284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Cover Page

Order ID : P3609

Project ID : Former Schlumberger Site Princeton NJ

Client : JACOBS Engineering Group, Inc.

Lab Sample Number	Client Sample Number
P3609-01	915-J-WS-081424
P3609-02	920-J-WS-081424
P3609-03	TB-01-081424

I certify that the data package is in compliance with the terms and conditions of the contract,both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Signature : _____

Date: 8/28/2024

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

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Phone: 908 789 8900 Fax: 908 789 8922

CASE NARRATIVE

JACOBS Engineering Group, Inc.
Project Name: Former Schlumberger Site Princeton NJ
Project # N/A
Chemtech Project # P3609
Test Name: VOCMS Group6

A. Number of Samples and Date of Receipt:
3 Water samples were received on 08/14/2024.

B. Parameters
According to the Chain of Custody document, the following analyses were requested: Hexavalent Chromium, Mercury, Metals Group4, SVOCMS Group3, SVOCMS Group6 and VOCMS Group6. This data package contains results for VOCMS Group6.

C. Analytical Techniques:
The analysis performed on instrument MSVOA_N were done using GC column RXI-624SIL MS 30m 0.25mm 1.4 um. Cat#13868.The analysis of VOCMS Group6 was based on method 8260D.

D. QA/ QC Samples:
The Holding Times were met for all analysis.
The Surrogate recoveries met the acceptable criteria.
The Internal Standards Areas met the acceptable requirements.
The Retention Times were acceptable for all samples.
The RPD met criteria .
The Blank Spike met requirements for all samples .
The Blank Spike Duplicate met requirements for all samples .
The Blank analysis did not indicate the presence of lab contamination.
The Initial Calibration met the requirements .
The Continuous Calibration met the requirements .
The Tuning criteria met requirements.

E. Additional Comments:
Samples for MS/MSD for VOC analysis were not provided with this set of samples. The Blank Spike Duplicate is reported with the data.
Please use %D calculated based on Avg RF and CCRF for all compounds using Average Response Factor when the %RSD value for a compound is <15% for the Initial Calibration curve and use %D calculated based on Amount added and Calculated amount for all compounds using Linear Regression when the %RSD value for a compound is > 15% for the Initial Calibration curve for SW-846 analysis.

F. Manual Integration Comments:

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Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Signature_____

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DATA REPORTING QUALIFIERS- ORGANIC

For reporting results, the following " Results Qualifiers" are used:

Value	If the result is a value greater than or equal to the detection limit, report the value
U	Indicates the compound was analyzed for but was not detected. Report the minimum detection limit for the sample with the U, i.e. "10 U". This is not necessarily the instrument detection limit attainable for this particular sample based on any concentration or dilution that may have been required.
ND	Indicates the analyte was analyzed for, but not detected
J	Indicates an estimated value**.** This flag is used: (1) When estimating a concentration for a tentatively identified compound (library search hits, where a 1:1 response is assumed.) (2) When the mass spectral data indicated the identification, however the result was less than the specified detection limit greater than zero. If the detection limit was 10ug/L and a concentration of 3 ug/L was calculated report as 3 J. This is flag is used when similar situation arise on any organic parameter i.e. Pest, PCB and others.
B	Indicates the analyte was found in the blank as well as the sample report as "12 B".
E	Indicates the analyte 's concentration exceeds the calibrated range of the instrument for that specific analysis.
D	This flag identifies all compounds identified in an analysis at a secondary dilution factor.
P	This flag is used for Pesticide/PCB target analyte when there is >25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on Form 1 and flagged with a "P".
N	This flag indicates presumptive evidence of a compound. This is only used for tentatively identified compounds (TICs), where the identification is based on a mass spectral library search. It applies to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the flag is not used.
A	This flag indicates that a Tentatively Identified Compound is a suspected aldol-condensation product.
Q	Indicates the LCS did not meet the control limits requirements

ALLIANCE 284 Sheffield Street, Mountainside New Jersey 07092

NEW JERSEY LAB ID#: 20012: NEW YORK LAB ID#: 11376

GC/MS VOA CONFORMANCE/NON-CONFORMANCE SUMMARY

CHEMTECH PROJECT NUMBER: P3609 MATRIX: Water

METHOD: 8260D

		NA	NO	YES
1.	Chromatograms Labeled/Compounds Identified. (Field samples and Method Blanks)			✓
2.	GC/MS Tuning Specifications BFB Meet Criteria (NOTE THAT THERE ARE DIFFERENT CRITERIA FOR NY ASP CLP, CLP AND NJ)			✓
3.	GC/MS Tuning Frequency - Performed every 24 hours for 600 series and 12 hours for 8000 Series.			✓
4.	GC/MS Calibration - Initial Calibration performed before sample analysis and continuing calibration performed within 24 hours of sample analysis for 600 series and 12 hours for 8000 series.			✓
5.	GC/MS Calibration Requirements. The Initial Calibration met the requirements .			✓
	The Continuous Calibration met the requirements .			
6.	Blank Contamination - If yes, list compounds and concentrations in each blank:		✓	
7.	Surrogate Recoveries Meet Criteria			✓
	If not met, list those compounds and their recoveries which fall outside the acceptable ranges.			
8.	Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria			✓
	If not met, list those compounds and their recoveries which fall outside the acceptable range.			
	The Blank Spike met requirements for all samples .			
	The Blank Spike Duplicate met requirements for all samples .			
9.	Internal Standard Area/Retention Time Shift Meet Criteria			✓
	Comments:			
10.	Analysis Holding Time Met			✓
	If not met, list number of days exceeded for each sample:			

GC/MS VOA CONFORMANCE/NON-CONFORMANCE SUMMARY (CONTINUED)

NA NO YES

ADDITIONAL COMMENTS:

Samples for MS/MSD for VOC analysis were not provided with this set of samples. The Blank Spike Duplicate is reported with the data.

Please use %D calculated based on Avg RF and CCRF for all compounds using Average Response Factor when the %RSD value for a compound is <15% for the Initial Calibration curve and use %D calculated based on Amount added and Calculated amount for all compounds using Linear Regression when the %RSD value for a compound is > 15% for the Initial Calibration curve for SW-846 analysis.

_____ _____

QA REVIEW Date

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
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APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: **P3609**

	Completed
For thorough review, the report must have the following:	
GENERAL:	
Are all original paperwork present (chain of custody, record of communication,airbill, sample management lab chronicle, login page)	✓
Check chain-of-custody for proper relinquish/return of samples	✓
Is the chain of custody signed and complete	✓
Check internal chain-of-custody for proper relinquish/return of samples /sample extracts	✓
Collect information for each project id from server. Were all requirements followed	✓
COVER PAGE:	
Do numbers of samples correspond to the number of samples in the Chain of Custody on login page	✓
Do lab numbers and client Ids on cover page agree with the Chain of Custody	✓
CHAIN OF CUSTODY:	
Do requested analyses on Chain of Custody agree with form I results	✓
Do requested analyses on Chain of Custody agree with the log-in page	✓
Were the correct method log-in for analysis according to the Analytical Request and Chain of Castody	✓
Were the samples received within hold time	✓
Were any problems found with the samples at arrival recorded in the Sample Management Laboratory Chronicle	✓
ANALYTICAL:	
Was method requirement followed?	✓
Was client requirement followed?	✓
Does the case narrative summarize all QC failure?	✓
All runlogs and manual integration are reviewed for requirements	✓
All manual calculations and /or hand notations verified	✓

1st Level QA Review Signature: **SOHIL JODHANI** **Date:** **08/28/2024**

2nd Level QA Review Signature: _____ **Date:** _____

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LAB CHRONICLE

OrderID:	P3609	**OrderDate:**	8/14/2024 12:48:00 PM
Client:	JACOBS Engineering Group, Inc.	**Project:**	Former Schlumberger Site Princeton NJ
Contact:	Mary I. Murphy	**Location:**	D21,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P3609-01	**915-J-WS-081424**	**Water**			**08/14/24**			**08/14/24**
			VOCMS Group6	8260-Low			08/14/24	
P3609-02	**920-J-WS-081424**	**Water**			**08/14/24**			**08/14/24**
			VOCMS Group6	8260-Low			08/14/24	
P3609-03	**TB-01-081424**	**Water**			**08/14/24**			**08/14/24**
			VOCMS Group6	8260-Low			08/14/24	

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Hit Summary Sheet
SW-846

SDG No.: P3609

Client: JACOBS Engineering Group, Inc.

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID:	**915-J-WS-081424**							
P3609-01	915-J-WS-081424	Water	Acetone	3.70	J	1.40	5.00	ug/L
			Total Voc :	3.70				
			Total Concentration:	3.70				
Client ID:	**920-J-WS-081424**							
P3609-02	920-J-WS-081424	Water	Acetone	3.70	J	1.40	5.00	ug/L
			Total Voc :	3.70				
			Total Concentration:	3.70				
Client ID:	**TB-01-081424**							
P3609-03	TB-01-081424	Water	Acetone	3.50	J	1.40	5.00	ug/L
			Total Voc :	3.50				
			Total Concentration:	3.50				

QC SUMMARY

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Surrogate Summary

SDG No.: P3609

Client: JACOBS Engineering Group, Inc.

Analytical Method: SW8260-Low

Lab Sample ID	Client ID	Parameter	Spike	Result	RecoveryQual	Limits Low	Limits High
P3609-01	915-J-WS-081424	1,2-Dichloroethane-d4	50	58.6	117	70 (74)	130 (125)
		Dibromofluoromethane	50	54.0	108	70 (75)	130 (124)
		Toluene-d8	50	53.6	107	70 (86)	130 (113)
		4-Bromofluorobenzene	50	57.3	115	70 (77)	130 (121)
P3609-02	920-J-WS-081424	1,2-Dichloroethane-d4	50	60.0	120	70 (74)	130 (125)
		Dibromofluoromethane	50	54.7	109	70 (75)	130 (124)
		Toluene-d8	50	55.0	110	70 (86)	130 (113)
		4-Bromofluorobenzene	50	56.5	113	70 (77)	130 (121)
P3609-03	TB-01-081424	1,2-Dichloroethane-d4	50	56.9	114	70 (74)	130 (125)
		Dibromofluoromethane	50	53.4	107	70 (75)	130 (124)
		Toluene-d8	50	53.6	107	70 (86)	130 (113)
		4-Bromofluorobenzene	50	57.0	114	70 (77)	130 (121)
VN0814WBL01	VN0814WBL01	1,2-Dichloroethane-d4	50	55.6	111	70 (74)	130 (125)
		Dibromofluoromethane	50	53.1	106	70 (75)	130 (124)
		Toluene-d8	50	54.2	108	70 (86)	130 (113)
		4-Bromofluorobenzene	50	56.3	113	70 (77)	130 (121)
VN0814WBS01	VN0814WBS01	1,2-Dichloroethane-d4	50	56.3	113	70 (74)	130 (125)
		Dibromofluoromethane	50	54.0	108	70 (75)	130 (124)
		Toluene-d8	50	53.1	106	70 (86)	130 (113)
		4-Bromofluorobenzene	50	52.3	105	70 (77)	130 (121)
VN0814WBSD0	VN0814WBSD01	1,2-Dichloroethane-d4	50	58.7	117	70 (74)	130 (125)
		Dibromofluoromethane	50	54.0	108	70 (75)	130 (124)
		Toluene-d8	50	53.0	106	70 (86)	130 (113)
		4-Bromofluorobenzene	50	53.0	106	70 (77)	130 (121)

( ) = LABORATORY INHOUSE LIMIT

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: P3609

Client: JACOBS Engineering Group, Inc.

Analytical Method: SW8260-Low **Datafile :** VN083298.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VN0814WBS01	Dichlorodifluoromethane	20	18.6	ug/L	93			40 (69)	160 (116)	
	Chloromethane	20	19.1	ug/L	96			40 (65)	160 (116)	
	Vinyl chloride	20	20.2	ug/L	101			70 (65)	130 (117)	
	Bromomethane	20	18.6	ug/L	93			40 (58)	160 (125)	
	1,1,2-Trichlorotrifluoroethane	20	20.8	ug/L	104			70 (80)	130 (112)	
	Acetone	100	100	ug/L	100			40 (60)	160 (125)	
	Carbon disulfide	20	16.3	ug/L	81			40 (64)	160 (112)	
	Methyl tert-butyl Ether	20	20.0	ug/L	100			70 (78)	130 (114)	
	Methylene Chloride	20	19.0	ug/L	95			70 (72)	130 (114)	
	trans-1,2-Dichloroethene	20	18.7	ug/L	94			70 (75)	130 (108)	
	Cyclohexane	20	18.5	ug/L	93			70 (75)	130 (110)	
	2-Butanone	100	100	ug/L	100			40 (65)	160 (122)	
	Carbon Tetrachloride	20	20.1	ug/L	101			70 (77)	130 (113)	
	cis-1,2-Dichloroethene	20	19.6	ug/L	98			70 (77)	130 (110)	
	Chloroform	20	21.3	ug/L	106			70 (79)	130 (113)	
	1,1,1-Trichloroethane	20	20.7	ug/L	104			70 (80)	130 (108)	
	Methylcyclohexane	20	18.2	ug/L	91			70 (72)	130 (115)	
	Benzene	20	20.4	ug/L	102			70 (82)	130 (109)	
	1,2-Dichloroethane	20	21.5	ug/L	108			70 (80)	130 (115)	
	Trichloroethene	20	20.1	ug/L	101			70 (77)	130 (113)	
	Bromodichloromethane	20	20.7	ug/L	104			70 (83)	130 (110)	
	Toluene	20	20.3	ug/L	102			70 (82)	130 (110)	
	1,1,2-Trichloroethane	20	21.5	ug/L	108			70 (83)	130 (112)	
	Dibromochloromethane	20	20.6	ug/L	103			70 (82)	130 (110)	
	Tetrachloroethene	20	19.6	ug/L	98			70 (67)	130 (123)	
	Chlorobenzene	20	19.8	ug/L	99			70 (82)	130 (109)	
	Ethyl Benzene	20	19.6	ug/L	98			70 (83)	130 (109)	
	m/p-Xylenes	40	38.6	ug/L	97			70 (82)	130 (110)	
	o-Xylene	20	19.5	ug/L	98			70 (83)	130 (109)	
	Isopropylbenzene	20	19.3	ug/L	97			70 (83)	130 (112)	
	1,4-Dichlorobenzene	20	19.1	ug/L	96			70 (82)	130 (107)	
	1,2-Dichlorobenzene	20	19.1	ug/L	96			70 (82)	130 (109)	

( ) = LABORATORY INHOUSE LIMIT

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: P3609

Client: JACOBS Engineering Group, Inc.

Analytical Method: SW8260-Low **Datafile :** VN083300.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	Limits RPD
VN0814WBSD01	Dichlorodifluoromethane	20	18.9	ug/L	95	2		40 (69)	160 (116)	20 (20)
	Chloromethane	20	19.1	ug/L	96	0		40 (65)	160 (116)	20 (20)
	Vinyl chloride	20	19.9	ug/L	100	1		70 (65)	130 (117)	20 (20)
	Bromomethane	20	19.1	ug/L	96	3		40 (58)	160 (125)	20 (20)
	1,1,2-Trichlorotrifluoroethane	20	20.5	ug/L	103	1		70 (80)	130 (112)	20 (20)
	Acetone	100	110	ug/L	110	10		40 (60)	160 (125)	20 (20)
	Carbon disulfide	20	16.2	ug/L	81	0		40 (64)	160 (112)	20 (20)
	Methyl tert-butyl Ether	20	21.7	ug/L	109	9		70 (78)	130 (114)	20 (20)
	Methylene Chloride	20	19.9	ug/L	100	5		70 (72)	130 (114)	20 (20)
	trans-1,2-Dichloroethene	20	19.2	ug/L	96	2		70 (75)	130 (108)	20 (20)
	Cyclohexane	20	18.7	ug/L	94	1		70 (75)	130 (110)	20 (20)
	2-Butanone	100	110	ug/L	110	10		40 (65)	160 (122)	20 (20)
	Carbon Tetrachloride	20	19.6	ug/L	98	3		70 (77)	130 (113)	20 (20)
	cis-1,2-Dichloroethene	20	20.9	ug/L	104	6		70 (77)	130 (110)	20 (20)
	Chloroform	20	22.4	ug/L	112	6		70 (79)	130 (113)	20 (20)
	1,1,1-Trichloroethane	20	20.9	ug/L	104	0		70 (80)	130 (108)	20 (20)
	Methylcyclohexane	20	17.8	ug/L	89	2		70 (72)	130 (115)	20 (20)
	Benzene	20	20.2	ug/L	101	1		70 (82)	130 (109)	20 (20)
	1,2-Dichloroethane	20	22.6	ug/L	113	5		70 (80)	130 (115)	20 (20)
	Trichloroethene	20	19.9	ug/L	100	1		70 (77)	130 (113)	20 (20)
	Bromodichloromethane	20	21.0	ug/L	105	1		70 (83)	130 (110)	20 (20)
	Toluene	20	20.2	ug/L	101	1		70 (82)	130 (110)	20 (20)
	1,1,2-Trichloroethane	20	22.7	ug/L	114	5		70 (83)	130 (112)	20 (20)
	Dibromochloromethane	20	20.8	ug/L	104	1		70 (82)	130 (110)	20 (20)
	Tetrachloroethene	20	19.8	ug/L	99	1		70 (67)	130 (123)	20 (20)
	Chlorobenzene	20	20.0	ug/L	100	1		70 (82)	130 (109)	20 (20)
	Ethyl Benzene	20	19.5	ug/L	98	0		70 (83)	130 (109)	20 (20)
	m/p-Xylenes	40	39.2	ug/L	98	1		70 (82)	130 (110)	20 (20)
	o-Xylene	20	19.8	ug/L	99	1		70 (83)	130 (109)	20 (20)
	Isopropylbenzene	20	19.3	ug/L	97	0		70 (83)	130 (112)	20 (20)
	1,4-Dichlorobenzene	20	19.3	ug/L	97	1		70 (82)	130 (107)	20 (20)
	1,2-Dichlorobenzene	20	19.4	ug/L	97	1		70 (82)	130 (109)	20 (20)

( ) = LABORATORY INHOUSE LIMIT

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VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VN0814WBL01

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM Case No.: P3609 SAS No.: P3609 SDG NO.: P3609

Lab File ID: VN083297.D Lab Sample ID: VN0814WBL01

Date Analyzed: 08/14/2024 Time Analyzed: 13:39

GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

Instrument ID: MSVOA_N

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
VN0814WBS01	VN0814WBS01	VN083298.D	08/14/2024
VN0814WBSD01	VN0814WBSD01	VN083300.D	08/14/2024
TB-01-081424	P3609-03	VN083315.D	08/14/2024
915-J-WS-081424	P3609-01	VN083316.D	08/14/2024
920-J-WS-081424	P3609-02	VN083317.D	08/14/2024

COMMENTS:

Raw Data: **VN083134.D**

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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM Case No.: P3609 SAS No.: P3609 SDG NO.: P3609

Lab File ID: VN083134.D BFB Injection Date: 08/07/2024

Instrument ID: MSVOA_N BFB Injection Time: 10:09

GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.7
75	30.0 - 60.0% of mass 95	52.6
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	7.5
173	Less than 2.0% of mass 174	0.2 (0.3) 1
174	50.0 - 100.0% of mass 95	66.5
175	5.0 - 9.0% of mass 174	4.9 (7.4) 1
176	95.0 - 101.0% of mass 174	64.4 (96.9) 1
177	5.0 - 9.0% of mass 176	4.1 (6.3) 2

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

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDICC100	VSTDICC100	VN083135.D	08/07/2024	10:33
VSTDICCC050	VSTDICCC050	VN083136.D	08/07/2024	10:58
VSTDICC020	VSTDICC020	VN083137.D	08/07/2024	11:22
VSTDICC010	VSTDICC010	VN083138.D	08/07/2024	11:46
VSTDICC005	VSTDICC005	VN083139.D	08/07/2024	12:10
VSTDICC001	VSTDICC001	VN083140.D	08/07/2024	12:34

Raw Data: **VN083294.D**

Alliance TECHNICAL GROUP
284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM Case No.: P3609 SAS No.: P3609 SDG NO.: P3609

Lab File ID: VN083294.D BFB Injection Date: 08/14/2024

Instrument ID: MSVOA_N BFB Injection Time: 12:07

GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	20.6
75	30.0 - 60.0% of mass 95	54.1
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	7.1
173	Less than 2.0% of mass 174	0.5 (0.8) 1
174	50.0 - 100.0% of mass 95	70.5
175	5.0 - 9.0% of mass 174	5.2 (7.4) 1
176	95.0 - 101.0% of mass 174	67.6 (95.9) 1
177	5.0 - 9.0% of mass 176	4.7 (6.9) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDCCC050	VSTDCCC050	VN083295.D	08/14/2024	12:41
VN0814WBL01	VN0814WBL01	VN083297.D	08/14/2024	13:39
VN0814WBS01	VN0814WBS01	VN083298.D	08/14/2024	14:03
VN0814WBSD01	VN0814WBSD01	VN083300.D	08/14/2024	14:51
TB-01-081424	P3609-03	VN083315.D	08/14/2024	20:55
915-J-WS-081424	P3609-01	VN083316.D	08/14/2024	21:19
920-J-WS-081424	P3609-02	VN083317.D	08/14/2024	21:43

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM Case No.: P3609 SAS No.: P3609 SDG NO.: P3609

Lab File ID: VN083295.D Date Analyzed: 08/14/2024

Instrument ID: MSVOA_N Time Analyzed: 12:41

GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	165534	8.22	282606	9.10	250996	11.87
UPPER LIMIT	331068	8.724	565212	9.6	501992	12.365
LOWER LIMIT	82767	7.724	141303	8.6	125498	11.365
EPA SAMPLE NO.						
915-J-WS-081424	123251	8.22	241969	9.10	252623	11.87
920-J-WS-081424	120820	8.22	238487	9.11	244841	11.87
TB-01-081424	130232	8.22	253989	9.10	263608	11.87
VN0814WBL01	145129	8.23	276647	9.10	286871	11.87
VN0814WBS01	164632	8.22	284346	9.10	250581	11.87
VN0814WBSD01	148957	8.22	263108	9.10	232246	11.87

IS1 = Pentafluorobenzene
IS2 = 1,4-Difluorobenzene
IS3 = Chlorobenzene-d5

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

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

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VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM Case No.: P3609 SAS No.: P3609 SDG NO.: P3609

Lab File ID: VN083295.D Date Analyzed: 08/14/2024

Instrument ID: MSVOA_N Time Analyzed: 12:41

GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	IS4 AREA #	RT #				
12 HOUR STD	122669	13.794				
UPPER LIMIT	245338	14.294				
LOWER LIMIT	61334.5	13.294				
EPA SAMPLE NO.						
915-J-WS-081424	111058	13.79				
920-J-WS-081424	106288	13.79				
TB-01-081424	116466	13.79				
VN0814WBL01	128230	13.79				
VN0814WBS01	117869	13.79				
VN0814WBSD01	107371	13.79				

IS4 = 1,4-Dichlorobenzene-d4

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

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

Alliance
TECHNICAL GROUP

SAMPLE DATA

Raw Data: **VN083316.D**

Alliance TECHNICAL GROUP
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Fax : 908 789 8922

Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	08/14/24
Project:	Former Schlumberger Site Princeton NJ	Date Received:	08/14/24
Client Sample ID:	915-J-WS-081424	SDG No.:	P3609
Lab Sample ID:	P3609-01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group6
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN083316.D	1		08/14/24 21:19	VN081424

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	0.21	U	0.21	1.00	ug/L
74-87-3	Chloromethane	0.35	U	0.35	1.00	ug/L
75-01-4	Vinyl Chloride	0.34	U	0.34	1.00	ug/L
74-83-9	Bromomethane	1.40	U	1.40	5.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.25	U	0.25	1.00	ug/L
67-64-1	Acetone	3.70	J	1.40	5.00	ug/L
75-15-0	Carbon Disulfide	0.32	U	0.32	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	0.16	U	0.16	1.00	ug/L
75-09-2	Methylene Chloride	0.32	U	0.32	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	0.25	U	0.25	1.00	ug/L
110-82-7	Cyclohexane	1.60	U	1.60	5.00	ug/L
78-93-3	2-Butanone	1.30	U	1.30	5.00	ug/L
56-23-5	Carbon Tetrachloride	0.25	U	0.25	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	0.25	U	0.25	1.00	ug/L
67-66-3	Chloroform	0.26	U	0.26	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	0.19	U	0.19	1.00	ug/L
108-87-2	Methylcyclohexane	0.19	U	0.19	1.00	ug/L
71-43-2	Benzene	0.16	U	0.16	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.24	U	0.24	1.00	ug/L
79-01-6	Trichloroethene	0.32	U	0.32	1.00	ug/L
75-27-4	Bromodichloromethane	0.24	U	0.24	1.00	ug/L
108-88-3	Toluene	0.18	U	0.18	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	0.21	U	0.21	1.00	ug/L
124-48-1	Dibromochloromethane	0.18	U	0.18	1.00	ug/L
127-18-4	Tetrachloroethene	0.25	U	0.25	1.00	ug/L
108-90-7	Chlorobenzene	0.13	U	0.13	1.00	ug/L
100-41-4	Ethyl Benzene	0.16	U	0.16	1.00	ug/L
179601-23-1	m/p-Xylenes	0.31	U	0.31	2.00	ug/L
1330-20-7	Total Xylenes	0.45	U	0.45	3.00	ug/L
95-47-6	o-Xylene	0.14	U	0.14	1.00	ug/L

Raw Data: **VN083316.D**

Alliance TECHNICAL GROUP
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Fax : 908 789 8922

Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	08/14/24
Project:	Former Schlumberger Site Princeton NJ	Date Received:	08/14/24
Client Sample ID:	915-J-WS-081424	SDG No.:	P3609
Lab Sample ID:	P3609-01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group6
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN083316.D	1		08/14/24 21:19	VN081424

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
98-82-8	Isopropylbenzene	0.13	U	0.13	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.27	U	0.27	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.19	U	0.19	1.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	58.6		70 (74) - 130 (125)	117%	SPK: 50
1868-53-7	Dibromofluoromethane	54.0		70 (75) - 130 (124)	108%	SPK: 50
2037-26-5	Toluene-d8	53.6		70 (86) - 130 (113)	107%	SPK: 50
460-00-4	4-Bromofluorobenzene	57.3		70 (77) - 130 (121)	115%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	123000	8.224			
540-36-3	1,4-Difluorobenzene	242000	9.1			
3114-55-4	Chlorobenzene-d5	253000	11.865			
3855-82-1	1,4-Dichlorobenzene-d4	111000	13.794			

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081424\
Data File : VN083316.D
Acq On : 14 Aug 2024 21:19
Operator : JC\MD
Sample : P3609-01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 24 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
915-J-WS-081424

Quant Time: Aug 14 23:27:56 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

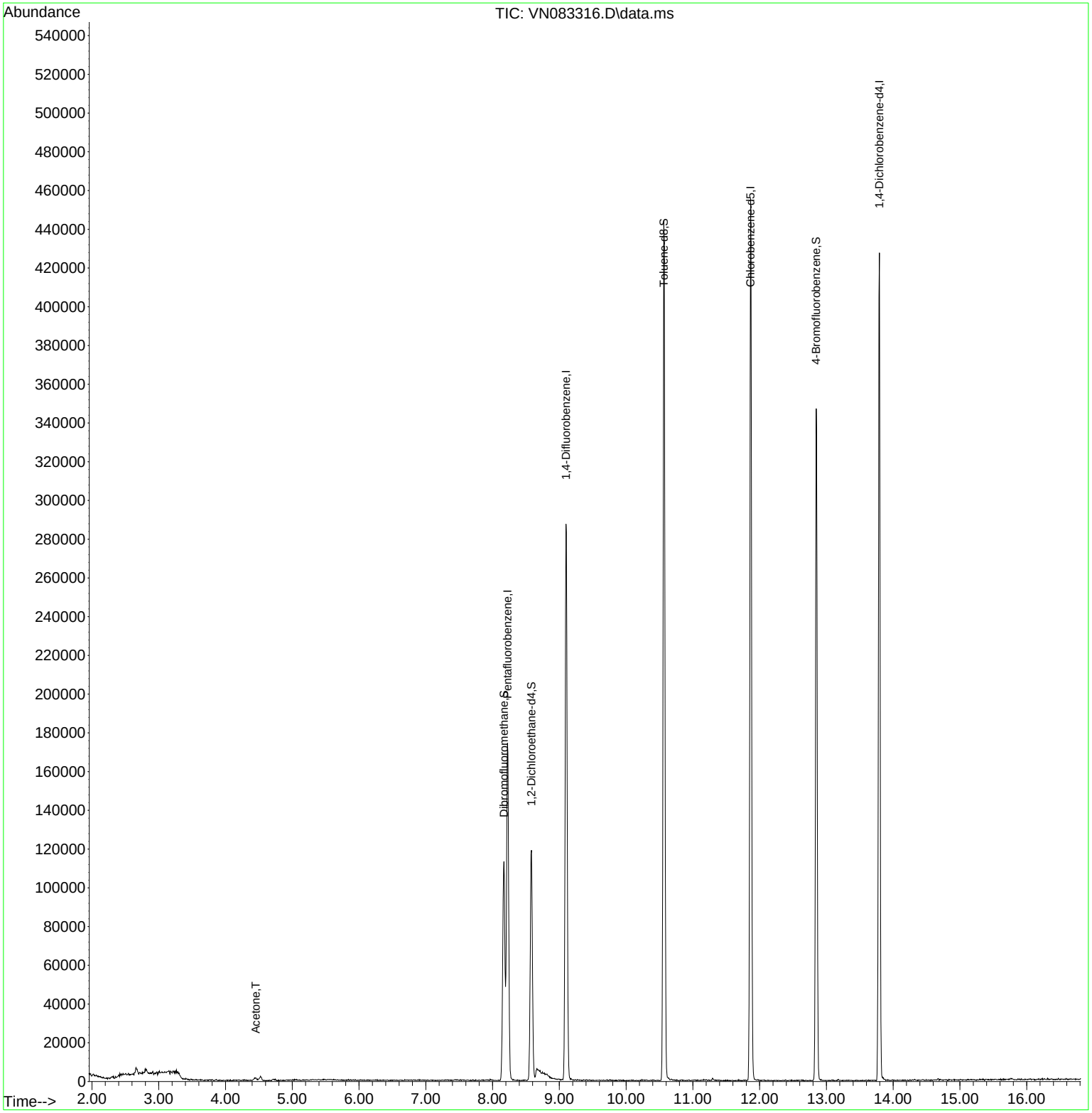
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.224	168	123251	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	241969	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	252623	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.794	152	111058	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.582	65	102801	58.598	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 117.200%			
35) Dibromofluoromethane	8.171	113	81558	54.001	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 108.000%			
50) Toluene-d8	10.565	98	302168	53.634	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 107.260%			
62) 4-Bromofluorobenzene	12.847	95	125840	57.294	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 114.580%			
Target Compounds						Qvalue
16) Acetone	4.453	43	2556	3.723	ug/l #	87

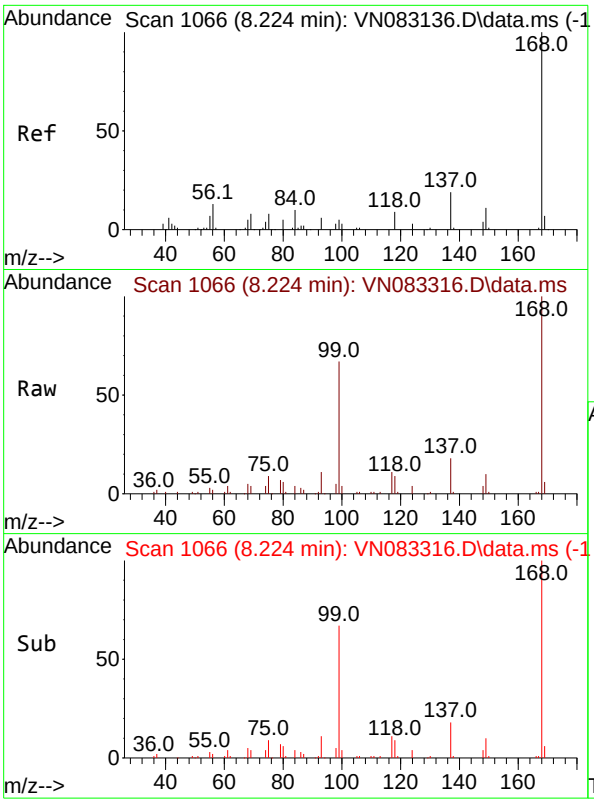
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081424\
Data File : VN083316.D
Acq On : 14 Aug 2024 21:19
Operator : JC\MD
Sample : P3609-01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 24 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
915-J-WS-081424

Quant Time: Aug 14 23:27:56 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration



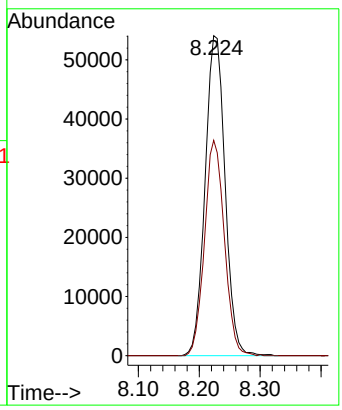


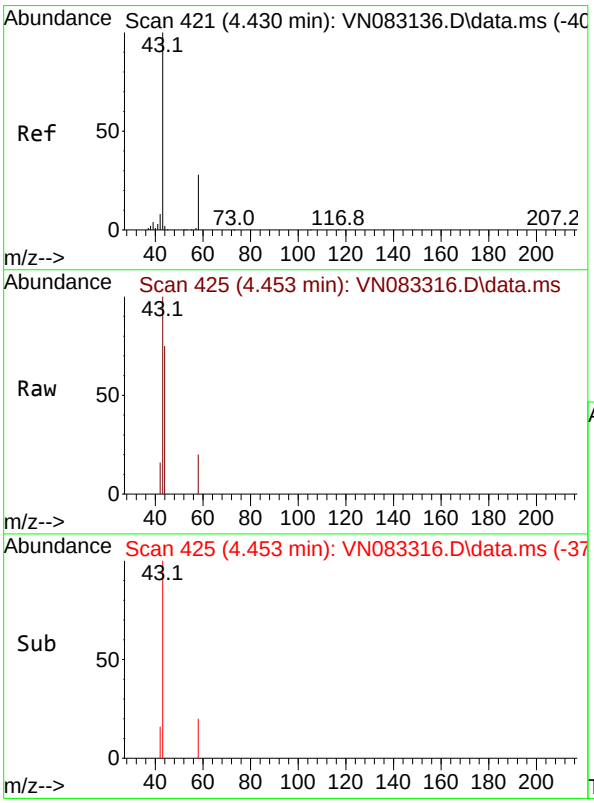
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083316.D
Acq: 14 Aug 2024 21:19

Instrument :
MSVOA_N
ClientSampleId :
915-J-WS-081424

Tgt Ion:168 Resp: 123251

Ion	Ratio	Lower	Upper
168	100		
99	67.3	48.2	72.4

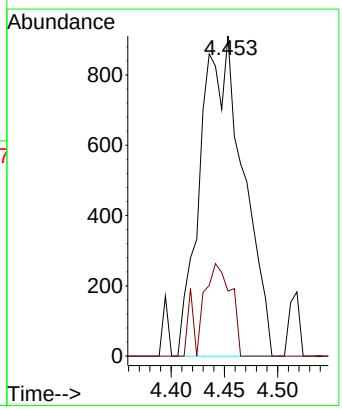


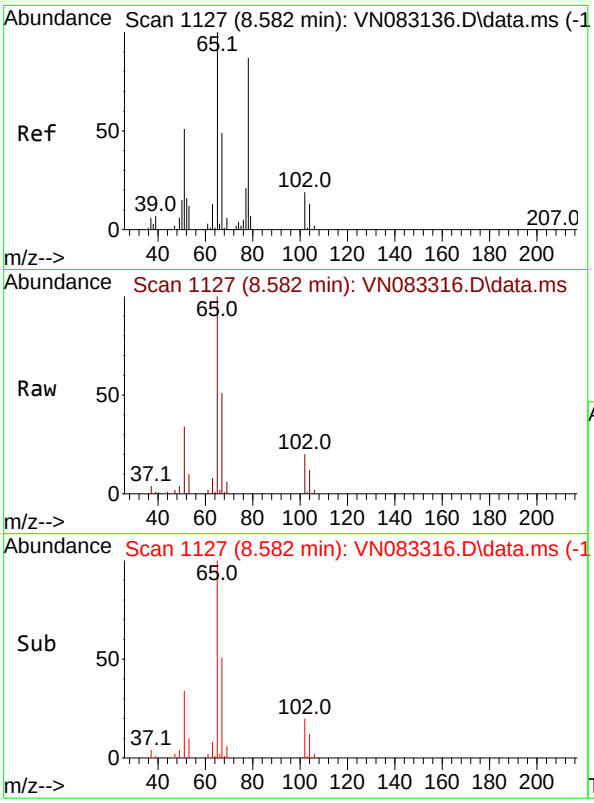


#16
Acetone
Concen: 3.723 ug/l
RT: 4.453 min Scan# 425
Delta R.T. 0.024 min
Lab File: VN083316.D
Acq: 14 Aug 2024 21:19

Tgt Ion: 43 Resp: 2556

Ion	Ratio	Lower	Upper
43	100		
58	20.3	21.8	32.6#



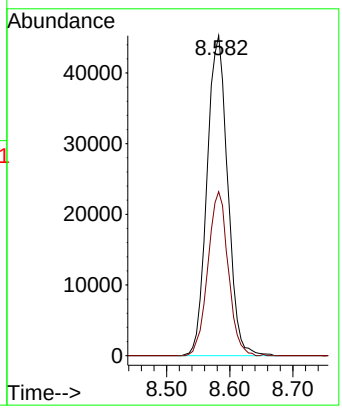


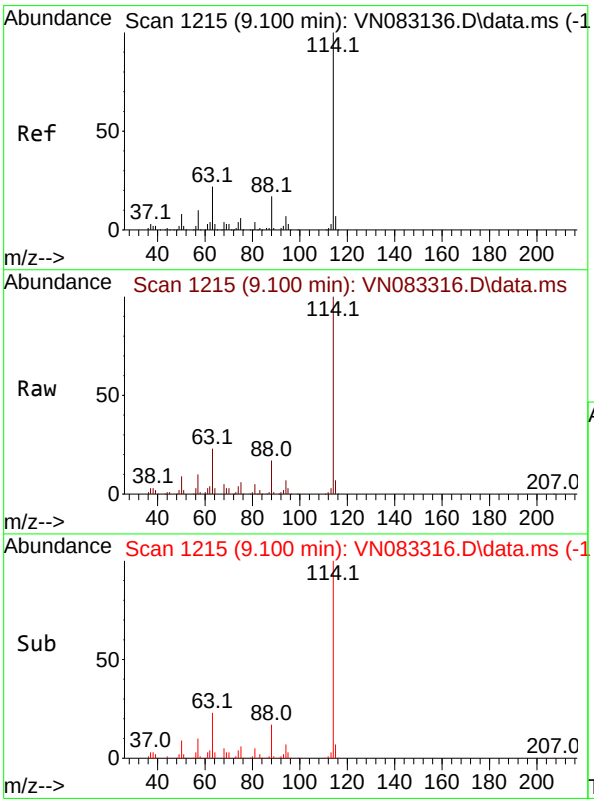
#33
1,2-Dichloroethane-d4
Concen: 58.598 ug/l
RT: 8.582 min Scan# 11
Delta R.T. 0.000 min
Lab File: VN083316.D
Acq: 14 Aug 2024 21:19

Instrument :
MSVOA_N
ClientSampleId :
915-J-WS-081424

Tgt Ion: 65 Resp: 102801

Ion	Ratio	Lower	Upper
65	100		
67	50.5	0.0	104.4

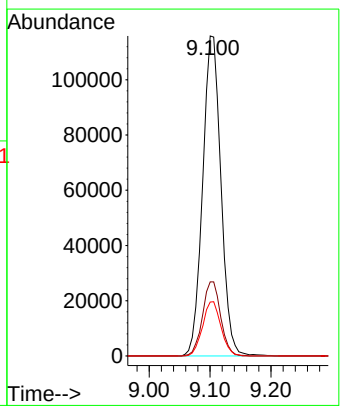


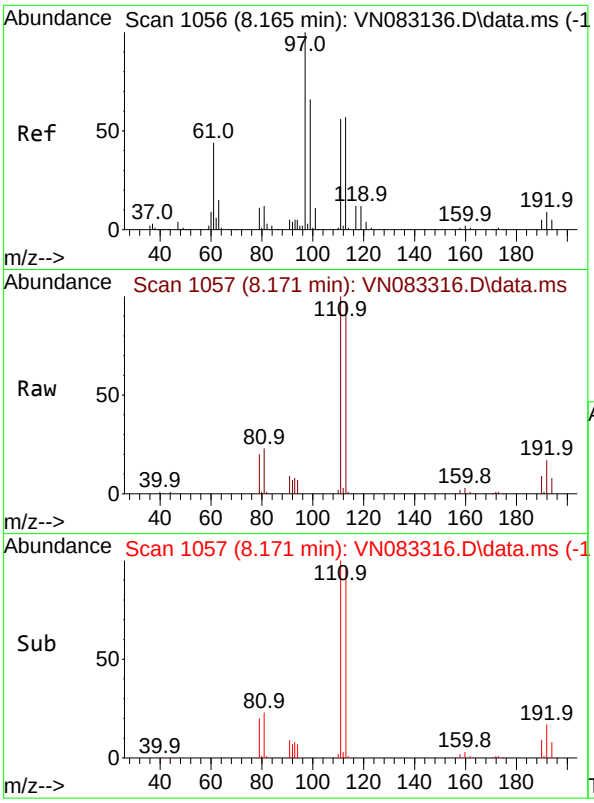


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1215
Delta R.T. 0.000 min
Lab File: VN083316.D
Acq: 14 Aug 2024 21:19

Tgt Ion:114 Resp: 241969

Ion	Ratio	Lower	Upper
114	100		
63	23.2	0.0	44.6
88	16.8	0.0	31.4



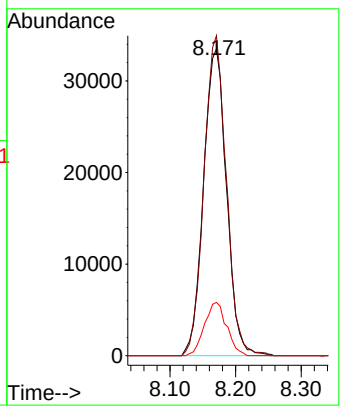


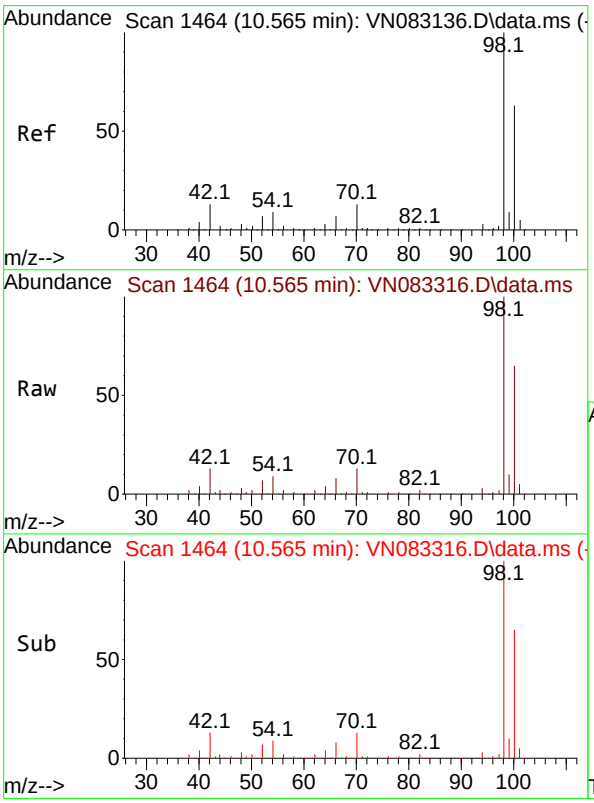
#35
Dibromofluoromethane
Concen: 54.001 ug/l
RT: 8.171 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN083316.D
Acq: 14 Aug 2024 21:19

Instrument :
MSVOA_N
ClientSampleId :
915-J-WS-081424

Tgt Ion:113 Resp: 81558

Ion	Ratio	Lower	Upper
113	100		
111	101.6	82.4	123.6
192	16.8	14.9	22.3

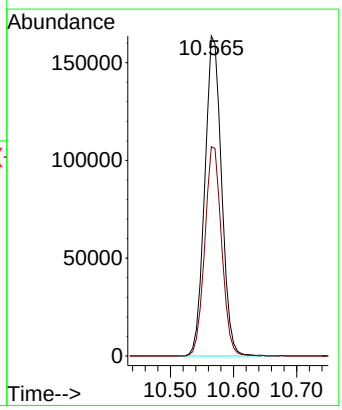


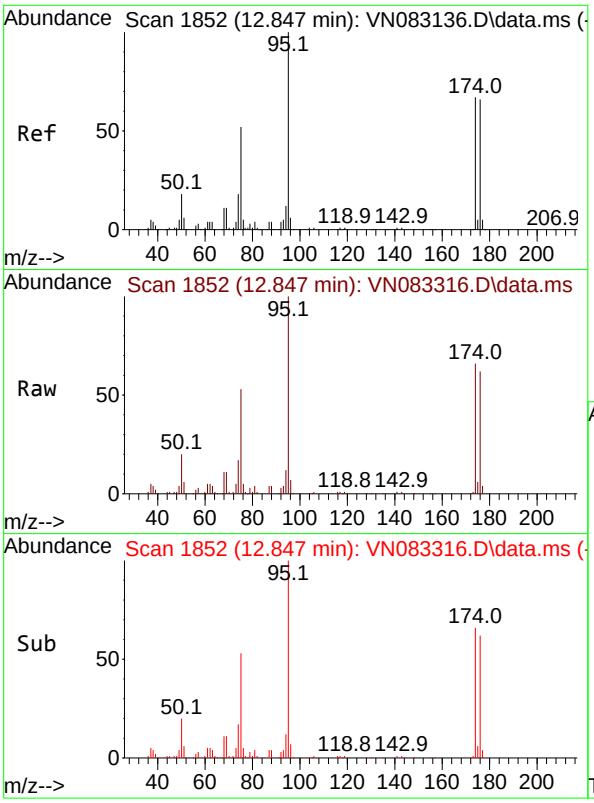


#50
Toluene-d8
Concen: 53.634 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. -0.000 min
Lab File: VN083316.D
Acq: 14 Aug 2024 21:19

Tgt Ion: 98 Resp: 302168

Ion	Ratio	Lower	Upper
98	100		
100	65.5	51.5	77.3



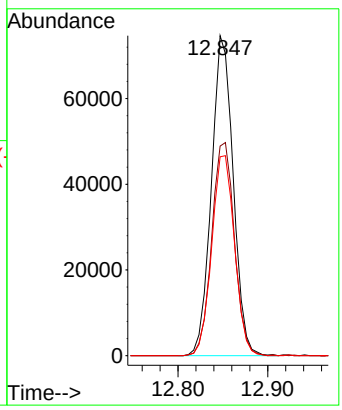


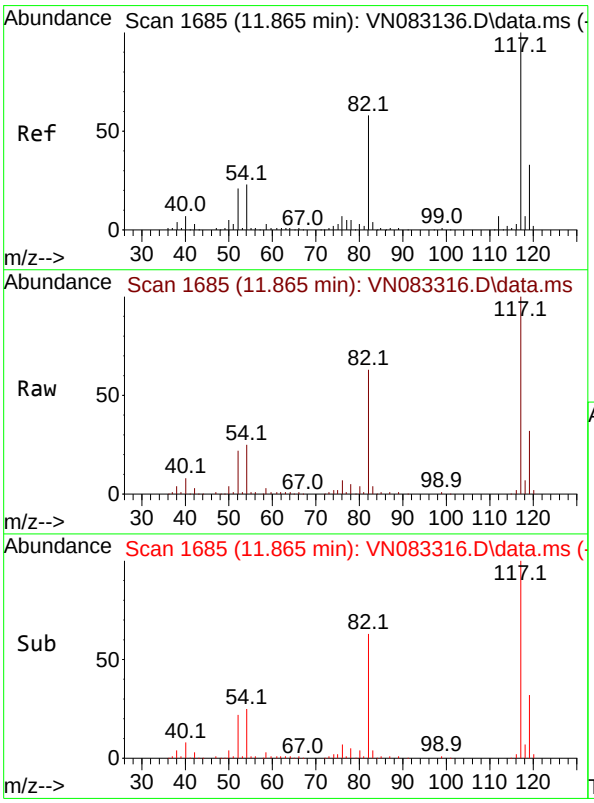
#62
4-Bromofluorobenzene
Concen: 57.294 ug/l
RT: 12.847 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083316.D
Acq: 14 Aug 2024 21:19

Instrument :
MSVOA_N
ClientSampleId :
915-J-WS-081424

Tgt Ion: 95 Resp: 125840

Ion	Ratio	Lower	Upper
95	100		
174	69.2	0.0	159.2
176	65.6	0.0	147.6

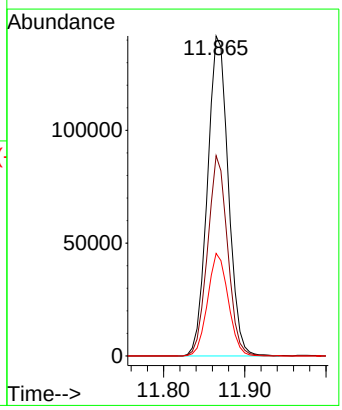


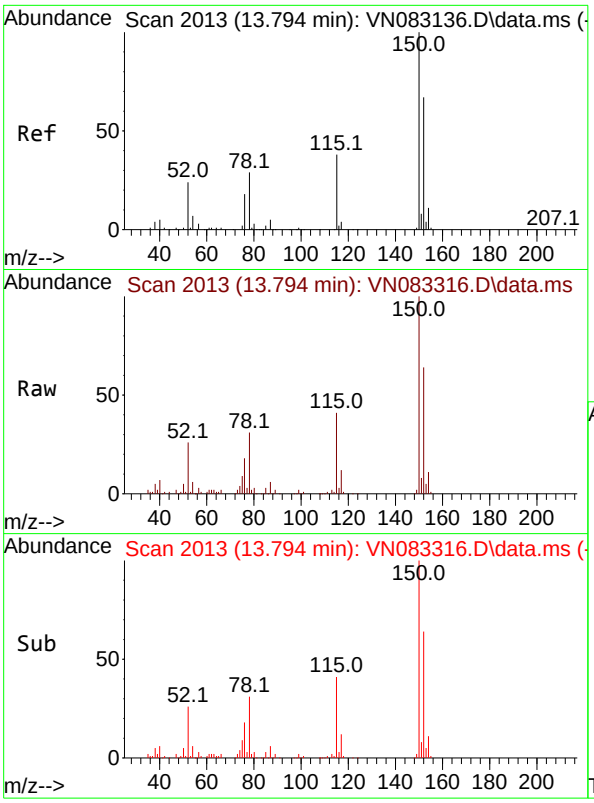


#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1685
Delta R.T. -0.000 min
Lab File: VN083316.D
Acq: 14 Aug 2024 21:19

Tgt Ion:117 Resp: 252623

Ion	Ratio	Lower	Upper
117	100		
82	62.6	47.5	71.3
119	32.1	25.6	38.4



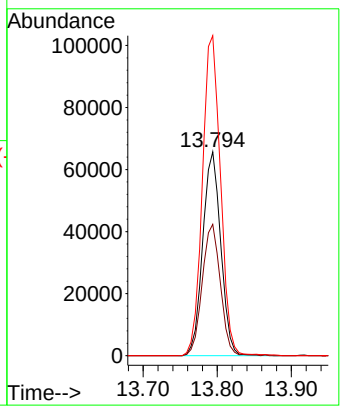


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.794 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN083316.D
Acq: 14 Aug 2024 21:19

Instrument :
MSVOA_N
ClientSampleId :
915-J-WS-081424

Tgt Ion:152 Resp: 111058

Ion	Ratio	Lower	Upper
152	100		
115	64.8	30.6	91.6
150	157.6	0.0	348.6



Raw Data: **VN083317.D**

Alliance TECHNICAL GROUP
284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	08/14/24
Project:	Former Schlumberger Site Princeton NJ	Date Received:	08/14/24
Client Sample ID:	920-J-WS-081424	SDG No.:	P3609
Lab Sample ID:	P3609-02	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group6
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN083317.D	1		08/14/24 21:43	VN081424

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	0.21	U	0.21	1.00	ug/L
74-87-3	Chloromethane	0.35	U	0.35	1.00	ug/L
75-01-4	Vinyl Chloride	0.34	U	0.34	1.00	ug/L
74-83-9	Bromomethane	1.40	U	1.40	5.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.25	U	0.25	1.00	ug/L
67-64-1	Acetone	3.70	J	1.40	5.00	ug/L
75-15-0	Carbon Disulfide	0.32	U	0.32	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	0.16	U	0.16	1.00	ug/L
75-09-2	Methylene Chloride	0.32	U	0.32	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	0.25	U	0.25	1.00	ug/L
110-82-7	Cyclohexane	1.60	U	1.60	5.00	ug/L
78-93-3	2-Butanone	1.30	U	1.30	5.00	ug/L
56-23-5	Carbon Tetrachloride	0.25	U	0.25	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	0.25	U	0.25	1.00	ug/L
67-66-3	Chloroform	0.26	U	0.26	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	0.19	U	0.19	1.00	ug/L
108-87-2	Methylcyclohexane	0.19	U	0.19	1.00	ug/L
71-43-2	Benzene	0.16	U	0.16	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.24	U	0.24	1.00	ug/L
79-01-6	Trichloroethene	0.32	U	0.32	1.00	ug/L
75-27-4	Bromodichloromethane	0.24	U	0.24	1.00	ug/L
108-88-3	Toluene	0.18	U	0.18	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	0.21	U	0.21	1.00	ug/L
124-48-1	Dibromochloromethane	0.18	U	0.18	1.00	ug/L
127-18-4	Tetrachloroethene	0.25	U	0.25	1.00	ug/L
108-90-7	Chlorobenzene	0.13	U	0.13	1.00	ug/L
100-41-4	Ethyl Benzene	0.16	U	0.16	1.00	ug/L
179601-23-1	m/p-Xylenes	0.31	U	0.31	2.00	ug/L
1330-20-7	Total Xylenes	0.45	U	0.45	3.00	ug/L
95-47-6	o-Xylene	0.14	U	0.14	1.00	ug/L

Raw Data: **VN083317.D**

Alliance TECHNICAL GROUP
284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	08/14/24
Project:	Former Schlumberger Site Princeton NJ	Date Received:	08/14/24
Client Sample ID:	920-J-WS-081424	SDG No.:	P3609
Lab Sample ID:	P3609-02	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group6
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN083317.D	1		08/14/24 21:43	VN081424

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
98-82-8	Isopropylbenzene	0.13	U	0.13	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.27	U	0.27	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.19	U	0.19	1.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	60.1		70 (74) - 130 (125)	120%	SPK: 50
1868-53-7	Dibromofluoromethane	54.7		70 (75) - 130 (124)	109%	SPK: 50
2037-26-5	Toluene-d8	55.0		70 (86) - 130 (113)	110%	SPK: 50
460-00-4	4-Bromofluorobenzene	56.5		70 (77) - 130 (121)	113%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	121000	8.224			
540-36-3	1,4-Difluorobenzene	238000	9.106			
3114-55-4	Chlorobenzene-d5	245000	11.865			
3855-82-1	1,4-Dichlorobenzene-d4	106000	13.794			

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081424\
Data File : VN083317.D
Acq On : 14 Aug 2024 21:43
Operator : JC\MD
Sample : P3609-02
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 25 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
920-J-WS-081424

Quant Time: Aug 14 23:28:19 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

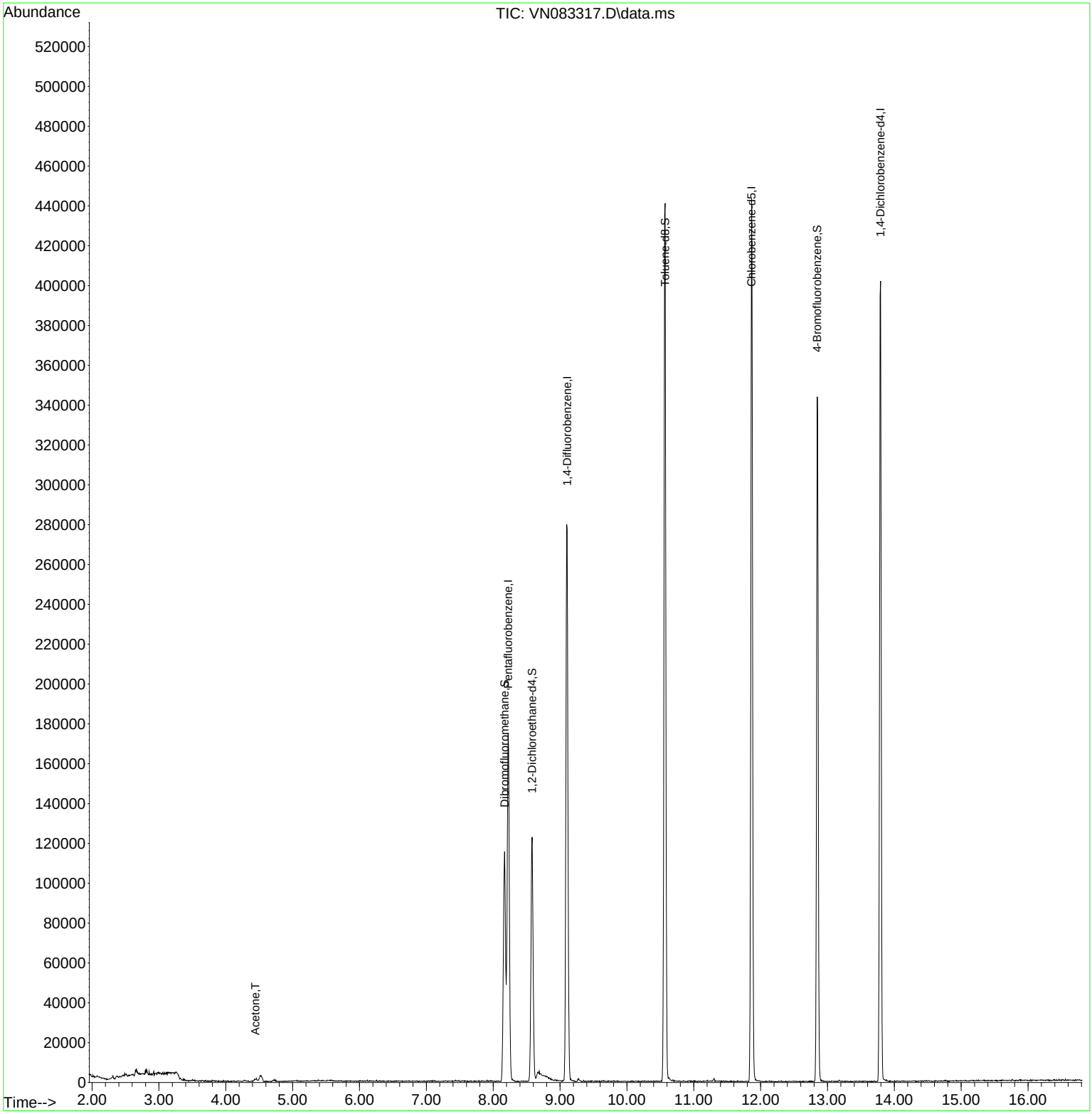
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.224	168	120820	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.106	114	238487	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	244841	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.794	152	106288	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.583	65	103273	60.052	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 120.100%			
35) Dibromofluoromethane	8.171	113	81464	54.726	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 109.460%			
50) Toluene-d8	10.571	98	305149	54.954	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 109.900%			
62) 4-Bromofluorobenzene	12.847	95	122364	56.525	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 113.040%			
Target Compounds						Qvalue
16) Acetone	4.442	43	2519	3.743	ug/l #	73

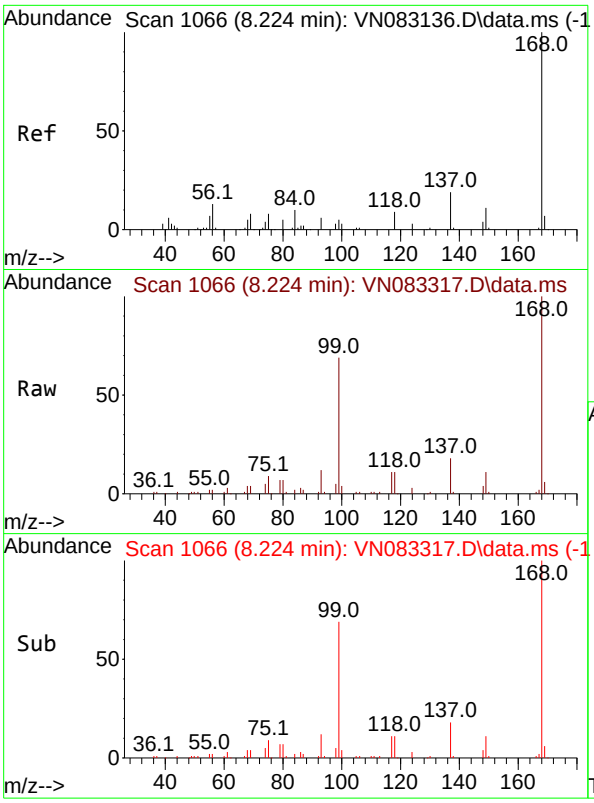
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081424\
Data File : VN083317.D
Acq On : 14 Aug 2024 21:43
Operator : JC\MD
Sample : P3609-02
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 25 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
920-J-WS-081424

Quant Time: Aug 14 23:28:19 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration



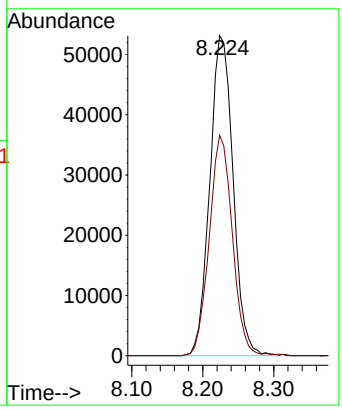


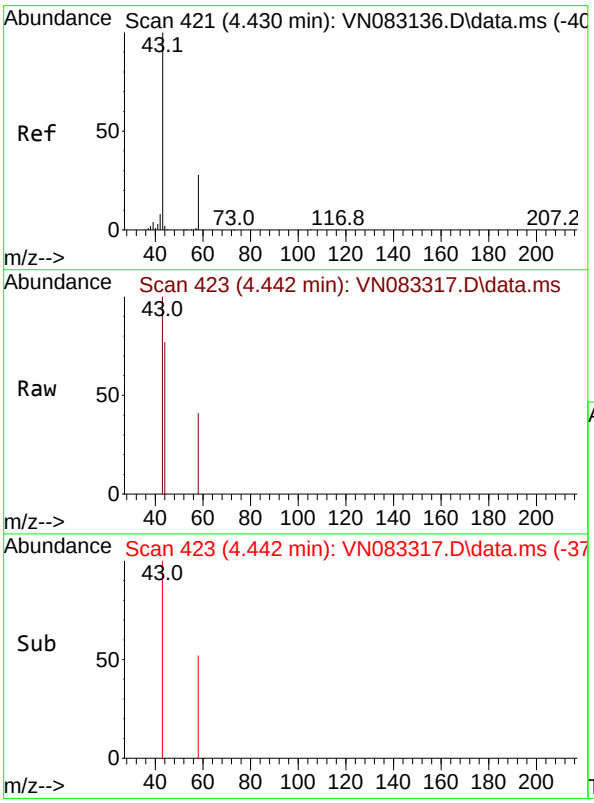
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083317.D
Acq: 14 Aug 2024 21:43

Instrument :
MSVOA_N
ClientSampleId :
920-J-WS-081424

Tgt Ion:168 Resp: 120820

Ion	Ratio	Lower	Upper
168	100		
99	68.9	48.2	72.4

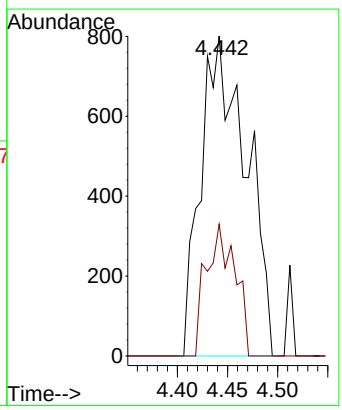


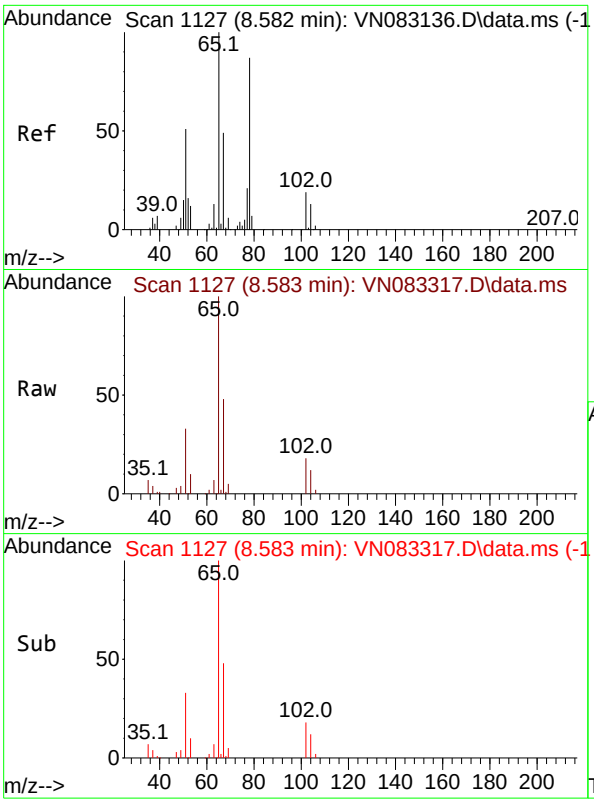


#16
Acetone
Concen: 3.743 ug/l
RT: 4.442 min Scan# 423
Delta R.T. 0.012 min
Lab File: VN083317.D
Acq: 14 Aug 2024 21:43

Tgt Ion: 43 Resp: 2519

Ion	Ratio	Lower	Upper
43	100		
58	41.2	21.8	32.6#



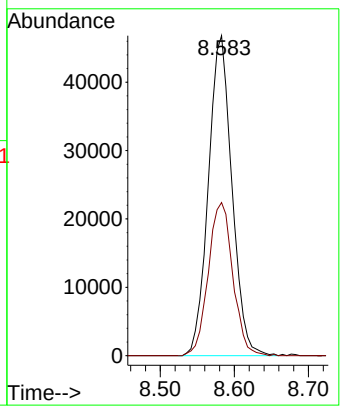


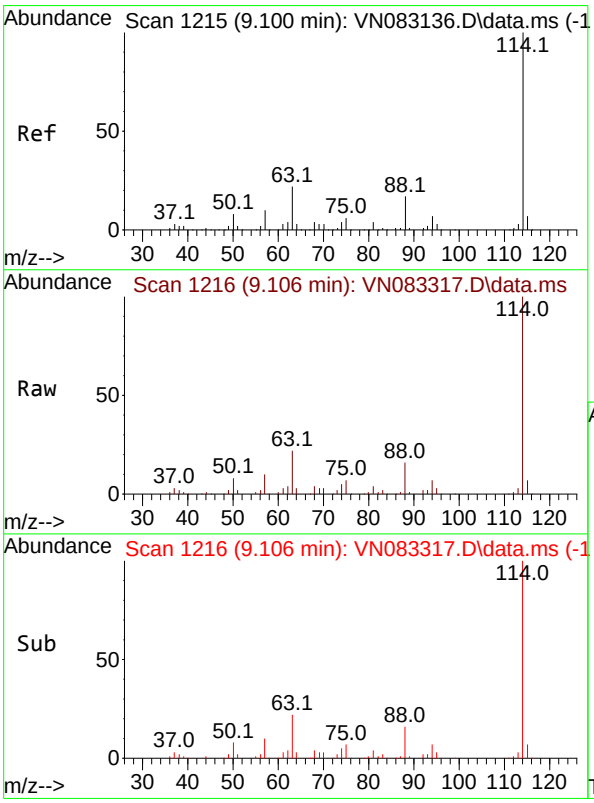
#33
1,2-Dichloroethane-d4
Concen: 60.052 ug/l
RT: 8.583 min Scan# 11
Delta R.T. 0.001 min
Lab File: VN083317.D
Acq: 14 Aug 2024 21:43

Instrument :
MSVOA_N
ClientSampleId :
920-J-WS-081424

Tgt Ion: 65 Resp: 103273

Ion	Ratio	Lower	Upper
65	100		
67	49.9	0.0	104.4

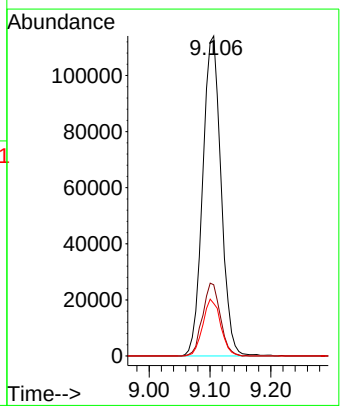


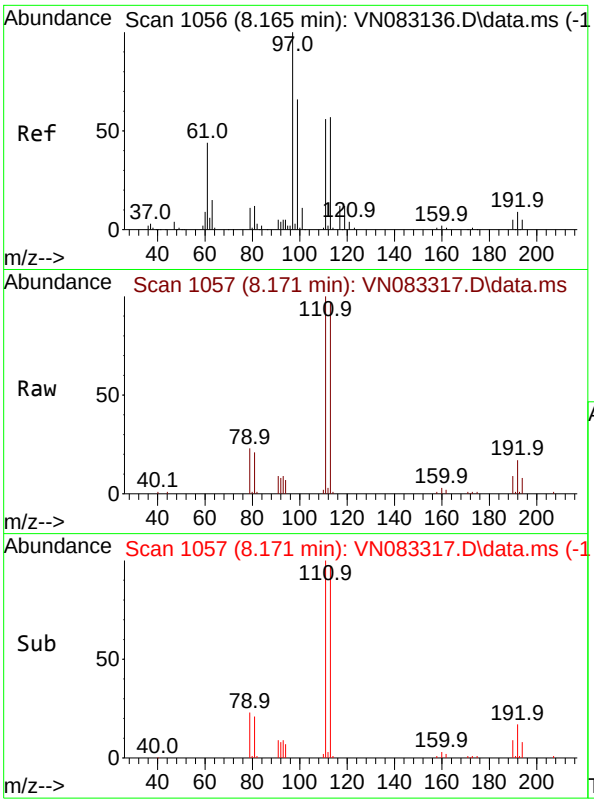


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.106 min Scan# 1216
Delta R.T. 0.006 min
Lab File: VN083317.D
Acq: 14 Aug 2024 21:43

Tgt Ion:114 Resp: 238487

Ion	Ratio	Lower	Upper
114	100		
63	22.2	0.0	44.6
88	16.4	0.0	31.4



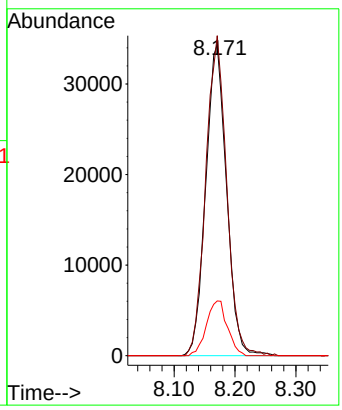


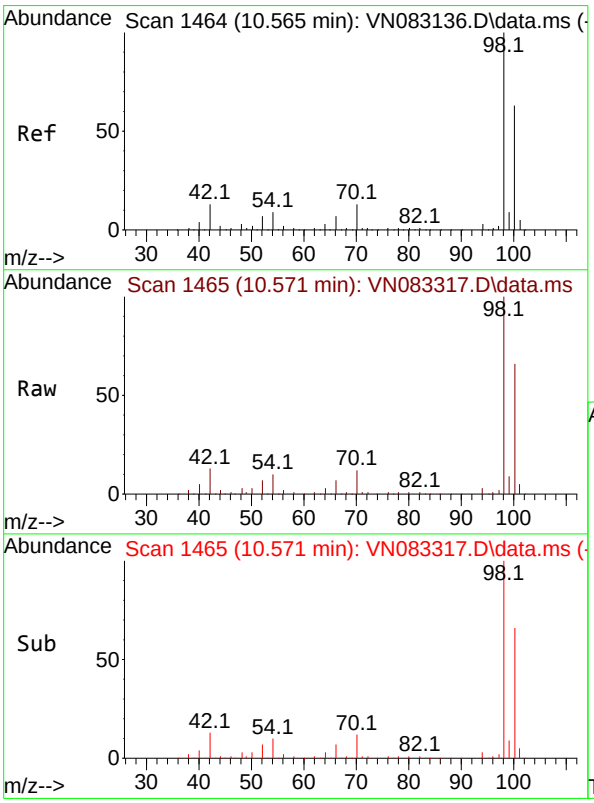
#35
Dibromofluoromethane
Concen: 54.726 ug/l
RT: 8.171 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN083317.D
Acq: 14 Aug 2024 21:43

Instrument :
MSVOA_N
ClientSampleId :
920-J-WS-081424

Tgt Ion:113 Resp: 81464

Ion	Ratio	Lower	Upper
113	100		
111	103.2	82.4	123.6
192	17.7	14.9	22.3

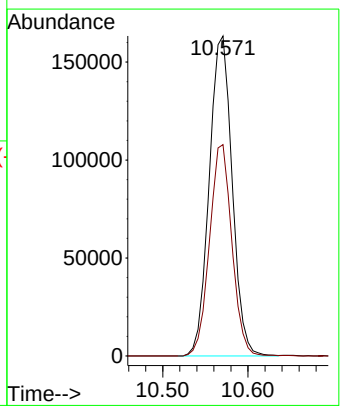


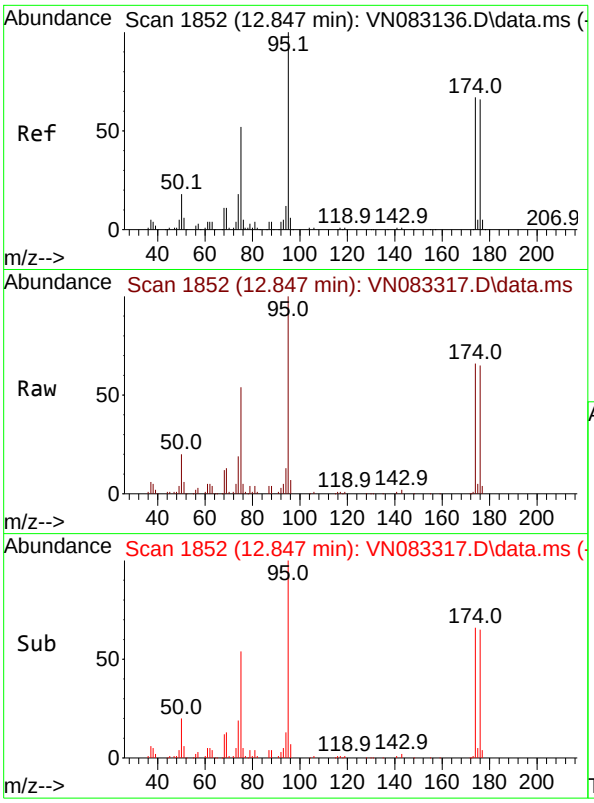


#50
Toluene-d8
Concen: 54.954 ug/l
RT: 10.571 min Scan# 1465
Delta R.T. 0.006 min
Lab File: VN083317.D
Acq: 14 Aug 2024 21:43

Tgt Ion: 98 Resp: 305149

Ion	Ratio	Lower	Upper
98	100		
100	64.6	51.5	77.3



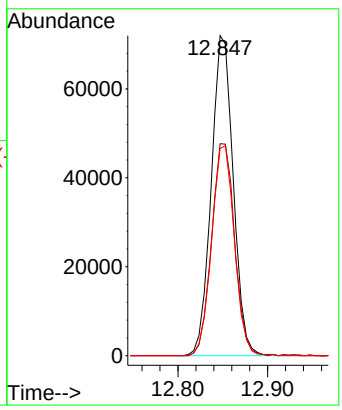


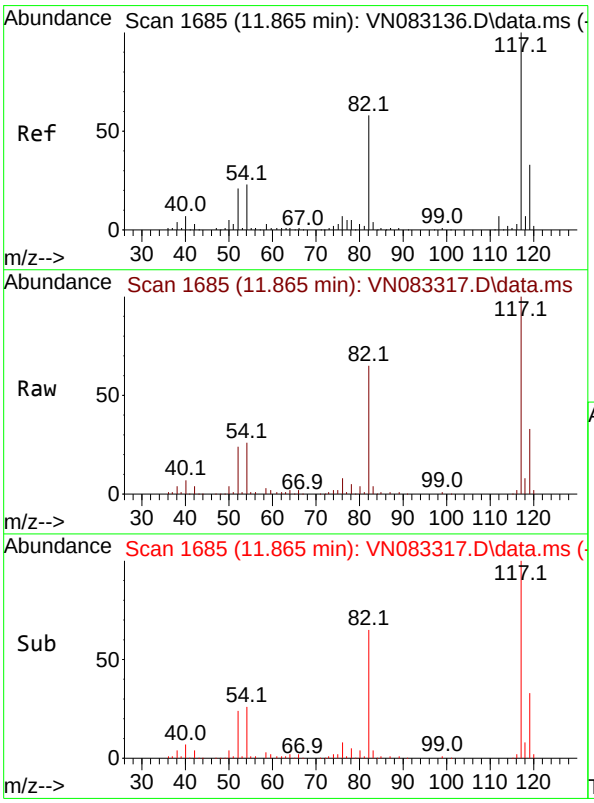
#62
4-Bromofluorobenzene
Concen: 56.525 ug/l
RT: 12.847 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083317.D
Acq: 14 Aug 2024 21:43

Instrument :
MSVOA_N
ClientSampleId :
920-J-WS-081424

Tgt Ion: 95 Resp: 122364

Ion	Ratio	Lower	Upper
95	100		
174	69.5	0.0	159.2
176	67.6	0.0	147.6

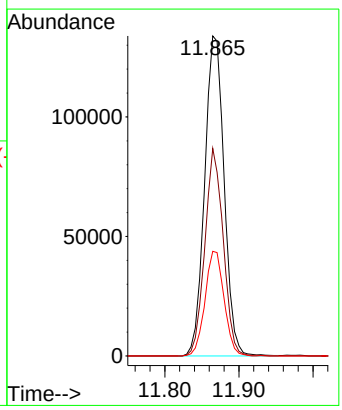


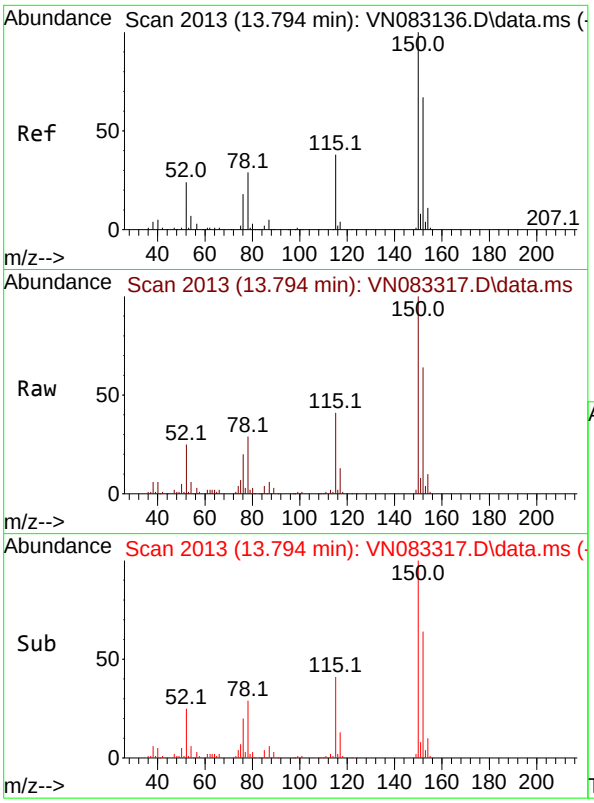


#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1685
Delta R.T. 0.000 min
Lab File: VN083317.D
Acq: 14 Aug 2024 21:43

Tgt Ion:117 Resp: 244841

Ion	Ratio	Lower	Upper
117	100		
82	64.8	47.5	71.3
119	32.7	25.6	38.4



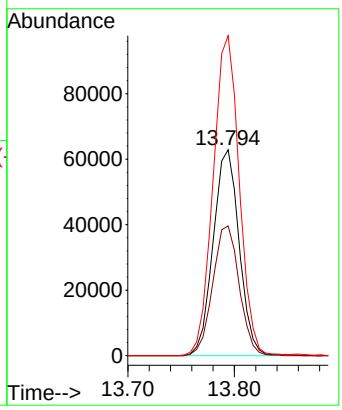


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.794 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN083317.D
Acq: 14 Aug 2024 21:43

Instrument :
MSVOA_N
ClientSampleId :
920-J-WS-081424

Tgt Ion:152 Resp: 106288

Ion	Ratio	Lower	Upper
152	100		
115	64.4	30.6	91.6
150	156.5	0.0	348.6



Raw Data: **VN083315.D**

Alliance TECHNICAL GROUP
284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	08/14/24
Project:	Former Schlumberger Site Princeton NJ	Date Received:	08/14/24
Client Sample ID:	TB-01-081424	SDG No.:	P3609
Lab Sample ID:	P3609-03	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group6
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN083315.D	1		08/14/24 20:55	VN081424

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	0.21	U	0.21	1.00	ug/L
74-87-3	Chloromethane	0.35	U	0.35	1.00	ug/L
75-01-4	Vinyl Chloride	0.34	U	0.34	1.00	ug/L
74-83-9	Bromomethane	1.40	U	1.40	5.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.25	U	0.25	1.00	ug/L
67-64-1	Acetone	3.50	J	1.40	5.00	ug/L
75-15-0	Carbon Disulfide	0.32	U	0.32	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	0.16	U	0.16	1.00	ug/L
75-09-2	Methylene Chloride	0.32	U	0.32	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	0.25	U	0.25	1.00	ug/L
110-82-7	Cyclohexane	1.60	U	1.60	5.00	ug/L
78-93-3	2-Butanone	1.30	U	1.30	5.00	ug/L
56-23-5	Carbon Tetrachloride	0.25	U	0.25	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	0.25	U	0.25	1.00	ug/L
67-66-3	Chloroform	0.26	U	0.26	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	0.19	U	0.19	1.00	ug/L
108-87-2	Methylcyclohexane	0.19	U	0.19	1.00	ug/L
71-43-2	Benzene	0.16	U	0.16	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.24	U	0.24	1.00	ug/L
79-01-6	Trichloroethene	0.32	U	0.32	1.00	ug/L
75-27-4	Bromodichloromethane	0.24	U	0.24	1.00	ug/L
108-88-3	Toluene	0.18	U	0.18	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	0.21	U	0.21	1.00	ug/L
124-48-1	Dibromochloromethane	0.18	U	0.18	1.00	ug/L
127-18-4	Tetrachloroethene	0.25	U	0.25	1.00	ug/L
108-90-7	Chlorobenzene	0.13	U	0.13	1.00	ug/L
100-41-4	Ethyl Benzene	0.16	U	0.16	1.00	ug/L
179601-23-1	m/p-Xylenes	0.31	U	0.31	2.00	ug/L
1330-20-7	Total Xylenes	0.45	U	0.45	3.00	ug/L
95-47-6	o-Xylene	0.14	U	0.14	1.00	ug/L

Alliance TECHNICAL GROUP
284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	08/14/24
Project:	Former Schlumberger Site Princeton NJ	Date Received:	08/14/24
Client Sample ID:	TB-01-081424	SDG No.:	P3609
Lab Sample ID:	P3609-03	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group6
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN083315.D	1		08/14/24 20:55	VN081424

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
98-82-8	Isopropylbenzene	0.13	U	0.13	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.27	U	0.27	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.19	U	0.19	1.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	56.9		70 (74) - 130 (125)	114%	SPK: 50
1868-53-7	Dibromofluoromethane	53.4		70 (75) - 130 (124)	107%	SPK: 50
2037-26-5	Toluene-d8	53.6		70 (86) - 130 (113)	107%	SPK: 50
460-00-4	4-Bromofluorobenzene	57.0		70 (77) - 130 (121)	114%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	130000	8.224			
540-36-3	1,4-Difluorobenzene	254000	9.1			
3114-55-4	Chlorobenzene-d5	264000	11.865			
3855-82-1	1,4-Dichlorobenzene-d4	116000	13.794			

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081424\
Data File : VN083315.D
Acq On : 14 Aug 2024 20:55
Operator : JC\MD
Sample : P3609-03
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 23 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
TB-01-081424

Quant Time: Aug 14 23:27:34 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

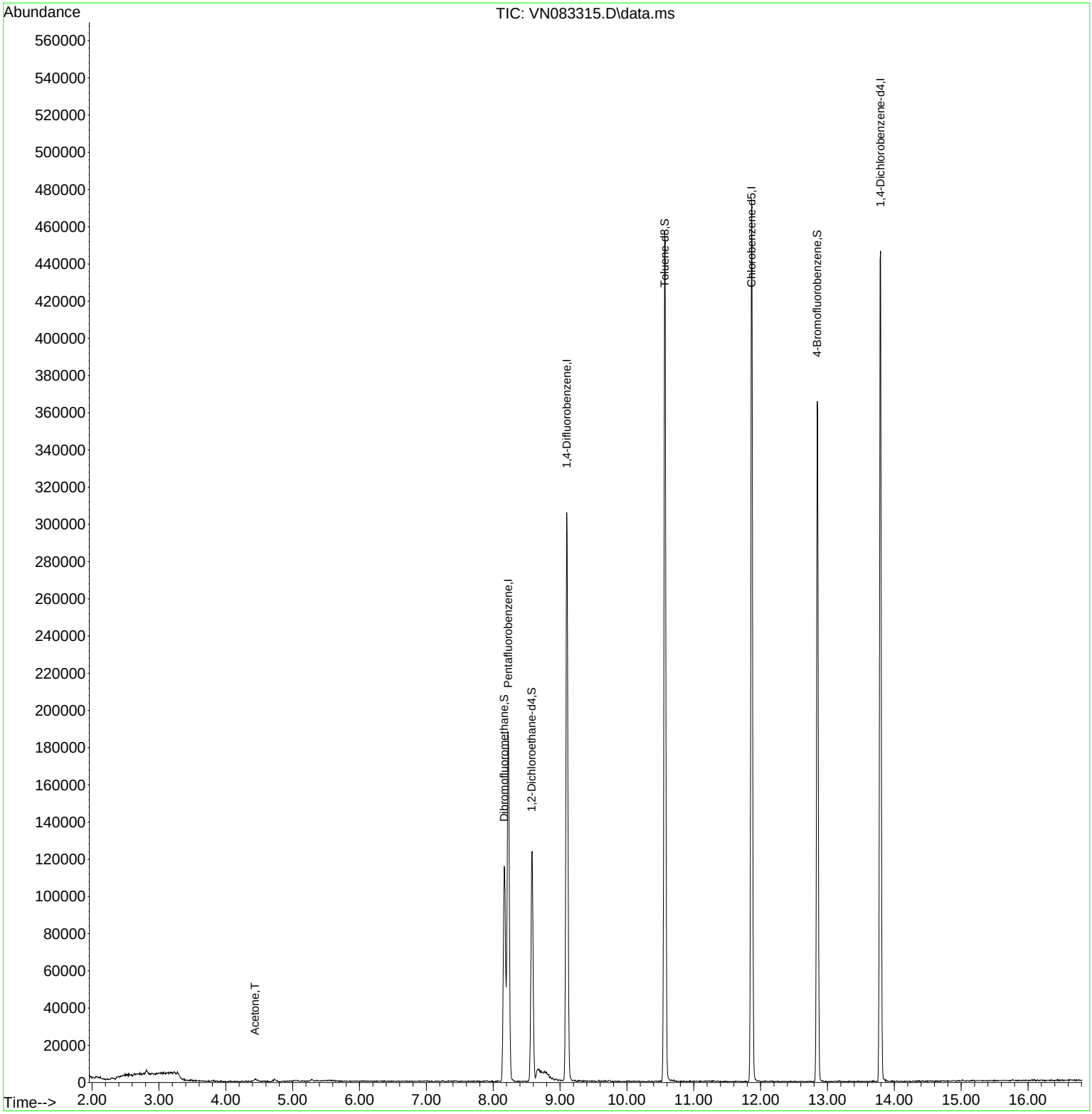
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.224	168	130232	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	253989	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	263608	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.794	152	116466	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.577	65	105497	56.911	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 113.820%			
35) Dibromofluoromethane	8.165	113	84684	53.417	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 106.840%			
50) Toluene-d8	10.565	98	316755	53.563	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 107.120%			
62) 4-Bromofluorobenzene	12.847	95	131440	57.011	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 114.020%			
Target Compounds						Qvalue
16) Acetone	4.436	43	2516	3.469	ug/l	99

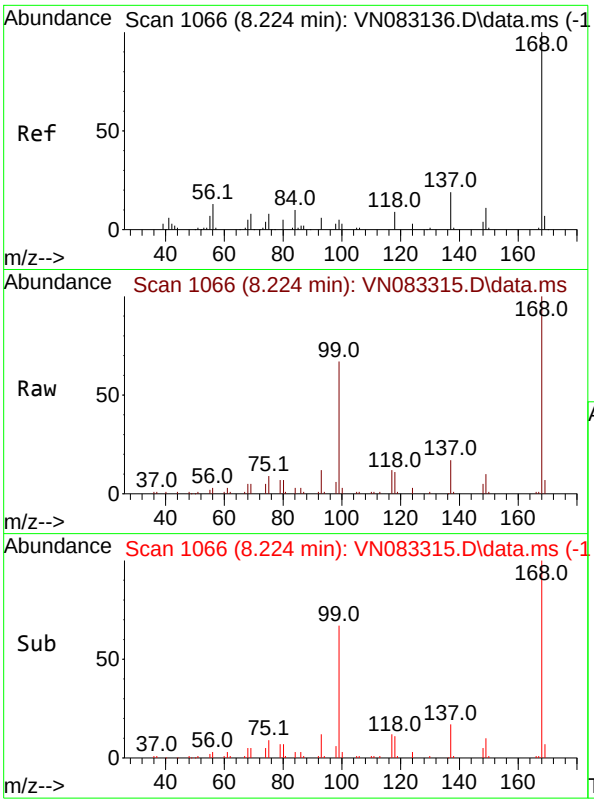
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081424\
Data File : VN083315.D
Acq On : 14 Aug 2024 20:55
Operator : JC\MD
Sample : P3609-03
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 23 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
TB-01-081424

Quant Time: Aug 14 23:27:34 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration



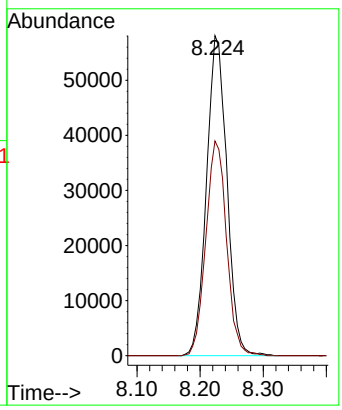


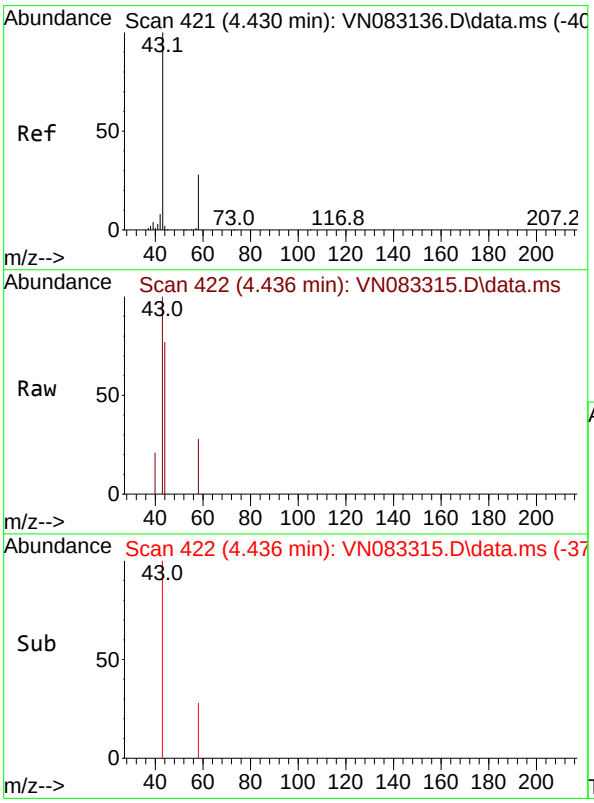
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083315.D
Acq: 14 Aug 2024 20:55

Instrument :
MSVOA_N
ClientSampleId :
TB-01-081424

Tgt Ion:168 Resp: 130232

Ion	Ratio	Lower	Upper
168	100		
99	67.1	48.2	72.4

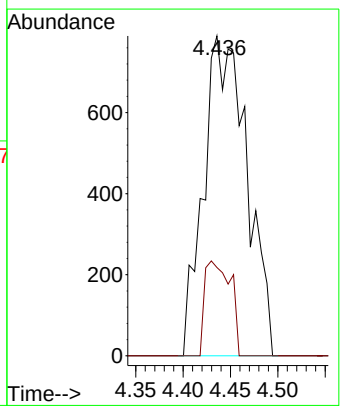


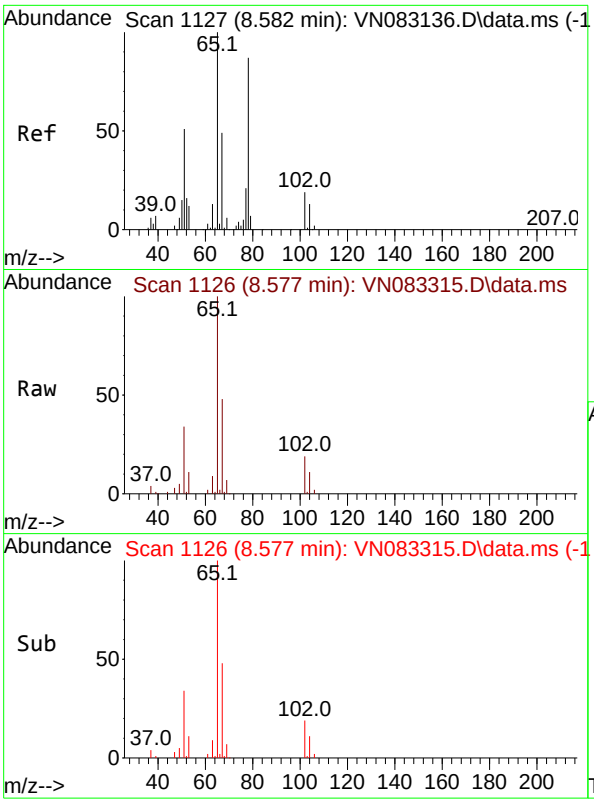


#16
Acetone
Concen: 3.469 ug/l
RT: 4.436 min Scan# 422
Delta R.T. 0.006 min
Lab File: VN083315.D
Acq: 14 Aug 2024 20:55

Tgt Ion: 43 Resp: 2516

Ion	Ratio	Lower	Upper
43	100		
58	27.6	21.8	32.6



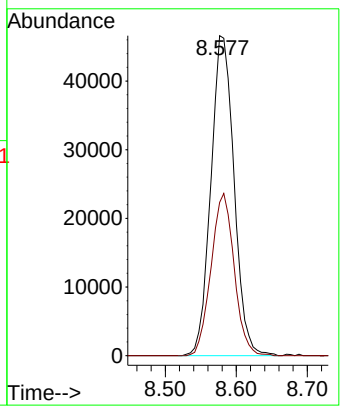


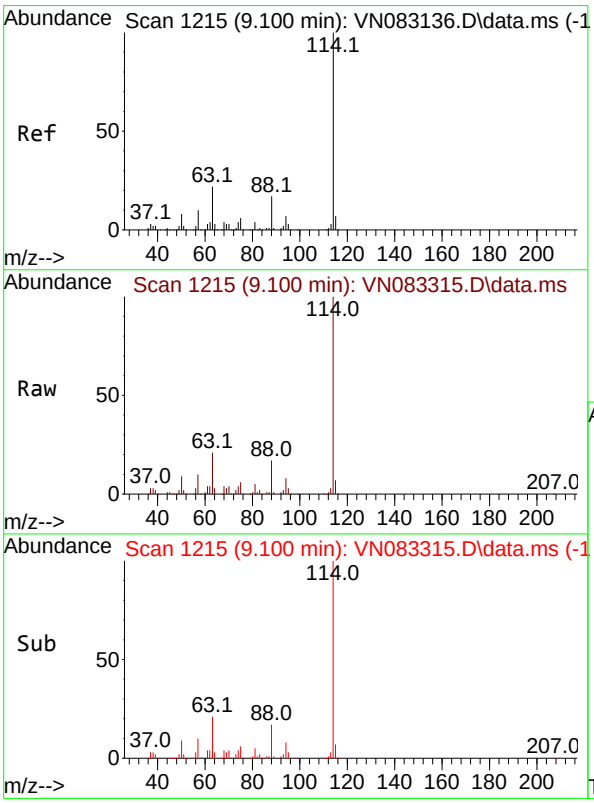
#33
1,2-Dichloroethane-d4
Concen: 56.911 ug/l
RT: 8.577 min Scan# 1
Delta R.T. -0.005 min
Lab File: VN083315.D
Acq: 14 Aug 2024 20:55

Instrument :
MSVOA_N
ClientSampleId :
TB-01-081424

Tgt Ion: 65 Resp: 105497

Ion	Ratio	Lower	Upper
65	100		
67	50.6	0.0	104.4

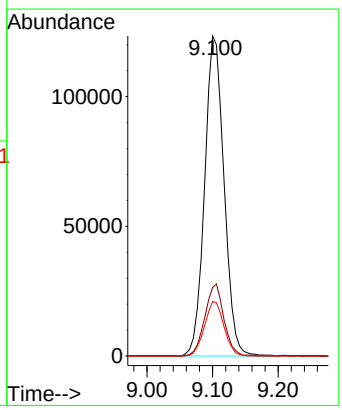


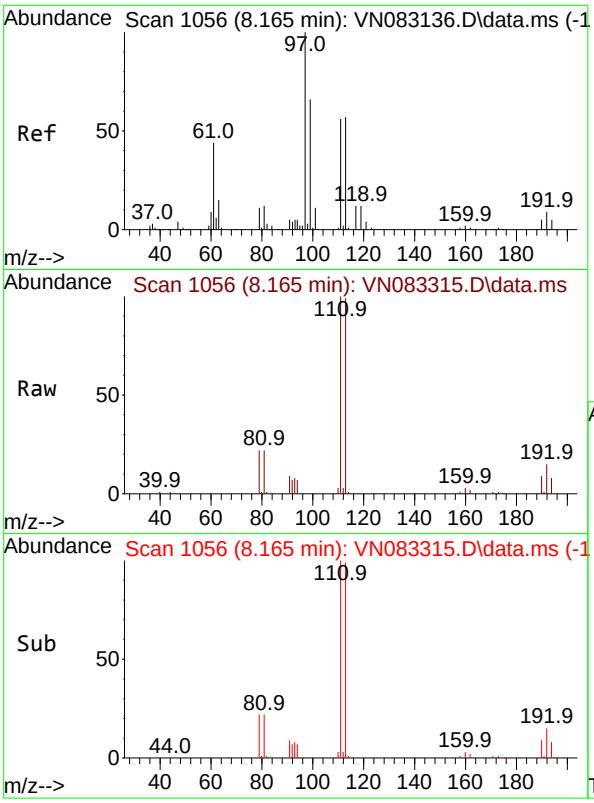


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1215
Delta R.T. -0.000 min
Lab File: VN083315.D
Acq: 14 Aug 2024 20:55

Tgt Ion:114 Resp: 253989

Ion	Ratio	Lower	Upper
114	100		
63	21.4	0.0	44.6
88	17.0	0.0	31.4



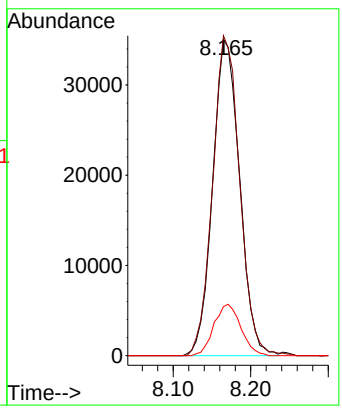


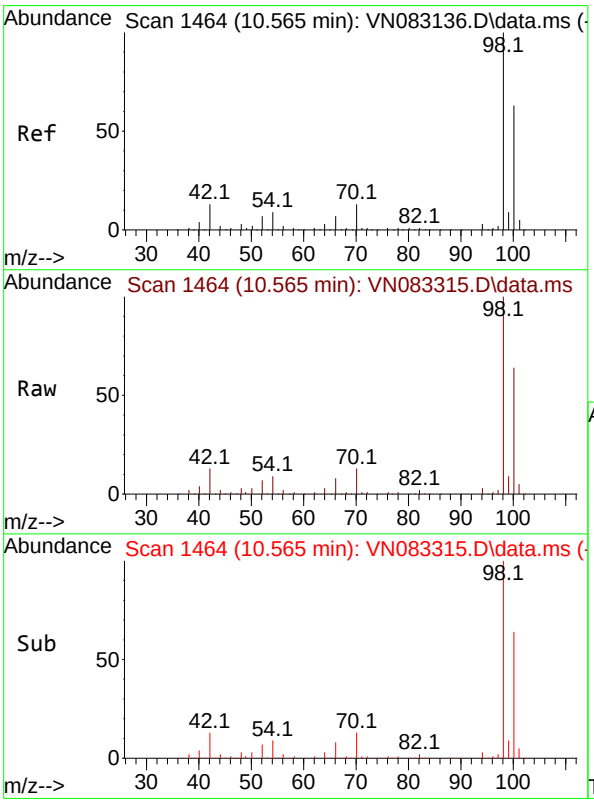
#35
Dibromofluoromethane
Concen: 53.417 ug/l
RT: 8.165 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083315.D
Acq: 14 Aug 2024 20:55

Instrument :
MSVOA_N
ClientSampleId :
TB-01-081424

Tgt Ion:113 Resp: 84684

Ion	Ratio	Lower	Upper
113	100		
111	101.5	82.4	123.6
192	16.3	14.9	22.3

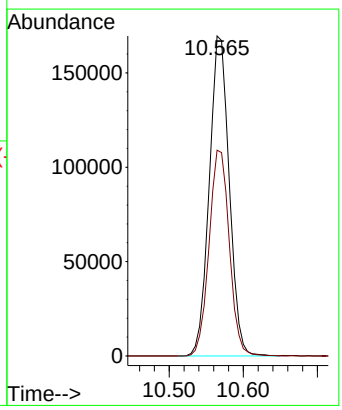


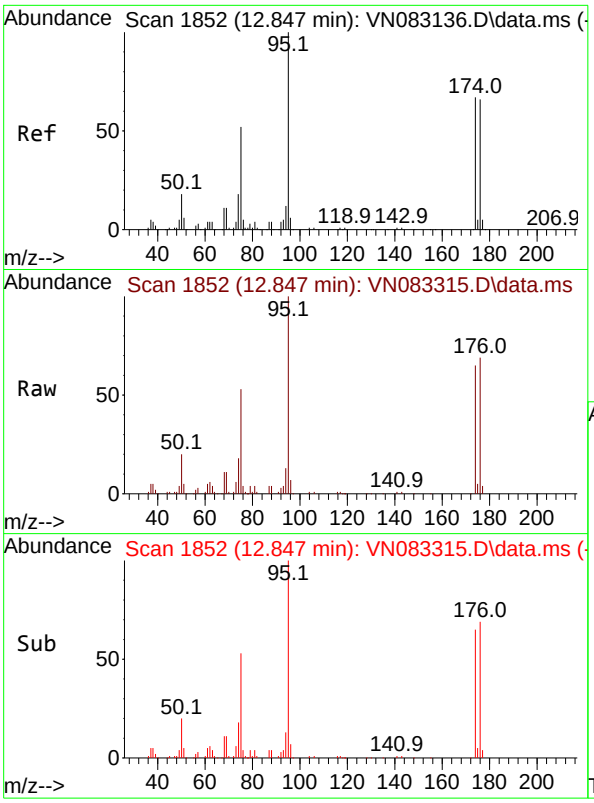


#50
Toluene-d8
Concen: 53.563 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. -0.000 min
Lab File: VN083315.D
Acq: 14 Aug 2024 20:55

Tgt Ion: 98 Resp: 316755

Ion	Ratio	Lower	Upper
98	100		
100	65.2	51.5	77.3



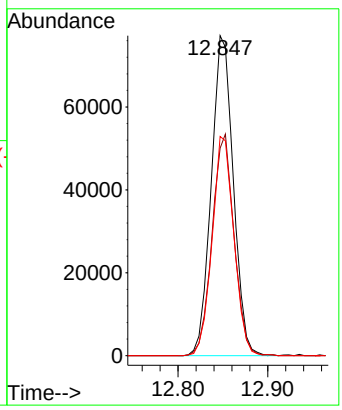


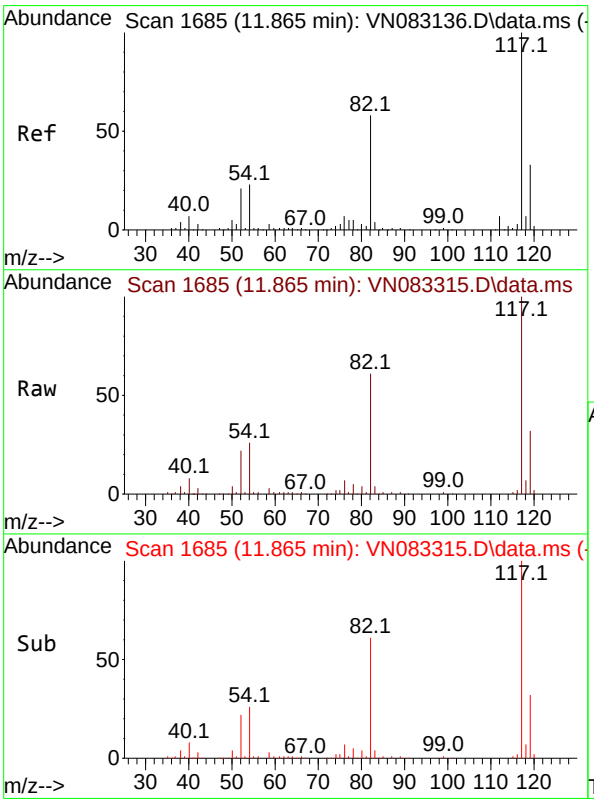
#62
4-Bromofluorobenzene
Concen: 57.011 ug/l
RT: 12.847 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083315.D
Acq: 14 Aug 2024 20:55

Instrument :
MSVOA_N
ClientSampleId :
TB-01-081424

Tgt Ion: 95 Resp: 131440

Ion	Ratio	Lower	Upper
95	100		
174	69.1	0.0	159.2
176	67.7	0.0	147.6

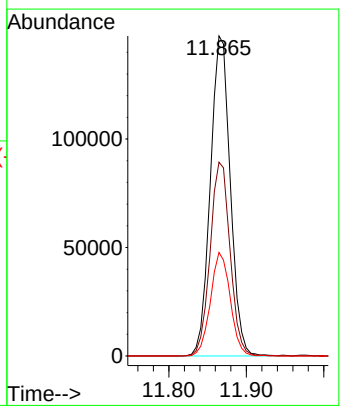


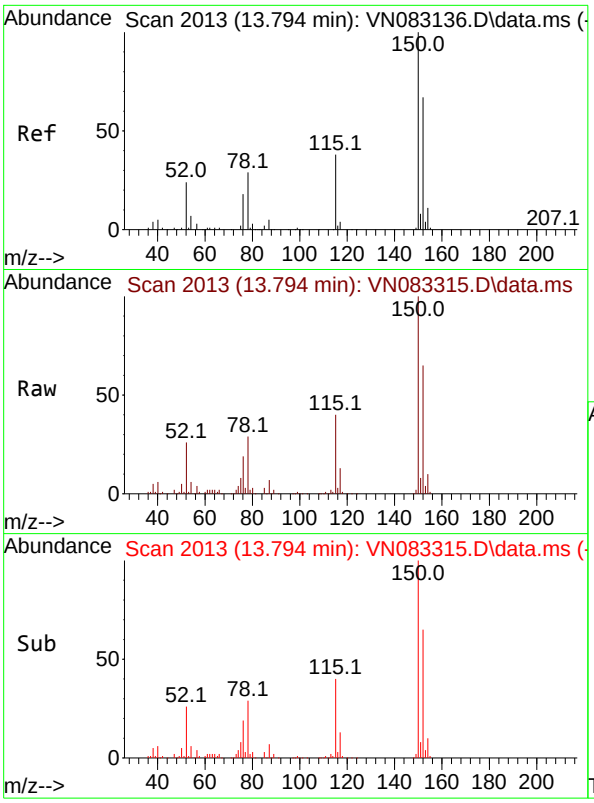


#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1685
Delta R.T. -0.000 min
Lab File: VN083315.D
Acq: 14 Aug 2024 20:55

Tgt Ion:117 Resp: 263608

Ion	Ratio	Lower	Upper
117	100		
82	60.6	47.5	71.3
119	32.4	25.6	38.4



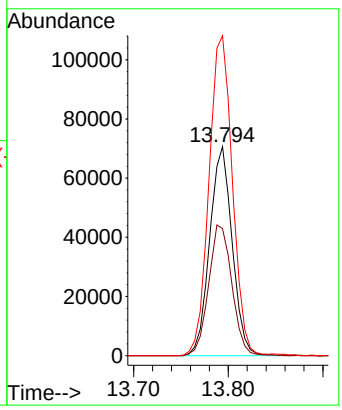


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.794 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN083315.D
Acq: 14 Aug 2024 20:55

Instrument :
MSVOA_N
ClientSampleId :
TB-01-081424

Tgt Ion:152 Resp: 116466

Ion	Ratio	Lower	Upper
152	100		
115	64.6	30.6	91.6
150	159.0	0.0	348.6



CALIBRATION SUMMARY

Raw Data

Alliance TECHNICAL GROUP

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM Case No.: P3609 SAS No.: P3609 SDG No.: P3609

Instrument ID: MSVOA_N Calibration Date(s): 08/07/2024 08/07/2024

Heated Purge: (Y/N) N Calibration Time(s): 10:33 12:34

GC Column: RXI-624 ID: 0.25 (mm)

LAB FILE ID: RRF100 = VN083135.D RRF050 = VN083136.D RRF020 = VN083137.D
RRF010 = VN083138.D RRF005 = VN083139.D RRF001 = VN083140.D

COMPOUND	RRF100	RRF050	RRF020	RRF010	RRF005	RRF001	$\overline{RRF}$	% RSD
Dichlorodifluoromethane	0.548	0.571	0.566	0.579	0.597	0.542	0.567	3.6
Chloromethane	0.547	0.591	0.584	0.589	0.595	0.576	0.581	3.1
Vinyl Chloride	0.562	0.598	0.588	0.612	0.586	0.607	0.592	3
Bromomethane	0.313	0.357	0.370	0.385	0.413		0.368	10.1
1,1,2-Trichlorotrifluoroethane	0.524	0.548	0.548	0.550	0.558	0.510	0.539	3.4
Acetone	0.302	0.286	0.260	0.284	0.274	0.265	0.278	5.5
Carbon Disulfide	1.466	1.560	1.596	1.599	1.630	1.879	1.622	8.5
Methyl tert-butyl Ether	1.927	2.028	2.028	2.015	2.053	1.953	2.001	2.5
Methylene Chloride	0.569	0.599	0.619	0.614	0.640	0.805	0.641	13
trans-1,2-Dichloroethene	0.533	0.574	0.577	0.586	0.568	0.599	0.573	3.9
Cyclohexane	0.933	0.982	1.010	1.110	1.238		1.055	11.5
2-Butanone	0.418	0.427	0.424	0.430	0.414	0.453	0.428	3.2
Carbon Tetrachloride	0.524	0.546	0.548	0.541	0.539	0.493	0.532	3.9
cis-1,2-Dichloroethene	0.658	0.689	0.691	0.701	0.687	0.721	0.691	3
Chloroform	1.087	1.137	1.110	1.132	1.122	1.102	1.115	1.7
1,1,1-Trichloroethane	1.027	1.075	1.066	1.076	1.081	1.007	1.055	2.9
Methylcyclohexane	0.565	0.597	0.587	0.583	0.575	0.572	0.580	2
Benzene	1.386	1.447	1.431	1.429	1.403	1.343	1.406	2.7
1,2-Dichloroethane	0.494	0.520	0.514	0.524	0.524	0.498	0.512	2.6
Trichloroethene	0.331	0.344	0.343	0.341	0.340	0.310	0.335	3.9
Bromodichloromethane	0.521	0.539	0.540	0.533	0.541	0.544	0.537	1.6
Toluene	0.892	0.926	0.905	0.900	0.885	0.824	0.889	3.9
1,1,2-Trichloroethane	0.322	0.334	0.331	0.327	0.314	0.283	0.318	6
Dibromochloromethane	0.400	0.413	0.397	0.388	0.383	0.329	0.385	7.7
Tetrachloroethene	0.319	0.343	0.338	0.343	0.324	0.320	0.331	3.5
Chlorobenzene	1.070	1.142	1.101	1.153	1.094	1.069	1.105	3.2
Ethyl Benzene	1.967	2.075	2.061	2.070	2.032	1.957	2.027	2.6
m/p-Xylenes	0.747	0.787	0.771	0.785	0.759	0.706	0.759	4
o-Xylene	0.735	0.773	0.759	0.773	0.750	0.703	0.749	3.6
Isopropylbenzene	3.822	4.249	4.133	4.386	4.249	4.254	4.182	4.6

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

Alliance TECHNICAL GROUP

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM Case No.: P3609 SAS No.: P3609 SDG No.: P3609

Instrument ID: MSVOA_N Calibration Date(s): 08/07/2024 08/07/2024

Heated Purge: (Y/N) N Calibration Time(s): 10:33 12:34

GC Column: RXI-624 ID: 0.25 (mm)

LAB FILE ID: RRF100 = VN083135.D RRF050 = VN083136.D RRF020 = VN083137.D
RRF010 = VN083138.D RRF005 = VN083139.D RRF001 = VN083140.D

COMPOUND	RRF100	RRF050	RRF020	RRF010	RRF005	RRF001	$\overline{RRF}$	% RSD
1,4-Dichlorobenzene	1.655	1.783	1.728	1.751	1.795	1.862	1.762	4
1,2-Dichlorobenzene	1.571	1.704	1.664	1.739	1.731	1.741	1.692	3.9
1,2-Dichloroethane-d4	0.717	0.745	0.601	0.710	0.786		0.712	9.7
Dibromofluoromethane	0.311	0.332	0.264	0.307	0.346		0.312	10
Toluene-d8	1.201	1.261	0.985	1.133	1.240		1.164	9.6
4-Bromofluorobenzene	0.473	0.492	0.390	0.432	0.483		0.454	9.4

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

Response Factor Report MSVOA_N_NEW

Method Path : Z:\voasrv\HPCHEM1\MSVOA_N\methods\
Method File : 82N080724W.M
Title : SW846 8260
Last Update : Thu Aug 08 06:30:41 2024
Response Via : Initial Calibration

Calibration Files
1 =VN083140.D 5 =VN083139.D 10 =VN083138.D 20 =VN083137.D 50 =VN083136.D 100 =VN083135.D

		Compound	1	5	10	20	50	100	Avg	%RSD
1)	I	Pentafluorobenzene	----------ISTD----------							
2)	T	Dichlorodifluo...	0.542	0.597	0.579	0.566	0.571	0.548	0.567	3.55
3)	P	Chloromethane	0.576	0.595	0.589	0.584	0.591	0.547	0.581	3.06
4)	C	Vinyl Chloride	0.607	0.586	0.612	0.588	0.598	0.562	0.592	3.02#
5)	T	Bromomethane		0.413	0.385	0.370	0.357	0.313	0.368	10.07
6)	T	Chloroethane	0.436	0.381	0.355	0.356	0.356	0.340	0.371	9.33
7)	T	Trichlorofluor...	0.901	1.003	1.013	1.005	0.995	0.955	0.979	4.42
8)	T	Diethyl Ether	0.338	0.380	0.385	0.367	0.366	0.348	0.364	4.97
9)	T	1,1,2-Trichlor...	0.510	0.558	0.550	0.548	0.548	0.524	0.539	3.41
10)	T	Methyl Iodide		0.688	0.710	0.703	0.740	0.707	0.710	2.72
11)	T	Tert butyl alc...		0.155	0.155	0.146	0.147	0.136	0.148	5.22
12)	CM	1,1-Dichloroet...	0.575	0.581	0.564	0.538	0.544	0.524	0.554	4.08#
13)	T	Acrolein		0.095	0.101	0.083	0.102	0.100	0.096	7.99
14)	T	Allyl chloride	1.210	1.099	1.083	1.063	0.933	0.896	1.047	11.00
15)	T	Acrylonitrile	0.306	0.311	0.306	0.304	0.306	0.293	0.304	1.95
16)	T	Acetone	0.265	0.274	0.284	0.260	0.286	0.302	0.278	5.51
17)	T	Carbon Disulfide	1.879	1.630	1.599	1.596	1.560	1.466	1.622	8.52
18)	T	Methyl Acetate	0.985	0.844	0.842	0.773	0.776	0.758	0.830	10.20
19)	T	Methyl tert-bu...	1.953	2.053	2.015	2.028	2.028	1.927	2.001	2.46
20)	T	Methylene Chlo...	0.805	0.640	0.614	0.619	0.599	0.569	0.641	13.03
21)	T	trans-1,2-Dich...	0.599	0.568	0.586	0.577	0.574	0.533	0.573	3.93
22)	T	Diisopropyl ether	1.945	1.966	2.009	1.976	2.008	1.909	1.969	1.94
23)	T	Vinyl Acetate	1.930	2.006	2.040	2.046	2.096	1.990	2.018	2.80
24)	P	1,1-Dichloroet...	1.035	1.093	1.096	1.093	1.084	1.038	1.073	2.65
25)	T	2-Butanone	0.453	0.414	0.430	0.424	0.427	0.418	0.428	3.22
26)	T	2,2-Dichloropr...	0.925	0.984	1.032	1.019	1.023	0.997	0.997	3.95
27)	T	cis-1,2-Dichlo...	0.721	0.687	0.701	0.691	0.689	0.658	0.691	2.99
28)	T	Bromochloromet...	0.465	0.489	0.391	0.420	0.439	0.427	0.439	7.91
29)	T	Tetrahydrofuran	0.271	0.280	0.286	0.272	0.279	0.270	0.276	2.24
30)	C	Chloroform	1.102	1.122	1.132	1.110	1.137	1.087	1.115	1.71#
31)	T	Cyclohexane		1.238	1.110	1.010	0.982	0.933	1.055	11.50
32)	T	1,1,1-Trichlor...	1.007	1.081	1.076	1.066	1.075	1.027	1.055	2.89
33)	S	1,2-Dichloroet...		0.786	0.710	0.601	0.745	0.717	0.712	9.68
34)	I	1,4-Difluorobenzene	----------ISTD----------							
35)	S	Dibromofluorom...		0.346	0.307	0.264	0.332	0.311	0.312	9.99
36)	T	1,1-Dichloropr...	0.488	0.463	0.477	0.472	0.475	0.457	0.472	2.33
37)	T	Ethyl Acetate	0.665	0.515	0.512	0.502	0.499	0.479	0.529	12.83
38)	T	Carbon Tetrach...	0.493	0.539	0.541	0.548	0.546	0.524	0.532	3.93
39)	T	Methylcyclohexane	0.572	0.575	0.583	0.587	0.597	0.565	0.580	1.96
40)	TM	Benzene	1.343	1.403	1.429	1.431	1.447	1.386	1.406	2.68
41)	T	Methacrylonitrile	0.377	0.290	0.277	0.300	0.283	0.276	0.301	12.78
42)	TM	1,2-Dichloroet...	0.498	0.524	0.524	0.514	0.520	0.494	0.512	2.63
43)	T	Isopropyl Acetate	2.156	1.289	1.075	0.956	0.921	0.869	1.211	40.18
44)	TM	Trichloroethene	0.310	0.340	0.341	0.343	0.344	0.331	0.335	3.94
45)	C	1,2-Dichloropr...	0.316	0.326	0.341	0.344	0.346	0.331	0.334	3.50#
46)	T	Dibromomethane	0.218	0.243	0.240	0.245	0.251	0.238	0.239	4.73
47)	T	Bromodichlorom...	0.544	0.541	0.533	0.540	0.539	0.521	0.537	1.55
48)	T	Methyl methacr...	0.506	0.423	0.432	0.421	0.425	0.415	0.437	7.88
49)	T	1,4-Dioxane	0.008	0.008	0.008	0.008	0.008	0.008	0.008	2.64
50)	S	Toluene-d8		1.240	1.133	0.985	1.261	1.201	1.164	9.56
51)	T	4-Methyl-2-Pen...	0.457	0.499	0.516	0.516	0.517	0.495	0.500	4.62
52)	CM	Toluene	0.824	0.885	0.900	0.905	0.926	0.892	0.889	3.91#
53)	T	t-1,3-Dichloro...	0.469	0.546	0.552	0.573	0.597	0.569	0.551	7.99
54)	T	cis-1,3-Dichlo...	0.546	0.588	0.595	0.597	0.606	0.586	0.586	3.54
55)	T	1,1,2-Trichlor...	0.283	0.314	0.327	0.331	0.334	0.322	0.318	5.95
56)	T	Ethyl methacry...	0.553	0.594	0.612	0.617	0.624	0.601	0.600	4.24

Method Path : Z:\voasrv\HPCHEM1\MSVOA_N\methods\
Method File : 82N080724W.M

57)	T	1,3-Dichloropr...	0.552	0.545	0.575	0.581	0.592	0.561	0.568	3.17
58)	T	2-Chloroethyl ...	0.243	0.250	0.262	0.242	0.261	0.264	0.254	3.91
59)	T	2-Hexanone	0.367	0.385	0.389	0.395	0.397	0.388	0.387	2.70
60)	T	Dibromochlorom...	0.329	0.383	0.388	0.397	0.413	0.400	0.385	7.68
61)	T	1,2-Dibromoethane	0.317	0.332	0.342	0.336	0.347	0.334	0.335	3.13
62)	S	4-Bromofluorob...		0.483	0.432	0.390	0.492	0.473	0.454	9.36
63)	I	Chlorobenzene-d5	----------ISTD----------							
64)	T	Tetrachloroethene	0.320	0.324	0.343	0.338	0.343	0.319	0.331	3.46
65)	PM	Chlorobenzene	1.069	1.094	1.153	1.101	1.142	1.070	1.105	3.23
66)	T	1,1,1,2-Tetrac...	0.370	0.401	0.403	0.385	0.399	0.380	0.390	3.37
67)	C	Ethyl Benzene	1.957	2.032	2.070	2.061	2.075	1.967	2.027	2.59#
68)	T	m/p-Xylenes	0.706	0.759	0.785	0.771	0.787	0.747	0.759	3.99
69)	T	o-Xylene	0.703	0.750	0.773	0.759	0.773	0.735	0.749	3.60
70)	T	Styrene	1.100	1.261	1.300	1.288	1.336	1.261	1.258	6.51
71)	P	Bromoform	0.267	0.275	0.292	0.309	0.318	0.310	0.295	7.01
72)	I	1,4-Dichlorobenzen...	----------ISTD----------							
73)	T	Isopropylbenzene	4.254	4.249	4.386	4.133	4.249	3.822	4.182	4.63
74)	T	N-amyl acetate	2.341	2.051	2.108	1.945	2.003	1.826	2.046	8.50
75)	P	1,1,2,2-Tetrac...	1.234	1.237	1.210	1.163	1.167	1.085	1.183	4.85
76)	T	1,2,3-Trichlor...	1.233	1.083	1.128	1.094	1.063	0.984	1.097	7.47
77)	T	Bromobenzene	0.900	0.975	0.946	0.927	0.959	0.868	0.929	4.27
78)	T	n-propylbenzene	4.800	4.849	4.998	4.753	4.968	4.526	4.816	3.55
79)	T	2-Chlorotoluene	3.146	3.083	3.184	3.027	3.076	2.802	3.053	4.42
80)	T	1,3,5-Trimethy...	3.479	3.563	3.641	3.490	3.589	3.245	3.501	3.98
81)	T	trans-1,4-Dich...		0.530	0.468	0.524	0.493	0.508	0.504	4.97
82)	T	4-Chlorotoluene	3.261	3.081	3.116	3.014	3.104	2.799	3.062	4.99
83)	T	tert-Butylbenzene	3.103	3.199	3.192	3.098	3.162	2.850	3.101	4.19
84)	T	1,2,4-Trimethy...	3.416	3.592	3.679	3.526	3.654	3.305	3.529	4.10
85)	T	sec-Butylbenzene	4.235	4.265	4.325	4.202	4.384	3.976	4.231	3.33
86)	T	p-Isopropyltol...	3.355	3.569	3.510	3.491	3.682	3.354	3.493	3.62
87)	T	1,3-Dichlorobe...	1.870	1.708	1.757	1.739	1.771	1.643	1.748	4.29
88)	T	1,4-Dichlorobe...	1.862	1.795	1.751	1.728	1.783	1.655	1.762	3.96
89)	T	n-Butylbenzene	2.851	3.017	3.045	3.023	3.216	3.011	3.027	3.84
90)	T	Hexachloroethane	0.620	0.696	0.708	0.686	0.689	0.650	0.675	4.92
91)	T	1,2-Dichlorobe...	1.741	1.731	1.739	1.664	1.704	1.571	1.692	3.90
92)	T	1,2-Dibromo-3-...	0.310	0.307	0.289	0.277	0.281	0.258	0.287	6.84
93)	T	1,2,4-Trichlor...	1.014	0.893	0.938	0.943	0.984	0.914	0.948	4.72
94)	T	Hexachlorobuta...	0.480	0.445	0.429	0.397	0.409	0.368	0.421	9.32
95)	T	Naphthalene	3.429	3.230	3.435	3.365	3.481	3.202	3.357	3.44
96)	T	1,2,3-Trichlor...	0.972	0.920	0.974	0.920	0.963	0.877	0.938	4.09

(#) = Out of Range

Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN080724\
Data File : VN083135.D
Acq On : 07 Aug 2024 10:33
Operator : JC\MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 08 06:14:38 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 05:50:26 2024
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.224	168	217317	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	373033	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	329850	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.794	152	162834	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.577	65	311531	100.713	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 201.420%#			
35) Dibromofluoromethane	8.165	113	231805	99.556	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 199.120%#			
50) Toluene-d8	10.565	98	896022	103.163	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 206.320%#			
62) 4-Bromofluorobenzene	12.847	95	352947	104.234	ug/l	0.00
Spiked Amount 50.000	Range 64 - 133		Recovery = 208.460%#			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.124	85	238119	96.624	ug/l	99
3) Chloromethane	2.359	50	237633	94.185	ug/l	98
4) Vinyl Chloride	2.512	62	244329	94.904	ug/l	100
5) Bromomethane	2.924	94	135920	85.085	ug/l	96
6) Chloroethane	3.100	64	147611	91.645	ug/l	99
7) Trichlorofluoromethane	3.489	101	414913	97.558	ug/l	96
8) Diethyl Ether	3.959	74	151291	95.597	ug/l	83
9) 1,1,2-Trichlorotrifluo...	4.365	101	227550	97.044	ug/l	98
10) Methyl Iodide	4.583	142	307476	99.686	ug/l	97
11) Tert butyl alcohol	5.524	59	296420	461.112	ug/l	98
12) 1,1-Dichloroethene	4.336	96	227537	94.453	ug/l	90
13) Acrolein	4.177	56	218130	520.640	ug/l	98
14) Allyl chloride	5.018	41	389580	85.577	ug/l	93
15) Acrylonitrile	5.718	53	636894	481.734	ug/l	99
16) Acetone	4.424	43	656348	542.264	ug/l	95
17) Carbon Disulfide	4.712	76	637255	90.406	ug/l	99
18) Methyl Acetate	5.024	43	329457	91.357	ug/l	92
19) Methyl tert-butyl Ether	5.794	73	837562	96.324	ug/l	99
20) Methylene Chloride	5.277	84	247283	88.771	ug/l	88
21) trans-1,2-Dichloroethene	5.783	96	231530	92.991	ug/l	95
22) Diisopropyl ether	6.671	45	829706	96.959	ug/l	96
23) Vinyl Acetate	6.600	43	4324915	493.177	ug/l	95
24) 1,1-Dichloroethane	6.571	63	451253	96.746	ug/l	99
25) 2-Butanone	7.482	43	908992	489.098	ug/l	91
26) 2,2-Dichloropropane	7.488	77	433489	100.075	ug/l	98
27) cis-1,2-Dichloroethene	7.488	96	286100	95.225	ug/l	93
28) Bromochloromethane	7.812	49	185533	97.333	ug/l	85
29) Tetrahydrofuran	7.841	42	587324	488.865	ug/l	88
30) Chloroform	7.965	83	472257	97.456	ug/l	99
31) Cyclohexane	8.259	56	405666	88.496	ug/l	98
32) 1,1,1-Trichloroethane	8.171	97	446446	97.332	ug/l	95
36) 1,1-Dichloropropene	8.371	75	340980	96.808	ug/l	98
37) Ethyl Acetate	7.559	43	357308	90.602	ug/l #	93
38) Carbon Tetrachloride	8.359	117	391148	98.597	ug/l	96
39) Methylcyclohexane	9.600	83	421743	97.486	ug/l	97
40) Benzene	8.606	78	1034059	98.550	ug/l	99

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN080724\
Data File : VN083135.D
Acq On : 07 Aug 2024 10:33
Operator : JC\MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 08 06:14:38 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 05:50:26 2024
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	7.777	41	205844	91.799	ug/l		95
42) 1,2-Dichloroethane	8.671	62	368412	96.385	ug/l		97
43) Isopropyl Acetate	8.688	43	648582	99.962	ug/l	#	93
44) Trichloroethene	9.353	130	246689	98.774	ug/l		93
45) 1,2-Dichloropropane	9.624	63	247262	99.275	ug/l		98
46) Dibromomethane	9.712	93	177294	99.449	ug/l		98
47) Bromodichloromethane	9.888	83	389020	97.184	ug/l		100
48) Methyl methacrylate	9.682	41	309367	94.886	ug/l		91
49) 1,4-Dioxane	9.694	88	117342	1994.879	ug/l		94
51) 4-Methyl-2-Pentanone	10.447	43	1846346	495.091	ug/l		92
52) Toluene	10.629	92	665274	100.347	ug/l		97
53) t-1,3-Dichloropropene	10.835	75	424825	103.317	ug/l		98
54) cis-1,3-Dichloropropene	10.312	75	436928	99.903	ug/l		90
55) 1,1,2-Trichloroethane	11.018	97	240237	101.114	ug/l		96
56) Ethyl methacrylate	10.876	69	448632	100.164	ug/l	#	84
57) 1,3-Dichloropropane	11.165	76	418505	98.824	ug/l		98
58) 2-Chloroethyl Vinyl ether	10.159	63	984478	519.987	ug/l		96
59) 2-Hexanone	11.194	43	1447307	501.642	ug/l		92
60) Dibromochloromethane	11.359	129	298498	103.914	ug/l		98
61) 1,2-Dibromoethane	11.470	107	249072	99.794	ug/l		96
64) Tetrachloroethene	11.106	164	210334	96.284	ug/l		96
65) Chlorobenzene	11.894	112	705635	96.805	ug/l		100
66) 1,1,1,2-Tetrachloroethane	11.959	131	250772	97.546	ug/l		99
67) Ethyl Benzene	11.965	91	1297632	97.041	ug/l		99
68) m/p-Xylenes	12.070	106	984984	196.641	ug/l		99
69) o-Xylene	12.400	106	484673	98.107	ug/l		97
70) Styrene	12.412	104	831903	100.261	ug/l		99
71) Bromoform	12.576	173	204380	104.942	ug/l	#	99
73) Isopropylbenzene	12.694	105	1244845	91.399	ug/l		100
74) N-amyl acetate	12.494	43	594797	89.282	ug/l		94
75) 1,1,2,2-Tetrachloroethane	12.941	83	353346	91.727	ug/l		99
76) 1,2,3-Trichloropropane	12.994	75	320302m	89.478	ug/l		
77) Bromobenzene	12.982	156	282676	93.431	ug/l		96
78) n-propylbenzene	13.035	91	1473868	93.979	ug/l		99
79) 2-Chlorotoluene	13.123	91	912618	91.785	ug/l		98
80) 1,3,5-Trimethylbenzene	13.170	105	1056912	92.690	ug/l		98
81) trans-1,4-Dichloro-2-b...	12.735	75	165326	100.628	ug/l		89
82) 4-Chlorotoluene	13.223	91	911384	91.381	ug/l		98
83) tert-Butylbenzene	13.441	119	928195	91.918	ug/l		99
84) 1,2,4-Trimethylbenzene	13.482	105	1076449	93.675	ug/l		99
85) sec-Butylbenzene	13.617	105	1294900	93.978	ug/l		100
86) p-Isopropyltoluene	13.729	119	1092439	96.022	ug/l		99
87) 1,3-Dichlorobenzene	13.735	146	535193	94.009	ug/l		99
88) 1,4-Dichlorobenzene	13.811	146	538924	93.900	ug/l		99
89) n-Butylbenzene	14.059	91	980482	99.461	ug/l		98
90) Hexachloroethane	14.335	117	211710	96.320	ug/l		95
91) 1,2-Dichlorobenzene	14.106	146	511584	92.863	ug/l		98
92) 1,2-Dibromo-3-Chloropr...	14.723	75	83930	89.788	ug/l		98
93) 1,2,4-Trichlorobenzene	15.394	180	297699	96.456	ug/l		99
94) Hexachlorobutadiene	15.500	225	119783	87.268	ug/l		98
95) Naphthalene	15.641	128	1042864	95.391	ug/l		99
96) 1,2,3-Trichlorobenzene	15.841	180	285769	93.575	ug/l		97

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN080724\
Data File : VN083135.D
Acq On : 07 Aug 2024 10:33
Operator : JC\MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

Quant Time: Aug 08 06:14:38 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 05:50:26 2024
Response via : Initial Calibration

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

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

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN080724\
Data File : VN083135.D
Acq On : 07 Aug 2024 10:33
Operator : JC\MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 08 06:14:38 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 05:50:26 2024
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

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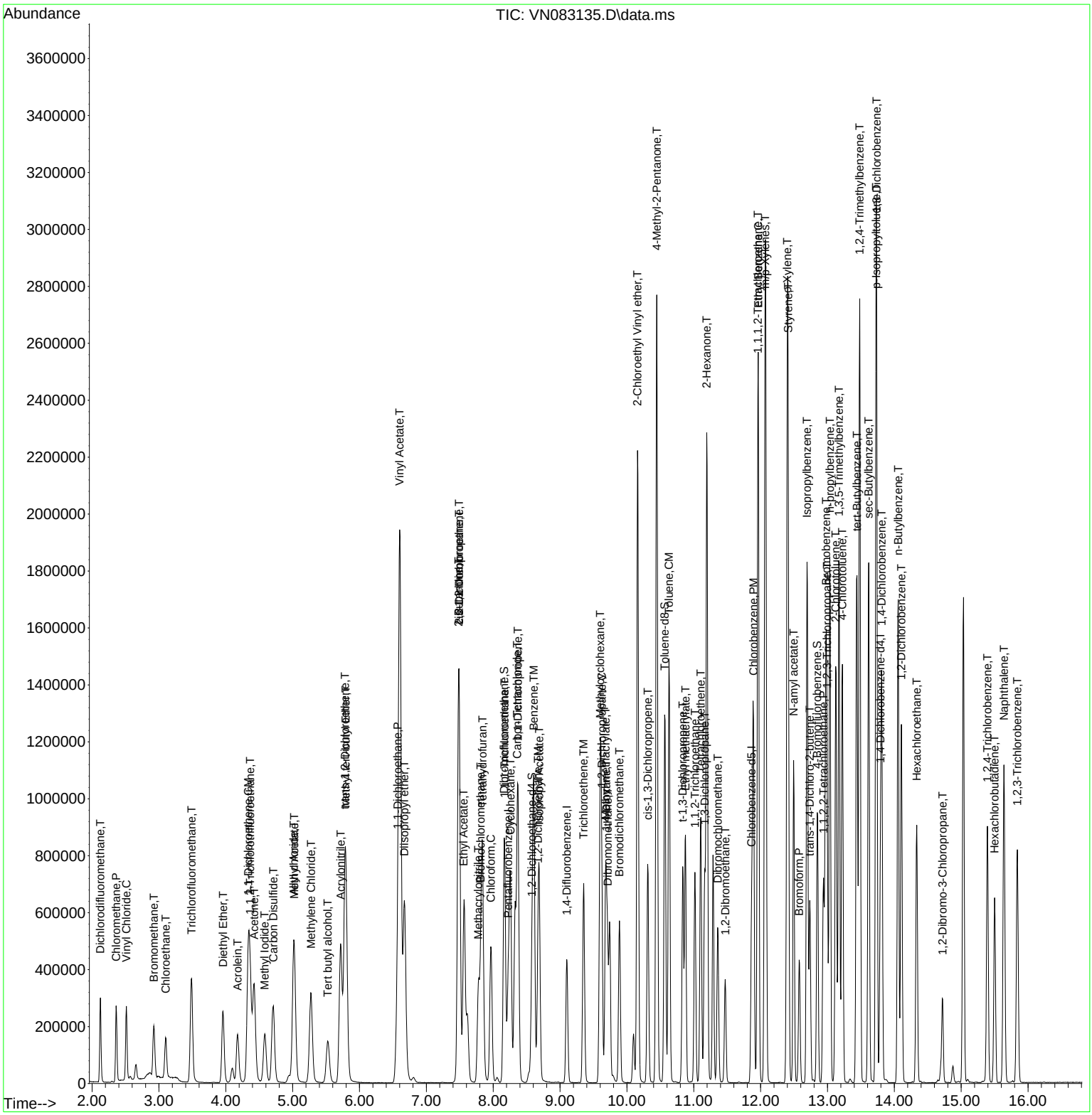
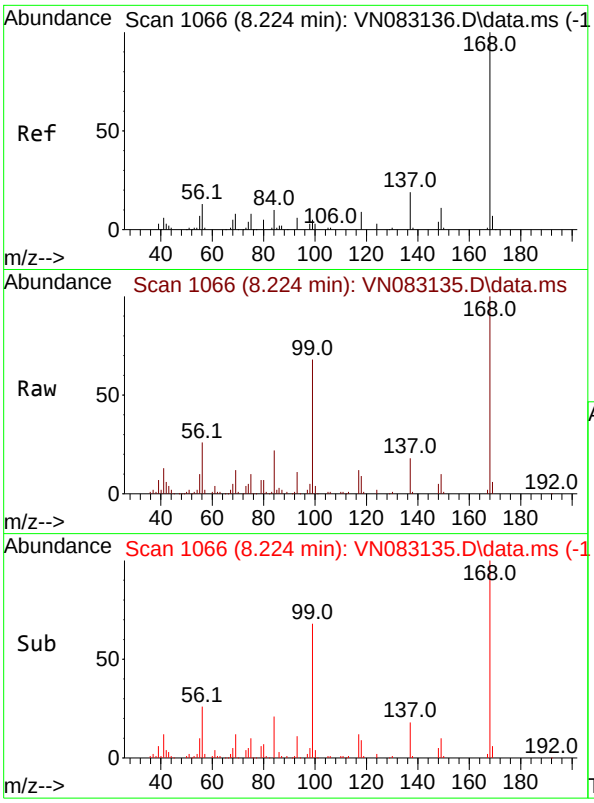
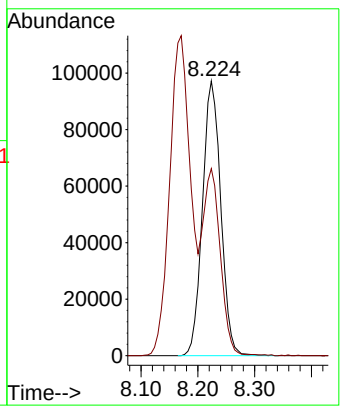




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion:168 Resp: 21731

Ion	Ratio	Lower	Upper
168	100		
99	68.1	48.2	72.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

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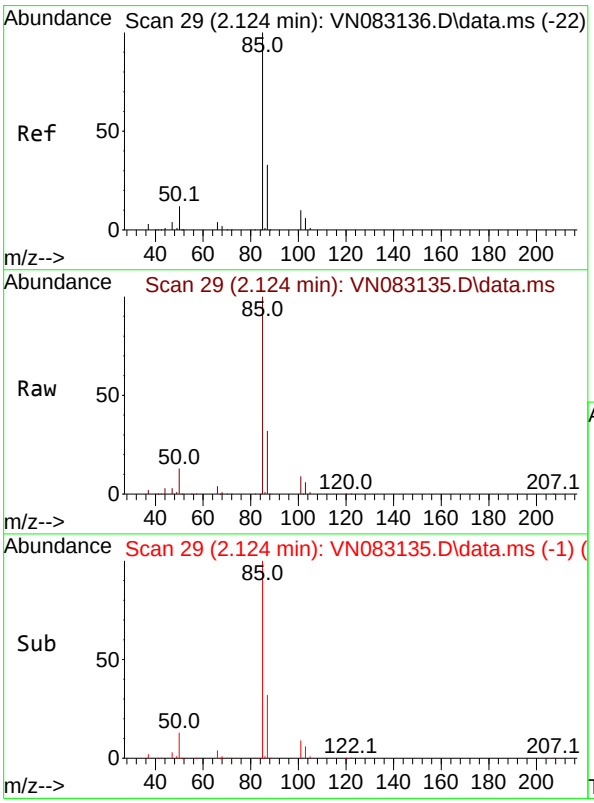
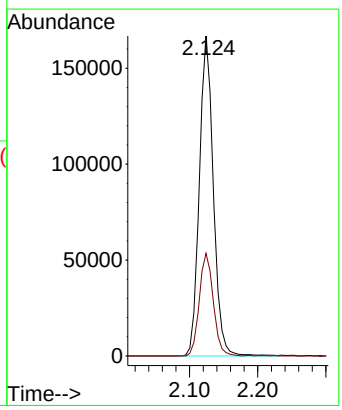
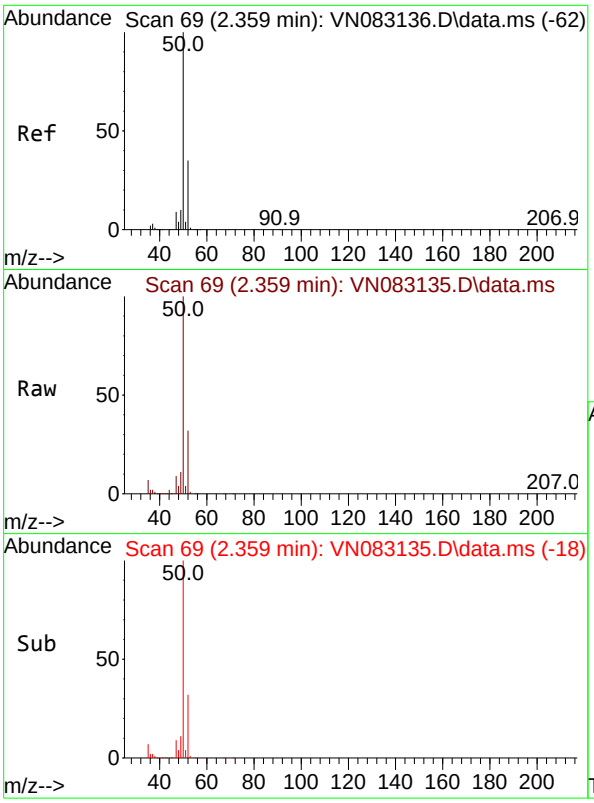


#2
Dichlorodifluoromethane
Concen: 96.624 ug/l
RT: 2.124 min Scan# 29
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 85 Resp: 238119

Ion	Ratio	Lower	Upper
85	100		
87	32.1	15.7	47.0

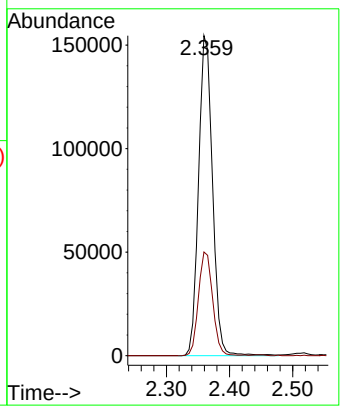




#3
Chloromethane
Concen: 94.185 ug/l
RT: 2.359 min Scan# 6
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 50 Resp: 23763

Ion	Ratio	Lower	Upper
50	100		
52	32.4	25.0	37.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

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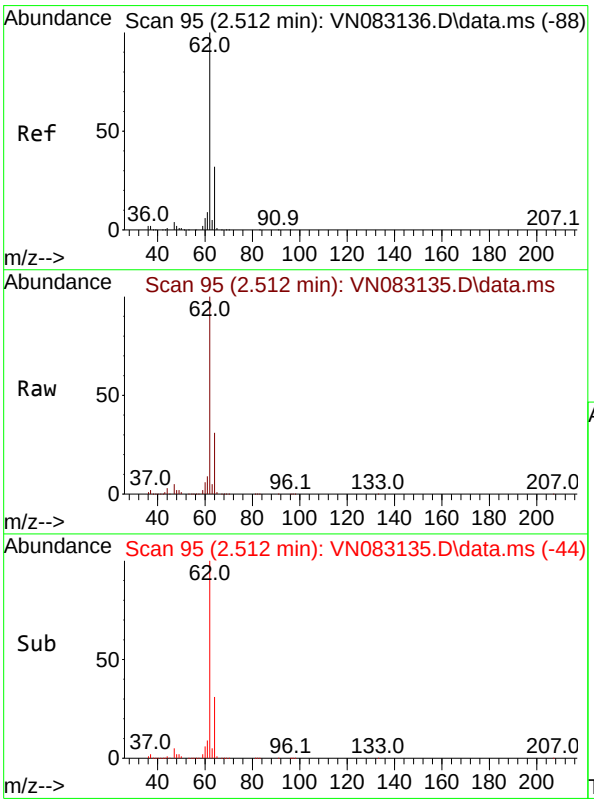
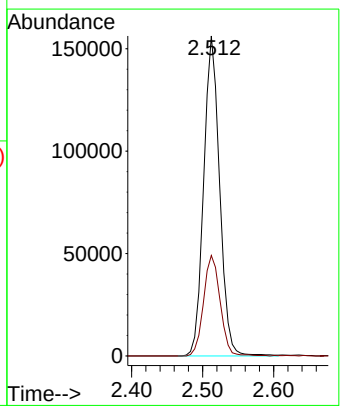
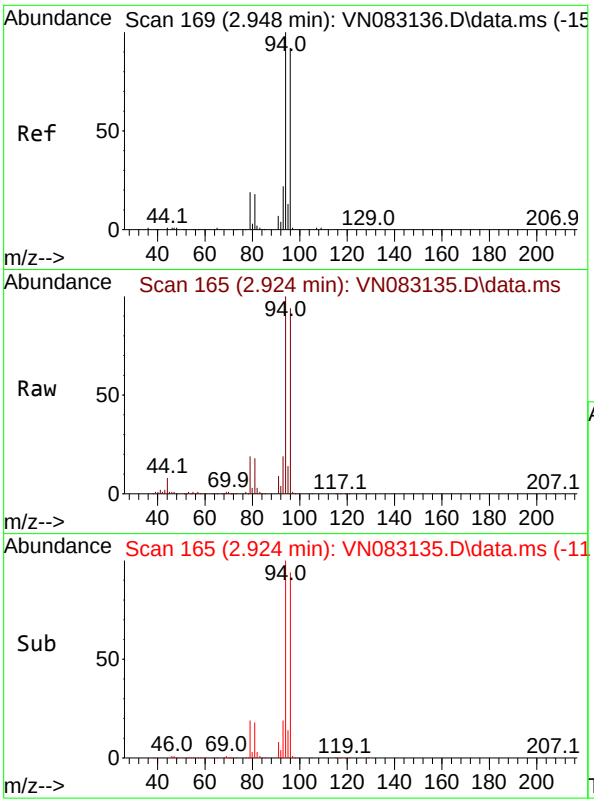


#4
Vinyl Chloride
Concen: 94.904 ug/l
RT: 2.512 min Scan# 95
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 62 Resp: 244329

Ion	Ratio	Lower	Upper
62	100		
64	31.4	25.0	37.6

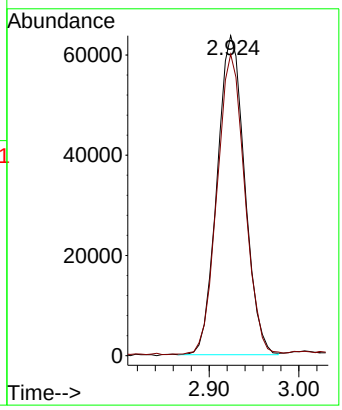




#5
Bromomethane
Concen: 85.085 ug/l
RT: 2.924 min Scan# 1
Delta R.T. -0.024 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 94 Resp: 13592

Ion	Ratio	Lower	Upper
94	100		
96	94.0	78.0	117.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations
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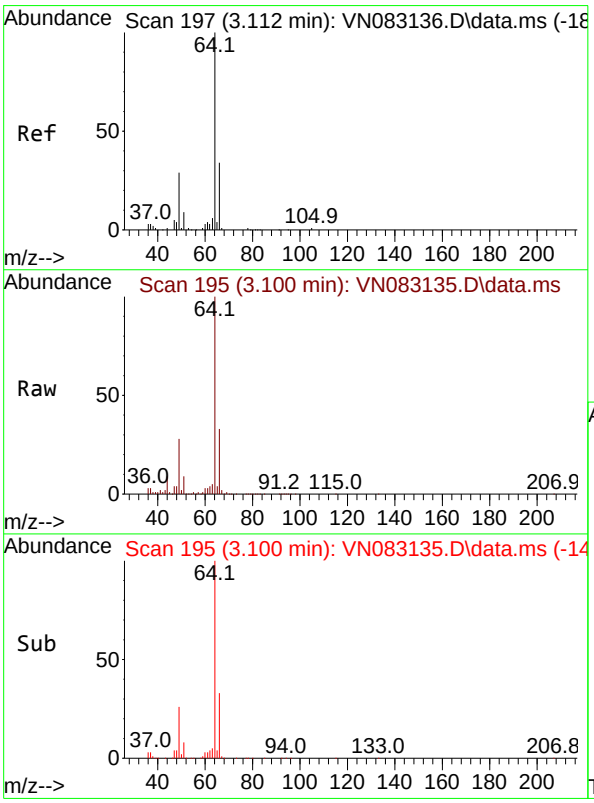
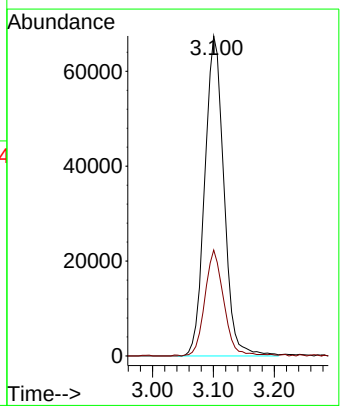
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

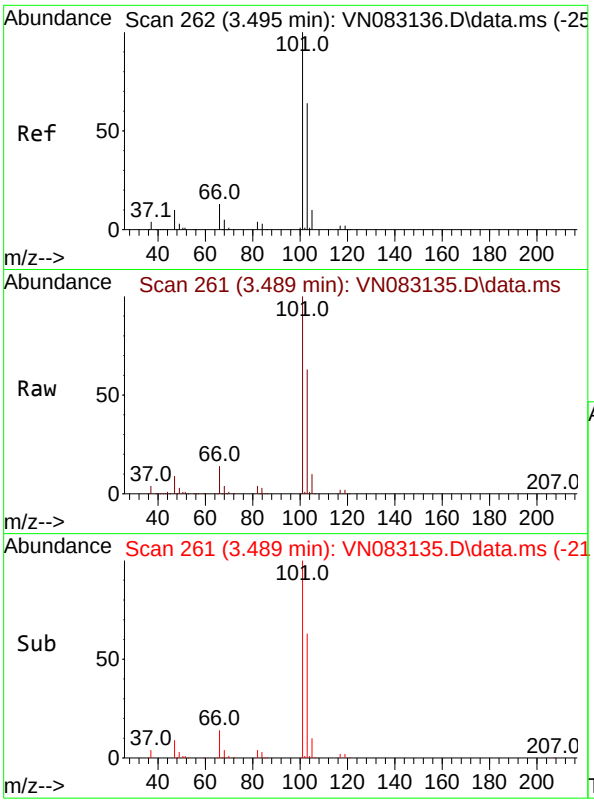


#6
Chloroethane
Concen: 91.645 ug/l
RT: 3.100 min Scan# 195
Delta R.T. -0.012 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 64 Resp: 147611

Ion	Ratio	Lower	Upper
64	100		
66	32.9	26.6	40.0

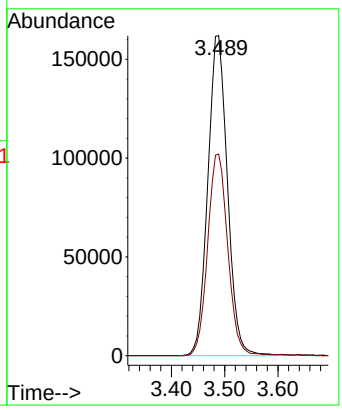




#7
Trichlorofluoromethane
Concen: 97.558 ug/l
RT: 3.489 min Scan# 2
Delta R.T. -0.006 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion:101 Resp: 41491

Ion	Ratio	Lower	Upper
101	100		
103	63.0	52.7	79.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations
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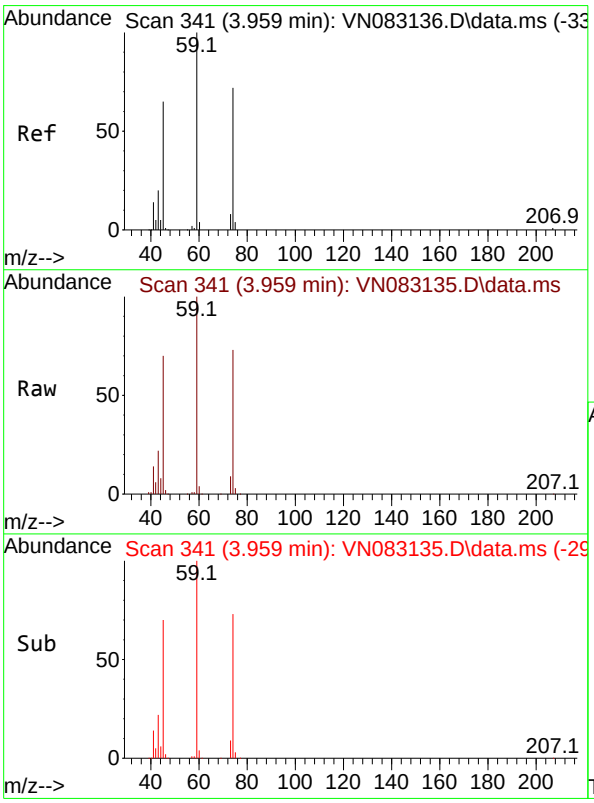
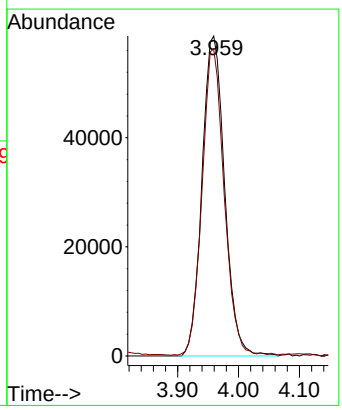
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

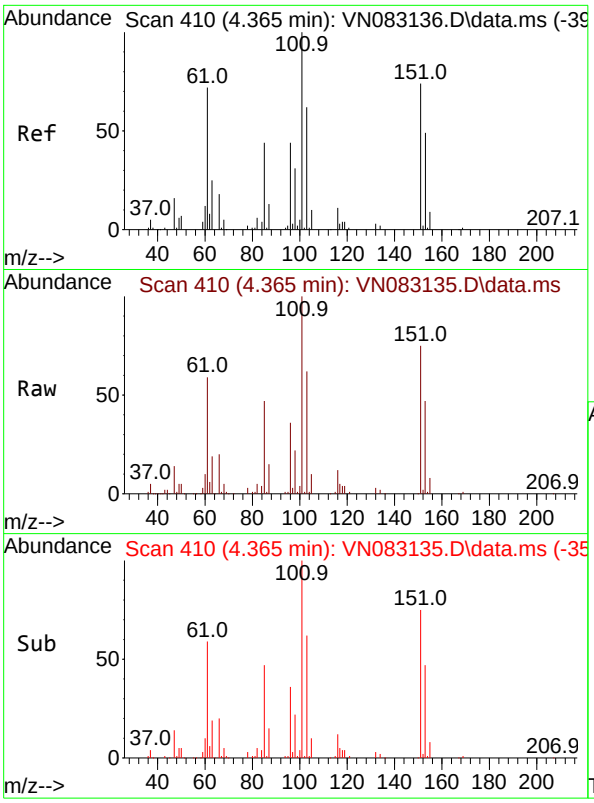


#8
Diethyl Ether
Concen: 95.597 ug/l
RT: 3.959 min Scan# 341
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 74 Resp: 151291

Ion	Ratio	Lower	Upper
74	100		
45	93.4	55.5	166.3

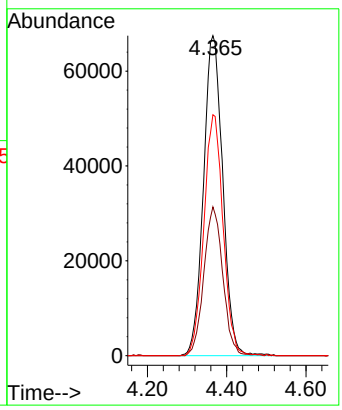




#9
1,1,2-Trichlorotrifluoroethane
Concen: 97.044 ug/l
RT: 4.365 min Scan# 4
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion:101 Resp: 22755

Ion	Ratio	Lower	Upper
101	100		
85	45.6	38.3	57.5
151	75.2	59.3	88.9



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

Reviewed By :John Carlone 08/08/2024
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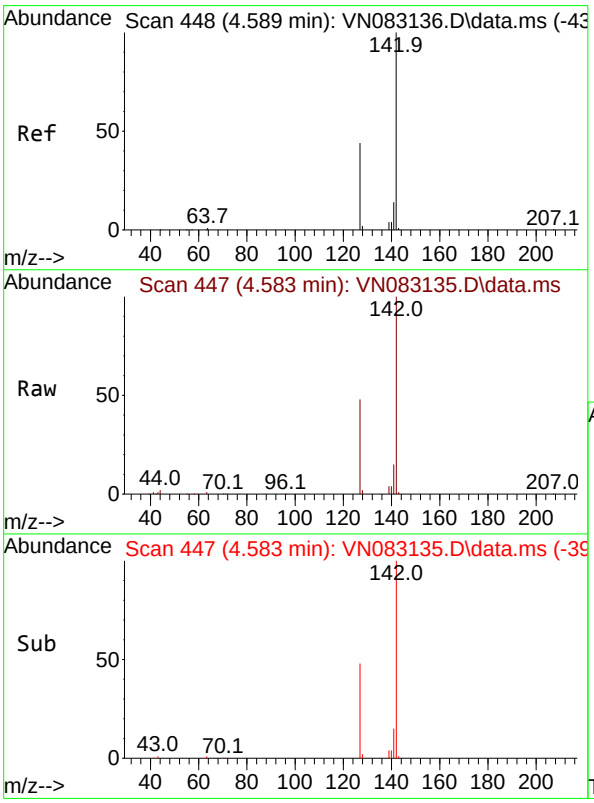
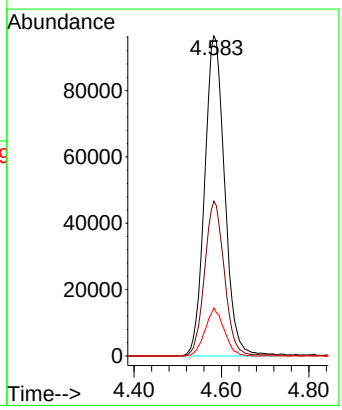
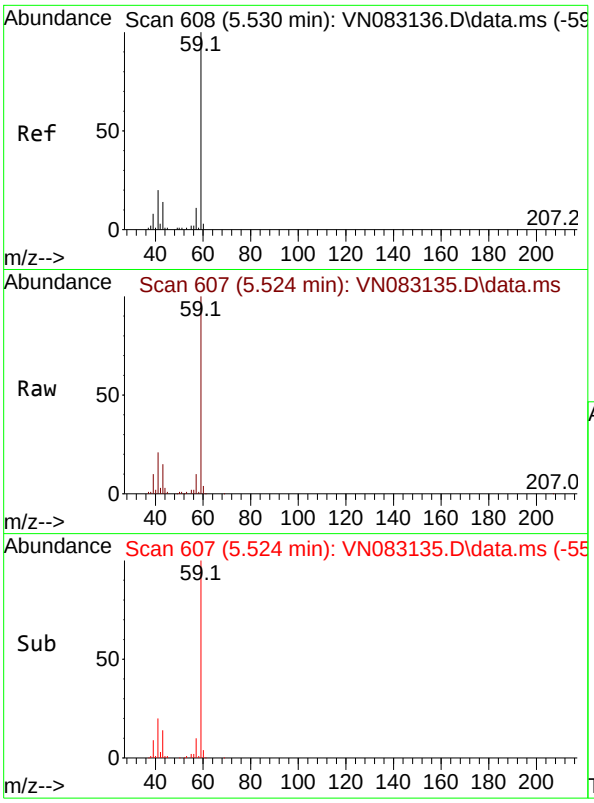


#10
Methyl Iodide
Concen: 99.686 ug/l
RT: 4.583 min Scan# 447
Delta R.T. -0.006 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion:142 Resp: 307476

Ion	Ratio	Lower	Upper
142	100		
127	48.4	37.5	56.3
141	15.0	13.1	19.7

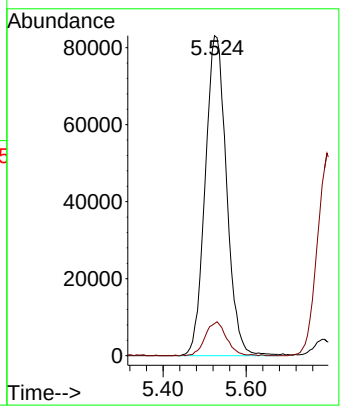




#11
Tert butyl alcohol
Concen: 461.112 ug/l
RT: 5.524 min Scan# 6
Delta R.T. -0.006 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 59 Resp: 29642

Ion	Ratio	Lower	Upper
59	100		
57	10.5	8.9	13.3



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

Reviewed By :John Carlone 08/08/2024
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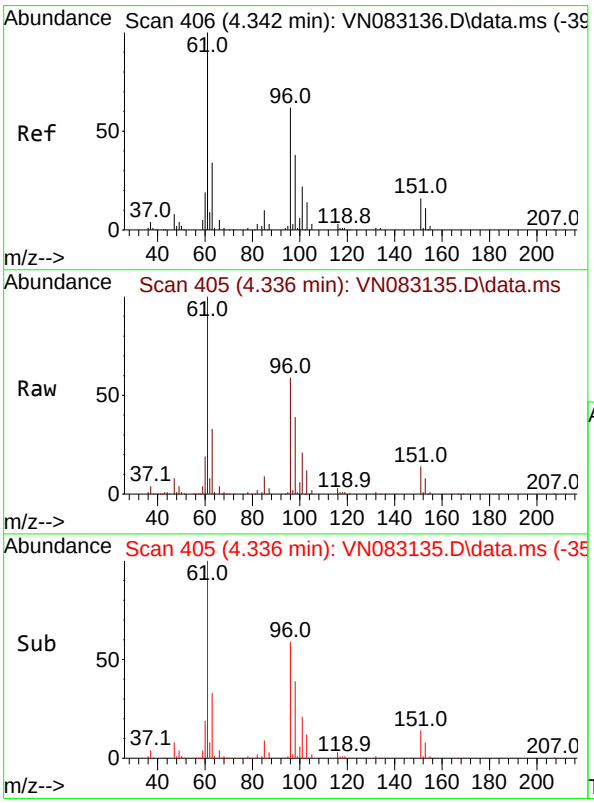
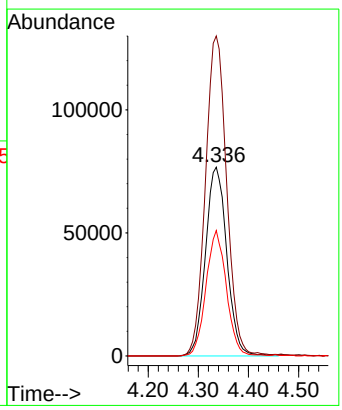
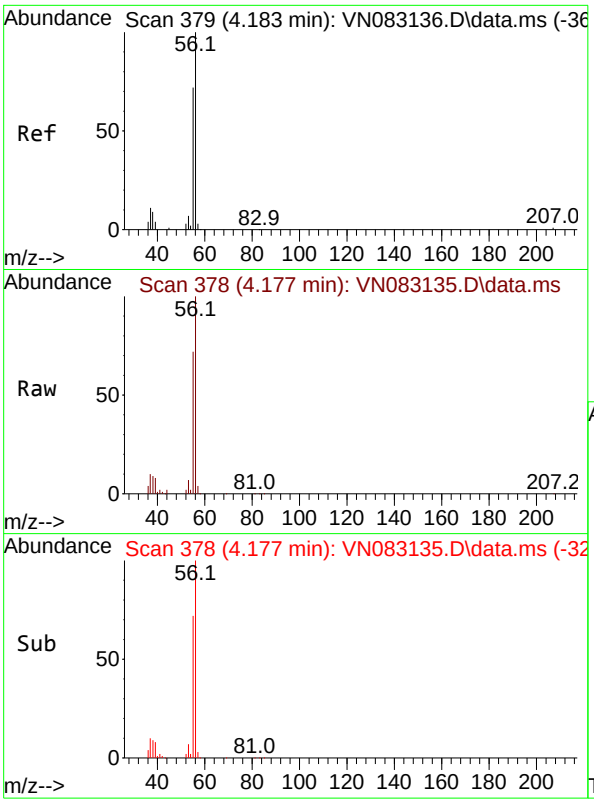


#12
1,1-Dichloroethene
Concen: 94.453 ug/l
RT: 4.336 min Scan# 405
Delta R.T. -0.006 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 96 Resp: 227537

Ion	Ratio	Lower	Upper
96	100		
61	169.4	149.7	224.5
98	66.5	50.1	75.1

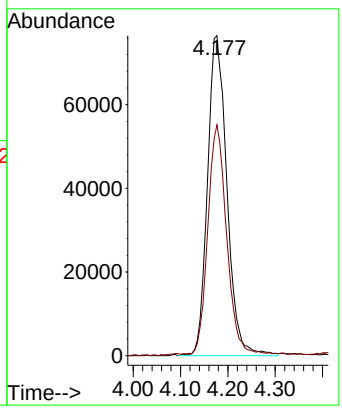




#13
Acrolein
Concen: 520.640 ug/l
RT: 4.177 min Scan# 3
Delta R.T. -0.006 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 56 Resp: 21813

Ion	Ratio	Lower	Upper
56	100		
55	68.5	56.4	84.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations
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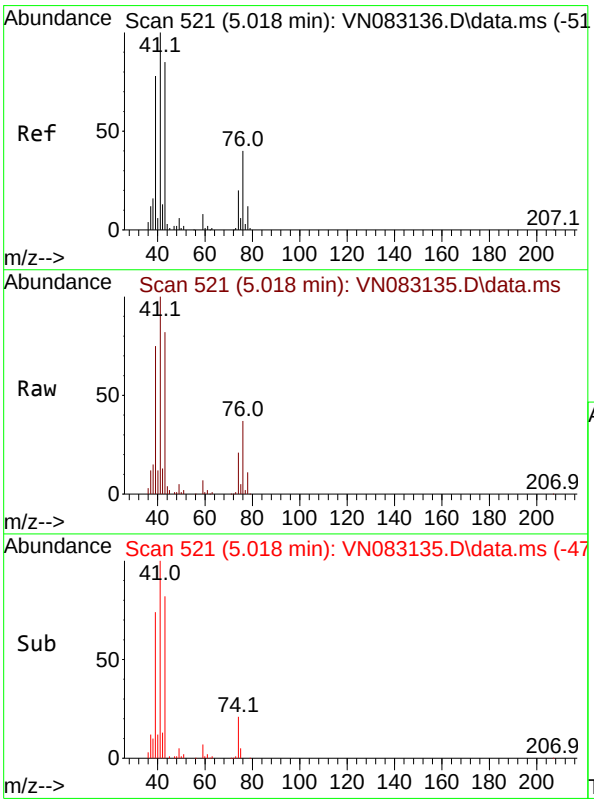
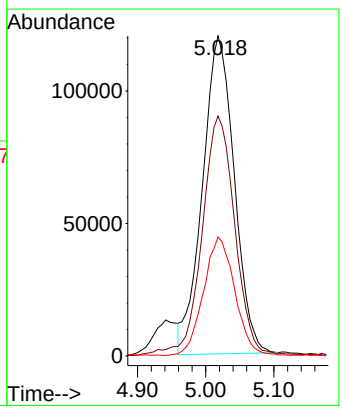
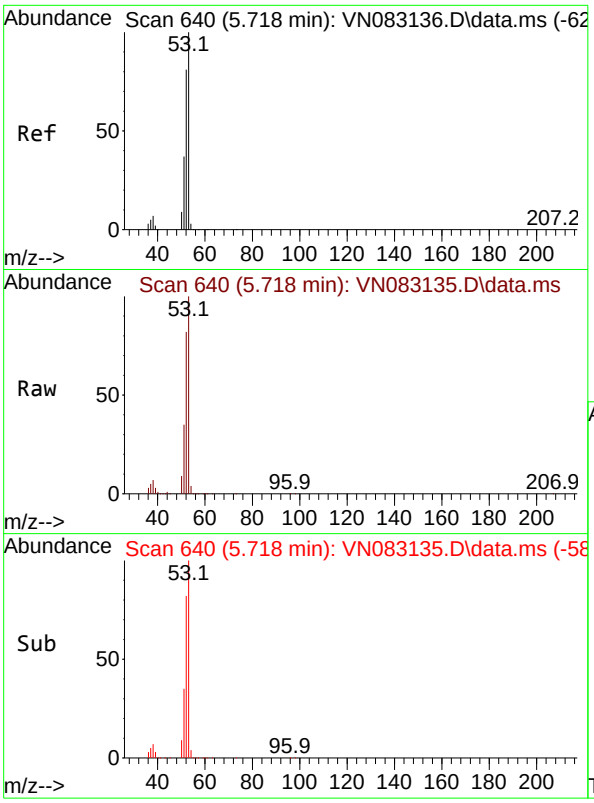


#14
Allyl chloride
Concen: 85.577 ug/l
RT: 5.018 min Scan# 521
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 41 Resp: 389580

Ion	Ratio	Lower	Upper
41	100		
39	78.4	67.8	101.6
76	36.6	25.8	38.8

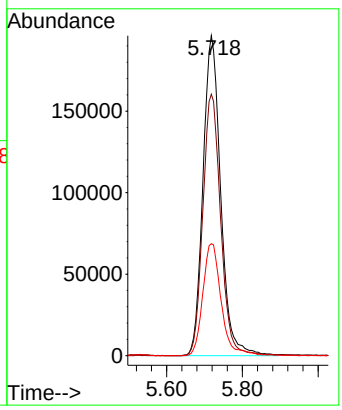




#15
Acrylonitrile
Concen: 481.734 ug/l
RT: 5.718 min Scan# 64
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 53 Resp: 63689

Ion	Ratio	Lower	Upper
53	100		
52	82.5	66.6	100.0
51	36.4	30.1	45.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations
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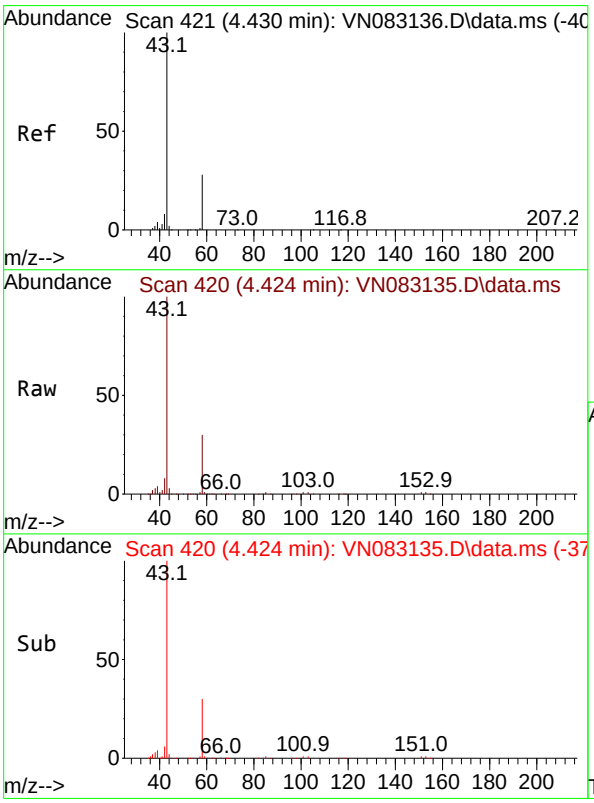
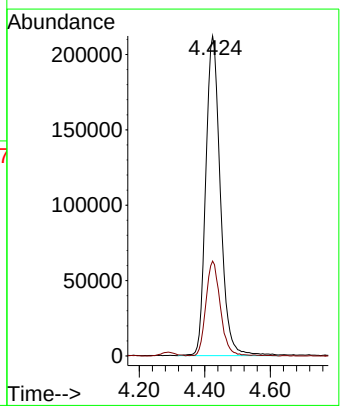
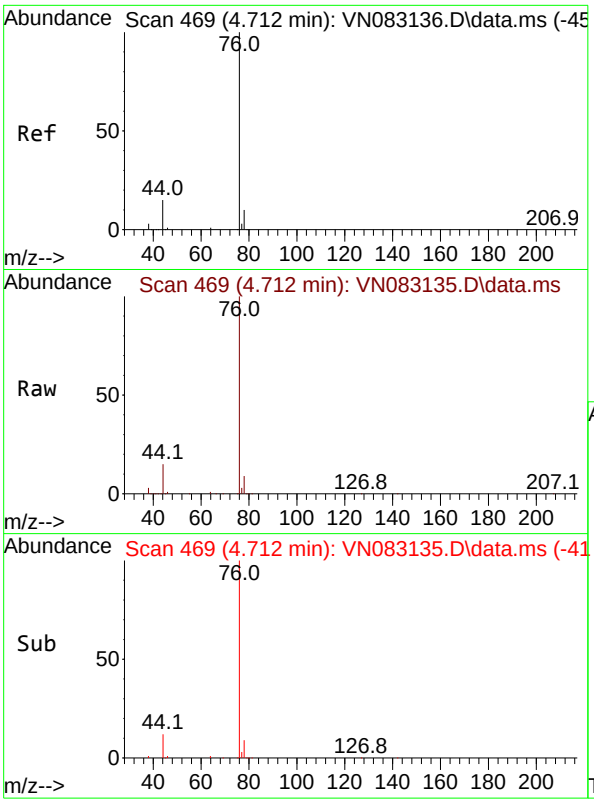


#16
Acetone
Concen: 542.264 ug/l
RT: 4.424 min Scan# 420
Delta R.T. -0.006 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 43 Resp: 656348

Ion	Ratio	Lower	Upper
43	100		
58	29.7	21.8	32.6





#17
Carbon Disulfide
Concen: 90.406 ug/l
RT: 4.712 min Scan# 4
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

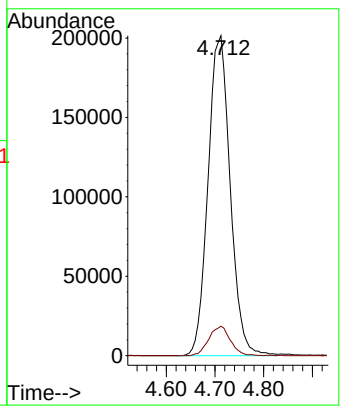
Tgt Ion: 76 Resp: 63725

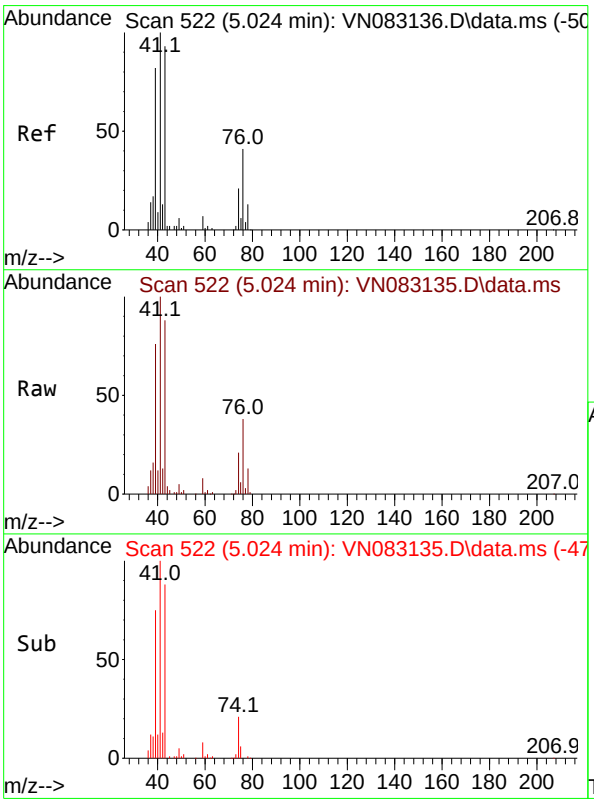
Ion	Ratio	Lower	Upper
76	100		
78	9.2	7.2	10.8

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

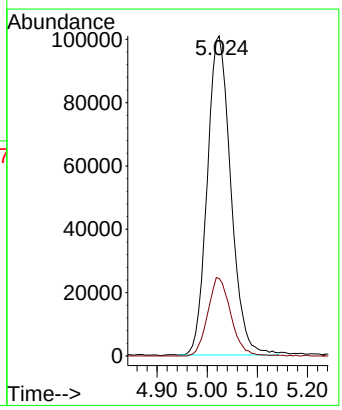


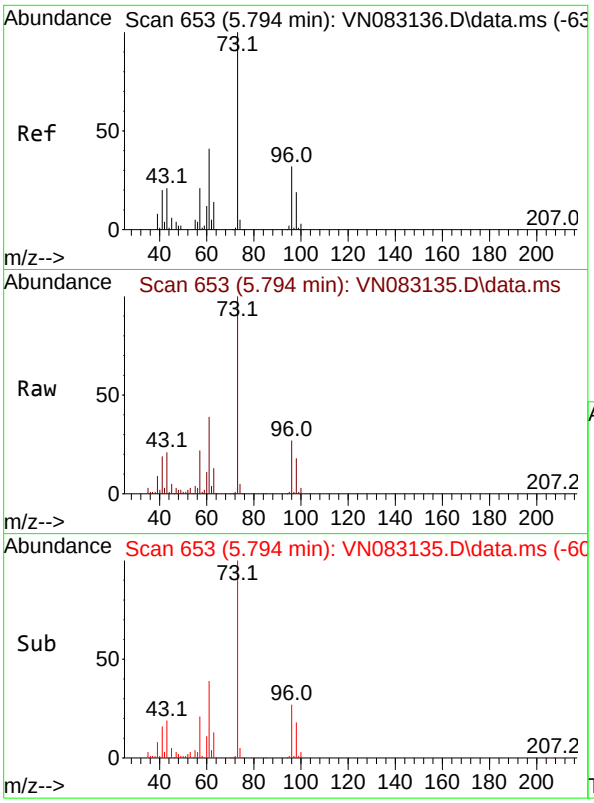


#18
Methyl Acetate
Concen: 91.357 ug/l
RT: 5.024 min Scan# 522
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 43 Resp: 329457

Ion	Ratio	Lower	Upper
43	100		
74	24.0	16.3	24.5

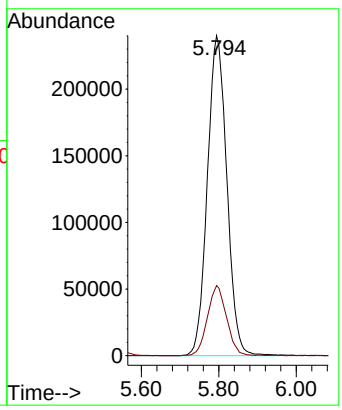




#19
Methyl tert-butyl Ether
Concen: 96.324 ug/l
RT: 5.794 min Scan# 6
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 73 Resp: 83756

Ion	Ratio	Lower	Upper
73	100		
57	21.9	17.9	26.9



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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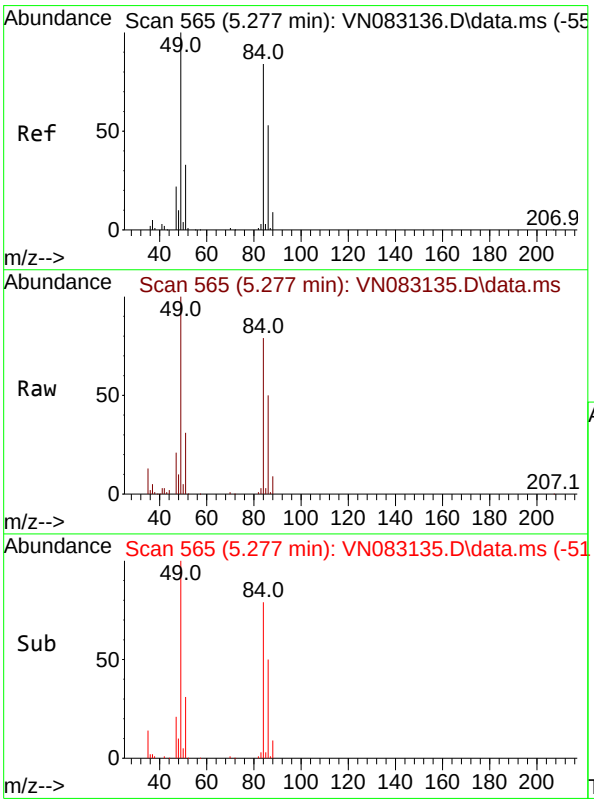
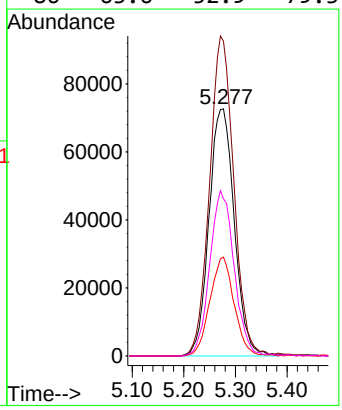
Supervised By :Mahesh Dadoda 08/09/2024

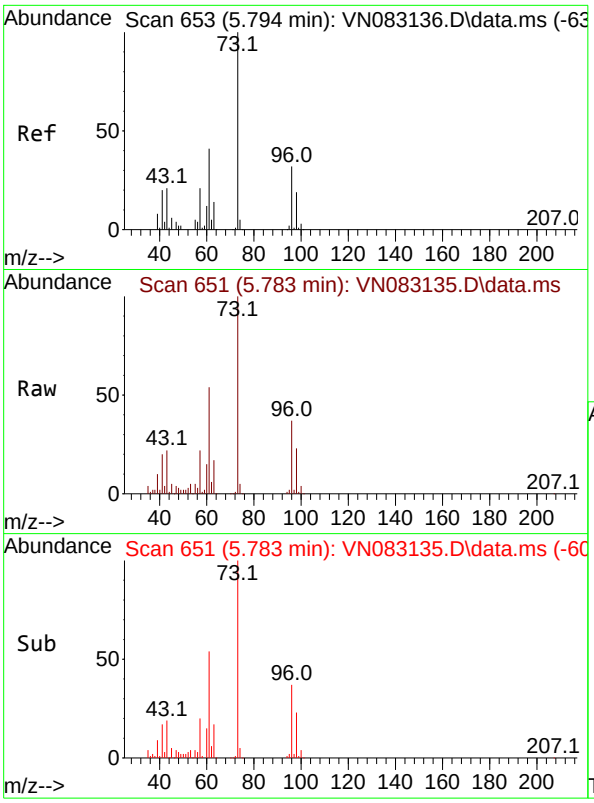


#20
Methylene Chloride
Concen: 88.771 ug/l
RT: 5.277 min Scan# 565
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 84 Resp: 247283

Ion	Ratio	Lower	Upper
84	100		
49	127.4	119.6	179.4
51	40.0	34.8	52.2
86	63.6	52.9	79.3

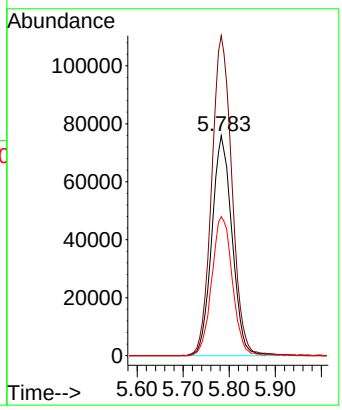




#21
trans-1,2-Dichloroethene
Concen: 92.991 ug/l
RT: 5.783 min Scan# 6
Delta R.T. -0.012 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 96 Resp: 23153

Ion	Ratio	Lower	Upper
96	100		
61	145.4	123.4	185.2
98	63.2	49.3	73.9



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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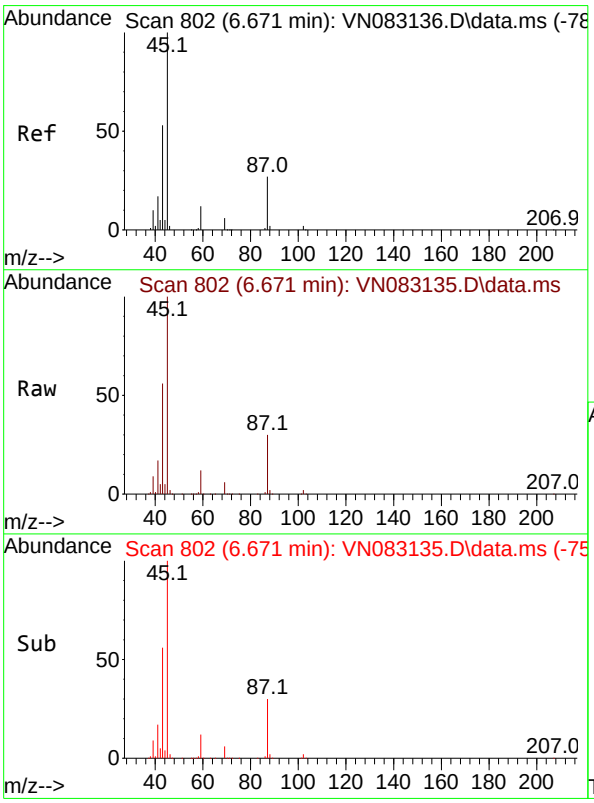
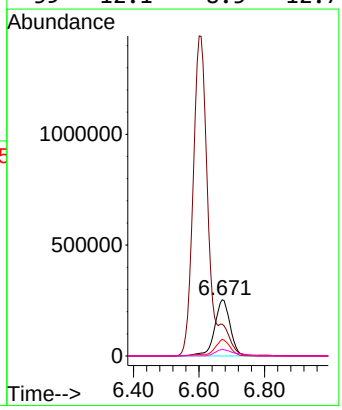
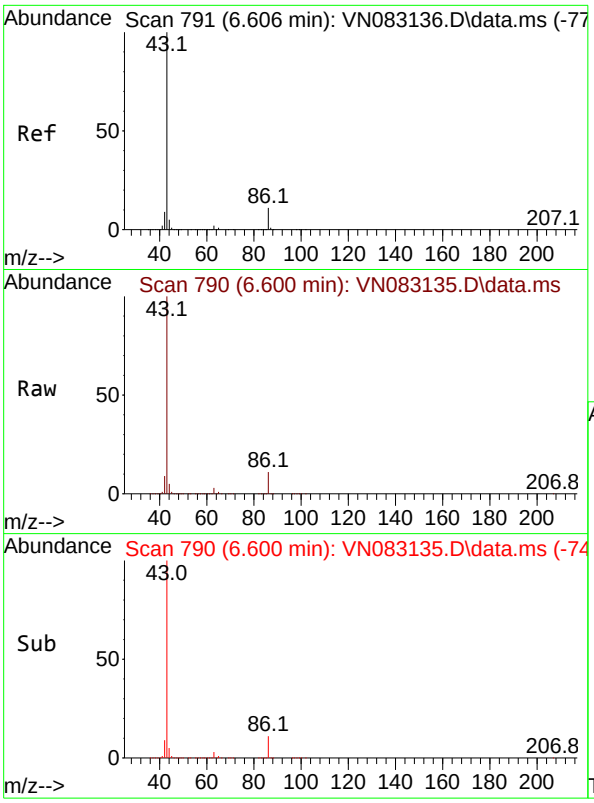


#22
Diisopropyl ether
Concen: 96.959 ug/l
RT: 6.671 min Scan# 802
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 45 Resp: 829706

Ion	Ratio	Lower	Upper
45	100		
43	55.8	44.0	66.0
87	29.5	19.7	29.5
59	12.1	8.5	12.7





#23
Vinyl Acetate
Concen: 493.177 ug/l
RT: 6.600 min Scan# 7
Delta R.T. -0.006 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 43 Resp: 432491

Ion	Ratio	Lower	Upper
43	100		
86	10.9	7.3	10.9

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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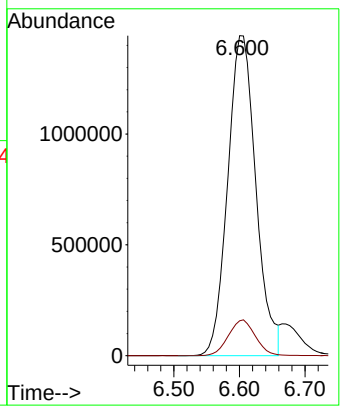
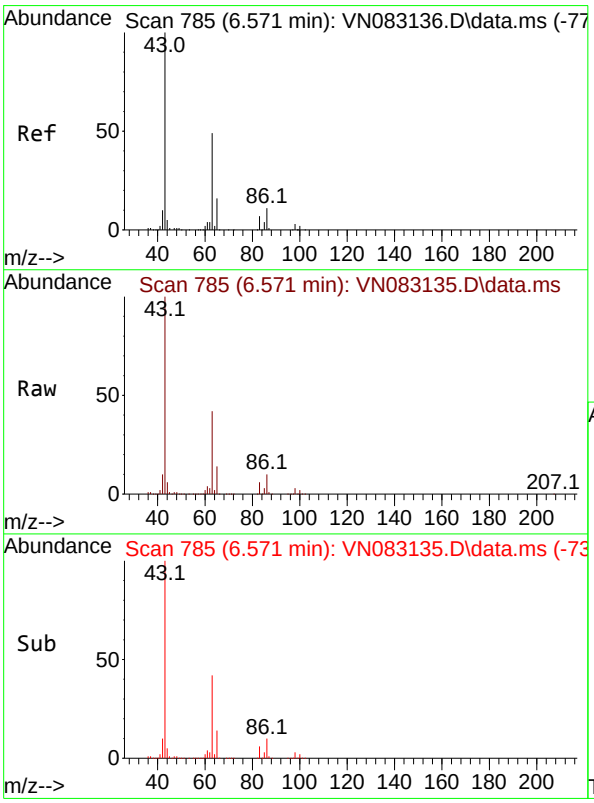
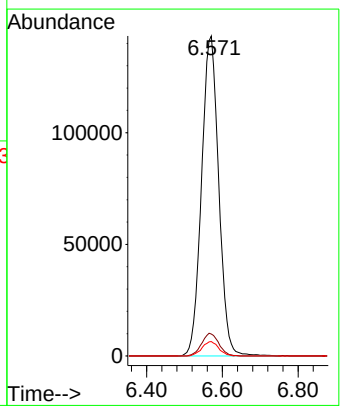


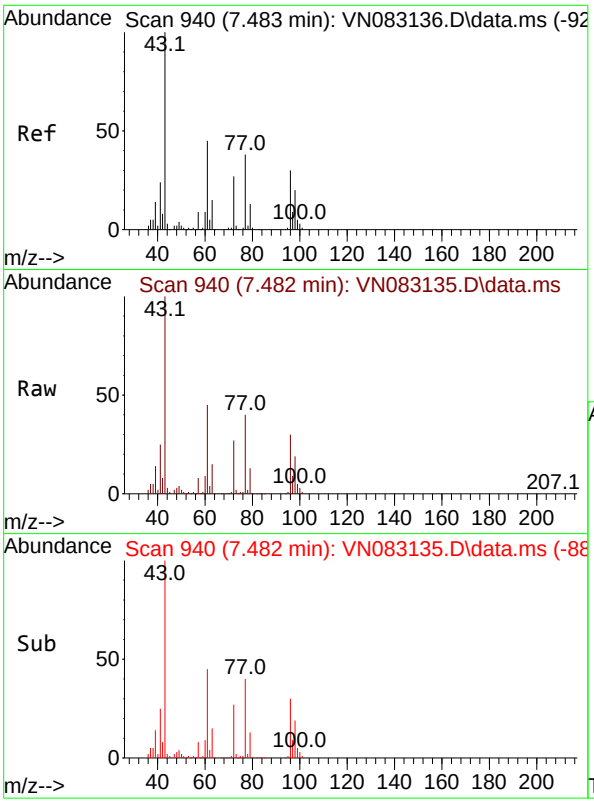


#24
1,1-Dichloroethane
Concen: 96.746 ug/l
RT: 6.571 min Scan# 785
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 63 Resp: 451253

Ion	Ratio	Lower	Upper
63	100		
98	6.8	3.3	9.9
100	4.5	2.0	6.0





#25
2-Butanone
Concen: 489.098 ug/l
RT: 7.482 min Scan# 94
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 43 Resp: 90899

Ion	Ratio	Lower	Upper
43	100		
72	27.2	18.2	27.2

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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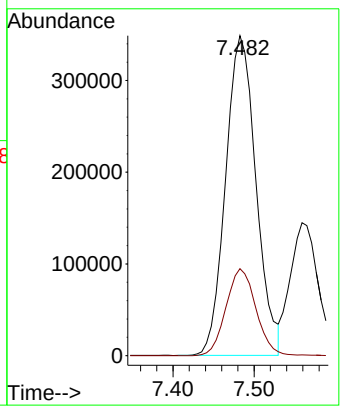
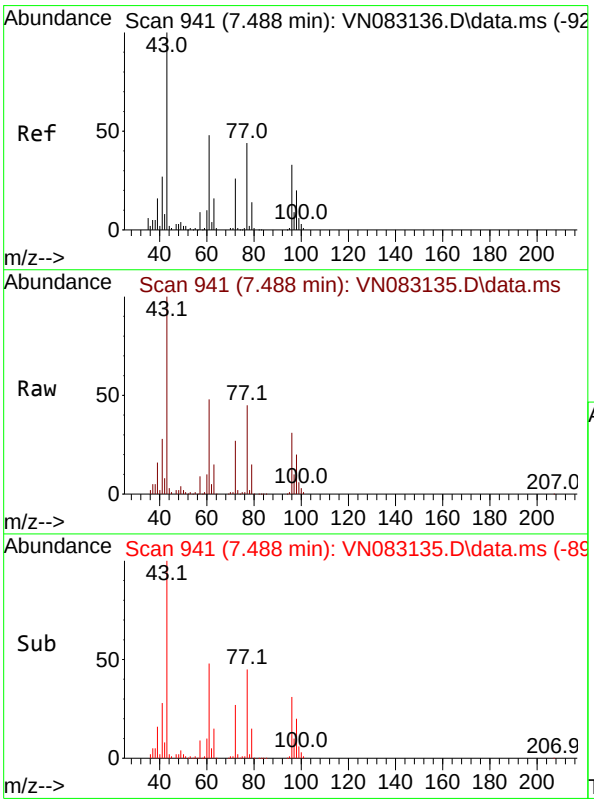
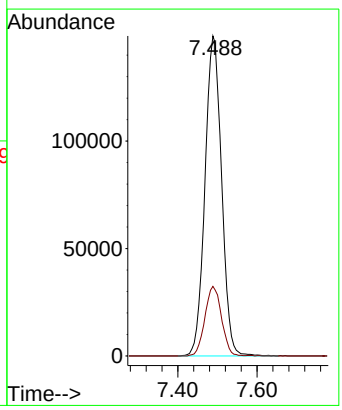


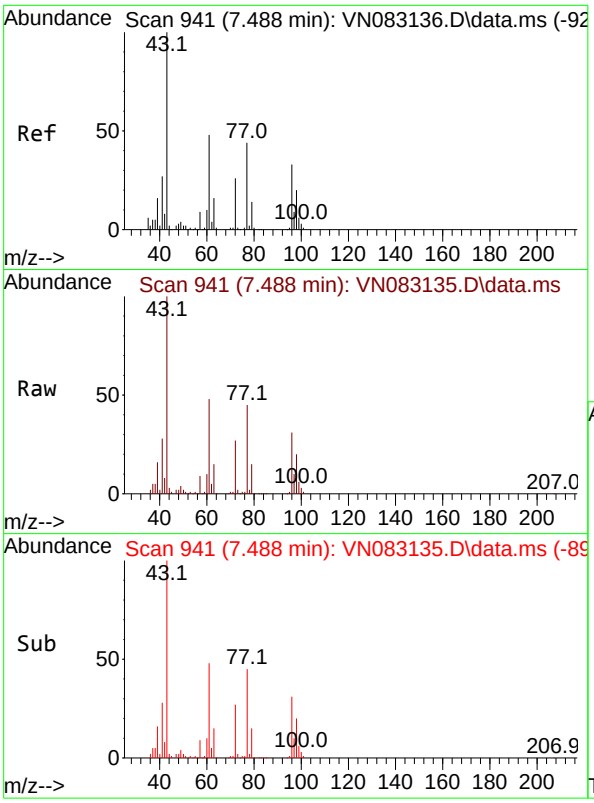


#26
2,2-Dichloropropane
Concen: 100.075 ug/l
RT: 7.488 min Scan# 941
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 77 Resp: 433489

Ion	Ratio	Lower	Upper
77	100		
97	21.7	10.3	30.9





#27
cis-1,2-Dichloroethene
Concen: 95.225 ug/l
RT: 7.488 min Scan# 94
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 96 Resp: 28610

Ion	Ratio	Lower	Upper
96	100		
61	151.6	0.0	329.6
98	64.3	0.0	128.6

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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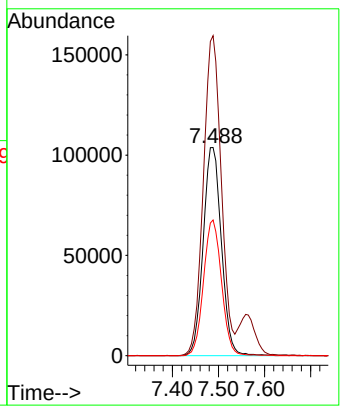
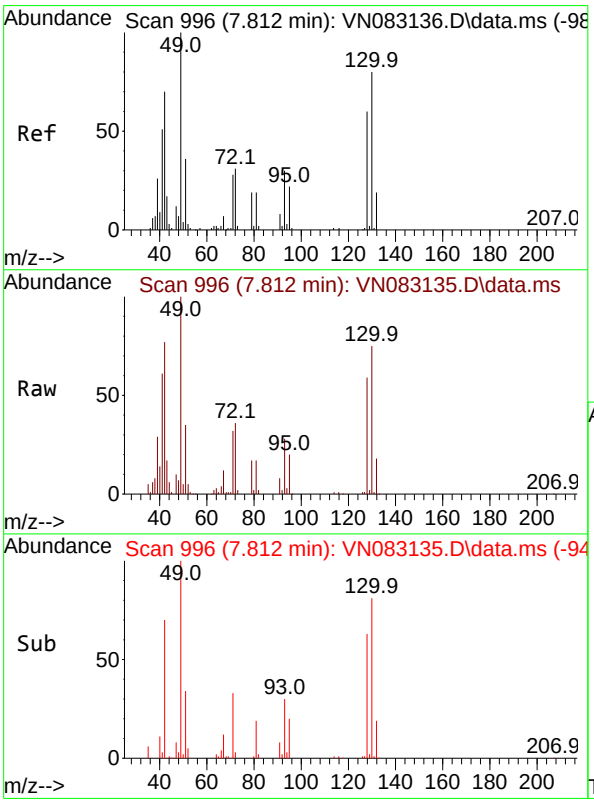
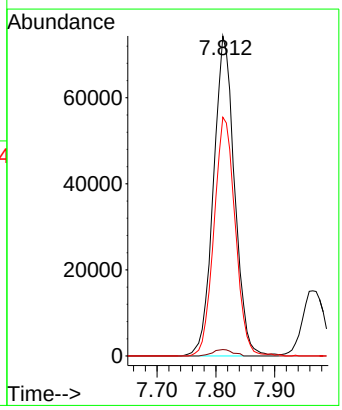


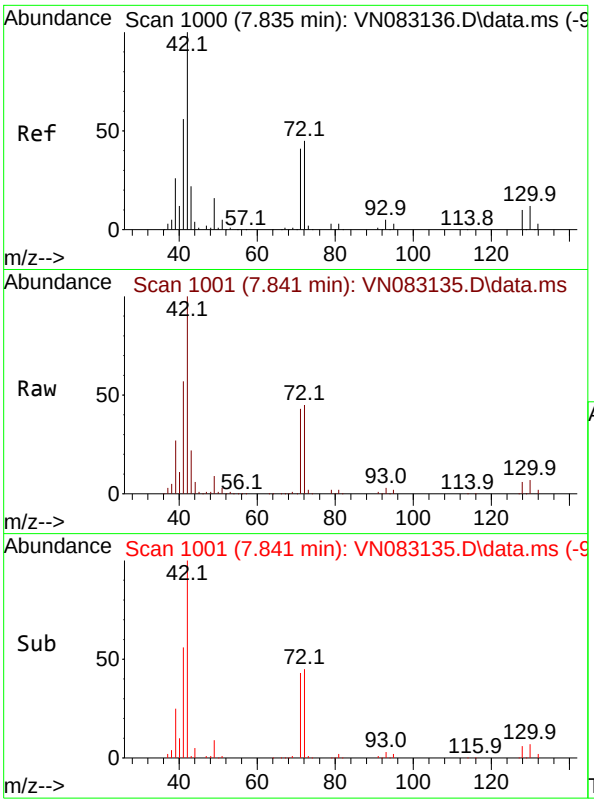


#28
Bromochloromethane
Concen: 97.333 ug/l
RT: 7.812 min Scan# 996
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 49 Resp: 185533

Ion	Ratio	Lower	Upper
49	100		
129	1.9	0.0	3.8
130	74.9	50.5	75.7





#29
Tetrahydrofuran
Concen: 488.865 ug/l
RT: 7.841 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 42 Resp: 58732

Ion	Ratio	Lower	Upper
42	100		
72	44.6	30.0	45.0
71	41.9	28.3	42.5

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations
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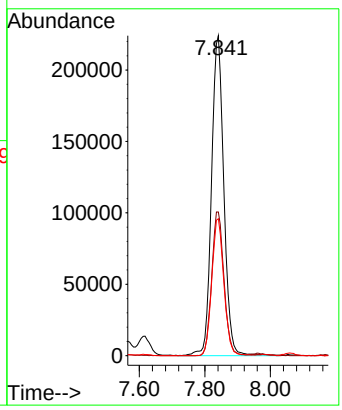
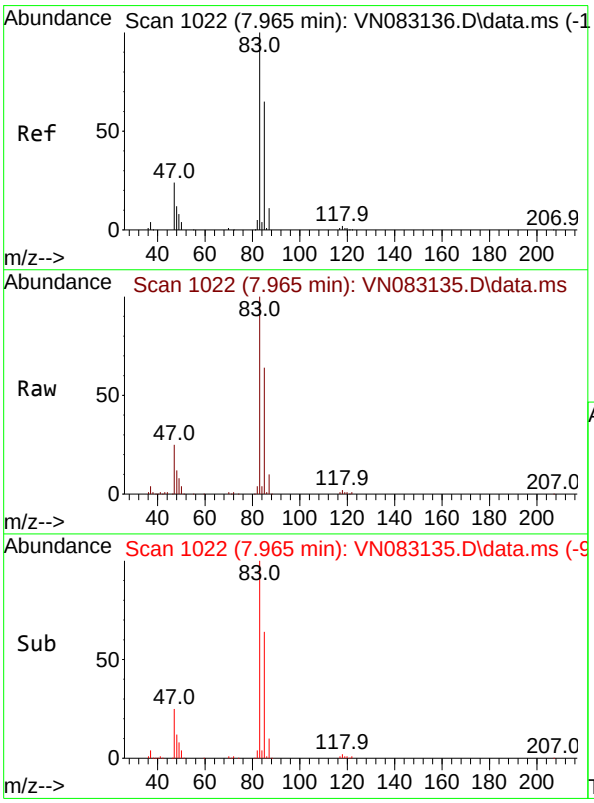
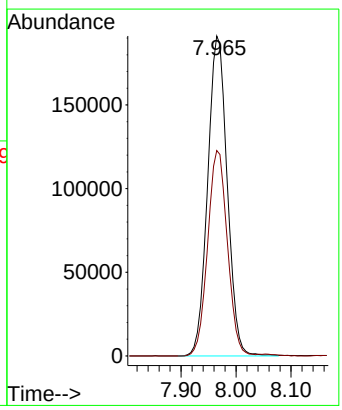


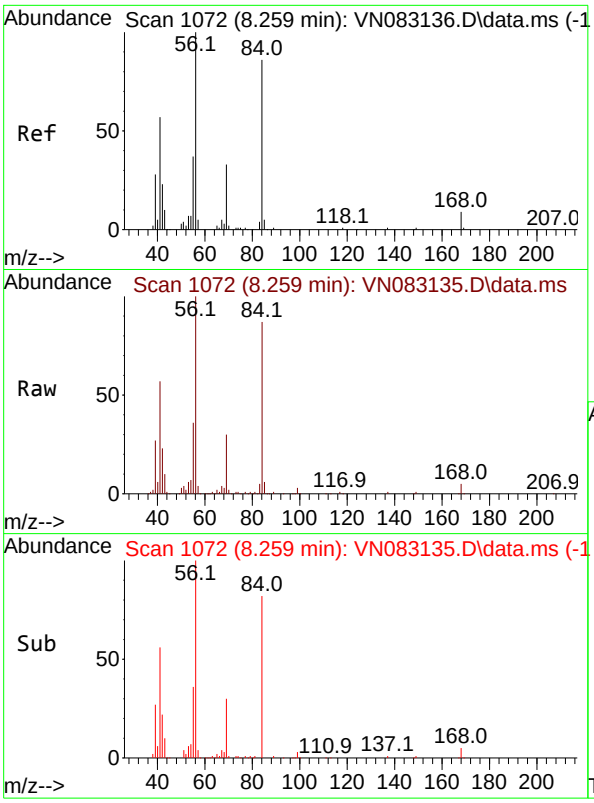


#30
Chloroform
Concen: 97.456 ug/l
RT: 7.965 min Scan# 1022
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 83 Resp: 472257

Ion	Ratio	Lower	Upper
83	100		
85	64.2	50.9	76.3

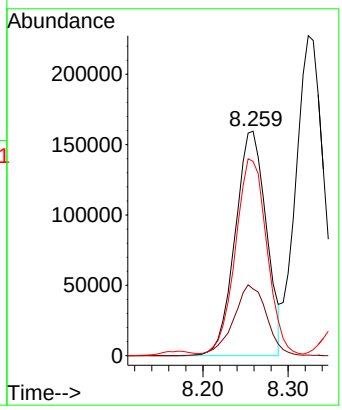




#31
Cyclohexane
Concen: 88.496 ug/l
RT: 8.259 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 56 Resp: 40566

Ion	Ratio	Lower	Upper
56	100		
69	29.7	24.5	36.7
84	84.5	66.0	99.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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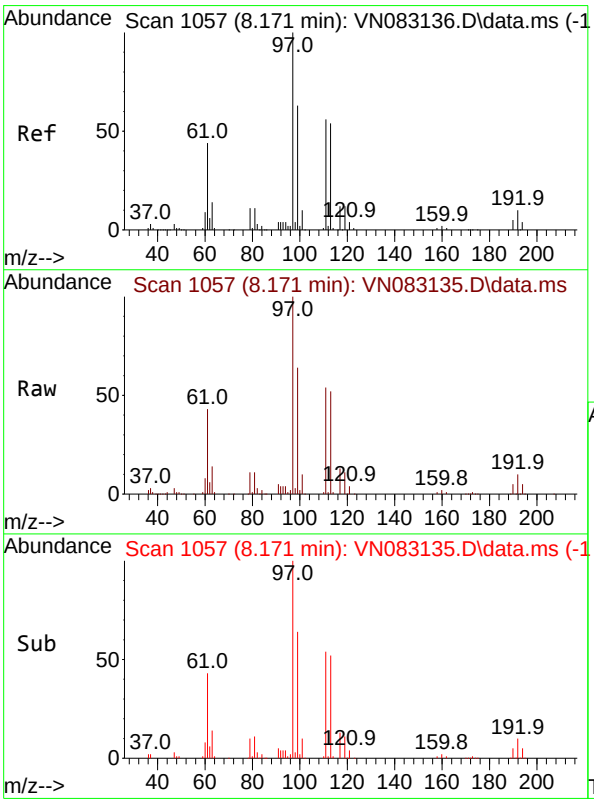
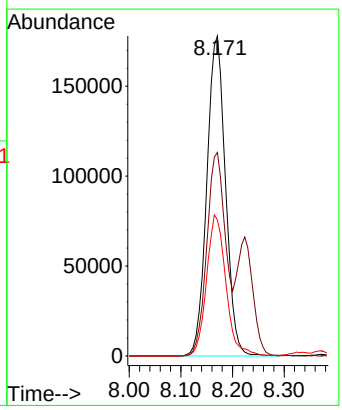
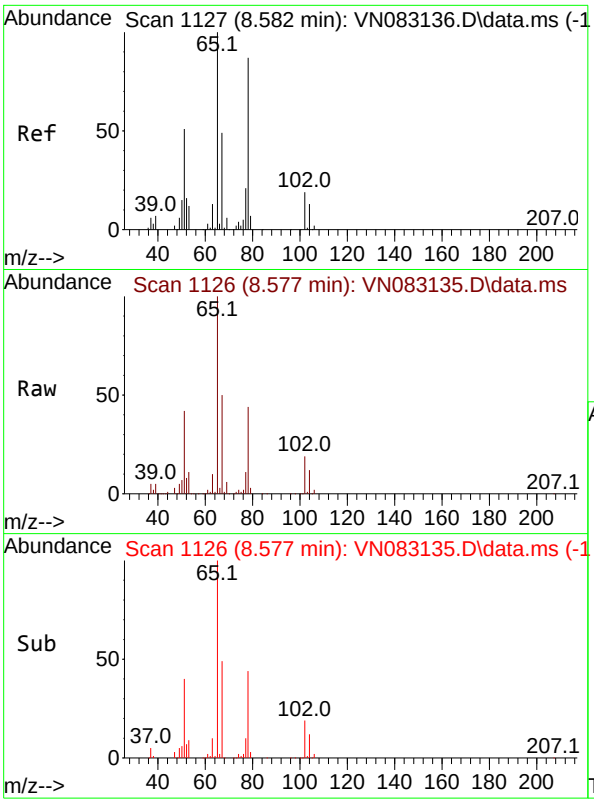


#32
1,1,1-Trichloroethane
Concen: 97.332 ug/l
RT: 8.171 min Scan# 1057
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 97 Resp: 446446

Ion	Ratio	Lower	Upper
97	100		
99	64.7	52.0	78.0
61	45.7	42.1	63.1





#33
1,2-Dichloroethane-d4
Concen: 100.713 ug/l
RT: 8.577 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 65 Resp: 31153

Ion	Ratio	Lower	Upper
65	100		
67	50.6	0.0	104.4

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations
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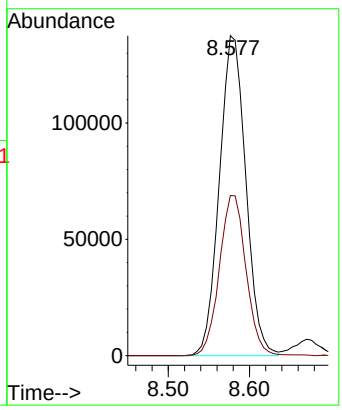
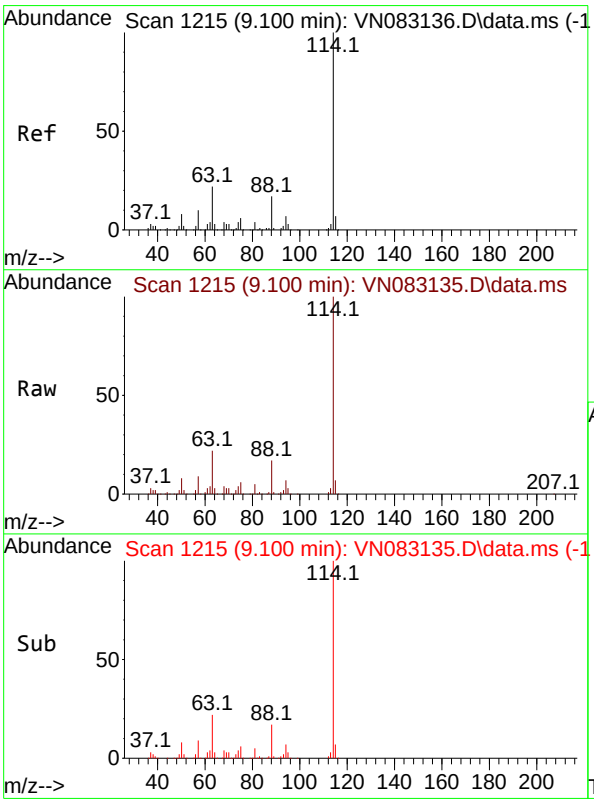
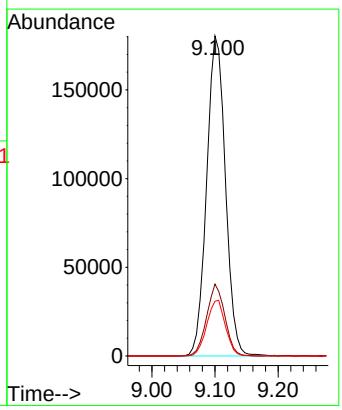


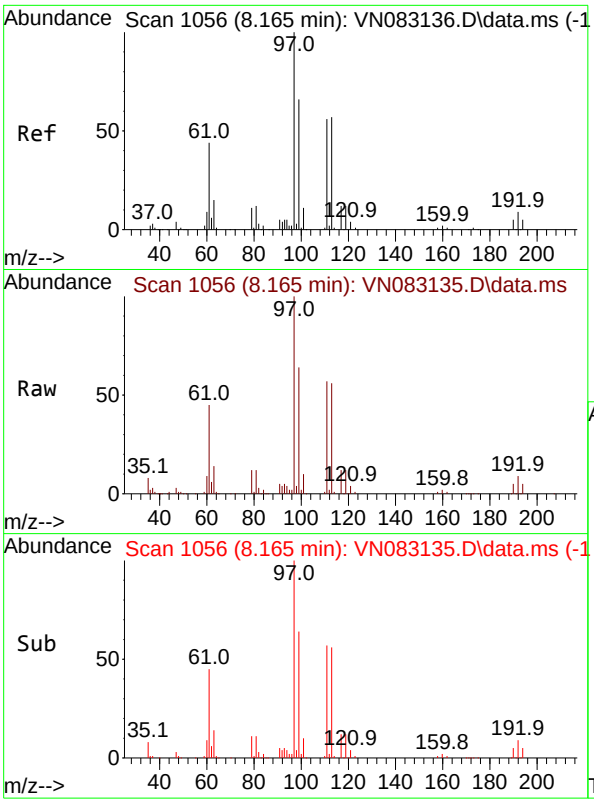


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1215
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion:114 Resp: 373033

Ion	Ratio	Lower	Upper
114	100		
63	22.5	0.0	44.6
88	17.1	0.0	31.4

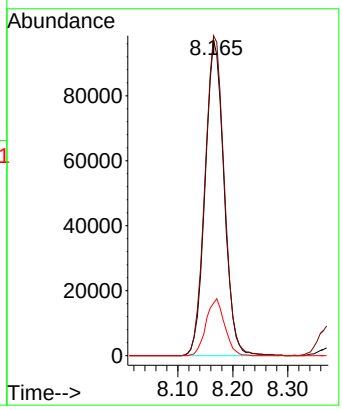




#35
Dibromofluoromethane
Concen: 99.556 ug/l
RT: 8.165 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion:113 Resp: 23180

Ion	Ratio	Lower	Upper
113	100		
111	103.7	82.4	123.6
192	17.7	14.9	22.3



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations
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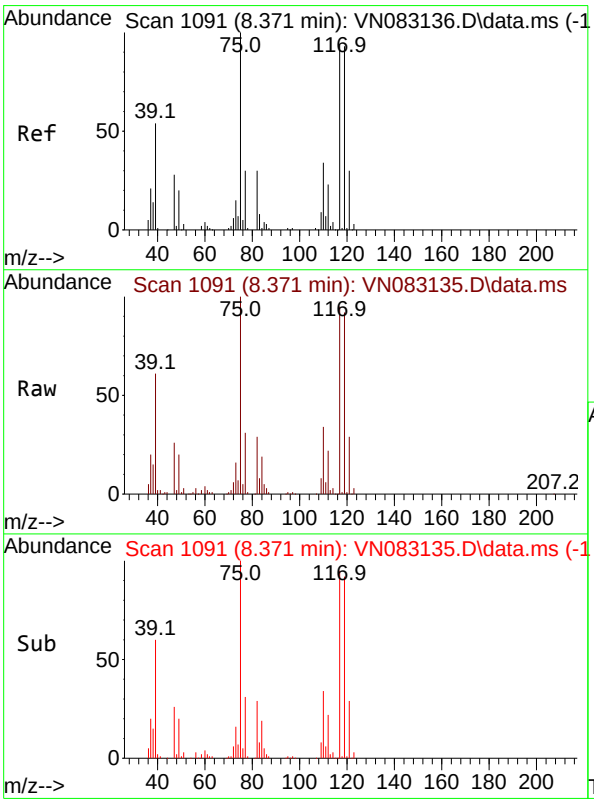
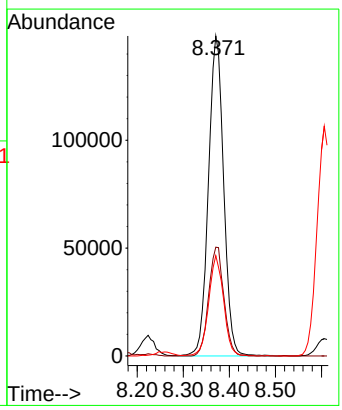
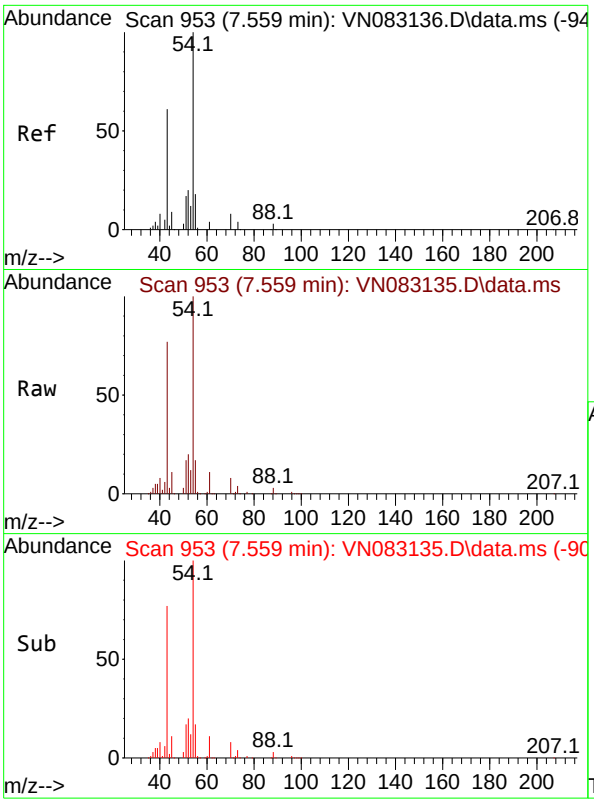


#36
1,1-Dichloropropene
Concen: 96.808 ug/l
RT: 8.371 min Scan# 1091
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 75 Resp: 340980

Ion	Ratio	Lower	Upper
75	100		
110	34.1	16.3	48.9
77	30.6	24.6	37.0





#37
Ethyl Acetate
Concen: 90.602 ug/l
RT: 7.559 min Scan# 9
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 43 Resp: 35730

Ion	Ratio	Lower	Upper
43	100		
61	14.4	9.3	13.9#
70	11.4	7.0	10.6#

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations
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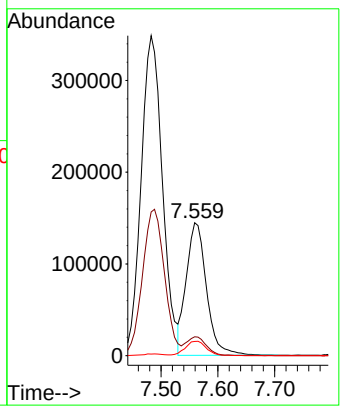
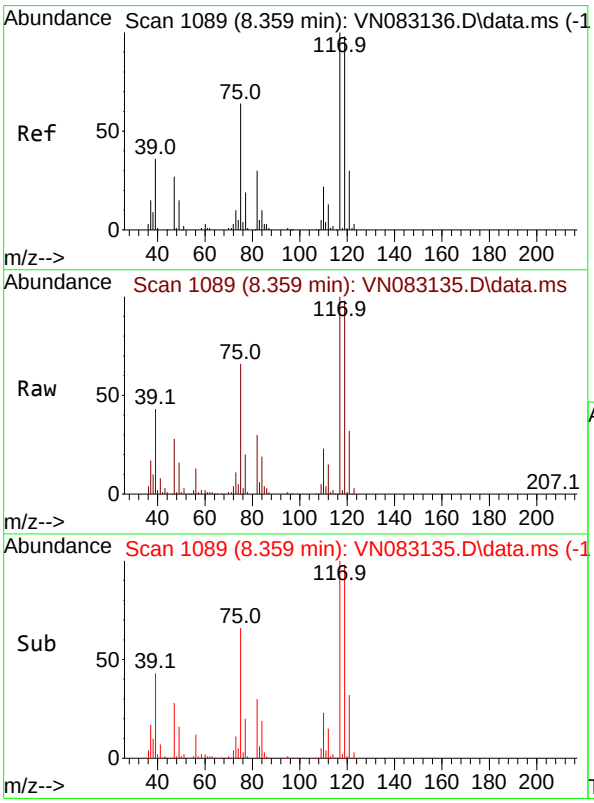
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

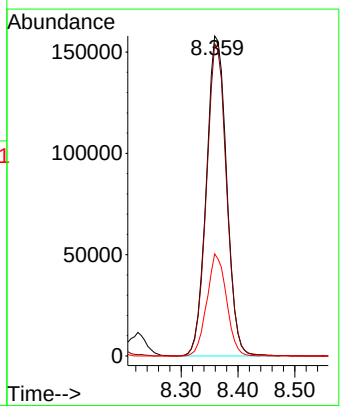


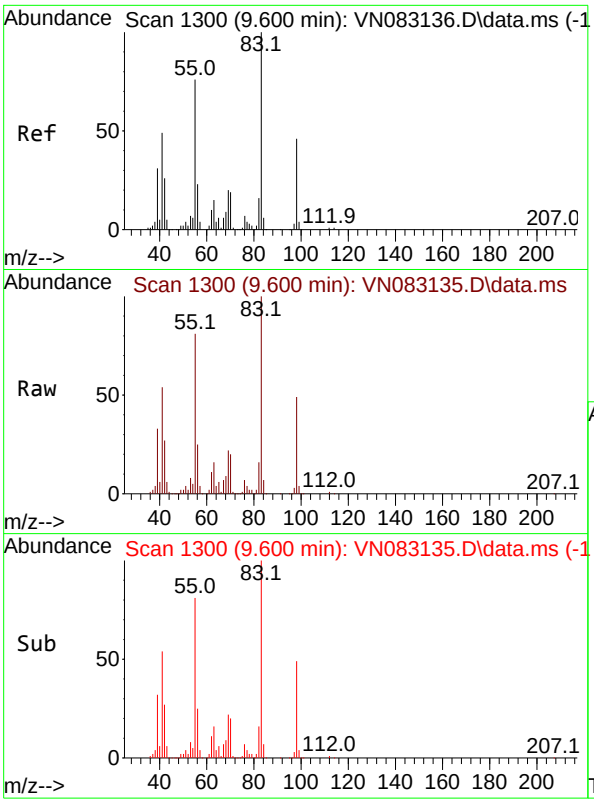


#38
Carbon Tetrachloride
Concen: 98.597 ug/l
RT: 8.359 min Scan# 1089
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion:117 Resp: 391148

Ion	Ratio	Lower	Upper
117	100		
119	97.5	74.9	112.3
121	31.9	24.3	36.5





#39
Methylcyclohexane
Concen: 97.486 ug/l
RT: 9.600 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 83 Resp: 42174

Ion	Ratio	Lower	Upper
83	100		
55	80.6	66.4	99.6
98	49.2	40.7	61.1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations
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Reviewed By :John Carlone 08/08/2024
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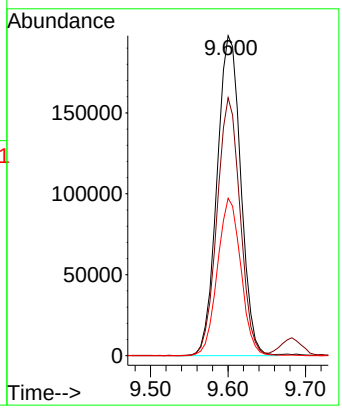
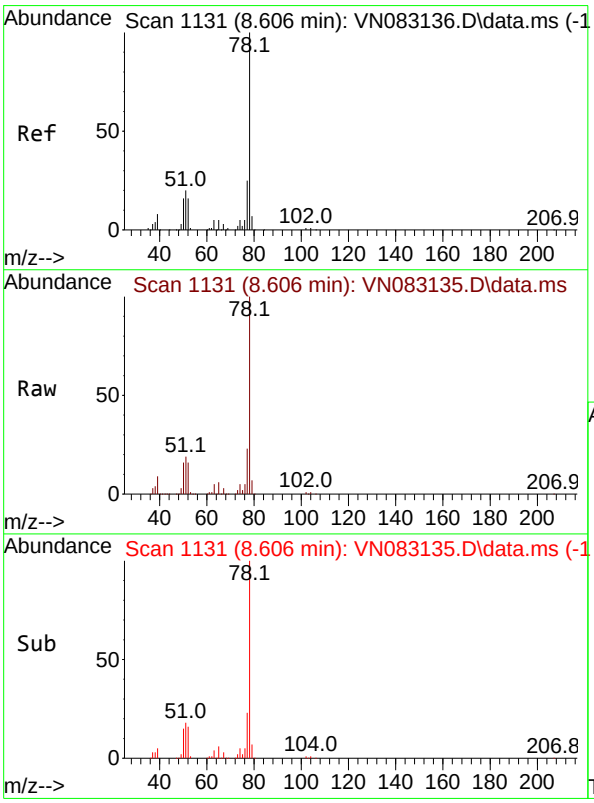
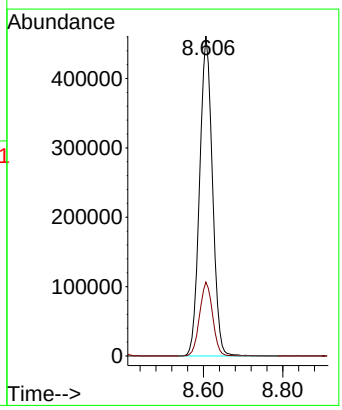


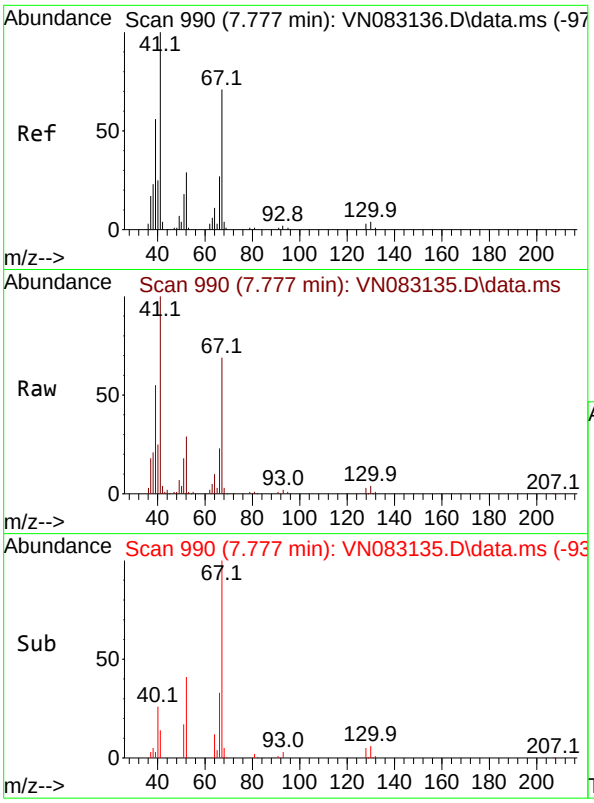


#40
Benzene
Concen: 98.550 ug/l
RT: 8.606 min Scan# 1131
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 78 Resp: 1034059

Ion	Ratio	Lower	Upper
78	100		
77	23.1	19.0	28.4

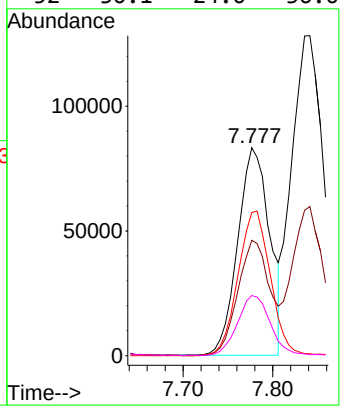




#41
Methacrylonitrile
Concen: 91.799 ug/l
RT: 7.777 min Scan# 9
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 41 Resp: 20584

Ion	Ratio	Lower	Upper
41	100		
39	55.7	45.5	68.3
67	70.9	50.5	75.7
52	30.1	24.0	36.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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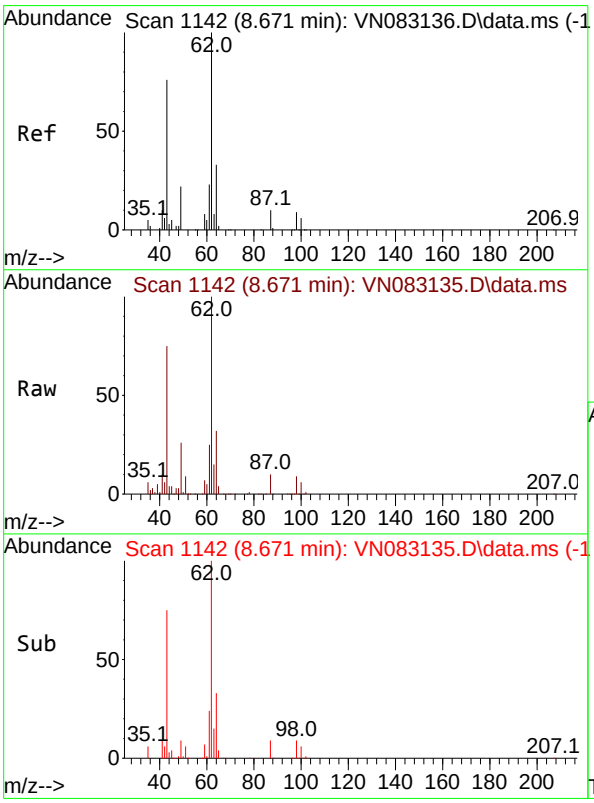
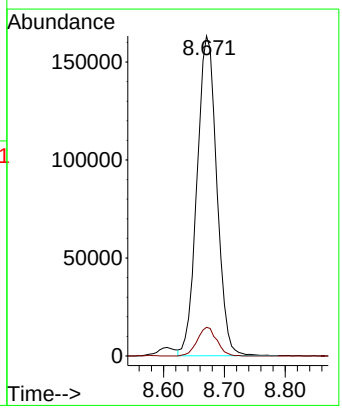
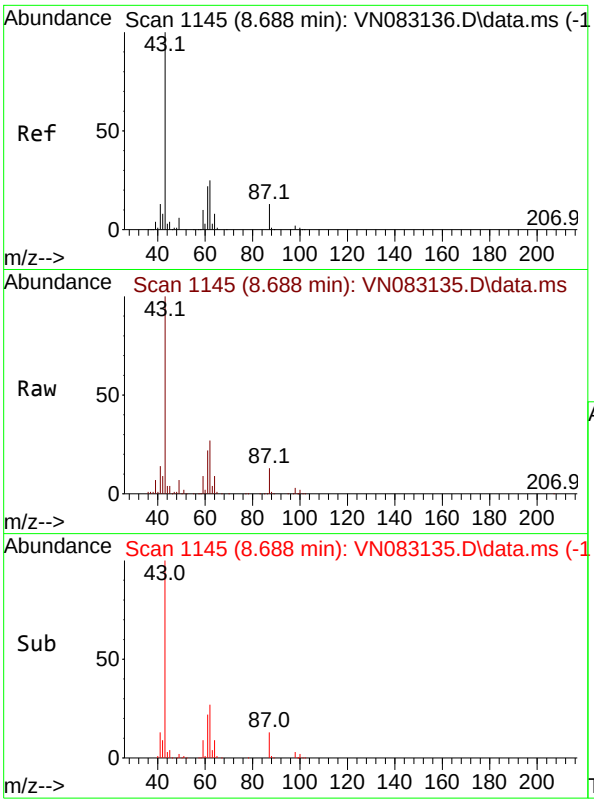


#42
1,2-Dichloroethane
Concen: 96.385 ug/l
RT: 8.671 min Scan# 1142
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 62 Resp: 368412

Ion	Ratio	Lower	Upper
62	100		
98	8.8	0.0	15.8





#43
Isopropyl Acetate
Concen: 99.962 ug/l
RT: 8.688 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 43 Resp: 64858

Ion	Ratio	Lower	Upper
43	100		
61	25.2	17.8	26.6
87	13.0	8.2	12.2

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations
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Reviewed By :John Carlone 08/08/2024
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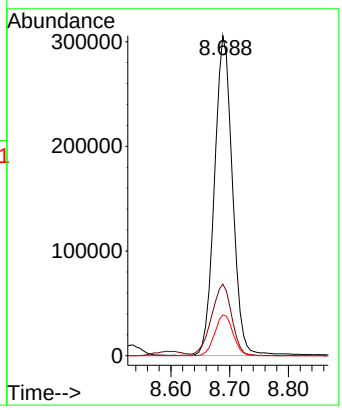
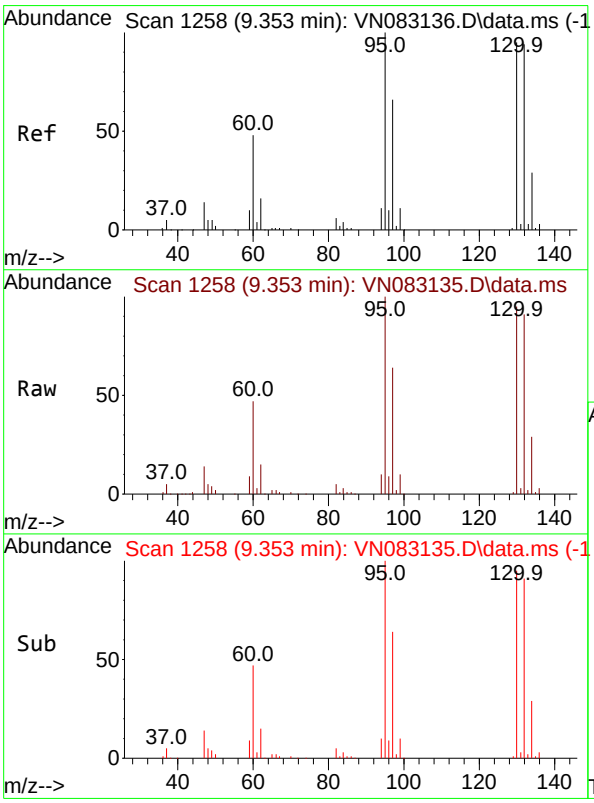
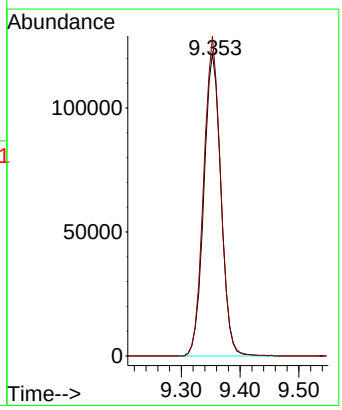


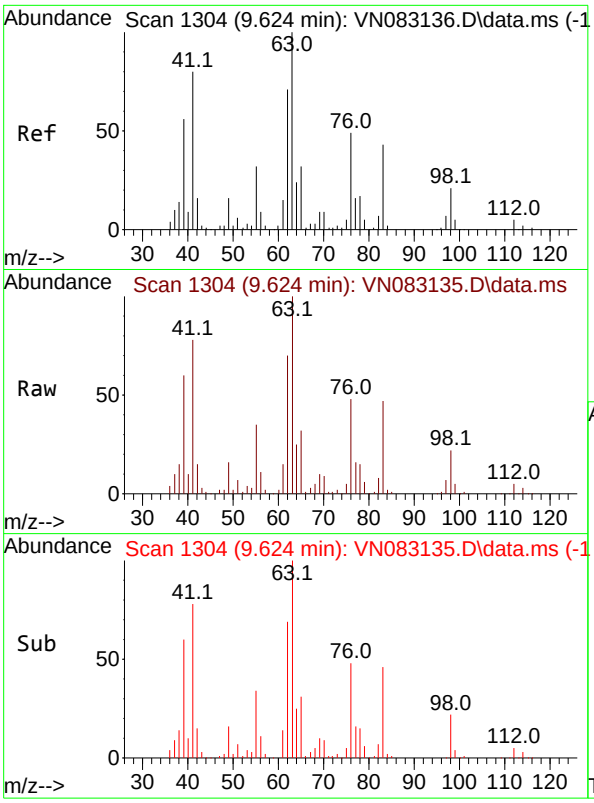


#44
Trichloroethene
Concen: 98.774 ug/l
RT: 9.353 min Scan# 1258
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion:130 Resp: 246689

Ion	Ratio	Lower	Upper
130	100		
95	105.7	0.0	197.8

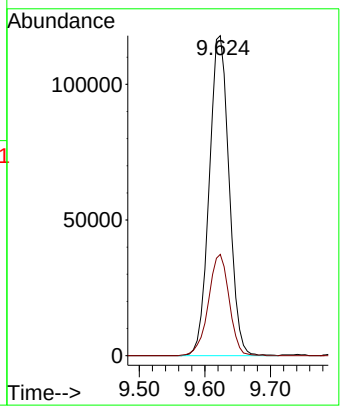




#45
1,2-Dichloropropane
Concen: 99.275 ug/l
RT: 9.624 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 63 Resp: 24726

Ion	Ratio	Lower	Upper
63	100		
65	31.6	24.4	36.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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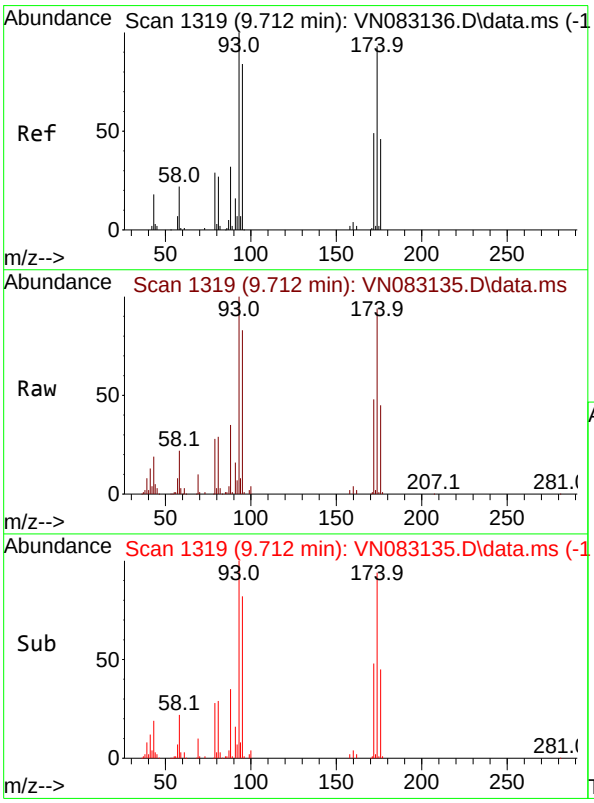
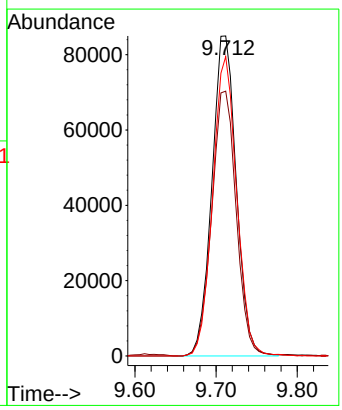
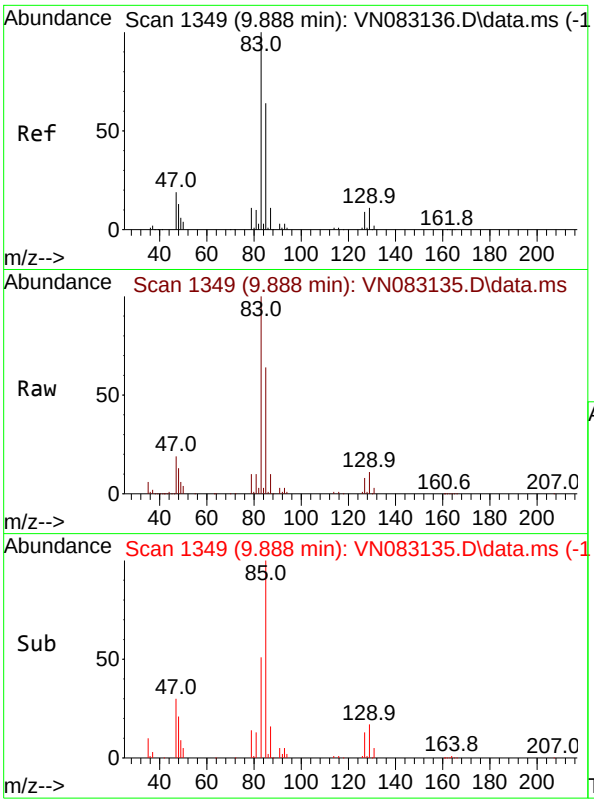


#46
Dibromomethane
Concen: 99.449 ug/l
RT: 9.712 min Scan# 1319
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 93 Resp: 177294

Ion	Ratio	Lower	Upper
93	100		
95	83.4	65.8	98.6
174	92.1	71.7	107.5

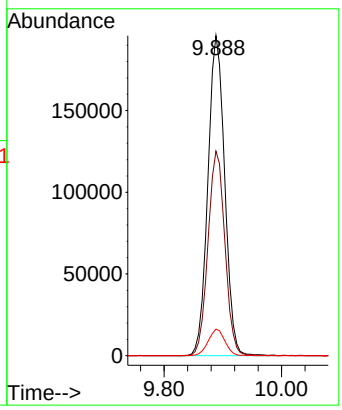




#47
Bromodichloromethane
Concen: 97.184 ug/l
RT: 9.888 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 83 Resp: 38902

Ion	Ratio	Lower	Upper
83	100		
85	63.9	51.1	76.7
127	8.3	7.2	10.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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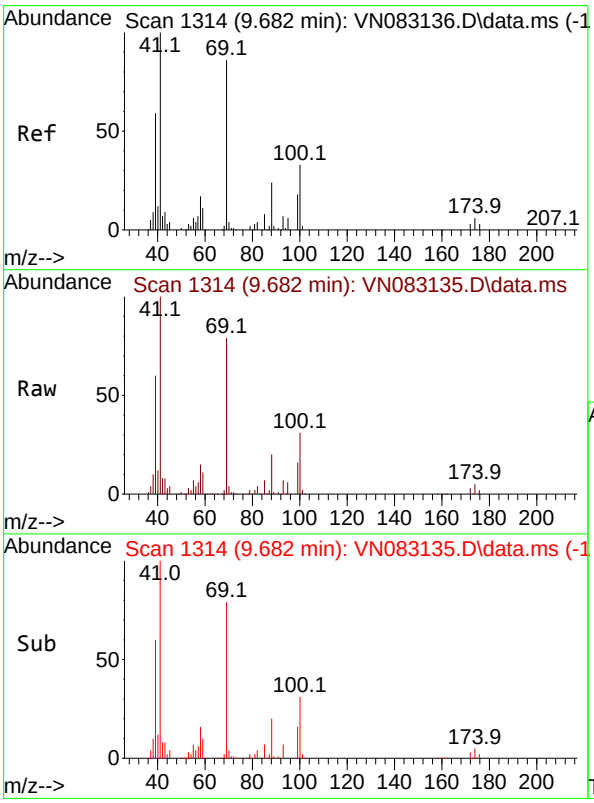
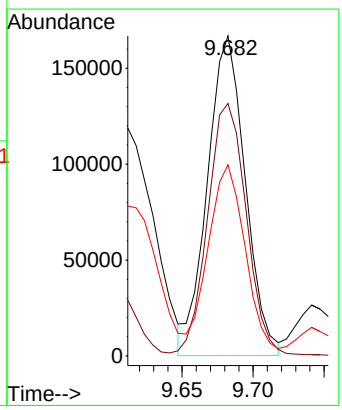
Supervised By :Mahesh Dadoda 08/09/2024

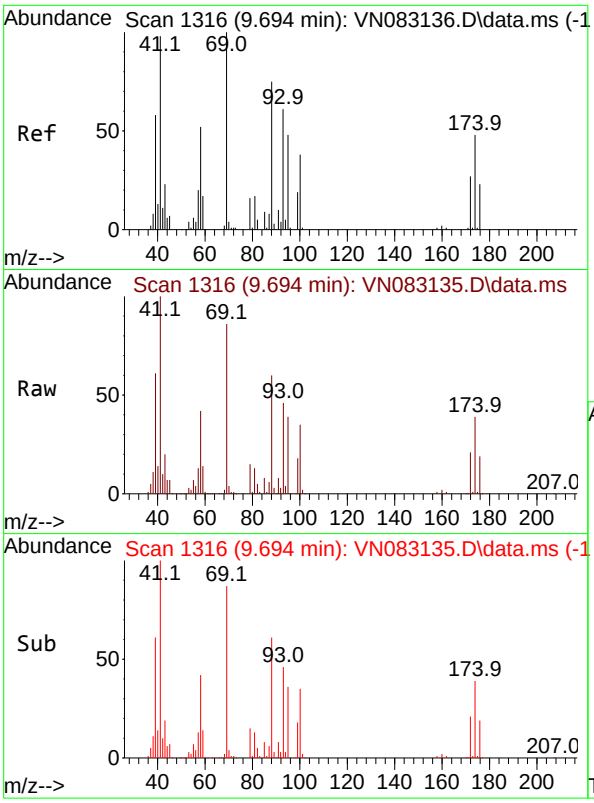


#48
Methyl methacrylate
Concen: 94.886 ug/l
RT: 9.682 min Scan# 1314
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 41 Resp: 309367

Ion	Ratio	Lower	Upper
41	100		
69	81.0	56.3	84.5
39	58.7	50.3	75.5





#49
1,4-Dioxane
Concen: 1994.879 ug/l
RT: 9.694 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 88 Resp: 11734

Ion	Ratio	Lower	Upper
88	100		
43	28.2	27.8	41.8
58	71.8	59.4	89.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations
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Reviewed By :John Carlone 08/08/2024
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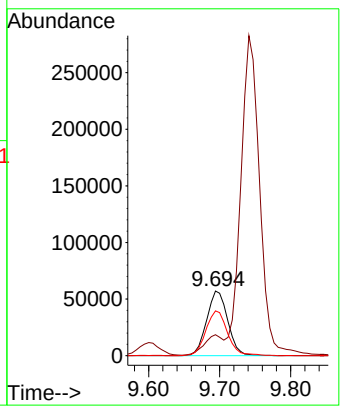
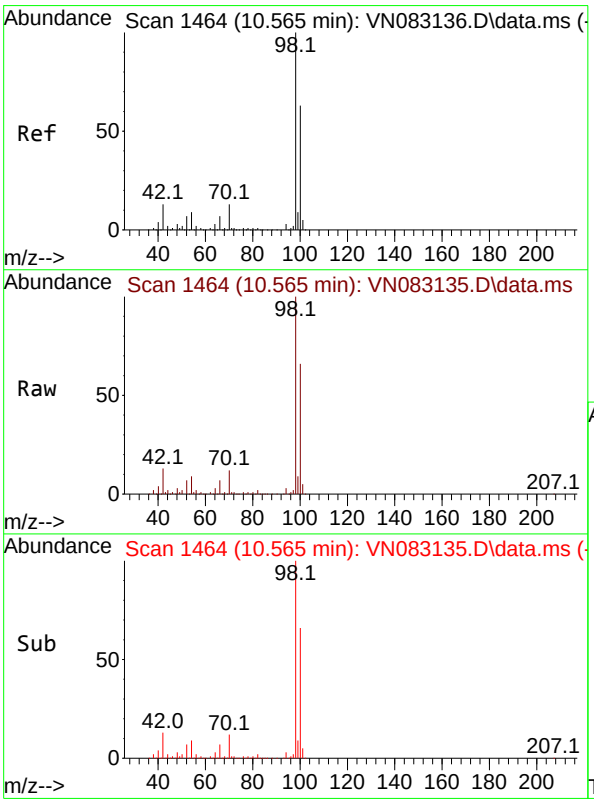
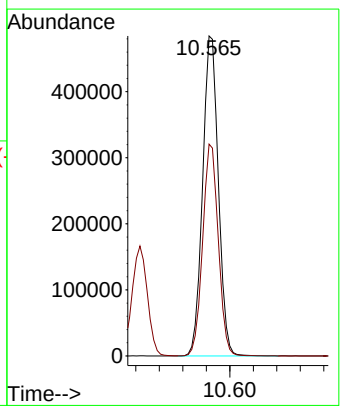


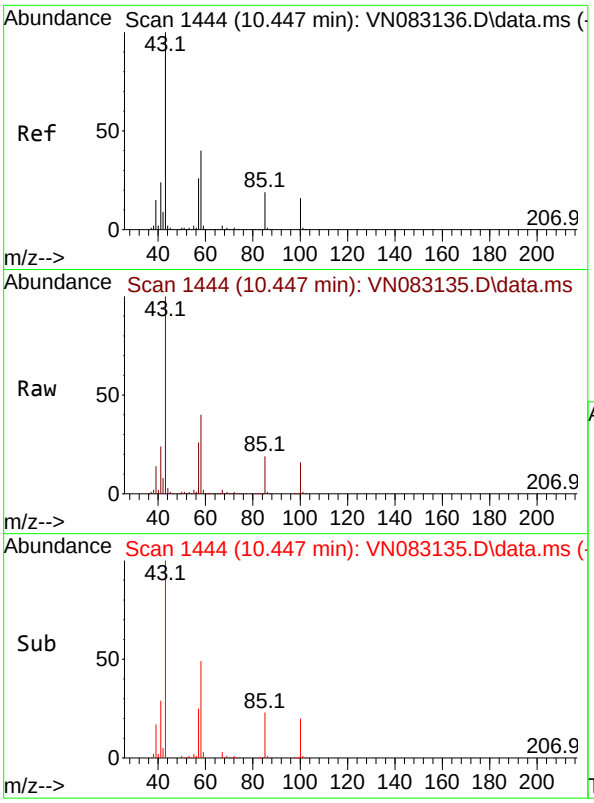


#50
Toluene-d8
Concen: 103.163 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 98 Resp: 896022

Ion	Ratio	Lower	Upper
98	100		
100	65.8	51.5	77.3





#51
4-Methyl-2-Pentanone
Concen: 495.091 ug/l
RT: 10.447 min Scan# 14
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 43 Resp: 184634

Ion	Ratio	Lower	Upper
43	100		
58	39.7	28.2	42.4

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations
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Reviewed By :John Carlone 08/08/2024
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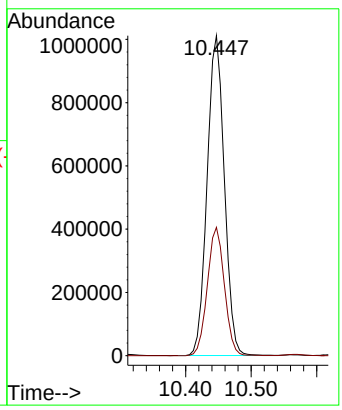
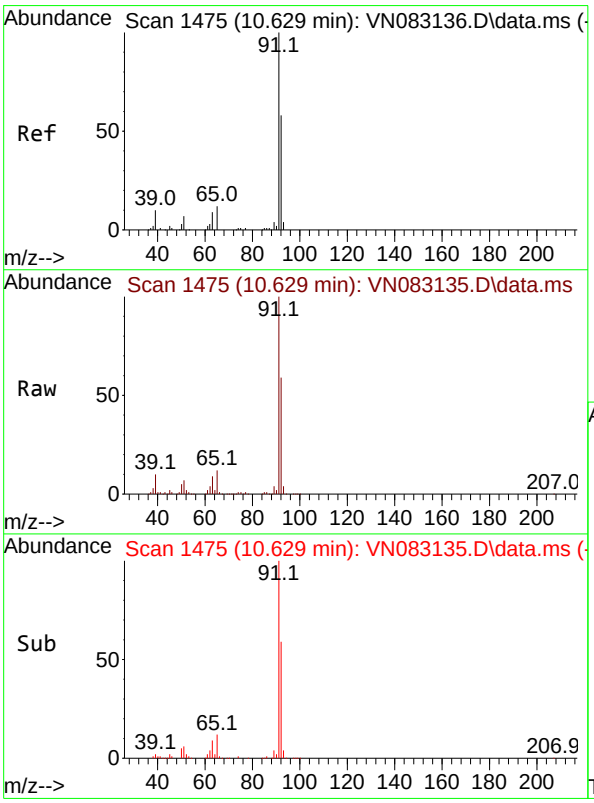
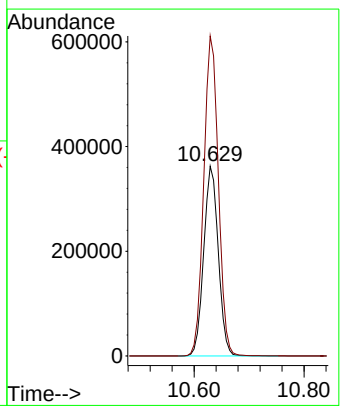


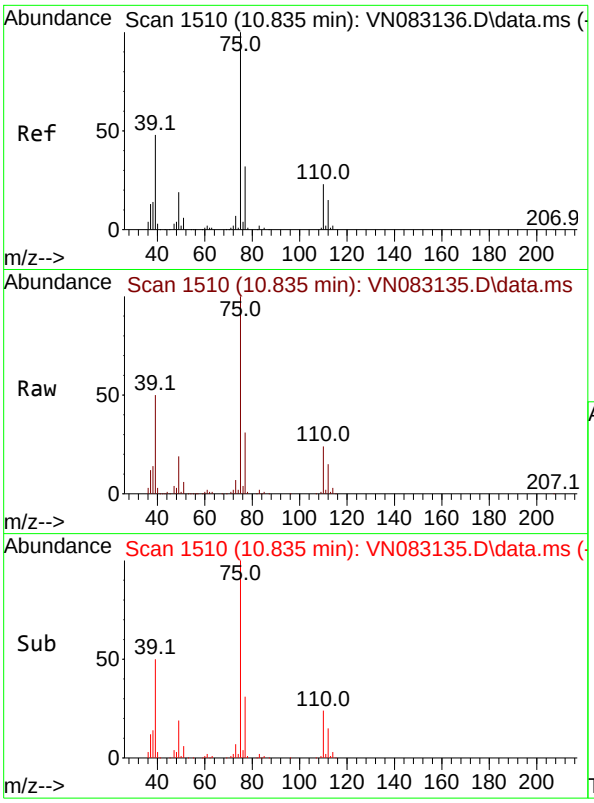


#52
Toluene
Concen: 100.347 ug/l
RT: 10.629 min Scan# 1475
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 92 Resp: 665274

Ion	Ratio	Lower	Upper
92	100		
91	169.4	139.4	209.0





#53
t-1,3-Dichloropropene
Concen: 103.317 ug/l
RT: 10.835 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 75 Resp: 42482

Ion	Ratio	Lower	Upper
75	100		
77	30.9	25.7	38.5

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations
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Reviewed By :John Carlone 08/08/2024
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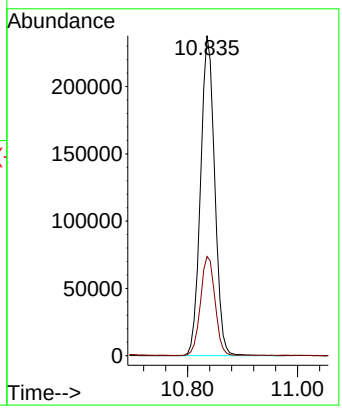
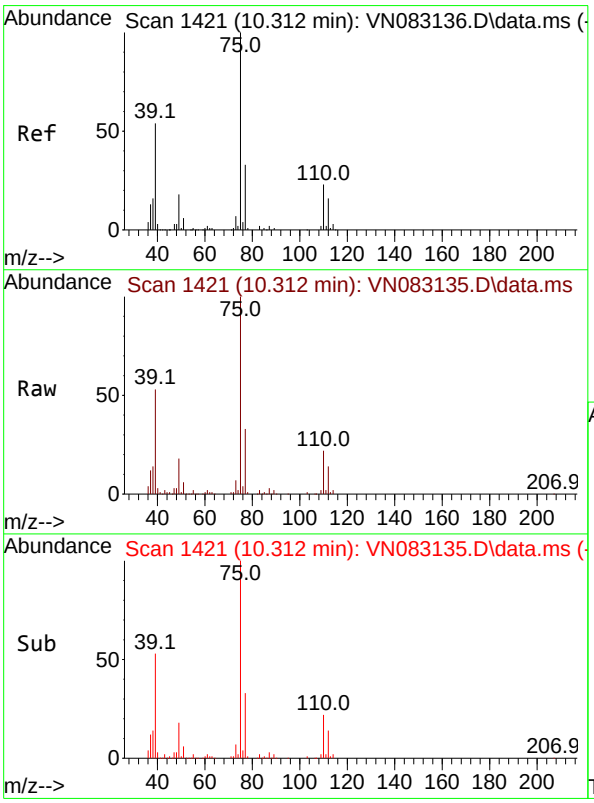
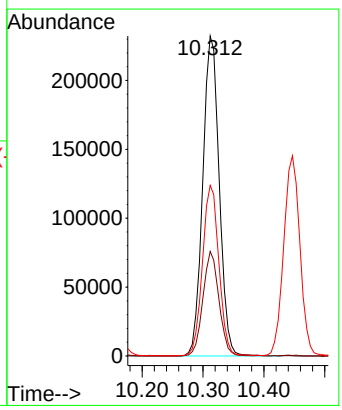


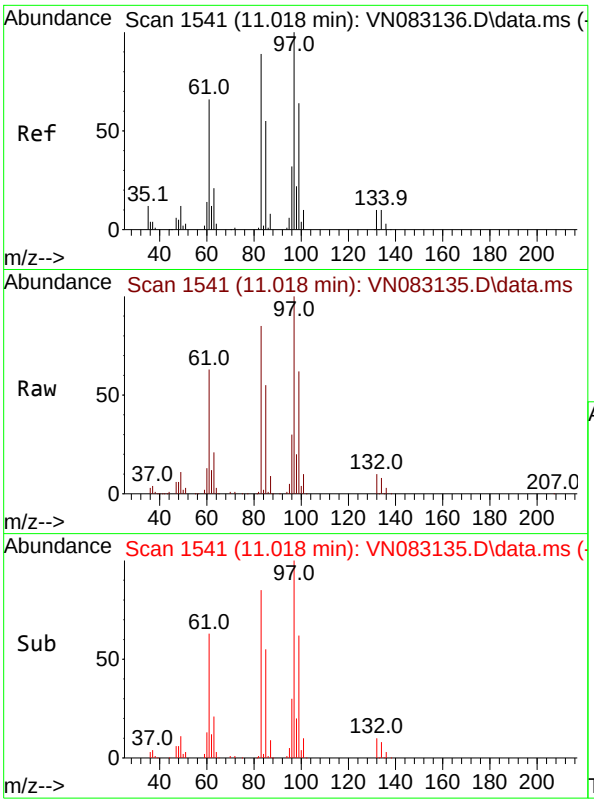


#54
cis-1,3-Dichloropropene
Concen: 99.903 ug/l
RT: 10.312 min Scan# 1421
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 75 Resp: 436928

Ion	Ratio	Lower	Upper
75	100		
77	32.7	24.3	36.5
39	53.2	50.5	75.7

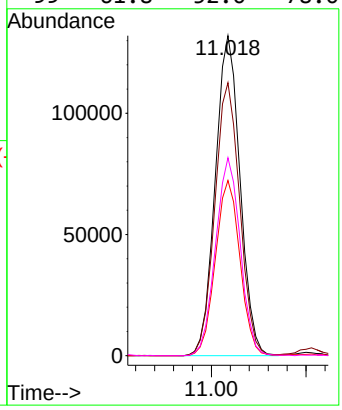




#55
1,1,2-Trichloroethane
Concen: 101.114 ug/l
RT: 11.018 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 97 Resp: 24023

Ion	Ratio	Lower	Upper
97	100		
83	85.3	71.4	107.0
85	54.8	45.8	68.6
99	61.8	52.0	78.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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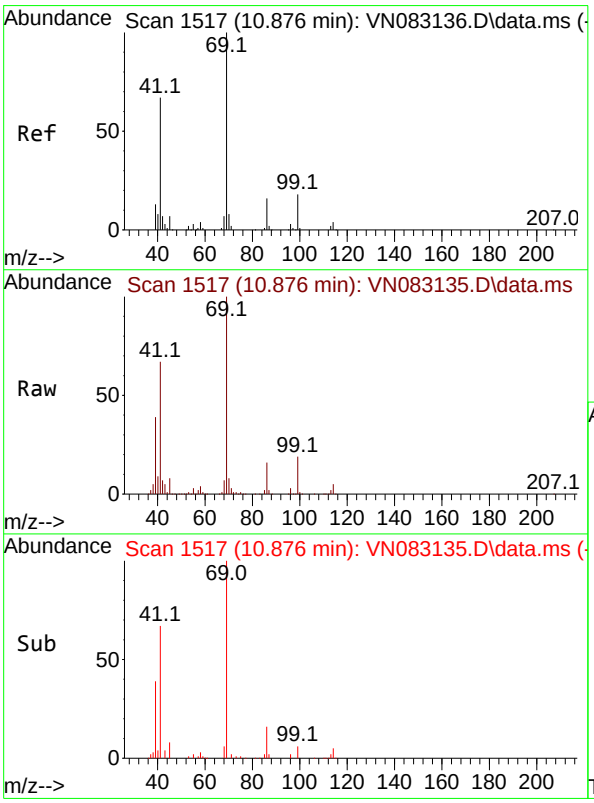
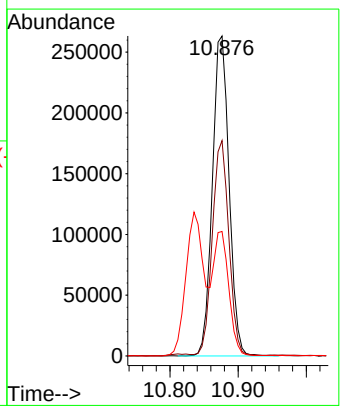
Supervised By :Mahesh Dadoda 08/09/2024

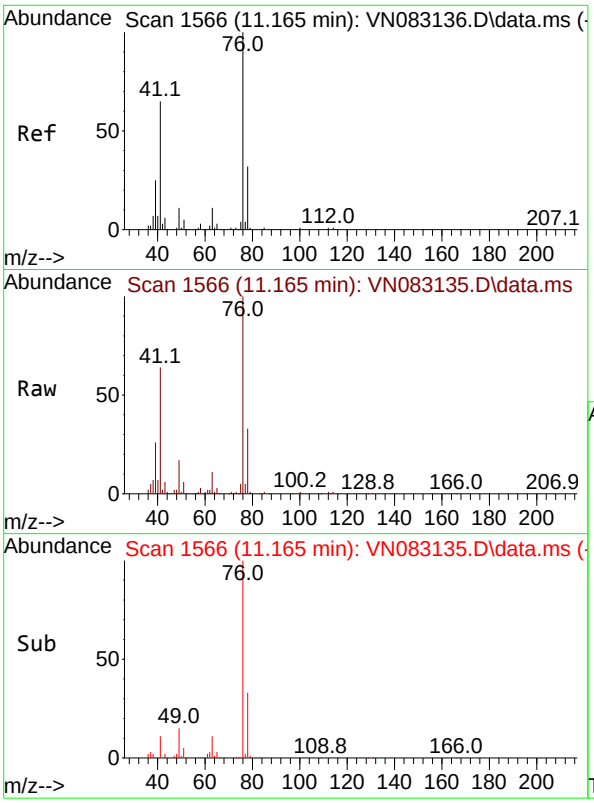


#56
Ethyl methacrylate
Concen: 100.164 ug/l
RT: 10.876 min Scan# 1517
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 69 Resp: 448632

Ion	Ratio	Lower	Upper
69	100		
41	66.4	63.4	95.2
39	34.5	37.4	56.0#

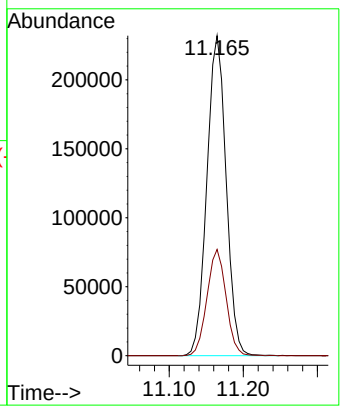




#57
1,3-Dichloropropane
Concen: 98.824 ug/l
RT: 11.165 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 76 Resp: 41850

Ion	Ratio	Lower	Upper
76	100		
78	32.9	25.6	38.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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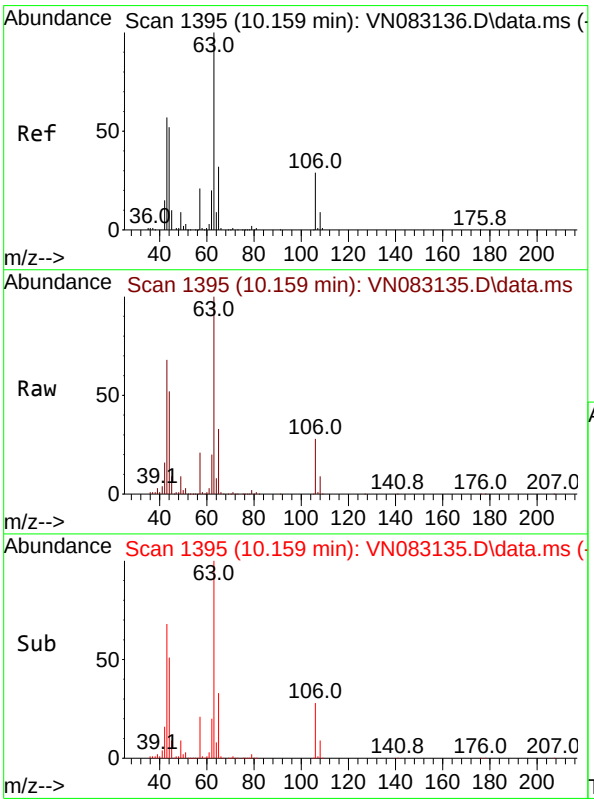
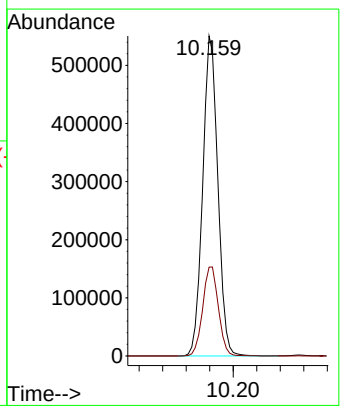
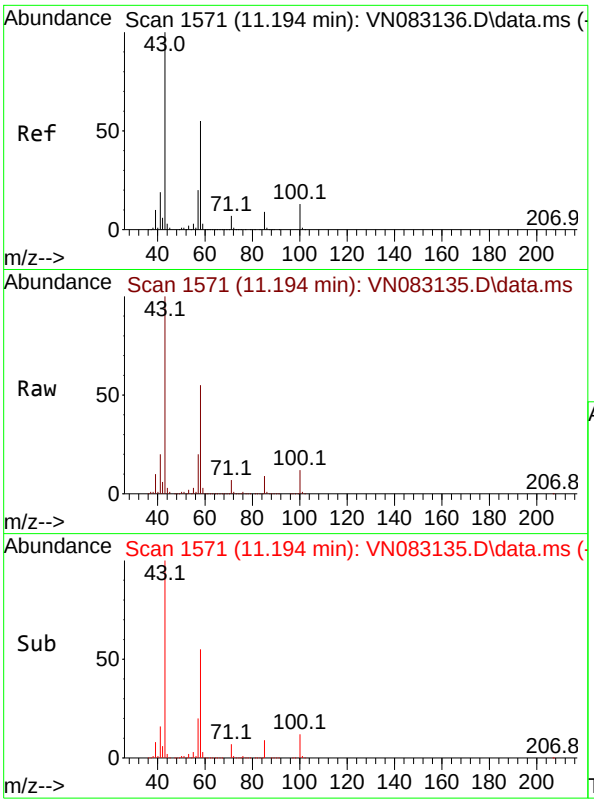


#58
2-Chloroethyl Vinyl ether
Concen: 519.987 ug/l
RT: 10.159 min Scan# 1395
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 63 Resp: 984478

Ion	Ratio	Lower	Upper
63	100		
106	28.8	21.4	32.0

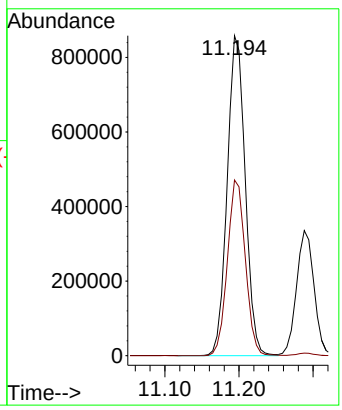




#59
2-Hexanone
Concen: 501.642 ug/l
RT: 11.194 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 43 Resp: 144730

Ion	Ratio	Lower	Upper
43	100		
58	54.7	24.6	73.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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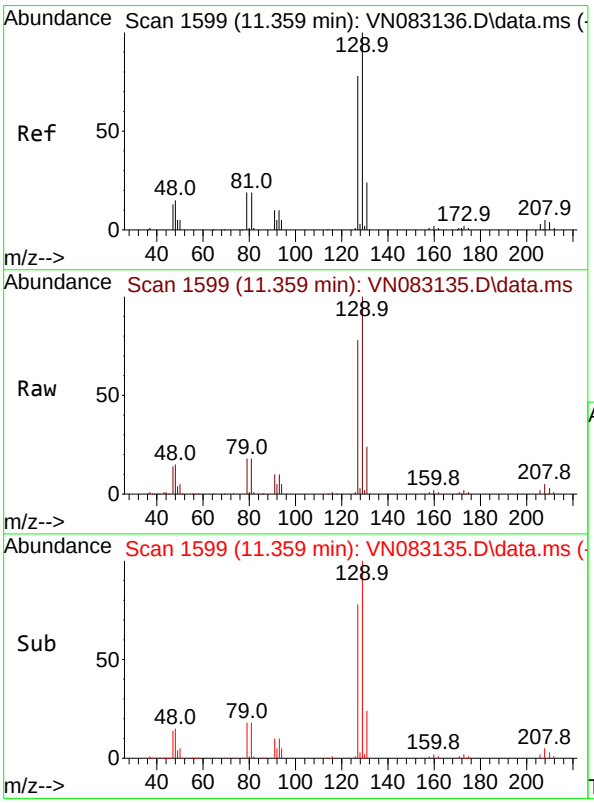
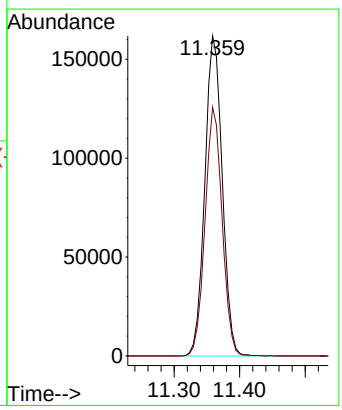
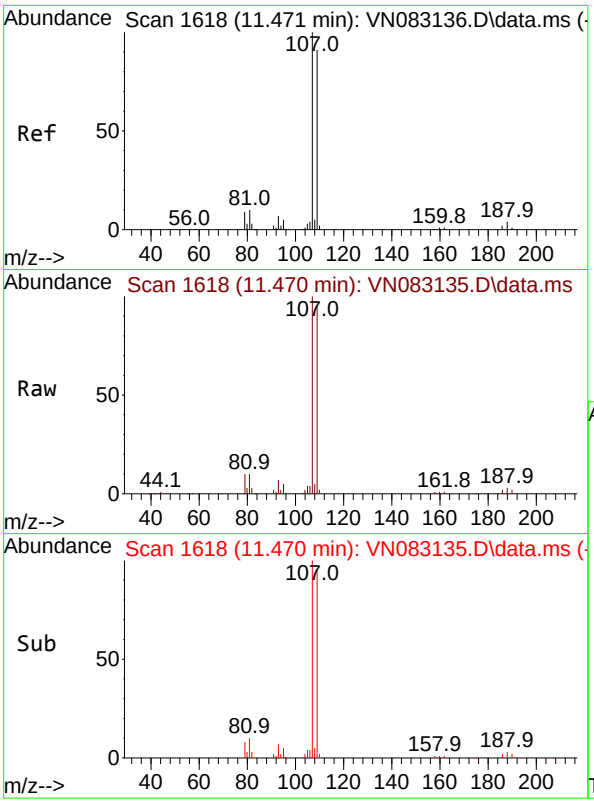


#60
Dibromochloromethane
Concen: 103.914 ug/l
RT: 11.359 min Scan# 1599
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion:129 Resp: 298498

Ion	Ratio	Lower	Upper
129	100		
127	76.3	39.2	117.6





#61
1,2-Dibromoethane
Concen: 99.794 ug/l
RT: 11.470 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion:107 Resp: 24907

Ion	Ratio	Lower	Upper
107	100		
109	95.5	73.7	110.5

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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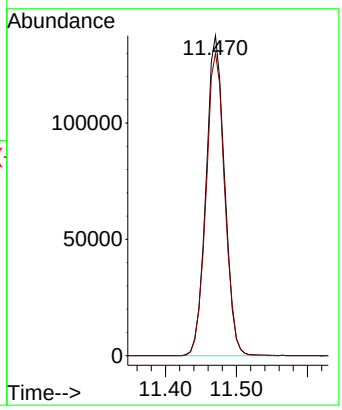
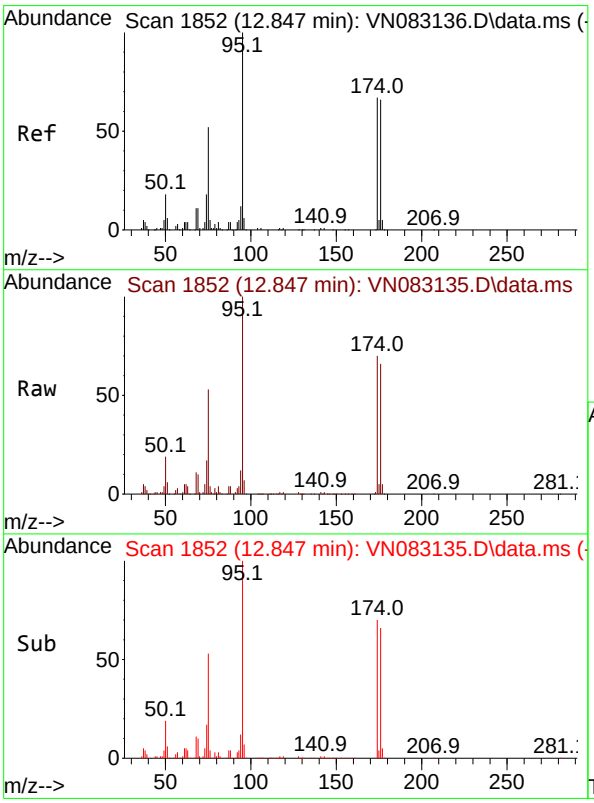
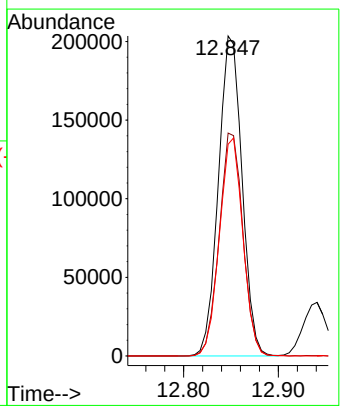


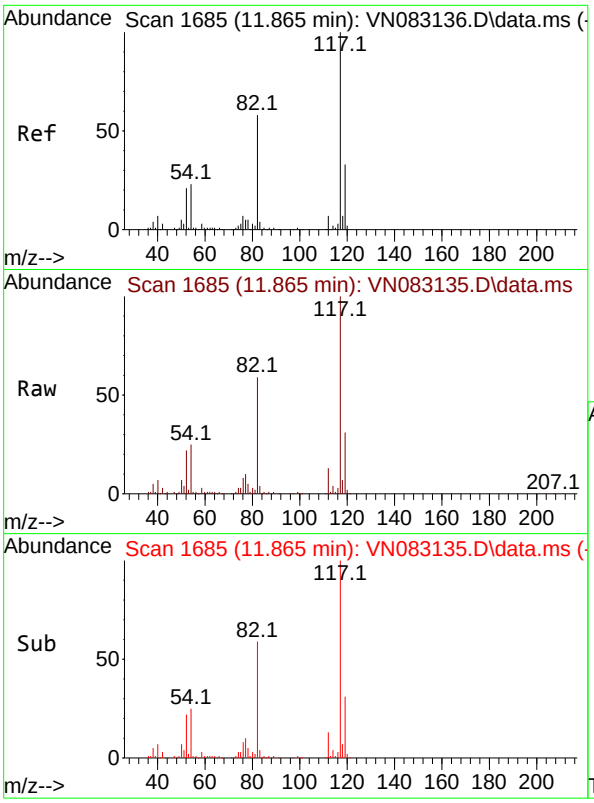


#62
4-Bromofluorobenzene
Concen: 104.234 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 95 Resp: 352947

Ion	Ratio	Lower	Upper
95	100		
174	69.9	0.0	159.2
176	67.6	0.0	147.6





#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion:117 Resp: 32985

Ion	Ratio	Lower	Upper
117	100		
82	59.0	47.5	71.3
119	31.4	25.6	38.4

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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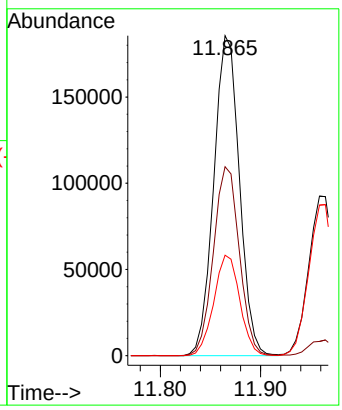
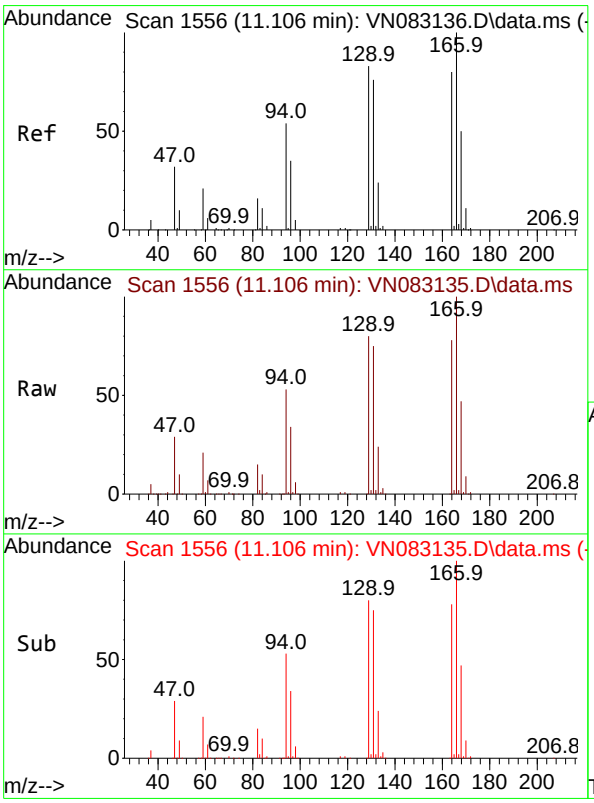
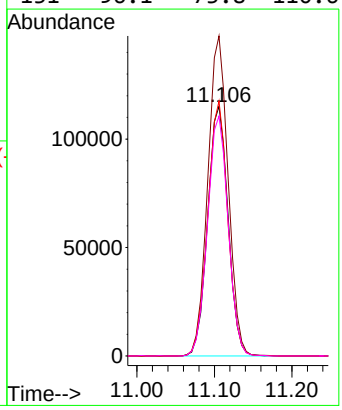


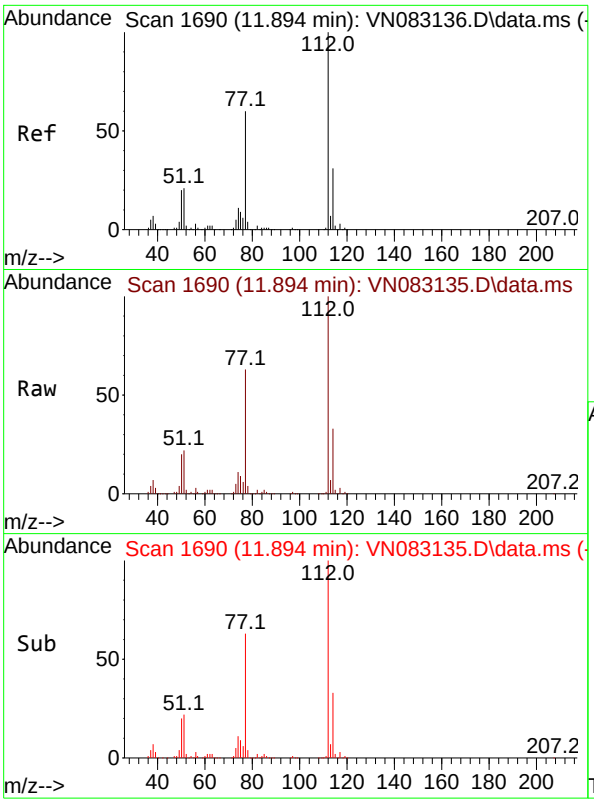


#64
Tetrachloroethene
Concen: 96.284 ug/l
RT: 11.106 min Scan# 1556
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion:164 Resp: 210334

Ion	Ratio	Lower	Upper
164	100		
166	128.2	101.4	152.0
129	102.1	75.7	113.5
131	96.1	73.8	110.6

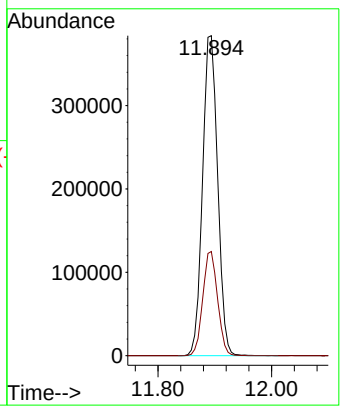




#65
Chlorobenzene
Concen: 96.805 ug/l
RT: 11.894 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion:112 Resp: 70563

Ion	Ratio	Lower	Upper
112	100		
114	32.5	26.2	39.2



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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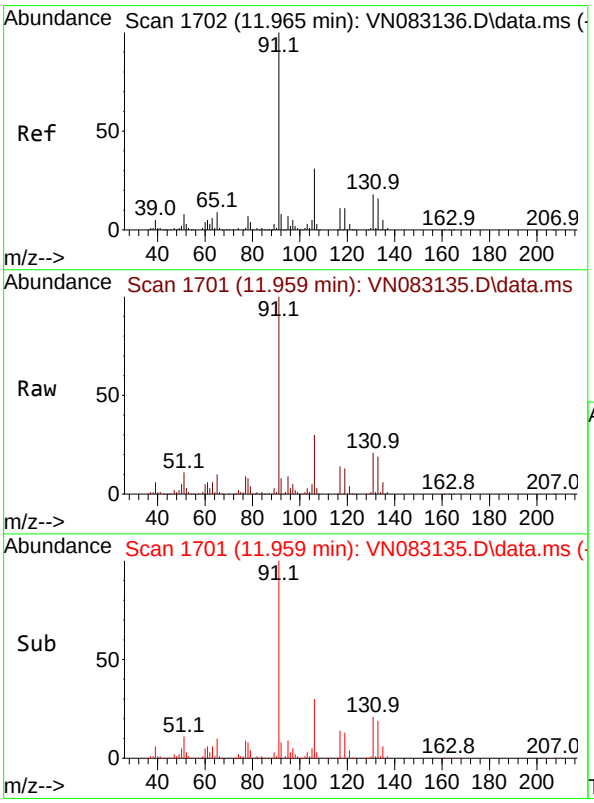
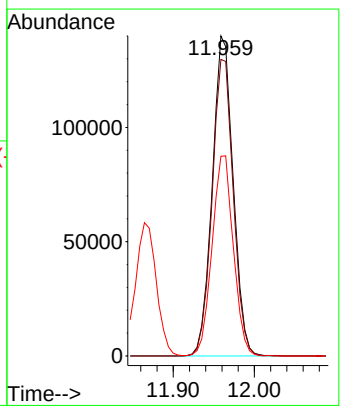
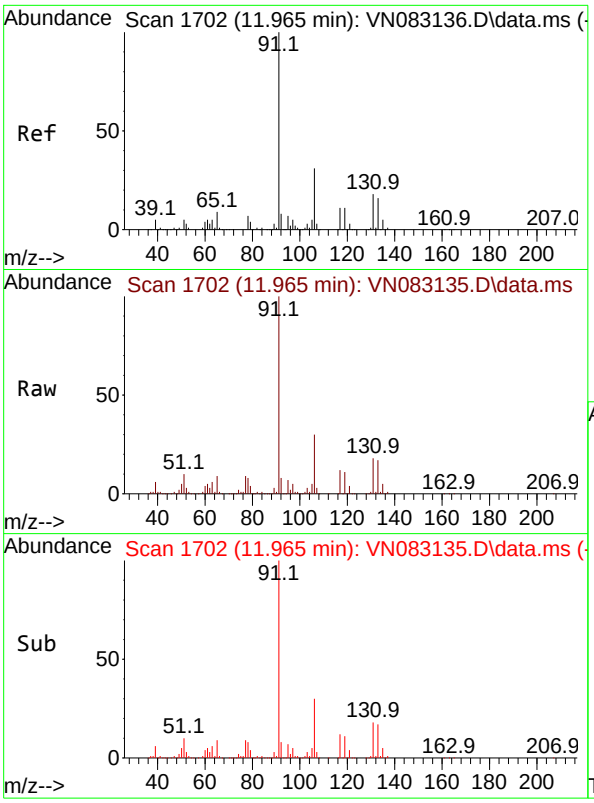


#66
1,1,1,2-Tetrachloroethane
Concen: 97.546 ug/l
RT: 11.959 min Scan# 1701
Delta R.T. -0.006 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion:131 Resp: 250772

Ion	Ratio	Lower	Upper
131	100		
133	93.9	47.3	142.0
119	63.6	32.5	97.4





#67
Ethyl Benzene
Concen: 97.041 ug/l
RT: 11.965 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 91 Resp: 129763

Ion	Ratio	Lower	Upper
91	100		
106	30.5	24.0	36.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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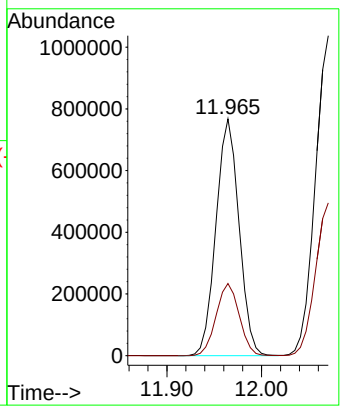
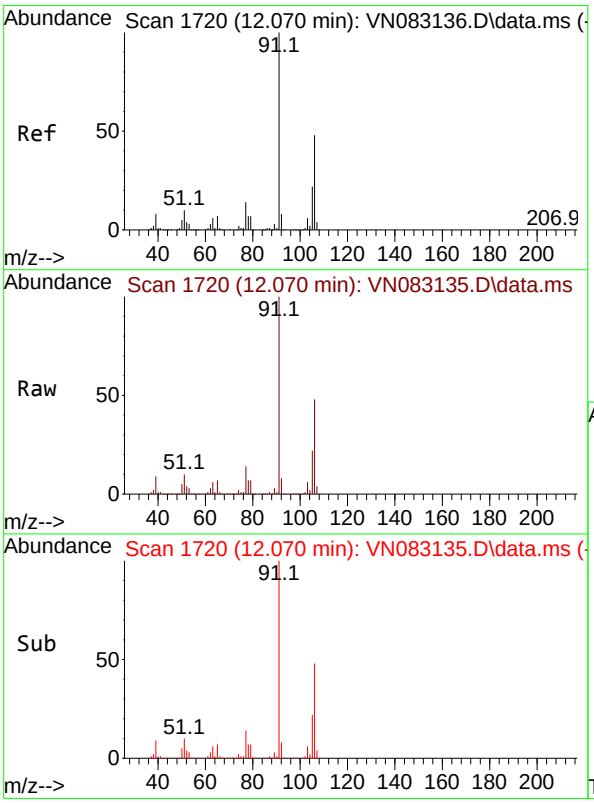
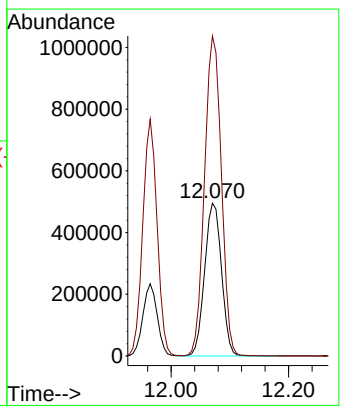


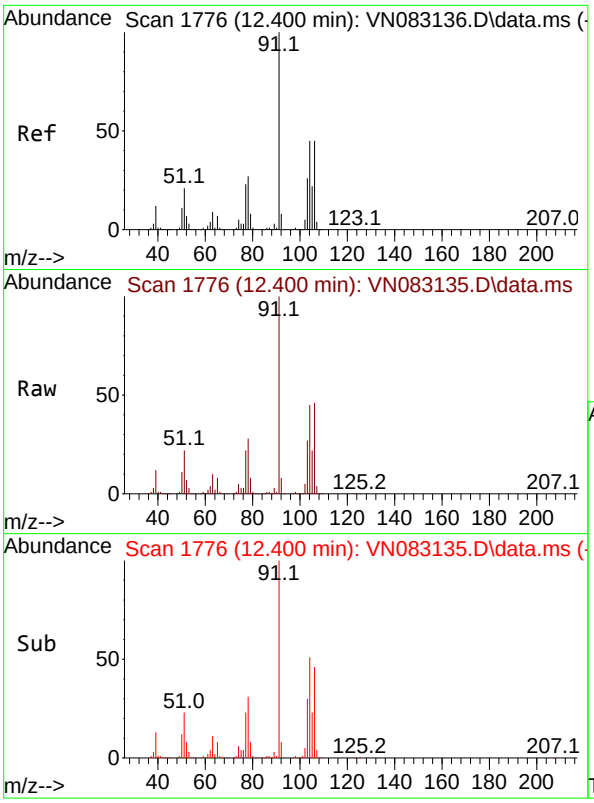


#68
m/p-Xylenes
Concen: 196.641 ug/l
RT: 12.070 min Scan# 1720
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion:106 Resp: 984984

Ion	Ratio	Lower	Upper
106	100		
91	208.8	166.1	249.1





#69
o-Xylene
Concen: 98.107 ug/l
RT: 12.400 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion:106 Resp: 48467

Ion	Ratio	Lower	Upper
106	100		
91	218.1	111.3	333.9

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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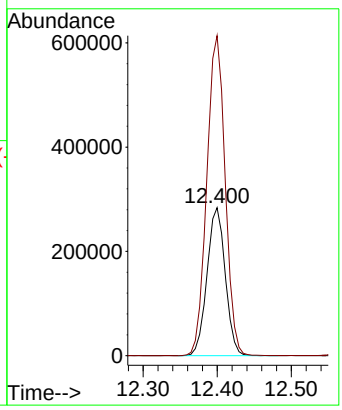
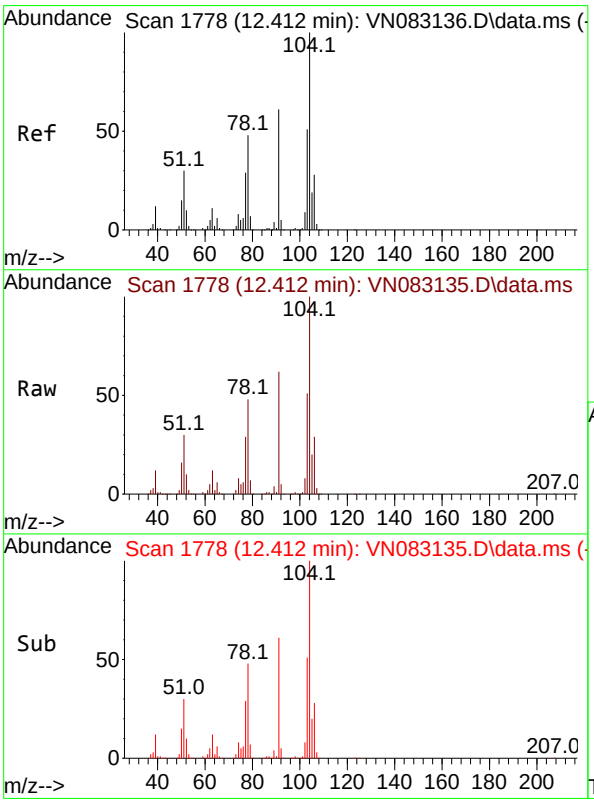
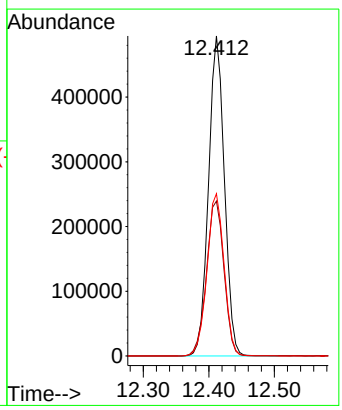


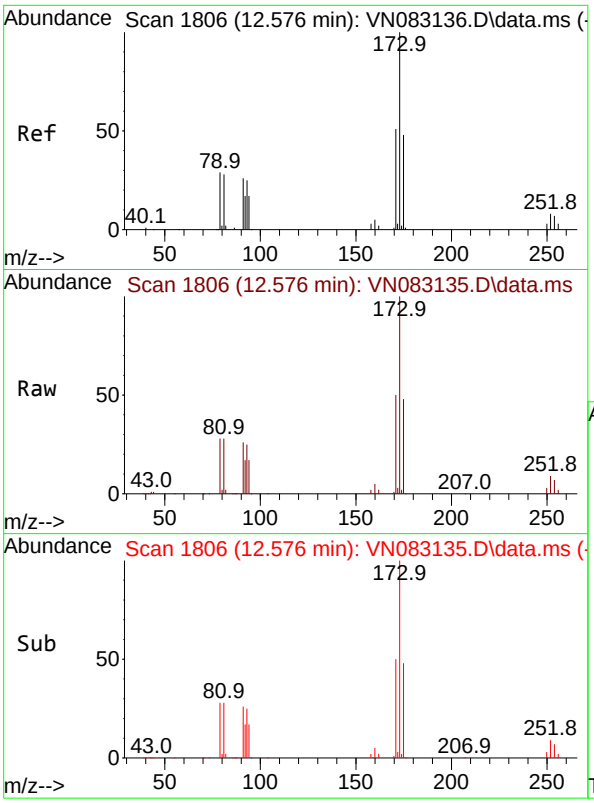


#70
Styrene
Concen: 100.261 ug/l
RT: 12.412 min Scan# 1778
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion:104 Resp: 831903

Ion	Ratio	Lower	Upper
104	100		
78	53.5	41.6	62.4
103	54.4	44.0	66.0

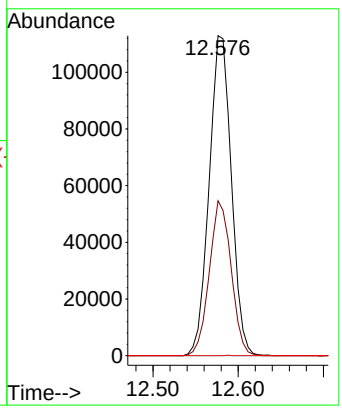




#71
Bromoform
Concen: 104.942 ug/l
RT: 12.576 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion:173 Resp: 20438

Ion	Ratio	Lower	Upper
173	100		
175	47.6	24.0	72.0
254	0.0	0.0	0.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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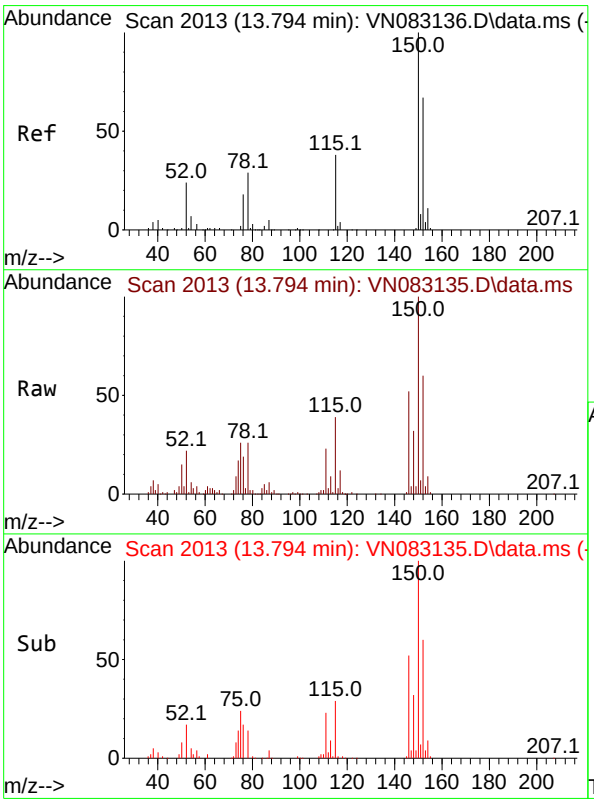
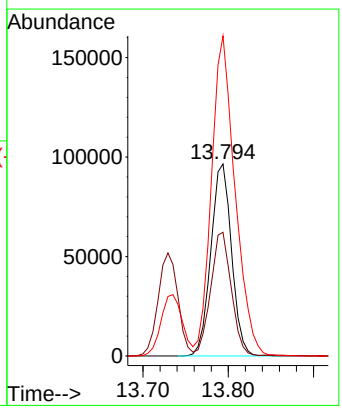
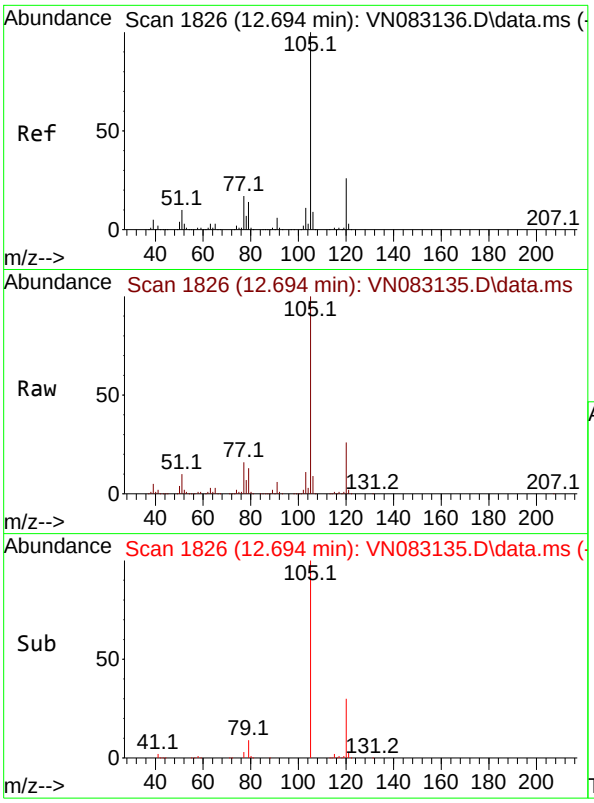


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.794 min Scan# 2013
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion:152 Resp: 162834

Ion	Ratio	Lower	Upper
152	100		
115	63.9	30.6	91.6
150	189.9	0.0	348.6





#73
Isopropylbenzene
Concen: 91.399 ug/l
RT: 12.694 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

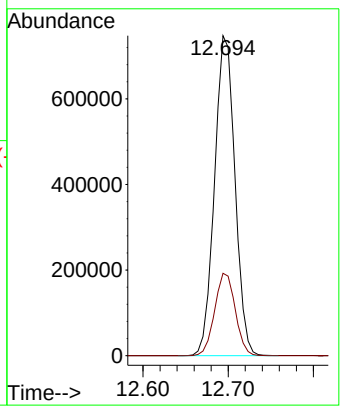
Tgt Ion:105 Resp: 124484

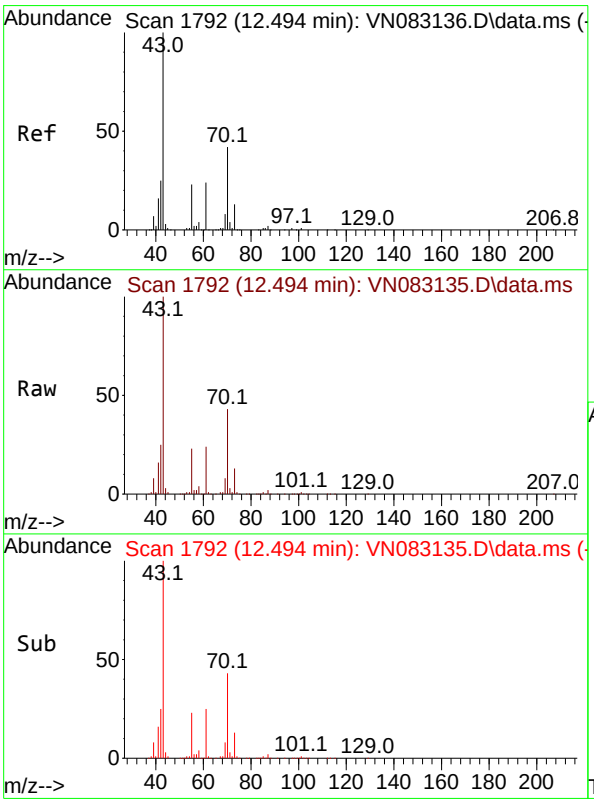
Ion	Ratio	Lower	Upper
105	100		
120	25.9	12.9	38.6

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

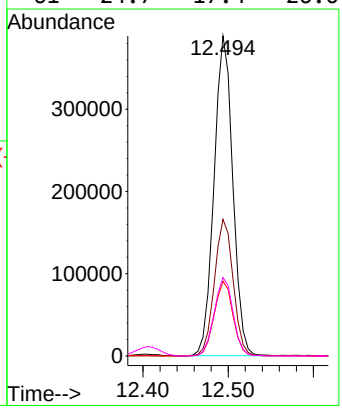


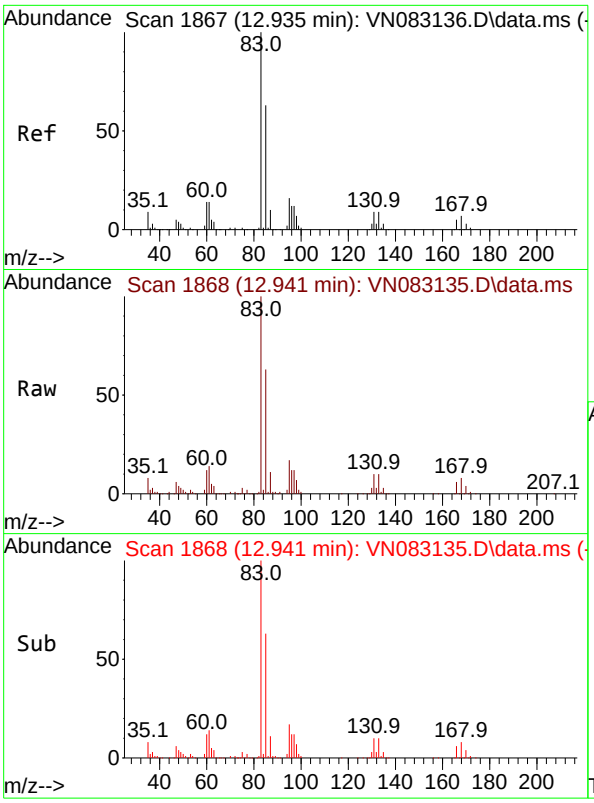


#74
N-amyl acetate
Concen: 89.282 ug/l
RT: 12.494 min Scan# 1792
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 43 Resp: 594797

Ion	Ratio	Lower	Upper
43	100		
70	42.7	29.8	44.6
55	23.4	18.7	28.1
61	24.7	17.4	26.0





#75
1,1,2,2-Tetrachloroethane
Concen: 91.727 ug/l
RT: 12.941 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 83 Resp: 35334

Ion	Ratio	Lower	Upper
83	100		
131	10.3	5.0	14.9
85	64.2	31.9	95.7

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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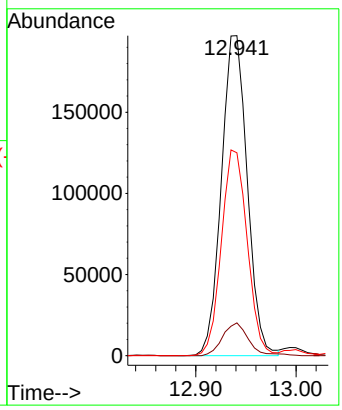
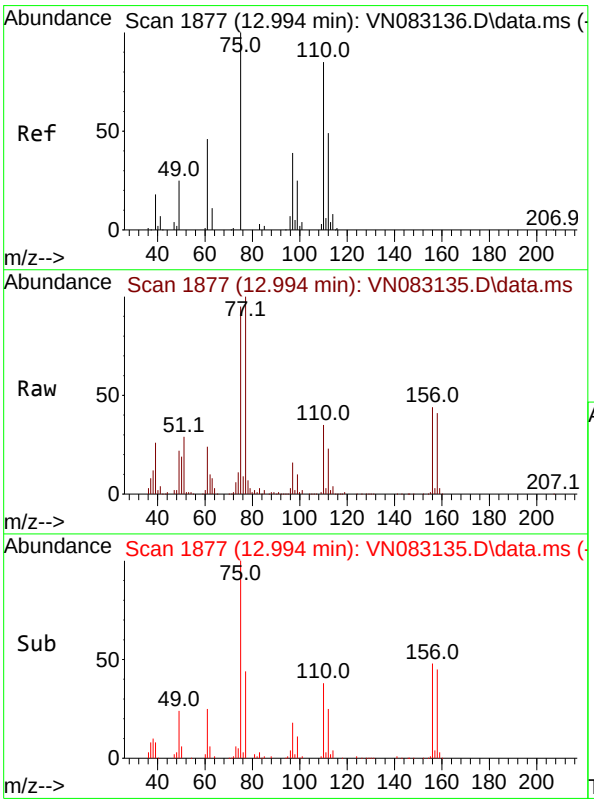
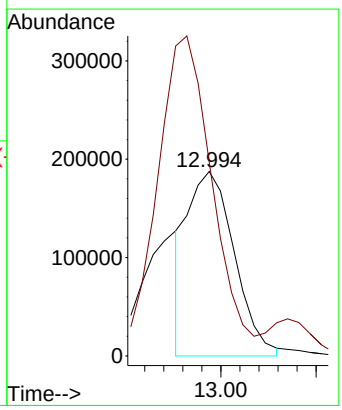


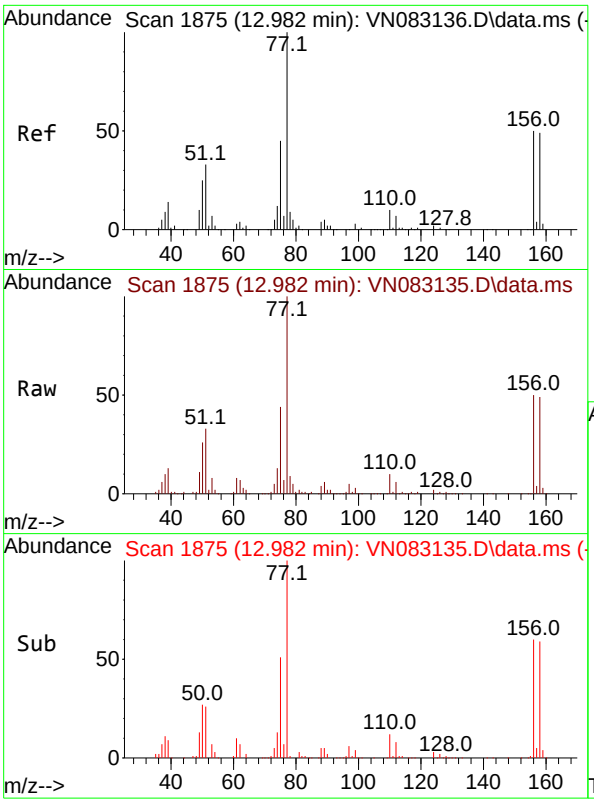


#76
1,2,3-Trichloropropane
Concen: 89.478 ug/l m
RT: 12.994 min Scan# 1877
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 75 Resp: 320302

Ion	Ratio	Lower	Upper
75	100		
77	203.7	110.9	332.6

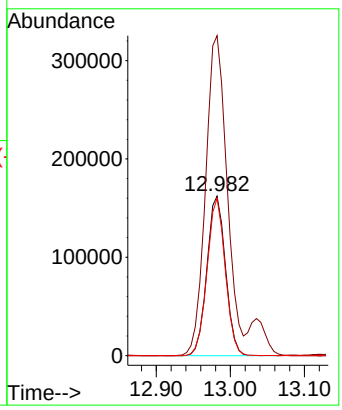




#77
Bromobenzene
Concen: 93.431 ug/l
RT: 12.982 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion:156 Resp: 28267

Ion	Ratio	Lower	Upper
156	100		
77	230.9	111.3	333.8
158	96.4	48.3	144.9



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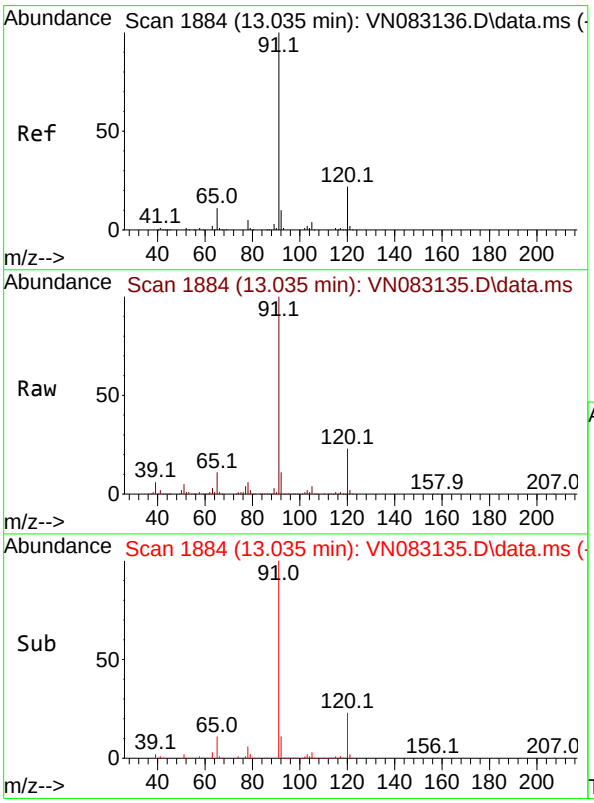
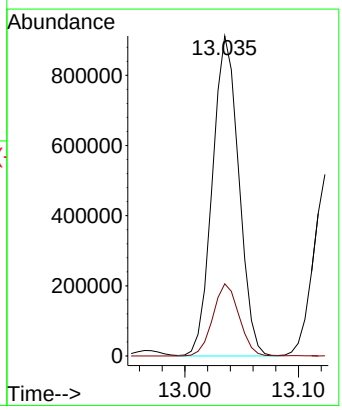
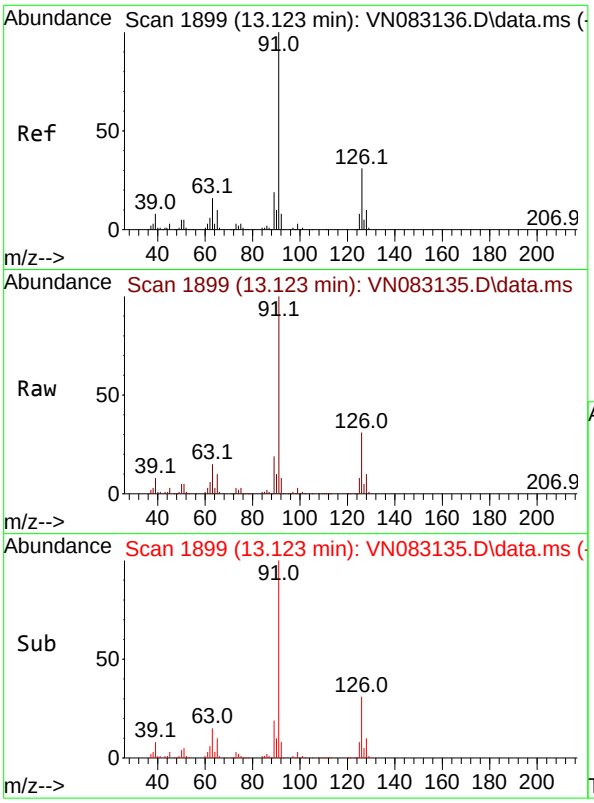


#78
n-propylbenzene
Concen: 93.979 ug/l
RT: 13.035 min Scan# 1884
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 91 Resp: 1473868

Ion	Ratio	Lower	Upper
91	100		
120	22.3	10.9	32.9

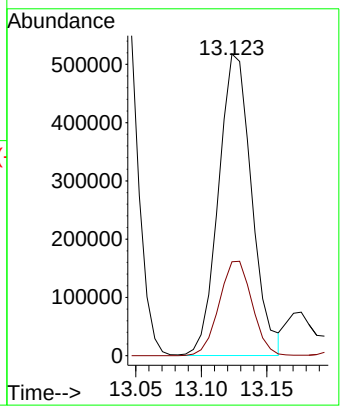




#79
2-Chlorotoluene
Concen: 91.785 ug/l
RT: 13.123 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 91 Resp: 91261

Ion	Ratio	Lower	Upper
91	100		
126	31.1	16.2	48.6



Instrument :
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ClientSampleId :
VSTDICC100

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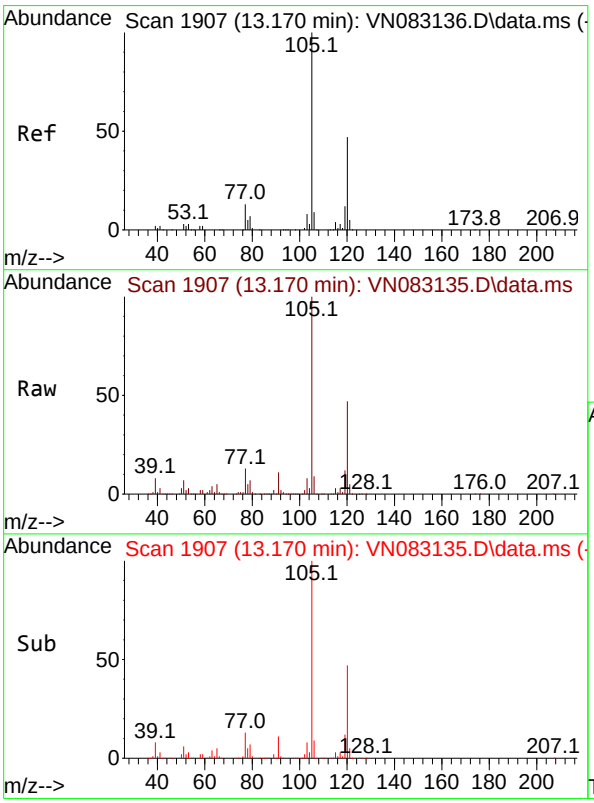
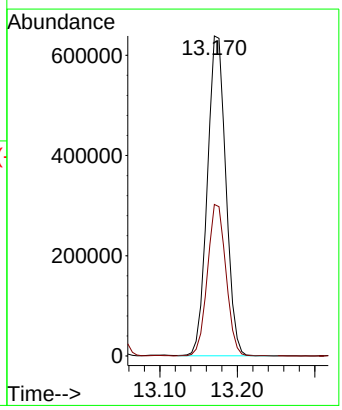
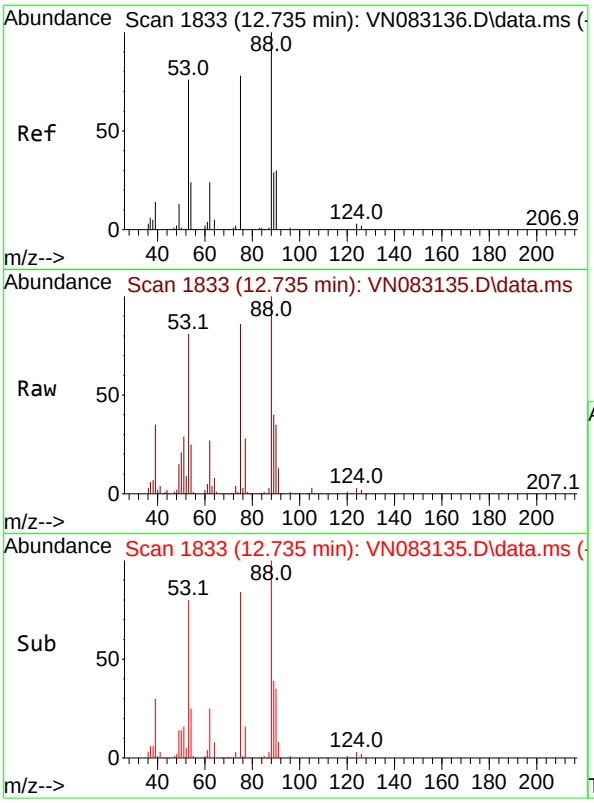


#80
1,3,5-Trimethylbenzene
Concen: 92.690 ug/l
RT: 13.170 min Scan# 1907
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion:105 Resp: 1056912

Ion	Ratio	Lower	Upper
105	100		
120	47.4	24.3	72.8





#81
trans-1,4-Dichloro-2-butene
Concen: 100.628 ug/l
RT: 12.735 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 75 Resp: 16532

Ion	Ratio	Lower	Upper
75	100		
53	96.5	88.4	132.6
89	41.9	36.3	54.5

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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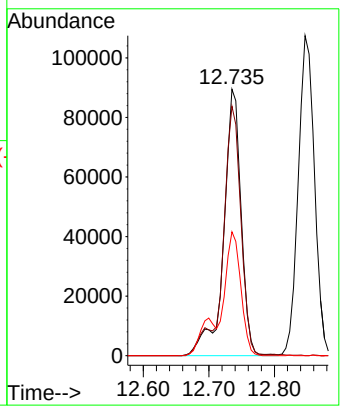
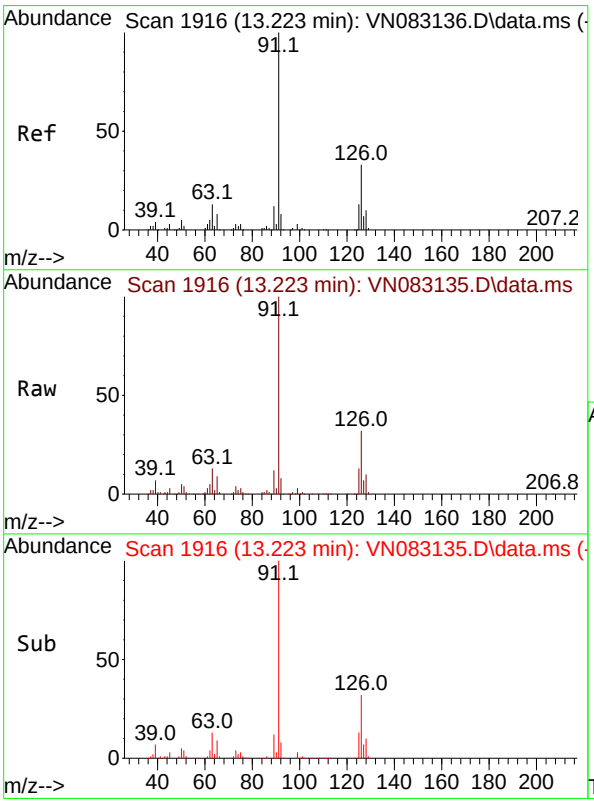
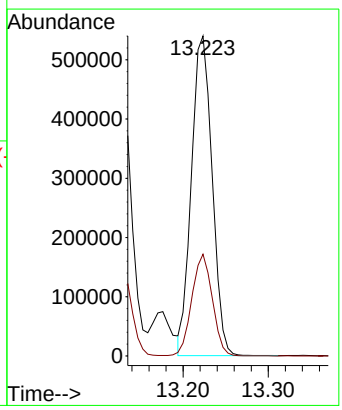


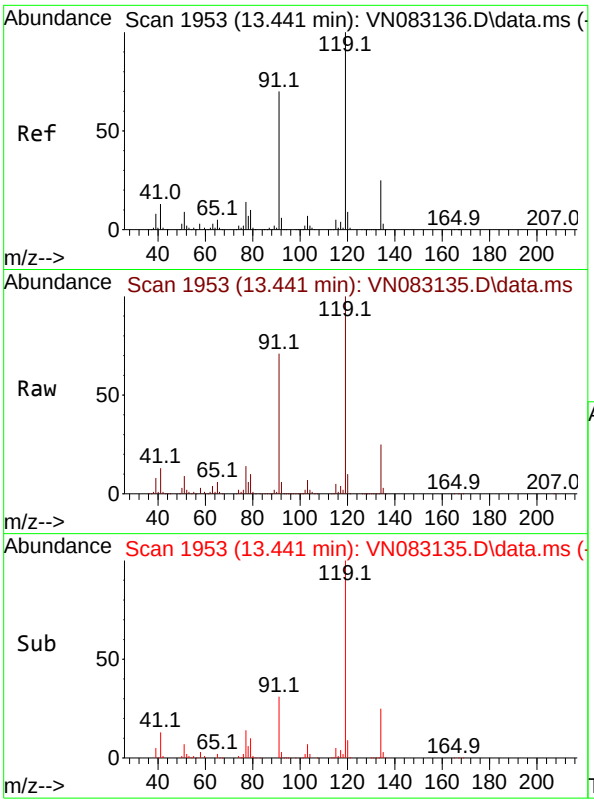


#82
4-Chlorotoluene
Concen: 91.381 ug/l
RT: 13.223 min Scan# 1916
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 91 Resp: 911384

Ion	Ratio	Lower	Upper
91	100		
126	31.4	16.2	48.6

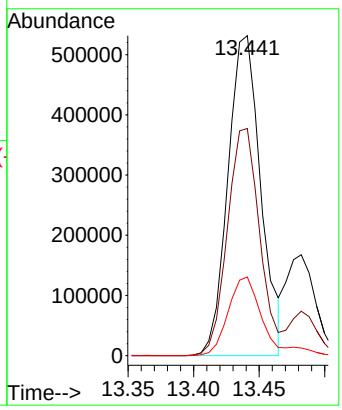




#83
tert-Butylbenzene
Concen: 91.918 ug/l
RT: 13.441 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion:119 Resp: 92819

Ion	Ratio	Lower	Upper
119	100		
91	69.3	35.0	105.1
134	26.1	13.3	39.8



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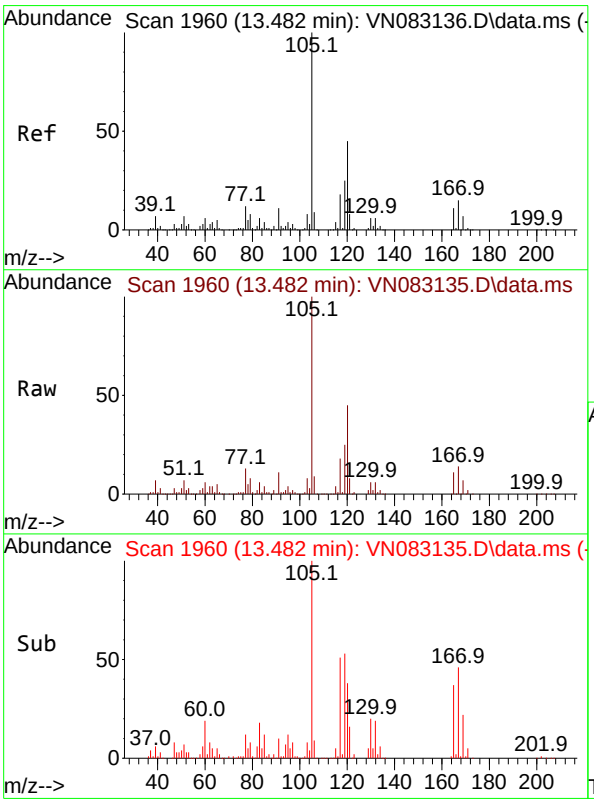
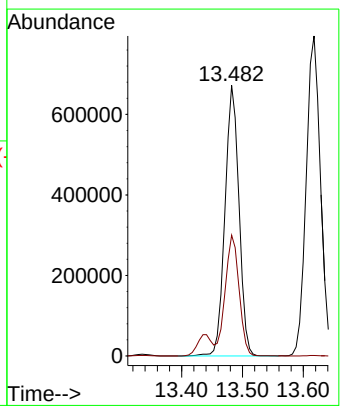
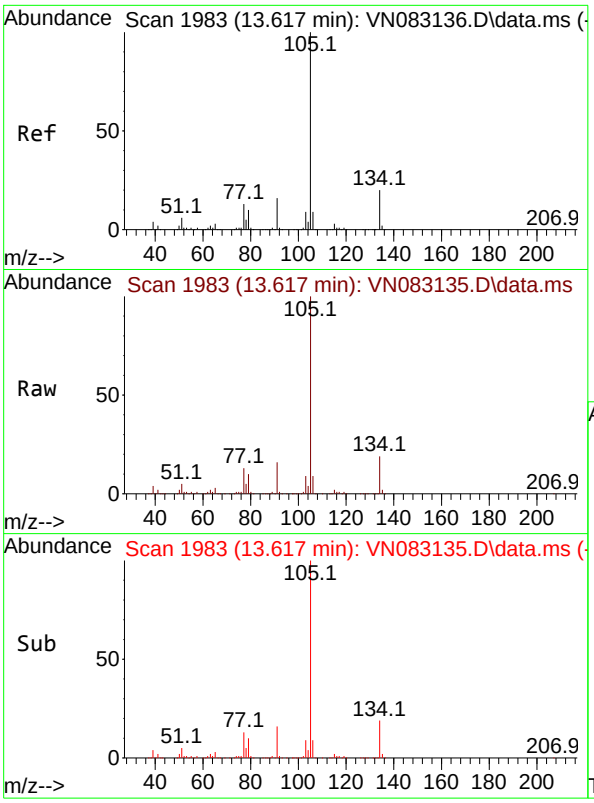


#84
1,2,4-Trimethylbenzene
Concen: 93.675 ug/l
RT: 13.482 min Scan# 1960
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion:105 Resp: 1076449

Ion	Ratio	Lower	Upper
105	100		
120	44.4	21.9	65.8





#85
sec-Butylbenzene
Concen: 93.978 ug/l
RT: 13.617 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion:105 Resp: 129490

Ion	Ratio	Lower	Upper
105	100		
134	19.4	9.8	29.3

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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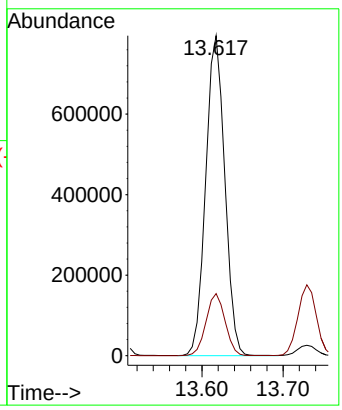
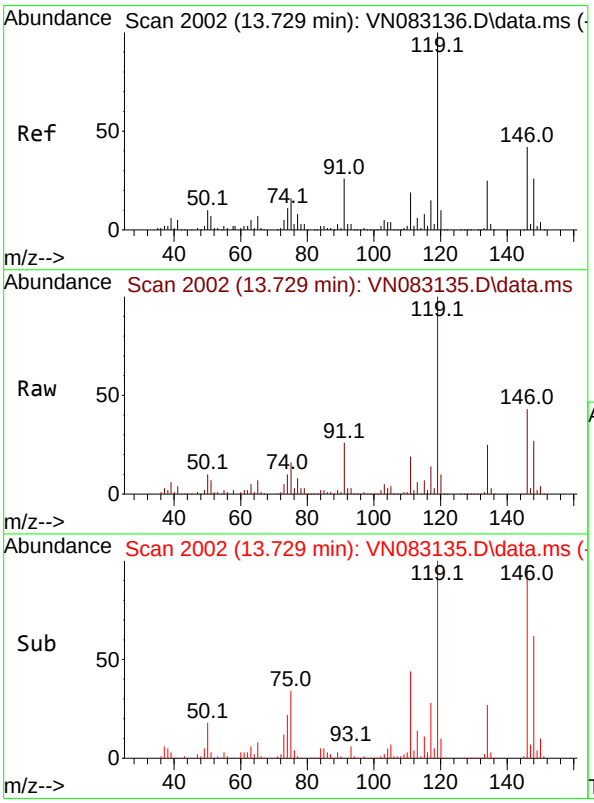
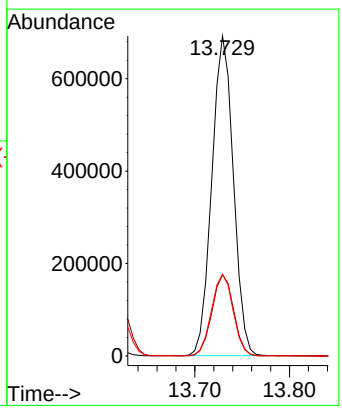


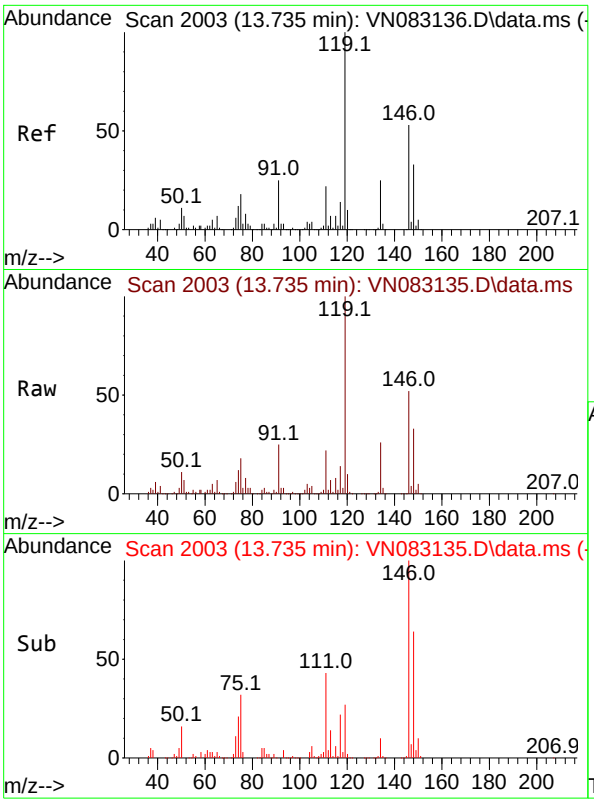


#86
p-Isopropyltoluene
Concen: 96.022 ug/l
RT: 13.729 min Scan# 2002
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion:119 Resp: 1092439

Ion	Ratio	Lower	Upper
119	100		
134	25.5	13.0	39.0
91	25.5	12.3	36.9





#87
1,3-Dichlorobenzene
Concen: 94.009 ug/l
RT: 13.735 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion:146 Resp: 53519

Ion	Ratio	Lower	Upper
146	100		
111	43.5	20.6	61.9
148	63.6	31.8	95.3

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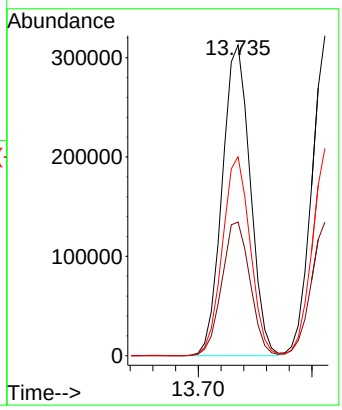
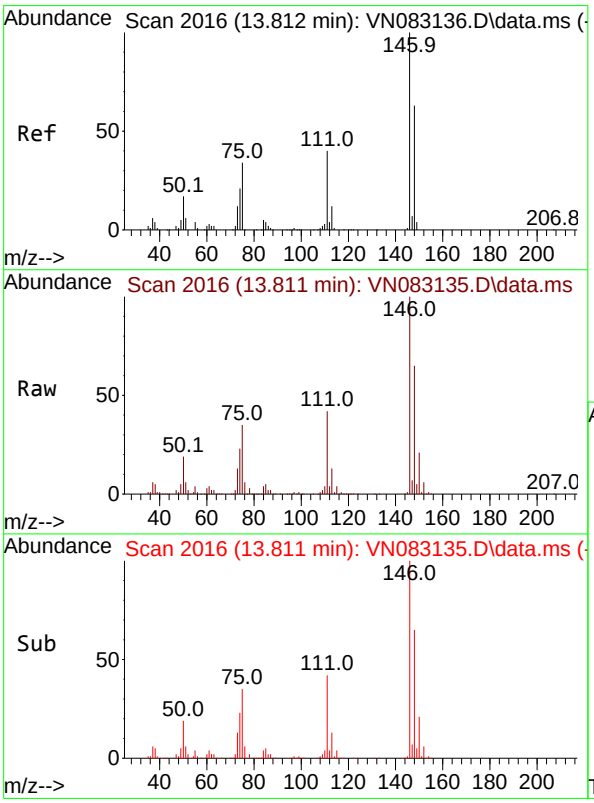
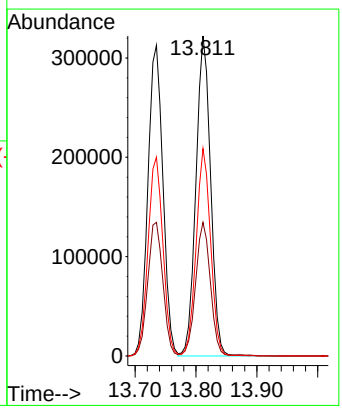


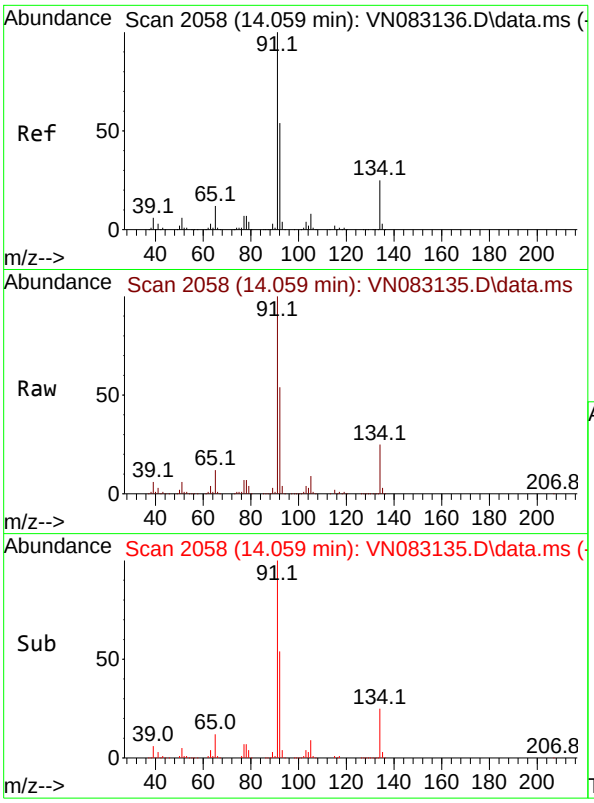


#88
1,4-Dichlorobenzene
Concen: 93.900 ug/l
RT: 13.811 min Scan# 2016
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion:146 Resp: 538924

Ion	Ratio	Lower	Upper
146	100		
111	41.5	20.1	60.3
148	63.6	32.2	96.6





#89
n-Butylbenzene
Concen: 99.461 ug/l
RT: 14.059 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 91 Resp: 98048

Ion	Ratio	Lower	Upper
91	100		
92	53.8	26.1	78.3
134	25.2	12.1	36.3

Instrument :
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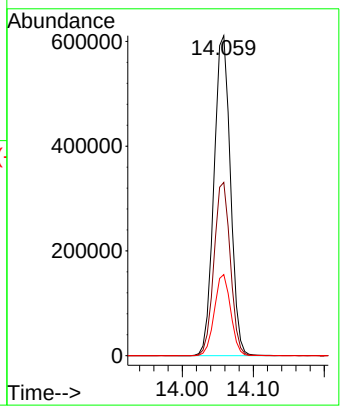
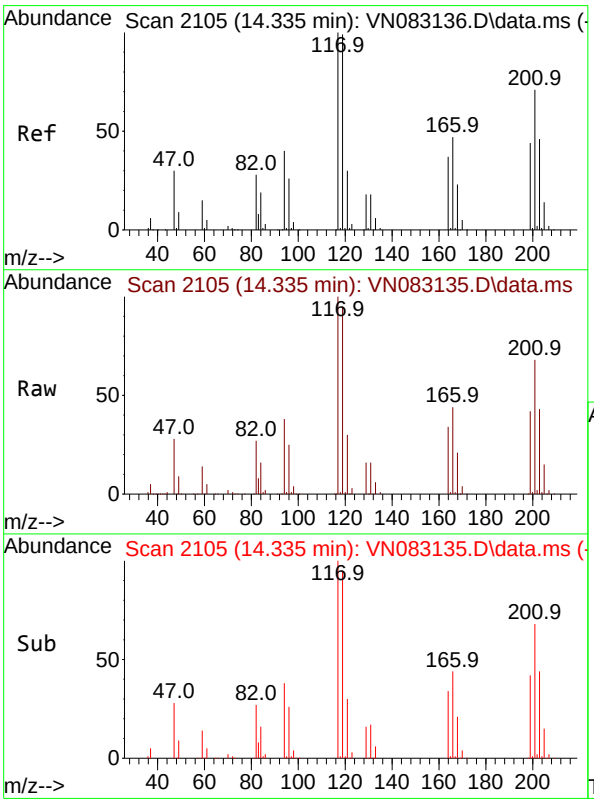
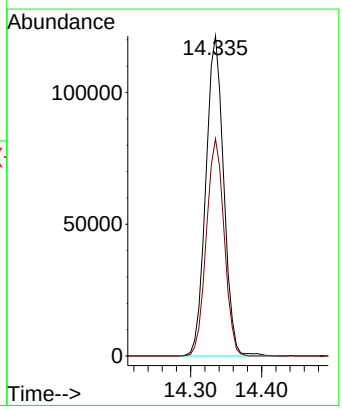


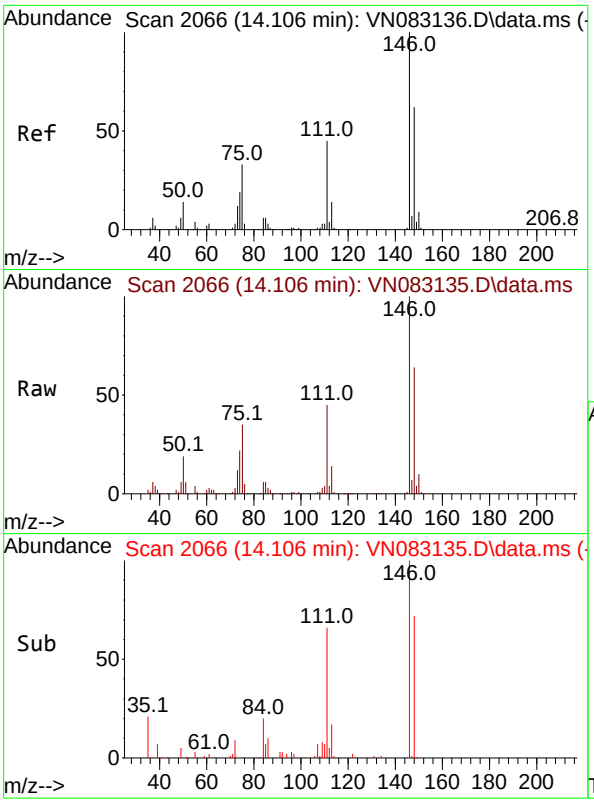


#90
Hexachloroethane
Concen: 96.320 ug/l
RT: 14.335 min Scan# 2105
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion:117 Resp: 211710

Ion	Ratio	Lower	Upper
117	100		
201	67.7	35.8	107.3

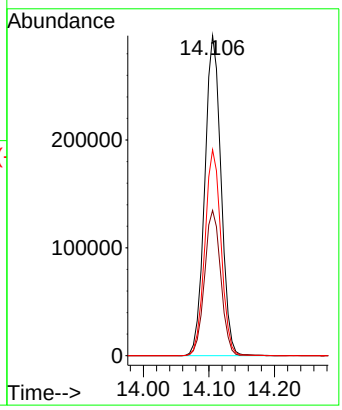




#91
1,2-Dichlorobenzene
Concen: 92.863 ug/l
RT: 14.106 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion:146 Resp: 51158

Ion	Ratio	Lower	Upper
146	100		
111	45.4	21.4	64.2
148	63.9	32.1	96.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

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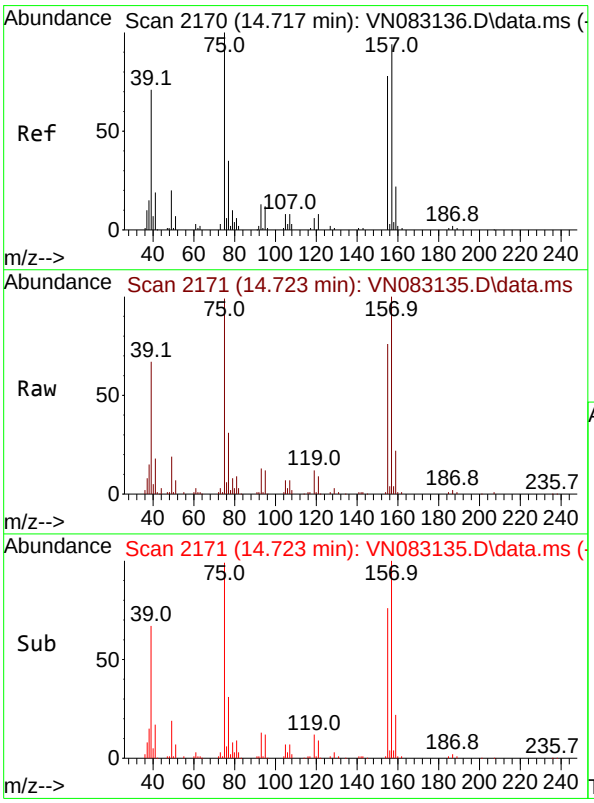
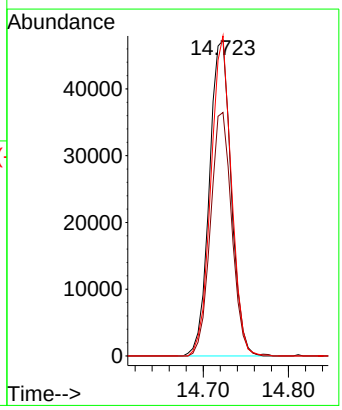
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

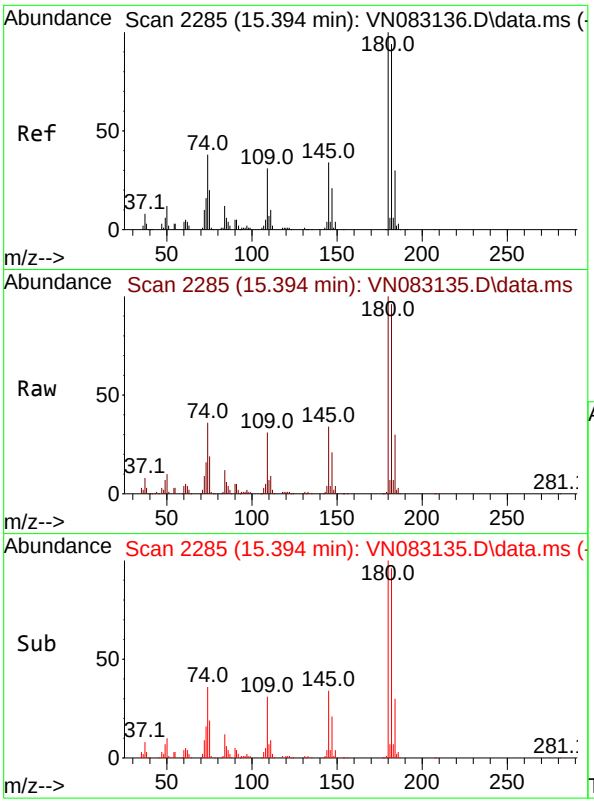


#92
1,2-Dibromo-3-Chloropropane
Concen: 89.788 ug/l
RT: 14.723 min Scan# 2171
Delta R.T. 0.006 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 75 Resp: 83930

Ion	Ratio	Lower	Upper
75	100		
155	75.2	36.6	109.8
157	95.1	46.9	140.6

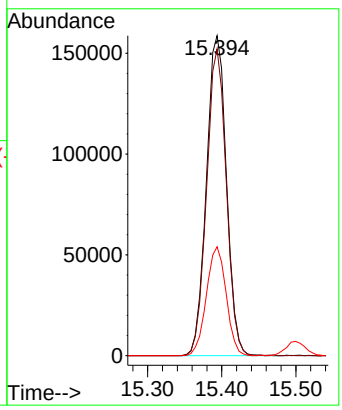




#93
1,2,4-Trichlorobenzene
Concen: 96.456 ug/l
RT: 15.394 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion:180 Resp: 29769

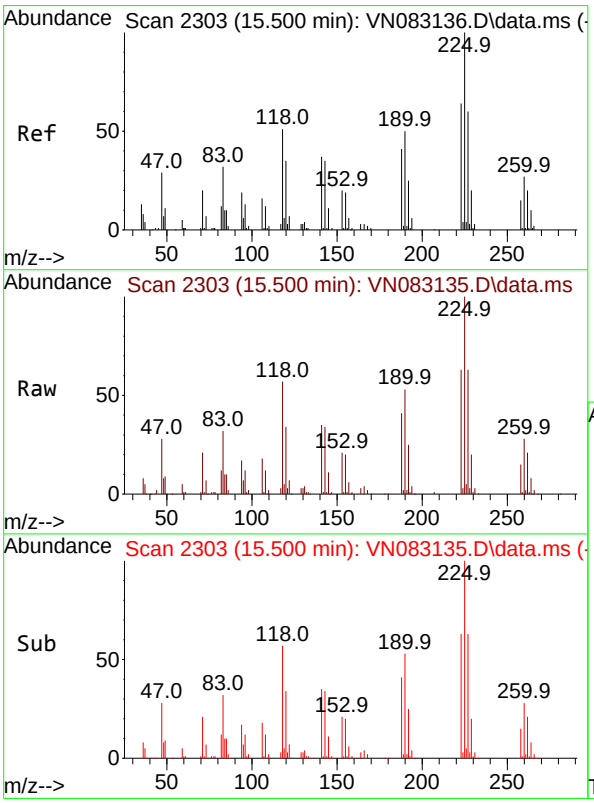
Ion	Ratio	Lower	Upper
180	100		
182	94.1	47.3	141.8
145	33.6	15.7	47.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

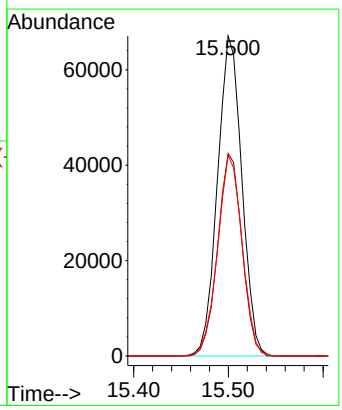
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

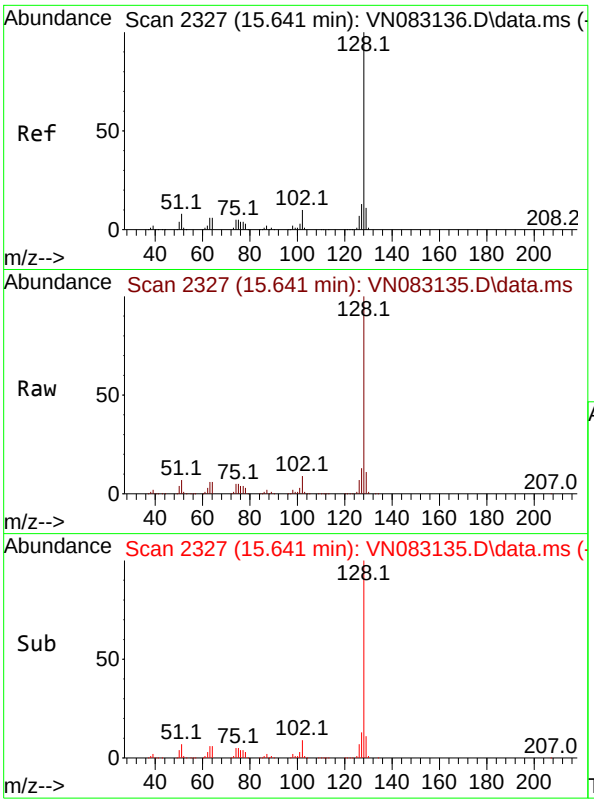


#94
Hexachlorobutadiene
Concen: 87.268 ug/l
RT: 15.500 min Scan# 2303
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion:225 Resp: 119783

Ion	Ratio	Lower	Upper
225	100		
223	63.0	31.9	95.7
227	63.3	32.5	97.5

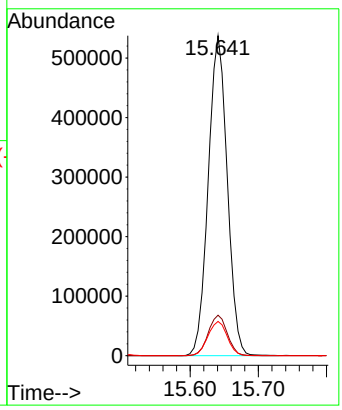




#95
Naphthalene
Concen: 95.391 ug/l
RT: 15.641 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion:128 Resp: 104286

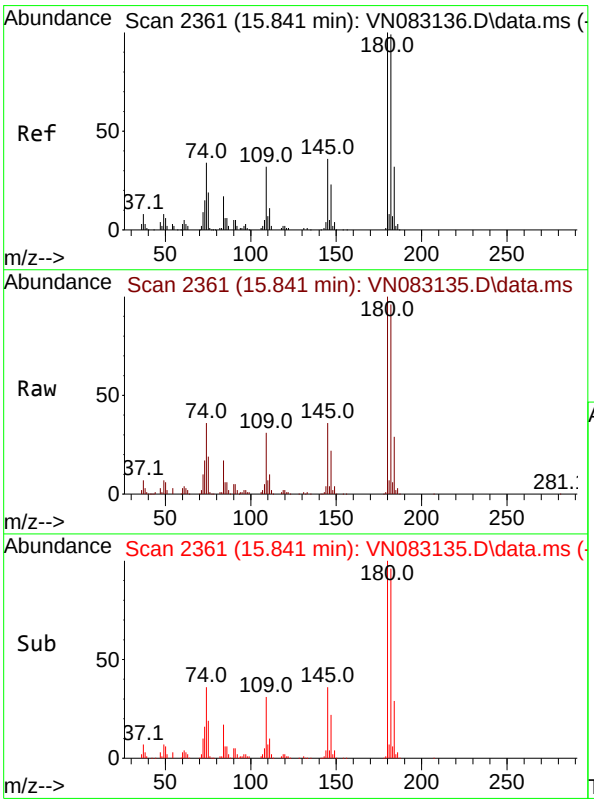
Ion	Ratio	Lower	Upper
128	100		
127	12.7	10.6	16.0
129	10.9	8.6	12.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

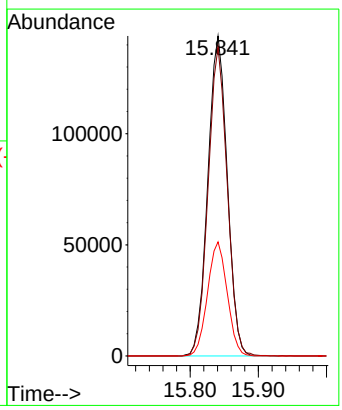
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024



#96
1,2,3-Trichlorobenzene
Concen: 93.575 ug/l
RT: 15.841 min Scan# 2361
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion:180 Resp: 285769

Ion	Ratio	Lower	Upper
180	100		
182	95.1	48.9	146.8
145	36.0	16.8	50.4



ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN080724\
Data File : VN083136.D
Acq On : 07 Aug 2024 10:58
Operator : JC\MD
Sample : VSTDICCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

Quant Time: Aug 08 06:15:41 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 05:50:26 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.224	168	204914	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	348813	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	303118	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.794	152	143466	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.582	65	152684	52.348	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 104.700%			
35) Dibromofluoromethane	8.165	113	115863	53.216	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 106.440%			
50) Toluene-d8	10.565	98	439976	54.174	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 108.340%			
62) 4-Bromofluorobenzene	12.847	95	171524	54.173	ug/l	0.00
Spiked Amount 50.000	Range 64 - 133		Recovery = 108.340%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.124	85	116913	50.312	ug/l	97
3) Chloromethane	2.359	50	121130	50.915	ug/l	93
4) Vinyl Chloride	2.512	62	122548	50.482	ug/l	98
5) Bromomethane	2.948	94	73113	48.538	ug/l	95
6) Chloroethane	3.112	64	72966	48.043	ug/l	98
7) Trichlorofluoromethane	3.495	101	203848	50.832	ug/l	98
8) Diethyl Ether	3.959	74	75087	50.318	ug/l	84
9) 1,1,2-Trichlorotrifluo...	4.365	101	112201	50.747	ug/l	98
10) Methyl Iodide	4.589	142	151731	52.170	ug/l	96
11) Tert butyl alcohol	5.530	59	150267	247.904	ug/l	100
12) 1,1-Dichloroethene	4.342	96	111564	49.114	ug/l	87
13) Acrolein	4.183	56	104276	263.954	ug/l	98
14) Allyl chloride	5.018	41	191195	44.541	ug/l	93
15) Acrylonitrile	5.718	53	313090	251.149	ug/l	98
16) Acetone	4.430	43	293091	256.804	ug/l	97
17) Carbon Disulfide	4.712	76	319654	48.094	ug/l	98
18) Methyl Acetate	5.024	43	159022	46.765	ug/l	91
19) Methyl tert-butyl Ether	5.794	73	415489	50.676	ug/l	97
20) Methylene Chloride	5.277	84	122780	46.744	ug/l	85
21) trans-1,2-Dichloroethene	5.794	96	117685	50.127	ug/l	85
22) Diisopropyl ether	6.671	45	411409	50.987	ug/l	96
23) Vinyl Acetate	6.606	43	2147591m	259.716	ug/l	
24) 1,1-Dichloroethane	6.571	63	222071	50.493	ug/l	99
25) 2-Butanone	7.483	43	437392	249.591	ug/l	91
26) 2,2-Dichloropropane	7.488	77	209679	51.336	ug/l	97
27) cis-1,2-Dichloroethene	7.488	96	141110	49.809	ug/l	92
28) Bromochloromethane	7.812	49	89942	50.041	ug/l #	83
29) Tetrahydrofuran	7.835	42	285853	252.334	ug/l	88
30) Chloroform	7.965	83	232933	50.978	ug/l	99
31) Cyclohexane	8.259	56	201273	46.565	ug/l	96
32) 1,1,1-Trichloroethane	8.171	97	220296	50.935	ug/l	95
36) 1,1-Dichloropropene	8.371	75	165826	50.349	ug/l	99
37) Ethyl Acetate	7.559	43	174105	47.213	ug/l #	92
38) Carbon Tetrachloride	8.359	117	190357	51.315	ug/l	97
39) Methylcyclohexane	9.600	83	208177	51.461	ug/l	93
40) Benzene	8.606	78	504662	51.436	ug/l	98

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN080724\
Data File : VN083136.D
Acq On : 07 Aug 2024 10:58
Operator : JC\MD
Sample : VSTDICCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 08 06:15:41 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 05:50:26 2024
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	7.777	41	98869	47.154	ug/l		94
42) 1,2-Dichloroethane	8.671	62	181440	50.765	ug/l		98
43) Isopropyl Acetate	8.688	43	321088	50.219	ug/l	#	93
44) Trichloroethene	9.353	130	119998	51.383	ug/l		94
45) 1,2-Dichloropropane	9.624	63	120518	51.747	ug/l		97
46) Dibromomethane	9.712	93	87411	52.436	ug/l		99
47) Bromodichloromethane	9.888	83	188069	50.245	ug/l		99
48) Methyl methacrylate	9.682	41	148264	48.631	ug/l		91
49) 1,4-Dioxane	9.694	88	57033	1036.917	ug/l		95
51) 4-Methyl-2-Pentanone	10.447	43	901412	258.493	ug/l		92
52) Toluene	10.629	92	323148	52.127	ug/l		98
53) t-1,3-Dichloropropene	10.835	75	208411	54.205	ug/l		100
54) cis-1,3-Dichloropropene	10.312	75	211396	51.692	ug/l		91
55) 1,1,2-Trichloroethane	11.018	97	116384	52.387	ug/l		99
56) Ethyl methacrylate	10.876	69	217635	51.964	ug/l	#	85
57) 1,3-Dichloropropane	11.165	76	206442	52.133	ug/l		100
58) 2-Chloroethyl Vinyl ether	10.159	63	454871	256.939	ug/l		95
59) 2-Hexanone	11.194	43	691708	256.396	ug/l		92
60) Dibromochloromethane	11.359	129	144208	53.688	ug/l		99
61) 1,2-Dibromoethane	11.471	107	121153	51.912	ug/l		98
64) Tetrachloroethene	11.106	164	103955	51.784	ug/l		96
65) Chlorobenzene	11.894	112	346172	51.679	ug/l		96
66) 1,1,1,2-Tetrachloroethane	11.965	131	121057	51.242	ug/l		100
67) Ethyl Benzene	11.965	91	628906	51.179	ug/l		98
68) m/p-Xylenes	12.070	106	477261	103.683	ug/l		99
69) o-Xylene	12.400	106	234432	51.638	ug/l		100
70) Styrene	12.412	104	405002	53.115	ug/l		98
71) Bromoform	12.576	173	96377	53.850	ug/l	#	99
73) Isopropylbenzene	12.694	105	609529	50.795	ug/l		100
74) N-amyl acetate	12.494	43	287319	48.950	ug/l		94
75) 1,1,2,2-Tetrachloroethane	12.935	83	167489	49.349	ug/l		99
76) 1,2,3-Trichloropropane	12.994	75	152531m	48.363	ug/l		
77) Bromobenzene	12.982	156	137514	51.587	ug/l		97
78) n-propylbenzene	13.035	91	712768	51.584	ug/l		99
79) 2-Chlorotoluene	13.123	91	441262	50.371	ug/l		98
80) 1,3,5-Trimethylbenzene	13.170	105	514918	51.254	ug/l		98
81) trans-1,4-Dichloro-2-b...	12.735	75	70776	48.894	ug/l		89
82) 4-Chlorotoluene	13.223	91	445369	50.684	ug/l		99
83) tert-Butylbenzene	13.441	119	453597	50.983	ug/l		98
84) 1,2,4-Trimethylbenzene	13.482	105	524226	51.778	ug/l		100
85) sec-Butylbenzene	13.617	105	628959	51.809	ug/l		100
86) p-Isopropyltoluene	13.729	119	528236	52.699	ug/l		98
87) 1,3-Dichlorobenzene	13.735	146	254058	50.651	ug/l		99
88) 1,4-Dichlorobenzene	13.812	146	255814	50.589	ug/l		99
89) n-Butylbenzene	14.059	91	461372	53.120	ug/l		97
90) Hexachloroethane	14.335	117	98836	51.037	ug/l		98
91) 1,2-Dichlorobenzene	14.106	146	244462	50.365	ug/l		98
92) 1,2-Dibromo-3-Chloropr...	14.717	75	40369	49.017	ug/l		98
93) 1,2,4-Trichlorobenzene	15.394	180	141229	51.937	ug/l		99
94) Hexachlorobutadiene	15.500	225	58664	48.509	ug/l		98
95) Naphthalene	15.641	128	499372	51.844	ug/l		99
96) 1,2,3-Trichlorobenzene	15.841	180	138125	51.335	ug/l		97

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN080724\
Data File : VN083136.D
Acq On : 07 Aug 2024 10:58
Operator : JC\MD
Sample : VSTDICCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

Quant Time: Aug 08 06:15:41 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 05:50:26 2024
Response via : Initial Calibration

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

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

ICAL Form

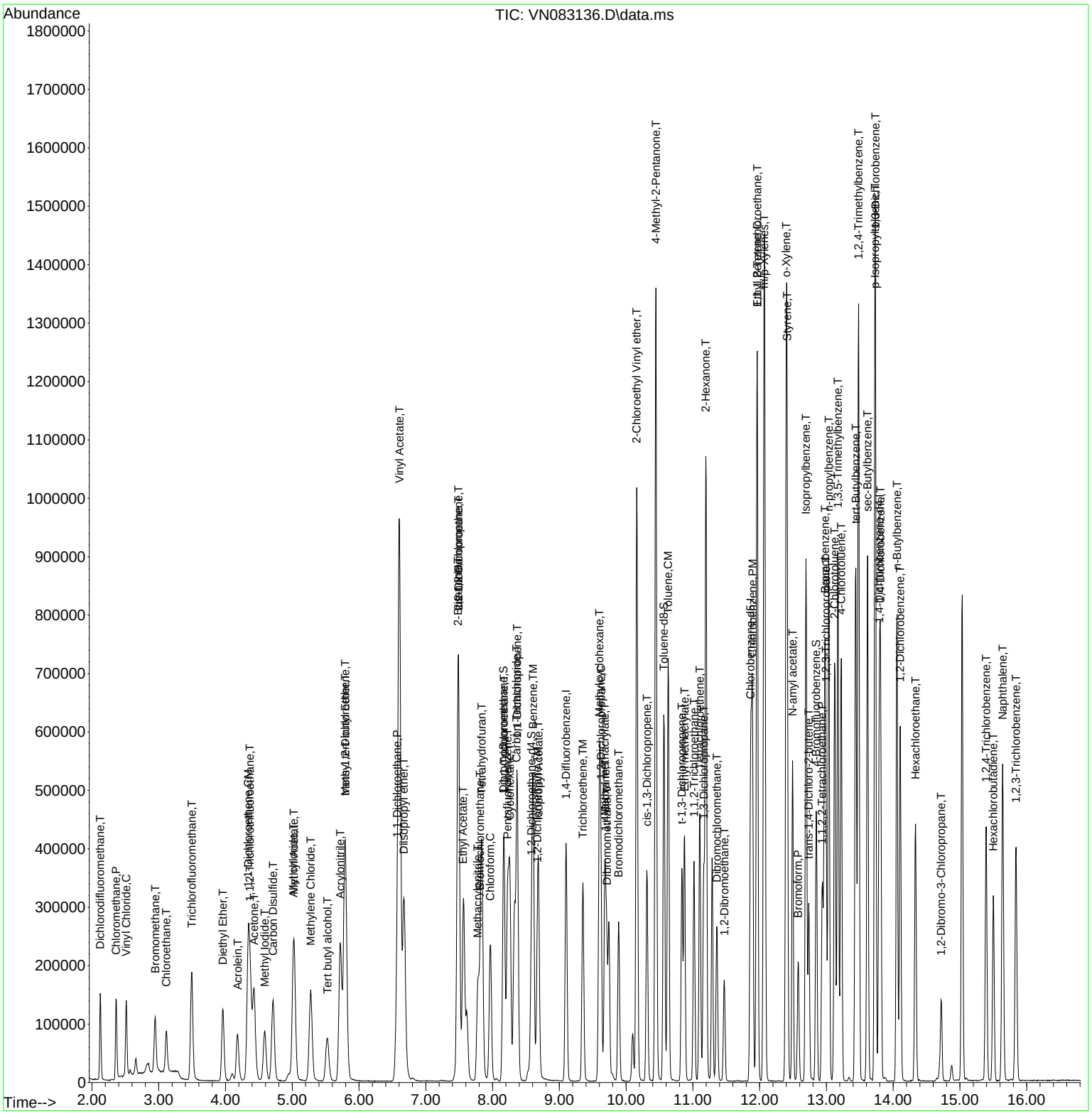
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN080724\
Data File : VN083136.D
Acq On : 07 Aug 2024 10:58
Operator : JC\MD
Sample : VSTDICCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

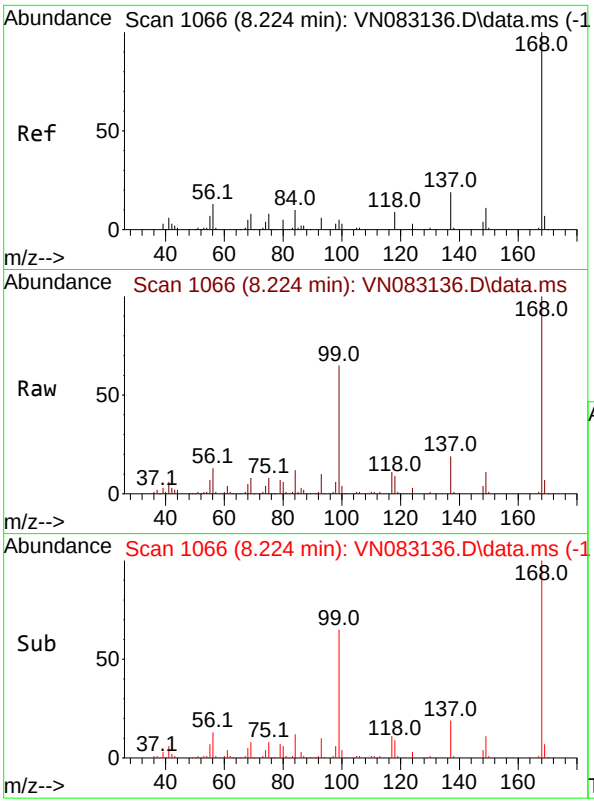
Quant Time: Aug 08 06:15:41 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 05:50:26 2024
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

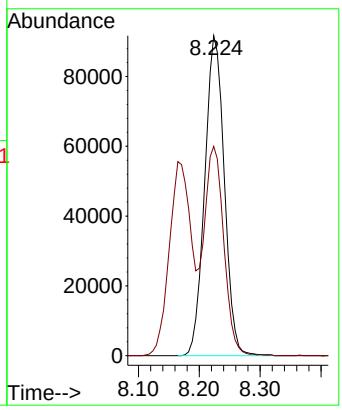




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion:168 Resp: 20491

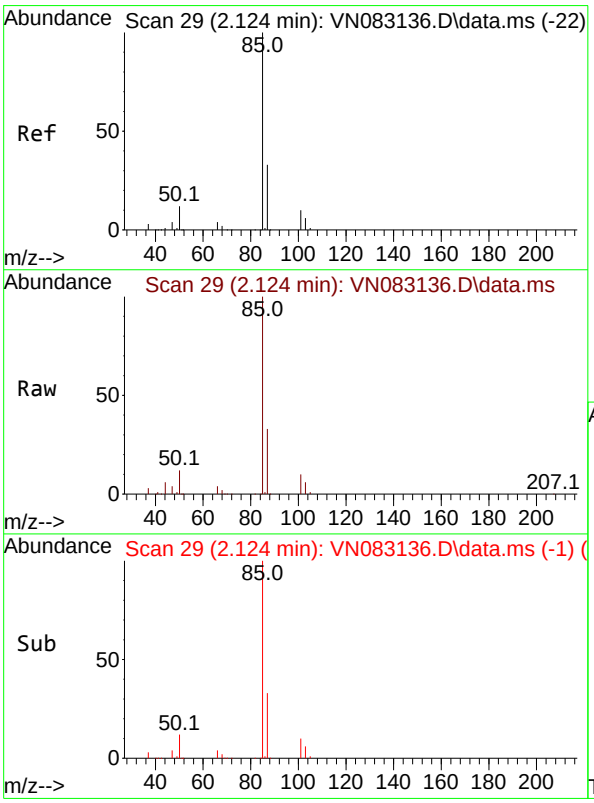
Ion	Ratio	Lower	Upper
168	100		
99	65.4	48.2	72.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Manual Integrations
APPROVED

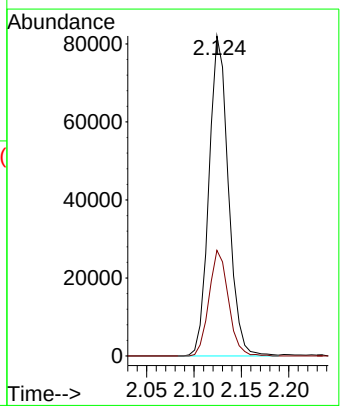
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

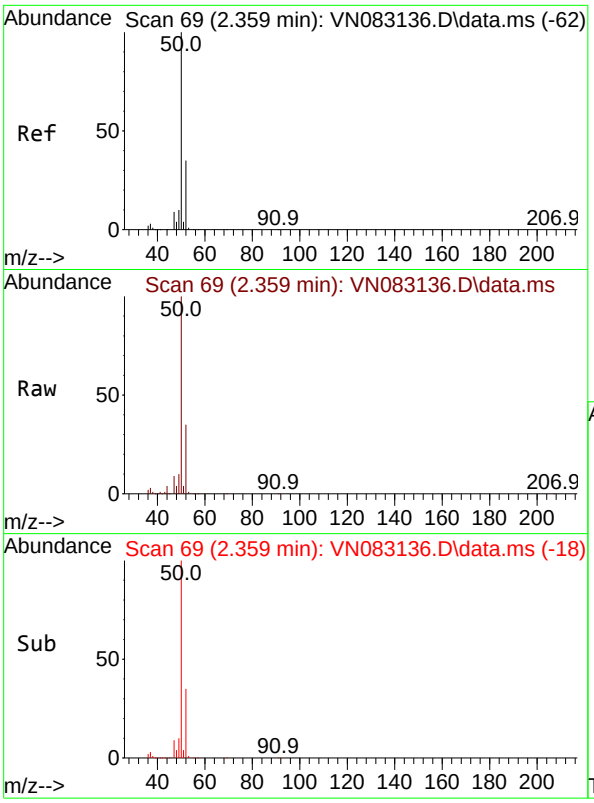


#2
Dichlorodifluoromethane
Concen: 50.312 ug/l
RT: 2.124 min Scan# 29
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 85 Resp: 116913

Ion	Ratio	Lower	Upper
85	100		
87	33.0	15.7	47.0

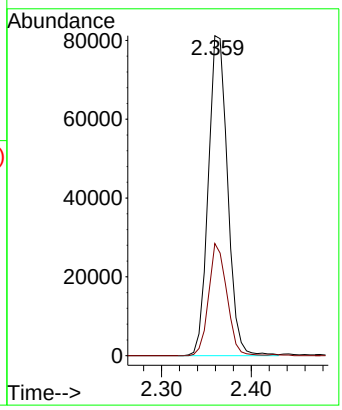




#3
Chloromethane
Concen: 50.915 ug/l
RT: 2.359 min Scan# 6
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 50 Resp: 12113

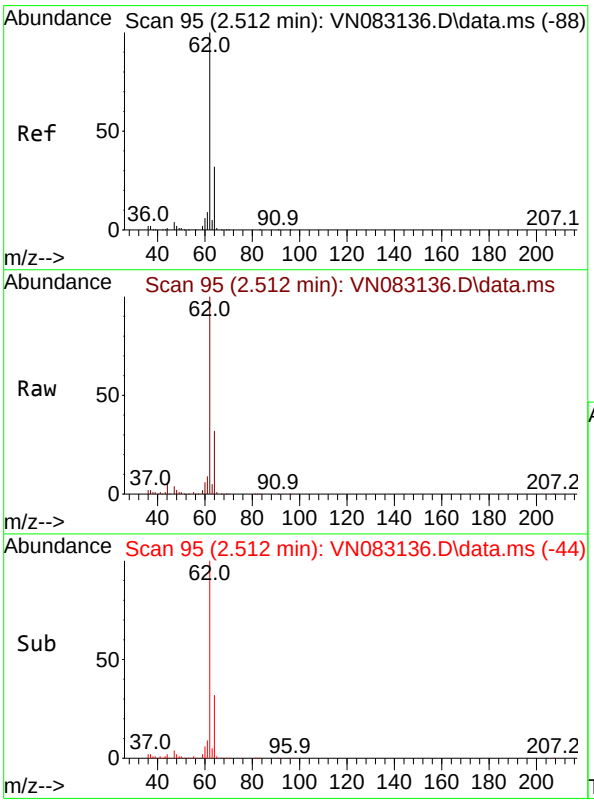
Ion	Ratio	Lower	Upper
50	100		
52	35.1	25.0	37.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Manual Integrations
APPROVED

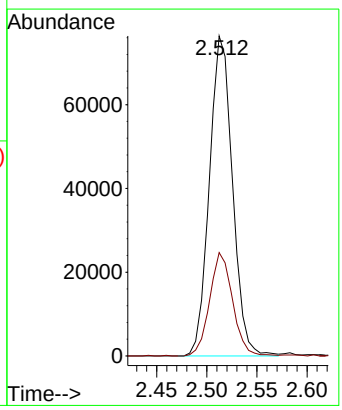
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

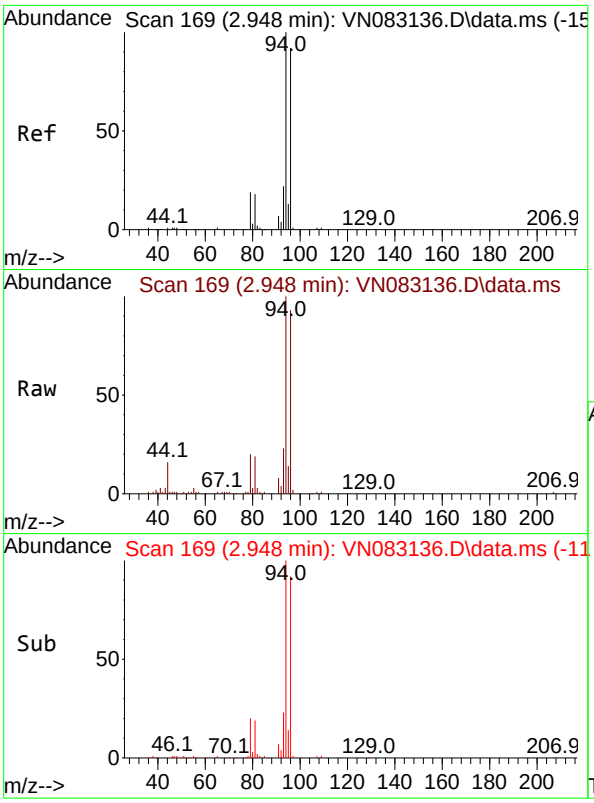


#4
Vinyl Chloride
Concen: 50.482 ug/l
RT: 2.512 min Scan# 95
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 62 Resp: 122548

Ion	Ratio	Lower	Upper
62	100		
64	32.3	25.0	37.6

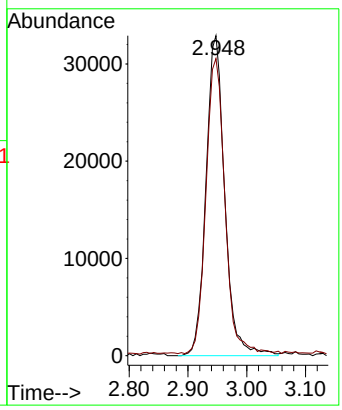




#5
Bromomethane
Concen: 48.538 ug/l
RT: 2.948 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 94 Resp: 7311

Ion	Ratio	Lower	Upper
94	100		
96	92.2	78.0	117.0



Instrument :
MSVOA_N
ClientSampleId :
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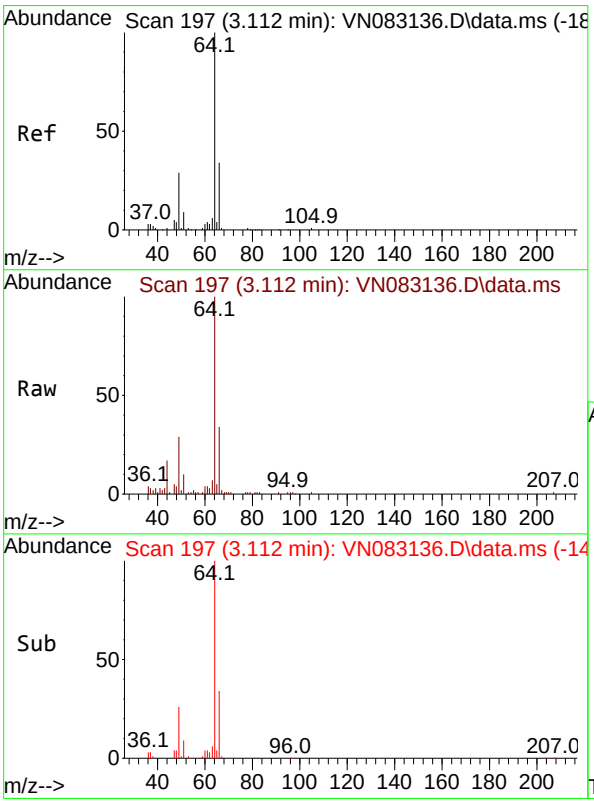
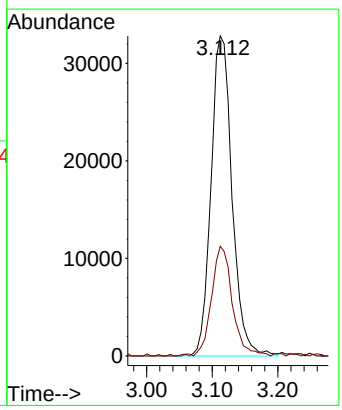
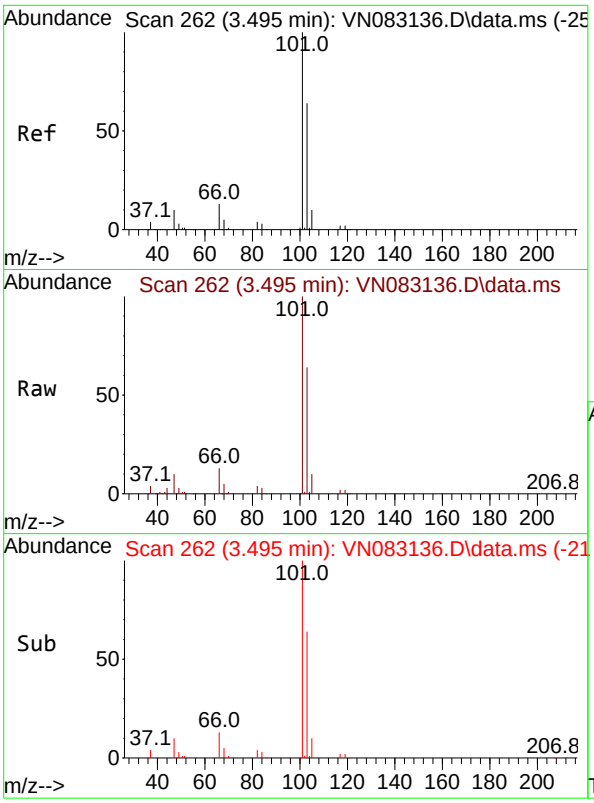


#6
Chloroethane
Concen: 48.043 ug/l
RT: 3.112 min Scan# 197
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 64 Resp: 72966

Ion	Ratio	Lower	Upper
64	100		
66	34.3	26.6	40.0

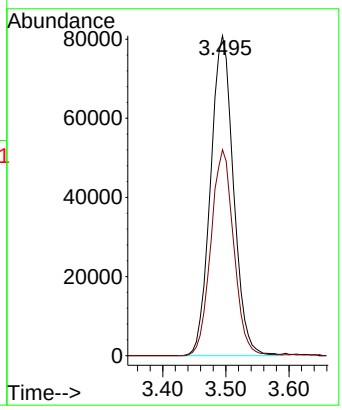




#7
Trichlorofluoromethane
Concen: 50.832 ug/l
RT: 3.495 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion:101 Resp: 20384

Ion	Ratio	Lower	Upper
101	100		
103	64.3	52.7	79.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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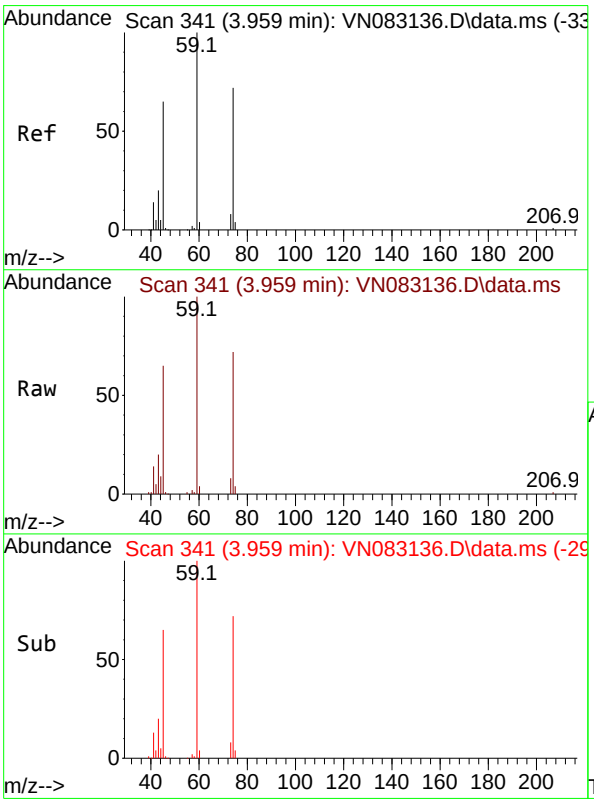
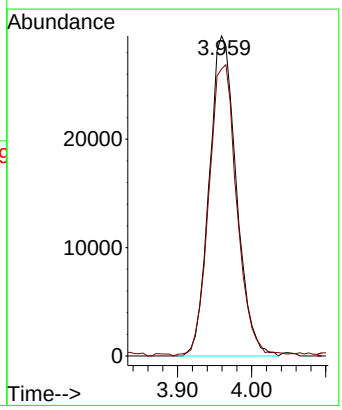
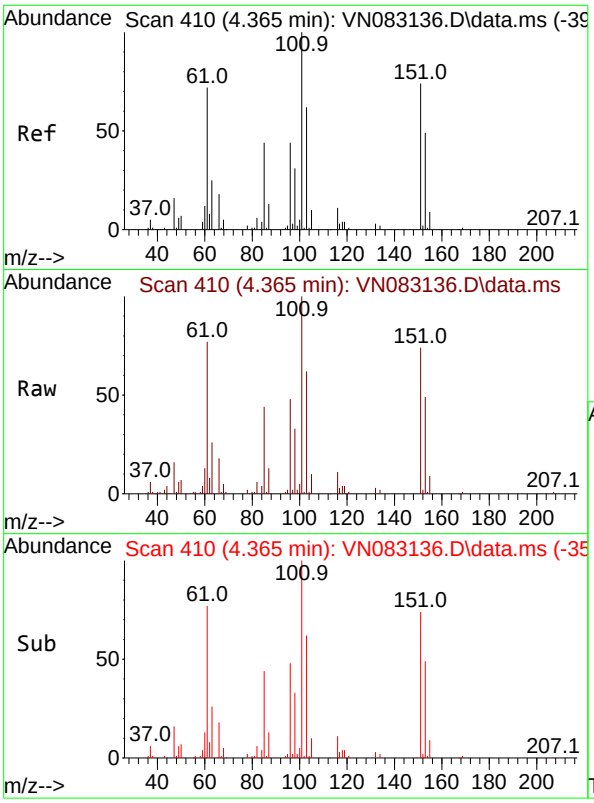


#8
Diethyl Ether
Concen: 50.318 ug/l
RT: 3.959 min Scan# 341
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 74 Resp: 75087

Ion	Ratio	Lower	Upper
74	100		
45	94.0	55.5	166.3





#9
1,1,2-Trichlorotrifluoroethane
Concen: 50.747 ug/l
RT: 4.365 min Scan# 41
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion:101 Resp: 11220

Ion	Ratio	Lower	Upper
101	100		
85	45.9	38.3	57.5
151	75.1	59.3	88.9

Instrument :
MSVOA_N
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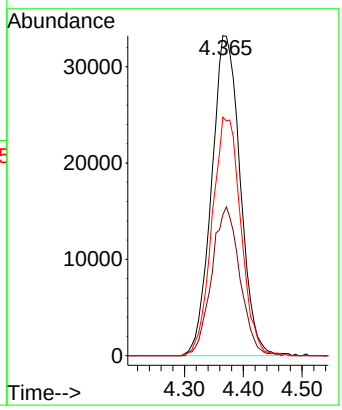
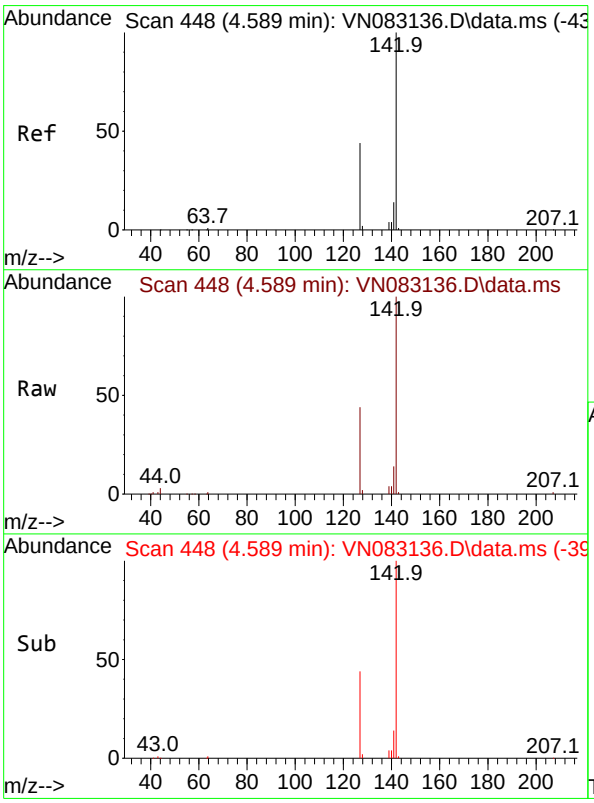
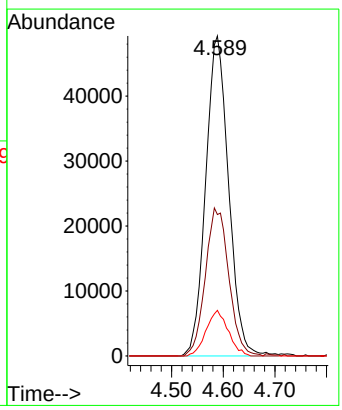


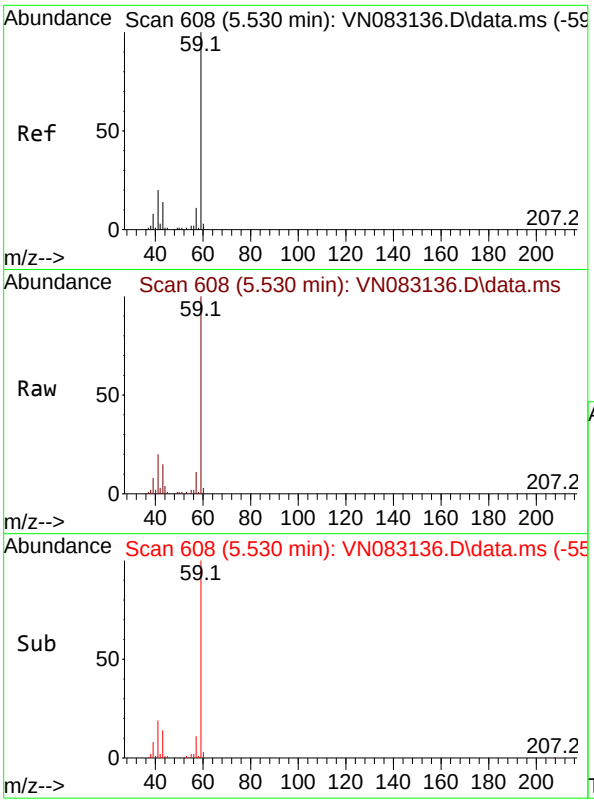


#10
Methyl Iodide
Concen: 52.170 ug/l
RT: 4.589 min Scan# 448
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion:142 Resp: 151731

Ion	Ratio	Lower	Upper
142	100		
127	44.2	37.5	56.3
141	14.3	13.1	19.7

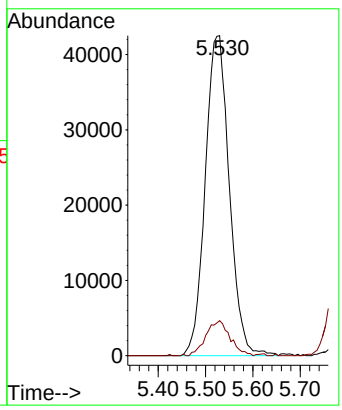




#11
Tert butyl alcohol
Concen: 247.904 ug/l
RT: 5.530 min Scan# 6
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 59 Resp: 15026

Ion	Ratio	Lower	Upper
59	100		
57	11.0	8.9	13.3



Instrument :
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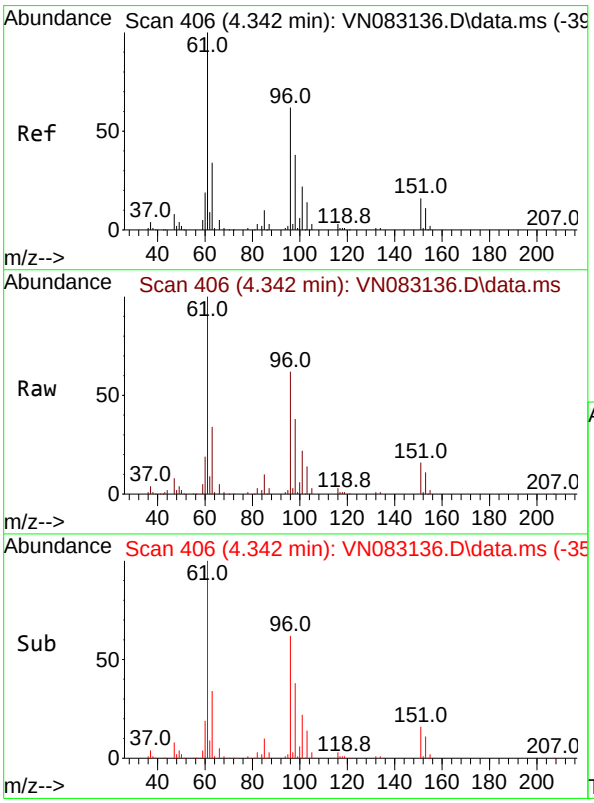
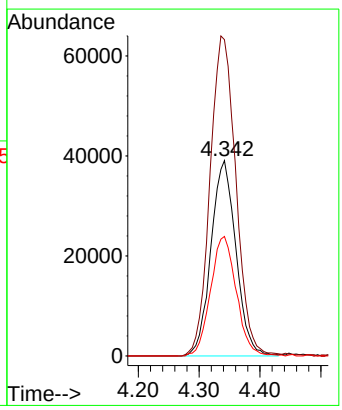
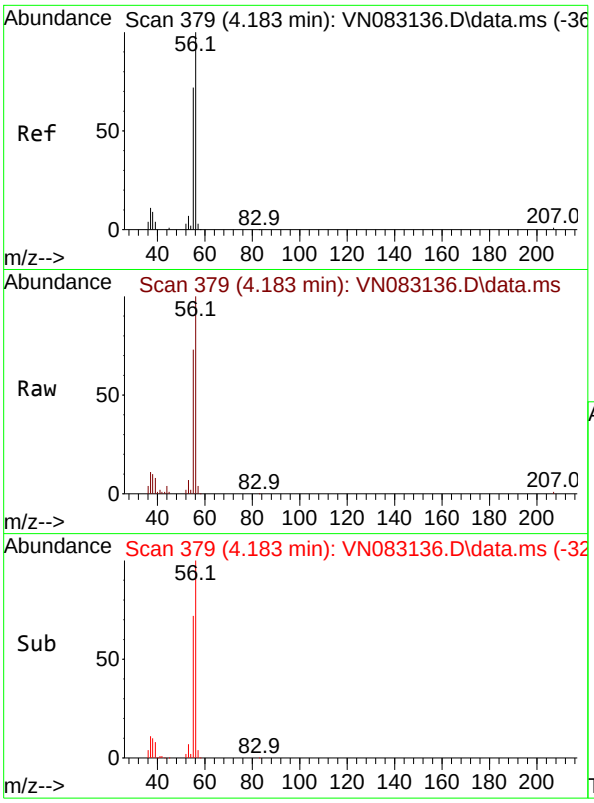


#12
1,1-Dichloroethene
Concen: 49.114 ug/l
RT: 4.342 min Scan# 406
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 96 Resp: 111564

Ion	Ratio	Lower	Upper
96	100		
61	162.0	149.7	224.5
98	61.2	50.1	75.1

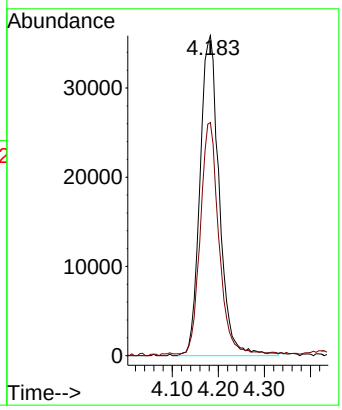




#13
Acrolein
Concen: 263.954 ug/l
RT: 4.183 min Scan# 3
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 56 Resp: 10427

Ion	Ratio	Lower	Upper
56	100		
55	68.8	56.4	84.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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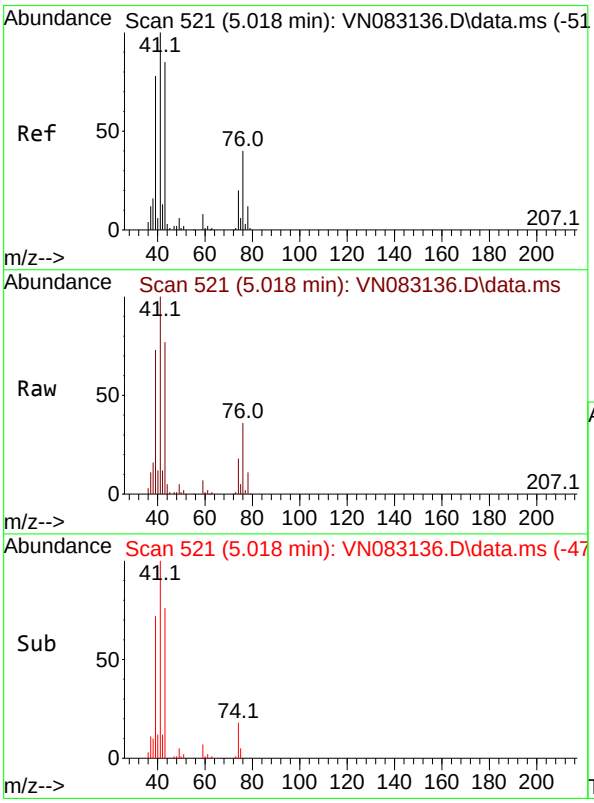
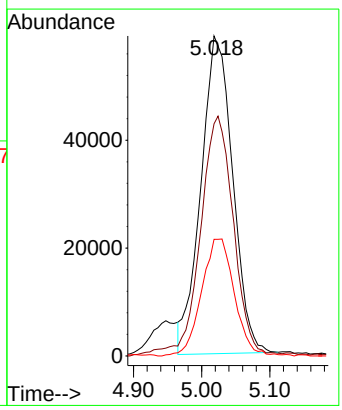
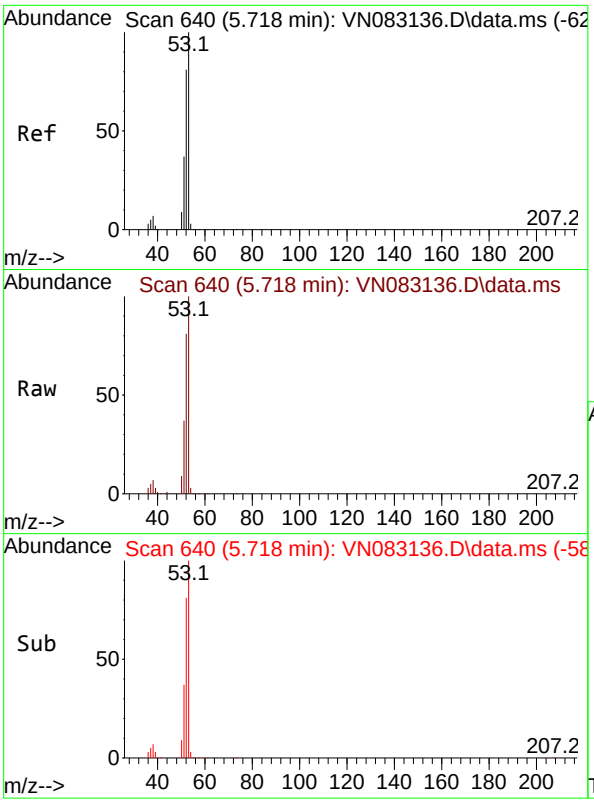


#14
Allyl chloride
Concen: 44.541 ug/l
RT: 5.018 min Scan# 521
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 41 Resp: 191195

Ion	Ratio	Lower	Upper
41	100		
39	78.9	67.8	101.6
76	38.1	25.8	38.8

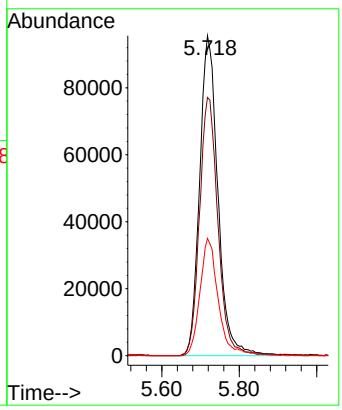




#15
Acrylonitrile
Concen: 251.149 ug/l
RT: 5.718 min Scan# 64
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 53 Resp: 31309

Ion	Ratio	Lower	Upper
53	100		
52	81.2	66.6	100.0
51	36.5	30.1	45.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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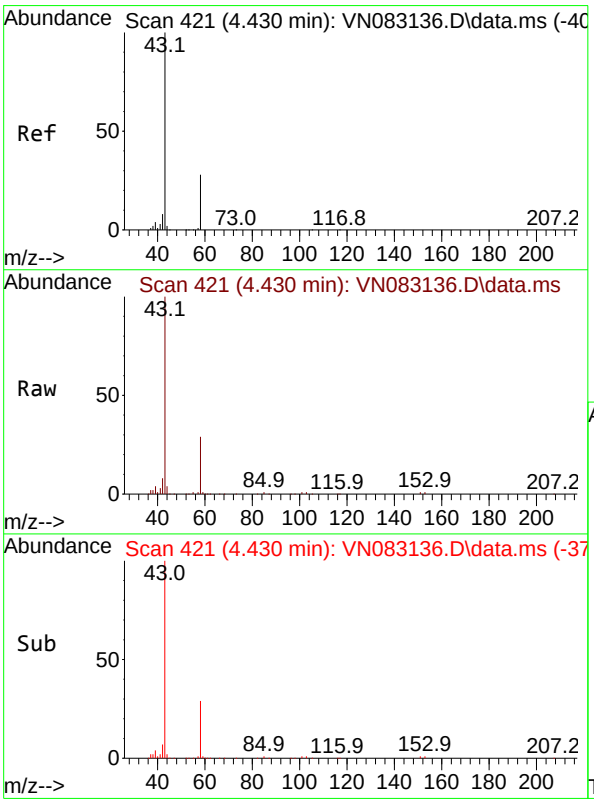
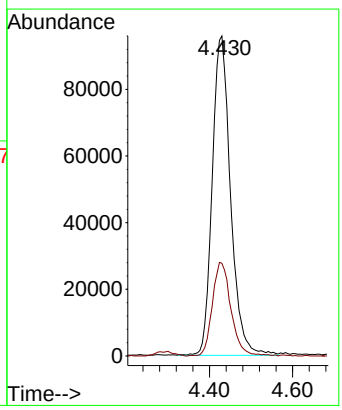
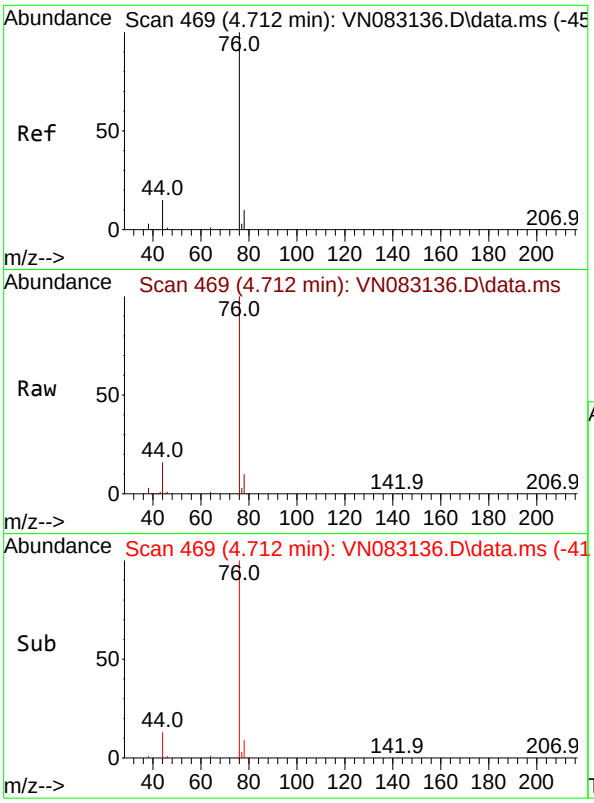


#16
Acetone
Concen: 256.804 ug/l
RT: 4.430 min Scan# 421
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 43 Resp: 293091

Ion	Ratio	Lower	Upper
43	100		
58	29.0	21.8	32.6





#17
Carbon Disulfide
Concen: 48.094 ug/l
RT: 4.712 min Scan# 4
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 76 Resp: 31965

Ion	Ratio	Lower	Upper
76	100		
78	9.6	7.2	10.8

Instrument :
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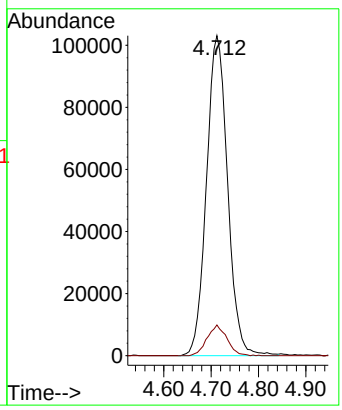
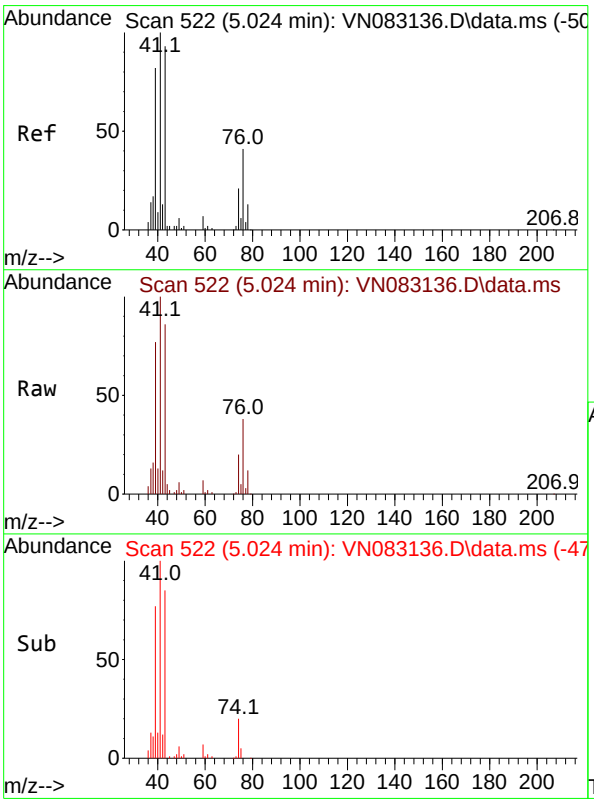
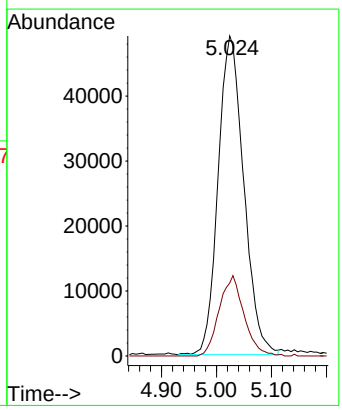


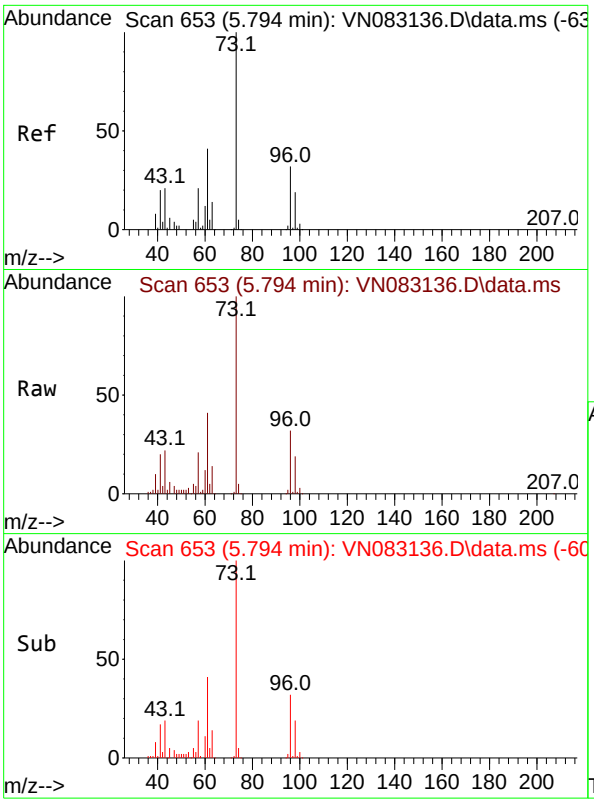


#18
Methyl Acetate
Concen: 46.765 ug/l
RT: 5.024 min Scan# 522
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 43 Resp: 159022

Ion	Ratio	Lower	Upper
43	100		
74	24.3	16.3	24.5

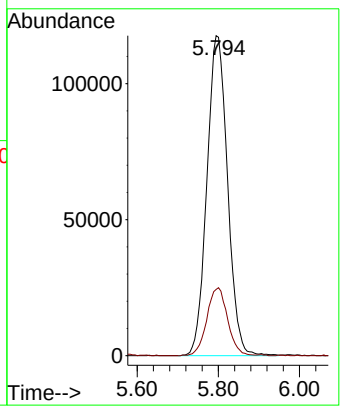




#19
Methyl tert-butyl Ether
Concen: 50.676 ug/l
RT: 5.794 min Scan# 6
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 73 Resp: 41548

Ion	Ratio	Lower	Upper
73	100		
57	20.7	17.9	26.9



Instrument :
MSVOA_N
ClientSampleId :
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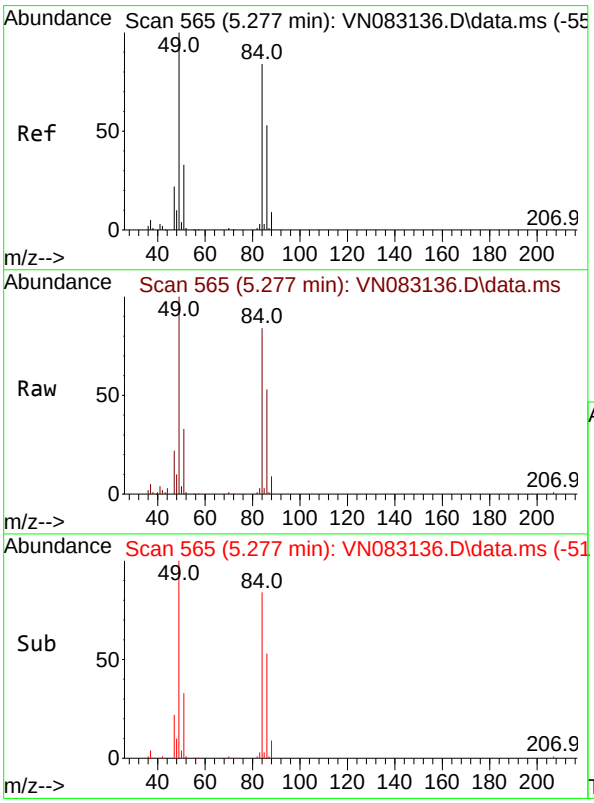
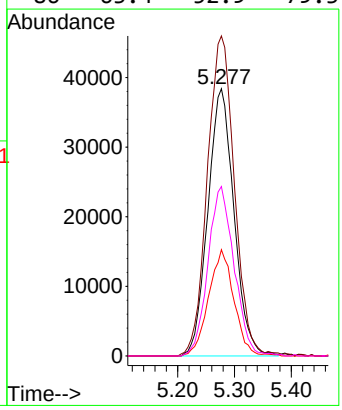
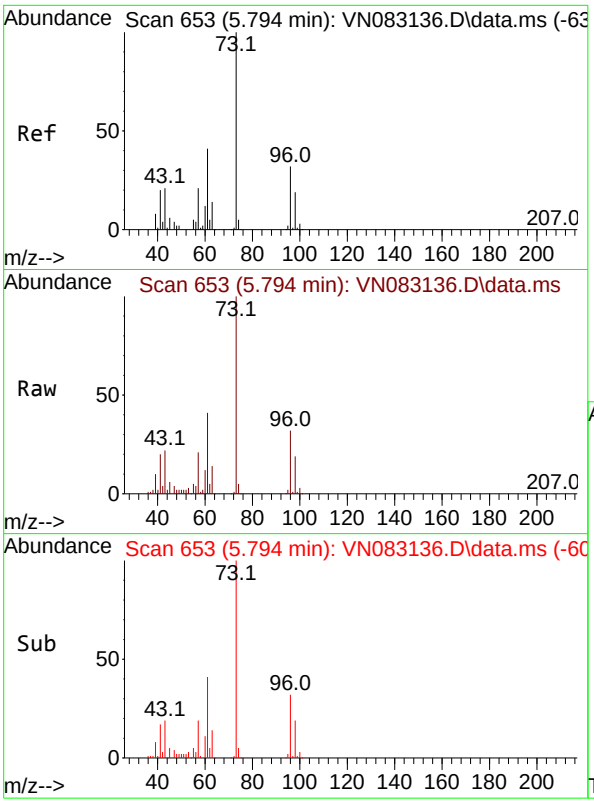


#20
Methylene Chloride
Concen: 46.744 ug/l
RT: 5.277 min Scan# 565
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 84 Resp: 122780

Ion	Ratio	Lower	Upper
84	100		
49	119.8	119.6	179.4
51	39.8	34.8	52.2
86	63.4	52.9	79.3

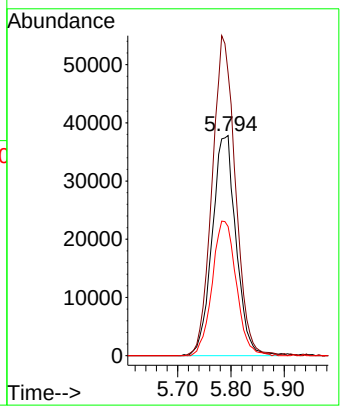




#21
trans-1,2-Dichloroethene
Concen: 50.127 ug/l
RT: 5.794 min Scan# 6
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 96 Resp: 11768

Ion	Ratio	Lower	Upper
96	100		
61	128.4	123.4	185.2
98	58.7	49.3	73.9



Instrument :
MSVOA_N
ClientSampleId :
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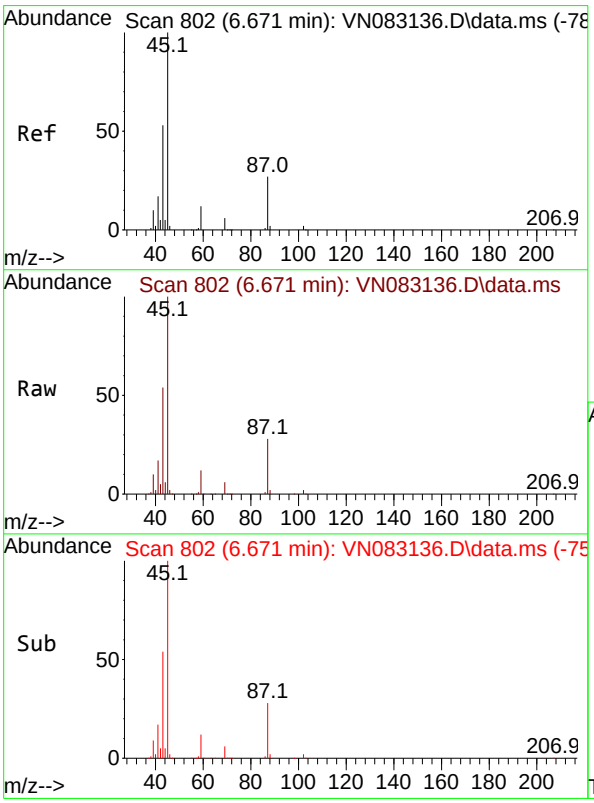
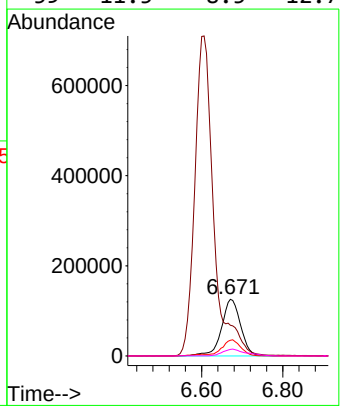
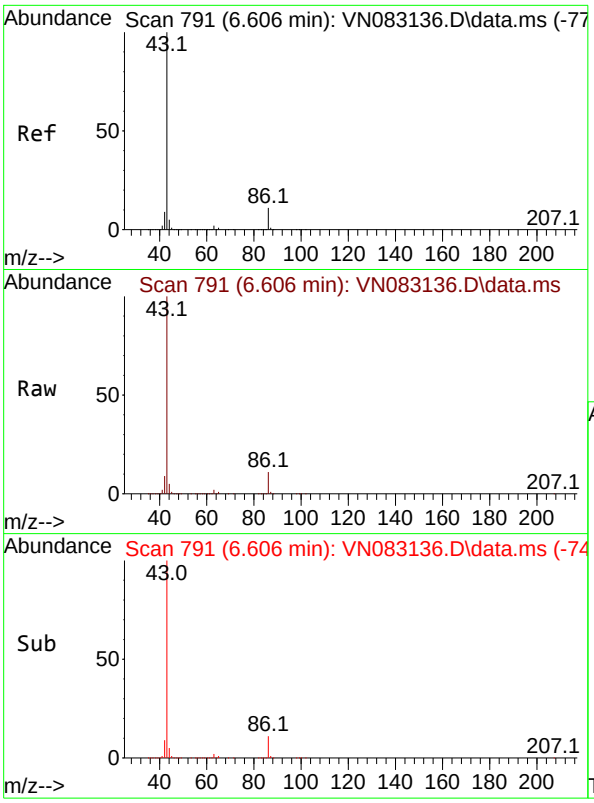


#22
Diisopropyl ether
Concen: 50.987 ug/l
RT: 6.671 min Scan# 802
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 45 Resp: 411409

Ion	Ratio	Lower	Upper
45	100		
43	52.8	44.0	66.0
87	27.7	19.7	29.5
59	11.5	8.5	12.7

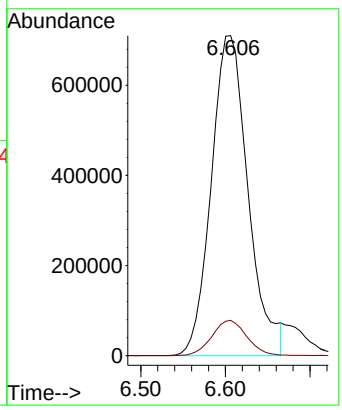




#23
Vinyl Acetate
Concen: 259.716 ug/l m
RT: 6.606 min Scan# 7
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 43 Resp: 214759

Ion	Ratio	Lower	Upper
43	100		
86	11.0	7.3	10.9



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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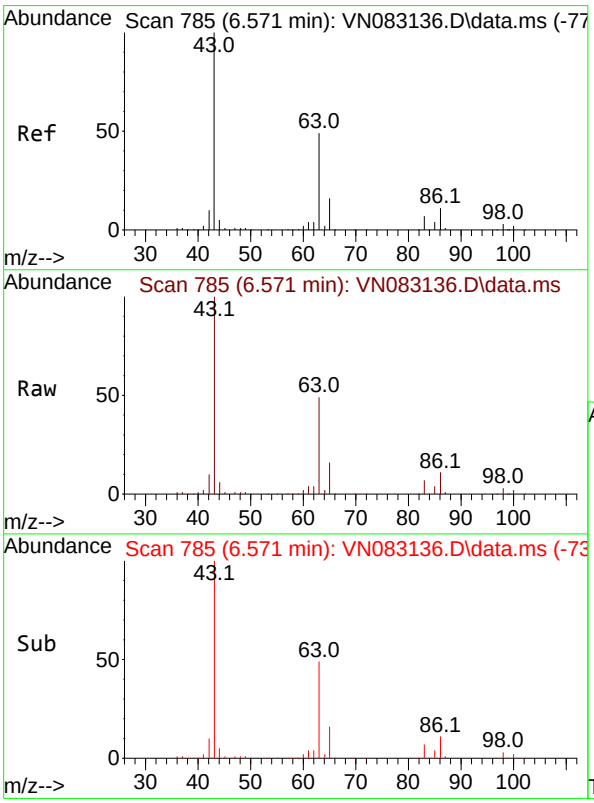
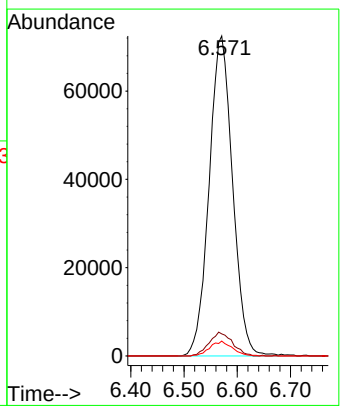
Supervised By :Mahesh Dadoda 08/09/2024

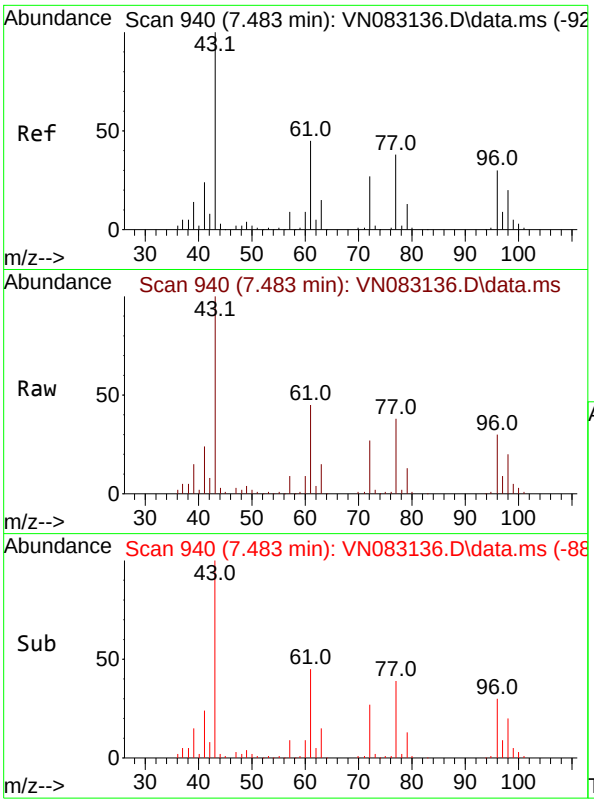


#24
1,1-Dichloroethane
Concen: 50.493 ug/l
RT: 6.571 min Scan# 785
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 63 Resp: 222071

Ion	Ratio	Lower	Upper
63	100		
98	6.9	3.3	9.9
100	4.6	2.0	6.0





#25
2-Butanone
Concen: 249.591 ug/l
RT: 7.483 min Scan# 94
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 43 Resp: 43739

Ion	Ratio	Lower	Upper
43	100		
72	27.1	18.2	27.2

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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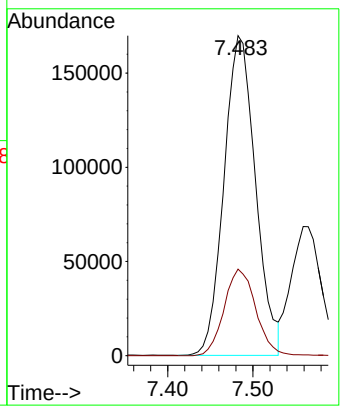
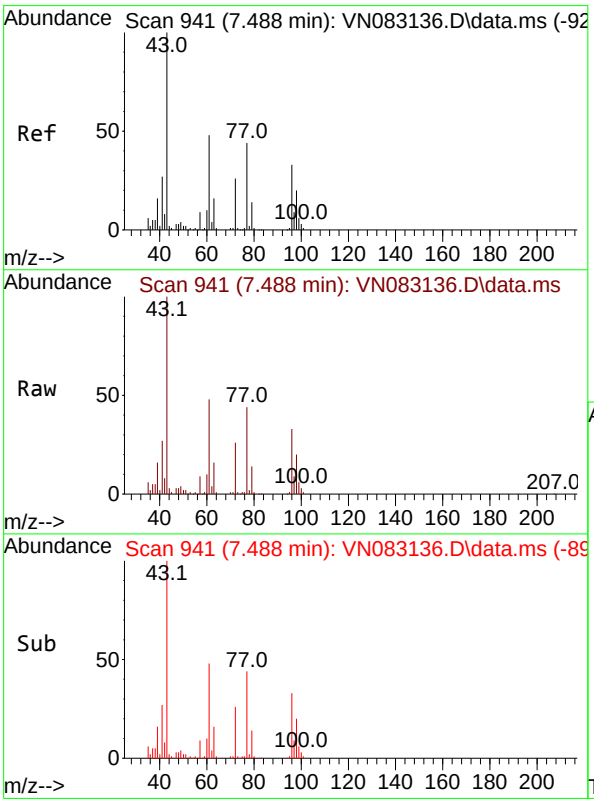
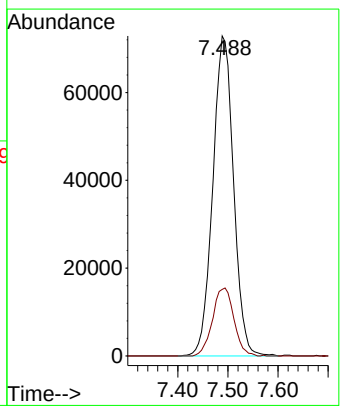


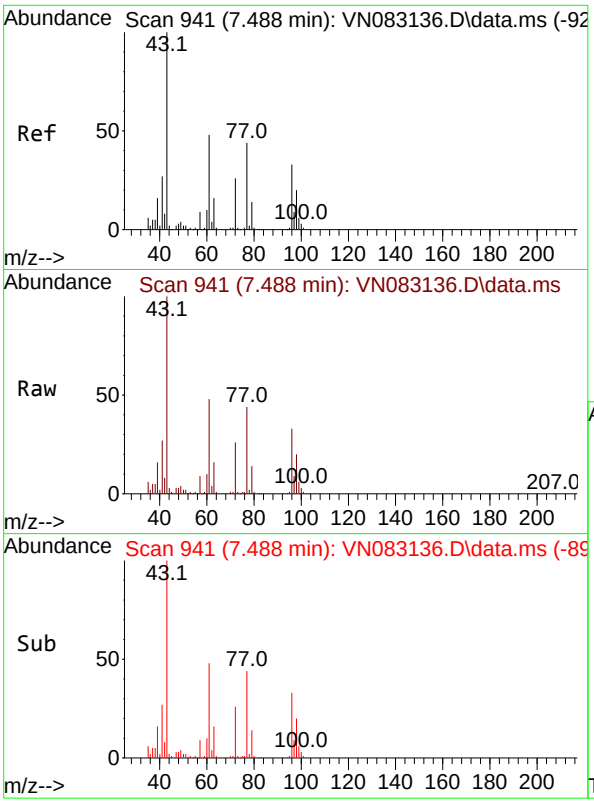


#26
2,2-Dichloropropane
Concen: 51.336 ug/l
RT: 7.488 min Scan# 941
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 77 Resp: 209679

Ion	Ratio	Lower	Upper
77	100		
97	21.9	10.3	30.9





#27
cis-1,2-Dichloroethene
Concen: 49.809 ug/l
RT: 7.488 min Scan# 94
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 96 Resp: 14111(

Ion	Ratio	Lower	Upper
96	100		
61	150.4	0.0	329.6
98	64.5	0.0	128.6

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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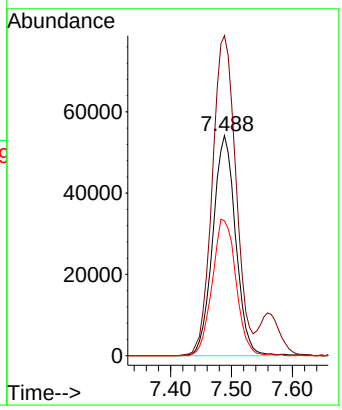
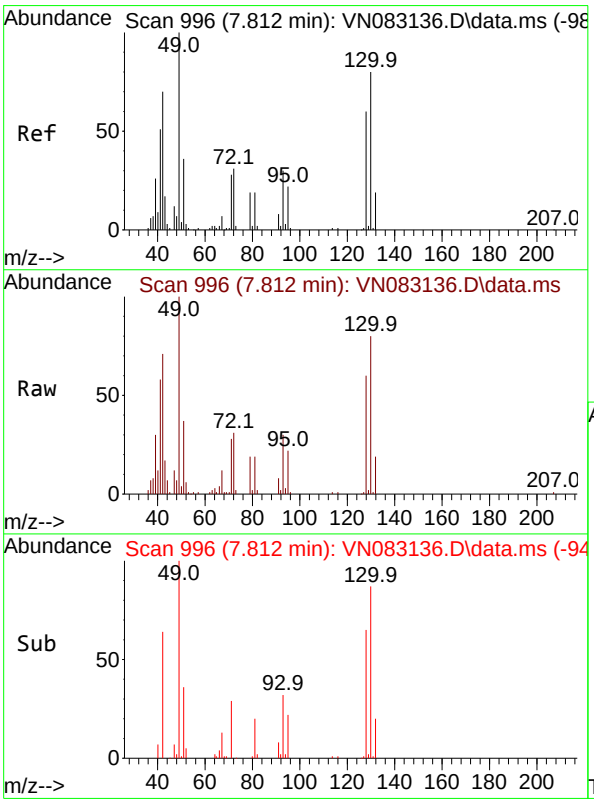
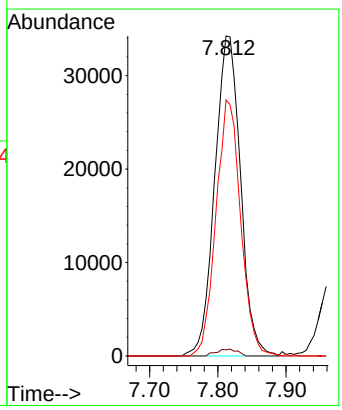


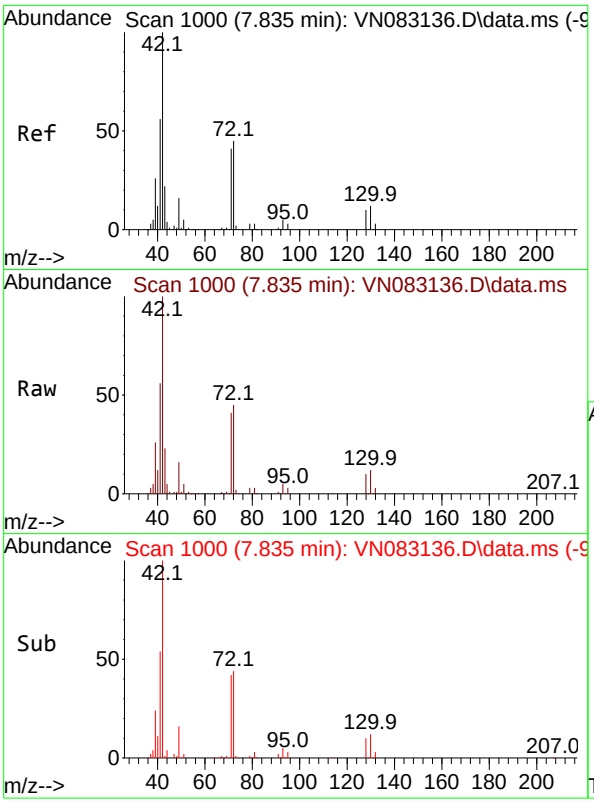


#28
Bromochloromethane
Concen: 50.041 ug/l
RT: 7.812 min Scan# 996
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 49 Resp: 89942

Ion	Ratio	Lower	Upper
49	100		
129	1.8	0.0	3.8
130	76.7	50.5	75.7#





#29
Tetrahydrofuran
Concen: 252.334 ug/l
RT: 7.835 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 42 Resp: 28585

Ion	Ratio	Lower	Upper
42	100		
72	44.6	30.0	45.0
71	42.4	28.3	42.5

Instrument :
MSVOA_N
ClientSampleId :
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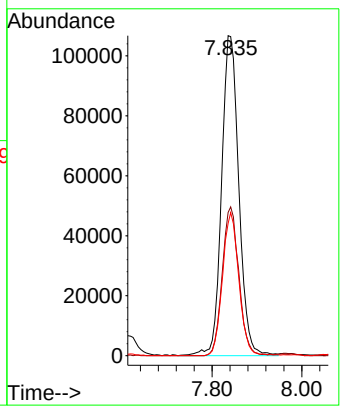
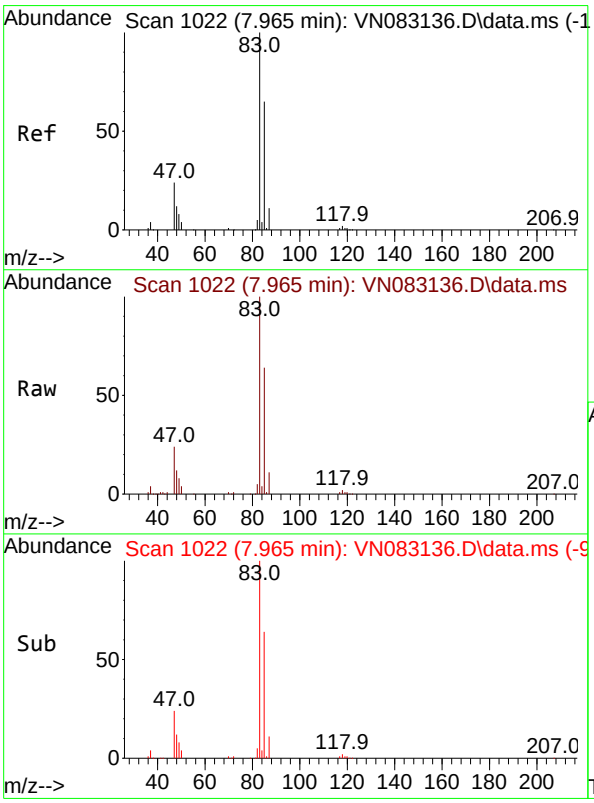
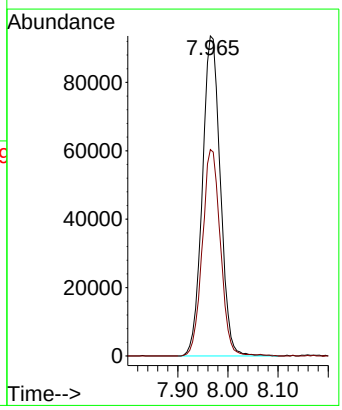


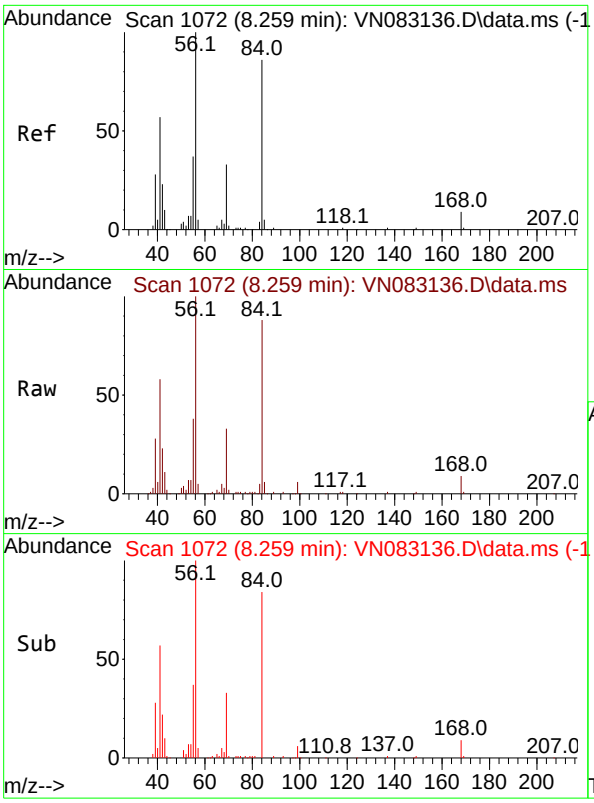


#30
Chloroform
Concen: 50.978 ug/l
RT: 7.965 min Scan# 1022
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 83 Resp: 232933

Ion	Ratio	Lower	Upper
83	100		
85	64.5	50.9	76.3

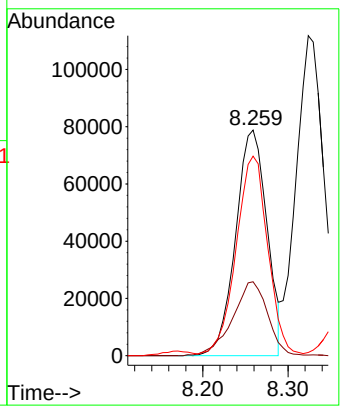




#31
Cyclohexane
Concen: 46.565 ug/l
RT: 8.259 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 56 Resp: 20127

Ion	Ratio	Lower	Upper
56	100		
69	32.7	24.5	36.7
84	86.4	66.0	99.0



Instrument :
MSVOA_N
ClientSampleId :
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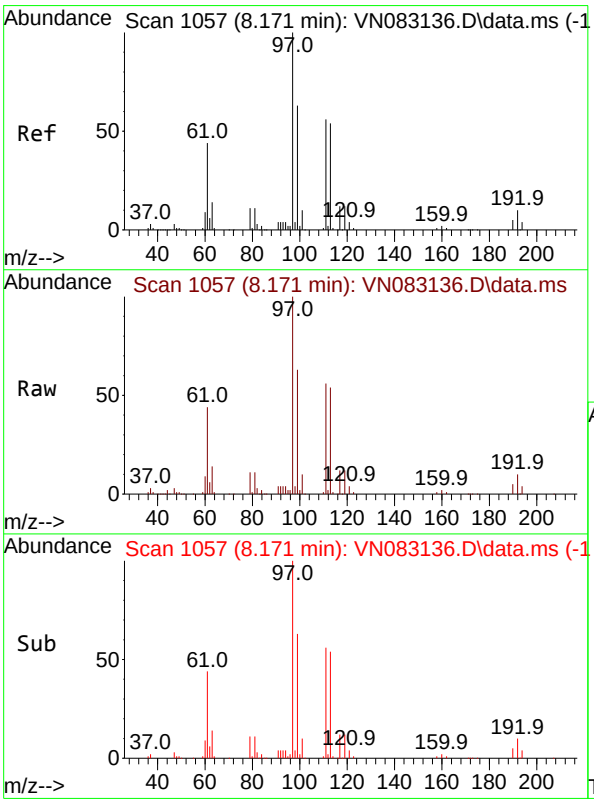
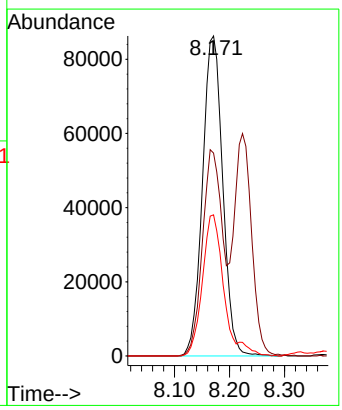
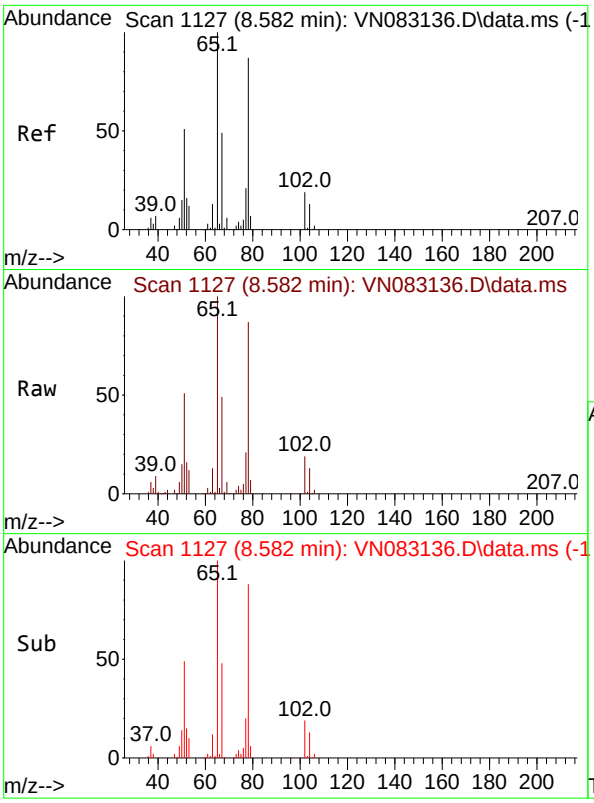


#32
1,1,1-Trichloroethane
Concen: 50.935 ug/l
RT: 8.171 min Scan# 1057
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 97 Resp: 220296

Ion	Ratio	Lower	Upper
97	100		
99	62.5	52.0	78.0
61	46.6	42.1	63.1

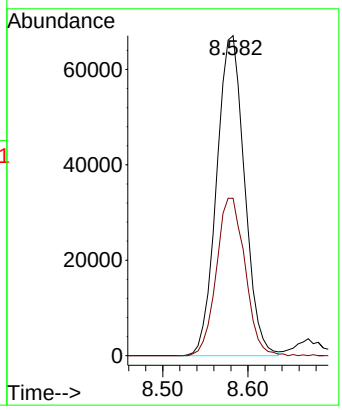




#33
1,2-Dichloroethane-d4
Concen: 52.348 ug/l
RT: 8.582 min Scan# 11
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 65 Resp: 15268

Ion	Ratio	Lower	Upper
65	100		
67	50.5	0.0	104.4



Instrument :
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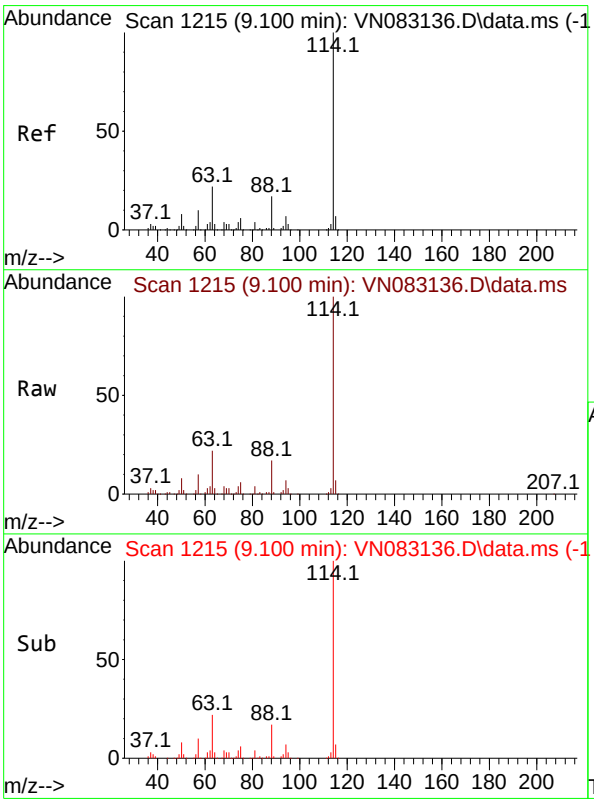
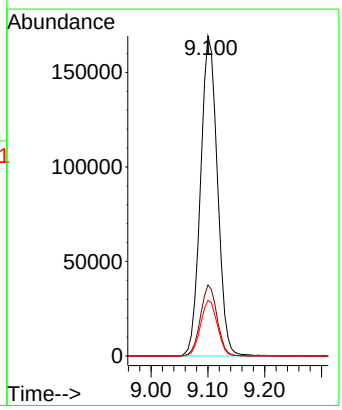
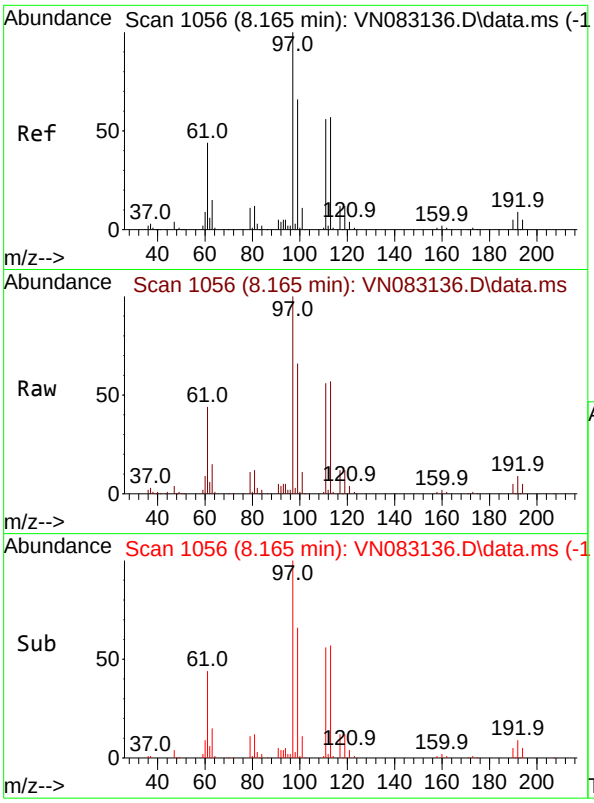


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1215
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion:114 Resp: 348813

Ion	Ratio	Lower	Upper
114	100		
63	22.2	0.0	44.6
88	17.3	0.0	31.4

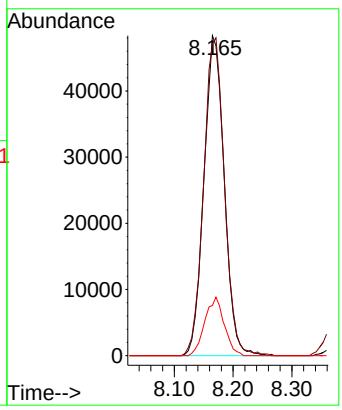




#35
Dibromofluoromethane
Concen: 53.216 ug/l
RT: 8.165 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion:113 Resp: 11586

Ion	Ratio	Lower	Upper
113	100		
111	101.9	82.4	123.6
192	17.5	14.9	22.3



Instrument :
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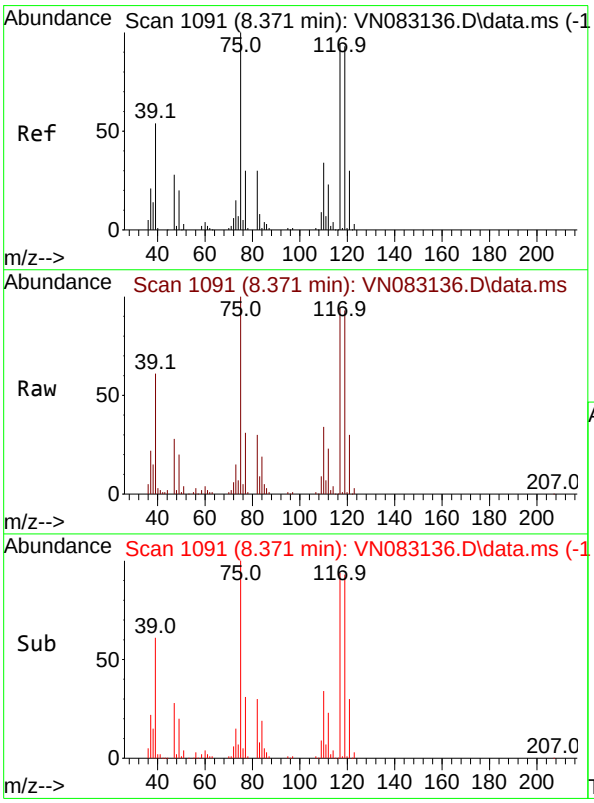
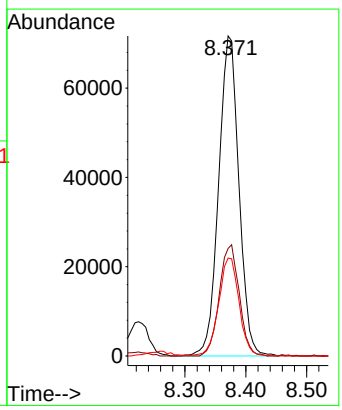
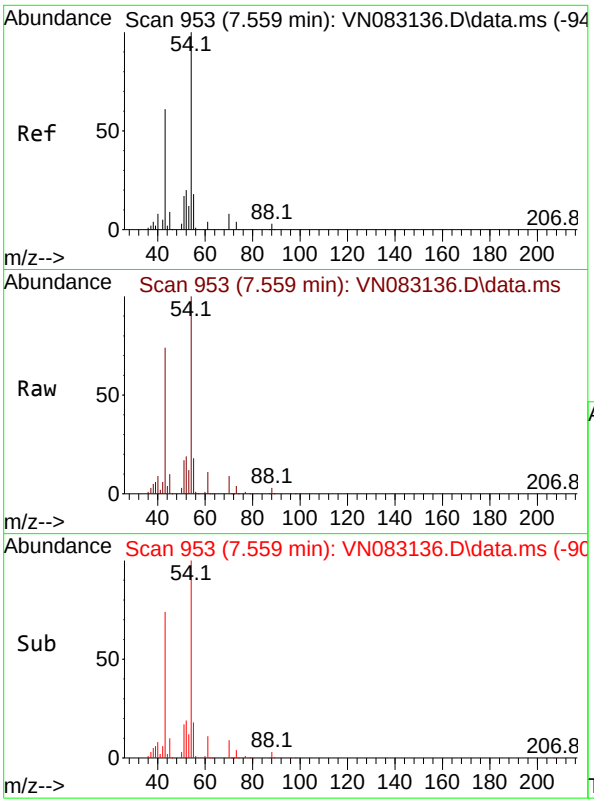


#36
1,1-Dichloropropene
Concen: 50.349 ug/l
RT: 8.371 min Scan# 1091
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 75 Resp: 165826

Ion	Ratio	Lower	Upper
75	100		
110	34.2	16.3	48.9
77	30.8	24.6	37.0





#37
Ethyl Acetate
Concen: 47.213 ug/l
RT: 7.559 min Scan# 9
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 43 Resp: 17410

Ion	Ratio	Lower	Upper
43	100		
61	14.4	9.3	13.9#
70	12.1	7.0	10.6#

Instrument :
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VSTDICCC050

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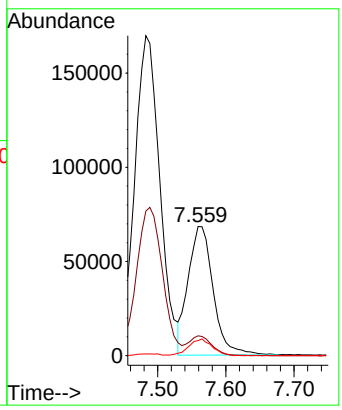
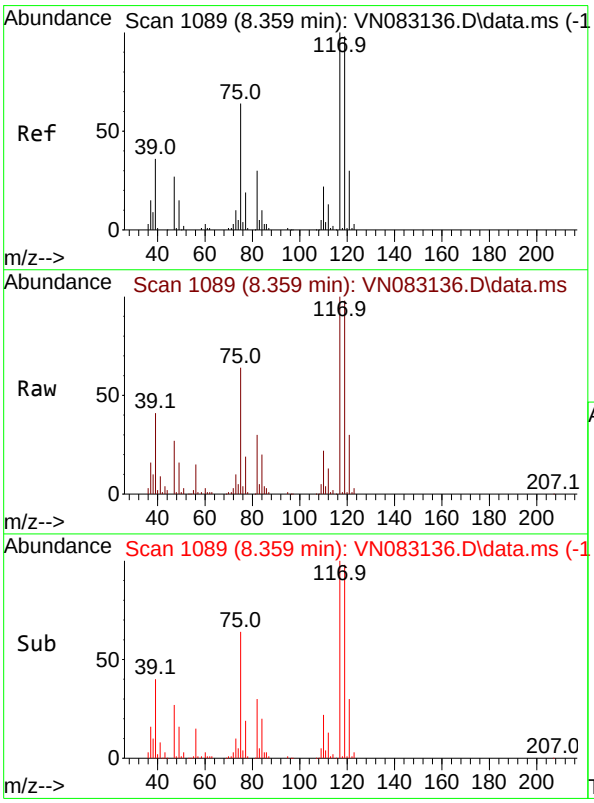
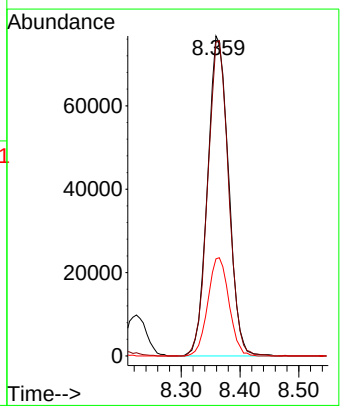


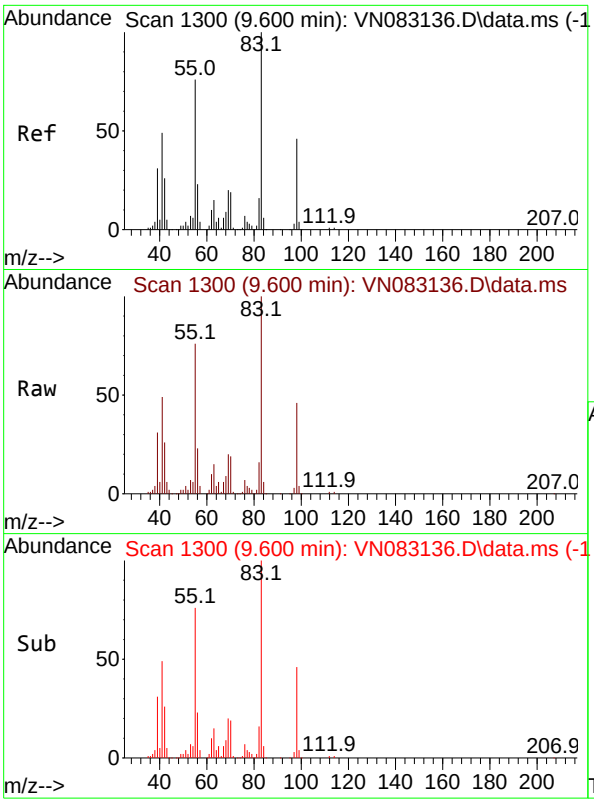


#38
Carbon Tetrachloride
Concen: 51.315 ug/l
RT: 8.359 min Scan# 1089
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion:117 Resp: 190357

Ion	Ratio	Lower	Upper
117	100		
119	98.0	74.9	112.3
121	30.3	24.3	36.5

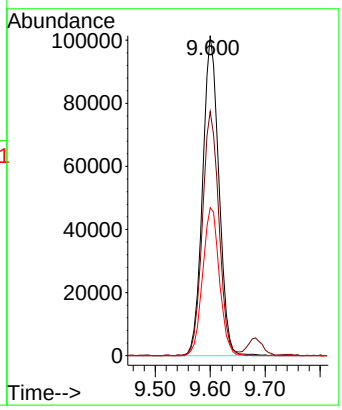




#39
Methylcyclohexane
Concen: 51.461 ug/l
RT: 9.600 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 83 Resp: 20817

Ion	Ratio	Lower	Upper
83	100		
55	76.0	66.4	99.6
98	46.3	40.7	61.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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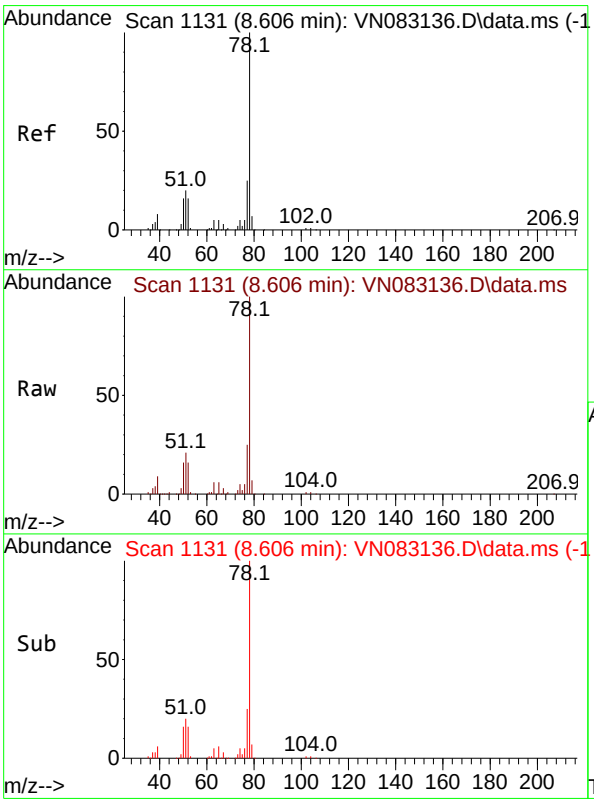
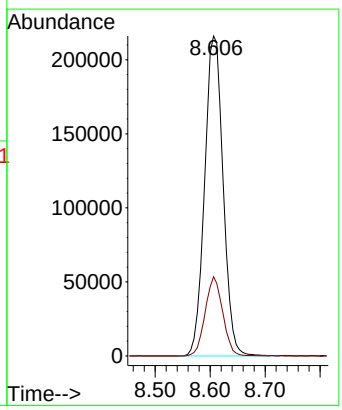
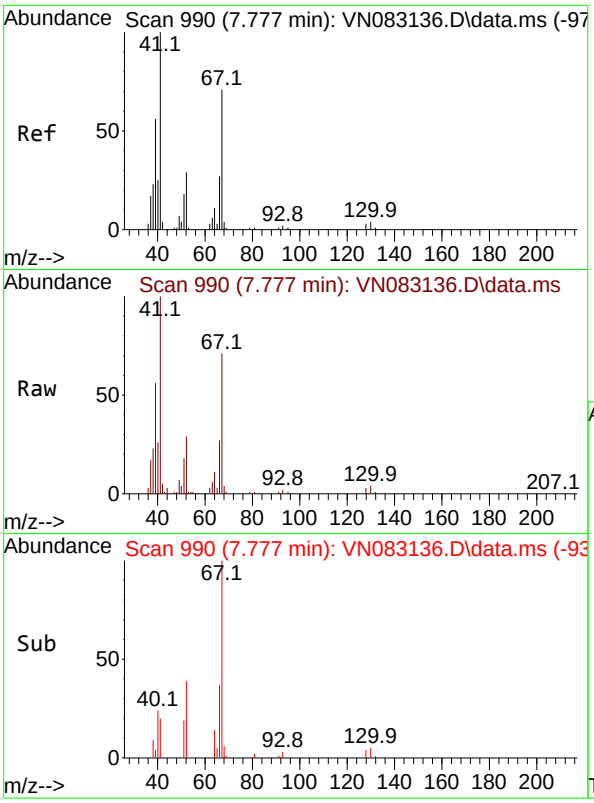


#40
Benzene
Concen: 51.436 ug/l
RT: 8.606 min Scan# 1131
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 78 Resp: 504662

Ion	Ratio	Lower	Upper
78	100		
77	24.8	19.0	28.4

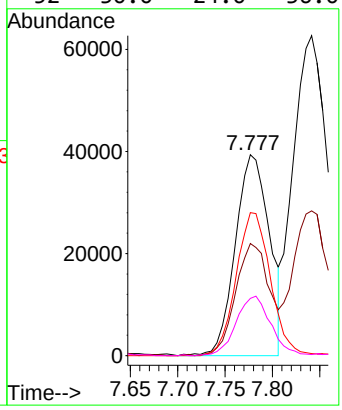




#41
Methacrylonitrile
Concen: 47.154 ug/l
RT: 7.777 min Scan# 9
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 41 Resp: 9886

Ion	Ratio	Lower	Upper
41	100		
39	55.4	45.5	68.3
67	72.0	50.5	75.7
52	30.0	24.0	36.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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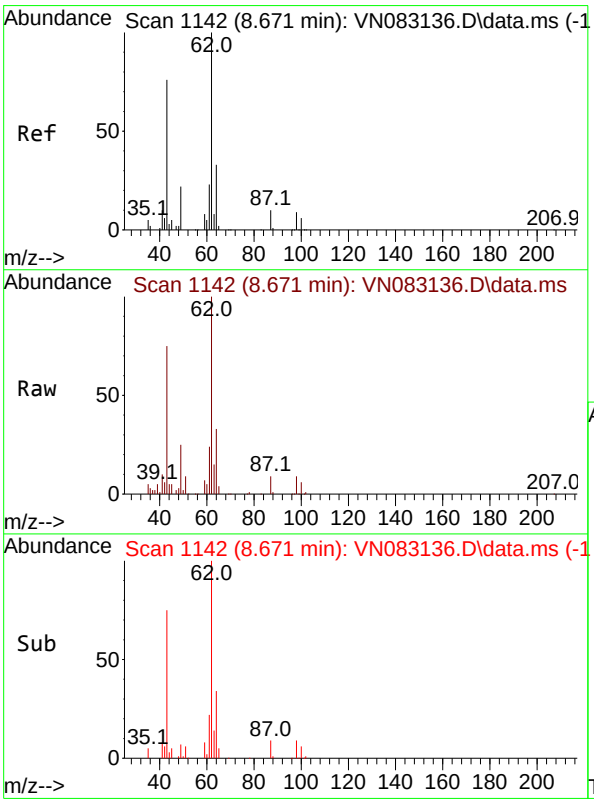
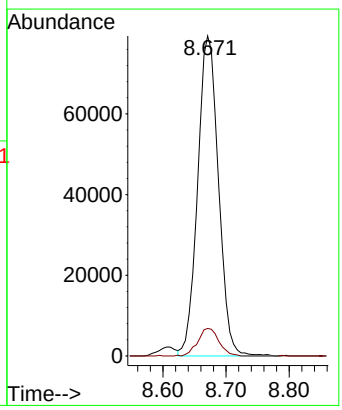
Supervised By :Mahesh Dadoda 08/09/2024

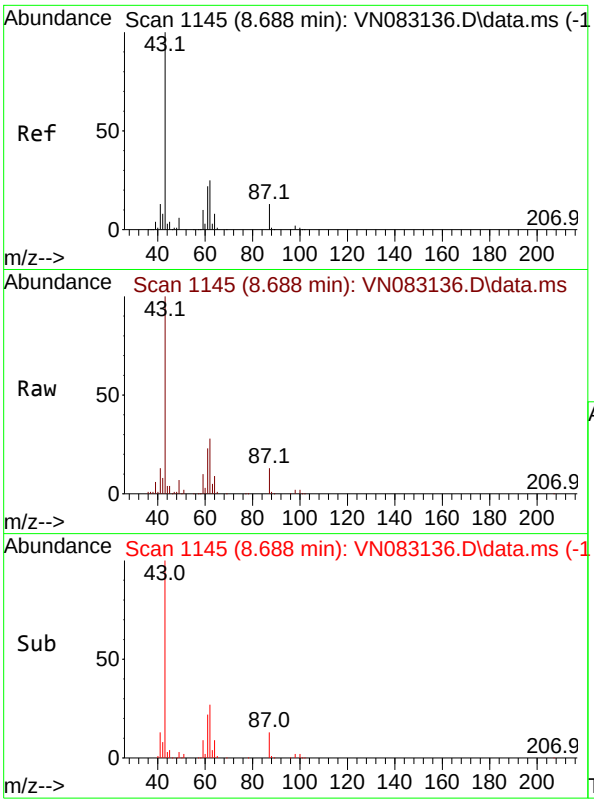


#42
1,2-Dichloroethane
Concen: 50.765 ug/l
RT: 8.671 min Scan# 1142
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 62 Resp: 181440

Ion	Ratio	Lower	Upper
62	100		
98	8.7	0.0	15.8





#43
Isopropyl Acetate
Concen: 50.219 ug/l
RT: 8.688 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 43 Resp: 32108

Ion	Ratio	Lower	Upper
43	100		
61	25.3	17.8	26.6
87	13.0	8.2	12.2

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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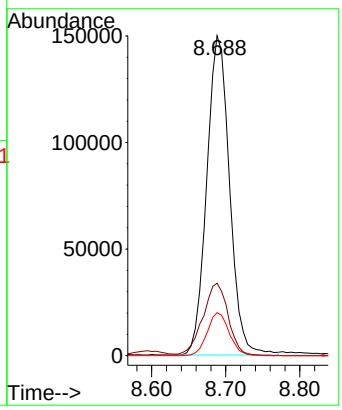
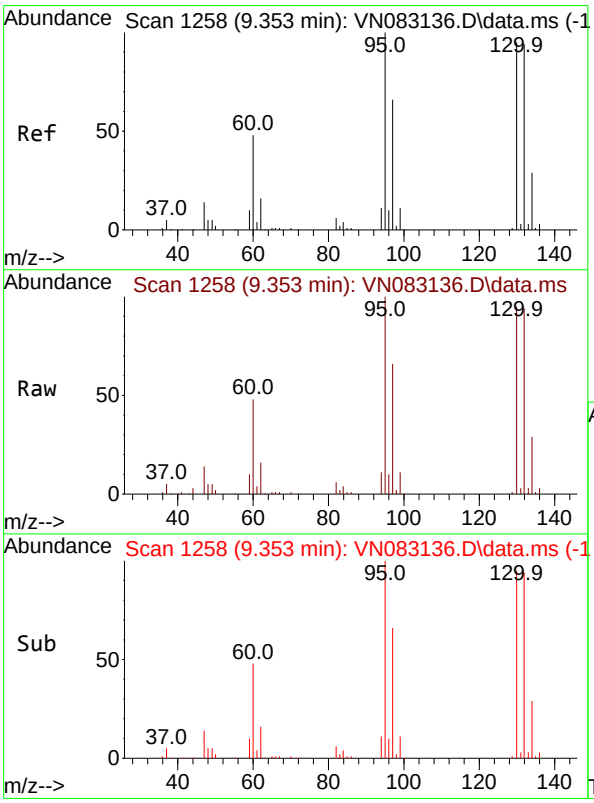
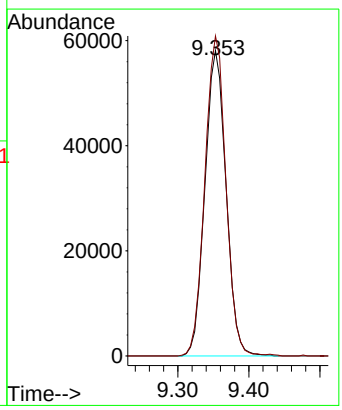


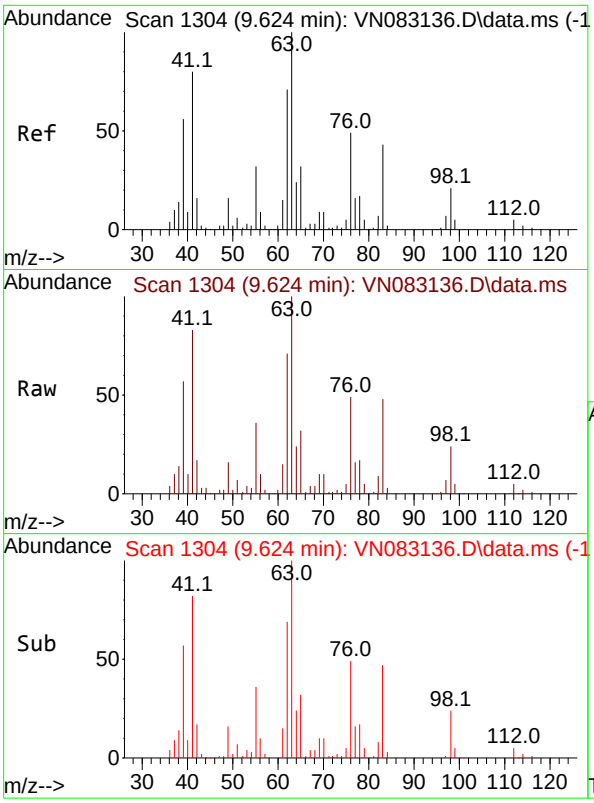


#44
Trichloroethene
Concen: 51.383 ug/l
RT: 9.353 min Scan# 1258
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion:130 Resp: 119998

Ion	Ratio	Lower	Upper
130	100		
95	104.7	0.0	197.8





#45
1,2-Dichloropropane
Concen: 51.747 ug/l
RT: 9.624 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 63 Resp: 12051

Ion	Ratio	Lower	Upper
63	100		
65	32.1	24.4	36.6

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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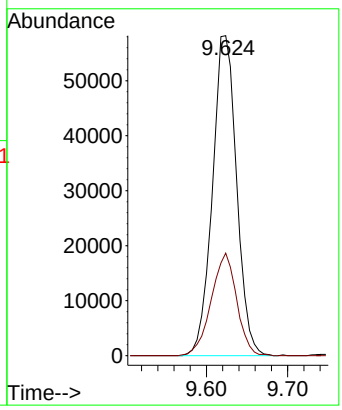
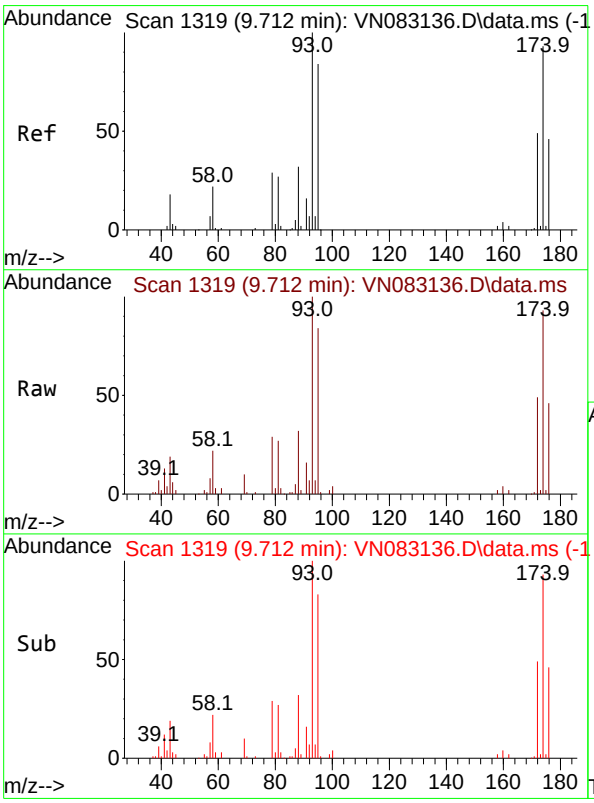
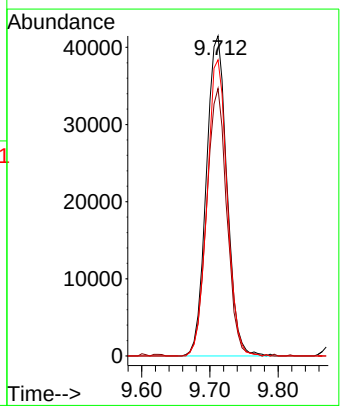


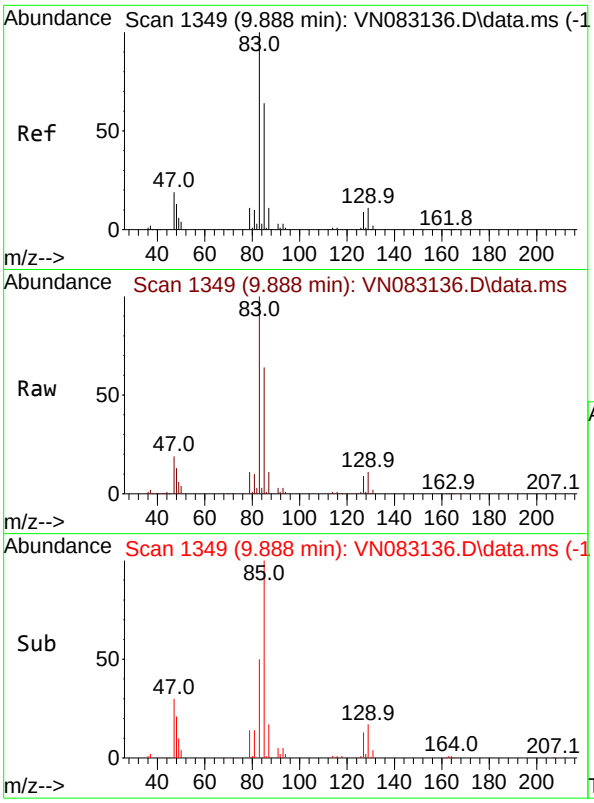


#46
Dibromomethane
Concen: 52.436 ug/l
RT: 9.712 min Scan# 1319
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 93 Resp: 87411

Ion	Ratio	Lower	Upper
93	100		
95	81.7	65.8	98.6
174	90.1	71.7	107.5

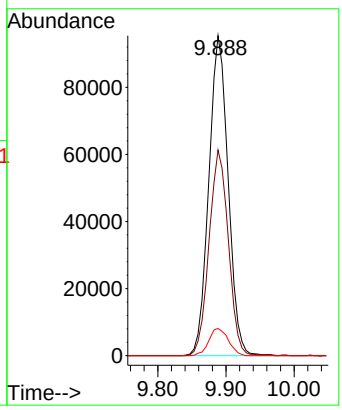




#47
Bromodichloromethane
Concen: 50.245 ug/l
RT: 9.888 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 83 Resp: 18806

Ion	Ratio	Lower	Upper
83	100		
85	64.3	51.1	76.7
127	8.5	7.2	10.8



Instrument :
MSVOA_N
ClientSampleId :
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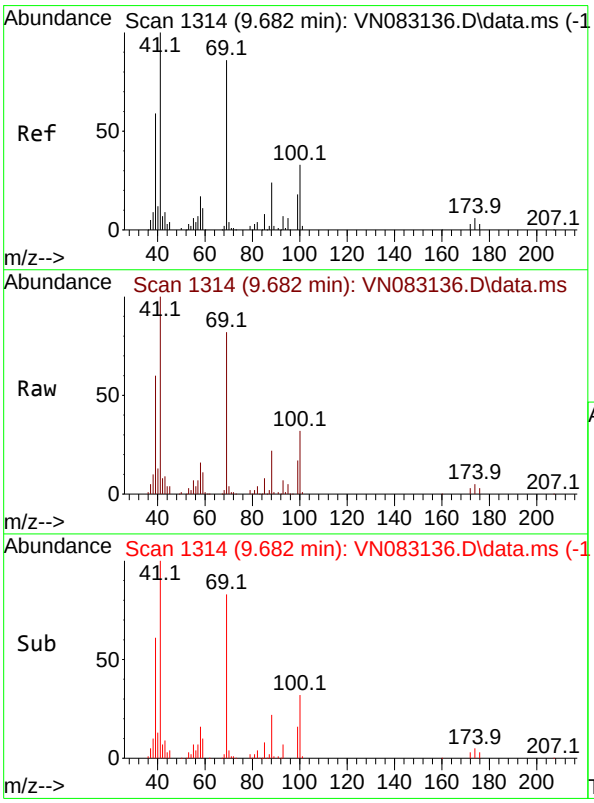
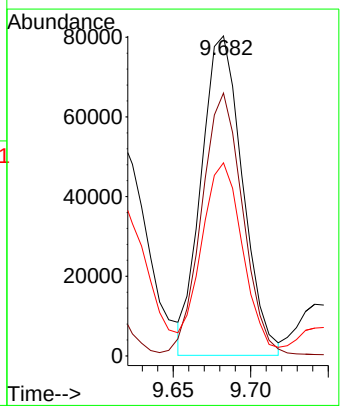
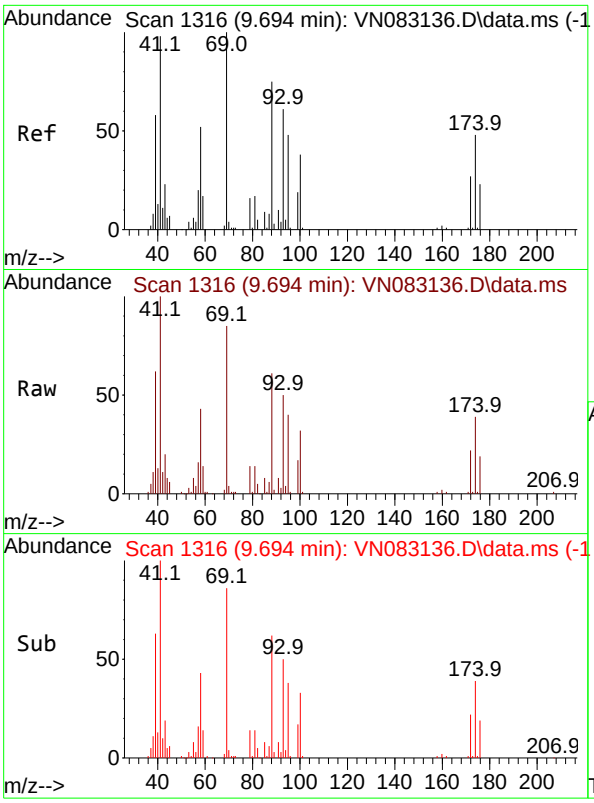


#48
Methyl methacrylate
Concen: 48.631 ug/l
RT: 9.682 min Scan# 1314
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 41 Resp: 148264

Ion	Ratio	Lower	Upper
41	100		
69	82.5	56.3	84.5
39	61.0	50.3	75.5

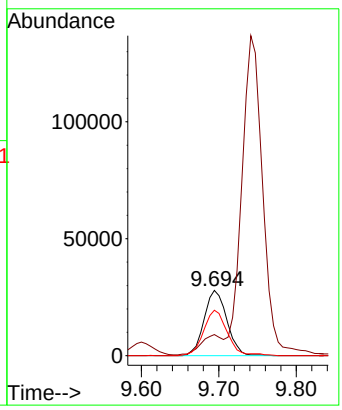




#49
1,4-Dioxane
Concen: 1036.917 ug/l
RT: 9.694 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 88 Resp: 5703

Ion	Ratio	Lower	Upper
88	100		
43	29.1	27.8	41.8
58	72.4	59.4	89.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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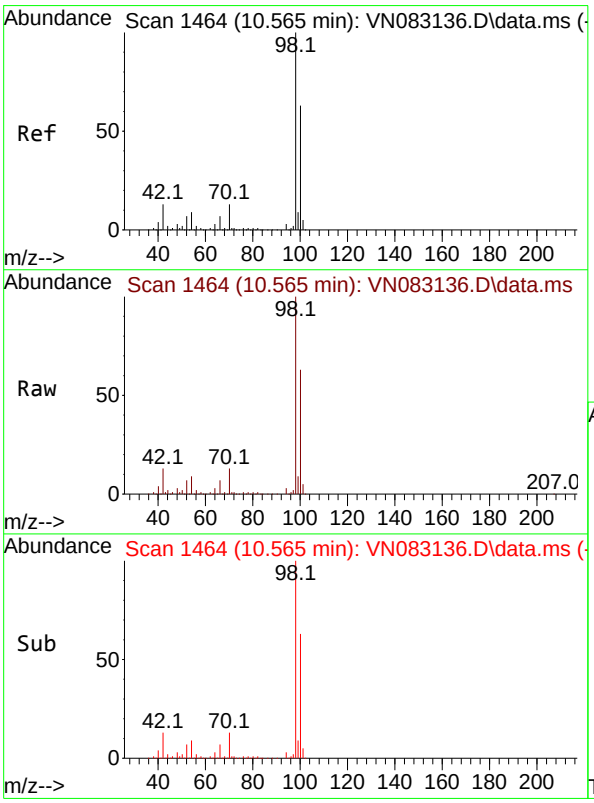
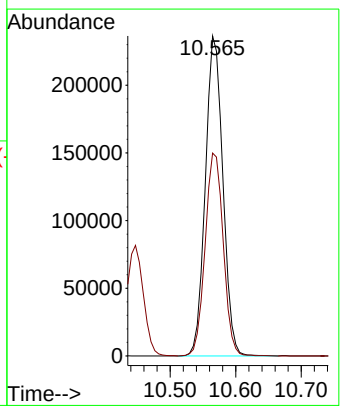
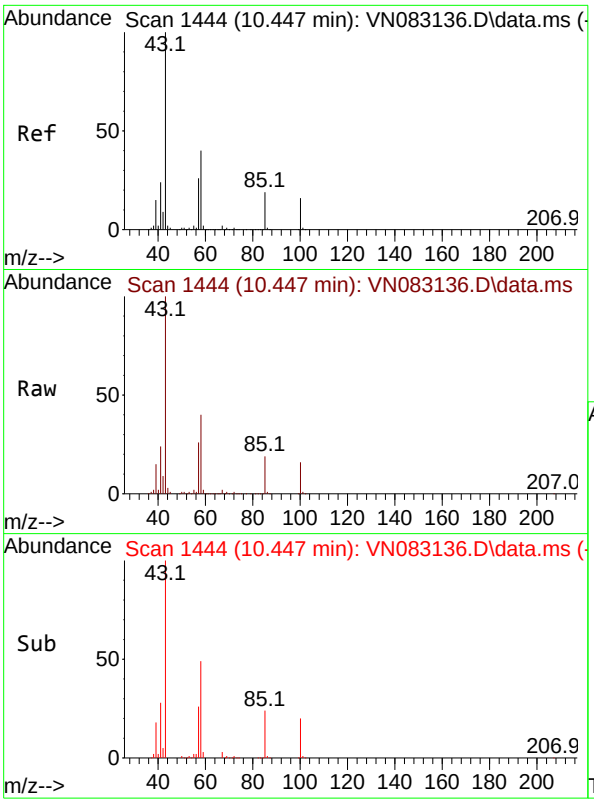


#50
Toluene-d8
Concen: 54.174 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 98 Resp: 439976

Ion	Ratio	Lower	Upper
98	100		
100	65.5	51.5	77.3





#51
4-Methyl-2-Pentanone
Concen: 258.493 ug/l
RT: 10.447 min Scan# 14
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 43 Resp: 90141

Ion	Ratio	Lower	Upper
43	100		
58	39.8	28.2	42.4

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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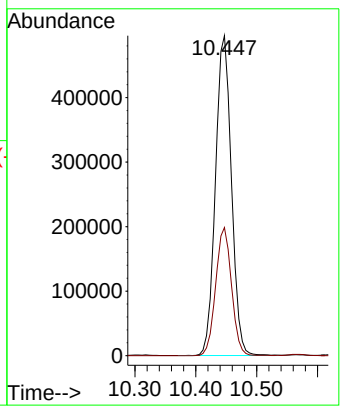
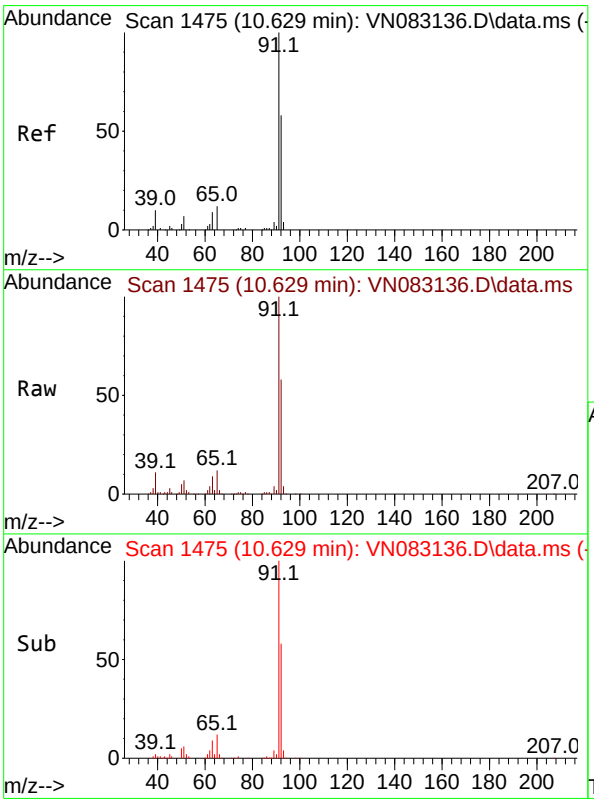
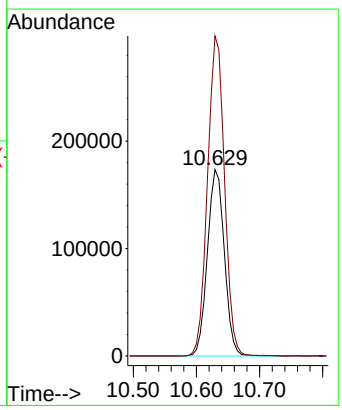


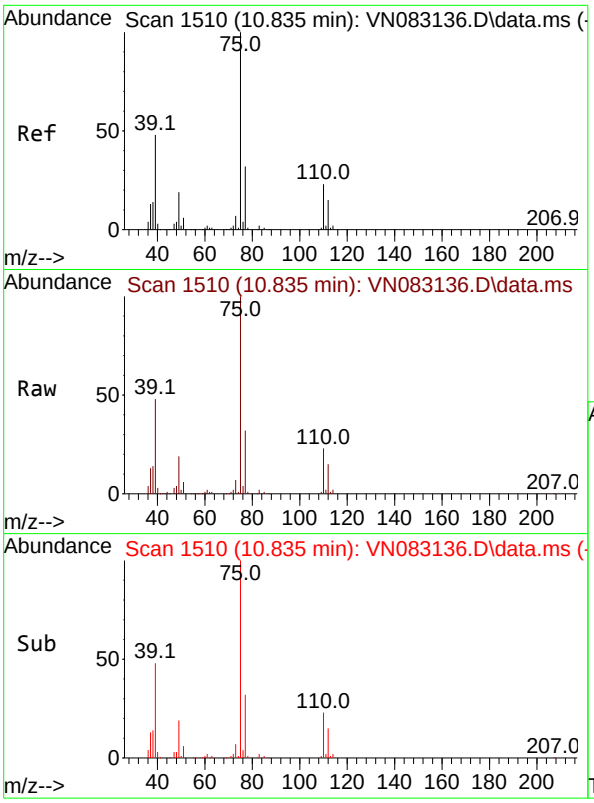


#52
Toluene
Concen: 52.127 ug/l
RT: 10.629 min Scan# 1475
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 92 Resp: 323148

Ion	Ratio	Lower	Upper
92	100		
91	172.1	139.4	209.0

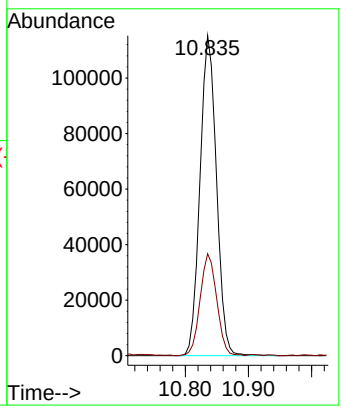




#53
t-1,3-Dichloropropene
Concen: 54.205 ug/l
RT: 10.835 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 75 Resp: 20841

Ion	Ratio	Lower	Upper
75	100		
77	31.9	25.7	38.5



Instrument :
MSVOA_N
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VSTDICCC050

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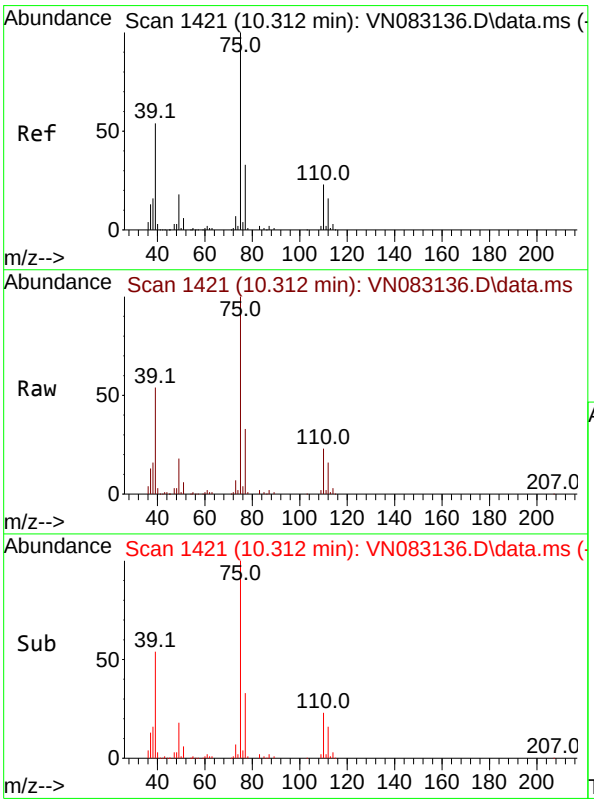
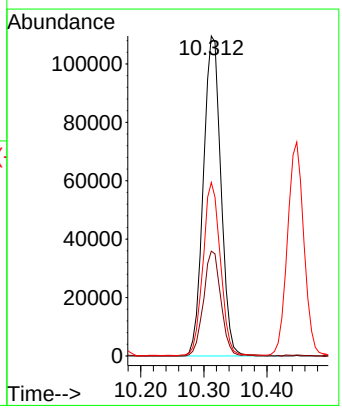
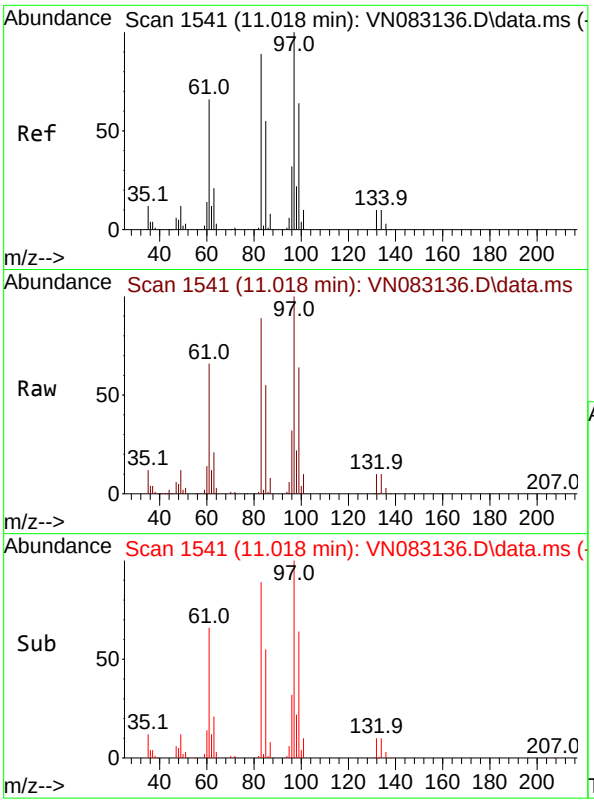


#54
cis-1,3-Dichloropropene
Concen: 51.692 ug/l
RT: 10.312 min Scan# 1421
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 75 Resp: 211396

Ion	Ratio	Lower	Upper
75	100		
77	32.8	24.3	36.5
39	54.0	50.5	75.7

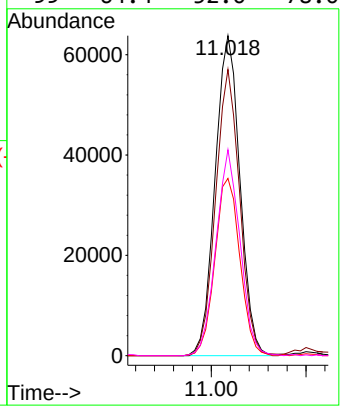




#55
1,1,2-Trichloroethane
Concen: 52.387 ug/l
RT: 11.018 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 97 Resp: 11638

Ion	Ratio	Lower	Upper
97	100		
83	89.4	71.4	107.0
85	55.4	45.8	68.6
99	64.4	52.0	78.0



Instrument :
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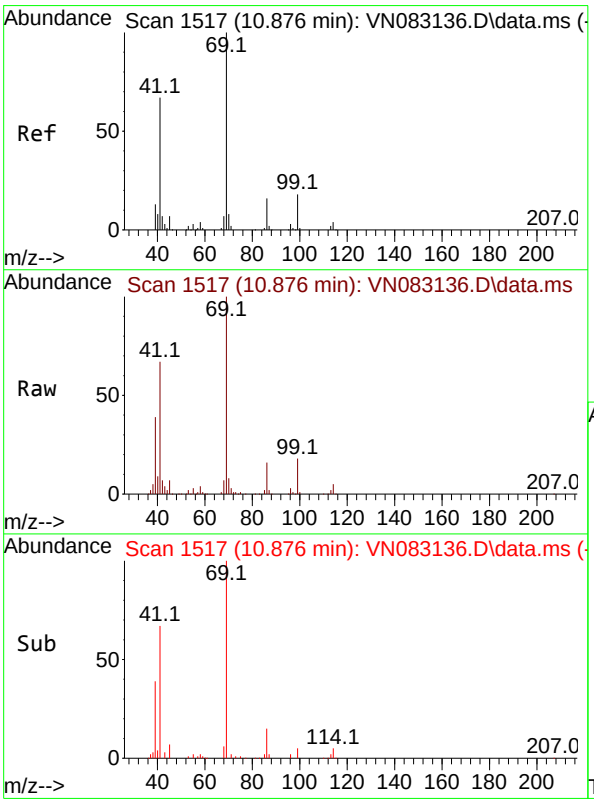
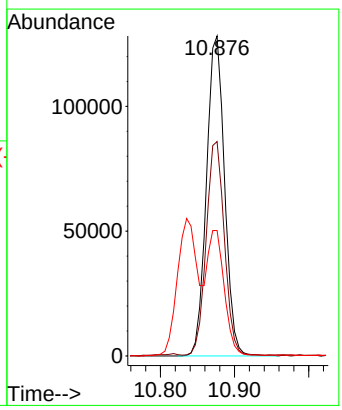
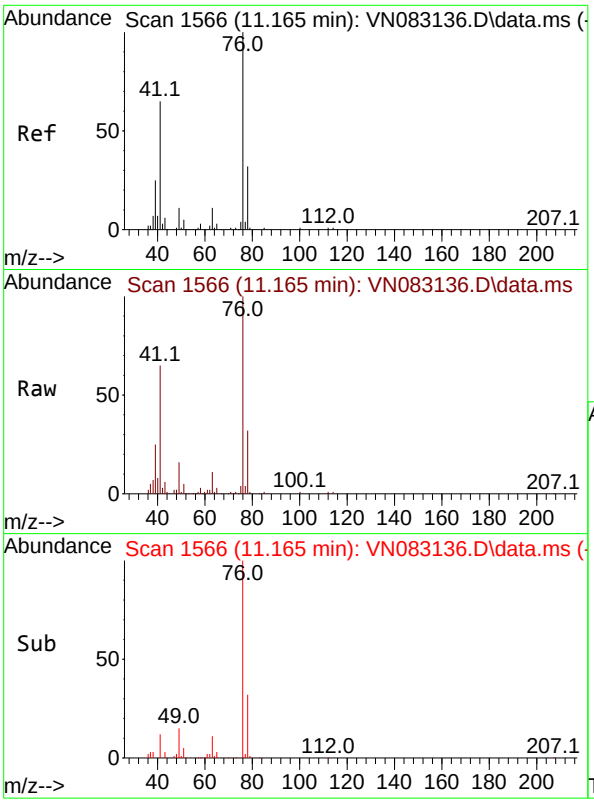


#56
Ethyl methacrylate
Concen: 51.964 ug/l
RT: 10.876 min Scan# 1517
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 69 Resp: 217635

Ion	Ratio	Lower	Upper
69	100		
41	66.9	63.4	95.2
39	35.2	37.4	56.0#

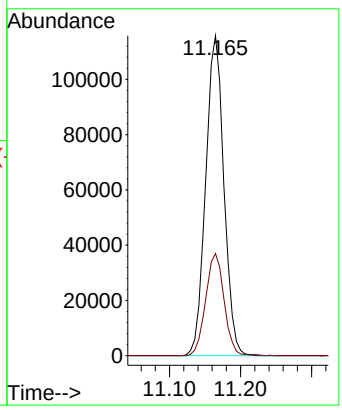




#57
1,3-Dichloropropane
Concen: 52.133 ug/l
RT: 11.165 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 76 Resp: 20644

Ion	Ratio	Lower	Upper
76	100		
78	32.2	25.6	38.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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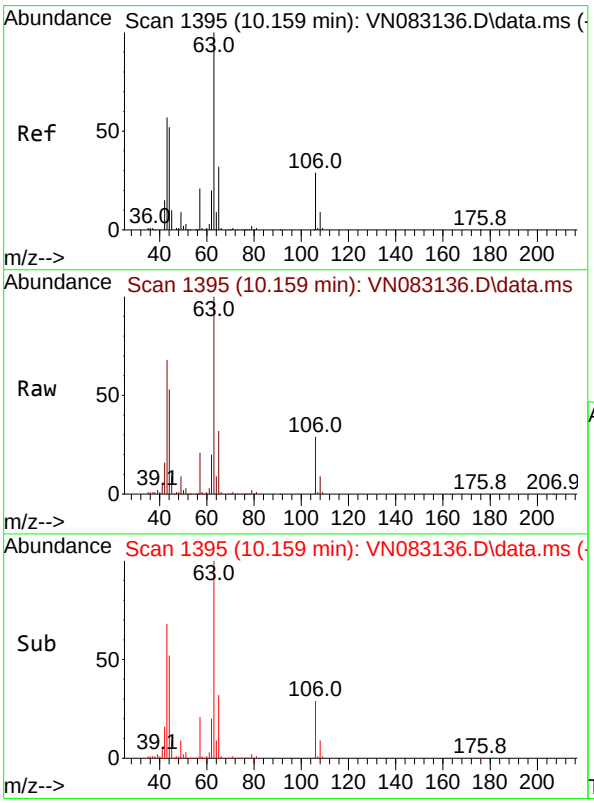
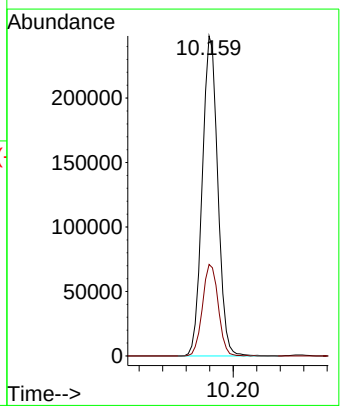
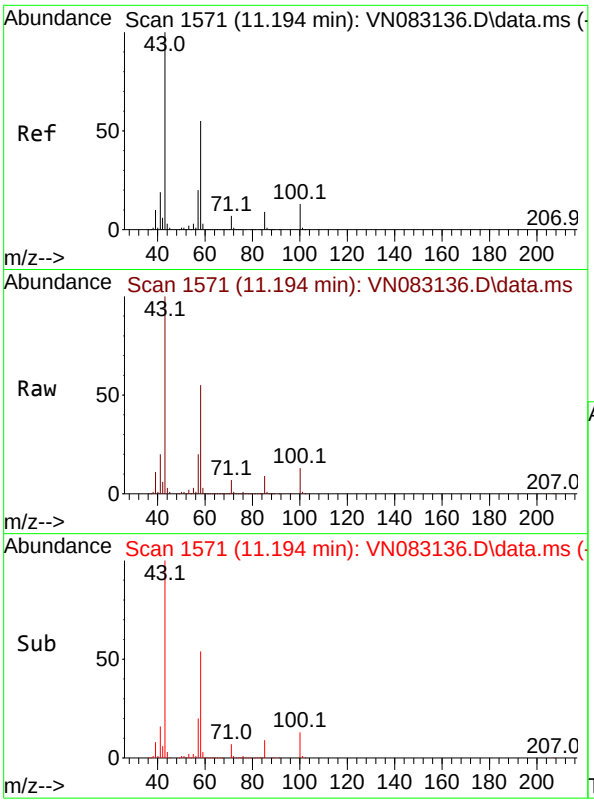


#58
2-Chloroethyl Vinyl ether
Concen: 256.939 ug/l
RT: 10.159 min Scan# 1395
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 63 Resp: 454871

Ion	Ratio	Lower	Upper
63	100		
106	29.0	21.4	32.0





#59
2-Hexanone
Concen: 256.396 ug/l
RT: 11.194 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 43 Resp: 69170

Ion	Ratio	Lower	Upper
43	100		
58	54.9	24.6	73.8

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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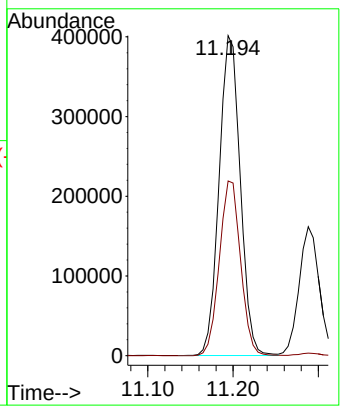
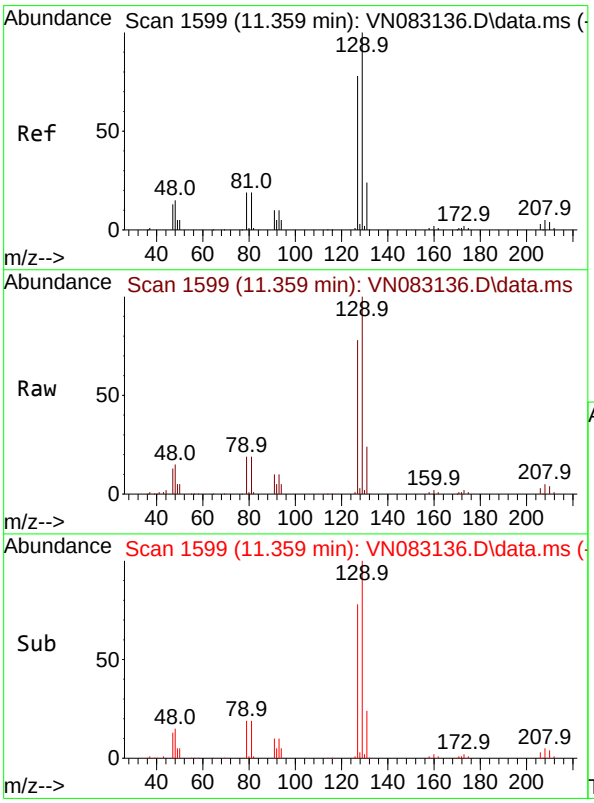
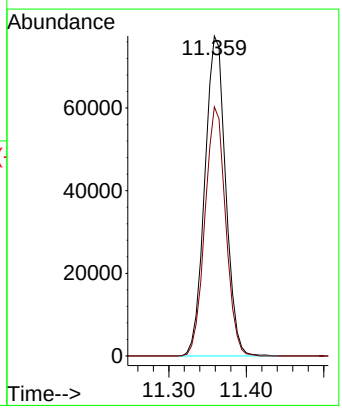


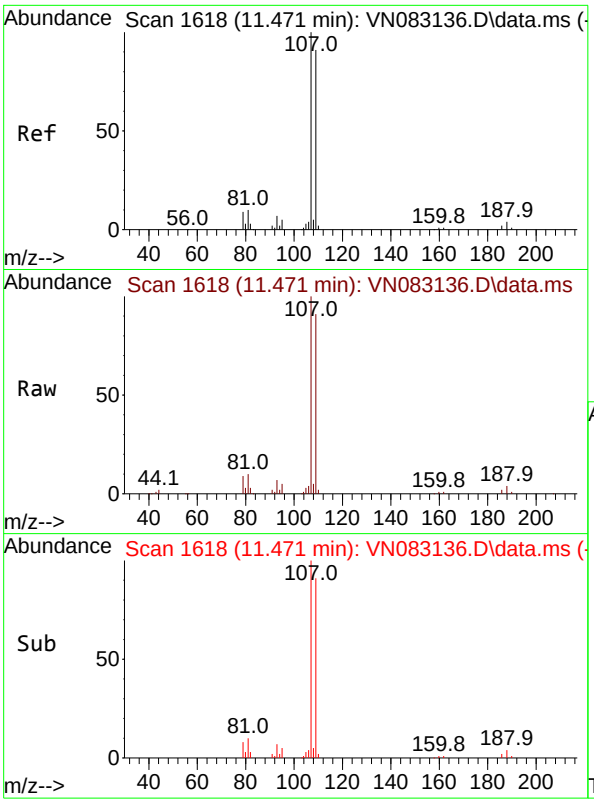


#60
Dibromochloromethane
Concen: 53.688 ug/l
RT: 11.359 min Scan# 1599
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion:129 Resp: 144208

Ion	Ratio	Lower	Upper
129	100		
127	77.4	39.2	117.6





#61
1,2-Dibromoethane
Concen: 51.912 ug/l
RT: 11.471 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion:107 Resp: 12115

Ion	Ratio	Lower	Upper
107	100		
109	94.4	73.7	110.5

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Manual Integrations
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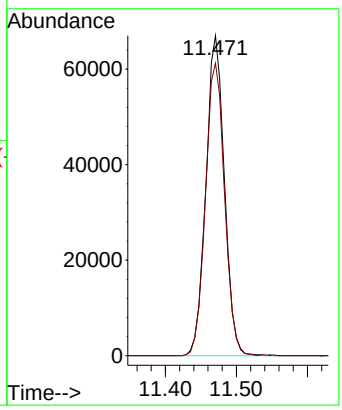
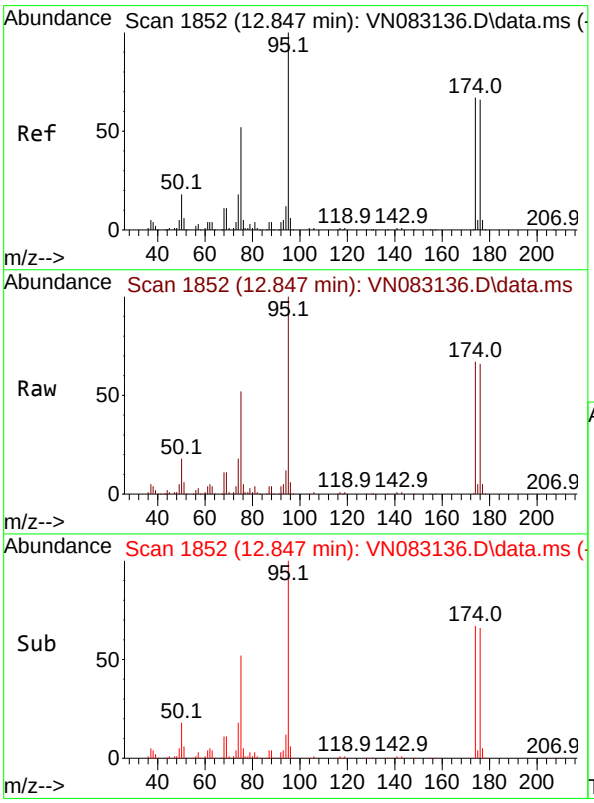
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

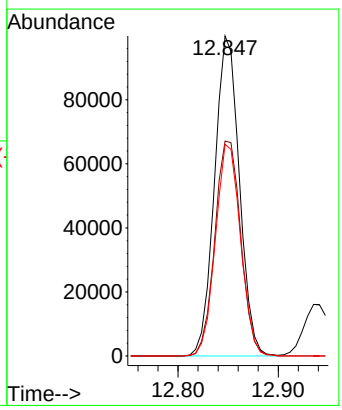


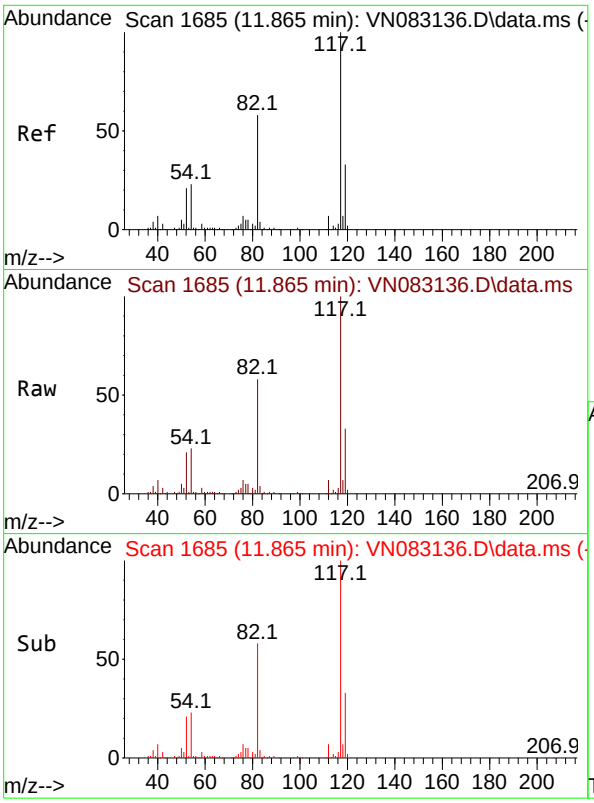


#62
4-Bromofluorobenzene
Concen: 54.173 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 95 Resp: 171524

Ion	Ratio	Lower	Upper
95	100		
174	70.0	0.0	159.2
176	66.9	0.0	147.6





#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion:117 Resp: 30311

Ion	Ratio	Lower	Upper
117	100		
82	57.9	47.5	71.3
119	32.7	25.6	38.4

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Manual Integrations
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Reviewed By :John Carlone 08/08/2024
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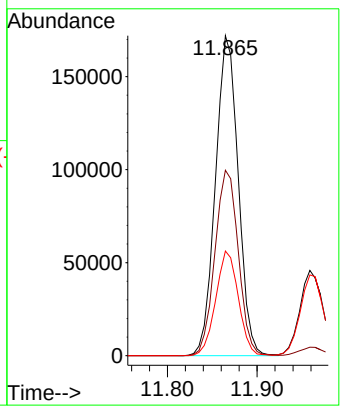
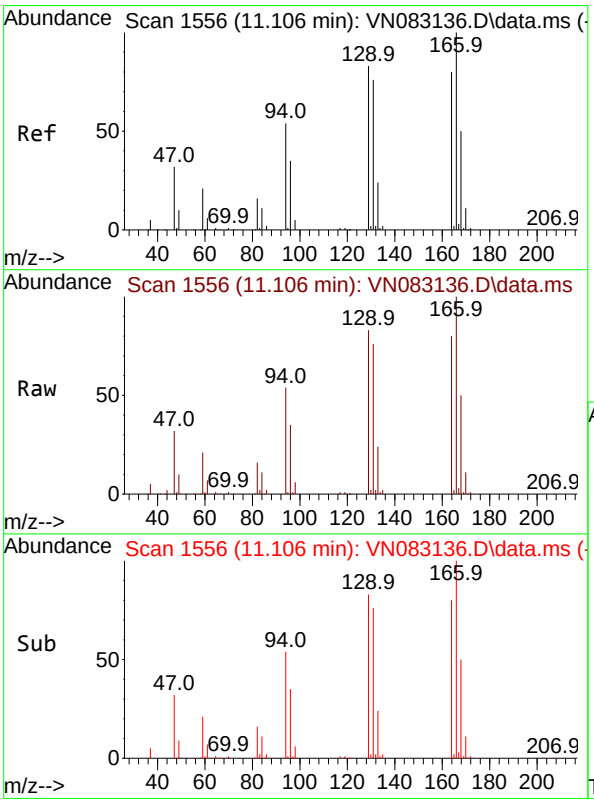
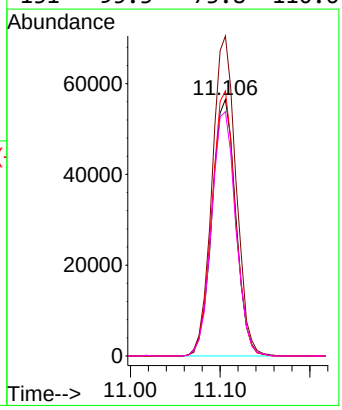


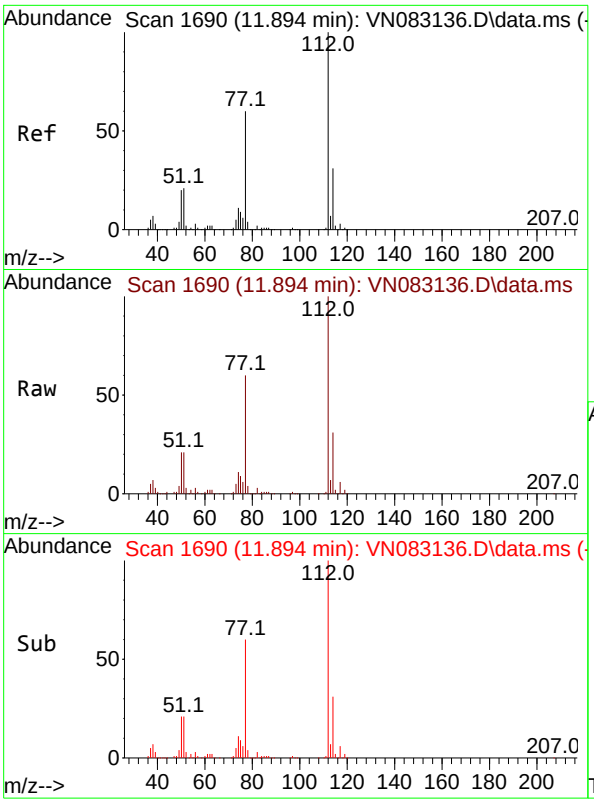


#64
Tetrachloroethene
Concen: 51.784 ug/l
RT: 11.106 min Scan# 1556
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion:164 Resp: 103955

Ion	Ratio	Lower	Upper
164	100		
166	124.8	101.4	152.0
129	103.3	75.7	113.5
131	95.3	73.8	110.6





#65
Chlorobenzene
Concen: 51.679 ug/l
RT: 11.894 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion:112 Resp: 34617

Ion	Ratio	Lower	Upper
112	100		
114	30.6	26.2	39.2

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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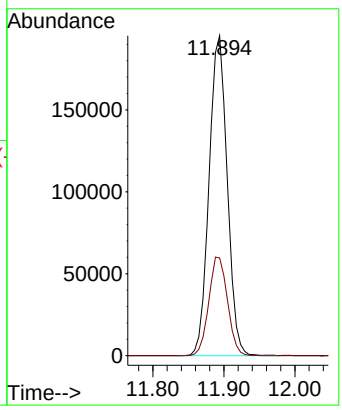
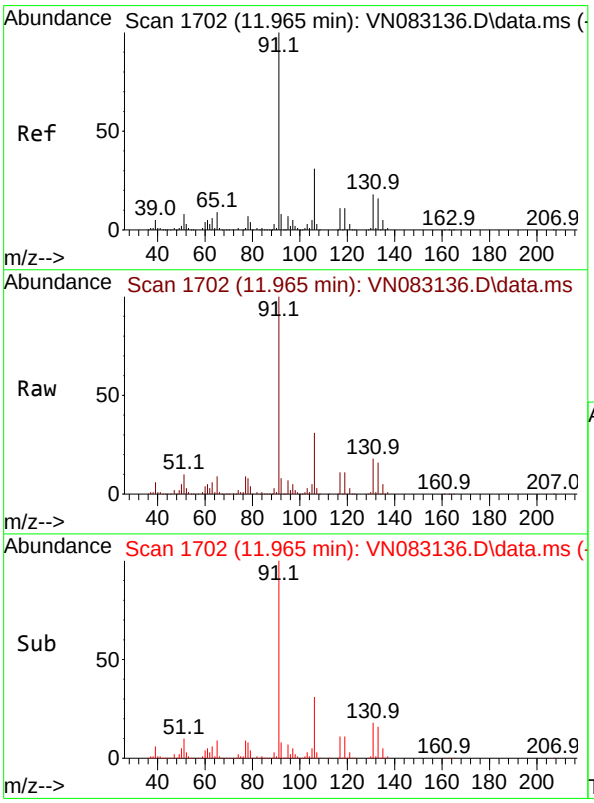
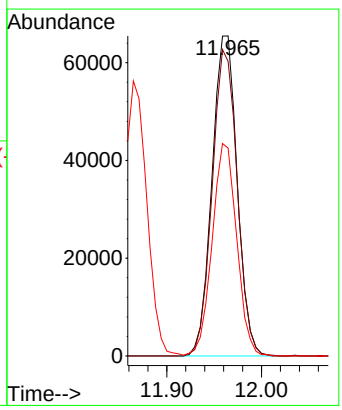


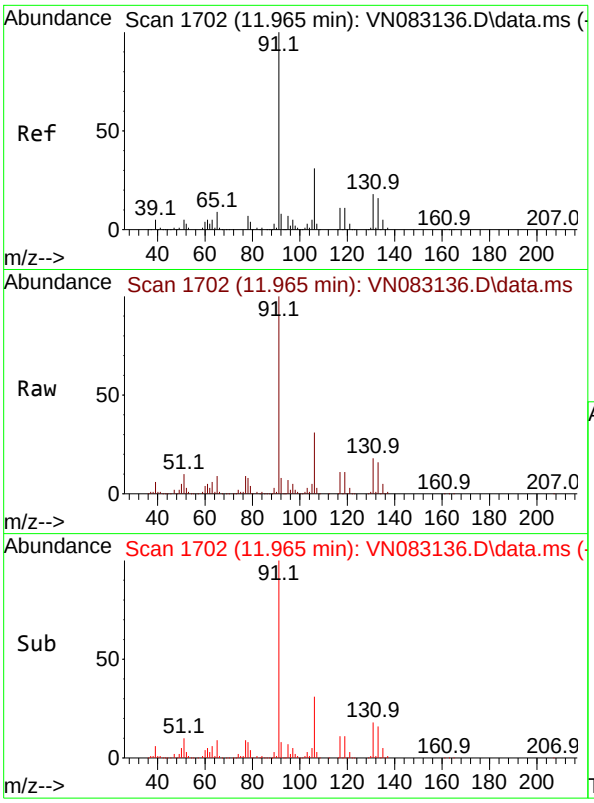


#66
1,1,1,2-Tetrachloroethane
Concen: 51.242 ug/l
RT: 11.965 min Scan# 1702
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion:131 Resp: 121057

Ion	Ratio	Lower	Upper
131	100		
133	94.9	47.3	142.0
119	64.7	32.5	97.4





#67
Ethyl Benzene
Concen: 51.179 ug/l
RT: 11.965 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 91 Resp: 62890

Ion	Ratio	Lower	Upper
91	100		
106	31.3	24.0	36.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Manual Integrations
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Reviewed By :John Carlone 08/08/2024
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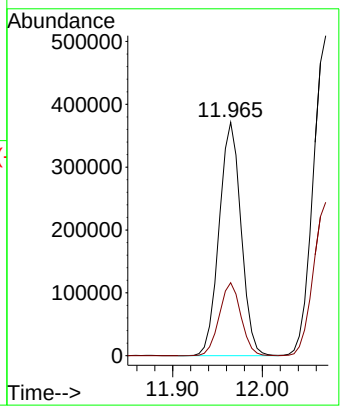
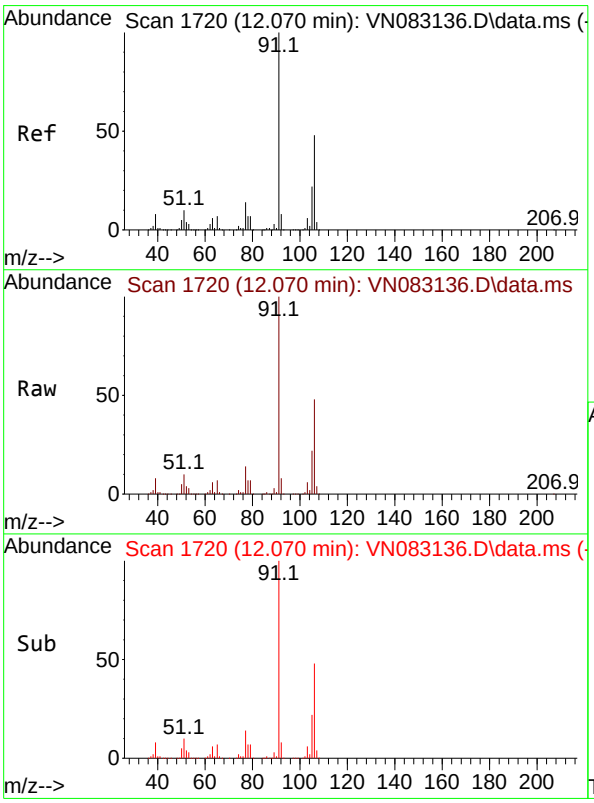
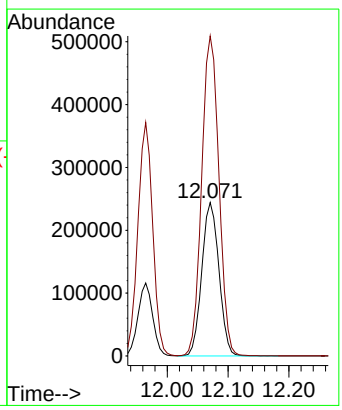


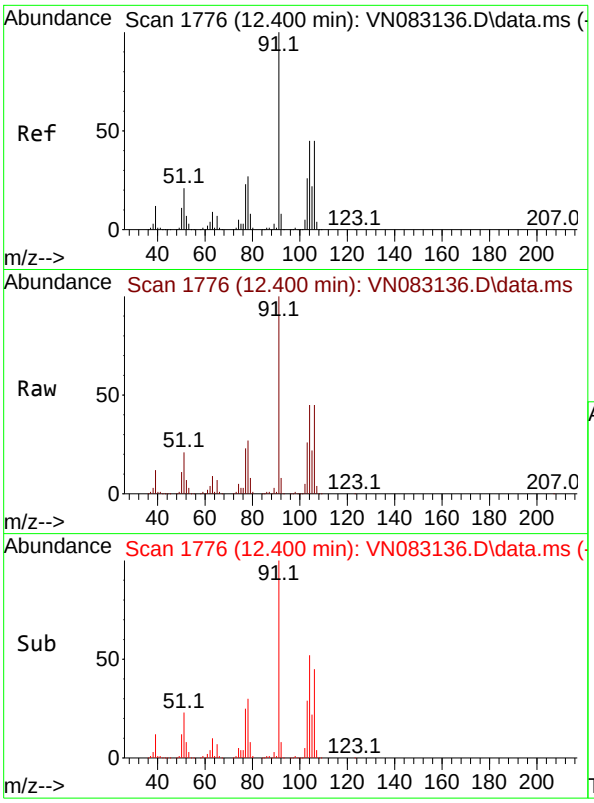


#68
m/p-Xylenes
Concen: 103.683 ug/l
RT: 12.070 min Scan# 1720
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion:106 Resp: 477261

Ion	Ratio	Lower	Upper
106	100		
91	209.9	166.1	249.1





#69
o-Xylene
Concen: 51.638 ug/l
RT: 12.400 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion:106 Resp: 23443

Ion	Ratio	Lower	Upper
106	100		
91	222.4	111.3	333.9

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Manual Integrations
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Reviewed By :John Carlone 08/08/2024
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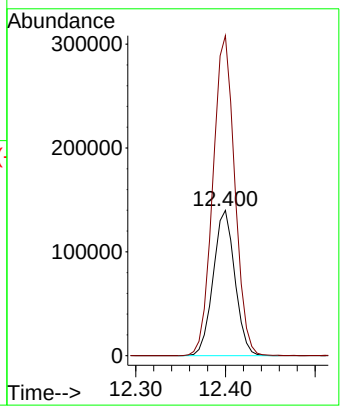
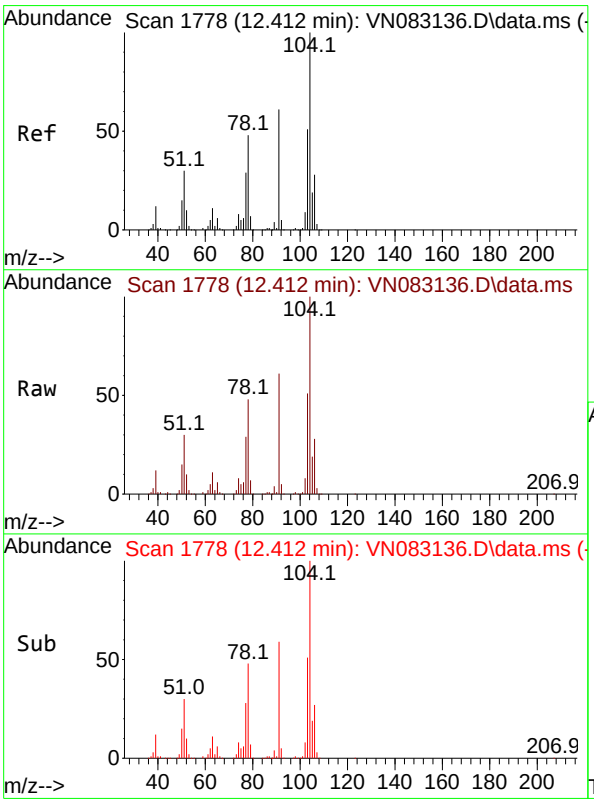
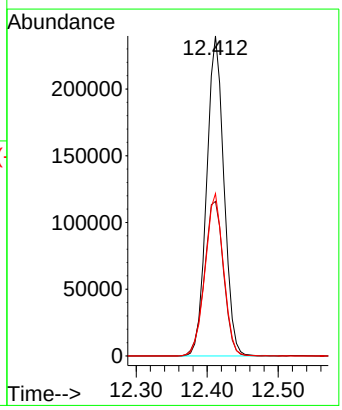


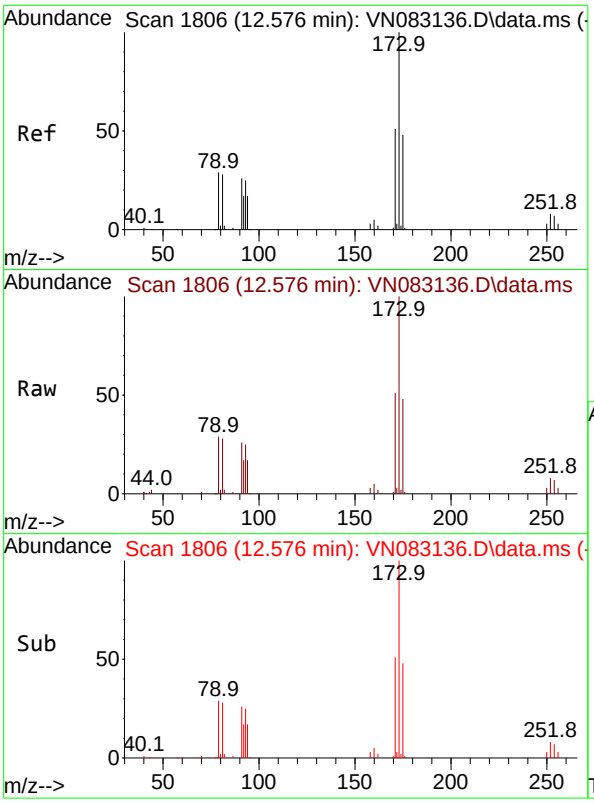


#70
Styrene
Concen: 53.115 ug/l
RT: 12.412 min Scan# 1778
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion:104 Resp: 405002

Ion	Ratio	Lower	Upper
104	100		
78	53.4	41.6	62.4
103	53.7	44.0	66.0

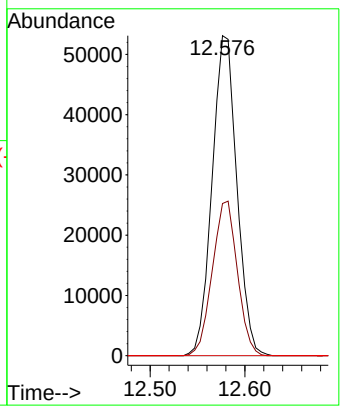




#71
Bromoform
Concen: 53.850 ug/l
RT: 12.576 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion:173 Resp: 9637

Ion	Ratio	Lower	Upper
173	100		
175	48.9	24.0	72.0
254	0.0	0.0	0.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Manual Integrations
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Reviewed By :John Carlone 08/08/2024
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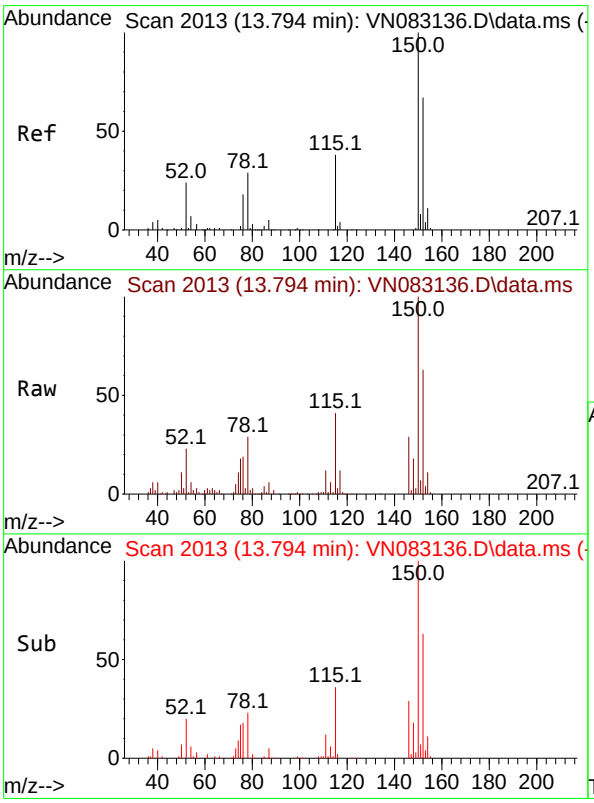
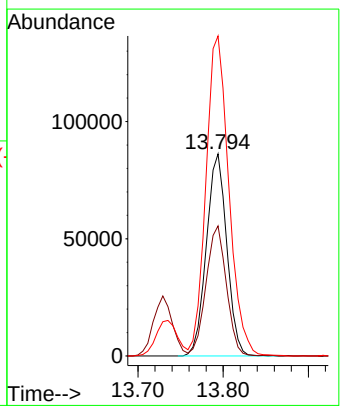
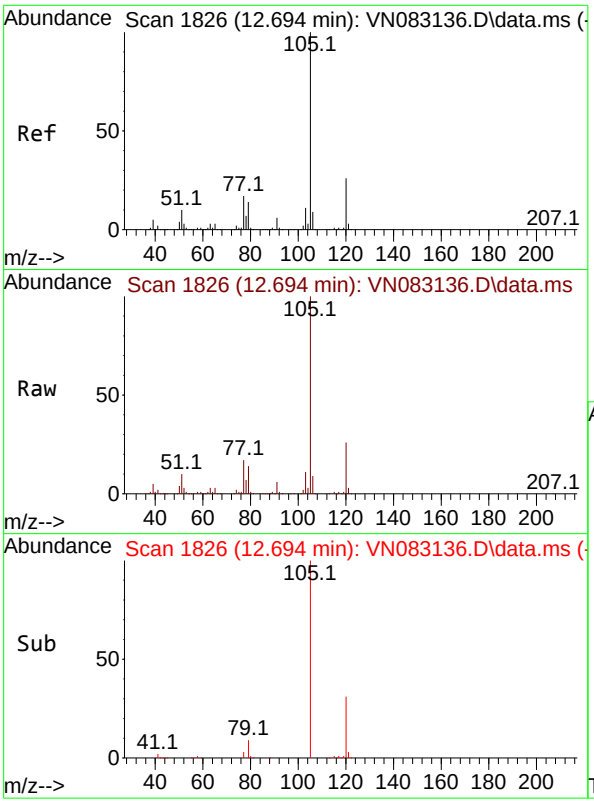


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.794 min Scan# 2013
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion:152 Resp: 143466

Ion	Ratio	Lower	Upper
152	100		
115	63.9	30.6	91.6
150	177.7	0.0	348.6





#73
Isopropylbenzene
Concen: 50.795 ug/l
RT: 12.694 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion:105 Resp: 60952

Ion	Ratio	Lower	Upper
105	100		
120	25.8	12.9	38.6

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Manual Integrations
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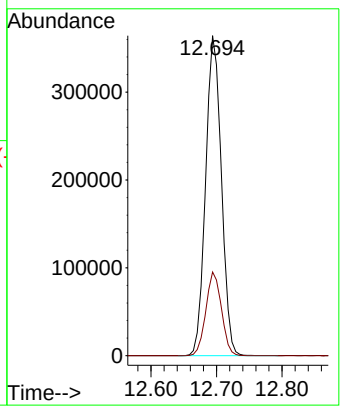
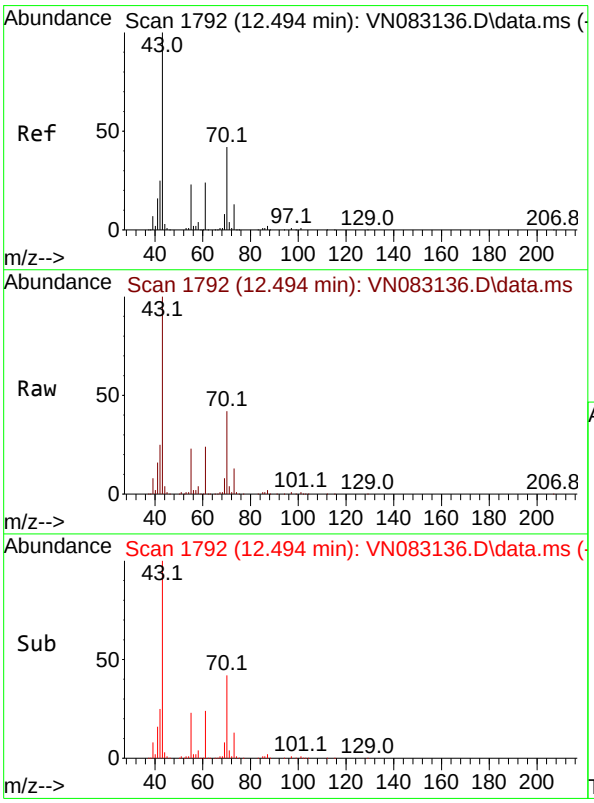
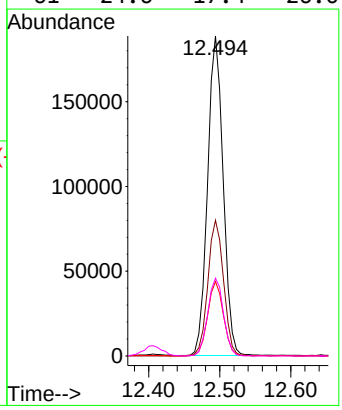


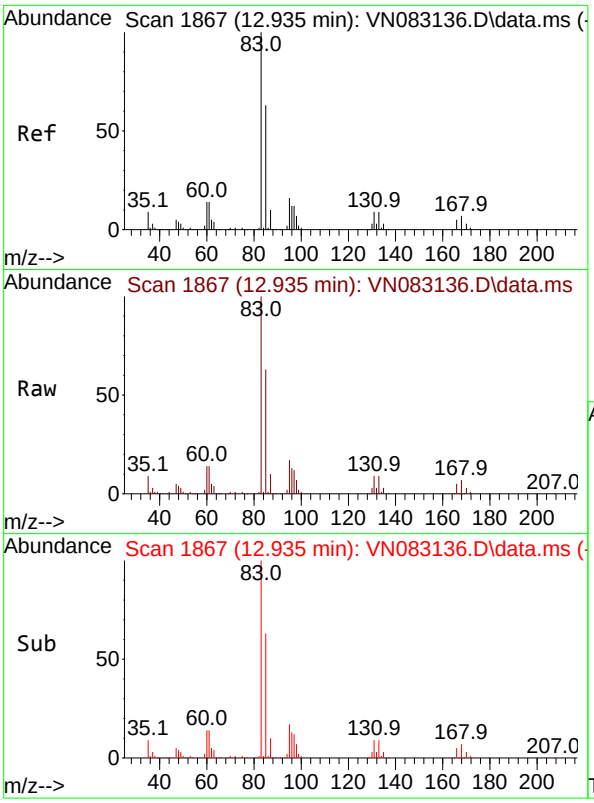


#74
N-amyl acetate
Concen: 48.950 ug/l
RT: 12.494 min Scan# 1792
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 43 Resp: 287319

Ion	Ratio	Lower	Upper
43	100		
70	42.7	29.8	44.6
55	23.8	18.7	28.1
61	24.6	17.4	26.0





#75
1,1,2,2-Tetrachloroethane
Concen: 49.349 ug/l
RT: 12.935 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 83 Resp: 16748

Ion	Ratio	Lower	Upper
83	100		
131	10.4	5.0	14.9
85	64.4	31.9	95.7

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Manual Integrations
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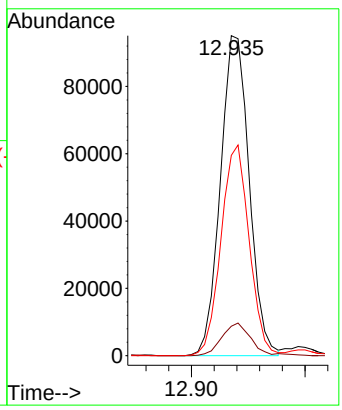
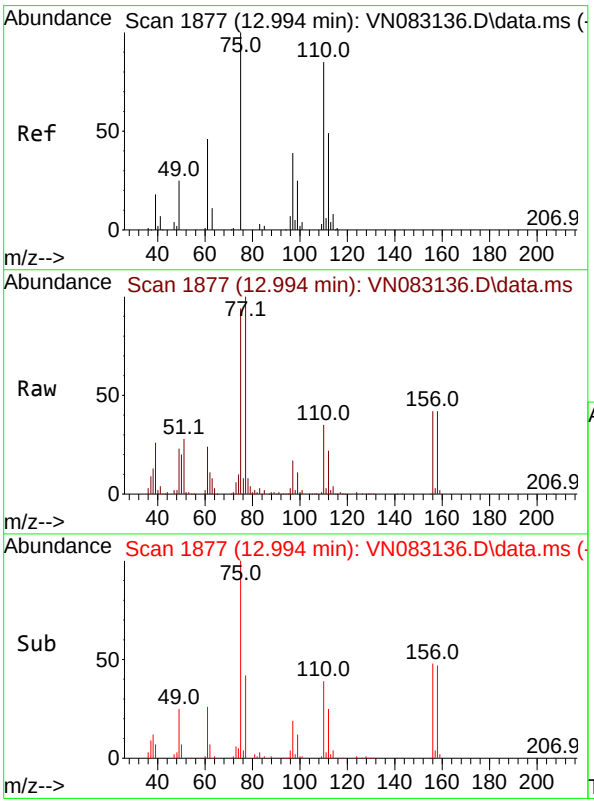
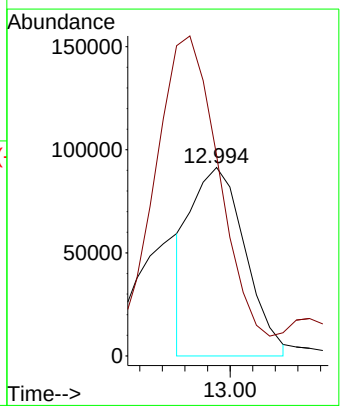


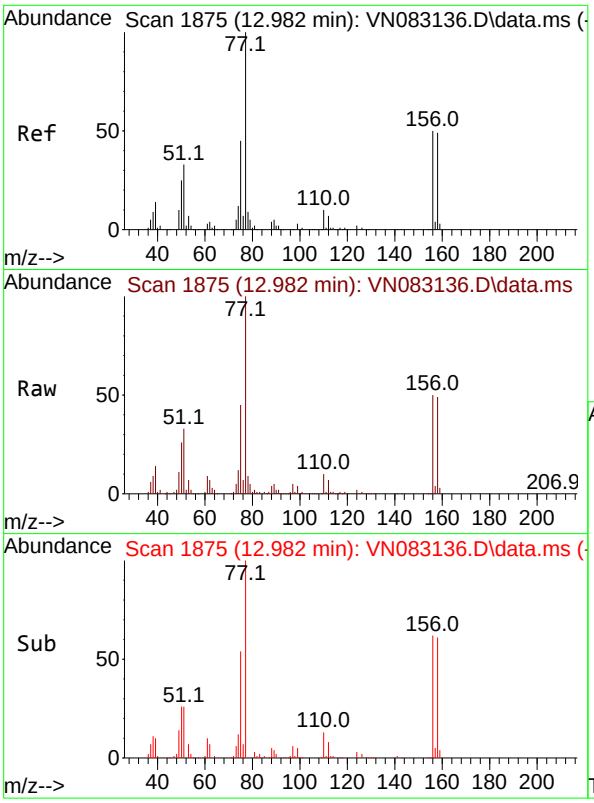


#76
1,2,3-Trichloropropane
Concen: 48.363 ug/l m
RT: 12.994 min Scan# 1877
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 75 Resp: 152531

Ion	Ratio	Lower	Upper
75	100		
77	207.4	110.9	332.6

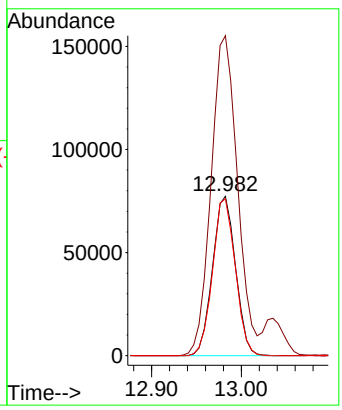




#77
Bromobenzene
Concen: 51.587 ug/l
RT: 12.982 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion:156 Resp: 13751

Ion	Ratio	Lower	Upper
156	100		
77	230.1	111.3	333.8
158	97.4	48.3	144.9



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Manual Integrations
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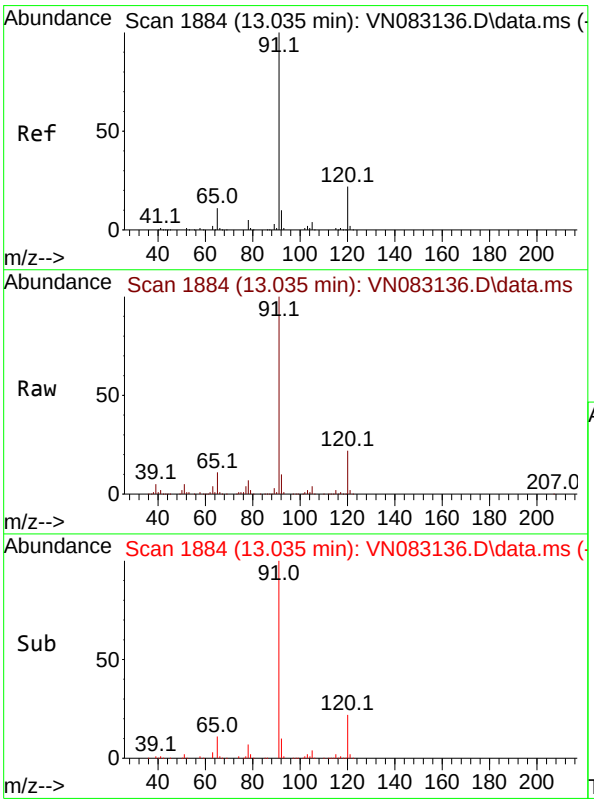
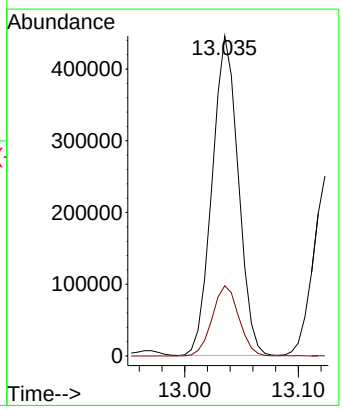
Supervised By :Mahesh Dadoda 08/09/2024

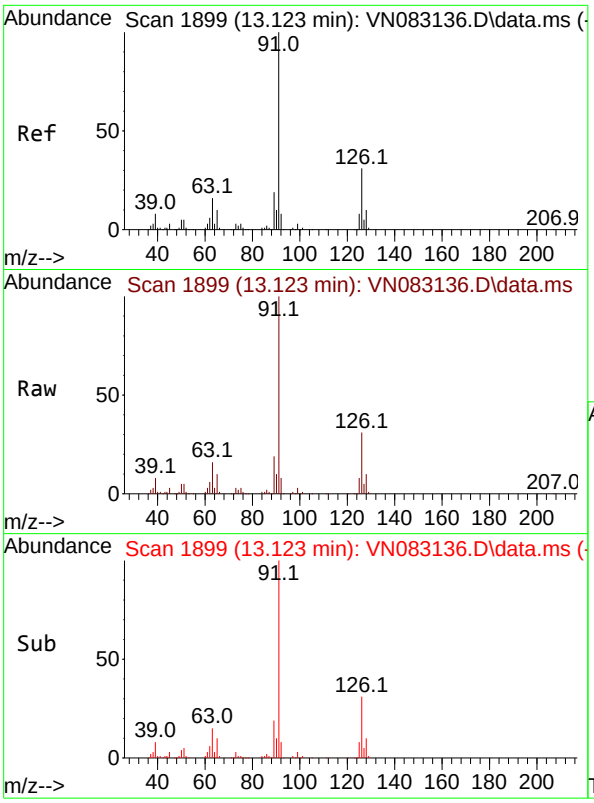


#78
n-propylbenzene
Concen: 51.584 ug/l
RT: 13.035 min Scan# 1884
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 91 Resp: 712768

Ion	Ratio	Lower	Upper
91	100		
120	22.3	10.9	32.9

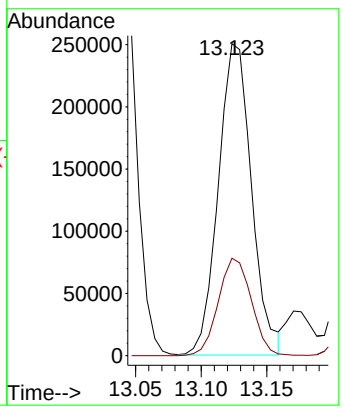




#79
2-Chlorotoluene
Concen: 50.371 ug/l
RT: 13.123 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 91 Resp: 44126

Ion	Ratio	Lower	Upper
91	100		
126	31.1	16.2	48.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Manual Integrations
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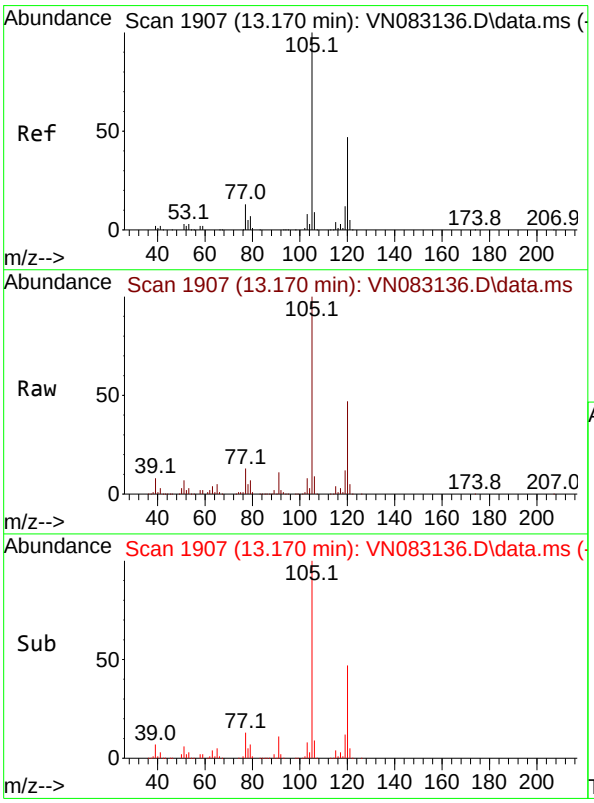
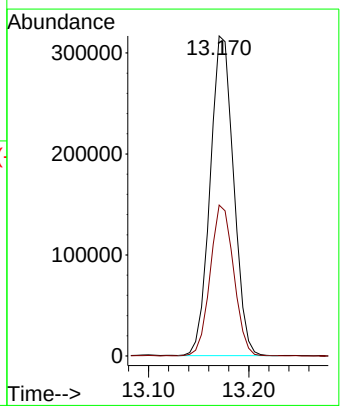
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

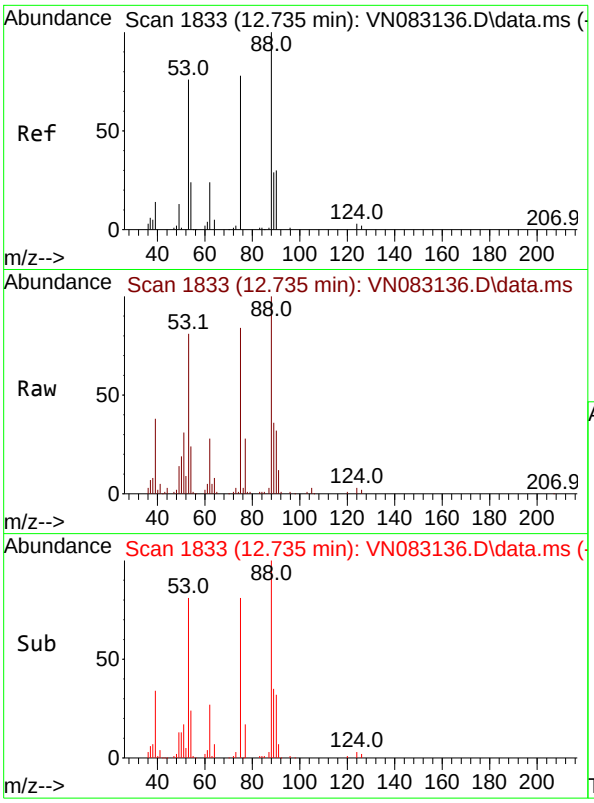


#80
1,3,5-Trimethylbenzene
Concen: 51.254 ug/l
RT: 13.170 min Scan# 1907
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion:105 Resp: 514918

Ion	Ratio	Lower	Upper
105	100		
120	47.5	24.3	72.8

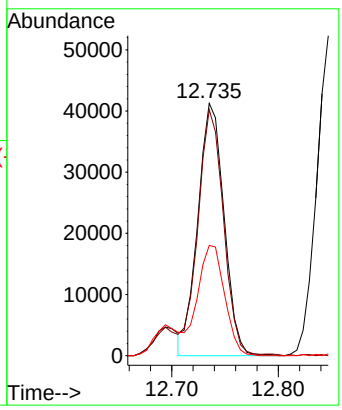




#81
trans-1,4-Dichloro-2-butene
Concen: 48.894 ug/l
RT: 12.735 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 75 Resp: 7077

Ion	Ratio	Lower	Upper
75	100		
53	94.2	88.4	132.6
89	44.3	36.3	54.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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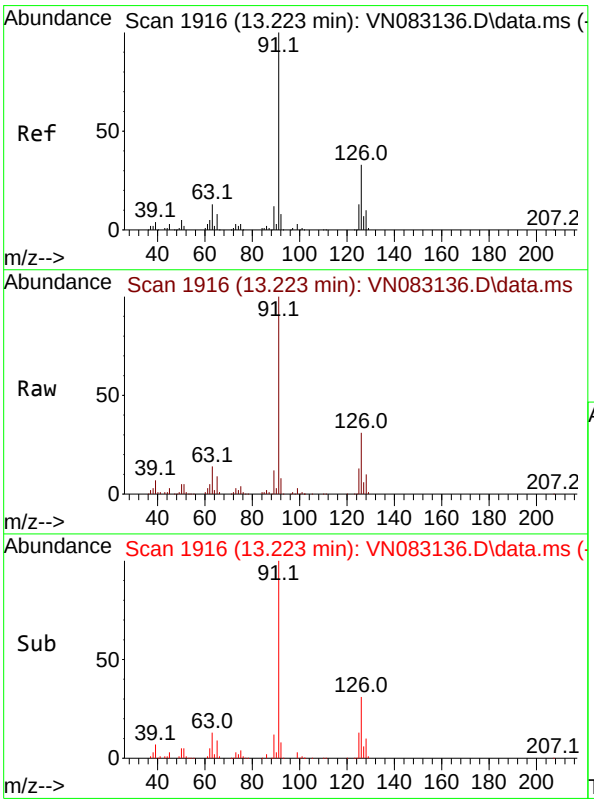
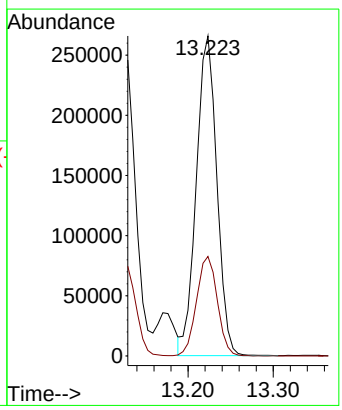
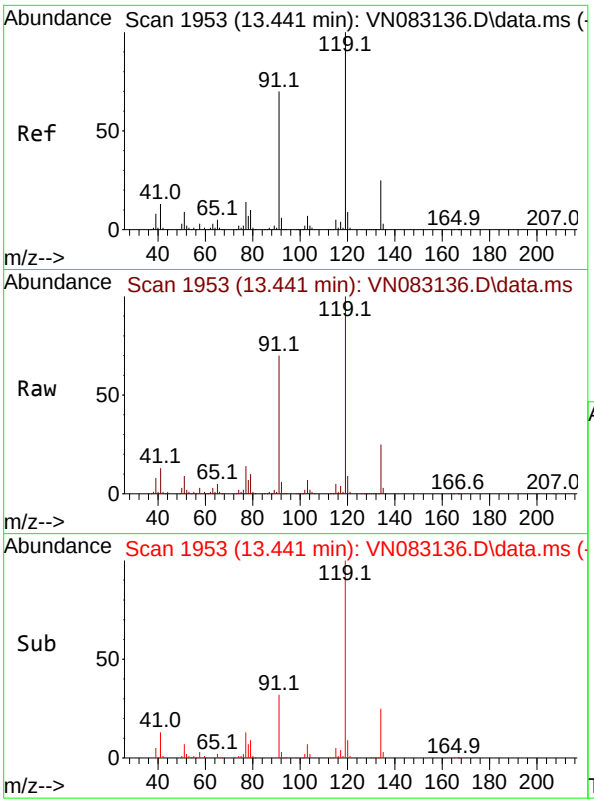


#82
4-Chlorotoluene
Concen: 50.684 ug/l
RT: 13.223 min Scan# 1916
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 91 Resp: 445369

Ion	Ratio	Lower	Upper
91	100		
126	31.6	16.2	48.6

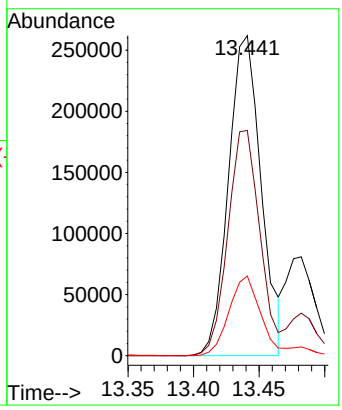




#83
tert-Butylbenzene
Concen: 50.983 ug/l
RT: 13.441 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion:119 Resp: 45359

Ion	Ratio	Lower	Upper
119	100		
91	68.9	35.0	105.1
134	24.1	13.3	39.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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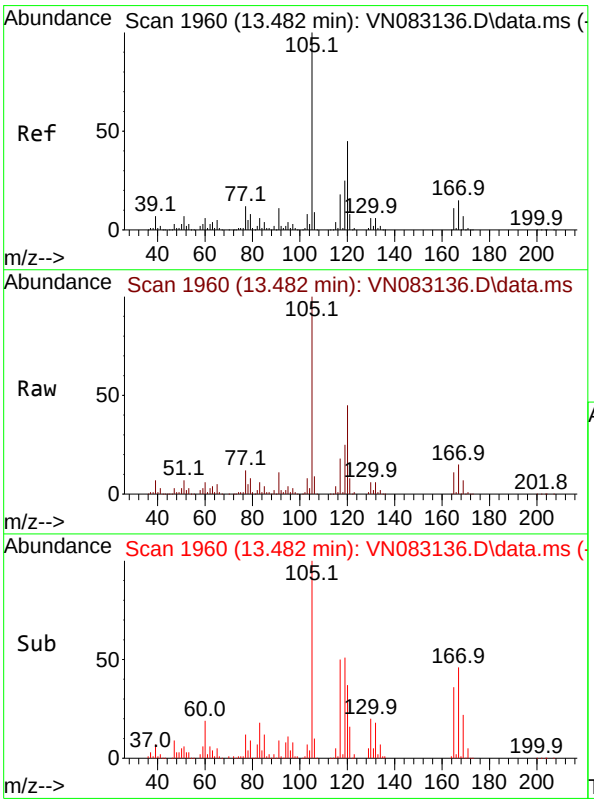
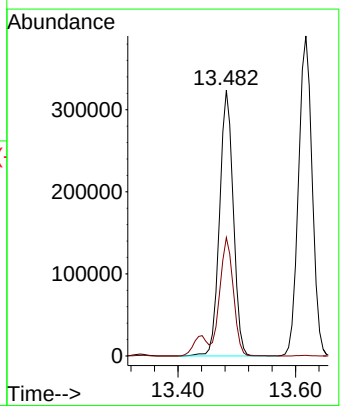
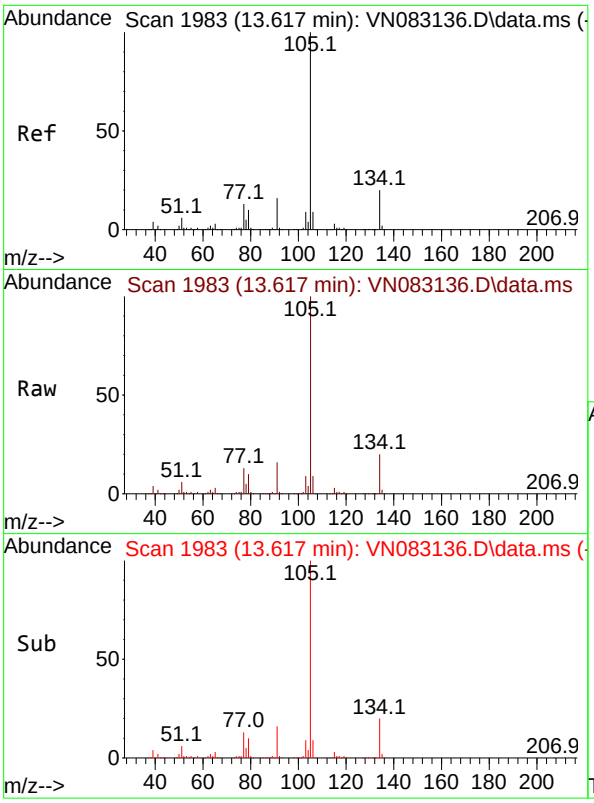


#84
1,2,4-Trimethylbenzene
Concen: 51.778 ug/l
RT: 13.482 min Scan# 1960
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion:105 Resp: 524226

Ion	Ratio	Lower	Upper
105	100		
120	44.1	21.9	65.8





#85
sec-Butylbenzene
Concen: 51.809 ug/l
RT: 13.617 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion:105 Resp: 62895

Ion	Ratio	Lower	Upper
105	100		
134	19.6	9.8	29.3

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Manual Integrations
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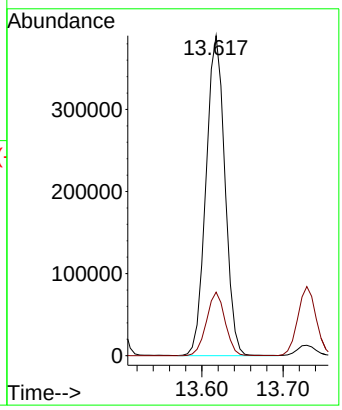
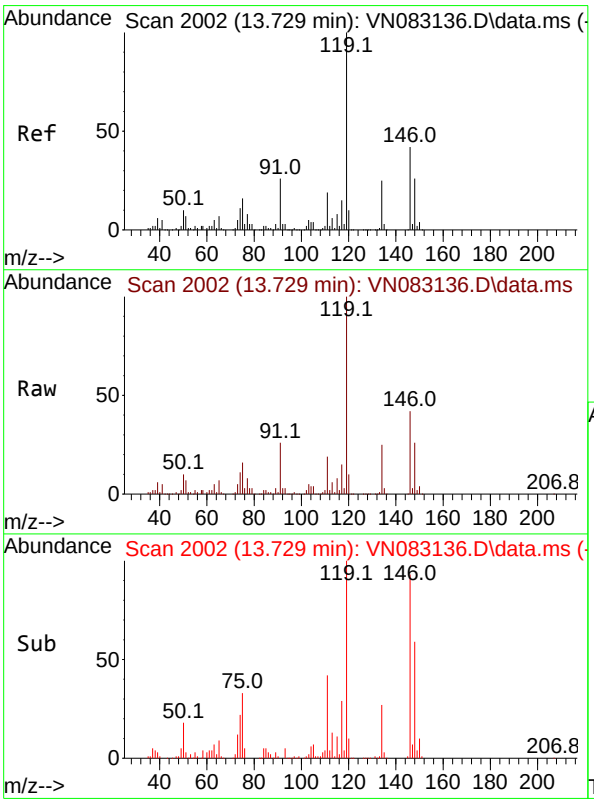
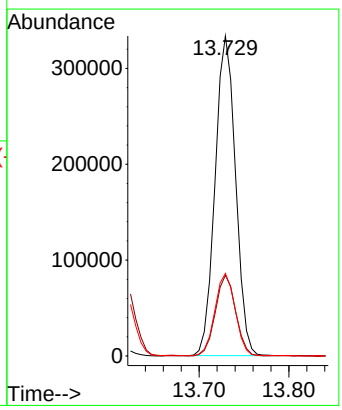


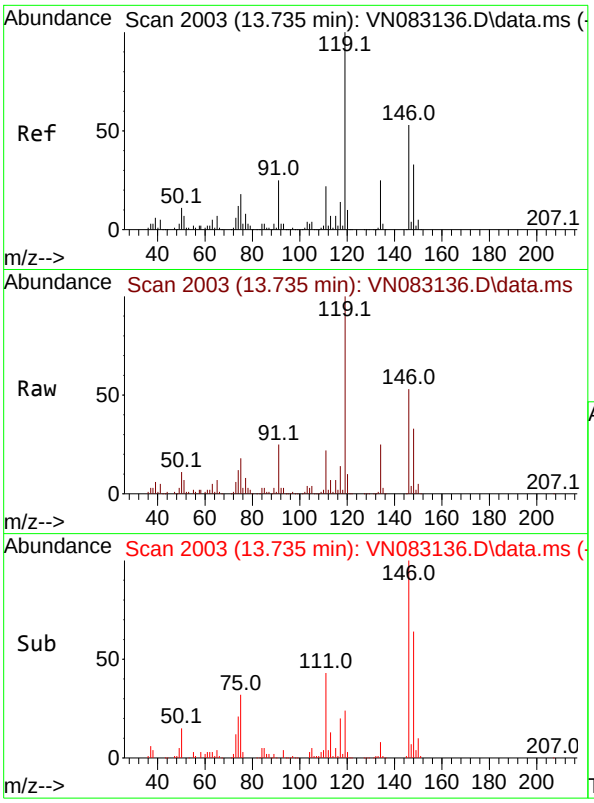


#86
p-Isopropyltoluene
Concen: 52.699 ug/l
RT: 13.729 min Scan# 2002
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion:119 Resp: 528236

Ion	Ratio	Lower	Upper
119	100		
134	24.8	13.0	39.0
91	25.4	12.3	36.9

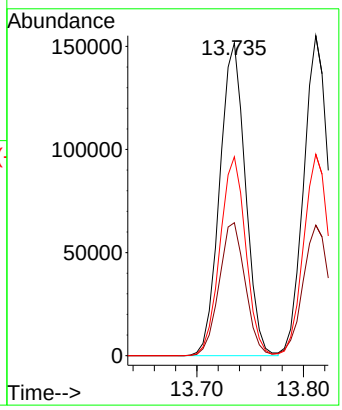




#87
1,3-Dichlorobenzene
Concen: 50.651 ug/l
RT: 13.735 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion:146 Resp: 25405

Ion	Ratio	Lower	Upper
146	100		
111	43.1	20.6	61.9
148	63.5	31.8	95.3



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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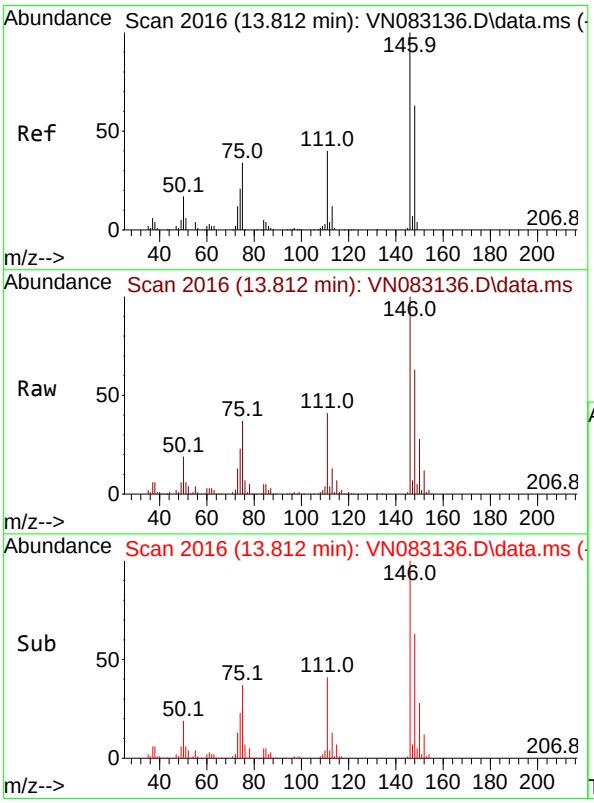
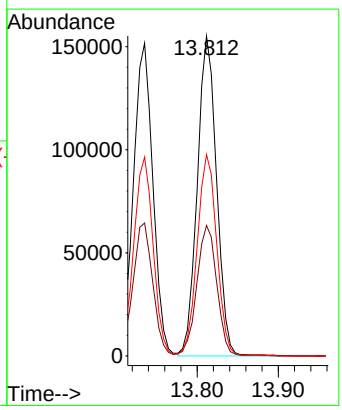
Supervised By :Mahesh Dadoda 08/09/2024

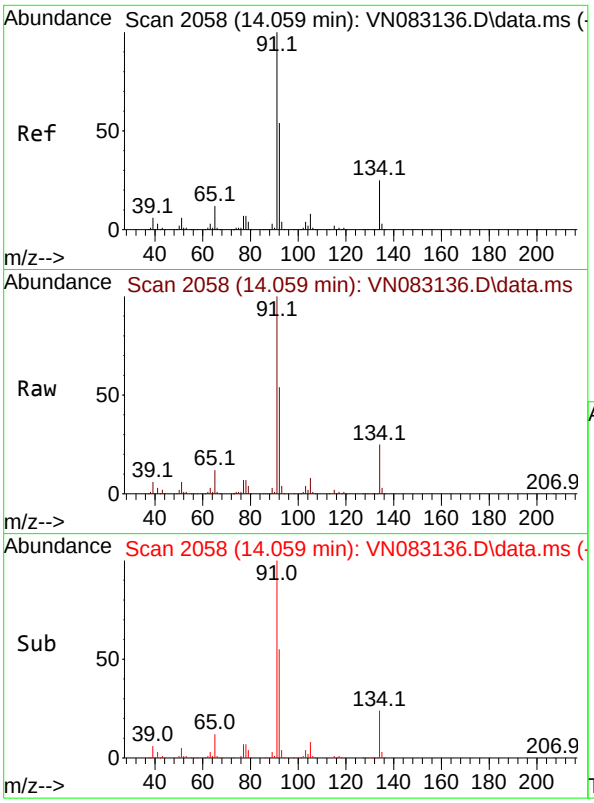


#88
1,4-Dichlorobenzene
Concen: 50.589 ug/l
RT: 13.812 min Scan# 2016
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion:146 Resp: 255814

Ion	Ratio	Lower	Upper
146	100		
111	42.0	20.1	60.3
148	64.0	32.2	96.6





#89
n-Butylbenzene
Concen: 53.120 ug/l
RT: 14.059 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 91 Resp: 46137

Ion	Ratio	Lower	Upper
91	100		
92	54.4	26.1	78.3
134	25.1	12.1	36.3

Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Manual Integrations
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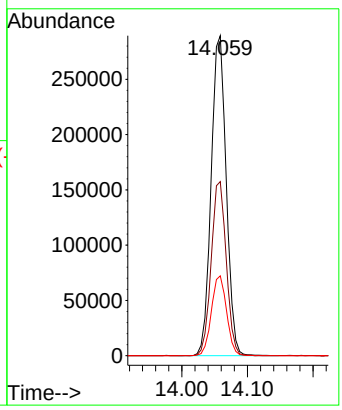
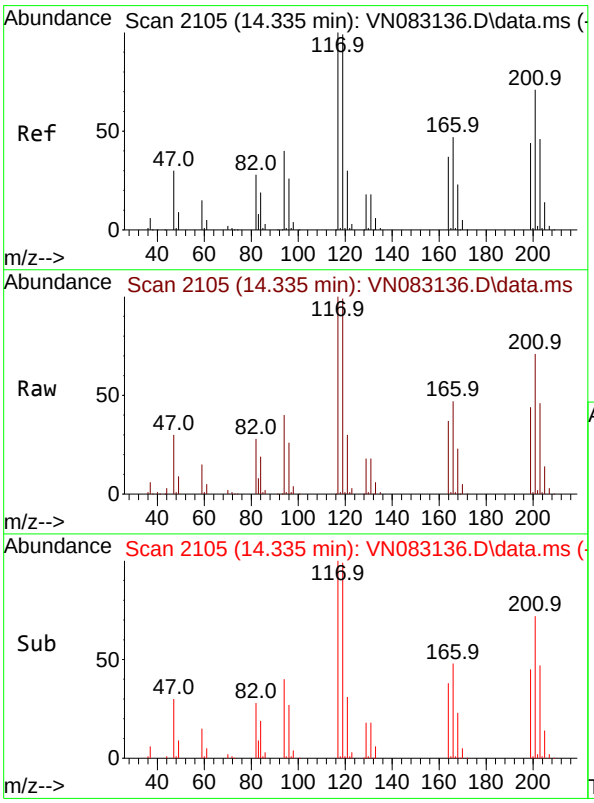
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

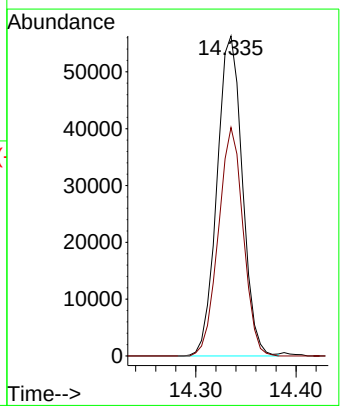


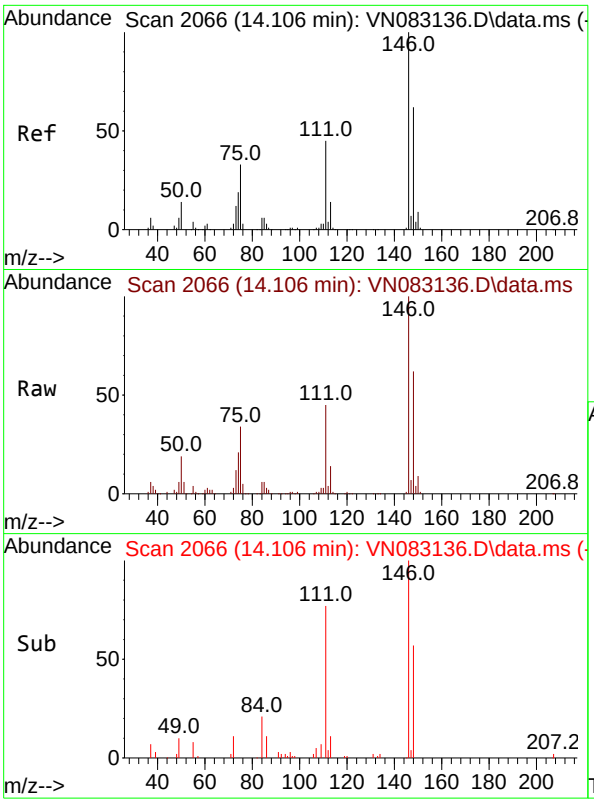


#90
Hexachloroethane
Concen: 51.037 ug/l
RT: 14.335 min Scan# 2105
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion:117 Resp: 98836

Ion	Ratio	Lower	Upper
117	100		
201	69.9	35.8	107.3

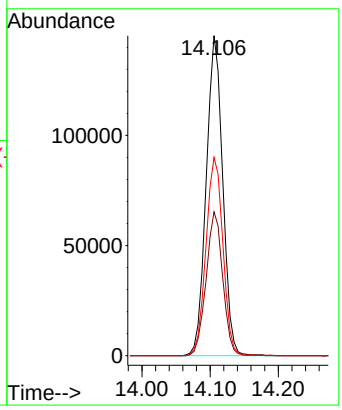




#91
1,2-Dichlorobenzene
Concen: 50.365 ug/l
RT: 14.106 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion:146 Resp: 24446

Ion	Ratio	Lower	Upper
146	100		
111	45.3	21.4	64.2
148	63.6	32.1	96.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Manual Integrations
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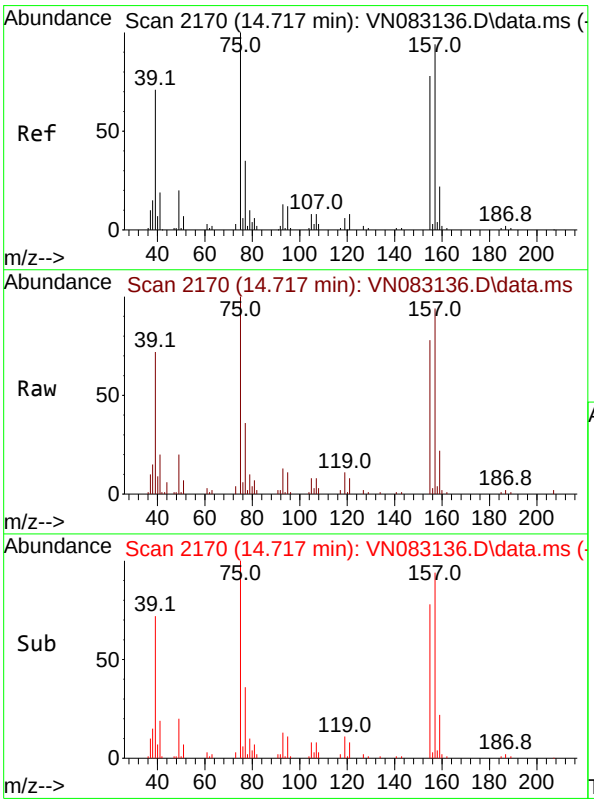
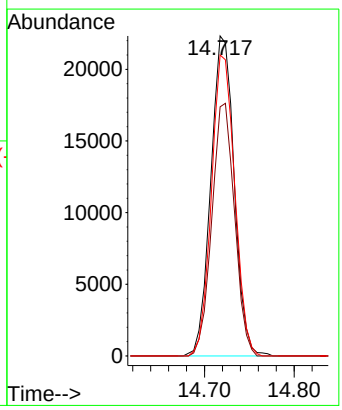
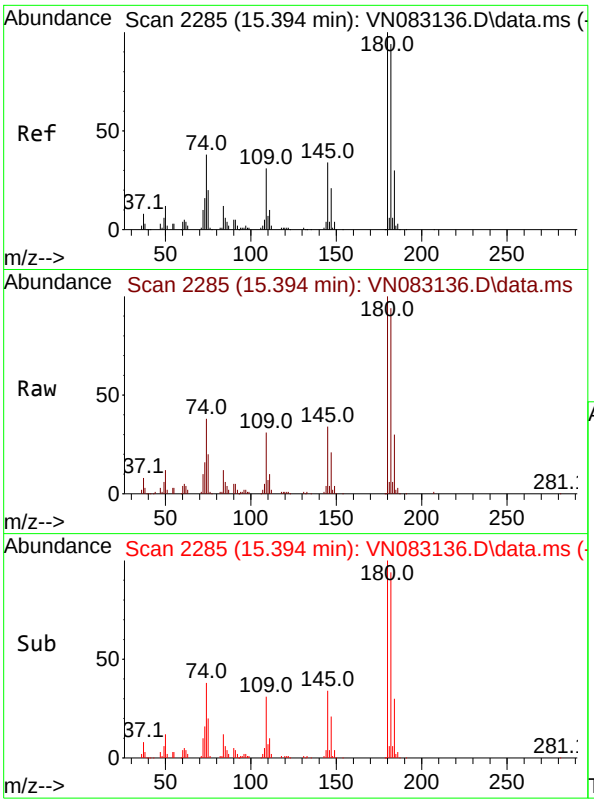


#92
1,2-Dibromo-3-Chloropropane
Concen: 49.017 ug/l
RT: 14.717 min Scan# 2170
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 75 Resp: 40369

Ion	Ratio	Lower	Upper
75	100		
155	76.6	36.6	109.8
157	93.4	46.9	140.6

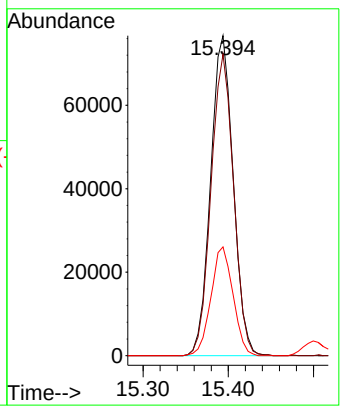




#93
1,2,4-Trichlorobenzene
Concen: 51.937 ug/l
RT: 15.394 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion:180 Resp: 14122

Ion	Ratio	Lower	Upper
180	100		
182	94.1	47.3	141.8
145	33.3	15.7	47.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

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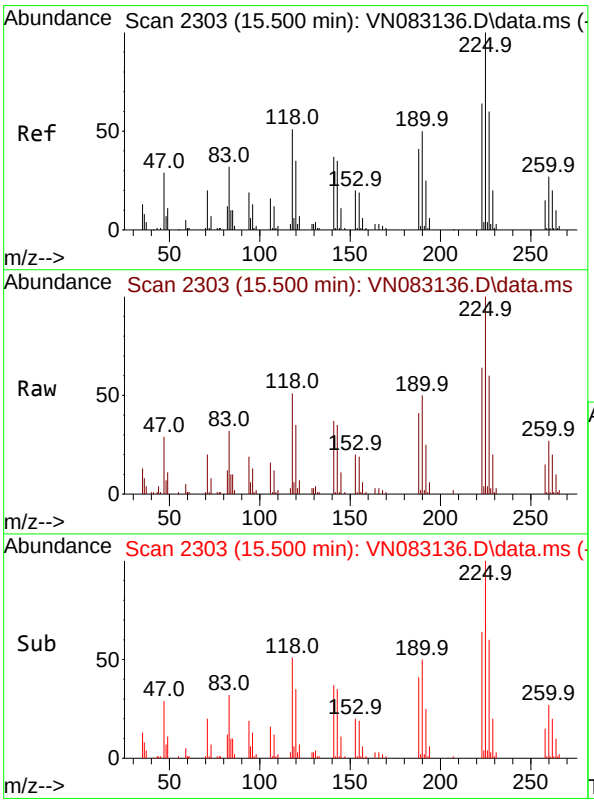
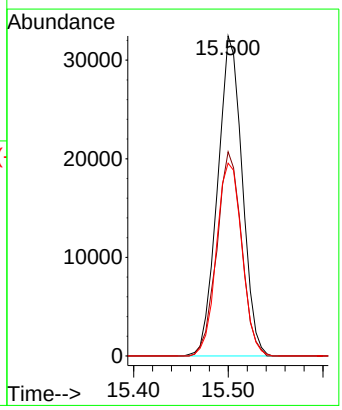
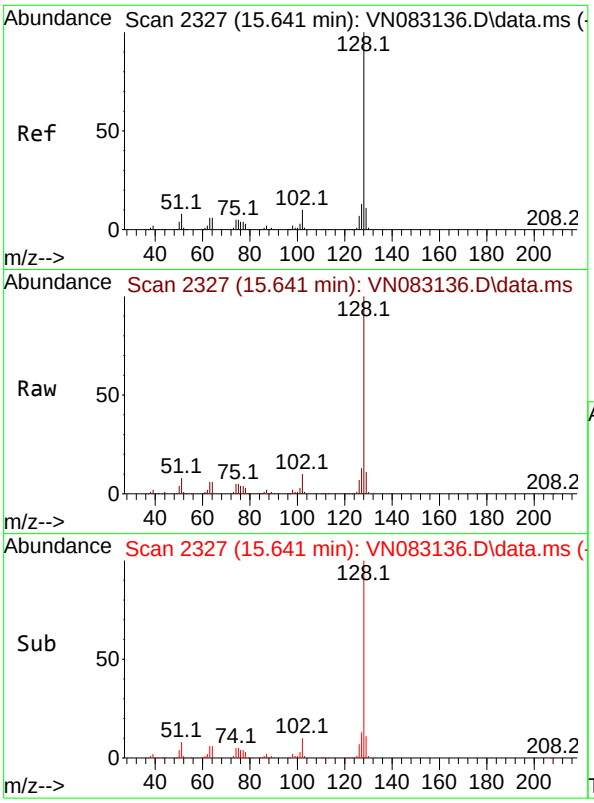


#94
Hexachlorobutadiene
Concen: 48.509 ug/l
RT: 15.500 min Scan# 2303
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion:225 Resp: 58664

Ion	Ratio	Lower	Upper
225	100		
223	63.9	31.9	95.7
227	62.3	32.5	97.5

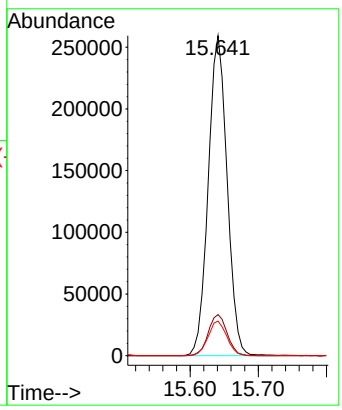




#95
Naphthalene
Concen: 51.844 ug/l
RT: 15.641 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion:128 Resp: 49937

Ion	Ratio	Lower	Upper
128	100		
127	12.9	10.6	16.0
129	10.7	8.6	12.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICCC050

Manual Integrations
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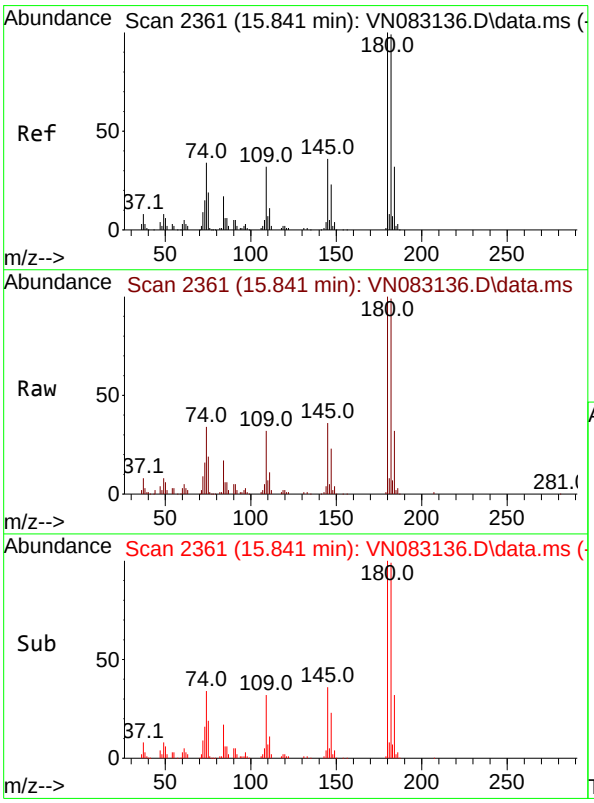
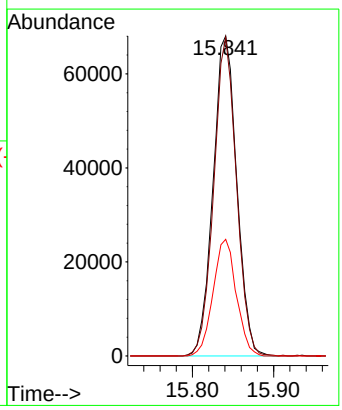


#96
1,2,3-Trichlorobenzene
Concen: 51.335 ug/l
RT: 15.841 min Scan# 2361
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion:180 Resp: 138125

Ion	Ratio	Lower	Upper
180	100		
182	95.2	48.9	146.8
145	35.8	16.8	50.4



Quantitation Report (QT Reviewed)

ICAL Form

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Data File : VN083137.D
Acq On : 07 Aug 2024 11:22
Operator : JC\MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

Quant Time: Aug 08 06:16:37 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 05:50:26 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.224	168	212913	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	362741	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	313255	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.794	152	149244	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.583	65	51159	16.881	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery =	33.760%#		
35) Dibromofluoromethane	8.171	113	38354	16.940	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery =	33.880%#		
50) Toluene-d8	10.565	98	142952	16.926	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery =	33.860%#		
62) 4-Bromofluorobenzene	12.847	95	56566	17.179	ug/l	0.00
Spiked Amount 50.000	Range 64 - 133		Recovery =	34.360%#		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.124	85	48191	19.959	ug/l	95
3) Chloromethane	2.359	50	49777	20.137	ug/l	99
4) Vinyl Chloride	2.512	62	50108	19.866	ug/l	97
5) Bromomethane	2.942	94	31525	20.143	ug/l	89
6) Chloroethane	3.112	64	30331	19.221	ug/l	100
7) Trichlorofluoromethane	3.489	101	85550	20.531	ug/l	99
8) Diethyl Ether	3.959	74	31256	20.158	ug/l	85
9) 1,1,2-Trichlorotrifluo...	4.365	101	46683	20.321	ug/l	99
10) Methyl Iodide	4.589	142	59865	19.810	ug/l	96
11) Tert butyl alcohol	5.530	59	62317	98.946	ug/l	97
12) 1,1-Dichloroethene	4.342	96	45786	19.399	ug/l	89
13) Acrolein	4.183	56	35516	86.524	ug/l	97
14) Allyl chloride	5.018	41	90544	20.301	ug/l	87
15) Acrylonitrile	5.718	53	129316	99.835	ug/l	99
16) Acetone	4.430	43	110676	93.330	ug/l	95
17) Carbon Disulfide	4.712	76	135927	19.683	ug/l	97
18) Methyl Acetate	5.030	43	65871	18.644	ug/l #	91
19) Methyl tert-butyl Ether	5.800	73	172740	20.277	ug/l	97
20) Methylene Chloride	5.271	84	52716	19.316	ug/l	84
21) trans-1,2-Dichloroethene	5.789	96	49121	20.137	ug/l	94
22) Diisopropyl ether	6.671	45	168267	20.070	ug/l #	95
23) Vinyl Acetate	6.600	43	871215m	101.401	ug/l	
24) 1,1-Dichloroethane	6.571	63	93066	20.366	ug/l	97
25) 2-Butanone	7.488	43	180458	99.107	ug/l	93
26) 2,2-Dichloropropane	7.488	77	86767	20.445	ug/l	99
27) cis-1,2-Dichloroethene	7.488	96	58852	19.993	ug/l	92
28) Bromochloromethane	7.812	49	35768	19.153	ug/l	86
29) Tetrahydrofuran	7.841	42	115821	98.399	ug/l #	86
30) Chloroform	7.965	83	94560	19.917	ug/l	98
31) Cyclohexane	8.253	56	85978	19.144	ug/l	96
32) 1,1,1-Trichloroethane	8.165	97	90748	20.194	ug/l	91
36) 1,1-Dichloropropene	8.377	75	68425	19.978	ug/l	98
37) Ethyl Acetate	7.565	43	72806	18.985	ug/l #	93
38) Carbon Tetrachloride	8.359	117	79487	20.605	ug/l	98
39) Methylcyclohexane	9.600	83	85173	20.246	ug/l	95
40) Benzene	8.606	78	207581	20.345	ug/l	99

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN080724\
Data File : VN083137.D
Acq On : 07 Aug 2024 11:22
Operator : JC\MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 08 06:16:37 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 05:50:26 2024
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	7.777	41	43539	19.968	ug/l		97
42) 1,2-Dichloroethane	8.671	62	74567	20.062	ug/l		97
43) Isopropyl Acetate	8.688	43	138715	19.459	ug/l	#	95
44) Trichloroethene	9.353	130	49712	20.469	ug/l		98
45) 1,2-Dichloropropane	9.624	63	49878	20.594	ug/l		100
46) Dibromomethane	9.712	93	35560	20.512	ug/l		98
47) Bromodichloromethane	9.888	83	78421	20.147	ug/l		99
48) Methyl methacrylate	9.682	41	61044	19.254	ug/l		92
49) 1,4-Dioxane	9.694	88	23083	403.558	ug/l		98
51) 4-Methyl-2-Pentanone	10.447	43	374332	103.224	ug/l		93
52) Toluene	10.629	92	131247	20.358	ug/l		99
53) t-1,3-Dichloropropene	10.835	75	83139	20.793	ug/l		97
54) cis-1,3-Dichloropropene	10.312	75	86551	20.351	ug/l		92
55) 1,1,2-Trichloroethane	11.018	97	48081	20.811	ug/l		94
56) Ethyl methacrylate	10.877	69	89503	20.550	ug/l		88
57) 1,3-Dichloropropane	11.165	76	84272	20.464	ug/l		99
58) 2-Chloroethyl Vinyl ether	10.159	63	175345	95.242	ug/l		96
59) 2-Hexanone	11.194	43	286222	102.020	ug/l		92
60) Dibromochloromethane	11.359	129	57571	20.610	ug/l		98
61) 1,2-Dibromoethane	11.471	107	48753	20.088	ug/l		98
64) Tetrachloroethene	11.106	164	42332	20.405	ug/l		94
65) Chlorobenzene	11.894	112	137984	19.933	ug/l		100
66) 1,1,1,2-Tetrachloroethane	11.959	131	48247	19.762	ug/l		99
67) Ethyl Benzene	11.965	91	258237	20.335	ug/l		98
68) m/p-Xylenes	12.071	106	193256	40.625	ug/l		99
69) o-Xylene	12.400	106	95153	20.281	ug/l		99
70) Styrene	12.412	104	161342	20.475	ug/l		98
71) Bromoform	12.576	173	38761	20.957	ug/l	#	100
73) Isopropylbenzene	12.694	105	246711	19.764	ug/l		100
74) N-amyl acetate	12.494	43	116100	19.014	ug/l		94
75) 1,1,2,2-Tetrachloroethane	12.935	83	69449	19.670	ug/l		99
76) 1,2,3-Trichloropropane	12.994	75	65295m	19.901	ug/l		
77) Bromobenzene	12.982	156	55327	19.952	ug/l		94
78) n-propylbenzene	13.035	91	283745	19.740	ug/l		99
79) 2-Chlorotoluene	13.123	91	180682	19.827	ug/l		97
80) 1,3,5-Trimethylbenzene	13.170	105	208367	19.938	ug/l		98
81) trans-1,4-Dichloro-2-b...	12.741	75	31260	20.759	ug/l	#	83
82) 4-Chlorotoluene	13.223	91	179932	19.684	ug/l		98
83) tert-Butylbenzene	13.441	119	184965	19.985	ug/l		99
84) 1,2,4-Trimethylbenzene	13.482	105	210474	19.984	ug/l		100
85) sec-Butylbenzene	13.618	105	250829	19.862	ug/l		100
86) p-Isopropyltoluene	13.729	119	208404	19.986	ug/l		99
87) 1,3-Dichlorobenzene	13.735	146	103819	19.897	ug/l		98
88) 1,4-Dichlorobenzene	13.812	146	103132	19.605	ug/l		97
89) n-Butylbenzene	14.053	91	180483	19.975	ug/l		97
90) Hexachloroethane	14.335	117	40982	20.343	ug/l		94
91) 1,2-Dichlorobenzene	14.106	146	99334	19.673	ug/l		98
92) 1,2-Dibromo-3-Chloropr...	14.723	75	16552	19.320	ug/l		98
93) 1,2,4-Trichlorobenzene	15.394	180	56299	19.902	ug/l		98
94) Hexachlorobutadiene	15.500	225	23725	18.859	ug/l		99
95) Naphthalene	15.641	128	200875	20.047	ug/l		99
96) 1,2,3-Trichlorobenzene	15.841	180	54944	19.630	ug/l		96

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN080724\
Data File : VN083137.D
Acq On : 07 Aug 2024 11:22
Operator : JC\MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

Quant Time: Aug 08 06:16:37 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 05:50:26 2024
Response via : Initial Calibration

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

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

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN080724\
Data File : VN083137.D
Acq On : 07 Aug 2024 11:22
Operator : JC\MD
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Quant Time: Aug 08 06:16:37 2024
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Quant Title : SW846 8260
QLast Update : Thu Aug 08 05:50:26 2024
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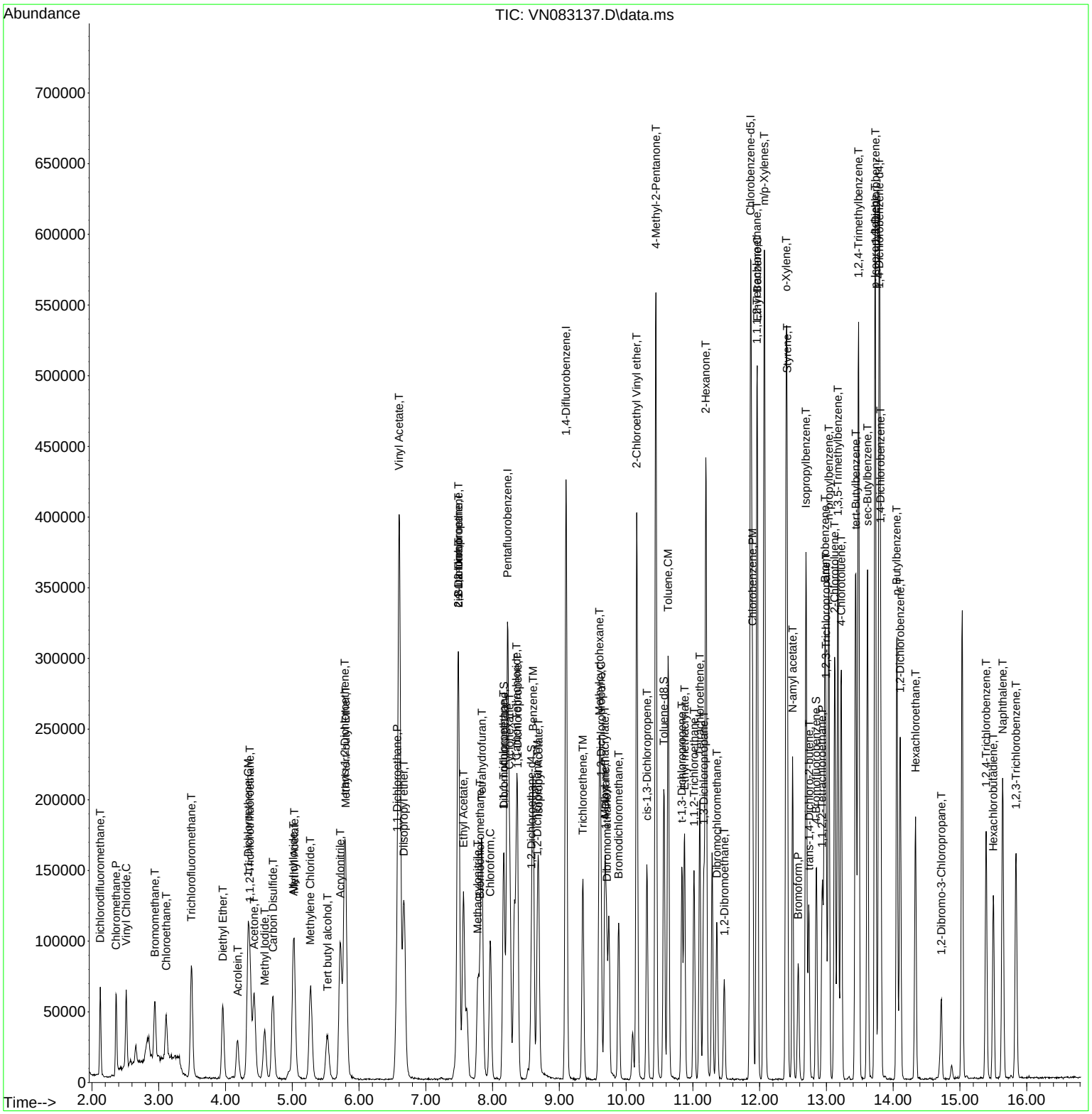
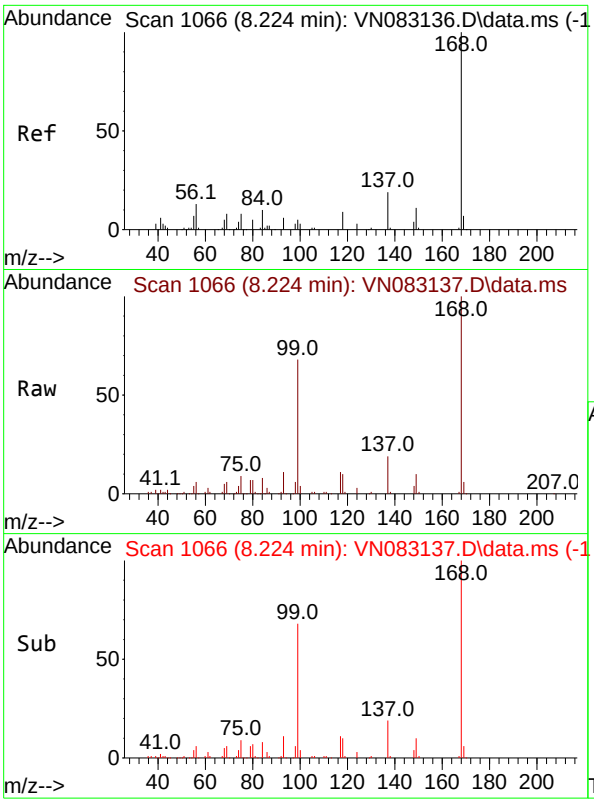
Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

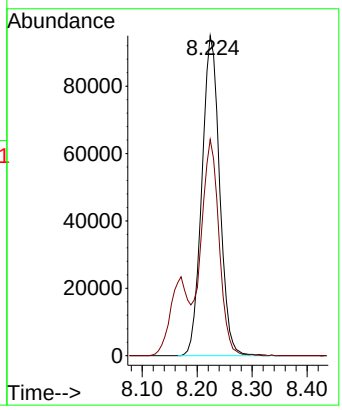




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion:168 Resp: 21291

Ion	Ratio	Lower	Upper
168	100		
99	67.5	48.2	72.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

Reviewed By :John Carlone 08/08/2024
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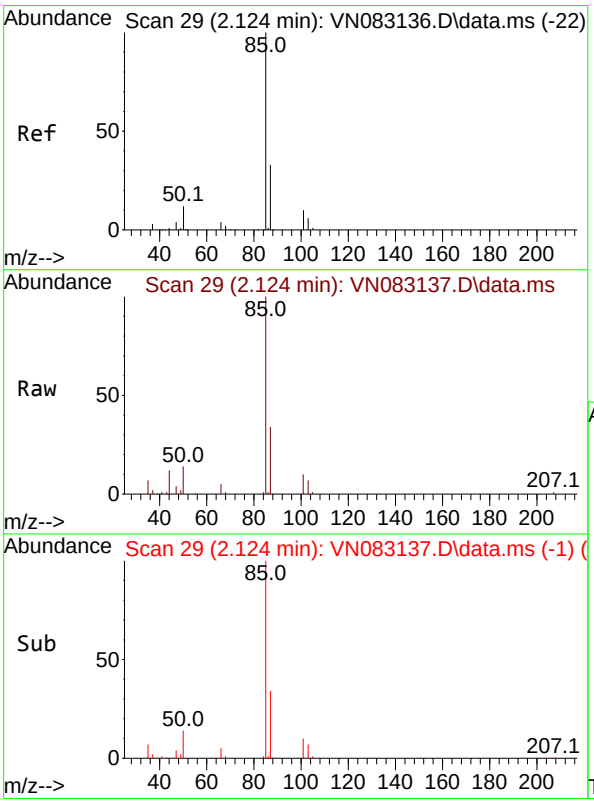
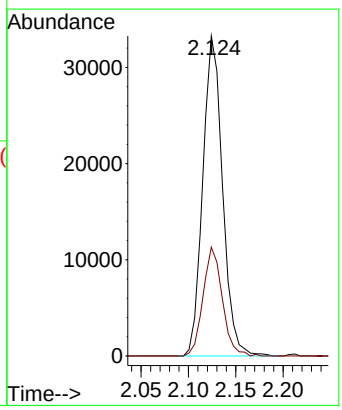
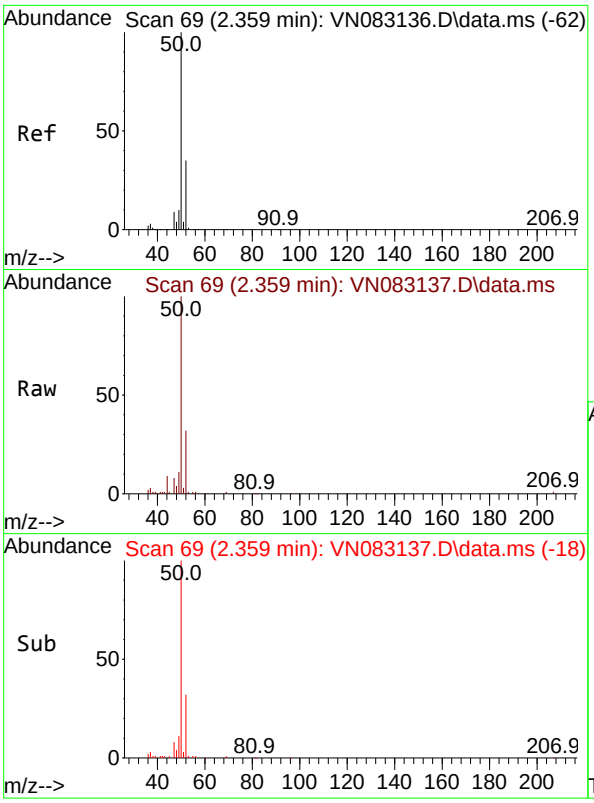


#2
Dichlorodifluoromethane
Concen: 19.959 ug/l
RT: 2.124 min Scan# 29
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 85 Resp: 48191

Ion	Ratio	Lower	Upper
85	100		
87	34.0	15.7	47.0

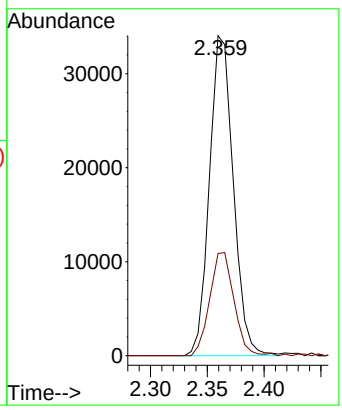




#3
Chloromethane
Concen: 20.137 ug/l
RT: 2.359 min Scan# 6
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 50 Resp: 4977

Ion	Ratio	Lower	Upper
50	100		
52	31.9	25.0	37.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

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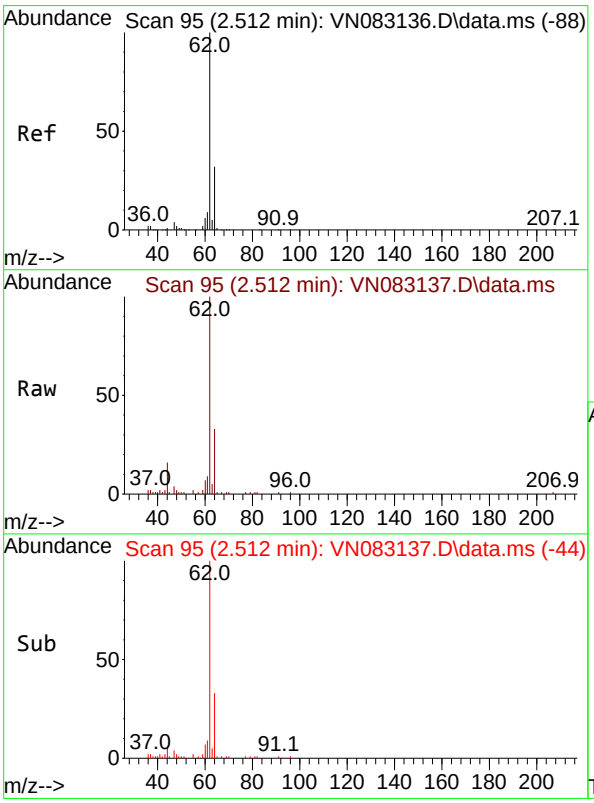
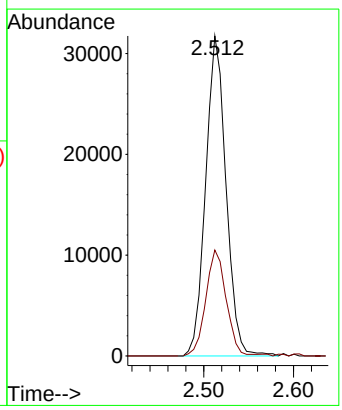
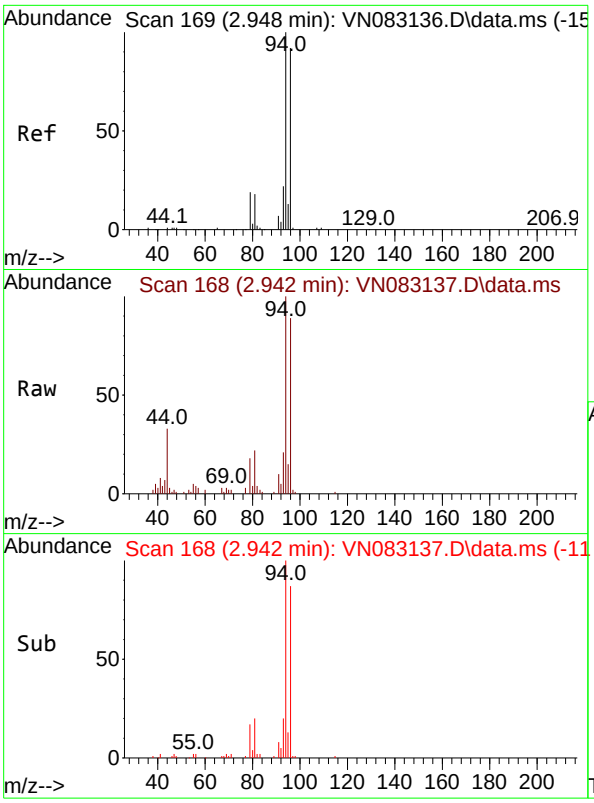


#4
Vinyl Chloride
Concen: 19.866 ug/l
RT: 2.512 min Scan# 95
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 62 Resp: 50108

Ion	Ratio	Lower	Upper
62	100		
64	33.1	25.0	37.6





#5
Bromomethane
Concen: 20.143 ug/l
RT: 2.942 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 94 Resp: 3152

Ion	Ratio	Lower	Upper
94	100		
96	87.1	78.0	117.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

Reviewed By :John Carlone 08/08/2024
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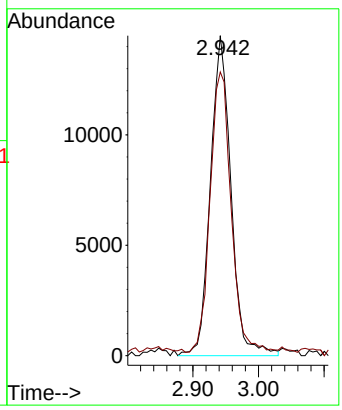
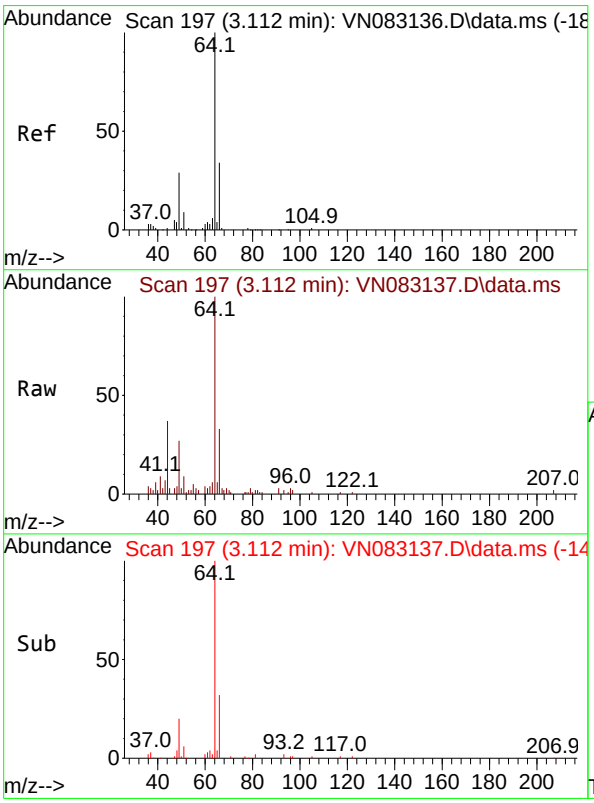
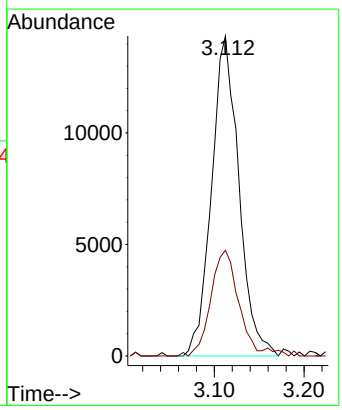


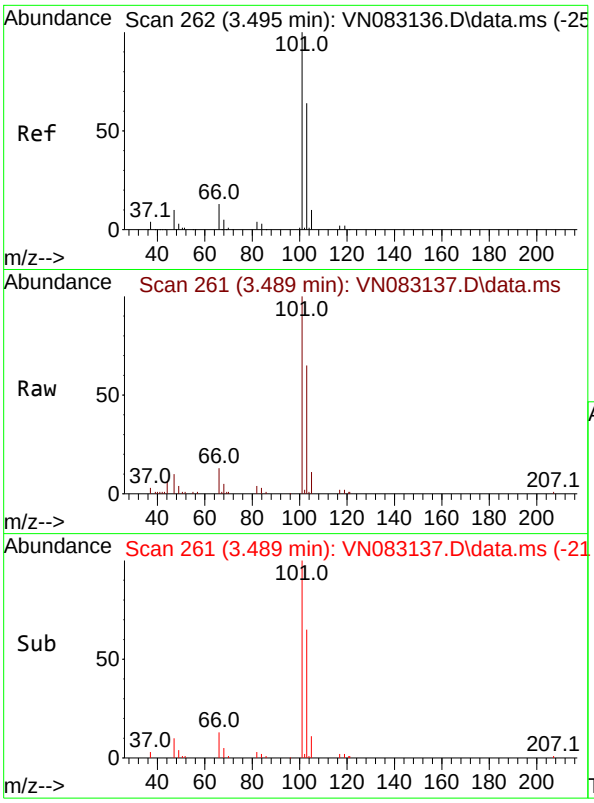


#6
Chloroethane
Concen: 19.221 ug/l
RT: 3.112 min Scan# 197
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 64 Resp: 30331

Ion	Ratio	Lower	Upper
64	100		
66	33.0	26.6	40.0





#7
Trichlorofluoromethane
Concen: 20.531 ug/l
RT: 3.489 min Scan# 2
Delta R.T. -0.006 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion:101 Resp: 8555

Ion	Ratio	Lower	Upper
101	100		
103	65.0	52.7	79.1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

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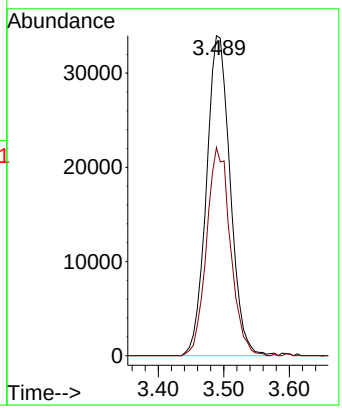
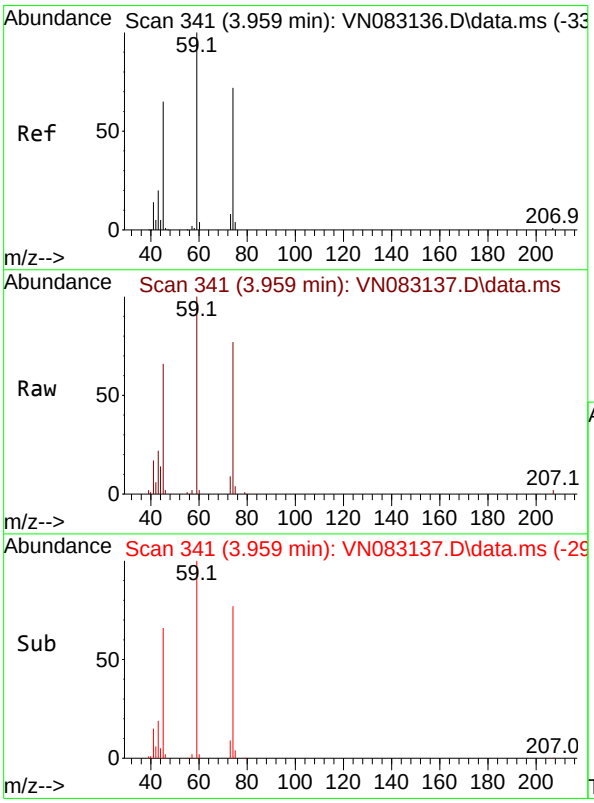
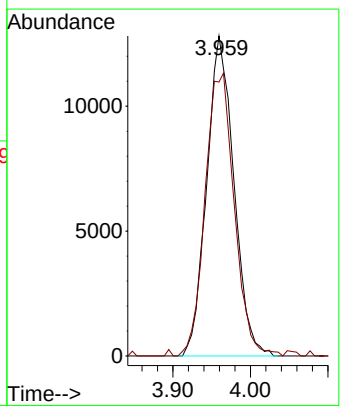


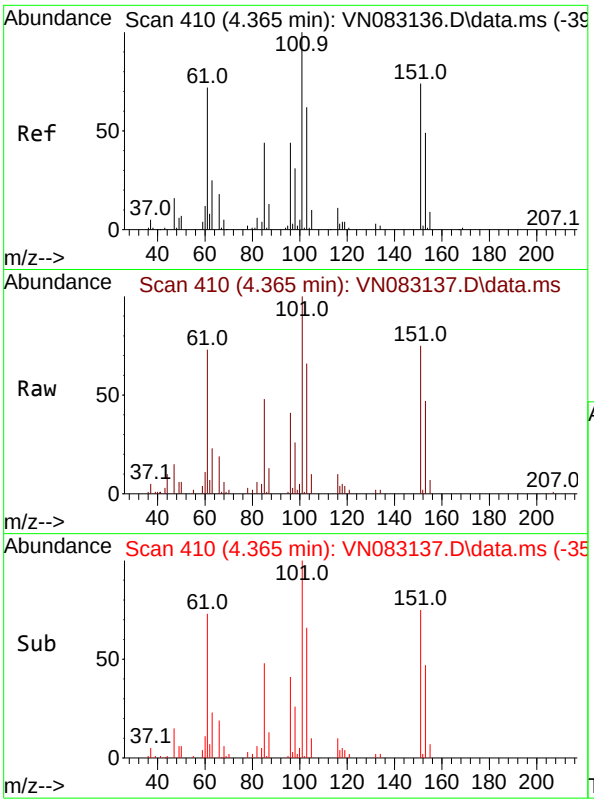


#8
Diethyl Ether
Concen: 20.158 ug/l
RT: 3.959 min Scan# 341
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 74 Resp: 31256

Ion	Ratio	Lower	Upper
74	100		
45	94.8	55.5	166.3

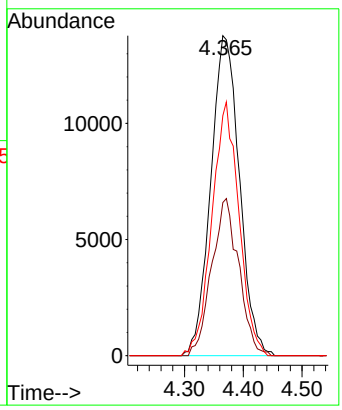




#9
1,1,2-Trichlorotrifluoroethane
Concen: 20.321 ug/l
RT: 4.365 min Scan# 41
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion:101 Resp: 4668

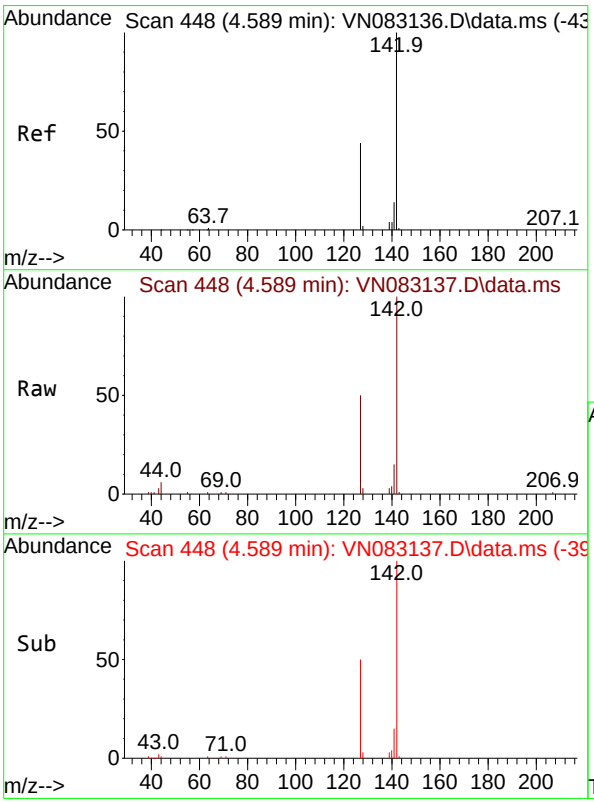
Ion	Ratio	Lower	Upper
101	100		
85	46.5	38.3	57.5
151	74.6	59.3	88.9



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

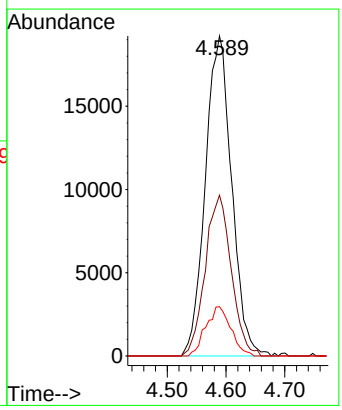
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

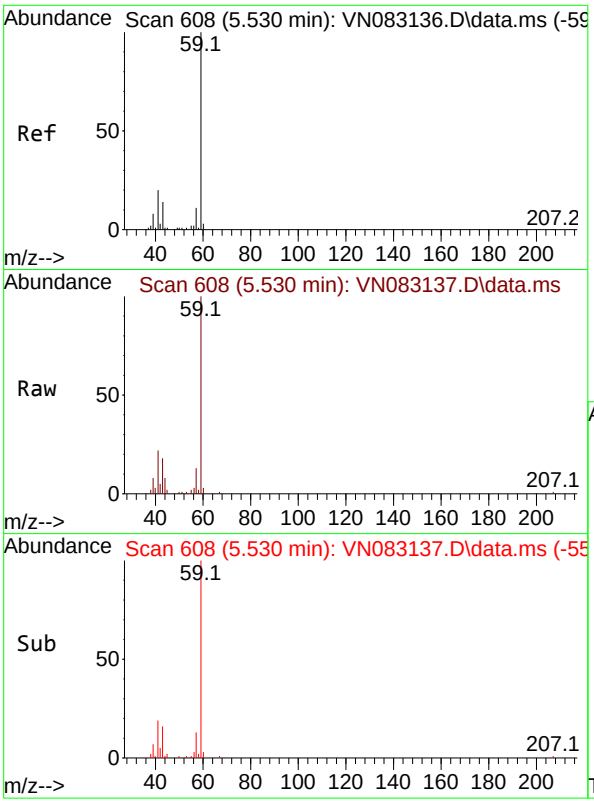


#10
Methyl Iodide
Concen: 19.810 ug/l
RT: 4.589 min Scan# 448
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion:142 Resp: 59865

Ion	Ratio	Lower	Upper
142	100		
127	50.3	37.5	56.3
141	15.4	13.1	19.7

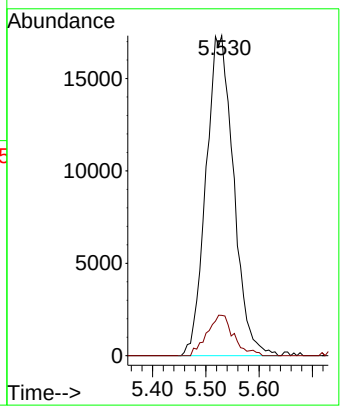




#11
Tert butyl alcohol
Concen: 98.946 ug/l
RT: 5.530 min Scan# 6
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 59 Resp: 6231

Ion	Ratio	Lower	Upper
59	100		
57	12.2	8.9	13.3



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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Reviewed By :John Carlone 08/08/2024
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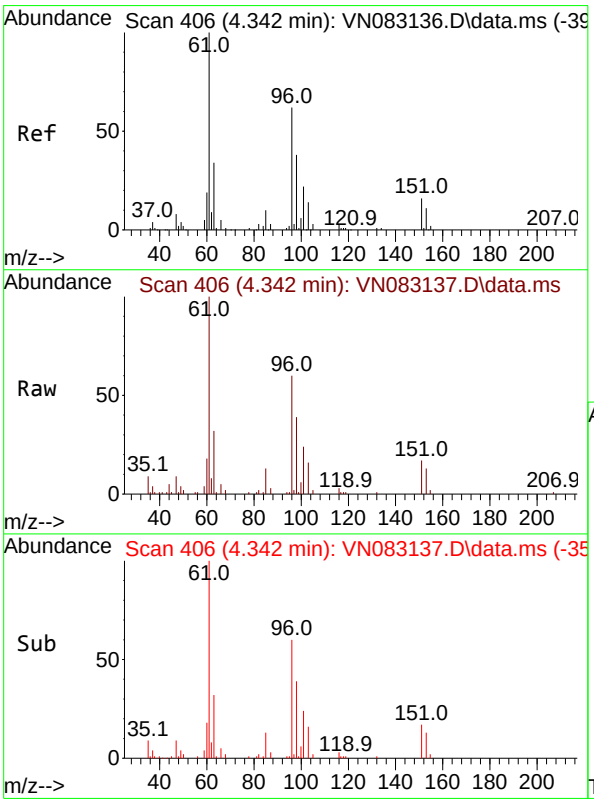
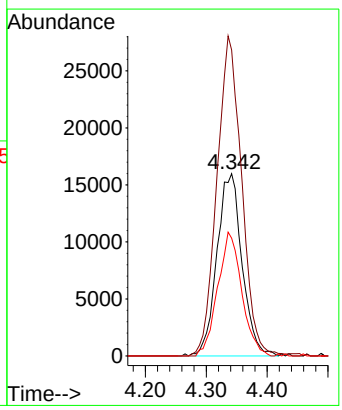
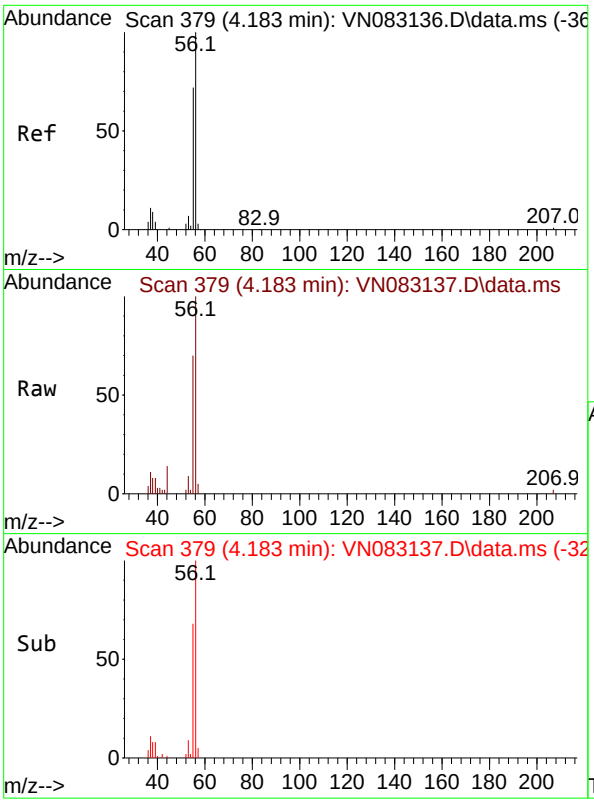


#12
1,1-Dichloroethene
Concen: 19.399 ug/l
RT: 4.342 min Scan# 406
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 96 Resp: 45786

Ion	Ratio	Lower	Upper
96	100		
61	167.8	149.7	224.5
98	64.7	50.1	75.1

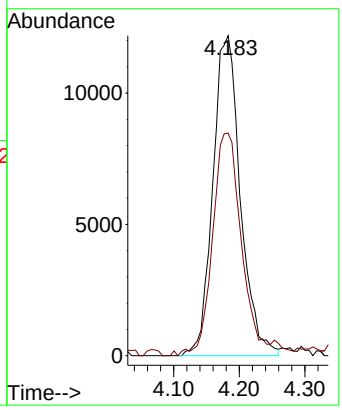




#13
Acrolein
Concen: 86.524 ug/l
RT: 4.183 min Scan# 3
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 56 Resp: 3551

Ion	Ratio	Lower	Upper
56	100		
55	72.6	56.4	84.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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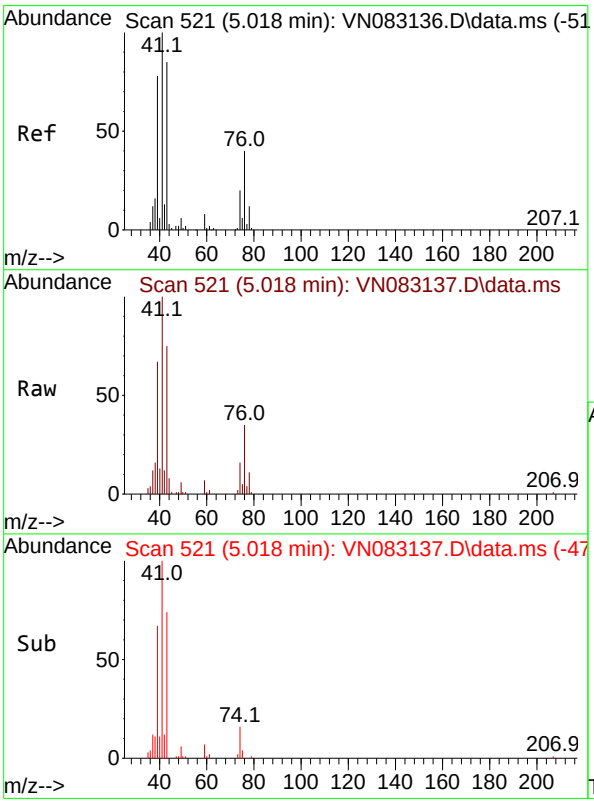
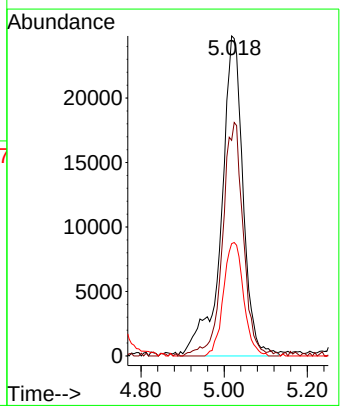
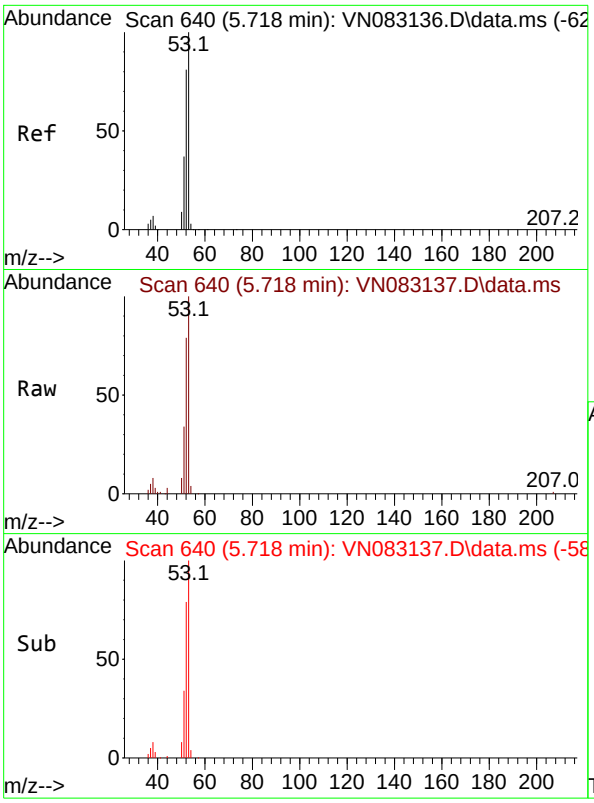


#14
Allyl chloride
Concen: 20.301 ug/l
RT: 5.018 min Scan# 521
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 41 Resp: 90544

Ion	Ratio	Lower	Upper
41	100		
39	69.0	67.8	101.6
76	32.7	25.8	38.8

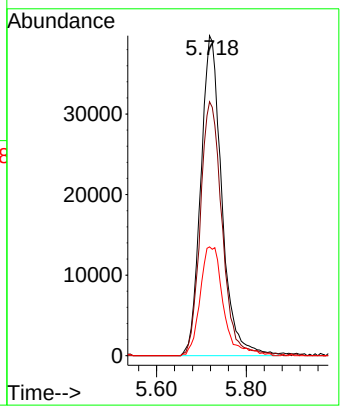




#15
Acrylonitrile
Concen: 99.835 ug/l
RT: 5.718 min Scan# 64
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 53 Resp: 12931

Ion	Ratio	Lower	Upper
53	100		
52	82.1	66.6	100.0
51	37.7	30.1	45.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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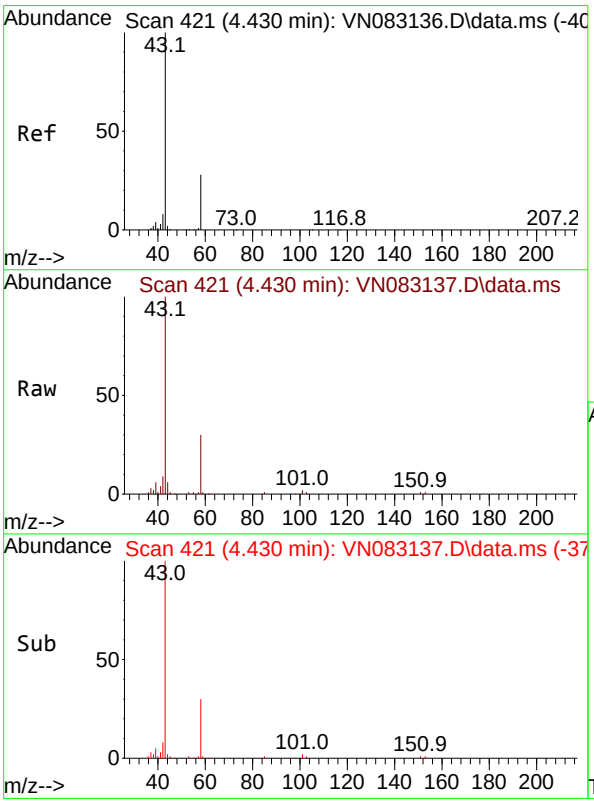
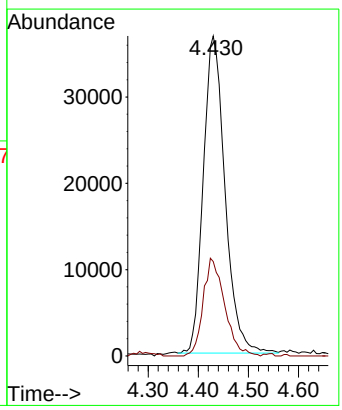
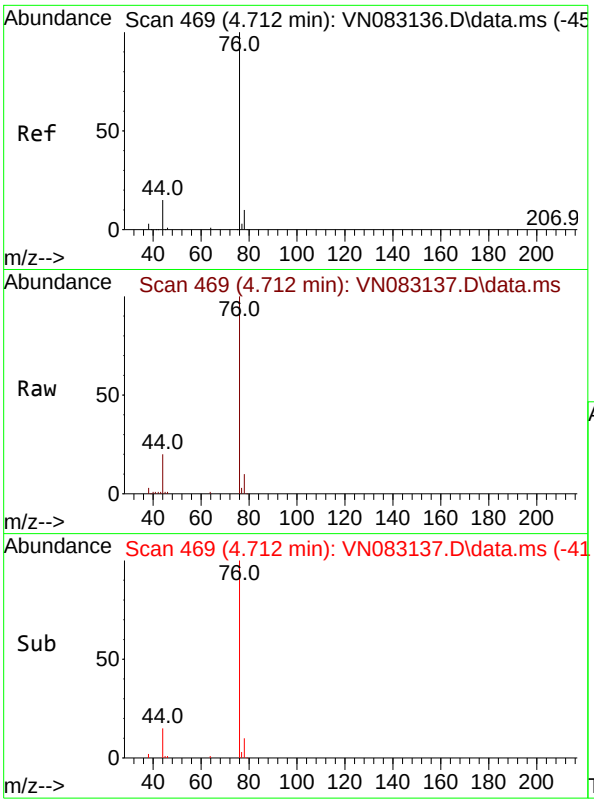


#16
Acetone
Concen: 93.330 ug/l
RT: 4.430 min Scan# 421
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 43 Resp: 110676

Ion	Ratio	Lower	Upper
43	100		
58	29.8	21.8	32.6

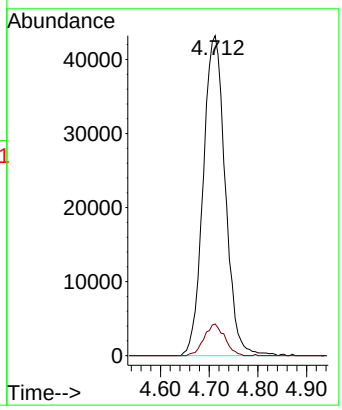




#17
Carbon Disulfide
Concen: 19.683 ug/l
RT: 4.712 min Scan# 4
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 76 Resp: 13592

Ion	Ratio	Lower	Upper
76	100		
78	9.9	7.2	10.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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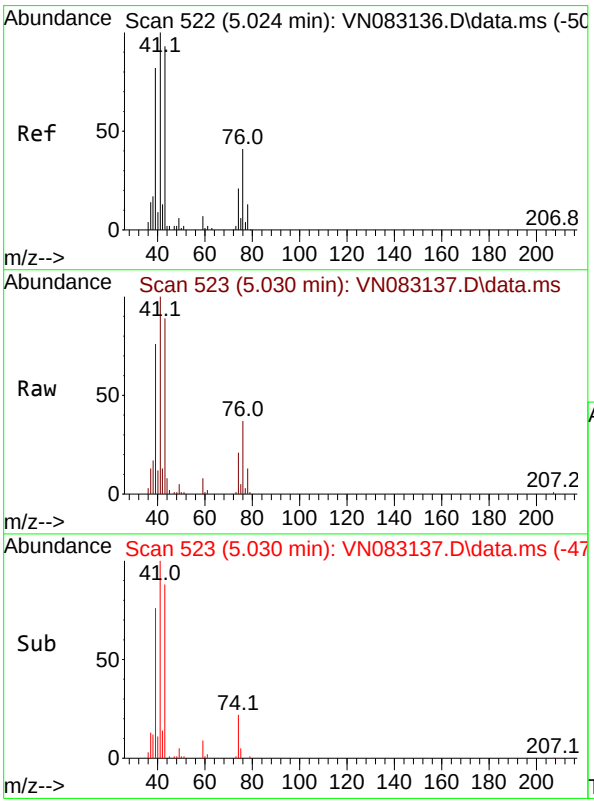
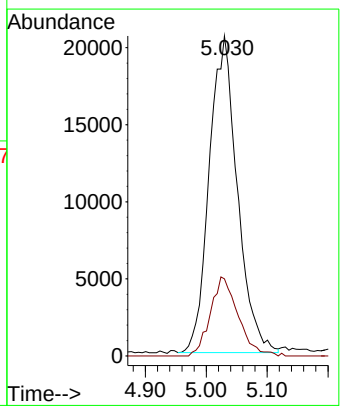
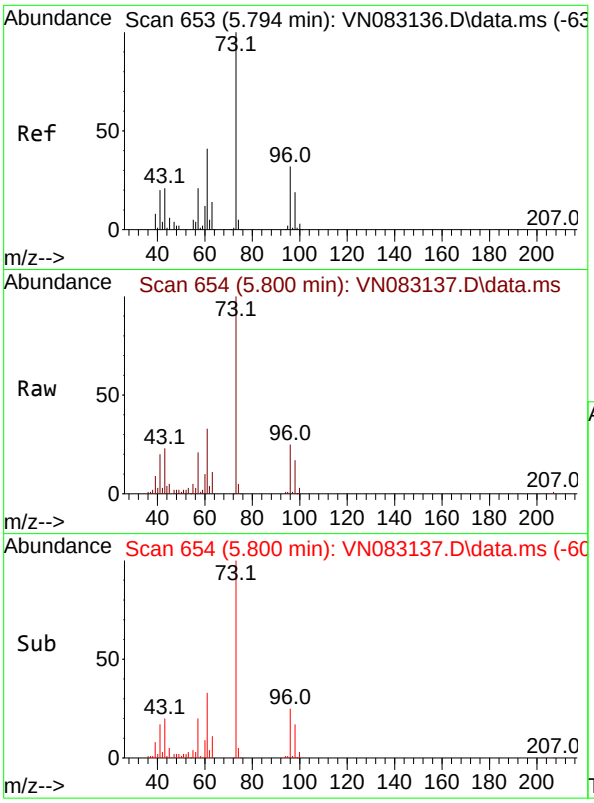


#18
Methyl Acetate
Concen: 18.644 ug/l
RT: 5.030 min Scan# 523
Delta R.T. 0.006 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 43 Resp: 65871

Ion	Ratio	Lower	Upper
43	100		
74	24.5	16.3	24.5#

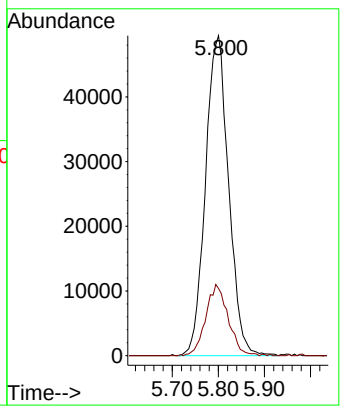




#19
Methyl tert-butyl Ether
Concen: 20.277 ug/l
RT: 5.800 min Scan# 6
Delta R.T. 0.006 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 73 Resp: 17274

Ion	Ratio	Lower	Upper
73	100		
57	21.0	17.9	26.9



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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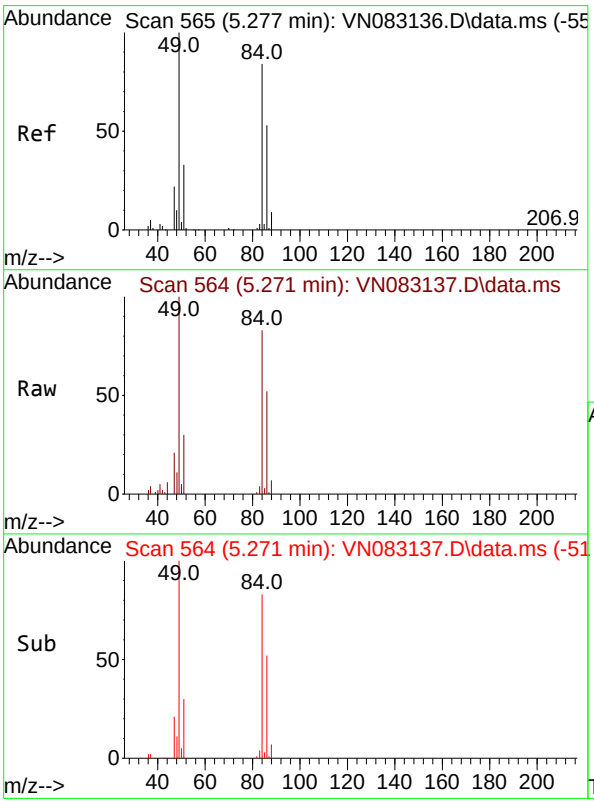
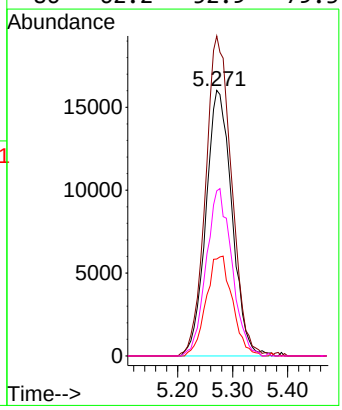
Supervised By :Mahesh Dadoda 08/09/2024

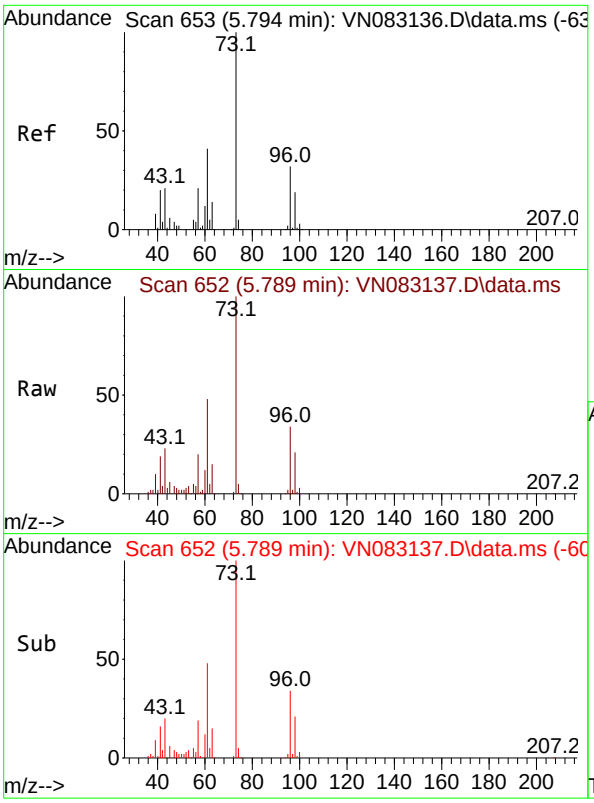


#20
Methylene Chloride
Concen: 19.316 ug/l
RT: 5.271 min Scan# 564
Delta R.T. -0.006 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 84 Resp: 52716

Ion	Ratio	Lower	Upper
84	100		
49	120.5	119.6	179.4
51	36.5	34.8	52.2
86	62.2	52.9	79.3

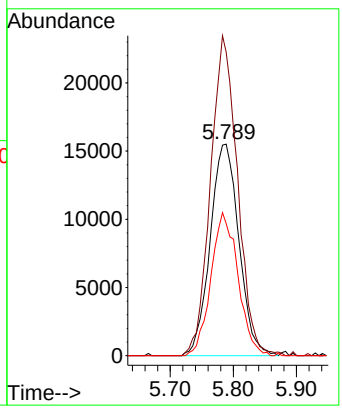




#21
trans-1,2-Dichloroethene
Concen: 20.137 ug/l
RT: 5.789 min Scan# 6
Delta R.T. -0.006 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 96 Resp: 4912

Ion	Ratio	Lower	Upper
96	100		
61	143.3	123.4	185.2
98	62.4	49.3	73.9



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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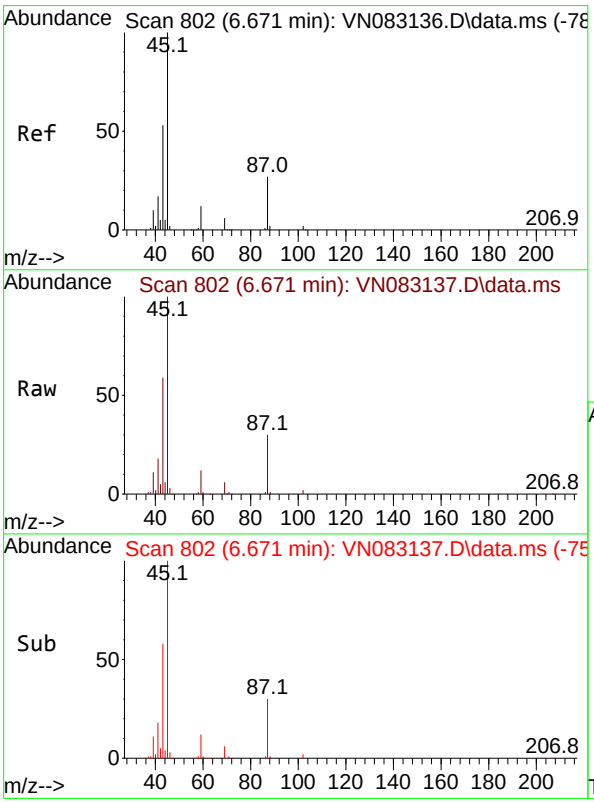
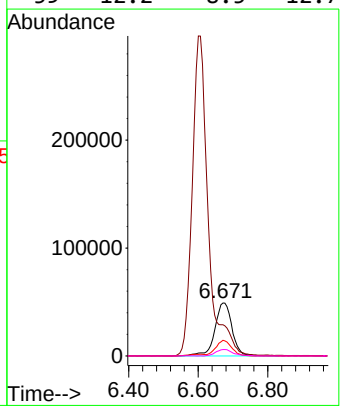
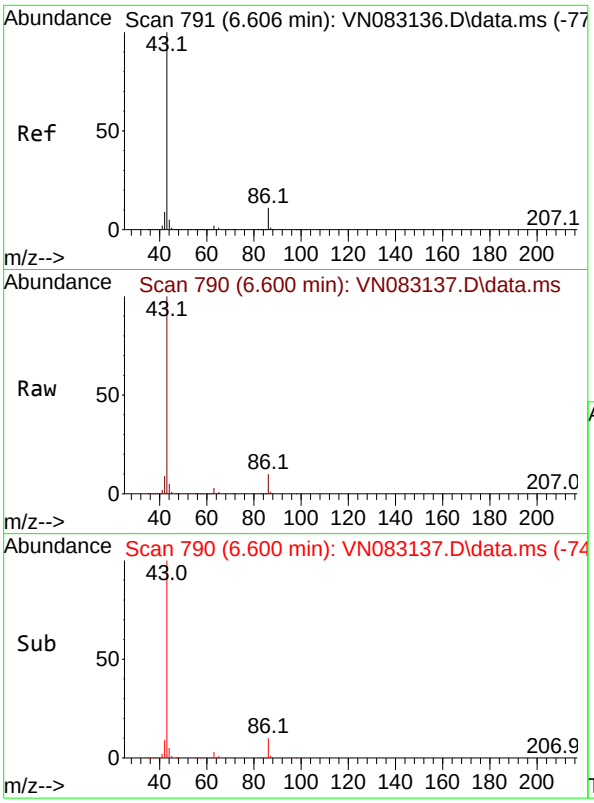


#22
Diisopropyl ether
Concen: 20.070 ug/l
RT: 6.671 min Scan# 802
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 45 Resp: 168267

Ion	Ratio	Lower	Upper
45	100		
43	57.6	44.0	66.0
87	29.6	19.7	29.5#
59	12.2	8.5	12.7





#23
Vinyl Acetate
Concen: 101.401 ug/l m
RT: 6.600 min Scan# 7
Delta R.T. -0.006 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 43 Resp: 87121

Ion	Ratio	Lower	Upper
43	100		
86	10.4	7.3	10.9

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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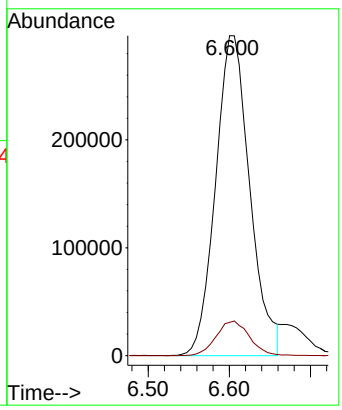
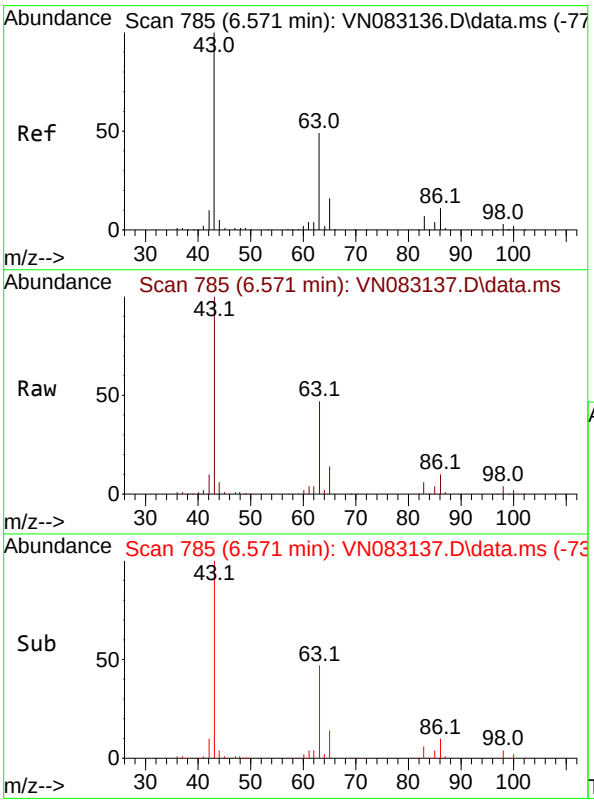
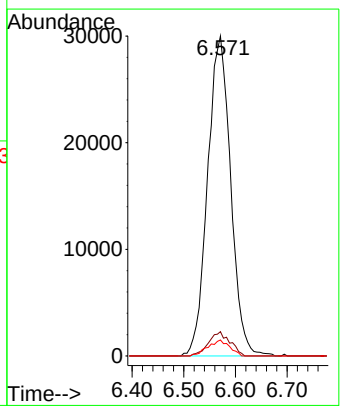


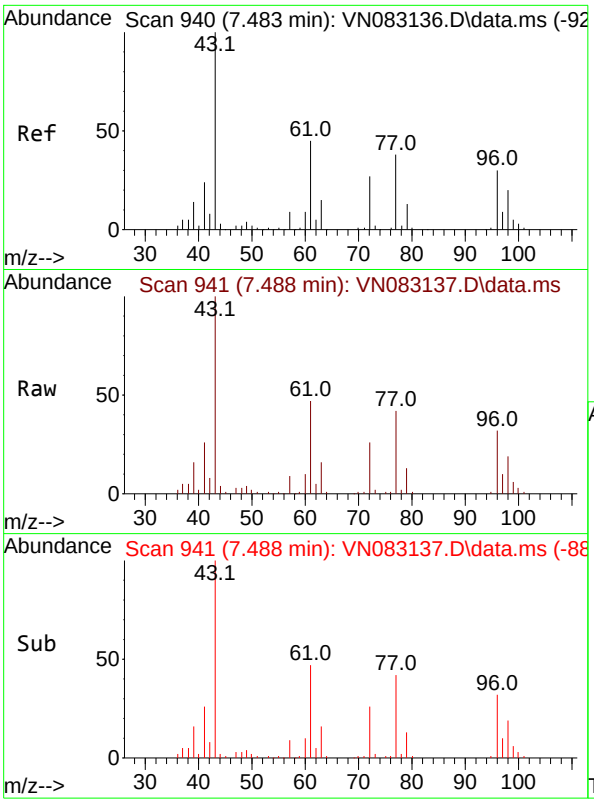


#24
1,1-Dichloroethane
Concen: 20.366 ug/l
RT: 6.571 min Scan# 785
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 63 Resp: 93066

Ion	Ratio	Lower	Upper
63	100		
98	7.6	3.3	9.9
100	5.0	2.0	6.0





#25
2-Butanone
Concen: 99.107 ug/l
RT: 7.488 min Scan# 94
Delta R.T. 0.006 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 43 Resp: 18045

Ion	Ratio	Lower	Upper
43	100		
72	25.9	18.2	27.2

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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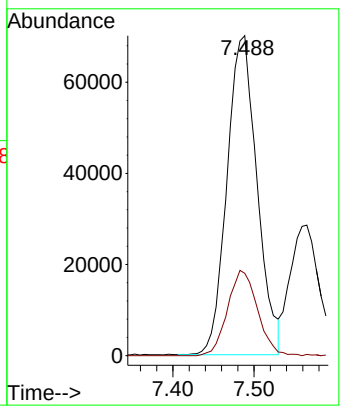
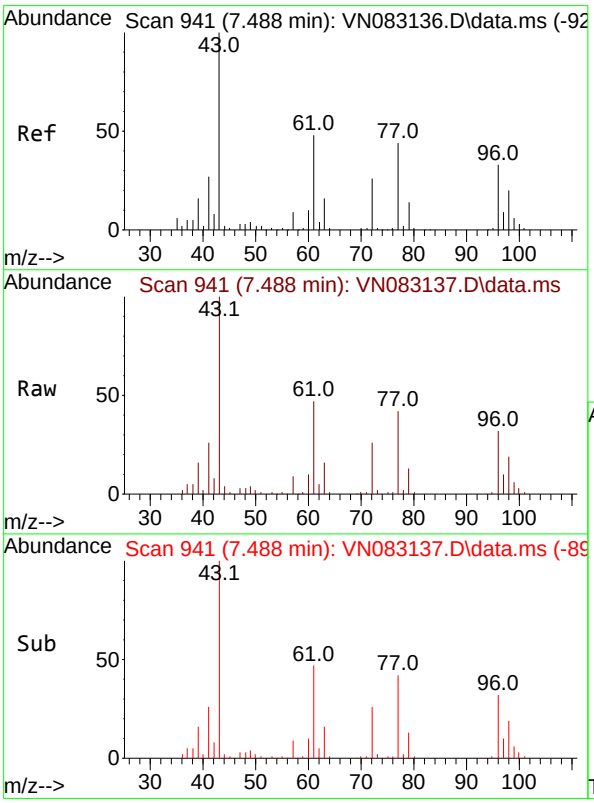
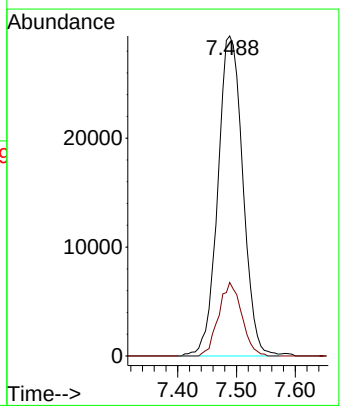


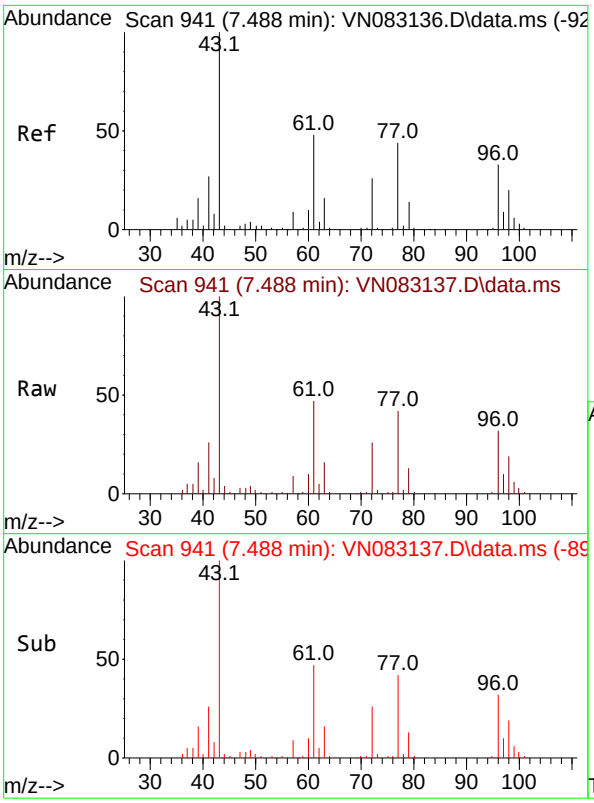


#26
2,2-Dichloropropane
Concen: 20.445 ug/l
RT: 7.488 min Scan# 941
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 77 Resp: 86767

Ion	Ratio	Lower	Upper
77	100		
97	21.3	10.3	30.9





#27
cis-1,2-Dichloroethene
Concen: 19.993 ug/l
RT: 7.488 min Scan# 94
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 96 Resp: 5885

Ion	Ratio	Lower	Upper
96	100		
61	149.6	0.0	329.6
98	63.7	0.0	128.6

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations
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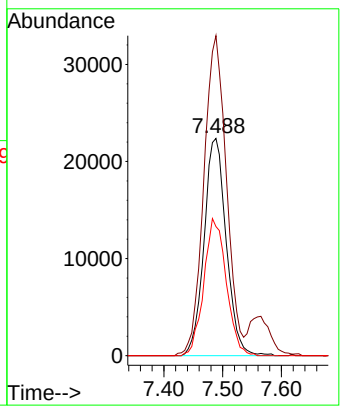
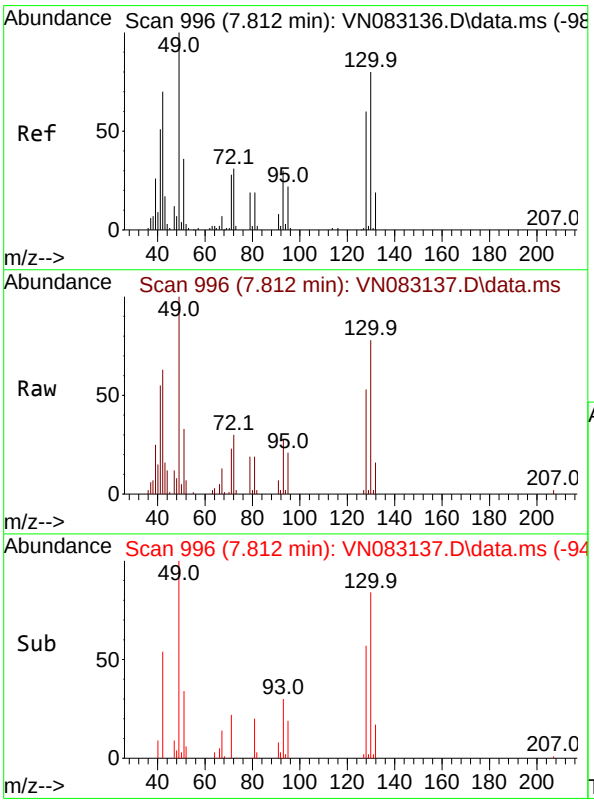
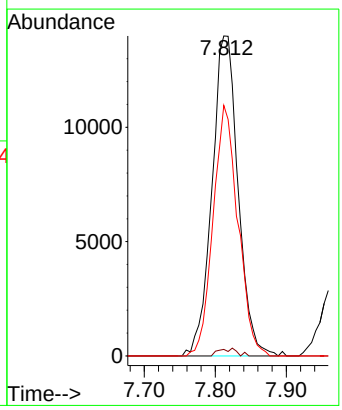


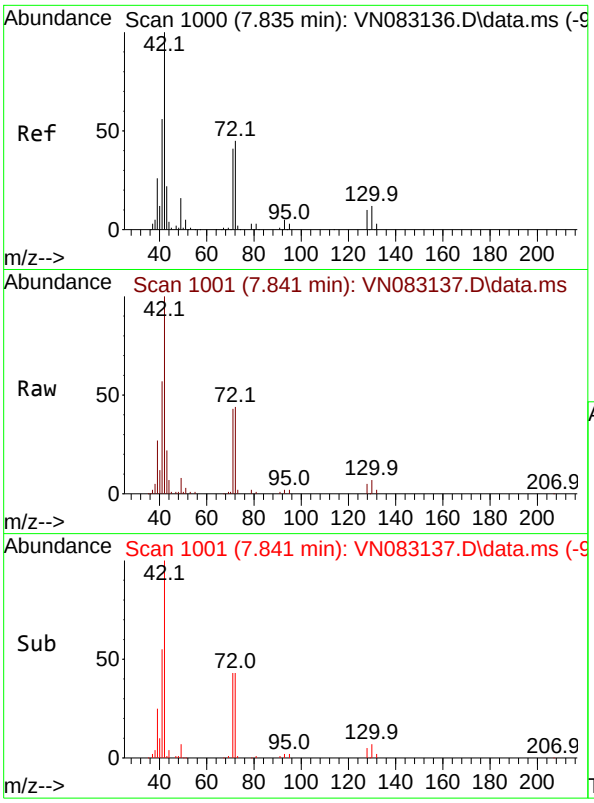


#28
Bromochloromethane
Concen: 19.153 ug/l
RT: 7.812 min Scan# 996
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 49 Resp: 35768

Ion	Ratio	Lower	Upper
49	100		
129	1.6	0.0	3.8
130	74.4	50.5	75.7

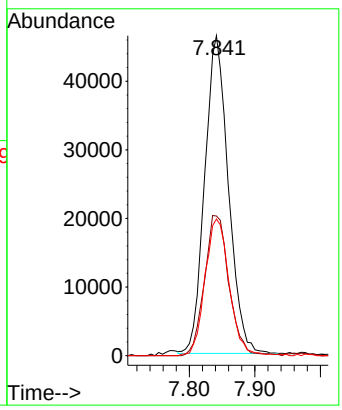




#29
Tetrahydrofuran
Concen: 98.399 ug/l
RT: 7.841 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 42 Resp: 11582

Ion	Ratio	Lower	Upper
42	100		
72	45.8	30.0	45.0#
71	44.0	28.3	42.5#



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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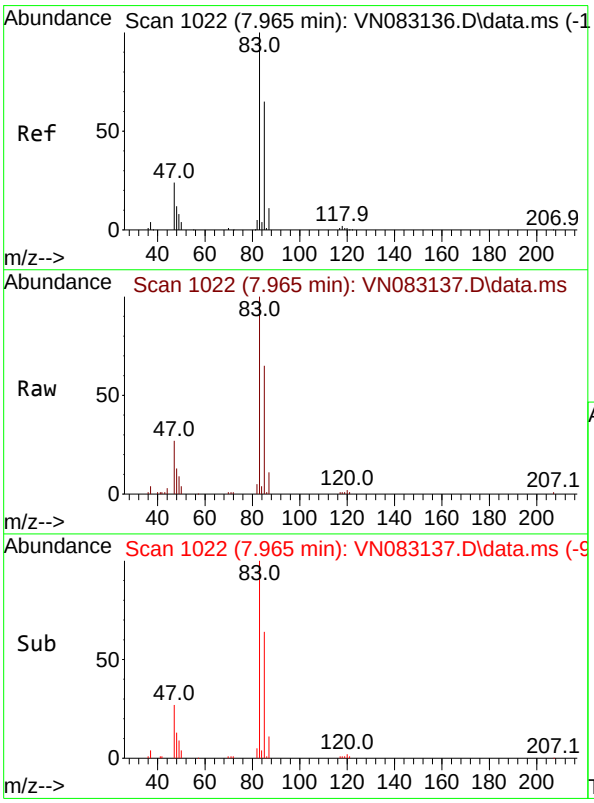
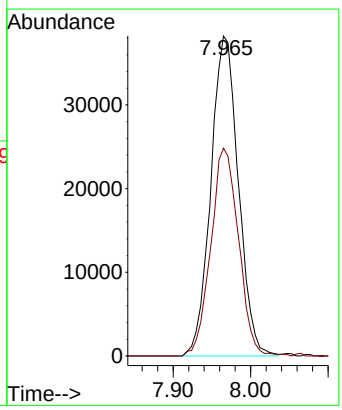
Supervised By :Mahesh Dadoda 08/09/2024

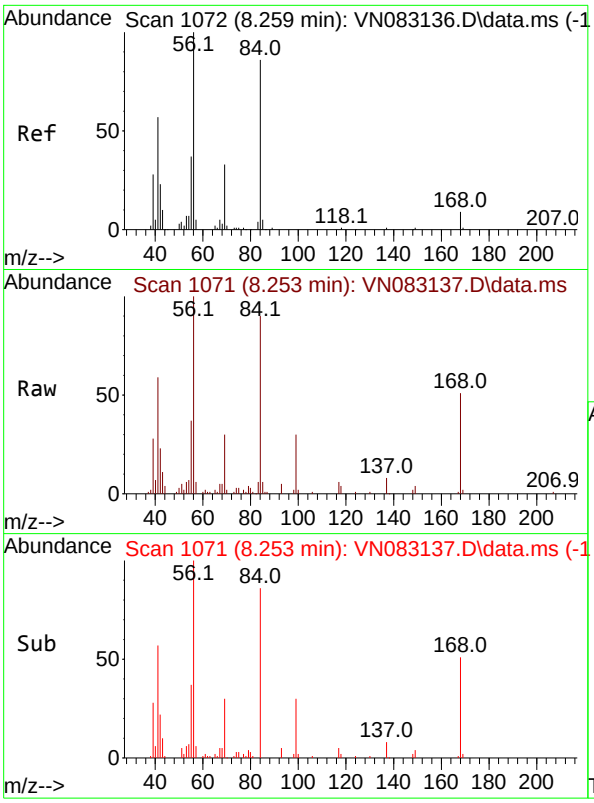


#30
Chloroform
Concen: 19.917 ug/l
RT: 7.965 min Scan# 1022
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 83 Resp: 94560

Ion	Ratio	Lower	Upper
83	100		
85	64.9	50.9	76.3





#31
Cyclohexane
Concen: 19.144 ug/l
RT: 8.253 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 56 Resp: 8597

Ion	Ratio	Lower	Upper
56	100		
69	30.4	24.5	36.7
84	87.9	66.0	99.0

Instrument :
MSVOA_N
ClientSampleId :
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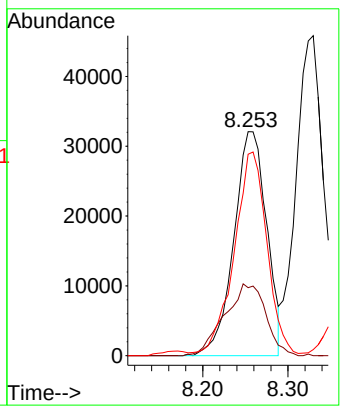
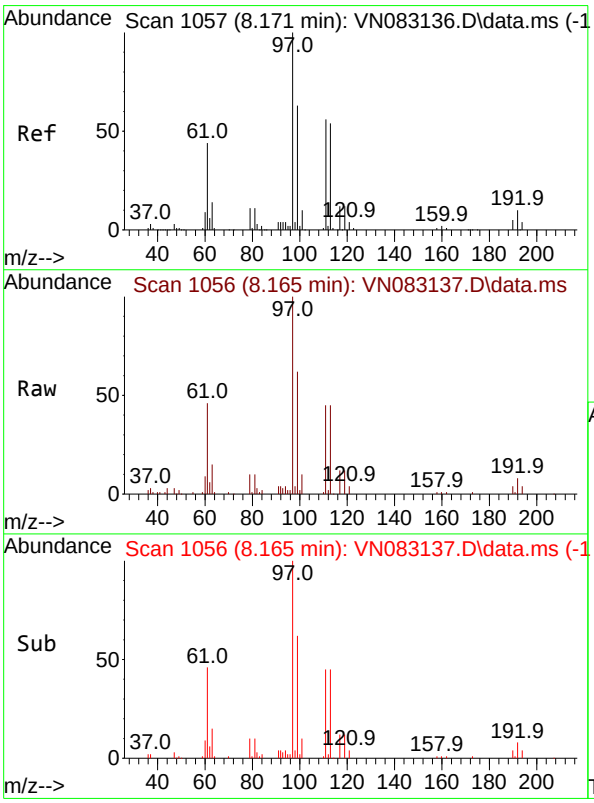
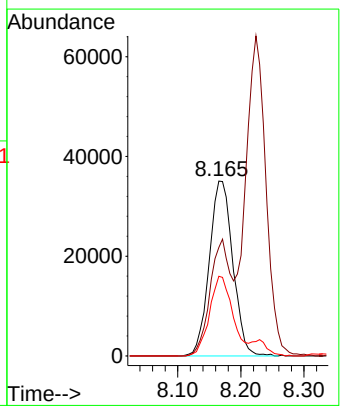


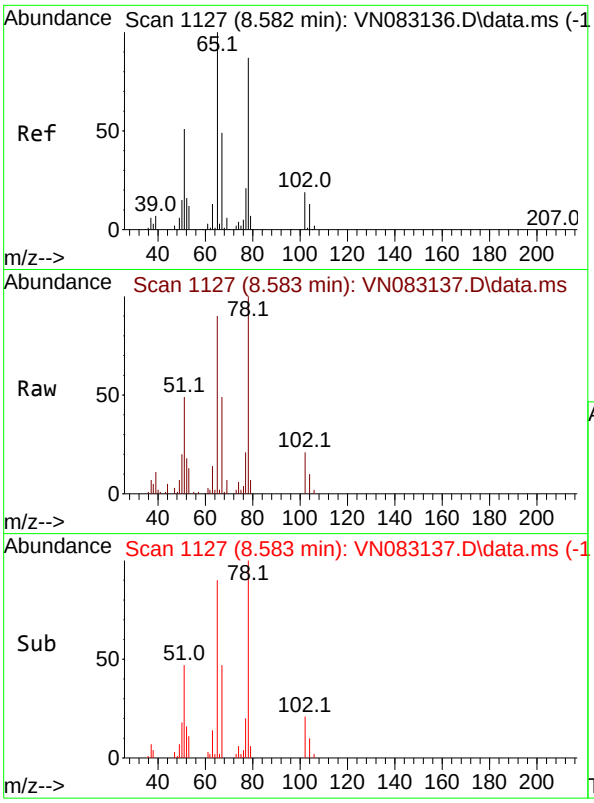


#32
1,1,1-Trichloroethane
Concen: 20.194 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. -0.006 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 97 Resp: 90748

Ion	Ratio	Lower	Upper
97	100		
99	58.9	52.0	78.0
61	45.3	42.1	63.1

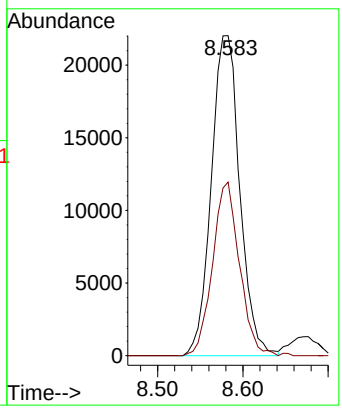




#33
1,2-Dichloroethane-d4
Concen: 16.881 ug/l
RT: 8.583 min Scan# 11
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 65 Resp: 5115

Ion	Ratio	Lower	Upper
65	100		
67	51.1	0.0	104.4



Instrument :
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ClientSampleId :
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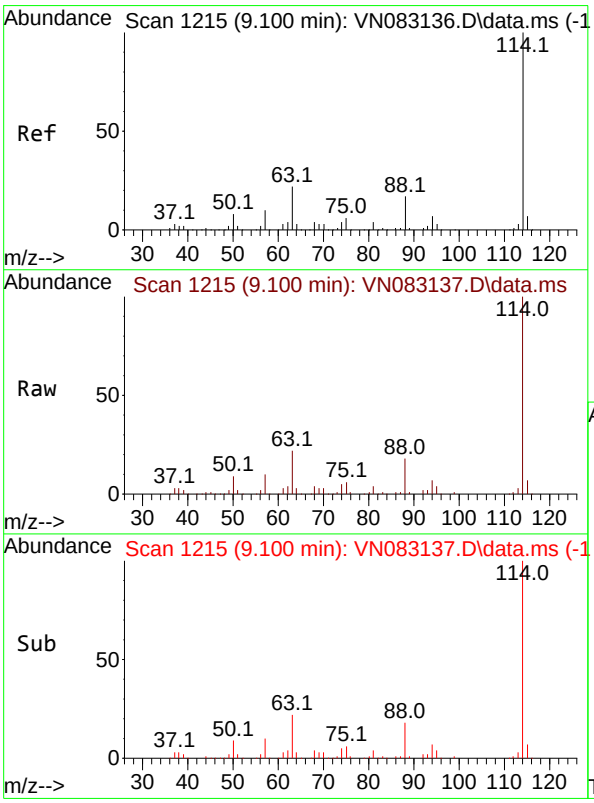
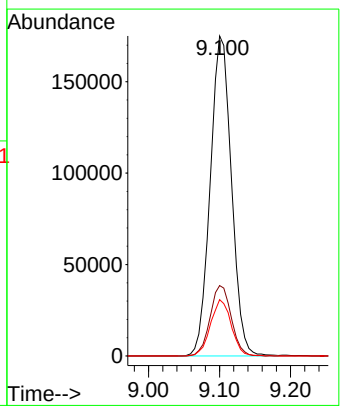
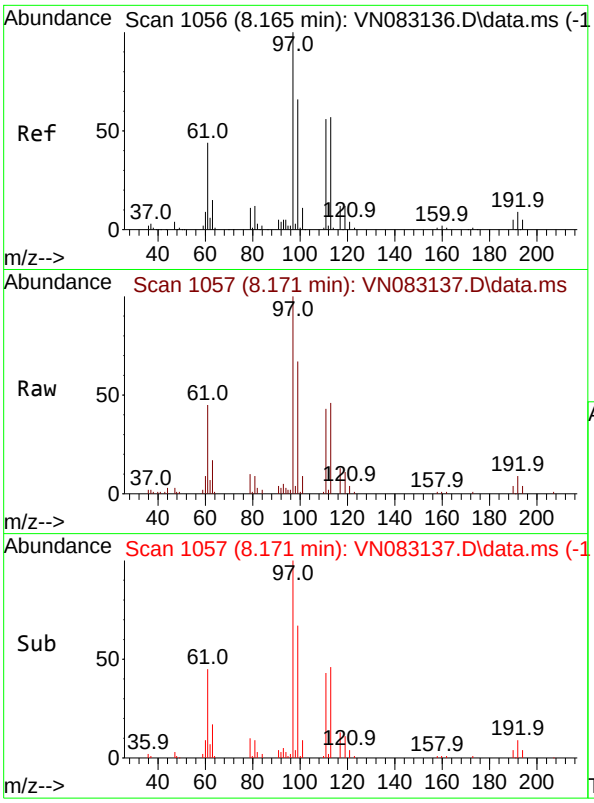


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1215
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion:114 Resp: 362741

Ion	Ratio	Lower	Upper
114	100		
63	22.0	0.0	44.6
88	17.6	0.0	31.4

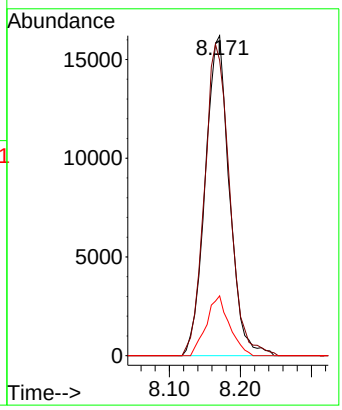




#35
Dibromofluoromethane
Concen: 16.940 ug/l
RT: 8.171 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion:113 Resp: 3835

Ion	Ratio	Lower	Upper
113	100		
111	101.3	82.4	123.6
192	17.8	14.9	22.3



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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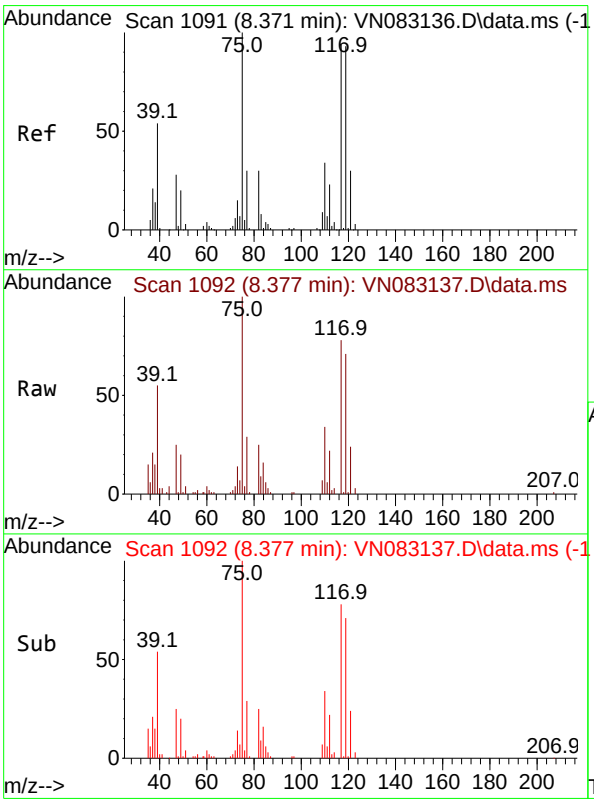
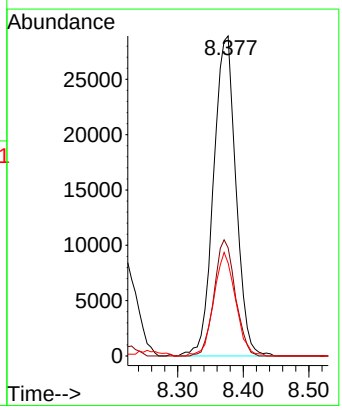
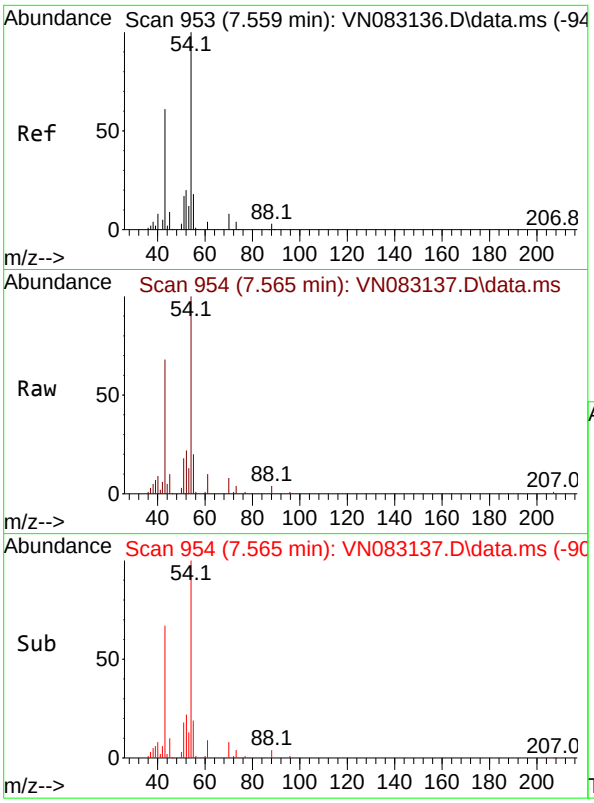


#36
1,1-Dichloropropene
Concen: 19.978 ug/l
RT: 8.377 min Scan# 1092
Delta R.T. 0.006 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 75 Resp: 68425

Ion	Ratio	Lower	Upper
75	100		
110	34.3	16.3	48.9
77	31.3	24.6	37.0

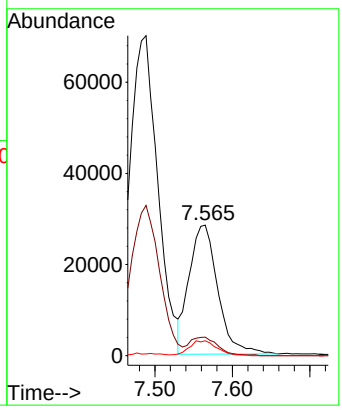




#37
Ethyl Acetate
Concen: 18.985 ug/l
RT: 7.565 min Scan# 9
Delta R.T. 0.006 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 43 Resp: 7280

Ion	Ratio	Lower	Upper
43	100		
61	14.3	9.3	13.9#
70	11.2	7.0	10.6#



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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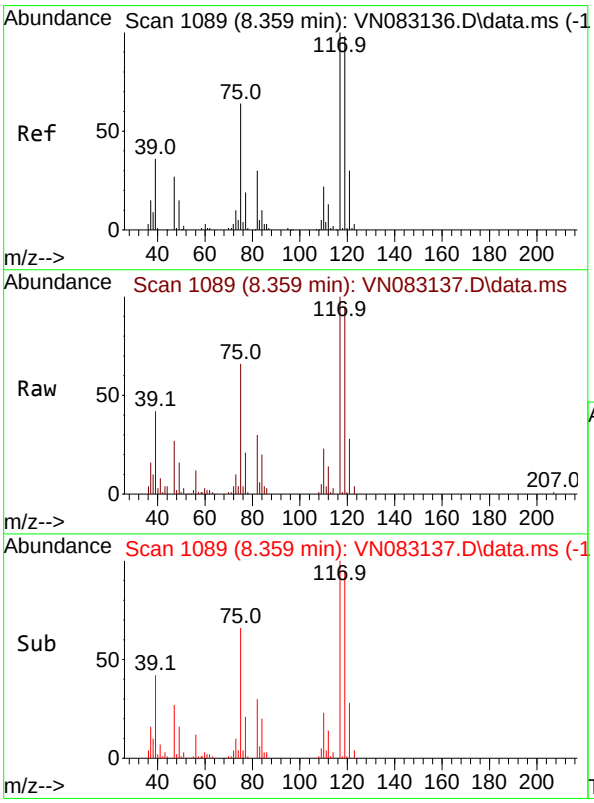
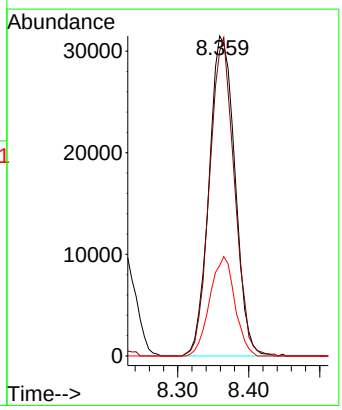
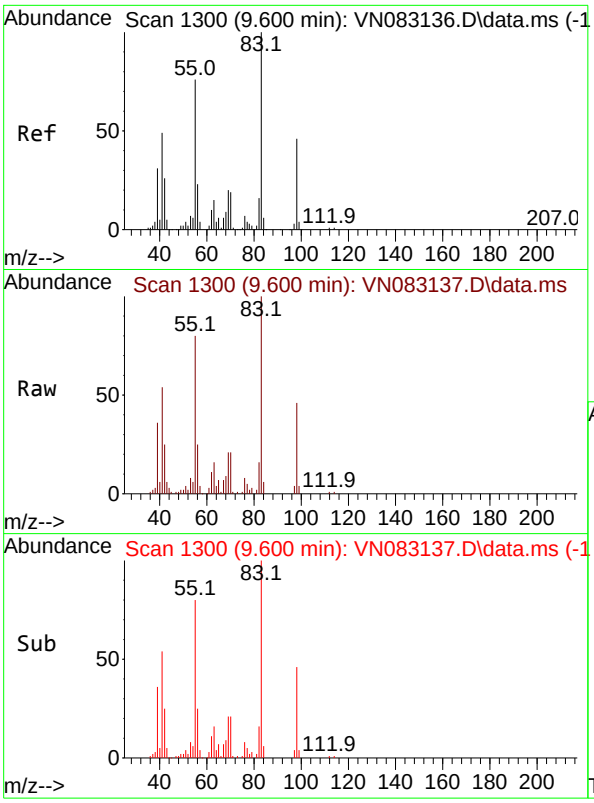


#38
Carbon Tetrachloride
Concen: 20.605 ug/l
RT: 8.359 min Scan# 1089
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion:117 Resp: 79487

Ion	Ratio	Lower	Upper
117	100		
119	95.1	74.9	112.3
121	28.3	24.3	36.5

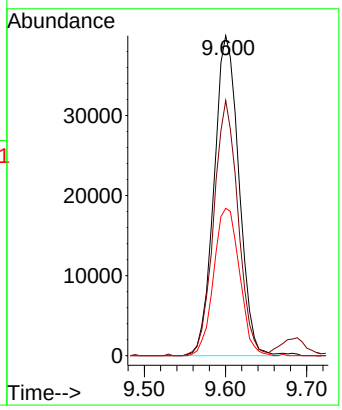




#39
Methylcyclohexane
Concen: 20.246 ug/l
RT: 9.600 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 83 Resp: 8517

Ion	Ratio	Lower	Upper
83	100		
55	79.7	66.4	99.6
98	46.1	40.7	61.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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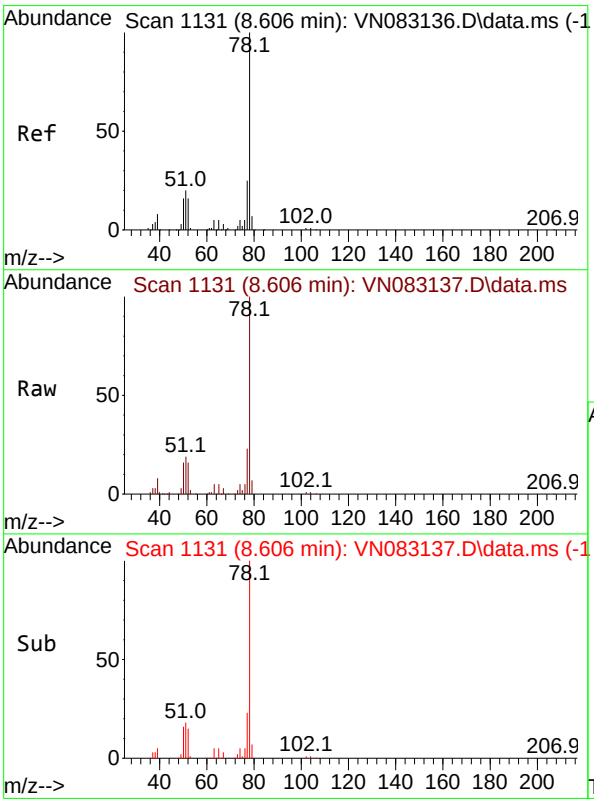
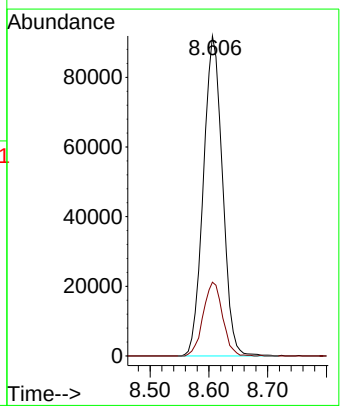
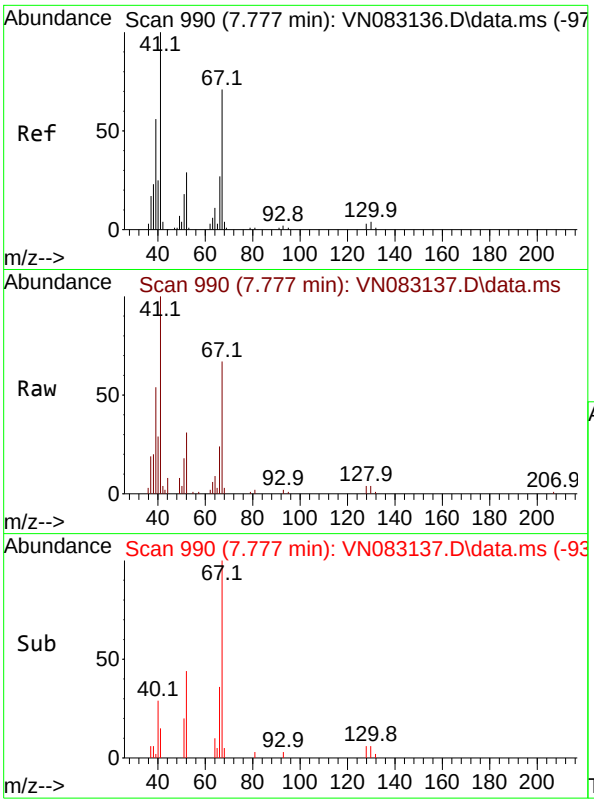


#40
Benzene
Concen: 20.345 ug/l
RT: 8.606 min Scan# 1131
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 78 Resp: 207581

Ion	Ratio	Lower	Upper
78	100		
77	23.1	19.0	28.4

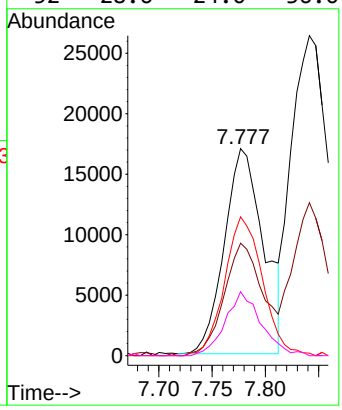




#41
Methacrylonitrile
Concen: 19.968 ug/l
RT: 7.777 min Scan# 9
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 41 Resp: 4353

Ion	Ratio	Lower	Upper
41	100		
39	54.6	45.5	68.3
67	65.2	50.5	75.7
52	28.6	24.0	36.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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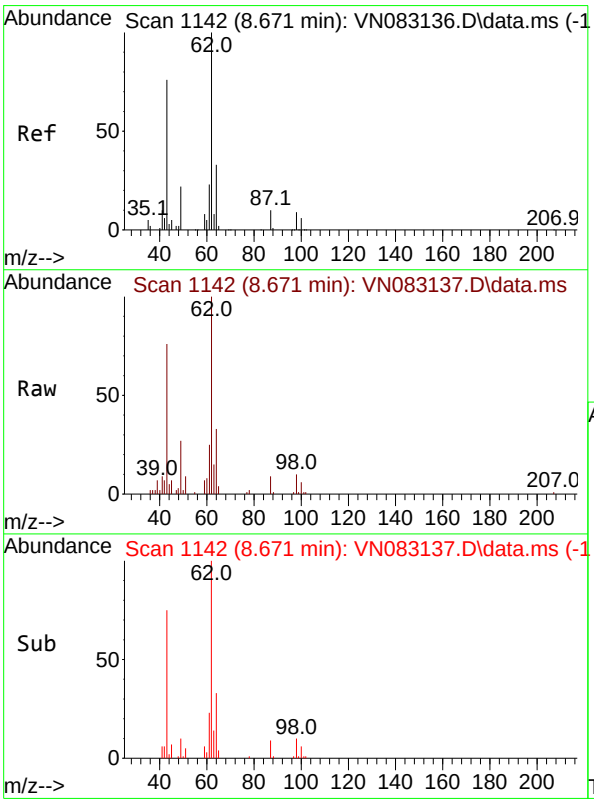
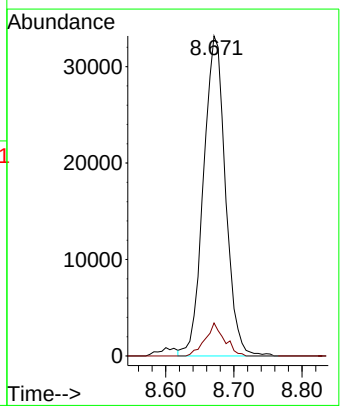
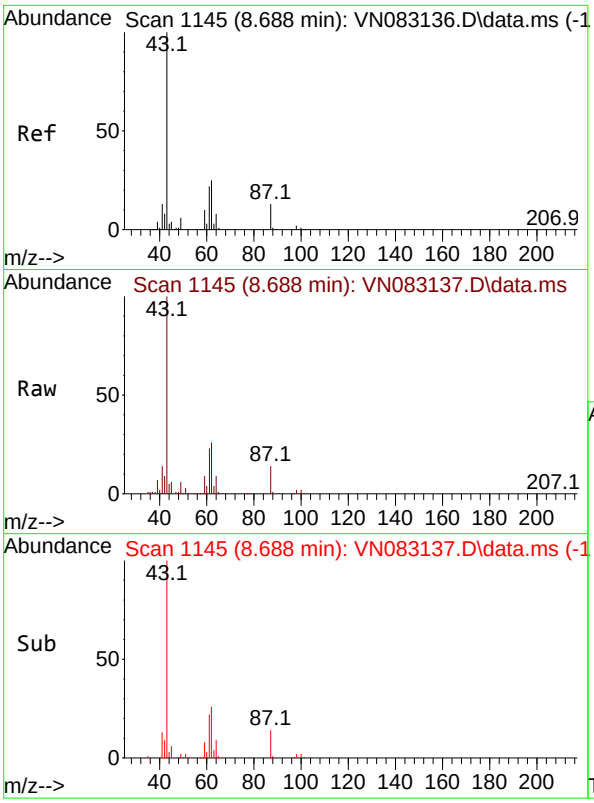


#42
1,2-Dichloroethane
Concen: 20.062 ug/l
RT: 8.671 min Scan# 1142
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 62 Resp: 74567

Ion	Ratio	Lower	Upper
62	100		
98	9.0	0.0	15.8





#43
Isopropyl Acetate
Concen: 19.459 ug/l
RT: 8.688 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 43 Resp: 13871

Ion	Ratio	Lower	Upper
43	100		
61	24.5	17.8	26.6
87	12.7	8.2	12.2

Instrument :
MSVOA_N
ClientSampleId :
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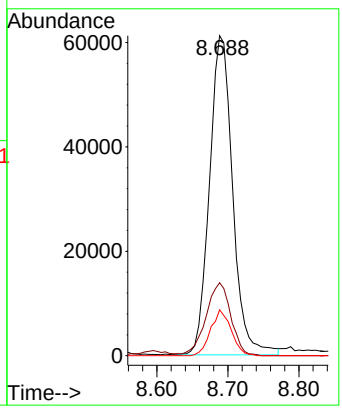
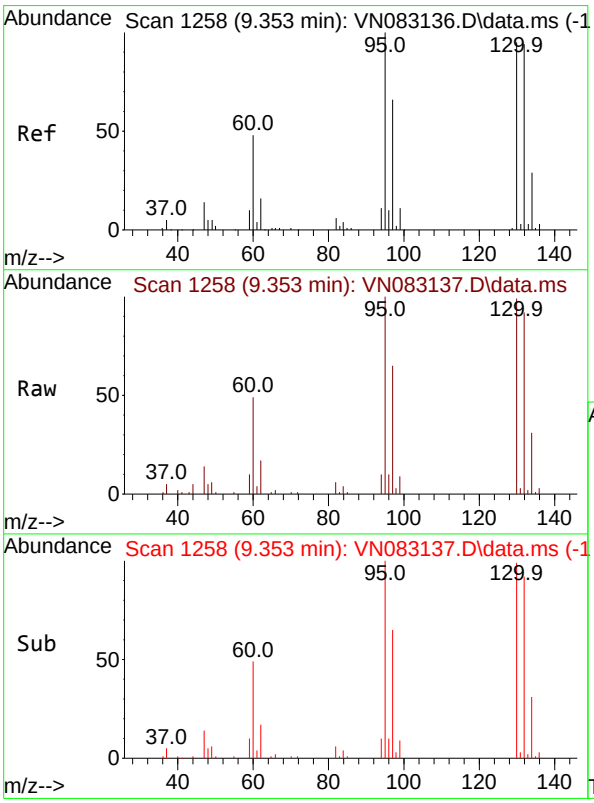
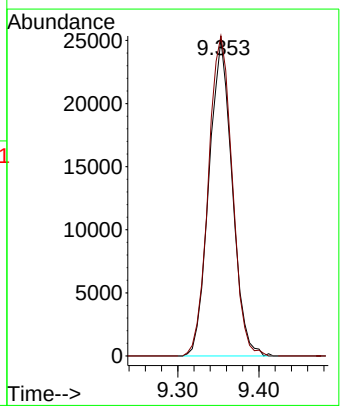


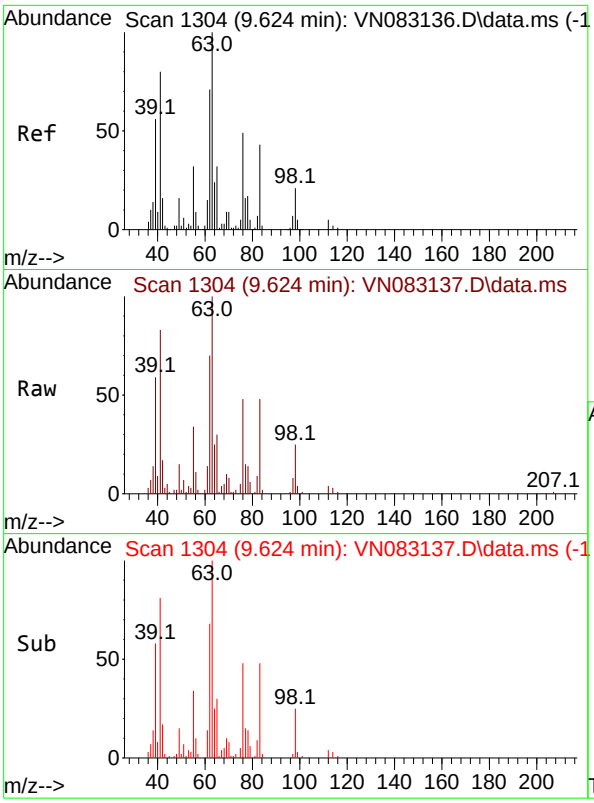


#44
Trichloroethene
Concen: 20.469 ug/l
RT: 9.353 min Scan# 1258
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion:130 Resp: 49712

Ion	Ratio	Lower	Upper
130	100		
95	101.0	0.0	197.8





#45
1,2-Dichloropropane
Concen: 20.594 ug/l
RT: 9.624 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 63 Resp: 4987

Ion	Ratio	Lower	Upper
63	100		
65	30.4	24.4	36.6

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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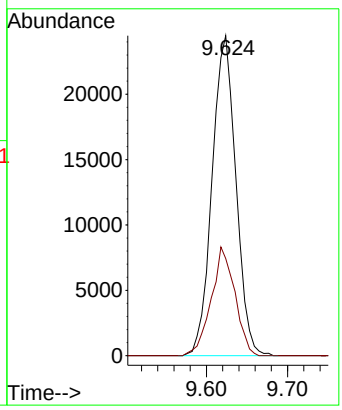
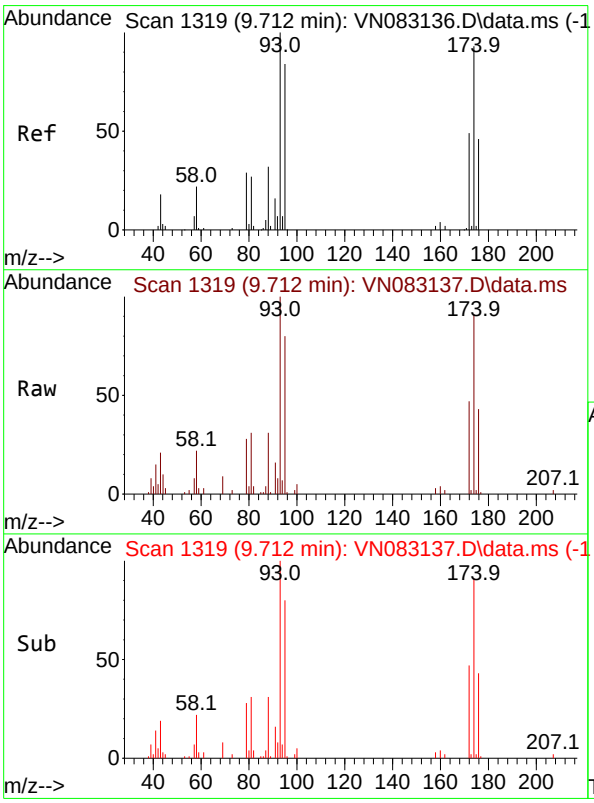
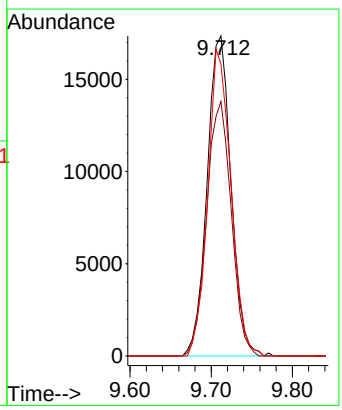


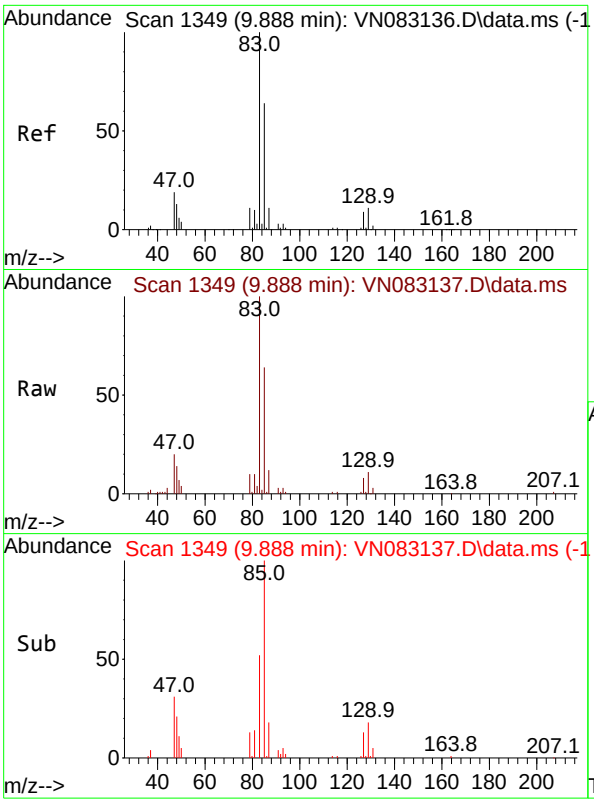


#46
Dibromomethane
Concen: 20.512 ug/l
RT: 9.712 min Scan# 1319
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 93 Resp: 35560

Ion	Ratio	Lower	Upper
93	100		
95	81.8	65.8	98.6
174	92.9	71.7	107.5

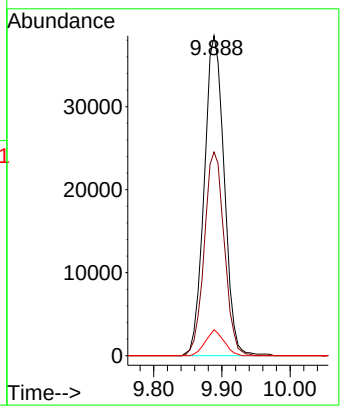




#47
Bromodichloromethane
Concen: 20.147 ug/l
RT: 9.888 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 83 Resp: 7842

Ion	Ratio	Lower	Upper
83	100		
85	63.7	51.1	76.7
127	8.1	7.2	10.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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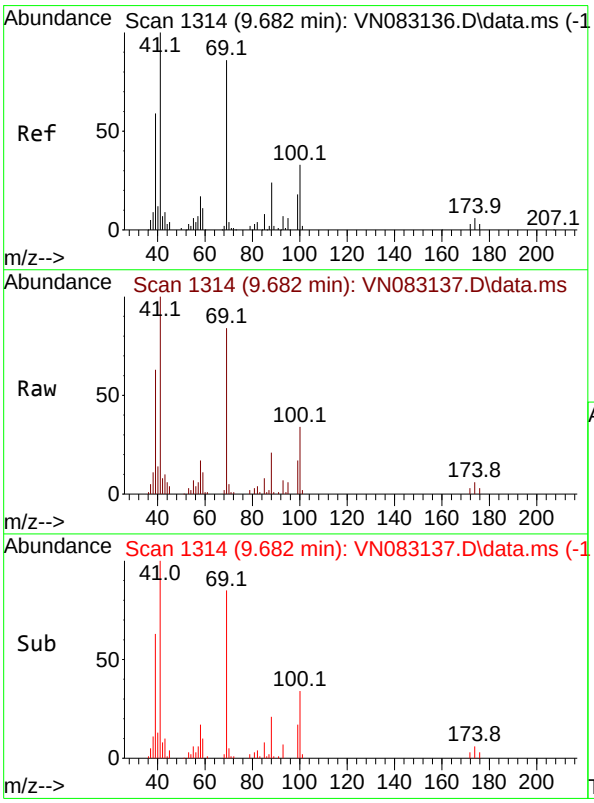
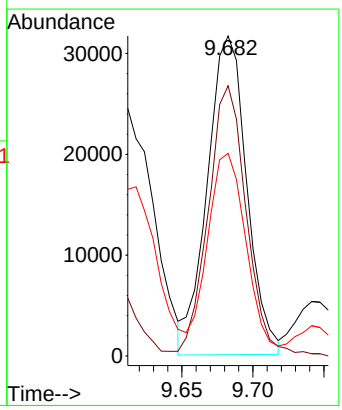
Supervised By :Mahesh Dadoda 08/09/2024

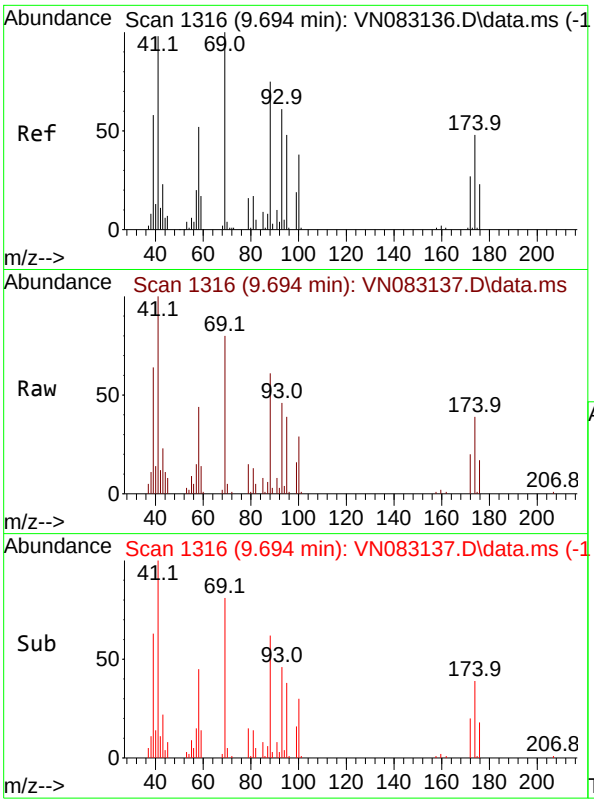


#48
Methyl methacrylate
Concen: 19.254 ug/l
RT: 9.682 min Scan# 1314
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 41 Resp: 61044

Ion	Ratio	Lower	Upper
41	100		
69	82.1	56.3	84.5
39	62.5	50.3	75.5





#49
1,4-Dioxane
Concen: 403.558 ug/l
RT: 9.694 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 88 Resp: 2308

Ion	Ratio	Lower	Upper
88	100		
43	32.7	27.8	41.8
58	75.6	59.4	89.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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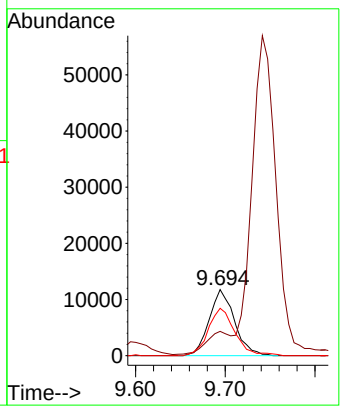
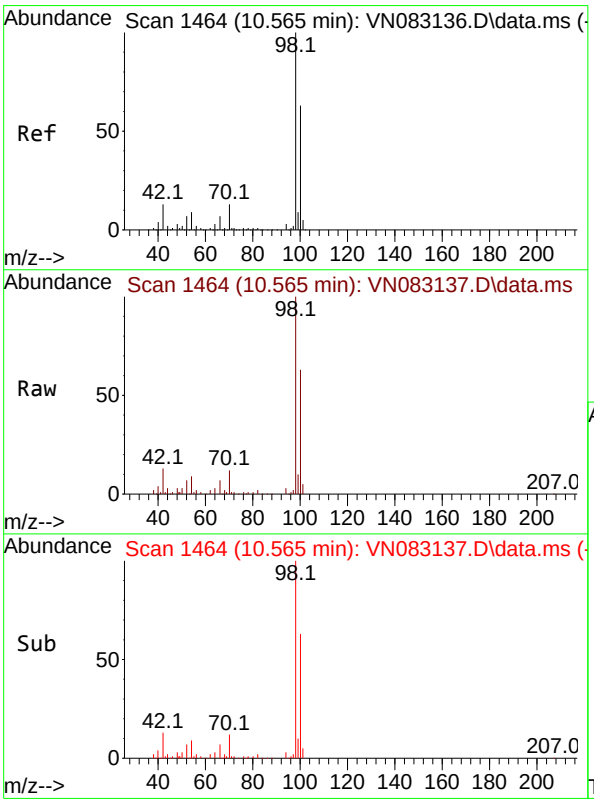
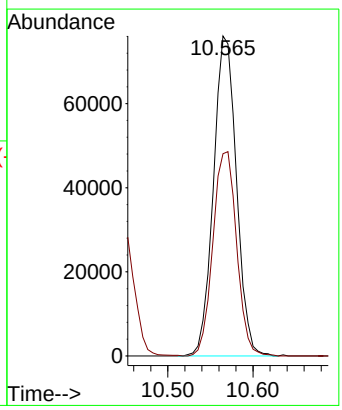


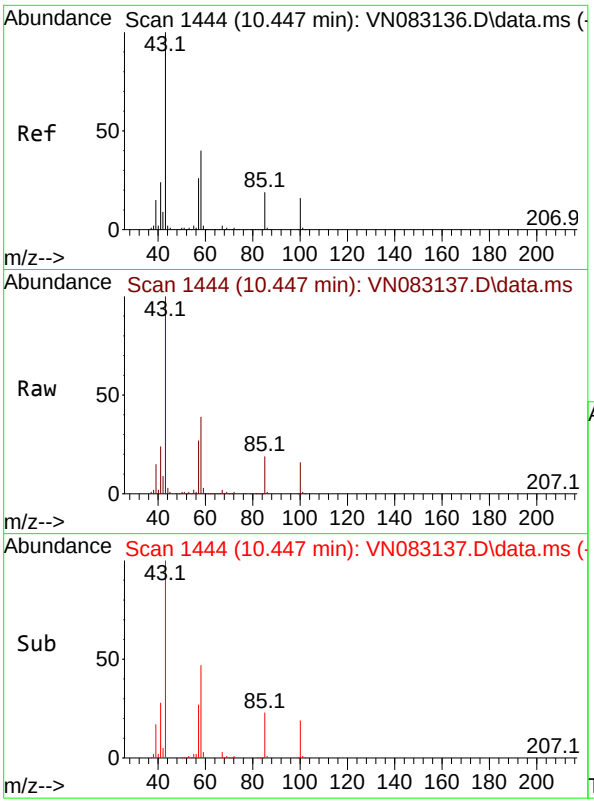


#50
Toluene-d8
Concen: 16.926 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 98 Resp: 142952

Ion	Ratio	Lower	Upper
98	100		
100	65.8	51.5	77.3

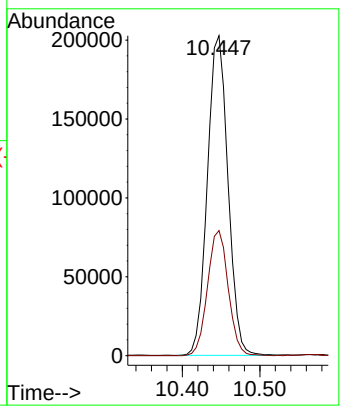




#51
4-Methyl-2-Pentanone
Concen: 103.224 ug/l
RT: 10.447 min Scan# 14
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 43 Resp: 37433

Ion	Ratio	Lower	Upper
43	100		
58	39.4	28.2	42.4



Instrument :
MSVOA_N
ClientSampleId :
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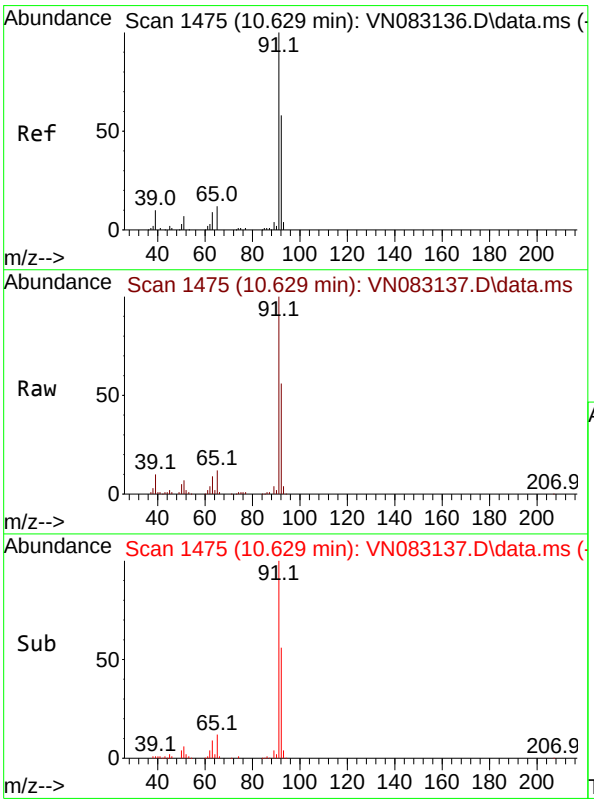
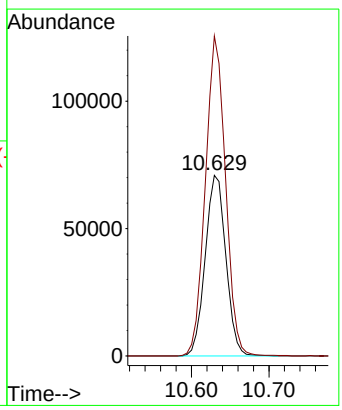
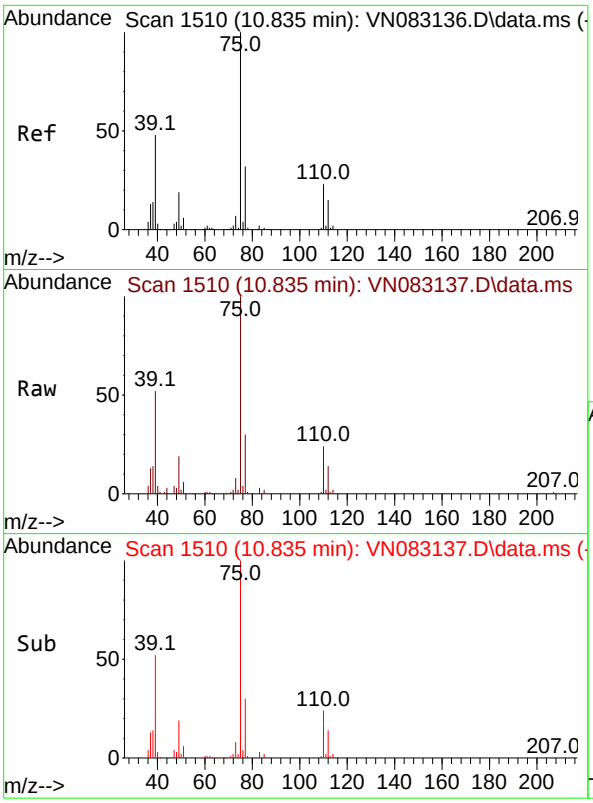


#52
Toluene
Concen: 20.358 ug/l
RT: 10.629 min Scan# 1475
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 92 Resp: 131247

Ion	Ratio	Lower	Upper
92	100		
91	173.0	139.4	209.0

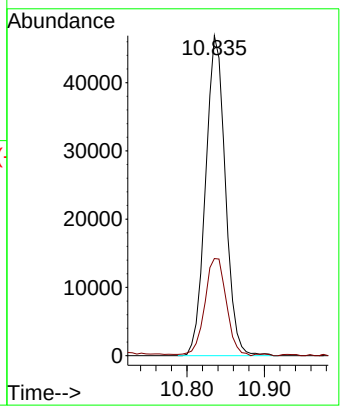




#53
t-1,3-Dichloropropene
Concen: 20.793 ug/l
RT: 10.835 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 75 Resp: 8313

Ion	Ratio	Lower	Upper
75	100		
77	30.4	25.7	38.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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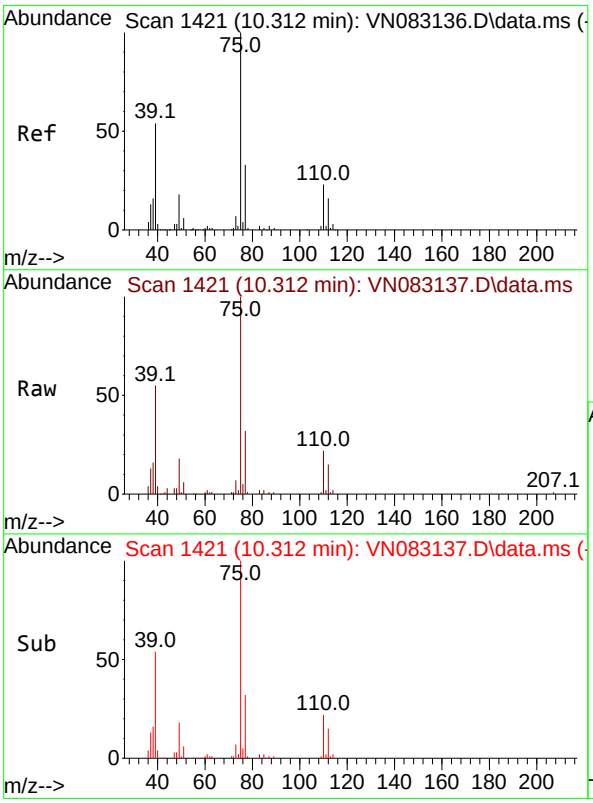
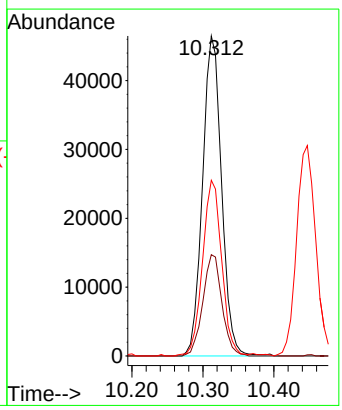
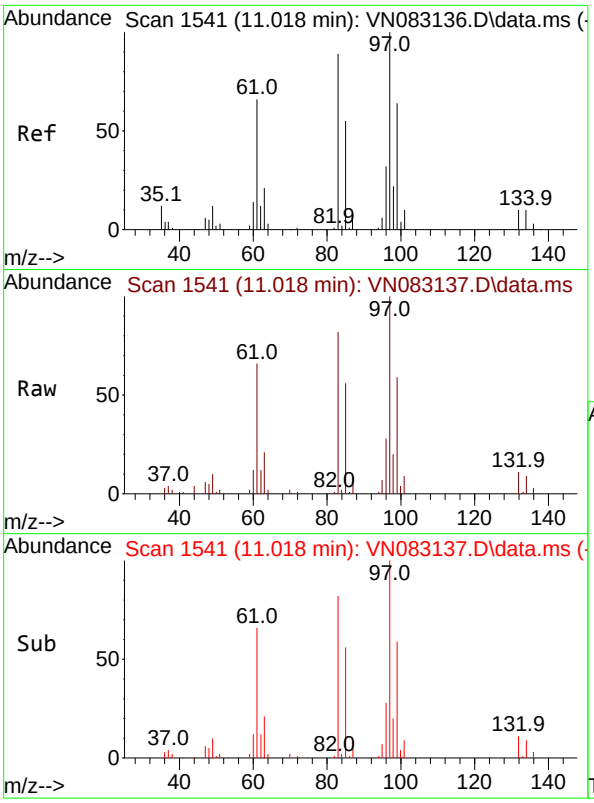


#54
cis-1,3-Dichloropropene
Concen: 20.351 ug/l
RT: 10.312 min Scan# 1421
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 75 Resp: 86551

Ion	Ratio	Lower	Upper
75	100		
77	31.7	24.3	36.5
39	54.5	50.5	75.7

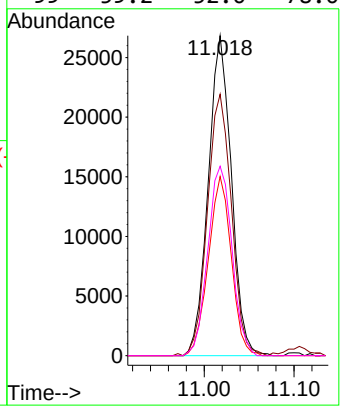




#55
1,1,2-Trichloroethane
Concen: 20.811 ug/l
RT: 11.018 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 97 Resp: 4808

Ion	Ratio	Lower	Upper
97	100		
83	81.1	71.4	107.0
85	56.0	45.8	68.6
99	59.2	52.0	78.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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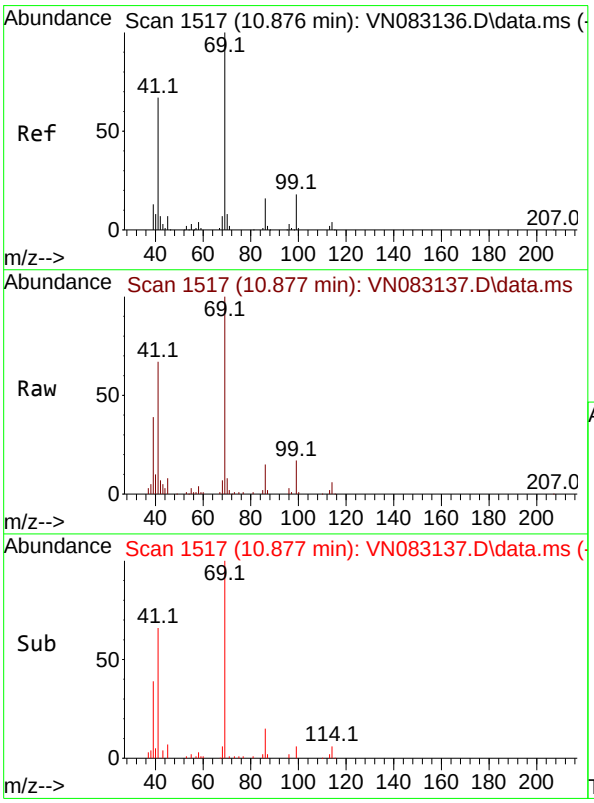
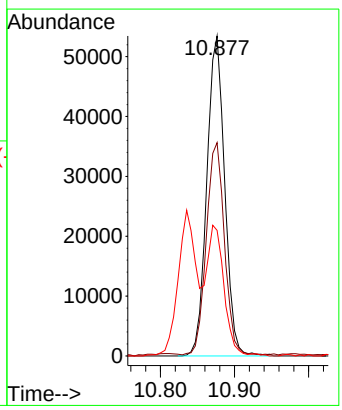
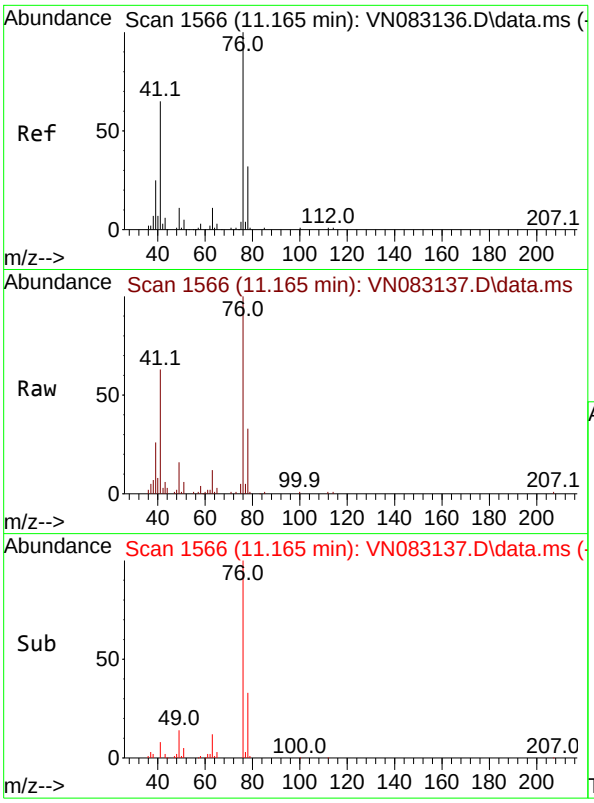


#56
Ethyl methacrylate
Concen: 20.550 ug/l
RT: 10.877 min Scan# 1517
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 69 Resp: 89503

Ion	Ratio	Lower	Upper
69	100		
41	67.5	63.4	95.2
39	41.2	37.4	56.0

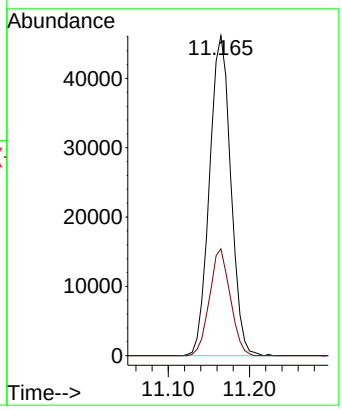




#57
1,3-Dichloropropane
Concen: 20.464 ug/l
RT: 11.165 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 76 Resp: 8427

Ion	Ratio	Lower	Upper
76	100		
78	32.5	25.6	38.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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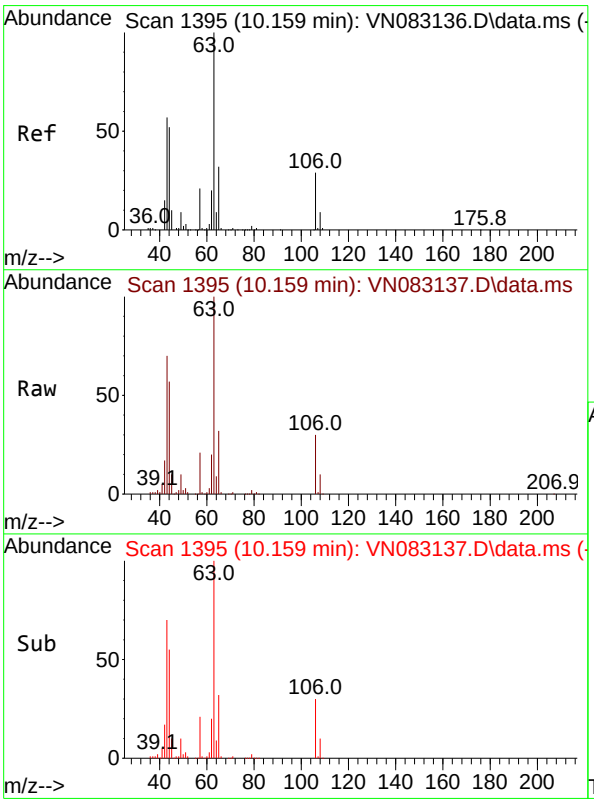
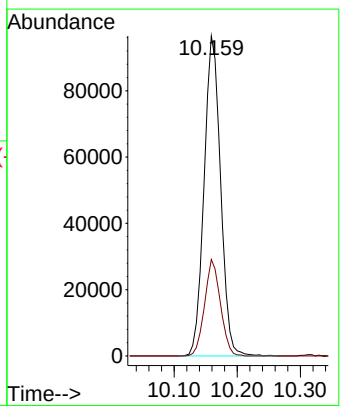
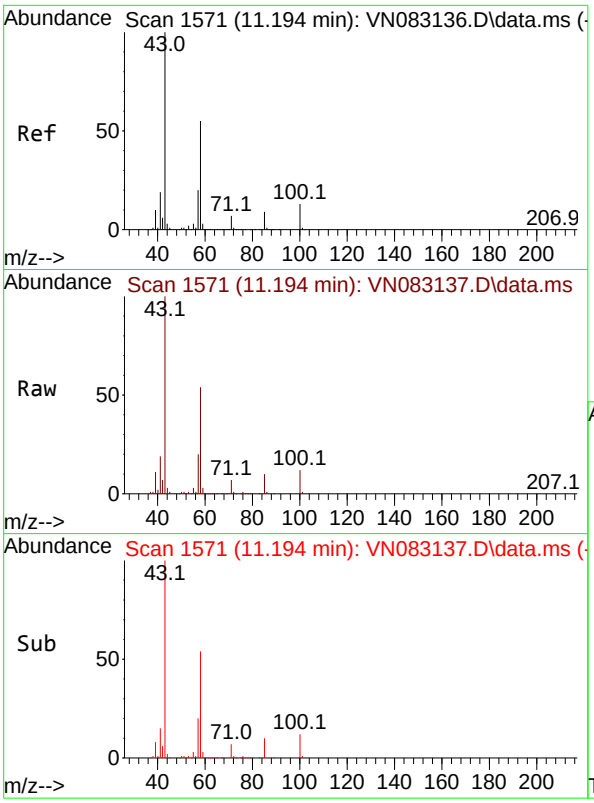


#58
2-Chloroethyl Vinyl ether
Concen: 95.242 ug/l
RT: 10.159 min Scan# 1395
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 63 Resp: 175345

Ion	Ratio	Lower	Upper
63	100		
106	28.9	21.4	32.0





#59
2-Hexanone
Concen: 102.020 ug/l
RT: 11.194 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 43 Resp: 28622

Ion	Ratio	Lower	Upper
43	100		
58	54.7	24.6	73.8

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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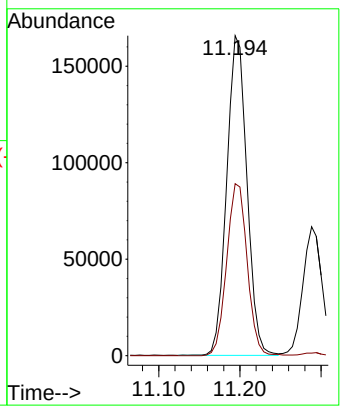
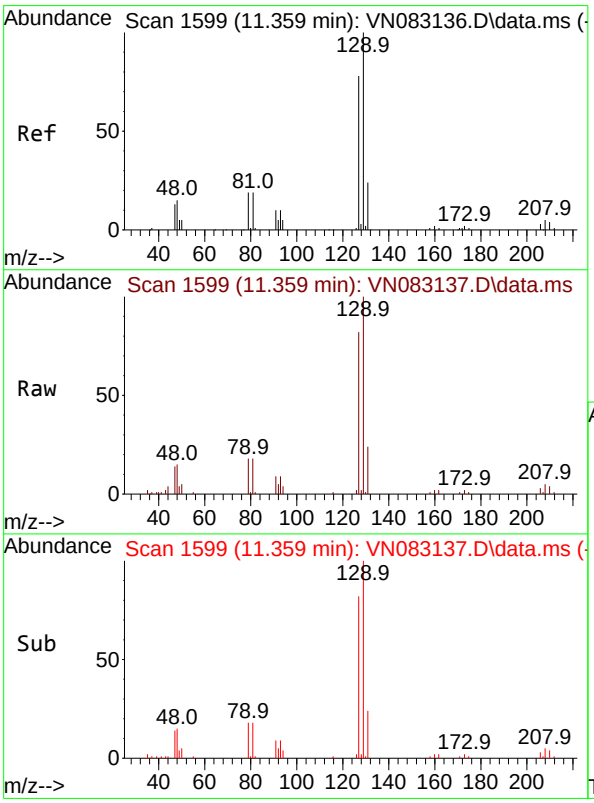
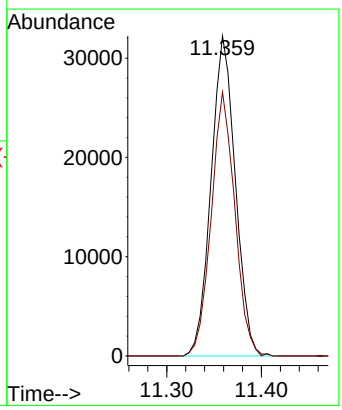


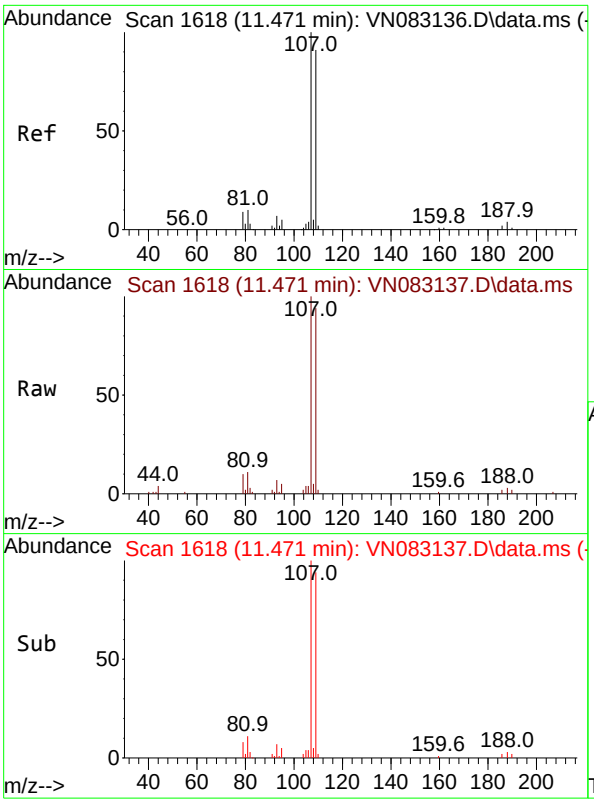


#60
Dibromochloromethane
Concen: 20.610 ug/l
RT: 11.359 min Scan# 1599
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion:129 Resp: 57571

Ion	Ratio	Lower	Upper
129	100		
127	79.9	39.2	117.6





#61
1,2-Dibromoethane
Concen: 20.088 ug/l
RT: 11.471 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion:107 Resp: 4875

Ion	Ratio	Lower	Upper
107	100		
109	94.4	73.7	110.5

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations
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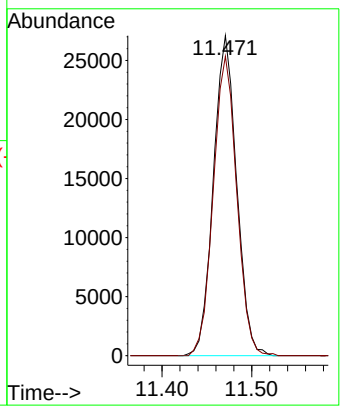
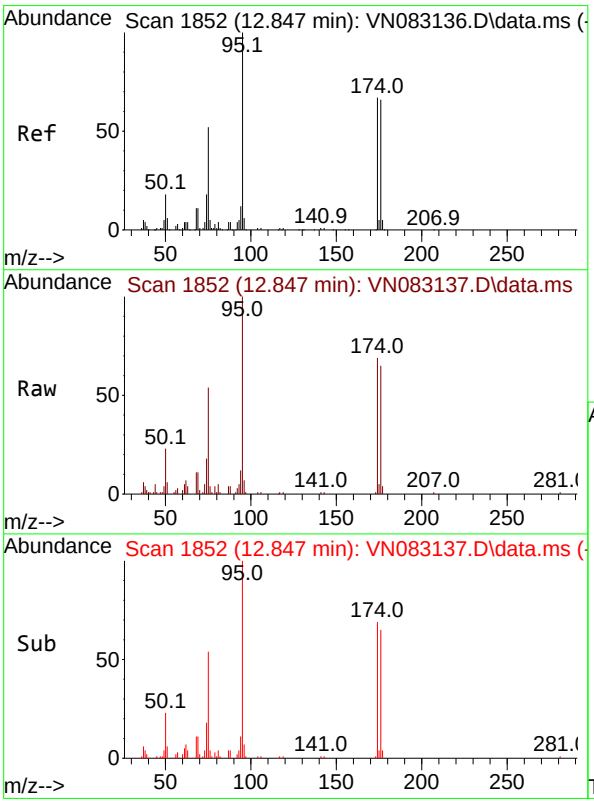
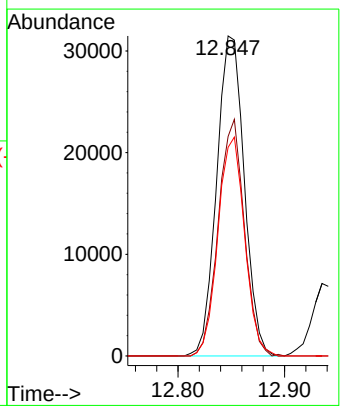


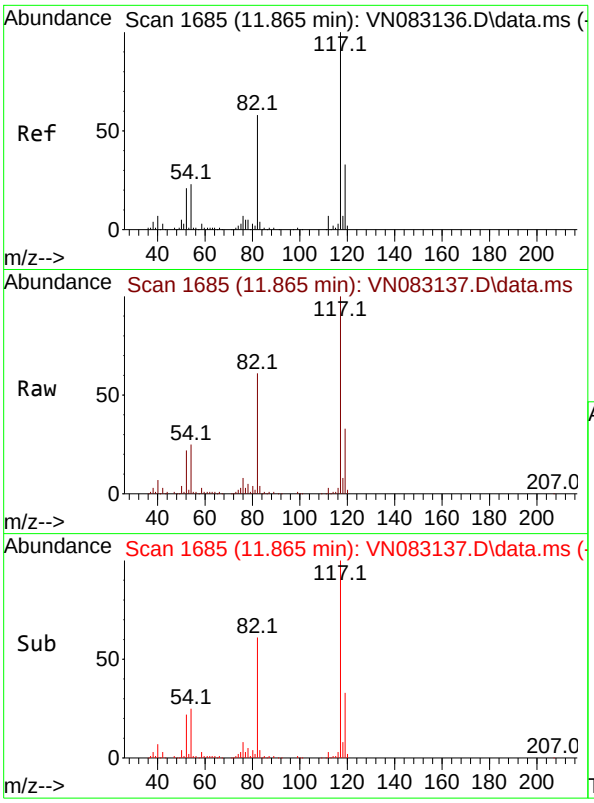


#62
4-Bromofluorobenzene
Concen: 17.179 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 95 Resp: 56566

Ion	Ratio	Lower	Upper
95	100		
174	69.8	0.0	159.2
176	66.2	0.0	147.6





#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion:117 Resp: 31325

Ion	Ratio	Lower	Upper
117	100		
82	61.1	47.5	71.3
119	33.4	25.6	38.4

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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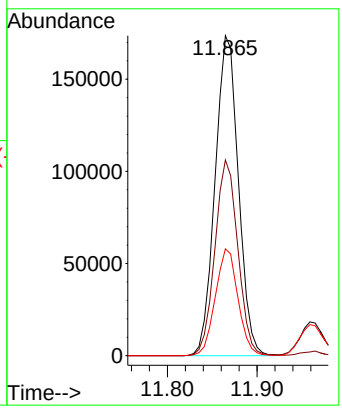
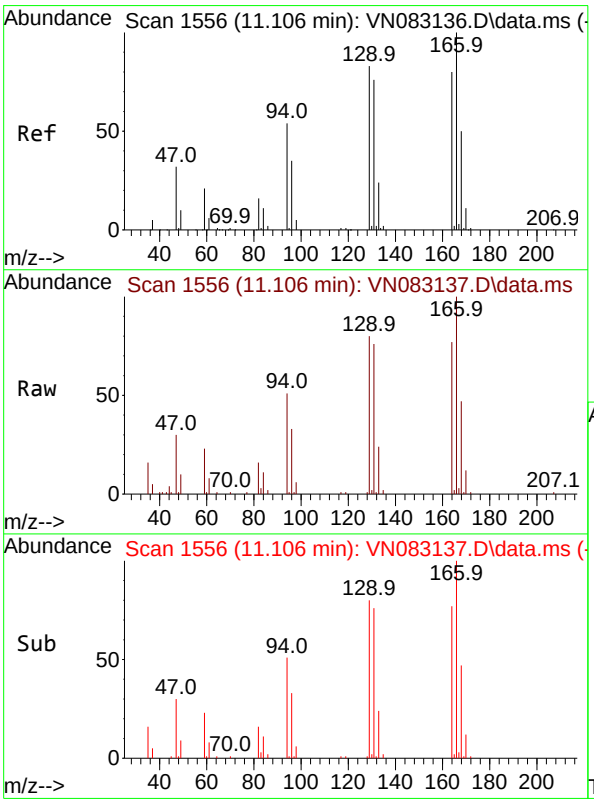
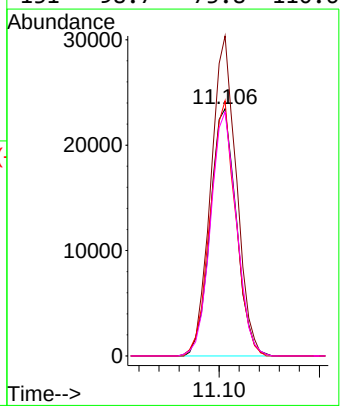


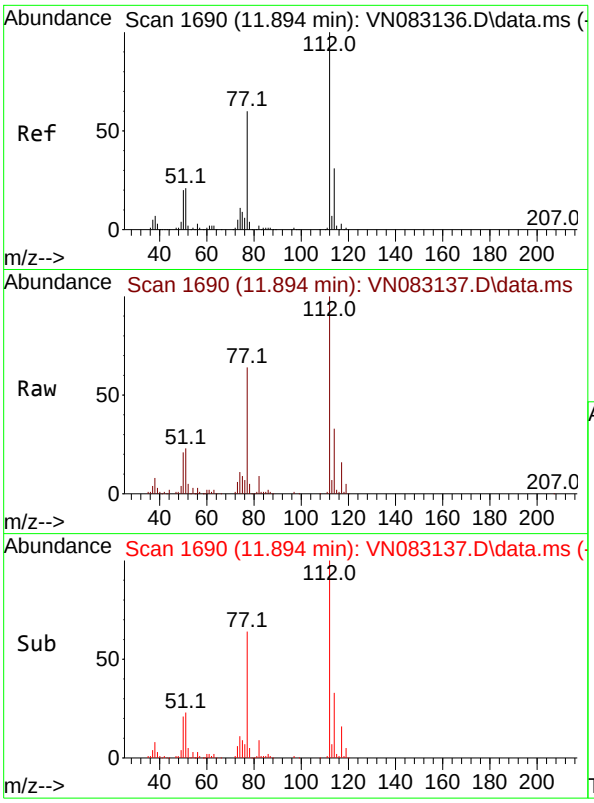


#64
Tetrachloroethene
Concen: 20.405 ug/l
RT: 11.106 min Scan# 1556
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion:164 Resp: 42332

Ion	Ratio	Lower	Upper
164	100		
166	129.4	101.4	152.0
129	103.2	75.7	113.5
131	98.7	73.8	110.6

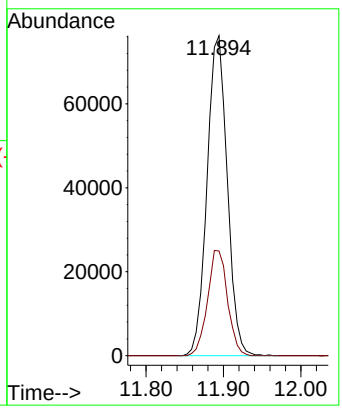




#65
Chlorobenzene
Concen: 19.933 ug/l
RT: 11.894 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion:112 Resp: 13798

Ion	Ratio	Lower	Upper
112	100		
114	32.7	26.2	39.2



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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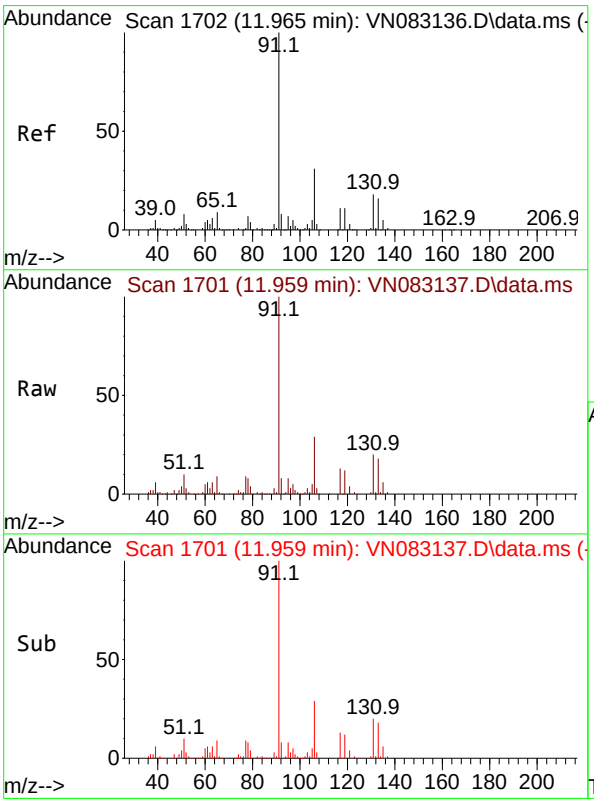
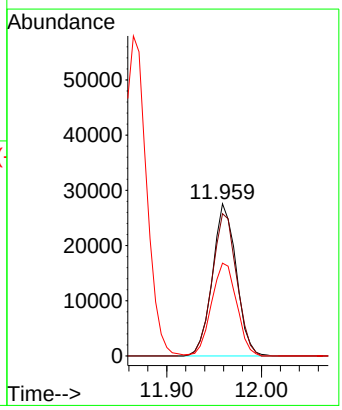
Supervised By :Mahesh Dadoda 08/09/2024

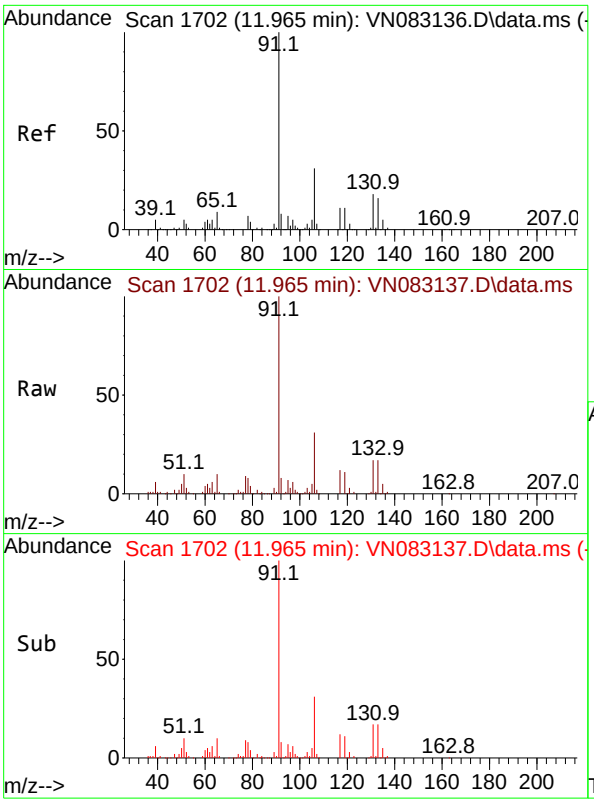


#66
1,1,1,2-Tetrachloroethane
Concen: 19.762 ug/l
RT: 11.959 min Scan# 1701
Delta R.T. -0.006 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion:131 Resp: 48247

Ion	Ratio	Lower	Upper
131	100		
133	96.1	47.3	142.0
119	64.5	32.5	97.4





#67
Ethyl Benzene
Concen: 20.335 ug/l
RT: 11.965 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 91 Resp: 25823

Ion	Ratio	Lower	Upper
91	100		
106	31.2	24.0	36.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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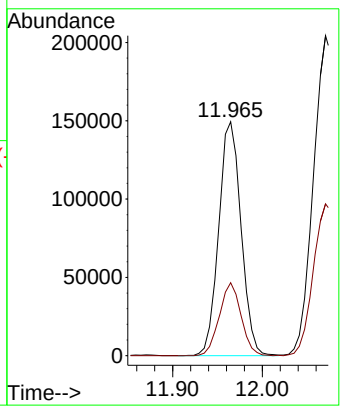
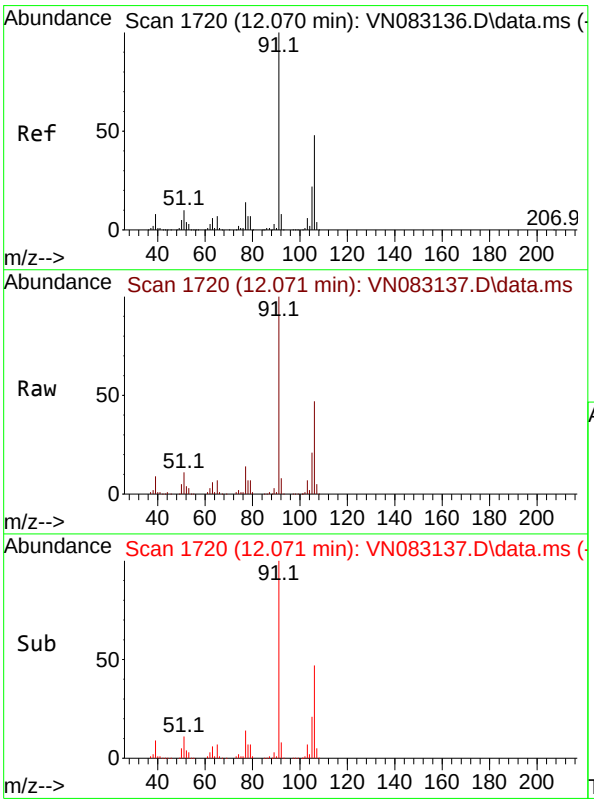
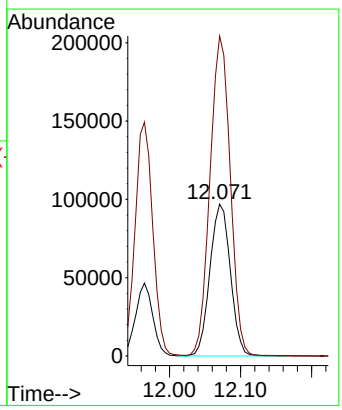


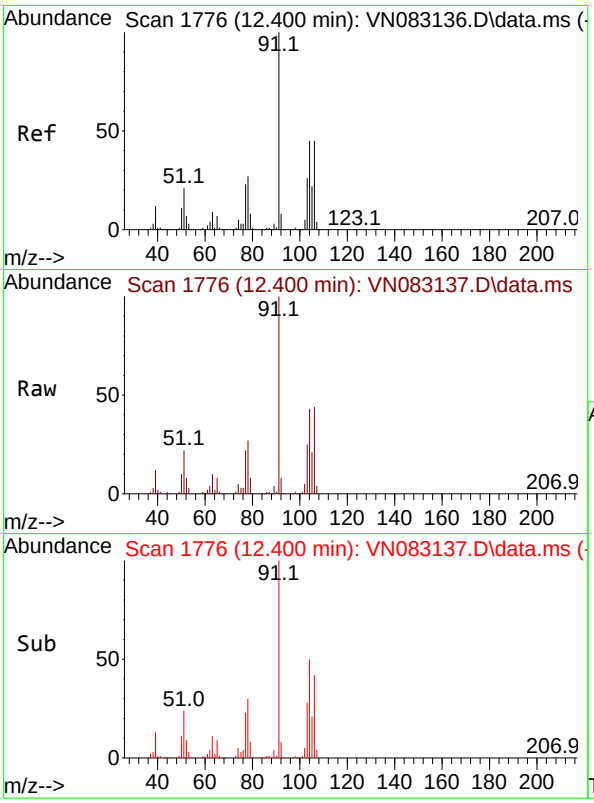


#68
m/p-Xylenes
Concen: 40.625 ug/l
RT: 12.071 min Scan# 1720
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion:106 Resp: 193256

Ion	Ratio	Lower	Upper
106	100		
91	209.9	166.1	249.1





#69
o-Xylene
Concen: 20.281 ug/l
RT: 12.400 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion:106 Resp: 9515

Ion	Ratio	Lower	Upper
106	100		
91	221.3	111.3	333.9

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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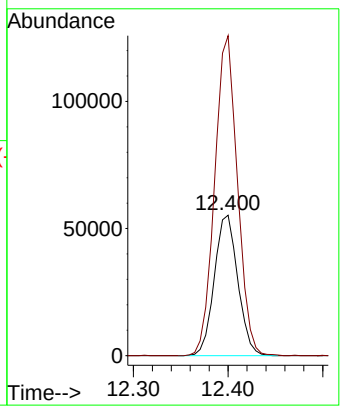
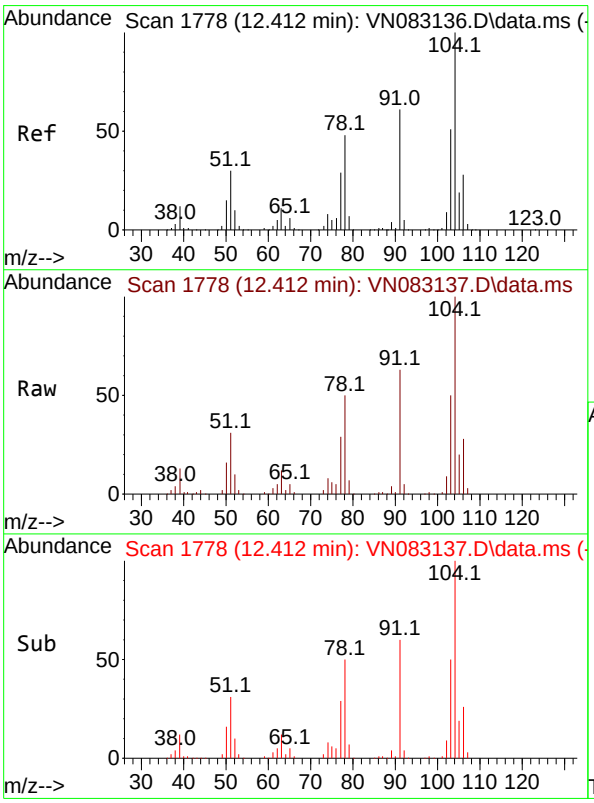
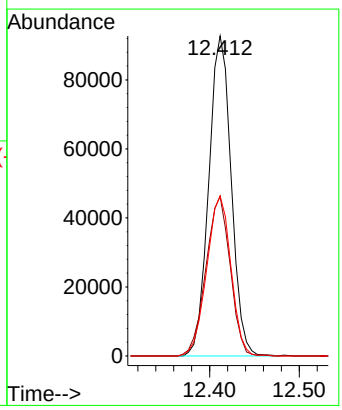


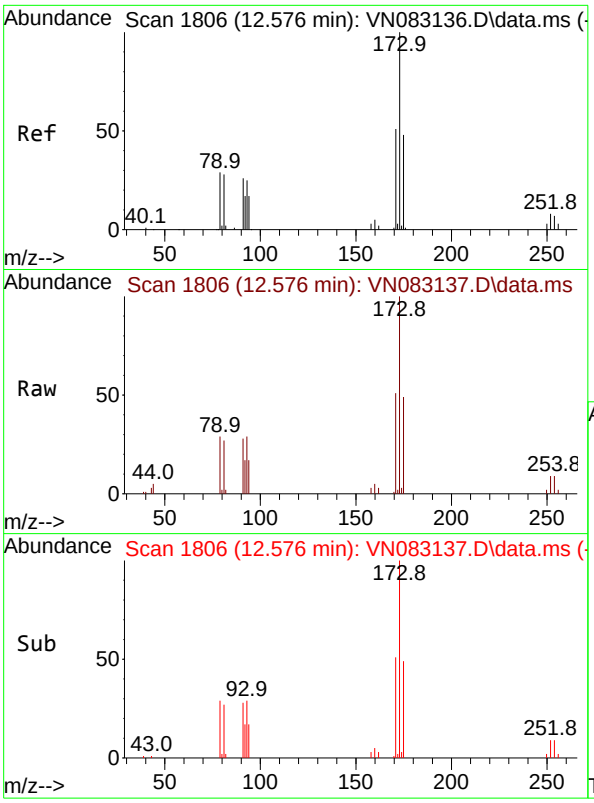


#70
Styrene
Concen: 20.475 ug/l
RT: 12.412 min Scan# 1778
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion:104 Resp: 161342

Ion	Ratio	Lower	Upper
104	100		
78	53.7	41.6	62.4
103	53.8	44.0	66.0

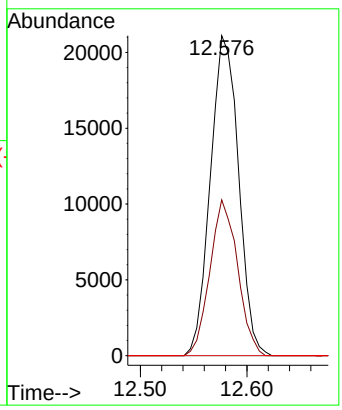




#71
Bromoform
Concen: 20.957 ug/l
RT: 12.576 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion:173 Resp: 3876

Ion	Ratio	Lower	Upper
173	100		
175	47.9	24.0	72.0
254	0.0	0.0	0.0



Instrument :
MSVOA_N
ClientSampleId :
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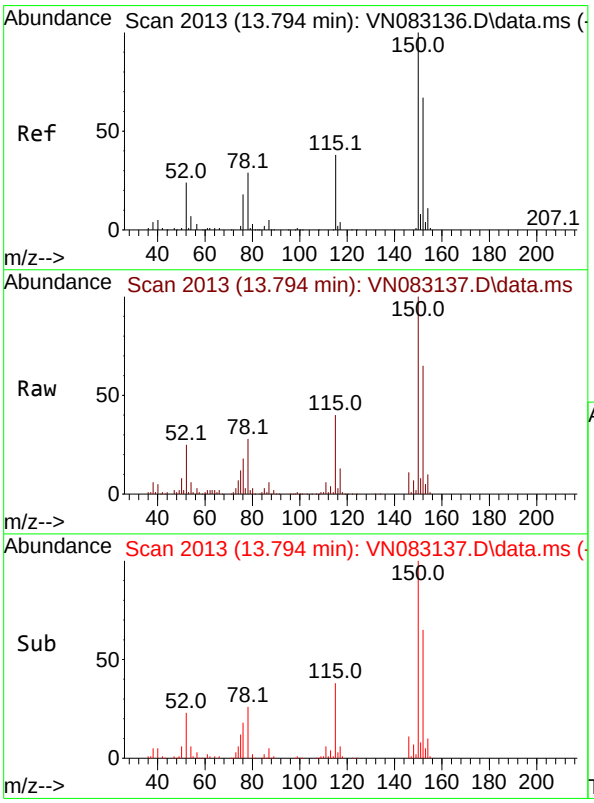
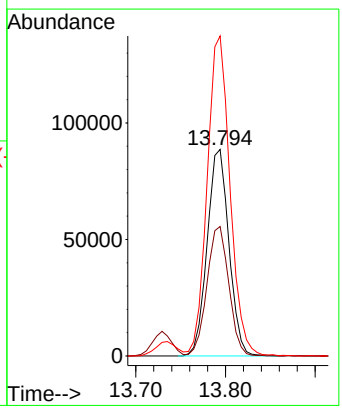
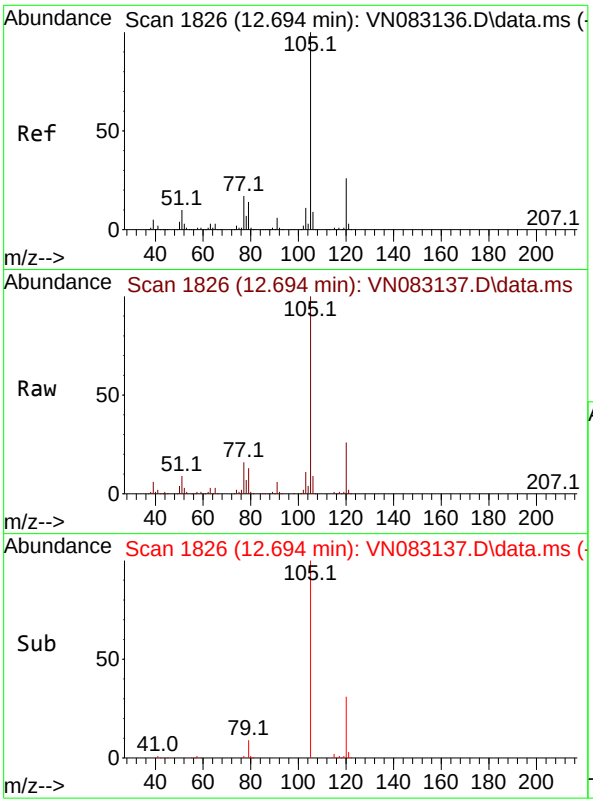


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.794 min Scan# 2013
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion:152 Resp: 149244

Ion	Ratio	Lower	Upper
152	100		
115	63.1	30.6	91.6
150	162.7	0.0	348.6

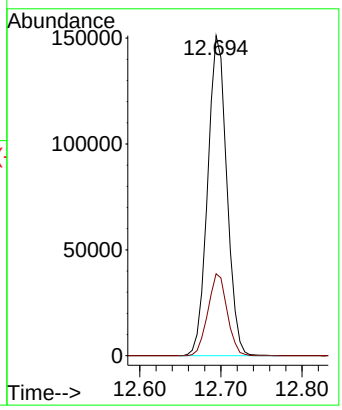




#73
Isopropylbenzene
Concen: 19.764 ug/l
RT: 12.694 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion:105 Resp: 24671

Ion	Ratio	Lower	Upper
105	100		
120	25.8	12.9	38.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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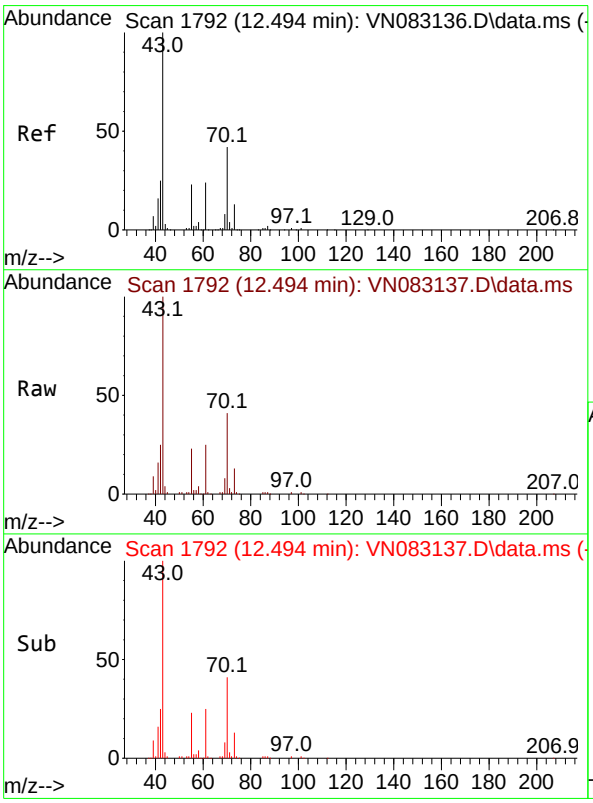
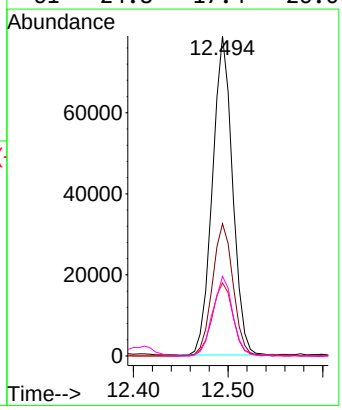
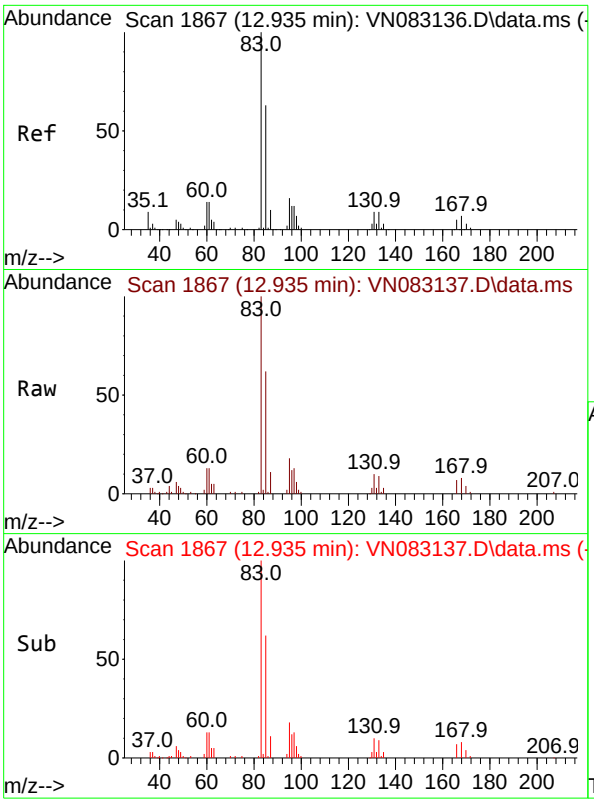


#74
N-amyl acetate
Concen: 19.014 ug/l
RT: 12.494 min Scan# 1792
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 43 Resp: 116100

Ion	Ratio	Lower	Upper
43	100		
70	42.8	29.8	44.6
55	24.0	18.7	28.1
61	24.8	17.4	26.0





#75
1,1,2,2-Tetrachloroethane
Concen: 19.670 ug/l
RT: 12.935 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 83 Resp: 6944

Ion	Ratio	Lower	Upper
83	100		
131	10.6	5.0	14.9
85	64.6	31.9	95.7

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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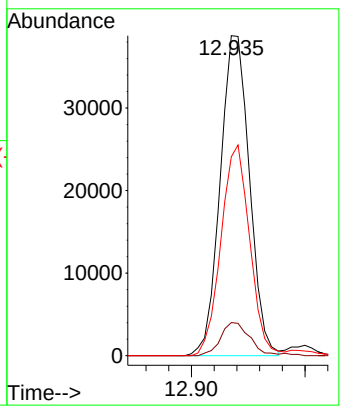
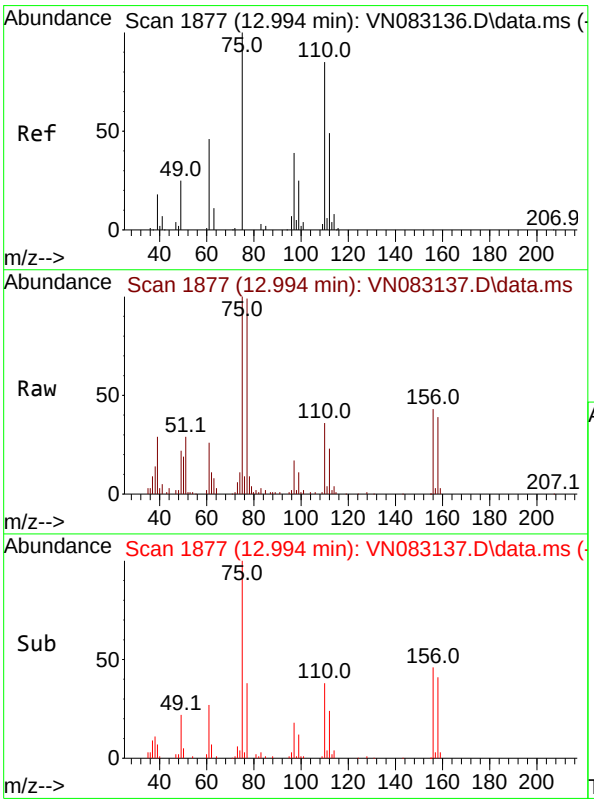
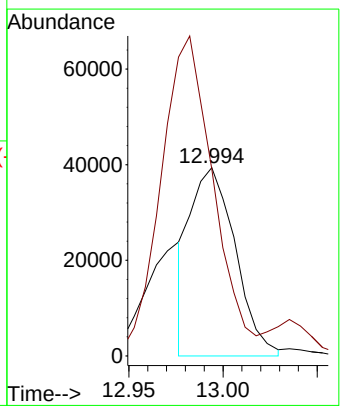


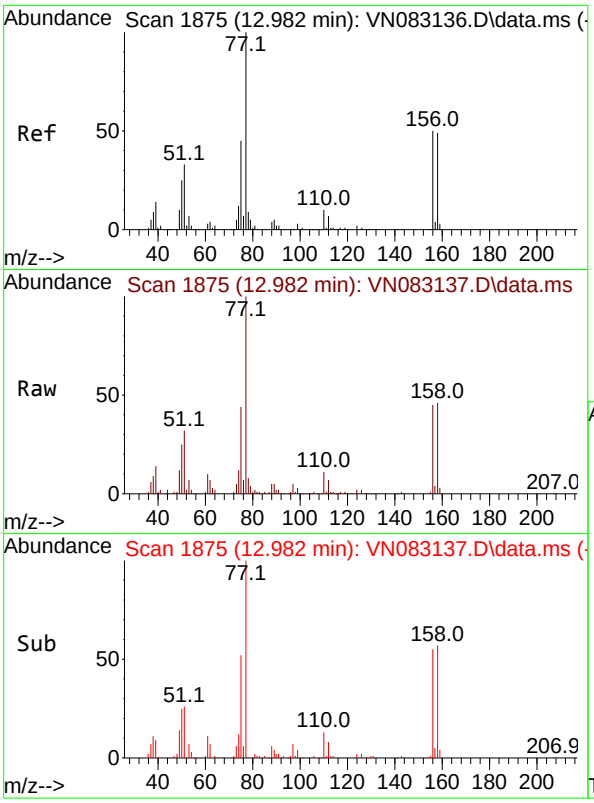


#76
1,2,3-Trichloropropane
Concen: 19.901 ug/l m
RT: 12.994 min Scan# 1877
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 75 Resp: 65295

Ion	Ratio	Lower	Upper
75	100		
77	199.0	110.9	332.6

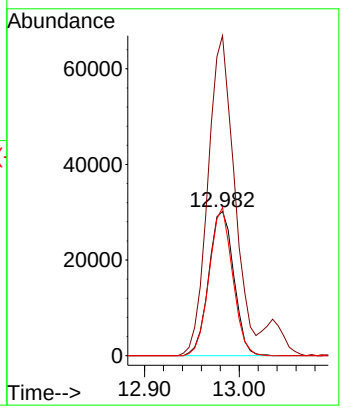




#77
Bromobenzene
Concen: 19.952 ug/l
RT: 12.982 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion:156 Resp: 5532

Ion	Ratio	Lower	Upper
156	100		
77	234.8	111.3	333.8
158	95.8	48.3	144.9



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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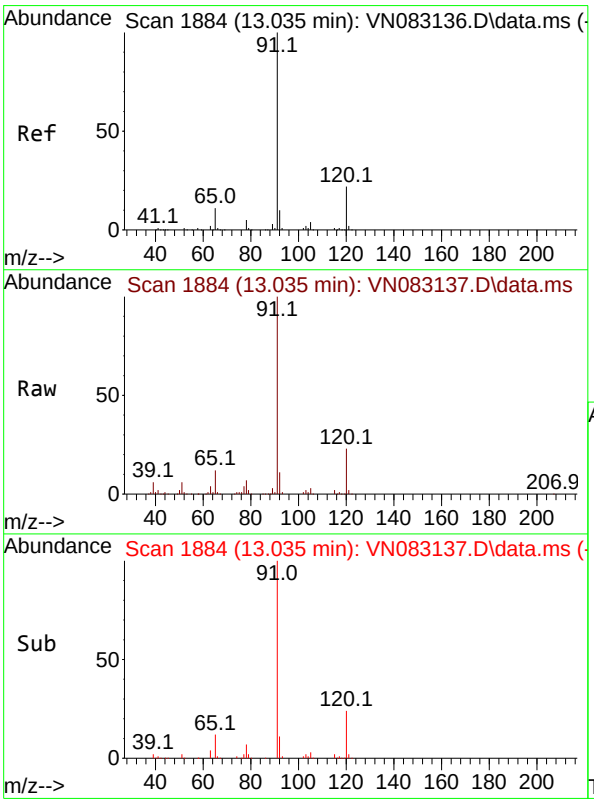
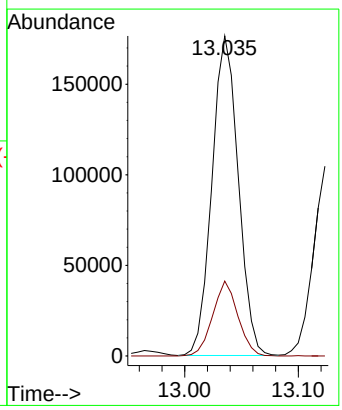
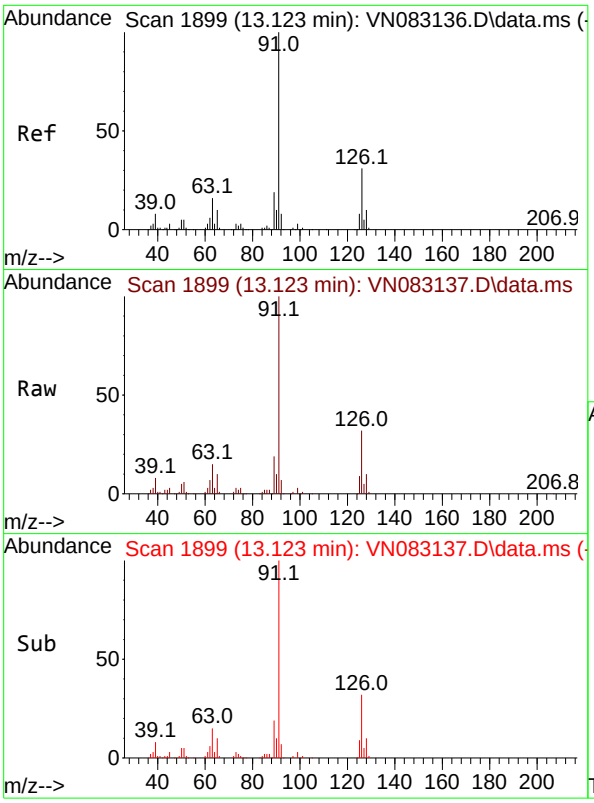


#78
n-propylbenzene
Concen: 19.740 ug/l
RT: 13.035 min Scan# 1884
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 91 Resp: 283745

Ion	Ratio	Lower	Upper
91	100		
120	22.4	10.9	32.9

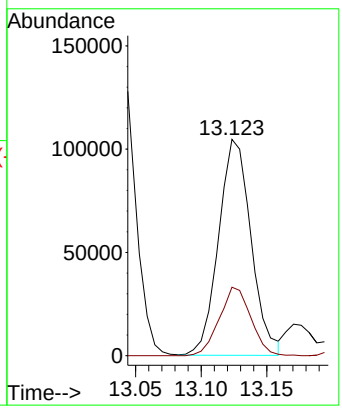




#79
2-Chlorotoluene
Concen: 19.827 ug/l
RT: 13.123 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 91 Resp: 18068

Ion	Ratio	Lower	Upper
91	100		
126	30.7	16.2	48.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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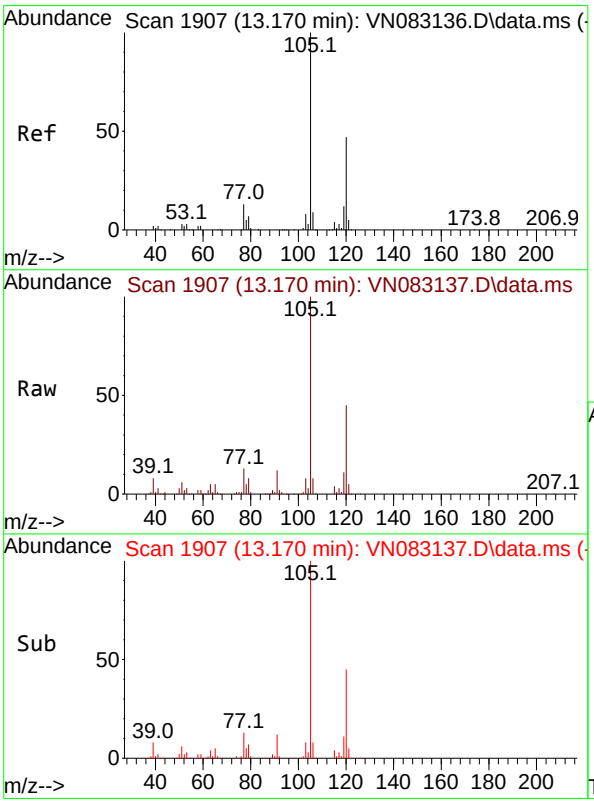
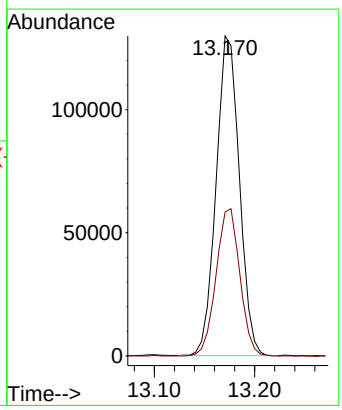
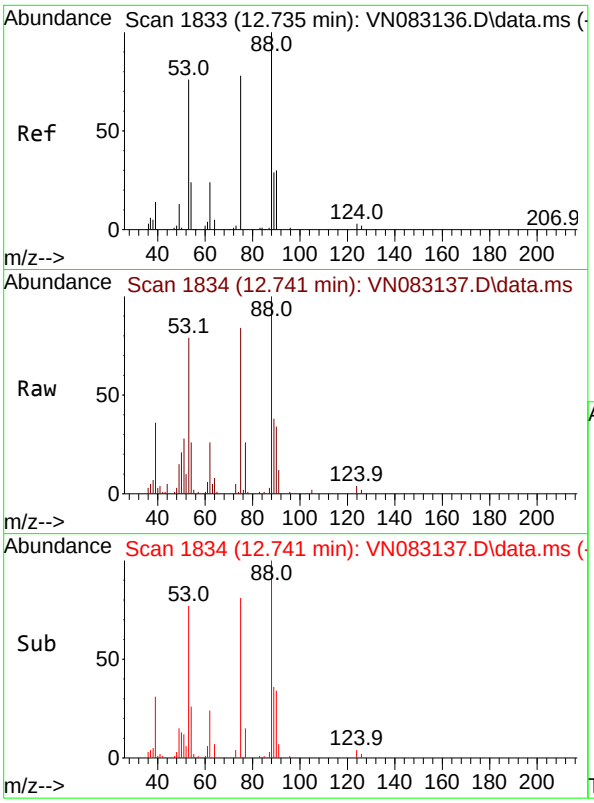


#80
1,3,5-Trimethylbenzene
Concen: 19.938 ug/l
RT: 13.170 min Scan# 1907
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion:105 Resp: 208367

Ion	Ratio	Lower	Upper
105	100		
120	47.2	24.3	72.8





#81
trans-1,4-Dichloro-2-butene
Concen: 20.759 ug/l
RT: 12.741 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 75 Resp: 3126

Ion	Ratio	Lower	Upper
75	100		
53	88.0	88.4	132.6
89	41.4	36.3	54.5

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

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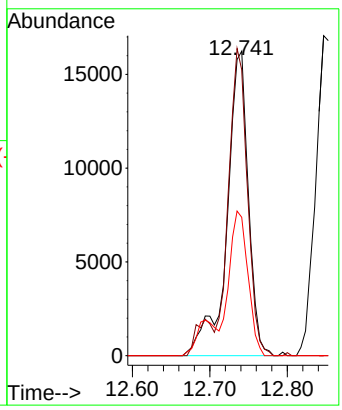
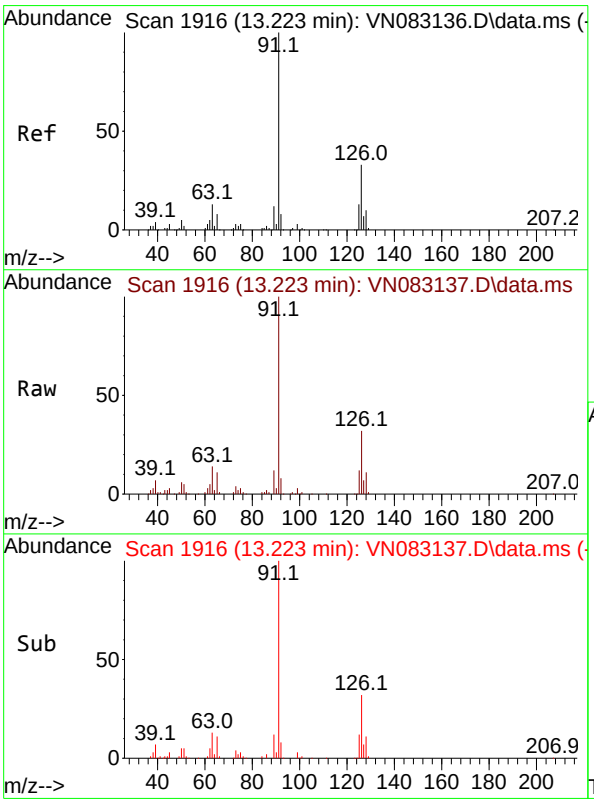
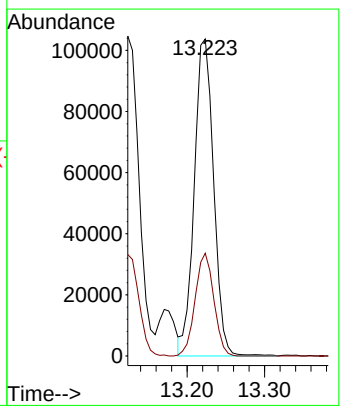


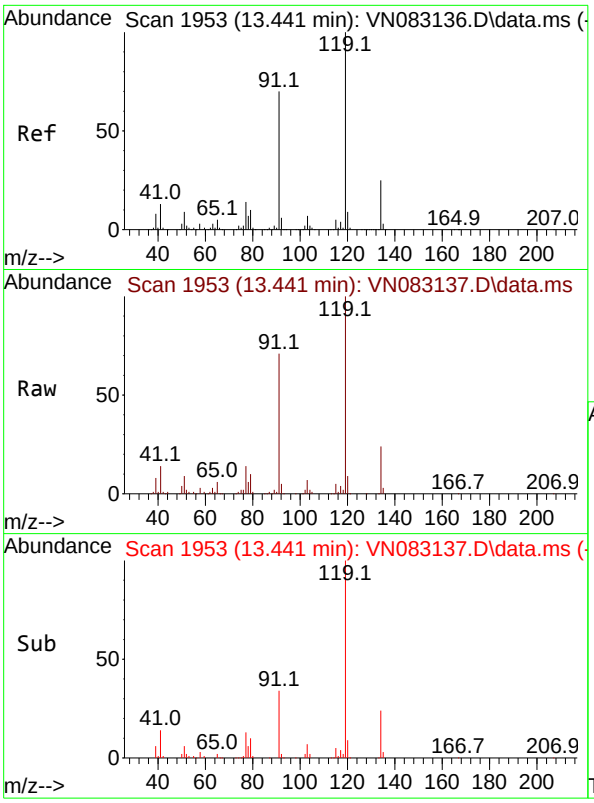


#82
4-Chlorotoluene
Concen: 19.684 ug/l
RT: 13.223 min Scan# 1916
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 91 Resp: 179932

Ion	Ratio	Lower	Upper
91	100		
126	31.3	16.2	48.6

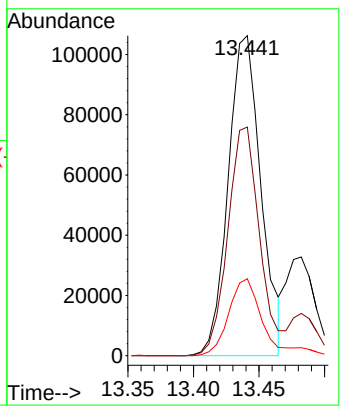




#83
tert-Butylbenzene
Concen: 19.985 ug/l
RT: 13.441 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion:119 Resp: 18496

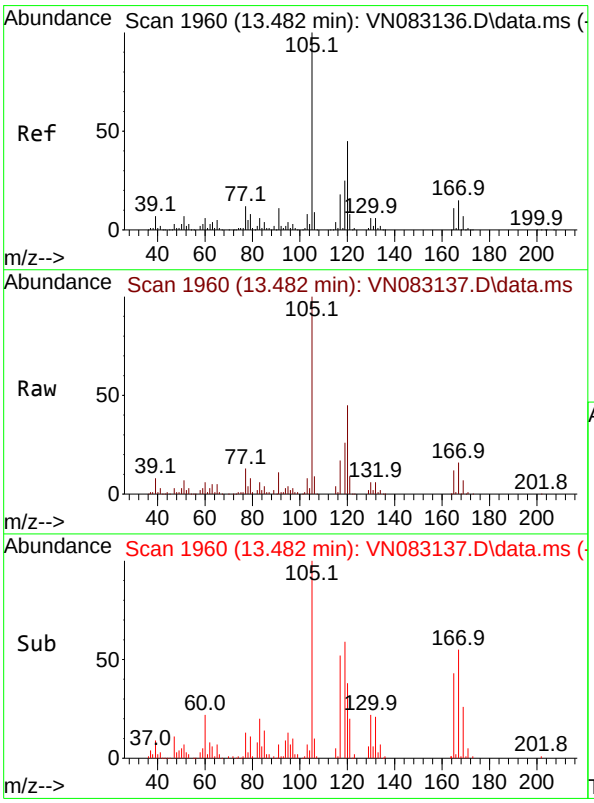
Ion	Ratio	Lower	Upper
119	100		
91	70.2	35.0	105.1
134	25.2	13.3	39.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

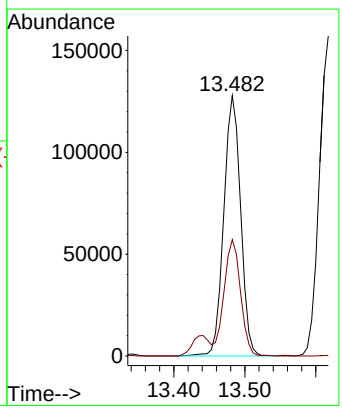
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

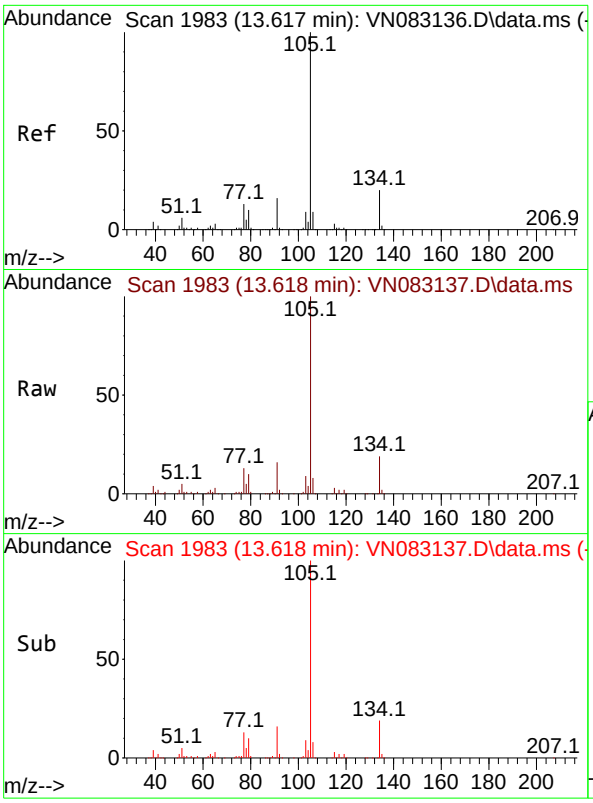


#84
1,2,4-Trimethylbenzene
Concen: 19.984 ug/l
RT: 13.482 min Scan# 1960
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion:105 Resp: 210474

Ion	Ratio	Lower	Upper
105	100		
120	44.0	21.9	65.8





#85
sec-Butylbenzene
Concen: 19.862 ug/l
RT: 13.618 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

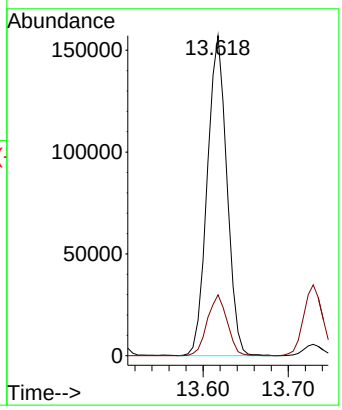
Tgt Ion:105 Resp: 25082

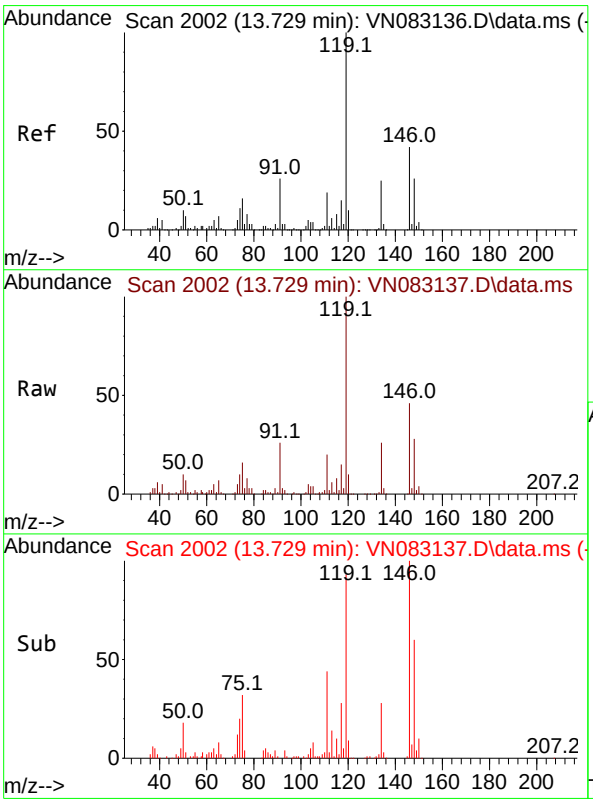
Ion	Ratio	Lower	Upper
105	100		
134	19.3	9.8	29.3

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

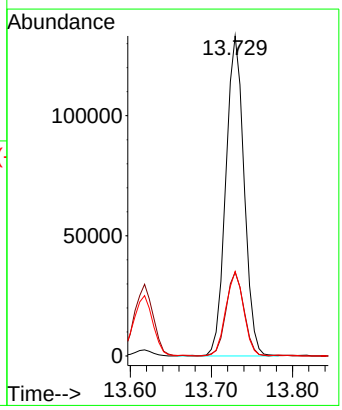


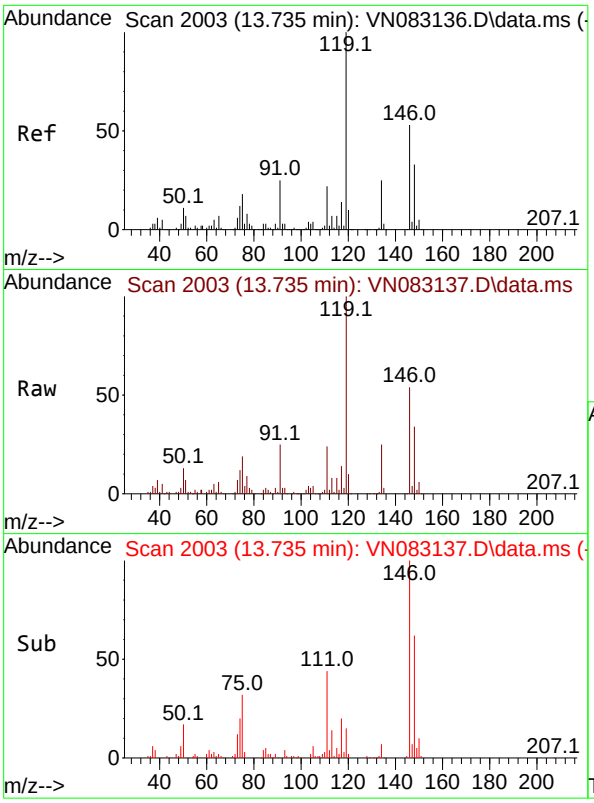


#86
p-Isopropyltoluene
Concen: 19.986 ug/l
RT: 13.729 min Scan# 2002
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion:119 Resp: 208404

Ion	Ratio	Lower	Upper
119	100		
134	25.7	13.0	39.0
91	25.8	12.3	36.9

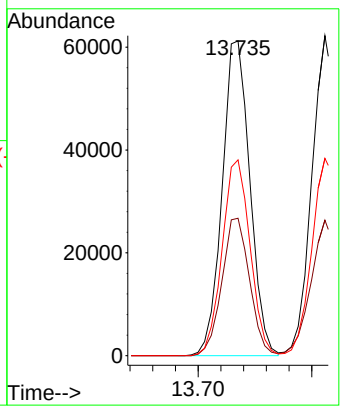




#87
1,3-Dichlorobenzene
Concen: 19.897 ug/l
RT: 13.735 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion:146 Resp: 10381

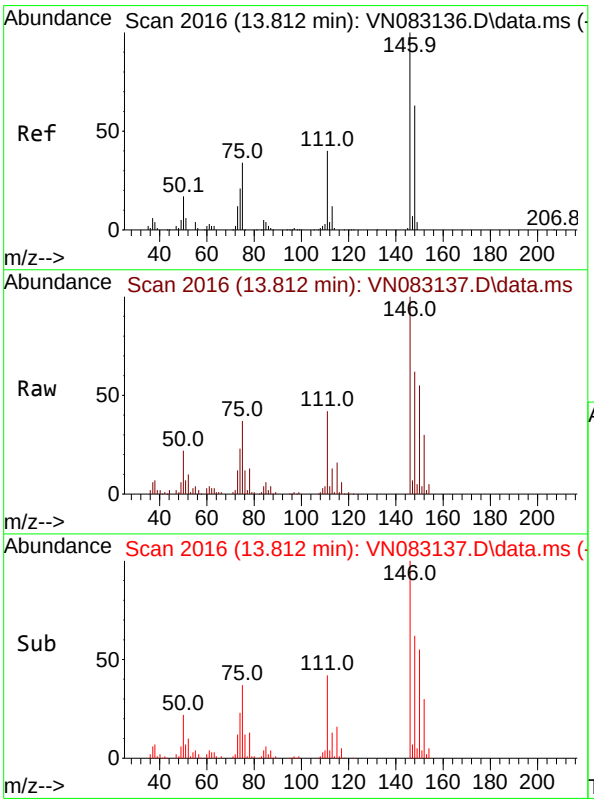
Ion	Ratio	Lower	Upper
146	100		
111	43.7	20.6	61.9
148	62.7	31.8	95.3



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

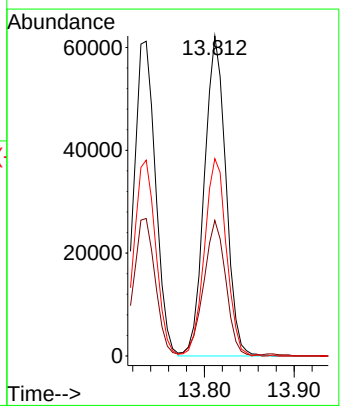
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

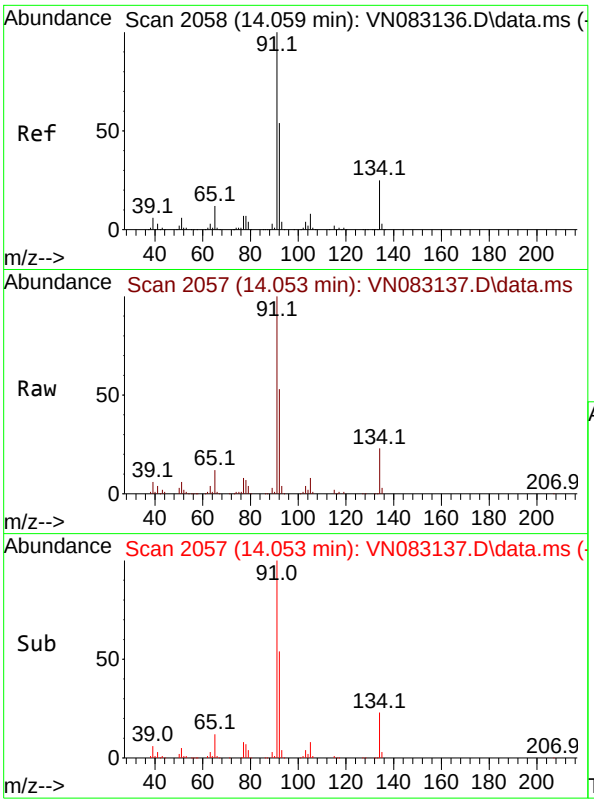


#88
1,4-Dichlorobenzene
Concen: 19.605 ug/l
RT: 13.812 min Scan# 2016
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion:146 Resp: 103132

Ion	Ratio	Lower	Upper
146	100		
111	43.2	20.1	60.3
148	63.5	32.2	96.6

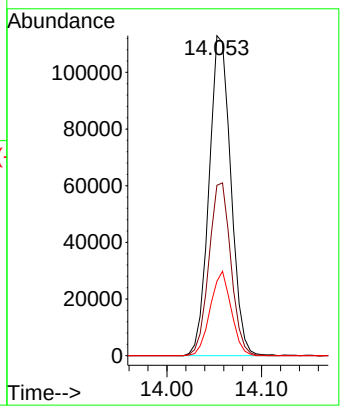




#89
n-Butylbenzene
Concen: 19.975 ug/l
RT: 14.053 min Scan# 2
Delta R.T. -0.006 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 91 Resp: 18048

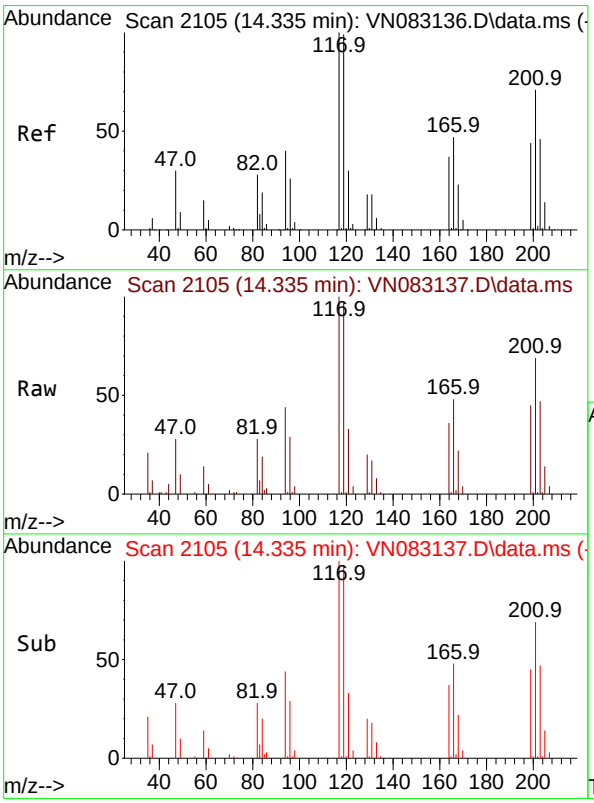
Ion	Ratio	Lower	Upper
91	100		
92	54.3	26.1	78.3
134	25.4	12.1	36.3



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

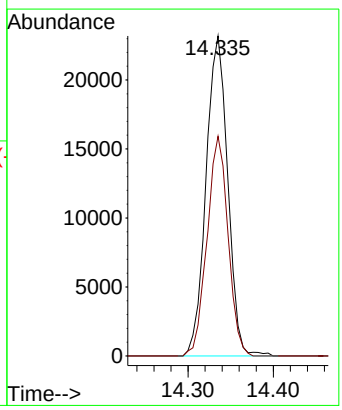
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

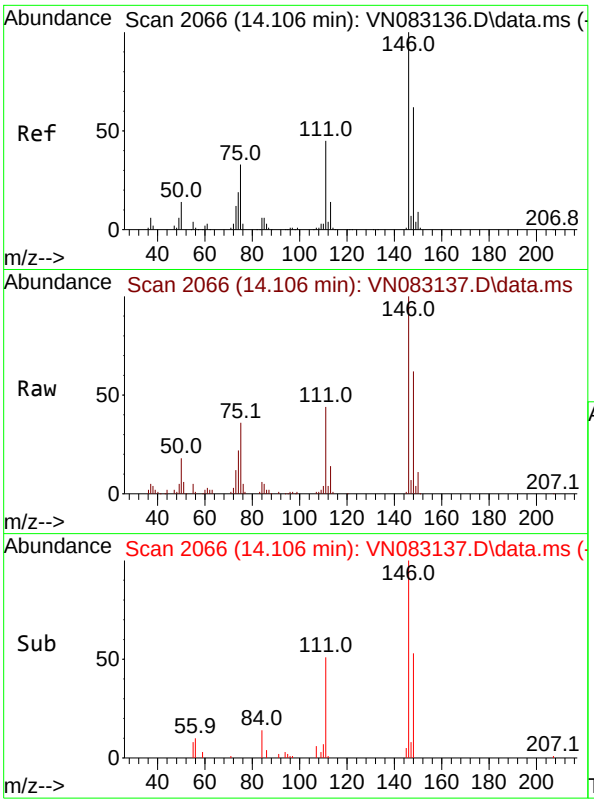


#90
Hexachloroethane
Concen: 20.343 ug/l
RT: 14.335 min Scan# 2105
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion:117 Resp: 40982

Ion	Ratio	Lower	Upper
117	100		
201	66.5	35.8	107.3

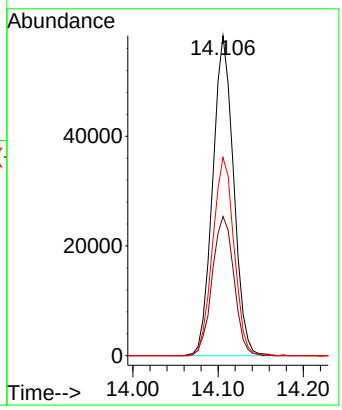




#91
1,2-Dichlorobenzene
Concen: 19.673 ug/l
RT: 14.106 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion:146 Resp: 9933

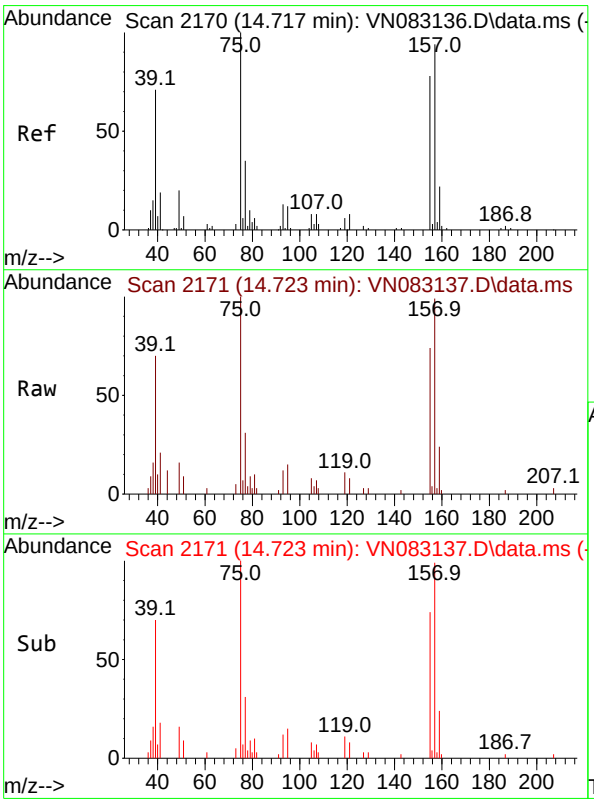
Ion	Ratio	Lower	Upper
146	100		
111	45.3	21.4	64.2
148	63.5	32.1	96.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

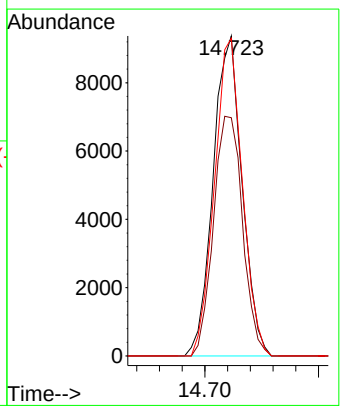
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

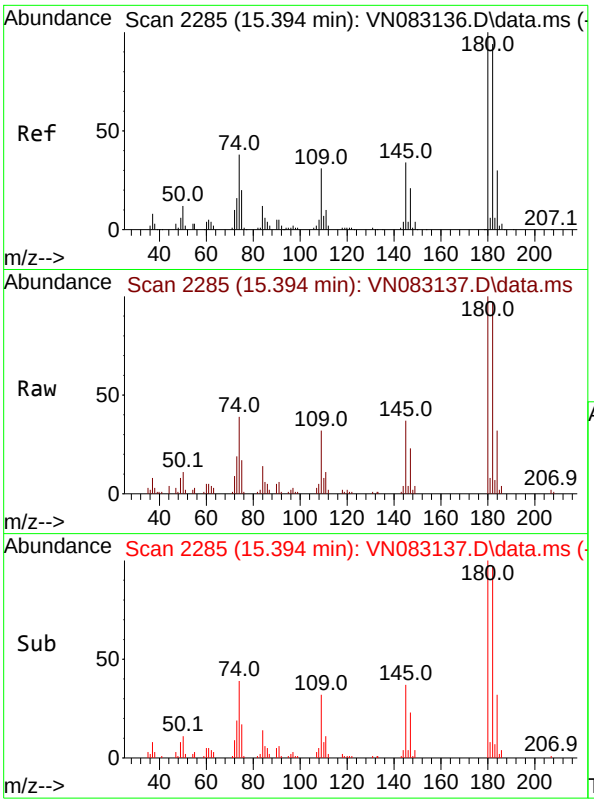


#92
1,2-Dibromo-3-Chloropropane
Concen: 19.320 ug/l
RT: 14.723 min Scan# 2171
Delta R.T. 0.006 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 75 Resp: 16552

Ion	Ratio	Lower	Upper
75	100		
155	75.5	36.6	109.8
157	95.6	46.9	140.6





#93
1,2,4-Trichlorobenzene
Concen: 19.902 ug/l
RT: 15.394 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

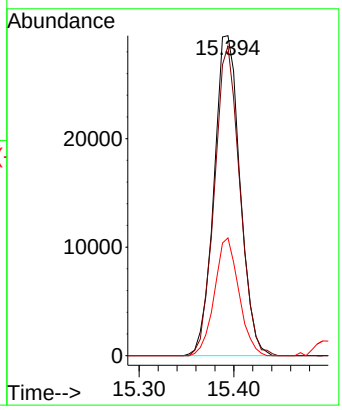
Tgt Ion:180 Resp: 5629

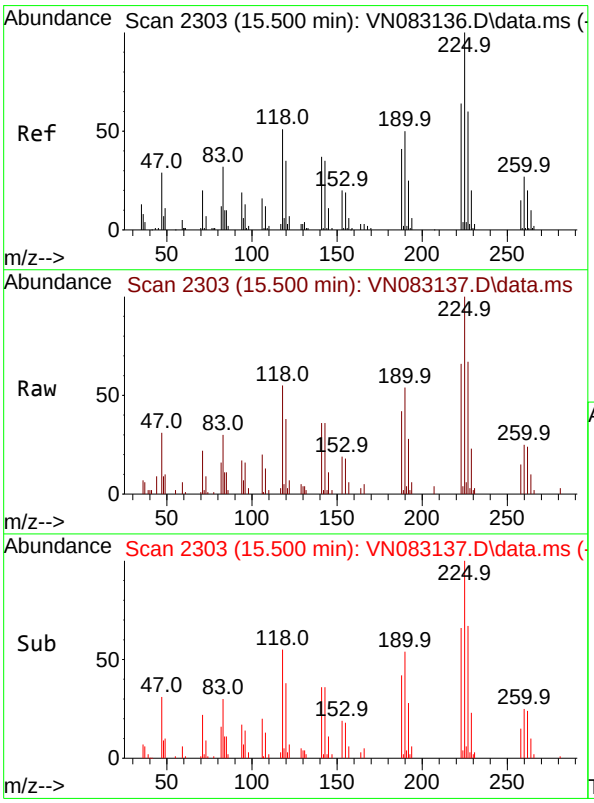
Ion	Ratio	Lower	Upper
180	100		
182	94.3	47.3	141.8
145	34.5	15.7	47.1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

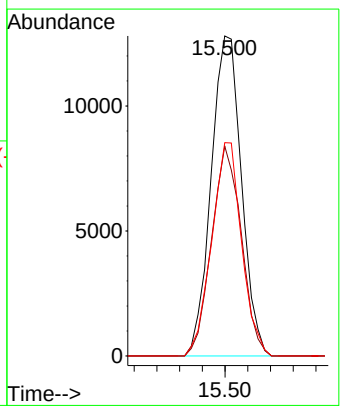


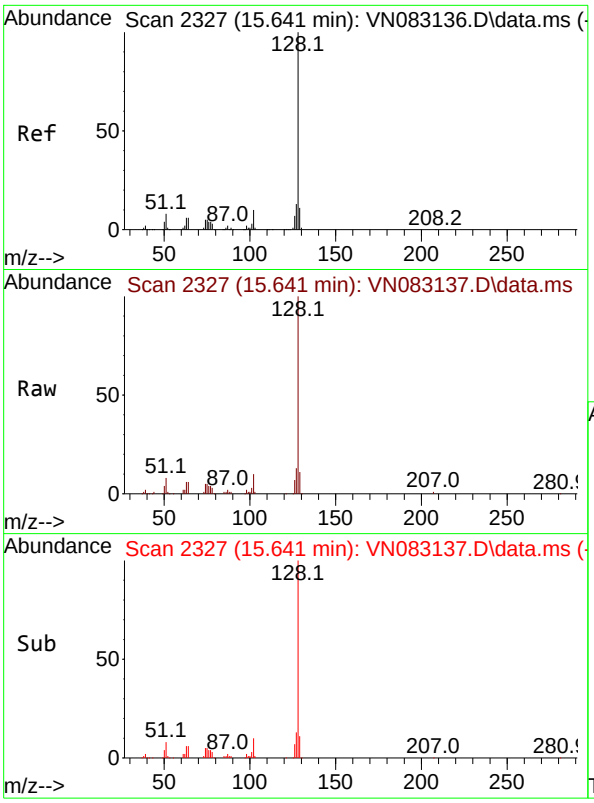


#94
Hexachlorobutadiene
Concen: 18.859 ug/l
RT: 15.500 min Scan# 2303
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion:225 Resp: 23725

Ion	Ratio	Lower	Upper
225	100		
223	64.3	31.9	95.7
227	65.7	32.5	97.5

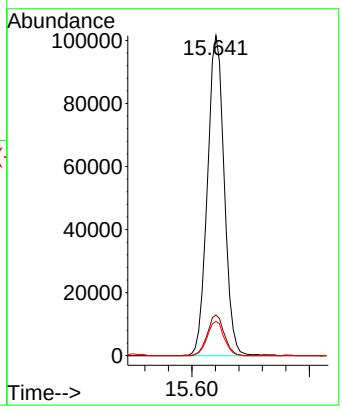




#95
Naphthalene
Concen: 20.047 ug/l
RT: 15.641 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion:128 Resp: 20087

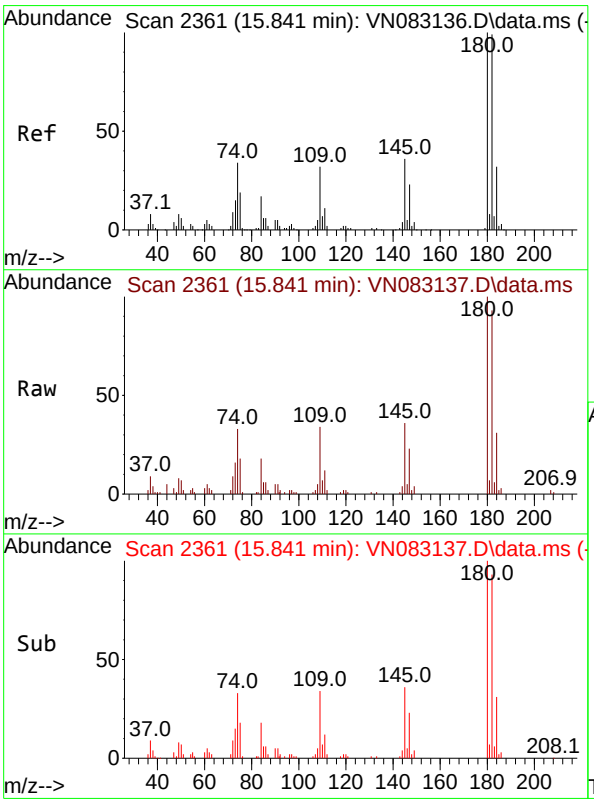
Ion	Ratio	Lower	Upper
128	100		
127	12.8	10.6	16.0
129	10.8	8.6	12.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

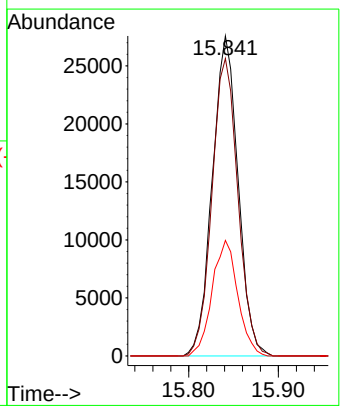
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024



#96
1,2,3-Trichlorobenzene
Concen: 19.630 ug/l
RT: 15.841 min Scan# 2361
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion:180 Resp: 54944

Ion	Ratio	Lower	Upper
180	100		
182	93.5	48.9	146.8
145	35.9	16.8	50.4



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN080724\
Data File : VN083138.D
Acq On : 07 Aug 2024 11:46
Operator : JC\MD
Sample : VSTDICC010
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

Manual Integrations APPROVED

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

Quant Time: Aug 08 06:17:39 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 05:50:26 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.224	168	191754	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	332105	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	279409	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.794	152	125725	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.582	65	27223	9.974	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery =	19.940%#		
35) Dibromofluoromethane	8.165	113	20382	9.832	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery =	19.660%#		
50) Toluene-d8	10.565	98	75261	9.733	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery =	19.460%#		
62) 4-Bromofluorobenzene	12.853	95	28691	9.517	ug/l	0.00
Spiked Amount 50.000	Range 64 - 133		Recovery =	19.040%#		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.124	85	22206	10.212	ug/l	99
3) Chloromethane	2.359	50	22596	10.150	ug/l	92
4) Vinyl Chloride	2.512	62	23461	10.328	ug/l	99
5) Bromomethane	2.959	94	14783	10.488	ug/l	95
6) Chloroethane	3.118	64	13616	9.581	ug/l	95
7) Trichlorofluoromethane	3.500	101	38868	10.357	ug/l	97
8) Diethyl Ether	3.965	74	14761	10.571	ug/l	86
9) 1,1,2-Trichlorotrifluo...	4.365	101	21081	10.189	ug/l	100
10) Methyl Iodide	4.589	142	27229	10.005	ug/l	96
11) Tert butyl alcohol	5.530	59	29665	52.299	ug/l	97
12) 1,1-Dichloroethene	4.336	96	21633	10.177	ug/l	83
13) Acrolein	4.177	56	19397	52.469	ug/l	92
14) Allyl chloride	5.024	41	41546	10.343	ug/l	89
15) Acrylonitrile	5.724	53	58618	50.248	ug/l	99
16) Acetone	4.430	43	54397	50.933	ug/l	92
17) Carbon Disulfide	4.712	76	61323	9.860	ug/l	97
18) Methyl Acetate	5.036	43	32282	10.145	ug/l	95
19) Methyl tert-butyl Ether	5.794	73	77278	10.072	ug/l	94
20) Methylene Chloride	5.277	84	23553	9.582	ug/l #	83
21) trans-1,2-Dichloroethene	5.788	96	22473	10.229	ug/l	93
22) Diisopropyl ether	6.671	45	77046	10.204	ug/l	91
23) Vinyl Acetate	6.606	43	391151	50.550	ug/l #	94
24) 1,1-Dichloroethane	6.571	63	42035	10.213	ug/l	100
25) 2-Butanone	7.488	43	82451	50.278	ug/l #	90
26) 2,2-Dichloropropane	7.488	77	39561	10.351	ug/l	99
27) cis-1,2-Dichloroethene	7.488	96	26902	10.148	ug/l	93
28) Bromochloromethane	7.818	49	14997	8.916	ug/l	85
29) Tetrahydrofuran	7.841	42	54815	51.708	ug/l	88
30) Chloroform	7.971	83	43421	10.155	ug/l	98
31) Cyclohexane	8.259	56	42564	10.523	ug/l	92
32) 1,1,1-Trichloroethane	8.171	97	41247	10.191	ug/l	92
36) 1,1-Dichloropropene	8.371	75	31681	10.103	ug/l	99
37) Ethyl Acetate	7.565	43	34005	9.685	ug/l #	96
38) Carbon Tetrachloride	8.365	117	35950	10.179	ug/l	93
39) Methylcyclohexane	9.600	83	38738	10.058	ug/l	93
40) Benzene	8.606	78	94885	10.157	ug/l	97

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN080724\
Data File : VN083138.D
Acq On : 07 Aug 2024 11:46
Operator : JC\MD
Sample : VSTDICC010
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 08 06:17:39 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 05:50:26 2024
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

Manual Integrations APPROVED

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	7.777	41	18392	9.213	ug/l		93
42) 1,2-Dichloroethane	8.671	62	34826	10.234	ug/l		97
43) Isopropyl Acetate	8.694	43	71420	10.170	ug/l		98
44) Trichloroethene	9.353	130	22669	10.195	ug/l		100
45) 1,2-Dichloropropane	9.624	63	22642	10.211	ug/l		98
46) Dibromomethane	9.706	93	15937	10.041	ug/l		97
47) Bromodichloromethane	9.888	83	35389	9.930	ug/l		97
48) Methyl methacrylate	9.682	41	28711	9.891	ug/l		93
49) 1,4-Dioxane	9.694	88	10545	201.364	ug/l		95
51) 4-Methyl-2-Pentanone	10.447	43	171277	51.587	ug/l		94
52) Toluene	10.629	92	59784	10.129	ug/l		97
53) t-1,3-Dichloropropene	10.835	75	36670	10.017	ug/l		100
54) cis-1,3-Dichloropropene	10.312	75	39503	10.145	ug/l		91
55) 1,1,2-Trichloroethane	11.018	97	21732	10.274	ug/l		94
56) Ethyl methacrylate	10.871	69	40676	10.201	ug/l	#	86
57) 1,3-Dichloropropane	11.165	76	38200	10.132	ug/l		98
58) 2-Chloroethyl Vinyl ether	10.159	63	87140	51.698	ug/l		96
59) 2-Hexanone	11.194	43	129231	50.312	ug/l		93
60) Dibromochloromethane	11.359	129	25798	10.088	ug/l		99
61) 1,2-Dibromoethane	11.470	107	22707	10.219	ug/l		99
64) Tetrachloroethene	11.106	164	19174	10.362	ug/l		92
65) Chlorobenzene	11.894	112	64445	10.437	ug/l		96
66) 1,1,1,2-Tetrachloroethane	11.965	131	22498	10.331	ug/l		99
67) Ethyl Benzene	11.965	91	115664	10.211	ug/l		99
68) m/p-Xylenes	12.070	106	87775	20.687	ug/l		100
69) o-Xylene	12.400	106	43216	10.327	ug/l		97
70) Styrene	12.412	104	72641	10.335	ug/l		97
71) Bromoform	12.582	173	16320	9.893	ug/l	#	95
73) Isopropylbenzene	12.694	105	110277	10.487	ug/l		99
74) N-amyl acetate	12.494	43	52998	10.303	ug/l		96
75) 1,1,2,2-Tetrachloroethane	12.941	83	30438	10.234	ug/l		98
76) 1,2,3-Trichloropropane	12.994	75	28359m	10.261	ug/l		
77) Bromobenzene	12.982	156	23781	10.180	ug/l		93
78) n-propylbenzene	13.035	91	125678	10.379	ug/l		99
79) 2-Chlorotoluene	13.123	91	80065	10.429	ug/l		96
80) 1,3,5-Trimethylbenzene	13.176	105	91559	10.400	ug/l		98
81) trans-1,4-Dichloro-2-b...	12.735	75	11760	9.271	ug/l		95
82) 4-Chlorotoluene	13.223	91	78348	10.174	ug/l		97
83) tert-Butylbenzene	13.441	119	80263	10.294	ug/l		98
84) 1,2,4-Trimethylbenzene	13.482	105	92502	10.426	ug/l		97
85) sec-Butylbenzene	13.617	105	108740	10.221	ug/l		98
86) p-Isopropyltoluene	13.729	119	88256	10.047	ug/l		97
87) 1,3-Dichlorobenzene	13.735	146	44168	10.048	ug/l		97
88) 1,4-Dichlorobenzene	13.811	146	44036	9.937	ug/l		96
89) n-Butylbenzene	14.059	91	76567	10.060	ug/l		99
90) Hexachloroethane	14.335	117	17798	10.487	ug/l		93
91) 1,2-Dichlorobenzene	14.106	146	43734	10.282	ug/l		98
92) 1,2-Dibromo-3-Chloropr...	14.723	75	7258	10.056	ug/l		98
93) 1,2,4-Trichlorobenzene	15.394	180	23580	9.895	ug/l		98
94) Hexachlorobutadiene	15.500	225	10788	10.179	ug/l		99
95) Naphthalene	15.641	128	86373	10.232	ug/l		99
96) 1,2,3-Trichlorobenzene	15.841	180	24492	10.387	ug/l		97

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN080724\
Data File : VN083138.D
Acq On : 07 Aug 2024 11:46
Operator : JC\MD
Sample : VSTDICC010
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

Manual Integrations APPROVED

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

Quant Time: Aug 08 06:17:39 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 05:50:26 2024
Response via : Initial Calibration

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

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

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN080724\
Data File : VN083138.D
Acq On : 07 Aug 2024 11:46
Operator : JC\MD
Sample : VSTDICC010
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 08 06:17:39 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 05:50:26 2024
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

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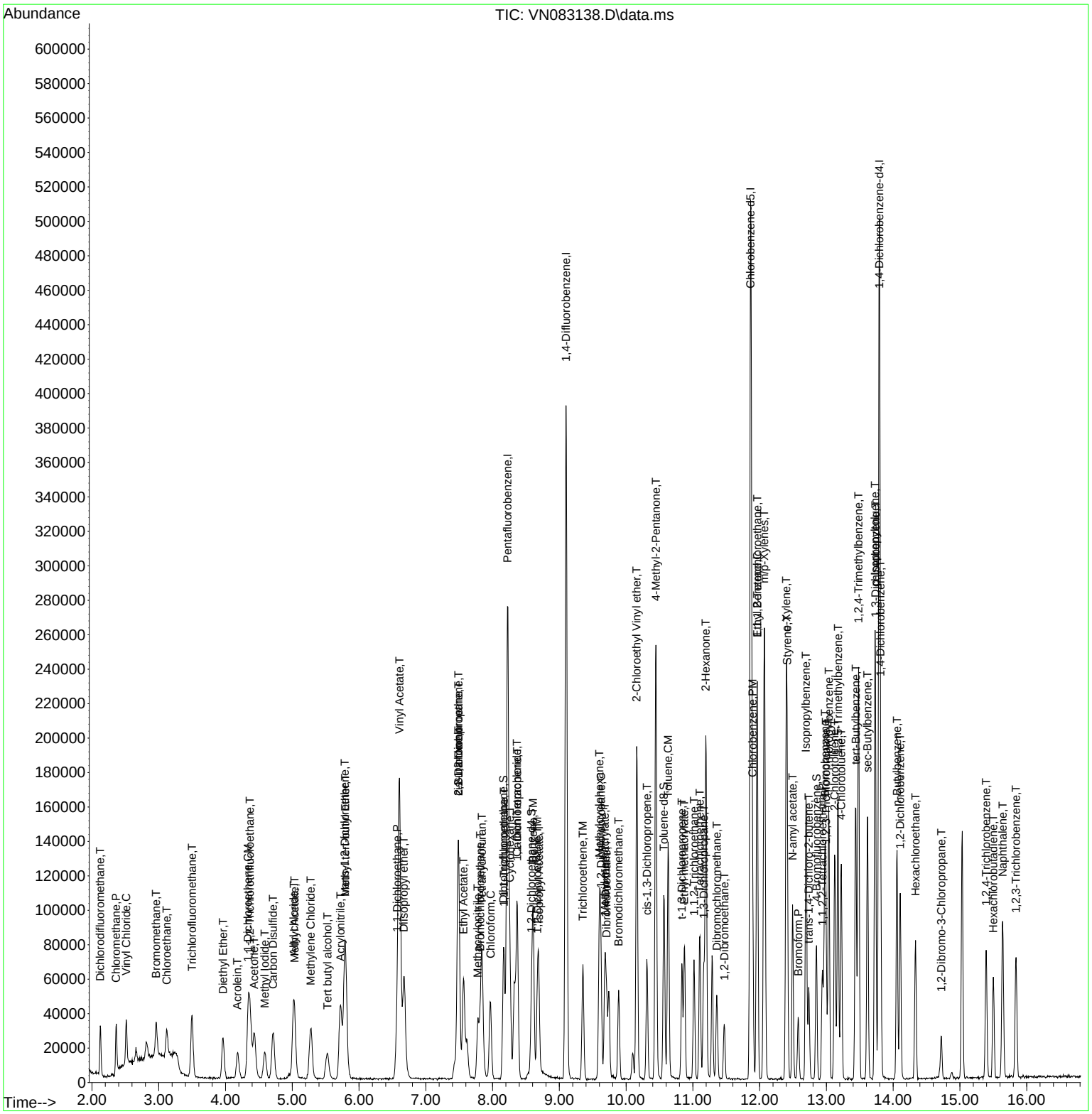
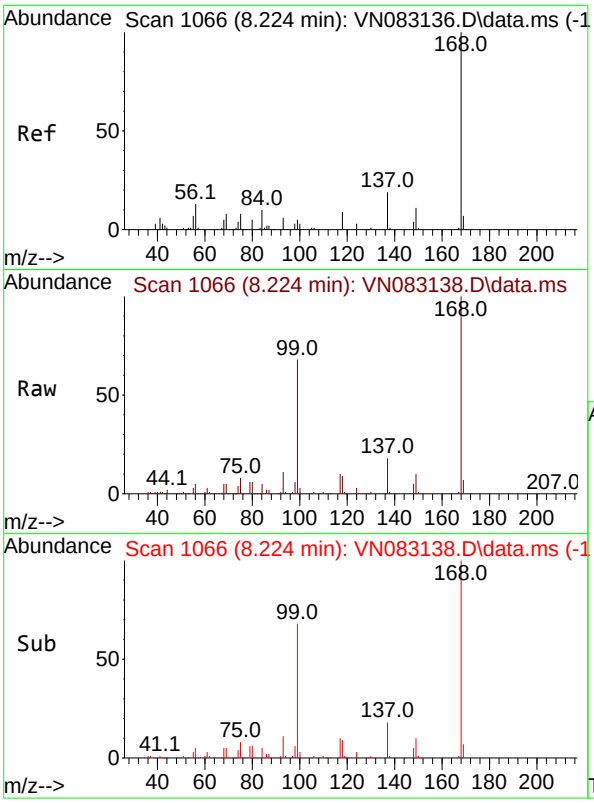
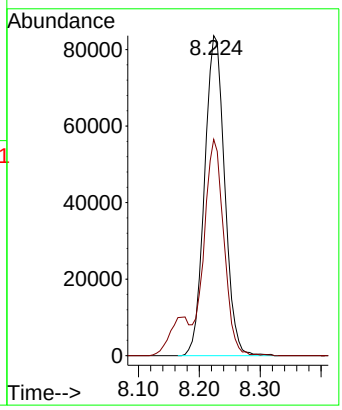




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion:168 Resp: 19175

Ion	Ratio	Lower	Upper
168	100		
99	67.6	48.2	72.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

Manual Integrations
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Reviewed By :John Carlone 08/08/2024
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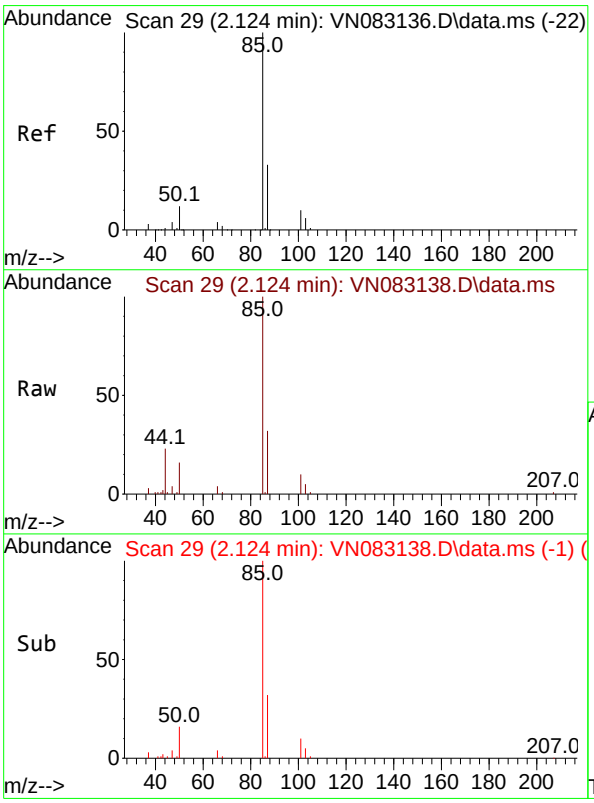
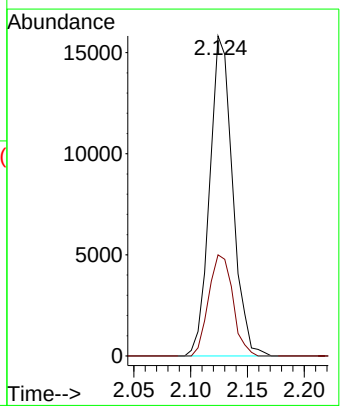
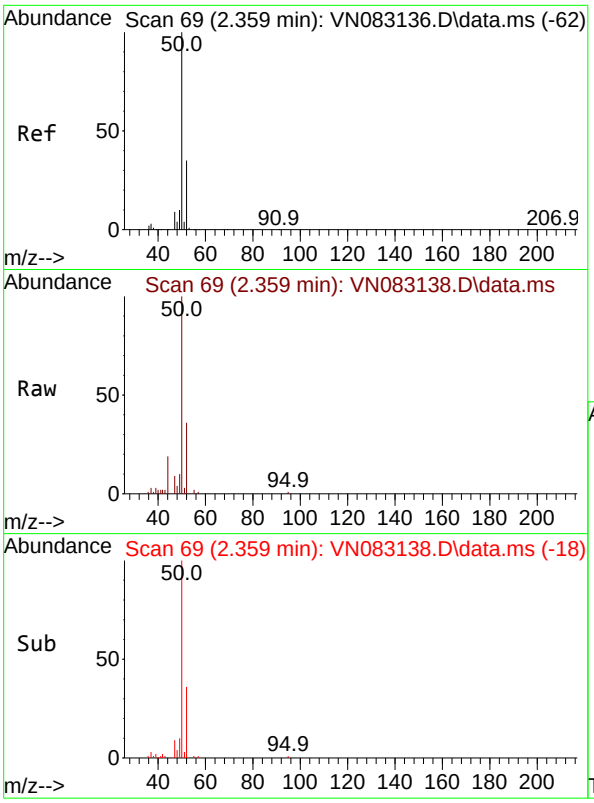


#2
Dichlorodifluoromethane
Concen: 10.212 ug/l
RT: 2.124 min Scan# 29
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 85 Resp: 22206

Ion	Ratio	Lower	Upper
85	100		
87	31.6	15.7	47.0

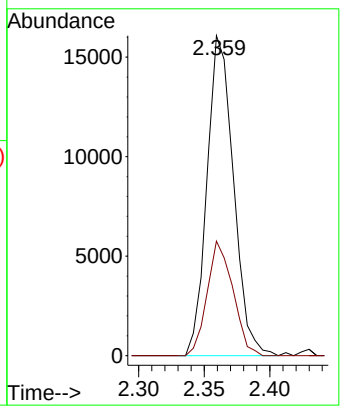




#3
Chloromethane
Concen: 10.150 ug/l
RT: 2.359 min Scan# 6
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 50 Resp: 2259

Ion	Ratio	Lower	Upper
50	100		
52	35.8	25.0	37.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

Manual Integrations
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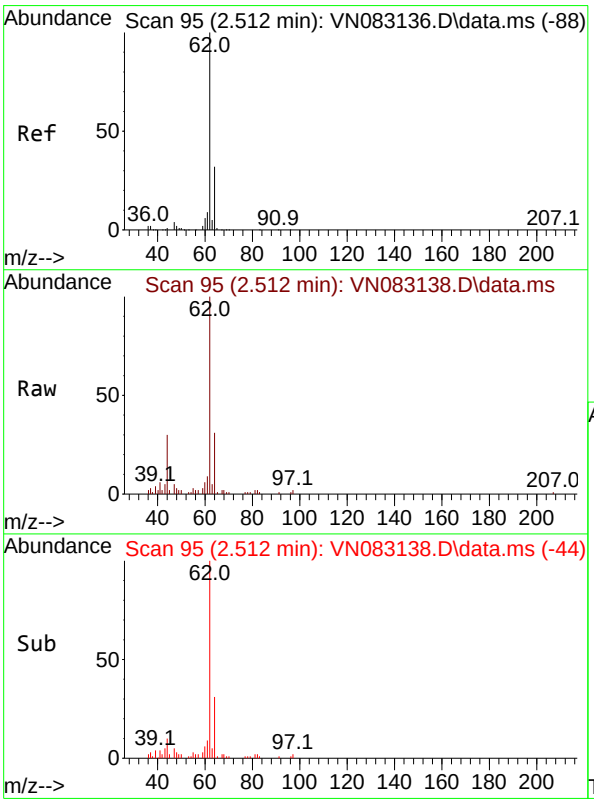
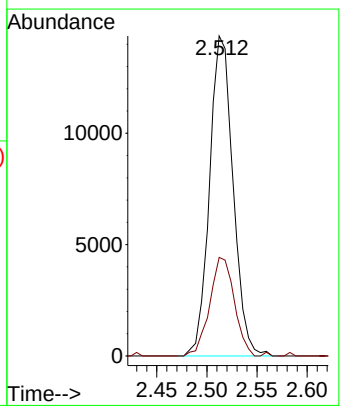
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

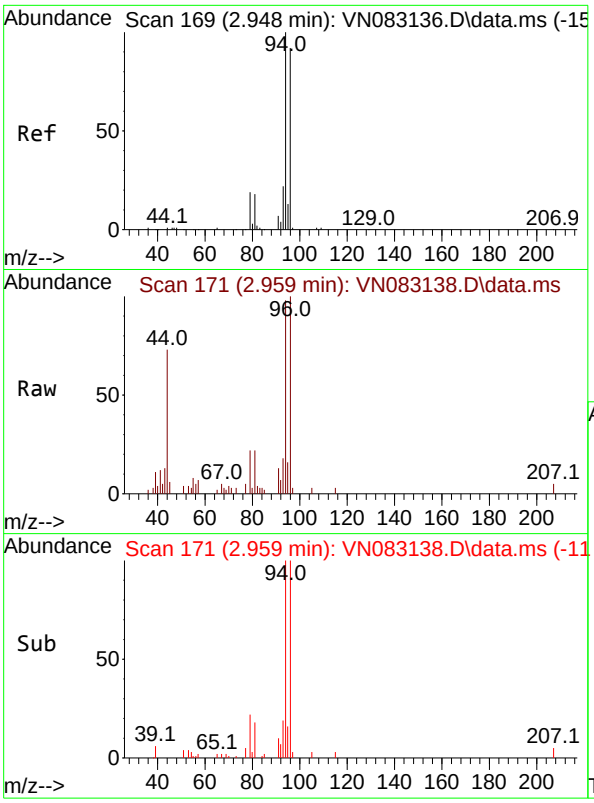


#4
Vinyl Chloride
Concen: 10.328 ug/l
RT: 2.512 min Scan# 95
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 62 Resp: 23461

Ion	Ratio	Lower	Upper
62	100		
64	30.8	25.0	37.6

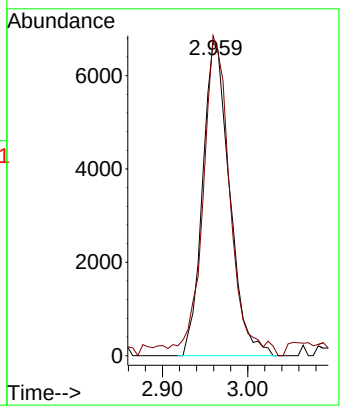




#5
Bromomethane
Concen: 10.488 ug/l
RT: 2.959 min Scan# 1
Delta R.T. 0.012 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 94 Resp: 1478

Ion	Ratio	Lower	Upper
94	100		
96	102.2	78.0	117.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

Manual Integrations
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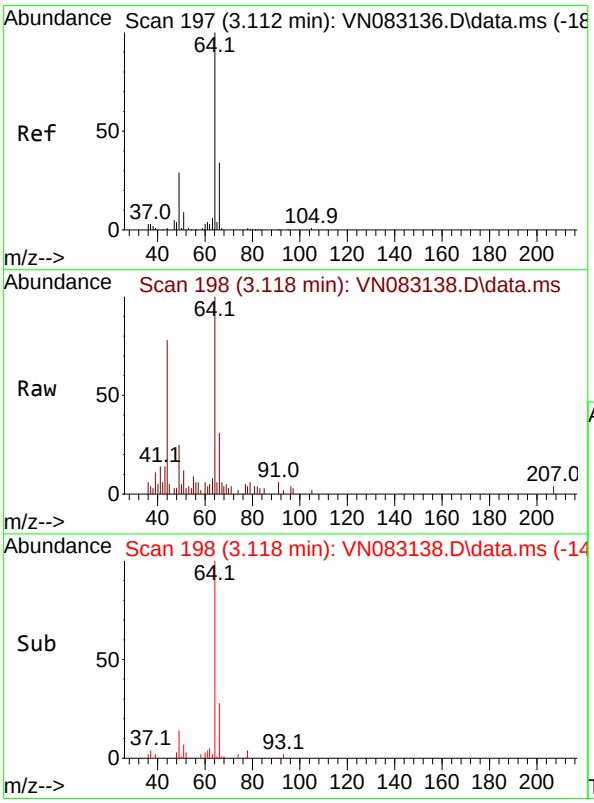
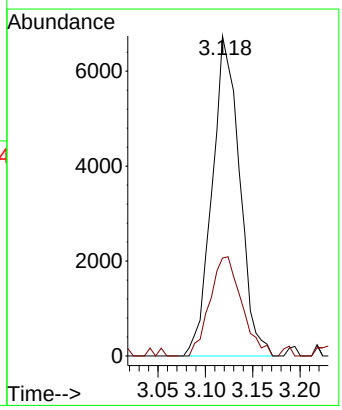
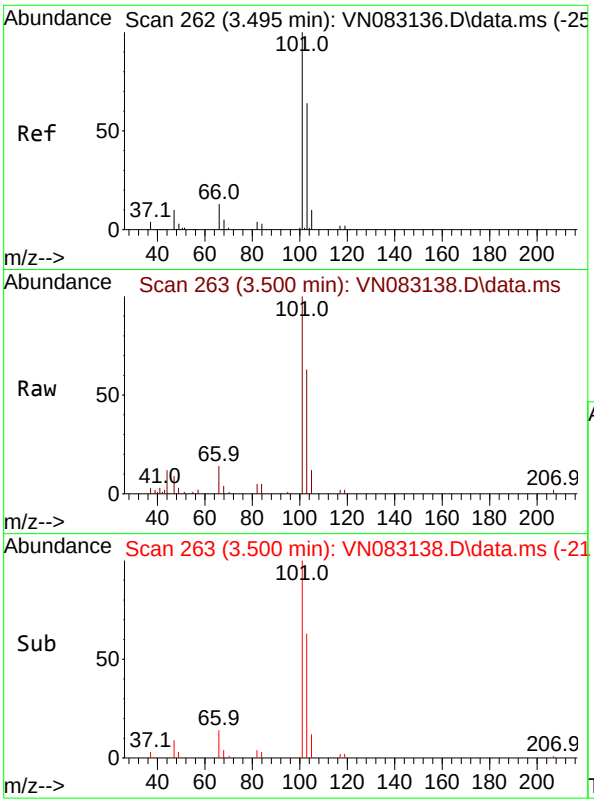


#6
Chloroethane
Concen: 9.581 ug/l
RT: 3.118 min Scan# 198
Delta R.T. 0.006 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 64 Resp: 13616

Ion	Ratio	Lower	Upper
64	100		
66	30.6	26.6	40.0





#7
Trichlorofluoromethane
Concen: 10.357 ug/l
RT: 3.500 min Scan# 2
Delta R.T. 0.005 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion:101 Resp: 3886

Ion	Ratio	Lower	Upper
101	100		
103	63.5	52.7	79.1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

Manual Integrations
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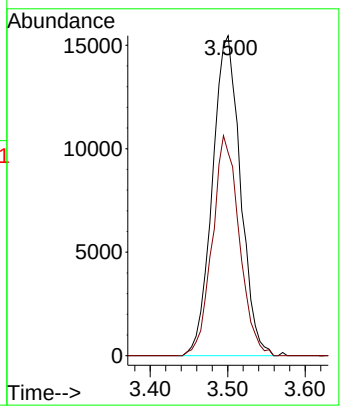
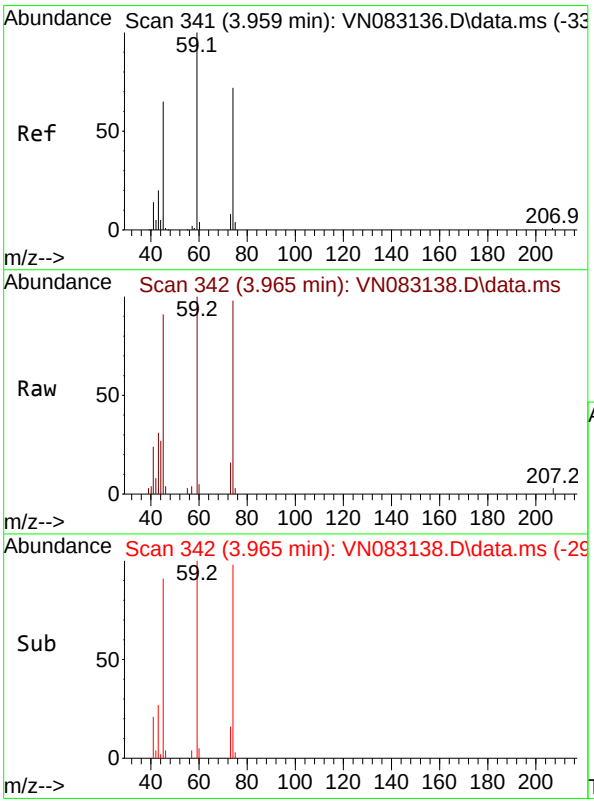
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

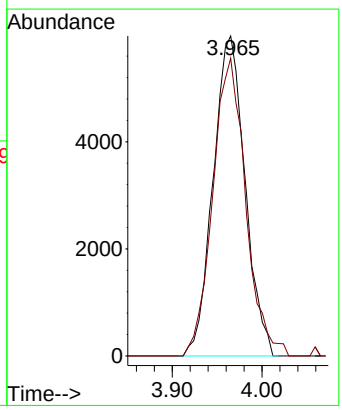


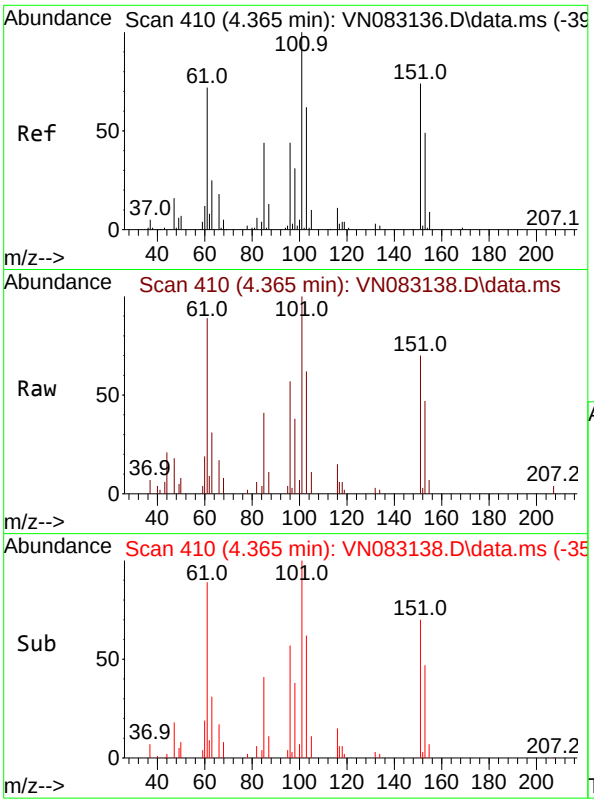


#8
Diethyl Ether
Concen: 10.571 ug/l
RT: 3.965 min Scan# 342
Delta R.T. 0.006 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 74 Resp: 14761

Ion	Ratio	Lower	Upper
74	100		
45	95.9	55.5	166.3

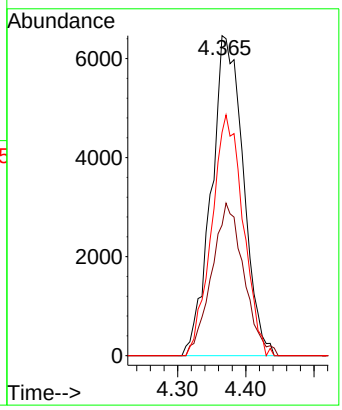




#9
1,1,2-Trichlorotrifluoroethane
Concen: 10.189 ug/l
RT: 4.365 min Scan# 41
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion:101 Resp: 2108

Ion	Ratio	Lower	Upper
101	100		
85	48.0	38.3	57.5
151	74.1	59.3	88.9



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

Manual Integrations
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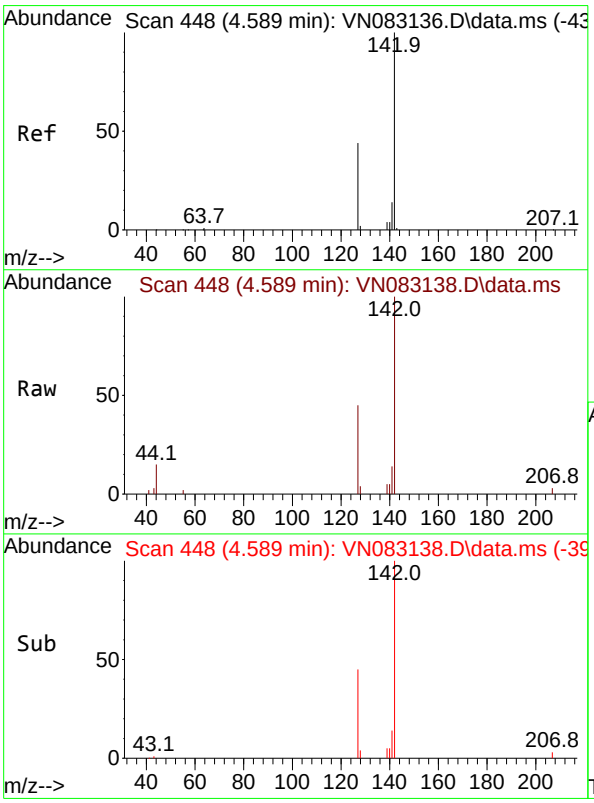
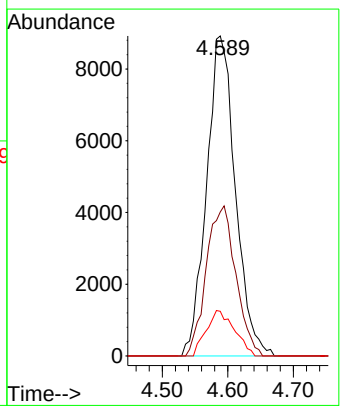
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

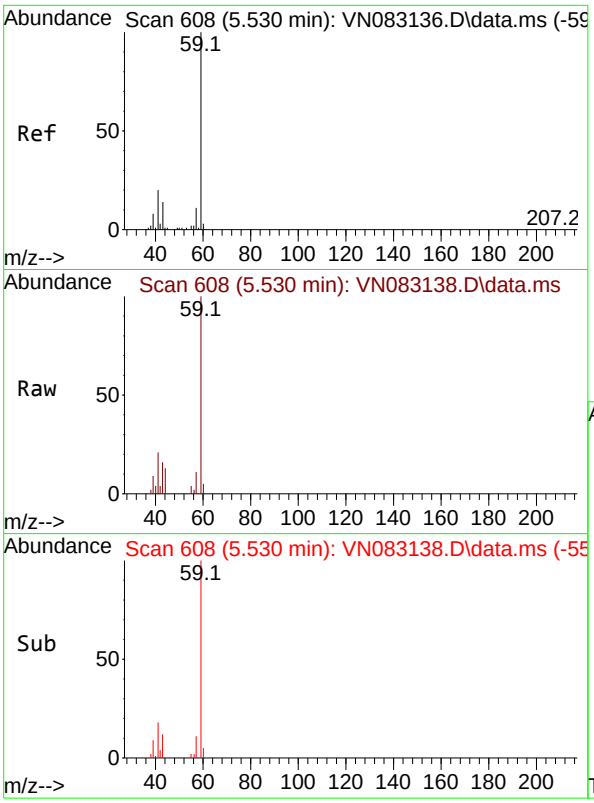


#10
Methyl Iodide
Concen: 10.005 ug/l
RT: 4.589 min Scan# 448
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion:142 Resp: 27229

Ion	Ratio	Lower	Upper
142	100		
127	45.0	37.5	56.3
141	13.9	13.1	19.7

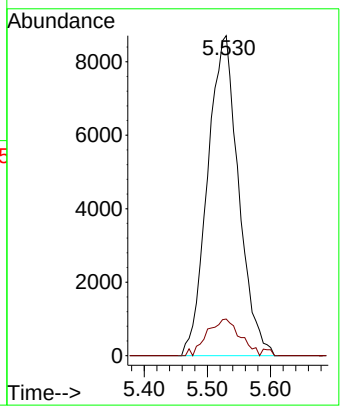




#11
Tert butyl alcohol
Concen: 52.299 ug/l
RT: 5.530 min Scan# 6
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 59 Resp: 2966

Ion	Ratio	Lower	Upper
59	100		
57	12.1	8.9	13.3



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

Manual Integrations
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Reviewed By :John Carlone 08/08/2024
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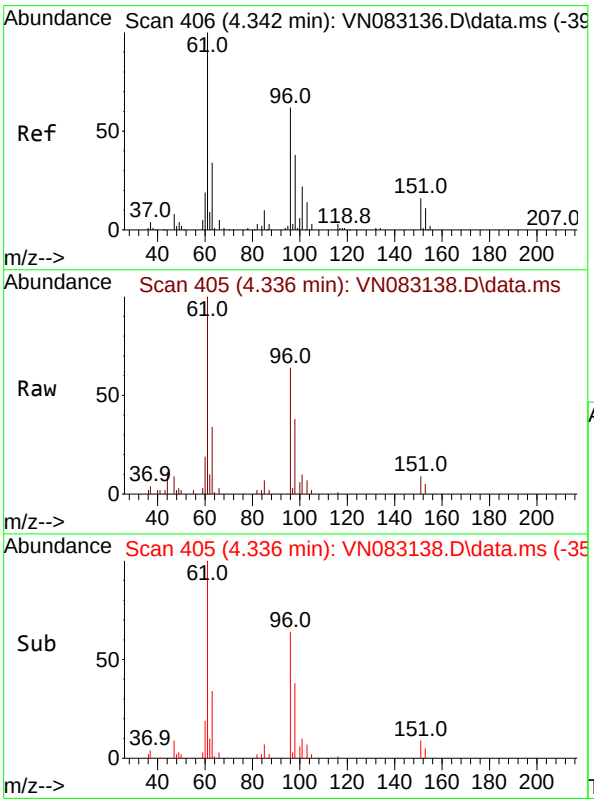
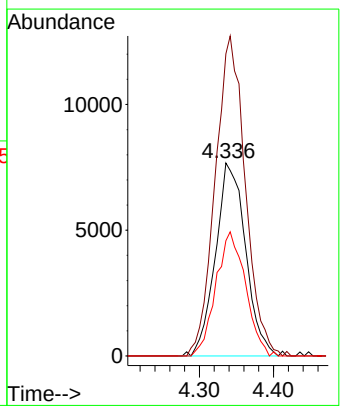
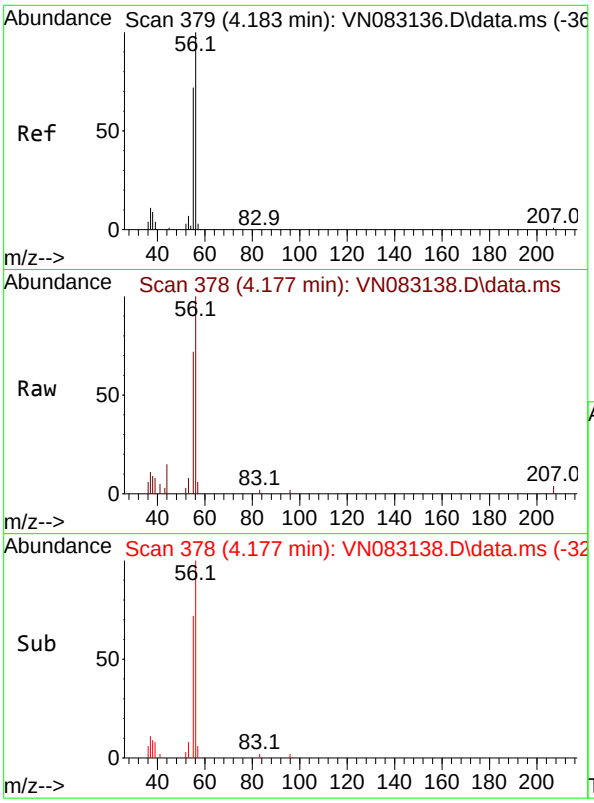


#12
1,1-Dichloroethene
Concen: 10.177 ug/l
RT: 4.336 min Scan# 405
Delta R.T. -0.006 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 96 Resp: 21633

Ion	Ratio	Lower	Upper
96	100		
61	156.5	149.7	224.5
98	59.7	50.1	75.1

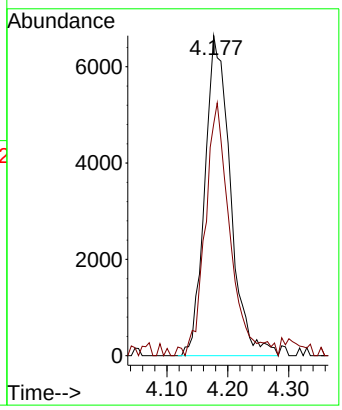




#13
Acrolein
Concen: 52.469 ug/l
RT: 4.177 min Scan# 3
Delta R.T. -0.006 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 56 Resp: 1939

Ion	Ratio	Lower	Upper
56	100		
55	77.0	56.4	84.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

Manual Integrations
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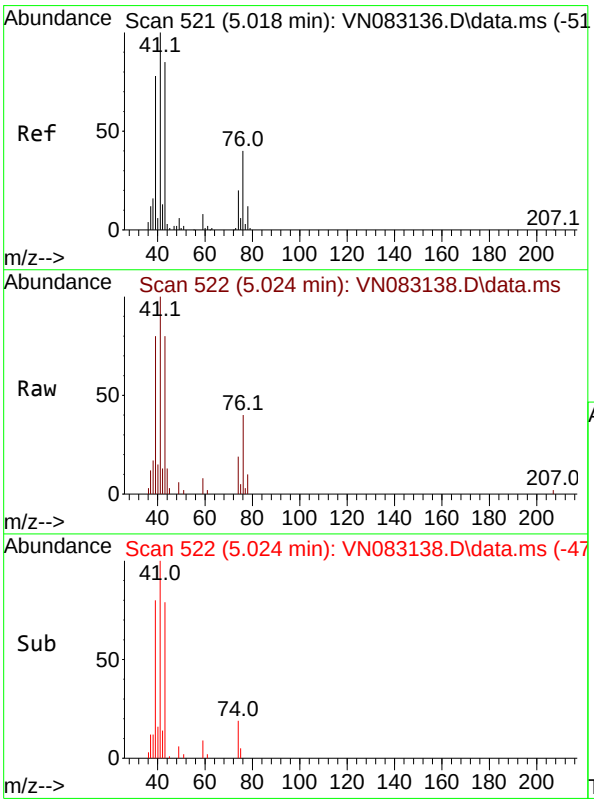
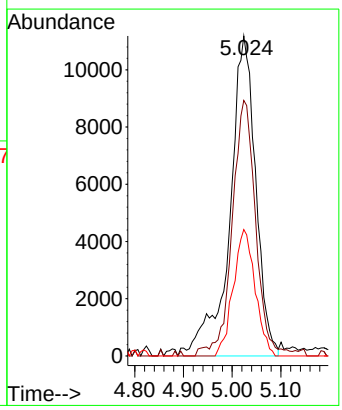
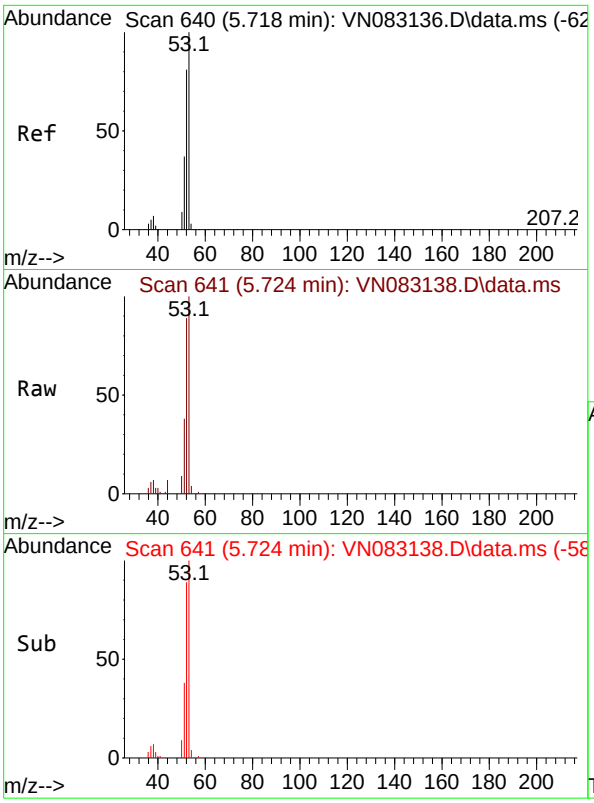


#14
Allyl chloride
Concen: 10.343 ug/l
RT: 5.024 min Scan# 522
Delta R.T. 0.006 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 41 Resp: 41546

Ion	Ratio	Lower	Upper
41	100		
39	72.0	67.8	101.6
76	33.2	25.8	38.8

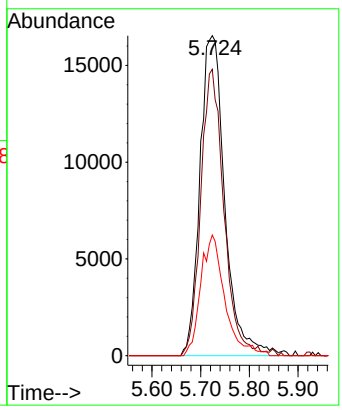




#15
Acrylonitrile
Concen: 50.248 ug/l
RT: 5.724 min Scan# 64
Delta R.T. 0.006 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 53 Resp: 5861

Ion	Ratio	Lower	Upper
53	100		
52	83.1	66.6	100.0
51	36.6	30.1	45.1



Instrument :
MSVOA_N
ClientSampleId :
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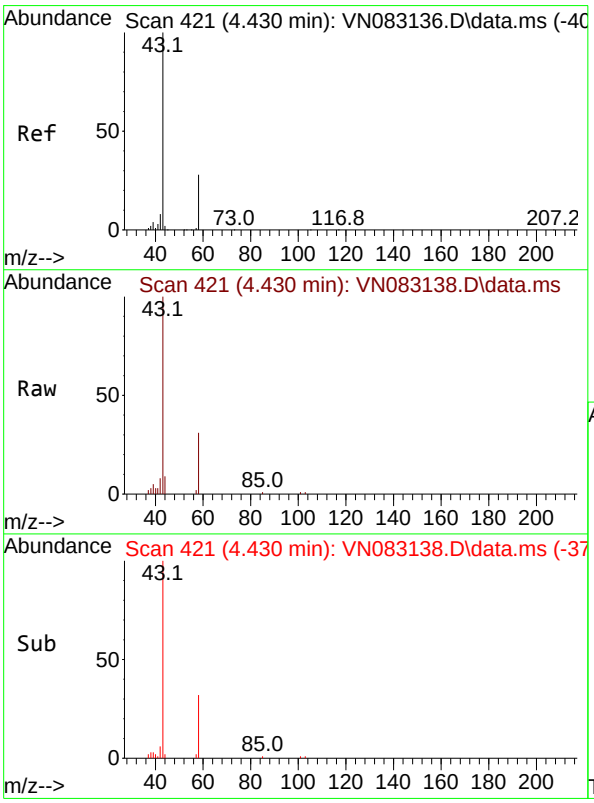
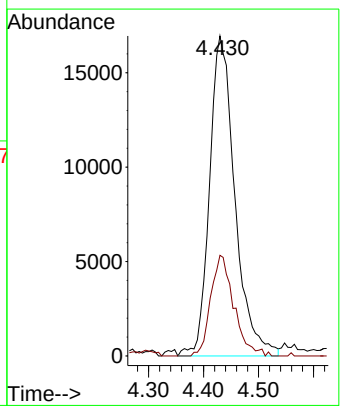
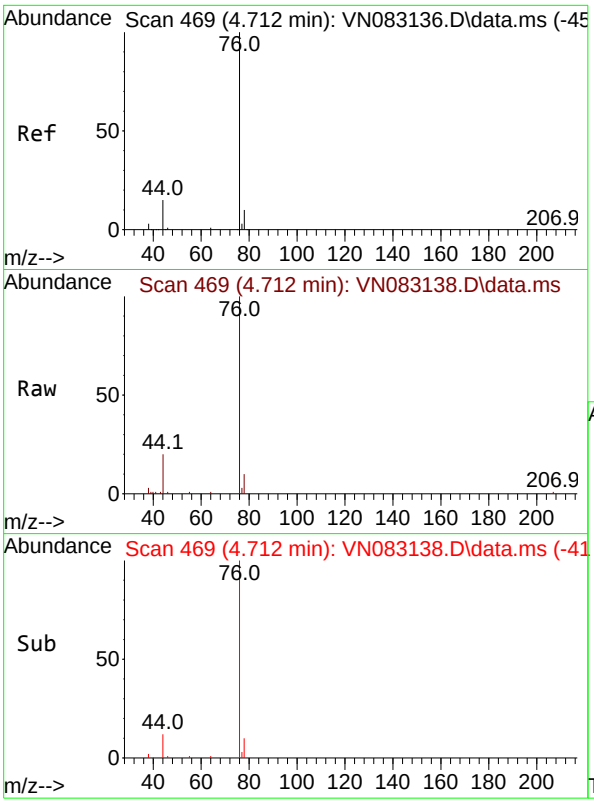


#16
Acetone
Concen: 50.933 ug/l
RT: 4.430 min Scan# 421
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 43 Resp: 54397

Ion	Ratio	Lower	Upper
43	100		
58	31.4	21.8	32.6

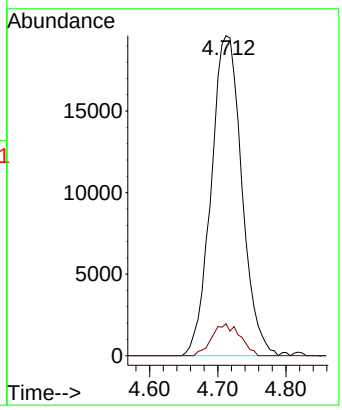




#17
Carbon Disulfide
Concen: 9.860 ug/l
RT: 4.712 min Scan# 4(
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 76 Resp: 6132

Ion	Ratio	Lower	Upper
76	100		
78	9.9	7.2	10.8



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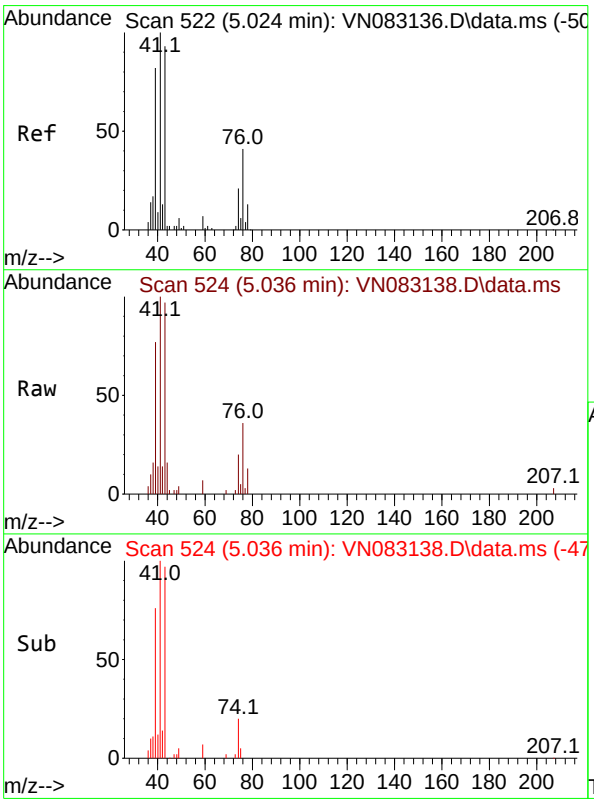
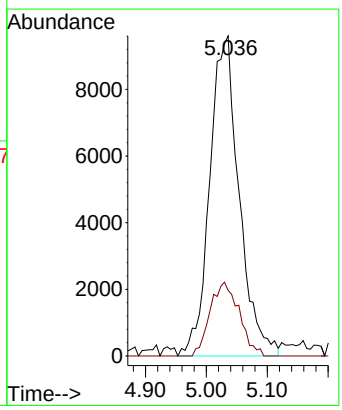
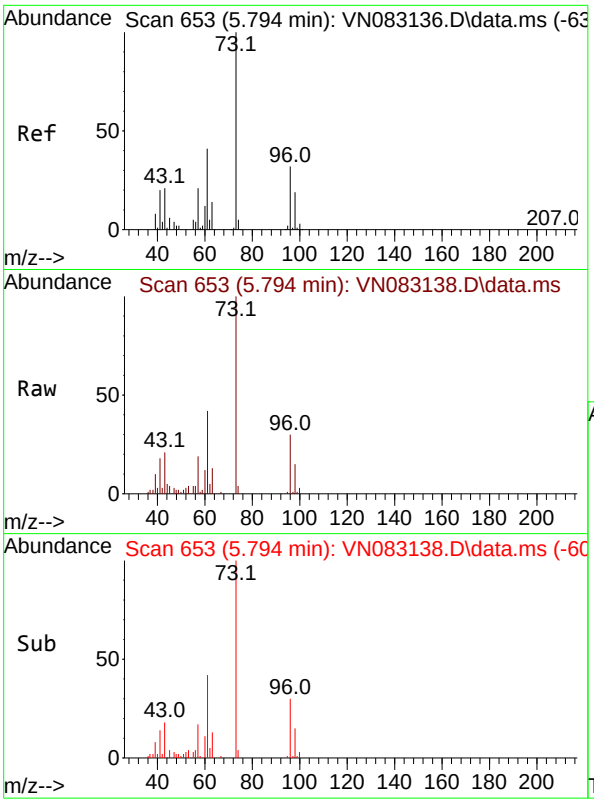


#18
Methyl Acetate
Concen: 10.145 ug/l
RT: 5.036 min Scan# 524
Delta R.T. 0.012 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 43 Resp: 32282

Ion	Ratio	Lower	Upper
43	100		
74	22.8	16.3	24.5

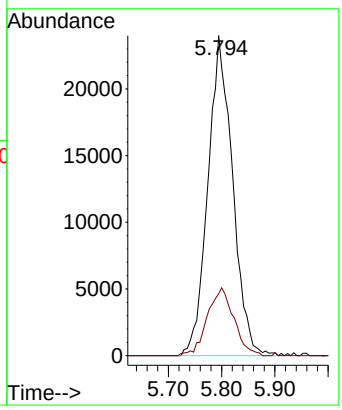




#19
Methyl tert-butyl Ether
Concen: 10.072 ug/l
RT: 5.794 min Scan# 6
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 73 Resp: 7727

Ion	Ratio	Lower	Upper
73	100		
57	19.3	17.9	26.9



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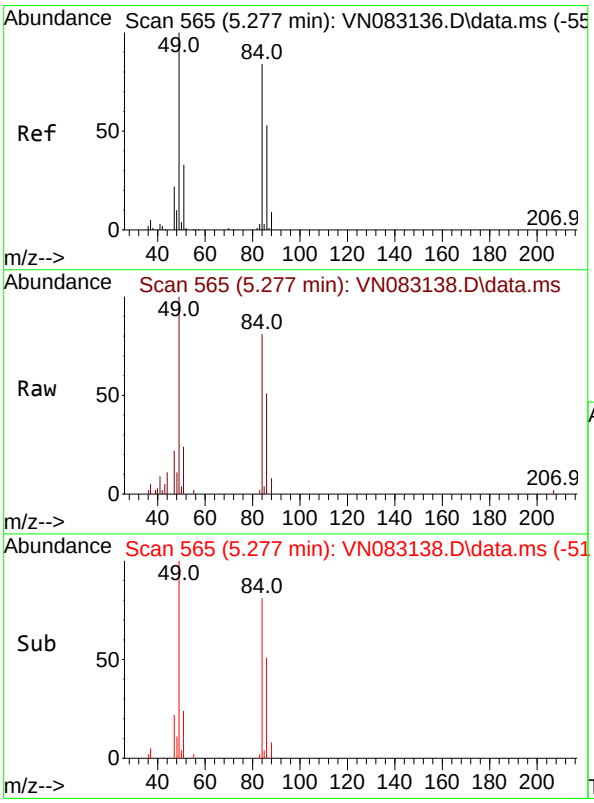
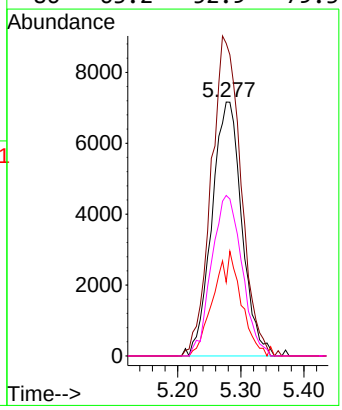
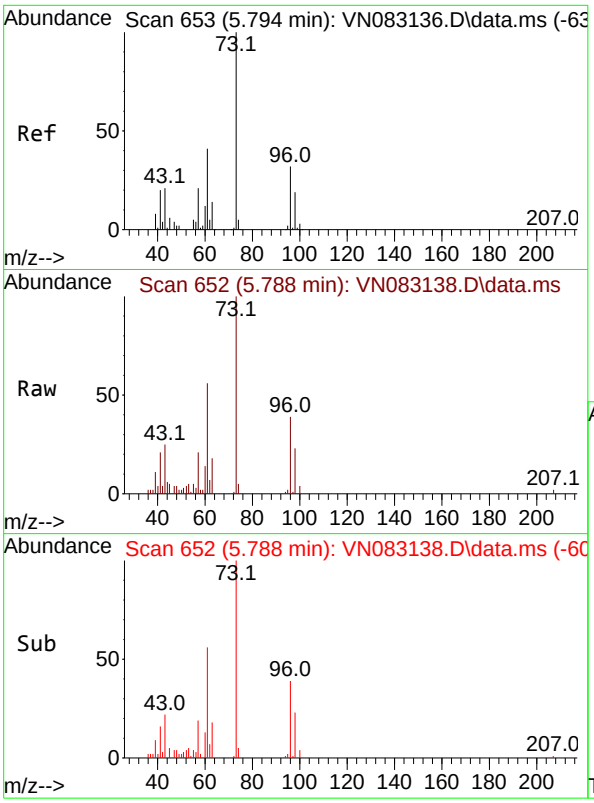


#20
Methylene Chloride
Concen: 9.582 ug/l
RT: 5.277 min Scan# 565
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 84 Resp: 23553

Ion	Ratio	Lower	Upper
84	100		
49	123.1	119.6	179.4
51	29.0	34.8	52.2#
86	63.2	52.9	79.3

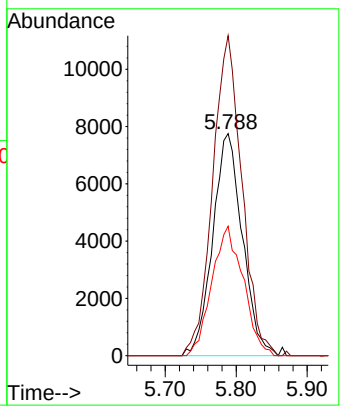




#21
trans-1,2-Dichloroethene
Concen: 10.229 ug/l
RT: 5.788 min Scan# 6
Delta R.T. -0.006 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 96 Resp: 2247

Ion	Ratio	Lower	Upper
96	100		
61	144.0	123.4	185.2
98	58.3	49.3	73.9



Instrument :
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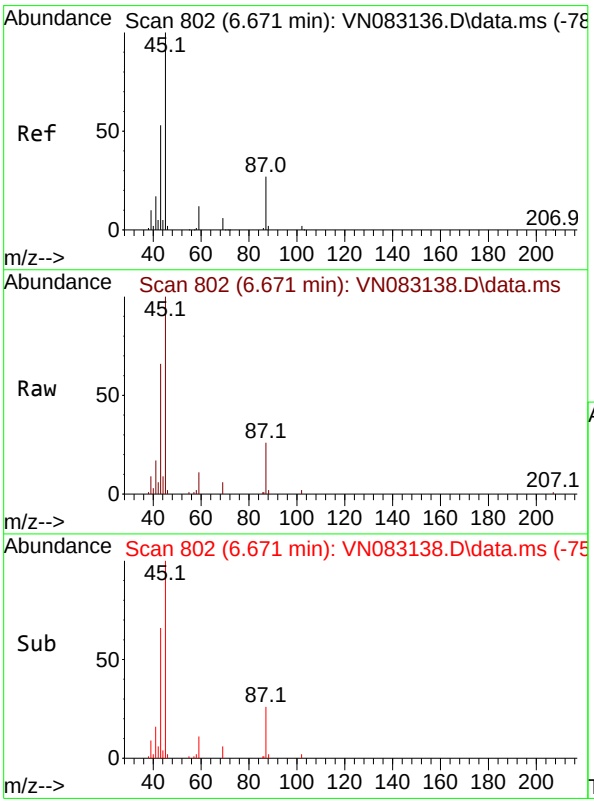
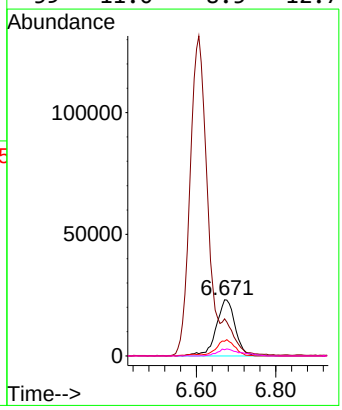
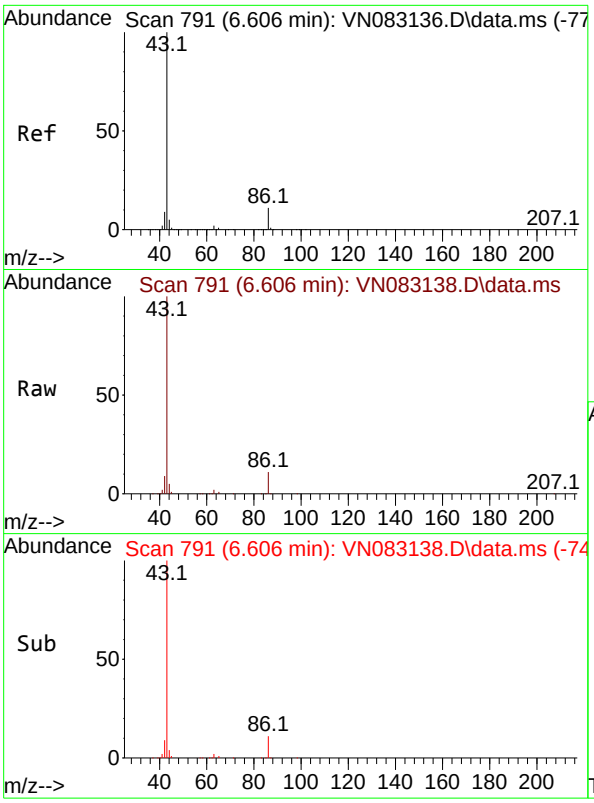


#22
Diisopropyl ether
Concen: 10.204 ug/l
RT: 6.671 min Scan# 802
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 45 Resp: 77046

Ion	Ratio	Lower	Upper
45	100		
43	64.3	44.0	66.0
87	26.1	19.7	29.5
59	11.0	8.5	12.7

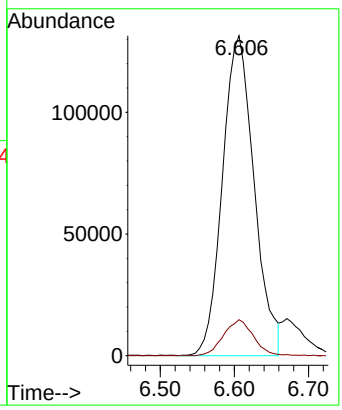




#23
Vinyl Acetate
Concen: 50.550 ug/l
RT: 6.606 min Scan# 7
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 43 Resp: 39115

Ion	Ratio	Lower	Upper
43	100		
86	11.2	7.3	10.9



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

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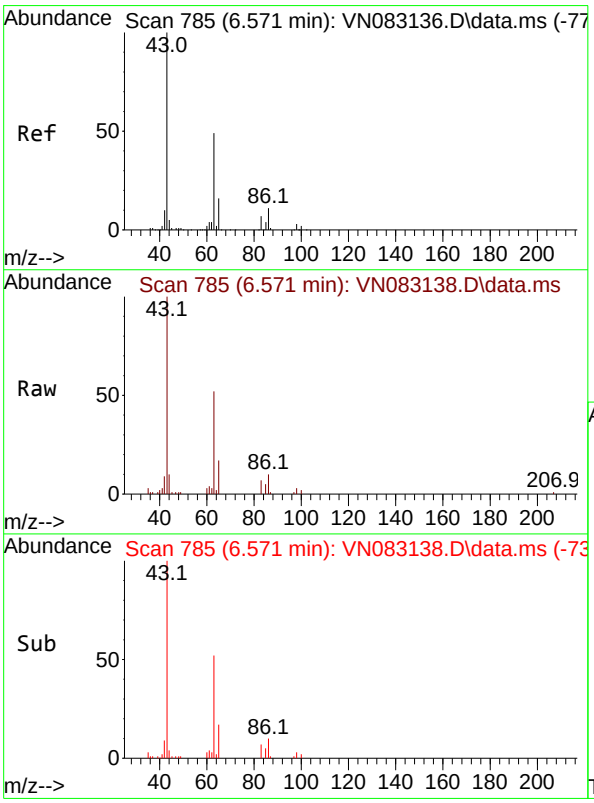
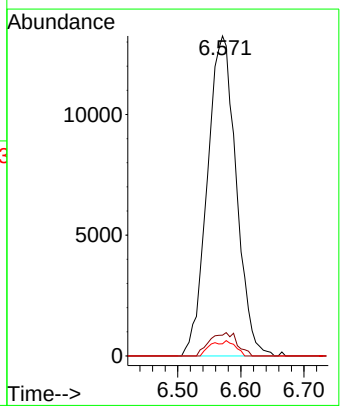
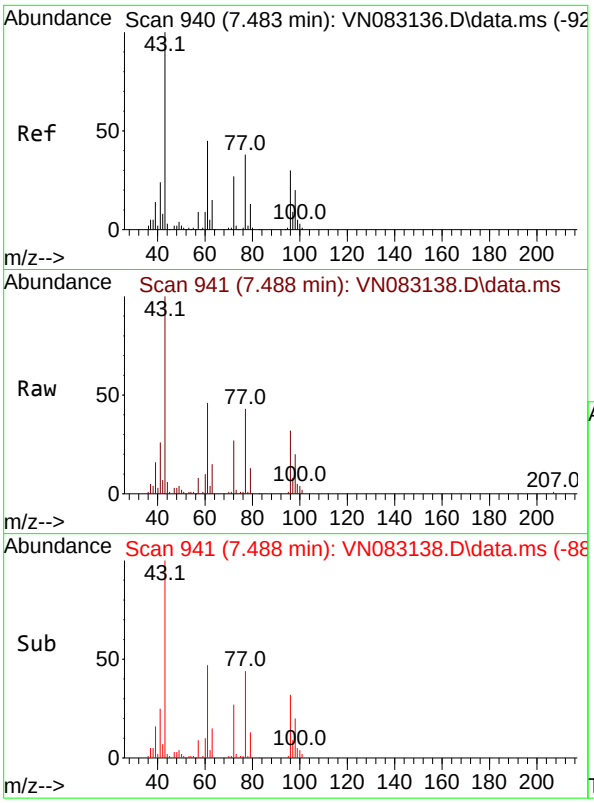


#24
1,1-Dichloroethane
Concen: 10.213 ug/l
RT: 6.571 min Scan# 785
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 63 Resp: 42035

Ion	Ratio	Lower	Upper
63	100		
98	6.5	3.3	9.9
100	3.8	2.0	6.0





#25
2-Butanone
Concen: 50.278 ug/l
RT: 7.488 min Scan# 94
Delta R.T. 0.006 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 43 Resp: 8245

Ion	Ratio	Lower	Upper
43	100		
72	27.4	18.2	27.2

Instrument :
MSVOA_N
ClientSampleId :
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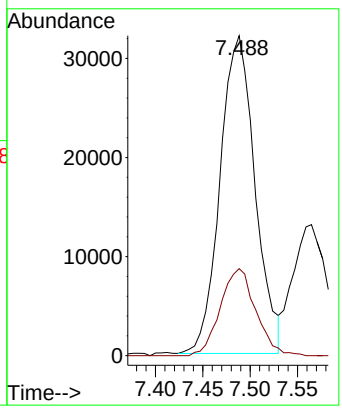
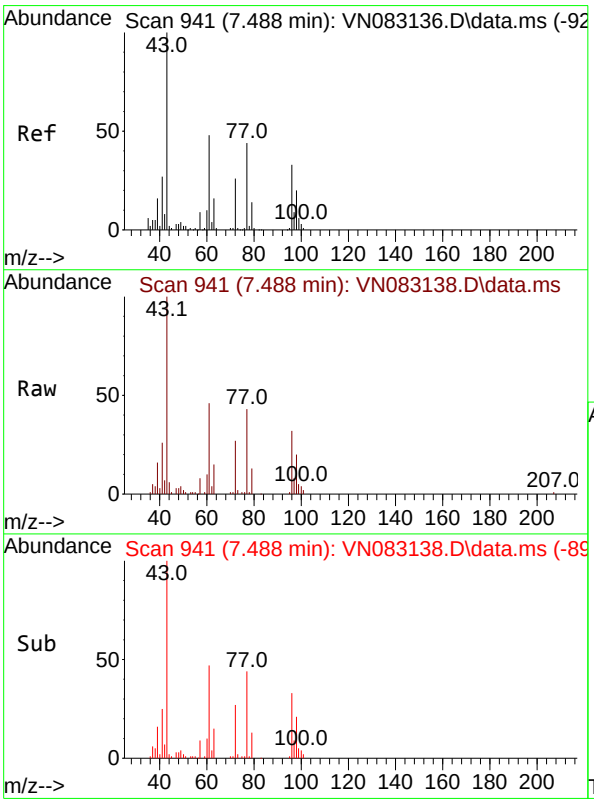
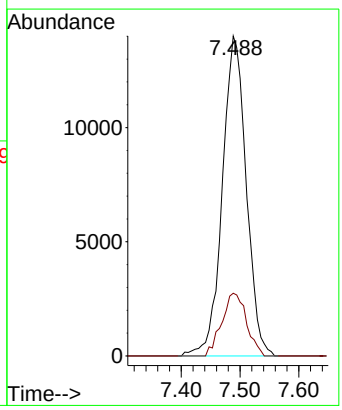


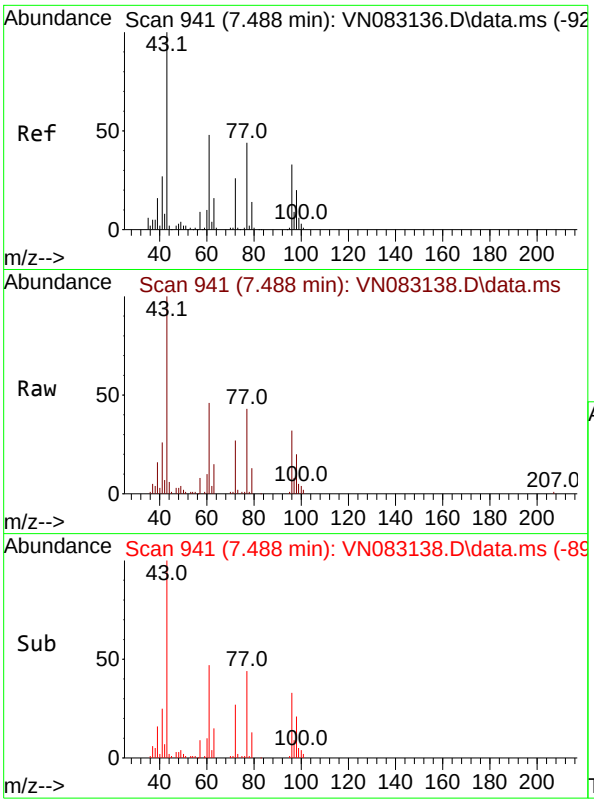


#26
2,2-Dichloropropane
Concen: 10.351 ug/l
RT: 7.488 min Scan# 941
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 77 Resp: 39561

Ion	Ratio	Lower	Upper
77	100		
97	20.2	10.3	30.9

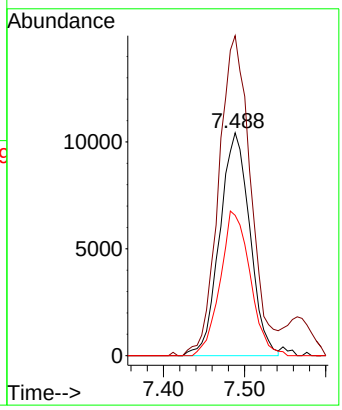




#27
cis-1,2-Dichloroethene
Concen: 10.148 ug/l
RT: 7.488 min Scan# 94
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 96 Resp: 2690

Ion	Ratio	Lower	Upper
96	100		
61	152.1	0.0	329.6
98	64.4	0.0	128.6



Instrument :
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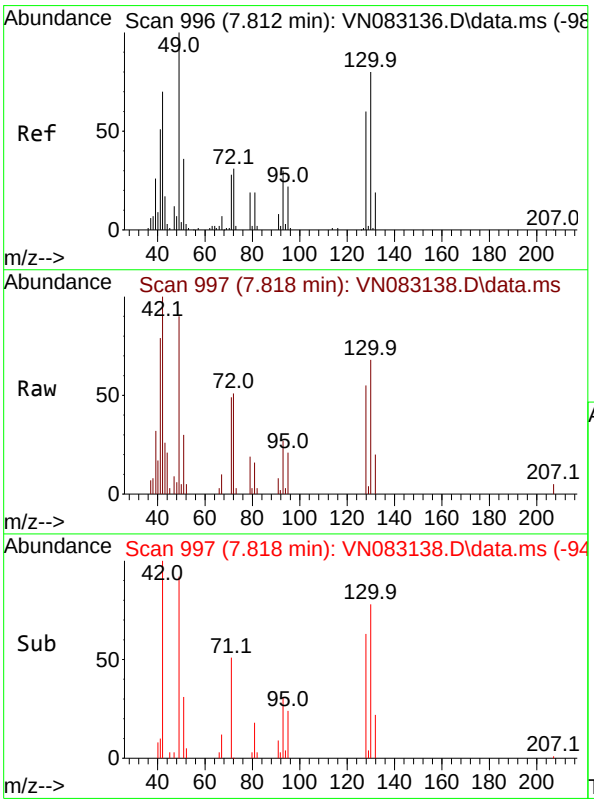
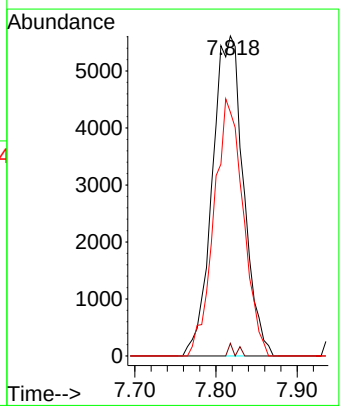
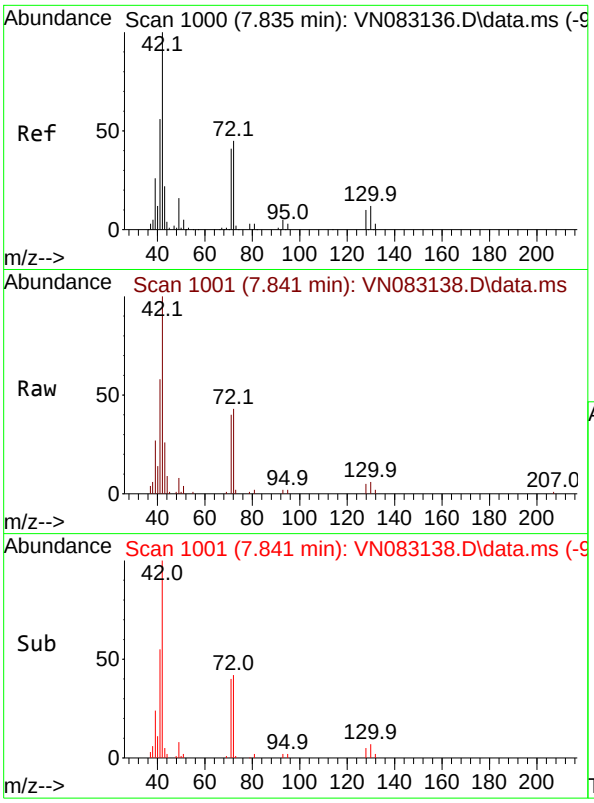


#28
Bromochloromethane
Concen: 8.916 ug/l
RT: 7.818 min Scan# 997
Delta R.T. 0.006 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 49 Resp: 14997

Ion	Ratio	Lower	Upper
49	100		
129	0.9	0.0	3.8
130	75.4	50.5	75.7

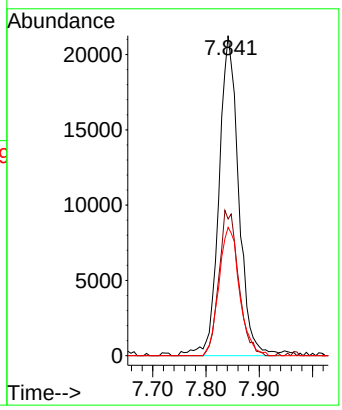




#29
Tetrahydrofuran
Concen: 51.708 ug/l
RT: 7.841 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 42 Resp: 5481

Ion	Ratio	Lower	Upper
42	100		
72	44.9	30.0	45.0
71	41.8	28.3	42.5



Instrument :
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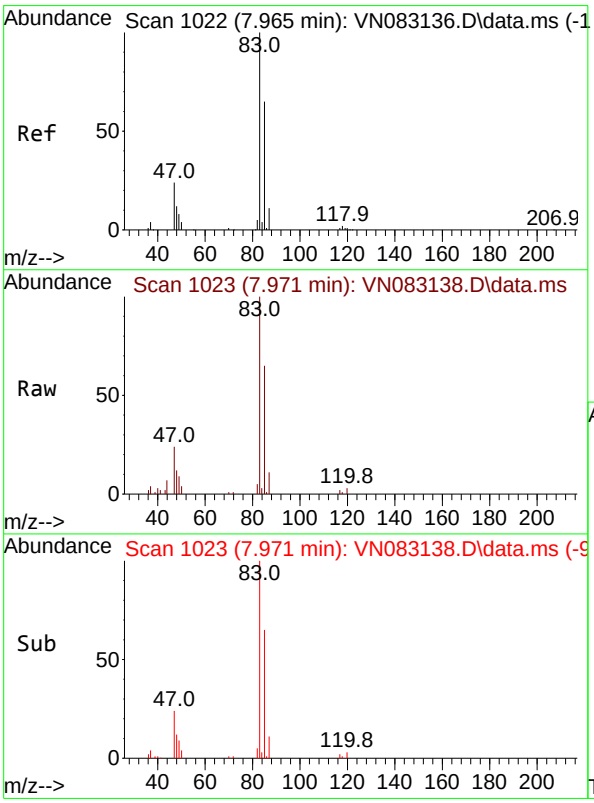
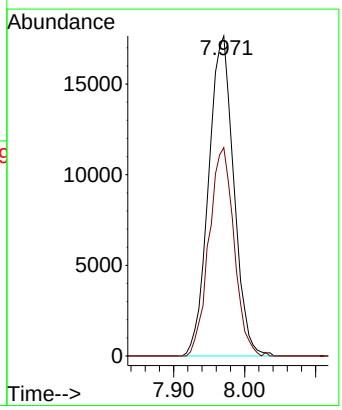
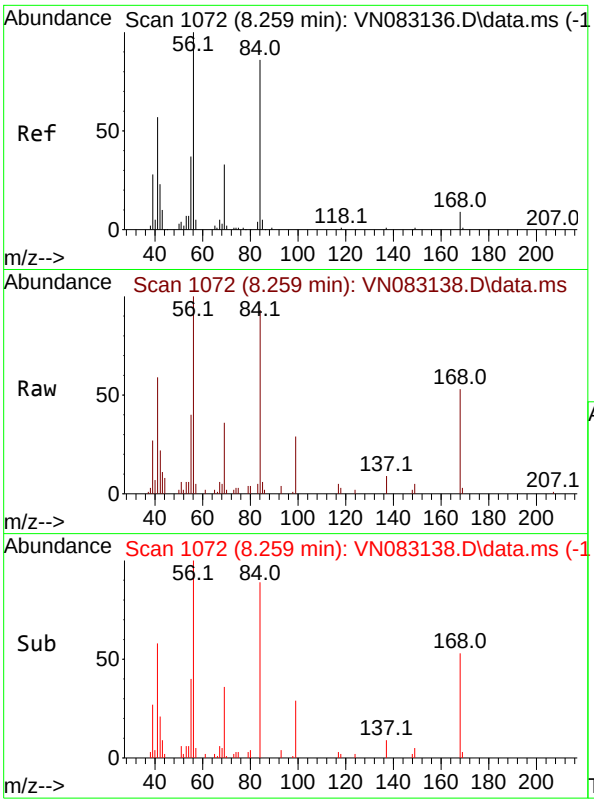


#30
Chloroform
Concen: 10.155 ug/l
RT: 7.971 min Scan# 1023
Delta R.T. 0.006 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 83 Resp: 43421

Ion	Ratio	Lower	Upper
83	100		
85	65.1	50.9	76.3

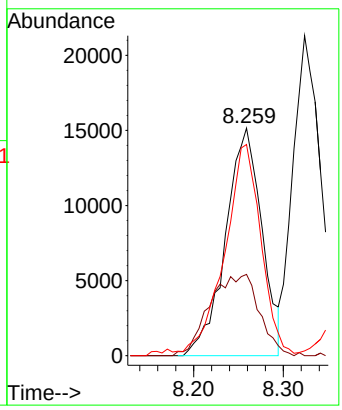




#31
Cyclohexane
Concen: 10.523 ug/l
RT: 8.259 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 56 Resp: 4256

Ion	Ratio	Lower	Upper
56	100		
69	34.0	24.5	36.7
84	90.8	66.0	99.0



Instrument :
MSVOA_N
ClientSampleId :
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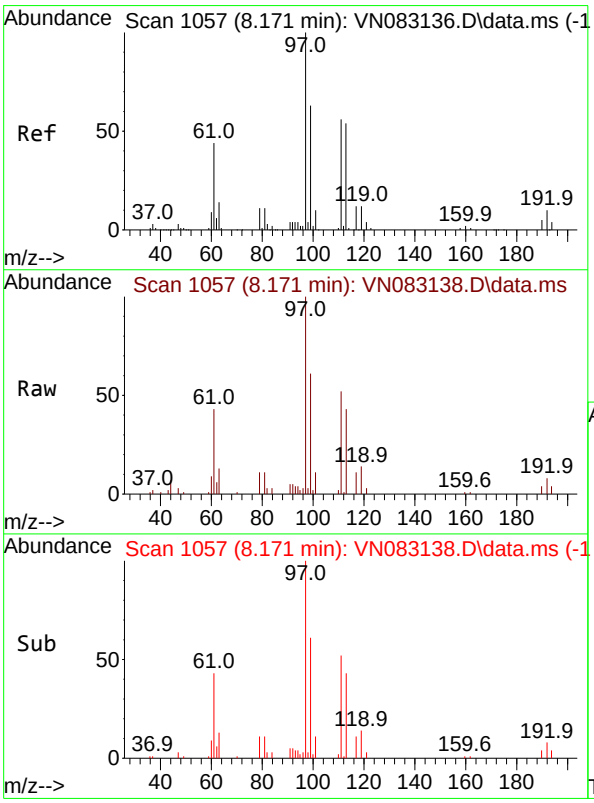
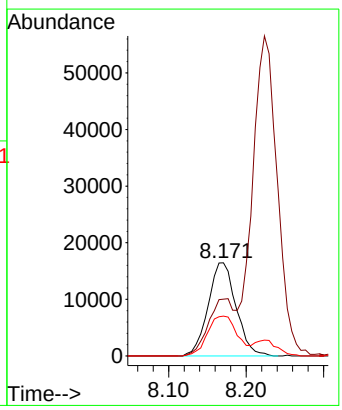
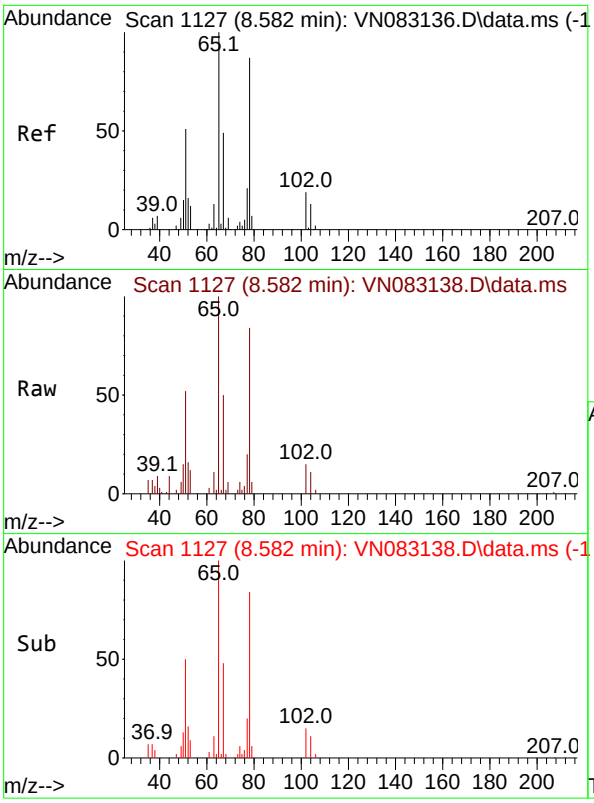


#32
1,1,1-Trichloroethane
Concen: 10.191 ug/l
RT: 8.171 min Scan# 1057
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 97 Resp: 41247

Ion	Ratio	Lower	Upper
97	100		
99	59.5	52.0	78.0
61	46.2	42.1	63.1





#33
1,2-Dichloroethane-d4
Concen: 9.974 ug/l
RT: 8.582 min Scan# 11
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 65 Resp: 2722

Ion	Ratio	Lower	Upper
65	100		
67	50.3	0.0	104.4

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

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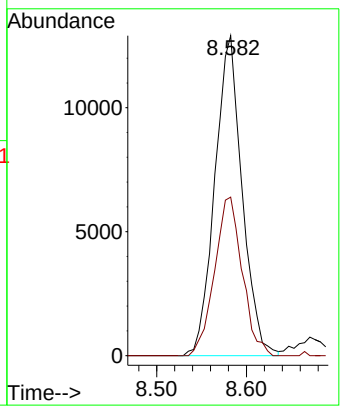
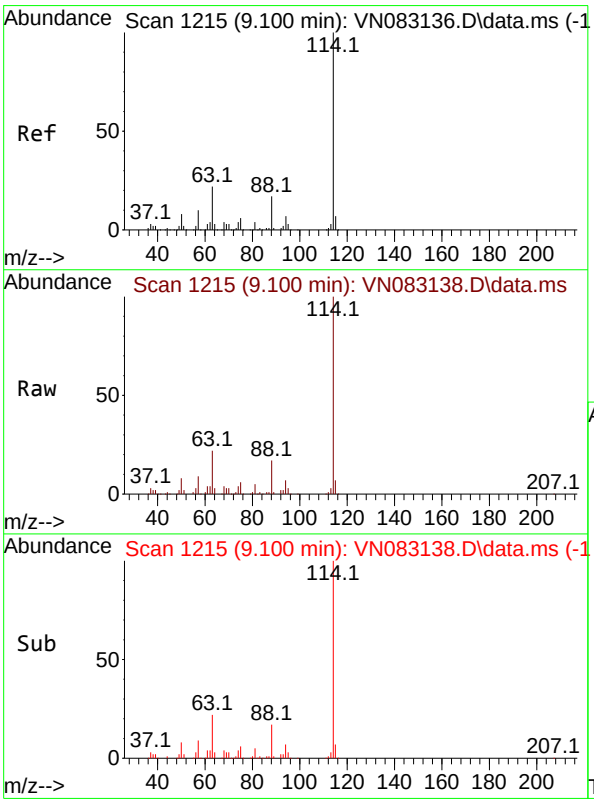
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

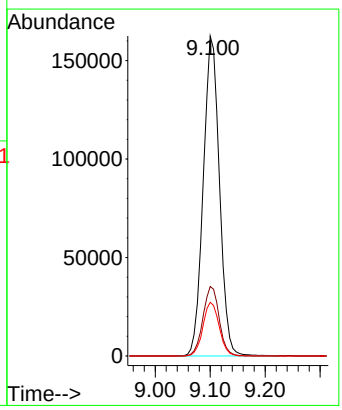


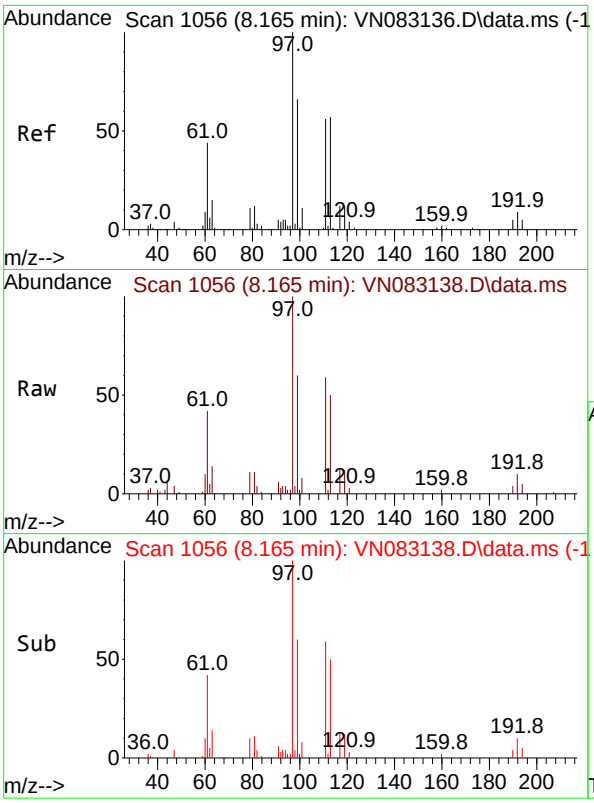


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1215
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion:114 Resp: 332105

Ion	Ratio	Lower	Upper
114	100		
63	21.7	0.0	44.6
88	16.8	0.0	31.4

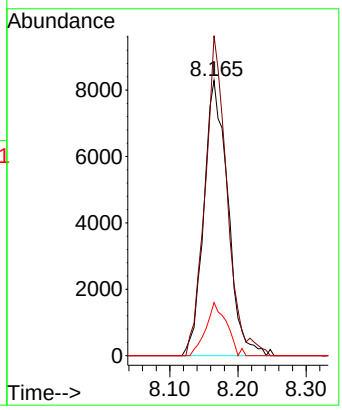




#35
Dibromofluoromethane
Concen: 9.832 ug/l
RT: 8.165 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion:113 Resp: 2038

Ion	Ratio	Lower	Upper
113	100		
111	105.9	82.4	123.6
192	16.7	14.9	22.3



Instrument :
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ClientSampleId :
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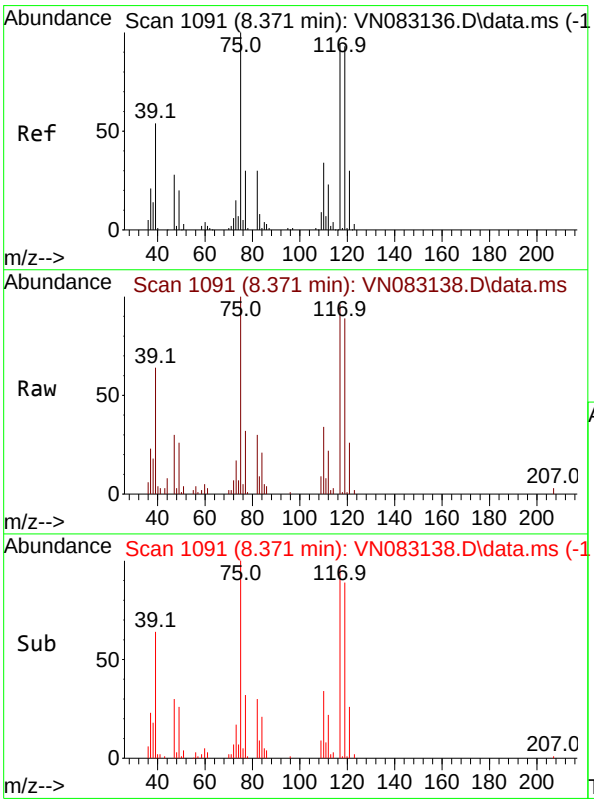
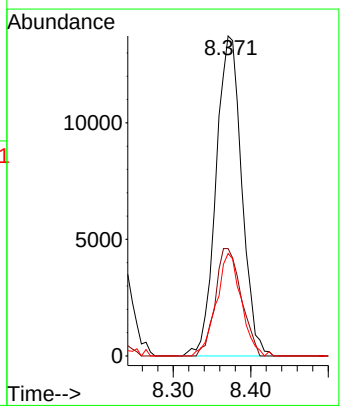
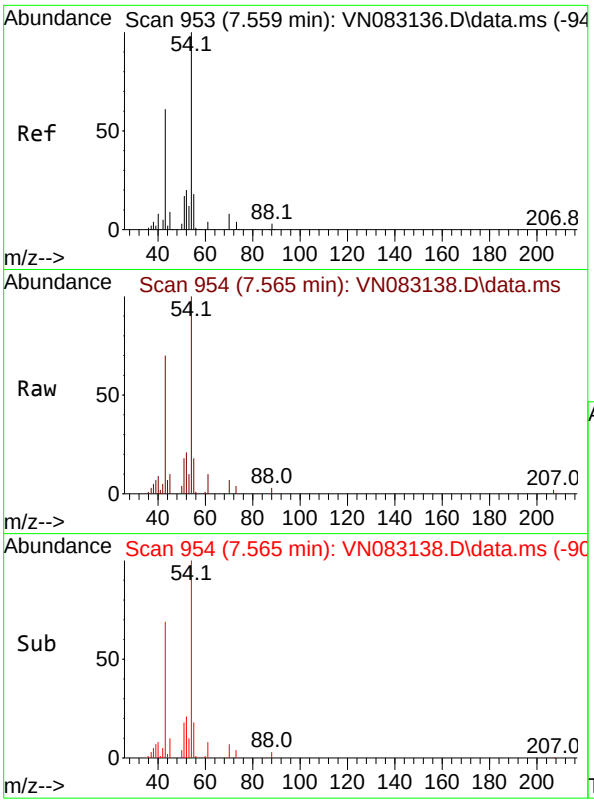


#36
1,1-Dichloropropene
Concen: 10.103 ug/l
RT: 8.371 min Scan# 1091
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 75 Resp: 31681

Ion	Ratio	Lower	Upper
75	100		
110	33.9	16.3	48.9
77	31.1	24.6	37.0





#37
Ethyl Acetate
Concen: 9.685 ug/l
RT: 7.565 min Scan# 9
Delta R.T. 0.006 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 43 Resp: 3400

Ion	Ratio	Lower	Upper
43	100		
61	12.0	9.3	13.9
70	11.4	7.0	10.6

Instrument :
MSVOA_N
ClientSampleId :
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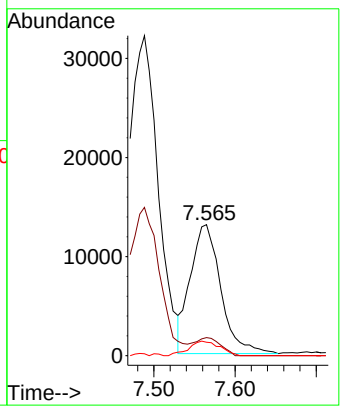
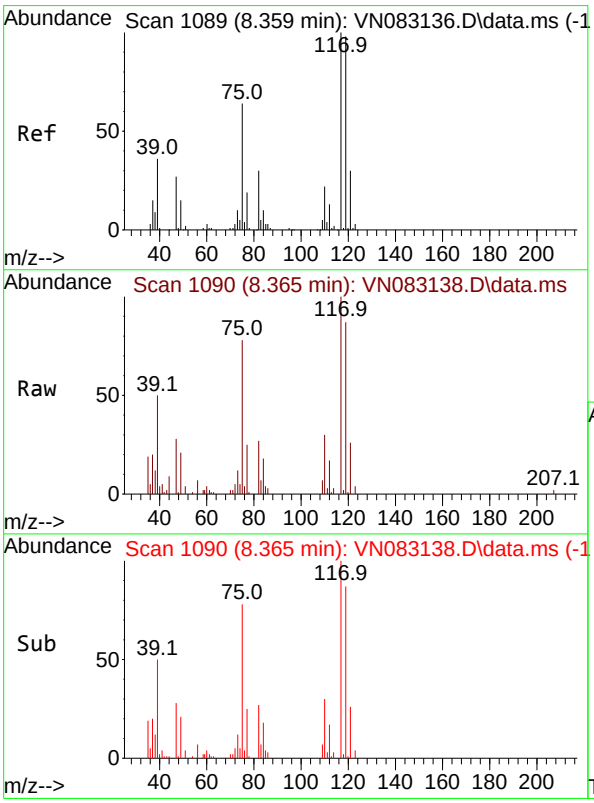
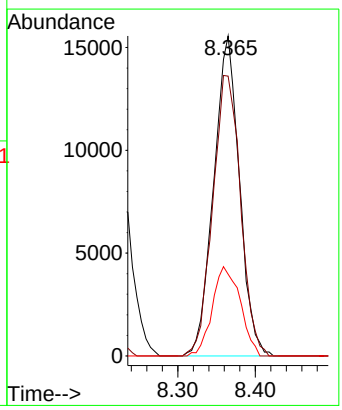


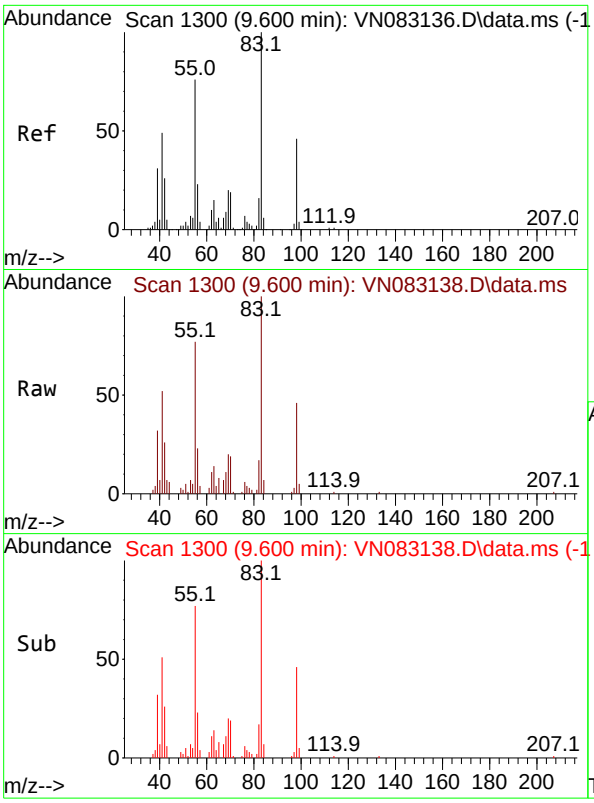


#38
Carbon Tetrachloride
Concen: 10.179 ug/l
RT: 8.365 min Scan# 1090
Delta R.T. 0.006 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion:117 Resp: 35950

Ion	Ratio	Lower	Upper
117	100		
119	87.5	74.9	112.3
121	25.6	24.3	36.5





#39
Methylcyclohexane
Concen: 10.058 ug/l
RT: 9.600 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 83 Resp: 3873

Ion	Ratio	Lower	Upper
83	100		
55	77.1	66.4	99.6
98	45.9	40.7	61.1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

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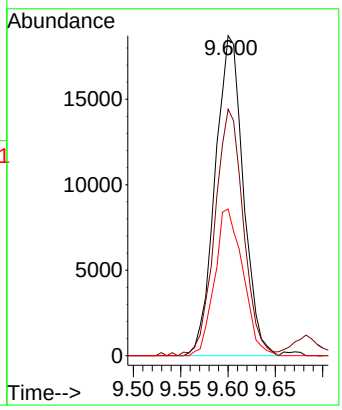
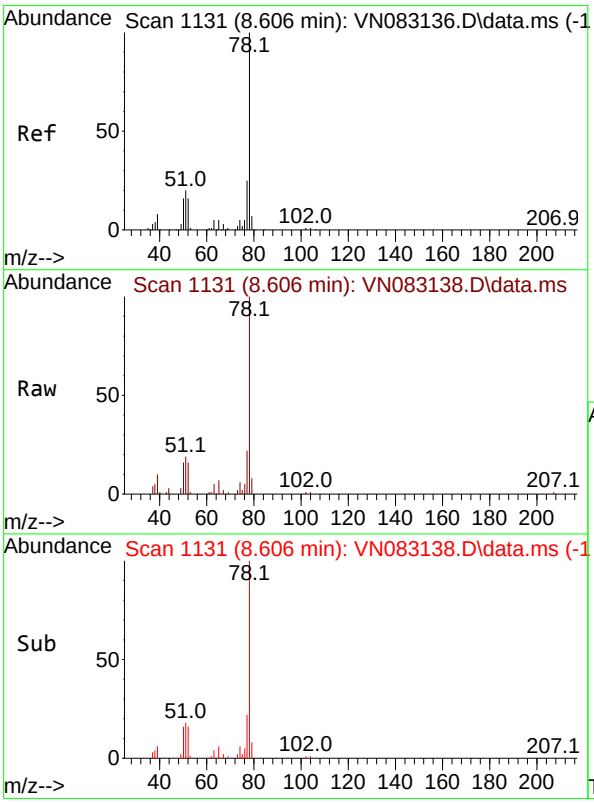
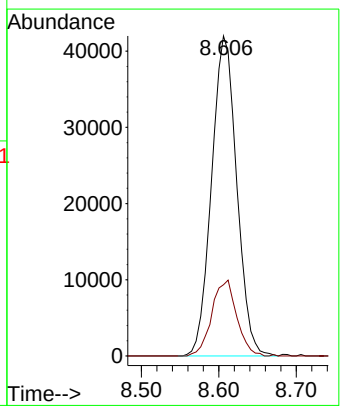


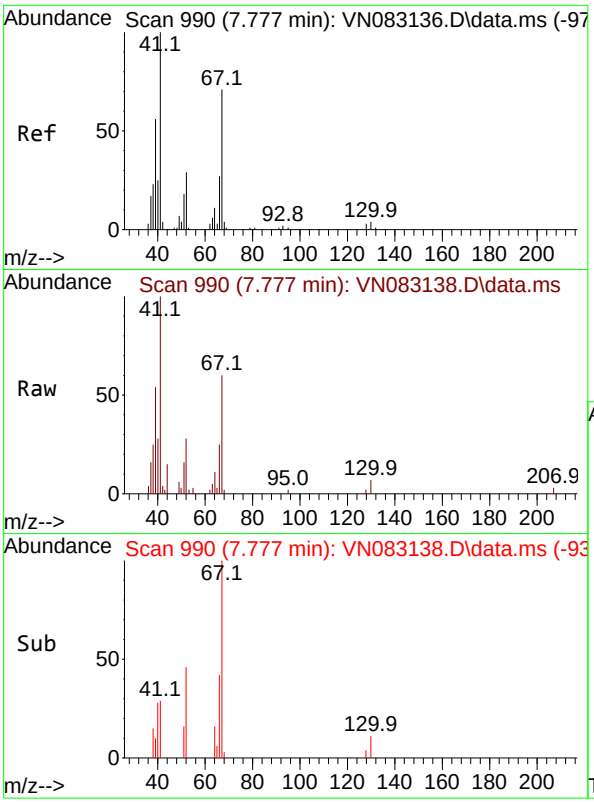


#40
Benzene
Concen: 10.157 ug/l
RT: 8.606 min Scan# 1131
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 78 Resp: 94885

Ion	Ratio	Lower	Upper
78	100		
77	22.2	19.0	28.4

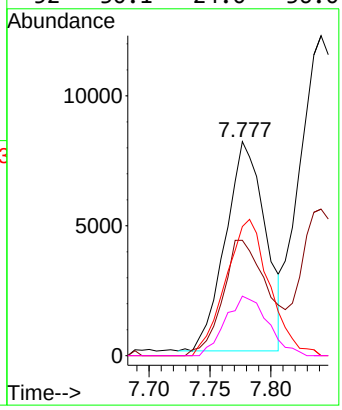




#41
Methacrylonitrile
Concen: 9.213 ug/l
RT: 7.777 min Scan# 9
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 41 Resp: 1839

Ion	Ratio	Lower	Upper
41	100		
39	62.6	45.5	68.3
67	71.3	50.5	75.7
52	30.1	24.0	36.0



Instrument :
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ClientSampleId :
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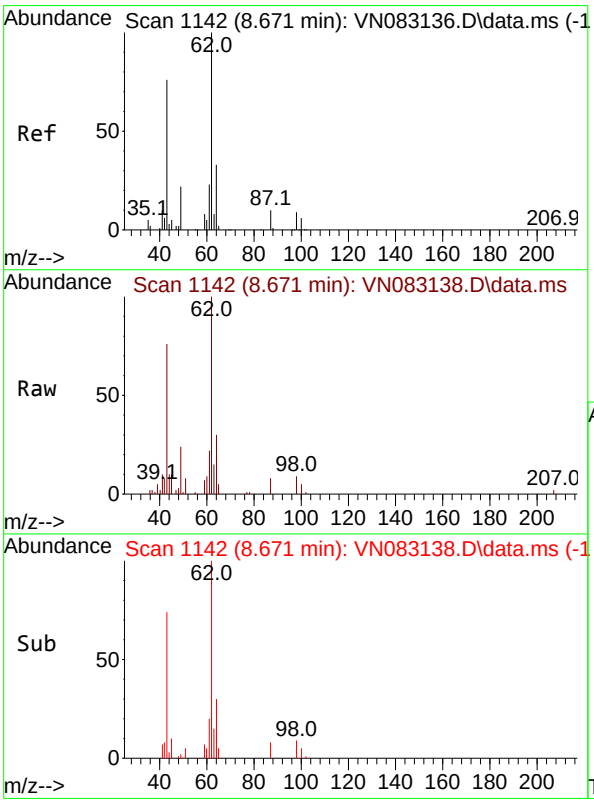
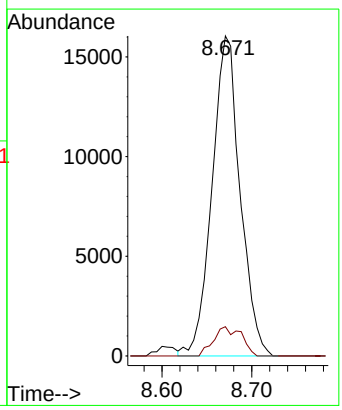
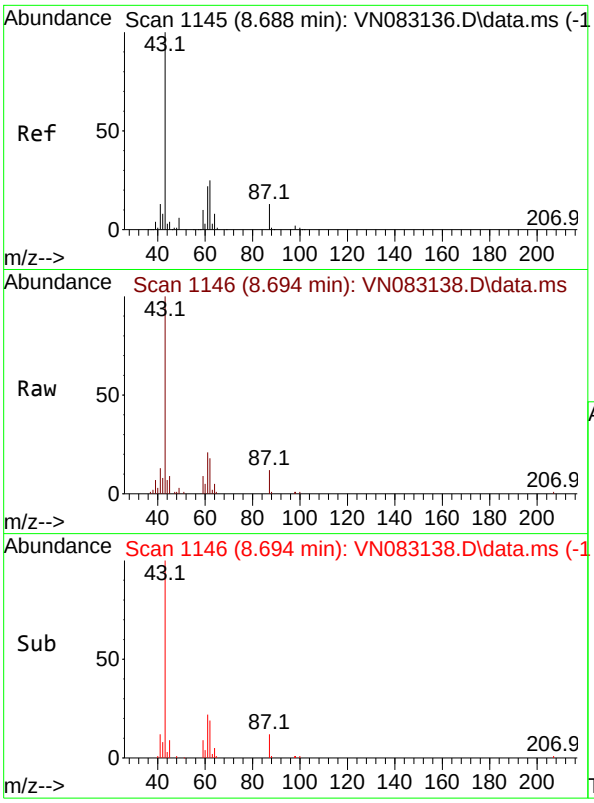


#42
1,2-Dichloroethane
Concen: 10.234 ug/l
RT: 8.671 min Scan# 1142
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 62 Resp: 34826

Ion	Ratio	Lower	Upper
62	100		
98	9.1	0.0	15.8





#43
Isopropyl Acetate
Concen: 10.170 ug/l
RT: 8.694 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 43 Resp: 7142

Ion	Ratio	Lower	Upper
43	100		
61	20.7	17.8	26.6
87	10.4	8.2	12.2

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

Manual Integrations
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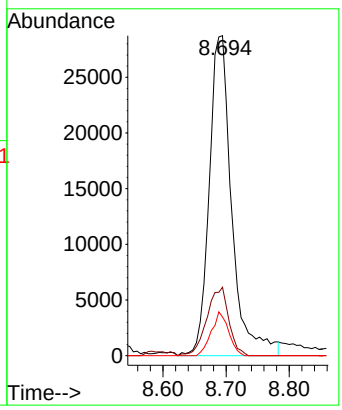
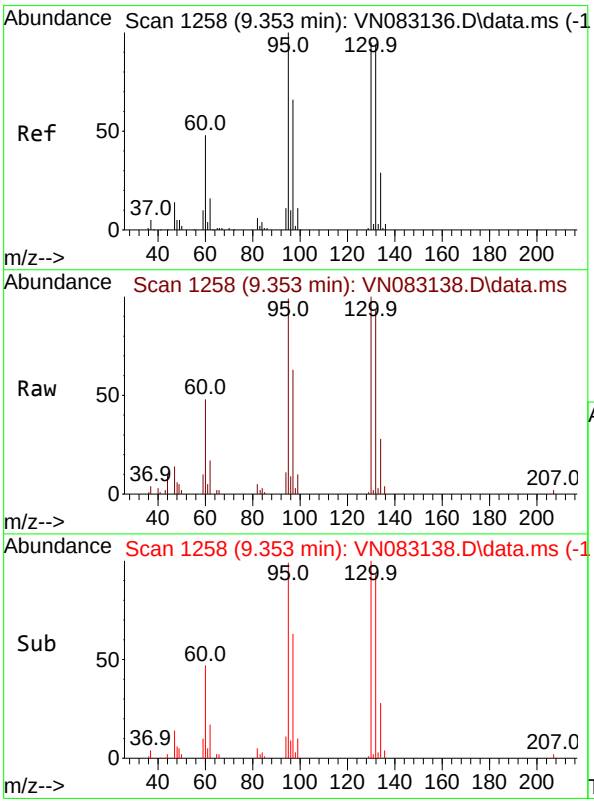
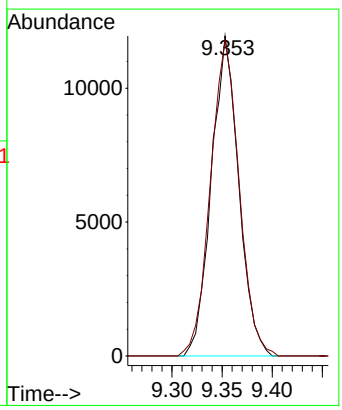


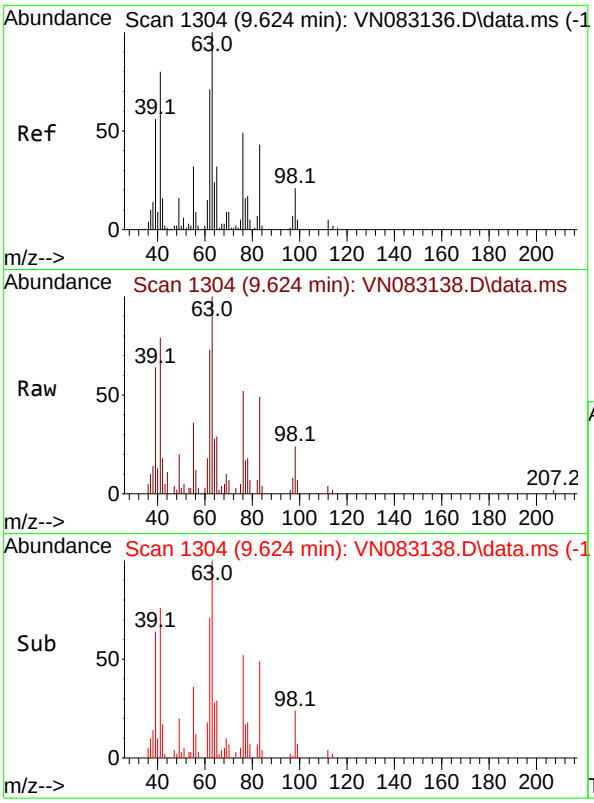


#44
Trichloroethene
Concen: 10.195 ug/l
RT: 9.353 min Scan# 1258
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion:130 Resp: 22669

Ion	Ratio	Lower	Upper
130	100		
95	98.5	0.0	197.8

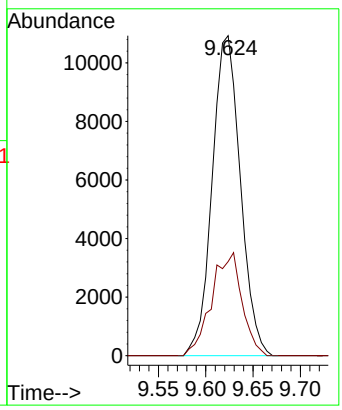




#45
1,2-Dichloropropane
Concen: 10.211 ug/l
RT: 9.624 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 63 Resp: 2264

Ion	Ratio	Lower	Upper
63	100		
65	29.4	24.4	36.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

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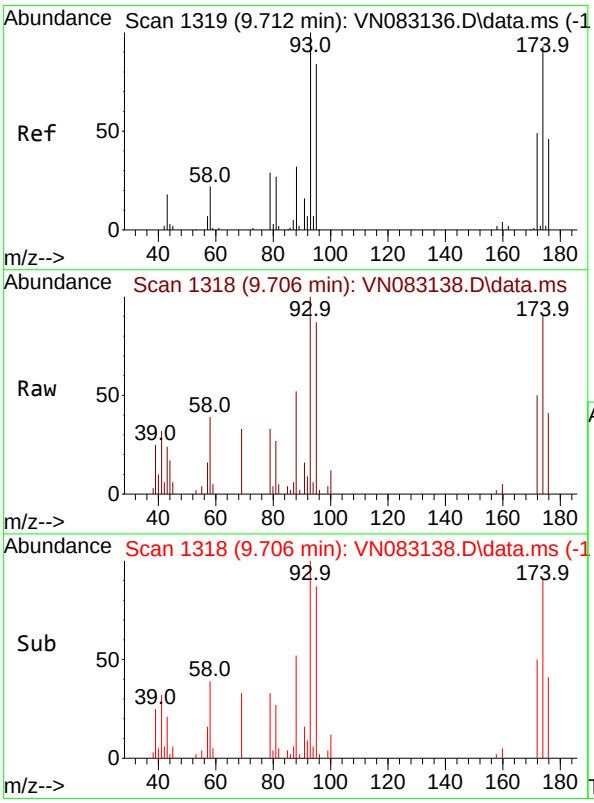
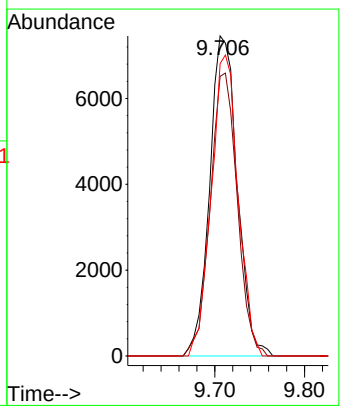
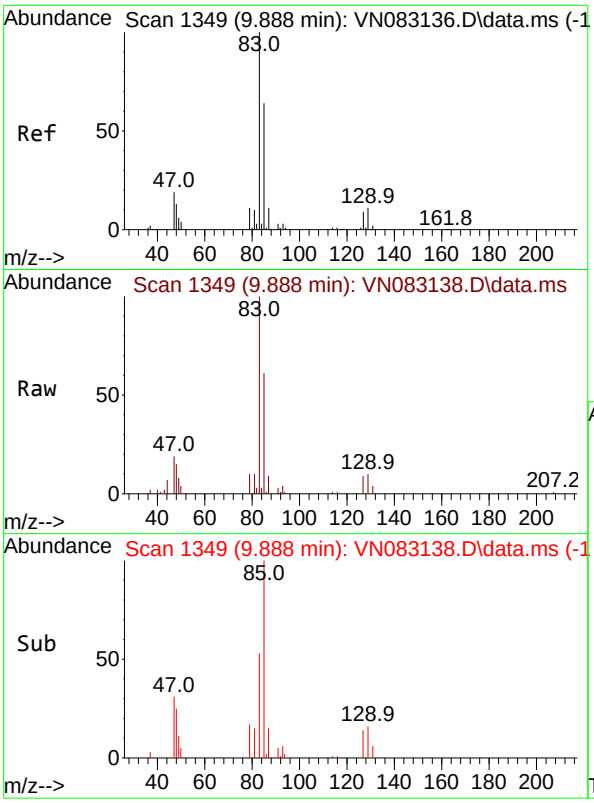


#46
Dibromomethane
Concen: 10.041 ug/l
RT: 9.706 min Scan# 1318
Delta R.T. -0.006 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 93 Resp: 15937

Ion	Ratio	Lower	Upper
93	100		
95	86.3	65.8	98.6
174	91.4	71.7	107.5

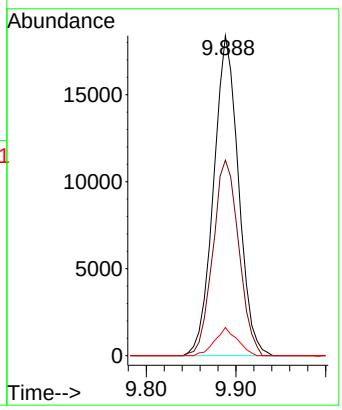




#47
Bromodichloromethane
Concen: 9.930 ug/l
RT: 9.888 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 83 Resp: 3538

Ion	Ratio	Lower	Upper
83	100		
85	61.1	51.1	76.7
127	8.8	7.2	10.8



Instrument :
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ClientSampleId :
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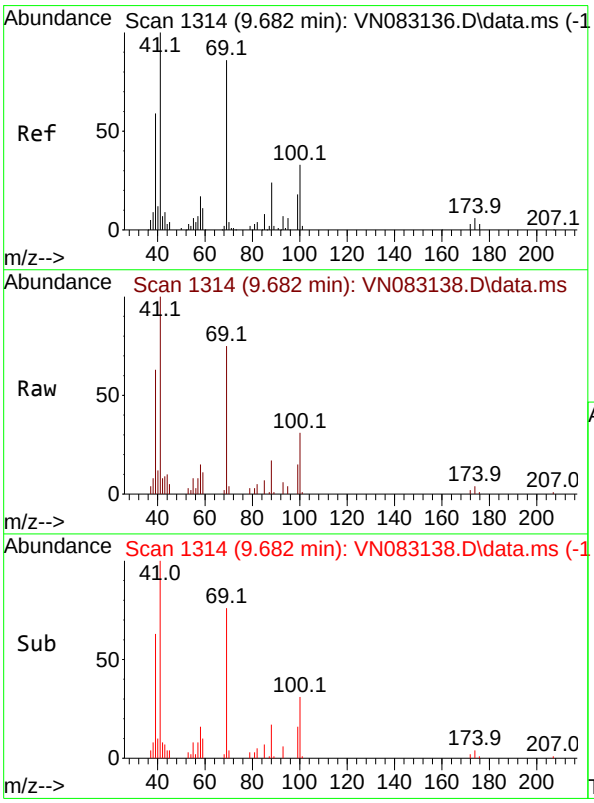
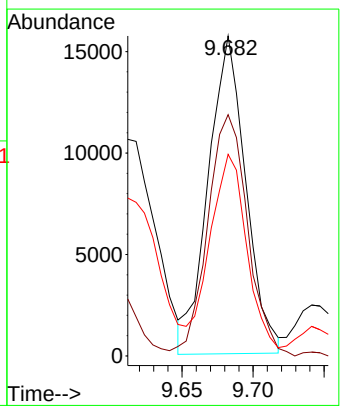
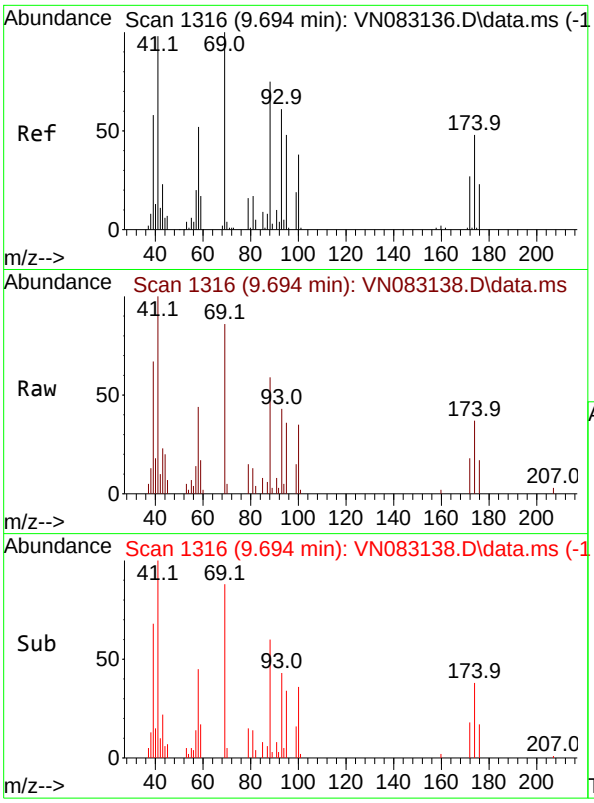


#48
Methyl methacrylate
Concen: 9.891 ug/l
RT: 9.682 min Scan# 1314
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 41 Resp: 28711

Ion	Ratio	Lower	Upper
41	100		
69	81.0	56.3	84.5
39	63.6	50.3	75.5





#49
1,4-Dioxane
Concen: 201.364 ug/l
RT: 9.694 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 88 Resp: 1054

Ion	Ratio	Lower	Upper
88	100		
43	39.2	27.8	41.8
58	77.8	59.4	89.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

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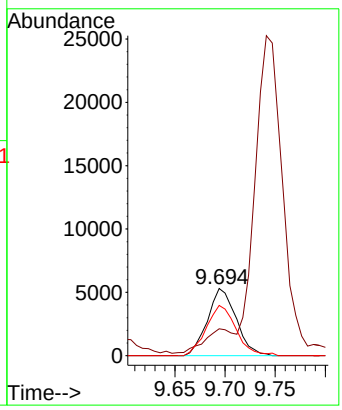
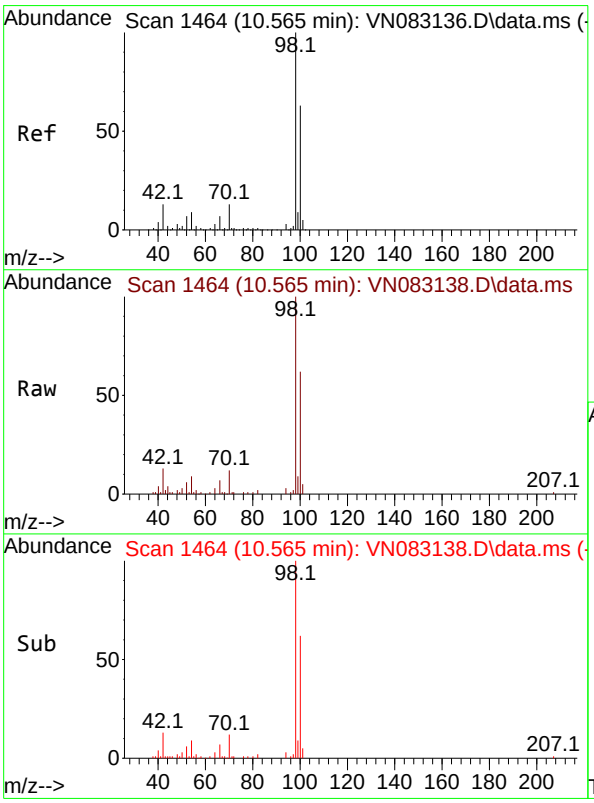
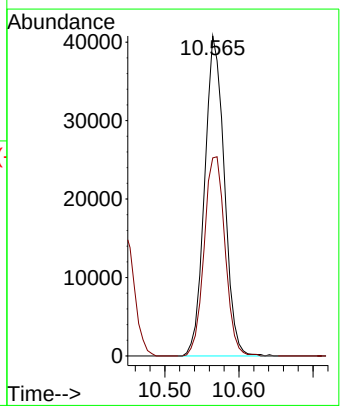


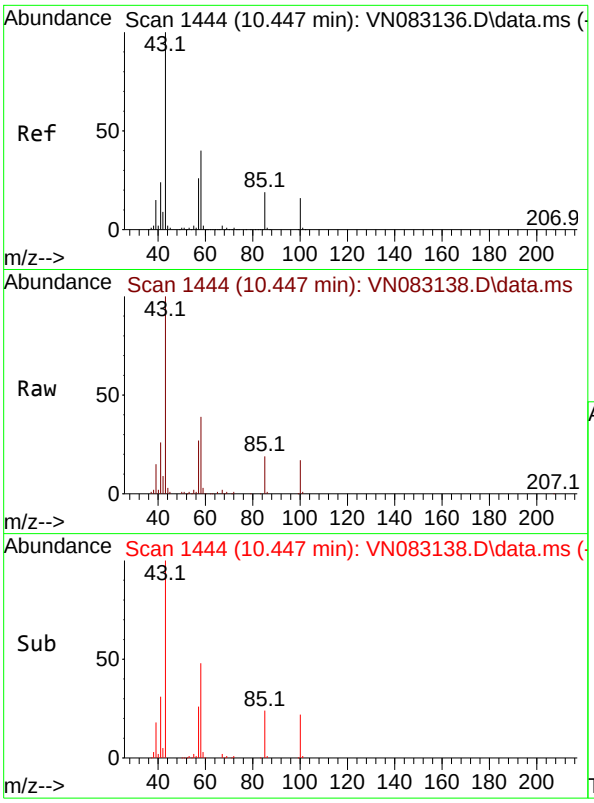


#50
Toluene-d8
Concen: 9.733 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 98 Resp: 75261

Ion	Ratio	Lower	Upper
98	100		
100	66.0	51.5	77.3





#51
4-Methyl-2-Pentanone
Concen: 51.587 ug/l
RT: 10.447 min Scan# 14
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 43 Resp: 17127

Ion	Ratio	Lower	Upper
43	100		
58	38.8	28.2	42.4

Instrument :
MSVOA_N
ClientSampleId :
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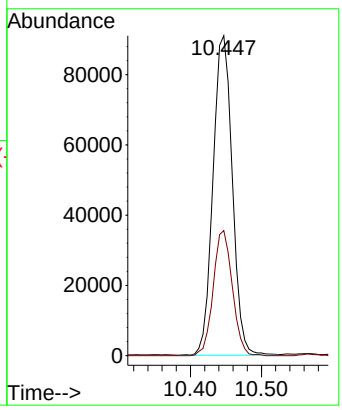
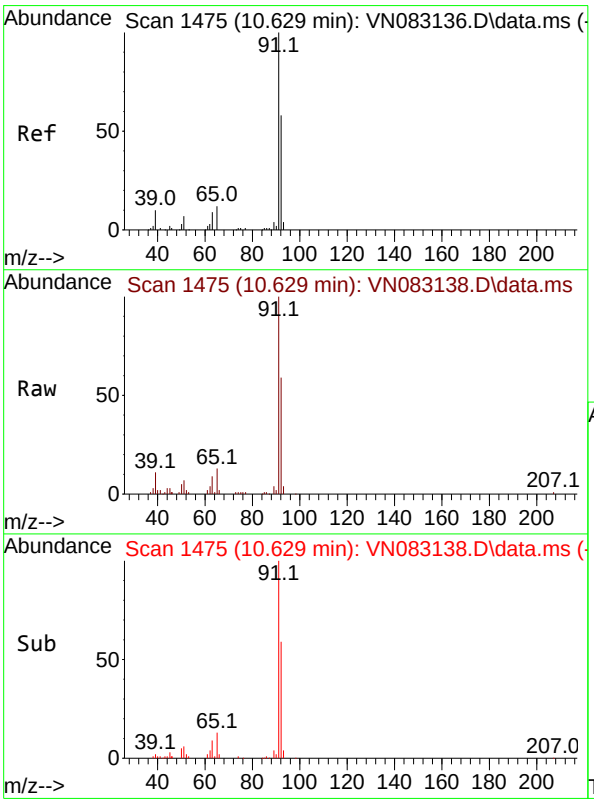
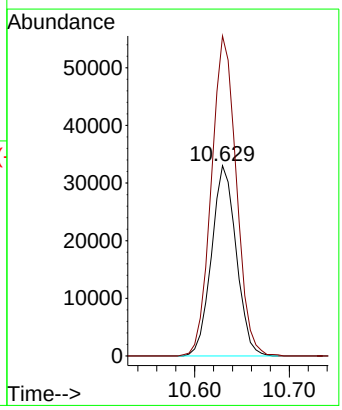


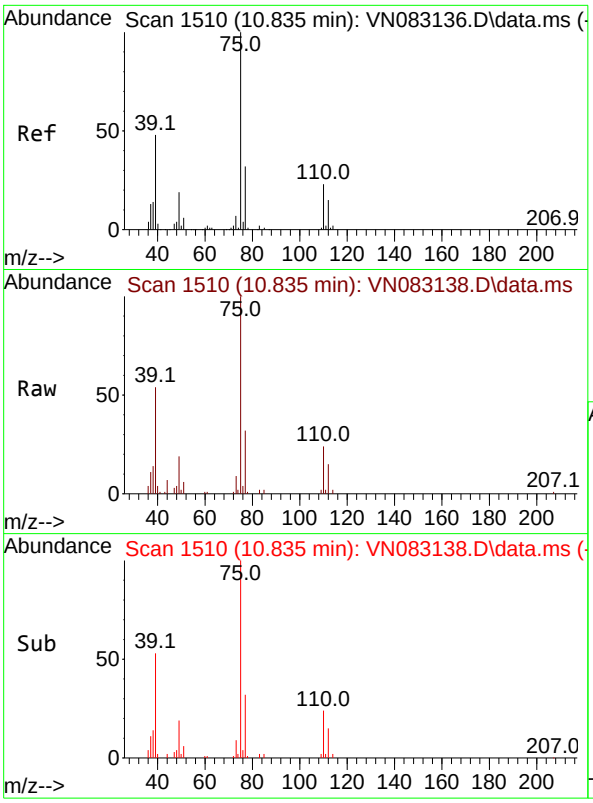


#52
Toluene
Concen: 10.129 ug/l
RT: 10.629 min Scan# 1475
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 92 Resp: 59784

Ion	Ratio	Lower	Upper
92	100		
91	170.0	139.4	209.0

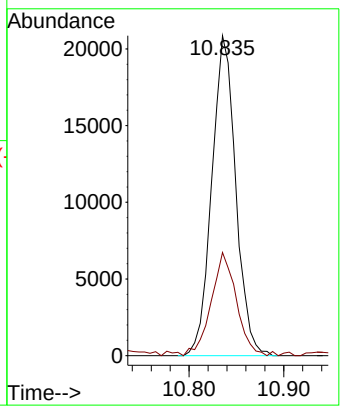




#53
t-1,3-Dichloropropene
Concen: 10.017 ug/l
RT: 10.835 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 75 Resp: 3667

Ion	Ratio	Lower	Upper
75	100		
77	32.2	25.7	38.5



Instrument :
MSVOA_N
ClientSampleId :
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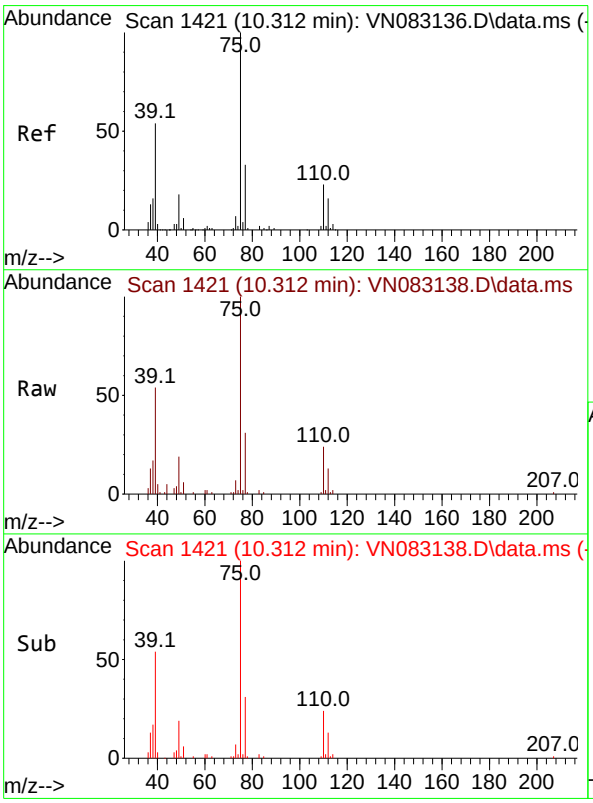
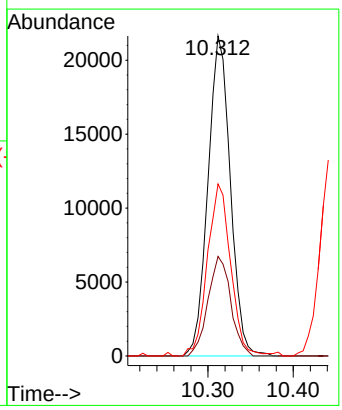
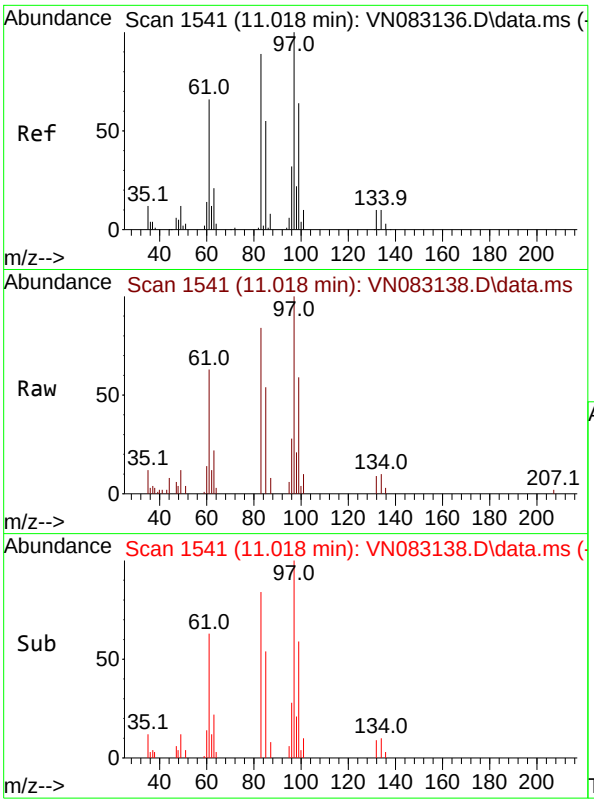


#54
cis-1,3-Dichloropropene
Concen: 10.145 ug/l
RT: 10.312 min Scan# 1421
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 75 Resp: 39503

Ion	Ratio	Lower	Upper
75	100		
77	31.1	24.3	36.5
39	53.8	50.5	75.7

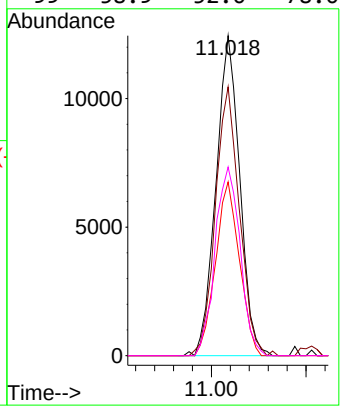




#55
1,1,2-Trichloroethane
Concen: 10.274 ug/l
RT: 11.018 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 97 Resp: 2173

Ion	Ratio	Lower	Upper
97	100		
83	84.0	71.4	107.0
85	54.3	45.8	68.6
99	58.9	52.0	78.0



Instrument :
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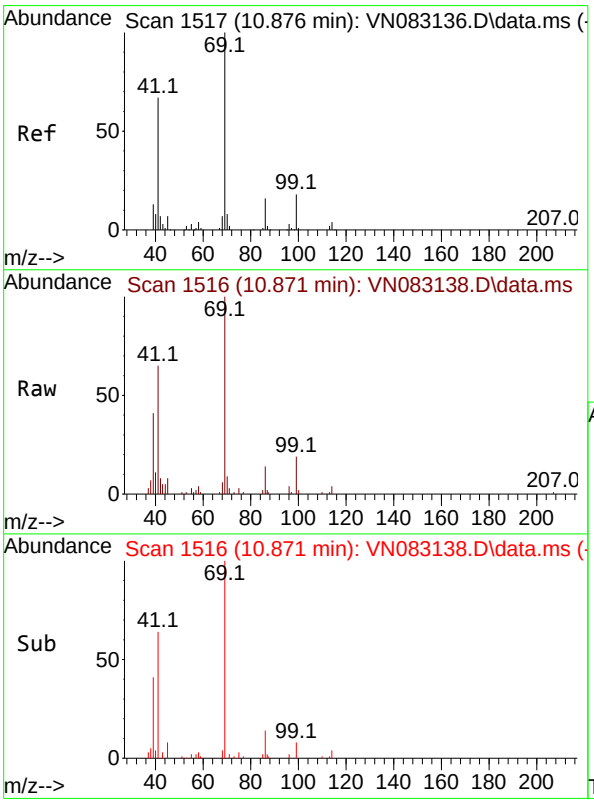
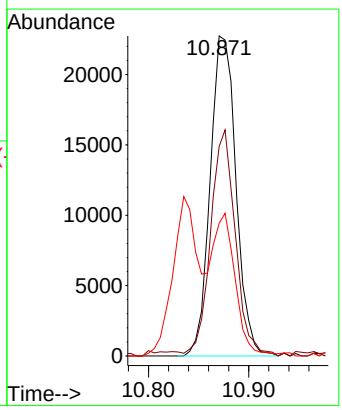
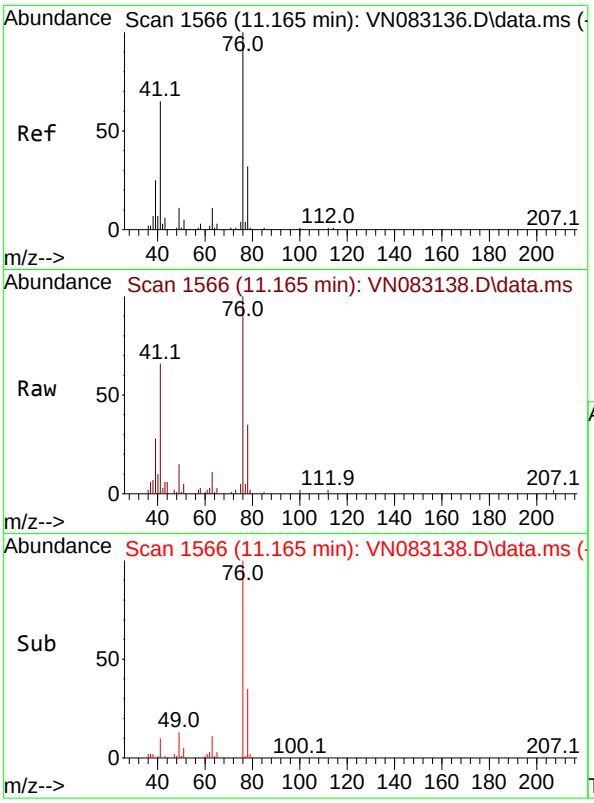


#56
Ethyl methacrylate
Concen: 10.201 ug/l
RT: 10.871 min Scan# 1516
Delta R.T. -0.006 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 69 Resp: 40676

Ion	Ratio	Lower	Upper
69	100		
41	67.9	63.4	95.2
39	36.8	37.4	56.0#

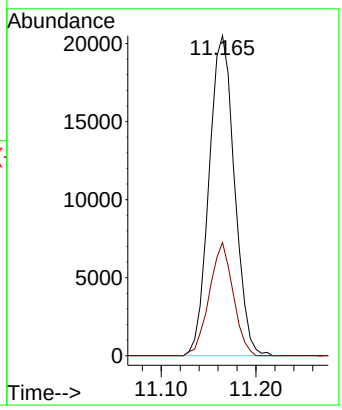




#57
1,3-Dichloropropane
Concen: 10.132 ug/l
RT: 11.165 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 76 Resp: 3820

Ion	Ratio	Lower	Upper
76	100		
78	33.1	25.6	38.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

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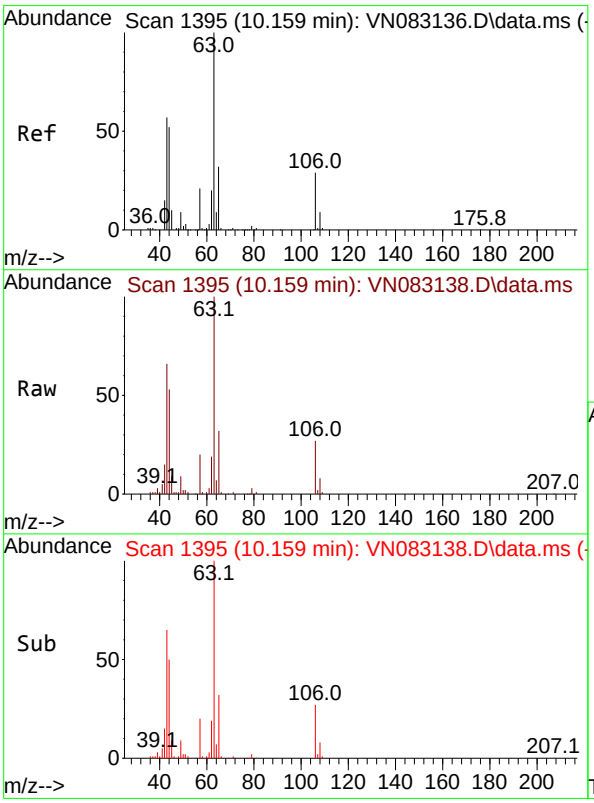
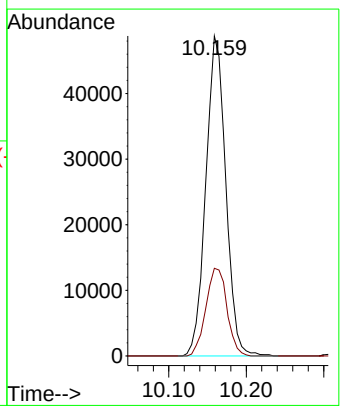
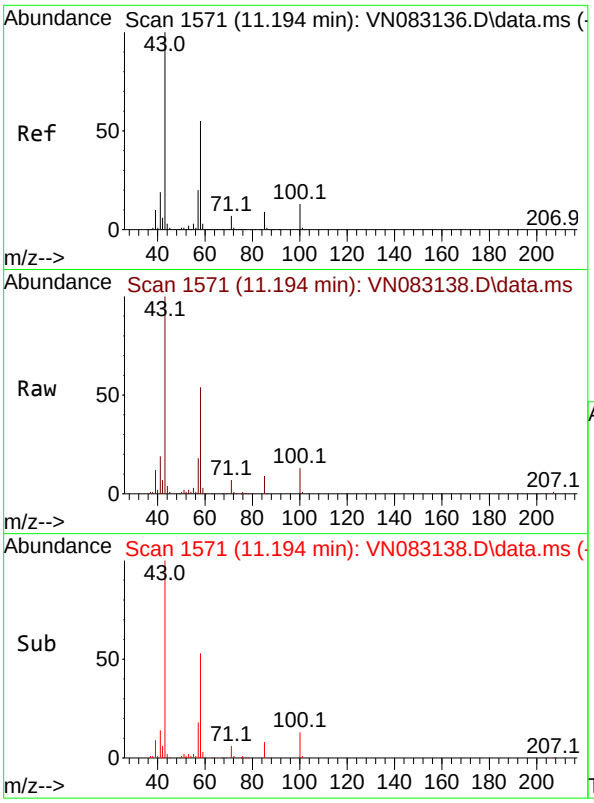


#58
2-Chloroethyl Vinyl ether
Concen: 51.698 ug/l
RT: 10.159 min Scan# 1395
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 63 Resp: 87140

Ion	Ratio	Lower	Upper
63	100		
106	28.9	21.4	32.0





#59
2-Hexanone
Concen: 50.312 ug/l
RT: 11.194 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 43 Resp: 12923

Ion	Ratio	Lower	Upper
43	100		
58	54.0	24.6	73.8

Instrument :
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ClientSampleId :
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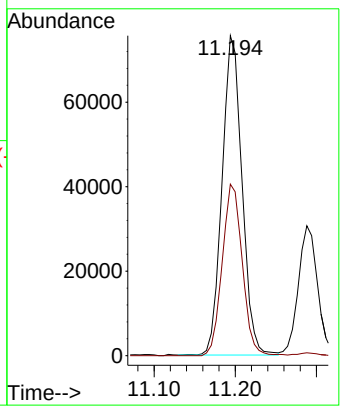
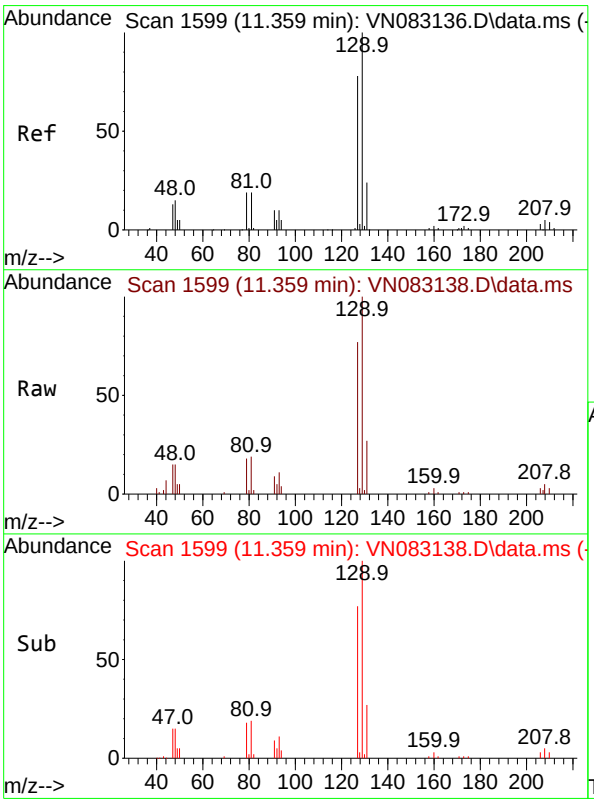
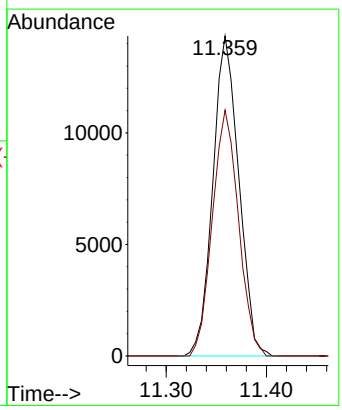


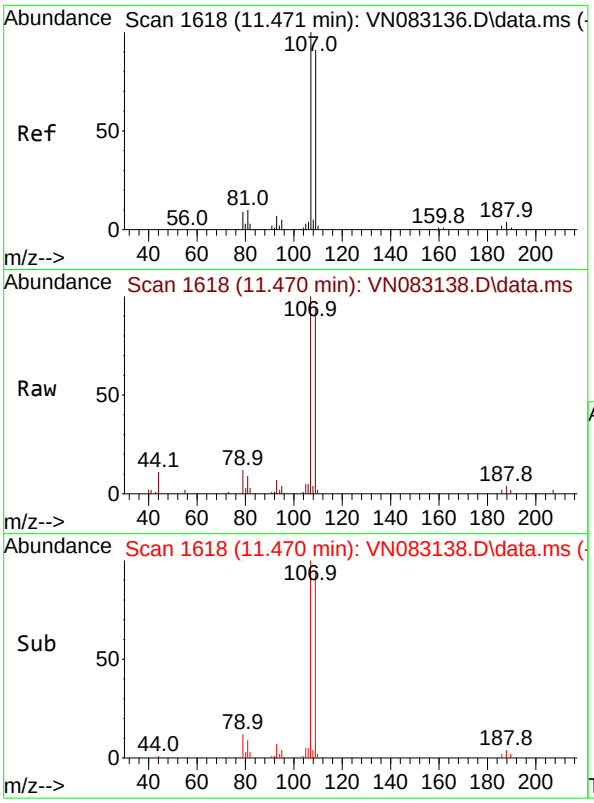


#60
Dibromochloromethane
Concen: 10.088 ug/l
RT: 11.359 min Scan# 1599
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion:129 Resp: 25798

Ion	Ratio	Lower	Upper
129	100		
127	77.5	39.2	117.6





#61
1,2-Dibromoethane
Concen: 10.219 ug/l
RT: 11.470 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion:107 Resp: 2270

Ion	Ratio	Lower	Upper
107	100		
109	92.7	73.7	110.5

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

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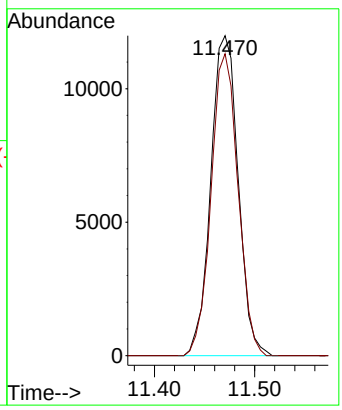
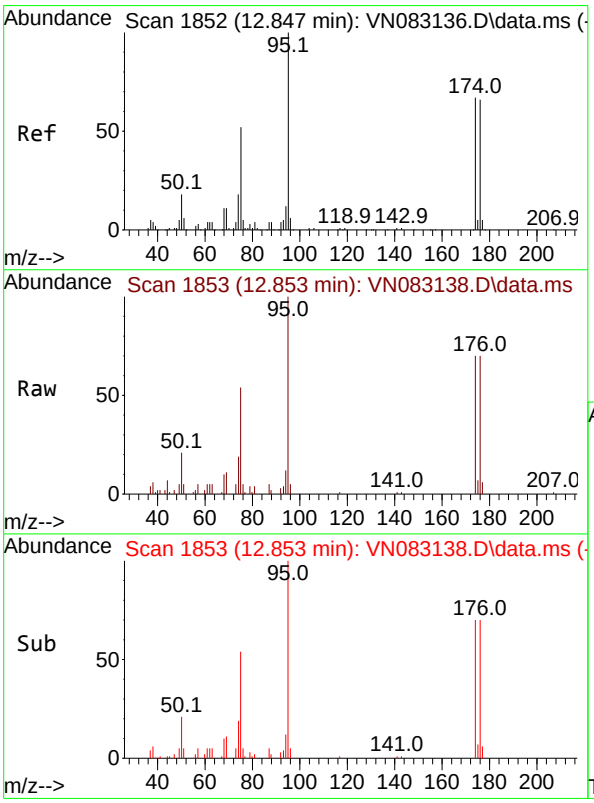
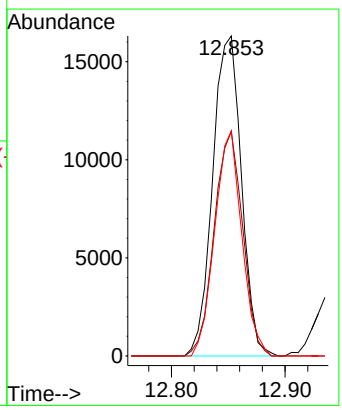


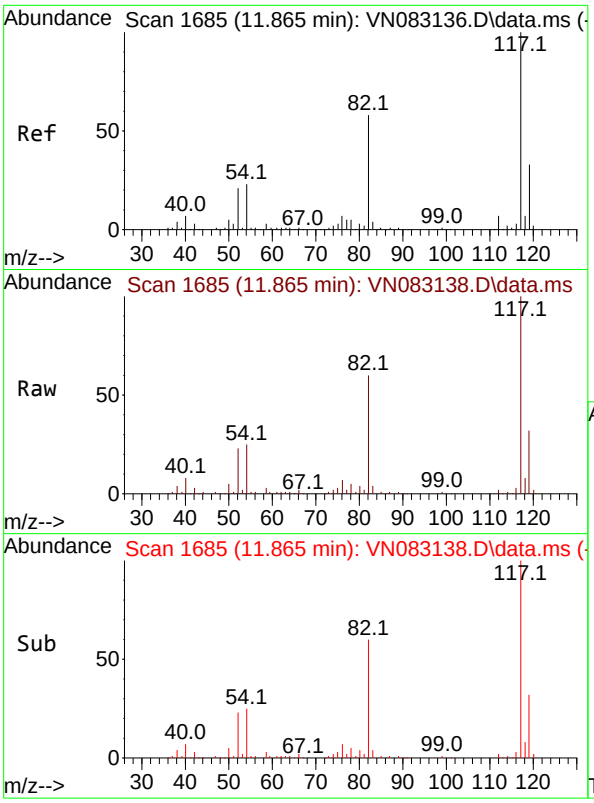


#62
4-Bromofluorobenzene
Concen: 9.517 ug/l
RT: 12.853 min Scan# 1853
Delta R.T. 0.006 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 95 Resp: 28691

Ion	Ratio	Lower	Upper
95	100		
174	69.5	0.0	159.2
176	66.2	0.0	147.6

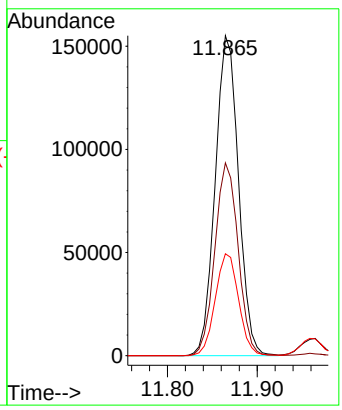




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion:117 Resp: 27940

Ion	Ratio	Lower	Upper
117	100		
82	60.2	47.5	71.3
119	31.9	25.6	38.4



Instrument :
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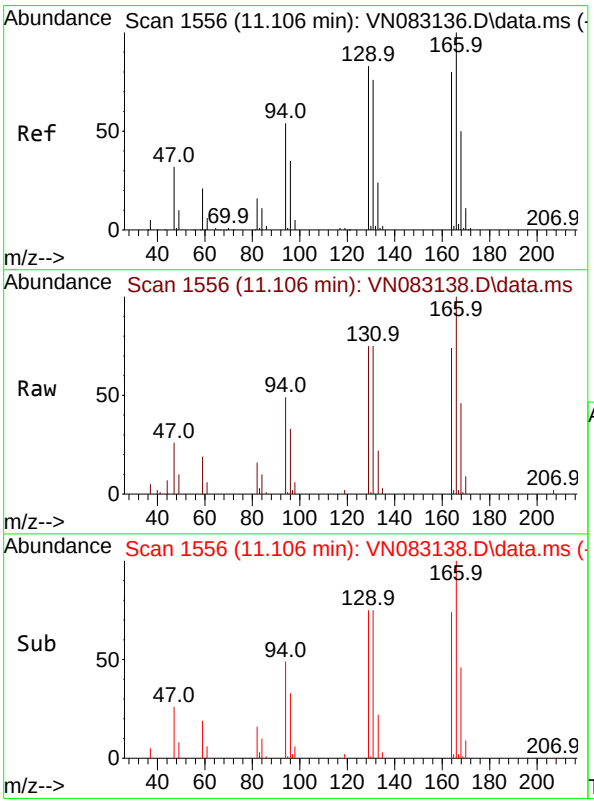
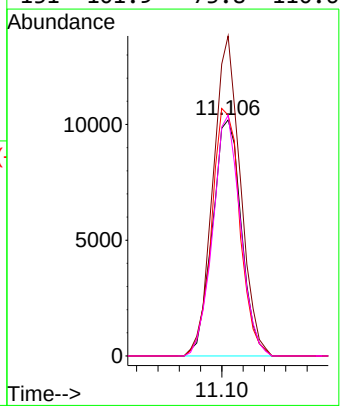
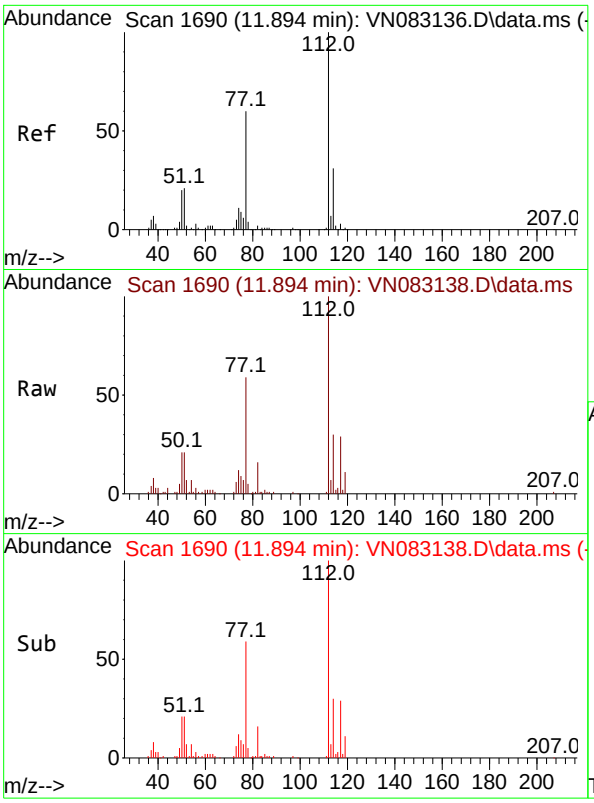


#64
Tetrachloroethene
Concen: 10.362 ug/l
RT: 11.106 min Scan# 1556
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion:164 Resp: 19174

Ion	Ratio	Lower	Upper
164	100		
166	135.5	101.4	152.0
129	102.0	75.7	113.5
131	101.9	73.8	110.6

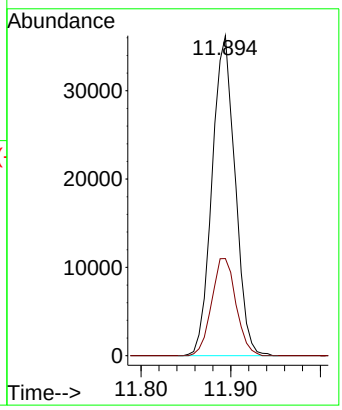




#65
Chlorobenzene
Concen: 10.437 ug/l
RT: 11.894 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion:112 Resp: 6444

Ion	Ratio	Lower	Upper
112	100		
114	30.4	26.2	39.2



Instrument :
MSVOA_N
ClientSampleId :
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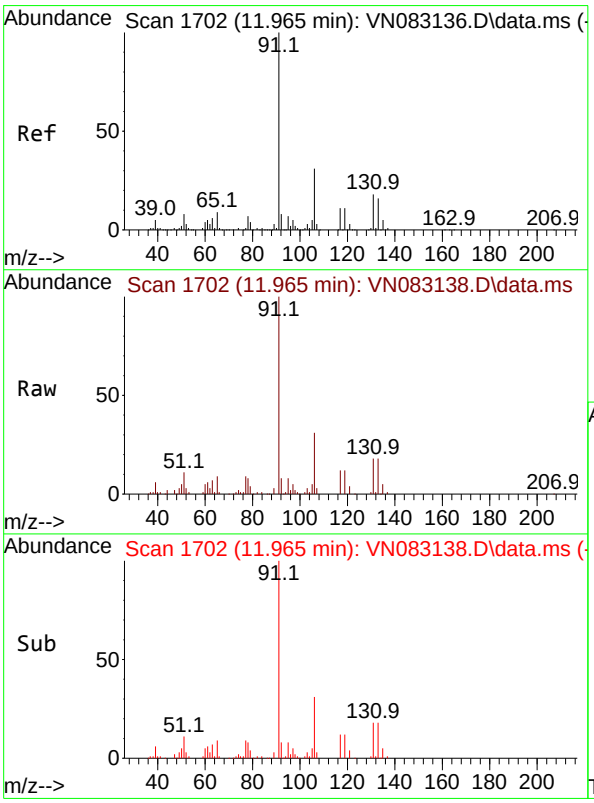
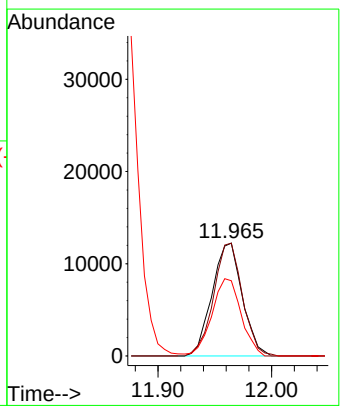
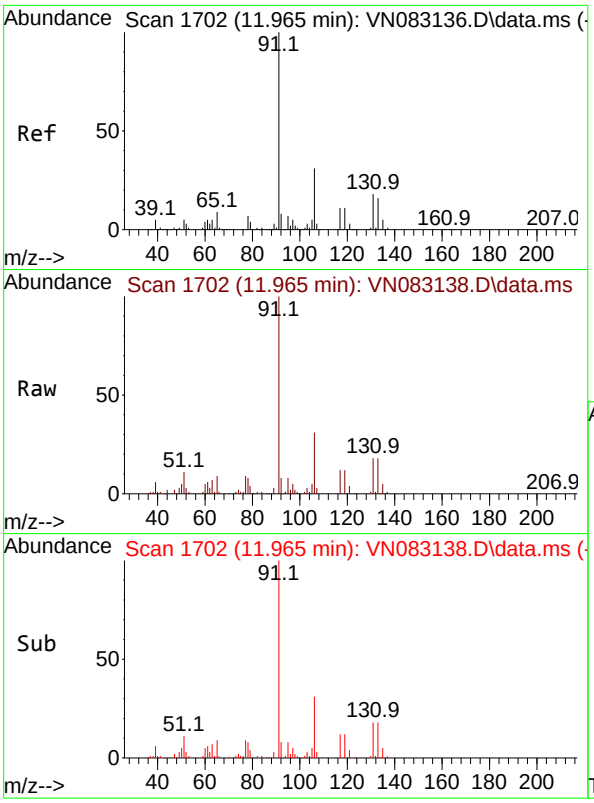


#66
1,1,1,2-Tetrachloroethane
Concen: 10.331 ug/l
RT: 11.965 min Scan# 1702
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion:131 Resp: 22498

Ion	Ratio	Lower	Upper
131	100		
133	95.7	47.3	142.0
119	66.5	32.5	97.4





#67
Ethyl Benzene
Concen: 10.211 ug/l
RT: 11.965 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 91 Resp: 11566

Ion	Ratio	Lower	Upper
91	100		
106	30.7	24.0	36.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

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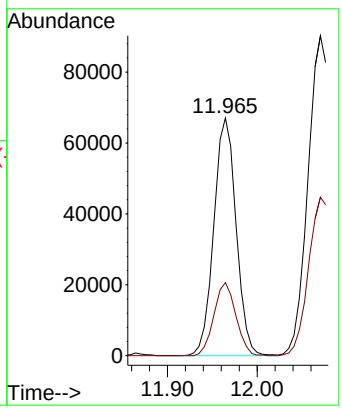
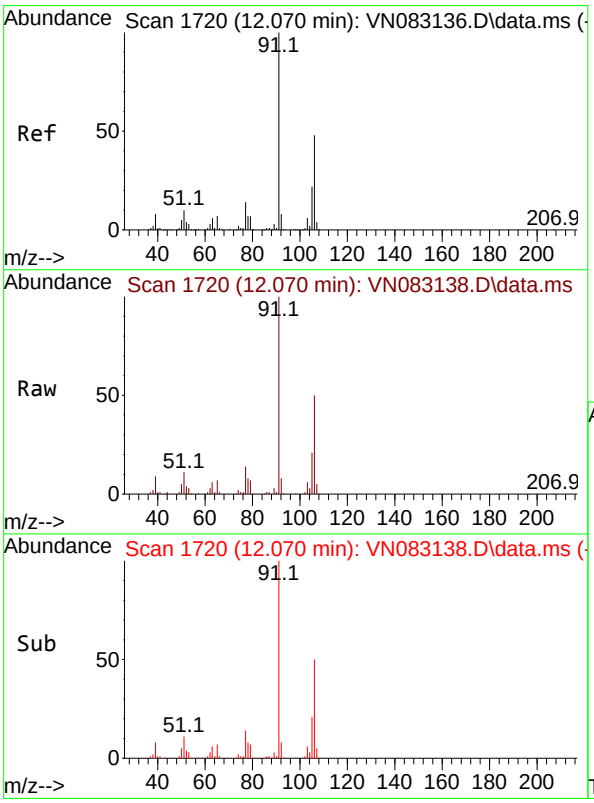
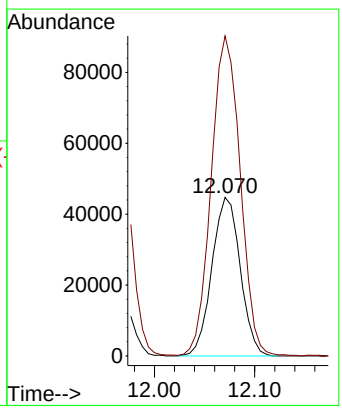


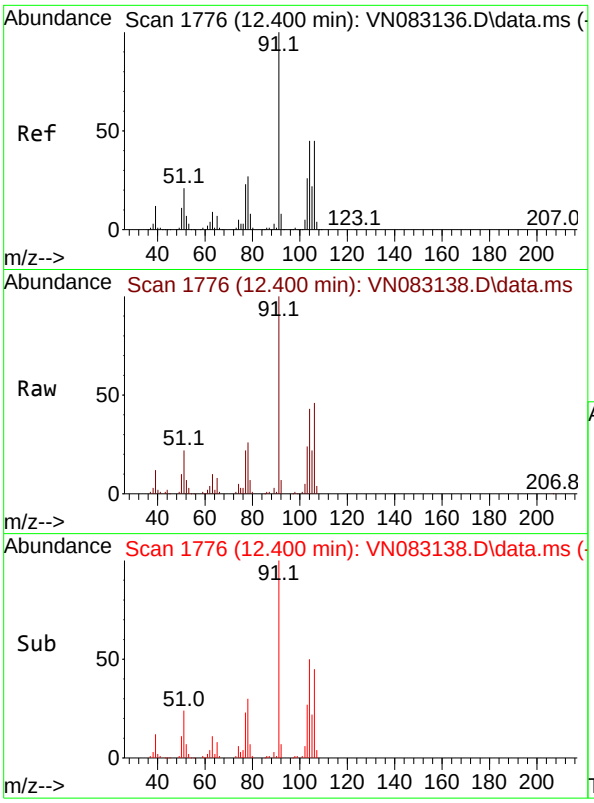


#68
m/p-Xylenes
Concen: 20.687 ug/l
RT: 12.070 min Scan# 1720
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion:106 Resp: 87775

Ion	Ratio	Lower	Upper
106	100		
91	206.9	166.1	249.1





#69
o-Xylene
Concen: 10.327 ug/l
RT: 12.400 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion:106 Resp: 4321

Ion	Ratio	Lower	Upper
106	100		
91	217.0	111.3	333.9

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

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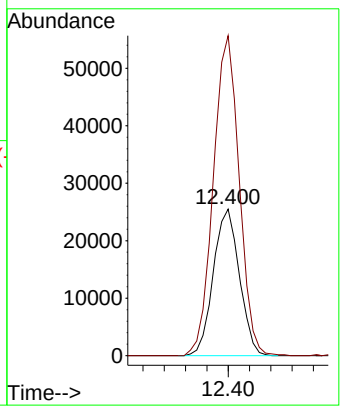
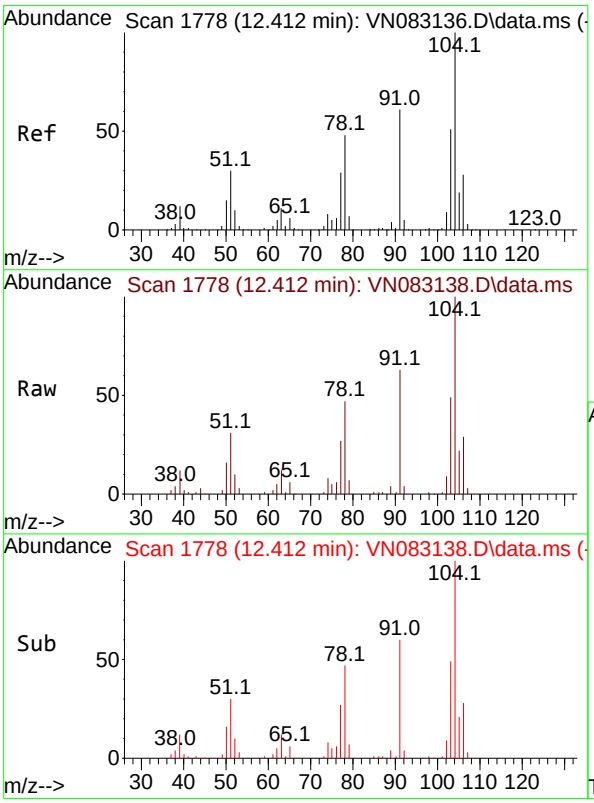
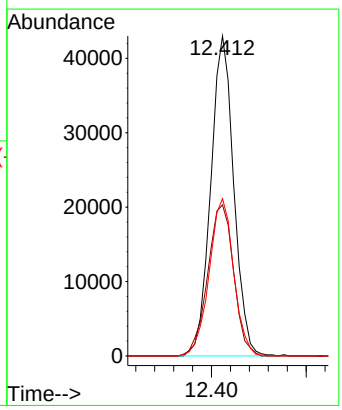


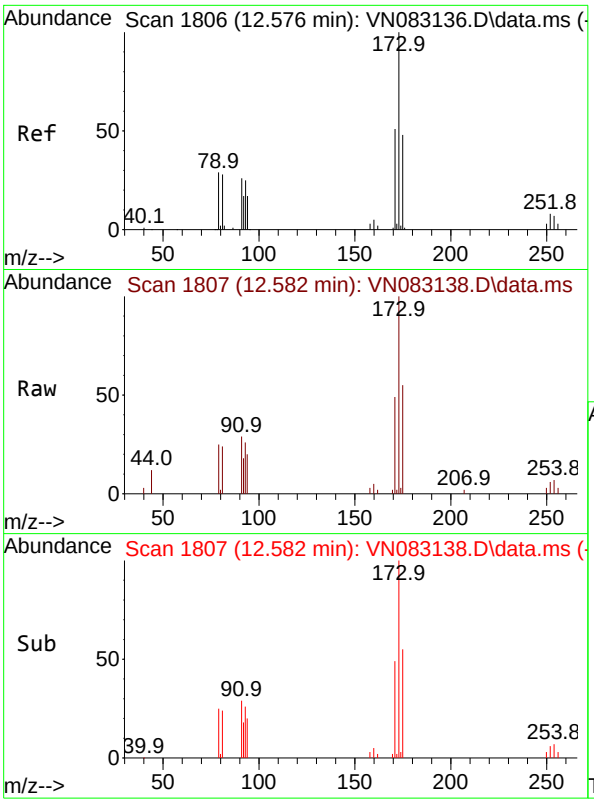


#70
Styrene
Concen: 10.335 ug/l
RT: 12.412 min Scan# 1778
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion:104 Resp: 72641

Ion	Ratio	Lower	Upper
104	100		
78	53.1	41.6	62.4
103	52.2	44.0	66.0

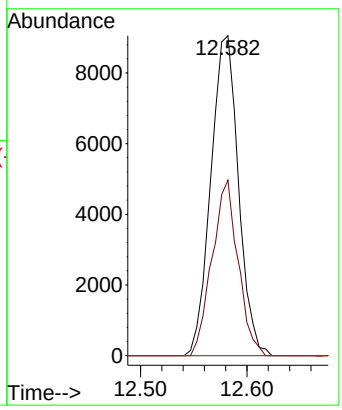




#71
Bromoform
Concen: 9.893 ug/l
RT: 12.582 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion:173 Resp: 1632

Ion	Ratio	Lower	Upper
173	100		
175	51.7	24.0	72.0
254	0.0	0.0	0.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

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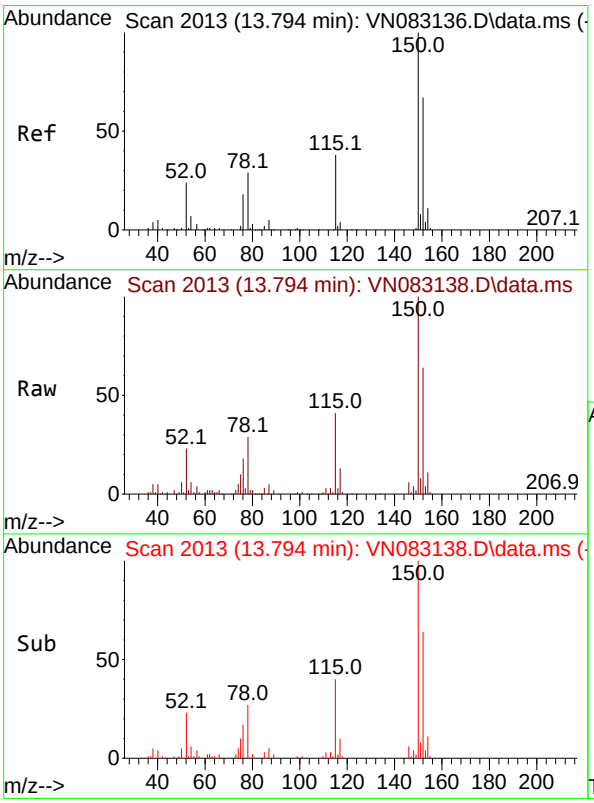
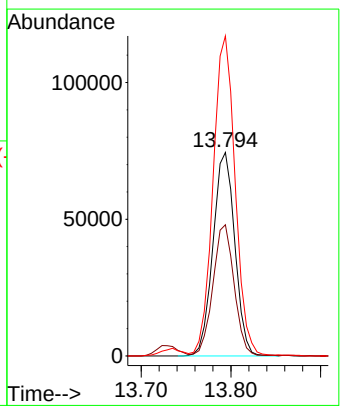
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

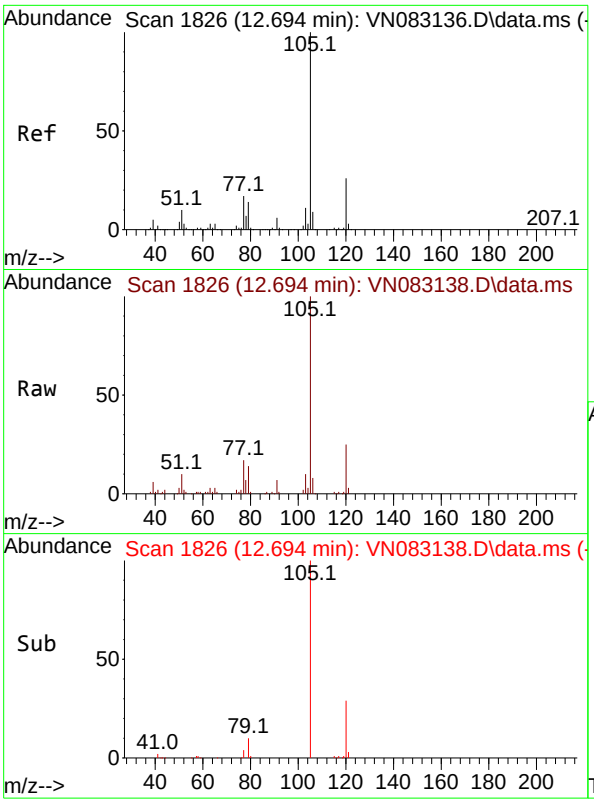


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.794 min Scan# 2013
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion:152 Resp: 125725

Ion	Ratio	Lower	Upper
152	100		
115	62.4	30.6	91.6
150	158.1	0.0	348.6

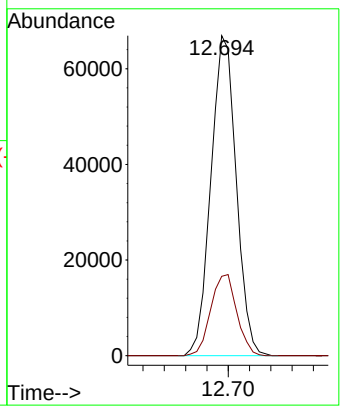




#73
Isopropylbenzene
Concen: 10.487 ug/l
RT: 12.694 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion:105 Resp: 11027

Ion	Ratio	Lower	Upper
105	100		
120	26.0	12.9	38.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

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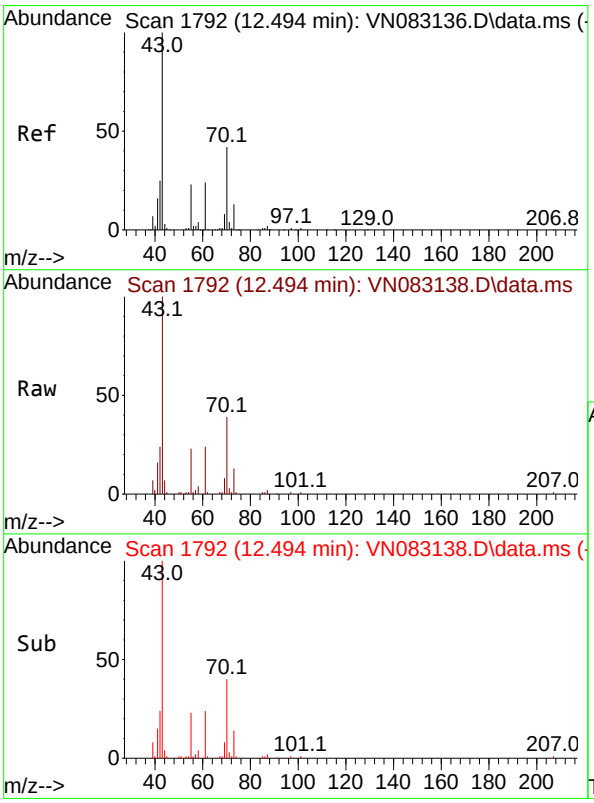
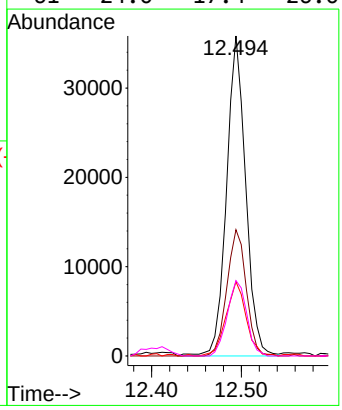
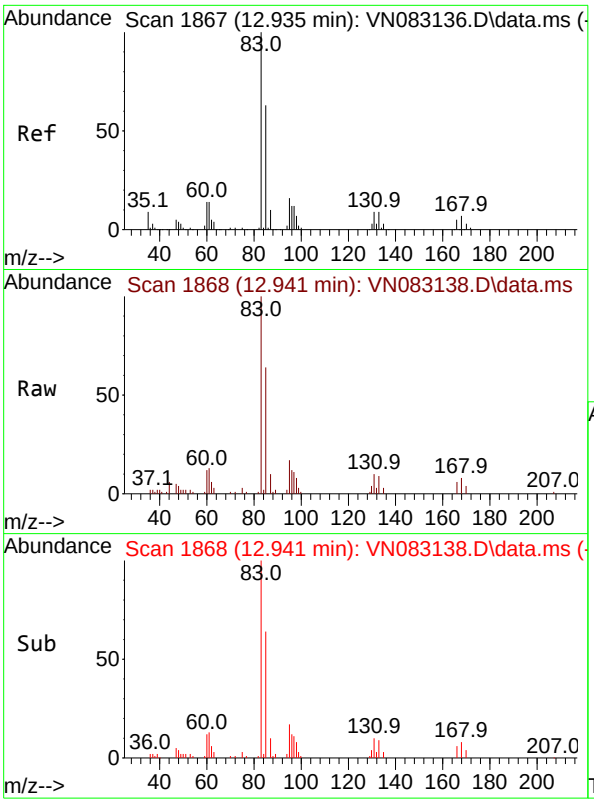


#74
N-amyl acetate
Concen: 10.303 ug/l
RT: 12.494 min Scan# 1792
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 43 Resp: 52998

Ion	Ratio	Lower	Upper
43	100		
70	39.8	29.8	44.6
55	24.3	18.7	28.1
61	24.0	17.4	26.0





#75
1,1,2,2-Tetrachloroethane
Concen: 10.234 ug/l
RT: 12.941 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 83 Resp: 3043

Ion	Ratio	Lower	Upper
83	100		
131	9.8	5.0	14.9
85	65.6	31.9	95.7

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

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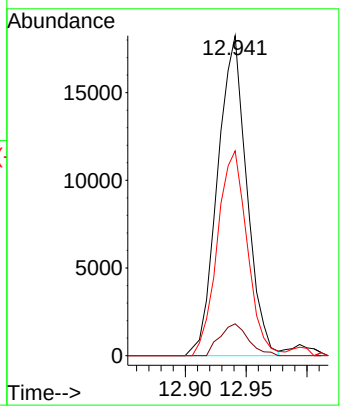
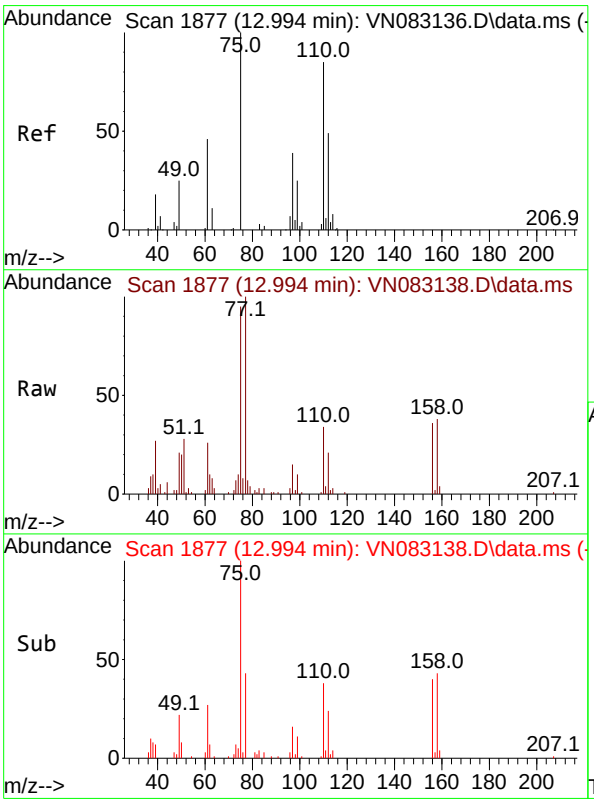
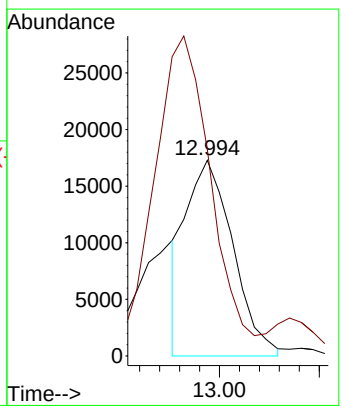


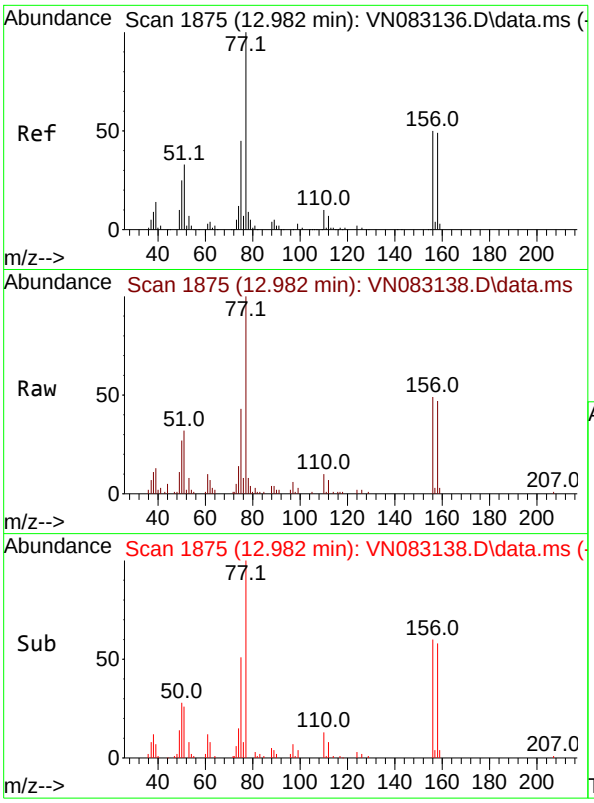


#76
1,2,3-Trichloropropane
Concen: 10.261 ug/l m
RT: 12.994 min Scan# 1877
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 75 Resp: 28359

Ion	Ratio	Lower	Upper
75	100		
77	197.9	110.9	332.6

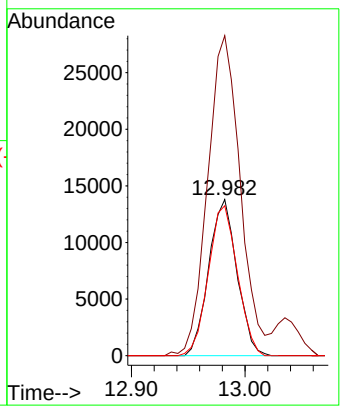




#77
Bromobenzene
Concen: 10.180 ug/l
RT: 12.982 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion:156 Resp: 2378

Ion	Ratio	Lower	Upper
156	100		
77	236.0	111.3	333.8
158	98.9	48.3	144.9



Instrument :
MSVOA_N
ClientSampleId :
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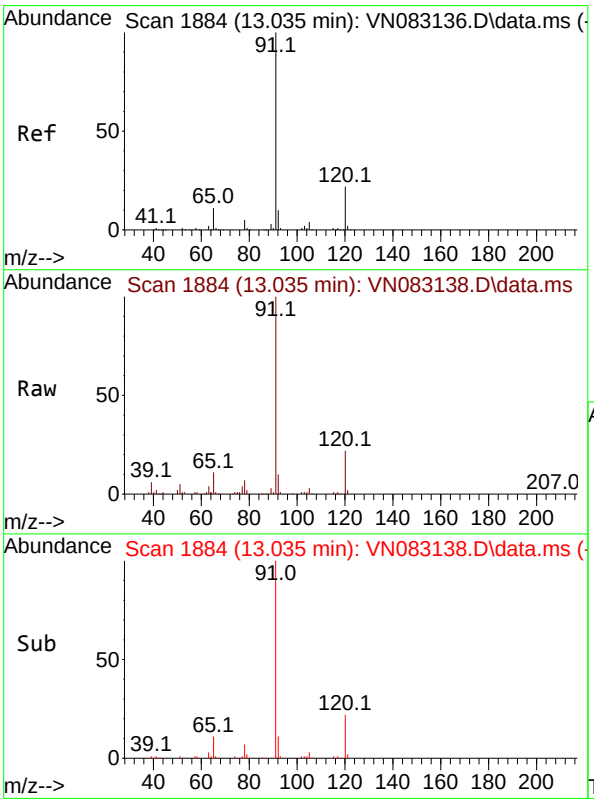
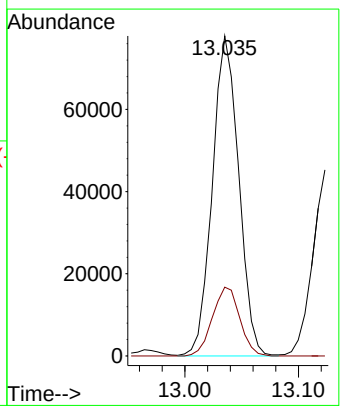
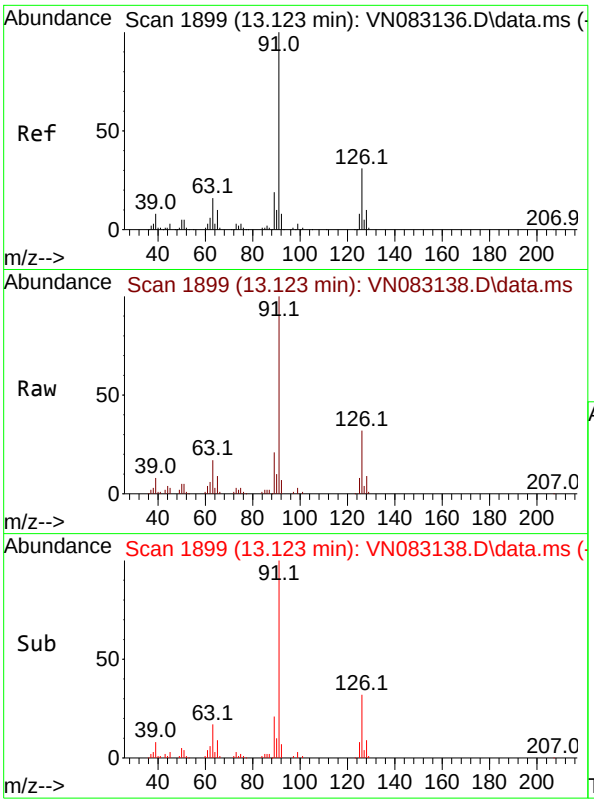


#78
n-propylbenzene
Concen: 10.379 ug/l
RT: 13.035 min Scan# 1884
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 91 Resp: 125678

Ion	Ratio	Lower	Upper
91	100		
120	22.2	10.9	32.9

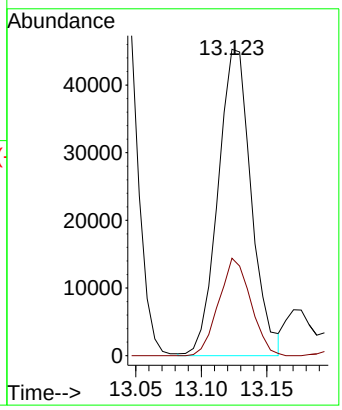




#79
2-Chlorotoluene
Concen: 10.429 ug/l
RT: 13.123 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 91 Resp: 8006

Ion	Ratio	Lower	Upper
91	100		
126	30.4	16.2	48.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

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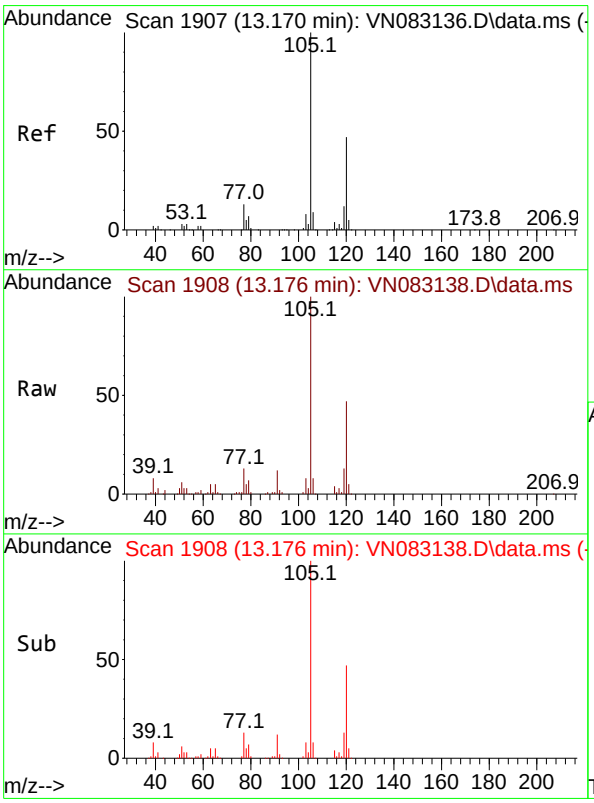
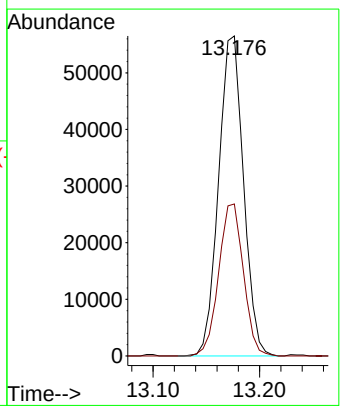
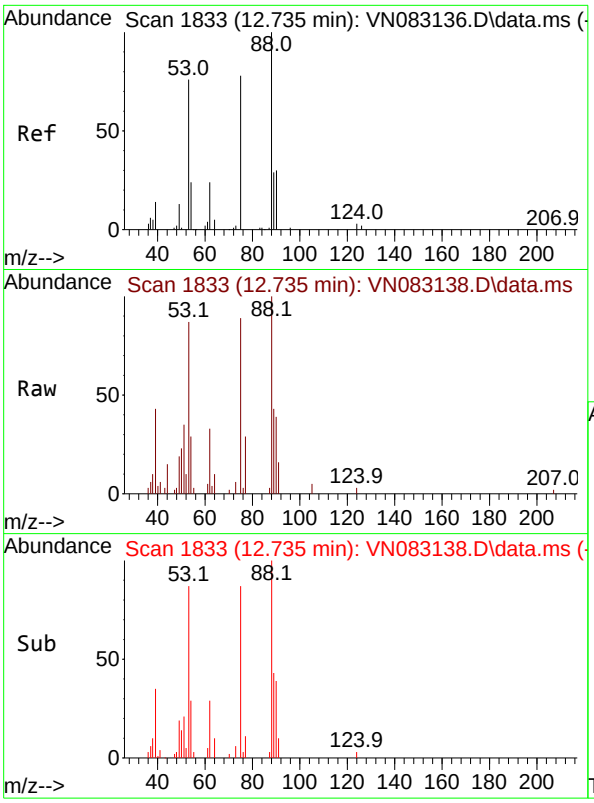


#80
1,3,5-Trimethylbenzene
Concen: 10.400 ug/l
RT: 13.176 min Scan# 1908
Delta R.T. 0.006 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion:105 Resp: 91559

Ion	Ratio	Lower	Upper
105	100		
120	47.3	24.3	72.8





#81
trans-1,4-Dichloro-2-butene
Concen: 9.271 ug/l
RT: 12.735 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 75 Resp: 1176

Ion	Ratio	Lower	Upper
75	100		
53	116.7	88.4	132.6
89	47.3	36.3	54.5

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

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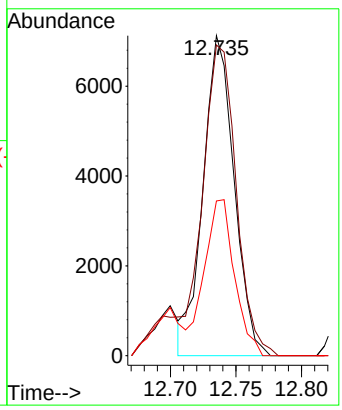
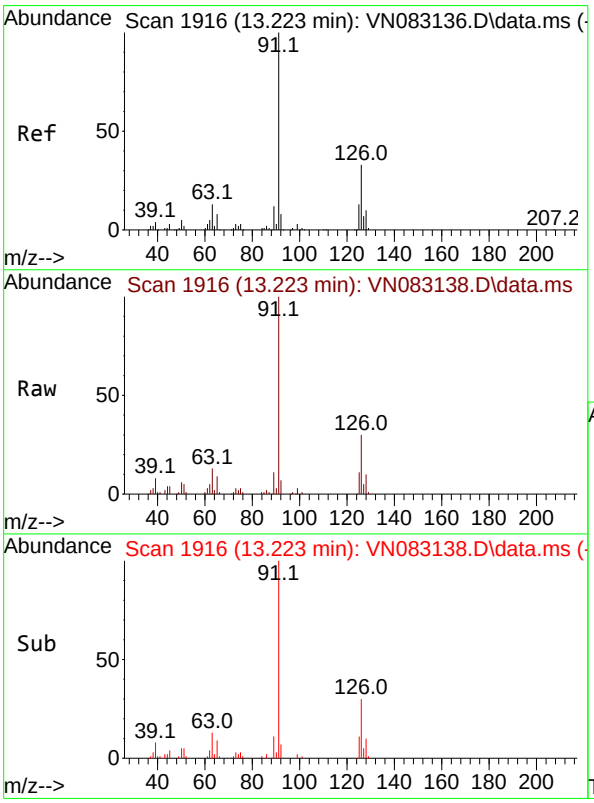
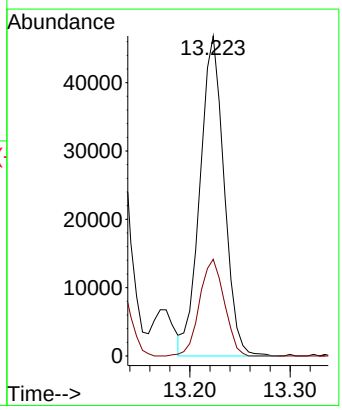


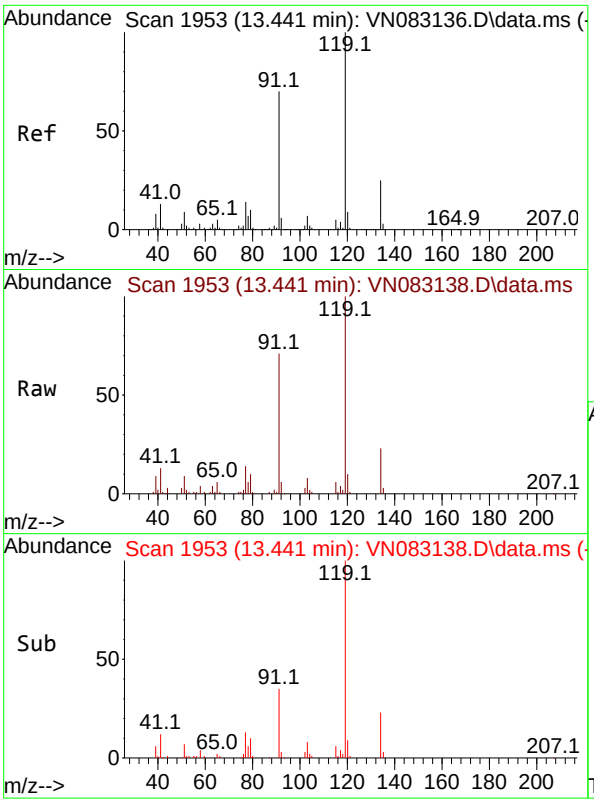


#82
4-Chlorotoluene
Concen: 10.174 ug/l
RT: 13.223 min Scan# 1916
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 91 Resp: 78348

Ion	Ratio	Lower	Upper
91	100		
126	31.0	16.2	48.6





#83
tert-Butylbenzene
Concen: 10.294 ug/l
RT: 13.441 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion:119 Resp: 8026

Ion	Ratio	Lower	Upper
119	100		
91	71.7	35.0	105.1
134	25.3	13.3	39.8

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

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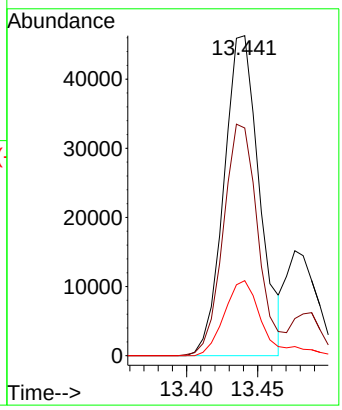
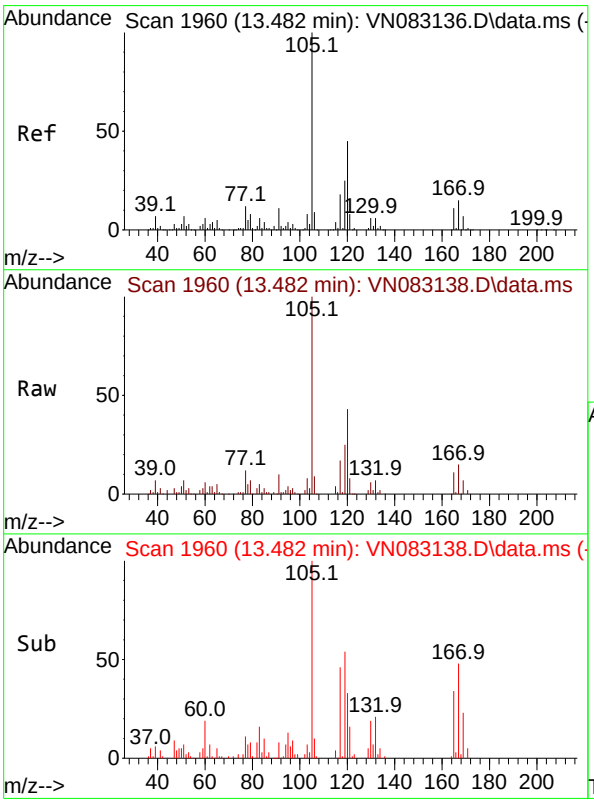
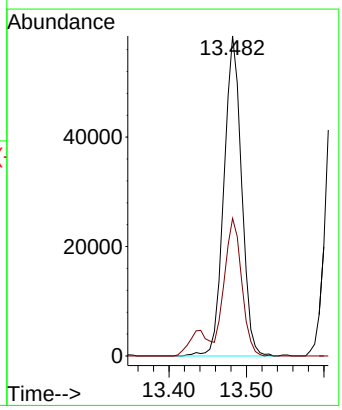


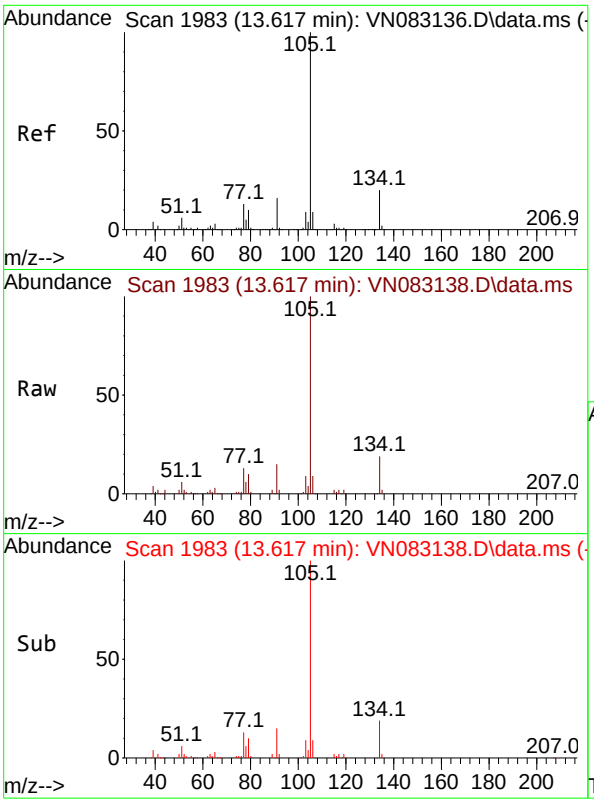


#84
1,2,4-Trimethylbenzene
Concen: 10.426 ug/l
RT: 13.482 min Scan# 1960
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion:105 Resp: 92502

Ion	Ratio	Lower	Upper
105	100		
120	42.1	21.9	65.8





#85
sec-Butylbenzene
Concen: 10.221 ug/l
RT: 13.617 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion:105 Resp: 10874

Ion	Ratio	Lower	Upper
105	100		
134	18.8	9.8	29.3

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

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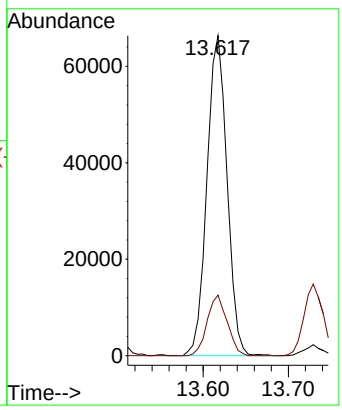
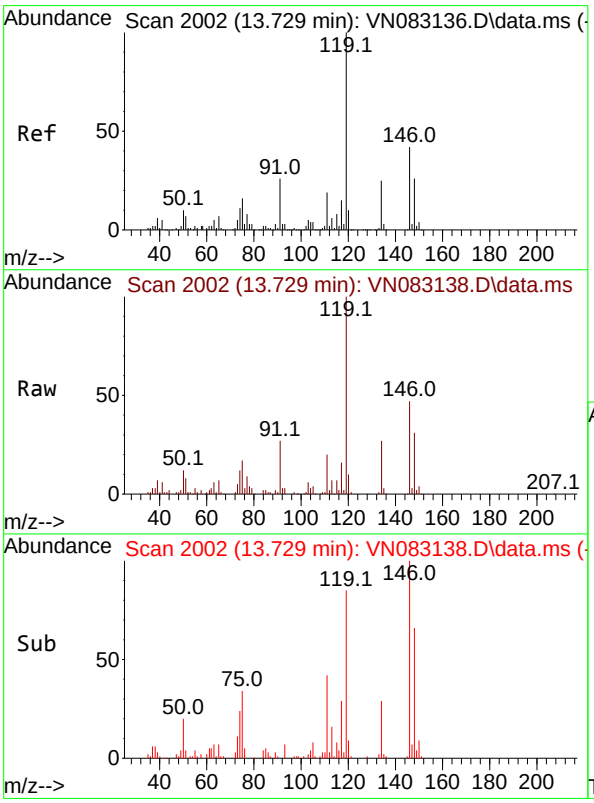
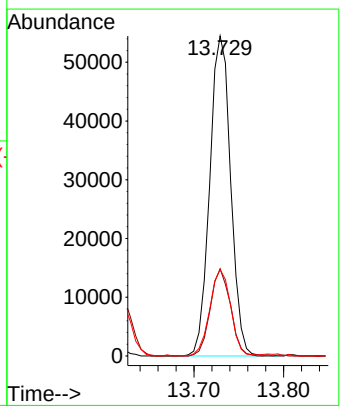


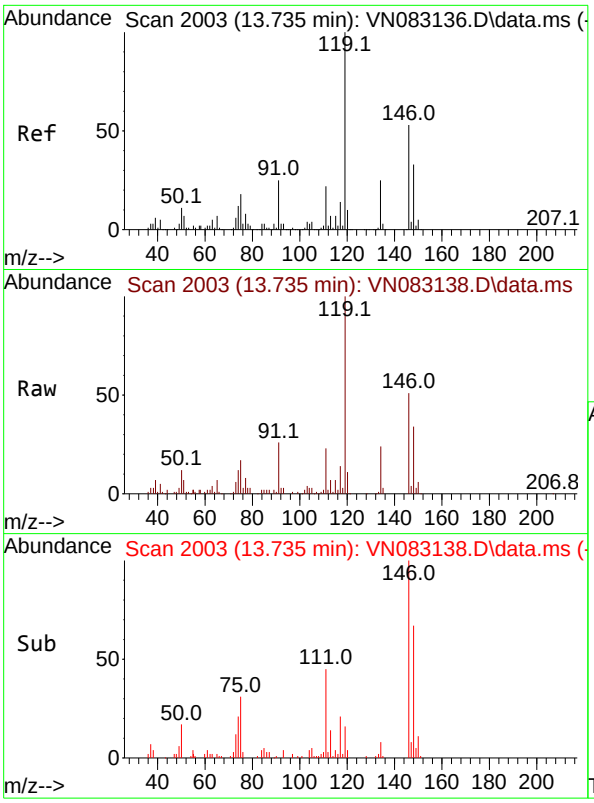


#86
p-Isopropyltoluene
Concen: 10.047 ug/l
RT: 13.729 min Scan# 2002
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion:119 Resp: 88256

Ion	Ratio	Lower	Upper
119	100		
134	26.2	13.0	39.0
91	27.0	12.3	36.9





#87
1,3-Dichlorobenzene
Concen: 10.048 ug/l
RT: 13.735 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion:146 Resp: 4416

Ion	Ratio	Lower	Upper
146	100		
111	44.1	20.6	61.9
148	65.1	31.8	95.3

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

Manual Integrations
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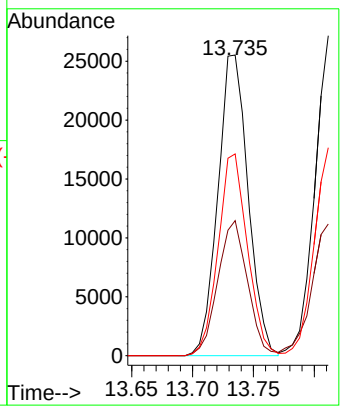
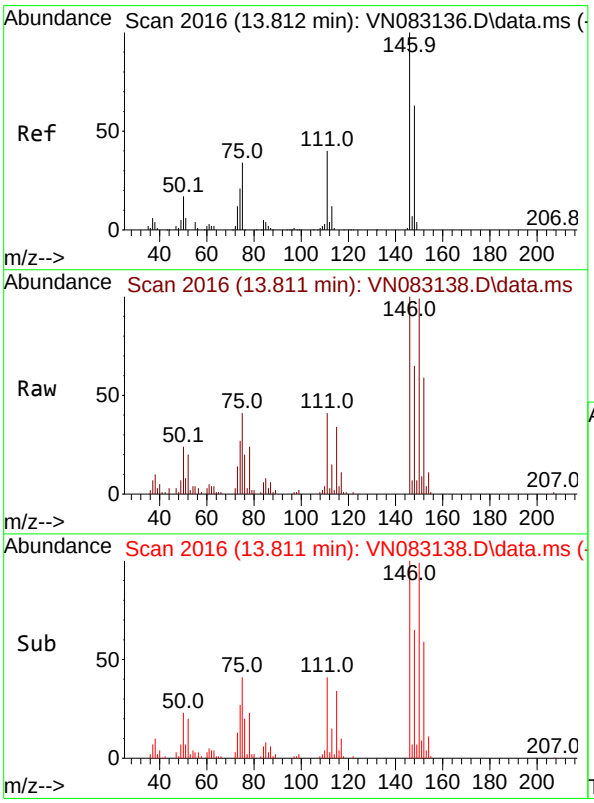
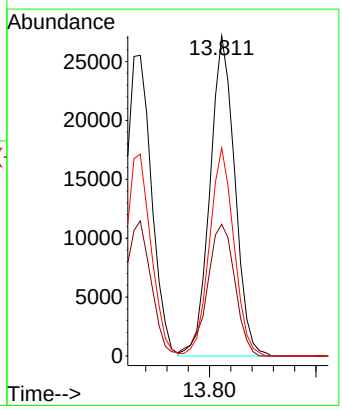


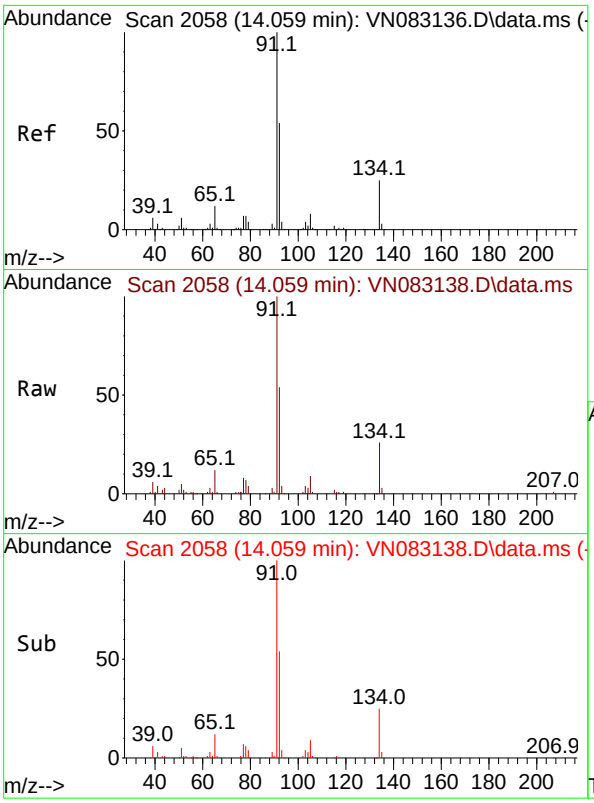


#88
1,4-Dichlorobenzene
Concen: 9.937 ug/l
RT: 13.811 min Scan# 2016
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion:146 Resp: 44036

Ion	Ratio	Lower	Upper
146	100		
111	45.6	20.1	60.3
148	64.0	32.2	96.6





#89
n-Butylbenzene
Concen: 10.060 ug/l
RT: 14.059 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

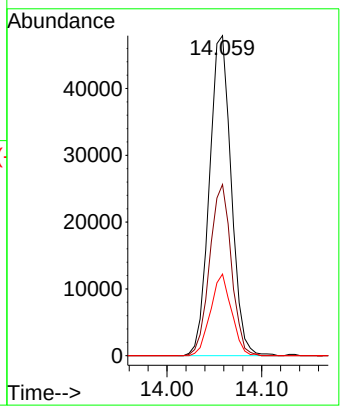
Tgt Ion: 91 Resp: 7656

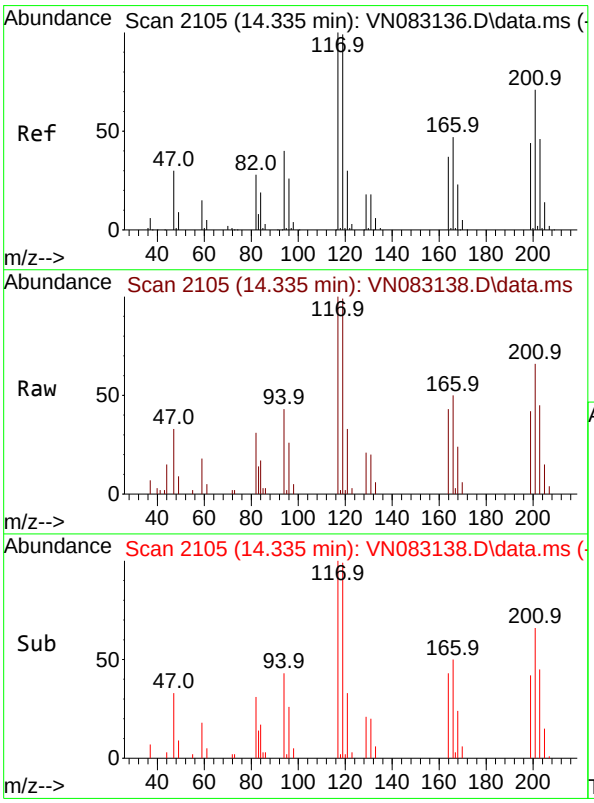
Ion	Ratio	Lower	Upper
91	100		
92	53.1	26.1	78.3
134	24.7	12.1	36.3

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

Manual Integrations
APPROVED

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

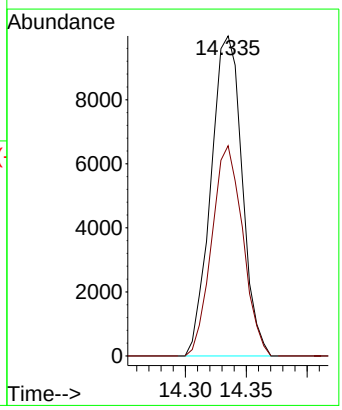


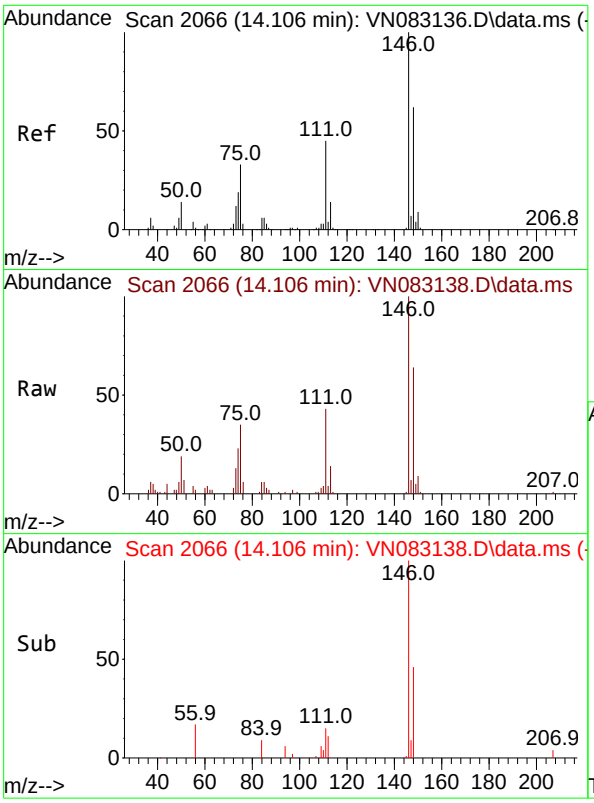


#90
Hexachloroethane
Concen: 10.487 ug/l
RT: 14.335 min Scan# 2105
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion:117 Resp: 17798

Ion	Ratio	Lower	Upper
117	100		
201	65.3	35.8	107.3

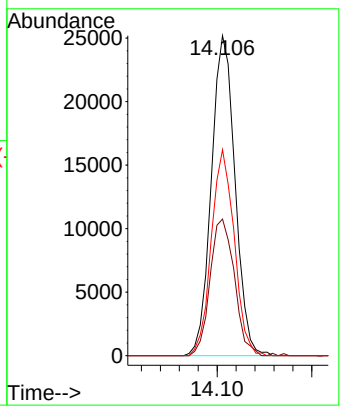




#91
1,2-Dichlorobenzene
Concen: 10.282 ug/l
RT: 14.106 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion:146 Resp: 4373

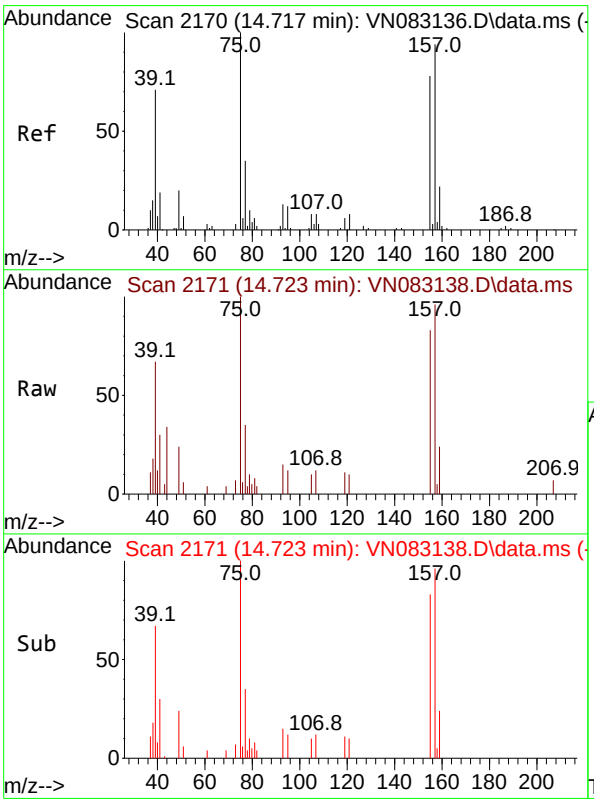
Ion	Ratio	Lower	Upper
146	100		
111	43.8	21.4	64.2
148	62.3	32.1	96.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

Manual Integrations
APPROVED

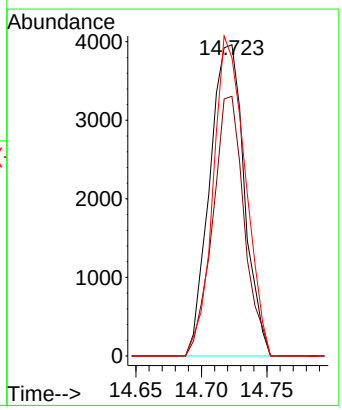
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

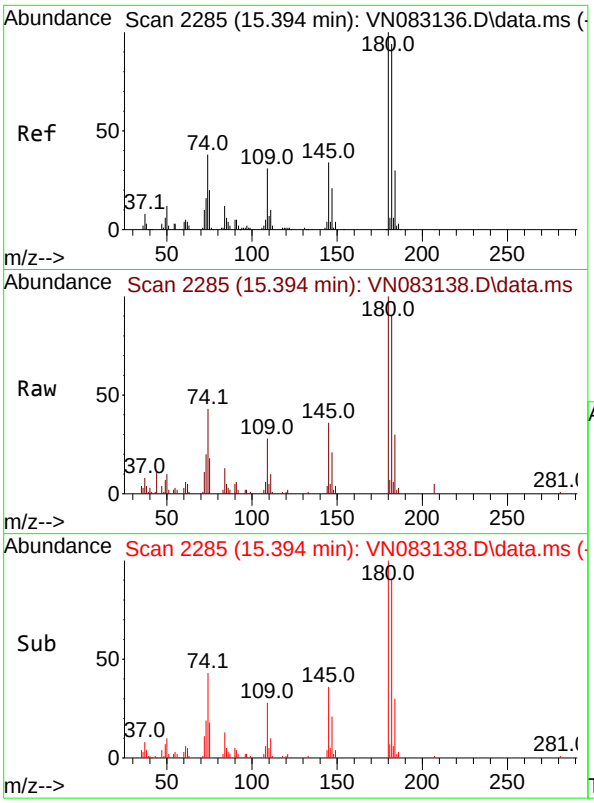


#92
1,2-Dibromo-3-Chloropropane
Concen: 10.056 ug/l
RT: 14.723 min Scan# 2171
Delta R.T. 0.006 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 75 Resp: 7258

Ion	Ratio	Lower	Upper
75	100		
155	75.6	36.6	109.8
157	95.2	46.9	140.6

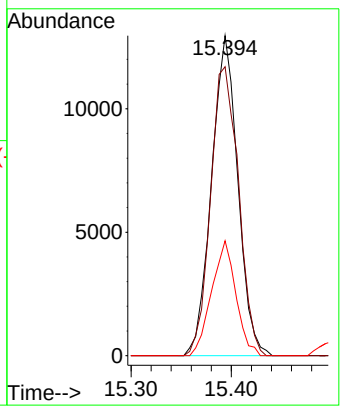




#93
1,2,4-Trichlorobenzene
Concen: 9.895 ug/l
RT: 15.394 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion:180 Resp: 2358

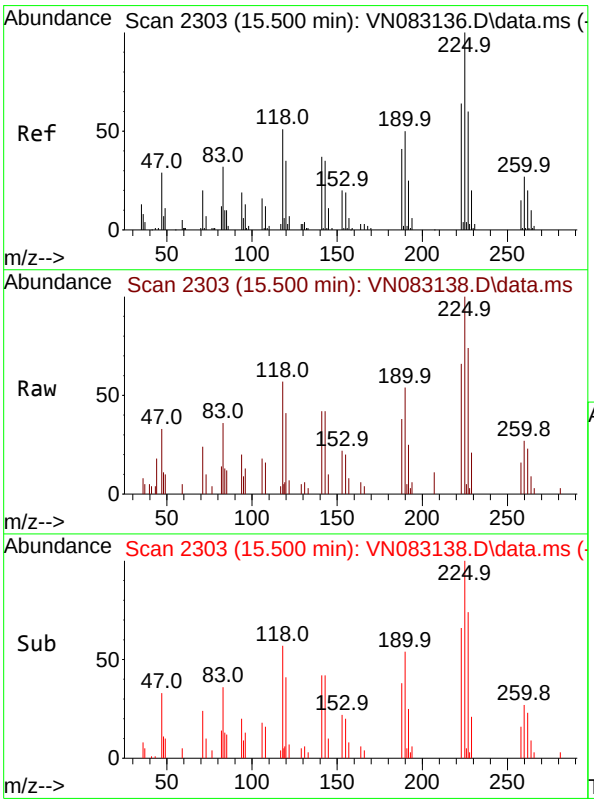
Ion	Ratio	Lower	Upper
180	100		
182	96.2	47.3	141.8
145	33.2	15.7	47.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

Manual Integrations
APPROVED

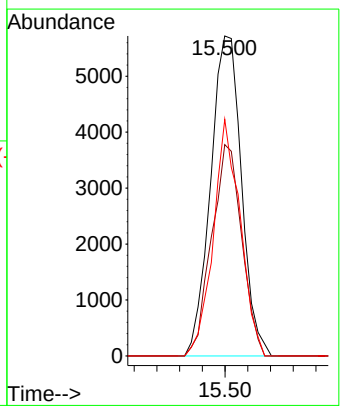
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

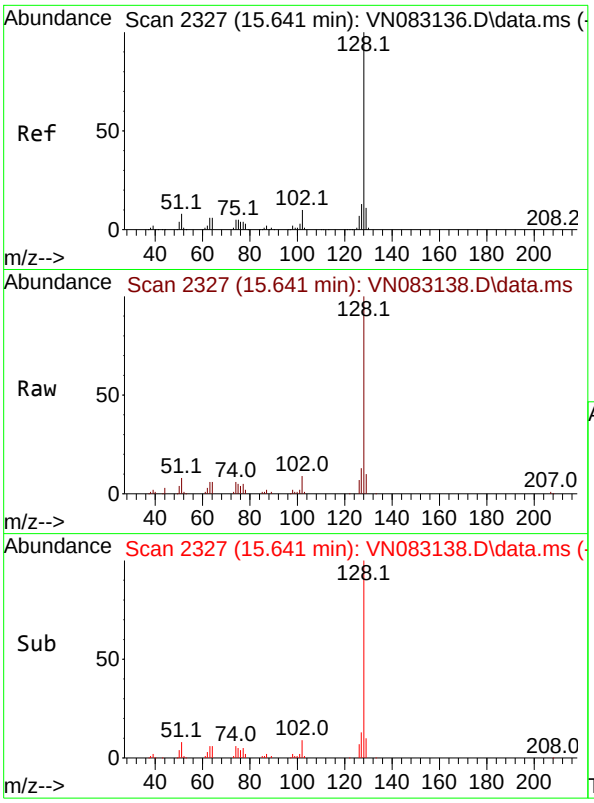


#94
Hexachlorobutadiene
Concen: 10.179 ug/l
RT: 15.500 min Scan# 2303
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion:225 Resp: 10788

Ion	Ratio	Lower	Upper
225	100		
223	64.4	31.9	95.7
227	64.4	32.5	97.5

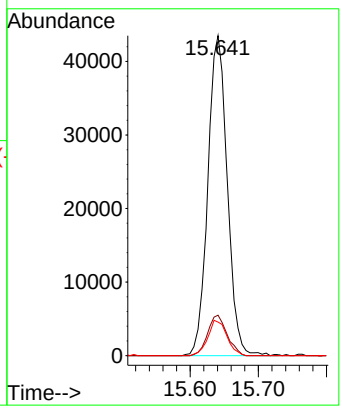




#95
Naphthalene
Concen: 10.232 ug/l
RT: 15.641 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion:128 Resp: 8637

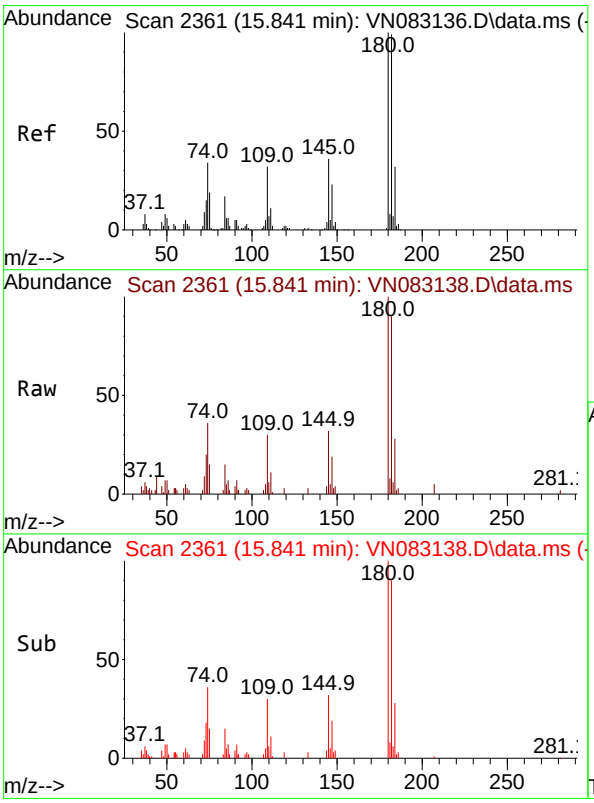
Ion	Ratio	Lower	Upper
128	100		
127	12.6	10.6	16.0
129	10.8	8.6	12.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC010

Manual Integrations
APPROVED

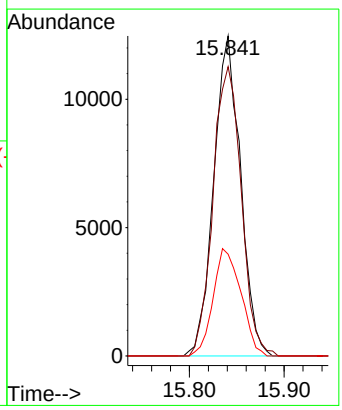
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024



#96
1,2,3-Trichlorobenzene
Concen: 10.387 ug/l
RT: 15.841 min Scan# 2361
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion:180 Resp: 24492

Ion	Ratio	Lower	Upper
180	100		
182	95.3	48.9	146.8
145	34.8	16.8	50.4



ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN080724\
Data File : VN083139.D
Acq On : 07 Aug 2024 12:10
Operator : JC\MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 08 06:18:41 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 05:50:26 2024
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.224	168	201859	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	347562	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	293513	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.794	152	133537	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.582	65	15867	5.522	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery =	11.040%#		
35) Dibromofluoromethane	8.159	113	12039	5.549	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery =	11.100%#		
50) Toluene-d8	10.565	98	43104	5.326	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery =	10.660%#		
62) 4-Bromofluorobenzene	12.847	95	16776	5.317	ug/l	0.00
Spiked Amount 50.000	Range 64 - 133		Recovery =	10.640%#		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.124	85	12045	5.262	ug/l	97
3) Chloromethane	2.359	50	12017	5.128	ug/l	97
4) Vinyl Chloride	2.512	62	11837	4.950	ug/l	96
5) Bromomethane	2.942	94	8328	5.612	ug/l	88
6) Chloroethane	3.106	64	7688	5.139	ug/l	90
7) Trichlorofluoromethane	3.489	101	20242	5.124	ug/l	93
8) Diethyl Ether	3.959	74	7674	5.220	ug/l	91
9) 1,1,2-Trichlorotrifluo...	4.377	101	11261	5.170	ug/l	99
10) Methyl Iodide	4.595	142	13878	4.844	ug/l #	95
11) Tert butyl alcohol	5.524	59	15685	26.268	ug/l	99
12) 1,1-Dichloroethene	4.342	96	11718	5.237	ug/l	90
13) Acrolein	4.177	56	9615	24.707	ug/l	89
14) Allyl chloride	5.018	41	22183	5.246	ug/l	87
15) Acrylonitrile	5.724	53	31357	25.534	ug/l	96
16) Acetone	4.436	43	27636	24.581	ug/l	97
17) Carbon Disulfide	4.712	76	32908	5.026	ug/l	96
18) Methyl Acetate	5.030	43	17029	5.084	ug/l	98
19) Methyl tert-butyl Ether	5.789	73	41439	5.131	ug/l	93
20) Methylene Chloride	5.271	84	12913	4.991	ug/l #	84
21) trans-1,2-Dichloroethene	5.783	96	11465	4.957	ug/l	88
22) Diisopropyl ether	6.677	45	39688	4.993	ug/l #	97
23) Vinyl Acetate	6.600	43	202471m	24.856	ug/l	
24) 1,1-Dichloroethane	6.565	63	22058	5.091	ug/l	98
25) 2-Butanone	7.488	43	41750	24.185	ug/l	91
26) 2,2-Dichloropropane	7.494	77	19864	4.937	ug/l	95
27) cis-1,2-Dichloroethene	7.483	96	13862	4.967	ug/l	94
28) Bromochloromethane	7.812	49	9874	5.577	ug/l #	85
29) Tetrahydrofuran	7.841	42	28260	25.324	ug/l	89
30) Chloroform	7.965	83	22650	5.032	ug/l	99
31) Cyclohexane	8.265	56	24999	5.871	ug/l	96
32) 1,1,1-Trichloroethane	8.165	97	21825	5.123	ug/l #	49
36) 1,1-Dichloropropene	8.377	75	16102	4.907	ug/l	99
37) Ethyl Acetate	7.559	43	17909	4.874	ug/l #	96
38) Carbon Tetrachloride	8.365	117	18728	5.067	ug/l	98
39) Methylcyclohexane	9.600	83	19981	4.957	ug/l	91
40) Benzene	8.606	78	48765	4.988	ug/l	98

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN080724\
Data File : VN083139.D
Acq On : 07 Aug 2024 12:10
Operator : JC\MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 08 06:18:41 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 05:50:26 2024
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	7.777	41	10086	4.828	ug/l		95
42) 1,2-Dichloroethane	8.671	62	18219	5.116	ug/l		97
43) Isopropyl Acetate	8.694	43	44817	5.438	ug/l	#	92
44) Trichloroethene	9.353	130	11830	5.084	ug/l		94
45) 1,2-Dichloropropane	9.624	63	11320	4.878	ug/l		90
46) Dibromomethane	9.712	93	8436	5.079	ug/l		98
47) Bromodichloromethane	9.888	83	18799	5.040	ug/l		98
48) Methyl methacrylate	9.682	41	14704	4.840	ug/l		94
49) 1,4-Dioxane	9.694	88	5239	95.593	ug/l	#	77
51) 4-Methyl-2-Pentanone	10.447	43	86679	24.946	ug/l		93
52) Toluene	10.629	92	30769	4.981	ug/l		99
53) t-1,3-Dichloropropene	10.835	75	18964	4.950	ug/l		100
54) cis-1,3-Dichloropropene	10.312	75	20431	5.014	ug/l		93
55) 1,1,2-Trichloroethane	11.018	97	10913	4.930	ug/l		98
56) Ethyl methacrylate	10.876	69	20661	4.951	ug/l		93
57) 1,3-Dichloropropane	11.165	76	18934	4.799	ug/l		94
58) 2-Chloroethyl Vinyl ether	10.159	63	43528	24.676	ug/l		96
59) 2-Hexanone	11.194	43	66854	24.870	ug/l		95
60) Dibromochloromethane	11.359	129	13307	4.972	ug/l		97
61) 1,2-Dibromoethane	11.471	107	11523	4.955	ug/l		96
64) Tetrachloroethene	11.106	164	9517	4.896	ug/l		96
65) Chlorobenzene	11.894	112	32114	4.951	ug/l		96
66) 1,1,1,2-Tetrachloroethane	11.959	131	11758	5.140	ug/l		94
67) Ethyl Benzene	11.965	91	59648	5.013	ug/l		97
68) m/p-Xylenes	12.070	106	44572	10.000	ug/l		96
69) o-Xylene	12.400	106	22003	5.005	ug/l		99
70) Styrene	12.412	104	37023	5.014	ug/l		98
71) Bromoform	12.582	173	8085	4.665	ug/l	#	89
73) Isopropylbenzene	12.694	105	56741	5.080	ug/l		100
74) N-amyl acetate	12.494	43	27393	5.014	ug/l		95
75) 1,1,2,2-Tetrachloroethane	12.935	83	16514	5.227	ug/l		97
76) 1,2,3-Trichloropropane	12.994	75	14463m	4.927	ug/l		
77) Bromobenzene	12.982	156	13024	5.249	ug/l		94
78) n-propylbenzene	13.035	91	64751	5.035	ug/l		99
79) 2-Chlorotoluene	13.123	91	41176	5.050	ug/l		99
80) 1,3,5-Trimethylbenzene	13.170	105	47581	5.088	ug/l		97
81) trans-1,4-Dichloro-2-b...	12.735	75	7079	5.254	ug/l		92
82) 4-Chlorotoluene	13.223	91	41137	5.030	ug/l		97
83) tert-Butylbenzene	13.435	119	42723	5.159	ug/l		100
84) 1,2,4-Trimethylbenzene	13.482	105	47965	5.090	ug/l		98
85) sec-Butylbenzene	13.617	105	56947	5.040	ug/l		98
86) p-Isopropyltoluene	13.729	119	47654	5.108	ug/l		98
87) 1,3-Dichlorobenzene	13.735	146	22814	4.887	ug/l		98
88) 1,4-Dichlorobenzene	13.812	146	23971	5.093	ug/l		94
89) n-Butylbenzene	14.053	91	40282	4.983	ug/l		99
90) Hexachloroethane	14.335	117	9298	5.158	ug/l		93
91) 1,2-Dichlorobenzene	14.106	146	23116	5.117	ug/l		96
92) 1,2-Dibromo-3-Chloropr...	14.717	75	4097	5.345	ug/l		94
93) 1,2,4-Trichlorobenzene	15.394	180	11922	4.710	ug/l		94
94) Hexachlorobutadiene	15.500	225	5946	5.282	ug/l		93
95) Naphthalene	15.641	128	43131	4.811	ug/l		99
96) 1,2,3-Trichlorobenzene	15.841	180	12285	4.905	ug/l		94

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN080724\
Data File : VN083139.D
Acq On : 07 Aug 2024 12:10
Operator : JC\MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

Quant Time: Aug 08 06:18:41 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 05:50:26 2024
Response via : Initial Calibration

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

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

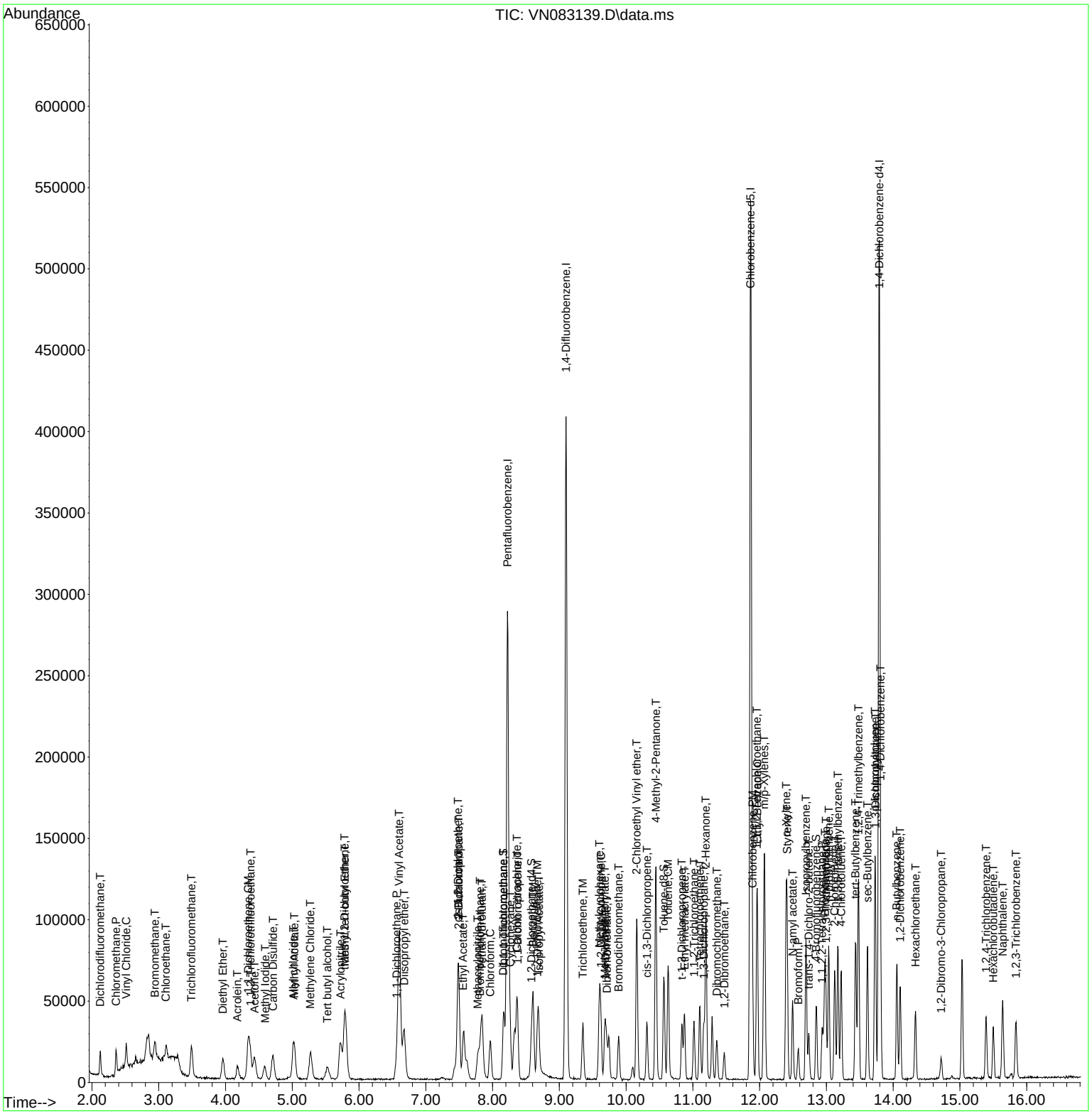
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN080724\
Data File : VN083139.D
Acq On : 07 Aug 2024 12:10
Operator : JC\MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 7 Sample Multiplier: 1

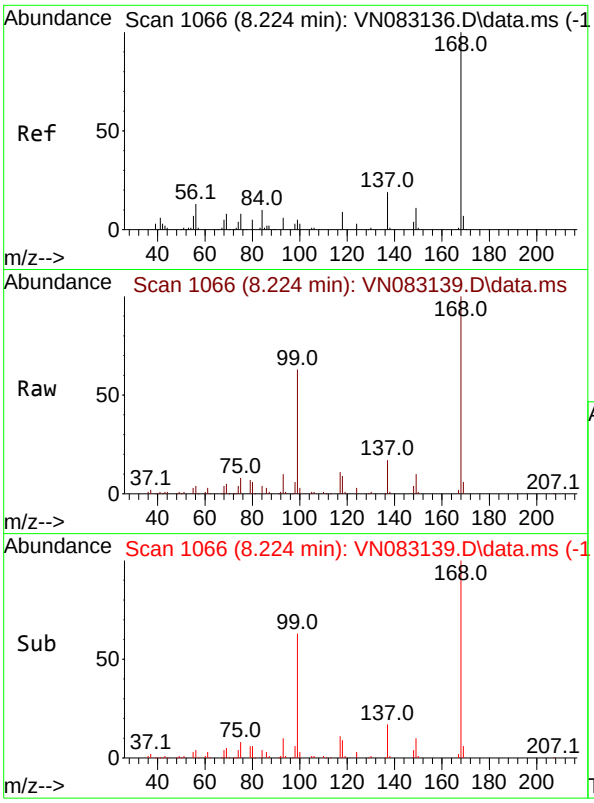
Quant Time: Aug 08 06:18:41 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 05:50:26 2024
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

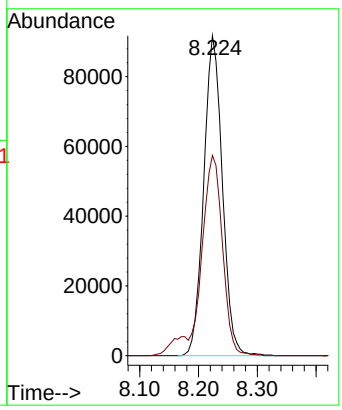




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion:168 Resp: 20185

Ion	Ratio	Lower	Upper
168	100		
99	62.6	48.2	72.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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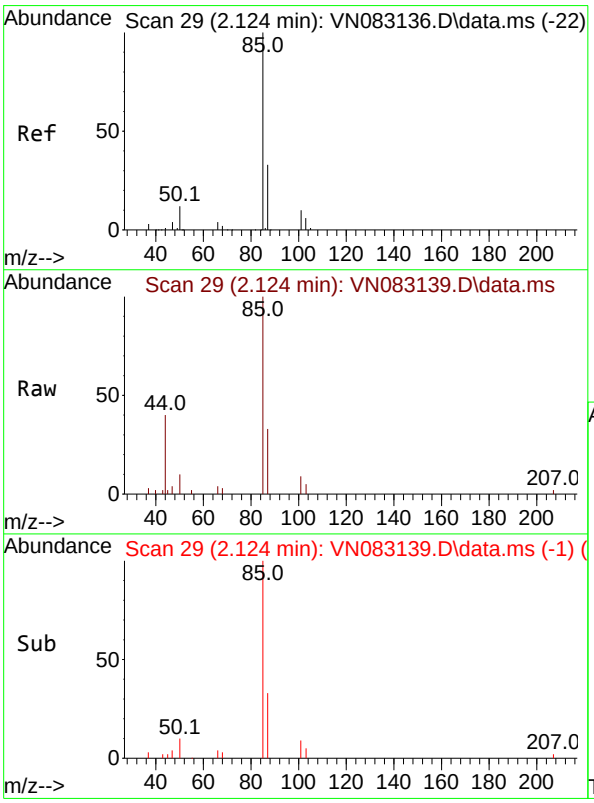
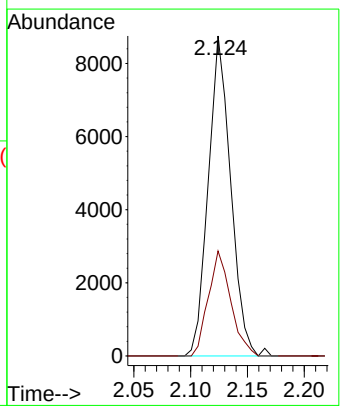
Supervised By :Mahesh Dadoda 08/09/2024

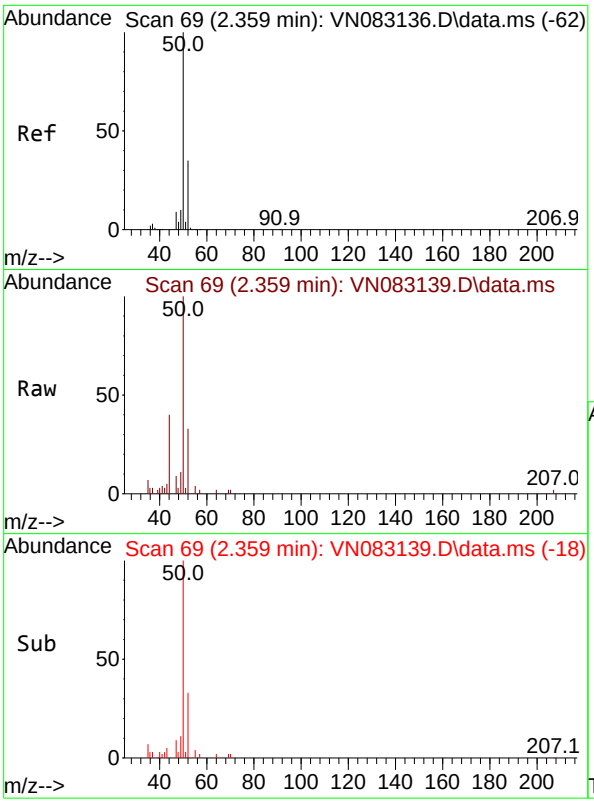


#2
Dichlorodifluoromethane
Concen: 5.262 ug/l
RT: 2.124 min Scan# 29
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 85 Resp: 12045

Ion	Ratio	Lower	Upper
85	100		
87	32.8	15.7	47.0

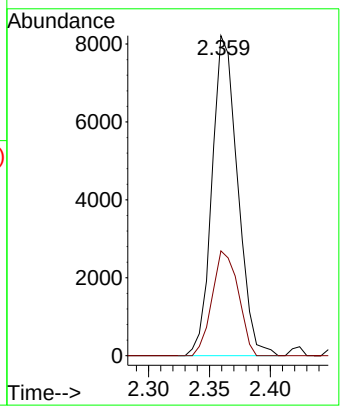




#3
Chloromethane
Concen: 5.128 ug/l
RT: 2.359 min Scan# 6
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 50 Resp: 1201

Ion	Ratio	Lower	Upper
50	100		
52	32.7	25.0	37.4



Instrument :
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ClientSampleId :
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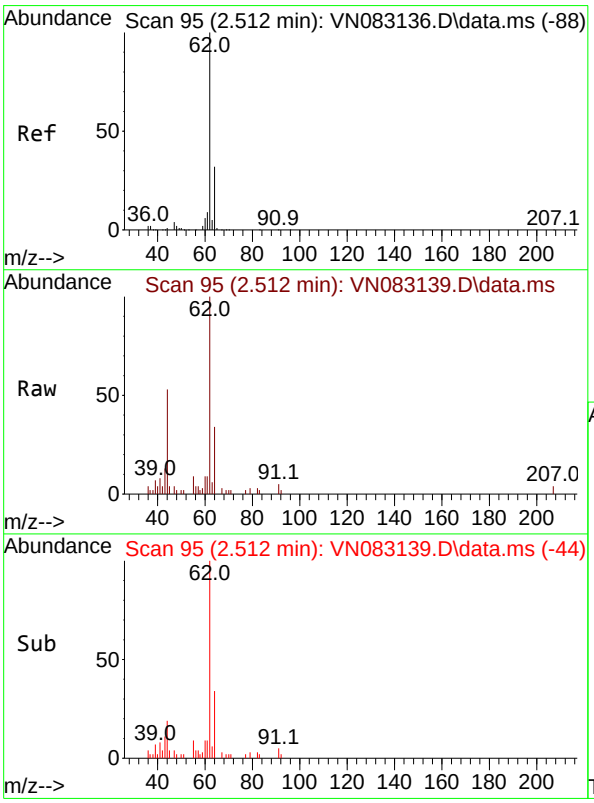
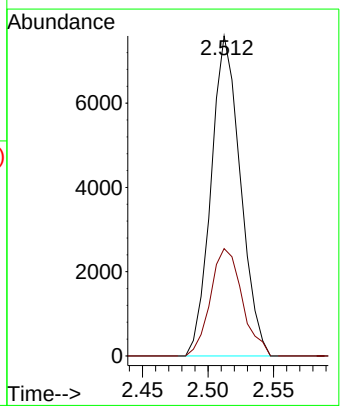
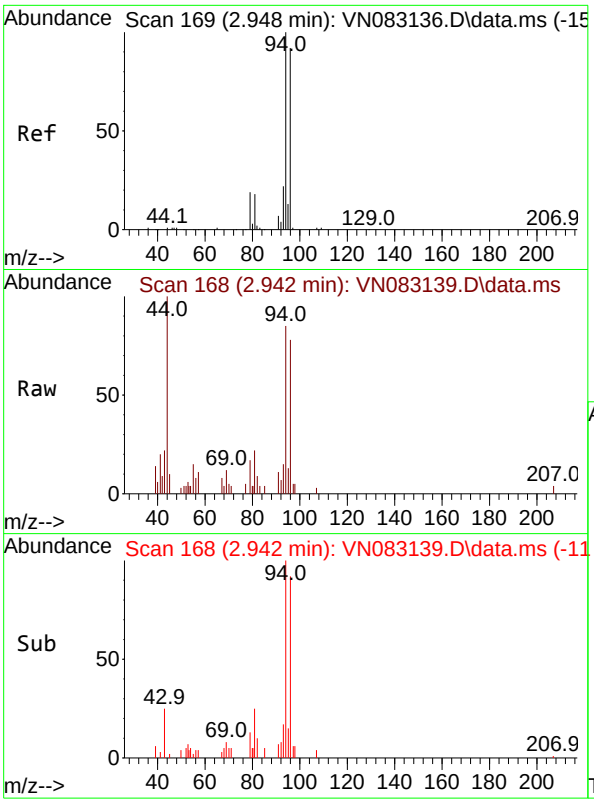


#4
Vinyl Chloride
Concen: 4.950 ug/l
RT: 2.512 min Scan# 95
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 62 Resp: 11837

Ion	Ratio	Lower	Upper
62	100		
64	33.6	25.0	37.6

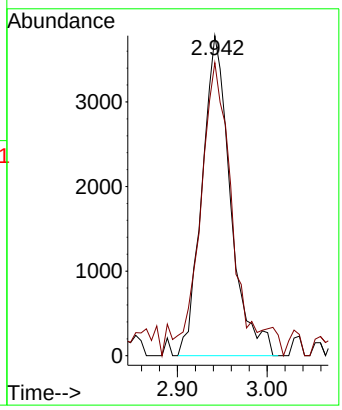




#5
Bromomethane
Concen: 5.612 ug/l
RT: 2.942 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 94 Resp: 832

Ion	Ratio	Lower	Upper
94	100		
96	85.3	78.0	117.0



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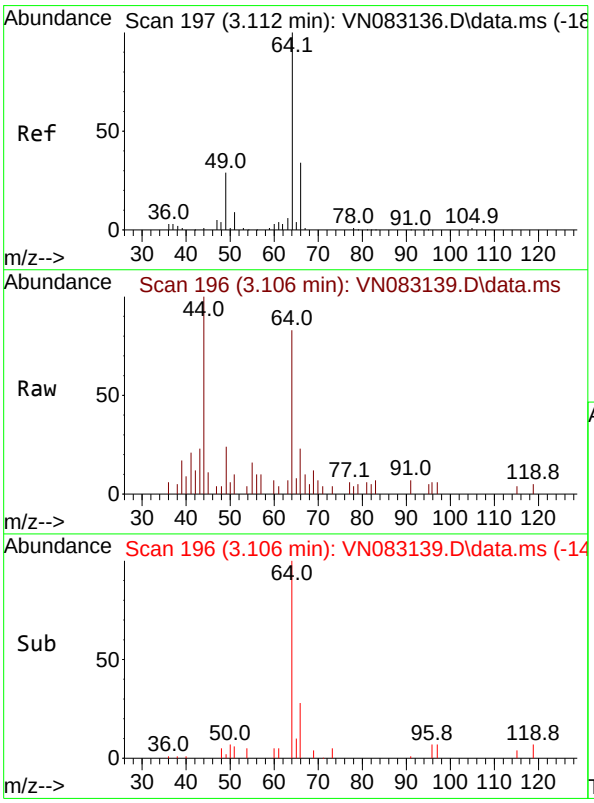
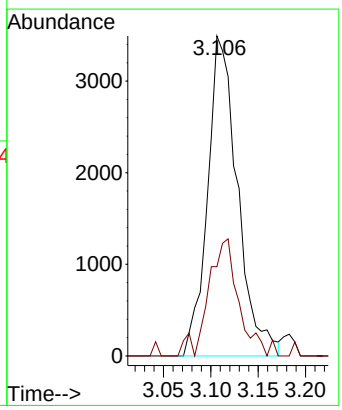
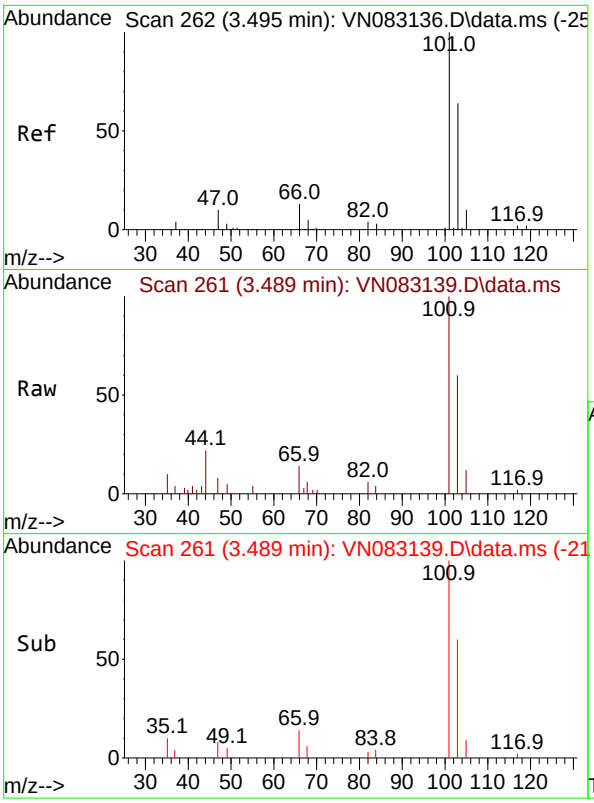


#6
Chloroethane
Concen: 5.139 ug/l
RT: 3.106 min Scan# 196
Delta R.T. -0.006 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 64 Resp: 7688

Ion	Ratio	Lower	Upper
64	100		
66	27.9	26.6	40.0





#7
Trichlorofluoromethane
Concen: 5.124 ug/l
RT: 3.489 min Scan# 2
Delta R.T. -0.006 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion:101 Resp: 2024

Ion	Ratio	Lower	Upper
101	100		
103	60.3	52.7	79.1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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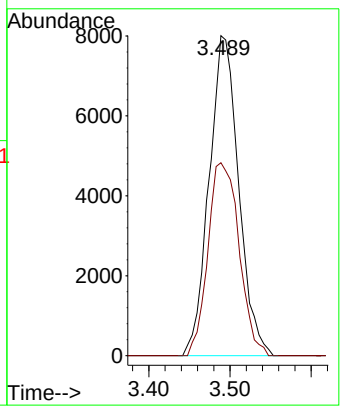
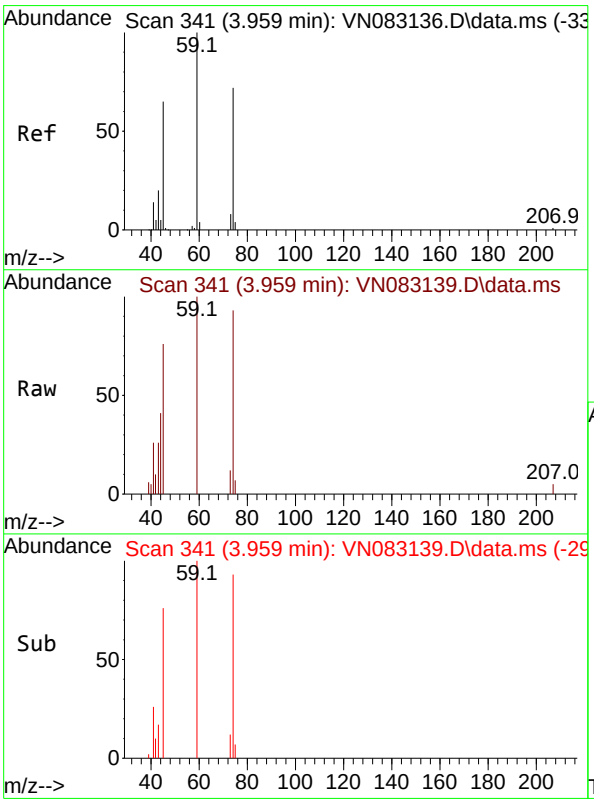
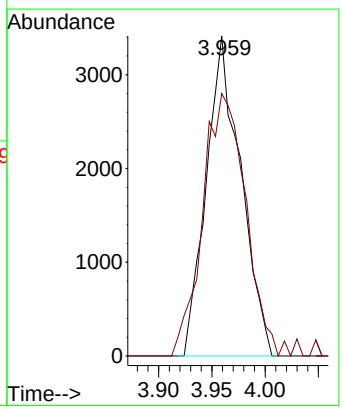


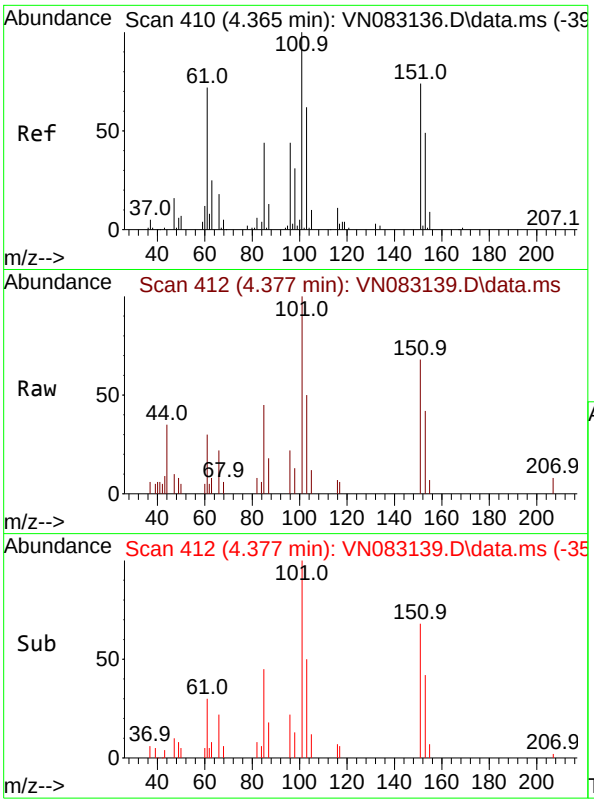


#8
Diethyl Ether
Concen: 5.220 ug/l
RT: 3.959 min Scan# 341
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 74 Resp: 7674

Ion	Ratio	Lower	Upper
74	100		
45	101.8	55.5	166.3





#9
1,1,2-Trichlorotrifluoroethane
Concen: 5.170 ug/l
RT: 4.377 min Scan# 41
Delta R.T. 0.012 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion:101 Resp: 1126

Ion	Ratio	Lower	Upper
101	100		
85	47.2	38.3	57.5
151	74.4	59.3	88.9

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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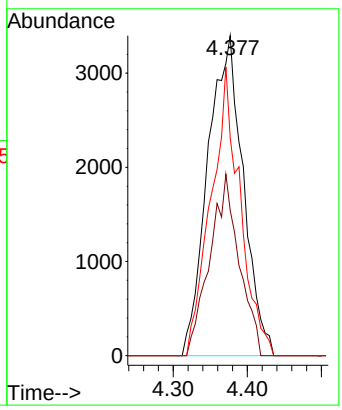
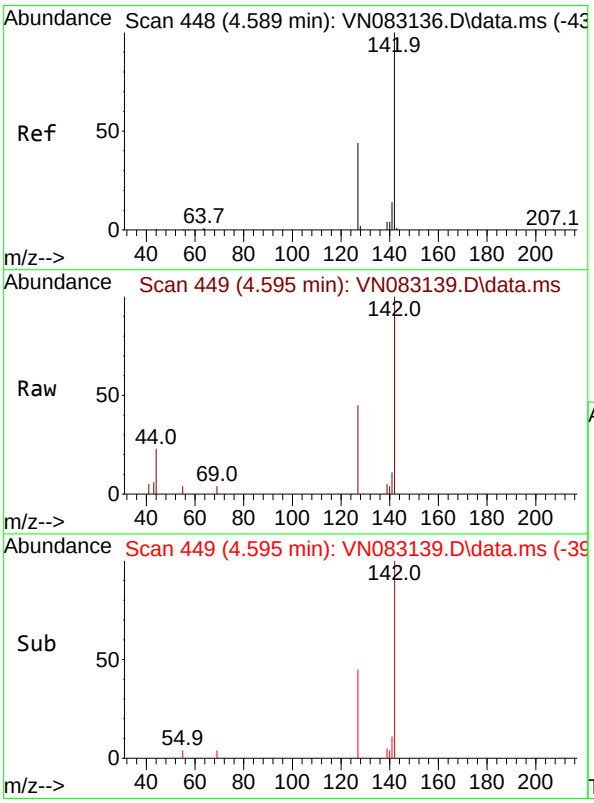
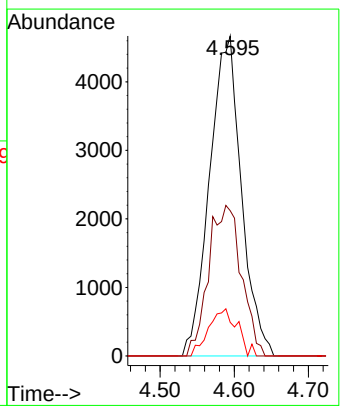


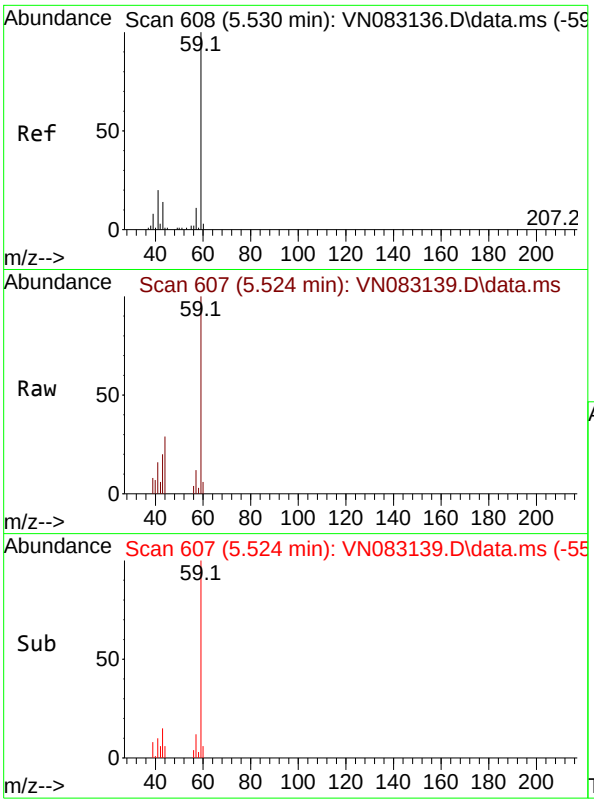


#10
Methyl Iodide
Concen: 4.844 ug/l
RT: 4.595 min Scan# 449
Delta R.T. 0.006 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion:142 Resp: 13878

Ion	Ratio	Lower	Upper
142	100		
127	45.4	37.5	56.3
141	10.5	13.1	19.7#

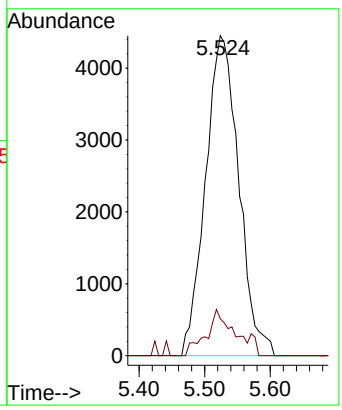




#11
Tert butyl alcohol
Concen: 26.268 ug/l
RT: 5.524 min Scan# 6
Delta R.T. -0.006 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 59 Resp: 1568

Ion	Ratio	Lower	Upper
59	100		
57	11.4	8.9	13.3



Instrument :
MSVOA_N
ClientSampleId :
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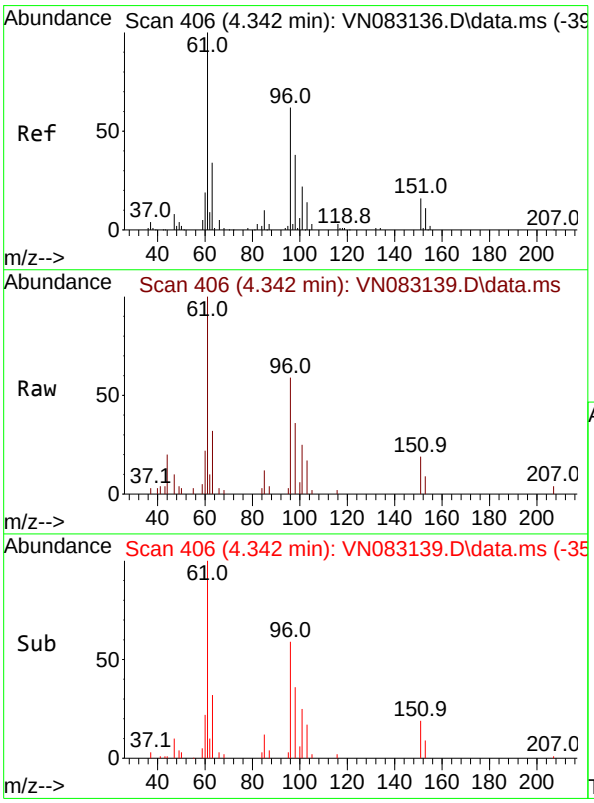
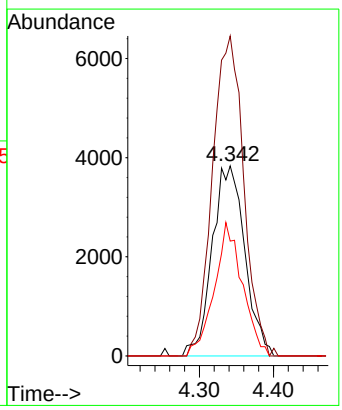
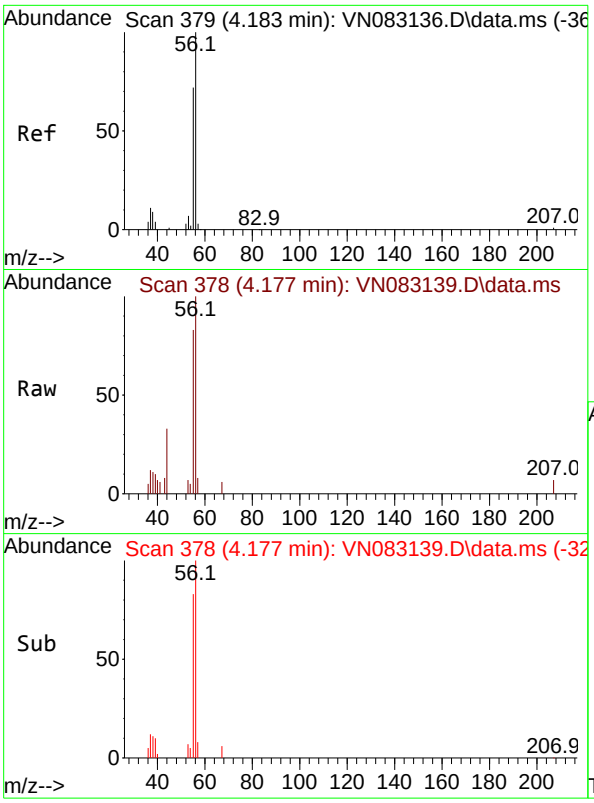


#12
1,1-Dichloroethene
Concen: 5.237 ug/l
RT: 4.342 min Scan# 406
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 96 Resp: 11718

Ion	Ratio	Lower	Upper
96	100		
61	168.3	149.7	224.5
98	60.4	50.1	75.1

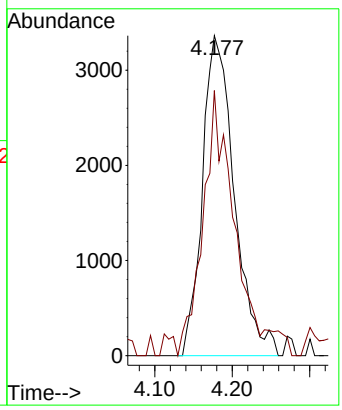




#13
Acrolein
Concen: 24.707 ug/l
RT: 4.177 min Scan# 3
Delta R.T. -0.006 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 56 Resp: 961

Ion	Ratio	Lower	Upper
56	100		
55	80.0	56.4	84.6



Instrument :
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ClientSampleId :
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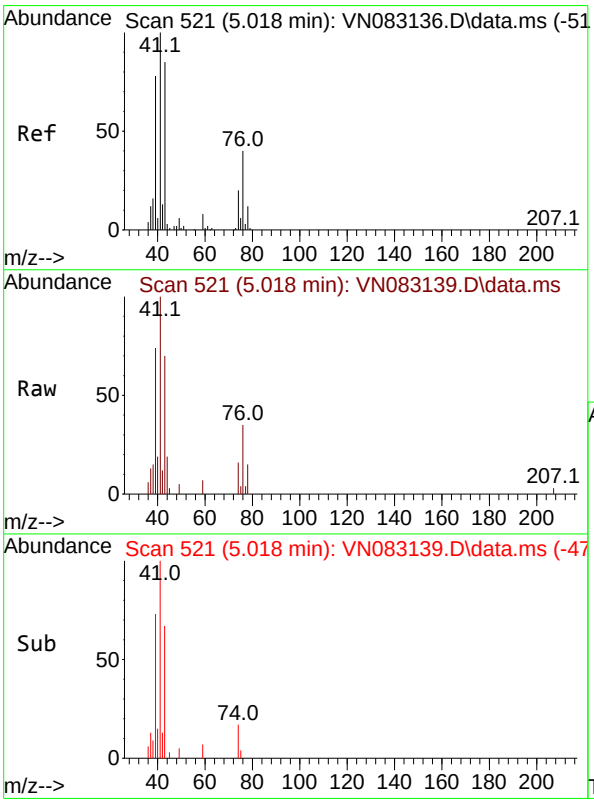
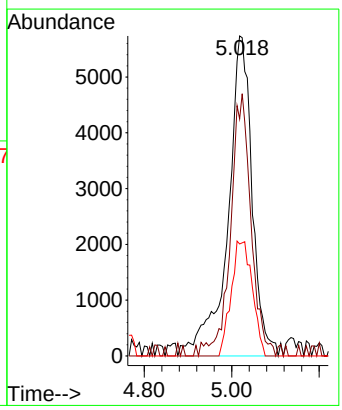
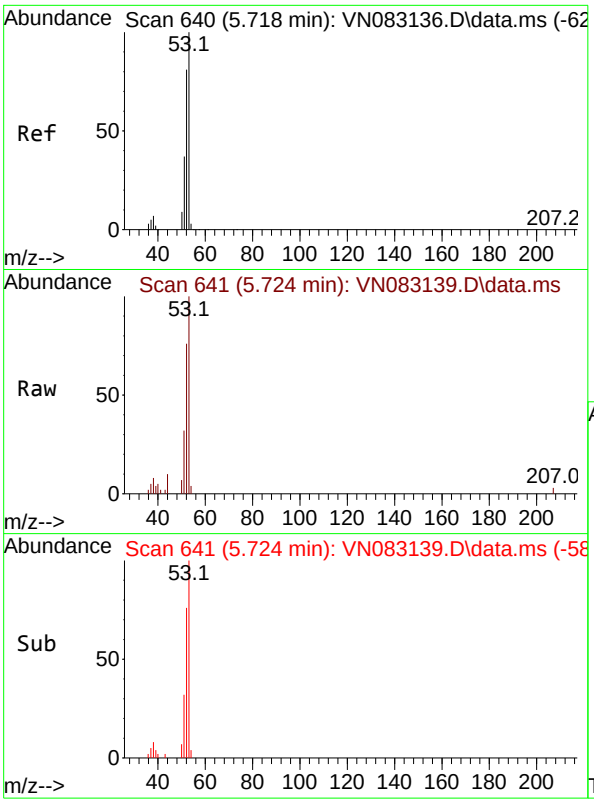


#14
Allyl chloride
Concen: 5.246 ug/l
RT: 5.018 min Scan# 521
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 41 Resp: 22183

Ion	Ratio	Lower	Upper
41	100		
39	69.3	67.8	101.6
76	31.2	25.8	38.8

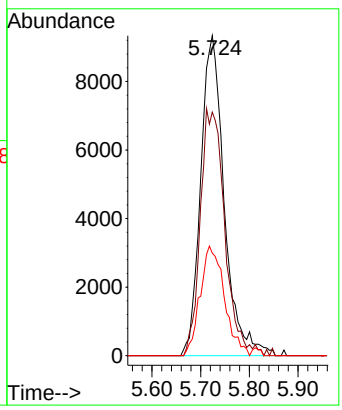




#15
Acrylonitrile
Concen: 25.534 ug/l
RT: 5.724 min Scan# 64
Delta R.T. 0.006 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 53 Resp: 3135

Ion	Ratio	Lower	Upper
53	100		
52	79.9	66.6	100.0
51	35.3	30.1	45.1



Instrument :
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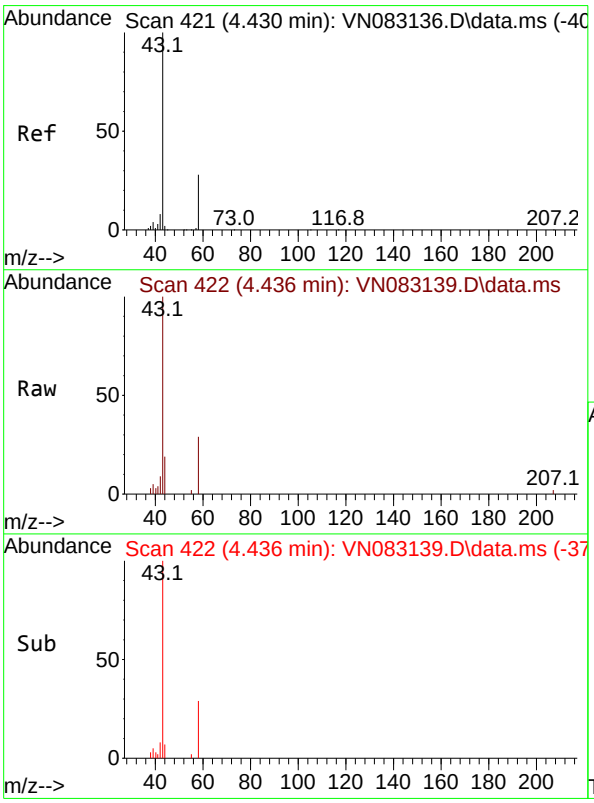
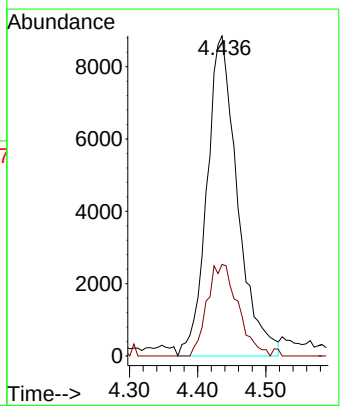
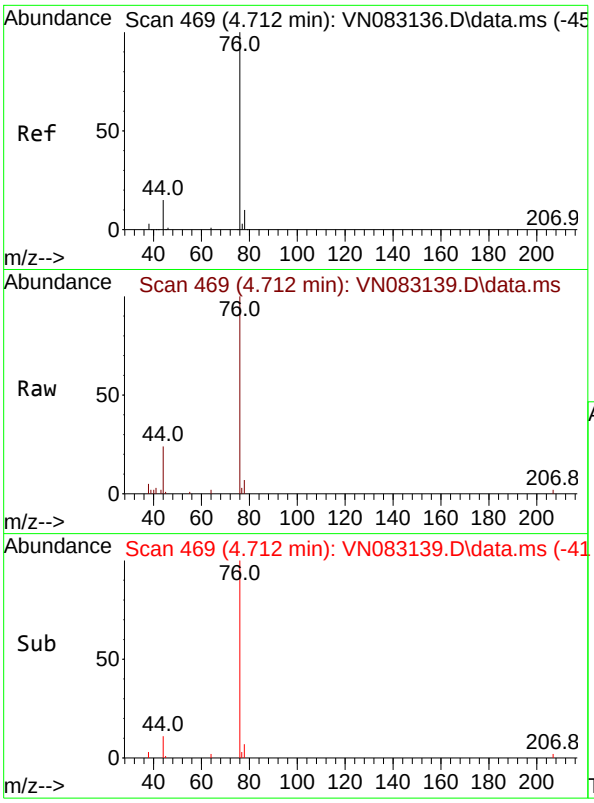


#16
Acetone
Concen: 24.581 ug/l
RT: 4.436 min Scan# 422
Delta R.T. 0.006 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 43 Resp: 27636

Ion	Ratio	Lower	Upper
43	100		
58	28.6	21.8	32.6

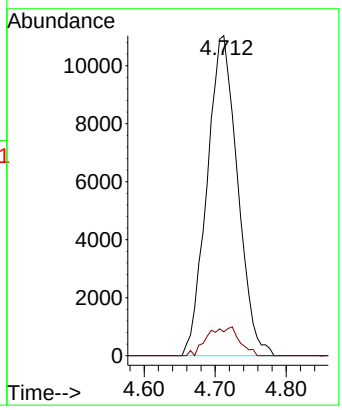




#17
Carbon Disulfide
Concen: 5.026 ug/l
RT: 4.712 min Scan# 4
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 76 Resp: 3290

Ion	Ratio	Lower	Upper
76	100		
78	7.4	7.2	10.8



Instrument :
MSVOA_N
ClientSampleId :
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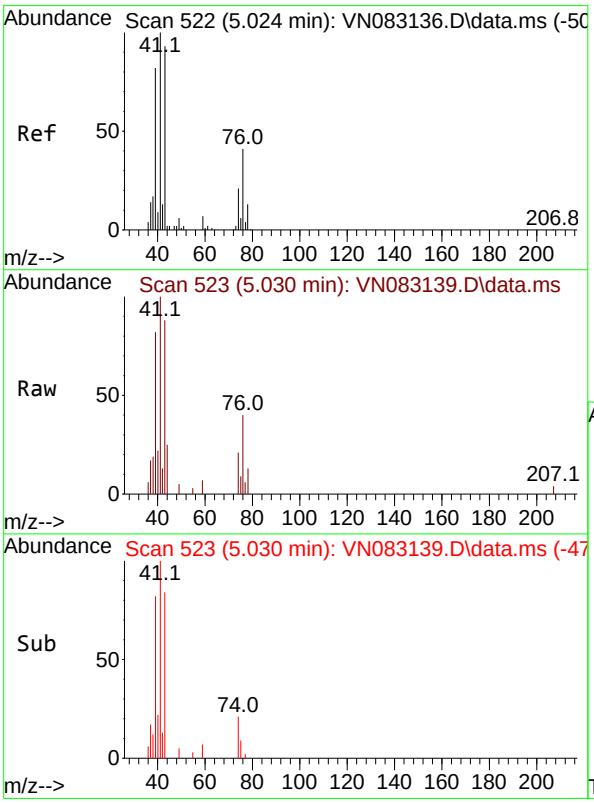
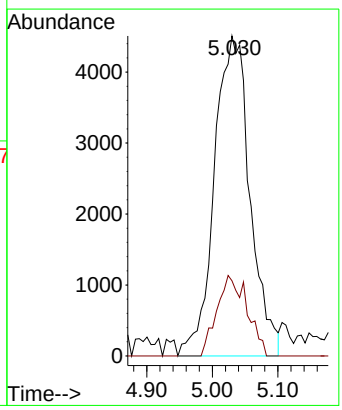
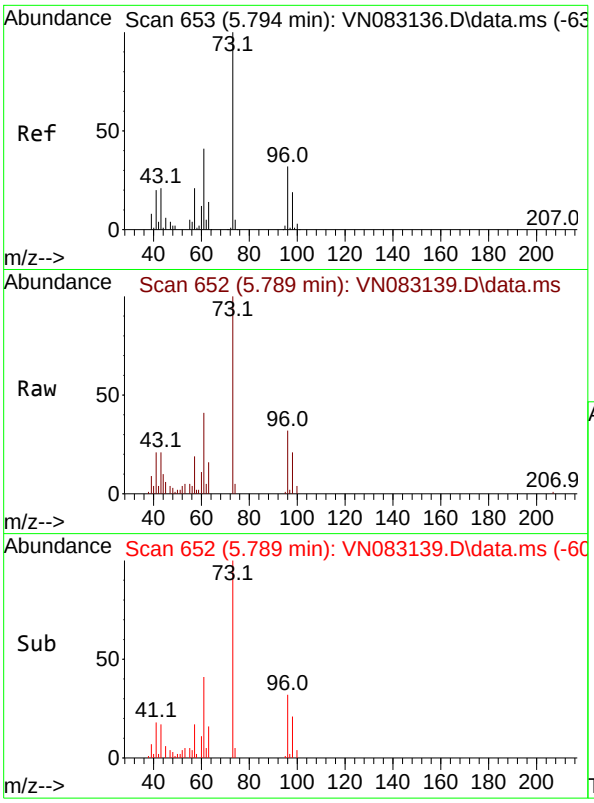


#18
Methyl Acetate
Concen: 5.084 ug/l
RT: 5.030 min Scan# 523
Delta R.T. 0.006 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 43 Resp: 17029

Ion	Ratio	Lower	Upper
43	100		
74	21.4	16.3	24.5

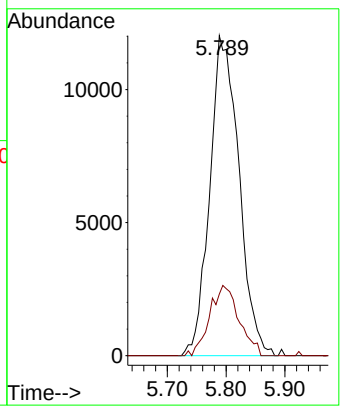




#19
Methyl tert-butyl Ether
Concen: 5.131 ug/l
RT: 5.789 min Scan# 6
Delta R.T. -0.006 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 73 Resp: 4143

Ion	Ratio	Lower	Upper
73	100		
57	19.2	17.9	26.9



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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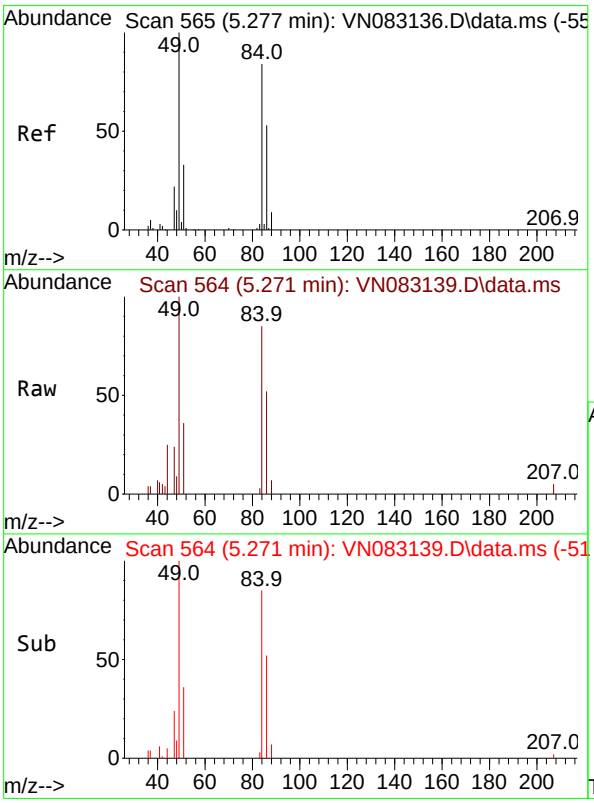
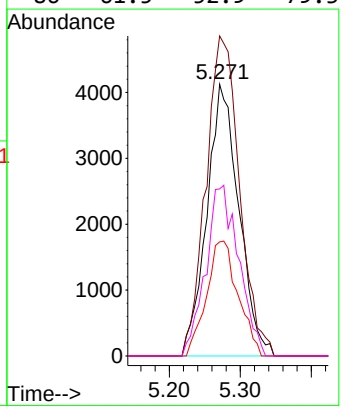
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

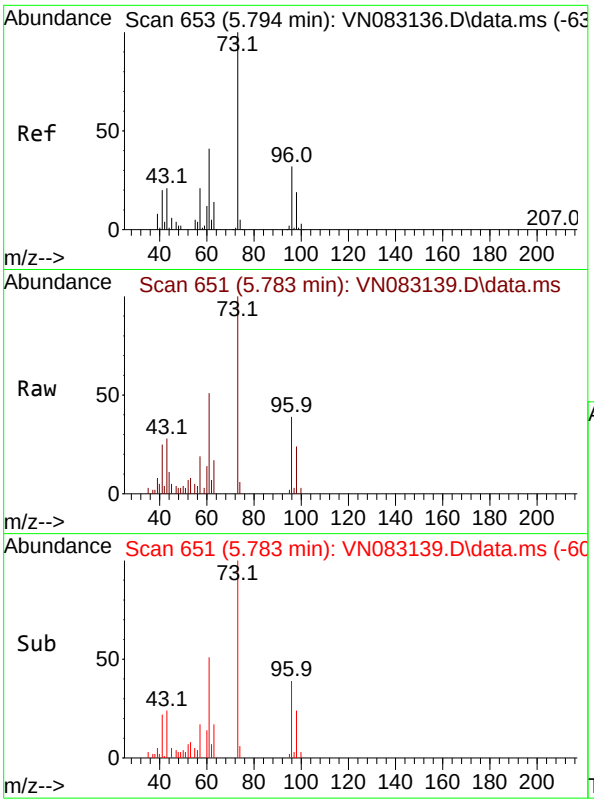


#20
Methylene Chloride
Concen: 4.991 ug/l
RT: 5.271 min Scan# 564
Delta R.T. -0.006 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 84 Resp: 12913

Ion	Ratio	Lower	Upper
84	100		
49	117.8	119.6	179.4#
51	42.0	34.8	52.2
86	61.5	52.9	79.3

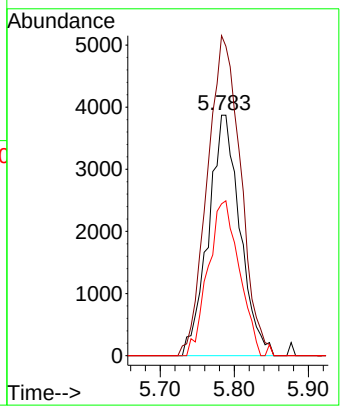




#21
trans-1,2-Dichloroethene
Concen: 4.957 ug/l
RT: 5.783 min Scan# 6
Delta R.T. -0.012 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 96 Resp: 1146

Ion	Ratio	Lower	Upper
96	100		
61	133.0	123.4	185.2
98	63.1	49.3	73.9



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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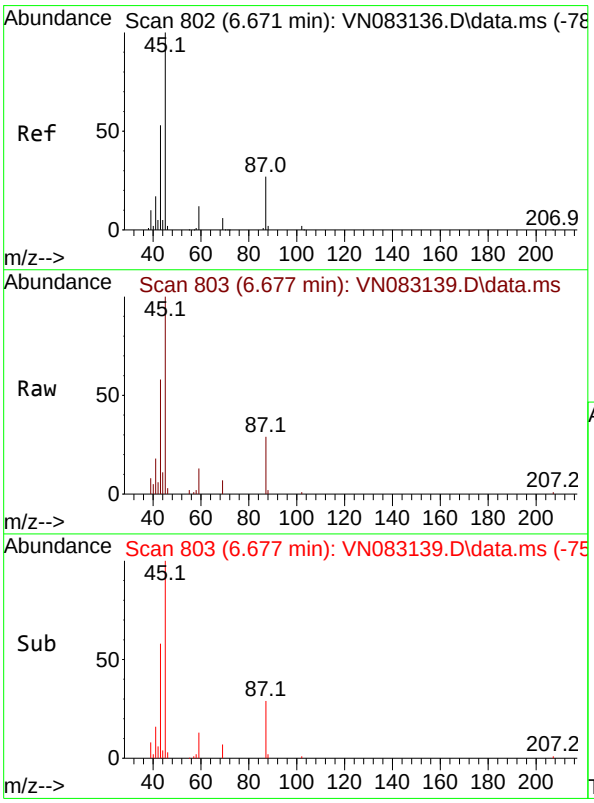
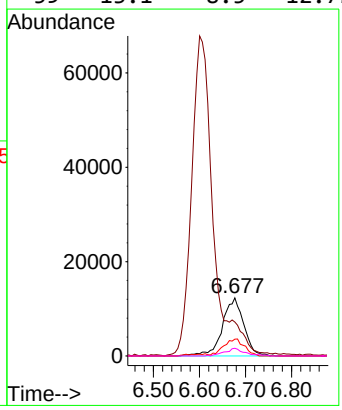
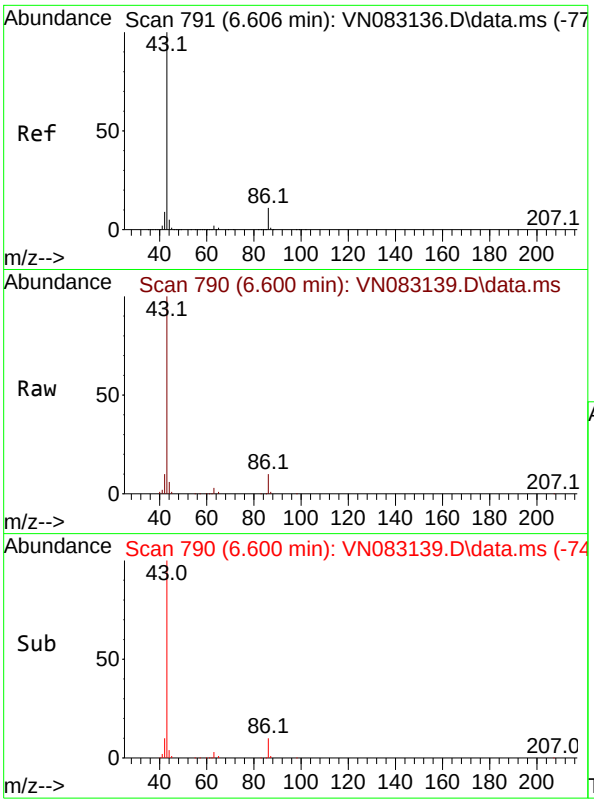


#22
Diisopropyl ether
Concen: 4.993 ug/l
RT: 6.677 min Scan# 803
Delta R.T. 0.006 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 45 Resp: 39688

Ion	Ratio	Lower	Upper
45	100		
43	54.9	44.0	66.0
87	29.0	19.7	29.5
59	13.1	8.5	12.7#

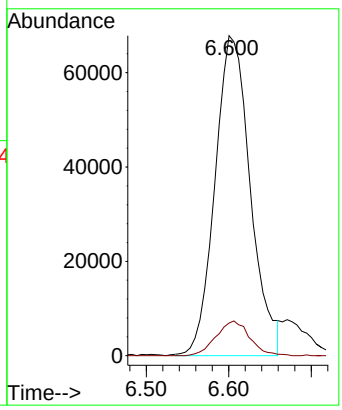




#23
Vinyl Acetate
Concen: 24.856 ug/l m
RT: 6.600 min Scan# 7
Delta R.T. -0.006 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 43 Resp: 20247

Ion	Ratio	Lower	Upper
43	100		
86	10.2	7.3	10.9



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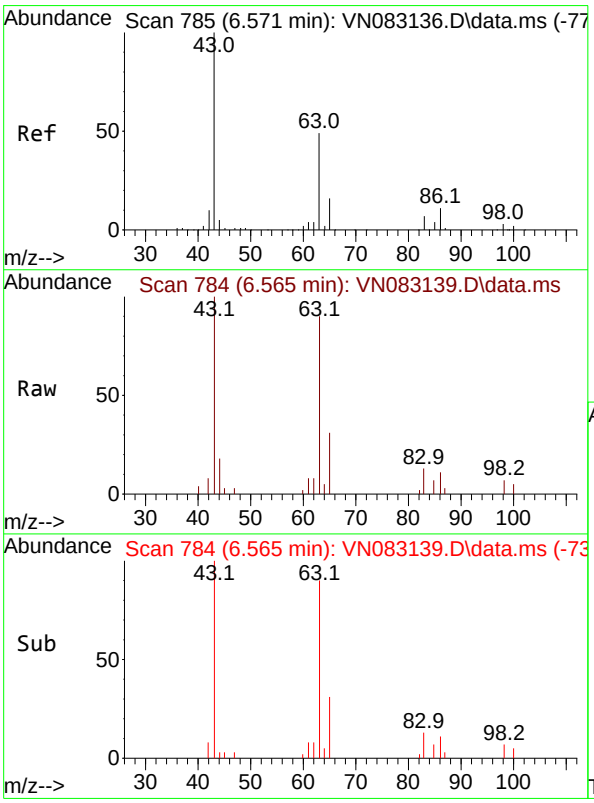
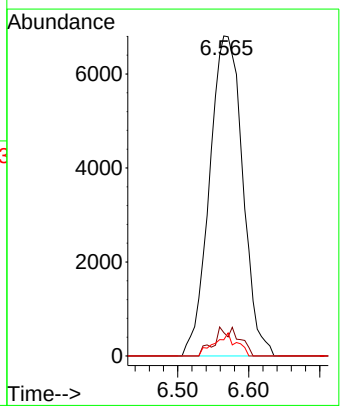
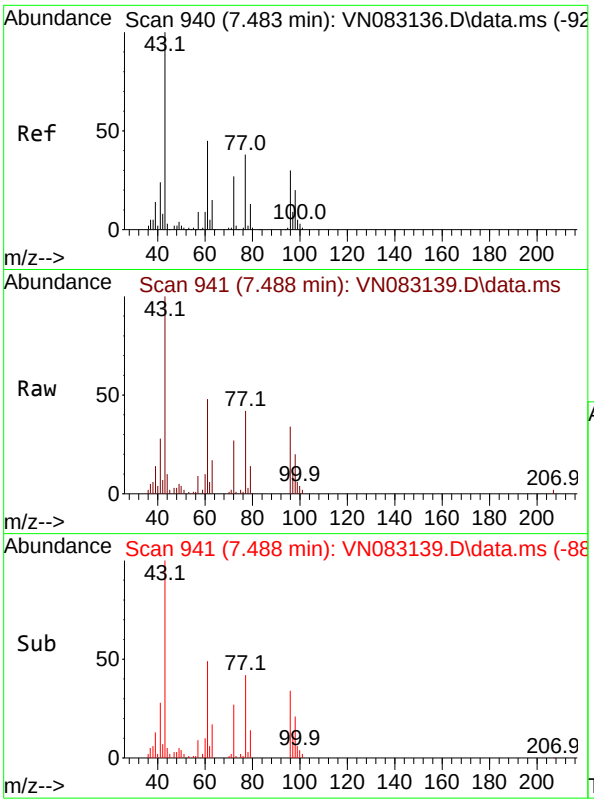


#24
1,1-Dichloroethane
Concen: 5.091 ug/l
RT: 6.565 min Scan# 784
Delta R.T. -0.006 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 63 Resp: 22058

Ion	Ratio	Lower	Upper
63	100		
98	7.3	3.3	9.9
100	5.0	2.0	6.0





#25
2-Butanone
Concen: 24.185 ug/l
RT: 7.488 min Scan# 94
Delta R.T. 0.006 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 43 Resp: 4175(

Ion	Ratio	Lower	Upper
43	100		
72	27.1	18.2	27.2

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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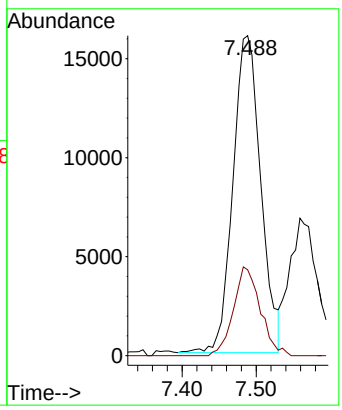
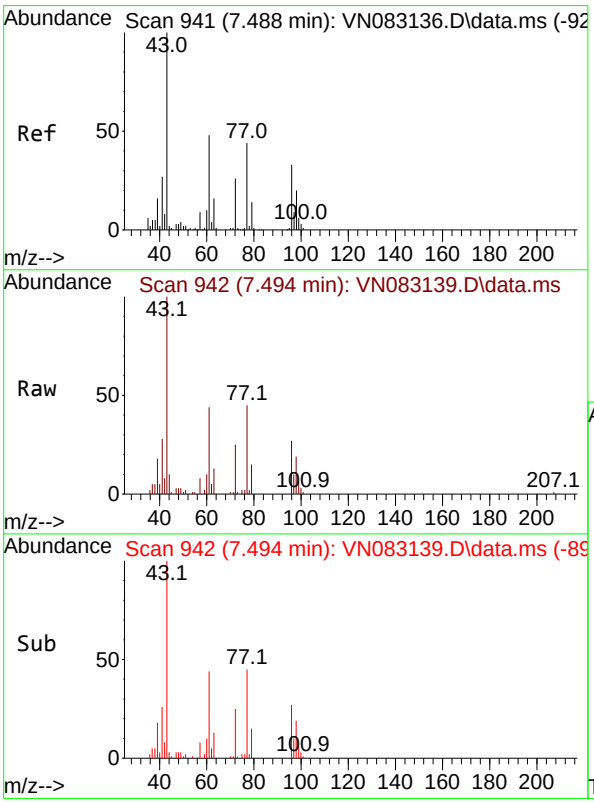
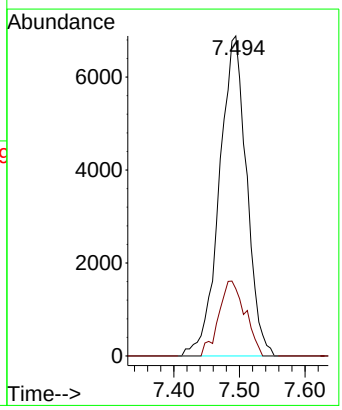


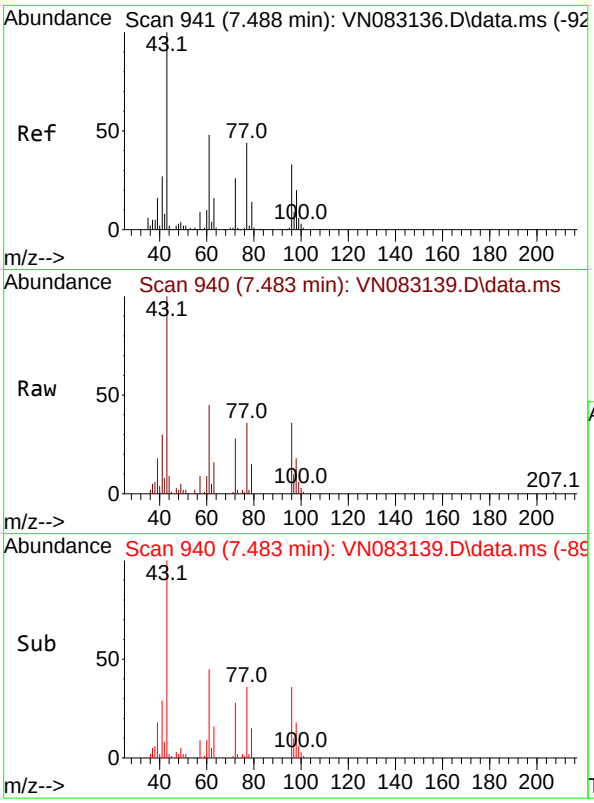


#26
2,2-Dichloropropane
Concen: 4.937 ug/l
RT: 7.494 min Scan# 942
Delta R.T. 0.006 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 77 Resp: 19864

Ion	Ratio	Lower	Upper
77	100		
97	22.7	10.3	30.9

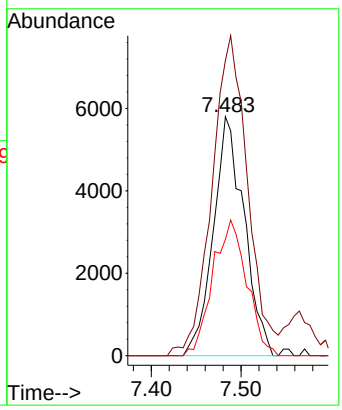




#27
cis-1,2-Dichloroethene
Concen: 4.967 ug/l
RT: 7.483 min Scan# 94
Delta R.T. -0.006 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 96 Resp: 1386

Ion	Ratio	Lower	Upper
96	100		
61	154.7	0.0	329.6
98	62.6	0.0	128.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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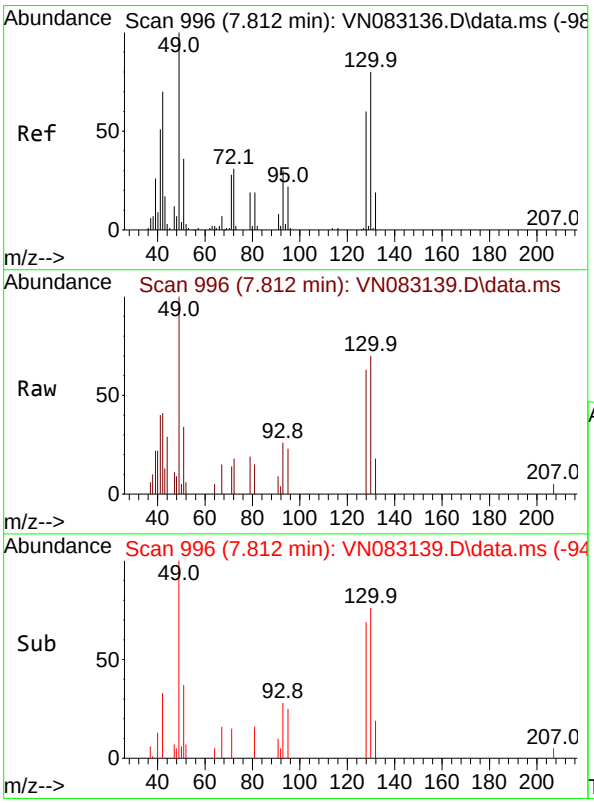
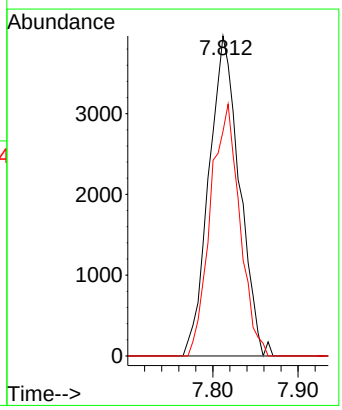
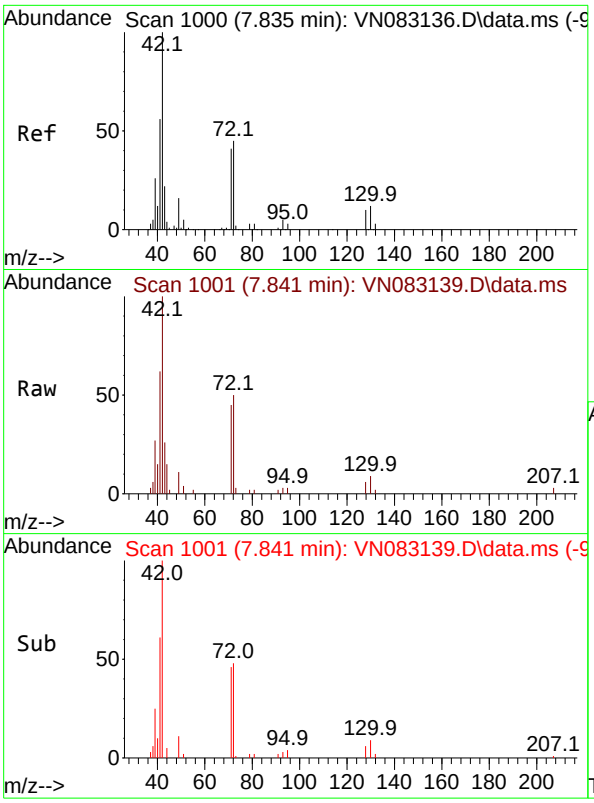


#28
Bromochloromethane
Concen: 5.577 ug/l
RT: 7.812 min Scan# 996
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 49 Resp: 9874

Ion	Ratio	Lower	Upper
49	100		
129	0.0	0.0	3.8
130	75.2	50.5	75.7

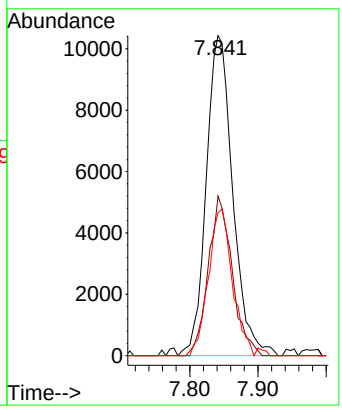




#29
Tetrahydrofuran
Concen: 25.324 ug/l
RT: 7.841 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 42 Resp: 2826

Ion	Ratio	Lower	Upper
42	100		
72	44.9	30.0	45.0
71	41.3	28.3	42.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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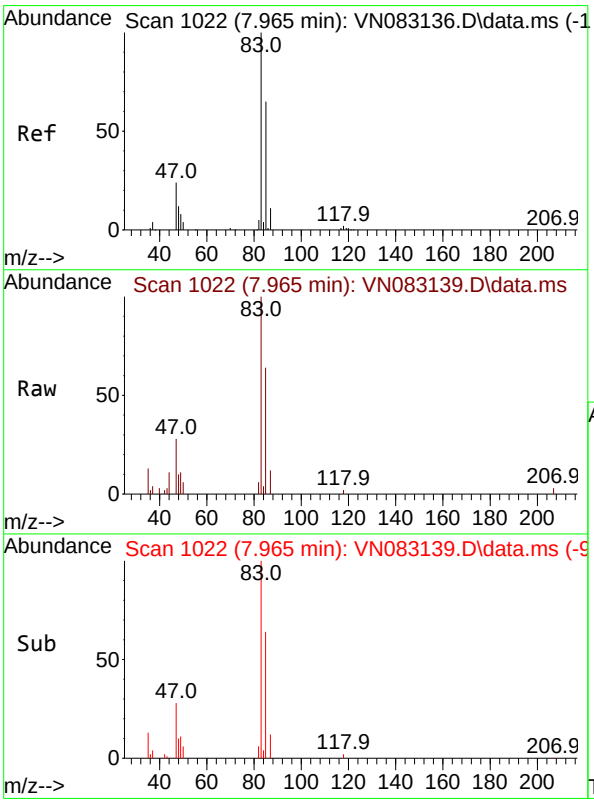
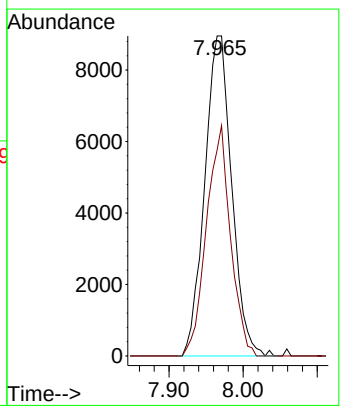
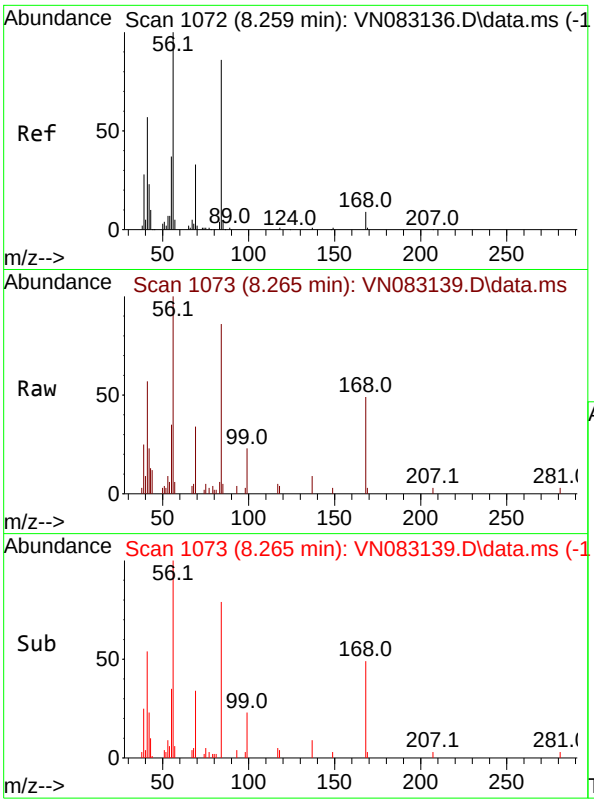


#30
Chloroform
Concen: 5.032 ug/l
RT: 7.965 min Scan# 1022
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 83 Resp: 22650

Ion	Ratio	Lower	Upper
83	100		
85	64.3	50.9	76.3

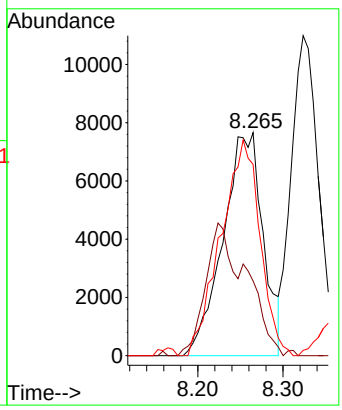




#31
Cyclohexane
Concen: 5.871 ug/l
RT: 8.265 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 56 Resp: 2499

Ion	Ratio	Lower	Upper
56	100		
69	33.5	24.5	36.7
84	85.8	66.0	99.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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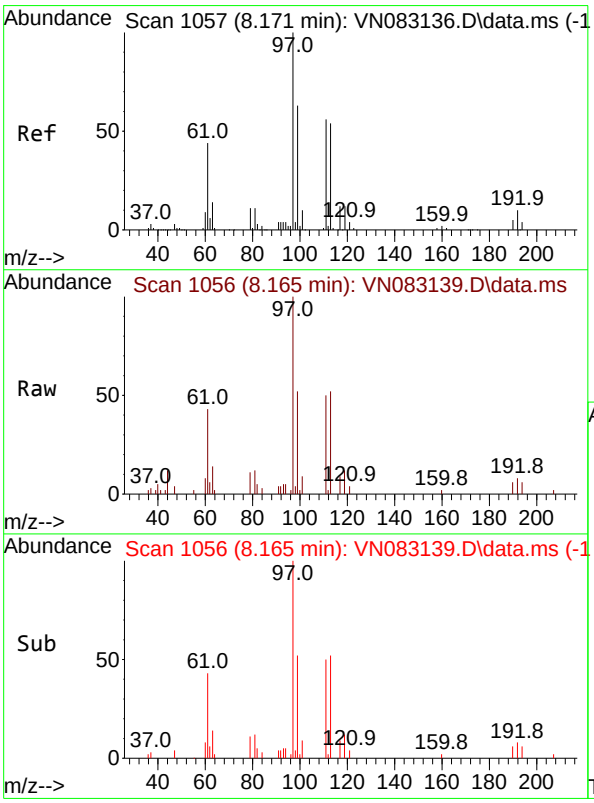
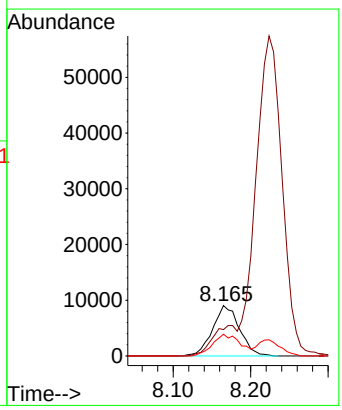
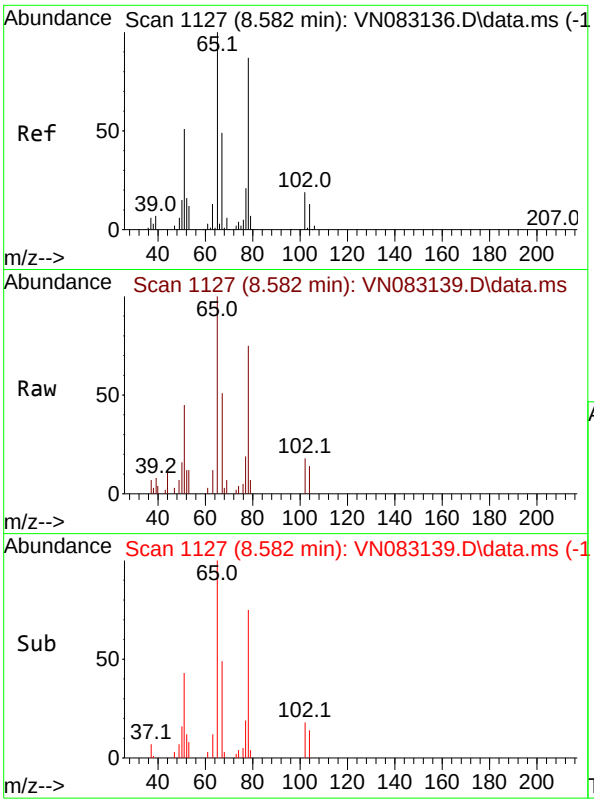


#32
1,1,1-Trichloroethane
Concen: 5.123 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. -0.006 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 97 Resp: 21825

Ion	Ratio	Lower	Upper
97	100		
99	0.0	52.0	78.0#
61	44.1	42.1	63.1





#33
1,2-Dichloroethane-d4
Concen: 5.522 ug/l
RT: 8.582 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 65 Resp: 1586

Ion	Ratio	Lower	Upper
65	100		
67	51.8	0.0	104.4

Instrument :
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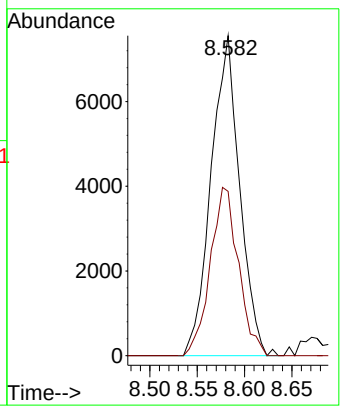
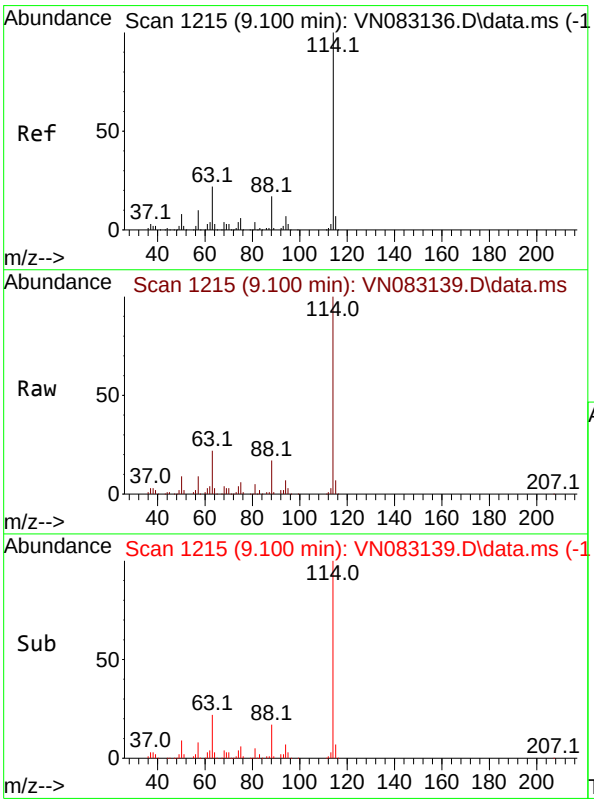
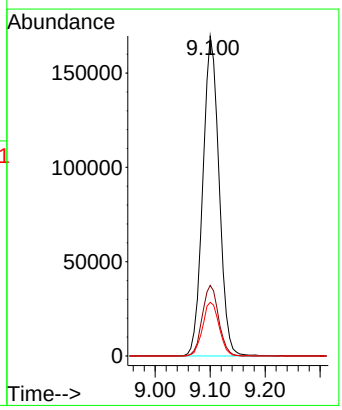


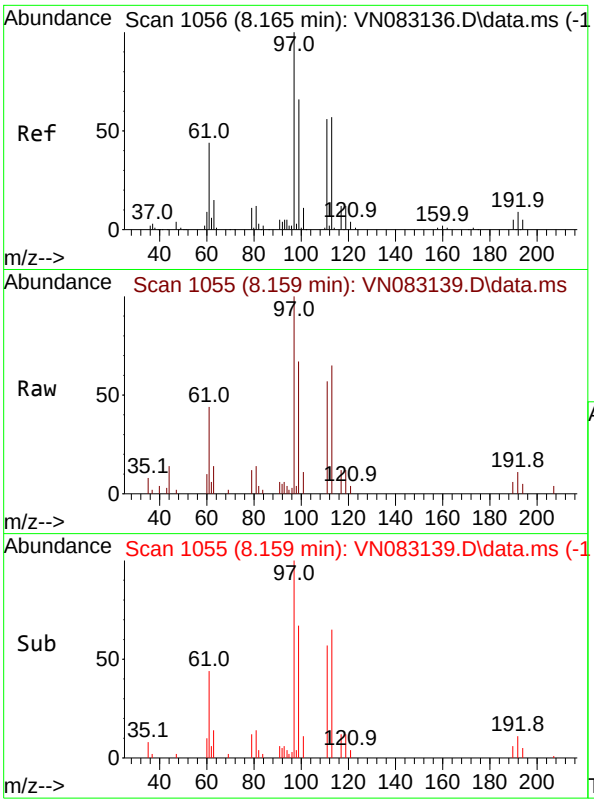


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1215
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion:114 Resp: 347562

Ion	Ratio	Lower	Upper
114	100		
63	22.1	0.0	44.6
88	16.8	0.0	31.4

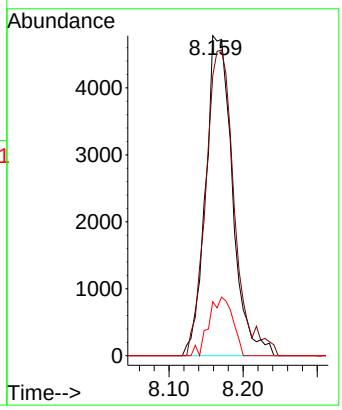




#35
Dibromofluoromethane
Concen: 5.549 ug/l
RT: 8.159 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion:113 Resp: 1203

Ion	Ratio	Lower	Upper
113	100		
111	101.4	82.4	123.6
192	16.2	14.9	22.3



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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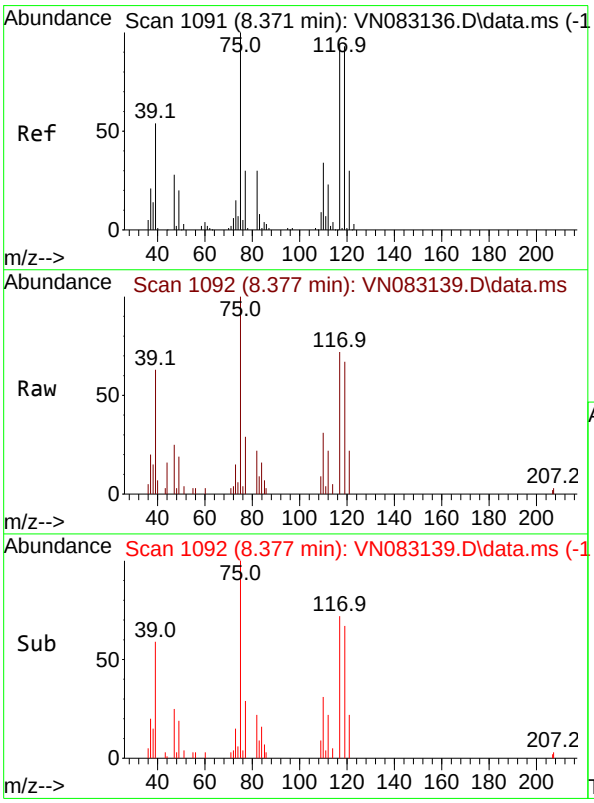
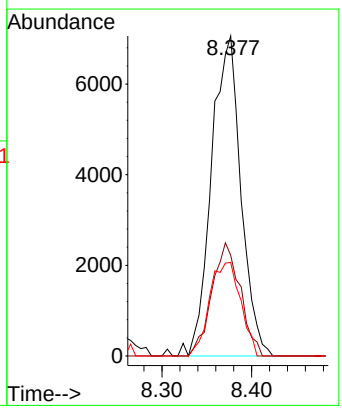
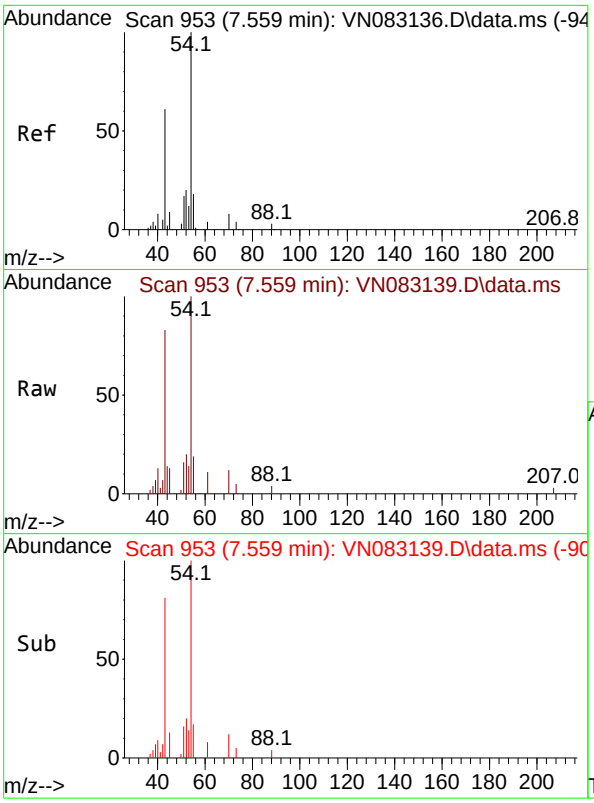


#36
1,1-Dichloropropene
Concen: 4.907 ug/l
RT: 8.377 min Scan# 1092
Delta R.T. 0.006 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 75 Resp: 16102

Ion	Ratio	Lower	Upper
75	100		
110	34.1	16.3	48.9
77	30.8	24.6	37.0





#37
Ethyl Acetate
Concen: 4.874 ug/l
RT: 7.559 min Scan# 9
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 43 Resp: 1790

Ion	Ratio	Lower	Upper
43	100		
61	12.1	9.3	13.9
70	11.6	7.0	10.6

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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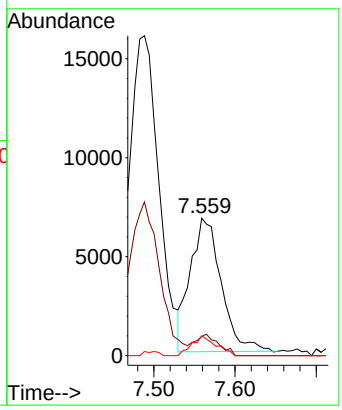
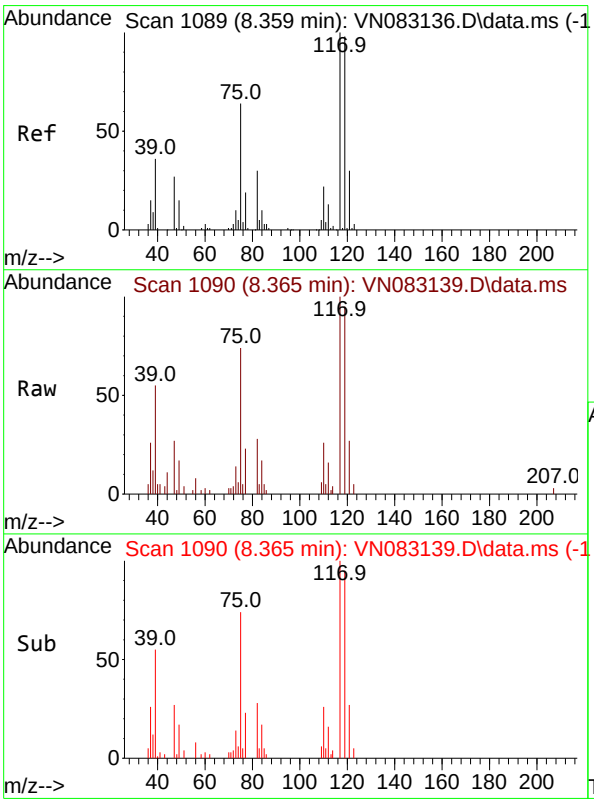
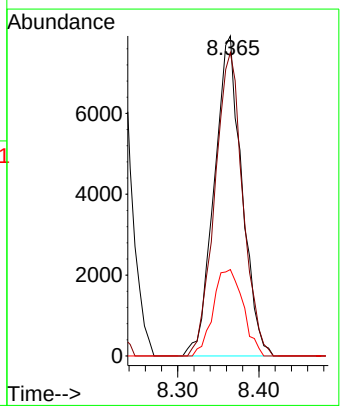


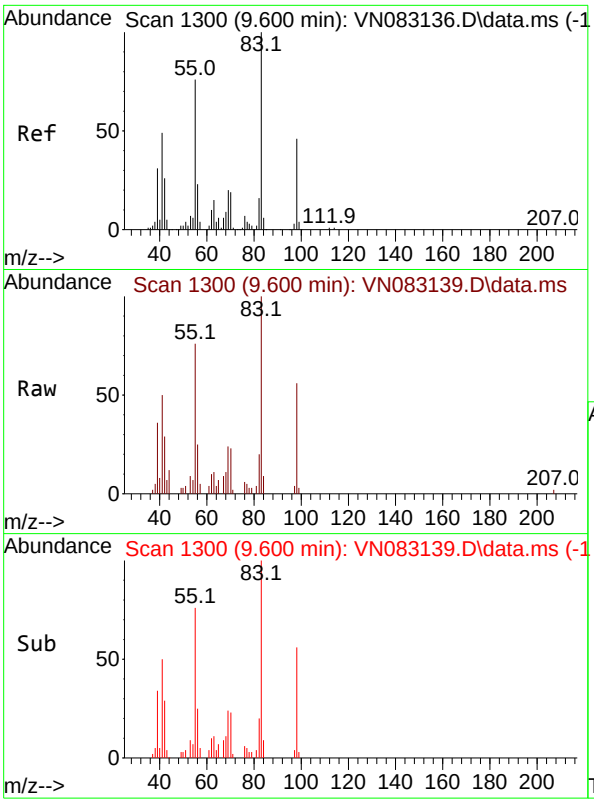


#38
Carbon Tetrachloride
Concen: 5.067 ug/l
RT: 8.365 min Scan# 1090
Delta R.T. 0.006 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion:117 Resp: 18728

Ion	Ratio	Lower	Upper
117	100		
119	94.8	74.9	112.3
121	27.0	24.3	36.5

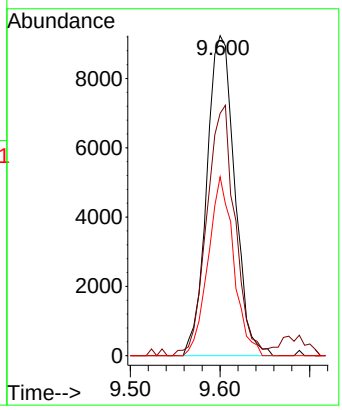




#39
Methylcyclohexane
Concen: 4.957 ug/l
RT: 9.600 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 83 Resp: 1998

Ion	Ratio	Lower	Upper
83	100		
55	74.1	66.4	99.6
98	55.9	40.7	61.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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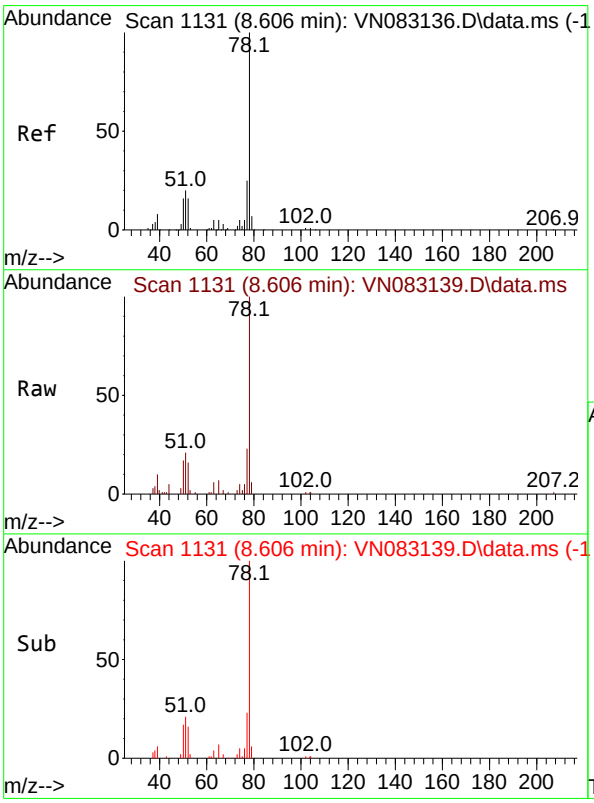
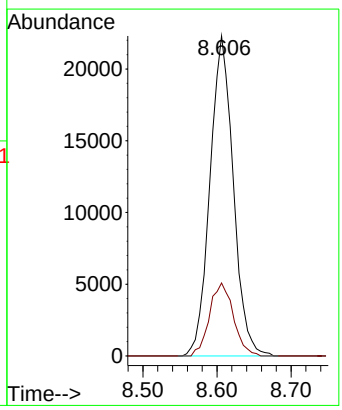
Supervised By :Mahesh Dadoda 08/09/2024

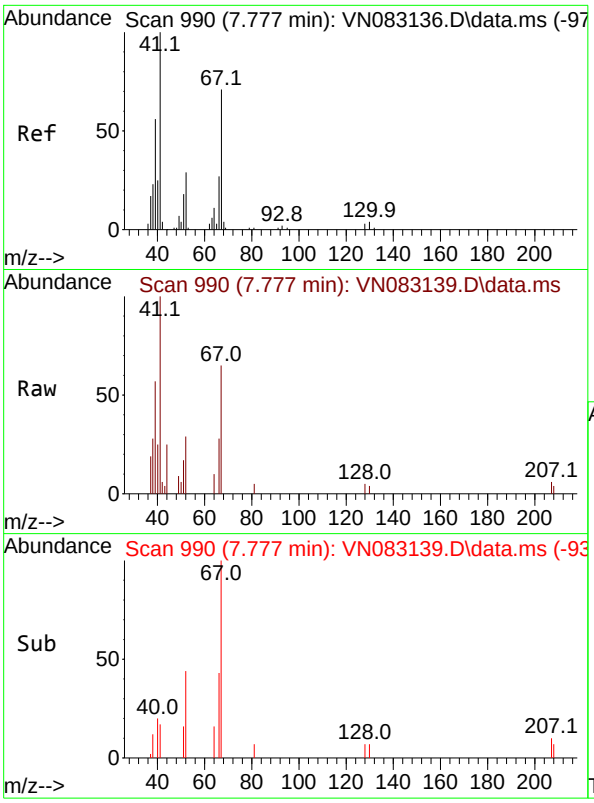


#40
Benzene
Concen: 4.988 ug/l
RT: 8.606 min Scan# 1131
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 78 Resp: 48765

Ion	Ratio	Lower	Upper
78	100		
77	22.8	19.0	28.4

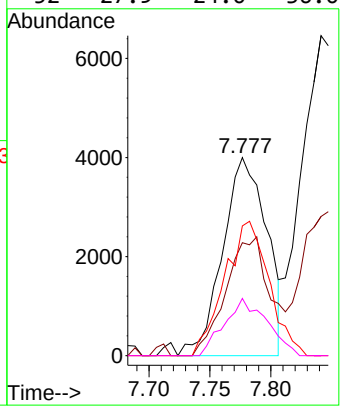




#41
Methacrylonitrile
Concen: 4.828 ug/l
RT: 7.777 min Scan# 9
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 41 Resp: 1008

Ion	Ratio	Lower	Upper
41	100		
39	60.2	45.5	68.3
67	68.2	50.5	75.7
52	27.9	24.0	36.0



Instrument :
MSVOA_N
ClientSampleId :
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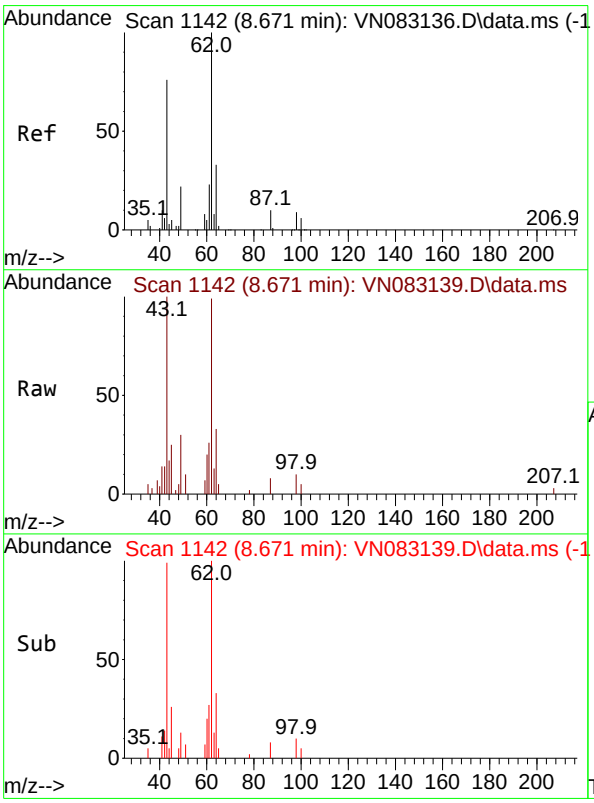
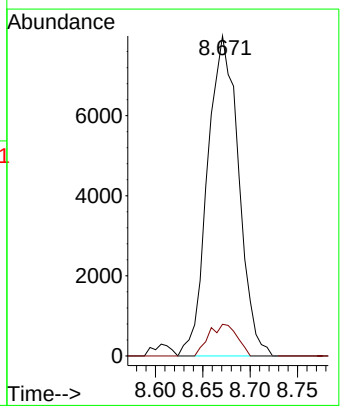
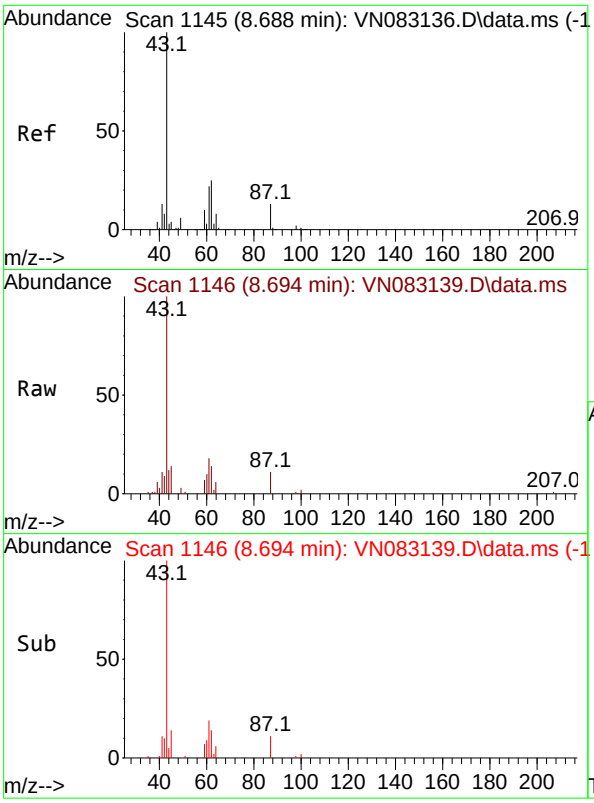


#42
1,2-Dichloroethane
Concen: 5.116 ug/l
RT: 8.671 min Scan# 1142
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 62 Resp: 18219

Ion	Ratio	Lower	Upper
62	100		
98	9.0	0.0	15.8





#43
Isopropyl Acetate
Concen: 5.438 ug/l
RT: 8.694 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 43 Resp: 4481

Ion	Ratio	Lower	Upper
43	100		
61	17.5	17.8	26.6
87	9.2	8.2	12.2

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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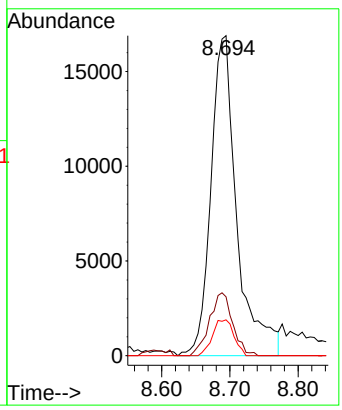
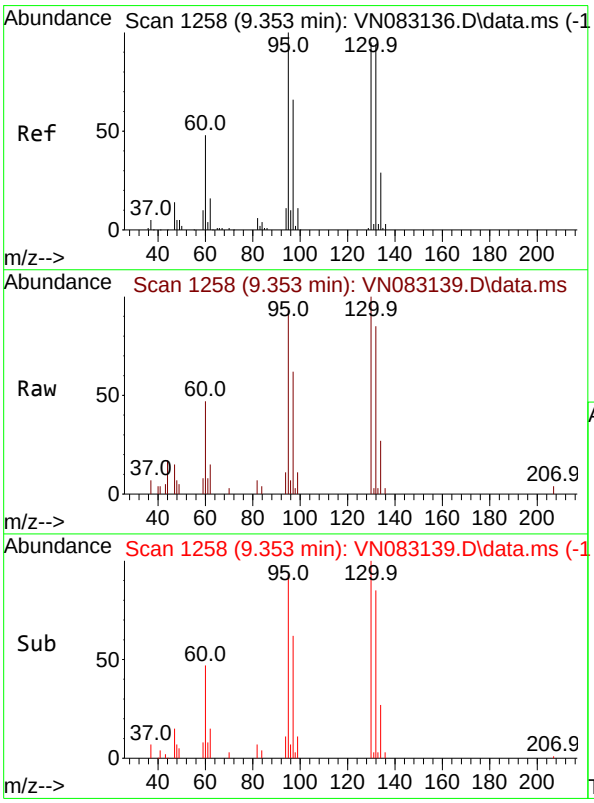
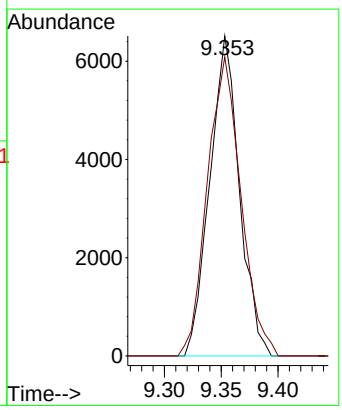


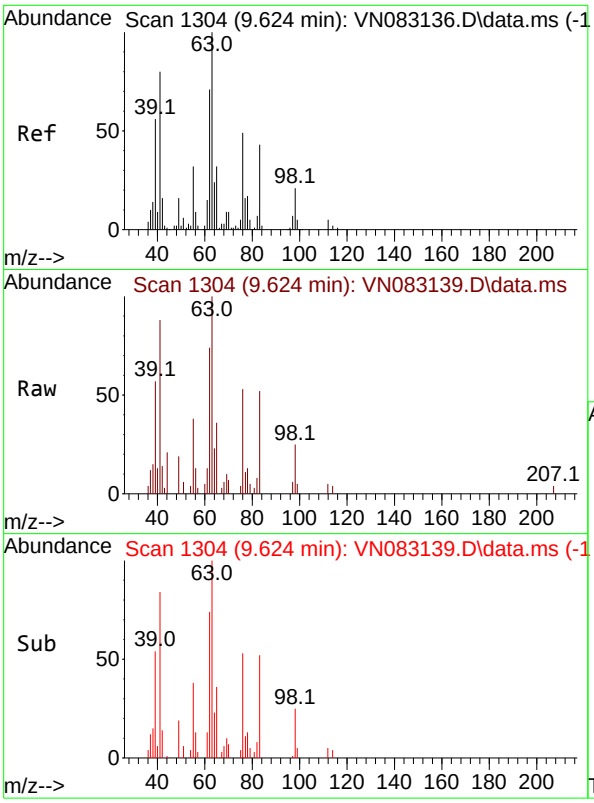


#44
Trichloroethene
Concen: 5.084 ug/l
RT: 9.353 min Scan# 1258
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion:130 Resp: 11830

Ion	Ratio	Lower	Upper
130	100		
95	93.4	0.0	197.8

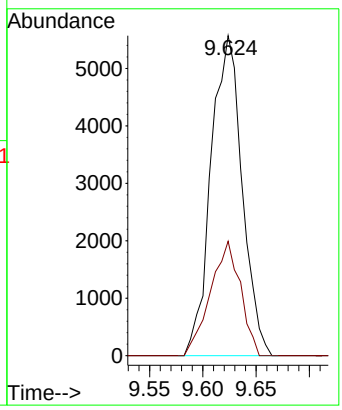




#45
1,2-Dichloropropane
Concen: 4.878 ug/l
RT: 9.624 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 63 Resp: 1132

Ion	Ratio	Lower	Upper
63	100		
65	35.7	24.4	36.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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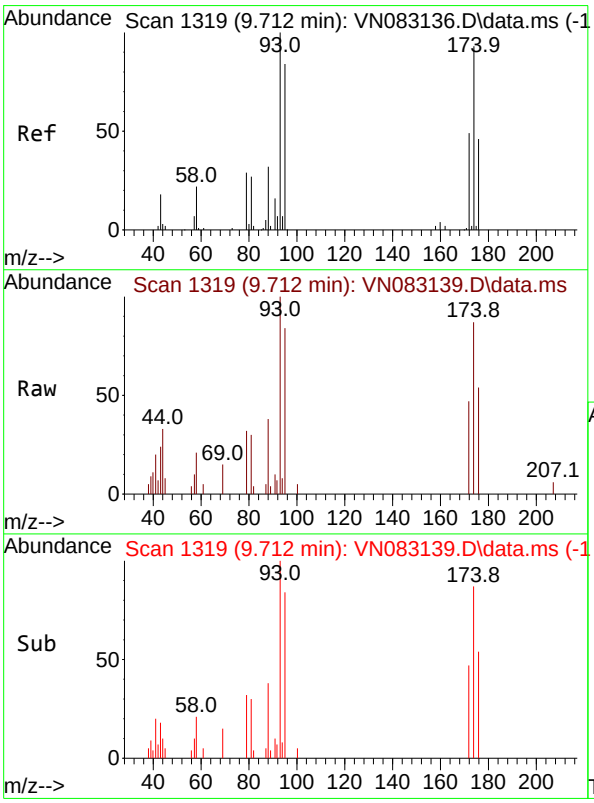
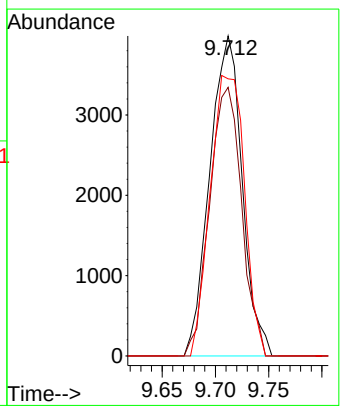
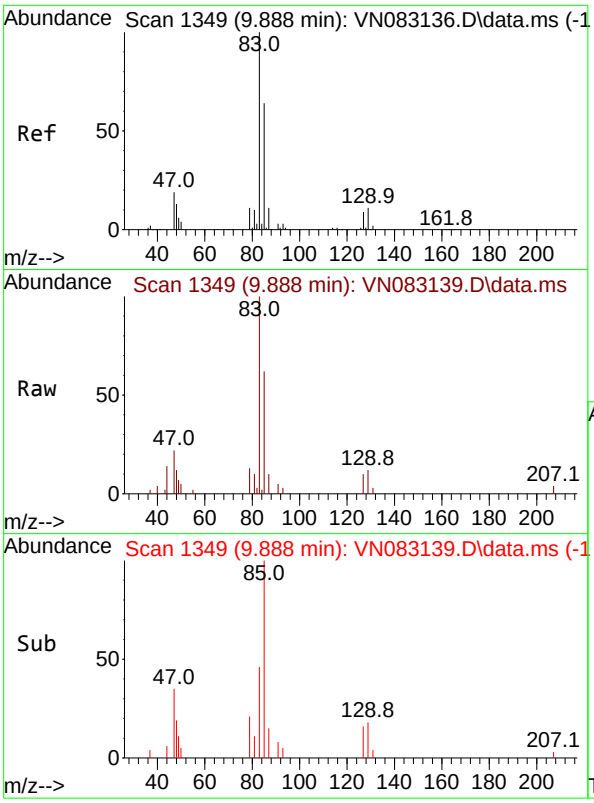


#46
Dibromomethane
Concen: 5.079 ug/l
RT: 9.712 min Scan# 1319
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 93 Resp: 8436

Ion	Ratio	Lower	Upper
93	100		
95	82.9	65.8	98.6
174	92.2	71.7	107.5

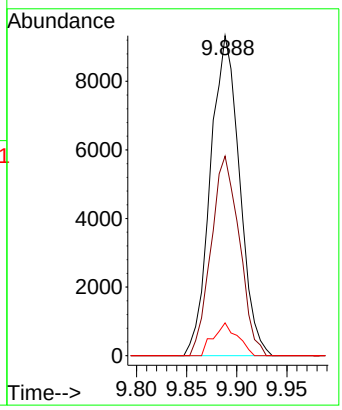




#47
Bromodichloromethane
Concen: 5.040 ug/l
RT: 9.888 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 83 Resp: 1879

Ion	Ratio	Lower	Upper
83	100		
85	62.3	51.1	76.7
127	10.3	7.2	10.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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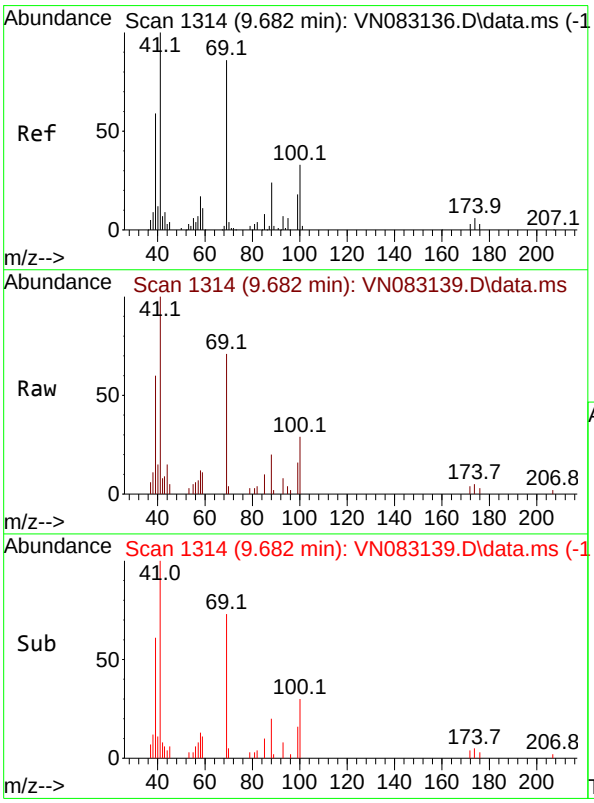
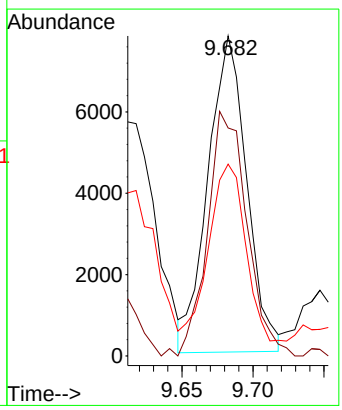
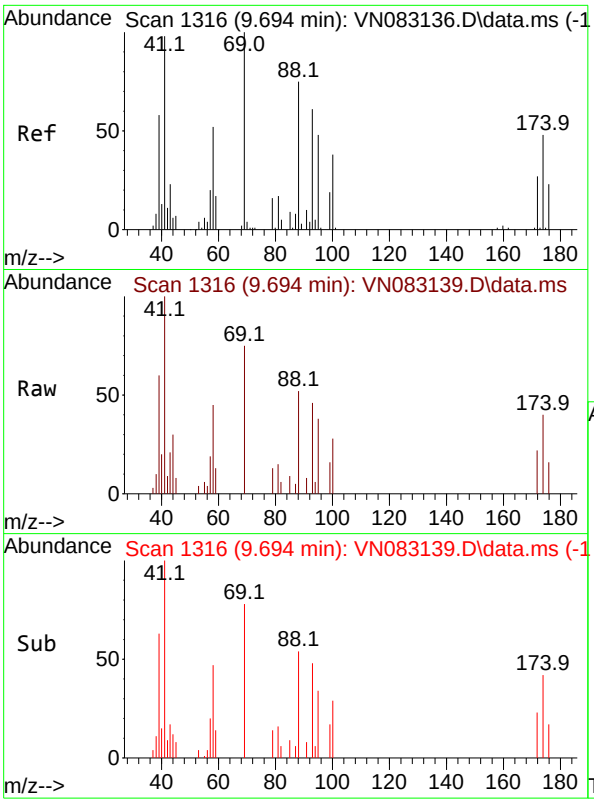


#48
Methyl methacrylate
Concen: 4.840 ug/l
RT: 9.682 min Scan# 1314
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 41 Resp: 14704

Ion	Ratio	Lower	Upper
41	100		
69	79.2	56.3	84.5
39	63.9	50.3	75.5





#49
1,4-Dioxane
Concen: 95.593 ug/l
RT: 9.694 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 88 Resp: 523

Ion	Ratio	Lower	Upper
88	100		
43	0.0	27.8	41.8
58	79.3	59.4	89.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
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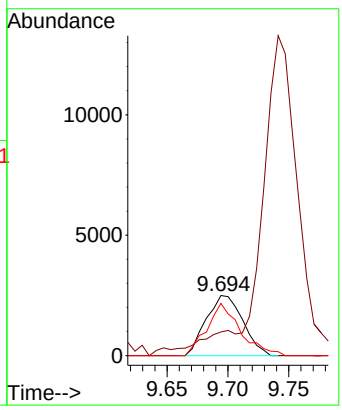
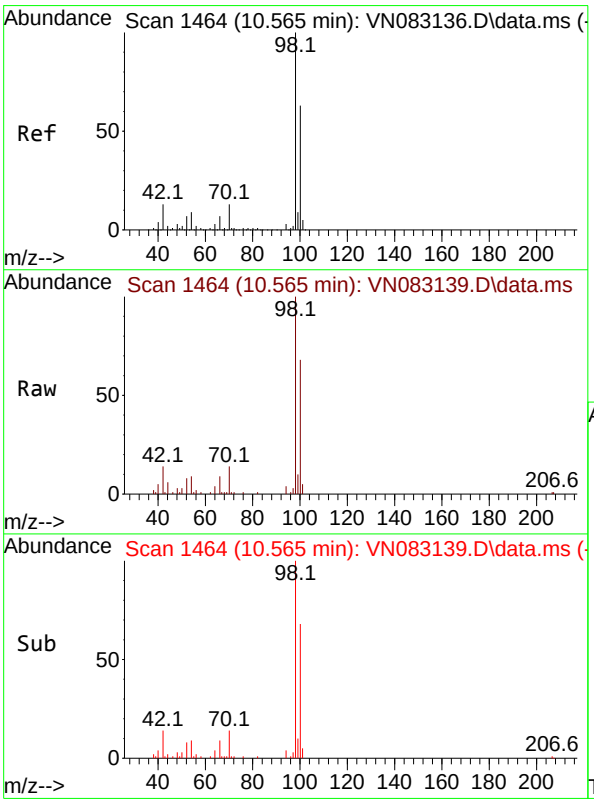
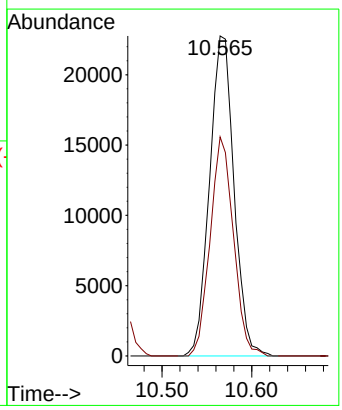


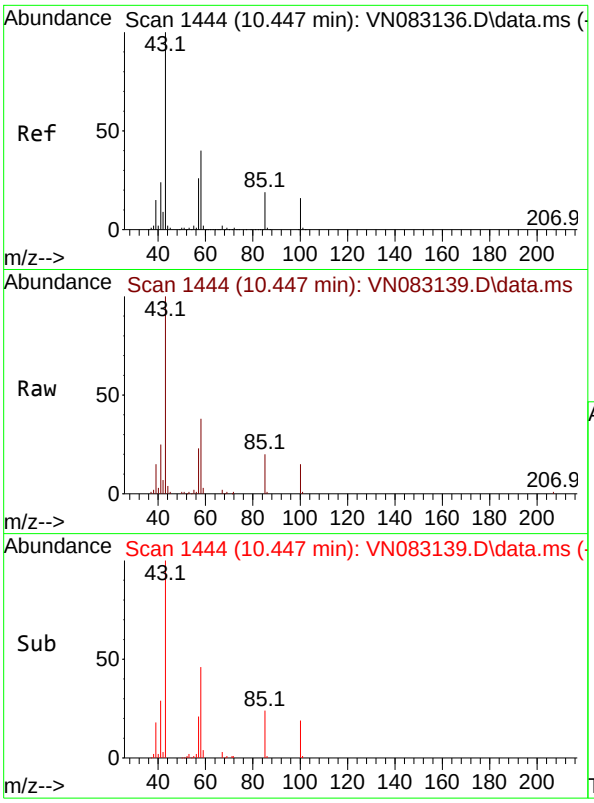


#50
Toluene-d8
Concen: 5.326 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 98 Resp: 43104

Ion	Ratio	Lower	Upper
98	100		
100	65.2	51.5	77.3

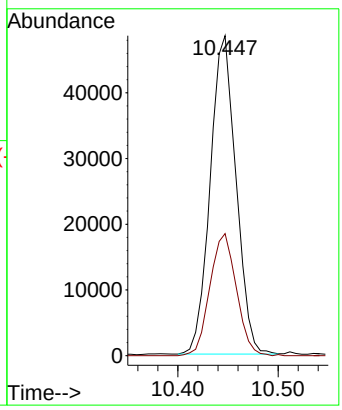




#51
4-Methyl-2-Pentanone
Concen: 24.946 ug/l
RT: 10.447 min Scan# 14
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 43 Resp: 8667

Ion	Ratio	Lower	Upper
43	100		
58	39.3	28.2	42.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
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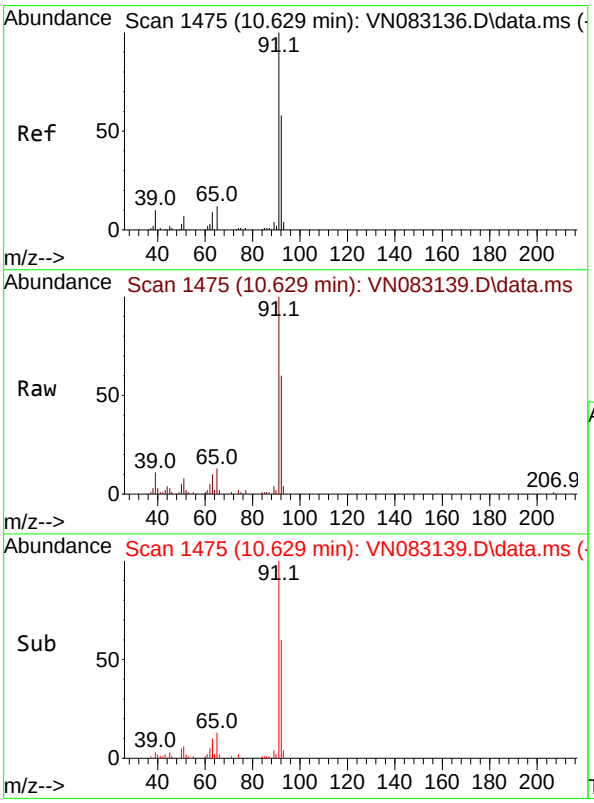
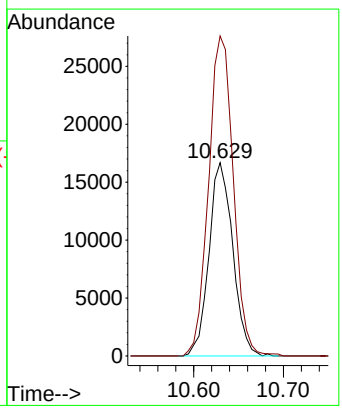
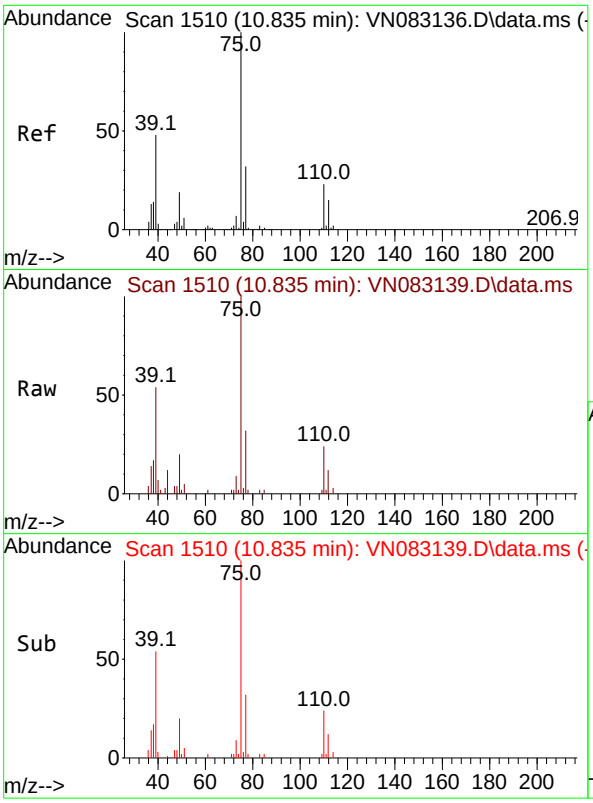


#52
Toluene
Concen: 4.981 ug/l
RT: 10.629 min Scan# 1475
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 92 Resp: 30769

Ion	Ratio	Lower	Upper
92	100		
91	172.3	139.4	209.0

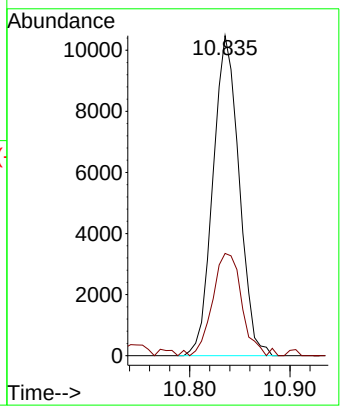




#53
t-1,3-Dichloropropene
Concen: 4.950 ug/l
RT: 10.835 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 75 Resp: 1896

Ion	Ratio	Lower	Upper
75	100		
77	32.0	25.7	38.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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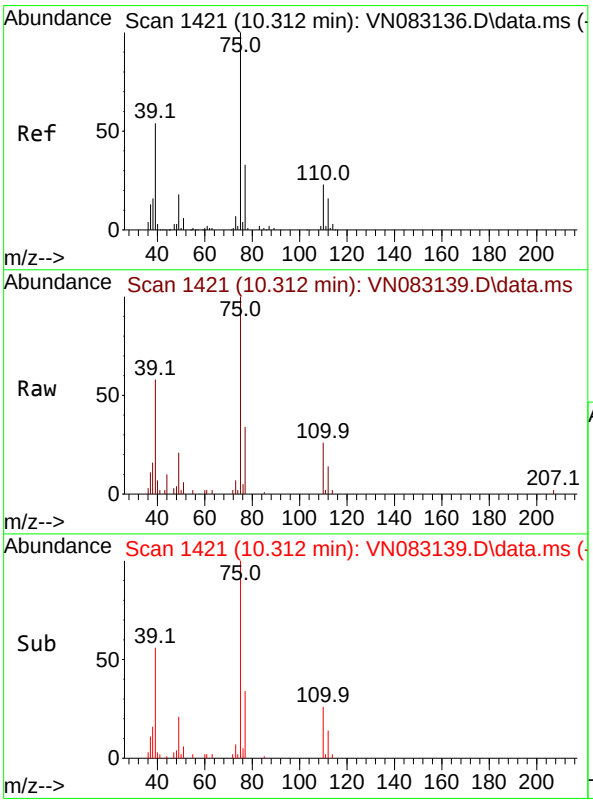
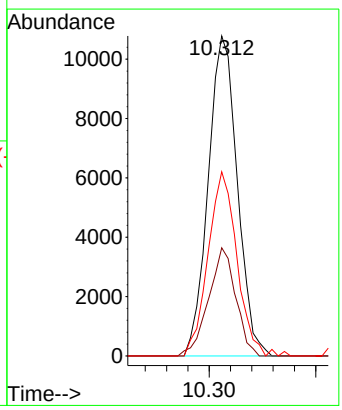
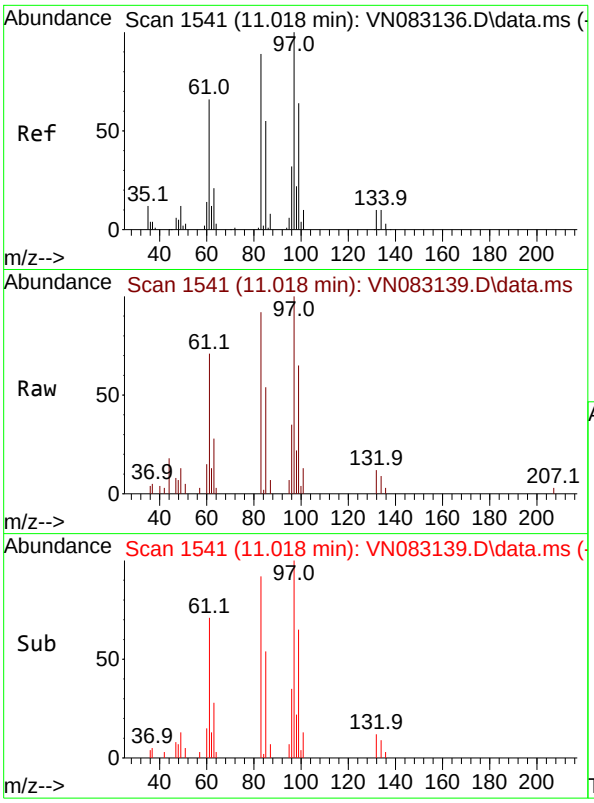


#54
cis-1,3-Dichloropropene
Concen: 5.014 ug/l
RT: 10.312 min Scan# 1421
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 75 Resp: 20431

Ion	Ratio	Lower	Upper
75	100		
77	33.8	24.3	36.5
39	57.5	50.5	75.7

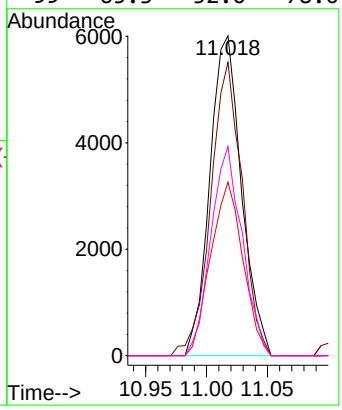




#55
1,1,2-Trichloroethane
Concen: 4.930 ug/l
RT: 11.018 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 97 Resp: 1091

Ion	Ratio	Lower	Upper
97	100		
83	91.7	71.4	107.0
85	54.2	45.8	68.6
99	65.3	52.0	78.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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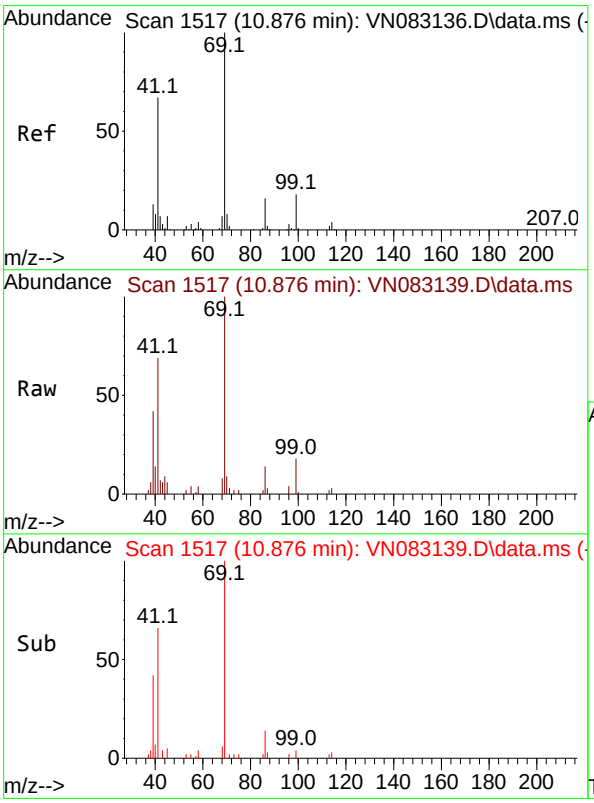
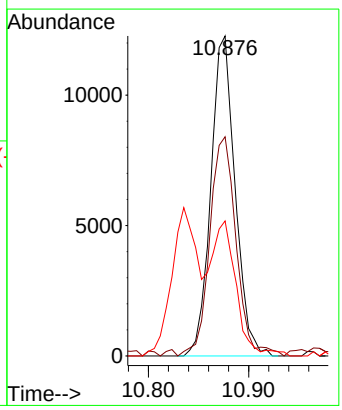
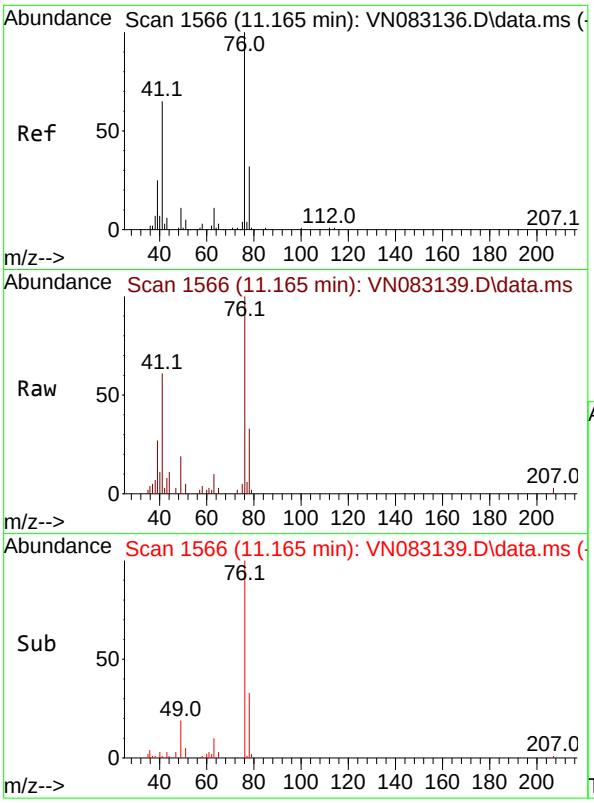


#56
Ethyl methacrylate
Concen: 4.951 ug/l
RT: 10.876 min Scan# 1517
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 69 Resp: 20661

Ion	Ratio	Lower	Upper
69	100		
41	74.3	63.4	95.2
39	39.8	37.4	56.0

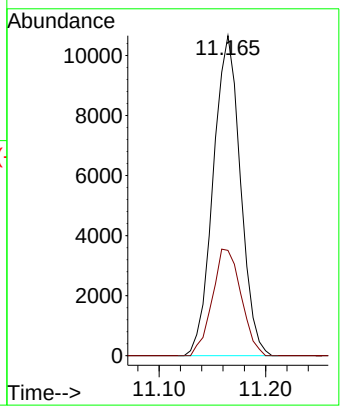




#57
1,3-Dichloropropane
Concen: 4.799 ug/l
RT: 11.165 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 76 Resp: 1893

Ion	Ratio	Lower	Upper
76	100		
78	35.3	25.6	38.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
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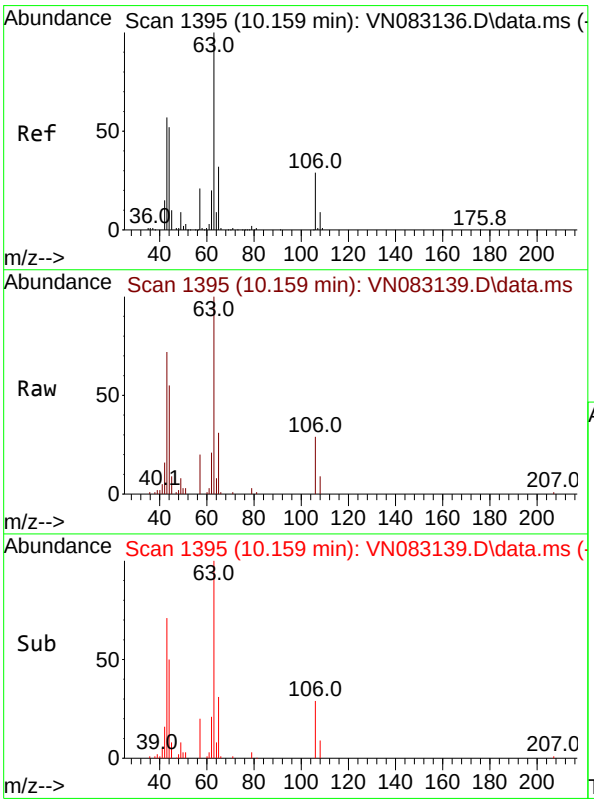
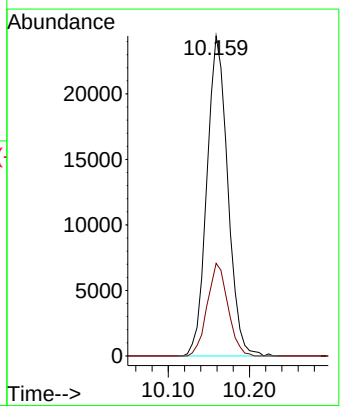
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

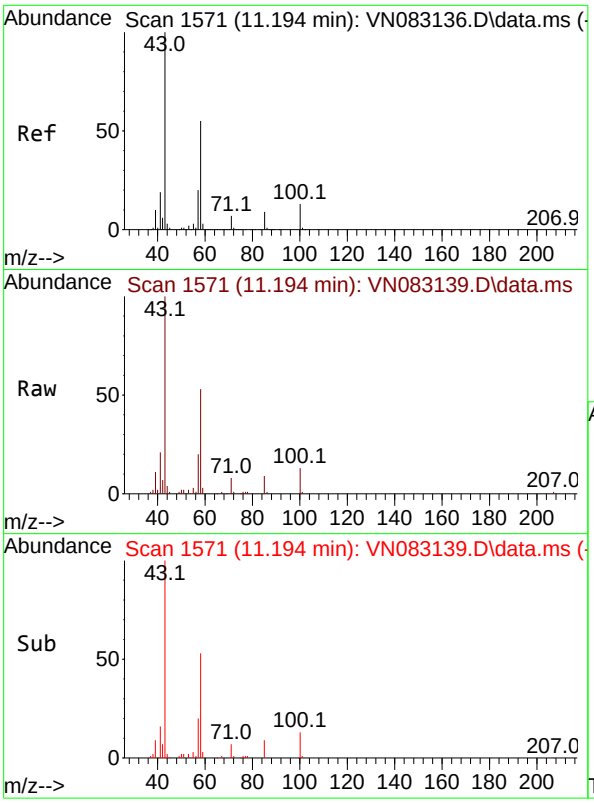


#58
2-Chloroethyl Vinyl ether
Concen: 24.676 ug/l
RT: 10.159 min Scan# 1395
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 63 Resp: 43528

Ion	Ratio	Lower	Upper
63	100		
106	28.8	21.4	32.0





#59
2-Hexanone
Concen: 24.870 ug/l
RT: 11.194 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 43 Resp: 6685

Ion	Ratio	Lower	Upper
43	100		
58	52.9	24.6	73.8

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
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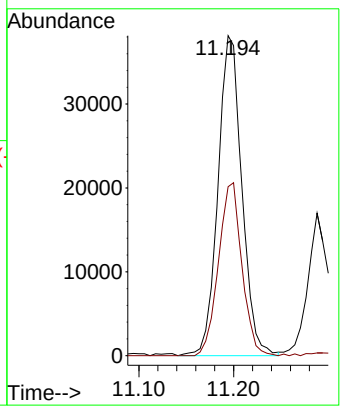
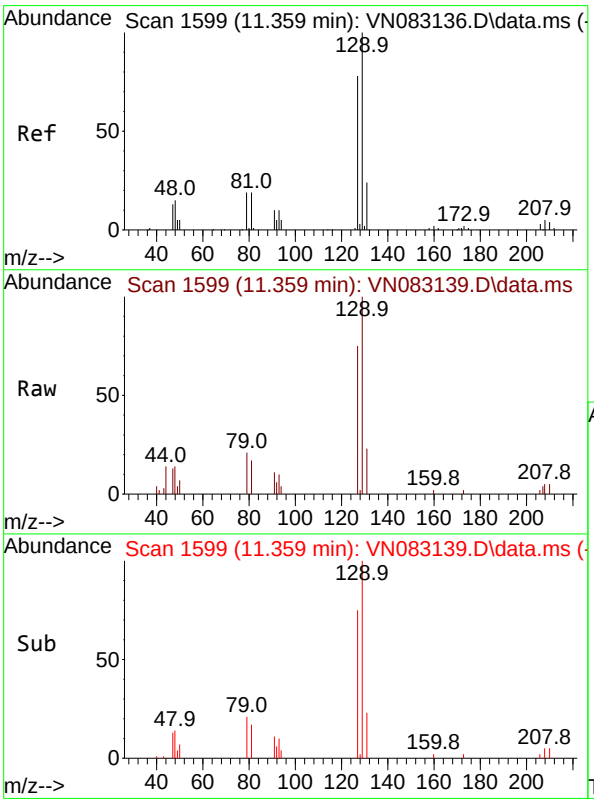
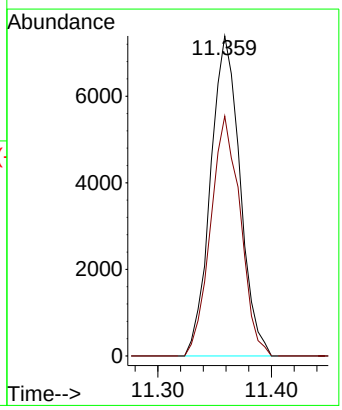


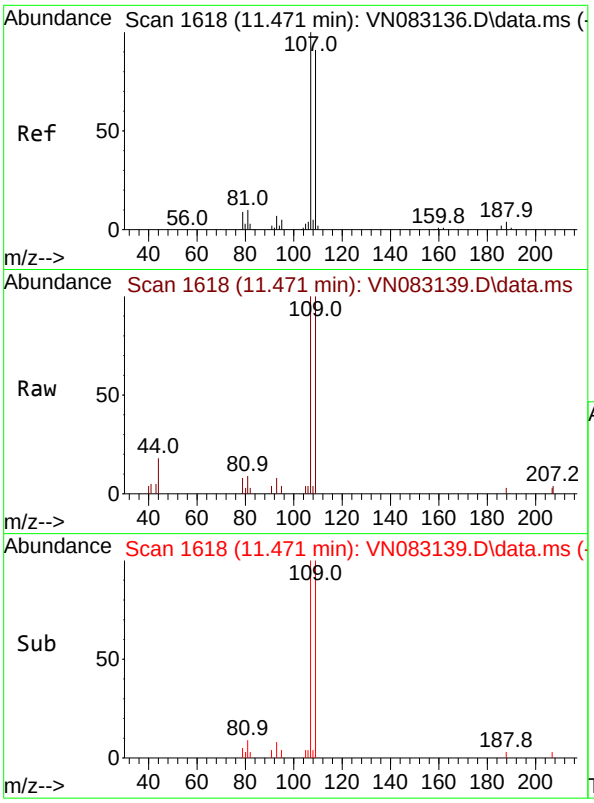


#60
Dibromochloromethane
Concen: 4.972 ug/l
RT: 11.359 min Scan# 1599
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion:129 Resp: 13307

Ion	Ratio	Lower	Upper
129	100		
127	75.6	39.2	117.6





#61
1,2-Dibromoethane
Concen: 4.955 ug/l
RT: 11.471 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion:107 Resp: 1152

Ion	Ratio	Lower	Upper
107	100		
109	95.9	73.7	110.5

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
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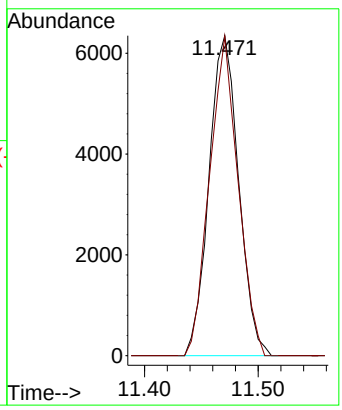
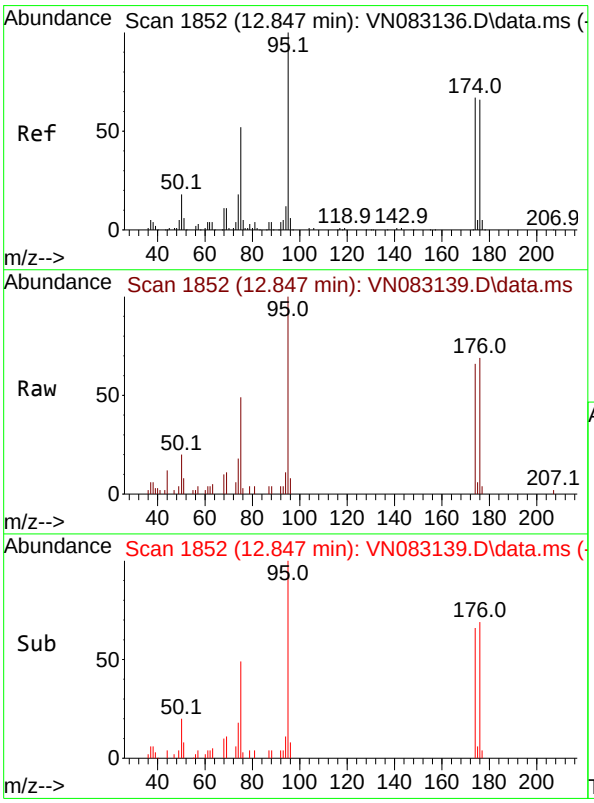
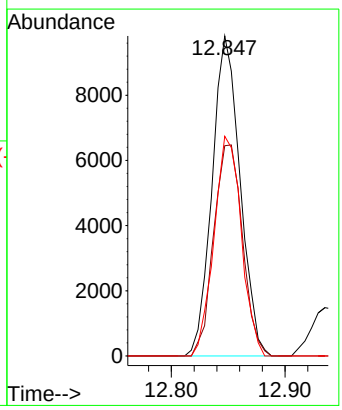


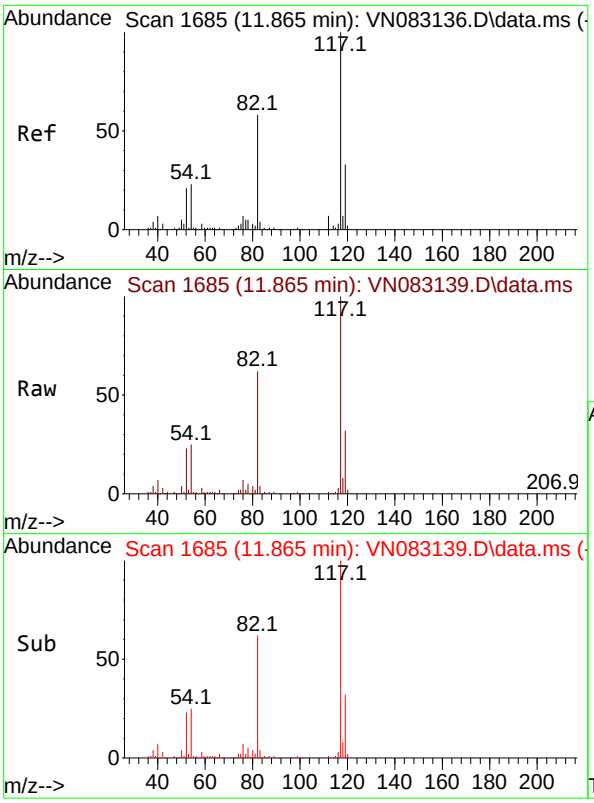


#62
4-Bromofluorobenzene
Concen: 5.317 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 95 Resp: 16776

Ion	Ratio	Lower	Upper
95	100		
174	68.1	0.0	159.2
176	67.0	0.0	147.6





#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion:117 Resp: 29351

Ion	Ratio	Lower	Upper
117	100		
82	62.1	47.5	71.3
119	32.0	25.6	38.4

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
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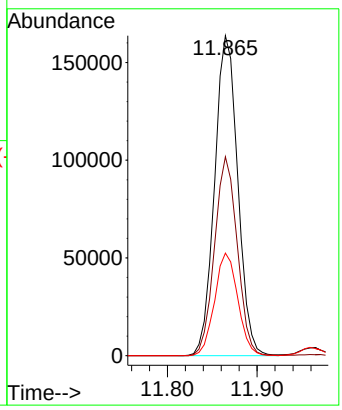
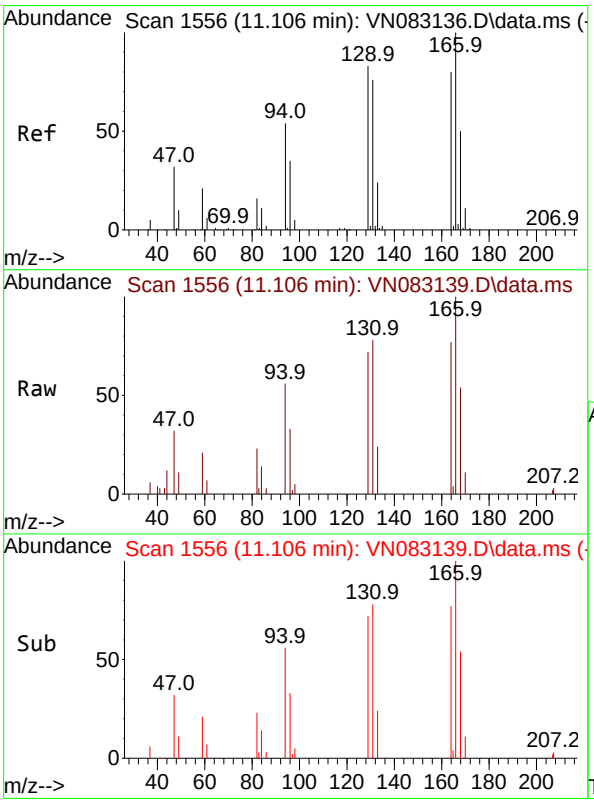
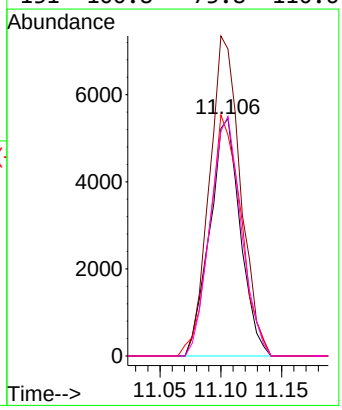


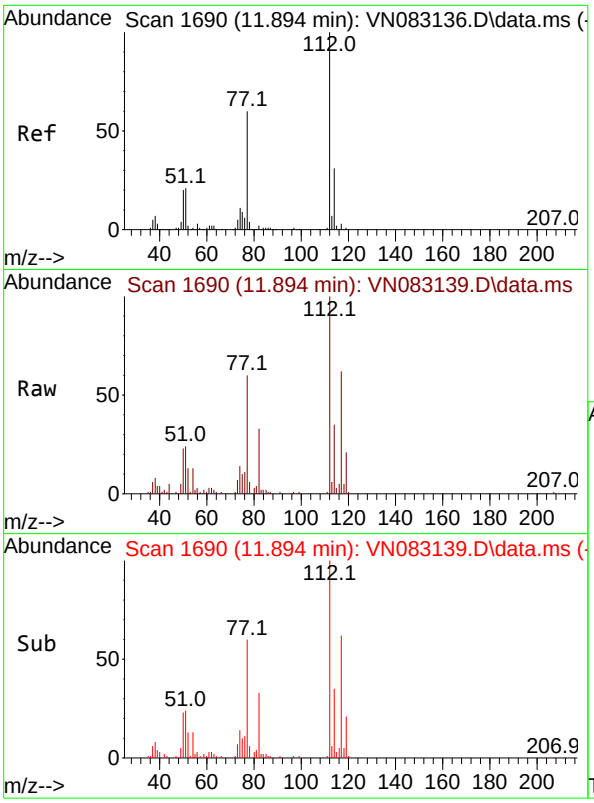


#64
Tetrachloroethene
Concen: 4.896 ug/l
RT: 11.106 min Scan# 1556
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion:164 Resp: 9517

Ion	Ratio	Lower	Upper
164	100		
166	129.2	101.4	152.0
129	93.1	75.7	113.5
131	100.8	73.8	110.6

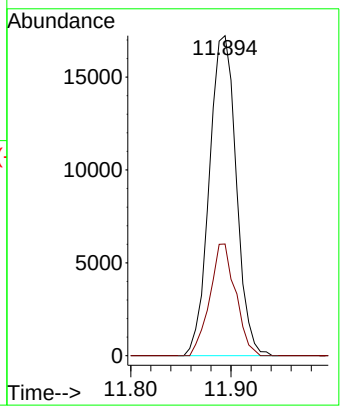




#65
Chlorobenzene
Concen: 4.951 ug/l
RT: 11.894 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion:112 Resp: 3211

Ion	Ratio	Lower	Upper
112	100		
114	34.9	26.2	39.2



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
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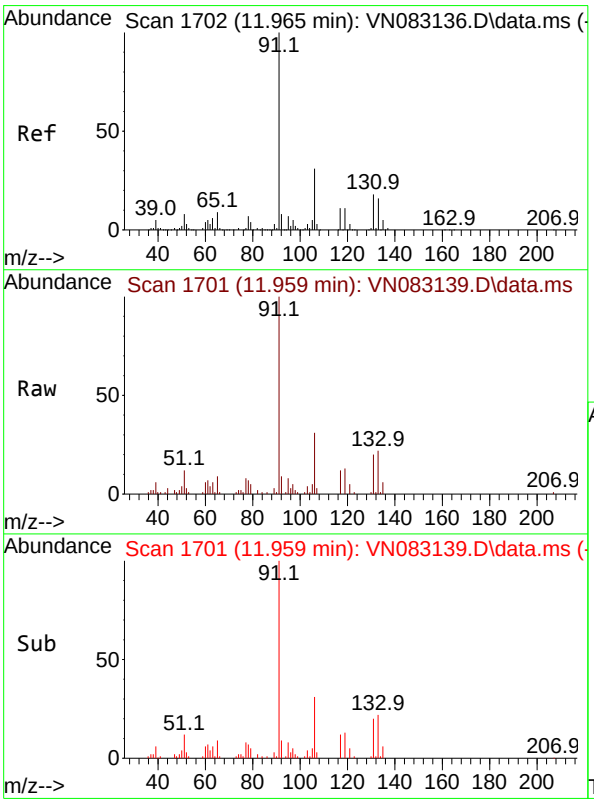
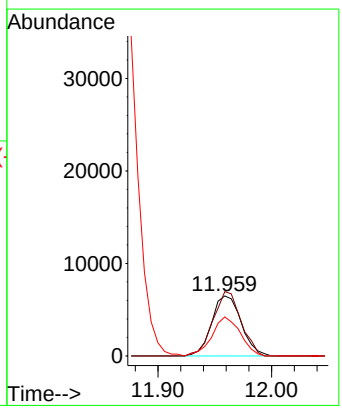
Supervised By :Mahesh Dadoda 08/09/2024

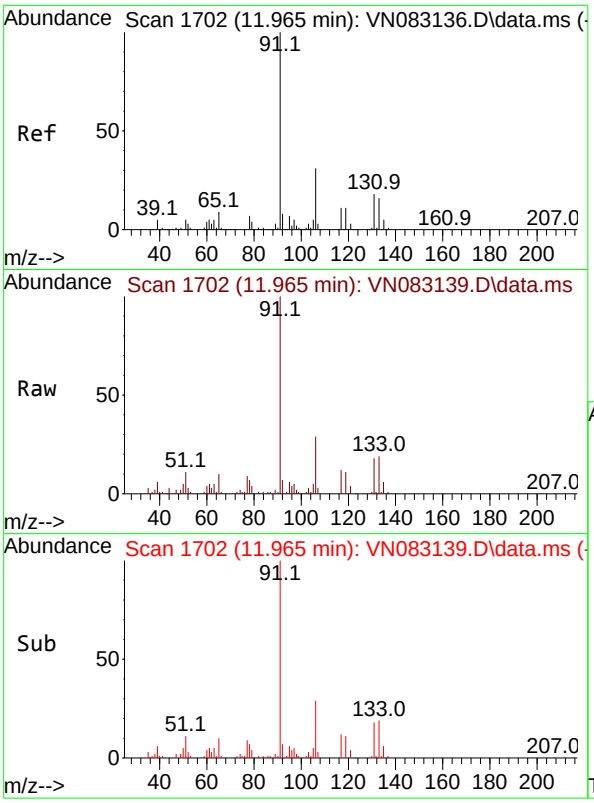


#66
1,1,1,2-Tetrachloroethane
Concen: 5.140 ug/l
RT: 11.959 min Scan# 1701
Delta R.T. -0.006 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion:131 Resp: 11758

Ion	Ratio	Lower	Upper
131	100		
133	101.6	47.3	142.0
119	62.2	32.5	97.4





#67
Ethyl Benzene
Concen: 5.013 ug/l
RT: 11.965 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 91 Resp: 5964

Ion	Ratio	Lower	Upper
91	100		
106	28.6	24.0	36.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
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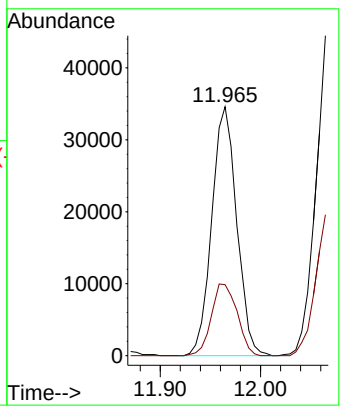
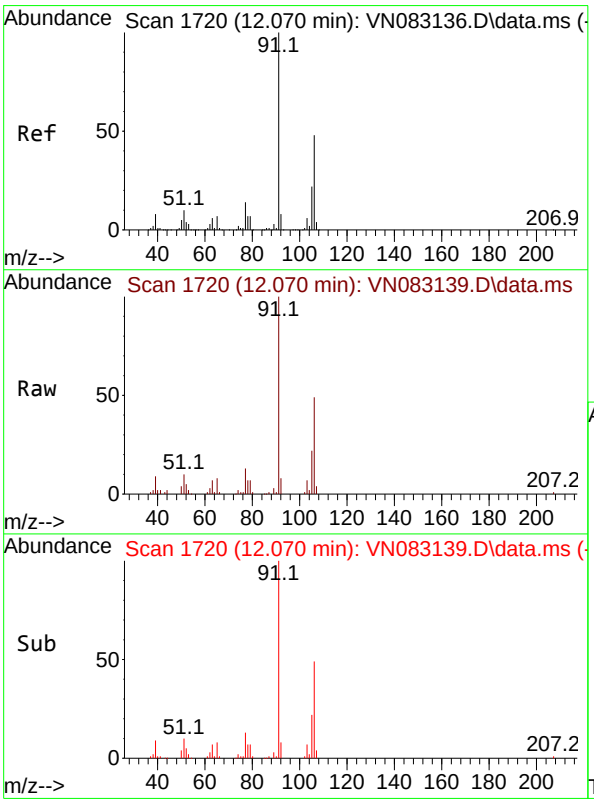
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

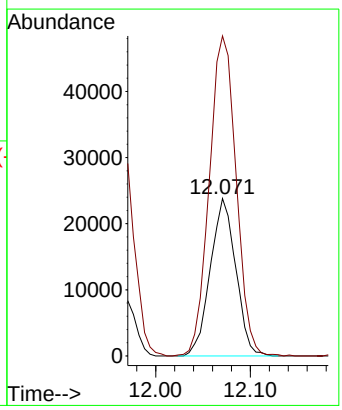


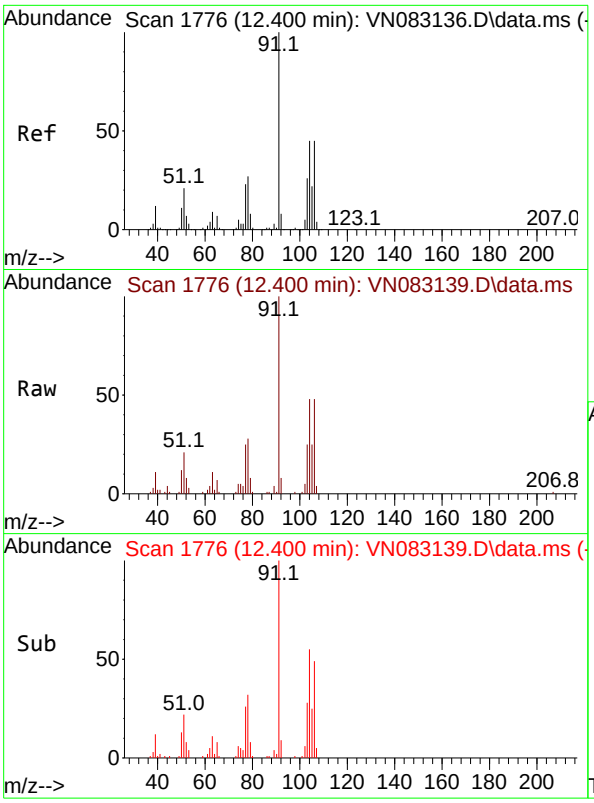


#68
m/p-Xylenes
Concen: 10.000 ug/l
RT: 12.070 min Scan# 1720
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion:106 Resp: 44572

Ion	Ratio	Lower	Upper
106	100		
91	214.3	166.1	249.1





#69
o-Xylene
Concen: 5.005 ug/l
RT: 12.400 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion:106 Resp: 2200

Ion	Ratio	Lower	Upper
106	100		
91	221.7	111.3	333.9

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
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Reviewed By :John Carlone 08/08/2024
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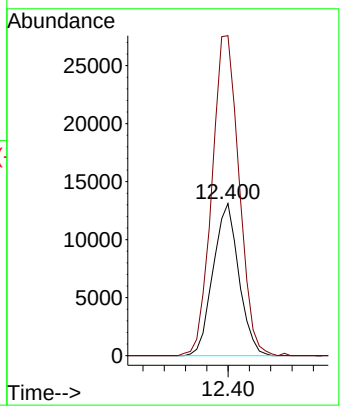
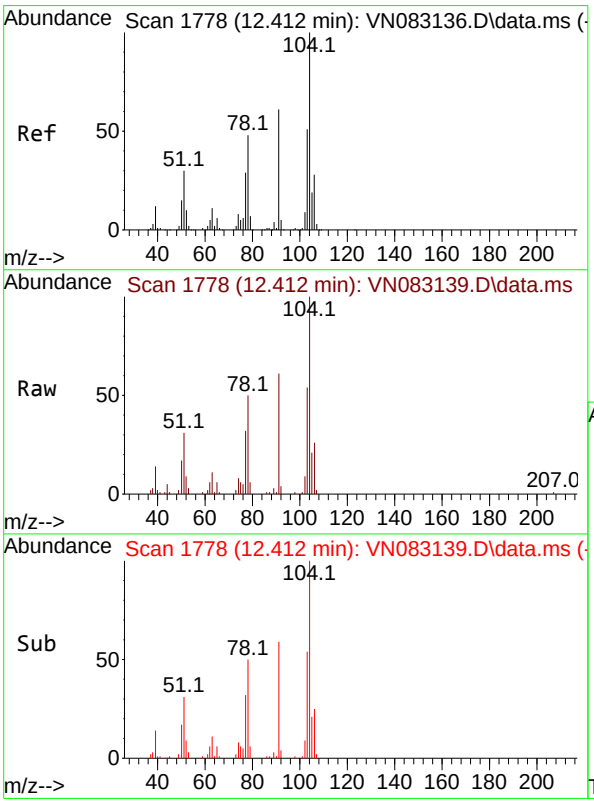
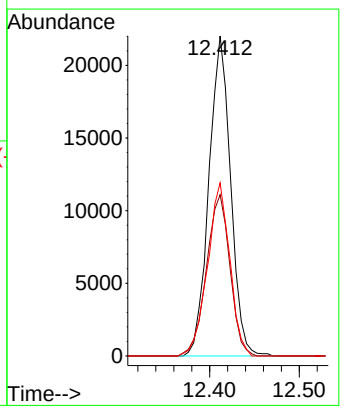


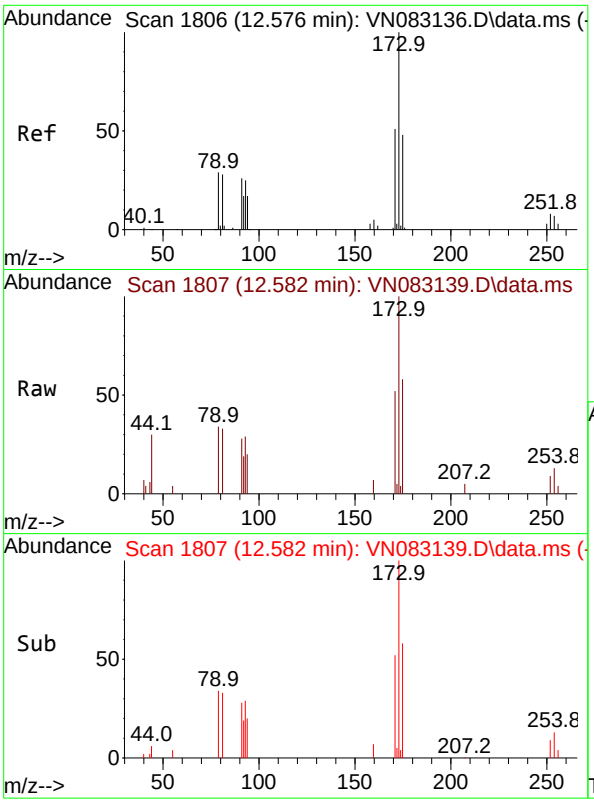


#70
Styrene
Concen: 5.014 ug/l
RT: 12.412 min Scan# 1778
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion:104 Resp: 37023

Ion	Ratio	Lower	Upper
104	100		
78	54.3	41.6	62.4
103	55.4	44.0	66.0





#71
Bromoform
Concen: 4.665 ug/l
RT: 12.582 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Tgt Ion:173 Resp: 808

Ion	Ratio	Lower	Upper
173	100		
175	55.6	24.0	72.0
254	0.0	0.0	0.0

Manual Integrations
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Reviewed By :John Carlone 08/08/2024
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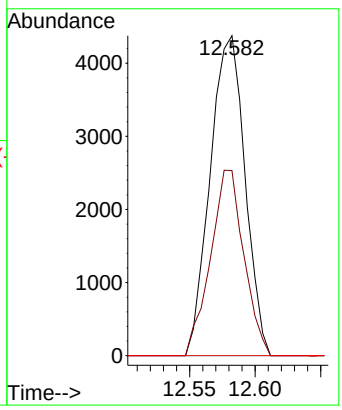
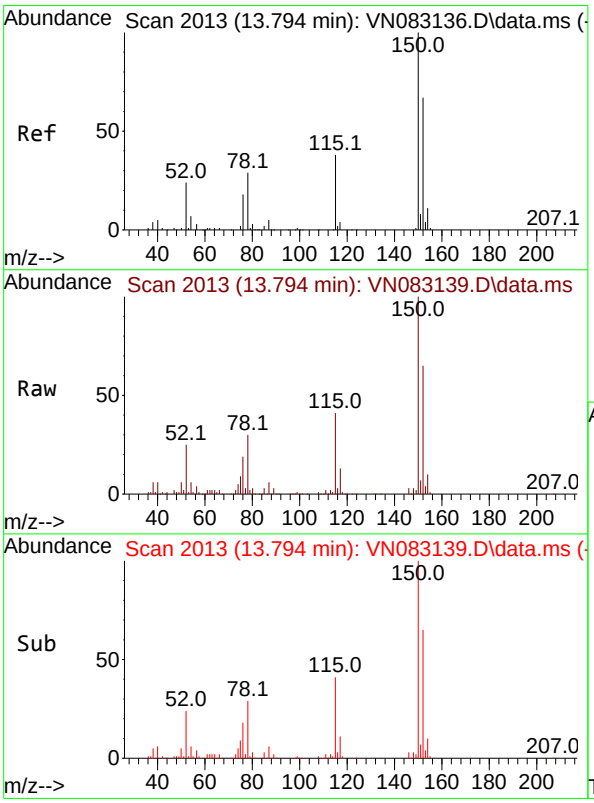
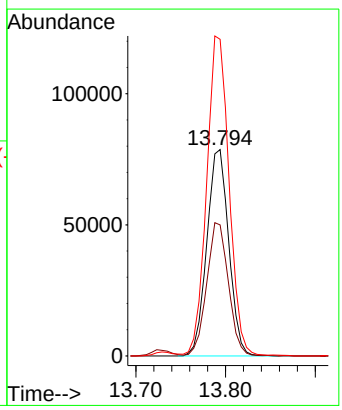


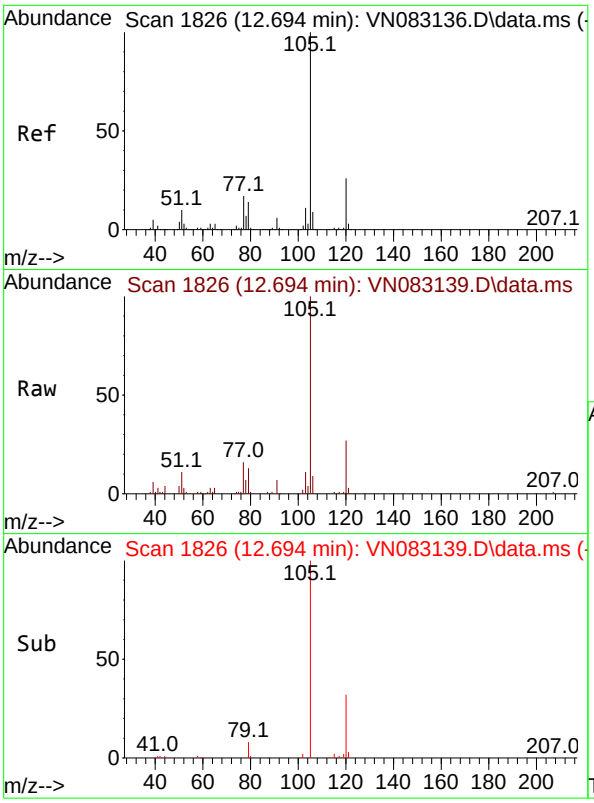


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.794 min Scan# 2013
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion:152 Resp: 133537

Ion	Ratio	Lower	Upper
152	100		
115	64.0	30.6	91.6
150	158.4	0.0	348.6

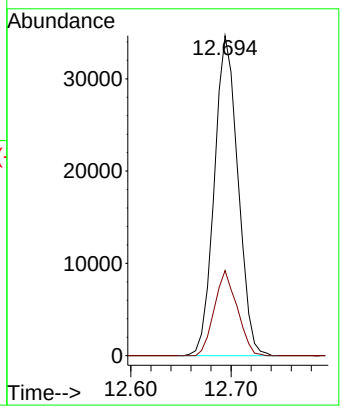




#73
Isopropylbenzene
Concen: 5.080 ug/l
RT: 12.694 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion:105 Resp: 5674

Ion	Ratio	Lower	Upper
105	100		
120	25.7	12.9	38.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
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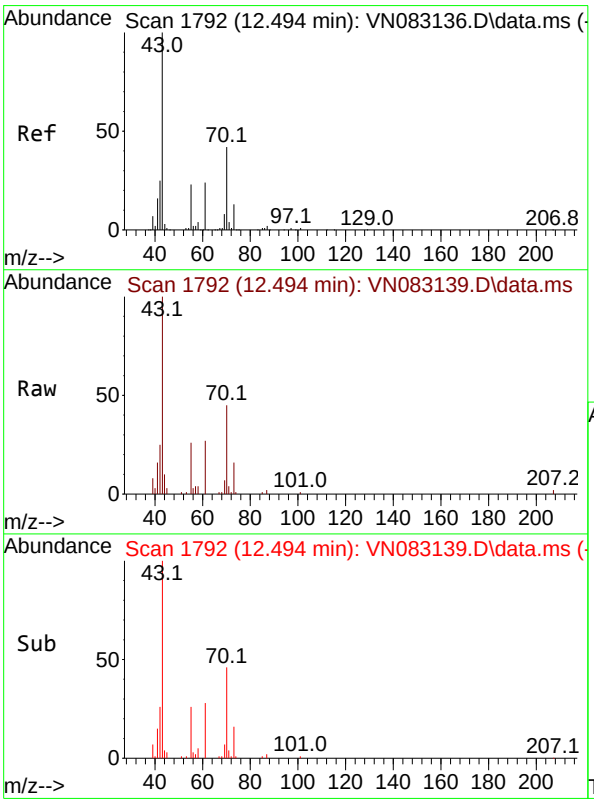
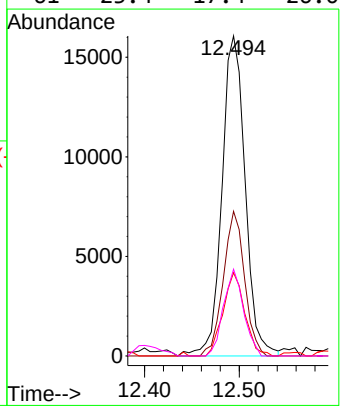
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

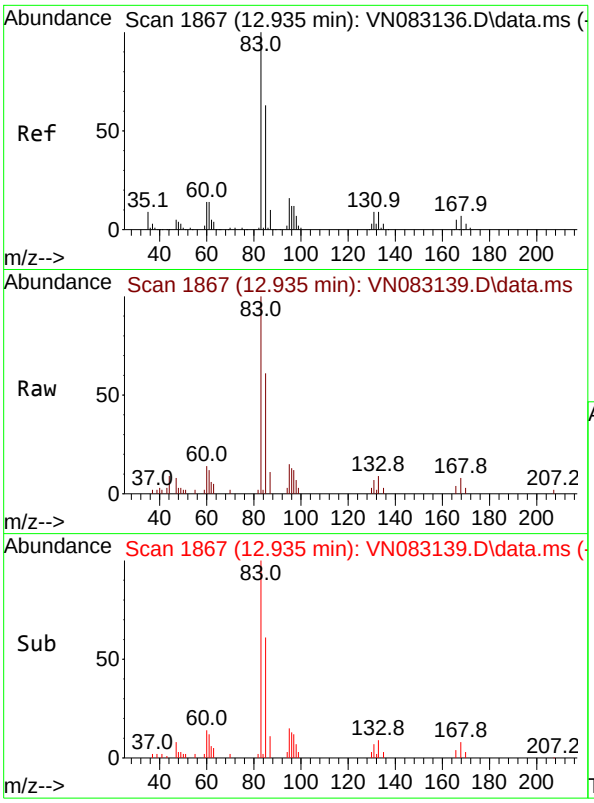


#74
N-amyl acetate
Concen: 5.014 ug/l
RT: 12.494 min Scan# 1792
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 43 Resp: 27393

Ion	Ratio	Lower	Upper
43	100		
70	41.4	29.8	44.6
55	24.3	18.7	28.1
61	23.4	17.4	26.0

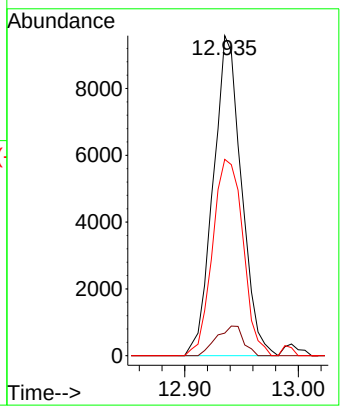




#75
1,1,2,2-Tetrachloroethane
Concen: 5.227 ug/l
RT: 12.935 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 83 Resp: 1651

Ion	Ratio	Lower	Upper
83	100		
131	8.8	5.0	14.9
85	66.4	31.9	95.7



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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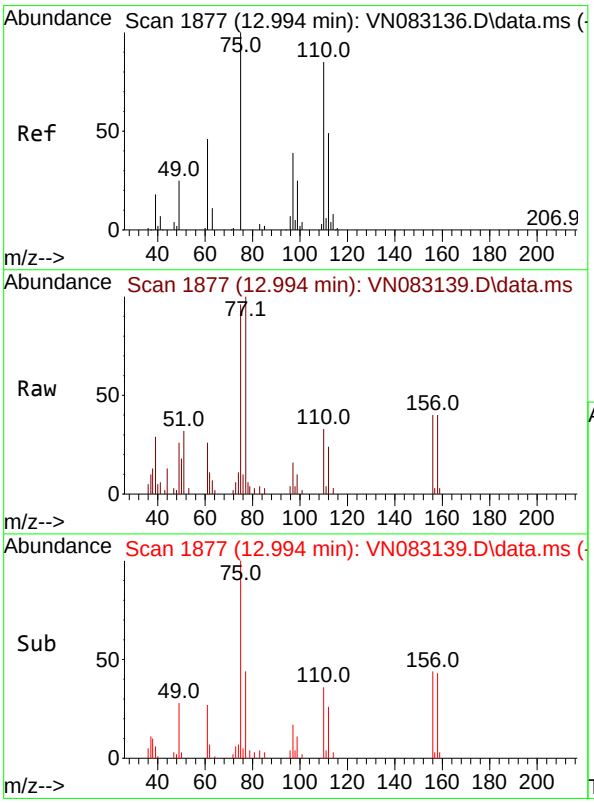
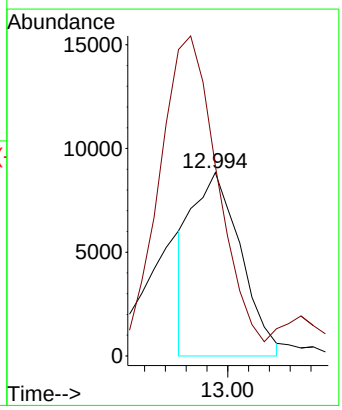
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

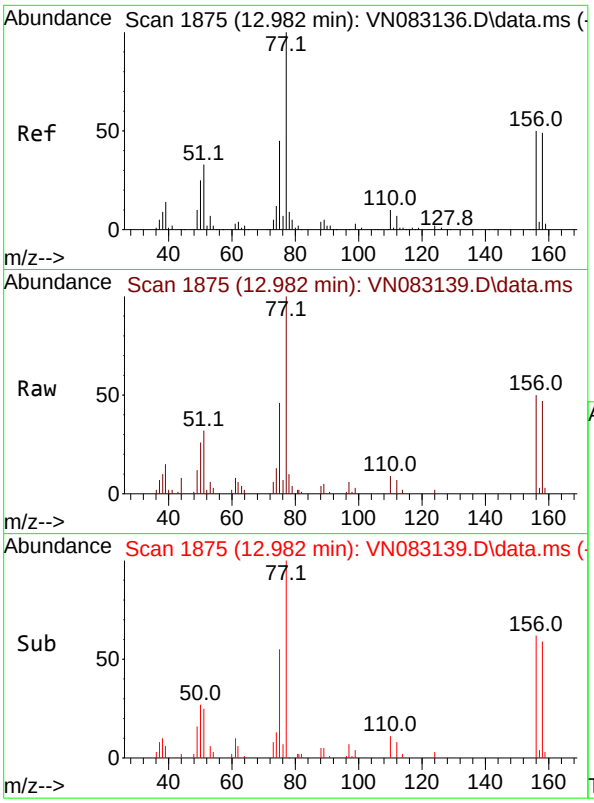


#76
1,2,3-Trichloropropane
Concen: 4.927 ug/l m
RT: 12.994 min Scan# 1877
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 75 Resp: 14463

Ion	Ratio	Lower	Upper
75	100		
77	212.4	110.9	332.6

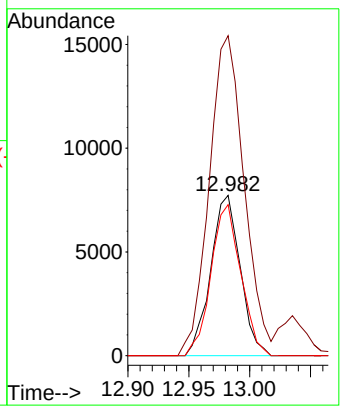




#77
Bromobenzene
Concen: 5.249 ug/l
RT: 12.982 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion:156 Resp: 1302

Ion	Ratio	Lower	Upper
156	100		
77	235.8	111.3	333.8
158	95.0	48.3	144.9



Instrument :
MSVOA_N
ClientSampleId :
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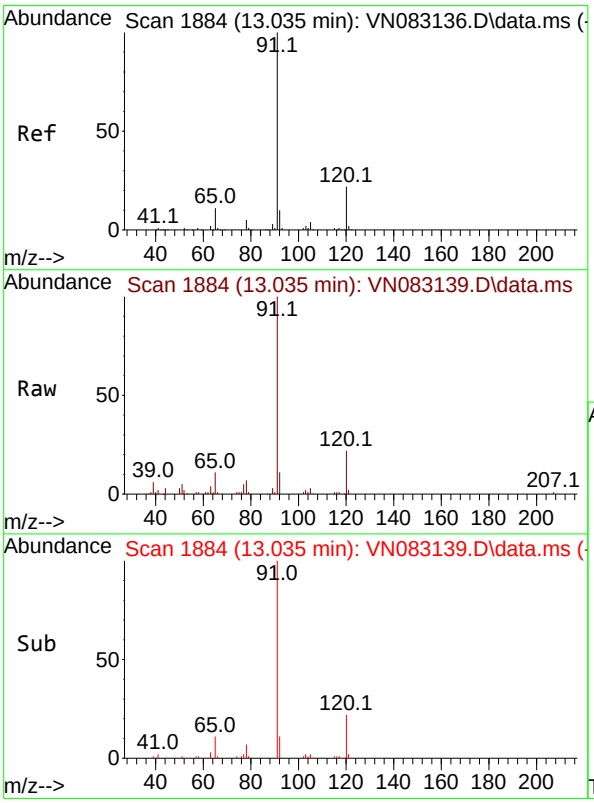
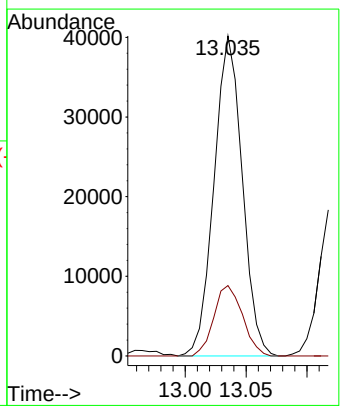
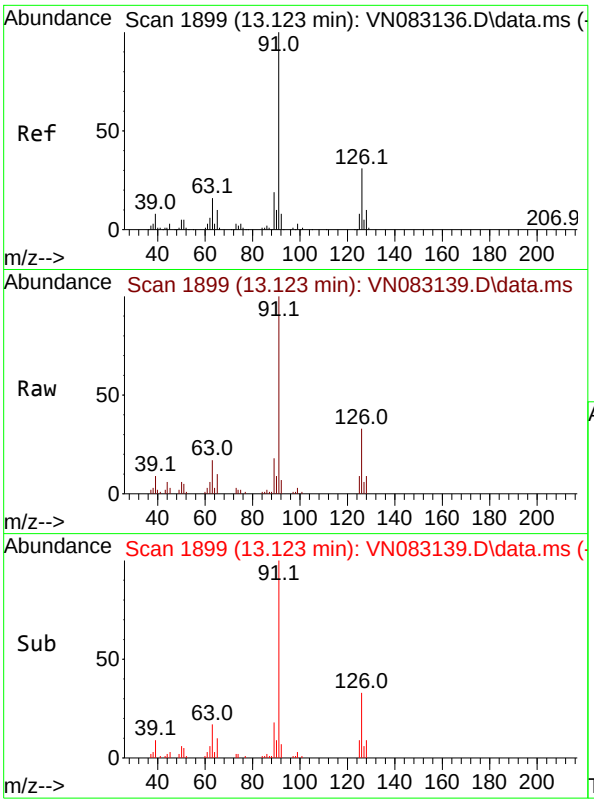


#78
n-propylbenzene
Concen: 5.035 ug/l
RT: 13.035 min Scan# 1884
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 91 Resp: 64751

Ion	Ratio	Lower	Upper
91	100		
120	22.4	10.9	32.9





#79
2-Chlorotoluene
Concen: 5.050 ug/l
RT: 13.123 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 91 Resp: 4117

Ion	Ratio	Lower	Upper
91	100		
126	31.6	16.2	48.6

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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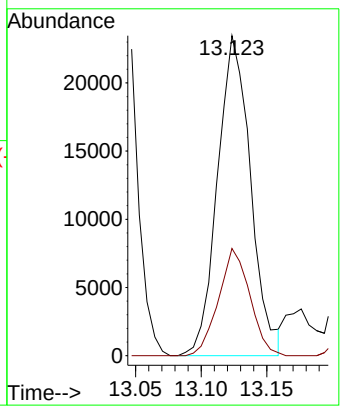
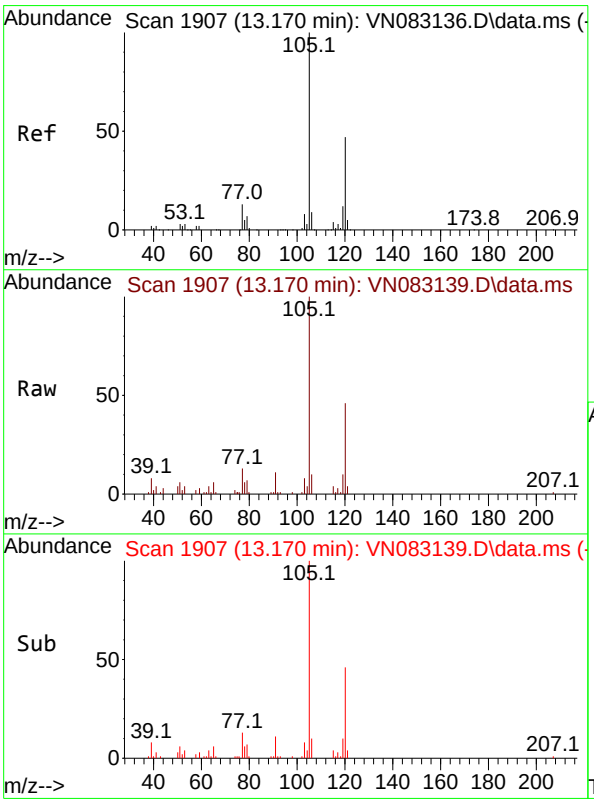
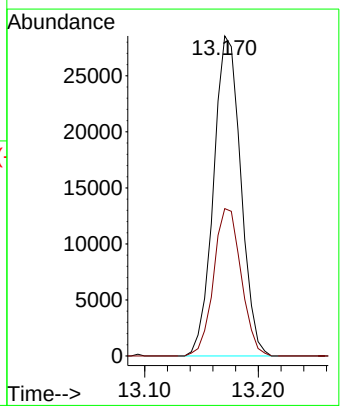


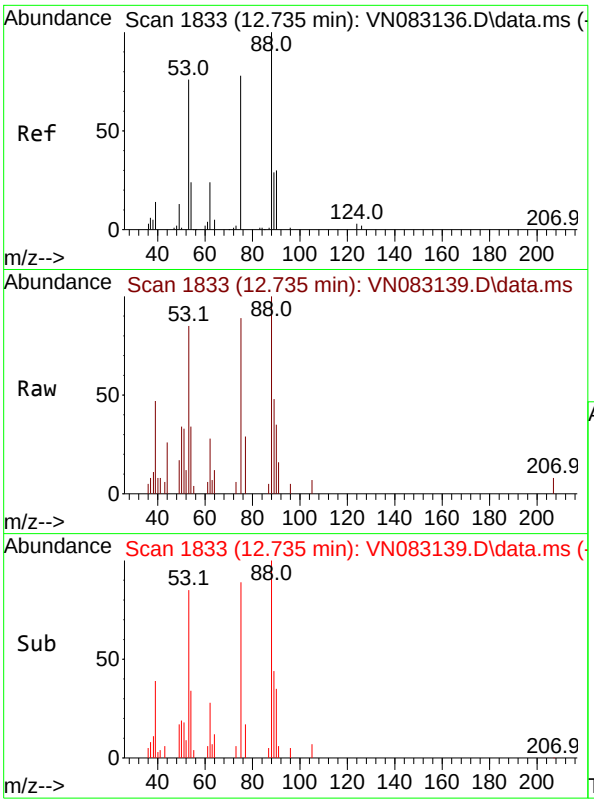


#80
1,3,5-Trimethylbenzene
Concen: 5.088 ug/l
RT: 13.170 min Scan# 1907
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion:105 Resp: 47581

Ion	Ratio	Lower	Upper
105	100		
120	46.5	24.3	72.8





#81
trans-1,4-Dichloro-2-butene
Concen: 5.254 ug/l
RT: 12.735 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 75 Resp: 707

Ion	Ratio	Lower	Upper
75	100		
53	100.6	88.4	132.6
89	41.6	36.3	54.5

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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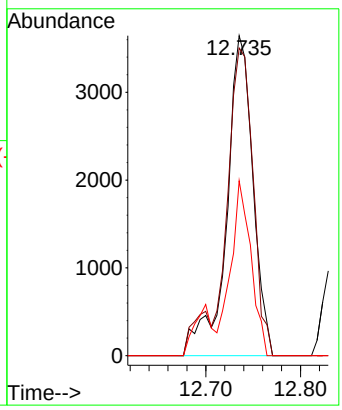
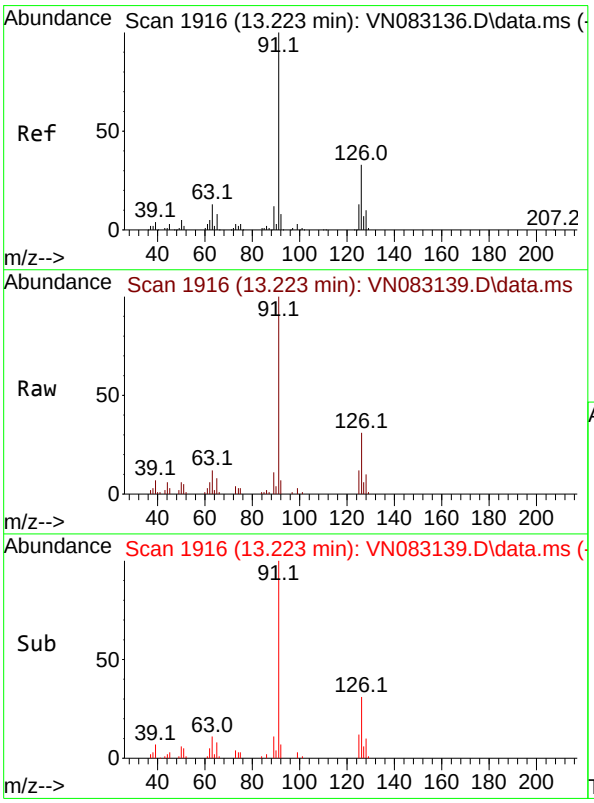
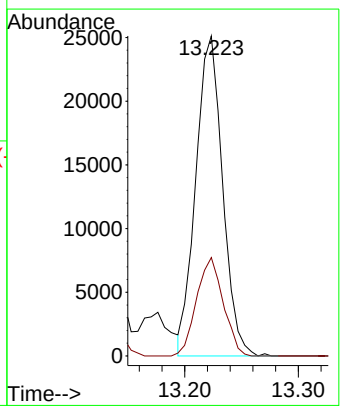


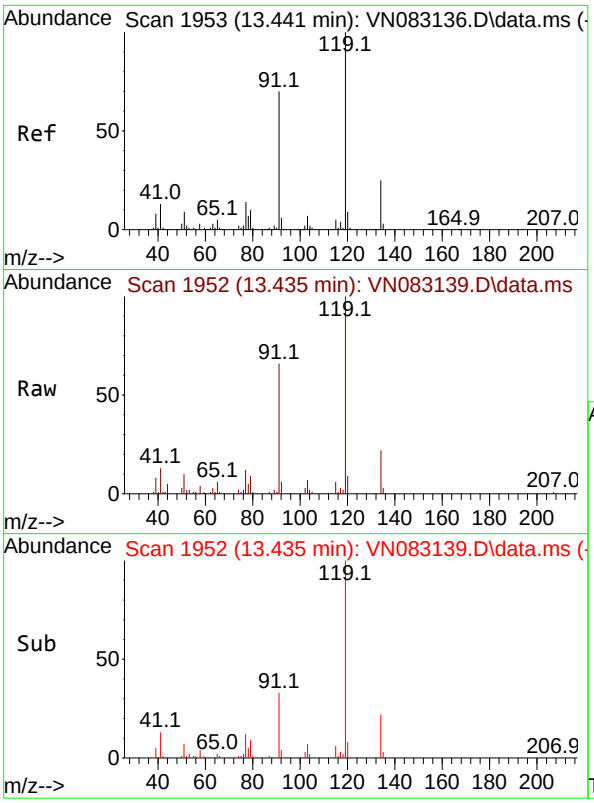


#82
4-Chlorotoluene
Concen: 5.030 ug/l
RT: 13.223 min Scan# 1916
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 91 Resp: 41137

Ion	Ratio	Lower	Upper
91	100		
126	30.6	16.2	48.6

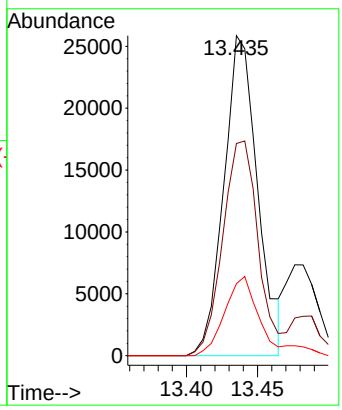




#83
tert-Butylbenzene
Concen: 5.159 ug/l
RT: 13.435 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion:119 Resp: 4272

Ion	Ratio	Lower	Upper
119	100		
91	70.0	35.0	105.1
134	26.6	13.3	39.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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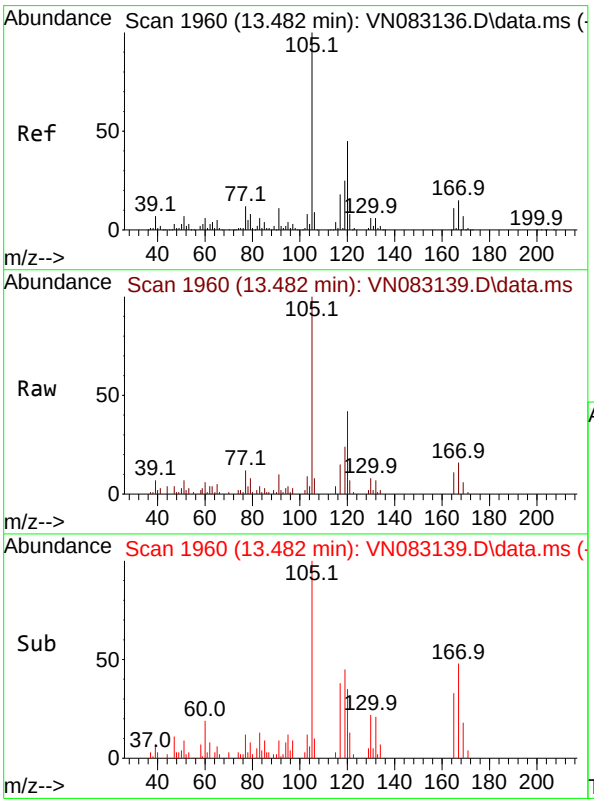
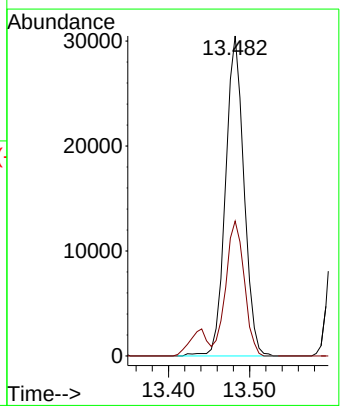
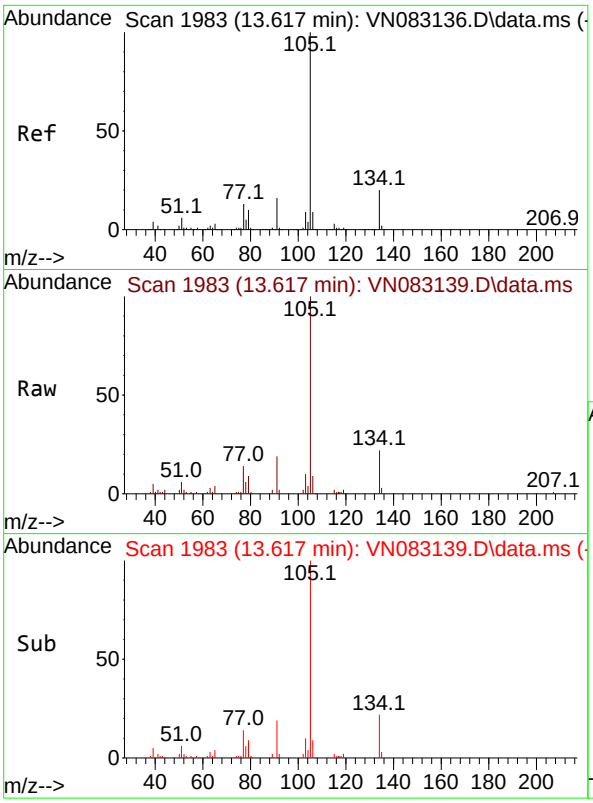


#84
1,2,4-Trimethylbenzene
Concen: 5.090 ug/l
RT: 13.482 min Scan# 1960
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion:105 Resp: 47965

Ion	Ratio	Lower	Upper
105	100		
120	42.3	21.9	65.8





#85
sec-Butylbenzene
Concen: 5.040 ug/l
RT: 13.617 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion:105 Resp: 5694

Ion	Ratio	Lower	Upper
105	100		
134	18.5	9.8	29.3

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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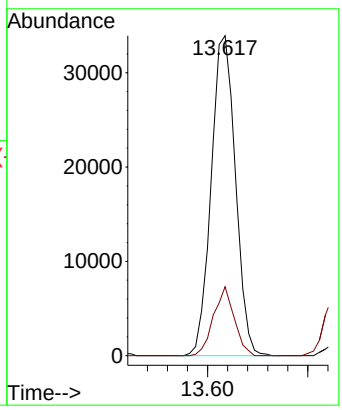
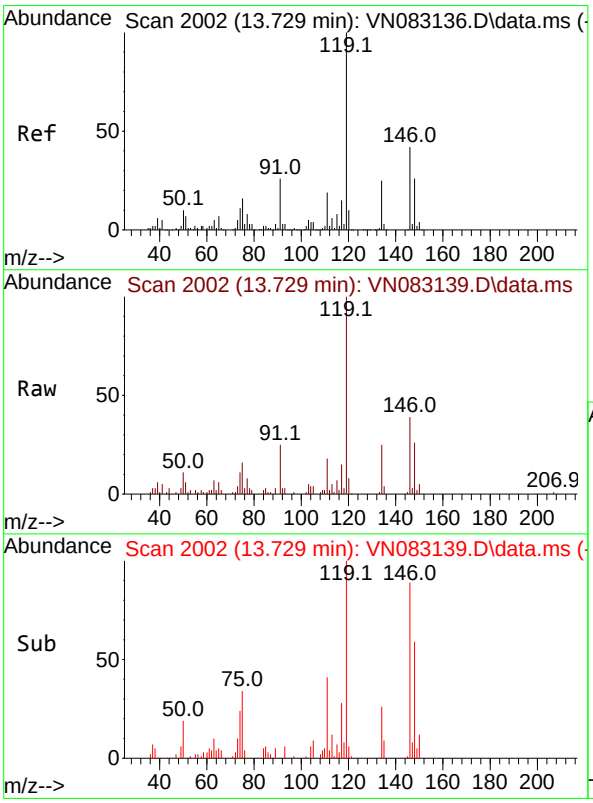
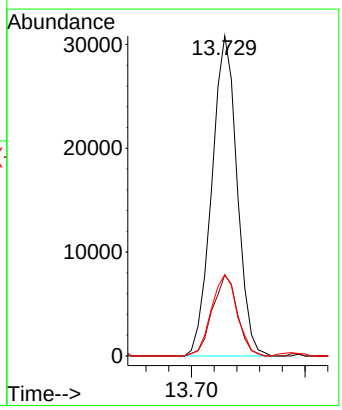


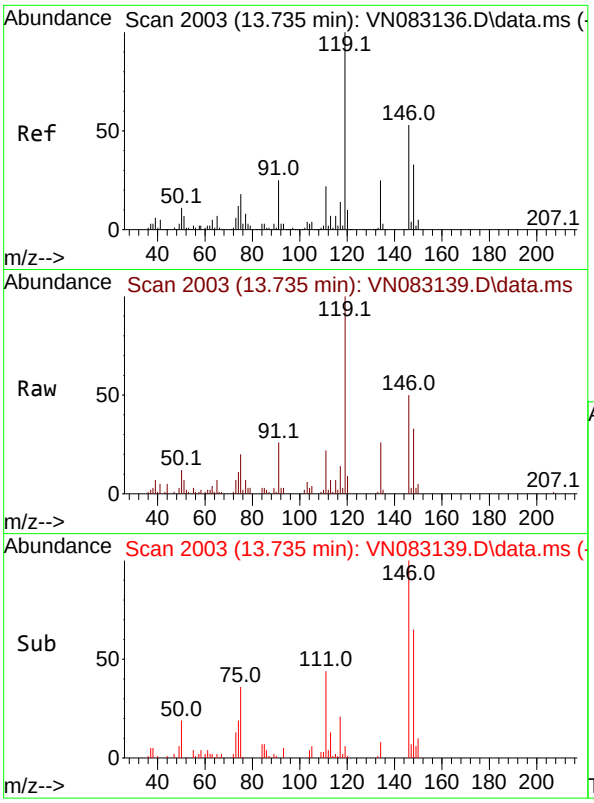


#86
p-Isopropyltoluene
Concen: 5.108 ug/l
RT: 13.729 min Scan# 2002
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion:119 Resp: 47654

Ion	Ratio	Lower	Upper
119	100		
134	24.9	13.0	39.0
91	26.0	12.3	36.9

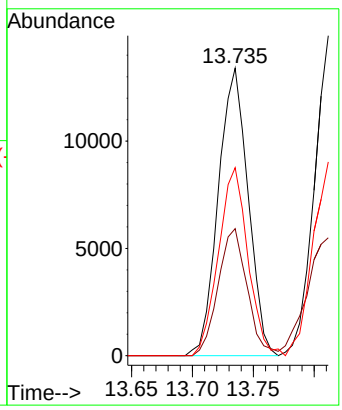




#87
1,3-Dichlorobenzene
Concen: 4.887 ug/l
RT: 13.735 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion:146 Resp: 2281

Ion	Ratio	Lower	Upper
146	100		
111	43.0	20.6	61.9
148	64.7	31.8	95.3



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

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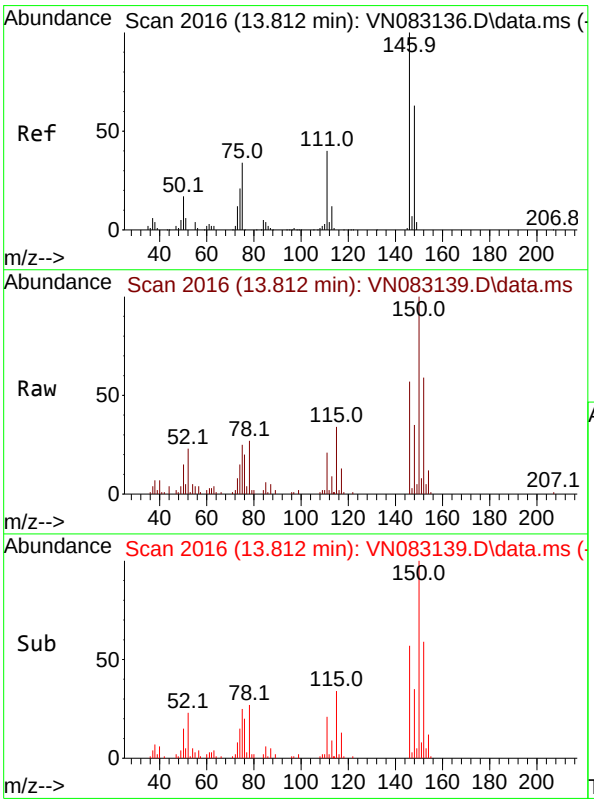
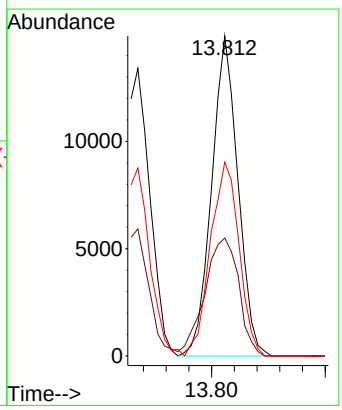
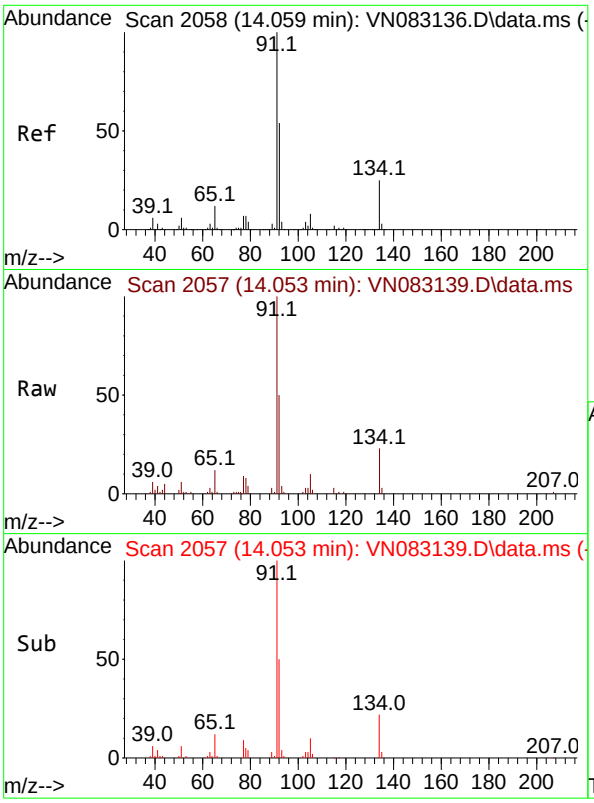


#88
1,4-Dichlorobenzene
Concen: 5.093 ug/l
RT: 13.812 min Scan# 2016
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion:146 Resp: 23971

Ion	Ratio	Lower	Upper
146	100		
111	47.6	20.1	60.3
148	65.9	32.2	96.6

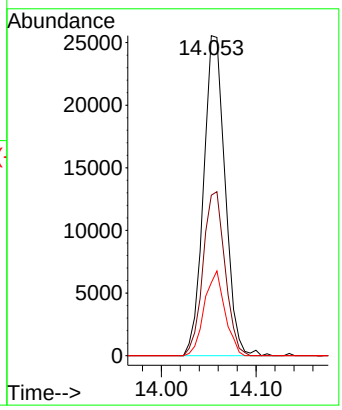




#89
n-Butylbenzene
Concen: 4.983 ug/l
RT: 14.053 min Scan# 2
Delta R.T. -0.006 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 91 Resp: 4028

Ion	Ratio	Lower	Upper
91	100		
92	52.3	26.1	78.3
134	25.3	12.1	36.3



Instrument :
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ClientSampleId :
VSTDICC005

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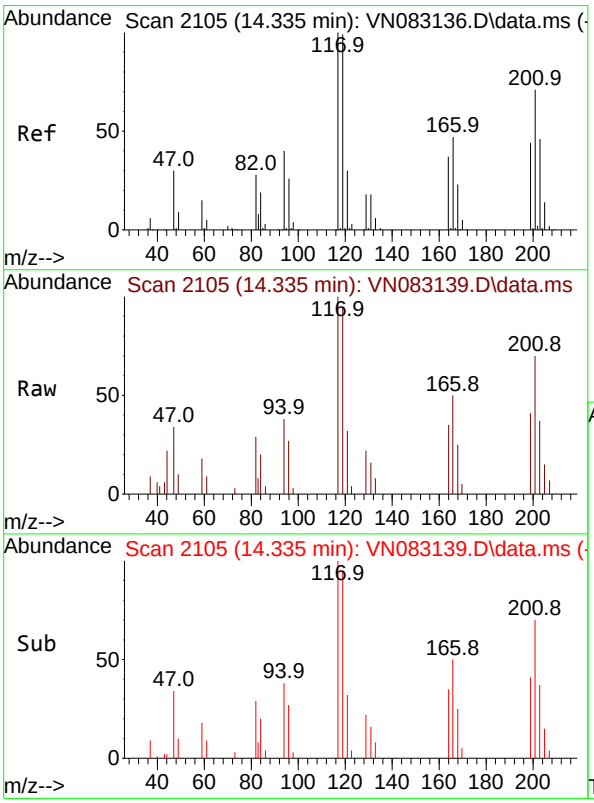
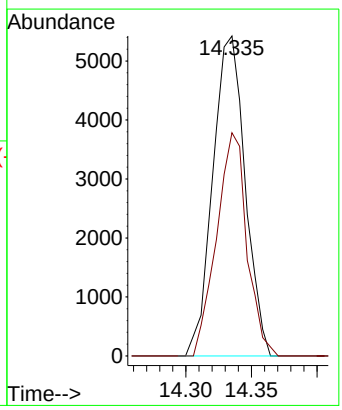
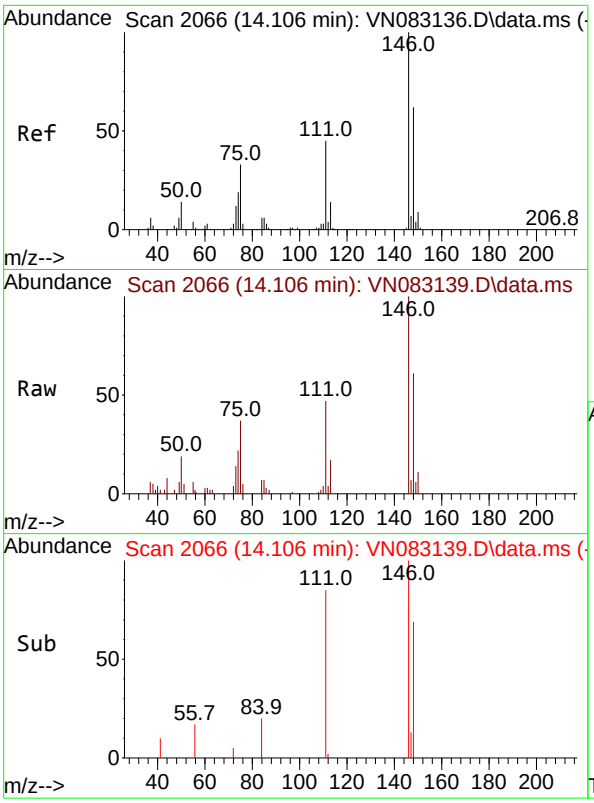


#90
Hexachloroethane
Concen: 5.158 ug/l
RT: 14.335 min Scan# 2105
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion:117 Resp: 9298

Ion	Ratio	Lower	Upper
117	100		
201	65.4	35.8	107.3

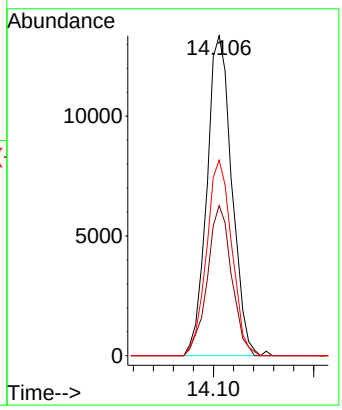




#91
1,2-Dichlorobenzene
Concen: 5.117 ug/l
RT: 14.106 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion:146 Resp: 2311

Ion	Ratio	Lower	Upper
146	100		
111	45.5	21.4	64.2
148	61.5	32.1	96.5



Instrument :
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ClientSampleId :
VSTDICC005

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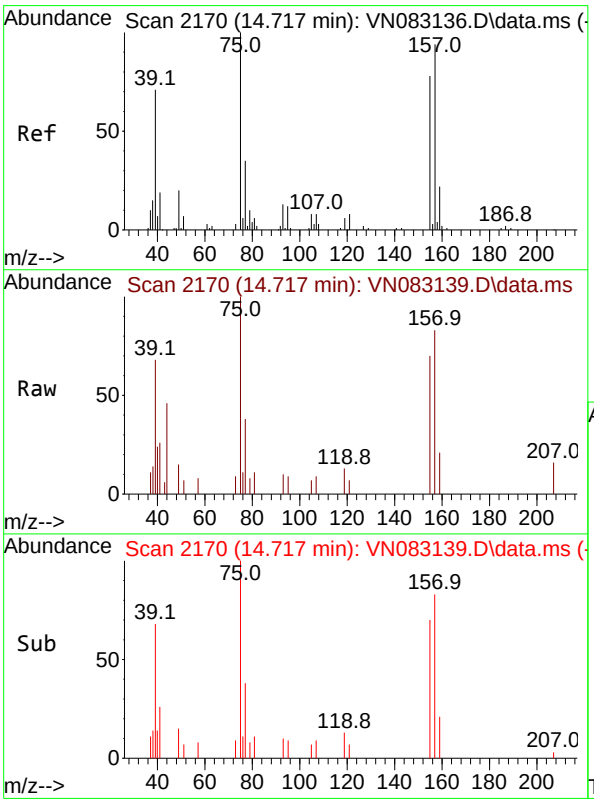
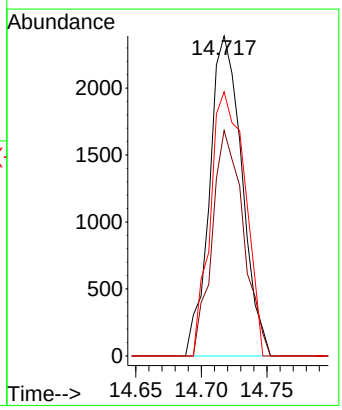
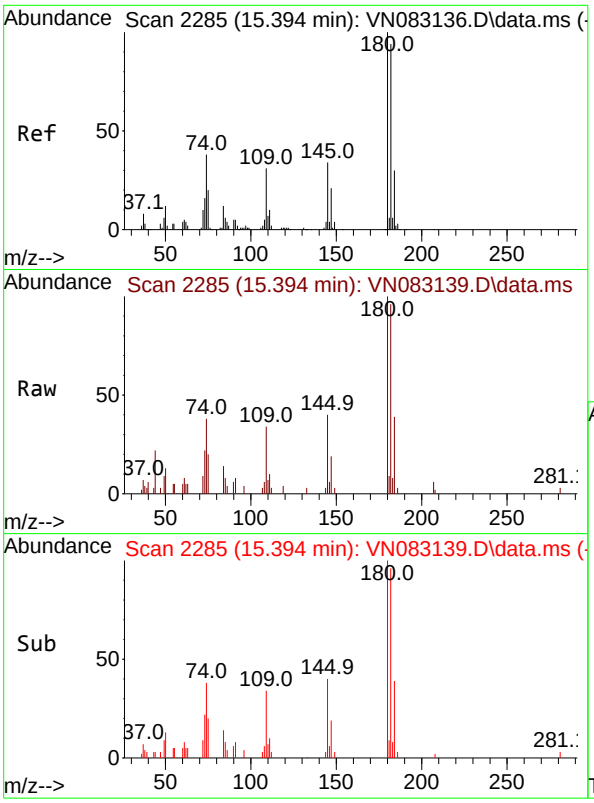


#92
1,2-Dibromo-3-Chloropropane
Concen: 5.345 ug/l
RT: 14.717 min Scan# 2170
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 75 Resp: 4097

Ion	Ratio	Lower	Upper
75	100		
155	68.1	36.6	109.8
157	88.3	46.9	140.6

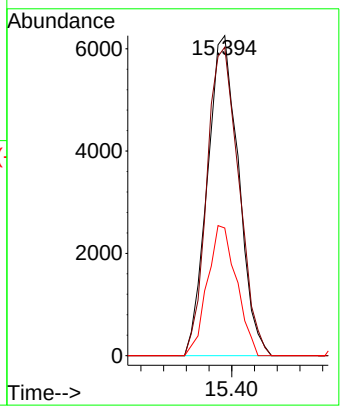




#93
1,2,4-Trichlorobenzene
Concen: 4.710 ug/l
RT: 15.394 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion:180 Resp: 1192

Ion	Ratio	Lower	Upper
180	100		
182	98.9	47.3	141.8
145	38.1	15.7	47.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
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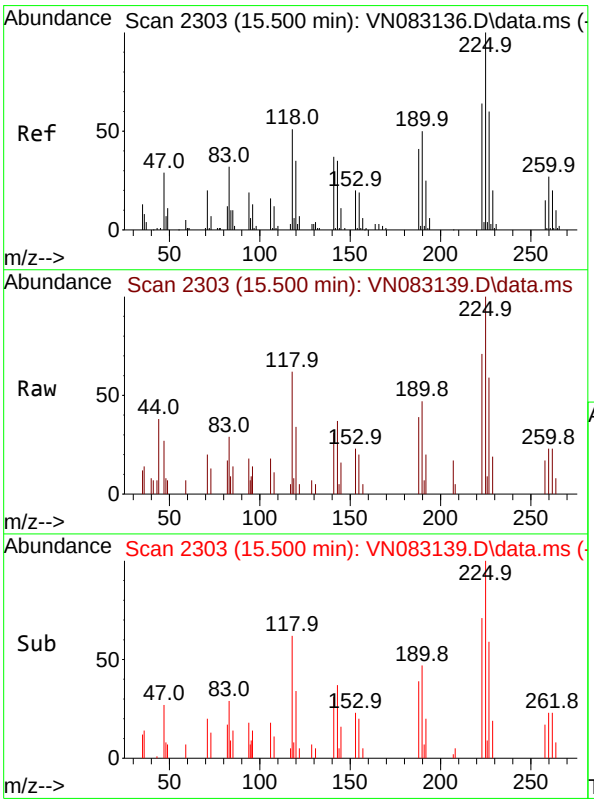
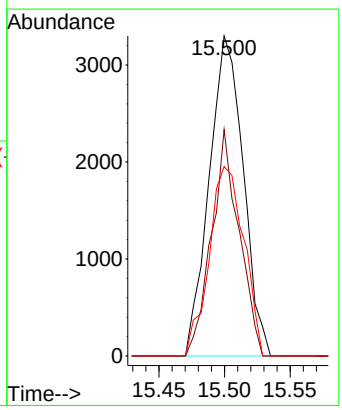
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

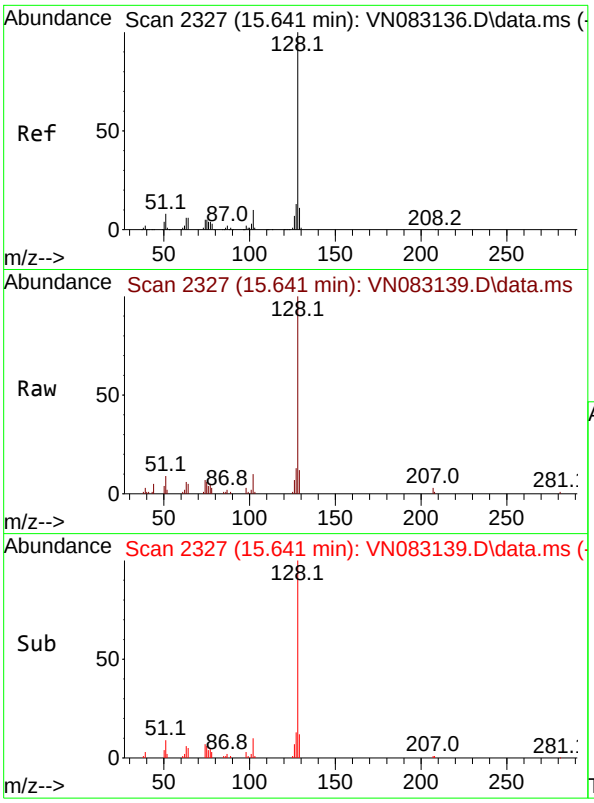


#94
Hexachlorobutadiene
Concen: 5.282 ug/l
RT: 15.500 min Scan# 2303
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion:225 Resp: 5946

Ion	Ratio	Lower	Upper
225	100		
223	57.3	31.9	95.7
227	60.5	32.5	97.5

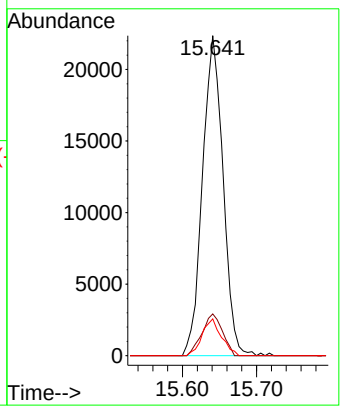




#95
Naphthalene
Concen: 4.811 ug/l
RT: 15.641 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion:128 Resp: 4313

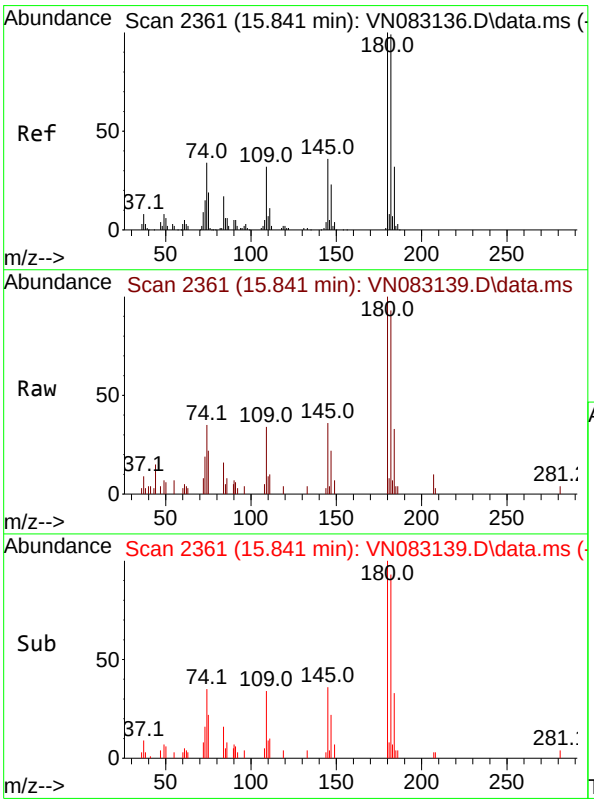
Ion	Ratio	Lower	Upper
128	100		
127	13.0	10.6	16.0
129	10.8	8.6	12.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

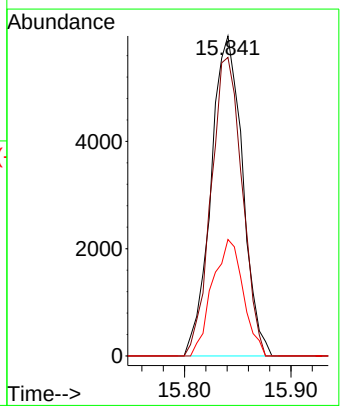
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024



#96
1,2,3-Trichlorobenzene
Concen: 4.905 ug/l
RT: 15.841 min Scan# 2361
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion:180 Resp: 12285

Ion	Ratio	Lower	Upper
180	100		
182	91.5	48.9	146.8
145	35.5	16.8	50.4



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN080724\
Data File : VN083140.D
Acq On : 07 Aug 2024 12:34
Operator : JC\MD
Sample : VSTDICC001
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

Quant Time: Aug 08 06:19:42 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 05:50:26 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	8.224	168	202290	50.000	ug/l		0.00
34) 1,4-Difluorobenzene	9.100	114	347394	50.000	ug/l		0.00
63) Chlorobenzene-d5	11.865	117	292647	50.000	ug/l		0.00
72) 1,4-Dichlorobenzene-d4	13.794	152	122922	50.000	ug/l		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4	0.000	65	0d	0.000	ug/l		
Spiked Amount 50.000	Range 74 - 125		Recovery =	0.000%#			
35) Dibromofluoromethane	0.000	113	0d	0.000	ug/l		
Spiked Amount 50.000	Range 75 - 124		Recovery =	0.000%#			
50) Toluene-d8	0.000	98	0d	0.000	ug/l		
Spiked Amount 50.000	Range 86 - 113		Recovery =	0.000%#			
62) 4-Bromofluorobenzene	0.000	95	0d	0.000	ug/l		
Spiked Amount 50.000	Range 64 - 133		Recovery =	0.000%#			
Target Compounds							Qvalue
2) Dichlorodifluoromethane	2.124	85	2193	0.956	ug/l		84
3) Chloromethane	2.365	50	2331	0.993	ug/l		96
4) Vinyl Chloride	2.512	62	2457	1.025	ug/l		94
6) Chloroethane	3.124	64	1763	1.176	ug/l	#	54
7) Trichlorofluoromethane	3.495	101	3645	0.921	ug/l		88
8) Diethyl Ether	3.965	74	1368	0.929	ug/l		95
9) 1,1,2-Trichlorotrifluo...	4.371	101	2064	0.946	ug/l	#	88
12) 1,1-Dichloroethene	4.342	96	2328	1.038	ug/l	#	72
14) Allyl chloride	5.018	41	4894	1.155	ug/l	#	75
15) Acrylonitrile	5.724	53	6198	5.036	ug/l		94
16) Acetone	4.442	43	5369	4.765	ug/l		95
17) Carbon Disulfide	4.718	76	7603	1.159	ug/l		99
18) Methyl Acetate	5.036	43	3987	1.188	ug/l	#	89
19) Methyl tert-butyl Ether	5.795	73	7900	0.976	ug/l		96
20) Methylene Chloride	5.283	84	3255	1.255	ug/l	#	63
21) trans-1,2-Dichloroethene	5.783	96	2425	1.046	ug/l	#	75
22) Diisopropyl ether	6.677	45	7871	0.988	ug/l		94
23) Vinyl Acetate	6.606	43	39044	4.783	ug/l	#	94
24) 1,1-Dichloroethane	6.571	63	4189	0.965	ug/l	#	83
25) 2-Butanone	7.495	43	9164	5.297	ug/l		93
26) 2,2-Dichloropropane	7.489	77	3741	0.928	ug/l		95
27) cis-1,2-Dichloroethene	7.495	96	2919	1.044	ug/l		90
28) Bromochloromethane	7.812	49	1883	1.061	ug/l	#	92
29) Tetrahydrofuran	7.842	42	5490	4.909	ug/l	#	87
30) Chloroform	7.971	83	4457	0.988	ug/l		95
32) 1,1,1-Trichloroethane	8.171	97	4076	0.955	ug/l	#	49
36) 1,1-Dichloropropene	8.377	75	3393	1.034	ug/l		97
37) Ethyl Acetate	7.565	43	4617	1.257	ug/l	#	90
38) Carbon Tetrachloride	8.359	117	3422	0.926	ug/l	#	84
39) Methylcyclohexane	9.600	83	3974	0.986	ug/l		87
40) Benzene	8.606	78	9334	0.955	ug/l		99
41) Methacrylonitrile	7.783	41	2618	1.254	ug/l	#	85
42) 1,2-Dichloroethane	8.677	62	3457	0.971	ug/l		82
43) Isopropyl Acetate	8.689	43	14981	0.753	ug/l	#	80
44) Trichloroethene	9.359	130	2151	0.925	ug/l		98
45) 1,2-Dichloropropane	9.618	63	2194	0.946	ug/l		93

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN080724\
Data File : VN083140.D
Acq On : 07 Aug 2024 12:34
Operator : JC\MD
Sample : VSTDICC001
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

Quant Time: Aug 08 06:19:42 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 05:50:26 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
46) Dibromomethane	9.700	93	1513	0.911 ug/l	95
47) Bromodichloromethane	9.894	83	3783	1.015 ug/l #	83
48) Methyl methacrylate	9.683	41	3518	1.159 ug/l	96
49) 1,4-Dioxane	9.700	88	1089	19.880 ug/l #	77
51) 4-Methyl-2-Pentanone	10.447	43	15872	4.570 ug/l	90
52) Toluene	10.630	92	5723	0.927 ug/l	97
53) t-1,3-Dichloropropene	10.835	75	3260	0.851 ug/l	100
54) cis-1,3-Dichloropropene	10.312	75	3797	0.932 ug/l #	87
55) 1,1,2-Trichloroethane	11.018	97	1963	0.887 ug/l	96
56) Ethyl methacrylate	10.871	69	3843	0.921 ug/l #	90
57) 1,3-Dichloropropane	11.165	76	3837	0.973 ug/l	99
58) 2-Chloroethyl Vinyl ether	10.159	63	8453	4.794 ug/l	93
59) 2-Hexanone	11.200	43	12761	4.749 ug/l	100
60) Dibromochloromethane	11.353	129	2283	0.853 ug/l	99
61) 1,2-Dibromoethane	11.465	107	2200	0.947 ug/l	98
64) Tetrachloroethene	11.106	164	1872	0.966 ug/l	93
65) Chlorobenzene	11.888	112	6259	0.968 ug/l	93
66) 1,1,1,2-Tetrachloroethane	11.965	131	2168	0.951 ug/l #	63
67) Ethyl Benzene	11.965	91	11455	0.966 ug/l	98
68) m/p-Xylenes	12.065	106	8266	1.860 ug/l	94
69) o-Xylene	12.400	106	4113	0.938 ug/l	98
70) Styrene	12.412	104	6441	0.875 ug/l	90
71) Bromoform	12.577	173	1561	0.903 ug/l #	88
73) Isopropylbenzene	12.694	105	10459	1.017 ug/l	99
74) N-amyl acetate	12.494	43	5755	1.144 ug/l #	92
75) 1,1,2,2-Tetrachloroethane	12.941	83	3034	1.043 ug/l	99
76) 1,2,3-Trichloropropane	12.988	75	3031m	1.122 ug/l	
77) Bromobenzene	12.977	156	2212	0.969 ug/l	86
78) n-propylbenzene	13.029	91	11800	0.997 ug/l	99
79) 2-Chlorotoluene	13.124	91	7735	1.031 ug/l	90
80) 1,3,5-Trimethylbenzene	13.176	105	8552	0.994 ug/l	95
82) 4-Chlorotoluene	13.224	91	8018	1.065 ug/l	93
83) tert-Butylbenzene	13.435	119	7628	1.001 ug/l	98
84) 1,2,4-Trimethylbenzene	13.482	105	8397	0.968 ug/l	100
85) sec-Butylbenzene	13.618	105	10411	1.001 ug/l	96
86) p-Isopropyltoluene	13.735	119	8247	0.960 ug/l	99
87) 1,3-Dichlorobenzene	13.735	146	4598	1.070 ug/l	97
88) 1,4-Dichlorobenzene	13.812	146	4578m	1.057 ug/l	
89) n-Butylbenzene	14.053	91	7008	0.942 ug/l	100
90) Hexachloroethane	14.335	117	1524	0.918 ug/l	93
91) 1,2-Dichlorobenzene	14.106	146	4279	1.029 ug/l	95
92) 1,2-Dibromo-3-Chloropr...	14.718	75	763	1.081 ug/l	78
93) 1,2,4-Trichlorobenzene	15.394	180	2493	1.070 ug/l	97
94) Hexachlorobutadiene	15.512	225	1181	1.140 ug/l	92
95) Naphthalene	15.641	128	8430	1.021 ug/l #	96
96) 1,2,3-Trichlorobenzene	15.835	180	2389	1.036 ug/l	96

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

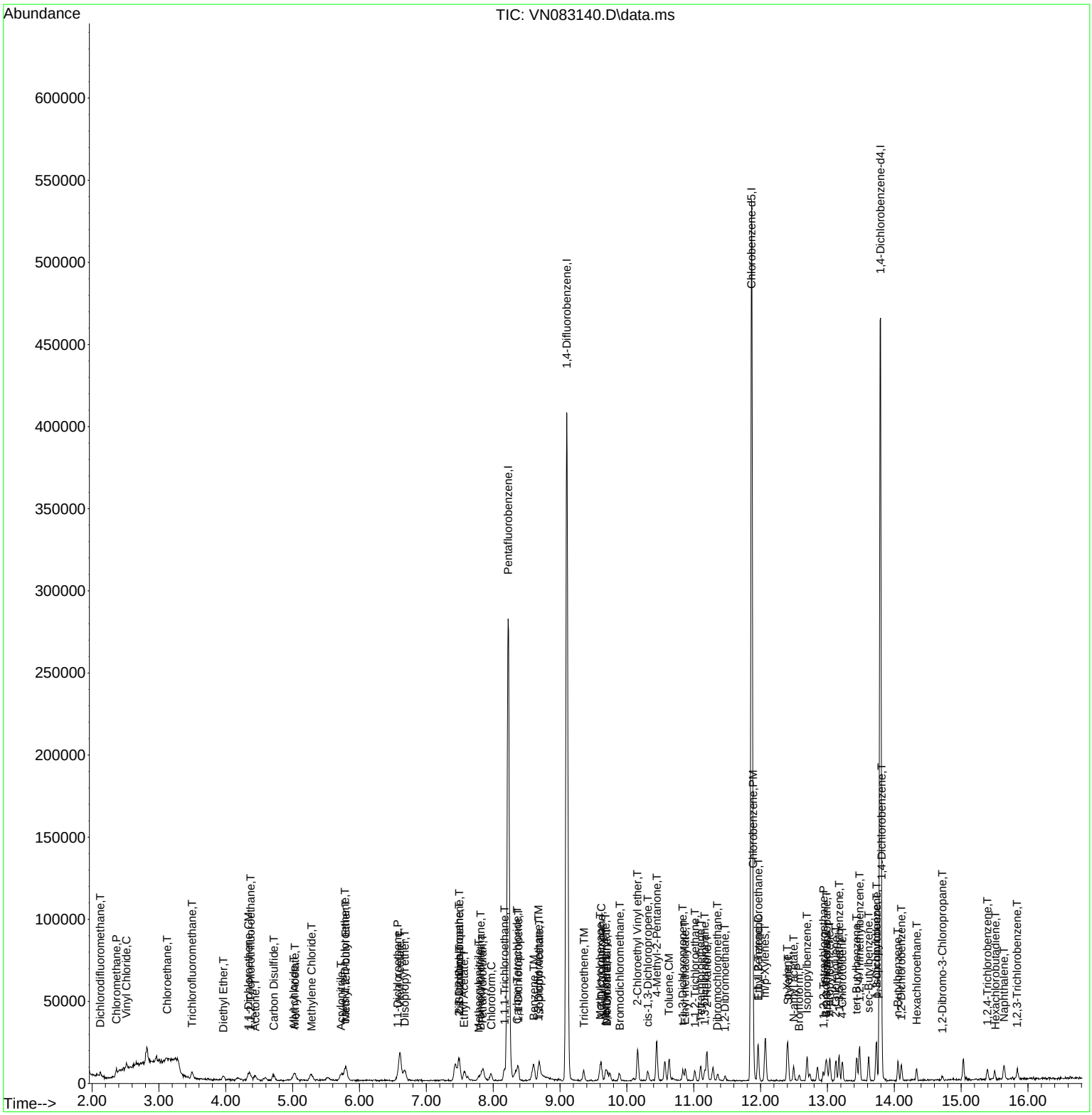
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN080724\
Data File : VN083140.D
Acq On : 07 Aug 2024 12:34
Operator : JC\MD
Sample : VSTDICC001
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

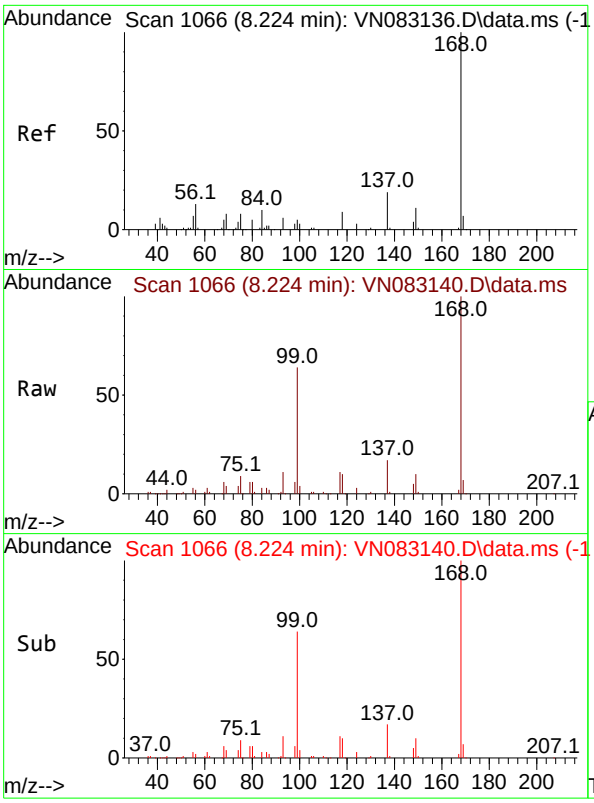
Quant Time: Aug 08 06:19:42 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 05:50:26 2024
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

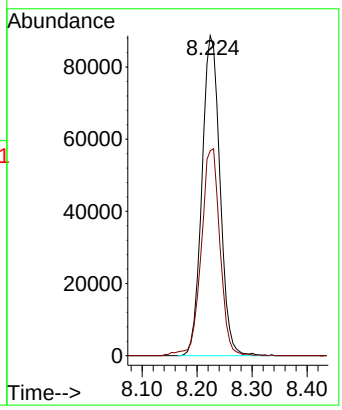




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion:168 Resp: 20229

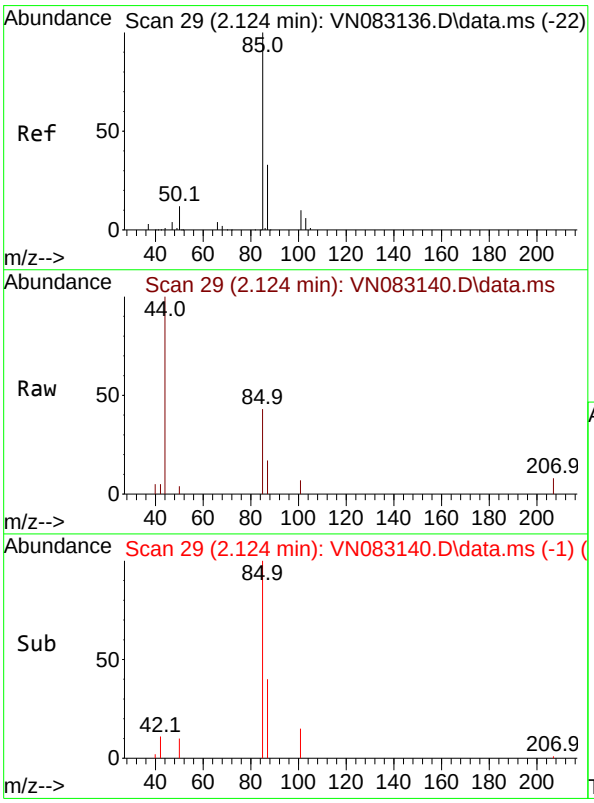
Ion	Ratio	Lower	Upper
168	100		
99	64.1	48.2	72.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

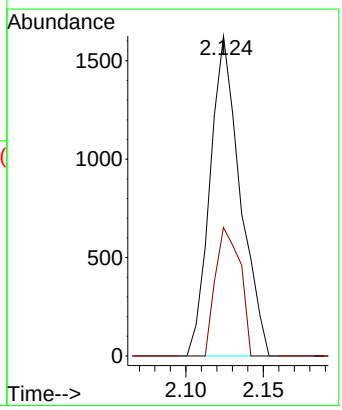
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

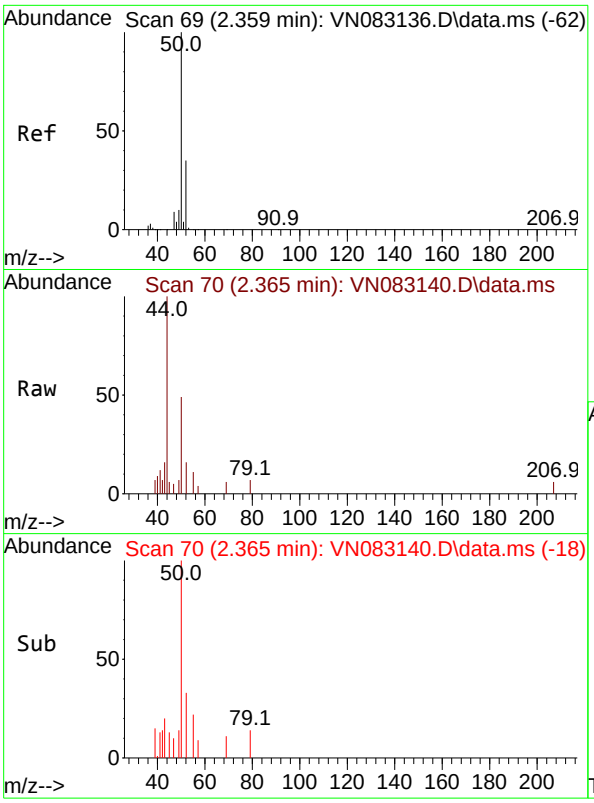


#2
Dichlorodifluoromethane
Concen: 0.956 ug/l
RT: 2.124 min Scan# 29
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 85 Resp: 2193

Ion	Ratio	Lower	Upper
85	100		
87	40.2	15.7	47.0





#3
Chloromethane
Concen: 0.993 ug/l
RT: 2.365 min Scan# 7
Delta R.T. 0.006 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

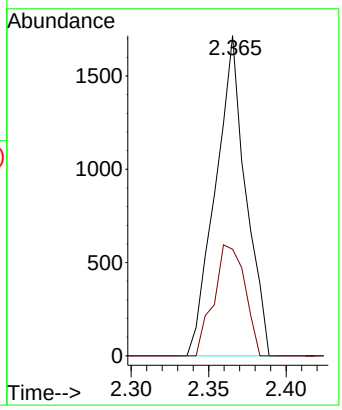
Tgt Ion: 50 Resp: 233

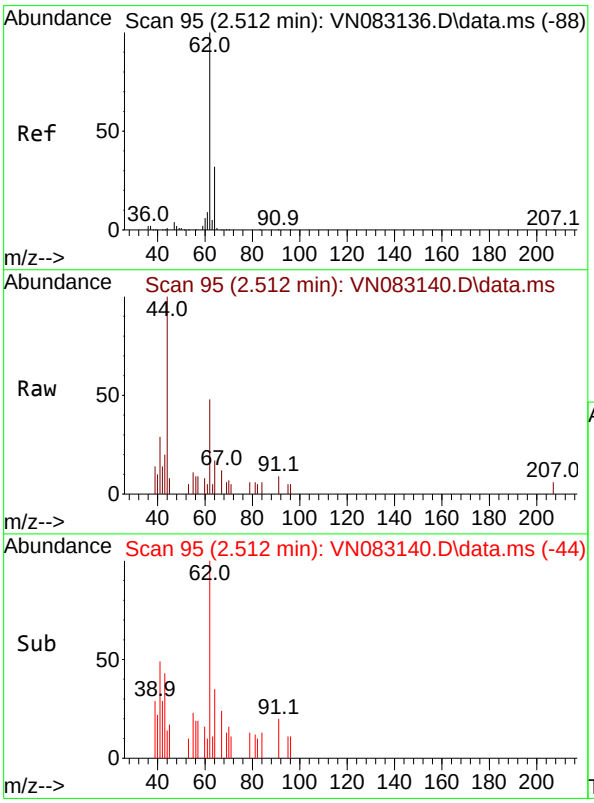
Ion	Ratio	Lower	Upper
50	100		
52	33.3	25.0	37.4

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

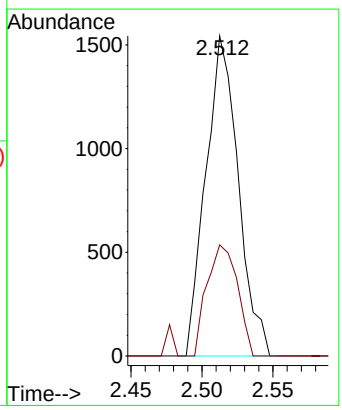


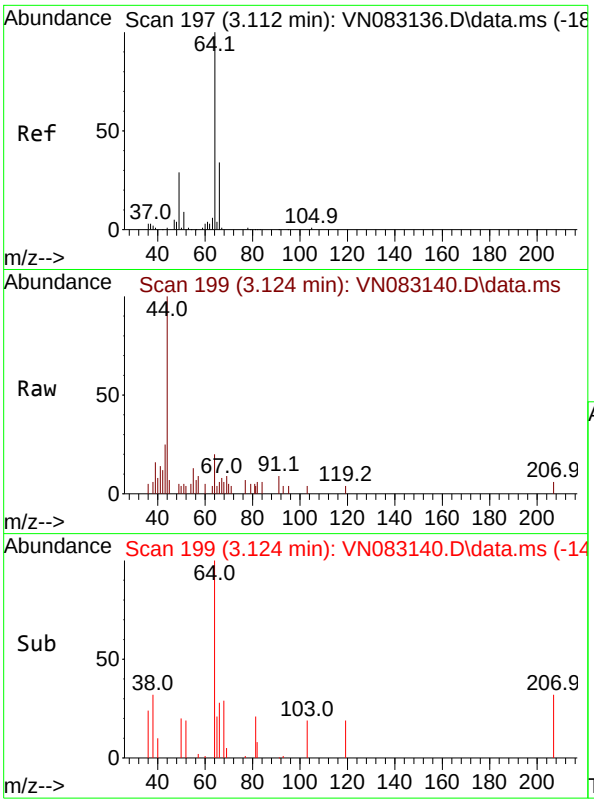


#4
Vinyl Chloride
Concen: 1.025 ug/l
RT: 2.512 min Scan# 95
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 62 Resp: 2457

Ion	Ratio	Lower	Upper
62	100		
64	34.7	25.0	37.6

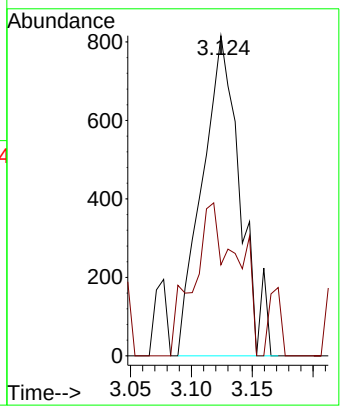




#6
Chloroethane
Concen: 1.176 ug/l
RT: 3.124 min Scan# 1
Delta R.T. 0.012 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 64 Resp: 176

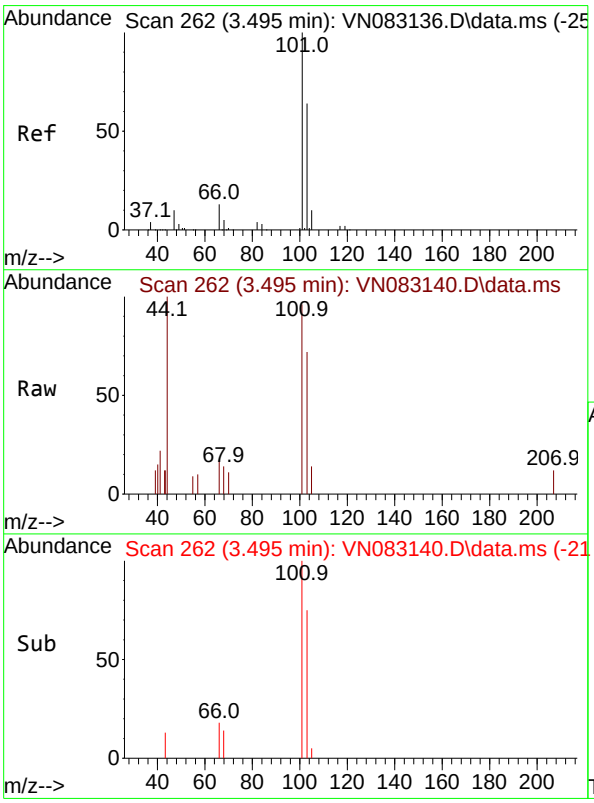
Ion	Ratio	Lower	Upper
64	100		
66	7.1	26.6	40.0#



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

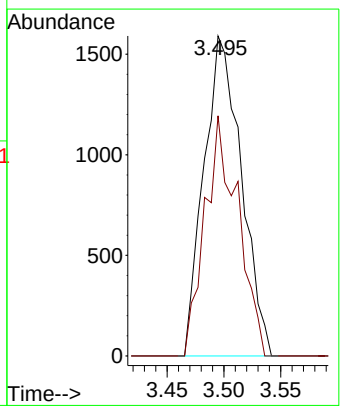
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

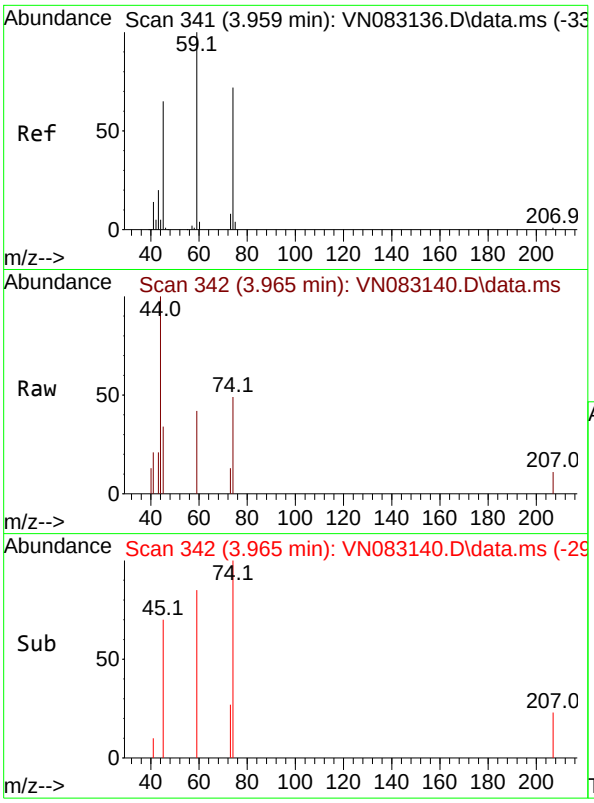


#7
Trichlorofluoromethane
Concen: 0.921 ug/l
RT: 3.495 min Scan# 262
Delta R.T. -0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion:101 Resp: 3645

Ion	Ratio	Lower	Upper
101	100		
103	75.0	52.7	79.1





#8
Diethyl Ether
Concen: 0.929 ug/l
RT: 3.965 min Scan# 34
Delta R.T. 0.006 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

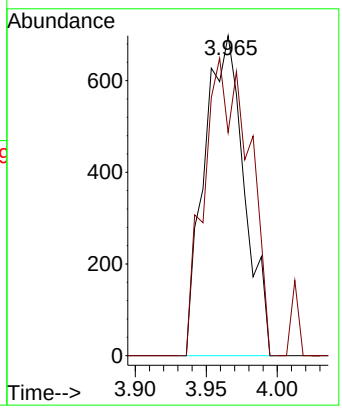
Tgt Ion: 74 Resp: 136

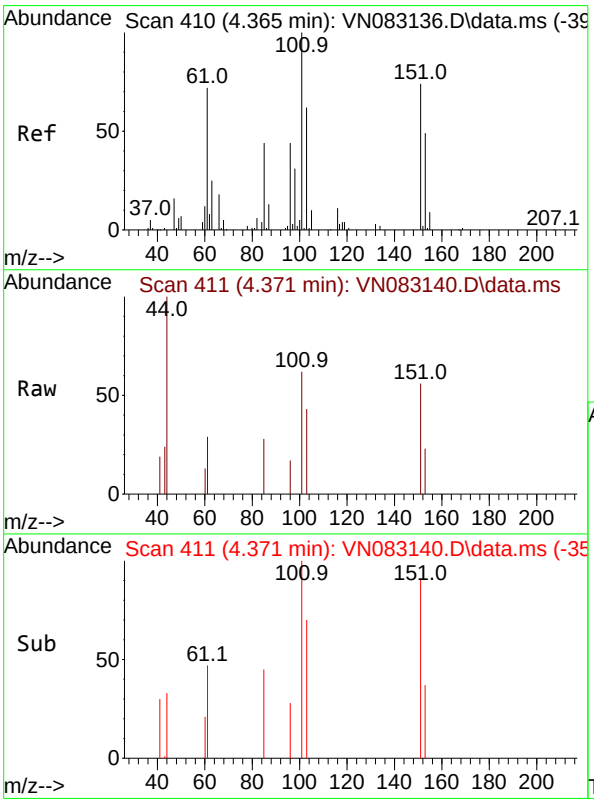
Ion	Ratio	Lower	Upper
74	100		
45	105.1	55.5	166.3

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

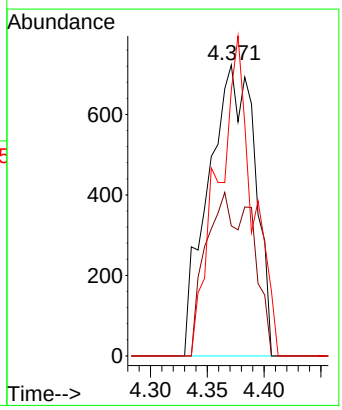


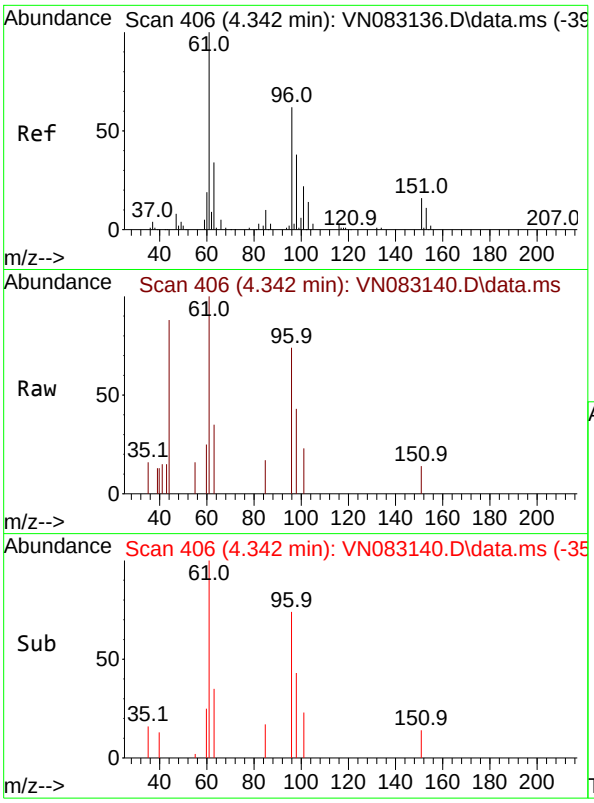


#9
1,1,2-Trichlorotrifluoroethane
Concen: 0.946 ug/l
RT: 4.371 min Scan# 411
Delta R.T. 0.006 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion:101 Resp: 2064

Ion	Ratio	Lower	Upper
101	100		
85	37.3	38.3	57.5#
151	82.8	59.3	88.9

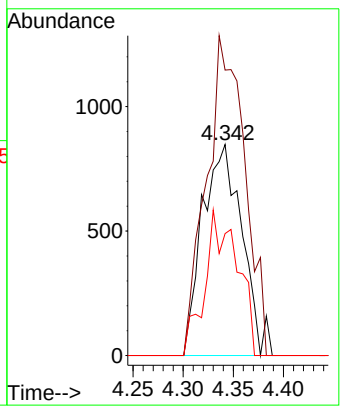




#12
1,1-Dichloroethene
Concen: 1.038 ug/l
RT: 4.342 min Scan# 4(
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 96 Resp: 232

Ion	Ratio	Lower	Upper
96	100		
61	135.3	149.7	224.5#
98	57.8	50.1	75.1



Instrument :
MSVOA_N
ClientSampleId :
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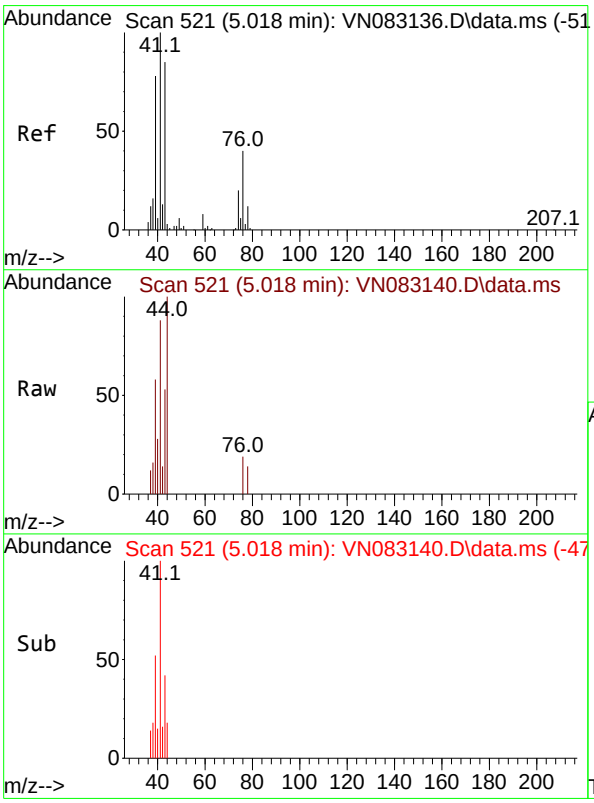
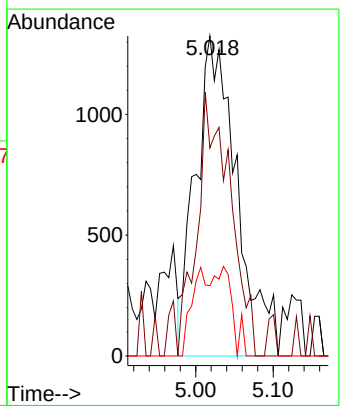
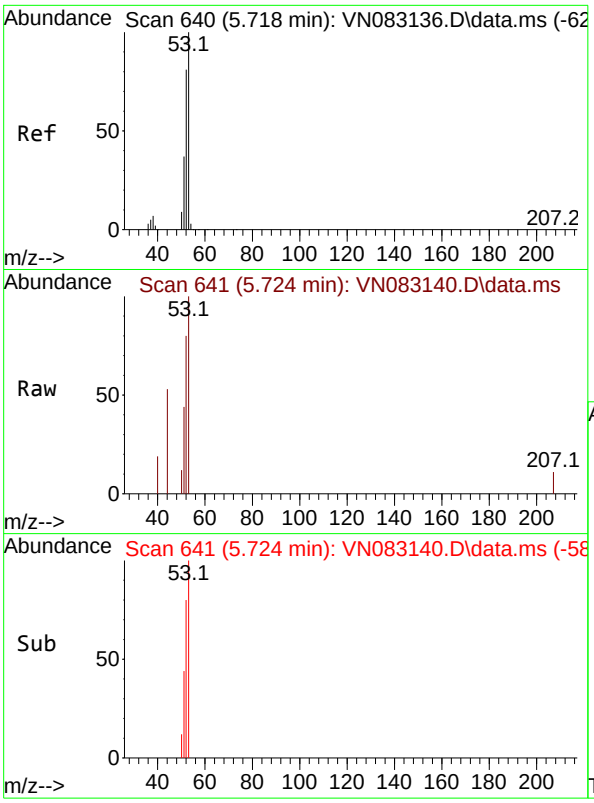


#14
Allyl chloride
Concen: 1.155 ug/l
RT: 5.018 min Scan# 521
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 41 Resp: 4894

Ion	Ratio	Lower	Upper
41	100		
39	65.9	67.8	101.6#
76	11.9	25.8	38.8#

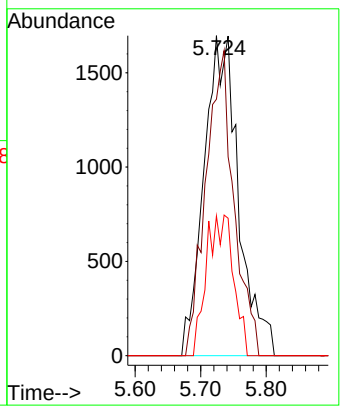




#15
Acrylonitrile
Concen: 5.036 ug/l
RT: 5.724 min Scan# 64
Delta R.T. 0.006 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 53 Resp: 619

Ion	Ratio	Lower	Upper
53	100		
52	77.5	66.6	100.0
51	34.3	30.1	45.1



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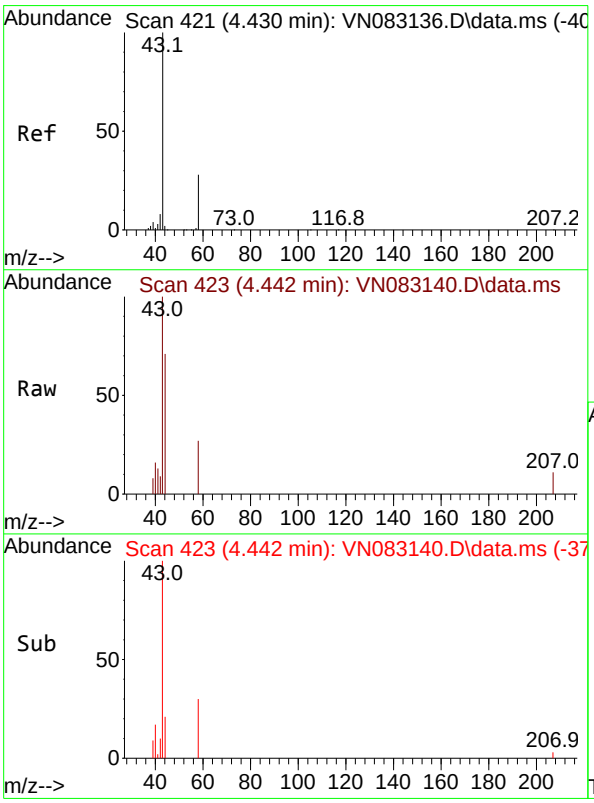
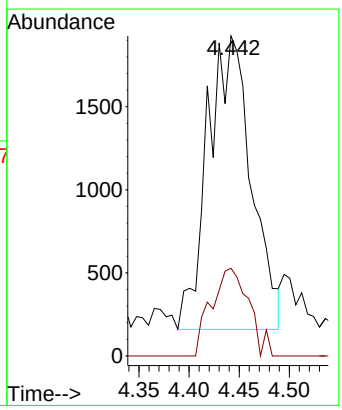
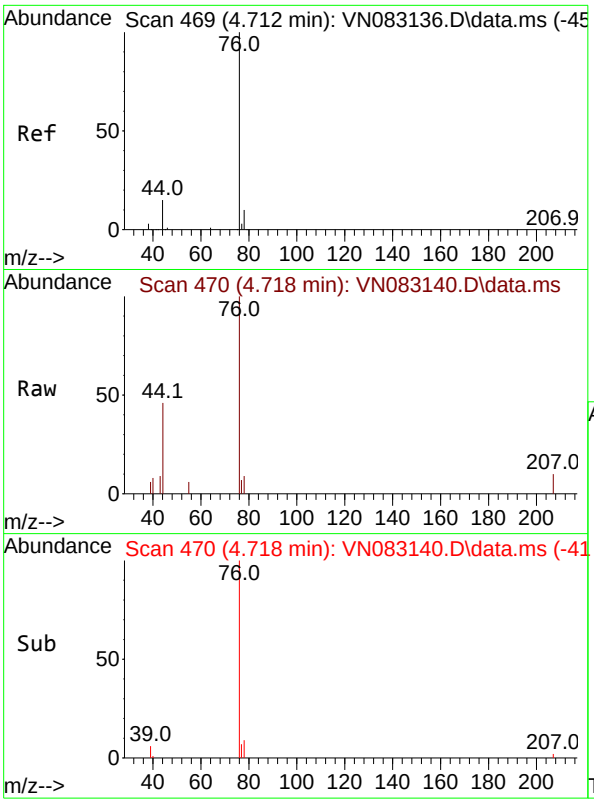


#16
Acetone
Concen: 4.765 ug/l
RT: 4.442 min Scan# 423
Delta R.T. 0.012 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 43 Resp: 5369

Ion	Ratio	Lower	Upper
43	100		
58	29.9	21.8	32.6

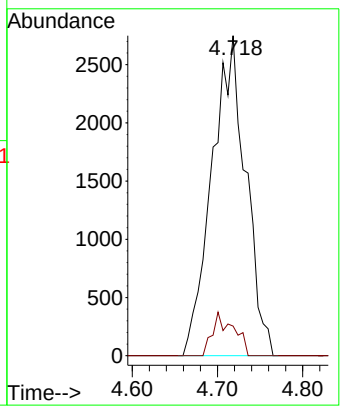




#17
Carbon Disulfide
Concen: 1.159 ug/l
RT: 4.718 min Scan# 4
Delta R.T. 0.006 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 76 Resp: 760

Ion	Ratio	Lower	Upper
76	100		
78	9.3	7.2	10.8



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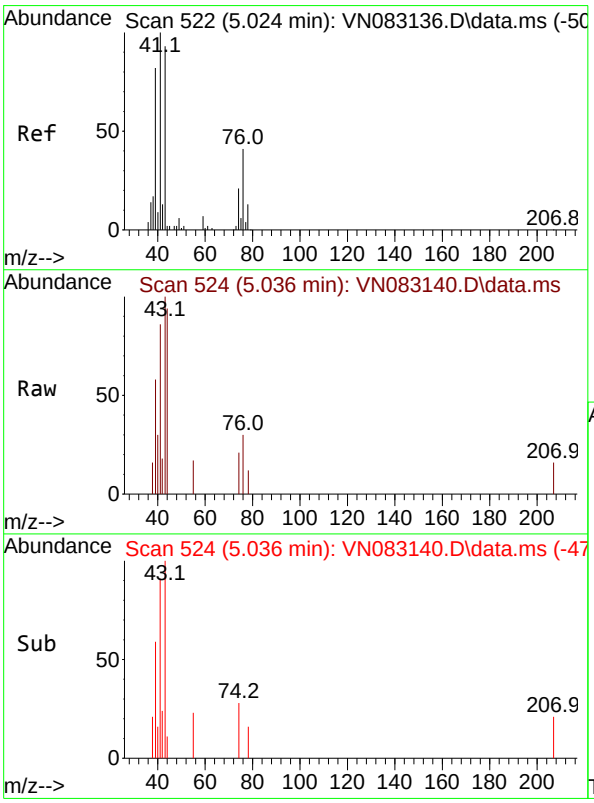
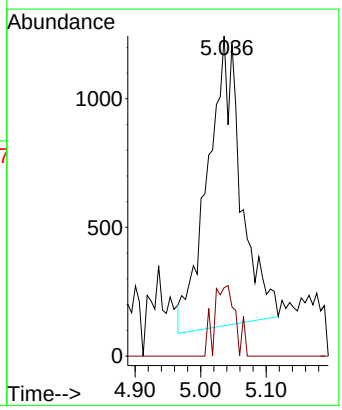
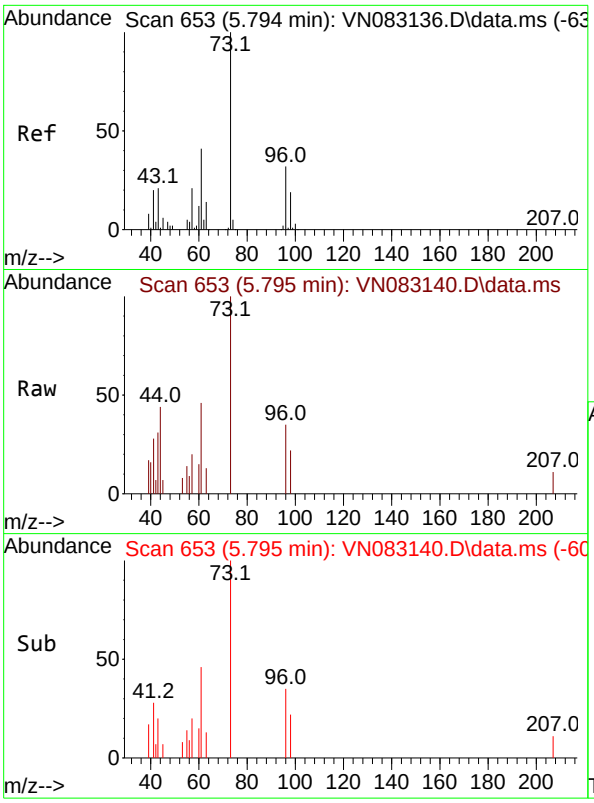


#18
Methyl Acetate
Concen: 1.188 ug/l
RT: 5.036 min Scan# 524
Delta R.T. 0.012 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 43 Resp: 3987

Ion	Ratio	Lower	Upper
43	100		
74	15.5	16.3	24.5#





#19
Methyl tert-butyl Ether
Concen: 0.976 ug/l
RT: 5.795 min Scan# 6
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 73 Resp: 790

Ion	Ratio	Lower	Upper
73	100		
57	20.5	17.9	26.9

Instrument :
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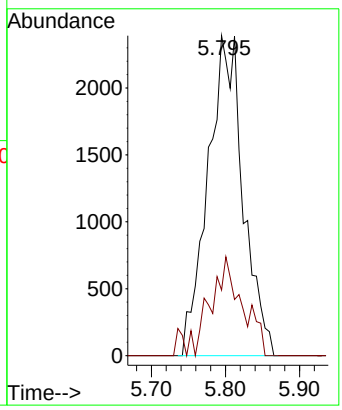
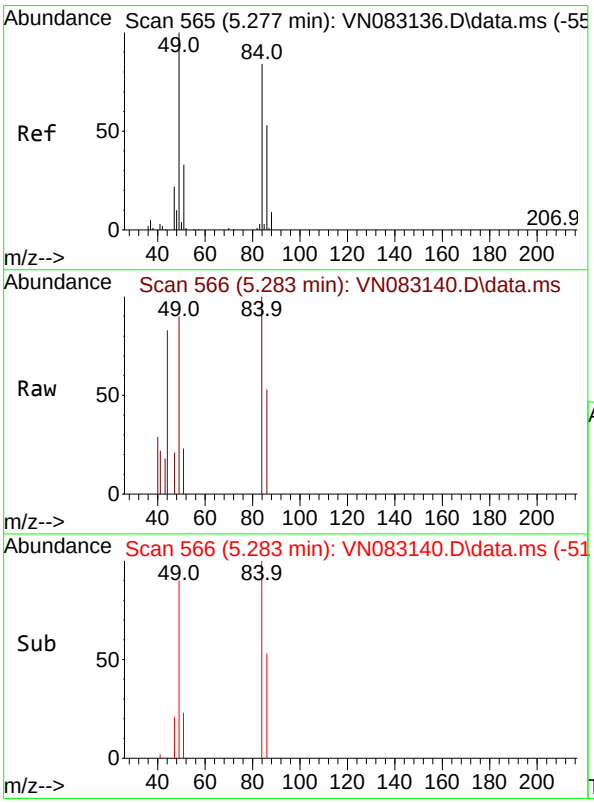
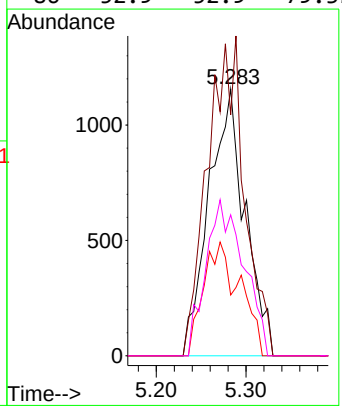


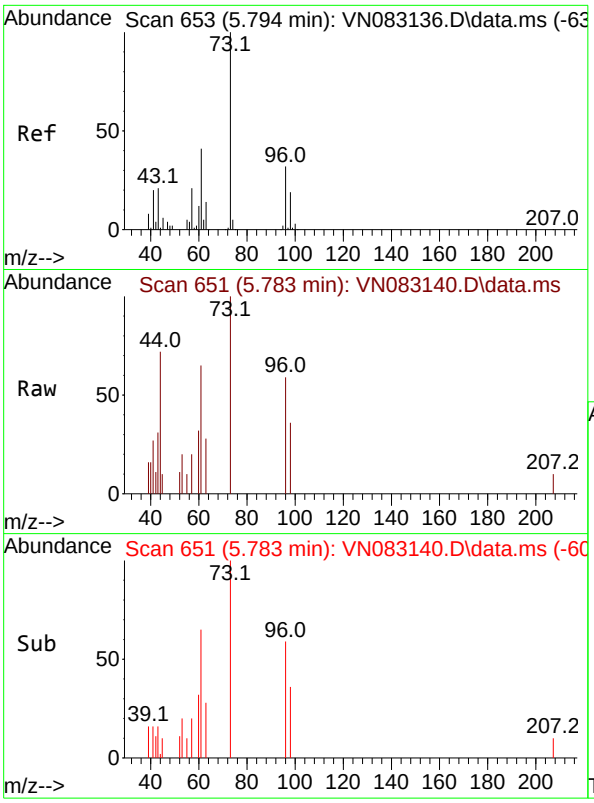


#20
Methylene Chloride
Concen: 1.255 ug/l
RT: 5.283 min Scan# 566
Delta R.T. 0.006 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 84 Resp: 3255

Ion	Ratio	Lower	Upper
84	100		
49	90.3	119.6	179.4#
51	22.8	34.8	52.2#
86	52.9	52.9	79.3#

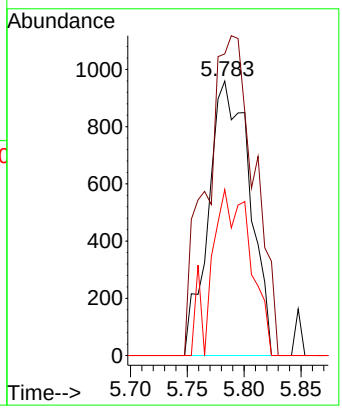




#21
trans-1,2-Dichloroethene
Concen: 1.046 ug/l
RT: 5.783 min Scan# 6
Delta R.T. -0.012 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 96 Resp: 242

Ion	Ratio	Lower	Upper
96	100		
61	109.9	123.4	185.2
98	60.5	49.3	73.9



Instrument :
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ClientSampleId :
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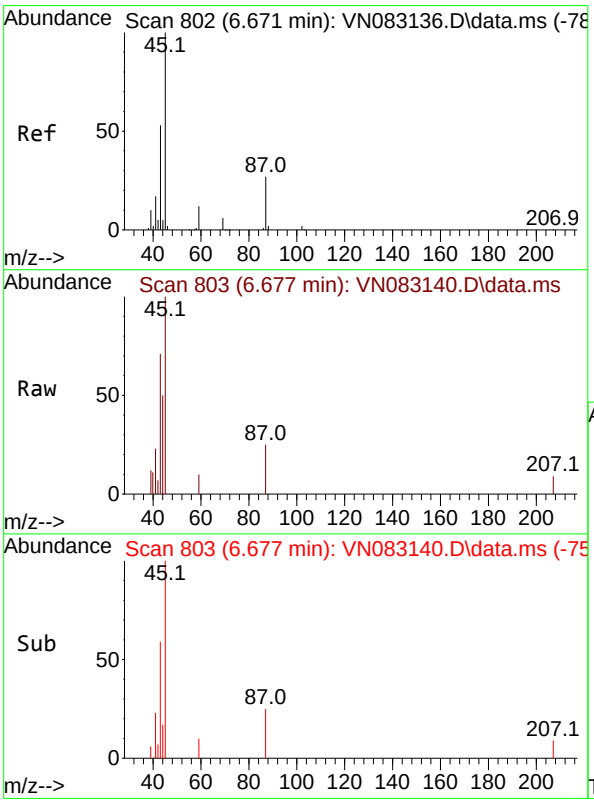
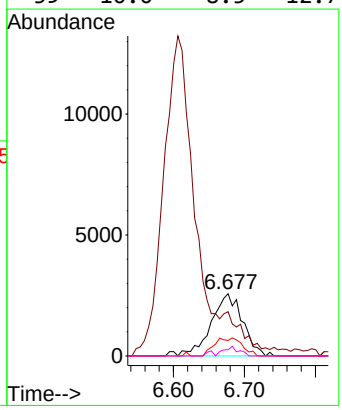
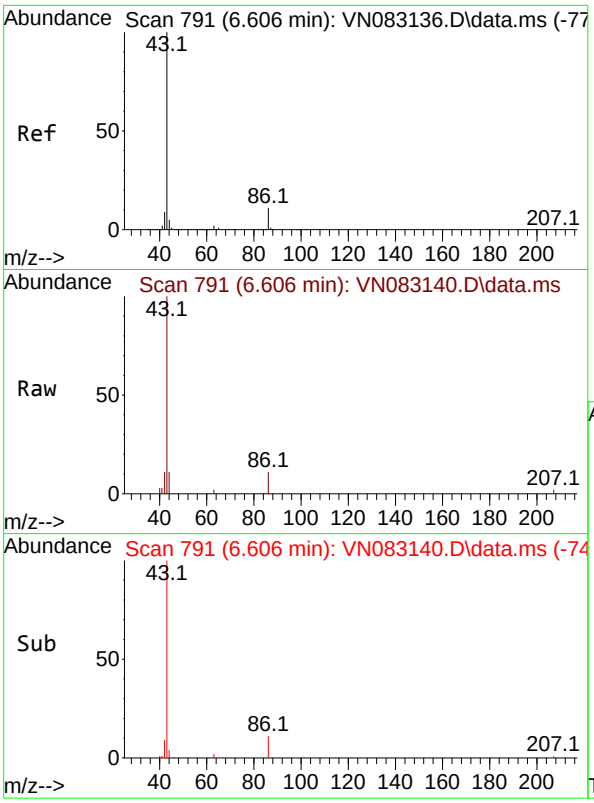


#22
Diisopropyl ether
Concen: 0.988 ug/l
RT: 6.677 min Scan# 803
Delta R.T. 0.006 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 45 Resp: 7871

Ion	Ratio	Lower	Upper
45	100		
43	61.5	44.0	66.0
87	24.9	19.7	29.5
59	10.0	8.5	12.7





#23
Vinyl Acetate
Concen: 4.783 ug/l
RT: 6.606 min Scan# 7
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 43 Resp: 3904

Ion	Ratio	Lower	Upper
43	100		
86	11.4	7.3	10.9#

Instrument :
MSVOA_N
ClientSampleId :
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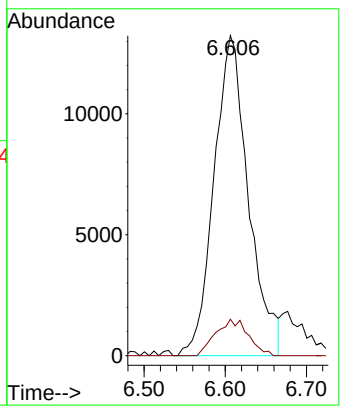
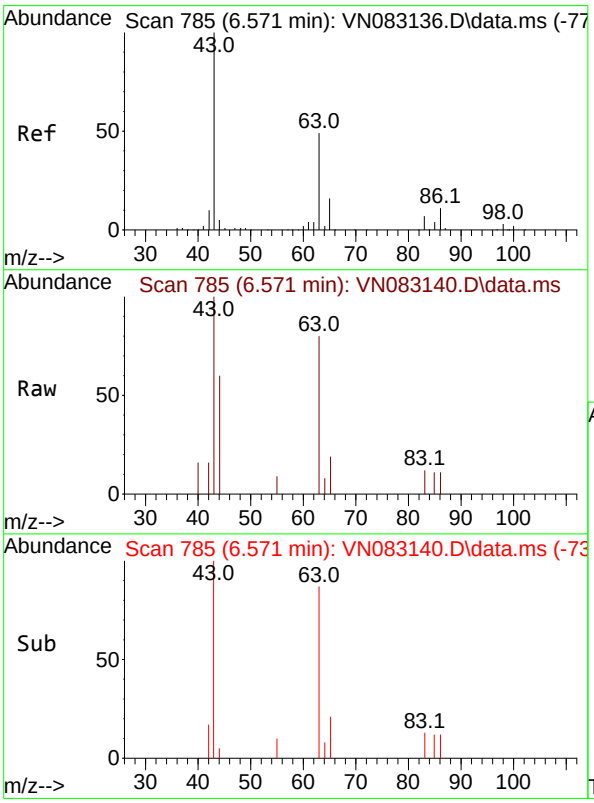
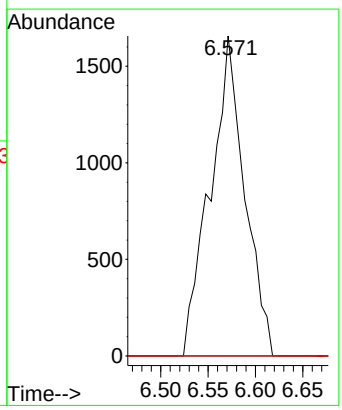


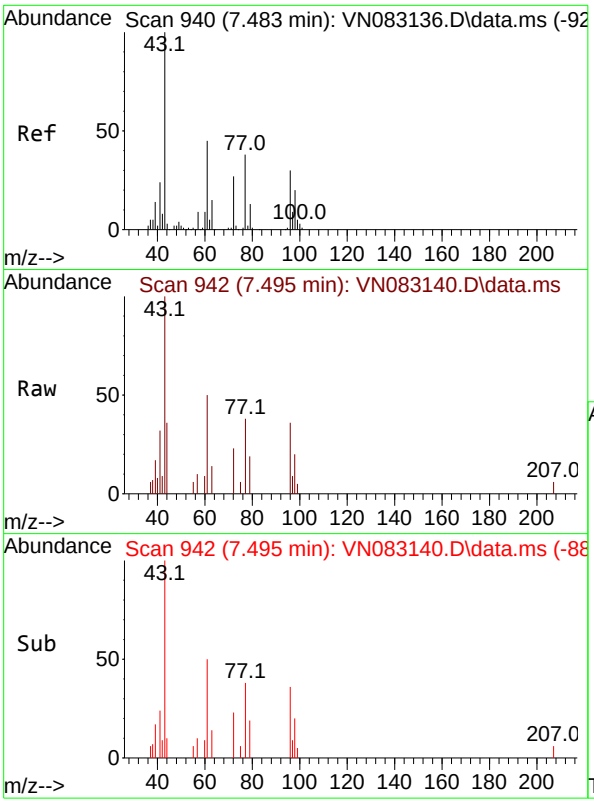


#24
1,1-Dichloroethane
Concen: 0.965 ug/l
RT: 6.571 min Scan# 785
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 63 Resp: 4189

Ion	Ratio	Lower	Upper
63	100		
98	0.0	3.3	9.9#
100	0.0	2.0	6.0#





#25
2-Butanone
Concen: 5.297 ug/l
RT: 7.495 min Scan# 94
Delta R.T. 0.012 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 43 Resp: 916

Ion	Ratio	Lower	Upper
43	100		
72	25.9	18.2	27.2

Instrument :
MSVOA_N
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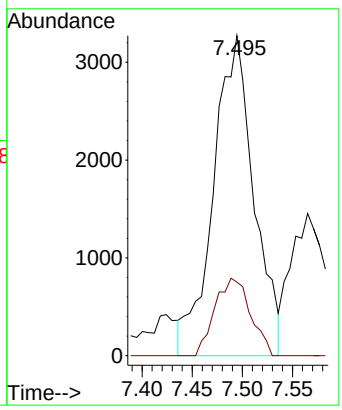
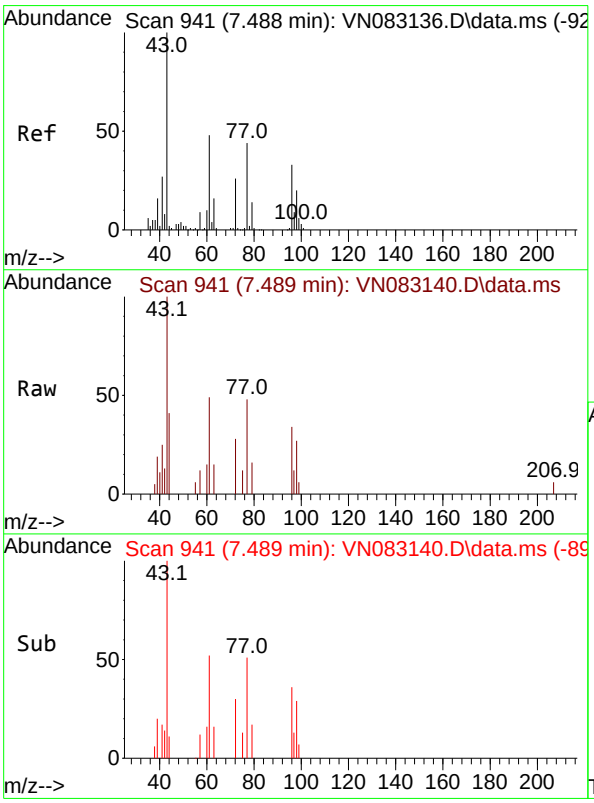
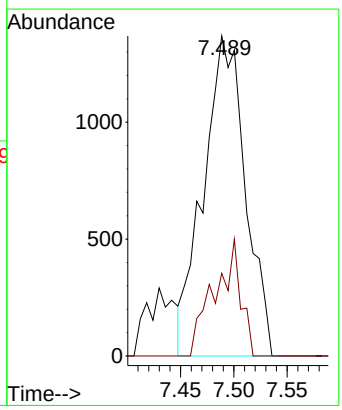


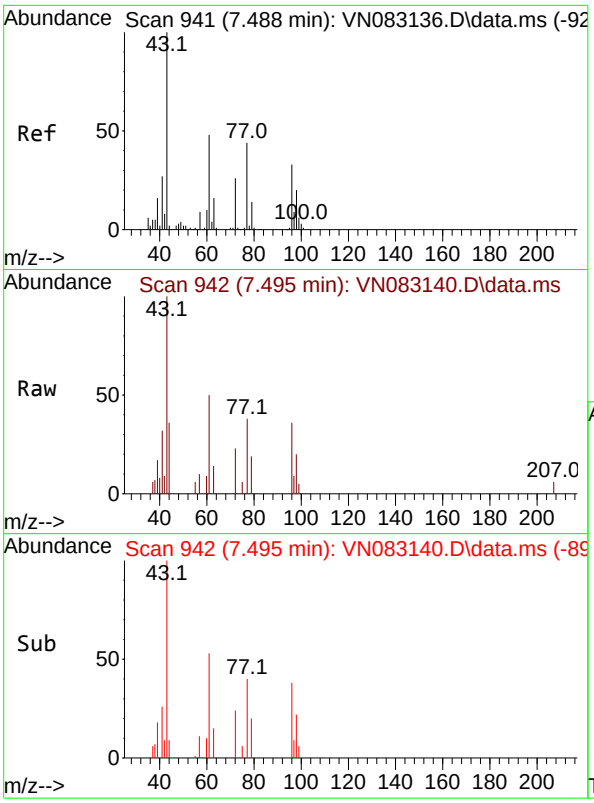


#26
2,2-Dichloropropane
Concen: 0.928 ug/l
RT: 7.489 min Scan# 941
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 77 Resp: 3741

Ion	Ratio	Lower	Upper
77	100		
97	22.9	10.3	30.9

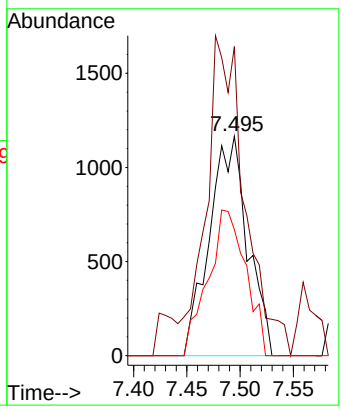




#27
cis-1,2-Dichloroethene
Concen: 1.044 ug/l
RT: 7.495 min Scan# 94
Delta R.T. 0.006 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 96 Resp: 291

Ion	Ratio	Lower	Upper
96	100		
61	146.7	0.0	329.6
98	65.4	0.0	128.6



Instrument :
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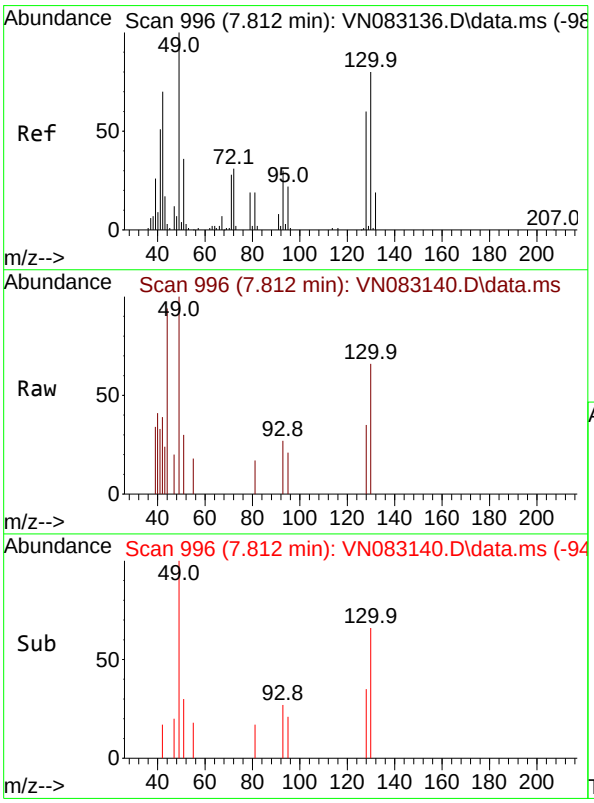
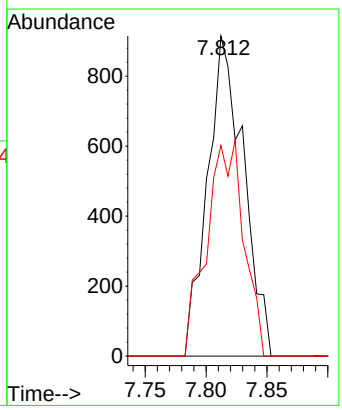
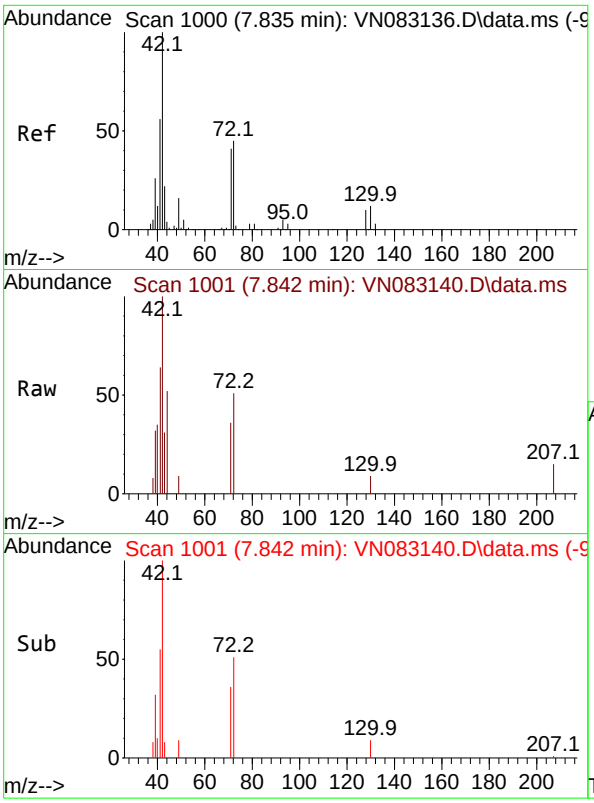


#28
Bromochloromethane
Concen: 1.061 ug/l
RT: 7.812 min Scan# 996
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 49 Resp: 1883

Ion	Ratio	Lower	Upper
49	100		
129	0.0	0.0	3.8
130	69.5	50.5	75.7

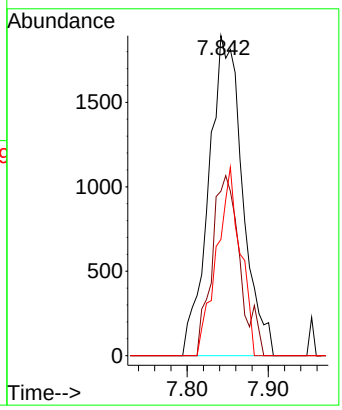




#29
Tetrahydrofuran
Concen: 4.909 ug/l
RT: 7.842 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 42 Resp: 549

Ion	Ratio	Lower	Upper
42	100		
72	46.5	30.0	45.0
71	41.2	28.3	42.5



Instrument :
MSVOA_N
ClientSampleId :
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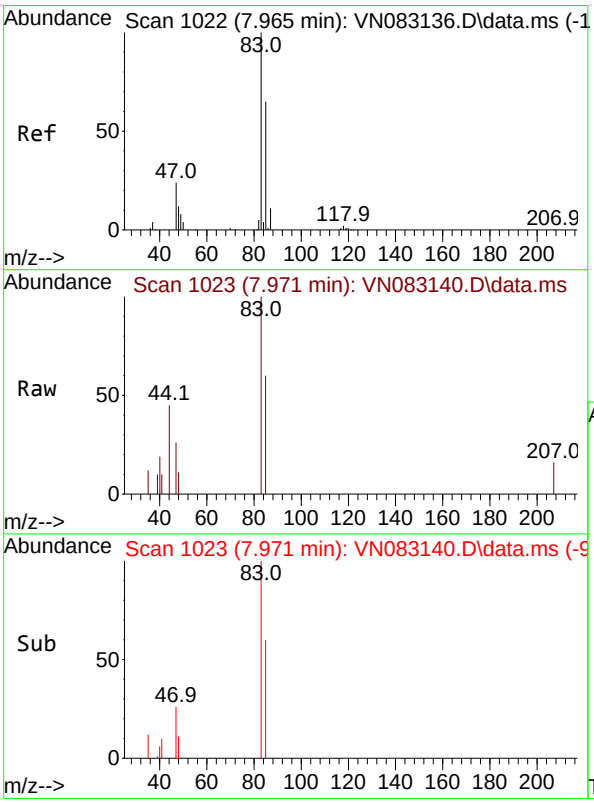
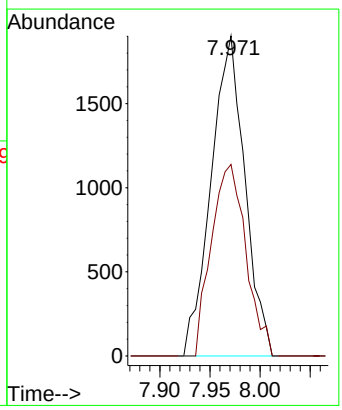
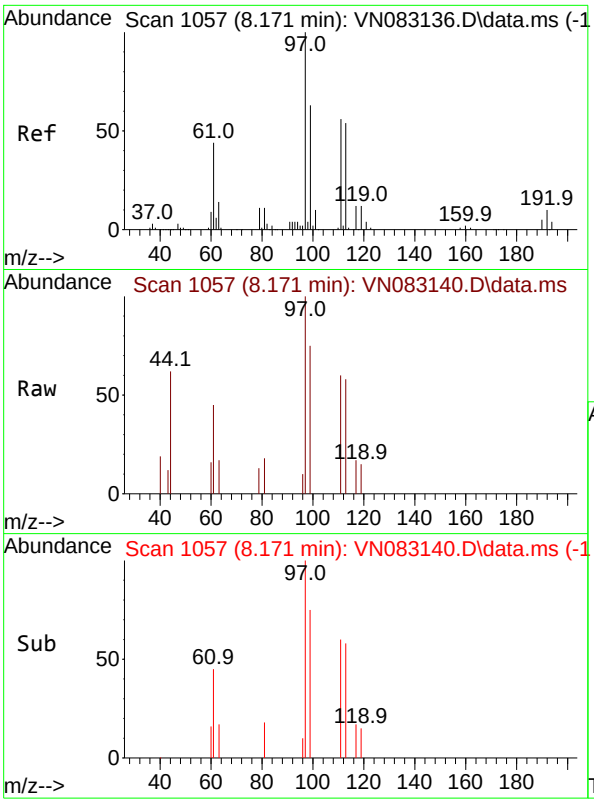


#30
Chloroform
Concen: 0.988 ug/l
RT: 7.971 min Scan# 1023
Delta R.T. 0.006 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 83 Resp: 4457

Ion	Ratio	Lower	Upper
83	100		
85	59.8	50.9	76.3





#32
1,1,1-Trichloroethane
Concen: 0.955 ug/l
RT: 8.171 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 97 Resp: 407

Ion	Ratio	Lower	Upper
97	100		
99	0.0	52.0	78.0#
61	44.6	42.1	63.1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
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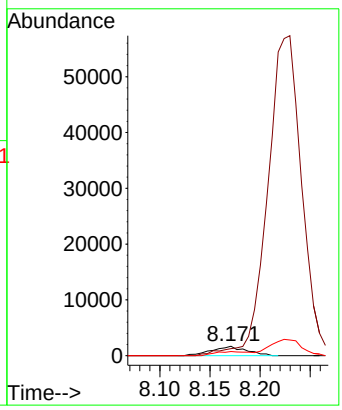
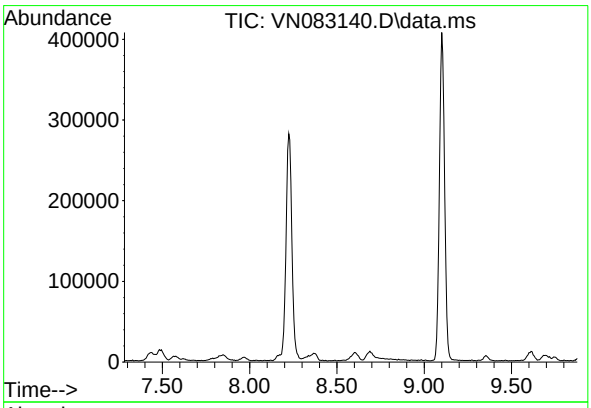
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024



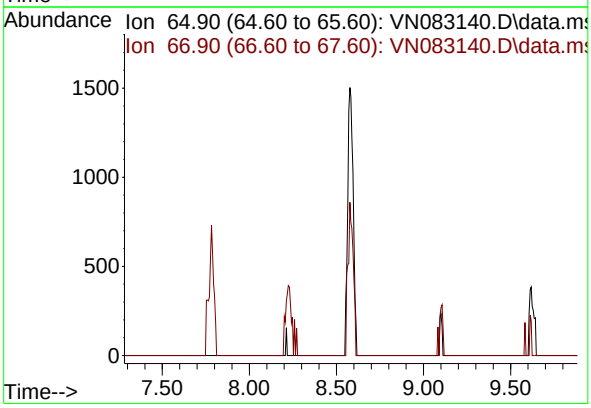


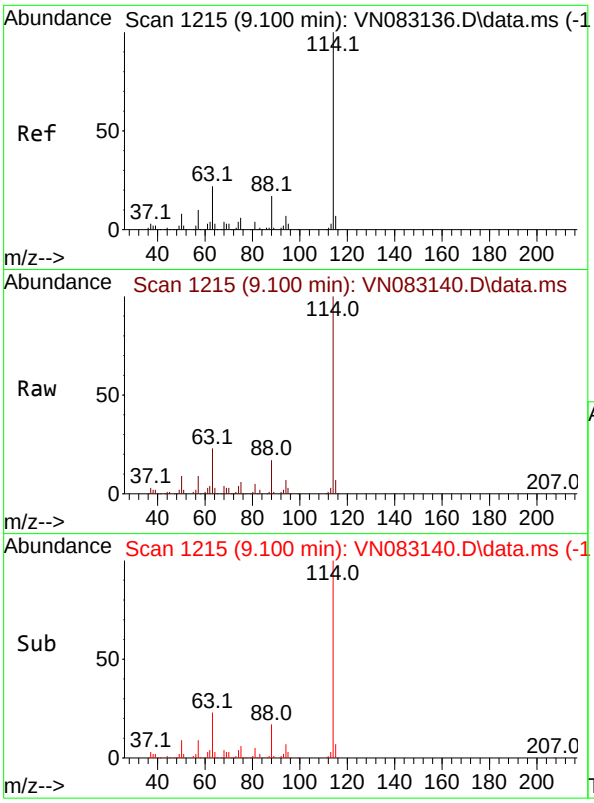
#33
1,2-Dichloroethane-d4
Concen: 0.000 ug/l
Expected RT: 8.58 min

Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 65

Sig	Exp Ratio
65	100
67	52.2





#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion:114 Resp: 34739

Ion	Ratio	Lower	Upper
114	100		
63	22.6	0.0	44.6
88	16.9	0.0	31.4

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
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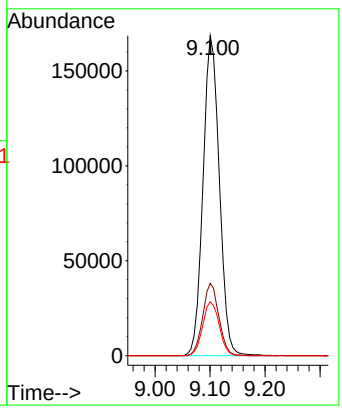
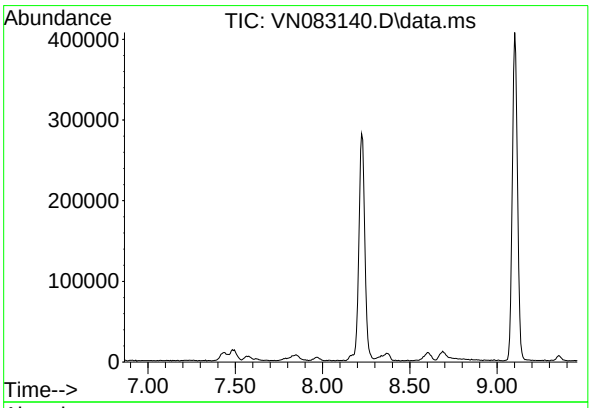


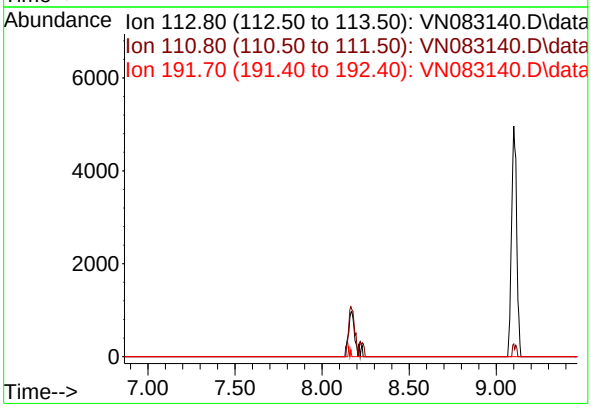


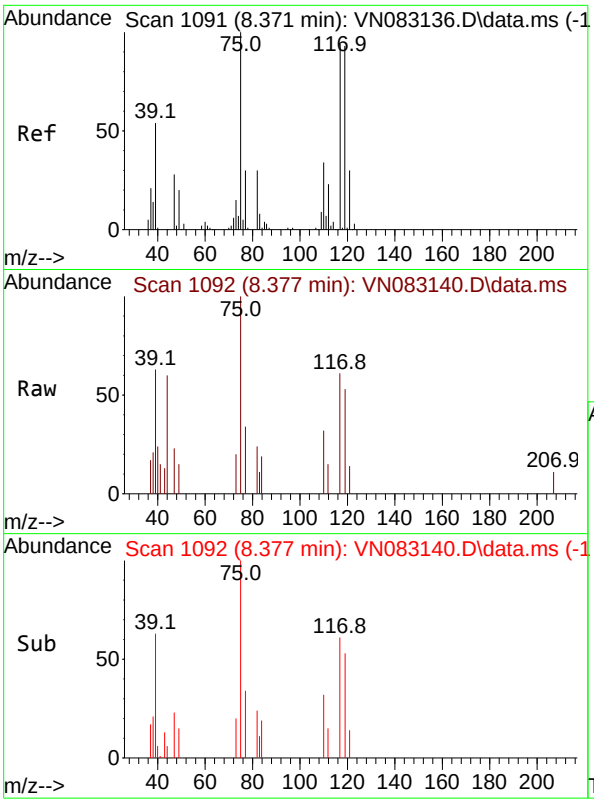
#35
Dibromofluoromethane
Concen: 0.000 ug/l
Expected RT: 8.16 min

Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 113

Sig	Exp Ratio
113	100
111	103.0
192	18.6





#36
1,1-Dichloropropene
Concen: 1.034 ug/l
RT: 8.377 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 75 Resp: 339

Ion	Ratio	Lower	Upper
75	100		
110	32.0	16.3	48.9
77	33.3	24.6	37.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
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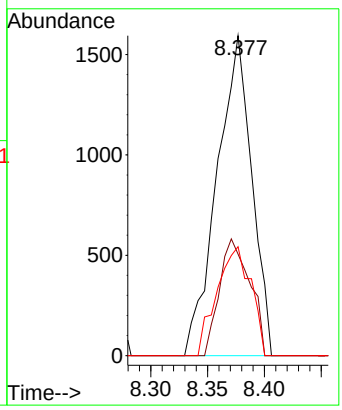
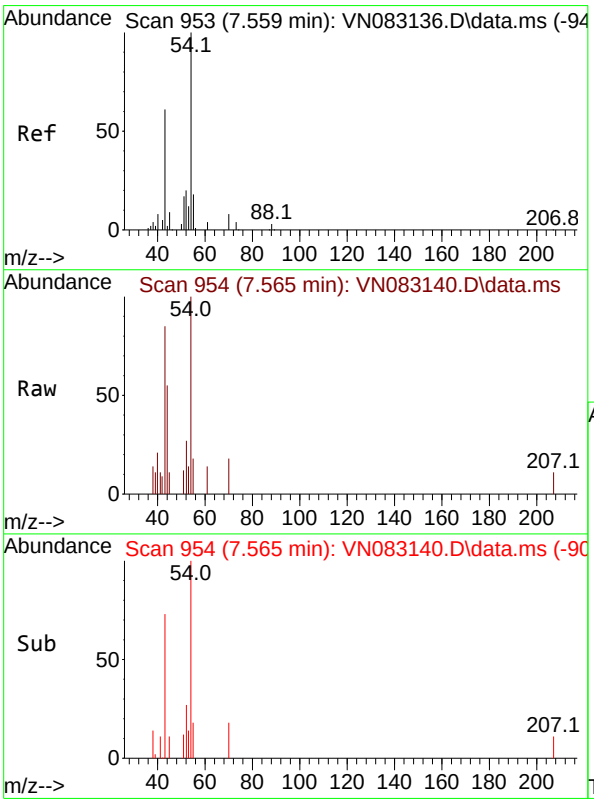
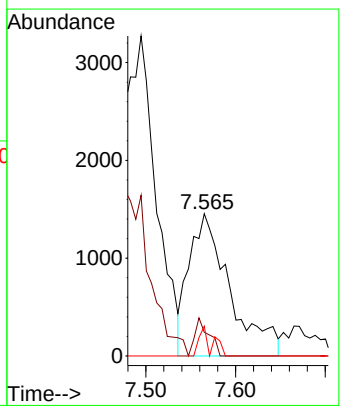


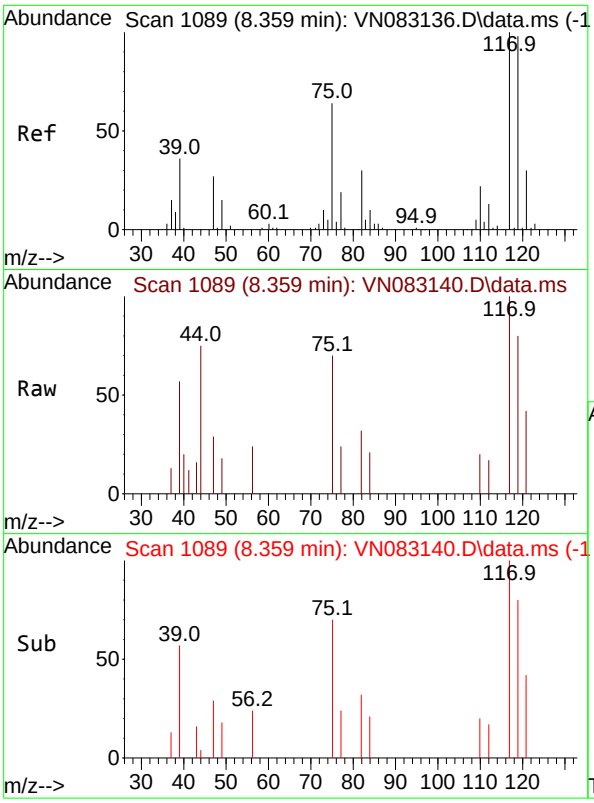


#37
Ethyl Acetate
Concen: 1.257 ug/l
RT: 7.565 min Scan# 954
Delta R.T. 0.006 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 43 Resp: 4617

Ion	Ratio	Lower	Upper
43	100		
61	9.2	9.3	13.9#
70	3.8	7.0	10.6#





#38
Carbon Tetrachloride
Concen: 0.926 ug/l
RT: 8.359 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion:117 Resp: 342

Ion	Ratio	Lower	Upper
117	100		
119	79.9	74.9	112.3
121	42.0	24.3	36.5

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
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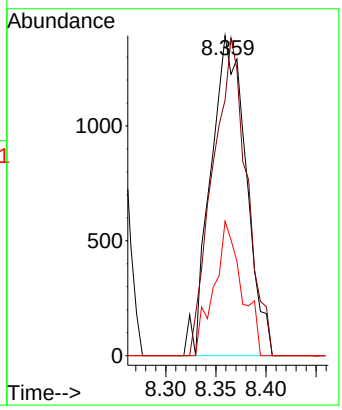
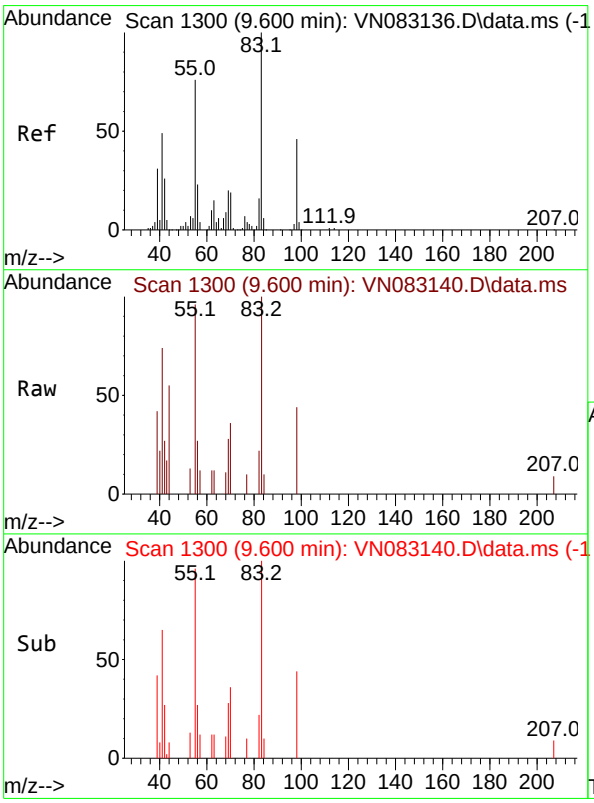
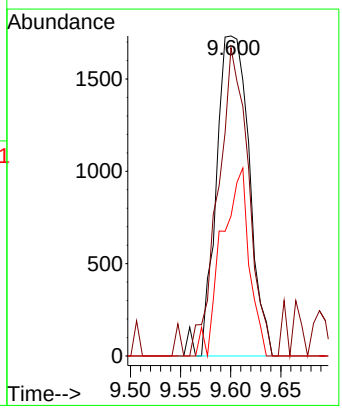


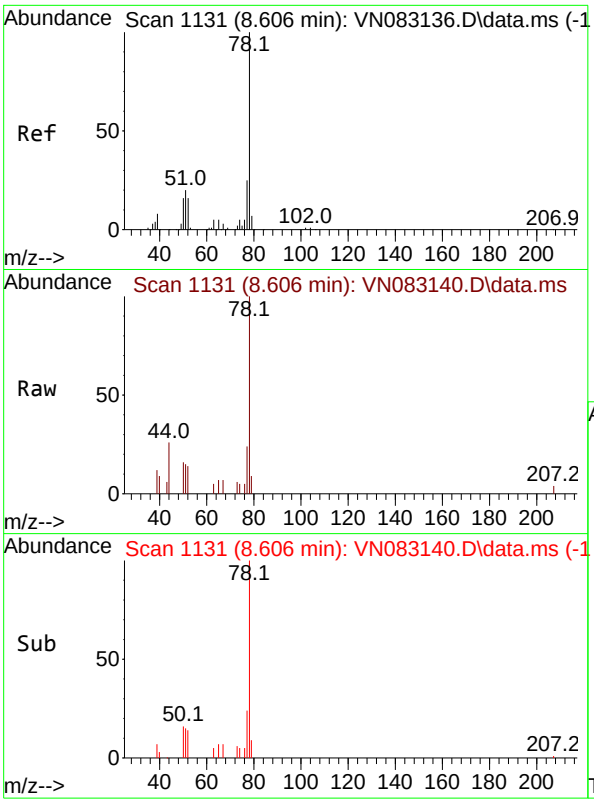


#39
Methylcyclohexane
Concen: 0.986 ug/l
RT: 9.600 min Scan# 1300
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 83 Resp: 3974

Ion	Ratio	Lower	Upper
83	100		
55	96.3	66.4	99.6
98	43.7	40.7	61.1





#40
Benzene
Concen: 0.955 ug/l
RT: 8.606 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 78 Resp: 933

Ion	Ratio	Lower	Upper
78	100		
77	24.2	19.0	28.4

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
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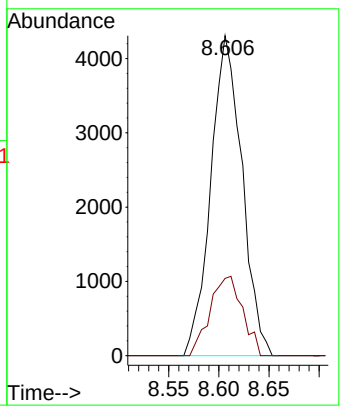
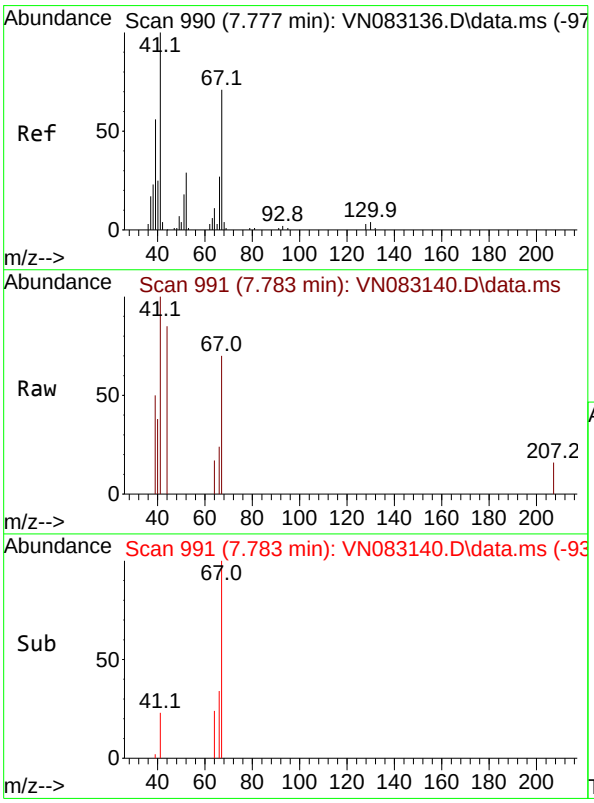
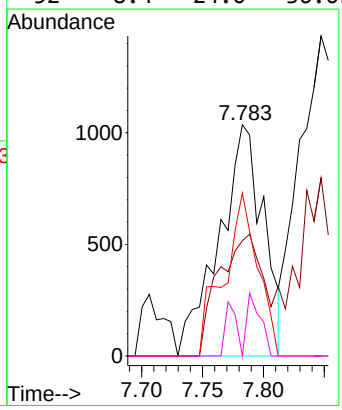


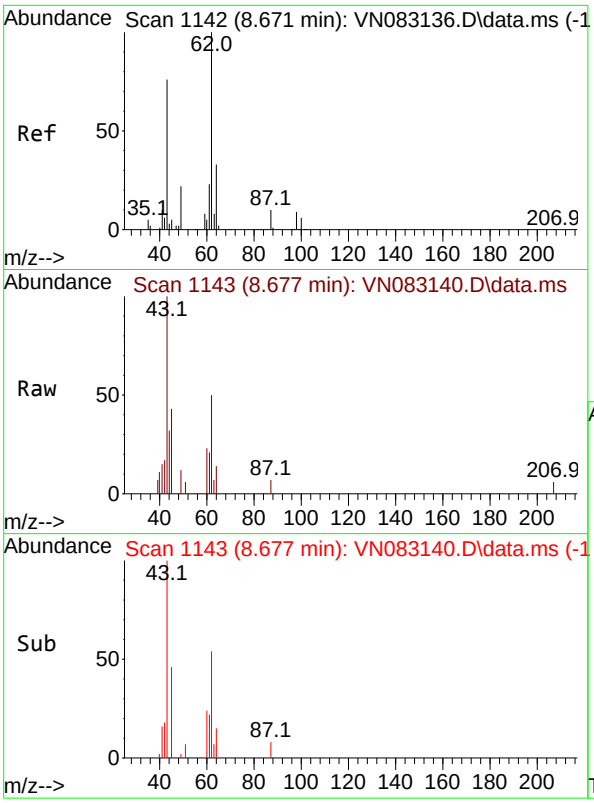


#41
Methacrylonitrile
Concen: 1.254 ug/l
RT: 7.783 min Scan# 991
Delta R.T. 0.006 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 41 Resp: 2618

Ion	Ratio	Lower	Upper
41	100		
39	52.4	45.5	68.3
67	54.2	50.5	75.7
52	8.4	24.0	36.0#





#42
1,2-Dichloroethane
Concen: 0.971 ug/l
RT: 8.677 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 62 Resp: 345

Ion	Ratio	Lower	Upper
62	100		
98	1.6	0.0	15.8

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
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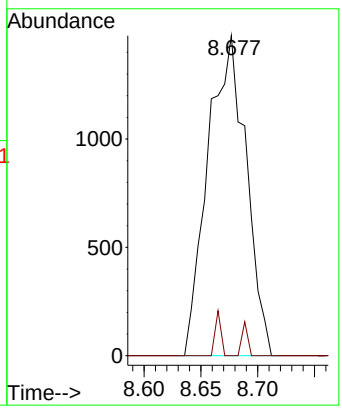
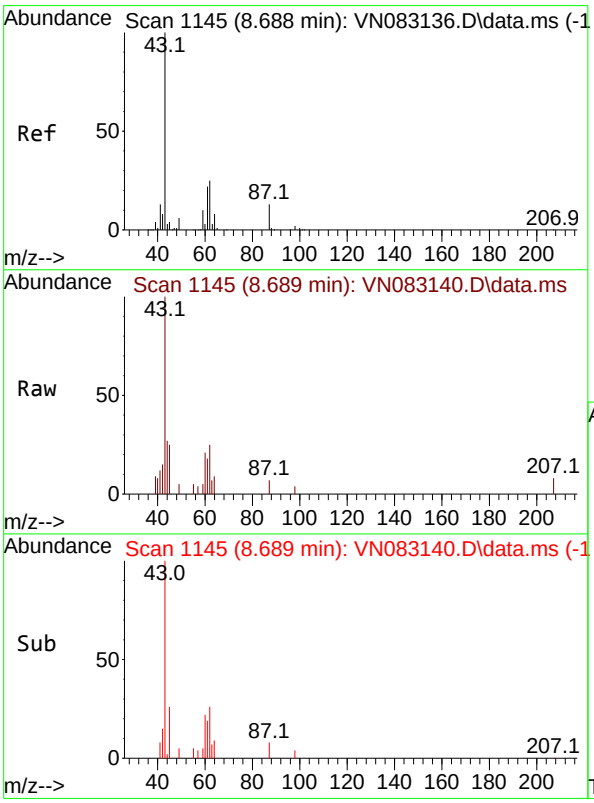
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

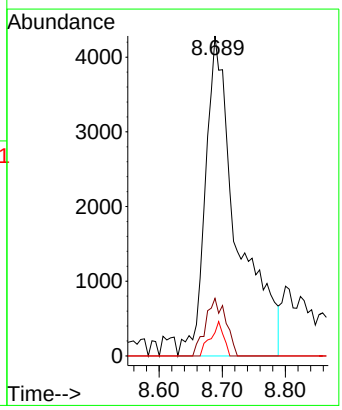


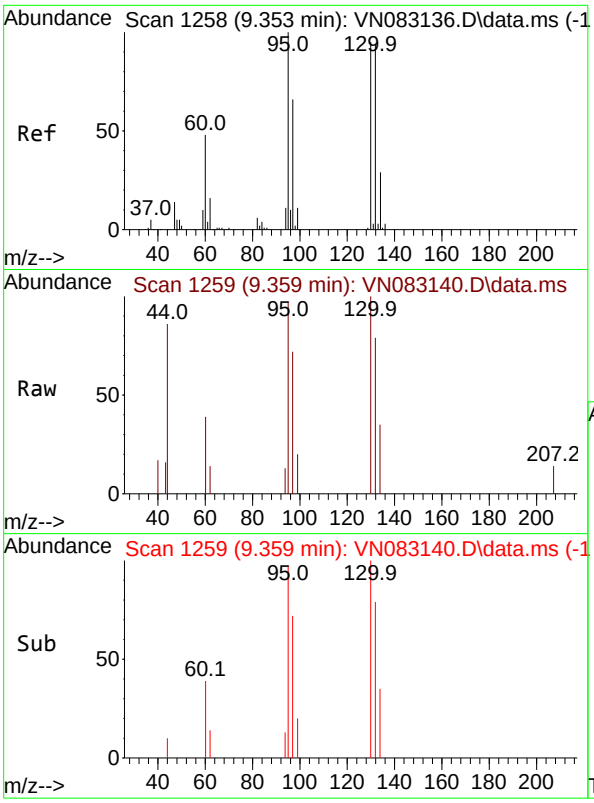


#43
Isopropyl Acetate
Concen: 0.753 ug/l
RT: 8.689 min Scan# 1145
Delta R.T. 0.001 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 43 Resp: 14981

Ion	Ratio	Lower	Upper
43	100		
61	11.5	17.8	26.6#
87	4.4	8.2	12.2#





#44
Trichloroethene
Concen: 0.925 ug/l
RT: 9.359 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion:130 Resp: 215

Ion	Ratio	Lower	Upper
130	100		
95	96.7	0.0	197.8

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

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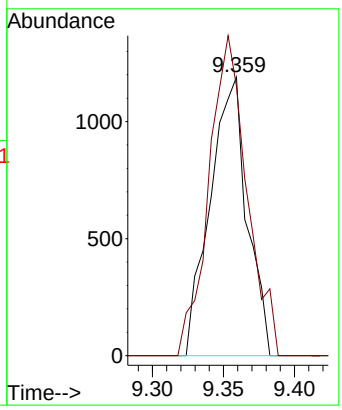
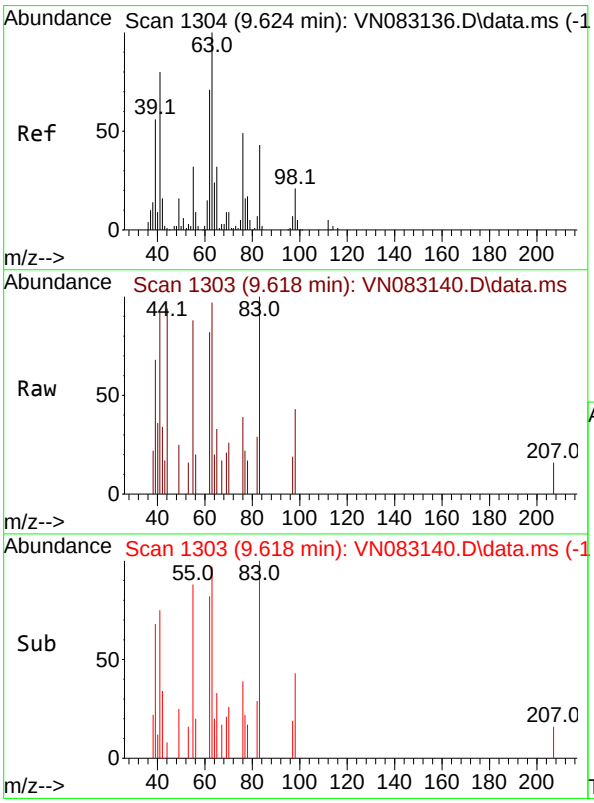
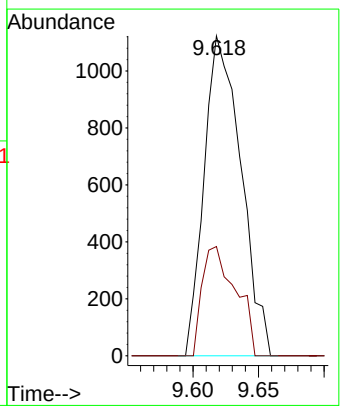


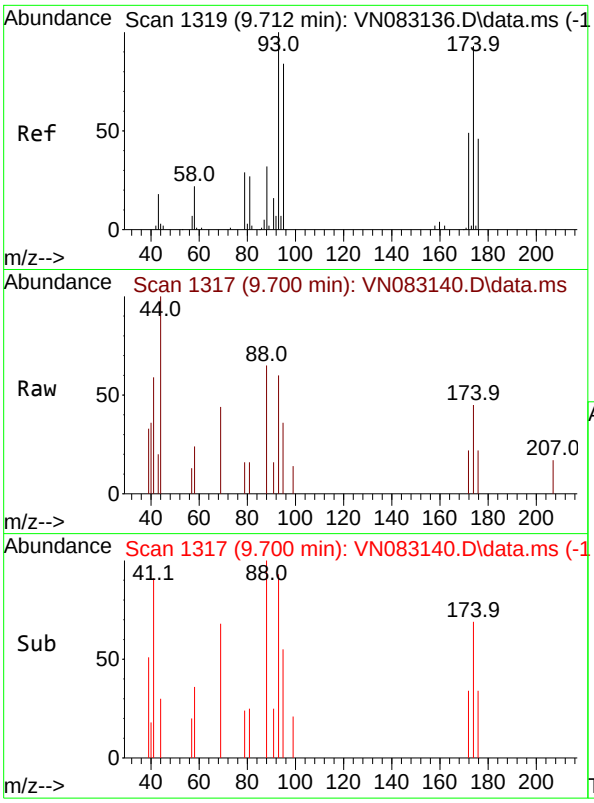


#45
1,2-Dichloropropane
Concen: 0.946 ug/l
RT: 9.618 min Scan# 1303
Delta R.T. -0.006 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 63 Resp: 2194

Ion	Ratio	Lower	Upper
63	100		
65	34.2	24.4	36.6

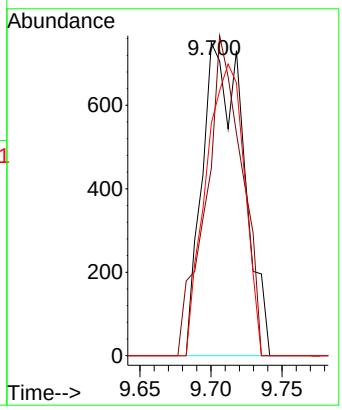




#46
Dibromomethane
Concen: 0.911 ug/l
RT: 9.700 min Scan# 1
Delta R.T. -0.012 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 93 Resp: 151

Ion	Ratio	Lower	Upper
93	100		
95	89.4	65.8	98.6
174	87.3	71.7	107.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
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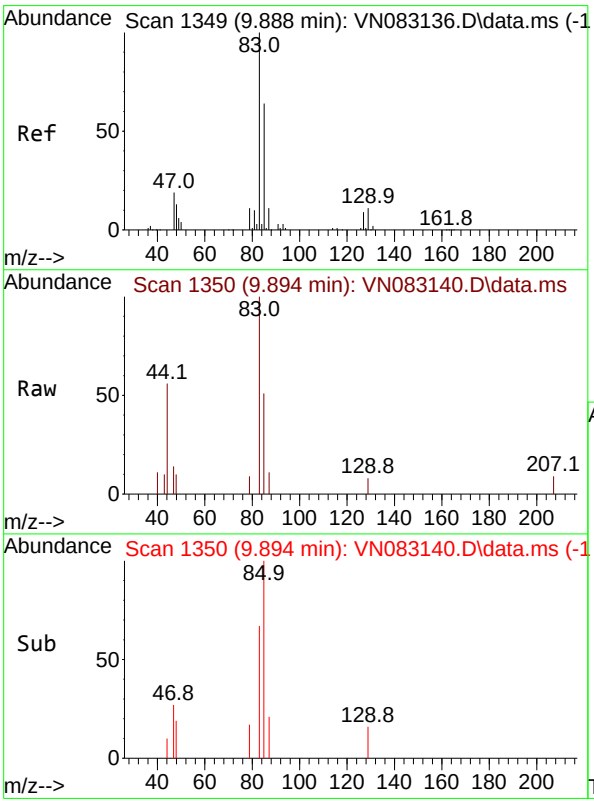
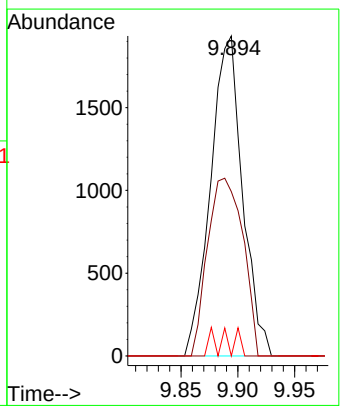
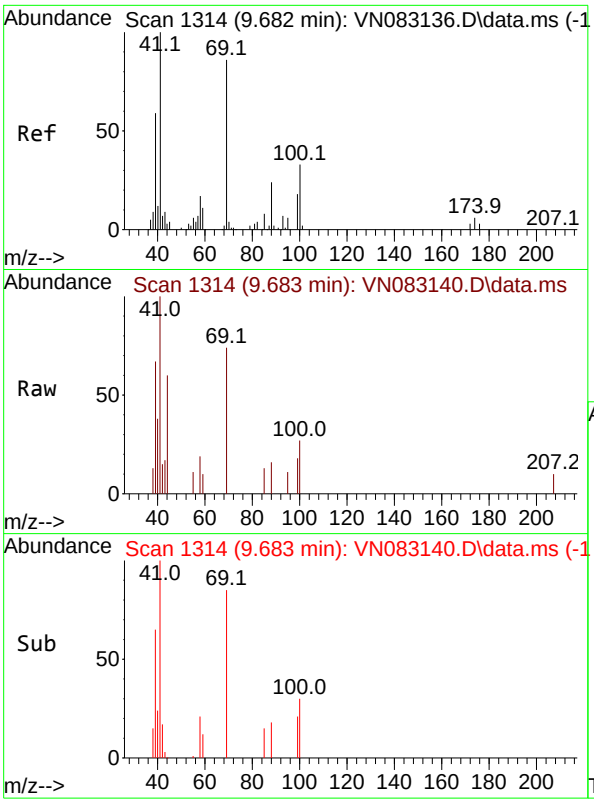


#47
Bromodichloromethane
Concen: 1.015 ug/l
RT: 9.894 min Scan# 1350
Delta R.T. 0.006 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 83 Resp: 3783

Ion	Ratio	Lower	Upper
83	100		
85	51.4	51.1	76.7
127	0.0	7.2	10.8#

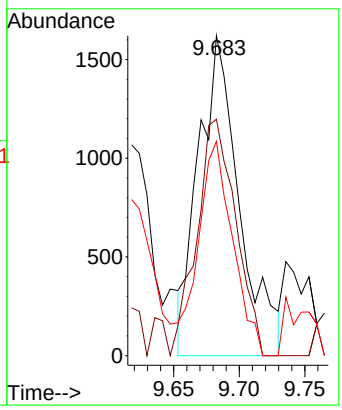




#48
Methyl methacrylate
Concen: 1.159 ug/l
RT: 9.683 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 41 Resp: 351

Ion	Ratio	Lower	Upper
41	100		
69	70.6	56.3	84.5
39	57.3	50.3	75.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
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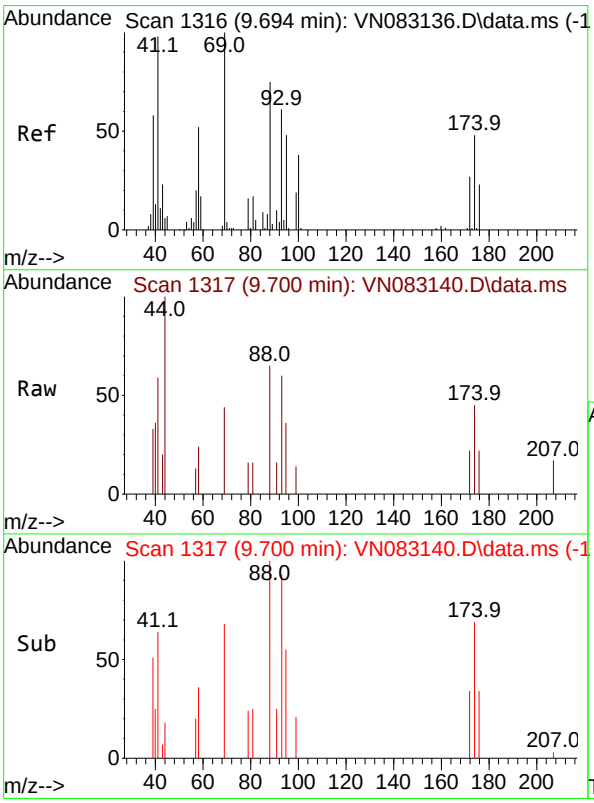
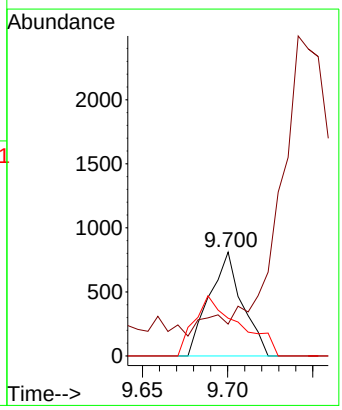
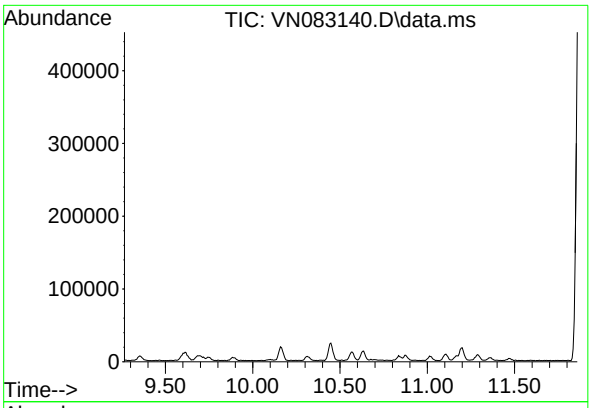


#49
1,4-Dioxane
Concen: 19.880 ug/l
RT: 9.700 min Scan# 1317
Delta R.T. 0.006 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 88 Resp: 1089

Ion	Ratio	Lower	Upper
88	100		
43	0.0	27.8	41.8#
58	79.4	59.4	89.0





#50
Toluene-d8
Concen: 0.000 ug/l
Expected RT: 10.56 min

Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 98

Sig	Exp Ratio
98	100
100	64.4

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
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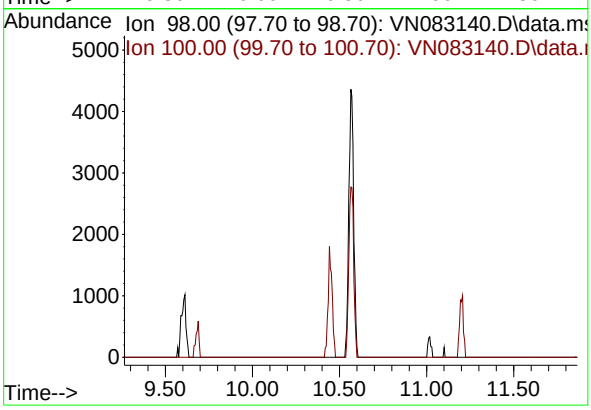
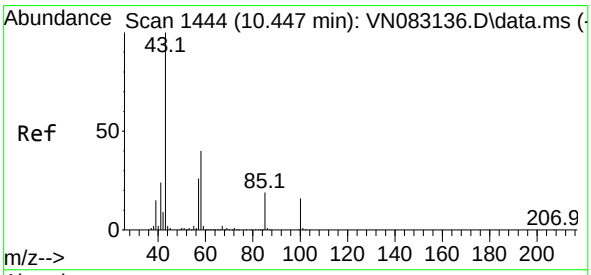
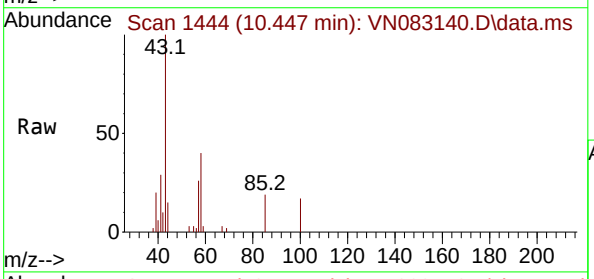
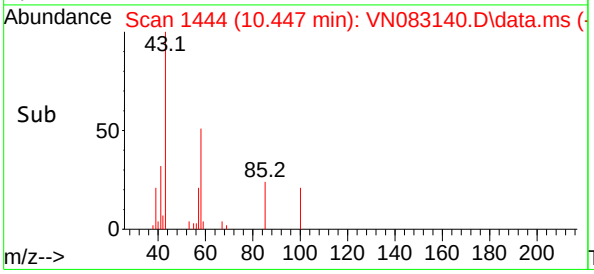
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024





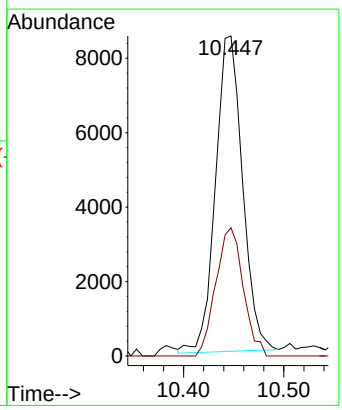


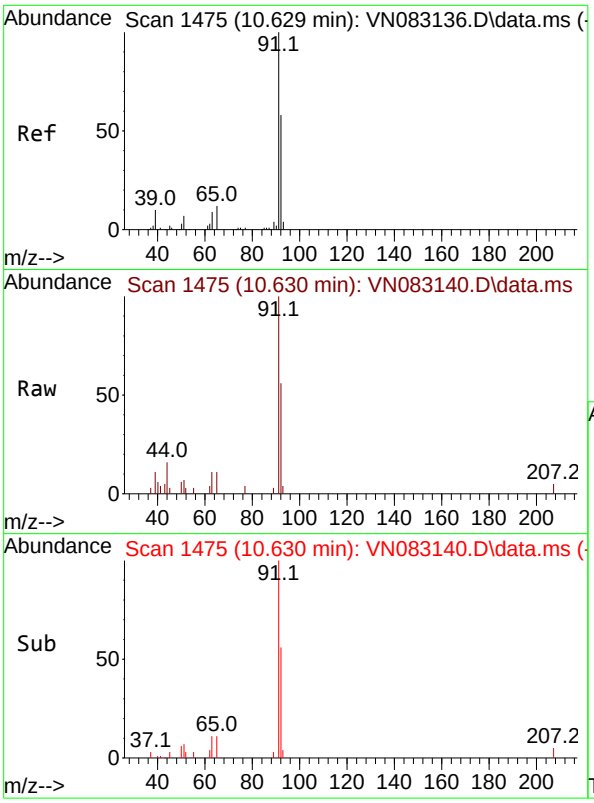


#51
4-Methyl-2-Pentanone
Concen: 4.570 ug/l
RT: 10.447 min Scan# 1444
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 43 Resp: 15872

Ion	Ratio	Lower	Upper
43	100		
58	41.1	28.2	42.4

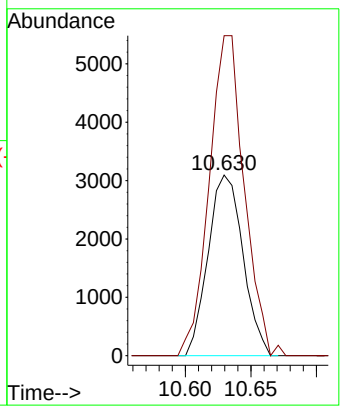




#52
Toluene
Concen: 0.927 ug/l
RT: 10.630 min Scan# 14
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 92 Resp: 572

Ion	Ratio	Lower	Upper
92	100		
91	178.1	139.4	209.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
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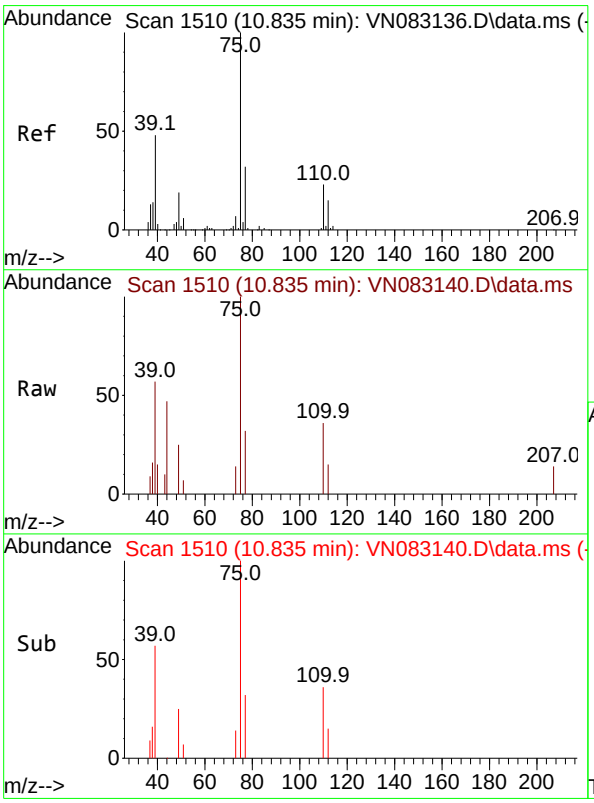
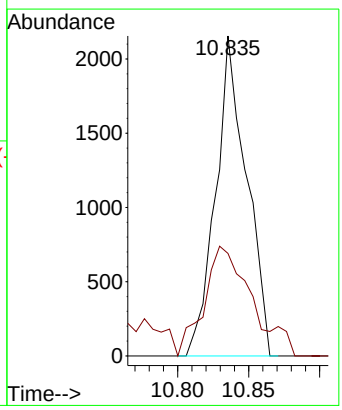
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

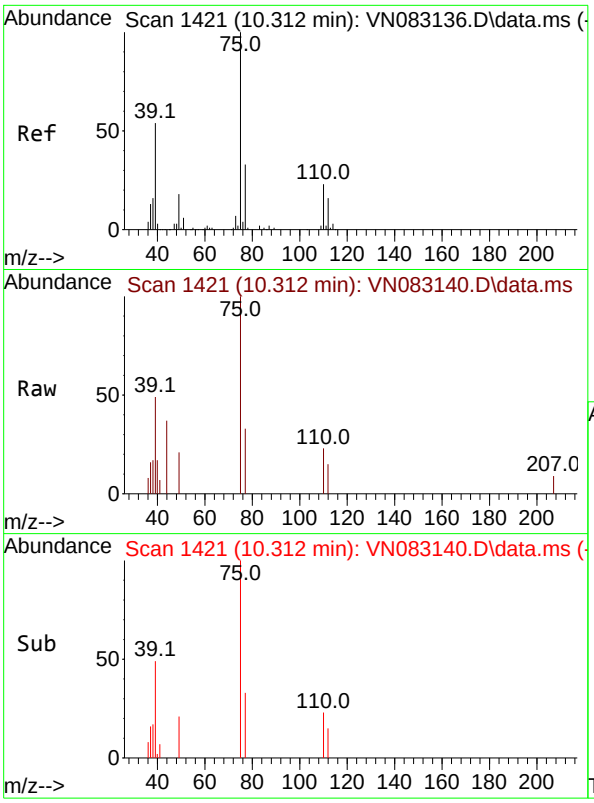


#53
t-1,3-Dichloropropene
Concen: 0.851 ug/l
RT: 10.835 min Scan# 1510
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 75 Resp: 3260

Ion	Ratio	Lower	Upper
75	100		
77	32.0	25.7	38.5

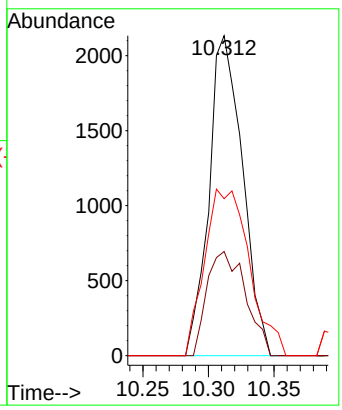




#54
cis-1,3-Dichloropropene
Concen: 0.932 ug/l
RT: 10.312 min Scan# 14
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 75 Resp: 379

Ion	Ratio	Lower	Upper
75	100		
77	32.5	24.3	36.5
39	49.0	50.5	75.7#



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

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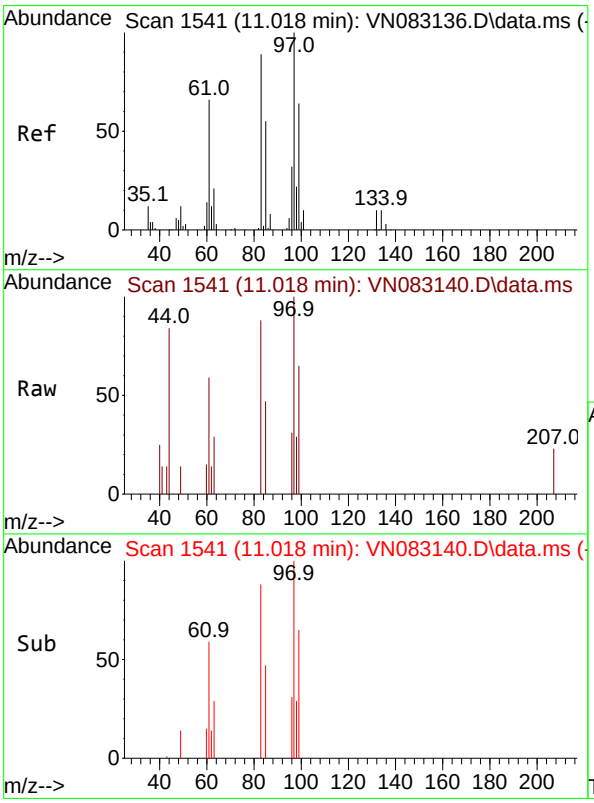
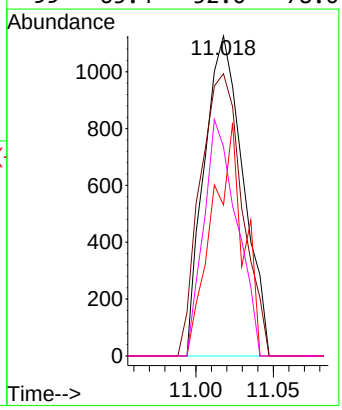
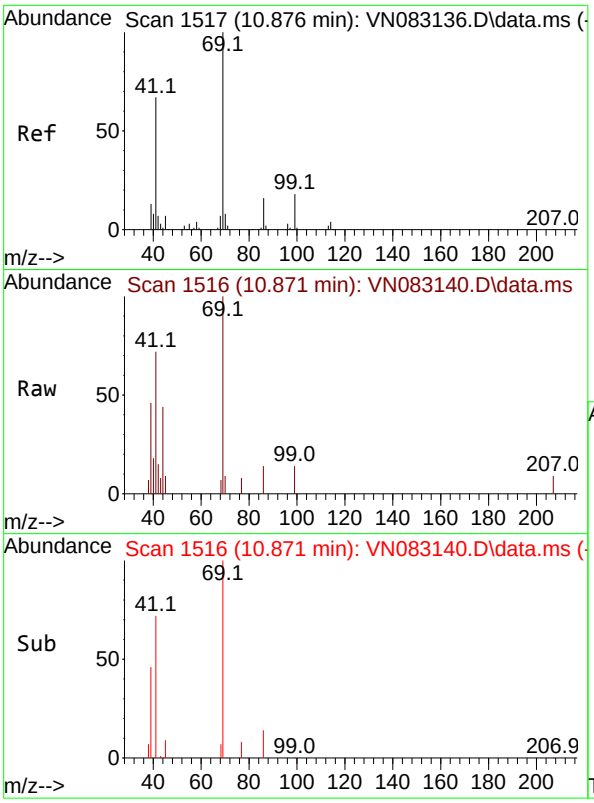


#55
1,1,2-Trichloroethane
Concen: 0.887 ug/l
RT: 11.018 min Scan# 1541
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 97 Resp: 1963

Ion	Ratio	Lower	Upper
97	100		
83	88.2	71.4	107.0
85	47.2	45.8	68.6
99	65.4	52.0	78.0





#56
Ethyl methacrylate
Concen: 0.921 ug/l
RT: 10.871 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 69 Resp: 384

Ion	Ratio	Lower	Upper
69	100		
41	83.6	63.4	95.2
39	33.7	37.4	56.0#

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
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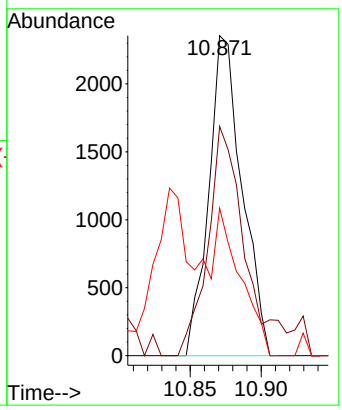
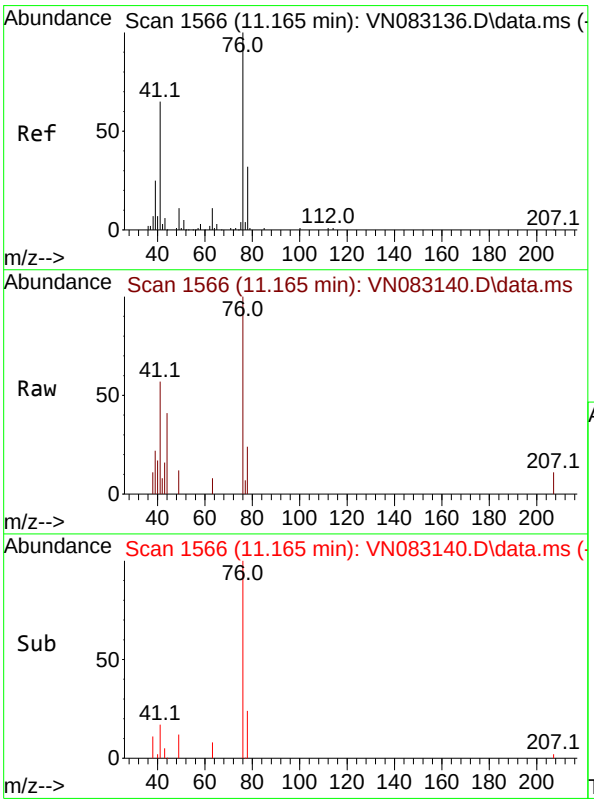
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

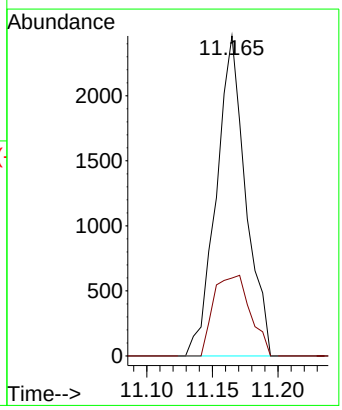


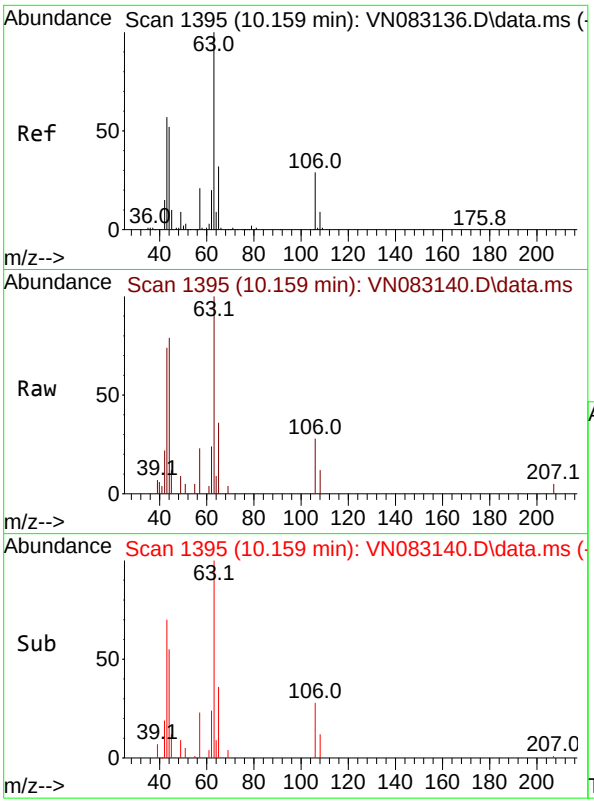


#57
1,3-Dichloropropane
Concen: 0.973 ug/l
RT: 11.165 min Scan# 1566
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 76 Resp: 3837

Ion	Ratio	Lower	Upper
76	100		
78	31.3	25.6	38.4





#58
2-Chloroethyl Vinyl ether
Concen: 4.794 ug/l
RT: 10.159 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 63 Resp: 845

Ion	Ratio	Lower	Upper
63	100		
106	30.3	21.4	32.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
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Reviewed By :John Carlone 08/08/2024
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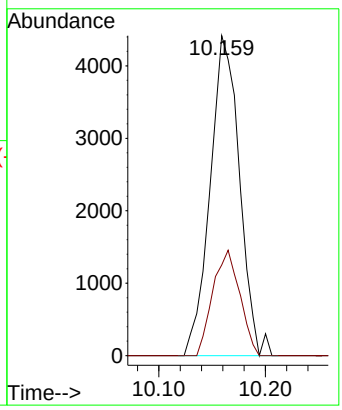
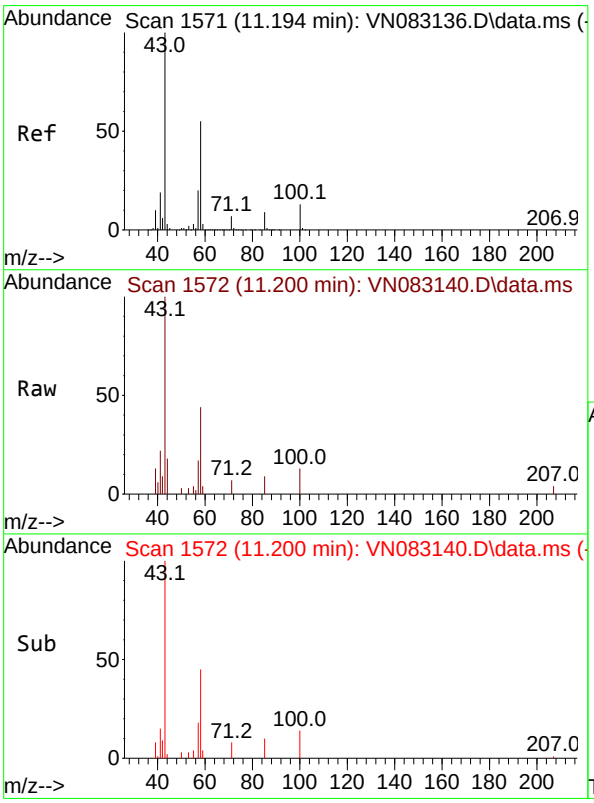
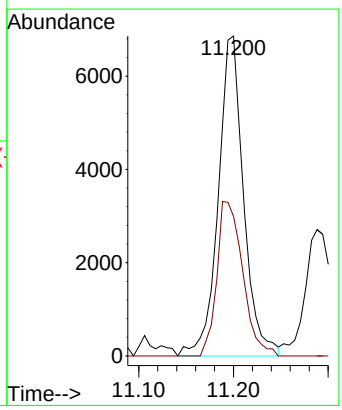


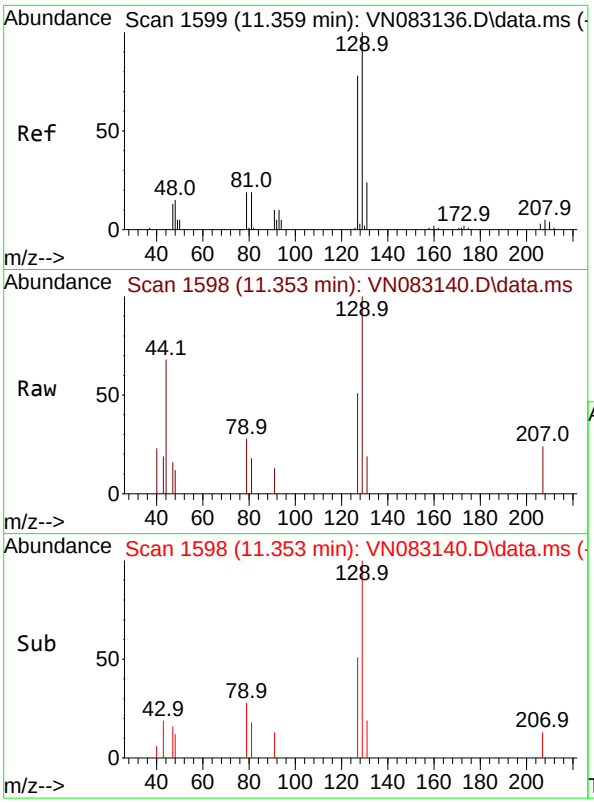


#59
2-Hexanone
Concen: 4.749 ug/l
RT: 11.200 min Scan# 1572
Delta R.T. 0.006 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 43 Resp: 12761

Ion	Ratio	Lower	Upper
43	100		
58	49.3	24.6	73.8

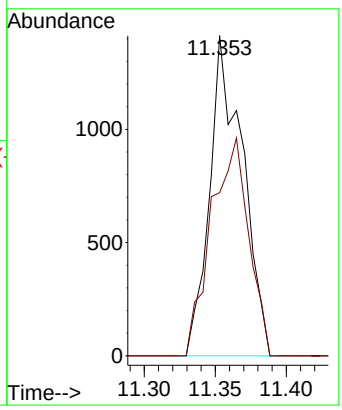




#60
Dibromochloromethane
Concen: 0.853 ug/l
RT: 11.353 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion:129 Resp: 228

Ion	Ratio	Lower	Upper
129	100		
127	77.5	39.2	117.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
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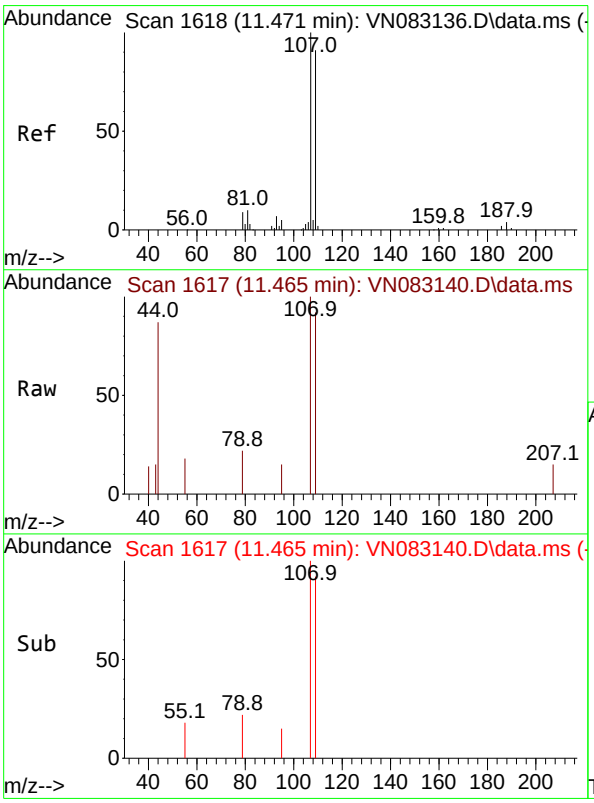
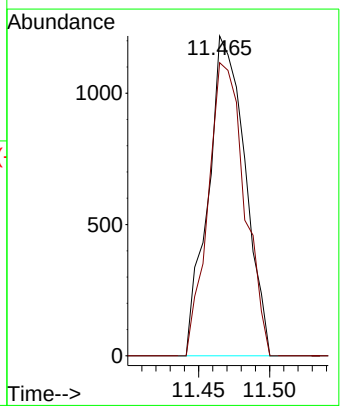
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

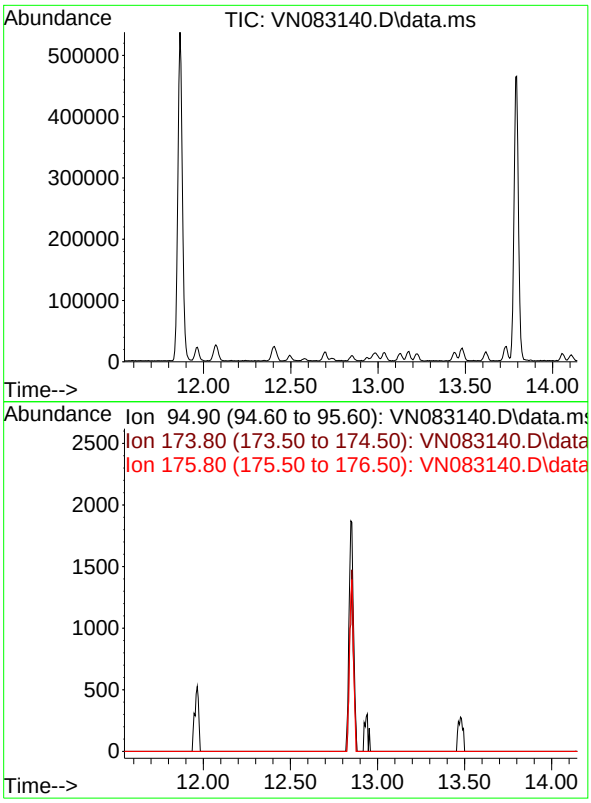


#61
1,2-Dibromoethane
Concen: 0.947 ug/l
RT: 11.465 min Scan# 1617
Delta R.T. -0.006 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion:107 Resp: 2200

Ion	Ratio	Lower	Upper
107	100		
109	90.4	73.7	110.5





#62
4-Bromofluorobenzene
Concen: 0.000 ug/l
Expected RT: 12.85 min

Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 95

Sig	Exp Ratio
95	100
174	79.6
176	73.8

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
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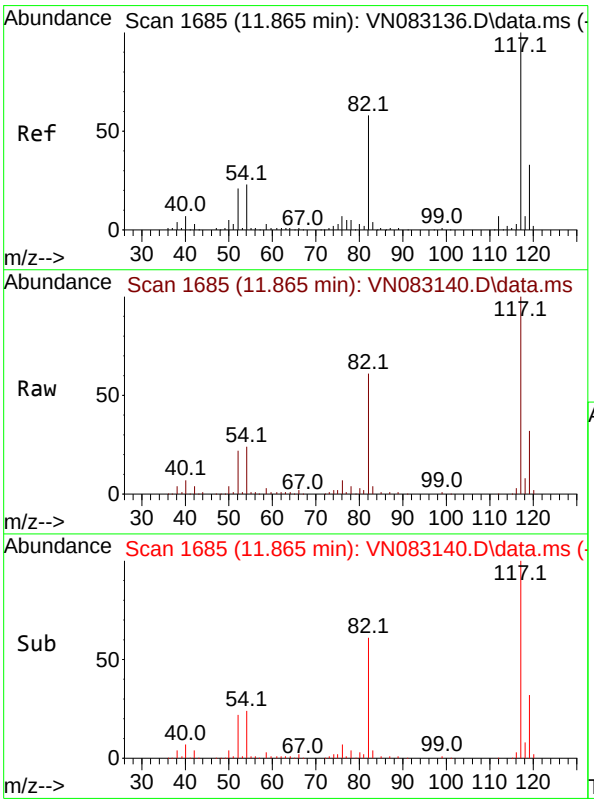
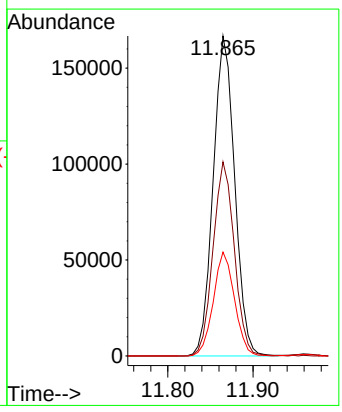
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

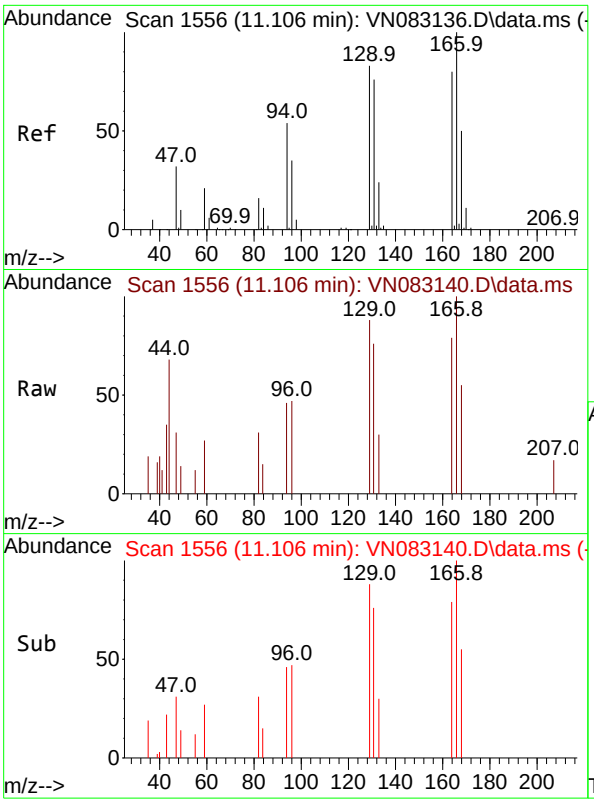


#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1685
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion:117 Resp: 292647

Ion	Ratio	Lower	Upper
117	100		
82	60.6	47.5	71.3
119	32.4	25.6	38.4

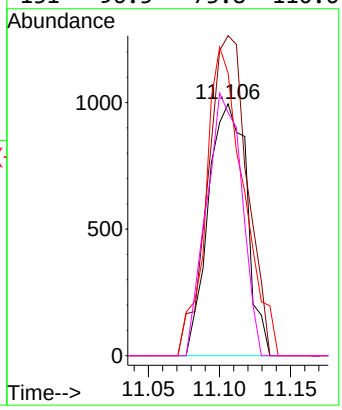




#64
Tetrachloroethene
Concen: 0.966 ug/l
RT: 11.106 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion:164 Resp: 187

Ion	Ratio	Lower	Upper
164	100		
166	127.0	101.4	152.0
129	112.2	75.7	113.5
131	96.5	73.8	110.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
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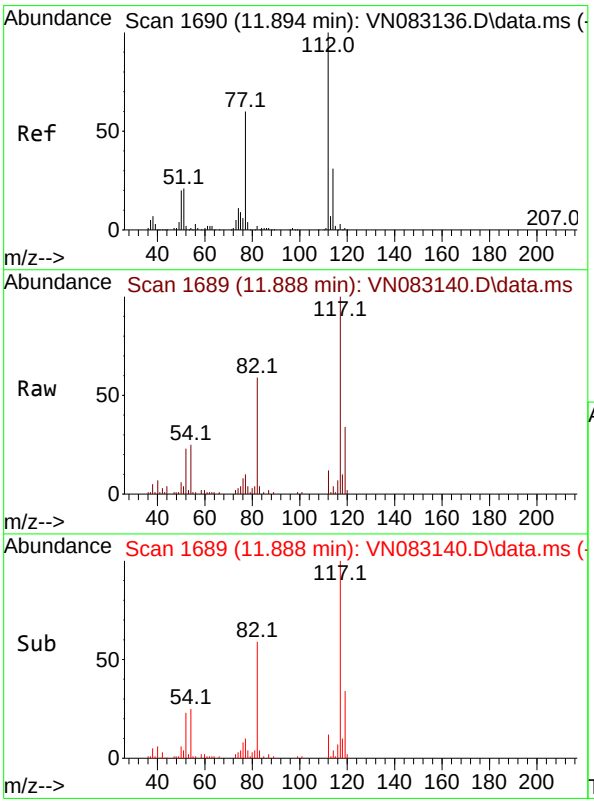
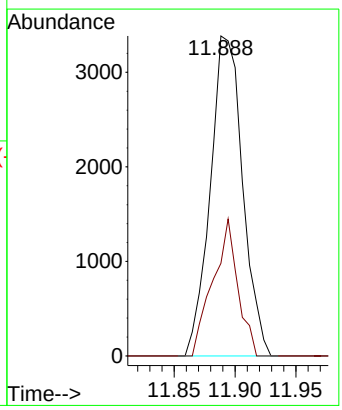
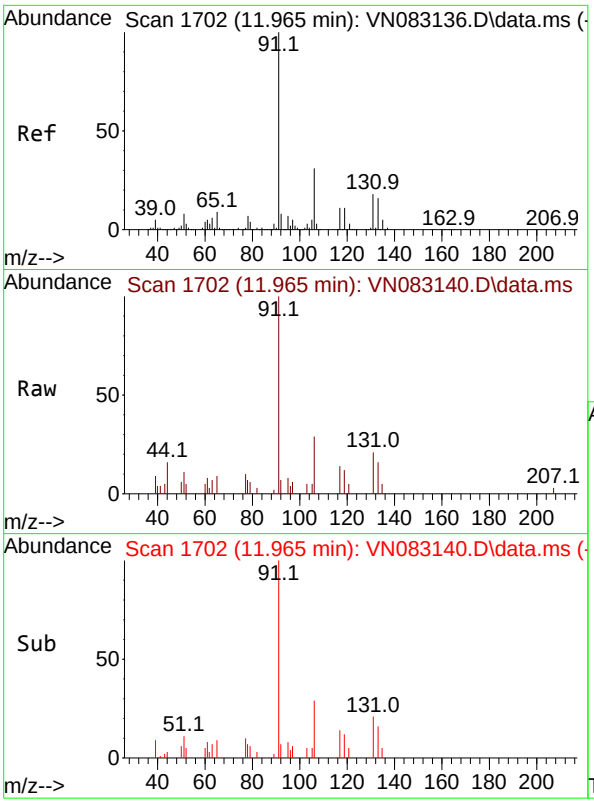


#65
Chlorobenzene
Concen: 0.968 ug/l
RT: 11.888 min Scan# 1689
Delta R.T. -0.006 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion:112 Resp: 6259

Ion	Ratio	Lower	Upper
112	100		
114	29.0	26.2	39.2





#66
1,1,1,2-Tetrachloroethane
Concen: 0.951 ug/l
RT: 11.965 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion:131 Resp: 216

Ion	Ratio	Lower	Upper
131	100		
133	100.6	47.3	142.0
119	0.0	32.5	97.4

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
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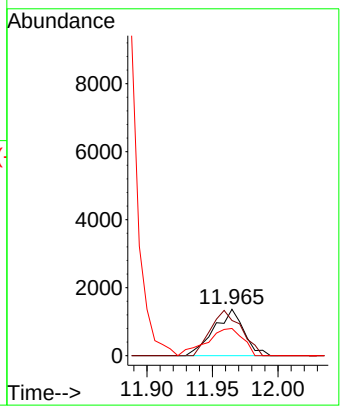
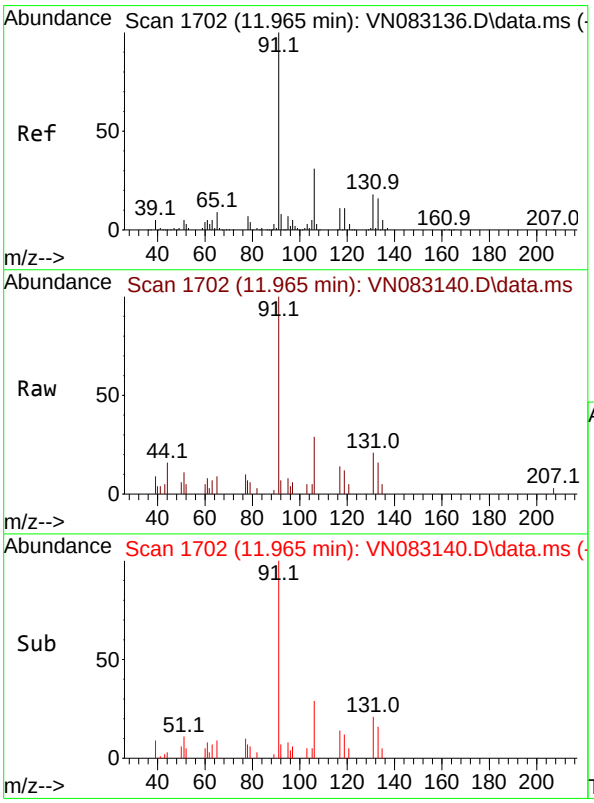
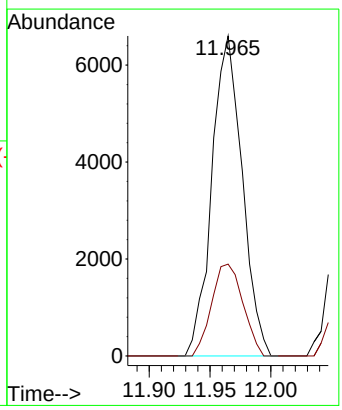


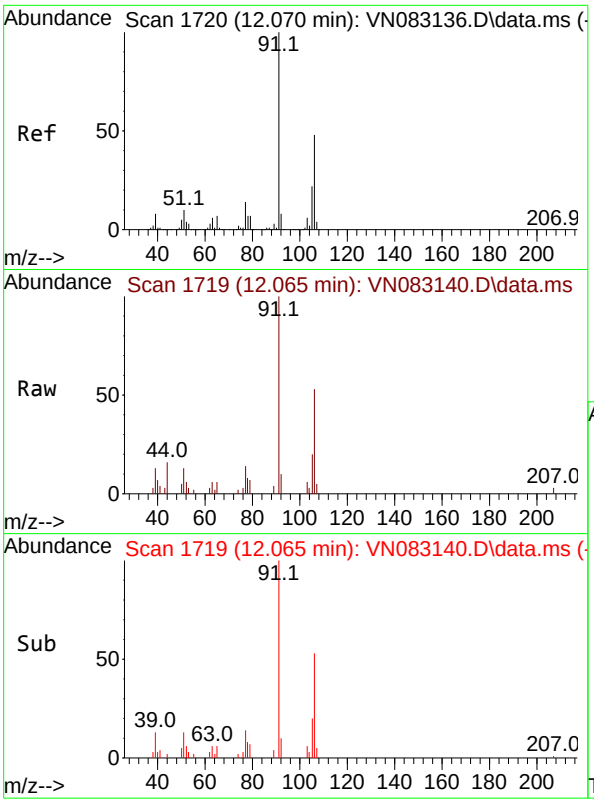


#67
Ethyl Benzene
Concen: 0.966 ug/l
RT: 11.965 min Scan# 1702
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 91 Resp: 11455

Ion	Ratio	Lower	Upper
91	100		
106	28.7	24.0	36.0





#68
m/p-Xylenes
Concen: 1.860 ug/l
RT: 12.065 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion:106 Resp: 826

Ion	Ratio	Lower	Upper
106	100		
91	217.0	166.1	249.1

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

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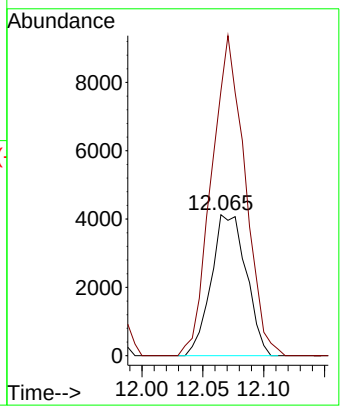
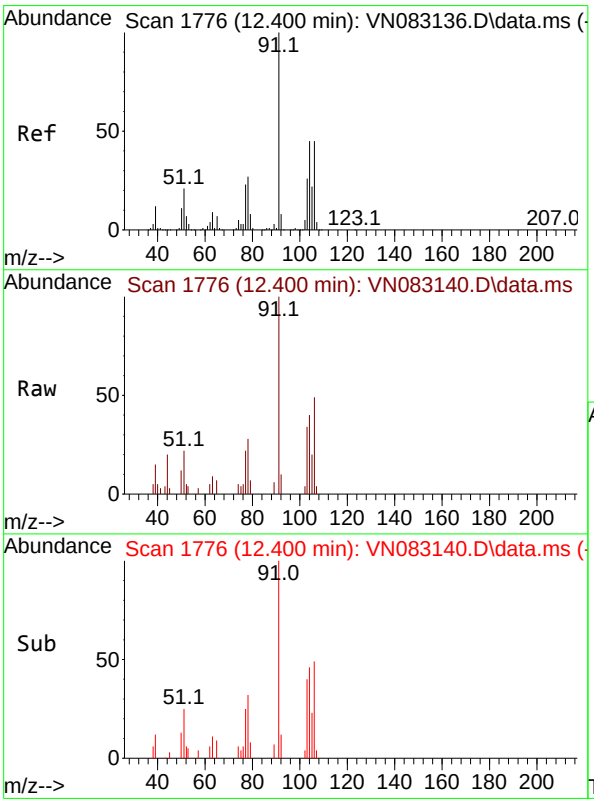
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

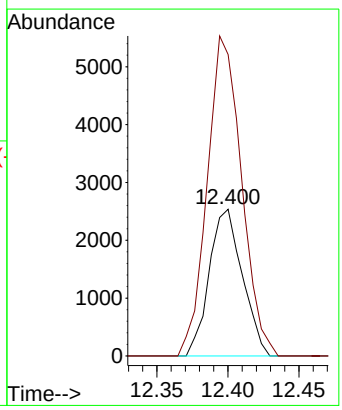


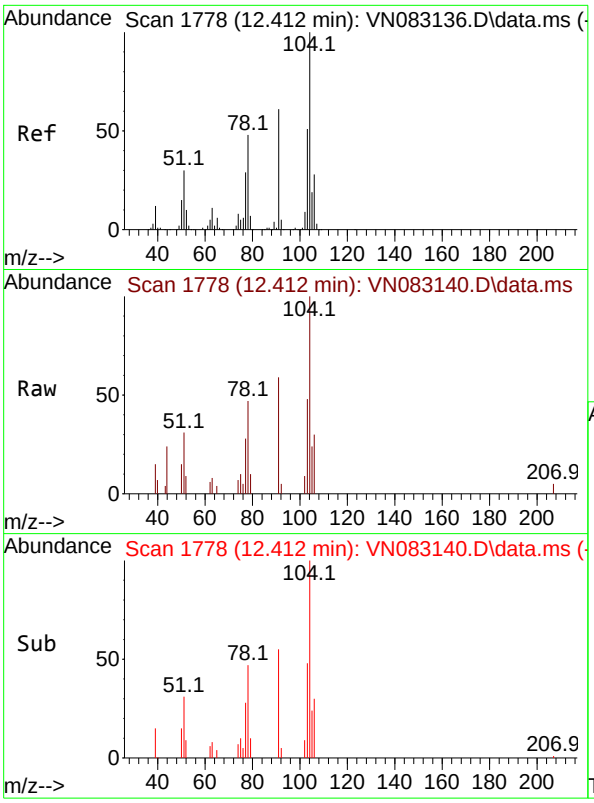


#69
o-Xylene
Concen: 0.938 ug/l
RT: 12.400 min Scan# 1776
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion:106 Resp: 4113

Ion	Ratio	Lower	Upper
106	100		
91	226.2	111.3	333.9





#70
Styrene
Concen: 0.875 ug/l
RT: 12.412 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion:104 Resp: 641

Ion	Ratio	Lower	Upper
104	100		
78	60.2	41.6	62.4
103	60.7	44.0	66.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
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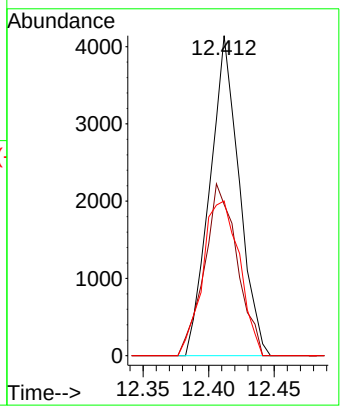
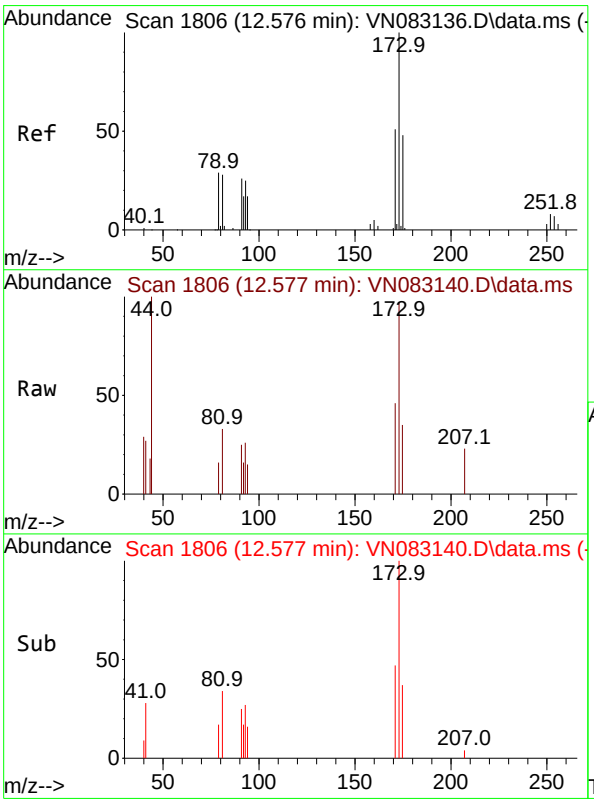
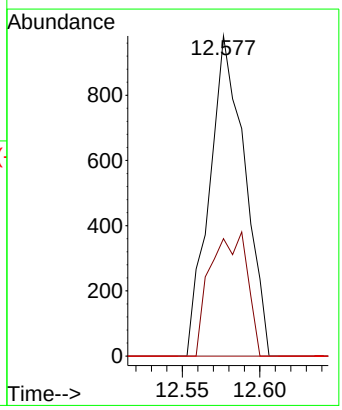


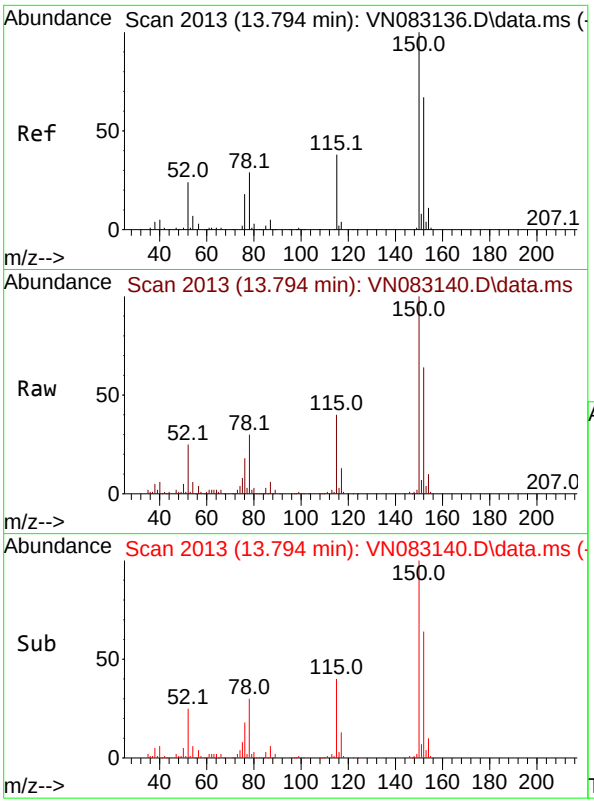


#71
Bromoform
Concen: 0.903 ug/l
RT: 12.577 min Scan# 1806
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion:173 Resp: 1561

Ion	Ratio	Lower	Upper
173	100		
175	40.2	24.0	72.0
254	0.0	0.0	0.0

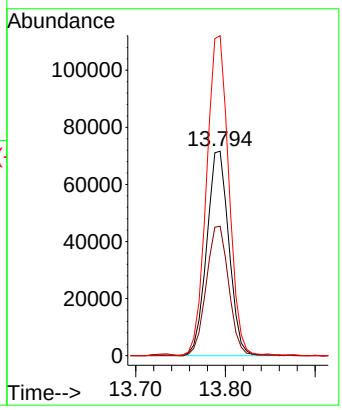




#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.794 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion:152 Resp: 12292

Ion	Ratio	Lower	Upper
152	100		
115	64.2	30.6	91.6
150	157.5	0.0	348.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

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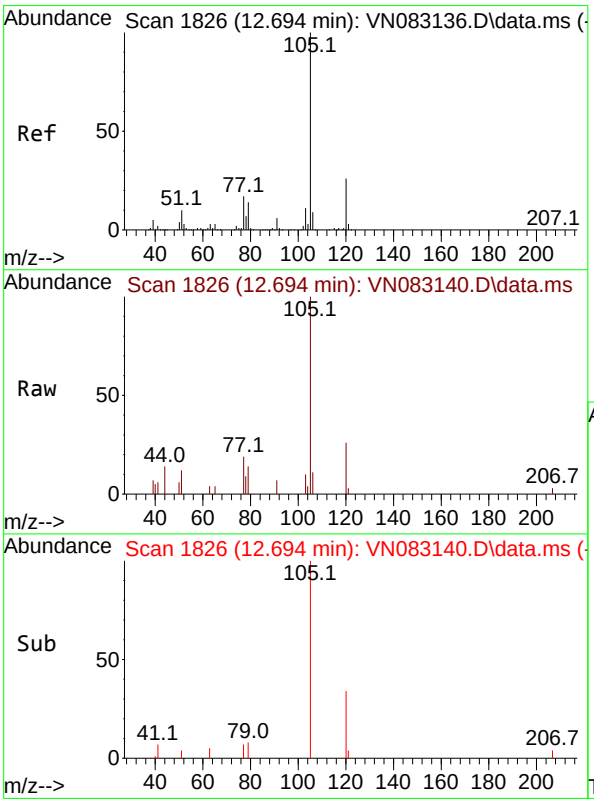
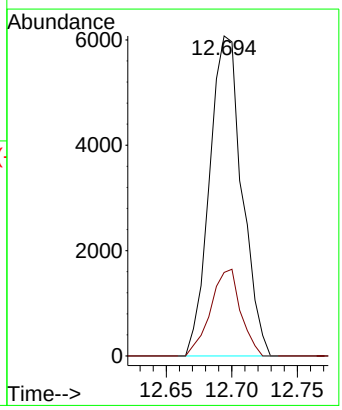
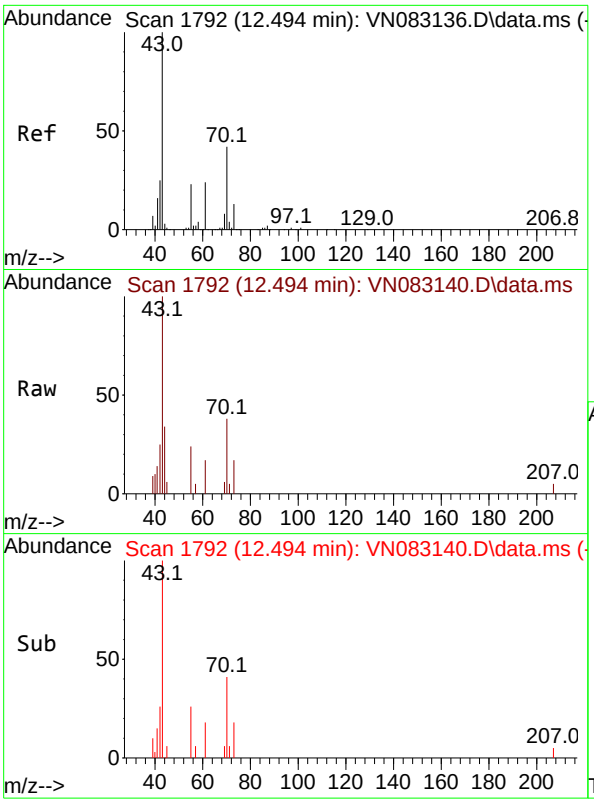


#73
Isopropylbenzene
Concen: 1.017 ug/l
RT: 12.694 min Scan# 1826
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion:105 Resp: 10459

Ion	Ratio	Lower	Upper
105	100		
120	25.1	12.9	38.6

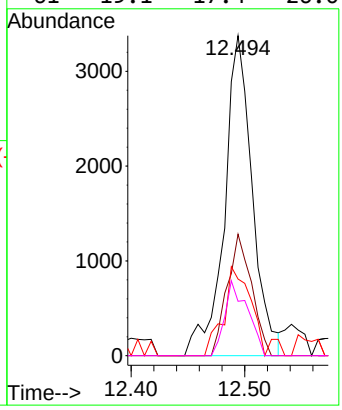




#74
N-amyl acetate
Concen: 1.144 ug/l
RT: 12.494 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 43 Resp: 575

Ion	Ratio	Lower	Upper
43	100		
70	33.3	29.8	44.6
55	28.9	18.7	28.1
61	19.1	17.4	26.0



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

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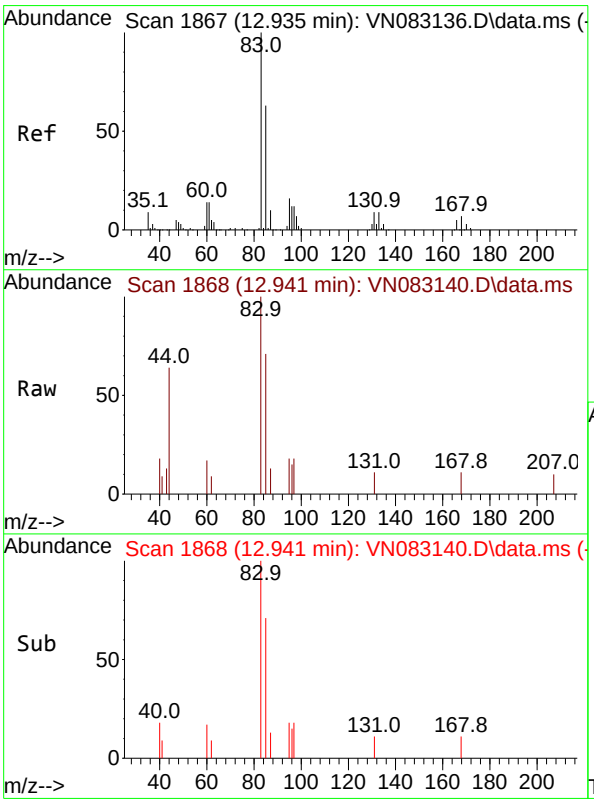
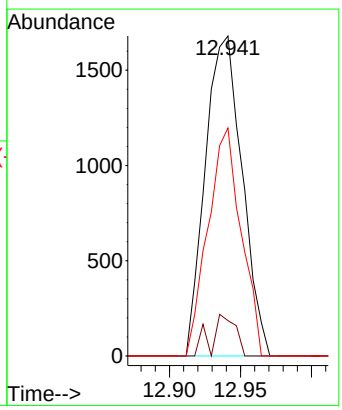
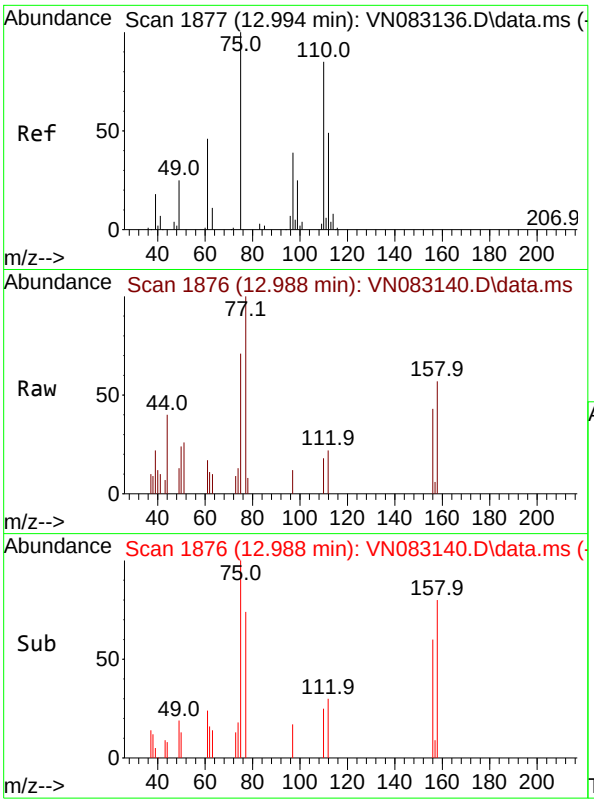


#75
1,1,2,2-Tetrachloroethane
Concen: 1.043 ug/l
RT: 12.941 min Scan# 1868
Delta R.T. 0.006 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 83 Resp: 3034

Ion	Ratio	Lower	Upper
83	100		
131	8.5	5.0	14.9
85	64.0	31.9	95.7





#76
1,2,3-Trichloropropane
Concen: 1.122 ug/l m
RT: 12.988 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 75 Resp: 303

Ion	Ratio	Lower	Upper
75	100		
77	184.1	110.9	332.6

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

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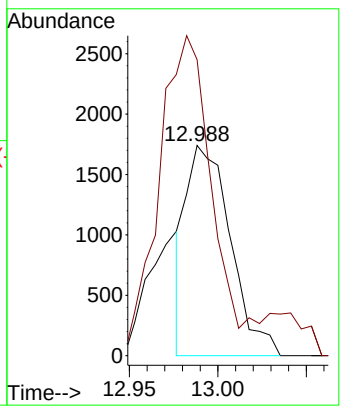
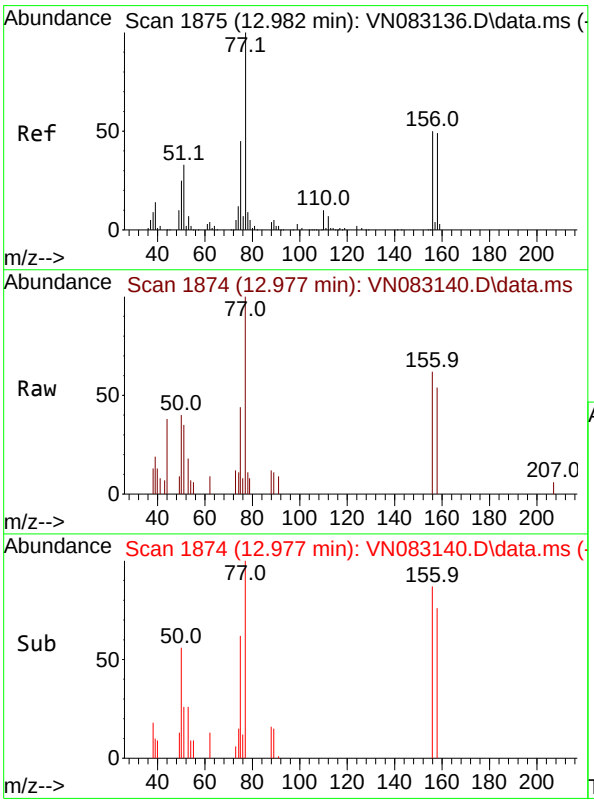
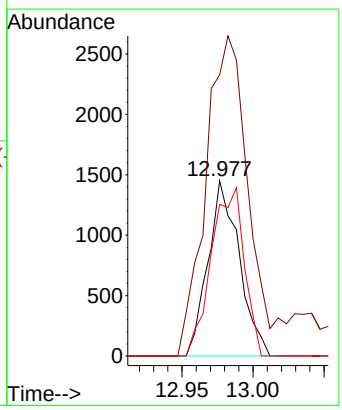


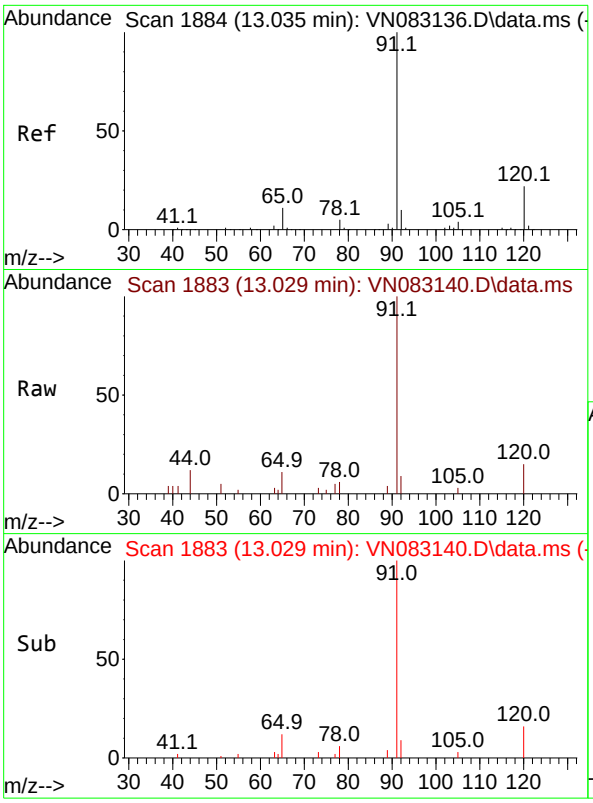


#77
Bromobenzene
Concen: 0.969 ug/l
RT: 12.977 min Scan# 1874
Delta R.T. -0.006 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion:156 Resp: 2212

Ion	Ratio	Lower	Upper
156	100		
77	252.2	111.3	333.8
158	101.5	48.3	144.9





#78
n-propylbenzene
Concen: 0.997 ug/l
RT: 13.029 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 91 Resp: 1180

Ion	Ratio	Lower	Upper
91	100		
120	21.7	10.9	32.9

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
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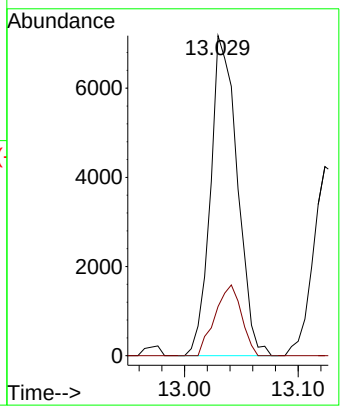
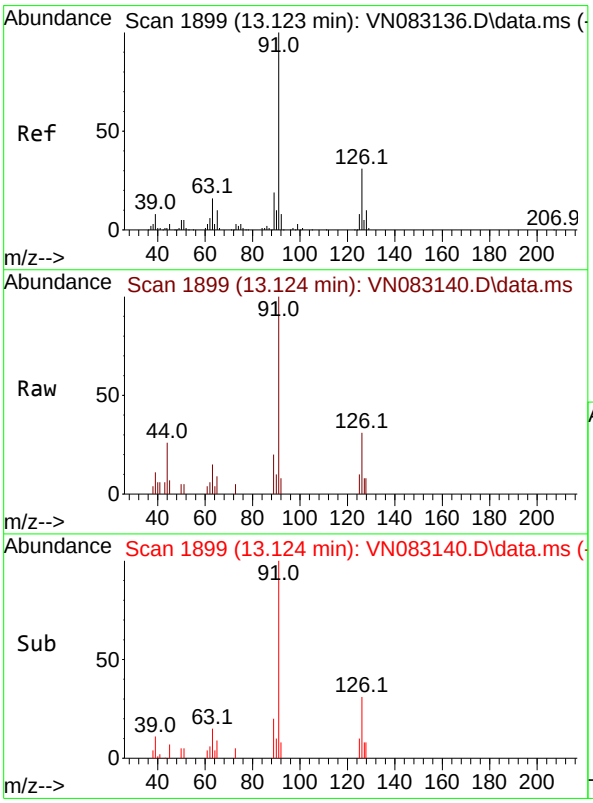
Supervised By :Mahesh Dadoda 08/09/2024

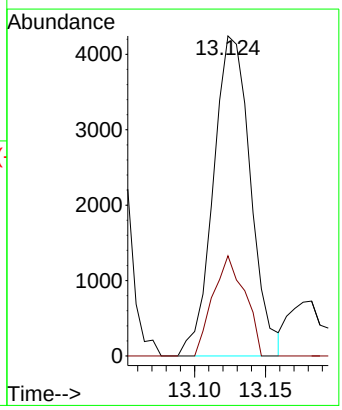


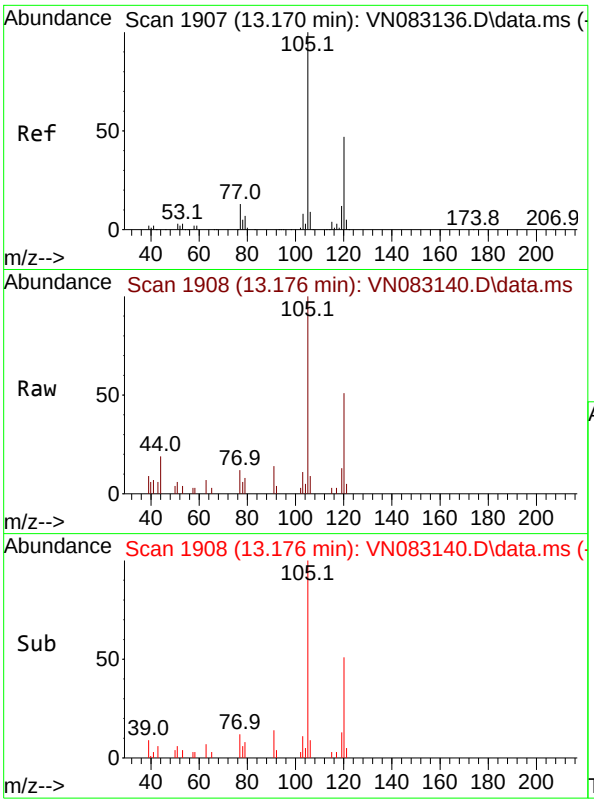


#79
2-Chlorotoluene
Concen: 1.031 ug/l
RT: 13.124 min Scan# 1899
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 91 Resp: 7735

Ion	Ratio	Lower	Upper
91	100		
126	26.9	16.2	48.6





#80
1,3,5-Trimethylbenzene
Concen: 0.994 ug/l
RT: 13.176 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion:105 Resp: 855

Ion	Ratio	Lower	Upper
105	100		
120	51.7	24.3	72.8

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
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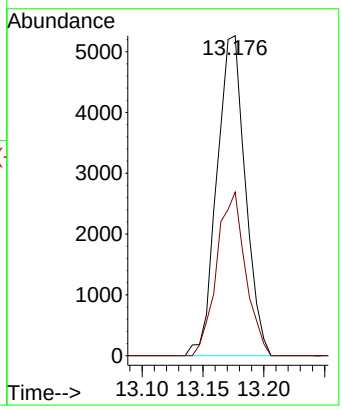
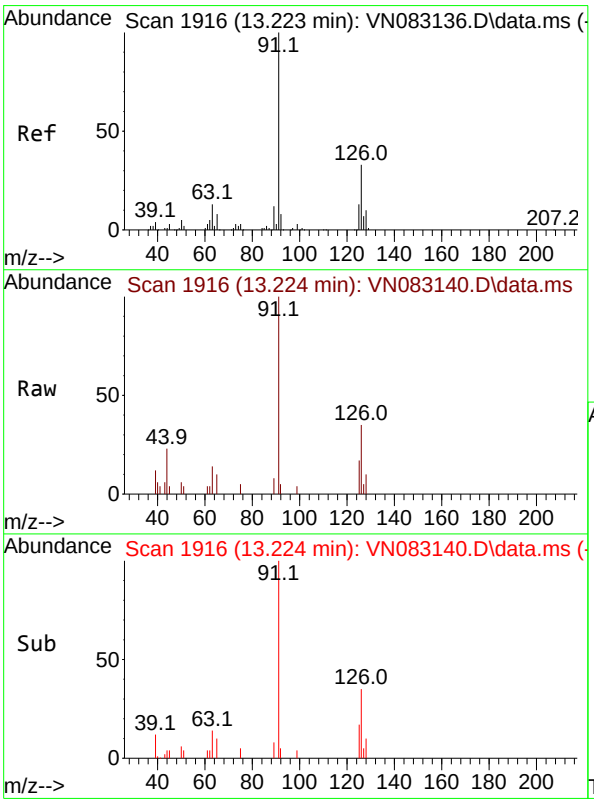
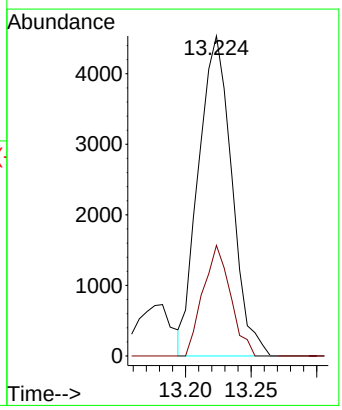


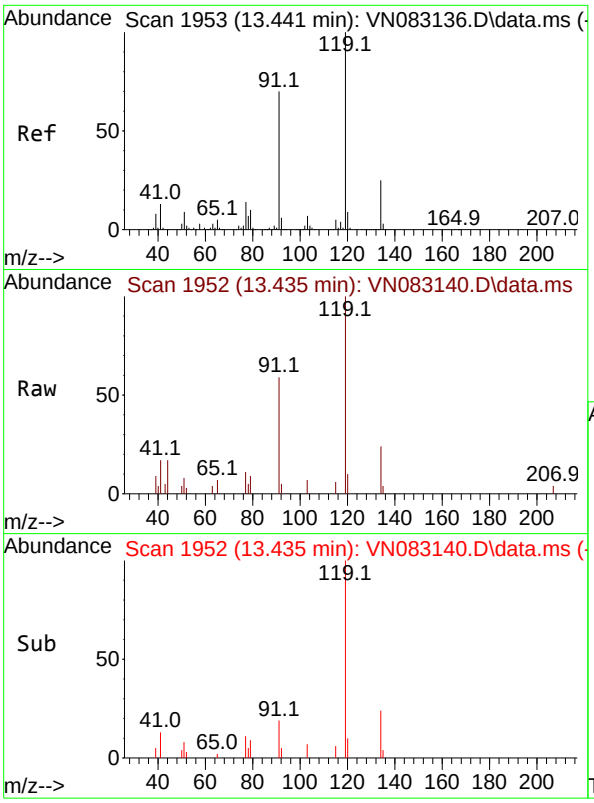


#82
4-Chlorotoluene
Concen: 1.065 ug/l
RT: 13.224 min Scan# 1916
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 91 Resp: 8018

Ion	Ratio	Lower	Upper
91	100		
126	28.6	16.2	48.6

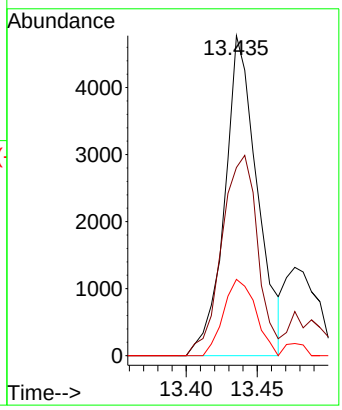




#83
tert-Butylbenzene
Concen: 1.001 ug/l
RT: 13.435 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion:119 Resp: 762

Ion	Ratio	Lower	Upper
119	100		
91	69.2	35.0	105.1
134	23.5	13.3	39.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

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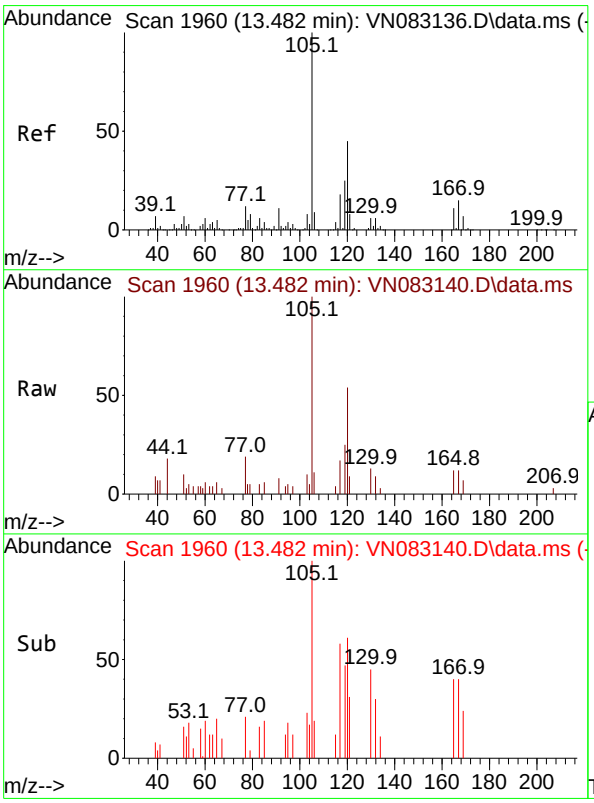
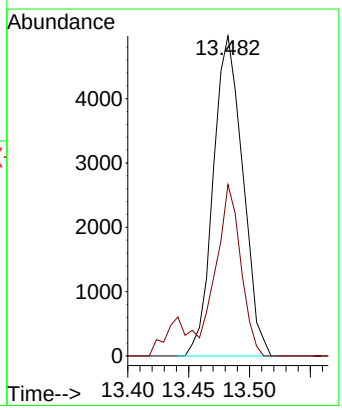
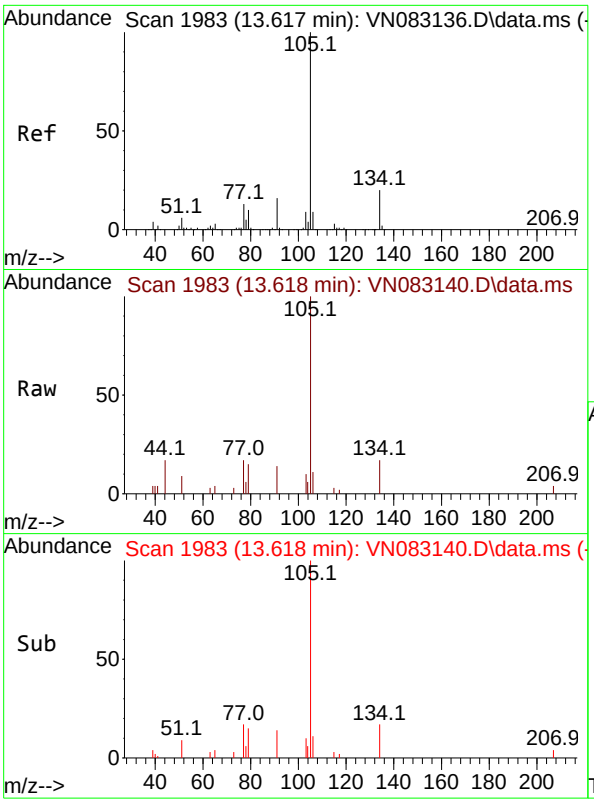


#84
1,2,4-Trimethylbenzene
Concen: 0.968 ug/l
RT: 13.482 min Scan# 1960
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion:105 Resp: 8397

Ion	Ratio	Lower	Upper
105	100		
120	44.1	21.9	65.8





#85
sec-Butylbenzene
Concen: 1.001 ug/l
RT: 13.618 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion:105 Resp: 1041

Ion	Ratio	Lower	Upper
105	100		
134	17.7	9.8	29.3

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
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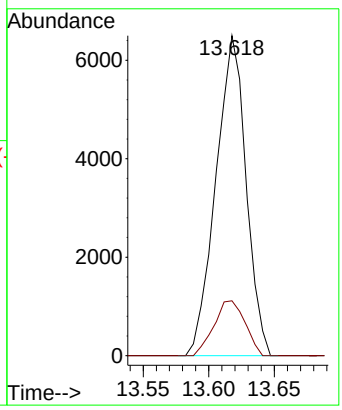
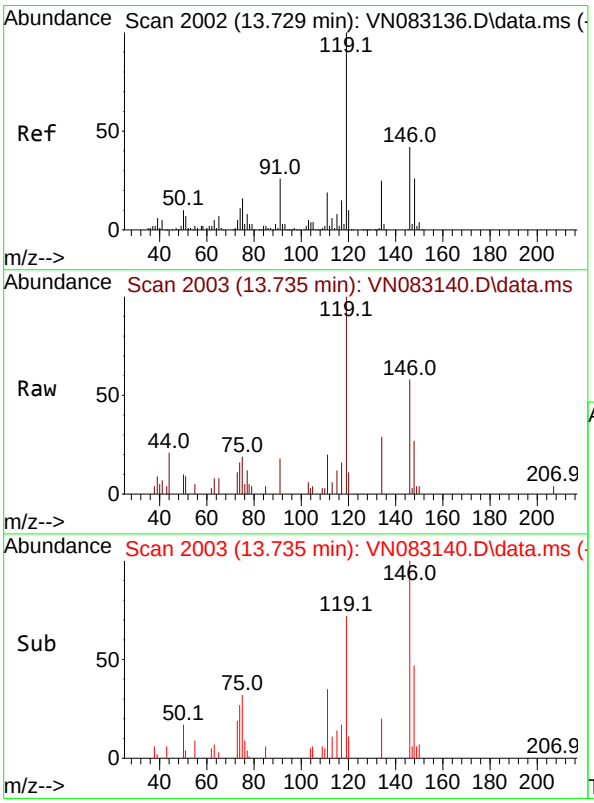
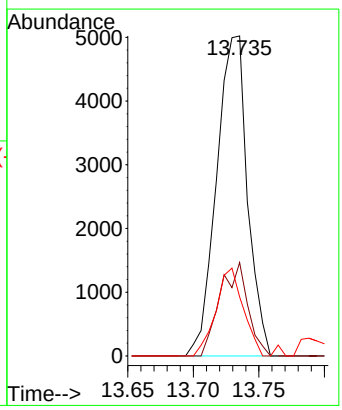


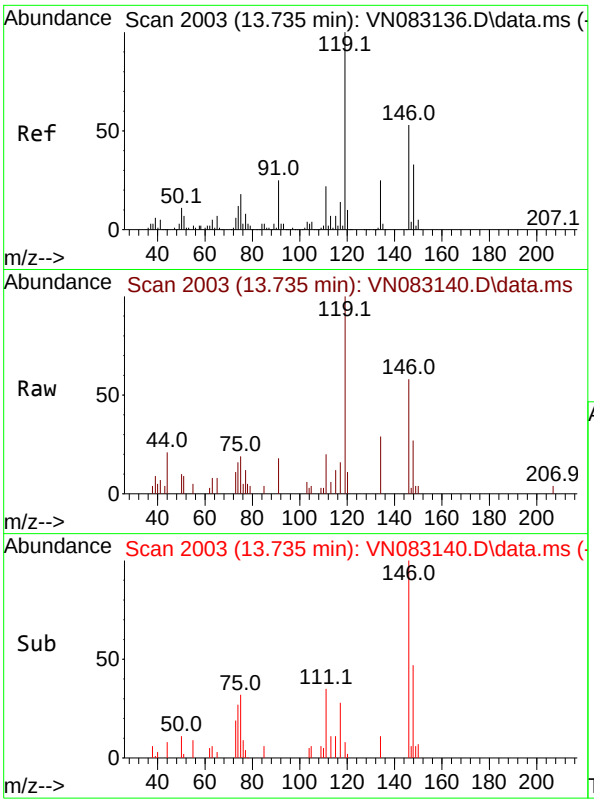


#86
p-Isopropyltoluene
Concen: 0.960 ug/l
RT: 13.735 min Scan# 2003
Delta R.T. 0.006 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion:119 Resp: 8247

Ion	Ratio	Lower	Upper
119	100		
134	26.4	13.0	39.0
91	24.2	12.3	36.9

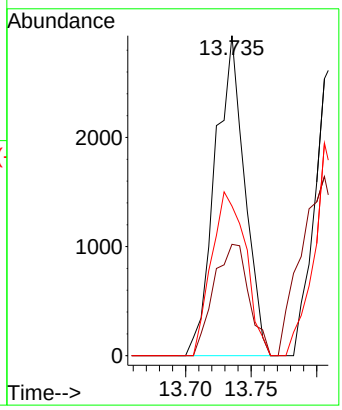




#87
1,3-Dichlorobenzene
Concen: 1.070 ug/l
RT: 13.735 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion:146 Resp: 459

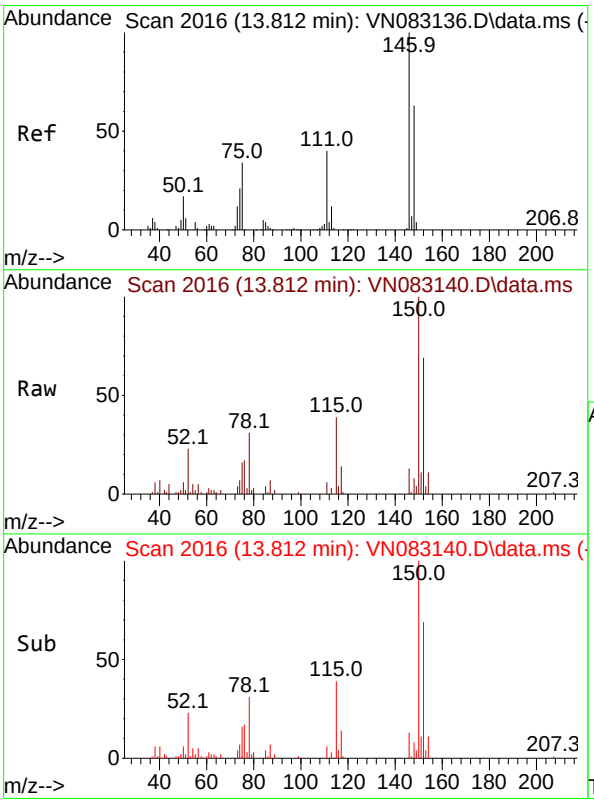
Ion	Ratio	Lower	Upper
146	100		
111	41.5	20.6	61.9
148	59.5	31.8	95.3



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

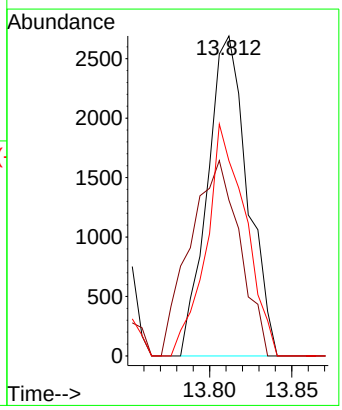
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

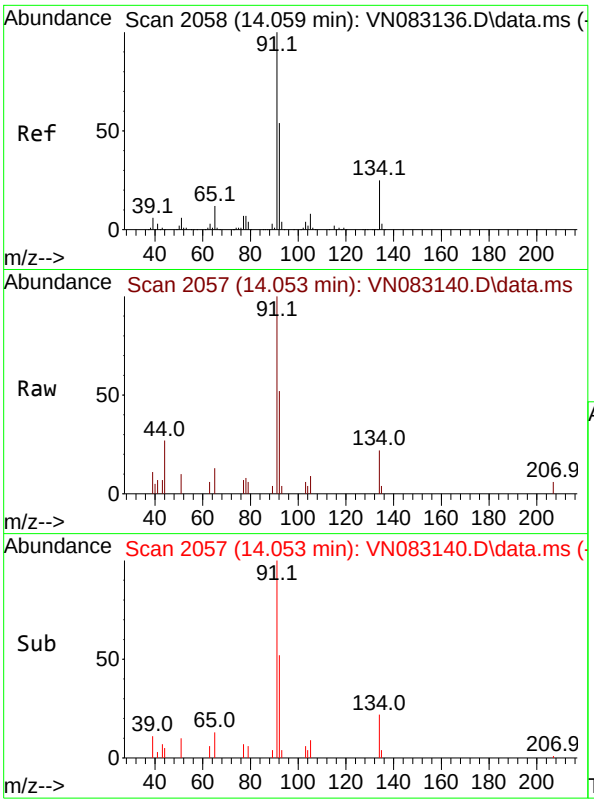


#88
1,4-Dichlorobenzene
Concen: 1.057 ug/l m
RT: 13.812 min Scan# 2016
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion:146 Resp: 4578

Ion	Ratio	Lower	Upper
146	100		
111	41.7	20.1	60.3
148	59.7	32.2	96.6





#89
n-Butylbenzene
Concen: 0.942 ug/l
RT: 14.053 min Scan# 2
Delta R.T. -0.006 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

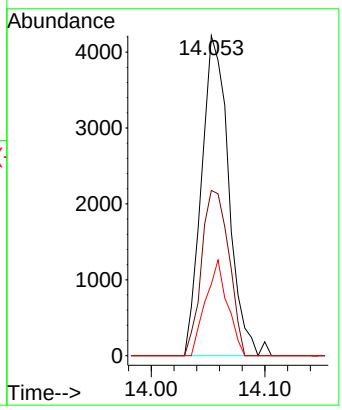
Tgt Ion: 91 Resp: 700

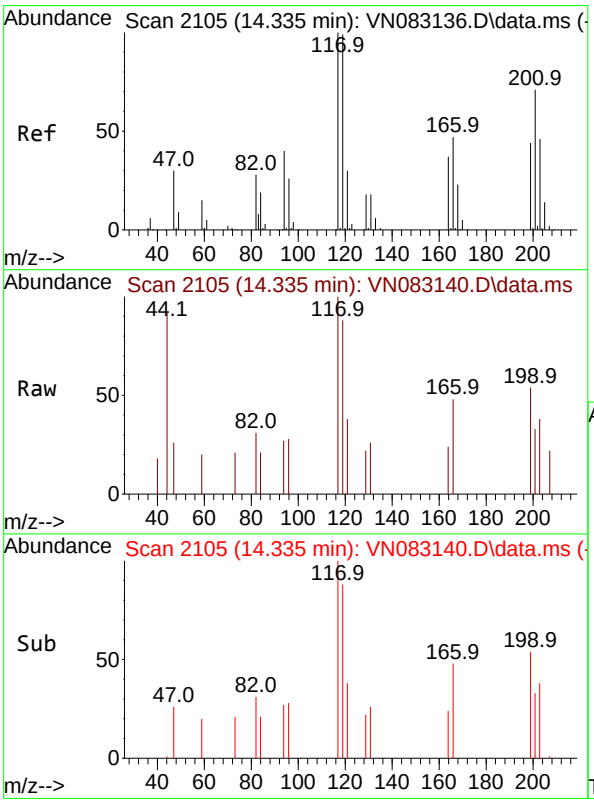
Ion	Ratio	Lower	Upper
91	100		
92	52.0	26.1	78.3
134	24.1	12.1	36.3

Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

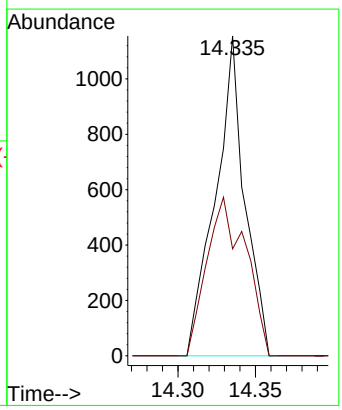


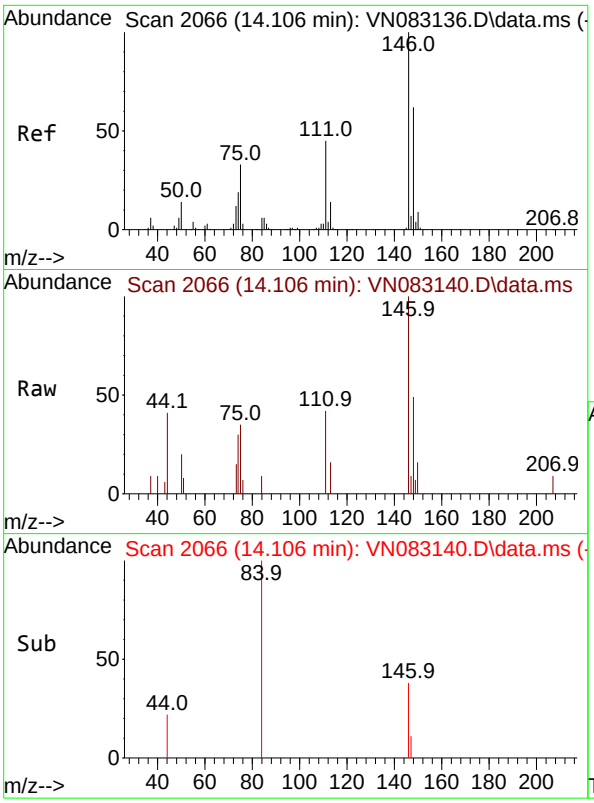


#90
Hexachloroethane
Concen: 0.918 ug/l
RT: 14.335 min Scan# 2105
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion:117 Resp: 1524

Ion	Ratio	Lower	Upper
117	100		
201	65.7	35.8	107.3

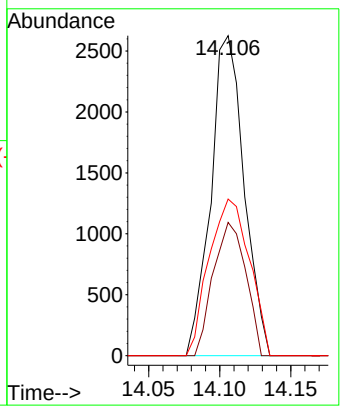




#91
1,2-Dichlorobenzene
Concen: 1.029 ug/l
RT: 14.106 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion:146 Resp: 427

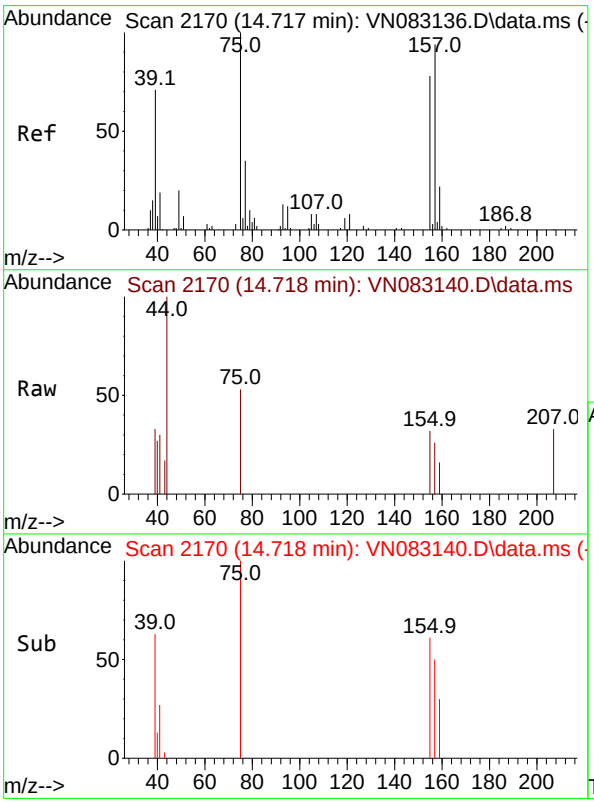
Ion	Ratio	Lower	Upper
146	100		
111	40.7	21.4	64.2
148	59.6	32.1	96.5



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

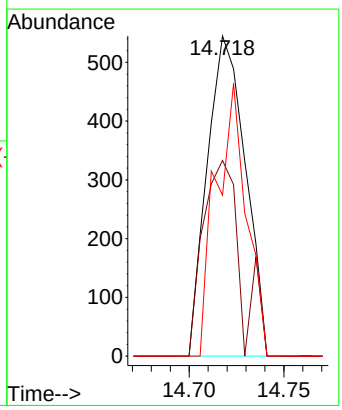
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

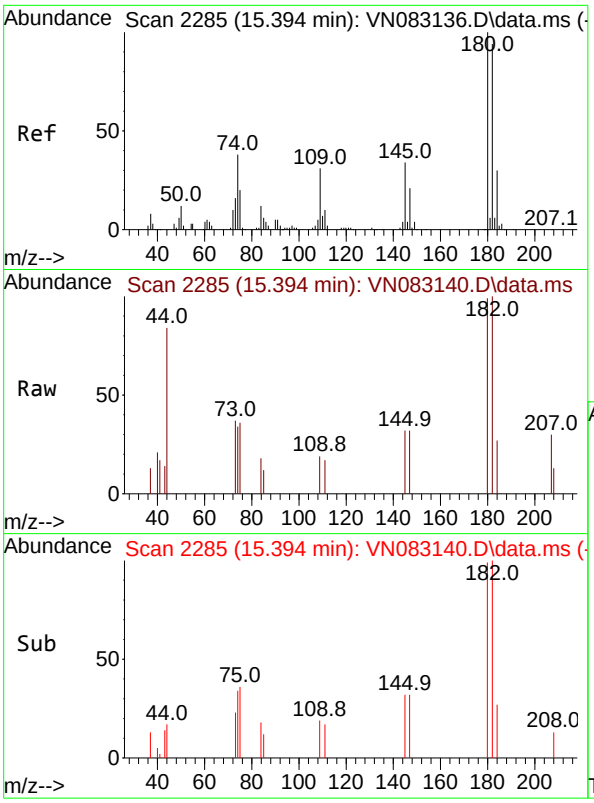


#92
1,2-Dibromo-3-Chloropropane
Concen: 1.081 ug/l
RT: 14.718 min Scan# 2170
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 75 Resp: 763

Ion	Ratio	Lower	Upper
75	100		
155	59.5	36.6	109.8
157	67.9	46.9	140.6

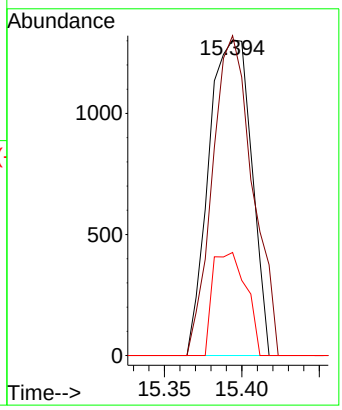




#93
1,2,4-Trichlorobenzene
Concen: 1.070 ug/l
RT: 15.394 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion:180 Resp: 249

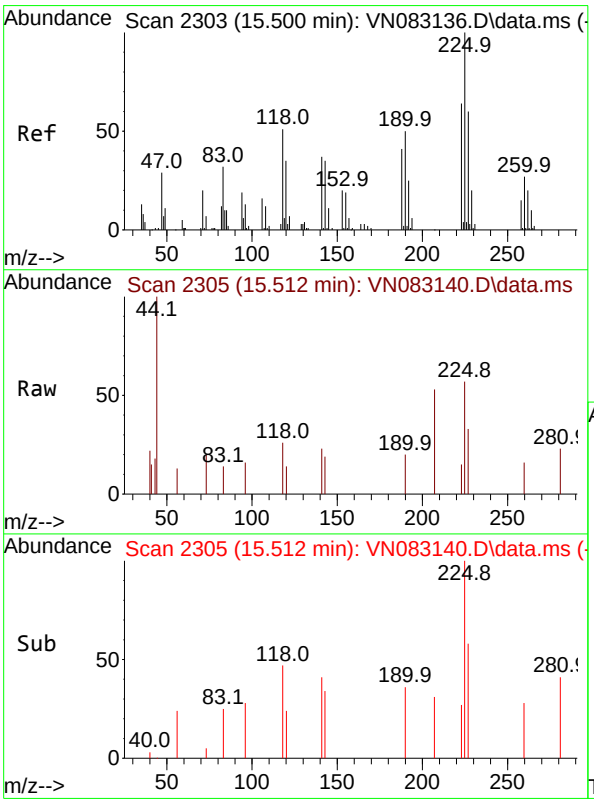
Ion	Ratio	Lower	Upper
180	100		
182	95.5	47.3	141.8
145	25.6	15.7	47.1



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

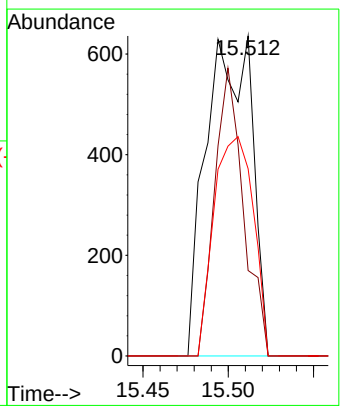
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

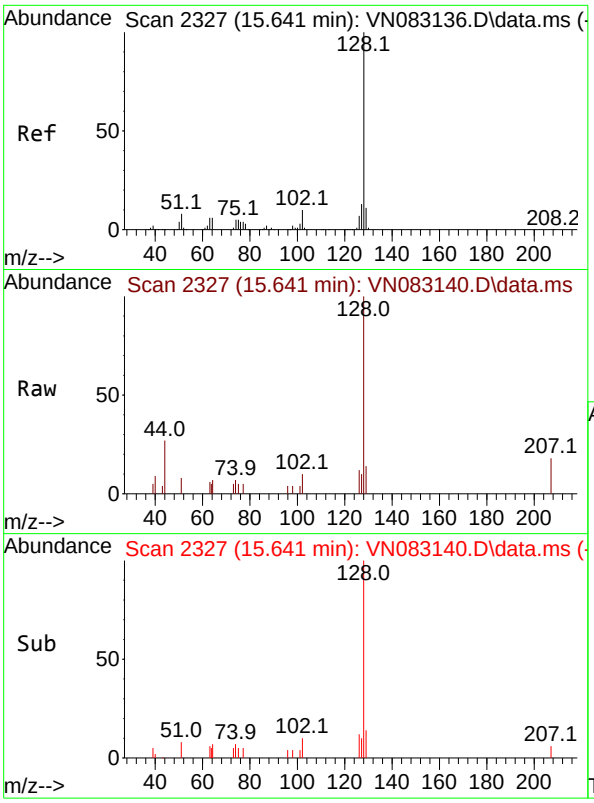


#94
Hexachlorobutadiene
Concen: 1.140 ug/l
RT: 15.512 min Scan# 2305
Delta R.T. 0.012 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion:225 Resp: 1181

Ion	Ratio	Lower	Upper
225	100		
223	57.0	31.9	95.7
227	59.4	32.5	97.5

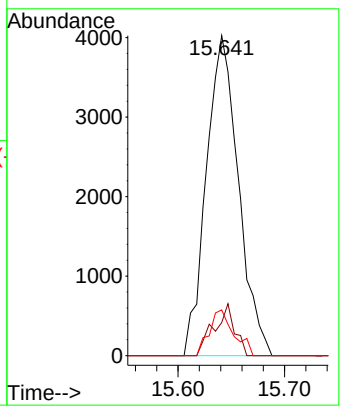




#95
Naphthalene
Concen: 1.021 ug/l
RT: 15.641 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion:128 Resp: 843

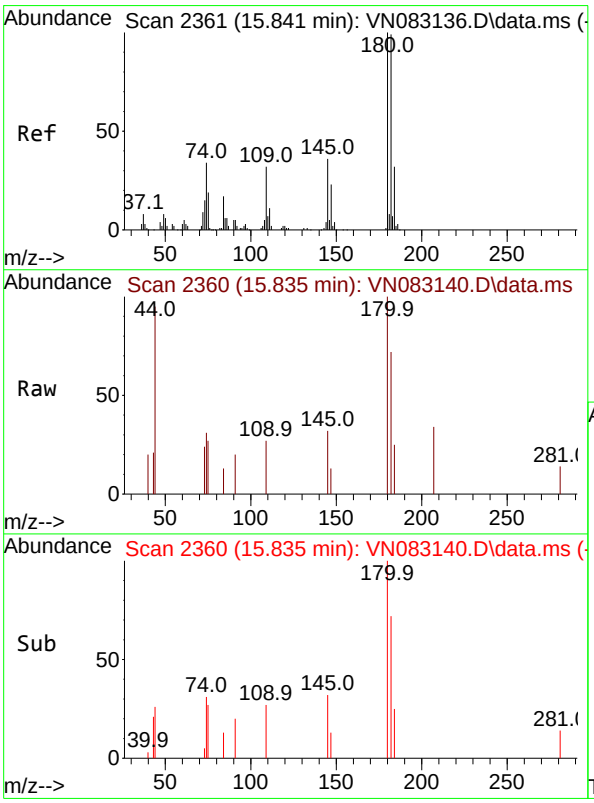
Ion	Ratio	Lower	Upper
128	100		
127	10.4	10.6	16.0
129	10.9	8.6	12.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

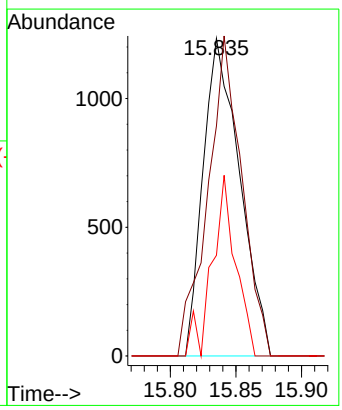
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024



#96
1,2,3-Trichlorobenzene
Concen: 1.036 ug/l
RT: 15.835 min Scan# 2360
Delta R.T. -0.006 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion:180 Resp: 2389

Ion	Ratio	Lower	Upper
180	100		
182	93.8	48.9	146.8
145	36.6	16.8	50.4



ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN080724\
Data File : VN083142.D
Acq On : 07 Aug 2024 14:49
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN080724

Manual Integrations APPROVED

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

Quant Time: Aug 08 06:35:30 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.224	168	223686	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	380000	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	330951	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.794	152	157193	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.577	65	161051	50.583	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 101.160%			
35) Dibromofluoromethane	8.165	113	122268	51.549	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 103.100%			
50) Toluene-d8	10.565	98	461627	52.175	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 104.340%			
62) 4-Bromofluorobenzene	12.847	95	181344	52.574	ug/l	0.00
Spiked Amount 50.000	Range 64 - 133		Recovery = 105.140%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.124	85	119481	47.102	ug/l	99
3) Chloromethane	2.360	50	120081	46.238	ug/l	97
4) Vinyl Chloride	2.512	62	121730	45.937	ug/l	99
5) Bromomethane	2.948	94	70678	42.984	ug/l	99
6) Chloroethane	3.112	64	72491	43.725	ug/l	96
7) Trichlorofluoromethane	3.495	101	206291	47.124	ug/l	98
8) Diethyl Ether	3.959	74	75355	46.259	ug/l	85
9) 1,1,2-Trichlorotrifluo...	4.365	101	113860	47.176	ug/l	99
10) Methyl Iodide	4.589	142	150327	47.349	ug/l	97
11) Tert butyl alcohol	5.524	59	137718	208.135	ug/l	99
12) 1,1-Dichloroethene	4.336	96	112976	45.562	ug/l	93
13) Acrolein	4.177	56	93826	217.571	ug/l	97
14) Allyl chloride	5.018	41	192929	41.173	ug/l	94
15) Acrylonitrile	5.712	53	296594	217.950	ug/l	99
16) Acetone	4.424	43	262677	210.840	ug/l	97
17) Carbon Disulfide	4.712	76	316980	43.689	ug/l	100
18) Methyl Acetate	5.024	43	157374	42.397	ug/l #	91
19) Methyl tert-butyl Ether	5.795	73	418691	46.781	ug/l	97
20) Methylene Chloride	5.277	84	125142	43.645	ug/l #	82
21) trans-1,2-Dichloroethene	5.783	96	117045	45.671	ug/l	92
22) Diisopropyl ether	6.671	45	412931	46.881	ug/l	97
23) Vinyl Acetate	6.600	43	2125343	235.414	ug/l	95
24) 1,1-Dichloroethane	6.565	63	224136	46.685	ug/l	99
25) 2-Butanone	7.483	43	405134	211.782	ug/l	91
26) 2,2-Dichloropropane	7.489	77	213355	47.853	ug/l	97
27) cis-1,2-Dichloroethene	7.483	96	142606	46.113	ug/l	93
28) Bromochloromethane	7.812	49	90226	45.986	ug/l	86
29) Tetrahydrofuran	7.836	42	274710	222.147	ug/l	89
30) Chloroform	7.965	83	236359	47.387	ug/l	97
31) Cyclohexane	8.253	56	205124	43.474	ug/l	96
32) 1,1,1-Trichloroethane	8.165	97	222538	47.135	ug/l	96
36) 1,1-Dichloropropene	8.371	75	171262	47.732	ug/l	99
37) Ethyl Acetate	7.559	43	173246	43.124	ug/l #	96
38) Carbon Tetrachloride	8.365	117	193592	47.904	ug/l	100
39) Methylcyclohexane	9.600	83	210745	47.821	ug/l	98
40) Benzene	8.606	78	509159	47.635	ug/l	99

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN080724\
Data File : VN083142.D
Acq On : 07 Aug 2024 14:49
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 08 06:35:30 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
ICVVN080724

Manual Integrations APPROVED

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	7.777	41	98251	43.013	ug/l		95
42) 1,2-Dichloroethane	8.671	62	184210	47.310	ug/l		98
43) Isopropyl Acetate	8.689	43	319540	45.577	ug/l	#	95
44) Trichloroethene	9.353	130	122105	47.994	ug/l		99
45) 1,2-Dichloropropane	9.624	63	122313	48.208	ug/l		99
46) Dibromomethane	9.712	93	85581	47.124	ug/l		99
47) Bromodichloromethane	9.888	83	191842	47.047	ug/l		98
48) Methyl methacrylate	9.683	41	148161	44.609	ug/l		92
49) 1,4-Dioxane	9.694	88	53042	885.211	ug/l		96
51) 4-Methyl-2-Pentanone	10.441	43	877246	230.917	ug/l		94
52) Toluene	10.630	92	327682	48.520	ug/l		98
53) t-1,3-Dichloropropene	10.835	75	208495	49.776	ug/l		99
54) cis-1,3-Dichloropropene	10.312	75	216020	48.487	ug/l		93
55) 1,1,2-Trichloroethane	11.018	97	117023	48.351	ug/l		99
56) Ethyl methacrylate	10.871	69	216248	47.395	ug/l		88
57) 1,3-Dichloropropane	11.165	76	204441	47.391	ug/l		98
58) 2-Chloroethyl Vinyl ether	10.159	63	472357	244.918	ug/l		96
59) 2-Hexanone	11.194	43	661033	224.916	ug/l		92
60) Dibromochloromethane	11.359	129	144886	49.513	ug/l		99
61) 1,2-Dibromoethane	11.471	107	119834	47.133	ug/l		98
64) Tetrachloroethene	11.106	164	105591	48.175	ug/l		97
65) Chlorobenzene	11.888	112	347560	47.522	ug/l		95
66) 1,1,1,2-Tetrachloroethane	11.959	131	120826	46.843	ug/l		98
67) Ethyl Benzene	11.965	91	640827	47.764	ug/l		99
68) m/p-Xylenes	12.071	106	484653	96.434	ug/l		98
69) o-Xylene	12.400	106	231292	46.662	ug/l		97
70) Styrene	12.412	104	403657	48.487	ug/l		98
71) Bromoform	12.577	173	93397	47.797	ug/l	#	99
73) Isopropylbenzene	12.694	105	616544	46.893	ug/l		99
74) N-amyl acetate	12.494	43	281352	43.748	ug/l		94
75) 1,1,2,2-Tetrachloroethane	12.941	83	159962	43.016	ug/l		99
76) 1,2,3-Trichloropropane	12.994	75	145309m	42.119	ug/l		
77) Bromobenzene	12.982	156	136249	46.649	ug/l		97
78) n-propylbenzene	13.035	91	721825	47.678	ug/l		99
79) 2-Chlorotoluene	13.124	91	445353	46.398	ug/l		98
80) 1,3,5-Trimethylbenzene	13.171	105	524769	47.673	ug/l		98
81) trans-1,4-Dichloro-2-b...	12.735	75	74654	47.070	ug/l		84
82) 4-Chlorotoluene	13.224	91	447810	46.512	ug/l		98
83) tert-Butylbenzene	13.435	119	450104	46.173	ug/l		99
84) 1,2,4-Trimethylbenzene	13.482	105	515759	46.493	ug/l		99
85) sec-Butylbenzene	13.618	105	625404	47.018	ug/l		100
86) p-Isopropyltoluene	13.729	119	522411	47.566	ug/l		98
87) 1,3-Dichlorobenzene	13.735	146	252579	45.959	ug/l		98
88) 1,4-Dichlorobenzene	13.812	146	252088	45.499	ug/l		98
89) n-Butylbenzene	14.059	91	461440	48.489	ug/l		98
90) Hexachloroethane	14.335	117	99176	46.741	ug/l		95
91) 1,2-Dichlorobenzene	14.106	146	240673	45.255	ug/l		98
92) 1,2-Dibromo-3-Chloropr...	14.723	75	37677	41.753	ug/l		99
93) 1,2,4-Trichlorobenzene	15.394	180	137214	46.054	ug/l		96
94) Hexachlorobutadiene	15.500	225	57394	43.315	ug/l		98
95) Naphthalene	15.641	128	471674	44.692	ug/l		99
96) 1,2,3-Trichlorobenzene	15.841	180	133315	45.221	ug/l		95

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN080724\
Data File : VN083142.D
Acq On : 07 Aug 2024 14:49
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN080724

Manual Integrations APPROVED

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

Quant Time: Aug 08 06:35:30 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

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

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

ICAL Form

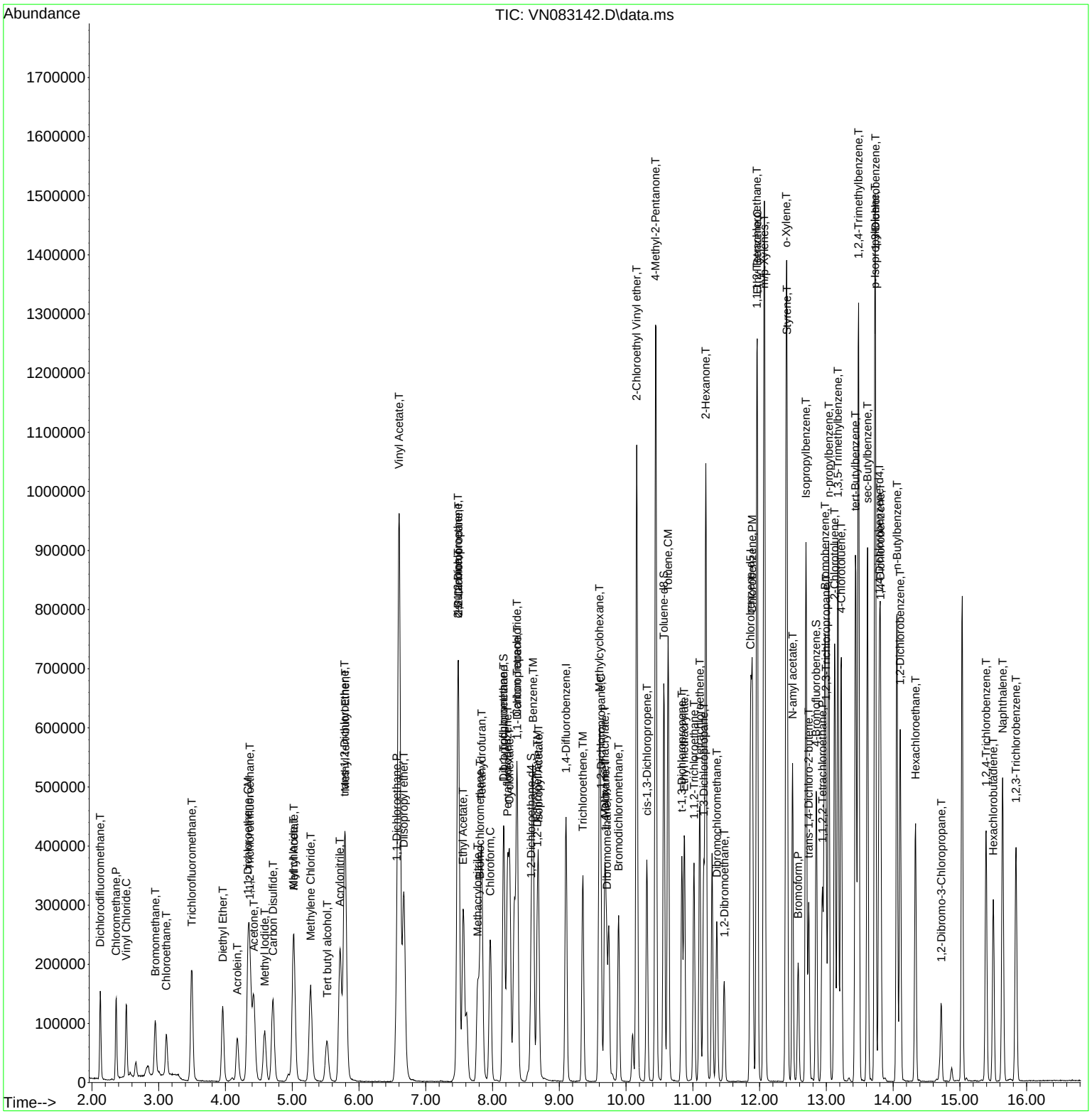
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN080724\
Data File : VN083142.D
Acq On : 07 Aug 2024 14:49
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 11 Sample Multiplier: 1

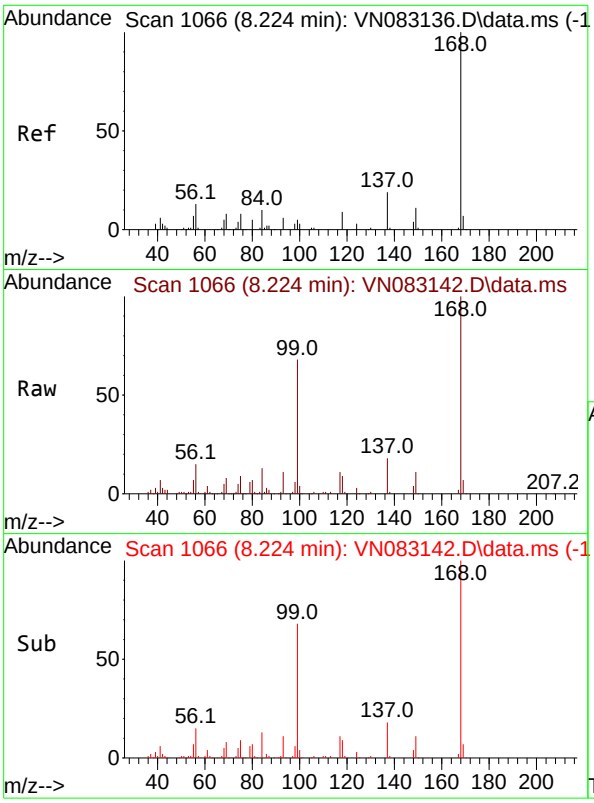
Quant Time: Aug 08 06:35:30 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
ICVVN080724

Manual Integrations APPROVED

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

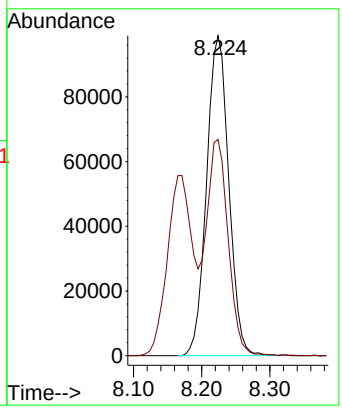




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion:168 Resp: 22368

Ion	Ratio	Lower	Upper
168	100		
99	67.4	48.2	72.4



Instrument :
MSVOA_N
ClientSampleId :
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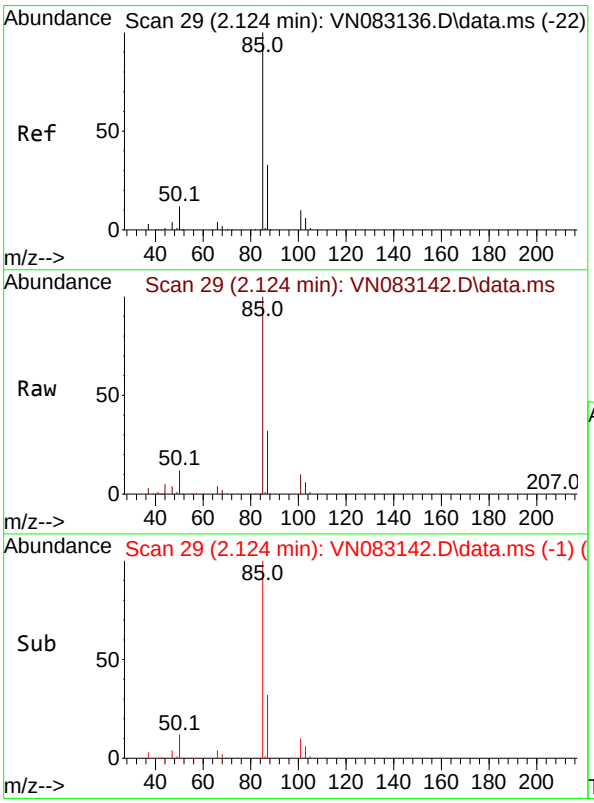
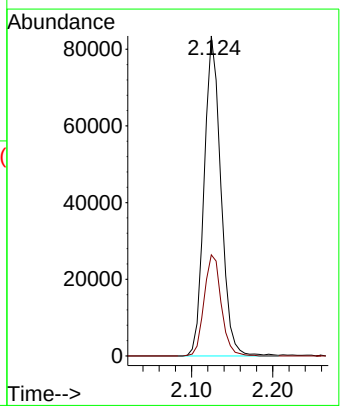
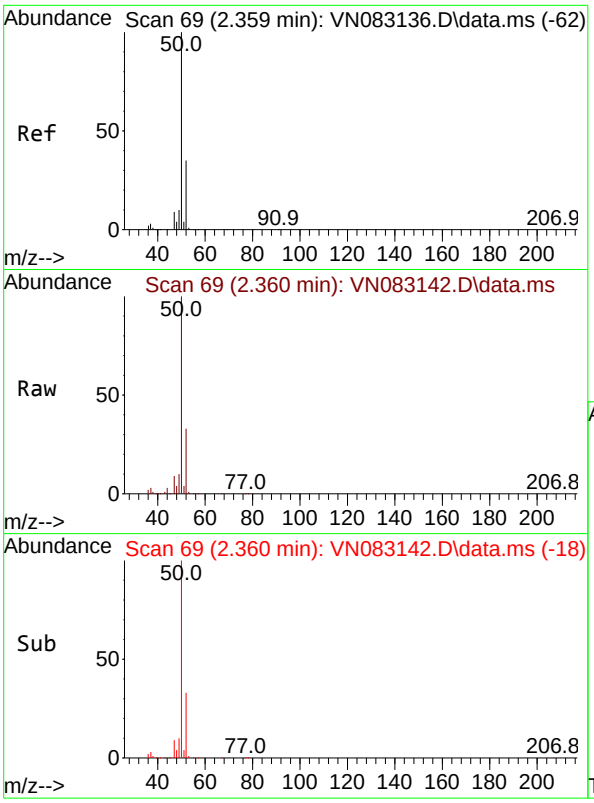


#2
Dichlorodifluoromethane
Concen: 47.102 ug/l
RT: 2.124 min Scan# 29
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 85 Resp: 119481

Ion	Ratio	Lower	Upper
85	100		
87	31.6	15.7	47.0

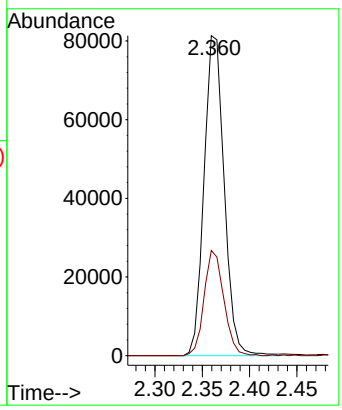




#3
Chloromethane
Concen: 46.238 ug/l
RT: 2.360 min Scan# 6
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 50 Resp: 12008

Ion	Ratio	Lower	Upper
50	100		
52	32.9	25.0	37.4



Instrument :
MSVOA_N
ClientSampleId :
ICVVN080724

Manual Integrations
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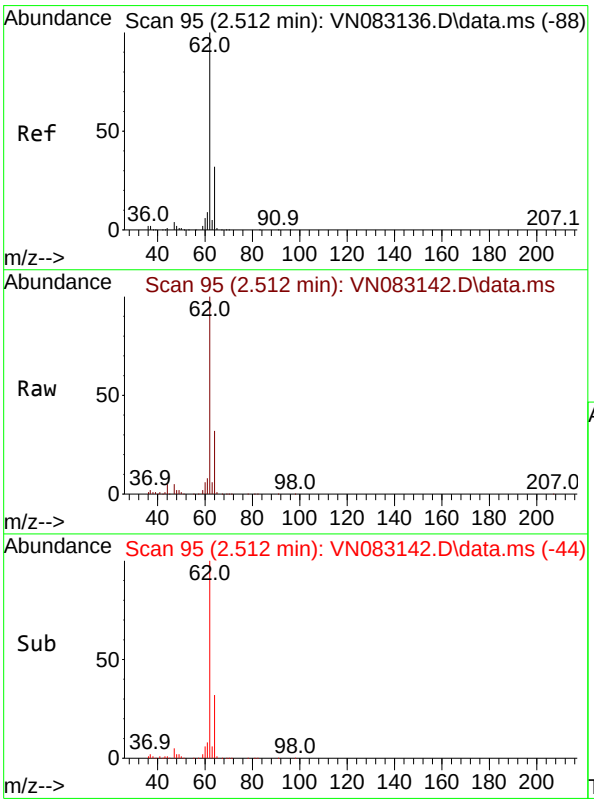
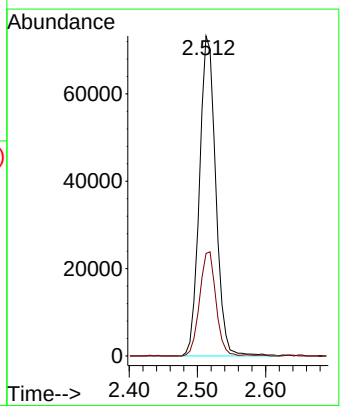
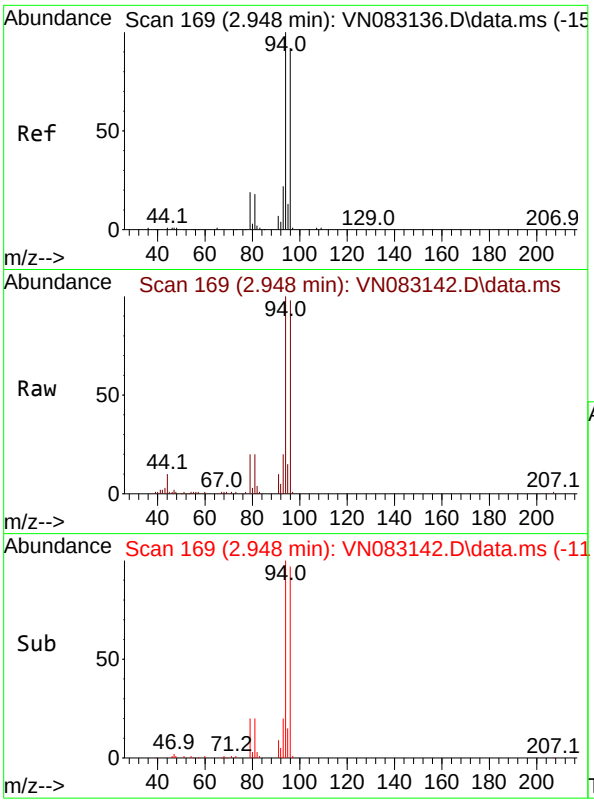


#4
Vinyl Chloride
Concen: 45.937 ug/l
RT: 2.512 min Scan# 95
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 62 Resp: 121730

Ion	Ratio	Lower	Upper
62	100		
64	32.0	25.0	37.6





#5
Bromomethane
Concen: 42.984 ug/l
RT: 2.948 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 94 Resp: 7067

Ion	Ratio	Lower	Upper
94	100		
96	96.9	78.0	117.0

Instrument :
MSVOA_N
ClientSampleId :
ICVVN080724

Manual Integrations
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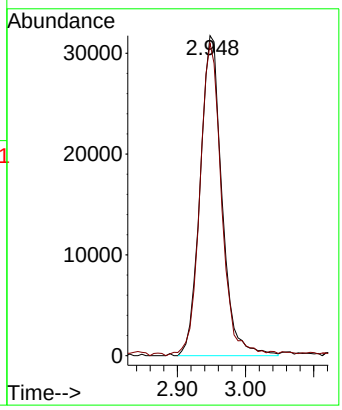
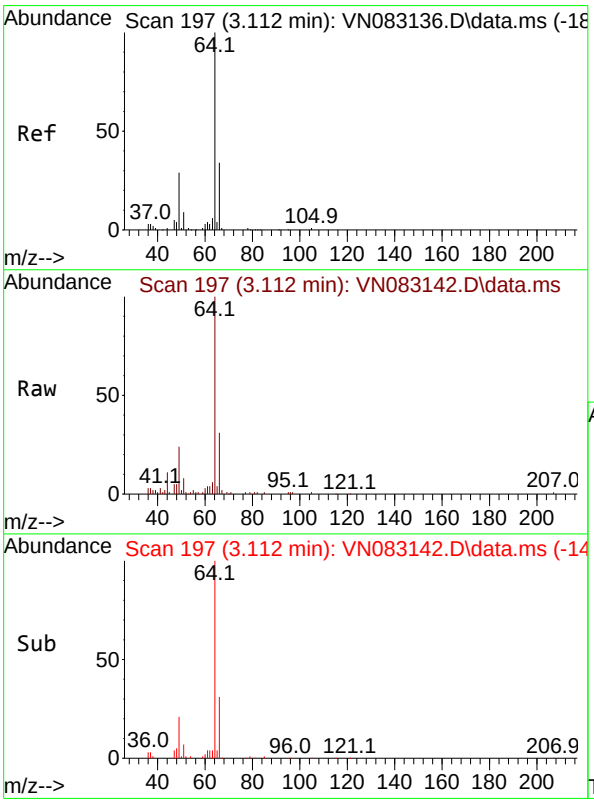
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

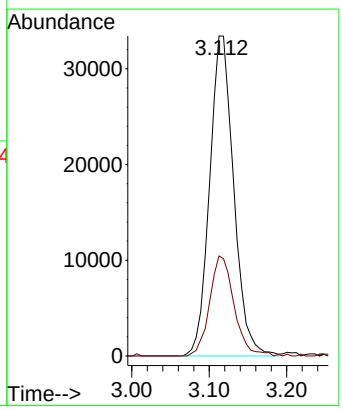


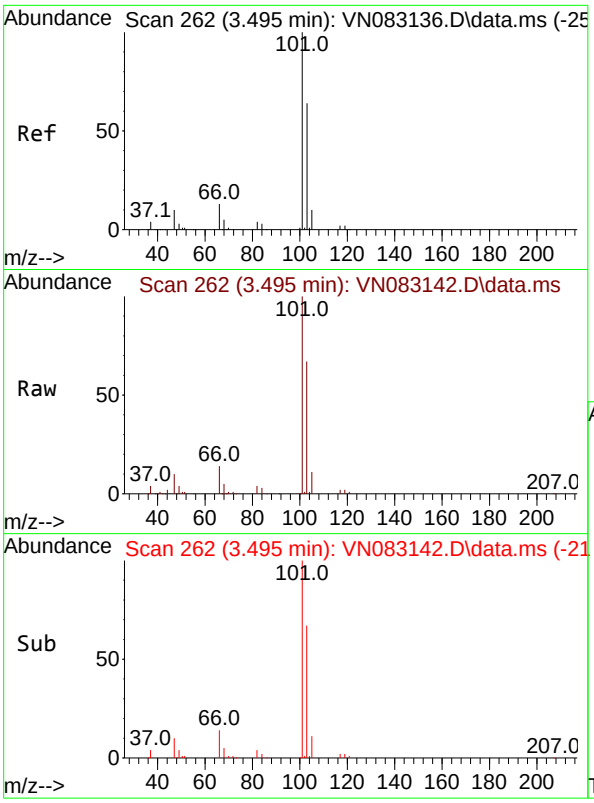


#6
Chloroethane
Concen: 43.725 ug/l
RT: 3.112 min Scan# 197
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 64 Resp: 72491

Ion	Ratio	Lower	Upper
64	100		
66	31.3	26.6	40.0





#7
Trichlorofluoromethane
Concen: 47.124 ug/l
RT: 3.495 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

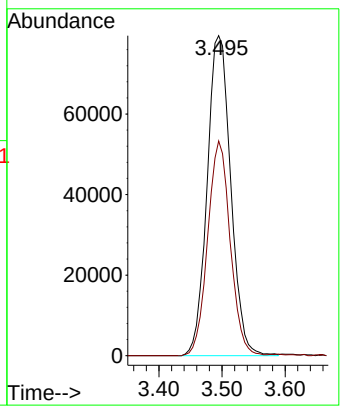
Tgt Ion:101 Resp: 20629

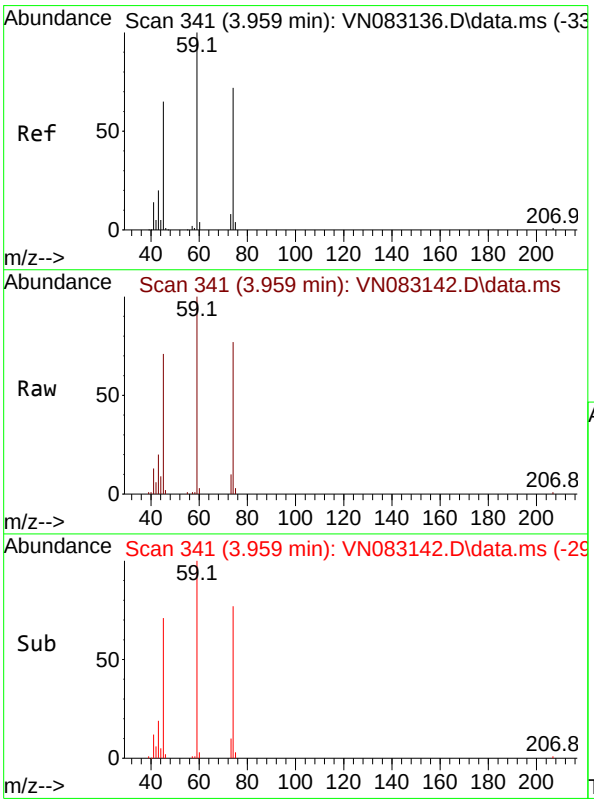
Ion	Ratio	Lower	Upper
101	100		
103	67.1	52.7	79.1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN080724

Manual Integrations
APPROVED

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

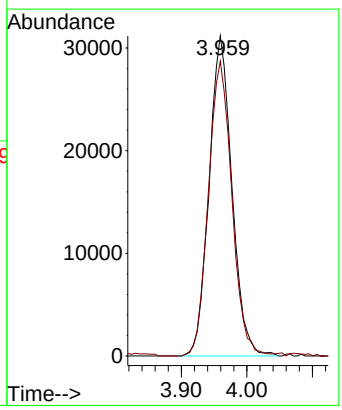


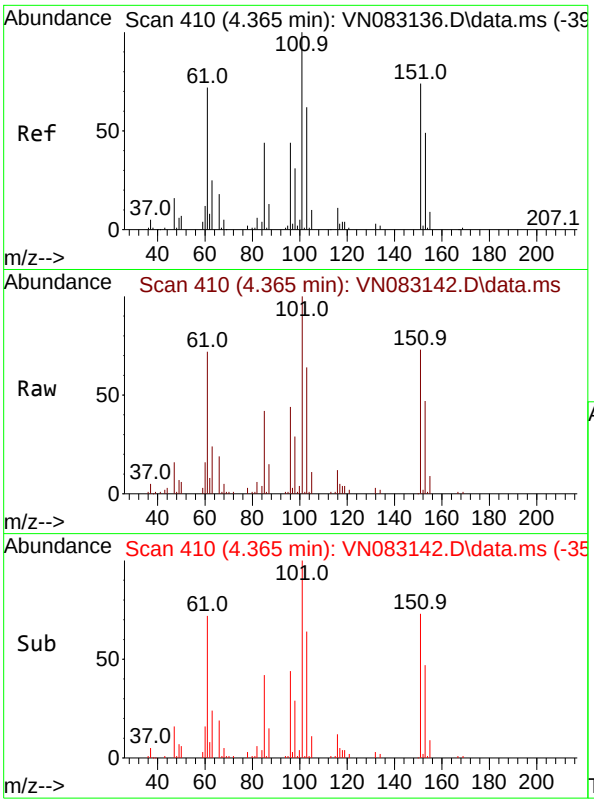


#8
Diethyl Ether
Concen: 46.259 ug/l
RT: 3.959 min Scan# 341
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 74 Resp: 75355

Ion	Ratio	Lower	Upper
74	100		
45	94.7	55.5	166.3

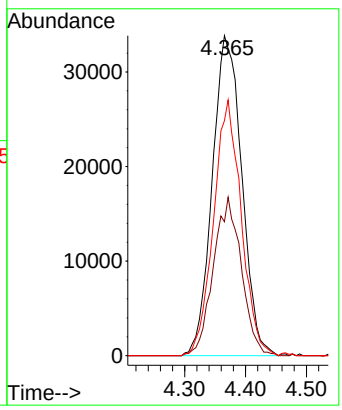




#9
1,1,2-Trichlorotrifluoroethane
Concen: 47.176 ug/l
RT: 4.365 min Scan# 41
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion:101 Resp: 11386

Ion	Ratio	Lower	Upper
101	100		
85	47.0	38.3	57.5
151	75.1	59.3	88.9



Instrument :
MSVOA_N
ClientSampleId :
ICVVN080724

Manual Integrations
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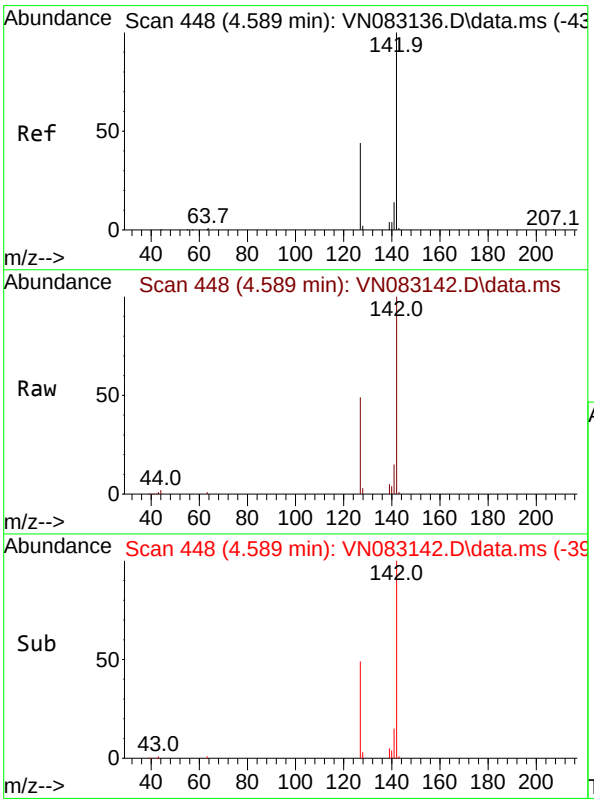
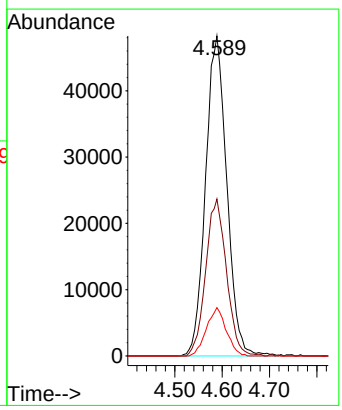
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

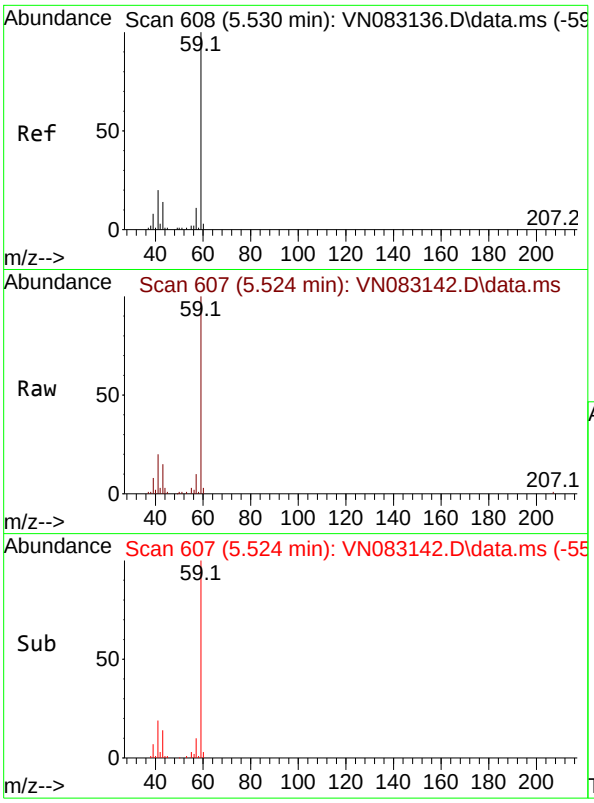


#10
Methyl Iodide
Concen: 47.349 ug/l
RT: 4.589 min Scan# 448
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion:142 Resp: 150327

Ion	Ratio	Lower	Upper
142	100		
127	49.1	37.5	56.3
141	15.1	13.1	19.7





#11
Tert butyl alcohol
Concen: 208.135 ug/l
RT: 5.524 min Scan# 6
Delta R.T. -0.006 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 59 Resp: 13771

Ion	Ratio	Lower	Upper
59	100		
57	10.9	8.9	13.3

Instrument :
MSVOA_N
ClientSampleId :
ICVVN080724

Manual Integrations
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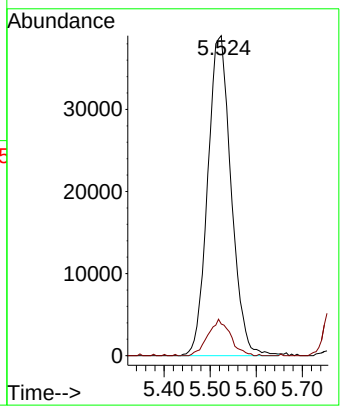
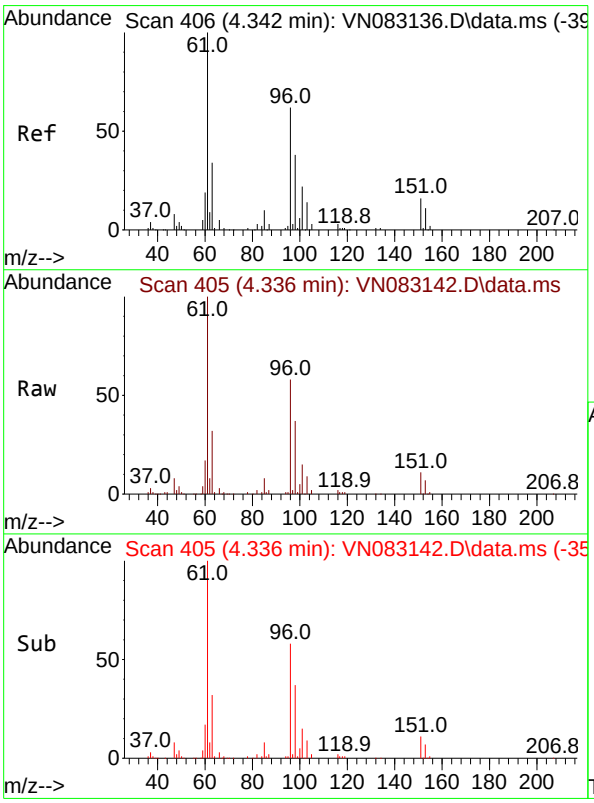
Supervised By :Mahesh Dadoda 08/09/2024

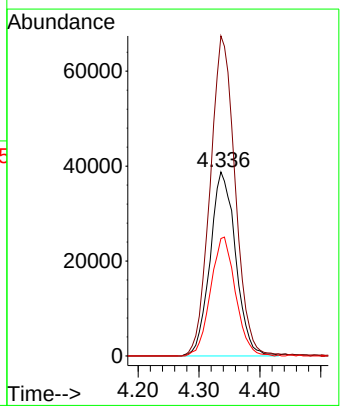


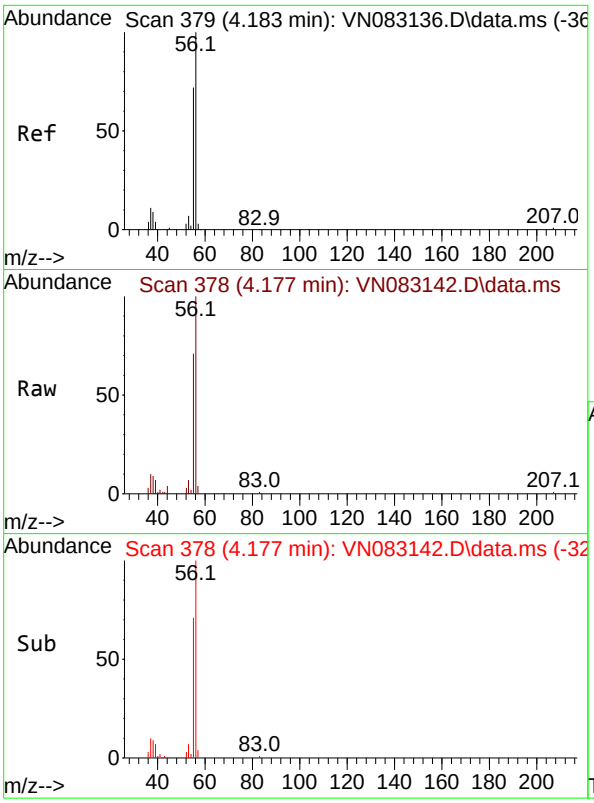


#12
1,1-Dichloroethene
Concen: 45.562 ug/l
RT: 4.336 min Scan# 405
Delta R.T. -0.006 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 96 Resp: 112976

Ion	Ratio	Lower	Upper
96	100		
61	173.9	149.7	224.5
98	63.8	50.1	75.1

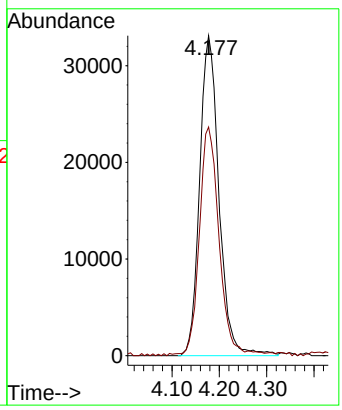




#13
Acrolein
Concen: 217.571 ug/l
RT: 4.177 min Scan# 3
Delta R.T. -0.006 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 56 Resp: 9382

Ion	Ratio	Lower	Upper
56	100		
55	73.1	56.4	84.6



Instrument :
MSVOA_N
ClientSampleId :
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Manual Integrations
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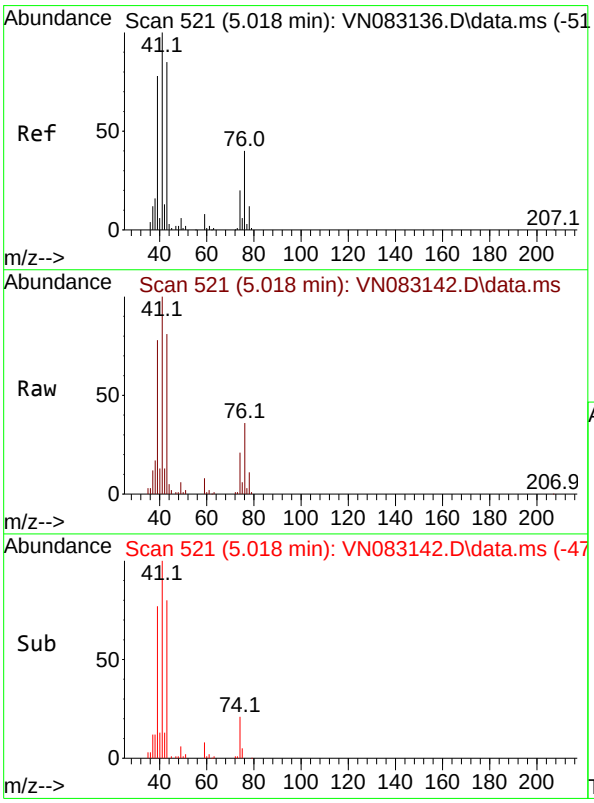
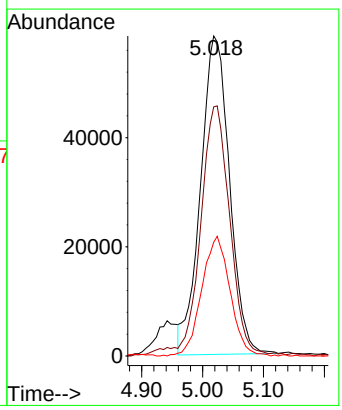
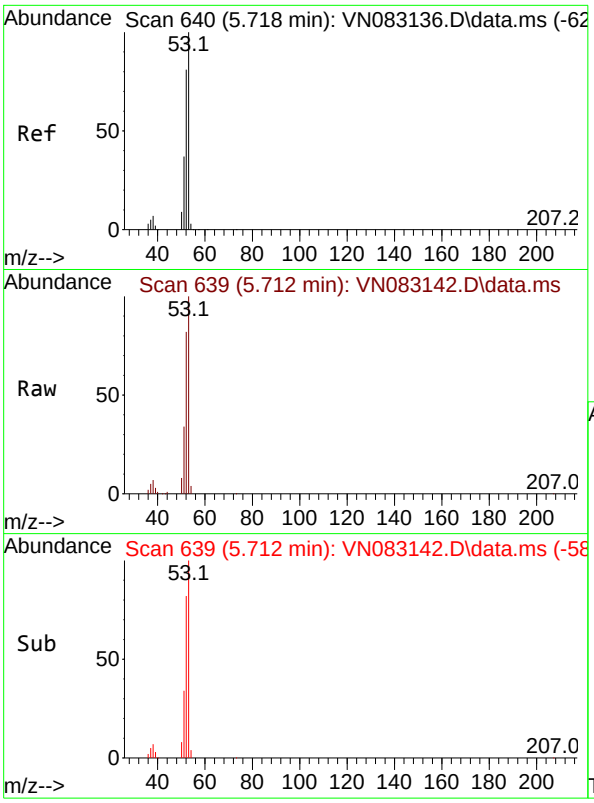


#14
Allyl chloride
Concen: 41.173 ug/l
RT: 5.018 min Scan# 521
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 41 Resp: 192929

Ion	Ratio	Lower	Upper
41	100		
39	79.9	67.8	101.6
76	36.7	25.8	38.8

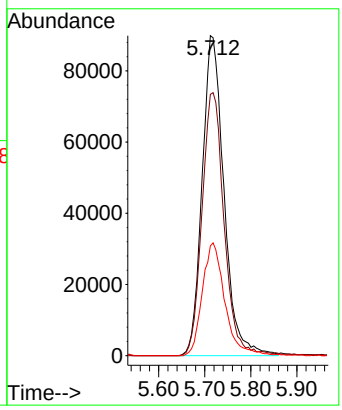




#15
Acrylonitrile
Concen: 217.950 ug/l
RT: 5.712 min Scan# 6
Delta R.T. -0.006 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 53 Resp: 29659

Ion	Ratio	Lower	Upper
53	100		
52	82.9	66.6	100.0
51	36.5	30.1	45.1



Instrument :
MSVOA_N
ClientSampleId :
ICVVN080724

Manual Integrations
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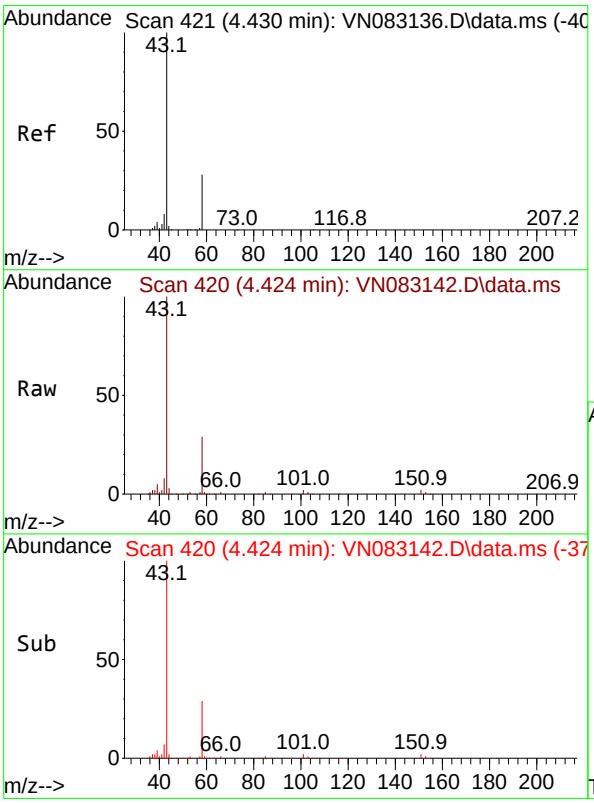
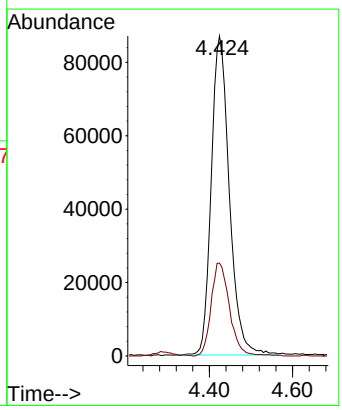
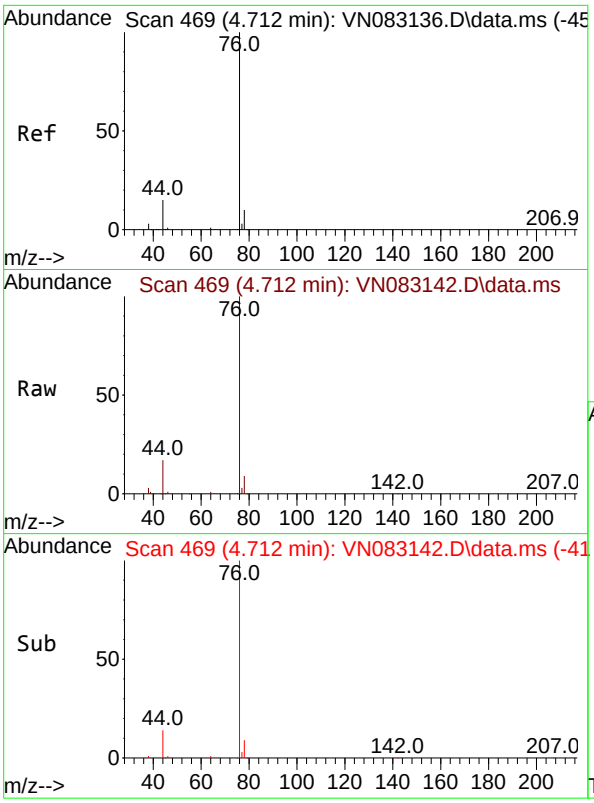


#16
Acetone
Concen: 210.840 ug/l
RT: 4.424 min Scan# 420
Delta R.T. -0.006 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 43 Resp: 262677

Ion	Ratio	Lower	Upper
43	100		
58	28.9	21.8	32.6

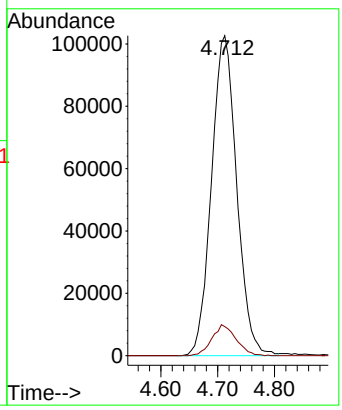




#17
Carbon Disulfide
Concen: 43.689 ug/l
RT: 4.712 min Scan# 4(
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 76 Resp: 31698(

Ion	Ratio	Lower	Upper
76	100		
78	9.1	7.2	10.8



Instrument :
MSVOA_N
ClientSampleId :
ICVVN080724

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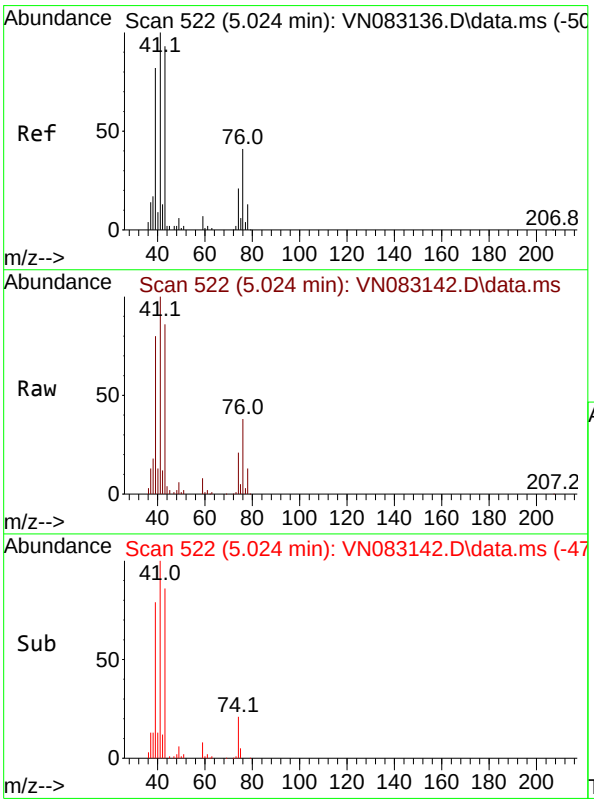
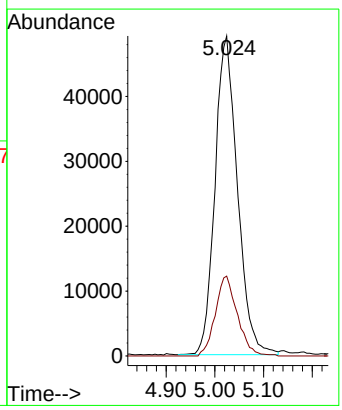
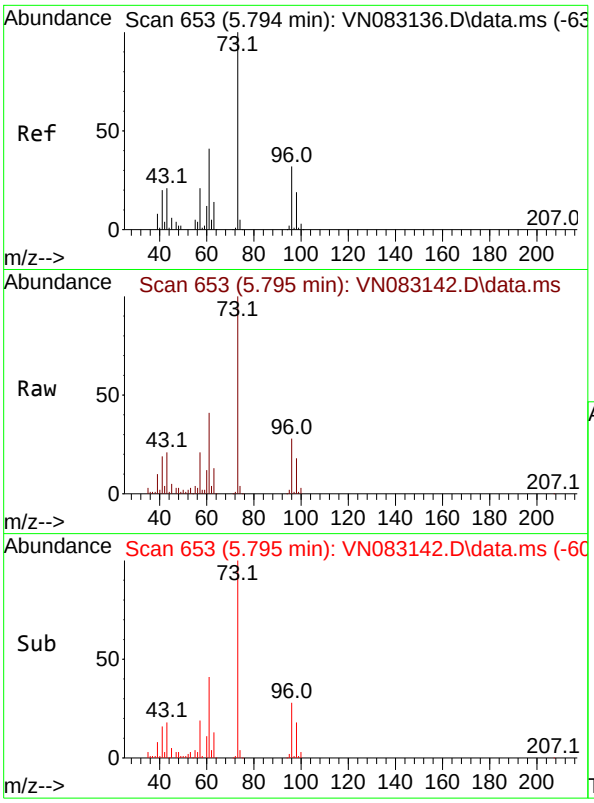


#18
Methyl Acetate
Concen: 42.397 ug/l
RT: 5.024 min Scan# 522
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 43 Resp: 157374

Ion	Ratio	Lower	Upper
43	100		
74	24.6	16.3	24.5#

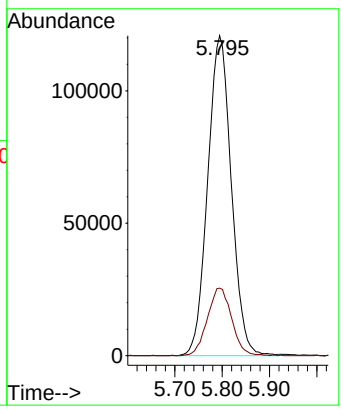




#19
Methyl tert-butyl Ether
Concen: 46.781 ug/l
RT: 5.795 min Scan# 6
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 73 Resp: 41869

Ion	Ratio	Lower	Upper
73	100		
57	21.1	17.9	26.9



Instrument :
MSVOA_N
ClientSampleId :
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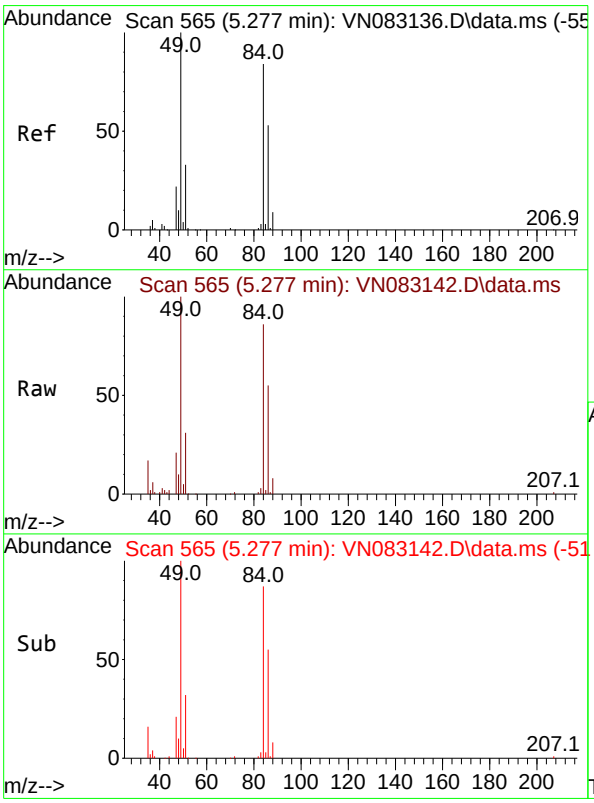
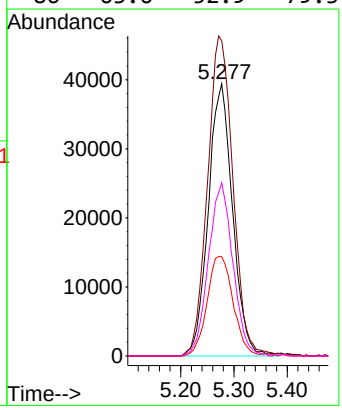
Supervised By :Mahesh Dadoda 08/09/2024

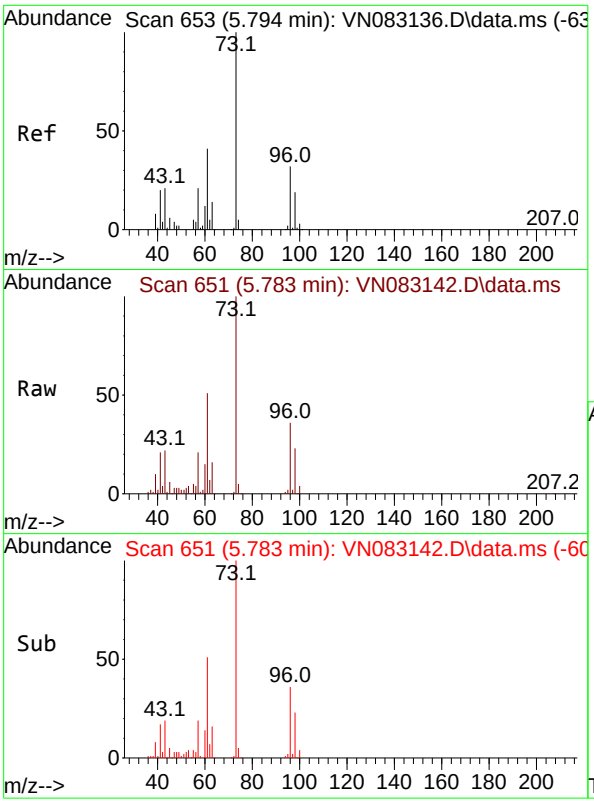


#20
Methylene Chloride
Concen: 43.645 ug/l
RT: 5.277 min Scan# 565
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 84 Resp: 125142

Ion	Ratio	Lower	Upper
84	100		
49	115.8	119.6	179.4#
51	36.5	34.8	52.2
86	63.6	52.9	79.3

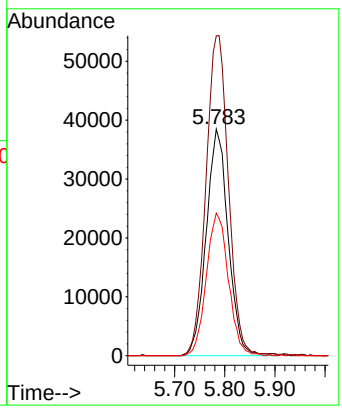




#21
trans-1,2-Dichloroethene
Concen: 45.671 ug/l
RT: 5.783 min Scan# 6
Delta R.T. -0.012 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 96 Resp: 11704

Ion	Ratio	Lower	Upper
96	100		
61	141.1	123.4	185.2
98	62.9	49.3	73.9



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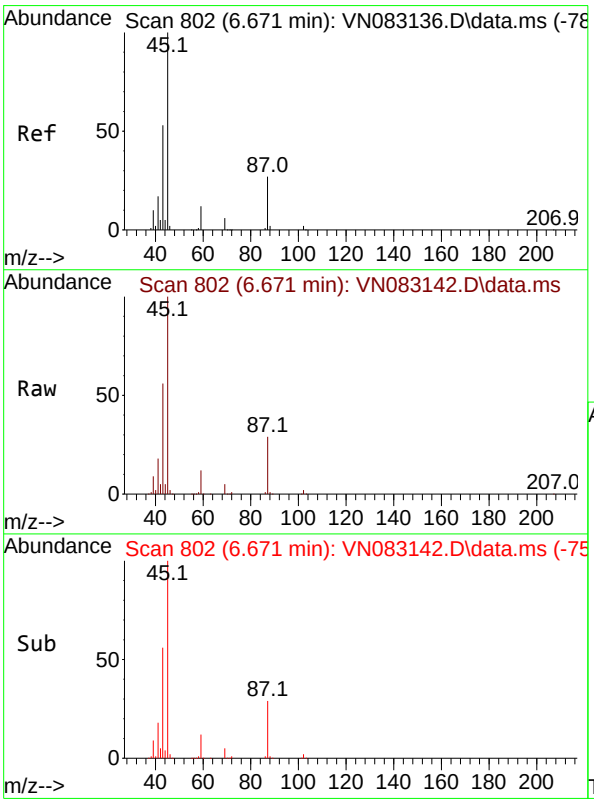
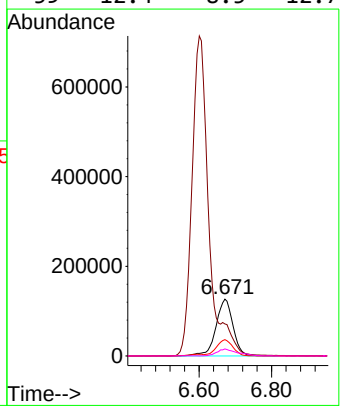
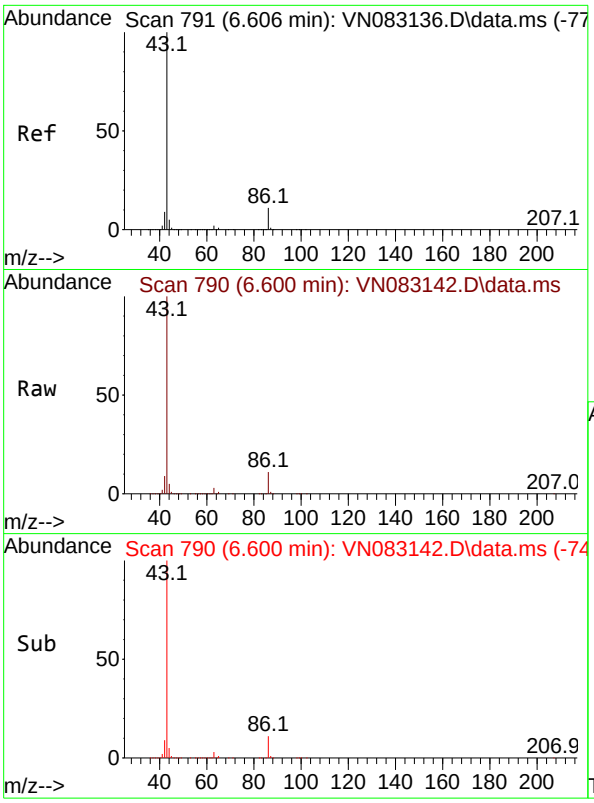


#22
Diisopropyl ether
Concen: 46.881 ug/l
RT: 6.671 min Scan# 802
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 45 Resp: 412931

Ion	Ratio	Lower	Upper
45	100		
43	55.6	44.0	66.0
87	28.6	19.7	29.5
59	12.4	8.5	12.7

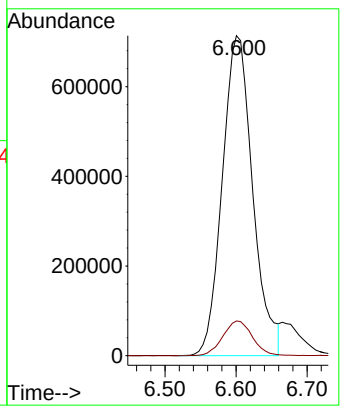




#23
Vinyl Acetate
Concen: 235.414 ug/l
RT: 6.600 min Scan# 7
Delta R.T. -0.006 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 43 Resp: 212534

Ion	Ratio	Lower	Upper
43	100		
86	10.9	7.3	10.9



Instrument :
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ClientSampleId :
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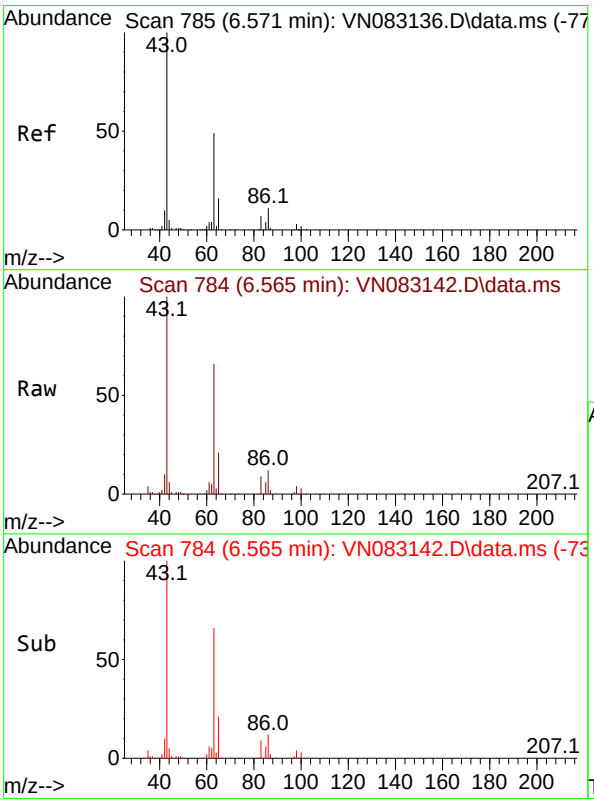
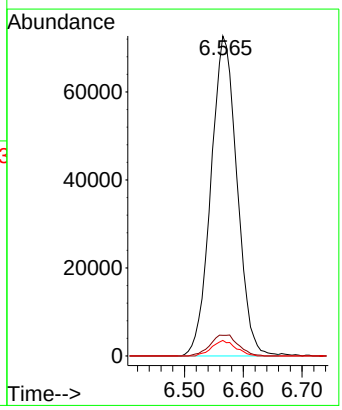
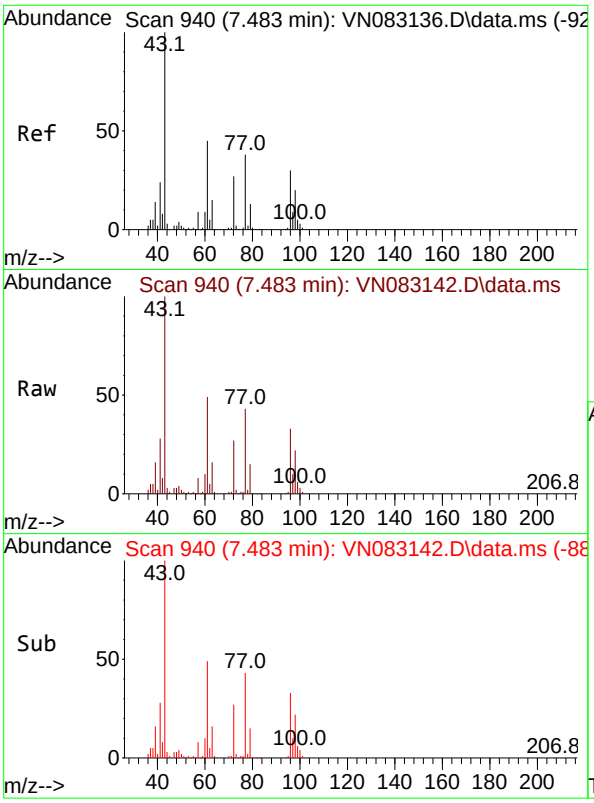


#24
1,1-Dichloroethane
Concen: 46.685 ug/l
RT: 6.565 min Scan# 784
Delta R.T. -0.006 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 63 Resp: 224136

Ion	Ratio	Lower	Upper
63	100		
98	6.5	3.3	9.9
100	4.9	2.0	6.0





#25
2-Butanone
Concen: 211.782 ug/l
RT: 7.483 min Scan# 94
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 43 Resp: 40513

Ion	Ratio	Lower	Upper
43	100		
72	26.9	18.2	27.2

Instrument :
MSVOA_N
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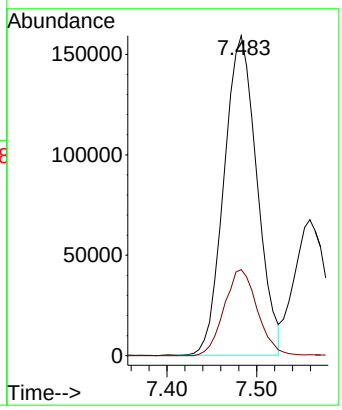
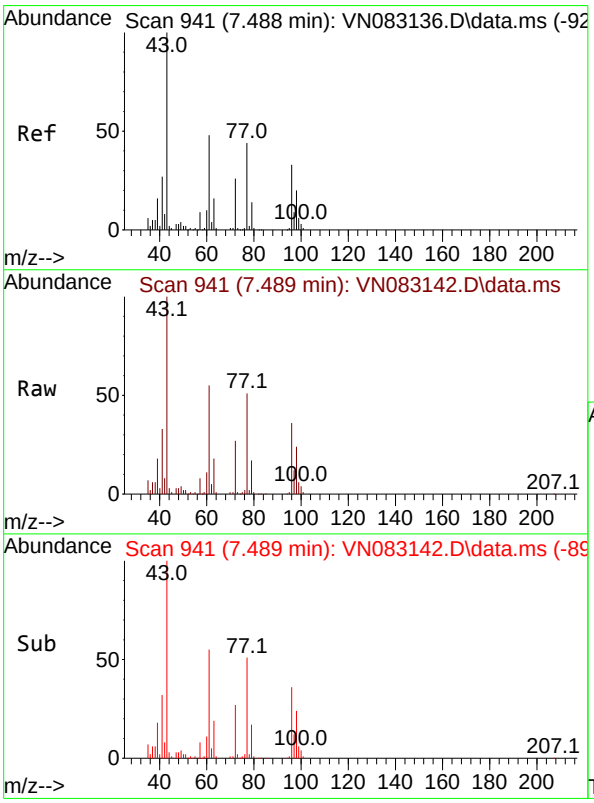
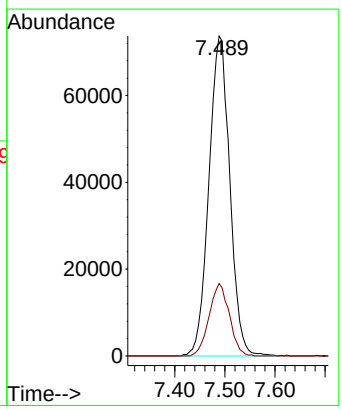


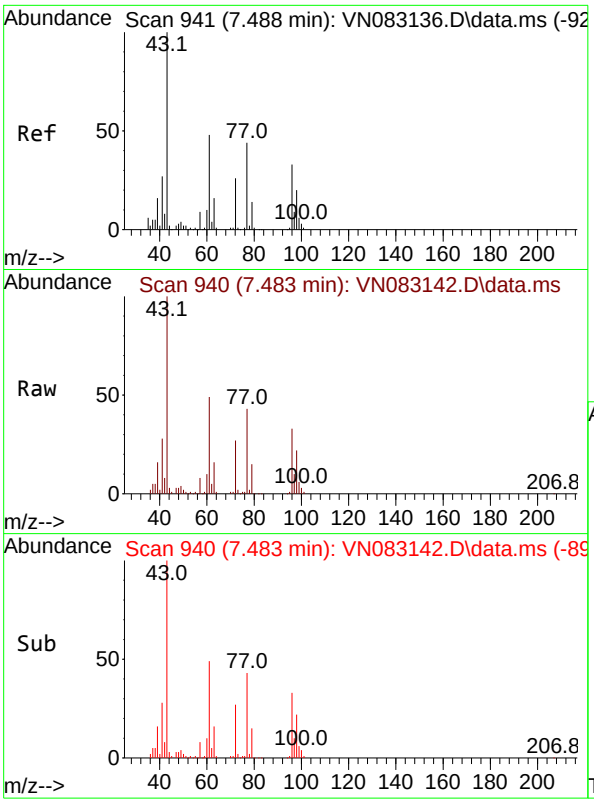


#26
2,2-Dichloropropane
Concen: 47.853 ug/l
RT: 7.489 min Scan# 941
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 77 Resp: 213355

Ion	Ratio	Lower	Upper
77	100		
97	21.9	10.3	30.9

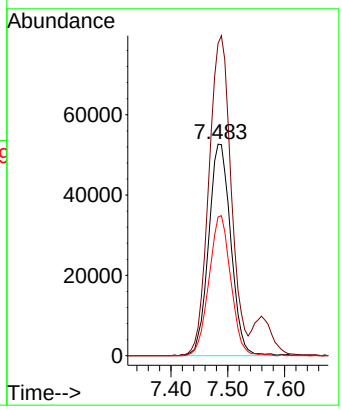




#27
cis-1,2-Dichloroethene
Concen: 46.113 ug/l
RT: 7.483 min Scan# 94
Delta R.T. -0.006 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 96 Resp: 14260

Ion	Ratio	Lower	Upper
96	100		
61	151.9	0.0	329.6
98	65.2	0.0	128.6



Instrument :
MSVOA_N
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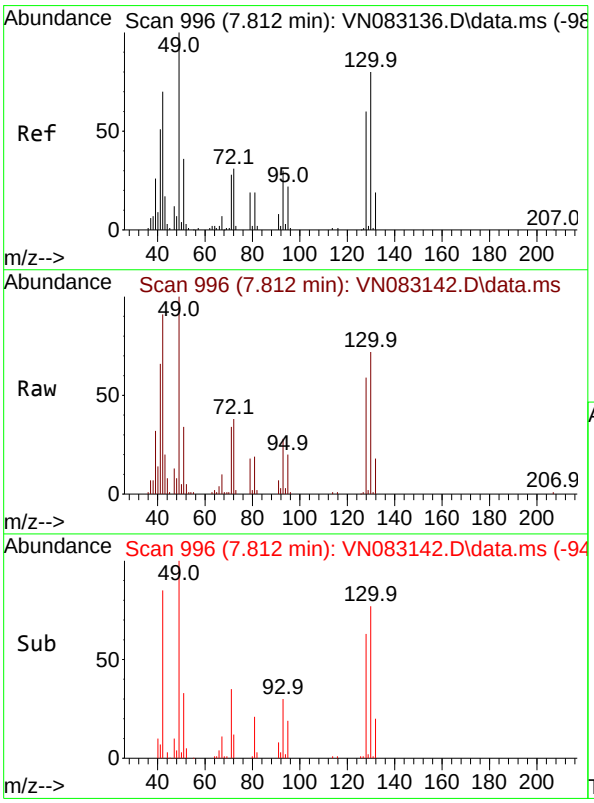
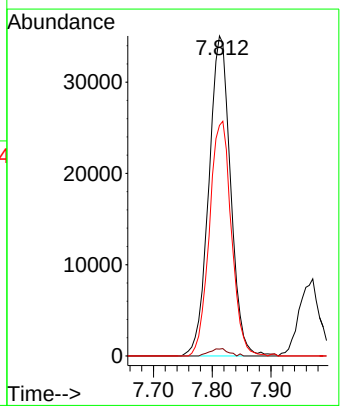
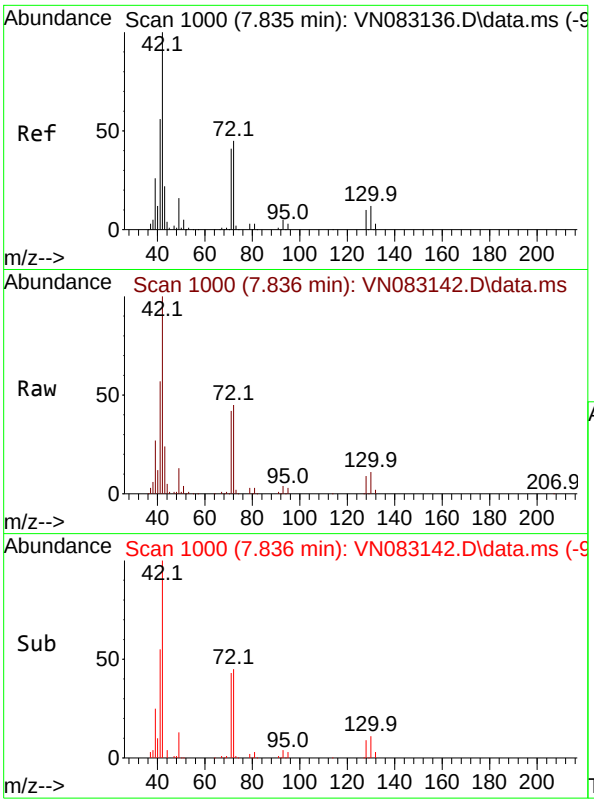


#28
Bromochloromethane
Concen: 45.986 ug/l
RT: 7.812 min Scan# 996
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 49 Resp: 90226

Ion	Ratio	Lower	Upper
49	100		
129	2.0	0.0	3.8
130	73.9	50.5	75.7

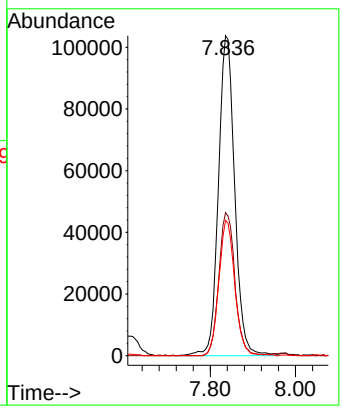




#29
Tetrahydrofuran
Concen: 222.147 ug/l
RT: 7.836 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 42 Resp: 27471

Ion	Ratio	Lower	Upper
42	100		
72	44.2	30.0	45.0
71	41.5	28.3	42.5



Instrument :
MSVOA_N
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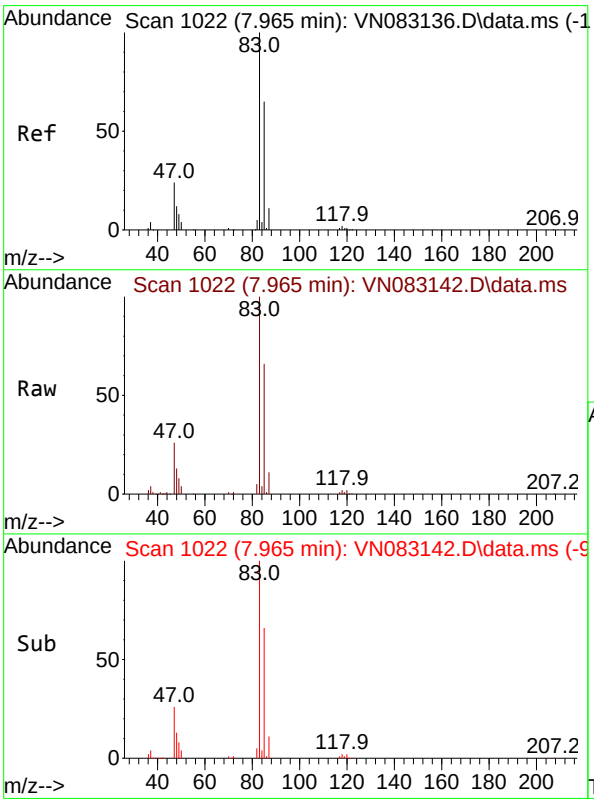
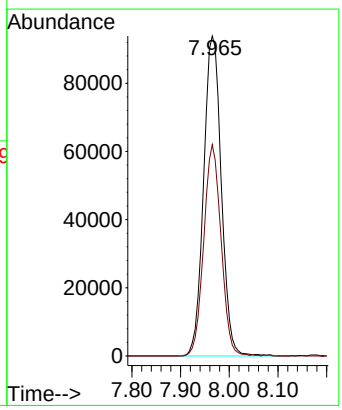
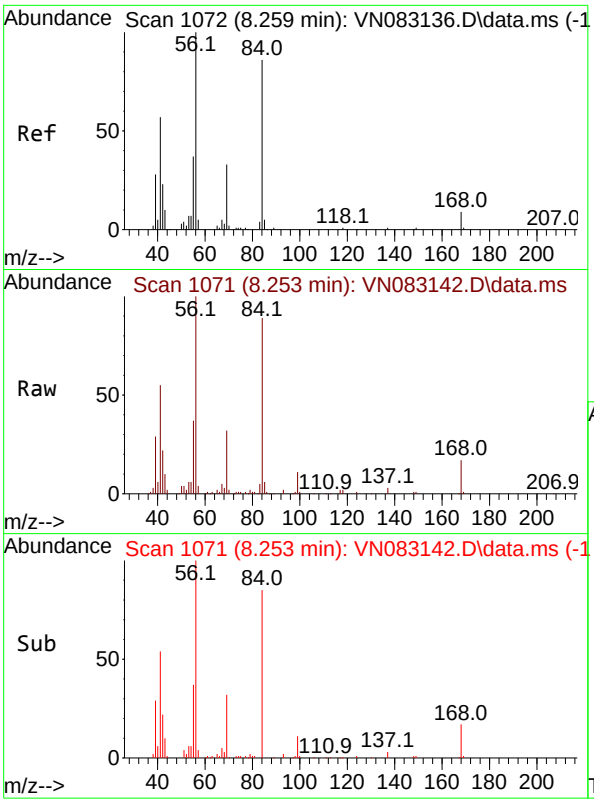


#30
Chloroform
Concen: 47.387 ug/l
RT: 7.965 min Scan# 1022
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 83 Resp: 236359

Ion	Ratio	Lower	Upper
83	100		
85	66.1	50.9	76.3

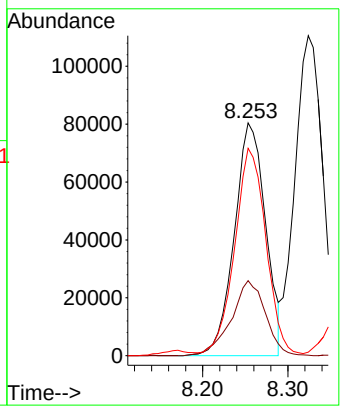




#31
Cyclohexane
Concen: 43.474 ug/l
RT: 8.253 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 56 Resp: 20512

Ion	Ratio	Lower	Upper
56	100		
69	32.3	24.5	36.7
84	86.7	66.0	99.0



Instrument :
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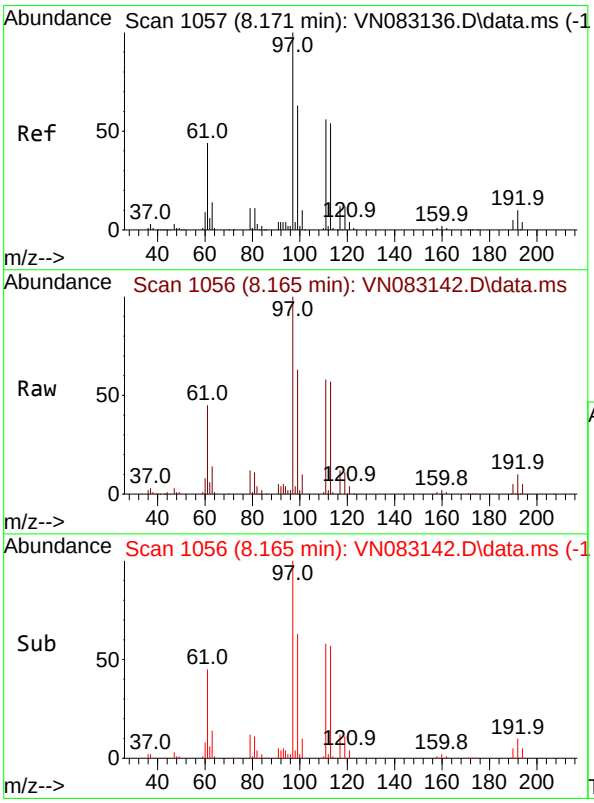
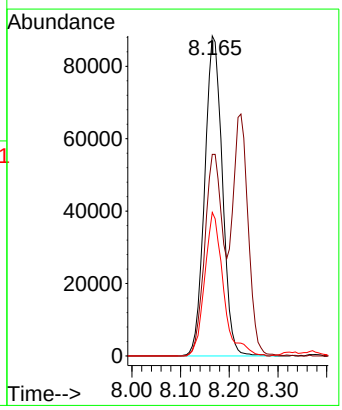
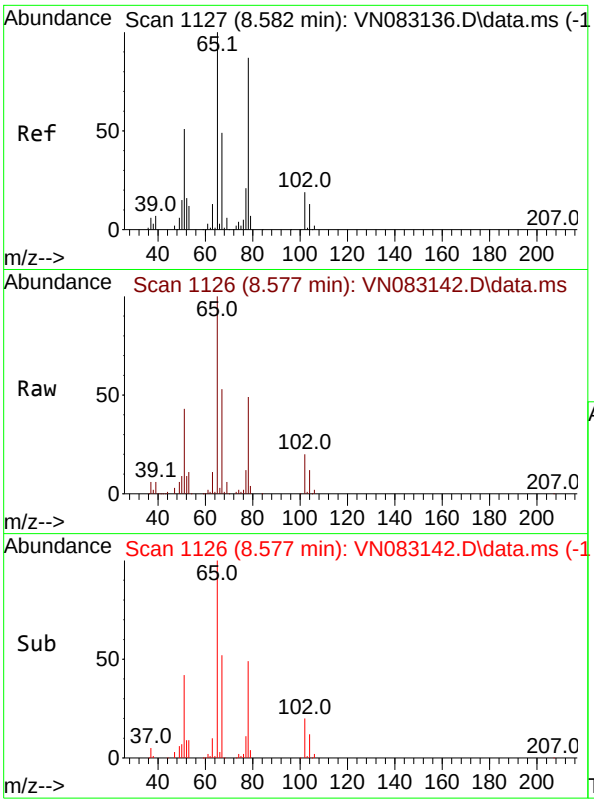


#32
1,1,1-Trichloroethane
Concen: 47.135 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. -0.006 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 97 Resp: 222538

Ion	Ratio	Lower	Upper
97	100		
99	64.0	52.0	78.0
61	47.5	42.1	63.1





#33
1,2-Dichloroethane-d4
Concen: 50.583 ug/l
RT: 8.577 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 65 Resp: 16105

Ion	Ratio	Lower	Upper
65	100		
67	51.3	0.0	104.4

Instrument :
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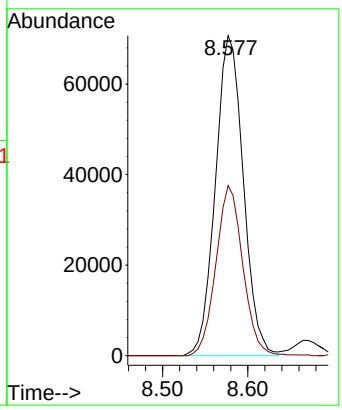
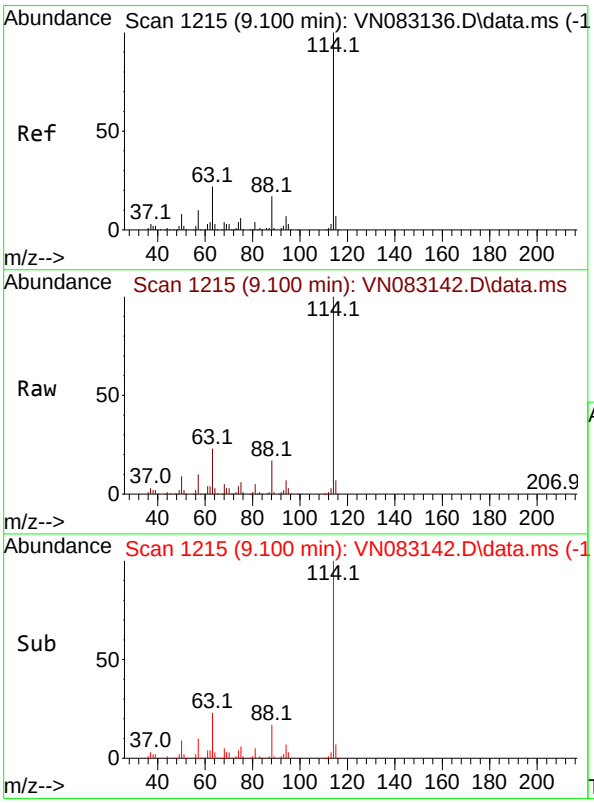
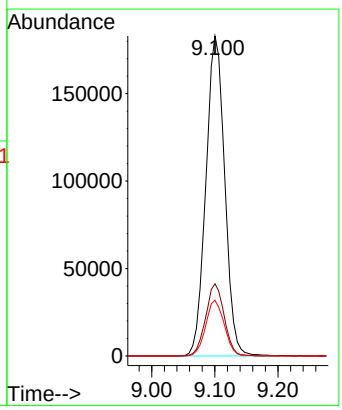


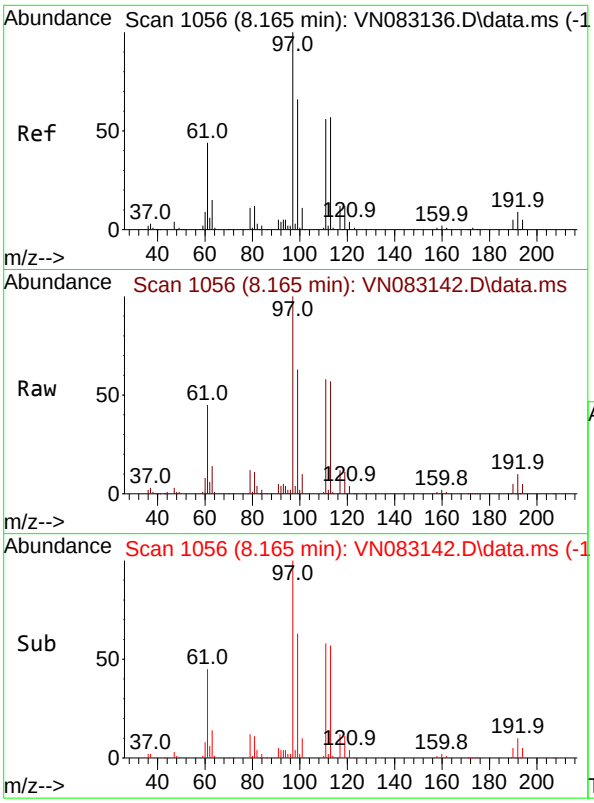


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1215
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion:114 Resp: 380000

Ion	Ratio	Lower	Upper
114	100		
63	22.6	0.0	44.6
88	17.4	0.0	31.4

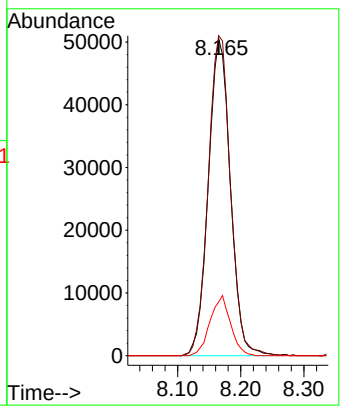




#35
Dibromofluoromethane
Concen: 51.549 ug/l
RT: 8.165 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion:113 Resp: 12226

Ion	Ratio	Lower	Upper
113	100		
111	102.3	82.4	123.6
192	17.6	14.9	22.3



Instrument :
MSVOA_N
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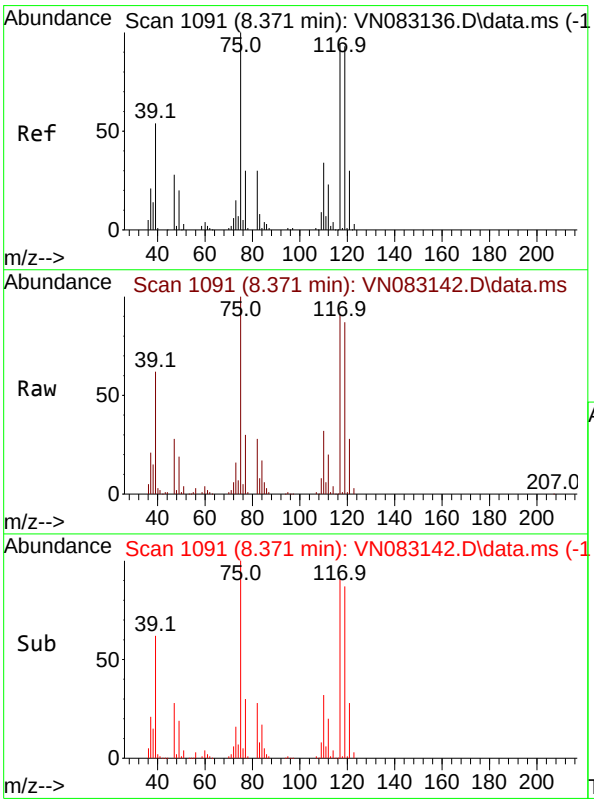
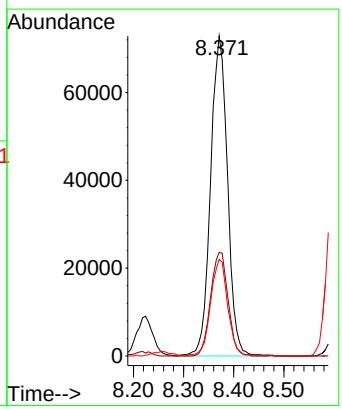
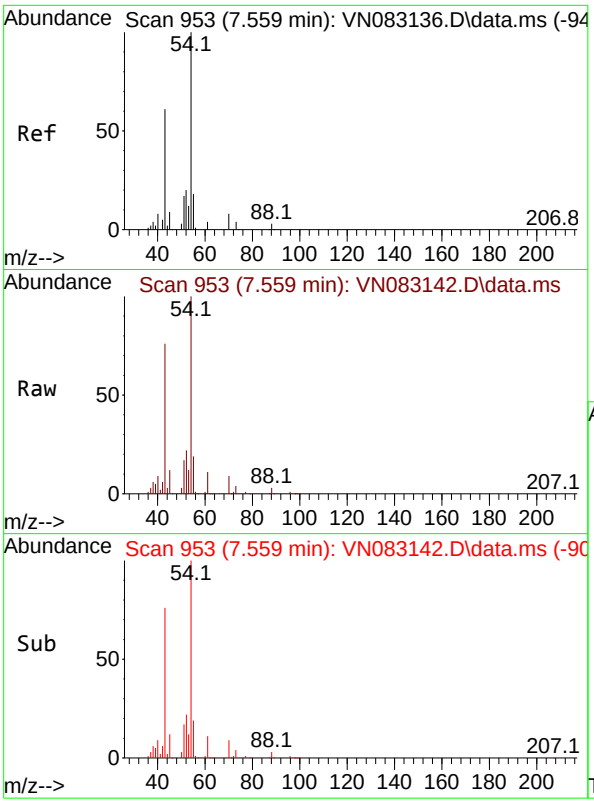


#36
1,1-Dichloropropene
Concen: 47.732 ug/l
RT: 8.371 min Scan# 1091
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 75 Resp: 171262

Ion	Ratio	Lower	Upper
75	100		
110	33.2	16.3	48.9
77	30.5	24.6	37.0





#37
Ethyl Acetate
Concen: 43.124 ug/l
RT: 7.559 min Scan# 9
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 43 Resp: 17324

Ion	Ratio	Lower	Upper
43	100		
61	12.9	9.3	13.9
70	11.0	7.0	10.6

Instrument :
MSVOA_N
ClientSampleId :
ICVVN080724

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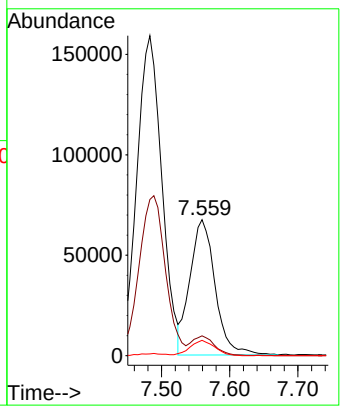
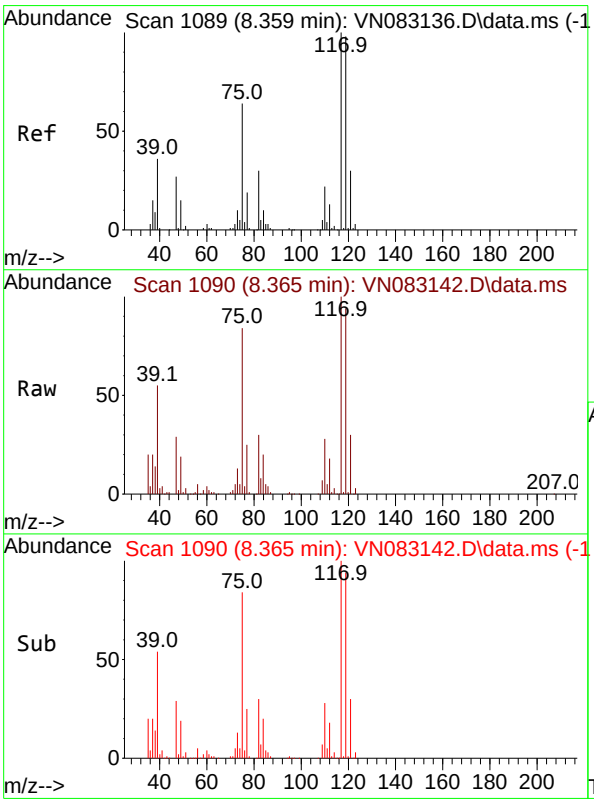
Supervised By :Mahesh Dadoda 08/09/2024

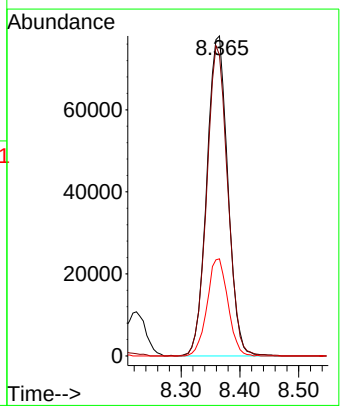


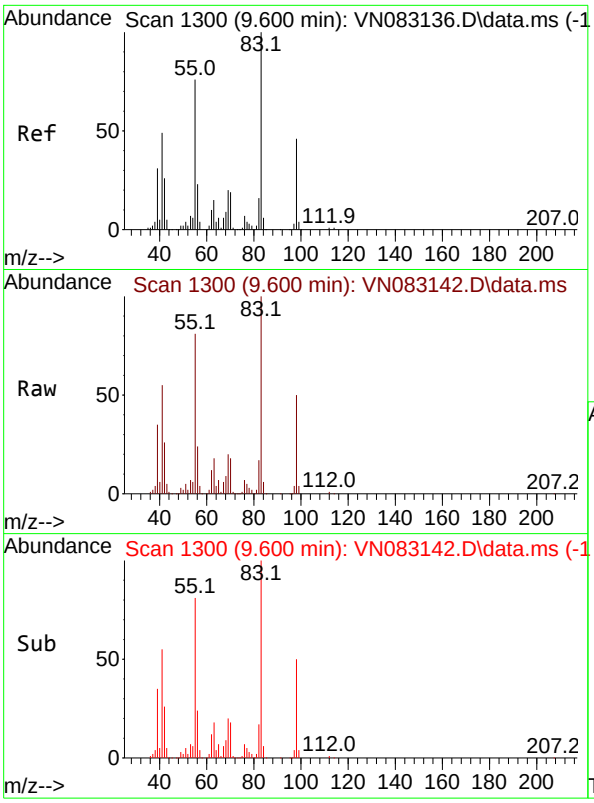


#38
Carbon Tetrachloride
Concen: 47.904 ug/l
RT: 8.365 min Scan# 1090
Delta R.T. 0.006 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion:117 Resp: 193592

Ion	Ratio	Lower	Upper
117	100		
119	94.0	74.9	112.3
121	30.3	24.3	36.5





#39
Methylcyclohexane
Concen: 47.821 ug/l
RT: 9.600 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 83 Resp: 21074

Ion	Ratio	Lower	Upper
83	100		
55	81.3	66.4	99.6
98	49.5	40.7	61.1

Instrument :
MSVOA_N
ClientSampleId :
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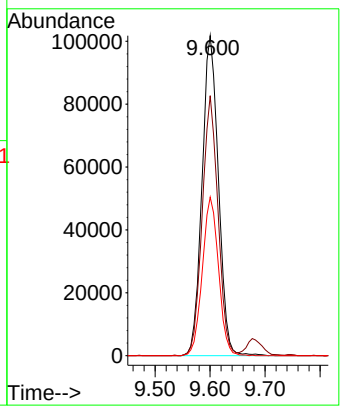
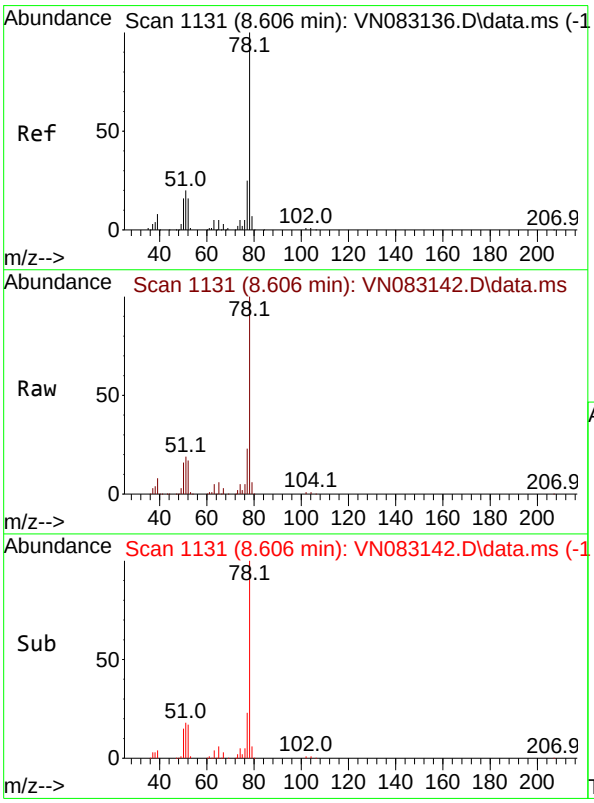
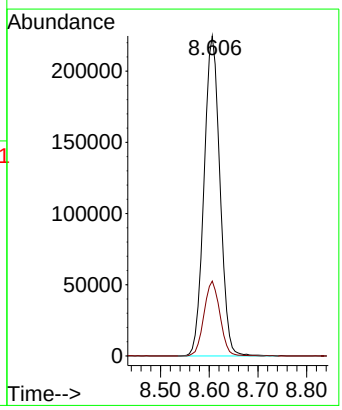


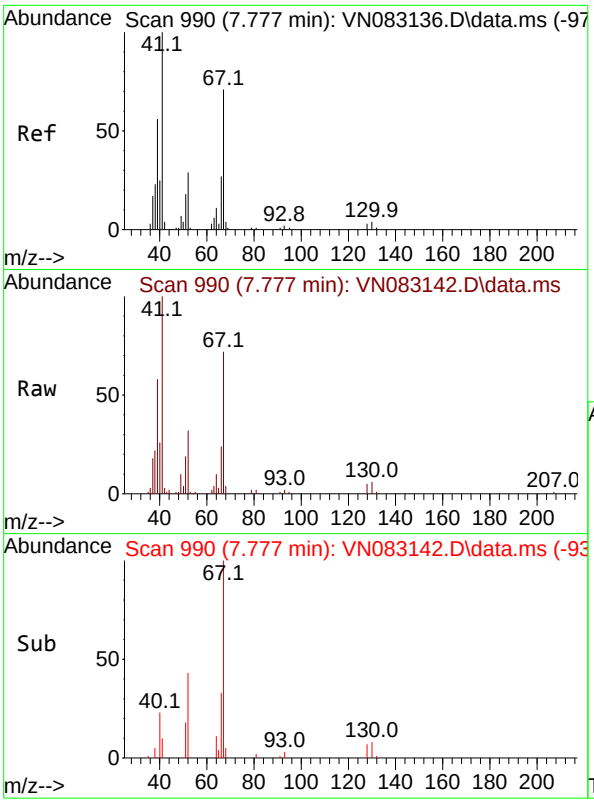


#40
Benzene
Concen: 47.635 ug/l
RT: 8.606 min Scan# 1131
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 78 Resp: 509159

Ion	Ratio	Lower	Upper
78	100		
77	23.4	19.0	28.4

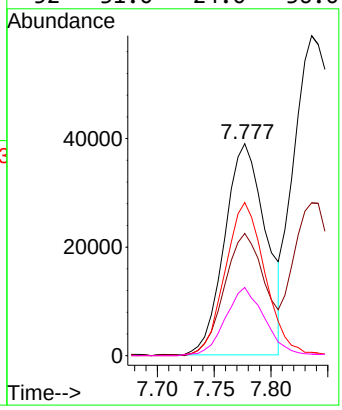




#41
Methacrylonitrile
Concen: 43.013 ug/l
RT: 7.777 min Scan# 9
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 41 Resp: 9825

Ion	Ratio	Lower	Upper
41	100		
39	57.7	45.5	68.3
67	70.8	50.5	75.7
52	31.0	24.0	36.0



Instrument :
MSVOA_N
ClientSampleId :
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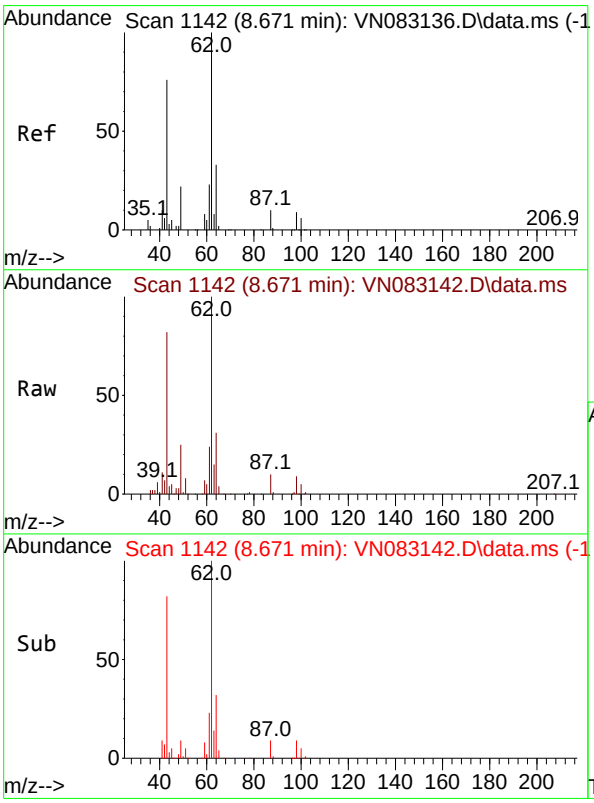
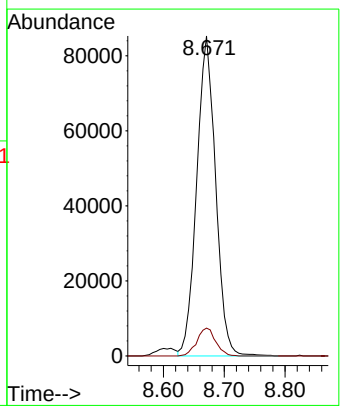
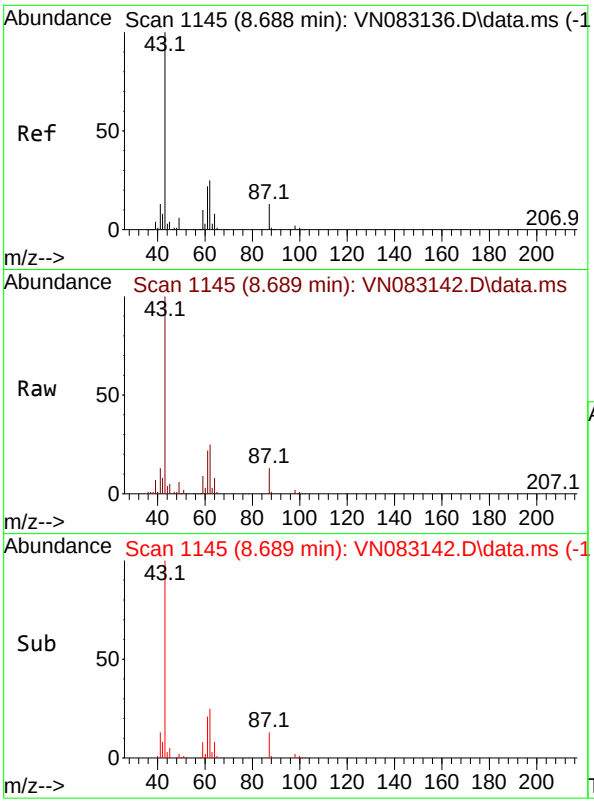


#42
1,2-Dichloroethane
Concen: 47.310 ug/l
RT: 8.671 min Scan# 1142
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 62 Resp: 184210

Ion	Ratio	Lower	Upper
62	100		
98	8.6	0.0	15.8





#43
Isopropyl Acetate
Concen: 45.577 ug/l
RT: 8.689 min Scan# 1
Delta R.T. 0.001 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 43 Resp: 31954

Ion	Ratio	Lower	Upper
43	100		
61	24.3	17.8	26.6
87	13.0	8.2	12.2

Instrument :
MSVOA_N
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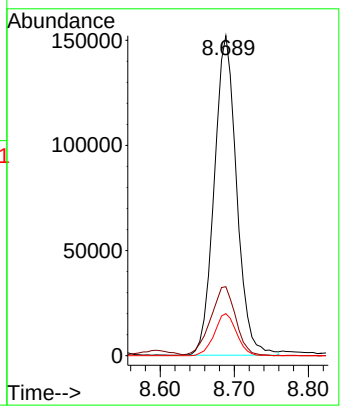
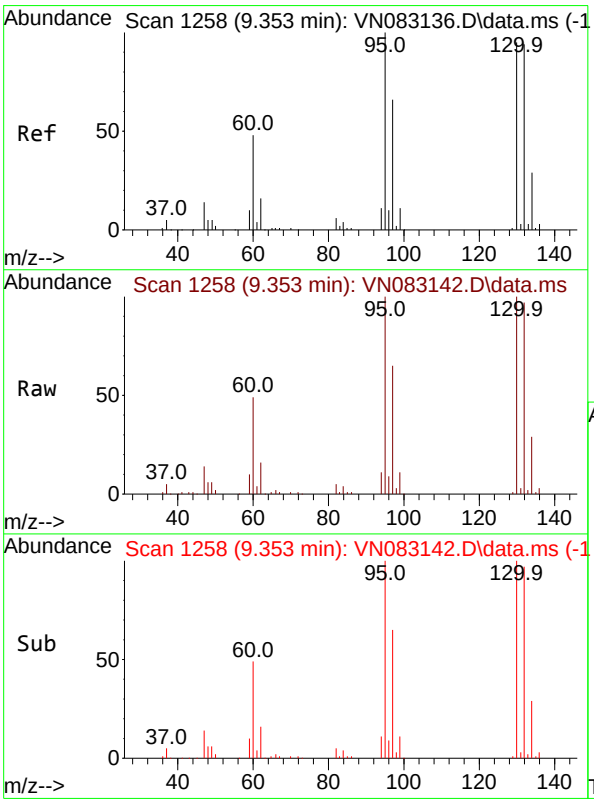
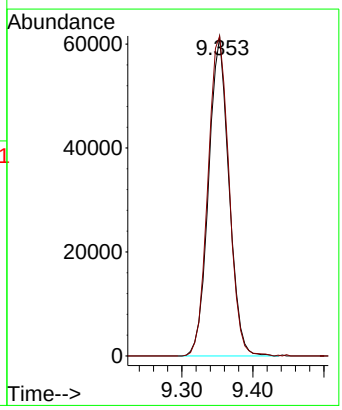


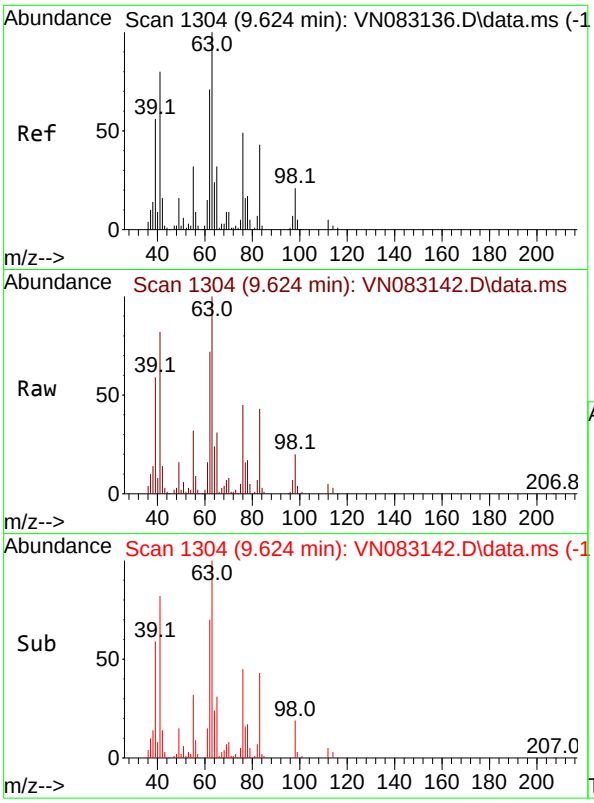


#44
Trichloroethene
Concen: 47.994 ug/l
RT: 9.353 min Scan# 1258
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion:130 Resp: 122105

Ion	Ratio	Lower	Upper
130	100		
95	100.4	0.0	197.8





#45
1,2-Dichloropropane
Concen: 48.208 ug/l
RT: 9.624 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 63 Resp: 12231

Ion	Ratio	Lower	Upper
63	100		
65	31.2	24.4	36.6

Instrument :
MSVOA_N
ClientSampleId :
ICVVN080724

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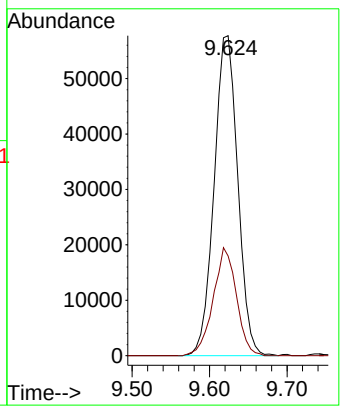
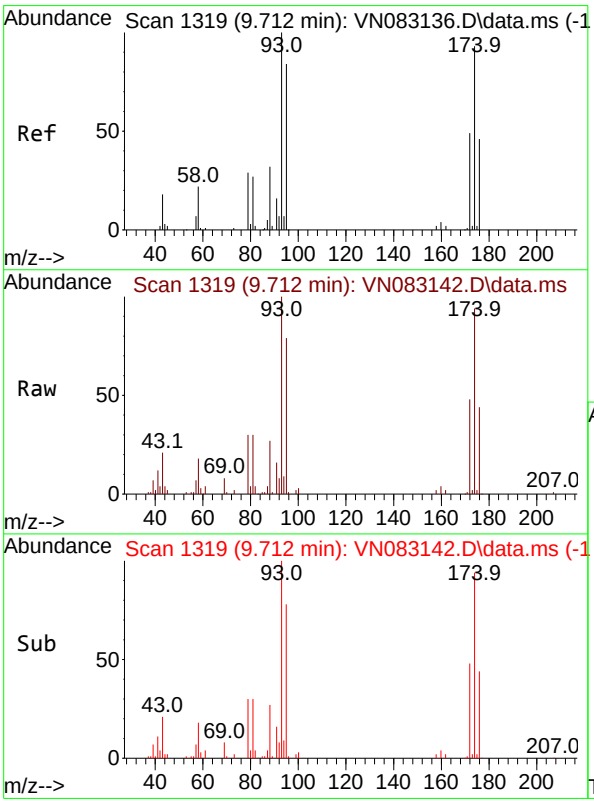
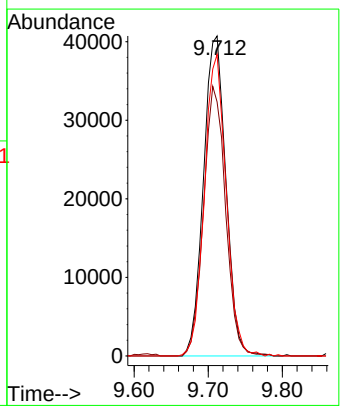


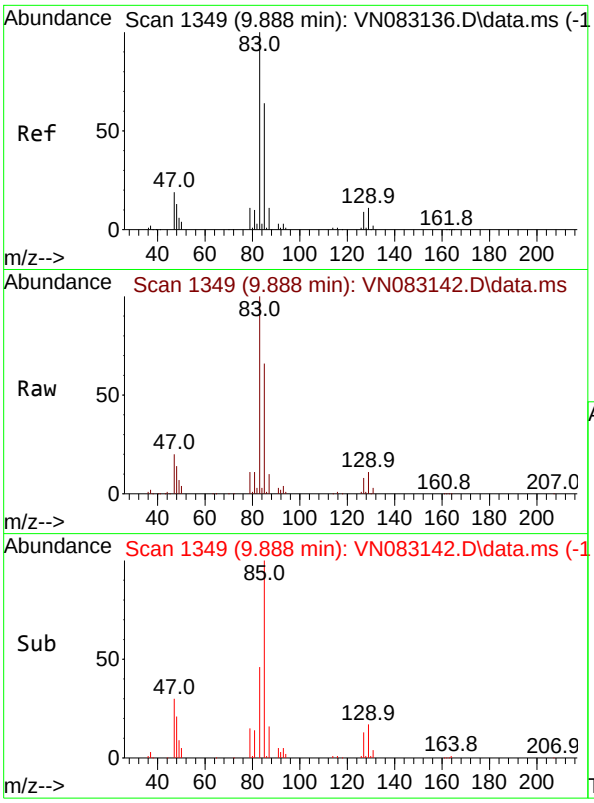


#46
Dibromomethane
Concen: 47.124 ug/l
RT: 9.712 min Scan# 1319
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 93 Resp: 85581

Ion	Ratio	Lower	Upper
93	100		
95	83.0	65.8	98.6
174	91.4	71.7	107.5

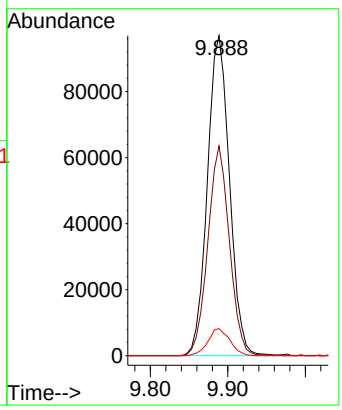




#47
Bromodichloromethane
Concen: 47.047 ug/l
RT: 9.888 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 83 Resp: 19184

Ion	Ratio	Lower	Upper
83	100		
85	65.5	51.1	76.7
127	8.5	7.2	10.8



Instrument :
MSVOA_N
ClientSampleId :
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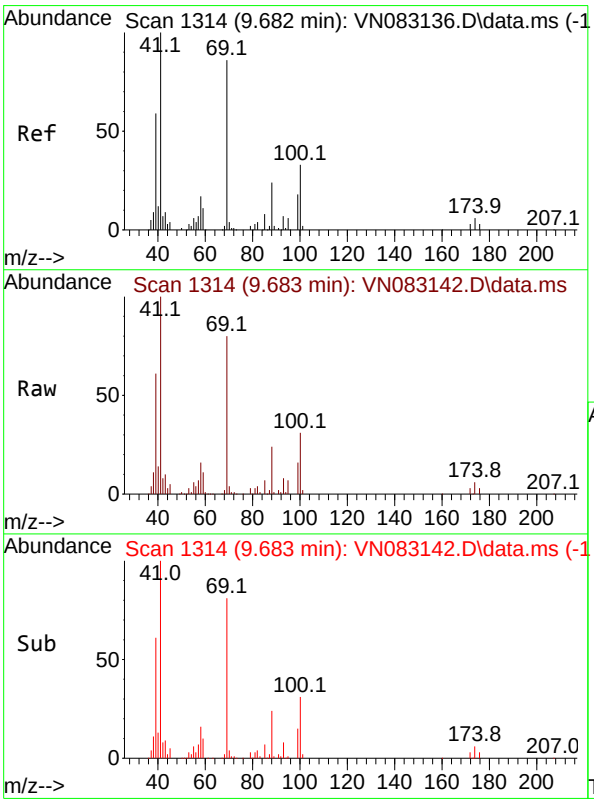
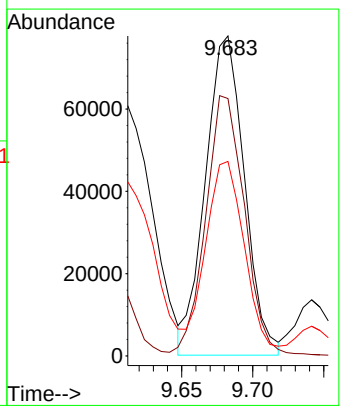
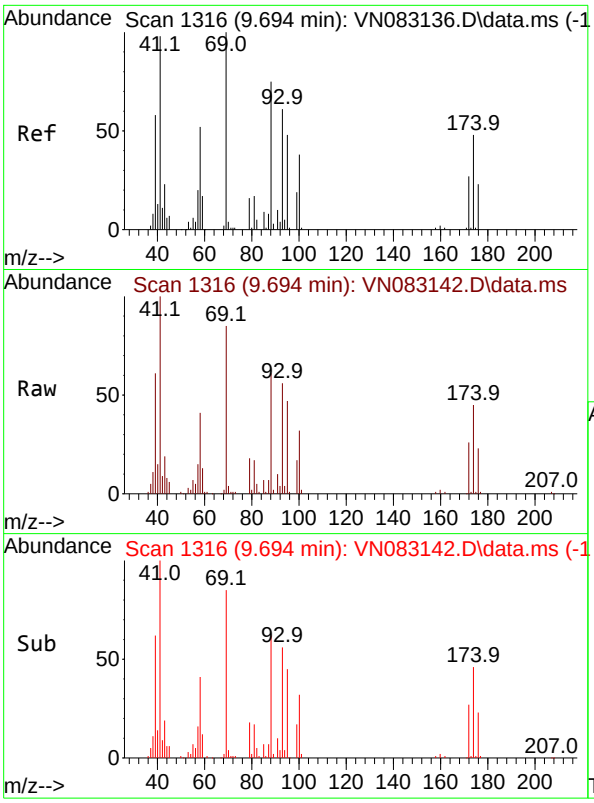


#48
Methyl methacrylate
Concen: 44.609 ug/l
RT: 9.683 min Scan# 1314
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 41 Resp: 148161

Ion	Ratio	Lower	Upper
41	100		
69	81.0	56.3	84.5
39	60.7	50.3	75.5





#49
1,4-Dioxane
Concen: 885.211 ug/l
RT: 9.694 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 88 Resp: 5304

Ion	Ratio	Lower	Upper
88	100		
43	32.0	27.8	41.8
58	71.4	59.4	89.0

Instrument :
MSVOA_N
ClientSampleId :
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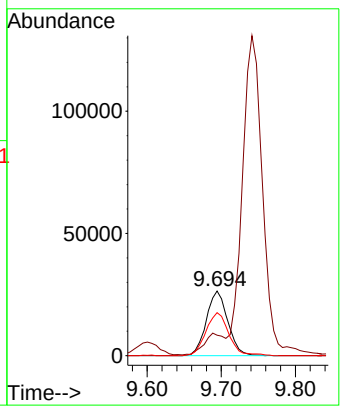
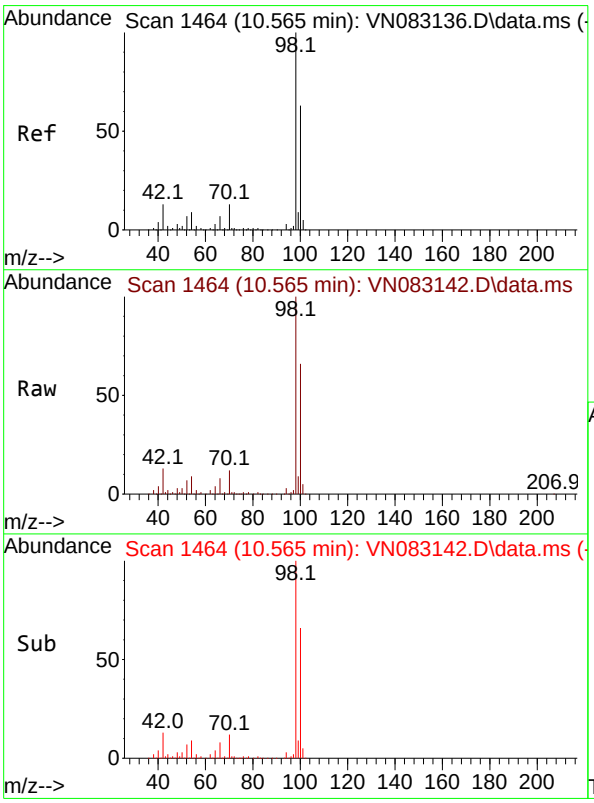
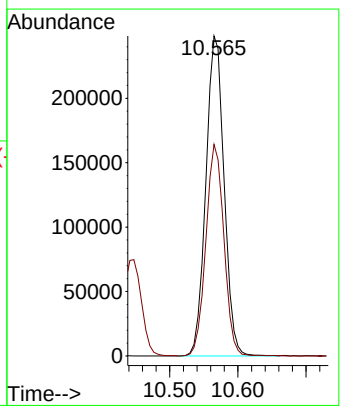


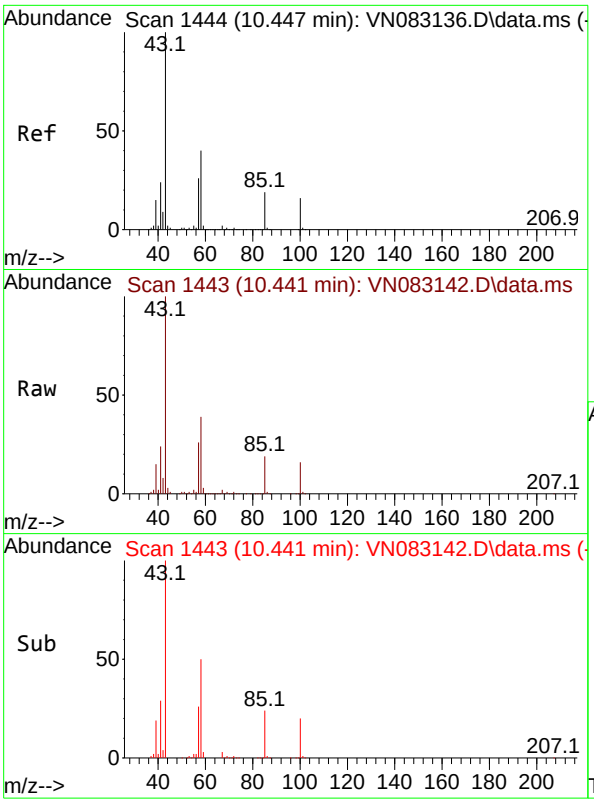


#50
Toluene-d8
Concen: 52.175 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 98 Resp: 461627

Ion	Ratio	Lower	Upper
98	100		
100	65.5	51.5	77.3

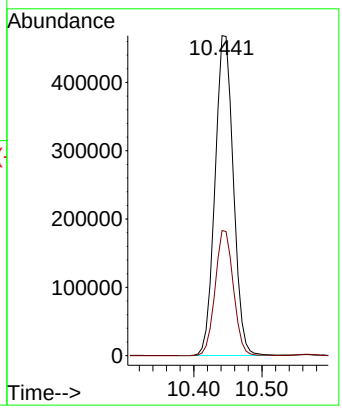




#51
4-Methyl-2-Pentanone
Concen: 230.917 ug/l
RT: 10.441 min Scan# 14
Delta R.T. -0.006 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 43 Resp: 87724

Ion	Ratio	Lower	Upper
43	100		
58	39.0	28.2	42.4



Instrument :
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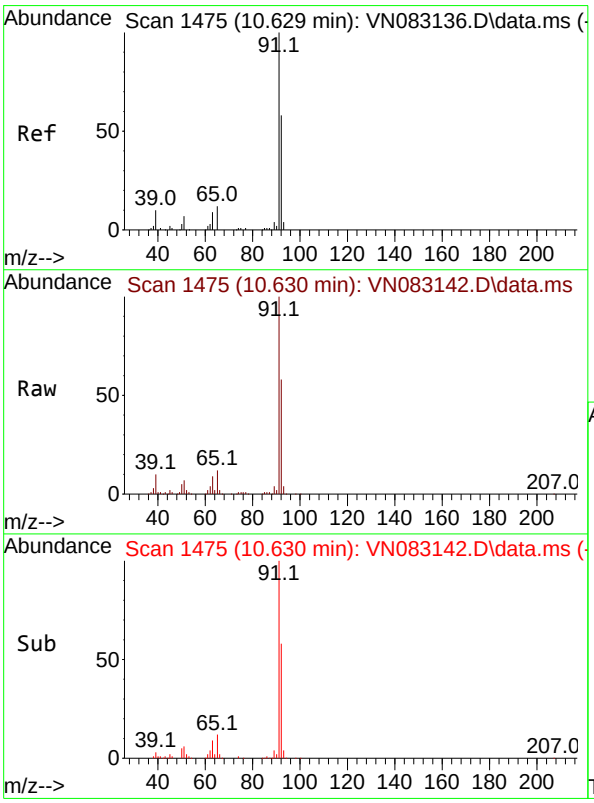
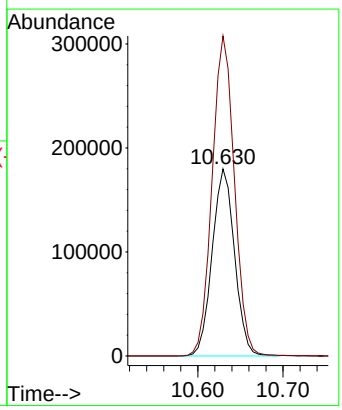
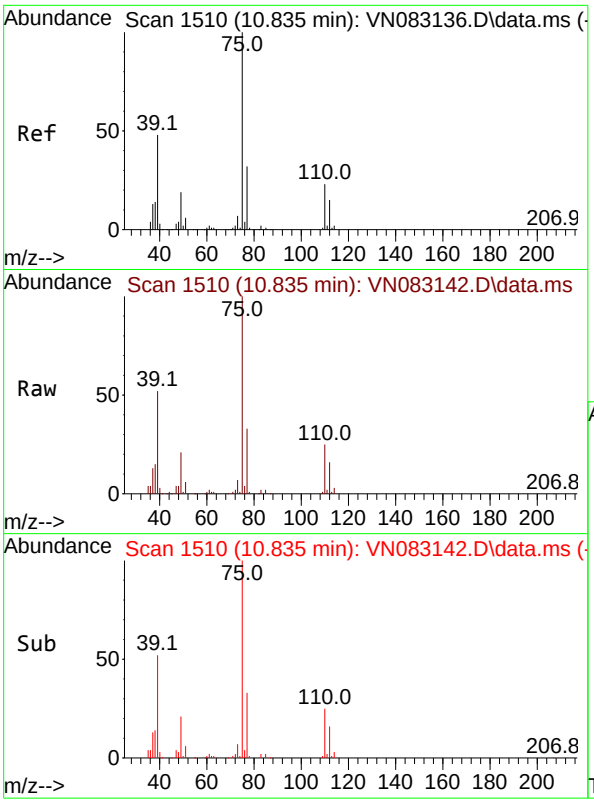


#52
Toluene
Concen: 48.520 ug/l
RT: 10.630 min Scan# 1475
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 92 Resp: 327682

Ion	Ratio	Lower	Upper
92	100		
91	170.9	139.4	209.0

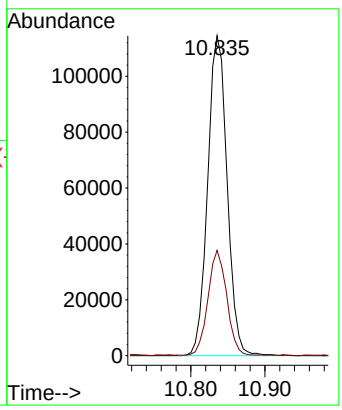




#53
t-1,3-Dichloropropene
Concen: 49.776 ug/l
RT: 10.835 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 75 Resp: 20849

Ion	Ratio	Lower	Upper
75	100		
77	32.8	25.7	38.5



Instrument :
MSVOA_N
ClientSampleId :
ICVVN080724

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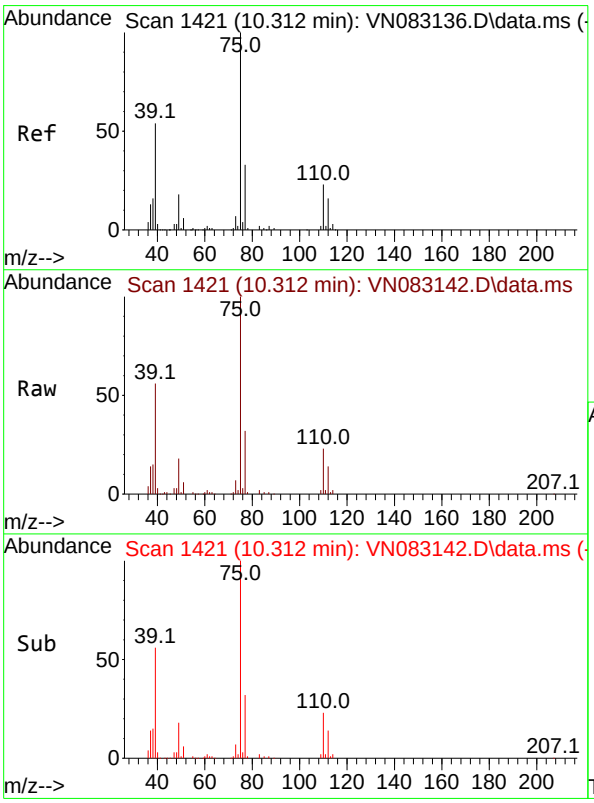
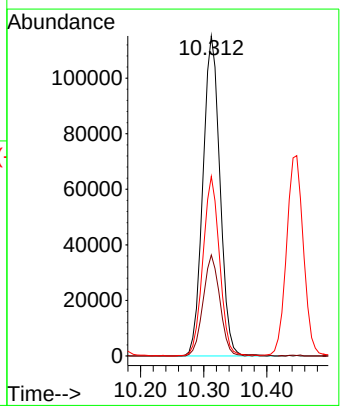
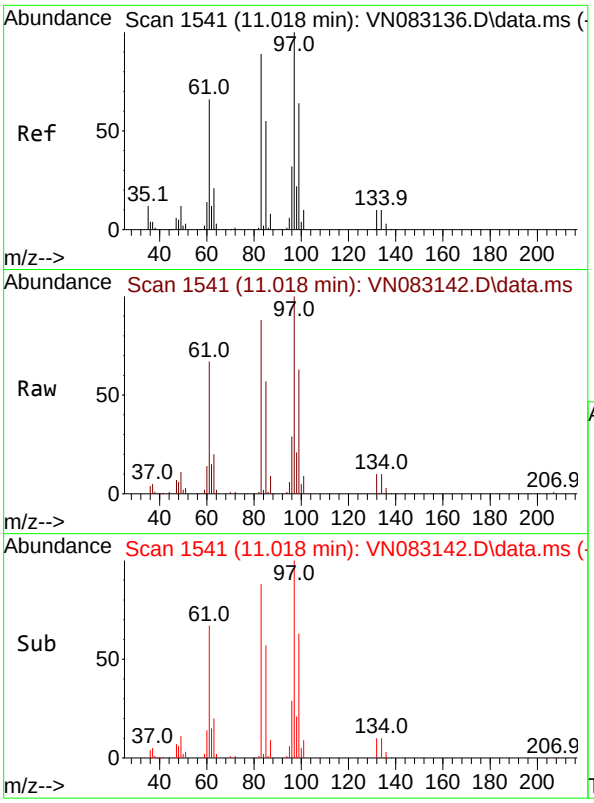


#54
cis-1,3-Dichloropropene
Concen: 48.487 ug/l
RT: 10.312 min Scan# 1421
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 75 Resp: 216020

Ion	Ratio	Lower	Upper
75	100		
77	31.6	24.3	36.5
39	56.0	50.5	75.7

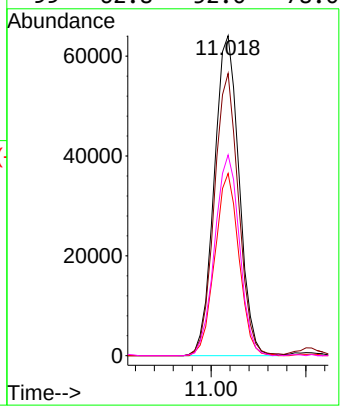




#55
1,1,2-Trichloroethane
Concen: 48.351 ug/l
RT: 11.018 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 97 Resp: 11702

Ion	Ratio	Lower	Upper
97	100		
83	88.2	71.4	107.0
85	57.0	45.8	68.6
99	62.8	52.0	78.0



Instrument :
MSVOA_N
ClientSampleId :
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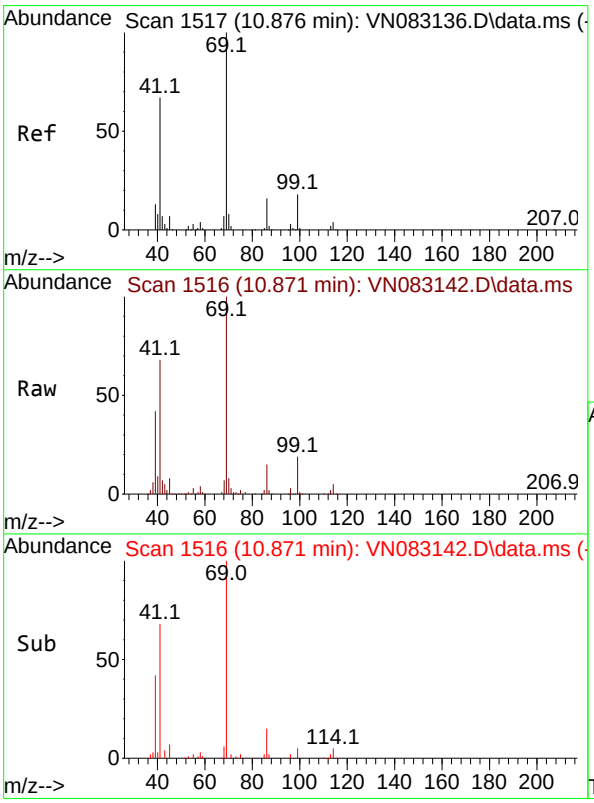
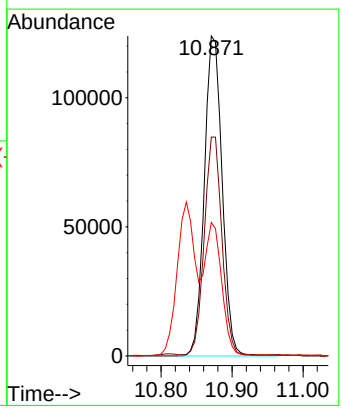
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

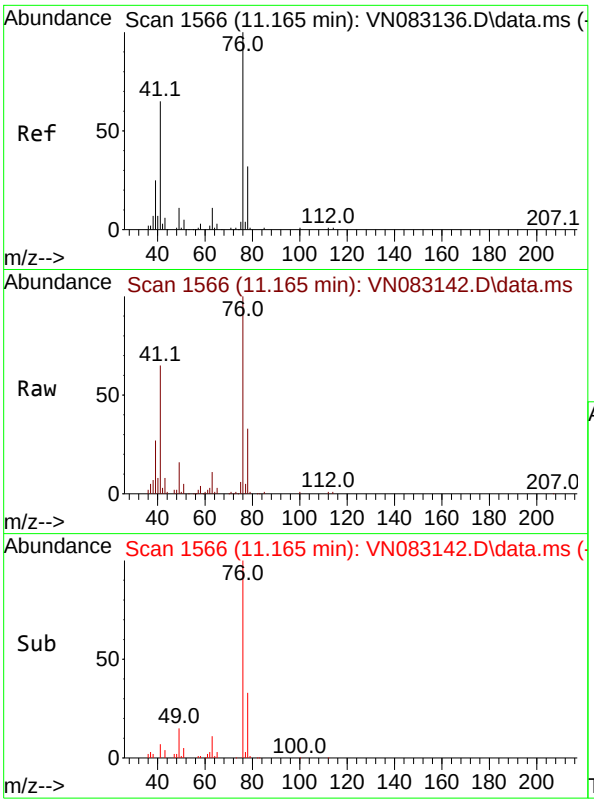


#56
Ethyl methacrylate
Concen: 47.395 ug/l
RT: 10.871 min Scan# 1516
Delta R.T. -0.006 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 69 Resp: 216248

Ion	Ratio	Lower	Upper
69	100		
41	67.3	63.4	95.2
39	40.2	37.4	56.0

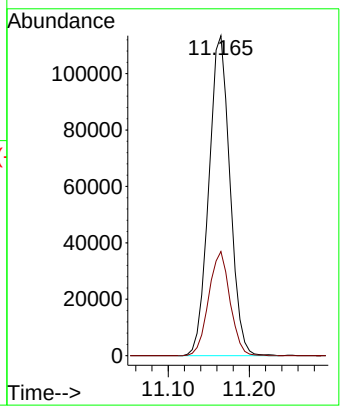




#57
1,3-Dichloropropane
Concen: 47.391 ug/l
RT: 11.165 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 76 Resp: 20444

Ion	Ratio	Lower	Upper
76	100		
78	32.9	25.6	38.4



Instrument :
MSVOA_N
ClientSampleId :
ICVVN080724

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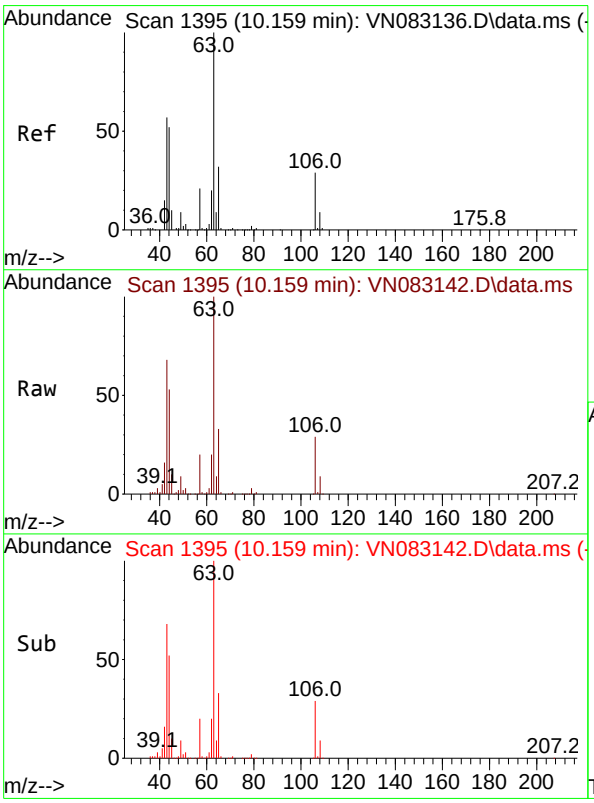
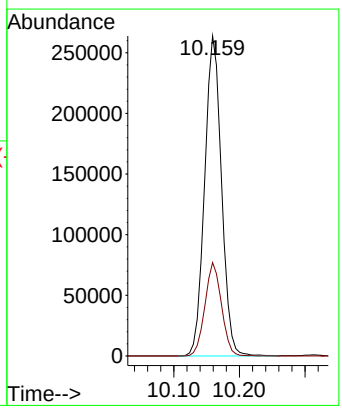
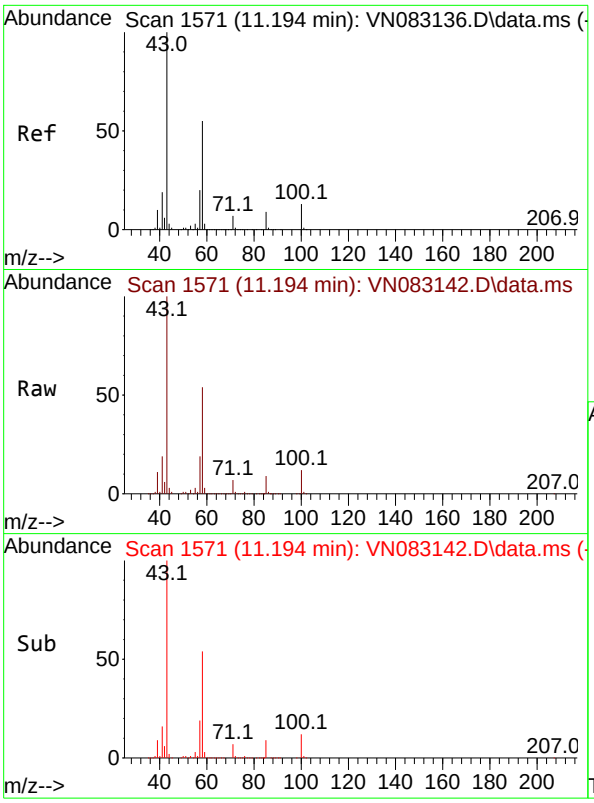


#58
2-Chloroethyl Vinyl ether
Concen: 244.918 ug/l
RT: 10.159 min Scan# 1395
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 63 Resp: 472357

Ion	Ratio	Lower	Upper
63	100		
106	28.6	21.4	32.0





#59
2-Hexanone
Concen: 224.916 ug/l
RT: 11.194 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 43 Resp: 66103

Ion	Ratio	Lower	Upper
43	100		
58	54.6	24.6	73.8

Instrument :
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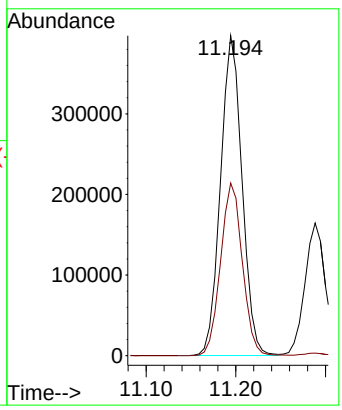
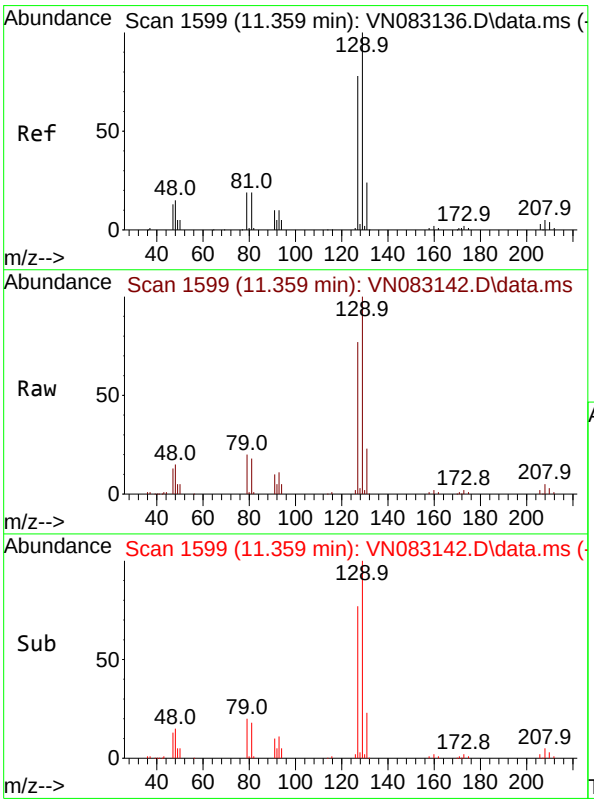
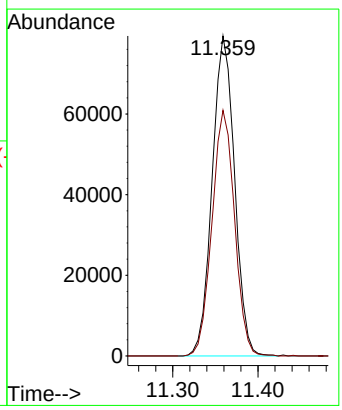


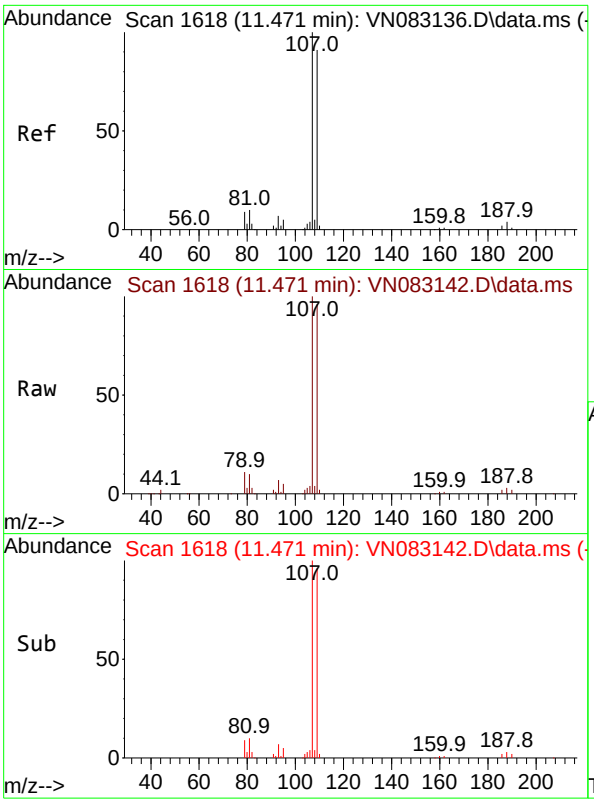


#60
Dibromochloromethane
Concen: 49.513 ug/l
RT: 11.359 min Scan# 1599
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion:129 Resp: 144886

Ion	Ratio	Lower	Upper
129	100		
127	77.3	39.2	117.6





#61
1,2-Dibromoethane
Concen: 47.133 ug/l
RT: 11.471 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion:107 Resp: 11983

Ion	Ratio	Lower	Upper
107	100		
109	94.5	73.7	110.5

Instrument :
MSVOA_N
ClientSampleId :
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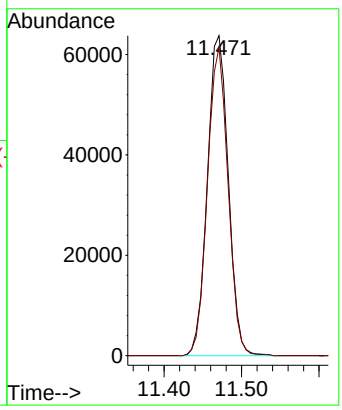
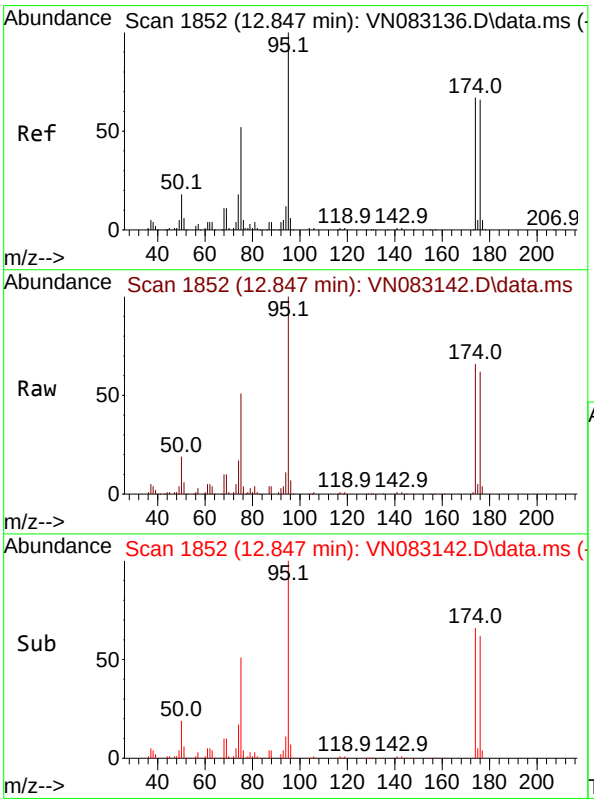
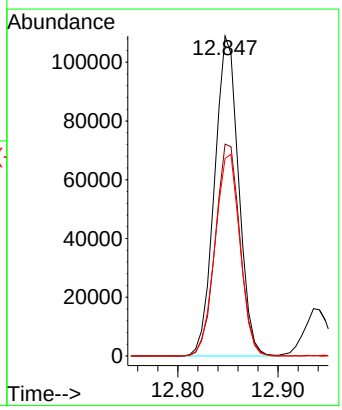


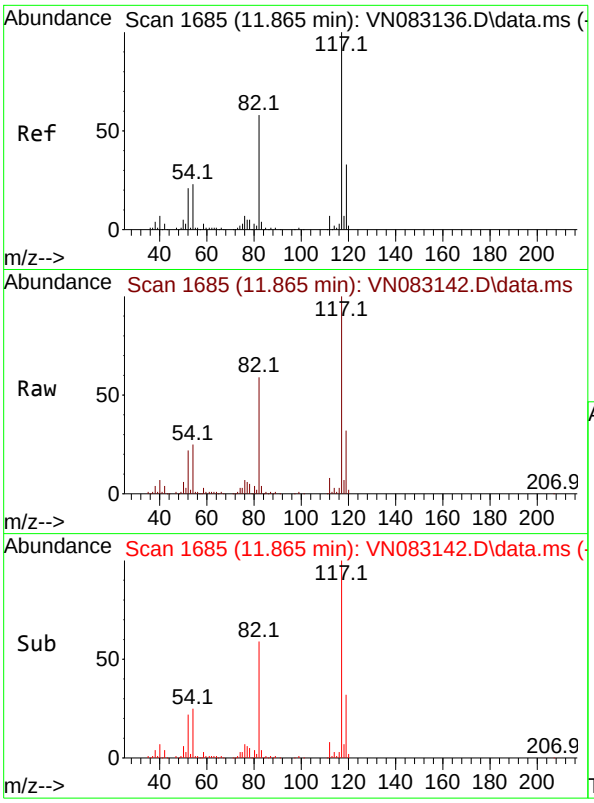


#62
4-Bromofluorobenzene
Concen: 52.574 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 95 Resp: 181344

Ion	Ratio	Lower	Upper
95	100		
174	68.0	0.0	159.2
176	65.5	0.0	147.6





#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion:117 Resp: 33095

Ion	Ratio	Lower	Upper
117	100		
82	59.4	47.5	71.3
119	31.9	25.6	38.4

Instrument :
MSVOA_N
ClientSampleId :
ICVVN080724

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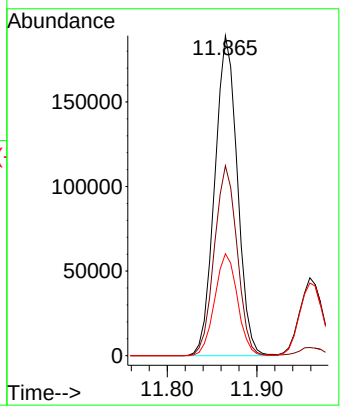
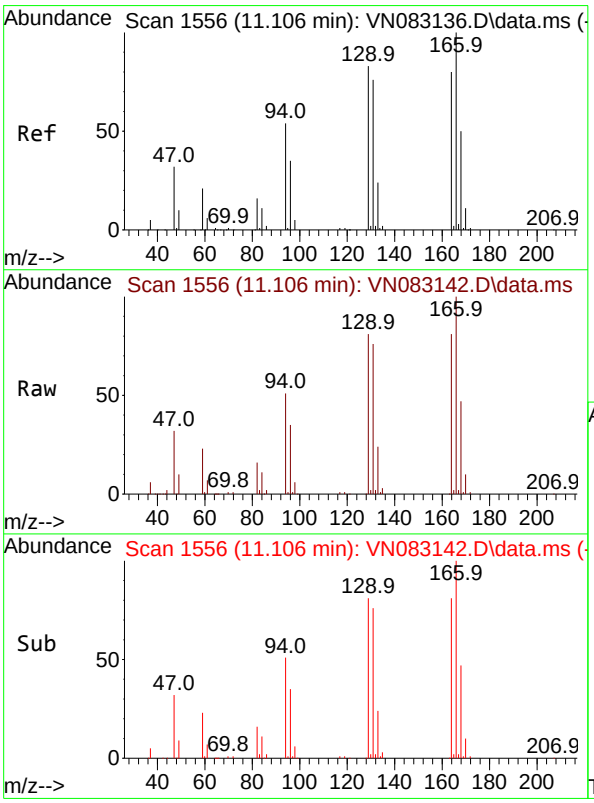
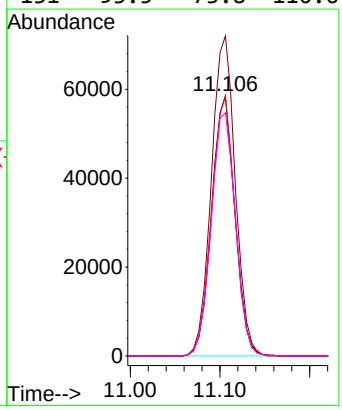


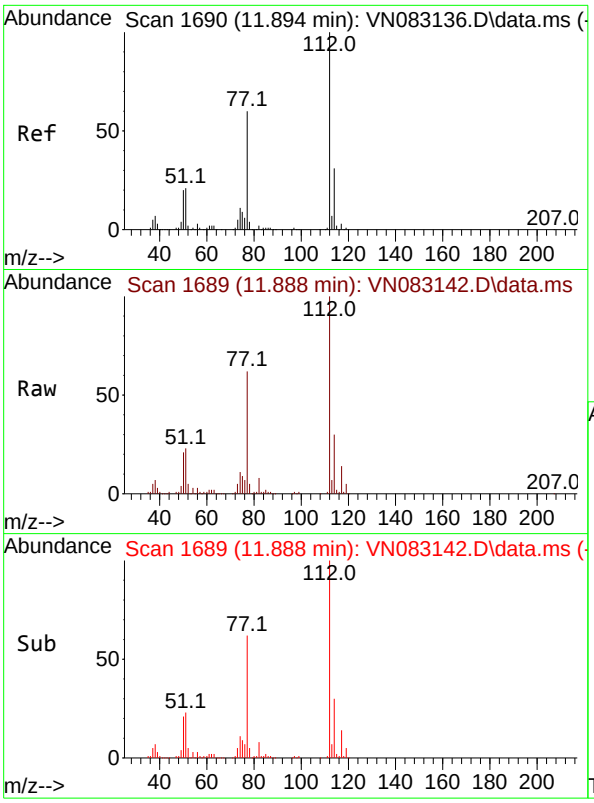


#64
Tetrachloroethene
Concen: 48.175 ug/l
RT: 11.106 min Scan# 1556
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion:164 Resp: 105591

Ion	Ratio	Lower	Upper
164	100		
166	123.0	101.4	152.0
129	99.7	75.7	113.5
131	93.5	73.8	110.6

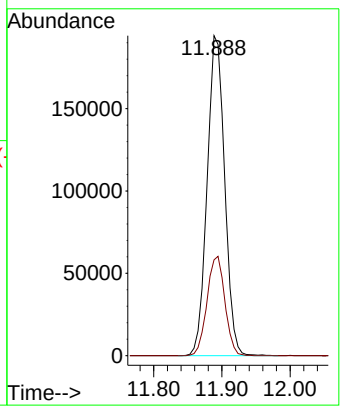




#65
Chlorobenzene
Concen: 47.522 ug/l
RT: 11.888 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion:112 Resp: 34756

Ion	Ratio	Lower	Upper
112	100		
114	29.9	26.2	39.2



Instrument :
MSVOA_N
ClientSampleId :
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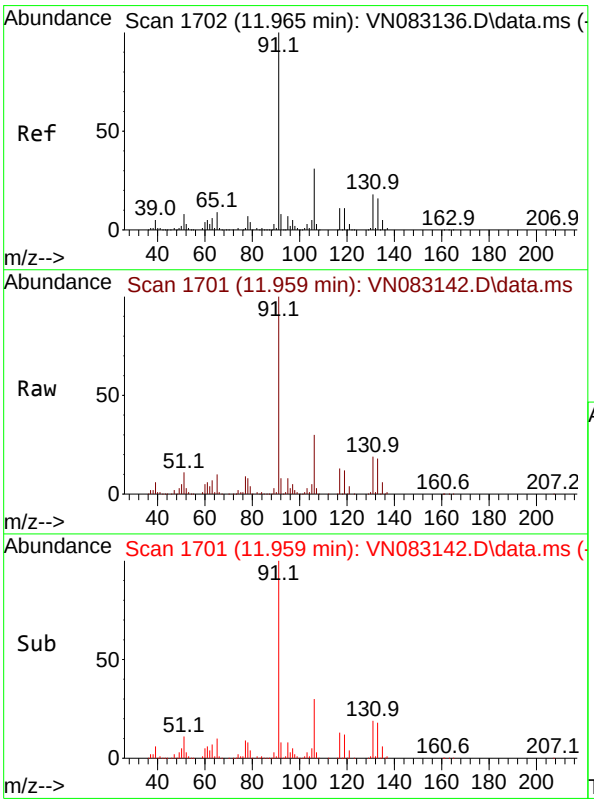
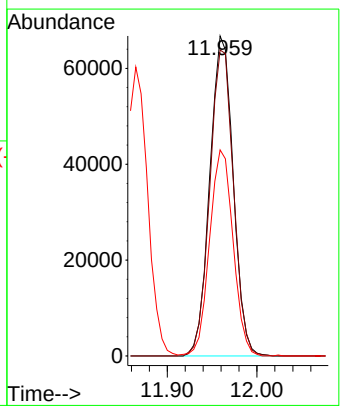
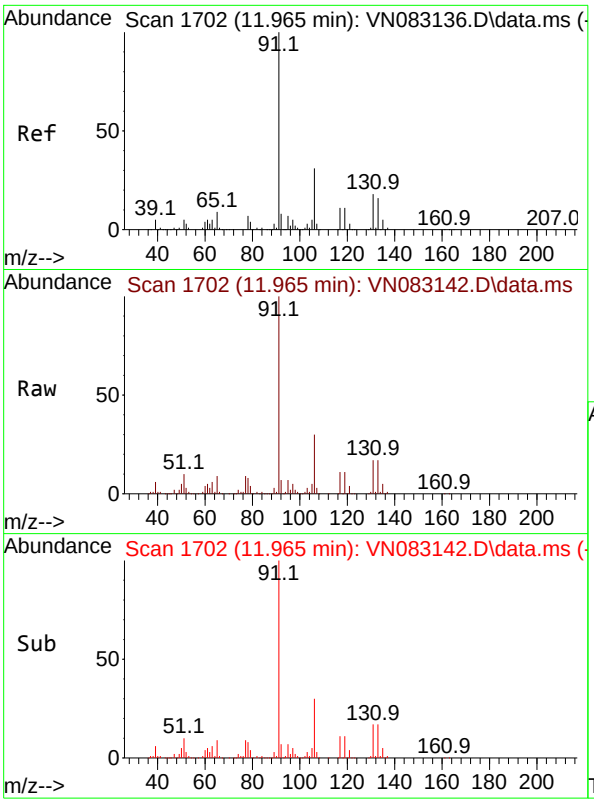


#66
1,1,1,2-Tetrachloroethane
Concen: 46.843 ug/l
RT: 11.959 min Scan# 1701
Delta R.T. -0.006 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion:131 Resp: 120826

Ion	Ratio	Lower	Upper
131	100		
133	97.1	47.3	142.0
119	64.8	32.5	97.4





#67
Ethyl Benzene
Concen: 47.764 ug/l
RT: 11.965 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 91 Resp: 64082

Ion	Ratio	Lower	Upper
91	100		
106	30.4	24.0	36.0

Instrument :
MSVOA_N
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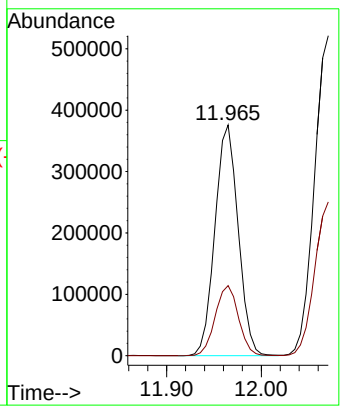
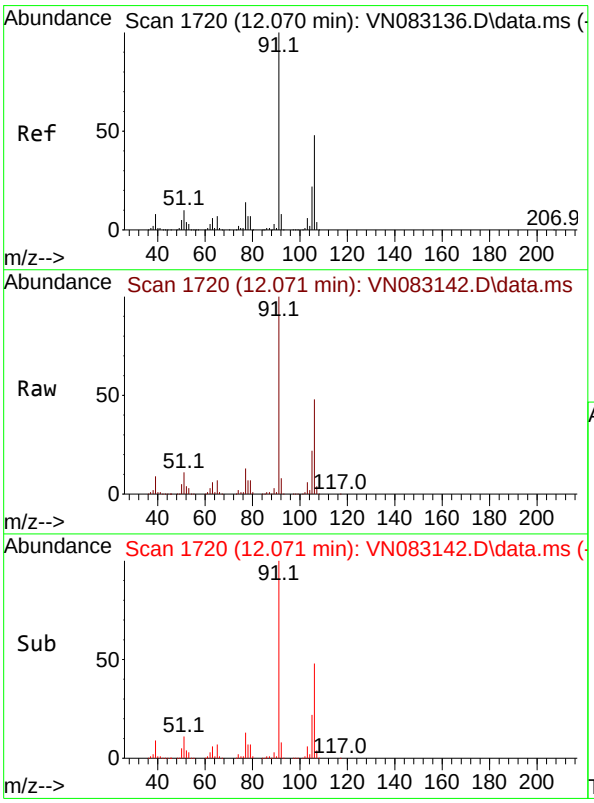
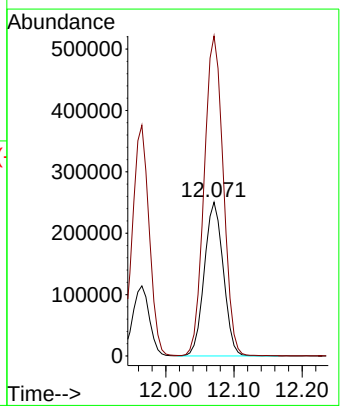


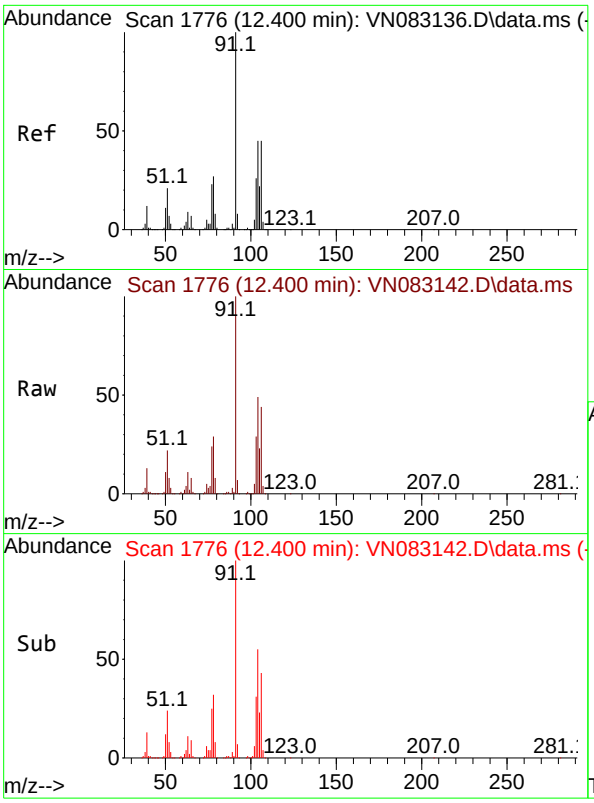


#68
m/p-Xylenes
Concen: 96.434 ug/l
RT: 12.071 min Scan# 1720
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion:106 Resp: 484653

Ion	Ratio	Lower	Upper
106	100		
91	210.2	166.1	249.1





#69
o-Xylene
Concen: 46.662 ug/l
RT: 12.400 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion:106 Resp: 23129

Ion	Ratio	Lower	Upper
106	100		
91	227.0	111.3	333.9

Instrument :
MSVOA_N
ClientSampleId :
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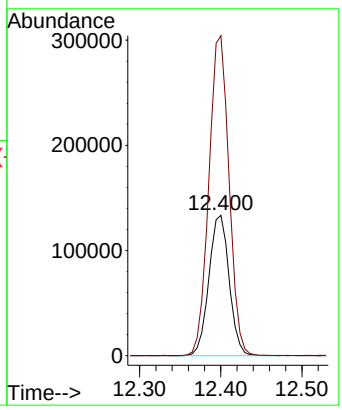
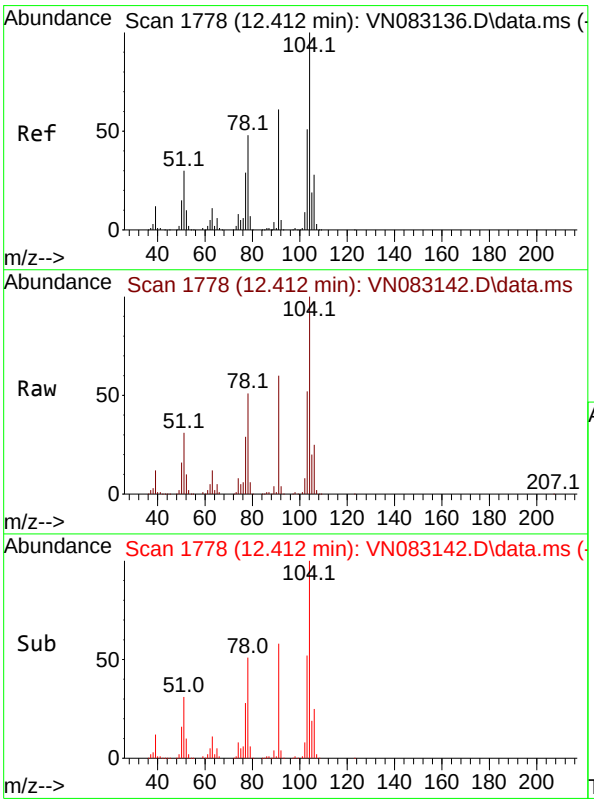
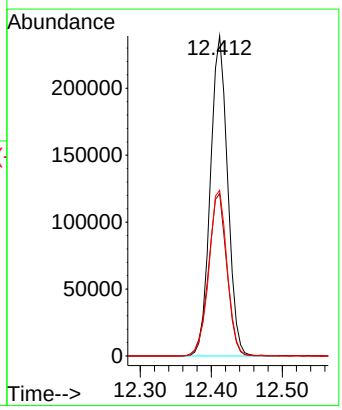


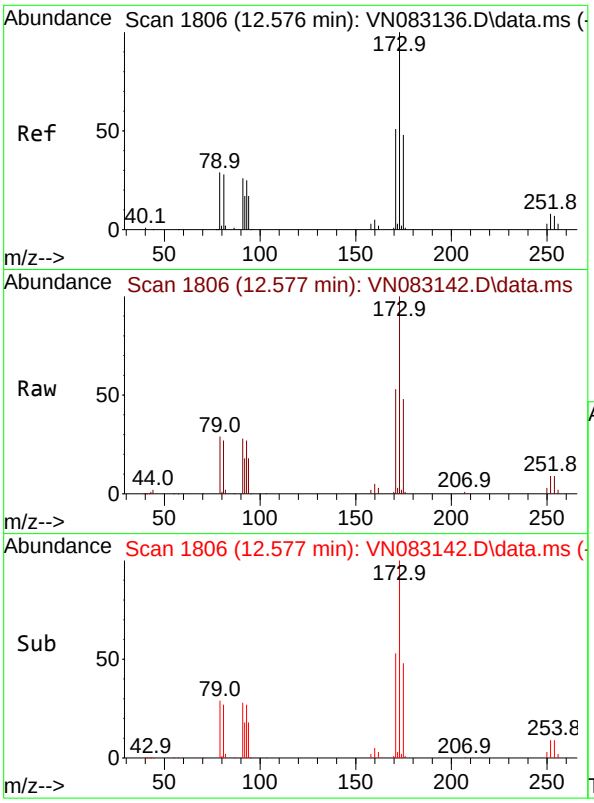


#70
Styrene
Concen: 48.487 ug/l
RT: 12.412 min Scan# 1778
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion:104 Resp: 403657

Ion	Ratio	Lower	Upper
104	100		
78	53.9	41.6	62.4
103	54.6	44.0	66.0

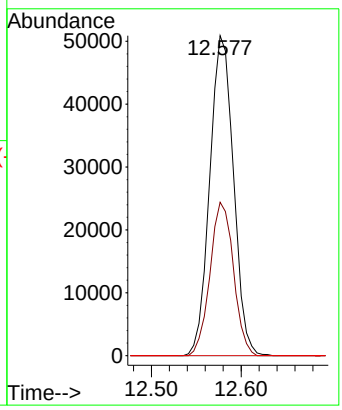




#71
Bromoform
Concen: 47.797 ug/l
RT: 12.577 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion:173 Resp: 9339

Ion	Ratio	Lower	Upper
173	100		
175	47.4	24.0	72.0
254	0.0	0.0	0.0



Instrument :
MSVOA_N
ClientSampleId :
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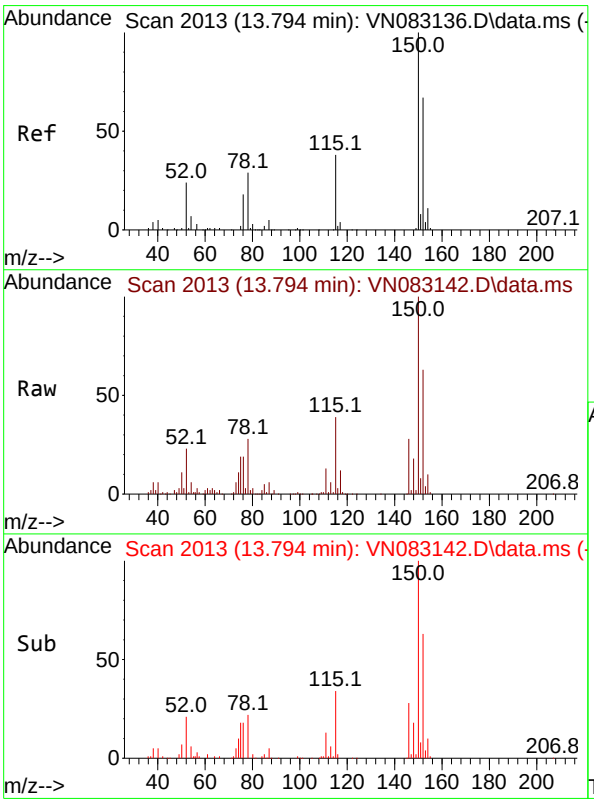
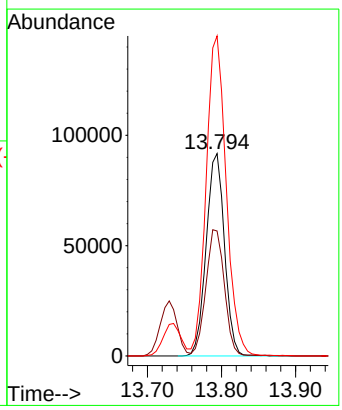
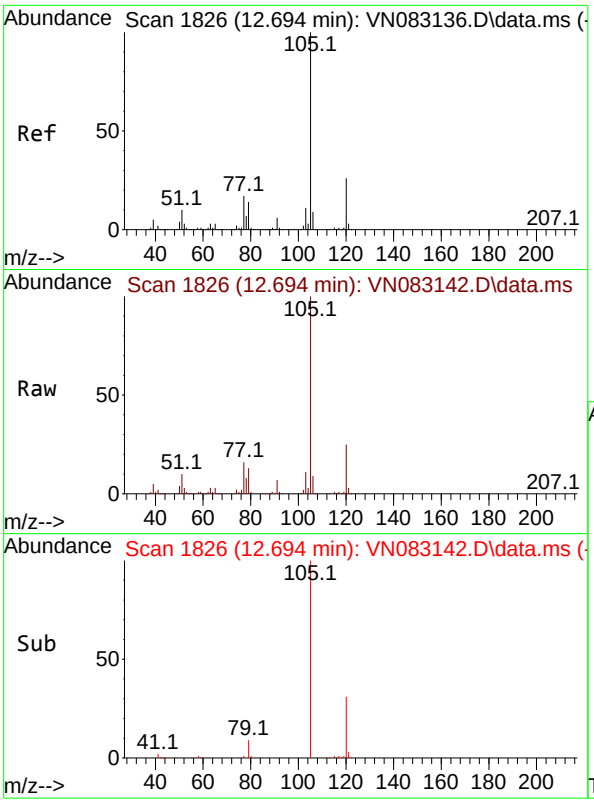


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.794 min Scan# 2013
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion:152 Resp: 157193

Ion	Ratio	Lower	Upper
152	100		
115	63.3	30.6	91.6
150	172.2	0.0	348.6





#73
Isopropylbenzene
Concen: 46.893 ug/l
RT: 12.694 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion:105 Resp: 61654

Ion	Ratio	Lower	Upper
105	100		
120	26.0	12.9	38.6

Instrument :
MSVOA_N
ClientSampleId :
ICVVN080724

Manual Integrations
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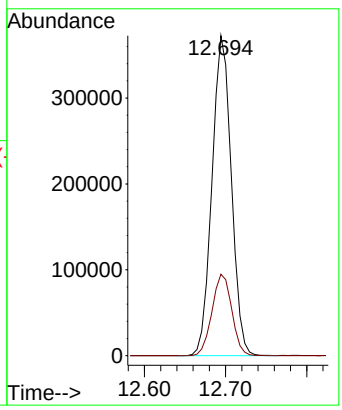
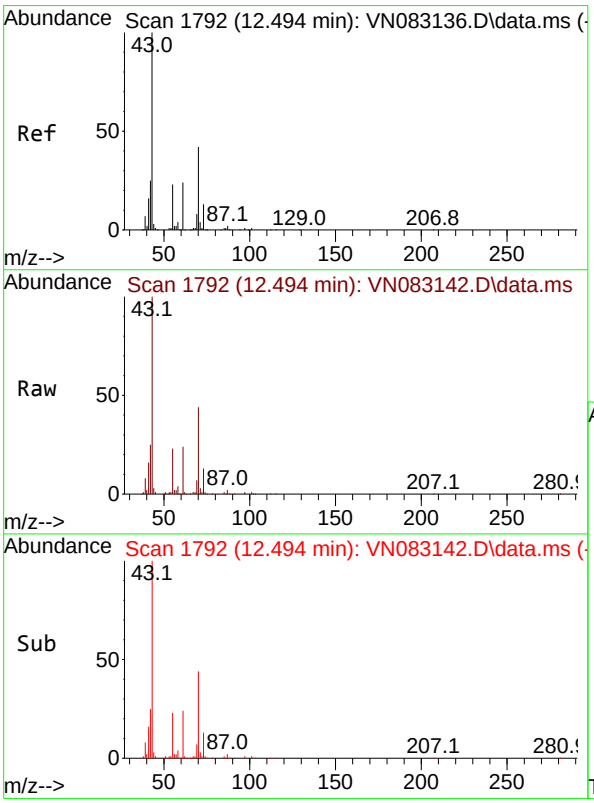
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

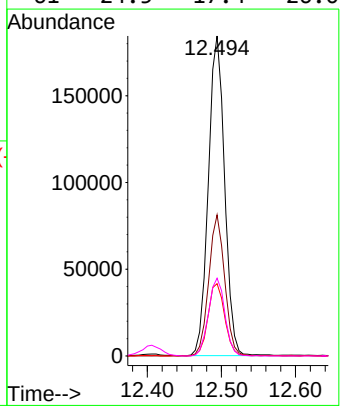


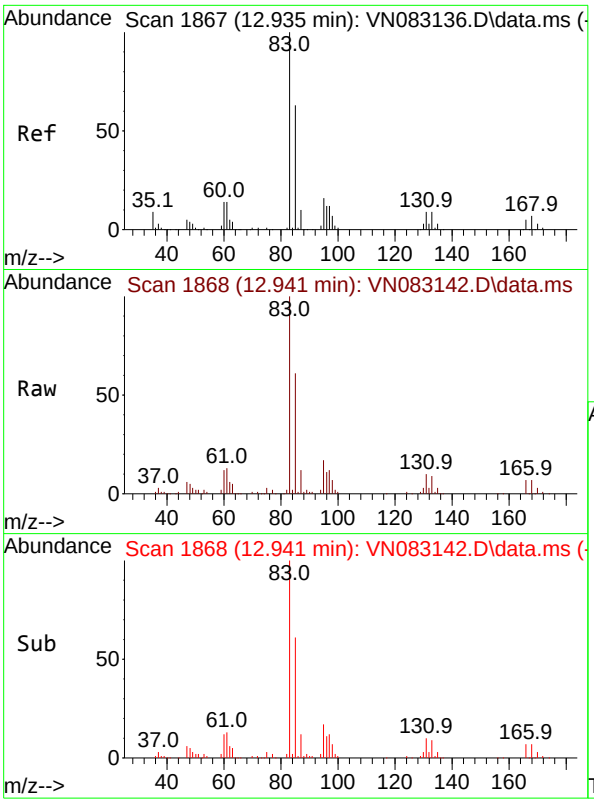


#74
N-amyl acetate
Concen: 43.748 ug/l
RT: 12.494 min Scan# 1792
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 43 Resp: 281352

Ion	Ratio	Lower	Upper
43	100		
70	43.1	29.8	44.6
55	23.3	18.7	28.1
61	24.5	17.4	26.0





#75
1,1,2,2-Tetrachloroethane
Concen: 43.016 ug/l
RT: 12.941 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 83 Resp: 15996

Ion	Ratio	Lower	Upper
83	100		
131	10.6	5.0	14.9
85	64.5	31.9	95.7

Instrument :
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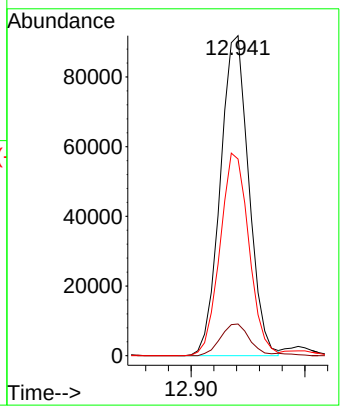
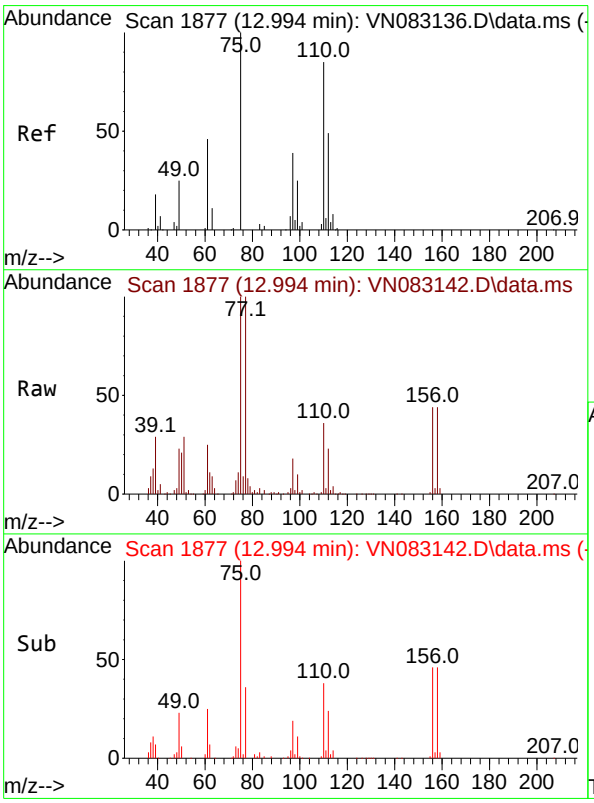
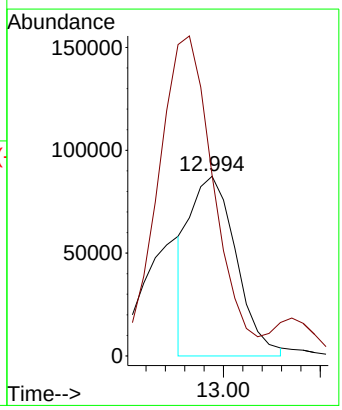


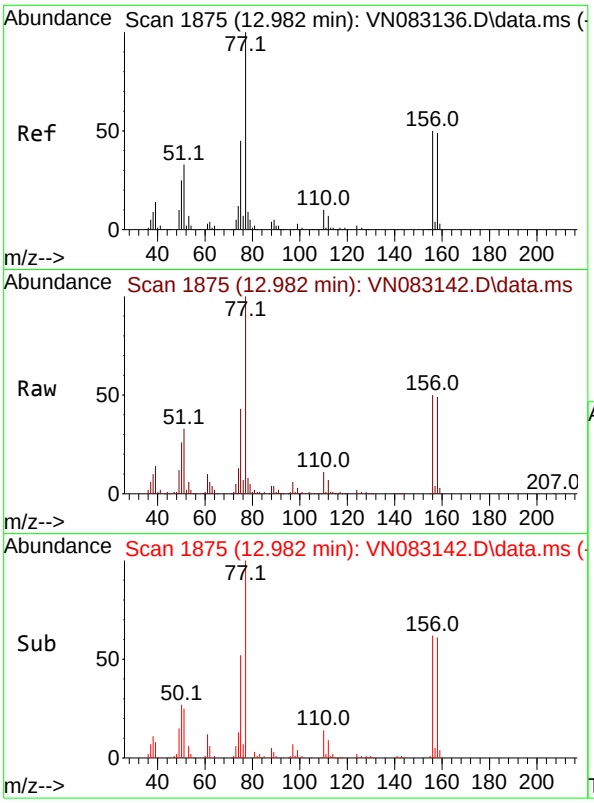


#76
1,2,3-Trichloropropane
Concen: 42.119 ug/l m
RT: 12.994 min Scan# 1877
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 75 Resp: 145309

Ion	Ratio	Lower	Upper
75	100		
77	214.8	110.9	332.6





#77
Bromobenzene
Concen: 46.649 ug/l
RT: 12.982 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion:156 Resp: 13624

Ion	Ratio	Lower	Upper
156	100		
77	229.1	111.3	333.8
158	98.0	48.3	144.9

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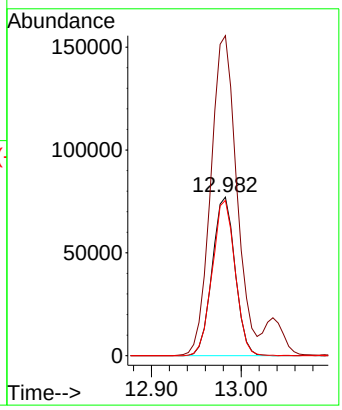
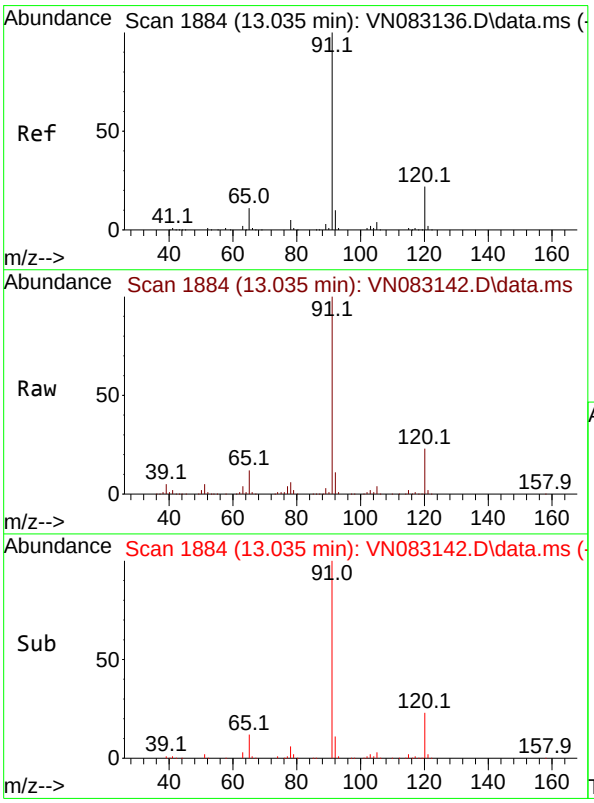
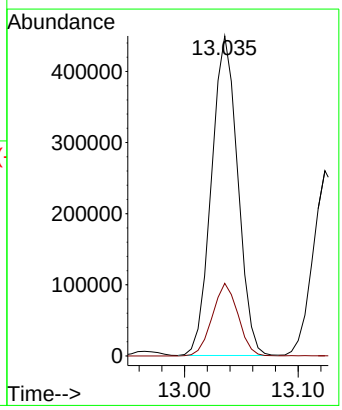


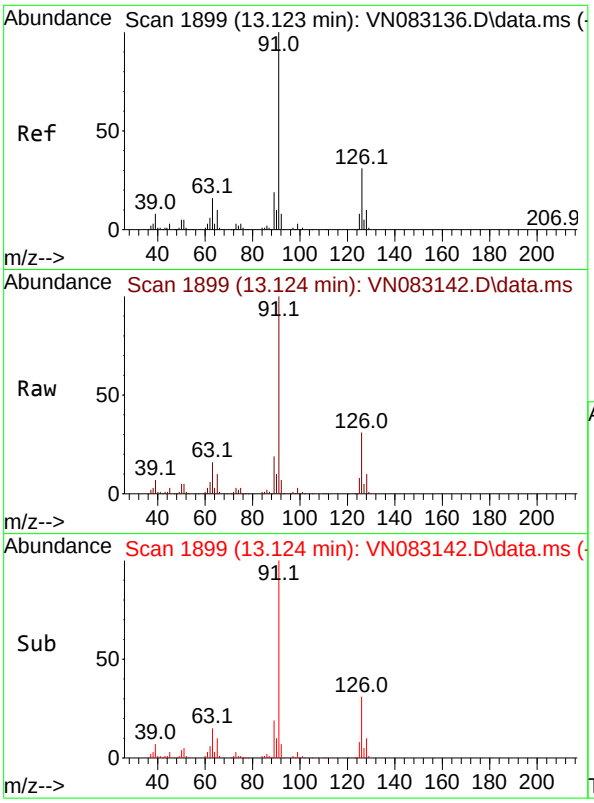


#78
n-propylbenzene
Concen: 47.678 ug/l
RT: 13.035 min Scan# 1884
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 91 Resp: 721825

Ion	Ratio	Lower	Upper
91	100		
120	22.2	10.9	32.9





#79
2-Chlorotoluene
Concen: 46.398 ug/l
RT: 13.124 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 91 Resp: 44535

Ion	Ratio	Lower	Upper
91	100		
126	31.1	16.2	48.6

Instrument :
MSVOA_N
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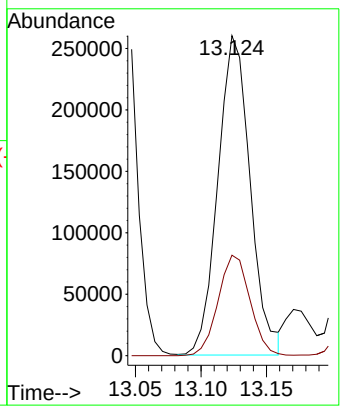
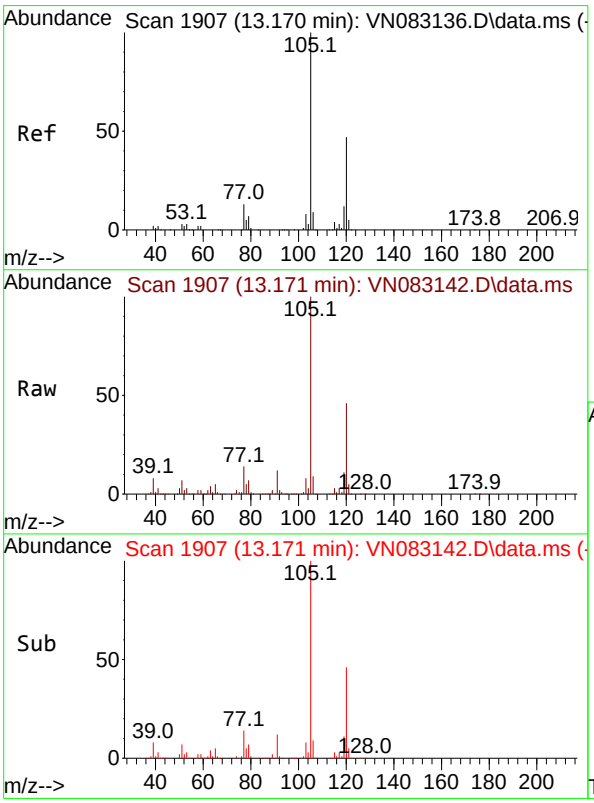
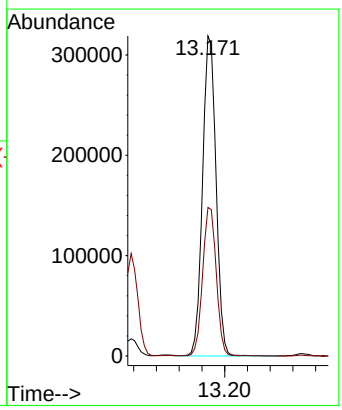


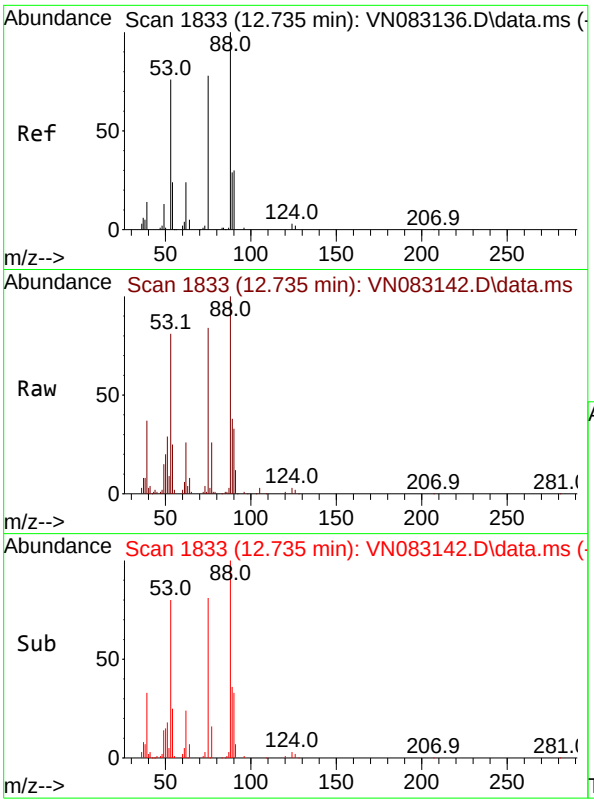


#80
1,3,5-Trimethylbenzene
Concen: 47.673 ug/l
RT: 13.171 min Scan# 1907
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion:105 Resp: 524769

Ion	Ratio	Lower	Upper
105	100		
120	46.9	24.3	72.8

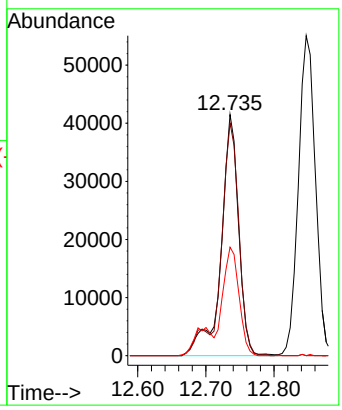




#81
trans-1,4-Dichloro-2-butene
Concen: 47.070 ug/l
RT: 12.735 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 75 Resp: 7465

Ion	Ratio	Lower	Upper
75	100		
53	89.6	88.4	132.6
89	41.1	36.3	54.5



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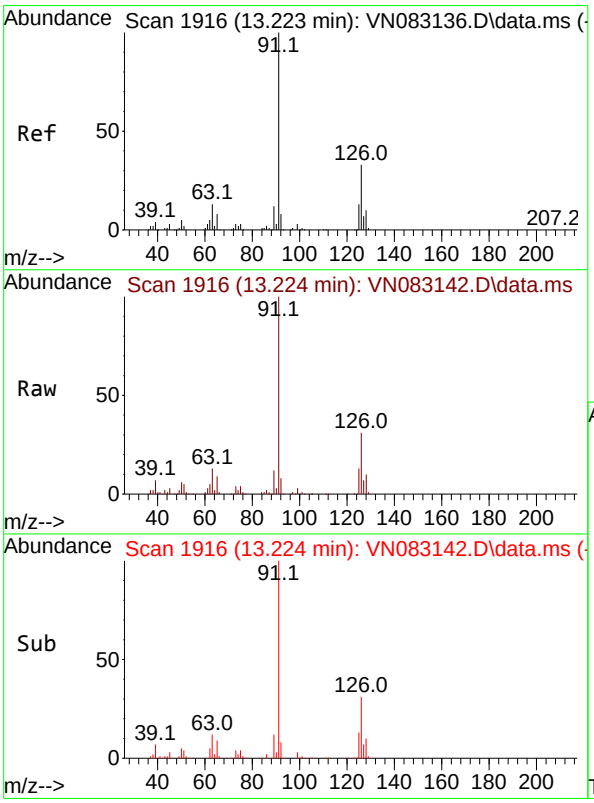
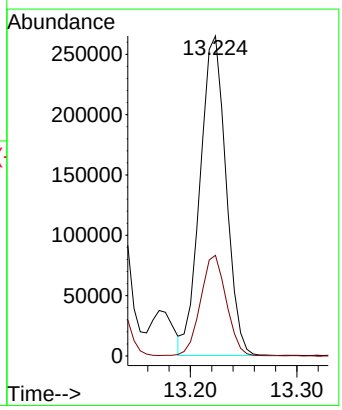
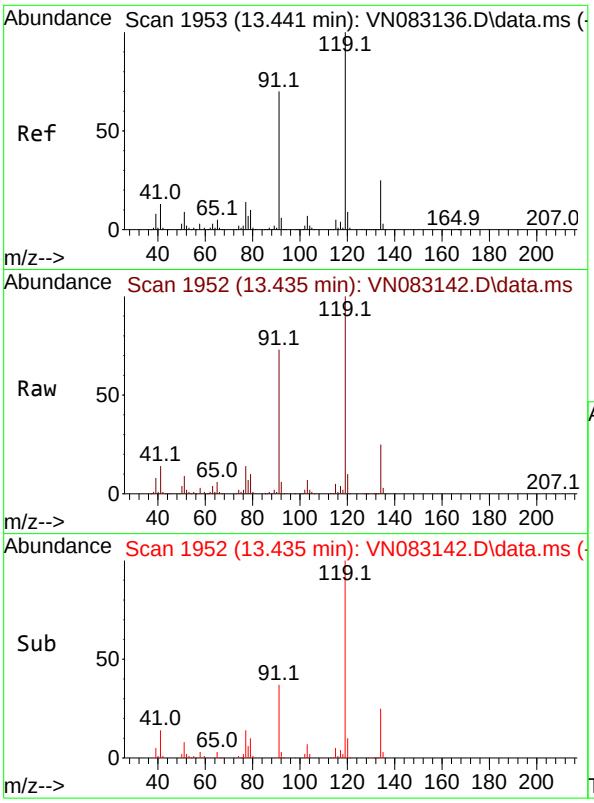


#82
4-Chlorotoluene
Concen: 46.512 ug/l
RT: 13.224 min Scan# 1916
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 91 Resp: 447810

Ion	Ratio	Lower	Upper
91	100		
126	31.2	16.2	48.6

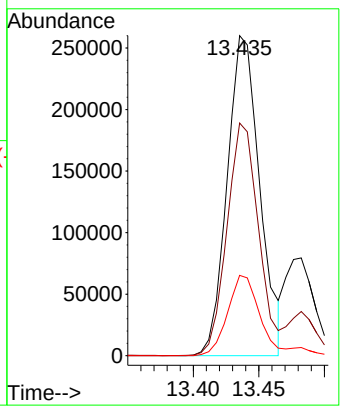




#83
tert-Butylbenzene
Concen: 46.173 ug/l
RT: 13.435 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion:119 Resp: 45010

Ion	Ratio	Lower	Upper
119	100		
91	70.4	35.0	105.1
134	24.4	13.3	39.8



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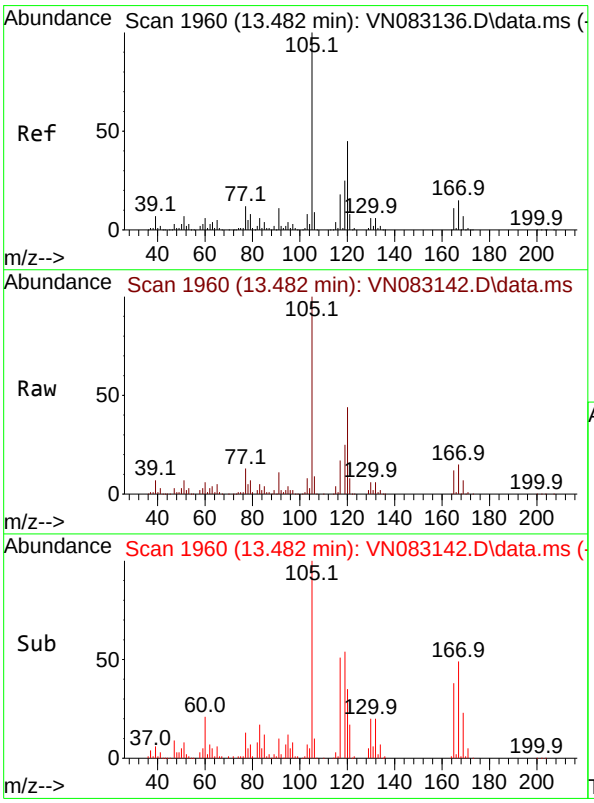
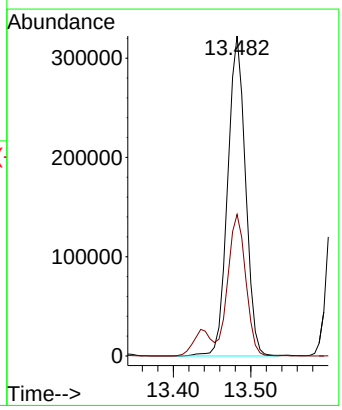
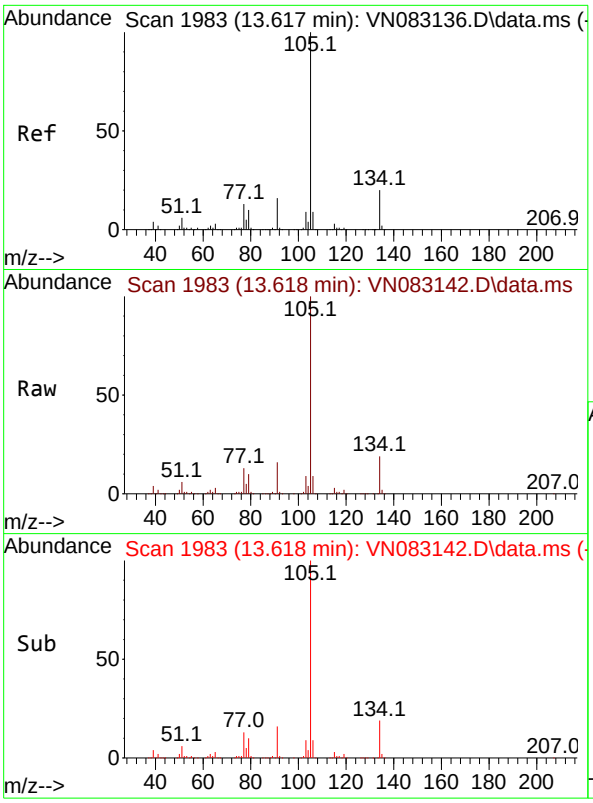


#84
1,2,4-Trimethylbenzene
Concen: 46.493 ug/l
RT: 13.482 min Scan# 1960
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion:105 Resp: 515759

Ion	Ratio	Lower	Upper
105	100		
120	44.4	21.9	65.8





#85
sec-Butylbenzene
Concen: 47.018 ug/l
RT: 13.618 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion:105 Resp: 62540

Ion	Ratio	Lower	Upper
105	100		
134	19.5	9.8	29.3

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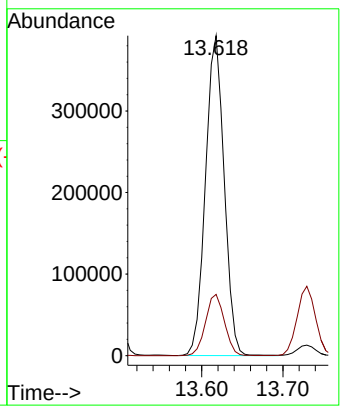
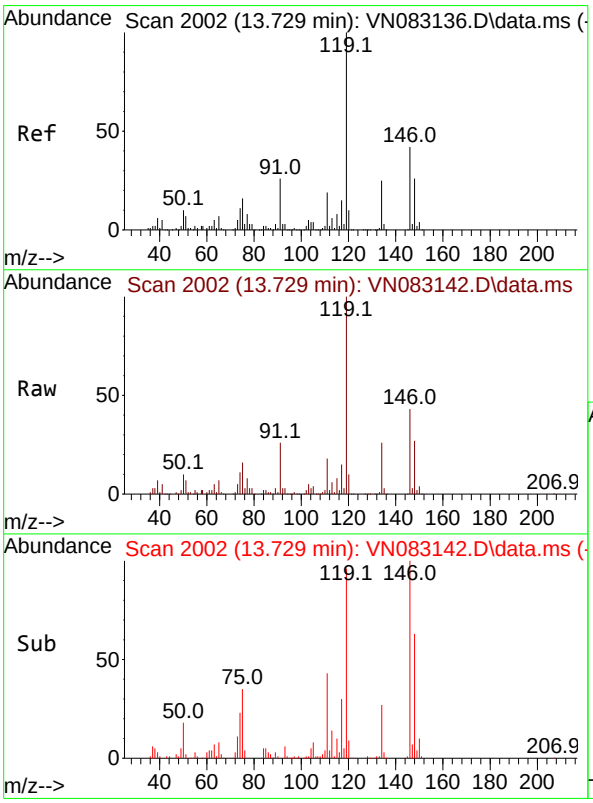
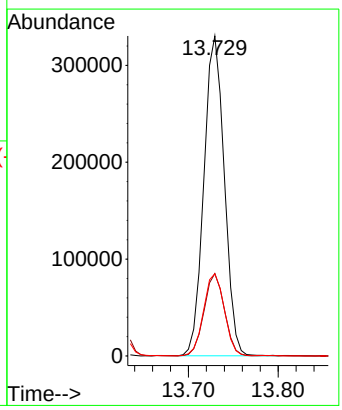


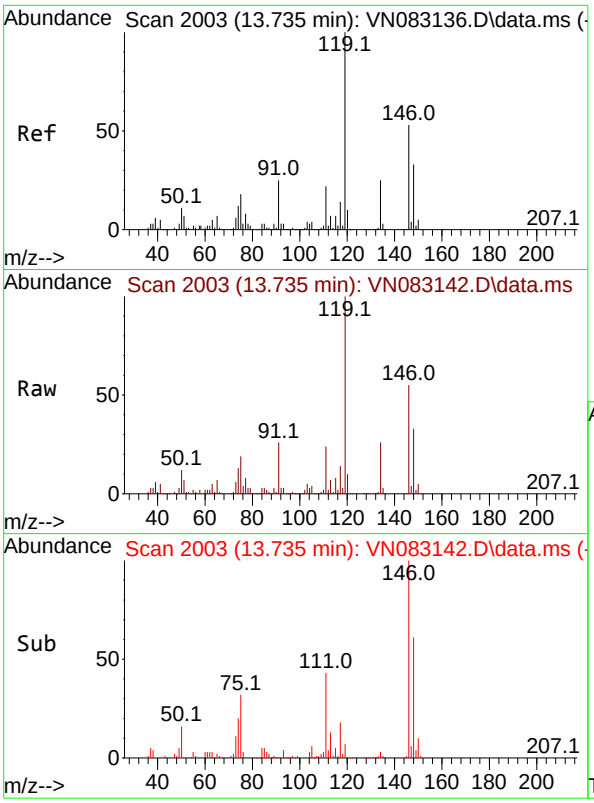


#86
p-Isopropyltoluene
Concen: 47.566 ug/l
RT: 13.729 min Scan# 2002
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion:119 Resp: 522411

Ion	Ratio	Lower	Upper
119	100		
134	25.6	13.0	39.0
91	25.9	12.3	36.9

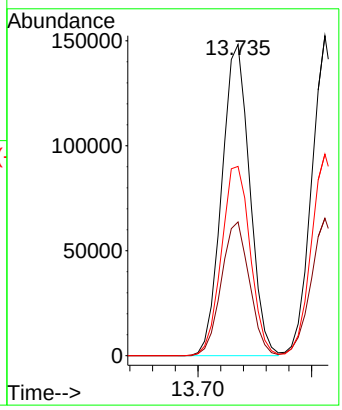




#87
1,3-Dichlorobenzene
Concen: 45.959 ug/l
RT: 13.735 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion:146 Resp: 25257

Ion	Ratio	Lower	Upper
146	100		
111	43.4	20.6	61.9
148	62.8	31.8	95.3



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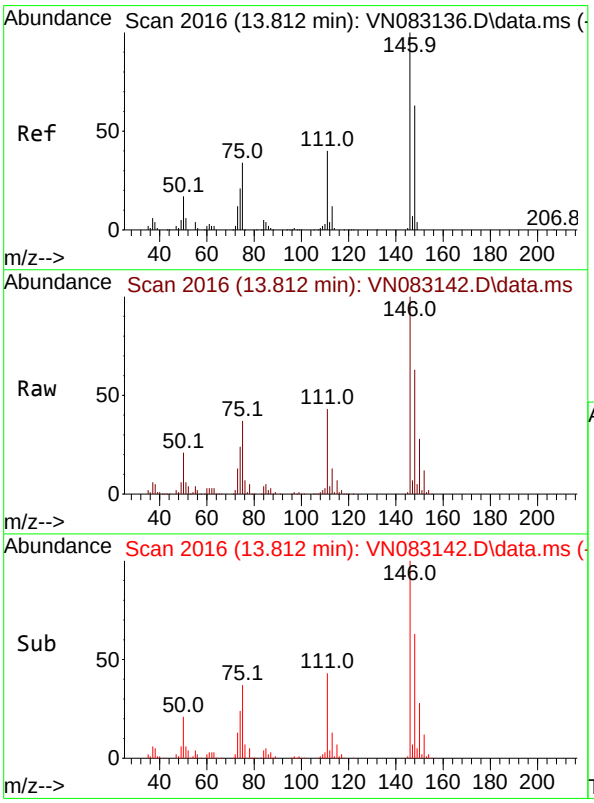
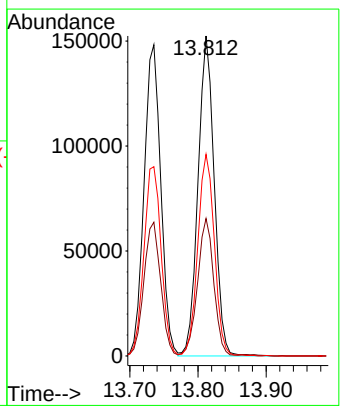
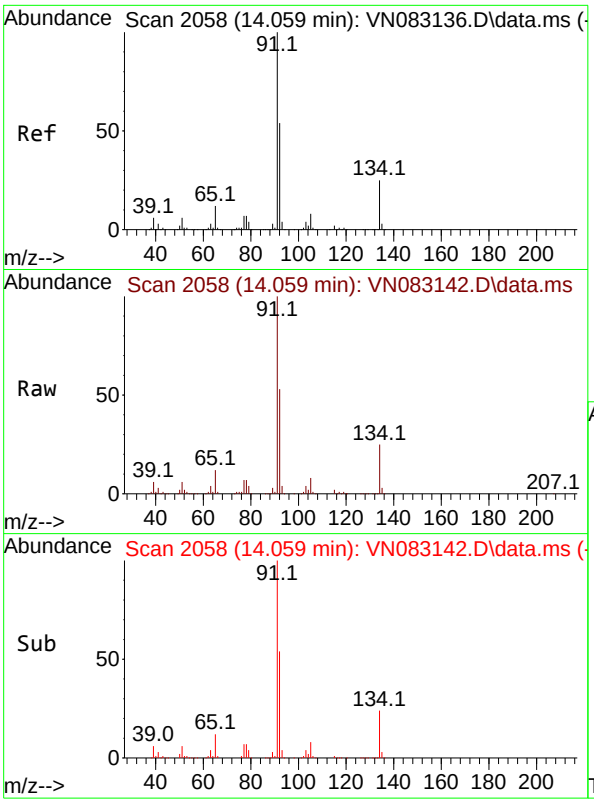


#88
1,4-Dichlorobenzene
Concen: 45.499 ug/l
RT: 13.812 min Scan# 2016
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion:146 Resp: 252088

Ion	Ratio	Lower	Upper
146	100		
111	42.6	20.1	60.3
148	64.5	32.2	96.6

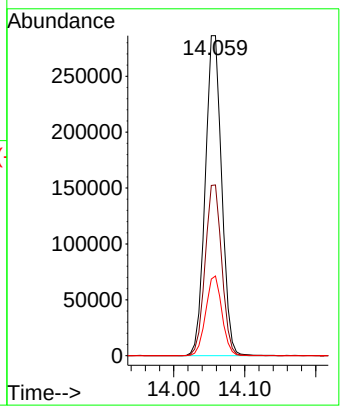




#89
n-Butylbenzene
Concen: 48.489 ug/l
RT: 14.059 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 91 Resp: 46144

Ion	Ratio	Lower	Upper
91	100		
92	53.9	26.1	78.3
134	24.5	12.1	36.3



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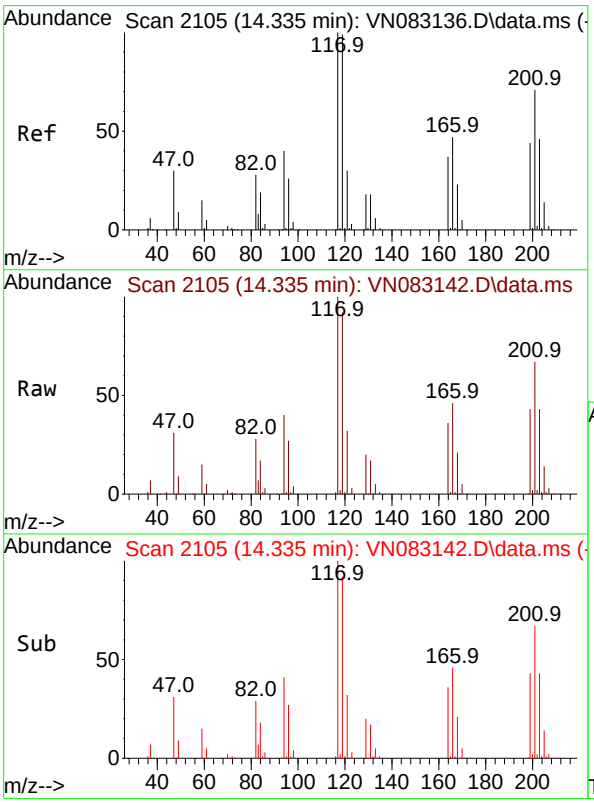
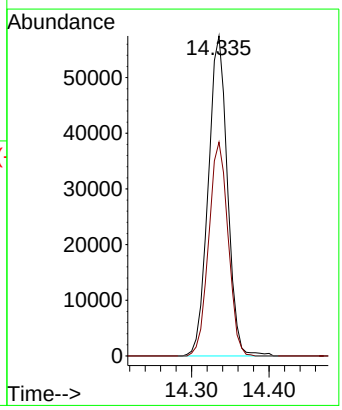
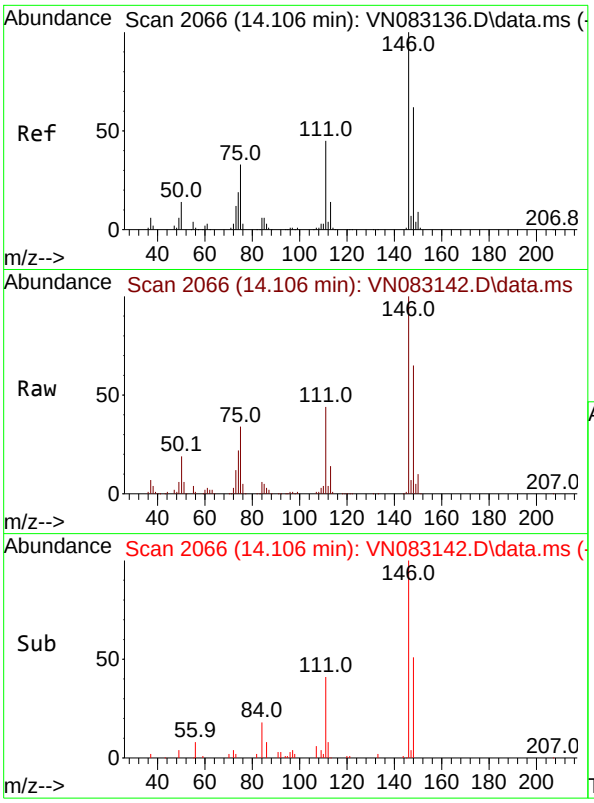


#90
Hexachloroethane
Concen: 46.741 ug/l
RT: 14.335 min Scan# 2105
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion:117 Resp: 99176

Ion	Ratio	Lower	Upper
117	100		
201	67.3	35.8	107.3

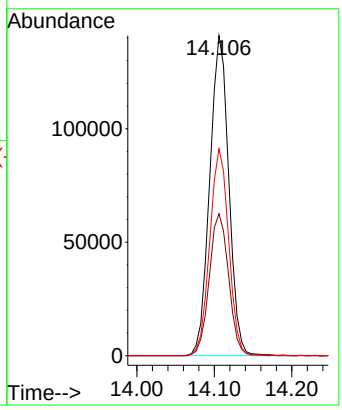




#91
1,2-Dichlorobenzene
Concen: 45.255 ug/l
RT: 14.106 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion:146 Resp: 24067

Ion	Ratio	Lower	Upper
146	100		
111	45.2	21.4	64.2
148	64.4	32.1	96.5



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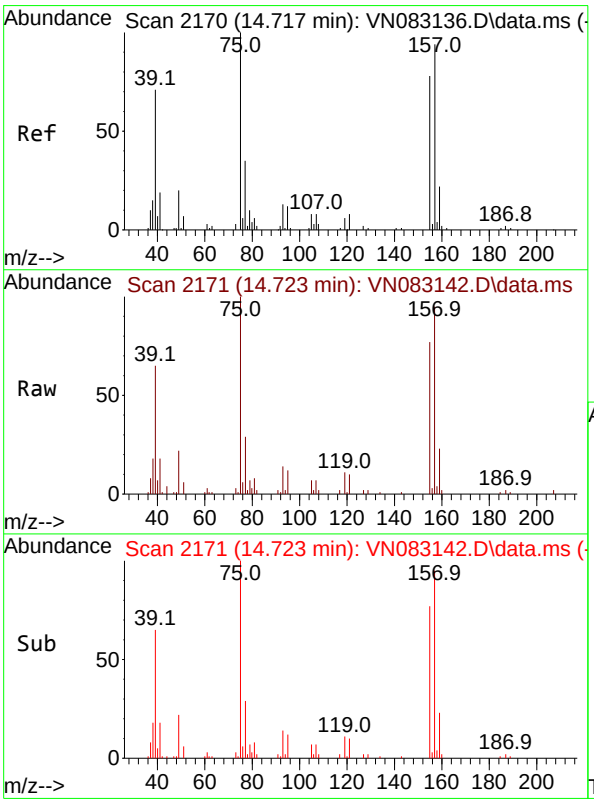
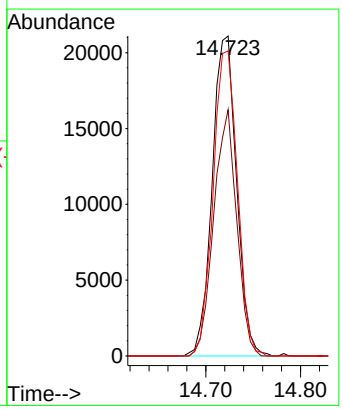
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

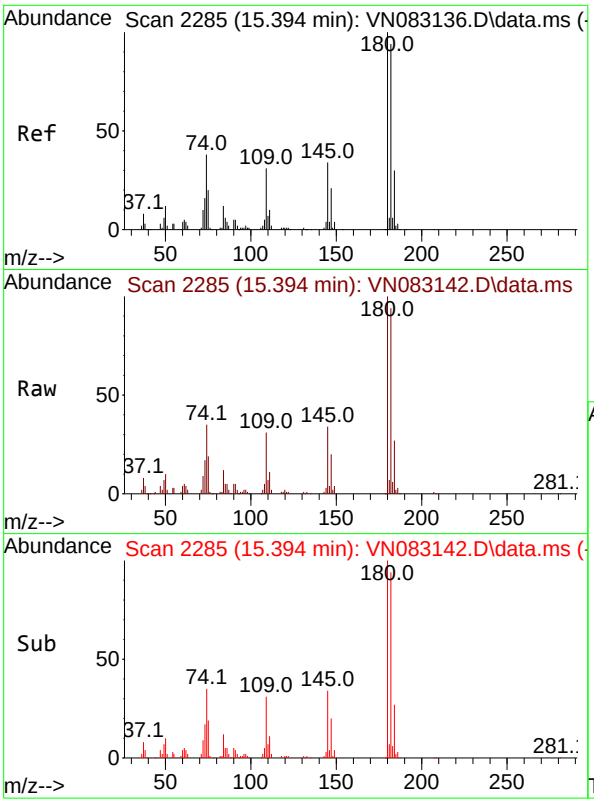


#92
1,2-Dibromo-3-Chloropropane
Concen: 41.753 ug/l
RT: 14.723 min Scan# 2171
Delta R.T. 0.006 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 75 Resp: 37677

Ion	Ratio	Lower	Upper
75	100		
155	72.8	36.6	109.8
157	95.3	46.9	140.6

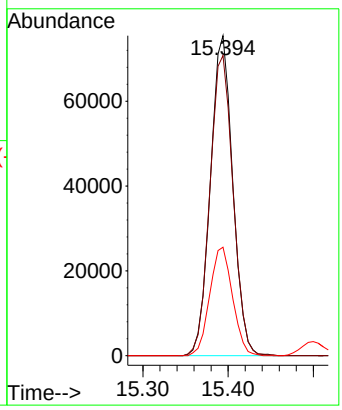




#93
1,2,4-Trichlorobenzene
Concen: 46.054 ug/l
RT: 15.394 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion:180 Resp: 13721

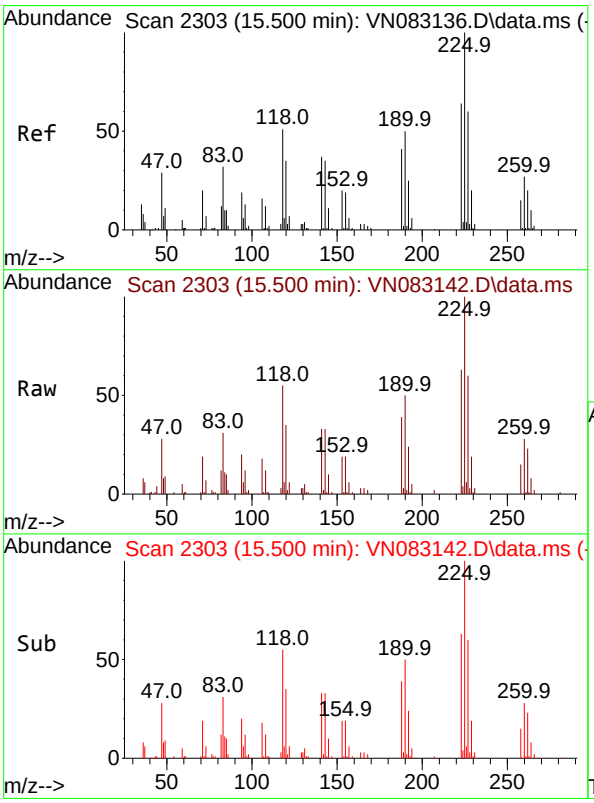
Ion	Ratio	Lower	Upper
180	100		
182	97.2	47.3	141.8
145	34.6	15.7	47.1



Instrument :
MSVOA_N
ClientSampleId :
ICVVN080724

Manual Integrations
APPROVED

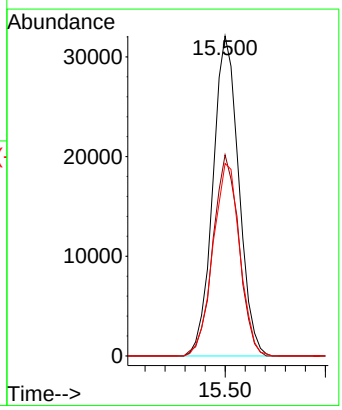
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

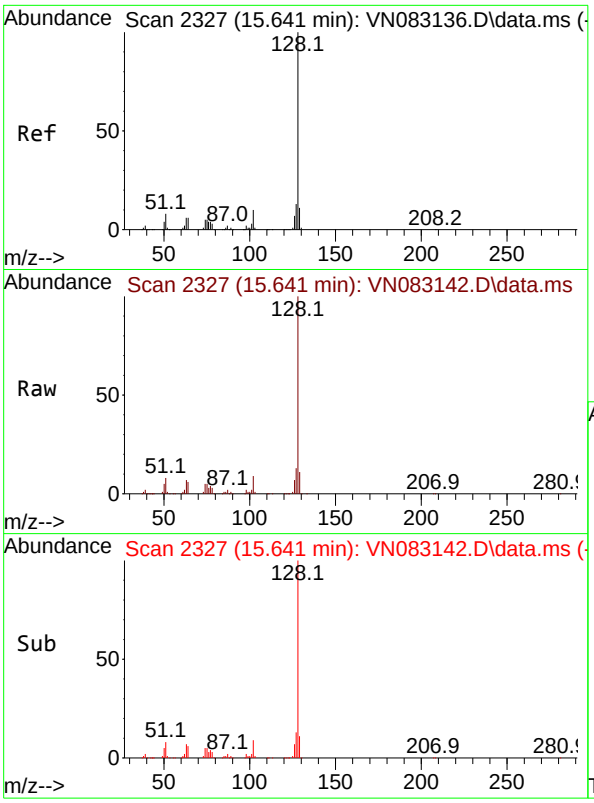


#94
Hexachlorobutadiene
Concen: 43.315 ug/l
RT: 15.500 min Scan# 2303
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion:225 Resp: 57394

Ion	Ratio	Lower	Upper
225	100		
223	63.3	31.9	95.7
227	62.6	32.5	97.5

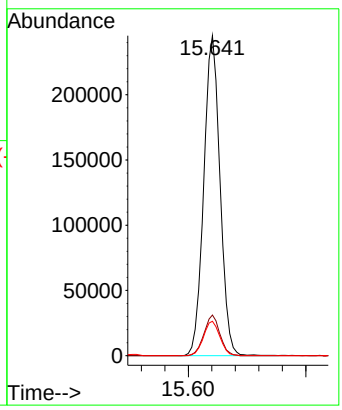




#95
Naphthalene
Concen: 44.692 ug/l
RT: 15.641 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion:128 Resp: 47167

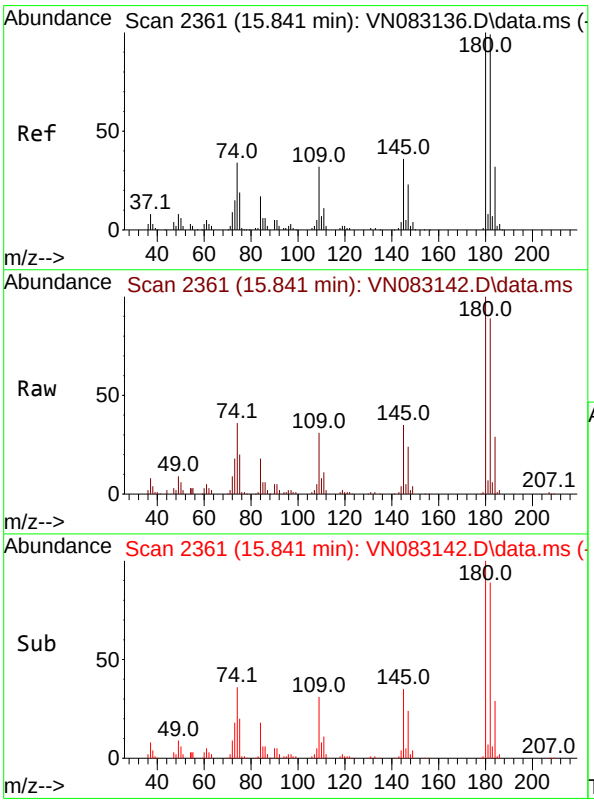
Ion	Ratio	Lower	Upper
128	100		
127	12.4	10.6	16.0
129	10.8	8.6	12.8



Instrument :
MSVOA_N
ClientSampleId :
ICVVN080724

Manual Integrations
APPROVED

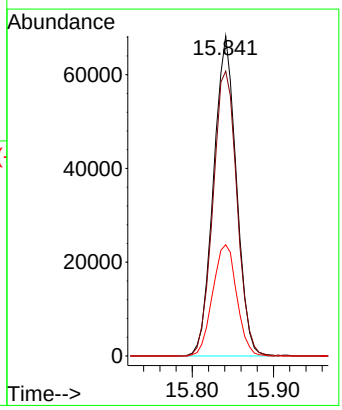
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024



#96
1,2,3-Trichlorobenzene
Concen: 45.221 ug/l
RT: 15.841 min Scan# 2361
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion:180 Resp: 133315

Ion	Ratio	Lower	Upper
180	100		
182	93.7	48.9	146.8
145	36.6	16.8	50.4



Evaluate Continuing Calibration Report

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN080724\
Data File : VN083142.D
Acq On : 07 Aug 2024 14:49
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN080724

Quant Time: Aug 08 06:35:30 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	109	0.00
2	T	Dichlorodifluoromethane	0.567	0.534	5.8	102	0.00
3	P	Chloromethane	0.581	0.537	7.6	99	0.00
4	C	Vinyl Chloride	0.592	0.544	8.1#	99	0.00
5	T	Bromomethane	0.368	0.316	14.1	97	0.00
6	T	Chloroethane	0.371	0.324	12.7	99	0.00
7	T	Trichlorofluoromethane	0.979	0.922	5.8	101	0.00
8	T	Diethyl Ether	0.364	0.337	7.4	100	0.00
9	T	1,1,2-Trichlorotrifluoroeth	0.539	0.509	5.6	101	0.00
10	T	Methyl Iodide	0.710	0.672	5.4	99	0.00
11	T	Tert butyl alcohol	0.148	0.123	16.9	92	0.00
12	CM	1,1-Dichloroethene	0.554	0.505	8.8#	101	0.00
13	T	Acrolein	0.096	0.084	12.5	90	0.00
14	T	Allyl chloride	1.047	0.862	17.7	101	0.00
15	T	Acrylonitrile	0.304	0.265	12.8	95	0.00
16	T	Acetone	0.278	0.235	15.5	90	0.00
17	T	Carbon Disulfide	1.622	1.417	12.6	99	0.00
18	T	Methyl Acetate	0.830	0.704	15.2	99	0.00
19	T	Methyl tert-butyl Ether	2.001	1.872	6.4	101	0.00
20	T	Methylene Chloride	0.641	0.559	12.8	102	0.00
21	T	trans-1,2-Dichloroethene	0.573	0.523	8.7	99	-0.01
22	T	Diisopropyl ether	1.969	1.846	6.2	100	0.00
23	T	Vinyl Acetate	2.018	1.900	5.8	99	0.00
24	P	1,1-Dichloroethane	1.073	1.002	6.6	101	0.00
25	T	2-Butanone	0.428	0.362	15.4	93	0.00
26	T	2,2-Dichloropropane	0.997	0.954	4.3	102	0.00
27	T	cis-1,2-Dichloroethene	0.691	0.638	7.7	101	0.00
28	T	Bromochloromethane	0.439	0.403	8.2	100	0.00
29	T	Tetrahydrofuran	0.276	0.246	10.9	96	0.00
30	C	Chloroform	1.115	1.057	5.2#	101	0.00
31	T	Cyclohexane	1.055	0.917	13.1	102	0.00
32	T	1,1,1-Trichloroethane	1.055	0.995	5.7	101	0.00
33	S	1,2-Dichloroethane-d4	0.712	0.720	-1.1	105	0.00
34	I	1,4-Difluorobenzene	1.000	1.000	0.0	109	0.00
35	S	Dibromofluoromethane	0.312	0.322	-3.2	106	0.00
36	T	1,1-Dichloropropene	0.472	0.451	4.4	103	0.00
37	T	Ethyl Acetate	0.529	0.456	13.8	100	0.00
38	T	Carbon Tetrachloride	0.532	0.509	4.3	102	0.00
39	T	Methylcyclohexane	0.580	0.555	4.3	101	0.00
40	TM	Benzene	1.406	1.340	4.7	101	0.00
41	T	Methacrylonitrile	0.301	0.259	14.0	99	0.00
42	TM	1,2-Dichloroethane	0.512	0.485	5.3	102	0.00
43	T	Isopropyl Acetate	1.211	0.841	30.6#	100	0.00
44	TM	Trichloroethene	0.335	0.321	4.2	102	0.00
45	C	1,2-Dichloropropane	0.334	0.322	3.6#	101	0.00
46	T	Dibromomethane	0.239	0.225	5.9	98	0.00
47	T	Bromodichloromethane	0.537	0.505	6.0	102	0.00
48	T	Methyl methacrylate	0.437	0.390	10.8	100	0.00

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN080724\
Data File : VN083142.D
Acq On : 07 Aug 2024 14:49
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN080724

Quant Time: Aug 08 06:35:30 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49	T	1,4-Dioxane	0.008	0.007	12.5	93	0.00
50	S	Toluene-d8	1.164	1.215	-4.4	105	0.00
51	T	4-Methyl-2-Pentanone	0.500	0.462	7.6	97	0.00
52	CM	Toluene	0.889	0.862	3.0#	101	0.00
53	T	t-1,3-Dichloropropene	0.551	0.549	0.4	100	0.00
54	T	cis-1,3-Dichloropropene	0.586	0.568	3.1	102	0.00
55	T	1,1,2-Trichloroethane	0.318	0.308	3.1	101	0.00
56	T	Ethyl methacrylate	0.600	0.569	5.2	99	0.00
57	T	1,3-Dichloropropane	0.568	0.538	5.3	99	0.00
58	T	2-Chloroethyl Vinyl ether	0.254	0.249	2.0	104	0.00
59	T	2-Hexanone	0.387	0.348	10.1	96	0.00
60	T	Dibromochloromethane	0.385	0.381	1.0	100	0.00
61	T	1,2-Dibromoethane	0.335	0.315	6.0	99	0.00
62	S	4-Bromofluorobenzene	0.454	0.477	-5.1	106	0.00
63	I	Chlorobenzene-d5	1.000	1.000	0.0	109	0.00
64	T	Tetrachloroethene	0.331	0.319	3.6	102	0.00
65	PM	Chlorobenzene	1.105	1.050	5.0	100	0.00
66	T	1,1,1,2-Tetrachloroethane	0.390	0.365	6.4	100	0.00
67	C	Ethyl Benzene	2.027	1.936	4.5#	102	0.00
68	T	m/p-Xylenes	0.759	0.732	3.6	102	0.00
69	T	o-Xylene	0.749	0.699	6.7	99	0.00
70	T	Styrene	1.258	1.220	3.0	100	0.00
71	P	Bromoform	0.295	0.282	4.4	97	0.00
72	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	110	0.00
73	T	Isopropylbenzene	4.182	3.922	6.2	101	0.00
74	T	N-amyl acetate	2.046	1.790	12.5	98	0.00
75	P	1,1,2,2-Tetrachloroethane	1.183	1.018	13.9	96	0.00
76	T	1,2,3-Trichloropropane	1.097	0.924	15.8	95	0.00
77	T	Bromobenzene	0.929	0.867	6.7	99	0.00
78	T	n-propylbenzene	4.816	4.592	4.7	101	0.00
79	T	2-Chlorotoluene	3.053	2.833	7.2	101	0.00
80	T	1,3,5-Trimethylbenzene	3.501	3.338	4.7	102	0.00
81	T	trans-1,4-Dichloro-2-butene	0.504	0.475	5.8	105	0.00
82	T	4-Chlorotoluene	3.062	2.849	7.0	101	0.00
83	T	tert-Butylbenzene	3.101	2.863	7.7	99	0.00
84	T	1,2,4-Trimethylbenzene	3.529	3.281	7.0	98	0.00
85	T	sec-Butylbenzene	4.231	3.979	6.0	99	0.00
86	T	p-Isopropyltoluene	3.493	3.323	4.9	99	0.00
87	T	1,3-Dichlorobenzene	1.748	1.607	8.1	99	0.00
88	T	1,4-Dichlorobenzene	1.762	1.604	9.0	99	0.00
89	T	n-Butylbenzene	3.027	2.935	3.0	100	0.00
90	T	Hexachloroethane	0.675	0.631	6.5	100	0.00
91	T	1,2-Dichlorobenzene	1.692	1.531	9.5	98	0.00
92	T	1,2-Dibromo-3-Chloropropane	0.287	0.240	16.4	93	0.00
93	T	1,2,4-Trichlorobenzene	0.948	0.873	7.9	97	0.00
94	T	Hexachlorobutadiene	0.421	0.365	13.3	98	0.00
95	T	Naphthalene	3.357	3.001	10.6	94	0.00

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN080724\
Data File : VN083142.D
Acq On : 07 Aug 2024 14:49
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN080724

Quant Time: Aug 08 06:35:30 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
96 T	1,2,3-Trichlorobenzene	0.938	0.848	9.6	97	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 6

Evaluate Continuing Calibration Report

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN080724\
Data File : VN083142.D
Acq On : 07 Aug 2024 14:49
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN080724

Quant Time: Aug 08 06:35:30 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	50.000	50.000	0.0	109	0.00
2	T	Dichlorodifluoromethane	50.000	47.102	5.8	102	0.00
3	P	Chloromethane	50.000	46.238	7.5	99	0.00
4	C	Vinyl Chloride	50.000	45.937	8.1#	99	0.00
5	T	Bromomethane	50.000	42.984	14.0	97	0.00
6	T	Chloroethane	50.000	43.725	12.5	99	0.00
7	T	Trichlorofluoromethane	50.000	47.124	5.8	101	0.00
8	T	Diethyl Ether	50.000	46.259	7.5	100	0.00
9	T	1,1,2-Trichlorotrifluoroeth	50.000	47.176	5.6	101	0.00
10	T	Methyl Iodide	50.000	47.349	5.3	99	0.00
11	T	Tert butyl alcohol	250.000	208.135	16.7	92	0.00
12	CM	1,1-Dichloroethene	50.000	45.562	8.9#	101	0.00
13	T	Acrolein	250.000	217.571	13.0	90	0.00
14	T	Allyl chloride	50.000	41.173	17.7	101	0.00
15	T	Acrylonitrile	250.000	217.950	12.8	95	0.00
16	T	Acetone	250.000	210.840	15.7	90	0.00
17	T	Carbon Disulfide	50.000	43.689	12.6	99	0.00
18	T	Methyl Acetate	50.000	42.397	15.2	99	0.00
19	T	Methyl tert-butyl Ether	50.000	46.781	6.4	101	0.00
20	T	Methylene Chloride	50.000	43.645	12.7	102	0.00
21	T	trans-1,2-Dichloroethene	50.000	45.671	8.7	99	-0.01
22	T	Diisopropyl ether	50.000	46.881	6.2	100	0.00
23	T	Vinyl Acetate	250.000	235.414	5.8	99	0.00
24	P	1,1-Dichloroethane	50.000	46.685	6.6	101	0.00
25	T	2-Butanone	250.000	211.782	15.3	93	0.00
26	T	2,2-Dichloropropane	50.000	47.853	4.3	102	0.00
27	T	cis-1,2-Dichloroethene	50.000	46.113	7.8	101	0.00
28	T	Bromochloromethane	50.000	45.986	8.0	100	0.00
29	T	Tetrahydrofuran	250.000	222.147	11.1	96	0.00
30	C	Chloroform	50.000	47.387	5.2#	101	0.00
31	T	Cyclohexane	50.000	43.474	13.1	102	0.00
32	T	1,1,1-Trichloroethane	50.000	47.135	5.7	101	0.00
33	S	1,2-Dichloroethane-d4	50.000	50.583	-1.2	105	0.00
34	I	1,4-Difluorobenzene	50.000	50.000	0.0	109	0.00
35	S	Dibromofluoromethane	50.000	51.549	-3.1	106	0.00
36	T	1,1-Dichloropropene	50.000	47.732	4.5	103	0.00
37	T	Ethyl Acetate	50.000	43.124	13.8	100	0.00
38	T	Carbon Tetrachloride	50.000	47.904	4.2	102	0.00
39	T	Methylcyclohexane	50.000	47.821	4.4	101	0.00
40	TM	Benzene	50.000	47.635	4.7	101	0.00
41	T	Methacrylonitrile	50.000	43.013	14.0	99	0.00
42	TM	1,2-Dichloroethane	50.000	47.310	5.4	102	0.00
43	T	Isopropyl Acetate	50.000	45.577	8.8	100	0.00
44	TM	Trichloroethene	50.000	47.994	4.0	102	0.00
45	C	1,2-Dichloropropane	50.000	48.208	3.6#	101	0.00
46	T	Dibromomethane	50.000	47.124	5.8	98	0.00
47	T	Bromodichloromethane	50.000	47.047	5.9	102	0.00
48	T	Methyl methacrylate	50.000	44.609	10.8	100	0.00

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN080724\
Data File : VN083142.D
Acq On : 07 Aug 2024 14:49
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN080724

Quant Time: Aug 08 06:35:30 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
49	T	1,4-Dioxane	1000.000	885.211	11.5	93	0.00
50	S	Toluene-d8	50.000	52.175	-4.3	105	0.00
51	T	4-Methyl-2-Pentanone	250.000	230.917	7.6	97	0.00
52	CM	Toluene	50.000	48.520	3.0#	101	0.00
53	T	t-1,3-Dichloropropene	50.000	49.776	0.4	100	0.00
54	T	cis-1,3-Dichloropropene	50.000	48.487	3.0	102	0.00
55	T	1,1,2-Trichloroethane	50.000	48.351	3.3	101	0.00
56	T	Ethyl methacrylate	50.000	47.395	5.2	99	0.00
57	T	1,3-Dichloropropane	50.000	47.391	5.2	99	0.00
58	T	2-Chloroethyl Vinyl ether	250.000	244.918	2.0	104	0.00
59	T	2-Hexanone	250.000	224.916	10.0	96	0.00
60	T	Dibromochloromethane	50.000	49.513	1.0	100	0.00
61	T	1,2-Dibromoethane	50.000	47.133	5.7	99	0.00
62	S	4-Bromofluorobenzene	50.000	52.574	-5.1	106	0.00
63	I	Chlorobenzene-d5	50.000	50.000	0.0	109	0.00
64	T	Tetrachloroethene	50.000	48.175	3.7	102	0.00
65	PM	Chlorobenzene	50.000	47.522	5.0	100	0.00
66	T	1,1,1,2-Tetrachloroethane	50.000	46.843	6.3	100	0.00
67	C	Ethyl Benzene	50.000	47.764	4.5#	102	0.00
68	T	m/p-Xylenes	100.000	96.434	3.6	102	0.00
69	T	o-Xylene	50.000	46.662	6.7	99	0.00
70	T	Styrene	50.000	48.487	3.0	100	0.00
71	P	Bromoform	50.000	47.797	4.4	97	0.00
72	I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	110	0.00
73	T	Isopropylbenzene	50.000	46.893	6.2	101	0.00
74	T	N-amyl acetate	50.000	43.748	12.5	98	0.00
75	P	1,1,2,2-Tetrachloroethane	50.000	43.016	14.0	96	0.00
76	T	1,2,3-Trichloropropane	50.000	42.119	15.8	95	0.00
77	T	Bromobenzene	50.000	46.649	6.7	99	0.00
78	T	n-propylbenzene	50.000	47.678	4.6	101	0.00
79	T	2-Chlorotoluene	50.000	46.398	7.2	101	0.00
80	T	1,3,5-Trimethylbenzene	50.000	47.673	4.7	102	0.00
81	T	trans-1,4-Dichloro-2-butene	50.000	47.070	5.9	105	0.00
82	T	4-Chlorotoluene	50.000	46.512	7.0	101	0.00
83	T	tert-Butylbenzene	50.000	46.173	7.7	99	0.00
84	T	1,2,4-Trimethylbenzene	50.000	46.493	7.0	98	0.00
85	T	sec-Butylbenzene	50.000	47.018	6.0	99	0.00
86	T	p-Isopropyltoluene	50.000	47.566	4.9	99	0.00
87	T	1,3-Dichlorobenzene	50.000	45.959	8.1	99	0.00
88	T	1,4-Dichlorobenzene	50.000	45.499	9.0	99	0.00
89	T	n-Butylbenzene	50.000	48.489	3.0	100	0.00
90	T	Hexachloroethane	50.000	46.741	6.5	100	0.00
91	T	1,2-Dichlorobenzene	50.000	45.255	9.5	98	0.00
92	T	1,2-Dibromo-3-Chloropropane	50.000	41.753	16.5	93	0.00
93	T	1,2,4-Trichlorobenzene	50.000	46.054	7.9	97	0.00
94	T	Hexachlorobutadiene	50.000	43.315	13.4	98	0.00
95	T	Naphthalene	50.000	44.692	10.6	94	0.00

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN080724\
Data File : VN083142.D
Acq On : 07 Aug 2024 14:49
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
ICVVN080724

Quant Time: Aug 08 06:35:30 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
96 T	1,2,3-Trichlorobenzene	50.000	45.221	9.6	97	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 6

Raw Data: **VN083295.D**

Alliance TECHNICAL GROUP
284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM Case No.: P3609 SAS No.: P3609 SDG No.: P3609

Instrument ID: MSVOA_N Calibration Date/Time: 08/14/2024 12:41

Lab File ID: VN083295.D Init. Calib. Date(s): 08/07/2024 08/07/2024

Heated Purge: (Y/N) N Init. Calib. Time(s): 10:33 12:34

GC Column: RXI-624 ID: 0.25 (mm)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Dichlorodifluoromethane	0.567	0.535		-5.64	20
Chloromethane	0.581	0.541	0.1	-6.89	20
Vinyl Chloride	0.592	0.580		-2.03	20
Bromomethane	0.368	0.326		-11.41	20
1,1,2-Trichlorotrifluoroethane	0.539	0.554		2.78	20
Acetone	0.278	0.244		-12.23	20
Carbon Disulfide	1.622	1.333		-17.82	20
Methyl tert-butyl Ether	2.001	2.005		0.2	20
Methylene Chloride	0.641	0.596		-7.02	20
trans-1,2-Dichloroethene	0.573	0.543		-5.24	20
Cyclohexane	1.055	0.966		-8.44	20
2-Butanone	0.428	0.402		-6.07	20
Carbon Tetrachloride	0.532	0.548		3.01	20
cis-1,2-Dichloroethene	0.691	0.680		-1.59	20
Chloroform	1.115	1.186		6.37	20
1,1,1-Trichloroethane	1.055	1.088		3.13	20
Methylcyclohexane	0.580	0.559		-3.62	20
Benzene	1.406	1.433		1.92	20
1,2-Dichloroethane	0.512	0.547		6.84	20
Trichloroethene	0.335	0.341		1.79	20
Bromodichloromethane	0.537	0.551		2.61	20
Toluene	0.889	0.921		3.6	20
1,1,2-Trichloroethane	0.318	0.338		6.29	20
Dibromochloromethane	0.385	0.416		8.05	20
Tetrachloroethene	0.331	0.333		0.6	20
Chlorobenzene	1.105	1.119	0.3	1.27	20
Ethyl Benzene	2.027	2.073		2.27	20
m/p-Xylenes	0.759	0.775		2.11	20
o-Xylene	0.749	0.756		0.94	20
Isopropylbenzene	4.182	4.049		-3.18	20
1,4-Dichlorobenzene	1.762	1.724		-2.16	20
1,2-Dichlorobenzene	1.692	1.685		-0.41	20
1,2-Dichloroethane-d4	0.712	0.742		4.21	20
Dibromofluoromethane	0.312	0.320		2.56	20
Toluene-d8	1.164	1.193		2.49	20
4-Bromofluorobenzene	0.454	0.479		5.51	20

All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

Sample Results: **VN083295.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081424\
Data File : VN083295.D
Acq On : 14 Aug 2024 12:41
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 14 23:14:20 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 08/15/2024
Supervised By :Semsettin Yesilyurt 08/15/2024

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	8.224	168	165534	50.000	ug/l		0.00
34) 1,4-Difluorobenzene	9.100	114	282606	50.000	ug/l		0.00
63) Chlorobenzene-d5	11.865	117	250996	50.000	ug/l		0.00
72) 1,4-Dichlorobenzene-d4	13.794	152	122669	50.000	ug/l		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4	8.582	65	122826	52.129	ug/l		0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 104.260%				
35) Dibromofluoromethane	8.171	113	90305	51.194	ug/l		0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 102.380%				
50) Toluene-d8	10.565	98	337123	51.234	ug/l		0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 102.460%				
62) 4-Bromofluorobenzene	12.853	95	135336	52.757	ug/l		0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 105.520%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	2.124	85	88523	47.158	ug/l		98
3) Chloromethane	2.365	50	89486	46.562	ug/l		96
4) Vinyl Chloride	2.512	62	96057	48.983	ug/l		96
5) Bromomethane	2.942	94	53952	44.339	ug/l		100
6) Chloroethane	3.112	64	61671	50.266	ug/l		97
7) Trichlorofluoromethane	3.495	101	169822	52.421	ug/l		97
8) Diethyl Ether	3.959	74	57654	47.827	ug/l		87
9) 1,1,2-Trichlorotrifluo...	4.365	101	91744	51.366	ug/l		99
10) Methyl Iodide	4.583	142	96810	41.205	ug/l		93
11) Tert butyl alcohol	5.524	59	122885	250.960	ug/l		99
12) 1,1-Dichloroethene	4.342	96	86237	46.996	ug/l		87
13) Acrolein	4.183	56	76414	239.443	ug/l		98
14) Allyl chloride	5.024	41	159911	46.115	ug/l		89
15) Acrylonitrile	5.718	53	244473	242.760	ug/l		98
16) Acetone	4.424	43	202275	219.394	ug/l		99
17) Carbon Disulfide	4.706	76	220684	41.102	ug/l		99
18) Methyl Acetate	5.030	43	136868	49.826	ug/l		92
19) Methyl tert-butyl Ether	5.794	73	331920	50.114	ug/l		99
20) Methylene Chloride	5.277	84	98695	46.513	ug/l	#	78
21) trans-1,2-Dichloroethene	5.783	96	89928	47.417	ug/l		90
22) Diisopropyl ether	6.677	45	332029	50.939	ug/l		98
23) Vinyl Acetate	6.600	43	1823939	273.001	ug/l		96
24) 1,1-Dichloroethane	6.571	63	181204	51.002	ug/l		100
25) 2-Butanone	7.482	43	332401	234.803	ug/l		92
26) 2,2-Dichloropropane	7.488	77	154672	46.878	ug/l		98
27) cis-1,2-Dichloroethene	7.488	96	112641	49.219	ug/l		94
28) Bromochloromethane	7.812	49	72630	50.022	ug/l		85
29) Tetrahydrofuran	7.841	42	212863	232.605	ug/l	#	87
30) Chloroform	7.965	83	196262	53.171	ug/l		98
31) Cyclohexane	8.259	56	159977	45.816	ug/l		98
32) 1,1,1-Trichloroethane	8.171	97	180121	51.554	ug/l		97
36) 1,1-Dichloropropene	8.371	75	134252	50.312	ug/l		99
37) Ethyl Acetate	7.559	43	137359	45.975	ug/l	#	95
38) Carbon Tetrachloride	8.365	117	154915	51.545	ug/l		99
39) Methylcyclohexane	9.600	83	157882	48.172	ug/l		98
40) Benzene	8.606	78	404907	50.937	ug/l		99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081424\
Data File : VN083295.D
Acq On : 14 Aug 2024 12:41
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 14 23:14:20 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 08/15/2024
Supervised By :Semsettin Yesilyurt 08/15/2024

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
41) Methacrylonitrile	7.777	41	78258	46.068 ug/l	93
42) 1,2-Dichloroethane	8.671	62	154557	53.374 ug/l	98
43) Isopropyl Acetate	8.688	43	252838	48.708 ug/l #	94
44) Trichloroethene	9.353	130	96274	50.883 ug/l	98
45) 1,2-Dichloropropane	9.624	63	100079	53.038 ug/l	99
46) Dibromomethane	9.712	93	72298	53.530 ug/l	99
47) Bromodichloromethane	9.888	83	155782	51.369 ug/l	99
48) Methyl methacrylate	9.682	41	117620	47.618 ug/l	92
49) 1,4-Dioxane	9.694	88	42819	960.872 ug/l	95
51) 4-Methyl-2-Pentanone	10.447	43	714918	253.043 ug/l	93
52) Toluene	10.629	92	260237	51.813 ug/l	99
53) t-1,3-Dichloropropene	10.835	75	161721	51.915 ug/l	97
54) cis-1,3-Dichloropropene	10.312	75	168161	50.753 ug/l	91
55) 1,1,2-Trichloroethane	11.018	97	95596	53.110 ug/l	98
56) Ethyl methacrylate	10.876	69	172350	50.792 ug/l	88
57) 1,3-Dichloropropane	11.165	76	169602	52.864 ug/l	98
58) 2-Chloroethyl Vinyl ether	10.159	63	364003	253.780 ug/l	97
59) 2-Hexanone	11.194	43	532597	243.668 ug/l	92
60) Dibromochloromethane	11.359	129	117651	54.062 ug/l	98
61) 1,2-Dibromoethane	11.470	107	97558	51.595 ug/l	97
64) Tetrachloroethene	11.106	164	83497	50.230 ug/l	95
65) Chlorobenzene	11.894	112	280885	50.640 ug/l	97
66) 1,1,1,2-Tetrachloroethane	11.965	131	99691	50.961 ug/l	99
67) Ethyl Benzene	11.965	91	520196	51.124 ug/l	99
68) m/p-Xylenes	12.070	106	388963	102.048 ug/l	98
69) o-Xylene	12.400	106	189655	50.450 ug/l	100
70) Styrene	12.412	104	327524	51.874 ug/l	98
71) Bromoform	12.582	173	74422	50.218 ug/l #	97
73) Isopropylbenzene	12.694	105	496635	48.403 ug/l	100
74) N-amyl acetate	12.494	43	224010	44.635 ug/l	94
75) 1,1,2,2-Tetrachloroethane	12.935	83	140246	48.328 ug/l	98
76) 1,2,3-Trichloropropane	12.994	75	128158m	47.602 ug/l	
77) Bromobenzene	12.982	156	113178	49.656 ug/l	97
78) n-propylbenzene	13.035	91	590000	49.938 ug/l	100
79) 2-Chlorotoluene	13.123	91	367969	49.125 ug/l	97
80) 1,3,5-Trimethylbenzene	13.176	105	428037	49.829 ug/l	97
81) trans-1,4-Dichloro-2-b...	12.735	75	56887	45.962 ug/l	86
82) 4-Chlorotoluene	13.223	91	364156	48.468 ug/l	98
83) tert-Butylbenzene	13.441	119	371735	48.866 ug/l	99
84) 1,2,4-Trimethylbenzene	13.482	105	430444	49.723 ug/l	100
85) sec-Butylbenzene	13.617	105	517202	49.826 ug/l	100
86) p-Isopropyltoluene	13.729	119	434576	50.705 ug/l	98
87) 1,3-Dichlorobenzene	13.735	146	213990	49.896 ug/l	98
88) 1,4-Dichlorobenzene	13.811	146	211478	48.912 ug/l	98
89) n-Butylbenzene	14.059	91	382193	51.464 ug/l	98
90) Hexachloroethane	14.335	117	78059	47.142 ug/l	93
91) 1,2-Dichlorobenzene	14.106	146	206688	49.802 ug/l	98
92) 1,2-Dibromo-3-Chloropr...	14.717	75	30853	43.813 ug/l	99
93) 1,2,4-Trichlorobenzene	15.394	180	112669	48.458 ug/l	97
94) Hexachlorobutadiene	15.500	225	46384	44.858 ug/l	98
95) Naphthalene	15.641	128	389373	47.278 ug/l	98
96) 1,2,3-Trichlorobenzene	15.841	180	110529	48.043 ug/l	97

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081424\
Data File : VN083295.D
Acq On : 14 Aug 2024 12:41
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 14 23:14:20 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 08/15/2024
Supervised By :Semsettin Yesilyurt 08/15/2024

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

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

Sample Results: **VN083295.D**

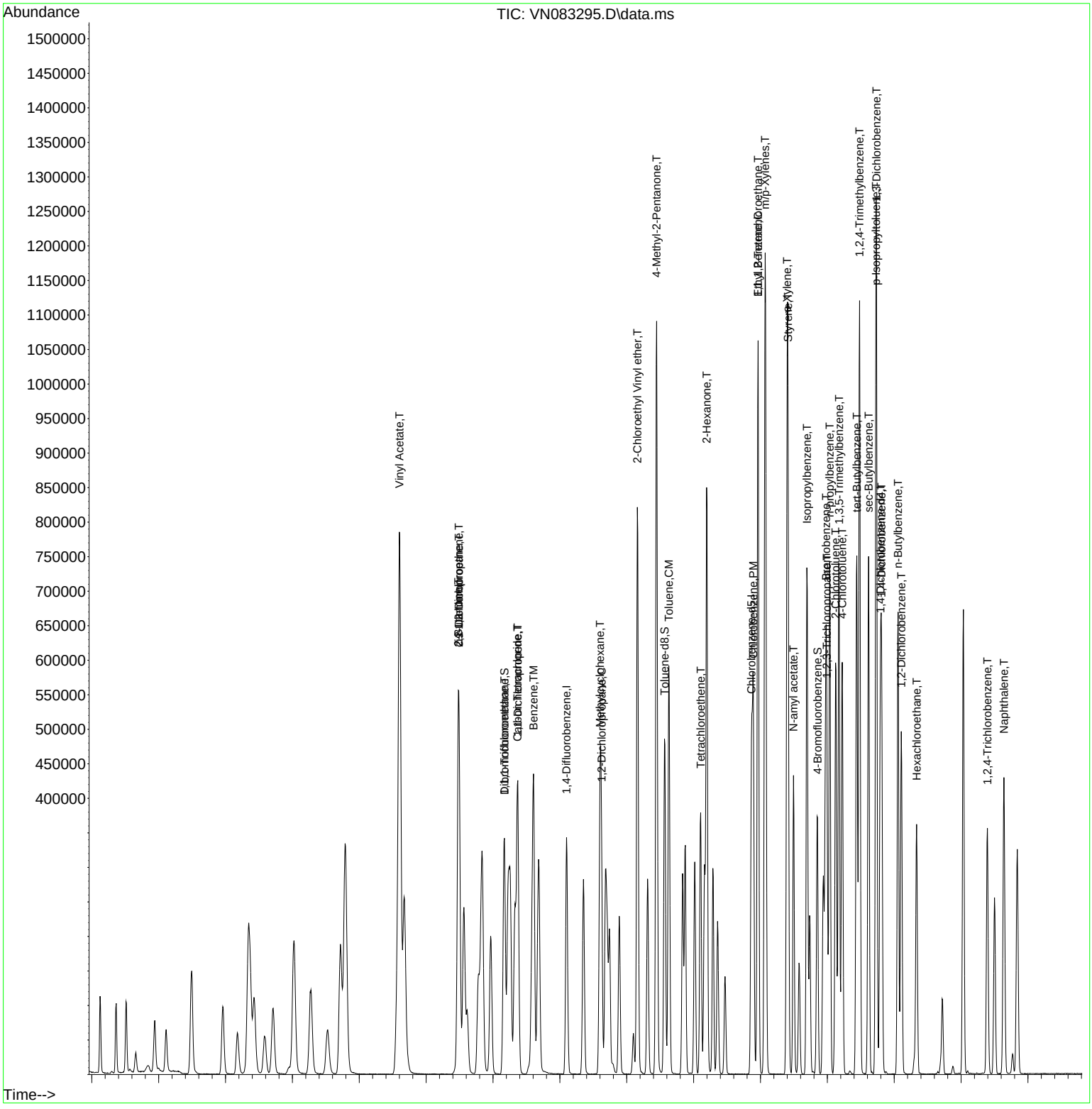
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081424\
Data File : VN083295.D
Acq On : 14 Aug 2024 12:41
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

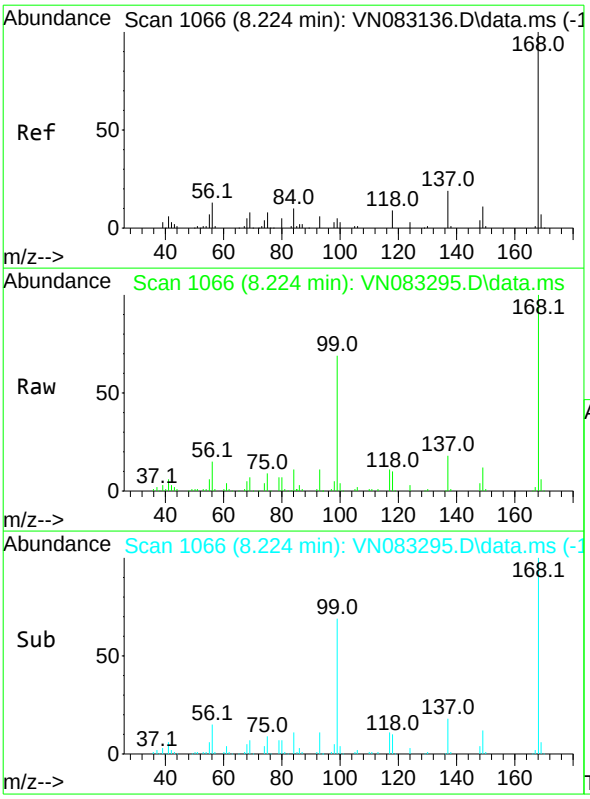
Quant Time: Aug 14 23:14:20 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 08/15/2024
Supervised By :Semsettin Yesilyurt 08/15/2024

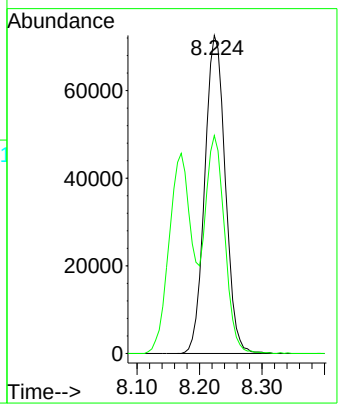




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 10
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion:168 Resp: 165534

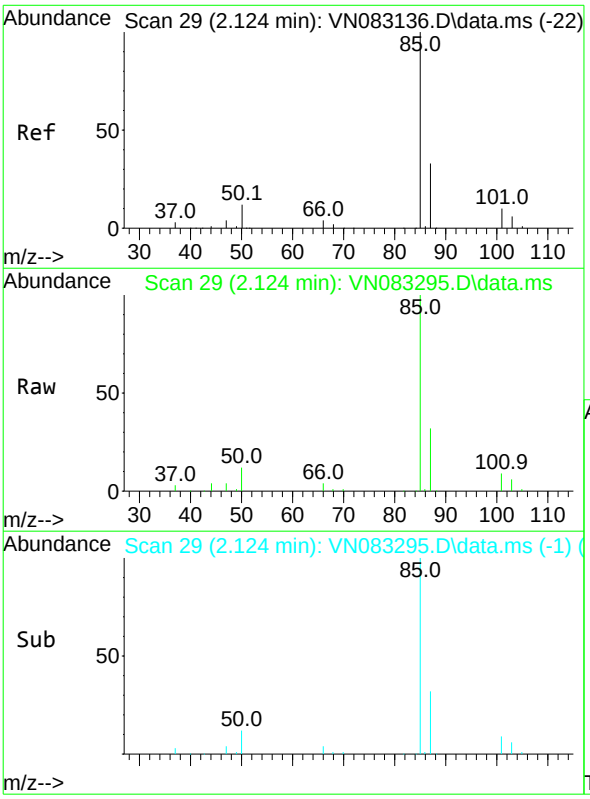
Ion	Ratio	Lower	Upper
168	100		
99	68.5	48.2	72.4



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

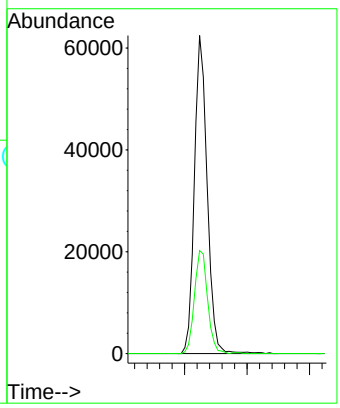
Reviewed By :Mahesh Dadoda 08/15/2024
Supervised By :Semsettin Yesilyurt 08/15/2024

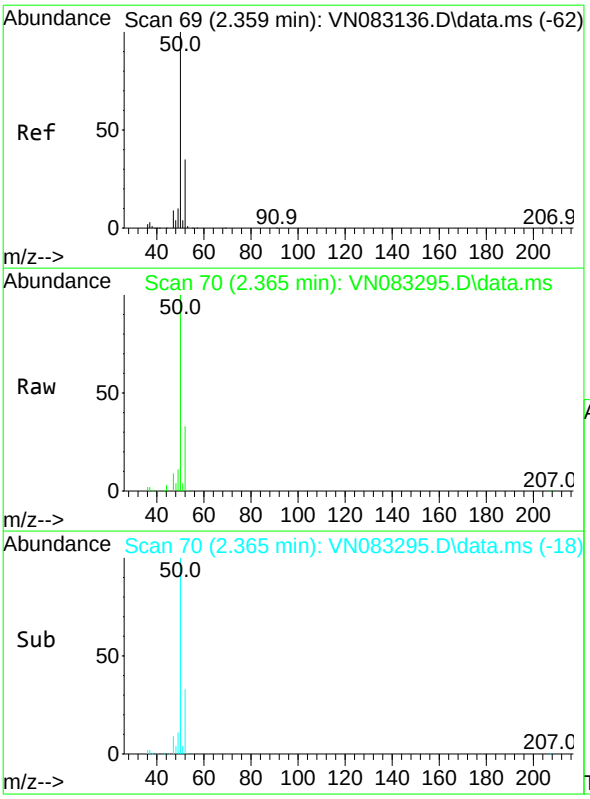


#2
Dichlorodifluoromethane
Concen: 47.158 ug/l
RT: 2.124 min Scan# 29
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 85 Resp: 88523

Ion	Ratio	Lower	Upper
85	100		
87	32.4	15.7	47.0

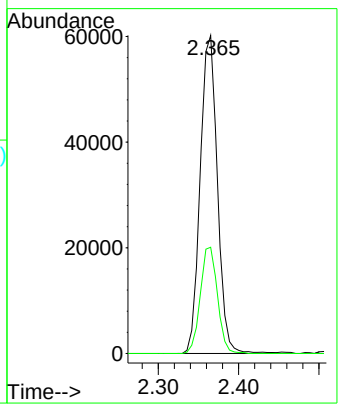




#3
Chloromethane
Concen: 46.562 ug/l
RT: 2.365 min Scan# 70
Delta R.T. 0.006 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 50 Resp: 89486

Ion	Ratio	Lower	Upper
50	100		
52	33.4	25.0	37.4



Instrument :
MSVOA_N
ClientSampleId :
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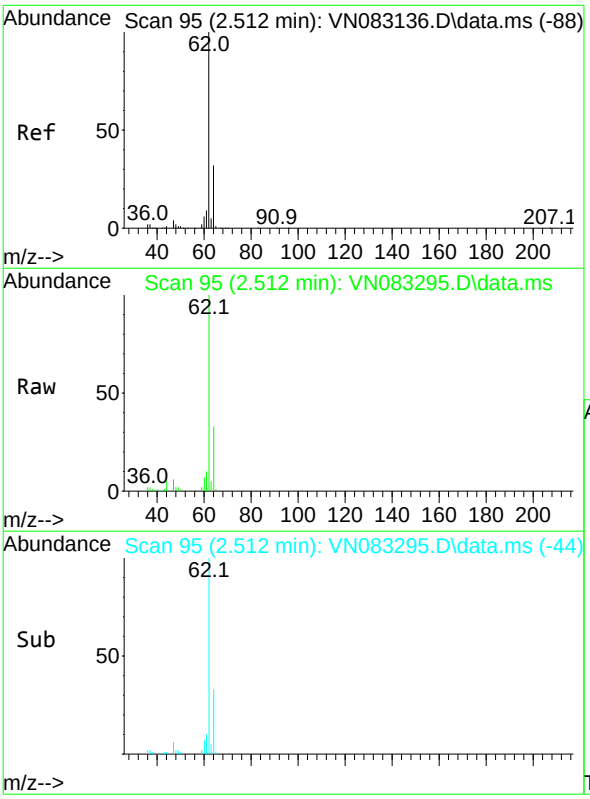
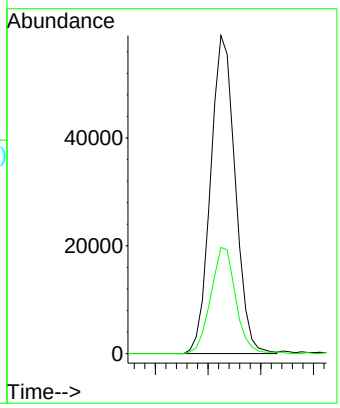
Supervised By :Semsettin Yesilyurt 08/15/2024

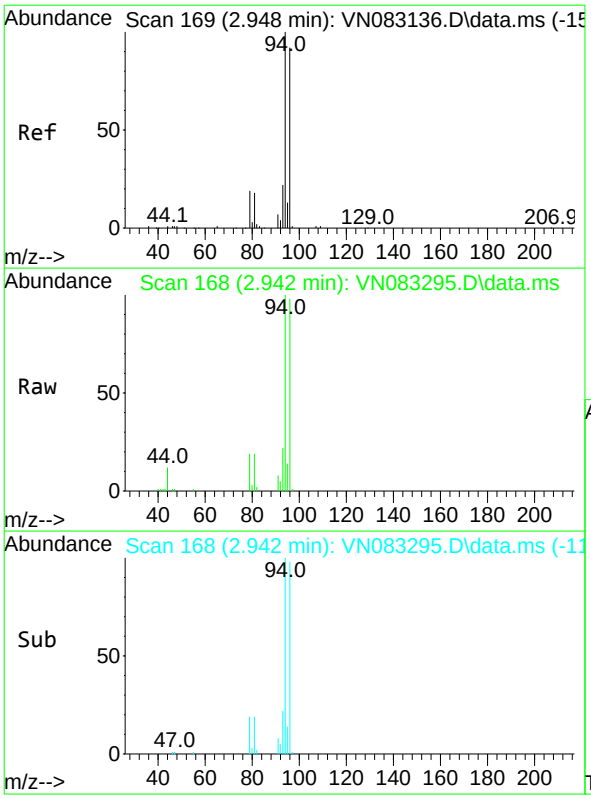


#4
Vinyl Chloride
Concen: 48.983 ug/l
RT: 2.512 min Scan# 95
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 62 Resp: 96057

Ion	Ratio	Lower	Upper
62	100		
64	33.4	25.0	37.6

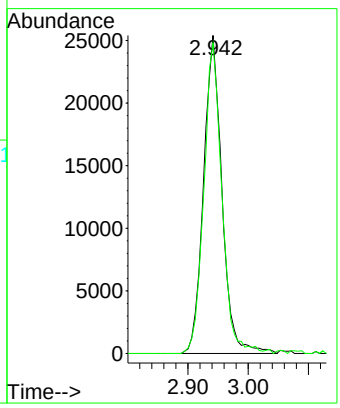




#5
Bromomethane
Concen: 44.339 ug/l
RT: 2.942 min Scan# 16
Delta R.T. -0.006 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 94 Resp: 53952

Ion	Ratio	Lower	Upper
94	100		
96	97.5	78.0	117.0



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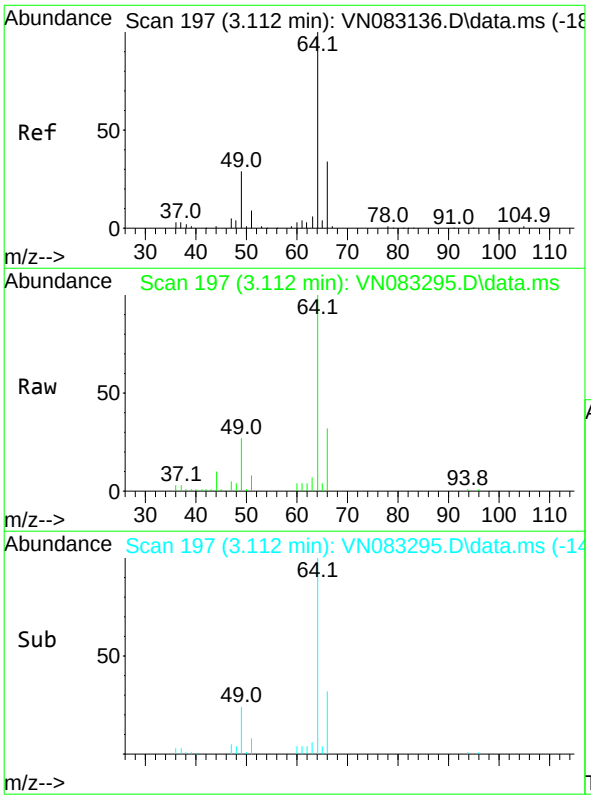
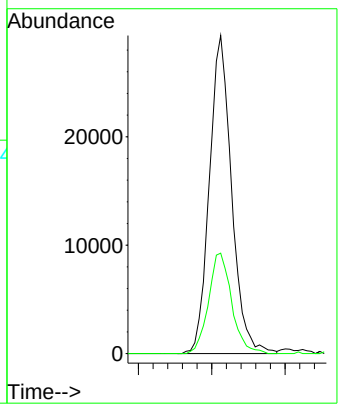
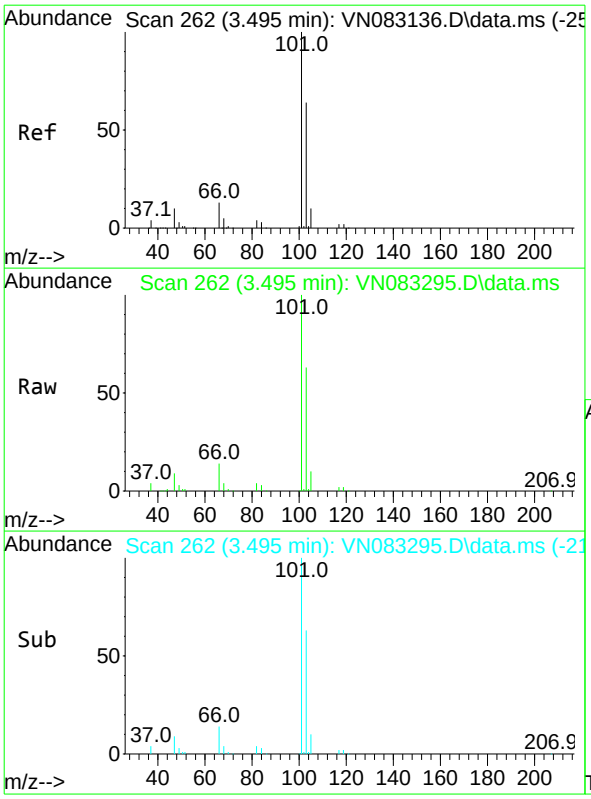


#6
Chloroethane
Concen: 50.266 ug/l
RT: 3.112 min Scan# 197
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 64 Resp: 61671

Ion	Ratio	Lower	Upper
64	100		
66	31.6	26.6	40.0

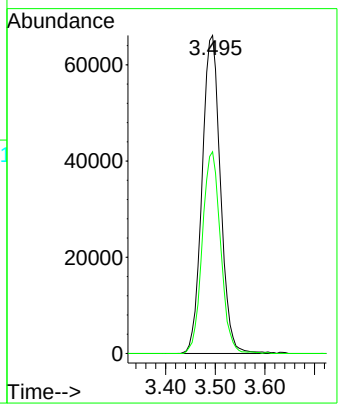




#7
Trichlorofluoromethane
Concen: 52.421 ug/l
RT: 3.495 min Scan# 26
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion:101 Resp: 169822

Ion	Ratio	Lower	Upper
101	100		
103	63.4	52.7	79.1



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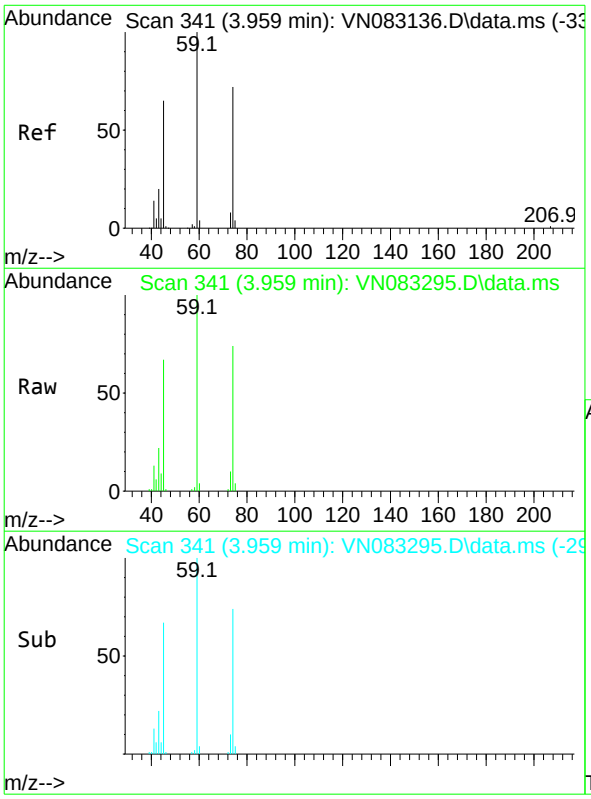
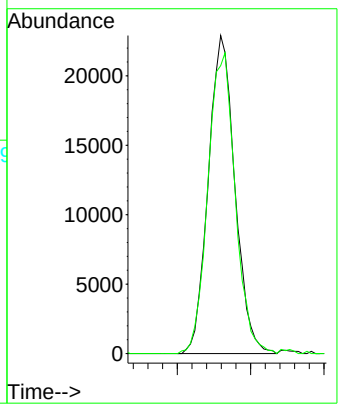
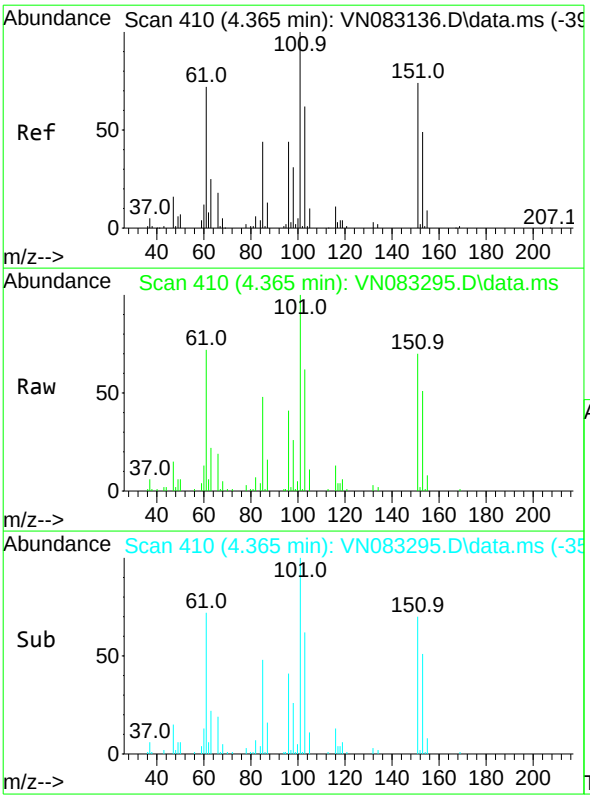


#8
Diethyl Ether
Concen: 47.827 ug/l
RT: 3.959 min Scan# 341
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 74 Resp: 57654

Ion	Ratio	Lower	Upper
74	100		
45	97.2	55.5	166.3





#9
1,1,2-Trichlorotrifluoroethane
Concen: 51.366 ug/l
RT: 4.365 min Scan# 41
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Tgt Ion:101 Resp: 91744

Ion	Ratio	Lower	Upper
101	100		
85	46.9	38.3	57.5
151	73.4	59.3	88.9

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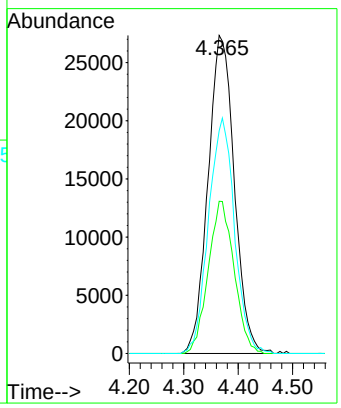
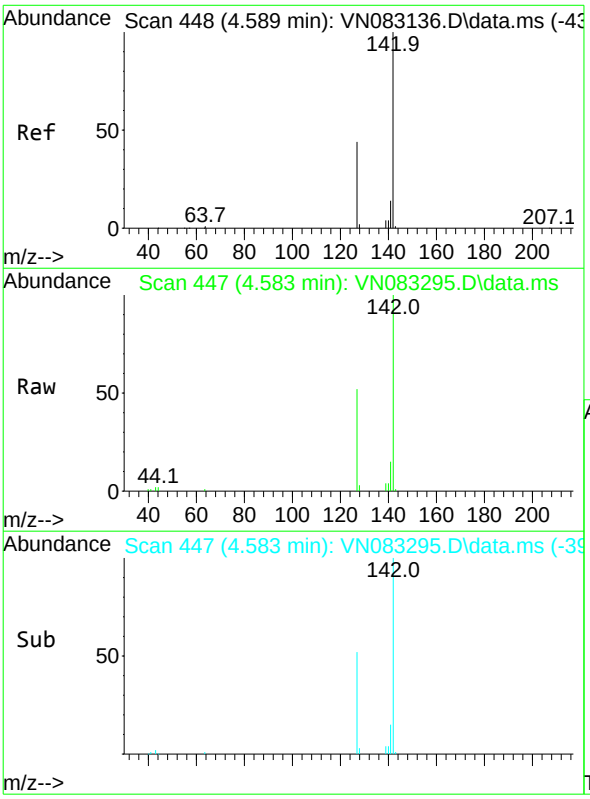
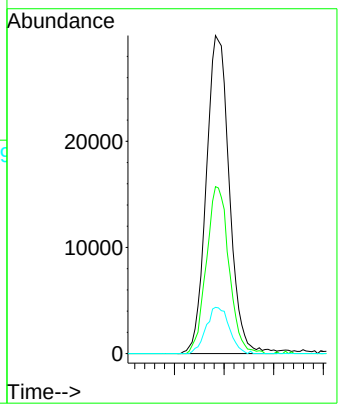


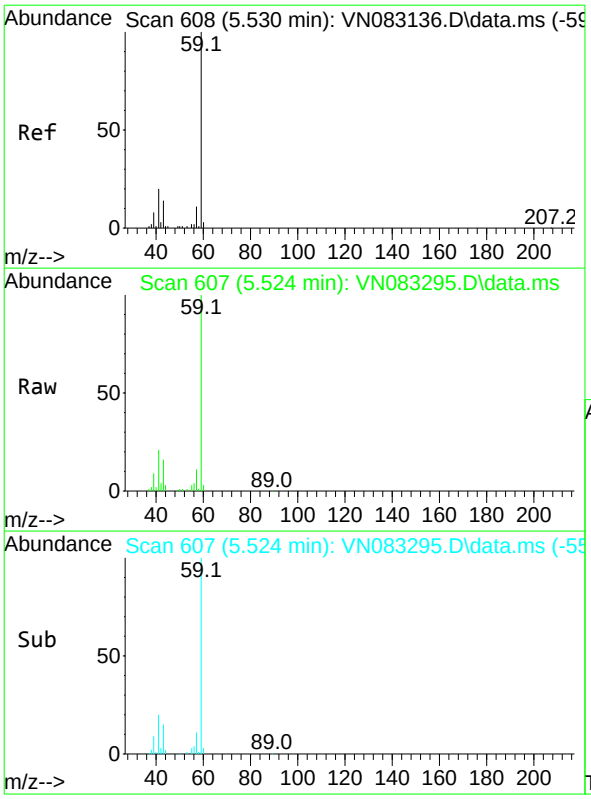


#10
Methyl Iodide
Concen: 41.205 ug/l
RT: 4.583 min Scan# 447
Delta R.T. -0.006 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion:142 Resp: 96810

Ion	Ratio	Lower	Upper
142	100		
127	52.5	37.5	56.3
141	14.5	13.1	19.7

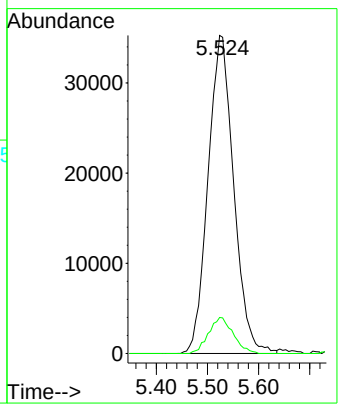




#11
Tert butyl alcohol
Concen: 250.960 ug/l
RT: 5.524 min Scan# 60
Delta R.T. -0.006 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 59 Resp: 122885

Ion	Ratio	Lower	Upper
59	100		
57	10.9	8.9	13.3



Instrument :
MSVOA_N
ClientSampleId :
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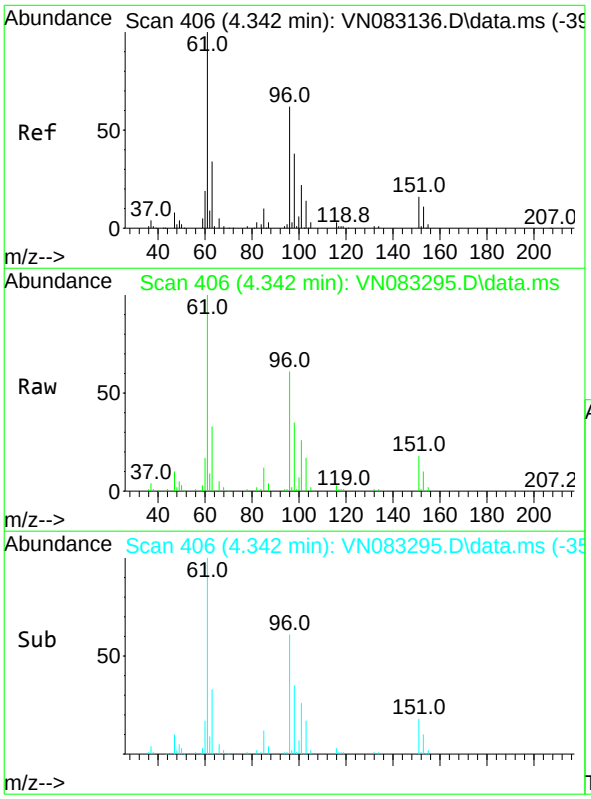
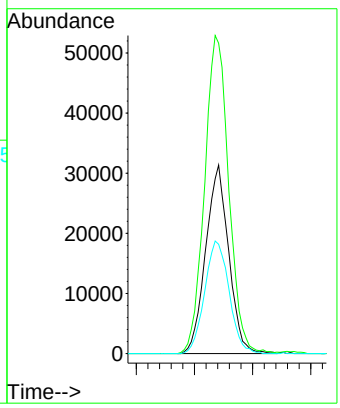
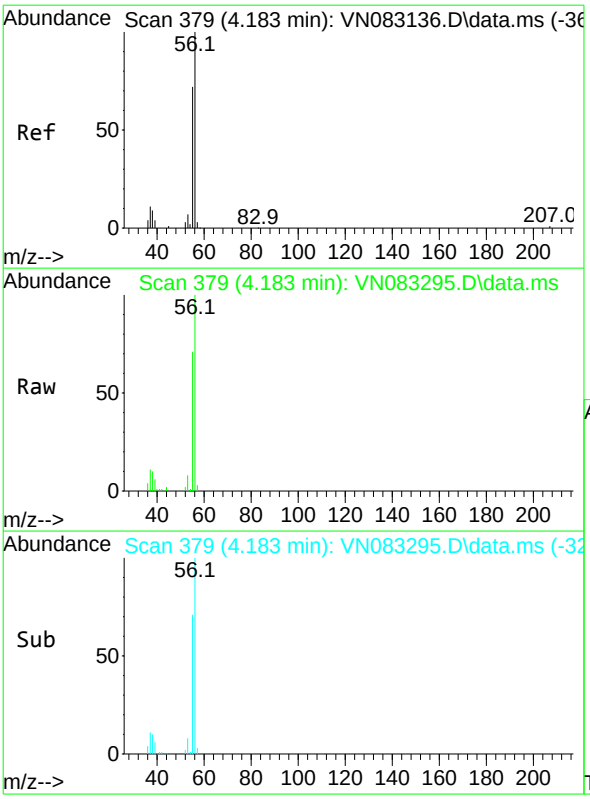


#12
1,1-Dichloroethene
Concen: 46.996 ug/l
RT: 4.342 min Scan# 406
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 96 Resp: 86237

Ion	Ratio	Lower	Upper
96	100		
61	164.6	149.7	224.5
98	58.0	50.1	75.1

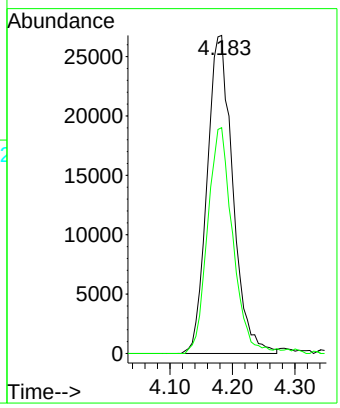




#13
Acrolein
Concen: 239.443 ug/l
RT: 4.183 min Scan# 37
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 56 Resp: 76414

Ion	Ratio	Lower	Upper
56	100		
55	69.2	56.4	84.6



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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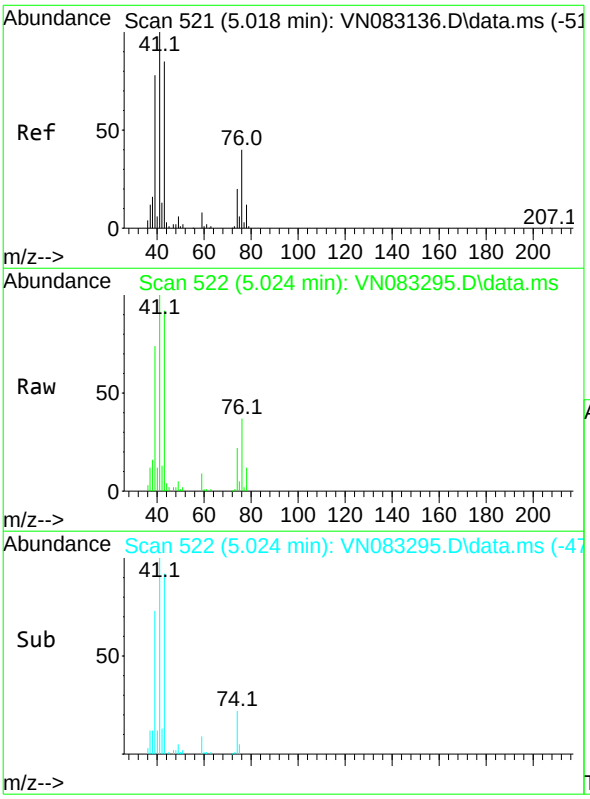
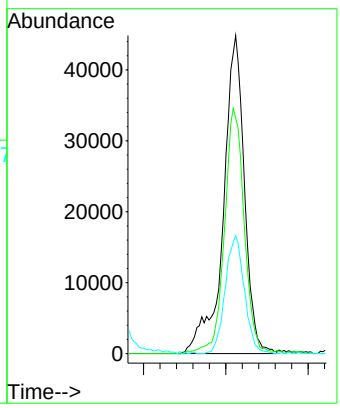
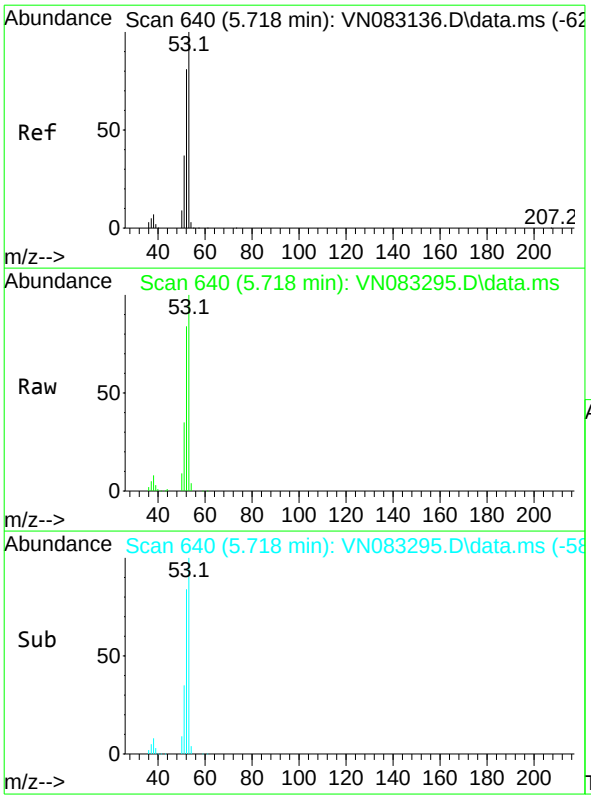


#14
Allyl chloride
Concen: 46.115 ug/l
RT: 5.024 min Scan# 522
Delta R.T. 0.006 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 41 Resp: 159911

Ion	Ratio	Lower	Upper
41	100		
39	72.1	67.8	101.6
76	33.5	25.8	38.8

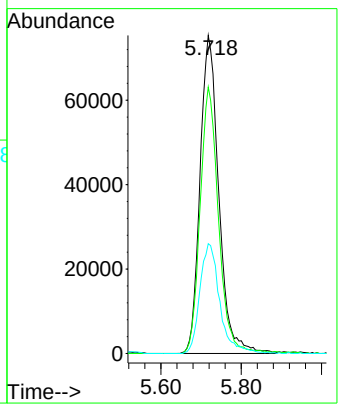




#15
Acrylonitrile
Concen: 242.760 ug/l
RT: 5.718 min Scan# 64
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 53 Resp: 244473

Ion	Ratio	Lower	Upper
53	100		
52	81.5	66.6	100.0
51	36.6	30.1	45.1



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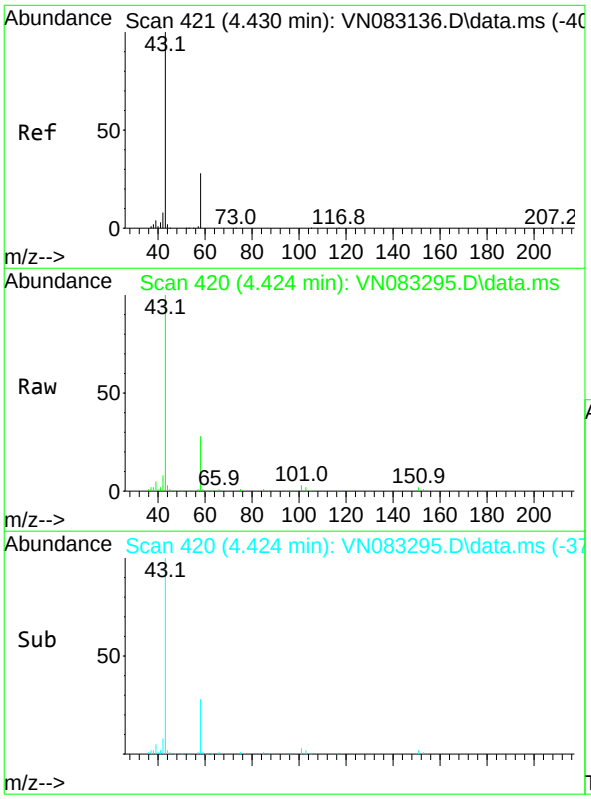
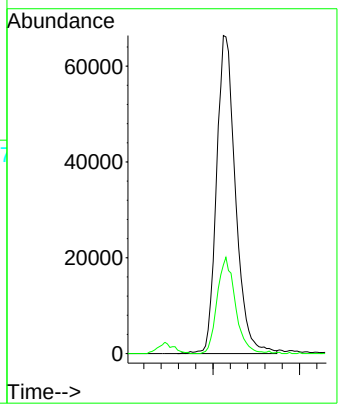
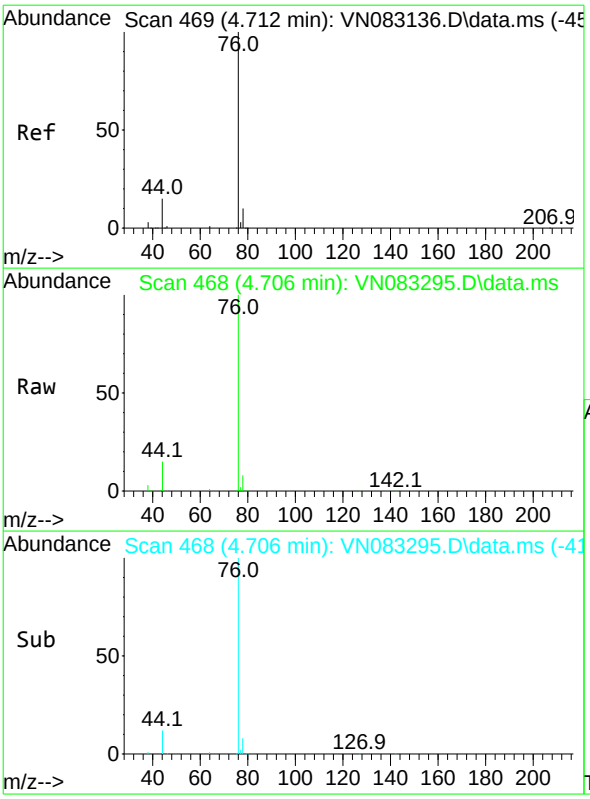


#16
Acetone
Concen: 219.394 ug/l
RT: 4.424 min Scan# 420
Delta R.T. -0.006 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 43 Resp: 202275

Ion	Ratio	Lower	Upper
43	100		
58	27.5	21.8	32.6

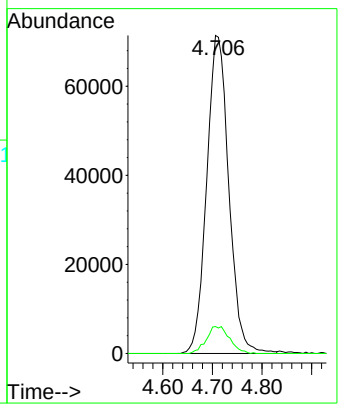




#17
Carbon Disulfide
Concen: 41.102 ug/l
RT: 4.706 min Scan# 46
Delta R.T. -0.006 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 76 Resp: 220684

Ion	Ratio	Lower	Upper
76	100		
78	8.5	7.2	10.8



Instrument :
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ClientSampleId :
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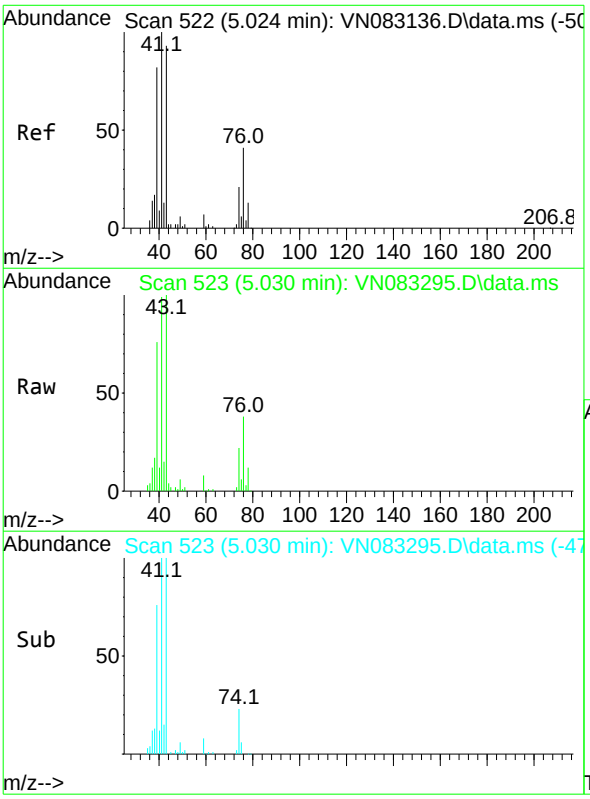
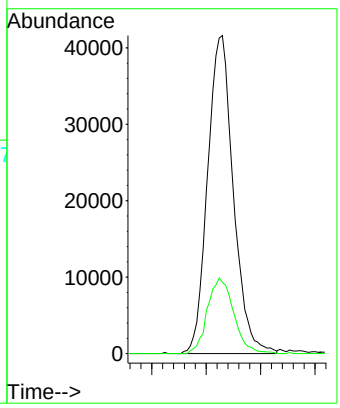
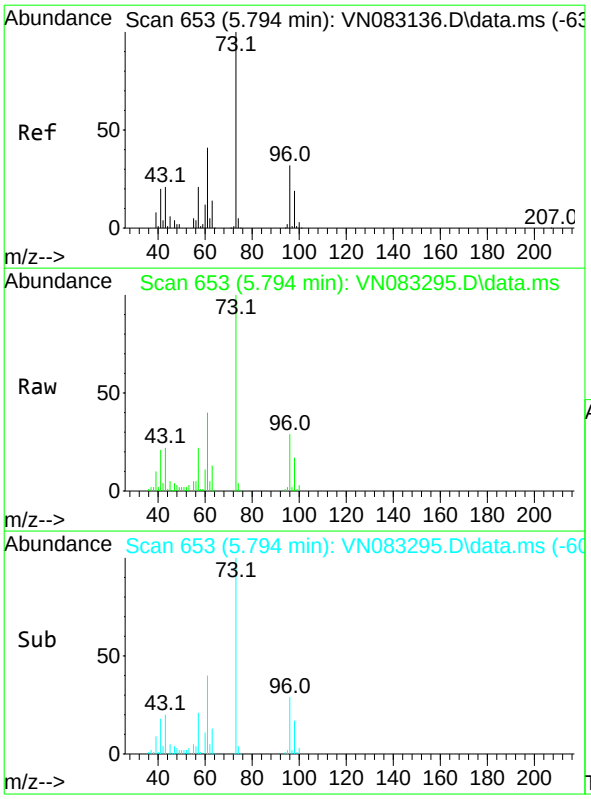


#18
Methyl Acetate
Concen: 49.826 ug/l
RT: 5.030 min Scan# 523
Delta R.T. 0.006 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 43 Resp: 136868

Ion	Ratio	Lower	Upper
43	100		
74	24.2	16.3	24.5

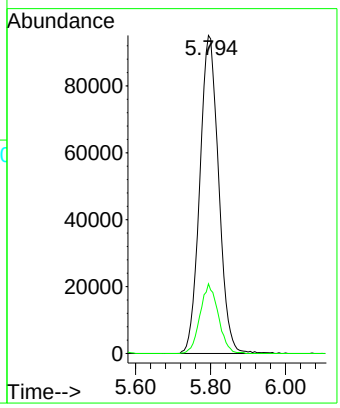




#19
Methyl tert-butyl Ether
Concen: 50.114 ug/l
RT: 5.794 min Scan# 65
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 73 Resp: 331920

Ion	Ratio	Lower	Upper
73	100		
57	21.9	17.9	26.9



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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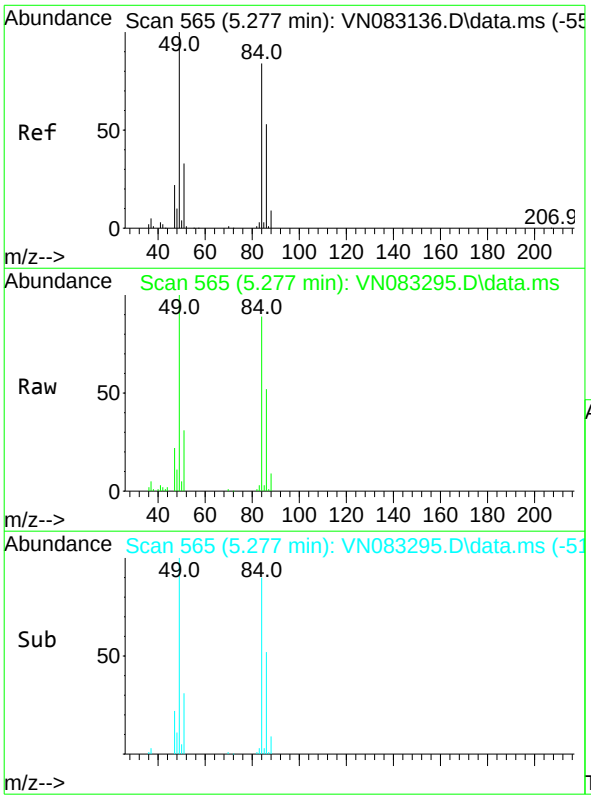
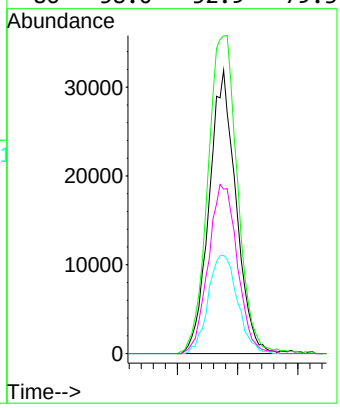
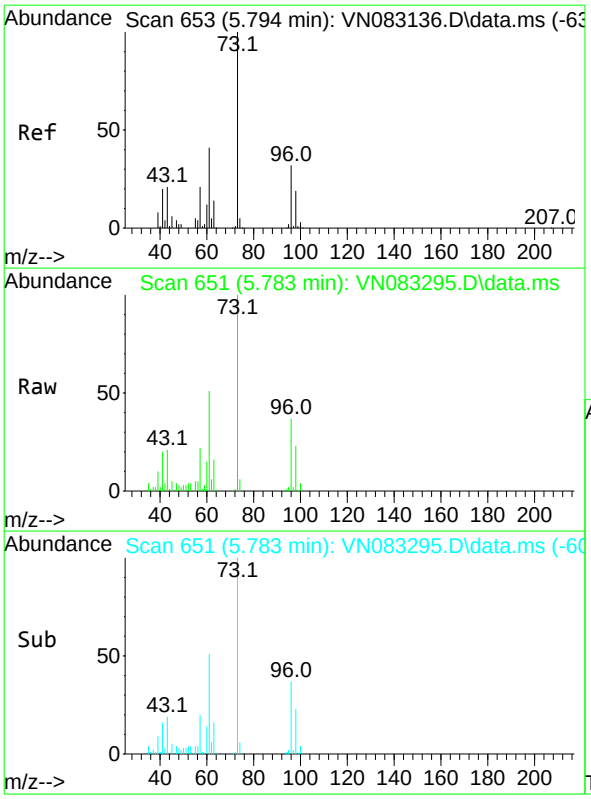


#20
Methylene Chloride
Concen: 46.513 ug/l
RT: 5.277 min Scan# 565
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 84 Resp: 98695

Ion	Ratio	Lower	Upper
84	100		
49	112.1	119.6	179.4#
51	34.7	34.8	52.2#
86	58.0	52.9	79.3

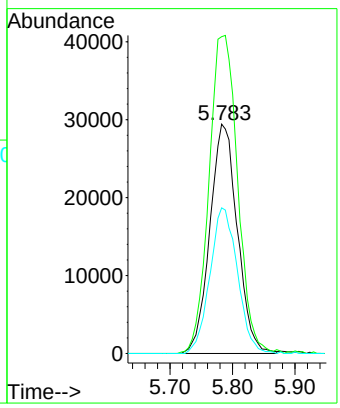




#21
trans-1,2-Dichloroethene
Concen: 47.417 ug/l
RT: 5.783 min Scan# 65
Delta R.T. -0.012 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 96 Resp: 89928

Ion	Ratio	Lower	Upper
96	100		
61	138.1	123.4	185.2
98	63.5	49.3	73.9



Instrument :
MSVOA_N
ClientSampleId :
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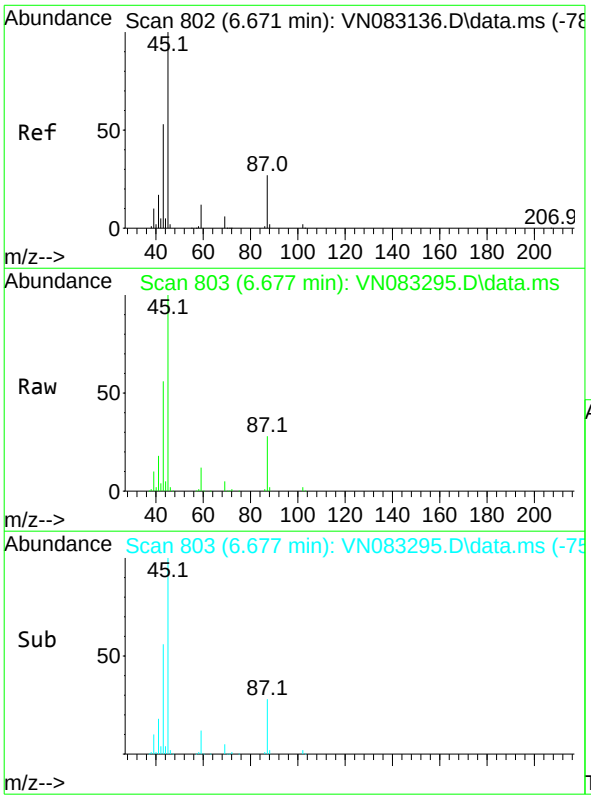
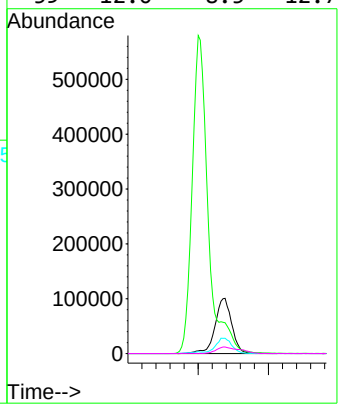
Supervised By :Semsettin Yesilyurt 08/15/2024

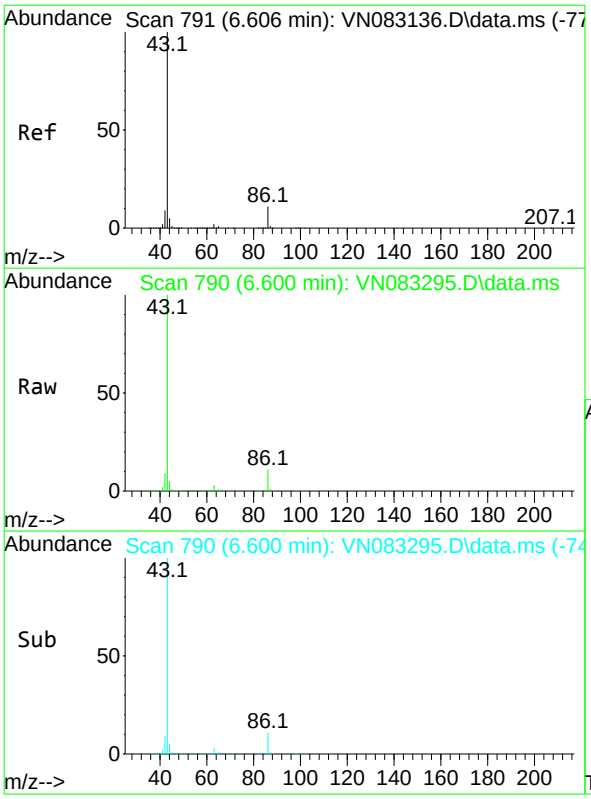


#22
Diisopropyl ether
Concen: 50.939 ug/l
RT: 6.677 min Scan# 803
Delta R.T. 0.006 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 45 Resp: 332029

Ion	Ratio	Lower	Upper
45	100		
43	55.3	44.0	66.0
87	27.8	19.7	29.5
59	12.0	8.5	12.7

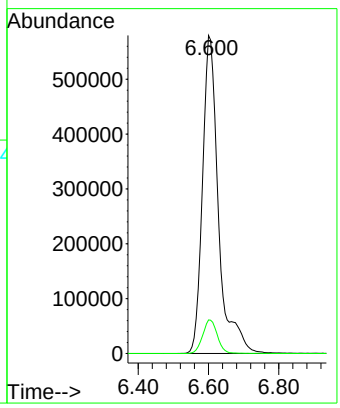




#23
Vinyl Acetate
Concen: 273.001 ug/l
RT: 6.600 min Scan# 79
Delta R.T. -0.006 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 43 Resp: 1823939

Ion	Ratio	Lower	Upper
43	100		
86	10.6	7.3	10.9



Instrument :
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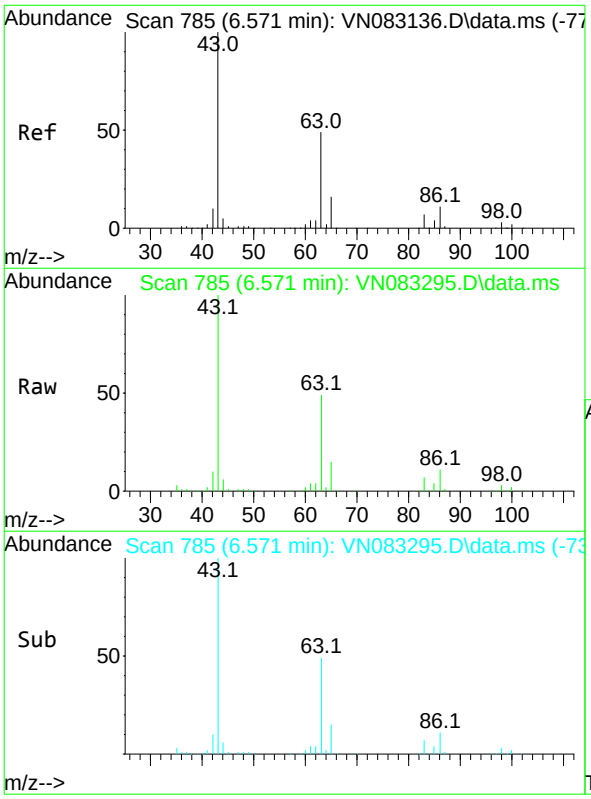
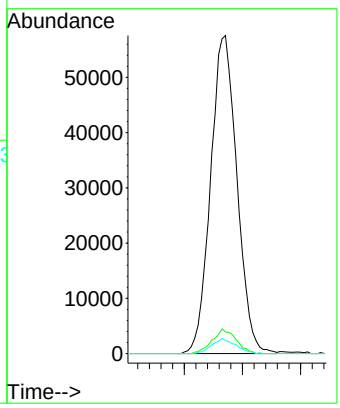
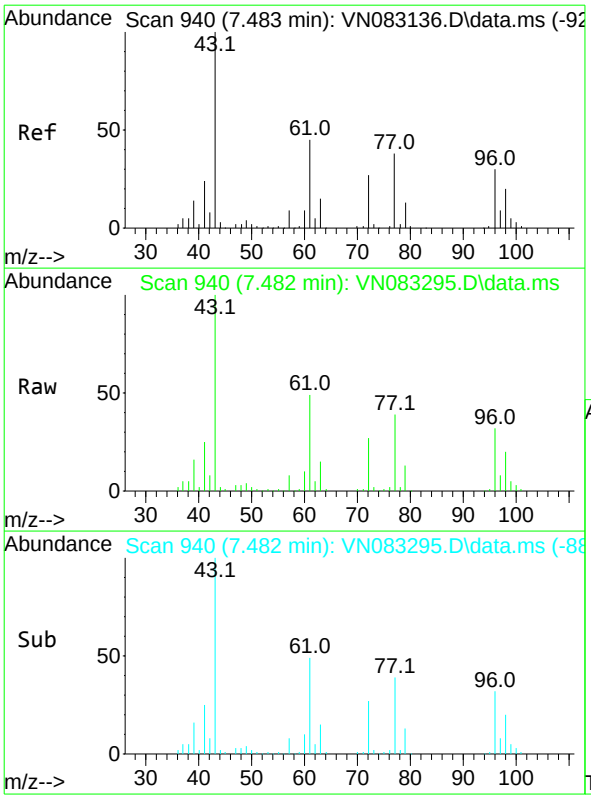


#24
1,1-Dichloroethane
Concen: 51.002 ug/l
RT: 6.571 min Scan# 785
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 63 Resp: 181204

Ion	Ratio	Lower	Upper
63	100		
98	6.8	3.3	9.9
100	4.1	2.0	6.0

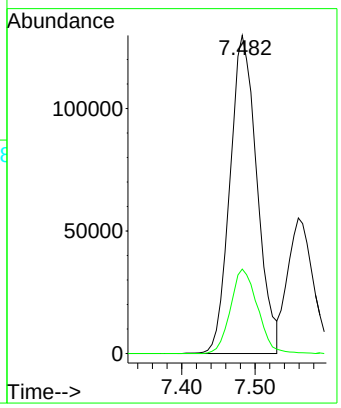




#25
2-Butanone
Concen: 234.803 ug/l
RT: 7.482 min Scan# 94
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 43 Resp: 332401

Ion	Ratio	Lower	Upper
43	100		
72	26.5	18.2	27.2



Instrument :
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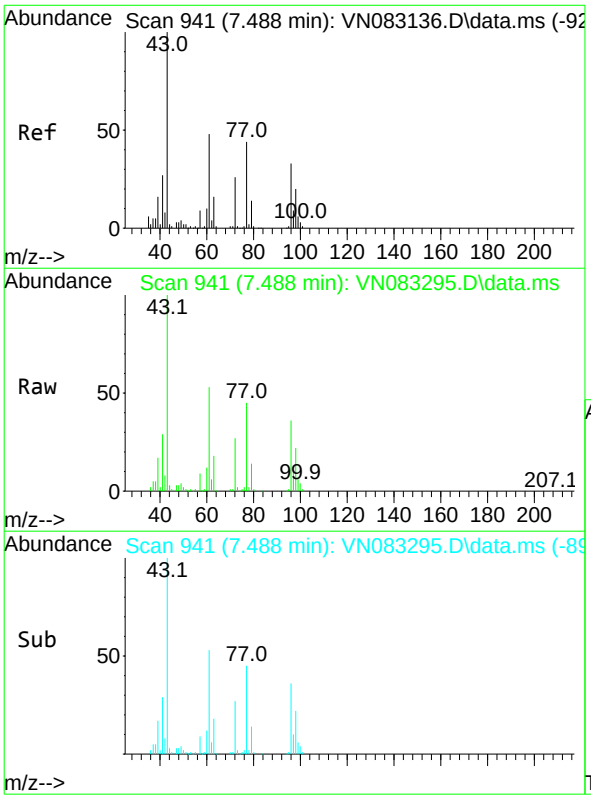
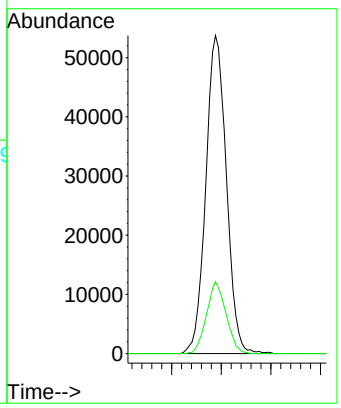
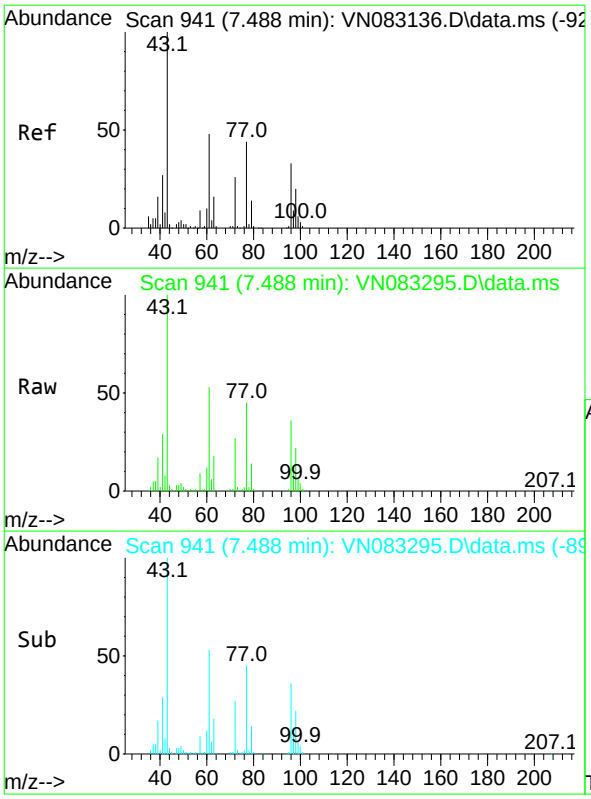


#26
2,2-Dichloropropane
Concen: 46.878 ug/l
RT: 7.488 min Scan# 941
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 77 Resp: 154672

Ion	Ratio	Lower	Upper
77	100		
97	21.4	10.3	30.9





#27
cis-1,2-Dichloroethene
Concen: 49.219 ug/l
RT: 7.488 min Scan# 94
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Tgt Ion: 96 Resp: 112641

Ion	Ratio	Lower	Upper
96	100		
61	153.9	0.0	329.6
98	64.1	0.0	128.6

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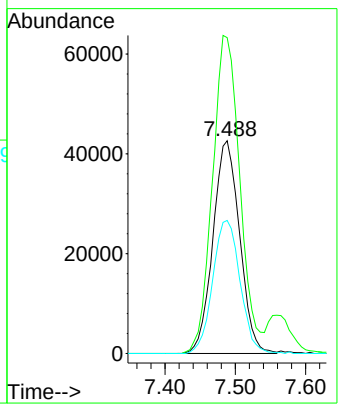
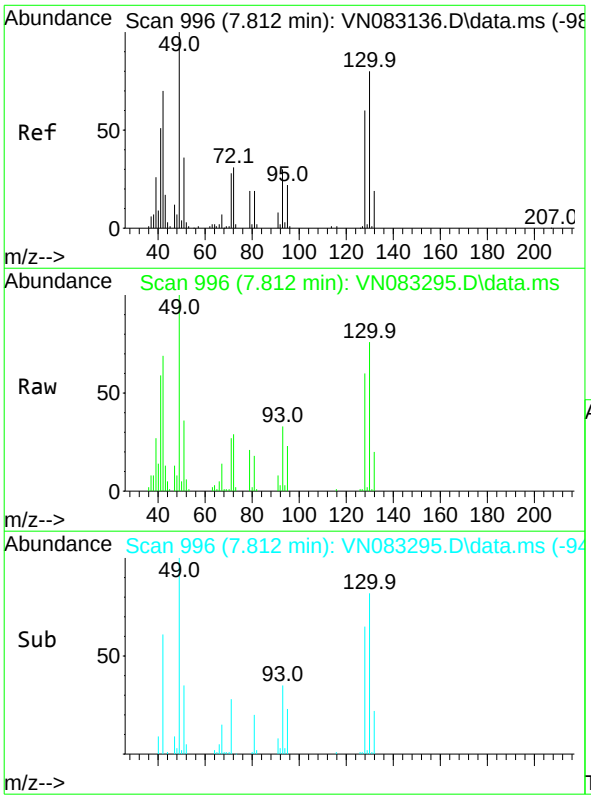
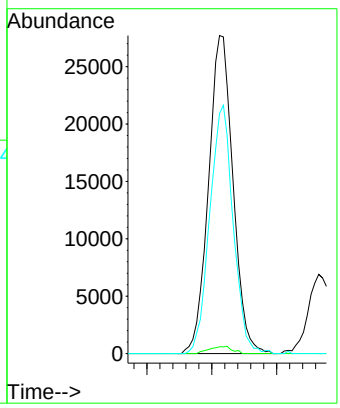


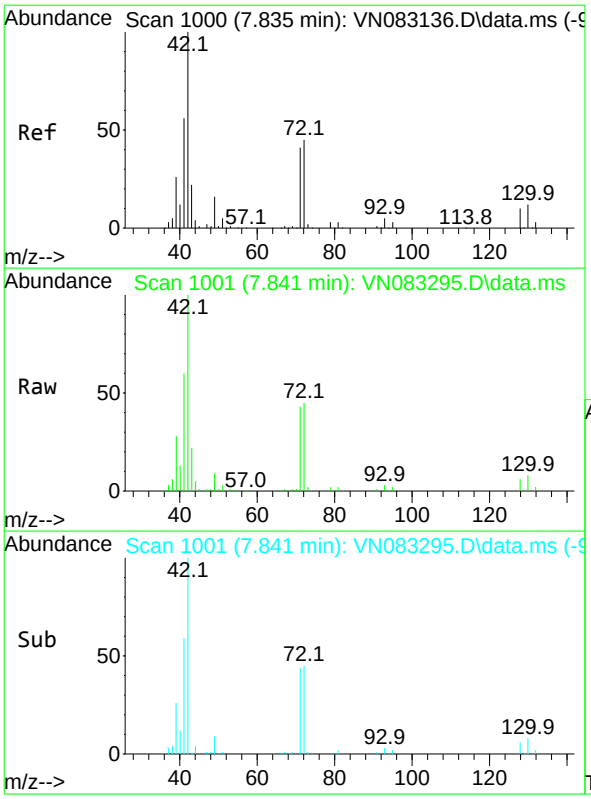


#28
Bromochloromethane
Concen: 50.022 ug/l
RT: 7.812 min Scan# 996
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 49 Resp: 72630

Ion	Ratio	Lower	Upper
49	100		
129	2.1	0.0	3.8
130	74.7	50.5	75.7

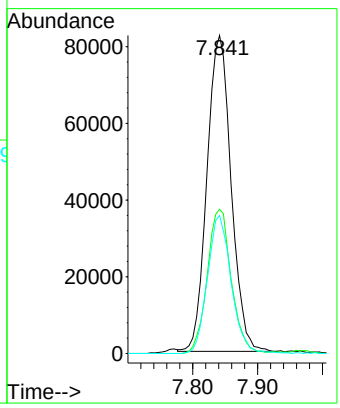




#29
Tetrahydrofuran
Concen: 232.605 ug/l
RT: 7.841 min Scan# 10
Delta R.T. 0.006 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 42 Resp: 212863

Ion	Ratio	Lower	Upper
42	100		
72	45.5	30.0	45.0#
71	42.9	28.3	42.5#



Instrument :
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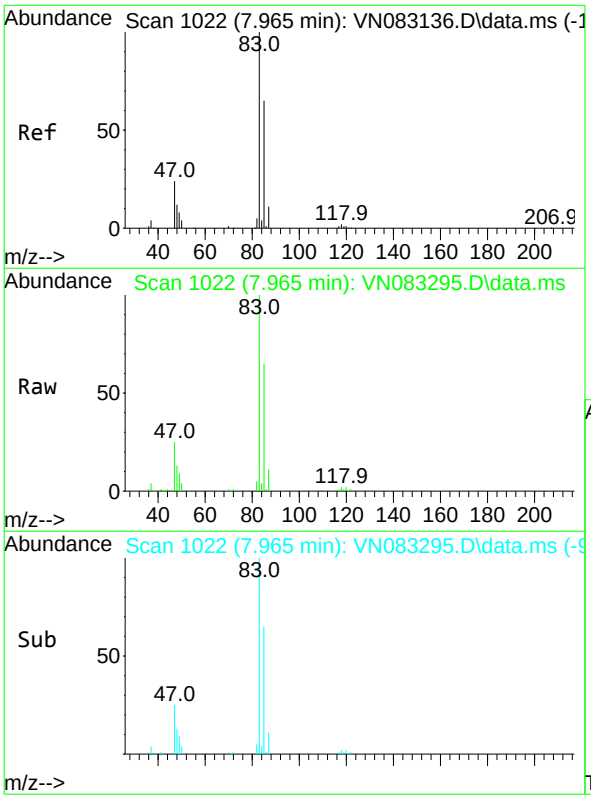
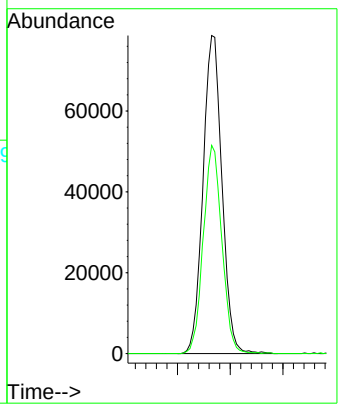
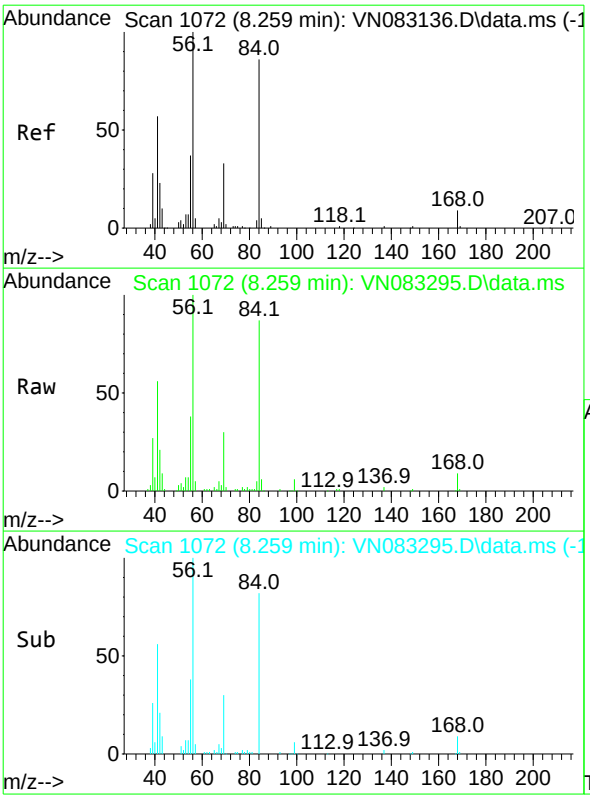


#30
Chloroform
Concen: 53.171 ug/l
RT: 7.965 min Scan# 1022
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 83 Resp: 196262

Ion	Ratio	Lower	Upper
83	100		
85	65.5	50.9	76.3





#31
Cyclohexane
Concen: 45.816 ug/l
RT: 8.259 min Scan# 10
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 56 Resp: 159977

Ion	Ratio	Lower	Upper
56	100		
69	30.5	24.5	36.7
84	84.7	66.0	99.0

Instrument :
MSVOA_N
ClientSampleId :
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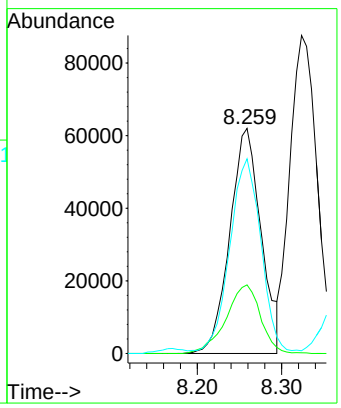
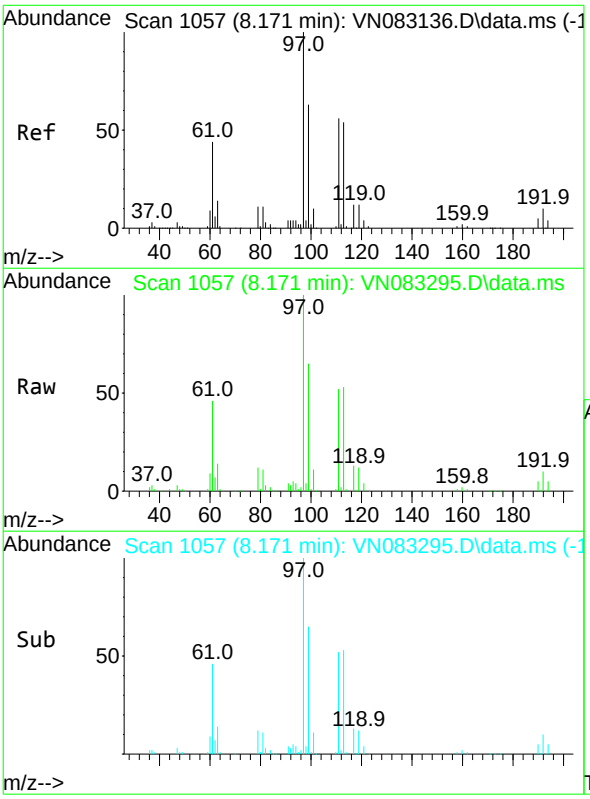
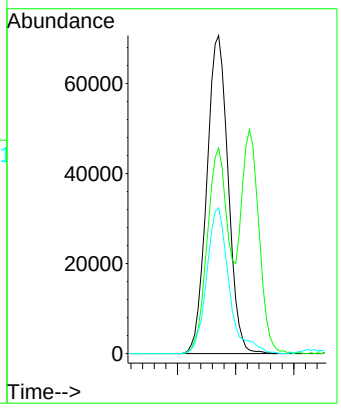


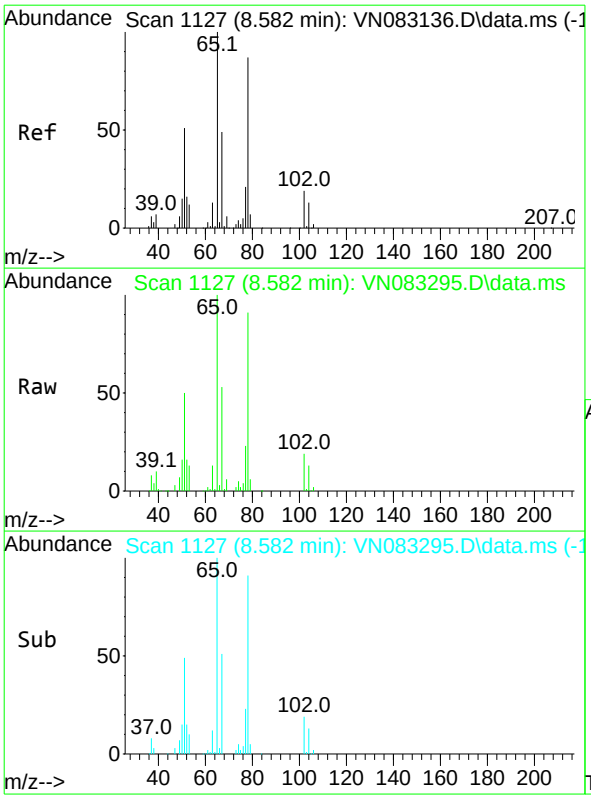


#32
1,1,1-Trichloroethane
Concen: 51.554 ug/l
RT: 8.171 min Scan# 1057
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 97 Resp: 180121

Ion	Ratio	Lower	Upper
97	100		
99	65.7	52.0	78.0
61	48.1	42.1	63.1

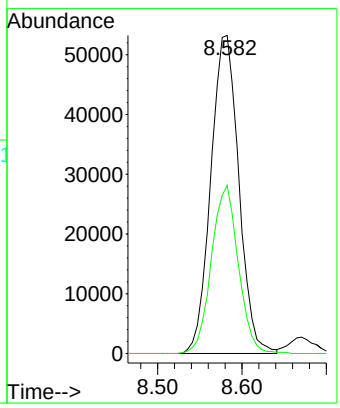




#33
1,2-Dichloroethane-d4
Concen: 52.129 ug/l
RT: 8.582 min Scan# 11
Delta R.T. 0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 65 Resp: 122826

Ion	Ratio	Lower	Upper
65	100		
67	50.7	0.0	104.4



Instrument :
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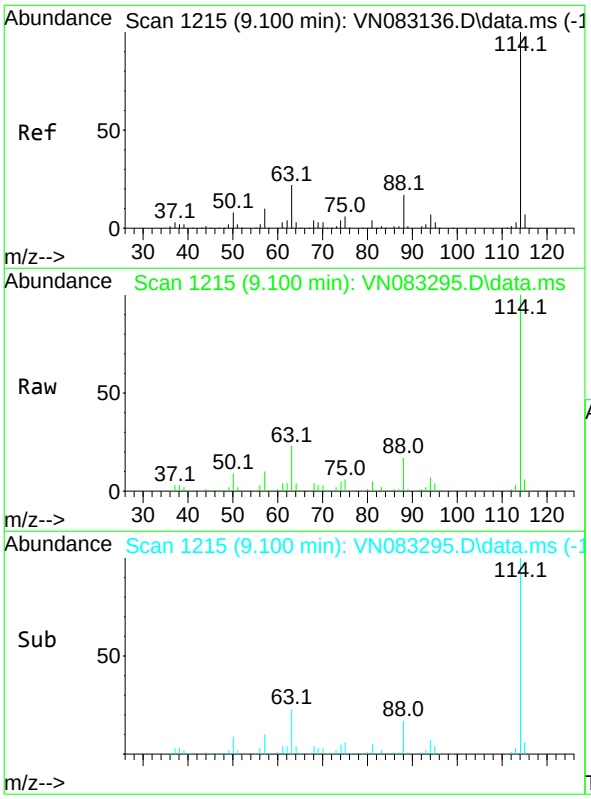
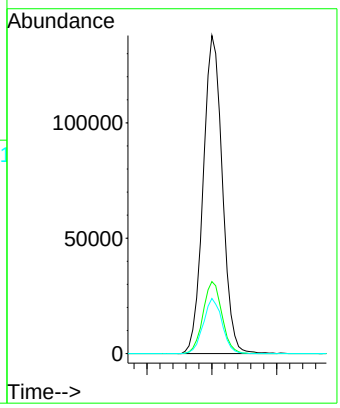
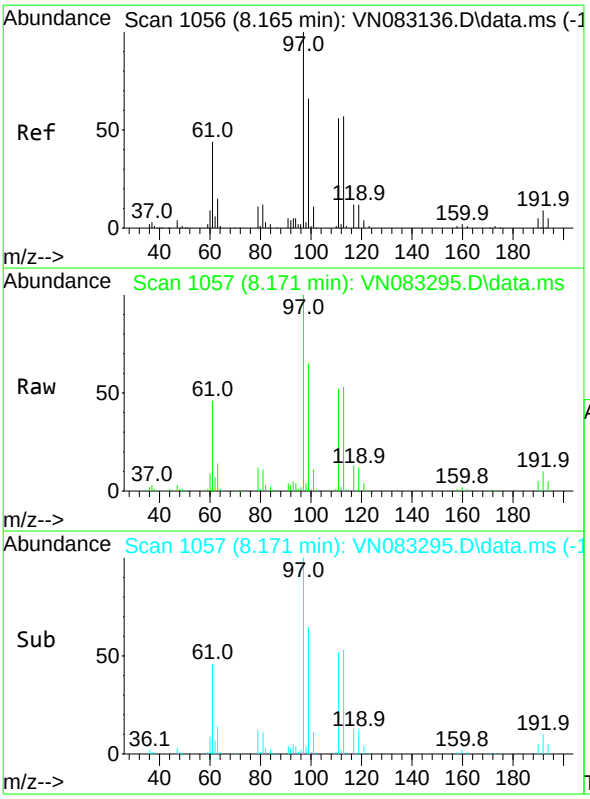


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1215
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion:114 Resp: 282606

Ion	Ratio	Lower	Upper
114	100		
63	22.6	0.0	44.6
88	17.3	0.0	31.4

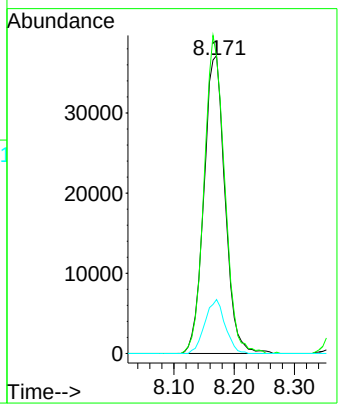




#35
Dibromofluoromethane
Concen: 51.194 ug/l
RT: 8.171 min Scan# 10
Delta R.T. 0.006 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion:113 Resp: 90305

Ion	Ratio	Lower	Upper
113	100		
111	103.3	82.4	123.6
192	17.3	14.9	22.3



Instrument :
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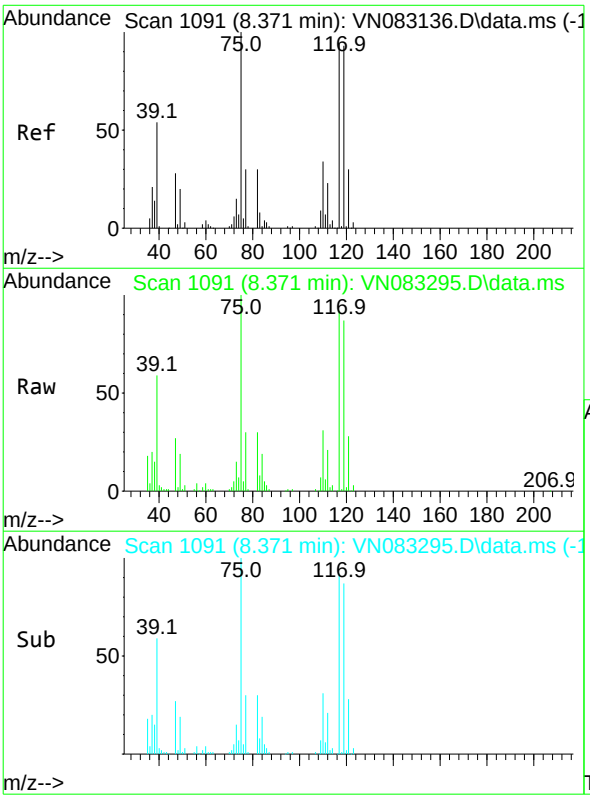
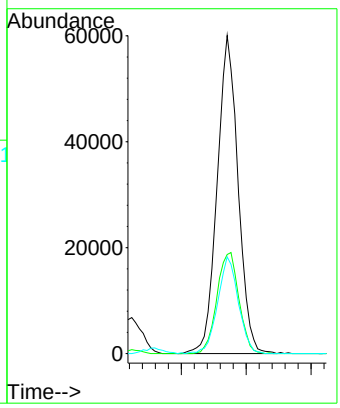
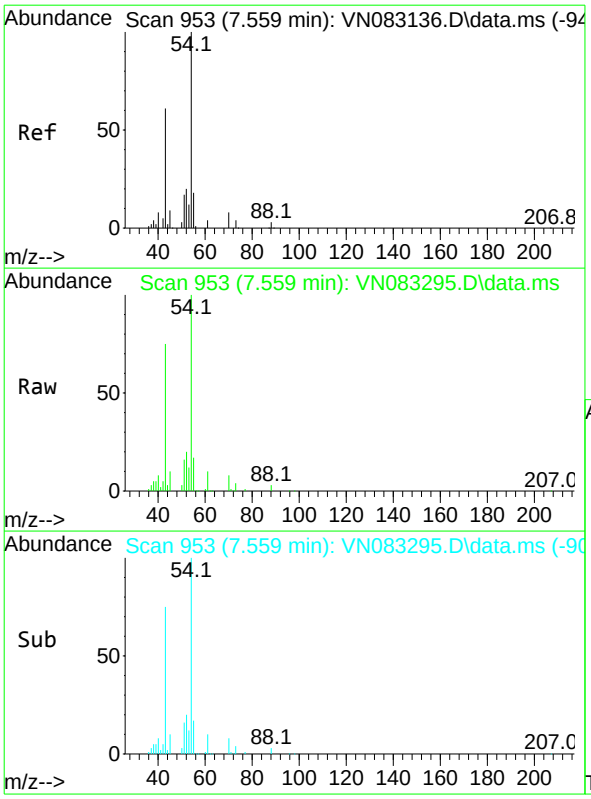


#36
1,1-Dichloropropene
Concen: 50.312 ug/l
RT: 8.371 min Scan# 1091
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 75 Resp: 134252

Ion	Ratio	Lower	Upper
75	100		
110	33.4	16.3	48.9
77	30.1	24.6	37.0





#37
Ethyl Acetate
Concen: 45.975 ug/l
RT: 7.559 min Scan# 95
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 43 Resp: 137359

Ion	Ratio	Lower	Upper
43	100		
61	13.0	9.3	13.9
70	10.9	7.0	10.6#

Instrument :
MSVOA_N
ClientSampleId :
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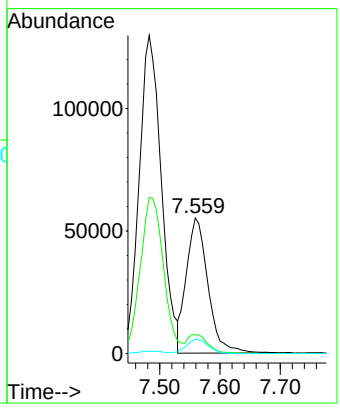
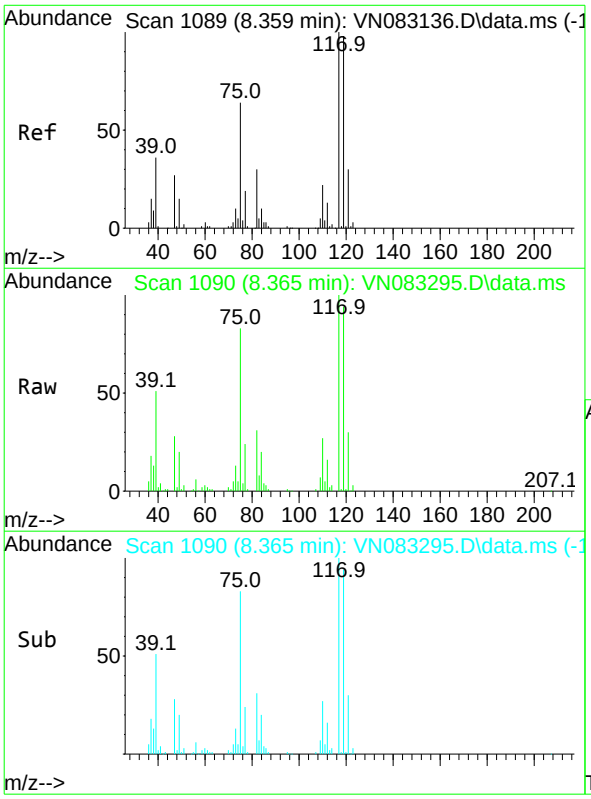
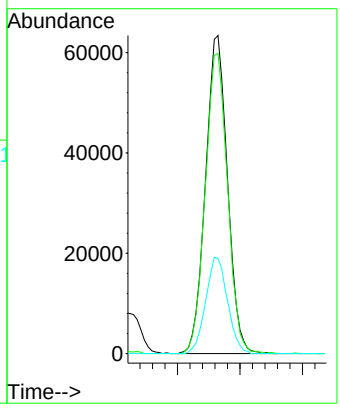


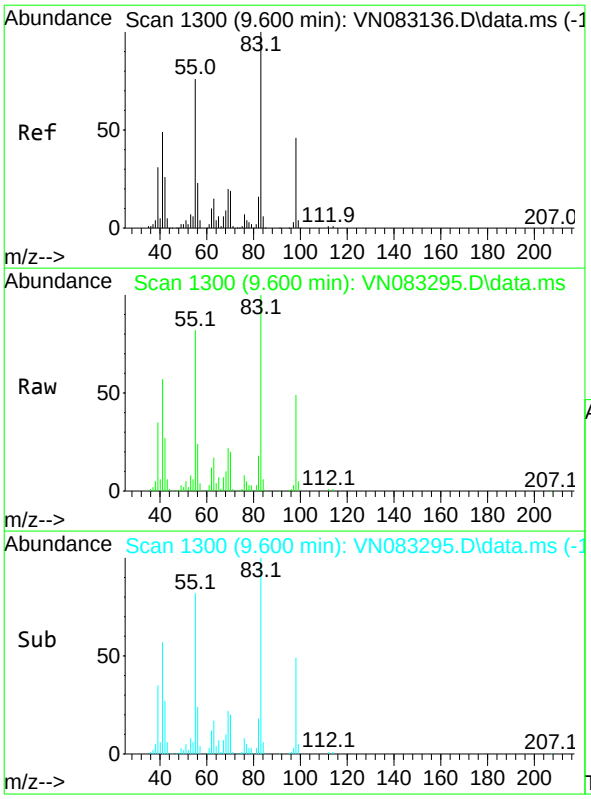


#38
Carbon Tetrachloride
Concen: 51.545 ug/l
RT: 8.365 min Scan# 1090
Delta R.T. 0.006 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion:117 Resp: 154915

Ion	Ratio	Lower	Upper
117	100		
119	94.4	74.9	112.3
121	29.9	24.3	36.5





#39
Methylcyclohexane
Concen: 48.172 ug/l
RT: 9.600 min Scan# 13
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 83 Resp: 157882

Ion	Ratio	Lower	Upper
83	100		
55	81.9	66.4	99.6
98	49.2	40.7	61.1

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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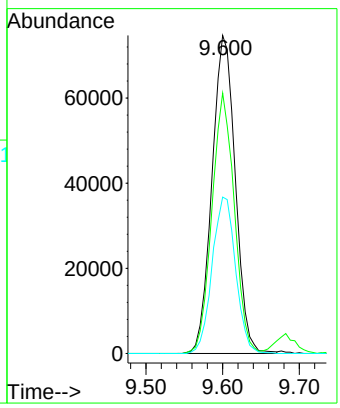
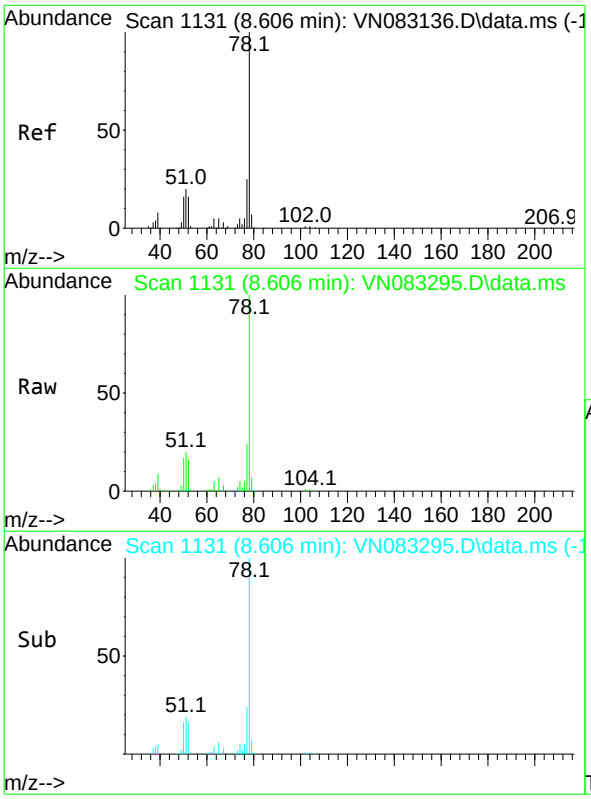
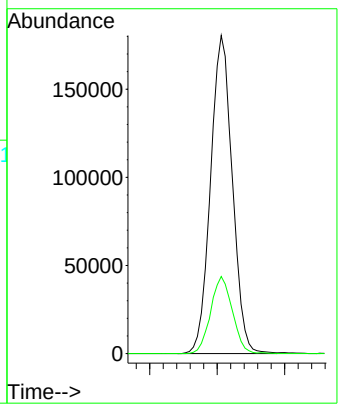


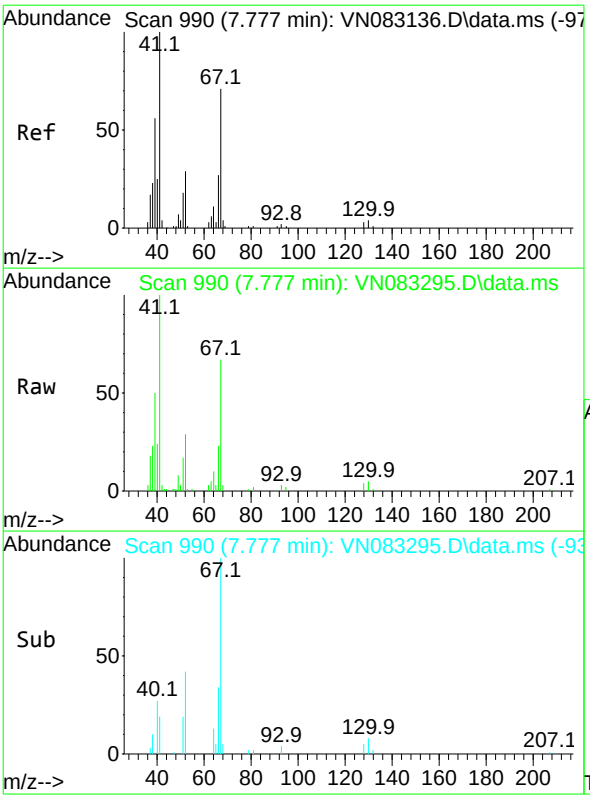


#40
Benzene
Concen: 50.937 ug/l
RT: 8.606 min Scan# 1131
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 78 Resp: 404907

Ion	Ratio	Lower	Upper
78	100		
77	24.3	19.0	28.4

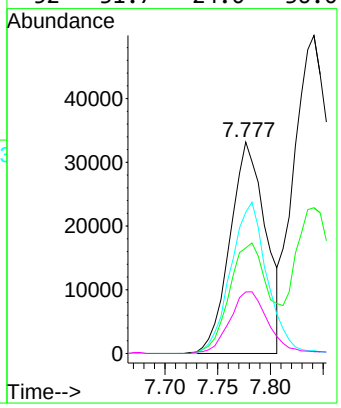




#41
Methacrylonitrile
Concen: 46.068 ug/l
RT: 7.777 min Scan# 99
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 41 Resp: 78258

Ion	Ratio	Lower	Upper
41	100		
39	58.8	45.5	68.3
67	72.8	50.5	75.7
52	31.7	24.0	36.0



Instrument :
MSVOA_N
ClientSampleId :
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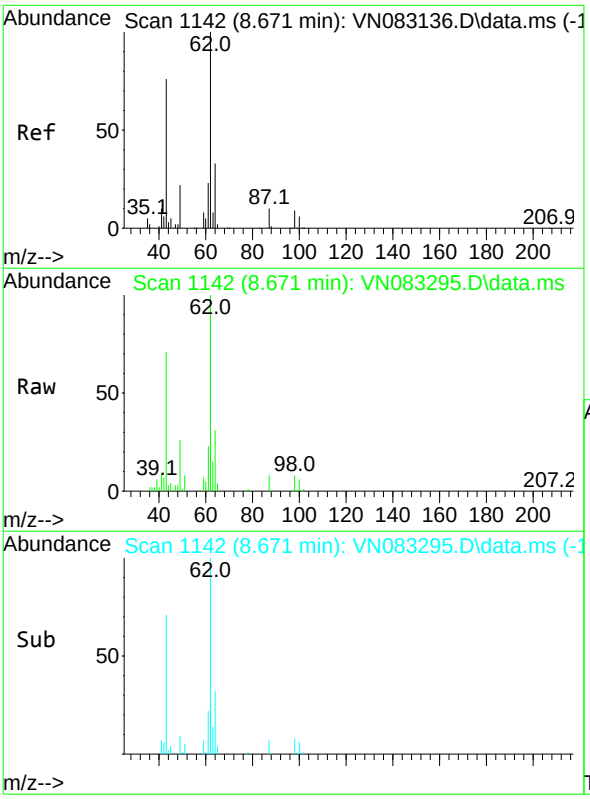
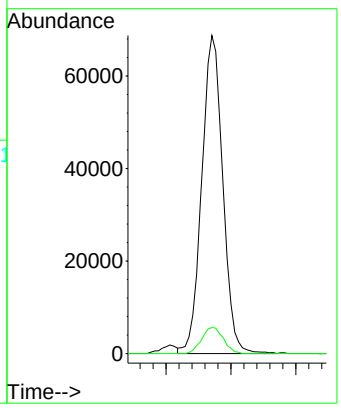
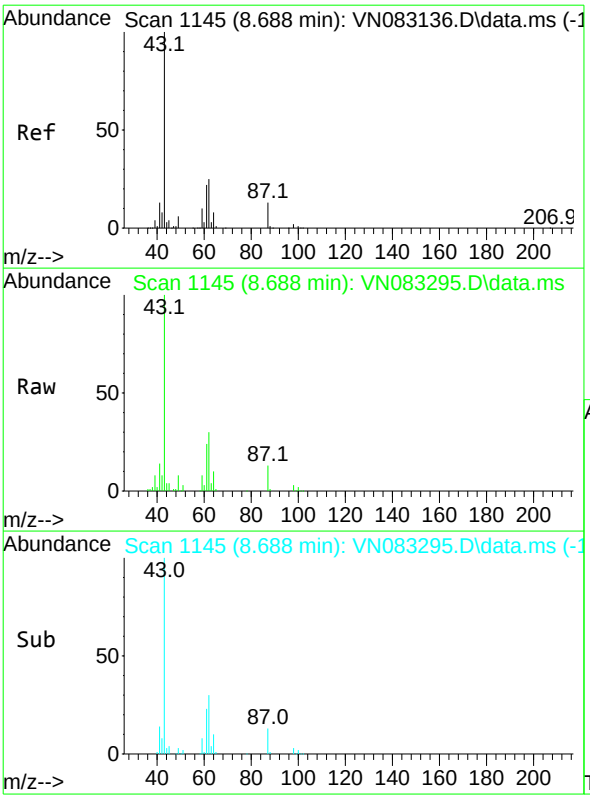


#42
1,2-Dichloroethane
Concen: 53.374 ug/l
RT: 8.671 min Scan# 1142
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 62 Resp: 154557

Ion	Ratio	Lower	Upper
62	100		
98	8.5	0.0	15.8





#43
Isopropyl Acetate
Concen: 48.708 ug/l
RT: 8.688 min Scan# 11
Delta R.T. 0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 43 Resp: 252838

Ion	Ratio	Lower	Upper
43	100		
61	25.1	17.8	26.6
87	12.5	8.2	12.2#

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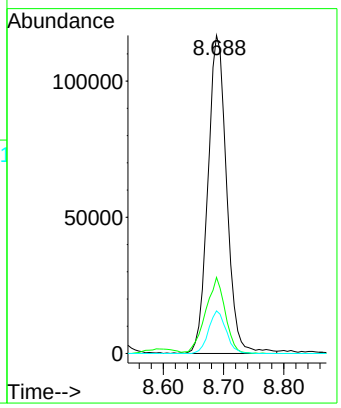
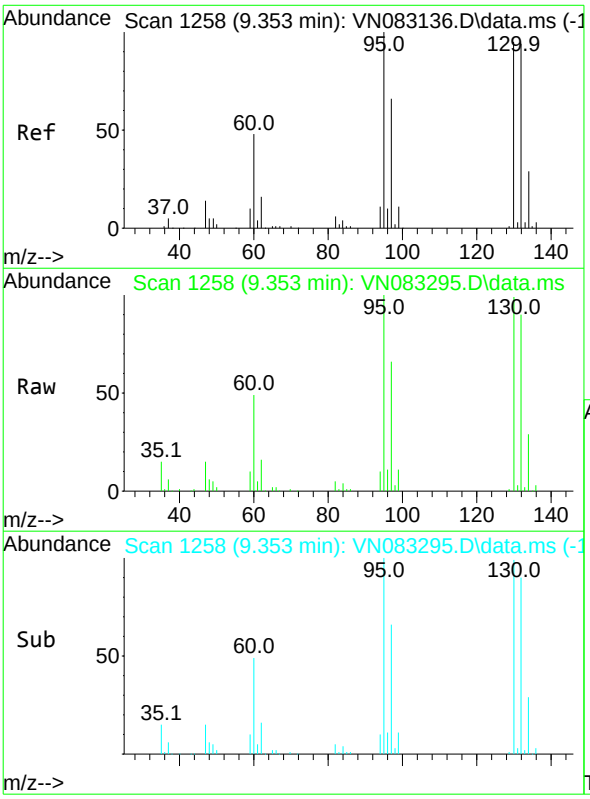
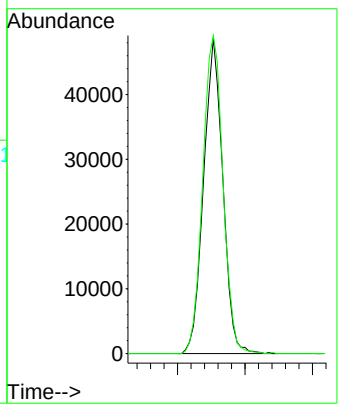


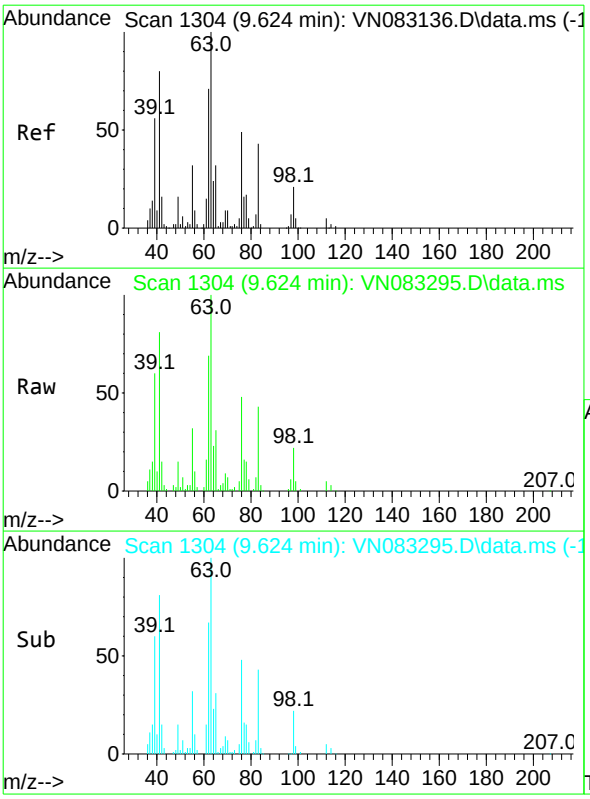


#44
Trichloroethene
Concen: 50.883 ug/l
RT: 9.353 min Scan# 1258
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion:130 Resp: 96274

Ion	Ratio	Lower	Upper
130	100		
95	100.8	0.0	197.8

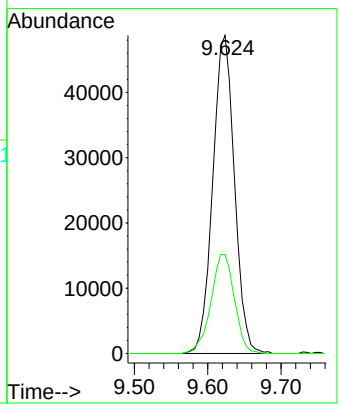




#45
1,2-Dichloropropane
Concen: 53.038 ug/l
RT: 9.624 min Scan# 13
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 63 Resp: 100079

Ion	Ratio	Lower	Upper
63	100		
65	31.1	24.4	36.6



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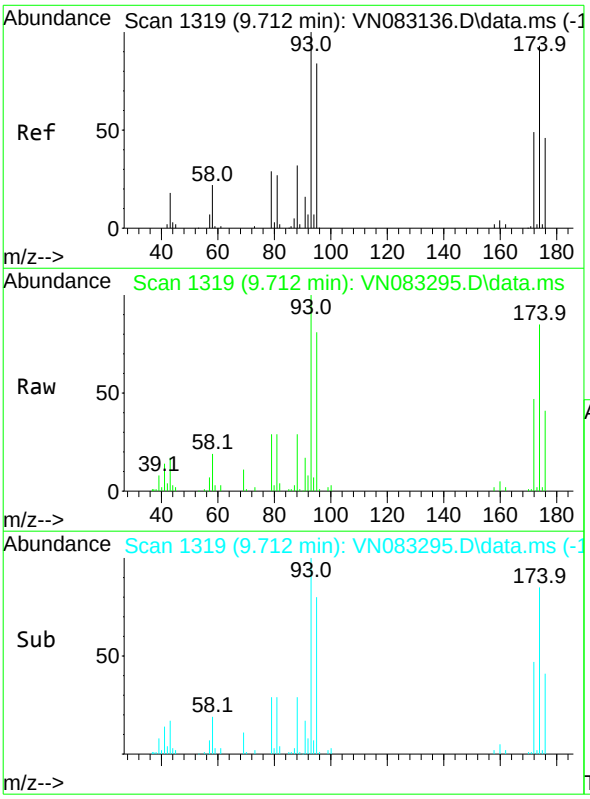
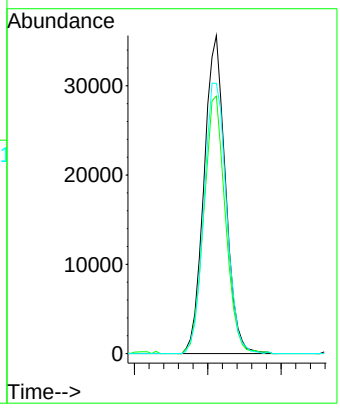
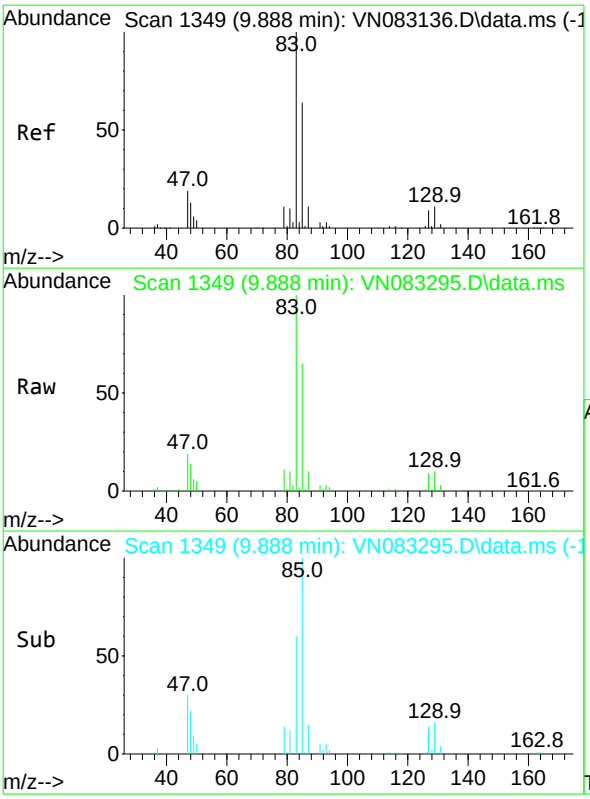


#46
Dibromomethane
Concen: 53.530 ug/l
RT: 9.712 min Scan# 1319
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 93 Resp: 72298

Ion	Ratio	Lower	Upper
93	100		
95	81.4	65.8	98.6
174	89.3	71.7	107.5

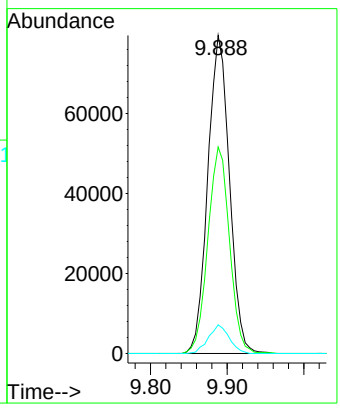




#47
Bromodichloromethane
Concen: 51.369 ug/l
RT: 9.888 min Scan# 13
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 83 Resp: 155782

Ion	Ratio	Lower	Upper
83	100		
85	64.9	51.1	76.7
127	9.0	7.2	10.8



Instrument :
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ClientSampleId :
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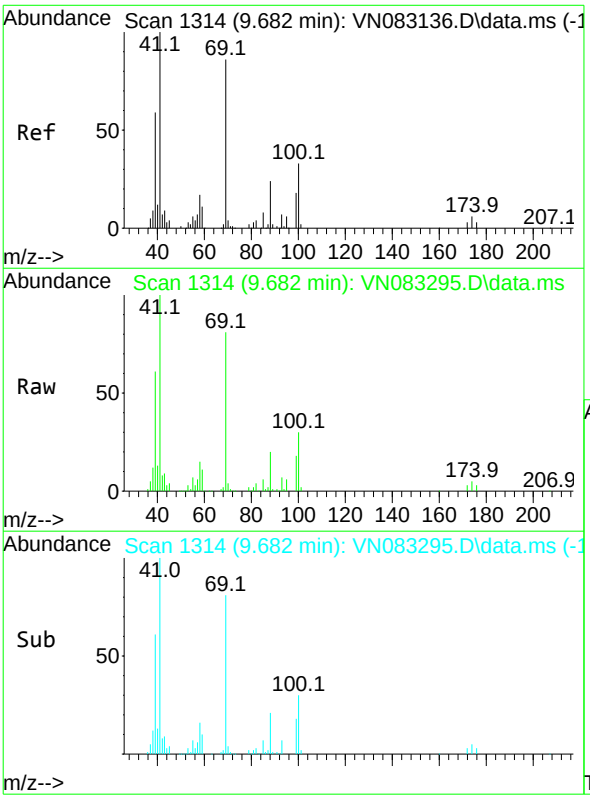
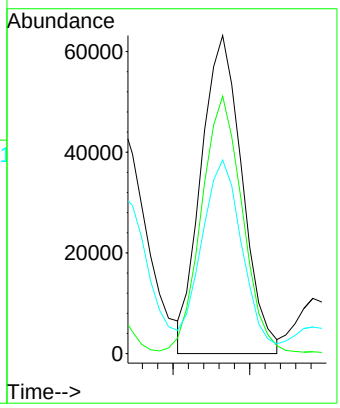
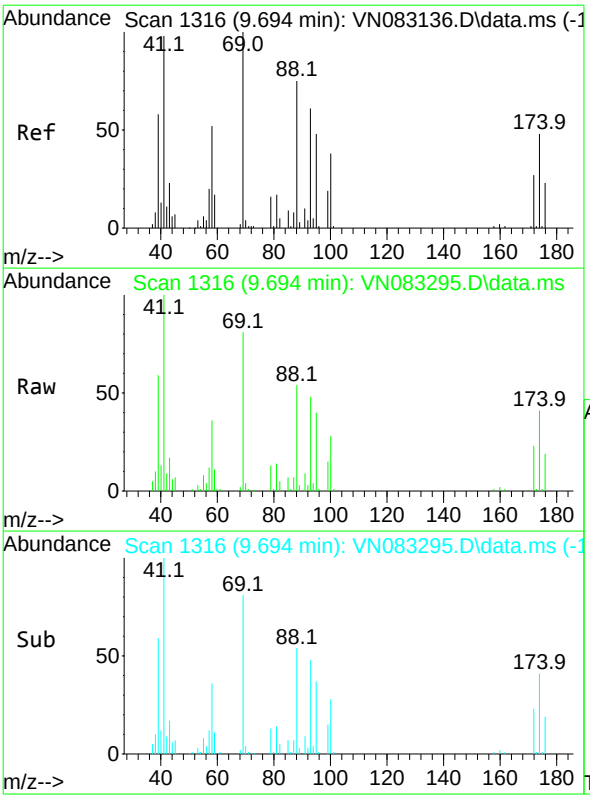


#48
Methyl methacrylate
Concen: 47.618 ug/l
RT: 9.682 min Scan# 1314
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 41 Resp: 117620

Ion	Ratio	Lower	Upper
41	100		
69	81.3	56.3	84.5
39	60.6	50.3	75.5

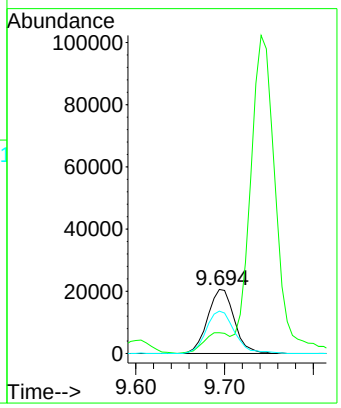




#49
1,4-Dioxane
Concen: 960.872 ug/l
RT: 9.694 min Scan# 13
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 88 Resp: 42819

Ion	Ratio	Lower	Upper
88	100		
43	31.5	27.8	41.8
58	70.6	59.4	89.0



Instrument :
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ClientSampleId :
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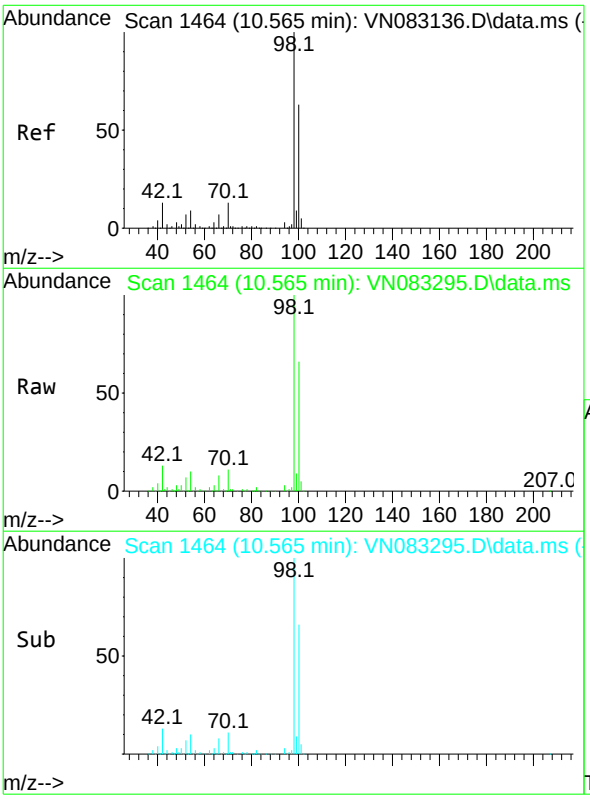
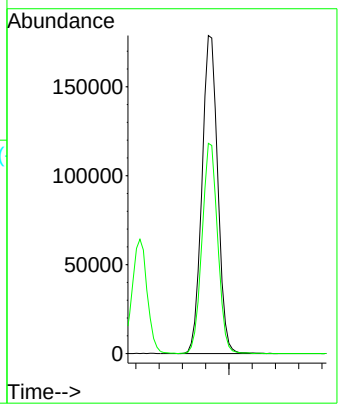
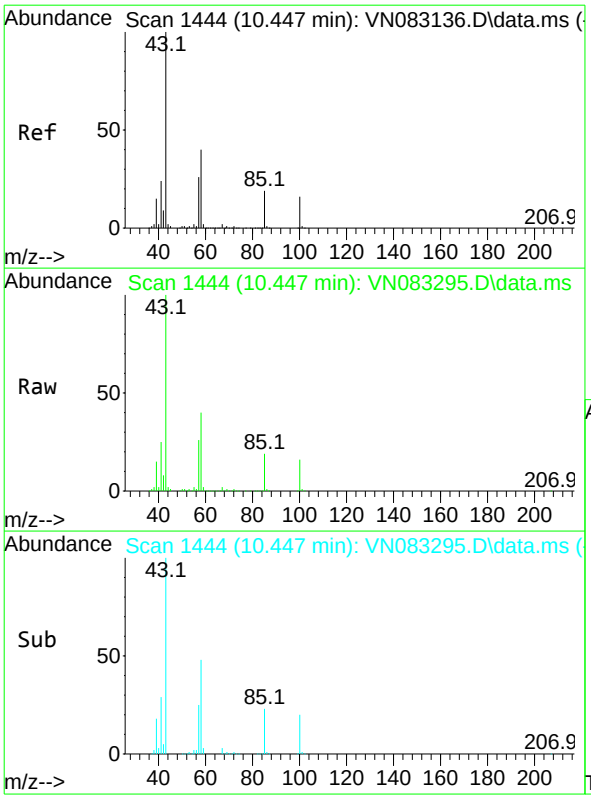


#50
Toluene-d8
Concen: 51.234 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 98 Resp: 337123

Ion	Ratio	Lower	Upper
98	100		
100	65.6	51.5	77.3

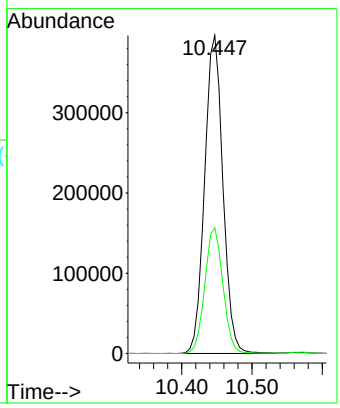




#51
4-Methyl-2-Pentanone
Concen: 253.043 ug/l
RT: 10.447 min Scan# 14
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 43 Resp: 714918

Ion	Ratio	Lower	Upper
43	100		
58	39.3	28.2	42.4



Instrument :
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ClientSampleId :
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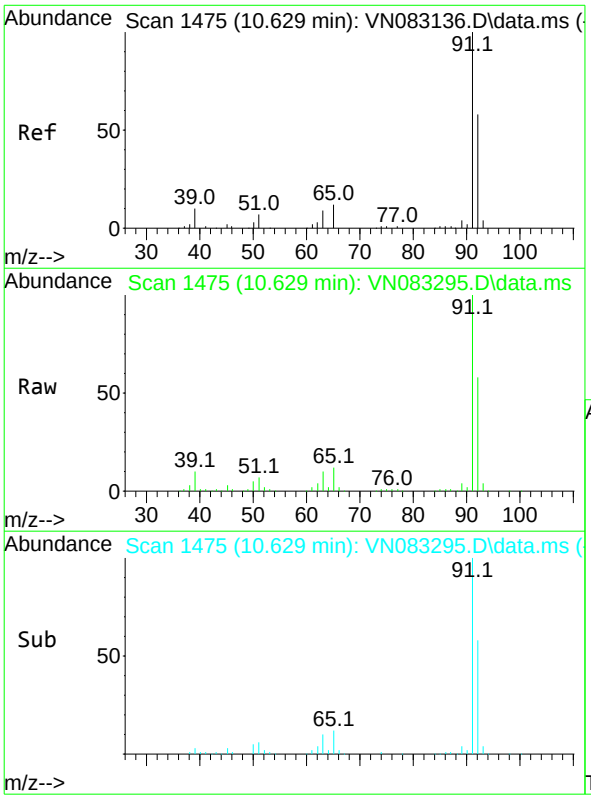
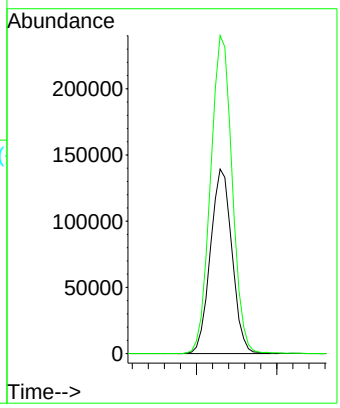
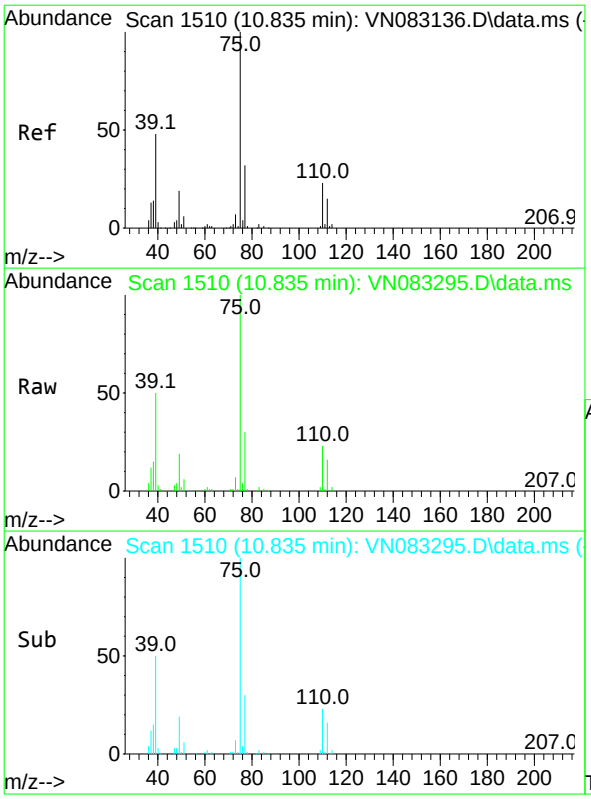


#52
Toluene
Concen: 51.813 ug/l
RT: 10.629 min Scan# 1475
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 92 Resp: 260237

Ion	Ratio	Lower	Upper
92	100		
91	173.2	139.4	209.0

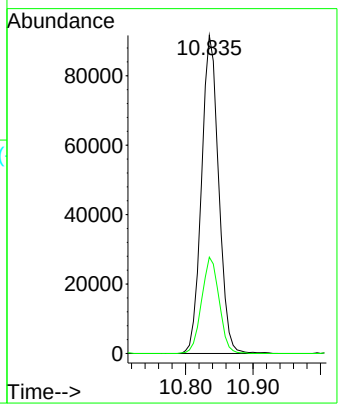




#53
t-1,3-Dichloropropene
Concen: 51.915 ug/l
RT: 10.835 min Scan# 15
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 75 Resp: 161721

Ion	Ratio	Lower	Upper
75	100		
77	30.3	25.7	38.5



Instrument :
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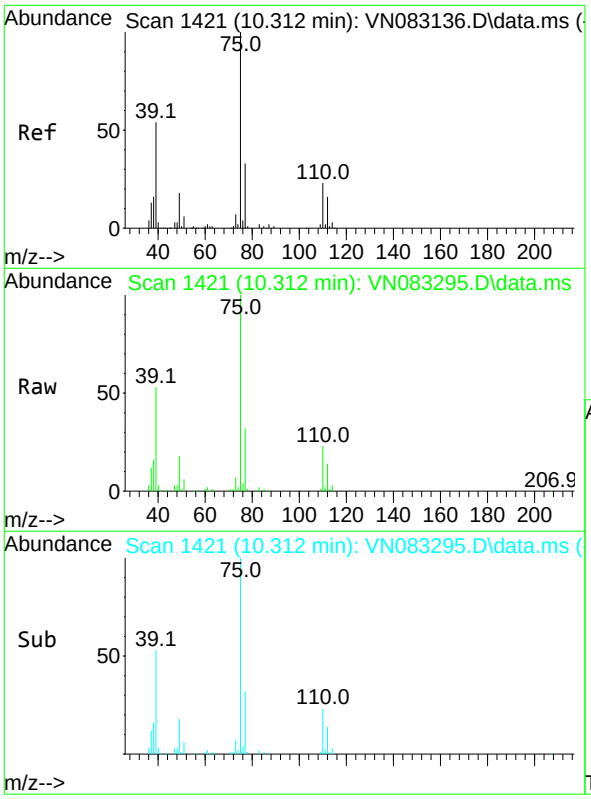
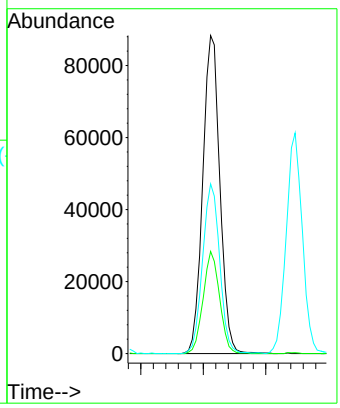
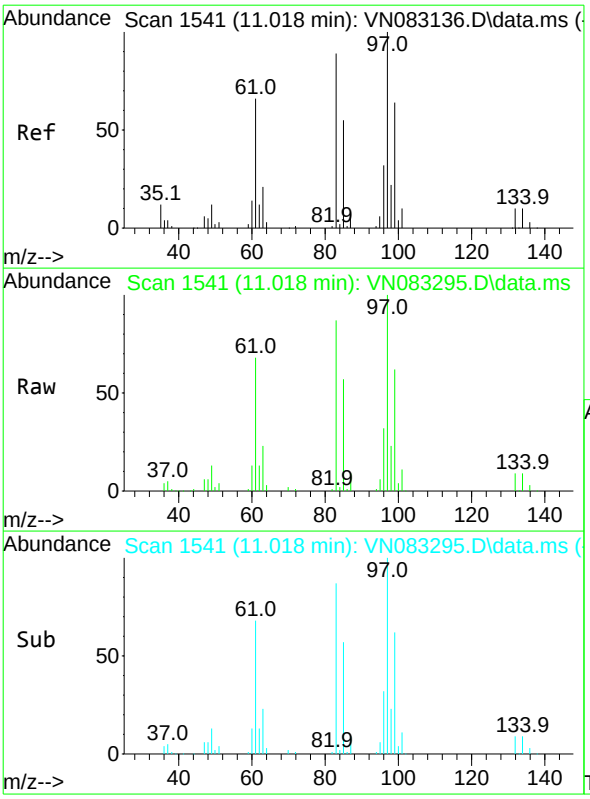


#54
cis-1,3-Dichloropropene
Concen: 50.753 ug/l
RT: 10.312 min Scan# 1421
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 75 Resp: 168161

Ion	Ratio	Lower	Upper
75	100		
77	32.1	24.3	36.5
39	53.4	50.5	75.7

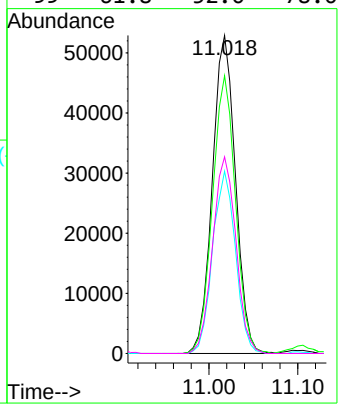




#55
1,1,2-Trichloroethane
Concen: 53.110 ug/l
RT: 11.018 min Scan# 15
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 97 Resp: 95596

Ion	Ratio	Lower	Upper
97	100		
83	87.3	71.4	107.0
85	57.3	45.8	68.6
99	61.8	52.0	78.0



Instrument :
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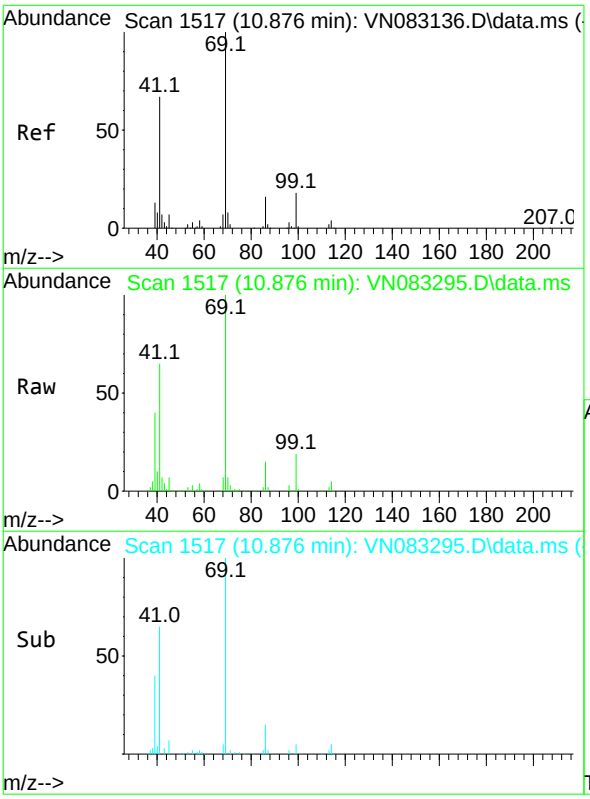
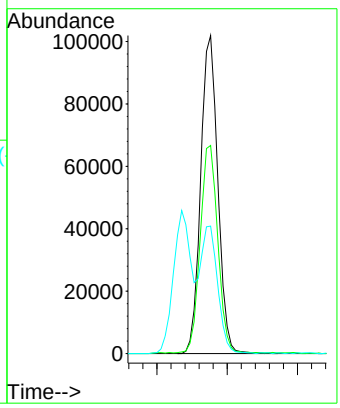
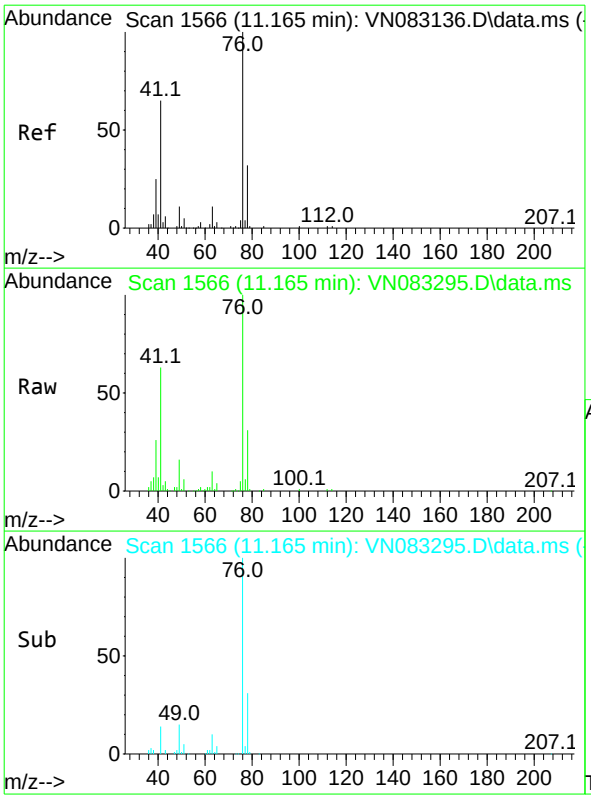


#56
Ethyl methacrylate
Concen: 50.792 ug/l
RT: 10.876 min Scan# 1517
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 69 Resp: 172350

Ion	Ratio	Lower	Upper
69	100		
41	66.8	63.4	95.2
39	41.7	37.4	56.0





#57
1,3-Dichloropropane
Concen: 52.864 ug/l
RT: 11.165 min Scan# 15
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 76 Resp: 169602

Ion	Ratio	Lower	Upper
76	100		
78	32.9	25.6	38.4

Instrument :
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ClientSampleId :
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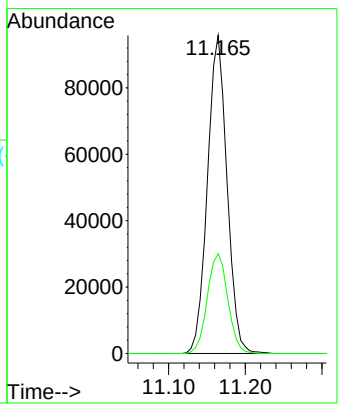
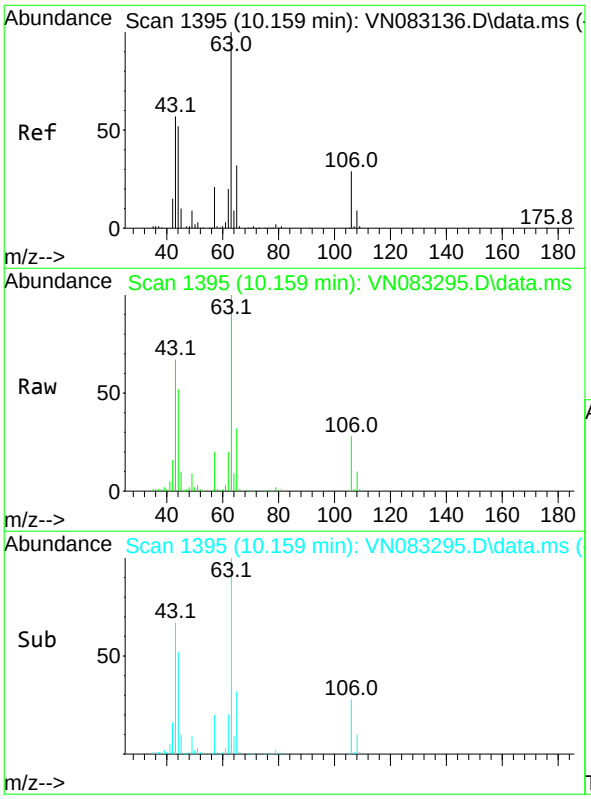
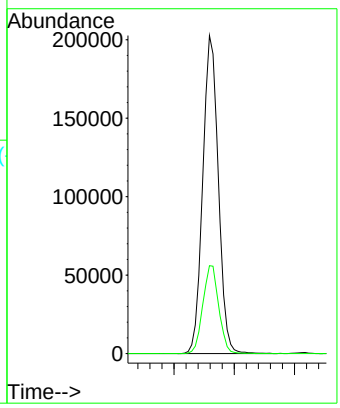


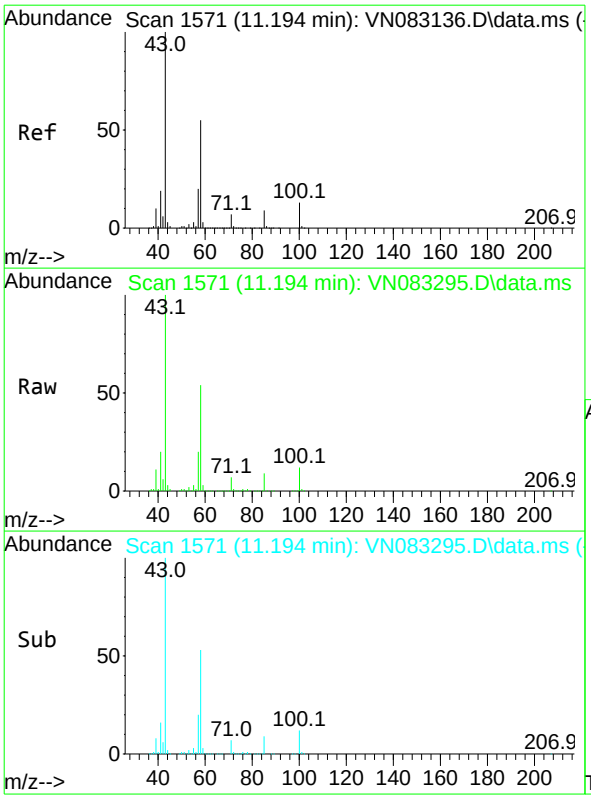


#58
2-Chloroethyl Vinyl ether
Concen: 253.780 ug/l
RT: 10.159 min Scan# 1395
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 63 Resp: 364003

Ion	Ratio	Lower	Upper
63	100		
106	28.2	21.4	32.0





#59
2-Hexanone
Concen: 243.668 ug/l
RT: 11.194 min Scan# 15
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 43 Resp: 532597

Ion	Ratio	Lower	Upper
43	100		
58	54.3	24.6	73.8

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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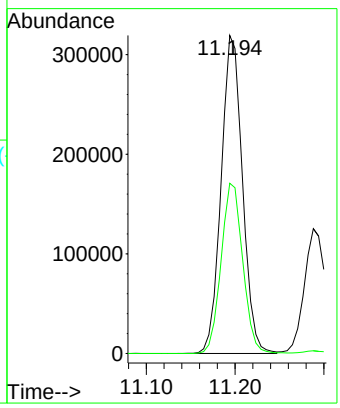
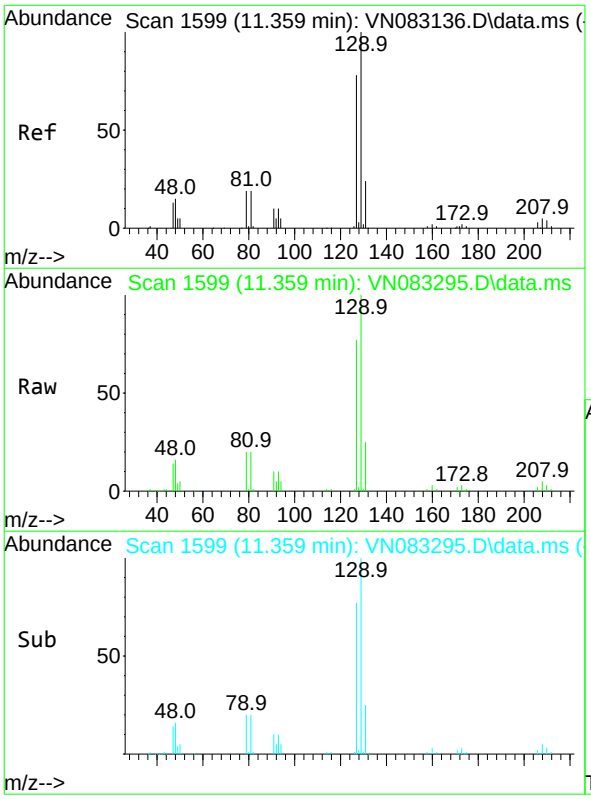
Supervised By :Semsettin Yesilyurt 08/15/2024

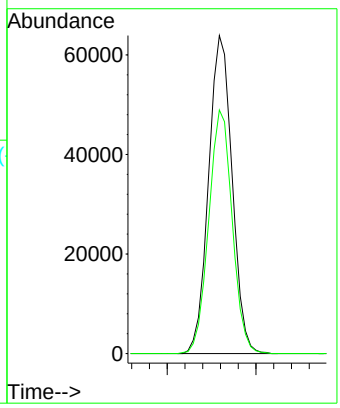


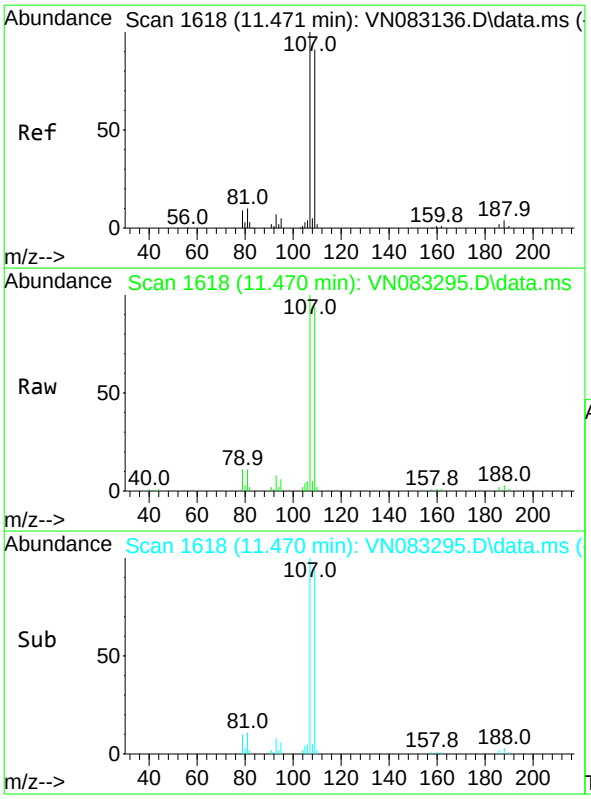


#60
Dibromochloromethane
Concen: 54.062 ug/l
RT: 11.359 min Scan# 1599
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion:129 Resp: 117651

Ion	Ratio	Lower	Upper
129	100		
127	76.5	39.2	117.6





#61
1,2-Dibromoethane
Concen: 51.595 ug/l
RT: 11.470 min Scan# 16
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion:107 Resp: 97558

Ion	Ratio	Lower	Upper
107	100		
109	94.9	73.7	110.5

Instrument :
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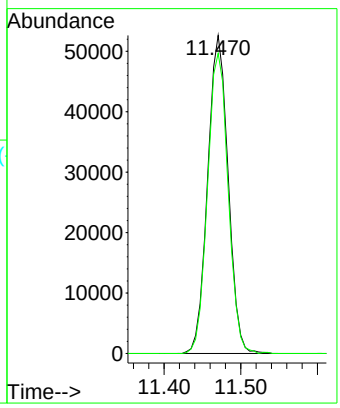
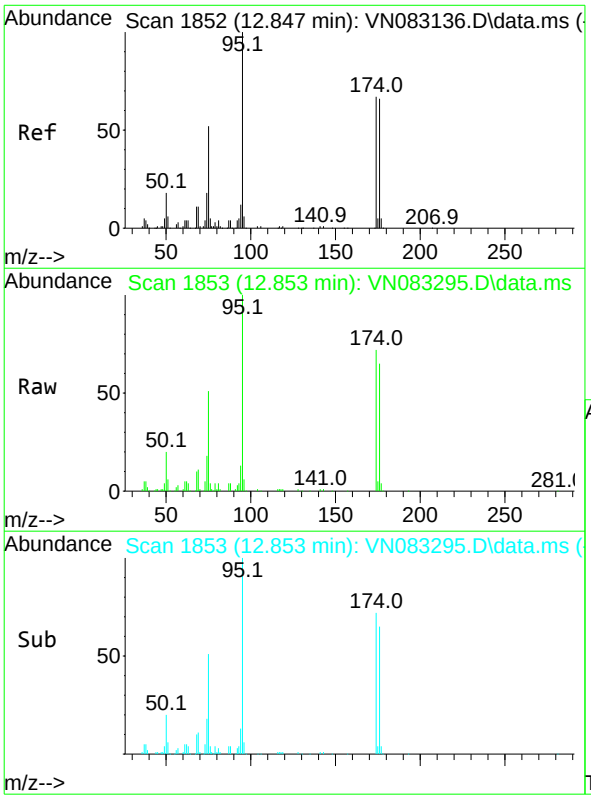
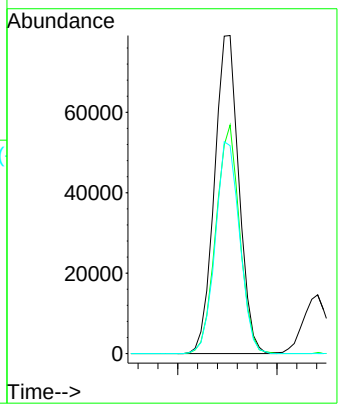


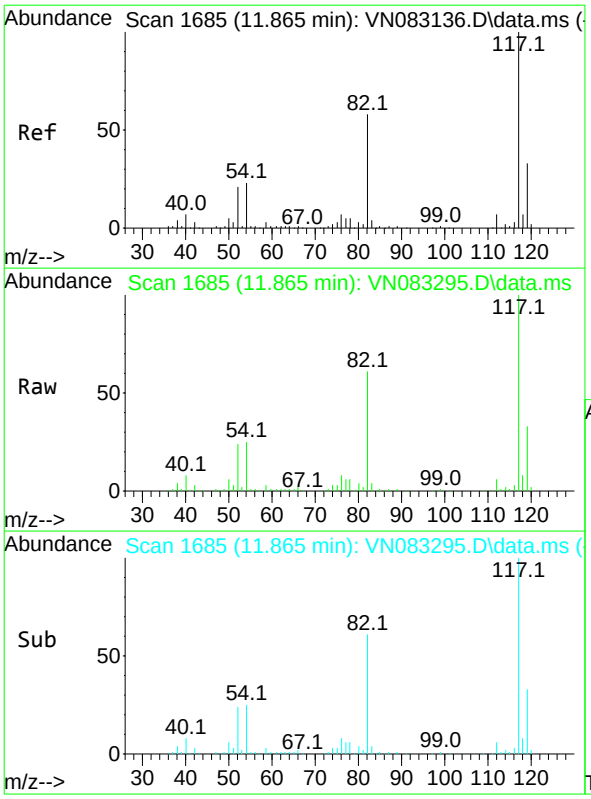


#62
4-Bromofluorobenzene
Concen: 52.757 ug/l
RT: 12.853 min Scan# 1853
Delta R.T. 0.006 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 95 Resp: 135336

Ion	Ratio	Lower	Upper
95	100		
174	69.6	0.0	159.2
176	66.4	0.0	147.6

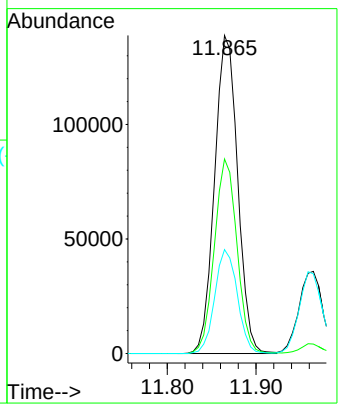




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 16
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion:117 Resp: 250996

Ion	Ratio	Lower	Upper
117	100		
82	61.1	47.5	71.3
119	32.7	25.6	38.4



Instrument :
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ClientSampleId :
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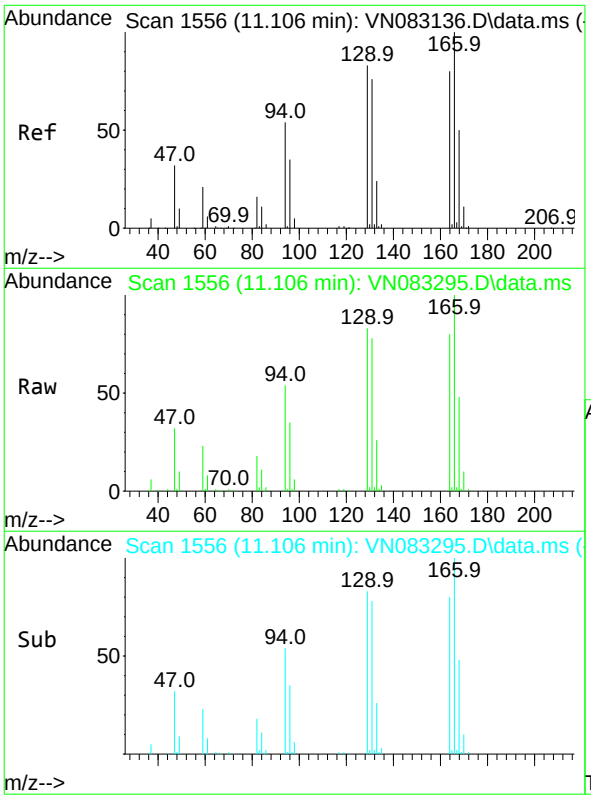
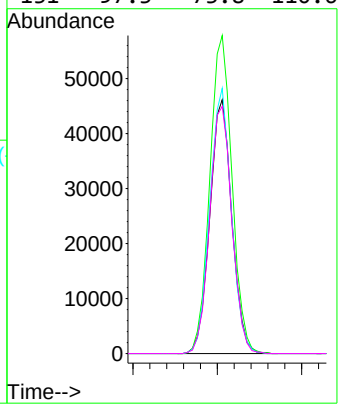
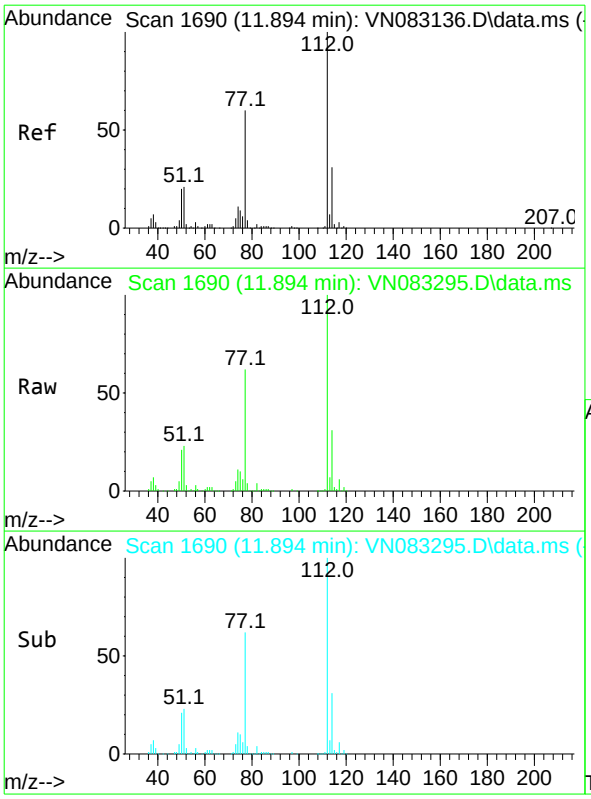


#64
Tetrachloroethene
Concen: 50.230 ug/l
RT: 11.106 min Scan# 1556
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion:164 Resp: 83497

Ion	Ratio	Lower	Upper
164	100		
166	125.2	101.4	152.0
129	104.5	75.7	113.5
131	97.3	73.8	110.6

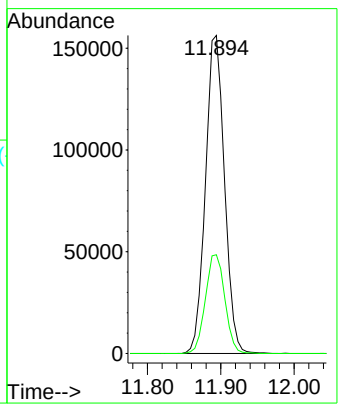




#65
Chlorobenzene
Concen: 50.640 ug/l
RT: 11.894 min Scan# 16
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion:112 Resp: 280885

Ion	Ratio	Lower	Upper
112	100		
114	31.1	26.2	39.2



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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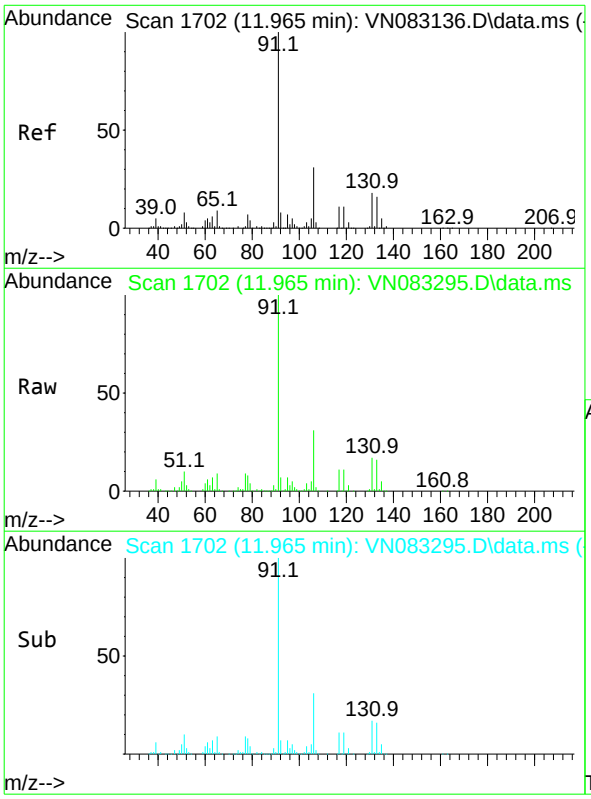
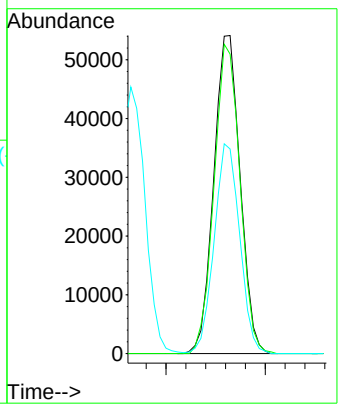
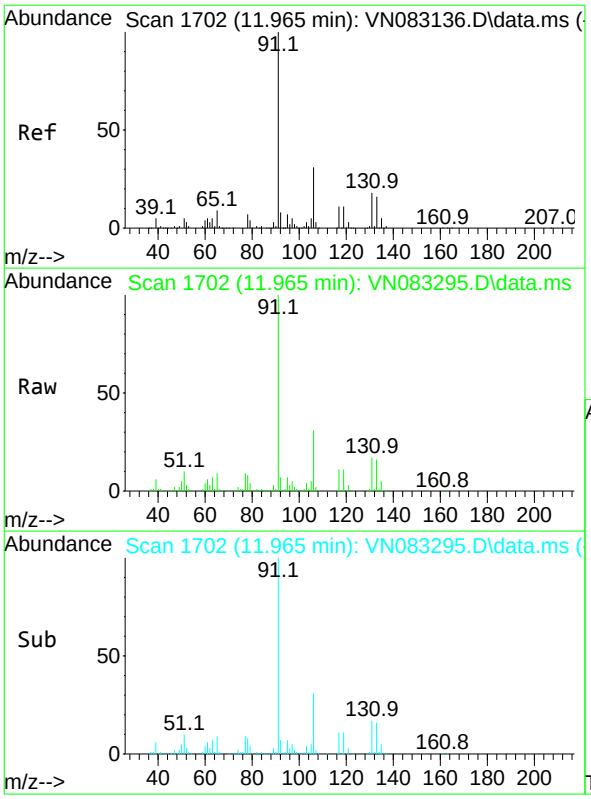


#66
1,1,1,2-Tetrachloroethane
Concen: 50.961 ug/l
RT: 11.965 min Scan# 1702
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion:131 Resp: 99691

Ion	Ratio	Lower	Upper
131	100		
133	95.5	47.3	142.0
119	64.0	32.5	97.4





#67
Ethyl Benzene
Concen: 51.124 ug/l
RT: 11.965 min Scan# 17
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 91 Resp: 520196

Ion	Ratio	Lower	Upper
91	100		
106	30.5	24.0	36.0

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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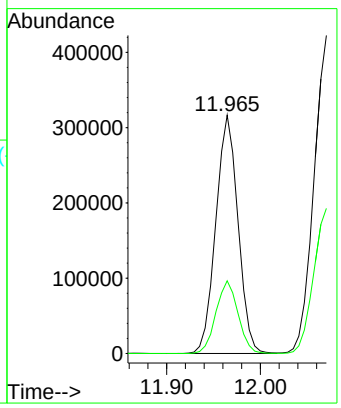
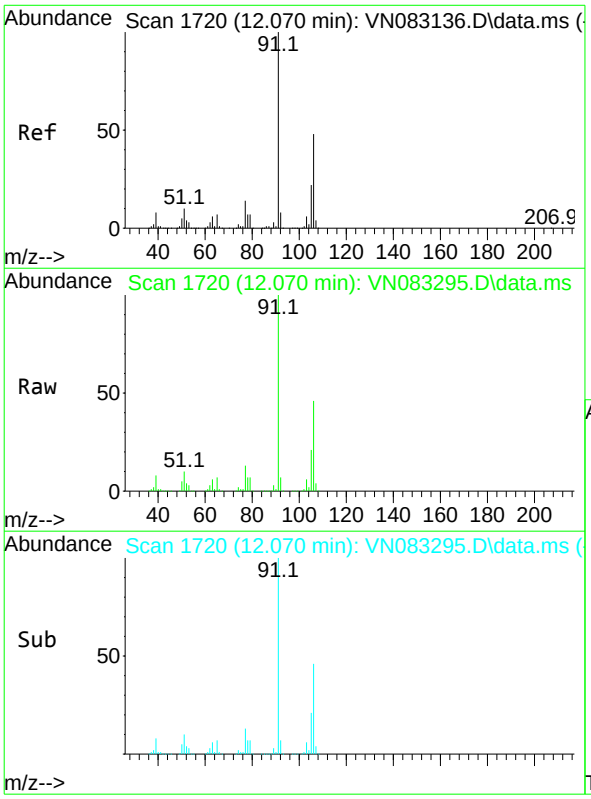
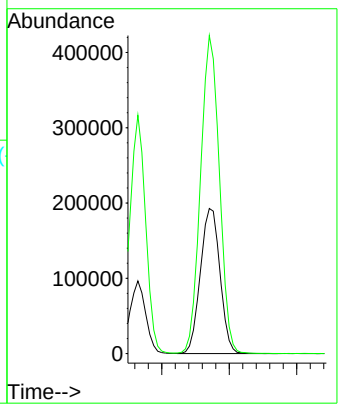


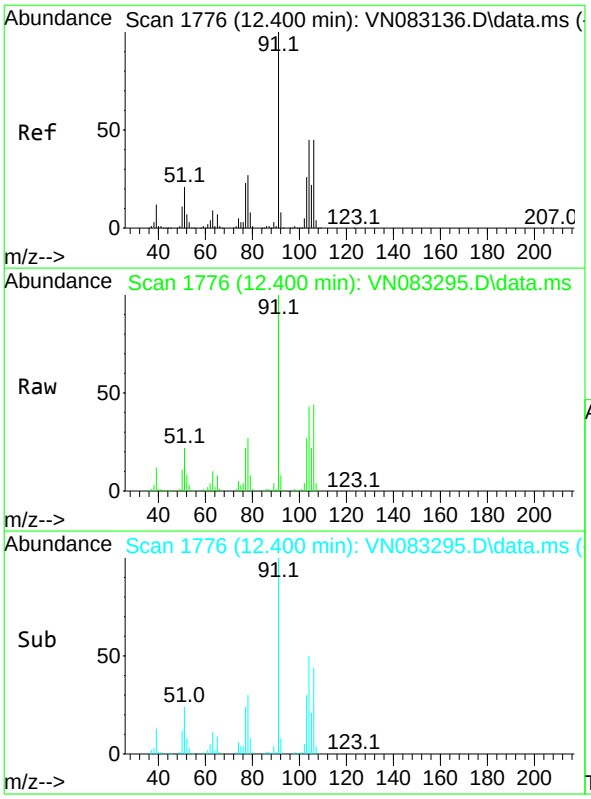


#68
m/p-Xylenes
Concen: 102.048 ug/l
RT: 12.070 min Scan# 1720
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion:106 Resp: 388963

Ion	Ratio	Lower	Upper
106	100		
91	211.2	166.1	249.1





#69
o-Xylene
Concen: 50.450 ug/l
RT: 12.400 min Scan# 17
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion:106 Resp: 189655

Ion	Ratio	Lower	Upper
106	100		
91	222.9	111.3	333.9

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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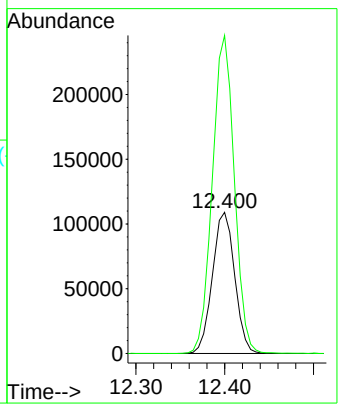
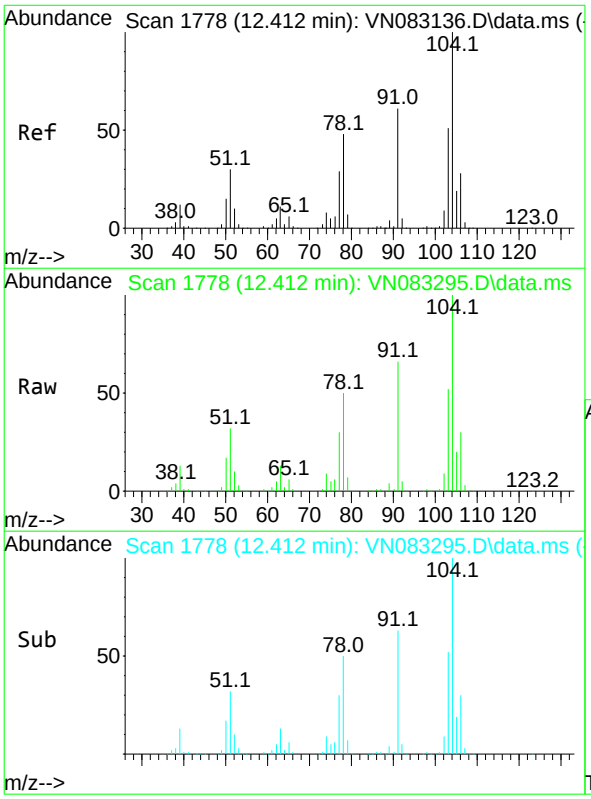
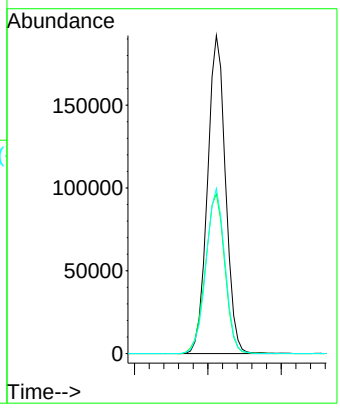


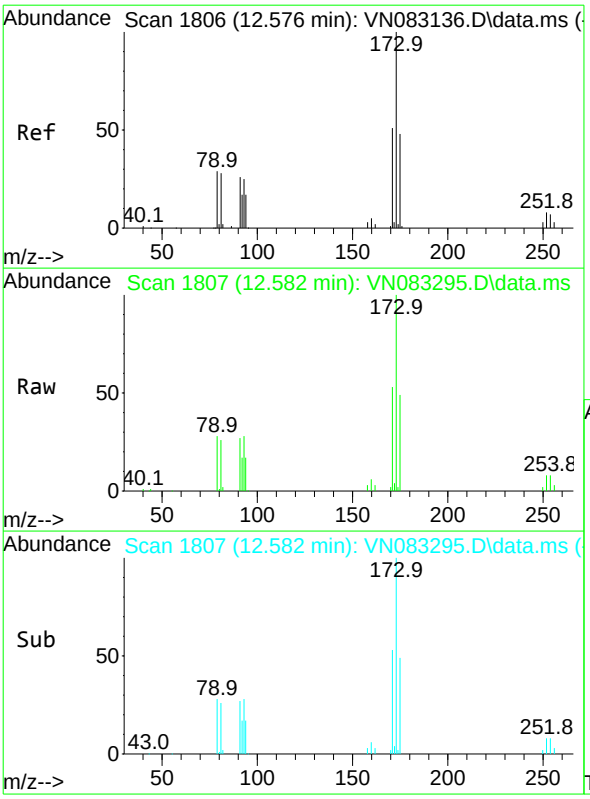


#70
Styrene
Concen: 51.874 ug/l
RT: 12.412 min Scan# 1778
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion:104 Resp: 327524

Ion	Ratio	Lower	Upper
104	100		
78	54.0	41.6	62.4
103	54.5	44.0	66.0





#71
Bromoform
Concen: 50.218 ug/l
RT: 12.582 min Scan# 18
Delta R.T. 0.006 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Tgt Ion:173 Resp: 74422

Ion	Ratio	Lower	Upper
173	100		
175	50.1	24.0	72.0
254	0.0	0.0	0.0

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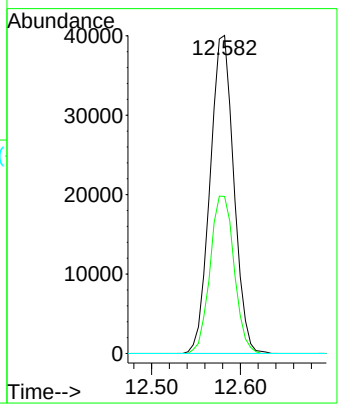
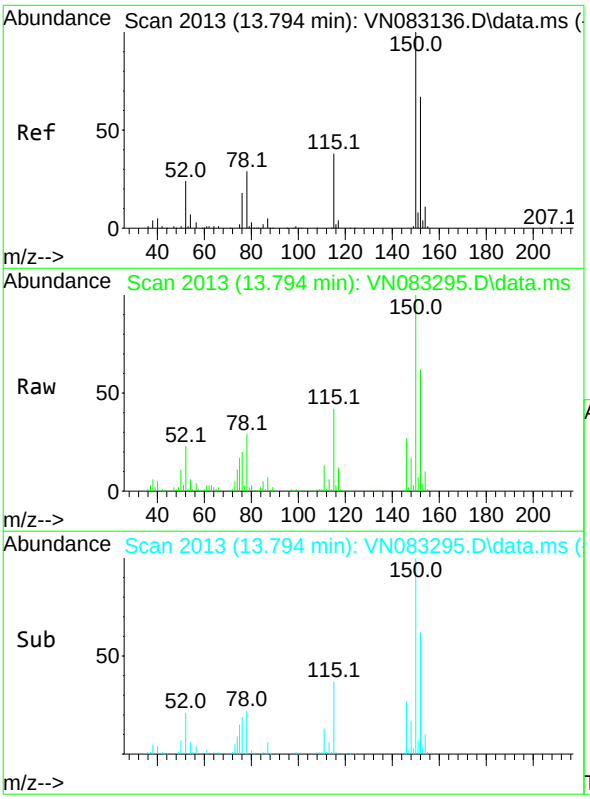
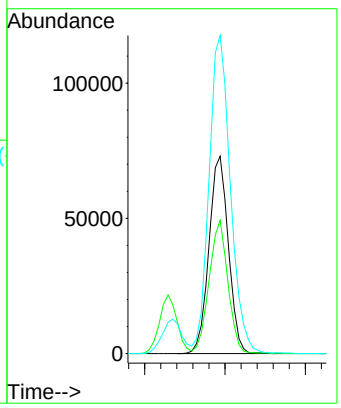


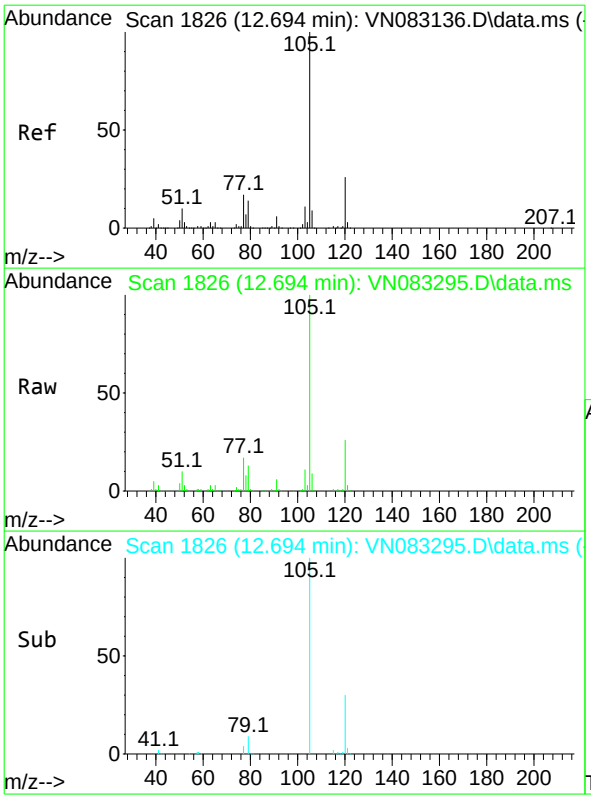


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.794 min Scan# 2013
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion:152 Resp: 122669

Ion	Ratio	Lower	Upper
152	100		
115	65.3	30.6	91.6
150	177.2	0.0	348.6

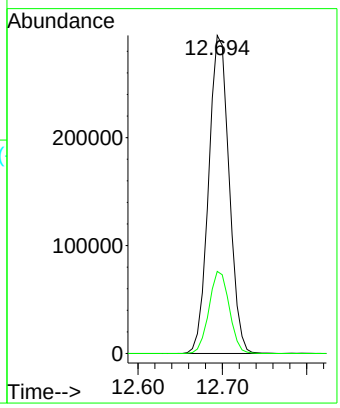




#73
Isopropylbenzene
Concen: 48.403 ug/l
RT: 12.694 min Scan# 18
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion:105 Resp: 496635

Ion	Ratio	Lower	Upper
105	100		
120	25.6	12.9	38.6



Instrument :
MSVOA_N
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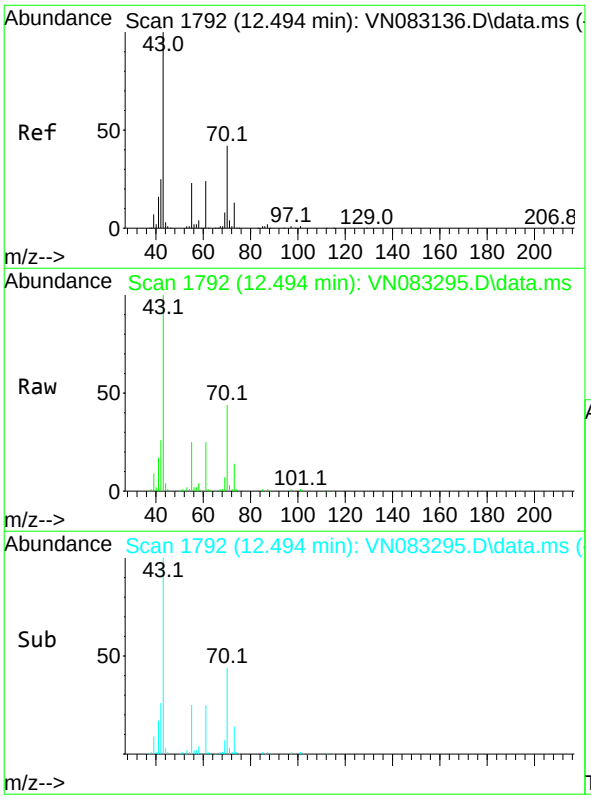
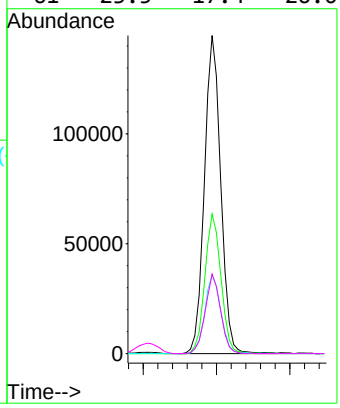
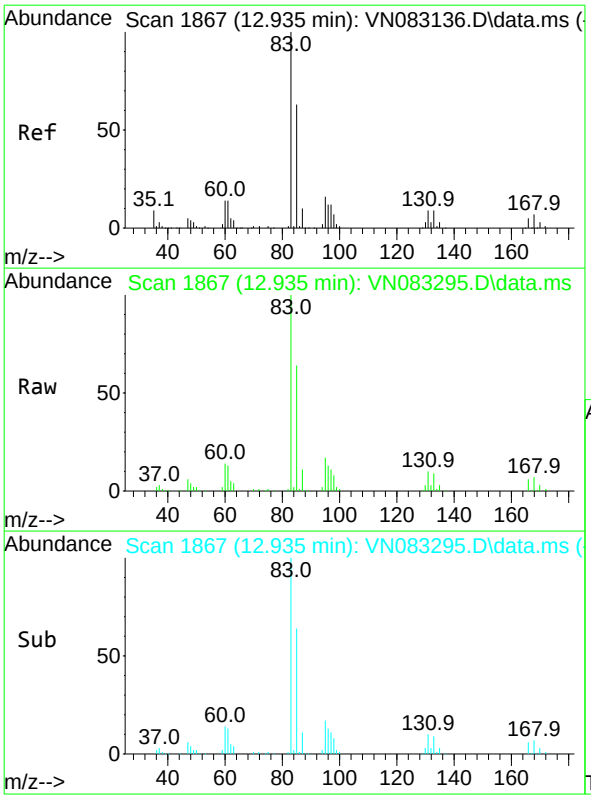


#74
N-amyl acetate
Concen: 44.635 ug/l
RT: 12.494 min Scan# 1792
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 43 Resp: 224010

Ion	Ratio	Lower	Upper
43	100		
70	43.2	29.8	44.6
55	24.3	18.7	28.1
61	23.5	17.4	26.0

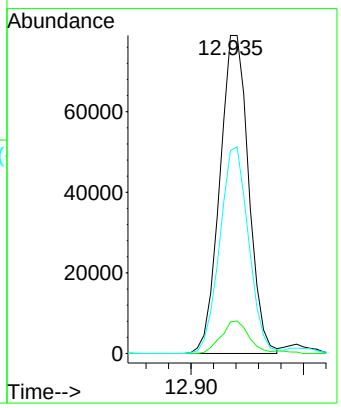




#75
1,1,2,2-Tetrachloroethane
Concen: 48.328 ug/l
RT: 12.935 min Scan# 18
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 83 Resp: 140246

Ion	Ratio	Lower	Upper
83	100		
131	10.3	5.0	14.9
85	65.1	31.9	95.7



Instrument :
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ClientSampleId :
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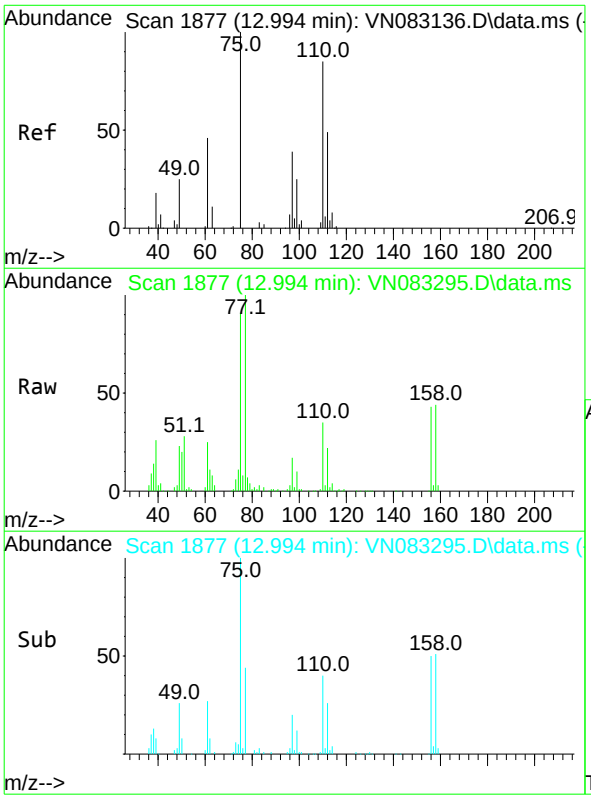
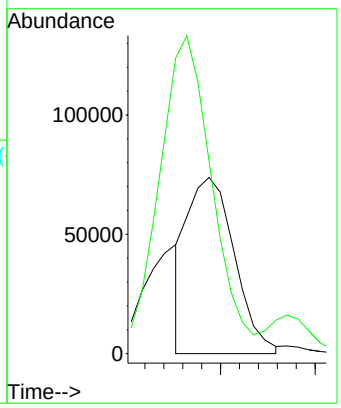
Supervised By :Semsettin Yesilyurt 08/15/2024

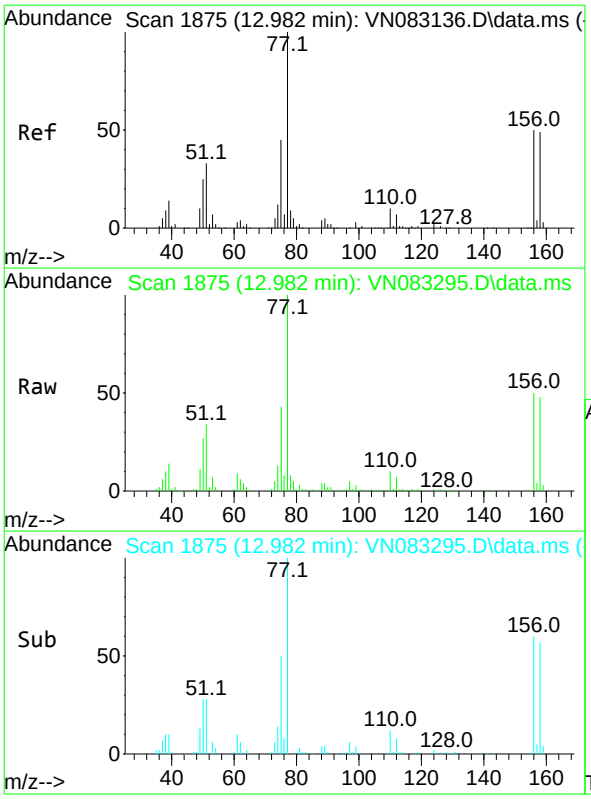


#76
1,2,3-Trichloropropane
Concen: 47.602 ug/l m
RT: 12.994 min Scan# 1877
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 75 Resp: 128158

Ion	Ratio	Lower	Upper
75	100		
77	202.2	110.9	332.6

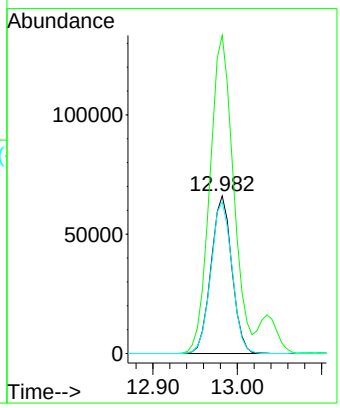




#77
Bromobenzene
Concen: 49.656 ug/l
RT: 12.982 min Scan# 18
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion:156 Resp: 113178

Ion	Ratio	Lower	Upper
156	100		
77	228.9	111.3	333.8
158	97.7	48.3	144.9



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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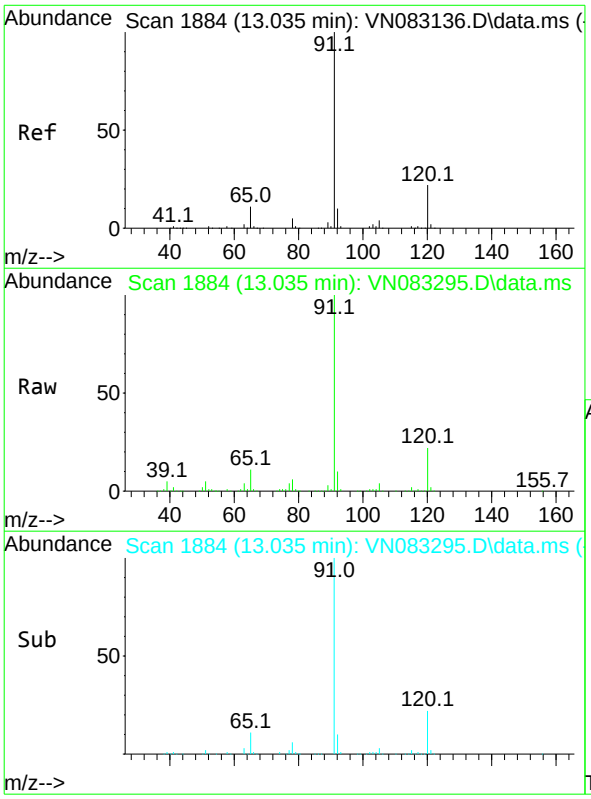
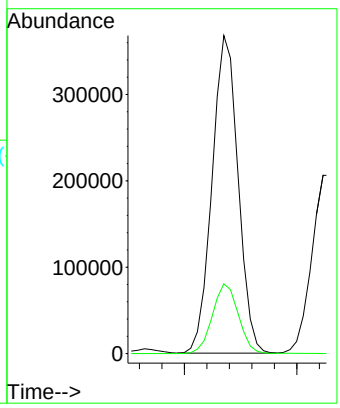
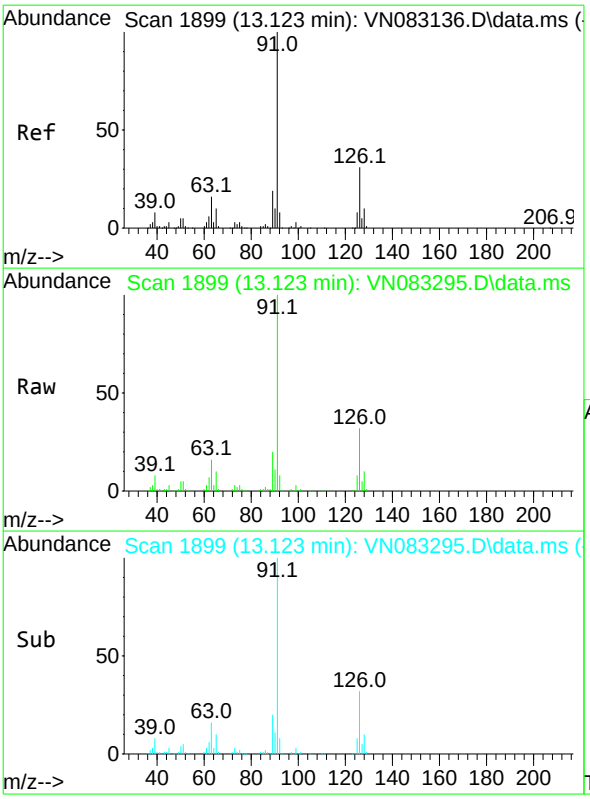


#78
n-propylbenzene
Concen: 49.938 ug/l
RT: 13.035 min Scan# 1884
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 91 Resp: 590000

Ion	Ratio	Lower	Upper
91	100		
120	21.9	10.9	32.9

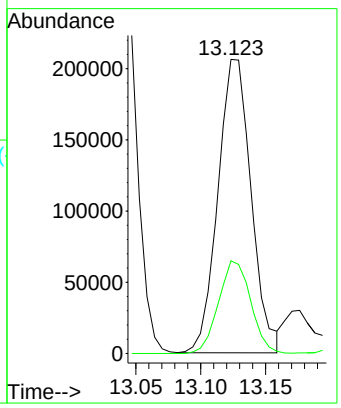




#79
2-Chlorotoluene
Concen: 49.125 ug/l
RT: 13.123 min Scan# 18
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 91 Resp: 367969

Ion	Ratio	Lower	Upper
91	100		
126	30.5	16.2	48.6



Instrument :
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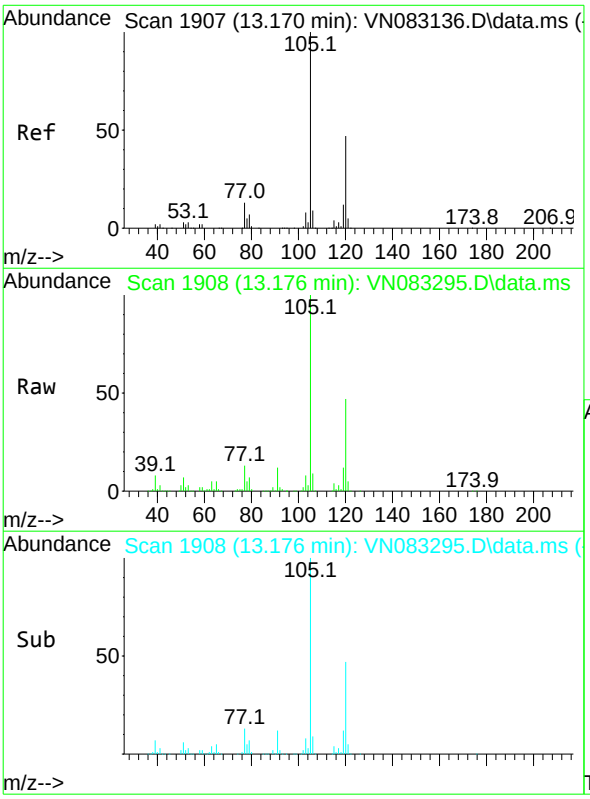
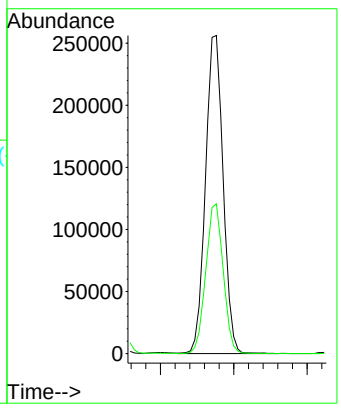
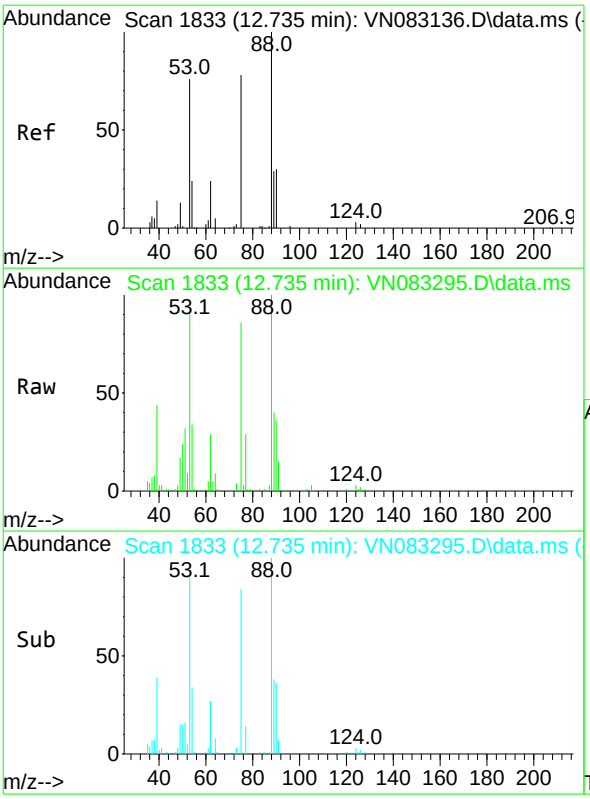


#80
1,3,5-Trimethylbenzene
Concen: 49.829 ug/l
RT: 13.176 min Scan# 1908
Delta R.T. 0.006 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion:105 Resp: 428037

Ion	Ratio	Lower	Upper
105	100		
120	46.5	24.3	72.8





#81
trans-1,4-Dichloro-2-butene
Concen: 45.962 ug/l
RT: 12.735 min Scan# 18
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 75 Resp: 56887

Ion	Ratio	Lower	Upper
75	100		
53	94.1	88.4	132.6
89	39.6	36.3	54.5

Instrument :
MSVOA_N
ClientSampleId :
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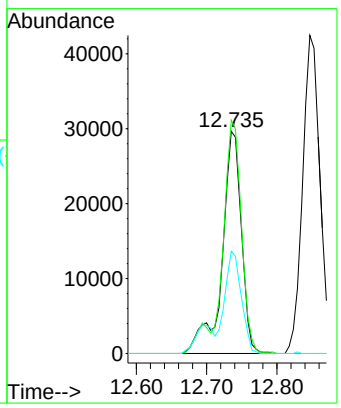
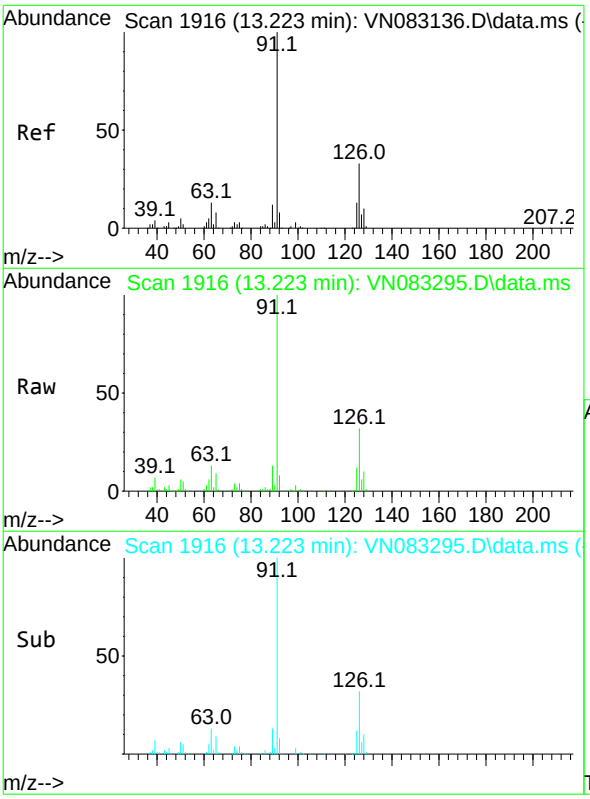
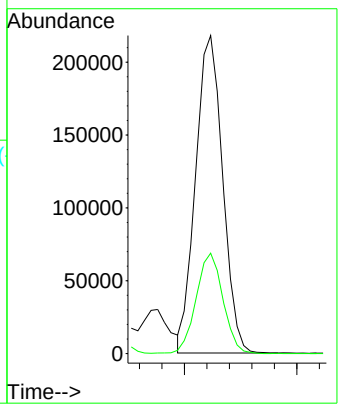


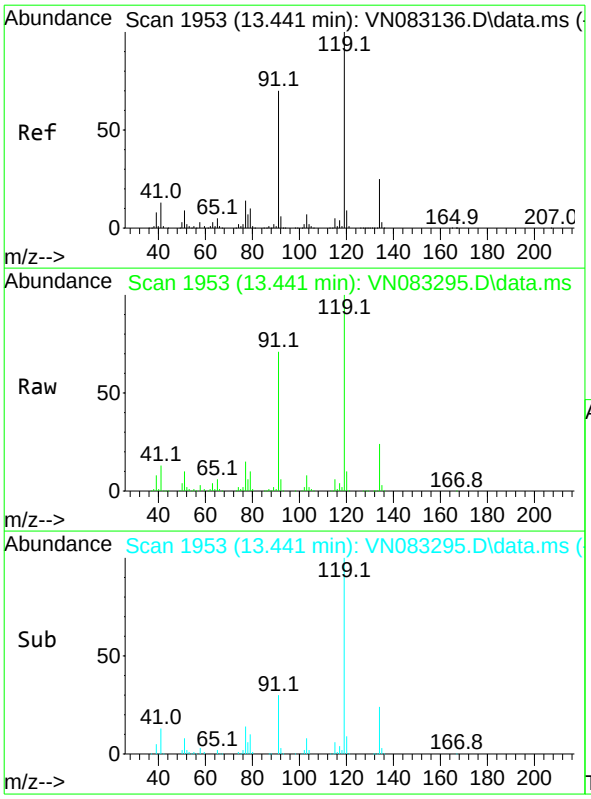


#82
4-Chlorotoluene
Concen: 48.468 ug/l
RT: 13.223 min Scan# 1916
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 91 Resp: 364156

Ion	Ratio	Lower	Upper
91	100		
126	31.4	16.2	48.6

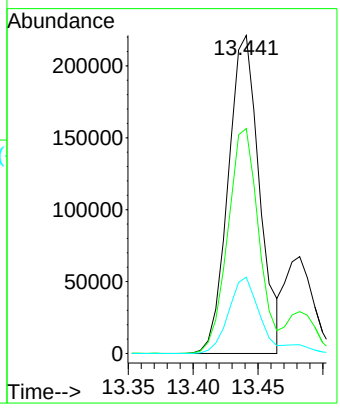




#83
tert-Butylbenzene
Concen: 48.866 ug/l
RT: 13.441 min Scan# 19
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion:119 Resp: 371735

Ion	Ratio	Lower	Upper
119	100		
91	69.6	35.0	105.1
134	25.6	13.3	39.8



Instrument :
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ClientSampleId :
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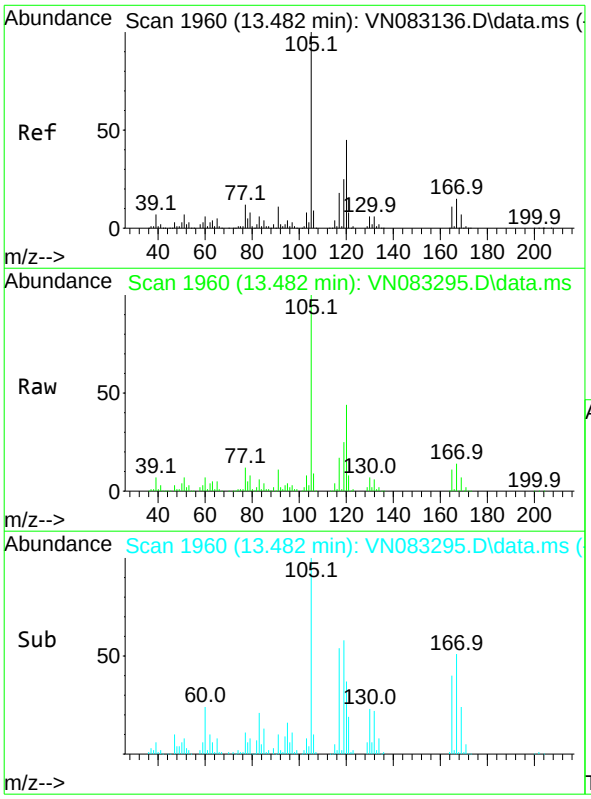
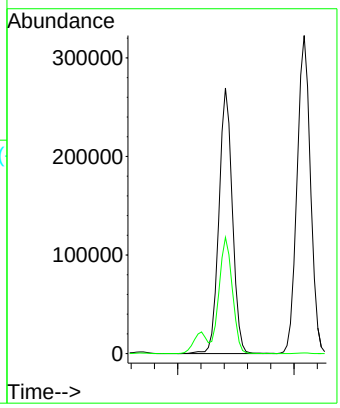
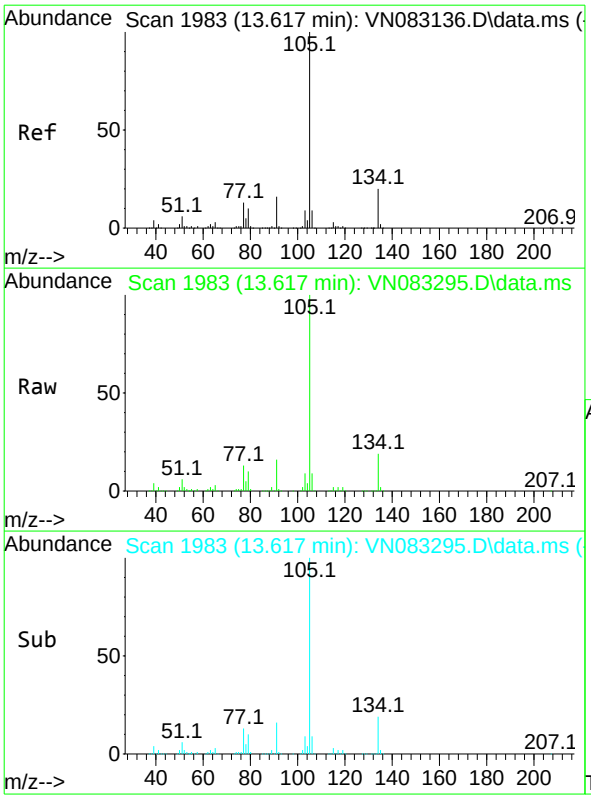


#84
1,2,4-Trimethylbenzene
Concen: 49.723 ug/l
RT: 13.482 min Scan# 1960
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion:105 Resp: 430444

Ion	Ratio	Lower	Upper
105	100		
120	43.7	21.9	65.8

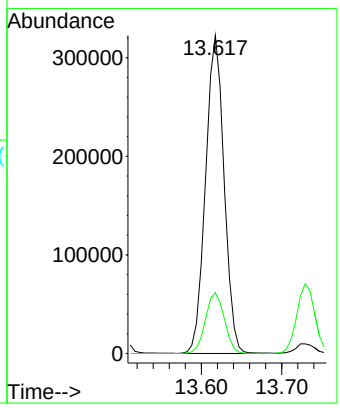




#85
sec-Butylbenzene
Concen: 49.826 ug/l
RT: 13.617 min Scan# 19
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion:105 Resp: 517202

Ion	Ratio	Lower	Upper
105	100		
134	19.5	9.8	29.3



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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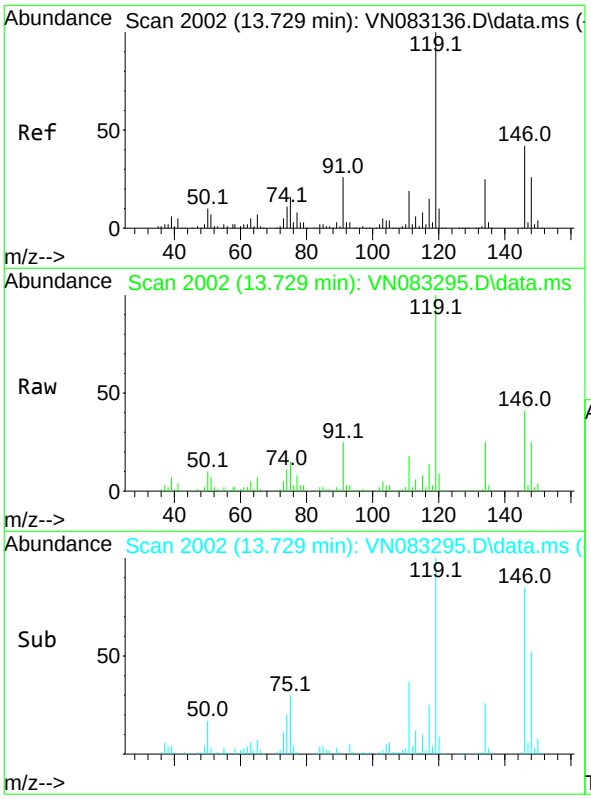
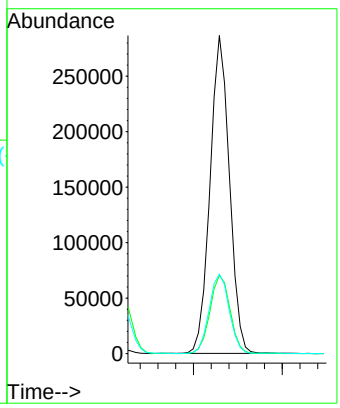
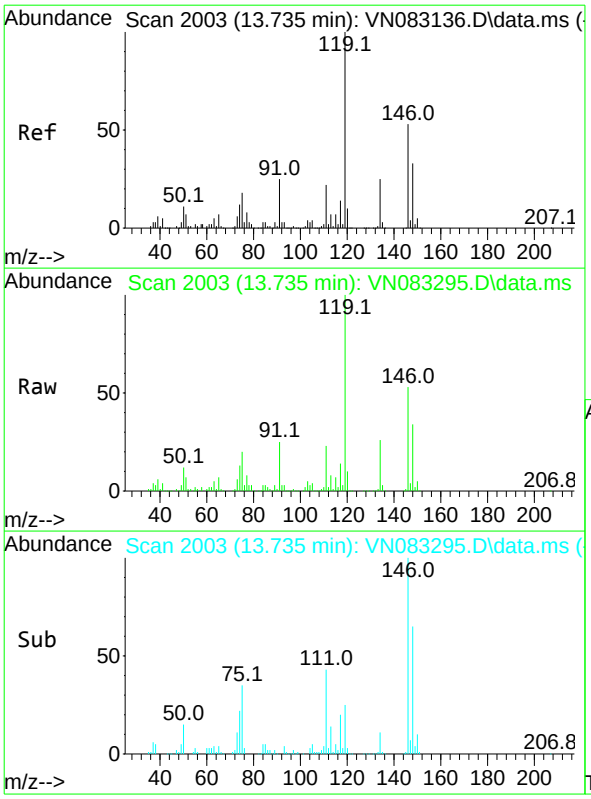


#86
p-Isopropyltoluene
Concen: 50.705 ug/l
RT: 13.729 min Scan# 2002
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion:119 Resp: 434576

Ion	Ratio	Lower	Upper
119	100		
134	25.5	13.0	39.0
91	25.9	12.3	36.9

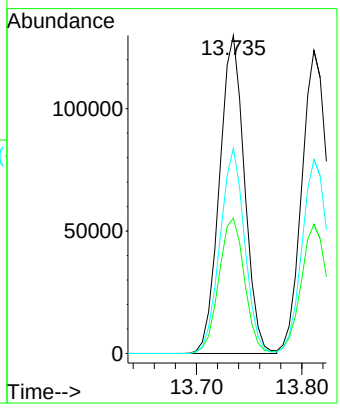




#87
1,3-Dichlorobenzene
Concen: 49.896 ug/l
RT: 13.735 min Scan# 20
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion:146 Resp: 213990

Ion	Ratio	Lower	Upper
146	100		
111	43.6	20.6	61.9
148	63.7	31.8	95.3



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

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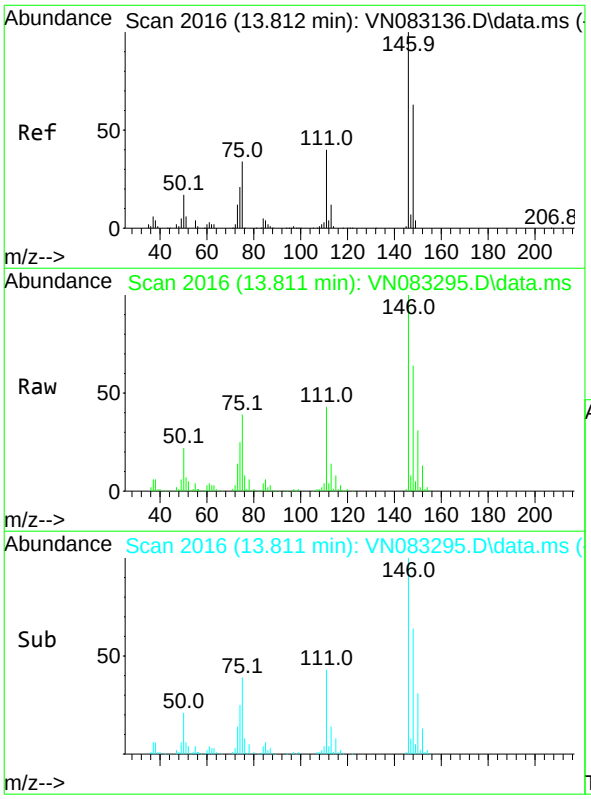
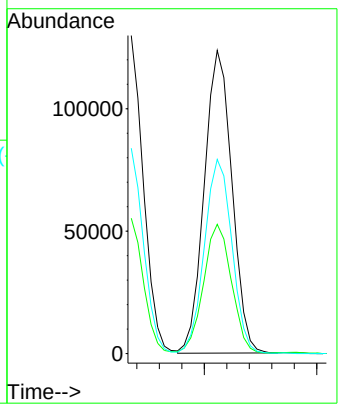
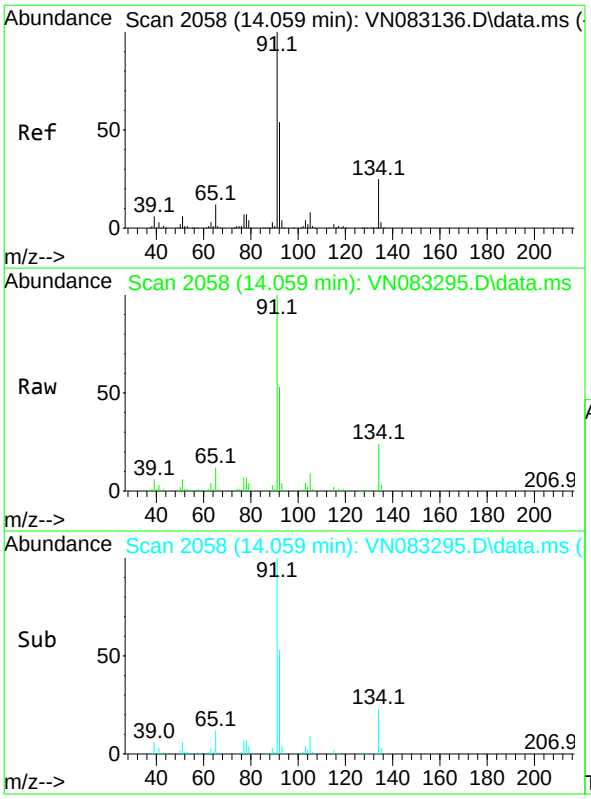


#88
1,4-Dichlorobenzene
Concen: 48.912 ug/l
RT: 13.811 min Scan# 2016
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion:146 Resp: 211478

Ion	Ratio	Lower	Upper
146	100		
111	42.9	20.1	60.3
148	64.0	32.2	96.6

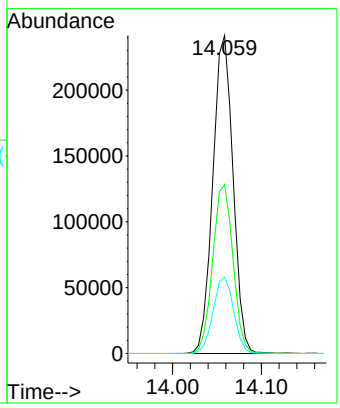




#89
n-Butylbenzene
Concen: 51.464 ug/l
RT: 14.059 min Scan# 20
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 91 Resp: 382193

Ion	Ratio	Lower	Upper
91	100		
92	53.6	26.1	78.3
134	24.5	12.1	36.3



Instrument :
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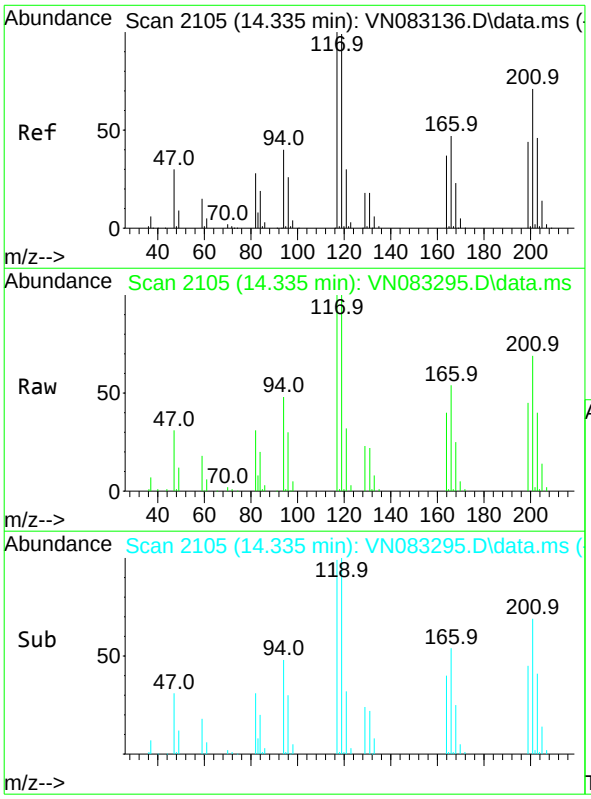
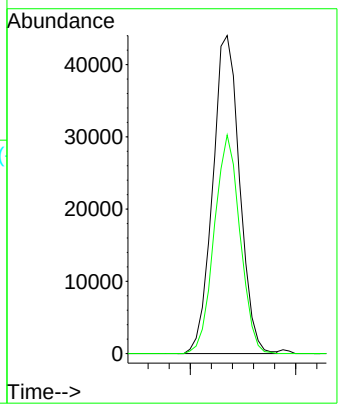
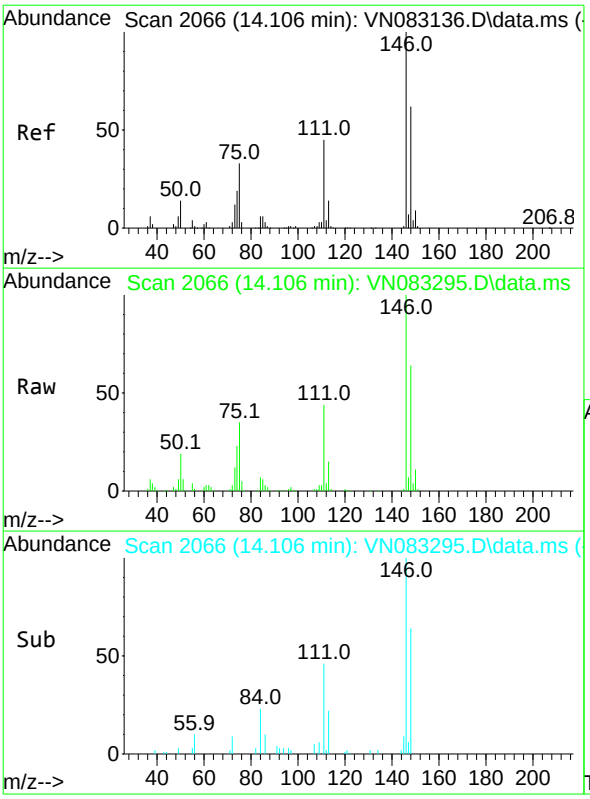


#90
Hexachloroethane
Concen: 47.142 ug/l
RT: 14.335 min Scan# 2105
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion:117 Resp: 78059

Ion	Ratio	Lower	Upper
117	100		
201	65.9	35.8	107.3

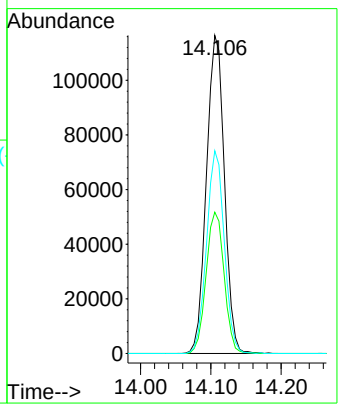




#91
1,2-Dichlorobenzene
Concen: 49.802 ug/l
RT: 14.106 min Scan# 20
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion:146 Resp: 206688

Ion	Ratio	Lower	Upper
146	100		
111	44.6	21.4	64.2
148	62.8	32.1	96.5



Instrument :
MSVOA_N
ClientSampleId :
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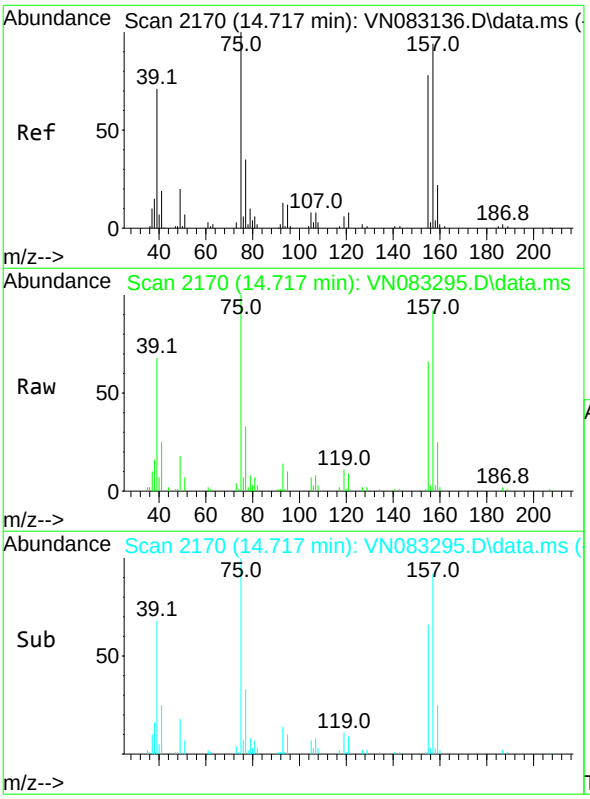
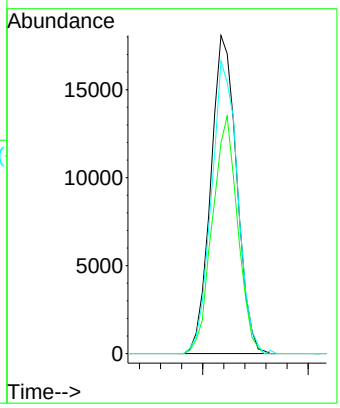
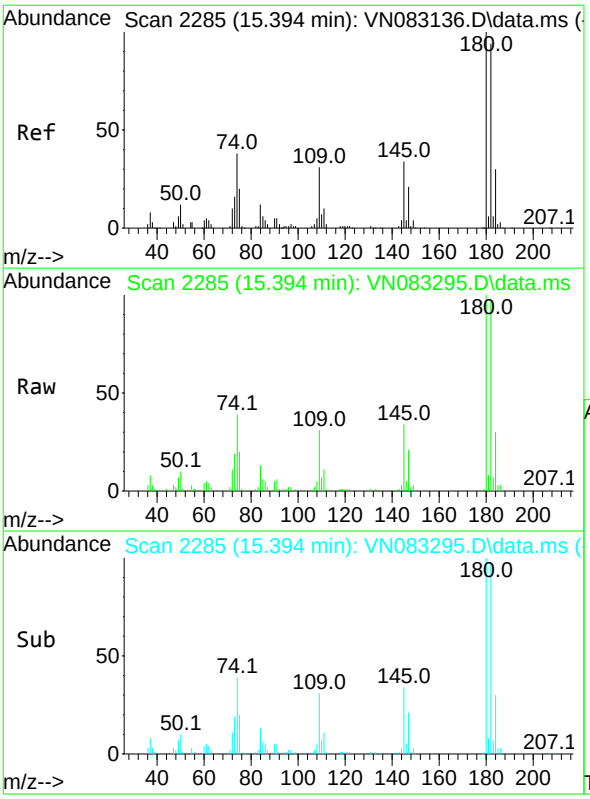


#92
1,2-Dibromo-3-Chloropropane
Concen: 43.813 ug/l
RT: 14.717 min Scan# 2170
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 75 Resp: 30853

Ion	Ratio	Lower	Upper
75	100		
155	72.7	36.6	109.8
157	93.0	46.9	140.6





#93
1,2,4-Trichlorobenzene
Concen: 48.458 ug/l
RT: 15.394 min Scan# 22
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion:180 Resp: 112669

Ion	Ratio	Lower	Upper
180	100		
182	96.4	47.3	141.8
145	34.0	15.7	47.1

Instrument :
MSVOA_N
ClientSampleId :
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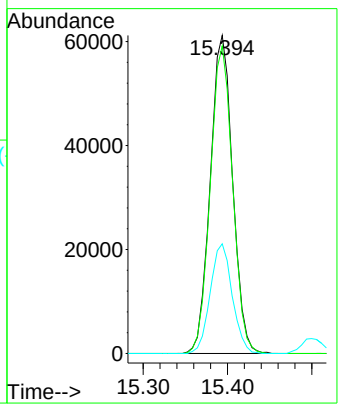
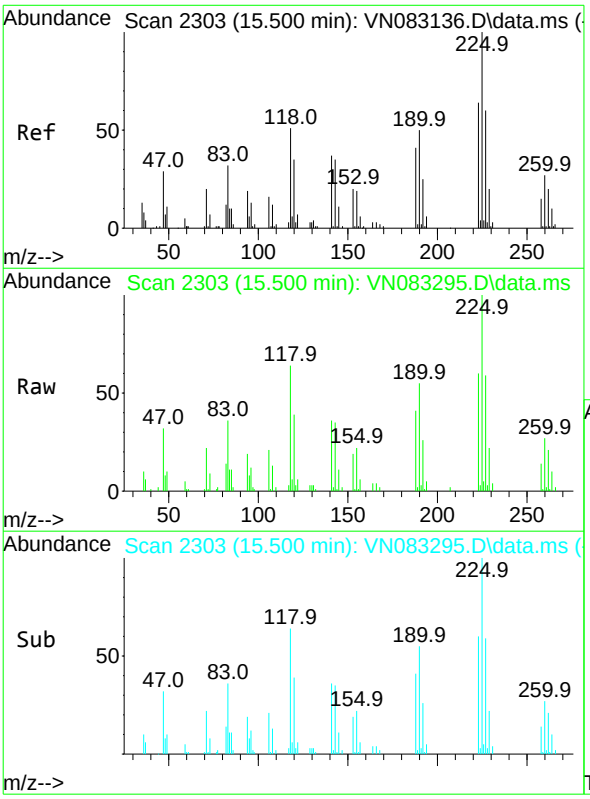
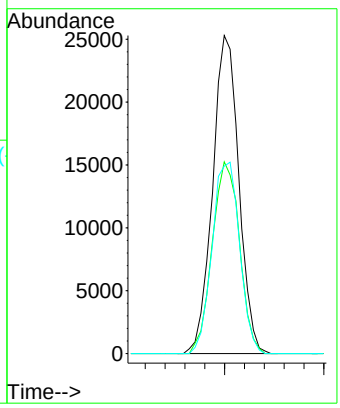


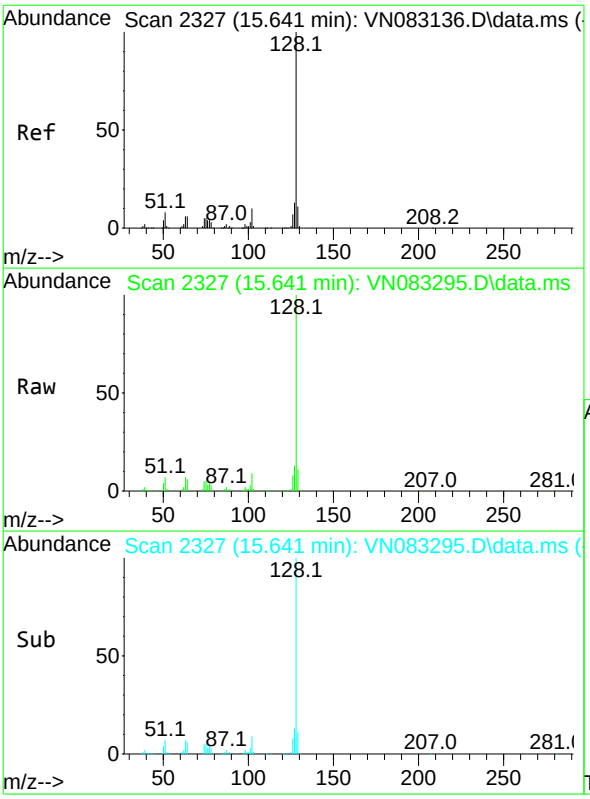


#94
Hexachlorobutadiene
Concen: 44.858 ug/l
RT: 15.500 min Scan# 2303
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion:225 Resp: 46384

Ion	Ratio	Lower	Upper
225	100		
223	62.7	31.9	95.7
227	63.0	32.5	97.5

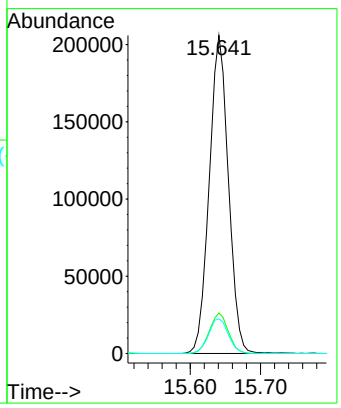




#95
Naphthalene
Concen: 47.278 ug/l
RT: 15.641 min Scan# 23
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion:128 Resp: 389373

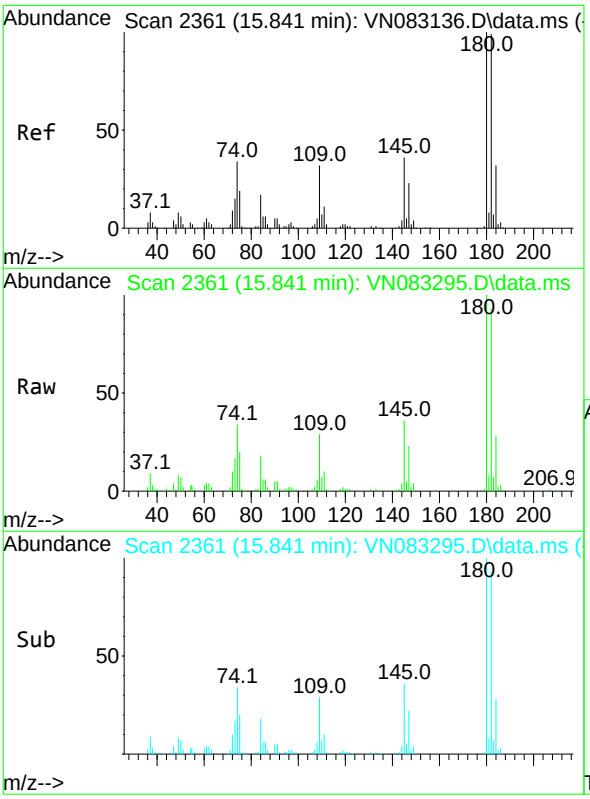
Ion	Ratio	Lower	Upper
128	100		
127	12.6	10.6	16.0
129	11.3	8.6	12.8



Instrument :
MSVOA_N
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

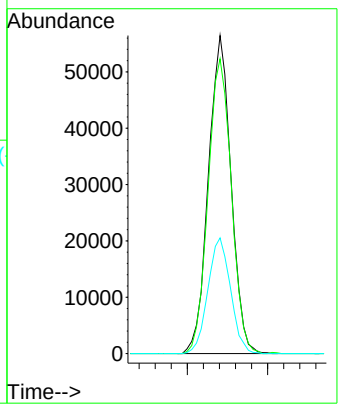
Reviewed By :Mahesh Dadoda 08/15/2024
Supervised By :Semsettin Yesilyurt 08/15/2024



#96
1,2,3-Trichlorobenzene
Concen: 48.043 ug/l
RT: 15.841 min Scan# 2361
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion:180 Resp: 110529

Ion	Ratio	Lower	Upper
180	100		
182	95.1	48.9	146.8
145	36.3	16.8	50.4



Evaluate Continuing Calibration Report

Sample Results: **VN083295.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081424\
Data File : VN083295.D
Acq On : 14 Aug 2024 12:41
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Quant Time: Aug 14 23:14:20 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	81	0.00
2	T	Dichlorodifluoromethane	0.567	0.535	5.6	76	0.00
3	P	Chloromethane	0.581	0.541	6.9	74	0.00
4	C	Vinyl Chloride	0.592	0.580	2.0#	78	0.00
5	T	Bromomethane	0.368	0.326	11.4	74	0.00
6	T	Chloroethane	0.371	0.373	-0.5	85	0.00
7	T	Trichlorofluoromethane	0.979	1.026	-4.8	83	0.00
8	T	Diethyl Ether	0.364	0.348	4.4	77	0.00
9	T	1,1,2-Trichlorotrifluoroeth	0.539	0.554	-2.8	82	0.00
10	T	Methyl Iodide	0.710	0.585	17.6	64	0.00
11	T	Tert butyl alcohol	0.148	0.148	0.0	82	0.00
12	CM	1,1-Dichloroethene	0.554	0.521	6.0#	77	0.00
13	T	Acrolein	0.096	0.092	4.2	73	0.00
14	T	Allyl chloride	1.047	0.966	7.7	84	0.00
15	T	Acrylonitrile	0.304	0.295	3.0	78	0.00
16	T	Acetone	0.278	0.244	12.2	69	0.00
17	T	Carbon Disulfide	1.622	1.333	17.8	69	0.00
18	T	Methyl Acetate	0.830	0.827	0.4	86	0.00
19	T	Methyl tert-butyl Ether	2.001	2.005	-0.2	80	0.00
20	T	Methylene Chloride	0.641	0.596	7.0	80	0.00
21	T	trans-1,2-Dichloroethene	0.573	0.543	5.2	76	-0.01
22	T	Diisopropyl ether	1.969	2.006	-1.9	81	0.00
23	T	Vinyl Acetate	2.018	2.204	-9.2	85	0.00
24	P	1,1-Dichloroethane	1.073	1.095	-2.1	82	0.00
25	T	2-Butanone	0.428	0.402	6.1	76	0.00
26	T	2,2-Dichloropropane	0.997	0.934	6.3	74	0.00
27	T	cis-1,2-Dichloroethene	0.691	0.680	1.6	80	0.00
28	T	Bromochloromethane	0.439	0.439	0.0	81	0.00
29	T	Tetrahydrofuran	0.276	0.257	6.9	74	0.00
30	C	Chloroform	1.115	1.186	-6.4#	84	0.00
31	T	Cyclohexane	1.055	0.966	8.4	79	0.00
32	T	1,1,1-Trichloroethane	1.055	1.088	-3.1	82	0.00
33	S	1,2-Dichloroethane-d4	0.712	0.742	-4.2	80	0.00
34	I	1,4-Difluorobenzene	1.000	1.000	0.0	81	0.00
35	S	Dibromofluoromethane	0.312	0.320	-2.6	78	0.00
36	T	1,1-Dichloropropene	0.472	0.475	-0.6	81	0.00
37	T	Ethyl Acetate	0.529	0.486	8.1	79	0.00
38	T	Carbon Tetrachloride	0.532	0.548	-3.0	81	0.00
39	T	Methylcyclohexane	0.580	0.559	3.6	76	0.00
40	TM	Benzene	1.406	1.433	-1.9	80	0.00
41	T	Methacrylonitrile	0.301	0.277	8.0	79	0.00
42	TM	1,2-Dichloroethane	0.512	0.547	-6.8	85	0.00
43	T	Isopropyl Acetate	1.211	0.895	26.1#	79	0.00
44	TM	Trichloroethene	0.335	0.341	-1.8	80	0.00
45	C	1,2-Dichloropropane	0.334	0.354	-6.0#	83	0.00
46	T	Dibromomethane	0.239	0.256	-7.1	83	0.00
47	T	Bromodichloromethane	0.537	0.551	-2.6	83	0.00
48	T	Methyl methacrylate	0.437	0.416	4.8	79	0.00

Sample Results: **VN083295.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081424\
Data File : VN083295.D
Acq On : 14 Aug 2024 12:41
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Quant Time: Aug 14 23:14:20 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49	T	1,4-Dioxane	0.008	0.008	0.0	75	0.00
50	S	Toluene-d8	1.164	1.193	-2.5	77	0.00
51	T	4-Methyl-2-Pentanone	0.500	0.506	-1.2	79	0.00
52	CM	Toluene	0.889	0.921	-3.6#	81	0.00
53	T	t-1,3-Dichloropropene	0.551	0.572	-3.8	78	0.00
54	T	cis-1,3-Dichloropropene	0.586	0.595	-1.5	80	0.00
55	T	1,1,2-Trichloroethane	0.318	0.338	-6.3	82	0.00
56	T	Ethyl methacrylate	0.600	0.610	-1.7	79	0.00
57	T	1,3-Dichloropropane	0.568	0.600	-5.6	82	0.00
58	T	2-Chloroethyl Vinyl ether	0.254	0.258	-1.6	80	0.00
59	T	2-Hexanone	0.387	0.377	2.6	77	0.00
60	T	Dibromochloromethane	0.385	0.416	-8.1	82	0.00
61	T	1,2-Dibromoethane	0.335	0.345	-3.0	81	0.00
62	S	4-Bromofluorobenzene	0.454	0.479	-5.5	79	0.00
63	I	Chlorobenzene-d5	1.000	1.000	0.0	83	0.00
64	T	Tetrachloroethene	0.331	0.333	-0.6	80	0.00
65	PM	Chlorobenzene	1.105	1.119	-1.3	81	0.00
66	T	1,1,1,2-Tetrachloroethane	0.390	0.397	-1.8	82	0.00
67	C	Ethyl Benzene	2.027	2.073	-2.3#	83	0.00
68	T	m/p-Xylenes	0.759	0.775	-2.1	81	0.00
69	T	o-Xylene	0.749	0.756	-0.9	81	0.00
70	T	Styrene	1.258	1.305	-3.7	81	0.00
71	P	Bromoform	0.295	0.297	-0.7	77	0.00
72	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	86	0.00
73	T	Isopropylbenzene	4.182	4.049	3.2	81	0.00
74	T	N-amyl acetate	2.046	1.826	10.8	78	0.00
75	P	1,1,2,2-Tetrachloroethane	1.183	1.143	3.4	84	0.00
76	T	1,2,3-Trichloropropane	1.097	1.045	4.7	84	0.00
77	T	Bromobenzene	0.929	0.923	0.6	82	0.00
78	T	n-propylbenzene	4.816	4.810	0.1	83	0.00
79	T	2-Chlorotoluene	3.053	3.000	1.7	83	0.00
80	T	1,3,5-Trimethylbenzene	3.501	3.489	0.3	83	0.00
81	T	trans-1,4-Dichloro-2-butene	0.504	0.464	7.9	80	0.00
82	T	4-Chlorotoluene	3.062	2.969	3.0	82	0.00
83	T	tert-Butylbenzene	3.101	3.030	2.3	82	0.00
84	T	1,2,4-Trimethylbenzene	3.529	3.509	0.6	82	0.00
85	T	sec-Butylbenzene	4.231	4.216	0.4	82	0.00
86	T	p-Isopropyltoluene	3.493	3.543	-1.4	82	0.00
87	T	1,3-Dichlorobenzene	1.748	1.744	0.2	84	0.00
88	T	1,4-Dichlorobenzene	1.762	1.724	2.2	83	0.00
89	T	n-Butylbenzene	3.027	3.116	-2.9	83	0.00
90	T	Hexachloroethane	0.675	0.636	5.8	79	0.00
91	T	1,2-Dichlorobenzene	1.692	1.685	0.4	85	0.00
92	T	1,2-Dibromo-3-Chloropropane	0.287	0.252	12.2	76	0.00
93	T	1,2,4-Trichlorobenzene	0.948	0.918	3.2	80	0.00
94	T	Hexachlorobutadiene	0.421	0.378	10.2	79	0.00
95	T	Naphthalene	3.357	3.174	5.5	78	0.00

Sample Results: **VN083295.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081424\
Data File : VN083295.D
Acq On : 14 Aug 2024 12:41
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Quant Time: Aug 14 23:14:20 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
96 T	1,2,3-Trichlorobenzene	0.938	0.901	3.9	80	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 6

Sample Results: **VN083295.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081424\
Data File : VN083295.D
Acq On : 14 Aug 2024 12:41
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Quant Time: Aug 14 23:14:20 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	50.000	50.000	0.0	81	0.00
2	T	Dichlorodifluoromethane	50.000	47.158	5.7	76	0.00
3	P	Chloromethane	50.000	46.562	6.9	74	0.00
4	C	Vinyl Chloride	50.000	48.983	2.0#	78	0.00
5	T	Bromomethane	50.000	44.339	11.3	74	0.00
6	T	Chloroethane	50.000	50.266	-0.5	85	0.00
7	T	Trichlorofluoromethane	50.000	52.421	-4.8	83	0.00
8	T	Diethyl Ether	50.000	47.827	4.3	77	0.00
9	T	1,1,2-Trichlorotrifluoroeth	50.000	51.366	-2.7	82	0.00
10	T	Methyl Iodide	50.000	41.205	17.6	64	0.00
11	T	Tert butyl alcohol	250.000	250.960	-0.4	82	0.00
12	CM	1,1-Dichloroethene	50.000	46.996	6.0#	77	0.00
13	T	Acrolein	250.000	239.443	4.2	73	0.00
14	T	Allyl chloride	50.000	46.115	7.8	84	0.00
15	T	Acrylonitrile	250.000	242.760	2.9	78	0.00
16	T	Acetone	250.000	219.394	12.2	69	0.00
17	T	Carbon Disulfide	50.000	41.102	17.8	69	0.00
18	T	Methyl Acetate	50.000	49.826	0.3	86	0.00
19	T	Methyl tert-butyl Ether	50.000	50.114	-0.2	80	0.00
20	T	Methylene Chloride	50.000	46.513	7.0	80	0.00
21	T	trans-1,2-Dichloroethene	50.000	47.417	5.2	76	-0.01
22	T	Diisopropyl ether	50.000	50.939	-1.9	81	0.00
23	T	Vinyl Acetate	250.000	273.001	-9.2	85	0.00
24	P	1,1-Dichloroethane	50.000	51.002	-2.0	82	0.00
25	T	2-Butanone	250.000	234.803	6.1	76	0.00
26	T	2,2-Dichloropropane	50.000	46.878	6.2	74	0.00
27	T	cis-1,2-Dichloroethene	50.000	49.219	1.6	80	0.00
28	T	Bromochloromethane	50.000	50.022	-0.0	81	0.00
29	T	Tetrahydrofuran	250.000	232.605	7.0	74	0.00
30	C	Chloroform	50.000	53.171	-6.3#	84	0.00
31	T	Cyclohexane	50.000	45.816	8.4	79	0.00
32	T	1,1,1-Trichloroethane	50.000	51.554	-3.1	82	0.00
33	S	1,2-Dichloroethane-d4	50.000	52.129	-4.3	80	0.00
34	I	1,4-Difluorobenzene	50.000	50.000	0.0	81	0.00
35	S	Dibromofluoromethane	50.000	51.194	-2.4	78	0.00
36	T	1,1-Dichloropropene	50.000	50.312	-0.6	81	0.00
37	T	Ethyl Acetate	50.000	45.975	8.0	79	0.00
38	T	Carbon Tetrachloride	50.000	51.545	-3.1	81	0.00
39	T	Methylcyclohexane	50.000	48.172	3.7	76	0.00
40	TM	Benzene	50.000	50.937	-1.9	80	0.00
41	T	Methacrylonitrile	50.000	46.068	7.9	79	0.00
42	TM	1,2-Dichloroethane	50.000	53.374	-6.7	85	0.00
43	T	Isopropyl Acetate	50.000	48.708	2.6	79	0.00
44	TM	Trichloroethene	50.000	50.883	-1.8	80	0.00
45	C	1,2-Dichloropropane	50.000	53.038	-6.1#	83	0.00
46	T	Dibromomethane	50.000	53.530	-7.1	83	0.00
47	T	Bromodichloromethane	50.000	51.369	-2.7	83	0.00
48	T	Methyl methacrylate	50.000	47.618	4.8	79	0.00

Sample Results: **VN083295.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081424\
Data File : VN083295.D
Acq On : 14 Aug 2024 12:41
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Quant Time: Aug 14 23:14:20 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
49	T	1,4-Dioxane	1000.000	960.872	3.9	75	0.00
50	S	Toluene-d8	50.000	51.234	-2.5	77	0.00
51	T	4-Methyl-2-Pentanone	250.000	253.043	-1.2	79	0.00
52	CM	Toluene	50.000	51.813	-3.6#	81	0.00
53	T	t-1,3-Dichloropropene	50.000	51.915	-3.8	78	0.00
54	T	cis-1,3-Dichloropropene	50.000	50.753	-1.5	80	0.00
55	T	1,1,2-Trichloroethane	50.000	53.110	-6.2	82	0.00
56	T	Ethyl methacrylate	50.000	50.792	-1.6	79	0.00
57	T	1,3-Dichloropropane	50.000	52.864	-5.7	82	0.00
58	T	2-Chloroethyl Vinyl ether	250.000	253.780	-1.5	80	0.00
59	T	2-Hexanone	250.000	243.668	2.5	77	0.00
60	T	Dibromochloromethane	50.000	54.062	-8.1	82	0.00
61	T	1,2-Dibromoethane	50.000	51.595	-3.2	81	0.00
62	S	4-Bromofluorobenzene	50.000	52.757	-5.5	79	0.00
63	I	Chlorobenzene-d5	50.000	50.000	0.0	83	0.00
64	T	Tetrachloroethene	50.000	50.230	-0.5	80	0.00
65	PM	Chlorobenzene	50.000	50.640	-1.3	81	0.00
66	T	1,1,1,2-Tetrachloroethane	50.000	50.961	-1.9	82	0.00
67	C	Ethyl Benzene	50.000	51.124	-2.2#	83	0.00
68	T	m/p-Xylenes	100.000	102.048	-2.0	81	0.00
69	T	o-Xylene	50.000	50.450	-0.9	81	0.00
70	T	Styrene	50.000	51.874	-3.7	81	0.00
71	P	Bromoform	50.000	50.218	-0.4	77	0.00
72	I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	86	0.00
73	T	Isopropylbenzene	50.000	48.403	3.2	81	0.00
74	T	N-amyl acetate	50.000	44.635	10.7	78	0.00
75	P	1,1,2,2-Tetrachloroethane	50.000	48.328	3.3	84	0.00
76	T	1,2,3-Trichloropropane	50.000	47.602	4.8	84	0.00
77	T	Bromobenzene	50.000	49.656	0.7	82	0.00
78	T	n-propylbenzene	50.000	49.938	0.1	83	0.00
79	T	2-Chlorotoluene	50.000	49.125	1.8	83	0.00
80	T	1,3,5-Trimethylbenzene	50.000	49.829	0.3	83	0.00
81	T	trans-1,4-Dichloro-2-butene	50.000	45.962	8.1	80	0.00
82	T	4-Chlorotoluene	50.000	48.468	3.1	82	0.00
83	T	tert-Butylbenzene	50.000	48.866	2.3	82	0.00
84	T	1,2,4-Trimethylbenzene	50.000	49.723	0.6	82	0.00
85	T	sec-Butylbenzene	50.000	49.826	0.3	82	0.00
86	T	p-Isopropyltoluene	50.000	50.705	-1.4	82	0.00
87	T	1,3-Dichlorobenzene	50.000	49.896	0.2	84	0.00
88	T	1,4-Dichlorobenzene	50.000	48.912	2.2	83	0.00
89	T	n-Butylbenzene	50.000	51.464	-2.9	83	0.00
90	T	Hexachloroethane	50.000	47.142	5.7	79	0.00
91	T	1,2-Dichlorobenzene	50.000	49.802	0.4	85	0.00
92	T	1,2-Dibromo-3-Chloropropane	50.000	43.813	12.4	76	0.00
93	T	1,2,4-Trichlorobenzene	50.000	48.458	3.1	80	0.00
94	T	Hexachlorobutadiene	50.000	44.858	10.3	79	0.00
95	T	Naphthalene	50.000	47.278	5.4	78	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081424\
Data File : VN083295.D
Acq On : 14 Aug 2024 12:41
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_N
LabSampleId :
VSTDCCC050

Quant Time: Aug 14 23:14:20 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
96 T	1,2,3-Trichlorobenzene	50.000	48.043	3.9	80	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 6

QC SAMPLE DATA

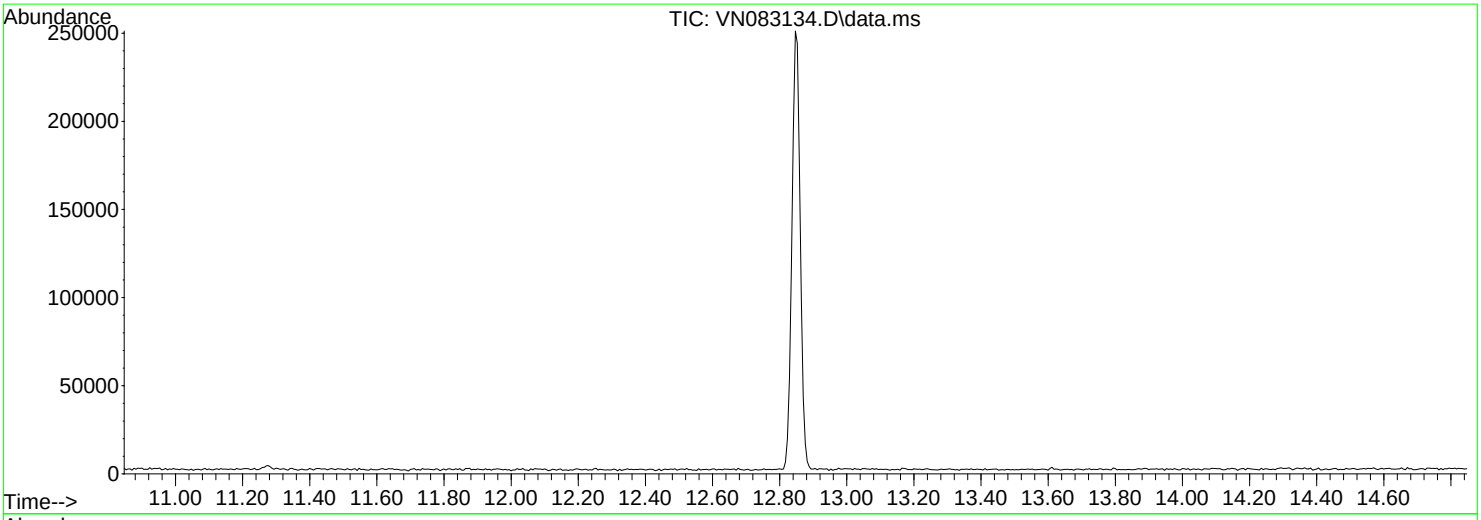
Sample Results: **VN083134.D**

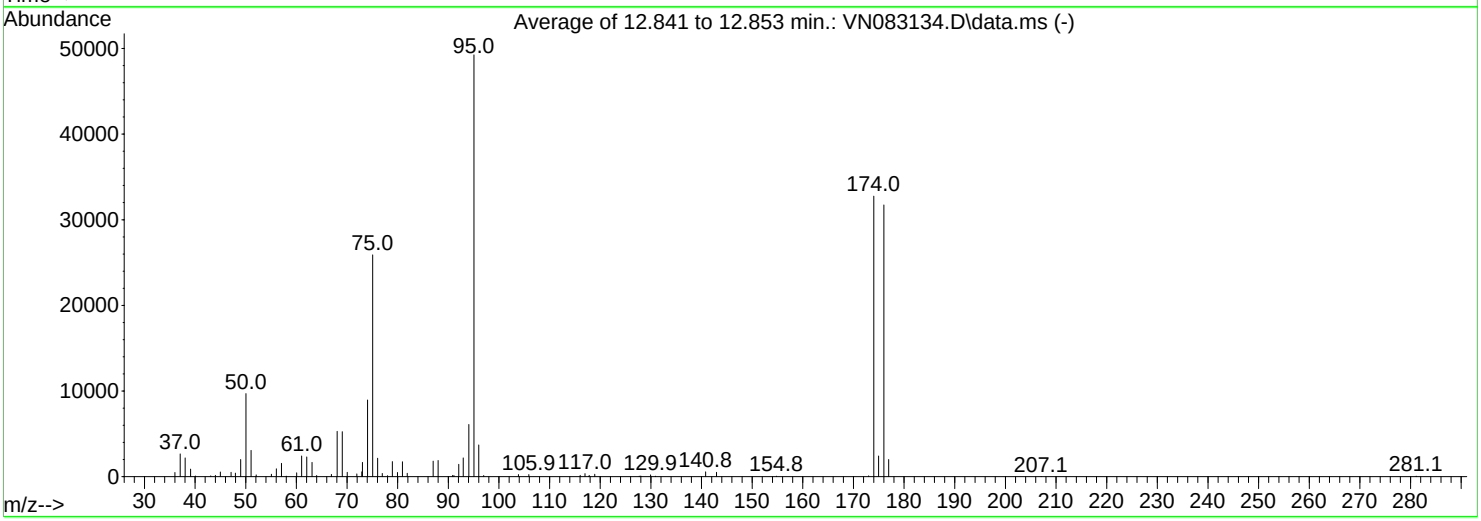
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN080724\
Data File : VN083134.D
Acq On : 07 Aug 2024 10:09
Operator : JC\MD
Sample : BFB
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Title : SW846 8260
Last Update : Thu Aug 08 06:30:41 2024





AutoFind: Scans 1851, 1852, 1853; Background Corrected with Scan 1843

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.7	9690	PASS
75	95	30	60	52.6	25907	PASS
95	95	100	100	100.0	49259	PASS
96	95	5	9	7.5	3697	PASS
173	174	0.00	2	0.3	99	PASS
174	95	50	100	66.5	32749	PASS
175	174	5	9	7.4	2414	PASS
176	174	95	101	96.9	31720	PASS
177	176	5	9	6.3	1999	PASS

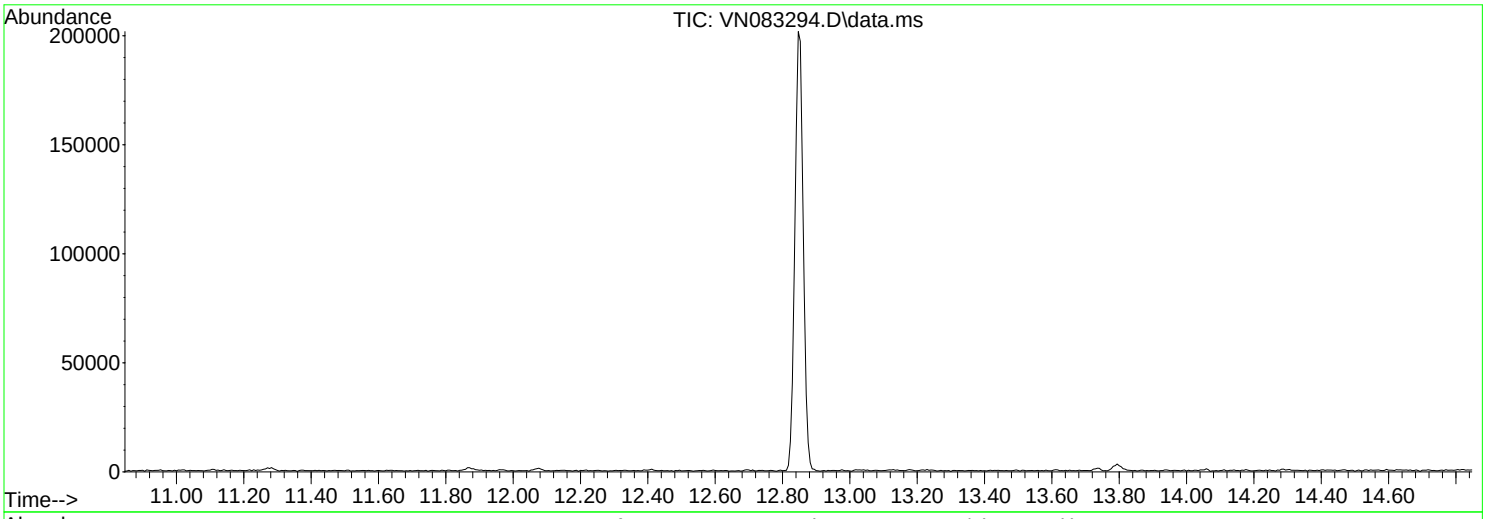
Sample Results: **VN083294.D**

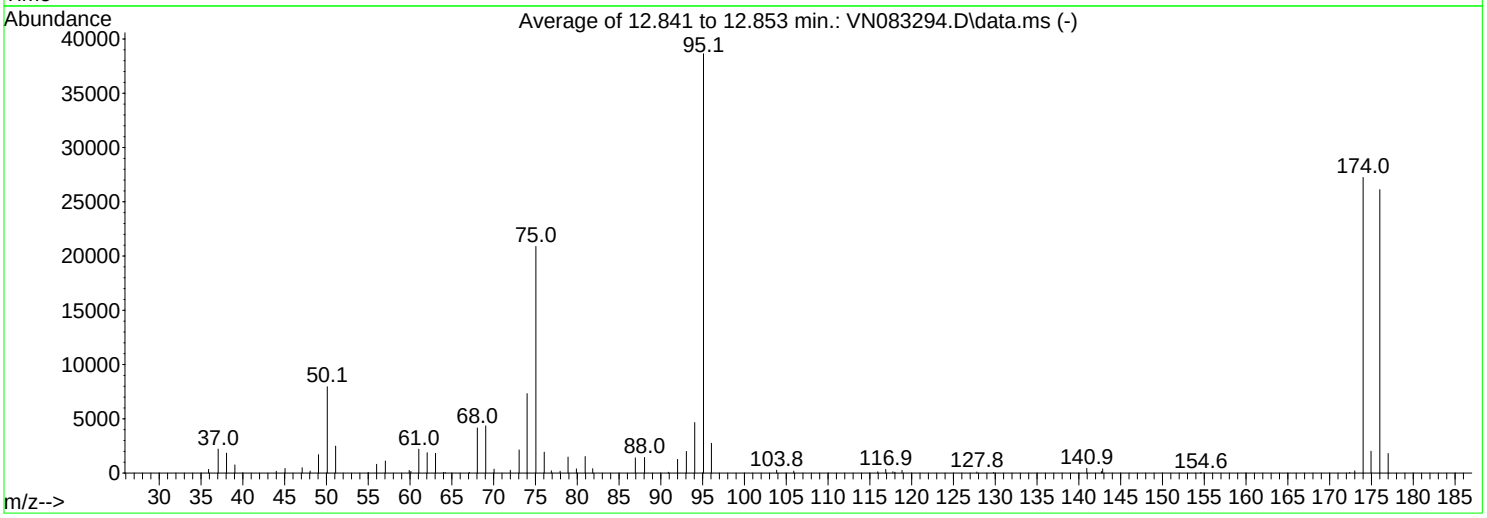
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081424\
Data File : VN083294.D
Acq On : 14 Aug 2024 12:07
Operator : JC\MD
Sample : BFB
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Title : SW846 8260
Last Update : Thu Aug 08 06:30:41 2024





AutoFind: Scans 1851, 1852, 1853; Background Corrected with Scan 1843

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.6	7958	PASS
75	95	30	60	54.1	20891	PASS
95	95	100	100	100.0	38643	PASS
96	95	5	9	7.1	2747	PASS
173	174	0.00	2	0.8	207	PASS
174	95	50	100	70.5	27243	PASS
175	174	5	9	7.4	2019	PASS
176	174	95	101	95.9	26120	PASS
177	176	5	9	6.9	1805	PASS

Raw Data: **VN083297.D**

Alliance TECHNICAL GROUP
284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	
Project:	Former Schlumberger Site Princeton NJ	Date Received:	
Client Sample ID:	VN0814WBL01	SDG No.:	P3609
Lab Sample ID:	VN0814WBL01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group6
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN083297.D	1		08/14/24 13:39	VN081424

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	0.21	U	0.21	1.00	ug/L
74-87-3	Chloromethane	0.35	U	0.35	1.00	ug/L
75-01-4	Vinyl Chloride	0.34	U	0.34	1.00	ug/L
74-83-9	Bromomethane	1.40	U	1.40	5.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.25	U	0.25	1.00	ug/L
67-64-1	Acetone	1.40	U	1.40	5.00	ug/L
75-15-0	Carbon Disulfide	0.32	U	0.32	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	0.16	U	0.16	1.00	ug/L
75-09-2	Methylene Chloride	0.32	U	0.32	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	0.25	U	0.25	1.00	ug/L
110-82-7	Cyclohexane	1.60	U	1.60	5.00	ug/L
78-93-3	2-Butanone	1.30	U	1.30	5.00	ug/L
56-23-5	Carbon Tetrachloride	0.25	U	0.25	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	0.25	U	0.25	1.00	ug/L
67-66-3	Chloroform	0.26	U	0.26	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	0.19	U	0.19	1.00	ug/L
108-87-2	Methylcyclohexane	0.19	U	0.19	1.00	ug/L
71-43-2	Benzene	0.16	U	0.16	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.24	U	0.24	1.00	ug/L
79-01-6	Trichloroethene	0.32	U	0.32	1.00	ug/L
75-27-4	Bromodichloromethane	0.24	U	0.24	1.00	ug/L
108-88-3	Toluene	0.18	U	0.18	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	0.21	U	0.21	1.00	ug/L
124-48-1	Dibromochloromethane	0.18	U	0.18	1.00	ug/L
127-18-4	Tetrachloroethene	0.25	U	0.25	1.00	ug/L
108-90-7	Chlorobenzene	0.13	U	0.13	1.00	ug/L
100-41-4	Ethyl Benzene	0.16	U	0.16	1.00	ug/L
179601-23-1	m/p-Xylenes	0.31	U	0.31	2.00	ug/L
1330-20-7	Total Xylenes	0.45	U	0.45	3.00	ug/L
95-47-6	o-Xylene	0.14	U	0.14	1.00	ug/L

Alliance TECHNICAL GROUP
284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	
Project:	Former Schlumberger Site Princeton NJ	Date Received:	
Client Sample ID:	VN0814WBL01	SDG No.:	P3609
Lab Sample ID:	VN0814WBL01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group6
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN083297.D	1		08/14/24 13:39	VN081424

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
98-82-8	Isopropylbenzene	0.13	U	0.13	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.27	U	0.27	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.19	U	0.19	1.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	55.6		70 (74) - 130 (125)	111%	SPK: 50
1868-53-7	Dibromofluoromethane	53.1		70 (75) - 130 (124)	106%	SPK: 50
2037-26-5	Toluene-d8	54.2		70 (86) - 130 (113)	108%	SPK: 50
460-00-4	4-Bromofluorobenzene	56.3		70 (77) - 130 (121)	113%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	145000	8.23			
540-36-3	1,4-Difluorobenzene	277000	9.1			
3114-55-4	Chlorobenzene-d5	287000	11.865			
3855-82-1	1,4-Dichlorobenzene-d4	128000	13.794			

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

Sample Results: **VN083297.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081424\
Data File : VN083297.D
Acq On : 14 Aug 2024 13:39
Operator : JC\MD
Sample : VN0814WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN0814WBL01

Quant Time: Aug 14 23:22:14 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.230	168	145129	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	276647	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	286871	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.794	152	128230	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.582	65	114917	55.630	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 111.260%			
35) Dibromofluoromethane	8.165	113	91714	53.113	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 106.220%			
50) Toluene-d8	10.565	98	349304	54.229	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 108.460%			
62) 4-Bromofluorobenzene	12.847	95	141438	56.323	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 112.640%			

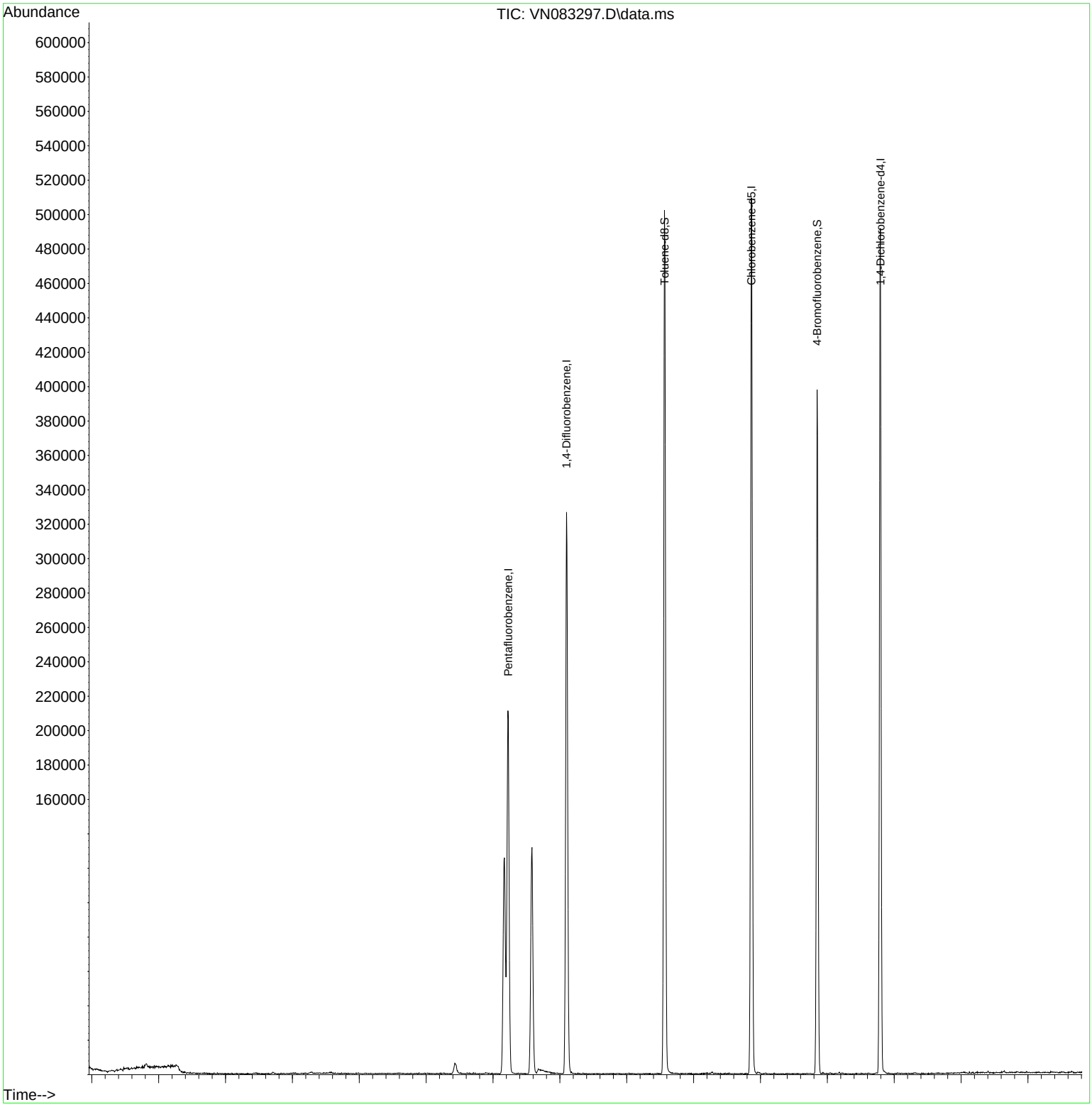
Target Compounds Qvalue

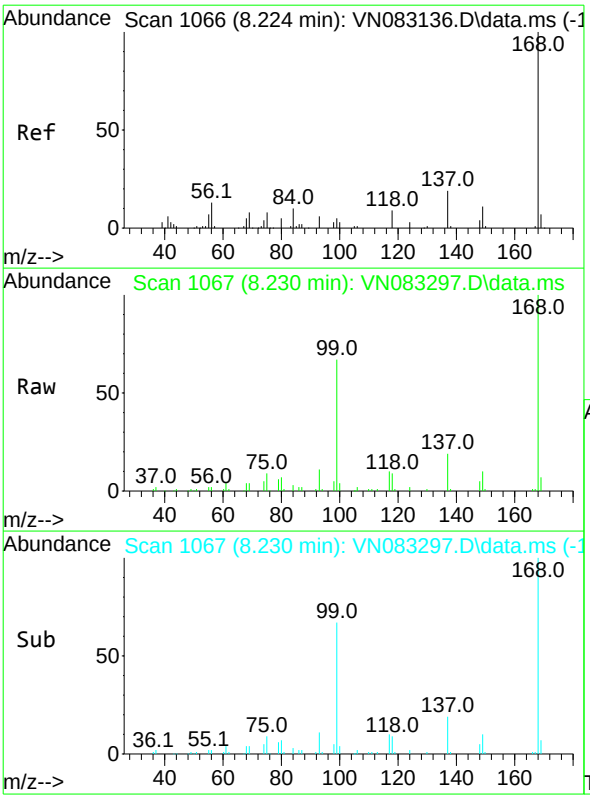
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081424\
Data File : VN083297.D
Acq On : 14 Aug 2024 13:39
Operator : JC\MD
Sample : VN0814WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN0814WBL01

Quant Time: Aug 14 23:22:14 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration



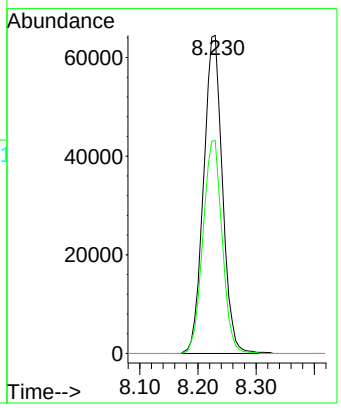


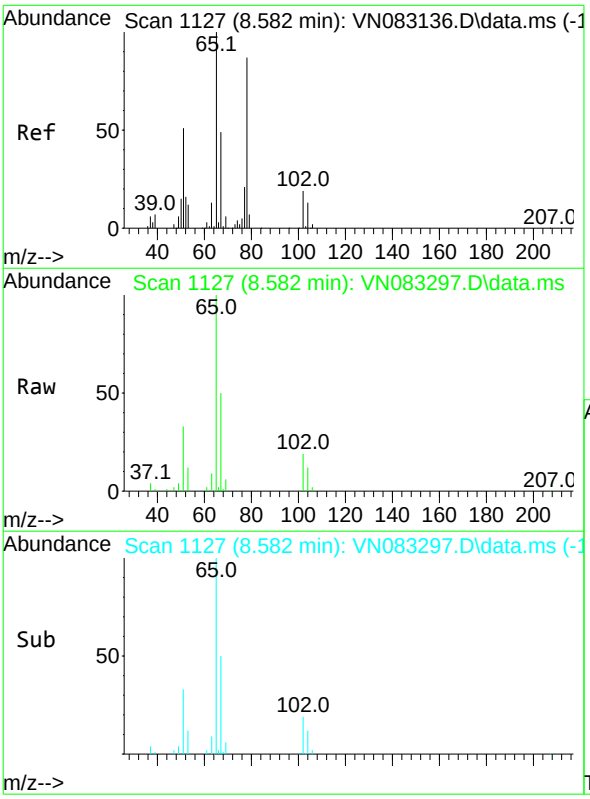
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.230 min Scan# 10
Delta R.T. 0.006 min
Lab File: VN083297.D
Acq: 14 Aug 2024 13:39

Instrument :
MSVOA_N
ClientSampleId :
VN0814WBL01

Tgt Ion:168 Resp: 145129

Ion	Ratio	Lower	Upper
168	100		
99	67.0	48.2	72.4

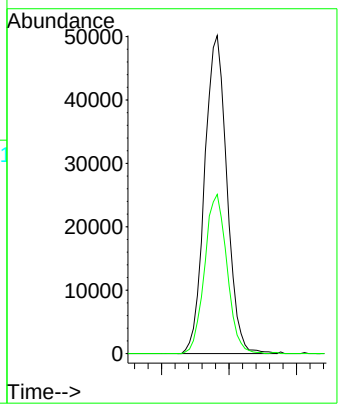


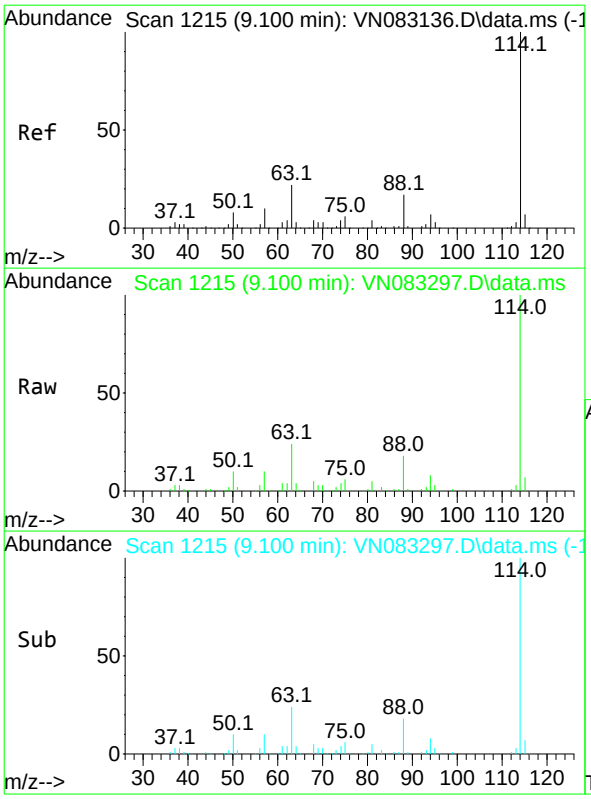


#33
1,2-Dichloroethane-d4
Concen: 55.630 ug/l
RT: 8.582 min Scan# 1127
Delta R.T. 0.000 min
Lab File: VN083297.D
Acq: 14 Aug 2024 13:39

Tgt Ion: 65 Resp: 114917

Ion	Ratio	Lower	Upper
65	100		
67	50.2	0.0	104.4



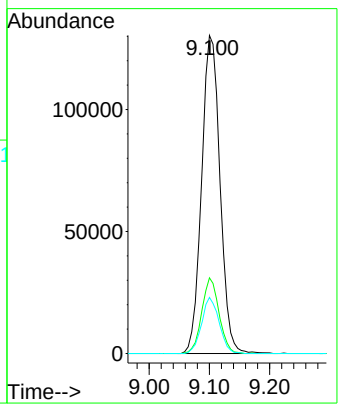


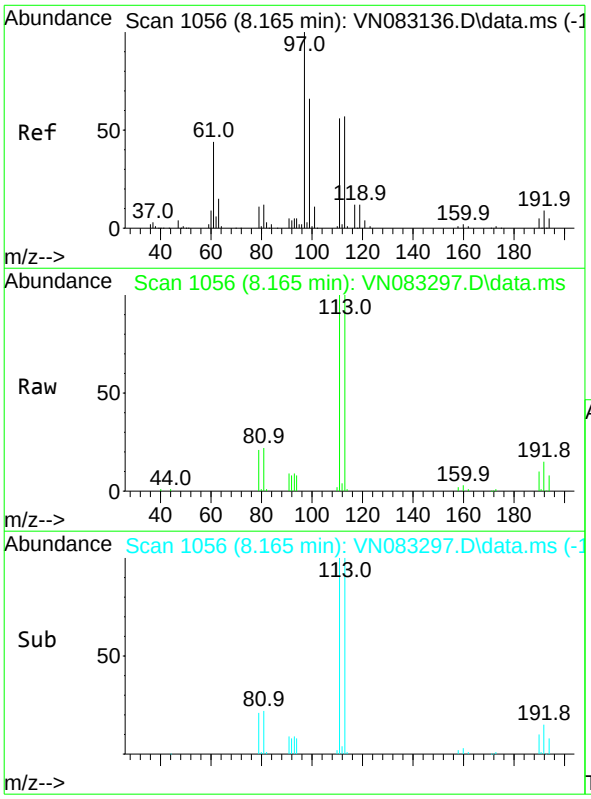
#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 12
Delta R.T. 0.000 min
Lab File: VN083297.D
Acq: 14 Aug 2024 13:39

Instrument :
MSVOA_N
ClientSampleId :
VN0814WBL01

Tgt Ion:114 Resp: 276647

Ion	Ratio	Lower	Upper
114	100		
63	23.8	0.0	44.6
88	17.6	0.0	31.4

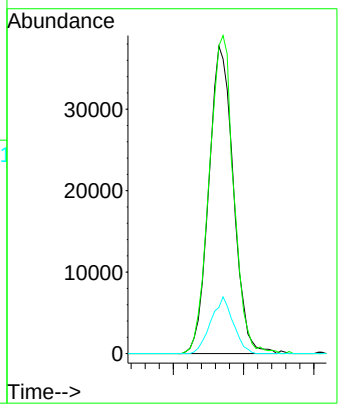


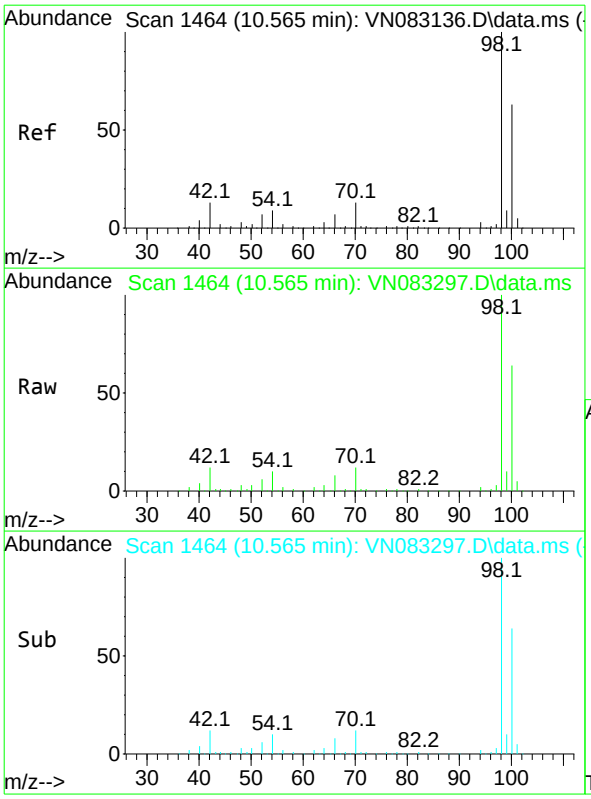


#35
Dibromofluoromethane
Concen: 53.113 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. -0.000 min
Lab File: VN083297.D
Acq: 14 Aug 2024 13:39

Tgt Ion:113 Resp: 91714

Ion	Ratio	Lower	Upper
113	100		
111	102.7	82.4	123.6
192	16.7	14.9	22.3



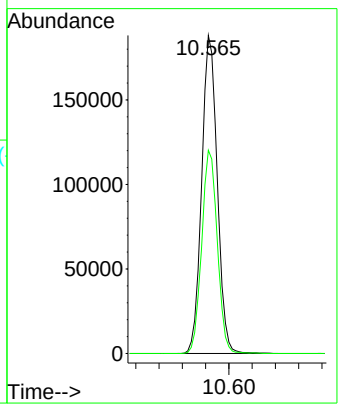


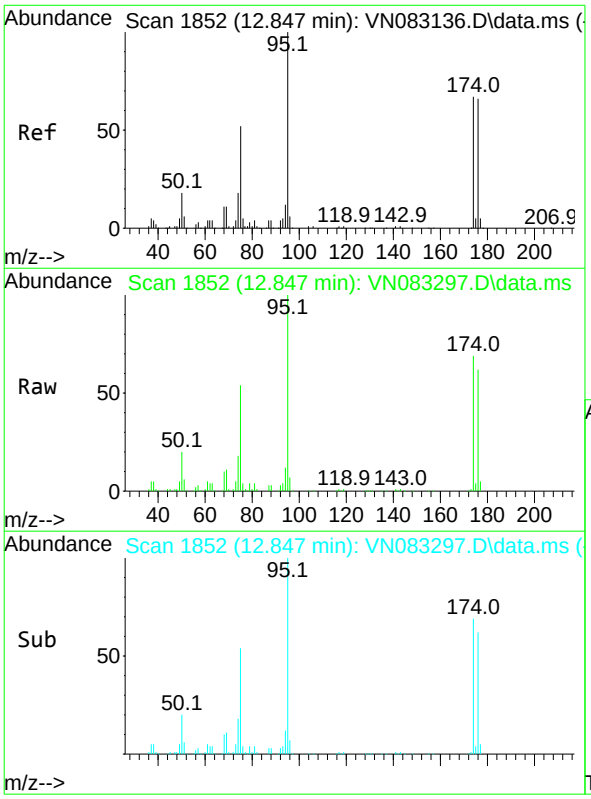
#50
Toluene-d8
Concen: 54.229 ug/l
RT: 10.565 min Scan# 14
Delta R.T. -0.000 min
Lab File: VN083297.D
Acq: 14 Aug 2024 13:39

Instrument :
MSVOA_N
ClientSampleId :
VN0814WBL01

Tgt Ion: 98 Resp: 349304

Ion	Ratio	Lower	Upper
98	100		
100	64.0	51.5	77.3

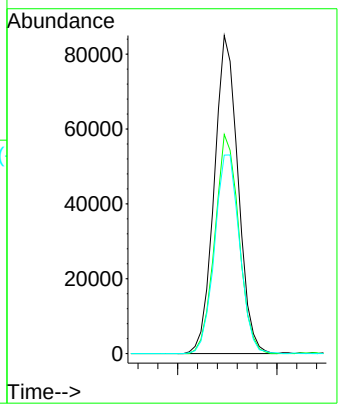


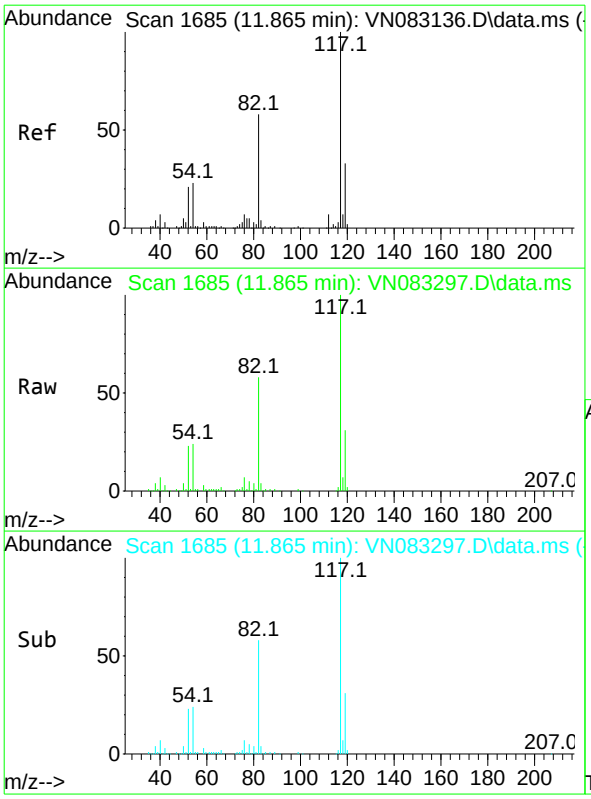


#62
4-Bromofluorobenzene
Concen: 56.323 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. -0.000 min
Lab File: VN083297.D
Acq: 14 Aug 2024 13:39

Tgt Ion: 95 Resp: 141438

Ion	Ratio	Lower	Upper
95	100		
174	69.3	0.0	159.2
176	65.8	0.0	147.6



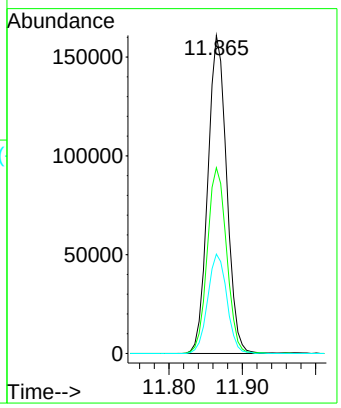


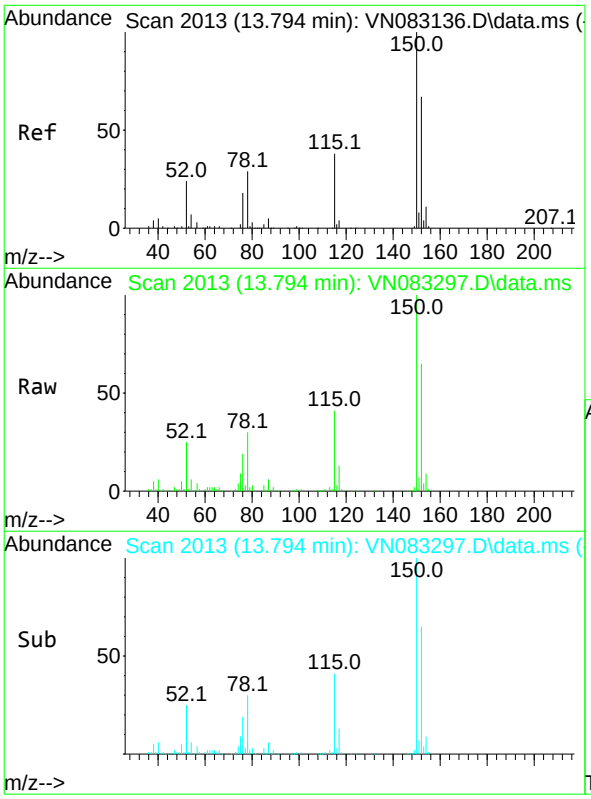
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 16
Delta R.T. 0.000 min
Lab File: VN083297.D
Acq: 14 Aug 2024 13:39

Instrument :
MSVOA_N
ClientSampleId :
VN0814WBL01

Tgt Ion:117 Resp: 286871

Ion	Ratio	Lower	Upper
117	100		
82	58.4	47.5	71.3
119	31.3	25.6	38.4

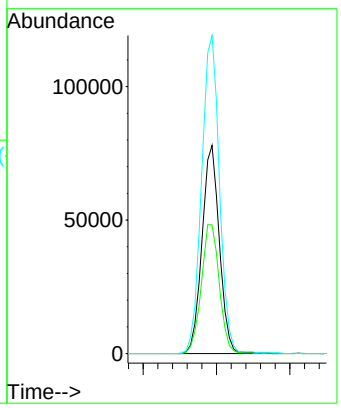




#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.794 min Scan# 2013
Delta R.T. 0.000 min
Lab File: VN083297.D
Acq: 14 Aug 2024 13:39

Tgt Ion:152 Resp: 128230

Ion	Ratio	Lower	Upper
152	100		
115	64.2	30.6	91.6
150	157.1	0.0	348.6



Raw Data: **VN083298.D**

Alliance TECHNICAL GROUP
284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	
Project:	Former Schlumberger Site Princeton NJ	Date Received:	
Client Sample ID:	VN0814WBS01	SDG No.:	P3609
Lab Sample ID:	VN0814WBS01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group6
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN083298.D	1		08/14/24 14:03	VN081424

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	18.6		0.21	1.00	ug/L
74-87-3	Chloromethane	19.1		0.35	1.00	ug/L
75-01-4	Vinyl Chloride	20.2		0.34	1.00	ug/L
74-83-9	Bromomethane	18.6		1.40	5.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	20.8		0.25	1.00	ug/L
67-64-1	Acetone	100		1.40	5.00	ug/L
75-15-0	Carbon Disulfide	16.3		0.32	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	20.0		0.16	1.00	ug/L
75-09-2	Methylene Chloride	19.0		0.32	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	18.7		0.25	1.00	ug/L
110-82-7	Cyclohexane	18.5		1.60	5.00	ug/L
78-93-3	2-Butanone	100		1.30	5.00	ug/L
56-23-5	Carbon Tetrachloride	20.1		0.25	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	19.6		0.25	1.00	ug/L
67-66-3	Chloroform	21.3		0.26	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	20.7		0.19	1.00	ug/L
108-87-2	Methylcyclohexane	18.2		0.19	1.00	ug/L
71-43-2	Benzene	20.4		0.16	1.00	ug/L
107-06-2	1,2-Dichloroethane	21.5		0.24	1.00	ug/L
79-01-6	Trichloroethene	20.1		0.32	1.00	ug/L
75-27-4	Bromodichloromethane	20.7		0.24	1.00	ug/L
108-88-3	Toluene	20.3		0.18	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	21.5		0.21	1.00	ug/L
124-48-1	Dibromochloromethane	20.6		0.18	1.00	ug/L
127-18-4	Tetrachloroethene	19.6		0.25	1.00	ug/L
108-90-7	Chlorobenzene	19.8		0.13	1.00	ug/L
100-41-4	Ethyl Benzene	19.6		0.16	1.00	ug/L
179601-23-1	m/p-Xylenes	38.6		0.31	2.00	ug/L
1330-20-7	Total Xylenes	58.1		0.45	3.00	ug/L
95-47-6	o-Xylene	19.5		0.14	1.00	ug/L

Raw Data: **VN083298.D**

Alliance TECHNICAL GROUP
284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	
Project:	Former Schlumberger Site Princeton NJ	Date Received:	
Client Sample ID:	VN0814WBS01	SDG No.:	P3609
Lab Sample ID:	VN0814WBS01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group6
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN083298.D	1		08/14/24 14:03	VN081424

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
98-82-8	Isopropylbenzene	19.3		0.13	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	19.1		0.27	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	19.1		0.19	1.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	56.3		70 (74) - 130 (125)	113%	SPK: 50
1868-53-7	Dibromofluoromethane	54.0		70 (75) - 130 (124)	108%	SPK: 50
2037-26-5	Toluene-d8	53.1		70 (86) - 130 (113)	106%	SPK: 50
460-00-4	4-Bromofluorobenzene	52.3		70 (77) - 130 (121)	105%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	165000	8.224			
540-36-3	1,4-Difluorobenzene	284000	9.1			
3114-55-4	Chlorobenzene-d5	251000	11.865			
3855-82-1	1,4-Dichlorobenzene-d4	118000	13.794			

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081424\
Data File : VN083298.D
Acq On : 14 Aug 2024 14:03
Operator : JC\MD
Sample : VN0814WBS01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 14 23:22:35 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VN0814WBS01

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 08/15/2024
Supervised By :Semsettin Yesilyurt 08/15/2024

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.224	168	164632	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	284346	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	250581	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.794	152	117869	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.577	65	131834	56.259	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 112.520%			
35) Dibromofluoromethane	8.171	113	95892	54.029	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 108.060%			
50) Toluene-d8	10.565	98	351385	53.075	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 106.160%			
62) 4-Bromofluorobenzene	12.847	95	134979	52.296	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 104.600%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.124	85	34716	18.595	ug/l	97
3) Chloromethane	2.365	50	36577	19.136	ug/l	95
4) Vinyl Chloride	2.512	62	39346	20.174	ug/l	99
5) Bromomethane	2.959	94	22519	18.608	ug/l	90
6) Chloroethane	3.112	64	24904	20.410	ug/l	100
7) Trichlorofluoromethane	3.495	101	66745	20.716	ug/l	93
8) Diethyl Ether	3.959	74	23647	19.724	ug/l	85
9) 1,1,2-Trichlorotrifluo...	4.377	101	36883	20.763	ug/l	98
10) Methyl Iodide	4.583	142	36262	15.519	ug/l	98
11) Tert butyl alcohol	5.524	59	47088	96.692	ug/l	99
12) 1,1-Dichloroethene	4.347	96	34241	18.762	ug/l	92
13) Acrolein	4.183	56	23357	73.590	ug/l	96
14) Allyl chloride	5.018	41	63728m	18.479	ug/l	
15) Acrylonitrile	5.718	53	103317	103.155	ug/l	98
16) Acetone	4.436	43	94520	103.081	ug/l	98
17) Carbon Disulfide	4.712	76	87175	16.325	ug/l	97
18) Methyl Acetate	5.030	43	57100	20.901	ug/l #	88
19) Methyl tert-butyl Ether	5.794	73	131685	19.991	ug/l	99
20) Methylene Chloride	5.283	84	40039	18.973	ug/l	85
21) trans-1,2-Dichloroethene	5.789	96	35228	18.677	ug/l	92
22) Diisopropyl ether	6.677	45	130740	20.168	ug/l	98
23) Vinyl Acetate	6.606	43	720397	108.418	ug/l	97
24) 1,1-Dichloroethane	6.571	63	72312	20.465	ug/l	96
25) 2-Butanone	7.483	43	145625	103.431	ug/l	95
26) 2,2-Dichloropropane	7.488	77	67033	20.428	ug/l	100
27) cis-1,2-Dichloroethene	7.488	96	44697	19.638	ug/l	94
28) Bromochloromethane	7.812	49	31073	21.518	ug/l	85
29) Tetrahydrofuran	7.841	42	94074	103.362	ug/l #	89
30) Chloroform	7.971	83	78159	21.291	ug/l	100
31) Cyclohexane	8.259	56	64241	18.499	ug/l	95
32) 1,1,1-Trichloroethane	8.171	97	71974	20.713	ug/l	92
36) 1,1-Dichloropropene	8.371	75	51536	19.195	ug/l	99
37) Ethyl Acetate	7.559	43	58610	19.497	ug/l #	96
38) Carbon Tetrachloride	8.359	117	60835	20.118	ug/l	99
39) Methylcyclohexane	9.600	83	60089	18.222	ug/l	97
40) Benzene	8.612	78	163247	20.411	ug/l	97

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081424\
Data File : VN083298.D
Acq On : 14 Aug 2024 14:03
Operator : JC\MD
Sample : VN0814WBS01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 14 23:22:35 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VN0814WBS01

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 08/15/2024
Supervised By :Semsettin Yesilyurt 08/15/2024

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
41) Methacrylonitrile	7.777	41	33603	19.660 ug/l	97
42) 1,2-Dichloroethane	8.671	62	62700	21.520 ug/l	100
43) Isopropyl Acetate	8.688	43	103775	18.485 ug/l	94
44) Trichloroethene	9.353	130	38223	20.078 ug/l	99
45) 1,2-Dichloropropane	9.624	63	40150	21.148 ug/l	98
46) Dibromomethane	9.712	93	29327	21.581 ug/l	96
47) Bromodichloromethane	9.888	83	63079	20.673 ug/l	100
48) Methyl methacrylate	9.682	41	46397	18.669 ug/l #	90
49) 1,4-Dioxane	9.694	88	18902	421.571 ug/l #	93
51) 4-Methyl-2-Pentanone	10.447	43	299875	105.490 ug/l	93
52) Toluene	10.629	92	102822	20.347 ug/l	99
53) t-1,3-Dichloropropene	10.835	75	61891	19.747 ug/l	98
54) cis-1,3-Dichloropropene	10.312	75	64711	19.411 ug/l	92
55) 1,1,2-Trichloroethane	11.018	97	38882	21.469 ug/l	97
56) Ethyl methacrylate	10.876	69	66534	19.488 ug/l #	88
57) 1,3-Dichloropropane	11.165	76	67303	20.850 ug/l	97
58) 2-Chloroethyl Vinyl ether	10.159	63	133714	92.654 ug/l	96
59) 2-Hexanone	11.194	43	226634	103.052 ug/l	93
60) Dibromochloromethane	11.359	129	45197	20.642 ug/l	99
61) 1,2-Dibromoethane	11.470	107	39209	20.609 ug/l	99
64) Tetrachloroethene	11.100	164	32564	19.622 ug/l	96
65) Chlorobenzene	11.894	112	109477	19.770 ug/l	99
66) 1,1,1,2-Tetrachloroethane	11.959	131	38818	19.876 ug/l	98
67) Ethyl Benzene	11.965	91	199315	19.621 ug/l	100
68) m/p-Xylenes	12.070	106	146923	38.610 ug/l	96
69) o-Xylene	12.400	106	73227	19.511 ug/l	100
70) Styrene	12.412	104	123747	19.632 ug/l	98
71) Bromoform	12.576	173	28667	19.376 ug/l #	99
73) Isopropylbenzene	12.694	105	189904	19.262 ug/l	99
74) N-amyl acetate	12.494	43	87695	18.185 ug/l	95
75) 1,1,2,2-Tetrachloroethane	12.935	83	55881	20.040 ug/l	100
76) 1,2,3-Trichloropropane	12.994	75	51046m	19.732 ug/l	
77) Bromobenzene	12.982	156	44274	20.216 ug/l	99
78) n-propylbenzene	13.035	91	221023	19.470 ug/l	100
79) 2-Chlorotoluene	13.123	91	139743	19.416 ug/l	97
80) 1,3,5-Trimethylbenzene	13.170	105	162894	19.735 ug/l	96
81) trans-1,4-Dichloro-2-b...	12.735	75	21751	18.289 ug/l	95
82) 4-Chlorotoluene	13.223	91	138990	19.252 ug/l	97
83) tert-Butylbenzene	13.441	119	140176	19.177 ug/l	99
84) 1,2,4-Trimethylbenzene	13.482	105	162074	19.484 ug/l	100
85) sec-Butylbenzene	13.617	105	191578	19.208 ug/l	98
86) p-Isopropyltoluene	13.729	119	158838	19.287 ug/l	97
87) 1,3-Dichlorobenzene	13.735	146	79688	19.337 ug/l	98
88) 1,4-Dichlorobenzene	13.812	146	79466	19.128 ug/l	95
89) n-Butylbenzene	14.059	91	134766	18.886 ug/l	98
90) Hexachloroethane	14.335	117	28843	18.128 ug/l	94
91) 1,2-Dichlorobenzene	14.106	146	76195	19.107 ug/l	97
92) 1,2-Dibromo-3-Chloropr...	14.717	75	12319	18.206 ug/l	97
93) 1,2,4-Trichlorobenzene	15.388	180	41092	18.393 ug/l	98
94) Hexachlorobutadiene	15.506	225	17266	17.378 ug/l	99
95) Naphthalene	15.641	128	145278	18.358 ug/l	99
96) 1,2,3-Trichlorobenzene	15.841	180	40786	18.450 ug/l	95

Sample Results: **VN083298.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081424\
Data File : VN083298.D
Acq On : 14 Aug 2024 14:03
Operator : JC\MD
Sample : VN0814WBS01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 14 23:22:35 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VN0814WBS01

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 08/15/2024
Supervised By :Semsettin Yesilyurt 08/15/2024

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

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

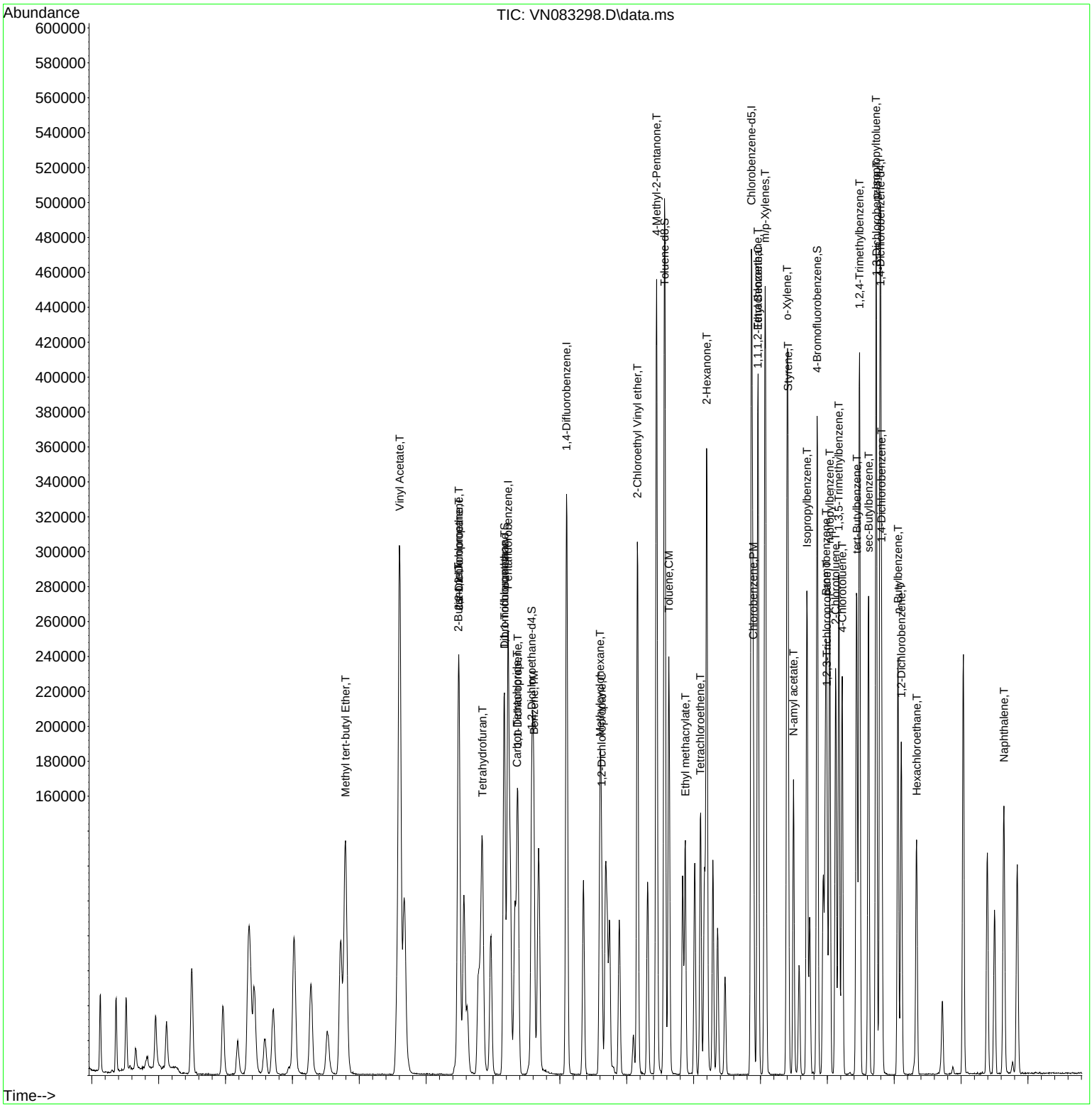
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081424\
Data File : VN083298.D
Acq On : 14 Aug 2024 14:03
Operator : JC\MD
Sample : VN0814WBS01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

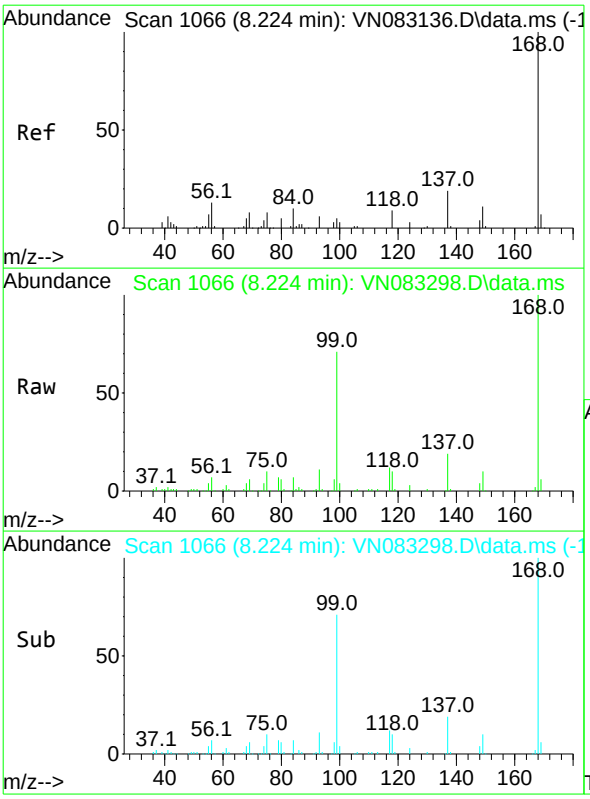
Quant Time: Aug 14 23:22:35 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VN0814WBS01

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 08/15/2024
Supervised By :Semsettin Yesilyurt 08/15/2024

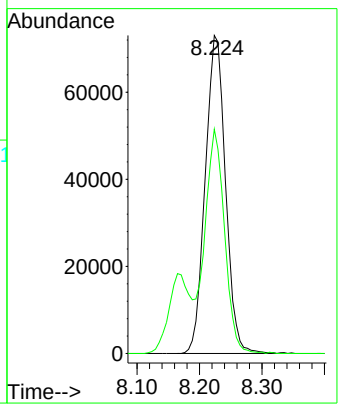




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 10
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion:168 Resp: 164632

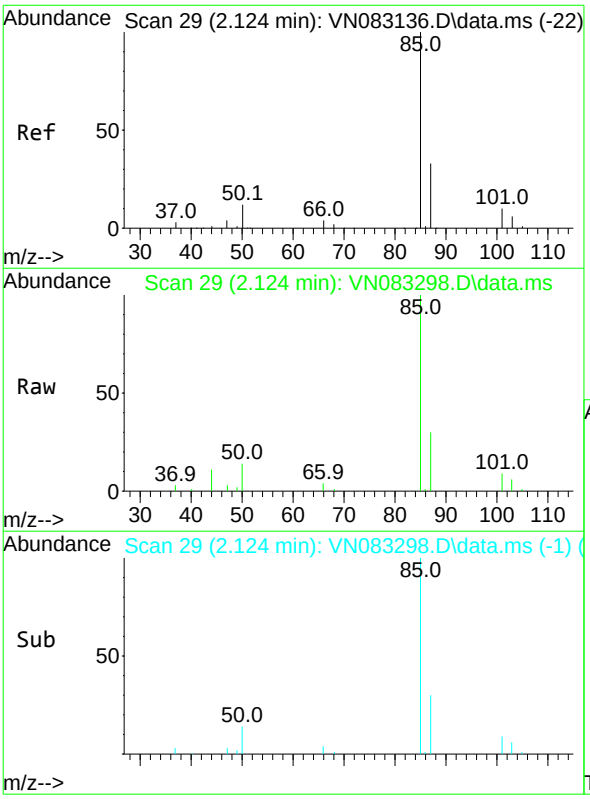
Ion	Ratio	Lower	Upper
168	100		
99	70.5	48.2	72.4



Instrument :
MSVOA_N
ClientSampleId :
VN0814WBS01

Manual Integrations
APPROVED

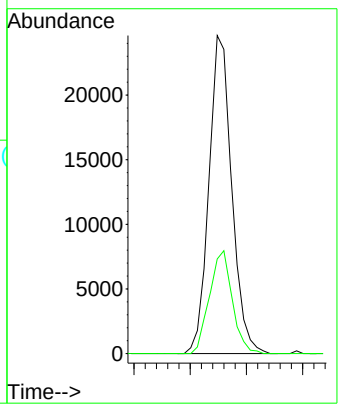
Reviewed By :Mahesh Dadoda 08/15/2024
Supervised By :Semsettin Yesilyurt 08/15/2024

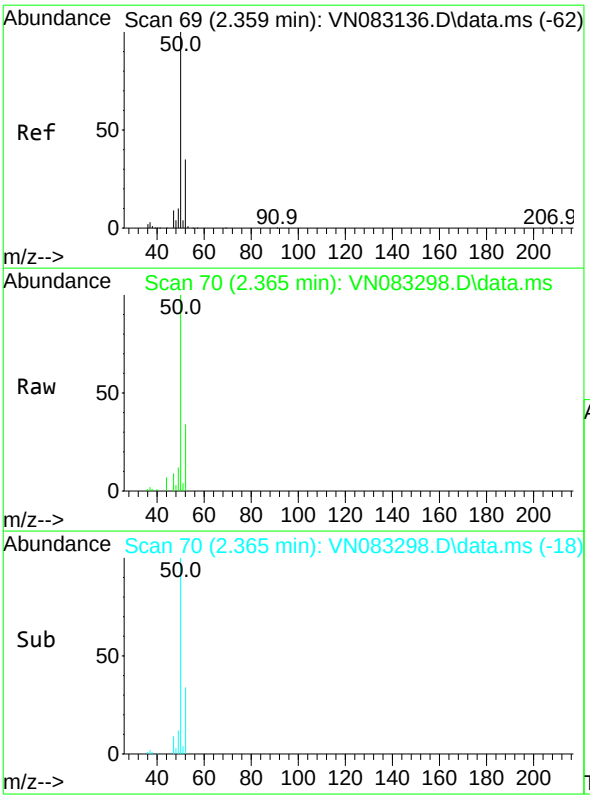


#2
Dichlorodifluoromethane
Concen: 18.595 ug/l
RT: 2.124 min Scan# 29
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 85 Resp: 34716

Ion	Ratio	Lower	Upper
85	100		
87	29.7	15.7	47.0

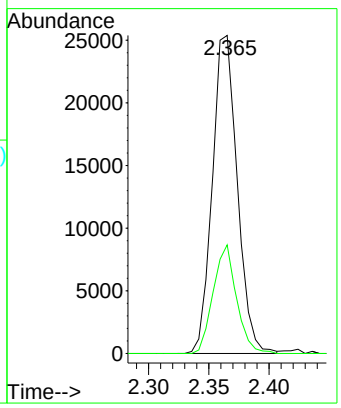




#3
Chloromethane
Concen: 19.136 ug/l
RT: 2.365 min Scan# 70
Delta R.T. 0.006 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 50 Resp: 36577

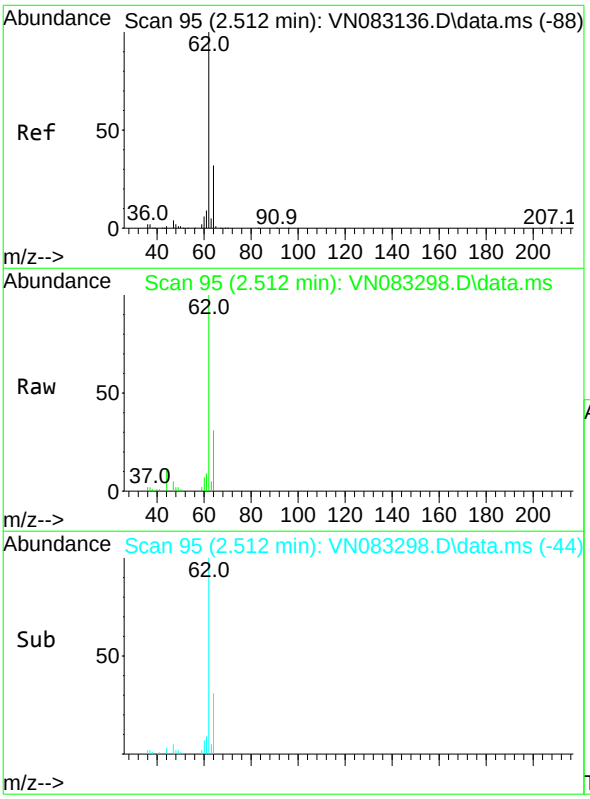
Ion	Ratio	Lower	Upper
50	100		
52	34.2	25.0	37.4



Instrument :
MSVOA_N
ClientSampleId :
VN0814WBS01

Manual Integrations
APPROVED

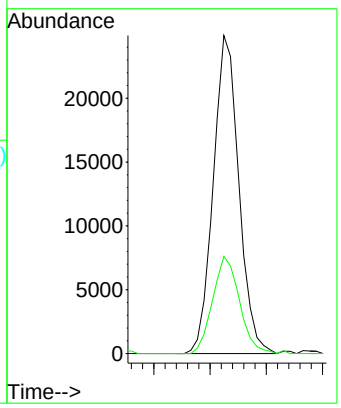
Reviewed By :Mahesh Dadoda 08/15/2024
Supervised By :Semsettin Yesilyurt 08/15/2024

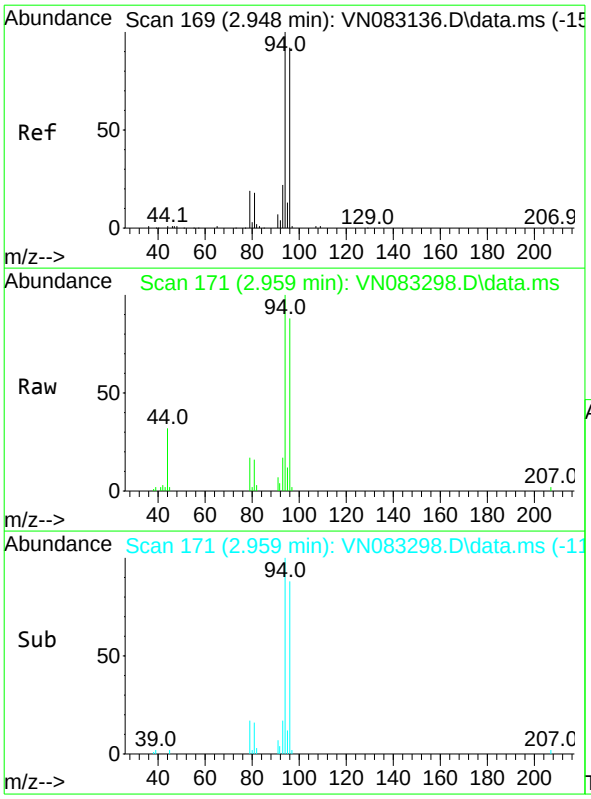


#4
Vinyl Chloride
Concen: 20.174 ug/l
RT: 2.512 min Scan# 95
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 62 Resp: 39346

Ion	Ratio	Lower	Upper
62	100		
64	30.5	25.0	37.6

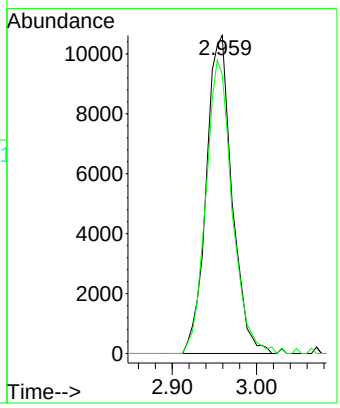




#5
Bromomethane
Concen: 18.608 ug/l
RT: 2.959 min Scan# 17
Delta R.T. 0.012 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 94 Resp: 22519

Ion	Ratio	Lower	Upper
94	100		
96	87.7	78.0	117.0



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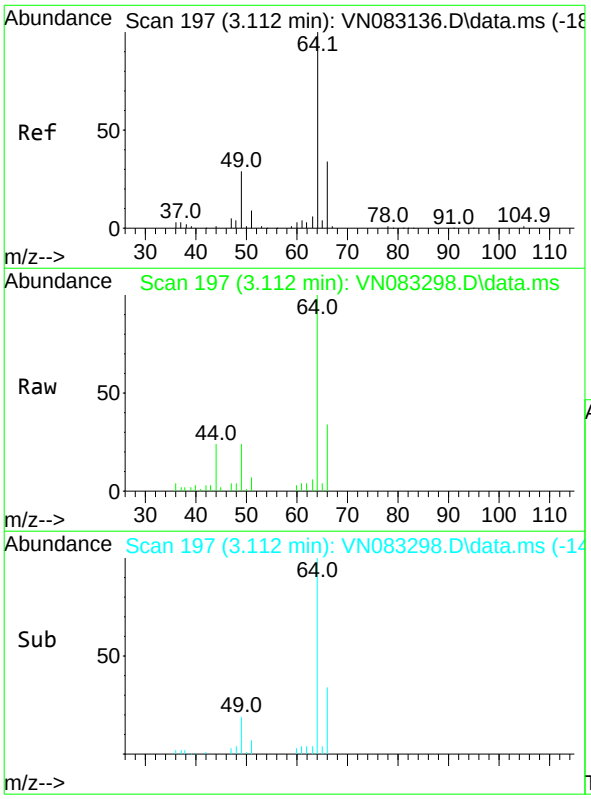
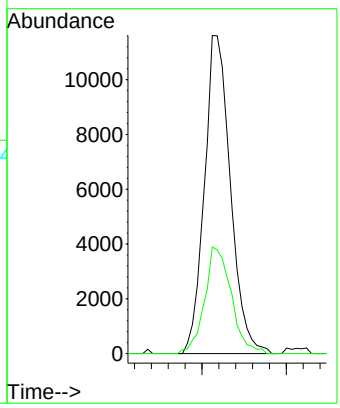
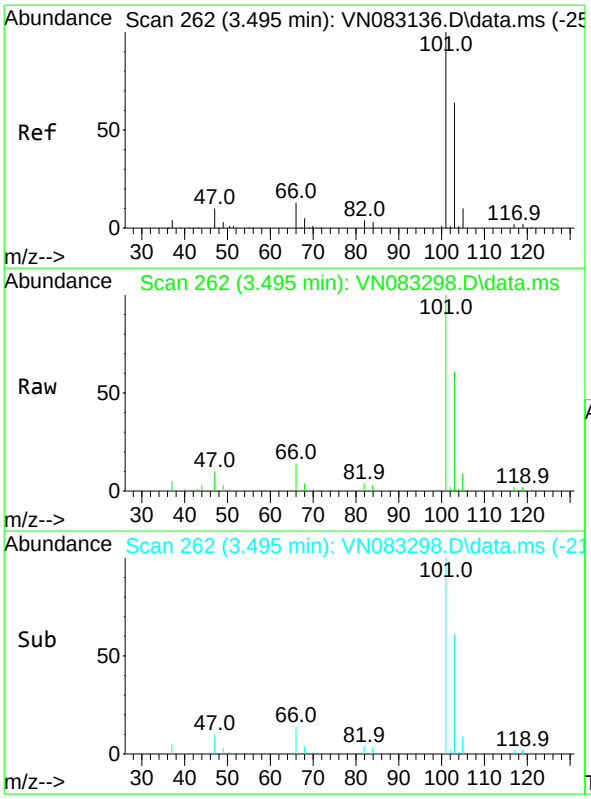


#6
Chloroethane
Concen: 20.410 ug/l
RT: 3.112 min Scan# 197
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 64 Resp: 24904

Ion	Ratio	Lower	Upper
64	100		
66	33.5	26.6	40.0

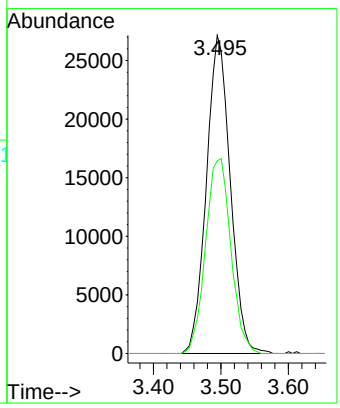




#7
Trichlorofluoromethane
Concen: 20.716 ug/l
RT: 3.495 min Scan# 26
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion:101 Resp: 66745

Ion	Ratio	Lower	Upper
101	100		
103	60.5	52.7	79.1



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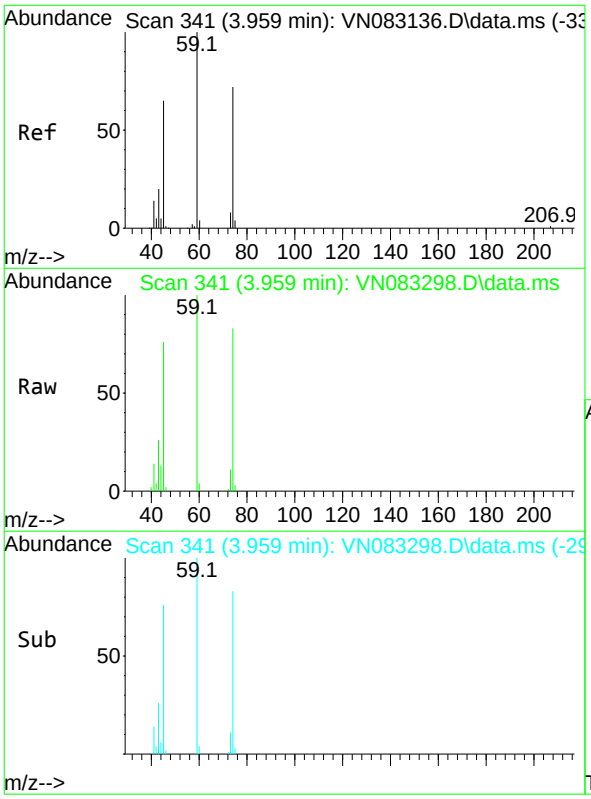
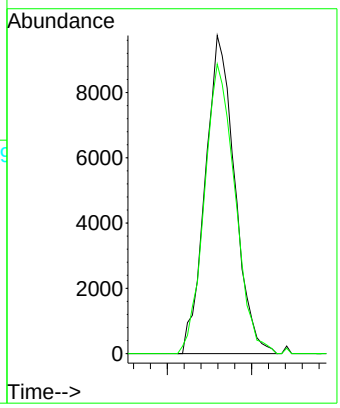
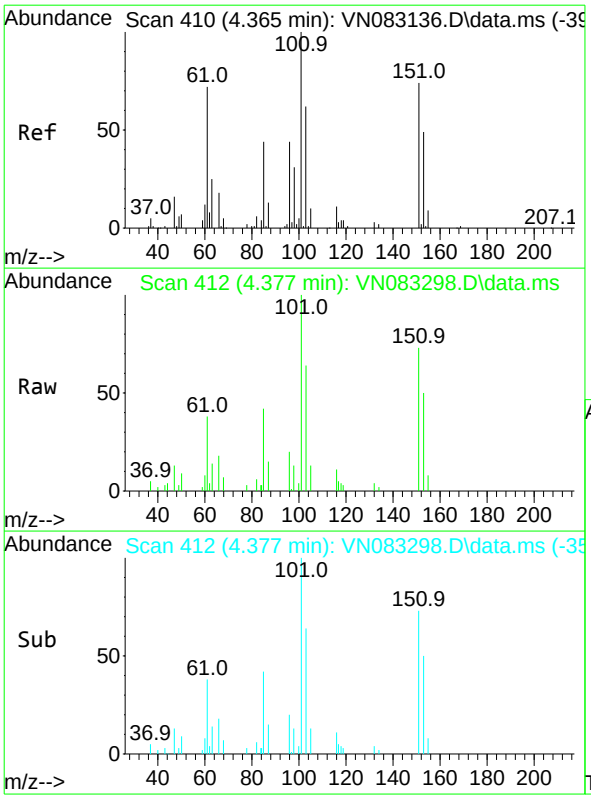


#8
Diethyl Ether
Concen: 19.724 ug/l
RT: 3.959 min Scan# 341
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 74 Resp: 23647

Ion	Ratio	Lower	Upper
74	100		
45	94.5	55.5	166.3





#9
1,1,2-Trichlorotrifluoroethane
Concen: 20.763 ug/l
RT: 4.377 min Scan# 41
Delta R.T. 0.012 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Instrument :
MSVOA_N
ClientSampleId :
VN0814WBS01

Tgt Ion:101 Resp: 36883

Ion	Ratio	Lower	Upper
101	100		
85	44.9	38.3	57.5
151	73.2	59.3	88.9

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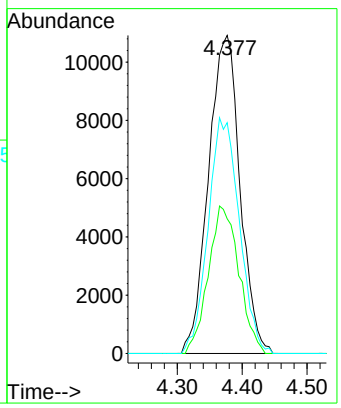
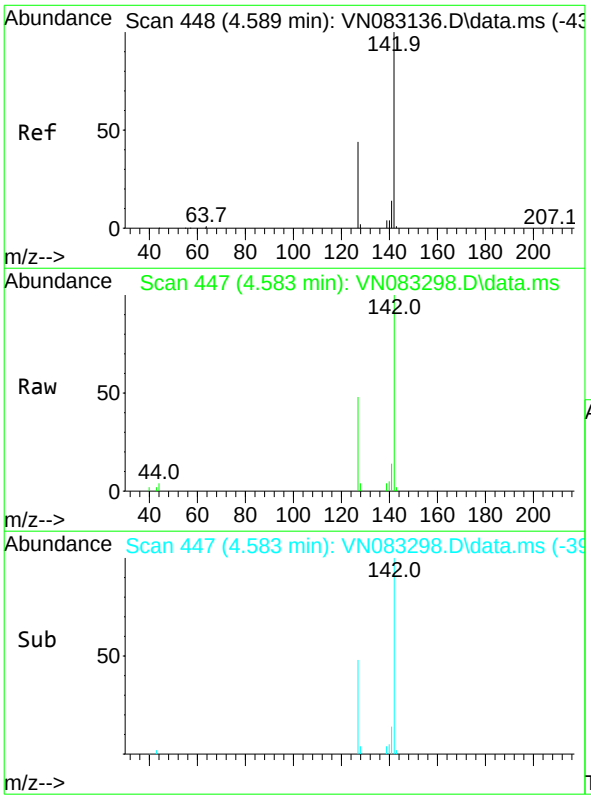
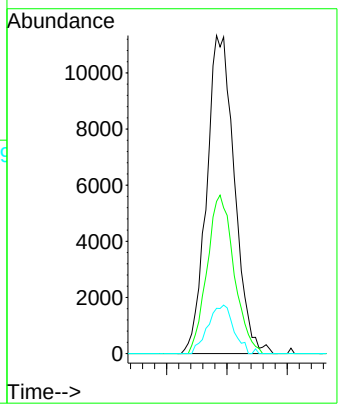


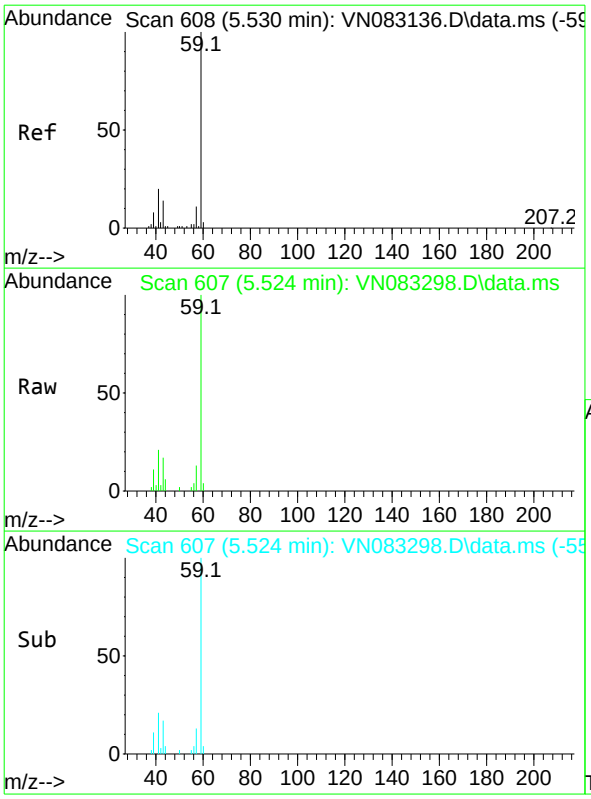


#10
Methyl Iodide
Concen: 15.519 ug/l
RT: 4.583 min Scan# 447
Delta R.T. -0.006 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion:142 Resp: 36262

Ion	Ratio	Lower	Upper
142	100		
127	47.9	37.5	56.3
141	14.2	13.1	19.7

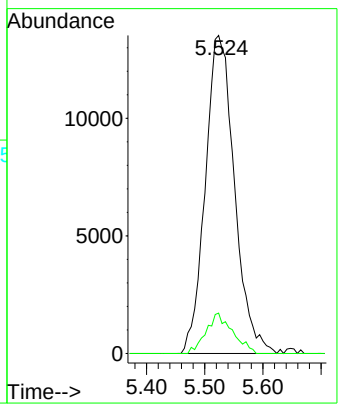




#11
Tert butyl alcohol
Concen: 96.692 ug/l
RT: 5.524 min Scan# 60
Delta R.T. -0.006 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 59 Resp: 47088

Ion	Ratio	Lower	Upper
59	100		
57	11.5	8.9	13.3



Instrument :
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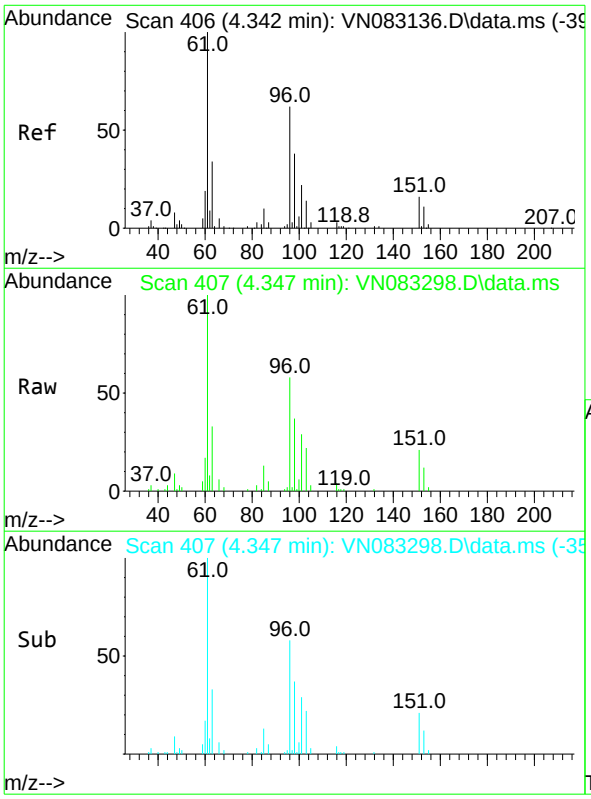
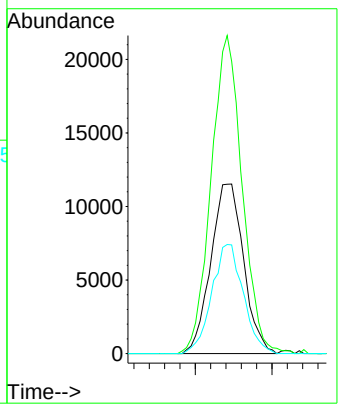
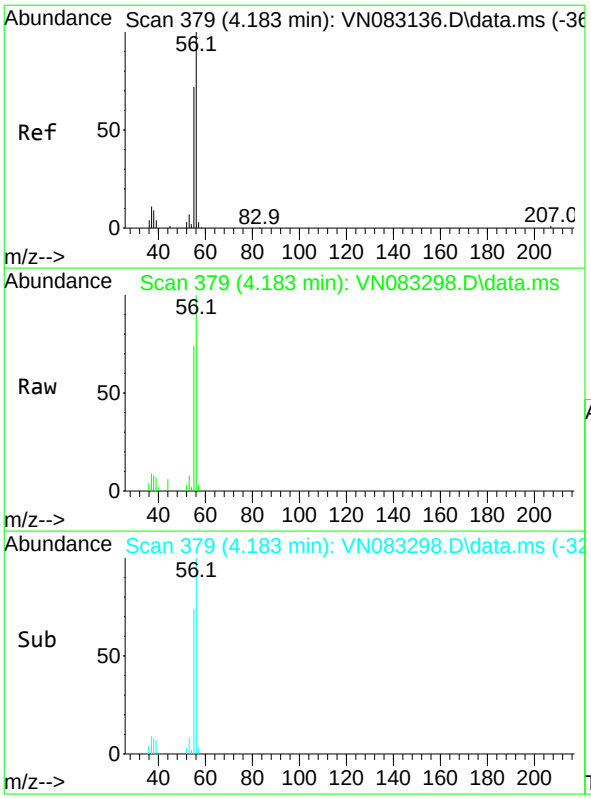


#12
1,1-Dichloroethene
Concen: 18.762 ug/l
RT: 4.347 min Scan# 407
Delta R.T. 0.006 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 96 Resp: 34241

Ion	Ratio	Lower	Upper
96	100		
61	172.3	149.7	224.5
98	64.1	50.1	75.1

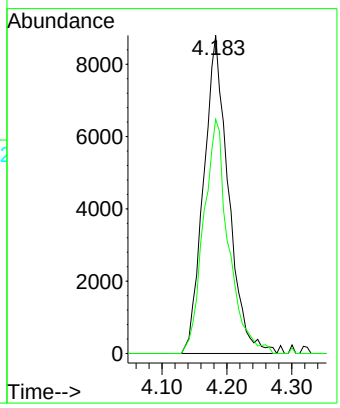




#13
Acrolein
Concen: 73.590 ug/l
RT: 4.183 min Scan# 37
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 56 Resp: 23357

Ion	Ratio	Lower	Upper
56	100		
55	73.8	56.4	84.6



Instrument :
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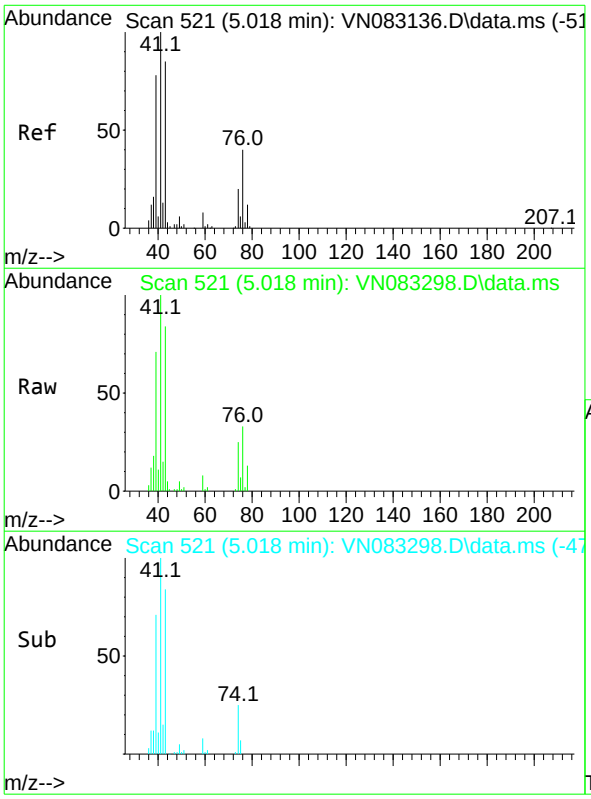
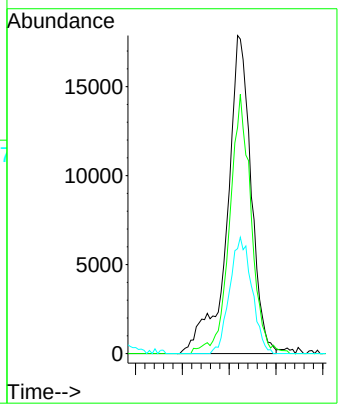
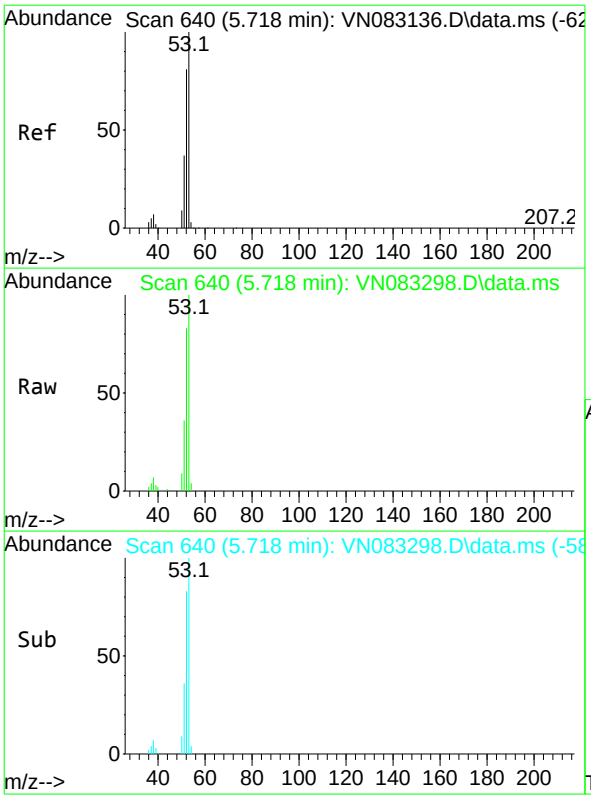


#14
Allyl chloride
Concen: 18.479 ug/l m
RT: 5.018 min Scan# 521
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 41 Resp: 63728

Ion	Ratio	Lower	Upper
41	100		
39	72.9	67.8	101.6
76	33.7	25.8	38.8





#15
Acrylonitrile
Concen: 103.155 ug/l
RT: 5.718 min Scan# 64
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 53 Resp: 103317

Ion	Ratio	Lower	Upper
53	100		
52	81.2	66.6	100.0
51	37.3	30.1	45.1

Instrument :
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ClientSampleId :
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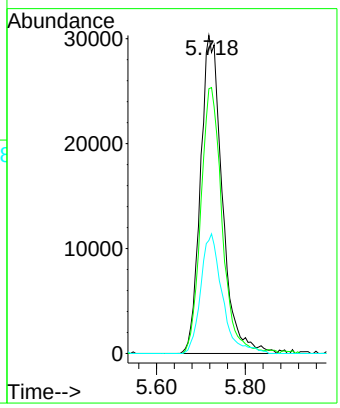
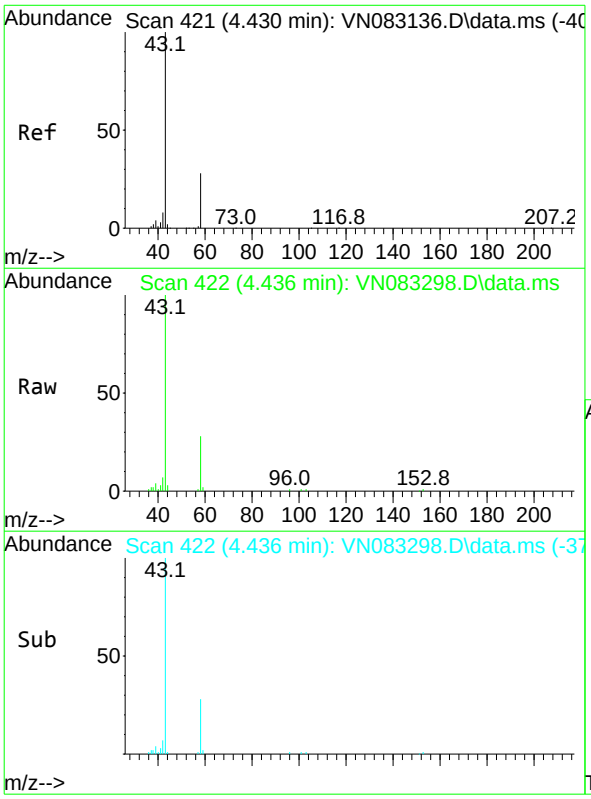
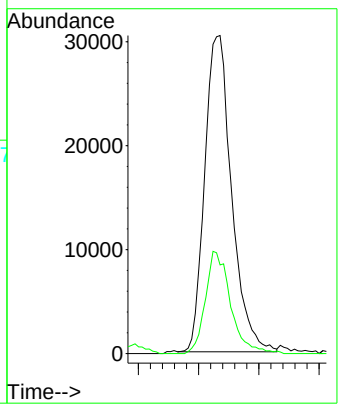


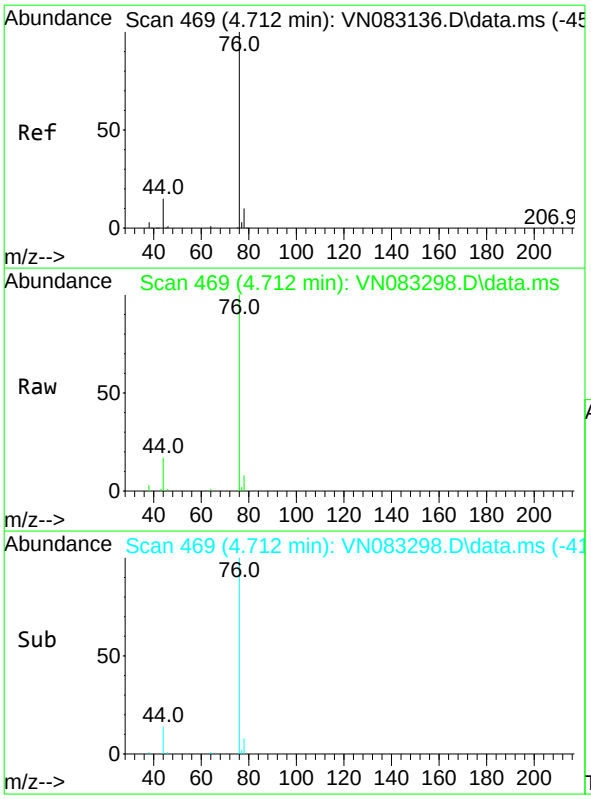


#16
Acetone
Concen: 103.081 ug/l
RT: 4.436 min Scan# 422
Delta R.T. 0.006 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 43 Resp: 94520

Ion	Ratio	Lower	Upper
43	100		
58	28.0	21.8	32.6

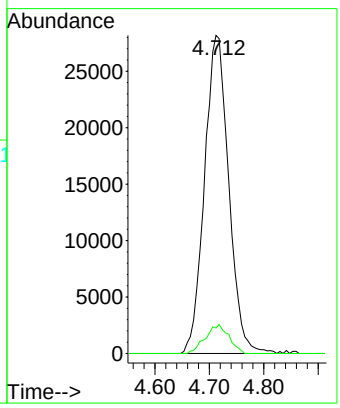




#17
Carbon Disulfide
Concen: 16.325 ug/l
RT: 4.712 min Scan# 46
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 76 Resp: 87175

Ion	Ratio	Lower	Upper
76	100		
78	8.0	7.2	10.8



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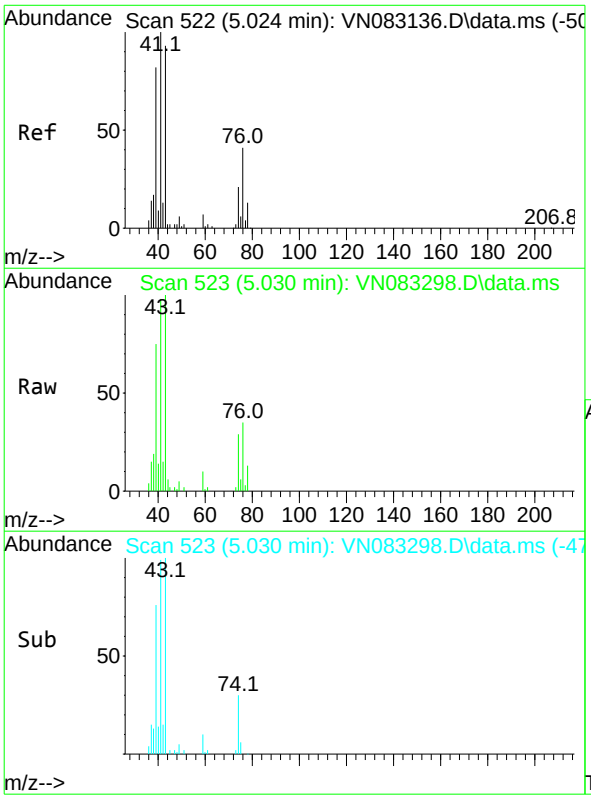
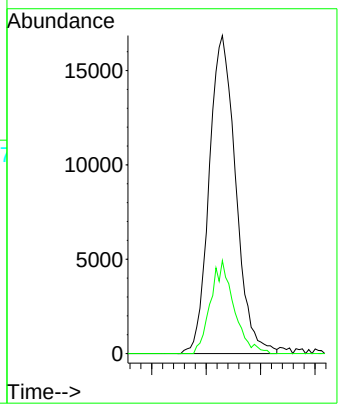
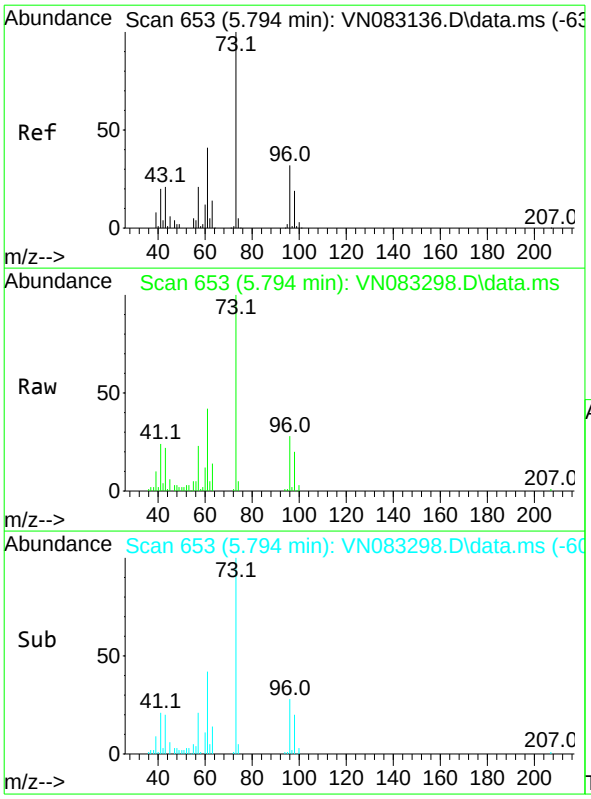


#18
Methyl Acetate
Concen: 20.901 ug/l
RT: 5.030 min Scan# 523
Delta R.T. 0.006 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 43 Resp: 57100

Ion	Ratio	Lower	Upper
43	100		
74	25.8	16.3	24.5#

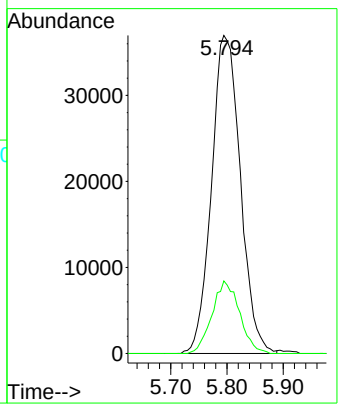




#19
Methyl tert-butyl Ether
Concen: 19.991 ug/l
RT: 5.794 min Scan# 65
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 73 Resp: 131685

Ion	Ratio	Lower	Upper
73	100		
57	22.8	17.9	26.9



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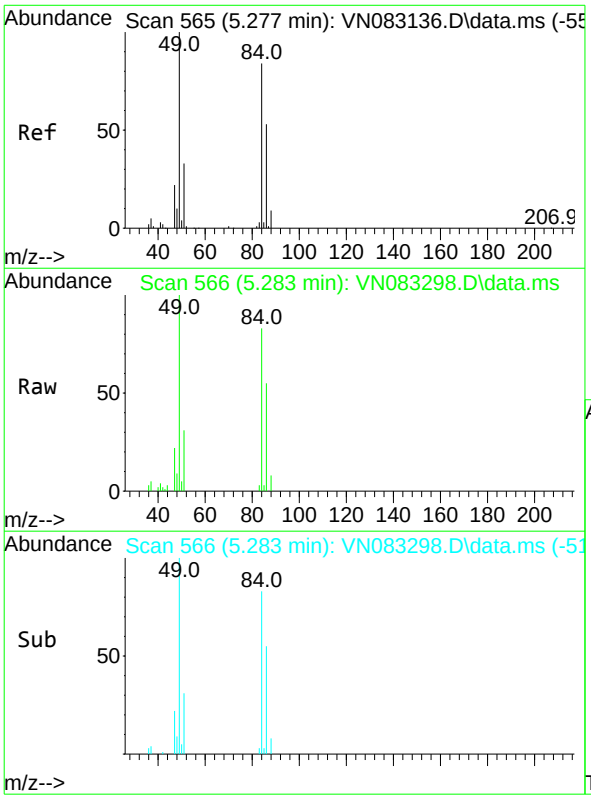
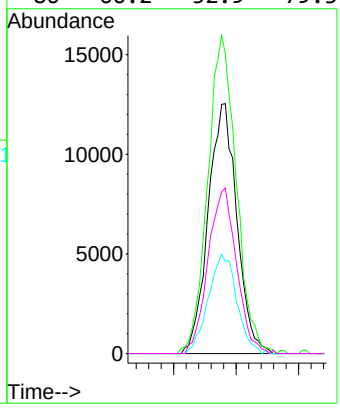
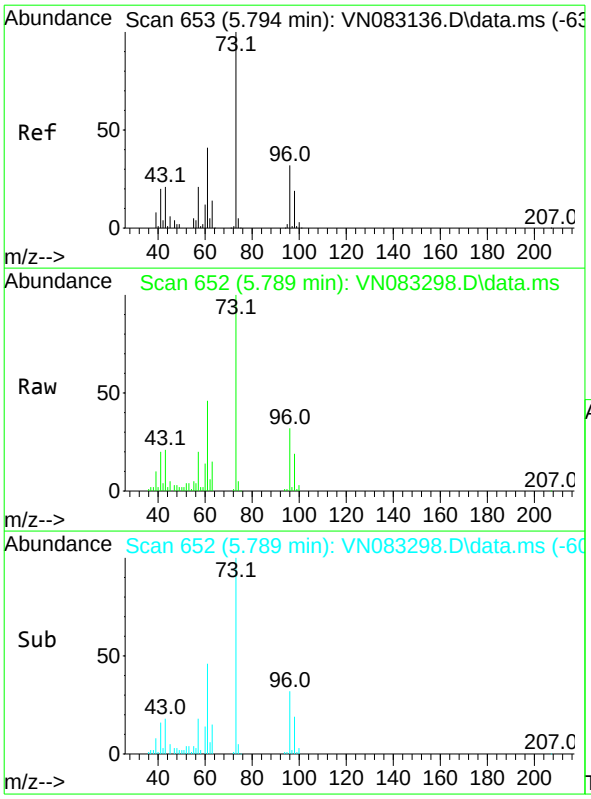


#20
Methylene Chloride
Concen: 18.973 ug/l
RT: 5.283 min Scan# 566
Delta R.T. 0.006 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 84 Resp: 40039

Ion	Ratio	Lower	Upper
84	100		
49	119.8	119.6	179.4
51	36.9	34.8	52.2
86	66.2	52.9	79.3





#21
trans-1,2-Dichloroethene
Concen: 18.677 ug/l
RT: 5.789 min Scan# 65
Delta R.T. -0.006 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 96 Resp: 35228

Ion	Ratio	Lower	Upper
96	100		
61	142.3	123.4	185.2
98	58.3	49.3	73.9

Instrument :
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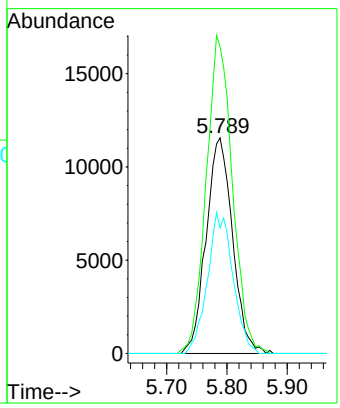
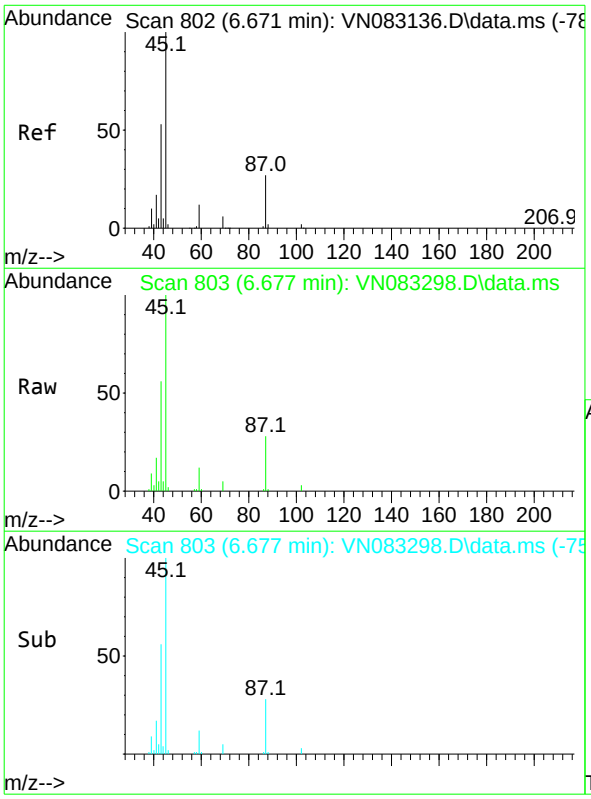
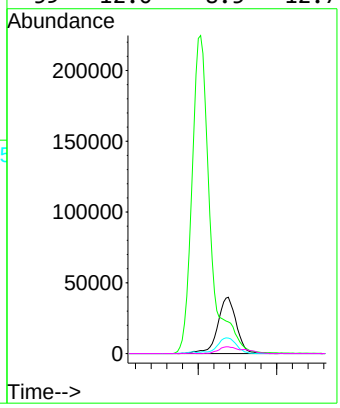


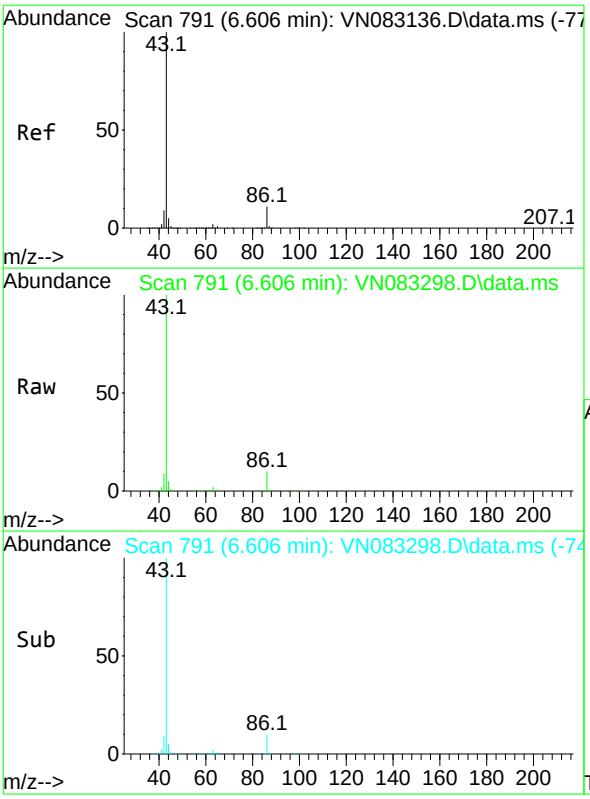


#22
Diisopropyl ether
Concen: 20.168 ug/l
RT: 6.677 min Scan# 803
Delta R.T. 0.006 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 45 Resp: 130740

Ion	Ratio	Lower	Upper
45	100		
43	54.8	44.0	66.0
87	27.6	19.7	29.5
59	12.0	8.5	12.7

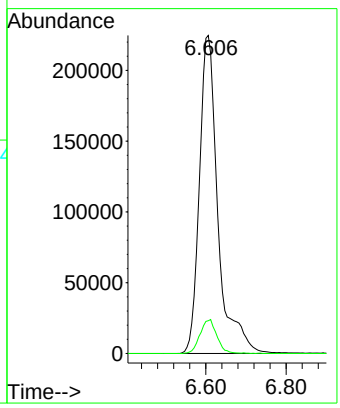




#23
Vinyl Acetate
Concen: 108.418 ug/l
RT: 6.606 min Scan# 79
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 43 Resp: 720397

Ion	Ratio	Lower	Upper
43	100		
86	10.3	7.3	10.9



Instrument :
MSVOA_N
ClientSampleId :
VN0814WBS01

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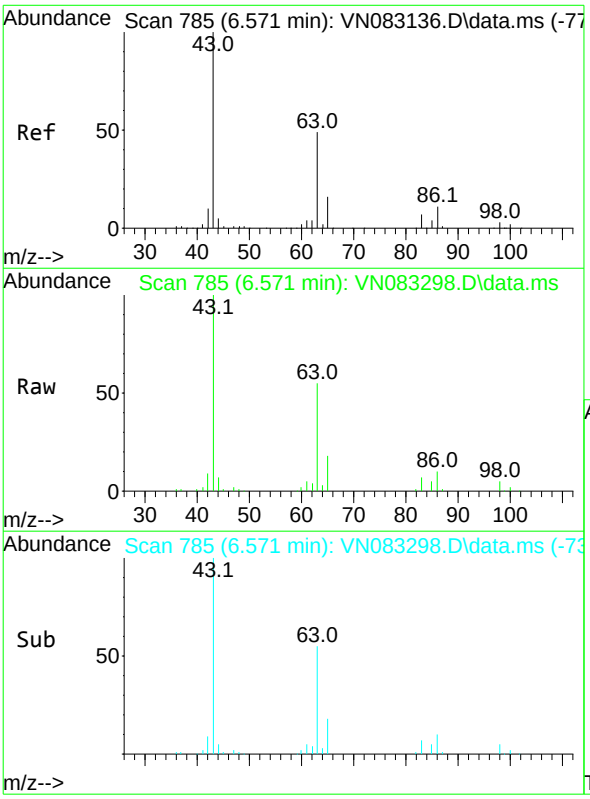
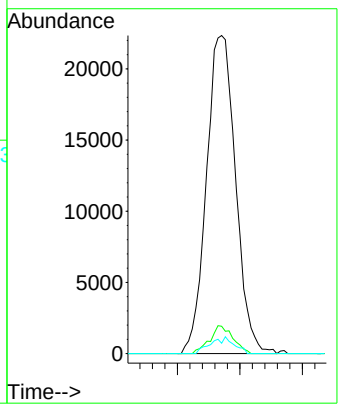
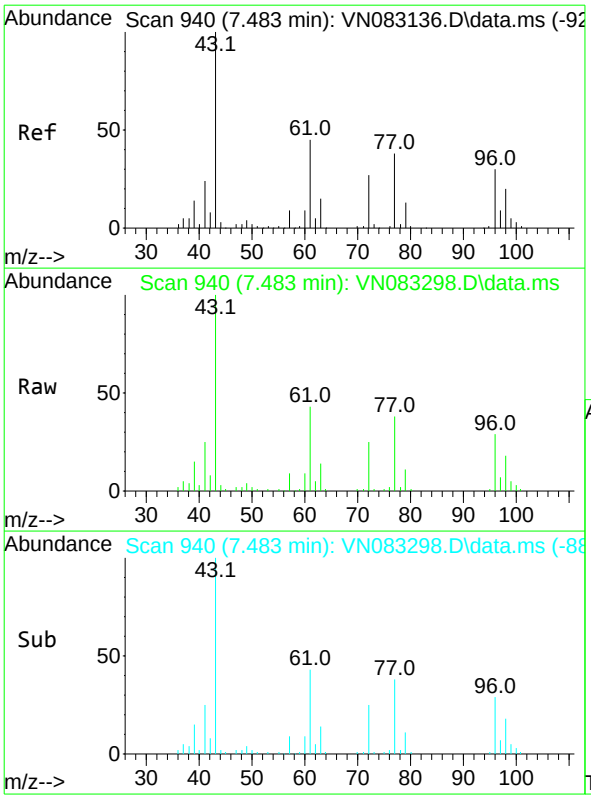


#24
1,1-Dichloroethane
Concen: 20.465 ug/l
RT: 6.571 min Scan# 785
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 63 Resp: 72312

Ion	Ratio	Lower	Upper
63	100		
98	8.6	3.3	9.9
100	3.2	2.0	6.0

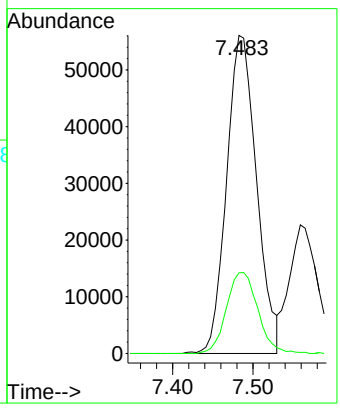




#25
2-Butanone
Concen: 103.431 ug/l
RT: 7.483 min Scan# 94
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 43 Resp: 145625

Ion	Ratio	Lower	Upper
43	100		
72	25.3	18.2	27.2



Instrument :
MSVOA_N
ClientSampleId :
VN0814WBS01

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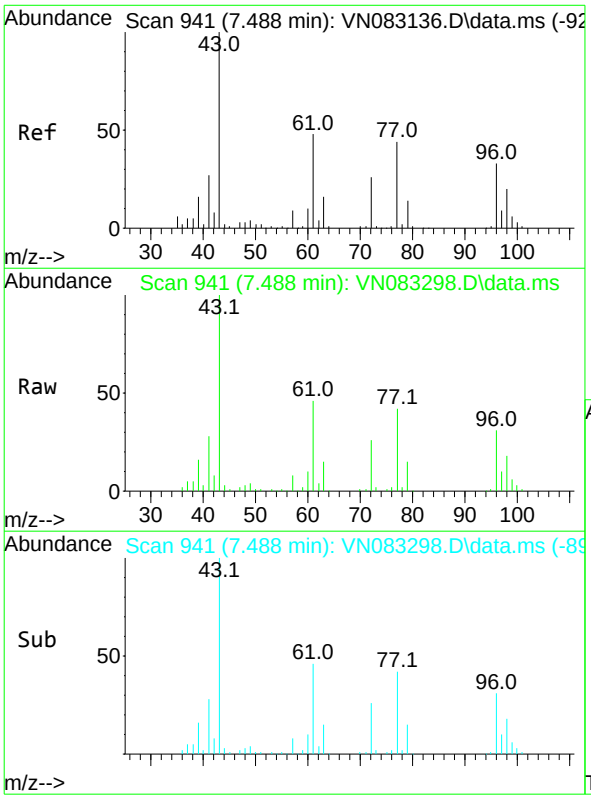
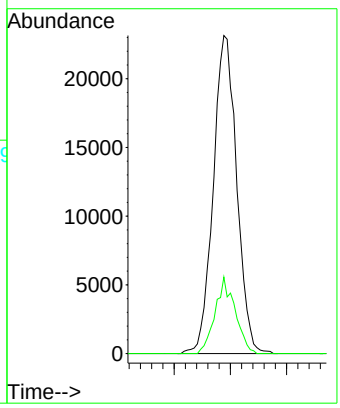
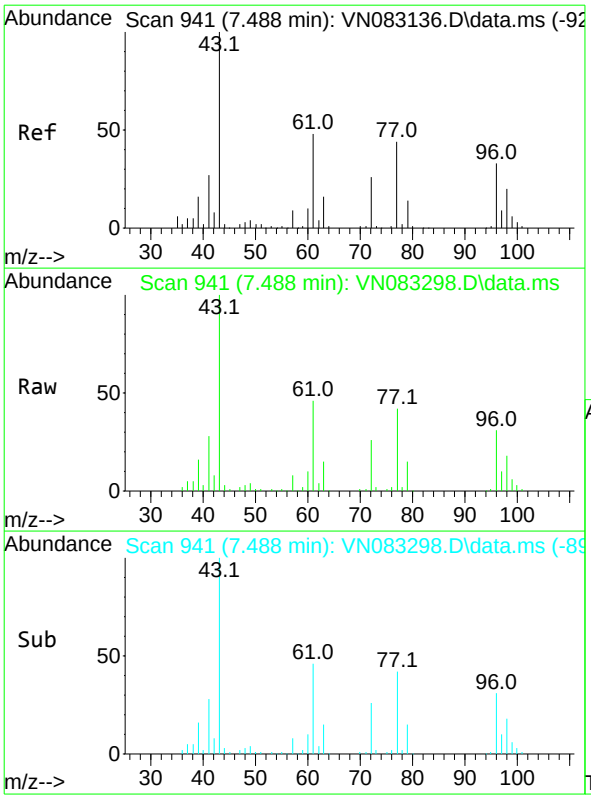


#26
2,2-Dichloropropane
Concen: 20.428 ug/l
RT: 7.488 min Scan# 941
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 77 Resp: 67033

Ion	Ratio	Lower	Upper
77	100		
97	20.5	10.3	30.9





#27
cis-1,2-Dichloroethene
Concen: 19.638 ug/l
RT: 7.488 min Scan# 94
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 96 Resp: 44697

Ion	Ratio	Lower	Upper
96	100		
61	154.6	0.0	329.6
98	63.5	0.0	128.6

Instrument :
MSVOA_N
ClientSampleId :
VN0814WBS01

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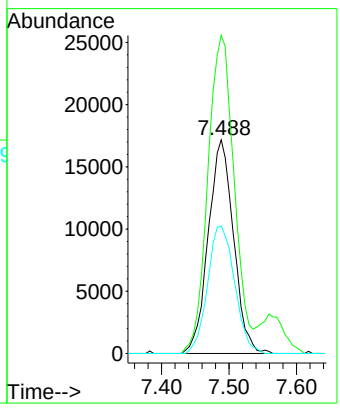
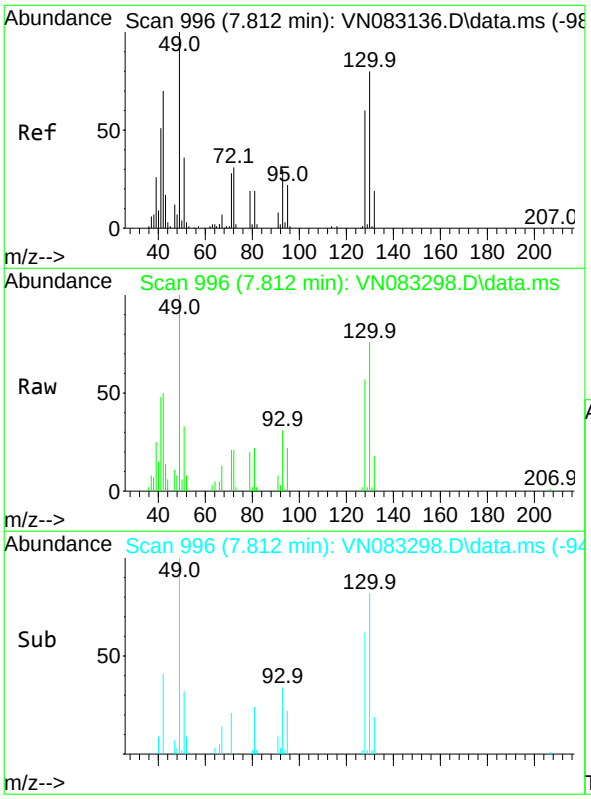
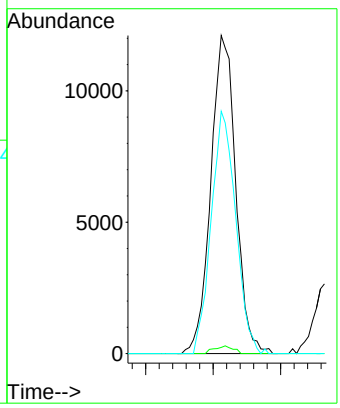


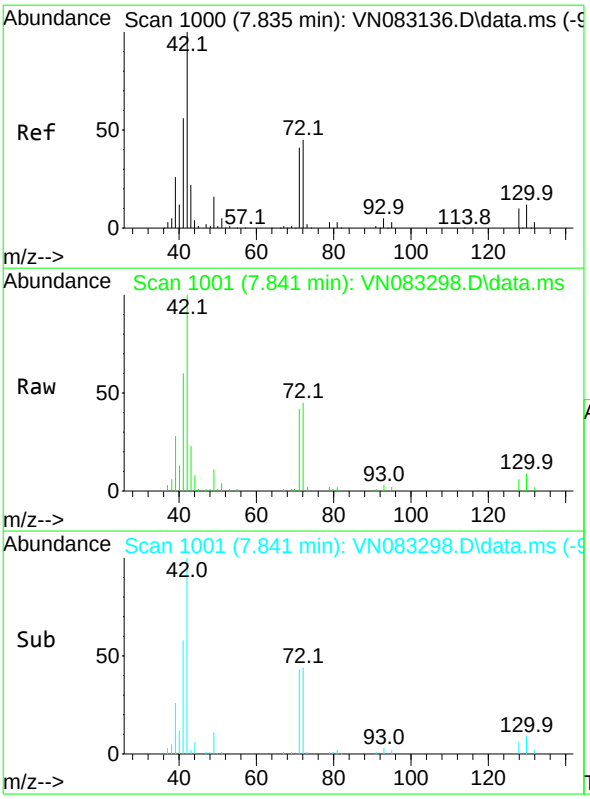


#28
Bromochloromethane
Concen: 21.518 ug/l
RT: 7.812 min Scan# 996
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 49 Resp: 31073

Ion	Ratio	Lower	Upper
49	100		
129	1.8	0.0	3.8
130	74.9	50.5	75.7

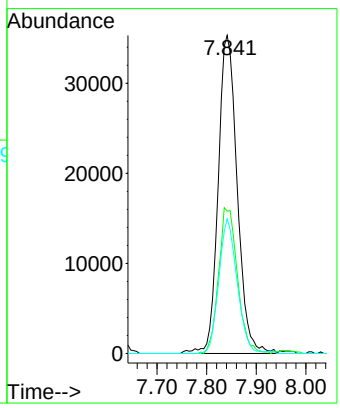




#29
Tetrahydrofuran
Concen: 103.362 ug/l
RT: 7.841 min Scan# 10
Delta R.T. 0.006 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 42 Resp: 94074

Ion	Ratio	Lower	Upper
42	100		
72	45.4	30.0	45.0#
71	40.6	28.3	42.5



Instrument :
MSVOA_N
ClientSampleId :
VN0814WBS01

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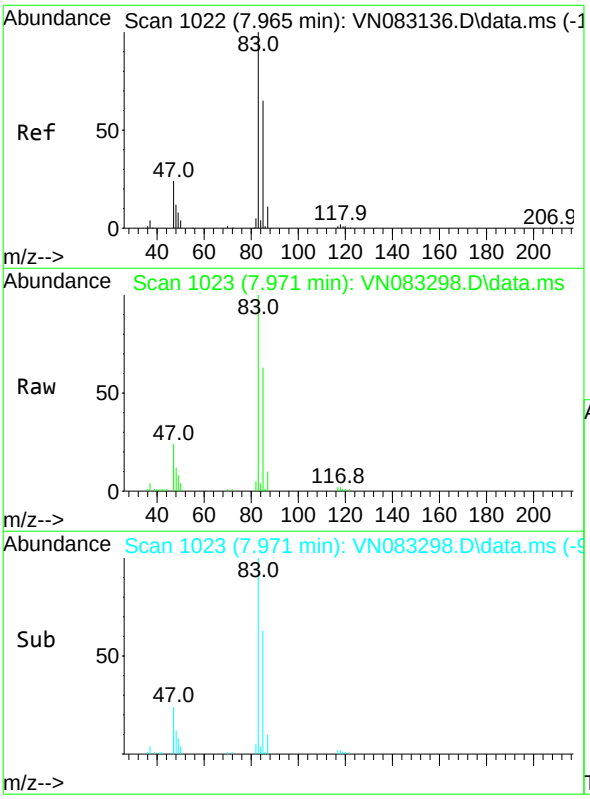
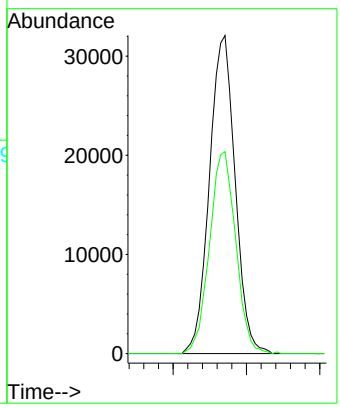
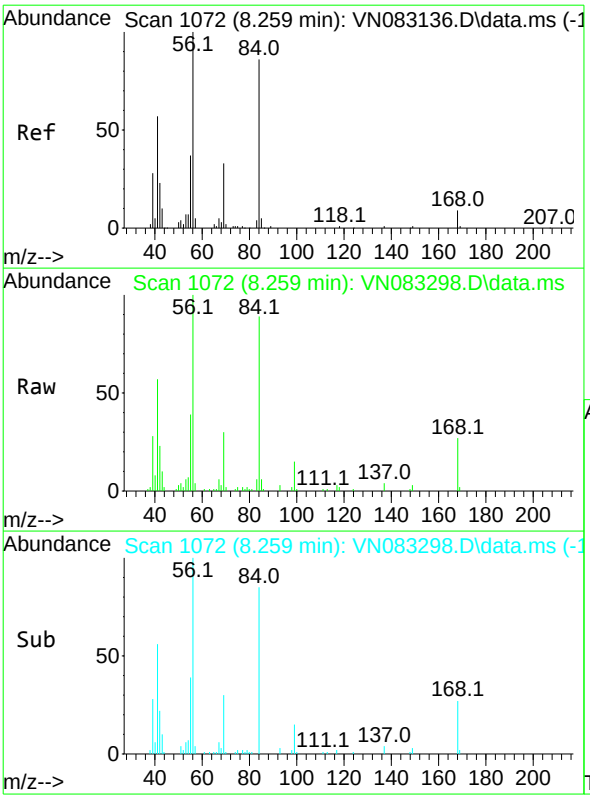


#30
Chloroform
Concen: 21.291 ug/l
RT: 7.971 min Scan# 1023
Delta R.T. 0.006 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 83 Resp: 78159

Ion	Ratio	Lower	Upper
83	100		
85	63.5	50.9	76.3





#31
Cyclohexane
Concen: 18.499 ug/l
RT: 8.259 min Scan# 10
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Instrument :
MSVOA_N
ClientSampleId :
VN0814WBS01

Tgt Ion: 56 Resp: 64241

Ion	Ratio	Lower	Upper
56	100		
69	29.5	24.5	36.7
84	87.9	66.0	99.0

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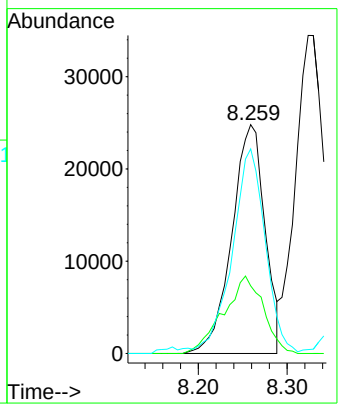
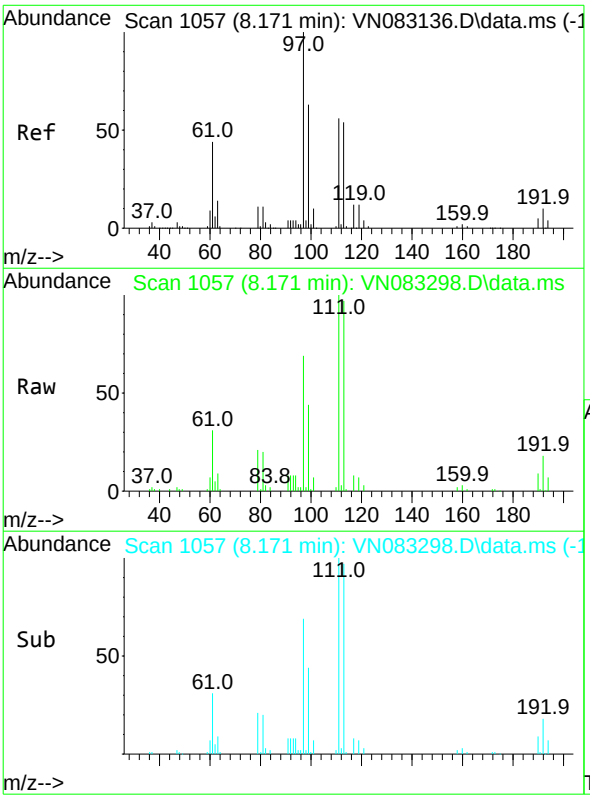
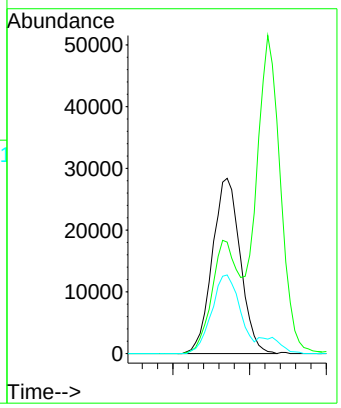


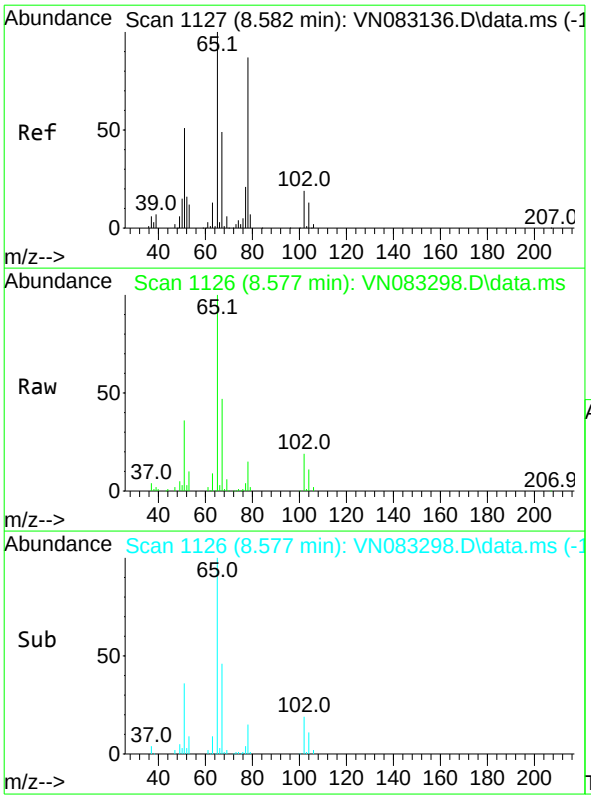


#32
1,1,1-Trichloroethane
Concen: 20.713 ug/l
RT: 8.171 min Scan# 1057
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 97 Resp: 71974

Ion	Ratio	Lower	Upper
97	100		
99	59.3	52.0	78.0
61	45.5	42.1	63.1





#33
1,2-Dichloroethane-d4
Concen: 56.259 ug/l
RT: 8.577 min Scan# 11
Delta R.T. -0.005 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 65 Resp: 131834

Ion	Ratio	Lower	Upper
65	100		
67	49.4	0.0	104.4

Instrument :
MSVOA_N
ClientSampleId :
VN0814WBS01

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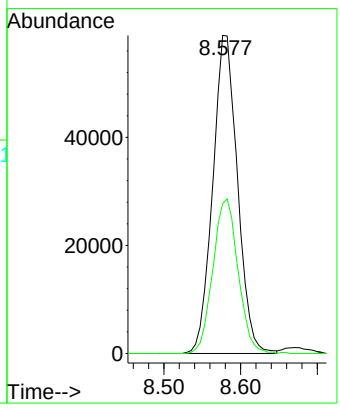
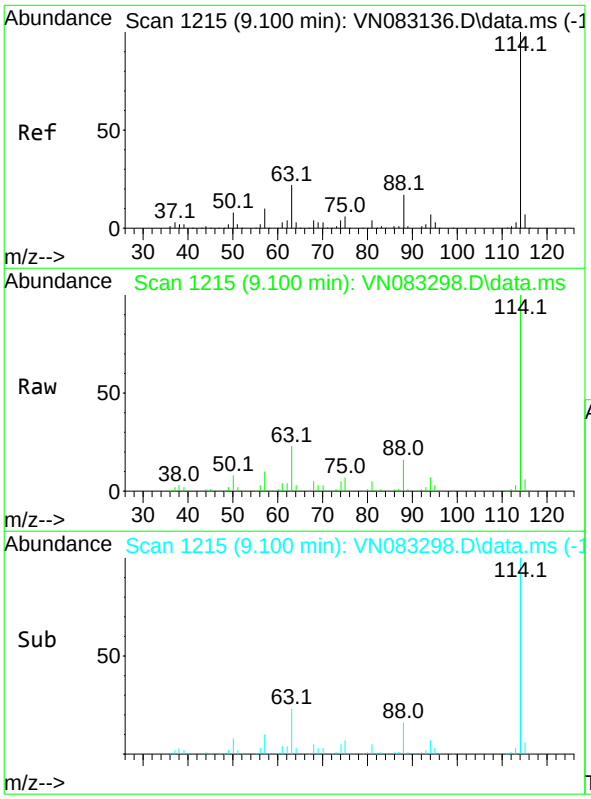
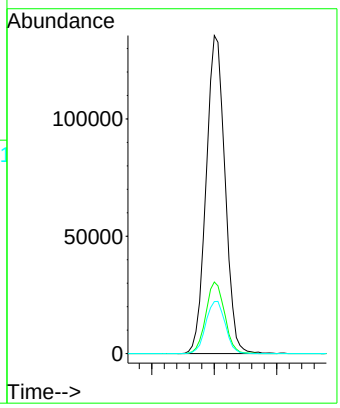


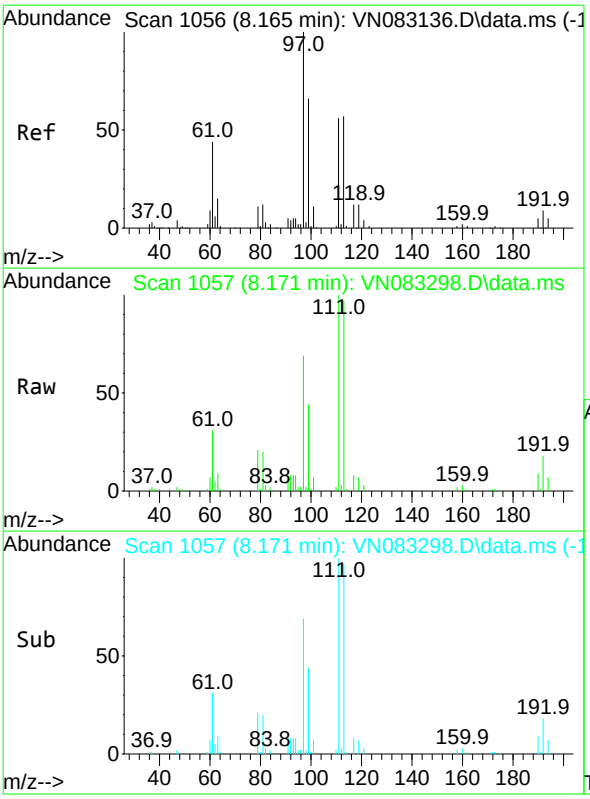


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1215
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion:114 Resp: 284346

Ion	Ratio	Lower	Upper
114	100		
63	22.5	0.0	44.6
88	16.4	0.0	31.4





#35
Dibromofluoromethane
Concen: 54.029 ug/l
RT: 8.171 min Scan# 10
Delta R.T. 0.006 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Instrument :
MSVOA_N
ClientSampleId :
VN0814WBS01

Tgt Ion:113 Resp: 95892

Ion	Ratio	Lower	Upper
113	100		
111	102.4	82.4	123.6
192	17.2	14.9	22.3

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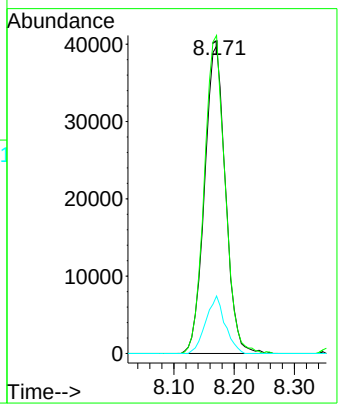
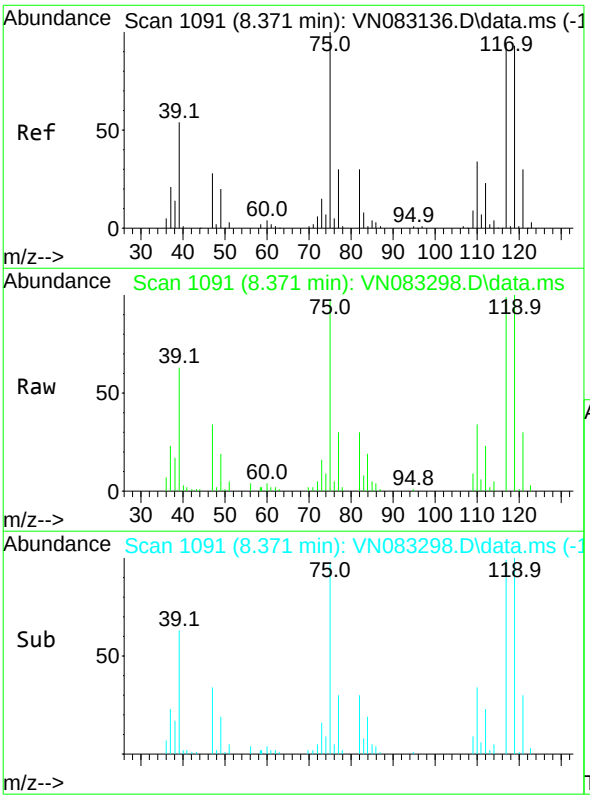
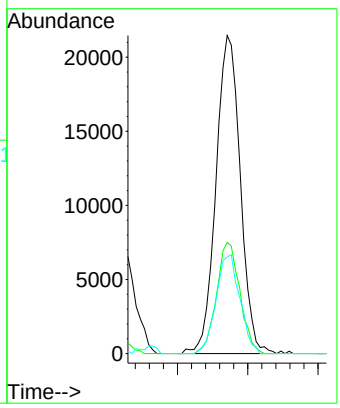


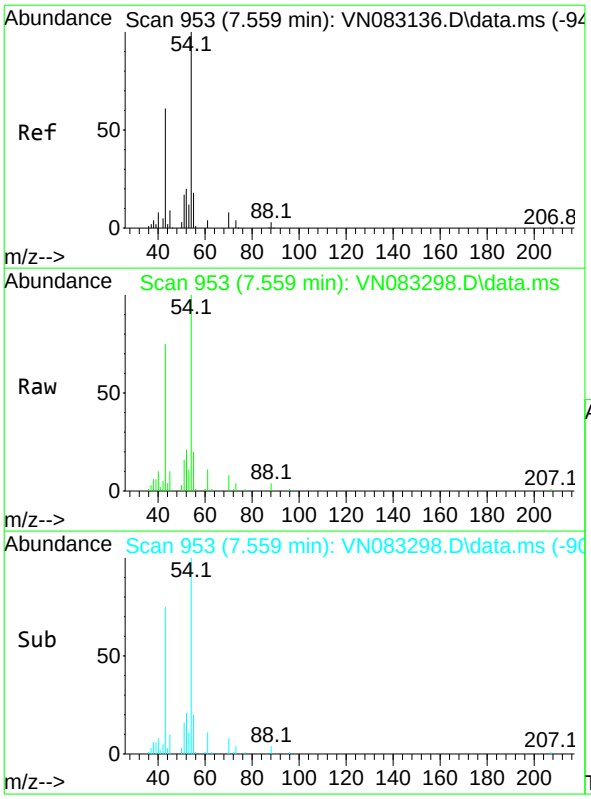


#36
1,1-Dichloropropene
Concen: 19.195 ug/l
RT: 8.371 min Scan# 1091
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 75 Resp: 51536

Ion	Ratio	Lower	Upper
75	100		
110	33.5	16.3	48.9
77	30.5	24.6	37.0





#37
Ethyl Acetate
Concen: 19.497 ug/l
RT: 7.559 min Scan# 95
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 43 Resp: 58610

Ion	Ratio	Lower	Upper
43	100		
61	12.3	9.3	13.9
70	11.2	7.0	10.6#

Instrument :
MSVOA_N
ClientSampleId :
VN0814WBS01

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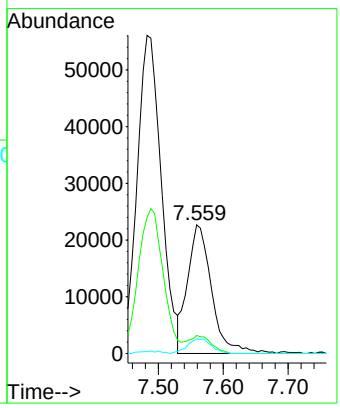
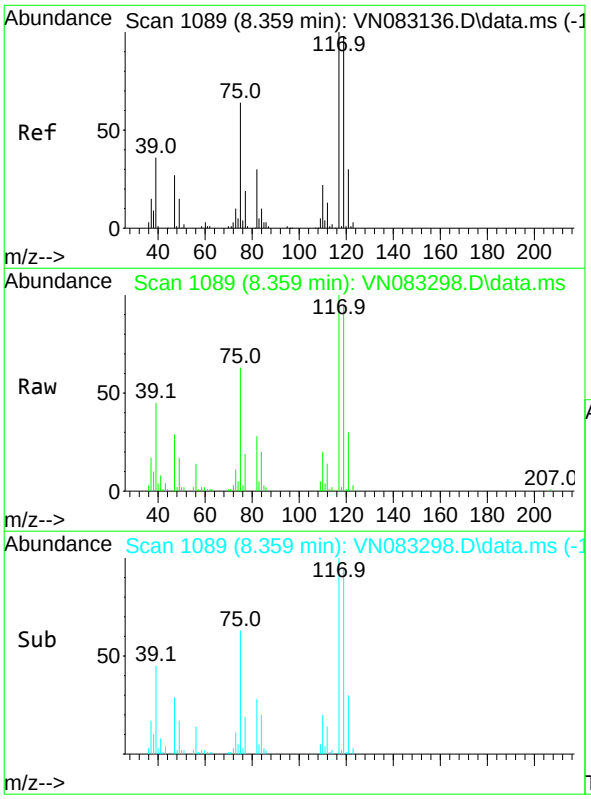
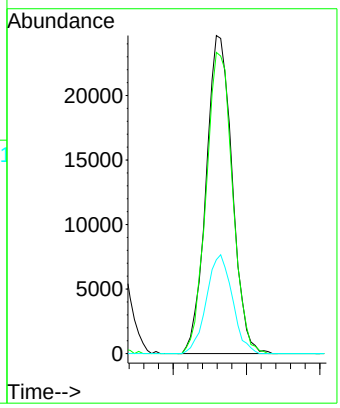


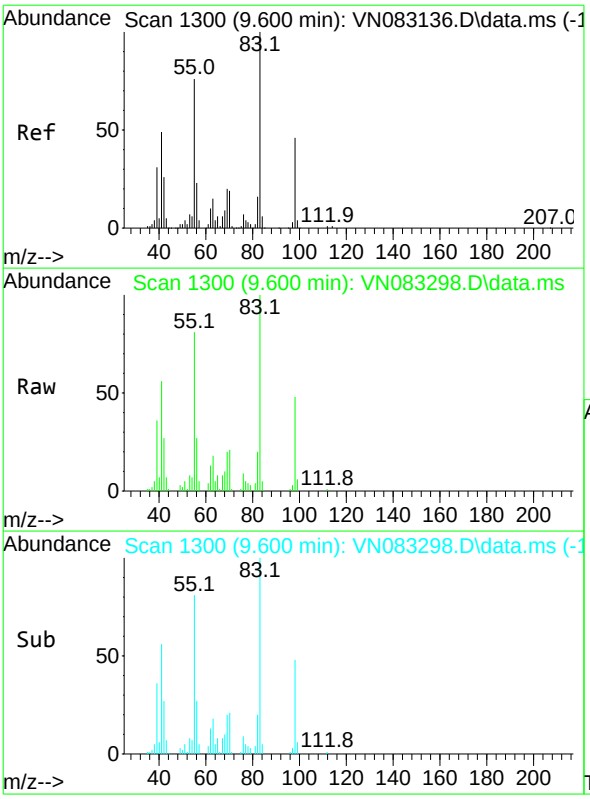


#38
Carbon Tetrachloride
Concen: 20.118 ug/l
RT: 8.359 min Scan# 1089
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion:117 Resp: 60835

Ion	Ratio	Lower	Upper
117	100		
119	94.7	74.9	112.3
121	29.5	24.3	36.5





#39
Methylcyclohexane
Concen: 18.222 ug/l
RT: 9.600 min Scan# 13
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 83 Resp: 60089

Ion	Ratio	Lower	Upper
83	100		
55	80.6	66.4	99.6
98	47.8	40.7	61.1

Instrument :
MSVOA_N
ClientSampleId :
VN0814WBS01

Manual Integrations
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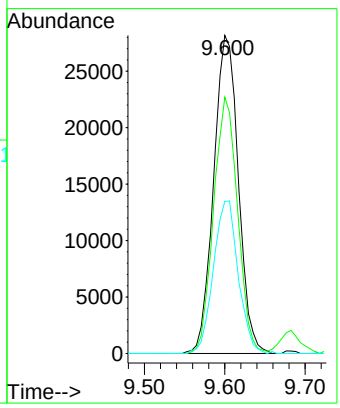
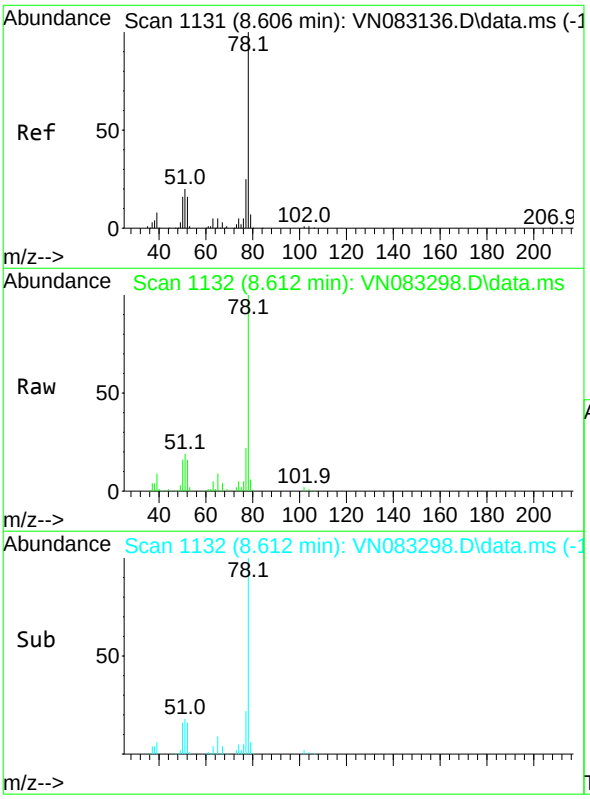
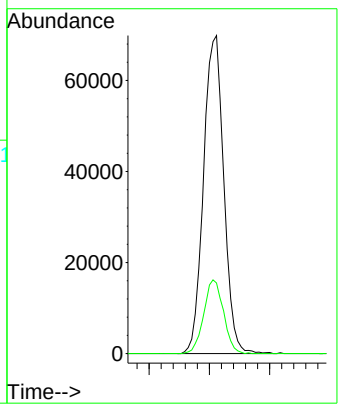


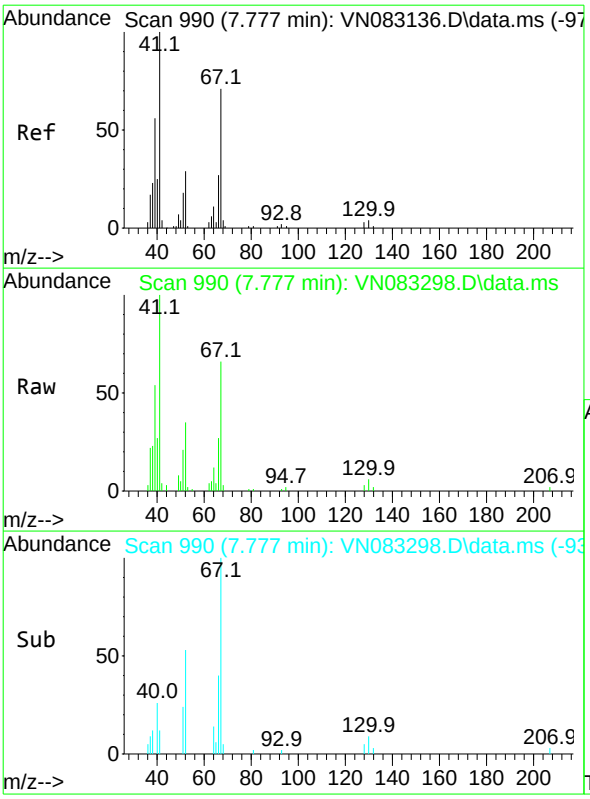


#40
Benzene
Concen: 20.411 ug/l
RT: 8.612 min Scan# 1132
Delta R.T. 0.006 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 78 Resp: 163247

Ion	Ratio	Lower	Upper
78	100		
77	22.2	19.0	28.4

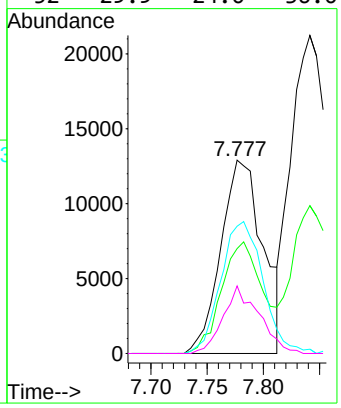




#41
Methacrylonitrile
Concen: 19.660 ug/l
RT: 7.777 min Scan# 99
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 41 Resp: 33603

Ion	Ratio	Lower	Upper
41	100		
39	56.9	45.5	68.3
67	68.3	50.5	75.7
52	29.9	24.0	36.0



Instrument :
MSVOA_N
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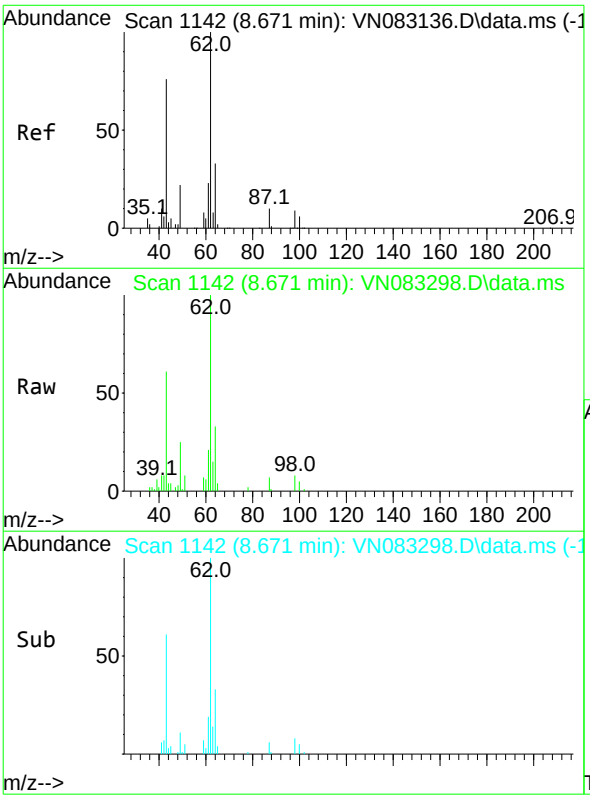
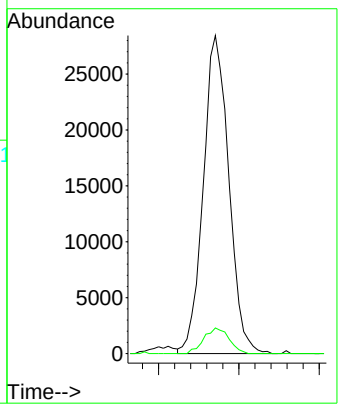
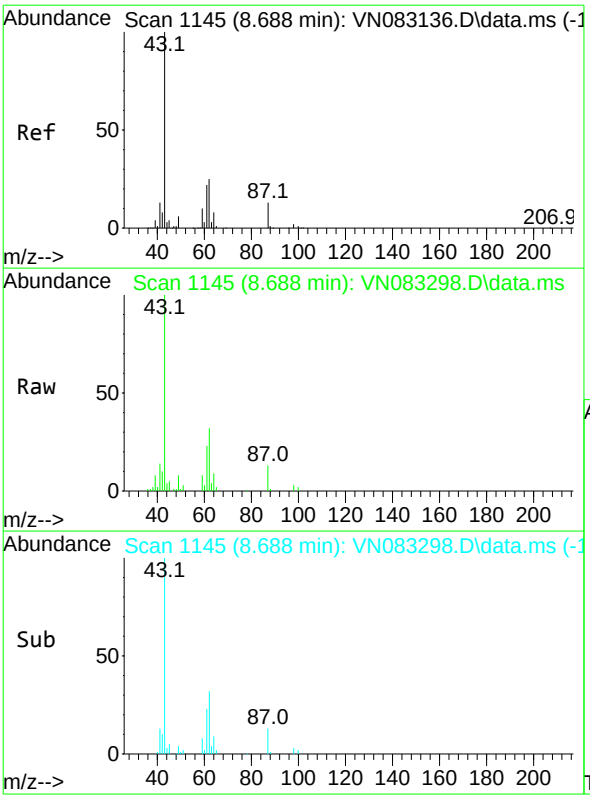


#42
1,2-Dichloroethane
Concen: 21.520 ug/l
RT: 8.671 min Scan# 1142
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 62 Resp: 62700

Ion	Ratio	Lower	Upper
62	100		
98	8.0	0.0	15.8





#43
Isopropyl Acetate
Concen: 18.485 ug/l
RT: 8.688 min Scan# 11
Delta R.T. 0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 43 Resp: 103775

Ion	Ratio	Lower	Upper
43	100		
61	25.3	17.8	26.6
87	12.2	8.2	12.2

Instrument :
MSVOA_N
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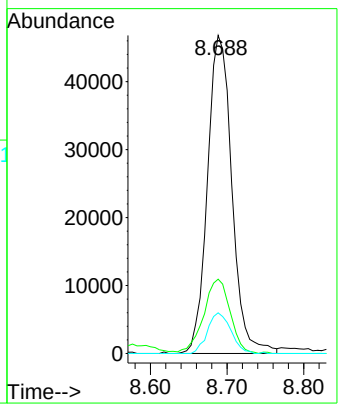
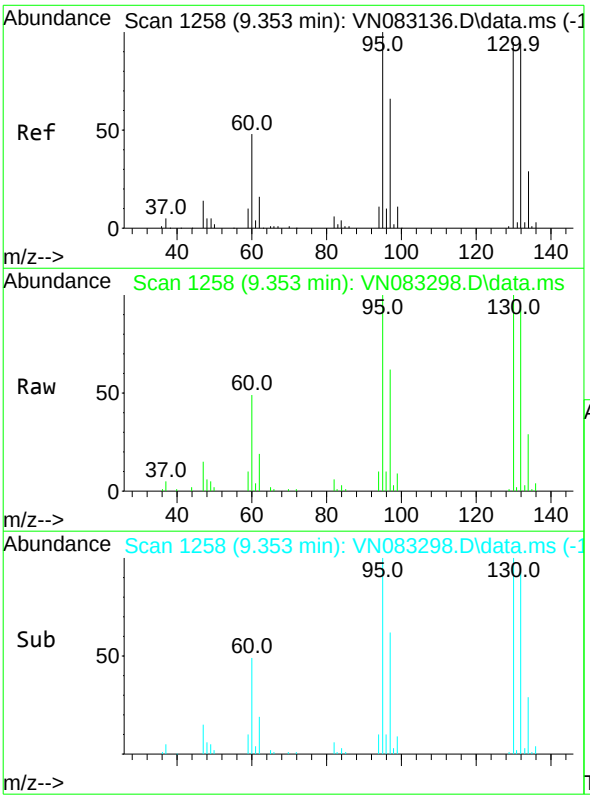
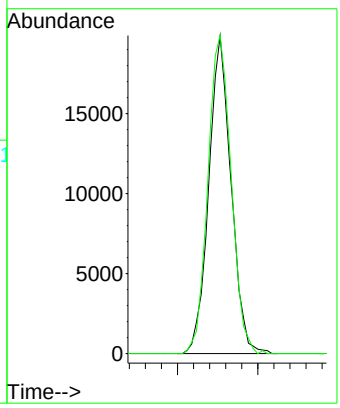


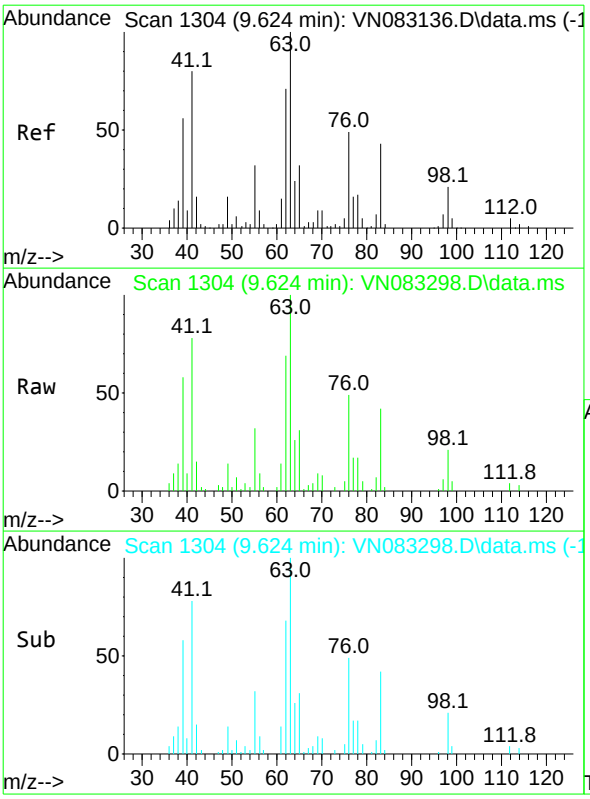


#44
Trichloroethene
Concen: 20.078 ug/l
RT: 9.353 min Scan# 1258
Delta R.T. 0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion:130 Resp: 38223

Ion	Ratio	Lower	Upper
130	100		
95	100.2	0.0	197.8

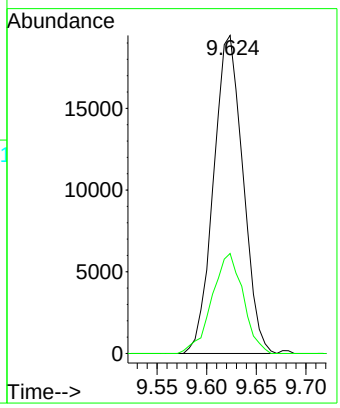




#45
1,2-Dichloropropane
Concen: 21.148 ug/l
RT: 9.624 min Scan# 13
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 63 Resp: 40150

Ion	Ratio	Lower	Upper
63	100		
65	31.4	24.4	36.6



Instrument :
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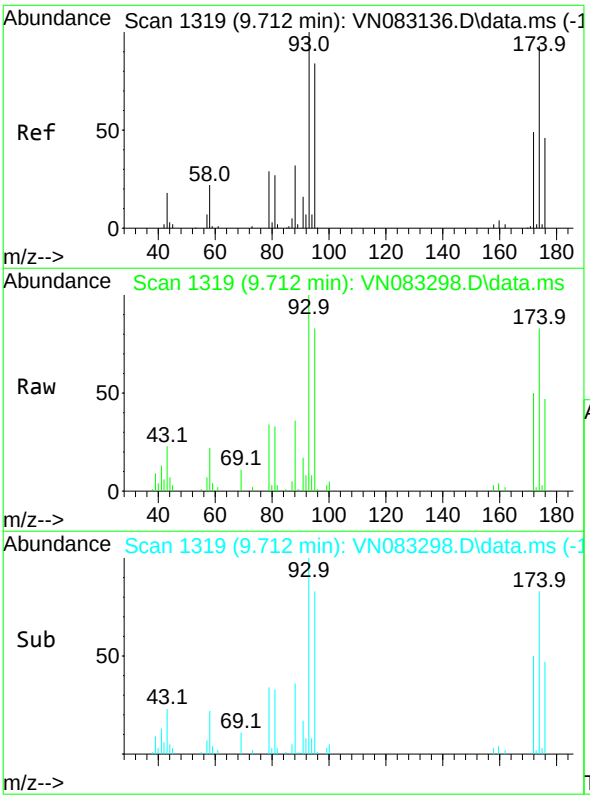
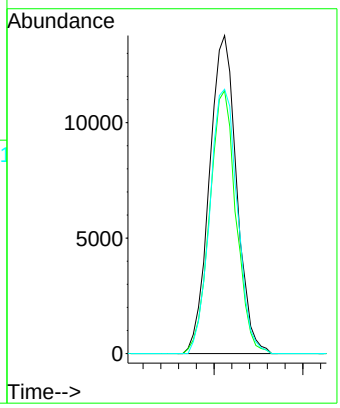
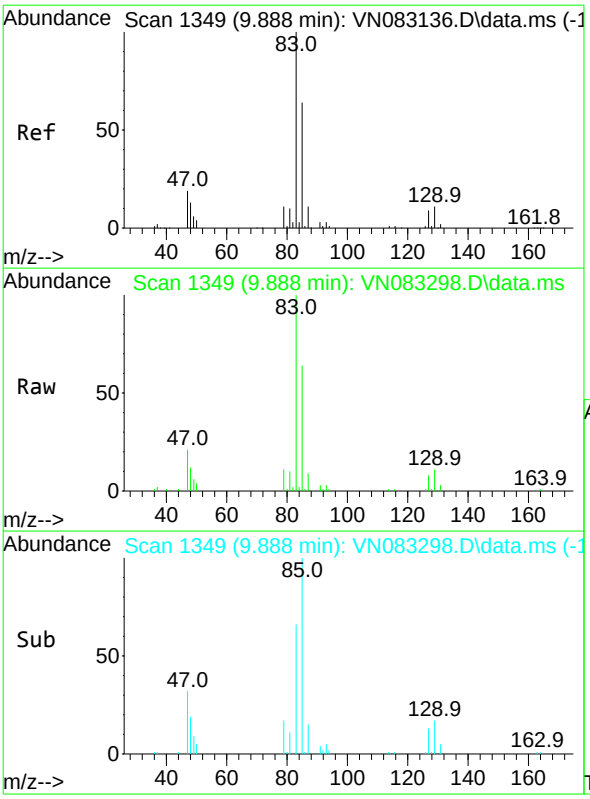


#46
Dibromomethane
Concen: 21.581 ug/l
RT: 9.712 min Scan# 1319
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 93 Resp: 29327

Ion	Ratio	Lower	Upper
93	100		
95	79.9	65.8	98.6
174	84.0	71.7	107.5

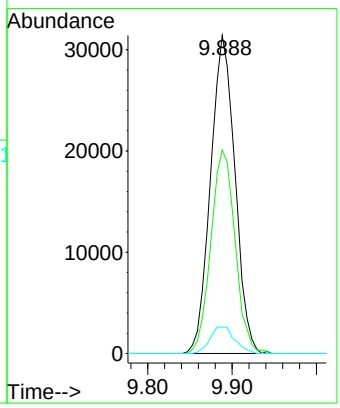




#47
Bromodichloromethane
Concen: 20.673 ug/l
RT: 9.888 min Scan# 13
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 83 Resp: 63079

Ion	Ratio	Lower	Upper
83	100		
85	64.0	51.1	76.7
127	8.3	7.2	10.8



Instrument :
MSVOA_N
ClientSampleId :
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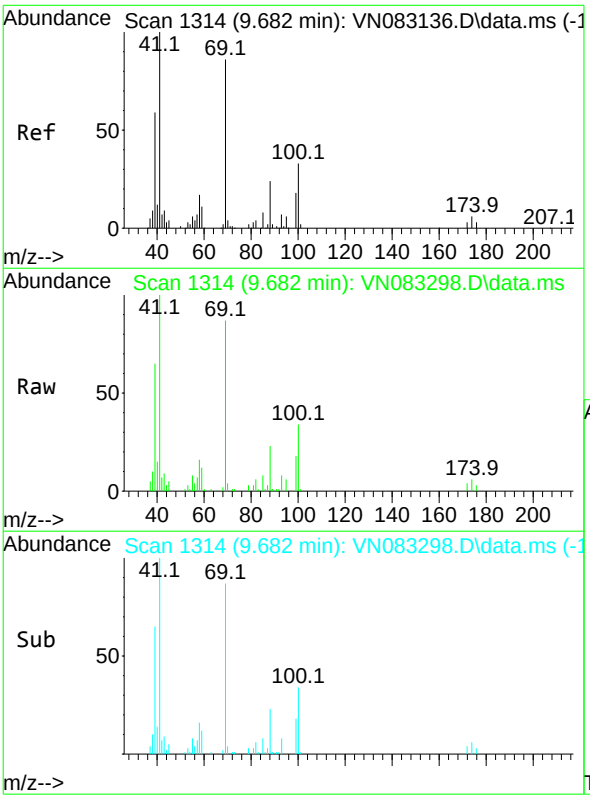
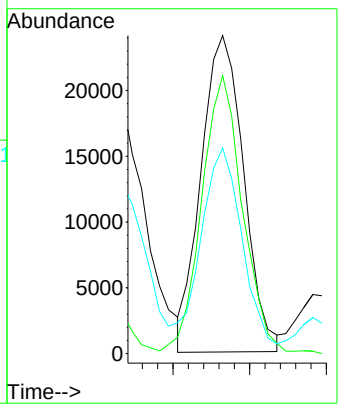
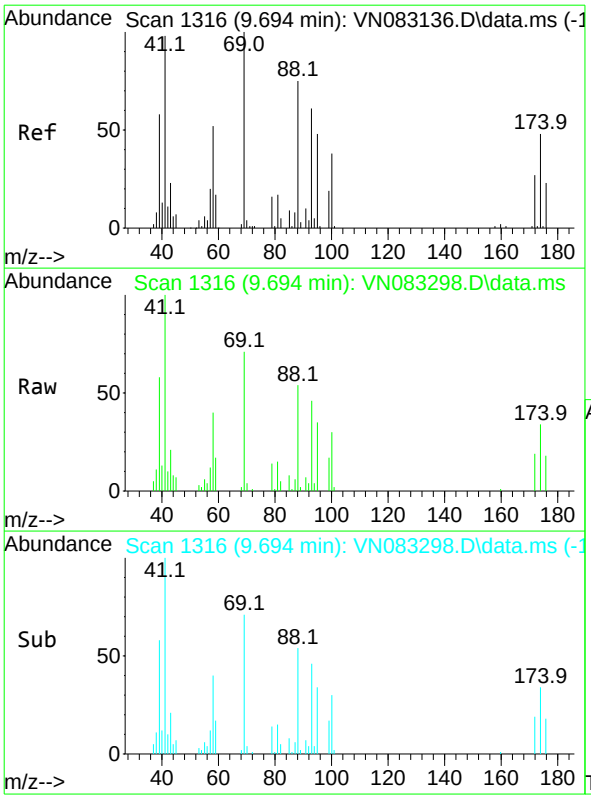


#48
Methyl methacrylate
Concen: 18.669 ug/l
RT: 9.682 min Scan# 1314
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 41 Resp: 46397

Ion	Ratio	Lower	Upper
41	100		
69	84.6	56.3	84.5#
39	64.7	50.3	75.5





#49
1,4-Dioxane
Concen: 421.571 ug/l
RT: 9.694 min Scan# 13
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 88 Resp: 18902

Ion	Ratio	Lower	Upper
88	100		
43	26.9	27.8	41.8#
58	71.3	59.4	89.0

Instrument :
MSVOA_N
ClientSampleId :
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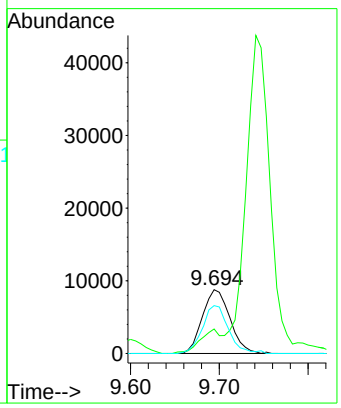
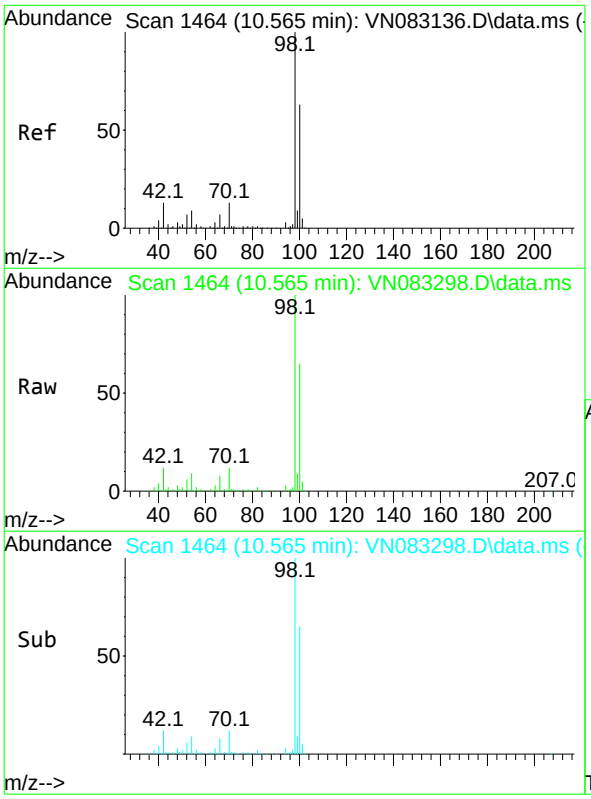
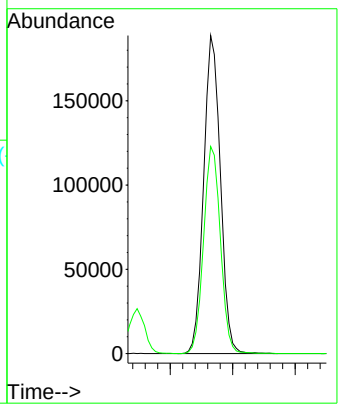


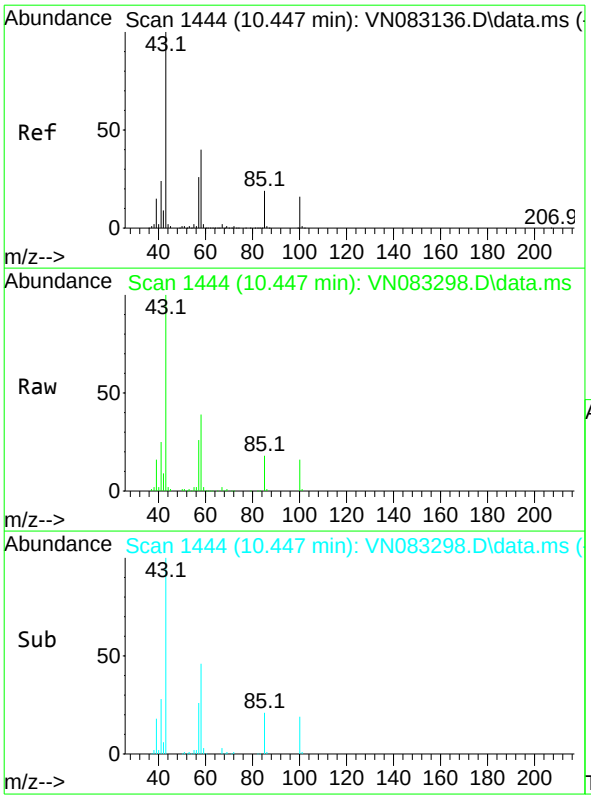


#50
Toluene-d8
Concen: 53.075 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 98 Resp: 351385

Ion	Ratio	Lower	Upper
98	100		
100	65.5	51.5	77.3

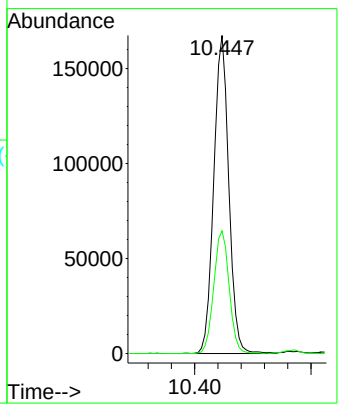




#51
4-Methyl-2-Pentanone
Concen: 105.490 ug/l
RT: 10.447 min Scan# 14
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 43 Resp: 299875

Ion	Ratio	Lower	Upper
43	100		
58	39.5	28.2	42.4



Instrument :
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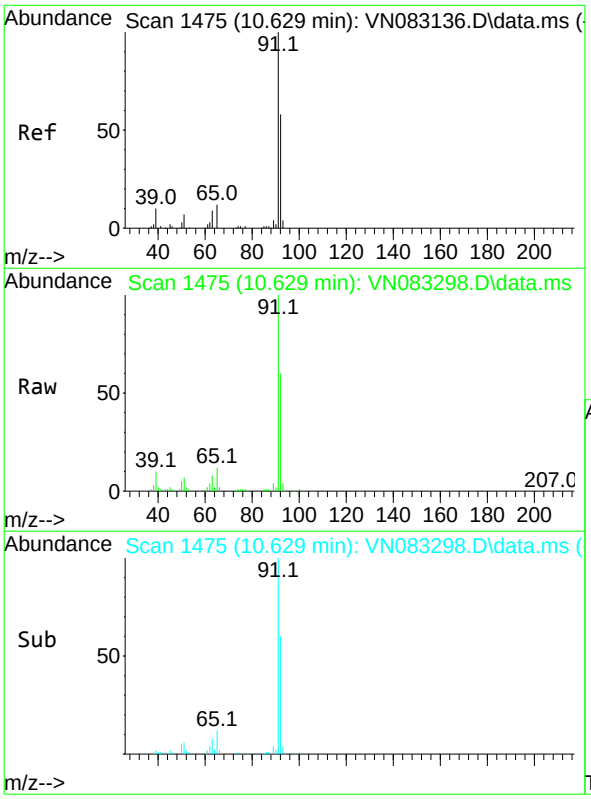
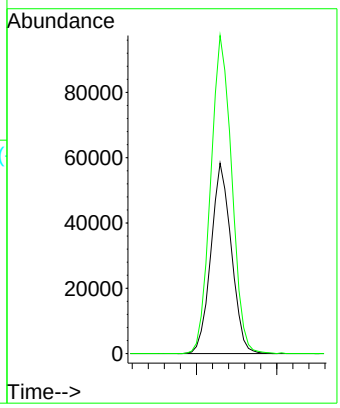
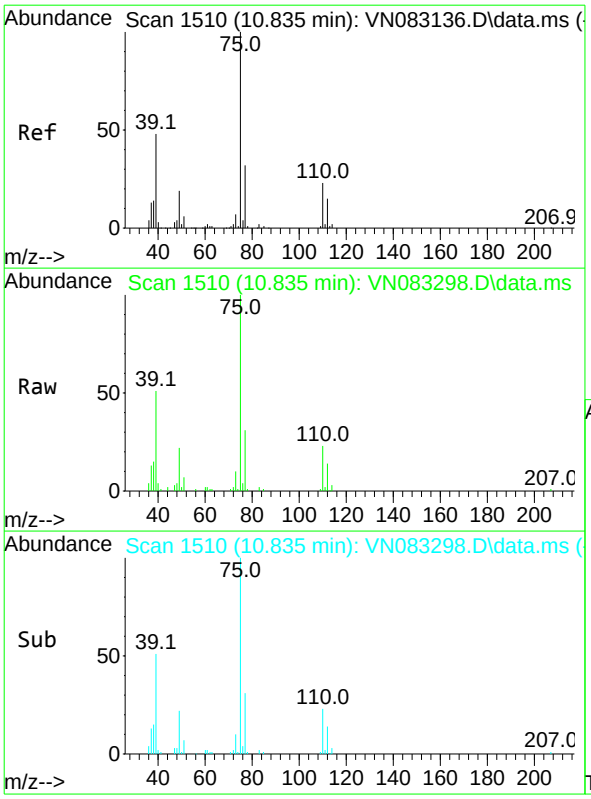


#52
Toluene
Concen: 20.347 ug/l
RT: 10.629 min Scan# 1475
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 92 Resp: 102822

Ion	Ratio	Lower	Upper
92	100		
91	172.4	139.4	209.0

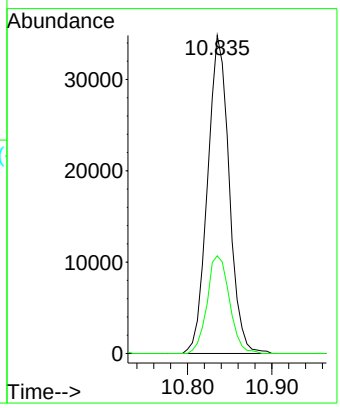




#53
t-1,3-Dichloropropene
Concen: 19.747 ug/l
RT: 10.835 min Scan# 15
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 75 Resp: 61891

Ion	Ratio	Lower	Upper
75	100		
77	30.7	25.7	38.5



Instrument :
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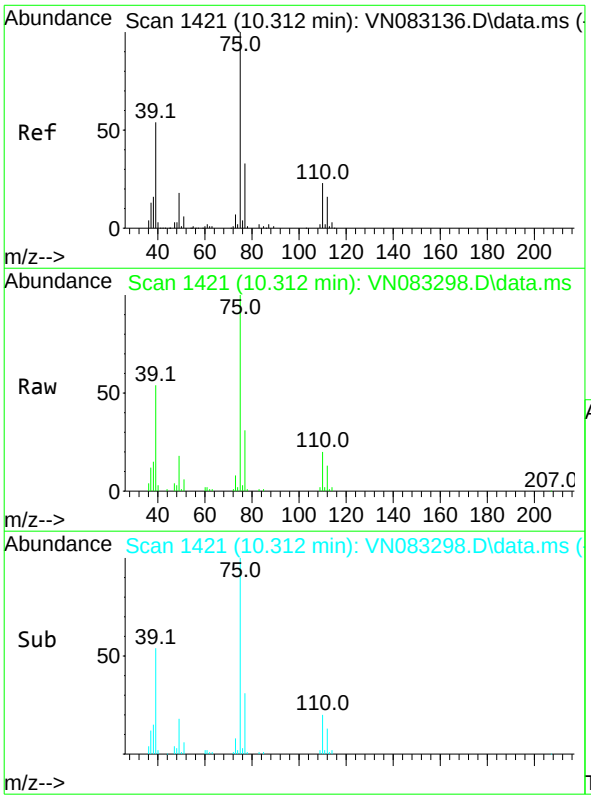
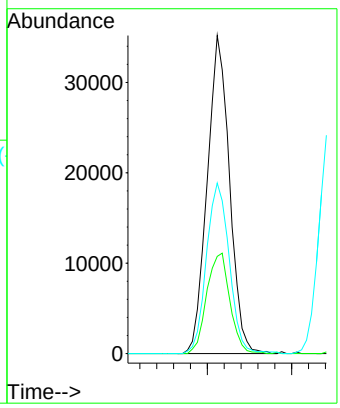
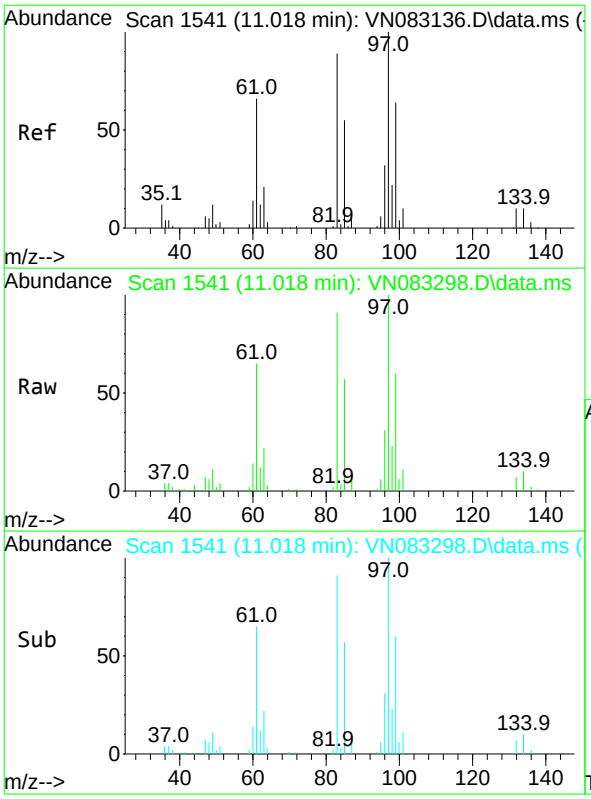


#54
cis-1,3-Dichloropropene
Concen: 19.411 ug/l
RT: 10.312 min Scan# 1421
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 75 Resp: 64711

Ion	Ratio	Lower	Upper
75	100		
77	30.6	24.3	36.5
39	53.6	50.5	75.7

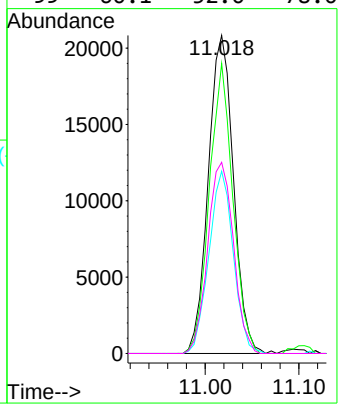




#55
1,1,2-Trichloroethane
Concen: 21.469 ug/l
RT: 11.018 min Scan# 15
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 97 Resp: 38882

Ion	Ratio	Lower	Upper
97	100		
83	91.2	71.4	107.0
85	57.3	45.8	68.6
99	60.1	52.0	78.0



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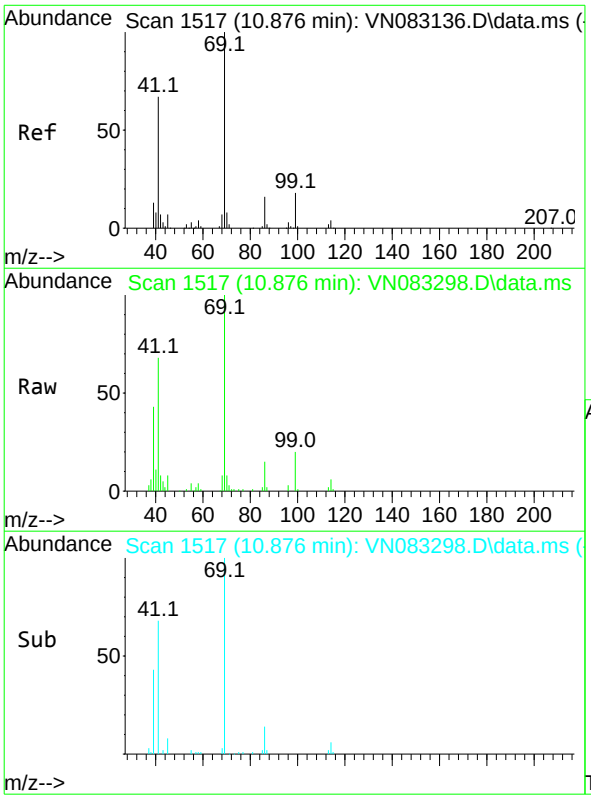
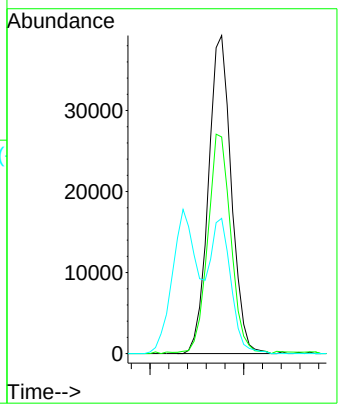
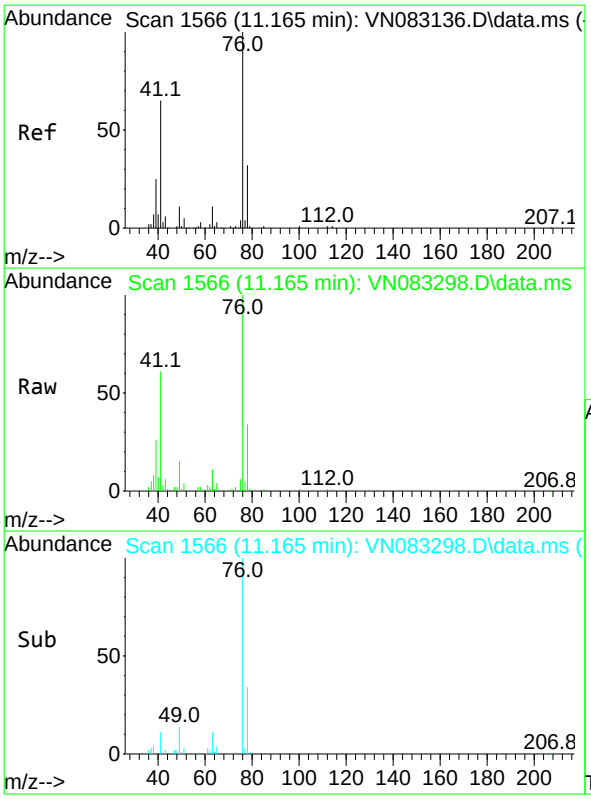


#56
Ethyl methacrylate
Concen: 19.488 ug/l
RT: 10.876 min Scan# 1517
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 69 Resp: 66534

Ion	Ratio	Lower	Upper
69	100		
41	69.7	63.4	95.2
39	37.3	37.4	56.0#

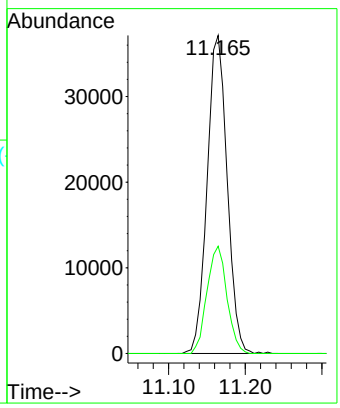




#57
1,3-Dichloropropane
Concen: 20.850 ug/l
RT: 11.165 min Scan# 15
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 76 Resp: 67303

Ion	Ratio	Lower	Upper
76	100		
78	33.6	25.6	38.4



Instrument :
MSVOA_N
ClientSampleId :
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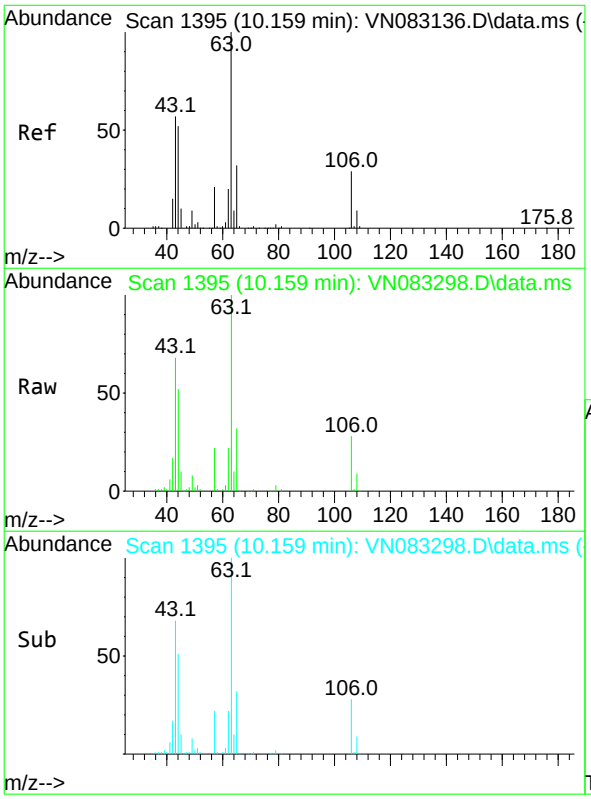
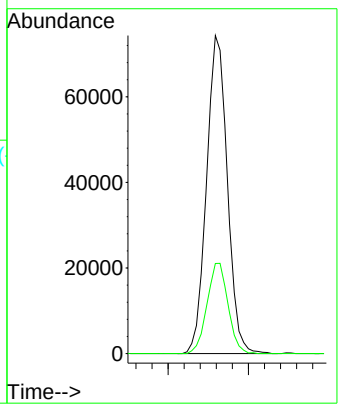
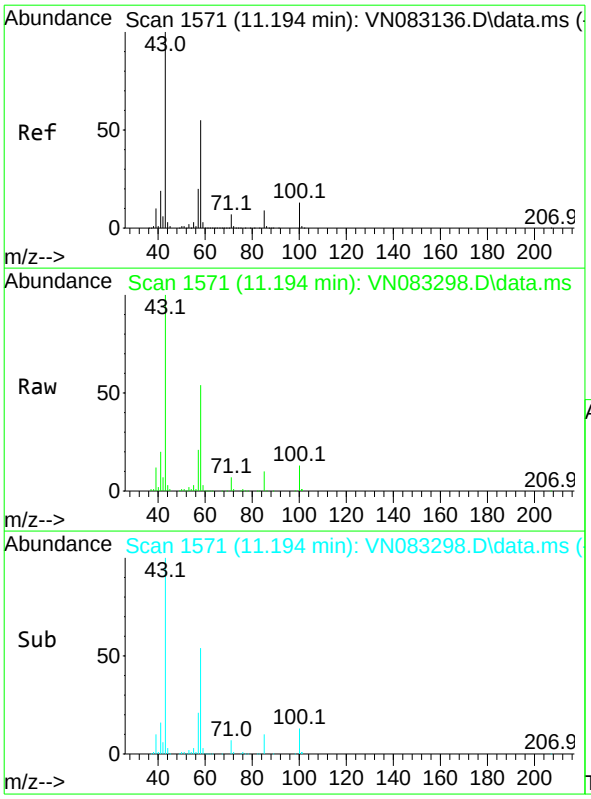


#58
2-Chloroethyl Vinyl ether
Concen: 92.654 ug/l
RT: 10.159 min Scan# 1395
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 63 Resp: 133714

Ion	Ratio	Lower	Upper
63	100		
106	28.6	21.4	32.0





#59
2-Hexanone
Concen: 103.052 ug/l
RT: 11.194 min Scan# 15
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 43 Resp: 226634

Ion	Ratio	Lower	Upper
43	100		
58	53.8	24.6	73.8

Instrument :
MSVOA_N
ClientSampleId :
VN0814WBS01

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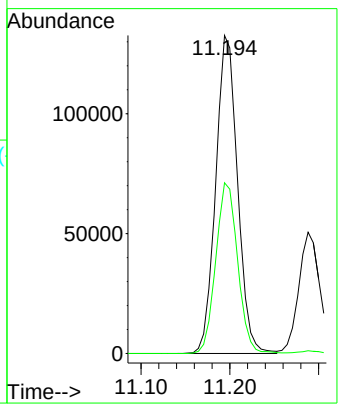
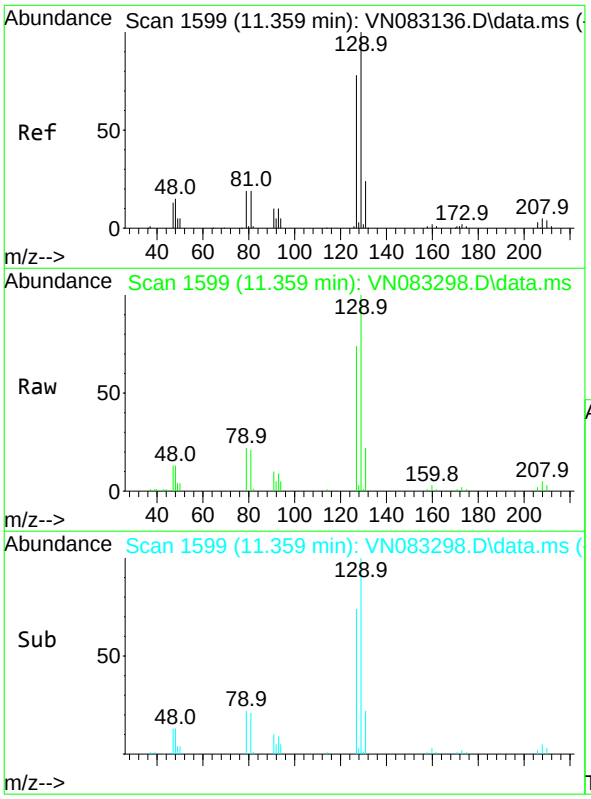
Reviewed By :Mahesh Dadoda 08/15/2024
Supervised By :Semsettin Yesilyurt 08/15/2024

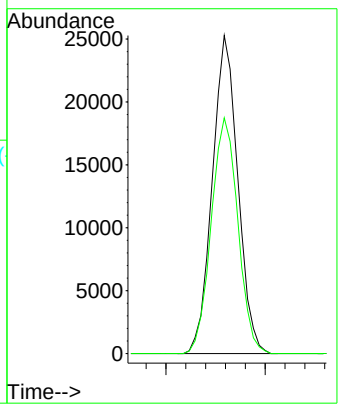


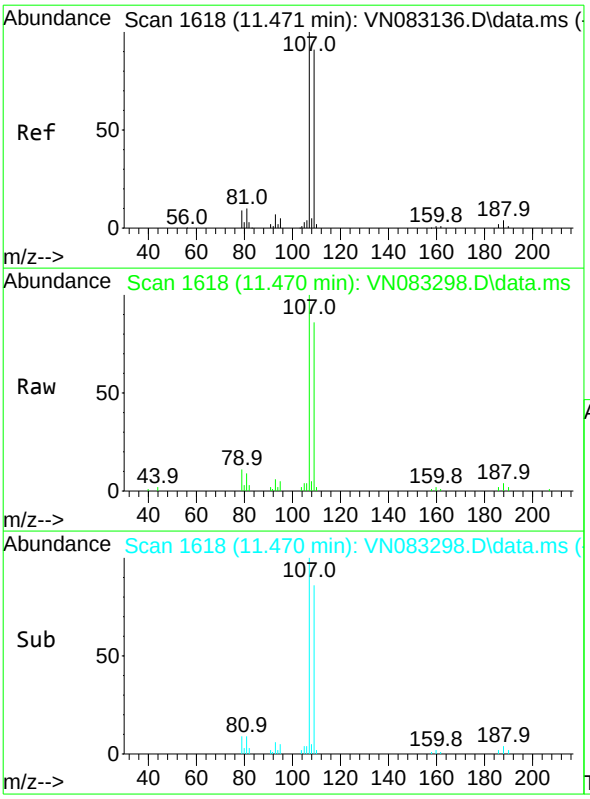


#60
Dibromochloromethane
Concen: 20.642 ug/l
RT: 11.359 min Scan# 1599
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion:129 Resp: 45197

Ion	Ratio	Lower	Upper
129	100		
127	77.3	39.2	117.6

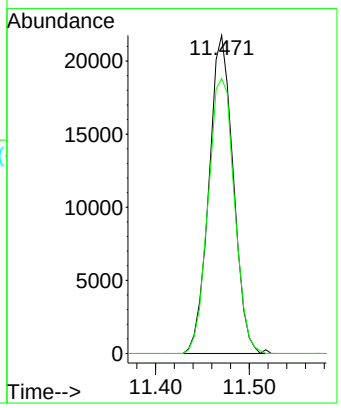




#61
1,2-Dibromoethane
Concen: 20.609 ug/l
RT: 11.470 min Scan# 16
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion:107 Resp: 39209

Ion	Ratio	Lower	Upper
107	100		
109	93.4	73.7	110.5



Instrument :
MSVOA_N
ClientSampleId :
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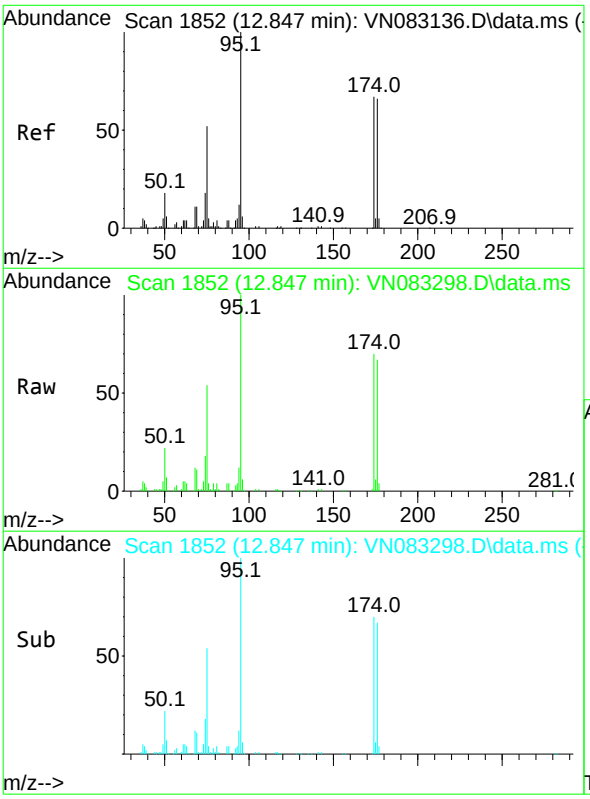
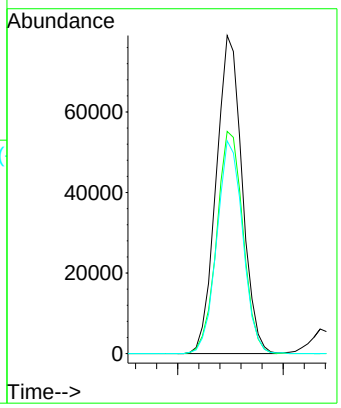
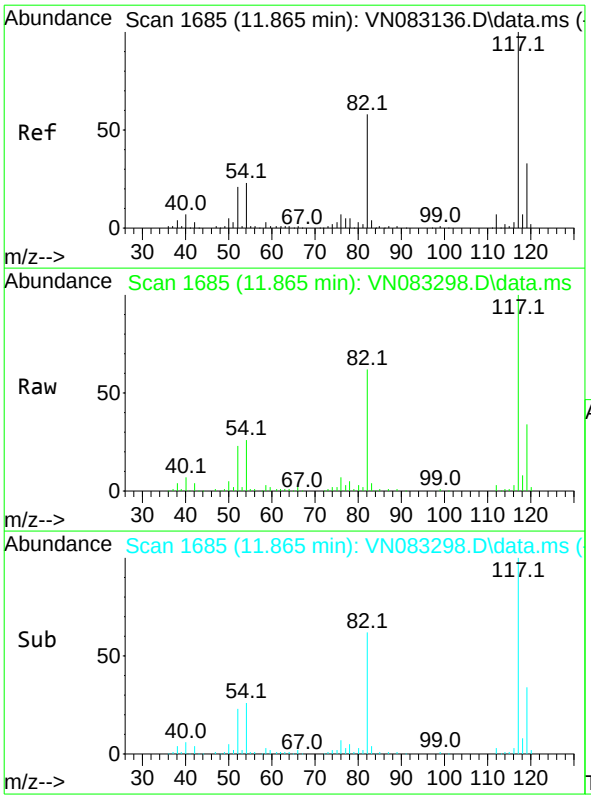


#62
4-Bromofluorobenzene
Concen: 52.296 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 95 Resp: 134979

Ion	Ratio	Lower	Upper
95	100		
174	70.7	0.0	159.2
176	66.8	0.0	147.6

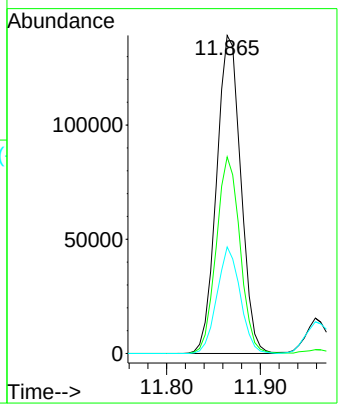




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 16
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion:117 Resp: 250581

Ion	Ratio	Lower	Upper
117	100		
82	61.8	47.5	71.3
119	33.5	25.6	38.4



Instrument :
MSVOA_N
ClientSampleId :
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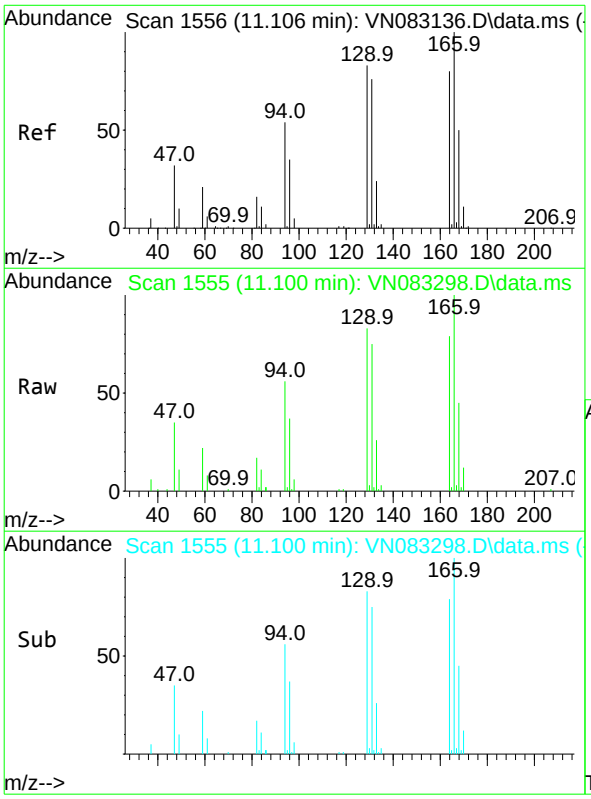
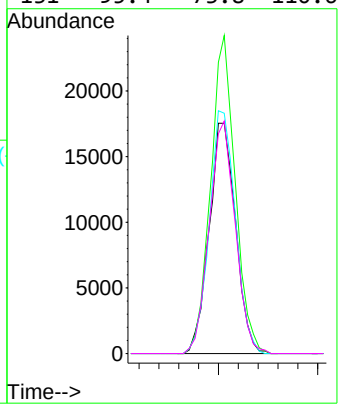
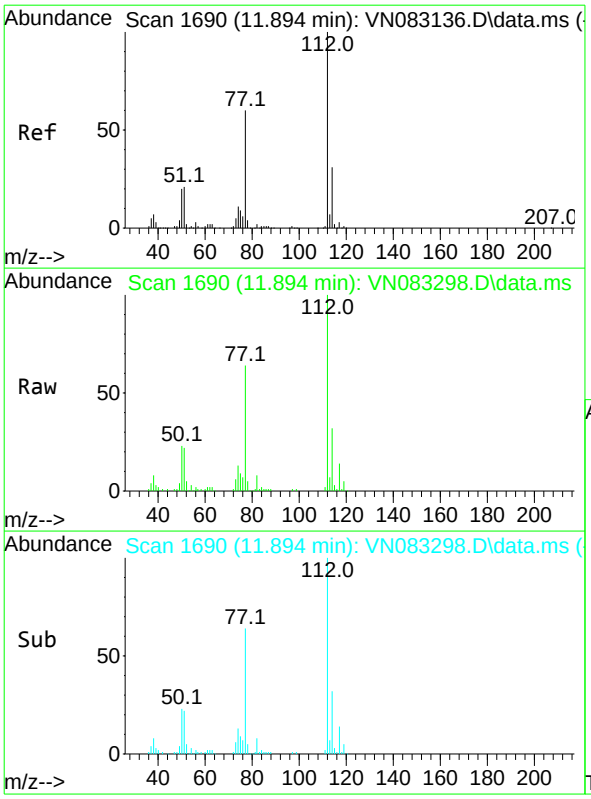


#64
Tetrachloroethene
Concen: 19.622 ug/l
RT: 11.100 min Scan# 1555
Delta R.T. -0.006 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion:164 Resp: 32564

Ion	Ratio	Lower	Upper
164	100		
166	126.4	101.4	152.0
129	105.4	75.7	113.5
131	95.4	73.8	110.6

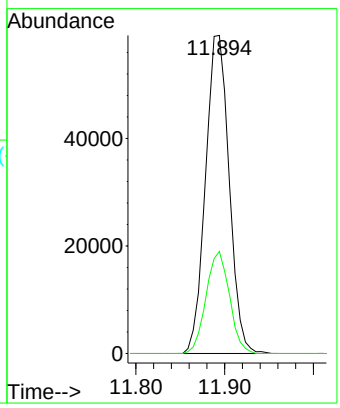




#65
Chlorobenzene
Concen: 19.770 ug/l
RT: 11.894 min Scan# 16
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion:112 Resp: 109477

Ion	Ratio	Lower	Upper
112	100		
114	32.1	26.2	39.2



Instrument :
MSVOA_N
ClientSampleId :
VN0814WBS01

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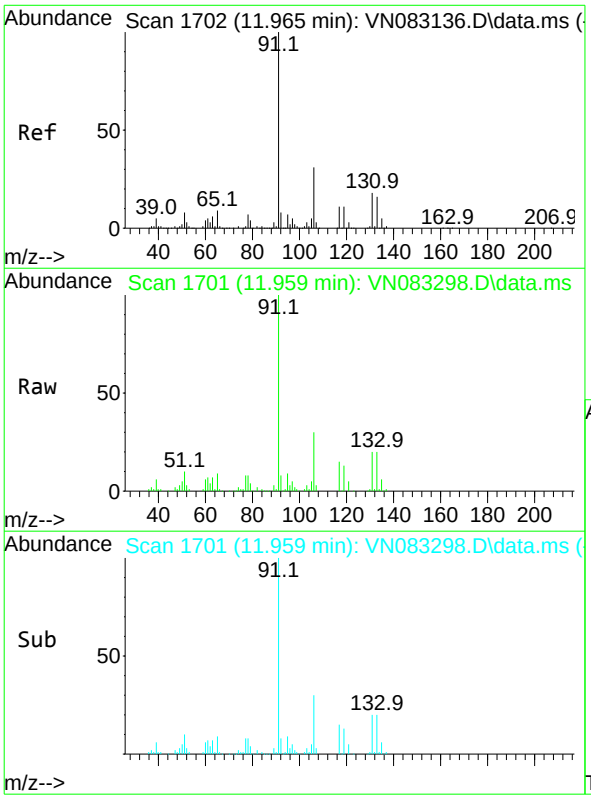
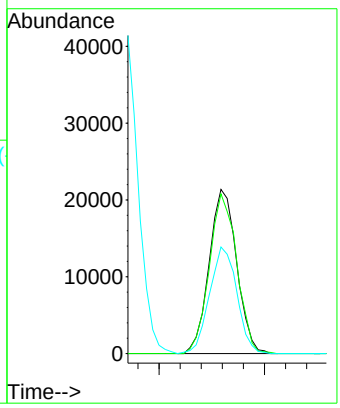
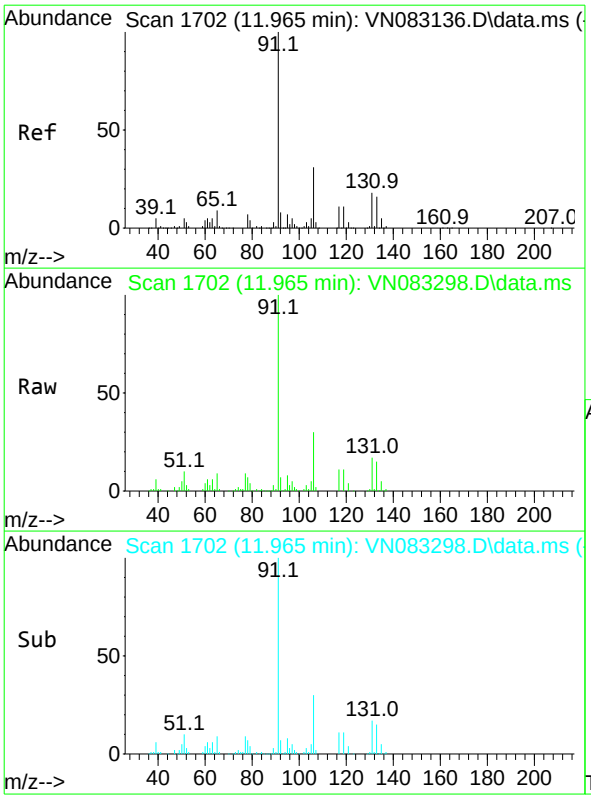


#66
1,1,1,2-Tetrachloroethane
Concen: 19.876 ug/l
RT: 11.959 min Scan# 1701
Delta R.T. -0.006 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion:131 Resp: 38818

Ion	Ratio	Lower	Upper
131	100		
133	96.8	47.3	142.0
119	64.3	32.5	97.4





#67
Ethyl Benzene
Concen: 19.621 ug/l
RT: 11.965 min Scan# 17
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 91 Resp: 199315

Ion	Ratio	Lower	Upper
91	100		
106	30.1	24.0	36.0

Instrument :
MSVOA_N
ClientSampleId :
VN0814WBS01

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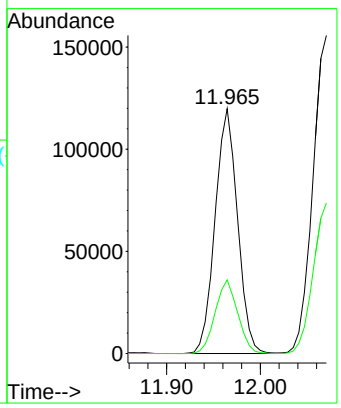
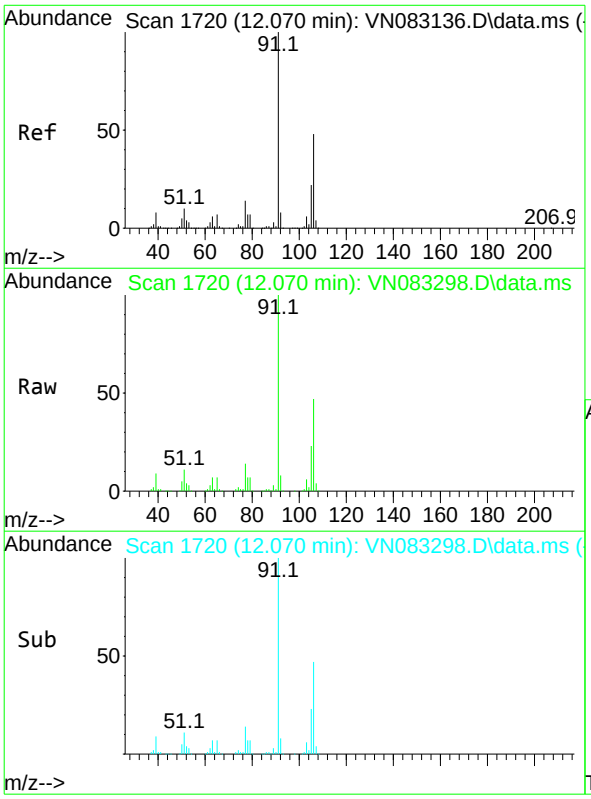
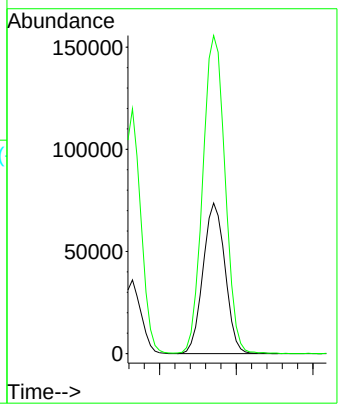


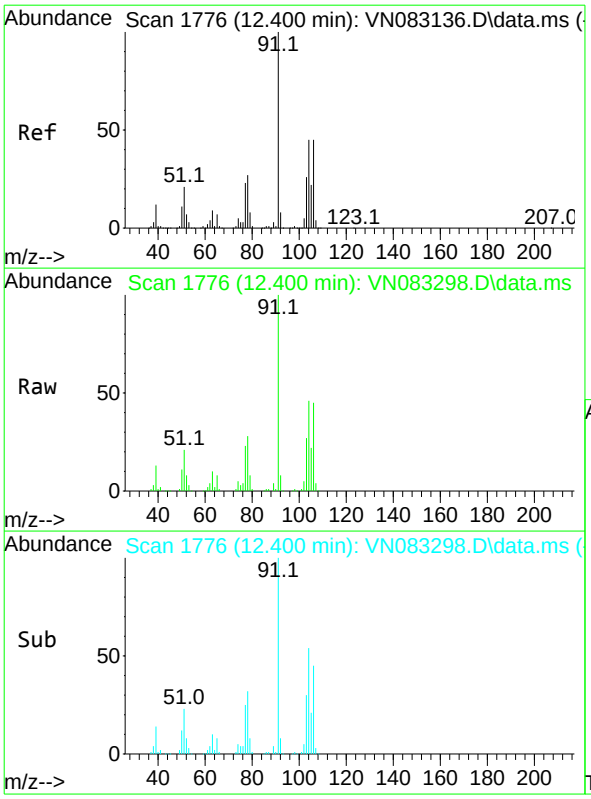


#68
m/p-Xylenes
Concen: 38.610 ug/l
RT: 12.070 min Scan# 1720
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion:106 Resp: 146923

Ion	Ratio	Lower	Upper
106	100		
91	214.5	166.1	249.1

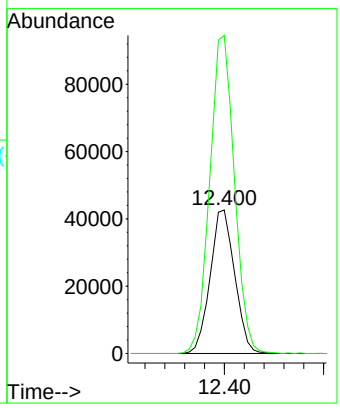




#69
o-Xylene
Concen: 19.511 ug/l
RT: 12.400 min Scan# 17
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion:106 Resp: 73227

Ion	Ratio	Lower	Upper
106	100		
91	223.1	111.3	333.9



Instrument :
MSVOA_N
ClientSampleId :
VN0814WBS01

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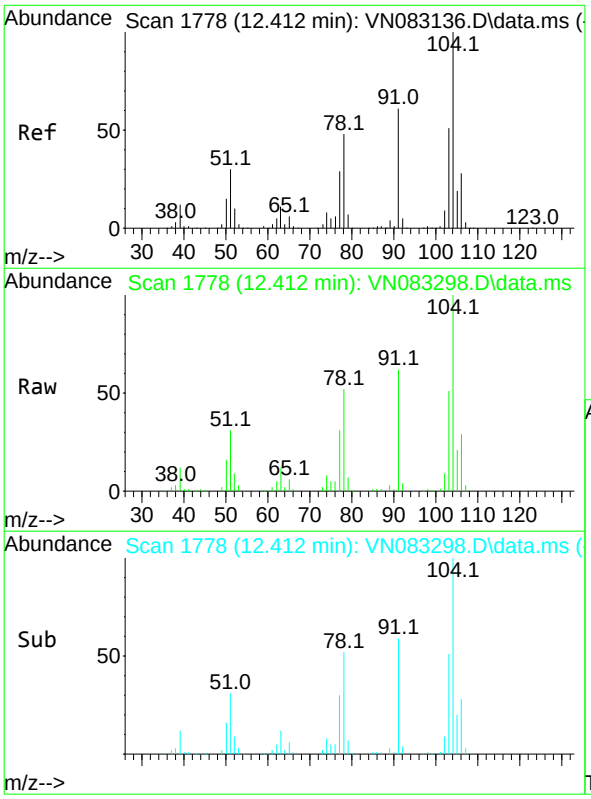
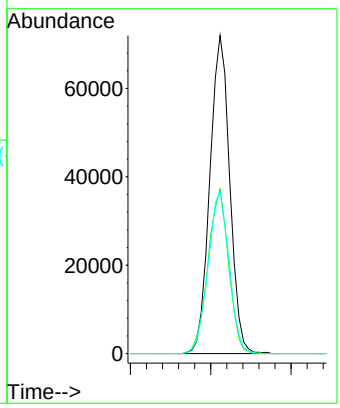
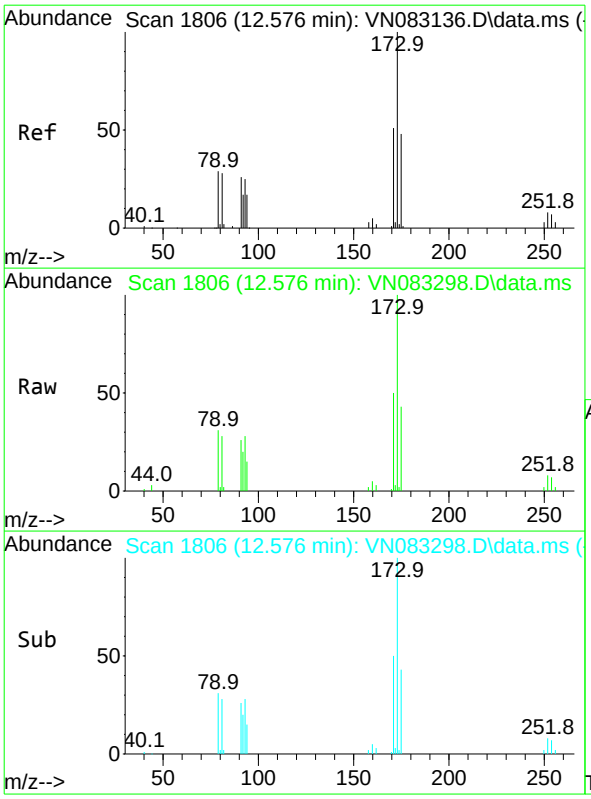


#70
Styrene
Concen: 19.632 ug/l
RT: 12.412 min Scan# 1778
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion:104 Resp: 123747

Ion	Ratio	Lower	Upper
104	100		
78	53.6	41.6	62.4
103	53.7	44.0	66.0





#71
Bromoform
Concen: 19.376 ug/l
RT: 12.576 min Scan# 18
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion:173 Resp: 28667

Ion	Ratio	Lower	Upper
173	100		
175	48.5	24.0	72.0
254	0.0	0.0	0.0

Instrument :
MSVOA_N
ClientSampleId :
VN0814WBS01

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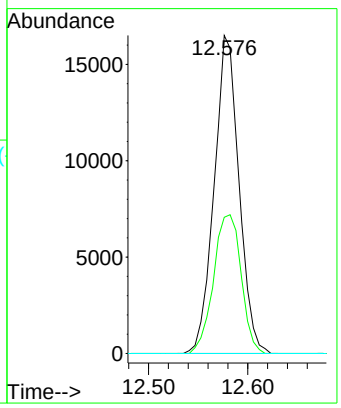
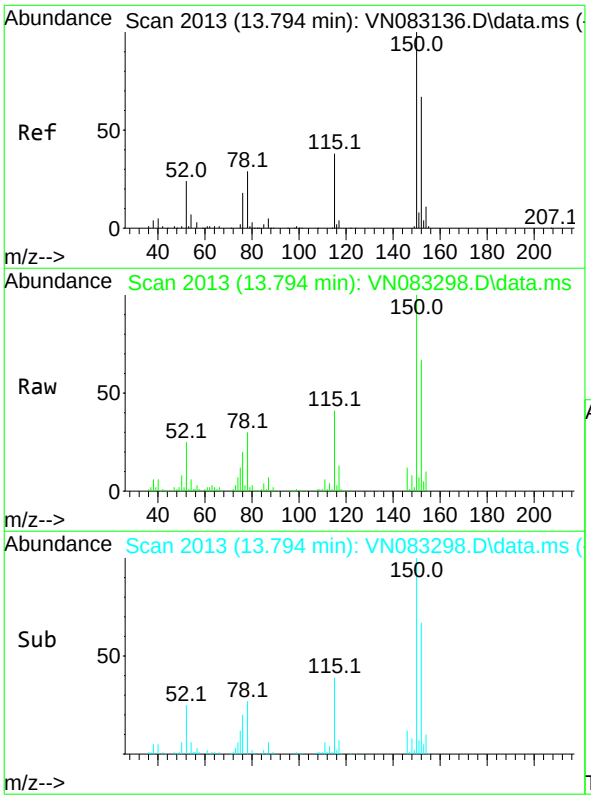
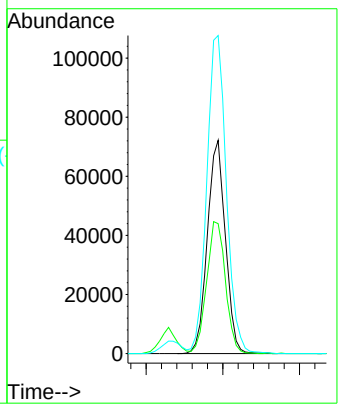


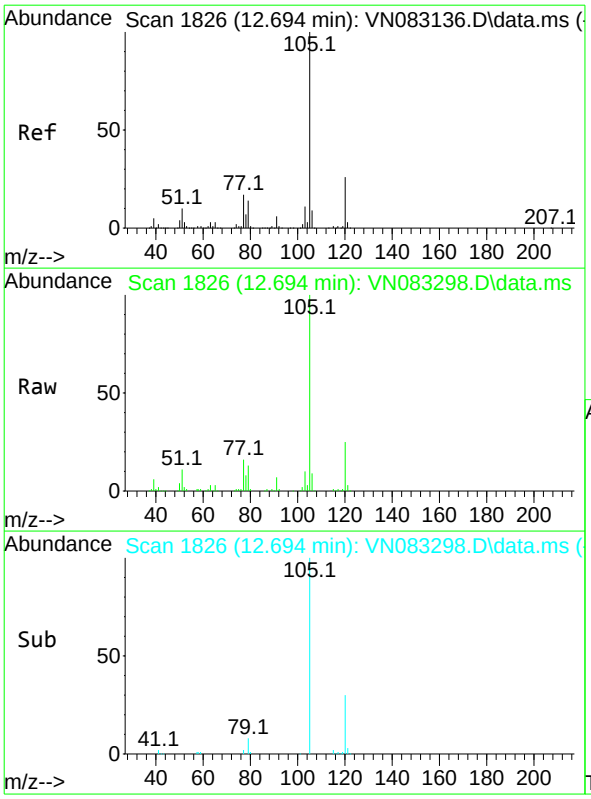


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.794 min Scan# 2013
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion:152 Resp: 117869

Ion	Ratio	Lower	Upper
152	100		
115	64.4	30.6	91.6
150	161.8	0.0	348.6

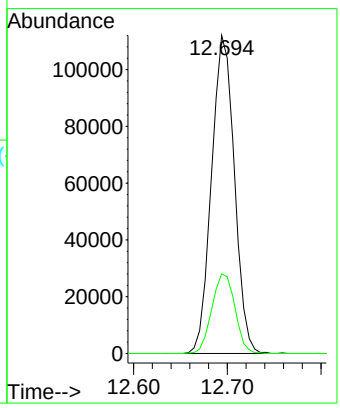




#73
Isopropylbenzene
Concen: 19.262 ug/l
RT: 12.694 min Scan# 18
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion:105 Resp: 189904

Ion	Ratio	Lower	Upper
105	100		
120	25.2	12.9	38.6



Instrument :
MSVOA_N
ClientSampleId :
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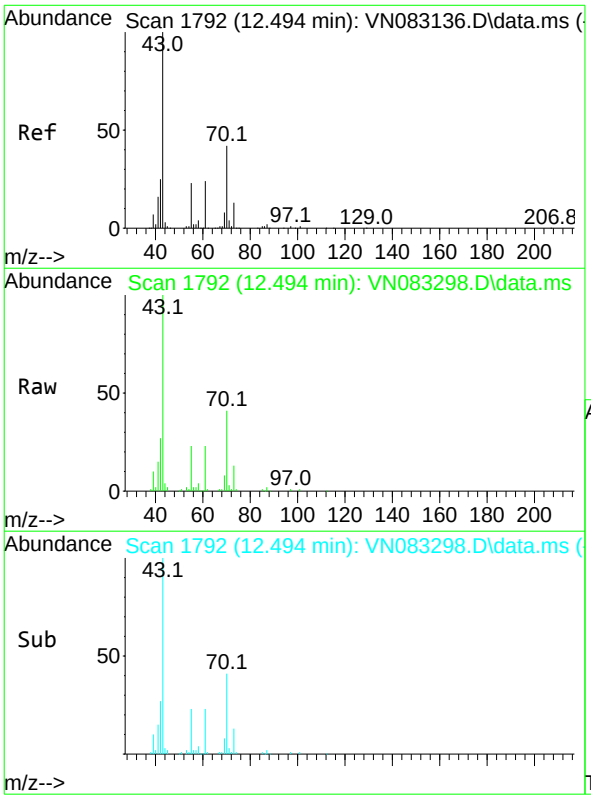
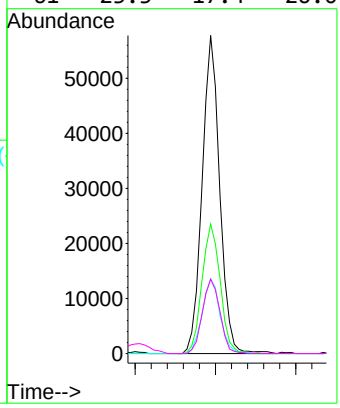
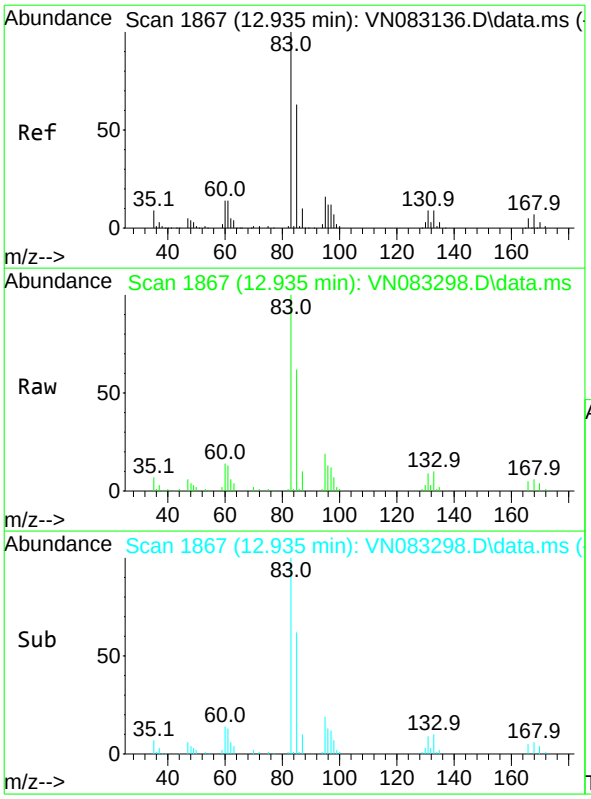


#74
N-amyl acetate
Concen: 18.185 ug/l
RT: 12.494 min Scan# 1792
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 43 Resp: 87695

Ion	Ratio	Lower	Upper
43	100		
70	42.1	29.8	44.6
55	24.0	18.7	28.1
61	23.3	17.4	26.0





#75
1,1,2,2-Tetrachloroethane
Concen: 20.040 ug/l
RT: 12.935 min Scan# 18
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Instrument :
MSVOA_N
ClientSampleId :
VN0814WBS01

Tgt Ion: 83 Resp: 55881

Ion	Ratio	Lower	Upper
83	100		
131	9.8	5.0	14.9
85	63.8	31.9	95.7

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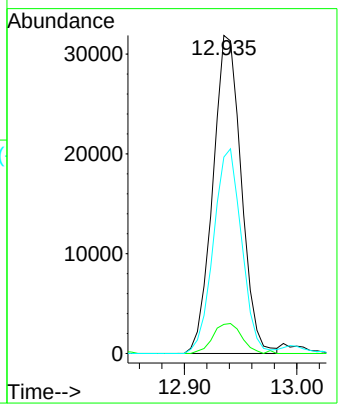
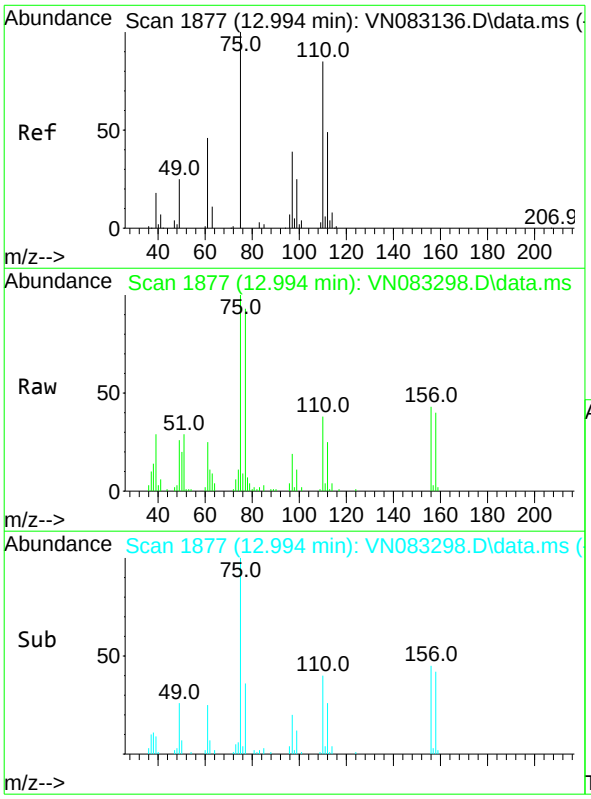
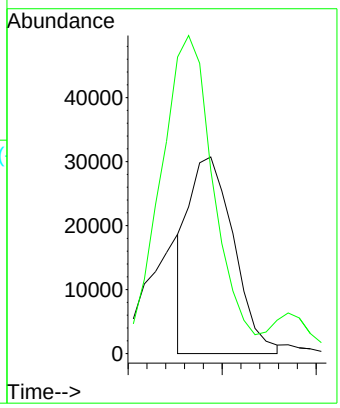


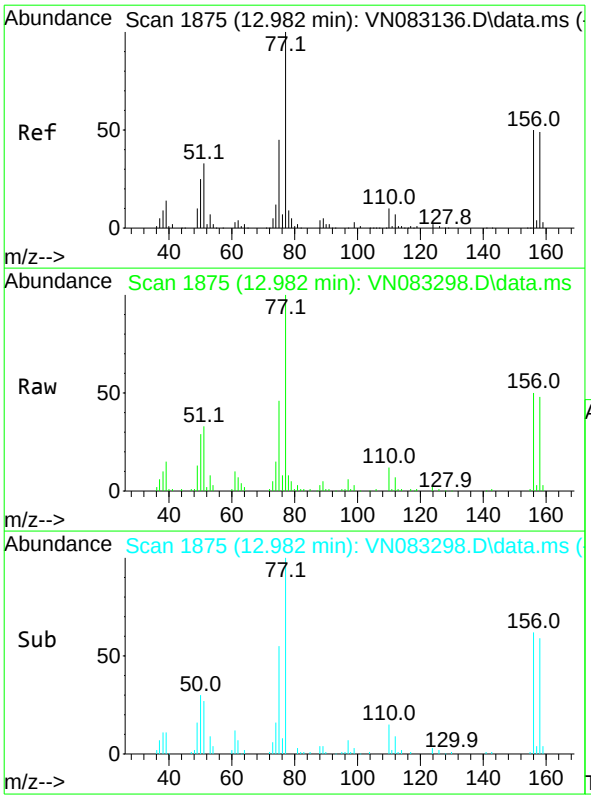


#76
1,2,3-Trichloropropane
Concen: 19.732 ug/l m
RT: 12.994 min Scan# 1877
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 75 Resp: 51046

Ion	Ratio	Lower	Upper
75	100		
77	193.3	110.9	332.6

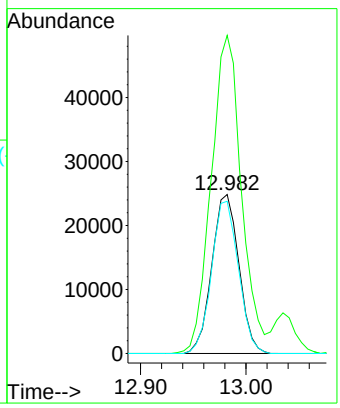




#77
Bromobenzene
Concen: 20.216 ug/l
RT: 12.982 min Scan# 18
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion:156 Resp: 44274

Ion	Ratio	Lower	Upper
156	100		
77	222.9	111.3	333.8
158	95.4	48.3	144.9



Instrument :
MSVOA_N
ClientSampleId :
VN0814WBS01

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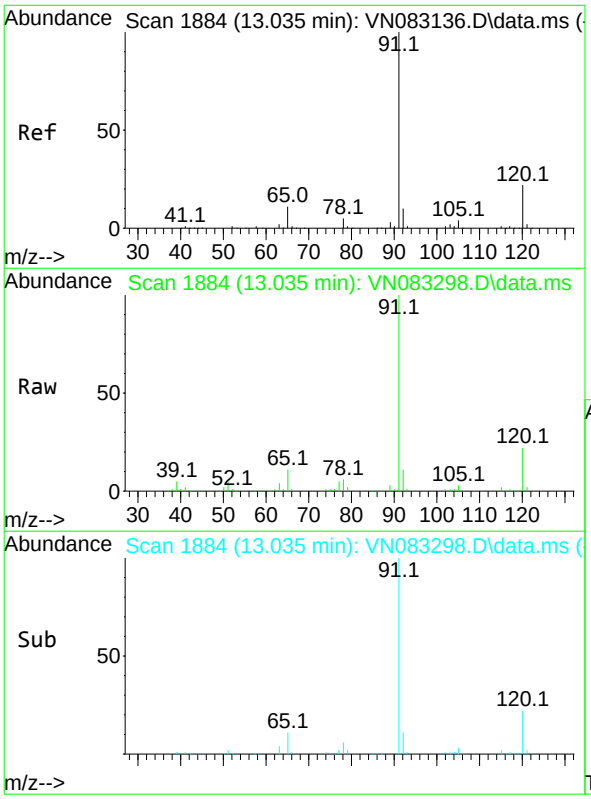
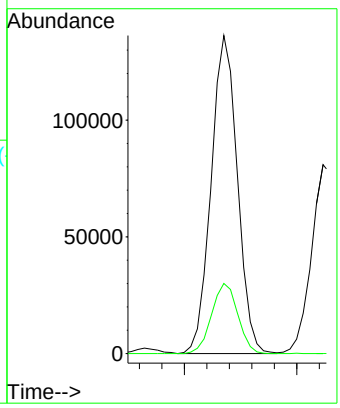
Supervised By :Semsettin Yesilyurt 08/15/2024

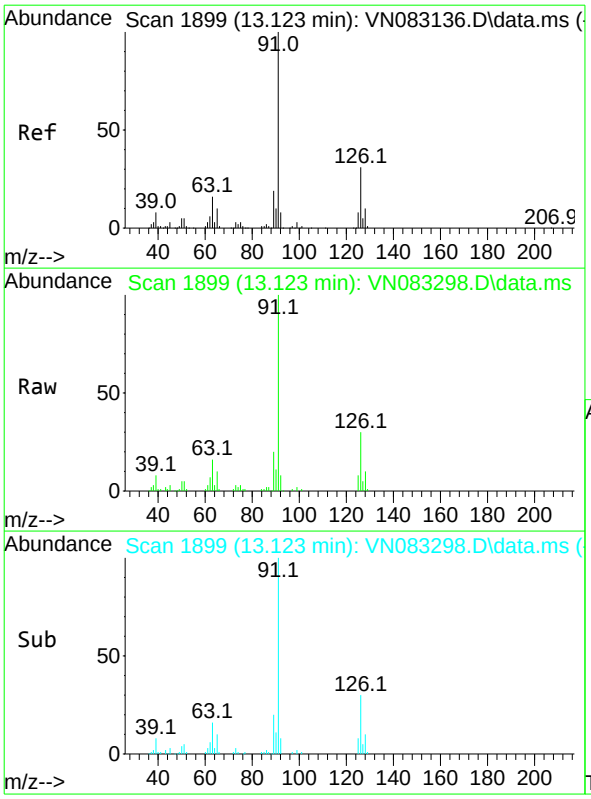


#78
n-propylbenzene
Concen: 19.470 ug/l
RT: 13.035 min Scan# 1884
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 91 Resp: 221023

Ion	Ratio	Lower	Upper
91	100		
120	21.9	10.9	32.9

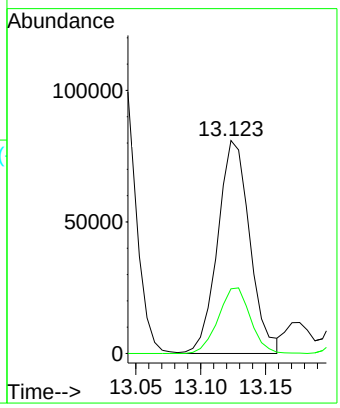




#79
2-Chlorotoluene
Concen: 19.416 ug/l
RT: 13.123 min Scan# 18
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 91 Resp: 139743

Ion	Ratio	Lower	Upper
91	100		
126	30.7	16.2	48.6



Instrument :
MSVOA_N
ClientSampleId :
VN0814WBS01

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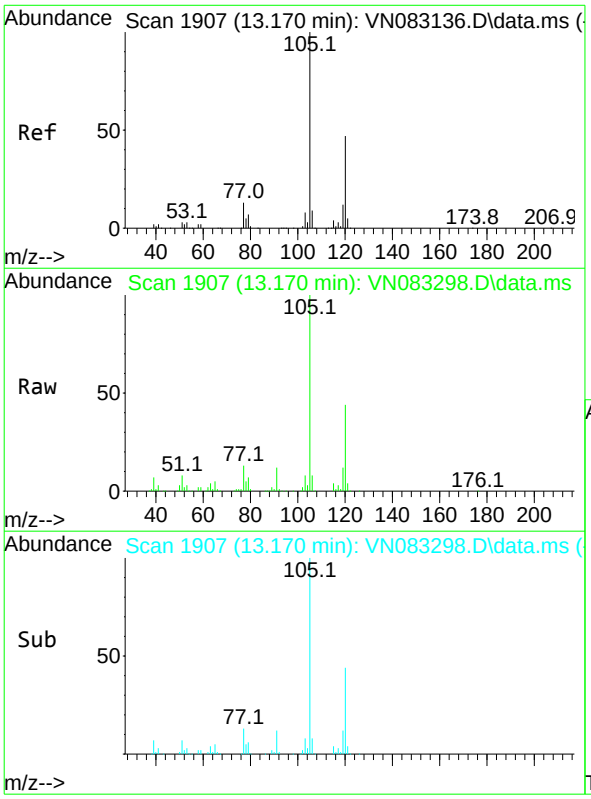
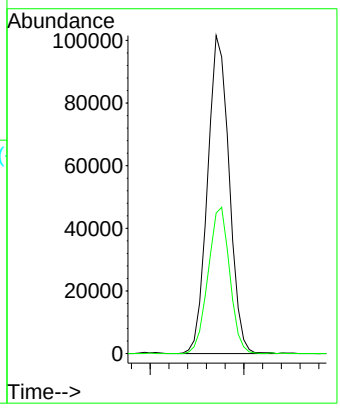
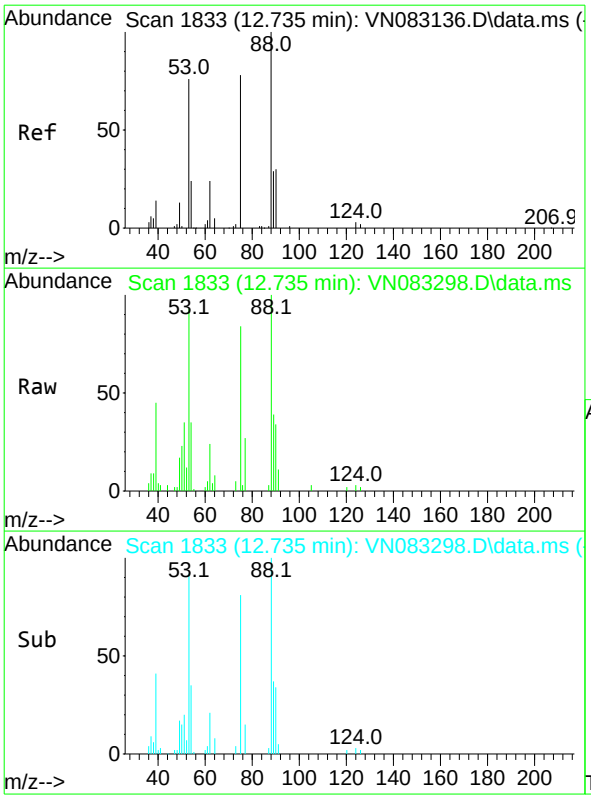


#80
1,3,5-Trimethylbenzene
Concen: 19.735 ug/l
RT: 13.170 min Scan# 1907
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion:105 Resp: 162894

Ion	Ratio	Lower	Upper
105	100		
120	45.9	24.3	72.8





#81
trans-1,4-Dichloro-2-butene
Concen: 18.289 ug/l
RT: 12.735 min Scan# 18
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Instrument :
MSVOA_N
ClientSampleId :
VN0814WBS01

Tgt Ion: 75 Resp: 21751

Ion	Ratio	Lower	Upper
75	100		
53	104.9	88.4	132.6
89	42.2	36.3	54.5

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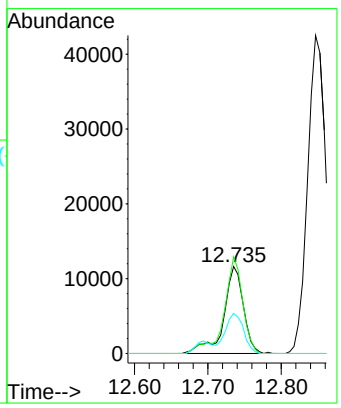
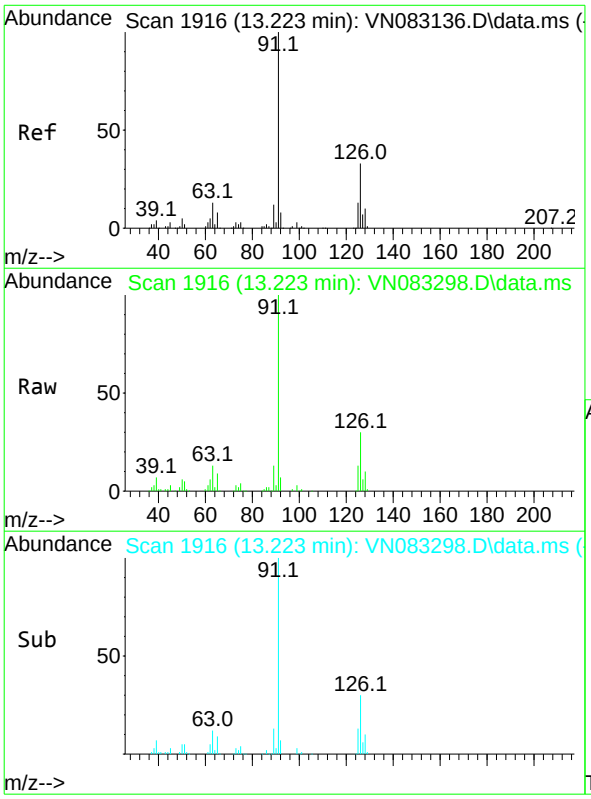
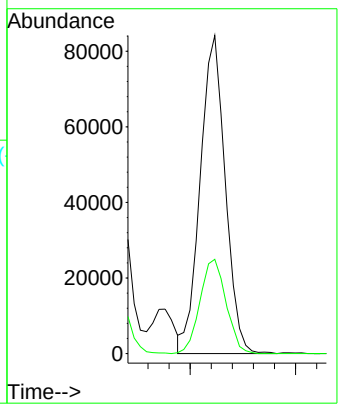


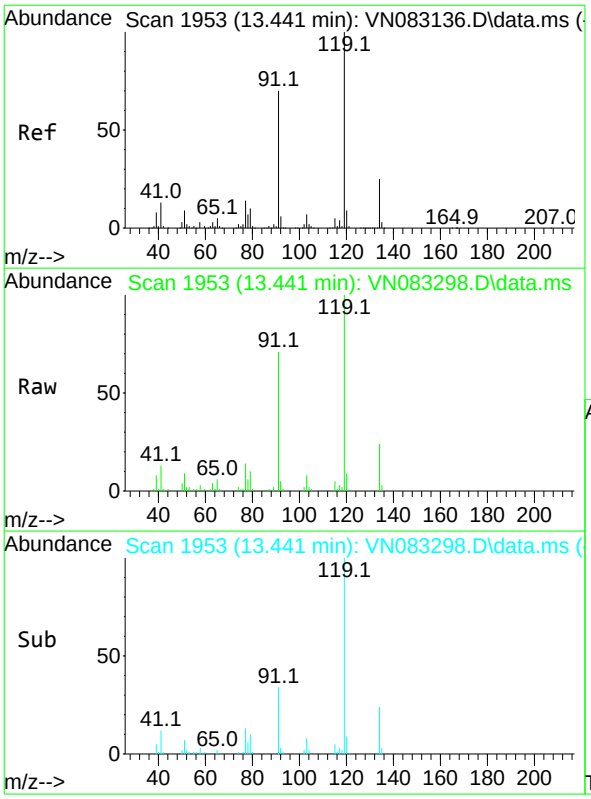


#82
4-Chlorotoluene
Concen: 19.252 ug/l
RT: 13.223 min Scan# 1916
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 91 Resp: 138990

Ion	Ratio	Lower	Upper
91	100		
126	30.8	16.2	48.6

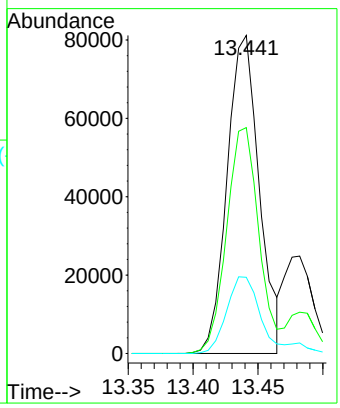




#83
tert-Butylbenzene
Concen: 19.177 ug/l
RT: 13.441 min Scan# 19
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion:119 Resp: 140176

Ion	Ratio	Lower	Upper
119	100		
91	70.7	35.0	105.1
134	26.9	13.3	39.8



Instrument :
MSVOA_N
ClientSampleId :
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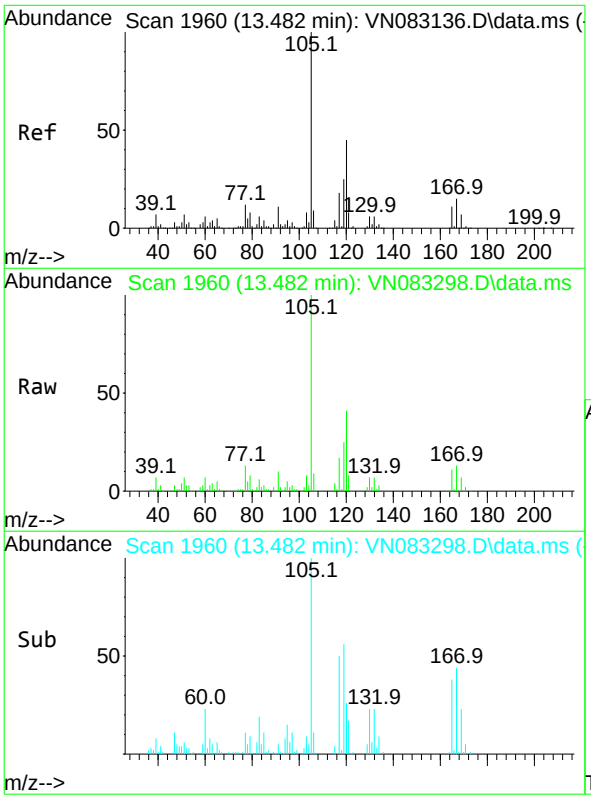
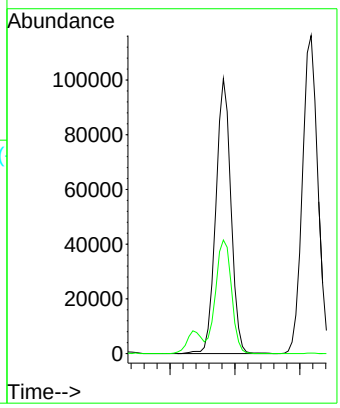
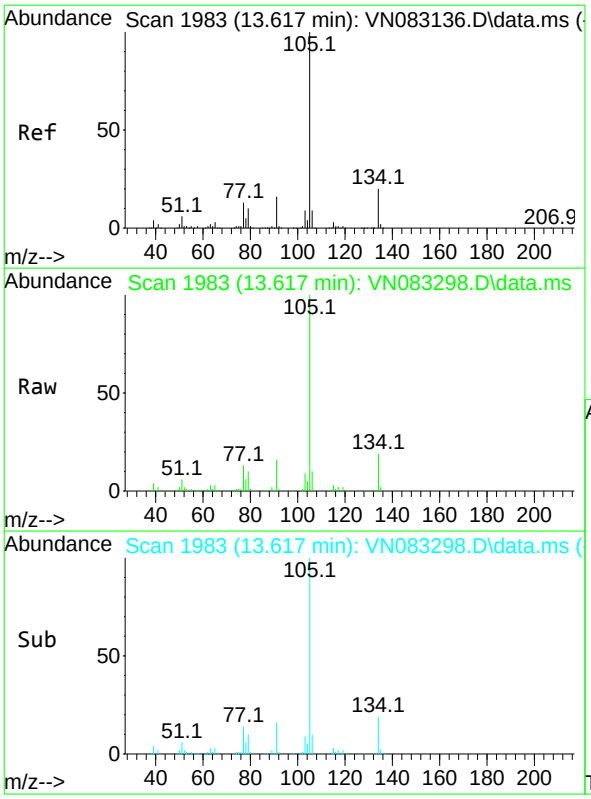


#84
1,2,4-Trimethylbenzene
Concen: 19.484 ug/l
RT: 13.482 min Scan# 1960
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion:105 Resp: 162074

Ion	Ratio	Lower	Upper
105	100		
120	43.7	21.9	65.8

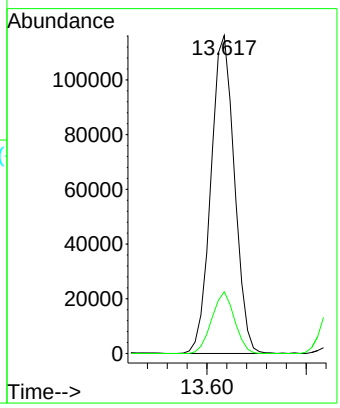




#85
sec-Butylbenzene
Concen: 19.208 ug/l
RT: 13.617 min Scan# 19
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion:105 Resp: 191578

Ion	Ratio	Lower	Upper
105	100		
134	18.7	9.8	29.3



Instrument :
MSVOA_N
ClientSampleId :
VN0814WBS01

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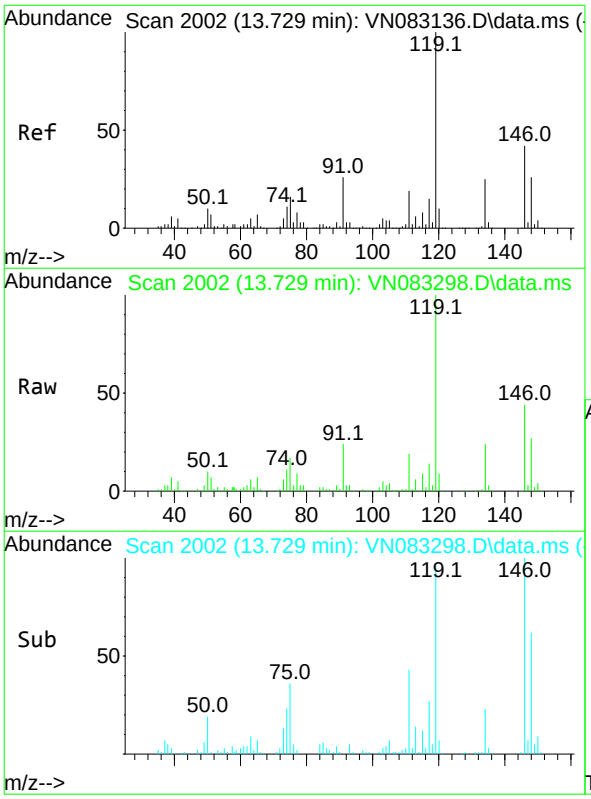
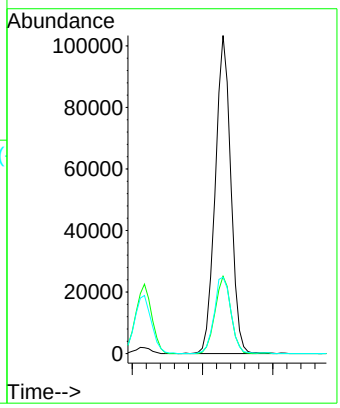
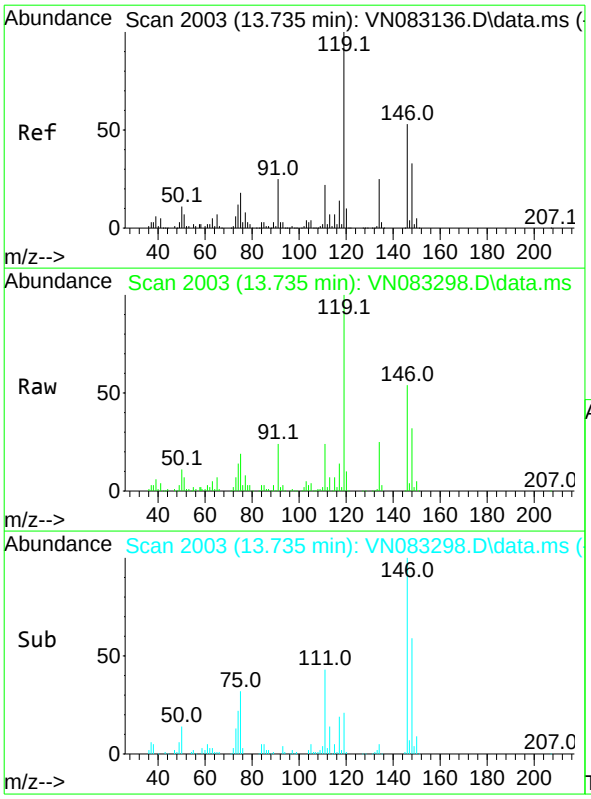


#86
p-Isopropyltoluene
Concen: 19.287 ug/l
RT: 13.729 min Scan# 2002
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion:119 Resp: 158838

Ion	Ratio	Lower	Upper
119	100		
134	24.7	13.0	39.0
91	25.9	12.3	36.9

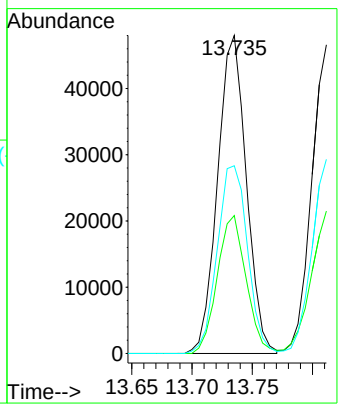




#87
1,3-Dichlorobenzene
Concen: 19.337 ug/l
RT: 13.735 min Scan# 20
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion:146 Resp: 79688

Ion	Ratio	Lower	Upper
146	100		
111	43.6	20.6	61.9
148	62.3	31.8	95.3



Instrument :
MSVOA_N
ClientSampleId :
VN0814WBS01

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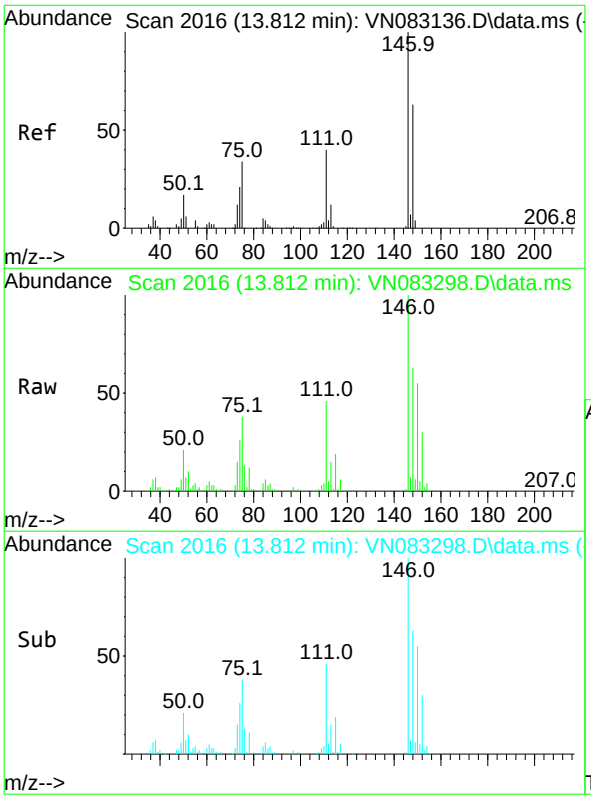
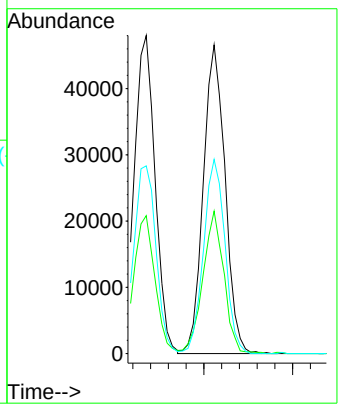
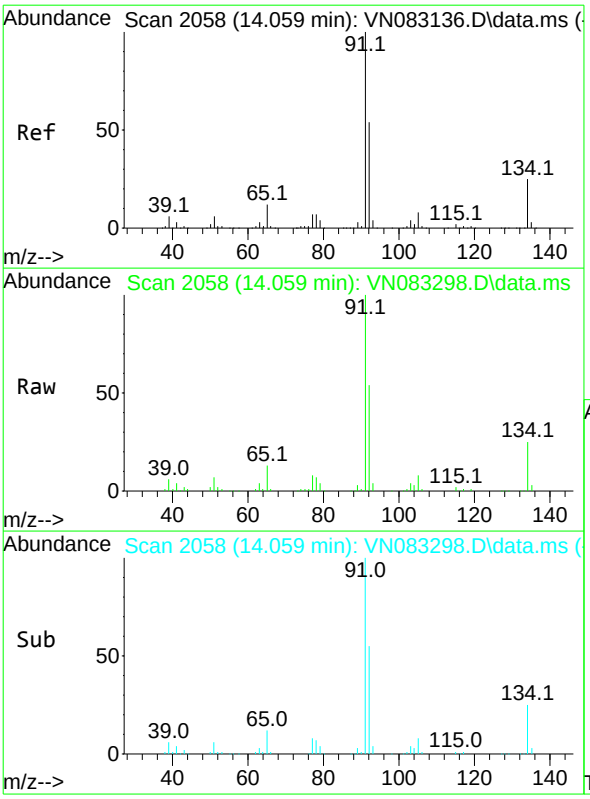


#88
1,4-Dichlorobenzene
Concen: 19.128 ug/l
RT: 13.812 min Scan# 2016
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion:146 Resp: 79466

Ion	Ratio	Lower	Upper
146	100		
111	44.7	20.1	60.3
148	62.0	32.2	96.6

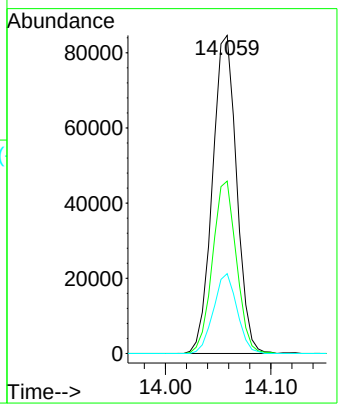




#89
n-Butylbenzene
Concen: 18.886 ug/l
RT: 14.059 min Scan# 20
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 91 Resp: 134766

Ion	Ratio	Lower	Upper
91	100		
92	53.6	26.1	78.3
134	24.6	12.1	36.3



Instrument :
MSVOA_N
ClientSampleId :
VN0814WBS01

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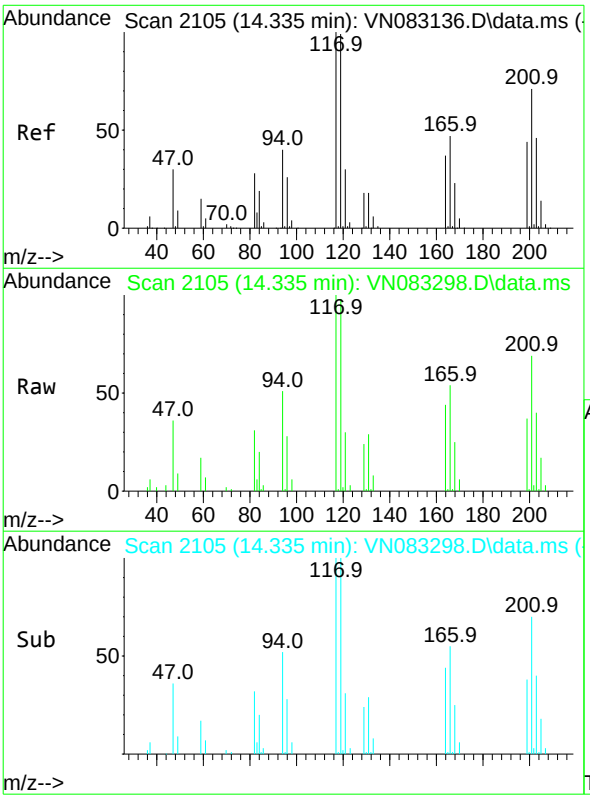
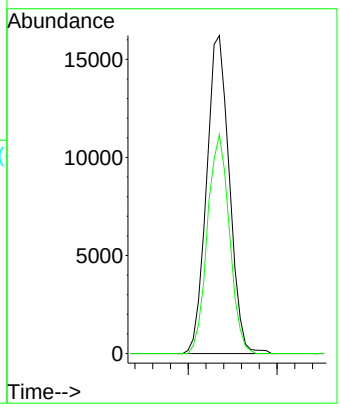
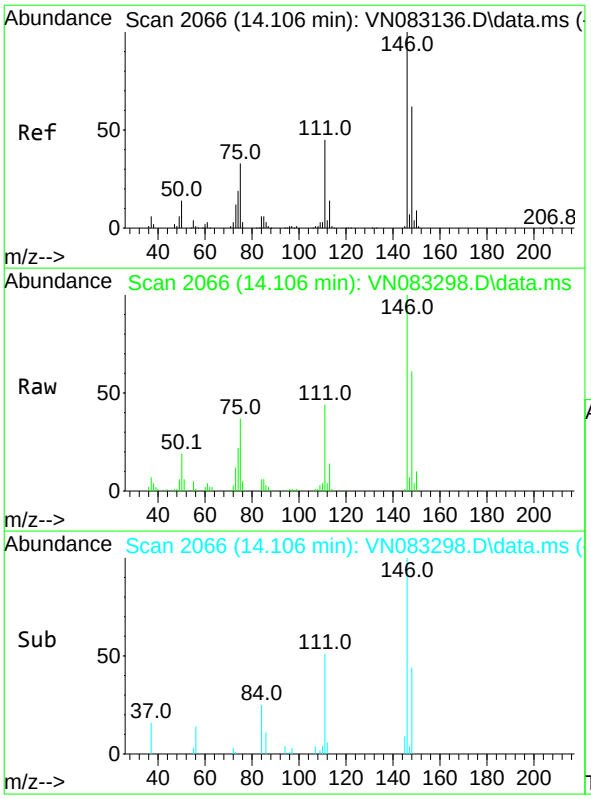


#90
Hexachloroethane
Concen: 18.128 ug/l
RT: 14.335 min Scan# 2105
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion:117 Resp: 28843

Ion	Ratio	Lower	Upper
117	100		
201	66.4	35.8	107.3

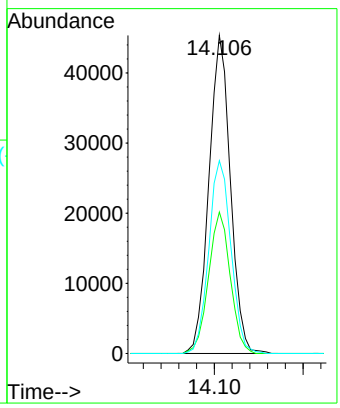




#91
1,2-Dichlorobenzene
Concen: 19.107 ug/l
RT: 14.106 min Scan# 20
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion:146 Resp: 76195

Ion	Ratio	Lower	Upper
146	100		
111	45.0	21.4	64.2
148	62.6	32.1	96.5



Instrument :
MSVOA_N
ClientSampleId :
VN0814WBS01

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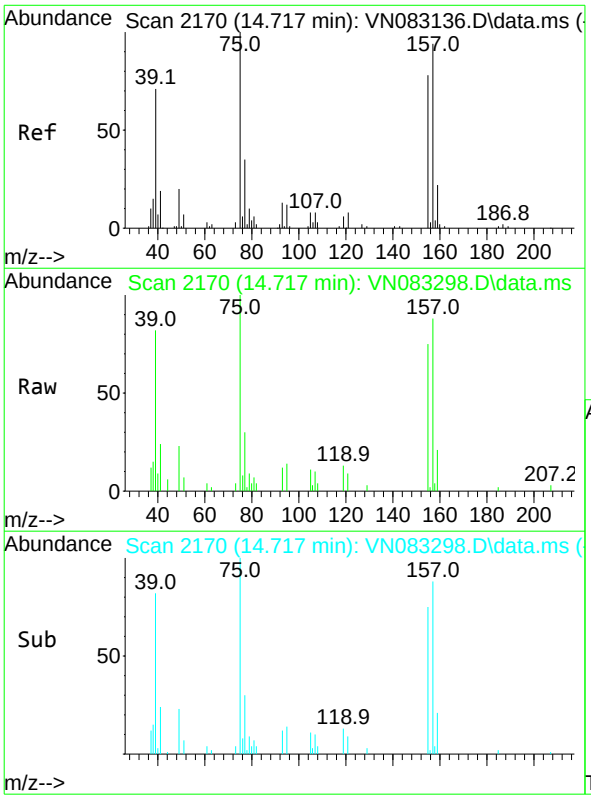
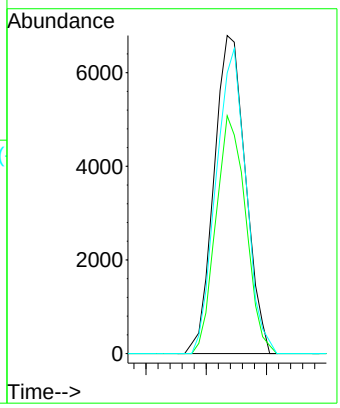
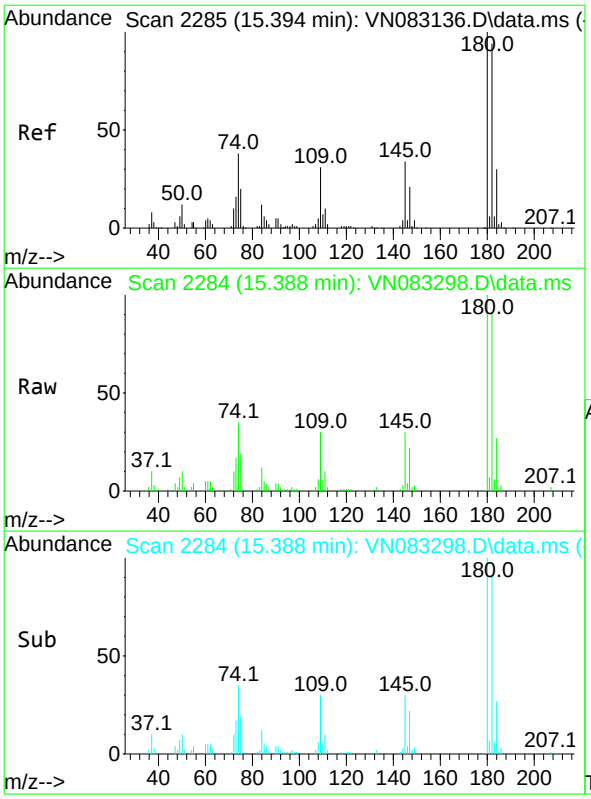


#92
1,2-Dibromo-3-Chloropropane
Concen: 18.206 ug/l
RT: 14.717 min Scan# 2170
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 75 Resp: 12319

Ion	Ratio	Lower	Upper
75	100		
155	70.8	36.6	109.8
157	91.2	46.9	140.6





#93
1,2,4-Trichlorobenzene
Concen: 18.393 ug/l
RT: 15.388 min Scan# 22
Delta R.T. -0.006 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion:180 Resp: 41092

Ion	Ratio	Lower	Upper
180	100		
182	95.3	47.3	141.8
145	34.2	15.7	47.1

Instrument :
MSVOA_N
ClientSampleId :
VN0814WBS01

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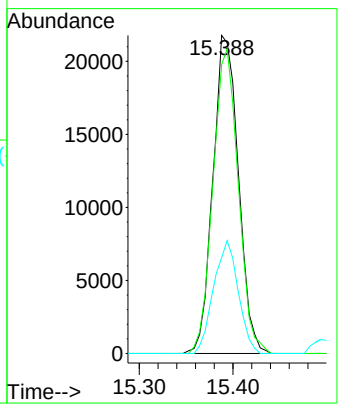
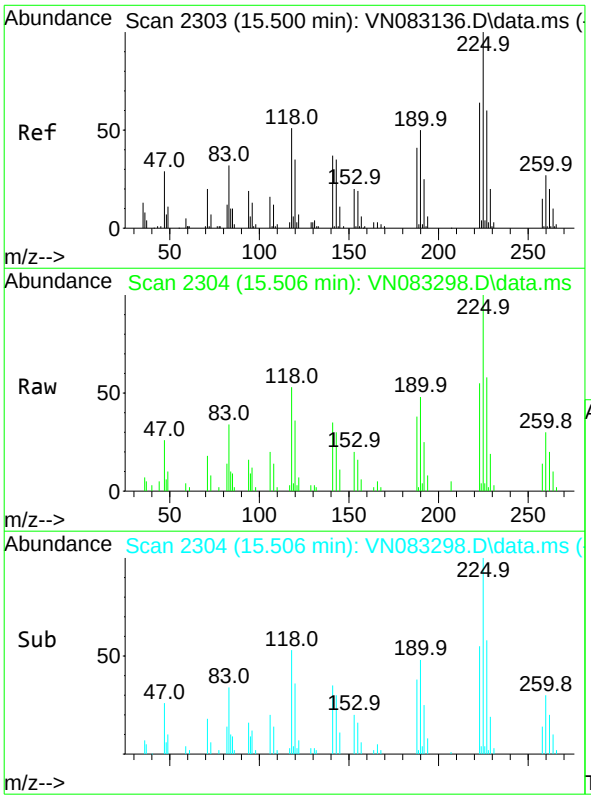
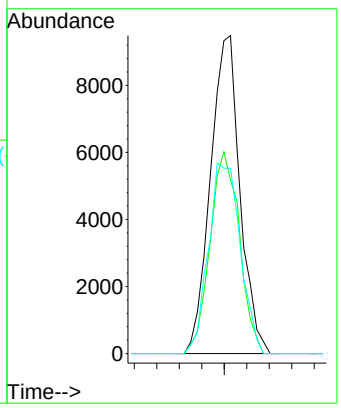


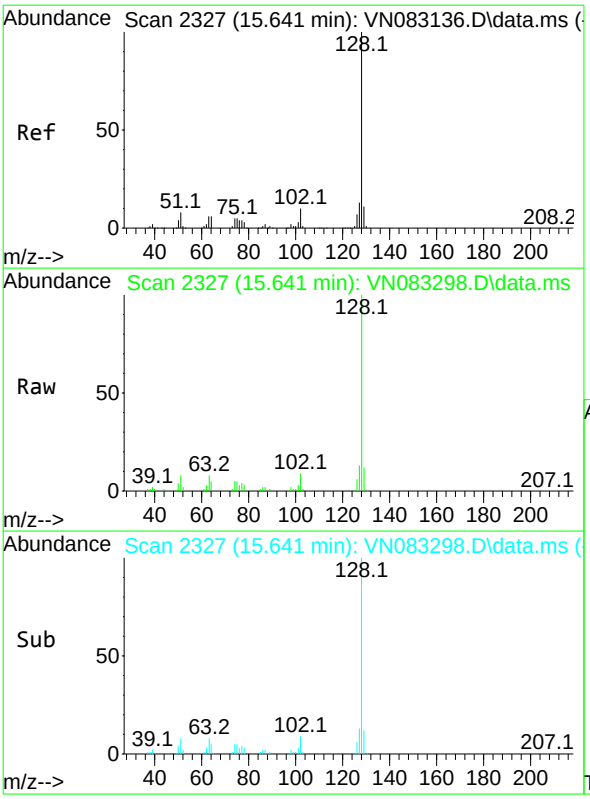


#94
Hexachlorobutadiene
Concen: 17.378 ug/l
RT: 15.506 min Scan# 2304
Delta R.T. 0.006 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion:225 Resp: 17266

Ion	Ratio	Lower	Upper
225	100		
223	63.2	31.9	95.7
227	64.5	32.5	97.5

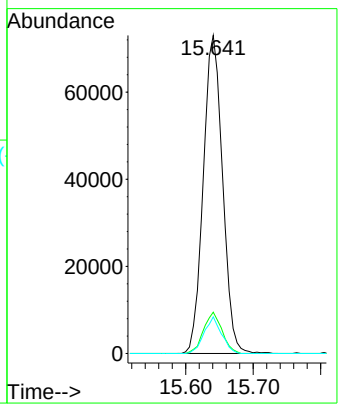




#95
Naphthalene
Concen: 18.358 ug/l
RT: 15.641 min Scan# 23
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion:128 Resp: 145278

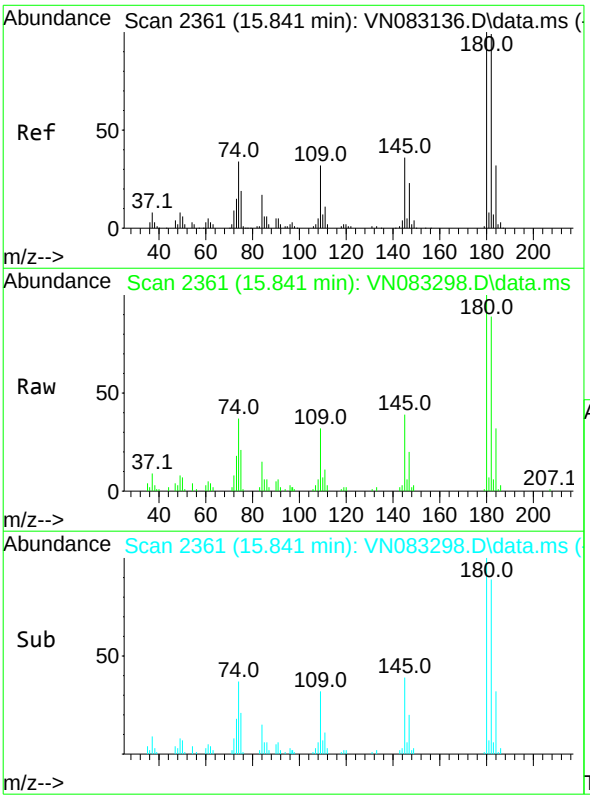
Ion	Ratio	Lower	Upper
128	100		
127	12.5	10.6	16.0
129	10.4	8.6	12.8



Instrument :
MSVOA_N
ClientSampleId :
VN0814WBS01

Manual Integrations
APPROVED

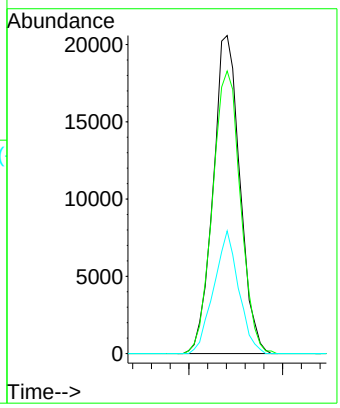
Reviewed By :Mahesh Dadoda 08/15/2024
Supervised By :Semsettin Yesilyurt 08/15/2024



#96
1,2,3-Trichlorobenzene
Concen: 18.450 ug/l
RT: 15.841 min Scan# 2361
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion:180 Resp: 40786

Ion	Ratio	Lower	Upper
180	100		
182	92.6	48.9	146.8
145	36.0	16.8	50.4



Alliance TECHNICAL GROUP
284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	
Project:	Former Schlumberger Site Princeton NJ	Date Received:	
Client Sample ID:	VN0814WBSD01	SDG No.:	P3609
Lab Sample ID:	VN0814WBSD01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group6
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN083300.D	1		08/14/24 14:51	VN081424

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	18.9		0.21	1.00	ug/L
74-87-3	Chloromethane	19.1		0.35	1.00	ug/L
75-01-4	Vinyl Chloride	19.9		0.34	1.00	ug/L
74-83-9	Bromomethane	19.1		1.40	5.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	20.5		0.25	1.00	ug/L
67-64-1	Acetone	110		1.40	5.00	ug/L
75-15-0	Carbon Disulfide	16.2		0.32	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	21.7		0.16	1.00	ug/L
75-09-2	Methylene Chloride	19.9		0.32	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	19.2		0.25	1.00	ug/L
110-82-7	Cyclohexane	18.7		1.60	5.00	ug/L
78-93-3	2-Butanone	110		1.30	5.00	ug/L
56-23-5	Carbon Tetrachloride	19.6		0.25	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	20.9		0.25	1.00	ug/L
67-66-3	Chloroform	22.4		0.26	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	20.9		0.19	1.00	ug/L
108-87-2	Methylcyclohexane	17.8		0.19	1.00	ug/L
71-43-2	Benzene	20.2		0.16	1.00	ug/L
107-06-2	1,2-Dichloroethane	22.6		0.24	1.00	ug/L
79-01-6	Trichloroethene	19.9		0.32	1.00	ug/L
75-27-4	Bromodichloromethane	21.0		0.24	1.00	ug/L
108-88-3	Toluene	20.2		0.18	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	22.7		0.21	1.00	ug/L
124-48-1	Dibromochloromethane	20.8		0.18	1.00	ug/L
127-18-4	Tetrachloroethene	19.8		0.25	1.00	ug/L
108-90-7	Chlorobenzene	20.0		0.13	1.00	ug/L
100-41-4	Ethyl Benzene	19.5		0.16	1.00	ug/L
179601-23-1	m/p-Xylenes	39.2		0.31	2.00	ug/L
1330-20-7	Total Xylenes	59.0		0.45	3.00	ug/L
95-47-6	o-Xylene	19.8		0.14	1.00	ug/L

Raw Data: **VN083300.D**

Alliance TECHNICAL GROUP
284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	
Project:	Former Schlumberger Site Princeton NJ	Date Received:	
Client Sample ID:	VN0814WBSD01	SDG No.:	P3609
Lab Sample ID:	VN0814WBSD01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group6
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN083300.D	1		08/14/24 14:51	VN081424

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
98-82-8	Isopropylbenzene	19.3		0.13	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	19.3		0.27	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	19.4		0.19	1.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	58.7		70 (74) - 130 (125)	117%	SPK: 50
1868-53-7	Dibromofluoromethane	54.0		70 (75) - 130 (124)	108%	SPK: 50
2037-26-5	Toluene-d8	53.0		70 (86) - 130 (113)	106%	SPK: 50
460-00-4	4-Bromofluorobenzene	53.0		70 (77) - 130 (121)	106%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	149000	8.224			
540-36-3	1,4-Difluorobenzene	263000	9.1			
3114-55-4	Chlorobenzene-d5	232000	11.865			
3855-82-1	1,4-Dichlorobenzene-d4	107000	13.794			

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081424\
Data File : VN083300.D
Acq On : 14 Aug 2024 14:51
Operator : JC\MD
Sample : VN0814WBSD01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 14 23:23:41 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VN0814WBSD01

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 08/15/2024
Supervised By :Semsettin Yesilyurt 08/15/2024

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene	8.224	168	148957	50.000 ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	263108	50.000 ug/l	0.00
63) Chlorobenzene-d5	11.865	117	232246	50.000 ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.794	152	107371	50.000 ug/l	0.00
System Monitoring Compounds					
33) 1,2-Dichloroethane-d4	8.583	65	124519	58.729 ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 117.460%		
35) Dibromofluoromethane	8.171	113	88647	53.979 ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 107.960%		
50) Toluene-d8	10.565	98	324722	53.007 ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 106.020%		
62) 4-Bromofluorobenzene	12.847	95	126506	52.969 ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 105.940%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	2.124	85	31902	18.886 ug/l	96
3) Chloromethane	2.359	50	33006	19.085 ug/l	98
4) Vinyl Chloride	2.512	62	35107	19.895 ug/l	97
5) Bromomethane	2.954	94	20902	19.089 ug/l	88
6) Chloroethane	3.118	64	23294	21.099 ug/l	100
7) Trichlorofluoromethane	3.495	101	60341	20.699 ug/l	94
8) Diethyl Ether	3.965	74	23349	21.525 ug/l	84
9) 1,1,2-Trichlorotrifluo...	4.371	101	32903	20.472 ug/l	98
10) Methyl Iodide	4.589	142	34081	16.120 ug/l	99
11) Tert butyl alcohol	5.524	59	46648	105.868 ug/l	100
12) 1,1-Dichloroethene	4.336	96	30841	18.678 ug/l	88
13) Acrolein	4.177	56	23570	82.076 ug/l	98
14) Allyl chloride	5.018	41	60175m	19.285 ug/l	
15) Acrylonitrile	5.724	53	101986	112.542 ug/l	99
16) Acetone	4.424	43	90484	109.064 ug/l	95
17) Carbon Disulfide	4.712	76	78453	16.238 ug/l	99
18) Methyl Acetate	5.030	43	58332	23.598 ug/l	91
19) Methyl tert-butyl Ether	5.806	73	129419	21.715 ug/l	93
20) Methylene Chloride	5.271	84	38038	19.922 ug/l	85
21) trans-1,2-Dichloroethene	5.789	96	32795	19.216 ug/l	91
22) Diisopropyl ether	6.677	45	126864	21.629 ug/l	95
23) Vinyl Acetate	6.606	43	706584	117.529 ug/l	97
24) 1,1-Dichloroethane	6.571	63	68043	21.283 ug/l	99
25) 2-Butanone	7.483	43	143105	112.337 ug/l #	90
26) 2,2-Dichloropropane	7.489	77	58546	19.719 ug/l	100
27) cis-1,2-Dichloroethene	7.489	96	43110	20.934 ug/l	93
28) Bromochloromethane	7.812	49	30457	23.311 ug/l	85
29) Tetrahydrofuran	7.841	42	92541	112.377 ug/l #	88
30) Chloroform	7.971	83	74303	22.370 ug/l	97
31) Cyclohexane	8.259	56	58642	18.664 ug/l	98
32) 1,1,1-Trichloroethane	8.171	97	65707	20.899 ug/l	95
36) 1,1-Dichloropropene	8.377	75	46982	18.912 ug/l	97
37) Ethyl Acetate	7.565	43	58293	20.957 ug/l	96
38) Carbon Tetrachloride	8.365	117	54843	19.600 ug/l	97
39) Methylcyclohexane	9.600	83	54374	17.820 ug/l	93
40) Benzene	8.606	78	149300	20.174 ug/l	98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081424\
Data File : VN083300.D
Acq On : 14 Aug 2024 14:51
Operator : JC\MD
Sample : VN0814WBSD01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 14 23:23:41 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VN0814WBSD01

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 08/15/2024
Supervised By :Semsettin Yesilyurt 08/15/2024

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	7.777	41	31761	20.082	ug/l		94
42) 1,2-Dichloroethane	8.671	62	60953	22.609	ug/l		99
43) Isopropyl Acetate	8.688	43	101718	19.694	ug/l		94
44) Trichloroethene	9.353	130	34966	19.850	ug/l		89
45) 1,2-Dichloropropane	9.624	63	37374	21.275	ug/l		99
46) Dibromomethane	9.712	93	27276	21.692	ug/l		97
47) Bromodichloromethane	9.894	83	59367	21.027	ug/l		98
48) Methyl methacrylate	9.683	41	46324	20.144	ug/l		93
49) 1,4-Dioxane	9.694	88	18696	450.635	ug/l		97
51) 4-Methyl-2-Pentanone	10.447	43	297156	112.972	ug/l		93
52) Toluene	10.630	92	94458	20.200	ug/l		99
53) t-1,3-Dichloropropene	10.835	75	60413	20.831	ug/l		96
54) cis-1,3-Dichloropropene	10.312	75	61789	20.031	ug/l		92
55) 1,1,2-Trichloroethane	11.018	97	38003	22.678	ug/l		97
56) Ethyl methacrylate	10.877	69	64894	20.542	ug/l	#	87
57) 1,3-Dichloropropane	11.165	76	66794	22.362	ug/l		99
58) 2-Chloroethyl Vinyl ether	10.159	63	131258	98.294	ug/l		96
59) 2-Hexanone	11.194	43	223217	109.692	ug/l		93
60) Dibromochloromethane	11.365	129	42122	20.790	ug/l		100
61) 1,2-Dibromoethane	11.471	107	37105	21.078	ug/l		95
64) Tetrachloroethene	11.100	164	30468	19.809	ug/l		96
65) Chlorobenzene	11.894	112	102762	20.022	ug/l		99
66) 1,1,1,2-Tetrachloroethane	11.959	131	36939	20.407	ug/l		99
67) Ethyl Benzene	11.965	91	183753	19.517	ug/l		99
68) m/p-Xylenes	12.071	106	138109	39.159	ug/l		99
69) o-Xylene	12.400	106	69006	19.838	ug/l		99
70) Styrene	12.412	104	112930	19.330	ug/l		97
71) Bromoform	12.582	173	27428	20.002	ug/l	#	99
73) Isopropylbenzene	12.694	105	173009	19.264	ug/l		98
74) N-amyl acetate	12.494	43	84935	19.335	ug/l		95
75) 1,1,2,2-Tetrachloroethane	12.935	83	54674	21.525	ug/l		100
76) 1,2,3-Trichloropropane	12.994	75	51117m	21.692	ug/l		
77) Bromobenzene	12.982	156	41167	20.635	ug/l		95
78) n-propylbenzene	13.035	91	202570	19.589	ug/l		99
79) 2-Chlorotoluene	13.123	91	129590	19.766	ug/l		96
80) 1,3,5-Trimethylbenzene	13.171	105	150641	20.035	ug/l		98
81) trans-1,4-Dichloro-2-b...	12.735	75	20587m	19.003	ug/l		
82) 4-Chlorotoluene	13.223	91	126446	19.227	ug/l		99
83) tert-Butylbenzene	13.441	119	129462	19.443	ug/l		99
84) 1,2,4-Trimethylbenzene	13.482	105	147503	19.467	ug/l		99
85) sec-Butylbenzene	13.618	105	171652	18.893	ug/l		100
86) p-Isopropyltoluene	13.729	119	144390	19.247	ug/l		98
87) 1,3-Dichlorobenzene	13.735	146	72454	19.301	ug/l		97
88) 1,4-Dichlorobenzene	13.812	146	73226	19.349	ug/l		98
89) n-Butylbenzene	14.059	91	123047	18.930	ug/l		100
90) Hexachloroethane	14.335	117	26207	18.082	ug/l		91
91) 1,2-Dichlorobenzene	14.106	146	70519	19.413	ug/l		98
92) 1,2-Dibromo-3-Chloropr...	14.717	75	12292	19.942	ug/l		97
93) 1,2,4-Trichlorobenzene	15.394	180	37837	18.592	ug/l		98
94) Hexachlorobutadiene	15.500	225	15515	17.142	ug/l		99
95) Naphthalene	15.641	128	136537	18.940	ug/l		99
96) 1,2,3-Trichlorobenzene	15.841	180	38366	19.052	ug/l		96

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081424\
Data File : VN083300.D
Acq On : 14 Aug 2024 14:51
Operator : JC\MD
Sample : VN0814WBSD01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 14 23:23:41 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VN0814WBSD01

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 08/15/2024
Supervised By :Semsettin Yesilyurt 08/15/2024

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

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

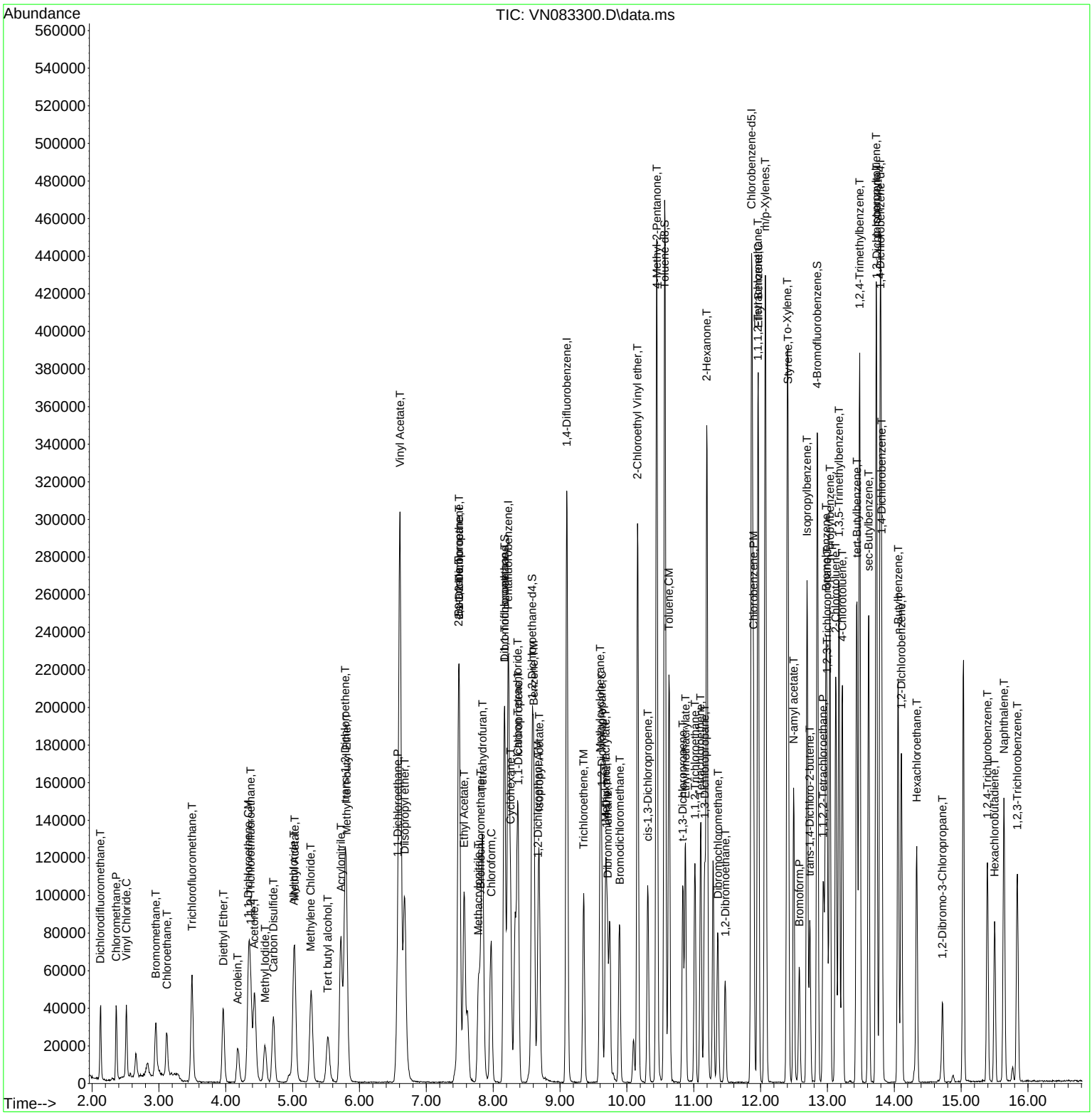
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081424\
Data File : VN083300.D
Acq On : 14 Aug 2024 14:51
Operator : JC\MD
Sample : VN0814WBSD01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

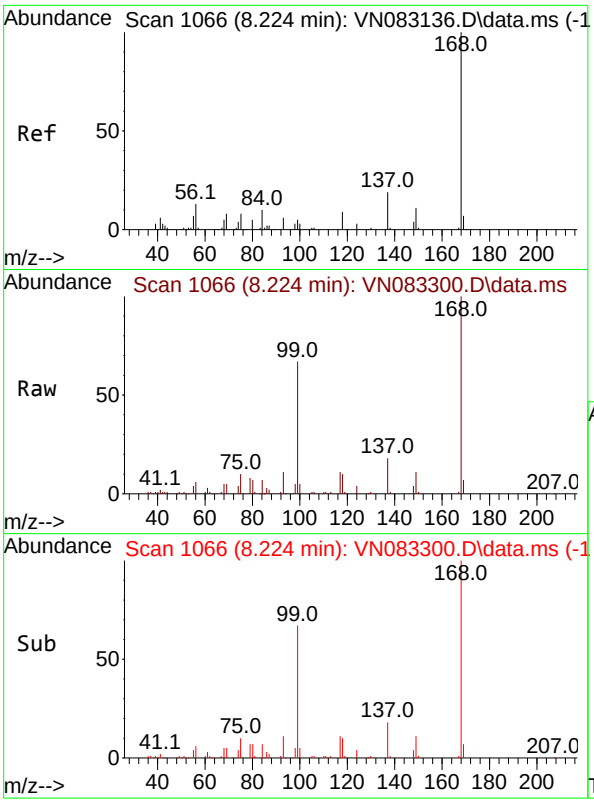
Quant Time: Aug 14 23:23:41 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VN0814WBSD01

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 08/15/2024
Supervised By :Semsettin Yesilyurt 08/15/2024

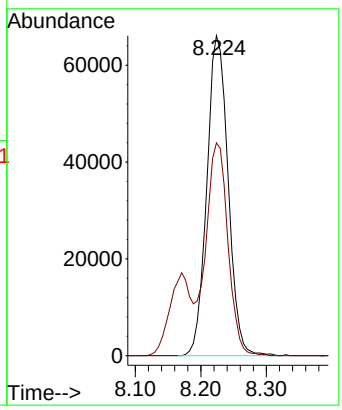




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion:168 Resp: 14895

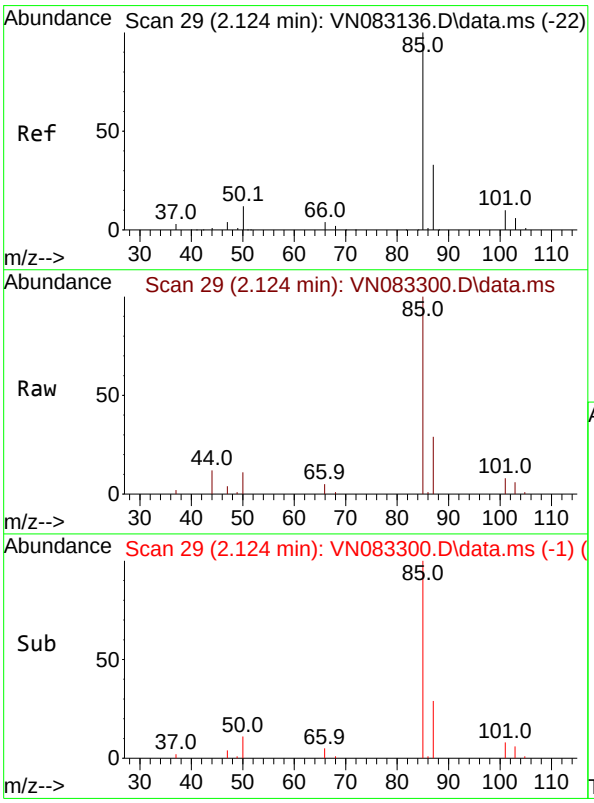
Ion	Ratio	Lower	Upper
168	100		
99	66.5	48.2	72.4



Instrument :
MSVOA_N
ClientSampleId :
VN0814WBSD01

Manual Integrations
APPROVED

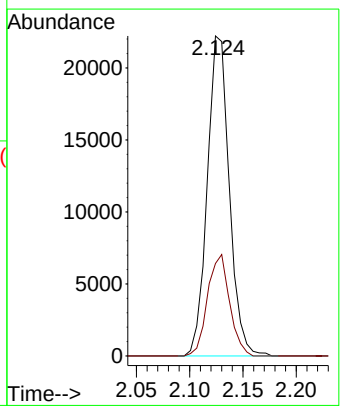
Reviewed By :Mahesh Dadoda 08/15/2024
Supervised By :Semsettin Yesilyurt 08/15/2024

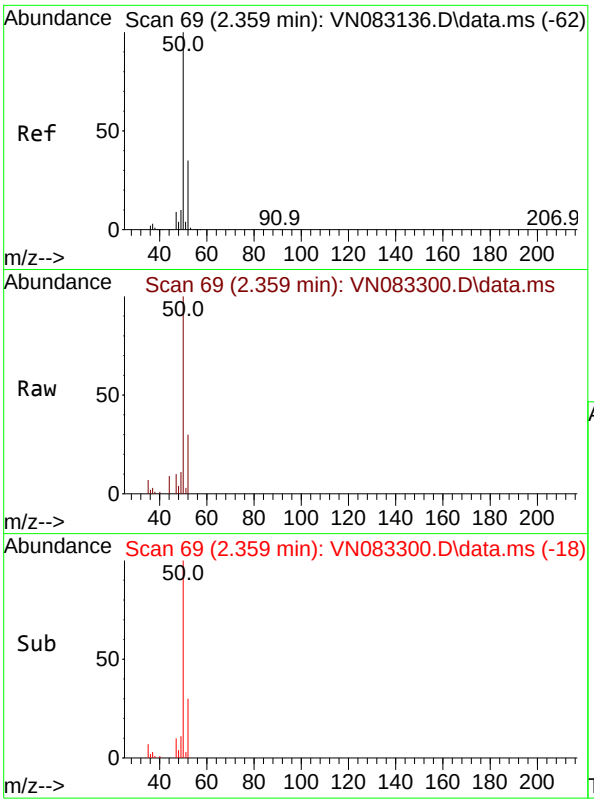


#2
Dichlorodifluoromethane
Concen: 18.886 ug/l
RT: 2.124 min Scan# 29
Delta R.T. 0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion: 85 Resp: 31902

Ion	Ratio	Lower	Upper
85	100		
87	28.9	15.7	47.0

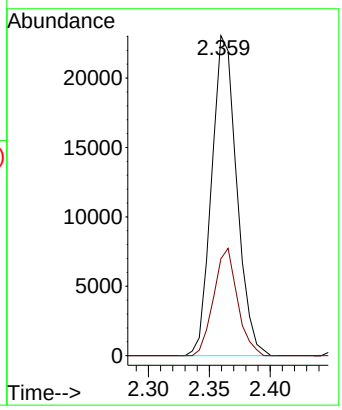




#3
Chloromethane
Concen: 19.085 ug/l
RT: 2.359 min Scan# 6
Delta R.T. 0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion: 50 Resp: 3300

Ion	Ratio	Lower	Upper
50	100		
52	30.3	25.0	37.4



Instrument :
MSVOA_N
ClientSampleId :
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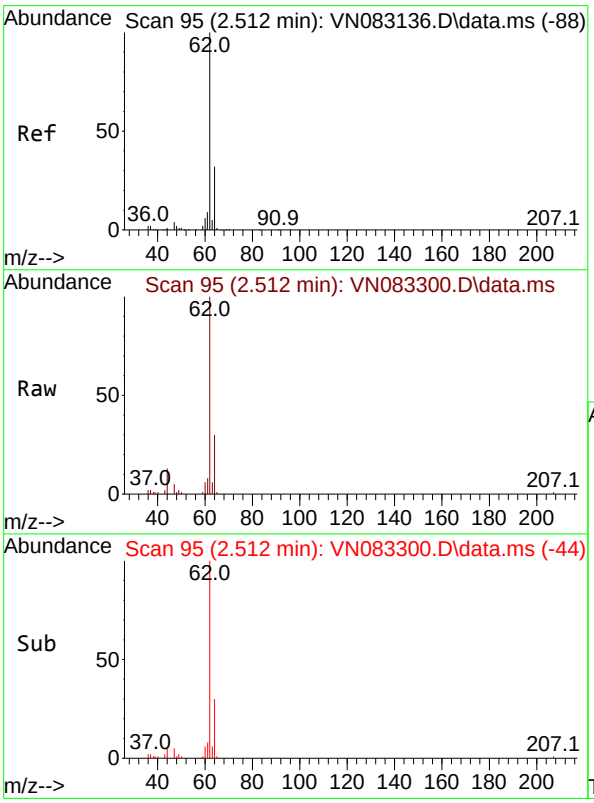
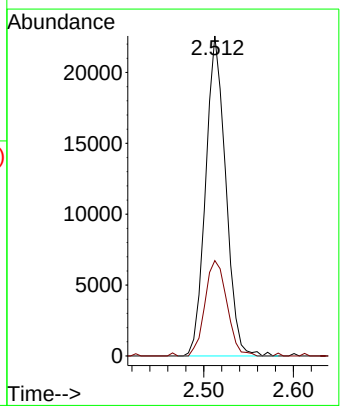
Supervised By :Semsettin Yesilyurt 08/15/2024

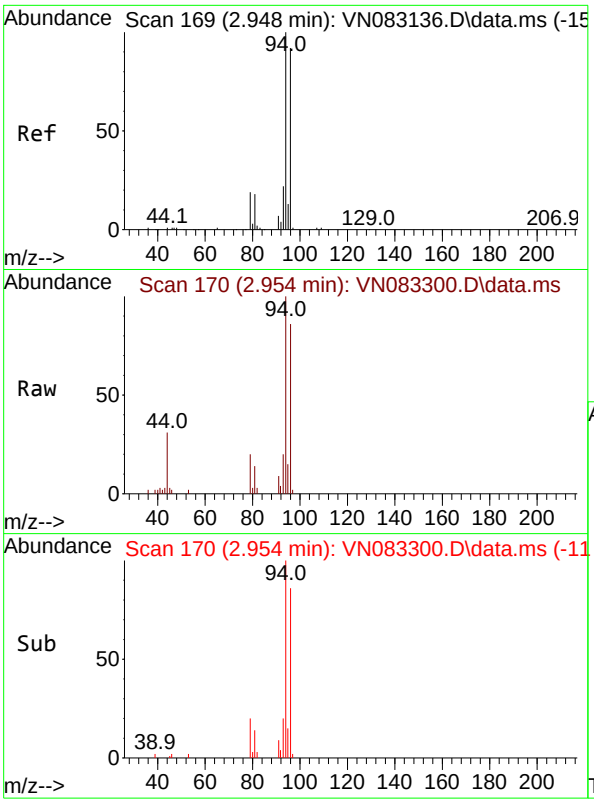


#4
Vinyl Chloride
Concen: 19.895 ug/l
RT: 2.512 min Scan# 95
Delta R.T. 0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion: 62 Resp: 35107

Ion	Ratio	Lower	Upper
62	100		
64	29.8	25.0	37.6

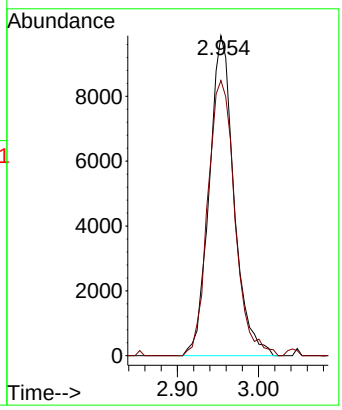




#5
Bromomethane
Concen: 19.089 ug/l
RT: 2.954 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion: 94 Resp: 2090

Ion	Ratio	Lower	Upper
94	100		
96	86.0	78.0	117.0



Instrument :
MSVOA_N
ClientSampleId :
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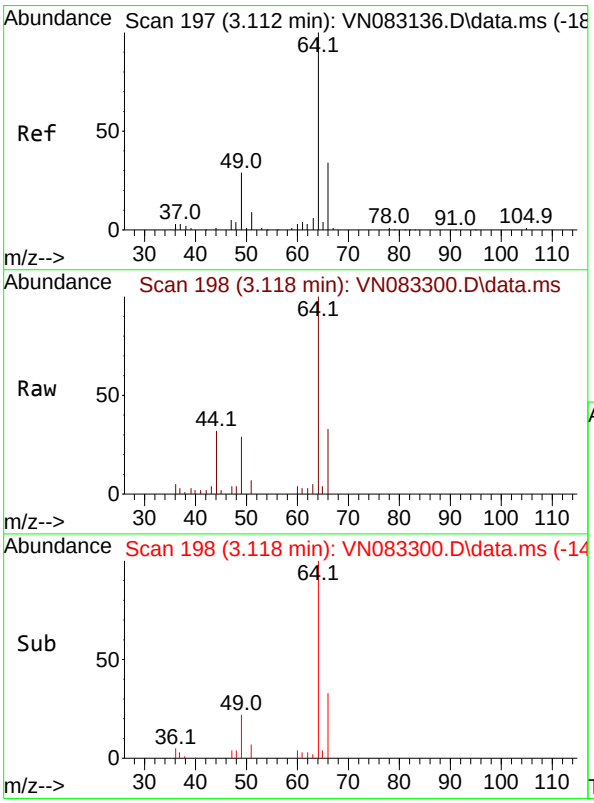
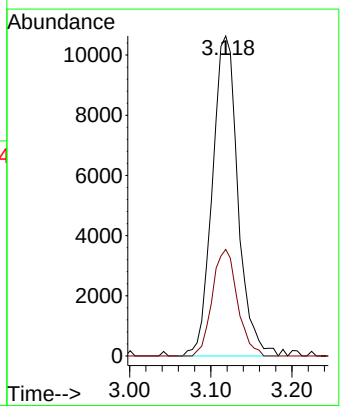
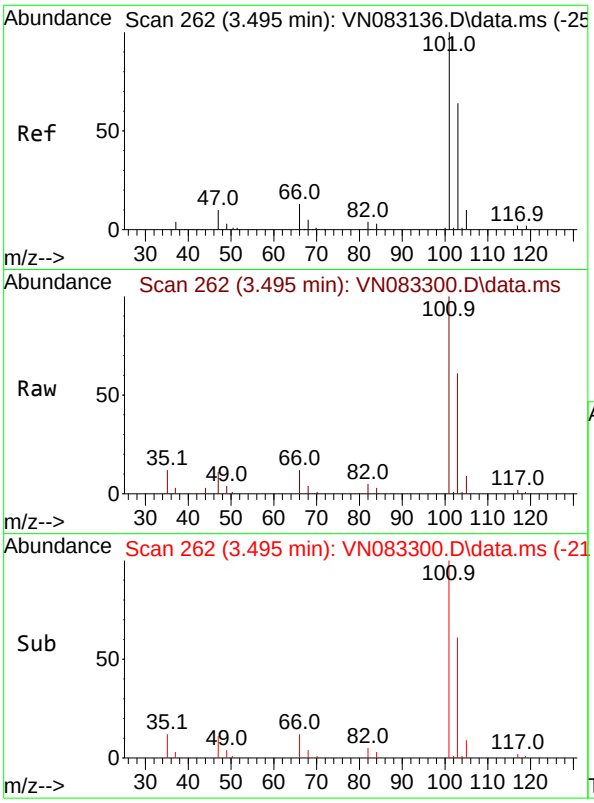


#6
Chloroethane
Concen: 21.099 ug/l
RT: 3.118 min Scan# 198
Delta R.T. 0.006 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion: 64 Resp: 23294

Ion	Ratio	Lower	Upper
64	100		
66	33.3	26.6	40.0

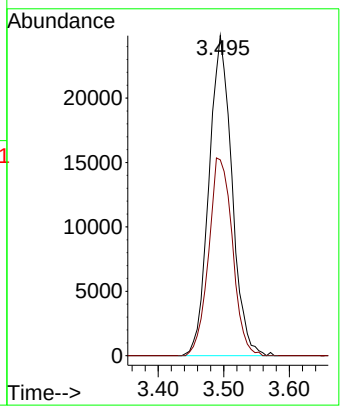




#7
Trichlorofluoromethane
Concen: 20.699 ug/l
RT: 3.495 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion:101 Resp: 6034

Ion	Ratio	Lower	Upper
101	100		
103	61.2	52.7	79.1



Instrument :
MSVOA_N
ClientSampleId :
VN0814WBSD01

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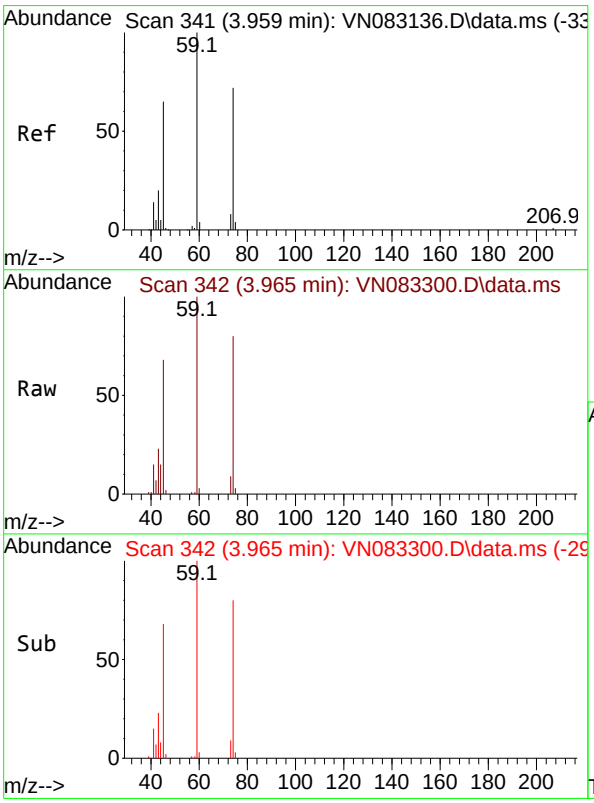
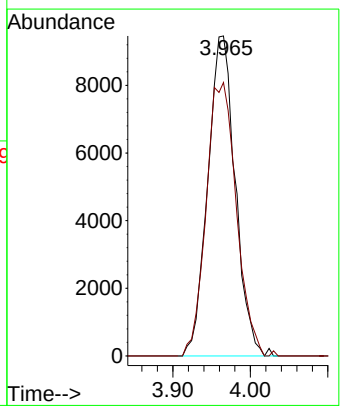
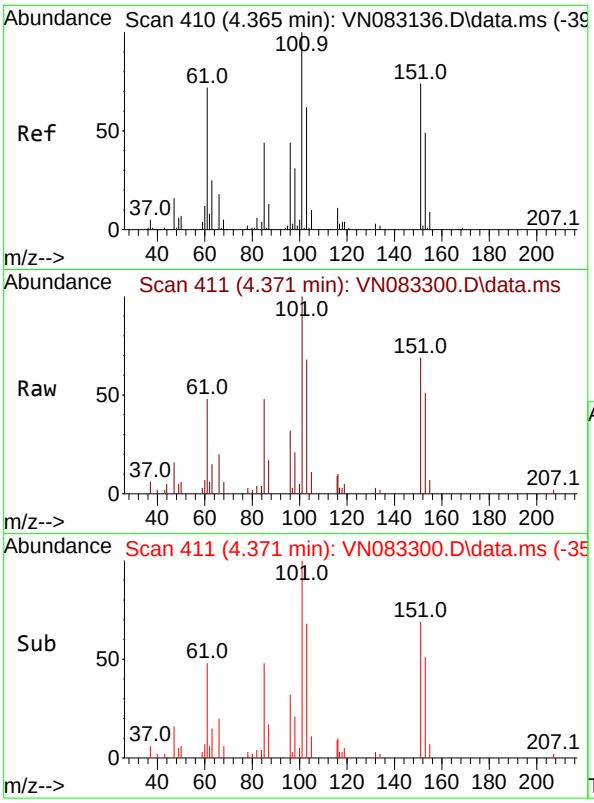


#8
Diethyl Ether
Concen: 21.525 ug/l
RT: 3.965 min Scan# 342
Delta R.T. 0.006 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion: 74 Resp: 23349

Ion	Ratio	Lower	Upper
74	100		
45	93.8	55.5	166.3





#9
1,1,2-Trichlorotrifluoroethane
Concen: 20.472 ug/l
RT: 4.371 min Scan# 41
Delta R.T. 0.006 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion:101 Resp: 3290

Ion	Ratio	Lower	Upper
101	100		
85	46.8	38.3	57.5
151	71.6	59.3	88.9

Instrument :
MSVOA_N
ClientSampleId :
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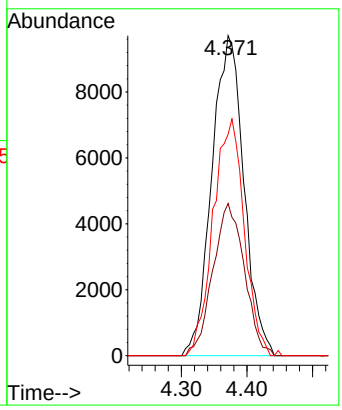
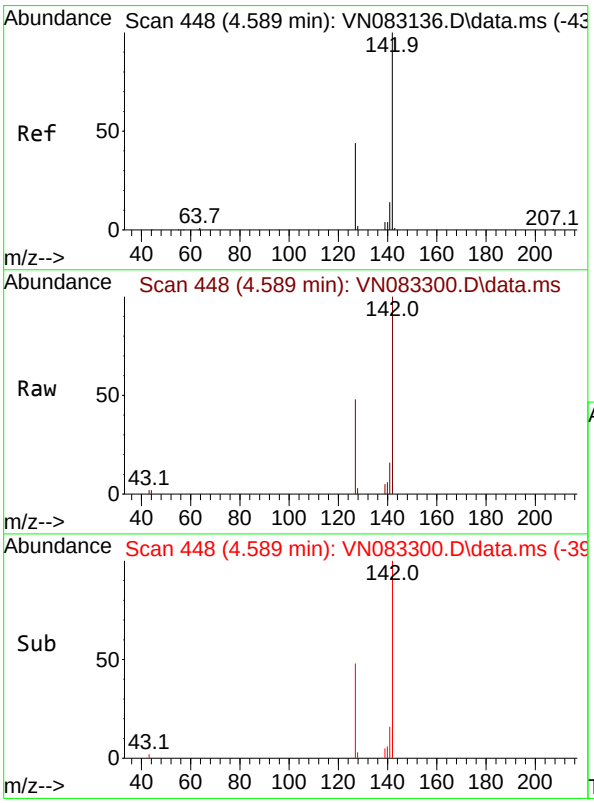
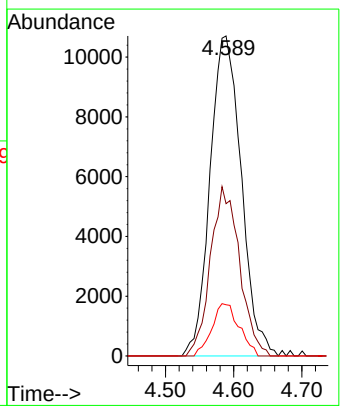


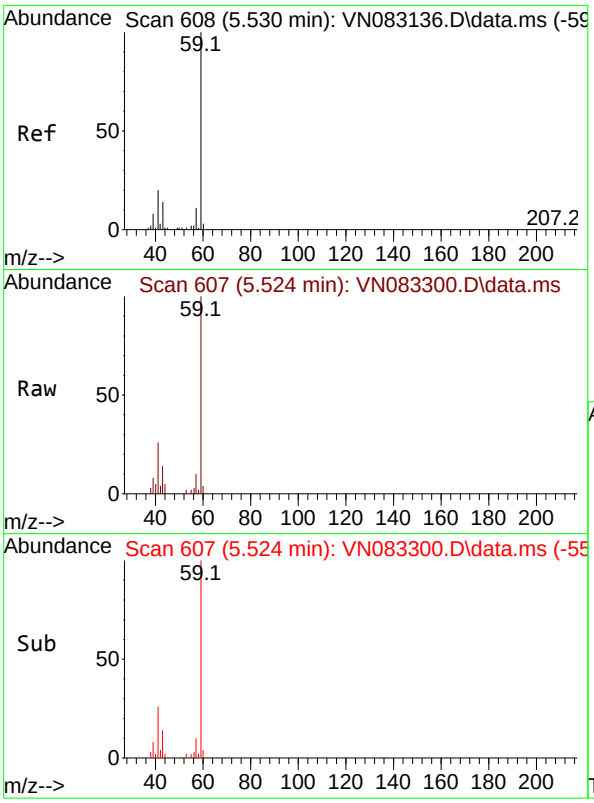


#10
Methyl Iodide
Concen: 16.120 ug/l
RT: 4.589 min Scan# 448
Delta R.T. 0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion:142 Resp: 34081

Ion	Ratio	Lower	Upper
142	100		
127	47.6	37.5	56.3
141	16.0	13.1	19.7





#11
Tert butyl alcohol
Concen: 105.868 ug/l
RT: 5.524 min Scan# 6
Delta R.T. -0.006 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion: 59 Resp: 4664

Ion	Ratio	Lower	Upper
59	100		
57	11.0	8.9	13.3

Instrument :
MSVOA_N
ClientSampleId :
VN0814WBSD01

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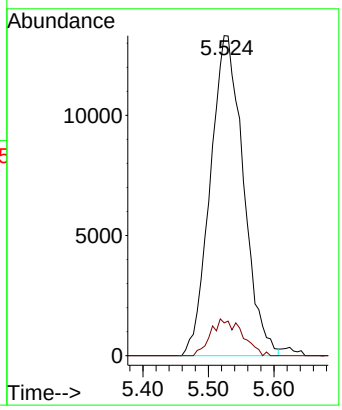
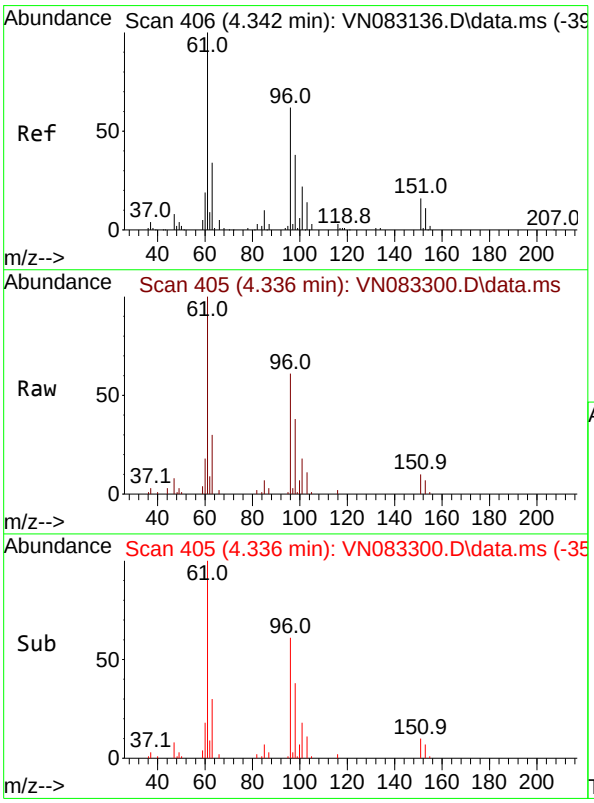
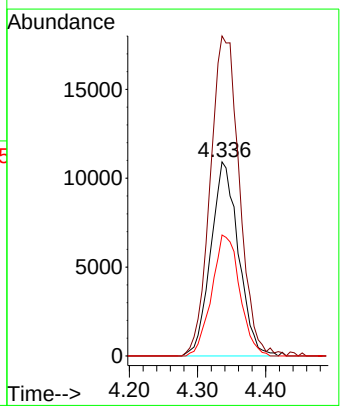


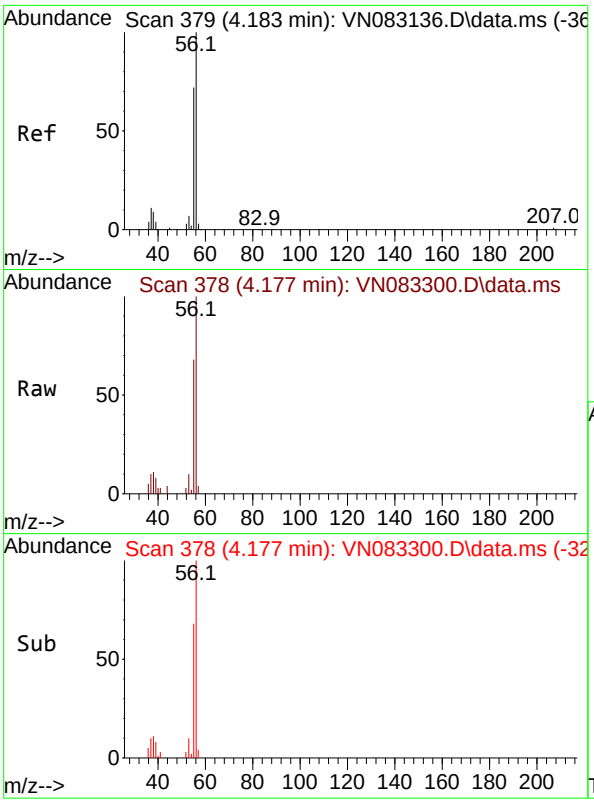


#12
1,1-Dichloroethene
Concen: 18.678 ug/l
RT: 4.336 min Scan# 405
Delta R.T. -0.006 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion: 96 Resp: 30841

Ion	Ratio	Lower	Upper
96	100		
61	164.8	149.7	224.5
98	62.3	50.1	75.1

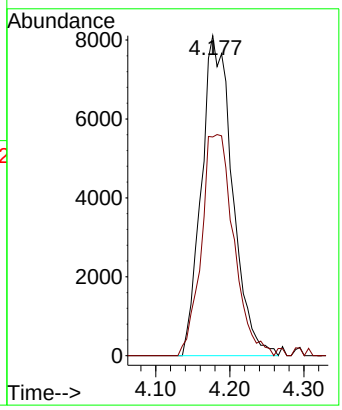




#13
Acrolein
Concen: 82.076 ug/l
RT: 4.177 min Scan# 3
Delta R.T. -0.006 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion: 56 Resp: 2357

Ion	Ratio	Lower	Upper
56	100		
55	71.9	56.4	84.6



Instrument :
MSVOA_N
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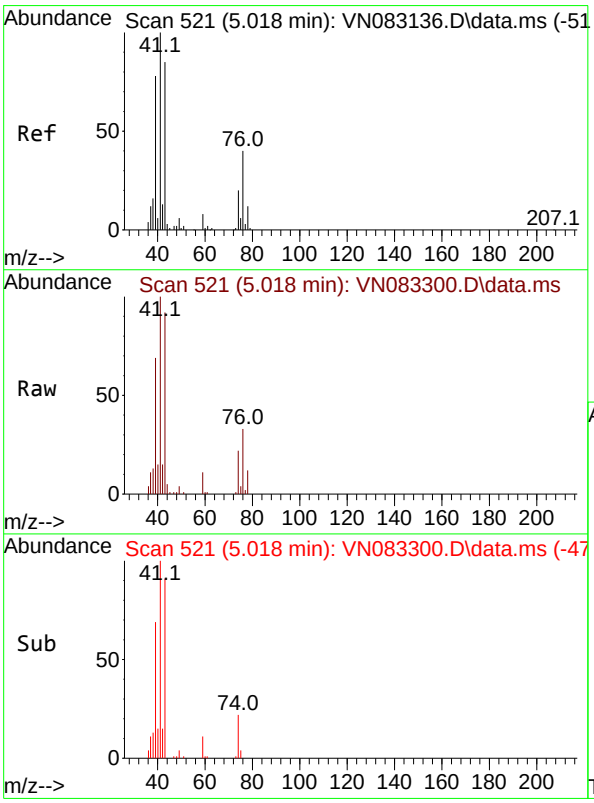
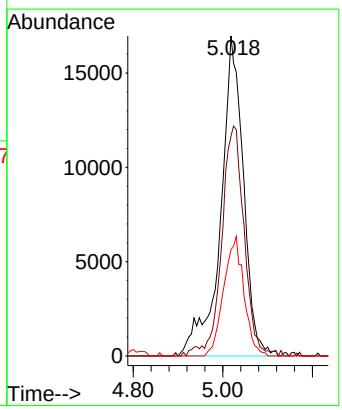
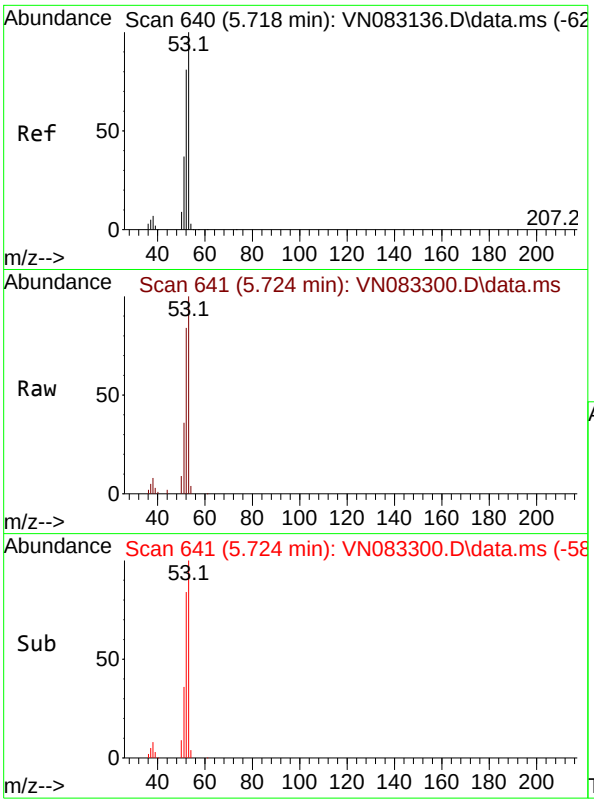


#14
Allyl chloride
Concen: 19.285 ug/l m
RT: 5.018 min Scan# 521
Delta R.T. 0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion: 41 Resp: 60175

Ion	Ratio	Lower	Upper
41	100		
39	69.4	67.8	101.6
76	33.0	25.8	38.8

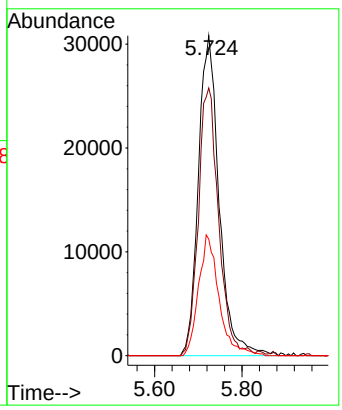




#15
Acrylonitrile
Concen: 112.542 ug/l
RT: 5.724 min Scan# 64
Delta R.T. 0.006 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion: 53 Resp: 10198

Ion	Ratio	Lower	Upper
53	100		
52	81.7	66.6	100.0
51	37.2	30.1	45.1



Instrument :
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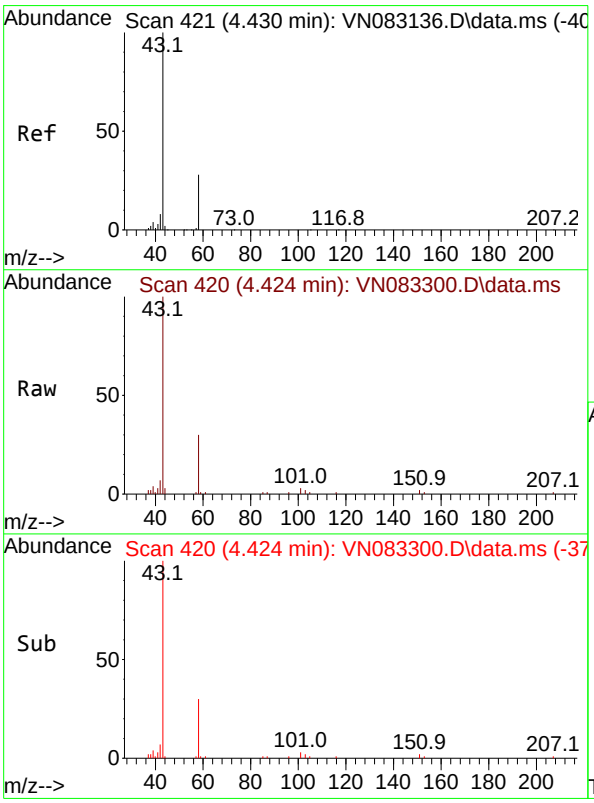
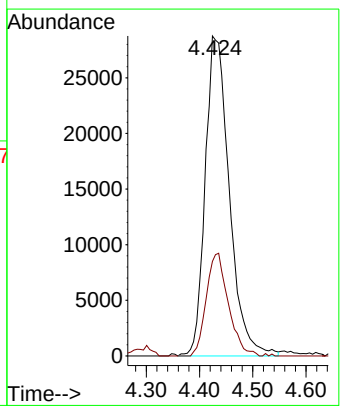
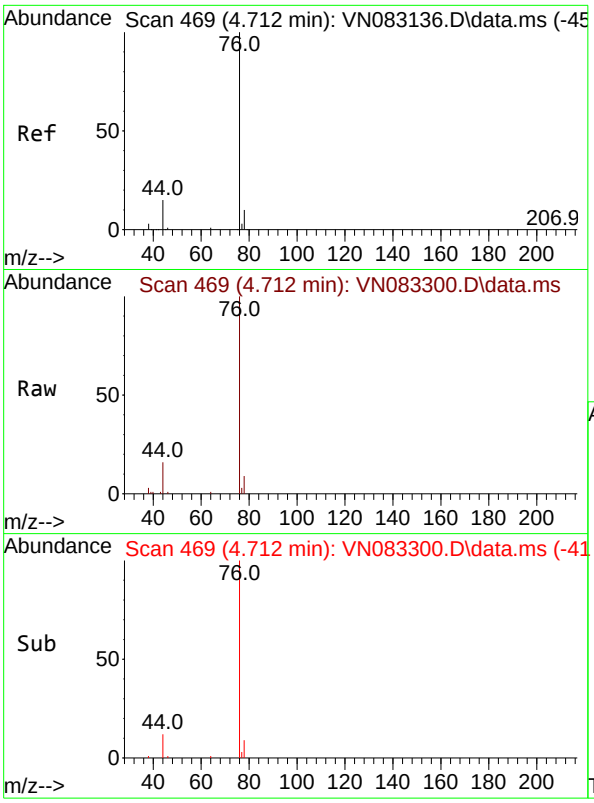


#16
Acetone
Concen: 109.064 ug/l
RT: 4.424 min Scan# 420
Delta R.T. -0.006 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion: 43 Resp: 90484

Ion	Ratio	Lower	Upper
43	100		
58	29.6	21.8	32.6

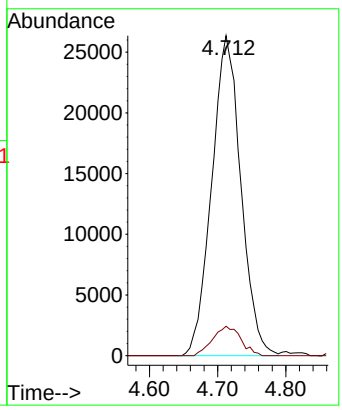




#17
Carbon Disulfide
Concen: 16.238 ug/l
RT: 4.712 min Scan# 4
Delta R.T. 0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion: 76 Resp: 7845

Ion	Ratio	Lower	Upper
76	100		
78	9.2	7.2	10.8



Instrument :
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ClientSampleId :
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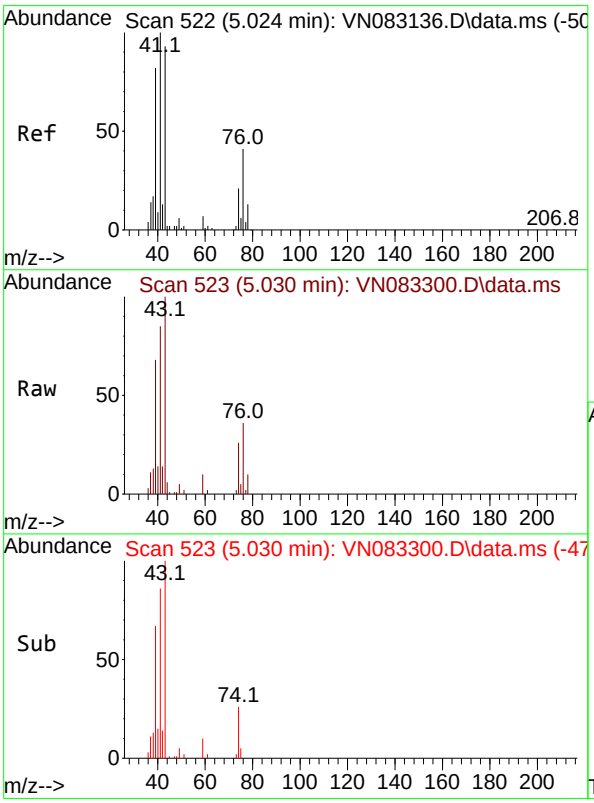
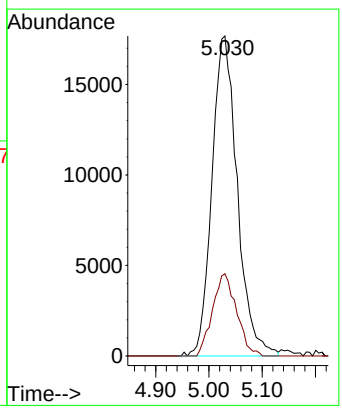
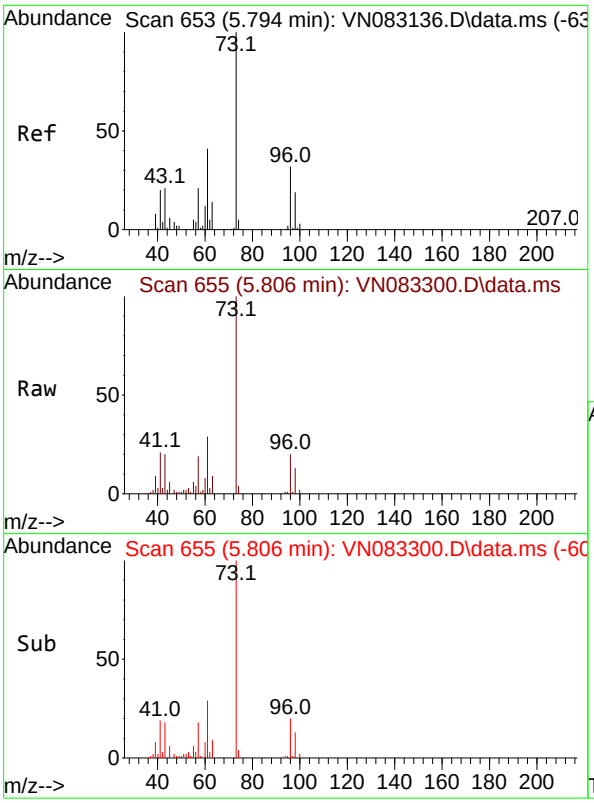


#18
Methyl Acetate
Concen: 23.598 ug/l
RT: 5.030 min Scan# 523
Delta R.T. 0.006 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion: 43 Resp: 58332

Ion	Ratio	Lower	Upper
43	100		
74	24.4	16.3	24.5

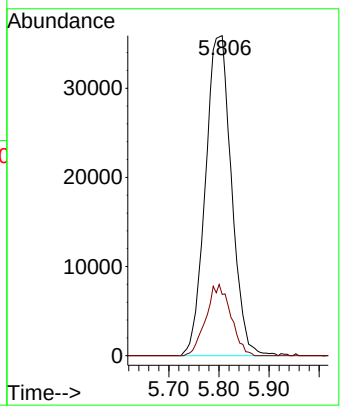




#19
Methyl tert-butyl Ether
Concen: 21.715 ug/l
RT: 5.806 min Scan# 6
Delta R.T. 0.012 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion: 73 Resp: 12941

Ion	Ratio	Lower	Upper
73	100		
57	19.2	17.9	26.9



Instrument :
MSVOA_N
ClientSampleId :
VN0814WBSD01

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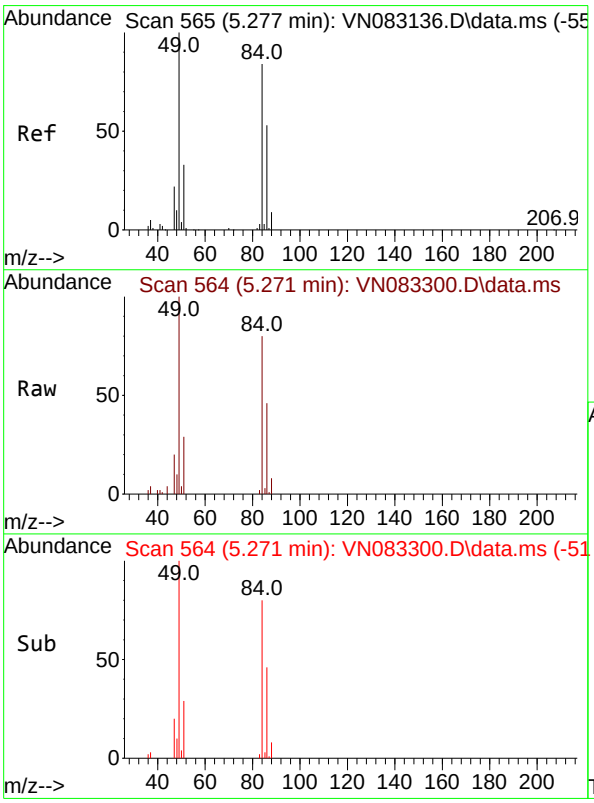
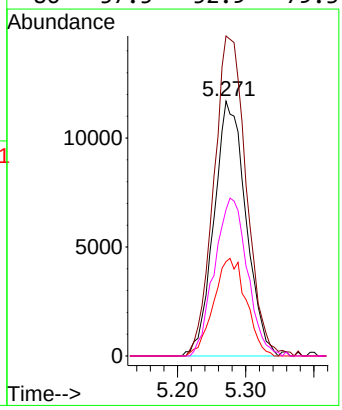
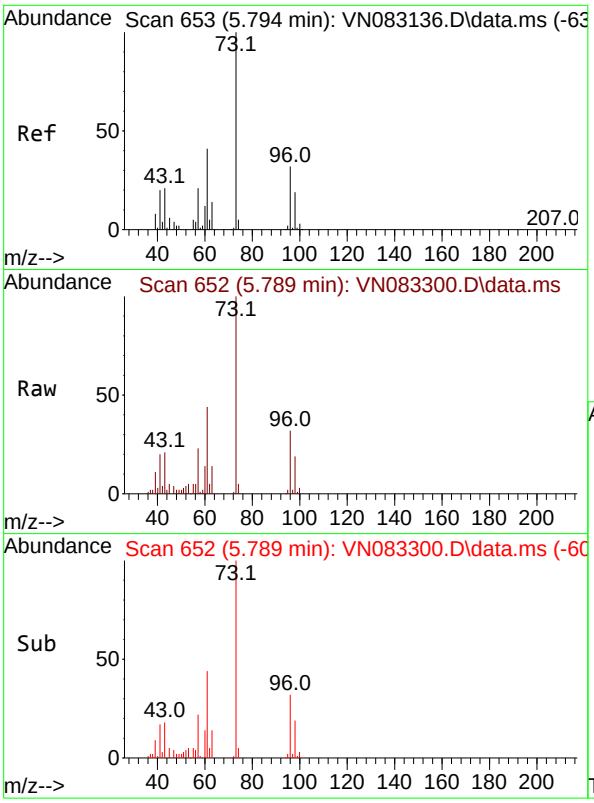


#20
Methylene Chloride
Concen: 19.922 ug/l
RT: 5.271 min Scan# 564
Delta R.T. -0.006 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion: 84 Resp: 38038

Ion	Ratio	Lower	Upper
84	100		
49	125.6	119.6	179.4
51	37.1	34.8	52.2
86	57.5	52.9	79.3





#21
trans-1,2-Dichloroethene
Concen: 19.216 ug/l
RT: 5.789 min Scan# 6
Delta R.T. -0.006 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion: 96 Resp: 3279

Ion	Ratio	Lower	Upper
96	100		
61	139.2	123.4	185.2
98	60.2	49.3	73.9

Instrument :
MSVOA_N
ClientSampleId :
VN0814WBSD01

Manual Integrations
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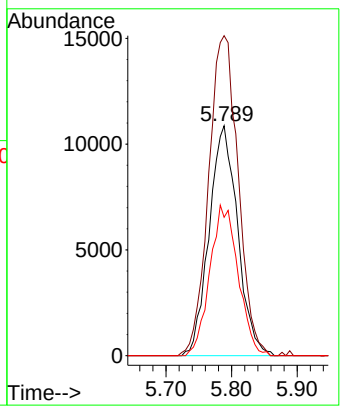
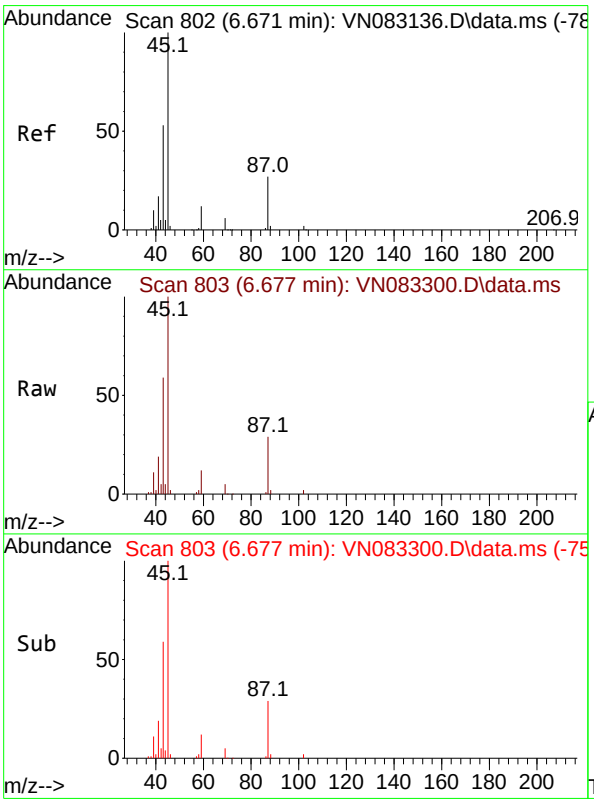
Reviewed By :Mahesh Dadoda 08/15/2024
Supervised By :Semsettin Yesilyurt 08/15/2024

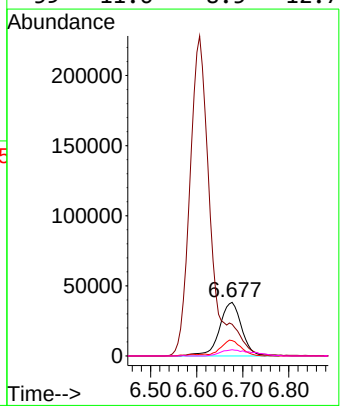


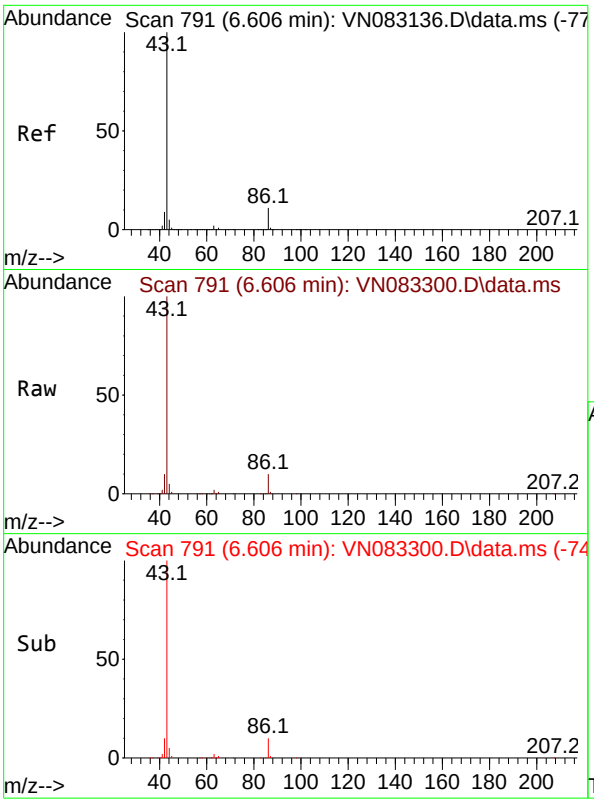


#22
Diisopropyl ether
Concen: 21.629 ug/l
RT: 6.677 min Scan# 803
Delta R.T. 0.006 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion: 45 Resp: 126864

Ion	Ratio	Lower	Upper
45	100		
43	57.5	44.0	66.0
87	28.6	19.7	29.5
59	11.6	8.5	12.7





#23
Vinyl Acetate
Concen: 117.529 ug/l
RT: 6.606 min Scan# 7
Delta R.T. 0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion: 43 Resp: 70658

Ion	Ratio	Lower	Upper
43	100		
86	10.2	7.3	10.9

Instrument :
MSVOA_N
ClientSampleId :
VN0814WBSD01

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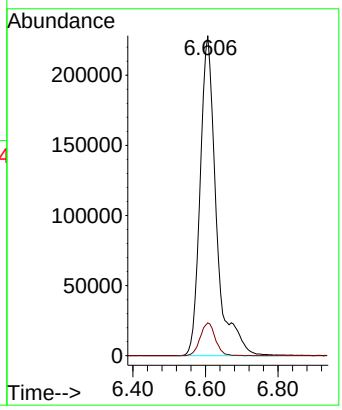
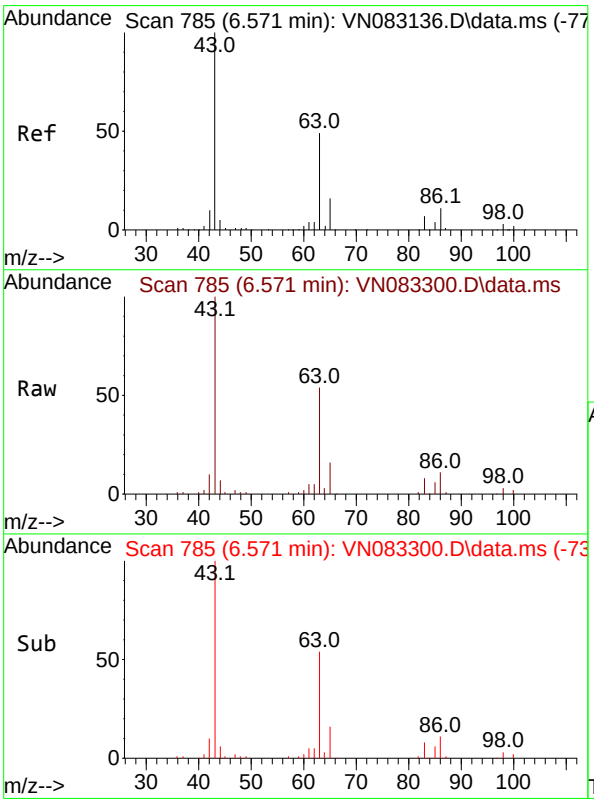
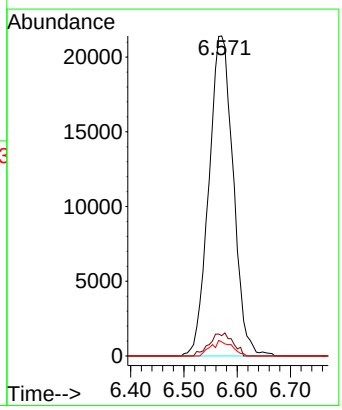


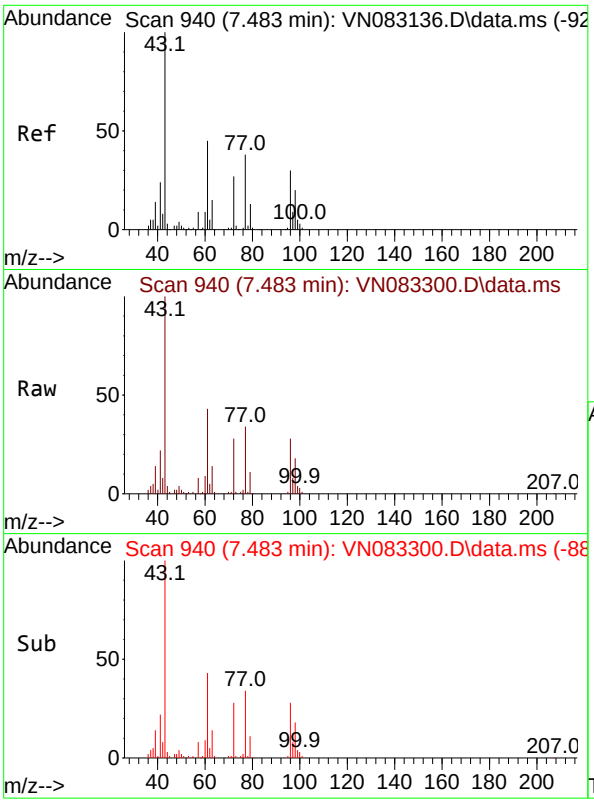


#24
1,1-Dichloroethane
Concen: 21.283 ug/l
RT: 6.571 min Scan# 785
Delta R.T. 0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion: 63 Resp: 68043

Ion	Ratio	Lower	Upper
63	100		
98	6.4	3.3	9.9
100	4.4	2.0	6.0





#25
2-Butanone
Concen: 112.337 ug/l
RT: 7.483 min Scan# 94
Delta R.T. 0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion: 43 Resp: 14310

Ion	Ratio	Lower	Upper
43	100		
72	27.5	18.2	27.2

Instrument :
MSVOA_N
ClientSampleId :
VN0814WBSD01

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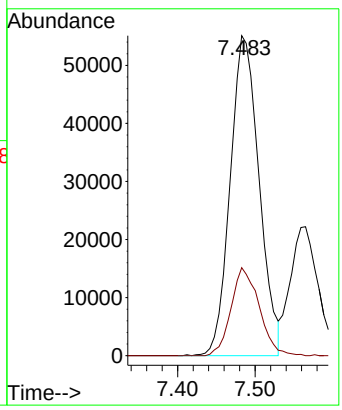
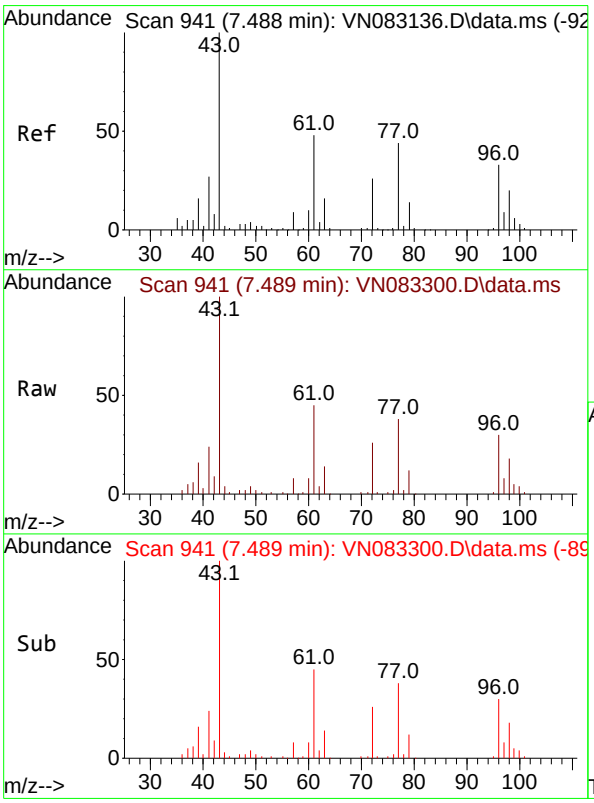
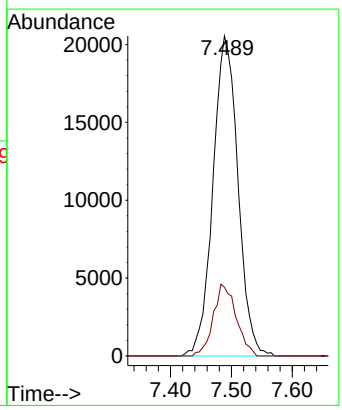


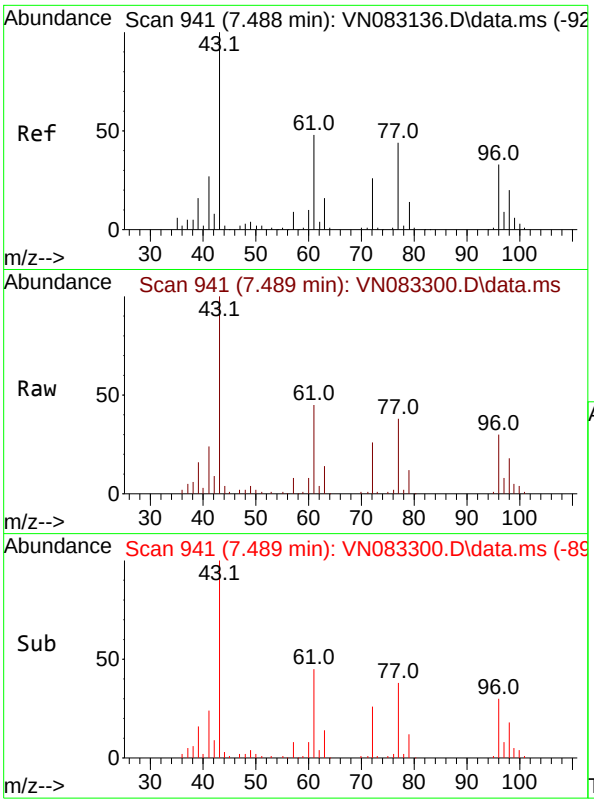


#26
2,2-Dichloropropane
Concen: 19.719 ug/l
RT: 7.489 min Scan# 941
Delta R.T. 0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion: 77 Resp: 58546

Ion	Ratio	Lower	Upper
77	100		
97	20.5	10.3	30.9





#27
cis-1,2-Dichloroethene
Concen: 20.934 ug/l
RT: 7.489 min Scan# 94
Delta R.T. 0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion: 96 Resp: 4311

Ion	Ratio	Lower	Upper
96	100		
61	153.2	0.0	329.6
98	62.7	0.0	128.6

Instrument :
MSVOA_N
ClientSampleId :
VN0814WBSD01

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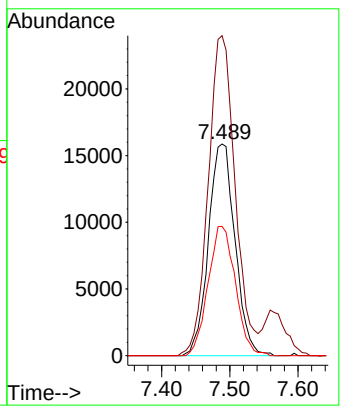
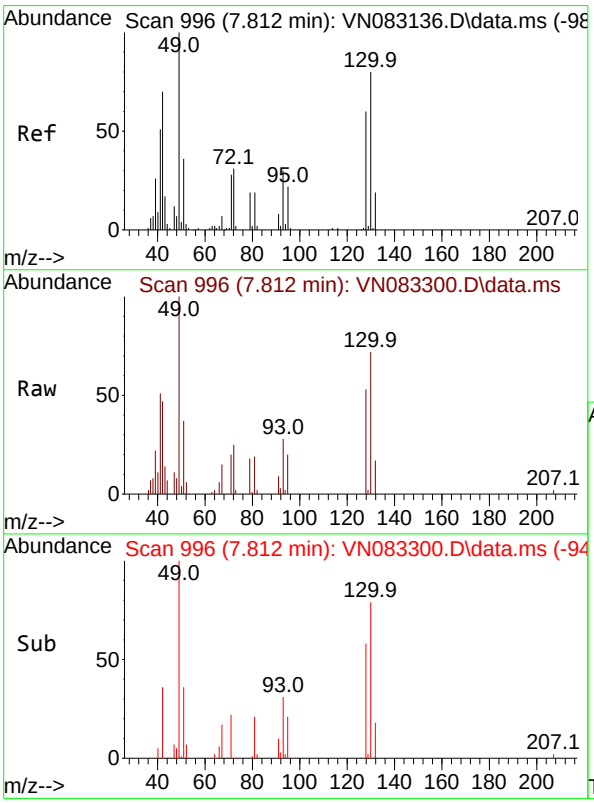
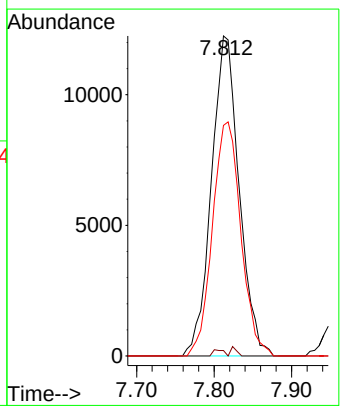


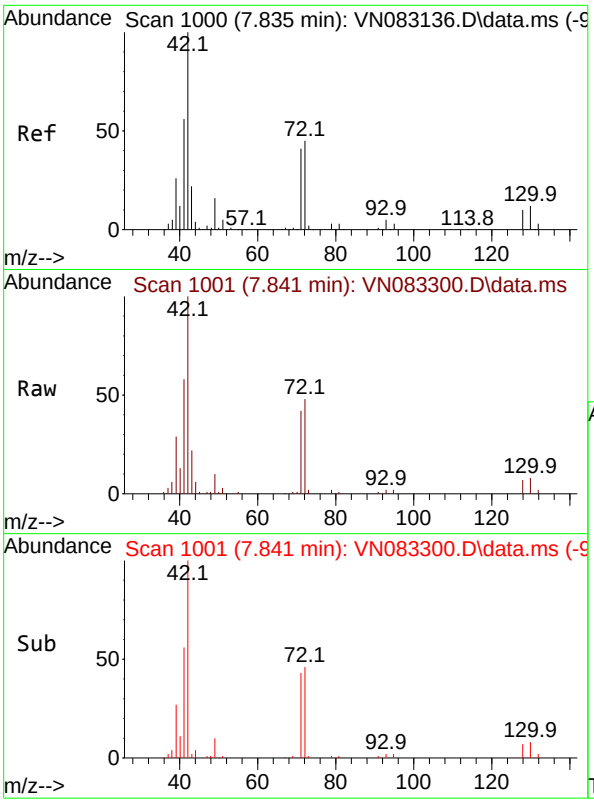


#28
Bromochloromethane
Concen: 23.311 ug/l
RT: 7.812 min Scan# 996
Delta R.T. 0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion: 49 Resp: 30457

Ion	Ratio	Lower	Upper
49	100		
129	0.6	0.0	3.8
130	74.9	50.5	75.7





#29
Tetrahydrofuran
Concen: 112.377 ug/l
RT: 7.841 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion: 42 Resp: 9254

Ion	Ratio	Lower	Upper
42	100		
72	46.1	30.0	45.0
71	41.0	28.3	42.5

Instrument :
MSVOA_N
ClientSampleId :
VN0814WBSD01

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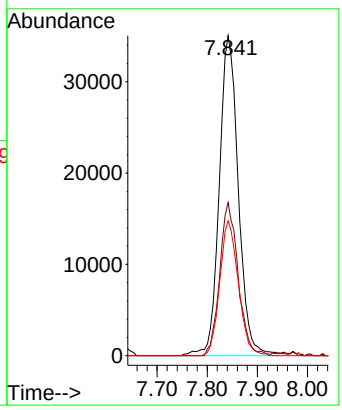
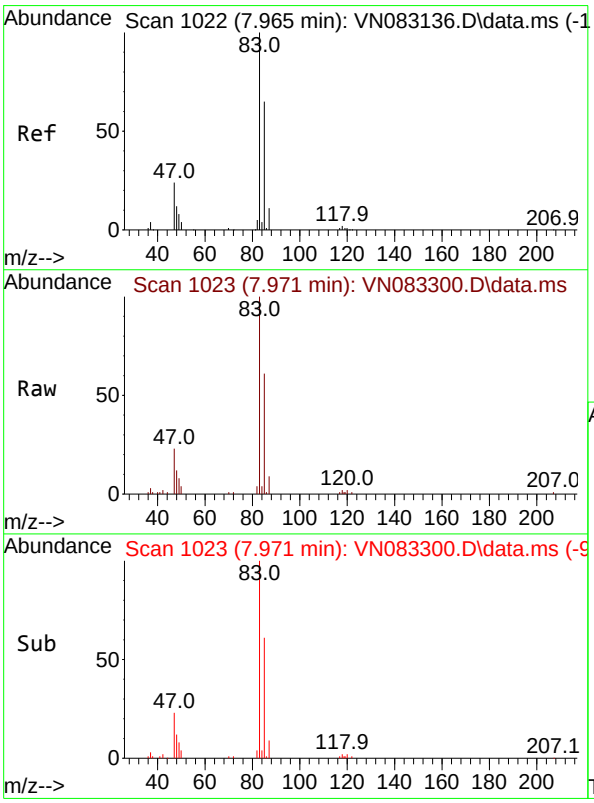
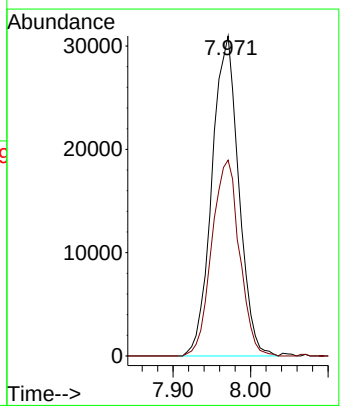


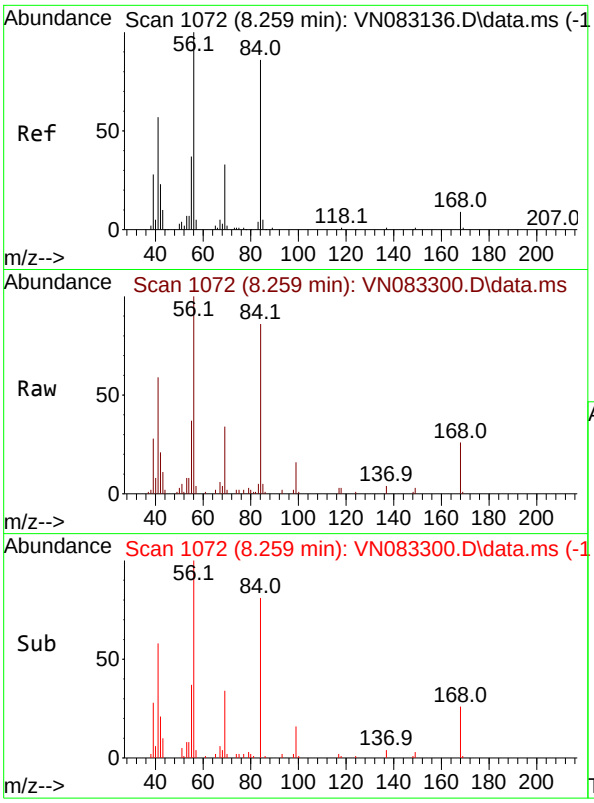


#30
Chloroform
Concen: 22.370 ug/l
RT: 7.971 min Scan# 1023
Delta R.T. 0.006 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion: 83 Resp: 74303

Ion	Ratio	Lower	Upper
83	100		
85	61.2	50.9	76.3

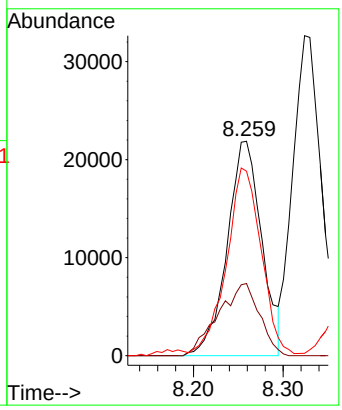




#31
Cyclohexane
Concen: 18.664 ug/l
RT: 8.259 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion: 56 Resp: 5864

Ion	Ratio	Lower	Upper
56	100		
69	33.6	24.5	36.7
84	83.3	66.0	99.0



Instrument :
MSVOA_N
ClientSampleId :
VN0814WBSD01

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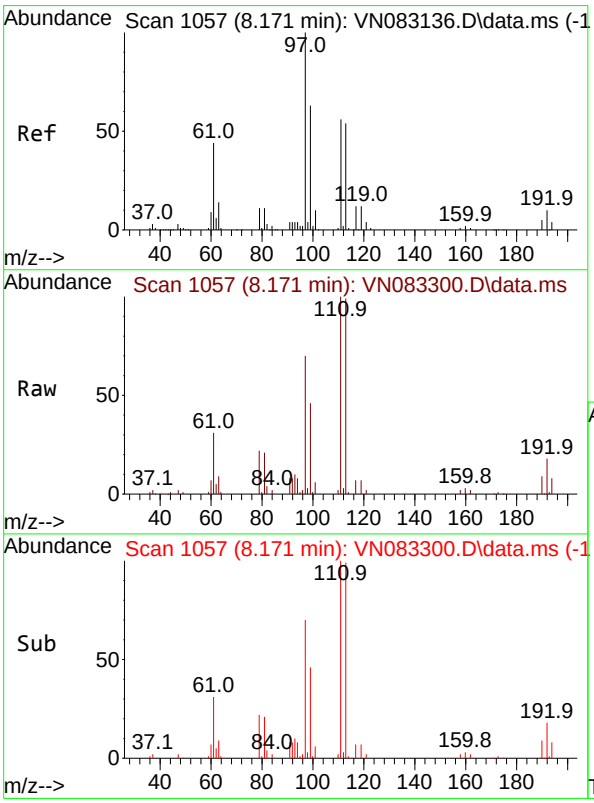
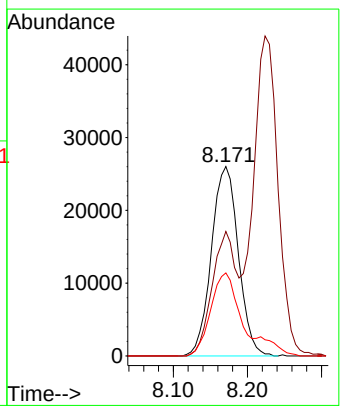
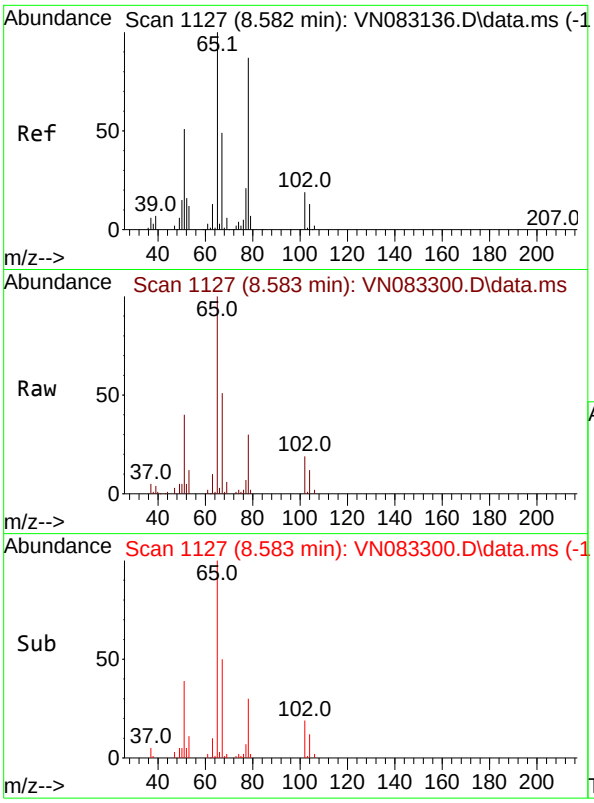


#32
1,1,1-Trichloroethane
Concen: 20.899 ug/l
RT: 8.171 min Scan# 1057
Delta R.T. 0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion: 97 Resp: 65707

Ion	Ratio	Lower	Upper
97	100		
99	58.3	52.0	78.0
61	52.9	42.1	63.1

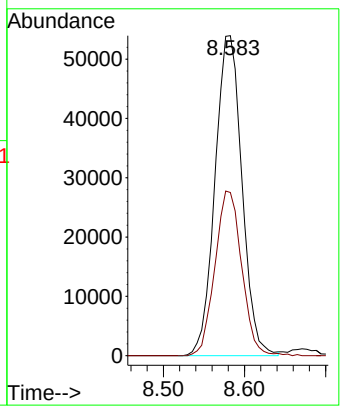




#33
1,2-Dichloroethane-d4
Concen: 58.729 ug/l
RT: 8.583 min Scan# 11
Delta R.T. 0.001 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion: 65 Resp: 12451

Ion	Ratio	Lower	Upper
65	100		
67	51.1	0.0	104.4



Instrument :
MSVOA_N
ClientSampleId :
VN0814WBSD01

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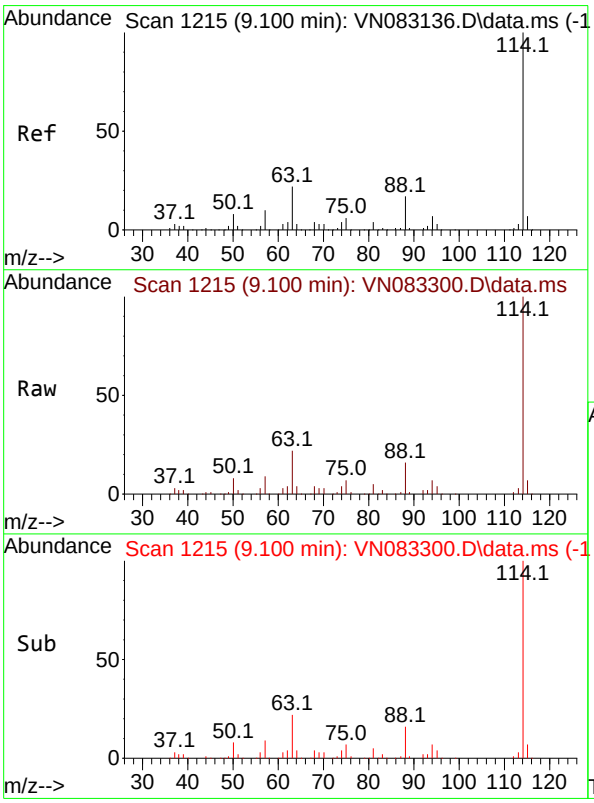
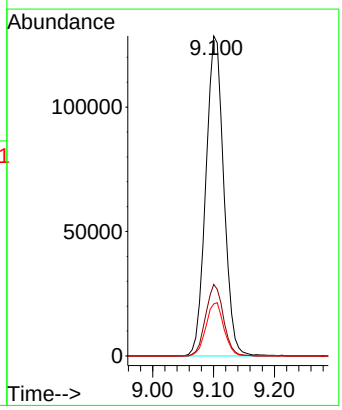
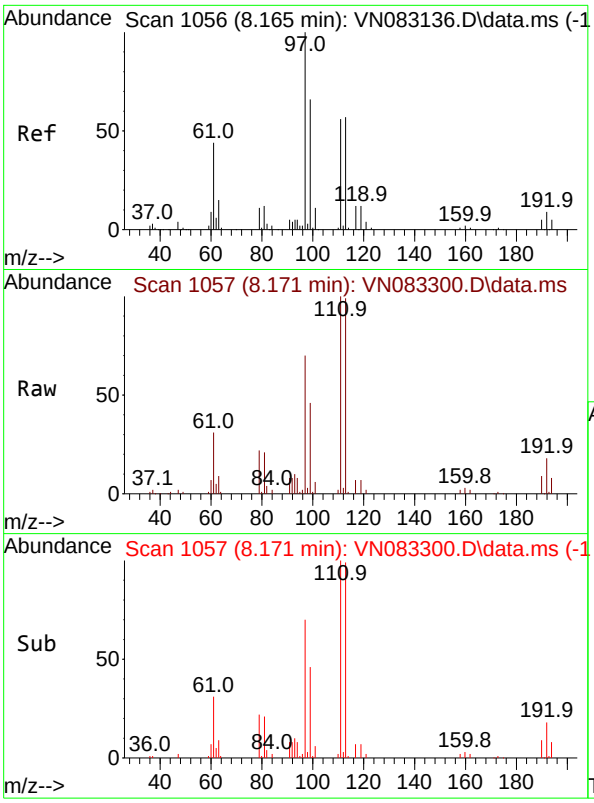


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1215
Delta R.T. 0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion:114 Resp: 263108

Ion	Ratio	Lower	Upper
114	100		
63	22.4	0.0	44.6
88	16.3	0.0	31.4

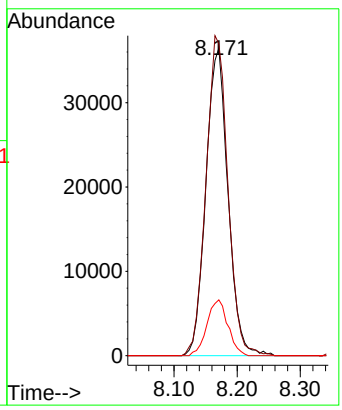




#35
Dibromofluoromethane
Concen: 53.979 ug/l
RT: 8.171 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion:113 Resp: 8864

Ion	Ratio	Lower	Upper
113	100		
111	103.3	82.4	123.6
192	17.2	14.9	22.3



Instrument :
MSVOA_N
ClientSampleId :
VN0814WBSD01

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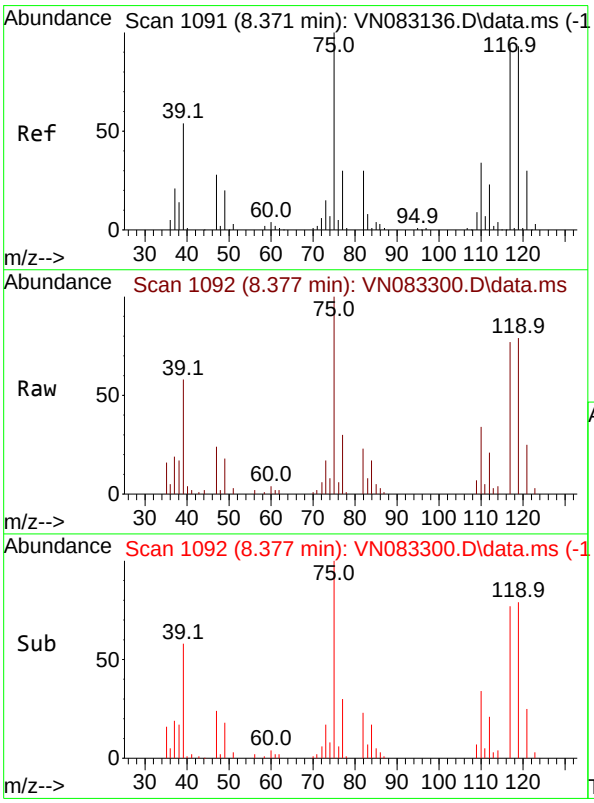
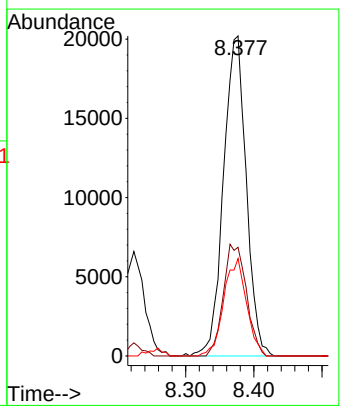
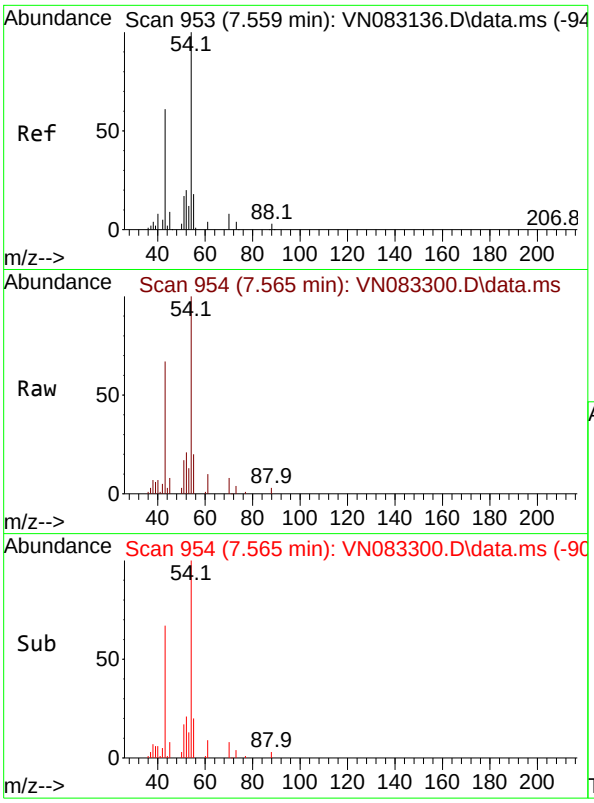


#36
1,1-Dichloropropene
Concen: 18.912 ug/l
RT: 8.377 min Scan# 1092
Delta R.T. 0.006 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion: 75 Resp: 46982

Ion	Ratio	Lower	Upper
75	100		
110	35.2	16.3	48.9
77	30.4	24.6	37.0





#37
Ethyl Acetate
Concen: 20.957 ug/l
RT: 7.565 min Scan# 9
Delta R.T. 0.006 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion: 43 Resp: 5829

Ion	Ratio	Lower	Upper
43	100		
61	13.0	9.3	13.9
70	10.4	7.0	10.6

Instrument :
MSVOA_N
ClientSampleId :
VN0814WBSD01

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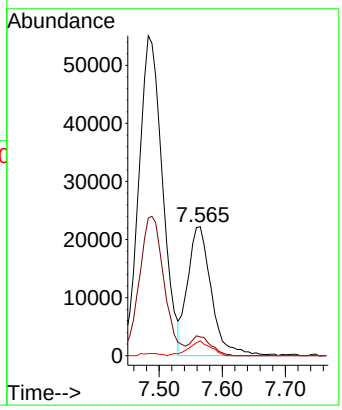
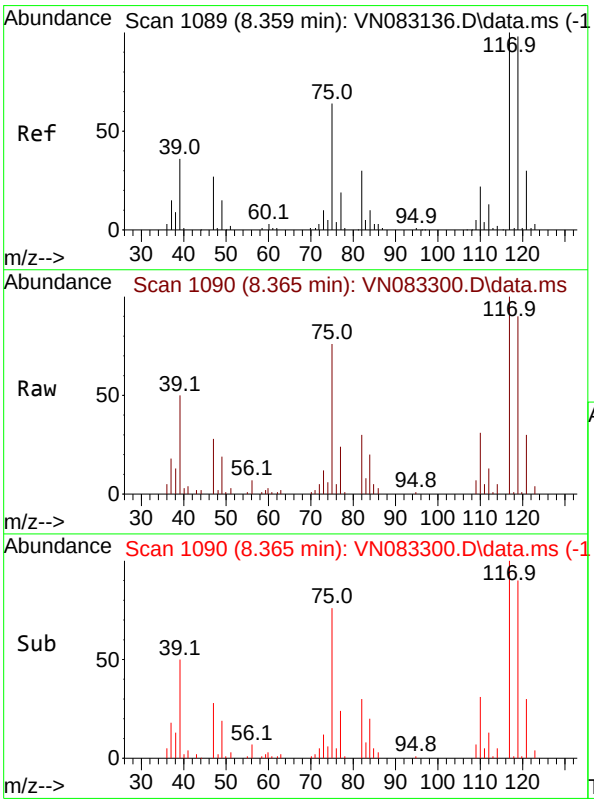
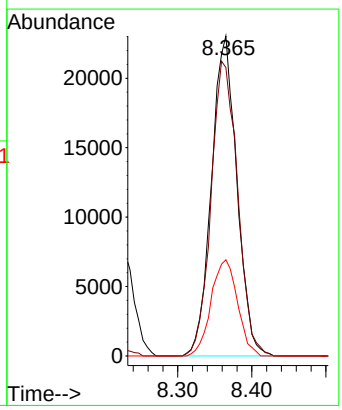


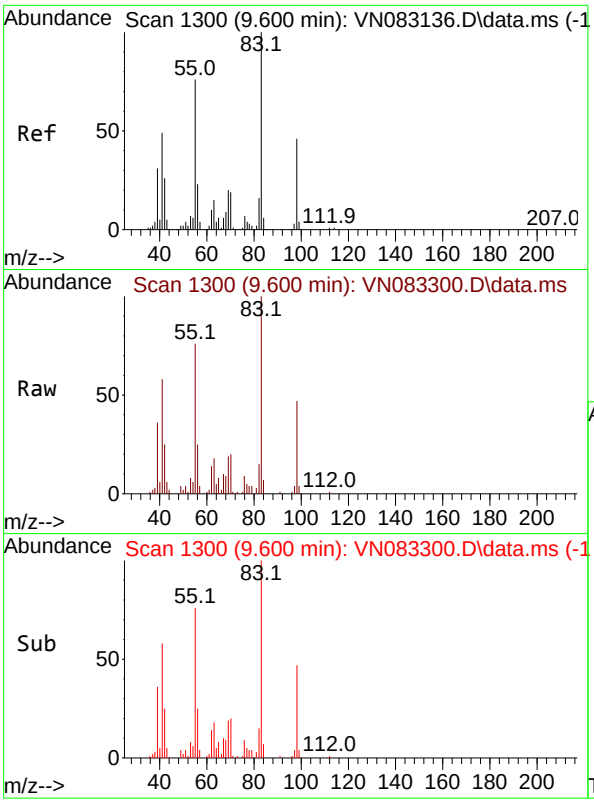


#38
Carbon Tetrachloride
Concen: 19.600 ug/l
RT: 8.365 min Scan# 1090
Delta R.T. 0.006 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion:117 Resp: 54843

Ion	Ratio	Lower	Upper
117	100		
119	90.1	74.9	112.3
121	30.1	24.3	36.5





#39
Methylcyclohexane
Concen: 17.820 ug/l
RT: 9.600 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion: 83 Resp: 5437

Ion	Ratio	Lower	Upper
83	100		
55	75.7	66.4	99.6
98	47.4	40.7	61.1

Instrument :
MSVOA_N
ClientSampleId :
VN0814WBSD01

Manual Integrations
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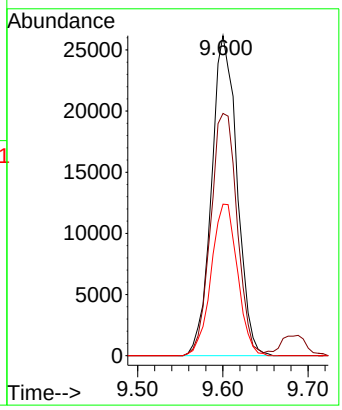
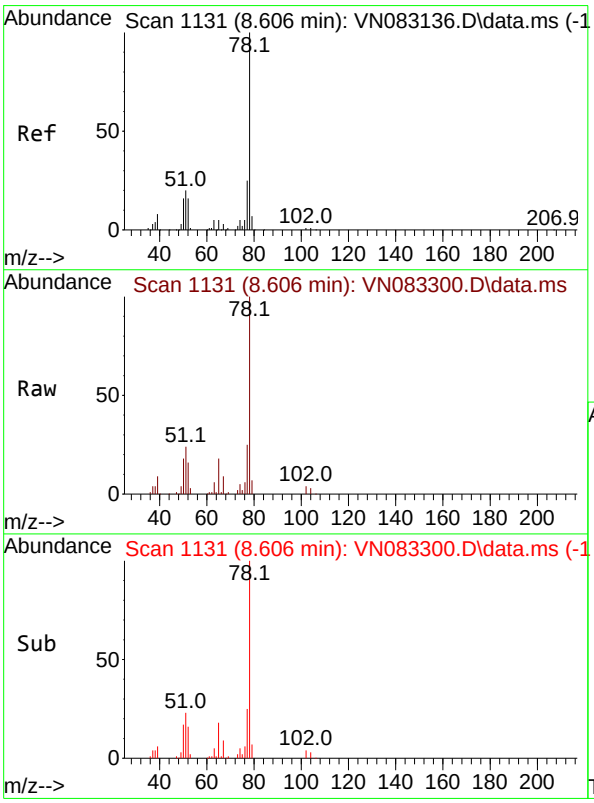
Reviewed By :Mahesh Dadoda 08/15/2024
Supervised By :Semsettin Yesilyurt 08/15/2024

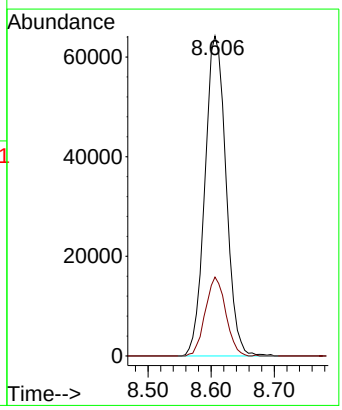


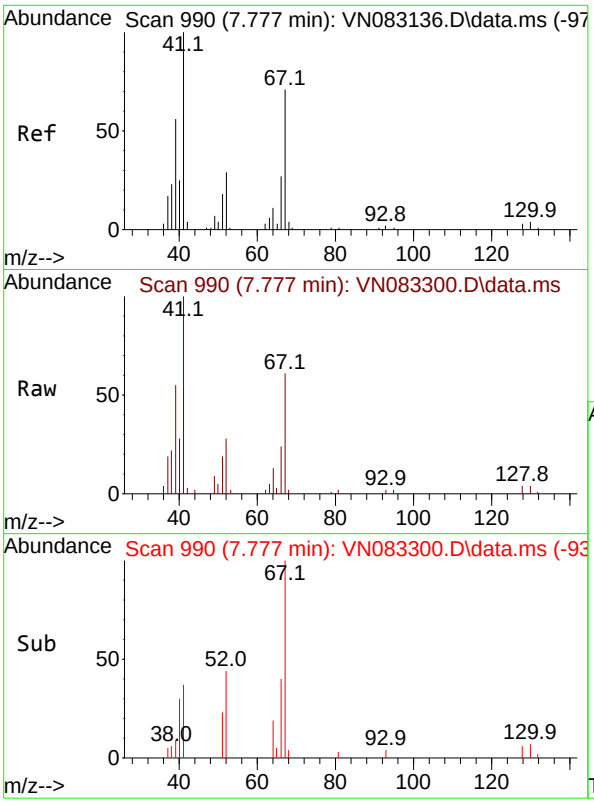


#40
Benzene
Concen: 20.174 ug/l
RT: 8.606 min Scan# 1131
Delta R.T. 0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion: 78 Resp: 149300

Ion	Ratio	Lower	Upper
78	100		
77	24.6	19.0	28.4

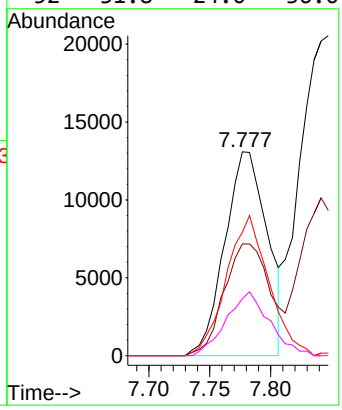




#41
Methacrylonitrile
Concen: 20.082 ug/l
RT: 7.777 min Scan# 9
Delta R.T. 0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion: 41 Resp: 3176

Ion	Ratio	Lower	Upper
41	100		
39	60.4	45.5	68.3
67	69.0	50.5	75.7
52	31.8	24.0	36.0



Instrument :
MSVOA_N
ClientSampleId :
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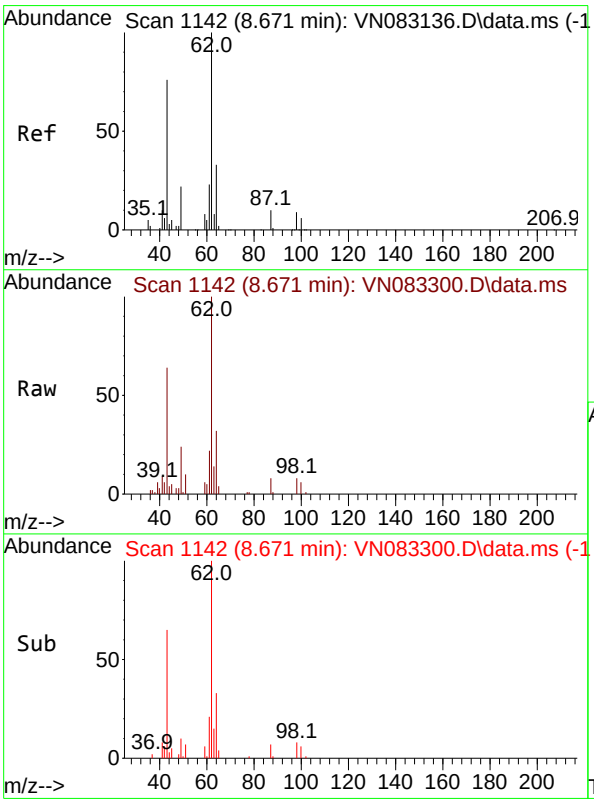
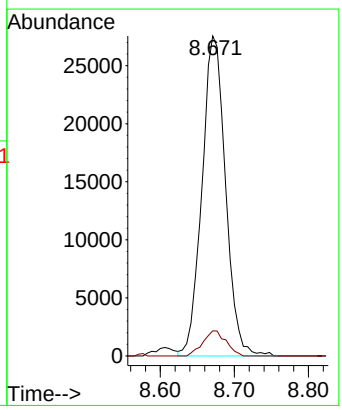
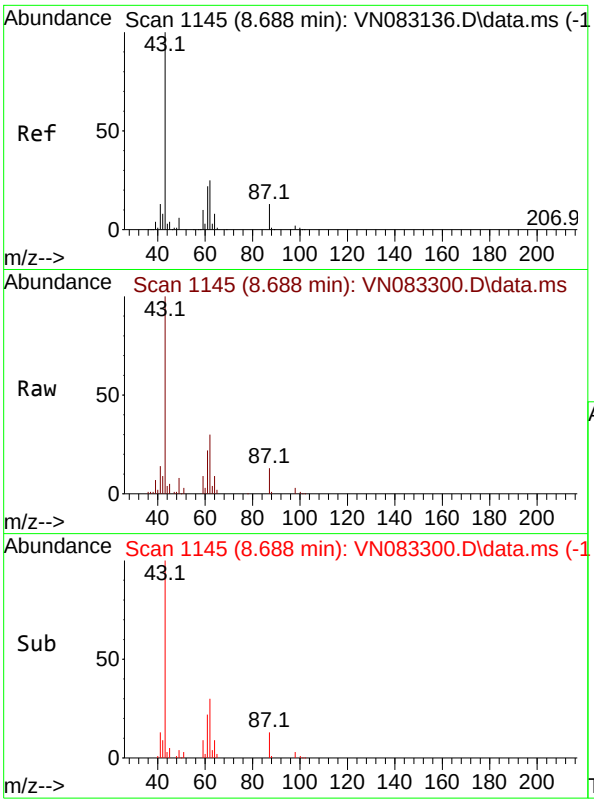


#42
1,2-Dichloroethane
Concen: 22.609 ug/l
RT: 8.671 min Scan# 1142
Delta R.T. 0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion: 62 Resp: 60953

Ion	Ratio	Lower	Upper
62	100		
98	7.7	0.0	15.8





#43
Isopropyl Acetate
Concen: 19.694 ug/l
RT: 8.688 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion: 43 Resp: 10171

Ion	Ratio	Lower	Upper
43	100		
61	25.1	17.8	26.6
87	12.2	8.2	12.2

Instrument :
MSVOA_N
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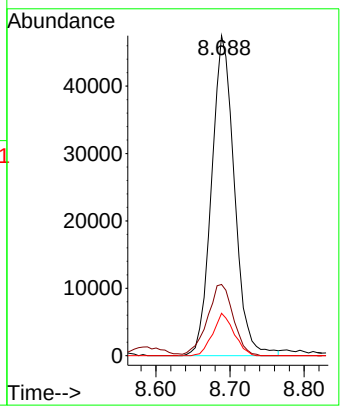
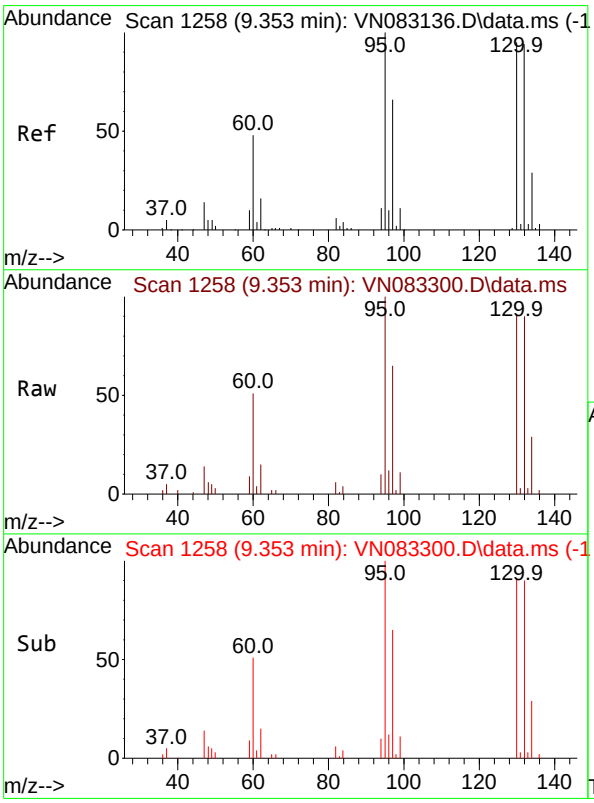
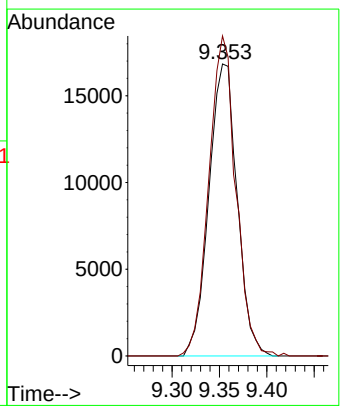


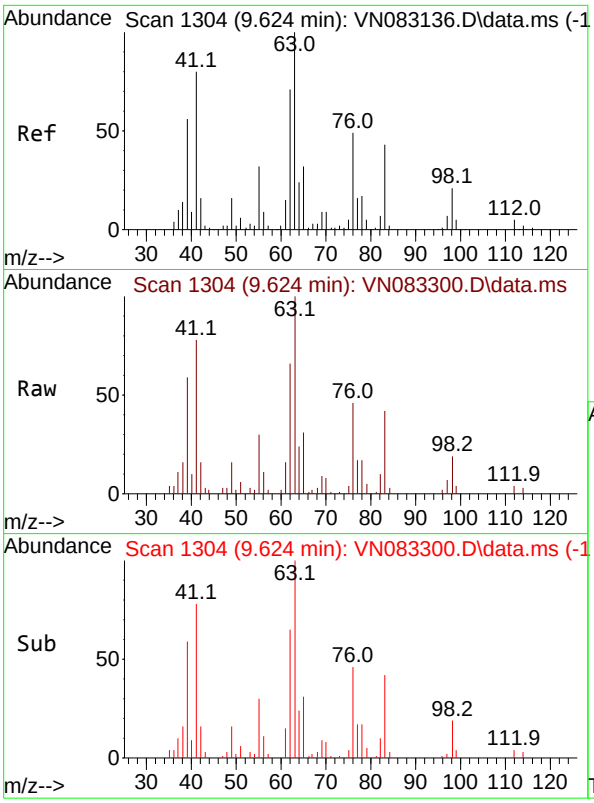


#44
Trichloroethene
Concen: 19.850 ug/l
RT: 9.353 min Scan# 1258
Delta R.T. 0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion:130 Resp: 34966

Ion	Ratio	Lower	Upper
130	100		
95	109.6	0.0	197.8

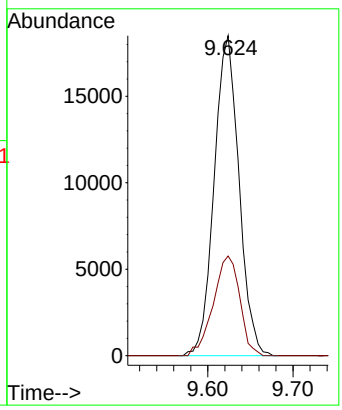




#45
1,2-Dichloropropane
Concen: 21.275 ug/l
RT: 9.624 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion: 63 Resp: 3737

Ion	Ratio	Lower	Upper
63	100		
65	31.2	24.4	36.6



Instrument :
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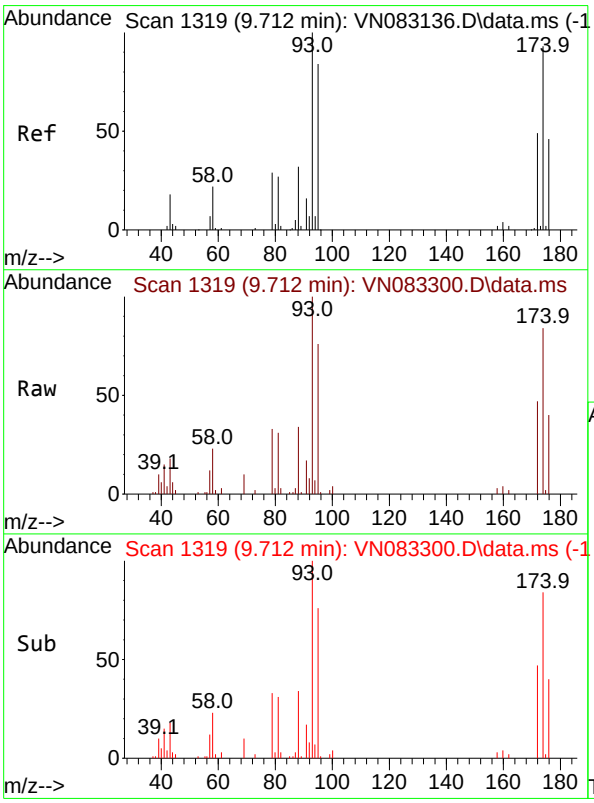
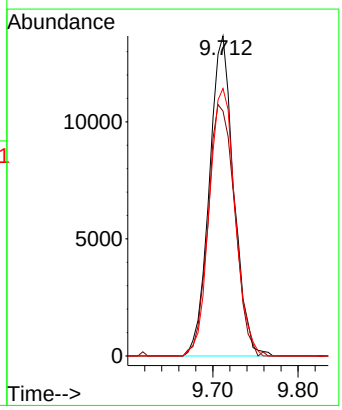
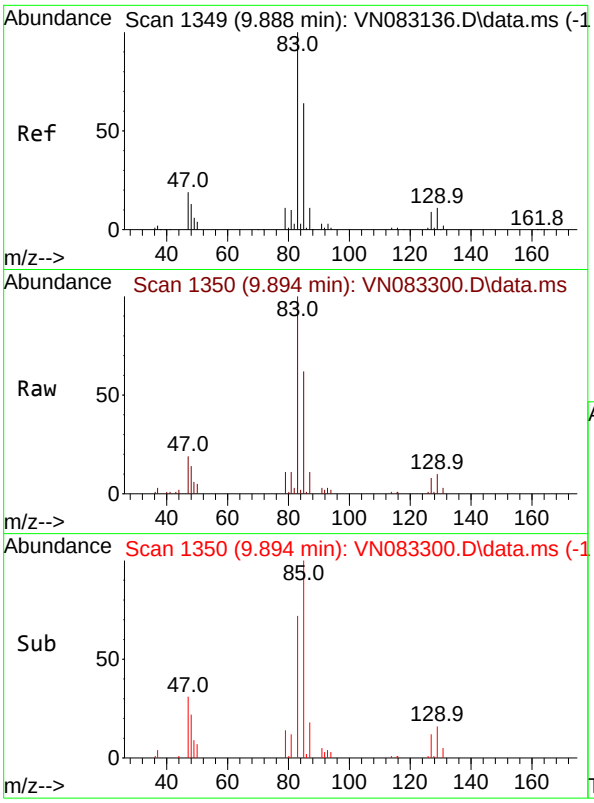


#46
Dibromomethane
Concen: 21.692 ug/l
RT: 9.712 min Scan# 1319
Delta R.T. 0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion: 93 Resp: 27276

Ion	Ratio	Lower	Upper
93	100		
95	85.6	65.8	98.6
174	88.0	71.7	107.5

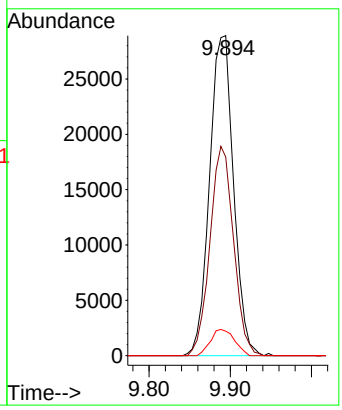




#47
Bromodichloromethane
Concen: 21.027 ug/l
RT: 9.894 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion: 83 Resp: 5936

Ion	Ratio	Lower	Upper
83	100		
85	62.1	51.1	76.7
127	7.6	7.2	10.8



Instrument :
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ClientSampleId :
VN0814WBSD01

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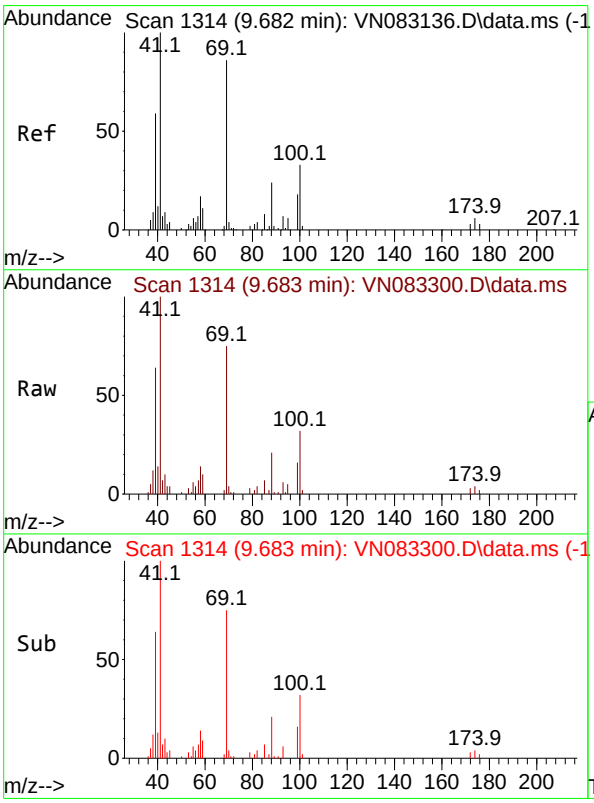
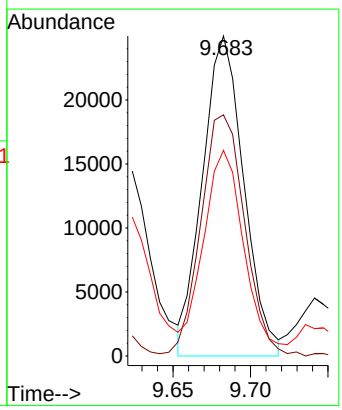
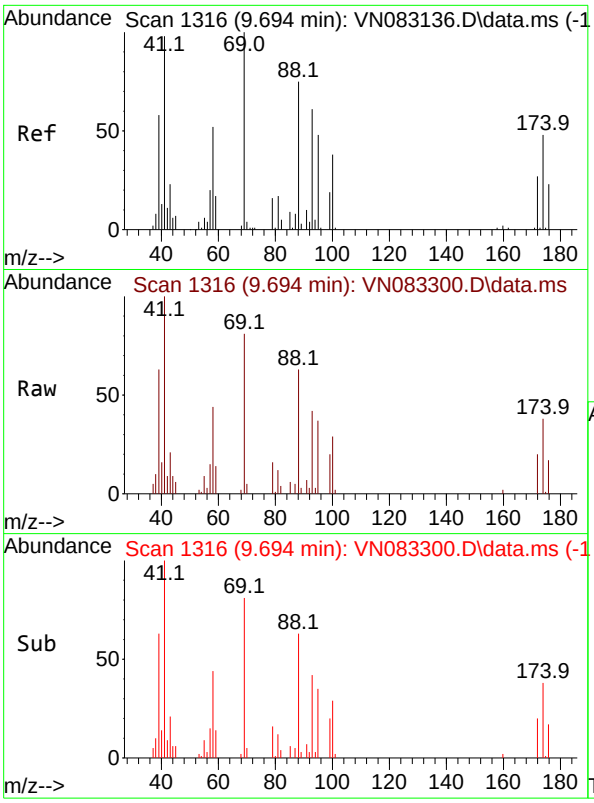


#48
Methyl methacrylate
Concen: 20.144 ug/l
RT: 9.683 min Scan# 1314
Delta R.T. 0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion: 41 Resp: 46324

Ion	Ratio	Lower	Upper
41	100		
69	80.1	56.3	84.5
39	63.9	50.3	75.5

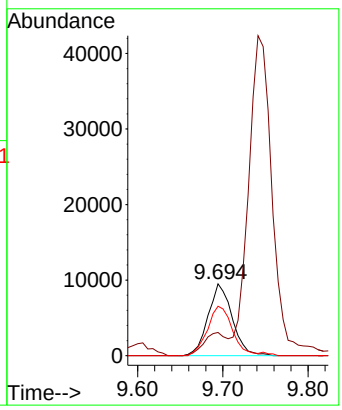




#49
1,4-Dioxane
Concen: 450.635 ug/l
RT: 9.694 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion: 88 Resp: 1869

Ion	Ratio	Lower	Upper
88	100		
43	30.5	27.8	41.8
58	72.9	59.4	89.0



Instrument :
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ClientSampleId :
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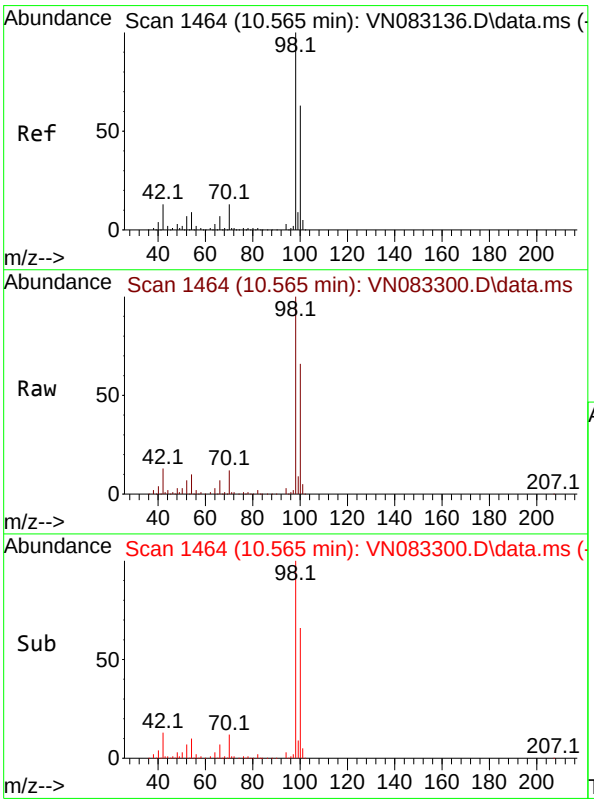
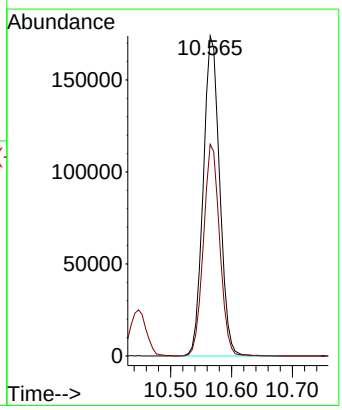
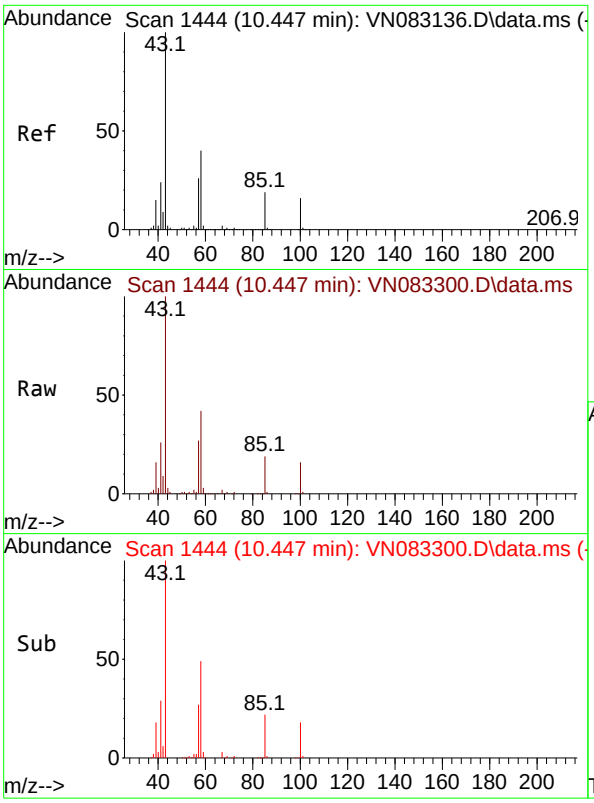


#50
Toluene-d8
Concen: 53.007 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. -0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion: 98 Resp: 324722

Ion	Ratio	Lower	Upper
98	100		
100	65.5	51.5	77.3

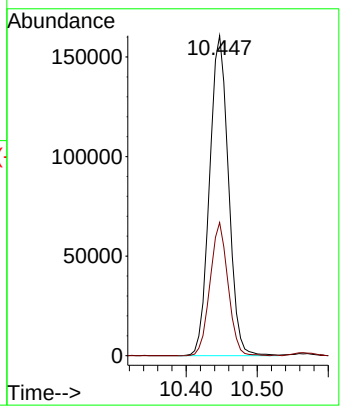




#51
4-Methyl-2-Pentanone
Concen: 112.972 ug/l
RT: 10.447 min Scan# 14
Delta R.T. 0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion: 43 Resp: 29715

Ion	Ratio	Lower	Upper
43	100		
58	39.5	28.2	42.4



Instrument :
MSVOA_N
ClientSampleId :
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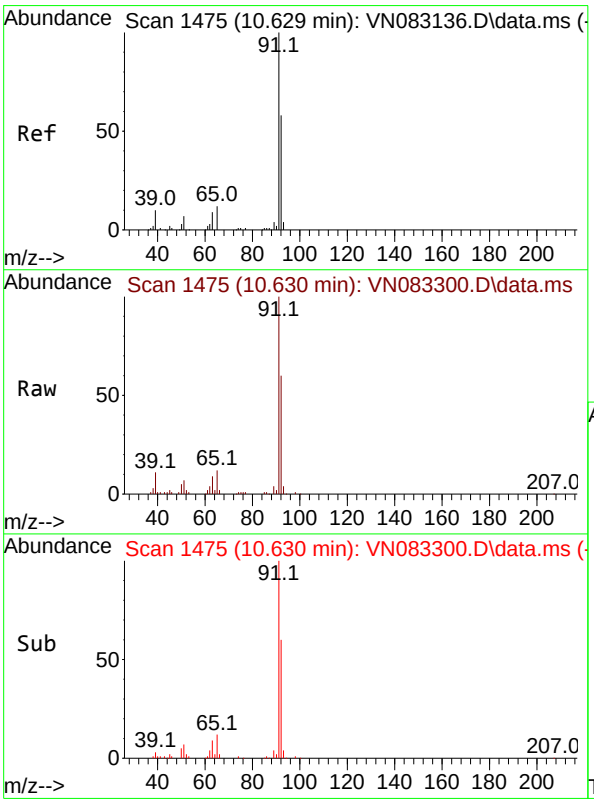
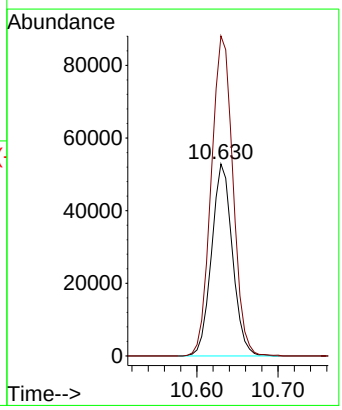
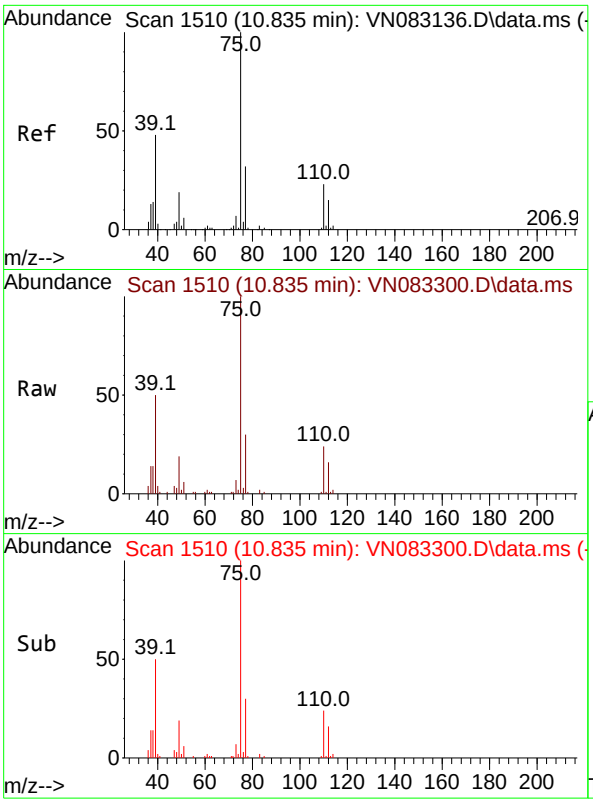


#52
Toluene
Concen: 20.200 ug/l
RT: 10.630 min Scan# 1475
Delta R.T. 0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion: 92 Resp: 94458

Ion	Ratio	Lower	Upper
92	100		
91	173.5	139.4	209.0

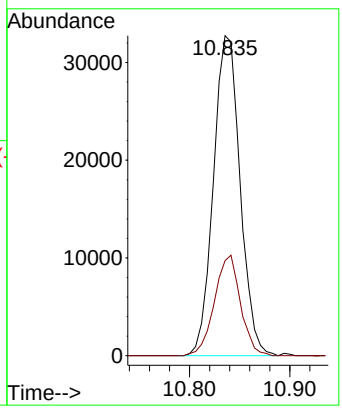




#53
t-1,3-Dichloropropene
Concen: 20.831 ug/l
RT: 10.835 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion: 75 Resp: 6041

Ion	Ratio	Lower	Upper
75	100		
77	29.7	25.7	38.5



Instrument :
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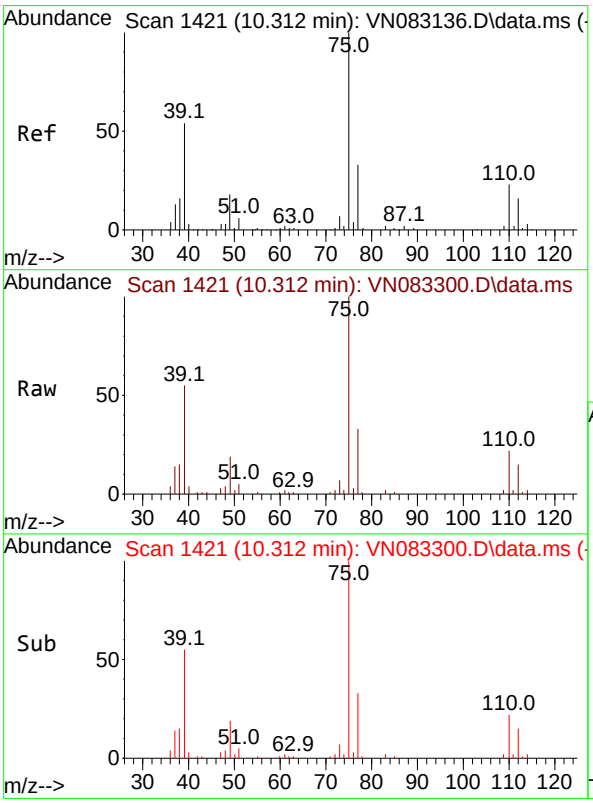
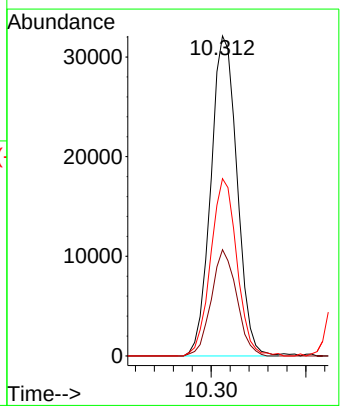
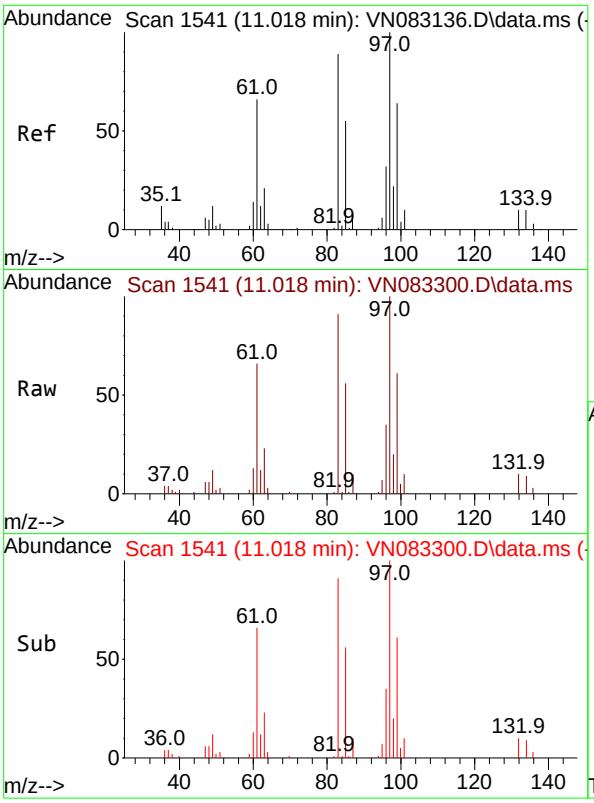


#54
cis-1,3-Dichloropropene
Concen: 20.031 ug/l
RT: 10.312 min Scan# 1421
Delta R.T. 0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion: 75 Resp: 61789

Ion	Ratio	Lower	Upper
75	100		
77	33.2	24.3	36.5
39	55.4	50.5	75.7

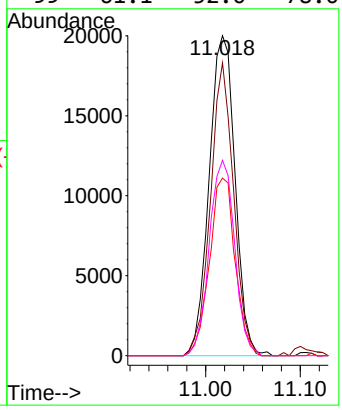




#55
1,1,2-Trichloroethane
Concen: 22.678 ug/l
RT: 11.018 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion: 97 Resp: 3800

Ion	Ratio	Lower	Upper
97	100		
83	91.5	71.4	107.0
85	55.5	45.8	68.6
99	61.1	52.0	78.0



Instrument :
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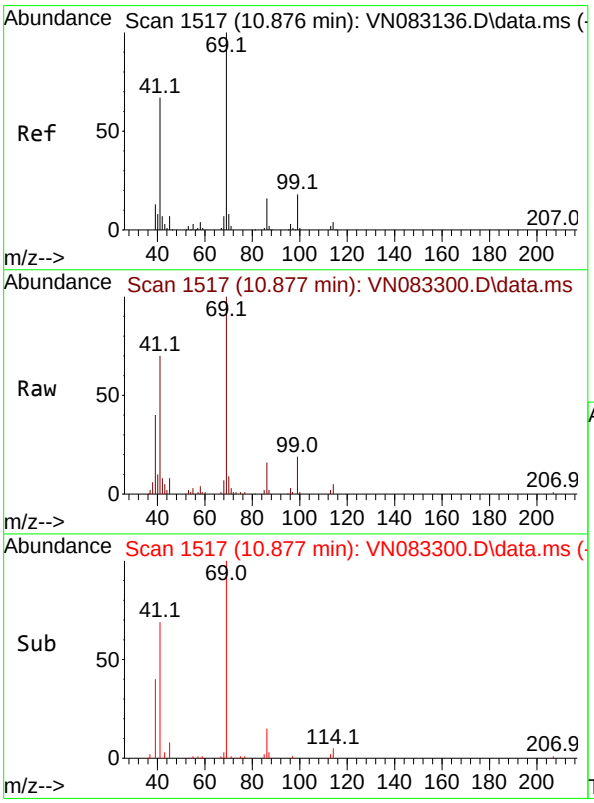
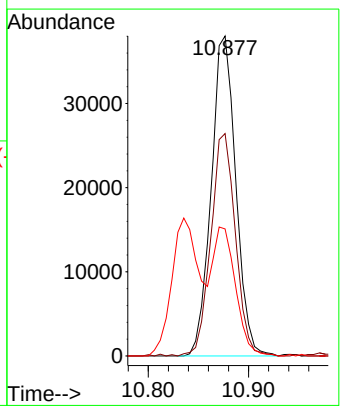
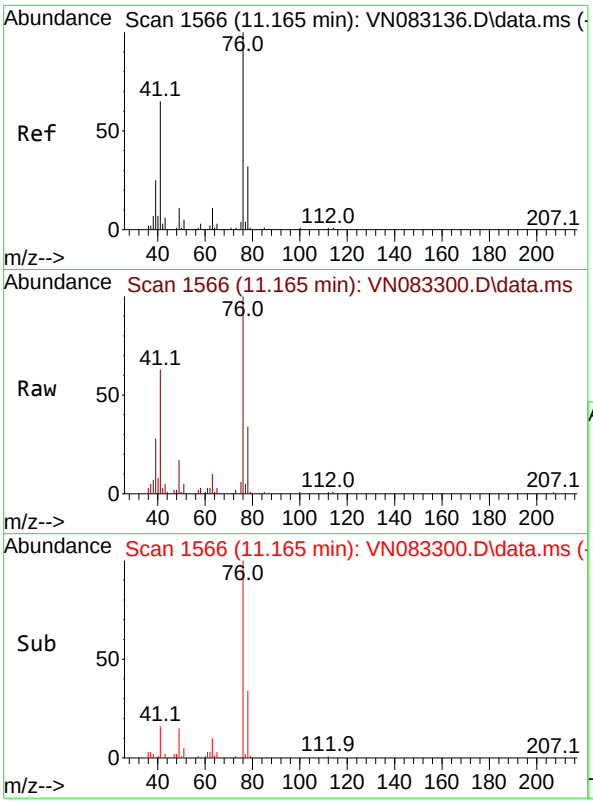


#56
Ethyl methacrylate
Concen: 20.542 ug/l
RT: 10.877 min Scan# 1517
Delta R.T. 0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion: 69 Resp: 64894

Ion	Ratio	Lower	Upper
69	100		
41	69.5	63.4	95.2
39	36.8	37.4	56.0#

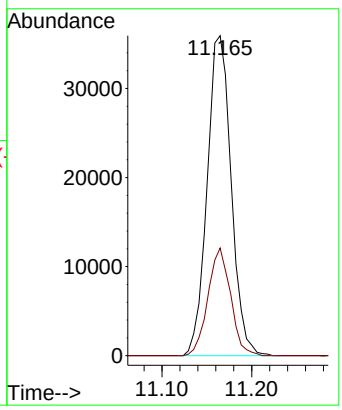




#57
1,3-Dichloropropane
Concen: 22.362 ug/l
RT: 11.165 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion: 76 Resp: 6679

Ion	Ratio	Lower	Upper
76	100		
78	31.7	25.6	38.4



Instrument :
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ClientSampleId :
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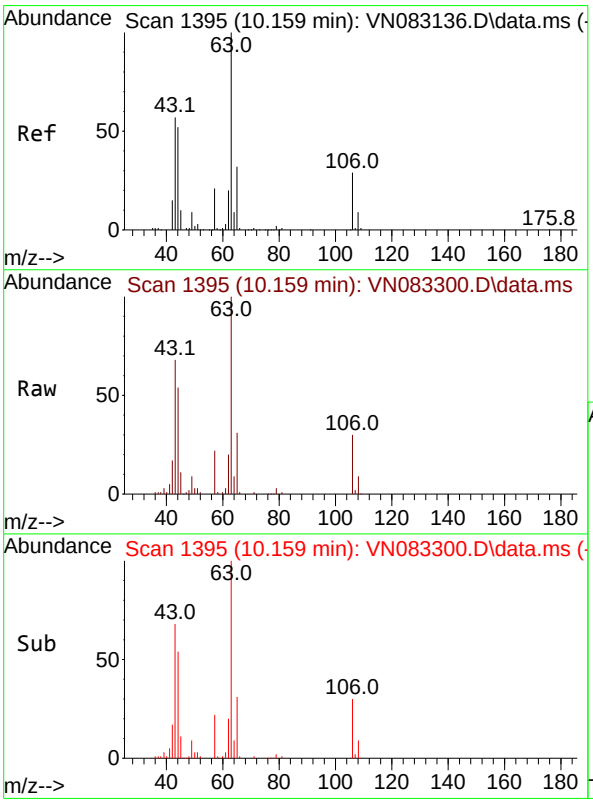
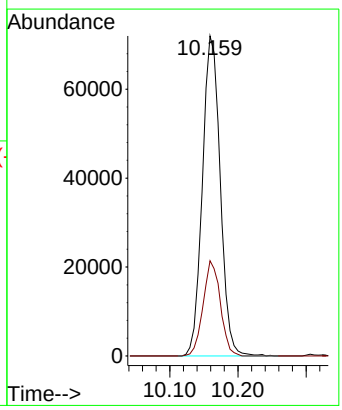
Supervised By :Semsettin Yesilyurt 08/15/2024

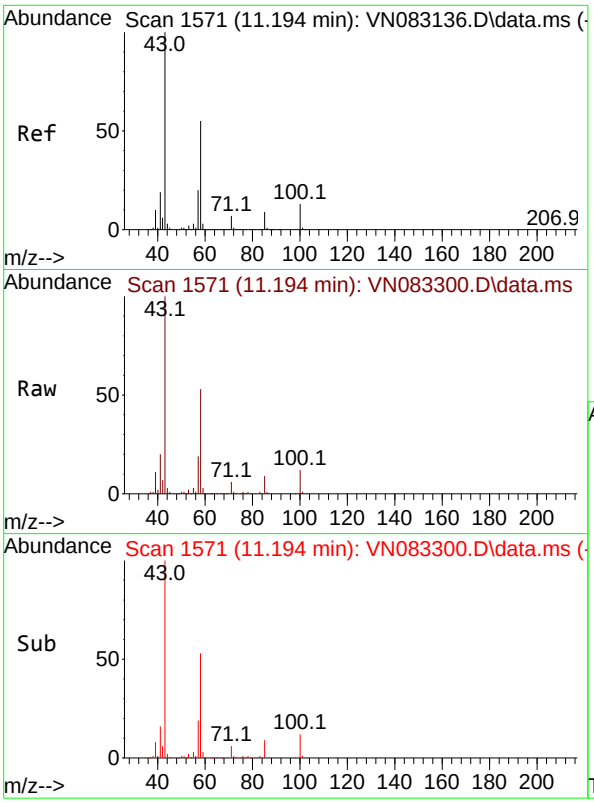


#58
2-Chloroethyl Vinyl ether
Concen: 98.294 ug/l
RT: 10.159 min Scan# 1395
Delta R.T. 0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion: 63 Resp: 131258

Ion	Ratio	Lower	Upper
63	100		
106	28.7	21.4	32.0





#59
2-Hexanone
Concen: 109.692 ug/l
RT: 11.194 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion: 43 Resp: 22321

Ion	Ratio	Lower	Upper
43	100		
58	53.9	24.6	73.8

Instrument :
MSVOA_N
ClientSampleId :
VN0814WBSD01

Manual Integrations
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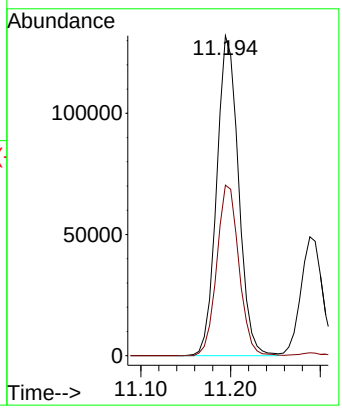
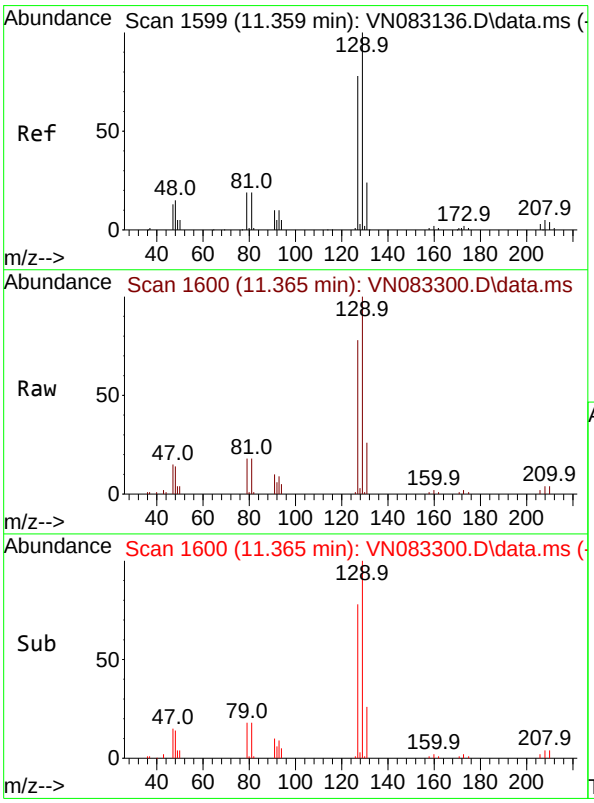
Reviewed By :Mahesh Dadoda 08/15/2024
Supervised By :Semsettin Yesilyurt 08/15/2024

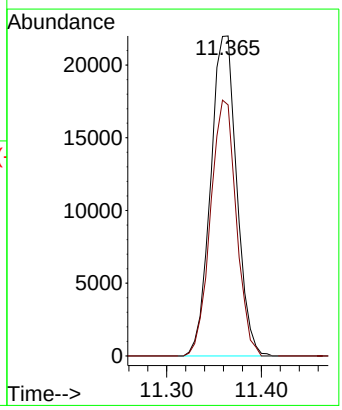


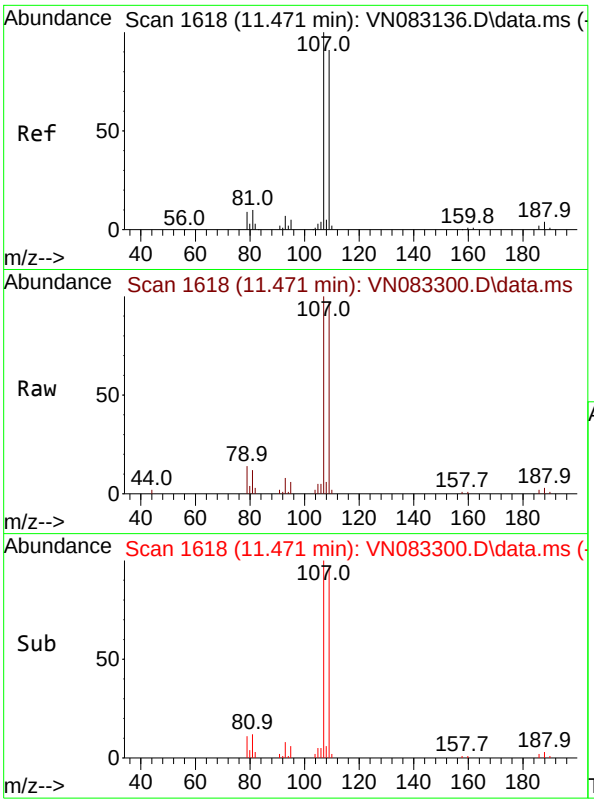


#60
Dibromochloromethane
Concen: 20.790 ug/l
RT: 11.365 min Scan# 1600
Delta R.T. 0.006 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion:129 Resp: 42122

Ion	Ratio	Lower	Upper
129	100		
127	78.8	39.2	117.6





#61
1,2-Dibromoethane
Concen: 21.078 ug/l
RT: 11.471 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion:107 Resp: 3710

Ion	Ratio	Lower	Upper
107	100		
109	97.0	73.7	110.5

Instrument :
MSVOA_N
ClientSampleId :
VN0814WBSD01

Manual Integrations
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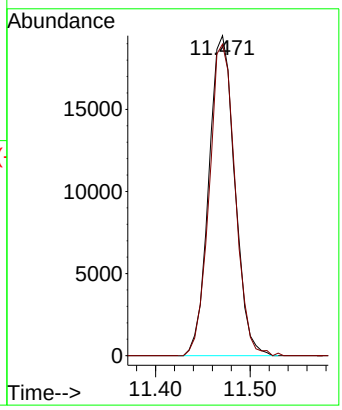
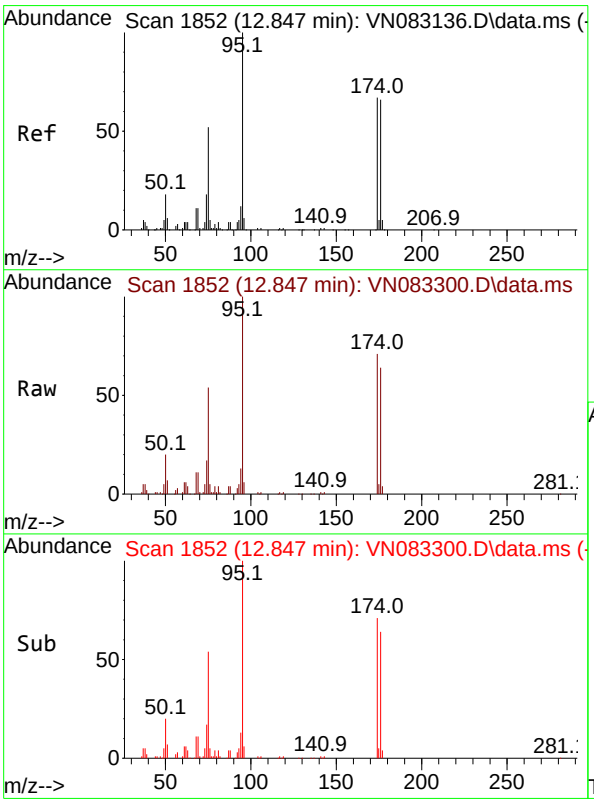
Supervised By :Semsettin Yesilyurt 08/15/2024

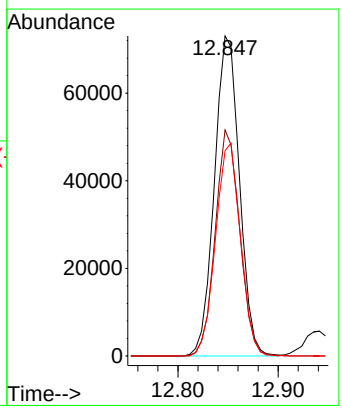


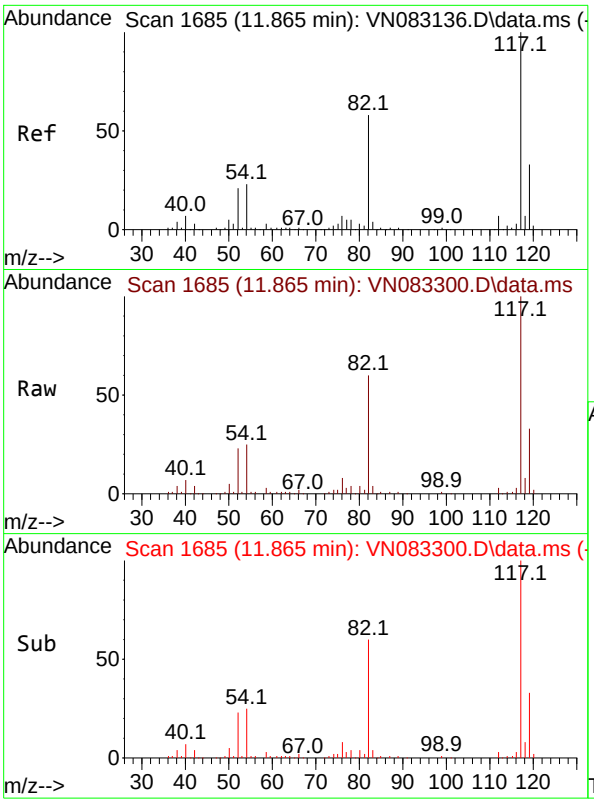


#62
4-Bromofluorobenzene
Concen: 52.969 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. 0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion: 95 Resp: 126506

Ion	Ratio	Lower	Upper
95	100		
174	69.1	0.0	159.2
176	66.3	0.0	147.6

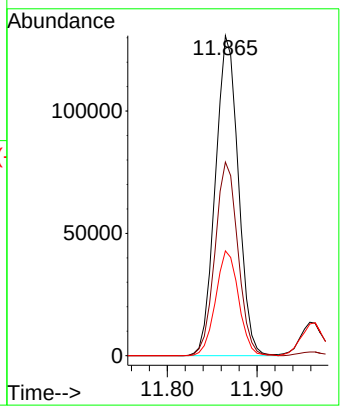




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion:117 Resp: 23224

Ion	Ratio	Lower	Upper
117	100		
82	60.5	47.5	71.3
119	32.8	25.6	38.4



Instrument :
MSVOA_N
ClientSampleId :
VN0814WBSD01

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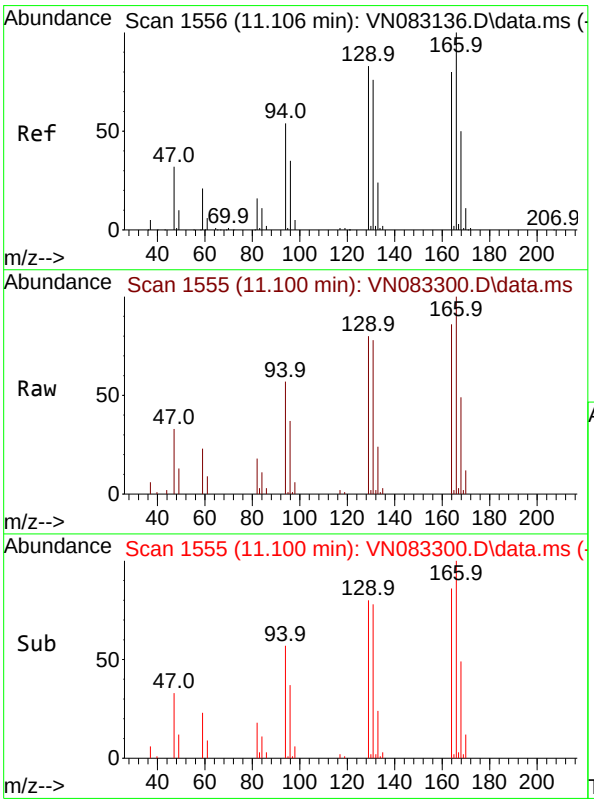
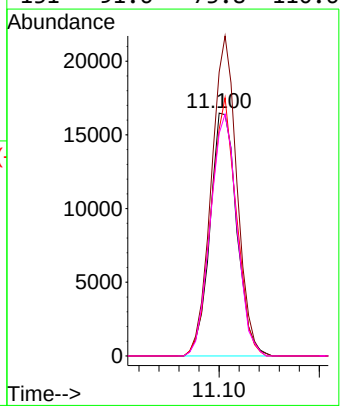
Supervised By :Semsettin Yesilyurt 08/15/2024

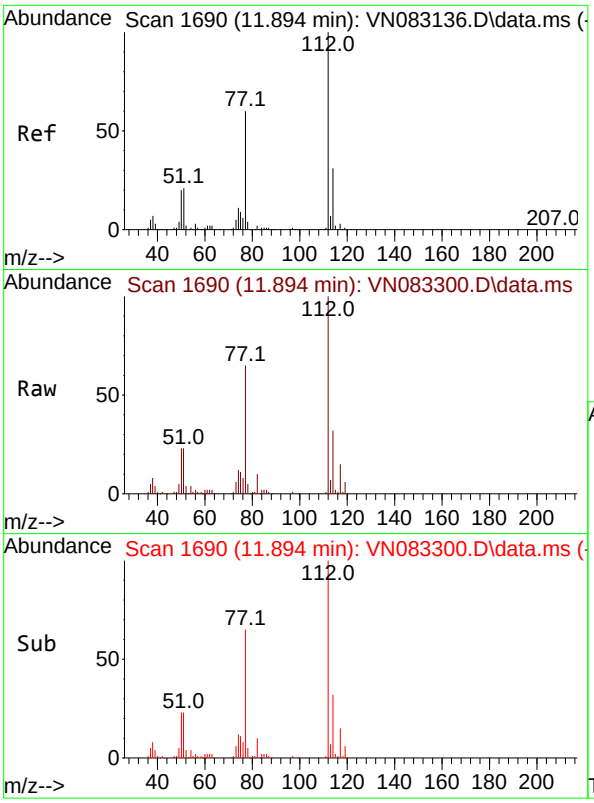


#64
Tetrachloroethene
Concen: 19.809 ug/l
RT: 11.100 min Scan# 1555
Delta R.T. -0.006 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion:164 Resp: 30468

Ion	Ratio	Lower	Upper
164	100		
166	116.8	101.4	152.0
129	93.4	75.7	113.5
131	91.6	73.8	110.6





#65
Chlorobenzene
Concen: 20.022 ug/l
RT: 11.894 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion:112 Resp: 10276

Ion	Ratio	Lower	Upper
112	100		
114	32.0	26.2	39.2

Instrument :
MSVOA_N
ClientSampleId :
VN0814WBSD01

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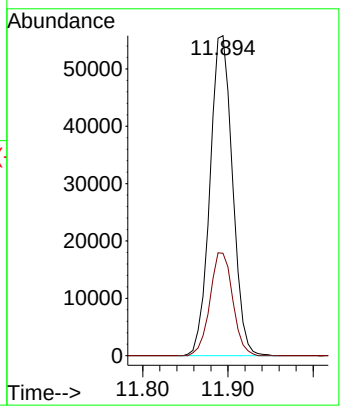
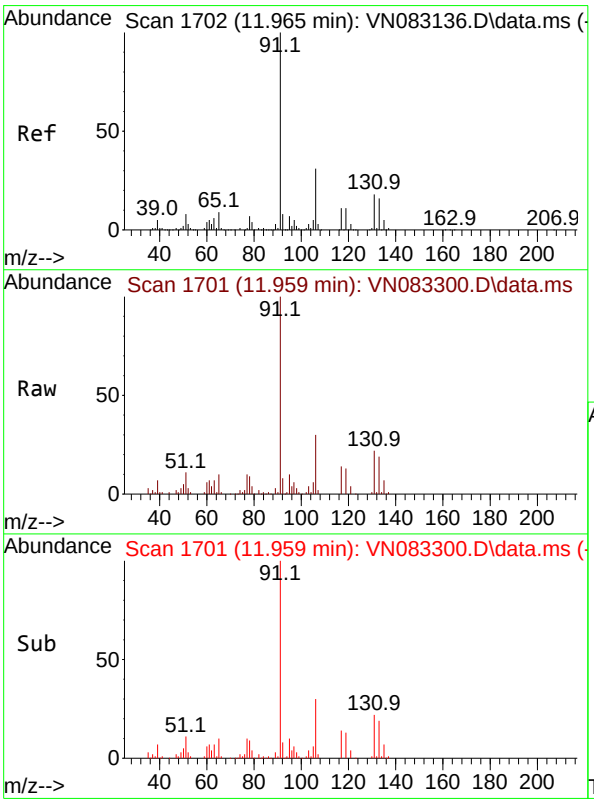
Supervised By :Semsettin Yesilyurt 08/15/2024

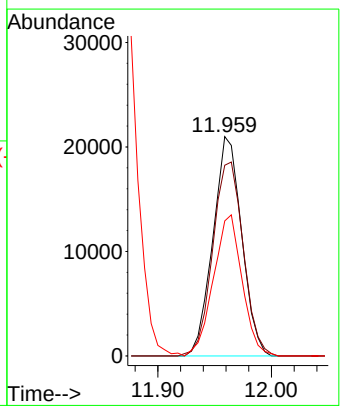


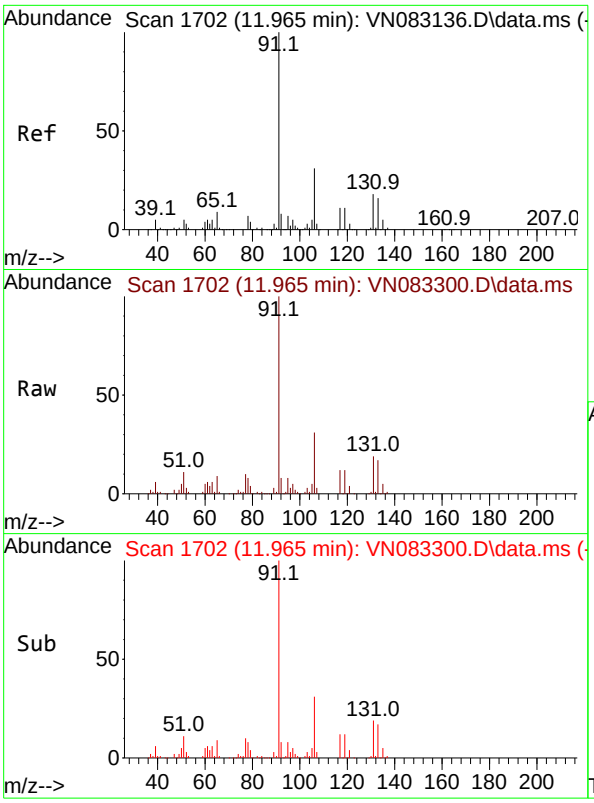


#66
1,1,1,2-Tetrachloroethane
Concen: 20.407 ug/l
RT: 11.959 min Scan# 1701
Delta R.T. -0.006 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion:131 Resp: 36939

Ion	Ratio	Lower	Upper
131	100		
133	93.7	47.3	142.0
119	64.2	32.5	97.4





#67
Ethyl Benzene
Concen: 19.517 ug/l
RT: 11.965 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion: 91 Resp: 18375

Ion	Ratio	Lower	Upper
91	100		
106	30.8	24.0	36.0

Instrument :
MSVOA_N
ClientSampleId :
VN0814WBSD01

Manual Integrations
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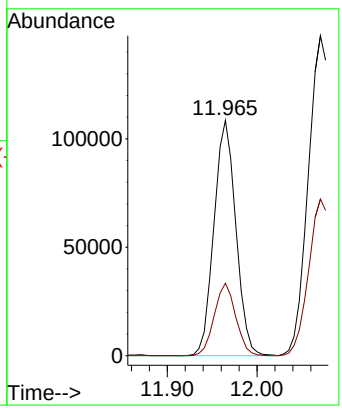
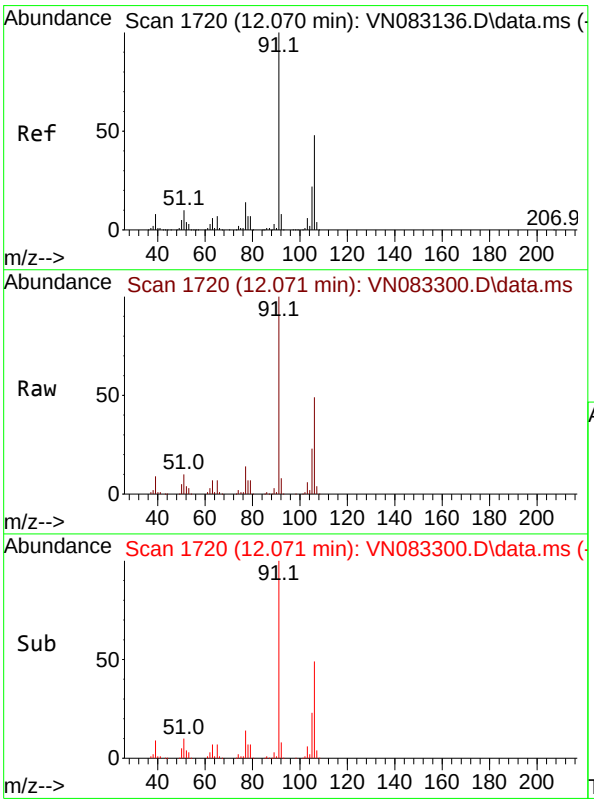
Supervised By :Semsettin Yesilyurt 08/15/2024

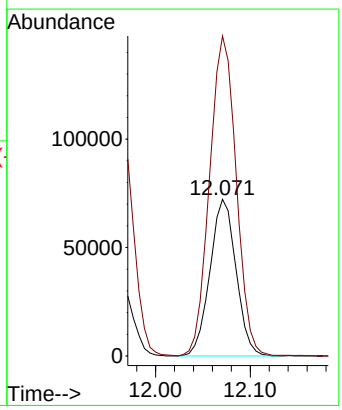


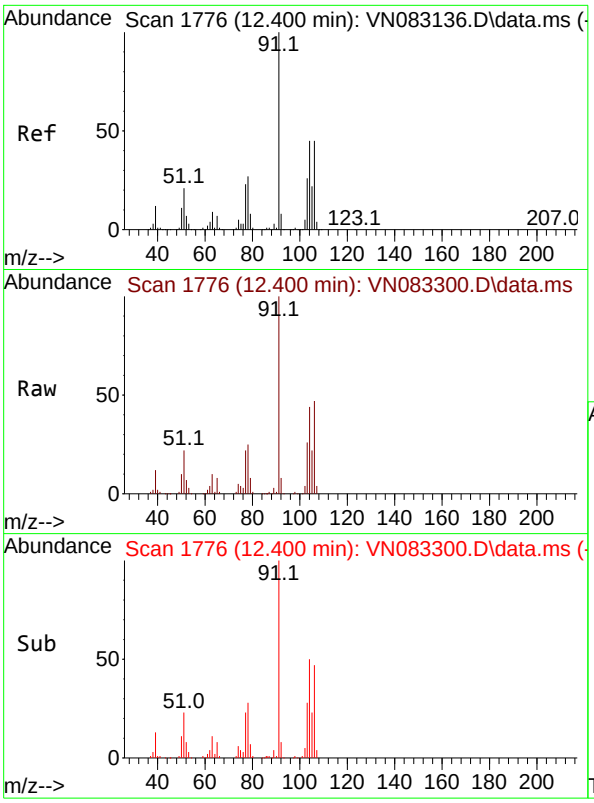


#68
m/p-Xylenes
Concen: 39.159 ug/l
RT: 12.071 min Scan# 1720
Delta R.T. 0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion:106 Resp: 138109

Ion	Ratio	Lower	Upper
106	100		
91	209.1	166.1	249.1





#69
o-Xylene
Concen: 19.838 ug/l
RT: 12.400 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion:106 Resp: 6900

Ion	Ratio	Lower	Upper
106	100		
91	220.5	111.3	333.9

Instrument :
MSVOA_N
ClientSampleId :
VN0814WBSD01

Manual Integrations
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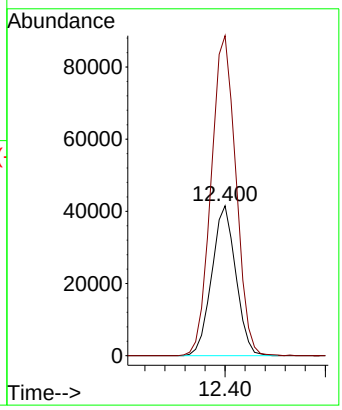
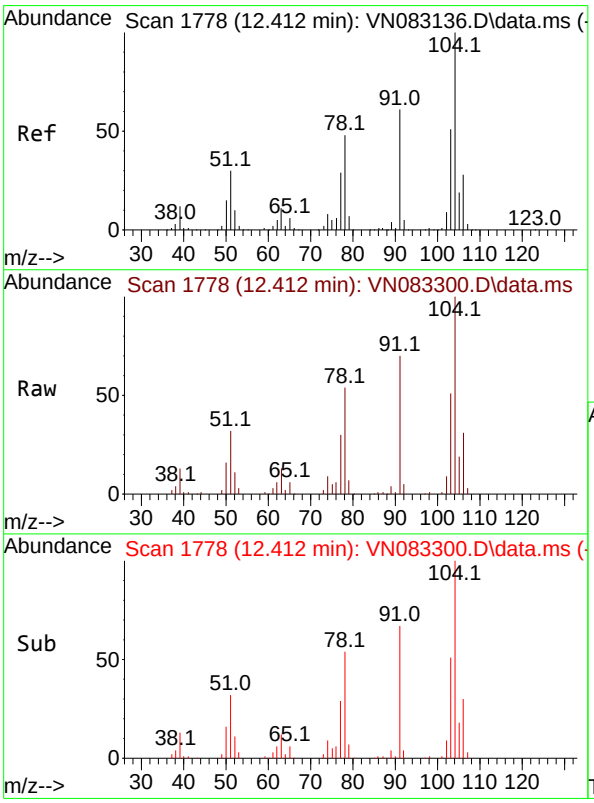
Reviewed By :Mahesh Dadoda 08/15/2024
Supervised By :Semsettin Yesilyurt 08/15/2024

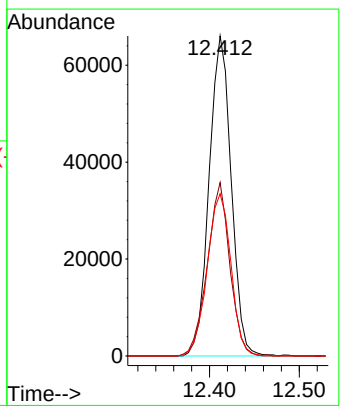


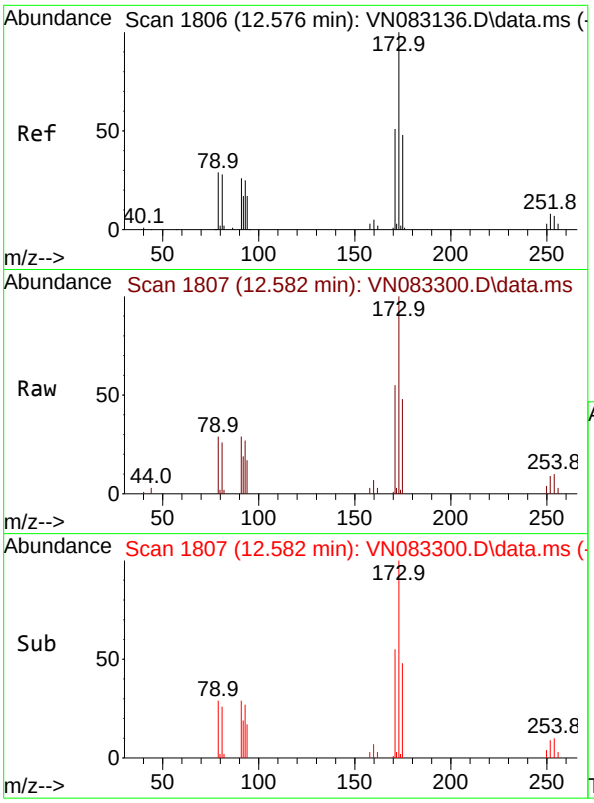


#70
Styrene
Concen: 19.330 ug/l
RT: 12.412 min Scan# 1778
Delta R.T. 0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion:104 Resp: 112930

Ion	Ratio	Lower	Upper
104	100		
78	55.3	41.6	62.4
103	54.5	44.0	66.0





#71
Bromoform
Concen: 20.002 ug/l
RT: 12.582 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion:173 Resp: 2742

Ion	Ratio	Lower	Upper
173	100		
175	47.2	24.0	72.0
254	0.0	0.0	0.0

Instrument :
MSVOA_N
ClientSampleId :
VN0814WBSD01

Manual Integrations
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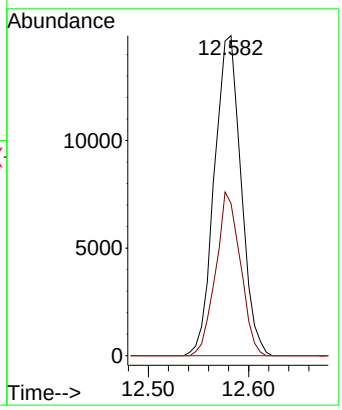
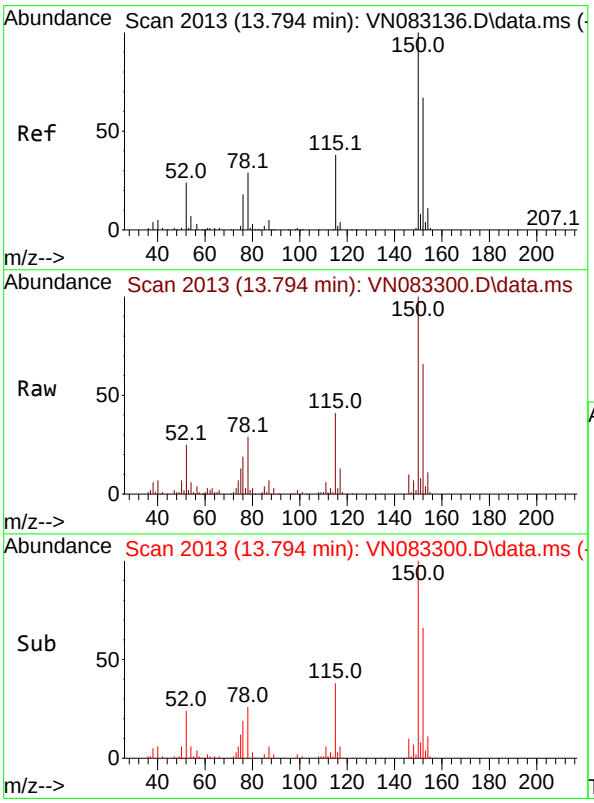
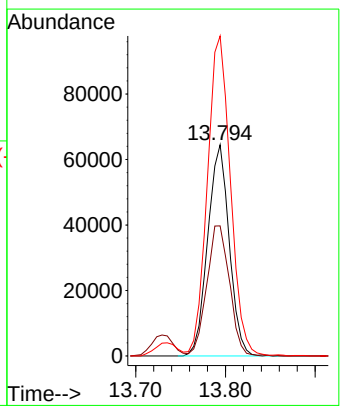


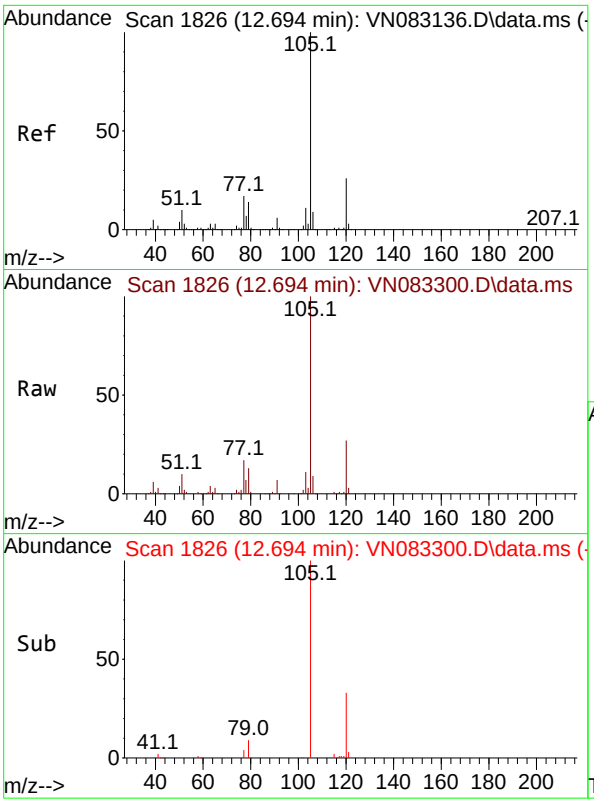


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.794 min Scan# 2013
Delta R.T. 0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion:152 Resp: 107371

Ion	Ratio	Lower	Upper
152	100		
115	64.9	30.6	91.6
150	162.6	0.0	348.6





#73
Isopropylbenzene
Concen: 19.264 ug/l
RT: 12.694 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion:105 Resp: 17300

Ion	Ratio	Lower	Upper
105	100		
120	26.6	12.9	38.6

Instrument :
MSVOA_N
ClientSampleId :
VN0814WBSD01

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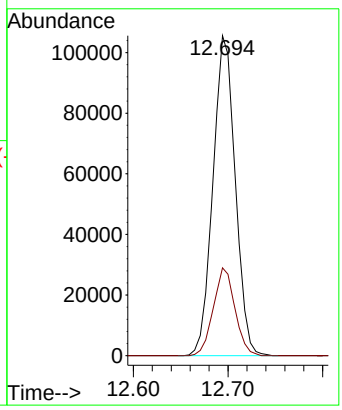
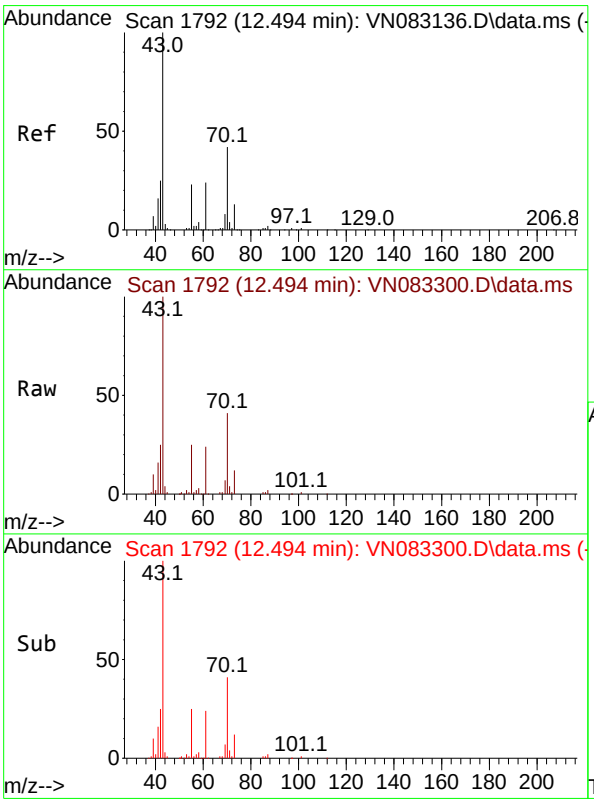
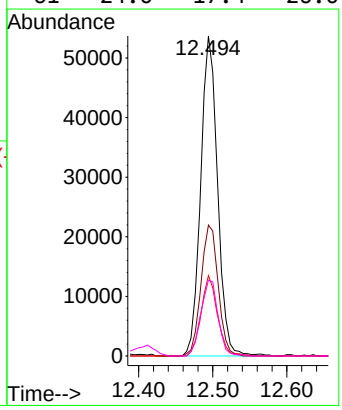


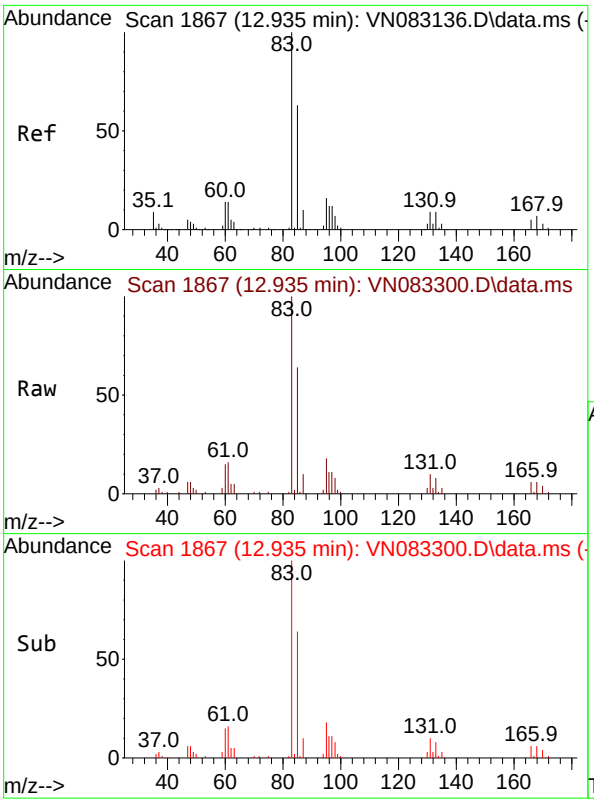


#74
N-amyl acetate
Concen: 19.335 ug/l
RT: 12.494 min Scan# 1792
Delta R.T. 0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion: 43 Resp: 84935

Ion	Ratio	Lower	Upper
43	100		
70	41.6	29.8	44.6
55	24.3	18.7	28.1
61	24.0	17.4	26.0





#75
1,1,2,2-Tetrachloroethane
Concen: 21.525 ug/l
RT: 12.935 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion: 83 Resp: 5467

Ion	Ratio	Lower	Upper
83	100		
131	9.6	5.0	14.9
85	63.8	31.9	95.7

Instrument :
MSVOA_N
ClientSampleId :
VN0814WBSD01

Manual Integrations
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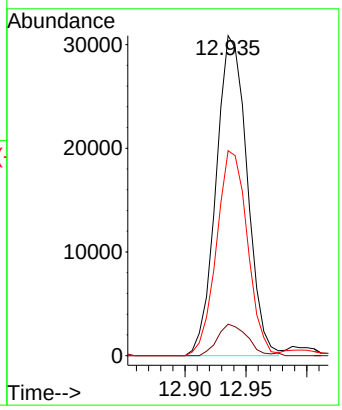
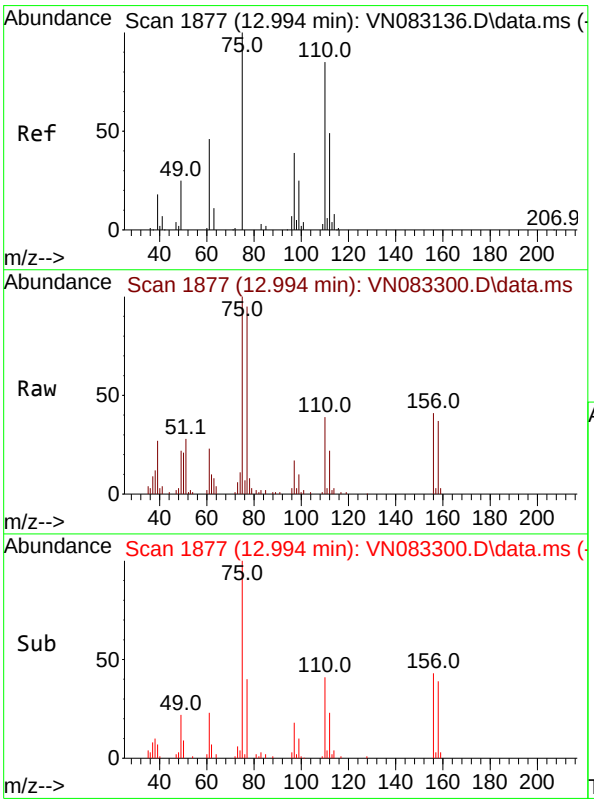
Supervised By :Semsettin Yesilyurt 08/15/2024

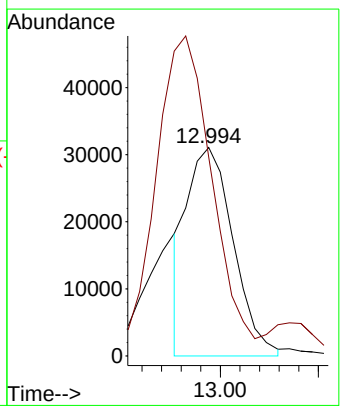


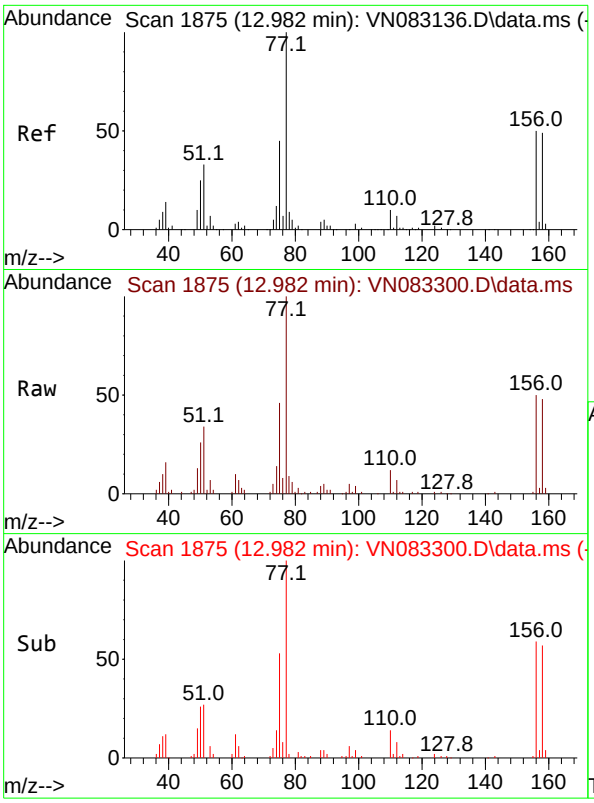


#76
1,2,3-Trichloropropane
Concen: 21.692 ug/l m
RT: 12.994 min Scan# 1877
Delta R.T. 0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion: 75 Resp: 51117

Ion	Ratio	Lower	Upper
75	100		
77	187.0	110.9	332.6

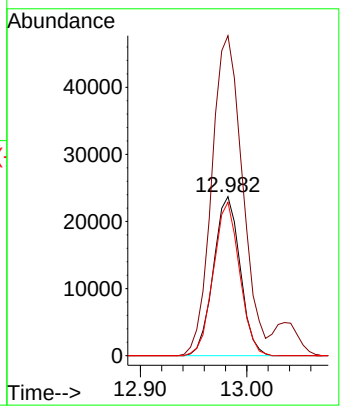




#77
Bromobenzene
Concen: 20.635 ug/l
RT: 12.982 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion:156 Resp: 4116

Ion	Ratio	Lower	Upper
156	100		
77	232.2	111.3	333.8
158	94.7	48.3	144.9



Instrument :
MSVOA_N
ClientSampleId :
VN0814WBSD01

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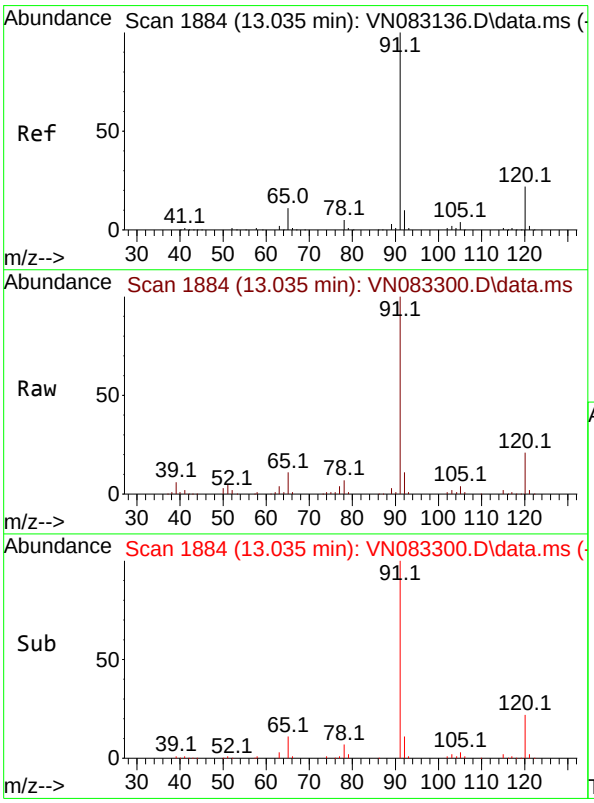
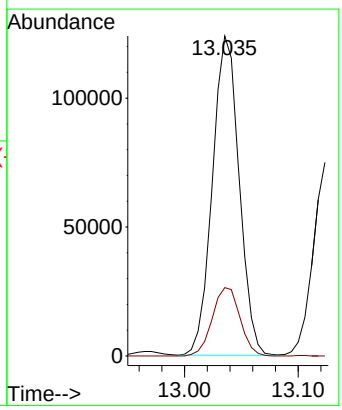
Reviewed By :Mahesh Dadoda 08/15/2024
Supervised By :Semsettin Yesilyurt 08/15/2024

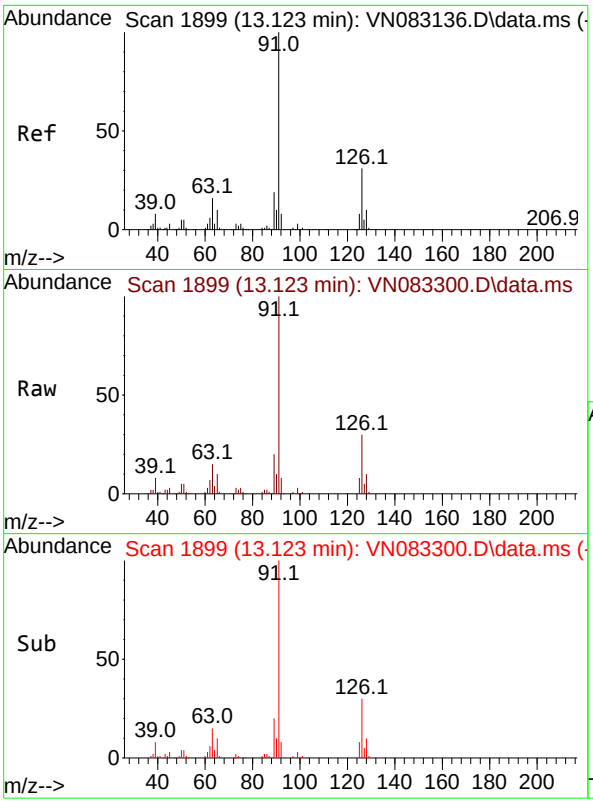


#78
n-propylbenzene
Concen: 19.589 ug/l
RT: 13.035 min Scan# 1884
Delta R.T. 0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion: 91 Resp: 202570

Ion	Ratio	Lower	Upper
91	100		
120	22.2	10.9	32.9

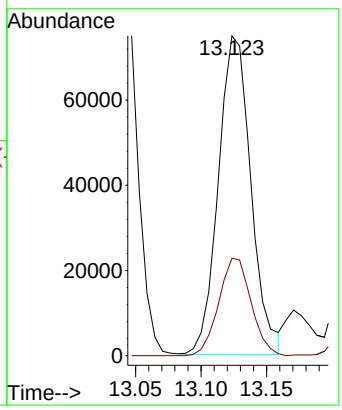




#79
2-Chlorotoluene
Concen: 19.766 ug/l
RT: 13.123 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion: 91 Resp: 12959

Ion	Ratio	Lower	Upper
91	100		
126	30.4	16.2	48.6



Instrument :
MSVOA_N
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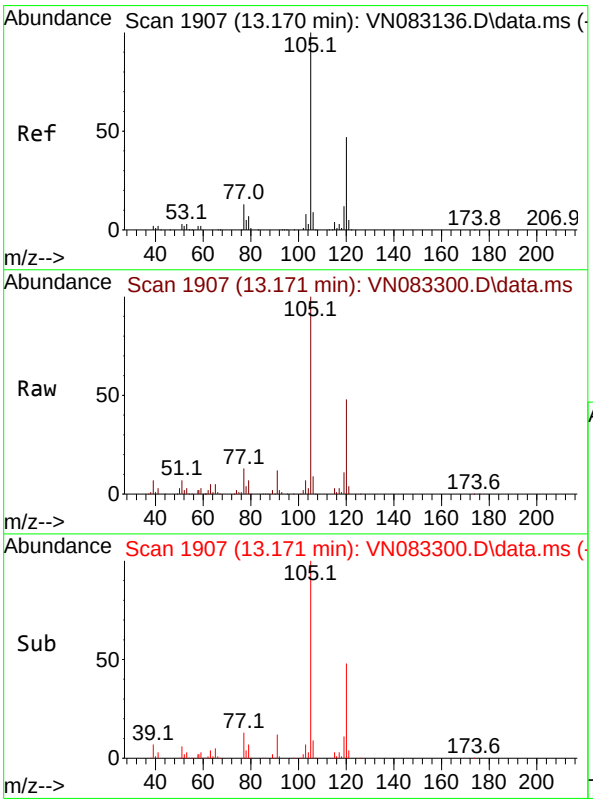
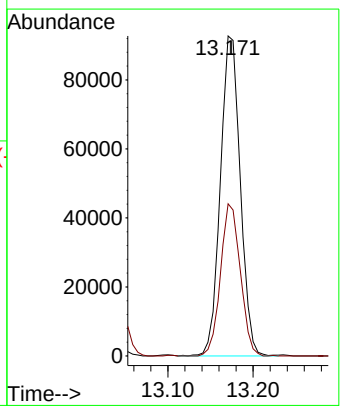
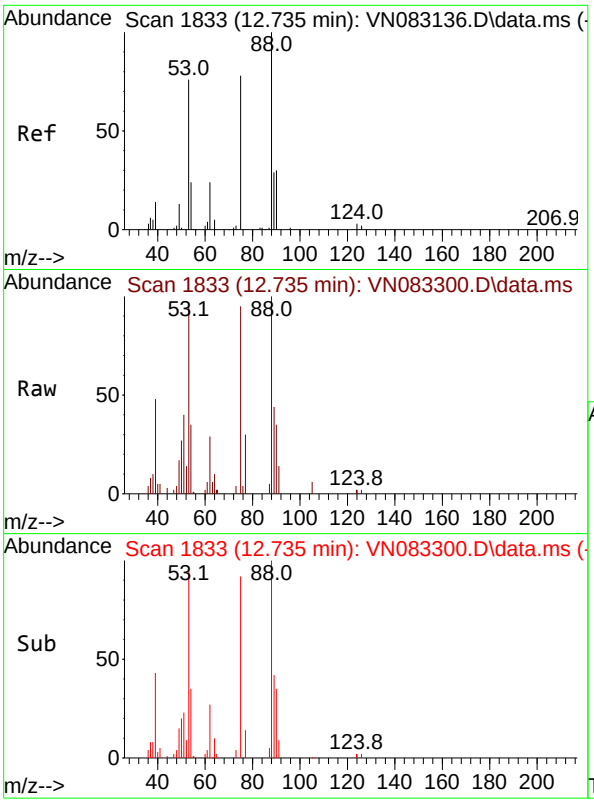


#80
1,3,5-Trimethylbenzene
Concen: 20.035 ug/l
RT: 13.171 min Scan# 1907
Delta R.T. 0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion:105 Resp: 150641

Ion	Ratio	Lower	Upper
105	100		
120	47.2	24.3	72.8





#81
trans-1,4-Dichloro-2-butene
Concen: 19.003 ug/l m
RT: 12.735 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion: 75 Resp: 2058

Ion	Ratio	Lower	Upper
75	100		
53	105.1	88.4	132.6
89	40.1	36.3	54.5

Instrument :
MSVOA_N
ClientSampleId :
VN0814WBSD01

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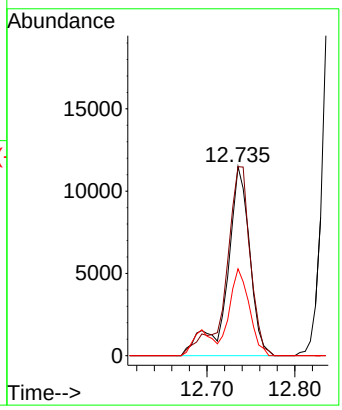
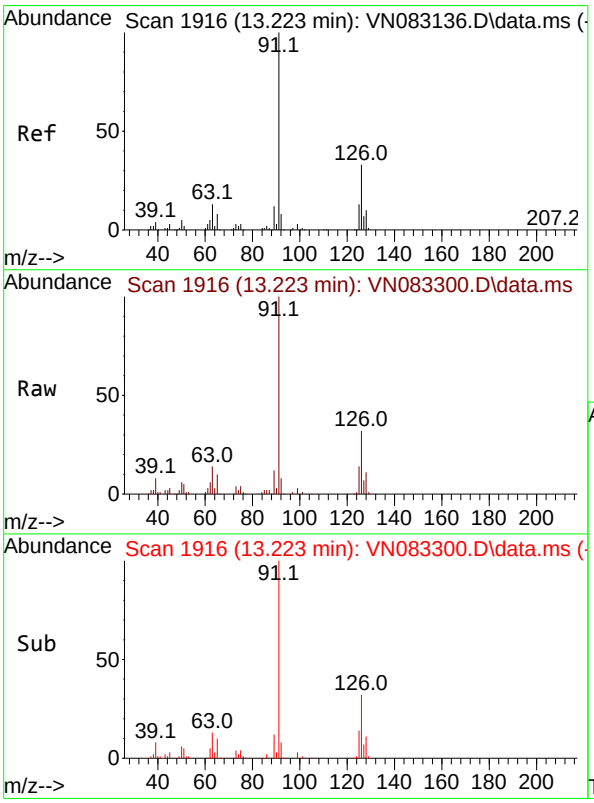
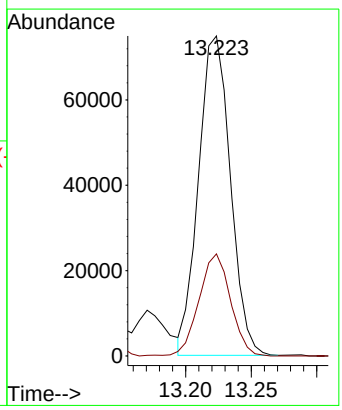


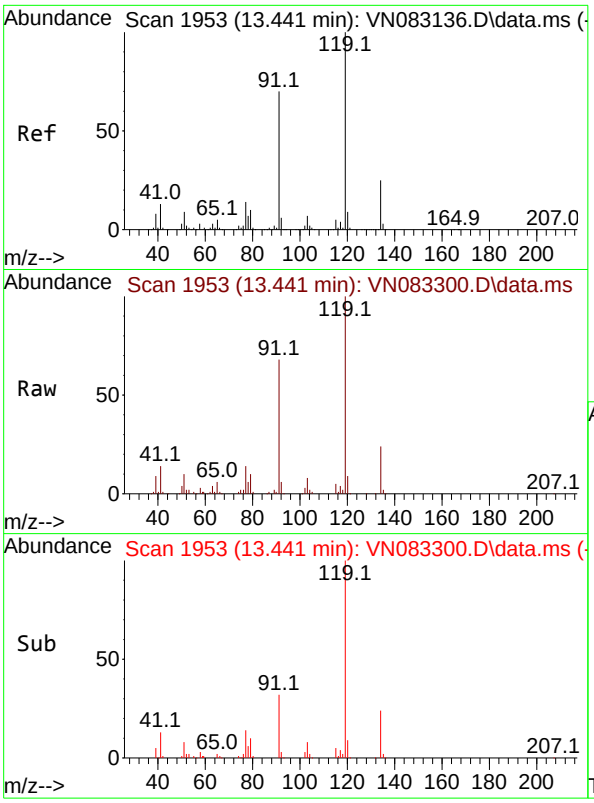


#82
4-Chlorotoluene
Concen: 19.227 ug/l
RT: 13.223 min Scan# 1916
Delta R.T. 0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion: 91 Resp: 126446

Ion	Ratio	Lower	Upper
91	100		
126	31.7	16.2	48.6

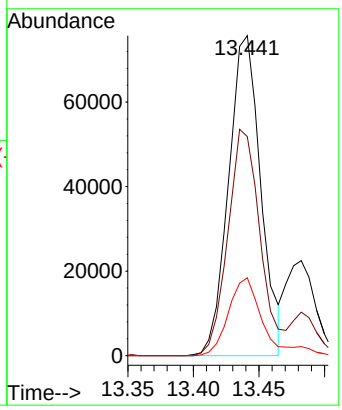




#83
tert-Butylbenzene
Concen: 19.443 ug/l
RT: 13.441 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion:119 Resp: 12946

Ion	Ratio	Lower	Upper
119	100		
91	71.5	35.0	105.1
134	26.1	13.3	39.8



Instrument :
MSVOA_N
ClientSampleId :
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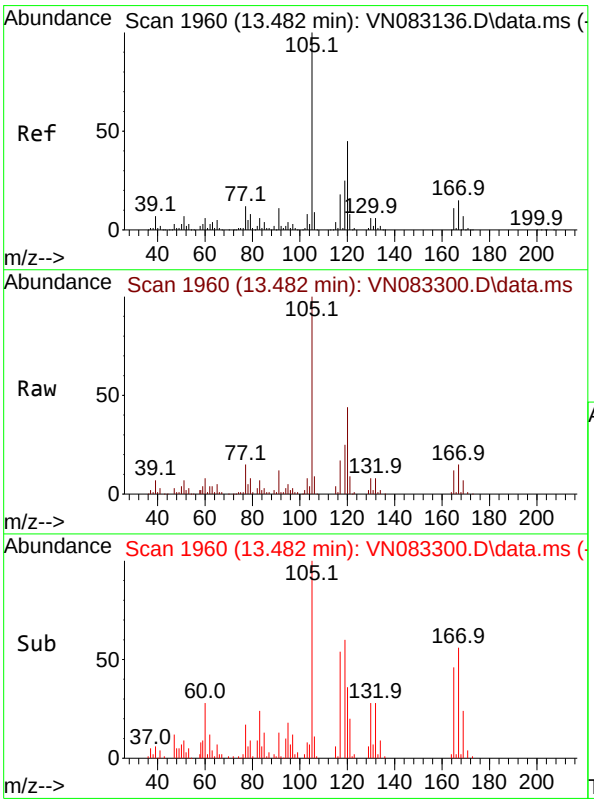
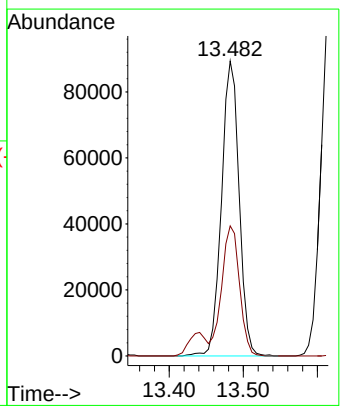
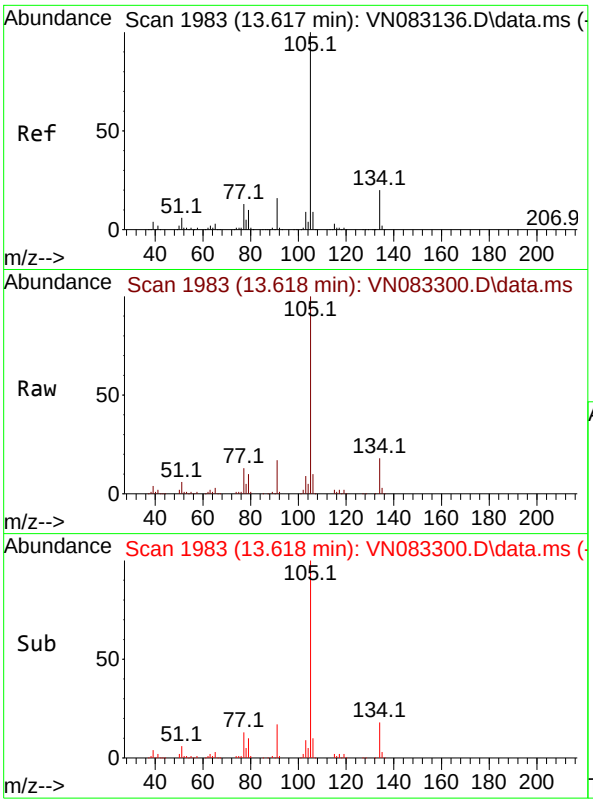


#84
1,2,4-Trimethylbenzene
Concen: 19.467 ug/l
RT: 13.482 min Scan# 1960
Delta R.T. 0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion:105 Resp: 147503

Ion	Ratio	Lower	Upper
105	100		
120	44.8	21.9	65.8





#85
sec-Butylbenzene
Concen: 18.893 ug/l
RT: 13.618 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion:105 Resp: 17165

Ion	Ratio	Lower	Upper
105	100		
134	19.3	9.8	29.3

Instrument :
MSVOA_N
ClientSampleId :
VN0814WBSD01

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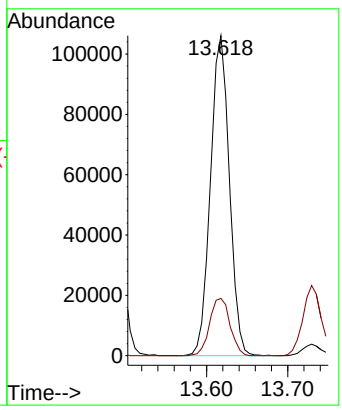
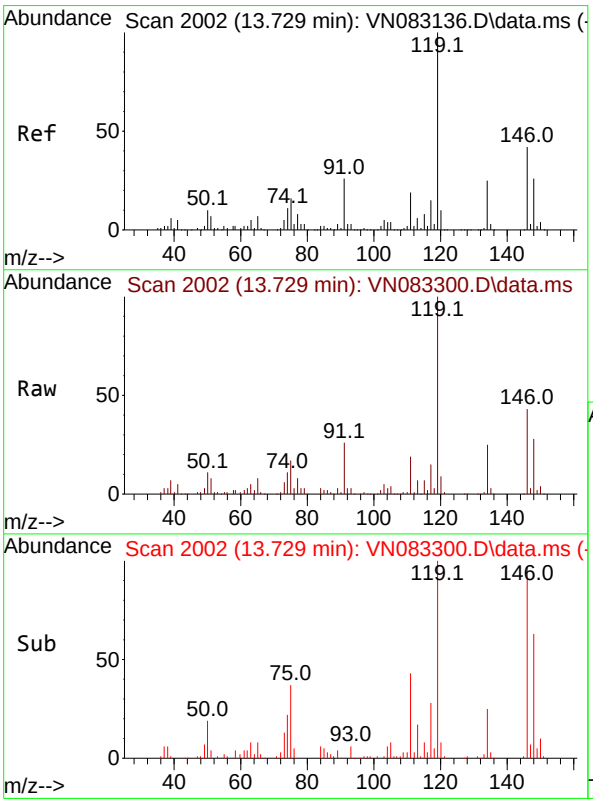
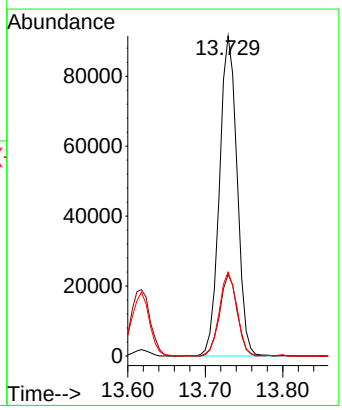


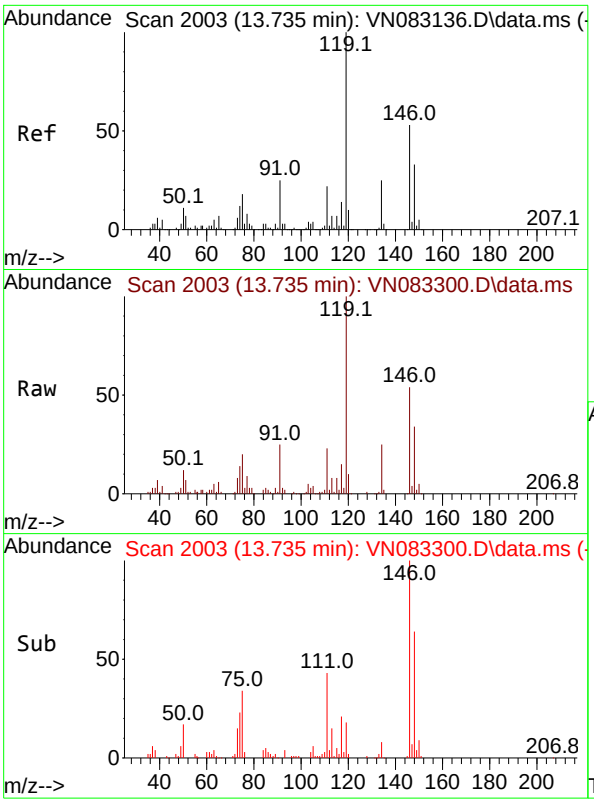


#86
p-Isopropyltoluene
Concen: 19.247 ug/l
RT: 13.729 min Scan# 2002
Delta R.T. 0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion:119 Resp: 144390

Ion	Ratio	Lower	Upper
119	100		
134	25.2	13.0	39.0
91	26.2	12.3	36.9

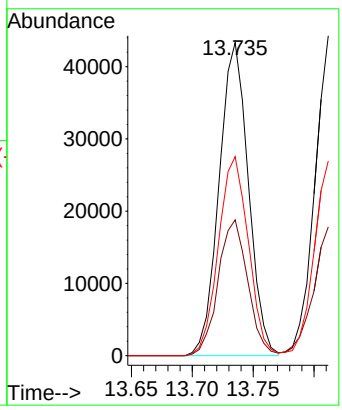




#87
1,3-Dichlorobenzene
Concen: 19.301 ug/l
RT: 13.735 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion:146 Resp: 7245

Ion	Ratio	Lower	Upper
146	100		
111	43.7	20.6	61.9
148	65.1	31.8	95.3



Instrument :
MSVOA_N
ClientSampleId :
VN0814WBSD01

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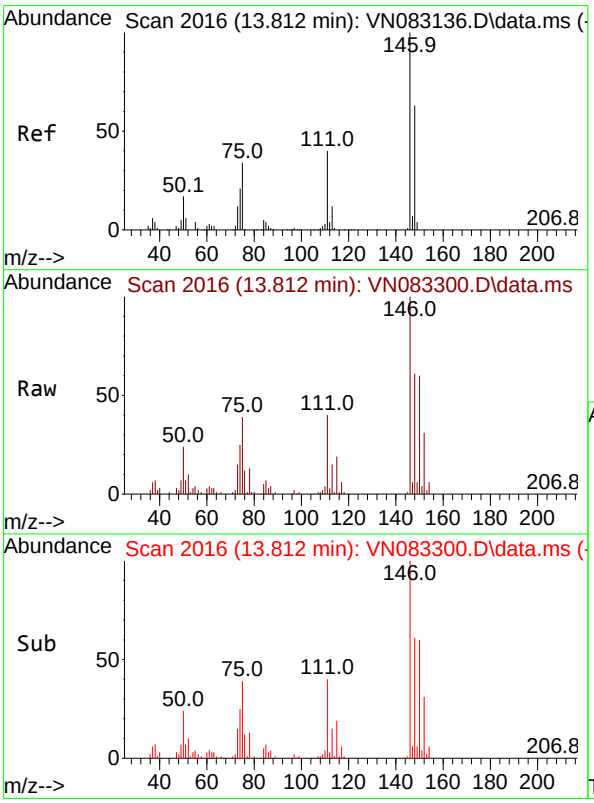
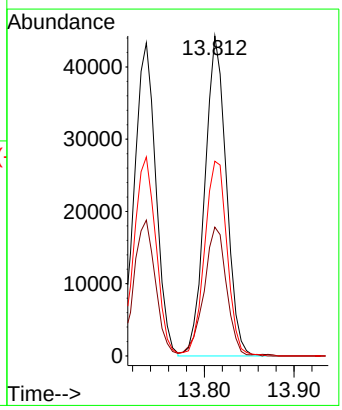
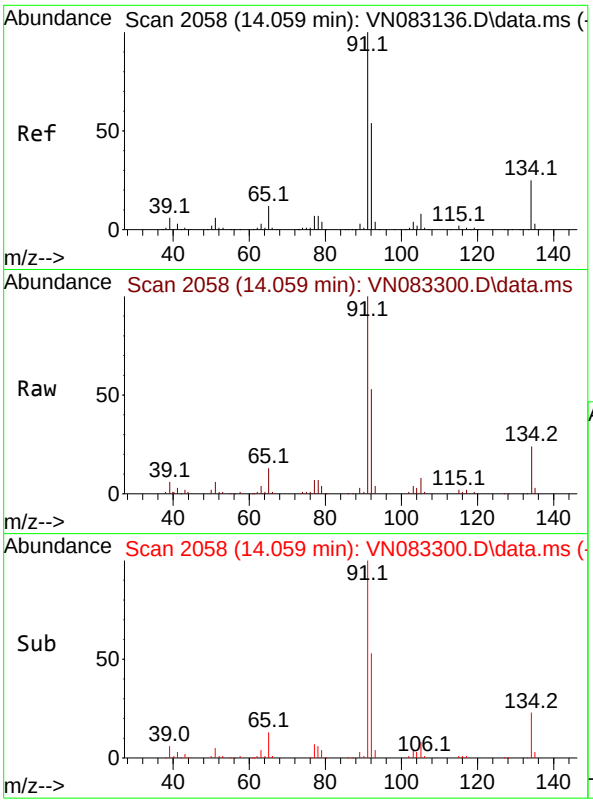


#88
1,4-Dichlorobenzene
Concen: 19.349 ug/l
RT: 13.812 min Scan# 2016
Delta R.T. 0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion:146 Resp: 73226

Ion	Ratio	Lower	Upper
146	100		
111	42.6	20.1	60.3
148	64.4	32.2	96.6





#89
n-Butylbenzene
Concen: 18.930 ug/l
RT: 14.059 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion: 91 Resp: 12304

Ion	Ratio	Lower	Upper
91	100		
92	52.3	26.1	78.3
134	24.2	12.1	36.3

Instrument :
MSVOA_N
ClientSampleId :
VN0814WBSD01

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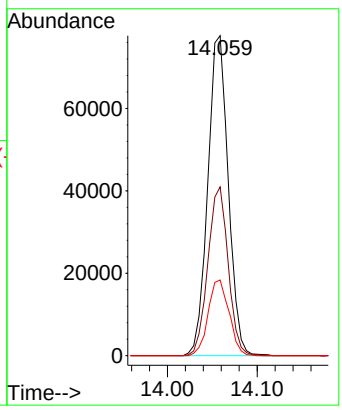
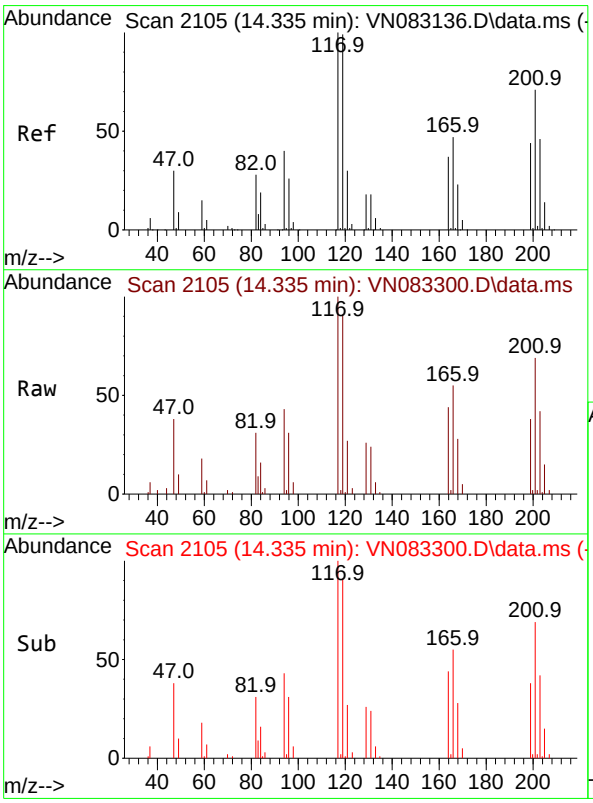
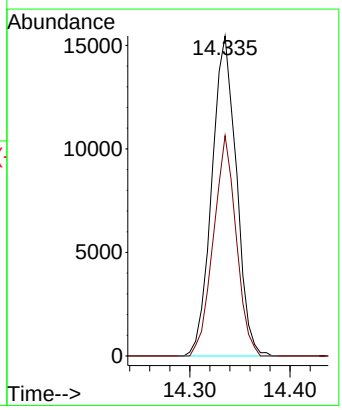


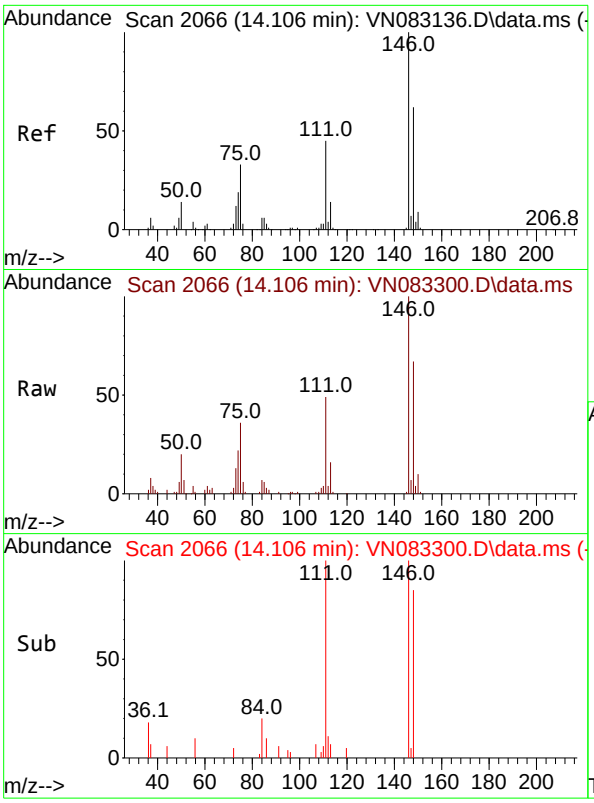


#90
Hexachloroethane
Concen: 18.082 ug/l
RT: 14.335 min Scan# 2105
Delta R.T. 0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion:117 Resp: 26207

Ion	Ratio	Lower	Upper
117	100		
201	64.0	35.8	107.3

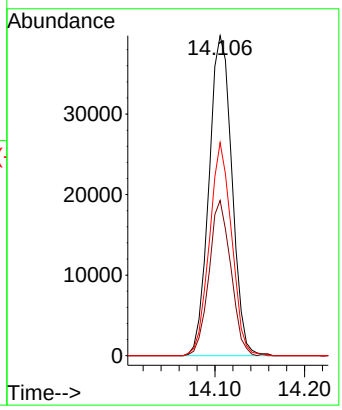




#91
1,2-Dichlorobenzene
Concen: 19.413 ug/l
RT: 14.106 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion:146 Resp: 7051

Ion	Ratio	Lower	Upper
146	100		
111	46.1	21.4	64.2
148	64.6	32.1	96.5



Instrument :
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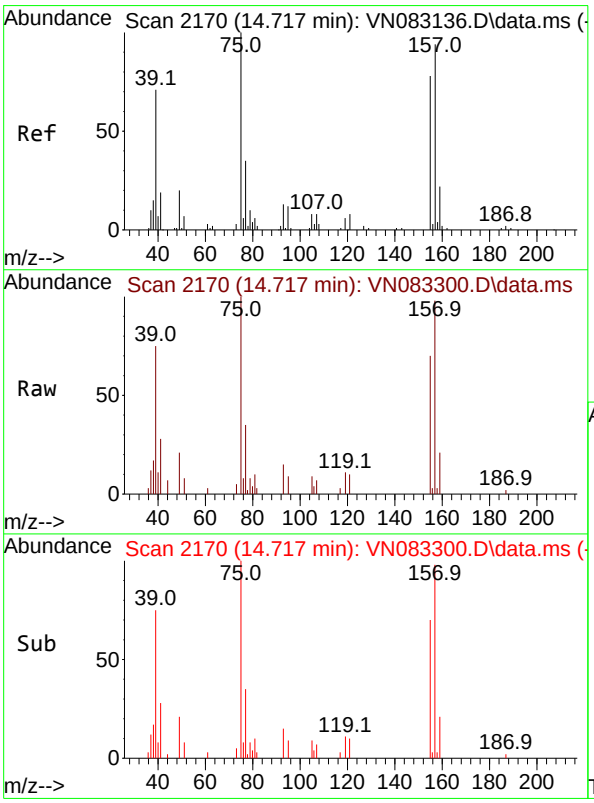
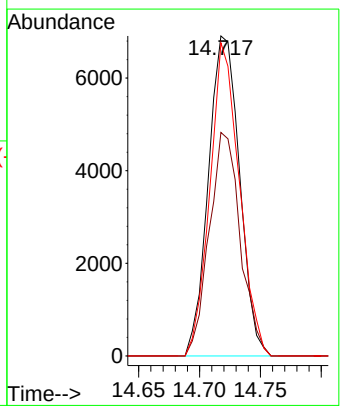
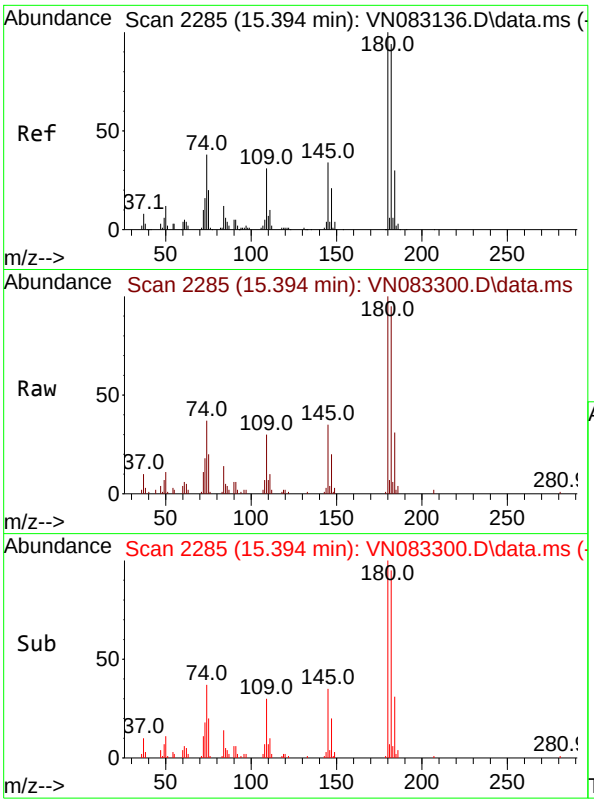


#92
1,2-Dibromo-3-Chloropropane
Concen: 19.942 ug/l
RT: 14.717 min Scan# 2170
Delta R.T. 0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion: 75 Resp: 12292

Ion	Ratio	Lower	Upper
75	100		
155	69.6	36.6	109.8
157	92.4	46.9	140.6

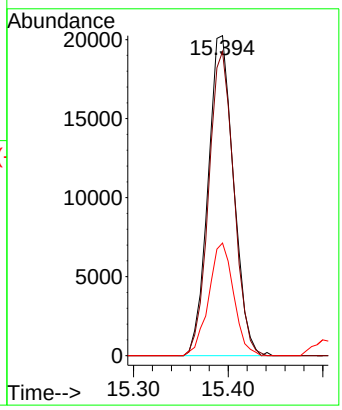




#93
1,2,4-Trichlorobenzene
Concen: 18.592 ug/l
RT: 15.394 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion:180 Resp: 3783

Ion	Ratio	Lower	Upper
180	100		
182	93.5	47.3	141.8
145	34.4	15.7	47.1



Instrument :
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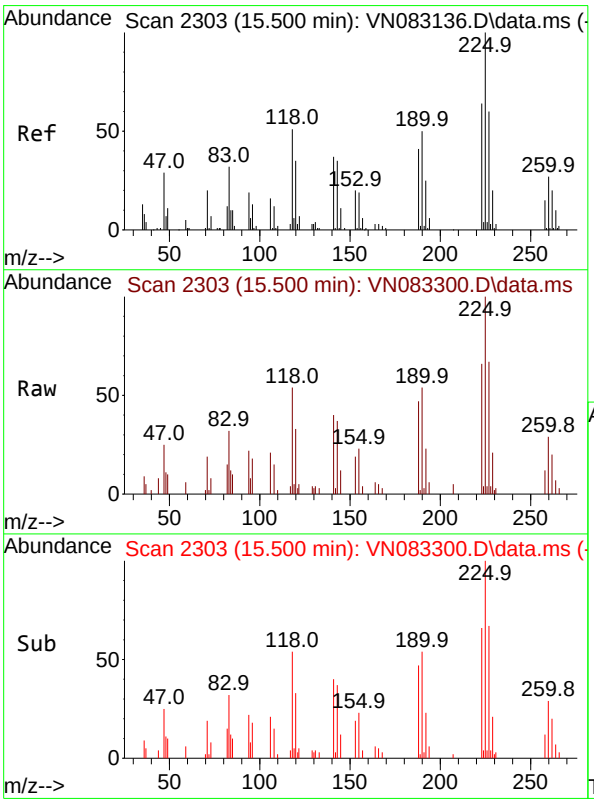
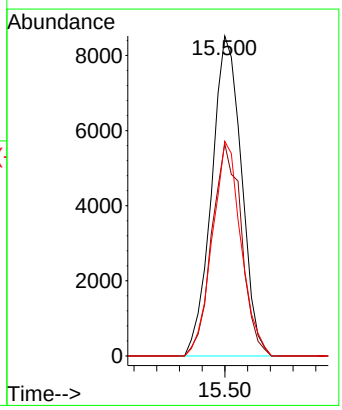
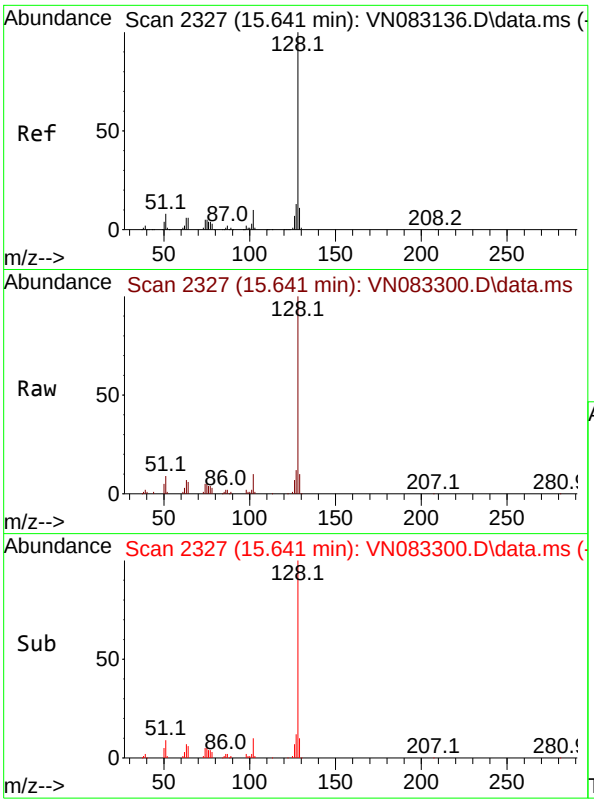


#94
Hexachlorobutadiene
Concen: 17.142 ug/l
RT: 15.500 min Scan# 2303
Delta R.T. 0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion:225 Resp: 15515

Ion	Ratio	Lower	Upper
225	100		
223	65.7	31.9	95.7
227	64.9	32.5	97.5

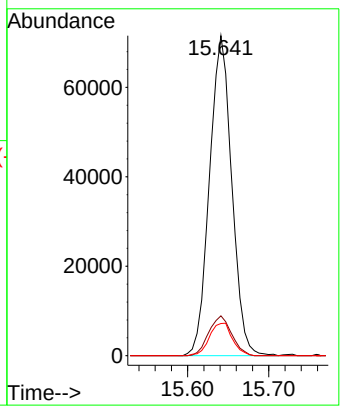




#95
Naphthalene
Concen: 18.940 ug/l
RT: 15.641 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion:128 Resp: 13653

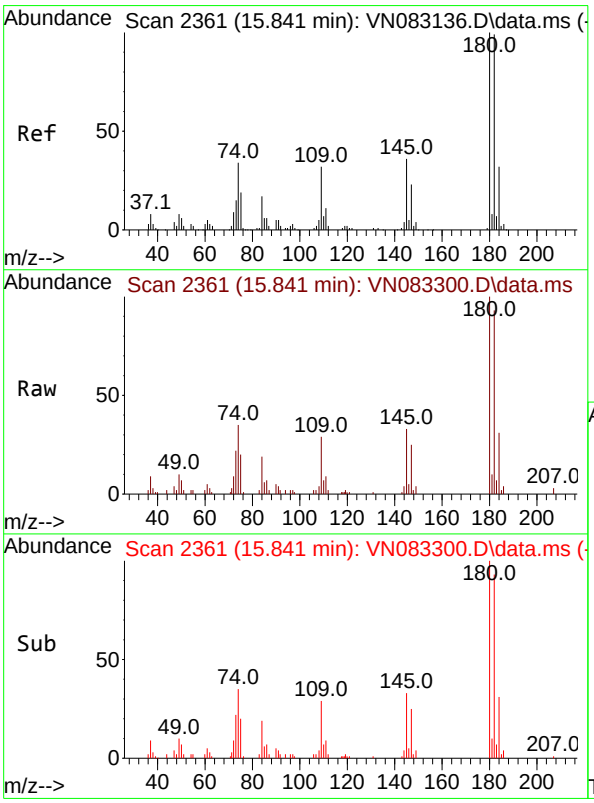
Ion	Ratio	Lower	Upper
128	100		
127	12.8	10.6	16.0
129	10.5	8.6	12.8



Instrument :
MSVOA_N
ClientSampleId :
VN0814WBSD01

Manual Integrations
APPROVED

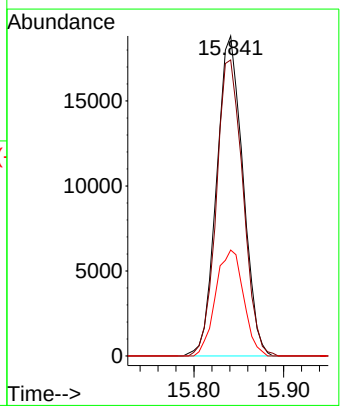
Reviewed By :Mahesh Dadoda 08/15/2024
Supervised By :Semsettin Yesilyurt 08/15/2024



#96
1,2,3-Trichlorobenzene
Concen: 19.052 ug/l
RT: 15.841 min Scan# 2361
Delta R.T. 0.000 min
Lab File: VN083300.D
Acq: 14 Aug 2024 14:51

Tgt Ion:180 Resp: 38366

Ion	Ratio	Lower	Upper
180	100		
182	93.4	48.9	146.8
145	35.0	16.8	50.4



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Manual Integration Report

Sequence:	vn080724	Instrument	MSVOA_n

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICC100	VN083135.D	1,2,3-Trichloropropane	JOHN	8/8/2024 9:35:12 AM	MMDadoda	8/9/2024 6:15:44 AM	Peak Integrated by Software incorrectly
VSTDICCC050	VN083136.D	1,2,3-Trichloropropane	JOHN	8/8/2024 9:35:17 AM	MMDadoda	8/9/2024 6:15:45 AM	Peak Integrated by Software incorrectly
VSTDICCC050	VN083136.D	Vinyl Acetate	JOHN	8/8/2024 9:35:17 AM	MMDadoda	8/9/2024 6:15:45 AM	Peak Integrated by Software incorrectly
VSTDICC020	VN083137.D	1,2,3-Trichloropropane	JOHN	8/8/2024 9:35:21 AM	MMDadoda	8/9/2024 6:15:46 AM	Peak Integrated by Software incorrectly
VSTDICC020	VN083137.D	Vinyl Acetate	JOHN	8/8/2024 9:35:21 AM	MMDadoda	8/9/2024 6:15:46 AM	Peak Integrated by Software incorrectly
VSTDICC010	VN083138.D	1,2,3-Trichloropropane	JOHN	8/8/2024 9:35:26 AM	MMDadoda	8/9/2024 6:15:48 AM	Peak Integrated by Software incorrectly
VSTDICC005	VN083139.D	1,2,3-Trichloropropane	JOHN	8/8/2024 9:35:30 AM	MMDadoda	8/9/2024 6:15:49 AM	Peak Integrated by Software incorrectly
VSTDICC005	VN083139.D	Vinyl Acetate	JOHN	8/8/2024 9:35:30 AM	MMDadoda	8/9/2024 6:15:49 AM	Peak Integrated by Software incorrectly
VSTDICC001	VN083140.D	1,2,3-Trichloropropane	JOHN	8/8/2024 9:35:34 AM	MMDadoda	8/9/2024 6:15:51 AM	Peak Integrated by Software incorrectly
VSTDICC001	VN083140.D	1,4-Dichlorobenzene	JOHN	8/8/2024 9:35:34 AM	MMDadoda	8/9/2024 6:15:51 AM	Peak Integrated by Software incorrectly
VSTDICV050	VN083142.D	1,2,3-Trichloropropane	JOHN	8/8/2024 9:35:41 AM	MMDadoda	8/9/2024 6:15:52 AM	Peak Integrated by Software incorrectly

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Manual Integration Report

Sequence:	VN081424	Instrument	MSVOA_n

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDCCC050	VN083295.D	1,2,3-Trichloropropane	MMDadoda	8/15/2024 1:43:36 AM	SAM	8/15/2024 1:45:44 AM	Peak Integrated by Software incorrectly
VN0814WBS01	VN083298.D	1,2,3-Trichloropropane	MMDadoda	8/15/2024 1:43:39 AM	SAM	8/15/2024 1:45:49 AM	Peak Integrated by Software incorrectly
VN0814WBS01	VN083298.D	Allyl chloride	MMDadoda	8/15/2024 1:43:39 AM	SAM	8/15/2024 1:45:49 AM	Peak Integrated by Software incorrectly
VN0814WBSD01	VN083300.D	1,2,3-Trichloropropane	MMDadoda	8/15/2024 1:43:42 AM	SAM	8/15/2024 1:45:50 AM	Peak Integrated by Software incorrectly
VN0814WBSD01	VN083300.D	Allyl chloride	MMDadoda	8/15/2024 1:43:42 AM	SAM	8/15/2024 1:45:50 AM	Peak Integrated by Software incorrectly
VN0814WBSD01	VN083300.D	trans-1,4-Dichloro-2-butene	MMDadoda	8/15/2024 1:43:42 AM	SAM	8/15/2024 1:45:50 AM	Peak Integrated by Software incorrectly
VSTDCCC050	VN083318.D	1,2,3-Trichloropropane	MMDadoda	8/15/2024 1:43:56 AM	SAM	8/15/2024 1:46:04 AM	Peak Integrated by Software incorrectly
VSTDCCC050	VN083318.D	Allyl chloride	MMDadoda	8/15/2024 1:43:56 AM	SAM	8/15/2024 1:46:04 AM	Peak Integrated by Software incorrectly

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Fax : 908 789 8922

Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QCBatch ID # VN080724

Review By	John Carlone	Review On	8/8/2024 9:36:00 AM		
Supervise By	Mahesh Dadoda	Supervise On	8/9/2024 6:16:03 AM		
SubDirectory	VN080724	HP Acquire Method		HP Processing Method	82N080724W.M

STD. NAME	STD REF.#
Tune/Reschk	VP129516
Initial Calibration Stds	VP129526,VP129527,VP129528,VP129529,VP129530,VP129531
CCC	
Internal Standard/PEM	
ICV/I.BLK	VP129532
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VN083134.D	07 Aug 2024 10:09	JC\MD	Ok
2	VSTDICC100	VN083135.D	07 Aug 2024 10:33	JC\MD	Ok,M
3	VSTDICCC050	VN083136.D	07 Aug 2024 10:58	JC\MD	Ok,M
4	VSTDICC020	VN083137.D	07 Aug 2024 11:22	JC\MD	Ok,M
5	VSTDICC010	VN083138.D	07 Aug 2024 11:46	JC\MD	Ok,M
6	VSTDICC005	VN083139.D	07 Aug 2024 12:10	JC\MD	Ok,M
7	VSTDICC001	VN083140.D	07 Aug 2024 12:34	JC\MD	Ok,M
8	IBLK	VN083141.D	07 Aug 2024 13:22	JC\MD	Ok
9	VSTDICV050	VN083142.D	07 Aug 2024 14:49	JC\MD	Ok,M

M : Manual Integration

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Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QCBatch ID # VN081424

Review By	Mahesh Dadoda	Review On	8/15/2024 1:44:31 AM		
Supervise By	John Carlone	Supervise On	8/15/2024 9:39:57 AM		
SubDirectory	VN081424	HP Acquire Method		HP Processing Method	82N080724W.M

STD. NAME	STD REF.#
Tune/Reschk	VP129723
Initial Calibration Stds	
CCC	VP129724,VP129725,VP129726,VP129727,VP129728,VP129729,VP129730,VP129731
Internal Standard/PEM	
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VN083294.D	14 Aug 2024 12:07	JC\MD	Ok
2	VSTDCCC050	VN083295.D	14 Aug 2024 12:41	JC\MD	Ok,M
3	VN0814MBL01	VN083296.D	14 Aug 2024 13:16	JC\MD	Not Ok
4	VN0814WBL01	VN083297.D	14 Aug 2024 13:39	JC\MD	Ok
5	VN0814WBS01	VN083298.D	14 Aug 2024 14:03	JC\MD	Ok,M
6	P3429-03DL	VN083299.D	14 Aug 2024 14:27	JC\MD	Ok
7	VN0814WBSD01	VN083300.D	14 Aug 2024 14:51	JC\MD	Ok,M
8	P3390-09 0.2PPB	VN083301.D	14 Aug 2024 15:15	JC\MD	Ok,M
9	P3390-09 0.5PPB	VN083302.D	14 Aug 2024 15:40	JC\MD	Ok,M
10	P3390-09 0.75PPB	VN083303.D	14 Aug 2024 16:04	JC\MD	Ok,M
11	P3390-09 2.5PPB	VN083304.D	14 Aug 2024 16:28	JC\MD	Ok,M
12	P3390-08 1.0PPB	VN083305.D	14 Aug 2024 16:52	JC\MD	Ok,M
13	P3390-08 5.0PPB	VN083306.D	14 Aug 2024 17:16	JC\MD	Ok,M
14	P3596-03	VN083307.D	14 Aug 2024 17:41	JC\MD	Ok
15	P3601-03	VN083308.D	14 Aug 2024 18:05	JC\MD	Ok
16	P3596-01	VN083309.D	14 Aug 2024 18:29	JC\MD	Ok
17	P3596-02	VN083310.D	14 Aug 2024 18:54	JC\MD	Ok
18	P3601-01	VN083311.D	14 Aug 2024 19:18	JC\MD	Ok
19	P3601-02	VN083312.D	14 Aug 2024 19:42	JC\MD	Ok
20	PB162684TB	VN083313.D	14 Aug 2024 20:07	JC\MD	Ok
21	P3574-01	VN083314.D	14 Aug 2024 20:31	JC\MD	Ok,M

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Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QCBatch ID # VN081424

Review By	Mahesh Dadoda	Review On	8/15/2024 1:44:31 AM		
Supervise By	John Carlone	Supervise On	8/15/2024 9:39:57 AM		
SubDirectory	VN081424	HP Acquire Method		HP Processing Method	82N080724W.M

STD. NAME	STD REF.#
Tune/Reschk	VP129723
Initial Calibration Stds	
CCC	VP129724,VP129725,VP129726,VP129727,VP129728,VP129729,VP129730,VP129731
Internal Standard/PEM	
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

22	P3609-03	VN083315.D	14 Aug 2024 20:55	JC\MD	Ok
23	P3609-01	VN083316.D	14 Aug 2024 21:19	JC\MD	Ok
24	P3609-02	VN083317.D	14 Aug 2024 21:43	JC\MD	Ok
25	VSTDCCC050	VN083318.D	14 Aug 2024 22:08	JC\MD	Ok,M

M : Manual Integration

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Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QCBatch ID # VN080724

Review By	John Carlone	Review On	8/8/2024 9:36:00 AM		
Supervise By	Mahesh Dadoda	Supervise On	8/9/2024 6:16:03 AM		
SubDirectory	VN080724	HP Acquire Method		HP Processing Method	82N080724W.M

STD. NAME	STD REF.#
Tune/Reschk	VP129516
Initial Calibration Stds	VP129526,VP129527,VP129528,VP129529,VP129530,VP129531
CCC	
Internal Standard/PEM	
ICV/I.BLK	VP129532
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VN083134.D	07 Aug 2024 10:09		JC\MD	Ok
2	VSTDICC100	VSTDICC100	VN083135.D	07 Aug 2024 10:33	Good for DOD	JC\MD	Ok,M
3	VSTDICCC050	VSTDICCC050	VN083136.D	07 Aug 2024 10:58	QR- 43	JC\MD	Ok,M
4	VSTDICC020	VSTDICC020	VN083137.D	07 Aug 2024 11:22		JC\MD	Ok,M
5	VSTDICC010	VSTDICC010	VN083138.D	07 Aug 2024 11:46		JC\MD	Ok,M
6	VSTDICC005	VSTDICC005	VN083139.D	07 Aug 2024 12:10		JC\MD	Ok,M
7	VSTDICC001	VSTDICC001	VN083140.D	07 Aug 2024 12:34		JC\MD	Ok,M
8	IBLK	IBLK	VN083141.D	07 Aug 2024 13:22		JC\MD	Ok
9	VSTDICV050	ICVVN080724	VN083142.D	07 Aug 2024 14:49		JC\MD	Ok,M

M : Manual Integration

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Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QCBatch ID # VN081424

Review By	Mahesh Dadoda	Review On	8/15/2024 1:44:31 AM		
Supervise By	John Carlone	Supervise On	8/15/2024 9:39:57 AM		
SubDirectory	VN081424	HP Acquire Method		HP Processing Method	82N080724W.M

STD. NAME	STD REF.#
Tune/Reschk	VP129723
Initial Calibration Stds	
CCC	VP129724,VP129725,VP129726,VP129727,VP129728,VP129729,VP129730,VP129731
Internal Standard/PEM	
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VN083294.D	14 Aug 2024 12:07		JC\MD	Ok
2	VSTDCCC050	VSTDCCC050	VN083295.D	14 Aug 2024 12:41		JC\MD	Ok,M
3	VN0814MBL01	VN0814MBL01	VN083296.D	14 Aug 2024 13:16	RT Differ;Not Required	JC\MD	Not Ok
4	VN0814WBL01	VN0814WBL01	VN083297.D	14 Aug 2024 13:39		JC\MD	Ok
5	VN0814WBS01	VN0814WBS01	VN083298.D	14 Aug 2024 14:03		JC\MD	Ok,M
6	P3429-03DL	925-K1-WS-073124DL	VN083299.D	14 Aug 2024 14:27	vial B pH<2	JC\MD	Ok
7	VN0814WBSD01	VN0814WBSD01	VN083300.D	14 Aug 2024 14:51		JC\MD	Ok,M
8	P3390-09 0.2PPB	MDL-WATER-03-QT3-2	VN083301.D	14 Aug 2024 15:15		JC\MD	Ok,M
9	P3390-09 0.5PPB	MDL-WATER-03-QT3-2	VN083302.D	14 Aug 2024 15:40		JC\MD	Ok,M
10	P3390-09 0.75PPB	MDL-WATER-03-QT3-2	VN083303.D	14 Aug 2024 16:04		JC\MD	Ok,M
11	P3390-09 2.5PPB	MDL-WATER-03-QT3-2	VN083304.D	14 Aug 2024 16:28		JC\MD	Ok,M
12	P3390-08 1.0PPB	LOQ-WATER-02-QT3-2	VN083305.D	14 Aug 2024 16:52		JC\MD	Ok,M
13	P3390-08 5.0PPB	LOQ-WATER-02-QT3-2	VN083306.D	14 Aug 2024 17:16		JC\MD	Ok,M
14	P3596-03	TB-01-081324	VN083307.D	14 Aug 2024 17:41	vial A pH<2 TB	JC\MD	Ok
15	P3601-03	TB-02-081324	VN083308.D	14 Aug 2024 18:05	vial A pH<2 TB	JC\MD	Ok
16	P3596-01	918-J-WS-081324	VN083309.D	14 Aug 2024 18:29	vial A pH<2	JC\MD	Ok
17	P3596-02	918-J-WS-081324-FD	VN083310.D	14 Aug 2024 18:54	vial A pH<2	JC\MD	Ok
18	P3601-01	918-J-WPO-0.25-08132	VN083311.D	14 Aug 2024 19:18	vial A pH<2	JC\MD	Ok

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Fax : 908 789 8922

Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QCBatch ID # VN081424

Review By	Mahesh Dadoda	Review On	8/15/2024 1:44:31 AM		
Supervise By	John Carlone	Supervise On	8/15/2024 9:39:57 AM		
SubDirectory	VN081424	HP Acquire Method		HP Processing Method	82N080724W.M

STD. NAME	STD REF.#
Tune/Reschk	VP129723
Initial Calibration Stds	
CCC	VP129724,VP129725,VP129726,VP129727,VP129728,VP129729,VP129730,VP129731
Internal Standard/PEM	
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

19	P3601-02	918-J-WPO-0.25-08132	VN083312.D	14 Aug 2024 19:42	vial A pH<2	JC\MD	Ok
20	PB162684TB	PB162684TB	VN083313.D	14 Aug 2024 20:07		JC\MD	Ok
21	P3574-01	WC-S-06-202408	VN083314.D	14 Aug 2024 20:31	vial A pH#5.0	JC\MD	Ok,M
22	P3609-03	TB-01-081424	VN083315.D	14 Aug 2024 20:55	vial A pH<2 TB	JC\MD	Ok
23	P3609-01	915-J-WS-081424	VN083316.D	14 Aug 2024 21:19	vial A pH<2	JC\MD	Ok
24	P3609-02	920-J-WS-081424	VN083317.D	14 Aug 2024 21:43	vial A pH<2	JC\MD	Ok
25	VSTDCCC050	VSTDCCC050EC	VN083318.D	14 Aug 2024 22:08		JC\MD	Ok,M

M : Manual Integration

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Prep Standard - Chemical Standard Summary

Order ID : P3609

Test : VOCMS Group6

Prepbatch ID :

Sequence ID/Qc Batch ID: VN081424,

Standard ID :
VP126666,VP128290,VP128298,VP128523,VP128632,VP128634,VP128762,VP128764,VP128765,VP128766,VP128768,
VP128769,VP129196,VP129228,VP129230,VP129231,VP129232,VP129235,VP129236,VP129238,VP129517,VP129519,
VP129520,VP129723,VP129724,VP129725,VP129726,VP129727,VP129728,VP129729,VP129730,VP129731,

Chemical ID :
V12794,V12798,V12966,V13390,V13444,V13448,V13462,V13463,V13539,V13581,V13707,V13708,V13800,V13801,V1381
2,V13952,V13953,V13959,V14016,V14017,V14093,V14103,V14104,V14123,V14141,V14142,V14143,V14147,V14148,V14
169,V14170,V14177,V14202,V14207,V14219,V14288,V14411,V14412,V14413,V14414,V14415,W3112,

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VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
617	8260 Surrogate, 400PPM	VP126666	03/19/2024	09/19/2024	Semsettin Yesilyurt	None	None	Mahesh Dadoda 03/28/2024

FROM 0.80000ml of V13708 + 49.20000ml of V14141 = Final Quantity: 50.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
218	BFB, 25PPM	VP128290	06/10/2024	11/23/2024	Semsettin Yesilyurt	None	None	Mahesh Dadoda 06/12/2024

FROM 0.25000ml of V13390 + 24.75000ml of V14148 = Final Quantity: 25.000 ml

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VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
247	8260 Internal Standard, 250PPM	VP128298	06/10/2024	11/23/2024	Semsettin Yesilyurt	None	None	Mahesh Dadoda 06/12/2024

FROM 0.10000ml of V14288 + 9.90000ml of V14148 = Final Quantity: 10.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
251	8260 Internal STD & Surrogate Mix, 250PPM	VP128523	06/10/2024	12/10/2024	Semsettin Yesilyurt	None	None	Mahesh Dadoda 06/22/2024

FROM 0.25000ml of V13707 + 0.25000ml of V14288 + 24.50000ml of V14142 = Final Quantity: 25.000 ml

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VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1817	8260 Working Std(2-CVE)-SS, 800ppm	VP128632	06/25/2024	12/11/2024	Semsettin Yesilyurt	None	None	Mahesh Dadoda 07/02/2024

FROM 0.80000ml of V13581 + 9.20000ml of V14147 = Final Quantity: 10.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1818	8260 Working Std(2-CVE)-SS, 50ppm	VP128634	06/25/2024	12/11/2024	Semsettin Yesilyurt	None	None	Mahesh Dadoda 07/02/2024

FROM 4.68750ml of V14147 + 0.31250ml of VP128632 = Final Quantity: 5.000 ml

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VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1810	8260 Working Std(2-CVE)-800ppm	VP128762	07/01/2024	12/11/2024	Semsettin Yesilyurt	None	None	Mahesh Dadoda 07/02/2024

FROM 0.50000ml of V12798 + 1.50000ml of V12794 + 23.00000ml of V14147 = Final Quantity: 25.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1812	8260 Working Std(2-CVE)-100ppm	VP128764	07/01/2024	12/11/2024	Semsettin Yesilyurt	None	None	Mahesh Dadoda 07/02/2024

FROM 0.20000ml of V12798 + 19.08000ml of V14147 = Final Quantity: 20.000 ml

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VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1813	8260 Working Std(2-CVE)-50ppm	VP128765	07/01/2024	12/11/2024	Semsettin Yesilyurt	None	None	Mahesh Dadoda 07/02/2024

FROM 9.37500ml of V14147 + 0.62500ml of VP128762 = Final Quantity: 10.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
719	8260 Working STD (BCM)-First source, 400PPM	VP128766	07/01/2024	12/11/2024	Semsettin Yesilyurt	None	None	Mahesh Dadoda 07/02/2024

FROM 1.50000ml of V13462 + 1.50000ml of V13463 + 12.00000ml of V14147 = Final Quantity: 15.000 ml

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VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
253	8260 Working STD (BCM)-First source, 20PPM	VP128768	07/01/2024	12/11/2024	Semsettin Yesilyurt	None	None	Mahesh Dadoda 07/02/2024

FROM 0.10000ml of V13463 + 9.90000ml of V14147 = Final Quantity: 10.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
254	8260 Working STD (BCM)-First source, 10PPM	VP128769	07/01/2024	12/11/2024	Semsettin Yesilyurt	None	None	Mahesh Dadoda 07/02/2024

FROM 0.05000ml of V13463 + 9.95000ml of V14147 = Final Quantity: 10.000 ml

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VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
825	8260 Working STD (BCM)-Second source, 10PPM	VP129196	07/22/2024	01/22/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 07/26/2024

FROM 0.10000ml of V12966 + 9.90000ml of V14143 = Final Quantity: 10.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
51	8260 Working STD (Acrolein) -first source, 800PPM	VP129228	07/25/2024	08/24/2024	Semsettin Yesilyurt	None	None	Mahesh Dadoda 07/30/2024

FROM 1.00000ml of V14411 + 1.00000ml of V14412 + 1.00000ml of V14413 + 1.00000ml of V14414 + 21.00000ml of V14143 = Final Quantity: 25.000 ml

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VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
180	8260 Working STD (Acrolein)-First source, 100PPM	VP129230	07/25/2024	08/24/2024	Semsettin Yesilyurt	None	None	Mahesh Dadoda 07/30/2024

FROM 17.50000ml of V14143 + 2.50000ml of VP129228 = Final Quantity: 20.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
181	8260 Working STD (Acrolein)-First source, 50PPM	VP129231	07/25/2024	08/24/2024	Semsettin Yesilyurt	None	None	Mahesh Dadoda 07/30/2024

FROM 9.37500ml of V14143 + 0.62500ml of VP129228 = Final Quantity: 10.000 ml

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VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
263	8260 Working STD (Acrolein)-Second source, 800PPM	VP129232	07/25/2024	08/23/2024	Semsettin Yesilyurt	None	None	Mahesh Dadoda 07/30/2024

FROM 0.60000ml of V14414 + 1.00000ml of V14415 + 8.40000ml of V14143 = Final Quantity: 10.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
826	8260 Working STD (Acrolein)-Second source, 50PPM	VP129235	07/25/2024	08/23/2024	Semsettin Yesilyurt	None	None	Mahesh Dadoda 07/30/2024

FROM 4.68750ml of V14143 + 0.31250ml of VP129232 = Final Quantity: 5.000 ml

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VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
259	8260 Calibration Working STD Mix-Second source, 160PPM	VP129236	07/22/2024	08/31/2024	Semsettin Yesilyurt	None	None	Mahesh Dadoda 07/30/2024

FROM 0.16000ml of V13448 + 0.80000ml of V13812 + 0.80000ml of V13959 + 0.80000ml of V14093 + 0.80000ml of V14123 + 0.80000ml of V14177 + 1.60000ml of V13539 + 4.24000ml of V14143 = Final Quantity: 10.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
820	8260 Calibration Working STD Mix-Second source, 10PPM	VP129238	07/22/2024	08/31/2024	Semsettin Yesilyurt	None	None	Mahesh Dadoda 07/30/2024

FROM 4.68750ml of V14143 + 0.31250ml of VP129236 = Final Quantity: 5.000 ml

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VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
257	8260 Calibration Working STD Mix-First source, 160PPM	VP129517	08/05/2024	09/14/2024	Semsettin Yesilyurt	None	None	Mahesh Dadoda 08/08/2024

FROM 0.40000ml of V13444 + 1.00000ml of V13800 + 1.00000ml of V13801 + 1.00000ml of V13952 + 1.00000ml of V13953 + 1.00000ml of V14016 + 1.00000ml of V14017 + 1.00000ml of V14103 + 1.00000ml of V14104 + 1.00000ml of V14169 + 1.00000ml of V14170 + 1.00000ml of V14219 + 1.50000ml of V14202 + 1.50000ml of V14207 + 10.60000ml of V14143 = Final Quantity: 25.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
245	8260 Calibration Working STD Mix-First source, 20PPM	VP129519	08/05/2024	09/14/2024	Semsettin Yesilyurt	None	None	Mahesh Dadoda 08/08/2024

FROM 17.50000ml of V14143 + 2.50000ml of VP129517 = Final Quantity: 20.000 ml

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VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
246	8260 Calibration Working STD Mix-First source, 10PPM	VP129520	08/05/2024	09/14/2024	Semsettin Yesilyurt	None	None	Mahesh Dadoda 08/08/2024

FROM 9.37500ml of V14143 + 0.62500ml of VP129517 = Final Quantity: 10.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
589	BFB TUNE CHECK	VP129723	08/14/2024	08/15/2024	John Carlone	None	None	Mahesh Dadoda 08/15/2024

FROM 39.98400ml of W3112 + 0.01600ml of VP128290 = Final Quantity: 40.000 ml

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VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
620	50 PPB CCC, 8260-Water	VP129724	08/14/2024	08/15/2024	John Carlone	None	None	Mahesh Dadoda 08/15/2024

FROM 39.94450ml of W3112 + 0.00500ml of VP126666 + 0.00500ml of VP128766 + 0.00800ml of VP128298 + 0.01250ml of VP128762 + 0.01250ml of VP129228 + 0.01250ml of VP129517 = Final Quantity: 40.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
620	50 PPB CCC, 8260-Water	VP129725	08/14/2024	08/15/2024	John Carlone	None	None	Mahesh Dadoda 08/15/2024

FROM 39.94450ml of W3112 + 0.00500ml of VP126666 + 0.00500ml of VP128766 + 0.00800ml of VP128298 + 0.01250ml of VP128762 + 0.01250ml of VP129228 + 0.01250ml of VP129517 = Final Quantity: 40.000 ml

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VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2390	0.2PPB LOD, 8260-Water	VP129726	08/14/2024	08/15/2024	John Carlone	None	None	Mahesh Dadoda 08/15/2024

FROM 39.98840ml of W3112 + 0.00080ml of VP128634 + 0.00080ml of VP129196 + 0.00080ml of VP129235 + 0.00080ml of VP129238 + 0.00800ml of VP128523 = Final Quantity: 40.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2947	0.5 ppb MDL 8260 Water	VP129727	08/14/2024	08/15/2024	John Carlone	None	None	Mahesh Dadoda 08/15/2024

FROM 39.98000ml of W3112 + 0.00100ml of VP128764 + 0.00100ml of VP128768 + 0.00100ml of VP129230 + 0.00100ml of VP129519 + 0.00500ml of VP126666 + 0.00800ml of VP128298 = Final Quantity: 40.000 ml

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VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3585	0.75 PPB MDL 8260 WATER	VP129728	08/14/2024	08/15/2024	John Carlone	None	None	Mahesh Dadoda 08/15/2024

FROM 39.97000ml of W3112 + 0.00300ml of VP128765 + 0.00300ml of VP128769 + 0.00300ml of VP129231 + 0.00300ml of VP129520 + 0.00500ml of VP126666 + 0.00800ml of VP128298 = Final Quantity: 40.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3786	2.5 PPB 8260 MDL-WATER	VP129729	08/14/2024	08/15/2024	John Carlone	None	None	Mahesh Dadoda 08/15/2024

FROM 39.92000ml of W3112 + 0.00800ml of VP128523 + 0.01000ml of VP128765 + 0.01000ml of VP128769 + 0.01000ml of VP129231 + 0.01000ml of VP129520 = Final Quantity: 40.000 ml

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VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3742	1.0 PPB LOQ 8260 Water	VP129730	08/14/2024	08/15/2024	John Carlone	None	None	Mahesh Dadoda 08/15/2024

FROM 39.98000ml of W3112 + 0.00200ml of VP128764 + 0.00200ml of VP128768 + 0.00200ml of VP129230 + 0.00200ml of VP129519 + 0.00500ml of VP126666 + 0.00800ml of VP128298 = Final Quantity: 40.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3748	8260 5.0 PPB LOQ/WATER	VP129731	08/14/2024	08/15/2024	John Carlone	None	None	Mahesh Dadoda 08/15/2024

FROM 39.94000ml of W3112 + 0.00500ml of VP126666 + 0.00800ml of VP128298 + 0.01000ml of VP128764 + 0.01000ml of VP128768 + 0.01000ml of VP129230 + 0.01000ml of VP129519 = Final Quantity: 40.000 ml

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	95318 / 2-Chloroethyl Vinyl Ether (Min = 5)	121321	12/13/2024	06/25/2024 / SAM	03/30/2022 / SAM	V12794

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	95318 / 2-Chloroethyl Vinyl Ether (Min = 5)	121321	12/13/2024	06/25/2024 / SAM	03/30/2022 / SAM	V12798

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	70046 / Bromochloromethane Std. sol/methanol 1000ppm	070122	01/22/2025	07/22/2024 / SAM	07/06/2022 / SAM	V12966

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30067 / BFB tuneing solution	A0191805	12/08/2024	12/08/2023 / SAM	01/13/2023 / SAM	V13390

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30470 / VOA Stock Solution, tert-butanol std, 1mL, P&TM	A0181905	12/14/2024	06/14/2024 / SAM	01/23/2023 / SAM	V13444

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30470 / VOA Stock Solution, tert-butanol std, 1mL, P&TM	A0191703	12/03/2024	06/03/2024 / SAM	01/23/2023 / SAM	V13448

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30225 / VOA Mix, bromochloromethane, 2000ug/mL, P&TM, 1mL/ampul	A0193071	01/01/2025	07/01/2024 / SAM	01/27/2023 / SAM	V13462

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30225 / VOA Mix, bromochloromethane, 2000ug/mL, P&TM, 1mL/ampul	A0193071	01/01/2025	07/01/2024 / SAM	01/27/2023 / SAM	V13463

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30006 / VOA Mix, CLP method Calibration Std #1 ketones 5000uq/ml, PTM, 1ml	A0186767	11/29/2024	05/29/2024 / SAM	01/27/2023 / SAM	V13539

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	95318 / 2-Chloroethyl Vinyl Ether (Min = 5)	111722	12/25/2024	06/25/2024 / SAM	01/30/2023 / SAM	V13581

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555582 / Custom Mixture, 8260 A/B Surrogate Mix [CS 5179-2]	A0196865	06/10/2025	06/10/2024 / SAM	04/12/2023 / SAM	V13707

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555582 / Custom Mixture, 8260 A/B Surrogate Mix [CS 5179-2]	A0196865	09/19/2024	03/19/2024 / SAM	04/12/2023 / SAM	V13708

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30042 / VOA Mix,500 series method 502.2 Calibration Std #1 gases, 2000ug/ml, PTM, 1ml	A0194279	01/30/2025	07/30/2024 / SAM	05/31/2023 / SAM	V13800

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30042 / VOA Mix,500 series method 502.2 Calibration Std #1 gases, 2000ug/ml, PTM, 1ml	A0194279	12/28/2024	06/28/2024 / SAM	05/31/2023 / SAM	V13801

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30042 / VOA Mix,500 series method 502.2 Calibration Std #1 gases, 2000ug/ml, PTM, 1ml	A0197644	11/29/2024	05/29/2024 / SAM	05/31/2023 / SAM	V13812

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30489 / VOA Mix, 8260B Acetates Mix, P&TM, 1mL	A0196115	09/30/2024	06/14/2024 / SAM	09/25/2023 / SAM	V13952

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30489 / VOA Mix, 8260B Acetates Mix, P&TM, 1mL	A0196115	09/30/2024	06/14/2024 / SAM	09/25/2023 / SAM	V13953

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30489 / VOA Mix, 8260B Acetates Mix, P&TM, 1mL	A0199224	12/31/2024	07/22/2024 / SAM	09/25/2023 / SAM	V13959

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	95319 / Revised Additions Mix (Min = 5)	032922	12/14/2024	06/14/2024 / SAM	11/22/2023 / SAM	V14016

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	95319 / Revised Additions Mix (Min = 5)	032922	12/14/2024	06/14/2024 / SAM	11/22/2023 / SAM	V14017

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555408 / Custom Standard, Vinyl Acetate Standard w/ Grav [CS 5066-6] TWO SEPARATE LOTS	A0205177	11/14/2024	05/14/2024 / SAM	12/22/2023 / SAM	V14093

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555408 / Custom Standard, Vinyl Acetate Standard w/ Grav [CS 5066-6] TWO SEPARATE LOTS	A0205179	12/14/2024	06/14/2024 / SAM	12/22/2023 / SAM	V14103

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555408 / Custom Standard, Vinyl Acetate Standard w/ Grav [CS 5066-6] TWO SEPARATE LOTS	A0205179	12/14/2024	06/14/2024 / SAM	12/22/2023 / SAM	V14104

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	95319 / Revised Additions Mix (Min = 5)	011624	12/03/2024	06/03/2024 / SAM	01/17/2024 / SAM	V14123

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA9077-02 / Methanol, Purge/Trap (cs=6x1L)	22L0562016	09/19/2024	03/19/2024 / SAM	02/06/2024 / SAM	V14141

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA9077-02 / Methanol, Purge/Trap (cs=6x1L)	22L0562016	12/10/2024	06/10/2024 / SAM	02/06/2024 / SAM	V14142

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA9077-02 / Methanol, Purge/Trap (cs=6x1L)	22L0562016	01/22/2025	07/22/2024 / SAM	02/06/2024 / SAM	V14143

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA9077-02 / Methanol, Purge/Trap (cs=6x1L)	22L0562016	12/11/2024	06/11/2024 / pedro	02/06/2024 / SAM	V14147

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA9077-02 / Methanol, Purge/Trap (cs=6x1L)	22L0562016	11/23/2024	05/23/2024 / pedro	02/06/2024 / SAM	V14148

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	95317 / Universal VOA Mega Mix (Min order = 5)	021624	12/14/2024	06/14/2024 / SAM	02/20/2024 / SAM	V14169

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	95317 / Universal VOA Mega Mix (Min order = 5)	021624	12/14/2024	06/14/2024 / SAM	02/20/2024 / SAM	V14170

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	95317 / Universal VOA Mega Mix (Min order = 5)	021524	12/03/2024	06/03/2024 / SAM	02/20/2024 / SAM	V14177

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30006 / VOA Mix, CLP method Calibration Std #1 ketones 5000uq/ml, PTM, 1ml	A0200785	12/25/2024	06/25/2024 / SAM	02/28/2024 / SAM	V14202

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30006 / VOA Mix, CLP method Calibration Std #1 ketones 5000uq/ml, PTM, 1ml	A0200785	12/25/2024	06/25/2024 / SAM	02/28/2024 / SAM	V14207

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30006 / VOA Mix, CLP method Calibration Std #1 ketones 5000uq/ml, PTM, 1ml	A0200785	12/25/2024	06/25/2024 / SAM	02/28/2024 / SAM	V14219

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555581 / Custom Standard, 8260 Internal Std [CS 5179-1]	A0210184	06/10/2025	06/10/2024 / SAM	04/15/2024 / SAM	V14288

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	072424	08/24/2024	07/25/2024 / SAM	07/25/2024 / SAM	V14411

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	072424	08/24/2024	07/25/2024 / SAM	07/25/2024 / SAM	V14412

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	072424	08/24/2024	07/25/2024 / SAM	07/25/2024 / SAM	V14413

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	072424	08/24/2024	07/25/2024 / SAM	07/25/2024 / SAM	V14414

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	072424	08/24/2024	07/25/2024 / SAM	07/25/2024 / SAM	V14415

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	DIW / DI Water	Daily Lab-Certified	07/03/2029	07/03/2024 / Iwona	07/03/2024 / Iwona	W3112

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

12

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

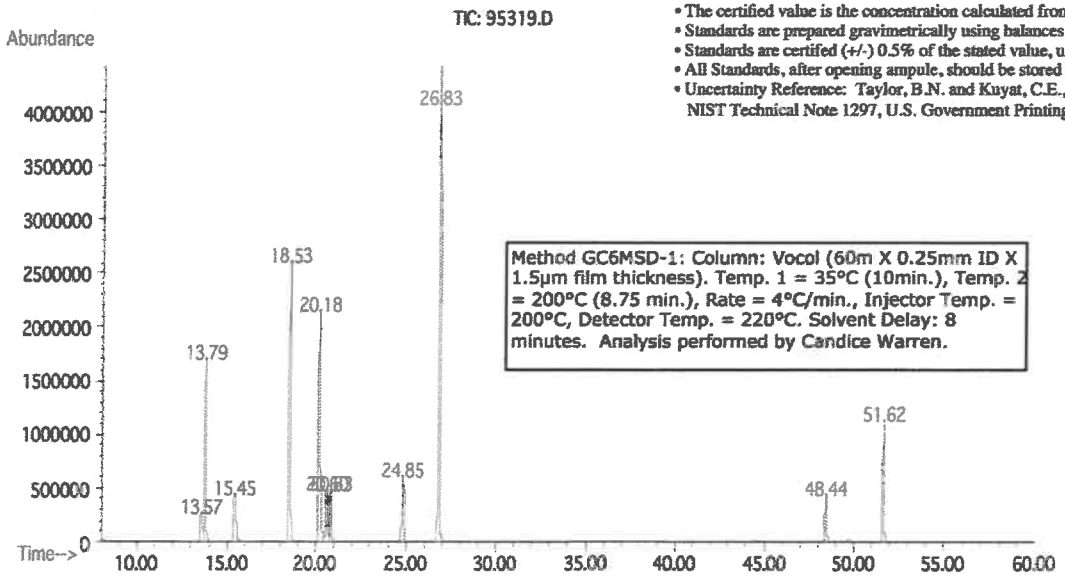
Part Number: 95319
Lot Number: 011624
Description: Revised Additions Mix
11 components
Expiration Date: 011627
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): Varied
NIST Test ID#: 6UTB

Solvent(s): Methanol Lot# EH471-US

5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 100.0 0.021 Flask Uncertainty

Formulated By:	Prashant Chauhan	011624 DATE
Reviewed By:	Pedro L. Rentas	011624 DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Acrylonitrile	7	4718CK	10000	99	0.2	1.01035	1.01080	10004.4	40.6	107-13-1	N/A	orl-rat 78 mg/kg
2. 1-Chlorobutane	1072	MKCM5711	2000	99.99	0.2	0.20007	0.20035	2002.8	8.1	109-69-3	N/A	orl-rat 2670mg/kg
3. Cyclohexane	1023	28930	2000	99	0.2	0.20207	0.20222	2001.5	8.2	110-82-7	300 ppm (1050mg/m3/8H)	orl-rat 12705mg/kg
4. Di-isopropyl ether (DIPE)	987	00412MX	2000	99	0.2	0.20207	0.20227	2002.0	8.2	108-20-3	500 ppm (2100mg/m3/8H)	orl-rat 8470mg/kg
5. 1,4-Dioxane	373	03853KE	40000	99	0.2	4.04142	4.04213	40007.0	162.5	123-91-1	25 ppm (90mg/m3/8H)(skin)	orl-mus 5700mg/kg
6. Hexachloroethane	199	12604HBV	2000	99	0.2	0.20207	0.20221	2001.4	8.2	67-72-1	1 ppm (10mg/m3/8H)(skin)	orl-gpg 4970mg/kg
7. Methylcyclohexane	1627	SHBG0199V	2000	99	0.2	0.20207	0.20230	2002.3	8.2	108-87-2	N/A	orl-mus 2250mg/kg
8. Methyl tert-butyl ether (MTBE)	209	21880	2000	99	0.2	0.20207	0.20227	2002.0	8.2	1634-04-4	N/A	orl-rat 4g/kg
9. Propionitrile	349	1395468	20000	99	0.2	2.02071	2.02150	20007.8	81.3	107-12-0	N/A	orl-rat 39mg/kg
10. Tetrahydrofuran	380	SHBH8330	10000	99.9	0.2	1.00125	1.00200	10007.5	40.3	109-99-9	20 ppm (590mg/m3/8H)	orl-rat 1650mg/kg
11. 1,2,3,4-Tetramethylbenzene	491	AP01	2000	93	0.2	0.21511	0.21522	2001.0	8.7	488-23-3	N/A	orl-rat 6408mg/kg



- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

Method GC6MSD-1: Column: Vocol (60m X 0.25mm ID X 1.5µm film thickness). Temp. 1 = 35°C (10min.), Temp. 2 = 200°C (8.75 min.), Rate = 4°C/min., Injector Temp. = 200°C, Detector Temp. = 220°C. Solvent Delay: 8 minutes. Analysis performed by Candice Warren.

Name	MSD RT (min.)
Methyl tert-butyl ether (MTBE)	13.56
Acrylonitrile	13.79
Di-isopropyl ether	15.44
Propionitrile	18.53
Tetrahydrofuran	20.17
Cyclohexane	20.58
1-Chlorobutane	20.83
Methylcyclohexane	24.84
1,4-Dioxane	26.84
Hexachloroethane	48.44
1,2,3,4-Tetramethylbenzene	51.62

CERTIFIED WEIGHT REPORT

Part Number: 95317
Lot Number: 021524
Description: Universal VOA Megamix
69 components
Expiration Date: 021527
Recommended Storage: Freezer (0 °C)
Nominal Concentration (µg/mL): 2000
NIST Test ID#: 8UTB

Solvent(s): Methanol Lot# EG359-USQ12

Formulated By: Mario Luis 021524 DATE

Reviewed By: Pedro L. Rentas 021524 DATE

Weight(s) shown below were combined and diluted to (mL): 100.0 5E-05 Balance Uncertainty 0.021 Flask Uncertainty

	Compound	(RM#) Part Number	Lot Number	Dil. Factor	Initial Vol. (mL)	Initial Conc.(ug/mL)	Nominal Conc (µg/mL)	Purity (%)	Purity Uncertainty	Uncertainty Pipette (mL)	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expended Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1.	Acetonitrile	(0324)	021644	NA	NA	NA	2000	99.99	0.2	NA	0.20007	0.20022	2001.5	8.1	75-05-8	40 ppm (70mg/m3/8H)	orl-rat 2460mg/kg
2.	Allyl chloride (3-Chloropropene)	(0325)	102396	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20222	2001.5	8.2	107-05-1	1 ppm (3mg/m3/8H)	orl-rat 700mg/kg
3.	Carbon disulphide	(0060)	MKCR8561	NA	NA	NA	2000	99.99	0.2	NA	0.20007	0.20020	2001.3	8.1	75-15-0	4 ppm (12mg/m3) (skin)	orl-rat 1200mg/kg
4.	cis-1,4-Dichloro-2-butene	(1196)	14718EF	NA	NA	NA	2000	95	0.2	NA	0.21058	0.21060	2000.2	8.5	1476-11-5	N/A	N/A
5.	trans-1,4-Dichloro-2-butene	(0486)	MKBP6041V	NA	NA	NA	2000	96.5	0.2	NA	0.20731	0.20734	2000.3	8.4	110-57-6	N/A	N/A
6.	Diethyl ether	(0153)	IK18CAS000(	NA	NA	NA	2000	99.9	0.2	NA	0.20025	0.20042	2001.7	8.1	60-29-7	N/A	N/A
7.	Ethyl methacrylate	(0381)	06126PX	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20231	2002.4	8.2	97-63-2	N/A	orl-rat 14800mg/kg
8.	Iodomethane	(0489)	SHBF8718V	NA	NA	NA	2000	99.5	0.2	NA	0.20106	0.20118	2001.2	8.1	74-88-4	5 ppm(28mg/m3/8H)(skin)	orl-rat 76mg/kg
9.	2-Methyl-1-propanol	(0445)	15241EB	NA	NA	NA	2000	99.5	0.2	NA	0.20106	0.20120	2001.4	8.1	78-83-1	50 ppm (150mg/m3/8H)	orl-rat 2460mg/kg
10.	Methacrylonitrile	(0442)	00427ET	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20209	2000.2	8.2	126-98-7	1 ppm (3mg/m3/8H)(skin)	orl-rat 120mg/kg
11.	Methyl acrylate	(1075)	SHBK0679	NA	NA	NA	2000	99.9	0.2	NA	0.20025	0.20042	2001.7	8.1	96-33-3	10 ppm(35mg/m3/8H)(skin)	orl-rat 277mg/kg
12.	Methyl methacrylate	(0404)	MKBW5137V	NA	NA	NA	2000	99.9	0.2	NA	0.20025	0.20030	2000.5	8.1	80-62-6	100 ppm (410mg/m3/8H)	orl-rat 7872mg/kg
13.	Nitrobenzene	(0228)	01213TV	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20230	2002.3	8.2	98-95-3	1 ppm (5mg/m3/8H)(skin)	orl-rat 780mg/kg
14.	2-Nitropropane	(0461)	14002JX	NA	NA	NA	2000	97.3	0.2	NA	0.20560	0.20570	2001.0	8.3	79-46-9	10 ppm (35mg/m3/8H)	orl-rat 720mg/kg
15.	Pentachloroethane	(0450)	HGA01	NA	NA	NA	2000	98	0.2	NA	0.20413	0.20415	2000.2	8.3	76-01-7	N/A	N/A
16.	1,1,2-Trichlorotrifluoroethane	(0474)	18930	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20210	2000.3	8.2	76-13-1	1000 ppm (7600mg/m3/8H)	orl-rat 43g/kg
17.	Bromodichloromethane	35171	101623	0.05	5.00	40001.7	2000	NA	NA	0.017	NA	NA	1999.6	22.9	75-27-4	N/A	orl-rat 916mg/kg
18.	Dibromochloromethane	35171	101623	0.05	5.00	40002.1	2000	NA	NA	0.017	NA	NA	1999.6	23.0	124-48-1	N/A	orl-rat 848mg/kg
19.	cis-1,2-Dichloroethene	35171	101623	0.05	5.00	40003.1	2000	NA	NA	0.017	NA	NA	1999.7	22.9	156-59-2	N/A	N/A
20.	trans-1,2-Dichloroethene	35171	101623	0.05	5.00	40002.4	2000	NA	NA	0.017	NA	NA	1999.6	23.0	156-60-5	N/A	orl-rat 1235mg/kg
21.	Methylene chloride	35171	101623	0.05	5.00	40002.8	2000	NA	NA	0.017	NA	NA	1999.6	22.9	75-09-2	500 ppm	orl-rat 820mg/kg
22.	1,1-Dichloroethene	32251	102023	0.10	10.00	20001.6	2000	NA	NA	0.042	NA	NA	1999.7	20.4	75-35-4	1 ppm (4mg/m3/8H)	orl-rat 200mg/kg
23.	Bromoform	95321	020724	0.10	10.00	20003.2	2000	NA	NA	0.042	NA	NA	1999.8	20.5	75-25-2	0.5 ppm (5mg/m3) (skin)	orl-rat 933mg/kg
24.	Carbon tetrachloride	95321	020724	0.10	10.00	20003.4	2000	NA	NA	0.042	NA	NA	1999.8	20.4	56-23-5	2 ppm (12.6mg/m3/8H)	orl-rat 2350mg/kg
25.	Chloroform	95321	020724	0.10	10.00	20024.0	2000	NA	NA	0.042	NA	NA	2001.9	20.5	67-66-3	50 ppm (240mg/m3) (CL)	orl-rat 908mg/kg
26.	Dibromomethane	95321	020724	0.10	10.00	20002.9	2000	NA	NA	0.042	NA	NA	1999.8	20.5	74-95-3	N/A	orl-rat 108mg/kg
27.	1,1-Dichloroethane	95321	020724	0.10	10.00	20003.4	2000	NA	NA	0.042	NA	NA	1999.8	20.5	75-34-3	100 ppm	orl-rat 725mg/kg
28.	2,2-Dichloropropane	95321	020724	0.10	10.00	20003.4	2000	NA	NA	0.042	NA	NA	1999.8	20.4	594-20-7	N/A	N/A
29.	Tetrachloroethene	95321	020724	0.10	10.00	20201.1	2000	NA	NA	0.042	NA	NA	2019.6	20.6	127-18-4	25 ppm (170mg/m3/8H)(final)	orl-rat 2629mg/kg
30.	1,1,1-Trichloroethane	95321	020724	0.10	10.00	20003.0	2000	NA	NA	0.042	NA	NA	1999.8	20.5	71-55-6	350 ppm (1900mg/m3/8H)	orl-rat 10300mg/kg
31.	1,2-Dibromo-3-chloropropane	35161	112322	0.05	5.00	40016.5	2000	NA	NA	0.017	NA	NA	2000.3	22.9	96-12-8	0.001 ppm	orl-rat 170mg/kg
32.	1,2-Dibromoethane	35161	112322	0.05	5.00	40024.8	2000	NA	NA	0.017	NA	NA	2000.7	22.9	106-93-4	20 ppm (8H)	orl-rat 108mg/kg
33.	1,2-Dichloroethane	35161	112322	0.05	5.00	40018.0	2000	NA	NA	0.017	NA	NA	2000.4	22.9	107-06-2	50 ppm (8H)	orl-rat 670mg/kg
34.	1,2-Dichloropropane	35161	112322	0.05	5.00	40051.0	2000	NA	NA	0.017	NA	NA	2002.0	22.9	78-87-5	75 ppm (350mg/m3/8H)	orl-rat 1947mg/kg
35.	1,3-Dichloropropane	35161	112322	0.05	5.00	40005.9	2000	NA	NA	0.017	NA	NA	1999.8	22.9	142-28-9	N/A	unr-mus 3600mg/kg
36.	1,1-Dichloropropene	35161	112322	0.05	5.00	40012.1	2000	NA	NA	0.017	NA	NA	2000.1	29.7	563-58-6	N/A	N/A
37.	cis-1,3-Dichloropropene	35161	112322	0.05	5.00	40010.0	2000	NA	NA	0.017	NA	NA	2000.0	23.0	10061-01-5	N/A	N/A
38.	trans-1,3-Dichloropropene	35161	112322	0.05	5.00	40017.6	2000	NA	NA	0.017	NA	NA	2000.4	23.0	10061-02-6	N/A	N/A
39.	Hexachloro-1,3-butadiene	35161	112322	0.05	5.00	40021.9	2000	NA	NA	0.017	NA	NA	2000.6	29.7	87-68-3	0.02 ppm (0.24mg/m3/8H)	orl-rat 82mg/kg
40.	1,1,1,2-Tetrachloroethane	35161	112322	0.05	5.00	40011.9	2000	NA	NA	0.017	NA	NA	2000.1	22.9	630-20-6	N/A	orl-rat 670mg/kg
41.	1,1,2,2-Tetrachloroethane	35161	112322	0.05	5.00	40007.5	2000	NA	NA	0.017	NA	NA	1999.9	22.9	79-34-5	5 ppm (35mg/m3/8H)(skin)	orl-rat 800mg/kg
42.	1,1,2-Trichloroethane	35161	112322	0.05	5.00	40006.6	2000	NA	NA	0.017	NA	NA	1999.8	23.0	79-00-5	10 ppm (45mg/m3/8H)(skin)	orl-rat 836mg/kg
43.	Trichloroethene	35161	112322	0.05	5.00	40029.0	2000	NA	NA	0.017	NA	NA	2000.9	22.9	79-01-6	50 ppm (270mg/m3/8H)	orl-mus 2402mg/kg
44.	1,2,3-Trichloropropane	35161	112322	0.05	5.00	40007.5	2000	NA	NA	0.017	NA	NA	1999.9	22.9	96-18-4	10 ppm (60mg/m3/8H)	orl-rat 149.6mg/kg
45.	Benzene	35162	050823	0.05	5.00	40005.0	2000	NA	NA	0.017	NA	NA	1999.7	22.9	71-43-2	1 ppm	orl-rat 4894mg/kg
46.	Bromobenzene	35162	050823	0.05	5.00	40006.9	2000	NA	NA	0.017	NA	NA	1999.8	22.9	108-86-1	N/A	orl-rat 2699mg/kg
47.	n-Butyl benzene	35162	050823	0.05	5.00	40003.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	104-51-8	N/A	N/A
48.	Ethyl benzene	35162	050823	0.05	5.00	40004.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	100-41-4	100 ppm (435mg/m3/8H)	orl-rat >2000mg/kg
49.	p-Isopropyl toluene	35162	050823	0.05	5.00	40005.6	2000	NA	NA	0.017	NA	NA	1999.8	22.9	99-87-6	N/A	orl-rat 4750mg/kg
50.	Naphthalene	35162	050823	0.05	5.00	40006.2	2000	NA	NA	0.017	NA	NA	1999.8	22.9	91-20-3	10 ppm (50mg/m3/8H)	orl-rat 490mg/kg
51.	Styrene	35162	050823	0.05	5.00	40004.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	100-42-5	100 ppm	orl-rat 5000mg/kg
52.	Toluene	35162	050823	0.05	5.00	40006.2	2000	NA	NA	0.017	NA	NA	1999.8	22.9	108-88-3	200 ppm	orl-rat 5000mg/kg
53.	1,2,3-Trichlorobenzene	35162	050823	0.05	5.00	40003.1	2000	NA	NA	0.017	NA	NA	1999.7	22.9	87-61-6	N/A	ipr-mus 1390mg/kg
54.	1,2,4-Trichlorobenzene	35162	050823	0.05	5.00	40006.8	2000	NA	NA	0.017	NA	NA	1999.8	22.9	120-82-1	5 ppm (CL) (40mg/m3)	orl-rat 756mg/kg
55.	1,2,4-Trimethylbenzene	35162	050823	0.05	5.00	40001.6	2000	NA	NA	0.017	NA	NA	1999.6	23.0	95-63-6	N/A	orl-rat 5g/kg
56.	1,3,5-Trimethylbenzene	35162	050823	0.05	5.00	40006.7	2000	NA	NA	0.017	NA	NA	1999.8	22.9	108-67-8	N/A	orl-rat 5000mg/kg
57.	m-Xylene	35162	050823	0.05	5.00	40005.8	2000	NA	NA	0.017	NA	NA	1999.8	22.9	108-38-3	100 ppm (435mg/m3/8H)	orl-rat 5g/kg
58.	tert-Butyl benzene	35163	101923	0.05	5.00	40001.2	2000	NA	NA	0.017	NA	NA	1999.6	22.9	98-06-6	N/A	N/A
59.	sec-Butyl benzene	35163	101923	0.05	5.00	40002.4	2000	NA	NA	0.017	NA	NA	1999.6	22.9	135-98-8	N/A	orl-rat 2240mg/kg
60.	Chlorobenzene	35163	101923	0.05	5.00	40003.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	108-90-7	75 ppm (350mg/m3/8H)	orl-rat 2290mg/kg
61.	2-Chlorotoluene	35163	101923	0.05	5.00	40000.3	2000	NA	NA	0.017	NA	NA	1999.5	22.9	95-49-8	50 ppm (250mg/m3/8H)	orl-rat 3900mg/kg
62.	4-Chlorotoluene	35163	101923	0.05	5.00	40003.3	2000	NA	NA	0.017	NA	NA	1999.7	22.9	106-43-4	N/A	orl-rat 2100mg/kg
63.	1,2-Dichlorobenzene	35163	101923	0.05	5.00	40003.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	95-50-1	50 ppm (300mg/m3) (CL)	orl-rat 500mg/kg
64.	1,3-Dichlorobenzene	35163	101923	0.05	5.00	40001.7	2000	NA	NA	0.017	NA	NA	1999.6	23.0	541-73-1	N/A	ipr-mus 1062mg/kg
65.	1,4-Dichlorobenzene	35163	101923	0.05	5.00	40001.8	2000	NA	NA	0.017	NA	NA	1999.6	22.9	106-46-7	75 ppm (450mg/m3/8H)	orl-rat 500mg/kg
66.	Isopropylbenzene	35163	101923	0.05	5.00	40000.8	2000	NA	NA	0.017	NA	NA	1999.5	22.9	98-82-8	50 ppm (245mg/m3/8H)	orl-rat 1400mg/kg
67.	n-Propylbenzene	35163	101923	0.05	5.00	40003.4	2000	NA	NA	0.017	NA	NA	1999.7	23.0	103-65-1	N/A	orl-rat 6040mg/kg
68.	o-Xylene	35163	101923	0.05	5.00	40040.8	2000	NA	NA	0.017	NA	NA	2001.5	23.0	95-47-6	100 ppm (435mg/m3/8H)	ipr-mus 1364mg/kg
69.	p-Xylene	35163	101923	0.05	5.00	40000.6	2000	NA	NA	0.017	NA	NA	1999.5	22.9	106-42-3	100 ppm (435mg/m3/8H)	orl-rat 5g/kg

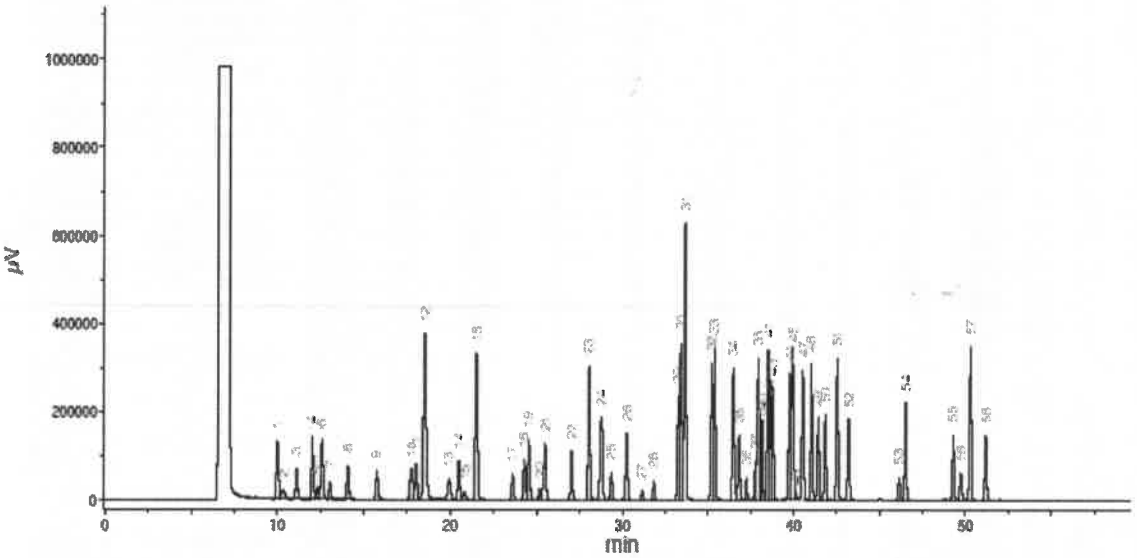
- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty References: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

Run 17, "P95317 L021524 [2000µg/mL in MeOH]"

Run Length: 60.00 min, 35998 points at 10 points/second.
Created: Sat, Feb 17, 2024 at 10:04:27 AM.
Sampled: Sequence "021624-GC5M1", Method "GC5-M1".
Analyzed using Method "GC5-M1".

Comments

GC5-M1 Analysis by Candice Warren
Column ID SPB-Vocol 105 meter X 0.53mm X 3.0µm film thickness
Flow rates: Total flow=290mL/min., Helium (carrier)=10mL/min.,
Helium(make-up)=10mL/min., Hydrogen(make-up)=40mL/min., Air(make-up)=230mL/min.
Oven Profile: Temp. 1=35°C (Time 1=10 min.), Temp 2=200°C (Time 2=8.75 min.),
Rate = 4°C/min., Total run time=60 min. Injector temp.=200°C, FID Temp.=200°C.
FID Signal = Edaq Channel 1
Standard injection = 0.5µL, Range=3



Peak #	Name	FID RT (min.)
1	Ether	9.97
2	1,1,2-Trichloro-1,2,2-trifluoroethane	10.33
3	1,1-Dichloroethene	11.10
4	Acetonitrile	12.00
5	Iodomethane	12.31
6	Allyl chloride	12.56
7	Carbon disulfide/Methylene chloride	13.04
8	trans-1,2-Dichloroethene	14.07
9	1,1-Dichloroethane	15.74
10	2,2-Dichloropropane	17.74
11	cis-1,2-Dichloroethene	18.00
12	Methacrylonitrile/Methyl acrylate/Chloroform	18.49
13	Isobutanol/1,1,1-Trichloroethane	19.91
14	1,1-Dichloropropene	20.46
15	Carbon tetrachloride	20.79
16	Benzene/1,2-Dichloroethane	21.48
17	Trichloroethene	23.58
18	1,2-Dichloropropane	24.26
19	Methyl methacrylate	24.52
20	Bromodichloromethane	25.13
21	Dibromomethane/2-Nitropropane	25.46
22	cis-1,3-Dichloropropene	27.02
23	Toluene	28.05
24	Ethyl methacrylate/trans-1,3-Dichloropropene	28.73
25	1,1,2-Trichloroethane	29.34
26	Tetrachloroethene/1,3-Dichloropropane	30.24
27	Dibromochloromethane	31.16
28	1,2-Dibromoethane	31.84
29	Chlorobenzene	33.26
30	Ethylbenzene/1,1,1,2-Tetrachloroethane	33.40
31	m-Xylene/p-Xylene	33.66
32	o-Xylene	33.22
33	Styrene	35.39
34	Isopropylbenzene/Bromoform	36.48
35	cis-1,4-Dichloro-2-butene	36.80
36	1,1,2,2-Tetrachloroethane	37.23
37	1,2,3-Trichloropropane	37.77
38	n-Propylbenzene	37.92
39	trans-1,4-Dichloro-2-butene	38.05
40	Bromobenzene	38.14
41	1,3,5-Trimethylbenzene	38.50
42	2-Chlorotoluene	38.62
43	4-Chlorotoluene	38.77
44	tert-Butylbenzene	39.76
45	1,2,4-Trimethylbenzene	39.91
46	Pentachloroethane	40.17
47	sec-Butylbenzene	40.52
48	p-Isopropyltoluene	41.02
49	1,3-Dichlorobenzene	41.42
50	1,4-Dichlorobenzene	41.83
51	n-Butylbenzene	42.52
52	1,2-Dichlorobenzene	43.18
53	1,2-Dibromo-3-chloropropane	46.12
54	Nitrobenzene	46.48
55	1,2,4-Trichlorobenzene	48.26
56	Hexachlorobutadiene	49.22
57	Naphthalene	50.26
58	1,2,3-Trichlorobenzene	51.16

CERTIFIED WEIGHT REPORT

Part Number: 95317
Lot Number: 021624
Description: Universal VOA Megamix
69 components
Expiration Date: 021627
Recommended Storage: Freezer (0 °C)
Nominal Concentration (µg/mL): 2000
NIST Test ID#: 6UTB

Solvent(s): Lot#
Methanol EG359-USQ12

Formulated By: Prashant Chauhan 021624 DATE

Reviewed By: Pedro L. Rentas 021624 DATE

Weight(s) shown below were combined and diluted to (mL): 100.0 0.021 Flask Uncertainty 5E-05 Balance Uncertainty

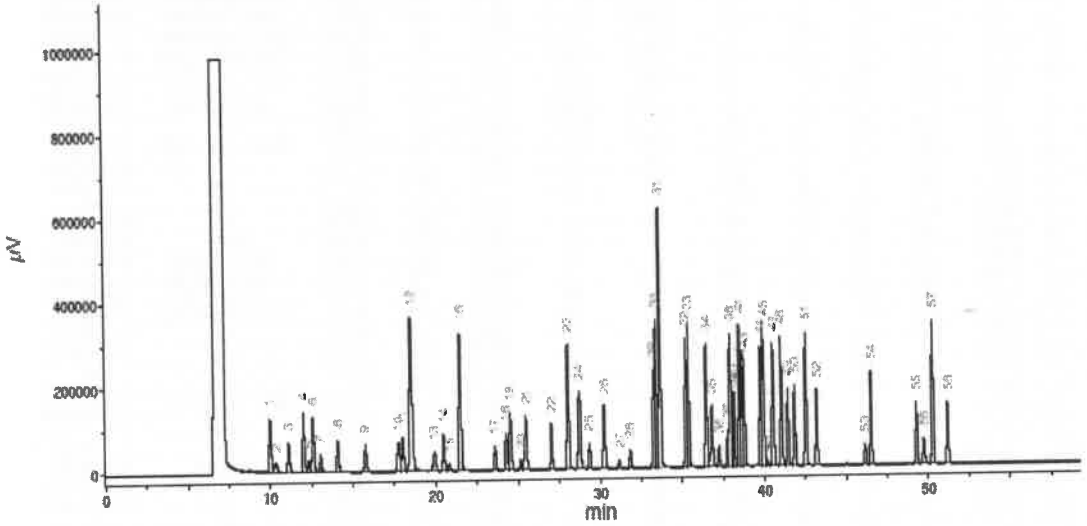
Compound	(RM#) Part Number	Lot Number	Dil. Factor	Initial Vol. (mL)	Initial Conc.(ug/mL)	Nominal Conc (µg/mL)	Purity (%)	Purity Uncertainty	Uncertainty Pipette (mL)	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Acetonitrile	(0324)	021644	NA	NA	NA	2000	99.99	0.2	NA	0.20007	0.20020	2001.3	8.1	75-05-8	40 ppm (70mg/m3/8H)	orl-rat 2460mg/kg
2. Allyl chloride (3-Chloropropene)	(0325)	102396	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20221	2001.4	8.2	107-05-1	1 ppm (3mg/m3/8H)	orl-rat 700mg/kg
3. Carbon disulphide	(0060)	MKCR8561	NA	NA	NA	2000	99.99	0.2	NA	0.20007	0.20023	2001.6	8.1	75-15-0	4 ppm (12mg/m3) (skin)	orl-rat 1200mg/kg
4. cis-1,4-Dichloro-2-butene	(1196)	14718EF	NA	NA	NA	2000	95	0.2	NA	0.21058	0.21069	2001.1	8.5	1476-11-5	N/A	N/A
5. trans-1,4-Dichloro-2-butene	(0486)	MKBP6041V	NA	NA	NA	2000	96.5	0.2	NA	0.20731	0.20748	2001.7	8.4	110-57-6	N/A	N/A
6. Diethyl ether	(0153)	IK18CAS0000	NA	NA	NA	2000	99.9	0.2	NA	0.20025	0.20040	2001.5	8.1	60-29-7	N/A	N/A
7. Ethyl methacrylate	(0361)	06126PX	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20230	2002.3	8.2	97-63-2	N/A	orl-rat 14800mg/kg
8. Iodomethane	(0489)	SHBF8718V	NA	NA	NA	2000	99.5	0.2	NA	0.20106	0.20121	2001.5	8.2	74-88-4	5 ppm(28mg/m3/8H)(skin)	orl-rat 76mg/kg
9. 2-Methyl-1-propanol	(0445)	15241EB	NA	NA	NA	2000	99.5	0.2	NA	0.20106	0.20120	2001.4	8.1	78-83-1	50 ppm (150mg/m3/8H)	orl-rat 2460mg/kg
10. Methacrylonitrile	(0442)	00427ET	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20221	2001.4	8.2	126-98-7	1 ppm (3mg/m3/8H)(skin)	orl-rat 120mg/kg
11. Methyl acrylate	(1075)	SHBK0679	NA	NA	NA	2000	99.9	0.2	NA	0.20025	0.20040	2001.5	8.1	96-33-3	10 ppm(35mg/m3/8H)(skin)	orl-rat 277mg/kg
12. Methyl methacrylate	(0404)	MKBW5137V	NA	NA	NA	2000	99.9	0.2	NA	0.20025	0.20041	2001.6	8.1	80-62-6	100 ppm (410mg/m3/8H)	orl-rat 7872mg/kg
13. Nitrobenzene	(0228)	01213TV	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20220	2001.3	8.2	98-95-3	1 ppm (5mg/m3/8H)(skin)	orl-rat 780mg/kg
14. 2-Nitropropane	(0461)	14002JX	NA	NA	NA	2000	97.3	0.2	NA	0.20560	0.20577	2001.6	8.3	79-46-9	10 ppm (35mg/m3/8H)	orl-rat 720mg/kg
15. Pentachloroethane	(0450)	HGA01	NA	NA	NA	2000	98	0.2	NA	0.20413	0.20430	2001.6	8.3	76-01-7	N/A	N/A
16. 1,1,2-Trichlorotrifluoroethane	(0474)	18930	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20225	2001.8	8.2	76-13-1	1000 ppm (7600mg/m3/8H)	orl-rat 43g/kg
17. Bromodichloromethane	35171	101623	0.05	5.00	40001.7	2000	NA	NA	0.017	NA	NA	1999.6	22.9	75-27-4	N/A	orl-rat 916mg/kg
18. Dibromochloromethane	35171	101623	0.05	5.00	40002.1	2000	NA	NA	0.017	NA	NA	1999.6	23.0	124-48-1	N/A	orl-rat 848mg/kg
19. cis-1,2-Dichloroethene	35171	101623	0.05	5.00	40003.1	2000	NA	NA	0.017	NA	NA	1999.7	22.9	156-59-2	N/A	N/A
20. trans-1,2-Dichloroethene	35171	101623	0.05	5.00	40002.4	2000	NA	NA	0.017	NA	NA	1999.6	23.0	156-60-5	N/A	orl-rat 1235mg/kg
21. Methylene chloride	35171	101623	0.05	5.00	40002.8	2000	NA	NA	0.017	NA	NA	1999.6	22.9	75-09-2	500 ppm	orl-rat 820mg/kg
22. 1,1-Dichloroethene	32251	102023	0.10	10.00	20001.6	2000	NA	NA	0.042	NA	NA	1999.7	20.4	75-35-4	1 ppm (4mg/m3/8H)	orl-rat 200mg/kg
23. Bromoform	95321	020724	0.10	10.00	20003.2	2000	NA	NA	0.042	NA	NA	1999.8	20.5	75-25-2	0.5 ppm (5mg/m3) (skin)	orl-rat 933mg/kg
24. Carbon tetrachloride	95321	020724	0.10	10.00	20003.4	2000	NA	NA	0.042	NA	NA	1999.8	20.4	56-23-5	2 ppm (12.6mg/m3/8H)	orl-rat 2350mg/kg
25. Chloroform	95321	020724	0.10	10.00	20024.0	2000	NA	NA	0.042	NA	NA	2001.9	20.5	67-66-3	50 ppm (240mg/m3) (CL)	orl-rat 908mg/kg
26. Dibromomethane	95321	020724	0.10	10.00	20002.9	2000	NA	NA	0.042	NA	NA	1999.8	20.5	74-95-3	N/A	orl-rat 108mg/kg
27. 1,1-Dichloroethane	95321	020724	0.10	10.00	20003.4	2000	NA	NA	0.042	NA	NA	1999.8	20.5	75-34-3	100 ppm	orl-rat 725mg/kg
28. 2,2-Dichloropropane	95321	020724	0.10	10.00	20003.4	2000	NA	NA	0.042	NA	NA	1999.8	20.4	594-20-7	N/A	N/A
29. Tetrachloroethene	95321	020724	0.10	10.00	20201.1	2000	NA	NA	0.042	NA	NA	2019.6	20.6	127-18-4	25 ppm (170mg/m3/8H)(final)	orl-rat 2629mg/kg
30. 1,1,1-Trichloroethane	95321	020724	0.10	10.00	20003.0	2000	NA	NA	0.042	NA	NA	1999.8	20.5	71-55-6	350 ppm (1900mg/m3/8H)	orl-rat 10300mg/kg
31. 1,2-Dibromo-3-chloropropane	35161	112322	0.05	5.00	40016.5	2000	NA	NA	0.017	NA	NA	2000.3	22.9	96-12-8	0.001 ppm	orl-rat 170mg/kg
32. 1,2-Dibromoethane	35161	112322	0.05	5.00	40024.8	2000	NA	NA	0.017	NA	NA	2000.7	22.9	106-93-4	20 ppm (8H)	orl-rat 108mg/kg
33. 1,2-Dichloroethane	35161	112322	0.05	5.00	40018.0	2000	NA	NA	0.017	NA	NA	2000.4	22.9	107-06-2	50 ppm (8H)	orl-rat 670mg/kg
34. 1,2-Dichloropropane	35161	112322	0.05	5.00	40051.0	2000	NA	NA	0.017	NA	NA	2002.0	22.9	78-87-5	75 ppm (350mg/m3/8H)	orl-rat 1947mg/kg
35. 1,3-Dichloropropane	35161	112322	0.05	5.00	40005.9	2000	NA	NA	0.017	NA	NA	1999.8	22.9	142-28-9	N/A	unr-mus 3600mg/kg
36. 1,1-Dichloropropene	35161	112322	0.05	5.00	40012.1	2000	NA	NA	0.017	NA	NA	2000.1	29.7	563-58-6	N/A	N/A
37. cis-1,3-Dichloropropene	35161	112322	0.05	5.00	40010.0	2000	NA	NA	0.017	NA	NA	2000.0	23.0	10061-01-5	N/A	N/A
38. trans-1,3-Dichloropropene	35161	112322	0.05	5.00	40017.8	2000	NA	NA	0.017	NA	NA	2000.4	23.0	10061-02-6	N/A	N/A
39. Hexachloro-1,3-butadiene	35161	112322	0.05	5.00	40021.9	2000	NA	NA	0.017	NA	NA	2000.6	29.7	87-68-3	0.02 ppm (0.24mg/m3/8H)	orl-rat 82mg/kg
40. 1,1,1,2-Tetrachloroethane	35161	112322	0.05	5.00	40011.9	2000	NA	NA	0.017	NA	NA	2000.1	22.9	630-20-6	N/A	orl-rat 670mg/kg
41. 1,1,2,2-Tetrachloroethane	35161	112322	0.05	5.00	40007.5	2000	NA	NA	0.017	NA	NA	1999.9	22.9	79-34-5	5 ppm (35mg/m3/8H)(skin)	orl-rat 800mg/kg
42. 1,1,2-Trichloroethane	35161	112322	0.05	5.00	40006.6	2000	NA	NA	0.017	NA	NA	1999.8	23.0	79-00-5	10 ppm (46mg/m3/8H)(skin)	orl-rat 836mg/kg
43. Trichloroethene	35161	112322	0.05	5.00	40029.0	2000	NA	NA	0.017	NA	NA	2000.9	22.9	79-01-6	50 ppm (270mg/m3/8H)	orl-mus 2402mg/kg
44. 1,2,3-Trichloropropane	35161	112322	0.05	5.00	40007.5	2000	NA	NA	0.017	NA	NA	1999.9	22.9	96-18-4	10 ppm (60mg/m3/8H)	orl-rat 149.6mg/kg
45. Benzene	35162	050823	0.05	5.00	40005.0	2000	NA	NA	0.017	NA	NA	1999.7	22.9	71-43-2	1 ppm	orl-rat 4894mg/kg
46. Bromobenzene	35162	050823	0.05	5.00	40006.9	2000	NA	NA	0.017	NA	NA	1999.8	22.9	108-86-1	N/A	orl-rat 2699mg/kg
47. n-Butyl benzene	35162	050823	0.05	5.00	40003.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	104-51-8	N/A	N/A
48. Ethyl benzene	35162	050823	0.05	5.00	40004.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	100-41-4	100 ppm (435mg/m3/8H)	orl-rat >2000mg/kg
49. p-Isopropyl toluene	35162	050823	0.05	5.00	40005.8	2000	NA	NA	0.017	NA	NA	1999.8	22.9	99-87-6	N/A	orl-rat 4750mg/kg
50. Naphthalene	35162	050823	0.05	5.00	40006.2	2000	NA	NA	0.017	NA	NA	1999.8	22.9	91-20-3	10 ppm (50mg/m3/8H)	orl-rat 490mg/kg
51. Styrene	35162	050823	0.05	5.00	40004.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	100-42-5	100 ppm	orl-rat 5000mg/kg
52. Toluene	35162	050823	0.05	5.00	40006.2	2000	NA	NA	0.017	NA	NA	1999.8	22.9	108-88-3	200 ppm	orl-rat 5000mg/kg
53. 1,2,3-Trichlorobenzene	35162	050823	0.05	5.00	40003.1	2000	NA	NA	0.017	NA	NA	1999.7	22.9	87-61-6	N/A	ipr-mus 1390mg/kg
54. 1,2,4-Trichlorobenzene	35162	050823	0.05	5.00	40006.8	2000	NA	NA	0.017	NA	NA	1999.8	22.9	120-82-1	5 ppm (CL) (40mg/m3)	orl-rat 756mg/kg
55. 1,2,4-Trimethylbenzene	35162	050823	0.05	5.00	40001.6	2000	NA	NA	0.017	NA	NA	1999.6	23.0	95-63-6	N/A	orl-rat 5g/kg
56. 1,3,5-Trimethylbenzene	35162	050823	0.05	5.00	40006.7	2000	NA	NA	0.017	NA	NA	1999.8	22.9	108-67-8	N/A	orl-rat 5000mg/kg
57. m-Xylene	35162	050823	0.05	5.00	40005.8	2000	NA	NA	0.017	NA	NA	1999.8	22.9	108-38-3	100 ppm (435mg/m3/8H)	orl-rat 5g/kg
58. tert-Butyl benzene	35163	101923	0.05	5.00	40001.2	2000	NA	NA	0.017	NA	NA	1999.6	22.9	98-06-6	N/A	N/A
59. sec-Butyl benzene	35163	101923	0.05	5.00	40002.4	2000	NA	NA	0.017	NA	NA	1999.6	22.9	135-98-8	N/A	orl-rat 2240mg/kg
60. Chlorobenzene	35163	101923	0.05	5.00	40003.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	108-90-7	75 ppm (350mg/m3/8H)	orl-rat 2290mg/kg
61. 2-Chlorotoluene	35163	101923	0.05	5.00	40000.3	2000	NA	NA	0.017	NA	NA	1999.5	22.9	95-49-8	50 ppm (250mg/m3/8H)	orl-rat 3900mg/kg
62. 4-Chlorotoluene	35163	101923	0.05	5.00	40003.3	2000	NA	NA	0.017	NA	NA	1999.7	22.9	106-43-4	N/A	orl-rat 2100mg/kg
63. 1,2-Dichlorobenzene	35163	101923	0.05	5.00	40003.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	95-50-1	50 ppm (300mg/m3) (CL)	orl-rat 500mg/kg
64. 1,3-Dichlorobenzene	35163	101923	0.05	5.00	40001.7	2000	NA	NA	0.017	NA	NA	1999.6	23.0	541-73-1	N/A	ipr-mus 1062mg/kg
65. 1,4-Dichlorobenzene	35163	101923	0.05	5.00	40001.8	2000	NA	NA	0.017	NA	NA	1999.6	22.9	106-46-7	75 ppm (450mg/m3/8H)	orl-rat 500mg/kg
66. Isopropylbenzene	35163	101923	0.05	5.00	40000.8	2000	NA	NA	0.017	NA	NA	1999.5	22.9	98-82-8	50 ppm (245mg/m3/8H)	orl-rat 1400mg/kg
67. n-Propylbenzene	35163	101923	0.05	5.00	40003.4	2000	NA	NA	0.017	NA	NA	1999.7	23.0	103-65-1	N/A	orl-rat 6040mg/kg
68. o-Xylene	35163	101923	0.05	5.00	40040.8	2000	NA	NA	0.017	NA	NA	2001.5	23.0	95-47-6	100 ppm (435mg/m3/8H)	ipr-mus 1364mg/kg
69. p-Xylene	35163	101923	0.05	5.00	40000.6	2000	NA	NA	0.017	NA	NA	1999.5	22.9	106-42-3	100 ppm (435mg/m3/8H)	orl-rat 5g/kg

- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening sample, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty References: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

Run 16, "P95317 L021624 [2000µg/mL in MeOH]"

Run Length: 60.00 min, 35998 points at 10 points/second.
Created: Sat, Feb 17, 2024 at 8:56:46 AM.
Sampled: Sequence "021624-GC5M1", Method "GC5-M1".
Analyzed using Method "GC5-M1".

Comments
GC5-M1 Analysis by Candice Warren
Column ID SPB-Vocol 105 meter X 0.53mm X 3.0µm film thickness
Flow rates: Total flow=290mL/min., Helium (carrier)=10mL/min.,
Helium(make-up)=10mL/min., Hydogen(make-up)=40mL/min., Air(make-up)=230mL/min.
Oven Profile: Temp. 1=35°C (Time 1=10 min.), Temp 2=200°C (Time 2=8.75 min.),
Rate = 4°C/min., Total run time=60 min. Injector temp.=200°C, FID Temp.=200°C.
FID Signal = Edaq Channel 1
Standard injection = 0.5µL, Range=3



Peak #	Name	FID RT (min.)
1	Ether	9.97
2	1,1,2-Trichloro-1,2,2-trifluoroethane	10.33
3	1,1-Dichloroethene	11.10
4	Acetonitrile	12.00
5	Iodomethane	12.31
6	Allyl chloride	12.56
7	Carbon disulfide/Methylene chloride	13.04
8	trans-1,2-Dichloroethene	14.07
9	1,1-Dichloroethane	15.74
10	2,2-Dichloropropane	17.74
11	cis-1,2-Dichloroethene	18.00
12	Methacrylonitrile/Methyl acrylate/Chloroform	18.46
13	Isobutanol/1,1,1-Trichloroethane	19.91
14	1,1-Dichloropropene	20.46
15	Carbon tetrachloride	20.79
16	Benzene/1,2-Dichloroethane	21.49
17	Trichloroethene	23.58
18	1,2-Dichloropropane	24.28
19	Methyl methacrylate	24.52
20	Bromodichloromethane	25.13
21	Dibromomethane/2-Nitropropane	25.46
22	cis-1,3-Dichloropropene	27.02
23	Toluene	28.05
24	Ethyl methacrylate/trans-1,3-Dichloropropene	28.73
25	1,1,2-Trichloroethane	29.34
26	Tetrachloroethene/1,3-Dichloropropane	30.24
27	Dibromochloromethane	31.16
28	1,2-Dibromoethane	31.84
29	Chlorobenzene	33.26
30	Ethylbenzene/1,1,1,2-Tetrachloroethane	33.40
31	m-Xylene/p-Xylene	33.86
32	o-Xylene	35.22
33	Styrene	35.38
34	Isopropylbenzene/Bromoform	36.18
35	cis-1,4-Dichloro-2-Butene	36.80
36	1,1,2,2-Tetrachloroethane	37.23
37	1,2,3-Trichloropropane	37.77
38	n-Propylbenzene	37.93
39	trans-1,4-Dichloro-2-Butene	38.05
40	Bromobenzene	38.14
41	1,3,5-Trimethylbenzene	38.80
42	2-Chlorotoluene	38.82
43	4-Chlorotoluene	38.77
44	tert-Butylbenzene	39.76
45	1,2,4-Trimethylbenzene	39.91
46	Pentachloroethane	40.17
47	sec-Butylbenzene	40.52
48	p-Isopropyltoluene	41.02
49	1,3-Dichlorobenzene	41.42
50	1,4-Dichlorobenzene	41.83
51	n-Butylbenzene	42.53
52	1,2-Dichlorobenzene	43.18
53	1,2-Dibromo-3-chloropropane	46.12
54	Nitrobenzene	46.48
55	1,2,4-Trichlorobenzene	49.26
56	Hexachlorobutadiene	49.72
57	Naphthalene	50.26
58	1,2,3-Trichlorobenzene	51.16

Absolute Standards Inc.
PO Box 5585
Hamden, CT 06518-0585
Phone: 203-281-2917
FAX: 203-281-2922

Safety Data Sheet (SDS) GHS/OSHA Compliant

Section I Product and Company Identification

IDENTITY **ANALYTICAL STANDARD DISSOLVED IN METHANOL**

Manufacturer's Name	ABSOLUTE STANDARDS INC	Emergency Telephone USA & CANADA	**1-800-535-5053**
Address	44 Rossotto Dr. Hamden CT, 06514	Emergency Telephone International	**1-352-323-3500**
		Date Prepared/Revised	January 1, 2023

Section II - Hazards Identification

GHS Classification In accordance with 29 CFR 1910 (OSHA HCS)

H225	**Highly Flammable Liquid and Vapor**	**H301, 311, 331**	**Toxic if swallowed, skin contact, inhaled**
H370	**Cause damage to organs**	**H351**	**Suspected of causing cancer**
P271	**Use in ventilated area**	**P280**	**Use gloves, eye protection/face sheild**
P302,332	**If on skin, wash with soap and water**	**P305,351,338**	**If in eyes, remove contacts, rinse with water**

Signal Word: DANGER

Section III - Composition

Components (Specific Chemical Identity; Common Name(s))			% (optional)
Methanol	METHYL ALCOHOL	CAS#: 67-56-1	> 97

See Certified Weight Report For Other Analytes Present At Trace Quantities.

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance.Move to safe area.
If inhaled	If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact	Wash with soap and water. Consult a physician.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed	Do NOT induce vomiting. Rinse mouth with water. Consult a physician.

Section V. FIREFIGHTING MEASURES

Flammability	Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking.
Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Protective equipment for fire	Wear self contained breathing apparatus for fire fighting if necessary.

Section VI. ACCIDENTAL RELEASE MEASURES

Personal precautions	Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Clean up	Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13).

Section VII. HANDLING AND STORAGE

Precautions for safe handling	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use ventilation Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge.
Storage Conditions	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Methanol 67-56-1 TWA 200 ppm
Skin notation TWA 200 ppm
Potential for skin absorption , ingestion and inhalation.
Personal protective equipment Respiratory protection Handle with gloves. Gloves must be inspected prior to use. Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.

Section IX - Physical/Chemical Characteristics

Boiling Point	65°C	Specific Gravity (H2O = 1)	0.79
Vapor Pressure (mm Hg)	96	Melting Point	-98°C
Vapor Density (AIR = 1)	1.11	Evaporation rate (Butyl Acetate = 1)	4.6

Solubility in Water COMPLETE

Appearance and Odor CLEAR, COLORLESS LIQUID WITH CHARACTERISTIC PUNGENT ODOR.

Section X. STABILITY AND REACTIVITY

Chemical stability — Stable under recommended storage conditions.
Possibility of hazardous reactions — Vapours may form explosive mixture with air.
Conditions to avoid — Heat, flames, sparks, extreme temperature and sunlight.
Materials to avoid — Acid chlorides, Acid anhydrides, Oxidizing agents, Alkali metals, Reducing agents, Acids
Hazardous decomposition products formed under fire conditions. - Carbon oxides

Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - rat - 5,628 mg/kg
LC50 Inhalation - rat - 4 h - 64000 ppm
LD50 Dermal - rabbit - 15,800 mg/kg
Toxic if absorbed through skin. Causes skin irritation.
Eye damage/eye irritation
Toxic if inhaled. Causes respiratory tract irritation.
Toxic if swallowed.

Section XII. ECOLOGICAL INFORMATION FOR REPORTABLE QUANTITY OF 5000 lbs.

LC50	15,400 mg/l - 96 h
EC50	24,500.00 mg/l - 48 h
EC100	10,000.00 mg/l - 24 h

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

DOT (US)
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

IATA
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

Section XV. REGULATORY INFORMATION

OSHA Hazards Flammable liquid, Target Organ Effect, Toxic by inhalation., Toxic by ingestion, Toxic by skin absorption, Irritant
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Section XVI. Misc. INFORMATION

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, ABSOLUTE STANDARDS INC. cannot warn of all the potential dangers of use or interaction with other chemicals or substances. ABSOLUTE STANDARDS INC. warrants that the chemical meets the specifications set forth on the label. ABSOLUTE STANDARDS INC DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR APPLICATION. The user should recognize that this product can cause severe injury or death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Absolute Standards Inc. will periodically revise this Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.

CERTIFIED WEIGHT REPORT

Part Number: 95317
Lot Number: 021624
Description: Universal VOA Megamix
69 components
Expiration Date: 021627
Recommended Storage: Freezer (0 °C)
Nominal Concentration (µg/mL): 2000
NIST Test ID#: 6UTB

Solvent(s): Lot#
Methanol EG359-USQ12

Formulated By: Prashant Chauhan 021624 DATE

Reviewed By: Pedro L. Rentas 021624 DATE

Weight(s) shown below were combined and diluted to (mL): 100.0 0.021 Flask Uncertainty 5E-05 Balance Uncertainty

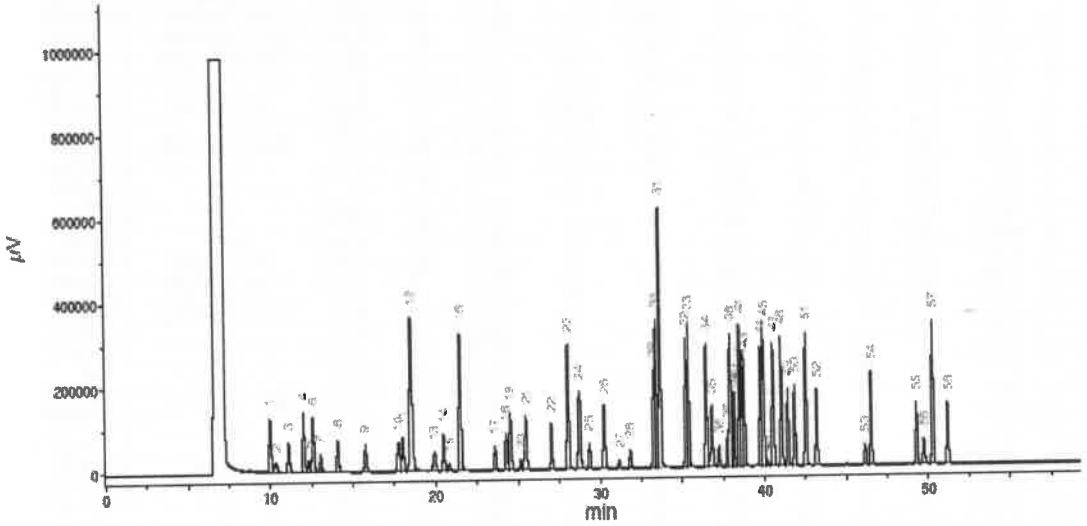
Compound	(RM#) Part Number	Lot Number	Dil. Factor	Initial Vol. (mL)	Initial Conc.(ug/mL)	Nominal Conc (µg/mL)	Purity (%)	Purity Uncertainty	Uncertainty Pipette (mL)	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Acetonitrile	(0324)	021644	NA	NA	NA	2000	99.99	0.2	NA	0.20007	0.20020	2001.3	8.1	75-05-8	40 ppm (70mg/m3/8H)	orl-rat 2460mg/kg
2. Allyl chloride (3-Chloropropene)	(0325)	102396	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20221	2001.4	8.2	107-05-1	1 ppm (3mg/m3/8H)	orl-rat 700mg/kg
3. Carbon disulphide	(0060)	MKCR8561	NA	NA	NA	2000	99.99	0.2	NA	0.20007	0.20023	2001.6	8.1	75-15-0	4 ppm (12mg/m3) (skin)	orl-rat 1200mg/kg
4. cis-1,4-Dichloro-2-butene	(1196)	14718EF	NA	NA	NA	2000	95	0.2	NA	0.21058	0.21069	2001.1	8.5	1476-11-5	N/A	N/A
5. trans-1,4-Dichloro-2-butene	(0486)	MKBP6041V	NA	NA	NA	2000	96.5	0.2	NA	0.20731	0.20748	2001.7	8.4	110-57-6	N/A	N/A
6. Diethyl ether	(0153)	IK18CAS0000	NA	NA	NA	2000	99.9	0.2	NA	0.20025	0.20040	2001.5	8.1	60-29-7	N/A	N/A
7. Ethyl methacrylate	(0361)	06126PX	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20230	2002.3	8.2	97-63-2	N/A	orl-rat 14800mg/kg
8. Iodomethane	(0489)	SHBF8718V	NA	NA	NA	2000	99.5	0.2	NA	0.20106	0.20121	2001.5	8.2	74-88-4	5 ppm(28mg/m3/8H)(skin)	orl-rat 76mg/kg
9. 2-Methyl-1-propanol	(0445)	15241EB	NA	NA	NA	2000	99.5	0.2	NA	0.20106	0.20120	2001.4	8.1	78-83-1	50 ppm (150mg/m3/8H)	orl-rat 2460mg/kg
10. Methacrylonitrile	(0442)	00427ET	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20221	2001.4	8.2	126-98-7	1 ppm (3mg/m3/8H)(skin)	orl-rat 120mg/kg
11. Methyl acrylate	(1075)	SHBK0679	NA	NA	NA	2000	99.9	0.2	NA	0.20025	0.20040	2001.5	8.1	96-33-3	10 ppm(35mg/m3/8H)(skin)	orl-rat 277mg/kg
12. Methyl methacrylate	(0404)	MKBW5137V	NA	NA	NA	2000	99.9	0.2	NA	0.20025	0.20041	2001.6	8.1	80-62-6	100 ppm (410mg/m3/8H)	orl-rat 7872mg/kg
13. Nitrobenzene	(0228)	01213TV	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20220	2001.3	8.2	98-95-3	1 ppm (5mg/m3/8H)(skin)	orl-rat 780mg/kg
14. 2-Nitropropane	(0461)	14002JX	NA	NA	NA	2000	97.3	0.2	NA	0.20560	0.20577	2001.6	8.3	79-46-9	10 ppm (35mg/m3/8H)	orl-rat 720mg/kg
15. Pentachloroethane	(0450)	HGA01	NA	NA	NA	2000	98	0.2	NA	0.20413	0.20430	2001.6	8.3	76-01-7	N/A	N/A
16. 1,1,2-Trichlorotrifluoroethane	(0474)	18930	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20225	2001.8	8.2	76-13-1	1000 ppm (7600mg/m3/8H)	orl-rat 43g/kg
17. Bromodichloromethane	35171	101623	0.05	5.00	40001.7	2000	NA	NA	0.017	NA	NA	1999.6	22.9	75-27-4	N/A	orl-rat 916mg/kg
18. Dibromochloromethane	35171	101623	0.05	5.00	40002.1	2000	NA	NA	0.017	NA	NA	1999.6	23.0	124-48-1	N/A	orl-rat 848mg/kg
19. cis-1,2-Dichloroethene	35171	101623	0.05	5.00	40003.1	2000	NA	NA	0.017	NA	NA	1999.7	22.9	156-59-2	N/A	N/A
20. trans-1,2-Dichloroethene	35171	101623	0.05	5.00	40002.4	2000	NA	NA	0.017	NA	NA	1999.6	23.0	156-60-5	N/A	orl-rat 1235mg/kg
21. Methylene chloride	35171	101623	0.05	5.00	40002.8	2000	NA	NA	0.017	NA	NA	1999.6	22.9	75-09-2	500 ppm	orl-rat 820mg/kg
22. 1,1-Dichloroethene	32251	102023	0.10	10.00	20001.6	2000	NA	NA	0.042	NA	NA	1999.7	20.4	75-35-4	1 ppm (4mg/m3/8H)	orl-rat 200mg/kg
23. Bromoform	95321	020724	0.10	10.00	20003.2	2000	NA	NA	0.042	NA	NA	1999.8	20.5	75-25-2	0.5 ppm (5mg/m3) (skin)	orl-rat 933mg/kg
24. Carbon tetrachloride	95321	020724	0.10	10.00	20003.4	2000	NA	NA	0.042	NA	NA	1999.8	20.4	56-23-5	2 ppm (12.6mg/m3/8H)	orl-rat 2350mg/kg
25. Chloroform	95321	020724	0.10	10.00	20024.0	2000	NA	NA	0.042	NA	NA	2001.9	20.5	67-66-3	50 ppm (240mg/m3) (CL)	orl-rat 908mg/kg
26. Dibromomethane	95321	020724	0.10	10.00	20002.9	2000	NA	NA	0.042	NA	NA	1999.8	20.5	74-95-3	N/A	orl-rat 108mg/kg
27. 1,1-Dichloroethane	95321	020724	0.10	10.00	20003.4	2000	NA	NA	0.042	NA	NA	1999.8	20.5	75-34-3	100 ppm	orl-rat 725mg/kg
28. 2,2-Dichloropropane	95321	020724	0.10	10.00	20003.4	2000	NA	NA	0.042	NA	NA	1999.8	20.4	594-20-7	N/A	N/A
29. Tetrachloroethene	95321	020724	0.10	10.00	20201.1	2000	NA	NA	0.042	NA	NA	2019.6	20.6	127-18-4	25 ppm (170mg/m3/8H)(final)	orl-rat 2629mg/kg
30. 1,1,1-Trichloroethane	95321	020724	0.10	10.00	20003.0	2000	NA	NA	0.042	NA	NA	1999.8	20.5	71-55-6	350 ppm (1900mg/m3/8H)	orl-rat 10300mg/kg
31. 1,2-Dibromo-3-chloropropane	35161	112322	0.05	5.00	40016.5	2000	NA	NA	0.017	NA	NA	2000.3	22.9	96-12-8	0.001 ppm	orl-rat 170mg/kg
32. 1,2-Dibromoethane	35161	112322	0.05	5.00	40024.8	2000	NA	NA	0.017	NA	NA	2000.7	22.9	106-93-4	20 ppm (8H)	orl-rat 108mg/kg
33. 1,2-Dichloroethane	35161	112322	0.05	5.00	40018.0	2000	NA	NA	0.017	NA	NA	2000.4	22.9	107-06-2	50 ppm (8H)	orl-rat 670mg/kg
34. 1,2-Dichloropropane	35161	112322	0.05	5.00	40051.0	2000	NA	NA	0.017	NA	NA	2002.0	22.9	78-87-5	75 ppm (350mg/m3/8H)	orl-rat 1947mg/kg
35. 1,3-Dichloropropane	35161	112322	0.05	5.00	40005.9	2000	NA	NA	0.017	NA	NA	1999.8	22.9	142-28-9	N/A	unr-mus 3600mg/kg
36. 1,1-Dichloropropene	35161	112322	0.05	5.00	40012.1	2000	NA	NA	0.017	NA	NA	2000.1	29.7	563-58-6	N/A	N/A
37. cis-1,3-Dichloropropene	35161	112322	0.05	5.00	40010.0	2000	NA	NA	0.017	NA	NA	2000.0	23.0	10061-01-5	N/A	N/A
38. trans-1,3-Dichloropropene	35161	112322	0.05	5.00	40017.8	2000	NA	NA	0.017	NA	NA	2000.4	23.0	10061-02-6	N/A	N/A
39. Hexachloro-1,3-butadiene	35161	112322	0.05	5.00	40021.9	2000	NA	NA	0.017	NA	NA	2000.6	29.7	87-68-3	0.02 ppm (0.24mg/m3/8H)	orl-rat 82mg/kg
40. 1,1,1,2-Tetrachloroethane	35161	112322	0.05	5.00	40011.9	2000	NA	NA	0.017	NA	NA	2000.1	22.9	630-20-6	N/A	orl-rat 670mg/kg
41. 1,1,2,2-Tetrachloroethane	35161	112322	0.05	5.00	40007.5	2000	NA	NA	0.017	NA	NA	1999.9	22.9	79-34-5	5 ppm (35mg/m3/8H)(skin)	orl-rat 800mg/kg
42. 1,1,2-Trichloroethane	35161	112322	0.05	5.00	40006.6	2000	NA	NA	0.017	NA	NA	1999.8	23.0	79-00-5	10 ppm (46mg/m3/8H)(skin)	orl-rat 836mg/kg
43. Trichloroethene	35161	112322	0.05	5.00	40029.0	2000	NA	NA	0.017	NA	NA	2000.9	22.9	79-01-6	50 ppm (270mg/m3/8H)	orl-mus 2402mg/kg
44. 1,2,3-Trichloropropane	35161	112322	0.05	5.00	40007.5	2000	NA	NA	0.017	NA	NA	1999.9	22.9	96-18-4	10 ppm (60mg/m3/8H)	orl-rat 149.6mg/kg
45. Benzene	35162	050823	0.05	5.00	40005.0	2000	NA	NA	0.017	NA	NA	1999.7	22.9	71-43-2	1 ppm	orl-rat 4894mg/kg
46. Bromobenzene	35162	050823	0.05	5.00	40006.9	2000	NA	NA	0.017	NA	NA	1999.8	22.9	108-86-1	N/A	orl-rat 2699mg/kg
47. n-Butyl benzene	35162	050823	0.05	5.00	40003.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	104-51-8	N/A	N/A
48. Ethyl benzene	35162	050823	0.05	5.00	40004.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	100-41-4	100 ppm (435mg/m3/8H)	orl-rat >2000mg/kg
49. p-Isopropyl toluene	35162	050823	0.05	5.00	40005.8	2000	NA	NA	0.017	NA	NA	1999.8	22.9	99-87-6	N/A	orl-rat 4750mg/kg
50. Naphthalene	35162	050823	0.05	5.00	40006.2	2000	NA	NA	0.017	NA	NA	1999.8	22.9	91-20-3	10 ppm (50mg/m3/8H)	orl-rat 490mg/kg
51. Styrene	35162	050823	0.05	5.00	40004.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	100-42-5	100 ppm	orl-rat 5000mg/kg
52. Toluene	35162	050823	0.05	5.00	40006.2	2000	NA	NA	0.017	NA	NA	1999.8	22.9	108-88-3	200 ppm	orl-rat 5000mg/kg
53. 1,2,3-Trichlorobenzene	35162	050823	0.05	5.00	40003.1	2000	NA	NA	0.017	NA	NA	1999.7	22.9	87-61-6	N/A	ipr-mus 1390mg/kg
54. 1,2,4-Trichlorobenzene	35162	050823	0.05	5.00	40006.8	2000	NA	NA	0.017	NA	NA	1999.8	22.9	120-82-1	5 ppm (CL) (40mg/m3)	orl-rat 756mg/kg
55. 1,2,4-Trimethylbenzene	35162	050823	0.05	5.00	40001.6	2000	NA	NA	0.017	NA	NA	1999.6	23.0	95-63-6	N/A	orl-rat 5g/kg
56. 1,3,5-Trimethylbenzene	35162	050823	0.05	5.00	40006.7	2000	NA	NA	0.017	NA	NA	1999.8	22.9	108-67-8	N/A	orl-rat 5000mg/kg
57. m-Xylene	35162	050823	0.05	5.00	40005.8	2000	NA	NA	0.017	NA	NA	1999.8	22.9	108-38-3	100 ppm (435mg/m3/8H)	orl-rat 5g/kg
58. tert-Butyl benzene	35163	101923	0.05	5.00	40001.2	2000	NA	NA	0.017	NA	NA	1999.6	22.9	98-06-6	N/A	N/A
59. sec-Butyl benzene	35163	101923	0.05	5.00	40002.4	2000	NA	NA	0.017	NA	NA	1999.6	22.9	135-98-8	N/A	orl-rat 2240mg/kg
60. Chlorobenzene	35163	101923	0.05	5.00	40003.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	108-90-7	75 ppm (350mg/m3/8H)	orl-rat 2290mg/kg
61. 2-Chlorotoluene	35163	101923	0.05	5.00	40000.3	2000	NA	NA	0.017	NA	NA	1999.5	22.9	95-49-8	50 ppm (250mg/m3/8H)	orl-rat 3900mg/kg
62. 4-Chlorotoluene	35163	101923	0.05	5.00	40003.3	2000	NA	NA	0.017	NA	NA	1999.7	22.9	106-43-4	N/A	orl-rat 2100mg/kg
63. 1,2-Dichlorobenzene	35163	101923	0.05	5.00	40003.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	95-50-1	50 ppm (300mg/m3) (CL)	orl-rat 500mg/kg
64. 1,3-Dichlorobenzene	35163	101923	0.05	5.00	40001.7	2000	NA	NA	0.017	NA	NA	1999.6	23.0	541-73-1	N/A	ipr-mus 1062mg/kg
65. 1,4-Dichlorobenzene	35163	101923	0.05	5.00	40001.8	2000	NA	NA	0.017	NA	NA	1999.6	22.9	106-46-7	75 ppm (450mg/m3/8H)	orl-rat 500mg/kg
66. Isopropylbenzene	35163	101923	0.05	5.00	40000.8	2000	NA	NA	0.017	NA	NA	1999.5	22.9	98-82-8	50 ppm (245mg/m3/8H)	orl-rat 1400mg/kg
67. n-Propylbenzene	35163	101923	0.05	5.00	40003.4	2000	NA	NA	0.017	NA	NA	1999.7	23.0	103-65-1	N/A	orl-rat 6040mg/kg
68. o-Xylene	35163	101923	0.05	5.00	40040.8	2000	NA	NA	0.017	NA	NA	2001.5	23.0	95-47-6	100 ppm (435mg/m3/8H)	ipr-mus 1364mg/kg
69. p-Xylene	35163	101923	0.05	5.00	40000.6	2000	NA	NA	0.017	NA	NA	1999.5	22.9	106-42-3	100 ppm (435mg/m3/8H)	orl-rat 5g/kg

- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening sample, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty References: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

Run 16, "P95317 L021624 [2000µg/mL in MeOH]"

Run Length: 60.00 min, 35998 points at 10 points/second.
Created: Sat, Feb 17, 2024 at 8:56:46 AM.
Sampled: Sequence "021624-GC5M1", Method "GC5-M1".
Analyzed using Method "GC5-M1".

Comments
GC5-M1 Analysis by Candice Warren
Column ID SPB-Vocol 105 meter X 0.53mm X 3.0µm film thickness
Flow rates: Total flow=290mL/min., Helium (carrier)=10mL/min.,
Helium(make-up)=10mL/min., Hydogen(make-up)=40mL/min., Air(make-up)=230mL/min.
Oven Profile: Temp. 1=35°C (Time 1=10 min.), Temp 2=200°C (Time 2=8.75 min.),
Rate = 4°C/min., Total run time=60 min. Injector temp.=200°C, FID Temp.=200°C.
FID Signal = Edaq Channel 1
Standard injection = 0.5µL, Range=3



Peak #	Name	FID RT (min.)
1	Ether	9.97
2	1,1,2-Trichloro-1,2,2-trifluoroethane	10.33
3	1,1-Dichloroethene	11.10
4	Acetonitrile	12.00
5	Iodomethane	12.31
6	Allyl chloride	12.56
7	Carbon disulfide/Methylene chloride	13.04
8	trans-1,2-Dichloroethene	14.07
9	1,1-Dichloroethane	15.74
10	2,2-Dichloropropane	17.74
11	cis-1,2-Dichloroethene	18.00
12	Methacrylonitrile/Methyl acrylate/Chloroform	18.46
13	Isobutanol/1,1,1-Trichloroethane	19.91
14	1,1-Dichloropropene	20.46
15	Carbon tetrachloride	20.79
16	Benzene/1,2-Dichloroethane	21.49
17	Trichloroethene	23.58
18	1,2-Dichloropropane	24.28
19	Methyl methacrylate	24.52
20	Bromodichloromethane	25.13
21	Dibromomethane/2-Nitropropane	25.46
22	cis-1,3-Dichloropropene	27.02
23	Toluene	28.05
24	Ethyl methacrylate/trans-1,3-Dichloropropene	28.73
25	1,1,2-Trichloroethane	29.34
26	Tetrachloroethene/1,3-Dichloropropane	30.24
27	Dibromochloromethane	31.16
28	1,2-Dibromoethane	31.84
29	Chlorobenzene	33.26
30	Ethylbenzene/1,1,1,2-Tetrachloroethane	33.40
31	m-Xylene/p-Xylene	33.86
32	o-Xylene	35.22
33	Styrene	35.38
34	Isopropylbenzene/Bromoform	36.18
35	cis-1,4-Dichloro-2-Butene	36.80
36	1,1,2,2-Tetrachloroethane	37.23
37	1,2,3-Trichloropropane	37.77
38	n-Propylbenzene	37.93
39	trans-1,4-Dichloro-2-Butene	38.05
40	Bromobenzene	38.14
41	1,3,5-Trimethylbenzene	38.80
42	2-Chlorotoluene	38.82
43	4-Chlorotoluene	38.77
44	tert-Butylbenzene	39.76
45	1,2,4-Trimethylbenzene	39.91
46	Pentachloroethane	40.17
47	sec-Butylbenzene	40.52
48	p-Isopropyltoluene	41.02
49	1,3-Dichlorobenzene	41.42
50	1,4-Dichlorobenzene	41.83
51	n-Butylbenzene	42.53
52	1,2-Dichlorobenzene	43.18
53	1,2-Dibromo-3-chloropropane	46.12
54	Nitrobenzene	46.48
55	1,2,4-Trichlorobenzene	49.26
56	Hexachlorobutadiene	49.72
57	Naphthalene	50.26
58	1,2,3-Trichlorobenzene	51.16

Absolute Standards Inc.
PO Box 5585
Hamden, CT 06518-0585
Phone: 203-281-2917
FAX: 203-281-2922

Safety Data Sheet (SDS) GHS/OSHA Compliant

Section I Product and Company Identification

IDENTITY **ANALYTICAL STANDARD DISSOLVED IN METHANOL**

Manufacturer's Name	ABSOLUTE STANDARDS INC	Emergency Telephone USA & CANADA	**1-800-535-5053**
Address	44 Rossotto Dr. Hamden CT, 06514	Emergency Telephone International	**1-352-323-3500**
		Date Prepared/Revised	January 1, 2023

Section II - Hazards Identification

GHS Classification In accordance with 29 CFR 1910 (OSHA HCS)

H225	**Highly Flammable Liquid and Vapor**	**H301, 311, 331**	**Toxic if swallowed, skin contact, inhaled**
H370	**Cause damage to organs**	**H351**	**Suspected of causing cancer**
P271	**Use in ventilated area**	**P280**	**Use gloves, eye protection/face sheild**
P302,332	**If on skin, wash with soap and water**	**P305,351,338**	**If in eyes, remove contacts, rinse with water**

Signal Word: DANGER

Section III - Composition

Components (Specific Chemical Identity; Common Name(s))			% (optional)
Methanol	METHYL ALCOHOL	CAS#: 67-56-1	> 97

See Certified Weight Report For Other Analytes Present At Trace Quantities.

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance.Move to safe area.
If inhaled	If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact	Wash with soap and water. Consult a physician.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed	Do NOT induce vomiting. Rinse mouth with water. Consult a physician.

Section V. FIREFIGHTING MEASURES

Flammability	Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking.
Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Protective equipment for fire	Wear self contained breathing apparatus for fire fighting if necessary.

Section VI. ACCIDENTAL RELEASE MEASURES

Personal precautions	Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Clean up	Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13).

Section VII. HANDLING AND STORAGE

Precautions for safe handling	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use ventilation Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge.
Storage Conditions	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Methanol 67-56-1 TWA 200 ppm
Skin notation TWA 200 ppm
Potential for skin absorption , ingestion and inhalation.
Personal protective equipment Respiratory protection Handle with gloves. Gloves must be inspected prior to use. Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.

Section IX - Physical/Chemical Characteristics

Boiling Point	65°C	Specific Gravity (H2O = 1)	0.79
Vapor Pressure (mm Hg)	96	Melting Point	-98°C
Vapor Density (AIR = 1)	1.11	Evaporation rate (Butyl Acetate = 1)	4.6

Solubility in Water COMPLETE

Appearance and Odor CLEAR, COLORLESS LIQUID WITH CHARACTERISTIC PUNGENT ODOR.

Section X. STABILITY AND REACTIVITY

Chemical stability — Stable under recommended storage conditions.
Possibility of hazardous reactions — Vapours may form explosive mixture with air.
Conditions to avoid — Heat, flames, sparks, extreme temperature and sunlight.
Materials to avoid — Acid chlorides, Acid anhydrides, Oxidizing agents, Alkali metals, Reducing agents, Acids
Hazardous decomposition products formed under fire conditions. - Carbon oxides

Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - rat - 5,628 mg/kg
LC50 Inhalation - rat - 4 h - 64000 ppm
LD50 Dermal - rabbit - 15,800 mg/kg
Toxic if absorbed through skin. Causes skin irritation.
Eye damage/eye irritation
Toxic if inhaled. Causes respiratory tract irritation.
Toxic if swallowed.

Section XII. ECOLOGICAL INFORMATION FOR REPORTABLE QUANTITY OF 5000 lbs.

LC50	15,400 mg/l - 96 h
EC50	24,500.00 mg/l - 48 h
EC100	10,000.00 mg/l - 24 h

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

DOT (US)
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

IATA
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

Section XV. REGULATORY INFORMATION

OSHA Hazards Flammable liquid, Target Organ Effect, Toxic by inhalation., Toxic by ingestion, Toxic by skin absorption, Irritant
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Section XVI. Misc. INFORMATION

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, ABSOLUTE STANDARDS INC. cannot warn of all the potential dangers of use or interaction with other chemicals or substances. ABSOLUTE STANDARDS INC. warrants that the chemical meets the specifications set forth on the label. ABSOLUTE STANDARDS INC DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR APPLICATION. The user should recognize that this product can cause severe injury or death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Absolute Standards Inc. will periodically revise this Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

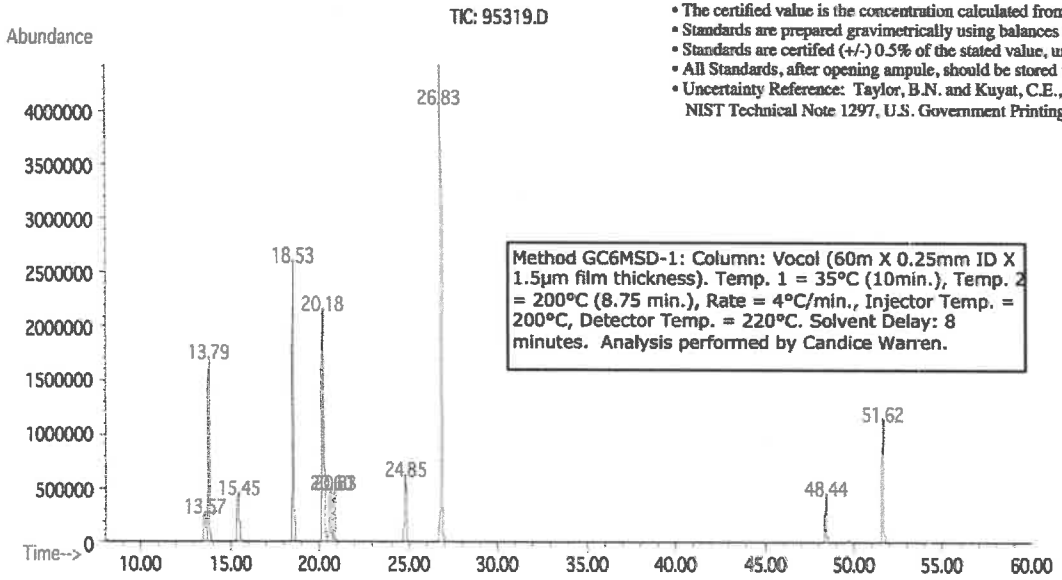
Part Number: 95319
Lot Number: 032922
Description: Revised Additions Mix
11 components
Expiration Date: 032925
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): Varied
NIST Test ID#: 6UTB 5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 100.0 0.012 Flask Uncertainty

Solvent(s): Methanol **Lot#** EC592-US

Formulated By: Prashant Chauhan 032922 DATE

Reviewed By: Pedro L. Rentas 032922 DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Acrylonitrile	7	4718CK	10000	99	0.2	1.01015	1.01030	10001.5	40.5	107-13-1	N/A	orl-rat 78 mg/kg
2. 1-Chlorobutane	1072	MKCM5711	2000	99.99	0.2	0.20003	0.20020	2001.7	8.1	109-69-3	N/A	orl-rat 2670mg/kg
3. Cyclohexane	1023	28930	2000	99	0.2	0.20203	0.20215	2001.2	8.2	110-82-7	300 ppm (1050mg/m3/8H)	orl-rat 12705mg/kg
4. Di-isopropyl ether (DIPE)	987	00412MX	2000	99	0.2	0.20203	0.20215	2001.2	8.2	108-20-3	500 ppm (2100mg/m3/8H)	orl-rat 8470mg/kg
5. 1,4-Dioxane	373	03853KE	40000	99	0.2	4.04060	4.04100	40004.0	161.9	123-91-1	25 ppm (90mg/m3/8H)(skin)	orl-mus 5700mg/kg
6. Hexachloroethane	199	12604HBV	2000	99	0.2	0.20203	0.20213	2001.0	8.2	67-72-1	1 ppm (10mg/m3/8H)(skin)	orl-gpg 4970mg/kg
7. Methylcyclohexane	1627	08046KN	2000	99	0.2	0.20203	0.20215	2001.2	8.2	108-87-2	N/A	N/A
8. Methyl tert-butyl ether (MTBE)	209	02197JJ	2000	99.8	0.2	0.20041	0.20055	2001.4	8.1	1634-04-4	N/A	orl-rat 4g/kg
9. Propionitrile	349	1395468	20000	99	0.2	2.02030	2.02045	20001.5	81.0	107-12-0	N/A	orl-rat 39mg/kg
10. Tetrahydrofuran	380	SHBH8330	10000	99.9	0.2	1.00105	1.00120	10001.5	40.1	109-99-9	20 ppm (590mg/m3/8H)	orl-rat 1650mg/kg
11. 1,2,3,4-Tetramethylbenzene	491	AP01	2000	93	0.2	0.21506	0.21520	2001.3	8.7	488-23-3	N/A	orl-rat 6408mg/kg



- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

Method GC6MSD-1: Column: Vocol (60m X 0.25mm ID X 1.5µm film thickness). Temp. 1 = 35°C (10min.), Temp. 2 = 200°C (8.75 min.), Rate = 4°C/min., Injector Temp. = 200°C, Detector Temp. = 220°C. Solvent Delay: 8 minutes. Analysis performed by Candice Warren.

Name	MSD RT (min.)
Methyl tert-butyl ether (MTBE)	13.56
Acrylonitrile	13.79
Di-isopropyl ether	15.44
Propionitrile	18.53
Tetrahydrofuran	20.17
Cyclohexane	20.58
1-Chlorobutane	20.83
Methylcyclohexane	24.84
1,4-Dioxane	26.84
Hexachloroethane	48.44
1,2,3,4-Tetramethylbenzene	51.62

Absolute Standards Inc.

PO Box 5585
Hamden, CT 06518-0585

Phone: 203-281-2917
FAX: 203-281-2922

Safety Data Sheet (SDS) GHS/OSHA Compliant

Section I Product and Company Identification

IDENTITY **ANALYTICAL STANDARD DISSOLVED IN METHANOL**

Manufacturer's Name	ABSOLUTE STANDARDS INC	Emergency Telephone USA & CANADA	**1-800-535-5053**
Address	44 Rossotto Dr. Hamden CT, 06514	Emergency Telephone International Date Prepared/Revised	**1-352-323-3500** January 1, 2023

Section II - Hazards Identification

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

H225	**Highly Flammable Liquid and Vapor**	**H301, 311, 331**	**Toxic if swallowed, skin contact, inhaled**
H370	**Cause damage to organs**	**H351**	**Suspected of causing cancer**
P271	**Use in ventilated area**	**P280**	**Use gloves, eye protection/face sheild**
P302,332	**If on skin, wash with soap and water**	**P305,351,338**	**If in eyes, remove contacts, rinse with water**

Signal Word: DANGER

Section III - Composition

Components:	CAS#:	LD50 Oral - Rat	OSHA PEL	% (optional)
Methanol	67-56-1	2,769 mg/kg	200 ppm	> 99

See Certified Weight Report For Other Analytes Present At Trace Quantities.

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance.Move to safe area.
If inhaled	If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact	Wash with soap and water. Consult a physician.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed	Do NOT induce vomiting. Rinse mouth with water. Consult a physician.

Section V. FIREFIGHTING MEASURES

Flammability	Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking.
Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Protective equipment for fire	Wear self contained breathing apparatus for fire fighting if necessary.

Section VI. ACCIDENTAL RELEASE MEASURES

Personal precautions	Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Clean up	Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13).

Section VII. HANDLING AND STORAGE

Precautions for safe handling	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use ventilation Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge.
Storage Conditions	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Methanol 67-56-1 TWA 200 ppm
Skin notation TWA 200 ppm
Potential for skin absorption , ingestion and inhalation.
Personal protective equipment Respiratory protection Handle with gloves. Gloves must be inspected prior to use. Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.

Section IX - Physical/Chemical Characteristics

Boiling Point	65°C	Specific Gravity (H2O = 1)	0.79
Vapor Pressure (mm Hg)	96	Melting Point	-98°C
Vapor Density (AIR = 1)	1.11	Evaporation rate (Butyl Acetate = 1)	4.6

Solubility in Water COMPLETE

Appearance and Odor CLEAR, COLORLESS LIQUID WITH CHARACTERISTIC PUNGENT ODOR.

Section X. STABILITY AND REACTIVITY

Chemical stability Stable under recommended storage conditions.
Possibility of hazardous reactions Vapours may form explosive mixture with air.
Conditions to avoid Heat, flames, sparks, extreme temperature and sunlight.
Materials to avoid Acid chlorides, Acid anhydrides, Oxidizing agents, Alkali metals, Reducing agents, Acids
Hazardous decomposition products formed under fire conditions. - Carbon oxides

Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - rat - 5,628 mg/kg
LC50 Inhalation - rat - 4 h - 64000 ppm
LD50 Dermal - rabbit - 15,800 mg/kg
Toxic if absorbed through skin. Causes skin irritation.
Eye damage/eye irritation
Toxic if inhaled. Causes respiratory tract irritation.
Toxic if swallowed.

Section XII. ECOLOGICAL INFORMATION FOR REPORTABLE QUANTITY OF 5000 lbs.

LC50	15,400 mg/l - 96 h
EC50	24,500.00 mg/l - 48 h
EC100	10,000.00 mg/l - 24 h

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

DOT (US)
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

IATA
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

Section XV. REGULATORY INFORMATION

OSHA Hazards Flammable liquid, Target Organ Effect, Toxic by inhalation., Toxic by ingestion, Toxic by skin absorption, Irritant
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Section XVI. Misc. INFORMATION

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, ABSOLUTE STANDARDS INC. cannot warn of all the potential dangers of use or interaction with other chemicals or substances. ABSOLUTE STANDARDS INC. warrants that the chemical meets the specifications set forth on the label. ABSOLUTE STANDARDS INC DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR APPLICATION. The user should recognize that this product can cause severe injury or death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Absolute Standards Inc. will periodically revise this Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

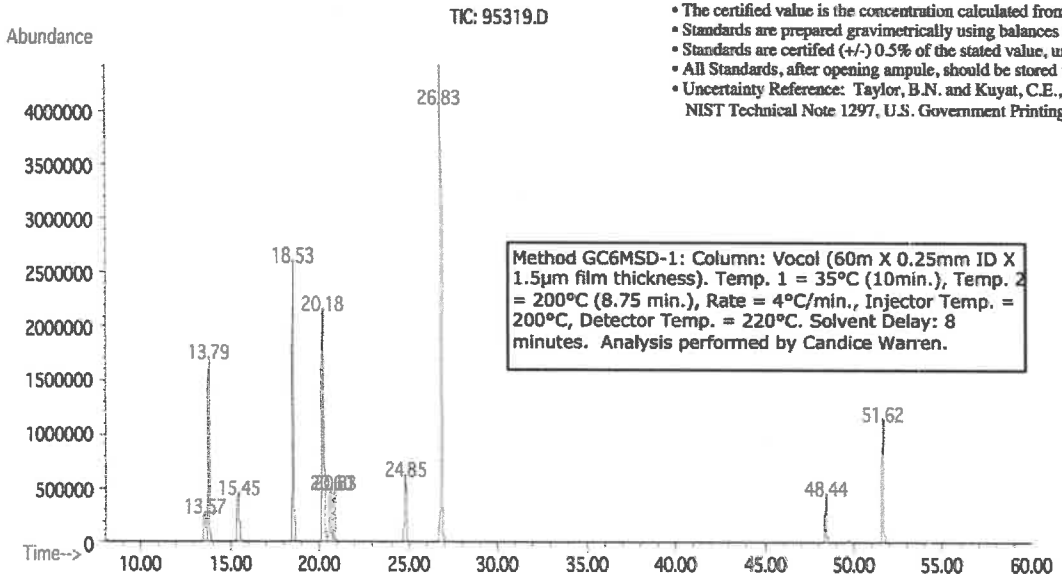
Part Number: 95319
Lot Number: 032922
Description: Revised Additions Mix
11 components
Expiration Date: 032925
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): Varied
NIST Test ID#: 6UTB 5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 100.0 0.012 Flask Uncertainty

Solvent(s): Methanol **Lot#** EC592-US

Formulated By: Prashant Chauhan 032922 DATE

Reviewed By: Pedro L. Rentas 032922 DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Acrylonitrile	7	4718CK	10000	99	0.2	1.01015	1.01030	10001.5	40.5	107-13-1	N/A	orl-rat 78 mg/kg
2. 1-Chlorobutane	1072	MKCM5711	2000	99.99	0.2	0.20003	0.20020	2001.7	8.1	109-69-3	N/A	orl-rat 2670mg/kg
3. Cyclohexane	1023	28930	2000	99	0.2	0.20203	0.20215	2001.2	8.2	110-82-7	300 ppm (1050mg/m3/8H)	orl-rat 12705mg/kg
4. Di-isopropyl ether (DIPE)	987	00412MX	2000	99	0.2	0.20203	0.20215	2001.2	8.2	108-20-3	500 ppm (2100mg/m3/8H)	orl-rat 8470mg/kg
5. 1,4-Dioxane	373	03853KE	40000	99	0.2	4.04060	4.04100	40004.0	161.9	123-91-1	25 ppm (90mg/m3/8H)(skin)	orl-mus 5700mg/kg
6. Hexachloroethane	199	12604HBV	2000	99	0.2	0.20203	0.20213	2001.0	8.2	67-72-1	1 ppm (10mg/m3/8H)(skin)	orl-gpg 4970mg/kg
7. Methylcyclohexane	1627	08046KN	2000	99	0.2	0.20203	0.20215	2001.2	8.2	108-87-2	N/A	N/A
8. Methyl tert-butyl ether (MTBE)	209	02197JJ	2000	99.8	0.2	0.20041	0.20055	2001.4	8.1	1634-04-4	N/A	orl-rat 4g/kg
9. Propionitrile	349	1395468	20000	99	0.2	2.02030	2.02045	20001.5	81.0	107-12-0	N/A	orl-rat 39mg/kg
10. Tetrahydrofuran	380	SHBH8330	10000	99.9	0.2	1.00105	1.00120	10001.5	40.1	109-99-9	20 ppm (590mg/m3/8H)	orl-rat 1650mg/kg
11. 1,2,3,4-Tetramethylbenzene	491	AP01	2000	93	0.2	0.21506	0.21520	2001.3	8.7	488-23-3	N/A	orl-rat 6408mg/kg



- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

Method GC6MSD-1: Column: Vocol (60m X 0.25mm ID X 1.5µm film thickness). Temp. 1 = 35°C (10min.), Temp. 2 = 200°C (8.75 min.), Rate = 4°C/min., Injector Temp. = 200°C, Detector Temp. = 220°C. Solvent Delay: 8 minutes. Analysis performed by Candice Warren.

Name	MSD RT (min.)
Methyl tert-butyl ether (MTBE)	13.56
Acrylonitrile	13.79
Di-isopropyl ether	15.44
Propionitrile	18.53
Tetrahydrofuran	20.17
Cyclohexane	20.58
1-Chlorobutane	20.83
Methylcyclohexane	24.84
1,4-Dioxane	26.84
Hexachloroethane	48.44
1,2,3,4-Tetramethylbenzene	51.62

Absolute Standards Inc.

PO Box 5585
Hamden, CT 06518-0585

Phone: 203-281-2917
FAX: 203-281-2922

Safety Data Sheet (SDS) GHS/OSHA Compliant

Section I Product and Company Identification

IDENTITY **ANALYTICAL STANDARD DISSOLVED IN METHANOL**

Manufacturer's Name	ABSOLUTE STANDARDS INC	Emergency Telephone USA & CANADA	**1-800-535-5053**
Address	44 Rossotto Dr. Hamden CT, 06514	Emergency Telephone International Date Prepared/Revised	**1-352-323-3500** January 1, 2023

Section II - Hazards Identification

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

H225	**Highly Flammable Liquid and Vapor**	**H301, 311, 331**	**Toxic if swallowed, skin contact, inhaled**
H370	**Cause damage to organs**	**H351**	**Suspected of causing cancer**
P271	**Use in ventilated area**	**P280**	**Use gloves, eye protection/face sheild**
P302,332	**If on skin, wash with soap and water**	**P305,351,338**	**If in eyes, remove contacts, rinse with water**

Signal Word: DANGER

Section III - Composition

Components:	CAS#:	LD50 Oral - Rat	OSHA PEL	% (optional)
Methanol	67-56-1	2,769 mg/kg	200 ppm	> 99

See Certified Weight Report For Other Analytes Present At Trace Quantities.

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance.Move to safe area.
If inhaled	If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact	Wash with soap and water. Consult a physician.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed	Do NOT induce vomiting. Rinse mouth with water. Consult a physician.

Section V. FIREFIGHTING MEASURES

Flammability	Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking.
Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Protective equipment for fire	Wear self contained breathing apparatus for fire fighting if necessary.

Section VI. ACCIDENTAL RELEASE MEASURES

Personal precautions	Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Clean up	Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13).

Section VII. HANDLING AND STORAGE

Precautions for safe handling	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use ventilation Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge.
Storage Conditions	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Methanol 67-56-1 TWA 200 ppm
Skin notation TWA 200 ppm
Potential for skin absorption , ingestion and inhalation.
Personal protective equipment Respiratory protection Handle with gloves. Gloves must be inspected prior to use. Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.

Section IX - Physical/Chemical Characteristics

Boiling Point	65°C	Specific Gravity (H2O = 1)	0.79
Vapor Pressure (mm Hg)	96	Melting Point	-98°C
Vapor Density (AIR = 1)	1.11	Evaporation rate (Butyl Acetate = 1)	4.6

Solubility in Water COMPLETE

Appearance and Odor CLEAR, COLORLESS LIQUID WITH CHARACTERISTIC PUNGENT ODOR.

Section X. STABILITY AND REACTIVITY

Chemical stability Stable under recommended storage conditions.
Possibility of hazardous reactions Vapours may form explosive mixture with air.
Conditions to avoid Heat, flames, sparks, extreme temperature and sunlight.
Materials to avoid Acid chlorides, Acid anhydrides, Oxidizing agents, Alkali metals, Reducing agents, Acids
Hazardous decomposition products formed under fire conditions. - Carbon oxides

Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - rat - 5,628 mg/kg
LC50 Inhalation - rat - 4 h - 64000 ppm
LD50 Dermal - rabbit - 15,800 mg/kg
Toxic if absorbed through skin. Causes skin irritation.
Eye damage/eye irritation
Toxic if inhaled. Causes respiratory tract irritation.
Toxic if swallowed.

Section XII. ECOLOGICAL INFORMATION FOR REPORTABLE QUANTITY OF 5000 lbs.

LC50	15,400 mg/l - 96 h
EC50	24,500.00 mg/l - 48 h
EC100	10,000.00 mg/l - 24 h

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

DOT (US)
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

IATA
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

Section XV. REGULATORY INFORMATION

OSHA Hazards Flammable liquid, Target Organ Effect, Toxic by inhalation., Toxic by ingestion, Toxic by skin absorption, Irritant
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Section XVI. Misc. INFORMATION

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, ABSOLUTE STANDARDS INC. cannot warn of all the potential dangers of use or interaction with other chemicals or substances. ABSOLUTE STANDARDS INC. warrants that the chemical meets the specifications set forth on the label. ABSOLUTE STANDARDS INC DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR APPLICATION. The user should recognize that this product can cause severe injury or death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Absolute Standards Inc. will periodically revise this Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.

Absolute Standards, Inc.
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Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

Part Number: 91980
Lot Number: 072423
Description: Acrolein

Solvent(s): Water **Lot#** 102422Q

5 Sum

Expiration Date: 082423
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB

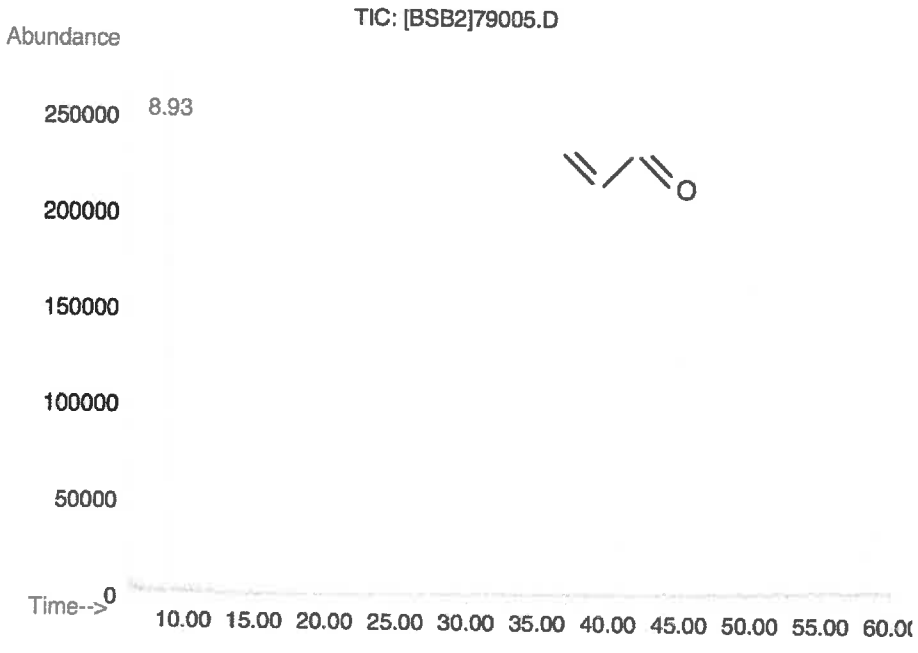
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 10.0 0.001 Flask Uncertainty

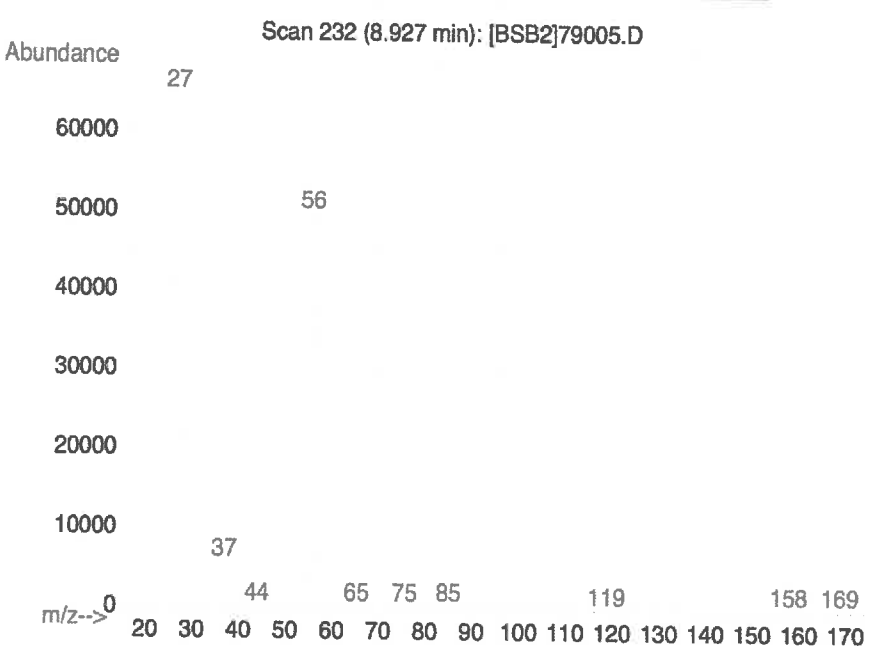
Gabriel Helland 072423
Formulated By: Gabriel Helland DATE

Pedro Rentas 072423
Reviewed By: Pedro L. Rentas DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Acrolein	5	103755R09M	5000	97.1	0.5	0.05160	0.05170	5009.2	52.5	107-02-8	0.1 ppm	orl-rat 46mg/kg

Method: GC6MSD-1. **Detector:** Mass Selective Detector (Scan mode). **Column:** Vocol (60m X 0.25mm ID X 1.5µm film thickness). **Oven Profile:** Temp. 1 = 35°C (Time 1 = 10min.), Temp. 2=200°C (Time 2 = 8.75 min.) Rate = 4°C/min., Injector Temp. = 200°C, Detector Temp. = 220°C. **Analyst:** Pedro Rentas. **NOTE:** Due to the instability of acrolein in solution, all solutions of acrolein, and any dilutions thereof, should be used immediately Long term storage is not recommended. Please contact our technical department if further information is required.





- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

Absolute Standards Inc.

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Hamden, CT 06518-0585

Phone: 203-281-2917
FAX: 203-281-2922

Safety Data Sheet (SDS) GHS/OSHA Compliant

Section I Product and Company Identification

IDENTITY **ANALYTICAL STANDARD DISSOLVED IN WATER**

Manufacturer's Name	ABSOLUTE STANDARDS INC	Emergency Telephone USA & CANADA	**1-800-535-5053**
Address	44 Rossotto Dr.	Emergency Telephone International	**1-352-323-3500**
	Hamden CT, 06514	Date Prepared/Revised	May 1, 2022

Section II - Hazards Identification

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

P271	**Use in ventilated area**	**H315**	**Causes skin and eye irritation.**
P302,332	**If on skin, wash with soap and water**	**P280**	**Use gloves, eye protection/face sheild**
		P305,351,338	**If in eyes, remove contacts, rinse with water**

Signal Word: DANGER

Section III - Composition

Components (Specific Chemical Identity; Common Name(s))		% (optional)
Water	CAS#: 7732-18-5	> 97

See Certified Weight Report For Other Analytes Present At Trace Quantities.

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance.Move to safe area.
If inhaled	If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact	Wash with soap and water. Consult a physician.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed	Do NOT induce vomiting. Rinse mouth with water. Consult a physician.

Section V. FIREFIGHTING MEASURES

Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Protective equipment for fire	Wear self contained breathing apparatus for fire fighting if necessary.
Hazardous Decomposition products	Carbon oxides

Section VI. ACCIDENTAL RELEASE MEASURES

Personal precautions	Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Clean up	Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13).

Section VII. HANDLING AND STORAGE

Precautions for safe handling	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use ventilation Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge.
Storage Conditions	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Water CAS#: 7732-18-5 TWA: 500 ppm

Personal protective equipment Respiratory protection Handle with gloves. Gloves must be inspected prior to use. Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.

Section IX - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point	100°C	Specific Gravity (H2O = 1)	1
Vapor Pressure (mm Hg)		Melting Point	

	NA		0°C
Vapor Density (AIR = 1)	NA	Evaporation rate (Butyl Acetate = 1)	NA

Solubility in Water Completely miscible

Appearance and Odor CLEAR, COLORLESS LIQUID WITH SLIGHT CHEMICAL ODOR.

Section X. STABILITY AND REACTIVITY

Chemical stability Stable under recommended storage conditions.
Possibility of hazardous reactions NA
Conditions to avoid NA
Materials to avoid NA
Hazardous decomposition products - No data available

Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - Rat NA
LC50 Inhalation - Rat NA
LD50 Dermal - Guinea pig NA
Causes skin irritation.
Eye irritation

Section XII. ECOLOGICAL INFORMATION

LC50 NA
EC50 NA

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

DOT (US)
Not dangerous goods
Proper shipping name: Water

IATA
Not dangerous goods
Proper shipping name: Water

Section XV. REGULATORY INFORMATION

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Section XVI. Misc. INFORMATION

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, ABSOLUTE STANDARDS INC. cannot warn of all the potential dangers of use or interaction with other chemicals or substances. ABSOLUTE STANDARDS INC. warrants that the chemical meets the specifications set forth on the label. ABSOLUTE STANDARDS INC DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR APPLICATION. The user should recognize that this product can cause severe injury or death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Absolute Standards Inc. will periodically revise this Material Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.

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Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

Part Number: 91980
Lot Number: 072423
Description: Acrolein

Solvent(s): Water **Lot#** 102422Q

5 Sum

Expiration Date: 082423
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB

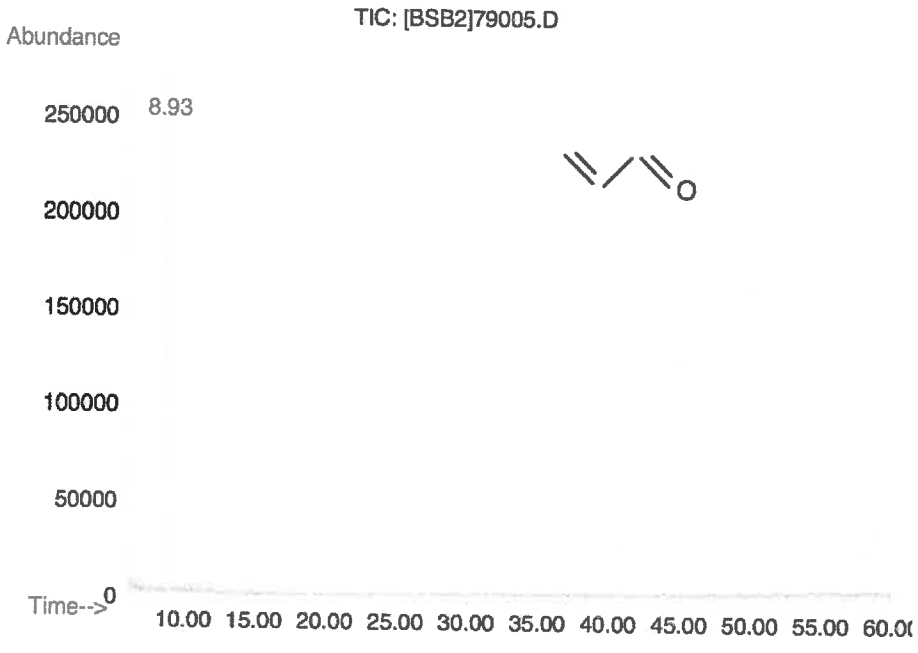
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 10.0 0.001 Flask Uncertainty

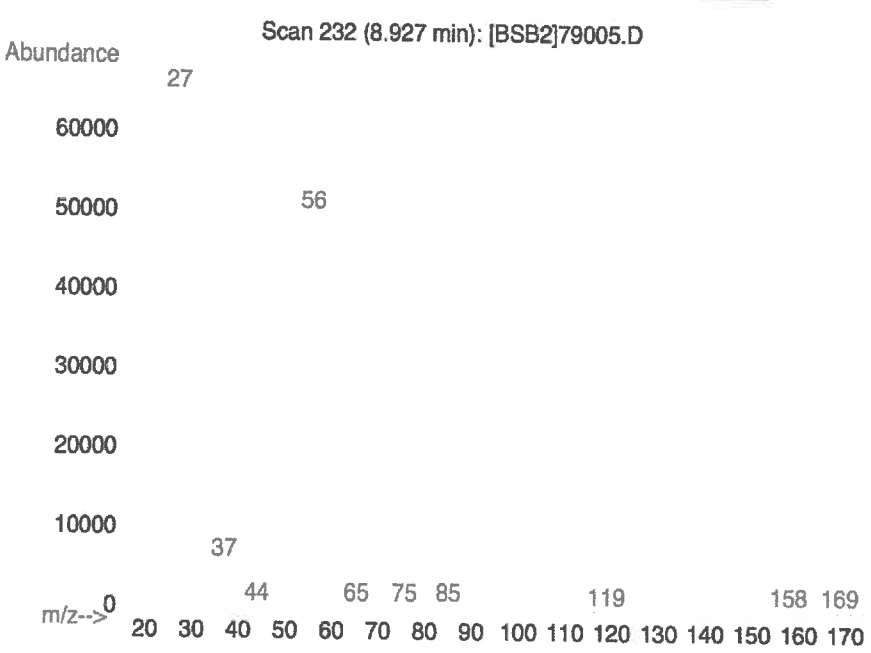
Gabriel Helland 072423
Formulated By: Gabriel Helland DATE

Pedro Rentas 072423
Reviewed By: Pedro L. Rentas DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Acrolein	5	103755R09M	5000	97.1	0.5	0.05160	0.05170	5009.2	52.5	107-02-8	0.1 ppm	orl-rat 46mg/kg

Method: GC6MSD-1. **Detector:** Mass Selective Detector (Scan mode). **Column:** Vocol (60m X 0.25mm ID X 1.5µm film thickness). **Oven Profile:** Temp. 1 = 35°C (Time 1 = 10min.), Temp. 2=200°C (Time 2 = 8.75 min.) Rate = 4°C/min., Injector Temp. = 200°C, Detector Temp. = 220°C. **Analyst:** Pedro Rentas. **NOTE:** Due to the instability of acrolein in solution, all solutions of acrolein, and any dilutions thereof, should be used immediately Long term storage is not recommended. Please contact our technical department if further information is required.





- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
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- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
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Safety Data Sheet (SDS) GHS/OSHA Compliant

Section I Product and Company Identification

IDENTITY **ANALYTICAL STANDARD DISSOLVED IN WATER**

Manufacturer's Name	ABSOLUTE STANDARDS INC	Emergency Telephone USA & CANADA	**1-800-535-5053**
Address	44 Rossotto Dr.	Emergency Telephone International	**1-352-323-3500**
	Hamden CT, 06514	Date Prepared/Revised	May 1, 2022

Section II - Hazards Identification

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

P271	**Use in ventilated area**	**H315**	**Causes skin and eye irritation.**
P302,332	**If on skin, wash with soap and water**	**P280**	**Use gloves, eye protection/face sheild**
		P305,351,338	**If in eyes, remove contacts, rinse with water**

Signal Word: DANGER

Section III - Composition

Components (Specific Chemical Identity; Common Name(s))		% (optional)
Water	CAS#: 7732-18-5	> 97

See Certified Weight Report For Other Analytes Present At Trace Quantities.

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance.Move to safe area.
If inhaled	If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact	Wash with soap and water. Consult a physician.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed	Do NOT induce vomiting. Rinse mouth with water. Consult a physician.

Section V. FIREFIGHTING MEASURES

Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Protective equipment for fire	Wear self contained breathing apparatus for fire fighting if necessary.
Hazardous Decomposition products	Carbon oxides

Section VI. ACCIDENTAL RELEASE MEASURES

Personal precautions	Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Clean up	Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13).

Section VII. HANDLING AND STORAGE

Precautions for safe handling	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use ventilation Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge.
Storage Conditions	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Water CAS#: 7732-18-5 TWA: 500 ppm

Personal protective equipment Respiratory protection Handle with gloves. Gloves must be inspected prior to use. Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.

Section IX - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point	100°C	Specific Gravity (H2O = 1)	1
Vapor Pressure (mm Hg)		Melting Point	

	NA		0°C
Vapor Density (AIR = 1)	NA	Evaporation rate (Butyl Acetate = 1)	NA

Solubility in Water Completely miscible

Appearance and Odor CLEAR, COLORLESS LIQUID WITH SLIGHT CHEMICAL ODOR.

Section X. STABILITY AND REACTIVITY

Chemical stability Stable under recommended storage conditions.
Possibility of hazardous reactions NA
Conditions to avoid NA
Materials to avoid NA
Hazardous decomposition products - No data available

Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - Rat NA
LC50 Inhalation - Rat NA
LD50 Dermal - Guinea pig NA
Causes skin irritation.
Eye irritation

Section XII. ECOLOGICAL INFORMATION

LC50 NA
EC50 NA

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

DOT (US)
Not dangerous goods
Proper shipping name: Water

IATA
Not dangerous goods
Proper shipping name: Water

Section XV. REGULATORY INFORMATION

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Section XVI. Misc. INFORMATION

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CERTIFIED WEIGHT REPORT

Part Number: 91980
Lot Number: 072423
Description: Acrolein

Solvent(s): Water **Lot#** 102422Q

5 Sum

Expiration Date: 082423
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB

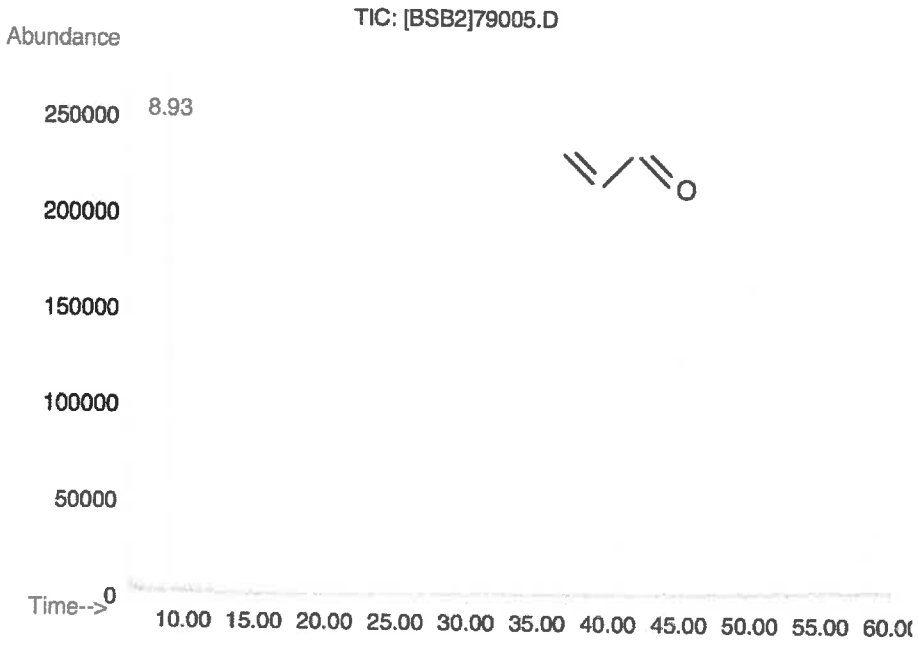
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 10.0 0.001 Flask Uncertainty

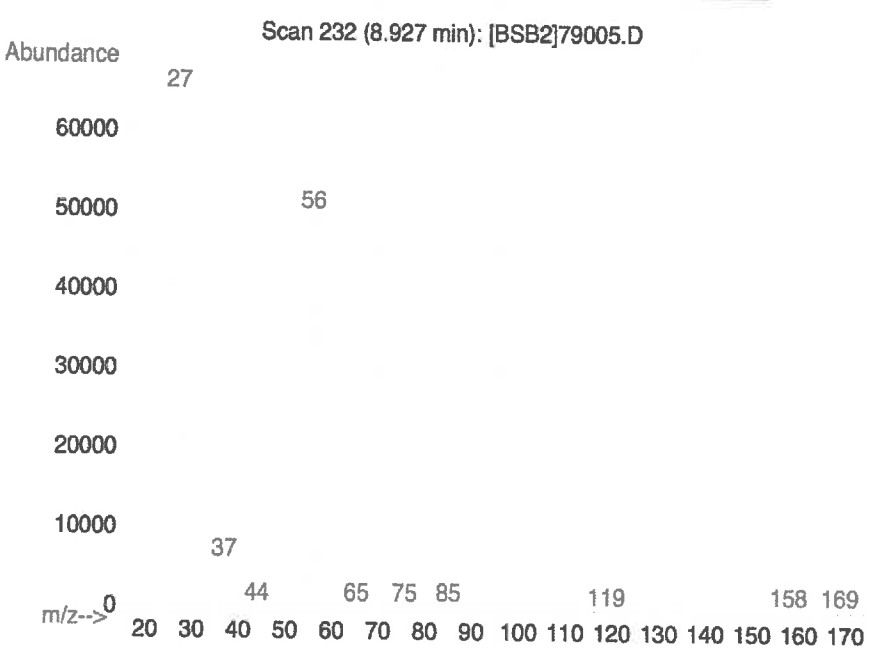
Gabriel Helland 072423
Formulated By: Gabriel Helland DATE

Pedro Rentas 072423
Reviewed By: Pedro L. Rentas DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Acrolein	5	103755R09M	5000	97.1	0.5	0.05160	0.05170	5009.2	52.5	107-02-8	0.1 ppm	orl-rat 46mg/kg

Method: GC6MSD-1. **Detector:** Mass Selective Detector (Scan mode). **Column:** Vocol (60m X 0.25mm ID X 1.5µm film thickness). **Oven Profile:** Temp. 1 = 35°C (Time 1 = 10min.), Temp. 2=200°C (Time 2 = 8.75 min.) Rate = 4°C/min., Injector Temp. = 200°C, Detector Temp. = 220°C. **Analyst:** Pedro Rentas. **NOTE:** Due to the instability of acrolein in solution, all solutions of acrolein, and any dilutions thereof, should be used immediately Long term storage is not recommended. Please contact our technical department if further information is required.





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- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

Absolute Standards Inc.

PO Box 5585
Hamden, CT 06518-0585

Phone: 203-281-2917
FAX: 203-281-2922

Safety Data Sheet (SDS) GHS/OSHA Compliant

Section I Product and Company Identification

IDENTITY **ANALYTICAL STANDARD DISSOLVED IN WATER**

Manufacturer's Name	ABSOLUTE STANDARDS INC	Emergency Telephone USA & CANADA	**1-800-535-5053**
Address	44 Rossotto Dr.	Emergency Telephone International	**1-352-323-3500**
	Hamden CT, 06514	Date Prepared/Revised	May 1, 2022

Section II - Hazards Identification

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

P271	**Use in ventilated area**	**H315**	**Causes skin and eye irritation.**
P302,332	**If on skin, wash with soap and water**	**P280**	**Use gloves, eye protection/face sheild**
		P305,351,338	**If in eyes, remove contacts, rinse with water**

Signal Word: DANGER

Section III - Composition

Components (Specific Chemical Identity; Common Name(s))		% (optional)
Water	CAS#: 7732-18-5	> 97

See Certified Weight Report For Other Analytes Present At Trace Quantities.

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance.Move to safe area.
If inhaled	If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact	Wash with soap and water. Consult a physician.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed	Do NOT induce vomiting. Rinse mouth with water. Consult a physician.

Section V. FIREFIGHTING MEASURES

Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Protective equipment for fire	Wear self contained breathing apparatus for fire fighting if necessary.
Hazardous Decomposition products	Carbon oxides

Section VI. ACCIDENTAL RELEASE MEASURES

Personal precautions	Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Clean up	Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13).

Section VII. HANDLING AND STORAGE

Precautions for safe handling	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use ventilation Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge.
Storage Conditions	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Water CAS#: 7732-18-5 TWA: 500 ppm

Personal protective equipment Respiratory protection Handle with gloves. Gloves must be inspected prior to use. Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.

Section IX - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point	100°C	Specific Gravity (H2O = 1)	1
Vapor Pressure (mm Hg)		Melting Point	

	NA		0°C
Vapor Density (AIR = 1)	NA	Evaporation rate (Butyl Acetate = 1)	NA

Solubility in Water Completely miscible

Appearance and Odor CLEAR, COLORLESS LIQUID WITH SLIGHT CHEMICAL ODOR.

Section X. STABILITY AND REACTIVITY

Chemical stability Stable under recommended storage conditions.
Possibility of hazardous reactions NA
Conditions to avoid NA
Materials to avoid NA
Hazardous decomposition products - No data available

Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - Rat NA
LC50 Inhalation - Rat NA
LD50 Dermal - Guinea pig NA
Causes skin irritation.
Eye irritation

Section XII. ECOLOGICAL INFORMATION

LC50 NA
EC50 NA

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

DOT (US)
Not dangerous goods
Proper shipping name: Water

IATA
Not dangerous goods
Proper shipping name: Water

Section XV. REGULATORY INFORMATION

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Section XVI. Misc. INFORMATION

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, ABSOLUTE STANDARDS INC. cannot warn of all the potential dangers of use or interaction with other chemicals or substances. ABSOLUTE STANDARDS INC. warrants that the chemical meets the specifications set forth on the label. ABSOLUTE STANDARDS INC DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR APPLICATION. The user should recognize that this product can cause severe injury or death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Absolute Standards Inc. will periodically revise this Material Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.

Absolute Standards, Inc.
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www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

Part Number: 91980
Lot Number: 072423
Description: Acrolein

Solvent(s): Water **Lot#** 102422Q

5 Sum

Expiration Date: 082423
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB

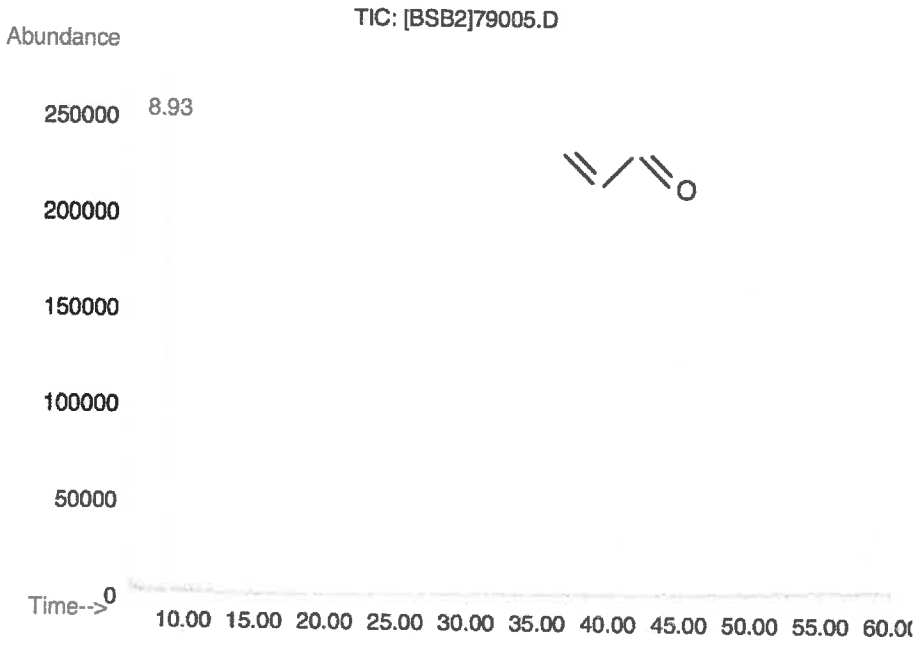
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 10.0 0.001 Flask Uncertainty

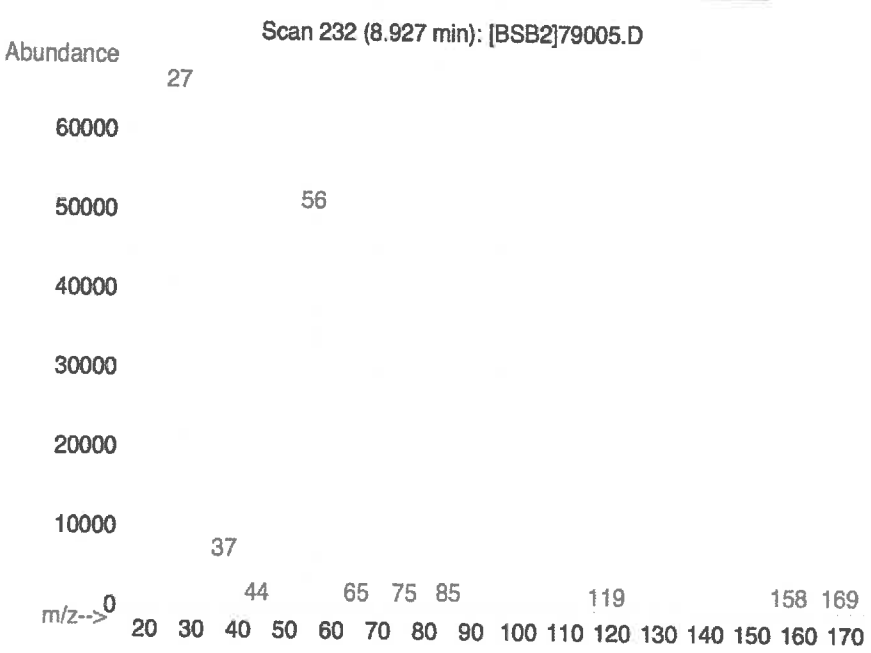
Gabriel Helland 072423
Formulated By: Gabriel Helland DATE

Pedro Rentas 072423
Reviewed By: Pedro L. Rentas DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Acrolein	5	103755R09M	5000	97.1	0.5	0.05160	0.05170	5009.2	52.5	107-02-8	0.1 ppm	orl-rat 46mg/kg

Method: GC6MSD-1. **Detector:** Mass Selective Detector (Scan mode). **Column:** Vocol (60m X 0.25mm ID X 1.5µm film thickness). **Oven Profile:** Temp. 1 = 35°C (Time 1 = 10min.), Temp. 2=200°C (Time 2 = 8.75 min.) Rate = 4°C/min., Injector Temp. = 200°C, Detector Temp. = 220°C. **Analyst:** Pedro Rentas. **NOTE:** Due to the instability of acrolein in solution, all solutions of acrolein, and any dilutions thereof, should be used immediately Long term storage is not recommended. Please contact our technical department if further information is required.





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- Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
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Safety Data Sheet (SDS) GHS/OSHA Compliant

Section I Product and Company Identification

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Manufacturer's Name	ABSOLUTE STANDARDS INC	Emergency Telephone USA & CANADA	**1-800-535-5053**
Address	44 Rossotto Dr.	Emergency Telephone International	**1-352-323-3500**
	Hamden CT, 06514	Date Prepared/Revised	May 1, 2022

Section II - Hazards Identification

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

P271	**Use in ventilated area**	**H315**	**Causes skin and eye irritation.**
P302,332	**If on skin, wash with soap and water**	**P280**	**Use gloves, eye protection/face sheild**
		P305,351,338	**If in eyes, remove contacts, rinse with water**

Signal Word: DANGER

Section III - Composition

Components (Specific Chemical Identity; Common Name(s))		% (optional)
Water	CAS#: 7732-18-5	> 97

See Certified Weight Report For Other Analytes Present At Trace Quantities.

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance.Move to safe area.
If inhaled	If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact	Wash with soap and water. Consult a physician.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed	Do NOT induce vomiting. Rinse mouth with water. Consult a physician.

Section V. FIREFIGHTING MEASURES

Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Protective equipment for fire	Wear self contained breathing apparatus for fire fighting if necessary.
Hazardous Decomposition products	Carbon oxides

Section VI. ACCIDENTAL RELEASE MEASURES

Personal precautions	Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Clean up	Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13).

Section VII. HANDLING AND STORAGE

Precautions for safe handling	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use ventilation Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge.
Storage Conditions	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Water CAS#: 7732-18-5 TWA: 500 ppm

Personal protective equipment Respiratory protection Handle with gloves. Gloves must be inspected prior to use. Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.

Section IX - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point	100°C	Specific Gravity (H2O = 1)	1
Vapor Pressure (mm Hg)		Melting Point	

	NA		0°C
Vapor Density (AIR = 1)	NA	Evaporation rate (Butyl Acetate = 1)	NA

Solubility in Water Completely miscible

Appearance and Odor CLEAR, COLORLESS LIQUID WITH SLIGHT CHEMICAL ODOR.

Section X. STABILITY AND REACTIVITY

Chemical stability Stable under recommended storage conditions.
Possibility of hazardous reactions NA
Conditions to avoid NA
Materials to avoid NA
Hazardous decomposition products - No data available

Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - Rat NA
LC50 Inhalation - Rat NA
LD50 Dermal - Guinea pig NA
Causes skin irritation.
Eye irritation

Section XII. ECOLOGICAL INFORMATION

LC50 NA
EC50 NA

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

DOT (US)
Not dangerous goods
Proper shipping name: Water

IATA
Not dangerous goods
Proper shipping name: Water

Section XV. REGULATORY INFORMATION

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Section XVI. Misc. INFORMATION

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, ABSOLUTE STANDARDS INC. cannot warn of all the potential dangers of use or interaction with other chemicals or substances. ABSOLUTE STANDARDS INC. warrants that the chemical meets the specifications set forth on the label. ABSOLUTE STANDARDS INC DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR APPLICATION. The user should recognize that this product can cause severe injury or death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Absolute Standards Inc. will periodically revise this Material Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.

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Certified Reference Material CRM

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CERTIFIED WEIGHT REPORT

Part Number: 91980
Lot Number: 072423
Description: Acrolein

Solvent(s): Water **Lot#** 102422Q

5 Sum

Expiration Date: 082423
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB

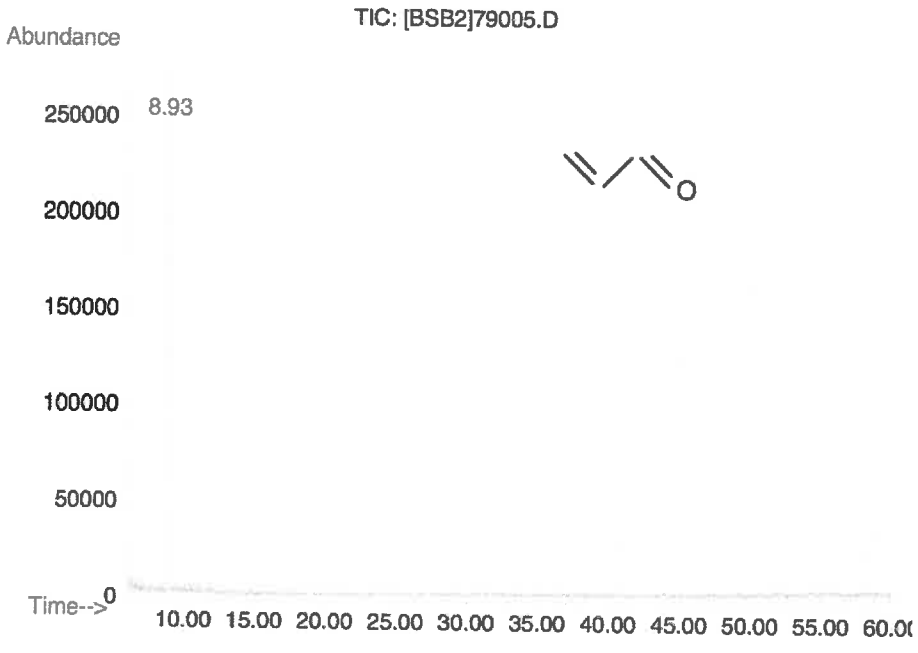
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 10.0 0.001 Flask Uncertainty

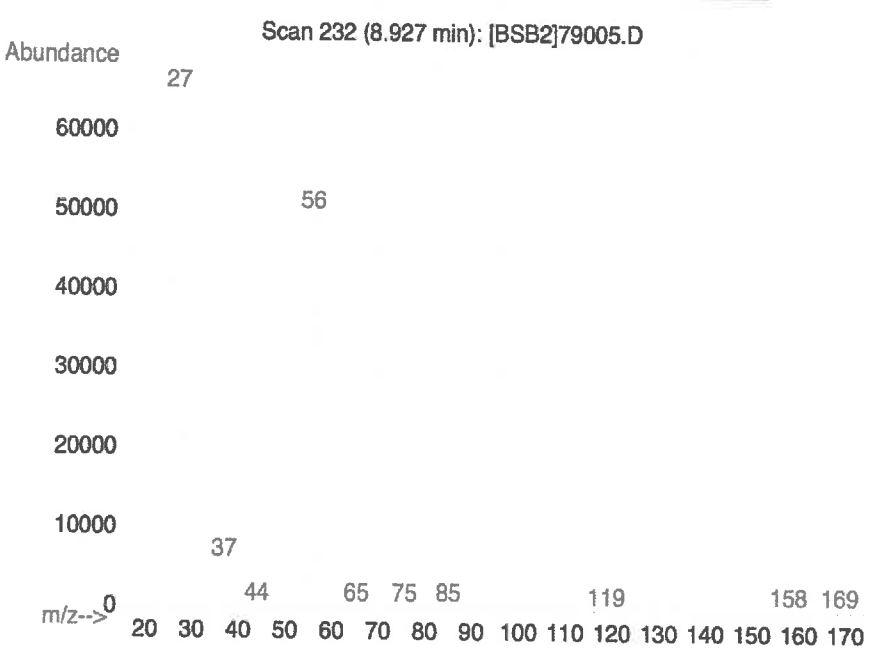
Gabriel Helland 072423
Formulated By: Gabriel Helland DATE

Pedro Rentas 072423
Reviewed By: Pedro L. Rentas DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Acrolein	5	103755R09M	5000	97.1	0.5	0.05160	0.05170	5009.2	52.5	107-02-8	0.1 ppm	orl-rat 46mg/kg

Method: GC6MSD-1. **Detector:** Mass Selective Detector (Scan mode). **Column:** Vocol (60m X 0.25mm ID X 1.5µm film thickness). **Oven Profile:** Temp. 1 = 35°C (Time 1 = 10min.), Temp. 2=200°C (Time 2 = 8.75 min.) Rate = 4°C/min., Injector Temp. = 200°C, Detector Temp. = 220°C. **Analyst:** Pedro Rentas. **NOTE:** Due to the instability of acrolein in solution, all solutions of acrolein, and any dilutions thereof, should be used immediately Long term storage is not recommended. Please contact our technical department if further information is required.





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Safety Data Sheet (SDS) GHS/OSHA Compliant

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Address	44 Rossotto Dr.	Emergency Telephone International	**1-352-323-3500**
	Hamden CT, 06514	Date Prepared/Revised	May 1, 2022

Section II - Hazards Identification

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

P271	**Use in ventilated area**	**H315**	**Causes skin and eye irritation.**
P302,332	**If on skin, wash with soap and water**	**P280**	**Use gloves, eye protection/face sheild**
		P305,351,338	**If in eyes, remove contacts, rinse with water**

Signal Word: DANGER

Section III - Composition

Components (Specific Chemical Identity; Common Name(s))		% (optional)
Water	CAS#: 7732-18-5	> 97

See Certified Weight Report For Other Analytes Present At Trace Quantities.

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance.Move to safe area.
If inhaled	If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact	Wash with soap and water. Consult a physician.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed	Do NOT induce vomiting. Rinse mouth with water. Consult a physician.

Section V. FIREFIGHTING MEASURES

Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
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Hazardous Decomposition products	Carbon oxides

Section VI. ACCIDENTAL RELEASE MEASURES

Personal precautions	Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Clean up	Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13).

Section VII. HANDLING AND STORAGE

Precautions for safe handling	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use ventilation Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge.
Storage Conditions	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Water CAS#: 7732-18-5 TWA: 500 ppm

Personal protective equipment Respiratory protection Handle with gloves. Gloves must be inspected prior to use. Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.

Section IX - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point	100°C	Specific Gravity (H2O = 1)	1
Vapor Pressure (mm Hg)		Melting Point	

	NA		0°C
Vapor Density (AIR = 1)	NA	Evaporation rate (Butyl Acetate = 1)	NA

Solubility in Water Completely miscible

Appearance and Odor CLEAR, COLORLESS LIQUID WITH SLIGHT CHEMICAL ODOR.

Section X. STABILITY AND REACTIVITY

Chemical stability Stable under recommended storage conditions.
Possibility of hazardous reactions NA
Conditions to avoid NA
Materials to avoid NA
Hazardous decomposition products - No data available

Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - Rat NA
LC50 Inhalation - Rat NA
LD50 Dermal - Guinea pig NA
Causes skin irritation.
Eye irritation

Section XII. ECOLOGICAL INFORMATION

LC50 NA
EC50 NA

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

DOT (US)
Not dangerous goods
Proper shipping name: Water

IATA
Not dangerous goods
Proper shipping name: Water

Section XV. REGULATORY INFORMATION

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Section XVI. Misc. INFORMATION

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, ABSOLUTE STANDARDS INC. cannot warn of all the potential dangers of use or interaction with other chemicals or substances. ABSOLUTE STANDARDS INC. warrants that the chemical meets the specifications set forth on the label. ABSOLUTE STANDARDS INC DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR APPLICATION. The user should recognize that this product can cause severe injury or death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Absolute Standards Inc. will periodically revise this Material Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.

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CERTIFIED WEIGHT REPORT

Part Number: 95318
Lot Number: 111722
Description: 2-Chloroethyl vinyl ether

Solvent(s): Methanol **Lot#** EB679-US

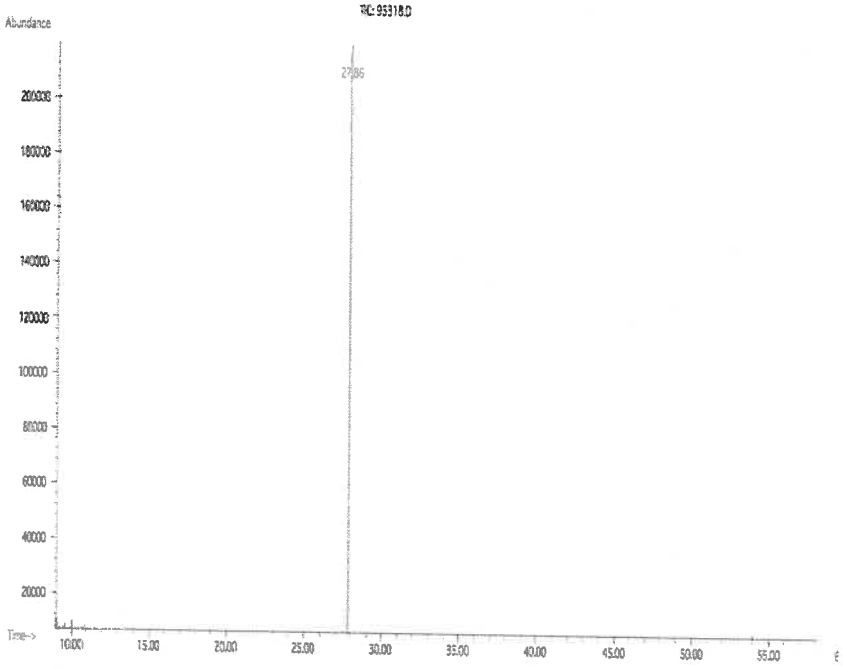
Expiration Date: 111725
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 10000
NIST Test ID#: 6UTB

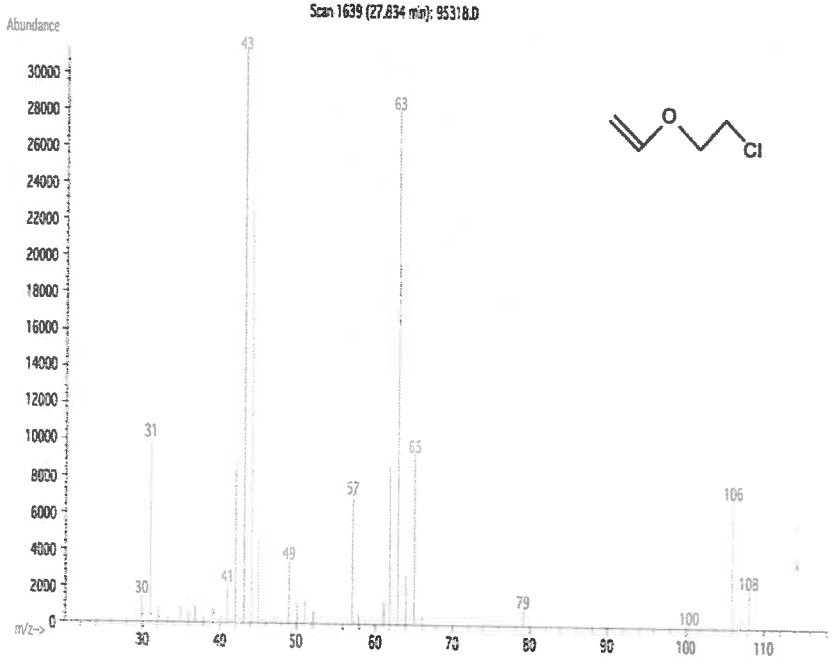
Weight(s) shown below were combined and diluted to (mL): 50.0 | 5E-05 Balance Uncertainty | 0.001 Flask Uncertainty

Formulated By:	Eli Aliaga	111722 DATE
Reviewed By:	Pedro L. Rentas	111722 DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight (g)	Actual Weight (g)	Actual Conc(µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. 2-Chloroethyl vinyl ether	74	MKCD0033	10000	99	0.2	0.50541	0.50551	10001.9	40.5	110-75-8	N/A	orl-rat 250mg/kg

Method: GC6MSD-1.M. **Detector:** MSD. **Column:** (60m X 0.25mm X 1.5 µm). **Oven Profile:** Temp 1 = 35°C (Time 1=10min.), Temp 2 = 200°C (Time 2=8.75 min.), Rate = 4°C/min., Injector B Temp.= 200°C, Detector B Temp. = 220°C. **Analyst:** Candice Warren.





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- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
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Certified Reference Material CRM

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AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

Part Number: 95318
Lot Number: 121321
Description: 2-Chloroethyl vinyl ether

Solvent(s): **Lot#**
Methanol EA899-US

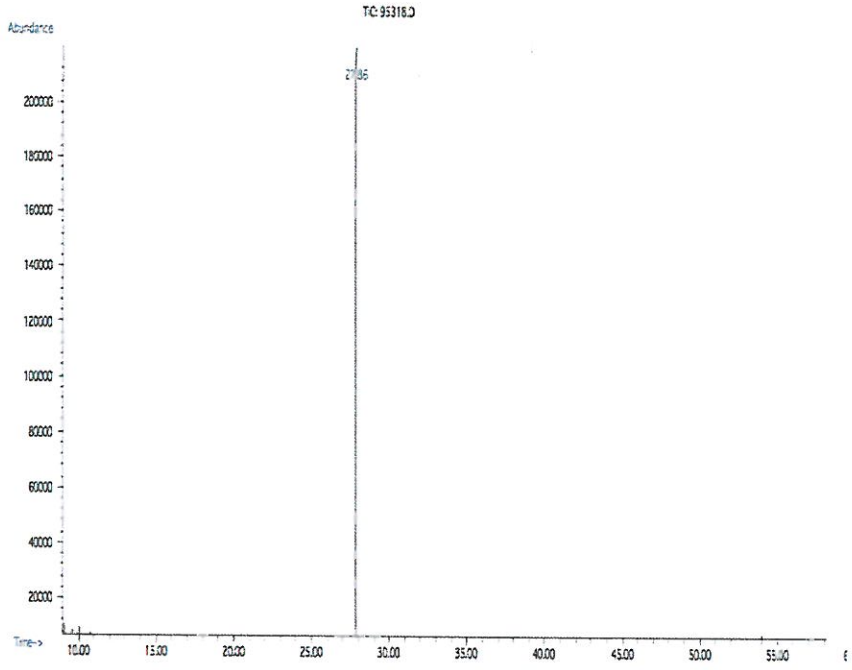
Expiration Date: 121324
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 10000
NIST Test ID#: 6UTB

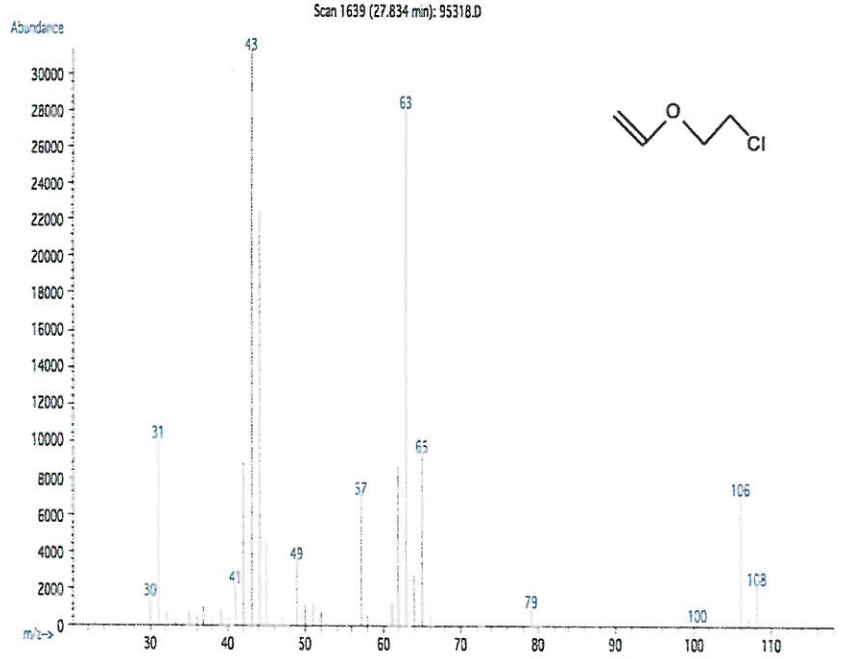
Weight(s) shown below were combined and diluted to (mL): 30.0 | 5E-05 Balance Uncertainty | 0.0003 Flask Uncertainty

		121321
Formulated By:	Benson Chan	DATE
		121321
Reviewed By:	Pedro L. Rentas	DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight (g)	Actual Weight (g)	Actual Conc(µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. 2-Chloroethyl vinyl ether	74	MKCD0033	10000	99	0.2	0.30320	0.30411	10030.2	40.7	110-75-8	N/A	orl-rat 250mg/kg

Method: GC6MSD-1.M. **Detector:** MSD. **Column:** (60m X 0.25mm X 1.5 µm). **Oven Profile:** Temp 1 = 35°C (Time 1=10min.), Temp 2 = 200°C (Time 2=8.75 min.), Rate = 4°C/min., Injector B Temp.= 200°C, Detector B Temp. = 220°C. **Analyst:** Candice Warren.





- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

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www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

Part Number: 95318
Lot Number: 121321
Description: 2-Chloroethyl vinyl ether

Solvent(s): **Lot#**
Methanol EA899-US

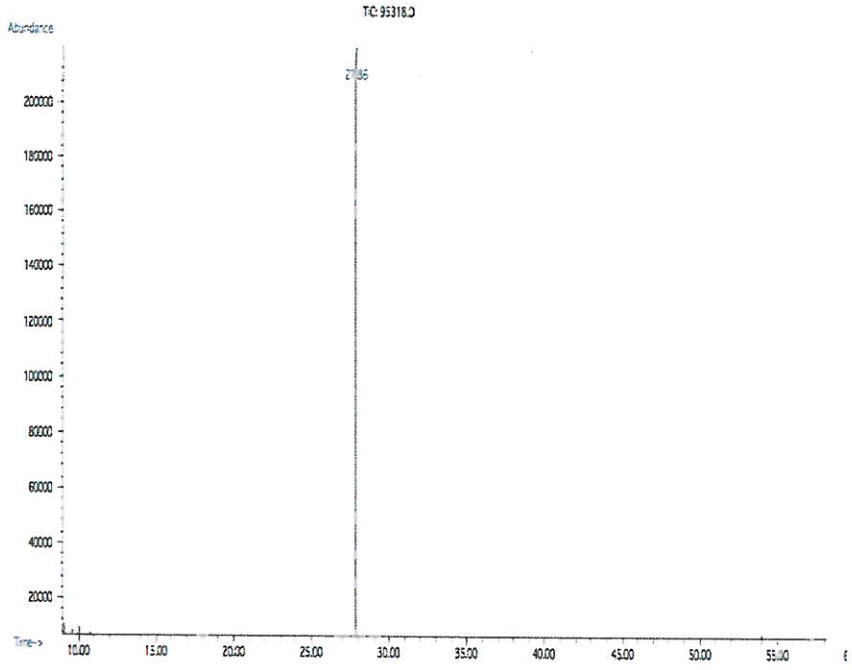
Expiration Date: 121324
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 10000
NIST Test ID#: 6UTB

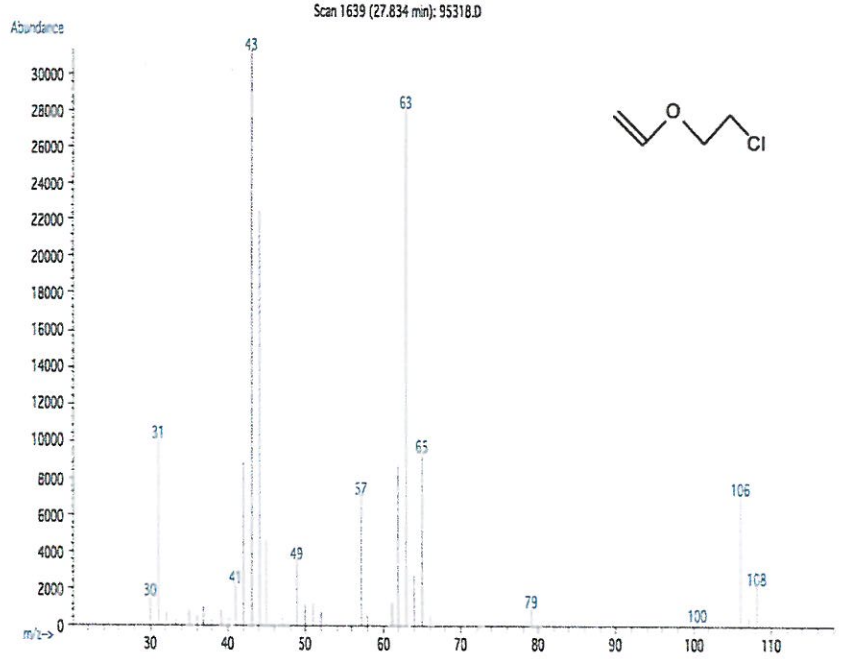
Weight(s) shown below were combined and diluted to (mL): 30.0 | 5E-05 Balance Uncertainty | 0.0003 Flask Uncertainty

		121321
Formulated By:	Benson Chan	DATE
		121321
Reviewed By:	Pedro L. Rentas	DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight (g)	Actual Weight (g)	Actual Conc(µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. 2-Chloroethyl vinyl ether	74	MKCD0033	10000	99	0.2	0.30320	0.30411	10030.2	40.7	110-75-8	N/A	orl-rat 250mg/kg

Method: GC6MSD-1.M. **Detector:** MSD. **Column:** (60m X 0.25mm X 1.5 µm). **Oven Profile:** Temp 1 = 35°C (Time 1=10min.), Temp 2 = 200°C (Time 2=8.75 min.), Rate = 4°C/min., Injector B Temp.= 200°C, Detector B Temp. = 220°C. **Analyst:** Candice Warren.





- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30006 **Lot No.:** A0186767

Description : VOA Calibration Mix #1

VOA Calibration Mix #1 5,000µg/mL, P&T Methanol/Water(90:10), 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : September 30, 2025 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Acetone **CAS #** 67-64-1 (Lot MKCQ7914) **Purity** 99%	5,046.8 µg/mL	+/- 29.3427 µg/mL +/- 304.4978 µg/mL +/- 305.2207 µg/mL	Gravimetric Unstressed Stressed
2	2-Butanone (MEK) **CAS #** 78-93-3 (Lot SHBN2844) **Purity** 99%	5,048.8 µg/mL	+/- 29.3544 µg/mL +/- 304.6185 µg/mL +/- 305.3417 µg/mL	Gravimetric Unstressed Stressed
3	4-Methyl-2-pentanone (MIBK) **CAS #** 108-10-1 (Lot SHBN3601) **Purity** 99%	5,045.0 µg/mL	+/- 29.3321 µg/mL +/- 304.3872 µg/mL +/- 305.1099 µg/mL	Gravimetric Unstressed Stressed
4	2-Hexanone **CAS #** 591-78-6 (Lot MKCQ6663) **Purity** 99%	5,045.3 µg/mL	+/- 29.3340 µg/mL +/- 304.4073 µg/mL +/- 305.1300 µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

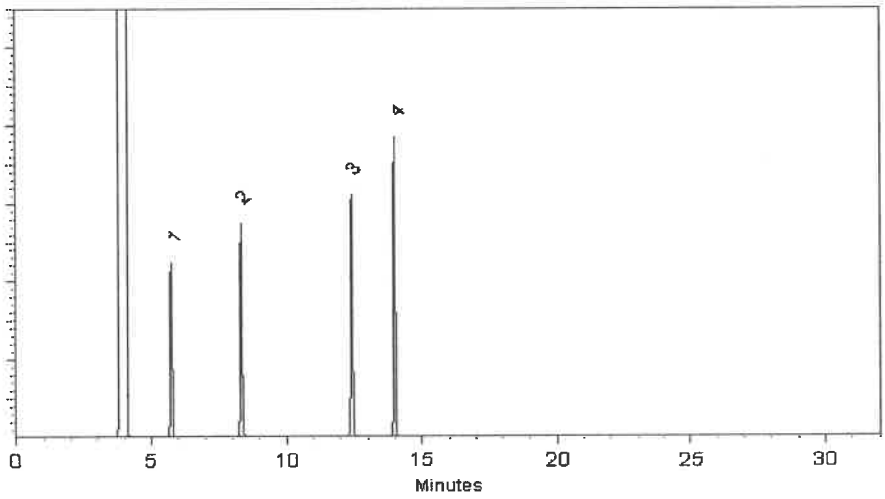
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Bethany Lowery - Operations Tech I

Date Mixed: 28-Jun-2022 **Balance:** B251644995

Christie Mills - Operations Tech II - ARM QC

Date Passed: 30-Jun-2022

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30470 **Lot No.:** A0181905

Description : tert-Butanol Standard

tert-Butanol Std 50,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : February 28, 2025 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	tert-Butanol (TBA)	50,126.0 µg/mL	+/- 293.4988 µg/mL	Gravimetric
	CAS # 75-65-0 (Lot SHBM7694)		+/- 1,073.7654 µg/mL	Unstressed
	Purity 99%		+/- 1,104.9494 µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

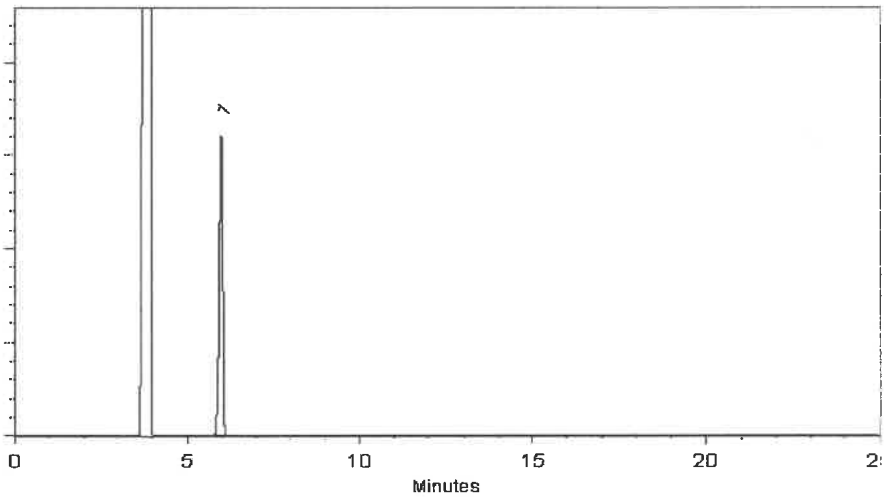
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

John Friedline - Operations Technician I

Date Mixed: 16-Feb-2022 **Balance:** B442140311

Marlina Cowan - Operations Tech I

Date Passed: 21-Feb-2022

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

4 J

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30470 **Lot No.:** A0191703

Description : tert-Butanol Standard

tert-Butanol Std 50,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2025 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	tert-Butanol (TBA)	50,122.0 µg/mL	+/- 293.4753 µg/mL	Gravimetric
	CAS # 75-65-0 (Lot 101619K21F-1)		+/- 1,073.6797 µg/mL	Unstressed
	Purity 99%		+/- 1,104.8612 µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

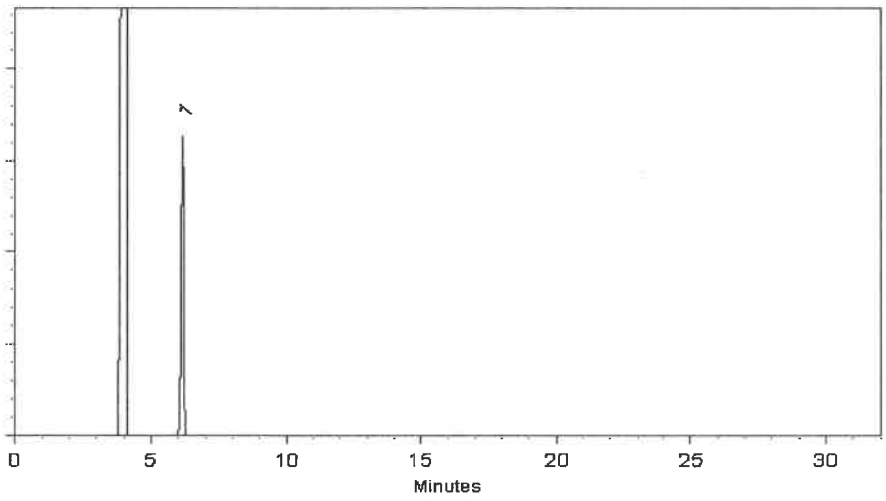
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Alicia Leathers - Operation Technician I **Date Mixed:** 15-Nov-2022 **Balance:** 1127510105

Jennifer Pollino - Operations Tech III - ARM QC **Date Passed:** 17-Nov-2022

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30067 **Lot No.:** A0191805

Description : 4-Bromofluorobenzene Standard

4-Bromofluorobenzene Standard 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2027 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1-Bromo-4-fluorobenzene (BFB)	460-00-4	184975	99%	2,483.9 µg/mL	+/- 139.5488

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

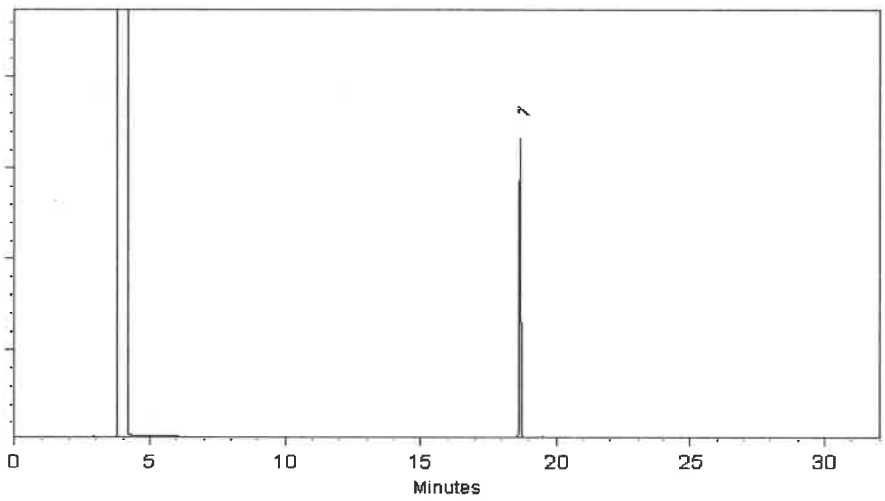
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Alicia Leathers - Operation Technician I **Date Mixed:** 17-Nov-2022 **Balance Serial #** B251644995

Jennifer Pollino - Operations Tech III - ARM QC **Date Passed:** 21-Nov-2022

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30225 **Lot No.:** A0193071

Description : Bromochloromethane Standard

Bromochloromethane 2000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 2027 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Bromochloromethane	74-97-5	00008541	99%	2,018.0 µg/mL	+/- 113.3890

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

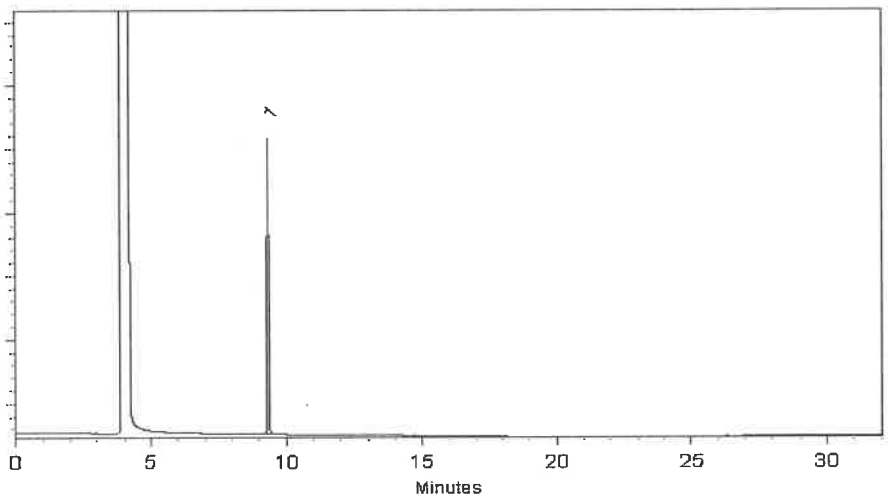
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Tom Suckar - Mix Technician

Date Mixed: 29-Dec-2022 **Balance Serial #** B707717271

Christie Mills - Operations Tech II - ARM QC

Date Passed: 03-Jan-2023

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30225 **Lot No.:** A0193071

Description : Bromochloromethane Standard

Bromochloromethane 2000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 2027 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Bromochloromethane	74-97-5	00008541	99%	2,018.0 µg/mL	+/- 113.3890

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

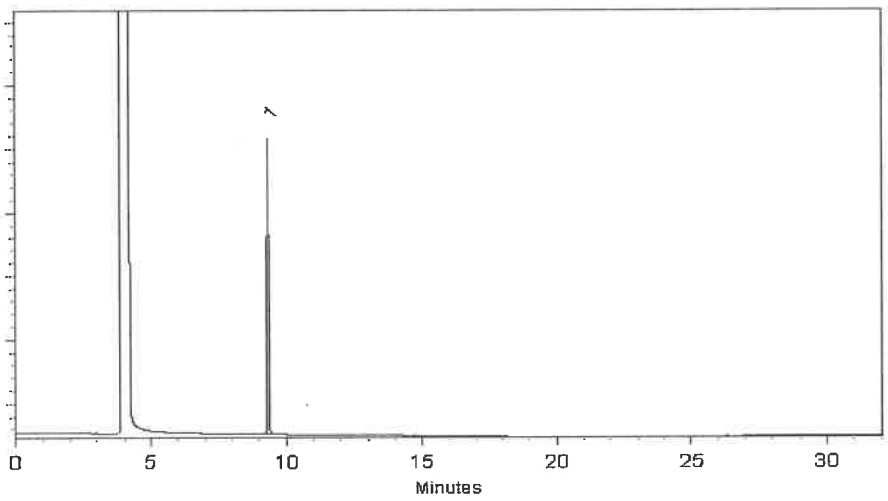
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Tom Suckar - Mix Technician

Date Mixed: 29-Dec-2022 **Balance Serial #** B707717271

Christie Mills - Operations Tech II - ARM QC

Date Passed: 03-Jan-2023

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30042 **Lot No.:** A0194279

Description : 502.2 Calibration Mix #1

502.2 Calibration Mix #1 2,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2029 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Dichlorodifluoromethane (CFC-12)	75-71-8	00012554	99%	2,001.5 µg/mL	+/- 112.7231
2	Chloromethane (methyl chloride)	74-87-3	SHBK6571	99%	2,001.2 µg/mL	+/- 112.5863
3	Vinyl chloride	75-01-4	00015559	99%	2,001.4 µg/mL	+/- 112.6561
4	Bromomethane (methyl bromide)	74-83-9	101604	99%	2,006.4 µg/mL	+/- 112.8262
5	Chloroethane (ethyl chloride)	75-00-3	107-401039114-1	99%	2,001.9 µg/mL	+/- 112.5897
6	Trichlorofluoromethane (CFC-11)	75-69-4	MKCL8411	99%	2,000.8 µg/mL	+/- 112.6473

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

Carrier Gas:
helium-constant flow 2.0 mL/min.

Temp. Program:
40°C (hold 6 min.) to 100°C
@ 6°C/min.

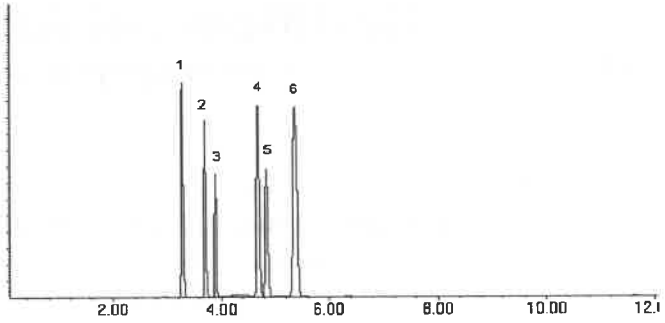
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD

Split Vent:
Split ratio 10:1

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Tom Suckar - Mix Technician

Date Mixed: 03-Feb-2023 **Balance Serial #** B707717271

Christie Mills - Operations Tech II - ARM QC

Date Passed: 07-Feb-2023

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30042 **Lot No.:** A0194279

Description : 502.2 Calibration Mix #1

502.2 Calibration Mix #1 2,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2029 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Dichlorodifluoromethane (CFC-12)	75-71-8	00012554	99%	2,001.5 µg/mL	+/- 112.7231
2	Chloromethane (methyl chloride)	74-87-3	SHBK6571	99%	2,001.2 µg/mL	+/- 112.5863
3	Vinyl chloride	75-01-4	00015559	99%	2,001.4 µg/mL	+/- 112.6561
4	Bromomethane (methyl bromide)	74-83-9	101604	99%	2,006.4 µg/mL	+/- 112.8262
5	Chloroethane (ethyl chloride)	75-00-3	107-401039114-1	99%	2,001.9 µg/mL	+/- 112.5897
6	Trichlorofluoromethane (CFC-11)	75-69-4	MKCL8411	99%	2,000.8 µg/mL	+/- 112.6473

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

Carrier Gas:
helium-constant flow 2.0 mL/min.

Temp. Program:
40°C (hold 6 min.) to 100°C
@ 6°C/min.

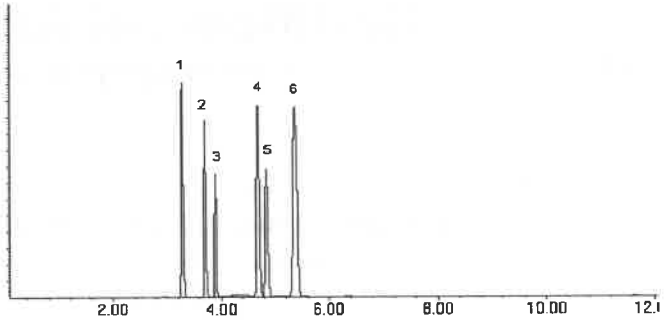
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD

Split Vent:
Split ratio 10:1

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Tom Suckar - Mix Technician

Date Mixed: 03-Feb-2023 **Balance Serial #** B707717271

Christie Mills - Operations Tech II - ARM QC

Date Passed: 07-Feb-2023

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30489 **Lot No.:** A0196115

Description : 8260B Acetates Mix

8260B Acetates Mix 2,000 µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : September 30, 2024 **Storage:** -20°C or colder

Handling: This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Methyl acetate	79-20-9	SHBP3100	99%	2,013.7 µg/mL	+/- 69.6015
2	Vinyl acetate	108-05-4	RD220630	99%	2,020.0 µg/mL	+/- 69.8205
3	Ethyl acetate	141-78-6	SHBP9289	99%	2,019.3 µg/mL	+/- 69.7974
4	Isopropyl acetate	108-21-4	BCCG7069	99%	2,014.0 µg/mL	+/- 69.6131
5	Propyl acetate	109-60-4	TFFKL	99%	2,014.7 µg/mL	+/- 69.6361
6	Butyl acetate	123-86-4	SHBP6314	99%	2,014.0 µg/mL	+/- 69.6131
7	Amyl acetate	628-63-7	41325/1	97%	2,016.3 µg/mL	+/- 69.6928

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods . Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this

reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

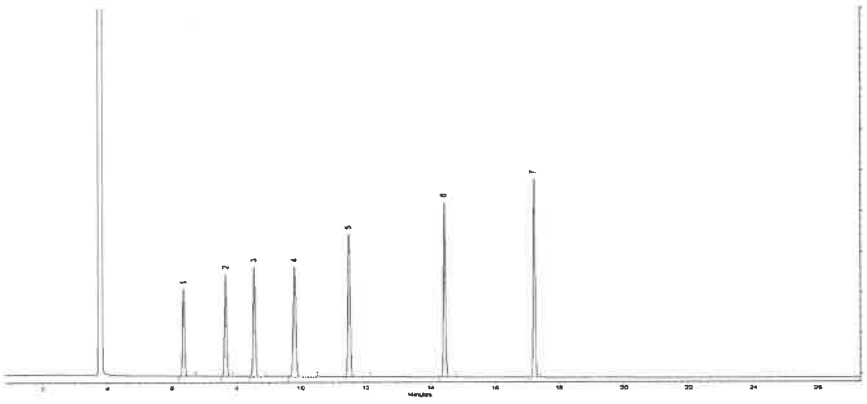
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Bethany Lowery - Operations Tech I

Date Mixed: 21-Mar-2023 **Balance Serial #** B251644995

John Lidgett - AD Chemist

Date Passed: 29-Mar-2023

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30489 **Lot No.:** A0196115

Description : 8260B Acetates Mix

8260B Acetates Mix 2,000 µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : September 30, 2024 **Storage:** -20°C or colder

Handling: This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Methyl acetate	79-20-9	SHBP3100	99%	2,013.7 µg/mL	+/- 69.6015
2	Vinyl acetate	108-05-4	RD220630	99%	2,020.0 µg/mL	+/- 69.8205
3	Ethyl acetate	141-78-6	SHBP9289	99%	2,019.3 µg/mL	+/- 69.7974
4	Isopropyl acetate	108-21-4	BCCG7069	99%	2,014.0 µg/mL	+/- 69.6131
5	Propyl acetate	109-60-4	TFFKL	99%	2,014.7 µg/mL	+/- 69.6361
6	Butyl acetate	123-86-4	SHBP6314	99%	2,014.0 µg/mL	+/- 69.6131
7	Amyl acetate	628-63-7	41325/1	97%	2,016.3 µg/mL	+/- 69.6928

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods . Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this

reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

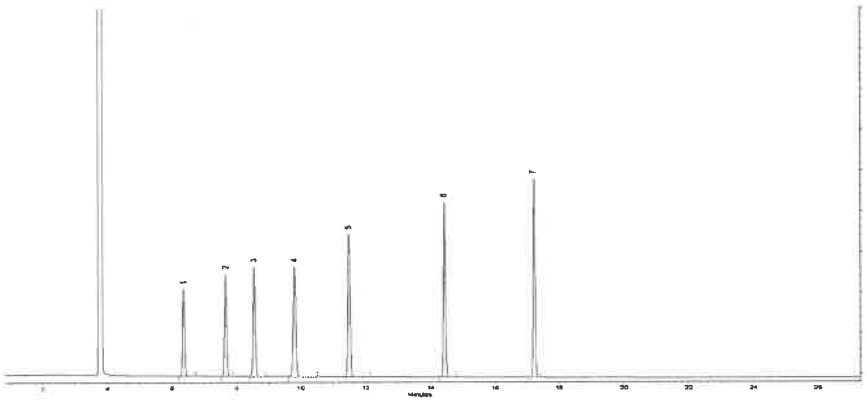
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Bethany Lowery - Operations Tech I

Date Mixed: 21-Mar-2023 **Balance Serial #** B251644995

John Lidgett - AD Chemist

Date Passed: 29-Mar-2023

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 555582 **Lot No.:** A0196865

Description : Custom 8260A/B Surrogate Mix

Custom 8260A/B Surrogate Mix 25,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2026 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Component #	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2-Dichloroethane-d4	17060-07-0	PR-32845	99%	25,036.0 µg/mL	+/- 1,417.9179
2	1-Bromo-4-fluorobenzene (BFB)	460-00-4	184975	99%	25,132.0 µg/mL	+/- 1,423.3549
3	Dibromofluoromethane	1868-53-7	022013	99%	25,040.0 µg/mL	+/- 1,418.1445
4	Toluene-d8	2037-26-5	PR-33397	99%	25,028.0 µg/mL	+/- 1,417.4648

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Russ Bookhamer - Operations Technician I

Date Mixed: 11-Apr-2023 **Balance:** 1127510105

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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Catalog No. : 555582 **Lot No.:** A0196865

Description : Custom 8260A/B Surrogate Mix

Custom 8260A/B Surrogate Mix 25,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2026 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Component #	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2-Dichloroethane-d4	17060-07-0	PR-32845	99%	25,036.0 µg/mL	+/- 1,417.9179
2	1-Bromo-4-fluorobenzene (BFB)	460-00-4	184975	99%	25,132.0 µg/mL	+/- 1,423.3549
3	Dibromofluoromethane	1868-53-7	022013	99%	25,040.0 µg/mL	+/- 1,418.1445
4	Toluene-d8	2037-26-5	PR-33397	99%	25,028.0 µg/mL	+/- 1,417.4648

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Russ Bookhamer - Operations Technician I

Date Mixed: 11-Apr-2023 **Balance:** 1127510105

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

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- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30042 **Lot No.:** A0197644

Description : 502.2 Calibration Mix #1

502.2 Calibration Mix #1 2,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : January 31, 2030 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Dichlorodifluoromethane (CFC-12)	75-71-8	00012554	99%	2,001.6 µg/mL	+/- 112.7159
2	Chloromethane (methyl chloride)	74-87-3	SHBM9611	99%	2,002.0 µg/mL	+/- 112.7840
3	Vinyl chloride	75-01-4	00015559	99%	2,002.2 µg/mL	+/- 112.6713
4	Bromomethane (methyl bromide)	74-83-9	101604	99%	2,006.4 µg/mL	+/- 112.8861
5	Chloroethane (ethyl chloride)	75-00-3	107-401039114-1	99%	2,000.9 µg/mL	+/- 112.5990
6	Trichlorofluoromethane (CFC-11)	75-69-4	MKCL8411	99%	1,999.2 µg/mL	+/- 112.4861

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

Carrier Gas:
helium-constant flow 2.0 mL/min.

Temp. Program:
40°C (hold 6 min.) to 100°C
@ 6°C/min.

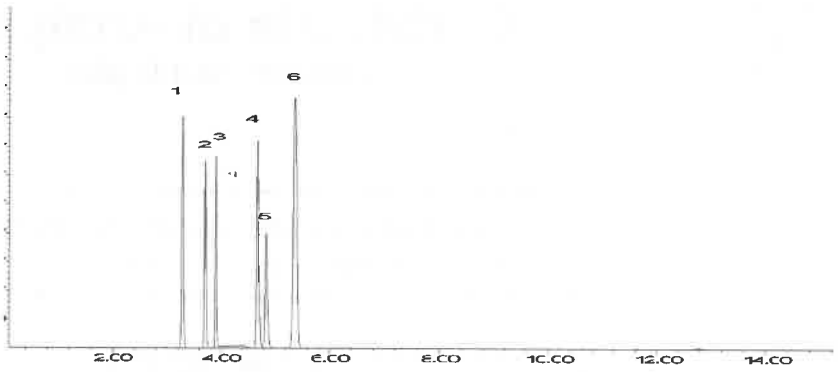
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD

Split Vent:
Split ratio 10:1

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brittany Federinko - Operations Tech I

Date Mixed: 02-May-2023 **Balance Serial #** B707717271

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 08-May-2023

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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Catalog No. : 30489 **Lot No.:** A0199224

Description : 8260B Acetates Mix

8260B Acetates Mix 2,000 µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 2024 **Storage:** -20°C or colder

Handling: This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Methyl acetate	79-20-9	SHBP3100	99%	2,015.0 µg/mL	+/- 69.6476
2	Vinyl acetate	108-05-4	RD220630	99%	2,014.3 µg/mL	+/- 69.6246
3	Ethyl acetate	141-78-6	SHBP9289	99%	2,012.7 µg/mL	+/- 69.5670
4	Isopropyl acetate	108-21-4	BCCG7069	99%	2,017.0 µg/mL	+/- 69.7168
5	Propyl acetate	109-60-4	KLOBM	99%	2,007.7 µg/mL	+/- 69.3942
6	Butyl acetate	123-86-4	SHBP6314	99%	2,014.3 µg/mL	+/- 69.6246
7	Amyl acetate	628-63-7	41325/1	97%	2,012.1 µg/mL	+/- 69.5475

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods . Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this

reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

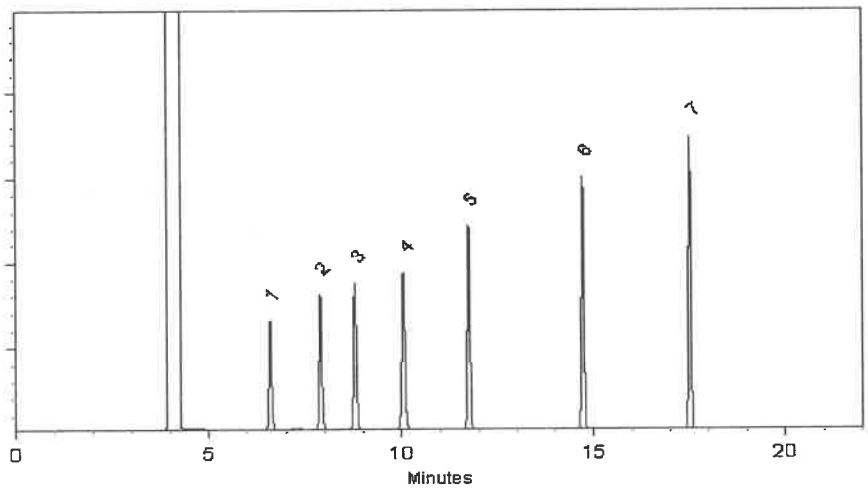
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Tom Suckar - Mix Technician

Date Mixed: 22-Jun-2023 **Balance Serial #** B251644995

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 26-Jun-2023

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
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Purity Notes:

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- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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Handling Notes:

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Catalog No. : 30006 **Lot No.:** A0200785

Description : VOA Calibration Mix #1

VOA Calibration Mix #1 5,000µg/mL, P&T Methanol/Water(90:10), 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2026 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Acetone	67-64-1	SHBP8774	99%	5,018.5 µg/mL	+/- 173.4162
2	2-Butanone (MEK)	78-93-3	SHBL5543	99%	5,016.0 µg/mL	+/- 173.3298
3	4-Methyl-2-pentanone (MIBK)	108-10-1	SHBP4724	99%	5,010.7 µg/mL	+/- 173.1455
4	2-Hexanone	591-78-6	MKCQ6663	99%	5,015.0 µg/mL	+/- 173.2952

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

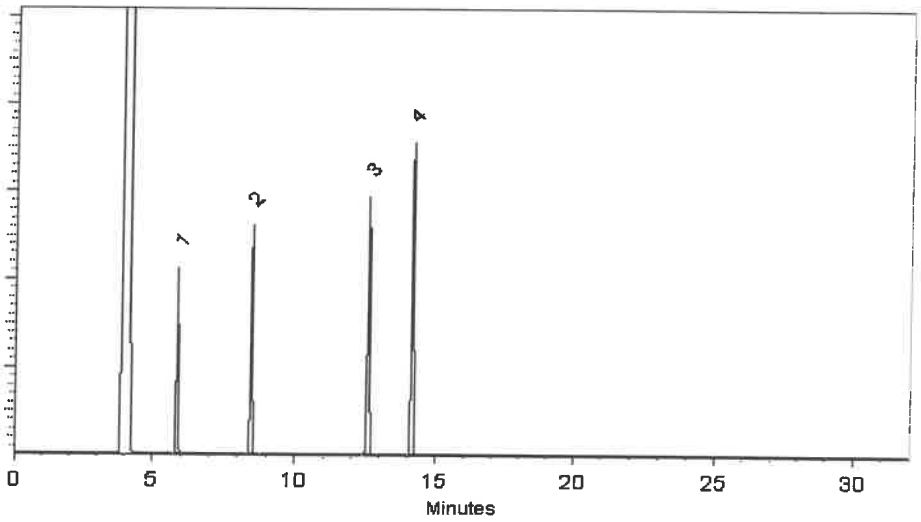
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Laith Clemente - Operations Technician I

Date Mixed: 09-Aug-2023 **Balance Serial #** B707717271

Marlina Cowan – Operations Tech II ARM QC

Date Passed: 16-Aug-2023

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30006 **Lot No.:** A0200785

Description : VOA Calibration Mix #1

VOA Calibration Mix #1 5,000µg/mL, P&T Methanol/Water(90:10), 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2026 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Acetone	67-64-1	SHBP8774	99%	5,018.5 µg/mL	+/- 173.4162
2	2-Butanone (MEK)	78-93-3	SHBL5543	99%	5,016.0 µg/mL	+/- 173.3298
3	4-Methyl-2-pentanone (MIBK)	108-10-1	SHBP4724	99%	5,010.7 µg/mL	+/- 173.1455
4	2-Hexanone	591-78-6	MKCQ6663	99%	5,015.0 µg/mL	+/- 173.2952

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

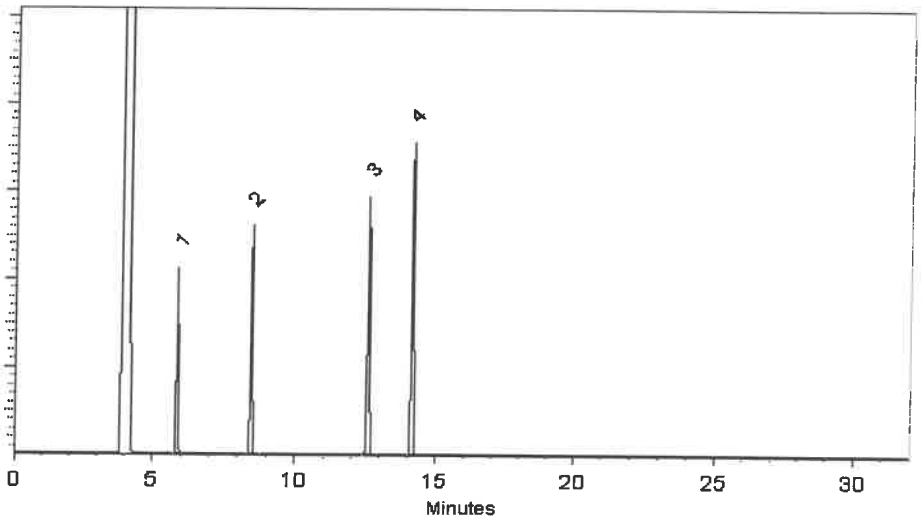
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



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Laith Clemente - Operations Technician I

Date Mixed: 09-Aug-2023 **Balance Serial #** B707717271

Marlina Cowan – Operations Tech II ARM QC

Date Passed: 16-Aug-2023

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
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- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

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Catalog No. : 30006 **Lot No.:** A0200785

Description : VOA Calibration Mix #1

VOA Calibration Mix #1 5,000µg/mL, P&T Methanol/Water(90:10), 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2026 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Acetone	67-64-1	SHBP8774	99%	5,018.5 µg/mL	+/- 173.4162
2	2-Butanone (MEK)	78-93-3	SHBL5543	99%	5,016.0 µg/mL	+/- 173.3298
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4	2-Hexanone	591-78-6	MKCQ6663	99%	5,015.0 µg/mL	+/- 173.2952

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

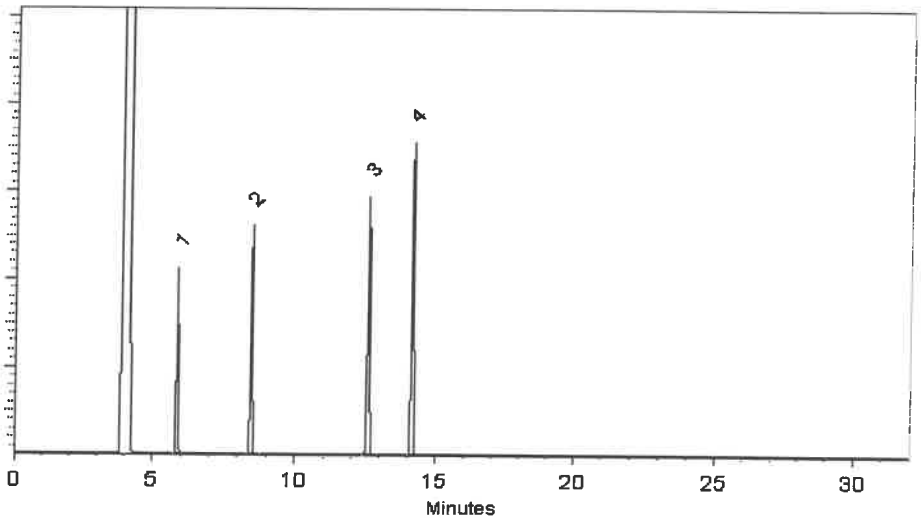
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



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Laith Clemente - Operations Technician I

Date Mixed: 09-Aug-2023 **Balance Serial #** B707717271

Marlina Cowan – Operations Tech II ARM QC

Date Passed: 16-Aug-2023

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 555408-FL **Lot No.:** A0205177

Description : Custom Vinyl Acetate Standard

Custom Vinyl Acetate Standard 8,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2025 **Storage:** -20°C or colder

Handling: This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Vinyl acetate	108-05-4	RP231030CTH	98%	8,047.8 µg/mL	+/- 278.1675

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods. Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

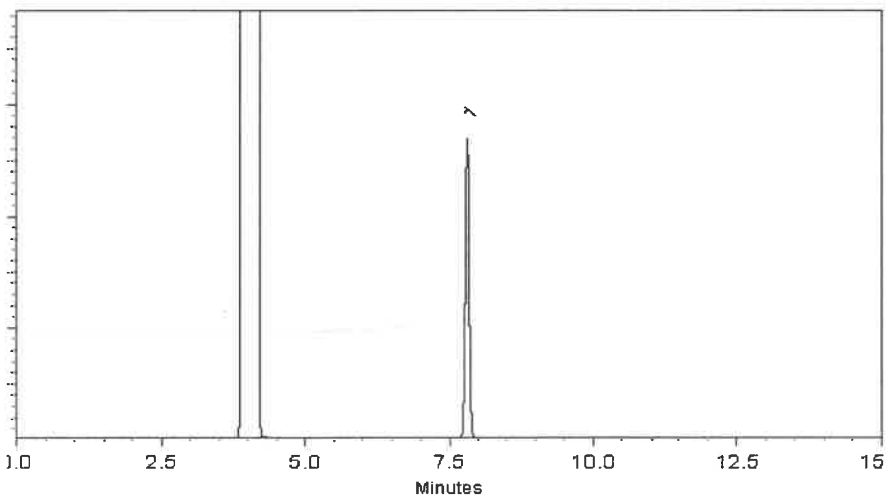
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



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Tom Suckar - Mix Technician

Date Mixed: 06-Dec-2023 **Balance Serial #** 1127510105

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 11-Dec-2023

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

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Certificate of Analysis

chromatographic

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 555408-SL **Lot No.:** A0205179

Description : Custom Vinyl Acetate Standard

Custom Vinyl Acetate Standard 8,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2025 **Storage:** -20°C or colder

Handling: This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Vinyl acetate	108-05-4	RP231030CTH	98%	8,075.2 µg/mL	+/- 279.1159

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods . Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

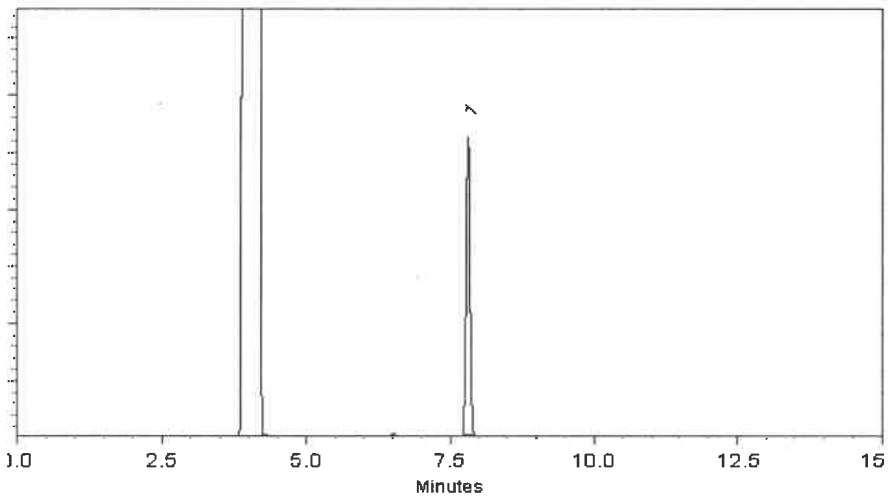
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



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Daniel Wasson - Operations Tech I **Date Mixed:** 06-Dec-2023 **Balance Serial #** 1127510105

Jennifer Pollino - Operations Tech III - ARM QC **Date Passed:** 11-Dec-2023

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
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Purity Notes:

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Certified Uncertainty Value Notes:

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Manufacturing Notes:

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Handling Notes:

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Catalog No. : 555408-SL **Lot No.:** A0205179

Description : Custom Vinyl Acetate Standard

Custom Vinyl Acetate Standard 8,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2025 **Storage:** -20°C or colder

Handling: This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Vinyl acetate	108-05-4	RP231030CTH	98%	8,075.2 µg/mL	+/- 279.1159

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

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Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

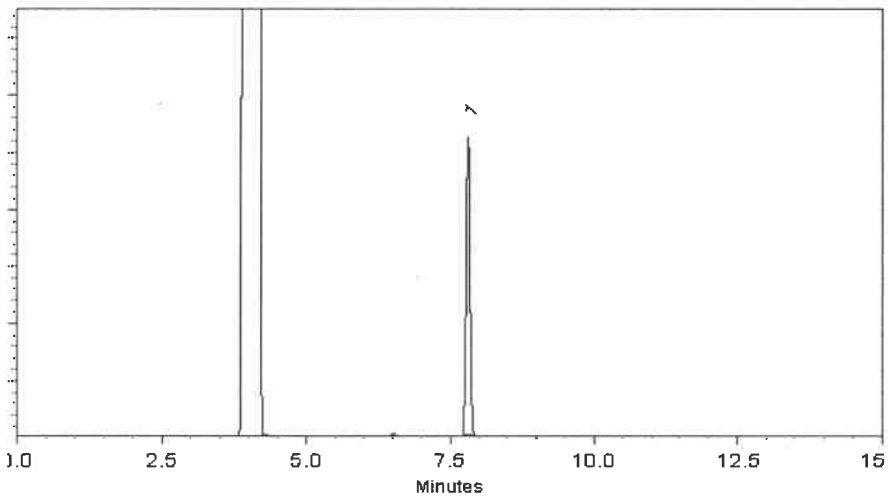
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



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Daniel Wasson - Operations Tech I **Date Mixed:** 06-Dec-2023 **Balance Serial #** 1127510105

Jennifer Pollino - Operations Tech III - ARM QC **Date Passed:** 11-Dec-2023

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

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Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

gravimetric

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 555581 **Lot No.:** A0210184

Description : Custom 8260 Internal Standard Mix

Custom 8260 Internal Standard Mix 25,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2027 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Component #	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,4-Dichlorobenzene-d4	3855-82-1	PR-30447	99%	25,212.0 µg/mL	+/- 1,427.8857
2	1,4-Difluorobenzene	540-36-3	MKCS8657	99%	25,220.0 µg/mL	+/- 1,428.3388
3	Chlorobenzene-d5	3114-55-4	PR-31132	99%	25,116.0 µg/mL	+/- 1,422.4487
4	Pentafluorobenzene	363-72-4	MKCR9383	99%	25,180.0 µg/mL	+/- 1,426.0734

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

John Friedline - Operations Technician I

Date Mixed: 11-Apr-2024 **Balance:** 1127510105

REVIEWED

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

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- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

Part Number: 70046
Lot Number: 070122
Description: Bromochloromethane

Solvent: Methanol **Lot#** EC592-US

Expiration Date: 070127
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 1000
NIST Test ID#: 6UTB

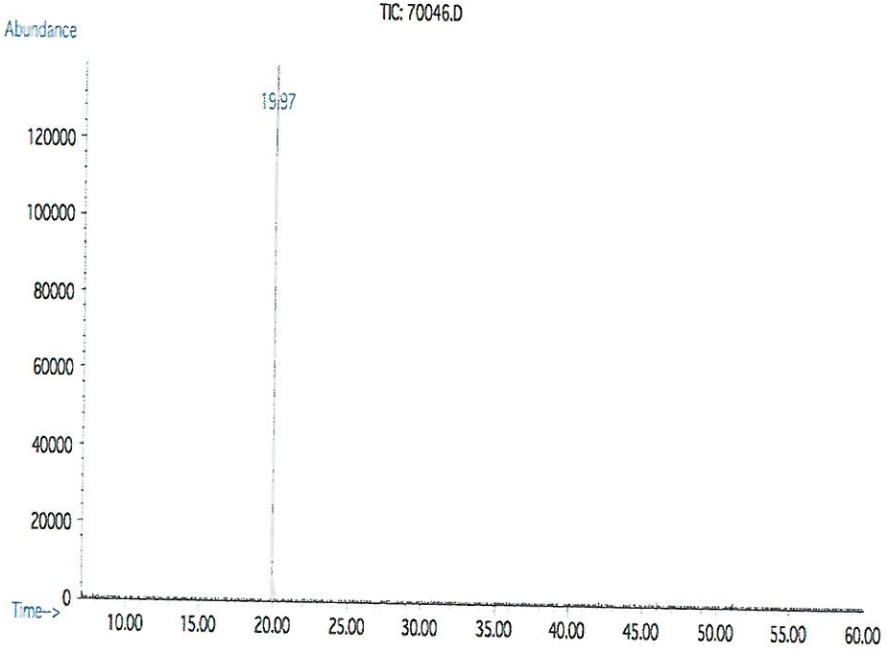
Weight(s) shown below were combined and diluted to (mL): 25.0

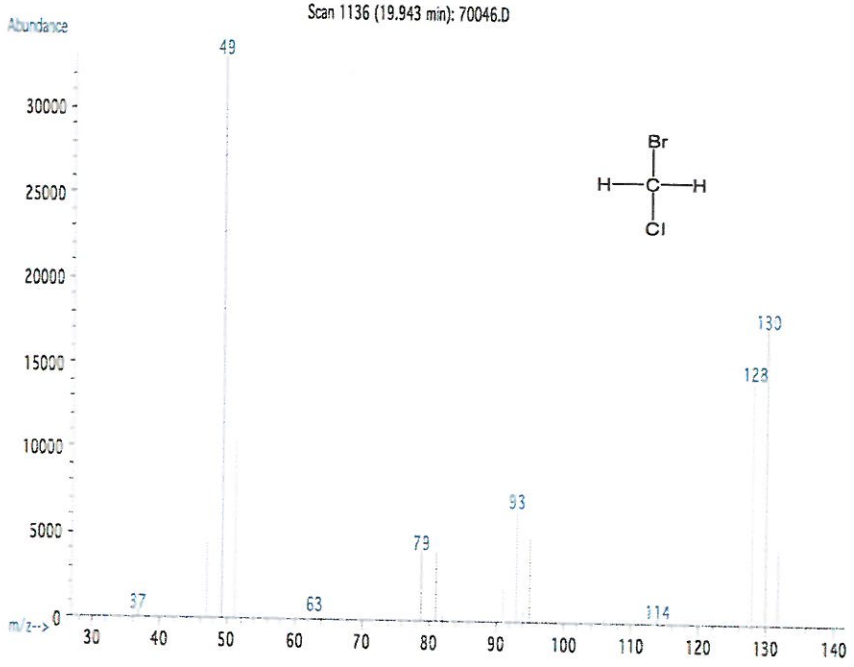
5E-05 Balance Uncertainty
0.0002 Flask Uncertainty

Gabriel Helland		070122
Formulated By:	Gabriel Helland	DATE
Pedro Rentas		070122
Reviewed By:	Pedro L. Rentas	DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity (%)	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Bromochloromethane	46	AY01	1000	99	0.2	0.02530	0.02540	1004.1	5.7	74-97-5	200 ppm (1050mg/m3/8H)	orl-rat 5000mg/kg

Method GC6MSD-1.M: Column : (60m X 0.25mm X 1.5 µm) Temp 1 = 35°C (10min.), Temp 2 = 200°C (8.75 min.), Rate = 4°C/min., Injector B= 200°C, Detector B = 220°C. Analyst: Candice Warren





- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis

avantor™ | J.T.Baker®

Material No.: 9077-02
Batch No.: 22L0562016
Manufactured Date: 2022-10-26
Expiration Date: 2025-10-25
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (CH_3OH) (by GC, corrected for water)	≥ 99.9 %	100.0 %
Residue after Evaporation	≤ 1.0 ppm	0.2 ppm
Titrable Acid (µeq/g)	≤ 0.3	0.2
Titrable Base (µeq/g)	≤ 0.10	0.03
Water (by KF, coulometric)	≤ 0.08 %	< 0.01 %
Volatile Organic Trace Analysis - Below EPA 8260B CRQL	Conforms	Conforms

For Laboratory,Research,or Manufacturing Use
Performance Tested for Use in EPA Methods
500 Series for Drinking Water
600 Series for Wastewater
846 for Solid Waste

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

James T Ethier
Jamie Ethier
Vice President Global Quality

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Jamie Ethier
Vice President Global Quality

SHIPPING DOCUMENTS

CHEMTECH
CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 • Fax (908) 789-8922
www.chemtech.net

CHEMTECH PROJECT NO. / QUOTE NO. P3609
COC Number 2041350

CLIENT INFORMATION

REPORT TO BE SENT TO:
COMPANY: Jacobs
ADDRESS: 412 Mt Kemble Ave Suite #100
CITY Morristown STATE: NJ ZIP: 07960
ATTENTION: John Yurfanic
PHONE: (281) 414-1719 FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: STC PTC
PROJECT NO.: D3779922 LOCATION: Princeton Junction
PROJECT MANAGER: Mary Murphy
e-mail: Mary.Murphy@Jacobs.com
PHONE: (201) 936-0586 FAX:

CLIENT BILLING INFORMATION

BILL TO: Mary Murphy PO#:
ADDRESS:
CITY STATE: ZIP:
ATTENTION: PHONE:

DATA TURNAROUND INFORMATION

FAX (RUSH) Standard TAT DAYS*
HARDCOPY (DATA PACKAGE): DAYS*
EDD: DAYS*
*TO BE APPROVED BY CHEMTECH
STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS DAYS

DATA DELIVERABLE INFORMATION

- ☐ Level 1 (Results Only)
- ☐ Level 2 (Results + QC)
- ☒ Level 3 (Results + QC + Raw Data)
- ☐ Level 4 (QC + Full Raw Data)
- ☐ NJ Reduced
- ☐ NYS ASP A
- ☐ NYS ASP B
- ☐ Other
- ☐ EDD FORMAT

ANALYSIS

1 VOCs 8260D (TCL) 8260D (TAL) 2 SVOCs PAHs 8270E, 8270E SIM 3 Metals 6020B, 7470A Hg 4 Cr(VI) 7196A 5 SW 3060A 6 7 8 9

PRESERVATIVES

A/E | E | B/E | E

COMMENTS

← Specify Preservatives
A-HCl D-NaOH
B-HN03 E-ICE
C-H2SO4 F-OTHER

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# OF BOTTLES	1	2	3	4	5	6	7	8	9
1.	915-J-WS-081424	WS		X	8-14-24	1025	8	2	4	1	1					
2.	920-J-WS-081424	WS		X	8-14-24	1120	8	2	4	1	1					
3.	TB-01-081424	DI		X	8-14-24	1125	1	1								
4.																
5.																
6.																
7.																
8.																
9.																
10.																

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:
1.	8-14-24 1227	1.
2.		2.
3.	8-14-2024 1415	3.

Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☒ COOLER TEMP 2.9°C
Comments: See attached table for required analytes list of ~~Eco-VOCs, Eco-SVOCs, and Eco-metals~~ (TA)
2L of extra volume for SVOCs + PAH analysis

Page 1 of 1

CLIENT: ☐ Hand Delivered ☐ Other
CHEMTECH: ☐ Picked Up ☐ Field Sampling

Shipment Complete ☐ YES ☐ NO

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WHITE - CHEMTECH COPY FOR RETURN TO CLIENT YELLOW - CHEMTECH COPY PINK - SAMPLER COPY

CHEMTECH 284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

Laboratory Certification

Certified By	License No.
CAS EPA CLP Contract	68HERH20D0011
Connecticut	PH-0830
DOD ELAP (L-A-B)	L2219
Maine	2024021
Maryland	296
New Hampshire	255423
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	T104704488

Alliance TECHNICAL GROUP
284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

LOGIN REPORT/SAMPLE TRANSFER

Order ID : P3609 JACO05
Client Name : JACOBS Engineering Grou
Client Contact : Mary I. Murphy
Invoice Name : JACOBS Engineering Grou
Invoice Contact : Mary I. Murphy

Order Date : 8/14/2024 12:48:00 PM
Project Name : Former Schlumberger Site I
Receive DateTime : 8/14/2024 2:15:00 PM
Purchase Order :

Project Mgr : Yazmeen
Report Type : Level 4
EDD Type : CH2MHILL
Hard Copy Date :
Date Signoff : 8/14/2024 4:40:21 PM

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
P3609-01	915-J-WS-081424	Water	08/14/2024	10:25					
					VOCMS Group6		8260-Low		10 Bus. Days
P3609-02	920-J-WS-081424	Water	08/14/2024	11:20					
					VOCMS Group6		8260-Low		10 Bus. Days
P3609-03	TB-01-081424	Water	08/14/2024	11:25					
					VOCMS Group6		8260-Low		10 Bus. Days

Relinguished By :
Date / Time : 8/14/24

Received By :
Date / Time : 8/14/24
Storage Area : VOA Refridgerator Room