CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

DATA PACKAGE

VOLATILE ORGANICS

PROJECT NAME : FORMER SCHLUMBERGER SITE PRINCETON NJ

JACOBS ENGINEERING GROUP, INC.

412 Mt. Kemble Ave

Downtown Building

Morristown, NJ - 07960

Phone No: 9732670555

ORDER ID : N6070

ATTENTION : Doug Scott

NELAP ACCREDITED TNI LABORATORY

ANAB ACCREDITED ISO/IEC 17025 DOD ELAP

Laboratory Certification ID # 20012

CHEMTECH

Table Of Contents for N6070

1) VOLATILES DATA 2

2) Signature Page 4

3) Case Narrative 5

4) Qualifier Page 7

5) Conformance/Non Conformance 8

6) QA Checklist 10

7) Chronicle 11

8) Hit Summary 12

9) QC Data Summary For VOCMS Group3 13

- 9.1) Deuterated Monitoring Compound Summary 14
- 9.2) LCS/LCSD Summary 15
- 9.3) Method Blank Summary 17
- 9.4) GS/MS Tune Summary 18
- 9.5) Internal Standard Area and RT Summary 20

10) Sample Data 23

- 10.1) GW-BR-04-226-245-121422-H 24

11) Calibration Data Summary 34

- 11.1) Initial Calibration Data 35
  - 11.1.1) VX120722 35
- 11.2) Continued Calibration Data 404
  - 11.2.1) VX033430.D 404

12) QC Sample Data 463

- 12.1) Tune Raw Data 464
- 12.2) Method Blank Data 466
- 12.3) LCS Data 473
- 12.4) LCSD Data 526

13) Manual Integration 579

14) Analytical Runlogs 582

15) Standard Prep Logs 589

16) Shipping Document 698

- 16.1) Chain Of Custody 699
- 16.2) ROC 700
- 16.3) Lab Certificate 702
- 16.4) Internal COC 703

Table Of Contents for N6070

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Cover Page

Order ID : N6070

Project ID : Former Schlumberger Site Princeton NJ

Client : JACOBS Engineering Group, Inc.

Lab Sample Number	Client Sample Number
N6070-01	GW-BR-04-226-245-121422-H

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 : N. N. Pandya

APPROVED
By Nimisha Pandya QA/QC Supervisor at 11:34 am, Jul 13, 2023

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

CHEMTECH
284 Sheffield Street, Mountainside, NJ 07092 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 # N6070
Test Name: VOCMS Group3

A. Number of Samples and Date of Receipt:
1 Water samples were received on 12/14/2022.

B. Parameters
According to the Chain of Custody document, the following analyses were requested: SVOC-SIMGroup1 and VOCMS Group3. This data package contains results for VOCMS Group3.

C. Analytical Techniques:
The analysis performed on instrument MSVOA_X were done using GC column DB-624UI 20m 0.18mm 1.0 um. Cat#121-1324UIThe analysis of VOCMS Group3 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.

CHEMTECH
284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

F. Manual Integration Comments:

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 N. N. Pandya

APPROVED

By Nimisha Pandya QA/QC Supervisor at 11:35 am, Jul 13, 2023

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

GC/MS VOA CONFORMANCE/NON-CONFORMANCE SUMMARY

CHEMTECH PROJECT NUMBER: N6070 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.			✓
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:			✓

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

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

NA NO YES

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.

S. M. Jodhani

QA REVIEW

REVIEWED
By Sohil Jodhani, QA/QC Director at 11:32 am, Jul 13, 2023

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: N6070

	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:** 07/13/2023

2nd Level QA Review Signature: N. N. Pandya **Date:**

APPROVED
By Nimisha Pandya QA/QC Supervisor at 11:35 am, Jul 13, 2023

CHEMTECH

284 Sheffield Street, Mountainside, New Jersey - 07092

Phone: (908) 789 8900 Fax: (908) 789 8922

LAB CHRONICLE

OrderID:	N6070	**OrderDate:**	12/14/2022 4:13:00 PM
Client:	JACOBS Engineering Group, Inc.	**Project:**	Former Schlumberger Site Princeton NJ
Contact:	Doug Scott	**Location:**	M11,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
N6070-01	**GW-BR-04-226-245-1 21422-H**	**Water**			**12/14/22**			**12/14/22**
			VOCMS Group3	8260-Low			12/15/22	

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Hit Summary Sheet
SW-846

SDG No.: N6070

Client: JACOBS Engineering Group, Inc.

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID:	**GW-BR-04-226-245-121422-H**							
N6070-01	GW-BR-04-226-24	Water	1,1-Dichloroethene	1.80		0.23	1.00	ug/L
N6070-01	GW-BR-04-226-24	Water	cis-1,2-Dichloroethene	9.00		0.17	1.00	ug/L
N6070-01	GW-BR-04-226-24	Water	Trichloroethene	4.90		0.27	1.00	ug/L
			Total Voc :	15.7				
			Total Concentration:	15.7				

QC SUMMARY

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Surrogate Summary

SDG No.: N6070

Client: JACOBS Engineering Group, Inc.

Analytical Method: SW8260-Low

Lab Sample ID	Client ID	Parameter	Spike	Result	RecoveryQual	Limits Low	Limits High
N6070-01	GW-BR-04-226-245-121422-H	1,2-Dichloroethane-d4	50	48.8	98	70 (74)	130 (125)
		Dibromofluoromethane	50	49.3	99	70 (75)	130 (124)
		Toluene-d8	50	47.6	95	70 (86)	130 (113)
		4-Bromofluorobenzene	50	48.6	97	70 (64)	130 (133)
VX1215WBL01	VX1215WBL01	1,2-Dichloroethane-d4	50	43.0	86	70 (74)	130 (125)
		Dibromofluoromethane	50	43.9	88	70 (75)	130 (124)
		Toluene-d8	50	42.9	86	70 (86)	130 (113)
		4-Bromofluorobenzene	50	43.5	87	70 (64)	130 (133)
VX1215WBS01	VX1215WBS01	1,2-Dichloroethane-d4	50	48.2	96	70 (74)	130 (125)
		Dibromofluoromethane	50	51.4	103	70 (75)	130 (124)
		Toluene-d8	50	54.1	108	70 (86)	130 (113)
		4-Bromofluorobenzene	50	58.6	117	70 (64)	130 (133)
VX1215WBSD0	VX1215WBSD01	1,2-Dichloroethane-d4	50	43.0	86	70 (74)	130 (125)
		Dibromofluoromethane	50	46.0	92	70 (75)	130 (124)
		Toluene-d8	50	47.4	95	70 (86)	130 (113)
		4-Bromofluorobenzene	50	51.1	102	70 (64)	130 (133)

( ) = LABORATORY INHOUSE LIMIT

CHEMTECH

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary
SW-846

SDG No.: N6070

Client: JACOBS Engineering Group, Inc.

Analytical Method: SW8260-Low **Datafile :** VX033432.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	Limits RPD
VX1215WBS01	Vinyl chloride	20	19.0	ug/L	95			70 (65)	130 (117)	
	1,1-Dichloroethene	20	14.9	ug/L	75			70 (74)	130 (110)	
	1,1-Dichloroethane	20	19.9	ug/L	100			70 (78)	130 (112)	
	cis-1,2-Dichloroethene	20	20.6	ug/L	103			70 (77)	130 (110)	
	1,1,1-Trichloroethane	20	21.7	ug/L	109			70 (80)	130 (108)	
	Benzene	20	21.3	ug/L	106			70 (82)	130 (109)	
	1,2-Dichloroethane	20	21.1	ug/L	106			70 (80)	130 (115)	
	Trichloroethene	20	22.2	ug/L	111			70 (77)	130 (113)	
	1,1,2-Trichloroethane	20	22.0	ug/L	110			70 (83)	130 (112)	
	Tetrachloroethene	20	22.0	ug/L	110			70 (67)	130 (123)	

( ) = LABORATORY INHOUSE LIMIT

CHEMTECH

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary
SW-846

SDG No.: N6070

Client: JACOBS Engineering Group, Inc.

Analytical Method: SW8260-Low **Datafile :** VX033433.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	Limits RPD
VX1215WBSD01	Vinyl chloride	20	17.6	ug/L	88	8		70 (65)	130 (117)	20 (20)
	1,1-Dichloroethene	20	16.8	ug/L	84	11		70 (74)	130 (110)	20 (20)
	1,1-Dichloroethane	20	18.5	ug/L	93	7		70 (78)	130 (112)	20 (20)
	cis-1,2-Dichloroethene	20	18.7	ug/L	94	9		70 (77)	130 (110)	20 (20)
	1,1,1-Trichloroethane	20	19.8	ug/L	99	10		70 (80)	130 (108)	20 (20)
	Benzene	20	19.7	ug/L	99	7		70 (82)	130 (109)	20 (20)
	1,2-Dichloroethane	20	19.8	ug/L	99	7		70 (80)	130 (115)	20 (20)
	Trichloroethene	20	21.0	ug/L	105	6		70 (77)	130 (113)	20 (20)
	1,1,2-Trichloroethane	20	20.5	ug/L	103	7		70 (83)	130 (112)	20 (20)
	Tetrachloroethene	20	19.9	ug/L	100	10		70 (67)	130 (123)	20 (20)

( ) = LABORATORY INHOUSE LIMIT

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VX1215WBL01

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM Case No.: N6070 SAS No.: N6070 SDG NO.: N6070

Lab File ID: VX033431.D Lab Sample ID: VX1215WBL01

Date Analyzed: 12/15/2022 Time Analyzed: 10:39

GC Column: DB-624UI ID: 0.18 (mm) Heated Purge: (Y/N) N

Instrument ID: MSVOA_X

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
VX1215WBS01	VX1215WBS01	VX033432.D	12/15/2022
VX1215WBSD01	VX1215WBSD01	VX033433.D	12/15/2022
GW-BR-04-226-245-121422-H	N6070-01	VX033441.D	12/15/2022

COMMENTS:

CHEMTECH 284 Sheffield Street, Mountainside, NJ 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.: N6070 SAS No.: N6070 SDG NO.: N6070

Lab File ID: VX033272.D BFB Injection Date: 12/07/2022

Instrument ID: MSVOA_X BFB Injection Time: 09:17

GC Column: DB-624UI ID: 0.18 (mm) Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	18.7
75	30.0 - 60.0% of mass 95	53.1
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0.7 (0.9) 1
174	50.0 - 100.0% of mass 95	77
175	5.0 - 9.0% of mass 174	5.9 (7.6) 1
176	95.0 - 101.0% of mass 174	75.2 (97.6) 1
177	5.0 - 9.0% of mass 176	4.9 (6.5) 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
VSTDICC001	VSTDICC001	VX033273.D	12/07/2022	09:46
VSTDICC005	VSTDICC005	VX033274.D	12/07/2022	10:09
VSTDICC020	VSTDICC020	VX033275.D	12/07/2022	10:32
VSTDICCC050	VSTDICCC050	VX033276.D	12/07/2022	10:55
VSTDICC100	VSTDICC100	VX033277.D	12/07/2022	11:18
VSTDICC150	VSTDICC150	VX033278.D	12/07/2022	11:42

CHEMTECH 284 Sheffield Street, Mountainside, NJ 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.: N6070 SAS No.: N6070 SDG NO.: N6070

Lab File ID: VX033429.D BFB Injection Date: 12/15/2022

Instrument ID: MSVOA_X BFB Injection Time: 09:39

GC Column: DB-624UI ID: 0.18 (mm) Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.2
75	30.0 - 60.0% of mass 95	52.9
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	7
173	Less than 2.0% of mass 174	0.9 (1.2) 1
174	50.0 - 100.0% of mass 95	80.4
175	5.0 - 9.0% of mass 174	6.1 (7.6) 1
176	95.0 - 101.0% of mass 174	78.2 (97.3) 1
177	5.0 - 9.0% of mass 176	5.1 (6.6) 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	VX033430.D	12/15/2022	10:10
VX1215WBL01	VX1215WBL01	VX033431.D	12/15/2022	10:39
VX1215WBS01	VX1215WBS01	VX033432.D	12/15/2022	11:07
VX1215WBSD01	VX1215WBSD01	VX033433.D	12/15/2022	11:46
GW-BR-04-226-245-121422-H	N6070-01	VX033441.D	12/15/2022	14:50

CHEMTECH 284 Sheffield Street, Mountainside, NJ 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.: N6070 SAS No.: N6070 SDG NO.: N6070

Lab File ID: VX033276.D Date Analyzed: 12/07/2022

Instrument ID: MSVOA_X Time Analyzed: 10:55

GC Column: DB-624UI ID: 0.18 (mm) Heated Purge: (Y/N) N

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	158881	5.56	255290	6.76	233891	10.06
UPPER LIMIT	317762	6.056	510580	7.263	467782	10.555
LOWER LIMIT	79440.5	5.056	127645	6.263	116946	9.555
EPA SAMPLE NO.						
GW-BR-04-226-245-121422	115233	5.55	182643	6.76	164061	10.06
TB-01-121422	128174	5.56	204029	6.76	177272	10.06
GW-BR-01-160-180-121422	112732	5.56	179781	6.76	158358	10.06
GW-BR-02-160-180-121422	111282	5.55	176885	6.76	155365	10.06
GW-BR-03-128-148-121422	117851	5.55	187379	6.76	166169	10.06

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.

CHEMTECH 284 Sheffield Street, Mountainside, NJ 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.: N6070 SAS No.: N6070 SDG NO.: N6070

Lab File ID: VX033430.D Date Analyzed: 12/15/2022

Instrument ID: MSVOA_X Time Analyzed: 10:10

GC Column: DB-624UI ID: 0.18 (mm) Heated Purge: (Y/N) N

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	139266	5.55	214327	6.76	205390	10.06
UPPER LIMIT	278532	6.05	428654	7.257	410780	10.555
LOWER LIMIT	69633	5.05	107164	6.257	102695	9.555
EPA SAMPLE NO.						
GW-BR-04-226-245-121422-H	115233	5.55	182643	6.76	164061	10.06
VX1215WBL01	143365	5.55	223781	6.76	198464	10.06
VX1215WBS01	144488	5.55	222709	6.76	207849	10.06
VX1215WBSD01	137295	5.55	210886	6.76	199474	10.06

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.

CHEMTECH 284 Sheffield Street, Mountainside, NJ 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.: N6070 SAS No.: N6070 SDG NO.: N6070

Lab File ID: VX033430.D Date Analyzed: 12/15/2022

Instrument ID: MSVOA_X Time Analyzed: 10:10

GC Column: DB-624UI ID: 0.18 (mm) Heated Purge: (Y/N) N

	IS4 AREA #	RT #				
12 HOUR STD	103647	12.024				
UPPER LIMIT	207294	12.524				
LOWER LIMIT	51823.5	11.524				
EPA SAMPLE NO.						
GW-BR-04-226-245-121422-H	77379	12.02				
VX1215WBL01	92099	12.02				
VX1215WBS01	106397	12.02				
VX1215WBSD01	101751	12.02				

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.

SAMPLE DATA

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	12/14/22
Project:	Former Schlumberger Site Princeton NJ	Date Received:	12/14/22
Client Sample ID:	GW-BR-04-226-245-121422-H	SDG No.:	N6070
Lab Sample ID:	N6070-01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group3
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX033441.D	1		12/15/22 14:50	VX121522

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-01-4	Vinyl Chloride	0.22	U	0.22	1.00	ug/L
75-35-4	1,1-Dichloroethene	1.80		0.23	1.00	ug/L
75-34-3	1,1-Dichloroethane	0.20	U	0.20	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	9.00		0.17	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	0.18	U	0.18	1.00	ug/L
71-43-2	Benzene	0.16	U	0.16	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.18	U	0.18	1.00	ug/L
79-01-6	Trichloroethene	4.90		0.27	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	0.19	U	0.19	1.00	ug/L
127-18-4	Tetrachloroethene	0.18	U	0.18	1.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	48.8		70 (74) - 130 (125)	98%	SPK: 50
1868-53-7	Dibromofluoromethane	49.3		70 (75) - 130 (124)	99%	SPK: 50
2037-26-5	Toluene-d8	47.6		70 (86) - 130 (113)	95%	SPK: 50
460-00-4	4-Bromofluorobenzene	48.7		70 (64) - 130 (133)	97%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	115000	5.55			
540-36-3	1,4-Difluorobenzene	183000	6.763			
3114-55-4	Chlorobenzene-d5	164000	10.055			
3855-82-1	1,4-Dichlorobenzene-d4	77400	12.024			

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_X\Data\VX121522\
Data File : VX033441.D
Acq On : 15 Dec 2022 14:50
Operator : JC/MD
Sample : N6070-01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 13 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
GW-BR-04-226-245-121422

Quant Time: Dec 16 01:02:56 2022
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X120722W.M
Quant Title : SW846 8260
QLast Update : Wed Dec 07 12:43:54 2022
Response via : Initial Calibration

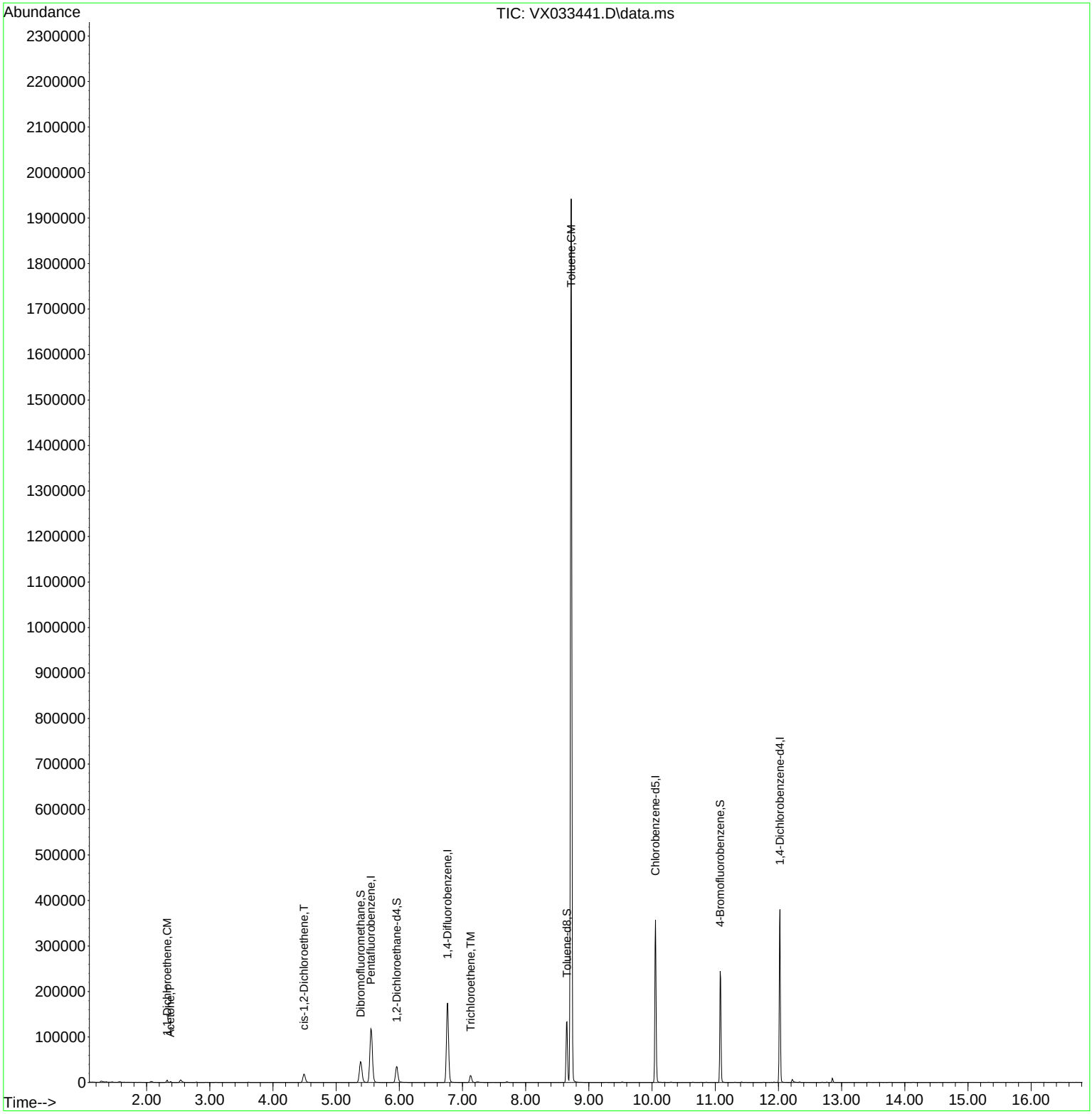
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.550	168	115233	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.763	114	182643	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.055	117	164061	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.024	152	77379	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.958	65	36088	48.816	ug/l	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 97.640%			
35) Dibromofluoromethane	5.385	113	40491	49.290	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 98.580%			
50) Toluene-d8	8.653	98	81865	47.637	ug/l	0.00
Spiked Amount 50.000	Range 92 - 112		Recovery = 95.280%			
62) 4-Bromofluorobenzene	11.079	95	63928	48.651	ug/l	0.00
Spiked Amount 50.000	Range 83 - 123		Recovery = 97.300%			
Target Compounds						Qvalue
12) 1,1-Dichloroethene	2.325	96	1845	1.766	ug/l	83
16) Acetone	2.373	43	2007	3.669	ug/l	96
27) cis-1,2-Dichloroethene	4.489	96	12282	8.993	ug/l	87
44) Trichloroethene	7.129	130	6252	4.856	ug/l	95
52) Toluene	8.720	92	739140	244.804	ug/l	99

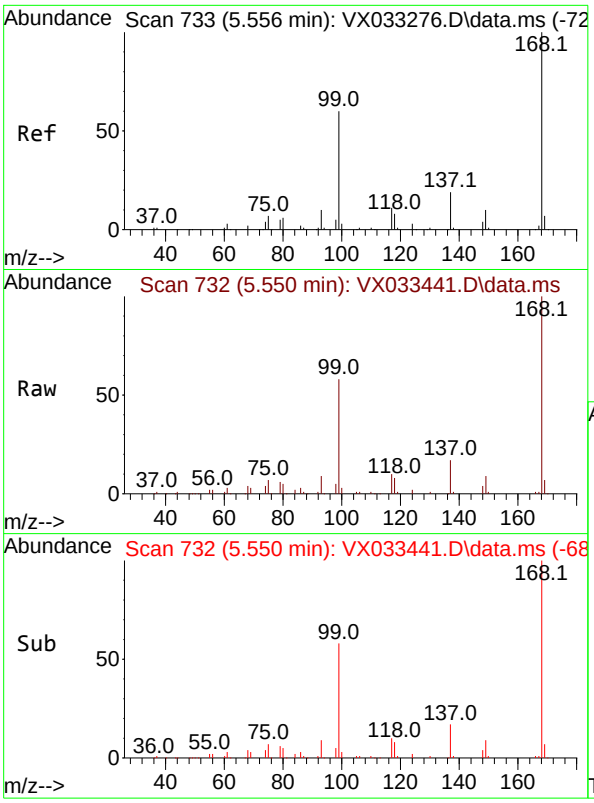
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX121522\
Data File : VX033441.D
Acq On : 15 Dec 2022 14:50
Operator : JC/MD
Sample : N6070-01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 13 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
GW-BR-04-226-245-121422

Quant Time: Dec 16 01:02:56 2022
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X120722W.M
Quant Title : SW846 8260
QLast Update : Wed Dec 07 12:43:54 2022
Response via : Initial Calibration



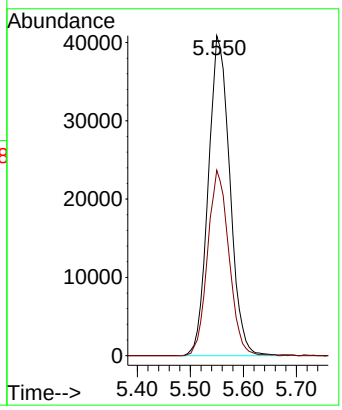


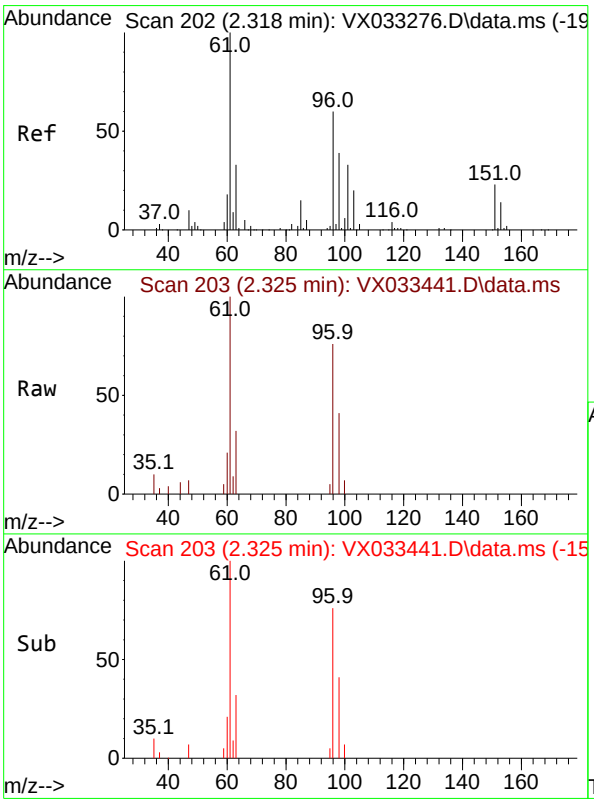
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 5.550 min Scan# 7
Delta R.T. -0.006 min
Lab File: VX033441.D
Acq: 15 Dec 2022 14:50

Instrument :
MSVOA_X
ClientSampleId :
GW-BR-04-226-245-121422

Tgt Ion:168 Resp: 115233

Ion	Ratio	Lower	Upper
168	100		
99	58.0	46.1	69.1

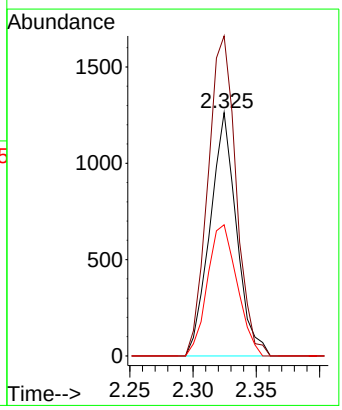


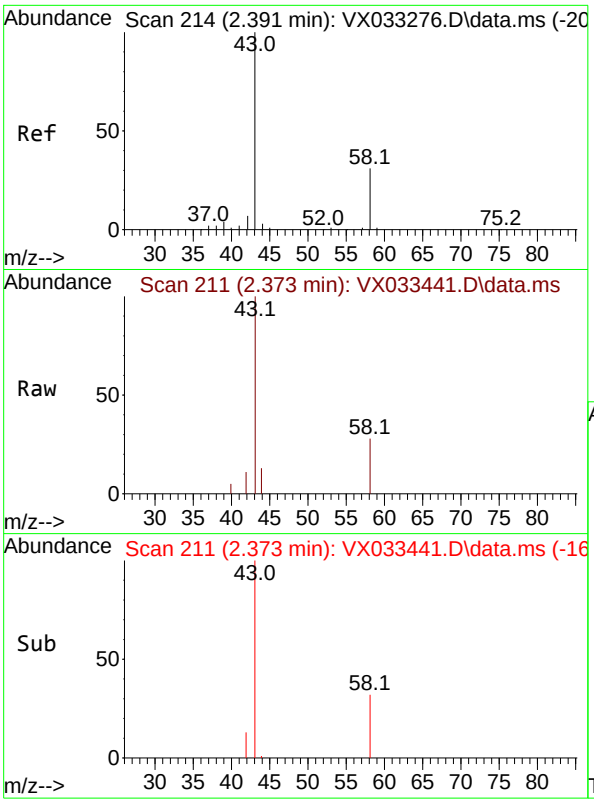


#12
1,1-Dichloroethene
Concen: 1.766 ug/l
RT: 2.325 min Scan# 203
Delta R.T. 0.006 min
Lab File: VX033441.D
Acq: 15 Dec 2022 14:50

Tgt Ion: 96 Resp: 1845

Ion	Ratio	Lower	Upper
96	100		
61	131.5	125.1	187.7
98	53.9	50.6	76.0



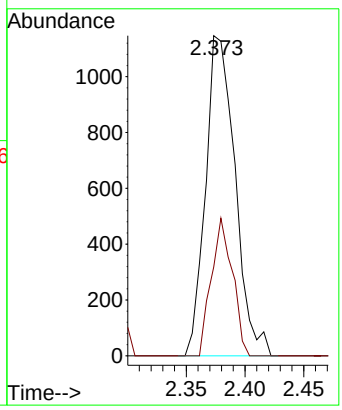


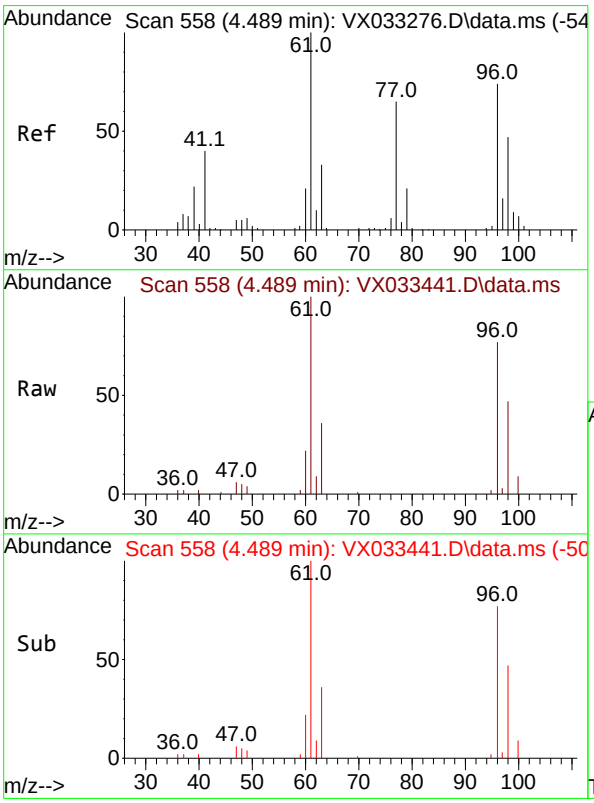
#16
Acetone
Concen: 3.669 ug/l
RT: 2.373 min Scan# 21
Delta R.T. -0.018 min
Lab File: VX033441.D
Acq: 15 Dec 2022 14:50

Instrument :
MSVOA_X
ClientSampleId :
GW-BR-04-226-245-121422

Tgt Ion: 43 Resp: 2007

Ion	Ratio	Lower	Upper
43	100		
58	27.7	23.8	35.8

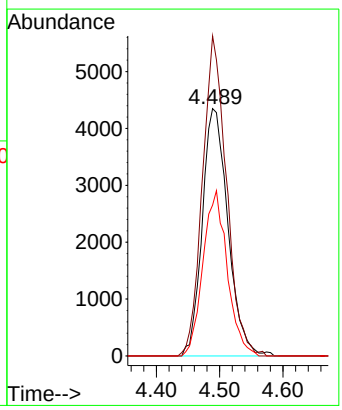


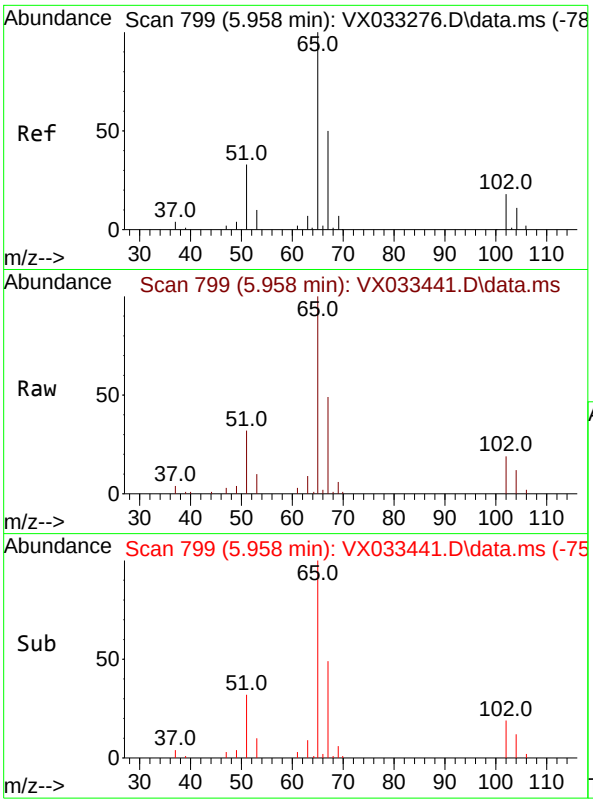


#27
cis-1,2-Dichloroethene
Concen: 8.993 ug/l
RT: 4.489 min Scan# 558
Delta R.T. 0.000 min
Lab File: VX033441.D
Acq: 15 Dec 2022 14:50

Tgt Ion: 96 Resp: 12282

Ion	Ratio	Lower	Upper
96	100		
61	120.8	0.0	286.0
98	63.1	0.0	129.6



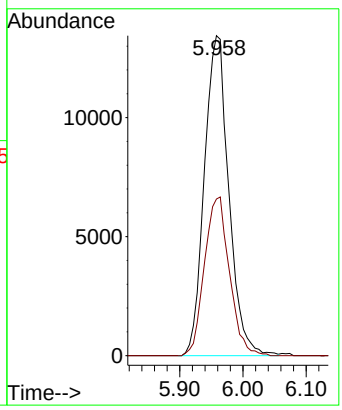


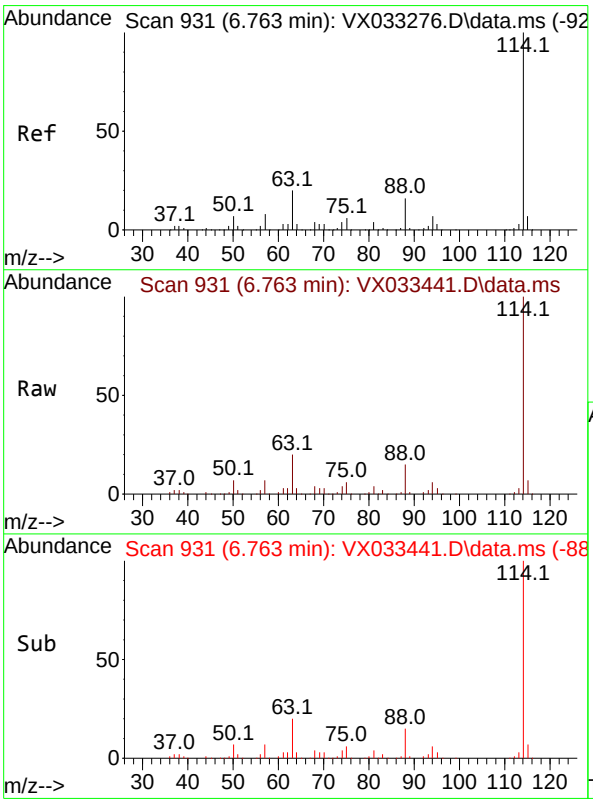
#33
1,2-Dichloroethane-d4
Concen: 48.816 ug/l
RT: 5.958 min Scan# 7
Delta R.T. 0.000 min
Lab File: VX033441.D
Acq: 15 Dec 2022 14:50

Instrument :
MSVOA_X
ClientSampleId :
GW-BR-04-226-245-121422

Tgt Ion: 65 Resp: 36088

Ion	Ratio	Lower	Upper
65	100		
67	50.7	0.0	101.8

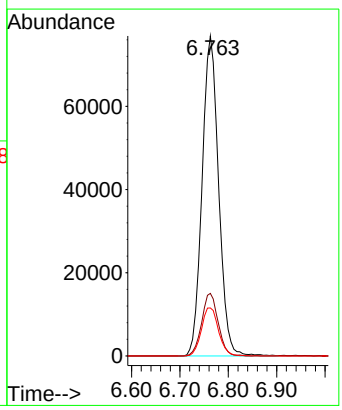


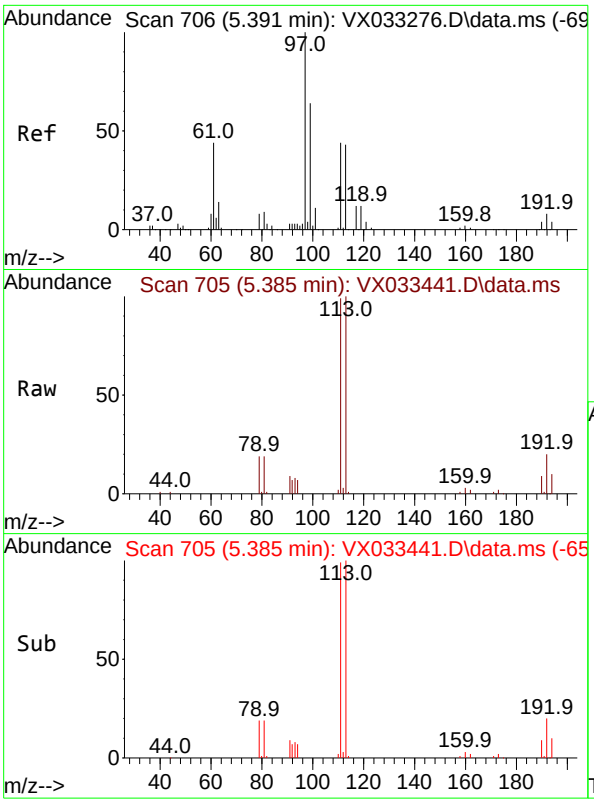


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 6.763 min Scan# 931
Delta R.T. 0.000 min
Lab File: VX033441.D
Acq: 15 Dec 2022 14:50

Tgt Ion:114 Resp: 182643

Ion	Ratio	Lower	Upper
114	100		
63	19.6	0.0	41.6
88	15.0	0.0	33.4



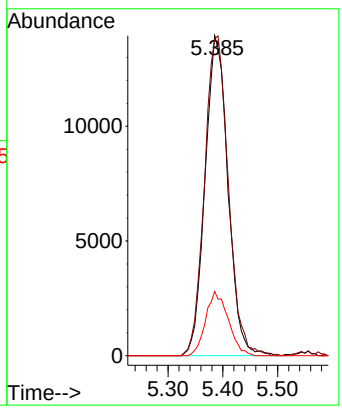


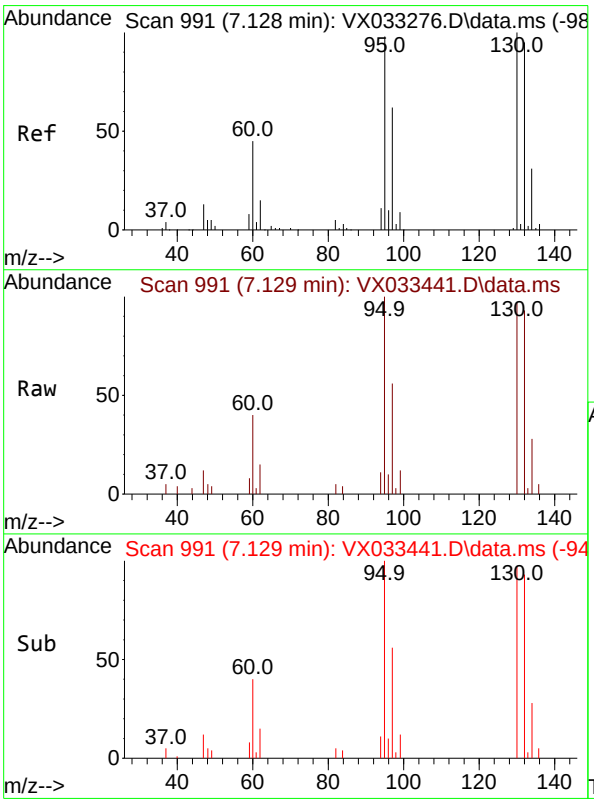
#35
Dibromofluoromethane
Concen: 49.290 ug/l
RT: 5.385 min Scan# 7
Delta R.T. -0.006 min
Lab File: VX033441.D
Acq: 15 Dec 2022 14:50

Instrument :
MSVOA_X
ClientSampleId :
GW-BR-04-226-245-121422

Tgt Ion:113 Resp: 40491

Ion	Ratio	Lower	Upper
113	100		
111	103.7	82.4	123.6
192	19.7	15.4	23.2

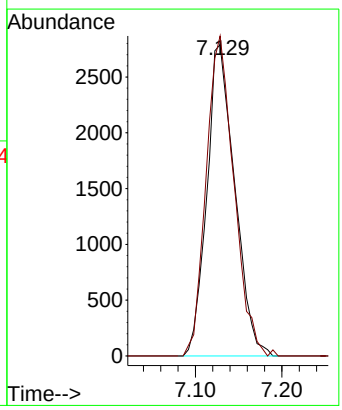


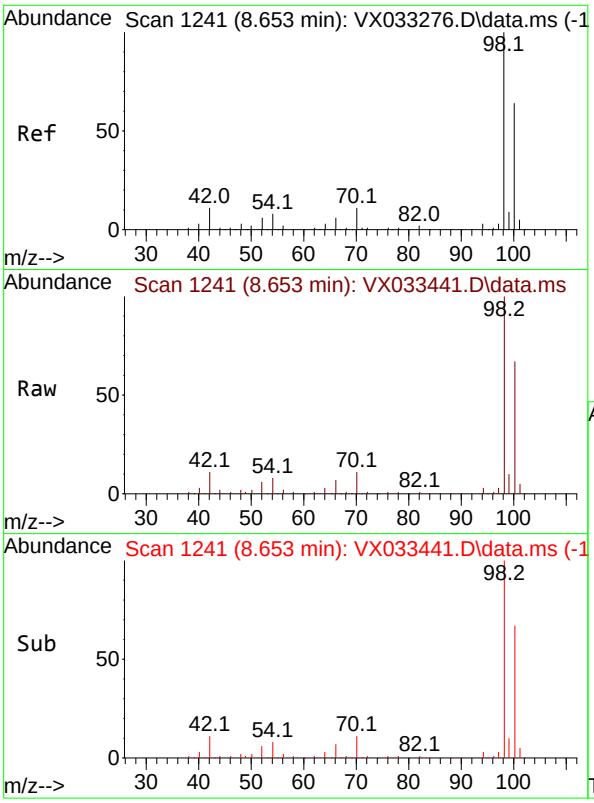


#44
Trichloroethene
Concen: 4.856 ug/l
RT: 7.129 min Scan# 991
Delta R.T. 0.000 min
Lab File: VX033441.D
Acq: 15 Dec 2022 14:50

Tgt Ion:130 Resp: 6252

Ion	Ratio	Lower	Upper
130	100		
95	102.8	0.0	195.2



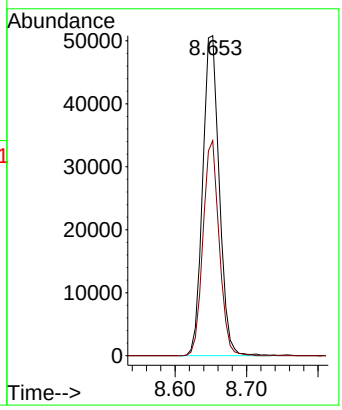


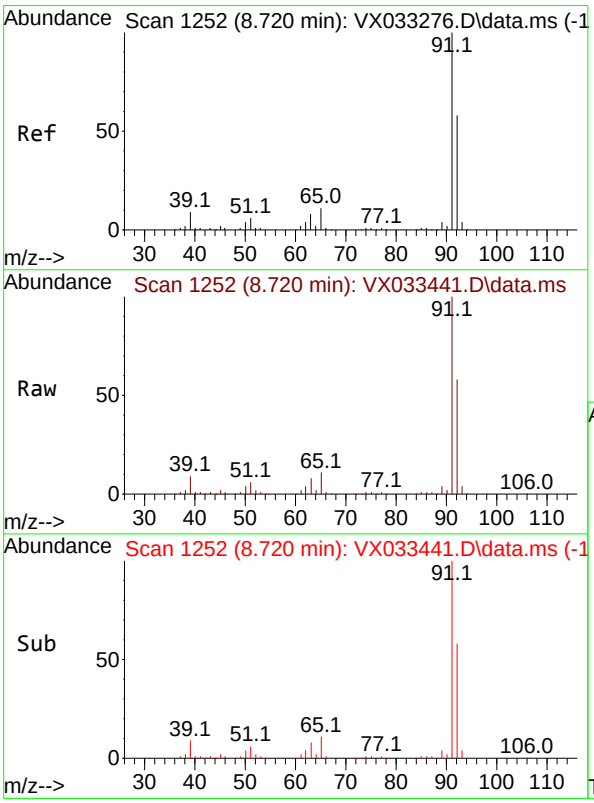
#50
Toluene-d8
Concen: 47.637 ug/l
RT: 8.653 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033441.D
Acq: 15 Dec 2022 14:50

Instrument :
MSVOA_X
ClientSampleId :
GW-BR-04-226-245-121422

Tgt Ion: 98 Resp: 81865

Ion	Ratio	Lower	Upper
98	100		
100	65.5	50.9	76.3

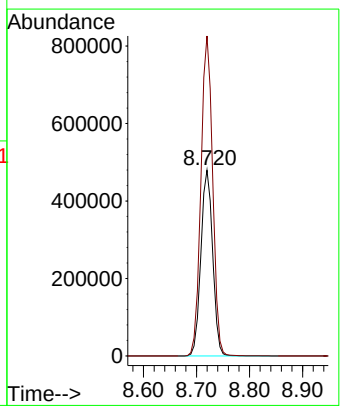


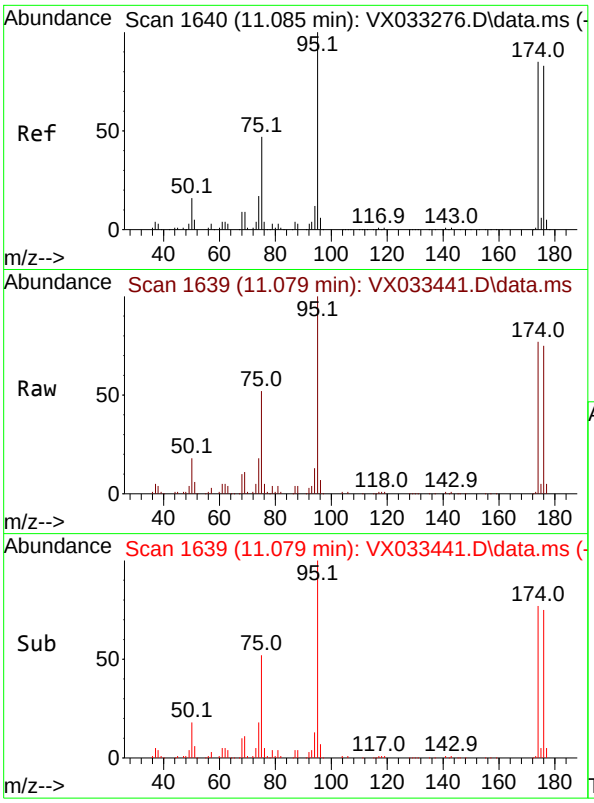


#52
Toluene
Concen: 244.804 ug/l
RT: 8.720 min Scan# 1252
Delta R.T. 0.000 min
Lab File: VX033441.D
Acq: 15 Dec 2022 14:50

Tgt Ion: 92 Resp: 739140

Ion	Ratio	Lower	Upper
92	100		
91	171.8	138.3	207.5



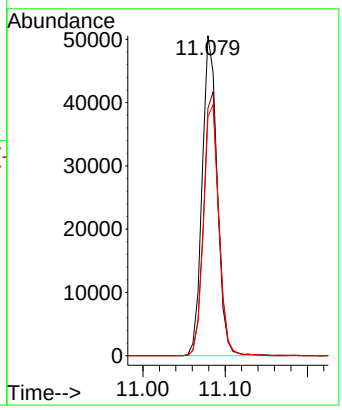


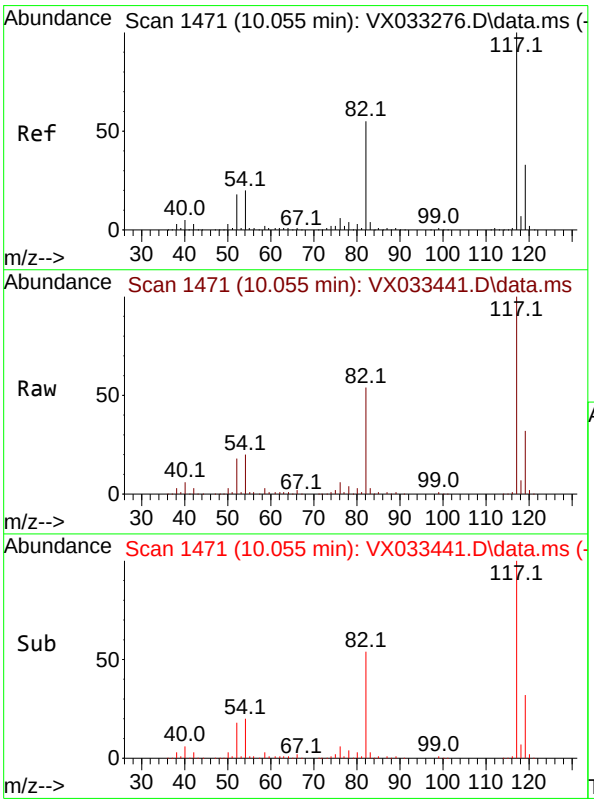
#62
4-Bromofluorobenzene
Concen: 48.651 ug/l
RT: 11.079 min Scan# 1
Delta R.T. -0.006 min
Lab File: VX033441.D
Acq: 15 Dec 2022 14:50

Instrument :
MSVOA_X
ClientSampleId :
GW-BR-04-226-245-121422

Tgt Ion: 95 Resp: 63928

Ion	Ratio	Lower	Upper
95	100		
174	83.2	0.0	164.0
176	79.9	0.0	154.4

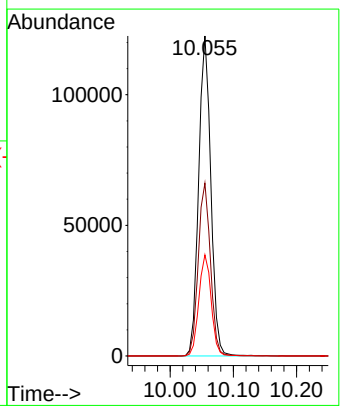


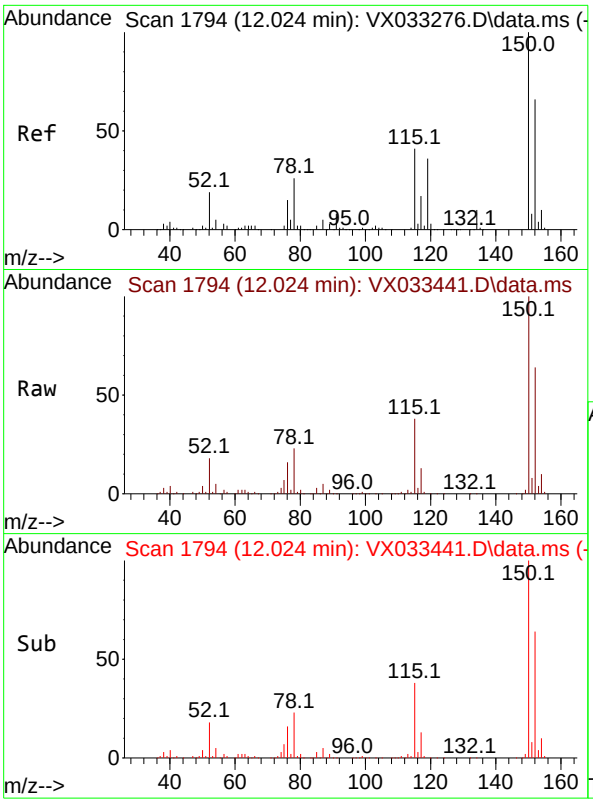


#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.055 min Scan# 1471
Delta R.T. 0.000 min
Lab File: VX033441.D
Acq: 15 Dec 2022 14:50

Tgt Ion:117 Resp: 164061

Ion	Ratio	Lower	Upper
117	100		
82	54.0	44.3	66.5
119	31.6	25.7	38.5



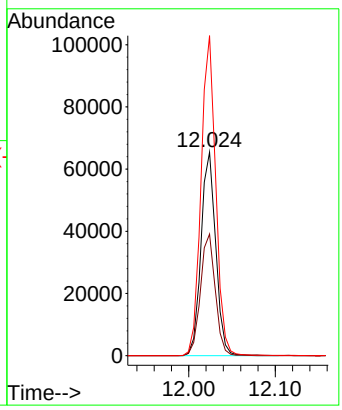


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.024 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033441.D
Acq: 15 Dec 2022 14:50

Instrument :
MSVOA_X
ClientSampleId :
GW-BR-04-226-245-121422

Tgt Ion:152 Resp: 77379

Ion	Ratio	Lower	Upper
152	100		
115	60.2	44.0	132.0
150	157.0	0.0	351.8



CALIBRATION SUMMARY

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM Case No.: N6070 SAS No.: N6070 SDG No.: N6070

Instrument ID: MSVOA_X Calibration Date(s): 12/07/2022 12/07/2022

Heated Purge: (Y/N) N Calibration Time(s): 09:46 11:42

GC Column: DB-624UI ID: 0.18 (mm)

LAB FILE ID: RRF001 = VX033273.D RRF005 = VX033274.D RRF020 = VX033275.D
RRF050 = VX033276.D RRF100 = VX033277.D RRF150 = VX033278.D

COMPOUND	RRF001	RRF005	RRF020	RRF050	RRF100	RRF150	$\overline{RRF}$	% RSD
Vinyl Chloride	0.507	0.456	0.514	0.427	0.429	0.434	0.461	8.6
1,1-Dichloroethene	0.442	0.467	0.505	0.422	0.439	0.445	0.453	6.4
1,1-Dichloroethane	0.880	0.899	1.006	0.844	0.851	0.987	0.911	7.6
cis-1,2-Dichloroethene	0.544	0.560	0.647	0.561	0.577	0.667	0.593	8.7
1,1,1-Trichloroethane	0.768	0.851	0.990	0.850	0.867	0.896	0.870	8.3
Benzene	1.179	1.249	1.464	1.214	1.280	1.285	1.278	7.8
1,2-Dichloroethane	0.475	0.503	0.586	0.477	0.488	0.516	0.508	8.1
Trichloroethene	0.321	0.337	0.410	0.338	0.361	0.348	0.352	8.8
1,1,2-Trichloroethane	0.322	0.322	0.387	0.333	0.350	0.369	0.347	7.6
Tetrachloroethene	0.352	0.360	0.390	0.322	0.332	0.296	0.342	9.6
1,2-Dichloroethane-d4		0.378	0.324	0.288	0.279	0.336	0.321	12.4
Dibromofluoromethane		0.251	0.234	0.204	0.210	0.226	0.225	8.4
Toluene-d8		0.503	0.488	0.444	0.454	0.463	0.470	5.2
4-Bromofluorobenzene		0.341	0.382	0.353	0.356	0.366	0.360	4.3

* 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_X

Method Path : Z:\voasrv\HPCHEM1\MSVOA_X\Method\
Method File : 82X120722W.M
Title : SW846 8260
Last Update : Wed Dec 07 12:43:54 2022
Response Via : Initial Calibration

Calibration Files
1 =VX033273.D 5 =VX033274.D 20 =VX033275.D 50 =VX033276.D 100 =VX033277.D 150 =VX033278.D

		Compound	1	5	20	50	100	150	Avg	%RSD
1)	I	Pentafluorobenzene	----------ISTD----------							
2)	T	Dichlorodifluo...	0.364	0.350	0.392	0.327	0.345	0.317	0.349	7.67
3)	P	Chloromethane	0.420	0.419	0.448	0.364	0.366	0.407	0.404	8.20
4)	C	Vinyl Chloride	0.507	0.456	0.514	0.427	0.429	0.434	0.461	8.63#
5)	T	Bromomethane		0.353	0.364	0.300	0.312	0.362	0.338	8.92
6)	T	Chloroethane	0.388	0.385	0.392	0.338	0.298	0.299	0.350	12.69
7)	T	Trichlorofluor...	0.980	0.897	0.981	0.815	0.789	0.732	0.866	11.96
8)	T	Diethyl Ether	0.312	0.324	0.344	0.275	0.277	0.344	0.313	9.93
9)	T	1,1,2-Trichlor...	0.441	0.476	0.535	0.445	0.448	0.410	0.459	9.26
10)	T	Methyl Iodide		0.388	0.559	0.490	0.510	0.568	0.503	14.38
11)	T	Tert butyl alc...		0.102	0.100	0.080	0.093	0.115	0.098	13.13
12)	CM	1,1-Dichloroet...	0.442	0.467	0.505	0.422	0.439	0.445	0.453	6.43#
13)	T	Acrolein		0.115	0.083	0.101	0.102	0.131	0.106	16.64
14)	T	Allyl chloride	0.678	0.697	0.798	0.684	0.702	0.785	0.724	7.35
15)	T	Acrylonitrile	0.211	0.232	0.267	0.226	0.233	0.288	0.243	11.90
16)	T	Acetone	0.262	0.248	0.265	0.205	0.201	0.243	0.237	11.72
17)	T	Carbon Disulfide	1.190	1.130	1.287	1.098	1.126	1.149	1.163	5.83
18)	T	Methyl Acetate	0.608	0.627	0.763	0.643	0.659	0.822	0.687	12.46
19)	T	Methyl tert-bu...	1.313	1.502	1.711	1.477	1.529	1.889	1.570	12.81
20)	T	Methylene Chlo...	0.568	0.516	0.566	0.470	0.477	0.579	0.529	9.13
21)	T	trans-1,2-Dich...	0.441	0.498	0.548	0.470	0.487	0.532	0.496	7.95
22)	T	Diisopropyl ether	1.317	1.488	1.743	1.509	1.499	1.750	1.551	10.78
23)	T	Vinyl Acetate	0.992	1.093	1.333	1.173	1.191	1.440	1.204	13.43
24)	P	1,1-Dichloroet...	0.880	0.899	1.006	0.844	0.851	0.987	0.911	7.61
25)	T	2-Butanone	0.297	0.333	0.386	0.323	0.321	0.384	0.341	10.70
26)	T	2,2-Dichloropr...	0.602	0.648	0.744	0.648	0.666	0.713	0.670	7.60
27)	T	cis-1,2-Dichlo...	0.544	0.560	0.647	0.561	0.577	0.667	0.593	8.66
28)	T	Bromochloromet...	0.378	0.376	0.407	0.373	0.345	0.409	0.381	6.22
29)	T	Tetrahydrofuran	0.189	0.213	0.246	0.210	0.212	0.253	0.221	11.04
30)	C	Chloroform	0.935	0.991	1.128	0.958	0.962	1.095	1.012	7.92#
31)	T	Cyclohexane		0.756	0.876	0.743	0.761	0.676	0.762	9.49
32)	T	1,1,1-Trichlor...	0.768	0.851	0.990	0.850	0.867	0.896	0.870	8.29
33)	S	1,2-Dichloroet...		0.378	0.324	0.288	0.279	0.336	0.321	12.37
34)	I	1,4-Difluorobenzene	----------ISTD----------							
35)	S	Dibromofluorom...		0.251	0.234	0.204	0.210	0.226	0.225	8.43
36)	T	1,1-Dichloropr...	0.439	0.420	0.500	0.422	0.450	0.400	0.438	7.88
37)	T	Ethyl Acetate	0.356	0.384	0.479	0.397	0.418	0.454	0.414	10.98
38)	T	Carbon Tetrach...	0.477	0.481	0.566	0.478	0.500	0.445	0.491	8.28
39)	T	Methylcyclohexane	0.487	0.478	0.574	0.490	0.528	0.388	0.491	12.57
40)	TM	Benzene	1.179	1.249	1.464	1.214	1.280	1.285	1.278	7.77
41)	T	Methacrylonitrile	0.185	0.209	0.268	0.225	0.232	0.252	0.228	12.95
42)	TM	1,2-Dichloroet...	0.475	0.503	0.586	0.477	0.488	0.516	0.508	8.14
43)	T	Isopropyl Acetate	0.561	0.604	0.751	0.641	0.685	0.759	0.667	11.95
44)	TM	Trichloroethene	0.321	0.337	0.410	0.338	0.361	0.348	0.352	8.82
45)	C	1,2-Dichloropr...	0.300	0.319	0.371	0.309	0.324	0.338	0.327	7.74#
46)	T	Dibromomethane	0.226	0.246	0.281	0.233	0.243	0.265	0.249	8.17
47)	T	Bromodichlorom...	0.428	0.448	0.562	0.468	0.491	0.515	0.485	9.99
48)	T	Methyl methacr...	0.310	0.309	0.386	0.331	0.350	0.378	0.344	9.61
49)	T	1,4-Dioxane	0.007	0.007	0.009	0.007	0.008	0.009	0.008	12.08
50)	S	Toluene-d8		0.503	0.488	0.444	0.454	0.463	0.470	5.19
51)	T	4-Methyl-2-Pen...	0.356	0.404	0.499	0.413	0.417	0.443	0.422	11.22
52)	CM	Toluene	0.715	0.786	0.970	0.814	0.845	0.829	0.827	10.14#
53)	T	t-1,3-Dichloro...	0.386	0.390	0.526	0.467	0.512	0.555	0.473	15.14
54)	T	cis-1,3-Dichlo...	0.419	0.456	0.580	0.510	0.549	0.587	0.517	13.19
55)	T	1,1,2-Trichlor...	0.322	0.322	0.387	0.333	0.350	0.369	0.347	7.63
56)	T	Ethyl methacry...	0.381	0.430	0.560	0.489	0.519	0.557	0.489	14.65

Method Path : Z:\voasrv\HPCHEM1\MSVOA_X\Method\
Method File : 82X120722W.M

57)	T	1,3-Dichloropr...	0.481	0.540	0.638	0.535	0.559	0.596	0.558	9.66
58)	T	2-Chloroethyl ...	0.196	0.211	0.218	0.224	0.236	0.258	0.224	9.57
59)	T	2-Hexanone	0.263	0.291	0.375	0.306	0.305	0.325	0.311	12.05
60)	T	Dibromochlorom...	0.305	0.353	0.439	0.376	0.399	0.425	0.383	12.82
61)	T	1,2-Dibromoethane	0.307	0.345	0.423	0.358	0.377	0.407	0.370	11.46
62)	S	4-Bromofluorob...		0.341	0.382	0.353	0.356	0.366	0.360	4.32
63)	I	Chlorobenzene-d5	----------ISTD----------							
64)	T	Tetrachloroethene	0.352	0.360	0.390	0.322	0.332	0.296	0.342	9.56
65)	PM	Chlorobenzene	0.995	0.976	1.159	0.966	0.993	0.985	1.013	7.15
66)	T	1,1,1,2-Tetrac...	0.352	0.357	0.442	0.372	0.381	0.392	0.383	8.49
67)	C	Ethyl Benzene	1.620	1.734	2.043	1.735	1.773	1.680	1.764	8.31#
68)	T	m/p-Xylenes	0.630	0.662	0.790	0.677	0.699	0.660	0.686	8.13
69)	T	o-Xylene	0.620	0.652	0.786	0.671	0.678	0.663	0.678	8.34
70)	T	Styrene	0.931	1.043	1.295	1.115	1.145	1.137	1.111	10.85
71)	P	Bromoform	0.246	0.274	0.344	0.304	0.315	0.334	0.303	12.22
72)	I	1,4-Dichlorobenzen...	----------ISTD----------							
73)	T	Isopropylbenzene	3.344	3.639	4.186	3.560	3.681	3.335	3.624	8.59
74)	T	N-amyl acetate	0.953	1.110	1.444	1.240	1.283	1.388	1.236	14.67
75)	P	1,1,2,2-Tetrac...	1.069	1.152	1.301	1.088	1.106	1.181	1.150	7.39
76)	T	1,2,3-Trichlor...	0.962	0.971	1.176	0.963	0.995	1.036	1.017	8.13
77)	T	Bromobenzene	0.862	0.918	1.033	0.865	0.901	0.912	0.915	6.82
78)	T	n-propylbenzene	3.595	3.949	4.768	4.049	4.186	3.731	4.047	10.21
79)	T	2-Chlorotoluene	2.395	2.495	2.876	2.425	2.460	2.354	2.501	7.62
80)	T	1,3,5-Trimethy...	2.678	2.967	3.535	2.982	3.093	2.845	3.017	9.64
81)	T	trans-1,4-Dich...		0.254	0.347	0.312	0.343	0.379	0.327	14.38
82)	T	4-Chlorotoluene	2.811	2.834	3.331	2.792	2.896	2.784	2.908	7.27
83)	T	tert-Butylbenzene	2.752	2.939	3.536	2.975	3.078	2.769	3.008	9.55
84)	T	1,2,4-Trimethy...	2.729	2.938	3.552	2.951	3.038	2.859	3.011	9.45
85)	T	sec-Butylbenzene	3.216	3.419	4.179	3.535	3.677	3.032	3.510	11.39
86)	T	p-Isopropyltol...	2.873	2.858	3.591	3.011	3.153	2.669	3.026	10.61
87)	T	1,3-Dichlorobe...	1.506	1.619	1.923	1.603	1.672	1.624	1.658	8.50
88)	T	1,4-Dichlorobe...	1.682	1.682	1.911	1.594	1.651	1.640	1.693	6.59
89)	T	n-Butylbenzene	2.204	2.260	2.999	2.508	2.697	2.202	2.478	12.99
90)	T	Hexachloroethane	0.494	0.476	0.589	0.506	0.542	0.480	0.514	8.43
91)	T	1,2-Dichlorobe...	1.630	1.619	1.901	1.561	1.612	1.621	1.657	7.35
92)	T	1,2-Dibromo-3-...	0.222	0.232	0.279	0.233	0.249	0.275	0.248	9.56
93)	T	1,2,4-Trichlor...	0.920	0.923	1.153	0.958	1.054	0.999	1.001	9.00
94)	T	Hexachlorobuta...	0.447	0.390	0.460	0.382	0.412	0.314	0.401	13.09
95)	T	Naphthalene	2.568	3.024	3.914	3.317	3.527	3.683	3.339	14.53
96)	T	1,2,3-Trichlor...	0.957	0.960	1.140	0.981	1.045	0.999	1.014	6.86

(#) = Out of Range

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX120722\
Data File : VX033273.D
Acq On : 07 Dec 2022 09:46
Operator : JC/MD
Sample : VSTDICC001
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 07 10:41:23 2022
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X120722W.M
Quant Title : SW846 8260
QLast Update : Wed Dec 07 09:47:15 2022
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	5.550	168	142504	50.000	ug/l		0.00
34) 1,4-Difluorobenzene	6.763	114	225802	50.000	ug/l		0.00
63) Chlorobenzene-d5	10.055	117	197000	50.000	ug/l		0.00
72) 1,4-Dichlorobenzene-d4	12.024	152	90814	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 78 - 117		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 92 - 112		Recovery =	0.000%#			
62) 4-Bromofluorobenzene	0.000	95	0d	0.000	ug/l		
Spiked Amount 50.000	Range 83 - 123		Recovery =	0.000%#			
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.166	85	1038	0.953	ug/l		92
3) Chloromethane	1.294	50	1198	1.019	ug/l		96
4) Vinyl Chloride	1.374	62	1445	1.104	ug/l		92
6) Chloroethane	1.697	64	1105	1.037	ug/l	#	87
7) Trichlorofluoromethane	1.892	101	2793	1.100	ug/l	#	80
8) Diethyl Ether	2.136	74	889	1.112	ug/l		83
9) 1,1,2-Trichlorotrifluo...	2.331	101	1257	0.942	ug/l		92
12) 1,1-Dichloroethene	2.318	96	1259	1.012	ug/l		92
14) Allyl chloride	2.666	41	1931	0.962	ug/l		94
15) Acrylonitrile	3.074	53	3013	4.842	ug/l		96
16) Acetone	2.392	43	3731	5.757	ug/l		97
17) Carbon Disulfide	2.514	76	3391	0.987	ug/l	#	93
18) Methyl Acetate	2.709	43	1734	0.967	ug/l		96
19) Methyl tert-butyl Ether	3.111	73	3742	0.868	ug/l		93
20) Methylene Chloride	2.794	84	1618	1.036	ug/l	#	85
21) trans-1,2-Dichloroethene	3.093	96	1257	0.884	ug/l		85
22) Diisopropyl ether	3.763	45	3754	0.859	ug/l	#	77
23) Vinyl Acetate	3.733	43	14131	4.129	ug/l	#	93
24) 1,1-Dichloroethane	3.611	63	2507	1.002	ug/l	#	93
25) 2-Butanone	4.574	43	4232	4.735	ug/l		97
26) 2,2-Dichloropropane	4.464	77	1715	0.853	ug/l	#	65
27) cis-1,2-Dichloroethene	4.489	96	1551	0.960	ug/l		97
28) Bromochloromethane	4.903	49	1078	0.981	ug/l	#	98
29) Tetrahydrofuran	5.031	42	2697	4.756	ug/l		94
30) Chloroform	5.098	83	2666	0.952	ug/l		98
32) 1,1,1-Trichloroethane	5.379	97	2190	0.873	ug/l	#	48
36) 1,1-Dichloropropene	5.696	75	1983	0.974	ug/l		97
37) Ethyl Acetate	4.721	43	1606	0.904	ug/l	#	77
38) Carbon Tetrachloride	5.672	117	2156	0.955	ug/l		85
39) Methylcyclohexane	7.385	83	2200	0.947	ug/l		94
40) Benzene	6.043	78	5324	0.933	ug/l		99
41) Methacrylonitrile	4.940	41	836	0.837	ug/l	#	69
42) 1,2-Dichloroethane	6.092	62	2147	0.934	ug/l		89
43) Isopropyl Acetate	6.342	43	2534	0.863	ug/l	#	94
44) Trichloroethene	7.129	130	1448	0.904	ug/l		78
45) 1,2-Dichloropropane	7.433	63	1355	0.961	ug/l		93

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX120722\
Data File : VX033273.D
Acq On : 07 Dec 2022 09:46
Operator : JC/MD
Sample : VSTDICC001
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 07 10:41:23 2022
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X120722W.M
Quant Title : SW846 8260
QLast Update : Wed Dec 07 09:47:15 2022
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) Dibromomethane	7.580	93	1022	0.929	ug/l		91
47) Bromodichloromethane	7.824	83	1934	0.909	ug/l	#	93
48) Methyl methacrylate	7.702	41	1402	0.927	ug/l		89
49) 1,4-Dioxane	7.714	88	593m	21.310	ug/l		
51) 4-Methyl-2-Pentanone	8.580	43	8030	4.431	ug/l		99
52) Toluene	8.720	92	3231	0.861	ug/l		94
53) t-1,3-Dichloropropene	8.988	75	1741	0.834	ug/l		95
54) cis-1,3-Dichloropropene	8.372	75	1891	0.825	ug/l		98
55) 1,1,2-Trichloroethane	9.153	97	1456	0.952	ug/l		96
56) Ethyl methacrylate	9.116	69	1720	0.817	ug/l		99
57) 1,3-Dichloropropane	9.311	76	2174	0.881	ug/l		98
58) 2-Chloroethyl Vinyl ether	8.244	63	4421	4.420	ug/l		96
59) 2-Hexanone	9.433	43	5946	4.442	ug/l		93
60) Dibromochloromethane	9.518	129	1379	0.838	ug/l		93
61) 1,2-Dibromoethane	9.616	107	1386	0.859	ug/l		99
64) Tetrachloroethene	9.275	164	1386	0.994	ug/l		86
65) Chlorobenzene	10.079	112	3922	0.999	ug/l		96
66) 1,1,1,2-Tetrachloroethane	10.165	131	1386	0.963	ug/l	#	66
67) Ethyl Benzene	10.195	91	6381	0.916	ug/l		96
68) m/p-Xylenes	10.305	106	4964	1.819	ug/l		98
69) o-Xylene	10.646	106	2441	0.925	ug/l		97
70) Styrene	10.658	104	3668	0.849	ug/l		95
71) Bromoform	10.799	173	971	0.880	ug/l	#	97
73) Isopropylbenzene	10.963	105	6074	0.936	ug/l		96
74) N-amyl acetate	10.847	43	1731	0.784	ug/l		95
75) 1,1,2,2-Tetrachloroethane	11.213	83	1942	0.992	ug/l		99
76) 1,2,3-Trichloropropane	11.238	75	1748m	1.016	ug/l		
77) Bromobenzene	11.201	156	1565	0.981	ug/l		98
78) n-propylbenzene	11.305	91	6530	0.880	ug/l		99
79) 2-Chlorotoluene	11.366	91	4350	0.965	ug/l		98
80) 1,3,5-Trimethylbenzene	11.451	105	4864	0.892	ug/l		96
82) 4-Chlorotoluene	11.457	91	5105	0.967	ug/l		98
83) tert-Butylbenzene	11.713	119	4998	0.921	ug/l		96
84) 1,2,4-Trimethylbenzene	11.756	105	4957	0.912	ug/l		100
85) sec-Butylbenzene	11.890	105	5842	0.900	ug/l		99
86) p-Isopropyltoluene	12.012	119	5219	0.949	ug/l		94
87) 1,3-Dichlorobenzene	11.969	146	2736	0.914	ug/l		96
88) 1,4-Dichlorobenzene	12.042	146	3055m	0.996	ug/l		
89) n-Butylbenzene	12.335	91	4003	0.845	ug/l		97
90) Hexachloroethane	12.542	117	897	0.993	ug/l		97
91) 1,2-Dichlorobenzene	12.341	146	2961	1.017	ug/l		99
92) 1,2-Dibromo-3-Chloropr...	12.945	75	404	1.034	ug/l		88
93) 1,2,4-Trichlorobenzene	13.591	180	1671	0.931	ug/l		91
94) Hexachlorobutadiene	13.725	225	811	1.024	ug/l		91
95) Naphthalene	13.780	128	4665	0.803	ug/l		98
96) 1,2,3-Trichlorobenzene	13.963	180	1739	0.966	ug/l		97

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

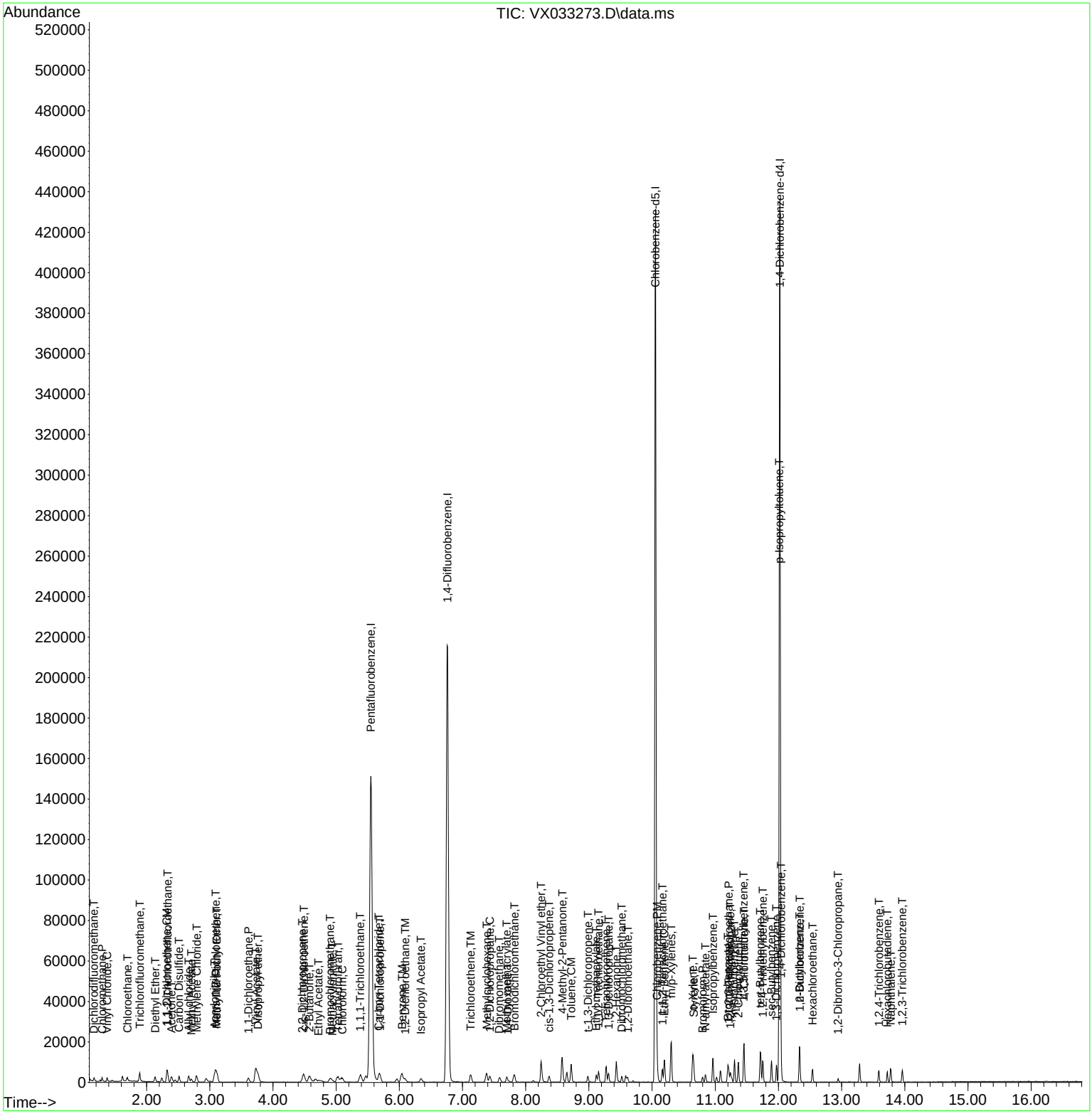
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX120722\
Data File : VX033273.D
Acq On : 07 Dec 2022 09:46
Operator : JC/MD
Sample : VSTDICC001
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

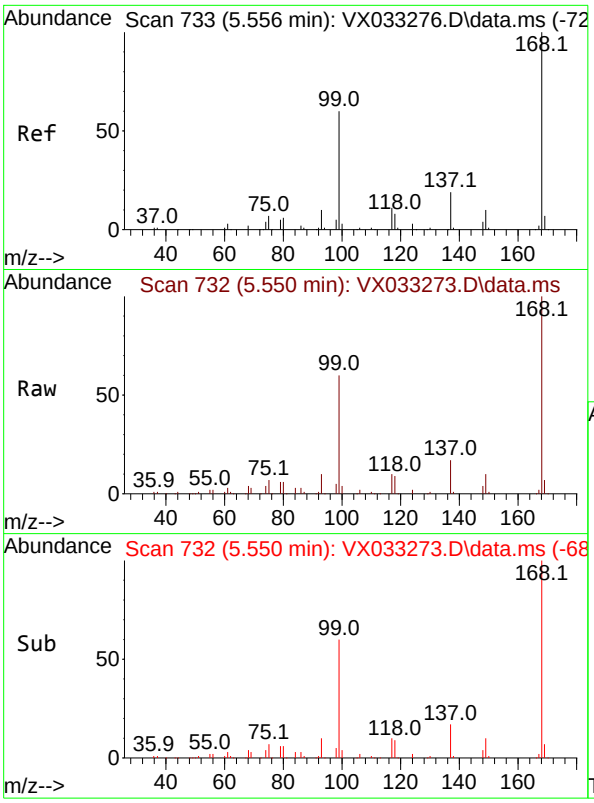
Quant Time: Dec 07 10:41:23 2022
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X120722W.M
Quant Title : SW846 8260
QLast Update : Wed Dec 07 09:47:15 2022
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

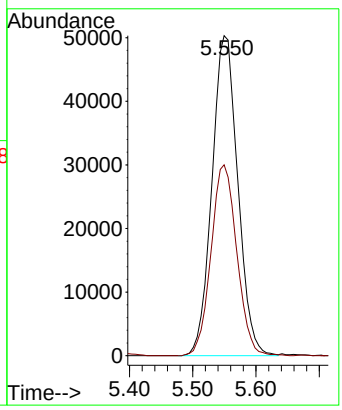




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 5.550 min Scan# 7
Delta R.T. -0.006 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion:168 Resp: 14250

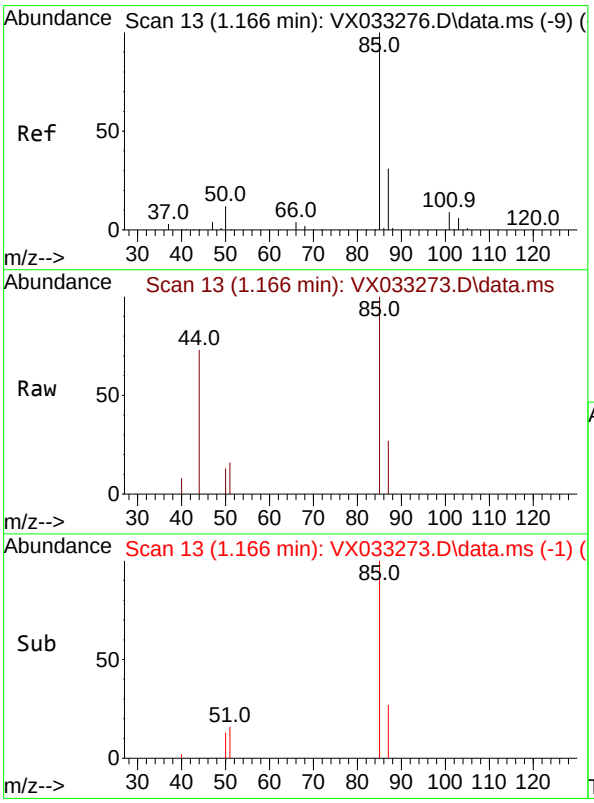
Ion	Ratio	Lower	Upper
168	100		
99	59.6	46.1	69.1



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

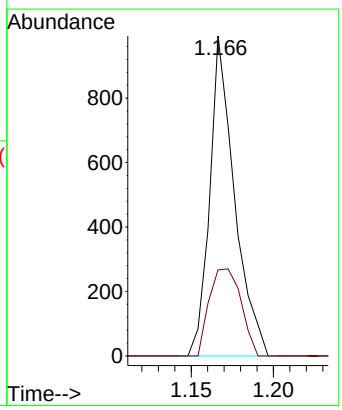
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

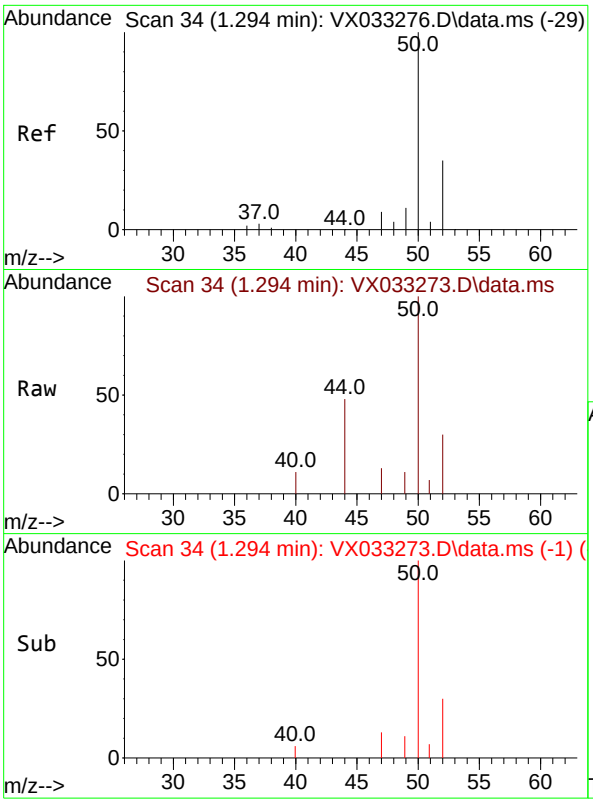


#2
Dichlorodifluoromethane
Concen: 0.953 ug/l
RT: 1.166 min Scan# 13
Delta R.T. 0.000 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion: 85 Resp: 1038

Ion	Ratio	Lower	Upper
85	100		
87	26.9	15.6	46.7

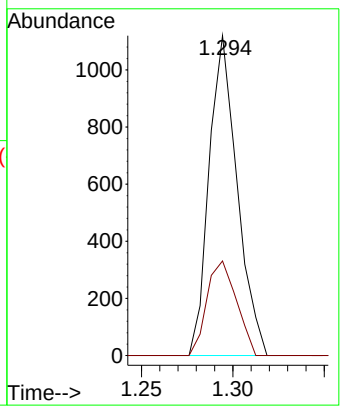




#3
Chloromethane
Concen: 1.019 ug/l
RT: 1.294 min Scan# 34
Delta R.T. 0.000 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion: 50 Resp: 119

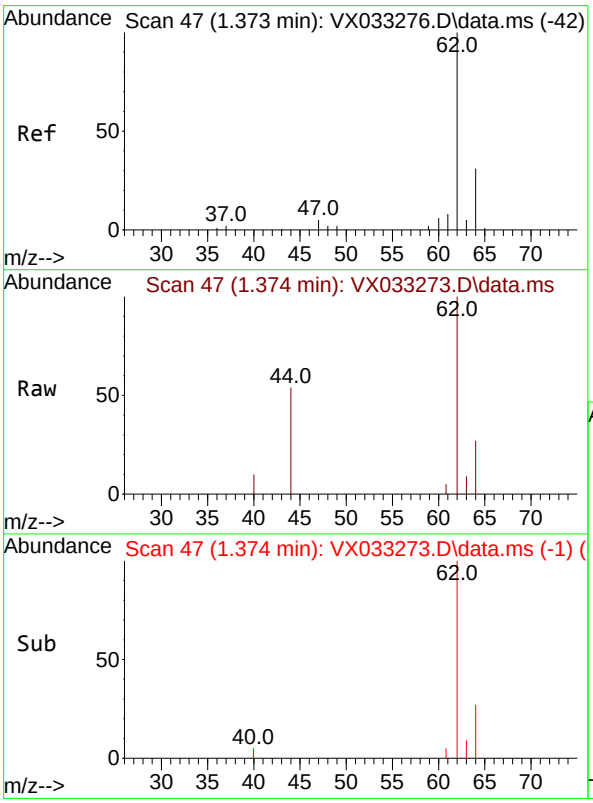
Ion	Ratio	Lower	Upper
50	100		
52	29.6	25.4	38.2



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

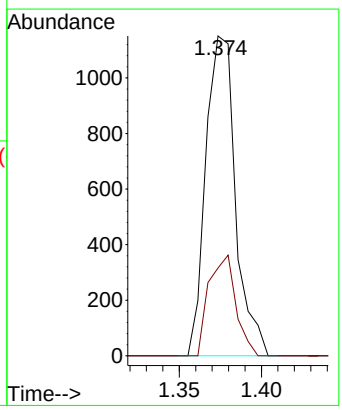
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

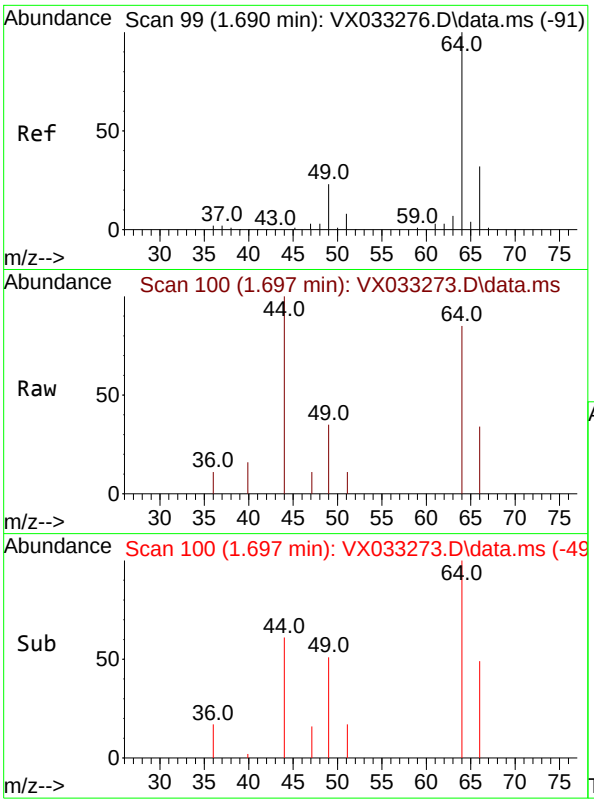


#4
Vinyl Chloride
Concen: 1.104 ug/l
RT: 1.374 min Scan# 47
Delta R.T. -0.000 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion: 62 Resp: 1445

Ion	Ratio	Lower	Upper
62	100		
64	27.5	25.8	38.6

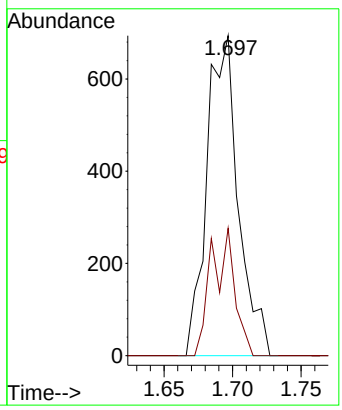




#6
Chloroethane
Concen: 1.037 ug/l
RT: 1.697 min Scan# 1
Delta R.T. 0.012 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion: 64 Resp: 110

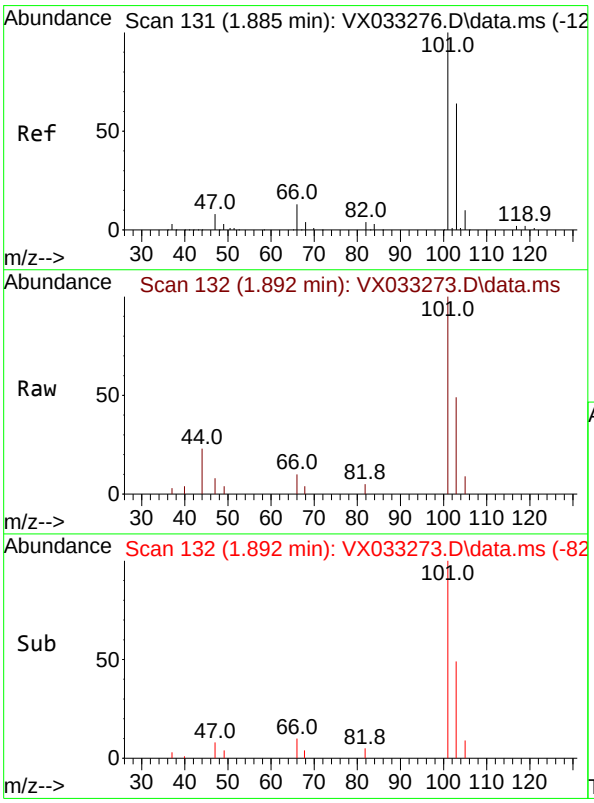
Ion	Ratio	Lower	Upper
64	100		
66	39.8	26.0	39.0#



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

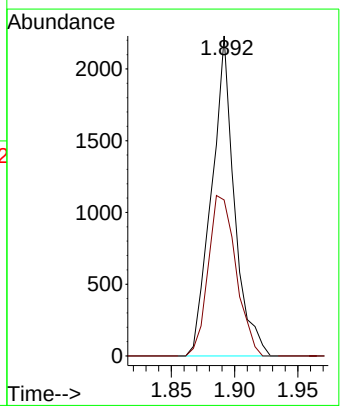
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

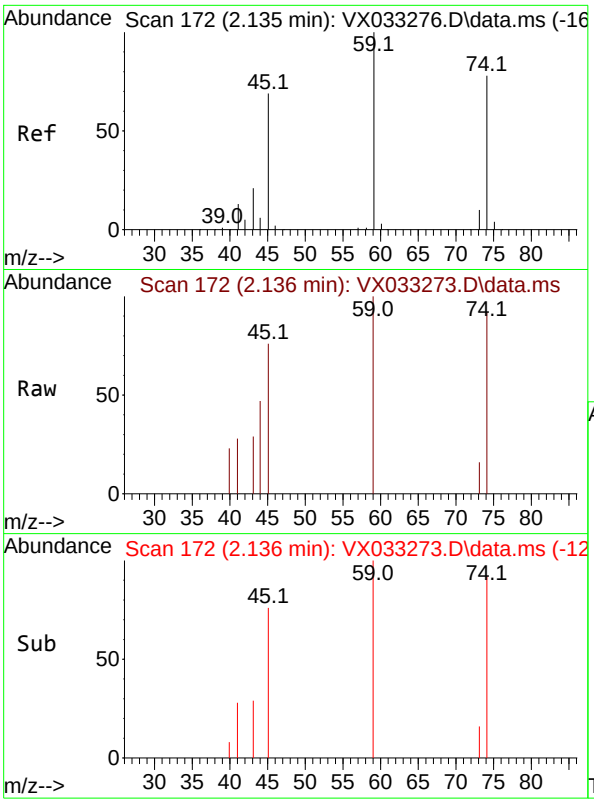


#7
Trichlorofluoromethane
Concen: 1.100 ug/l
RT: 1.892 min Scan# 132
Delta R.T. 0.006 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion:101 Resp: 2793

Ion	Ratio	Lower	Upper
101	100		
103	48.7	51.4	77.2#





#8
Diethyl Ether
Concen: 1.112 ug/l
RT: 2.136 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

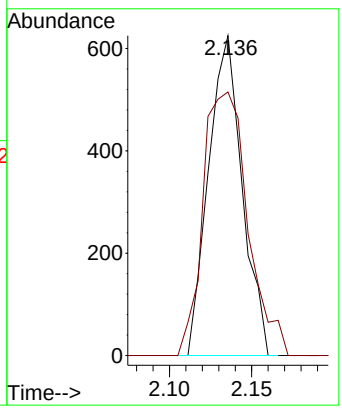
Tgt Ion: 74 Resp: 88

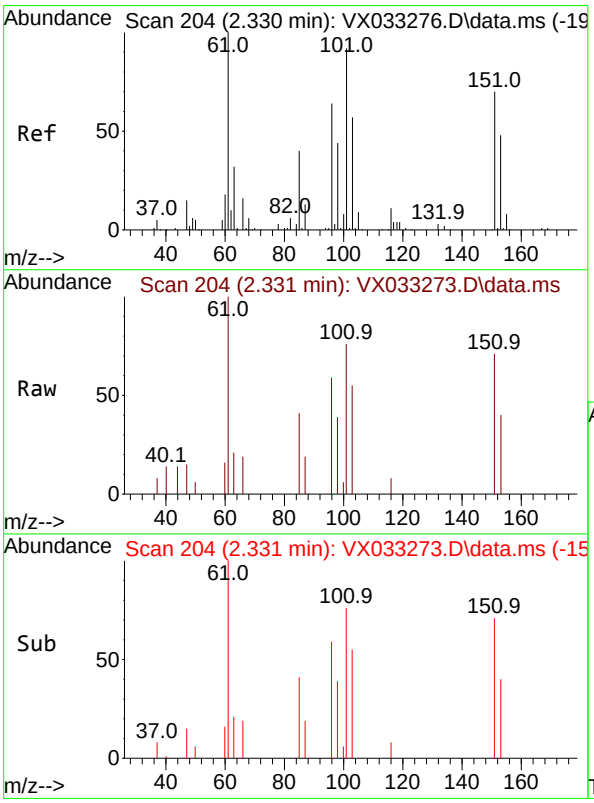
Ion	Ratio	Lower	Upper
74	100		
45	109.8	46.6	139.7

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

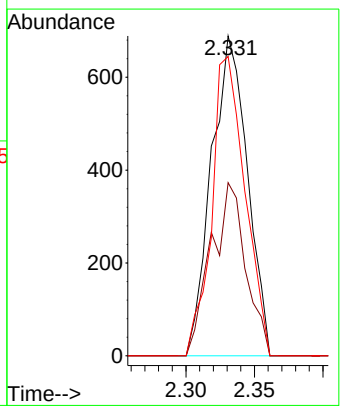


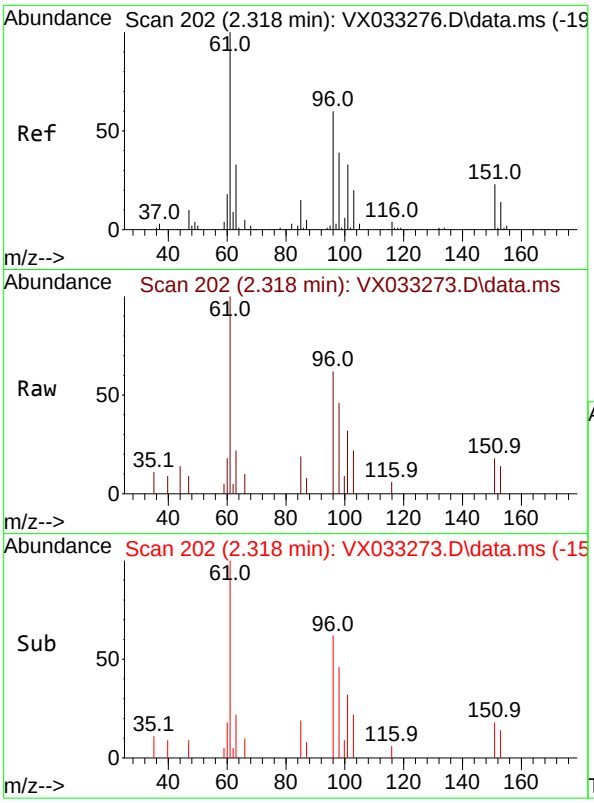


#9
1,1,2-Trichlorotrifluoroethane
Concen: 0.942 ug/l
RT: 2.331 min Scan# 204
Delta R.T. -0.000 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion:101 Resp: 1257

Ion	Ratio	Lower	Upper
101	100		
85	52.3	37.0	55.4
151	86.6	64.4	96.6

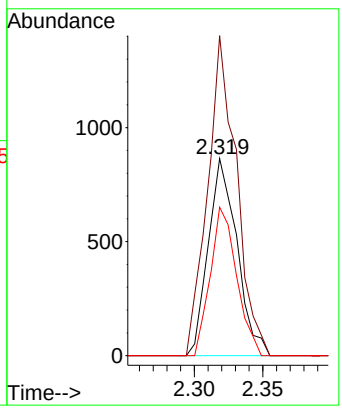




#12
1,1-Dichloroethene
Concen: 1.012 ug/l
RT: 2.318 min Scan# 2
Delta R.T. -0.001 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion: 96 Resp: 125

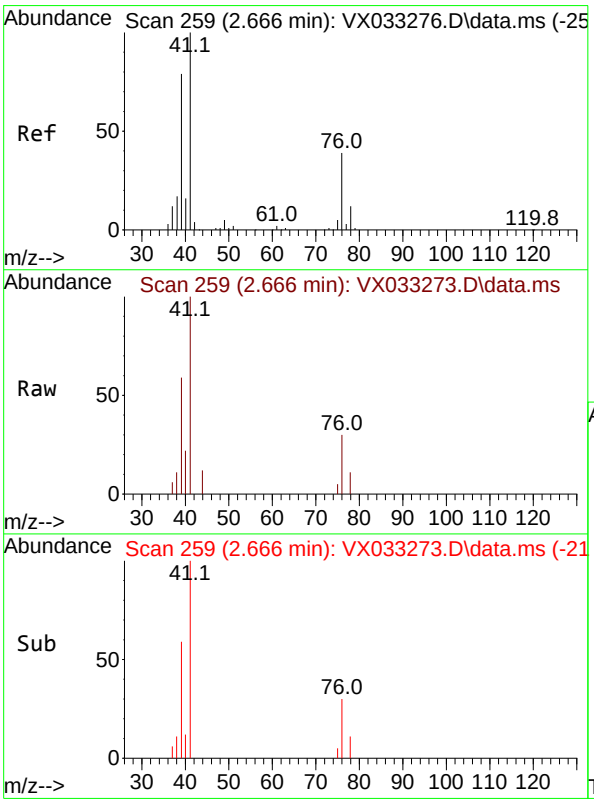
Ion	Ratio	Lower	Upper
96	100		
61	162.4	125.1	187.7
98	75.3	50.6	76.0



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

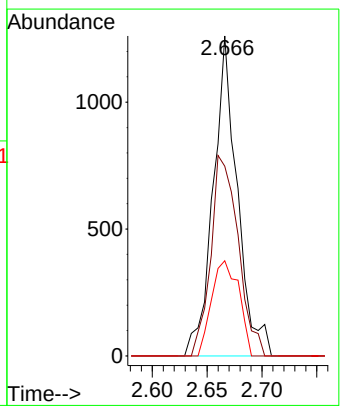
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

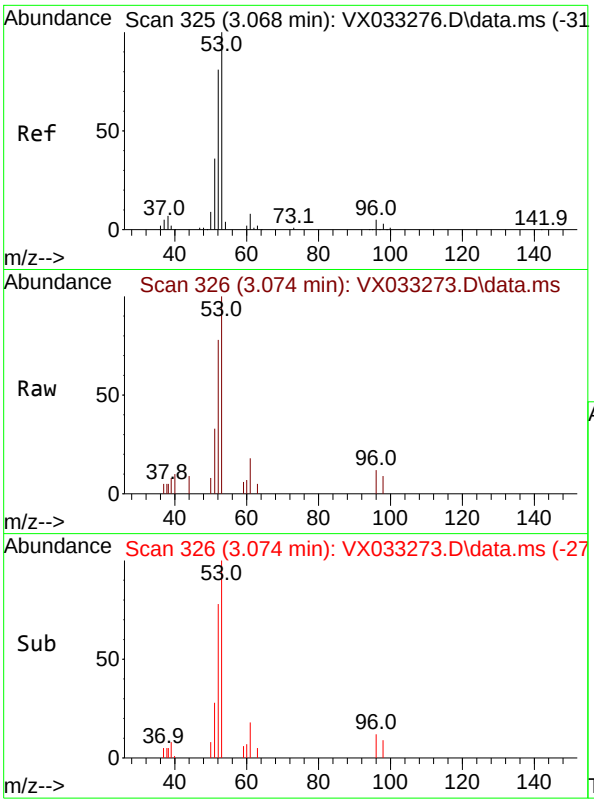


#14
Allyl chloride
Concen: 0.962 ug/l
RT: 2.666 min Scan# 259
Delta R.T. 0.000 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion: 41 Resp: 1931

Ion	Ratio	Lower	Upper
41	100		
39	71.1	61.4	92.2
76	33.6	29.2	43.8

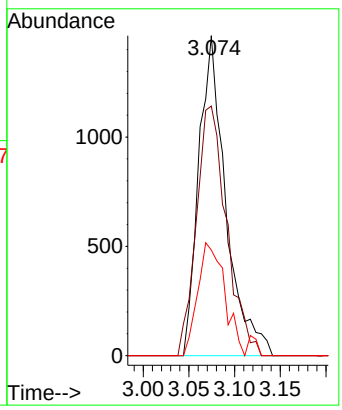




#15
Acrylonitrile
Concen: 4.842 ug/l
RT: 3.074 min Scan# 3
Delta R.T. 0.012 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion: 53 Resp: 301

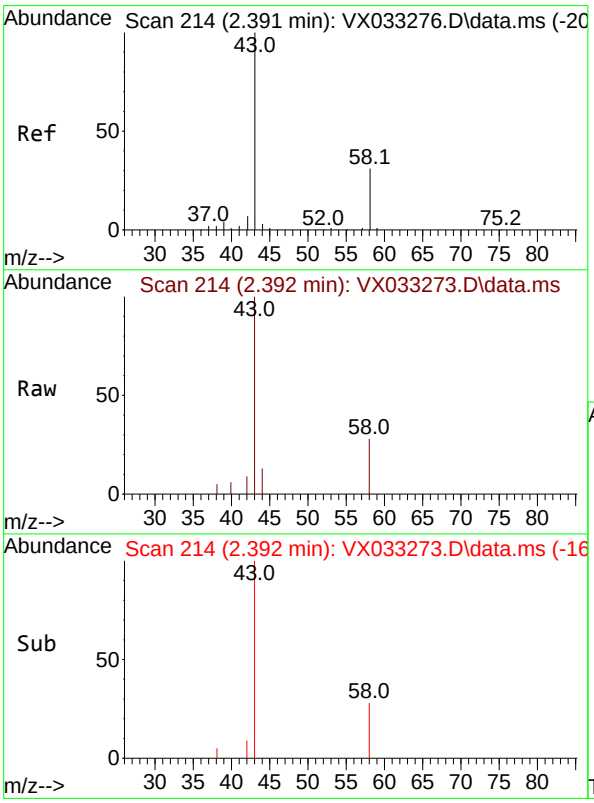
Ion	Ratio	Lower	Upper
53	100		
52	86.9	67.4	101.0
51	35.0	30.3	45.5



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

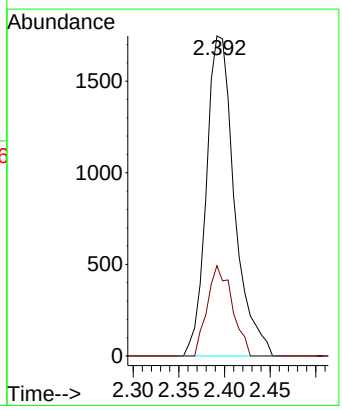
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

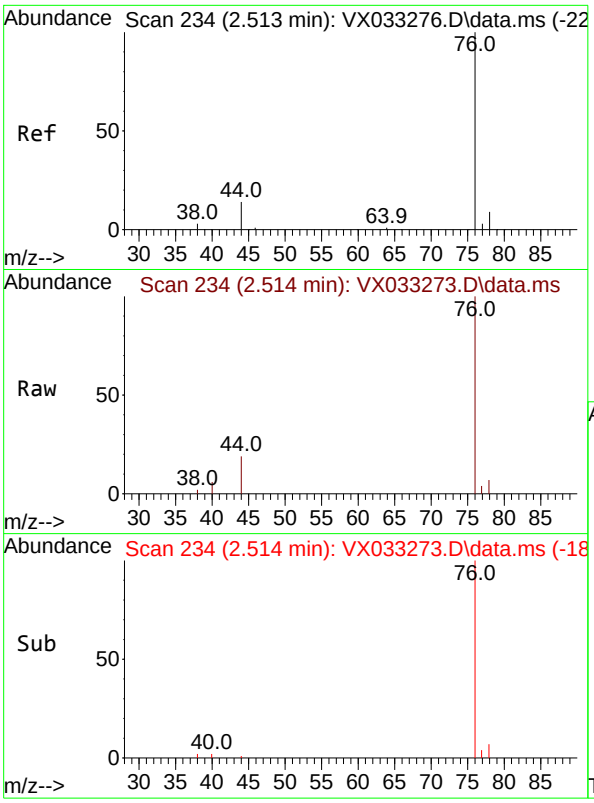


#16
Acetone
Concen: 5.757 ug/l
RT: 2.392 min Scan# 214
Delta R.T. 0.012 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion: 43 Resp: 3731

Ion	Ratio	Lower	Upper
43	100		
58	28.2	23.8	35.8





#17
Carbon Disulfide
Concen: 0.987 ug/l
RT: 2.514 min Scan# 2
Delta R.T. -0.000 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

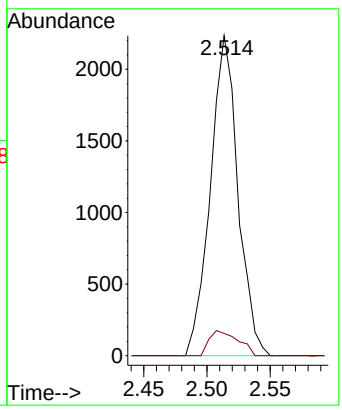
Tgt Ion: 76 Resp: 339

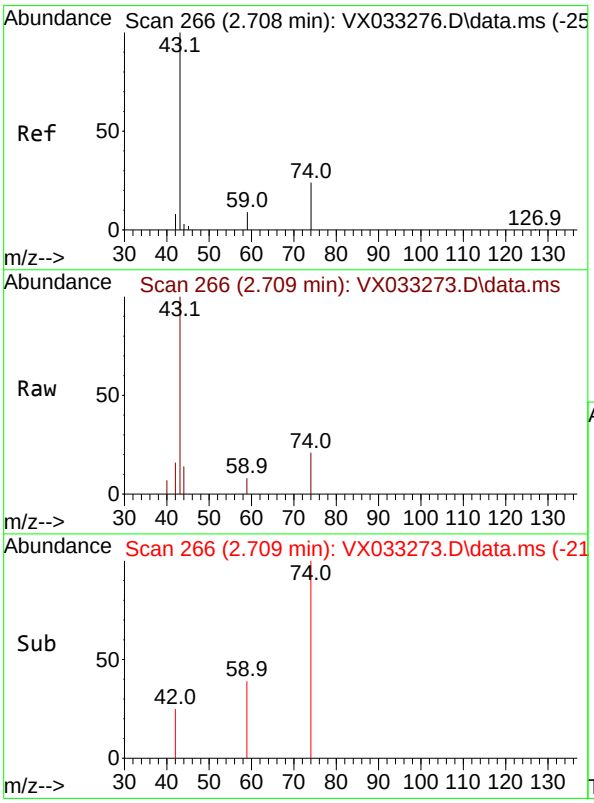
Ion	Ratio	Lower	Upper
76	100		
78	6.9	7.5	11.3#

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

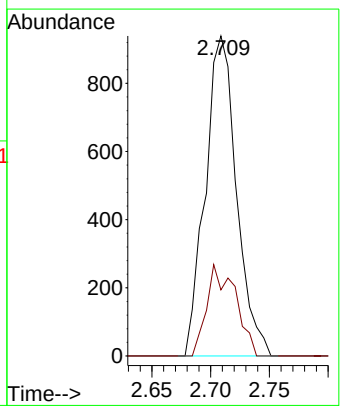


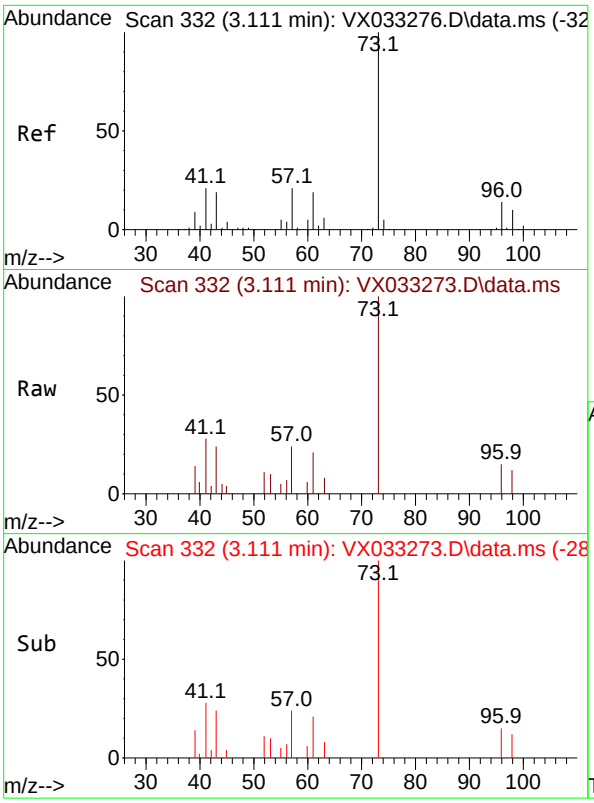


#18
Methyl Acetate
Concen: 0.967 ug/l
RT: 2.709 min Scan# 266
Delta R.T. 0.006 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion: 43 Resp: 1734

Ion	Ratio	Lower	Upper
43	100		
74	26.4	19.4	29.0

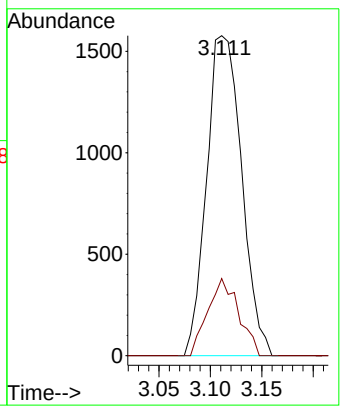




#19
Methyl tert-butyl Ether
Concen: 0.868 ug/l
RT: 3.111 min Scan# 3
Delta R.T. 0.000 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion: 73 Resp: 374

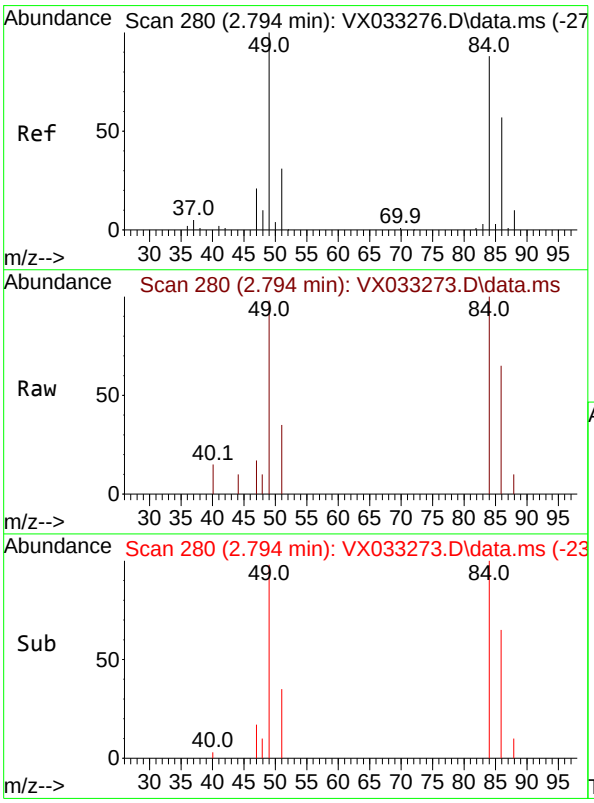
Ion	Ratio	Lower	Upper
73	100		
57	24.1	16.6	25.0



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

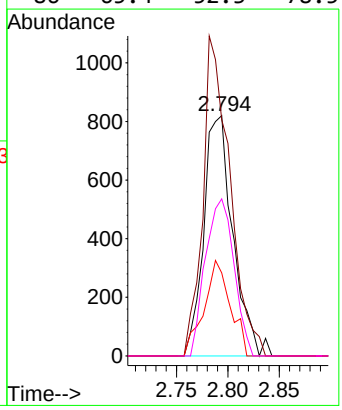
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

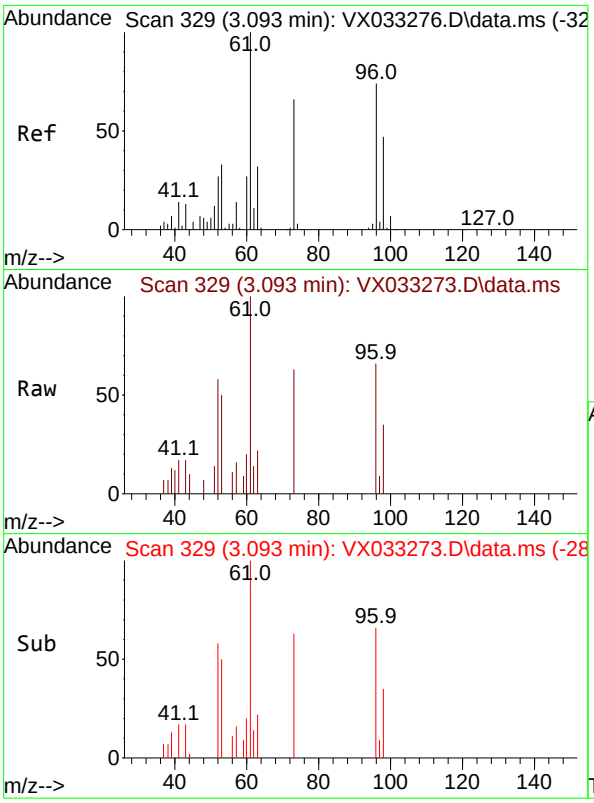


#20
Methylene Chloride
Concen: 1.036 ug/l
RT: 2.794 min Scan# 280
Delta R.T. 0.006 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion: 84 Resp: 1618

Ion	Ratio	Lower	Upper
84	100		
49	98.3	101.0	151.6#
51	34.5	31.1	46.7
86	65.4	52.3	78.5

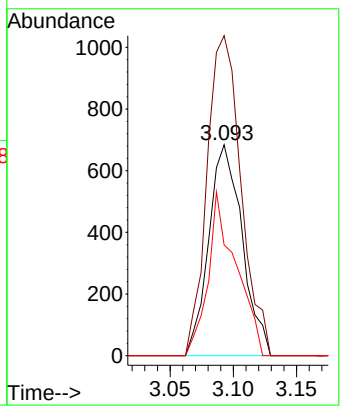




#21
trans-1,2-Dichloroethene
Concen: 0.884 ug/l
RT: 3.093 min Scan# 3
Delta R.T. -0.000 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion: 96 Resp: 125

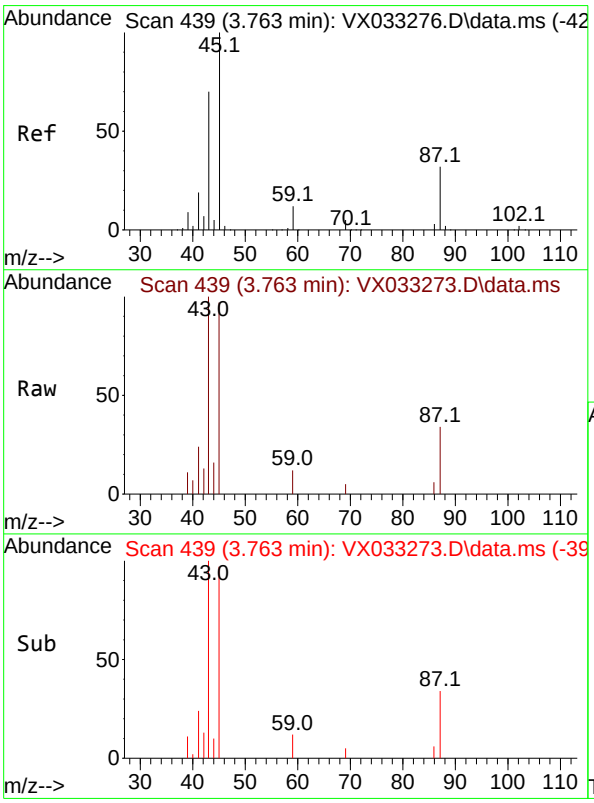
Ion	Ratio	Lower	Upper
96	100		
61	151.8	106.6	160.0
98	52.5	51.0	76.6



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

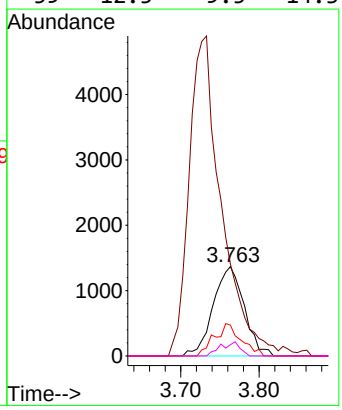
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

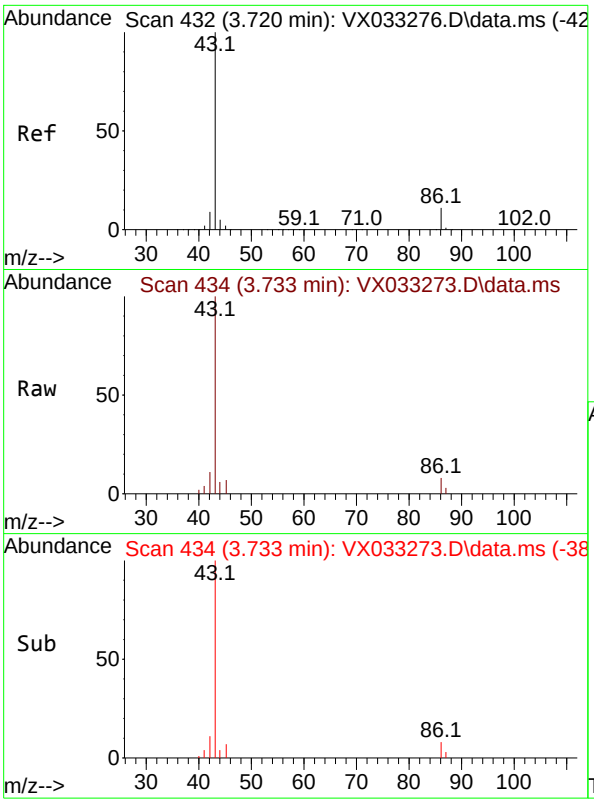


#22
Diisopropyl ether
Concen: 0.859 ug/l
RT: 3.763 min Scan# 439
Delta R.T. 0.000 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion: 45 Resp: 3754

Ion	Ratio	Lower	Upper
45	100		
43	97.5	56.4	84.6#
87	34.6	24.4	36.6
59	12.5	9.5	14.3





#23
Vinyl Acetate
Concen: 4.129 ug/l
RT: 3.733 min Scan# 4
Delta R.T. 0.012 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

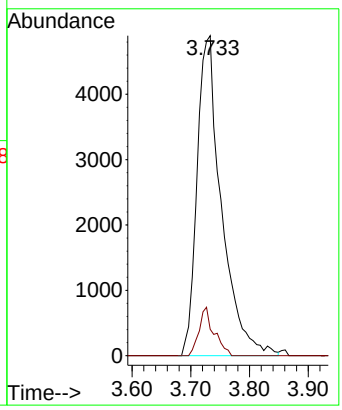
Tgt Ion: 43 Resp: 1413

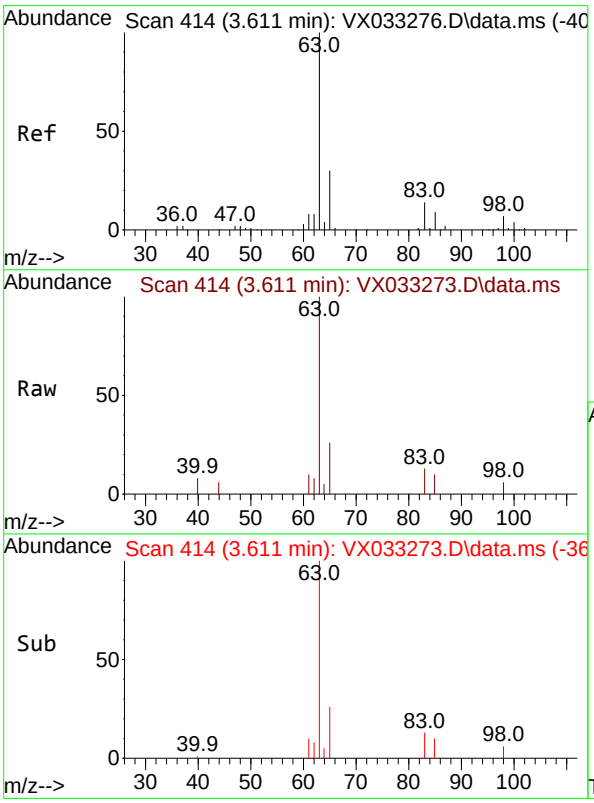
Ion	Ratio	Lower	Upper
43	100		
86	8.2	8.6	12.8#

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

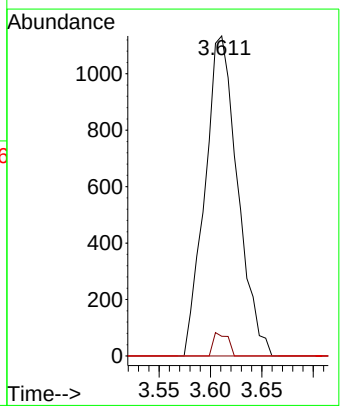


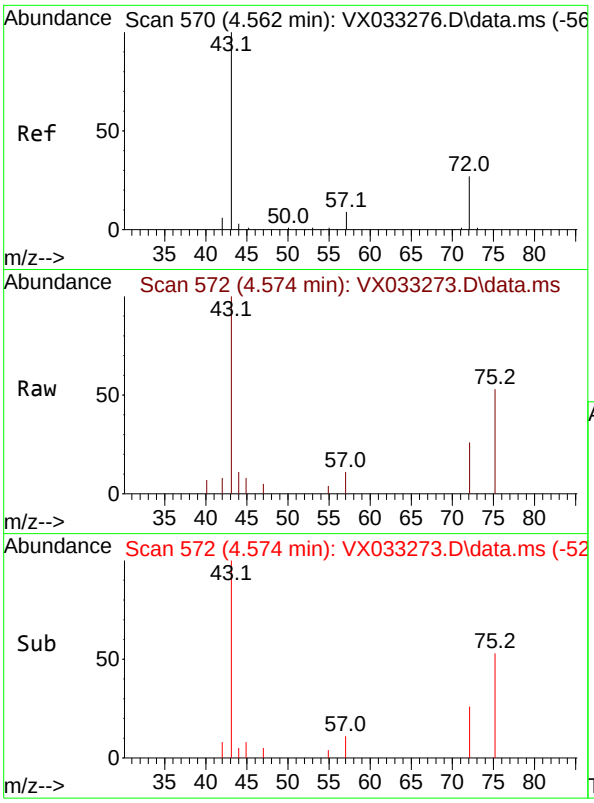


#24
1,1-Dichloroethane
Concen: 1.002 ug/l
RT: 3.611 min Scan# 414
Delta R.T. -0.000 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion: 63 Resp: 2507

Ion	Ratio	Lower	Upper
63	100		
98	6.2	3.5	10.4
100	0.0	2.3	6.8#





#25
2-Butanone
Concen: 4.735 ug/l
RT: 4.574 min Scan# 5
Delta R.T. 0.018 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

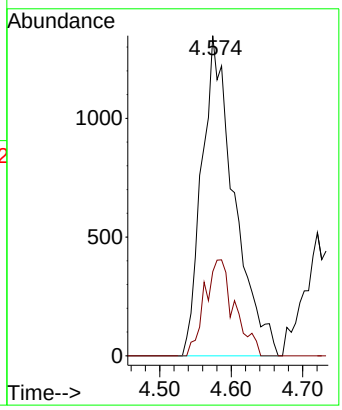
Tgt Ion: 43 Resp: 423

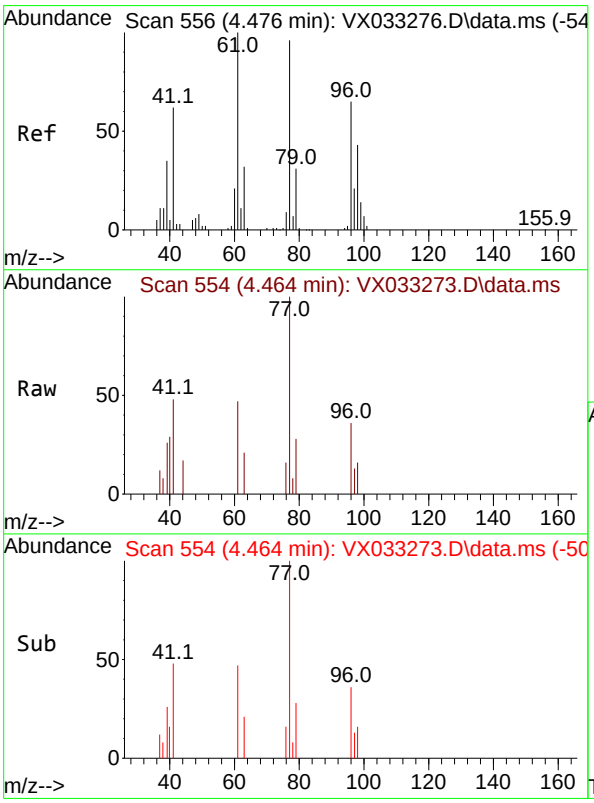
Ion	Ratio	Lower	Upper
43	100		
72	26.3	22.2	33.2

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

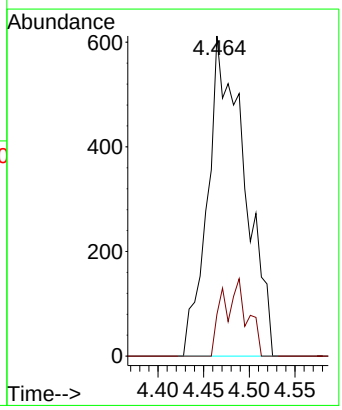


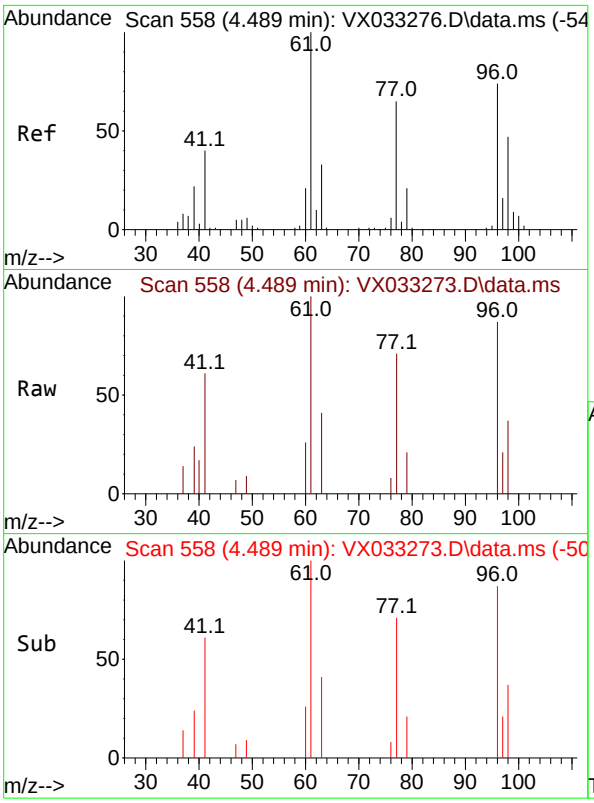


#26
2,2-Dichloropropane
Concen: 0.853 ug/l
RT: 4.464 min Scan# 554
Delta R.T. -0.013 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion: 77 Resp: 1715

Ion	Ratio	Lower	Upper
77	100		
97	5.9	11.4	34.1#

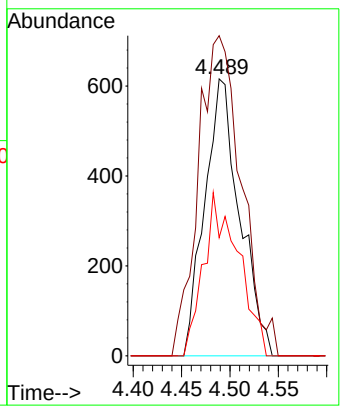




#27
cis-1,2-Dichloroethene
Concen: 0.960 ug/l
RT: 4.489 min Scan# 5
Delta R.T. -0.000 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion: 96 Resp: 155

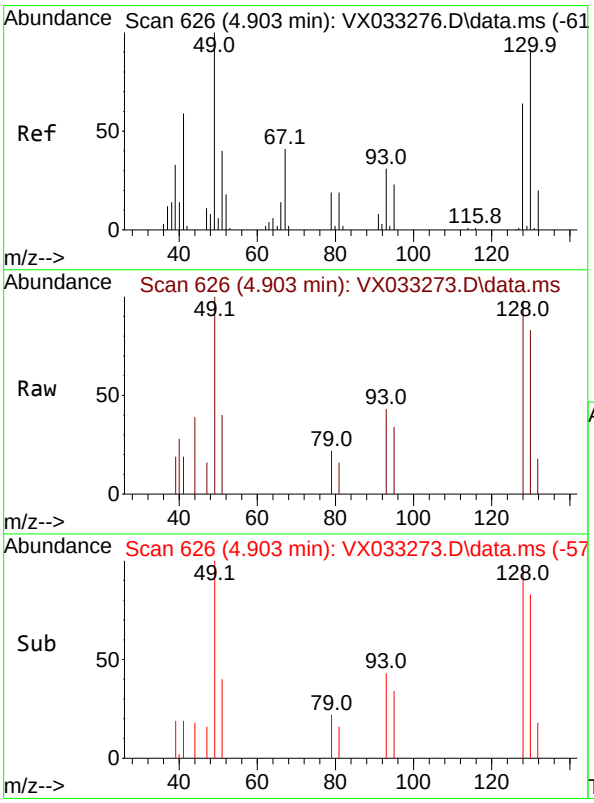
Ion	Ratio	Lower	Upper
96	100		
61	141.5	0.0	286.0
98	58.6	0.0	129.6



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

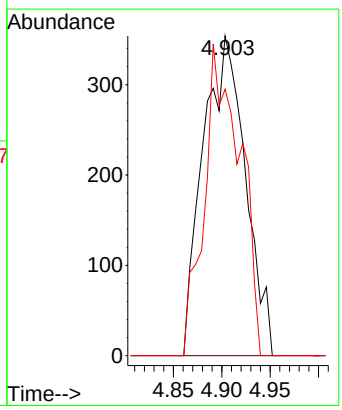
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

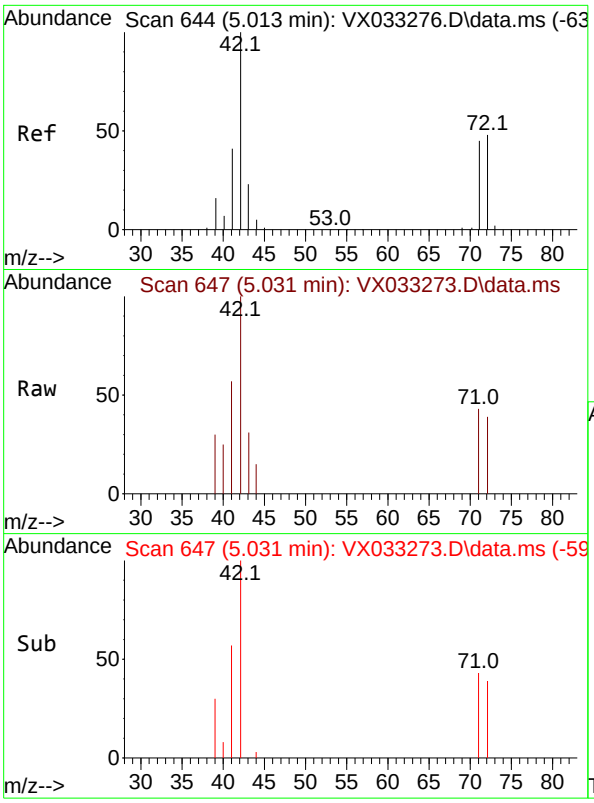


#28
Bromochloromethane
Concen: 0.981 ug/l
RT: 4.903 min Scan# 626
Delta R.T. -0.001 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion: 49 Resp: 1078

Ion	Ratio	Lower	Upper
49	100		
129	0.0	0.0	3.8
130	82.5	67.5	101.3

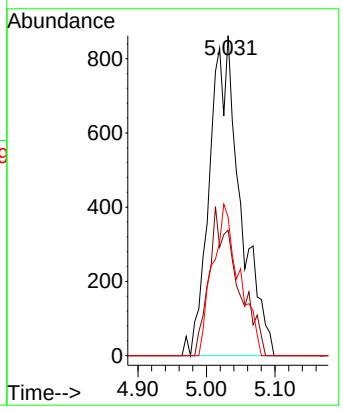




#29
Tetrahydrofuran
Concen: 4.756 ug/l
RT: 5.031 min Scan# 64
Delta R.T. 0.030 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion: 42 Resp: 269

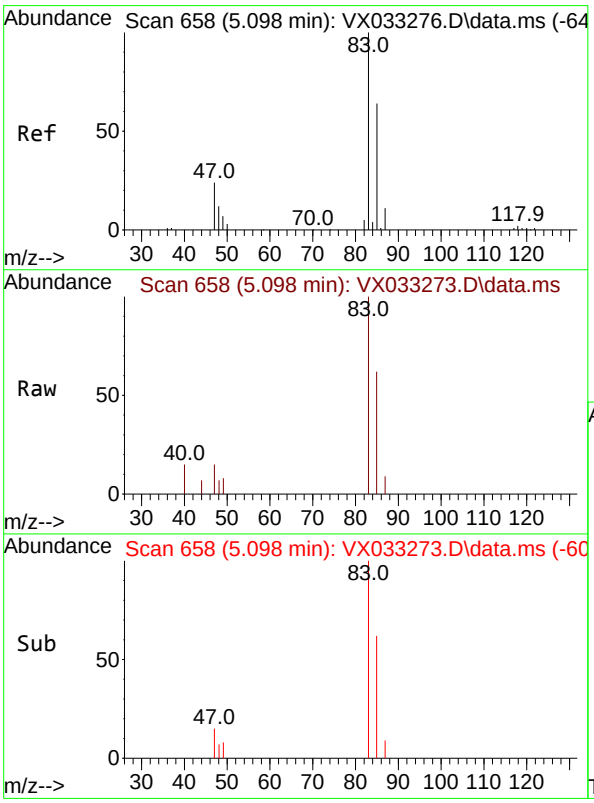
Ion	Ratio	Lower	Upper
42	100		
72	42.4	37.6	56.4
71	40.8	34.7	52.1



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

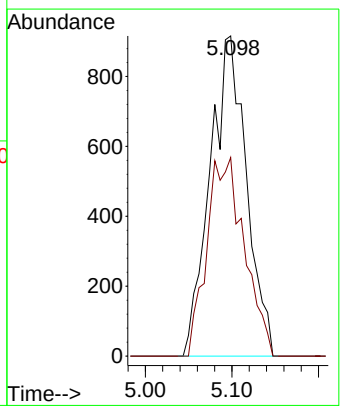
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

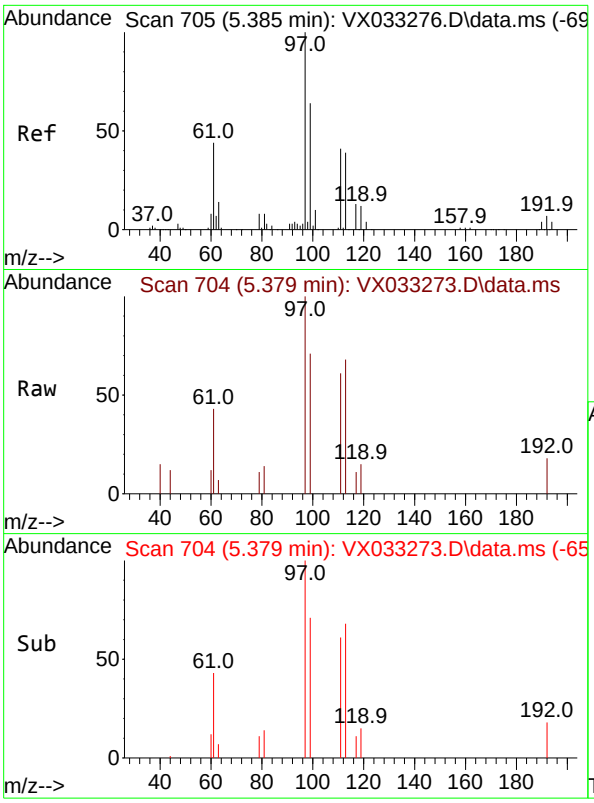


#30
Chloroform
Concen: 0.952 ug/l
RT: 5.098 min Scan# 658
Delta R.T. -0.001 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion: 83 Resp: 2666

Ion	Ratio	Lower	Upper
83	100		
85	62.0	51.1	76.7





#32
1,1,1-Trichloroethane
Concen: 0.873 ug/l
RT: 5.379 min Scan# 7
Delta R.T. -0.006 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

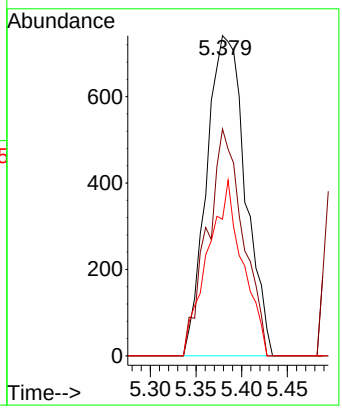
Tgt Ion: 97 Resp: 219

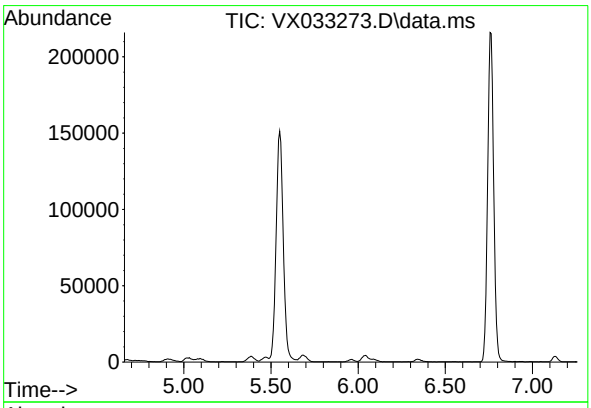
Ion	Ratio	Lower	Upper
97	100		
99	0.0	51.4	77.0#
61	49.5	35.2	52.8

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022



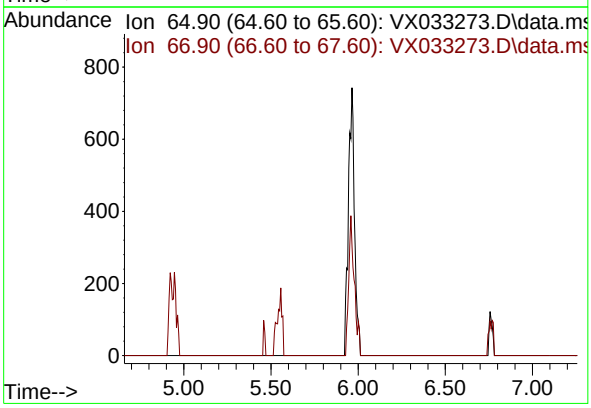


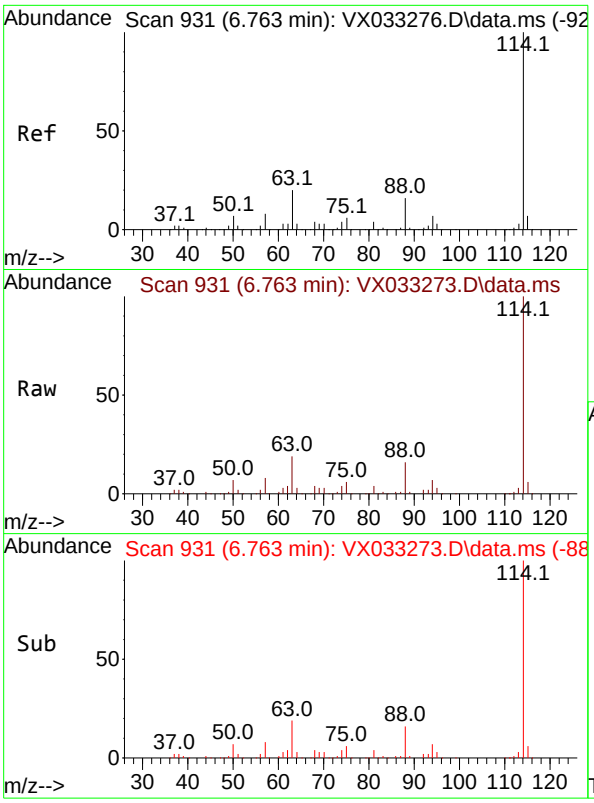
#33
1,2-Dichloroethane-d4
Concen: 0.000 ug/l
Expected RT: 5.96 min

Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion: 65

Sig	Exp Ratio
65	100
67	50.9





#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 6.763 min Scan# 9
Delta R.T. -0.000 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

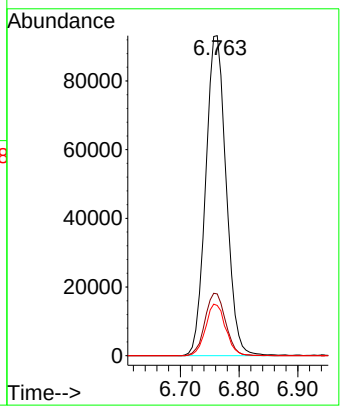
Tgt Ion:114 Resp: 22580

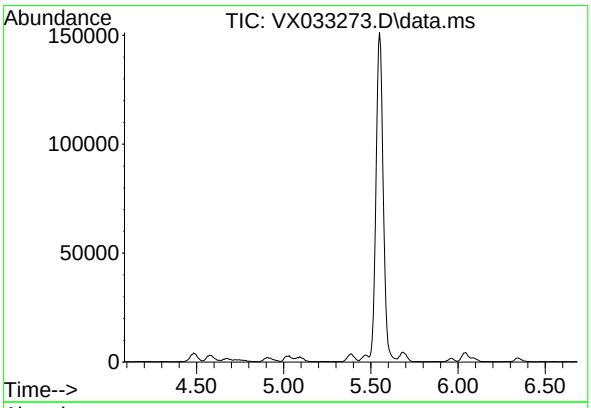
Ion	Ratio	Lower	Upper
114	100		
63	19.3	0.0	41.6
88	15.7	0.0	33.4

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022



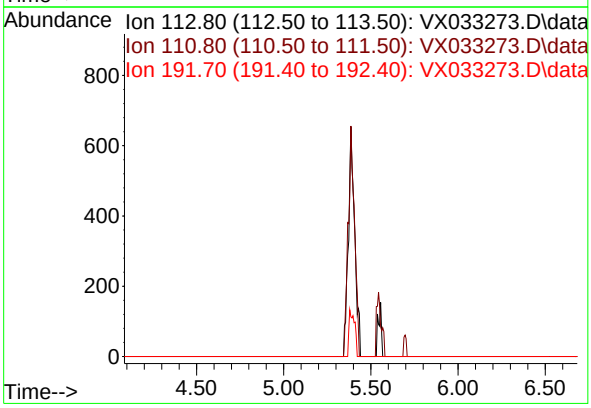


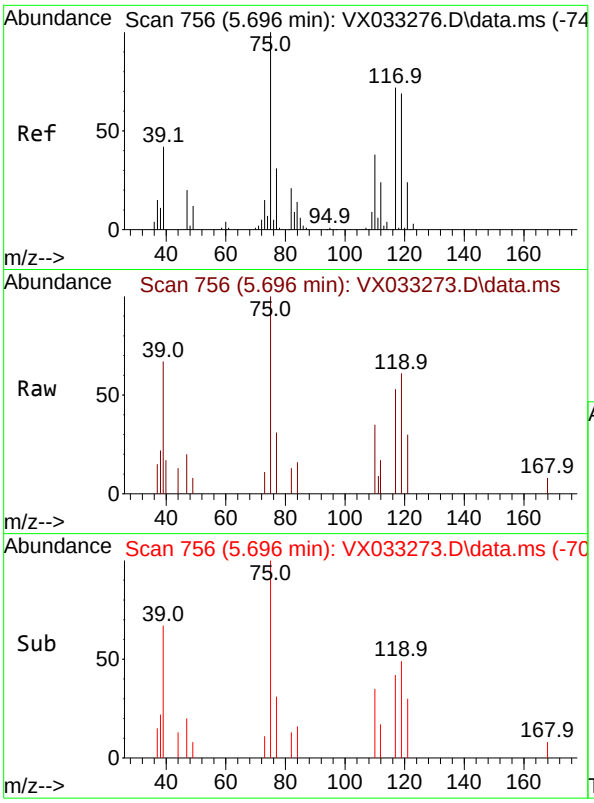
#35
Dibromofluoromethane
Concen: 0.000 ug/l
Expected RT: 5.38 min

Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion: 113

Sig	Exp Ratio
113	100
111	103.0
192	19.3

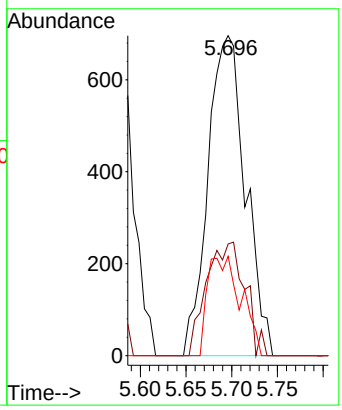




#36
1,1-Dichloropropene
Concen: 0.974 ug/l
RT: 5.696 min Scan# 7
Delta R.T. -0.000 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion: 75 Resp: 198

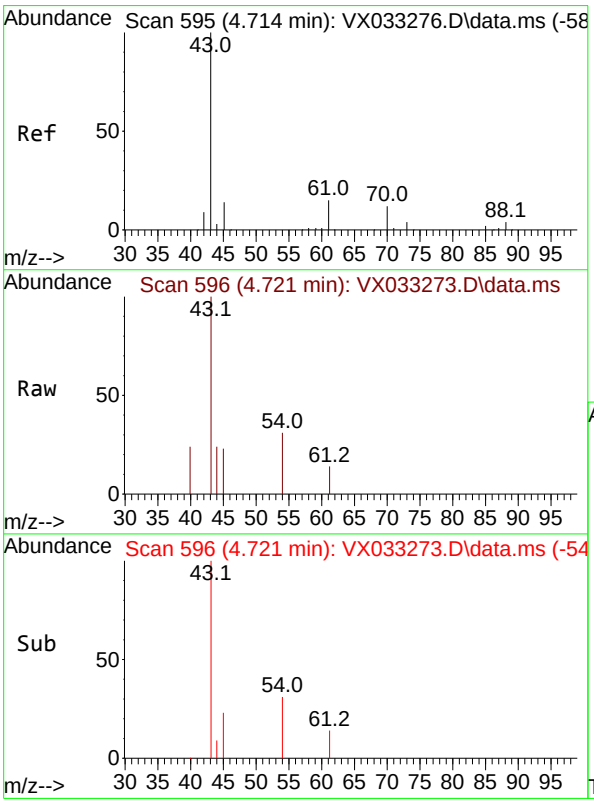
Ion	Ratio	Lower	Upper
75	100		
110	36.4	18.4	55.2
77	27.5	24.5	36.7



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

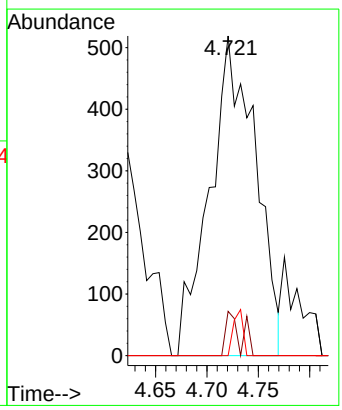
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

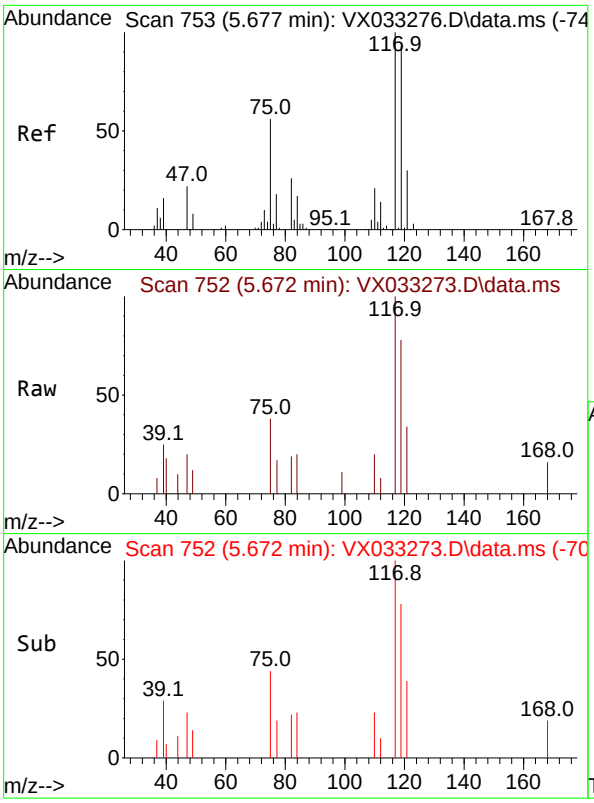


#37
Ethyl Acetate
Concen: 0.904 ug/l
RT: 4.721 min Scan# 596
Delta R.T. 0.006 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion: 43 Resp: 1606

Ion	Ratio	Lower	Upper
43	100		
61	4.5	11.5	17.3#
70	3.1	9.1	13.7#

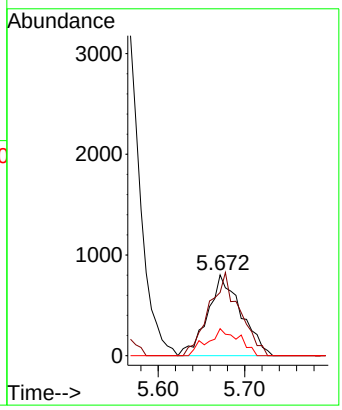




#38
Carbon Tetrachloride
Concen: 0.955 ug/l
RT: 5.672 min Scan# 7
Delta R.T. -0.012 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion:117 Resp: 215

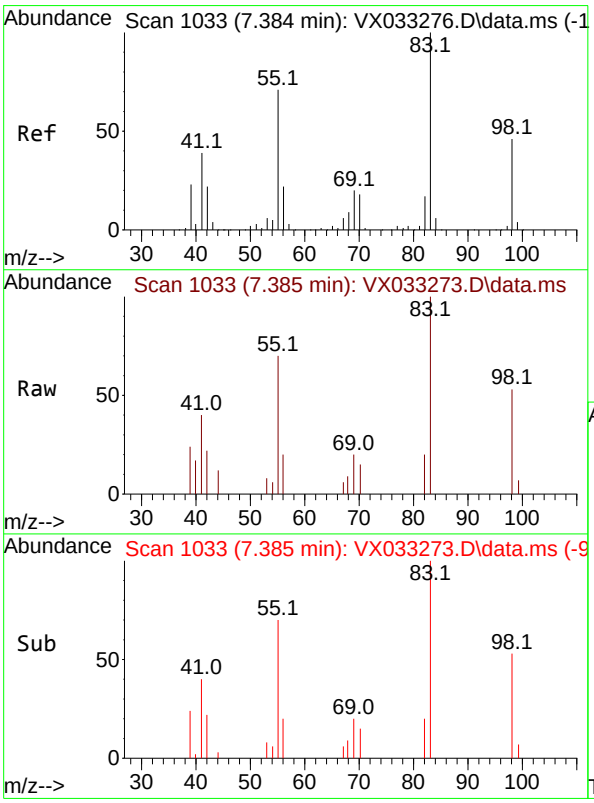
Ion	Ratio	Lower	Upper
117	100		
119	78.3	77.2	115.8
121	33.5	25.8	38.6



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

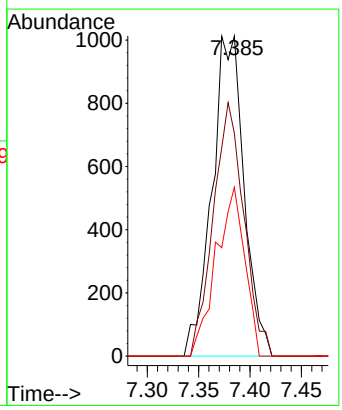
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

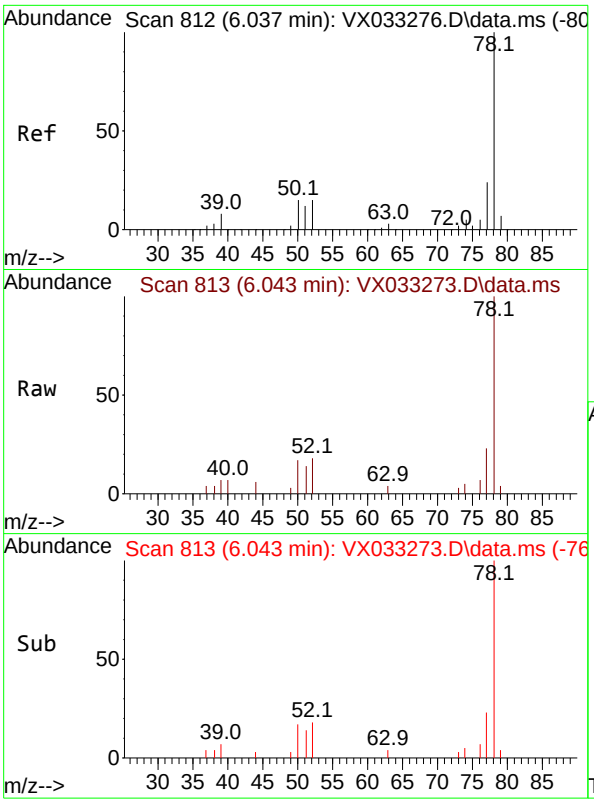


#39
Methylcyclohexane
Concen: 0.947 ug/l
RT: 7.385 min Scan# 1033
Delta R.T. -0.000 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion: 83 Resp: 2200

Ion	Ratio	Lower	Upper
83	100		
55	69.6	58.4	87.6
98	52.7	37.2	55.8

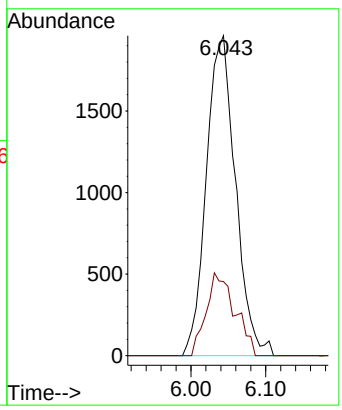




#40
Benzene
Concen: 0.933 ug/l
RT: 6.043 min Scan# 8
Delta R.T. 0.006 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion: 78 Resp: 532

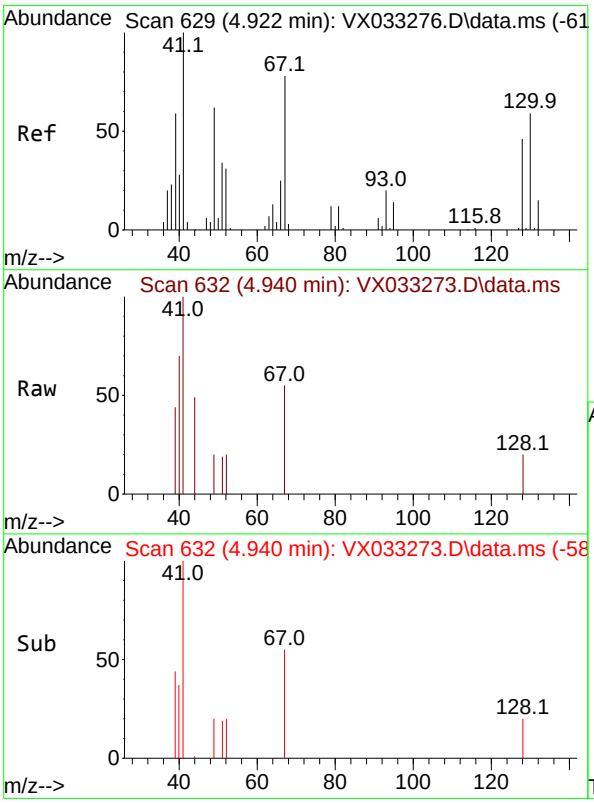
Ion	Ratio	Lower	Upper
78	100		
77	23.1	19.0	28.4



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

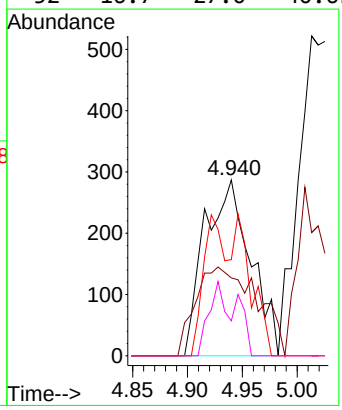
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

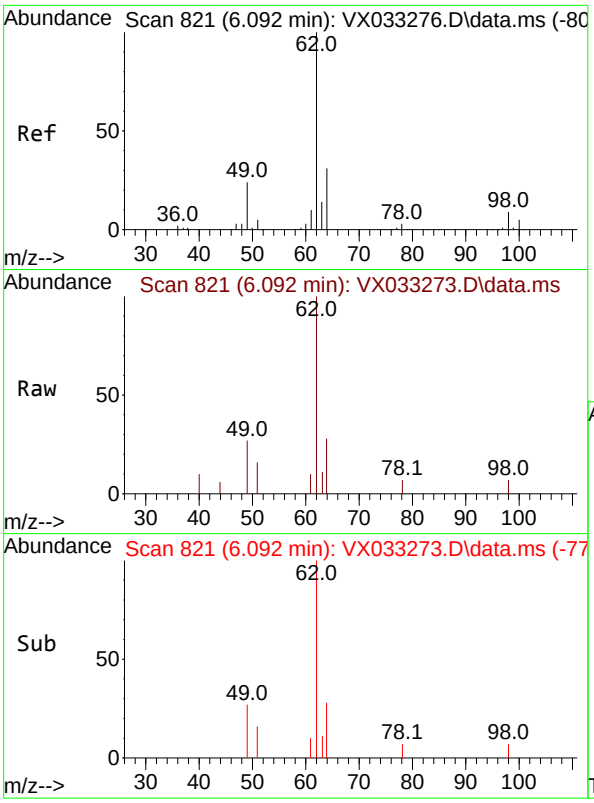


#41
Methacrylonitrile
Concen: 0.837 ug/l
RT: 4.940 min Scan# 632
Delta R.T. 0.018 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion: 41 Resp: 836

Ion	Ratio	Lower	Upper
41	100		
39	67.6	47.5	71.3
67	35.8	60.5	90.7#
52	16.7	27.0	40.6#

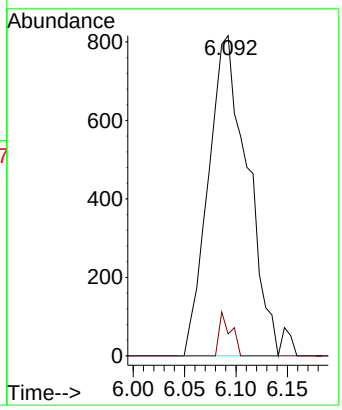




#42
1,2-Dichloroethane
Concen: 0.934 ug/l
RT: 6.092 min Scan# 8
Delta R.T. 0.006 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion: 62 Resp: 214

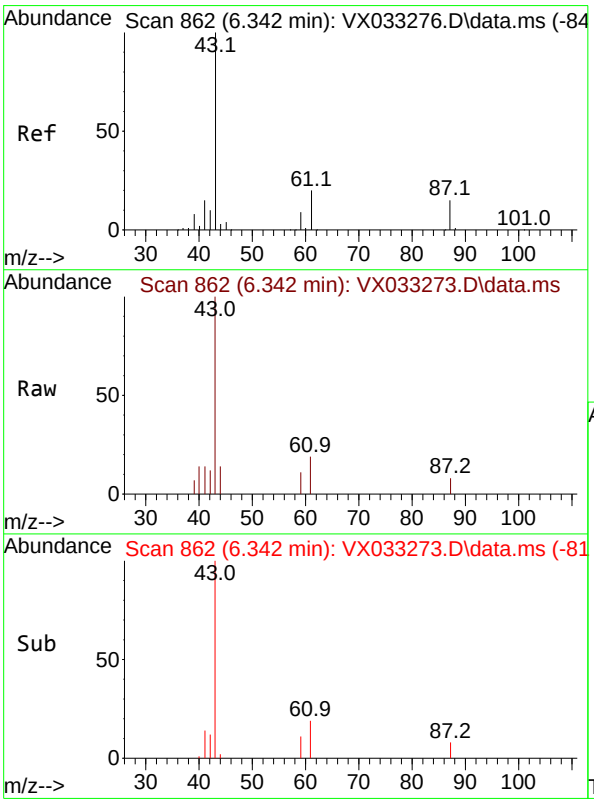
Ion	Ratio	Lower	Upper
62	100		
98	4.1	0.0	16.0



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

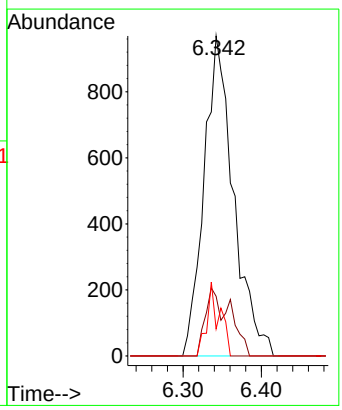
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

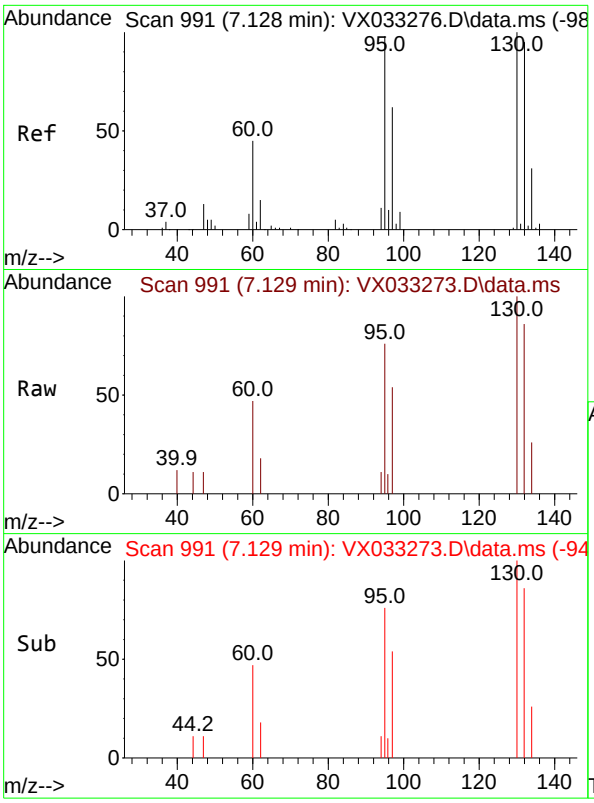


#43
Isopropyl Acetate
Concen: 0.863 ug/l
RT: 6.342 min Scan# 862
Delta R.T. 0.000 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion: 43 Resp: 2534

Ion	Ratio	Lower	Upper
43	100		
61	17.6	15.4	23.0
87	10.0	10.8	16.2#

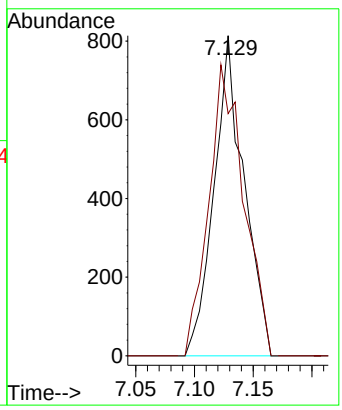




#44
Trichloroethene
Concen: 0.904 ug/l
RT: 7.129 min Scan# 9
Delta R.T. -0.000 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion:130 Resp: 144

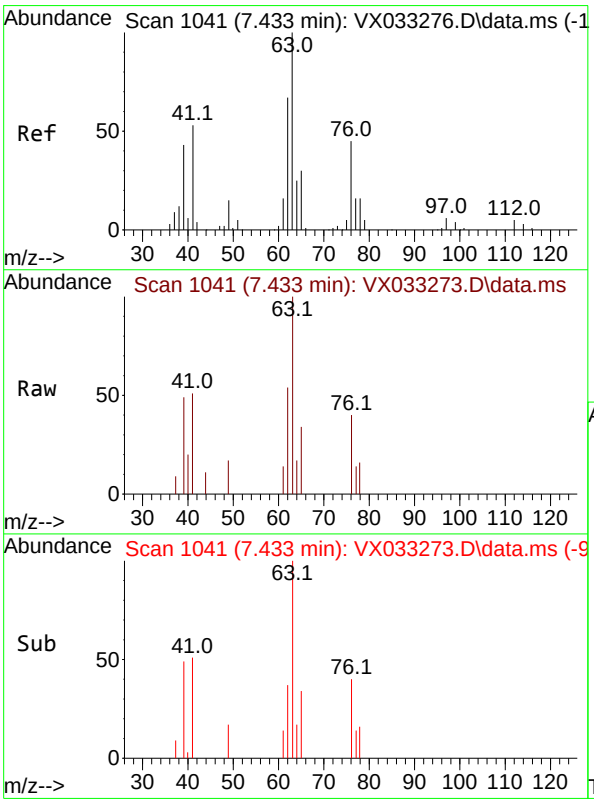
Ion	Ratio	Lower	Upper
130	100		
95	75.7	0.0	195.2



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

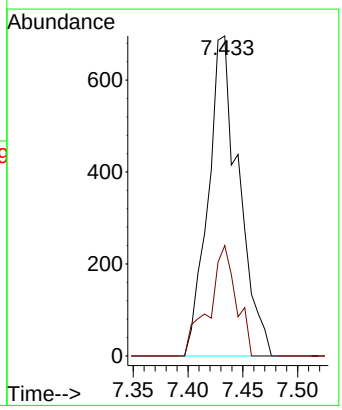
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

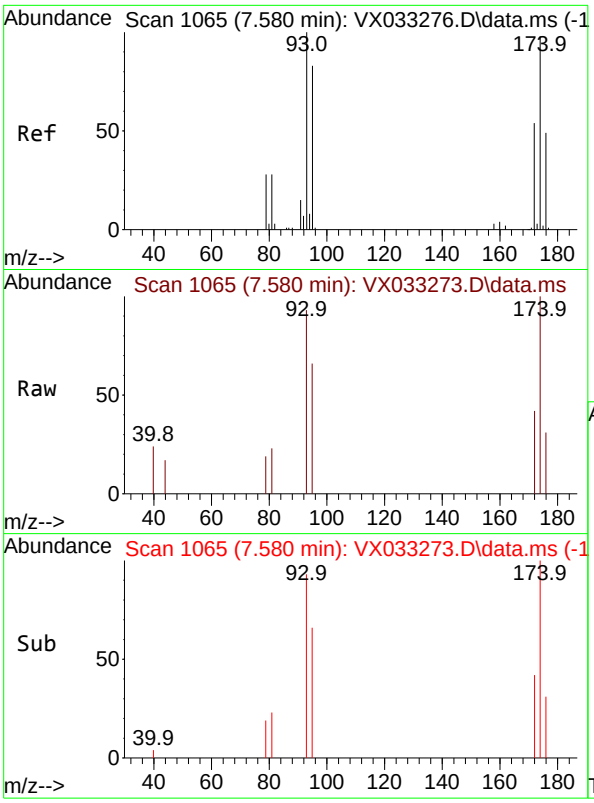


#45
1,2-Dichloropropane
Concen: 0.961 ug/l
RT: 7.433 min Scan# 1041
Delta R.T. -0.001 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion: 63 Resp: 1355

Ion	Ratio	Lower	Upper
63	100		
65	34.5	24.6	36.8

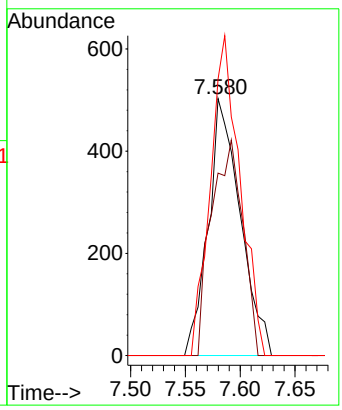




#46
Dibromomethane
Concen: 0.929 ug/l
RT: 7.580 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion: 93 Resp: 102

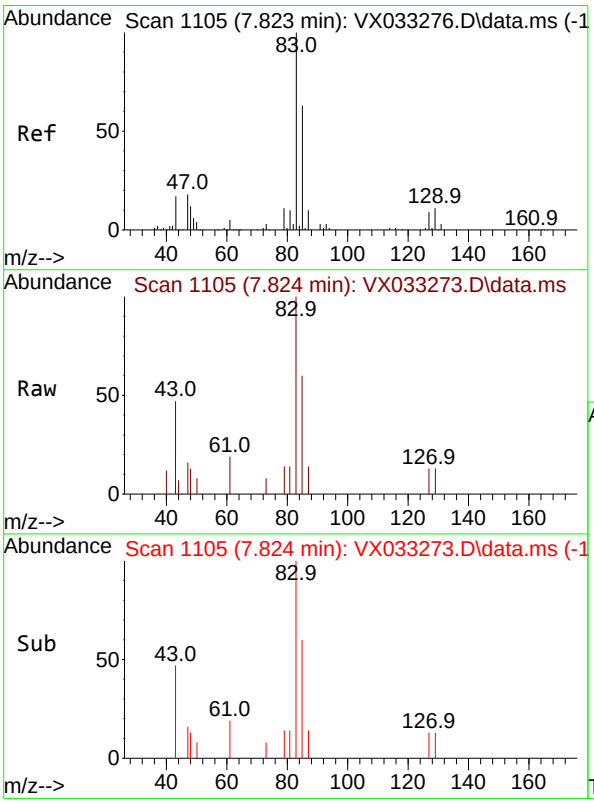
Ion	Ratio	Lower	Upper
93	100		
95	82.4	65.8	98.8
174	115.3	79.8	119.6



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

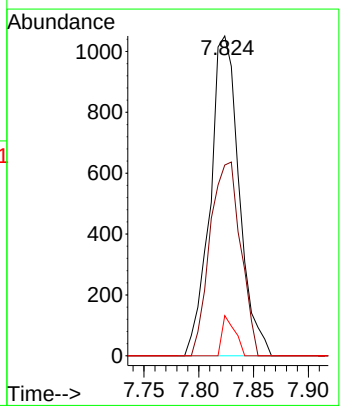
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

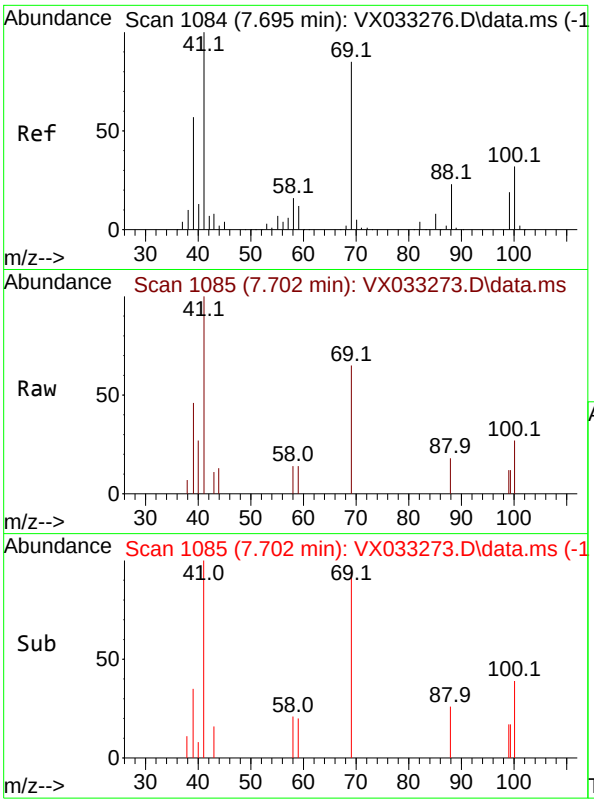


#47
Bromodichloromethane
Concen: 0.909 ug/l
RT: 7.824 min Scan# 1105
Delta R.T. -0.000 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion: 83 Resp: 1934

Ion	Ratio	Lower	Upper
83	100		
85	59.7	52.2	78.4
127	12.6	7.4	11.2#

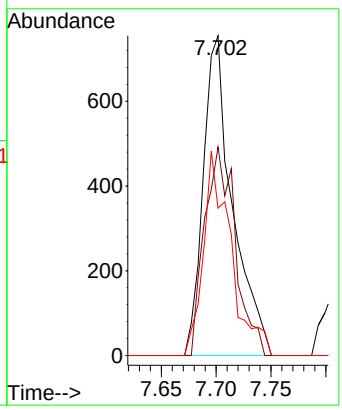




#48
Methyl methacrylate
Concen: 0.927 ug/l
RT: 7.702 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion: 41 Resp: 140

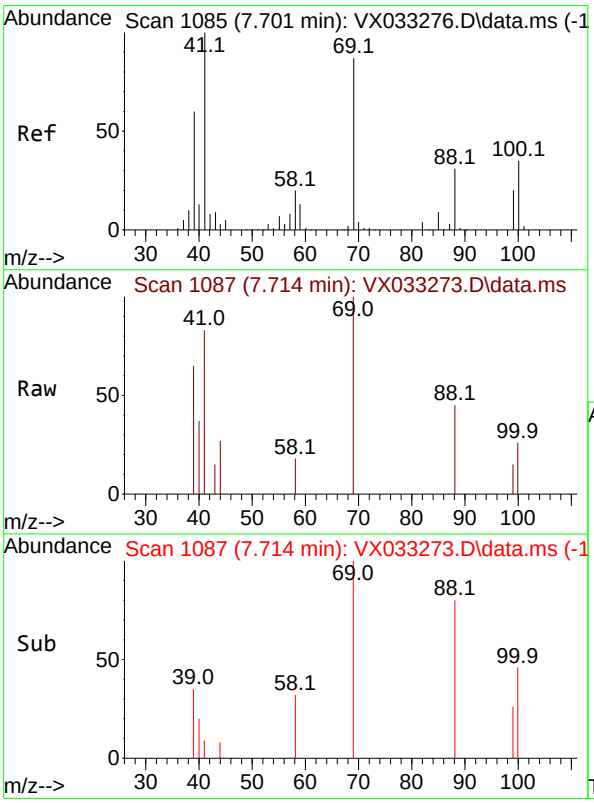
Ion	Ratio	Lower	Upper
41	100		
69	68.5	65.1	97.7
39	59.7	51.9	77.9



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

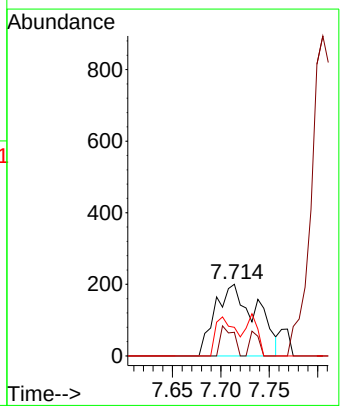
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

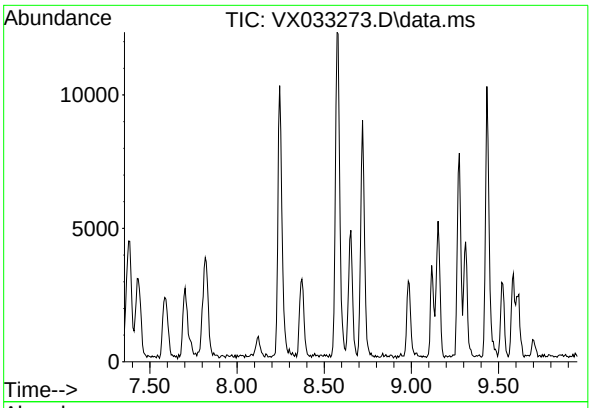


#49
1,4-Dioxane
Concen: 21.310 ug/l m
RT: 7.714 min Scan# 1087
Delta R.T. 0.043 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion: 88 Resp: 593

Ion	Ratio	Lower	Upper
88	100		
43	13.2	26.6	39.8#
58	25.8	51.7	77.5#





#50
Toluene-d8
Concen: 0.000 ug/l
Expected RT: 8.65 min

Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

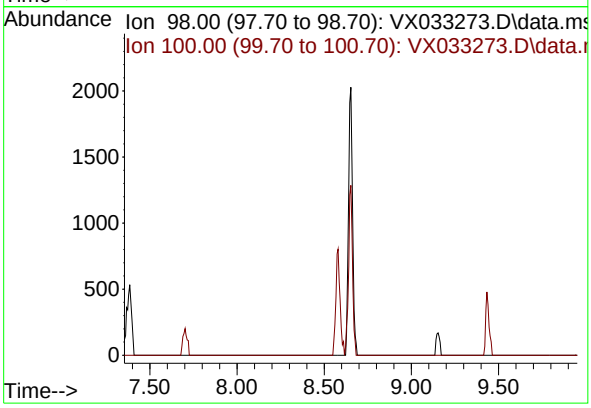
Tgt Ion: 98

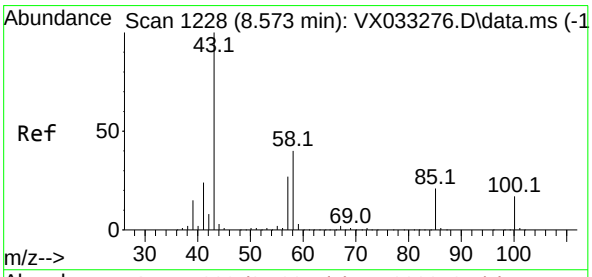
Sig	Exp Ratio
98	100
100	63.6

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

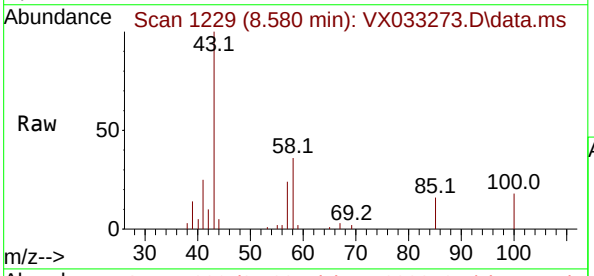


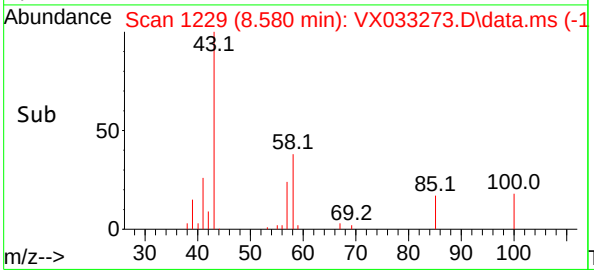


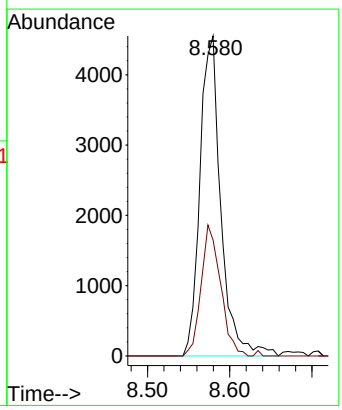
#51
4-Methyl-2-Pentanone
Concen: 4.431 ug/l
RT: 8.580 min Scan# 1229
Delta R.T. 0.006 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

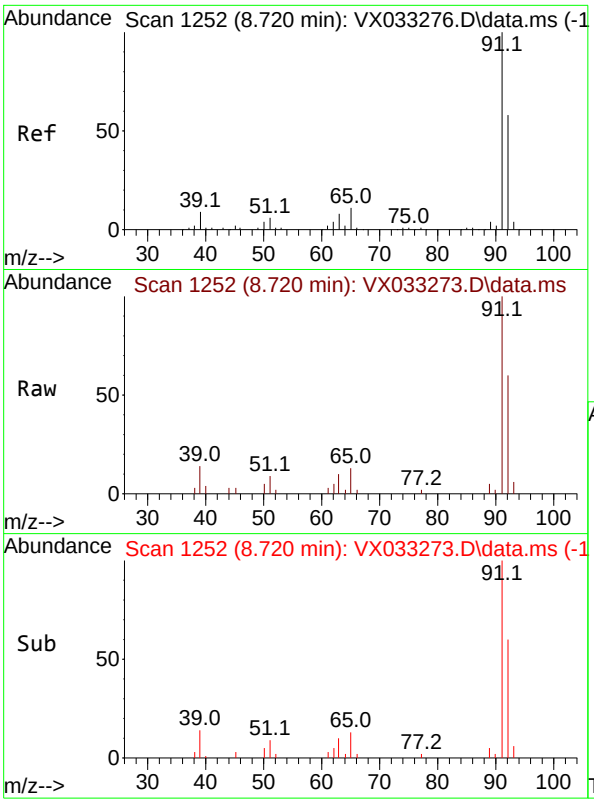
Tgt Ion: 43 Resp: 8030

Ion	Ratio	Lower	Upper
43	100		
58	38.2	30.9	46.3





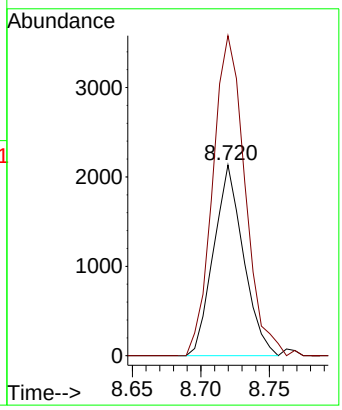




#52
Toluene
Concen: 0.861 ug/l
RT: 8.720 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion: 92 Resp: 323

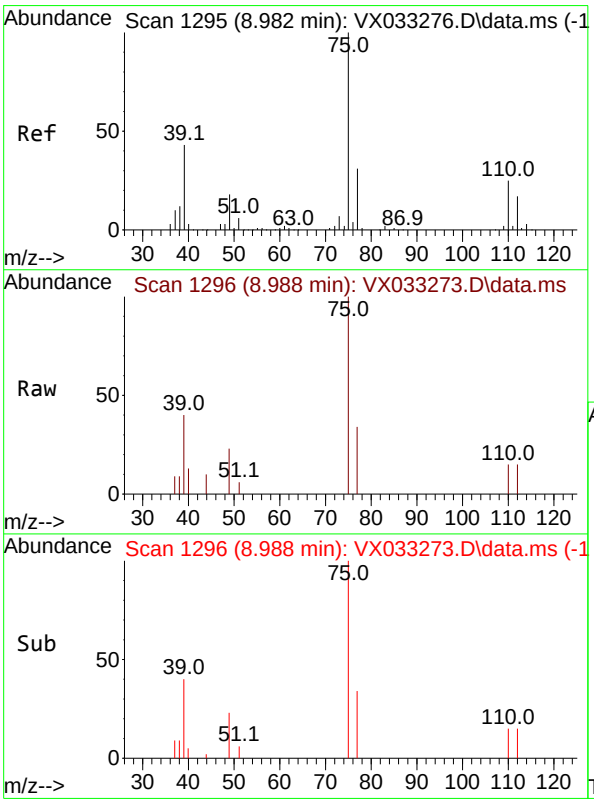
Ion	Ratio	Lower	Upper
92	100		
91	181.7	138.3	207.5



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

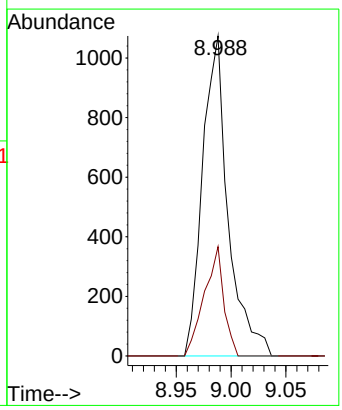
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

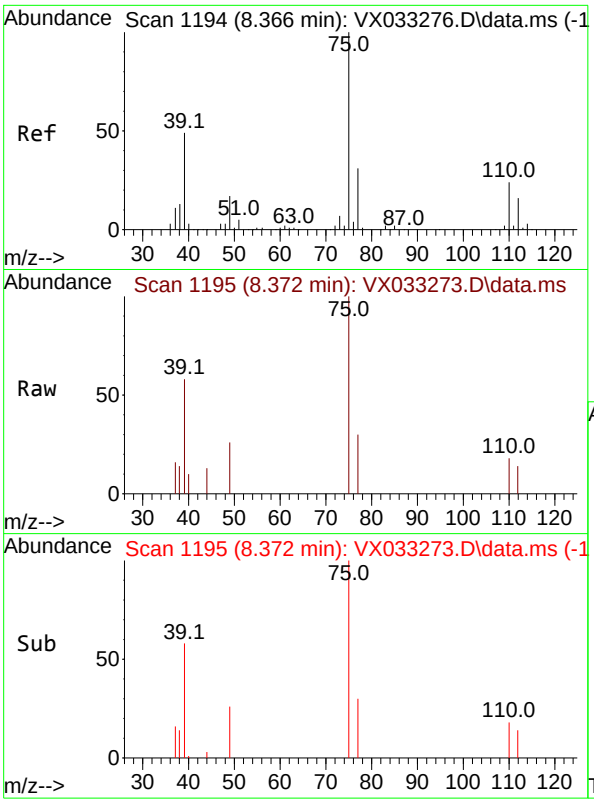


#53
t-1,3-Dichloropropene
Concen: 0.834 ug/l
RT: 8.988 min Scan# 1296
Delta R.T. 0.006 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion: 75 Resp: 1741

Ion	Ratio	Lower	Upper
75	100		
77	34.2	25.1	37.7

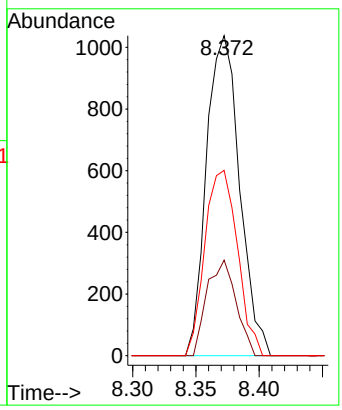




#54
cis-1,3-Dichloropropene
Concen: 0.825 ug/l
RT: 8.372 min Scan# 11
Delta R.T. 0.006 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion: 75 Resp: 189

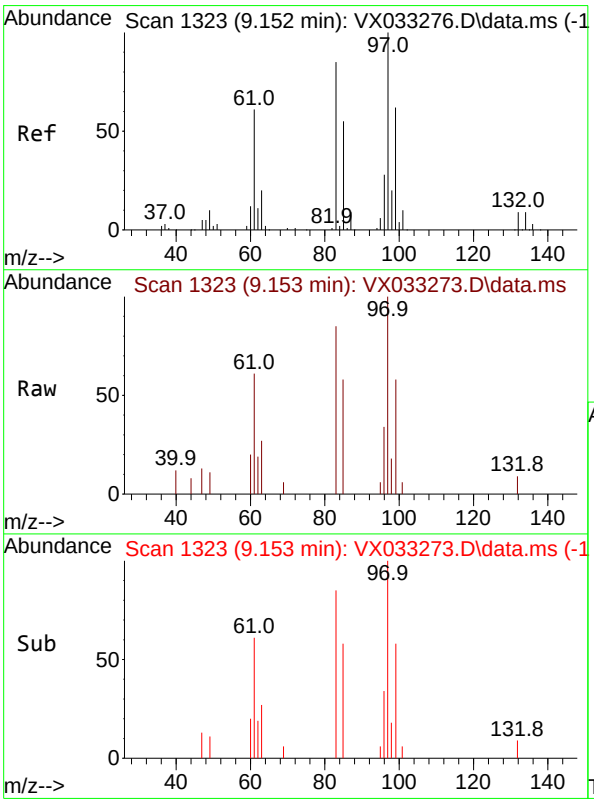
Ion	Ratio	Lower	Upper
75	100		
77	29.9	25.1	37.7
39	57.9	45.5	68.3



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

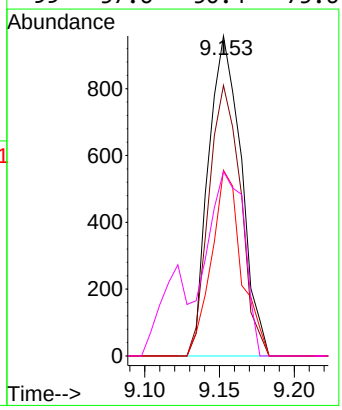
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

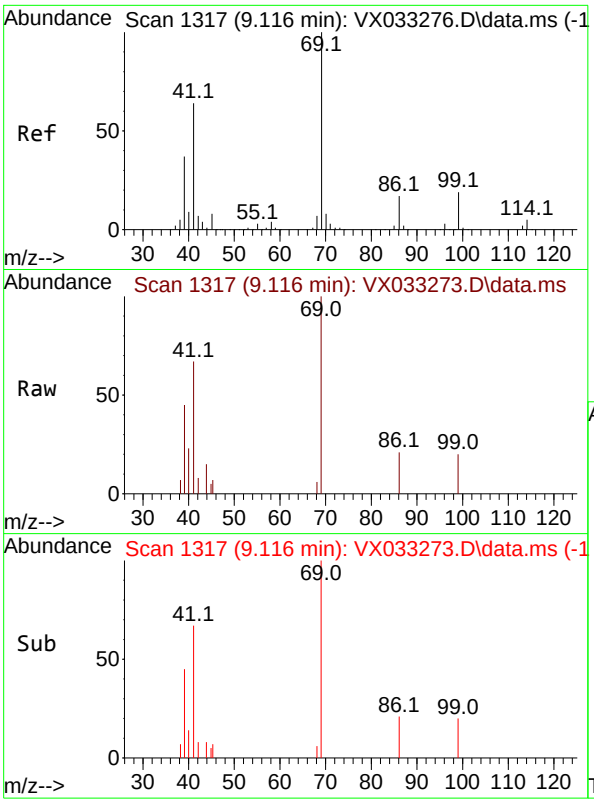


#55
1,1,2-Trichloroethane
Concen: 0.952 ug/l
RT: 9.153 min Scan# 1323
Delta R.T. -0.000 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion: 97 Resp: 1456

Ion	Ratio	Lower	Upper
97	100		
83	84.6	68.1	102.1
85	58.0	43.3	64.9
99	57.6	50.4	75.6

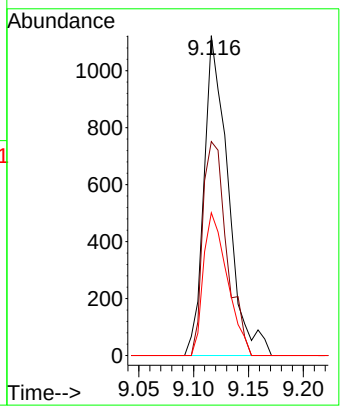




#56
Ethyl methacrylate
Concen: 0.817 ug/l
RT: 9.116 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion: 69 Resp: 172

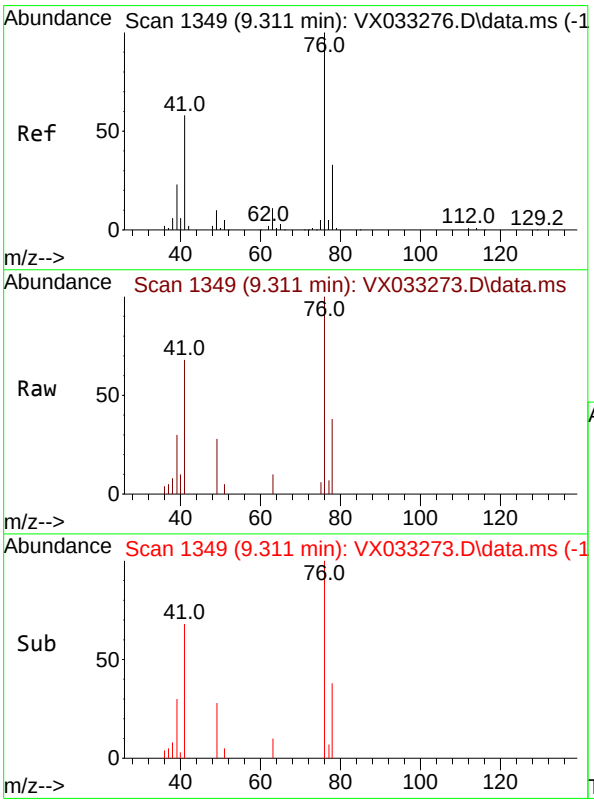
Ion	Ratio	Lower	Upper
69	100		
41	66.0	54.3	81.5
39	44.1	35.2	52.8



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

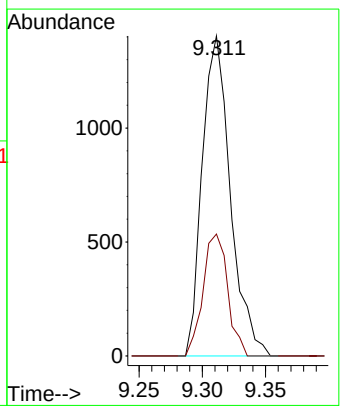
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

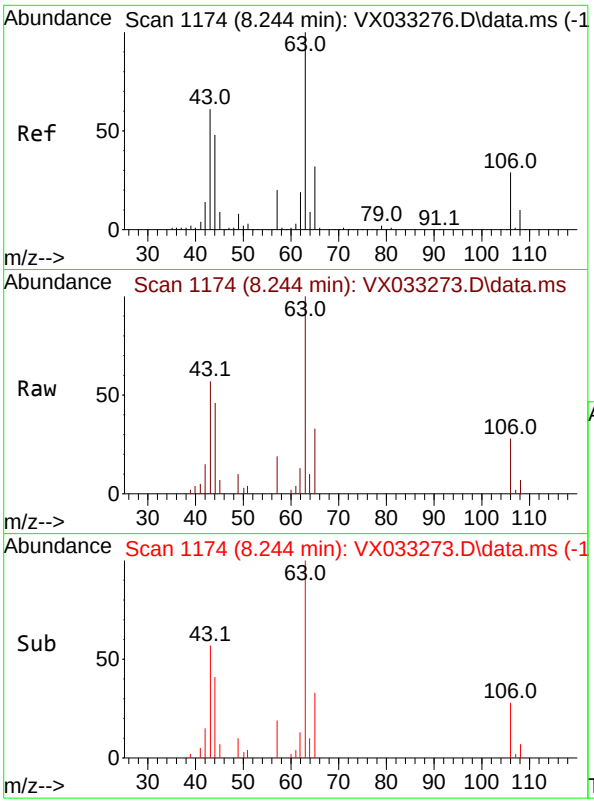


#57
1,3-Dichloropropane
Concen: 0.881 ug/l
RT: 9.311 min Scan# 1349
Delta R.T. 0.000 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion: 76 Resp: 2174

Ion	Ratio	Lower	Upper
76	100		
78	33.3	26.0	39.0

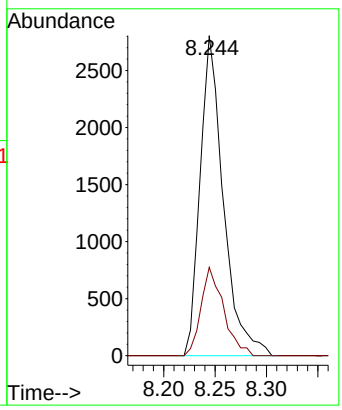




#58
2-Chloroethyl Vinyl ether
Concen: 4.420 ug/l
RT: 8.244 min Scan# 11
Delta R.T. 0.000 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion: 63 Resp: 442

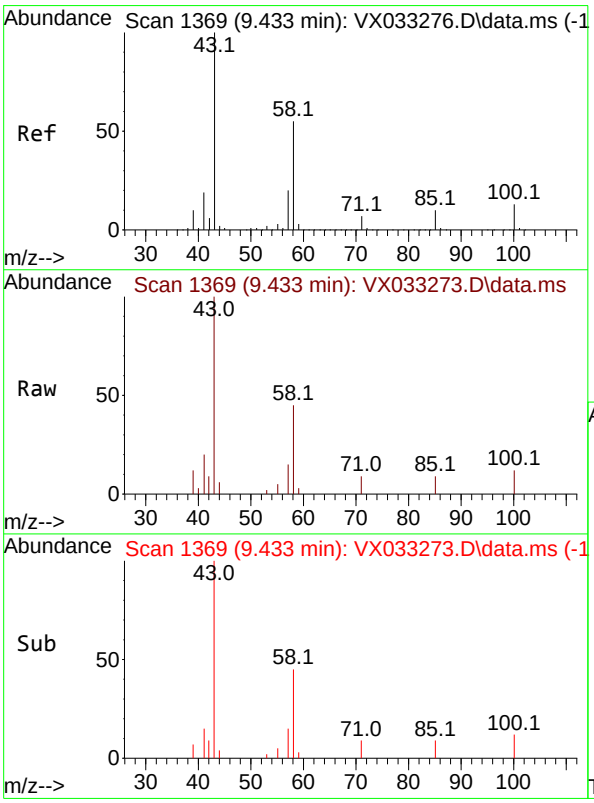
Ion	Ratio	Lower	Upper
63	100		
106	26.8	23.3	34.9



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

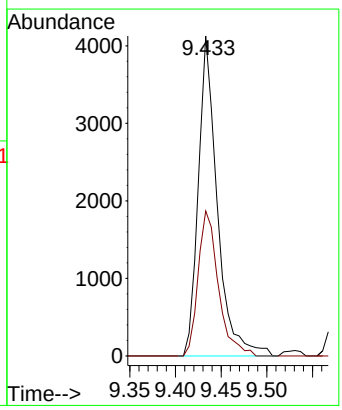
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

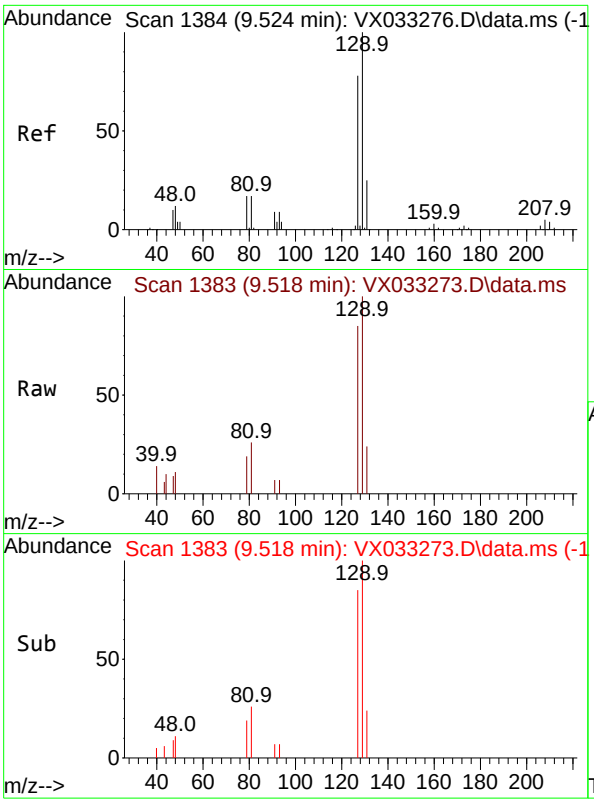


#59
2-Hexanone
Concen: 4.442 ug/l
RT: 9.433 min Scan# 1369
Delta R.T. 0.000 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion: 43 Resp: 5946

Ion	Ratio	Lower	Upper
43	100		
58	48.4	26.5	79.5

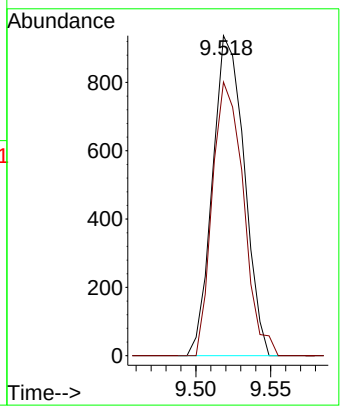




#60
Dibromochloromethane
Concen: 0.838 ug/l
RT: 9.518 min Scan# 1
Delta R.T. -0.007 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion:129 Resp: 137

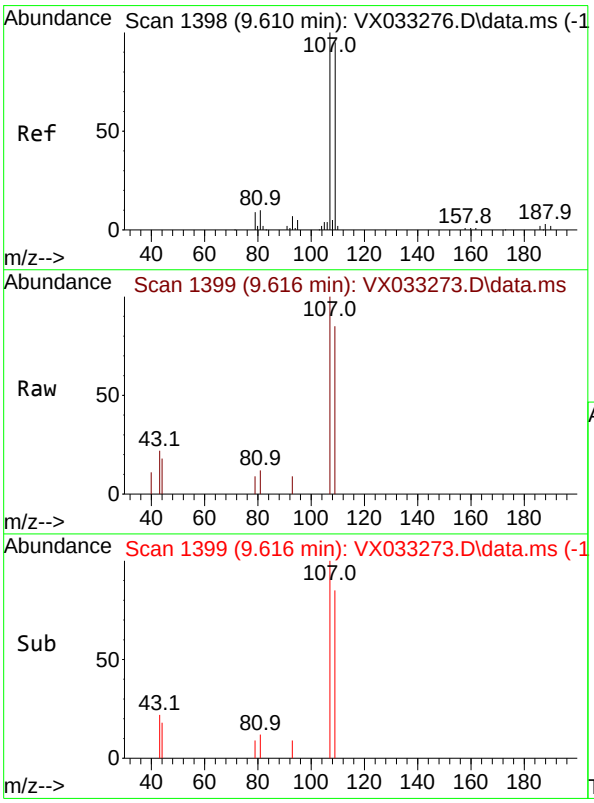
Ion	Ratio	Lower	Upper
129	100		
127	83.7	38.6	115.8



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

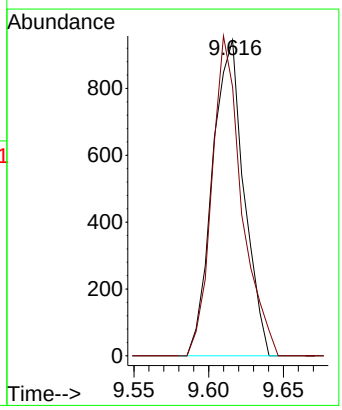
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

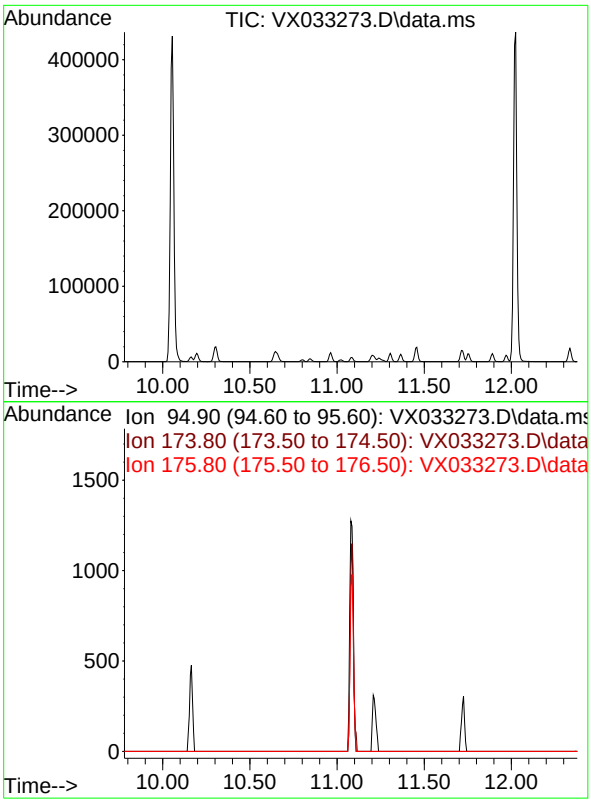


#61
1,2-Dibromoethane
Concen: 0.859 ug/l
RT: 9.616 min Scan# 1399
Delta R.T. 0.006 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion:107 Resp: 1386

Ion	Ratio	Lower	Upper
107	100		
109	95.6	76.0	114.0





#62
4-Bromofluorobenzene
Concen: 0.000 ug/l
Expected RT: 11.08 min

Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

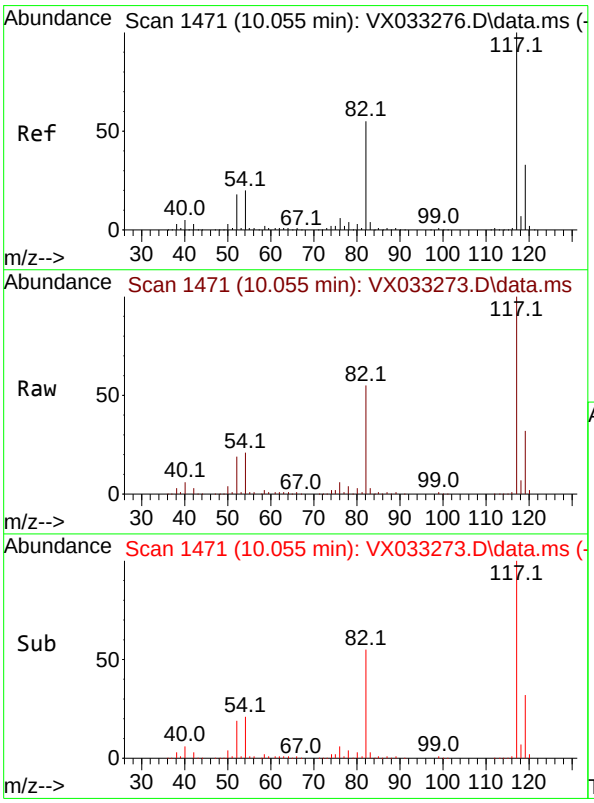
Tgt Ion: 95

Sig	Exp Ratio
95	100
174	82.0
176	77.2

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

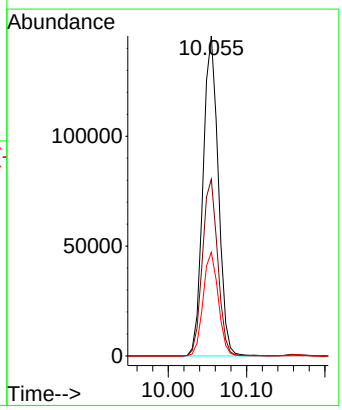
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

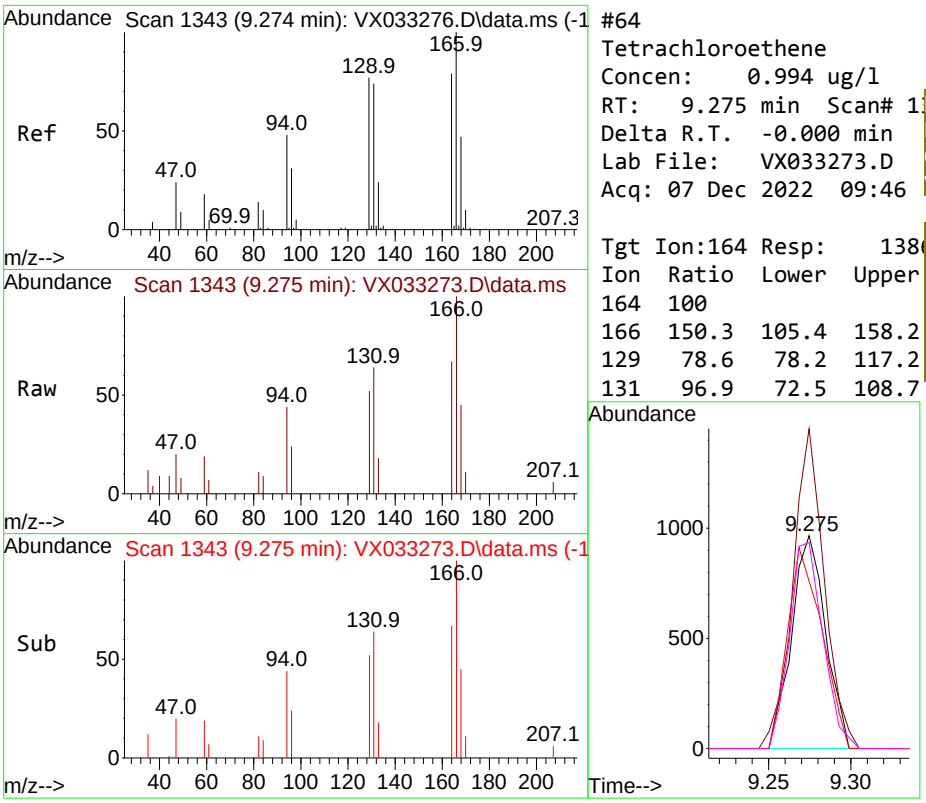


#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.055 min Scan# 1471
Delta R.T. -0.000 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion:117 Resp: 197000

Ion	Ratio	Lower	Upper
117	100		
82	55.3	44.3	66.5
119	32.4	25.7	38.5





#64
Tetrachloroethene
Concen: 0.994 ug/l
RT: 9.275 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

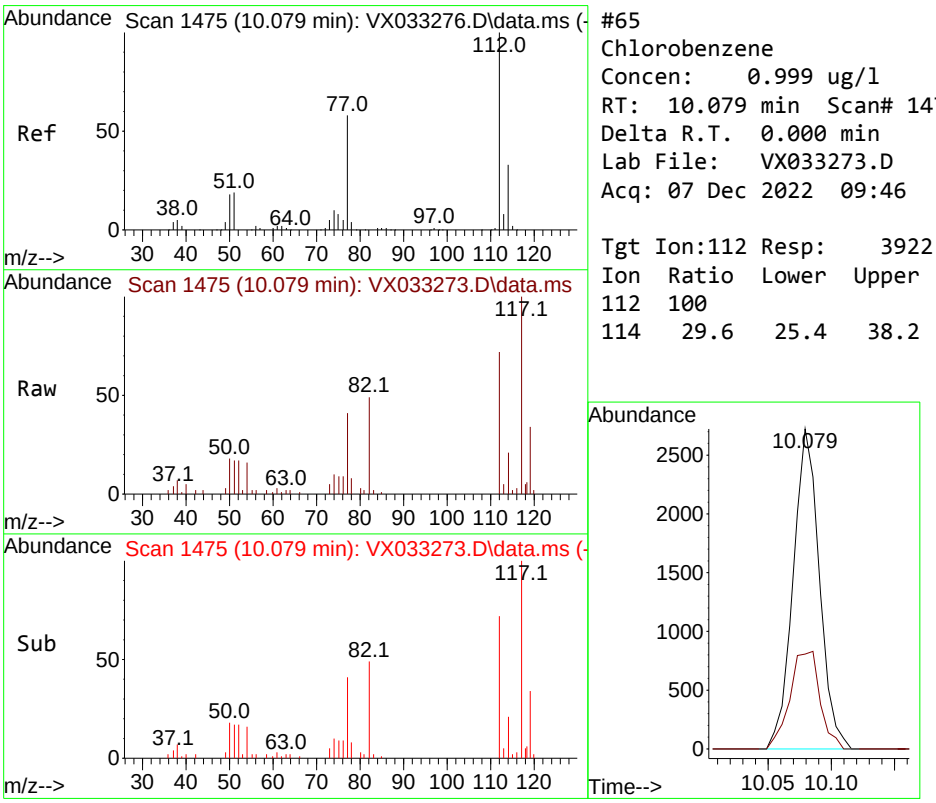
Tgt Ion:164 Resp: 138

Ion	Ratio	Lower	Upper
164	100		
166	150.3	105.4	158.2
129	78.6	78.2	117.2
131	96.9	72.5	108.7

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

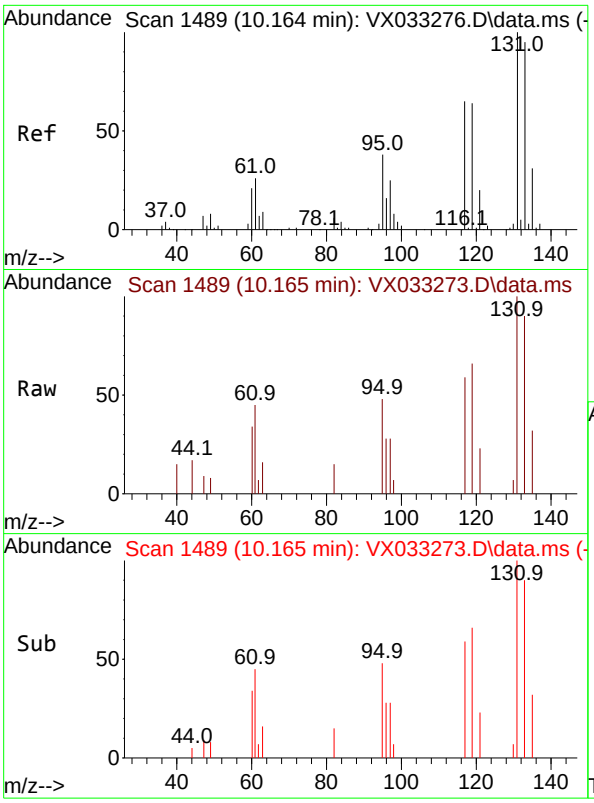
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022



#65
Chlorobenzene
Concen: 0.999 ug/l
RT: 10.079 min Scan# 1475
Delta R.T. 0.000 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion:112 Resp: 3922

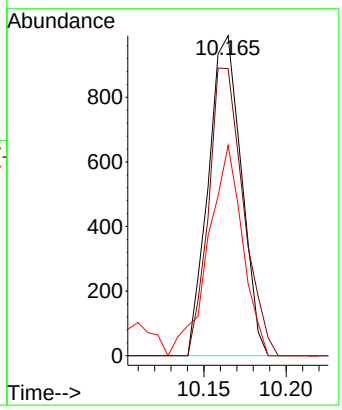
Ion	Ratio	Lower	Upper
112	100		
114	29.6	25.4	38.2



#66
1,1,1,2-Tetrachloroethane
Concen: 0.963 ug/l
RT: 10.165 min Scan# 14
Delta R.T. -0.000 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion:131 Resp: 138

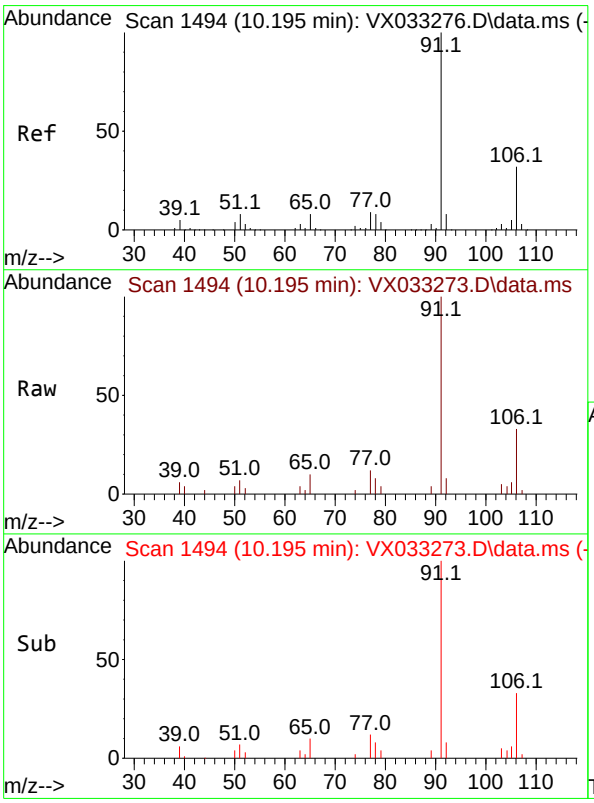
Ion	Ratio	Lower	Upper
131	100		
133	94.3	47.6	142.9
119	0.0	32.4	97.0#



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

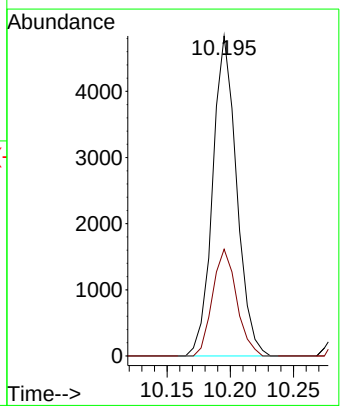
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

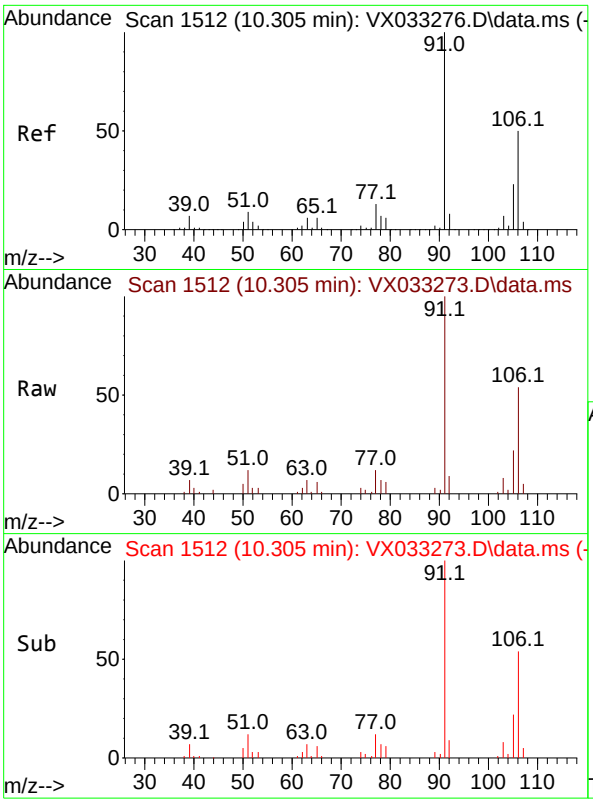


#67
Ethyl Benzene
Concen: 0.916 ug/l
RT: 10.195 min Scan# 1494
Delta R.T. 0.000 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion: 91 Resp: 6381

Ion	Ratio	Lower	Upper
91	100		
106	33.4	25.0	37.6

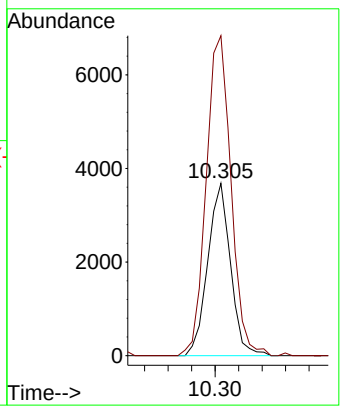




#68
m/p-Xylenes
Concen: 1.819 ug/l
RT: 10.305 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion:106 Resp: 496

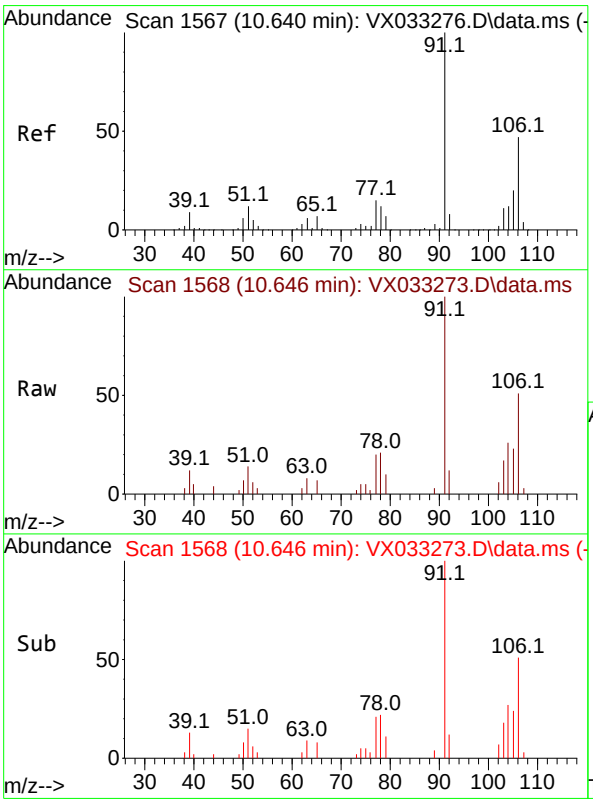
Ion	Ratio	Lower	Upper
106	100		
91	202.0	164.5	246.7



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

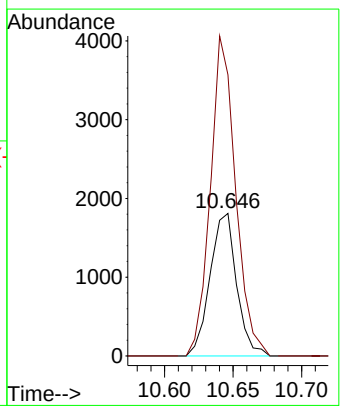
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

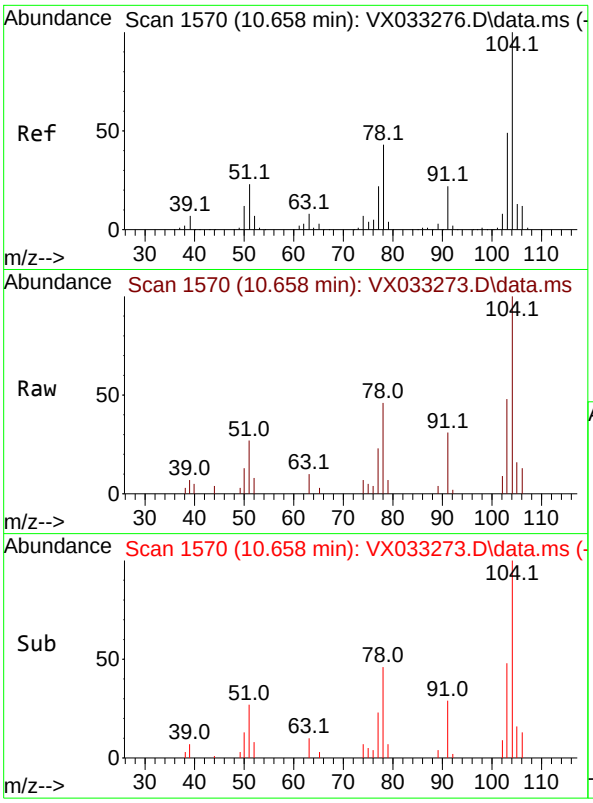


#69
o-Xylene
Concen: 0.925 ug/l
RT: 10.646 min Scan# 1568
Delta R.T. 0.006 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion:106 Resp: 2441

Ion	Ratio	Lower	Upper
106	100		
91	213.0	109.2	327.6

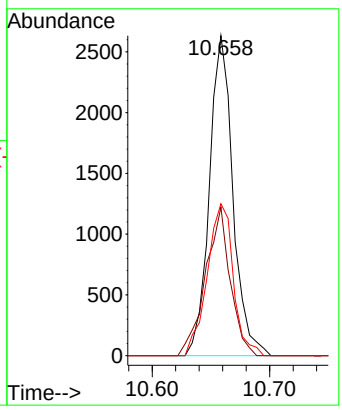




#70
Styrene
Concen: 0.849 ug/l
RT: 10.658 min Scan# 1
Delta R.T. -0.001 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion:104 Resp: 366

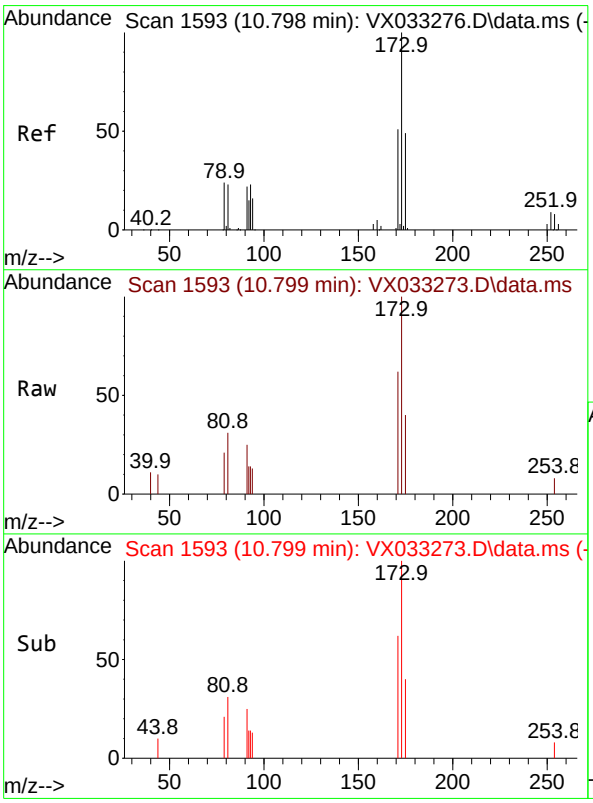
Ion	Ratio	Lower	Upper
104	100		
78	48.7	41.8	62.8
103	52.5	44.5	66.7



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

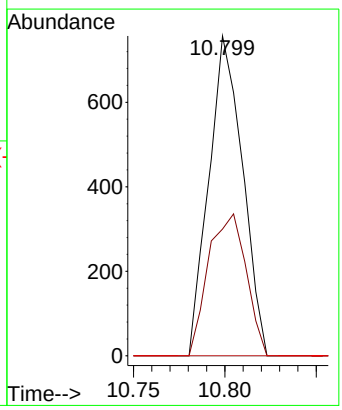
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

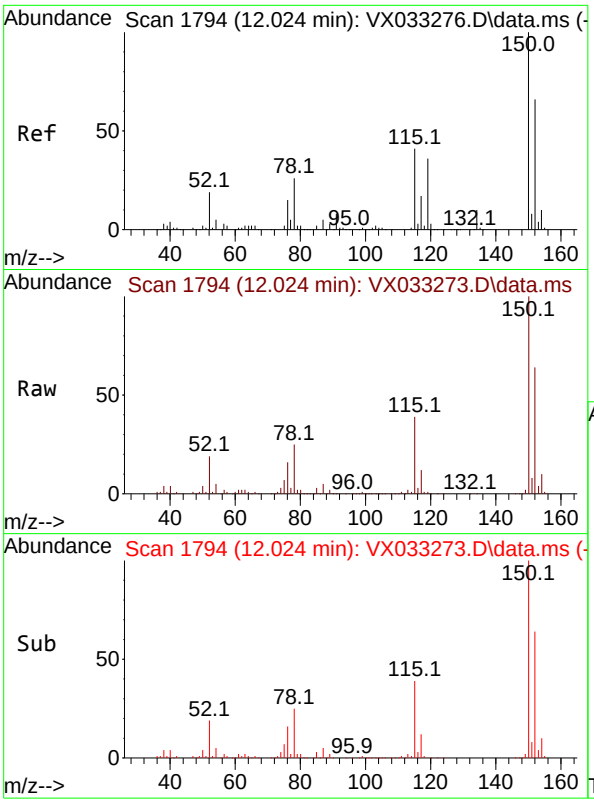


#71
Bromoform
Concen: 0.880 ug/l
RT: 10.799 min Scan# 1593
Delta R.T. -0.000 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion:173 Resp: 971

Ion	Ratio	Lower	Upper
173	100		
175	49.8	23.9	71.8
254	0.0	0.0	0.0

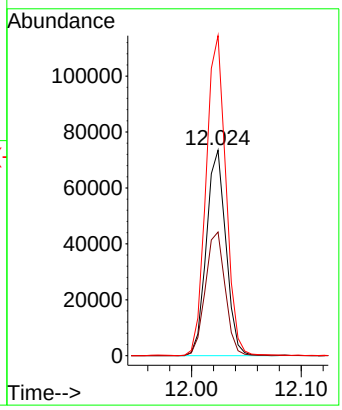




#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.024 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion:152 Resp: 9081

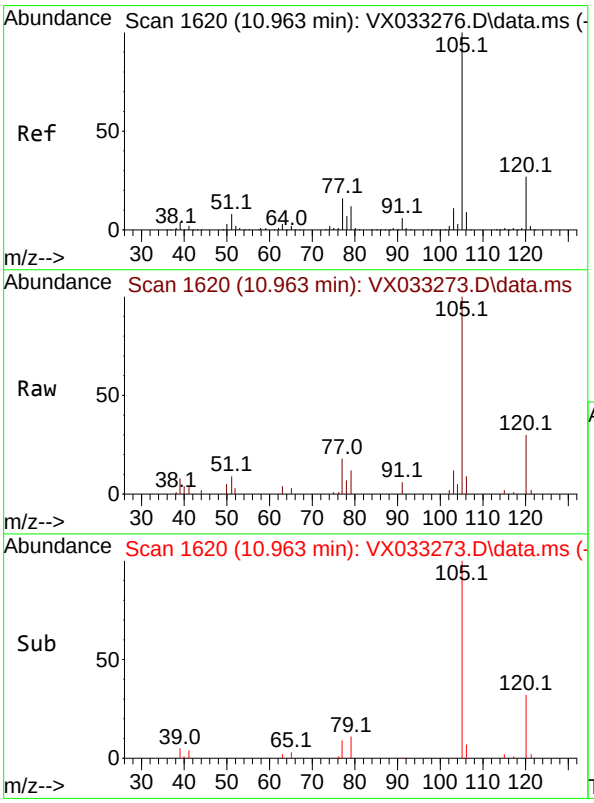
Ion	Ratio	Lower	Upper
152	100		
115	61.3	44.0	132.0
150	158.4	0.0	351.8



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

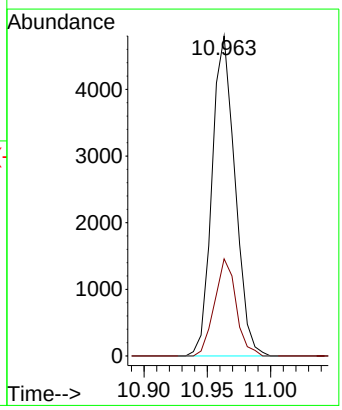
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

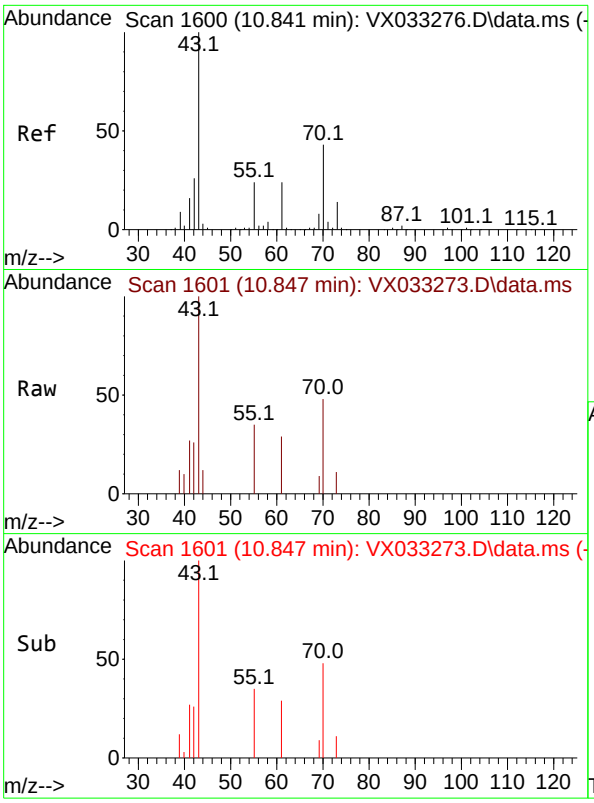


#73
Isopropylbenzene
Concen: 0.936 ug/l
RT: 10.963 min Scan# 1620
Delta R.T. 0.000 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion:105 Resp: 6074

Ion	Ratio	Lower	Upper
105	100		
120	28.4	13.1	39.3

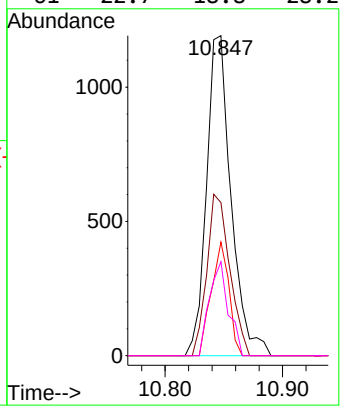




#74
N-amyl acetate
Concen: 0.784 ug/l
RT: 10.847 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion: 43 Resp: 173

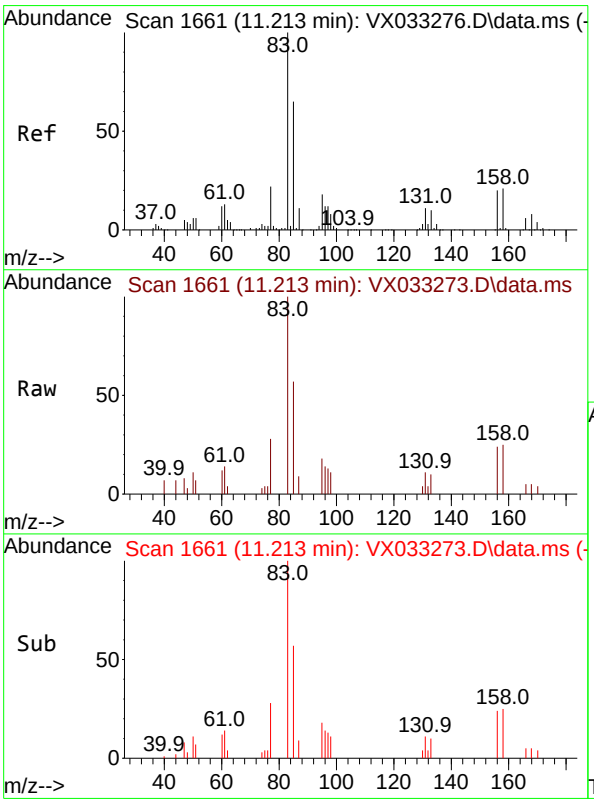
Ion	Ratio	Lower	Upper
43	100		
70	46.9	33.6	50.4
55	25.6	19.4	29.2
61	22.7	18.8	28.2



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

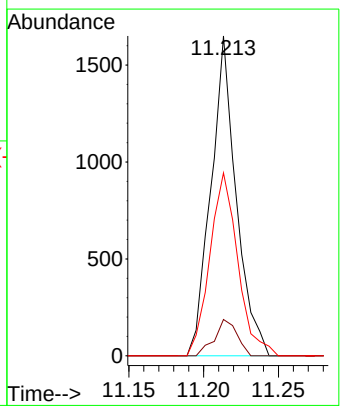
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

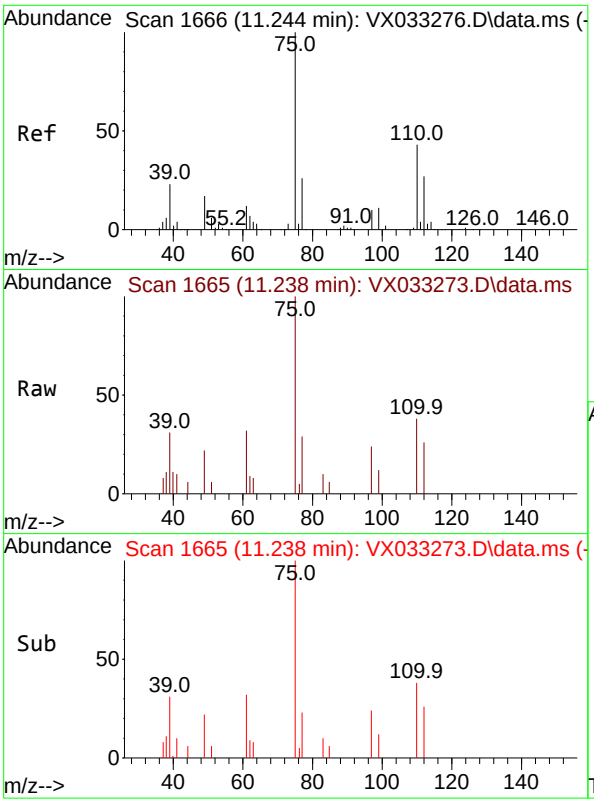


#75
1,1,2,2-Tetrachloroethane
Concen: 0.992 ug/l
RT: 11.213 min Scan# 1661
Delta R.T. 0.000 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion: 83 Resp: 1942

Ion	Ratio	Lower	Upper
83	100		
131	10.1	5.4	16.2
85	63.4	31.9	95.9

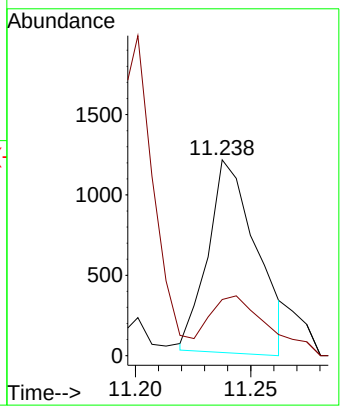




#76
1,2,3-Trichloropropane
Concen: 1.016 ug/l m
RT: 11.238 min Scan# 1
Delta R.T. -0.006 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion: 75 Resp: 174

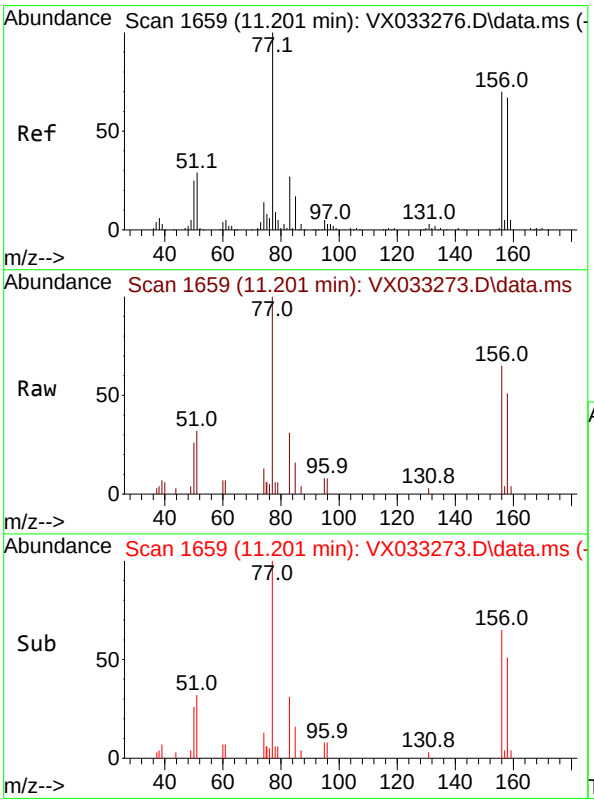
Ion	Ratio	Lower	Upper
75	100		
77	37.1	20.0	60.0



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

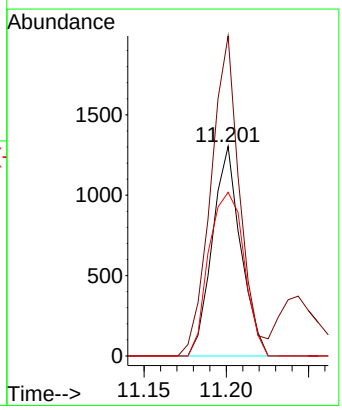
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

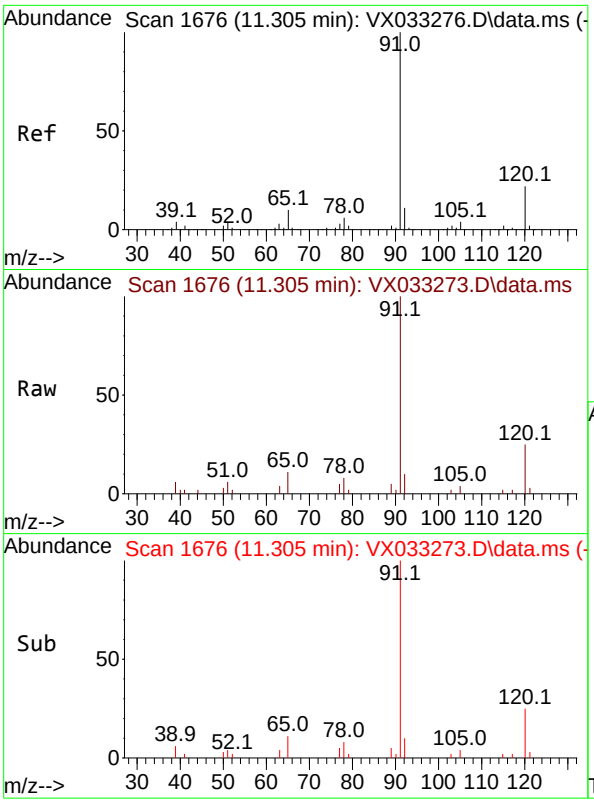


#77
Bromobenzene
Concen: 0.981 ug/l
RT: 11.201 min Scan# 1659
Delta R.T. 0.000 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion:156 Resp: 1565

Ion	Ratio	Lower	Upper
156	100		
77	155.7	76.1	228.4
158	97.1	48.8	146.3





#78
n-propylbenzene
Concen: 0.880 ug/l
RT: 11.305 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

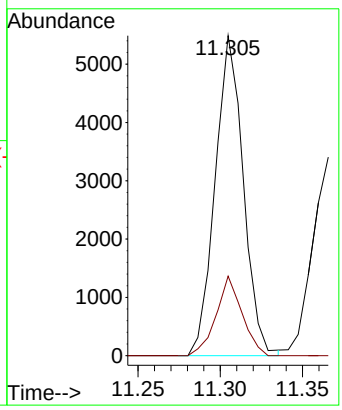
Tgt Ion: 91 Resp: 653

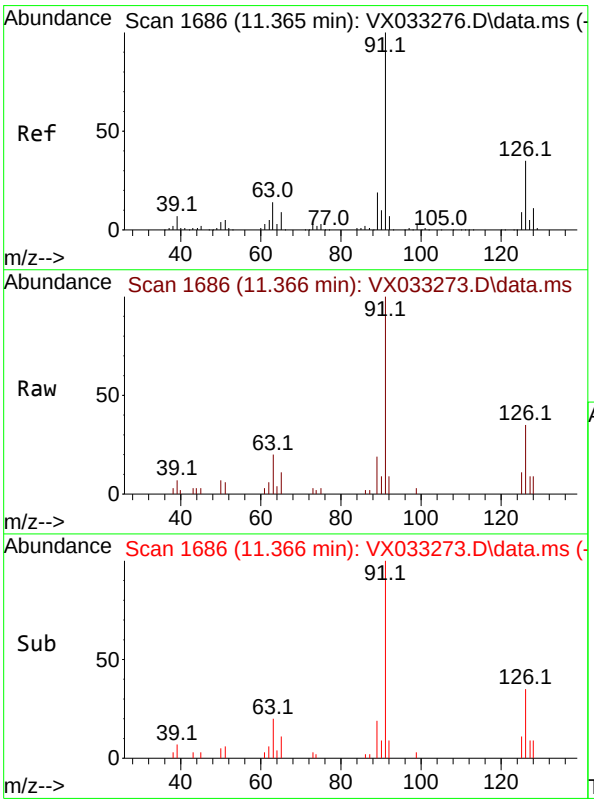
Ion	Ratio	Lower	Upper
91	100		
120	22.9	11.6	34.8

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

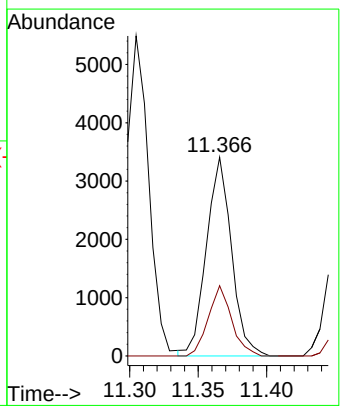


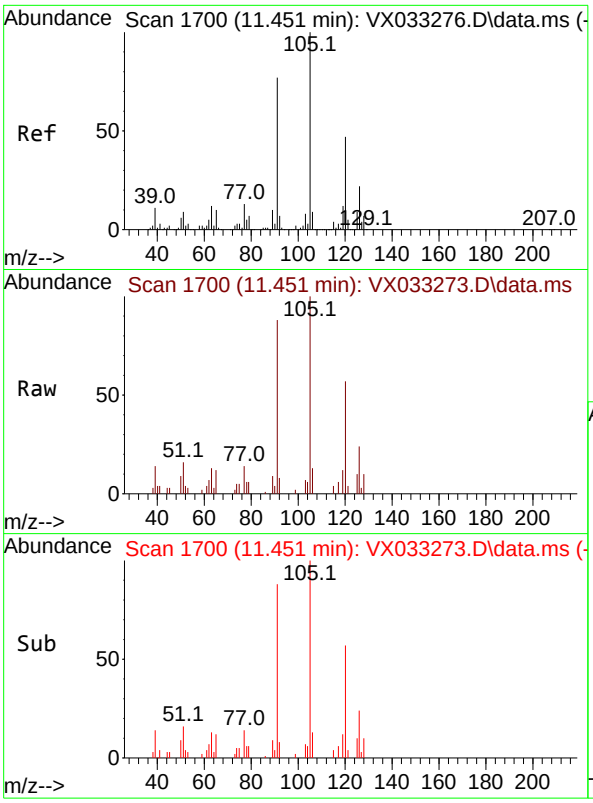


#79
2-Chlorotoluene
Concen: 0.965 ug/l
RT: 11.366 min Scan# 1686
Delta R.T. -0.000 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion: 91 Resp: 4350

Ion	Ratio	Lower	Upper
91	100		
126	32.9	17.1	51.2

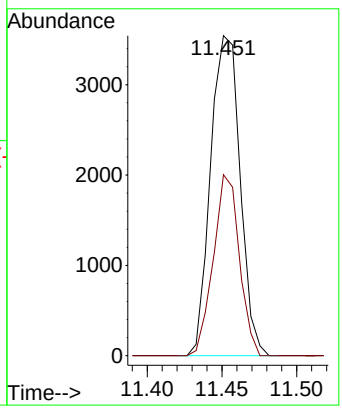




#80
1,3,5-Trimethylbenzene
Concen: 0.892 ug/l
RT: 11.451 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion:105 Resp: 486

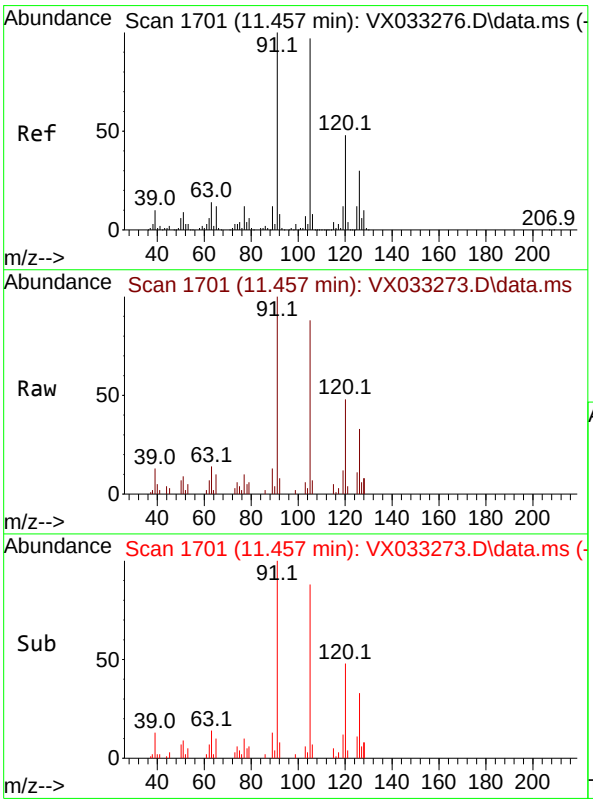
Ion	Ratio	Lower	Upper
105	100		
120	49.8	23.6	71.0



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

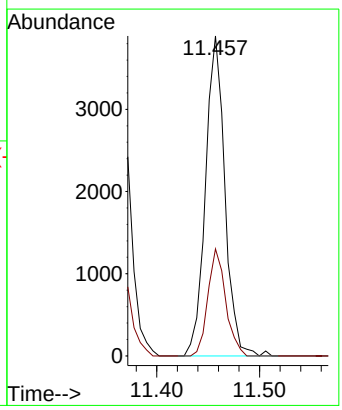
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

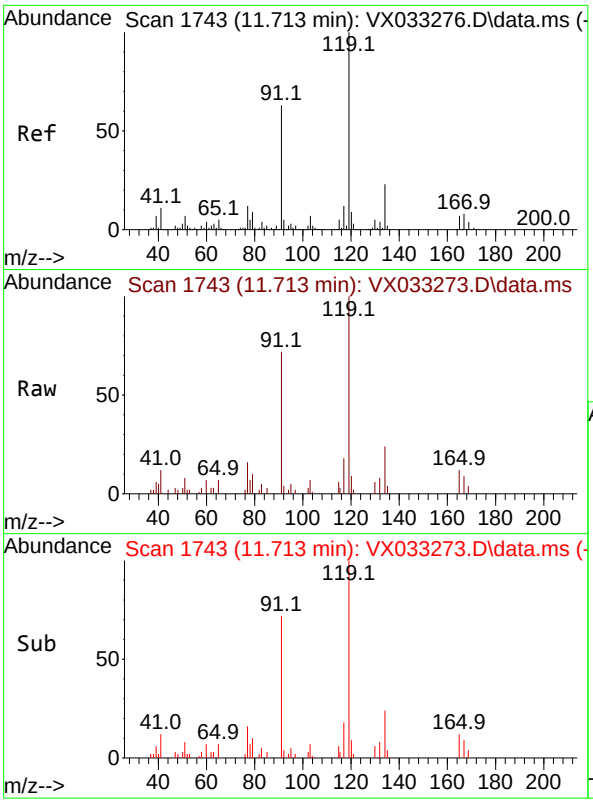


#82
4-Chlorotoluene
Concen: 0.967 ug/l
RT: 11.457 min Scan# 1701
Delta R.T. 0.000 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion: 91 Resp: 5105

Ion	Ratio	Lower	Upper
91	100		
126	30.7	14.8	44.4

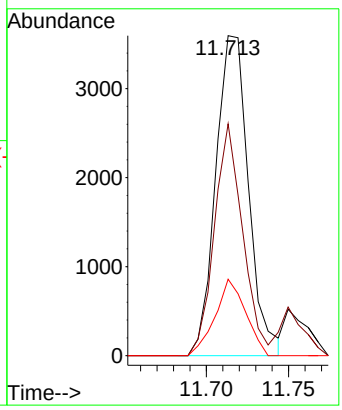




#83
tert-Butylbenzene
Concen: 0.921 ug/l
RT: 11.713 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion:119 Resp: 499

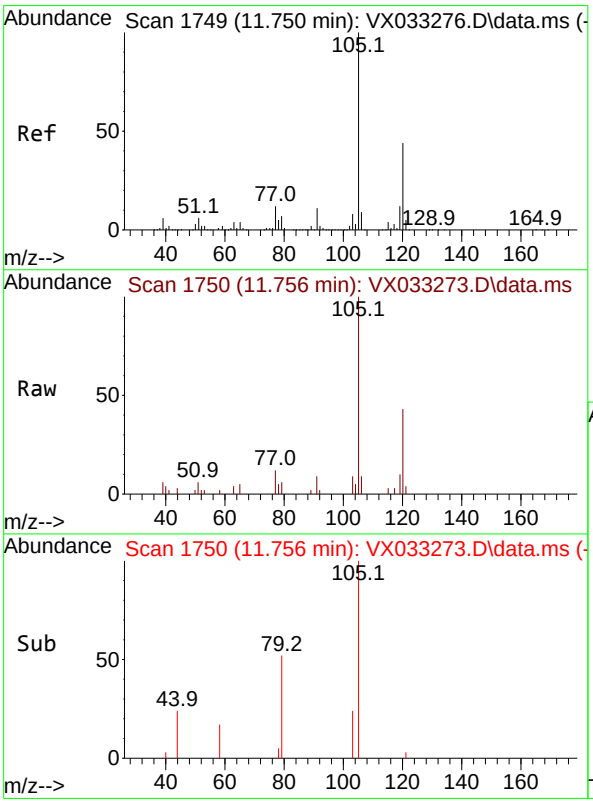
Ion	Ratio	Lower	Upper
119	100		
91	62.4	29.4	88.2
134	22.2	11.0	33.0



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

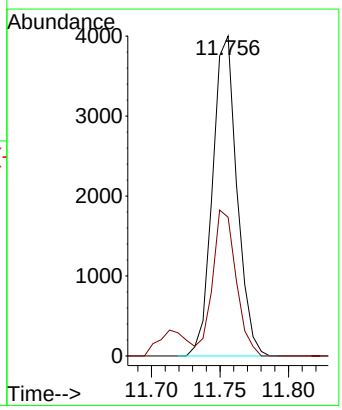
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

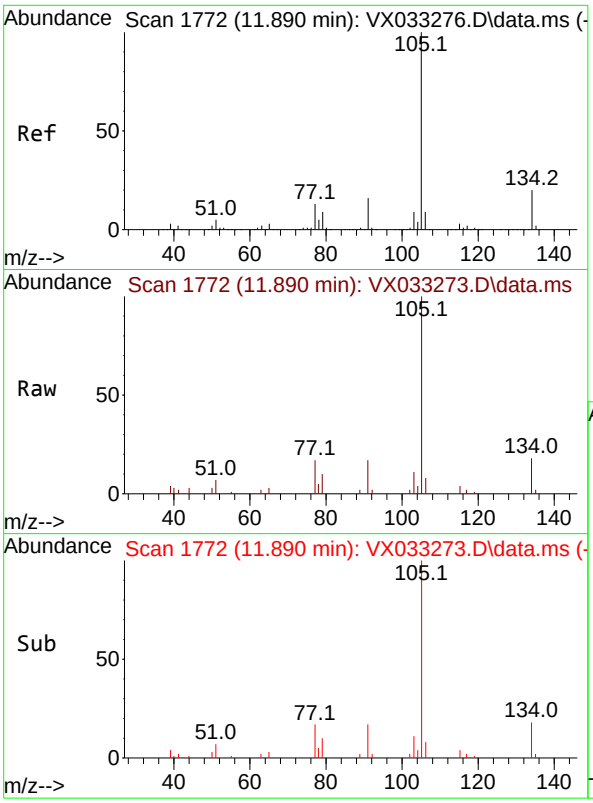


#84
1,2,4-Trimethylbenzene
Concen: 0.912 ug/l
RT: 11.756 min Scan# 1750
Delta R.T. 0.006 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion:105 Resp: 4957

Ion	Ratio	Lower	Upper
105	100		
120	43.9	21.9	65.5

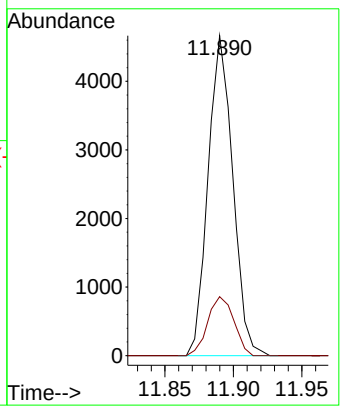




#85
sec-Butylbenzene
Concen: 0.900 ug/l
RT: 11.890 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion:105 Resp: 584

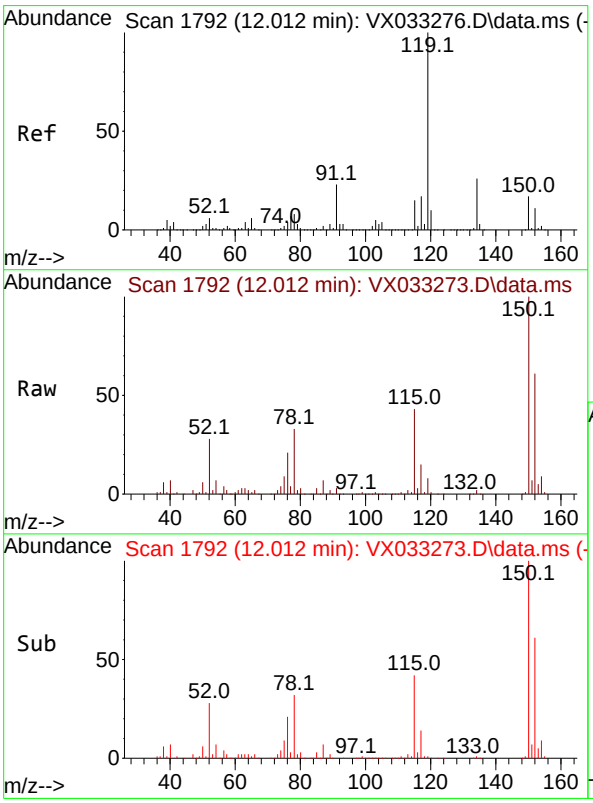
Ion	Ratio	Lower	Upper
105	100		
134	19.6	9.9	29.7



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

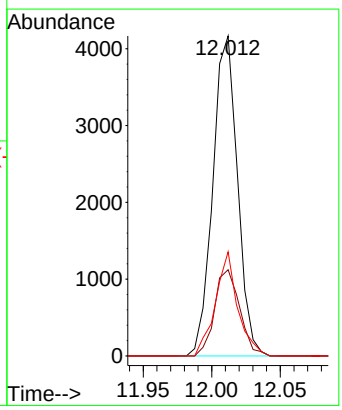
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

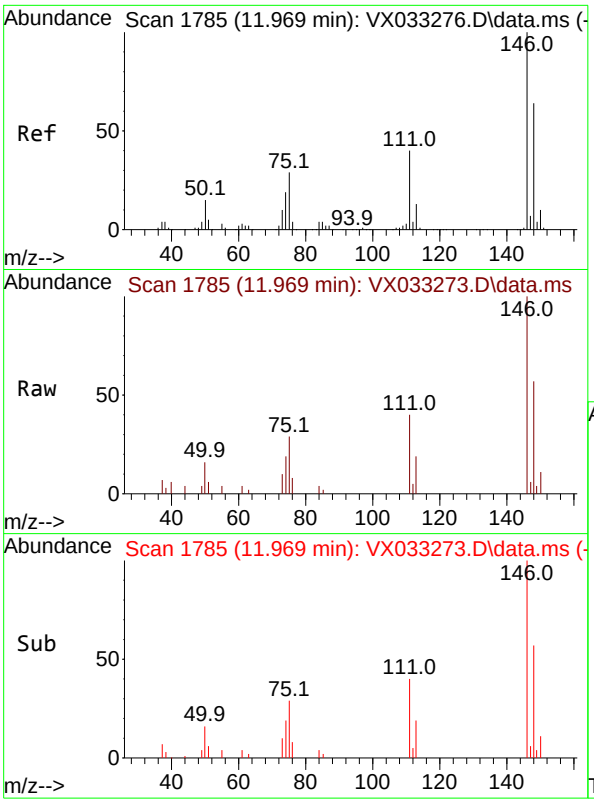


#86
p-Isopropyltoluene
Concen: 0.949 ug/l
RT: 12.012 min Scan# 1792
Delta R.T. -0.000 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion:119 Resp: 5219

Ion	Ratio	Lower	Upper
119	100		
134	27.5	12.9	38.7
91	29.4	12.5	37.5

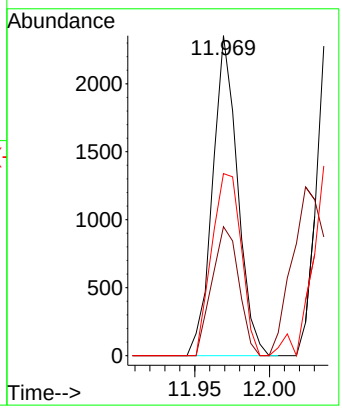




#87
1,3-Dichlorobenzene
Concen: 0.914 ug/l
RT: 11.969 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion:146 Resp: 273

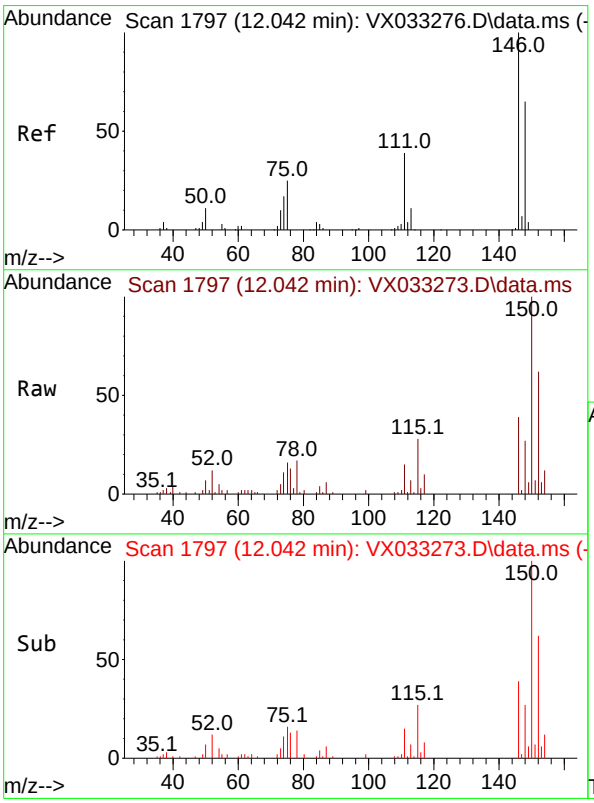
Ion	Ratio	Lower	Upper
146	100		
111	43.3	20.6	61.8
148	66.9	31.7	95.1



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

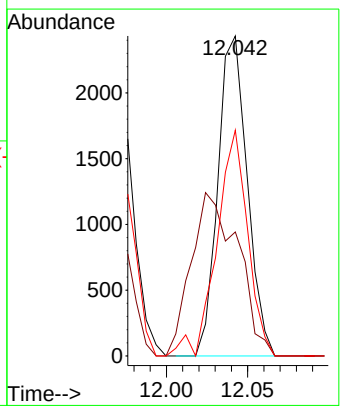
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

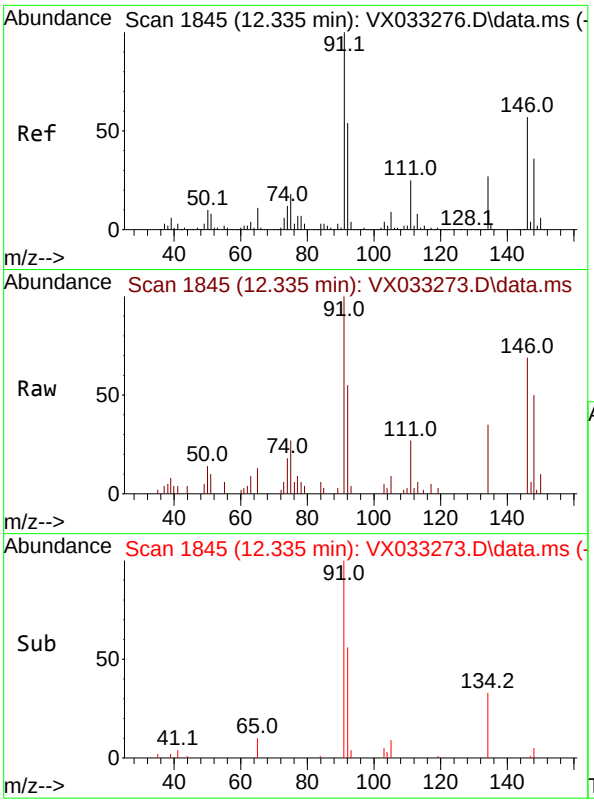


#88
1,4-Dichlorobenzene
Concen: 0.996 ug/l m
RT: 12.042 min Scan# 1797
Delta R.T. 0.000 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion:146 Resp: 3055

Ion	Ratio	Lower	Upper
146	100		
111	38.8	20.5	61.6
148	59.9	32.2	96.6

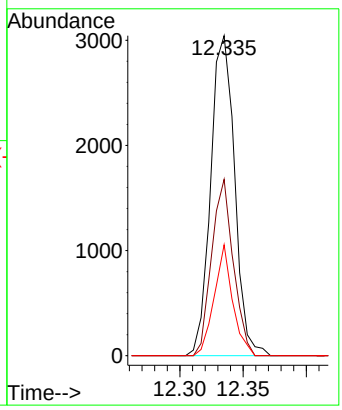




#89
n-Butylbenzene
Concen: 0.845 ug/l
RT: 12.335 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion: 91 Resp: 400

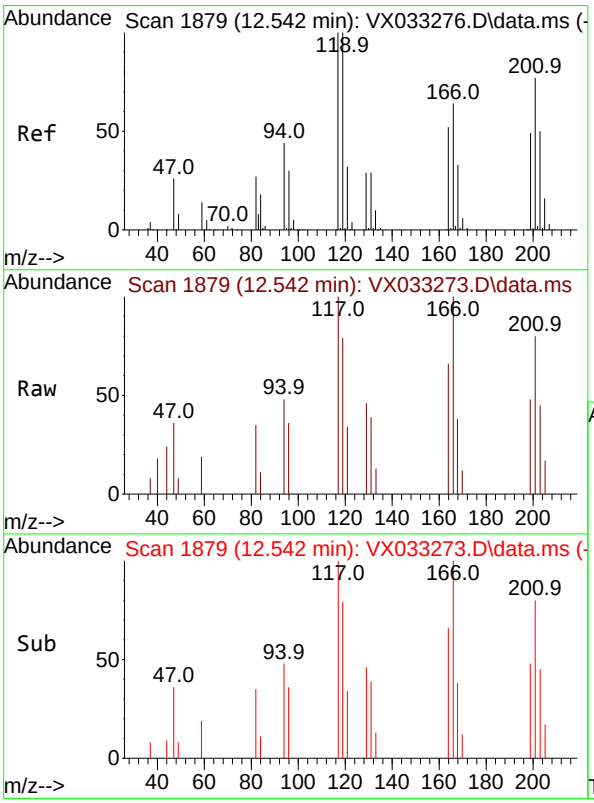
Ion	Ratio	Lower	Upper
91	100		
92	49.8	26.2	78.6
134	26.9	12.9	38.6



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

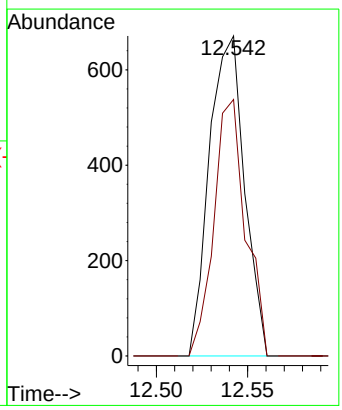
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

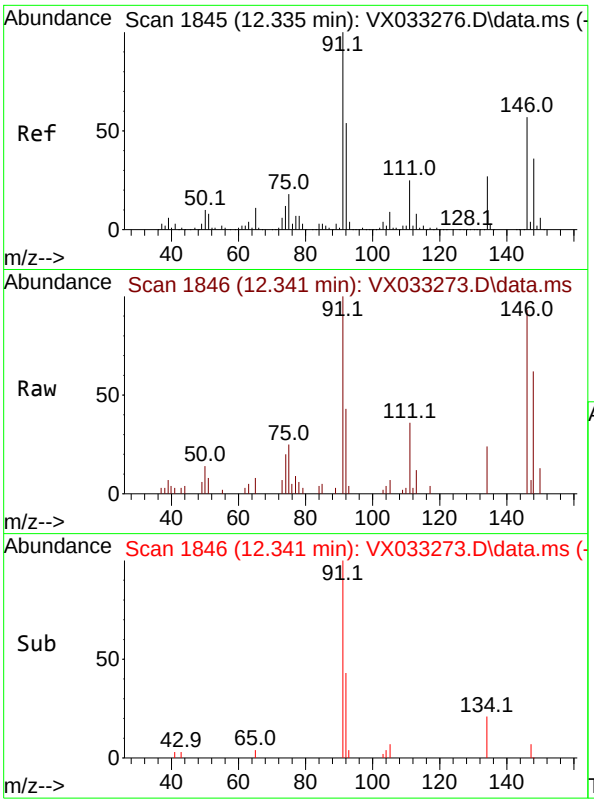


#90
Hexachloroethane
Concen: 0.993 ug/l
RT: 12.542 min Scan# 1879
Delta R.T. 0.000 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion:117 Resp: 897

Ion	Ratio	Lower	Upper
117	100		
201	72.5	37.6	112.9

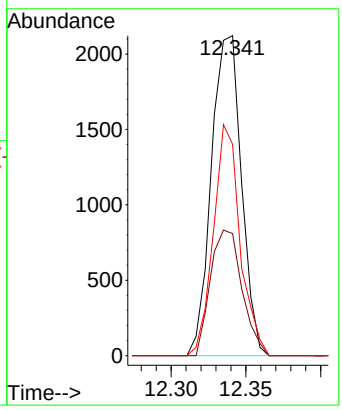




#91
1,2-Dichlorobenzene
Concen: 1.017 ug/l
RT: 12.341 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion:146 Resp: 296

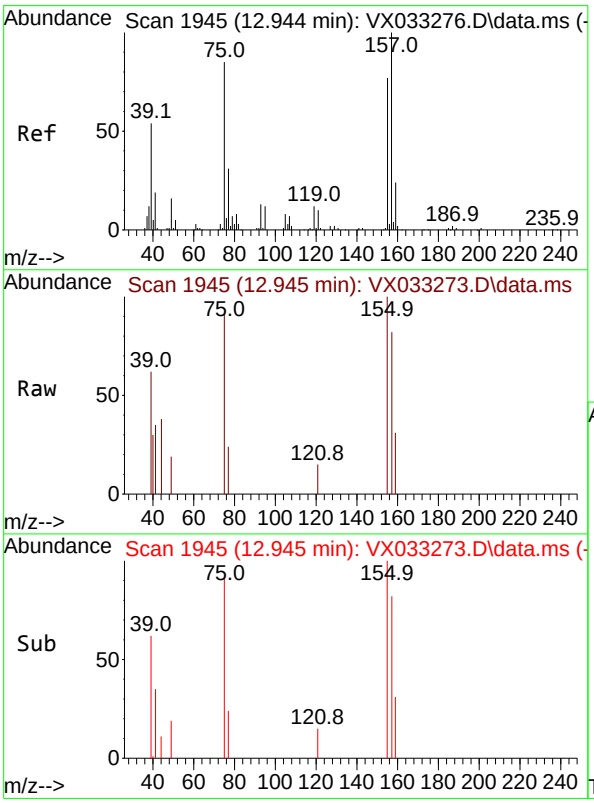
Ion	Ratio	Lower	Upper
146	100		
111	41.3	21.5	64.5
148	64.1	32.0	96.2



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

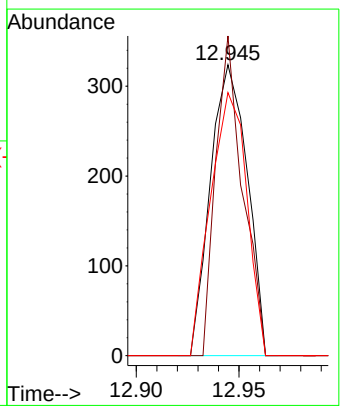
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

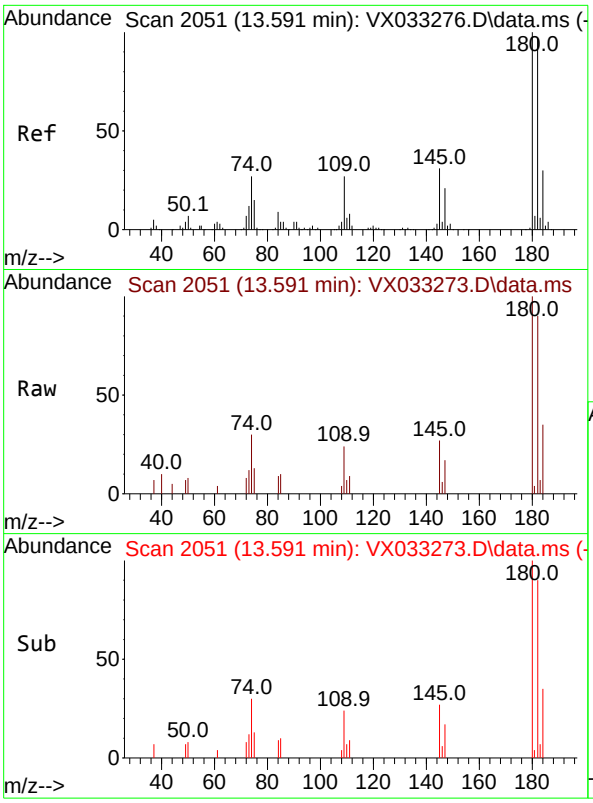


#92
1,2-Dibromo-3-Chloropropane
Concen: 1.034 ug/l
RT: 12.945 min Scan# 1945
Delta R.T. -0.000 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion: 75 Resp: 404

Ion	Ratio	Lower	Upper
75	100		
155	80.2	41.6	124.8
157	89.1	54.1	162.4

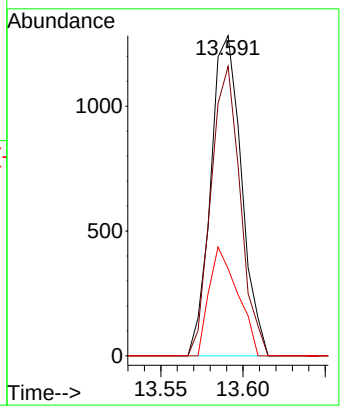




#93
1,2,4-Trichlorobenzene
Concen: 0.931 ug/l
RT: 13.591 min Scan# 2
Delta R.T. -0.000 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion:180 Resp: 167

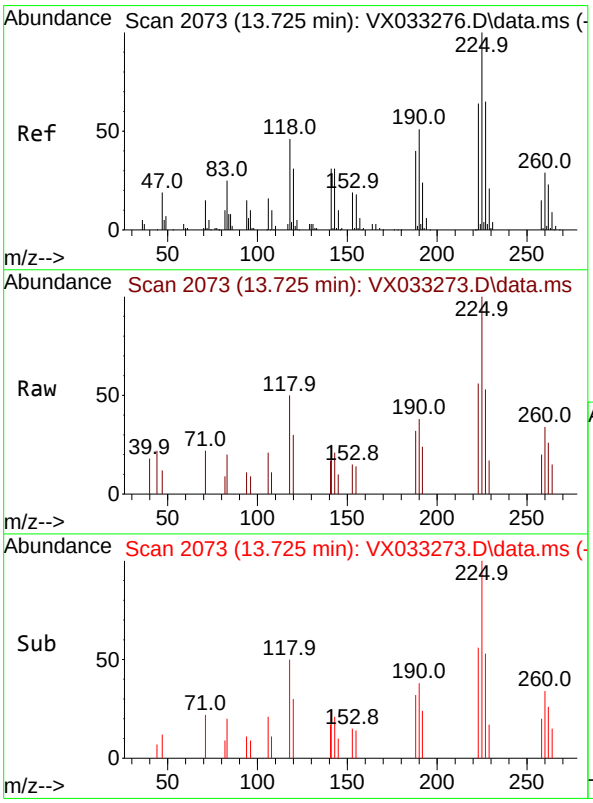
Ion	Ratio	Lower	Upper
180	100		
182	85.9	48.4	145.0
145	31.5	16.2	48.5



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

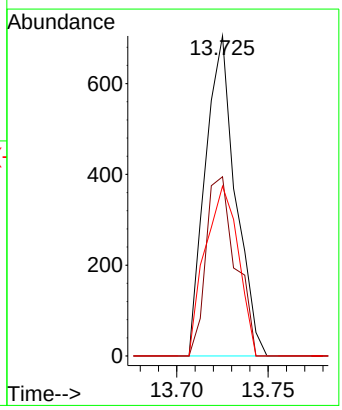
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

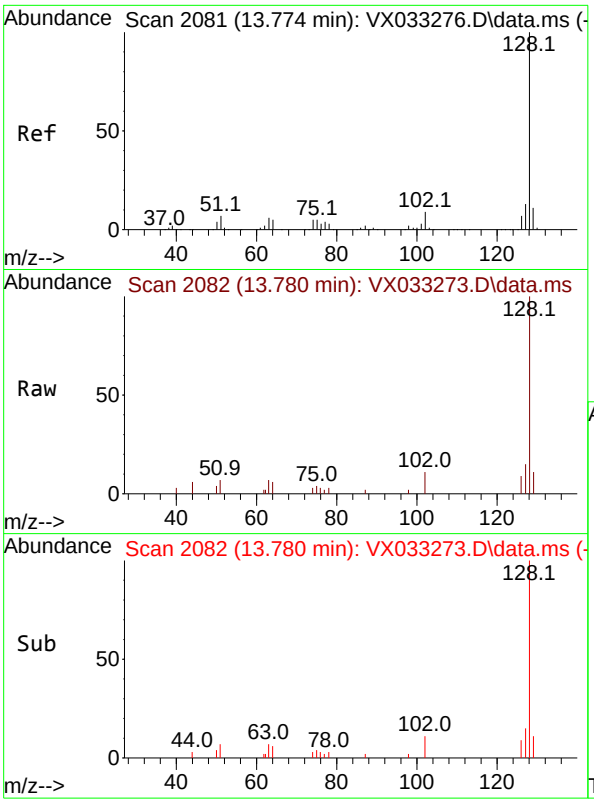


#94
Hexachlorobutadiene
Concen: 1.024 ug/l
RT: 13.725 min Scan# 2073
Delta R.T. -0.000 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion:225 Resp: 811

Ion	Ratio	Lower	Upper
225	100		
223	55.2	31.9	95.9
227	58.3	31.9	95.5

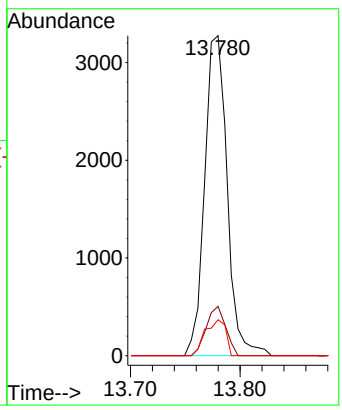




#95
Naphthalene
Concen: 0.803 ug/l
RT: 13.780 min Scan# 2
Delta R.T. -0.000 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion:128 Resp: 466

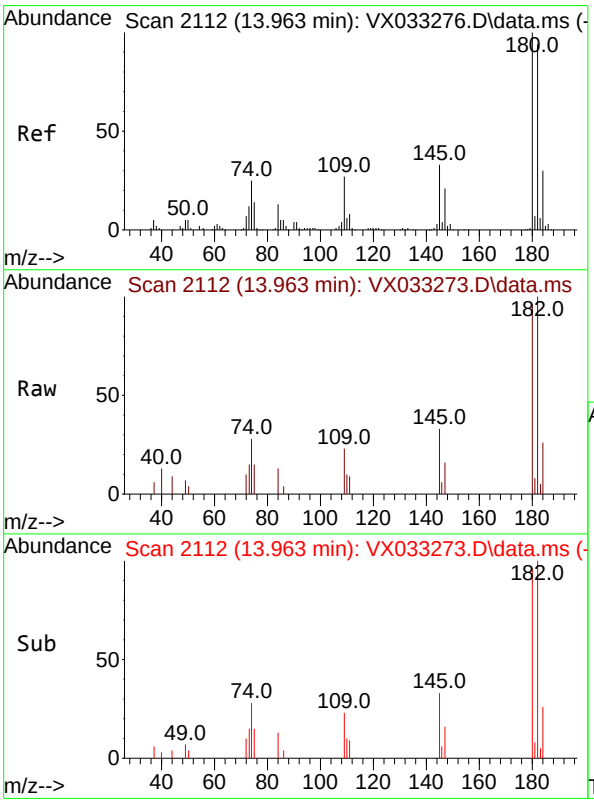
Ion	Ratio	Lower	Upper
128	100		
127	13.4	10.2	15.4
129	10.2	8.9	13.3



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

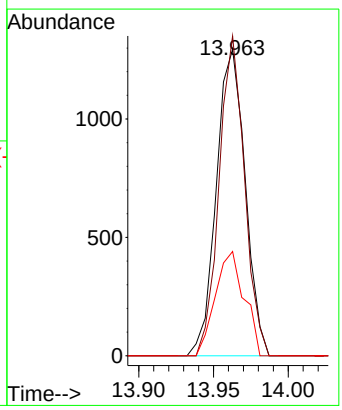
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022



#96
1,2,3-Trichlorobenzene
Concen: 0.966 ug/l
RT: 13.963 min Scan# 2112
Delta R.T. -0.000 min
Lab File: VX033273.D
Acq: 07 Dec 2022 09:46

Tgt Ion:180 Resp: 1739

Ion	Ratio	Lower	Upper
180	100		
182	91.4	47.5	142.6
145	34.1	16.9	50.6



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX120722\
Data File : VX033274.D
Acq On : 07 Dec 2022 10:09
Operator : JC/MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 07 10:46:23 2022
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X120722W.M
Quant Title : SW846 8260
QLast Update : Wed Dec 07 09:47:15 2022
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.556	168	144070	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.763	114	229334	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.055	117	202892	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.024	152	94568	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.958	65	5440	3.505	ug/l	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery =	7.020%#		
35) Dibromofluoromethane	5.391	113	5752	4.449	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery =	8.900%#		
50) Toluene-d8	8.653	98	11540	2.749	ug/l	0.00
Spiked Amount 50.000	Range 92 - 112		Recovery =	5.500%#		
62) 4-Bromofluorobenzene	11.079	95	7812	4.600	ug/l	0.00
Spiked Amount 50.000	Range 83 - 123		Recovery =	9.200%#		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.166	85	5044	4.583	ug/l	97
3) Chloromethane	1.294	50	6038	5.081	ug/l	96
4) Vinyl Chloride	1.374	62	6564	4.961	ug/l	94
5) Bromomethane	1.617	94	5092	5.190	ug/l	97
6) Chloroethane	1.691	64	5540	5.143	ug/l	95
7) Trichlorofluoromethane	1.886	101	12920	5.032	ug/l	100
8) Diethyl Ether	2.136	74	4665	5.770	ug/l	94
9) 1,1,2-Trichlorotrifluo...	2.331	101	6854	5.078	ug/l	97
10) Methyl Iodide	2.453	142	5583	3.613	ug/l	99
11) Tert butyl alcohol	3.007	59	7343m	33.016	ug/l	
12) 1,1-Dichloroethene	2.319	96	6721	5.346	ug/l	99
13) Acrolein	2.239	56	8257m	32.321	ug/l	
14) Allyl chloride	2.666	41	10045	4.949	ug/l	97
15) Acrylonitrile	3.068	53	16698	26.544	ug/l	99
16) Acetone	2.392	43	17889	27.301	ug/l	97
17) Carbon Disulfide	2.514	76	16275	4.685	ug/l	97
18) Methyl Acetate	2.709	43	9028	4.977	ug/l	96
19) Methyl tert-butyl Ether	3.111	73	21635	4.962	ug/l	98
20) Methylene Chloride	2.788	84	7429	4.706	ug/l	97
21) trans-1,2-Dichloroethene	3.093	96	7168	4.984	ug/l	97
22) Diisopropyl ether	3.763	45	21433	4.849	ug/l	94
23) Vinyl Acetate	3.727	43	78754	22.764	ug/l	98
24) 1,1-Dichloroethane	3.605	63	12949	5.120	ug/l	98
25) 2-Butanone	4.568	43	23979	26.540	ug/l	98
26) 2,2-Dichloropropane	4.483	77	9330	4.588	ug/l	99
27) cis-1,2-Dichloroethene	4.495	96	8066	4.936	ug/l	100
28) Bromochloromethane	4.903	49	5414	4.872	ug/l #	99
29) Tetrahydrofuran	5.019	42	15358	26.788	ug/l	98
30) Chloroform	5.099	83	14271	5.038	ug/l	99
31) Cyclohexane	5.476	56	10895	4.793	ug/l	96
32) 1,1,1-Trichloroethane	5.385	97	12264	4.834	ug/l	97
36) 1,1-Dichloropropene	5.690	75	9627	4.657	ug/l	98
37) Ethyl Acetate	4.714	43	8802	4.880	ug/l	97
38) Carbon Tetrachloride	5.678	117	11021	4.806	ug/l	93
39) Methylcyclohexane	7.379	83	10958	4.646	ug/l	95
40) Benzene	6.043	78	28636	4.940	ug/l	98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX120722\
Data File : VX033274.D
Acq On : 07 Dec 2022 10:09
Operator : JC/MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 07 10:46:23 2022
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X120722W.M
Quant Title : SW846 8260
QLast Update : Wed Dec 07 09:47:15 2022
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	4.922	41	4794	4.724	ug/l		97
42) 1,2-Dichloroethane	6.092	62	11537	4.944	ug/l		99
43) Isopropyl Acetate	6.348	43	13843	4.641	ug/l		98
44) Trichloroethene	7.129	130	7732	4.754	ug/l		99
45) 1,2-Dichloropropane	7.433	63	7318	5.109	ug/l		96
46) Dibromomethane	7.586	93	5641	5.047	ug/l		99
47) Bromodichloromethane	7.824	83	10273	4.757	ug/l		100
48) Methyl methacrylate	7.696	41	7089	4.617	ug/l		97
49) 1,4-Dioxane	7.708	88	3321	117.505	ug/l	#	83
51) 4-Methyl-2-Pentanone	8.573	43	46309	25.160	ug/l		98
52) Toluene	8.720	92	18018	4.725	ug/l		100
53) t-1,3-Dichloropropene	8.982	75	8954m	4.224	ug/l		
54) cis-1,3-Dichloropropene	8.366	75	10463	4.494	ug/l		99
55) 1,1,2-Trichloroethane	9.153	97	7396	4.764	ug/l		94
56) Ethyl methacrylate	9.116	69	9861	4.610	ug/l		97
57) 1,3-Dichloropropane	9.311	76	12377	4.938	ug/l		100
58) 2-Chloroethyl Vinyl ether	8.244	63	24237	23.860	ug/l		99
59) 2-Hexanone	9.433	43	33348	24.527	ug/l		98
60) Dibromochloromethane	9.525	129	8098	4.845	ug/l		99
61) 1,2-Dibromoethane	9.610	107	7913	4.829	ug/l		96
64) Tetrachloroethene	9.275	164	7306	5.087	ug/l		93
65) Chlorobenzene	10.079	112	19809	4.897	ug/l		96
66) 1,1,1,2-Tetrachloroethane	10.165	131	7253	4.894	ug/l		98
67) Ethyl Benzene	10.195	91	35174	4.902	ug/l		99
68) m/p-Xylenes	10.305	106	26854	9.557	ug/l		99
69) o-Xylene	10.640	106	13235	4.868	ug/l		94
70) Styrene	10.659	104	21152	4.756	ug/l		98
71) Bromoform	10.799	173	5553	4.886	ug/l	#	98
73) Isopropylbenzene	10.963	105	34409	5.092	ug/l		99
74) N-amyl acetate	10.841	43	10497	4.566	ug/l		98
75) 1,1,2,2-Tetrachloroethane	11.213	83	10892	5.340	ug/l		97
76) 1,2,3-Trichloropropane	11.238	75	9183m	5.127	ug/l		
77) Bromobenzene	11.201	156	8678	5.222	ug/l		98
78) n-propylbenzene	11.305	91	37347	4.834	ug/l		100
79) 2-Chlorotoluene	11.366	91	23595	5.028	ug/l		100
80) 1,3,5-Trimethylbenzene	11.451	105	28056	4.942	ug/l		99
81) trans-1,4-Dichloro-2-b...	11.018	75	2404	4.363	ug/l	#	84
82) 4-Chlorotoluene	11.457	91	26803	4.874	ug/l		99
83) tert-Butylbenzene	11.713	119	27792	4.918	ug/l		99
84) 1,2,4-Trimethylbenzene	11.750	105	27785	4.908	ug/l		100
85) sec-Butylbenzene	11.890	105	32333	4.783	ug/l		99
86) p-Isopropyltoluene	12.012	119	27023	4.718	ug/l		98
87) 1,3-Dichlorobenzene	11.969	146	15307	4.910	ug/l		99
88) 1,4-Dichlorobenzene	12.042	146	15903	4.981	ug/l		96
89) n-Butylbenzene	12.335	91	21376	4.332	ug/l		97
90) Hexachloroethane	12.542	117	4506	4.788	ug/l		99
91) 1,2-Dichlorobenzene	12.335	146	15312	5.050	ug/l		99
92) 1,2-Dibromo-3-Chloropr...	12.945	75	2190	5.382	ug/l		95
93) 1,2,4-Trichlorobenzene	13.591	180	8724	4.667	ug/l		99
94) Hexachlorobutadiene	13.725	225	3692	4.477	ug/l		99
95) Naphthalene	13.780	128	28600	4.730	ug/l		99
96) 1,2,3-Trichlorobenzene	13.963	180	9081	4.845	ug/l		98

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX120722\
Data File : VX033274.D
Acq On : 07 Dec 2022 10:09
Operator : JC/MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 07 10:46:23 2022
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X120722W.M
Quant Title : SW846 8260
QLast Update : Wed Dec 07 09:47:15 2022
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

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

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

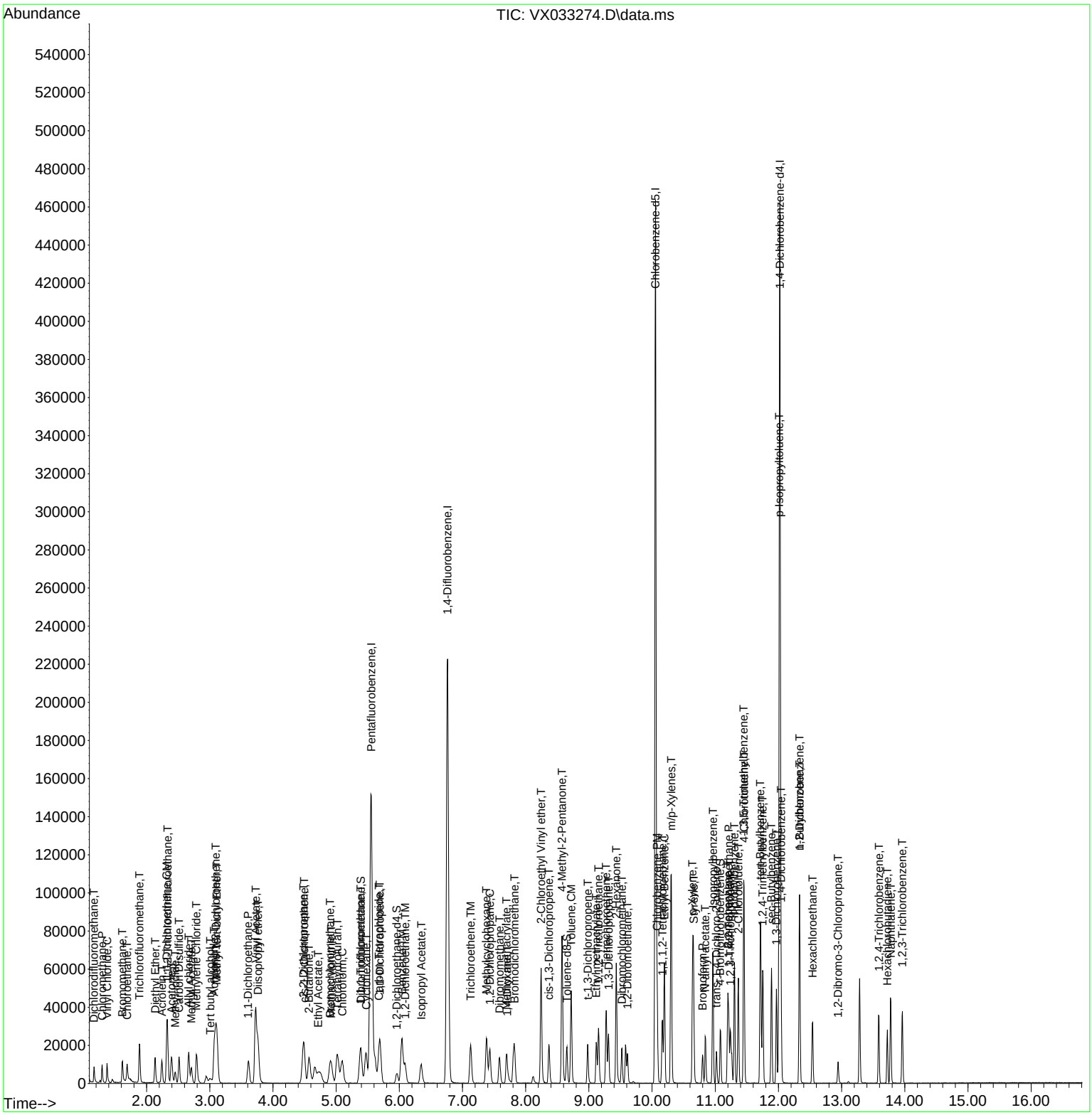
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX120722\
Data File : VX033274.D
Acq On : 07 Dec 2022 10:09
Operator : JC/MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 3 Sample Multiplier: 1

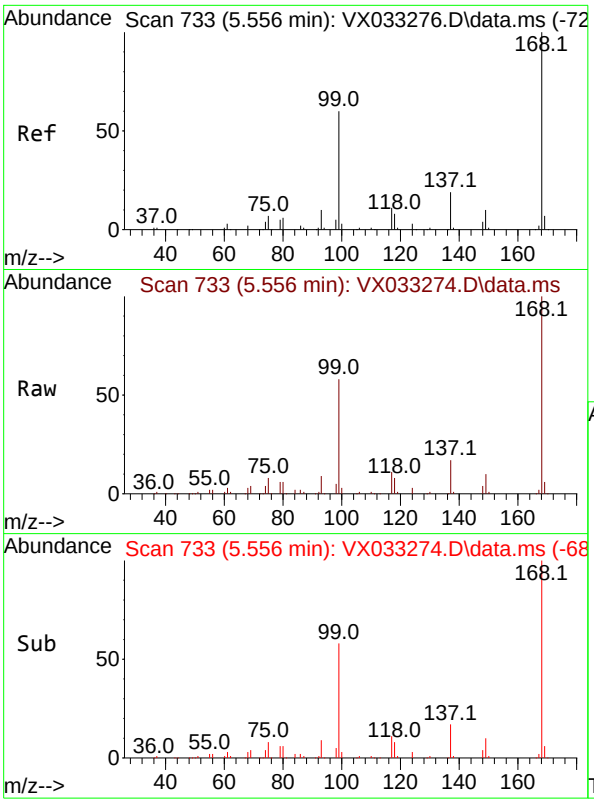
Quant Time: Dec 07 10:46:23 2022
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X120722W.M
Quant Title : SW846 8260
QLast Update : Wed Dec 07 09:47:15 2022
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

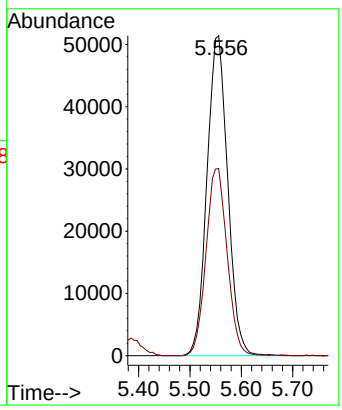




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 5.556 min Scan# 7
Delta R.T. -0.000 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion:168 Resp: 14407

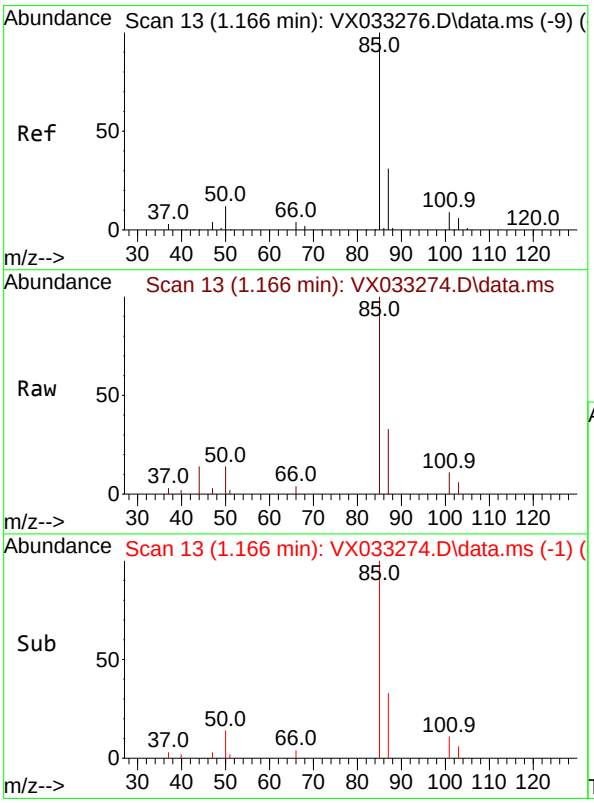
Ion	Ratio	Lower	Upper
168	100		
99	58.5	46.1	69.1



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

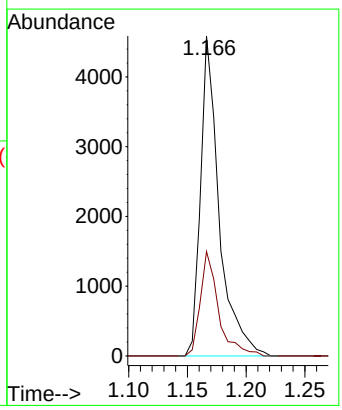
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

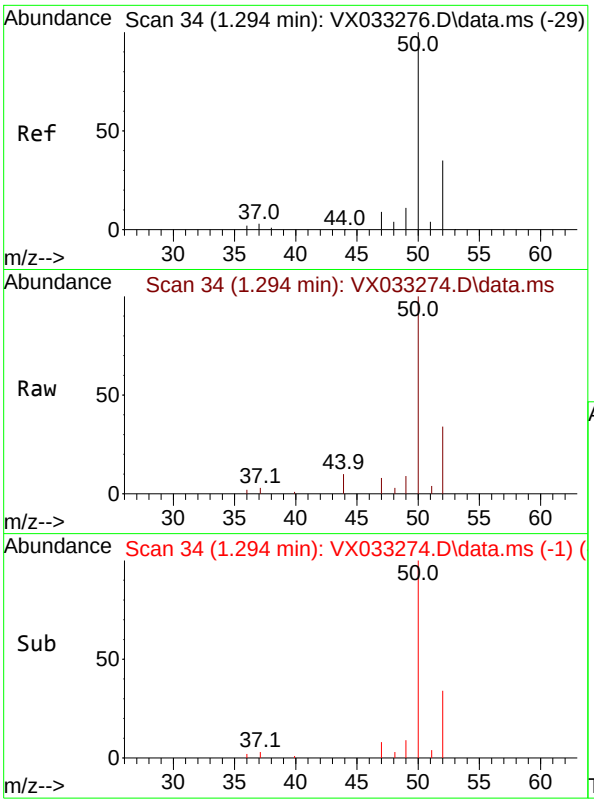


#2
Dichlorodifluoromethane
Concen: 4.583 ug/l
RT: 1.166 min Scan# 13
Delta R.T. 0.000 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion: 85 Resp: 5044

Ion	Ratio	Lower	Upper
85	100		
87	32.7	15.6	46.7

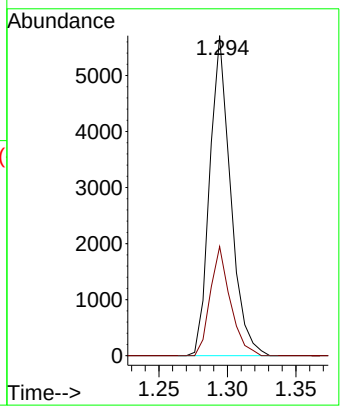




#3
Chloromethane
Concen: 5.081 ug/l
RT: 1.294 min Scan# 34
Delta R.T. 0.000 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion: 50 Resp: 603

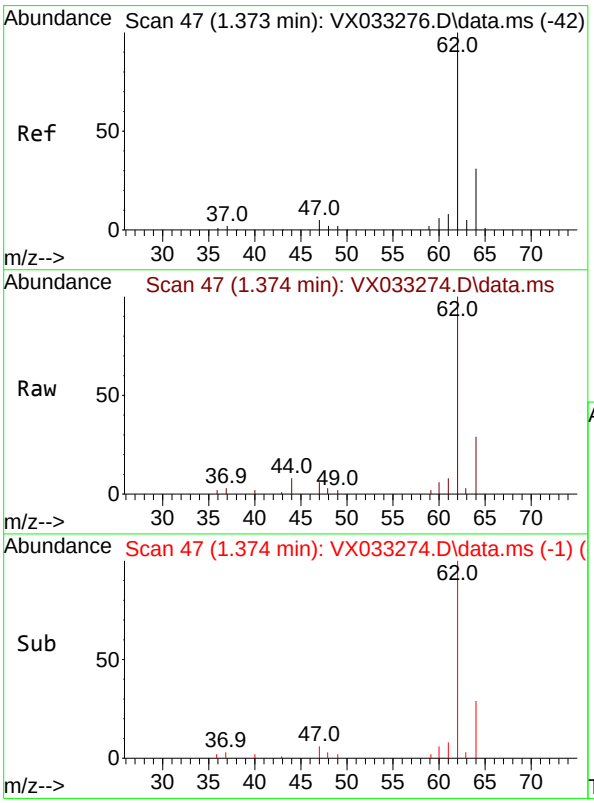
Ion	Ratio	Lower	Upper
50	100		
52	34.1	25.4	38.2



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

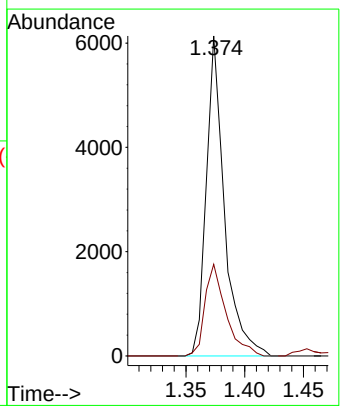
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

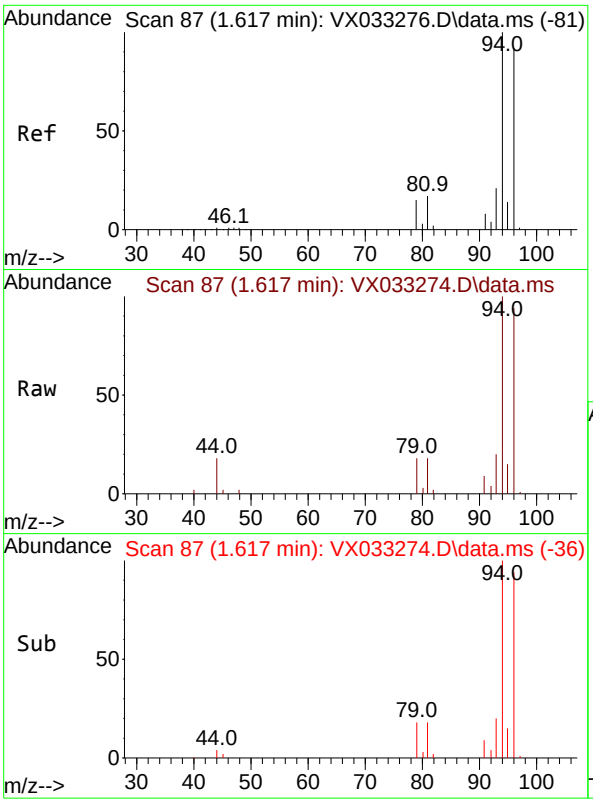


#4
Vinyl Chloride
Concen: 4.961 ug/l
RT: 1.374 min Scan# 47
Delta R.T. -0.000 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion: 62 Resp: 6564

Ion	Ratio	Lower	Upper
62	100		
64	28.6	25.8	38.6

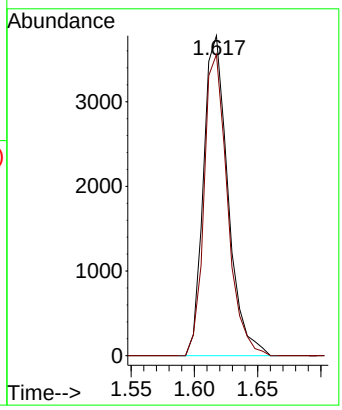




#5
Bromomethane
Concen: 5.190 ug/l
RT: 1.617 min Scan# 8
Delta R.T. 0.012 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion: 94 Resp: 509

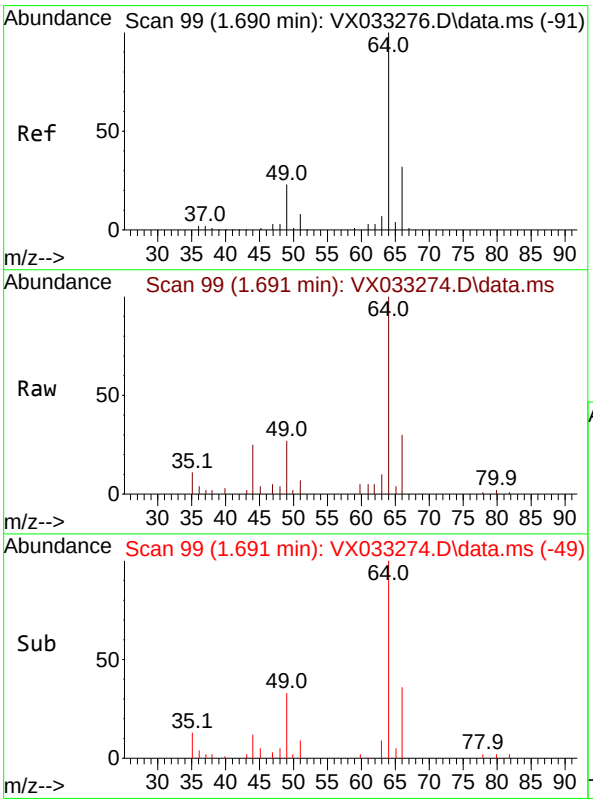
Ion	Ratio	Lower	Upper
94	100		
96	94.2	77.6	116.4



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

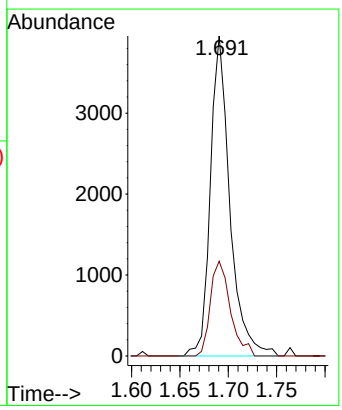
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

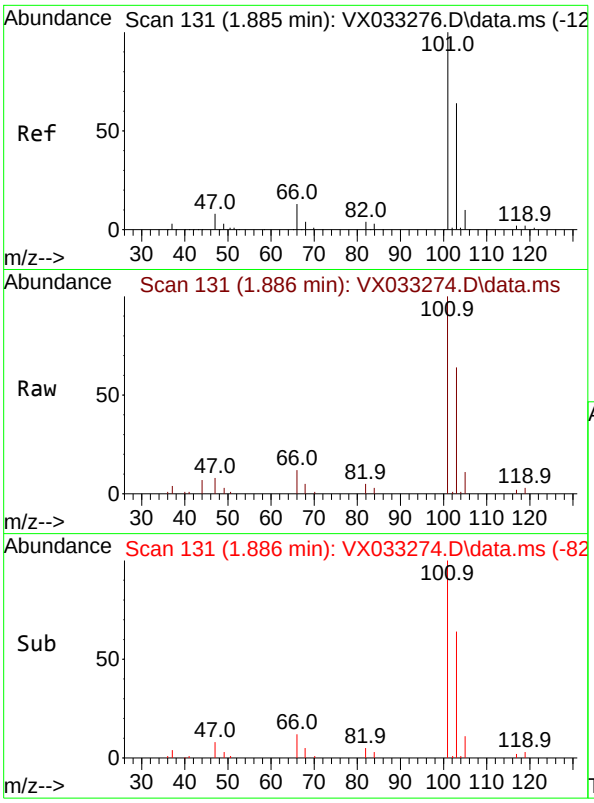


#6
Chloroethane
Concen: 5.143 ug/l
RT: 1.691 min Scan# 99
Delta R.T. 0.006 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion: 64 Resp: 5540

Ion	Ratio	Lower	Upper
64	100		
66	29.6	26.0	39.0

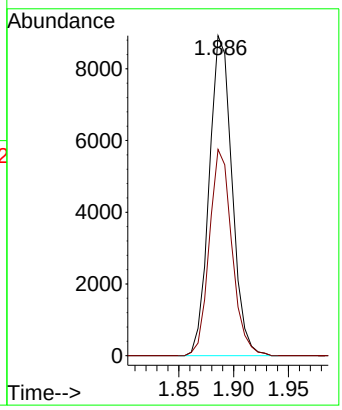




#7
Trichlorofluoromethane
Concen: 5.032 ug/l
RT: 1.886 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion:101 Resp: 1292

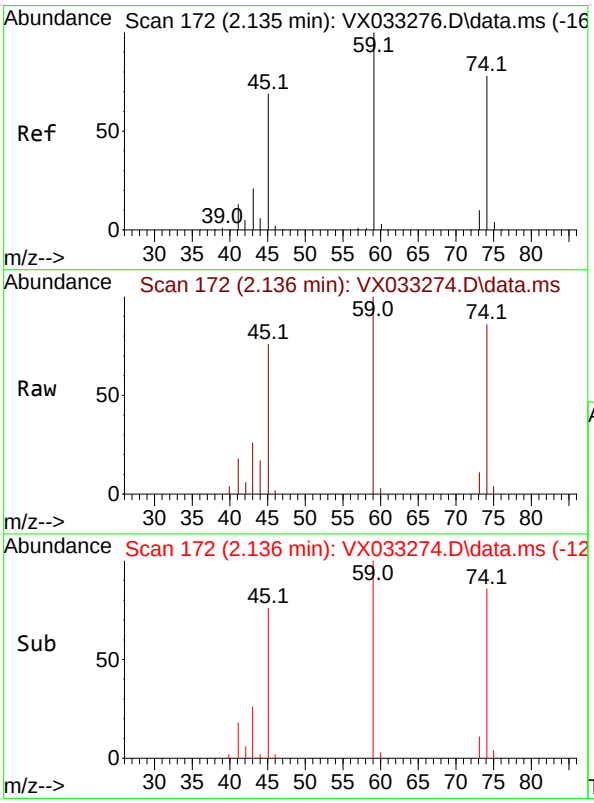
Ion	Ratio	Lower	Upper
101	100		
103	64.4	51.4	77.2



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

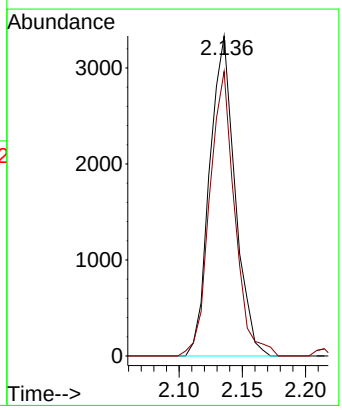
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

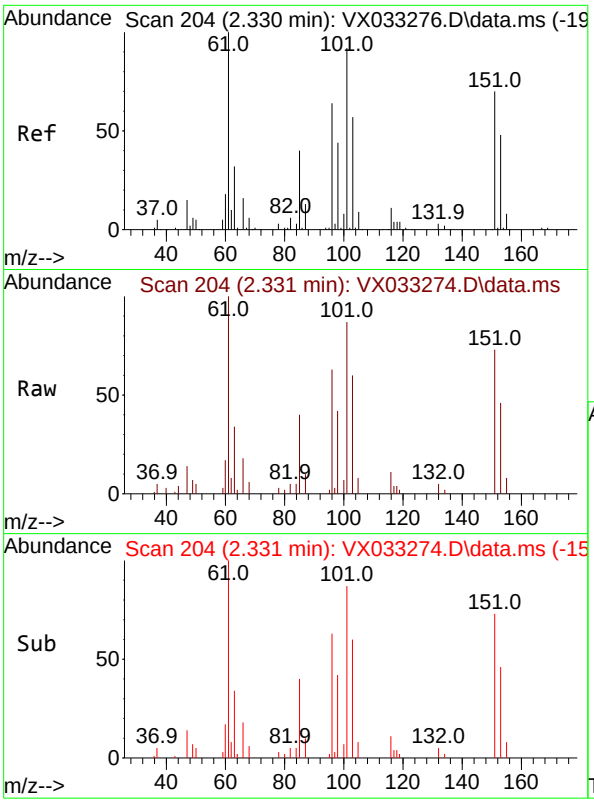


#8
Diethyl Ether
Concen: 5.770 ug/l
RT: 2.136 min Scan# 172
Delta R.T. 0.006 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion: 74 Resp: 4665

Ion	Ratio	Lower	Upper
74	100		
45	87.1	46.6	139.7





#9
1,1,2-Trichlorotrifluoroethane
Concen: 5.078 ug/l
RT: 2.331 min Scan# 2
Delta R.T. -0.000 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

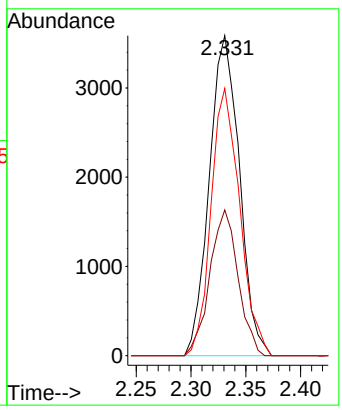
Tgt Ion:101 Resp: 685

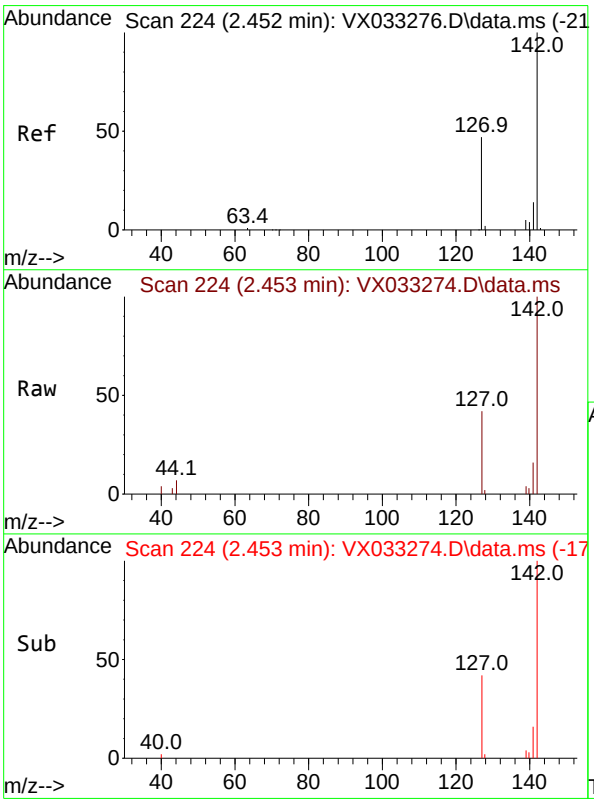
Ion	Ratio	Lower	Upper
101	100		
85	42.7	37.0	55.4
151	79.5	64.4	96.6

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

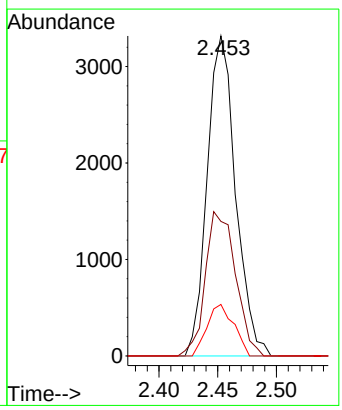


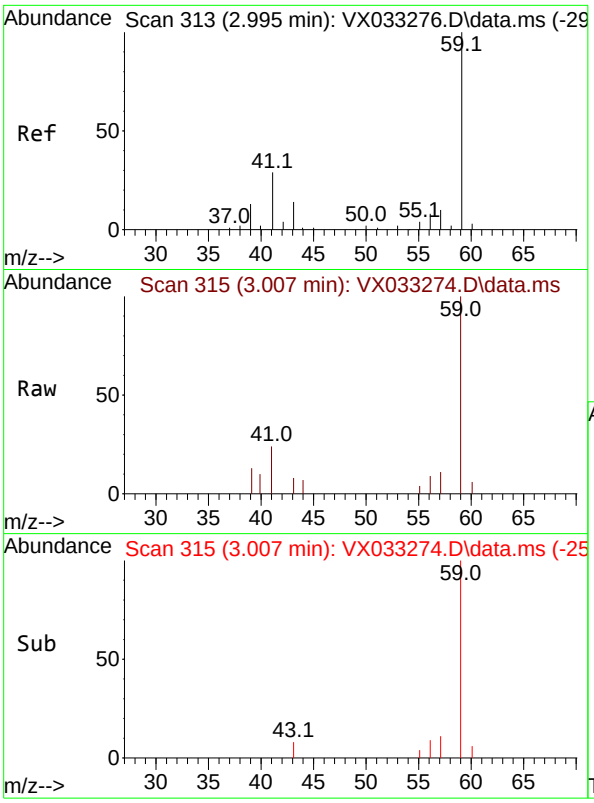


#10
Methyl Iodide
Concen: 3.613 ug/l
RT: 2.453 min Scan# 224
Delta R.T. -0.000 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion:142 Resp: 5583

Ion	Ratio	Lower	Upper
142	100		
127	47.8	38.6	57.8
141	15.1	11.4	17.2

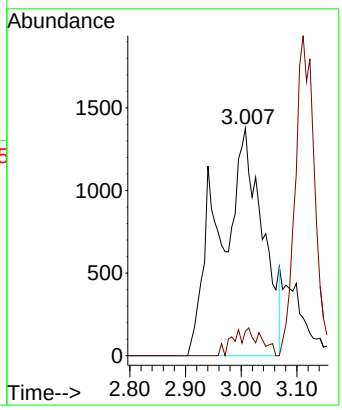




#11
Tert butyl alcohol
Concen: 33.016 ug/l m
RT: 3.007 min Scan# 3
Delta R.T. 0.042 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion: 59 Resp: 734

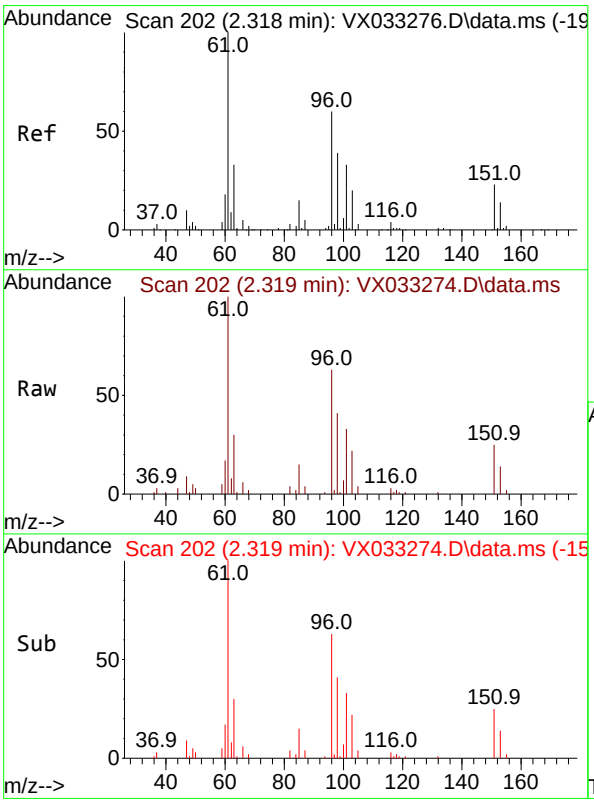
Ion	Ratio	Lower	Upper
59	100		
57	0.0	8.2	12.4



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

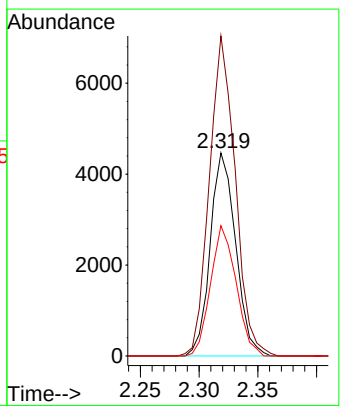
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

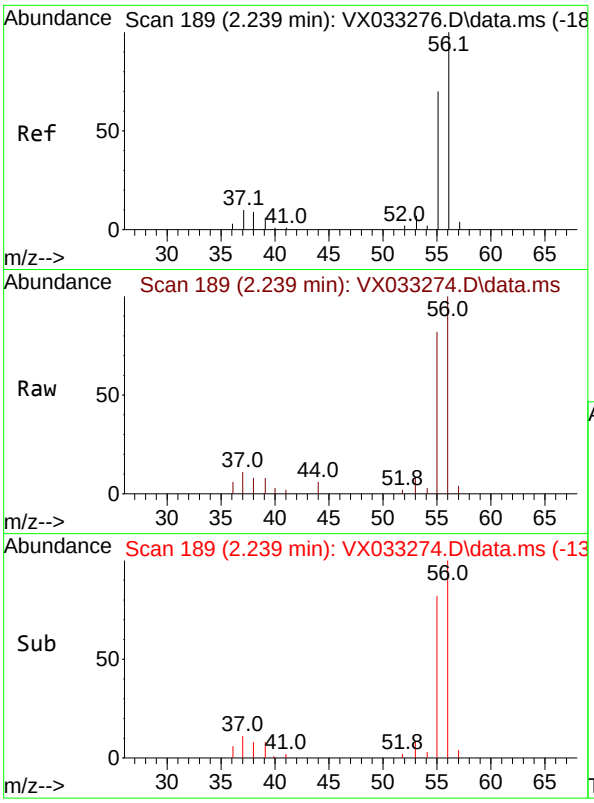


#12
1,1-Dichloroethene
Concen: 5.346 ug/l
RT: 2.319 min Scan# 202
Delta R.T. -0.000 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion: 96 Resp: 6721

Ion	Ratio	Lower	Upper
96	100		
61	157.6	125.1	187.7
98	64.2	50.6	76.0

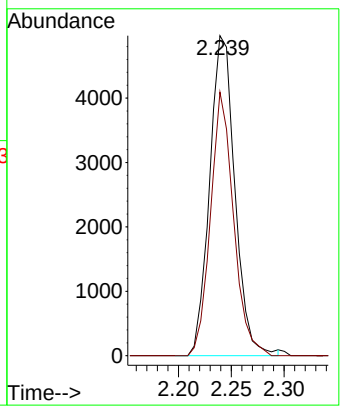




#13
Acrolein
Concen: 32.321 ug/l m
RT: 2.239 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion: 56 Resp: 825

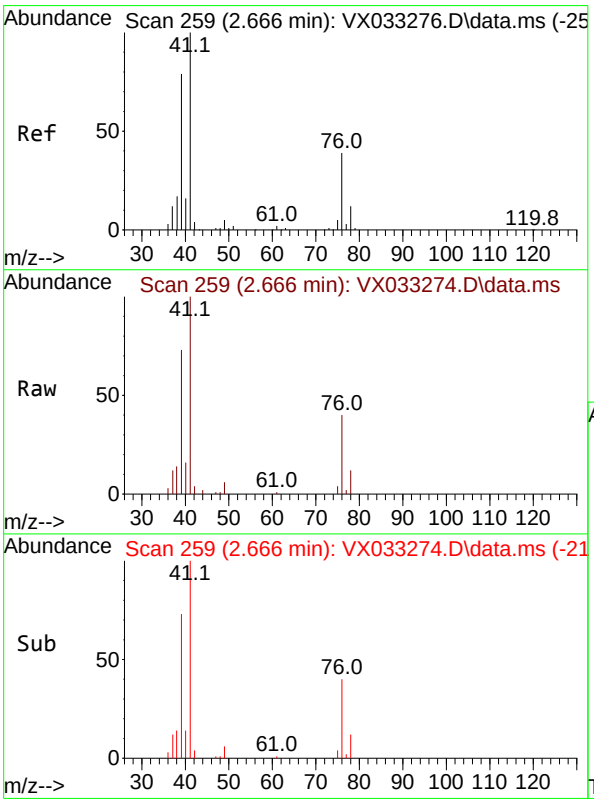
Ion	Ratio	Lower	Upper
56	100		
55	75.3	56.9	85.3



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

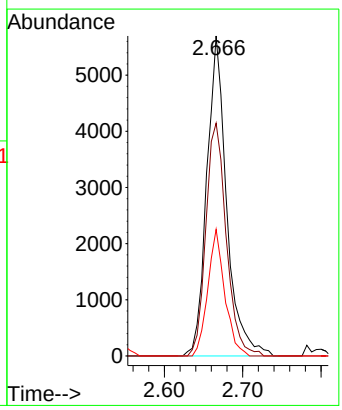
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

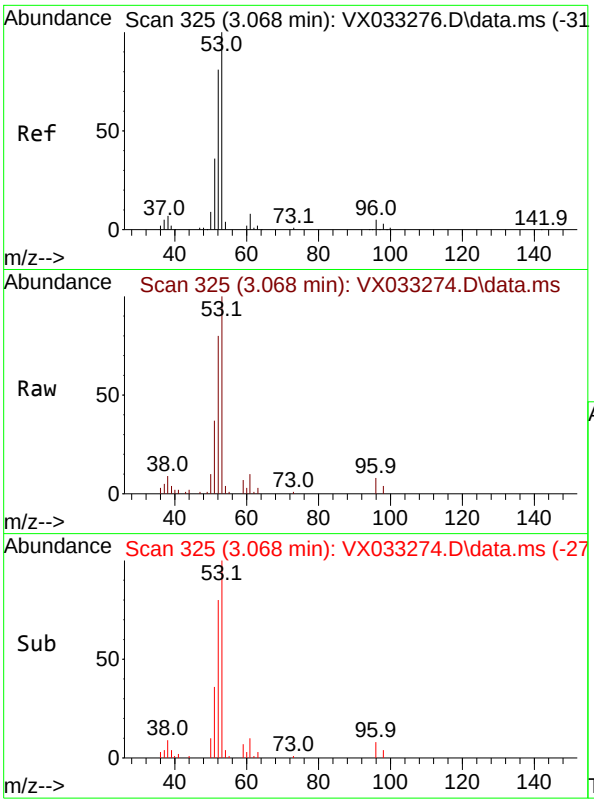


#14
Allyl chloride
Concen: 4.949 ug/l
RT: 2.666 min Scan# 259
Delta R.T. 0.000 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion: 41 Resp: 10045

Ion	Ratio	Lower	Upper
41	100		
39	74.6	61.4	92.2
76	33.8	29.2	43.8

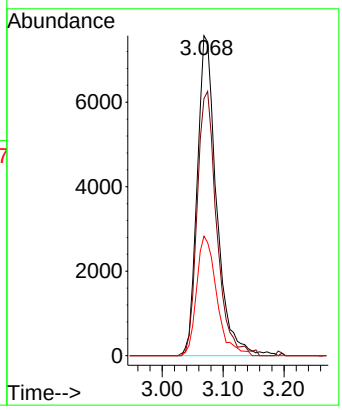




#15
Acrylonitrile
Concen: 26.544 ug/l
RT: 3.068 min Scan# 3
Delta R.T. 0.006 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion: 53 Resp: 1669

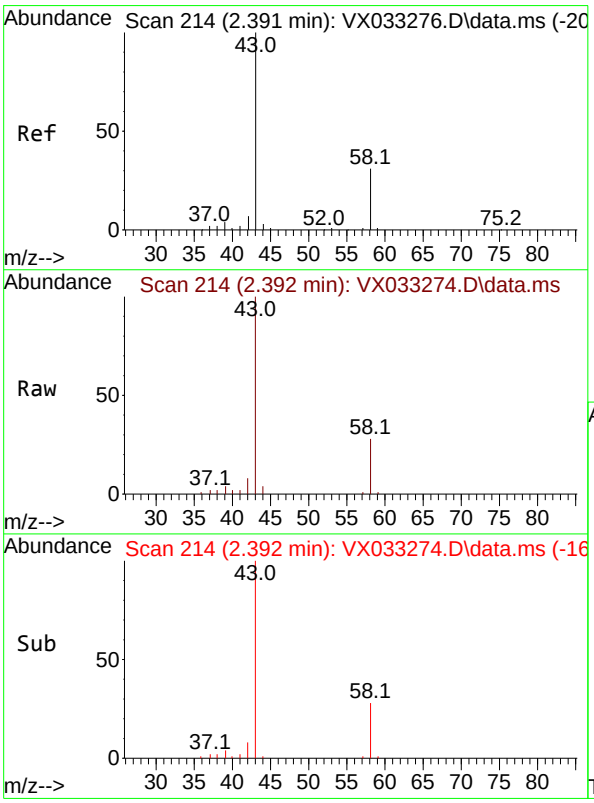
Ion	Ratio	Lower	Upper
53	100		
52	83.6	67.4	101.0
51	38.9	30.3	45.5



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

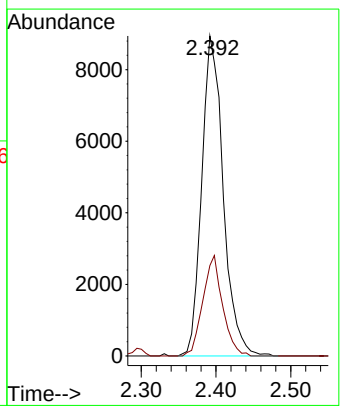
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

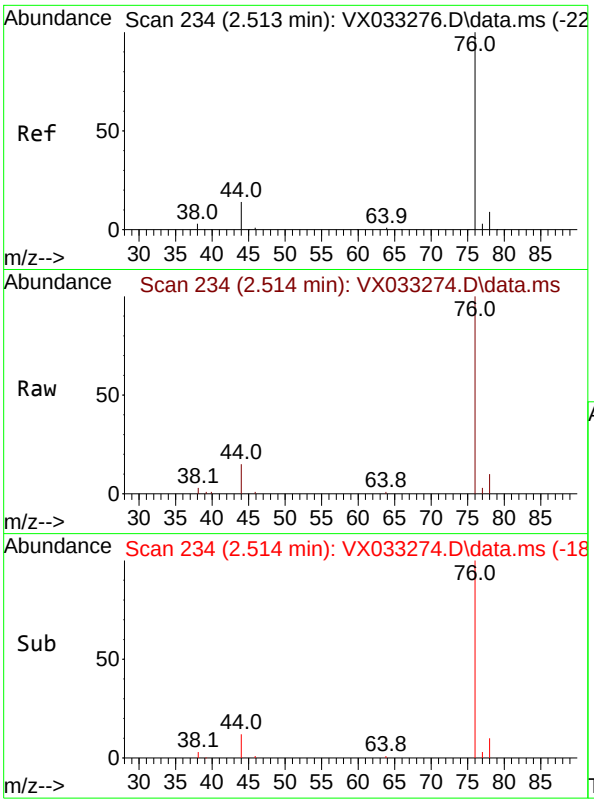


#16
Acetone
Concen: 27.301 ug/l
RT: 2.392 min Scan# 214
Delta R.T. 0.012 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion: 43 Resp: 17889

Ion	Ratio	Lower	Upper
43	100		
58	28.2	23.8	35.8





#17
Carbon Disulfide
Concen: 4.685 ug/l
RT: 2.514 min Scan# 2
Delta R.T. -0.000 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

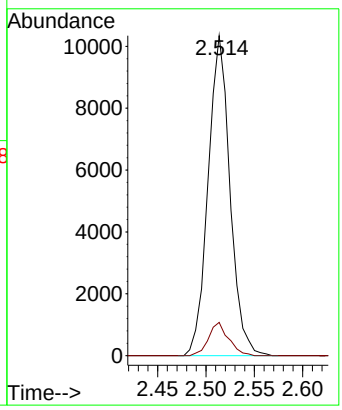
Tgt Ion: 76 Resp: 1627

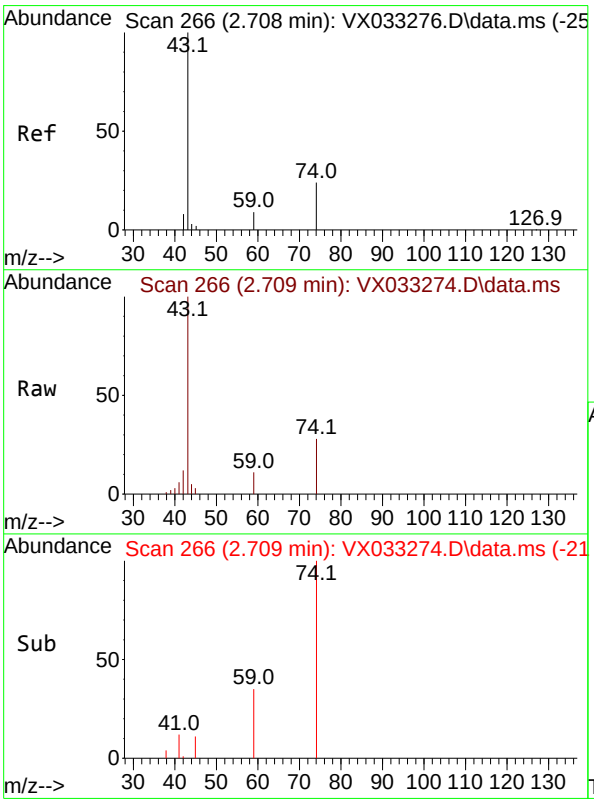
Ion	Ratio	Lower	Upper
76	100		
78	10.4	7.5	11.3

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

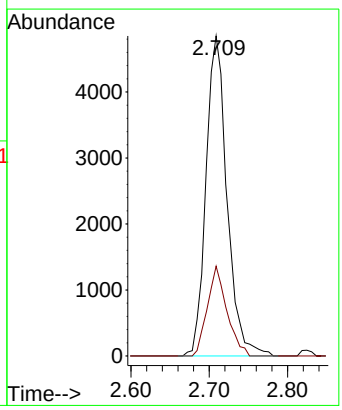


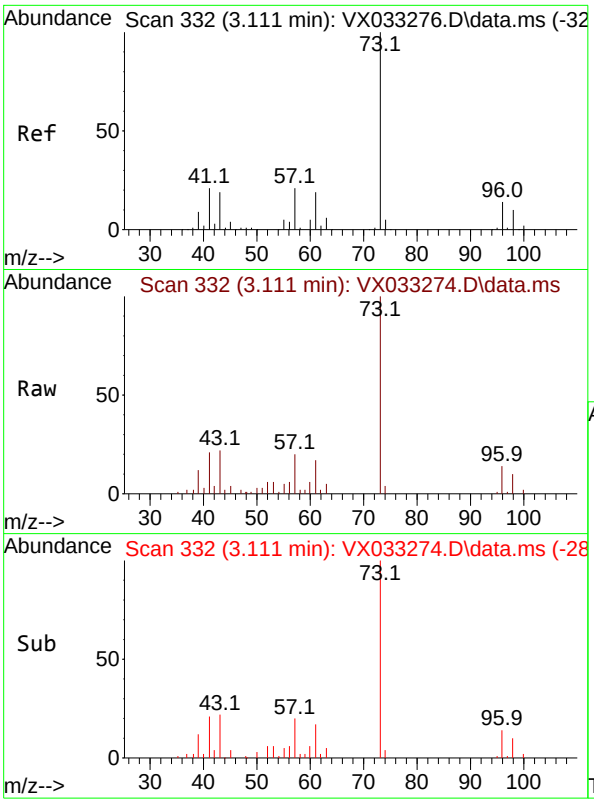


#18
Methyl Acetate
Concen: 4.977 ug/l
RT: 2.709 min Scan# 266
Delta R.T. 0.006 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion: 43 Resp: 9028

Ion	Ratio	Lower	Upper
43	100		
74	26.1	19.4	29.0

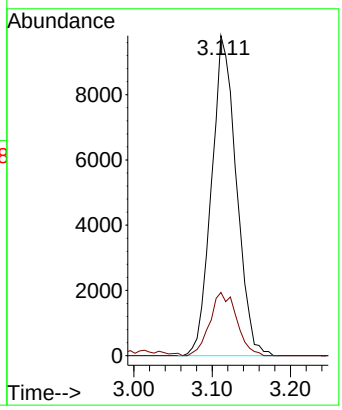




#19
Methyl tert-butyl Ether
Concen: 4.962 ug/l
RT: 3.111 min Scan# 3
Delta R.T. 0.000 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion: 73 Resp: 2163

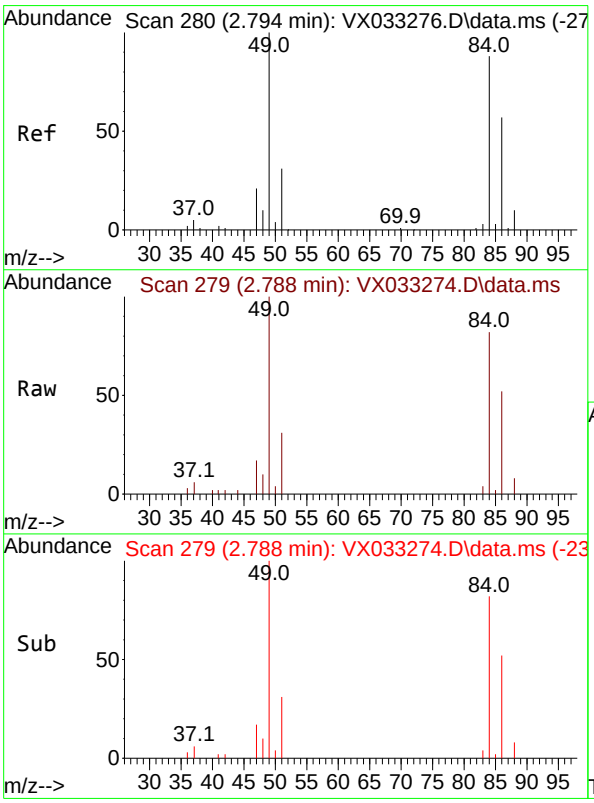
Ion	Ratio	Lower	Upper
73	100		
57	19.7	16.6	25.0



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

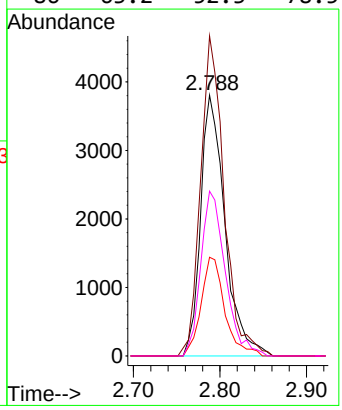
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

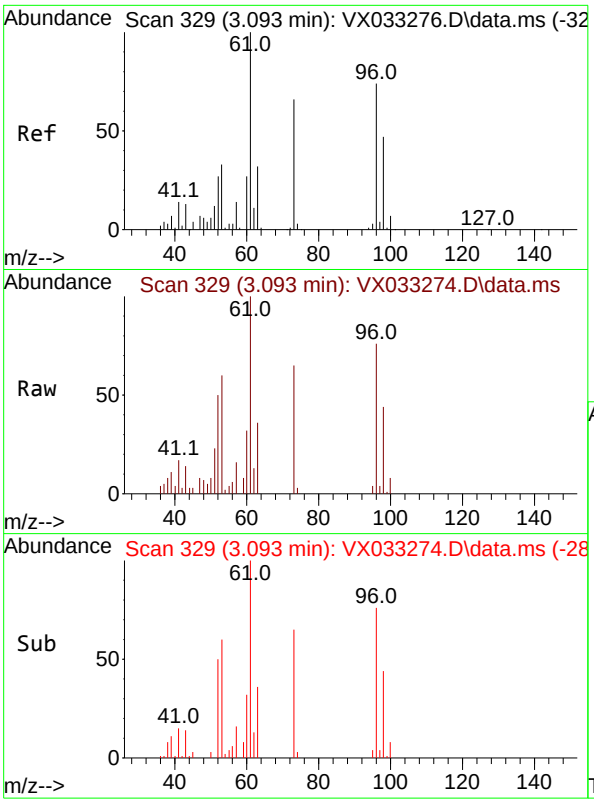


#20
Methylene Chloride
Concen: 4.706 ug/l
RT: 2.788 min Scan# 279
Delta R.T. -0.000 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion: 84 Resp: 7429

Ion	Ratio	Lower	Upper
84	100		
49	122.7	101.0	151.6
51	37.8	31.1	46.7
86	63.2	52.3	78.5

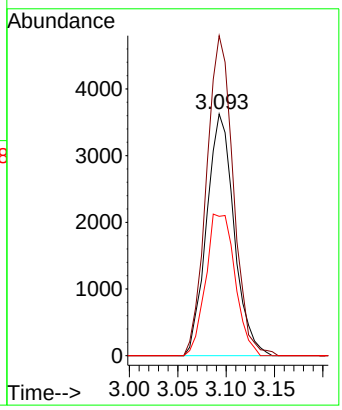




#21
trans-1,2-Dichloroethene
Concen: 4.984 ug/l
RT: 3.093 min Scan# 3
Delta R.T. -0.000 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion: 96 Resp: 716

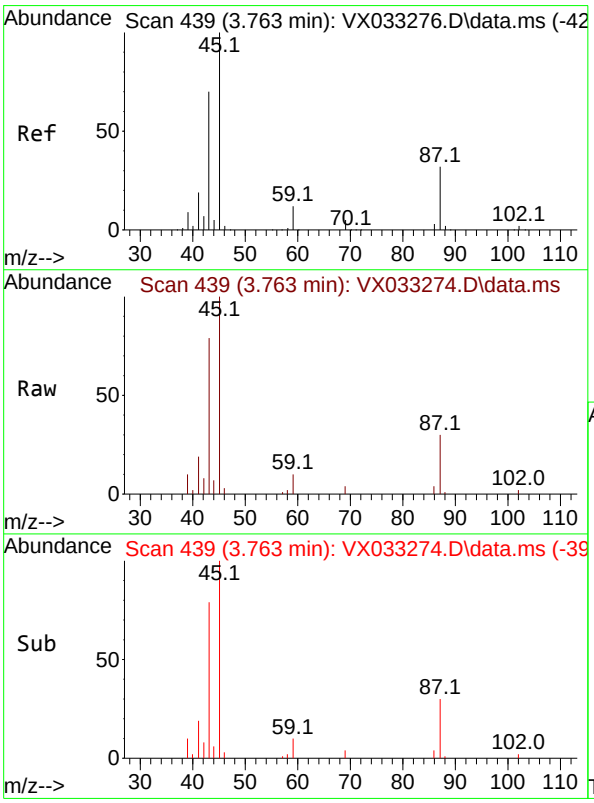
Ion	Ratio	Lower	Upper
96	100		
61	132.4	106.6	160.0
98	57.7	51.0	76.6



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

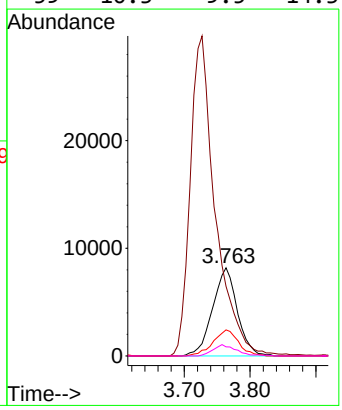
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

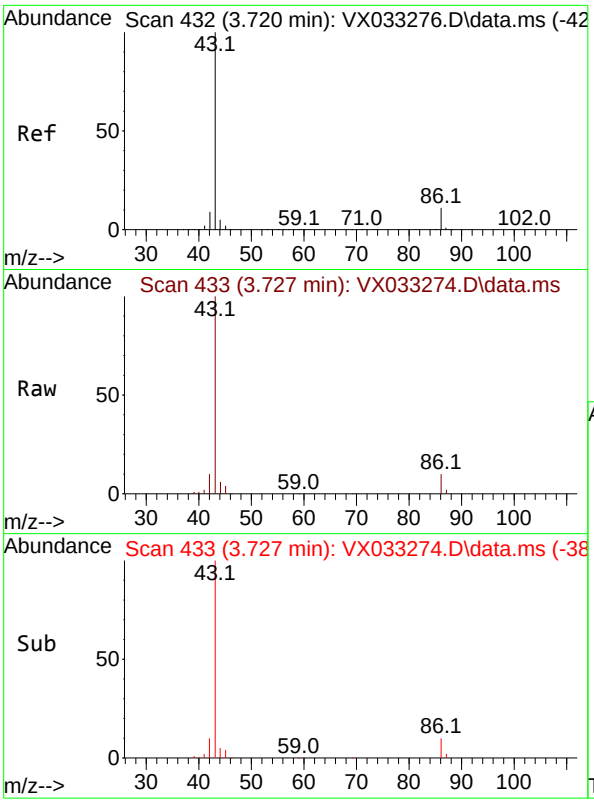


#22
Diisopropyl ether
Concen: 4.849 ug/l
RT: 3.763 min Scan# 439
Delta R.T. 0.000 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion: 45 Resp: 21433

Ion	Ratio	Lower	Upper
45	100		
43	76.9	56.4	84.6
87	29.5	24.4	36.6
59	10.3	9.5	14.3





#23
Vinyl Acetate
Concen: 22.764 ug/l
RT: 3.727 min Scan# 4
Delta R.T. 0.006 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

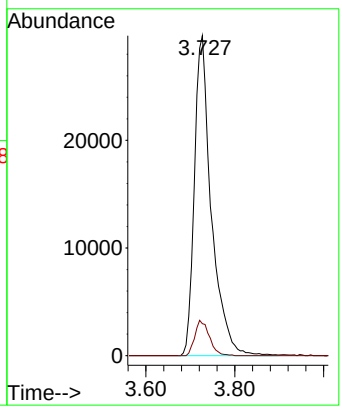
Tgt Ion: 43 Resp: 7875

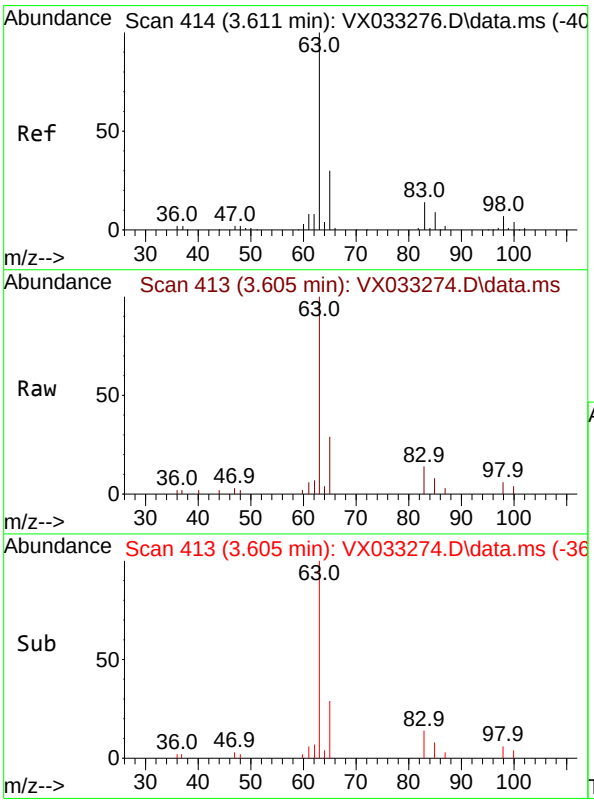
Ion	Ratio	Lower	Upper
43	100		
86	10.0	8.6	12.8

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

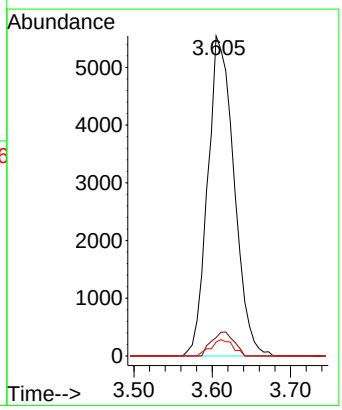


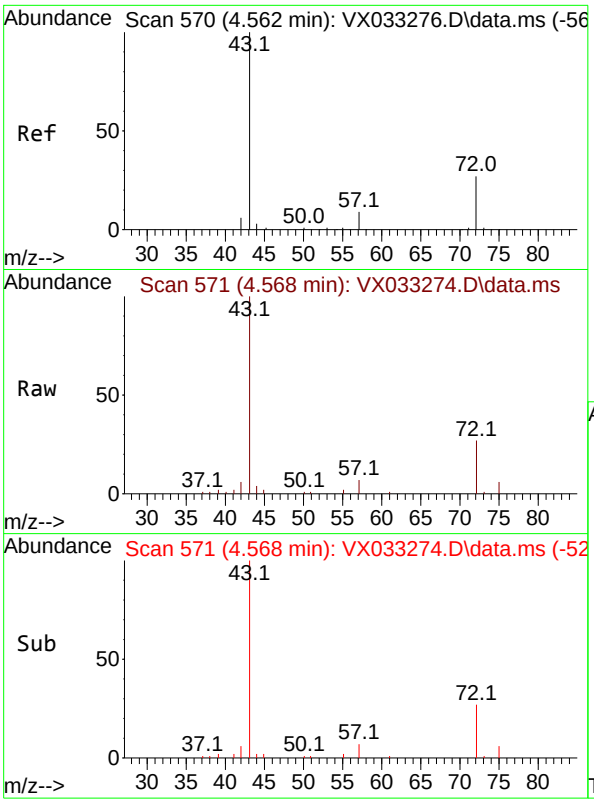


#24
1,1-Dichloroethane
Concen: 5.120 ug/l
RT: 3.605 min Scan# 413
Delta R.T. -0.006 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion: 63 Resp: 12949

Ion	Ratio	Lower	Upper
63	100		
98	5.8	3.5	10.4
100	4.4	2.3	6.8

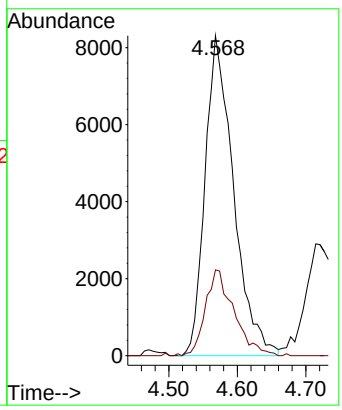




#25
2-Butanone
Concen: 26.540 ug/l
RT: 4.568 min Scan# 5
Delta R.T. 0.012 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion: 43 Resp: 2397

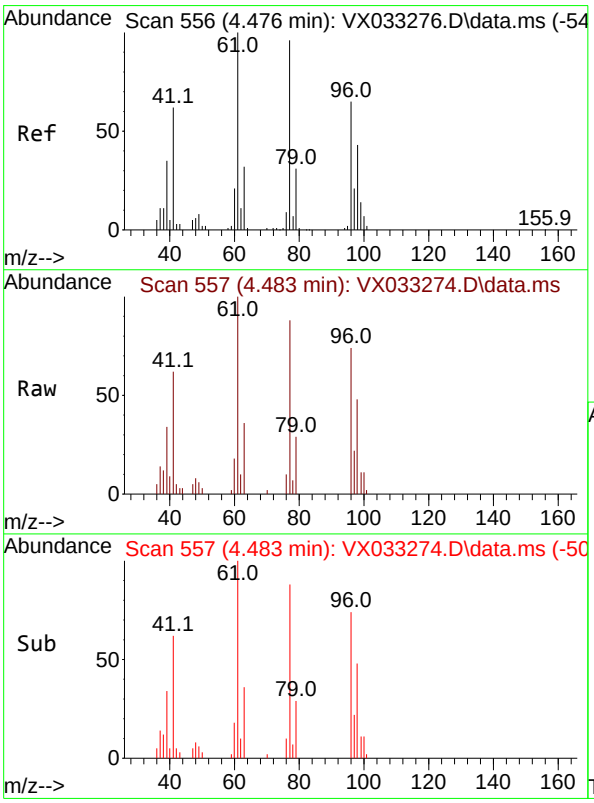
Ion	Ratio	Lower	Upper
43	100		
72	26.8	22.2	33.2



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

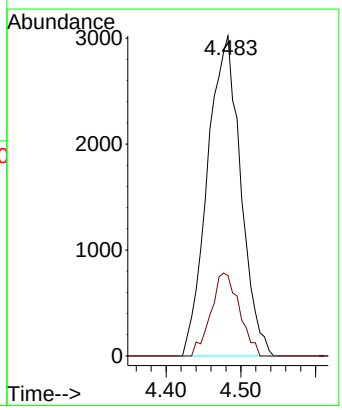
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

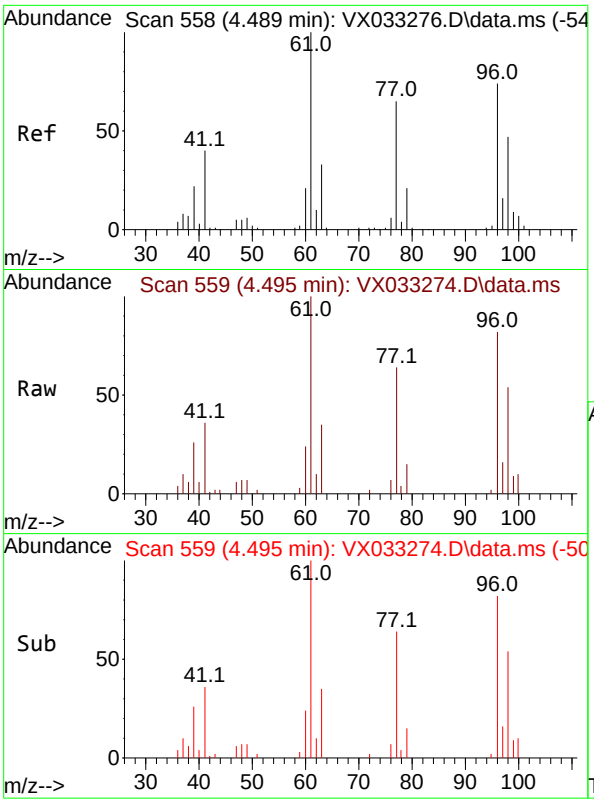


#26
2,2-Dichloropropane
Concen: 4.588 ug/l
RT: 4.483 min Scan# 557
Delta R.T. 0.006 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion: 77 Resp: 9330

Ion	Ratio	Lower	Upper
77	100		
97	22.2	11.4	34.1





#27
cis-1,2-Dichloroethene
Concen: 4.936 ug/l
RT: 4.495 min Scan# 5
Delta R.T. 0.006 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

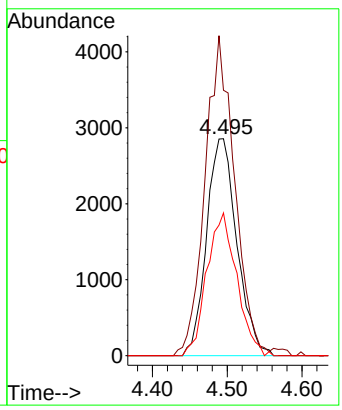
Tgt Ion: 96 Resp: 806

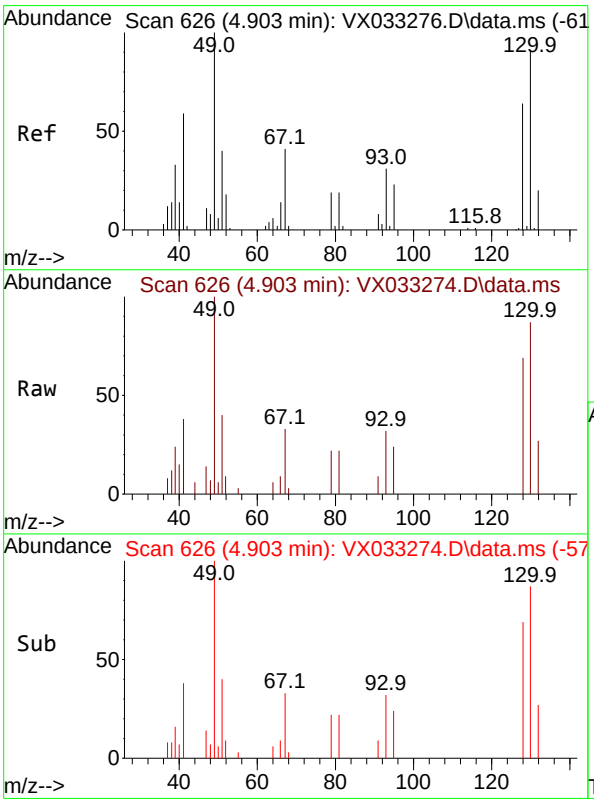
Ion	Ratio	Lower	Upper
96	100		
61	143.6	0.0	286.0
98	64.8	0.0	129.6

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

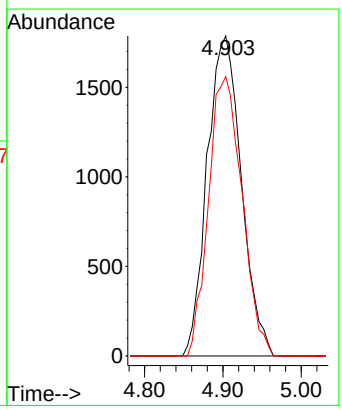


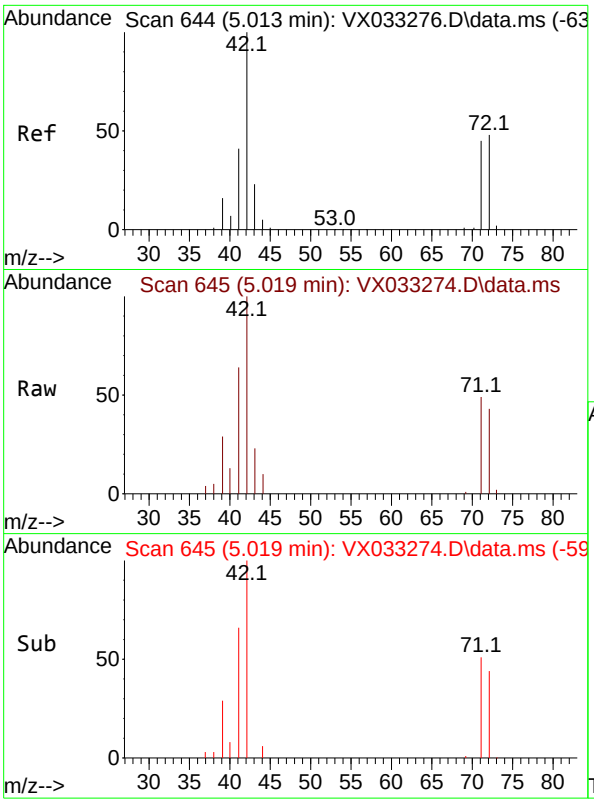


#28
Bromochloromethane
Concen: 4.872 ug/l
RT: 4.903 min Scan# 626
Delta R.T. -0.001 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion: 49 Resp: 5414

Ion	Ratio	Lower	Upper
49	100		
129	0.0	0.0	3.8
130	85.6	67.5	101.3





#29
Tetrahydrofuran
Concen: 26.788 ug/l
RT: 5.019 min Scan# 64
Delta R.T. 0.018 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

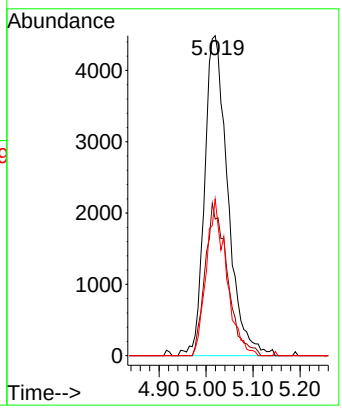
Tgt Ion: 42 Resp: 1535

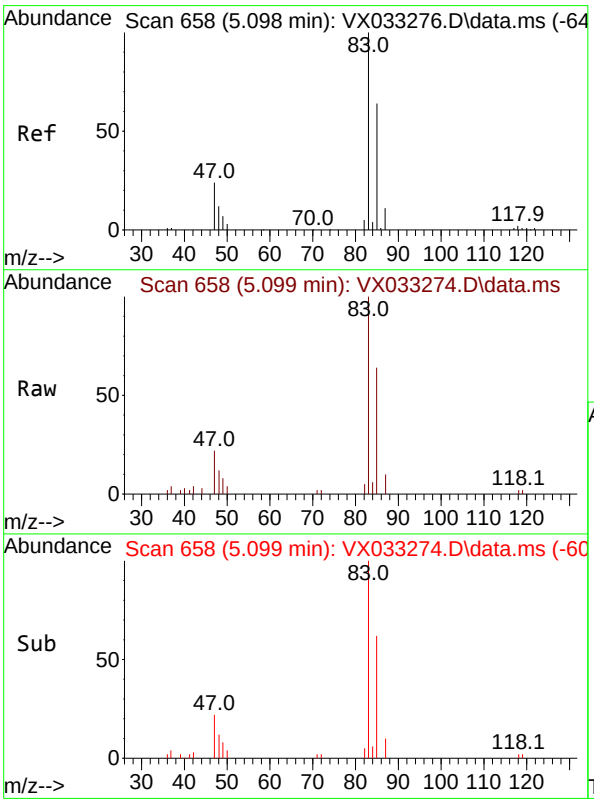
Ion	Ratio	Lower	Upper
42	100		
72	45.6	37.6	56.4
71	42.4	34.7	52.1

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

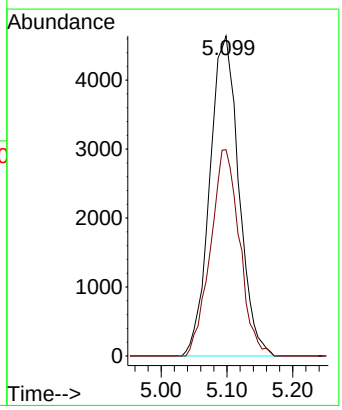


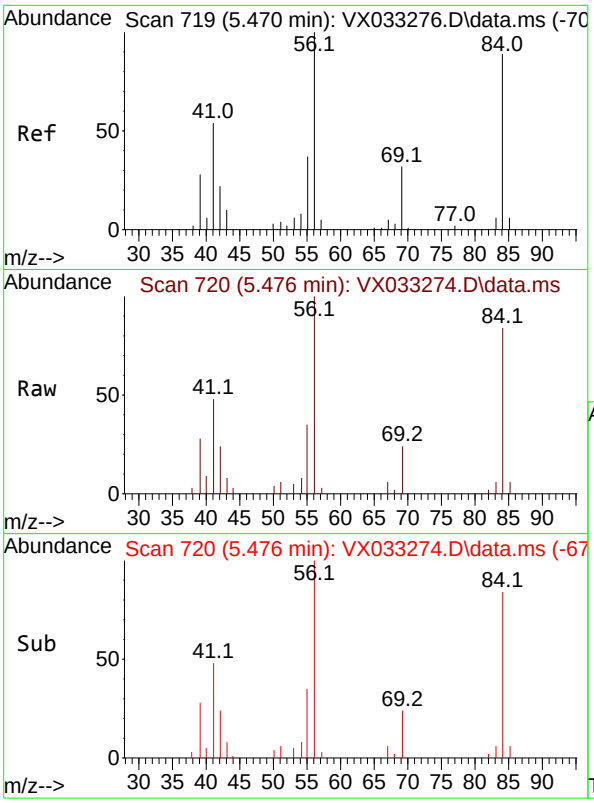


#30
Chloroform
Concen: 5.038 ug/l
RT: 5.099 min Scan# 658
Delta R.T. -0.000 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion: 83 Resp: 14271

Ion	Ratio	Lower	Upper
83	100		
85	64.5	51.1	76.7

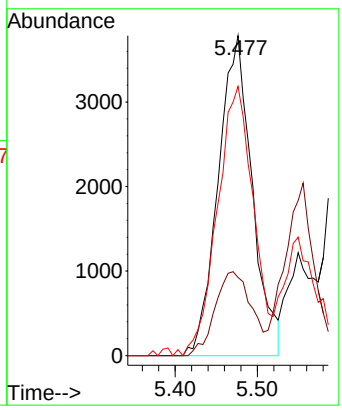




#31
Cyclohexane
Concen: 4.793 ug/l
RT: 5.476 min Scan# 7
Delta R.T. 0.006 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion: 56 Resp: 1089

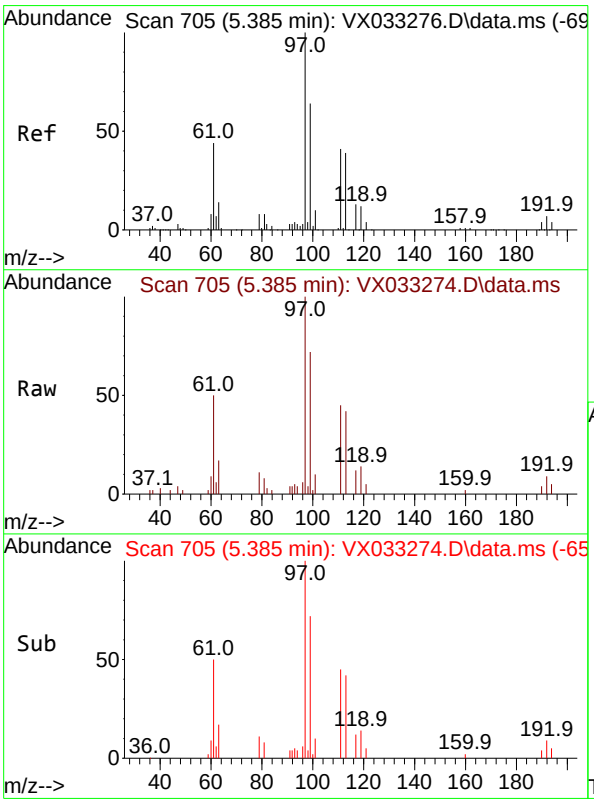
Ion	Ratio	Lower	Upper
56	100		
69	24.5	24.1	36.1
84	82.3	66.9	100.3



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

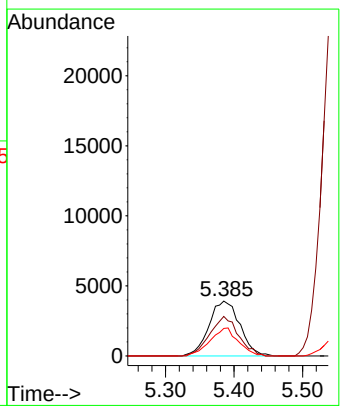
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

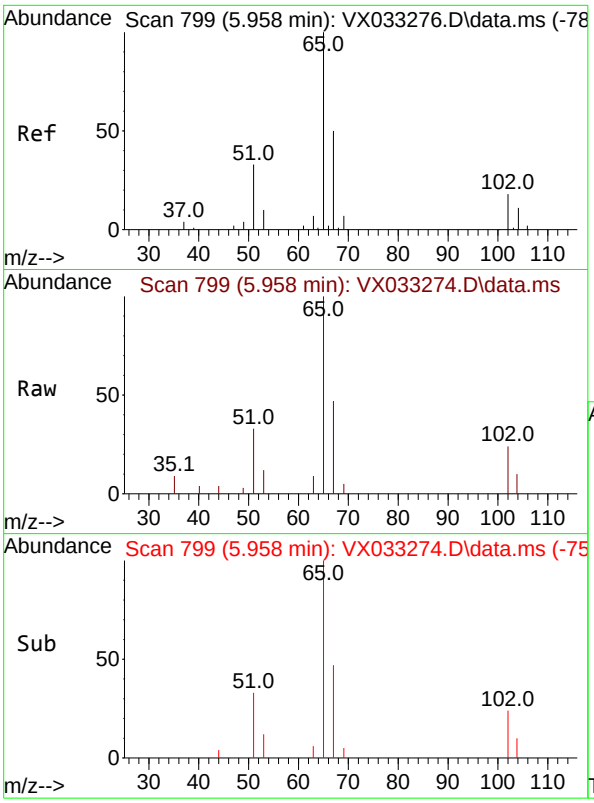


#32
1,1,1-Trichloroethane
Concen: 4.834 ug/l
RT: 5.385 min Scan# 705
Delta R.T. 0.000 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion: 97 Resp: 12264

Ion	Ratio	Lower	Upper
97	100		
99	66.8	51.4	77.0
61	46.3	35.2	52.8

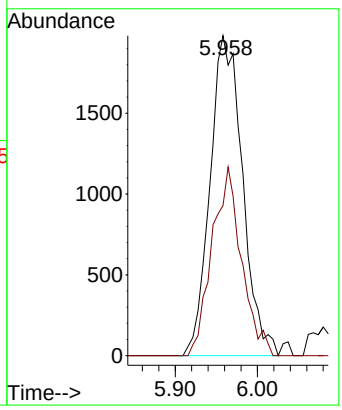




#33
1,2-Dichloroethane-d4
Concen: 3.505 ug/l
RT: 5.958 min Scan# 7
Delta R.T. 0.000 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion: 65 Resp: 544

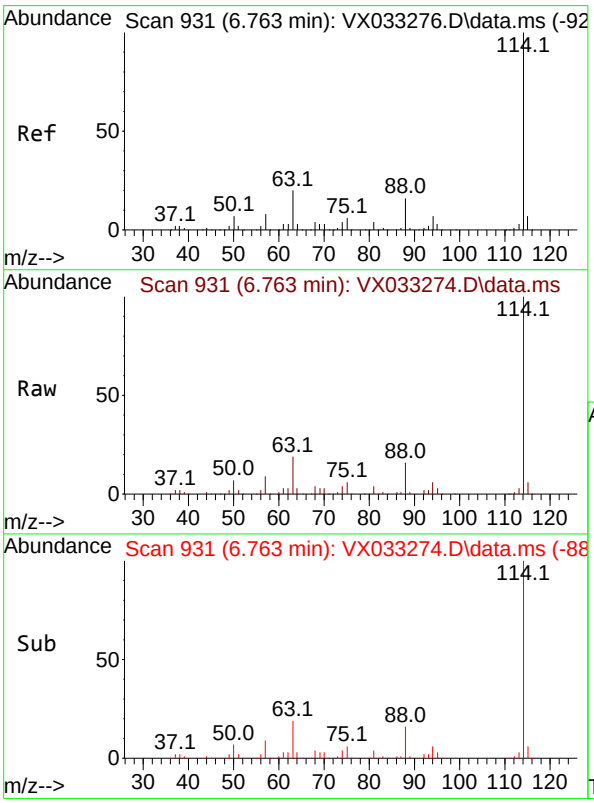
Ion	Ratio	Lower	Upper
65	100		
67	53.5	0.0	101.8



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

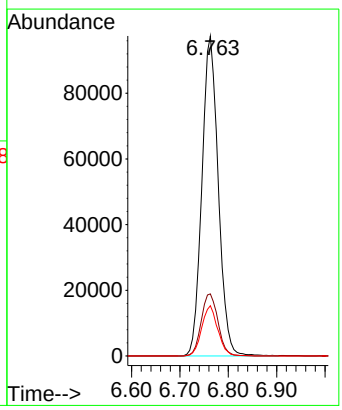
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

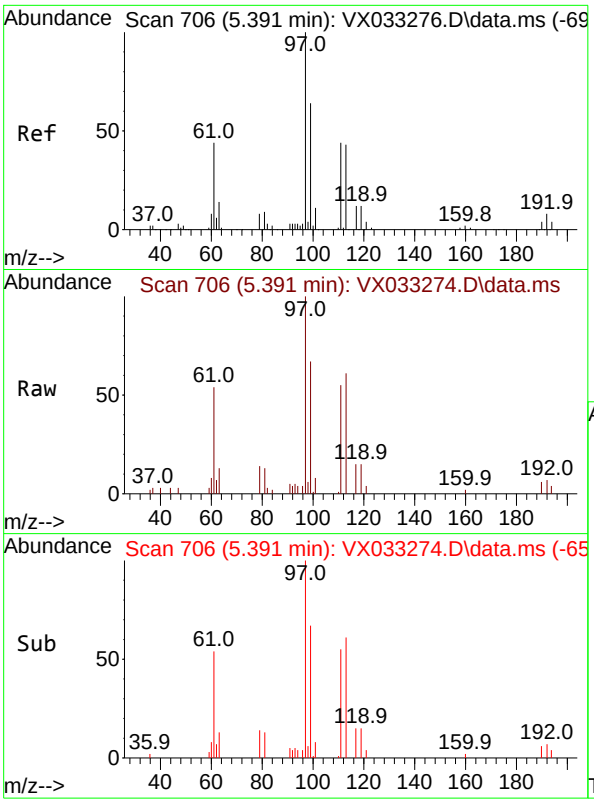


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 6.763 min Scan# 931
Delta R.T. -0.000 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion:114 Resp: 229334

Ion	Ratio	Lower	Upper
114	100		
63	19.4	0.0	41.6
88	15.7	0.0	33.4

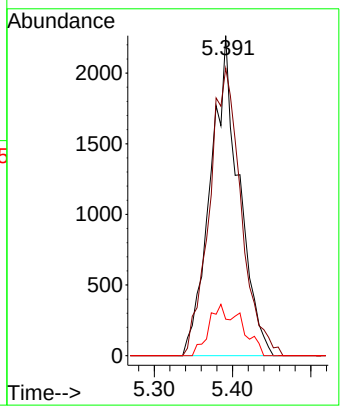




#35
Dibromofluoromethane
Concen: 4.449 ug/l
RT: 5.391 min Scan# 7
Delta R.T. 0.006 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion:113 Resp: 575

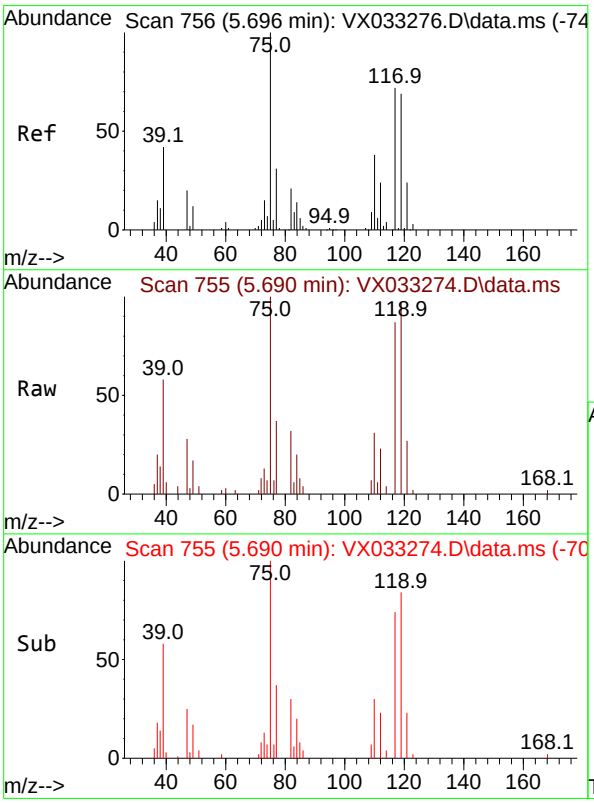
Ion	Ratio	Lower	Upper
113	100		
111	99.5	82.4	123.6
192	11.1	15.4	23.2#



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

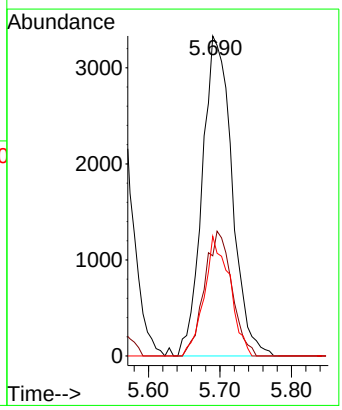
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

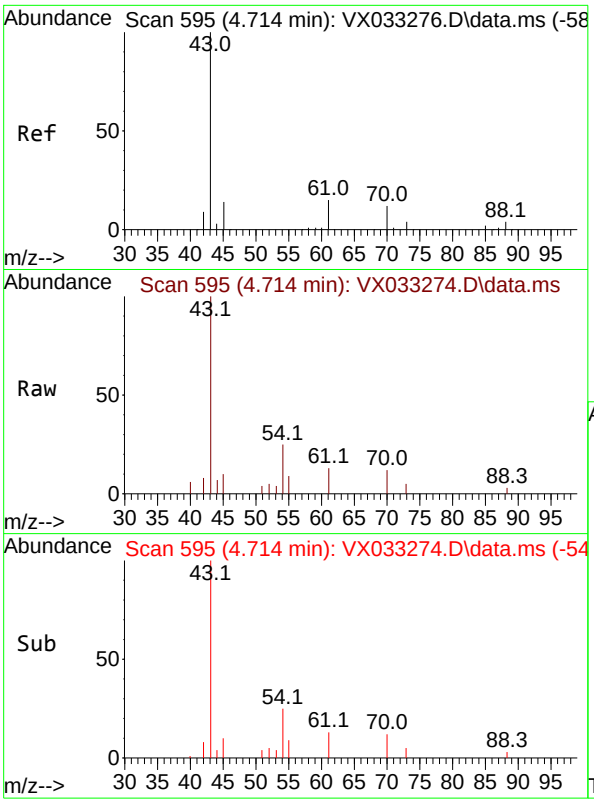


#36
1,1-Dichloropropene
Concen: 4.657 ug/l
RT: 5.690 min Scan# 755
Delta R.T. -0.006 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion: 75 Resp: 9627

Ion	Ratio	Lower	Upper
75	100		
110	36.0	18.4	55.2
77	32.2	24.5	36.7





#37
Ethyl Acetate
Concen: 4.880 ug/l
RT: 4.714 min Scan# 5
Delta R.T. -0.001 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

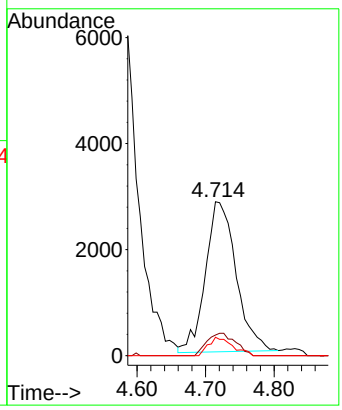
Tgt Ion: 43 Resp: 880

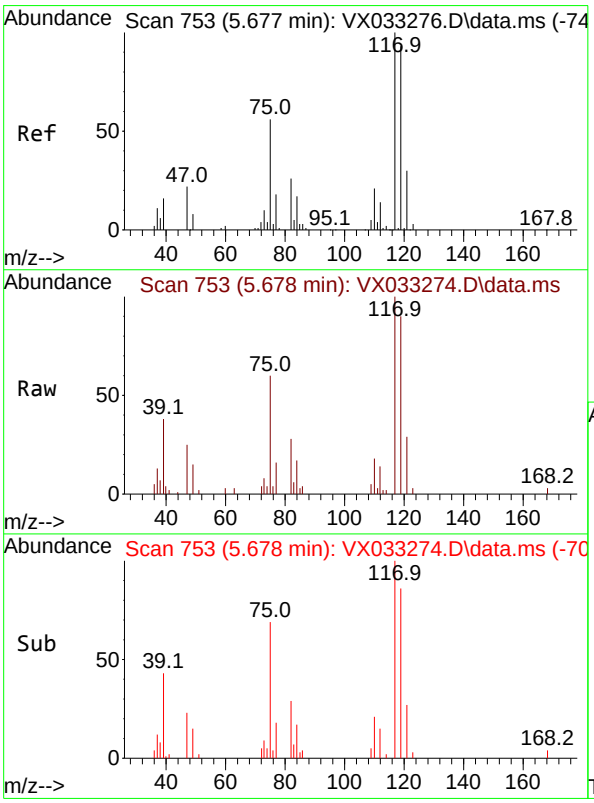
Ion	Ratio	Lower	Upper
43	100		
61	13.9	11.5	17.3
70	9.7	9.1	13.7

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

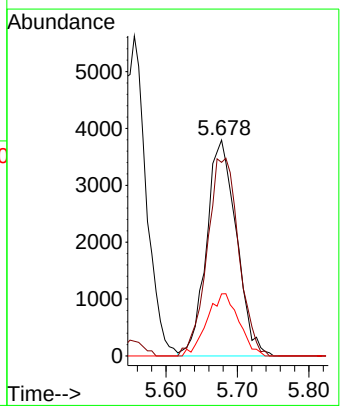


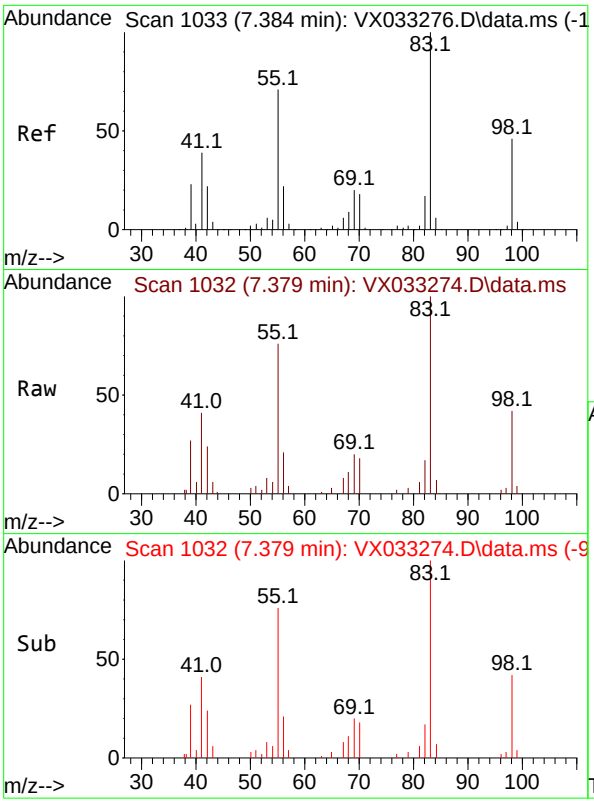


#38
Carbon Tetrachloride
Concen: 4.806 ug/l
RT: 5.678 min Scan# 753
Delta R.T. -0.006 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion:117 Resp: 11021

Ion	Ratio	Lower	Upper
117	100		
119	89.7	77.2	115.8
121	28.8	25.8	38.6

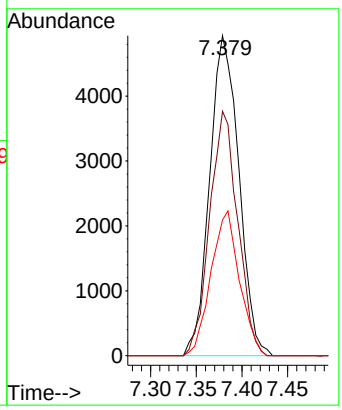




#39
Methylcyclohexane
Concen: 4.646 ug/l
RT: 7.379 min Scan# 1
Delta R.T. -0.006 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion: 83 Resp: 1095

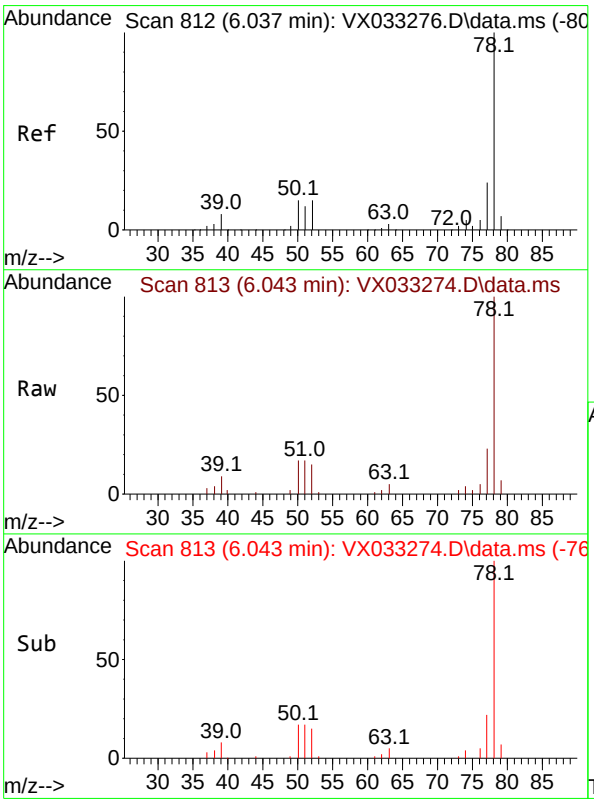
Ion	Ratio	Lower	Upper
83	100		
55	76.4	58.4	87.6
98	42.4	37.2	55.8



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

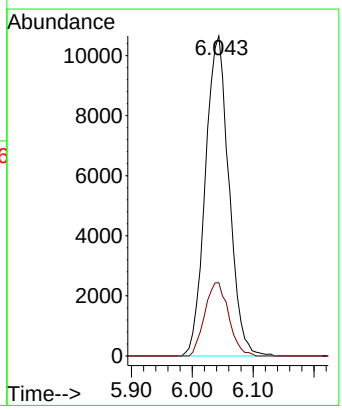
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

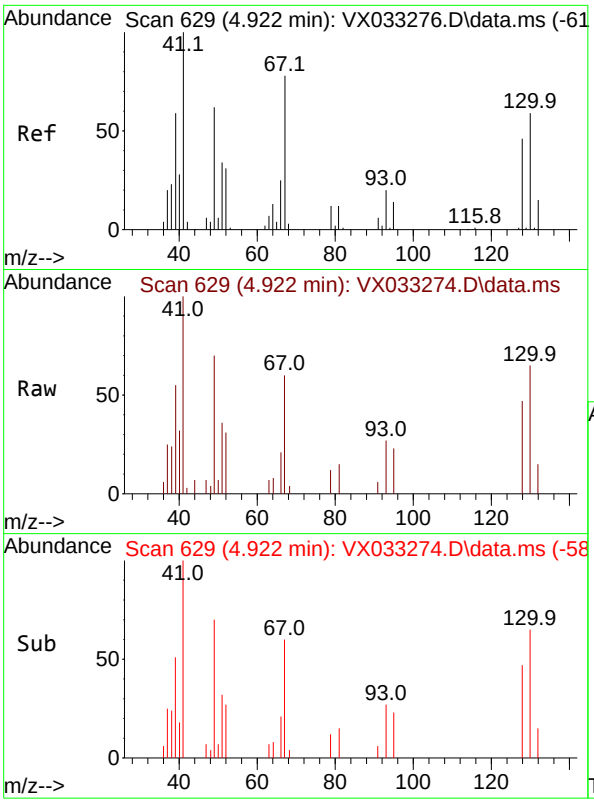


#40
Benzene
Concen: 4.940 ug/l
RT: 6.043 min Scan# 813
Delta R.T. 0.006 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion: 78 Resp: 28636

Ion	Ratio	Lower	Upper
78	100		
77	22.9	19.0	28.4

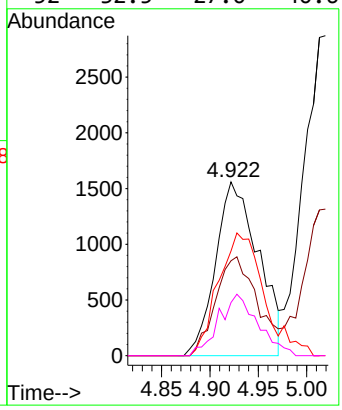




#41
Methacrylonitrile
Concen: 4.724 ug/l
RT: 4.922 min Scan# 6
Delta R.T. -0.000 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion: 41 Resp: 479

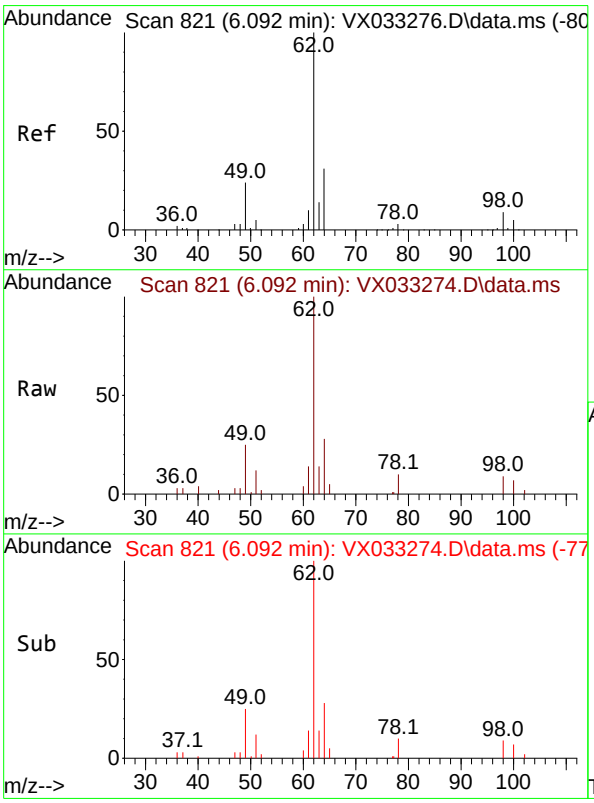
Ion	Ratio	Lower	Upper
41	100		
39	55.5	47.5	71.3
67	75.1	60.5	90.7
52	32.5	27.0	40.6



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

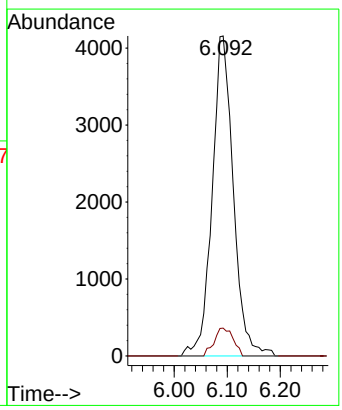
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

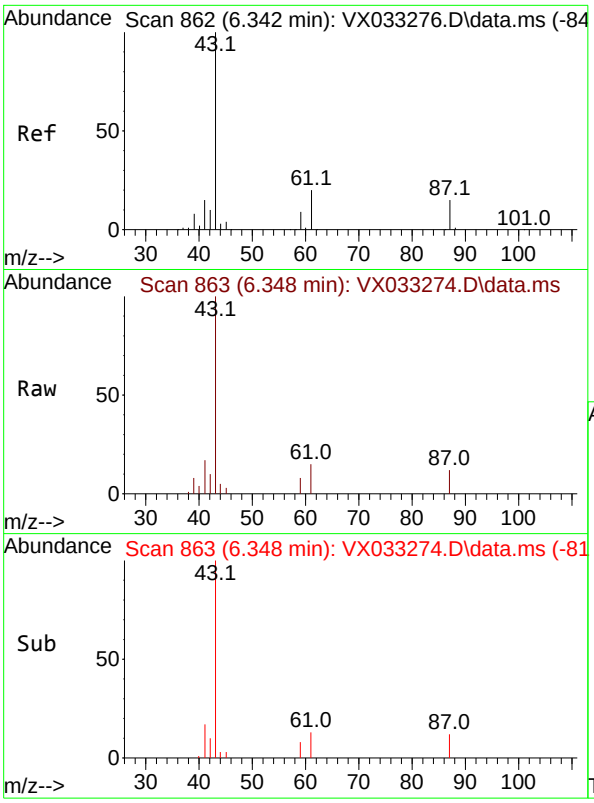


#42
1,2-Dichloroethane
Concen: 4.944 ug/l
RT: 6.092 min Scan# 821
Delta R.T. 0.006 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion: 62 Resp: 11537

Ion	Ratio	Lower	Upper
62	100		
98	7.8	0.0	16.0

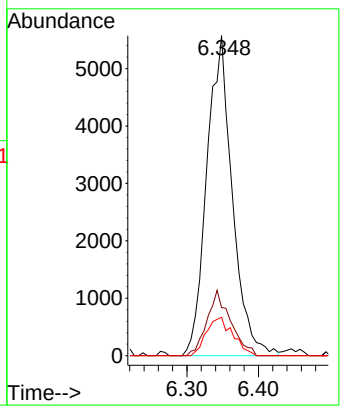




#43
Isopropyl Acetate
Concen: 4.641 ug/l
RT: 6.348 min Scan# 8
Delta R.T. 0.006 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion: 43 Resp: 1384

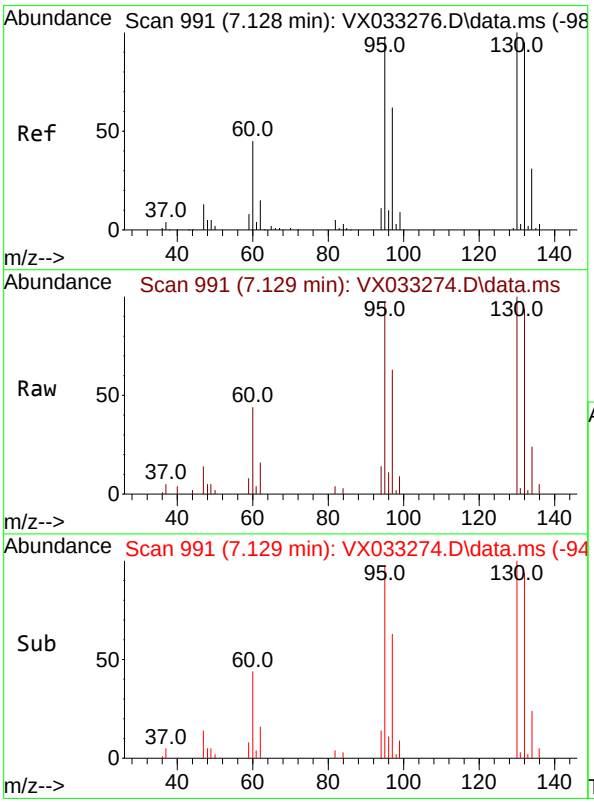
Ion	Ratio	Lower	Upper
43	100		
61	18.9	15.4	23.0
87	12.4	10.8	16.2



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

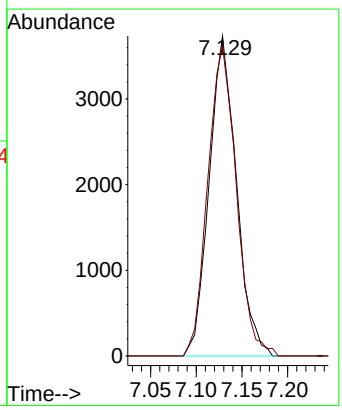
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

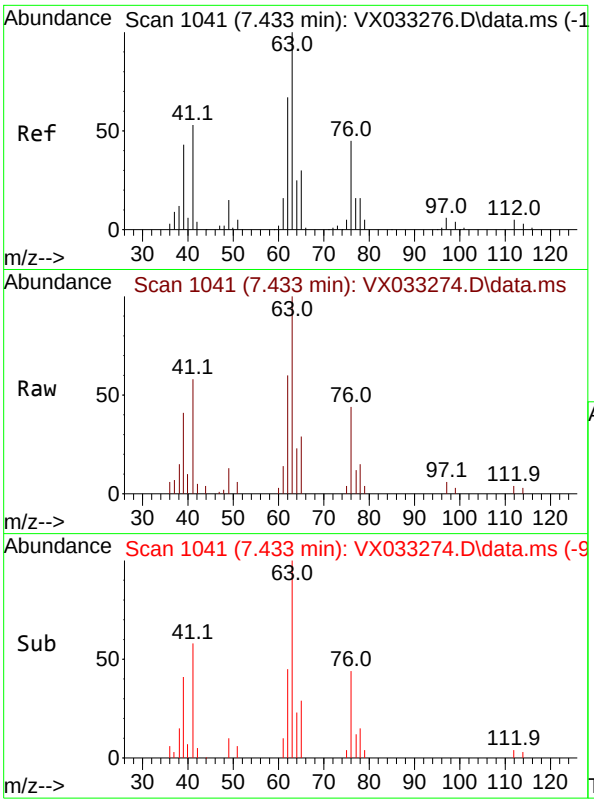


#44
Trichloroethene
Concen: 4.754 ug/l
RT: 7.129 min Scan# 991
Delta R.T. -0.000 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion:130 Resp: 7732

Ion	Ratio	Lower	Upper
130	100		
95	96.9	0.0	195.2

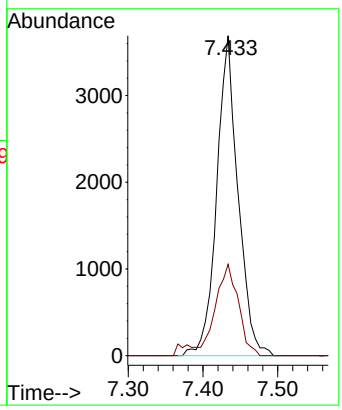




#45
1,2-Dichloropropane
Concen: 5.109 ug/l
RT: 7.433 min Scan# 1
Delta R.T. -0.001 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion: 63 Resp: 731

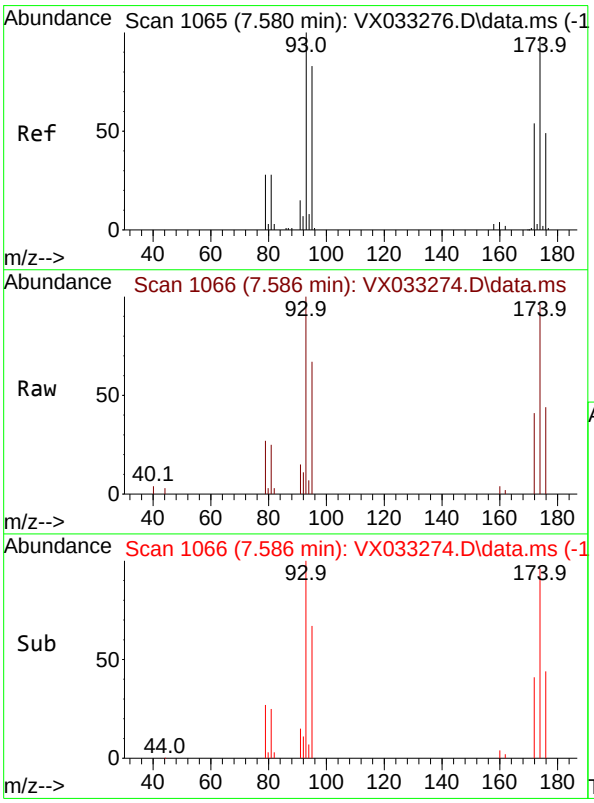
Ion	Ratio	Lower	Upper
63	100		
65	28.6	24.6	36.8



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

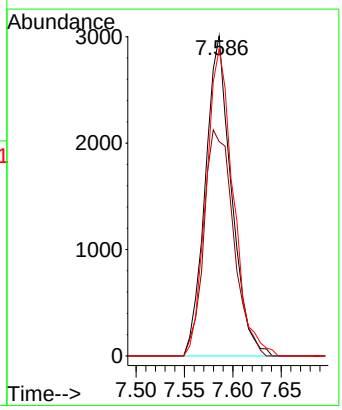
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

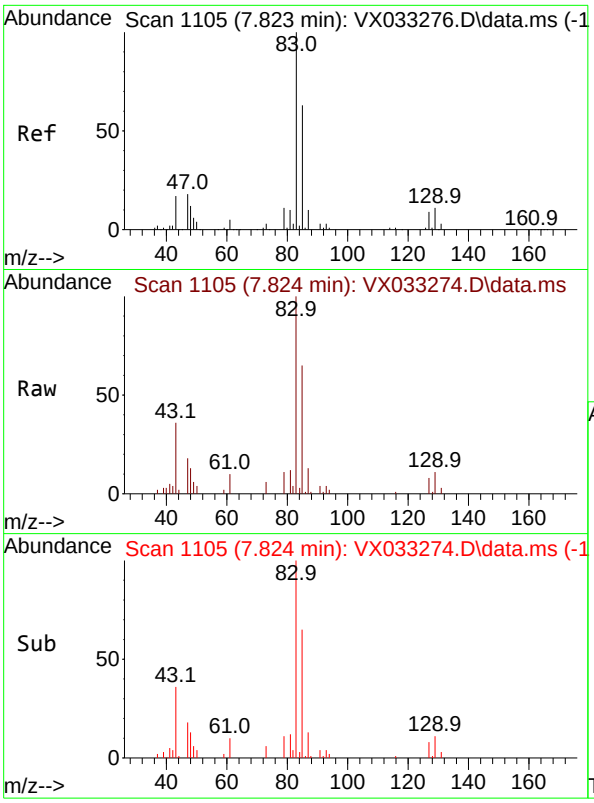


#46
Dibromomethane
Concen: 5.047 ug/l
RT: 7.586 min Scan# 1066
Delta R.T. 0.006 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion: 93 Resp: 5641

Ion	Ratio	Lower	Upper
93	100		
95	79.9	65.8	98.8
174	99.7	79.8	119.6

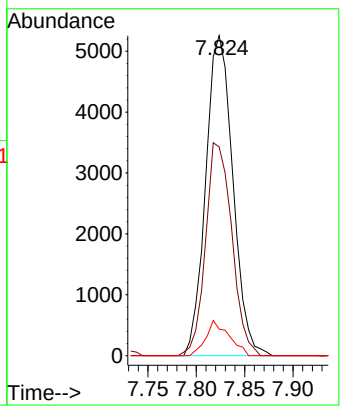




#47
Bromodichloromethane
Concen: 4.757 ug/l
RT: 7.824 min Scan# 11
Delta R.T. -0.000 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion: 83 Resp: 1027

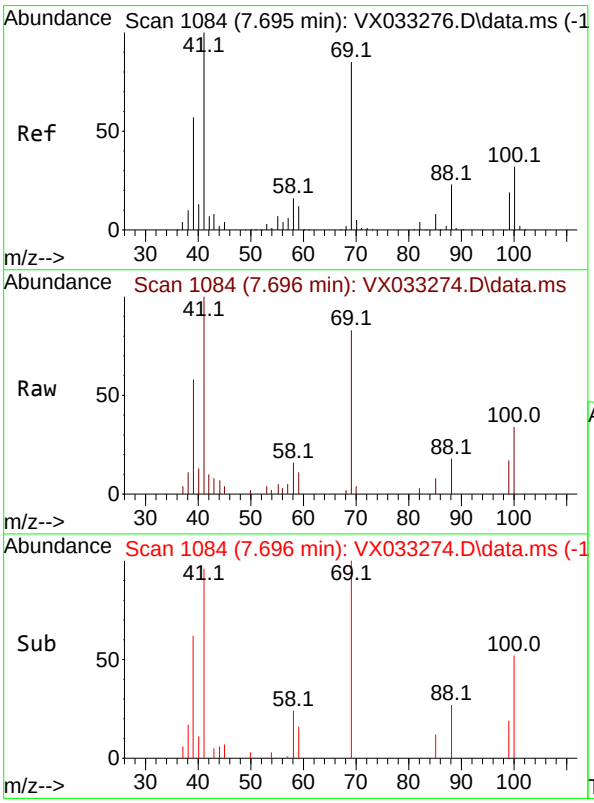
Ion	Ratio	Lower	Upper
83	100		
85	65.2	52.2	78.4
127	8.3	7.4	11.2



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

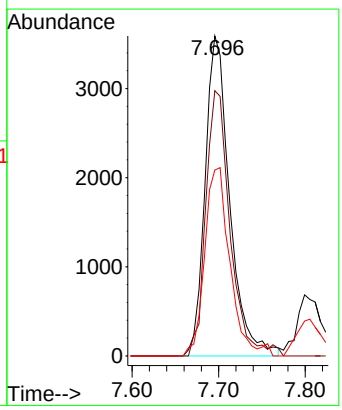
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

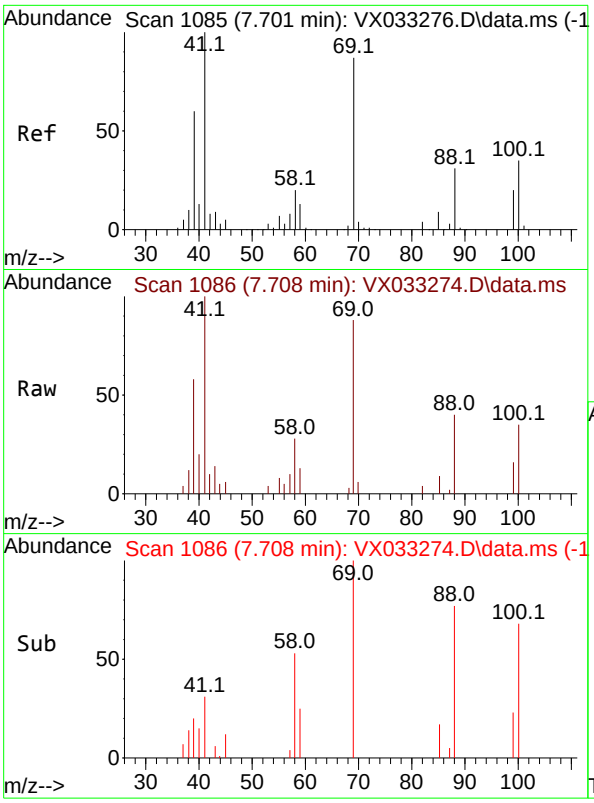


#48
Methyl methacrylate
Concen: 4.617 ug/l
RT: 7.696 min Scan# 1084
Delta R.T. -0.000 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion: 41 Resp: 7089

Ion	Ratio	Lower	Upper
41	100		
69	82.0	65.1	97.7
39	60.3	51.9	77.9





#49
1,4-Dioxane
Concen: 117.505 ug/l
RT: 7.708 min Scan# 1
Delta R.T. 0.037 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

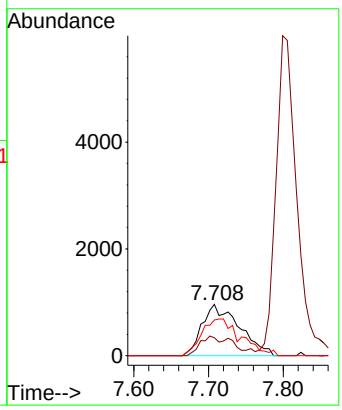
Tgt Ion: 88 Resp: 332

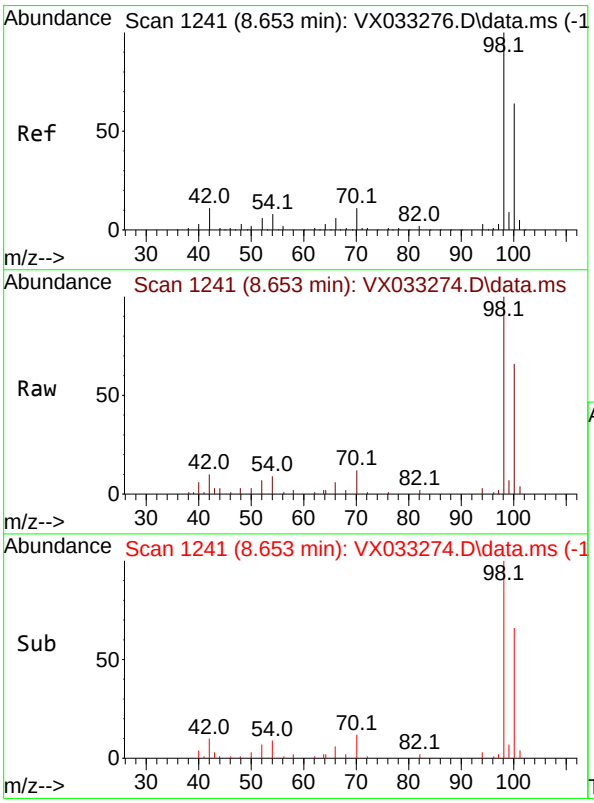
Ion	Ratio	Lower	Upper
88	100		
43	18.7	26.6	39.8#
58	75.0	51.7	77.5

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

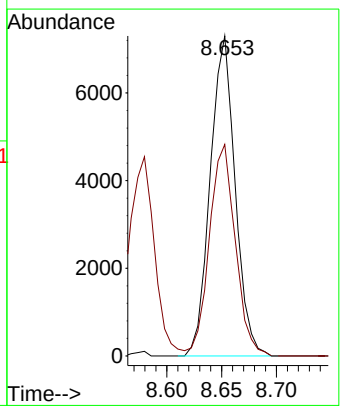


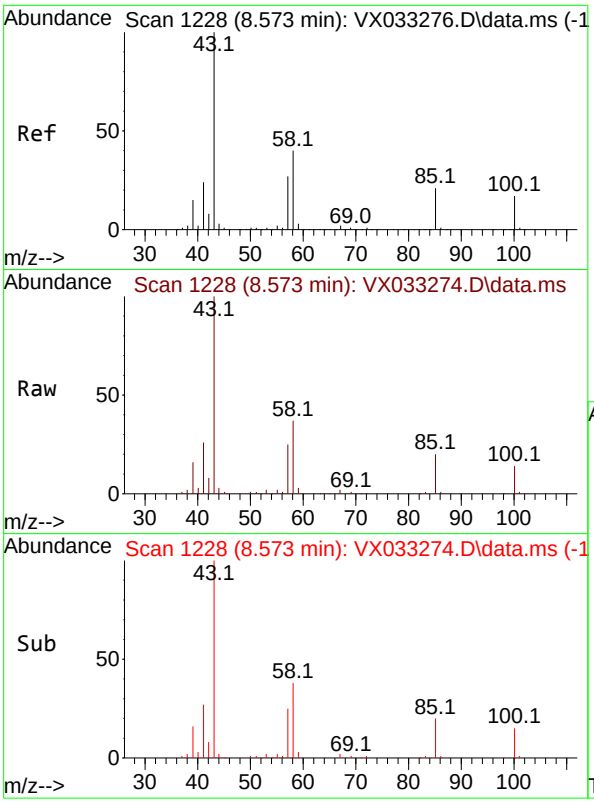


#50
Toluene-d8
Concen: 2.749 ug/l
RT: 8.653 min Scan# 1241
Delta R.T. -0.000 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion: 98 Resp: 11540

Ion	Ratio	Lower	Upper
98	100		
100	68.8	50.9	76.3

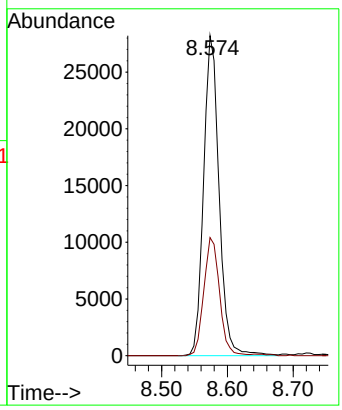




#51
4-Methyl-2-Pentanone
Concen: 25.160 ug/l
RT: 8.573 min Scan# 1
Delta R.T. -0.001 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion: 43 Resp: 4630

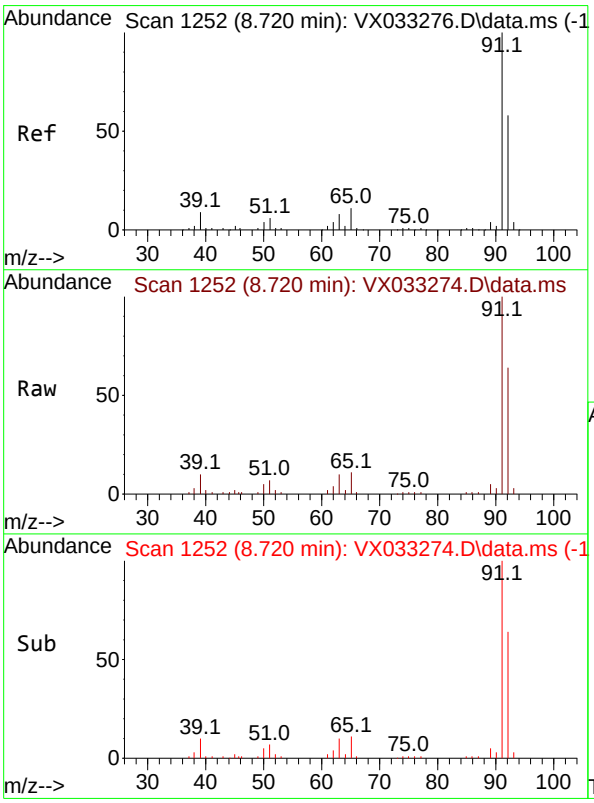
Ion	Ratio	Lower	Upper
43	100		
58	37.4	30.9	46.3



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

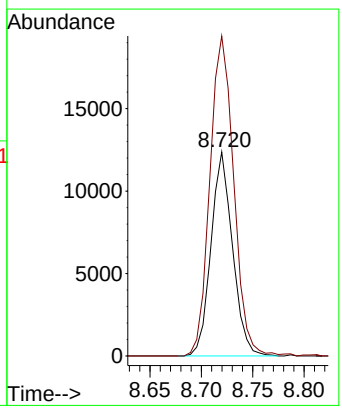
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

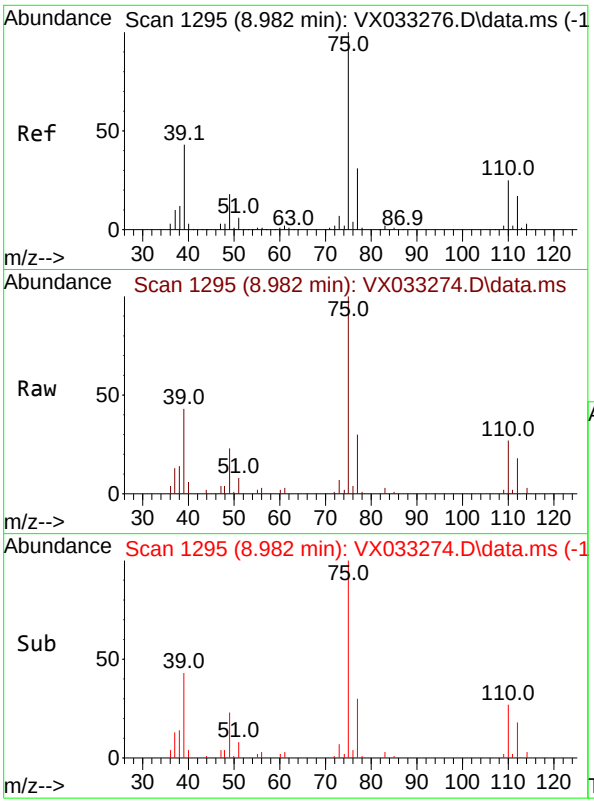


#52
Toluene
Concen: 4.725 ug/l
RT: 8.720 min Scan# 1252
Delta R.T. -0.000 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion: 92 Resp: 18018

Ion	Ratio	Lower	Upper
92	100		
91	173.6	138.3	207.5

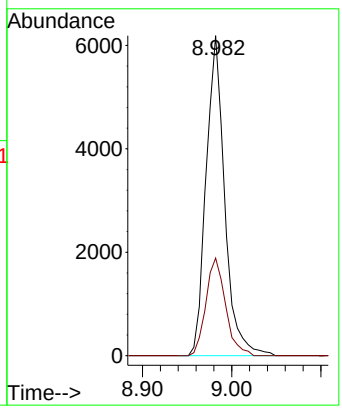




#53
t-1,3-Dichloropropene
Concen: 4.224 ug/l m
RT: 8.982 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion: 75 Resp: 895

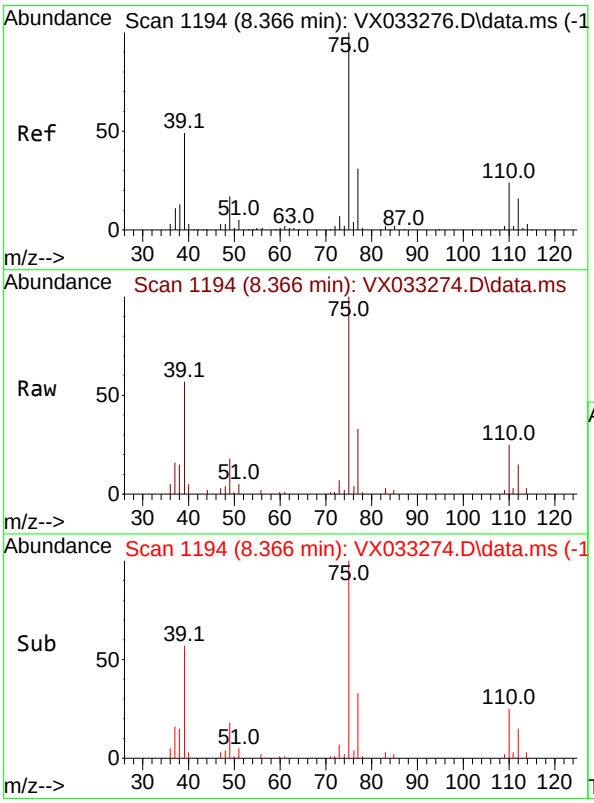
Ion	Ratio	Lower	Upper
75	100		
77	30.5	25.1	37.7



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

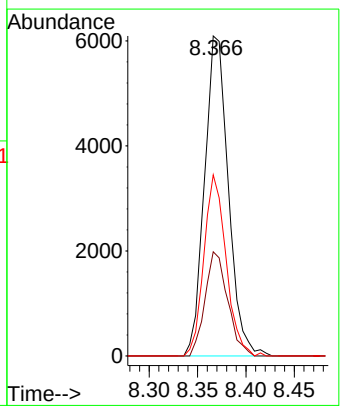
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

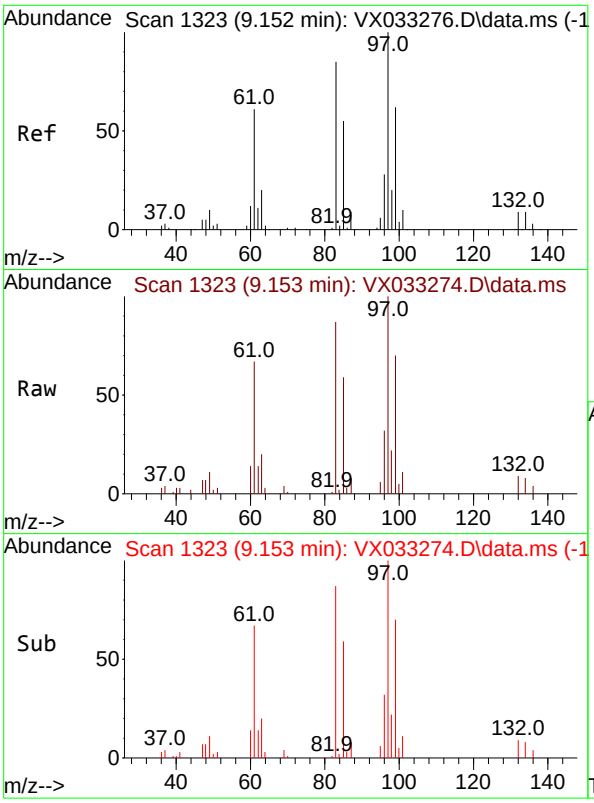


#54
cis-1,3-Dichloropropene
Concen: 4.494 ug/l
RT: 8.366 min Scan# 1194
Delta R.T. 0.000 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion: 75 Resp: 10463

Ion	Ratio	Lower	Upper
75	100		
77	32.6	25.1	37.7
39	56.6	45.5	68.3

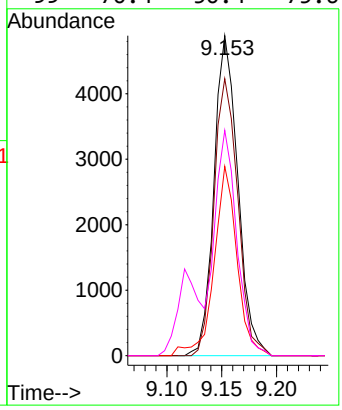




#55
1,1,2-Trichloroethane
Concen: 4.764 ug/l
RT: 9.153 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion: 97 Resp: 739

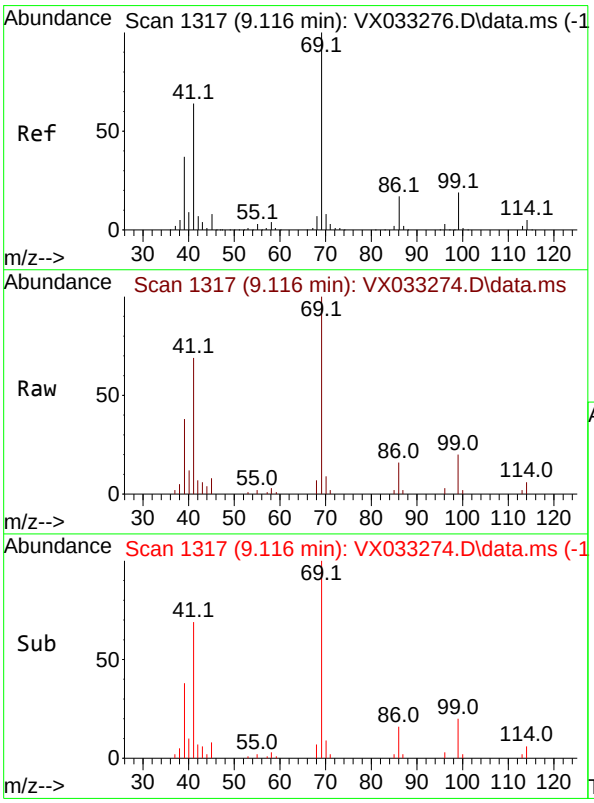
Ion	Ratio	Lower	Upper
97	100		
83	86.5	68.1	102.1
85	59.2	43.3	64.9
99	70.4	50.4	75.6



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

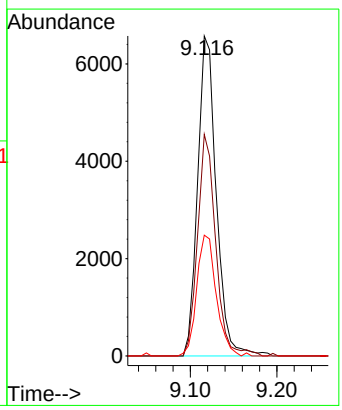
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

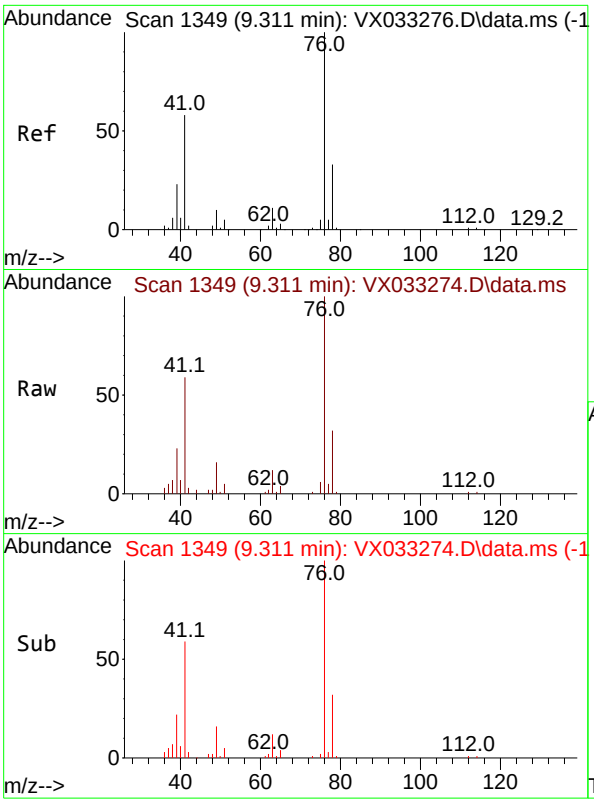


#56
Ethyl methacrylate
Concen: 4.610 ug/l
RT: 9.116 min Scan# 1317
Delta R.T. 0.000 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion: 69 Resp: 9861

Ion	Ratio	Lower	Upper
69	100		
41	67.2	54.3	81.5
39	39.7	35.2	52.8

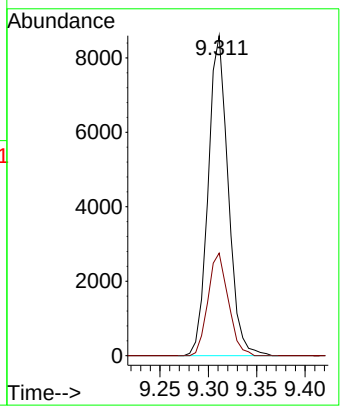




#57
1,3-Dichloropropane
Concen: 4.938 ug/l
RT: 9.311 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion: 76 Resp: 1237

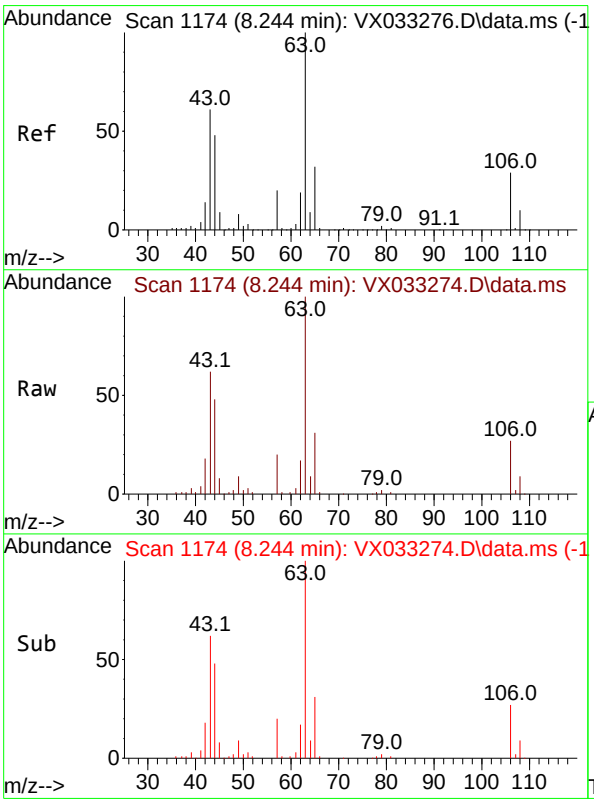
Ion	Ratio	Lower	Upper
76	100		
78	32.6	26.0	39.0



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

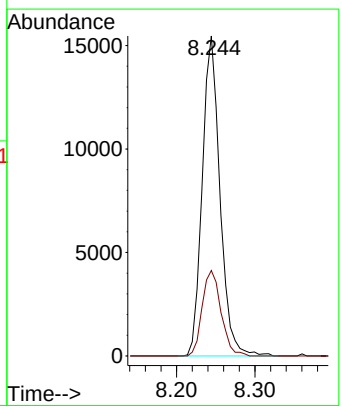
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

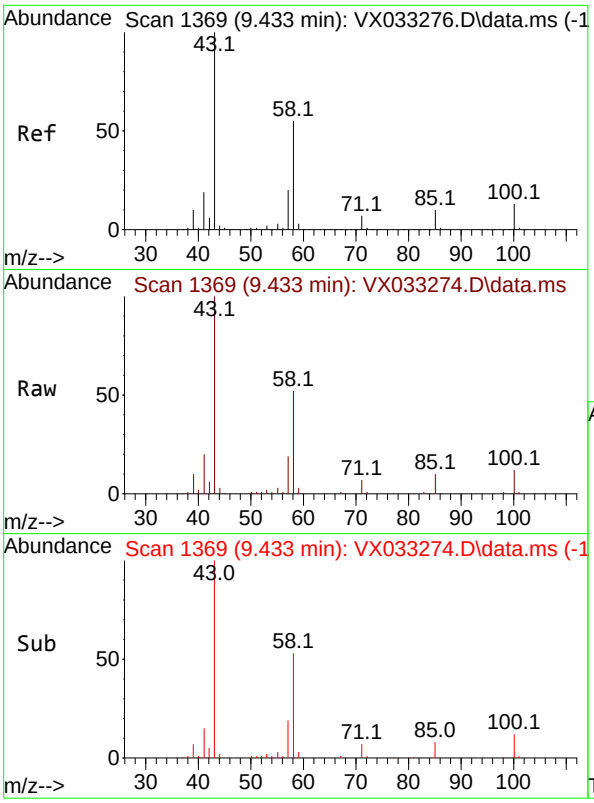


#58
2-Chloroethyl Vinyl ether
Concen: 23.860 ug/l
RT: 8.244 min Scan# 1174
Delta R.T. 0.000 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion: 63 Resp: 24237

Ion	Ratio	Lower	Upper
63	100		
106	28.3	23.3	34.9

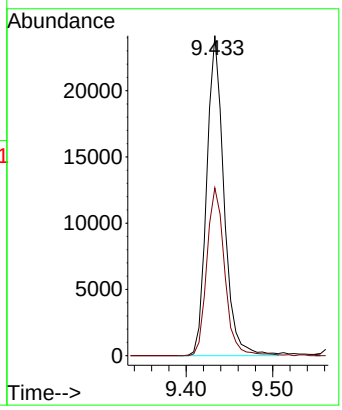




#59
2-Hexanone
Concen: 24.527 ug/l
RT: 9.433 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion: 43 Resp: 3334

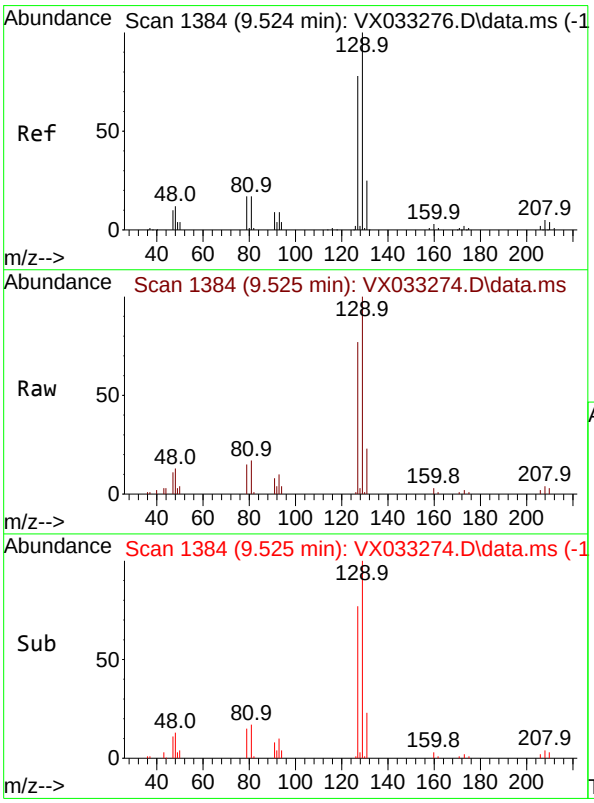
Ion	Ratio	Lower	Upper
43	100		
58	54.4	26.5	79.5



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

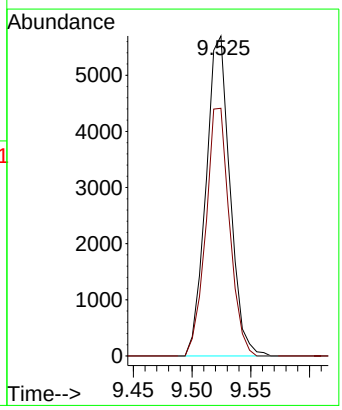
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

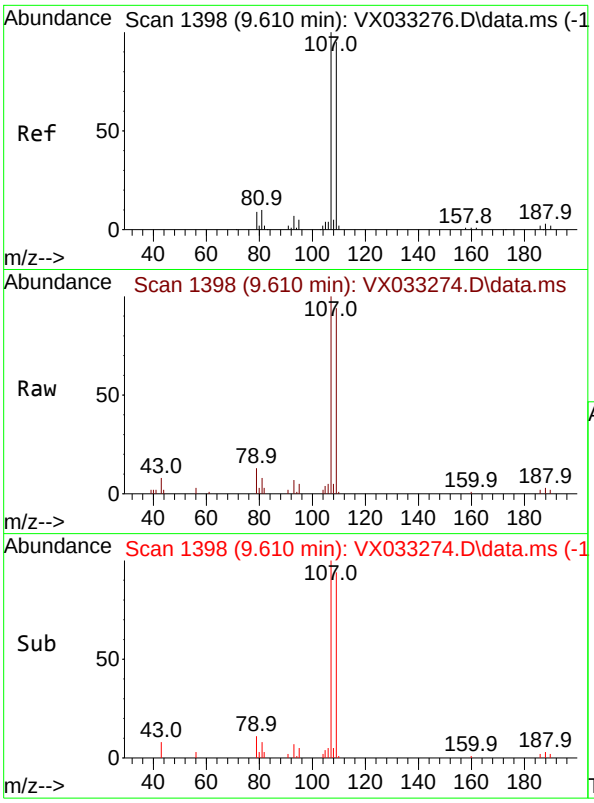


#60
Dibromochloromethane
Concen: 4.845 ug/l
RT: 9.525 min Scan# 1384
Delta R.T. -0.000 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion:129 Resp: 8098

Ion	Ratio	Lower	Upper
129	100		
127	76.5	38.6	115.8





#61
1,2-Dibromoethane
Concen: 4.829 ug/l
RT: 9.610 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

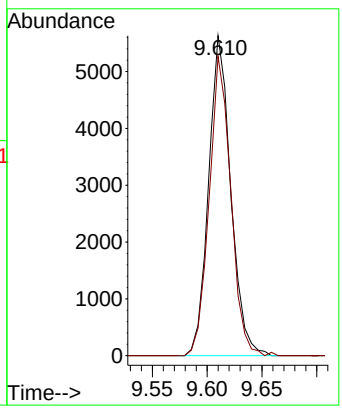
Tgt Ion:107 Resp: 791

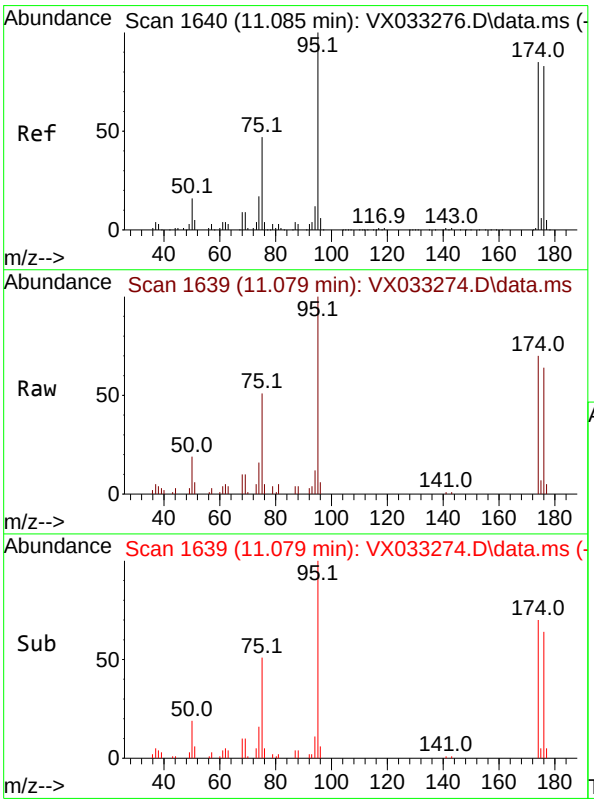
Ion	Ratio	Lower	Upper
107	100		
109	91.3	76.0	114.0

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

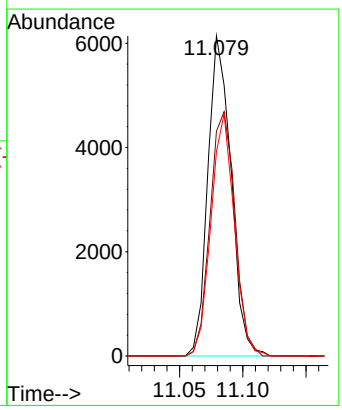


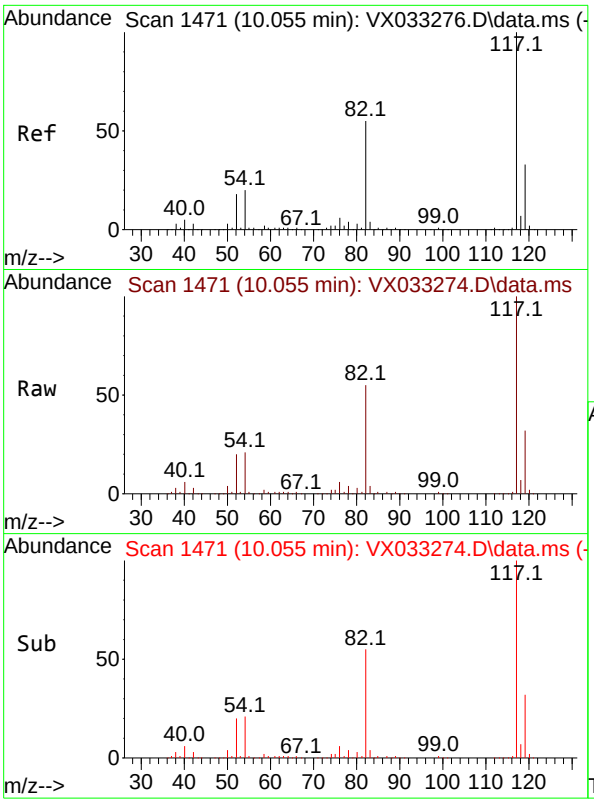


#62
4-Bromofluorobenzene
Concen: 4.600 ug/l
RT: 11.079 min Scan# 1639
Delta R.T. 0.000 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion: 95 Resp: 7812

Ion	Ratio	Lower	Upper
95	100		
174	82.3	0.0	164.0
176	76.3	0.0	154.4

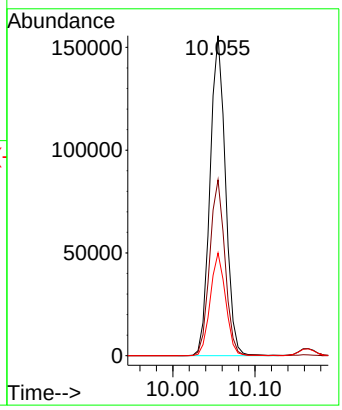




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.055 min Scan# 14
Delta R.T. -0.000 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion:117 Resp: 20289

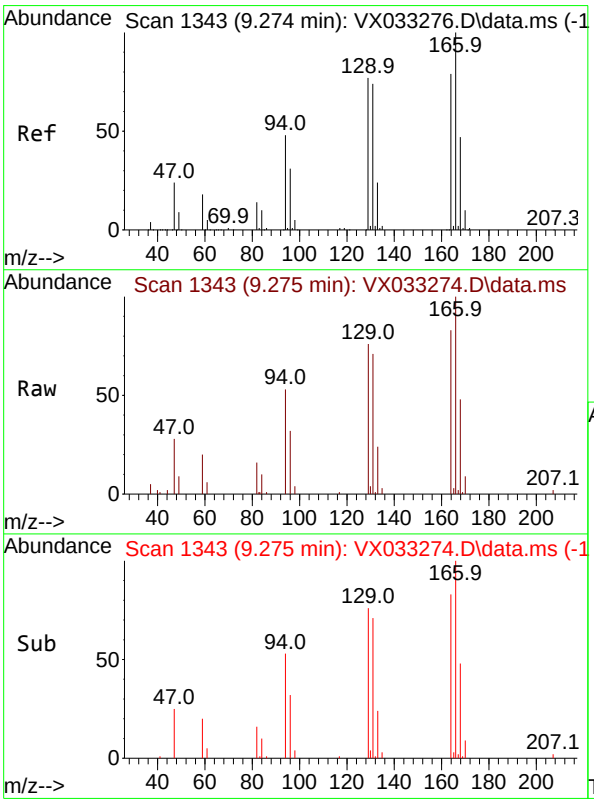
Ion	Ratio	Lower	Upper
117	100		
82	55.0	44.3	66.5
119	32.1	25.7	38.5



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

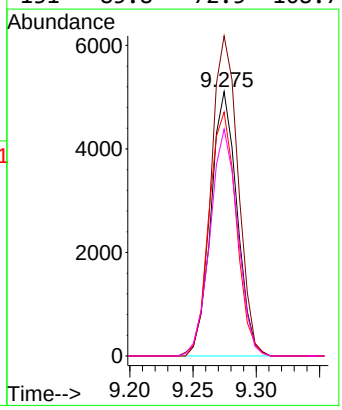
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

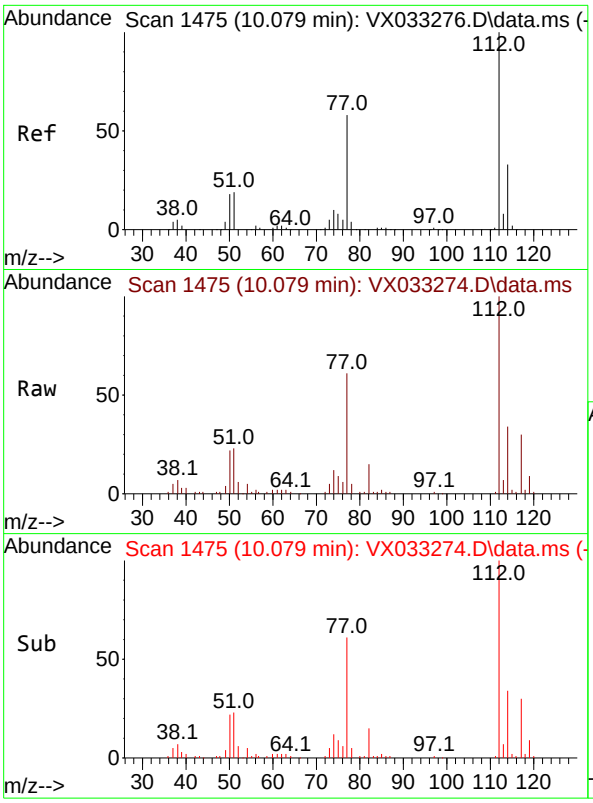


#64
Tetrachloroethene
Concen: 5.087 ug/l
RT: 9.275 min Scan# 1343
Delta R.T. -0.000 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion:164 Resp: 7306

Ion	Ratio	Lower	Upper
164	100		
166	121.0	105.4	158.2
129	92.2	78.2	117.2
131	85.8	72.5	108.7





#65
Chlorobenzene
Concen: 4.897 ug/l
RT: 10.079 min Scan# 14
Delta R.T. 0.000 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

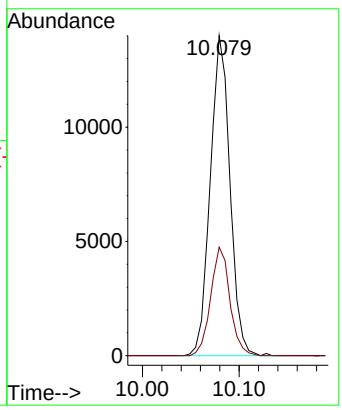
Tgt Ion:112 Resp: 1980

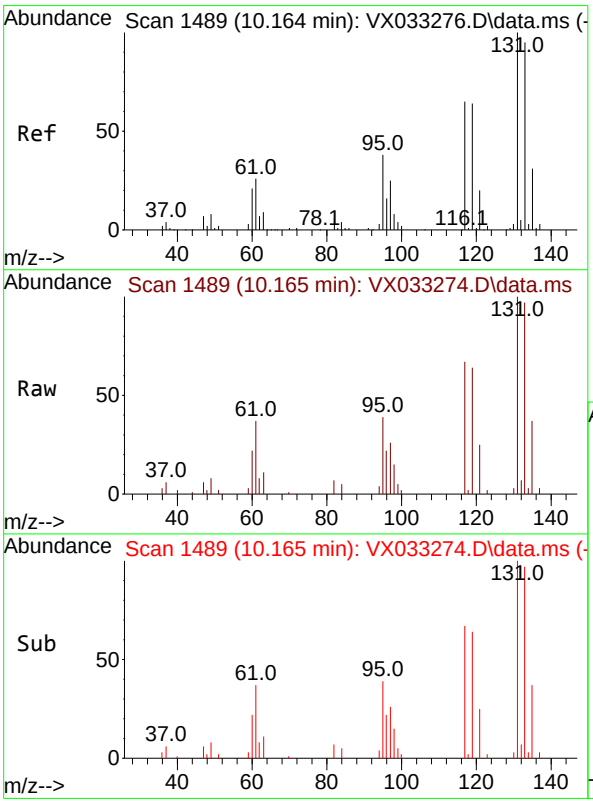
Ion	Ratio	Lower	Upper
112	100		
114	33.9	25.4	38.2

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

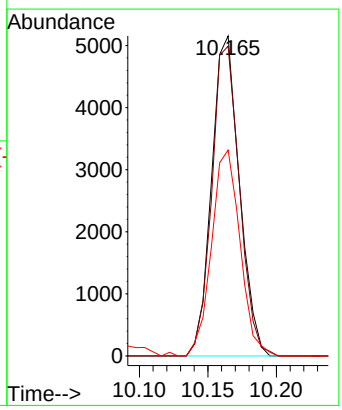


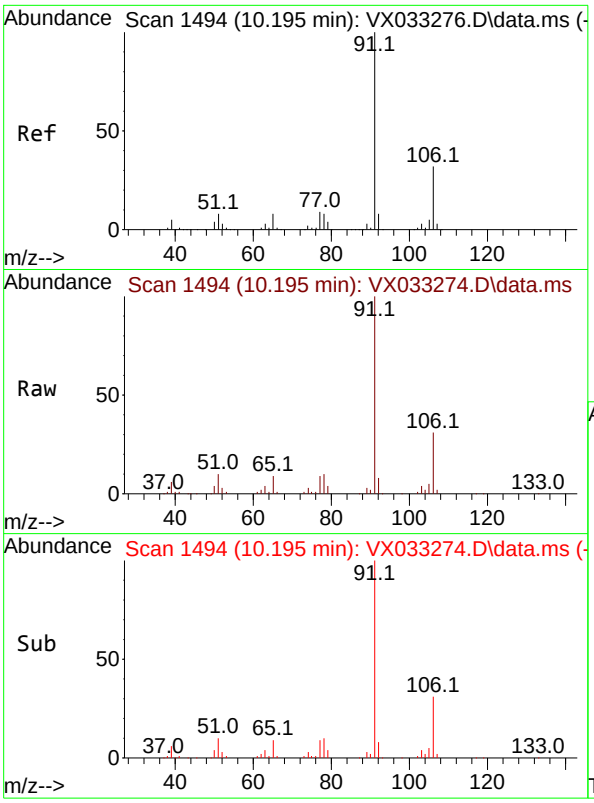


#66
1,1,1,2-Tetrachloroethane
Concen: 4.894 ug/l
RT: 10.165 min Scan# 1489
Delta R.T. -0.000 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion:131 Resp: 7253

Ion	Ratio	Lower	Upper
131	100		
133	96.9	47.6	142.9
119	66.0	32.4	97.0





#67
Ethyl Benzene
Concen: 4.902 ug/l
RT: 10.195 min Scan# 14
Delta R.T. 0.000 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

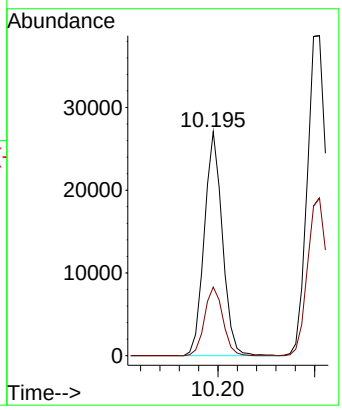
Tgt Ion: 91 Resp: 3517

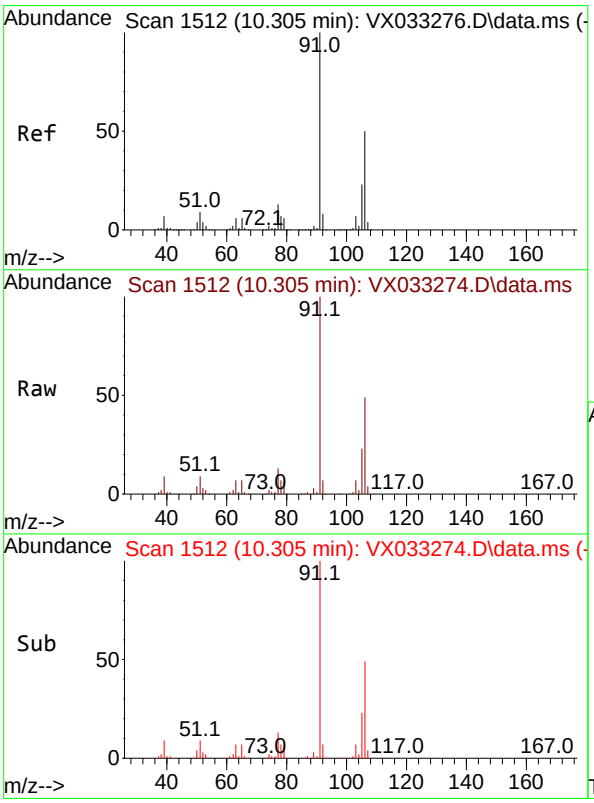
Ion	Ratio	Lower	Upper
91	100		
106	30.6	25.0	37.6

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

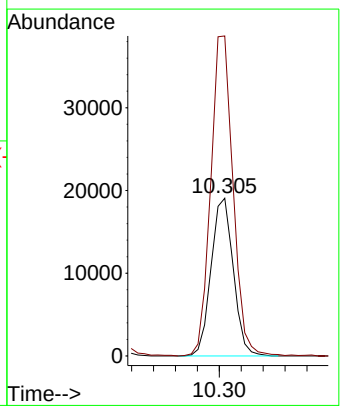


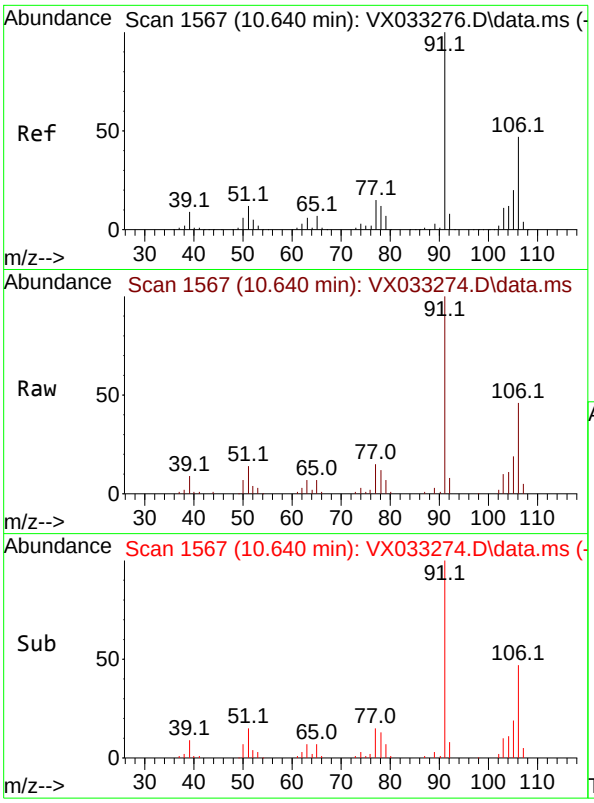


#68
m/p-Xylenes
Concen: 9.557 ug/l
RT: 10.305 min Scan# 1512
Delta R.T. -0.000 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion:106 Resp: 26854

Ion	Ratio	Lower	Upper
106	100		
91	204.2	164.5	246.7

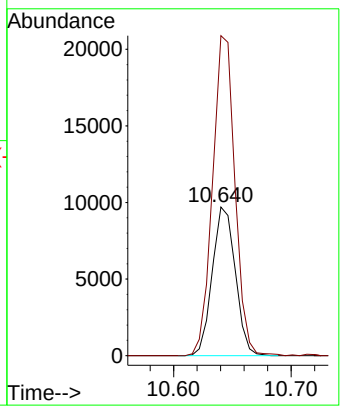




#69
o-Xylene
Concen: 4.868 ug/l
RT: 10.640 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion:106 Resp: 1323

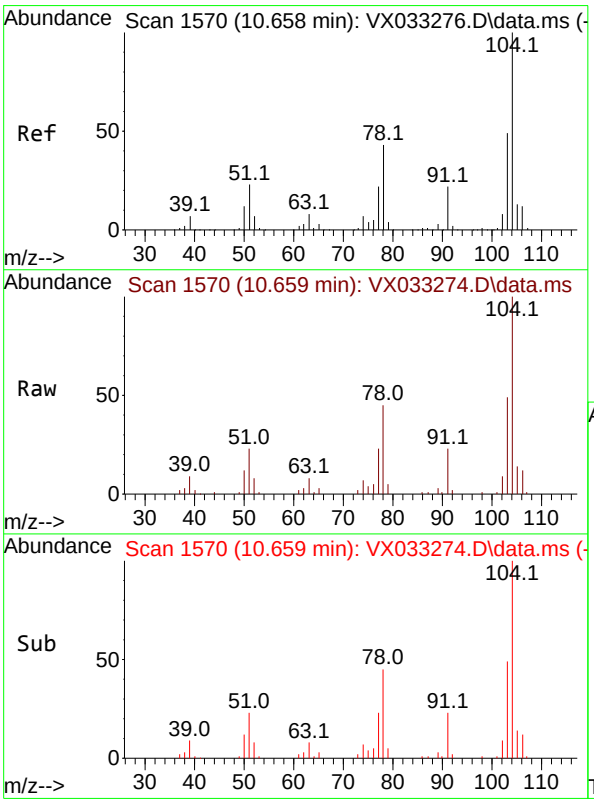
Ion	Ratio	Lower	Upper
106	100		
91	209.4	109.2	327.6



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

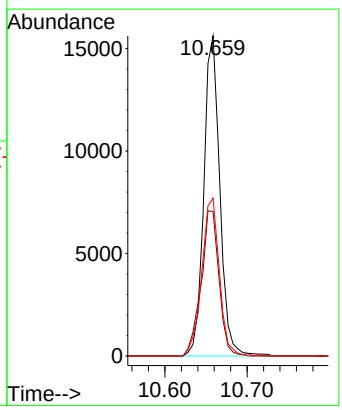
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

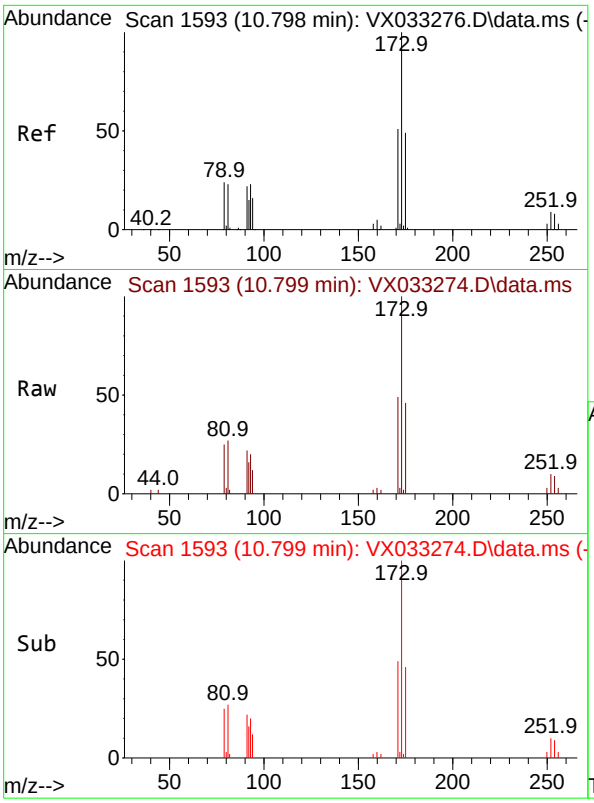


#70
Styrene
Concen: 4.756 ug/l
RT: 10.659 min Scan# 1570
Delta R.T. -0.001 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion:104 Resp: 21152

Ion	Ratio	Lower	Upper
104	100		
78	50.7	41.8	62.8
103	53.9	44.5	66.7





#71
Bromoform
Concen: 4.886 ug/l
RT: 10.799 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

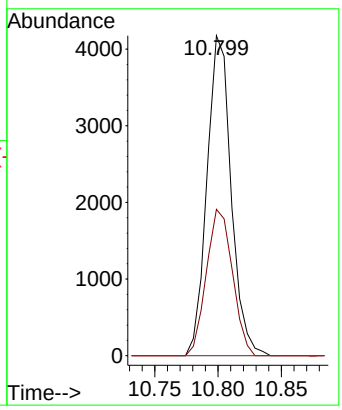
Tgt Ion:173 Resp: 555

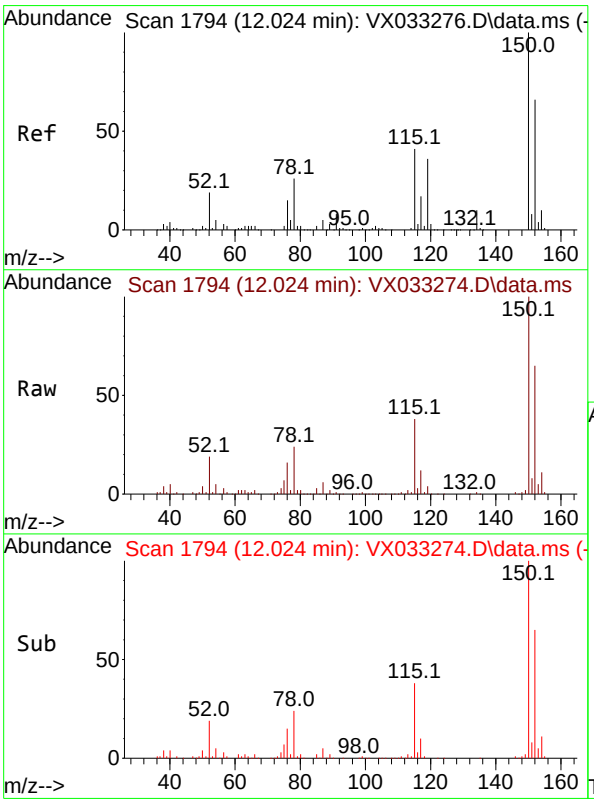
Ion	Ratio	Lower	Upper
173	100		
175	49.3	23.9	71.8
254	0.0	0.0	0.0

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

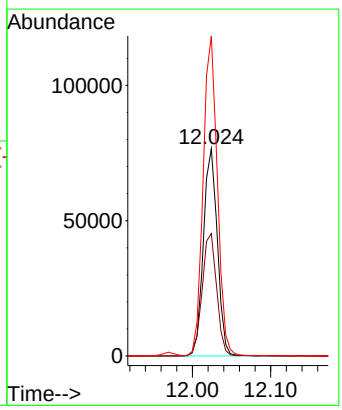


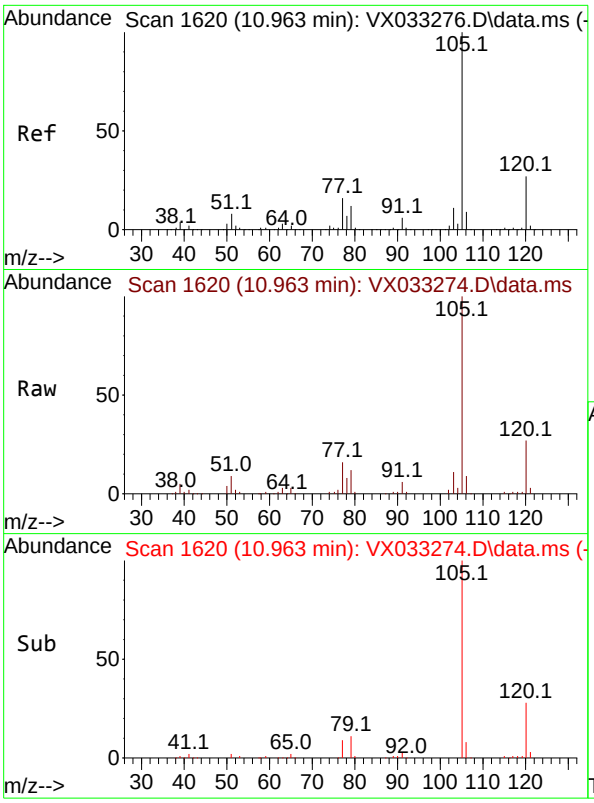


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.024 min Scan# 1794
Delta R.T. 0.000 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion:152 Resp: 94568

Ion	Ratio	Lower	Upper
152	100		
115	61.6	44.0	132.0
150	157.0	0.0	351.8

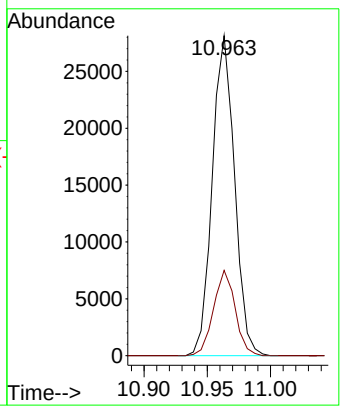




#73
Isopropylbenzene
Concen: 5.092 ug/l
RT: 10.963 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion:105 Resp: 3440

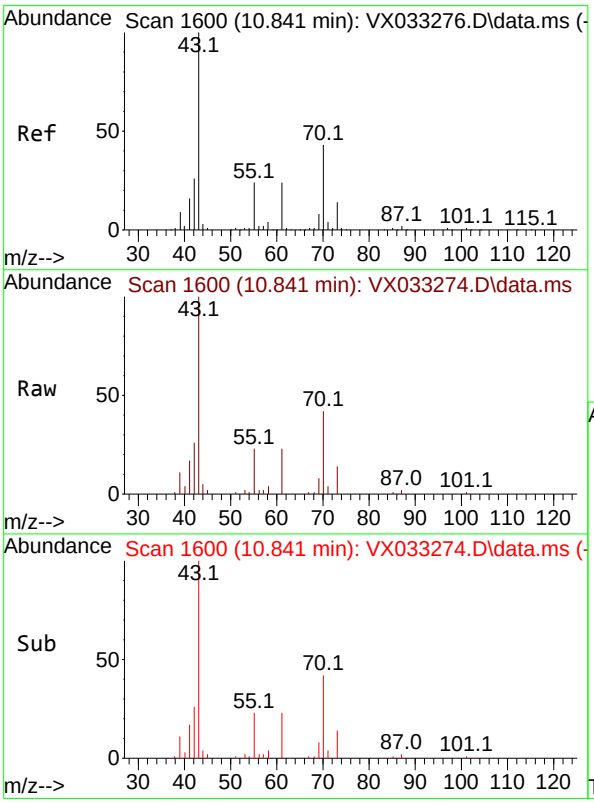
Ion	Ratio	Lower	Upper
105	100		
120	25.9	13.1	39.3



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

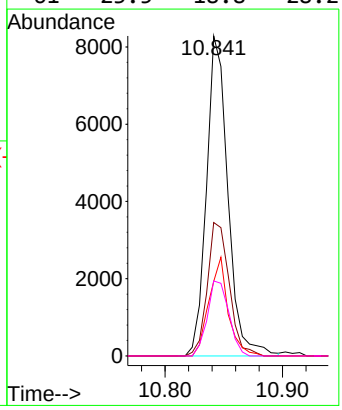
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

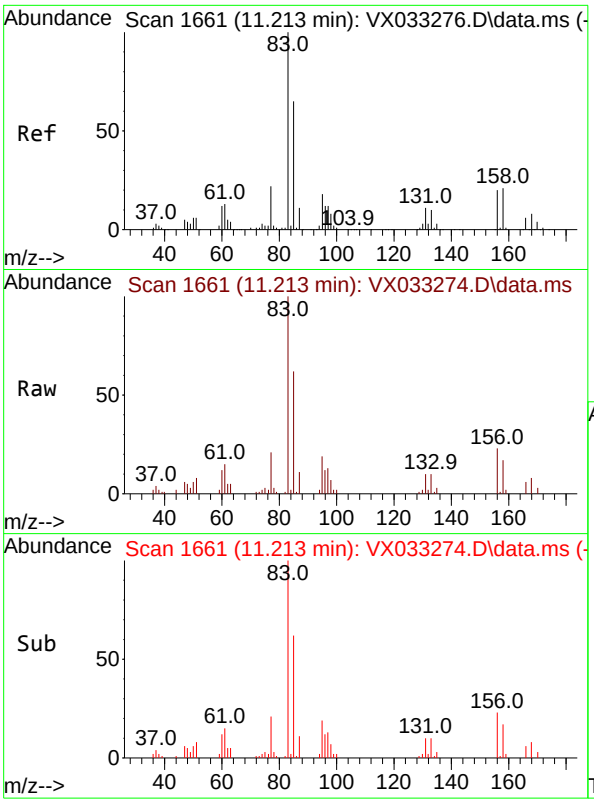


#74
N-amyl acetate
Concen: 4.566 ug/l
RT: 10.841 min Scan# 1600
Delta R.T. 0.000 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion: 43 Resp: 10497

Ion	Ratio	Lower	Upper
43	100		
70	42.7	33.6	50.4
55	27.5	19.4	29.2
61	23.5	18.8	28.2

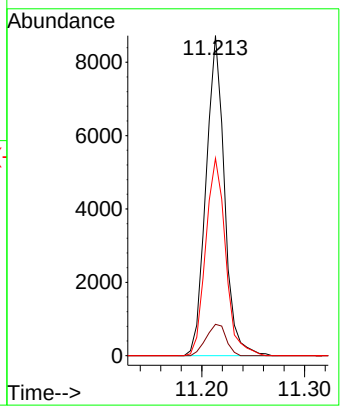




#75
1,1,2,2-Tetrachloroethane
Concen: 5.340 ug/l
RT: 11.213 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion: 83 Resp: 1089

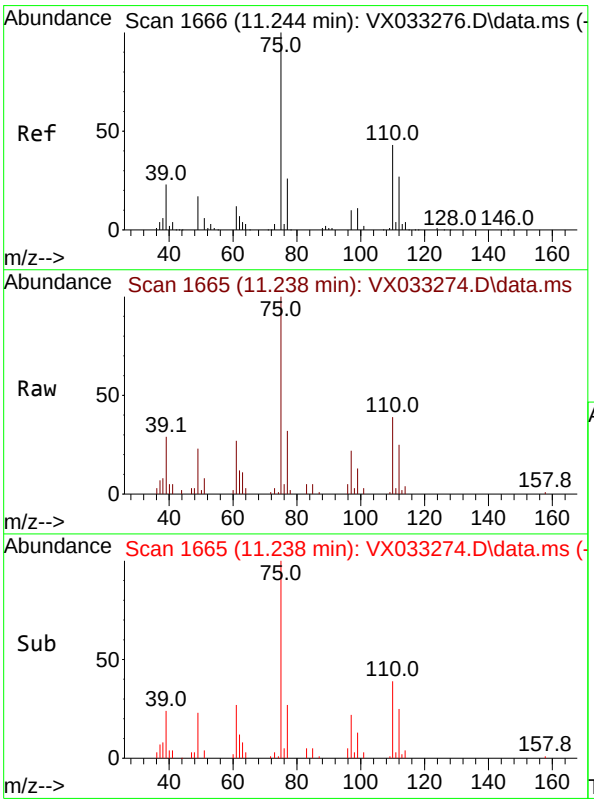
Ion	Ratio	Lower	Upper
83	100		
131	10.6	5.4	16.2
85	66.5	31.9	95.9



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

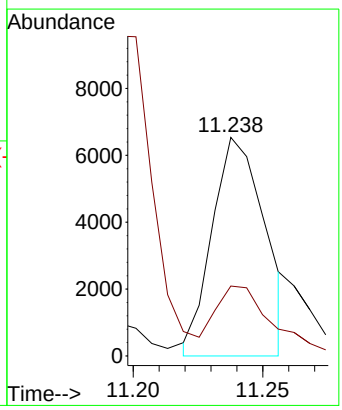
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

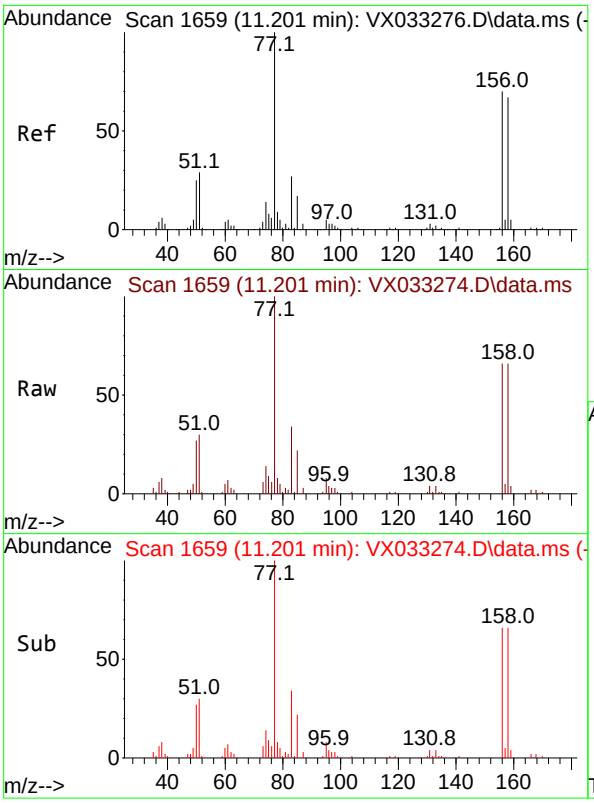


#76
1,2,3-Trichloropropane
Concen: 5.127 ug/l m
RT: 11.238 min Scan# 1665
Delta R.T. -0.006 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion: 75 Resp: 9183

Ion	Ratio	Lower	Upper
75	100		
77	36.0	20.0	60.0

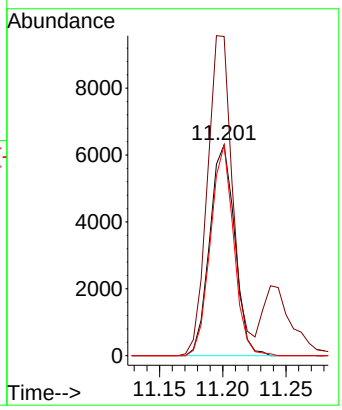




#77
Bromobenzene
Concen: 5.222 ug/l
RT: 11.201 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion:156 Resp: 867

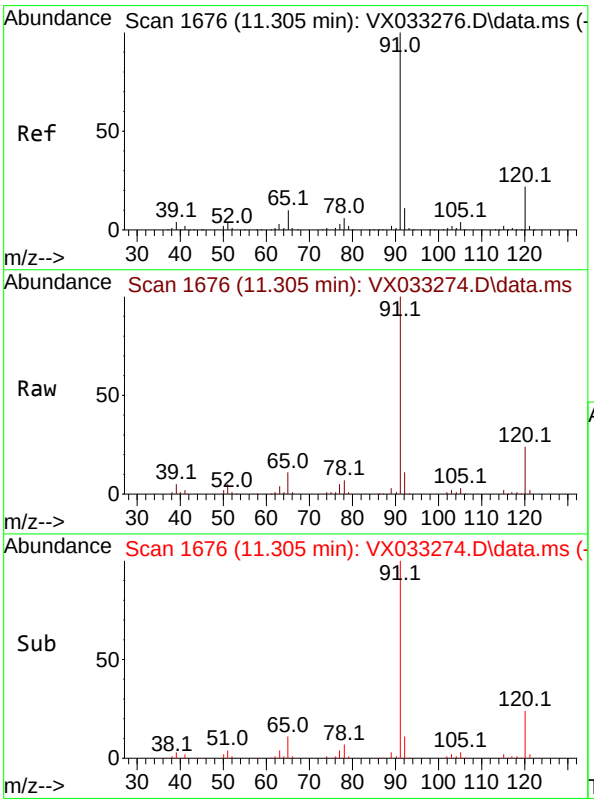
Ion	Ratio	Lower	Upper
156	100		
77	152.5	76.1	228.4
158	92.8	48.8	146.3



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

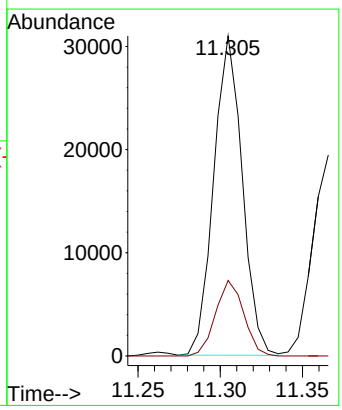
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

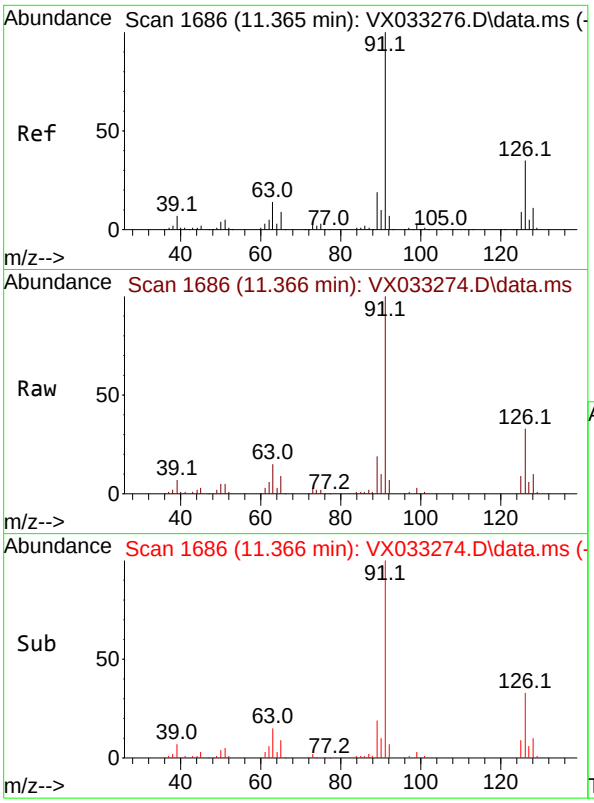


#78
n-propylbenzene
Concen: 4.834 ug/l
RT: 11.305 min Scan# 1676
Delta R.T. -0.000 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion: 91 Resp: 37347

Ion	Ratio	Lower	Upper
91	100		
120	23.4	11.6	34.8





#79
2-Chlorotoluene
Concen: 5.028 ug/l
RT: 11.366 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

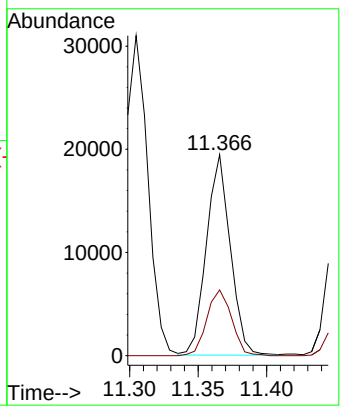
Tgt Ion: 91 Resp: 2359

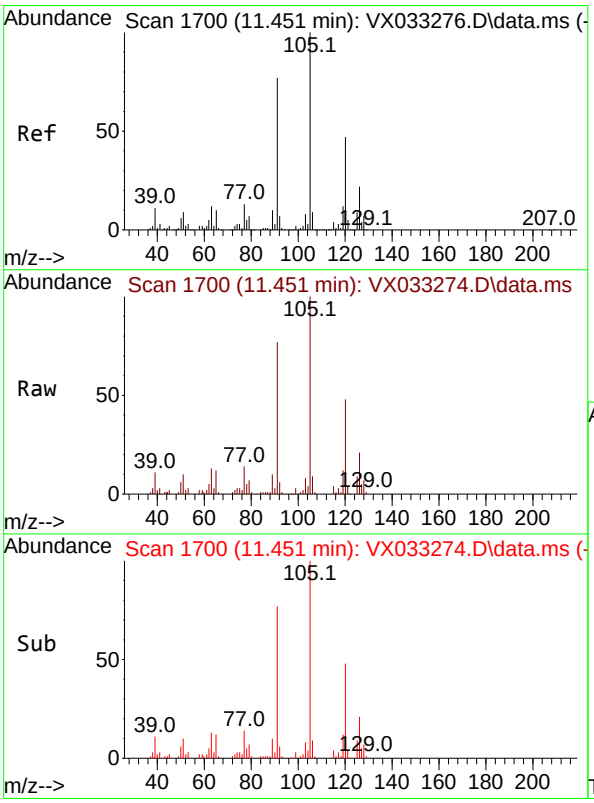
Ion	Ratio	Lower	Upper
91	100		
126	33.9	17.1	51.2

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

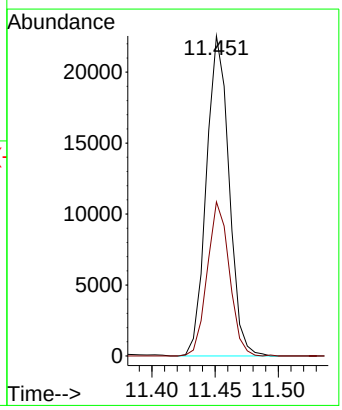


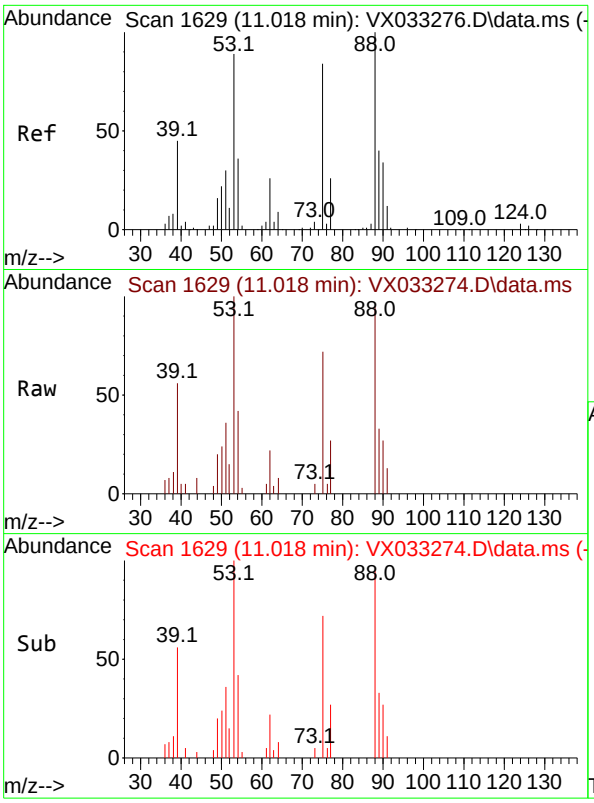


#80
1,3,5-Trimethylbenzene
Concen: 4.942 ug/l
RT: 11.451 min Scan# 1700
Delta R.T. 0.000 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion:105 Resp: 28056

Ion	Ratio	Lower	Upper
105	100		
120	46.9	23.6	71.0

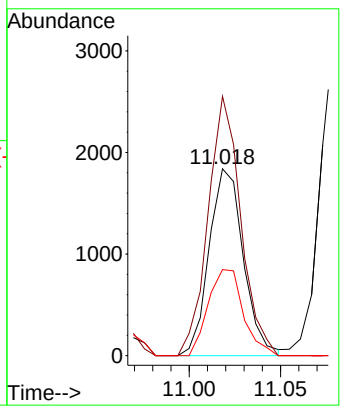




#81
trans-1,4-Dichloro-2-butene
Concen: 4.363 ug/l
RT: 11.018 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion: 75 Resp: 240

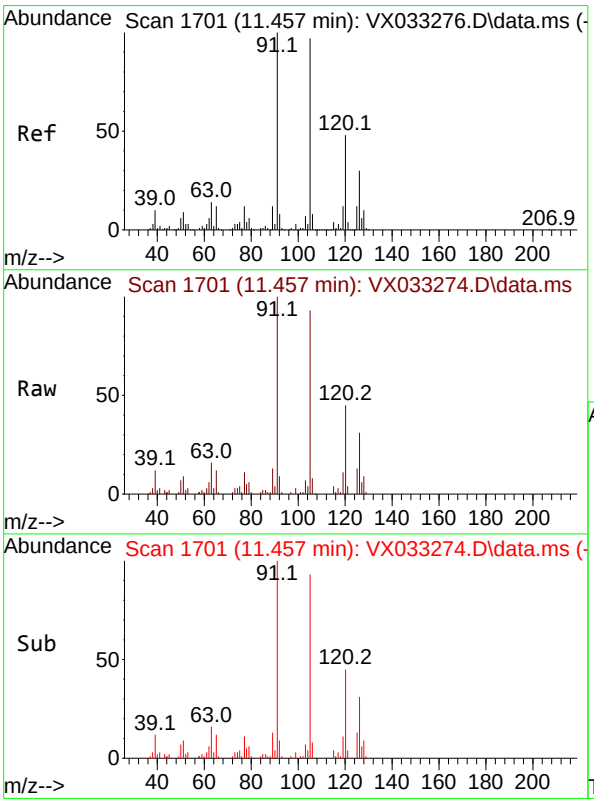
Ion	Ratio	Lower	Upper
75	100		
53	132.4	86.9	130.3#
89	47.3	38.3	57.5



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

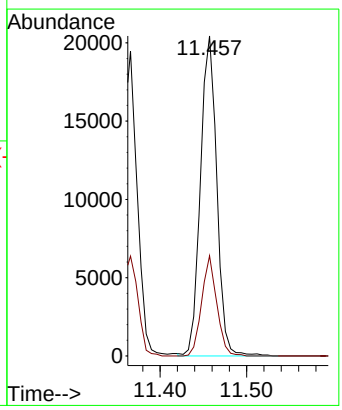
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

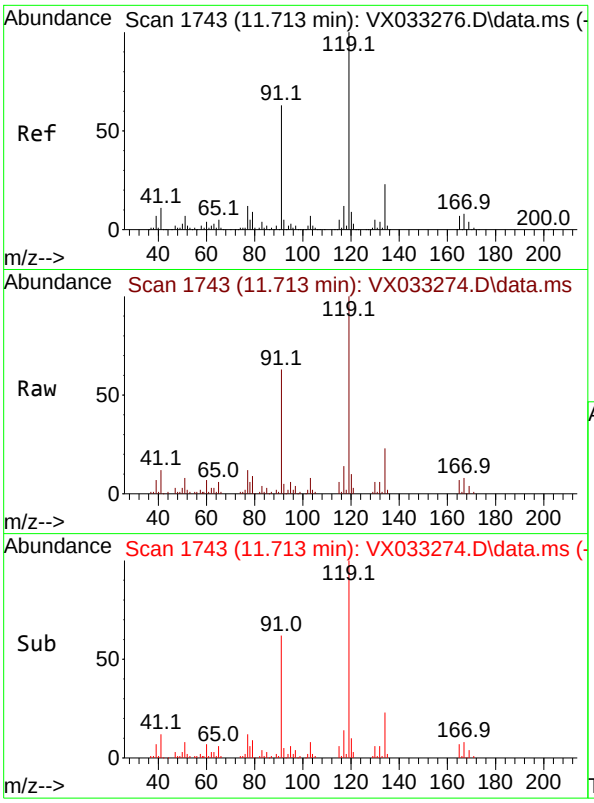


#82
4-Chlorotoluene
Concen: 4.874 ug/l
RT: 11.457 min Scan# 1701
Delta R.T. 0.000 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion: 91 Resp: 26803

Ion	Ratio	Lower	Upper
91	100		
126	28.9	14.8	44.4

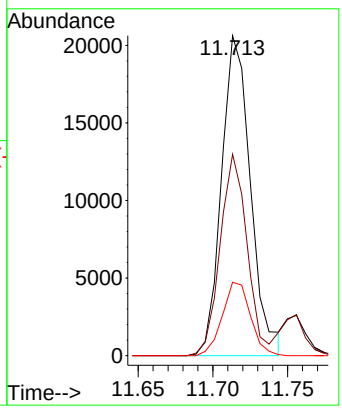




#83
tert-Butylbenzene
Concen: 4.918 ug/l
RT: 11.713 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion:119 Resp: 2779

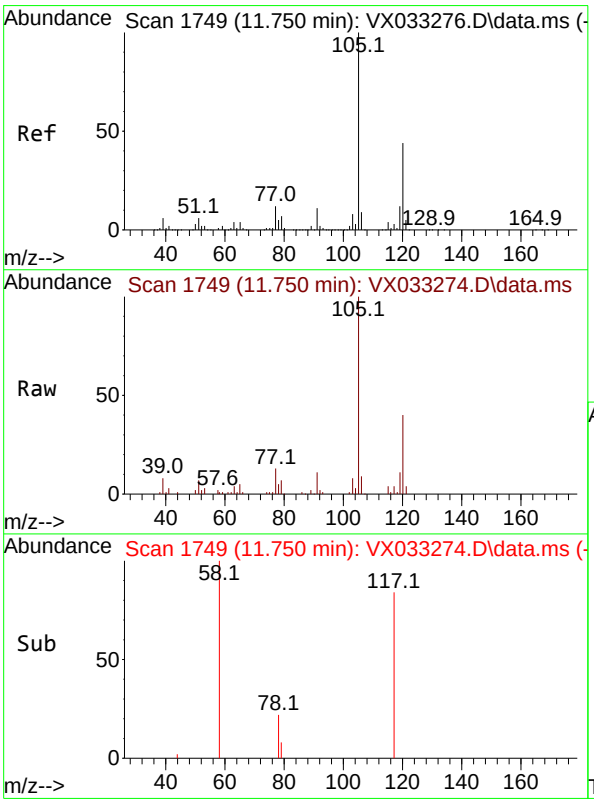
Ion	Ratio	Lower	Upper
119	100		
91	58.4	29.4	88.2
134	22.4	11.0	33.0



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

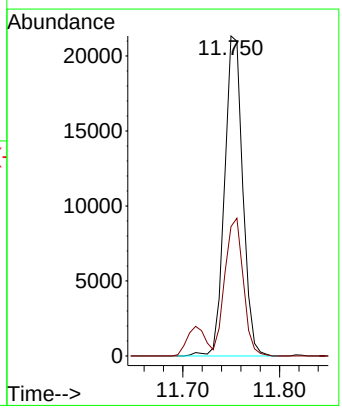
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

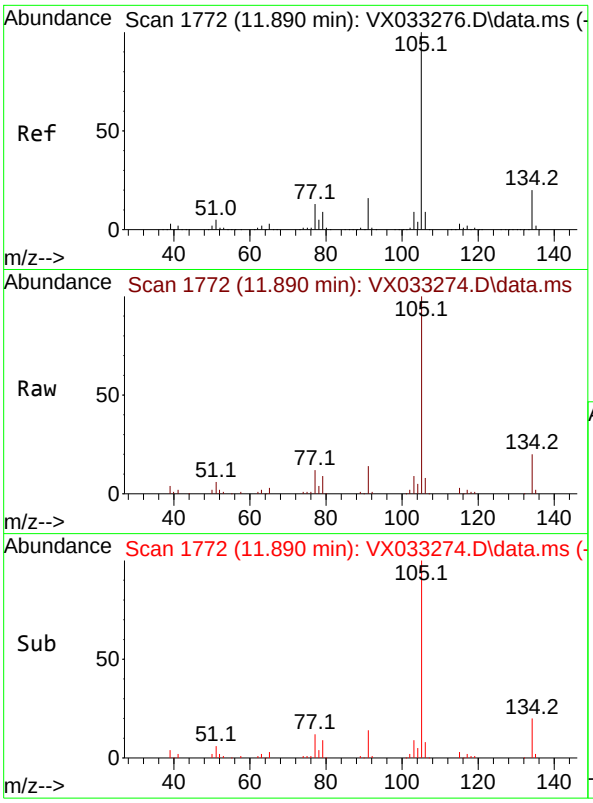


#84
1,2,4-Trimethylbenzene
Concen: 4.908 ug/l
RT: 11.750 min Scan# 1749
Delta R.T. -0.000 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion:105 Resp: 27785

Ion	Ratio	Lower	Upper
105	100		
120	43.6	21.9	65.5





#85
sec-Butylbenzene
Concen: 4.783 ug/l
RT: 11.890 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

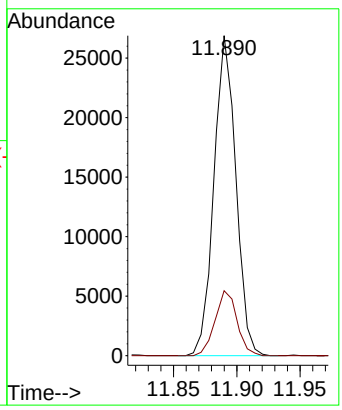
Tgt Ion:105 Resp: 3233

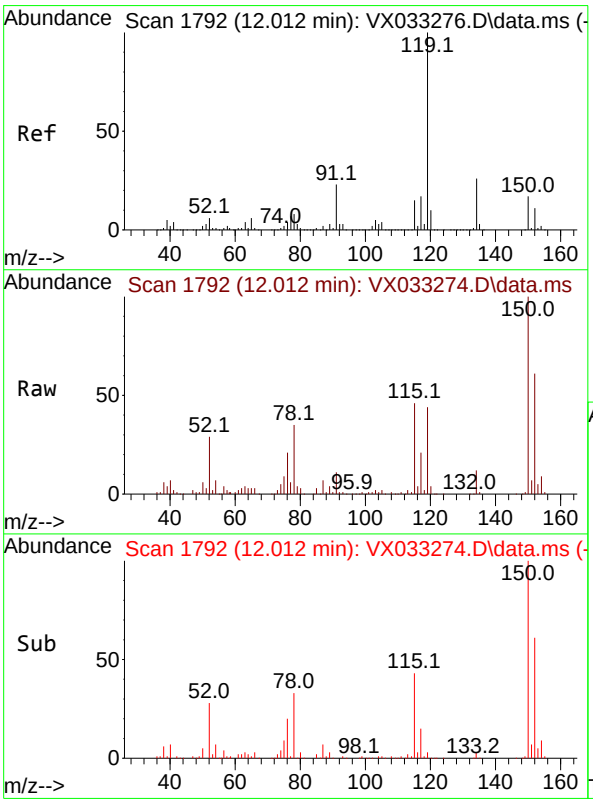
Ion	Ratio	Lower	Upper
105	100		
134	20.3	9.9	29.7

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

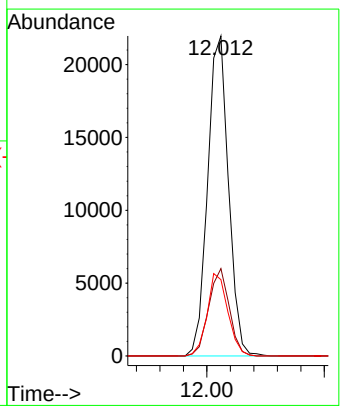


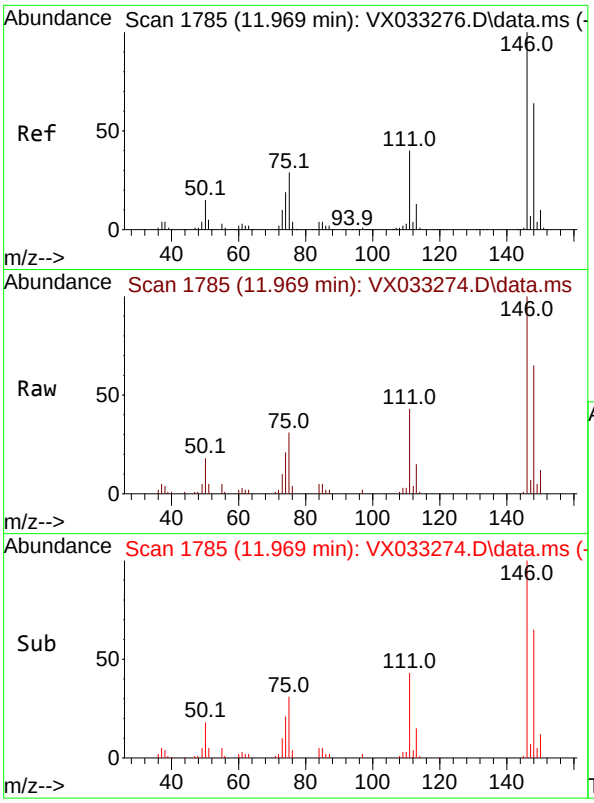


#86
p-Isopropyltoluene
Concen: 4.718 ug/l
RT: 12.012 min Scan# 1792
Delta R.T. -0.000 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion:119 Resp: 27023

Ion	Ratio	Lower	Upper
119	100		
134	27.0	12.9	38.7
91	25.6	12.5	37.5

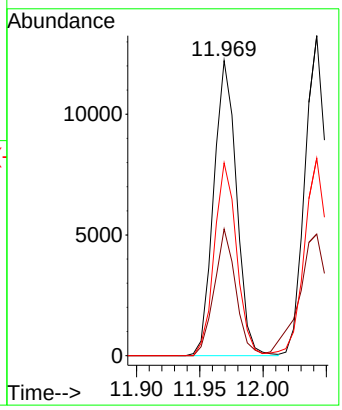




#87
1,3-Dichlorobenzene
Concen: 4.910 ug/l
RT: 11.969 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion:146 Resp: 1530

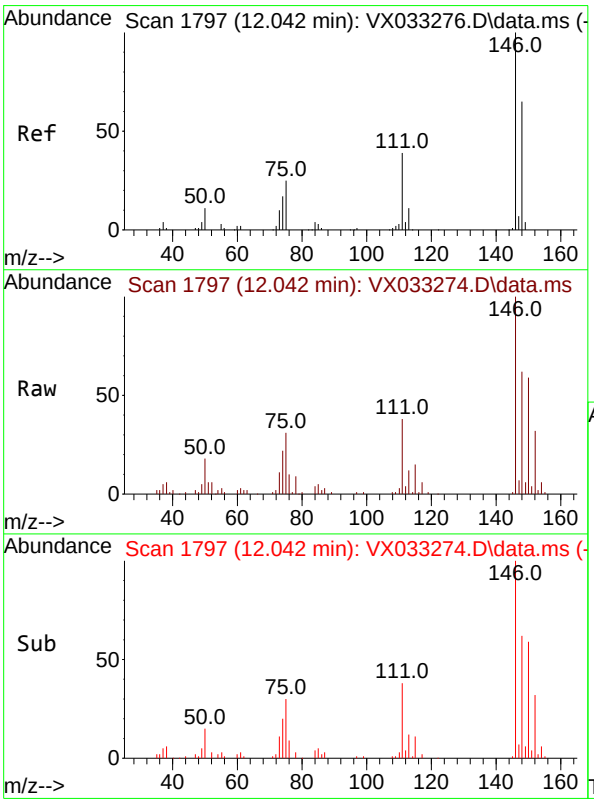
Ion	Ratio	Lower	Upper
146	100		
111	40.5	20.6	61.8
148	63.9	31.7	95.1



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

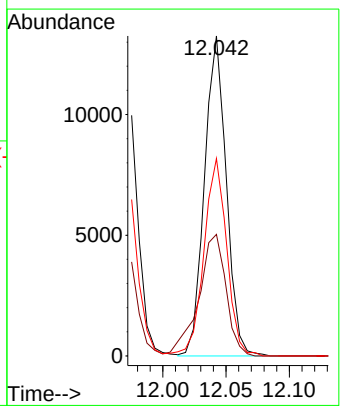
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

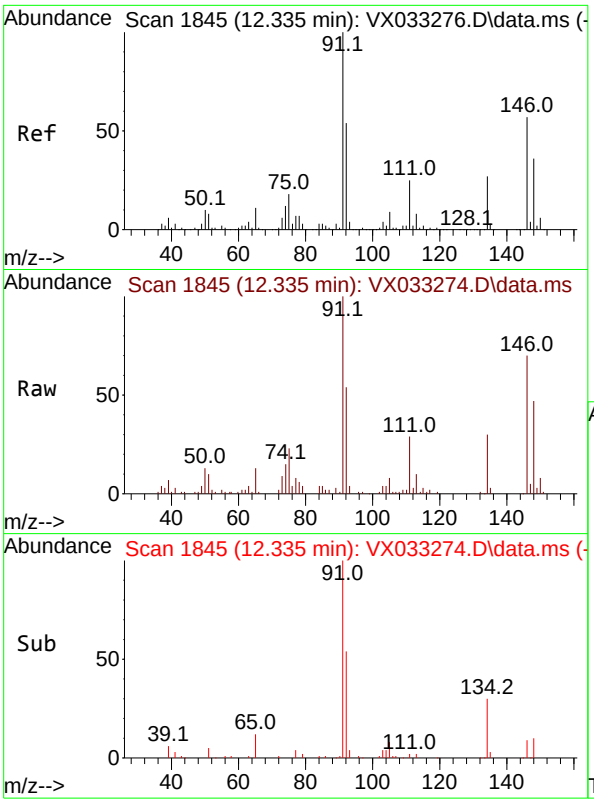


#88
1,4-Dichlorobenzene
Concen: 4.981 ug/l
RT: 12.042 min Scan# 1797
Delta R.T. 0.000 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion:146 Resp: 15903

Ion	Ratio	Lower	Upper
146	100		
111	47.8	20.5	61.6
148	64.5	32.2	96.6

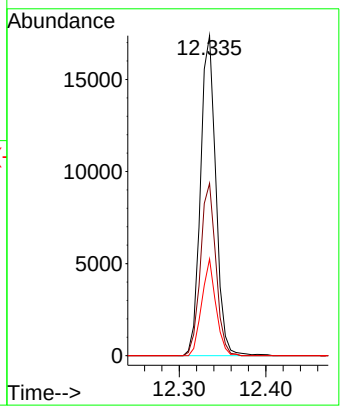




#89
n-Butylbenzene
Concen: 4.332 ug/l
RT: 12.335 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion: 91 Resp: 2137

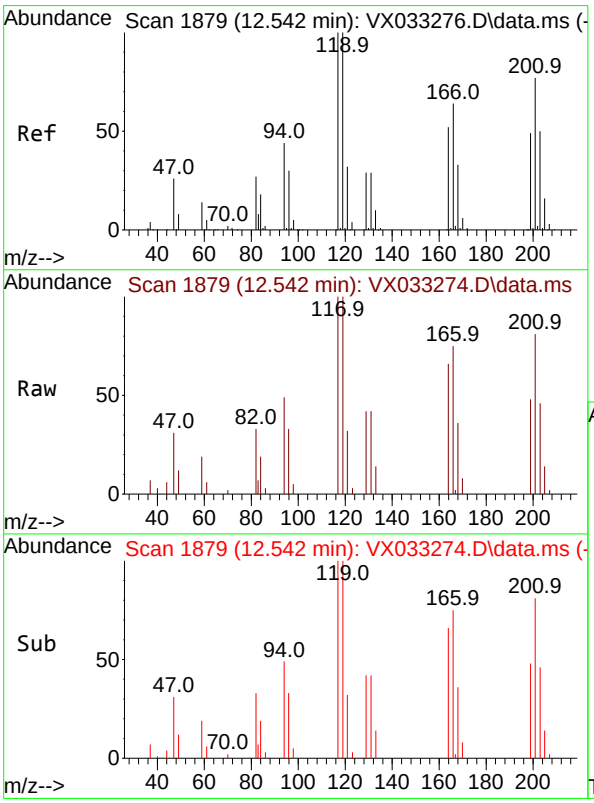
Ion	Ratio	Lower	Upper
91	100		
92	53.9	26.2	78.6
134	27.9	12.9	38.6



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

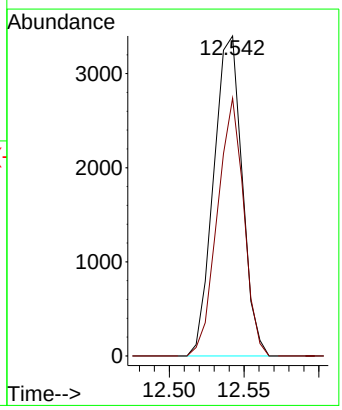
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

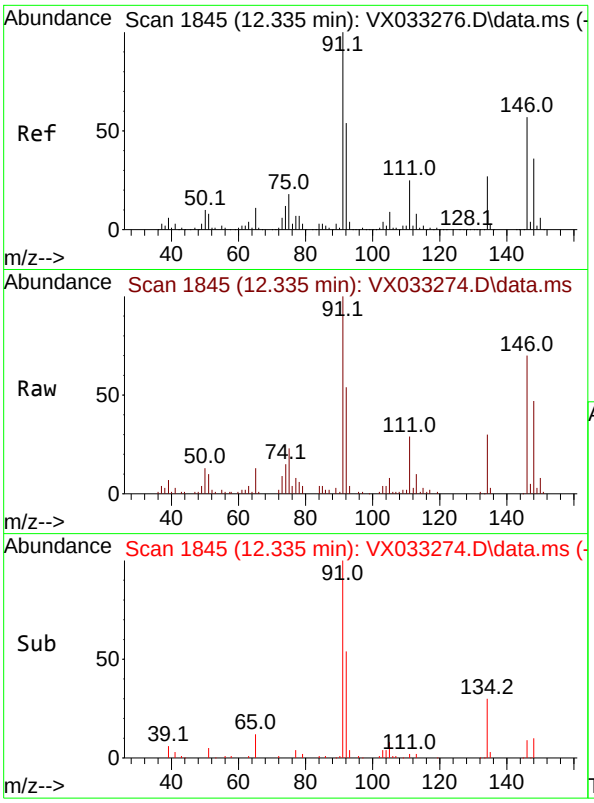


#90
Hexachloroethane
Concen: 4.788 ug/l
RT: 12.542 min Scan# 1879
Delta R.T. 0.000 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion:117 Resp: 4506

Ion	Ratio	Lower	Upper
117	100		
201	74.5	37.6	112.9

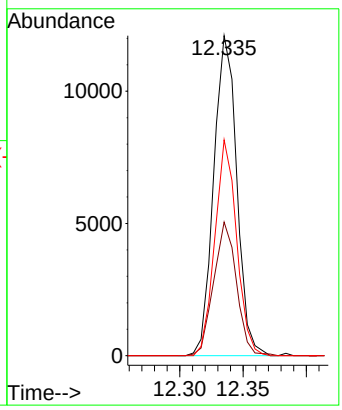




#91
1,2-Dichlorobenzene
Concen: 5.050 ug/l
RT: 12.335 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion:146 Resp: 1531

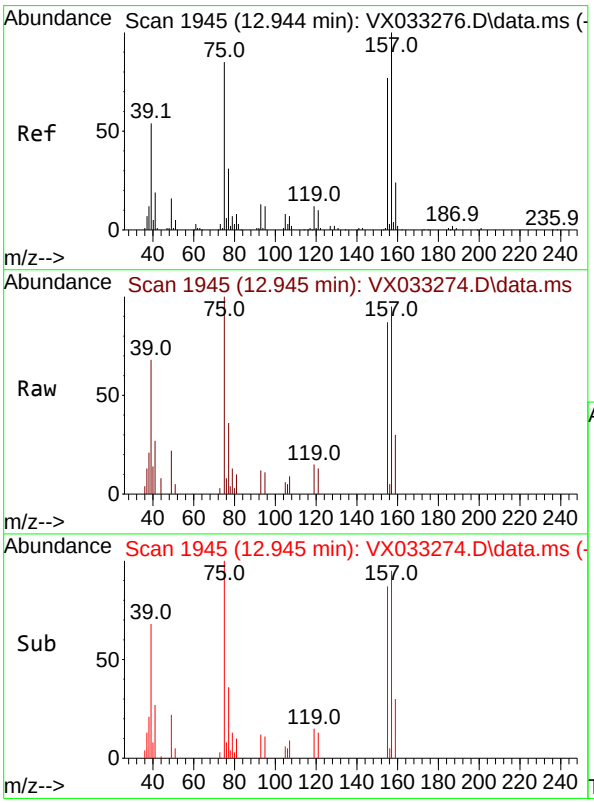
Ion	Ratio	Lower	Upper
146	100		
111	41.3	21.5	64.5
148	63.7	32.0	96.2



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

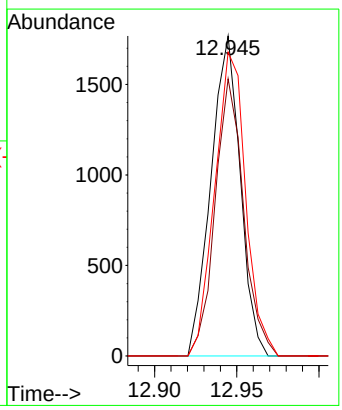
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

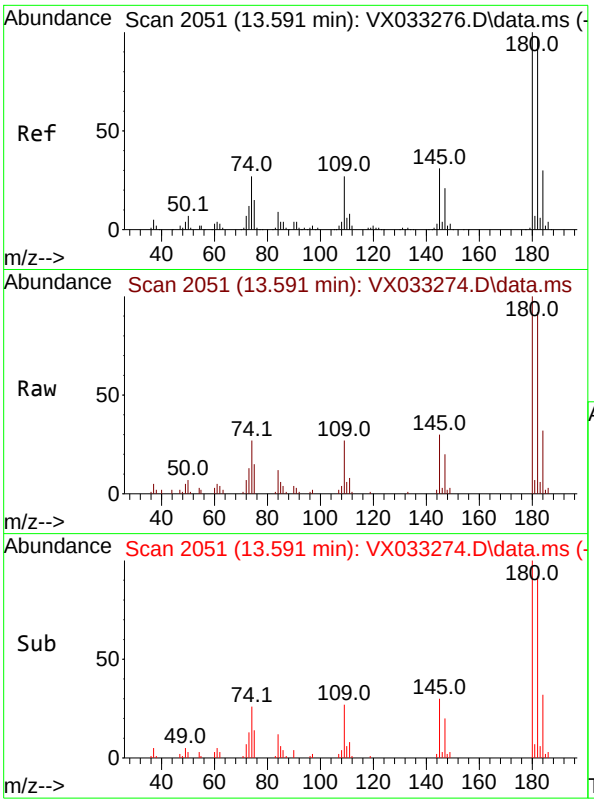


#92
1,2-Dibromo-3-Chloropropane
Concen: 5.382 ug/l
RT: 12.945 min Scan# 1945
Delta R.T. -0.000 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion: 75 Resp: 2190

Ion	Ratio	Lower	Upper
75	100		
155	84.2	41.6	124.8
157	100.3	54.1	162.4

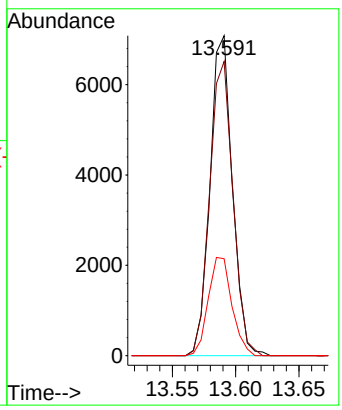




#93
1,2,4-Trichlorobenzene
Concen: 4.667 ug/l
RT: 13.591 min Scan# 2
Delta R.T. -0.000 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion:180 Resp: 872

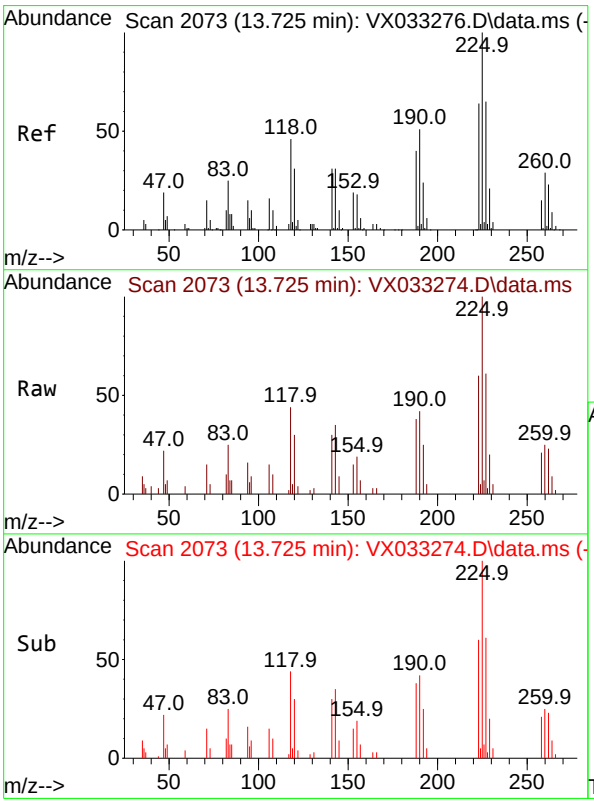
Ion	Ratio	Lower	Upper
180	100		
182	95.3	48.4	145.0
145	32.5	16.2	48.5



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

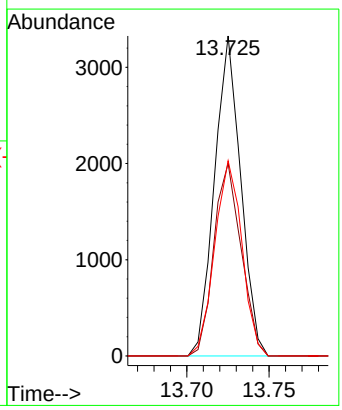
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

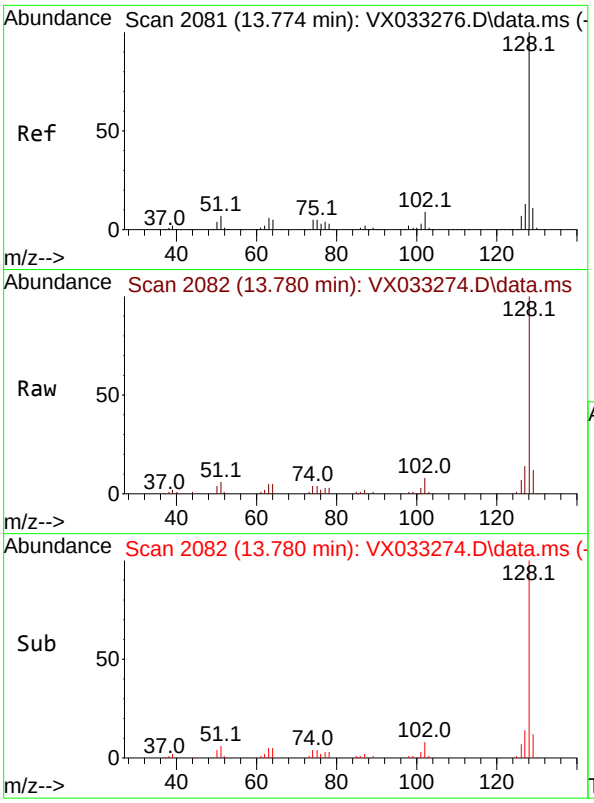


#94
Hexachlorobutadiene
Concen: 4.477 ug/l
RT: 13.725 min Scan# 2073
Delta R.T. 0.000 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion:225 Resp: 3692

Ion	Ratio	Lower	Upper
225	100		
223	62.6	31.9	95.9
227	63.3	31.9	95.5

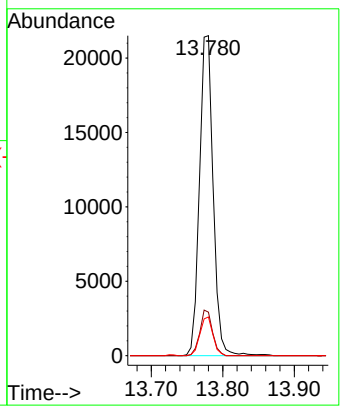




#95
Naphthalene
Concen: 4.730 ug/l
RT: 13.780 min Scan# 2
Delta R.T. -0.000 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion:128 Resp: 2860

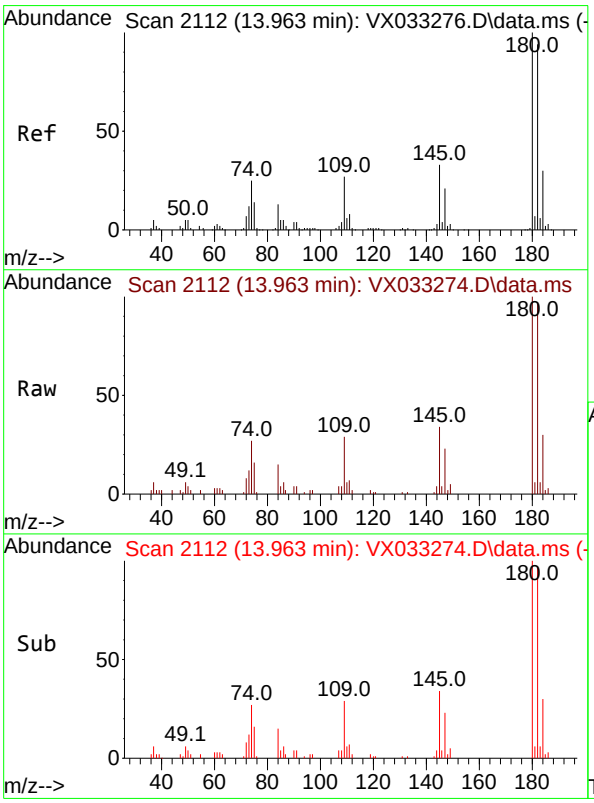
Ion	Ratio	Lower	Upper
128	100		
127	13.1	10.2	15.4
129	11.5	8.9	13.3



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

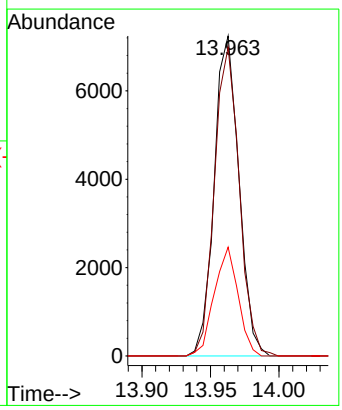
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022



#96
1,2,3-Trichlorobenzene
Concen: 4.845 ug/l
RT: 13.963 min Scan# 2112
Delta R.T. -0.000 min
Lab File: VX033274.D
Acq: 07 Dec 2022 10:09

Tgt Ion:180 Resp: 9081

Ion	Ratio	Lower	Upper
180	100		
182	96.9	47.5	142.6
145	32.9	16.9	50.6



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX120722\
Data File : VX033275.D
Acq On : 07 Dec 2022 10:32
Operator : JC/MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 07 11:16:31 2022
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X120722W.M
Quant Title : SW846 8260
QLast Update : Wed Dec 07 09:47:15 2022
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.556	168	147521	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.763	114	231761	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.055	117	212087	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.024	152	104636	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.964	65	19119	12.031	ug/l	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 24.060%#			
35) Dibromofluoromethane	5.391	113	21699	16.607	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 33.220%#			
50) Toluene-d8	8.653	98	45228	10.662	ug/l	0.00
Spiked Amount 50.000	Range 92 - 112		Recovery = 21.320%#			
62) 4-Bromofluorobenzene	11.079	95	35433	20.645	ug/l	0.00
Spiked Amount 50.000	Range 83 - 123		Recovery = 41.280%#			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.166	85	23127	20.520	ug/l	99
3) Chloromethane	1.294	50	26409	21.705	ug/l	98
4) Vinyl Chloride	1.373	62	30354	22.406	ug/l	98
5) Bromomethane	1.617	94	21504	21.406	ug/l	99
6) Chloroethane	1.690	64	23121	20.964	ug/l	97
7) Trichlorofluoromethane	1.892	101	57892	22.018	ug/l	99
8) Diethyl Ether	2.135	74	20304	24.528	ug/l	95
9) 1,1,2-Trichlorotrifluo...	2.330	101	31565	22.840	ug/l	96
10) Methyl Iodide	2.452	142	32964	20.836	ug/l	99
11) Tert butyl alcohol	2.989	59	29613	130.033	ug/l	99
12) 1,1-Dichloroethene	2.324	96	29810	23.156	ug/l	98
13) Acrolein	2.239	56	24508	93.690	ug/l	100
14) Allyl chloride	2.666	41	47089	22.656	ug/l	96
15) Acrylonitrile	3.068	53	78907	122.500	ug/l	99
16) Acetone	2.391	43	78227	116.594	ug/l	100
17) Carbon Disulfide	2.513	76	75958	21.356	ug/l	100
18) Methyl Acetate	2.708	43	45026	24.243	ug/l	99
19) Methyl tert-butyl Ether	3.117	73	100985	22.619	ug/l	99
20) Methylene Chloride	2.794	84	33410	20.670	ug/l	93
21) trans-1,2-Dichloroethene	3.093	96	32308	21.939	ug/l	96
22) Diisopropyl ether	3.763	45	102846	22.725	ug/l	97
23) Vinyl Acetate	3.720	43	393390	111.048	ug/l	100
24) 1,1-Dichloroethane	3.611	63	59379	22.928	ug/l	99
25) 2-Butanone	4.562	43	113918	123.133	ug/l	98
26) 2,2-Dichloropropane	4.483	77	43915	21.089	ug/l	100
27) cis-1,2-Dichloroethene	4.495	96	38152	22.802	ug/l	99
28) Bromochloromethane	4.897	49	24001	21.092	ug/l	97
29) Tetrahydrofuran	5.013	42	72726	123.883	ug/l	99
30) Chloroform	5.098	83	66575	22.953	ug/l	98
31) Cyclohexane	5.476	56	51704	22.212	ug/l	91
32) 1,1,1-Trichloroethane	5.385	97	58398	22.482	ug/l	99
36) 1,1-Dichloropropene	5.696	75	46341	22.181	ug/l	99
37) Ethyl Acetate	4.720	43	44368	24.342	ug/l	98
38) Carbon Tetrachloride	5.677	117	52464	22.637	ug/l	97
39) Methylcyclohexane	7.384	83	53198	22.317	ug/l	97
40) Benzene	6.037	78	135692	23.165	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX120722\
Data File : VX033275.D
Acq On : 07 Dec 2022 10:32
Operator : JC/MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 07 11:16:31 2022
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X120722W.M
Quant Title : SW846 8260
QLast Update : Wed Dec 07 09:47:15 2022
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	4.928	41	24810	24.191	ug/l		98
42) 1,2-Dichloroethane	6.092	62	54314	23.029	ug/l		99
43) Isopropyl Acetate	6.342	43	69604	23.091	ug/l		99
44) Trichloroethene	7.128	130	37995	23.116	ug/l		100
45) 1,2-Dichloropropane	7.433	63	34412	23.772	ug/l		96
46) Dibromomethane	7.586	93	26034	23.049	ug/l		98
47) Bromodichloromethane	7.823	83	52123	23.881	ug/l		99
48) Methyl methacrylate	7.695	41	35797	23.071	ug/l		97
49) 1,4-Dioxane	7.701	88	16990	594.851	ug/l		99
51) 4-Methyl-2-Pentanone	8.573	43	231237	124.317	ug/l		99
52) Toluene	8.720	92	89946	23.340	ug/l		98
53) t-1,3-Dichloropropene	8.976	75	48793	22.777	ug/l		100
54) cis-1,3-Dichloropropene	8.366	75	53756	22.847	ug/l		96
55) 1,1,2-Trichloroethane	9.152	97	35906	22.885	ug/l		99
56) Ethyl methacrylate	9.116	69	51875	23.997	ug/l		95
57) 1,3-Dichloropropane	9.311	76	59108	23.336	ug/l		99
58) 2-Chloroethyl Vinyl ether	8.244	63	101008	98.398	ug/l		100
59) 2-Hexanone	9.433	43	173715	126.425	ug/l		98
60) Dibromochloromethane	9.524	129	40652	24.066	ug/l		99
61) 1,2-Dibromoethane	9.610	107	39225	23.686	ug/l		98
64) Tetrachloroethene	9.274	164	33071	22.029	ug/l		96
65) Chlorobenzene	10.079	112	98299	23.247	ug/l		100
66) 1,1,1,2-Tetrachloroethane	10.164	131	37470	24.185	ug/l		99
67) Ethyl Benzene	10.195	91	173292	23.103	ug/l		100
68) m/p-Xylenes	10.299	106	134099	45.655	ug/l		100
69) o-Xylene	10.640	106	66685	23.464	ug/l		98
70) Styrene	10.658	104	109831	23.622	ug/l		100
71) Bromoform	10.798	173	29189	24.572	ug/l	#	99
73) Isopropylbenzene	10.963	105	175194	23.430	ug/l		100
74) N-amyl acetate	10.841	43	60421	23.754	ug/l		98
75) 1,1,2,2-Tetrachloroethane	11.213	83	54465	24.134	ug/l		99
76) 1,2,3-Trichloropropane	11.237	75	49227m	24.842	ug/l		
77) Bromobenzene	11.195	156	43240	23.514	ug/l		99
78) n-propylbenzene	11.304	91	199580	23.345	ug/l		100
79) 2-Chlorotoluene	11.365	91	120391	23.187	ug/l		99
80) 1,3,5-Trimethylbenzene	11.451	105	147966	23.556	ug/l		100
81) trans-1,4-Dichloro-2-b...	11.018	75	14526	23.827	ug/l		96
82) 4-Chlorotoluene	11.457	91	139436	22.916	ug/l		100
83) tert-Butylbenzene	11.713	119	148011	23.672	ug/l		98
84) 1,2,4-Trimethylbenzene	11.756	105	148682	23.739	ug/l		99
85) sec-Butylbenzene	11.890	105	174891	23.380	ug/l		100
86) p-Isopropyltoluene	12.012	119	150310	23.717	ug/l		99
87) 1,3-Dichlorobenzene	11.969	146	80485	23.335	ug/l		98
88) 1,4-Dichlorobenzene	12.042	146	79989	22.644	ug/l		99
89) n-Butylbenzene	12.335	91	125513	22.988	ug/l		100
90) Hexachloroethane	12.542	117	24641	23.665	ug/l		98
91) 1,2-Dichlorobenzene	12.335	146	79568	23.715	ug/l		98
92) 1,2-Dibromo-3-Chloropr...	12.944	75	11683	25.947	ug/l		98
93) 1,2,4-Trichlorobenzene	13.591	180	48268	23.338	ug/l		97
94) Hexachlorobutadiene	13.725	225	19262	21.110	ug/l		99
95) Naphthalene	13.774	128	163799	24.481	ug/l		100
96) 1,2,3-Trichlorobenzene	13.963	180	47697	22.997	ug/l		100

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX120722\
Data File : VX033275.D
Acq On : 07 Dec 2022 10:32
Operator : JC/MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

Quant Time: Dec 07 11:16:31 2022
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X120722W.M
Quant Title : SW846 8260
QLast Update : Wed Dec 07 09:47:15 2022
Response via : Initial Calibration

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

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

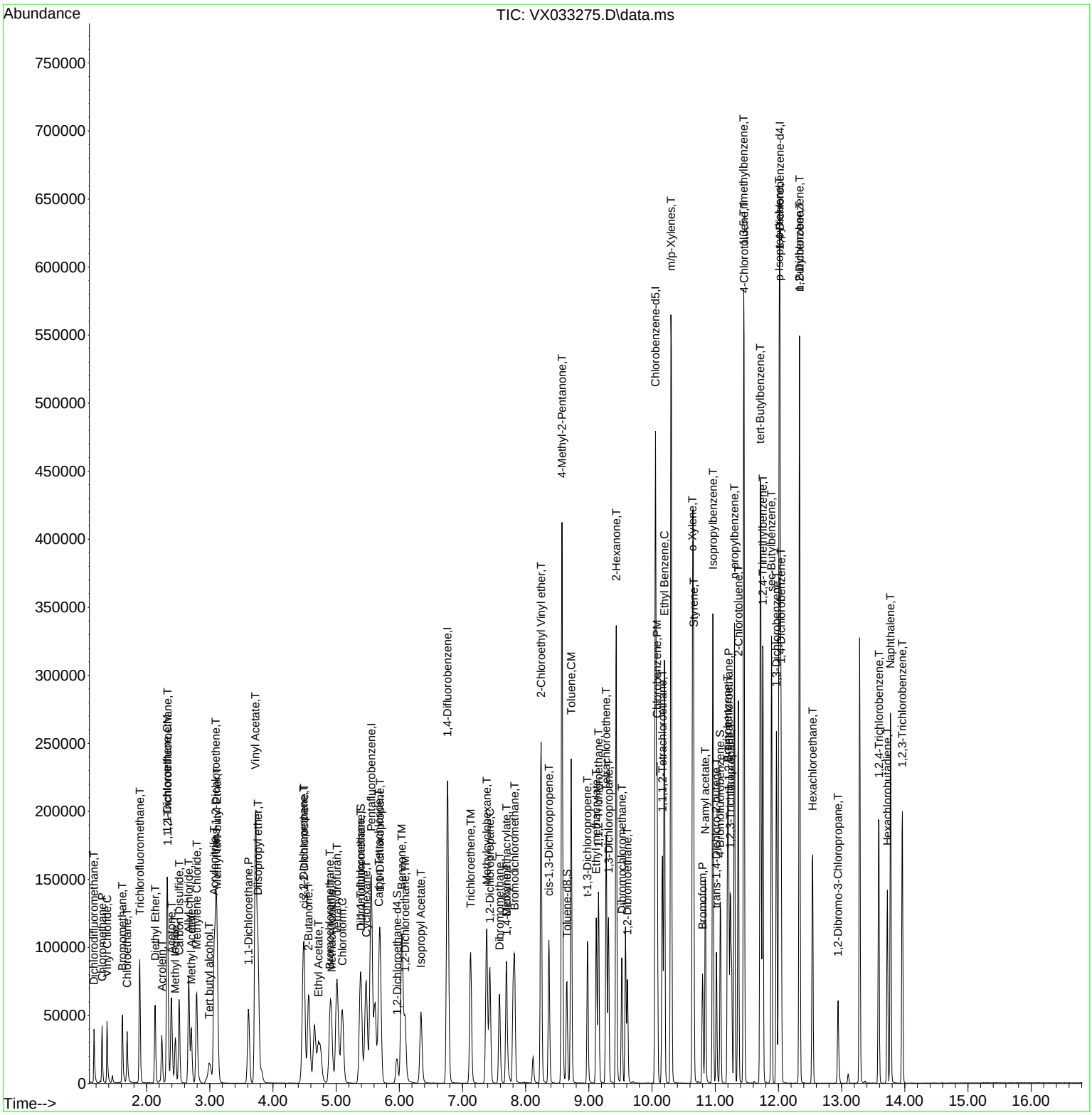
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX120722\
Data File : VX033275.D
Acq On : 07 Dec 2022 10:32
Operator : JC/MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 4 Sample Multiplier: 1

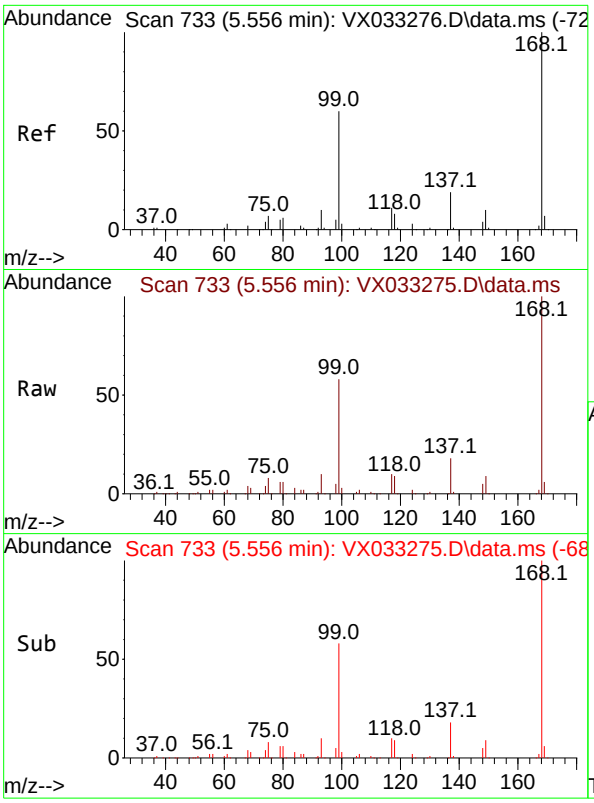
Quant Time: Dec 07 11:16:31 2022
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X120722W.M
Quant Title : SW846 8260
QLast Update : Wed Dec 07 09:47:15 2022
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

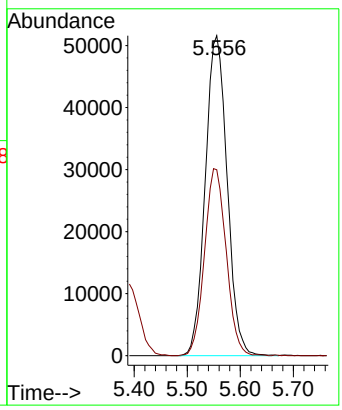




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 5.556 min Scan# 7
Delta R.T. -0.000 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion:168 Resp: 14752

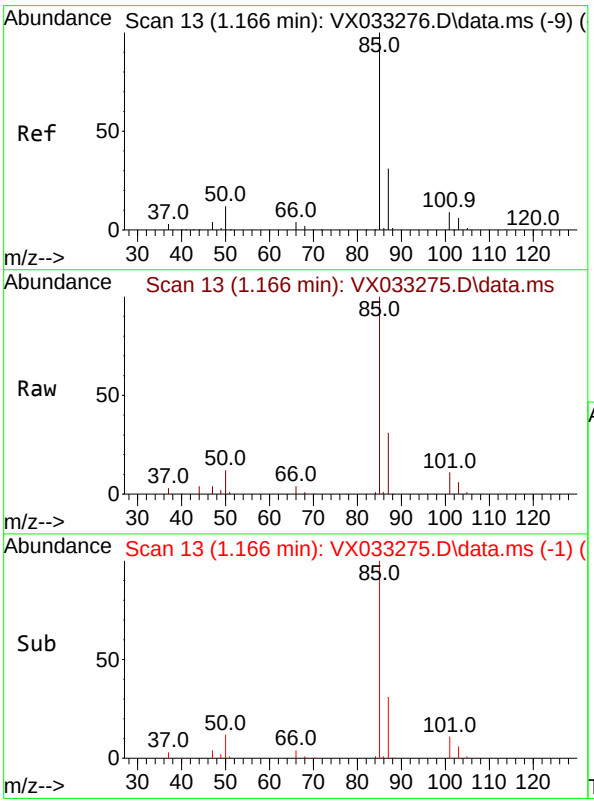
Ion	Ratio	Lower	Upper
168	100		
99	58.1	46.1	69.1



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

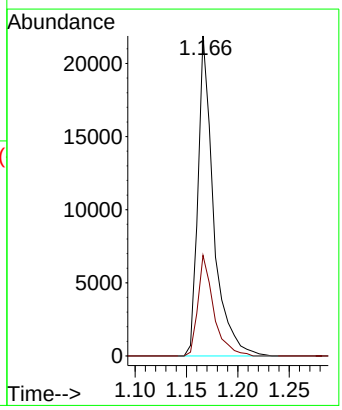
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

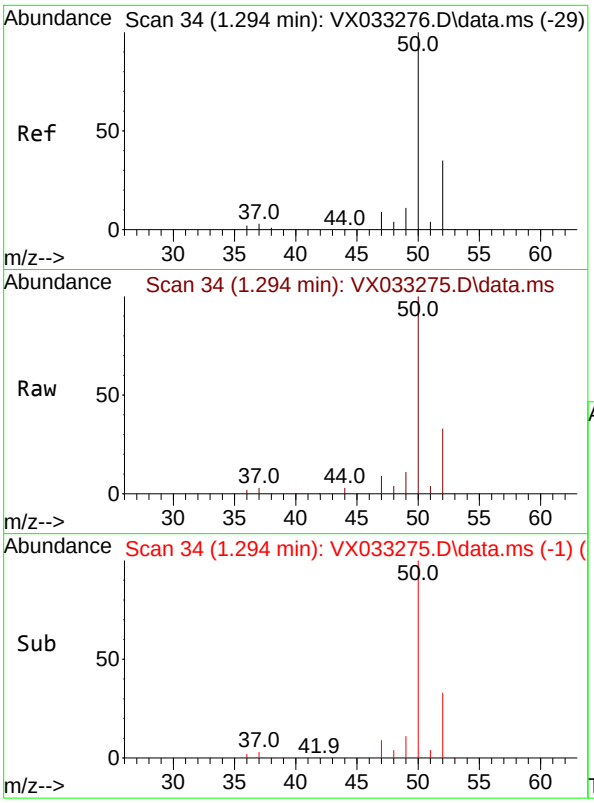


#2
Dichlorodifluoromethane
Concen: 20.520 ug/l
RT: 1.166 min Scan# 13
Delta R.T. 0.000 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion: 85 Resp: 23127

Ion	Ratio	Lower	Upper
85	100		
87	31.5	15.6	46.7

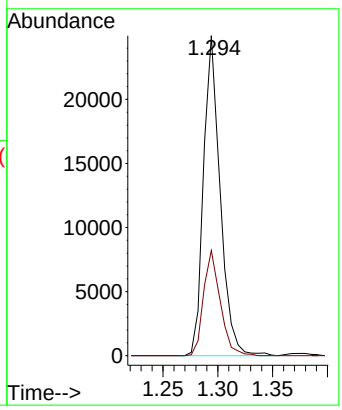




#3
Chloromethane
Concen: 21.705 ug/l
RT: 1.294 min Scan# 34
Delta R.T. 0.000 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion: 50 Resp: 2640

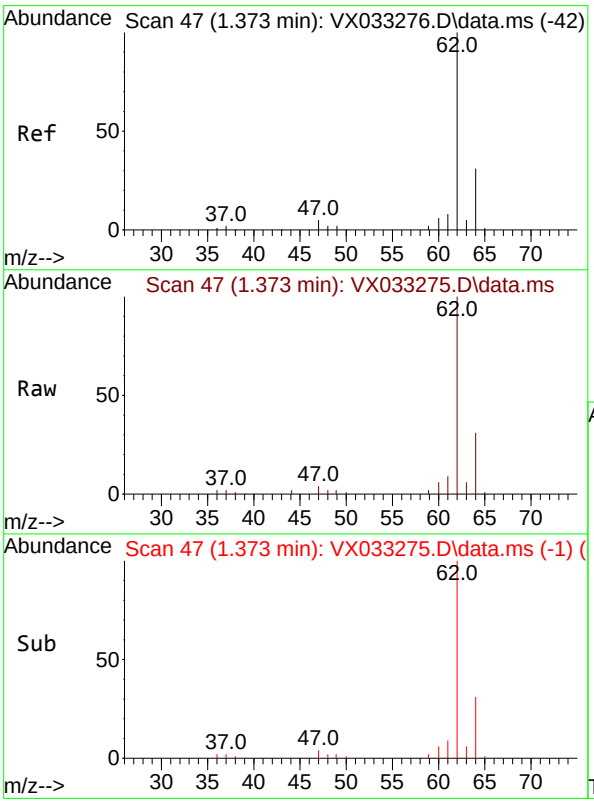
Ion	Ratio	Lower	Upper
50	100		
52	32.9	25.4	38.2



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

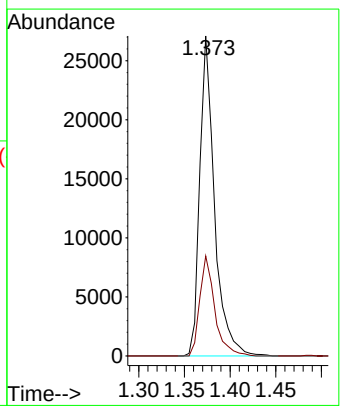
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

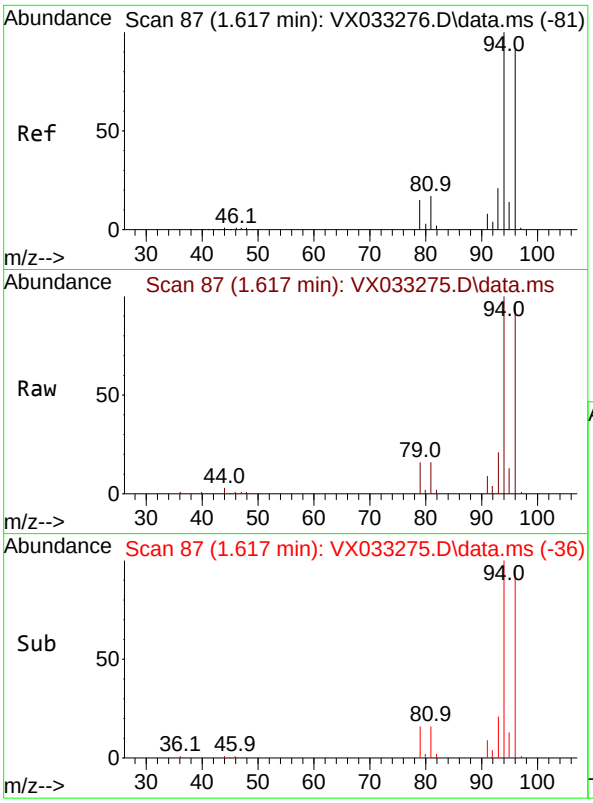


#4
Vinyl Chloride
Concen: 22.406 ug/l
RT: 1.373 min Scan# 47
Delta R.T. -0.001 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion: 62 Resp: 30354

Ion	Ratio	Lower	Upper
62	100		
64	31.2	25.8	38.6

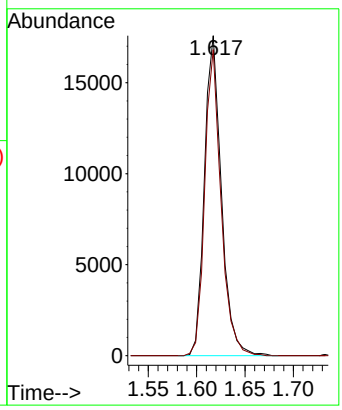




#5
Bromomethane
Concen: 21.406 ug/l
RT: 1.617 min Scan# 8
Delta R.T. 0.012 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion: 94 Resp: 2150

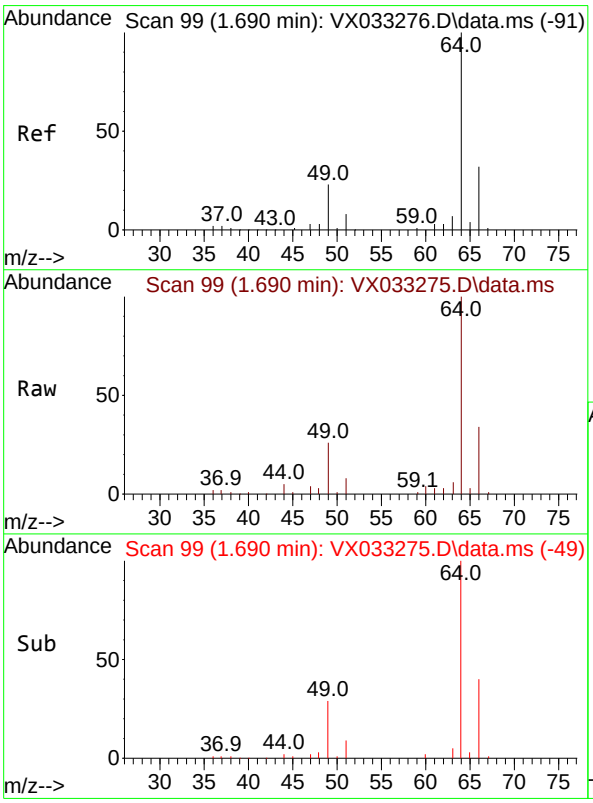
Ion	Ratio	Lower	Upper
94	100		
96	95.6	77.6	116.4



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

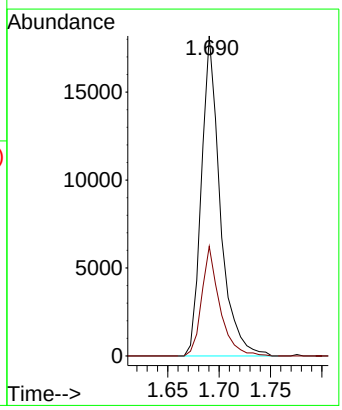
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

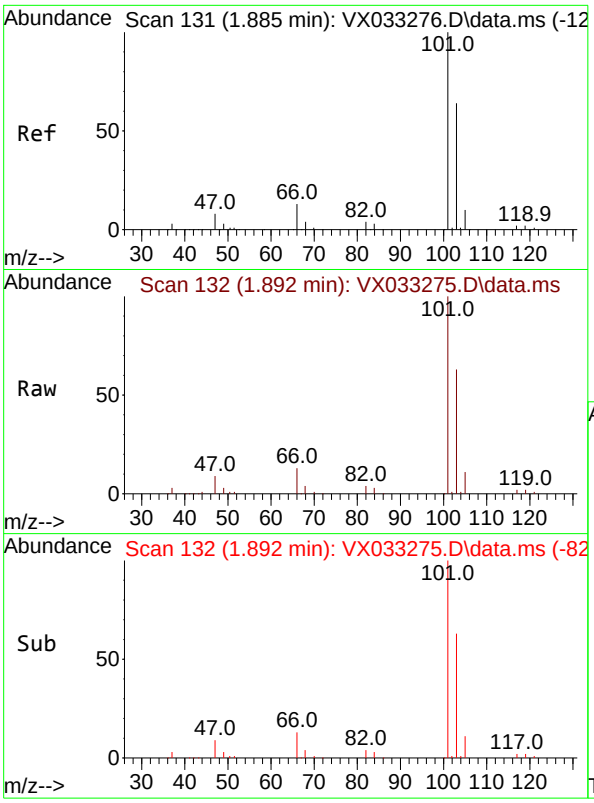


#6
Chloroethane
Concen: 20.964 ug/l
RT: 1.690 min Scan# 99
Delta R.T. 0.005 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion: 64 Resp: 23121

Ion	Ratio	Lower	Upper
64	100		
66	34.3	26.0	39.0

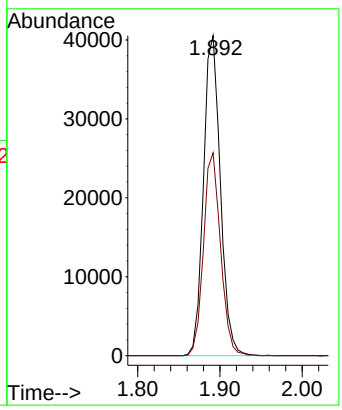




#7
Trichlorofluoromethane
Concen: 22.018 ug/l
RT: 1.892 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion:101 Resp: 5789

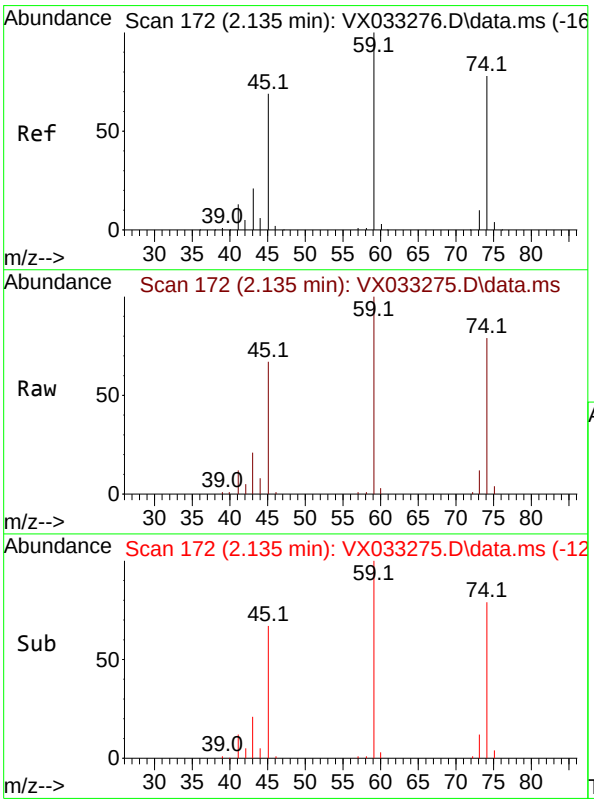
Ion	Ratio	Lower	Upper
101	100		
103	63.4	51.4	77.2



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

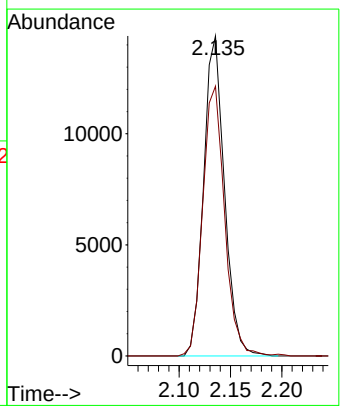
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

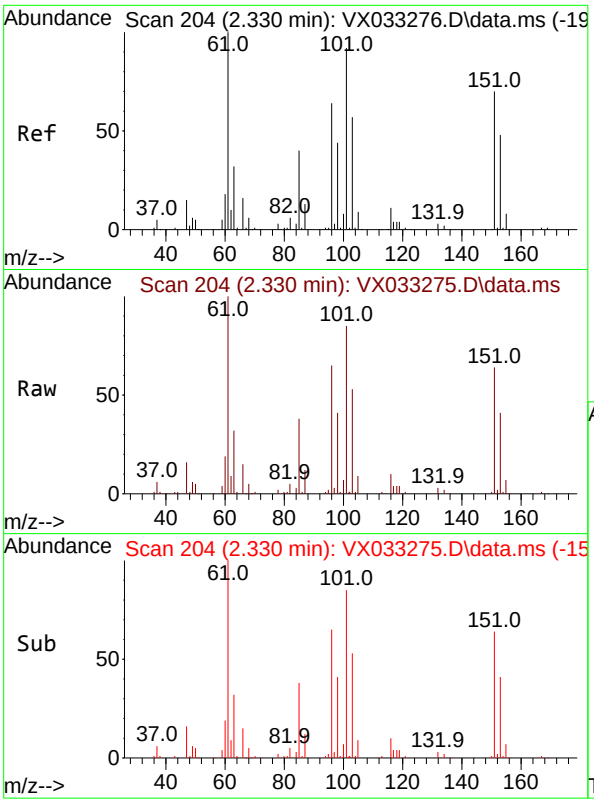


#8
Diethyl Ether
Concen: 24.528 ug/l
RT: 2.135 min Scan# 172
Delta R.T. 0.005 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion: 74 Resp: 20304

Ion	Ratio	Lower	Upper
74	100		
45	88.7	46.6	139.7

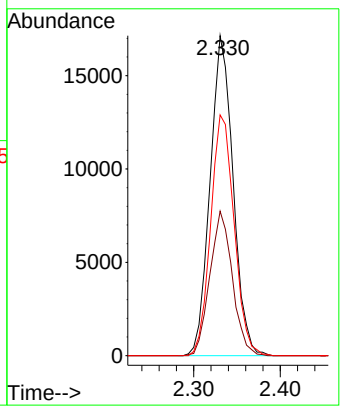




#9
1,1,2-Trichlorotrifluoroethane
Concen: 22.840 ug/l
RT: 2.330 min Scan# 2
Delta R.T. -0.001 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion:101 Resp: 3156

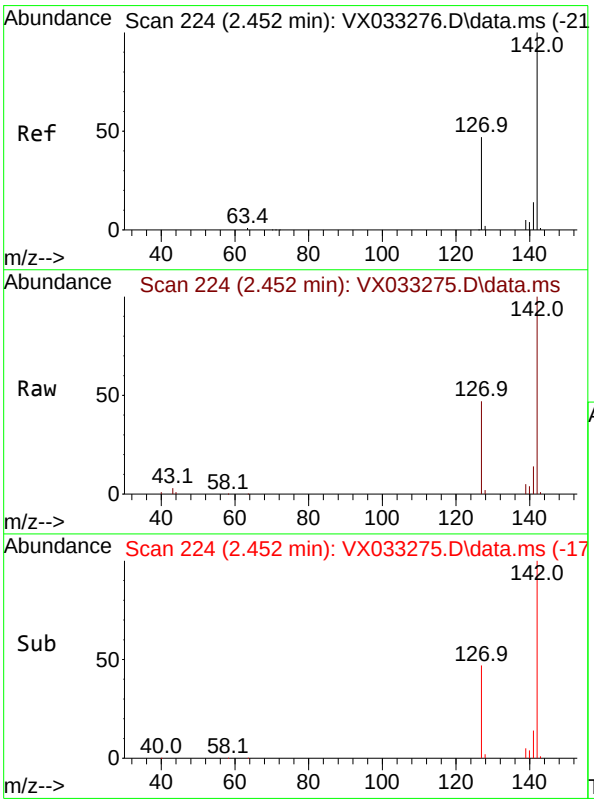
Ion	Ratio	Lower	Upper
101	100		
85	44.3	37.0	55.4
151	76.9	64.4	96.6



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

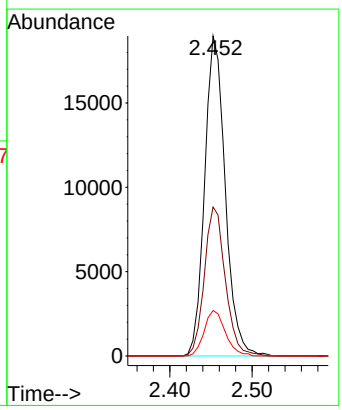
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

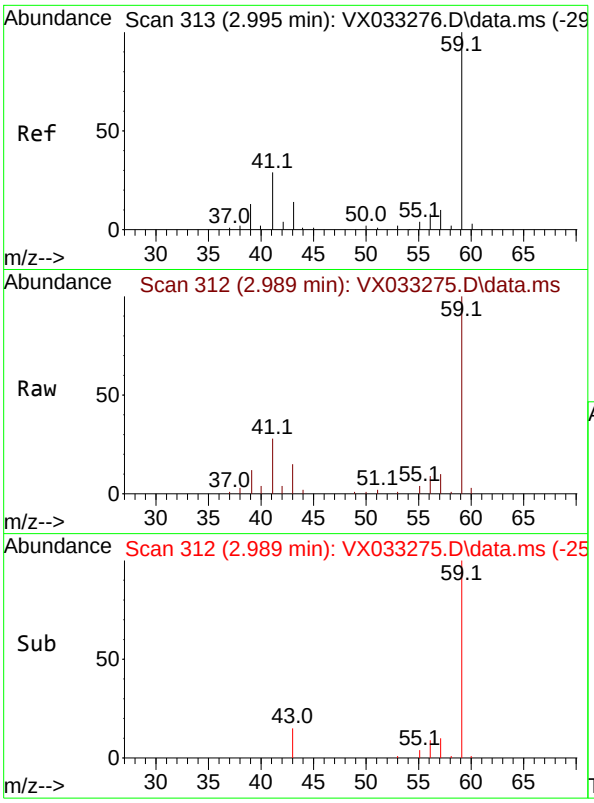


#10
Methyl Iodide
Concen: 20.836 ug/l
RT: 2.452 min Scan# 224
Delta R.T. -0.001 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion:142 Resp: 32964

Ion	Ratio	Lower	Upper
142	100		
127	47.4	38.6	57.8
141	14.6	11.4	17.2

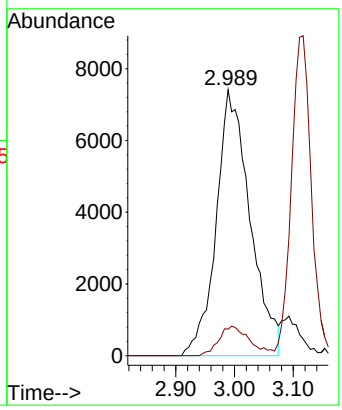




#11
Tert butyl alcohol
Concen: 130.033 ug/l
RT: 2.989 min Scan# 3
Delta R.T. 0.024 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion: 59 Resp: 2961

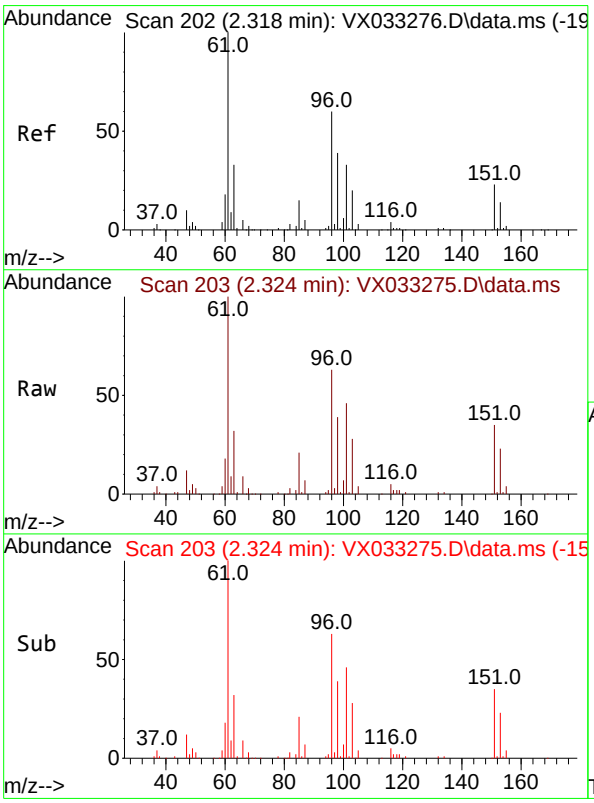
Ion	Ratio	Lower	Upper
59	100		
57	9.9	8.2	12.4



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

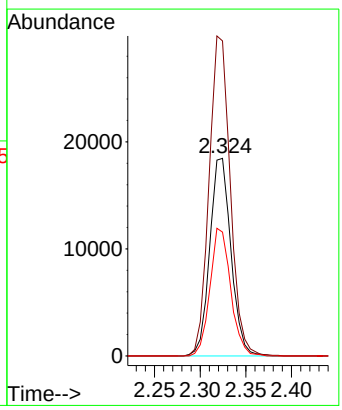
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

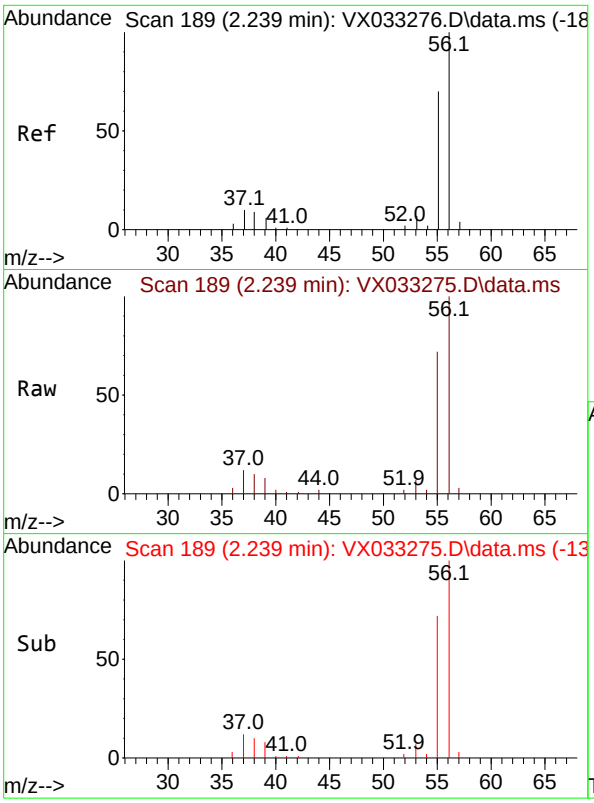


#12
1,1-Dichloroethene
Concen: 23.156 ug/l
RT: 2.324 min Scan# 203
Delta R.T. 0.005 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion: 96 Resp: 29810

Ion	Ratio	Lower	Upper
96	100		
61	159.4	125.1	187.7
98	62.7	50.6	76.0

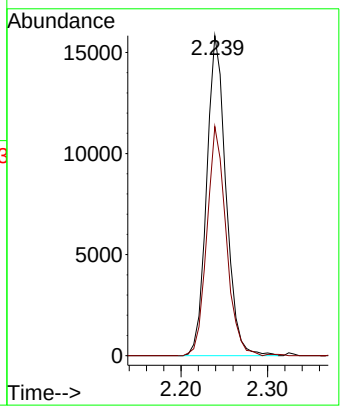




#13
Acrolein
Concen: 93.690 ug/l
RT: 2.239 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion: 56 Resp: 2450

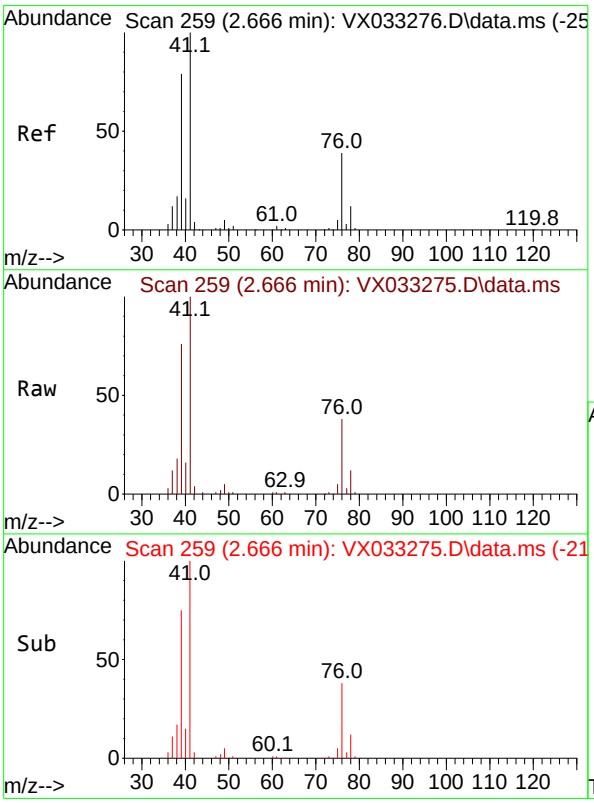
Ion	Ratio	Lower	Upper
56	100		
55	71.5	56.9	85.3



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

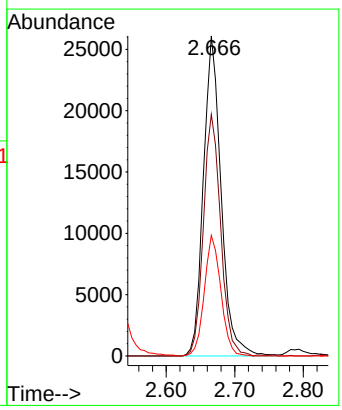
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

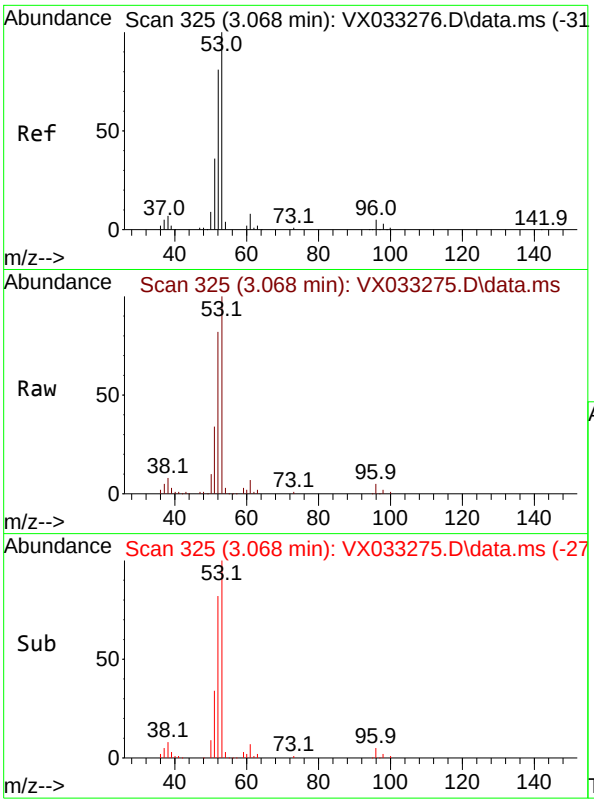


#14
Allyl chloride
Concen: 22.656 ug/l
RT: 2.666 min Scan# 259
Delta R.T. -0.000 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion: 41 Resp: 47089

Ion	Ratio	Lower	Upper
41	100		
39	73.2	61.4	92.2
76	35.1	29.2	43.8

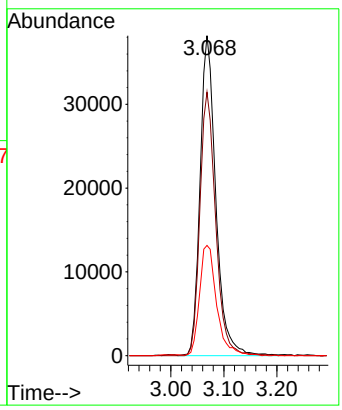




#15
Acrylonitrile
Concen: 122.500 ug/l
RT: 3.068 min Scan# 3
Delta R.T. 0.006 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion: 53 Resp: 7890

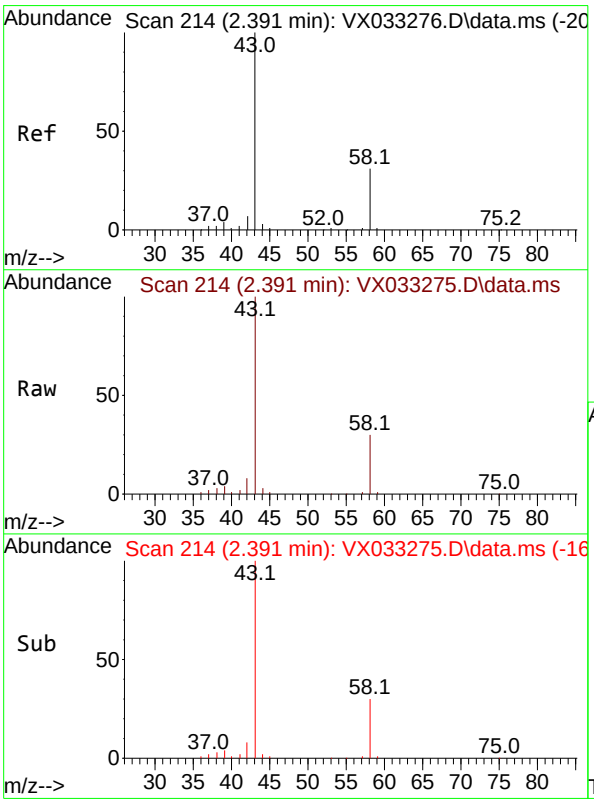
Ion	Ratio	Lower	Upper
53	100		
52	82.5	67.4	101.0
51	37.5	30.3	45.5



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

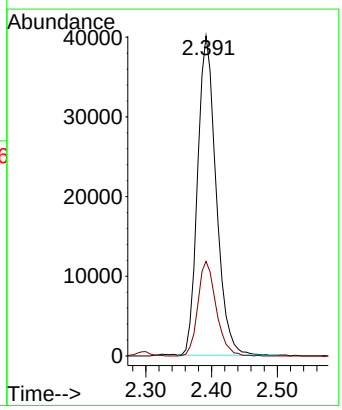
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

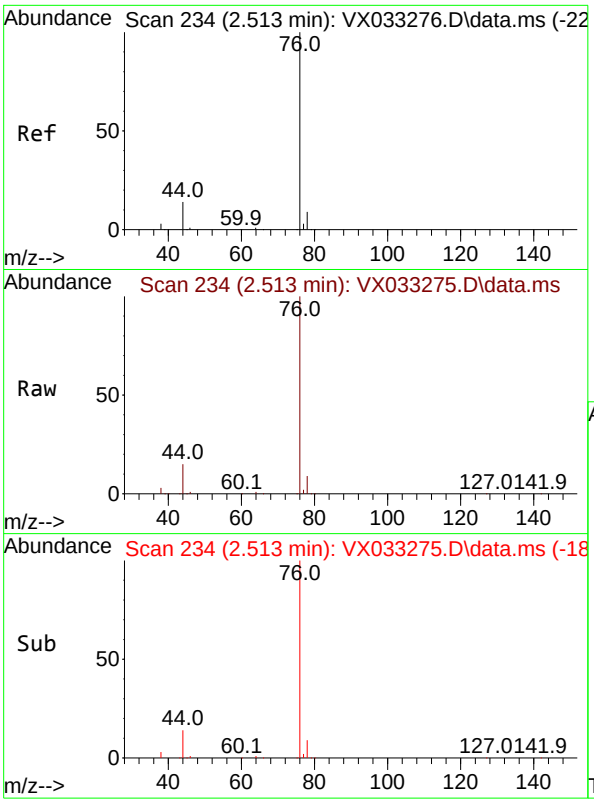


#16
Acetone
Concen: 116.594 ug/l
RT: 2.391 min Scan# 214
Delta R.T. 0.011 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion: 43 Resp: 78227

Ion	Ratio	Lower	Upper
43	100		
58	29.6	23.8	35.8





#17
Carbon Disulfide
Concen: 21.356 ug/l
RT: 2.513 min Scan# 2
Delta R.T. -0.001 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

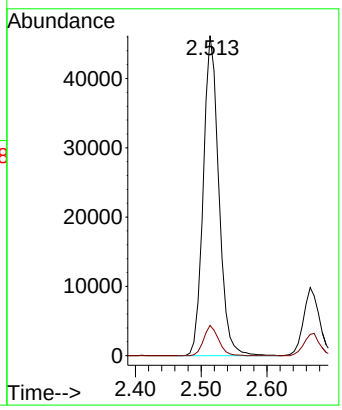
Tgt Ion: 76 Resp: 7595

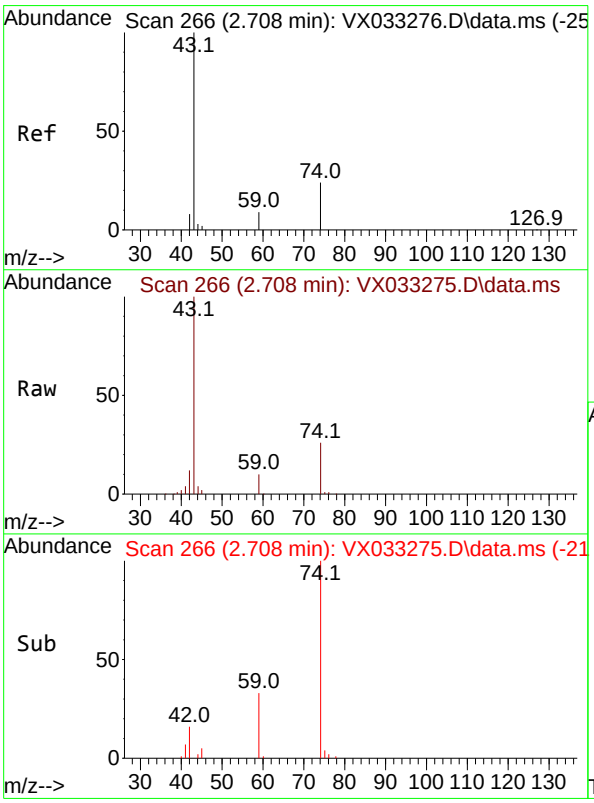
Ion	Ratio	Lower	Upper
76	100		
78	9.4	7.5	11.3

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

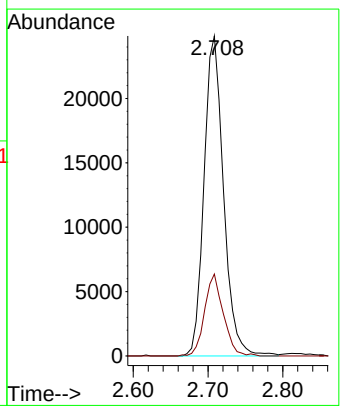


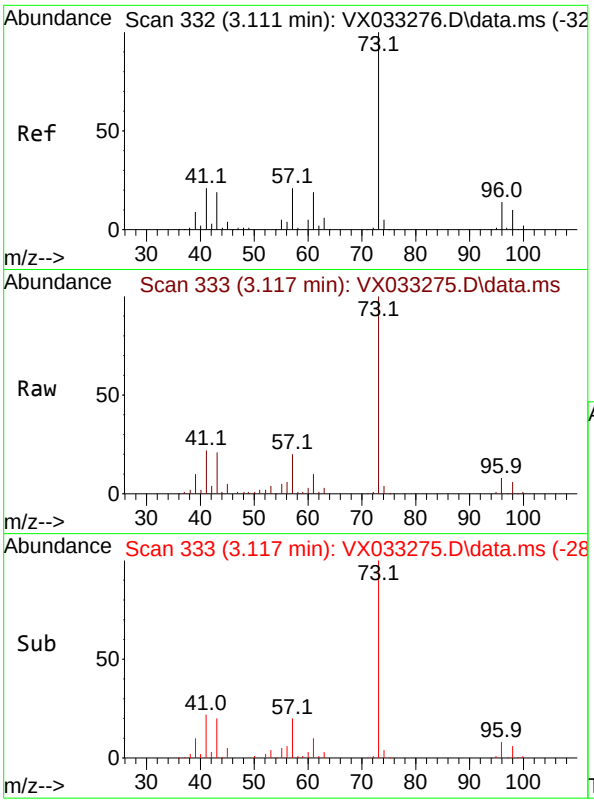


#18
Methyl Acetate
Concen: 24.243 ug/l
RT: 2.708 min Scan# 266
Delta R.T. 0.005 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion: 43 Resp: 45026

Ion	Ratio	Lower	Upper
43	100		
74	24.5	19.4	29.0

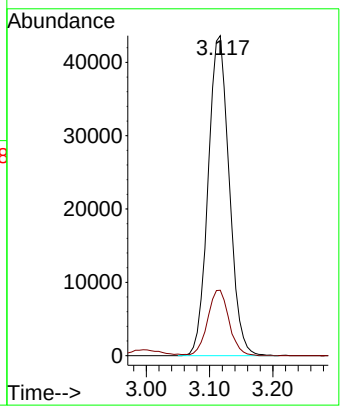




#19
Methyl tert-butyl Ether
Concen: 22.619 ug/l
RT: 3.117 min Scan# 3
Delta R.T. 0.006 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion: 73 Resp: 10098

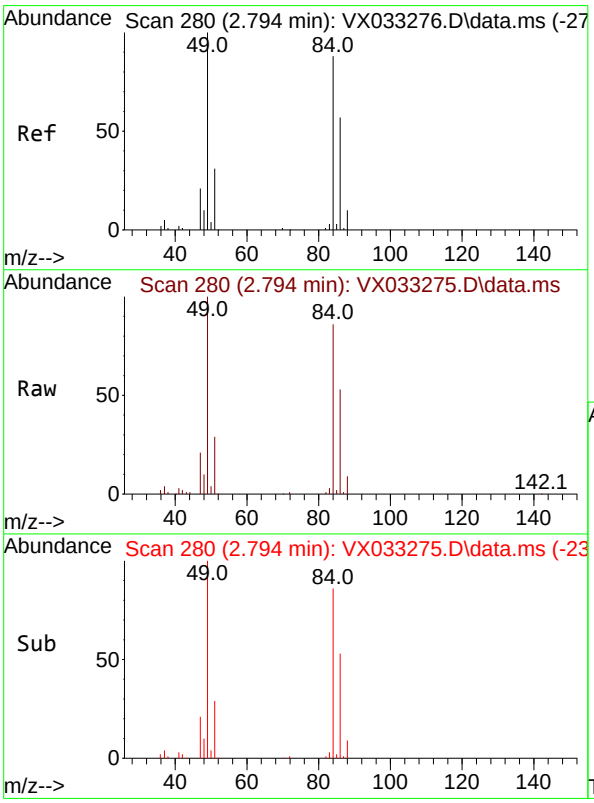
Ion	Ratio	Lower	Upper
73	100		
57	20.4	16.6	25.0



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

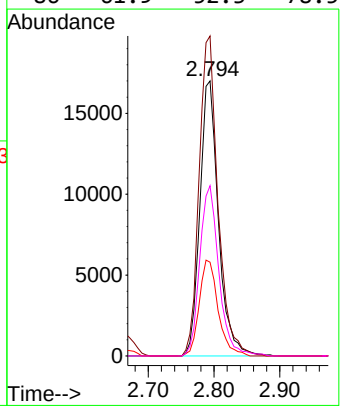
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

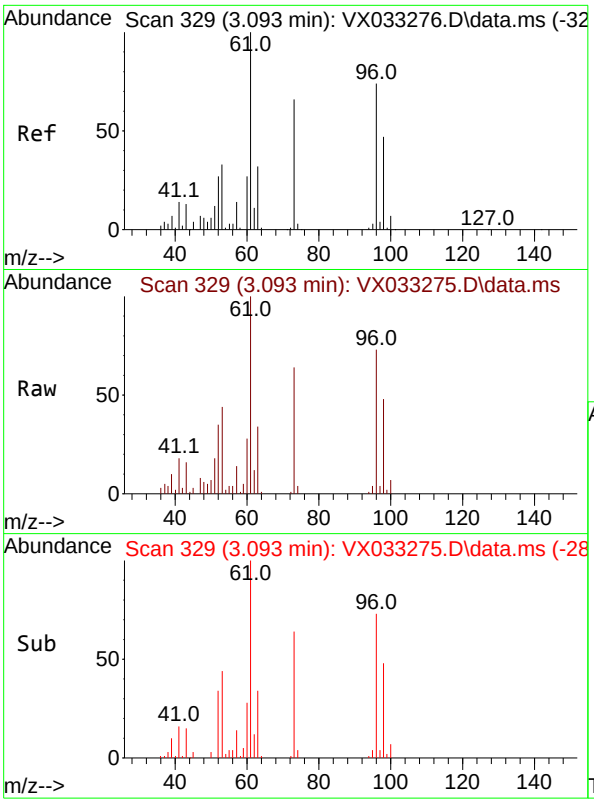


#20
Methylene Chloride
Concen: 20.670 ug/l
RT: 2.794 min Scan# 280
Delta R.T. 0.006 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion: 84 Resp: 33410

Ion	Ratio	Lower	Upper
84	100		
49	116.4	101.0	151.6
51	34.1	31.1	46.7
86	61.9	52.3	78.5

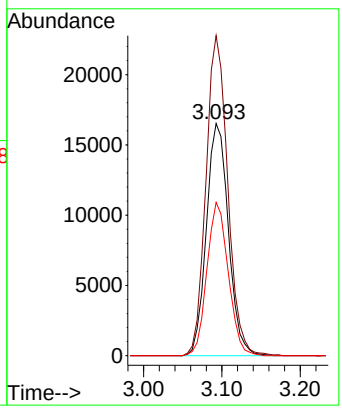




#21
trans-1,2-Dichloroethene
Concen: 21.939 ug/l
RT: 3.093 min Scan# 3
Delta R.T. -0.000 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion: 96 Resp: 3230

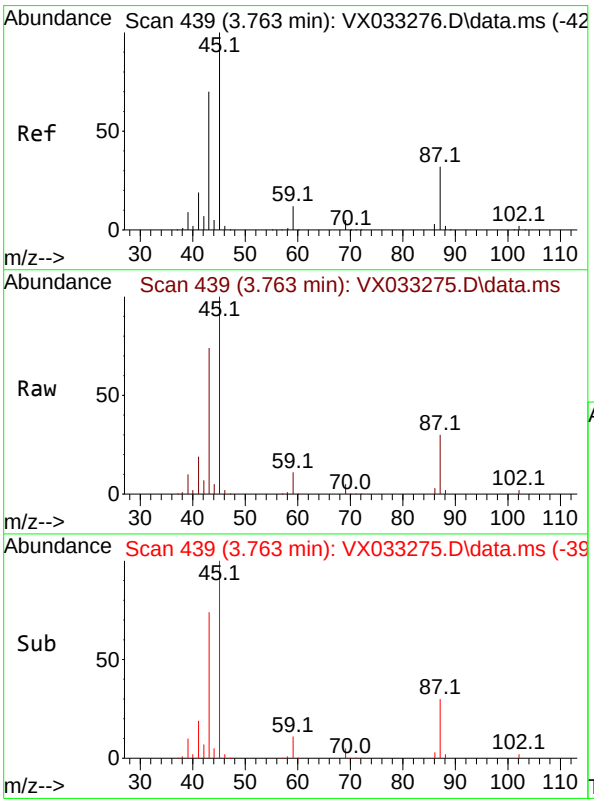
Ion	Ratio	Lower	Upper
96	100		
61	137.9	106.6	160.0
98	66.0	51.0	76.6



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

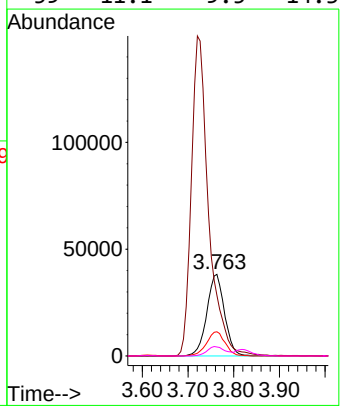
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

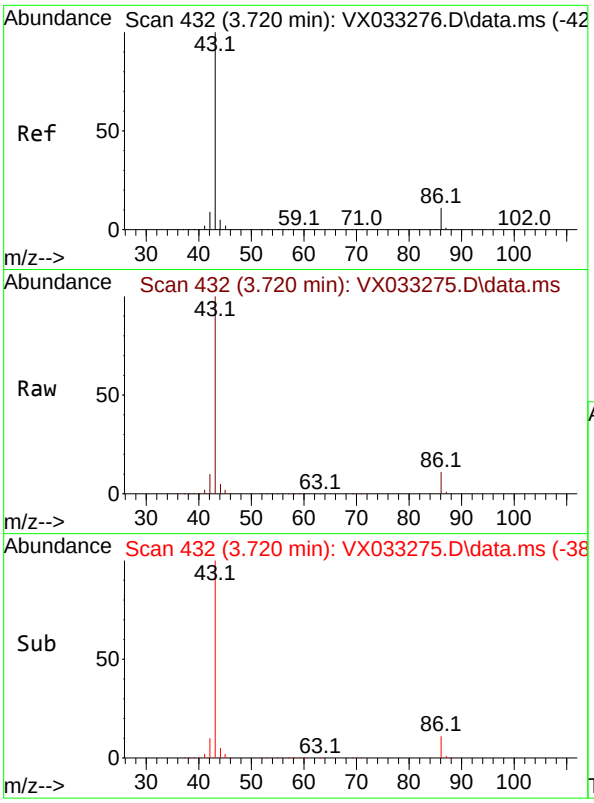


#22
Diisopropyl ether
Concen: 22.725 ug/l
RT: 3.763 min Scan# 439
Delta R.T. 0.000 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion: 45 Resp: 102846

Ion	Ratio	Lower	Upper
45	100		
43	73.6	56.4	84.6
87	29.6	24.4	36.6
59	11.1	9.5	14.3





#23
Vinyl Acetate
Concen: 111.048 ug/l
RT: 3.720 min Scan# 4
Delta R.T. -0.001 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

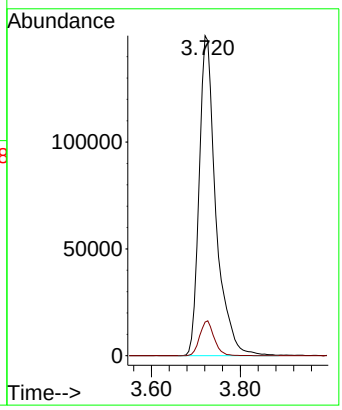
Tgt Ion: 43 Resp: 39339

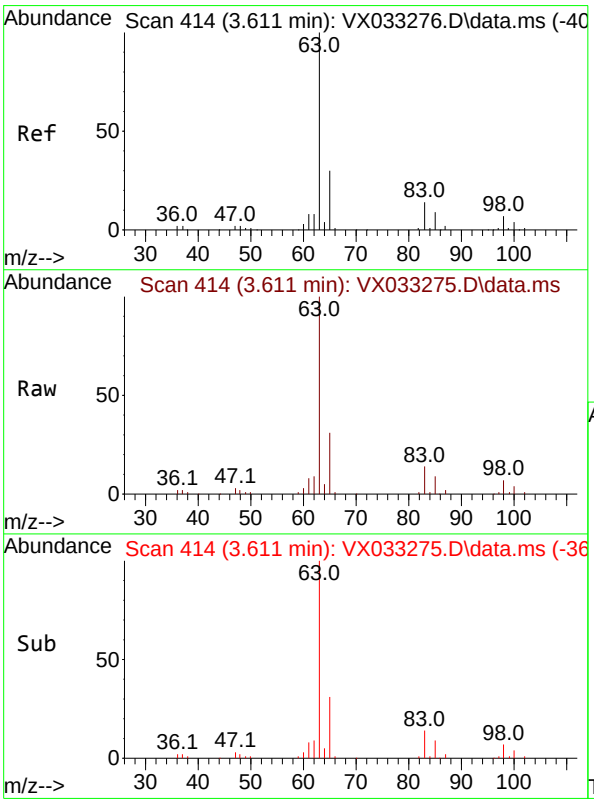
Ion	Ratio	Lower	Upper
43	100		
86	10.5	8.6	12.8

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

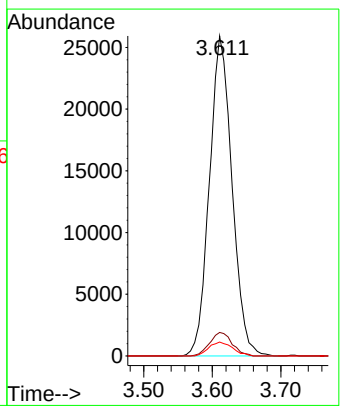


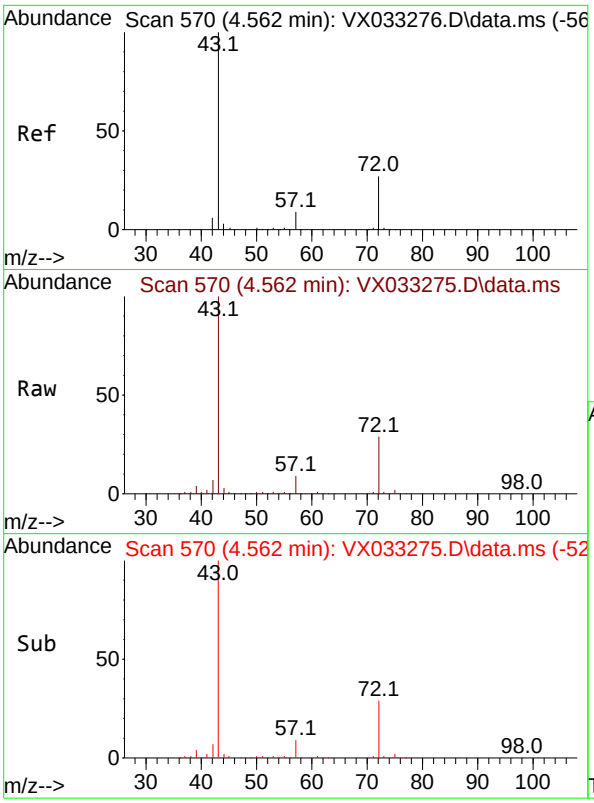


#24
1,1-Dichloroethane
Concen: 22.928 ug/l
RT: 3.611 min Scan# 414
Delta R.T. -0.000 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion: 63 Resp: 59379

Ion	Ratio	Lower	Upper
63	100		
98	7.3	3.5	10.4
100	4.4	2.3	6.8

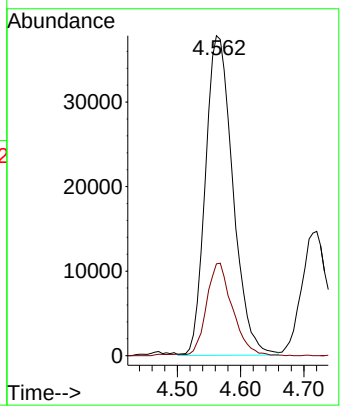




#25
2-Butanone
Concen: 123.133 ug/l
RT: 4.562 min Scan# 5
Delta R.T. 0.006 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion: 43 Resp: 11391

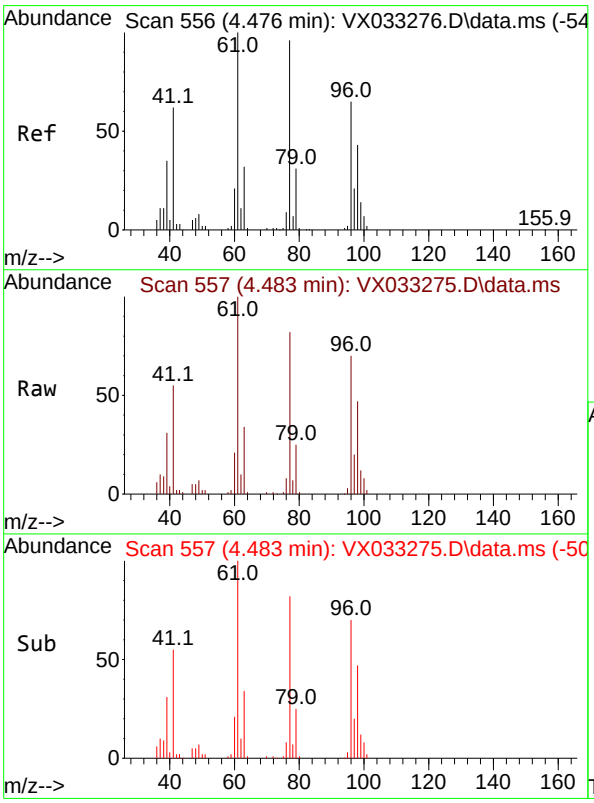
Ion	Ratio	Lower	Upper
43	100		
72	28.6	22.2	33.2



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

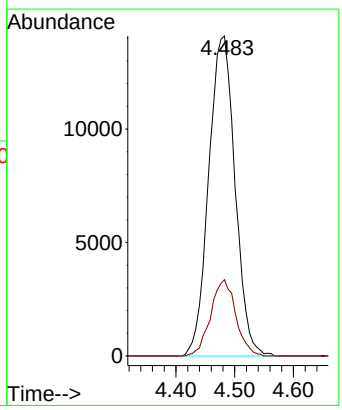
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

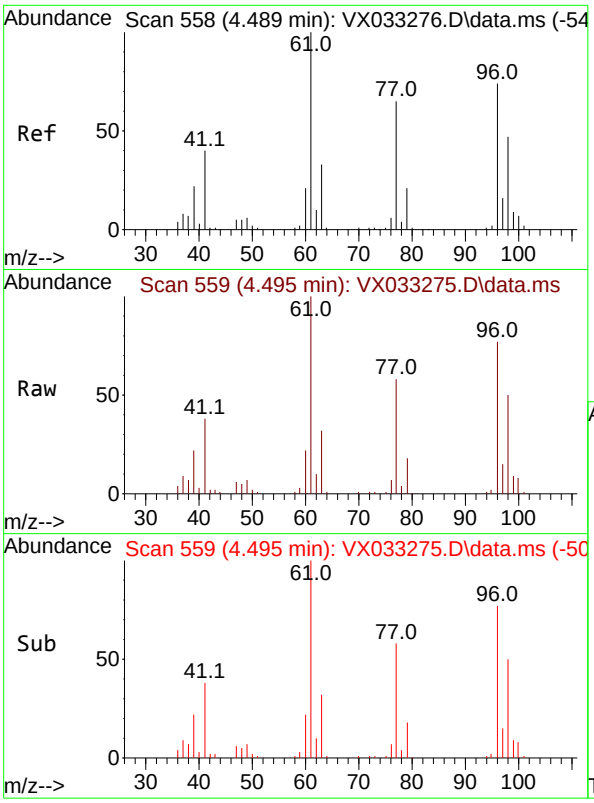


#26
2,2-Dichloropropane
Concen: 21.089 ug/l
RT: 4.483 min Scan# 557
Delta R.T. 0.006 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion: 77 Resp: 43915

Ion	Ratio	Lower	Upper
77	100		
97	22.8	11.4	34.1

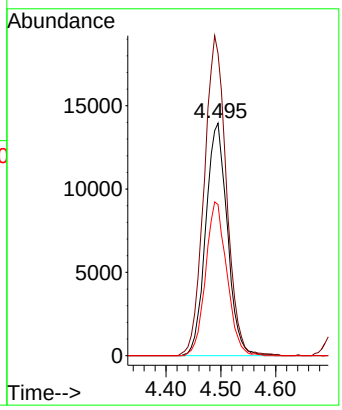




#27
cis-1,2-Dichloroethene
Concen: 22.802 ug/l
RT: 4.495 min Scan# 5
Delta R.T. 0.006 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion: 96 Resp: 3815

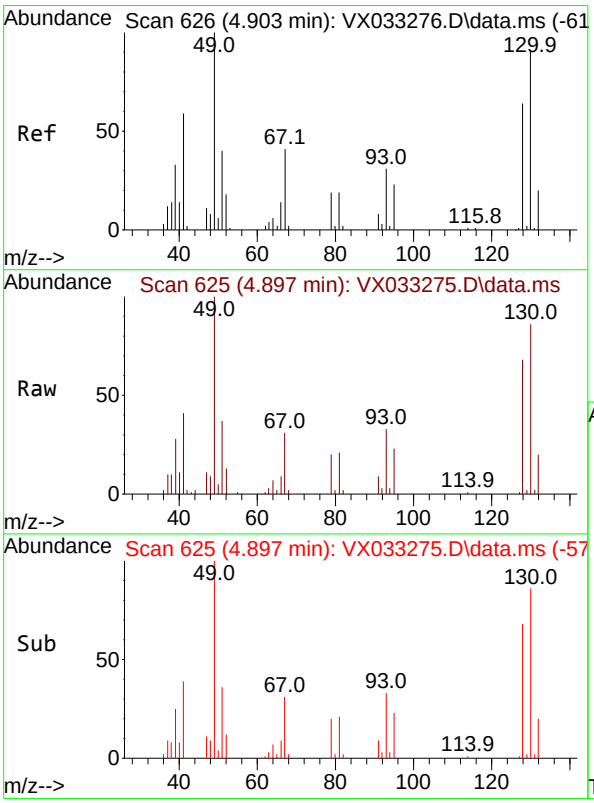
Ion	Ratio	Lower	Upper
96	100		
61	141.4	0.0	286.0
98	65.0	0.0	129.6



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

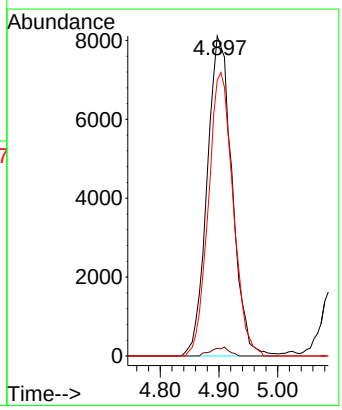
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

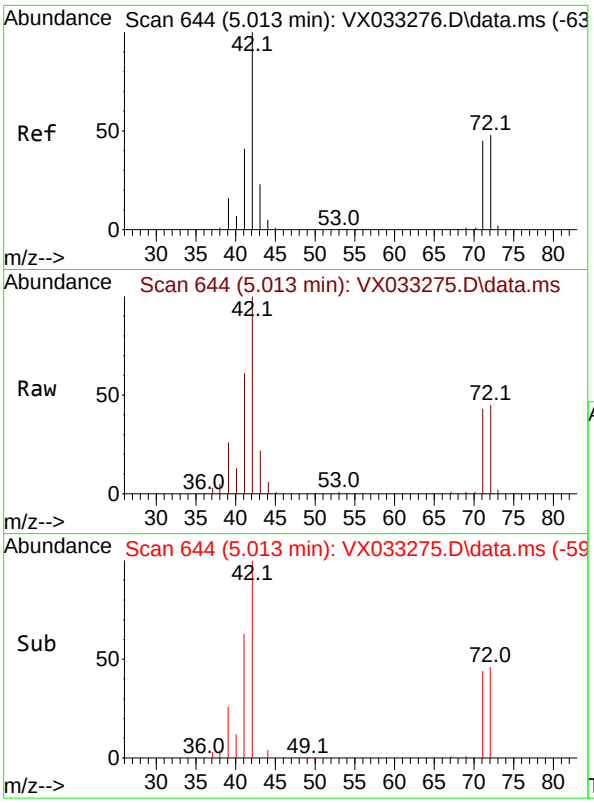


#28
Bromochloromethane
Concen: 21.092 ug/l
RT: 4.897 min Scan# 625
Delta R.T. -0.007 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion: 49 Resp: 24001

Ion	Ratio	Lower	Upper
49	100		
129	2.0	0.0	3.8
130	87.4	67.5	101.3

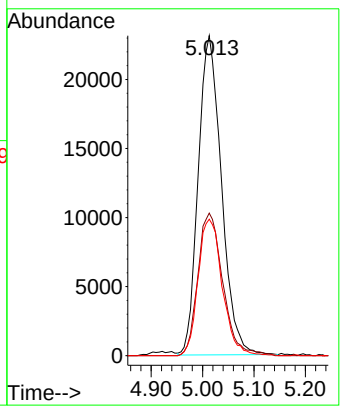




#29
Tetrahydrofuran
Concen: 123.883 ug/l
RT: 5.013 min Scan# 64
Delta R.T. 0.012 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion: 42 Resp: 7272

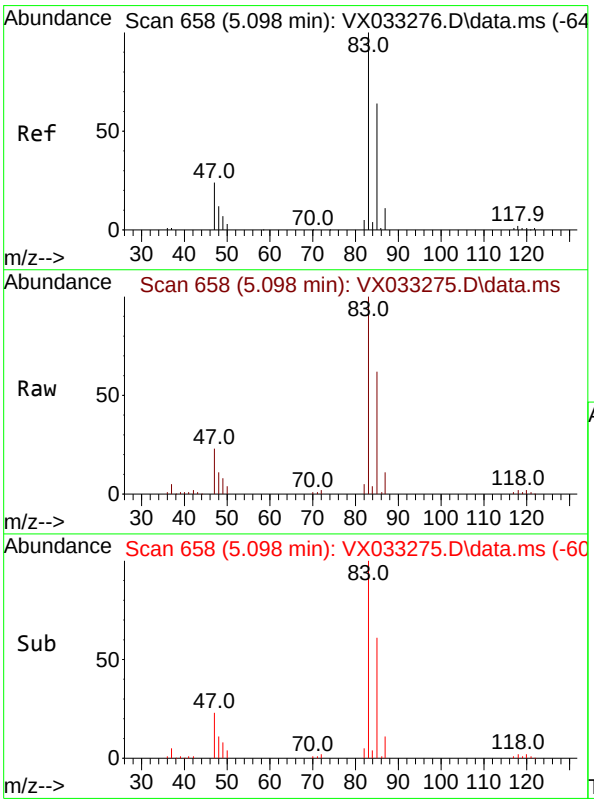
Ion	Ratio	Lower	Upper
42	100		
72	47.8	37.6	56.4
71	44.5	34.7	52.1



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

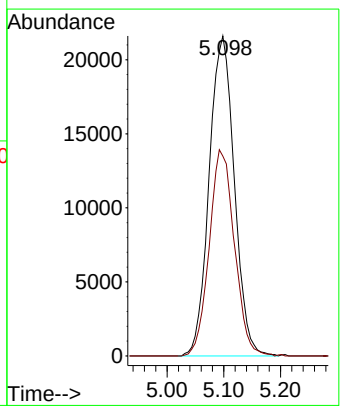
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

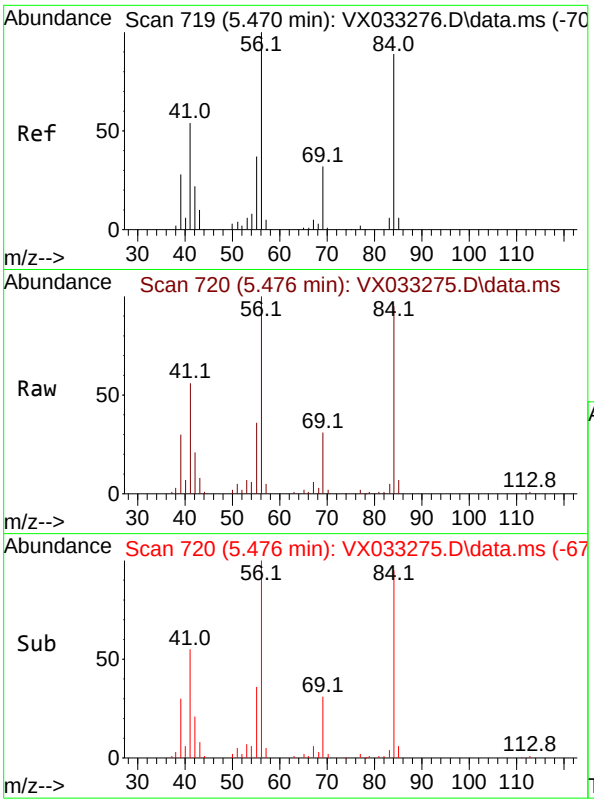


#30
Chloroform
Concen: 22.953 ug/l
RT: 5.098 min Scan# 658
Delta R.T. -0.001 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion: 83 Resp: 66575

Ion	Ratio	Lower	Upper
83	100		
85	62.5	51.1	76.7





#31
Cyclohexane
Concen: 22.212 ug/l
RT: 5.476 min Scan# 7
Delta R.T. 0.006 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

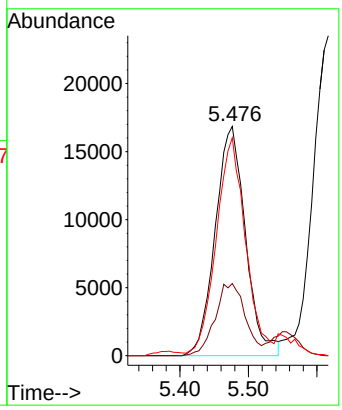
Tgt Ion: 56 Resp: 5170

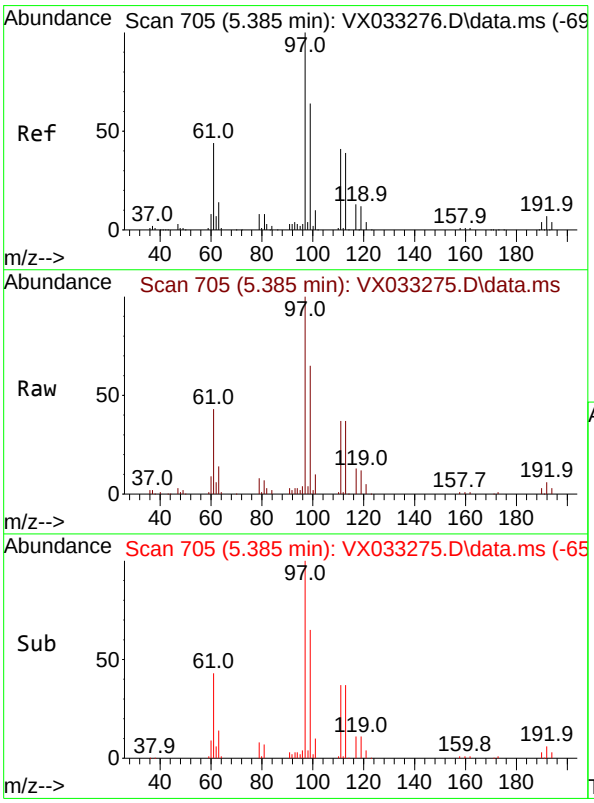
Ion	Ratio	Lower	Upper
56	100		
69	31.4	24.1	36.1
84	93.6	66.9	100.3

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

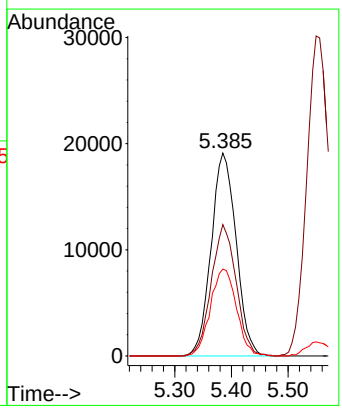


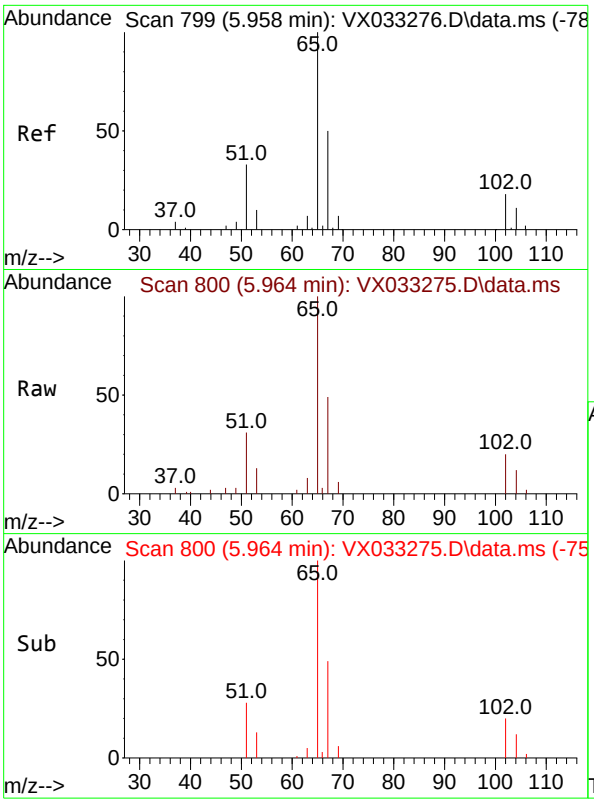


#32
1,1,1-Trichloroethane
Concen: 22.482 ug/l
RT: 5.385 min Scan# 705
Delta R.T. -0.000 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion: 97 Resp: 58398

Ion	Ratio	Lower	Upper
97	100		
99	64.5	51.4	77.0
61	44.8	35.2	52.8

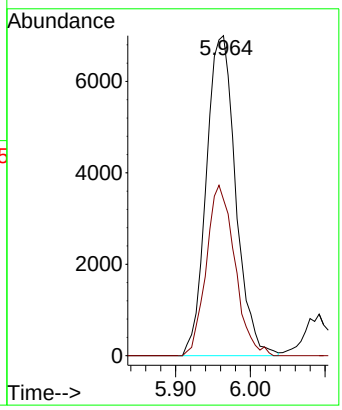




#33
1,2-Dichloroethane-d4
Concen: 12.031 ug/l
RT: 5.964 min Scan# 8
Delta R.T. 0.006 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion: 65 Resp: 1911

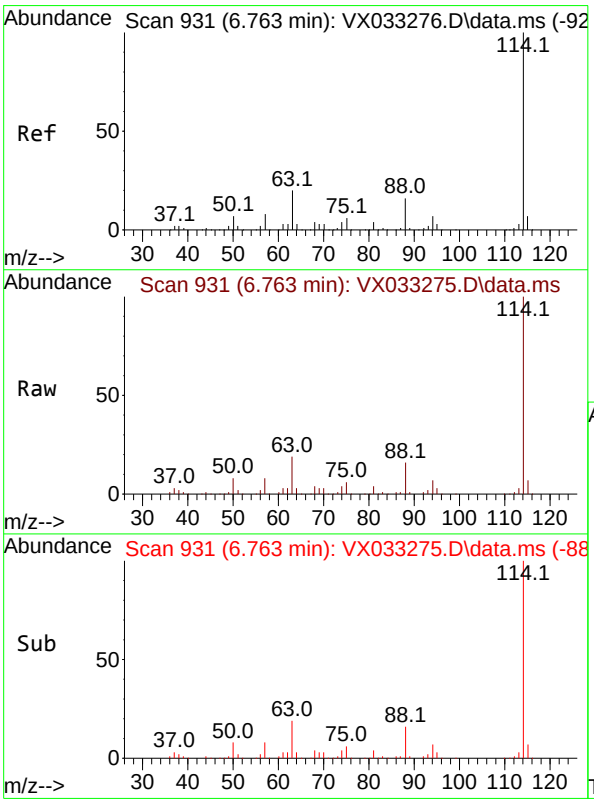
Ion	Ratio	Lower	Upper
65	100		
67	51.7	0.0	101.8



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

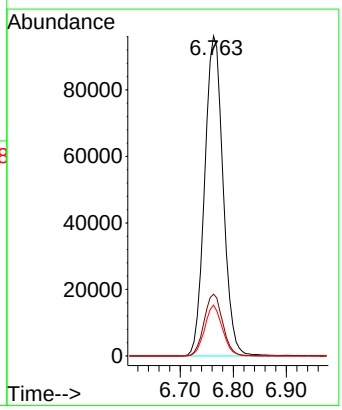
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

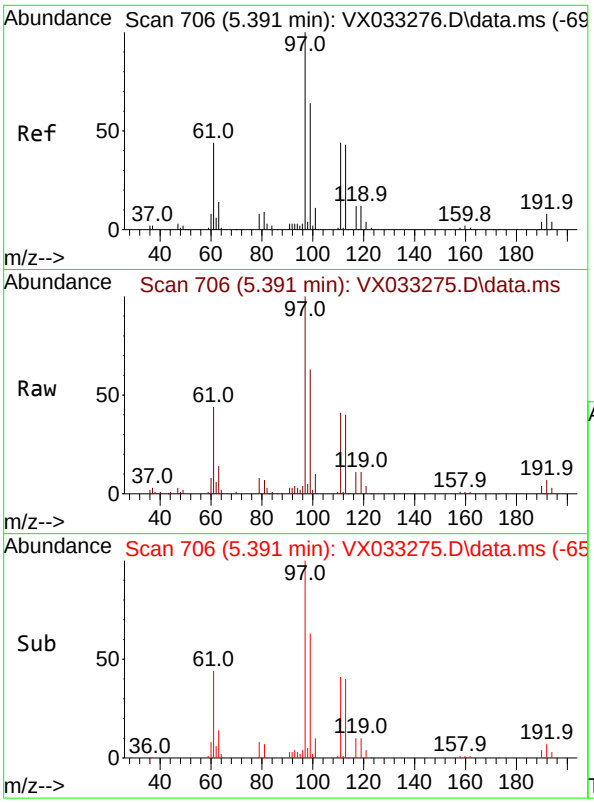


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 6.763 min Scan# 931
Delta R.T. -0.000 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion:114 Resp: 231761

Ion	Ratio	Lower	Upper
114	100		
63	19.3	0.0	41.6
88	15.9	0.0	33.4

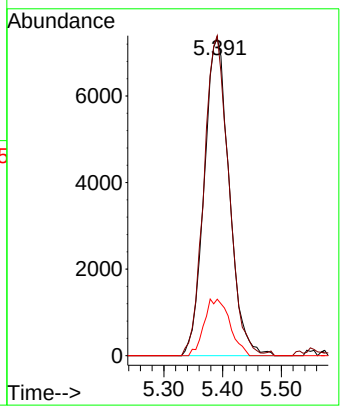




#35
Dibromofluoromethane
Concen: 16.607 ug/l
RT: 5.391 min Scan# 7
Delta R.T. 0.006 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion:113 Resp: 2169

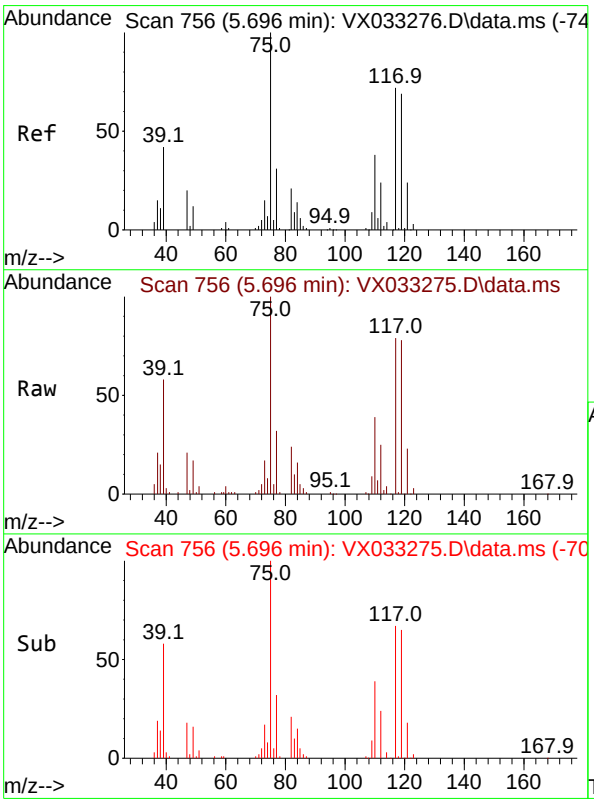
Ion	Ratio	Lower	Upper
113	100		
111	99.9	82.4	123.6
192	18.3	15.4	23.2



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

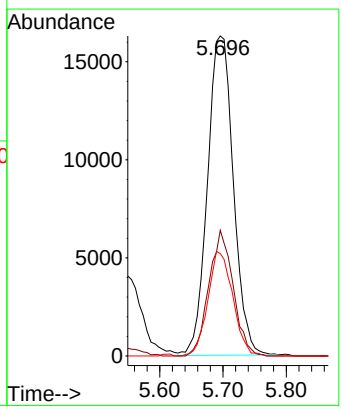
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

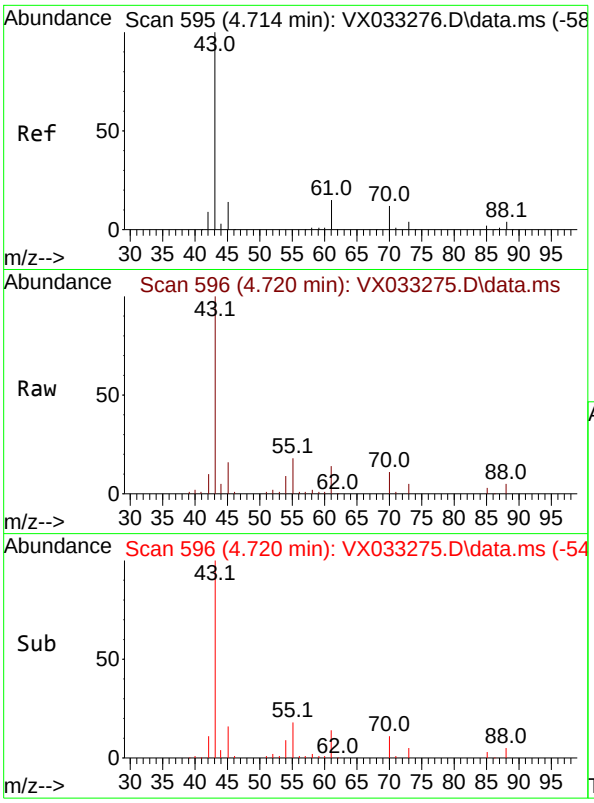


#36
1,1-Dichloropropene
Concen: 22.181 ug/l
RT: 5.696 min Scan# 756
Delta R.T. -0.000 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion: 75 Resp: 46341

Ion	Ratio	Lower	Upper
75	100		
110	36.7	18.4	55.2
77	31.5	24.5	36.7

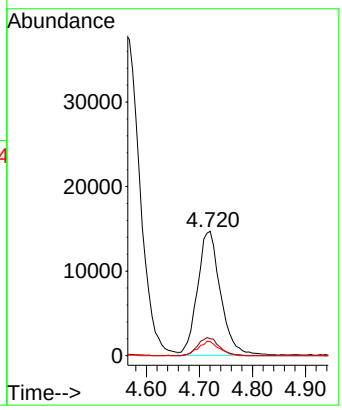




#37
Ethyl Acetate
Concen: 24.342 ug/l
RT: 4.720 min Scan# 5
Delta R.T. 0.005 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion: 43 Resp: 4436

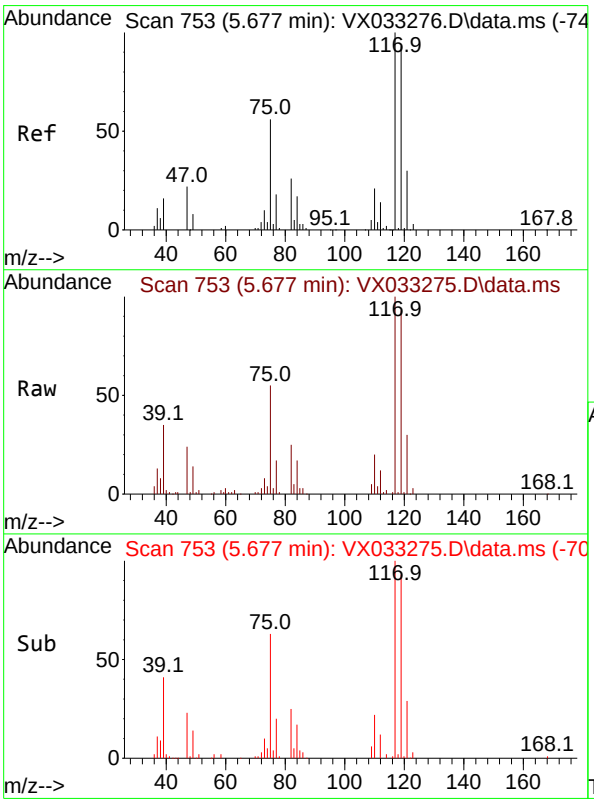
Ion	Ratio	Lower	Upper
43	100		
61	13.7	11.5	17.3
70	10.3	9.1	13.7



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

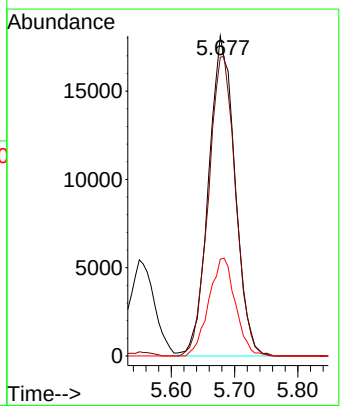
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

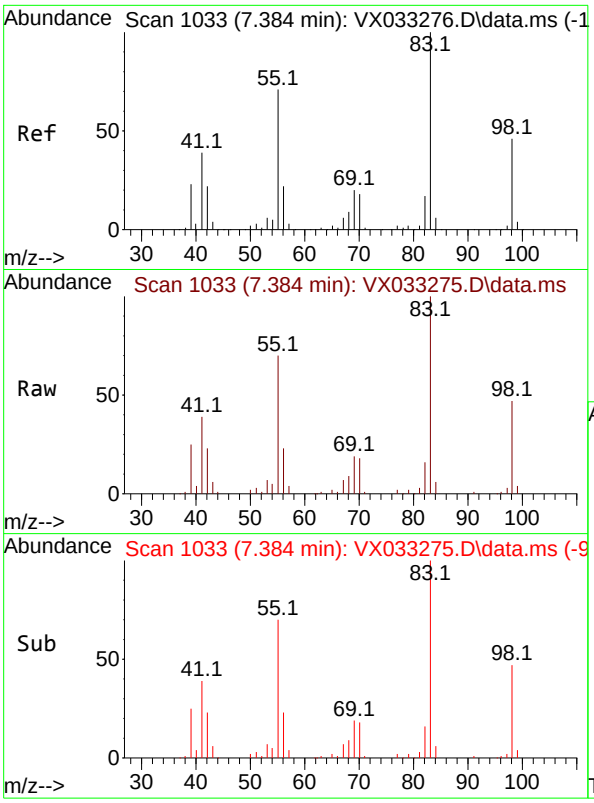


#38
Carbon Tetrachloride
Concen: 22.637 ug/l
RT: 5.677 min Scan# 753
Delta R.T. -0.007 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion:117 Resp: 52464

Ion	Ratio	Lower	Upper
117	100		
119	93.3	77.2	115.8
121	30.3	25.8	38.6

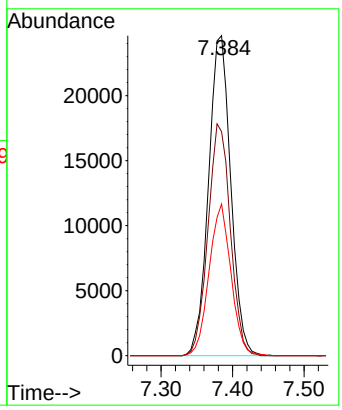




#39
Methylcyclohexane
Concen: 22.317 ug/l
RT: 7.384 min Scan# 1
Delta R.T. -0.001 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion: 83 Resp: 5319

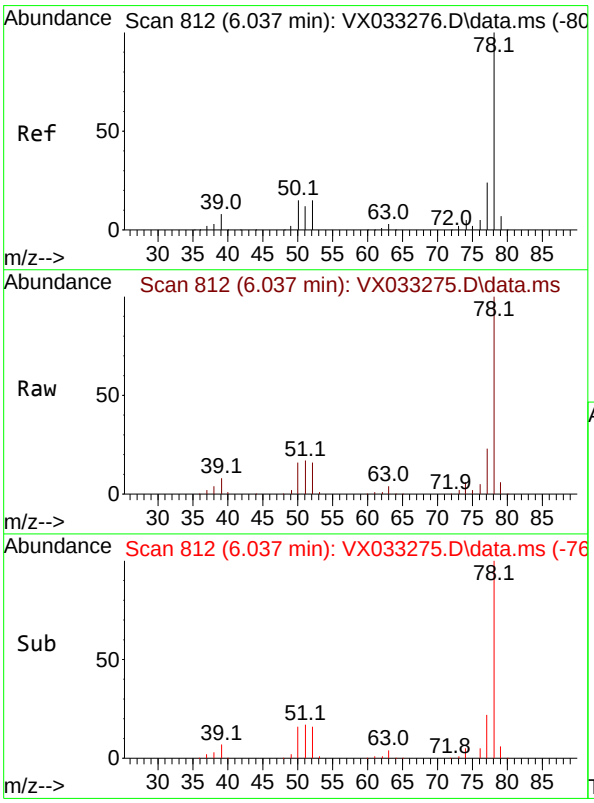
Ion	Ratio	Lower	Upper
83	100		
55	70.0	58.4	87.6
98	47.4	37.2	55.8



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

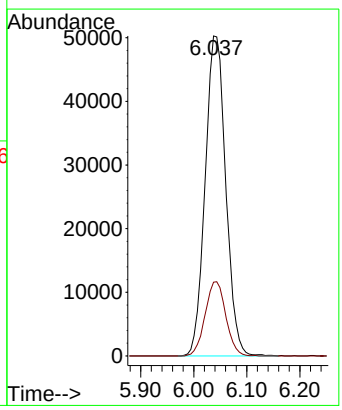
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

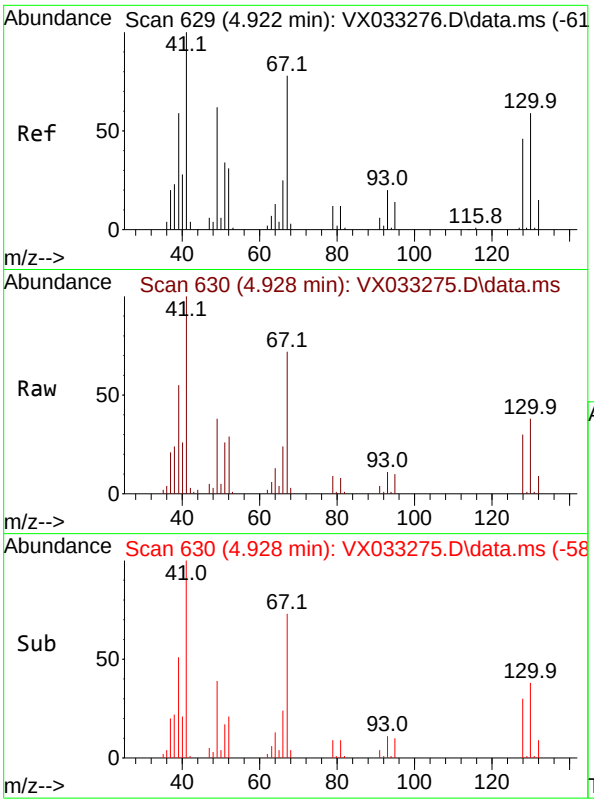


#40
Benzene
Concen: 23.165 ug/l
RT: 6.037 min Scan# 812
Delta R.T. 0.000 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion: 78 Resp: 135692

Ion	Ratio	Lower	Upper
78	100		
77	23.0	19.0	28.4

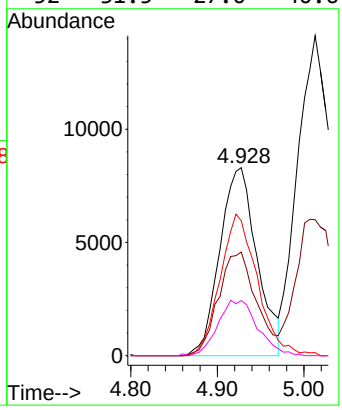




#41
Methacrylonitrile
Concen: 24.191 ug/l
RT: 4.928 min Scan# 6
Delta R.T. 0.006 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion: 41 Resp: 2481

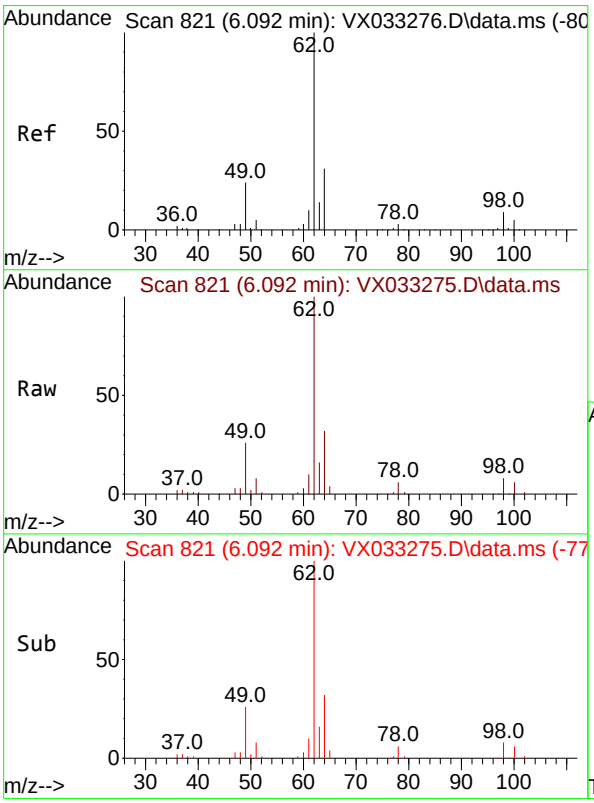
Ion	Ratio	Lower	Upper
41	100		
39	56.4	47.5	71.3
67	75.3	60.5	90.7
52	31.5	27.0	40.6



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

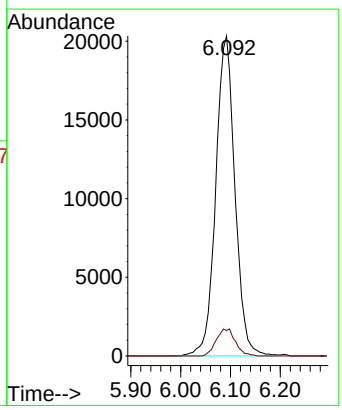
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

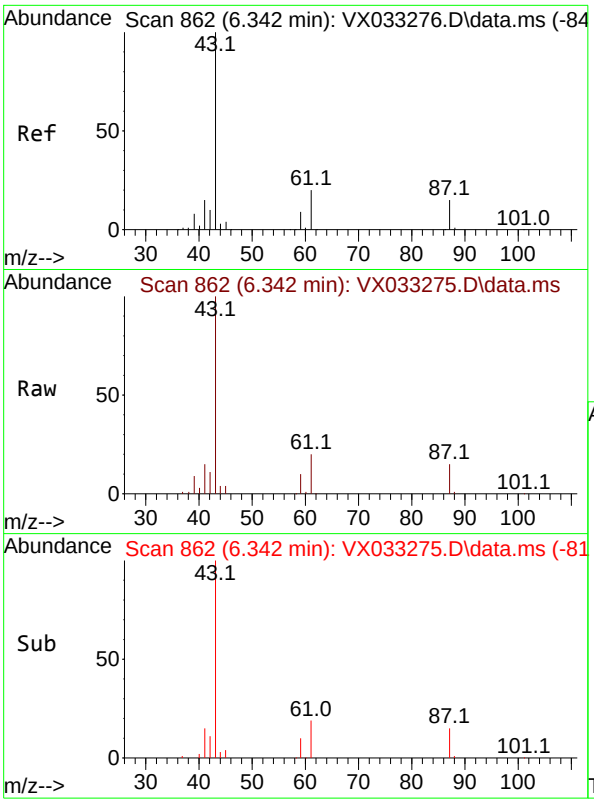


#42
1,2-Dichloroethane
Concen: 23.029 ug/l
RT: 6.092 min Scan# 821
Delta R.T. 0.006 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion: 62 Resp: 54314

Ion	Ratio	Lower	Upper
62	100		
98	8.5	0.0	16.0

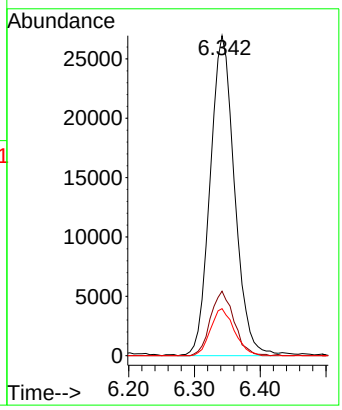




#43
Isopropyl Acetate
Concen: 23.091 ug/l
RT: 6.342 min Scan# 8
Delta R.T. -0.000 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion: 43 Resp: 6960

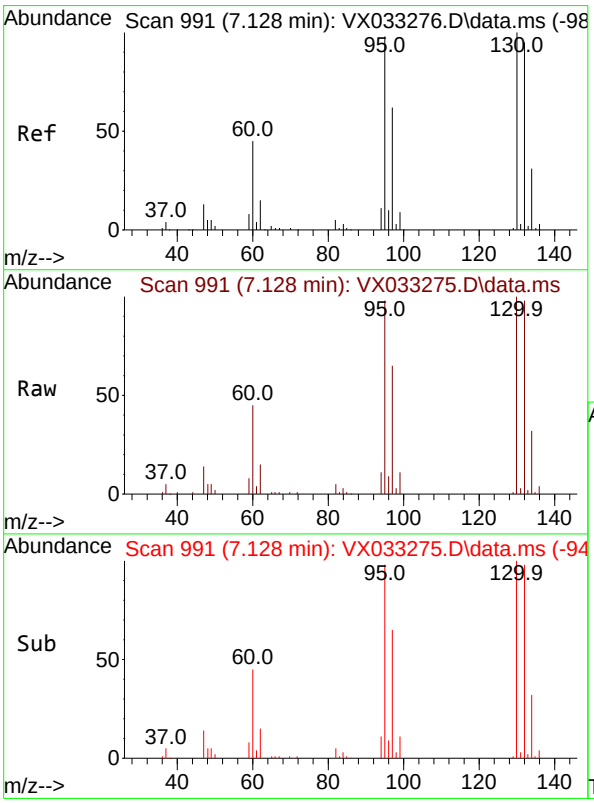
Ion	Ratio	Lower	Upper
43	100		
61	19.4	15.4	23.0
87	14.3	10.8	16.2



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

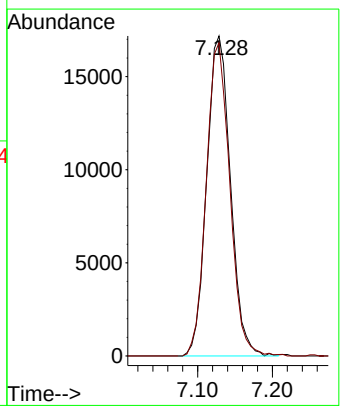
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

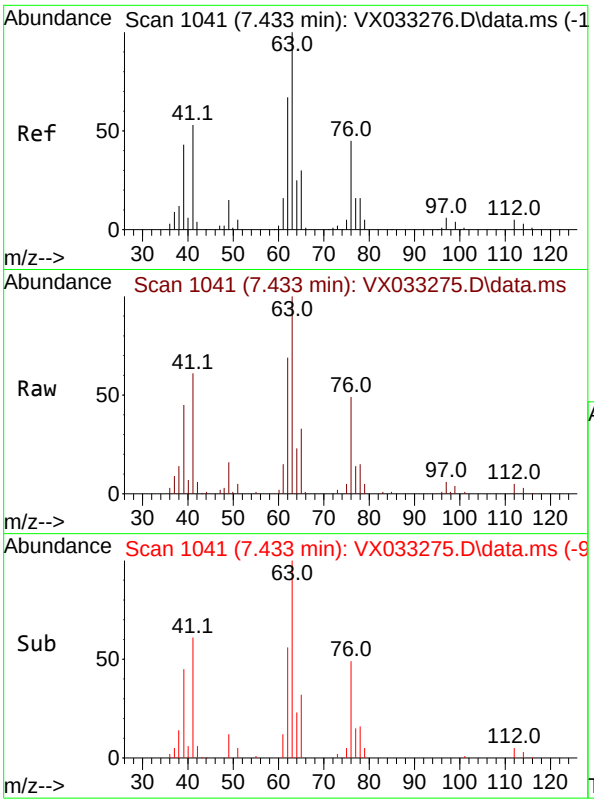


#44
Trichloroethene
Concen: 23.116 ug/l
RT: 7.128 min Scan# 991
Delta R.T. -0.001 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion:130 Resp: 37995

Ion	Ratio	Lower	Upper
130	100		
95	97.9	0.0	195.2

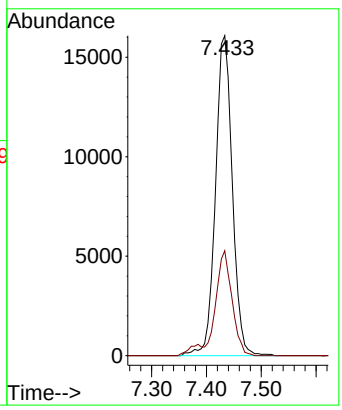




#45
1,2-Dichloropropane
Concen: 23.772 ug/l
RT: 7.433 min Scan# 1
Delta R.T. -0.001 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion: 63 Resp: 3441

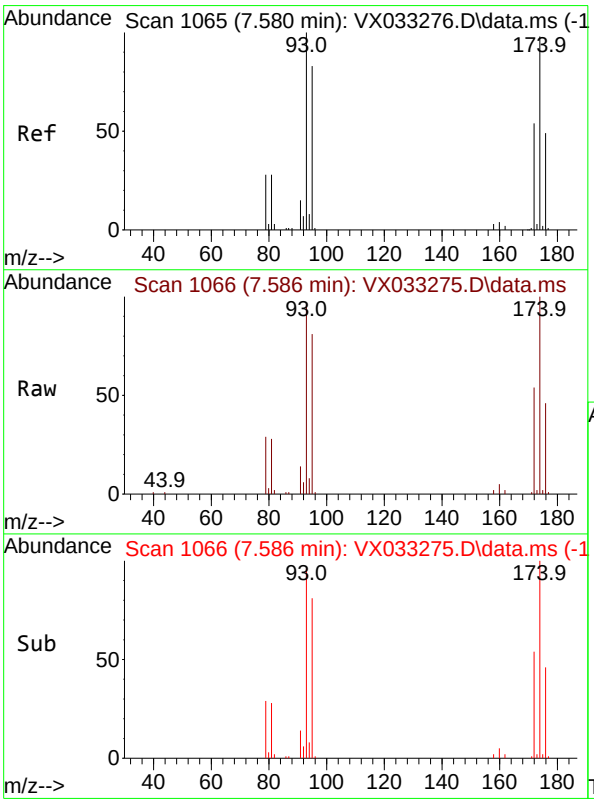
Ion	Ratio	Lower	Upper
63	100		
65	32.8	24.6	36.8



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

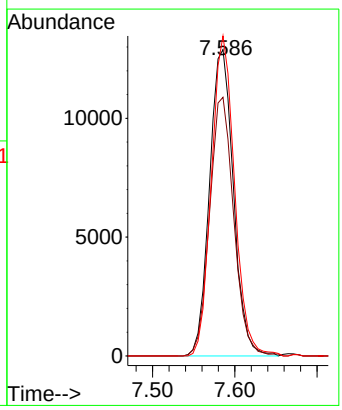
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

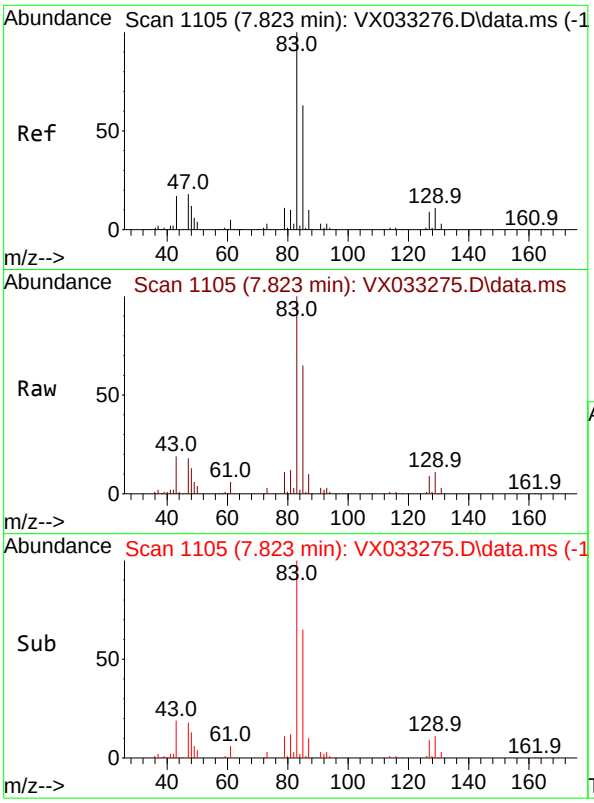


#46
Dibromomethane
Concen: 23.049 ug/l
RT: 7.586 min Scan# 1066
Delta R.T. 0.006 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion: 93 Resp: 26034

Ion	Ratio	Lower	Upper
93	100		
95	85.2	65.8	98.8
174	101.4	79.8	119.6

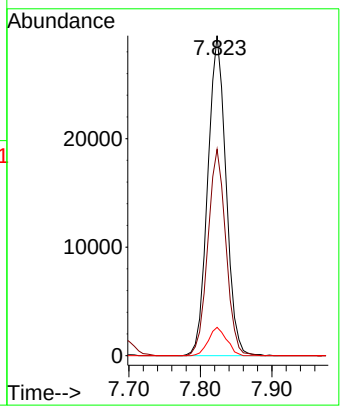




#47
Bromodichloromethane
Concen: 23.881 ug/l
RT: 7.823 min Scan# 11
Delta R.T. -0.001 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion: 83 Resp: 5212

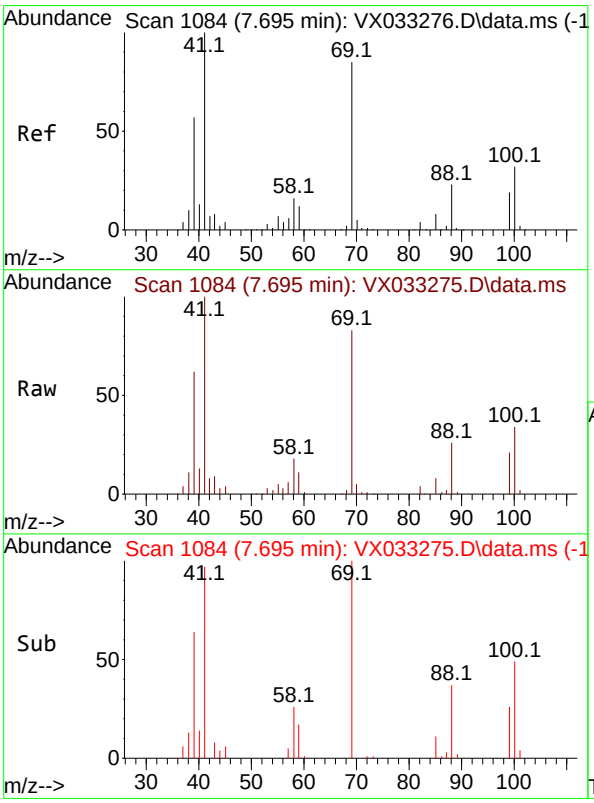
Ion	Ratio	Lower	Upper
83	100		
85	64.5	52.2	78.4
127	8.9	7.4	11.2



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

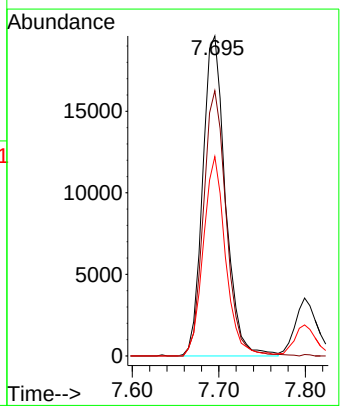
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

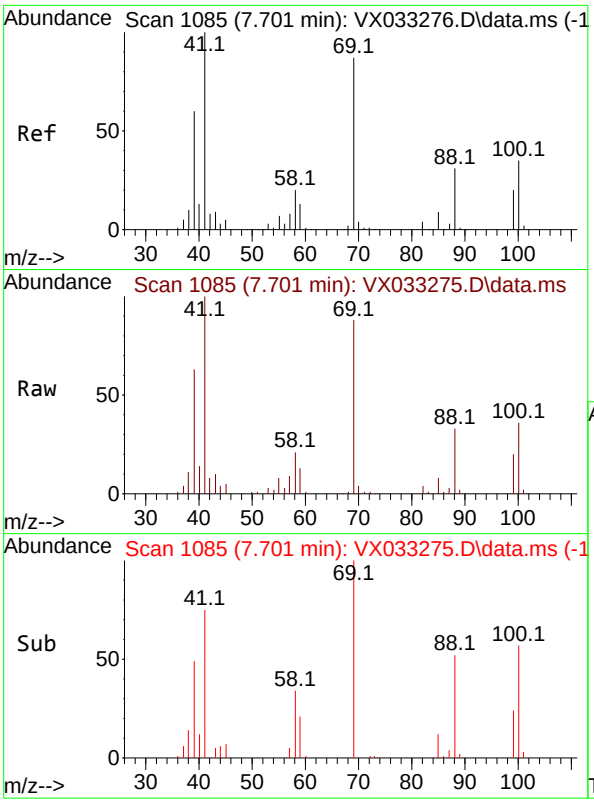


#48
Methyl methacrylate
Concen: 23.071 ug/l
RT: 7.695 min Scan# 1084
Delta R.T. -0.001 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion: 41 Resp: 35797

Ion	Ratio	Lower	Upper
41	100		
69	83.0	65.1	97.7
39	61.1	51.9	77.9

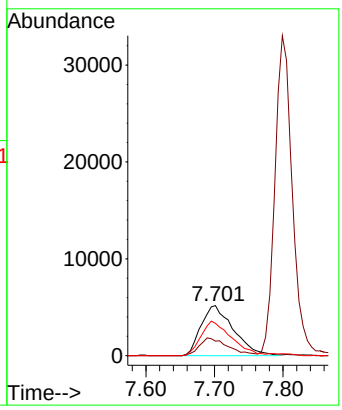




#49
1,4-Dioxane
Concen: 594.851 ug/l
RT: 7.701 min Scan# 1
Delta R.T. 0.030 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion: 88 Resp: 1699

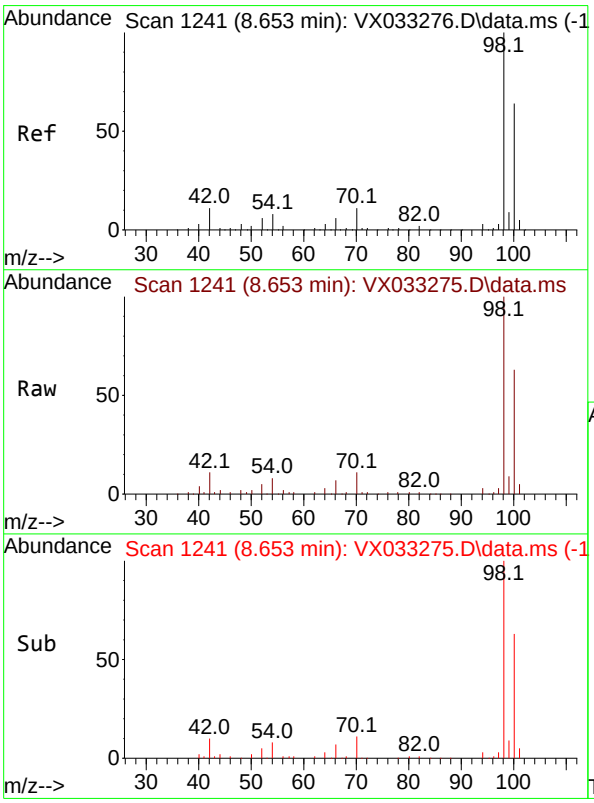
Ion	Ratio	Lower	Upper
88	100		
43	31.6	26.6	39.8
58	64.5	51.7	77.5



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

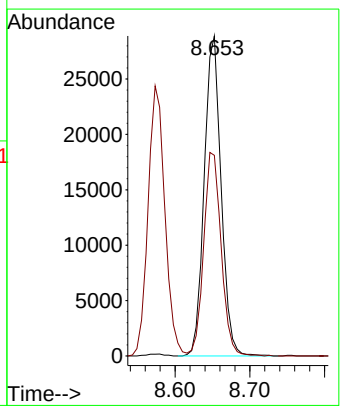
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

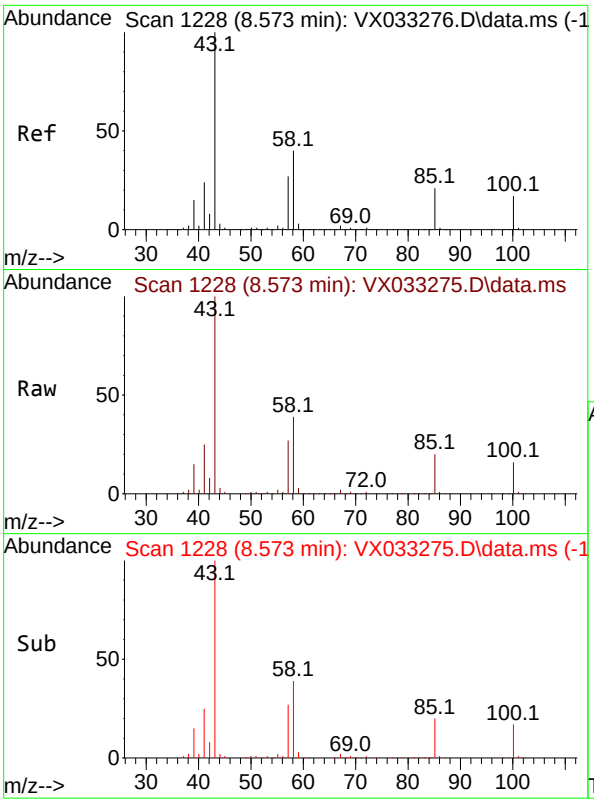


#50
Toluene-d8
Concen: 10.662 ug/l
RT: 8.653 min Scan# 1241
Delta R.T. -0.000 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion: 98 Resp: 45228

Ion	Ratio	Lower	Upper
98	100		
100	65.9	50.9	76.3





#51
4-Methyl-2-Pentanone
Concen: 124.317 ug/l
RT: 8.573 min Scan# 1
Delta R.T. -0.001 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

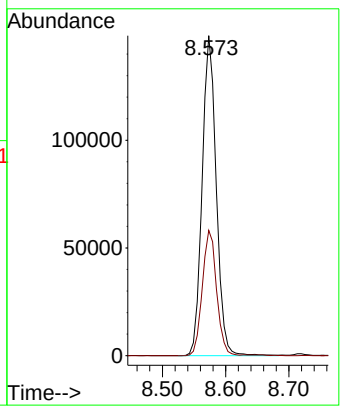
Tgt Ion: 43 Resp: 23123

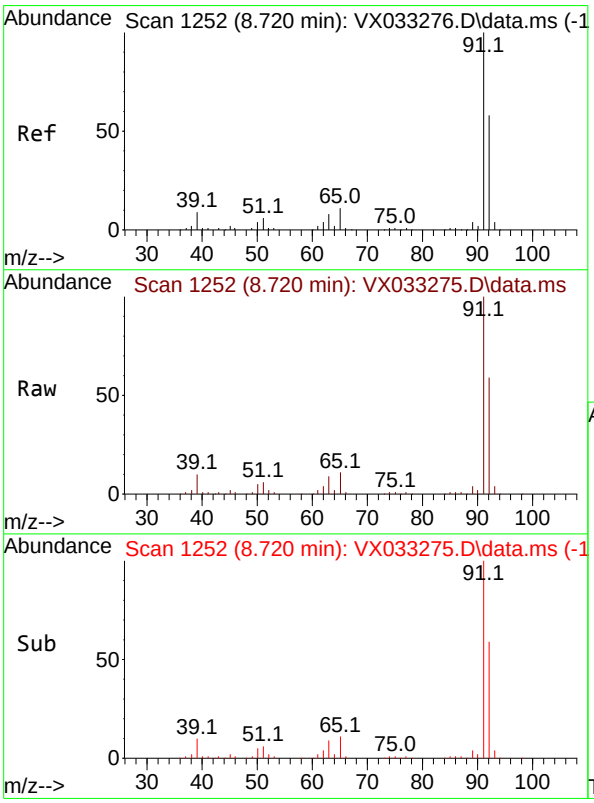
Ion	Ratio	Lower	Upper
43	100		
58	39.5	30.9	46.3

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

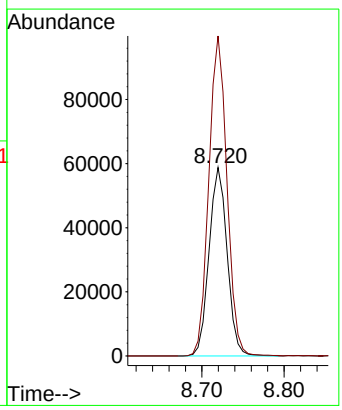


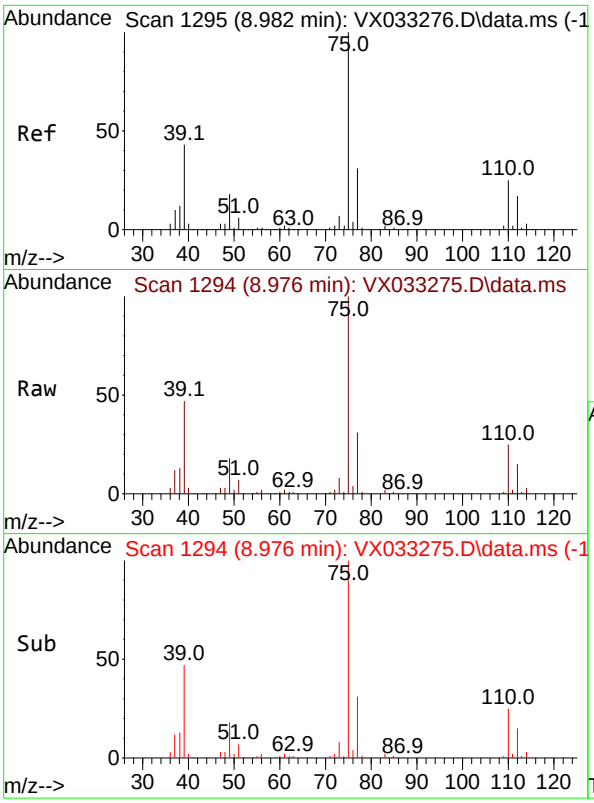


#52
Toluene
Concen: 23.340 ug/l
RT: 8.720 min Scan# 1252
Delta R.T. -0.000 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion: 92 Resp: 89946

Ion	Ratio	Lower	Upper
92	100		
91	169.9	138.3	207.5

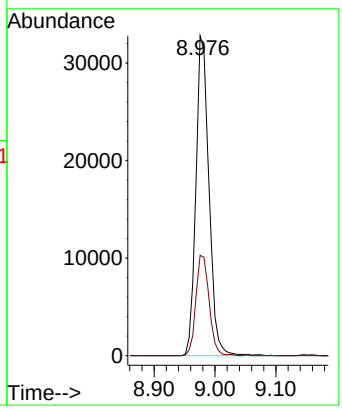




#53
t-1,3-Dichloropropene
Concen: 22.777 ug/l
RT: 8.976 min Scan# 1
Delta R.T. -0.006 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion: 75 Resp: 4879

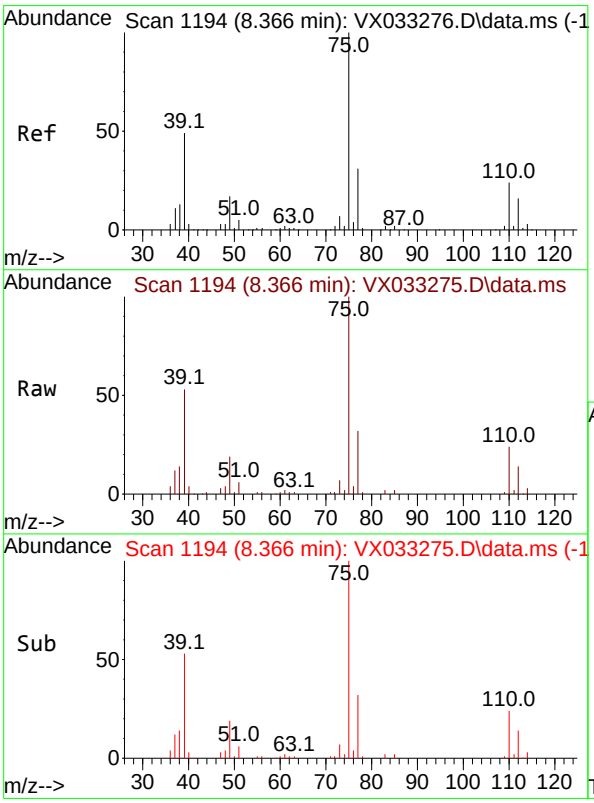
Ion	Ratio	Lower	Upper
75	100		
77	31.3	25.1	37.7



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

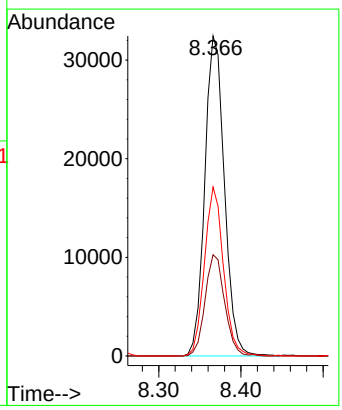
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

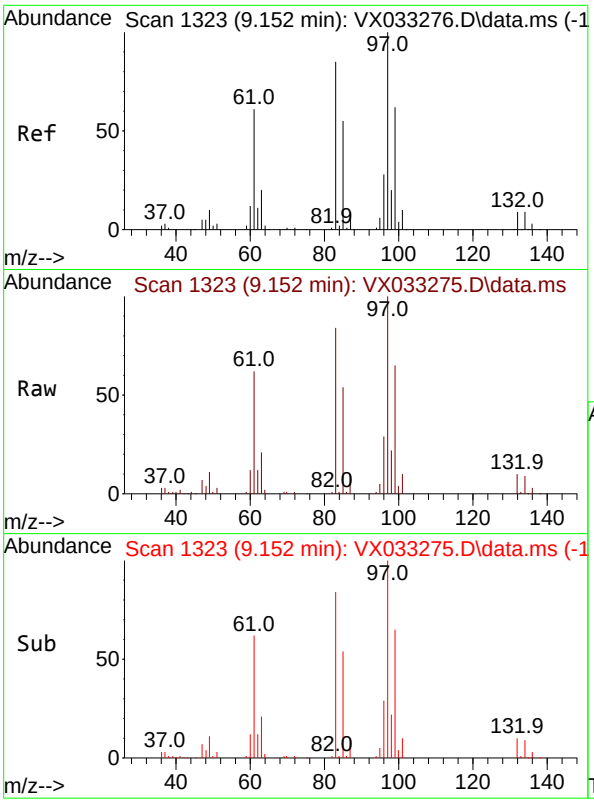


#54
cis-1,3-Dichloropropene
Concen: 22.847 ug/l
RT: 8.366 min Scan# 1194
Delta R.T. -0.000 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion: 75 Resp: 53756

Ion	Ratio	Lower	Upper
75	100		
77	31.7	25.1	37.7
39	52.8	45.5	68.3

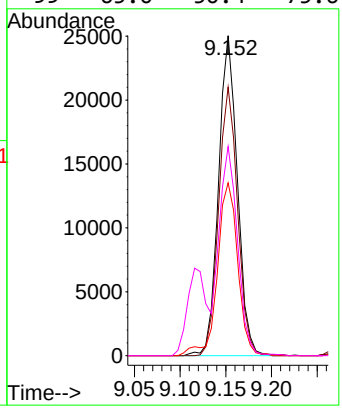




#55
1,1,2-Trichloroethane
Concen: 22.885 ug/l
RT: 9.152 min Scan# 1
Delta R.T. -0.001 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion: 97 Resp: 3590

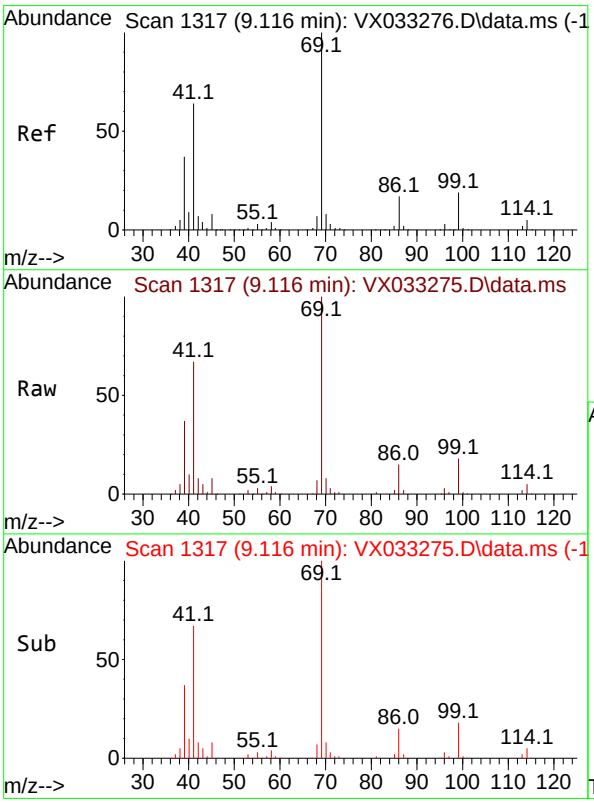
Ion	Ratio	Lower	Upper
97	100		
83	83.9	68.1	102.1
85	54.0	43.3	64.9
99	65.0	50.4	75.6



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

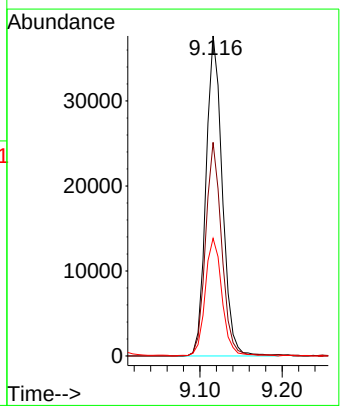
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

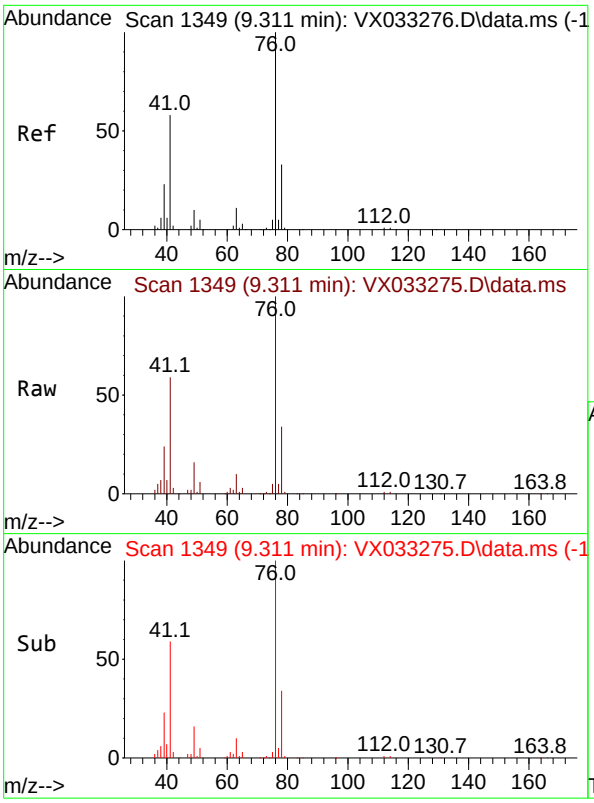


#56
Ethyl methacrylate
Concen: 23.997 ug/l
RT: 9.116 min Scan# 1317
Delta R.T. -0.000 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion: 69 Resp: 51875

Ion	Ratio	Lower	Upper
69	100		
41	65.8	54.3	81.5
39	38.0	35.2	52.8

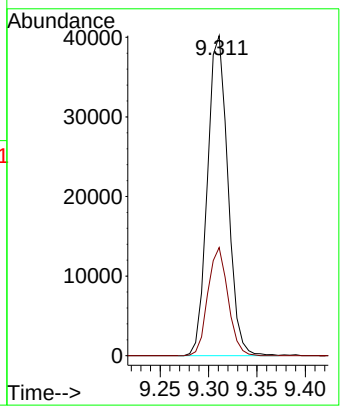




#57
1,3-Dichloropropane
Concen: 23.336 ug/l
RT: 9.311 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion: 76 Resp: 5910

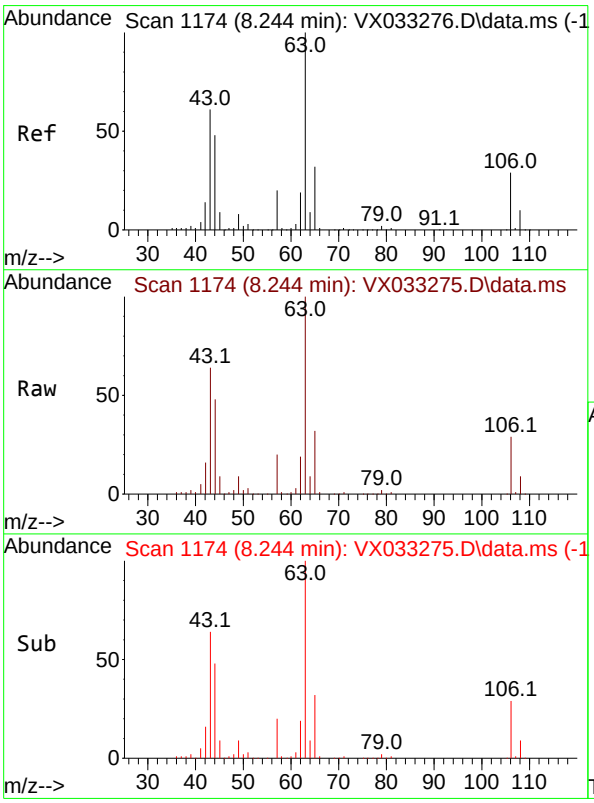
Ion	Ratio	Lower	Upper
76	100		
78	33.3	26.0	39.0



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

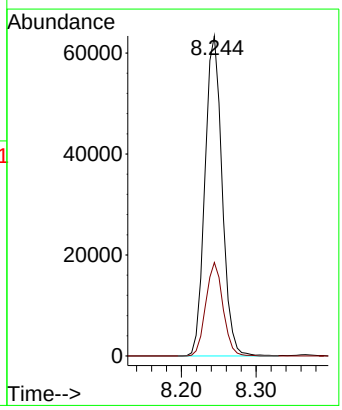
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

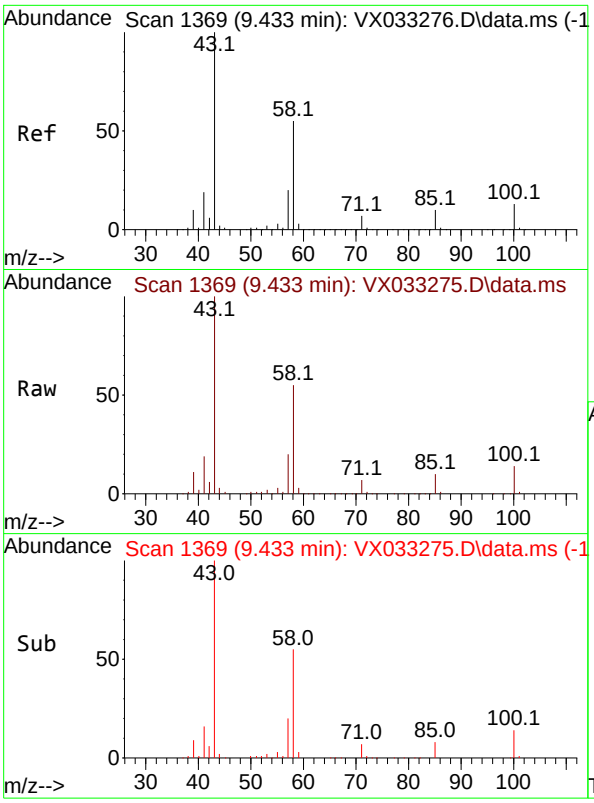


#58
2-Chloroethyl Vinyl ether
Concen: 98.398 ug/l
RT: 8.244 min Scan# 1174
Delta R.T. 0.000 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion: 63 Resp: 101008

Ion	Ratio	Lower	Upper
63	100		
106	29.2	23.3	34.9





#59
2-Hexanone
Concen: 126.425 ug/l
RT: 9.433 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

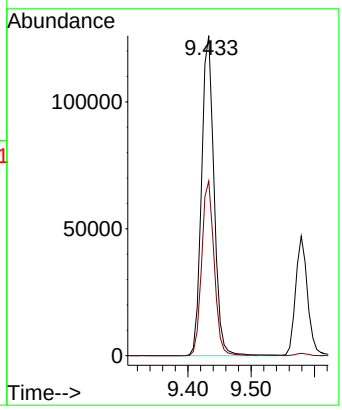
Tgt Ion: 43 Resp: 17371

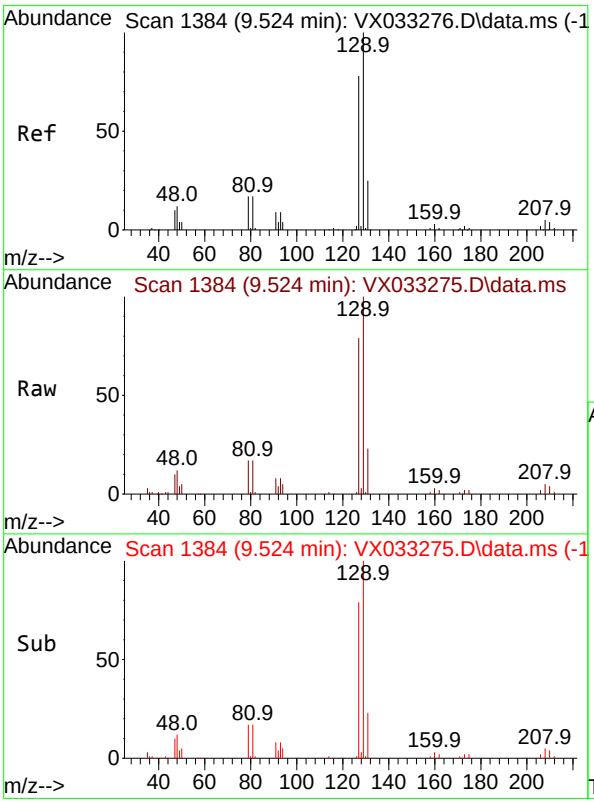
Ion	Ratio	Lower	Upper
43	100		
58	54.5	26.5	79.5

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

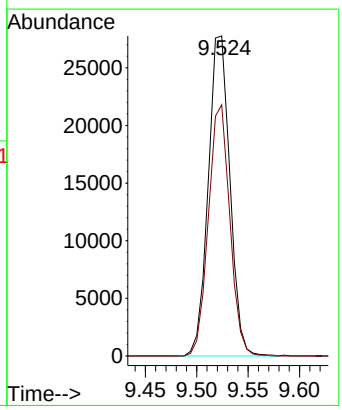


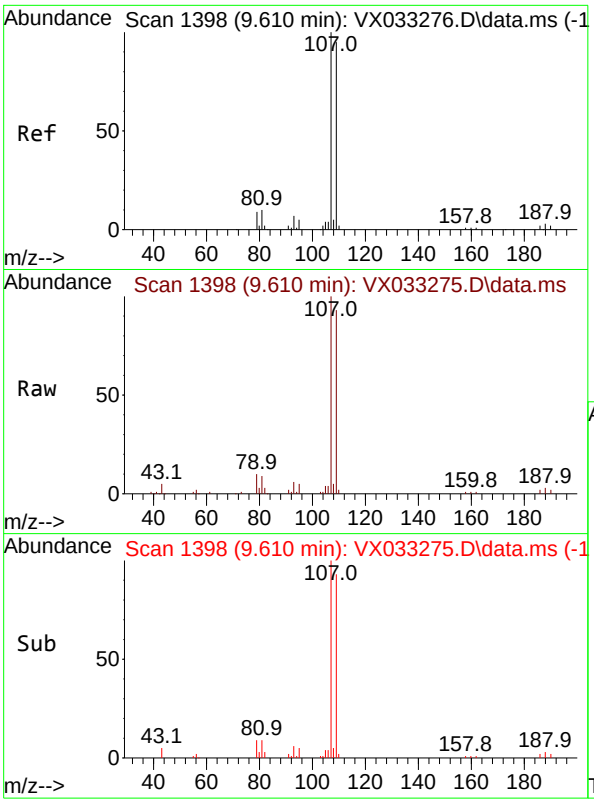


#60
Dibromochloromethane
Concen: 24.066 ug/l
RT: 9.524 min Scan# 1384
Delta R.T. -0.001 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion:129 Resp: 40652

Ion	Ratio	Lower	Upper
129	100		
127	77.7	38.6	115.8

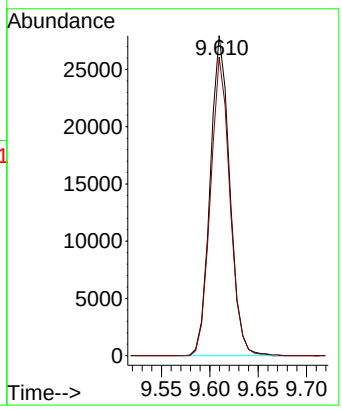




#61
1,2-Dibromoethane
Concen: 23.686 ug/l
RT: 9.610 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion:107 Resp: 3922

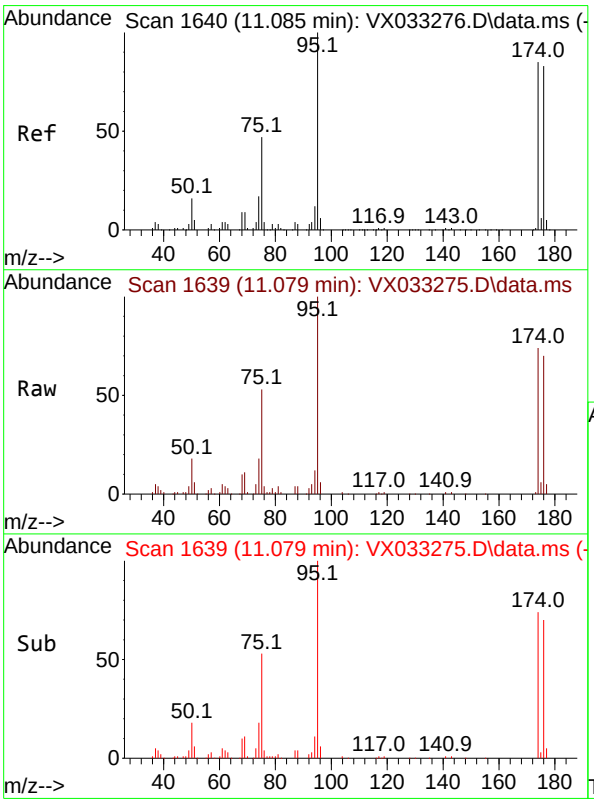
Ion	Ratio	Lower	Upper
107	100		
109	92.6	76.0	114.0



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

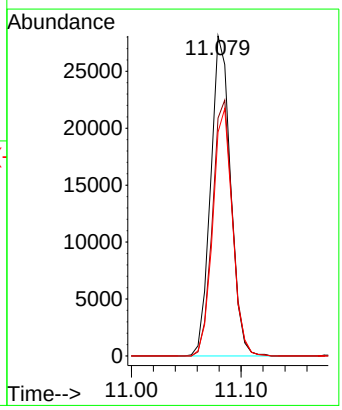
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

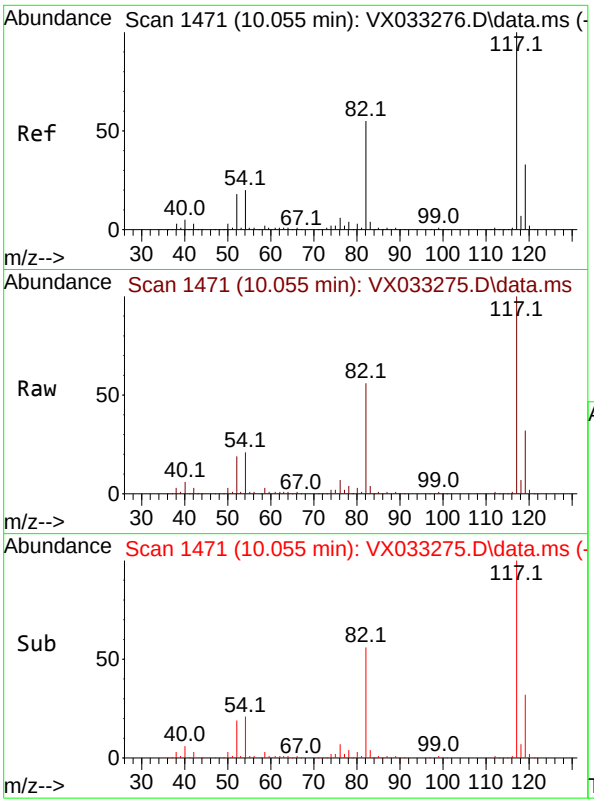


#62
4-Bromofluorobenzene
Concen: 20.645 ug/l
RT: 11.079 min Scan# 1639
Delta R.T. -0.000 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion: 95 Resp: 35433

Ion	Ratio	Lower	Upper
95	100		
174	80.4	0.0	164.0
176	76.6	0.0	154.4

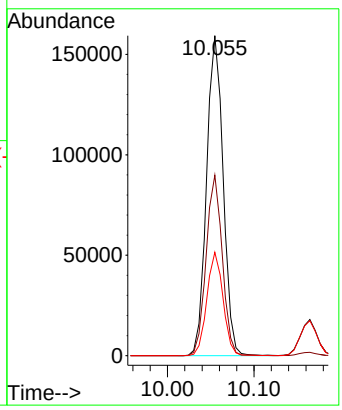




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.055 min Scan# 14
Delta R.T. -0.000 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion:117 Resp: 21208

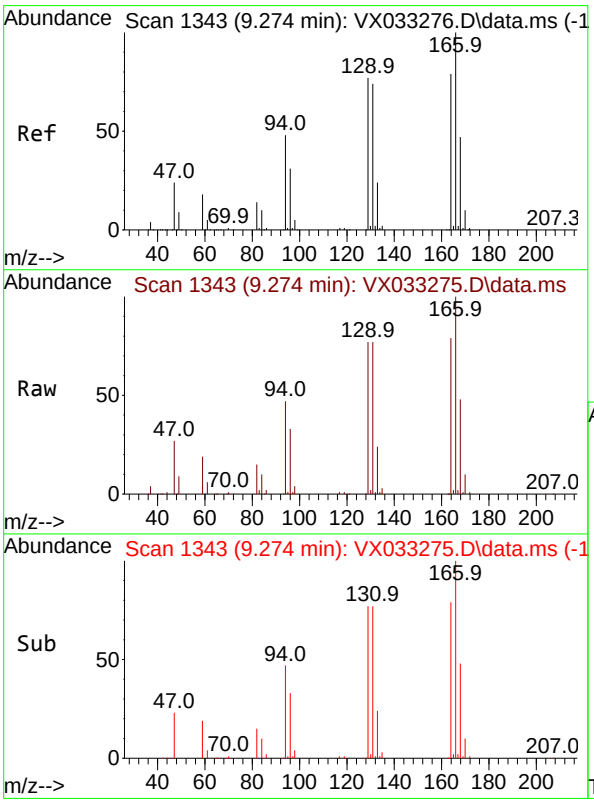
Ion	Ratio	Lower	Upper
117	100		
82	56.4	44.3	66.5
119	32.3	25.7	38.5



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

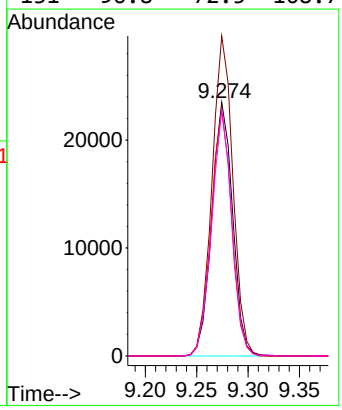
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

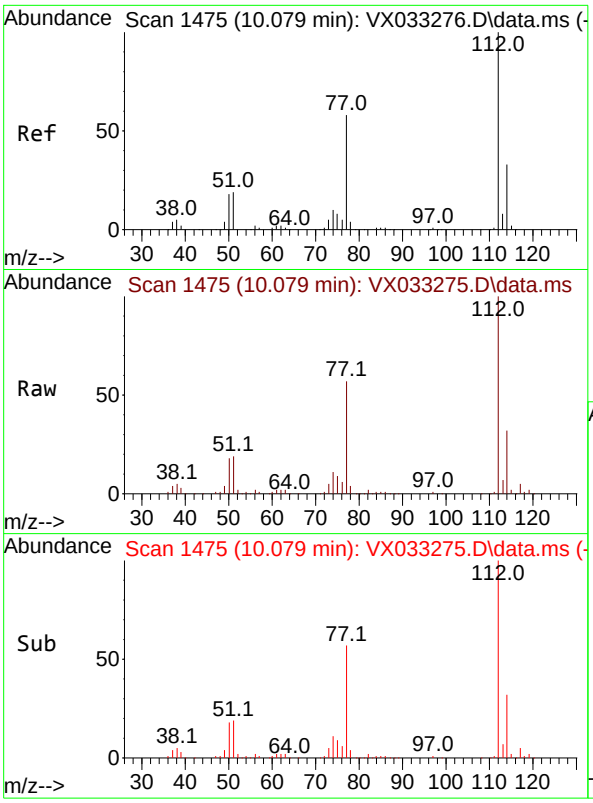


#64
Tetrachloroethene
Concen: 22.029 ug/l
RT: 9.274 min Scan# 1343
Delta R.T. -0.001 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion:164 Resp: 33071

Ion	Ratio	Lower	Upper
164	100		
166	126.2	105.4	158.2
129	97.2	78.2	117.2
131	96.8	72.5	108.7

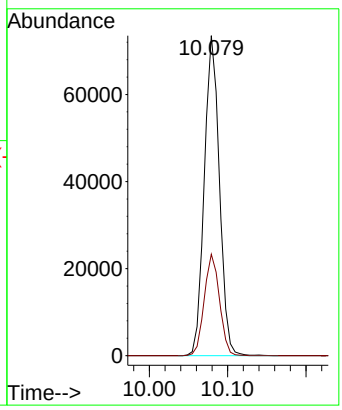




#65
Chlorobenzene
Concen: 23.247 ug/l
RT: 10.079 min Scan# 14
Delta R.T. 0.000 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion:112 Resp: 9829

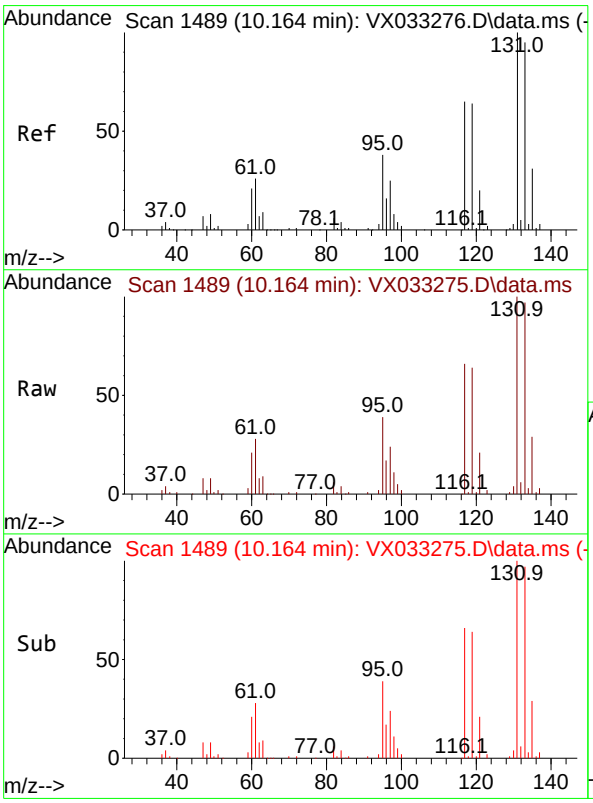
Ion	Ratio	Lower	Upper
112	100		
114	31.7	25.4	38.2



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

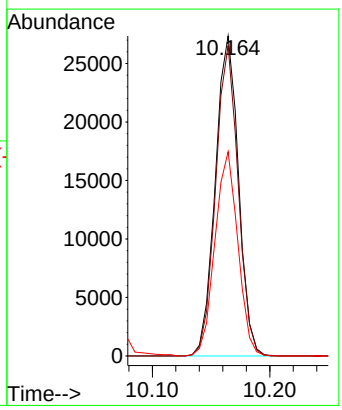
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

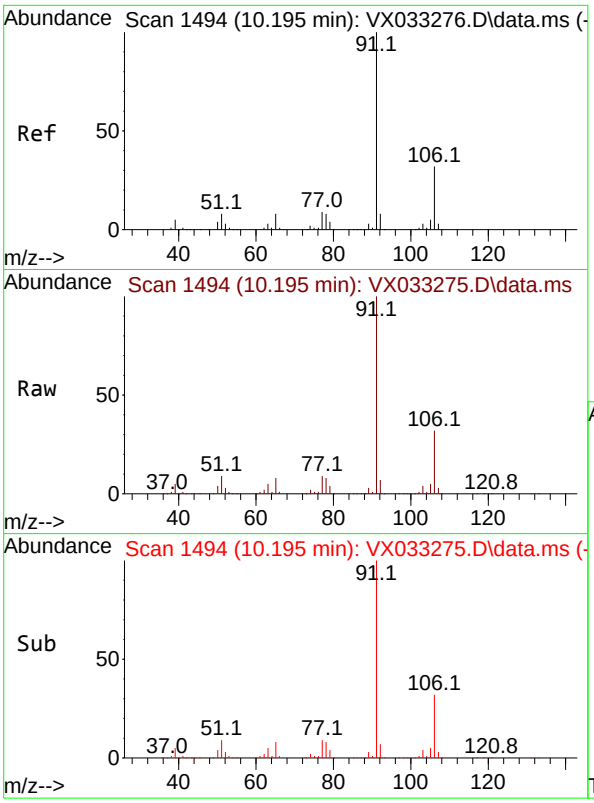


#66
1,1,1,2-Tetrachloroethane
Concen: 24.185 ug/l
RT: 10.164 min Scan# 1489
Delta R.T. -0.001 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion:131 Resp: 37470

Ion	Ratio	Lower	Upper
131	100		
133	94.3	47.6	142.9
119	63.1	32.4	97.0





#67
Ethyl Benzene
Concen: 23.103 ug/l
RT: 10.195 min Scan# 14
Delta R.T. -0.000 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

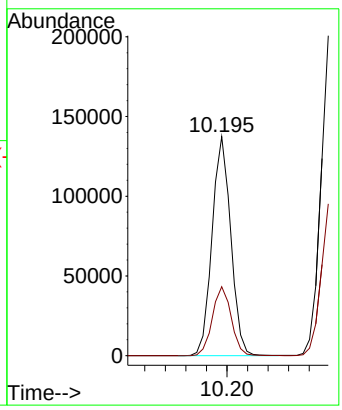
Tgt Ion: 91 Resp: 17329

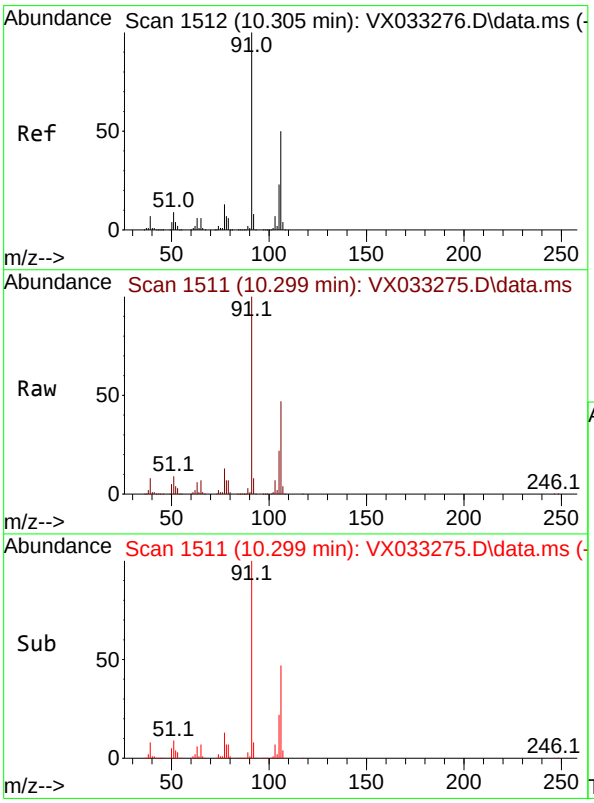
Ion	Ratio	Lower	Upper
91	100		
106	31.5	25.0	37.6

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

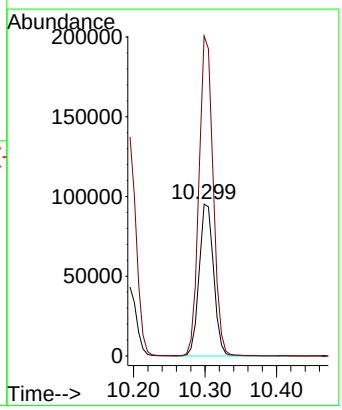


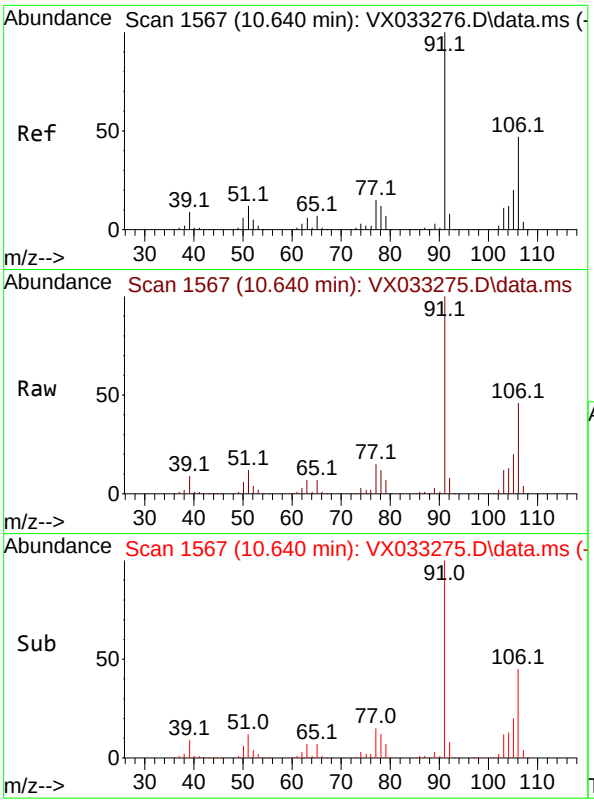


#68
m/p-Xylenes
Concen: 45.655 ug/l
RT: 10.299 min Scan# 1511
Delta R.T. -0.006 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion:106 Resp: 134099

Ion	Ratio	Lower	Upper
106	100		
91	205.9	164.5	246.7

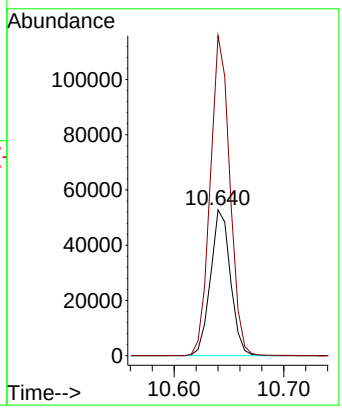




#69
o-Xylene
Concen: 23.464 ug/l
RT: 10.640 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion:106 Resp: 6668

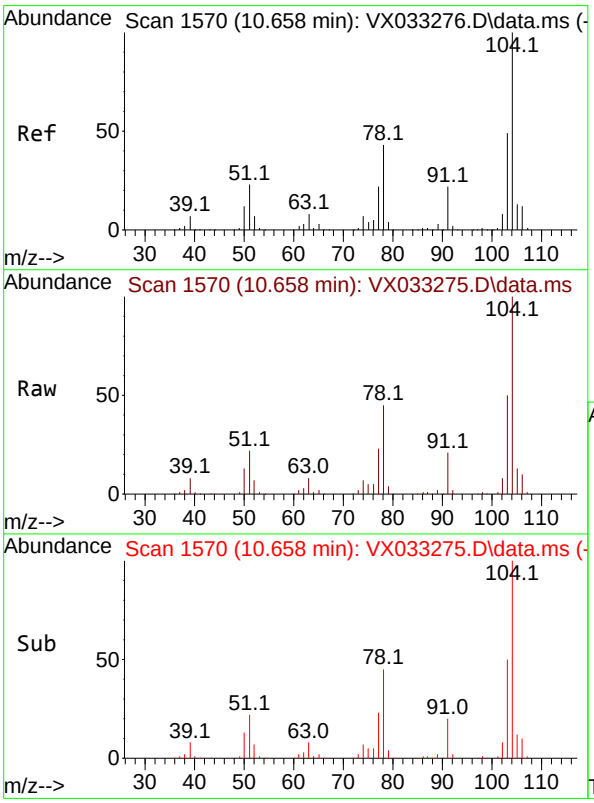
Ion	Ratio	Lower	Upper
106	100		
91	215.9	109.2	327.6



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

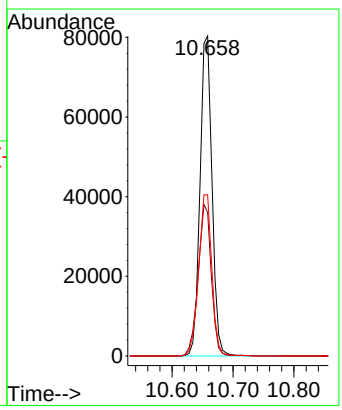
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

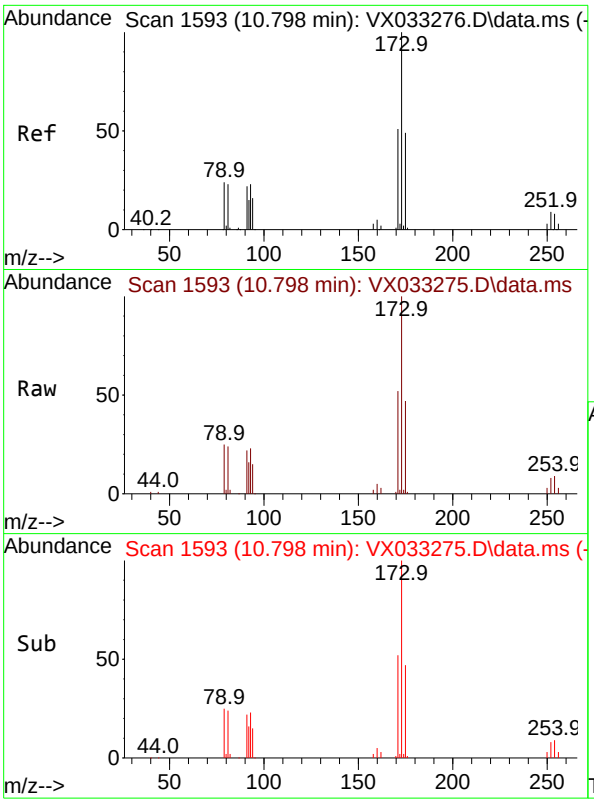


#70
Styrene
Concen: 23.622 ug/l
RT: 10.658 min Scan# 1570
Delta R.T. -0.001 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion:104 Resp: 109831

Ion	Ratio	Lower	Upper
104	100		
78	52.0	41.8	62.8
103	55.5	44.5	66.7

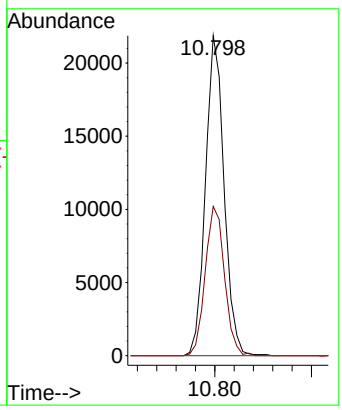




#71
Bromoform
Concen: 24.572 ug/l
RT: 10.798 min Scan# 1
Delta R.T. -0.001 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion:173 Resp: 2918

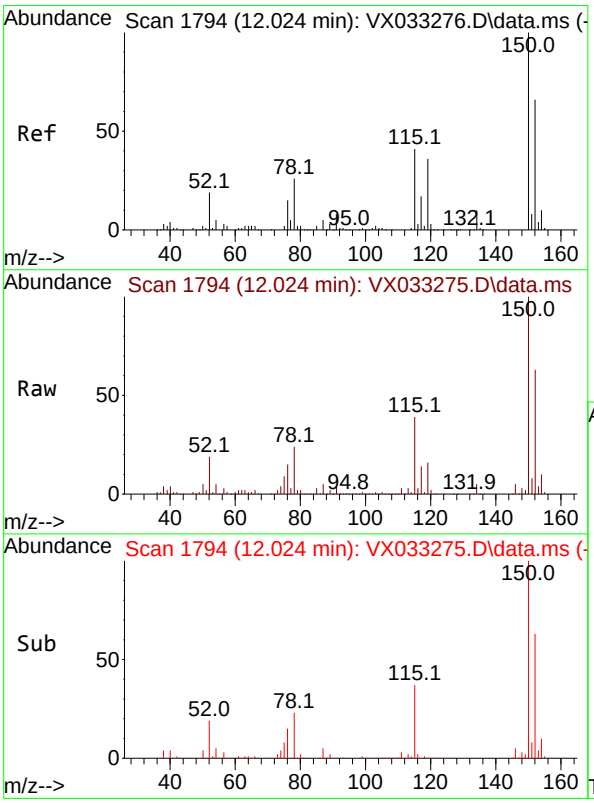
Ion	Ratio	Lower	Upper
173	100		
175	48.5	23.9	71.8
254	0.0	0.0	0.0



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

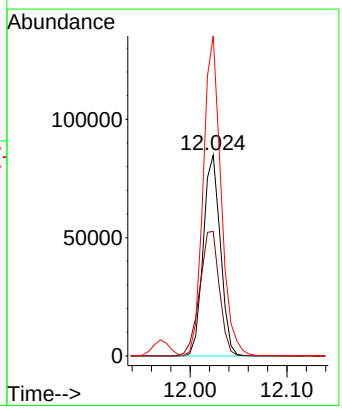
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

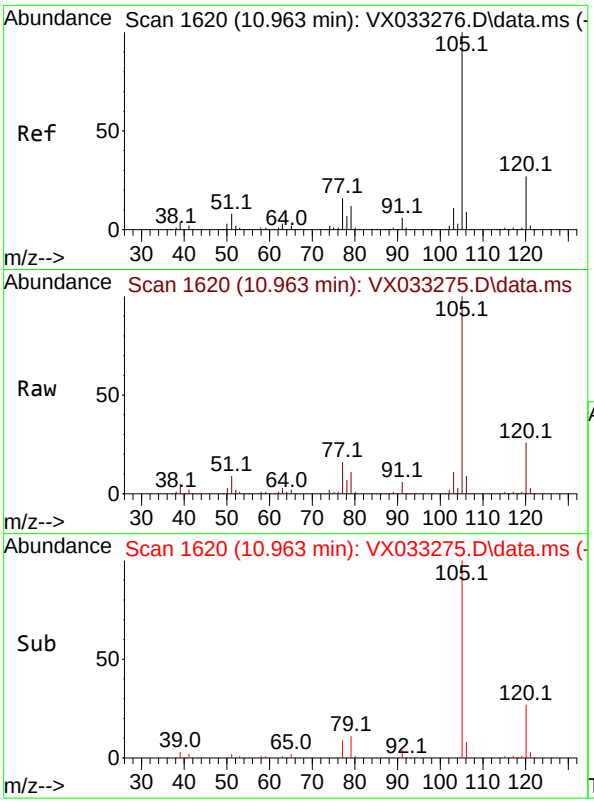


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.024 min Scan# 1794
Delta R.T. -0.000 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion:152 Resp: 104636

Ion	Ratio	Lower	Upper
152	100		
115	71.2	44.0	132.0
150	165.8	0.0	351.8





#73
Isopropylbenzene
Concen: 23.430 ug/l
RT: 10.963 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

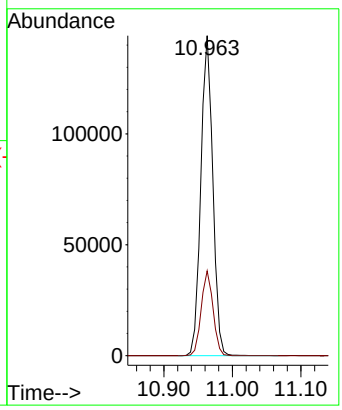
Tgt Ion:105 Resp: 17519

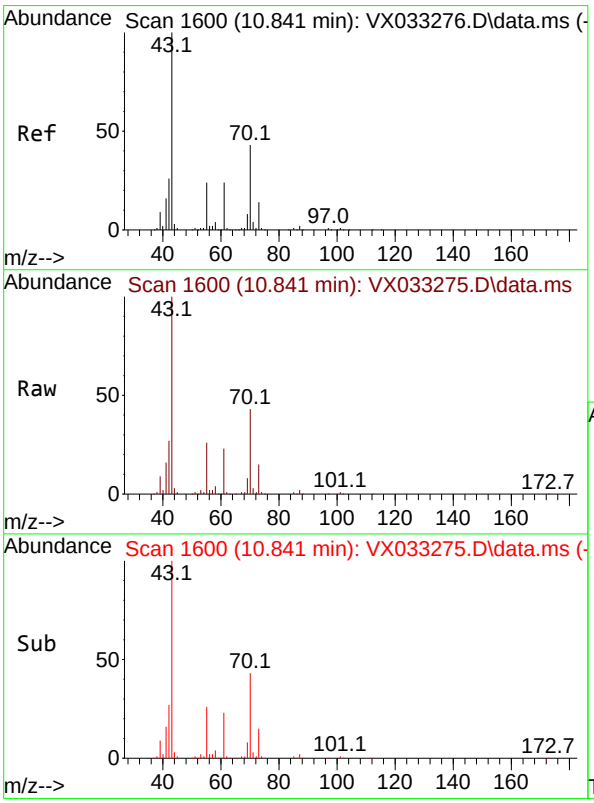
Ion	Ratio	Lower	Upper
105	100		
120	26.2	13.1	39.3

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

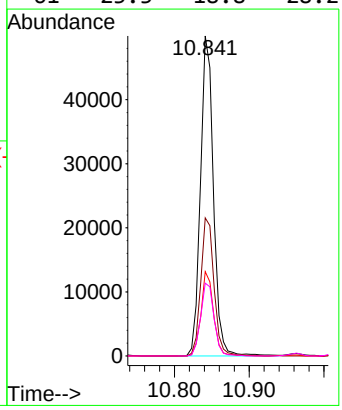


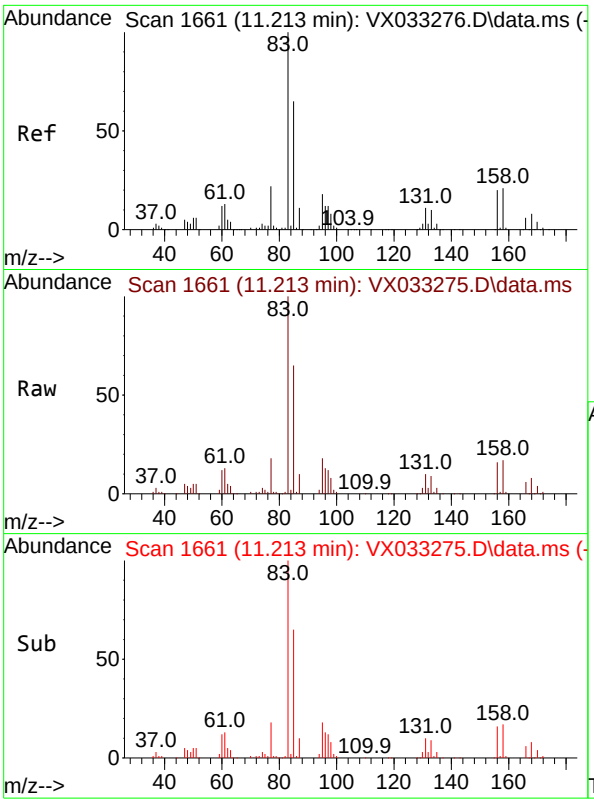


#74
N-amyl acetate
Concen: 23.754 ug/l
RT: 10.841 min Scan# 1600
Delta R.T. 0.000 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion: 43 Resp: 60421

Ion	Ratio	Lower	Upper
43	100		
70	43.9	33.6	50.4
55	25.3	19.4	29.2
61	23.3	18.8	28.2

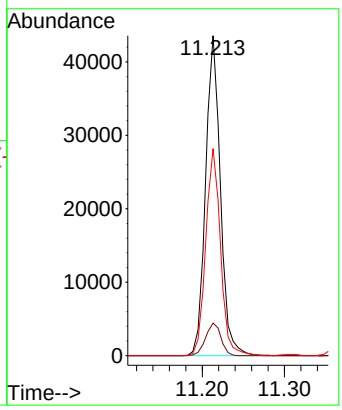




#75
1,1,2,2-Tetrachloroethane
Concen: 24.134 ug/l
RT: 11.213 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion: 83 Resp: 5446

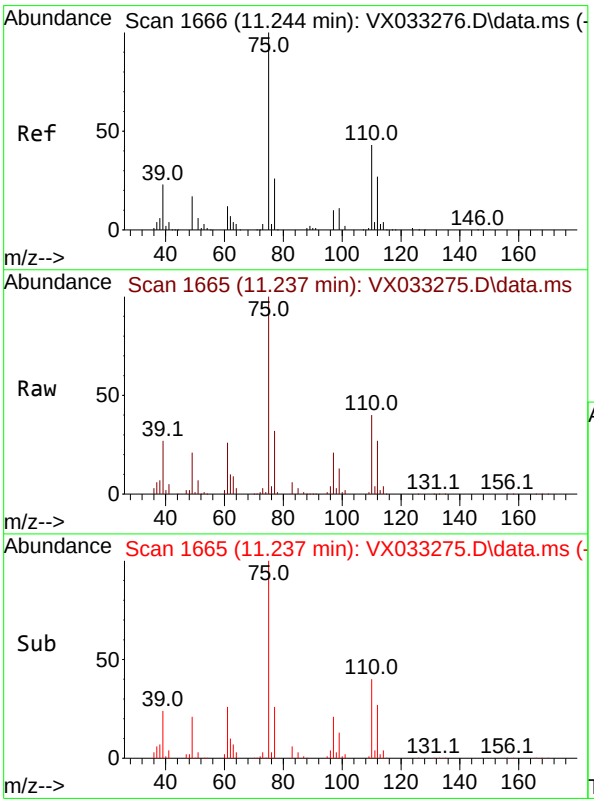
Ion	Ratio	Lower	Upper
83	100		
131	10.6	5.4	16.2
85	64.6	31.9	95.9



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

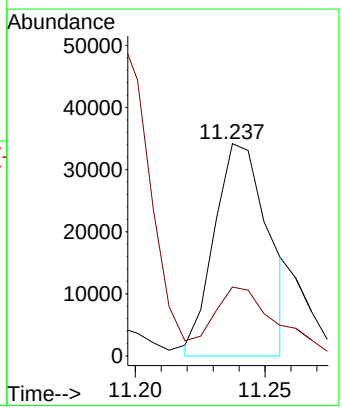
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

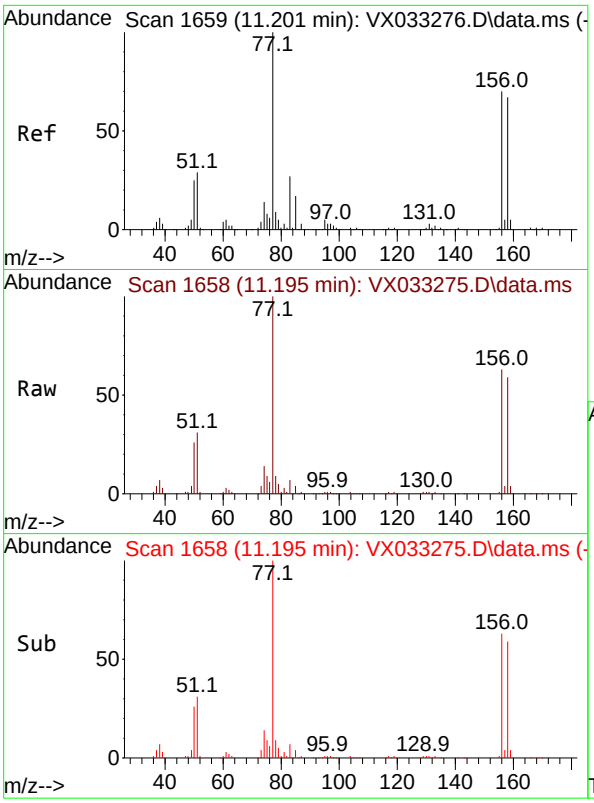


#76
1,2,3-Trichloropropane
Concen: 24.842 ug/l m
RT: 11.237 min Scan# 1665
Delta R.T. -0.007 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion: 75 Resp: 49227

Ion	Ratio	Lower	Upper
75	100		
77	38.8	20.0	60.0

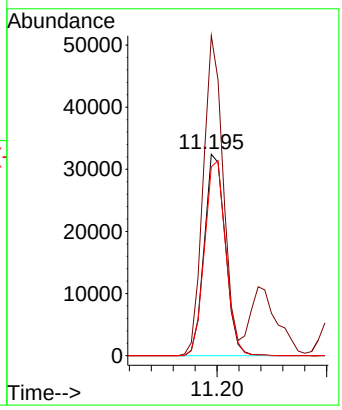




#77
Bromobenzene
Concen: 23.514 ug/l
RT: 11.195 min Scan# 1
Delta R.T. -0.006 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion:156 Resp: 4324

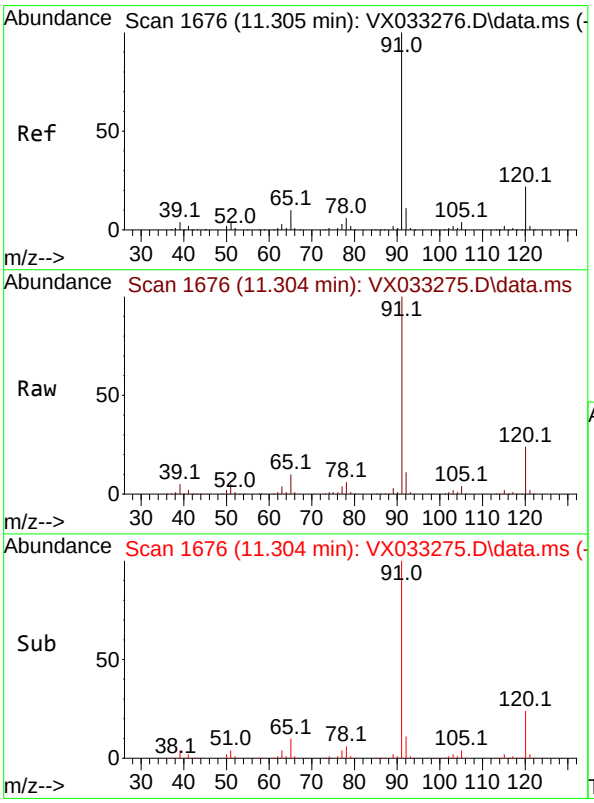
Ion	Ratio	Lower	Upper
156	100		
77	150.5	76.1	228.4
158	97.5	48.8	146.3



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

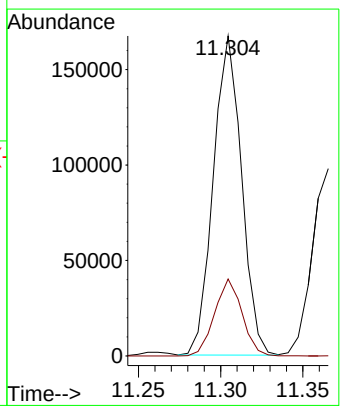
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

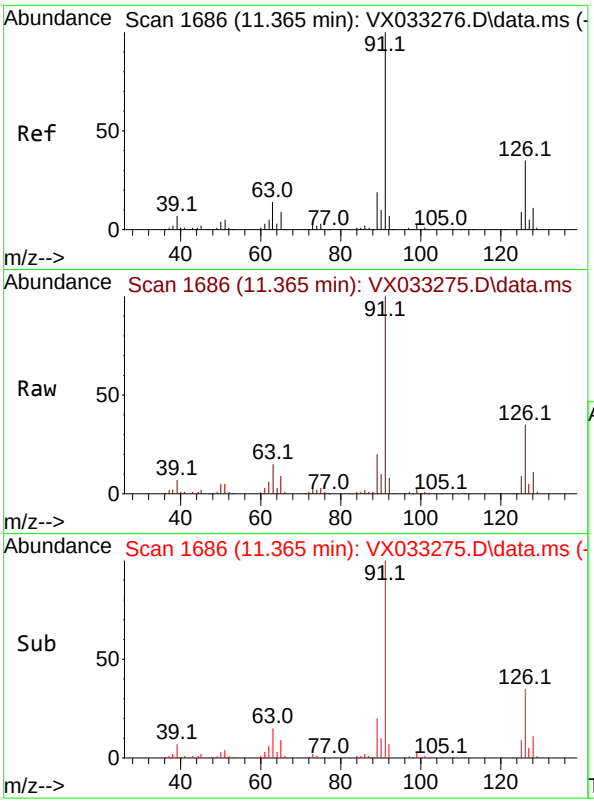


#78
n-propylbenzene
Concen: 23.345 ug/l
RT: 11.304 min Scan# 1676
Delta R.T. -0.001 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion: 91 Resp: 199580

Ion	Ratio	Lower	Upper
91	100		
120	23.4	11.6	34.8

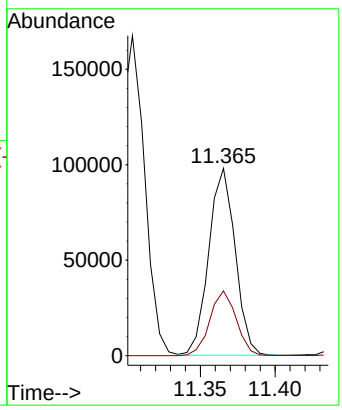




#79
2-Chlorotoluene
Concen: 23.187 ug/l
RT: 11.365 min Scan# 1
Delta R.T. -0.001 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion: 91 Resp: 12039

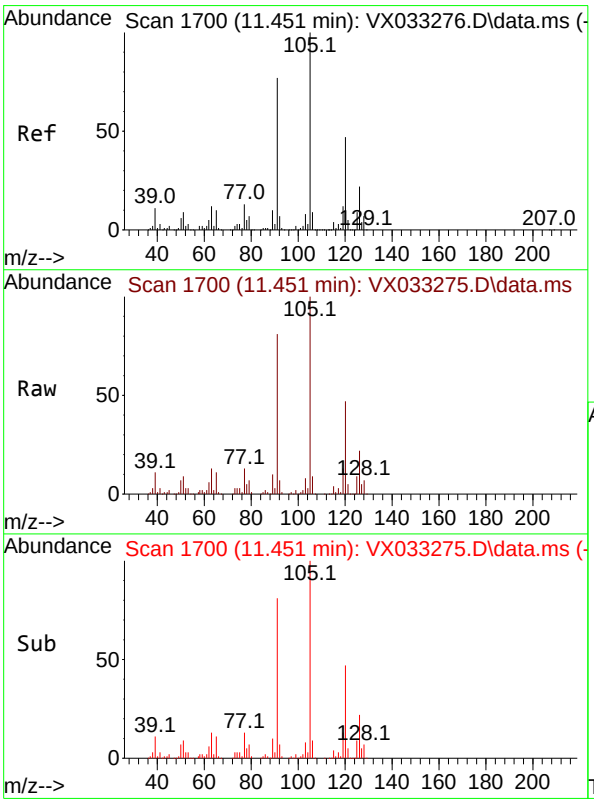
Ion	Ratio	Lower	Upper
91	100		
126	34.7	17.1	51.2



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

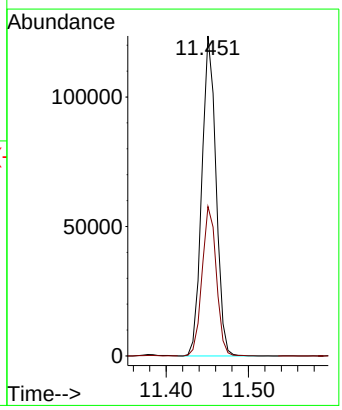
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

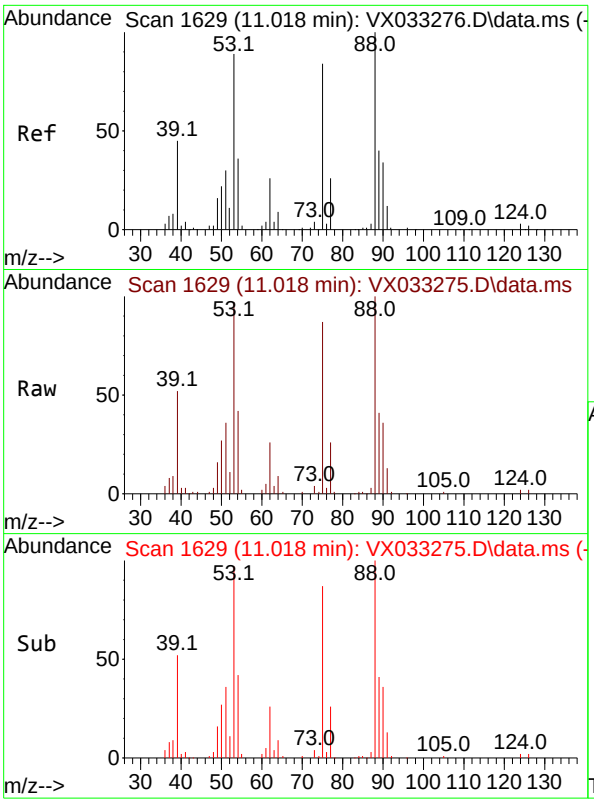


#80
1,3,5-Trimethylbenzene
Concen: 23.556 ug/l
RT: 11.451 min Scan# 1700
Delta R.T. -0.000 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion:105 Resp: 147966

Ion	Ratio	Lower	Upper
105	100		
120	47.1	23.6	71.0





#81
trans-1,4-Dichloro-2-butene
Concen: 23.827 ug/l
RT: 11.018 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

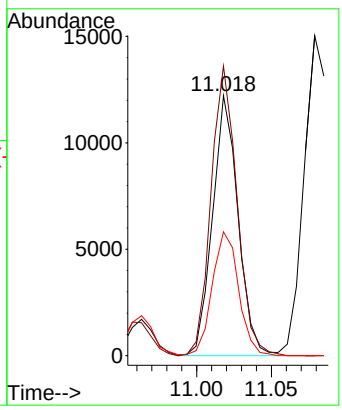
Tgt Ion: 75 Resp: 1452

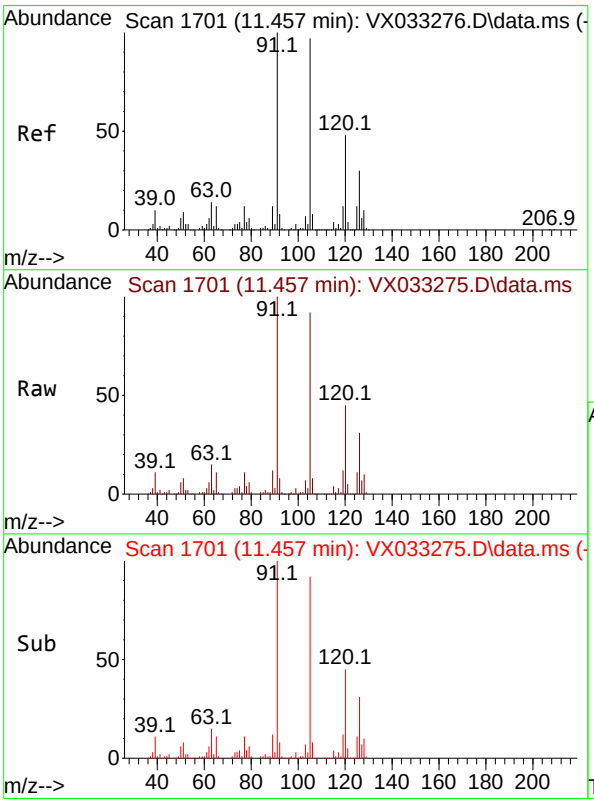
Ion	Ratio	Lower	Upper
75	100		
53	113.0	86.9	130.3
89	49.1	38.3	57.5

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

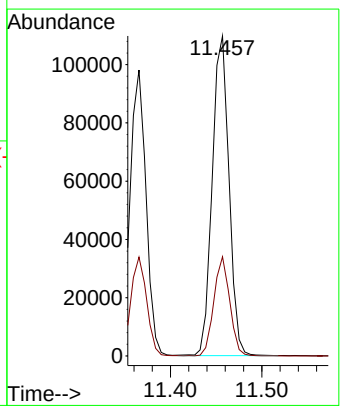


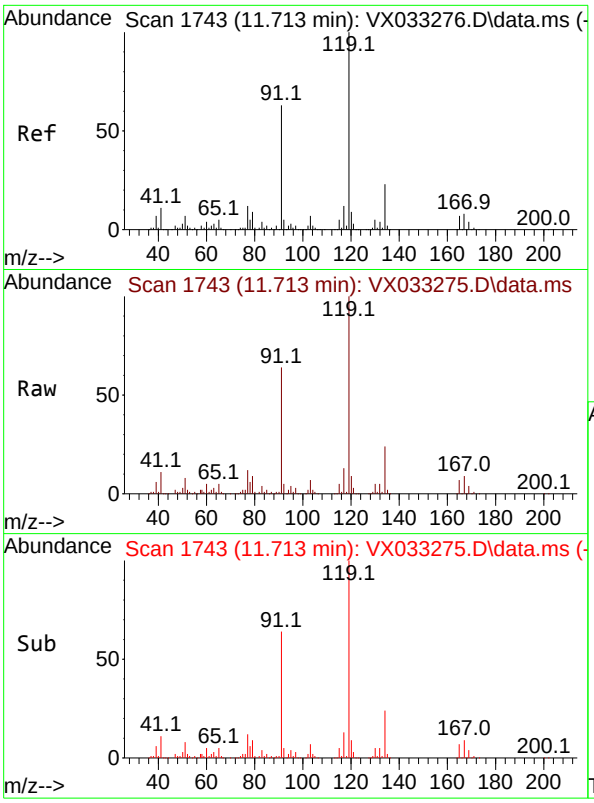


#82
4-Chlorotoluene
Concen: 22.916 ug/l
RT: 11.457 min Scan# 1701
Delta R.T. -0.000 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion: 91 Resp: 139436

Ion	Ratio	Lower	Upper
91	100		
126	29.6	14.8	44.4

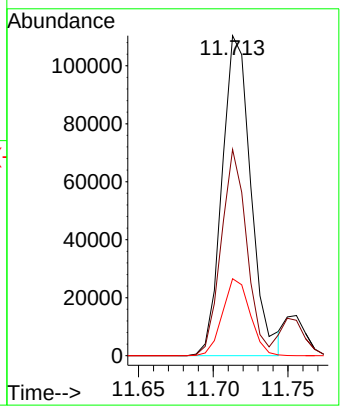




#83
tert-Butylbenzene
Concen: 23.672 ug/l
RT: 11.713 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion:119 Resp: 14801

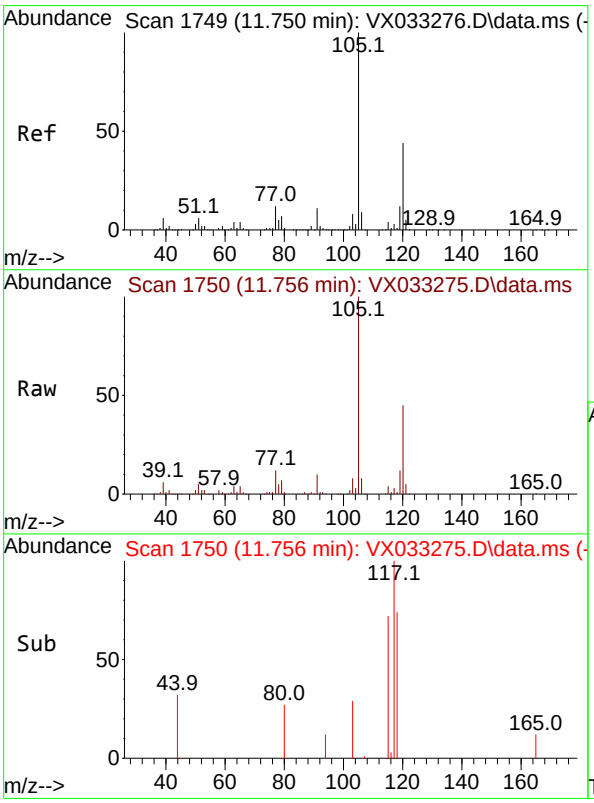
Ion	Ratio	Lower	Upper
119	100		
91	57.2	29.4	88.2
134	23.0	11.0	33.0



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

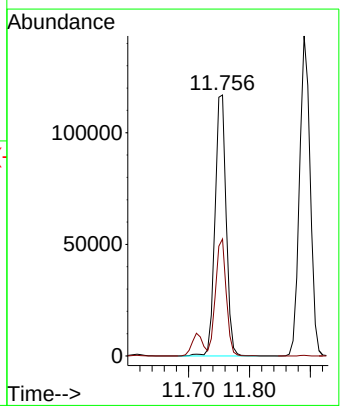
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

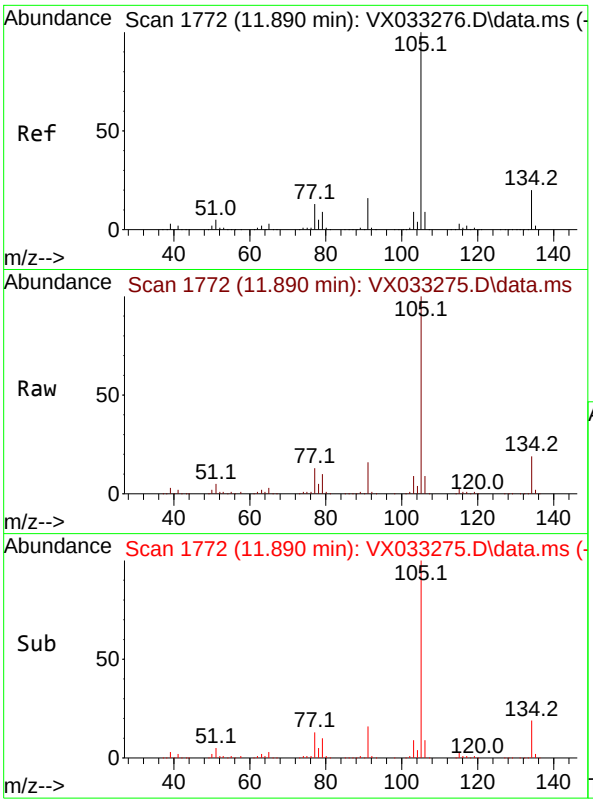


#84
1,2,4-Trimethylbenzene
Concen: 23.739 ug/l
RT: 11.756 min Scan# 1750
Delta R.T. 0.006 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion:105 Resp: 148682

Ion	Ratio	Lower	Upper
105	100		
120	43.2	21.9	65.5





#85
sec-Butylbenzene
Concen: 23.380 ug/l
RT: 11.890 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

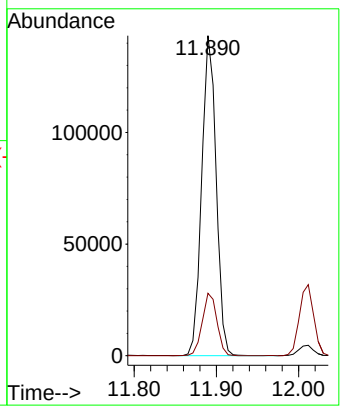
Tgt Ion:105 Resp: 17489

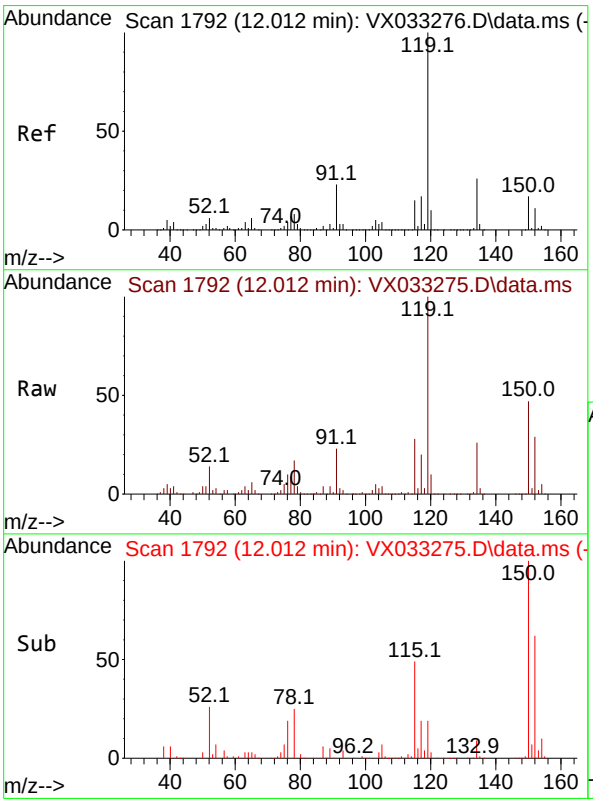
Ion	Ratio	Lower	Upper
105	100		
134	19.8	9.9	29.7

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

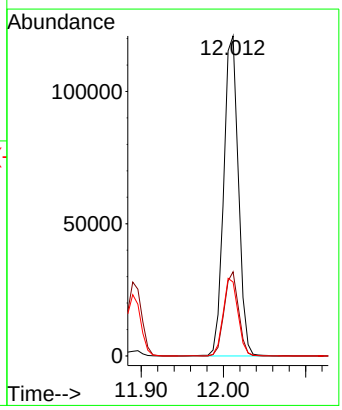


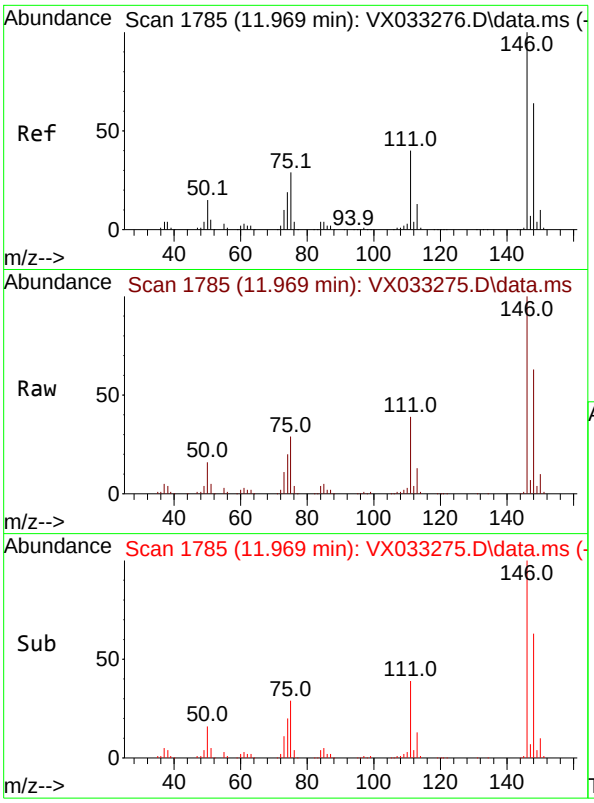


#86
p-Isopropyltoluene
Concen: 23.717 ug/l
RT: 12.012 min Scan# 1792
Delta R.T. -0.000 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion:119 Resp: 150310

Ion	Ratio	Lower	Upper
119	100		
134	25.7	12.9	38.7
91	24.6	12.5	37.5

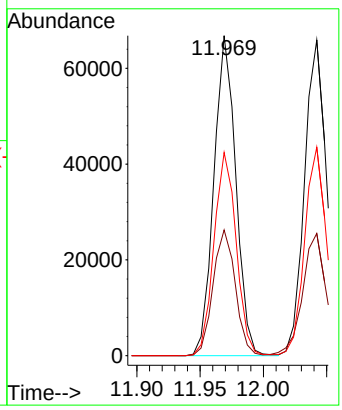




#87
1,3-Dichlorobenzene
Concen: 23.335 ug/l
RT: 11.969 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion:146 Resp: 8048

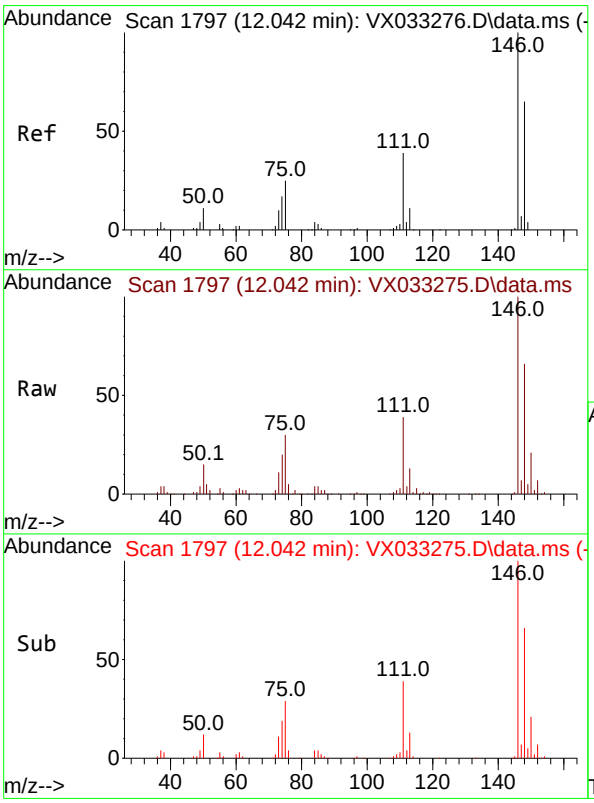
Ion	Ratio	Lower	Upper
146	100		
111	39.9	20.6	61.8
148	64.3	31.7	95.1



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

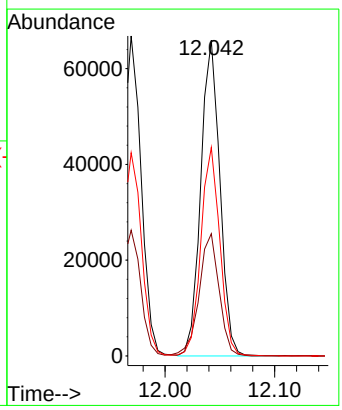
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

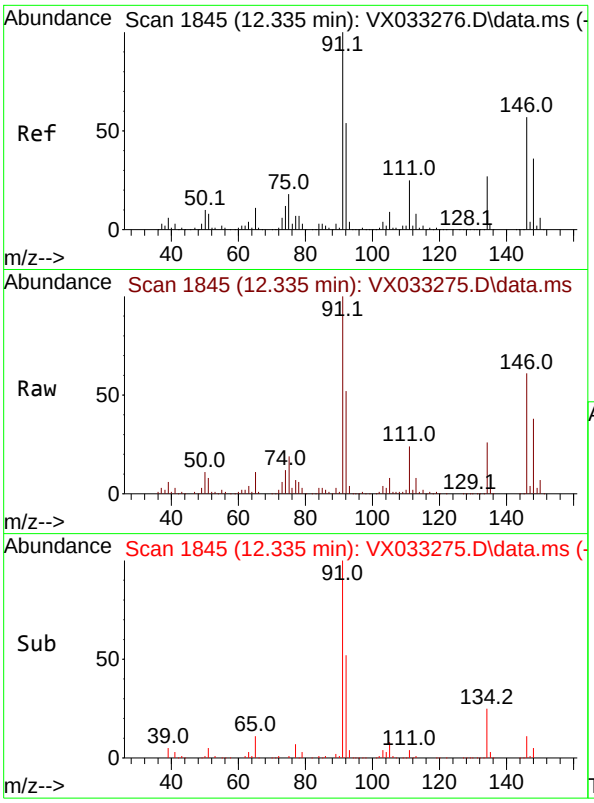


#88
1,4-Dichlorobenzene
Concen: 22.644 ug/l
RT: 12.042 min Scan# 1797
Delta R.T. 0.000 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion:146 Resp: 79989

Ion	Ratio	Lower	Upper
146	100		
111	40.7	20.5	61.6
148	65.5	32.2	96.6

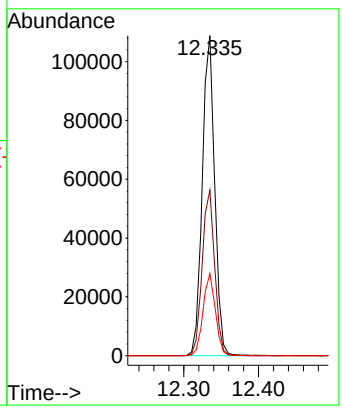




#89
n-Butylbenzene
Concen: 22.988 ug/l
RT: 12.335 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion: 91 Resp: 12551

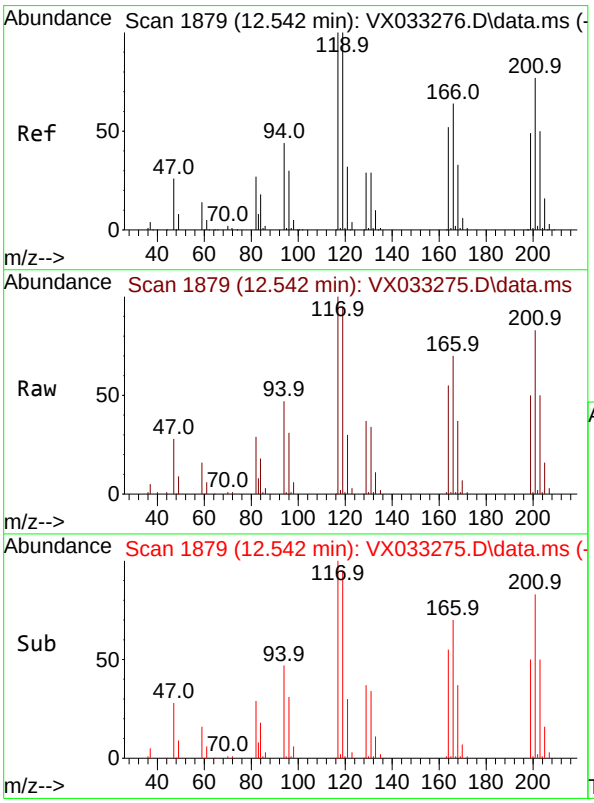
Ion	Ratio	Lower	Upper
91	100		
92	52.2	26.2	78.6
134	25.5	12.9	38.6



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

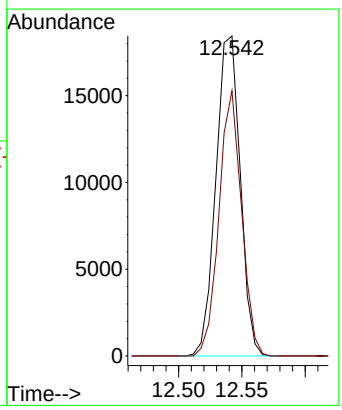
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

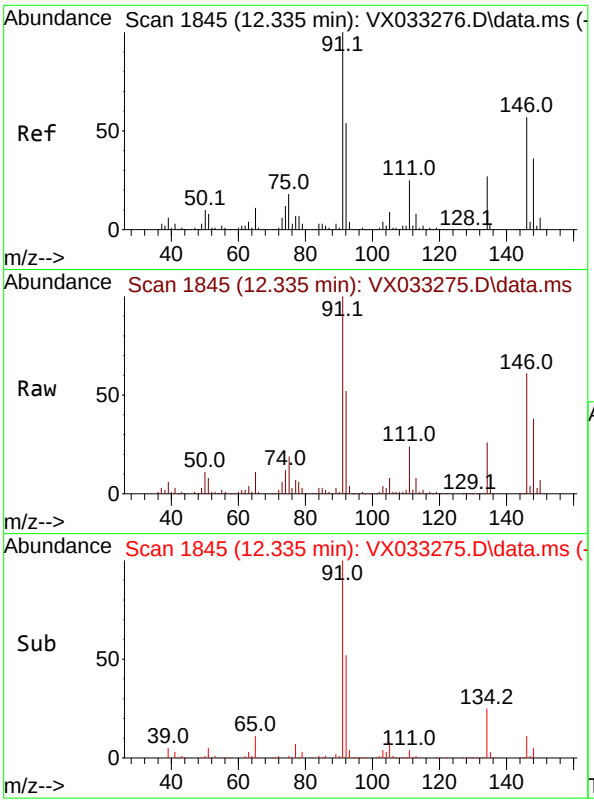


#90
Hexachloroethane
Concen: 23.665 ug/l
RT: 12.542 min Scan# 1879
Delta R.T. 0.000 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion:117 Resp: 24641

Ion	Ratio	Lower	Upper
117	100		
201	76.9	37.6	112.9

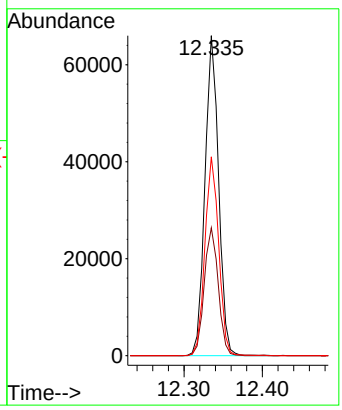




#91
1,2-Dichlorobenzene
Concen: 23.715 ug/l
RT: 12.335 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion:146 Resp: 7956

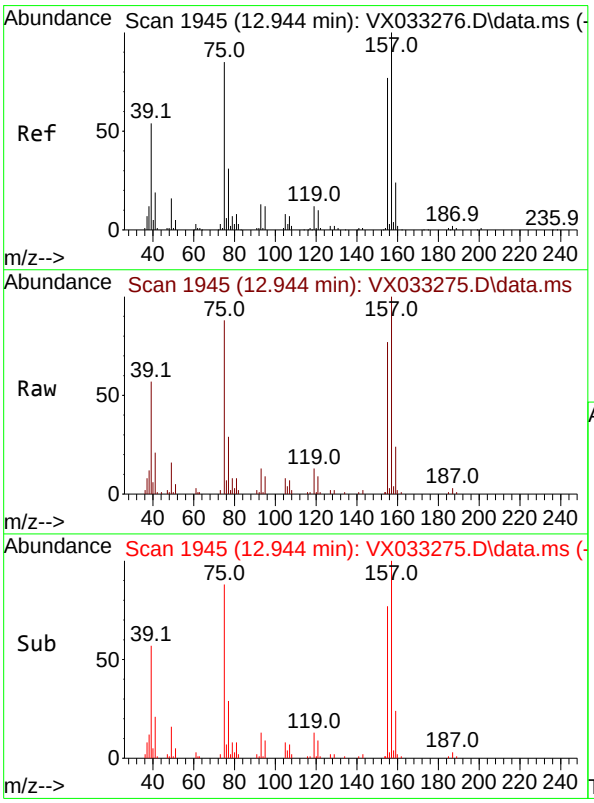
Ion	Ratio	Lower	Upper
146	100		
111	41.0	21.5	64.5
148	62.8	32.0	96.2



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

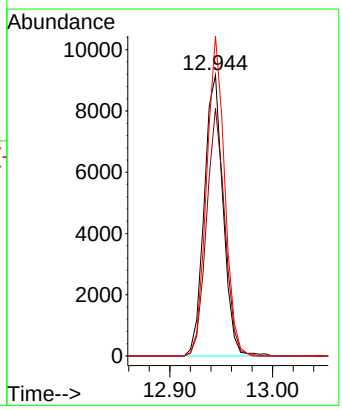
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

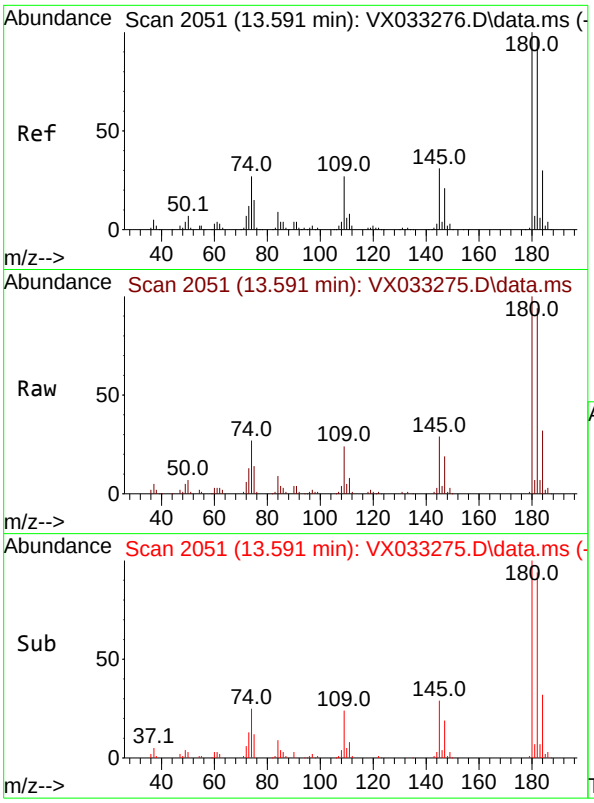


#92
1,2-Dibromo-3-Chloropropane
Concen: 25.947 ug/l
RT: 12.944 min Scan# 1945
Delta R.T. -0.001 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion: 75 Resp: 11683

Ion	Ratio	Lower	Upper
75	100		
155	85.4	41.6	124.8
157	109.4	54.1	162.4

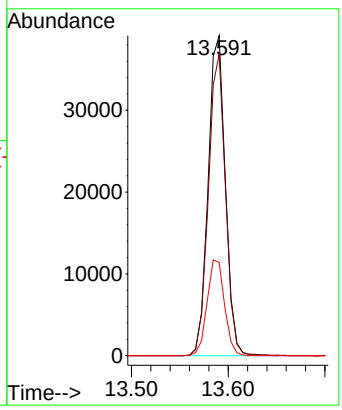




#93
1,2,4-Trichlorobenzene
Concen: 23.338 ug/l
RT: 13.591 min Scan# 2
Delta R.T. -0.000 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion:180 Resp: 4826

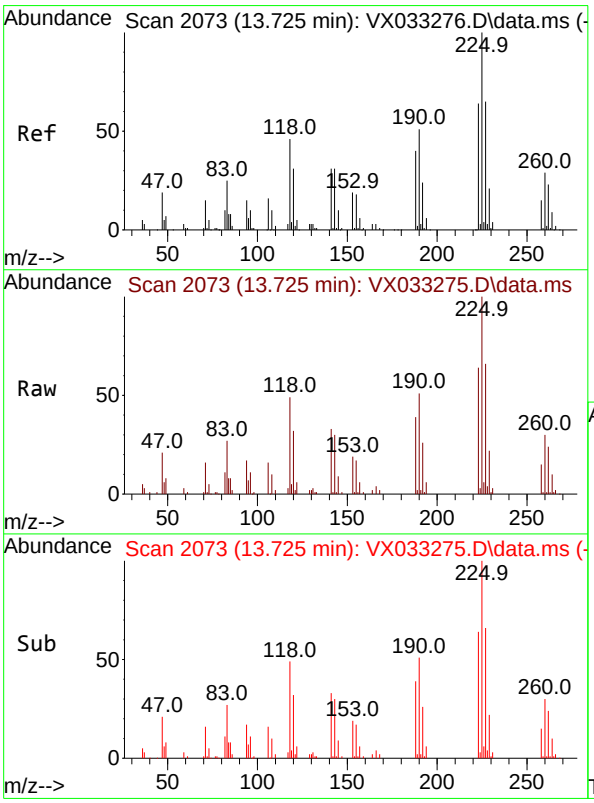
Ion	Ratio	Lower	Upper
180	100		
182	93.7	48.4	145.0
145	30.3	16.2	48.5



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

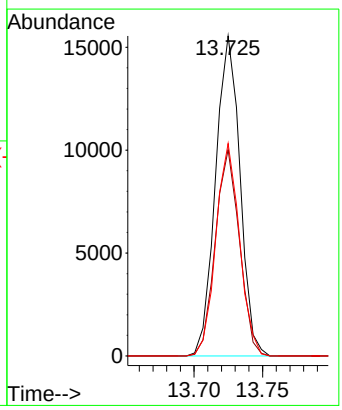
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

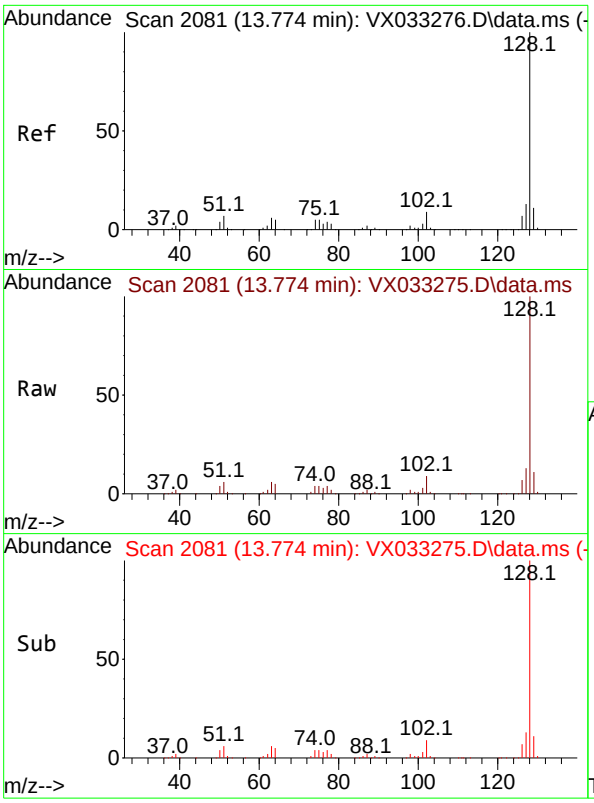


#94
Hexachlorobutadiene
Concen: 21.110 ug/l
RT: 13.725 min Scan# 2073
Delta R.T. -0.000 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion:225 Resp: 19262

Ion	Ratio	Lower	Upper
225	100		
223	63.3	31.9	95.9
227	64.2	31.9	95.5

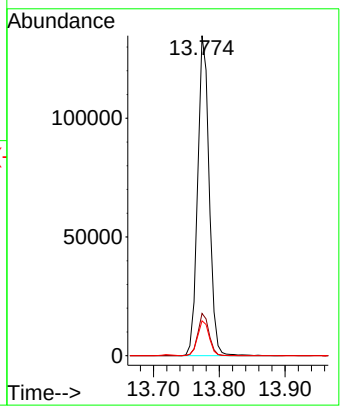




#95
Naphthalene
Concen: 24.481 ug/l
RT: 13.774 min Scan# 2
Delta R.T. -0.006 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion:128 Resp: 16379

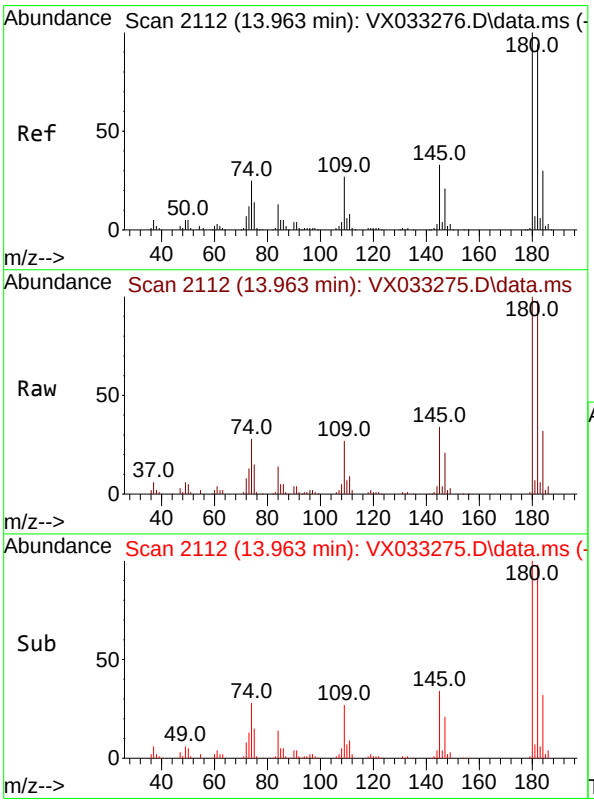
Ion	Ratio	Lower	Upper
128	100		
127	12.9	10.2	15.4
129	11.0	8.9	13.3



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

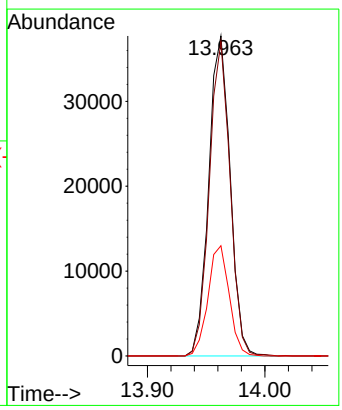
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022



#96
1,2,3-Trichlorobenzene
Concen: 22.997 ug/l
RT: 13.963 min Scan# 2112
Delta R.T. -0.000 min
Lab File: VX033275.D
Acq: 07 Dec 2022 10:32

Tgt Ion:180 Resp: 47697

Ion	Ratio	Lower	Upper
180	100		
182	95.2	47.5	142.6
145	34.2	16.9	50.6



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX120722\
Data File : VX033276.D
Acq On : 07 Dec 2022 10:55
Operator : JC/MD
Sample : VSTDICCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

Quant Time: Dec 07 11:21:04 2022
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X120722W.M
Quant Title : SW846 8260
QLast Update : Wed Dec 07 09:47:15 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.556	168	158881	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.763	114	255290	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.055	117	233891	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.024	152	115251	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.958	65	45704	26.704	ug/l	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 53.400%#			
35) Dibromofluoromethane	5.391	113	52030	36.151	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 72.300%#			
50) Toluene-d8	8.653	98	113428	24.276	ug/l	0.00
Spiked Amount 50.000	Range 92 - 112		Recovery = 48.560%#			
62) 4-Bromofluorobenzene	11.085	95	90159	47.689	ug/l	0.00
Spiked Amount 50.000	Range 83 - 123		Recovery = 95.380%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.166	85	51981	42.824	ug/l	100
3) Chloromethane	1.294	50	57823	44.126	ug/l	95
4) Vinyl Chloride	1.373	62	67871	46.517	ug/l	98
5) Bromomethane	1.617	94	47634	44.026	ug/l	95
6) Chloroethane	1.690	64	53654	45.170	ug/l	99
7) Trichlorofluoromethane	1.885	101	129548	45.748	ug/l	100
8) Diethyl Ether	2.135	74	43677	48.991	ug/l	98
9) 1,1,2-Trichlorotrifluo...	2.330	101	70688	47.492	ug/l	98
10) Methyl Iodide	2.452	142	77866	45.699	ug/l	100
11) Tert butyl alcohol	2.995	59	63661	259.553	ug/l	97
12) 1,1-Dichloroethene	2.318	96	67045	48.355	ug/l	95
13) Acrolein	2.239	56	80235	284.793	ug/l	99
14) Allyl chloride	2.666	41	108703	48.562	ug/l	96
15) Acrylonitrile	3.068	53	179363	258.544	ug/l	98
16) Acetone	2.391	43	162918	225.460	ug/l	98
17) Carbon Disulfide	2.513	76	174501	45.554	ug/l	99
18) Methyl Acetate	2.708	43	102198	51.092	ug/l	98
19) Methyl tert-butyl Ether	3.111	73	234733	48.816	ug/l	98
20) Methylene Chloride	2.794	84	74742	42.935	ug/l	93
21) trans-1,2-Dichloroethene	3.093	96	74596	47.033	ug/l	98
22) Diisopropyl ether	3.763	45	239712	49.181	ug/l	99
23) Vinyl Acetate	3.720	43	932198	244.330	ug/l	98
24) 1,1-Dichloroethane	3.611	63	134140	48.093	ug/l	99
25) 2-Butanone	4.562	43	256828	257.754	ug/l	99
26) 2,2-Dichloropropane	4.476	77	102996	45.925	ug/l	100
27) cis-1,2-Dichloroethene	4.489	96	89089	49.439	ug/l	97
28) Bromochloromethane	4.903	49	59340	48.418	ug/l	94
29) Tetrahydrofuran	5.013	42	166665	263.602	ug/l	99
30) Chloroform	5.098	83	152229	48.731	ug/l	99
31) Cyclohexane	5.470	56	118008	47.071	ug/l	95
32) 1,1,1-Trichloroethane	5.385	97	135108	48.294	ug/l	99
36) 1,1-Dichloropropene	5.696	75	107681	46.792	ug/l	99
37) Ethyl Acetate	4.714	43	101371	50.491	ug/l	100
38) Carbon Tetrachloride	5.677	117	122084	47.822	ug/l	96
39) Methylcyclohexane	7.384	83	125111	47.648	ug/l	98
40) Benzene	6.037	78	309956	48.039	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX120722\
Data File : VX033276.D
Acq On : 07 Dec 2022 10:55
Operator : JC/MD
Sample : VSTDICCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 07 11:21:04 2022
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X120722W.M
Quant Title : SW846 8260
QLast Update : Wed Dec 07 09:47:15 2022
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	4.922	41	57319	50.738	ug/l		98
42) 1,2-Dichloroethane	6.092	62	121854	46.905	ug/l		99
43) Isopropyl Acetate	6.342	43	163749	49.316	ug/l		98
44) Trichloroethene	7.128	130	86406	47.724	ug/l		100
45) 1,2-Dichloropropane	7.433	63	78837	49.442	ug/l		99
46) Dibromomethane	7.580	93	59524	47.841	ug/l		99
47) Bromodichloromethane	7.823	83	119589	49.743	ug/l		98
48) Methyl methacrylate	7.695	41	84608	49.504	ug/l		95
49) 1,4-Dioxane	7.701	88	38262	1216.156	ug/l		99
51) 4-Methyl-2-Pentanone	8.573	43	526567	257.000	ug/l		97
52) Toluene	8.720	92	207899	48.976	ug/l		100
53) t-1,3-Dichloropropene	8.982	75	119339	50.573	ug/l		98
54) cis-1,3-Dichloropropene	8.366	75	130089	50.193	ug/l		93
55) 1,1,2-Trichloroethane	9.152	97	85123	49.254	ug/l		99
56) Ethyl methacrylate	9.116	69	124802	52.411	ug/l		93
57) 1,3-Dichloropropane	9.311	76	136551	48.943	ug/l		99
58) 2-Chloroethyl Vinyl ether	8.244	63	286076	252.998	ug/l		100
59) 2-Hexanone	9.433	43	390656	258.105	ug/l		96
60) Dibromochloromethane	9.524	129	96040	51.615	ug/l		99
61) 1,2-Dibromoethane	9.610	107	91480	50.149	ug/l		99
64) Tetrachloroethene	9.274	164	75304	45.485	ug/l		97
65) Chlorobenzene	10.079	112	225991	48.463	ug/l		98
66) 1,1,1,2-Tetrachloroethane	10.164	131	86946	50.887	ug/l		99
67) Ethyl Benzene	10.195	91	405828	49.061	ug/l		99
68) m/p-Xylenes	10.305	106	316676	97.764	ug/l		98
69) o-Xylene	10.640	106	156950	50.078	ug/l		96
70) Styrene	10.658	104	260878	50.879	ug/l		98
71) Bromoform	10.798	173	71067	54.249	ug/l	#	99
73) Isopropylbenzene	10.963	105	410304	49.820	ug/l		99
74) N-amyl acetate	10.841	43	142952	51.025	ug/l		97
75) 1,1,2,2-Tetrachloroethane	11.213	83	125418	50.456	ug/l		99
76) 1,2,3-Trichloropropane	11.244	75	110953m	50.834	ug/l		
77) Bromobenzene	11.201	156	99728	49.237	ug/l		100
78) n-propylbenzene	11.305	91	466678	49.561	ug/l		100
79) 2-Chlorotoluene	11.365	91	279467	48.866	ug/l		99
80) 1,3,5-Trimethylbenzene	11.451	105	343696	49.677	ug/l		99
81) trans-1,4-Dichloro-2-b...	11.018	75	36013	53.631	ug/l		97
82) 4-Chlorotoluene	11.457	91	321742	48.008	ug/l		98
83) tert-Butylbenzene	11.713	119	342890	49.789	ug/l		98
84) 1,2,4-Trimethylbenzene	11.750	105	340117	49.302	ug/l		99
85) sec-Butylbenzene	11.890	105	407442	49.452	ug/l		98
86) p-Isopropyltoluene	12.012	119	347069	49.719	ug/l		99
87) 1,3-Dichlorobenzene	11.969	146	184702	48.618	ug/l		99
88) 1,4-Dichlorobenzene	12.042	146	183674	47.208	ug/l		99
89) n-Butylbenzene	12.335	91	289041	48.064	ug/l		99
90) Hexachloroethane	12.542	117	58312	50.845	ug/l		99
91) 1,2-Dichlorobenzene	12.335	146	179882	48.675	ug/l		99
92) 1,2-Dibromo-3-Chloropr...	12.944	75	26891	54.222	ug/l		95
93) 1,2,4-Trichlorobenzene	13.591	180	110381	48.454	ug/l		99
94) Hexachlorobutadiene	13.725	225	44005	43.785	ug/l		99
95) Naphthalene	13.774	128	382237	51.866	ug/l		100
96) 1,2,3-Trichlorobenzene	13.963	180	113042	49.483	ug/l		99

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX120722\
Data File : VX033276.D
Acq On : 07 Dec 2022 10:55
Operator : JC/MD
Sample : VSTDICCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 07 11:21:04 2022
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X120722W.M
Quant Title : SW846 8260
QLast Update : Wed Dec 07 09:47:15 2022
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

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

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

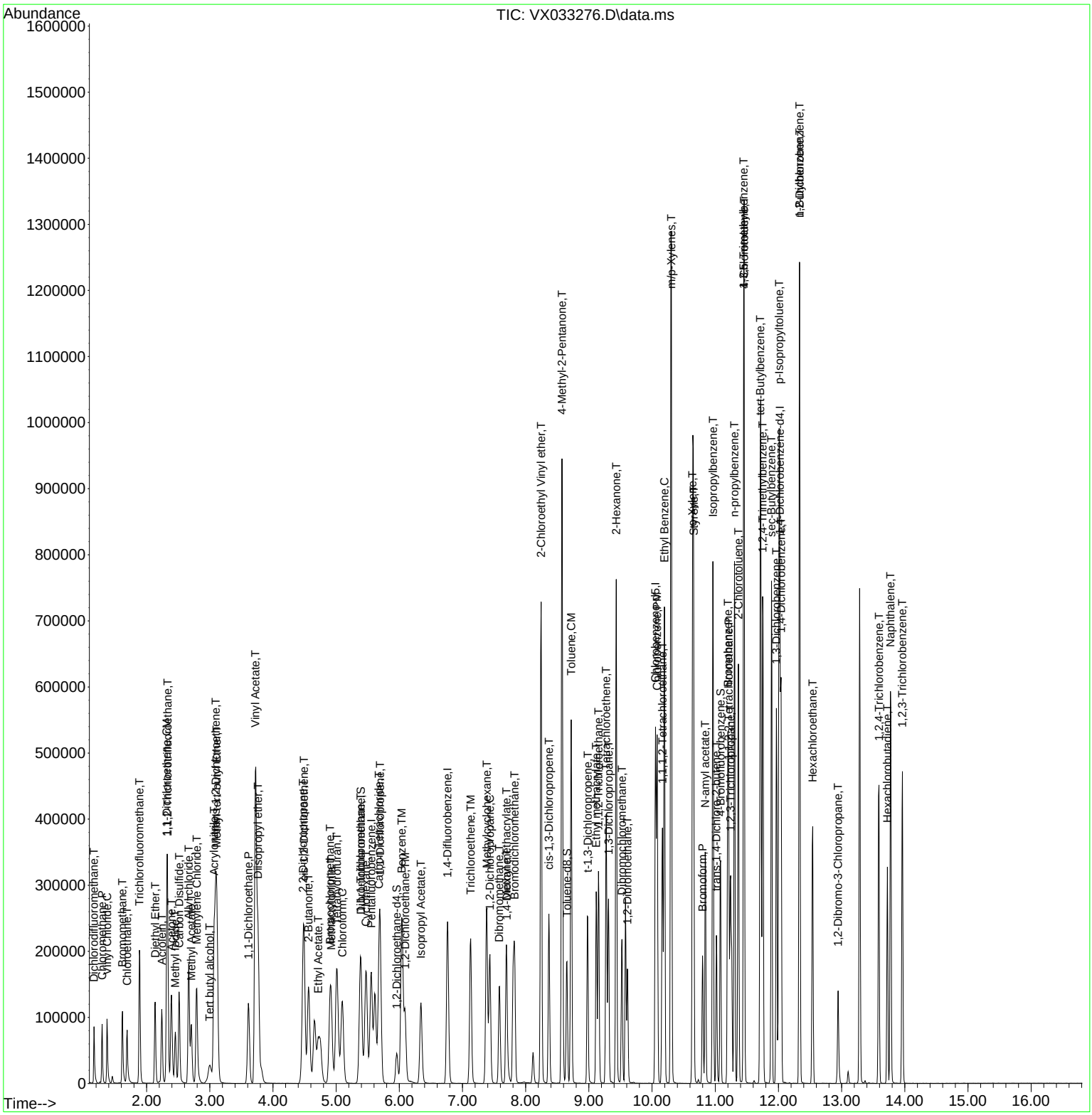
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX120722\
Data File : VX033276.D
Acq On : 07 Dec 2022 10:55
Operator : JC/MD
Sample : VSTDICCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 5 Sample Multiplier: 1

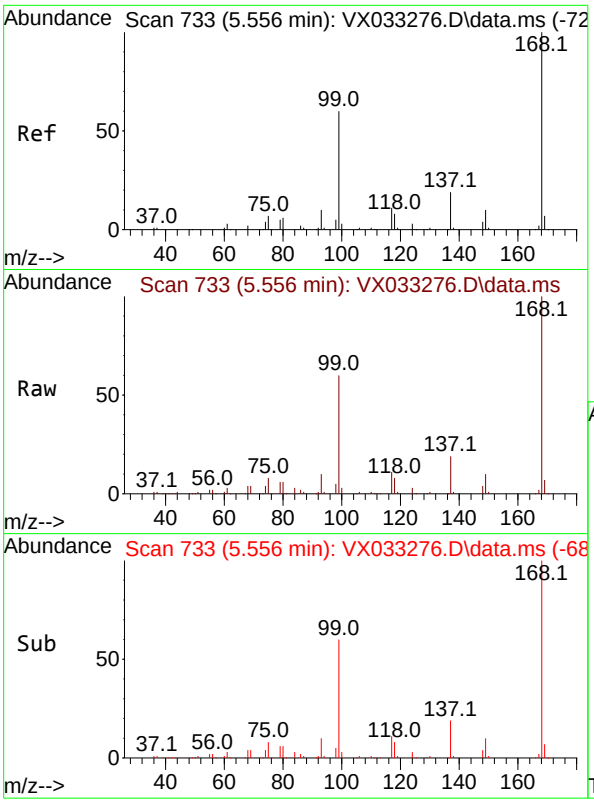
Quant Time: Dec 07 11:21:04 2022
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X120722W.M
Quant Title : SW846 8260
QLast Update : Wed Dec 07 09:47:15 2022
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

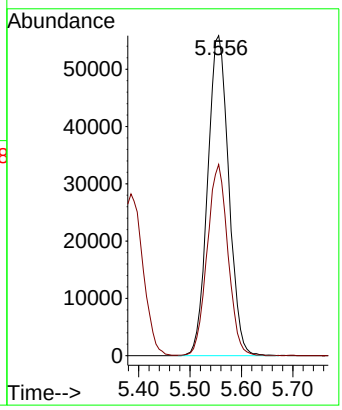




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 5.556 min Scan# 7
Delta R.T. -0.000 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion:168 Resp: 15888

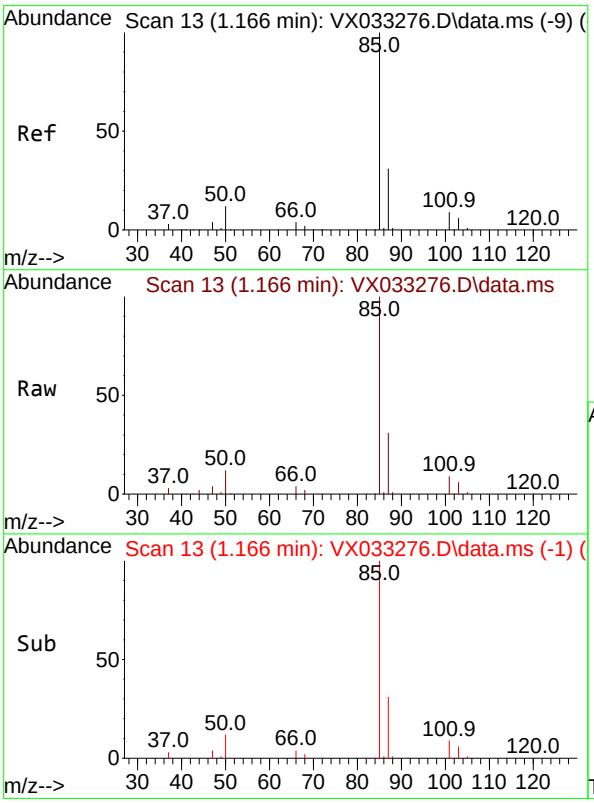
Ion	Ratio	Lower	Upper
168	100		
99	59.6	46.1	69.1



Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

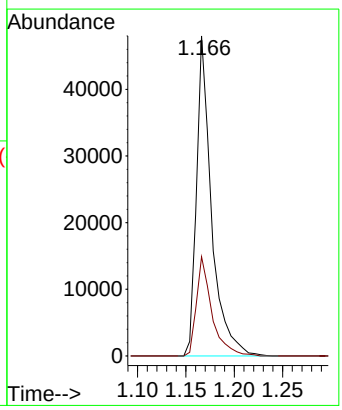
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

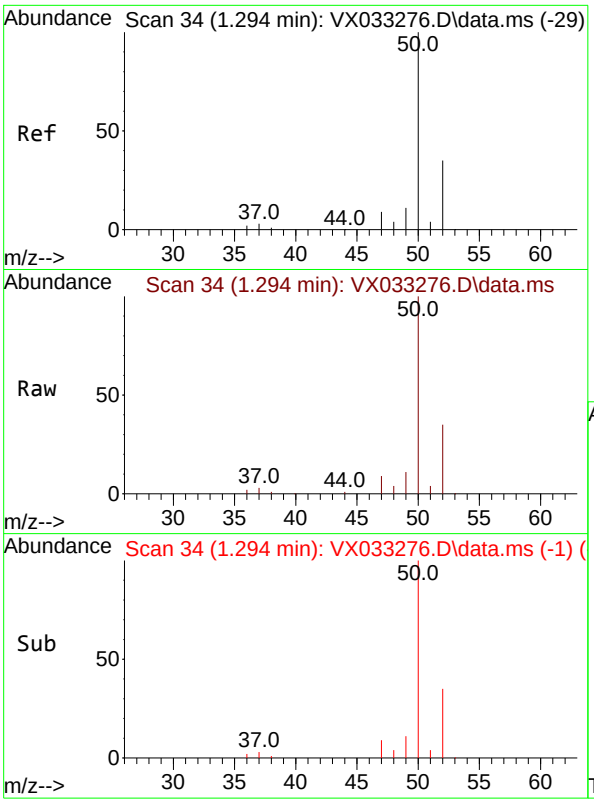


#2
Dichlorodifluoromethane
Concen: 42.824 ug/l
RT: 1.166 min Scan# 13
Delta R.T. 0.000 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion: 85 Resp: 51981

Ion	Ratio	Lower	Upper
85	100		
87	31.0	15.6	46.7

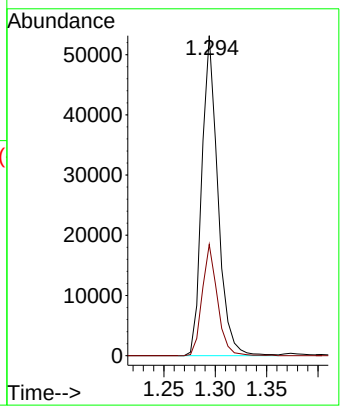




#3
Chloromethane
Concen: 44.126 ug/l
RT: 1.294 min Scan# 34
Delta R.T. 0.000 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion: 50 Resp: 5782

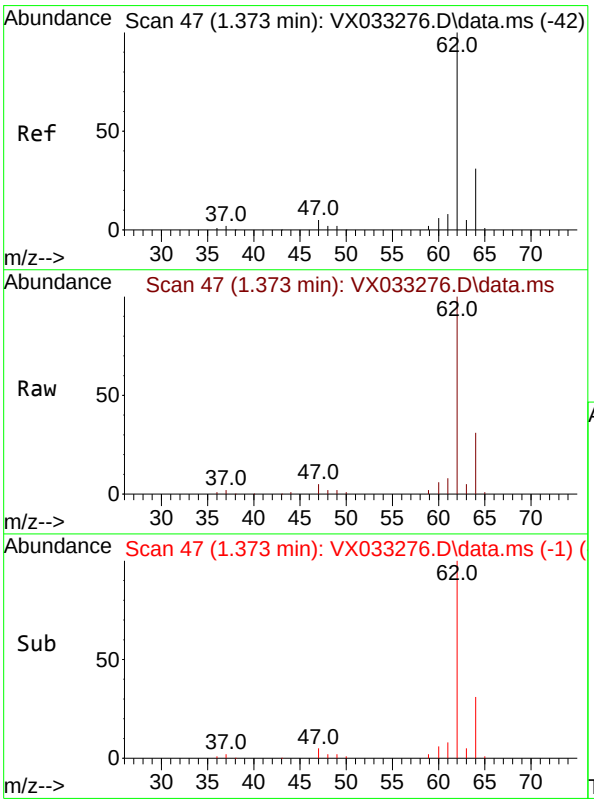
Ion	Ratio	Lower	Upper
50	100		
52	34.7	25.4	38.2



Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

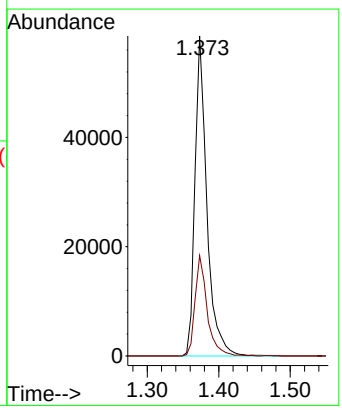
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

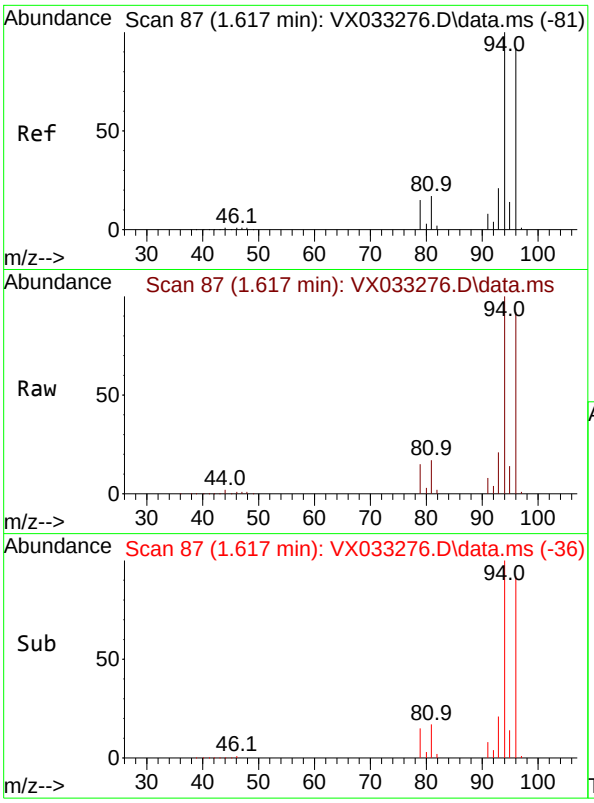


#4
Vinyl Chloride
Concen: 46.517 ug/l
RT: 1.373 min Scan# 47
Delta R.T. -0.001 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion: 62 Resp: 67871

Ion	Ratio	Lower	Upper
62	100		
64	31.4	25.8	38.6

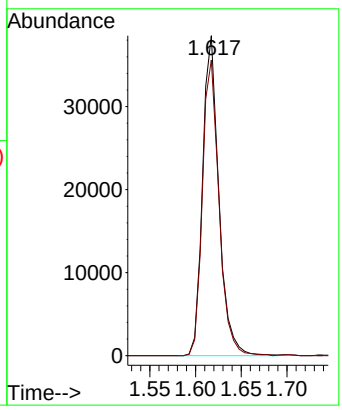




#5
Bromomethane
Concen: 44.026 ug/l
RT: 1.617 min Scan# 8
Delta R.T. 0.012 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion: 94 Resp: 4763

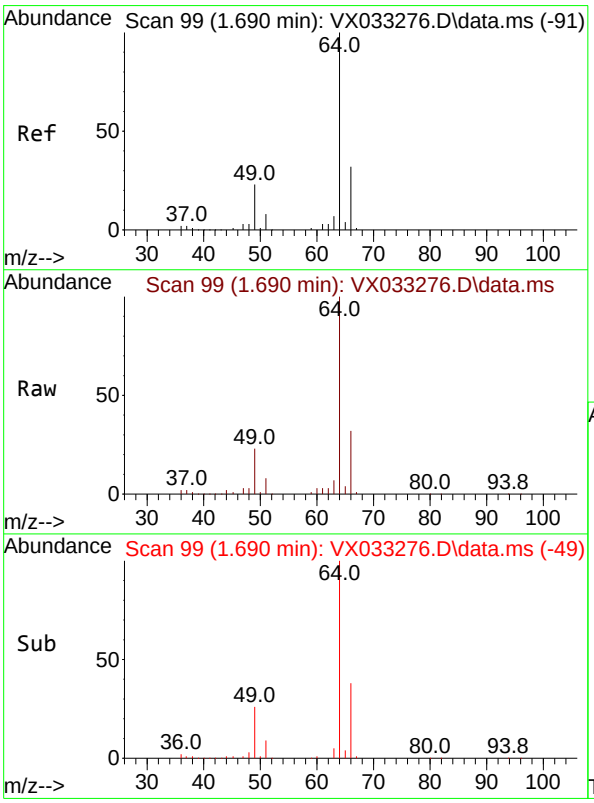
Ion	Ratio	Lower	Upper
94	100		
96	92.4	77.6	116.4



Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations
APPROVED

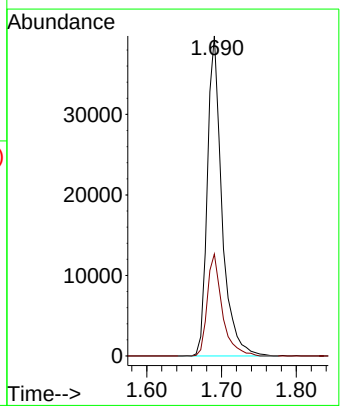
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

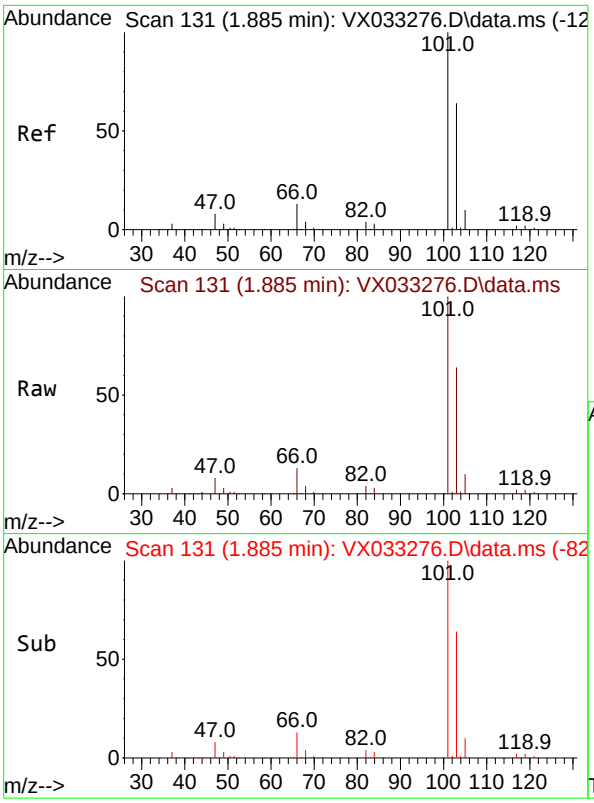


#6
Chloroethane
Concen: 45.170 ug/l
RT: 1.690 min Scan# 99
Delta R.T. 0.005 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion: 64 Resp: 53654

Ion	Ratio	Lower	Upper
64	100		
66	31.9	26.0	39.0

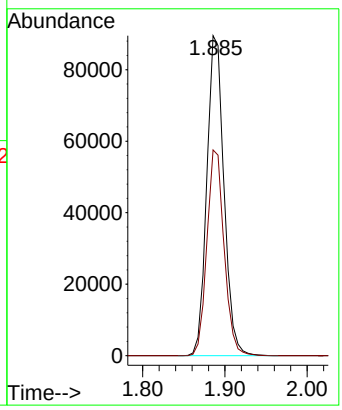




#7
Trichlorofluoromethane
Concen: 45.748 ug/l
RT: 1.885 min Scan# 1
Delta R.T. -0.001 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion:101 Resp: 12954

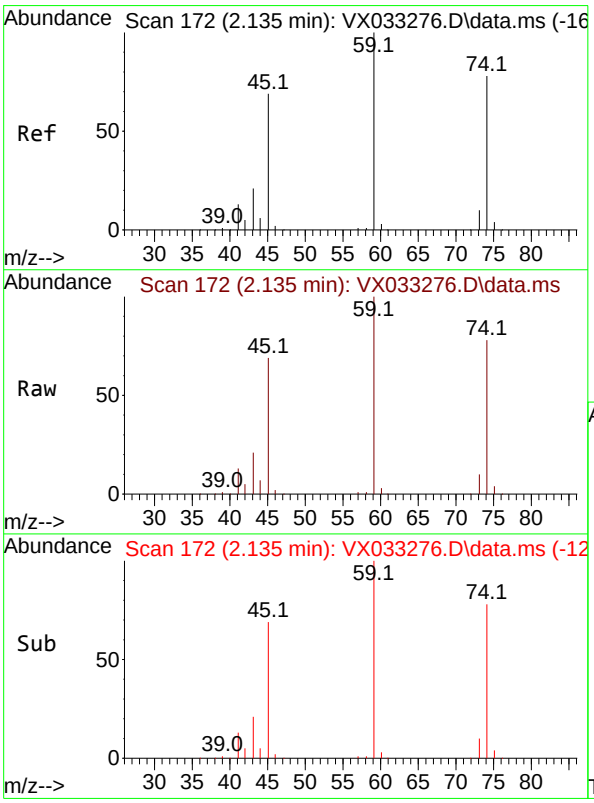
Ion	Ratio	Lower	Upper
101	100		
103	64.3	51.4	77.2



Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

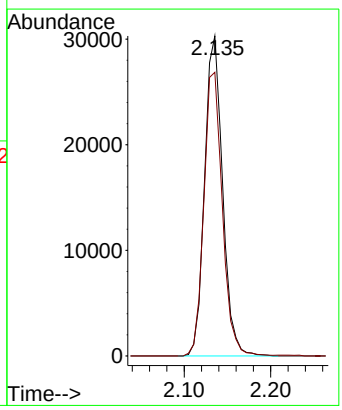
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

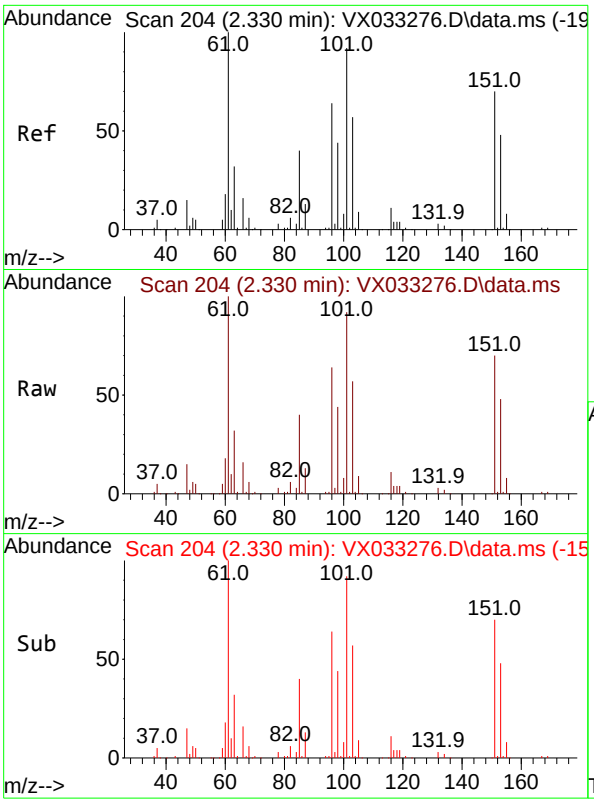


#8
Diethyl Ether
Concen: 48.991 ug/l
RT: 2.135 min Scan# 172
Delta R.T. 0.005 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion: 74 Resp: 43677

Ion	Ratio	Lower	Upper
74	100		
45	91.2	46.6	139.7

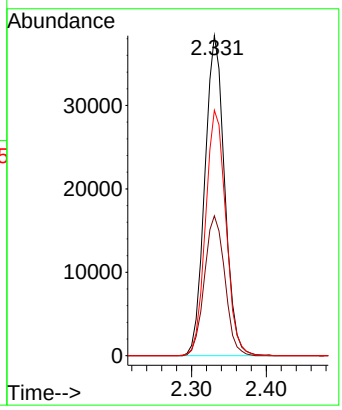




#9
1,1,2-Trichlorotrifluoroethane
Concen: 47.492 ug/l
RT: 2.330 min Scan# 2
Delta R.T. -0.001 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion:101 Resp: 7068

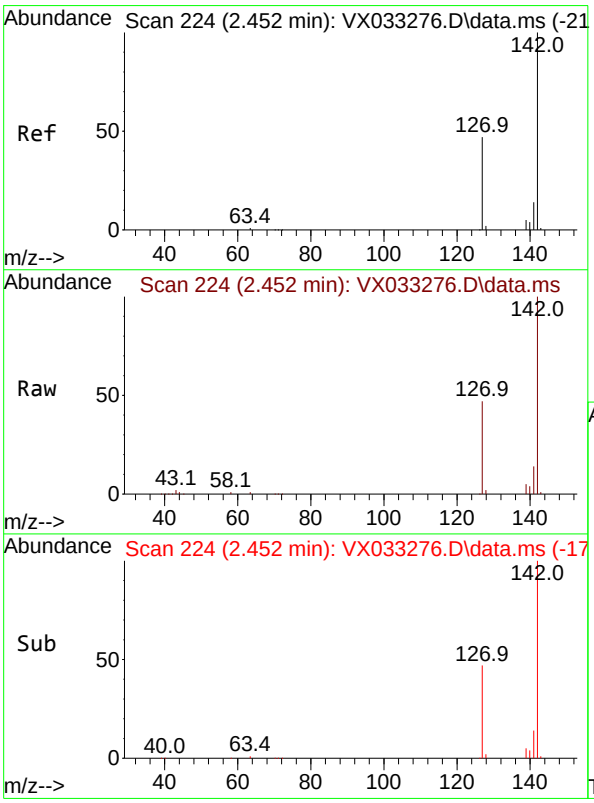
Ion	Ratio	Lower	Upper
101	100		
85	45.0	37.0	55.4
151	78.7	64.4	96.6



Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations
APPROVED

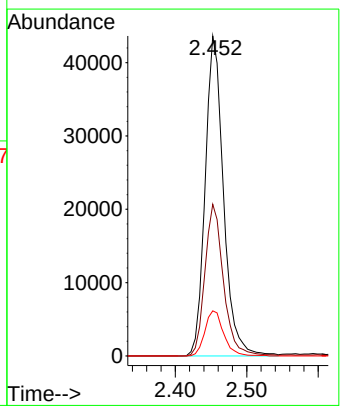
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

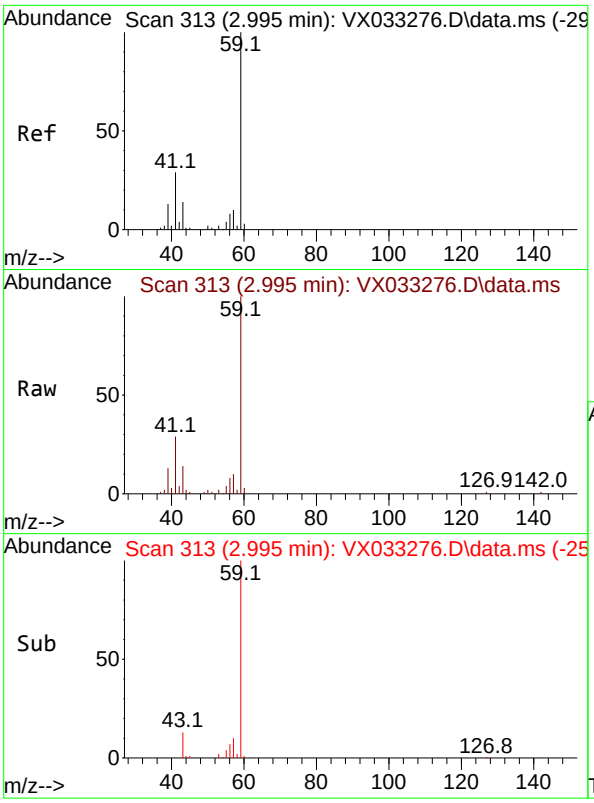


#10
Methyl Iodide
Concen: 45.699 ug/l
RT: 2.452 min Scan# 224
Delta R.T. -0.001 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion:142 Resp: 77866

Ion	Ratio	Lower	Upper
142	100		
127	47.9	38.6	57.8
141	14.4	11.4	17.2

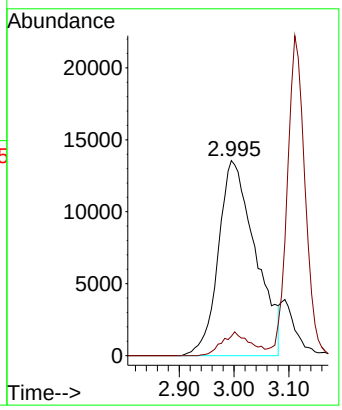




#11
Tert butyl alcohol
Concen: 259.553 ug/l
RT: 2.995 min Scan# 3
Delta R.T. 0.030 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion: 59 Resp: 6366

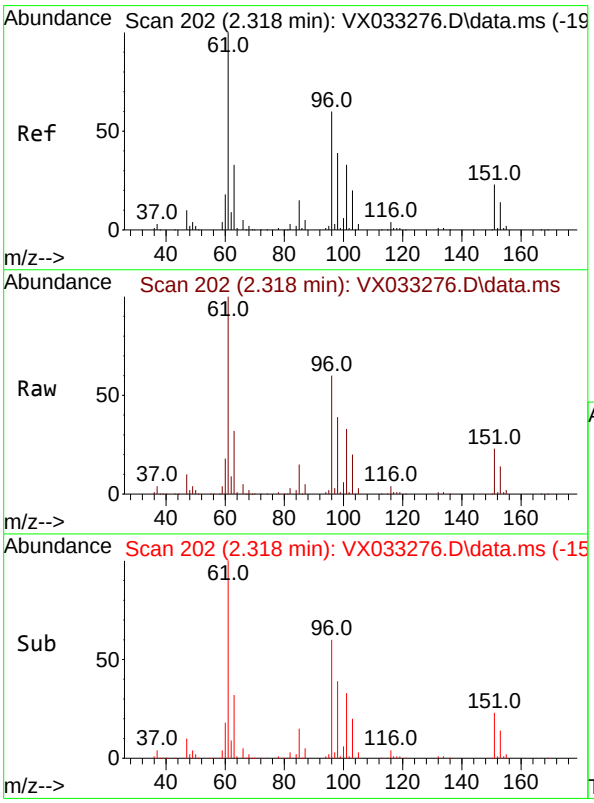
Ion	Ratio	Lower	Upper
59	100		
57	9.2	8.2	12.4



Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations
APPROVED

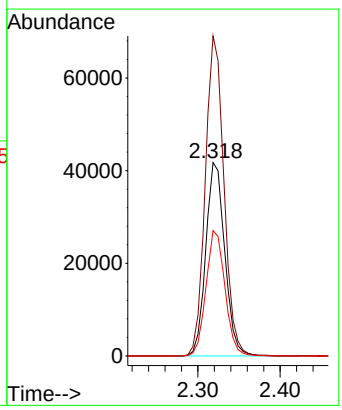
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

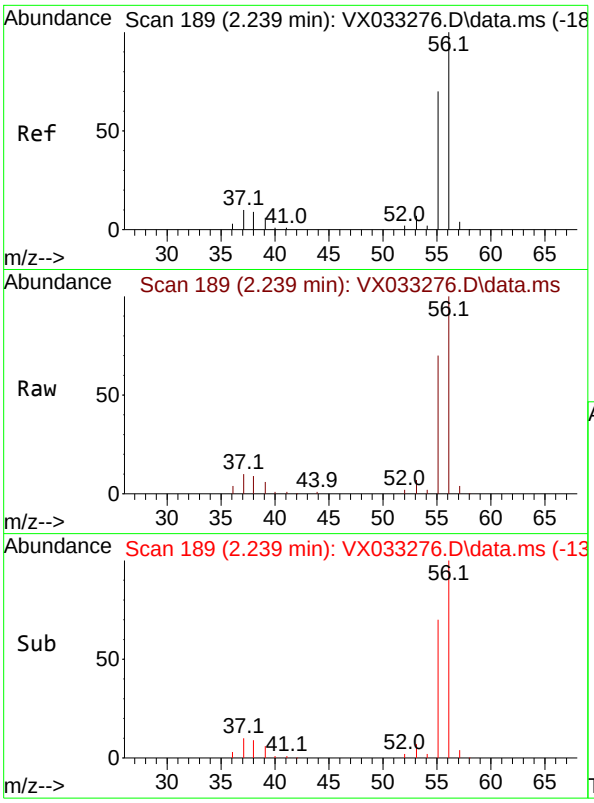


#12
1,1-Dichloroethene
Concen: 48.355 ug/l
RT: 2.318 min Scan# 202
Delta R.T. -0.001 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion: 96 Resp: 67045

Ion	Ratio	Lower	Upper
96	100		
61	165.4	125.1	187.7
98	64.8	50.6	76.0

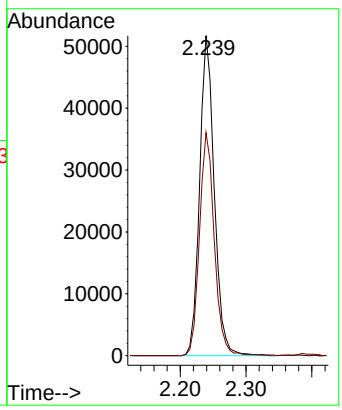




#13
Acrolein
Concen: 284.793 ug/l
RT: 2.239 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion: 56 Resp: 8023

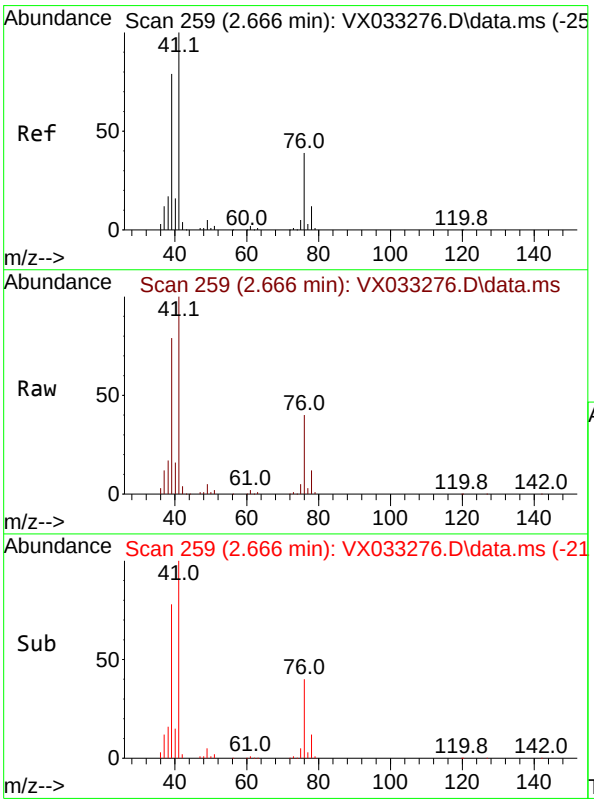
Ion	Ratio	Lower	Upper
56	100		
55	70.3	56.9	85.3



Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations
APPROVED

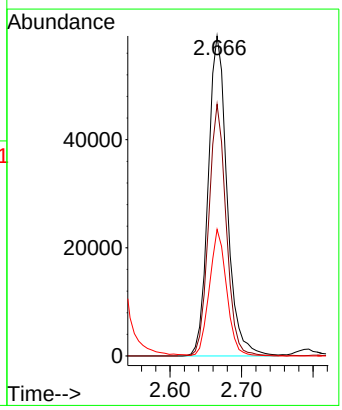
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

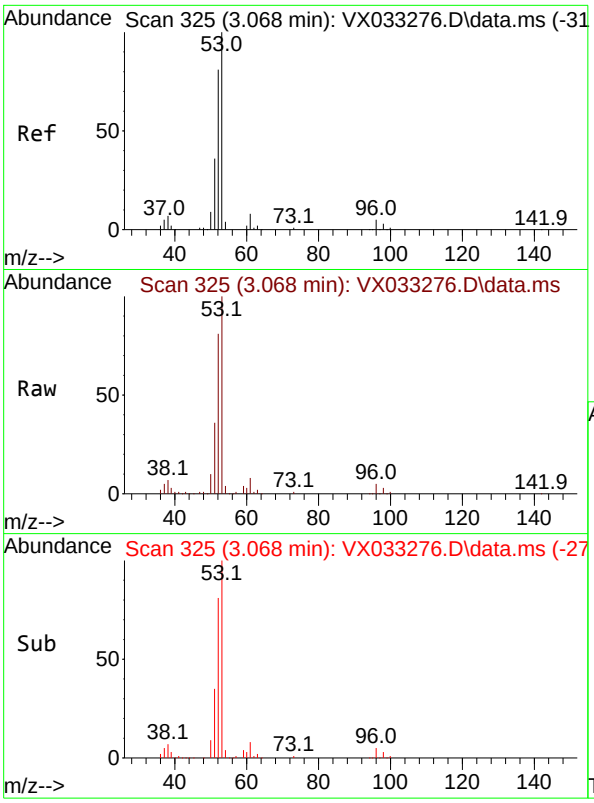


#14
Allyl chloride
Concen: 48.562 ug/l
RT: 2.666 min Scan# 259
Delta R.T. -0.000 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion: 41 Resp: 108703

Ion	Ratio	Lower	Upper
41	100		
39	72.6	61.4	92.2
76	36.0	29.2	43.8

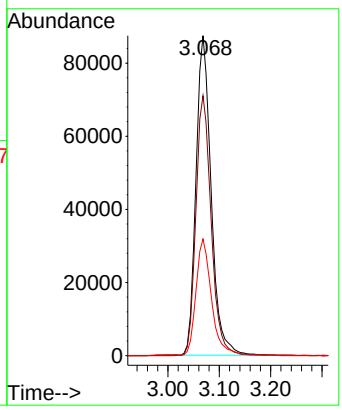




#15
Acrylonitrile
Concen: 258.544 ug/l
RT: 3.068 min Scan# 3
Delta R.T. 0.006 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion: 53 Resp: 17936

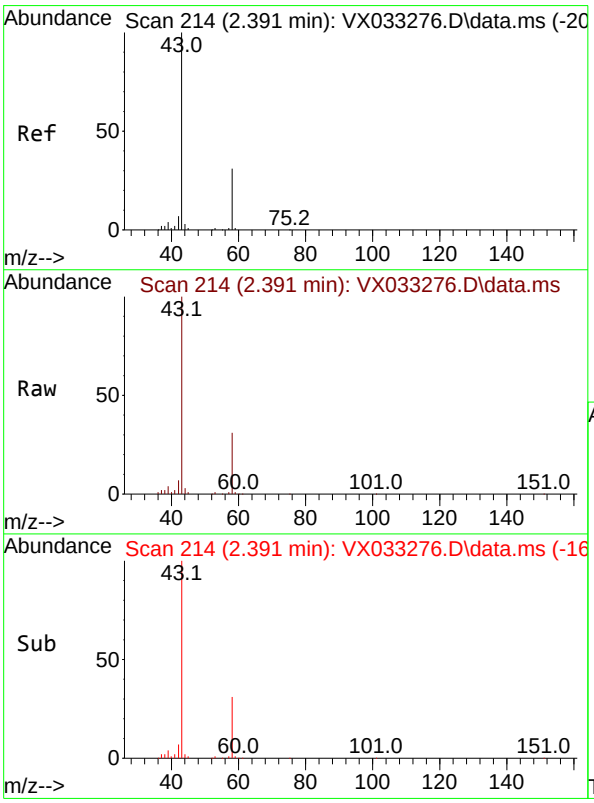
Ion	Ratio	Lower	Upper
53	100		
52	82.4	67.4	101.0
51	37.1	30.3	45.5



Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations
APPROVED

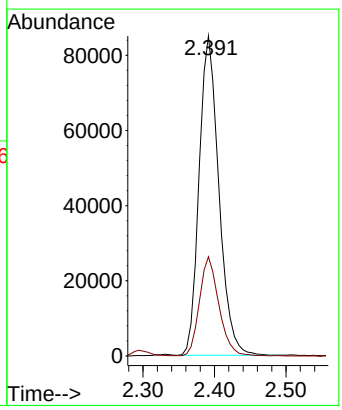
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

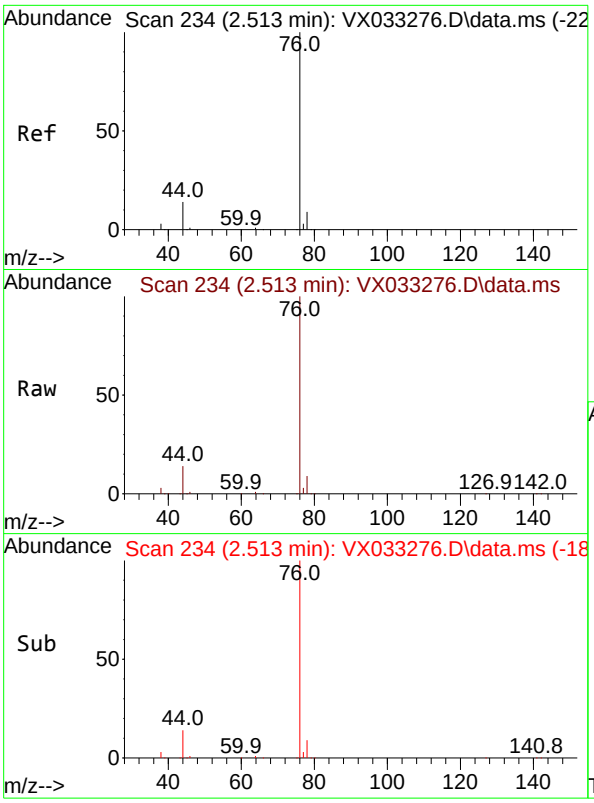


#16
Acetone
Concen: 225.460 ug/l
RT: 2.391 min Scan# 214
Delta R.T. 0.011 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion: 43 Resp: 162918

Ion	Ratio	Lower	Upper
43	100		
58	31.0	23.8	35.8





#17
Carbon Disulfide
Concen: 45.554 ug/l
RT: 2.513 min Scan# 2
Delta R.T. -0.001 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

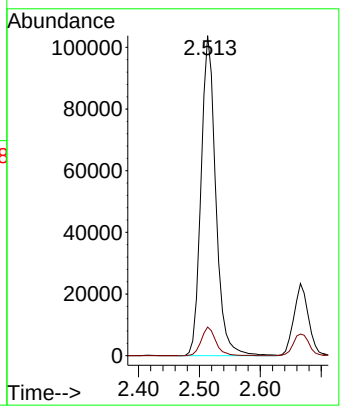
Tgt Ion: 76 Resp: 17450

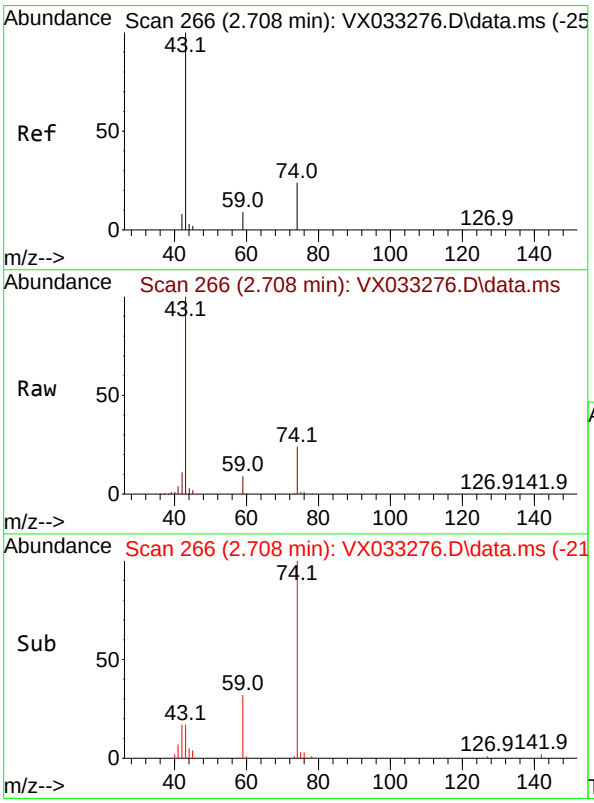
Ion	Ratio	Lower	Upper
76	100		
78	8.9	7.5	11.3

Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

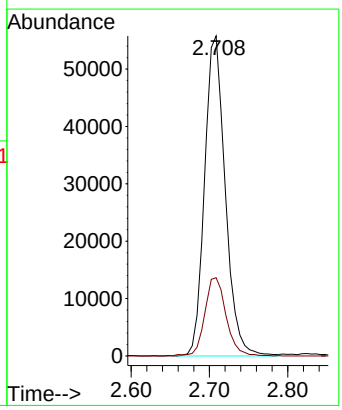


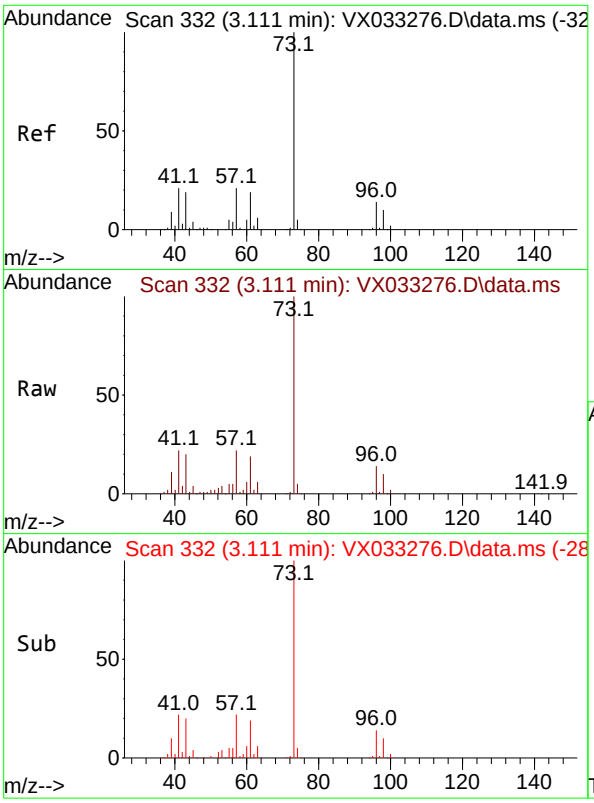


#18
Methyl Acetate
Concen: 51.092 ug/l
RT: 2.708 min Scan# 266
Delta R.T. 0.005 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion: 43 Resp: 102198

Ion	Ratio	Lower	Upper
43	100		
74	25.2	19.4	29.0





#19
Methyl tert-butyl Ether
Concen: 48.816 ug/l
RT: 3.111 min Scan# 3
Delta R.T. -0.000 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

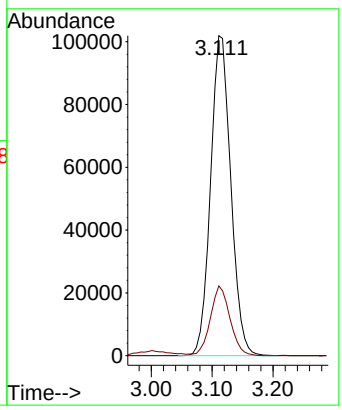
Tgt Ion: 73 Resp: 23473

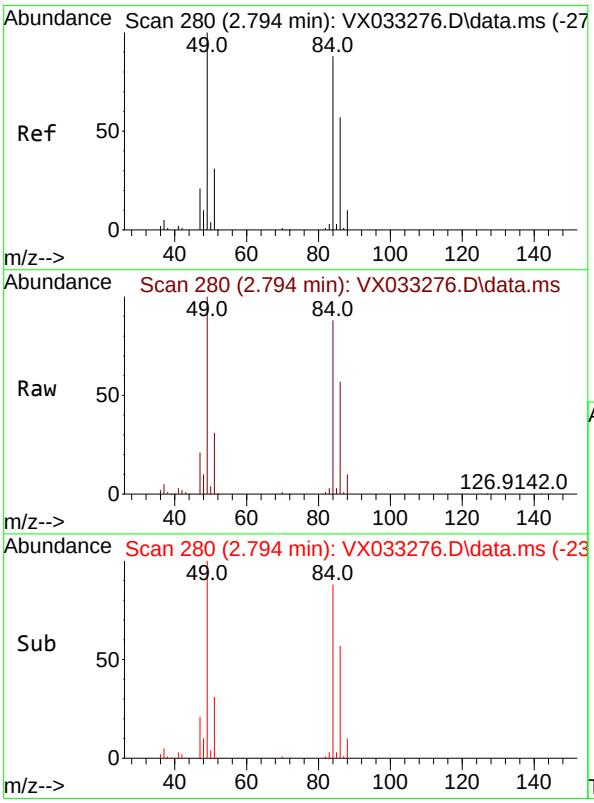
Ion	Ratio	Lower	Upper
73	100		
57	21.8	16.6	25.0

Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

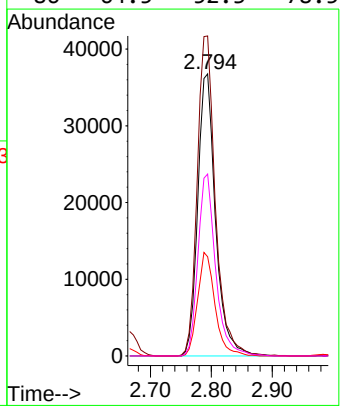


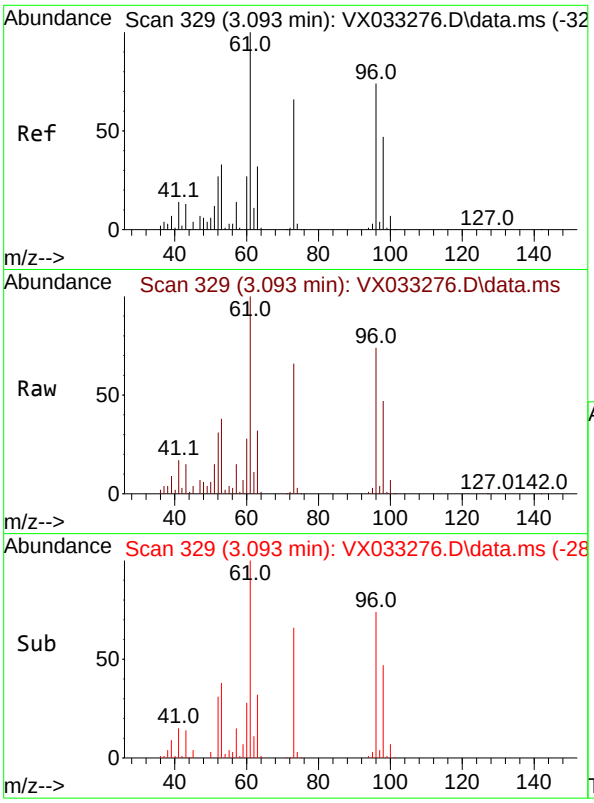


#20
Methylene Chloride
Concen: 42.935 ug/l
RT: 2.794 min Scan# 280
Delta R.T. 0.006 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion: 84 Resp: 74742

Ion	Ratio	Lower	Upper
84	100		
49	113.5	101.0	151.6
51	35.2	31.1	46.7
86	64.5	52.3	78.5

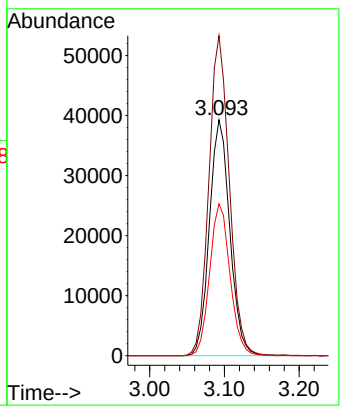




#21
trans-1,2-Dichloroethene
Concen: 47.033 ug/l
RT: 3.093 min Scan# 3
Delta R.T. -0.000 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion: 96 Resp: 7459

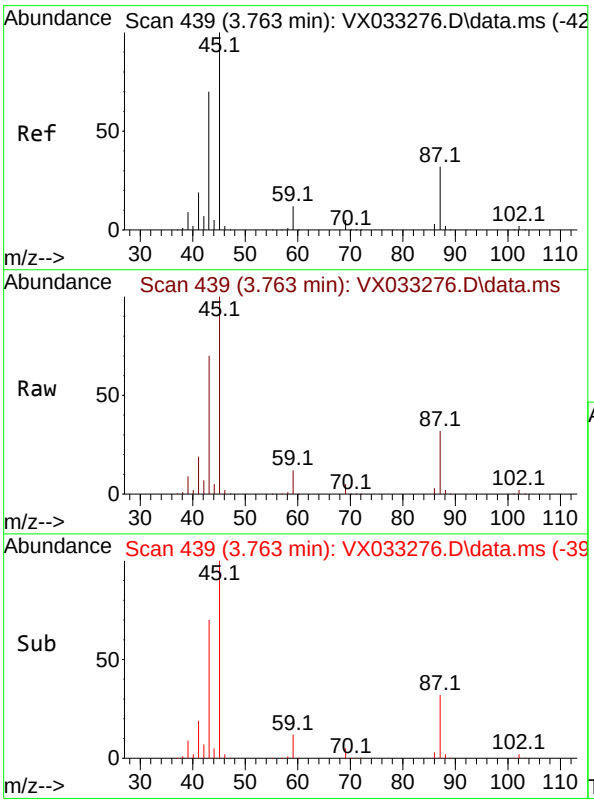
Ion	Ratio	Lower	Upper
96	100		
61	135.7	106.6	160.0
98	64.4	51.0	76.6



Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations
APPROVED

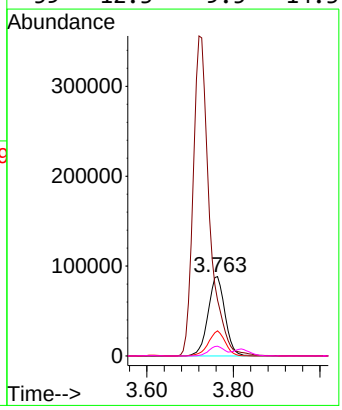
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

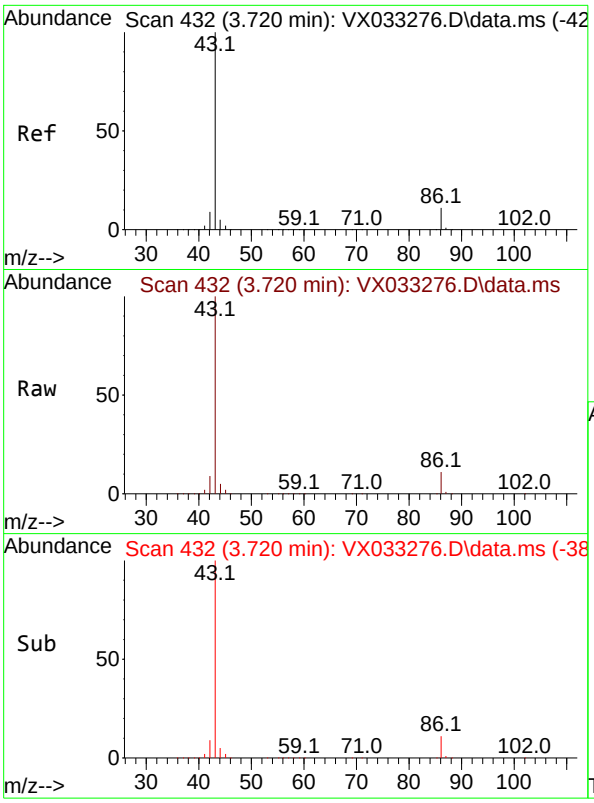


#22
Diisopropyl ether
Concen: 49.181 ug/l
RT: 3.763 min Scan# 439
Delta R.T. 0.000 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion: 45 Resp: 239712

Ion	Ratio	Lower	Upper
45	100		
43	70.1	56.4	84.6
87	31.7	24.4	36.6
59	12.3	9.5	14.3





#23
Vinyl Acetate
Concen: 244.330 ug/l
RT: 3.720 min Scan# 4
Delta R.T. -0.001 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

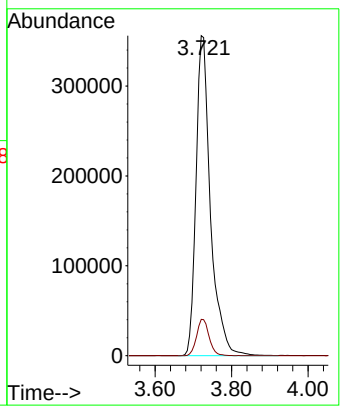
Tgt Ion: 43 Resp: 93219

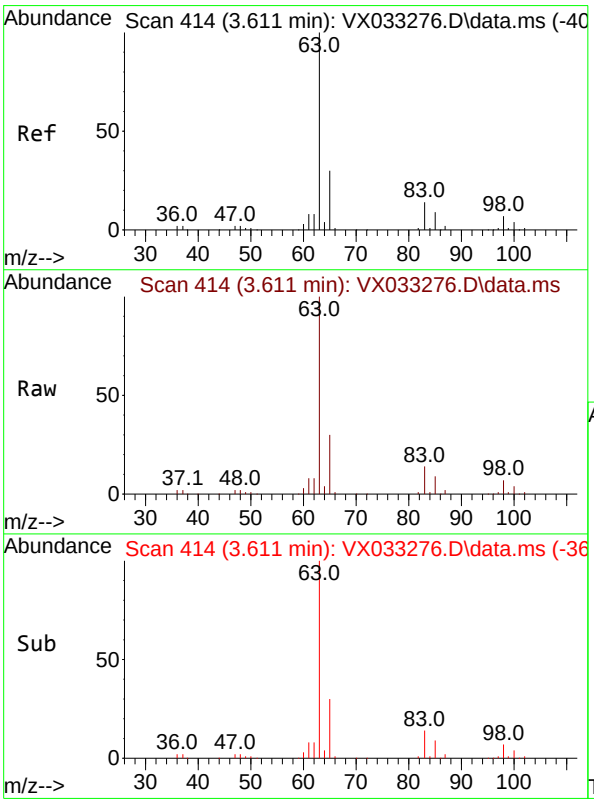
Ion	Ratio	Lower	Upper
43	100		
86	11.4	8.6	12.8

Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

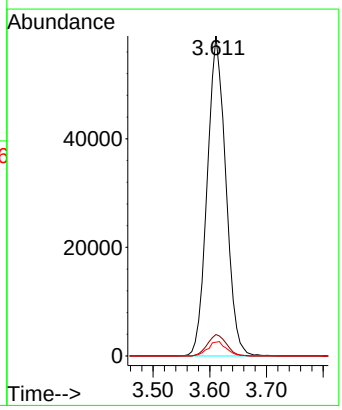


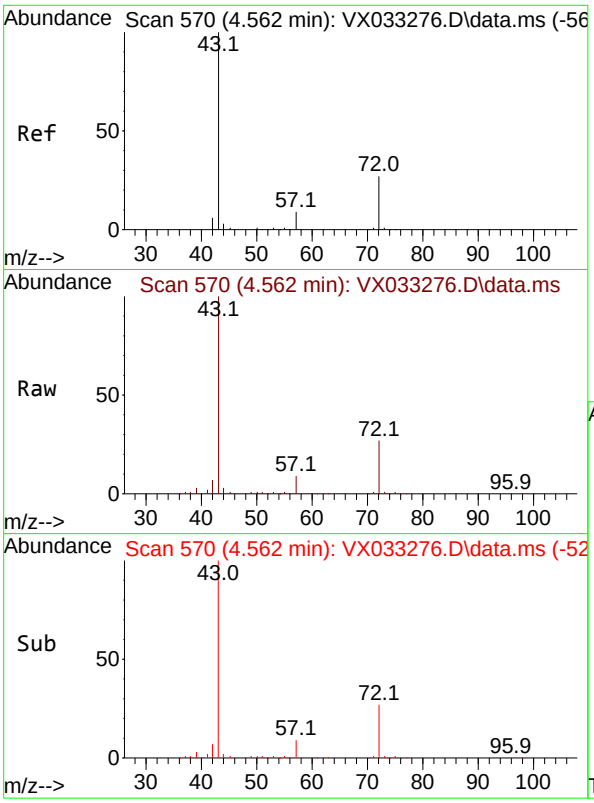


#24
1,1-Dichloroethane
Concen: 48.093 ug/l
RT: 3.611 min Scan# 414
Delta R.T. -0.000 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion: 63 Resp: 134140

Ion	Ratio	Lower	Upper
63	100		
98	6.7	3.5	10.4
100	4.3	2.3	6.8





#25
2-Butanone
Concen: 257.754 ug/l
RT: 4.562 min Scan# 5
Delta R.T. 0.006 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

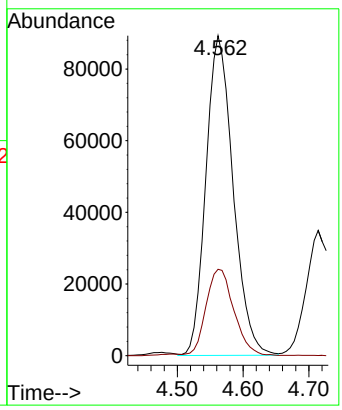
Tgt Ion: 43 Resp: 25682

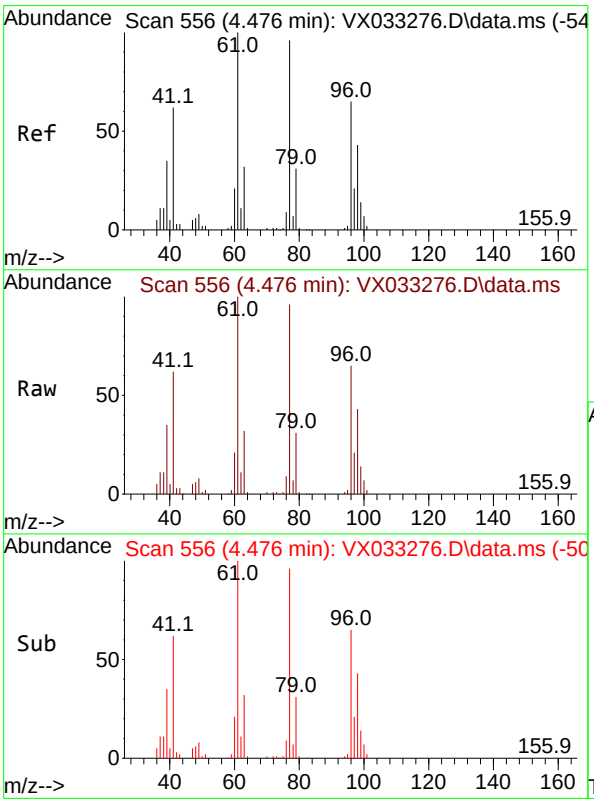
Ion	Ratio	Lower	Upper
43	100		
72	27.0	22.2	33.2

Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

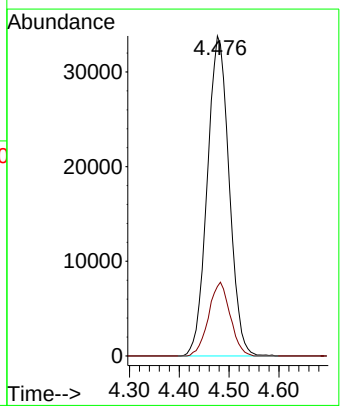


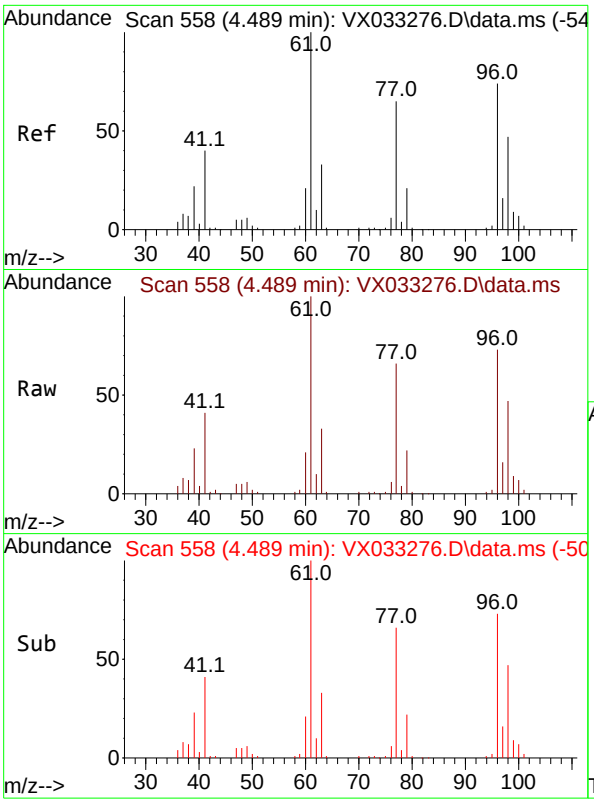


#26
2,2-Dichloropropane
Concen: 45.925 ug/l
RT: 4.476 min Scan# 556
Delta R.T. -0.001 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion: 77 Resp: 102996

Ion	Ratio	Lower	Upper
77	100		
97	22.7	11.4	34.1

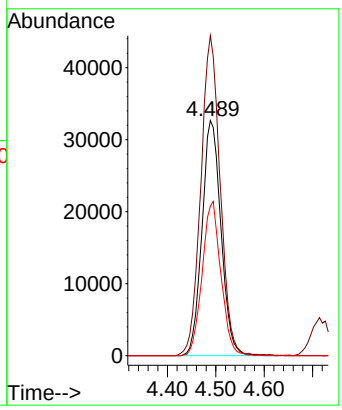




#27
cis-1,2-Dichloroethene
Concen: 49.439 ug/l
RT: 4.489 min Scan# 5
Delta R.T. -0.000 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion: 96 Resp: 8908

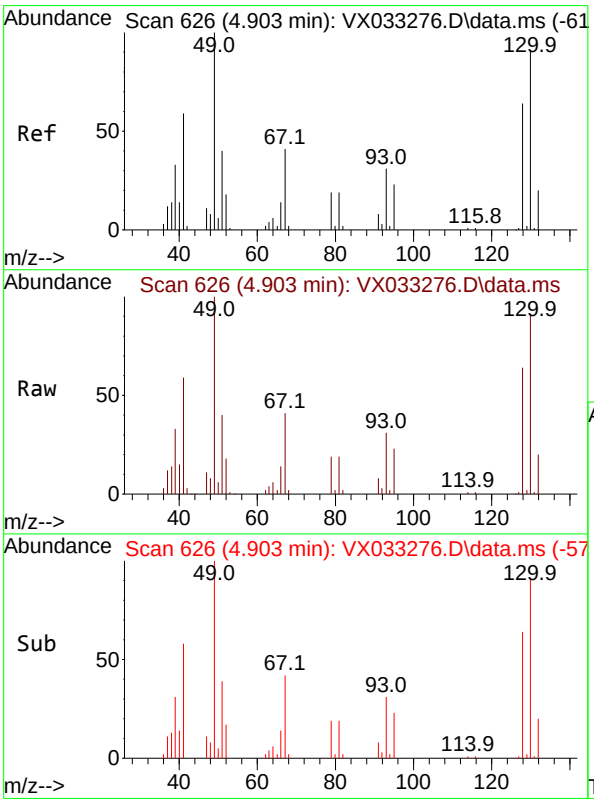
Ion	Ratio	Lower	Upper
96	100		
61	138.7	0.0	286.0
98	64.4	0.0	129.6



Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations
APPROVED

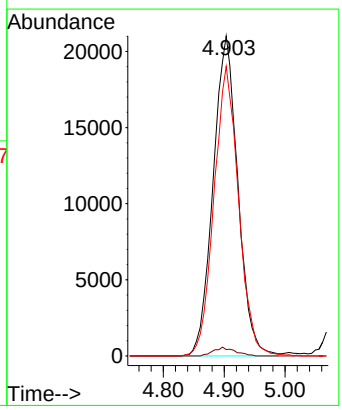
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

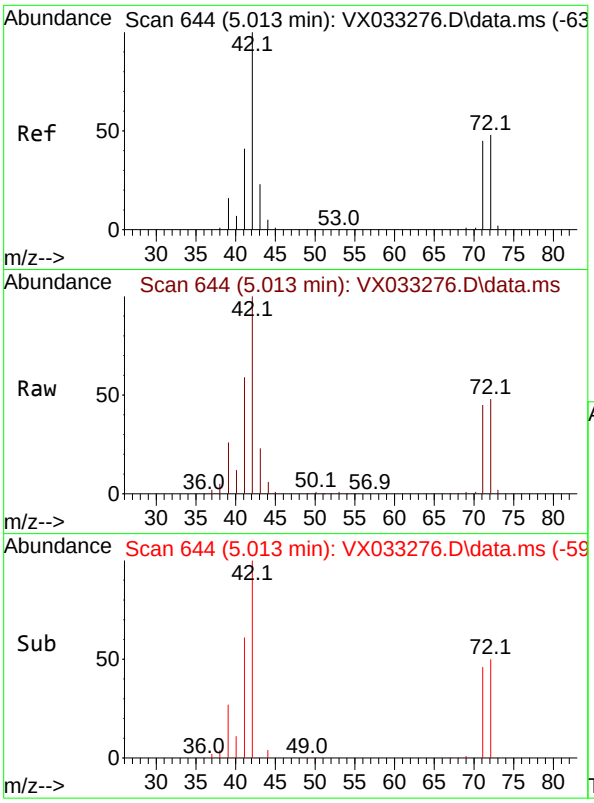


#28
Bromochloromethane
Concen: 48.418 ug/l
RT: 4.903 min Scan# 626
Delta R.T. -0.001 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion: 49 Resp: 59340

Ion	Ratio	Lower	Upper
49	100		
129	2.4	0.0	3.8
130	90.0	67.5	101.3

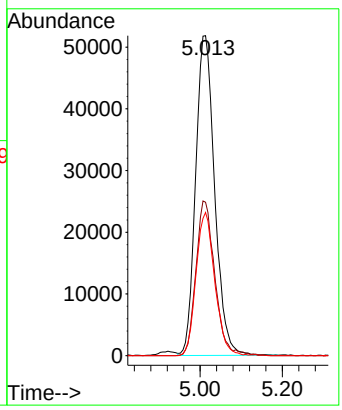




#29
Tetrahydrofuran
Concen: 263.602 ug/l
RT: 5.013 min Scan# 64
Delta R.T. 0.012 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion: 42 Resp: 16666

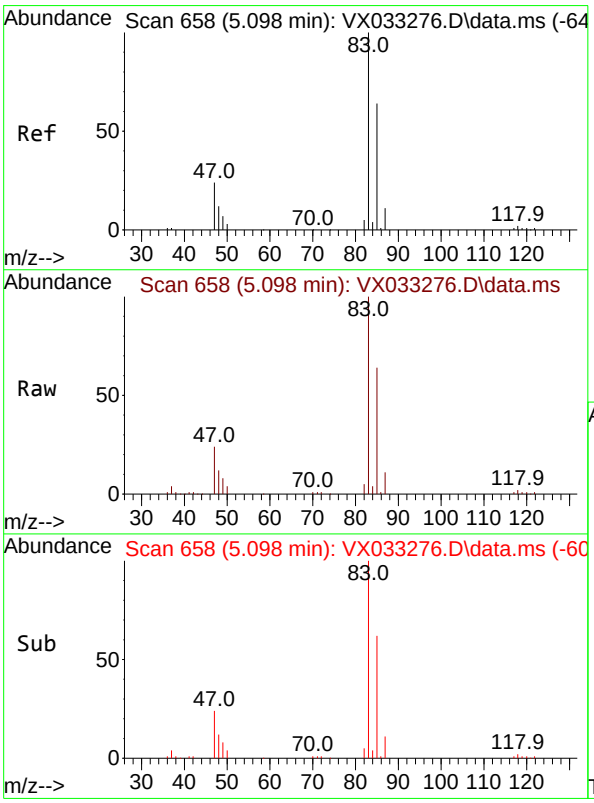
Ion	Ratio	Lower	Upper
42	100		
72	48.0	37.6	56.4
71	44.2	34.7	52.1



Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

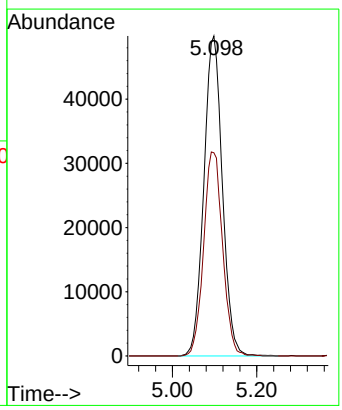
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

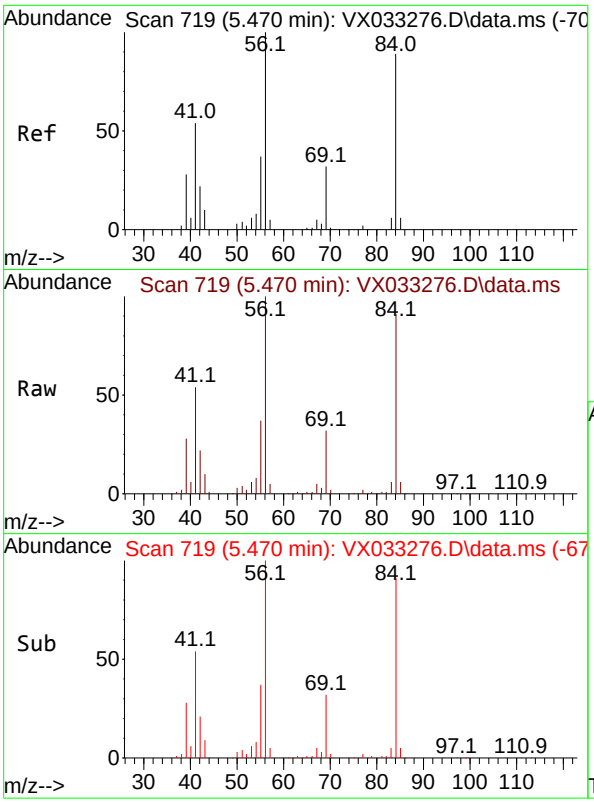


#30
Chloroform
Concen: 48.731 ug/l
RT: 5.098 min Scan# 658
Delta R.T. -0.001 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion: 83 Resp: 152229

Ion	Ratio	Lower	Upper
83	100		
85	63.5	51.1	76.7

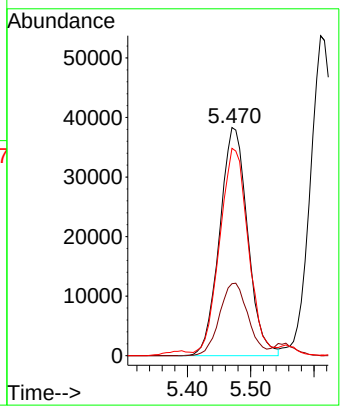




#31
Cyclohexane
Concen: 47.071 ug/l
RT: 5.470 min Scan# 7
Delta R.T. 0.000 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion: 56 Resp: 11800

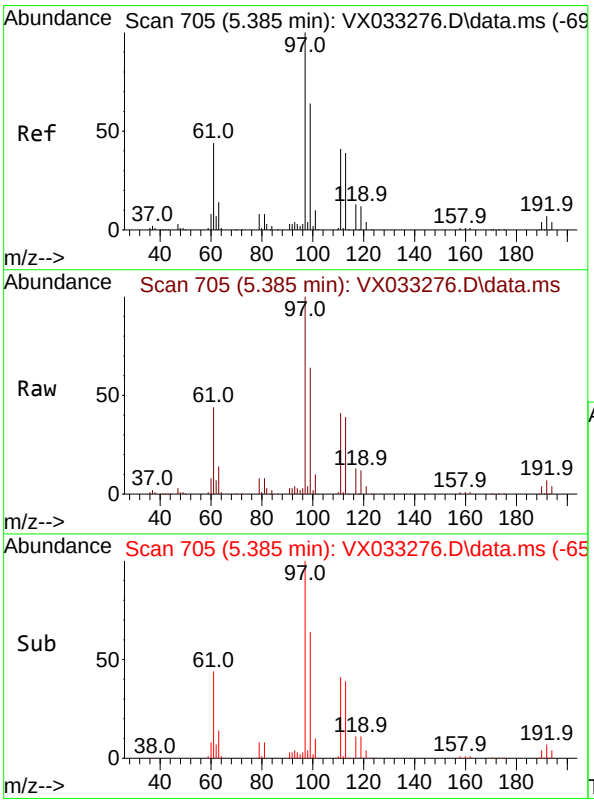
Ion	Ratio	Lower	Upper
56	100		
69	31.6	24.1	36.1
84	88.9	66.9	100.3



Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations
APPROVED

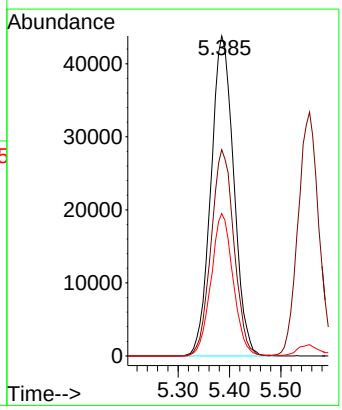
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

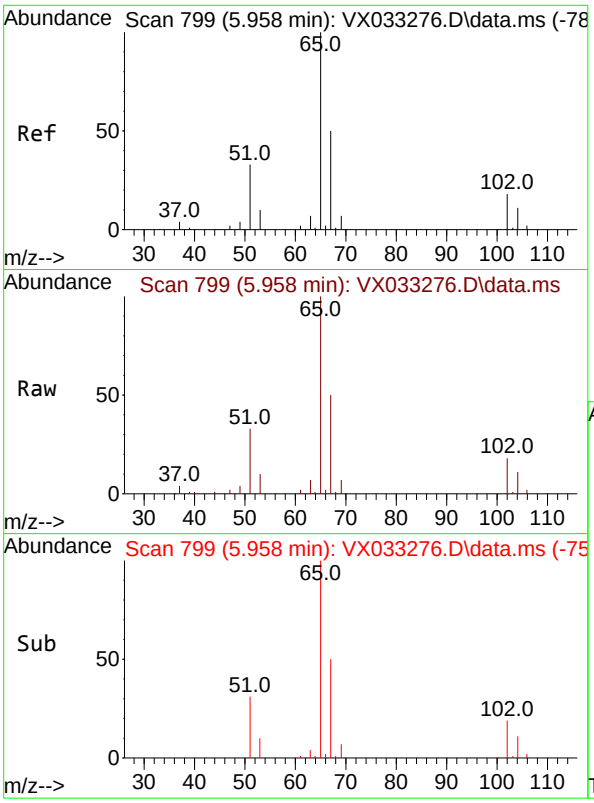


#32
1,1,1-Trichloroethane
Concen: 48.294 ug/l
RT: 5.385 min Scan# 705
Delta R.T. -0.000 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion: 97 Resp: 135108

Ion	Ratio	Lower	Upper
97	100		
99	64.6	51.4	77.0
61	43.0	35.2	52.8





#33
1,2-Dichloroethane-d4
Concen: 26.704 ug/l
RT: 5.958 min Scan# 7
Delta R.T. -0.000 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

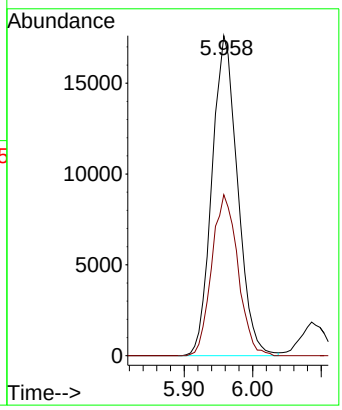
Tgt Ion: 65 Resp: 4570

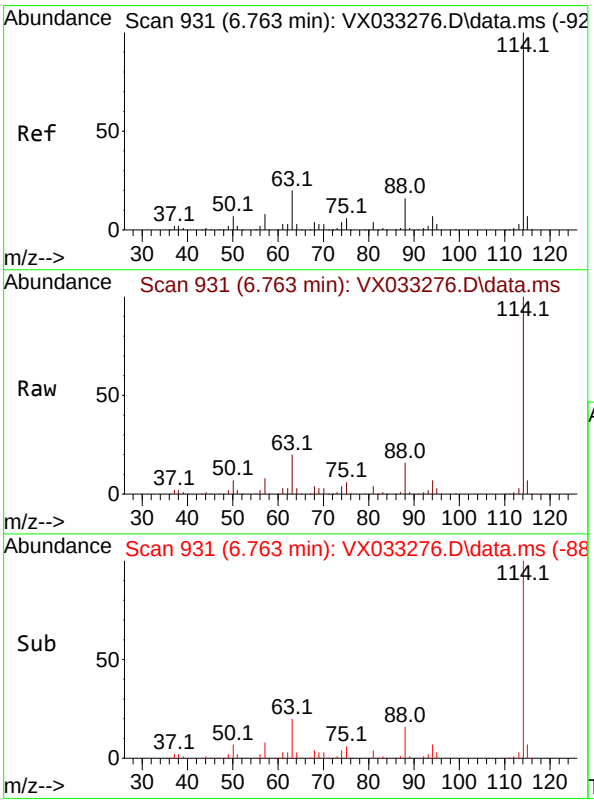
Ion	Ratio	Lower	Upper
65	100		
67	51.3	0.0	101.8

Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

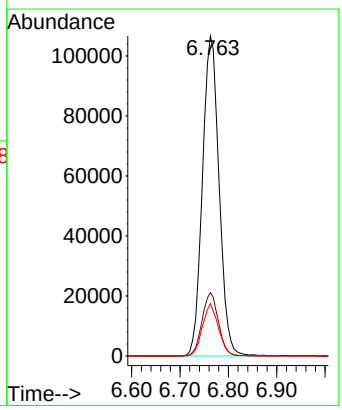


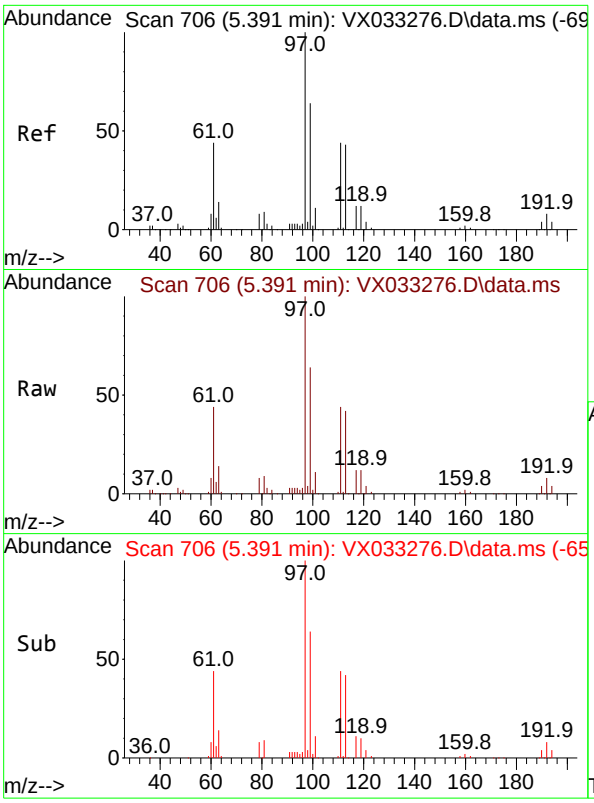


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 6.763 min Scan# 931
Delta R.T. -0.000 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion:114 Resp: 255290

Ion	Ratio	Lower	Upper
114	100		
63	19.8	0.0	41.6
88	16.3	0.0	33.4

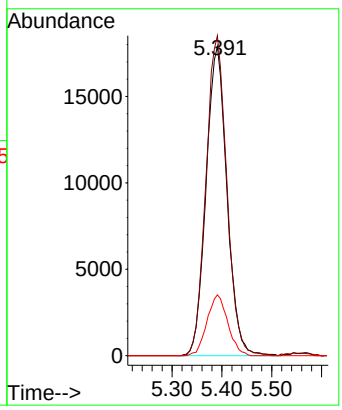




#35
Dibromofluoromethane
Concen: 36.151 ug/l
RT: 5.391 min Scan# 7
Delta R.T. 0.006 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion:113 Resp: 5203

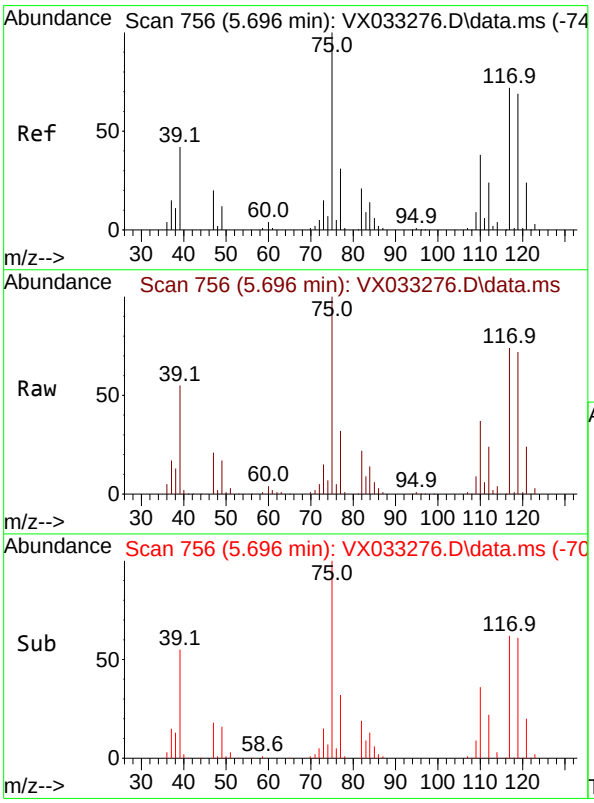
Ion	Ratio	Lower	Upper
113	100		
111	103.5	82.4	123.6
192	19.6	15.4	23.2



Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

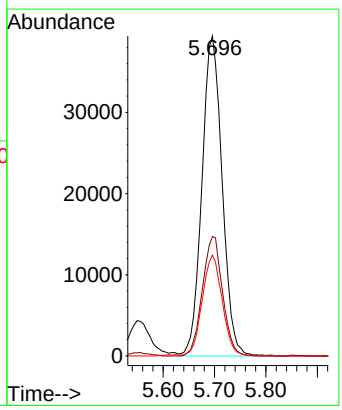
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

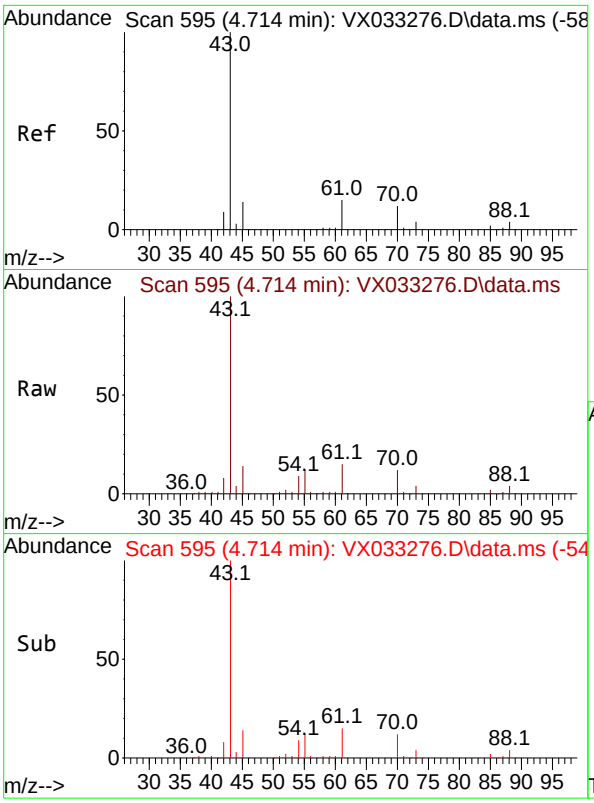


#36
1,1-Dichloropropene
Concen: 46.792 ug/l
RT: 5.696 min Scan# 756
Delta R.T. -0.000 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion: 75 Resp: 107681

Ion	Ratio	Lower	Upper
75	100		
110	37.2	18.4	55.2
77	31.0	24.5	36.7





#37
Ethyl Acetate
Concen: 50.491 ug/l
RT: 4.714 min Scan# 5
Delta R.T. -0.001 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

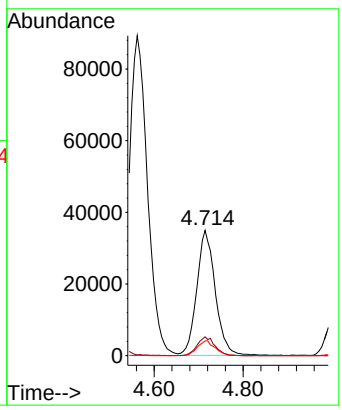
Tgt Ion: 43 Resp: 10137

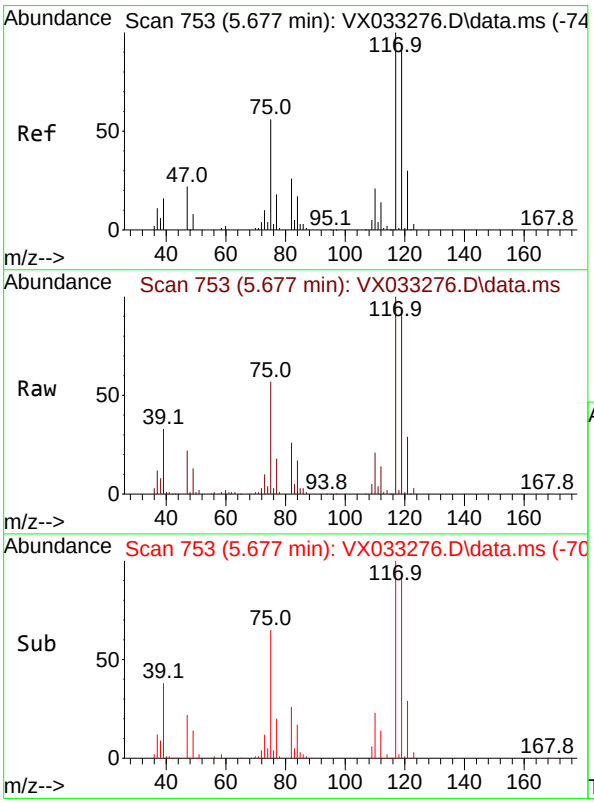
Ion	Ratio	Lower	Upper
43	100		
61	14.4	11.5	17.3
70	11.3	9.1	13.7

Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

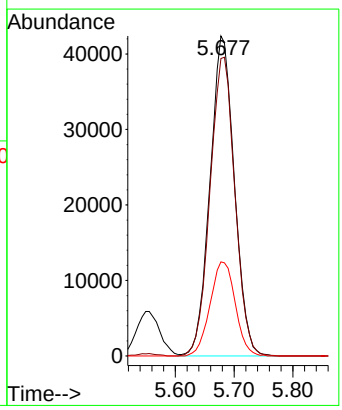


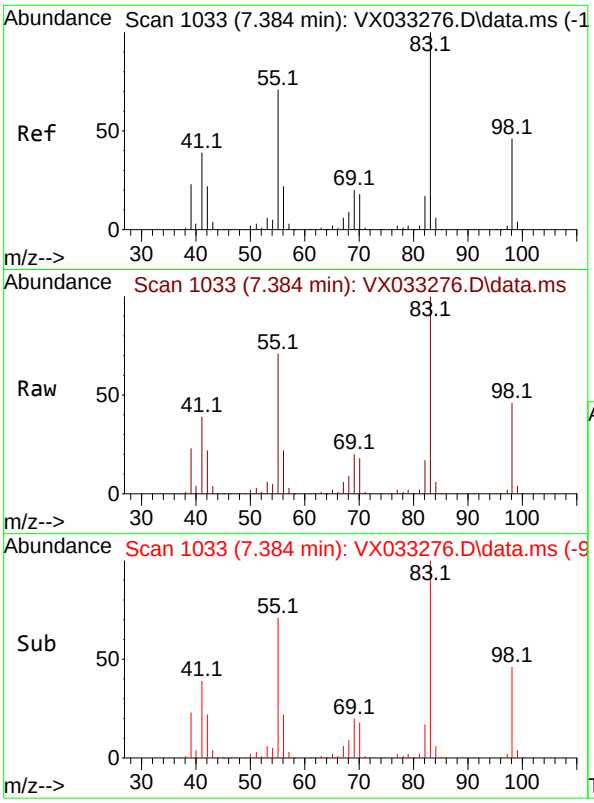


#38
Carbon Tetrachloride
Concen: 47.822 ug/l
RT: 5.677 min Scan# 753
Delta R.T. -0.007 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion:117 Resp: 122084

Ion	Ratio	Lower	Upper
117	100		
119	93.0	77.2	115.8
121	29.4	25.8	38.6

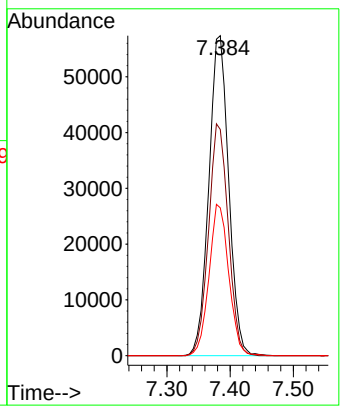




#39
Methylcyclohexane
Concen: 47.648 ug/l
RT: 7.384 min Scan# 1
Delta R.T. -0.001 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion: 83 Resp: 12511

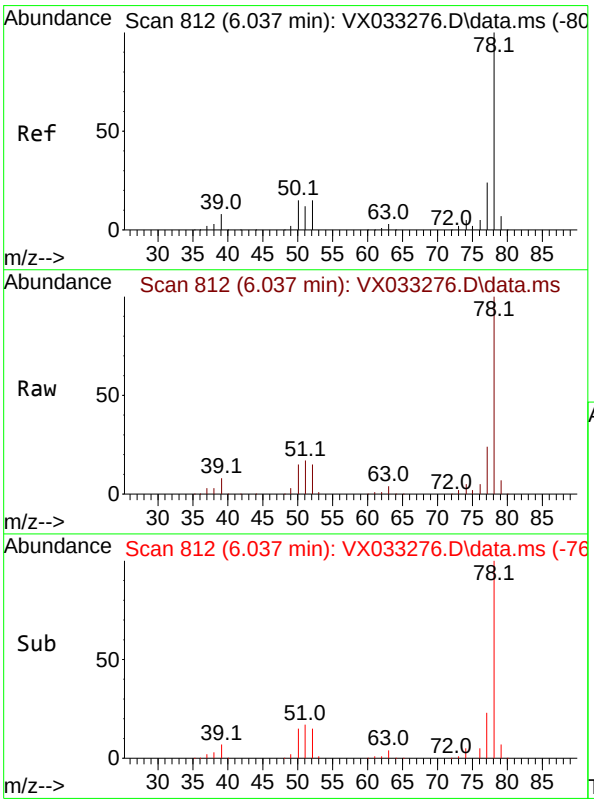
Ion	Ratio	Lower	Upper
83	100		
55	70.7	58.4	87.6
98	46.2	37.2	55.8



Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

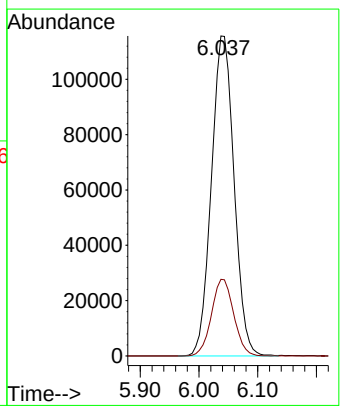
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

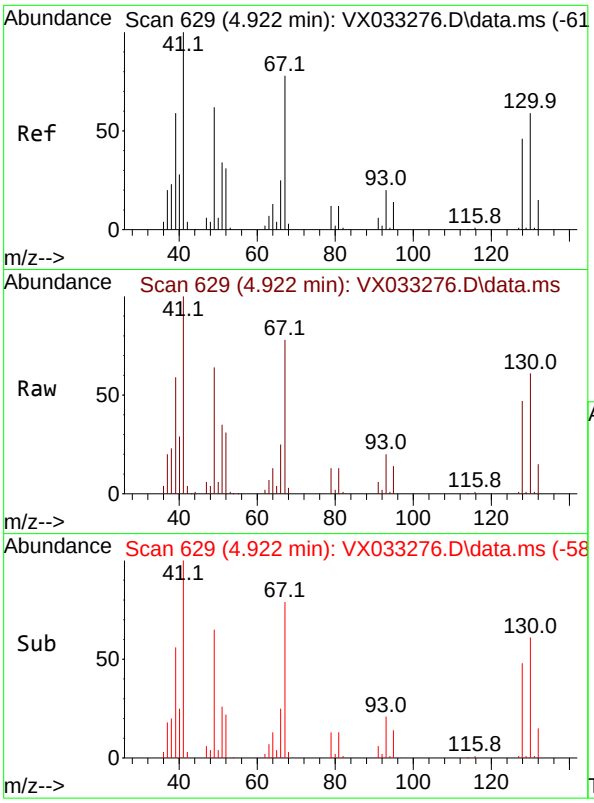


#40
Benzene
Concen: 48.039 ug/l
RT: 6.037 min Scan# 812
Delta R.T. 0.000 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion: 78 Resp: 309956

Ion	Ratio	Lower	Upper
78	100		
77	24.0	19.0	28.4

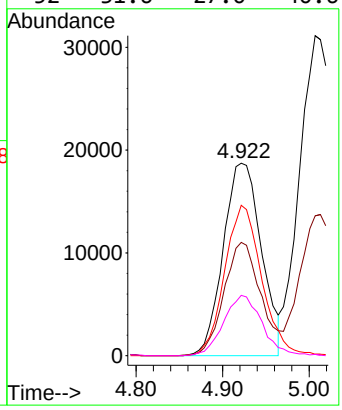




#41
Methacrylonitrile
Concen: 50.738 ug/l
RT: 4.922 min Scan# 6
Delta R.T. -0.000 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion: 41 Resp: 5731

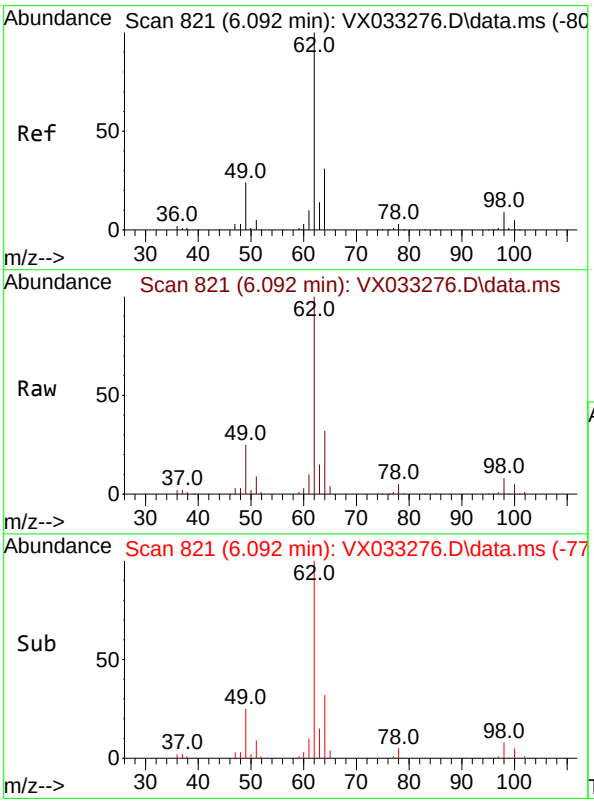
Ion	Ratio	Lower	Upper
41	100		
39	57.9	47.5	71.3
67	76.2	60.5	90.7
52	31.6	27.0	40.6



Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations
APPROVED

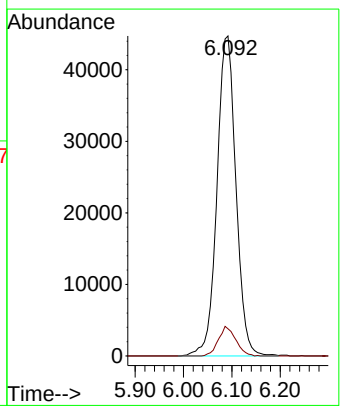
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

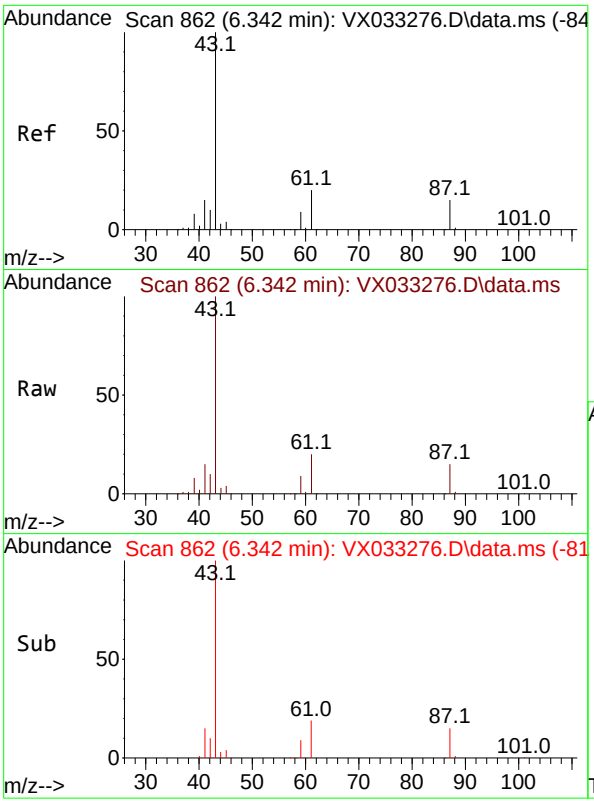


#42
1,2-Dichloroethane
Concen: 46.905 ug/l
RT: 6.092 min Scan# 821
Delta R.T. 0.006 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion: 62 Resp: 121854

Ion	Ratio	Lower	Upper
62	100		
98	8.5	0.0	16.0

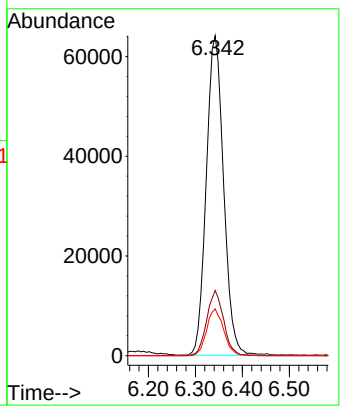




#43
Isopropyl Acetate
Concen: 49.316 ug/l
RT: 6.342 min Scan# 8
Delta R.T. -0.000 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion: 43 Resp: 16374

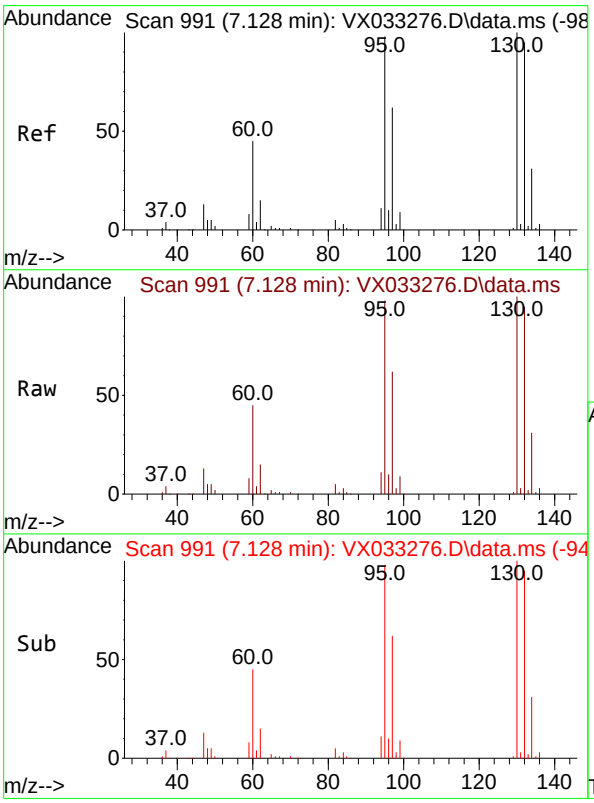
Ion	Ratio	Lower	Upper
43	100		
61	19.9	15.4	23.0
87	14.4	10.8	16.2



Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

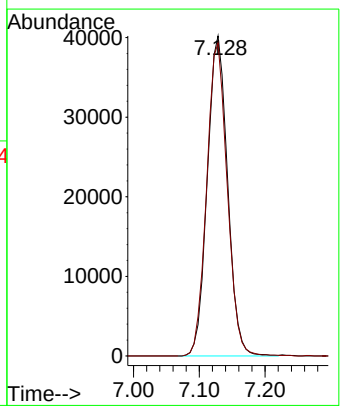
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

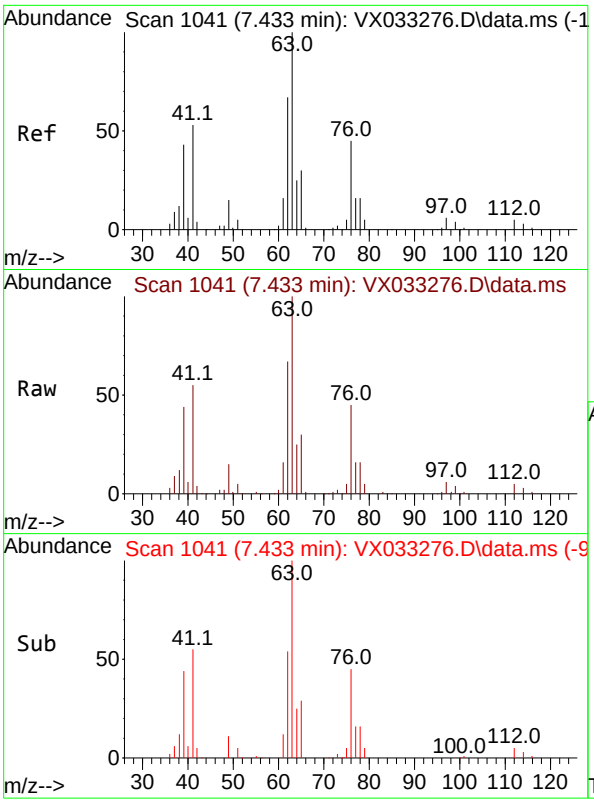


#44
Trichloroethene
Concen: 47.724 ug/l
RT: 7.128 min Scan# 991
Delta R.T. -0.001 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion:130 Resp: 86406

Ion	Ratio	Lower	Upper
130	100		
95	97.8	0.0	195.2

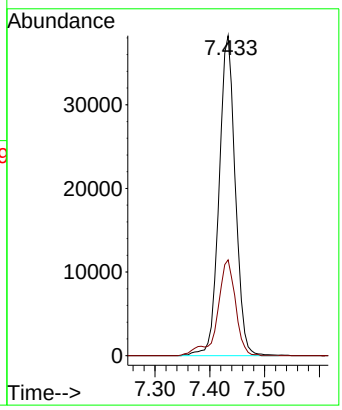




#45
1,2-Dichloropropane
Concen: 49.442 ug/l
RT: 7.433 min Scan# 1
Delta R.T. -0.001 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion: 63 Resp: 7883

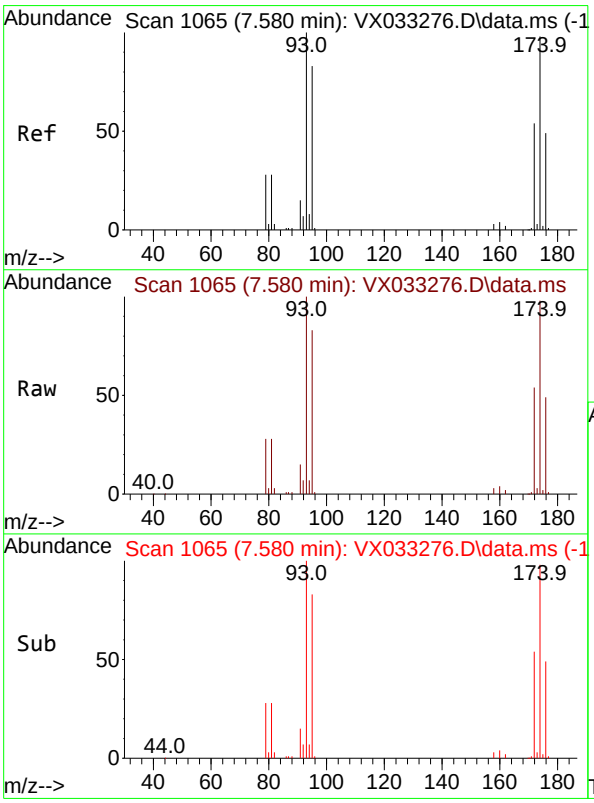
Ion	Ratio	Lower	Upper
63	100		
65	30.0	24.6	36.8



Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

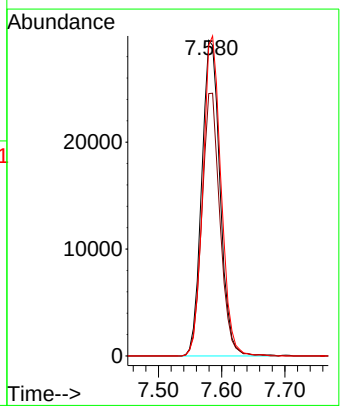
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

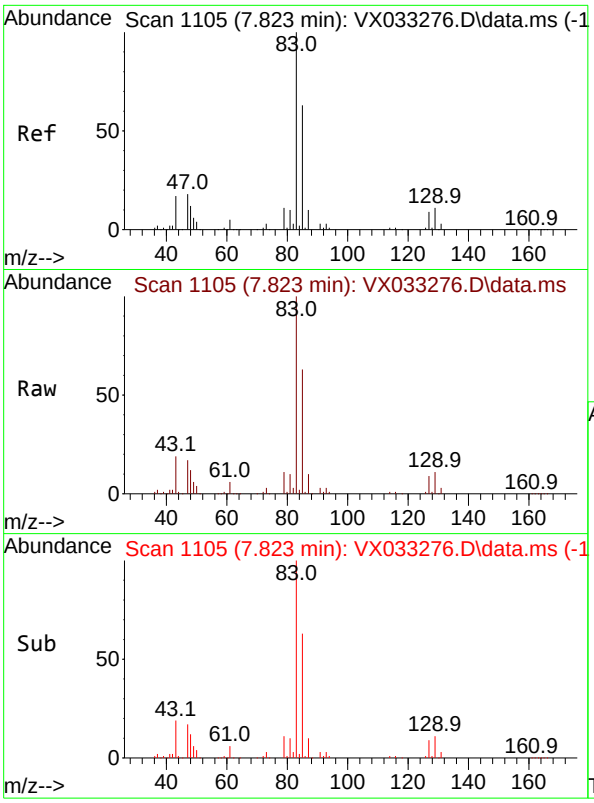


#46
Dibromomethane
Concen: 47.841 ug/l
RT: 7.580 min Scan# 1065
Delta R.T. -0.000 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion: 93 Resp: 59524

Ion	Ratio	Lower	Upper
93	100		
95	81.8	65.8	98.8
174	100.3	79.8	119.6

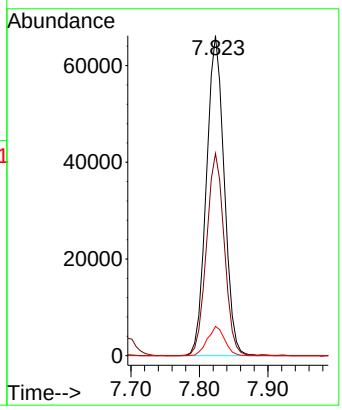




#47
Bromodichloromethane
Concen: 49.743 ug/l
RT: 7.823 min Scan# 11
Delta R.T. -0.001 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion: 83 Resp: 11958

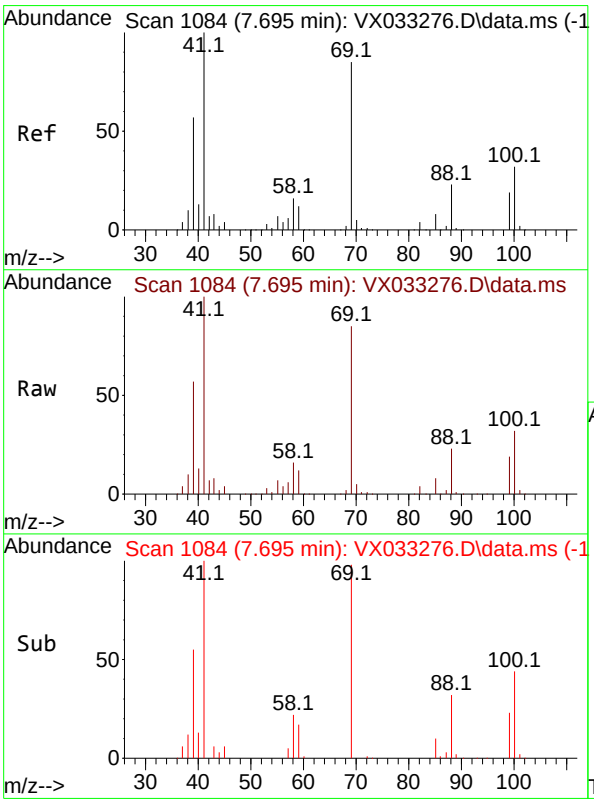
Ion	Ratio	Lower	Upper
83	100		
85	63.2	52.2	78.4
127	9.1	7.4	11.2



Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

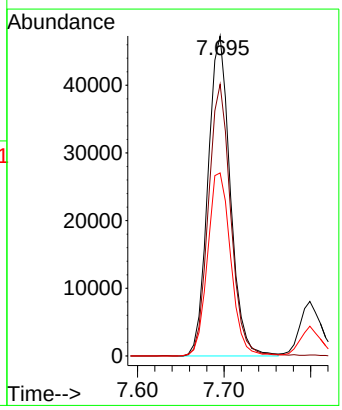
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

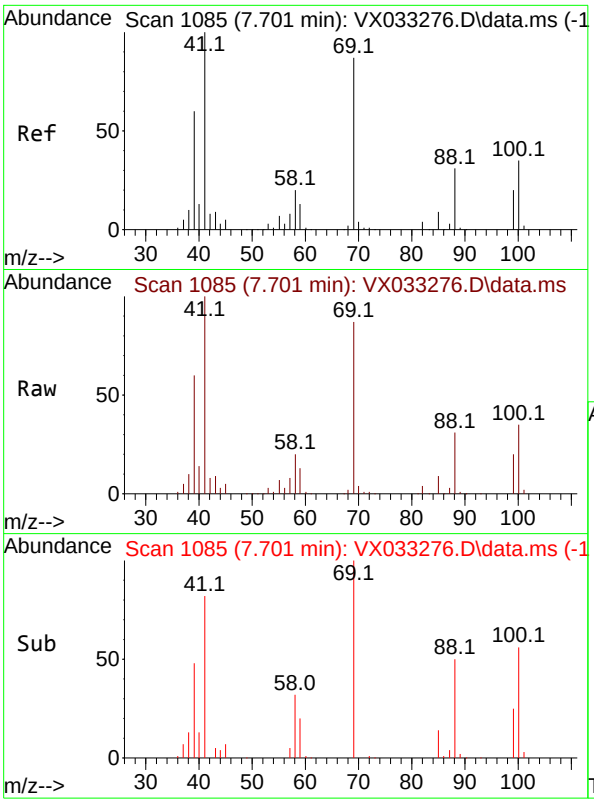


#48
Methyl methacrylate
Concen: 49.504 ug/l
RT: 7.695 min Scan# 1084
Delta R.T. -0.001 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion: 41 Resp: 84608

Ion	Ratio	Lower	Upper
41	100		
69	84.7	65.1	97.7
39	59.5	51.9	77.9

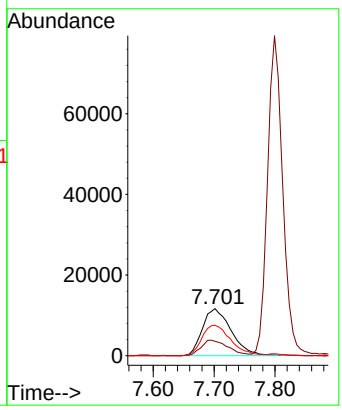




#49
1,4-Dioxane
Concen: 1216.156 ug/l
RT: 7.701 min Scan# 1
Delta R.T. 0.030 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion: 88 Resp: 3826

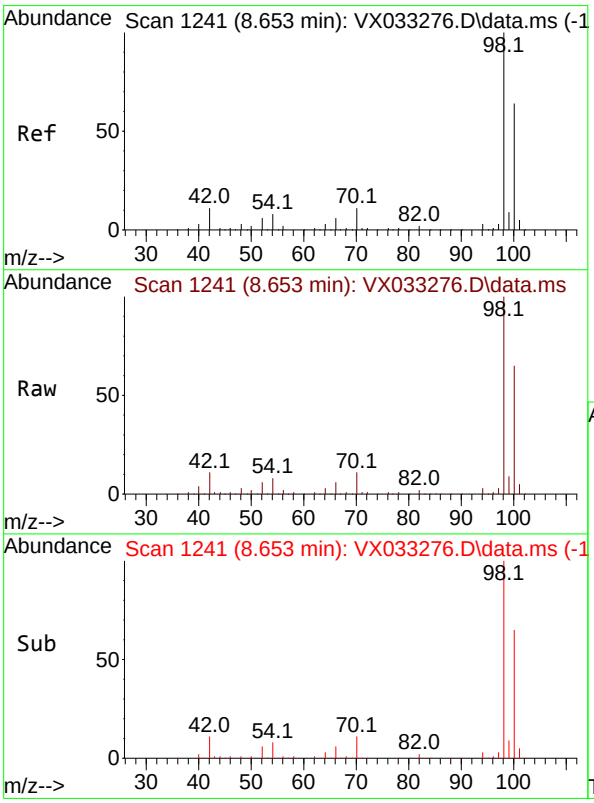
Ion	Ratio	Lower	Upper
88	100		
43	30.9	26.6	39.8
58	64.5	51.7	77.5



Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations
APPROVED

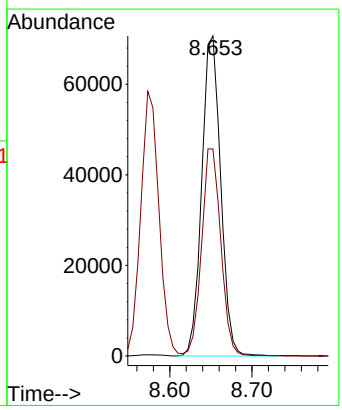
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

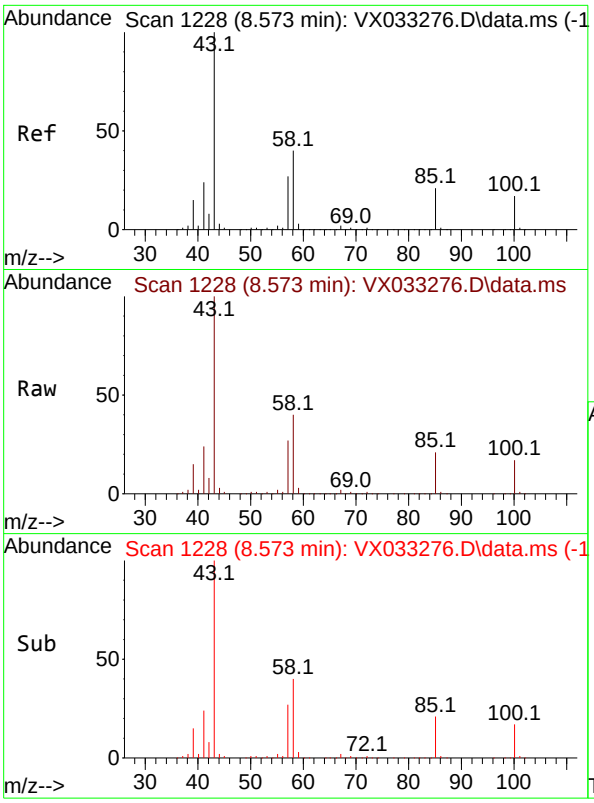


#50
Toluene-d8
Concen: 24.276 ug/l
RT: 8.653 min Scan# 1241
Delta R.T. -0.000 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion: 98 Resp: 113428

Ion	Ratio	Lower	Upper
98	100		
100	65.6	50.9	76.3

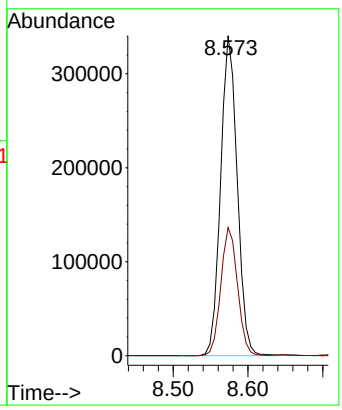




#51
4-Methyl-2-Pentanone
Concen: 257.000 ug/l
RT: 8.573 min Scan# 1
Delta R.T. -0.001 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion: 43 Resp: 52656

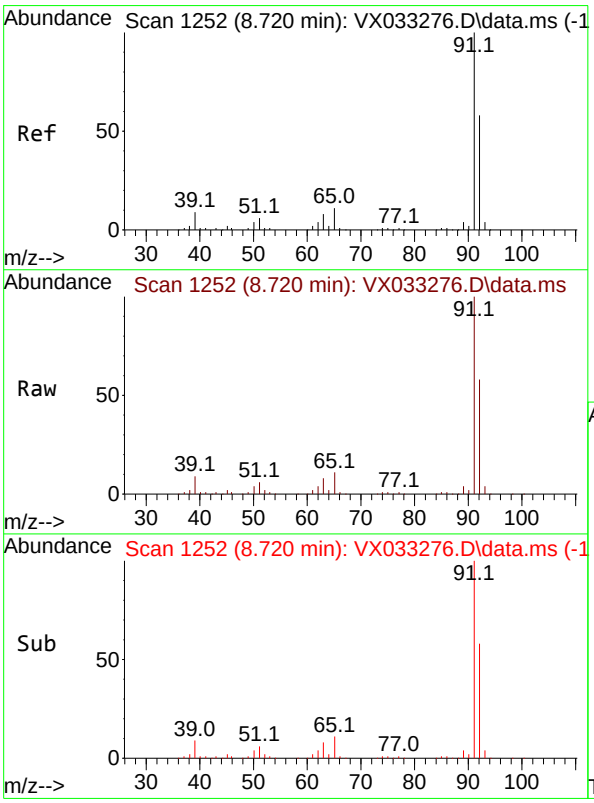
Ion	Ratio	Lower	Upper
43	100		
58	40.2	30.9	46.3



Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations
APPROVED

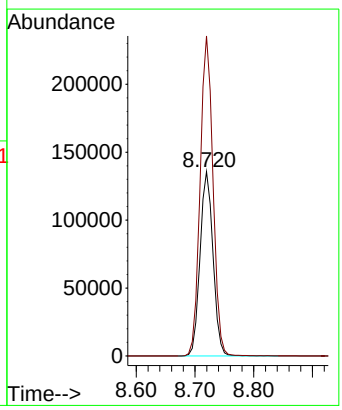
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

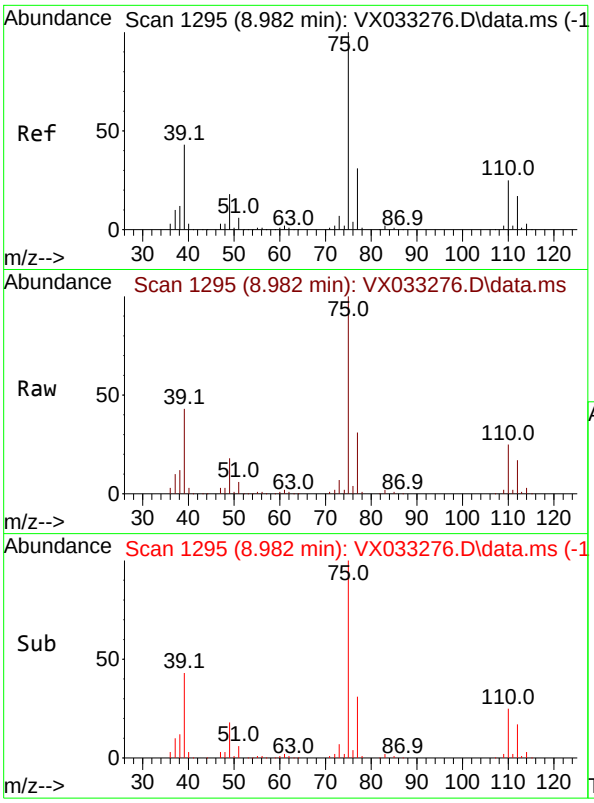


#52
Toluene
Concen: 48.976 ug/l
RT: 8.720 min Scan# 1252
Delta R.T. -0.000 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion: 92 Resp: 207899

Ion	Ratio	Lower	Upper
92	100		
91	172.3	138.3	207.5

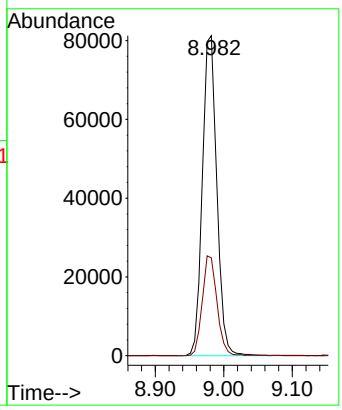




#53
t-1,3-Dichloropropene
Concen: 50.573 ug/l
RT: 8.982 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion: 75 Resp: 11933

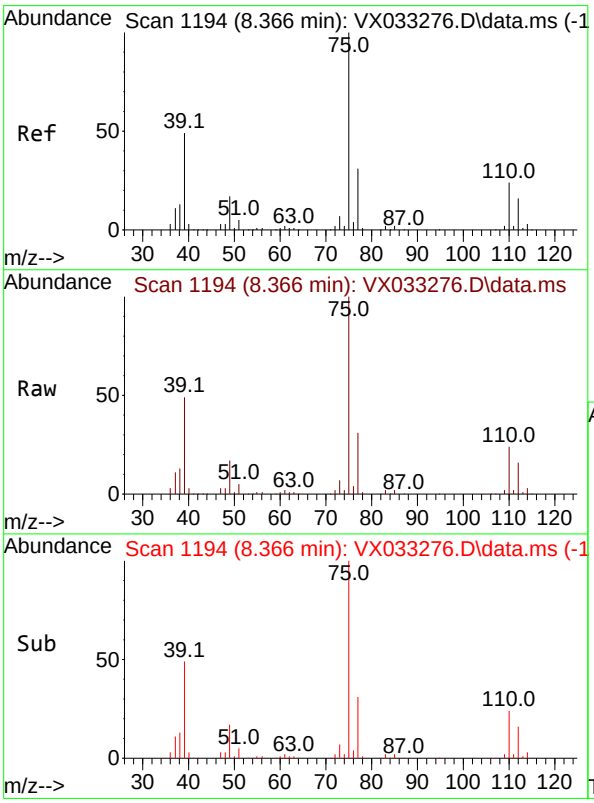
Ion	Ratio	Lower	Upper
75	100		
77	30.6	25.1	37.7



Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

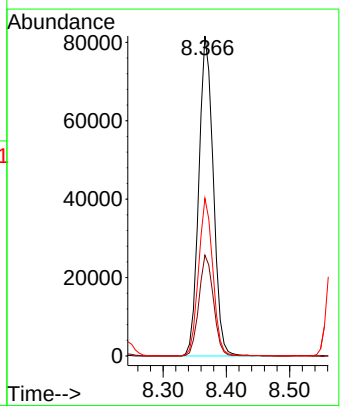
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

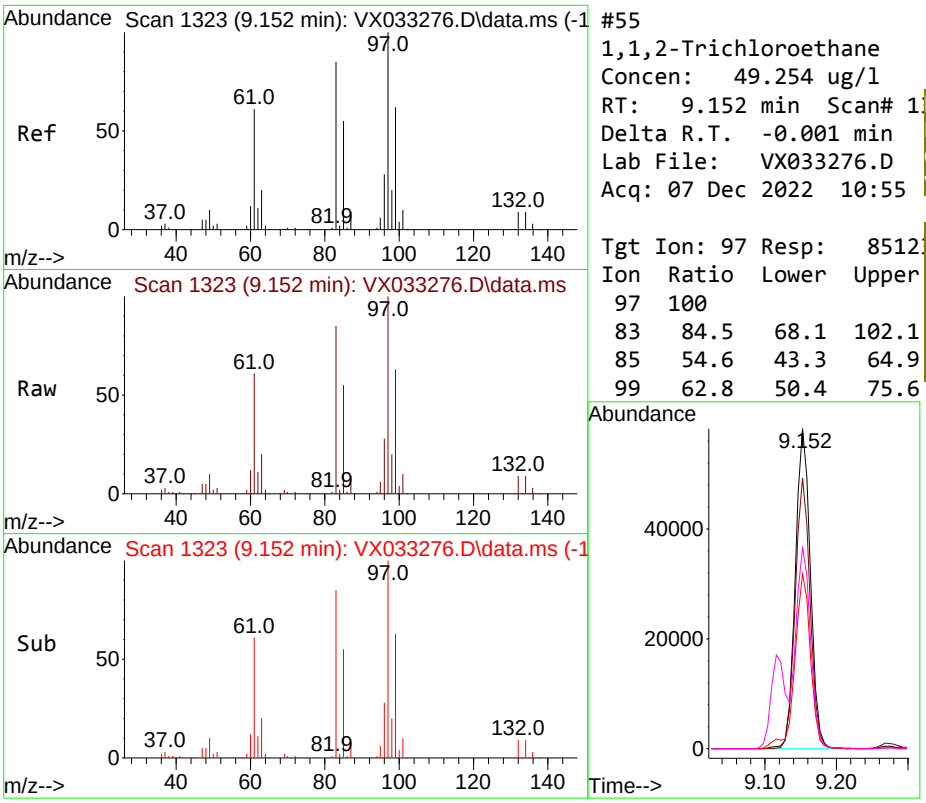


#54
cis-1,3-Dichloropropene
Concen: 50.193 ug/l
RT: 8.366 min Scan# 1194
Delta R.T. 0.000 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion: 75 Resp: 130089

Ion	Ratio	Lower	Upper
75	100		
77	31.5	25.1	37.7
39	49.3	45.5	68.3





#55
1,1,2-Trichloroethane
Concen: 49.254 ug/l
RT: 9.152 min Scan# 1
Delta R.T. -0.001 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

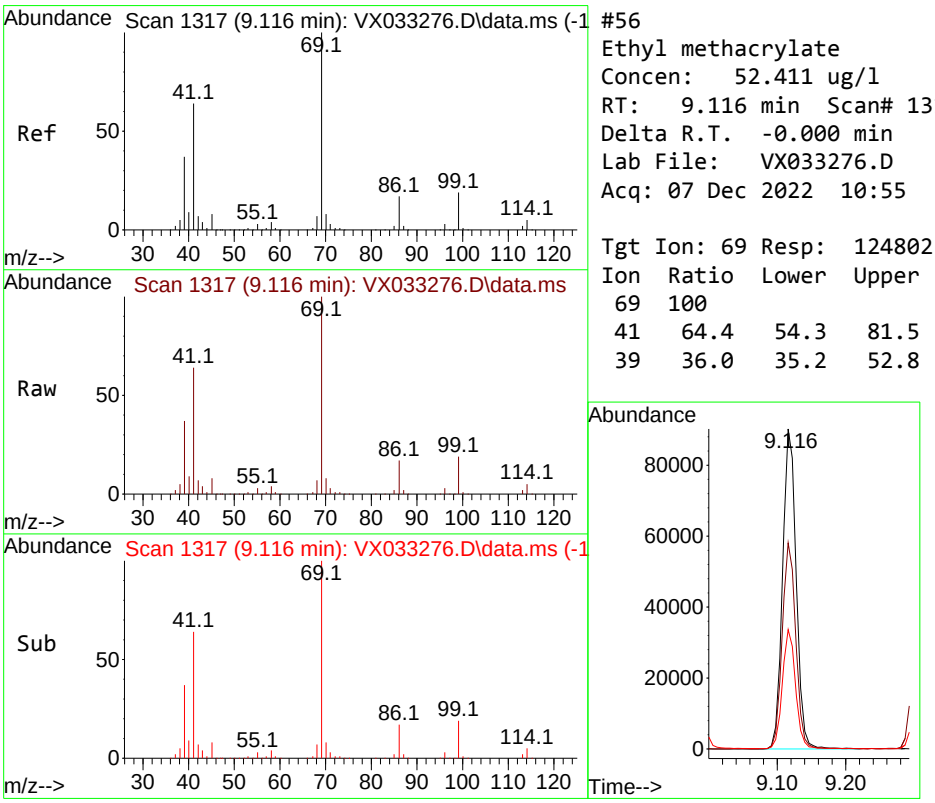
Tgt Ion: 97 Resp: 8512

Ion	Ratio	Lower	Upper
97	100		
83	84.5	68.1	102.1
85	54.6	43.3	64.9
99	62.8	50.4	75.6

Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

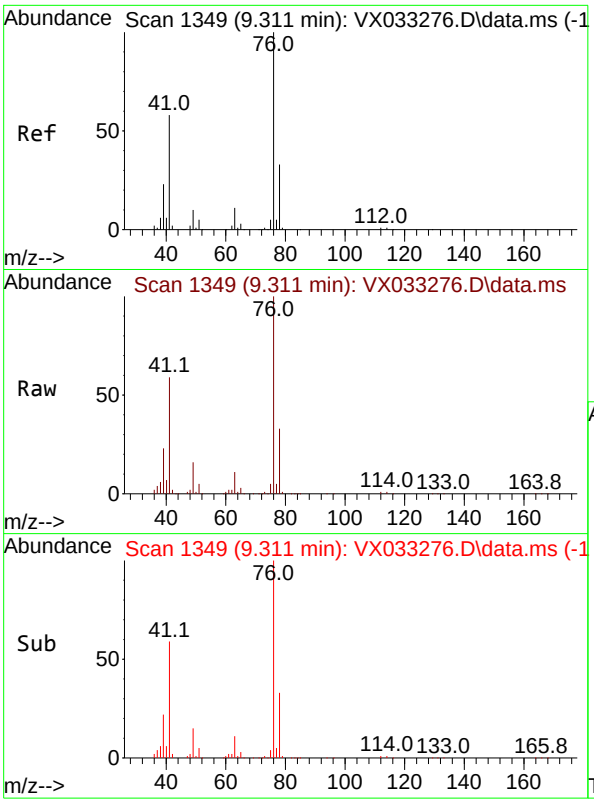
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022



#56
Ethyl methacrylate
Concen: 52.411 ug/l
RT: 9.116 min Scan# 1317
Delta R.T. -0.000 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion: 69 Resp: 124802

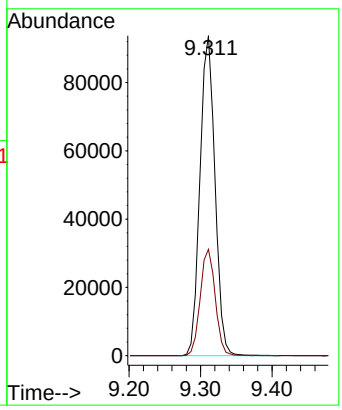
Ion	Ratio	Lower	Upper
69	100		
41	64.4	54.3	81.5
39	36.0	35.2	52.8



#57
1,3-Dichloropropane
Concen: 48.943 ug/l
RT: 9.311 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion: 76 Resp: 13655

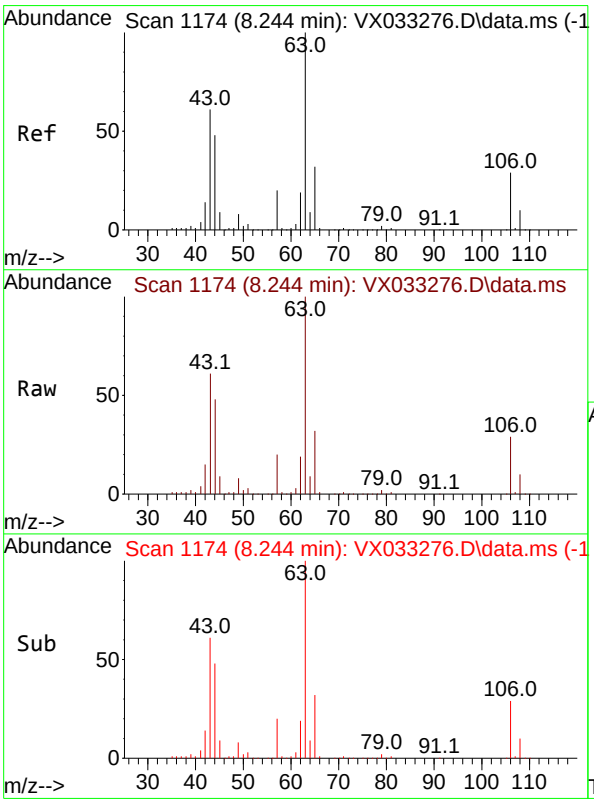
Ion	Ratio	Lower	Upper
76	100		
78	33.2	26.0	39.0



Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

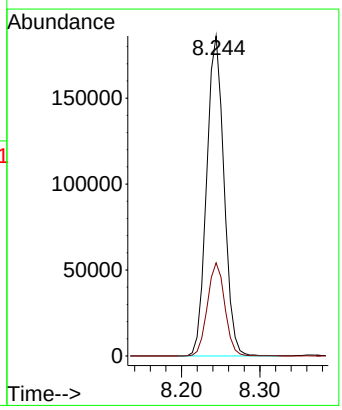
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

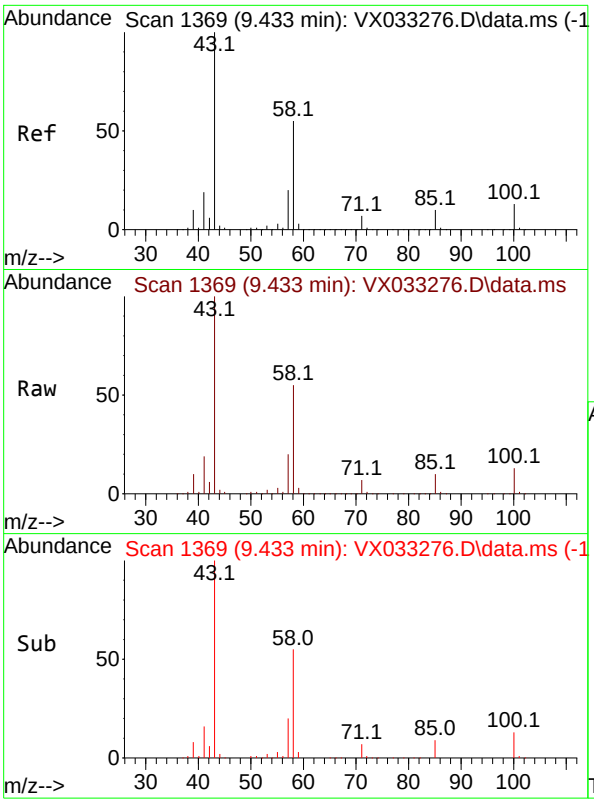


#58
2-Chloroethyl Vinyl ether
Concen: 252.998 ug/l
RT: 8.244 min Scan# 1174
Delta R.T. 0.000 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion: 63 Resp: 286076

Ion	Ratio	Lower	Upper
63	100		
106	29.2	23.3	34.9





#59
2-Hexanone
Concen: 258.105 ug/l
RT: 9.433 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

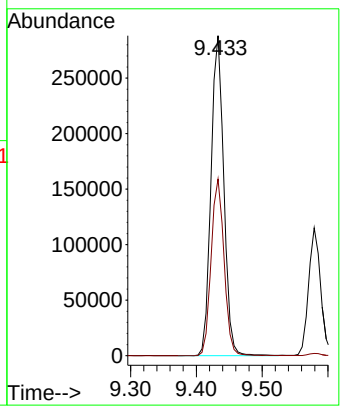
Tgt Ion: 43 Resp: 39065

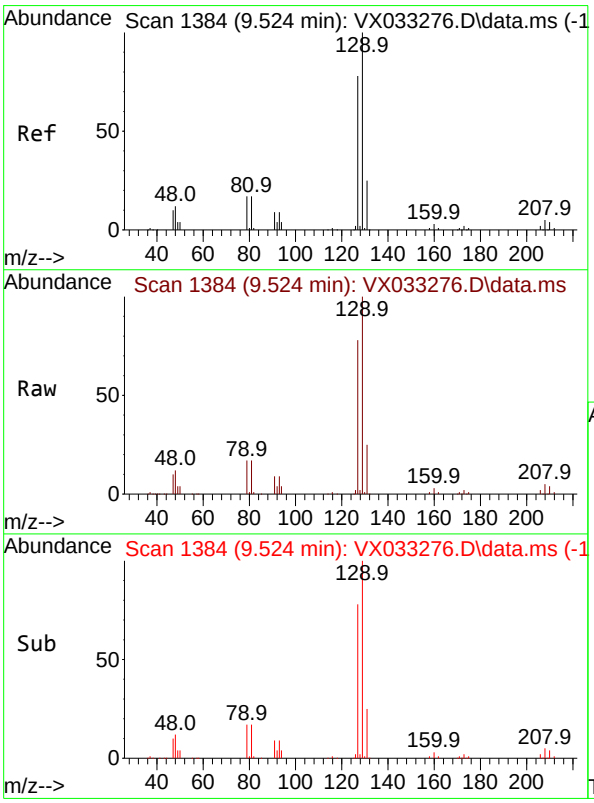
Ion	Ratio	Lower	Upper
43	100		
58	55.8	26.5	79.5

Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

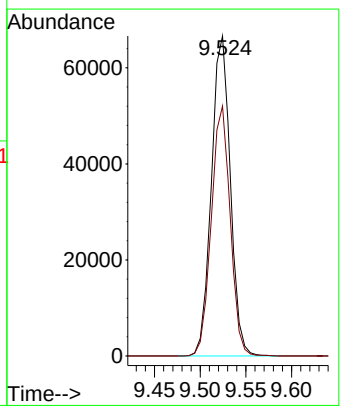


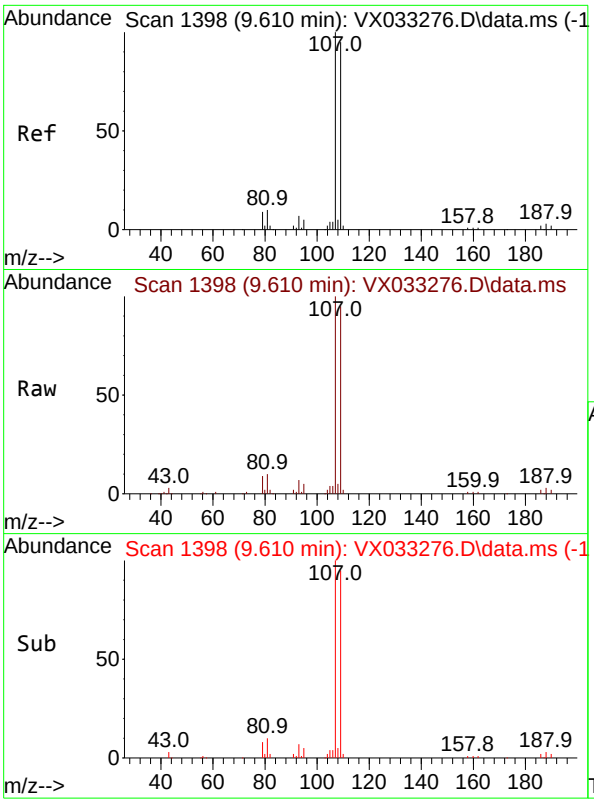


#60
Dibromochloromethane
Concen: 51.615 ug/l
RT: 9.524 min Scan# 1384
Delta R.T. -0.001 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion:129 Resp: 96040

Ion	Ratio	Lower	Upper
129	100		
127	78.0	38.6	115.8

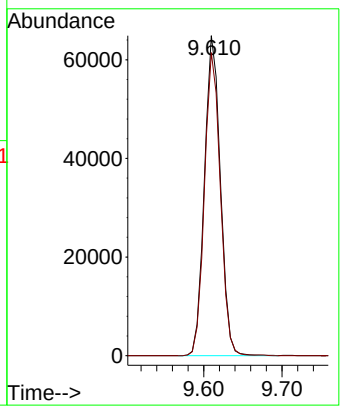




#61
1,2-Dibromoethane
Concen: 50.149 ug/l
RT: 9.610 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion:107 Resp: 9148

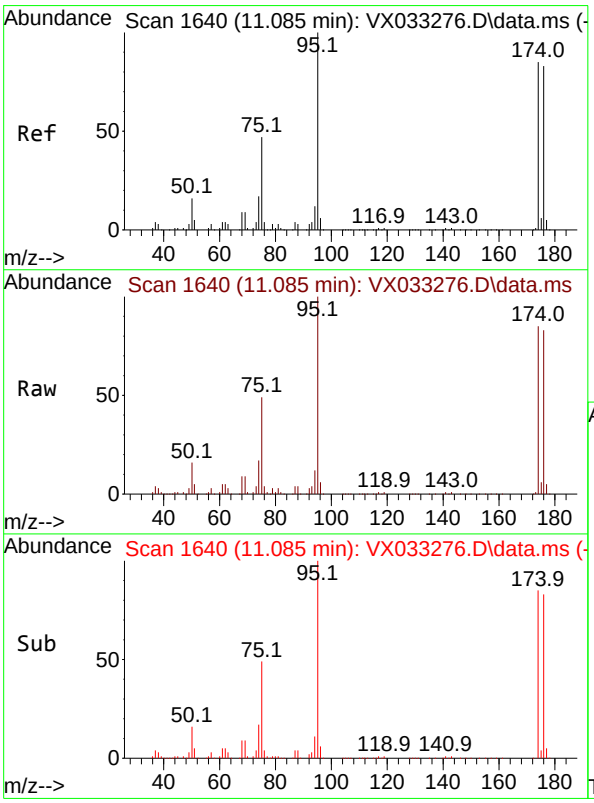
Ion	Ratio	Lower	Upper
107	100		
109	94.4	76.0	114.0



Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations
APPROVED

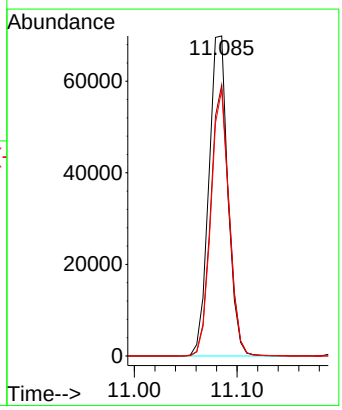
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

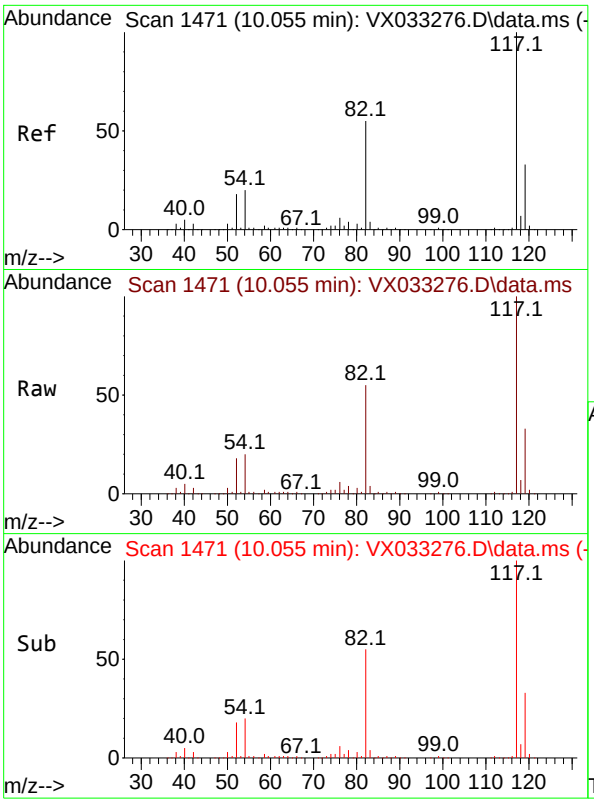


#62
4-Bromofluorobenzene
Concen: 47.689 ug/l
RT: 11.085 min Scan# 1640
Delta R.T. 0.006 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion: 95 Resp: 90159

Ion	Ratio	Lower	Upper
95	100		
174	81.7	0.0	164.0
176	79.3	0.0	154.4

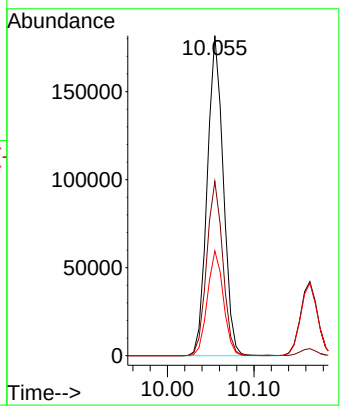




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.055 min Scan# 14
Delta R.T. -0.000 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion:117 Resp: 23389

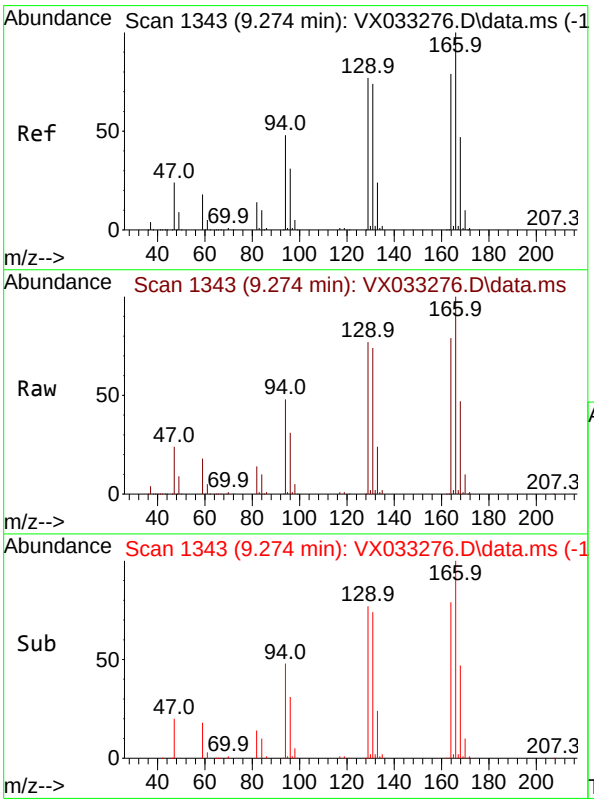
Ion	Ratio	Lower	Upper
117	100		
82	54.5	44.3	66.5
119	32.7	25.7	38.5



Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

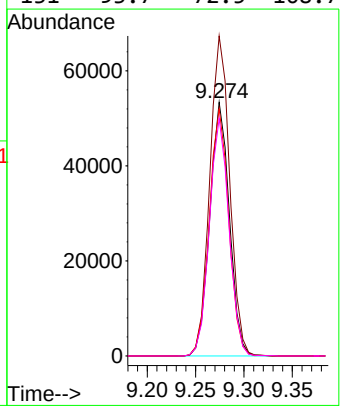
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

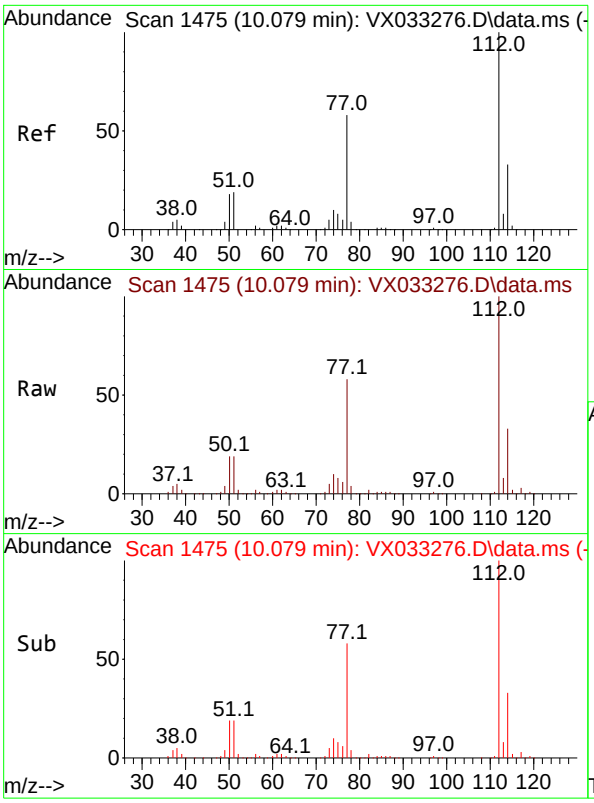


#64
Tetrachloroethene
Concen: 45.485 ug/l
RT: 9.274 min Scan# 1343
Delta R.T. -0.001 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion:164 Resp: 75304

Ion	Ratio	Lower	Upper
164	100		
166	126.2	105.4	158.2
129	97.5	78.2	117.2
131	93.7	72.5	108.7

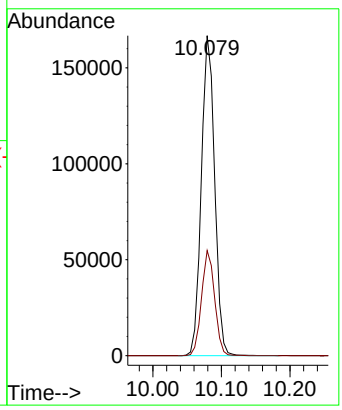




#65
Chlorobenzene
Concen: 48.463 ug/l
RT: 10.079 min Scan# 14
Delta R.T. 0.000 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion:112 Resp: 22599

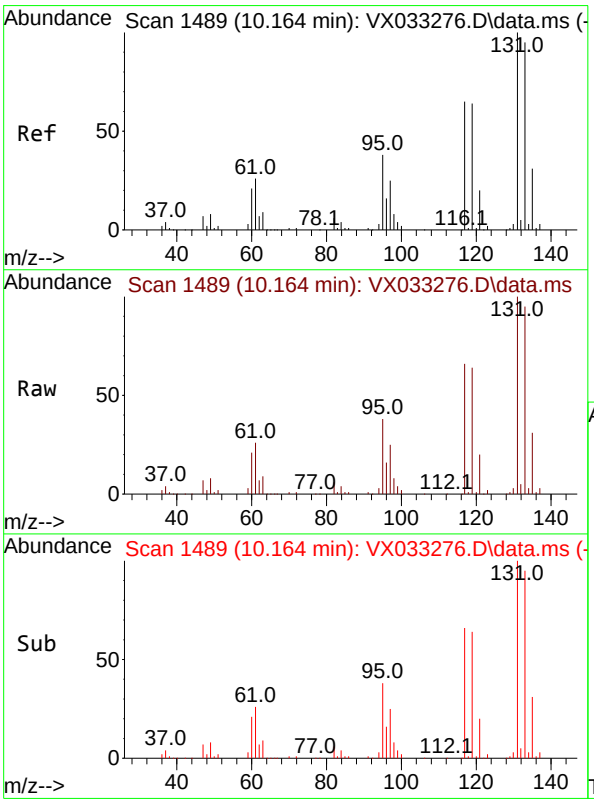
Ion	Ratio	Lower	Upper
112	100		
114	32.8	25.4	38.2



Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

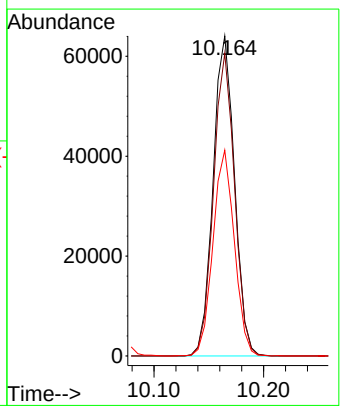
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

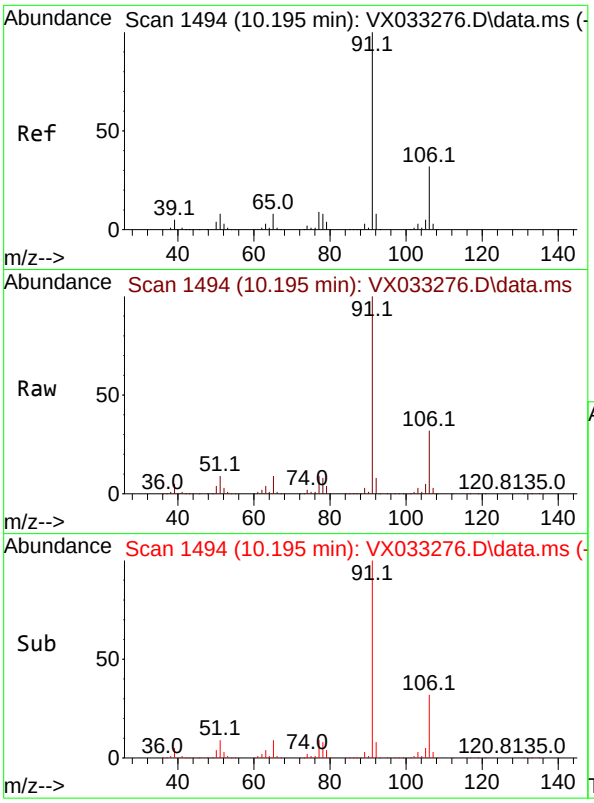


#66
1,1,1,2-Tetrachloroethane
Concen: 50.887 ug/l
RT: 10.164 min Scan# 1489
Delta R.T. -0.001 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion:131 Resp: 86946

Ion	Ratio	Lower	Upper
131	100		
133	93.4	47.6	142.9
119	64.5	32.4	97.0





#67
Ethyl Benzene
Concen: 49.061 ug/l
RT: 10.195 min Scan# 14
Delta R.T. -0.000 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

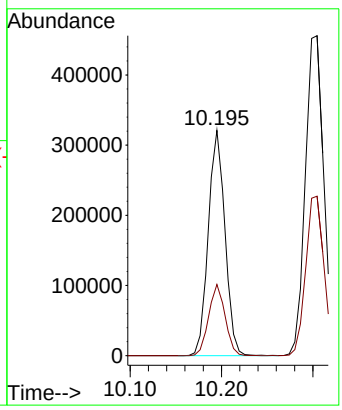
Tgt Ion: 91 Resp: 40582

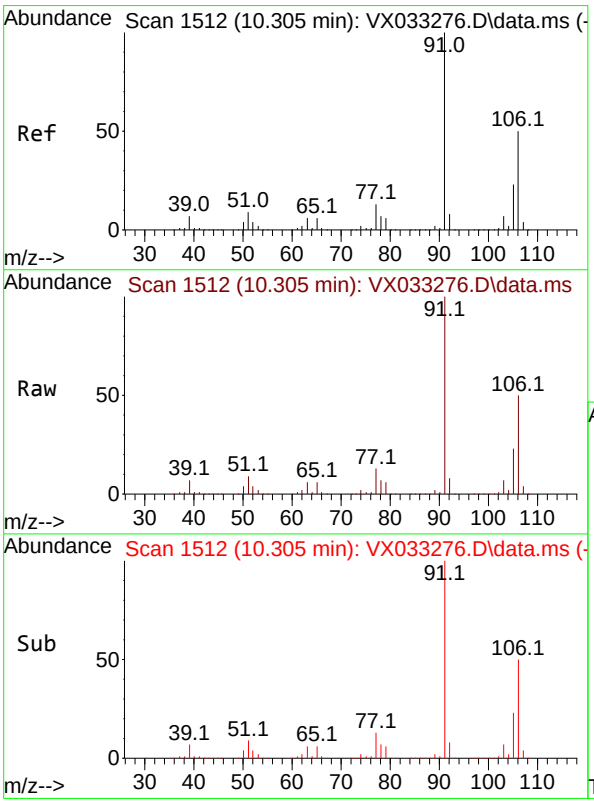
Ion	Ratio	Lower	Upper
91	100		
106	31.6	25.0	37.6

Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

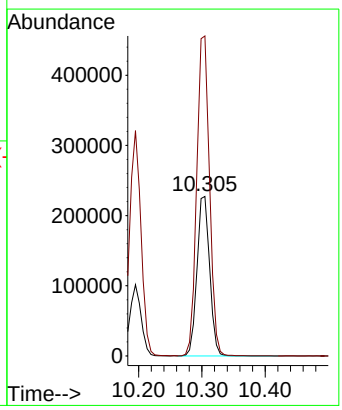


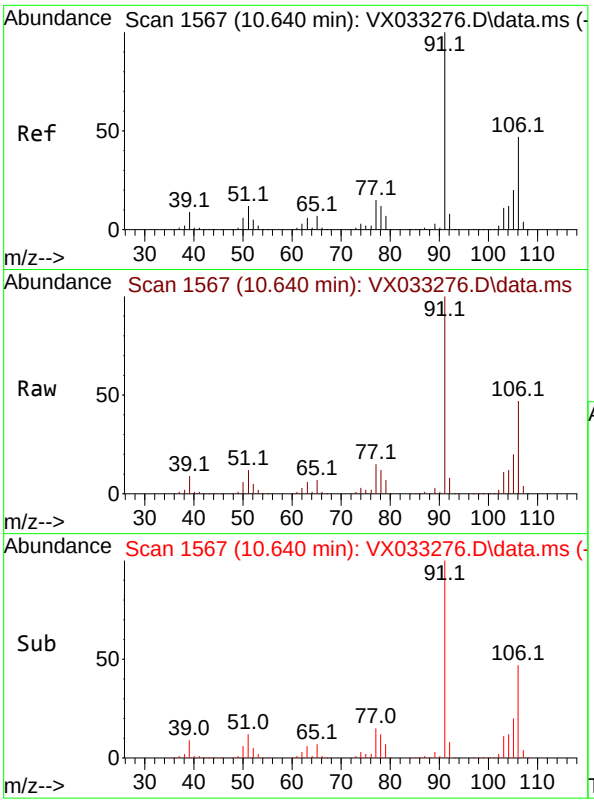


#68
m/p-Xylenes
Concen: 97.764 ug/l
RT: 10.305 min Scan# 1512
Delta R.T. -0.000 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion:106 Resp: 316676

Ion	Ratio	Lower	Upper
106	100		
91	202.3	164.5	246.7





#69
o-Xylene
Concen: 50.078 ug/l
RT: 10.640 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

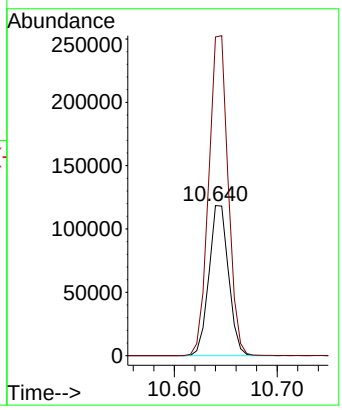
Tgt Ion:106 Resp: 15695

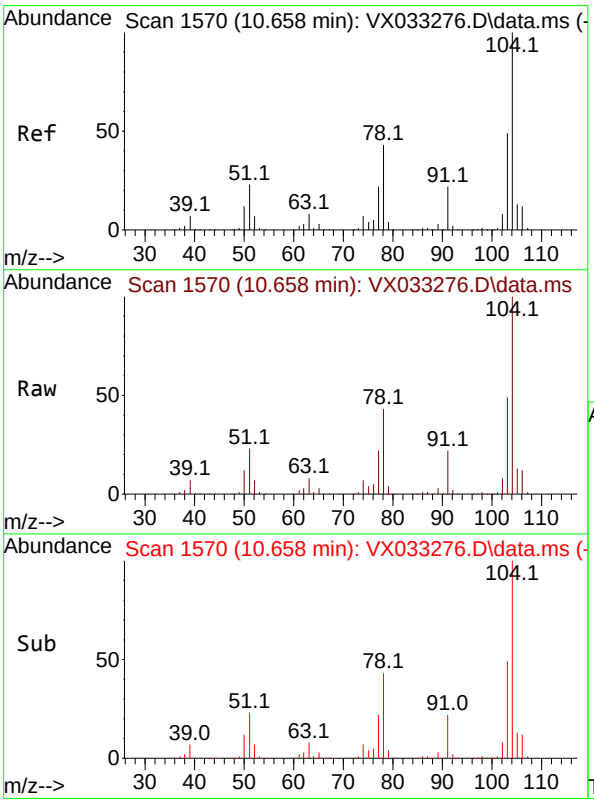
Ion	Ratio	Lower	Upper
106	100		
91	212.0	109.2	327.6

Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

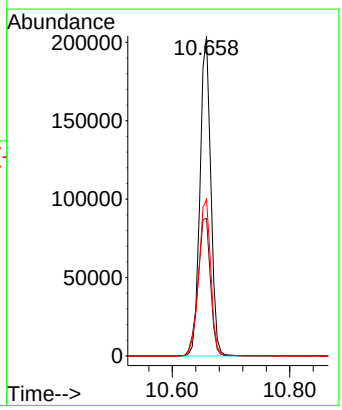


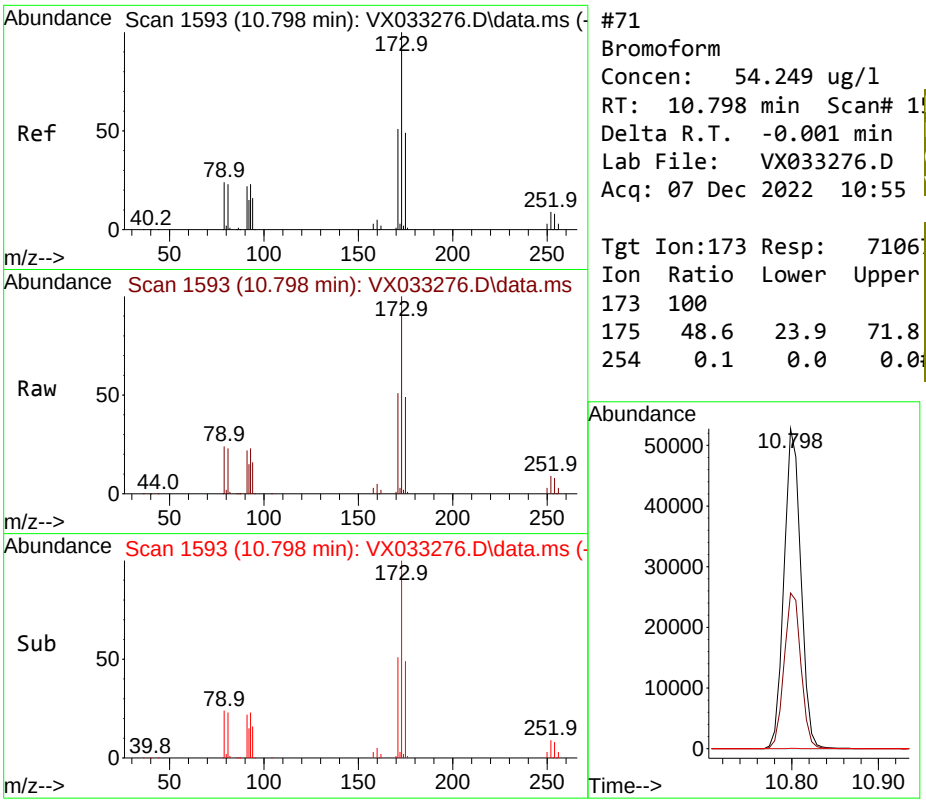


#70
Styrene
Concen: 50.879 ug/l
RT: 10.658 min Scan# 1570
Delta R.T. -0.001 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion:104 Resp: 260878

Ion	Ratio	Lower	Upper
104	100		
78	49.9	41.8	62.8
103	54.4	44.5	66.7





#71
Bromoform
Concen: 54.249 ug/l
RT: 10.798 min Scan# 1
Delta R.T. -0.001 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

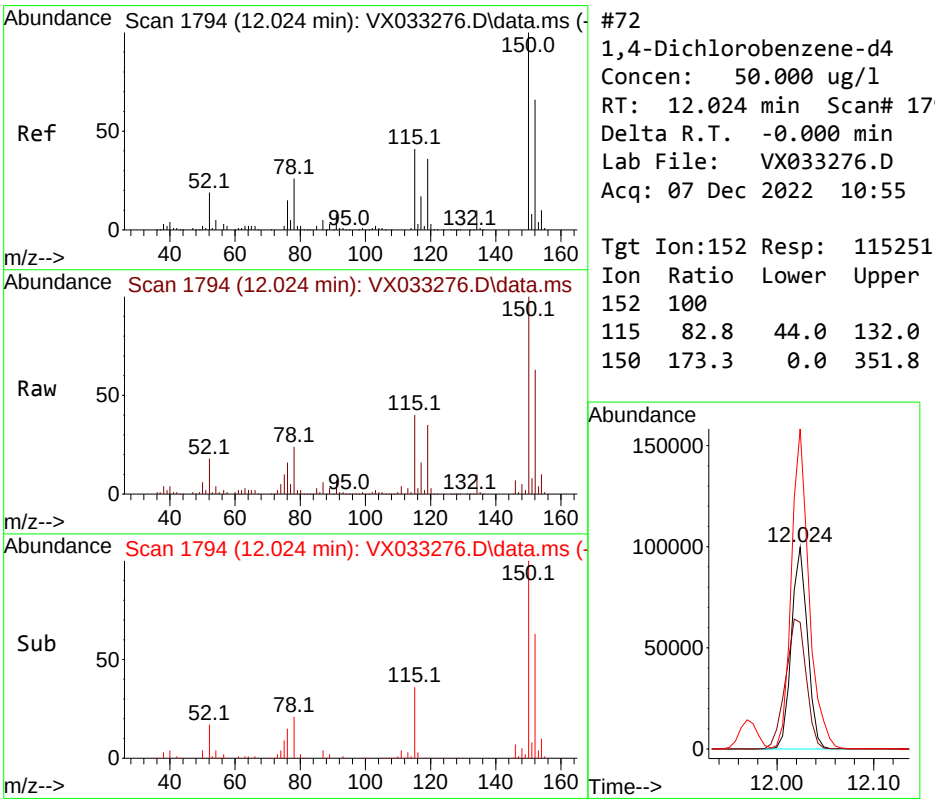
Tgt Ion:173 Resp: 7106

Ion	Ratio	Lower	Upper
173	100		
175	48.6	23.9	71.8
254	0.1	0.0	0.0

Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

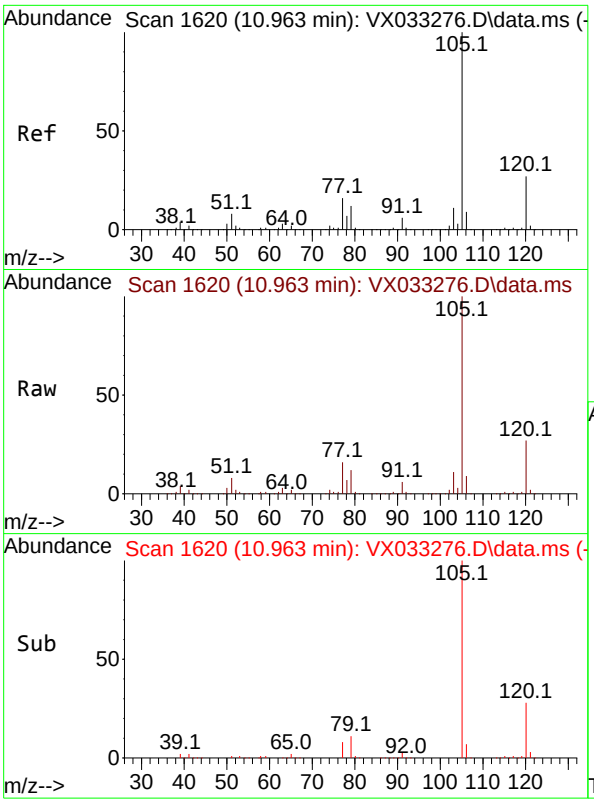
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.024 min Scan# 1794
Delta R.T. -0.000 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion:152 Resp: 115251

Ion	Ratio	Lower	Upper
152	100		
115	82.8	44.0	132.0
150	173.3	0.0	351.8



#73
Isopropylbenzene
Concen: 49.820 ug/l
RT: 10.963 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

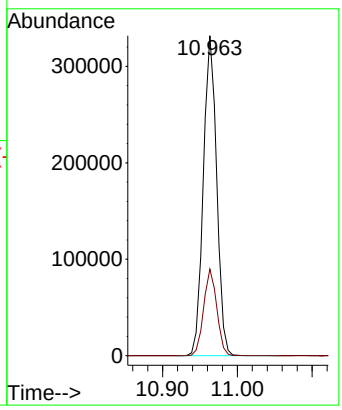
Tgt Ion:105 Resp: 41030

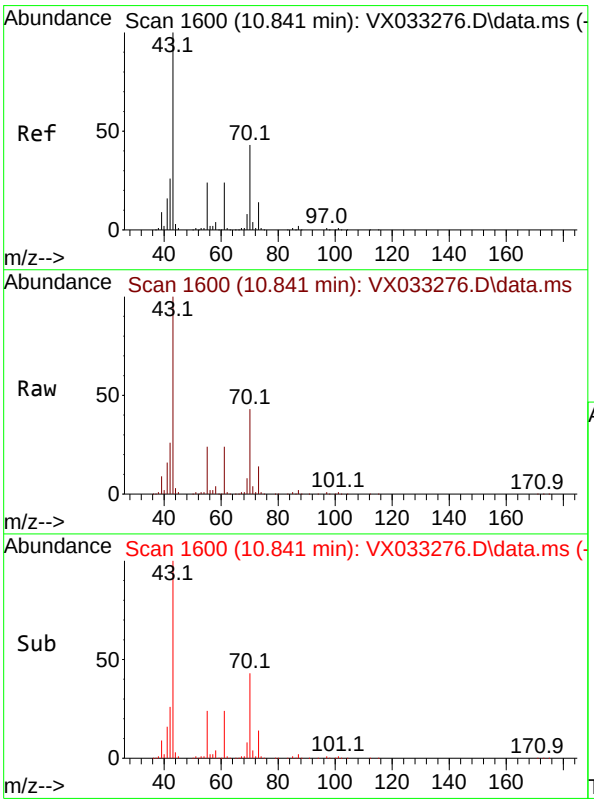
Ion	Ratio	Lower	Upper
105	100		
120	26.6	13.1	39.3

Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

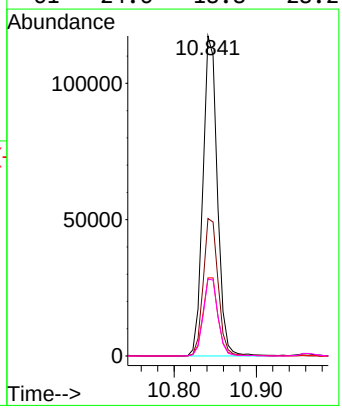


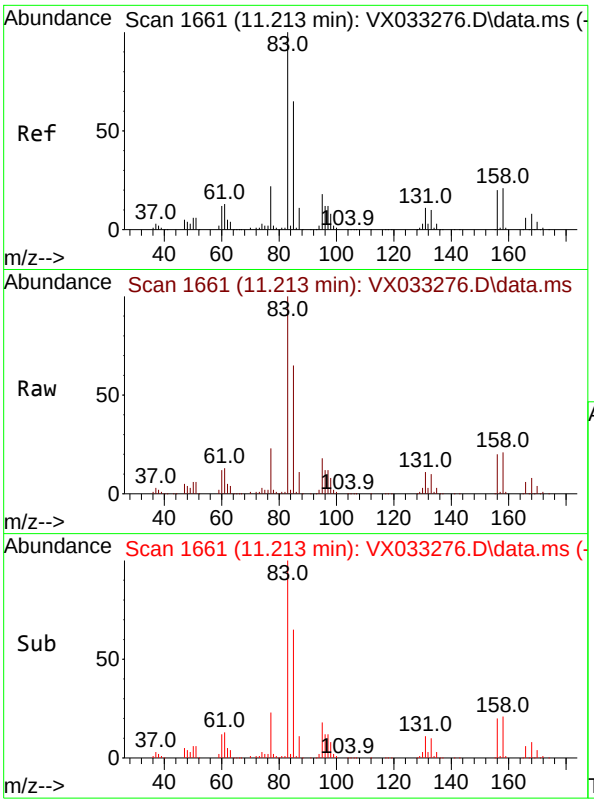


#74
N-amyl acetate
Concen: 51.025 ug/l
RT: 10.841 min Scan# 1600
Delta R.T. 0.000 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion: 43 Resp: 142952

Ion	Ratio	Lower	Upper
43	100		
70	44.2	33.6	50.4
55	25.6	19.4	29.2
61	24.6	18.8	28.2

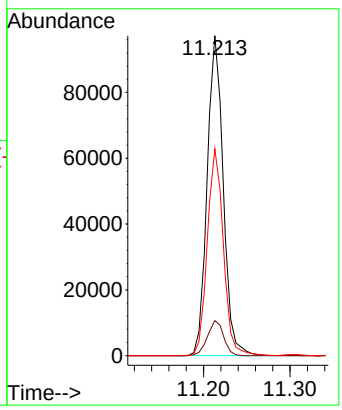




#75
1,1,2,2-Tetrachloroethane
Concen: 50.456 ug/l
RT: 11.213 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion: 83 Resp: 12541

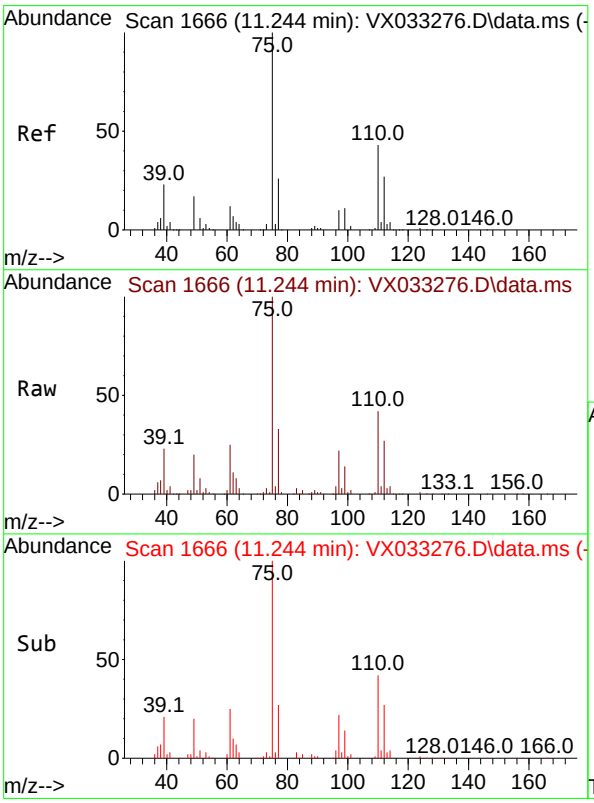
Ion	Ratio	Lower	Upper
83	100		
131	11.1	5.4	16.2
85	64.5	31.9	95.9



Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

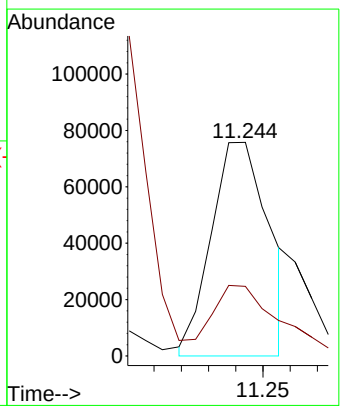
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

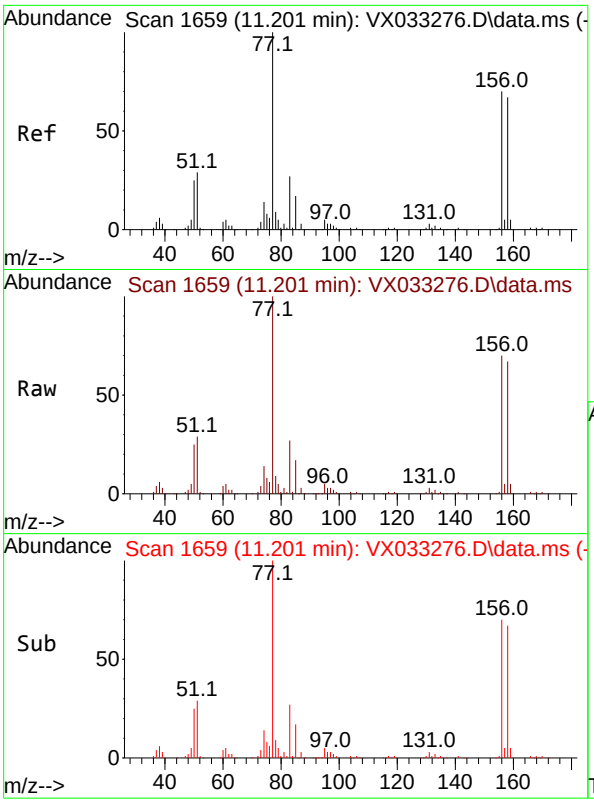


#76
1,2,3-Trichloropropane
Concen: 50.834 ug/l m
RT: 11.244 min Scan# 1666
Delta R.T. -0.000 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion: 75 Resp: 110953

Ion	Ratio	Lower	Upper
75	100		
77	39.7	20.0	60.0

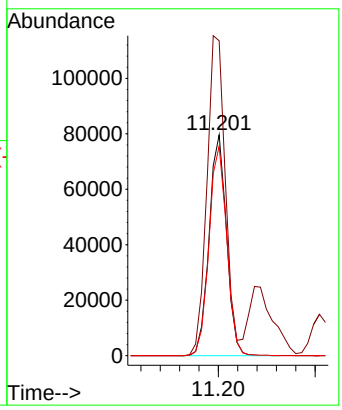




#77
Bromobenzene
Concen: 49.237 ug/l
RT: 11.201 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion:156 Resp: 9972

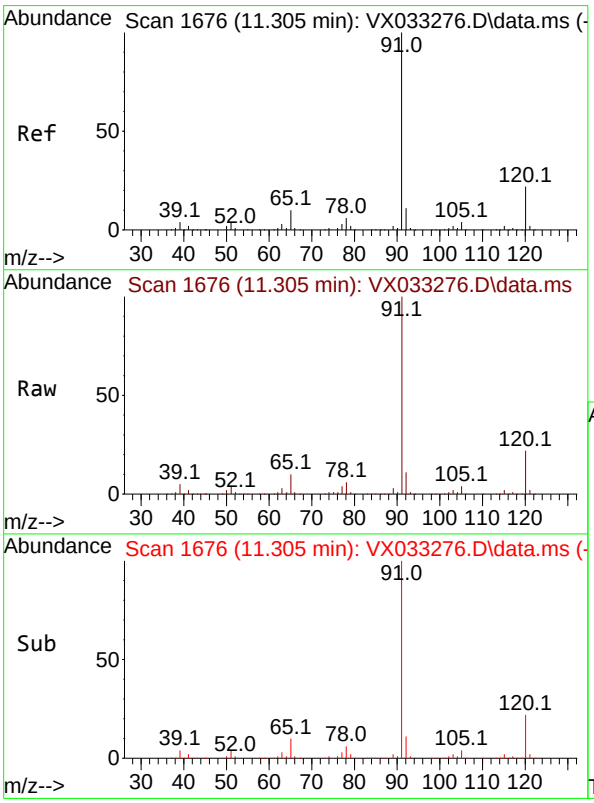
Ion	Ratio	Lower	Upper
156	100		
77	152.2	76.1	228.4
158	96.5	48.8	146.3



Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

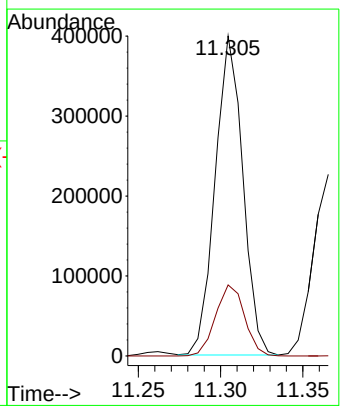
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

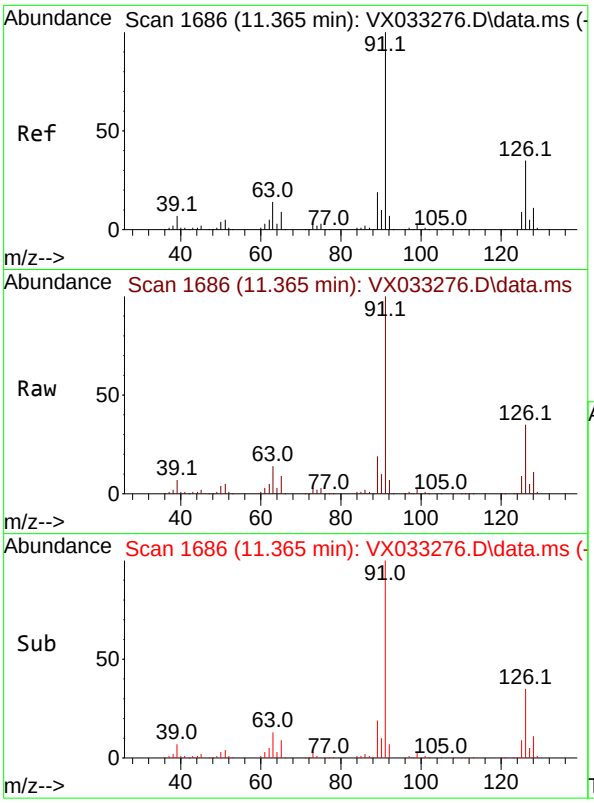


#78
n-propylbenzene
Concen: 49.561 ug/l
RT: 11.305 min Scan# 1676
Delta R.T. -0.000 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion: 91 Resp: 466678

Ion	Ratio	Lower	Upper
91	100		
120	23.3	11.6	34.8





#79
2-Chlorotoluene
Concen: 48.866 ug/l
RT: 11.365 min Scan# 1
Delta R.T. -0.001 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

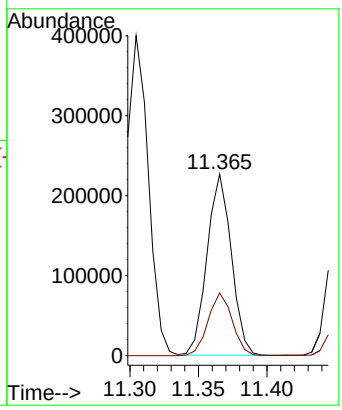
Tgt Ion: 91 Resp: 27946

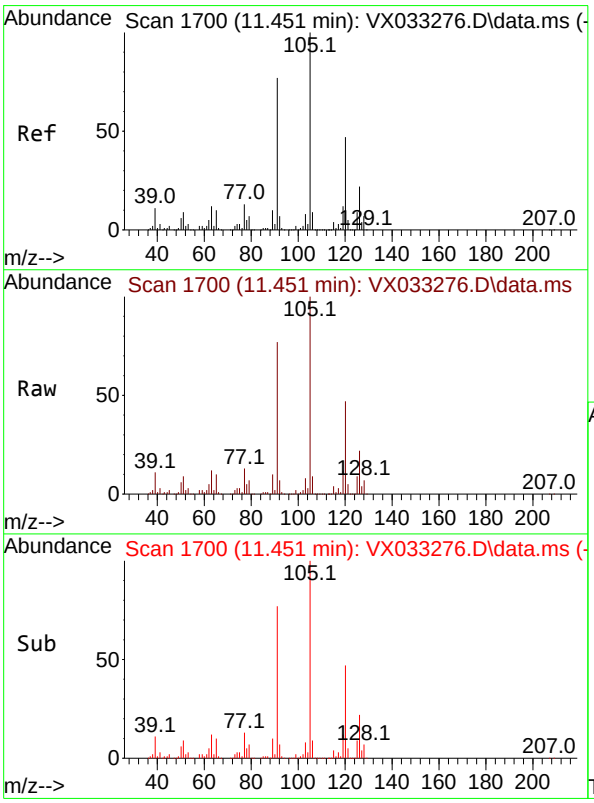
Ion	Ratio	Lower	Upper
91	100		
126	34.5	17.1	51.2

Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

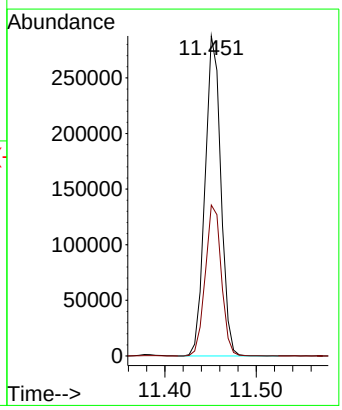


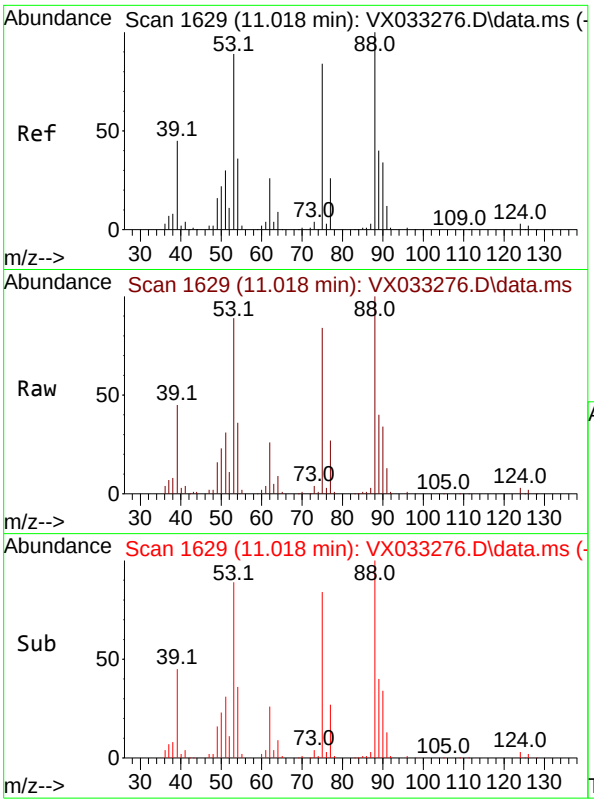


#80
1,3,5-Trimethylbenzene
Concen: 49.677 ug/l
RT: 11.451 min Scan# 1700
Delta R.T. -0.000 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion:105 Resp: 343696

Ion	Ratio	Lower	Upper
105	100		
120	48.1	23.6	71.0





#81
trans-1,4-Dichloro-2-butene
Concen: 53.631 ug/l
RT: 11.018 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

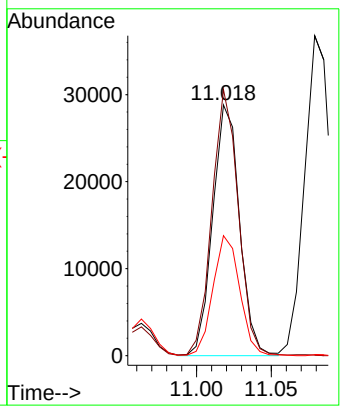
Tgt Ion: 75 Resp: 3601

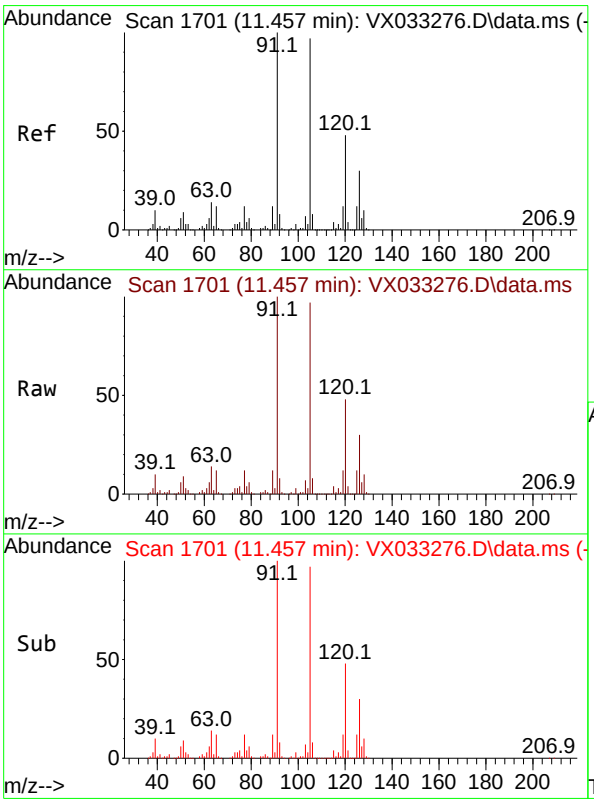
Ion	Ratio	Lower	Upper
75	100		
53	103.6	86.9	130.3
89	47.7	38.3	57.5

Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

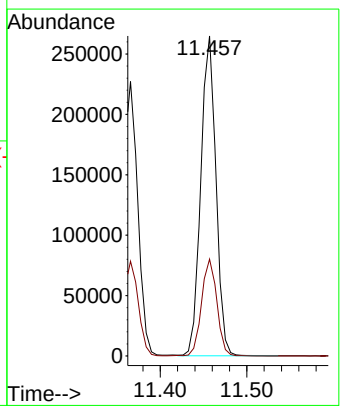


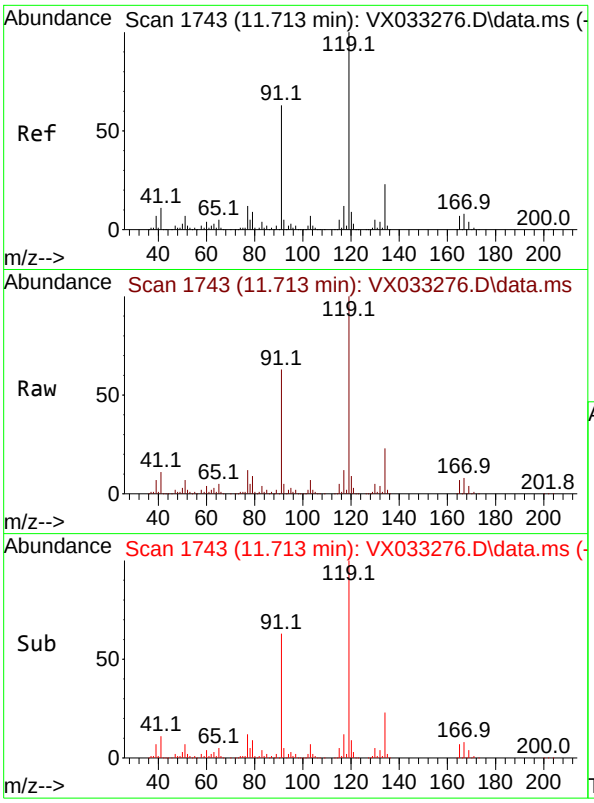


#82
4-Chlorotoluene
Concen: 48.008 ug/l
RT: 11.457 min Scan# 1701
Delta R.T. -0.000 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion: 91 Resp: 321742

Ion	Ratio	Lower	Upper
91	100		
126	30.6	14.8	44.4

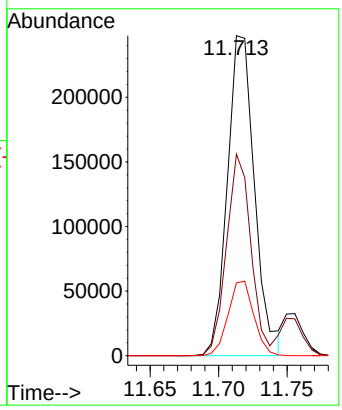




#83
tert-Butylbenzene
Concen: 49.789 ug/l
RT: 11.713 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion:119 Resp: 34289

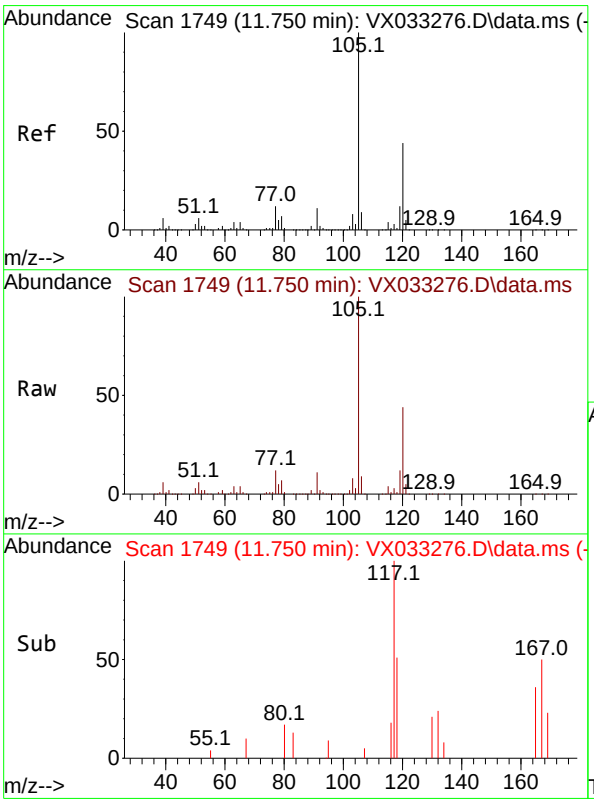
Ion	Ratio	Lower	Upper
119	100		
91	56.7	29.4	88.2
134	22.0	11.0	33.0



Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

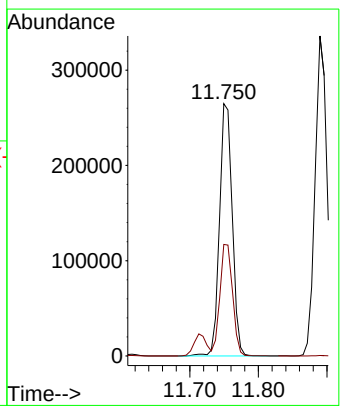
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

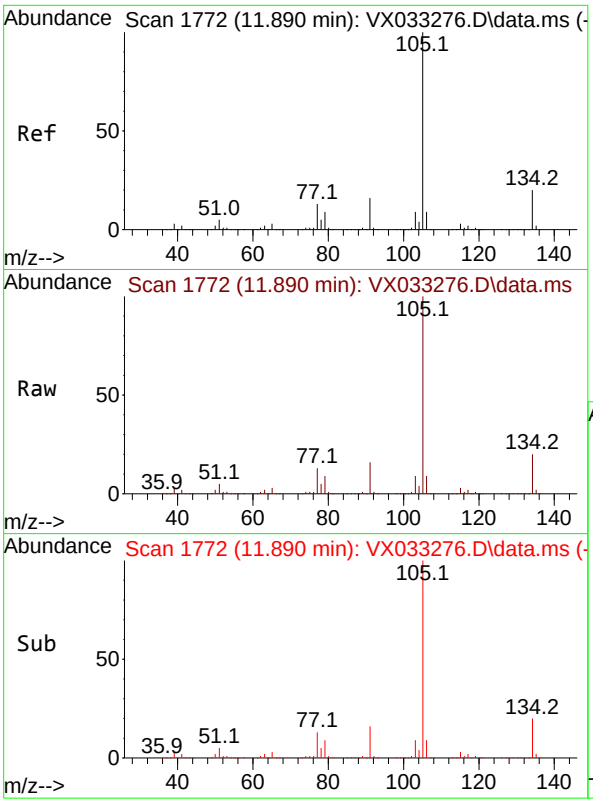


#84
1,2,4-Trimethylbenzene
Concen: 49.302 ug/l
RT: 11.750 min Scan# 1749
Delta R.T. -0.000 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion:105 Resp: 340117

Ion	Ratio	Lower	Upper
105	100		
120	44.0	21.9	65.5

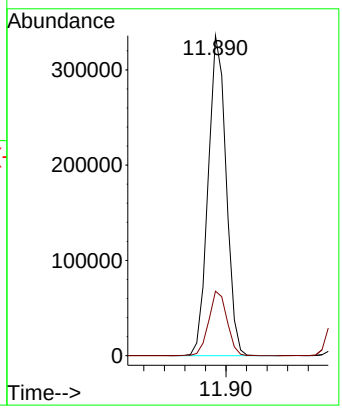




#85
sec-Butylbenzene
Concen: 49.452 ug/l
RT: 11.890 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion:105 Resp: 40744

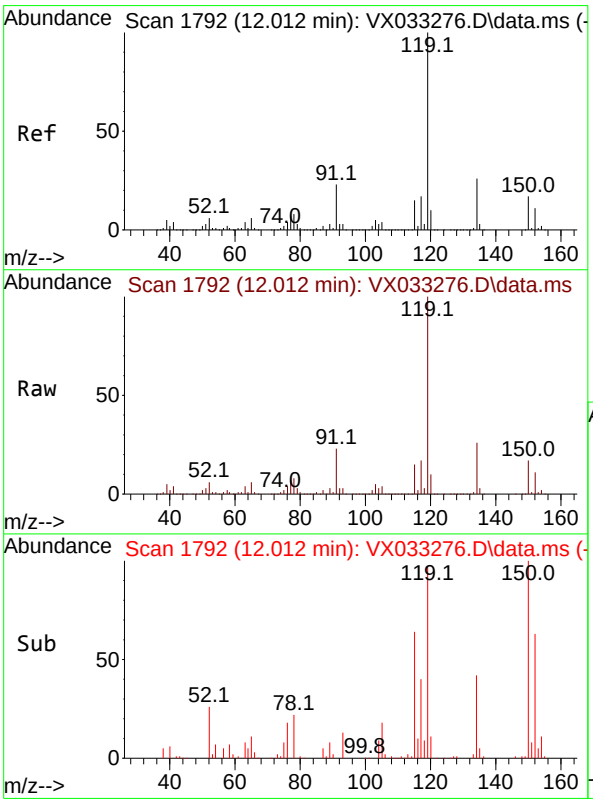
Ion	Ratio	Lower	Upper
105	100		
134	20.5	9.9	29.7



Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations
APPROVED

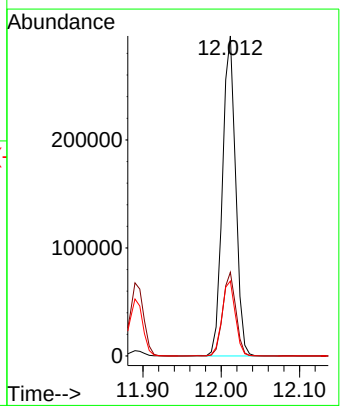
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

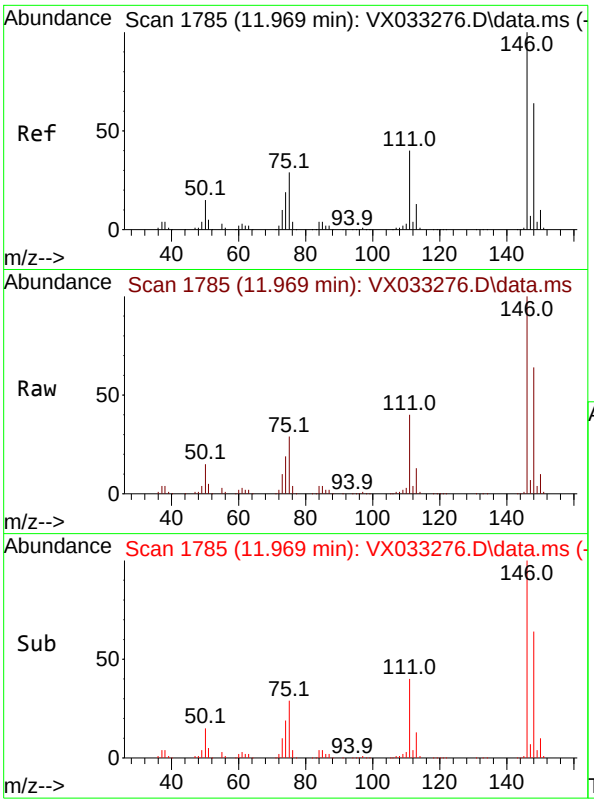


#86
p-Isopropyltoluene
Concen: 49.719 ug/l
RT: 12.012 min Scan# 1792
Delta R.T. -0.000 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion:119 Resp: 347069

Ion	Ratio	Lower	Upper
119	100		
134	26.0	12.9	38.7
91	23.8	12.5	37.5





#87
1,3-Dichlorobenzene
Concen: 48.618 ug/l
RT: 11.969 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

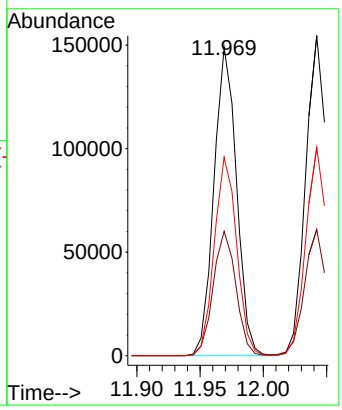
Tgt Ion:146 Resp: 18470

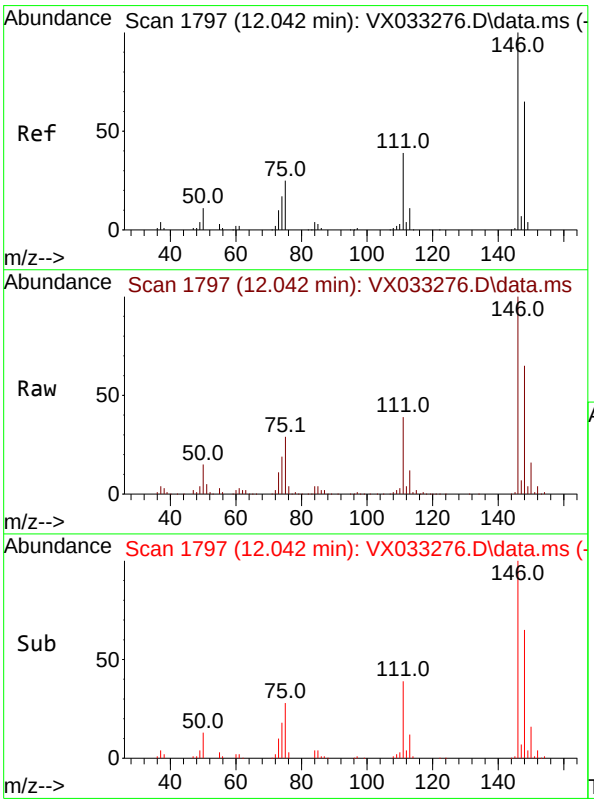
Ion	Ratio	Lower	Upper
146	100		
111	40.6	20.6	61.8
148	63.9	31.7	95.1

Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

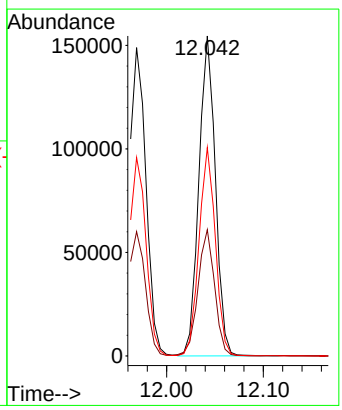


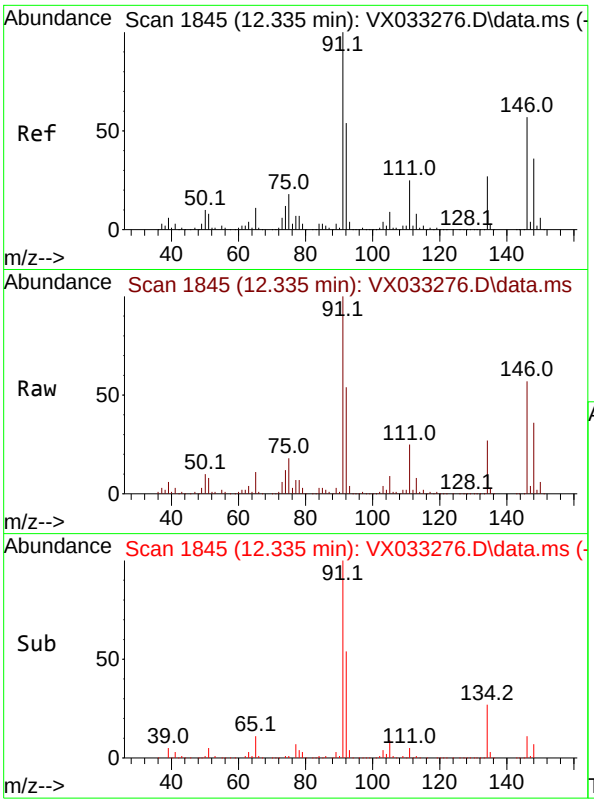


#88
1,4-Dichlorobenzene
Concen: 47.208 ug/l
RT: 12.042 min Scan# 1797
Delta R.T. 0.000 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion:146 Resp: 183674

Ion	Ratio	Lower	Upper
146	100		
111	39.8	20.5	61.6
148	64.7	32.2	96.6

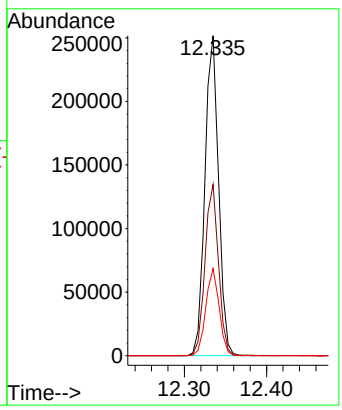




#89
n-Butylbenzene
Concen: 48.064 ug/l
RT: 12.335 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion: 91 Resp: 28904

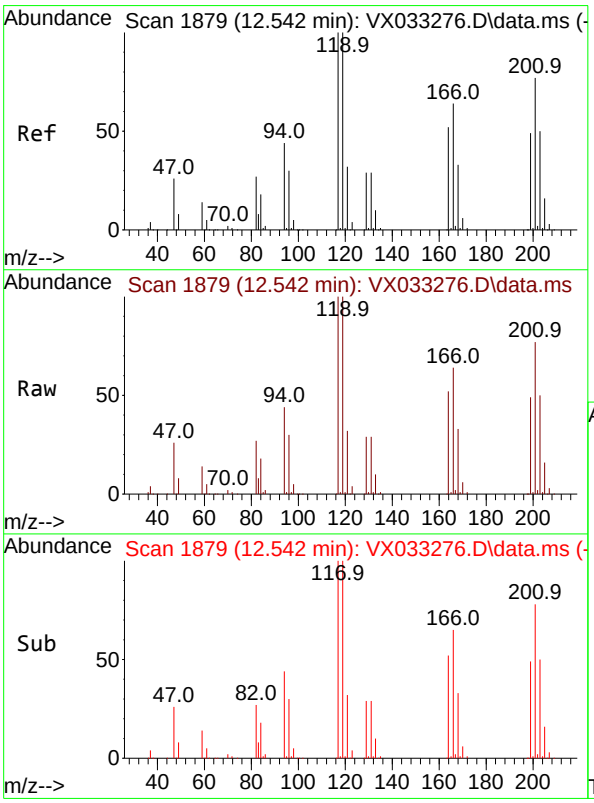
Ion	Ratio	Lower	Upper
91	100		
92	53.0	26.2	78.6
134	26.7	12.9	38.6



Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

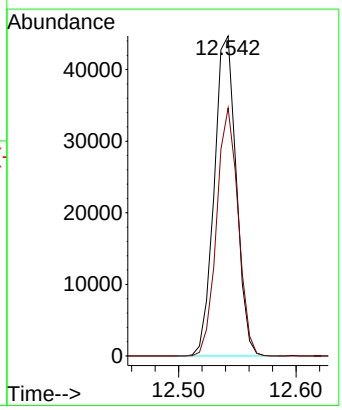
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

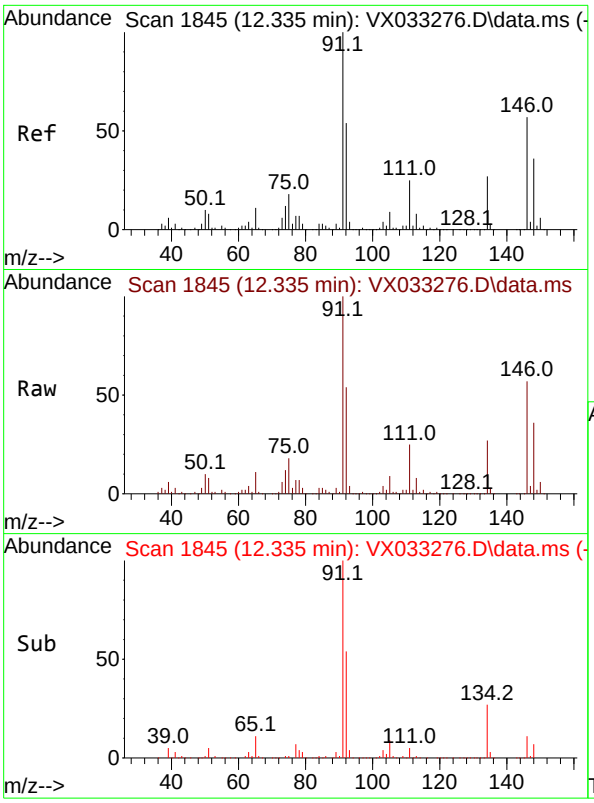


#90
Hexachloroethane
Concen: 50.845 ug/l
RT: 12.542 min Scan# 1879
Delta R.T. 0.000 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion:117 Resp: 58312

Ion	Ratio	Lower	Upper
117	100		
201	75.7	37.6	112.9

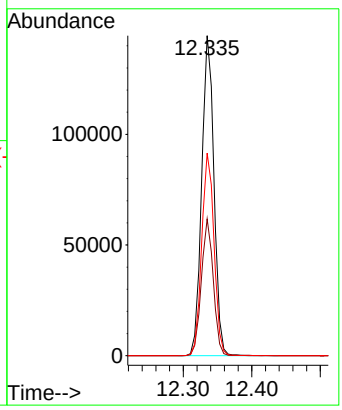




#91
1,2-Dichlorobenzene
Concen: 48.675 ug/l
RT: 12.335 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion:146 Resp: 17988

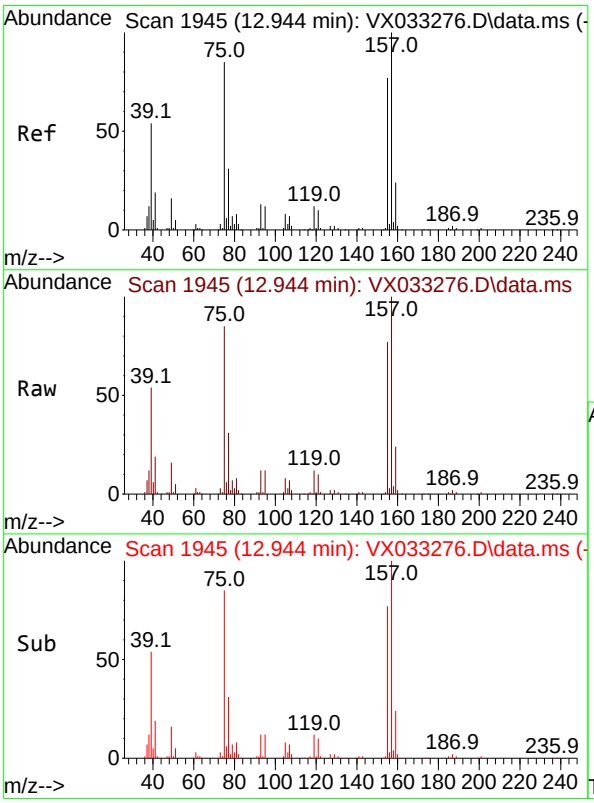
Ion	Ratio	Lower	Upper
146	100		
111	41.7	21.5	64.5
148	63.8	32.0	96.2



Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

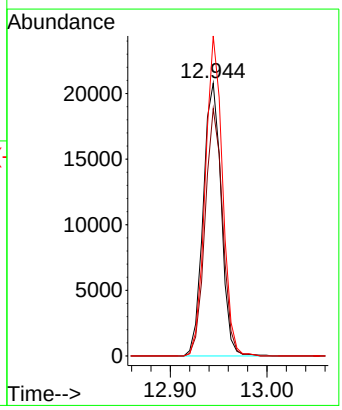
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

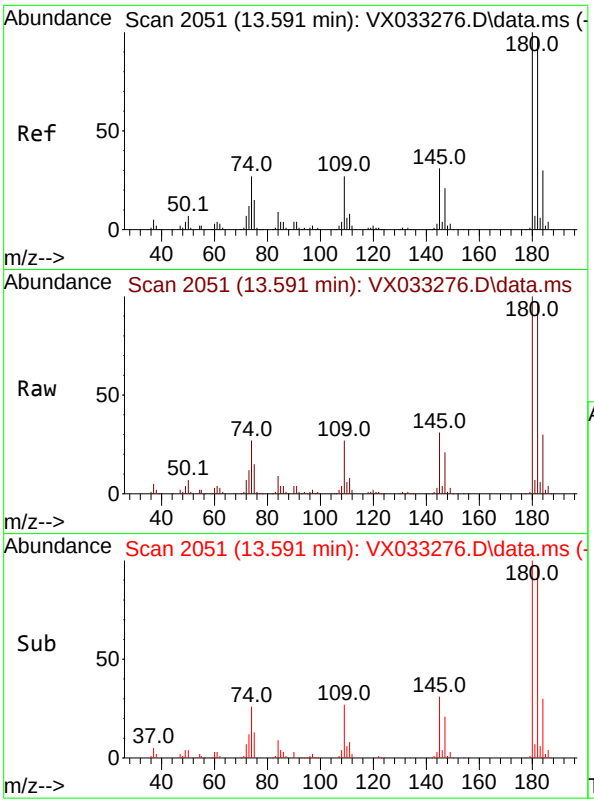


#92
1,2-Dibromo-3-Chloropropane
Concen: 54.222 ug/l
RT: 12.944 min Scan# 1945
Delta R.T. -0.001 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion: 75 Resp: 26891

Ion	Ratio	Lower	Upper
75	100		
155	88.6	41.6	124.8
157	112.8	54.1	162.4





#93
1,2,4-Trichlorobenzene
Concen: 48.454 ug/l
RT: 13.591 min Scan# 2
Delta R.T. -0.000 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

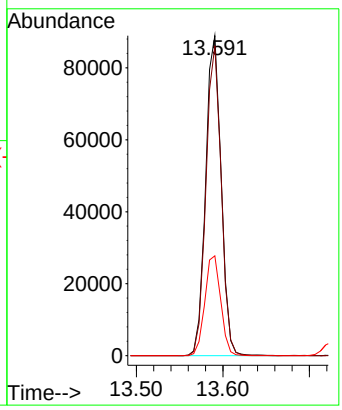
Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

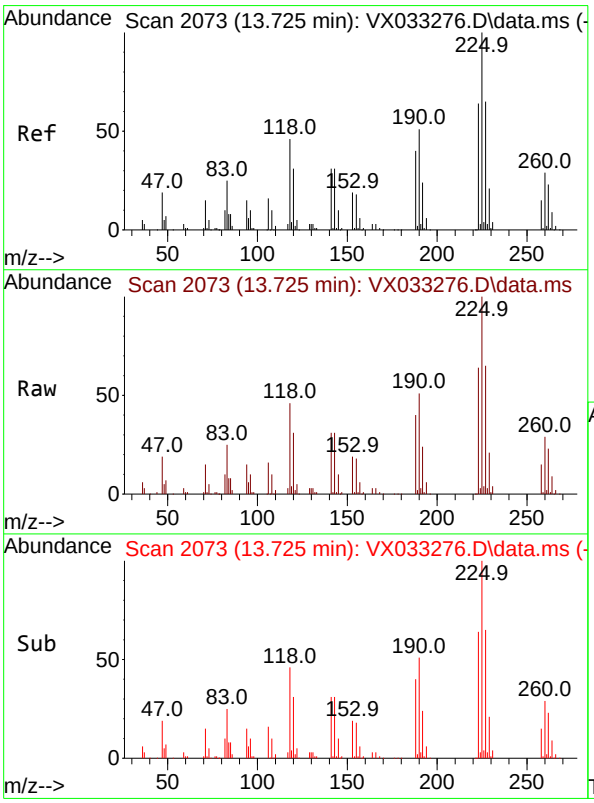
Tgt Ion:180 Resp: 11038

Ion	Ratio	Lower	Upper
180	100		
182	95.6	48.4	145.0
145	32.0	16.2	48.5

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

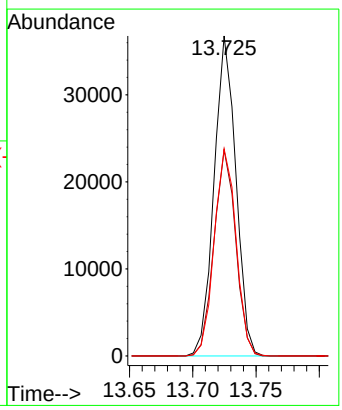


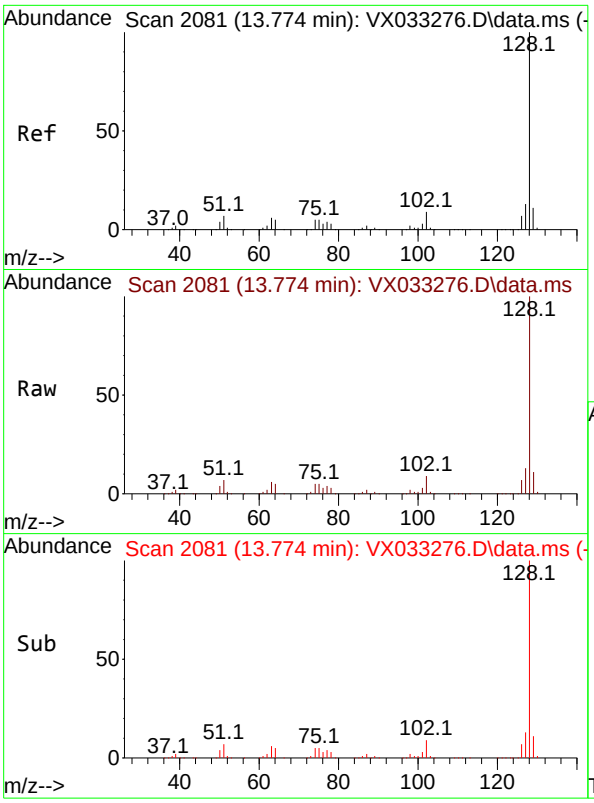


#94
Hexachlorobutadiene
Concen: 43.785 ug/l
RT: 13.725 min Scan# 2073
Delta R.T. -0.000 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion:225 Resp: 44005

Ion	Ratio	Lower	Upper
225	100		
223	64.1	31.9	95.9
227	64.7	31.9	95.5

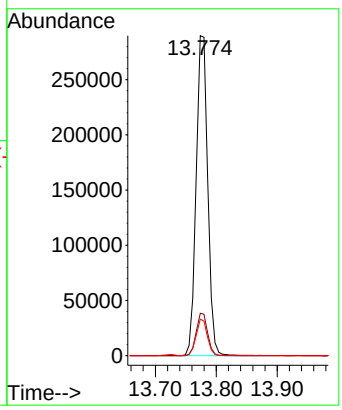




#95
Naphthalene
Concen: 51.866 ug/l
RT: 13.774 min Scan# 2
Delta R.T. -0.006 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion:128 Resp: 38223

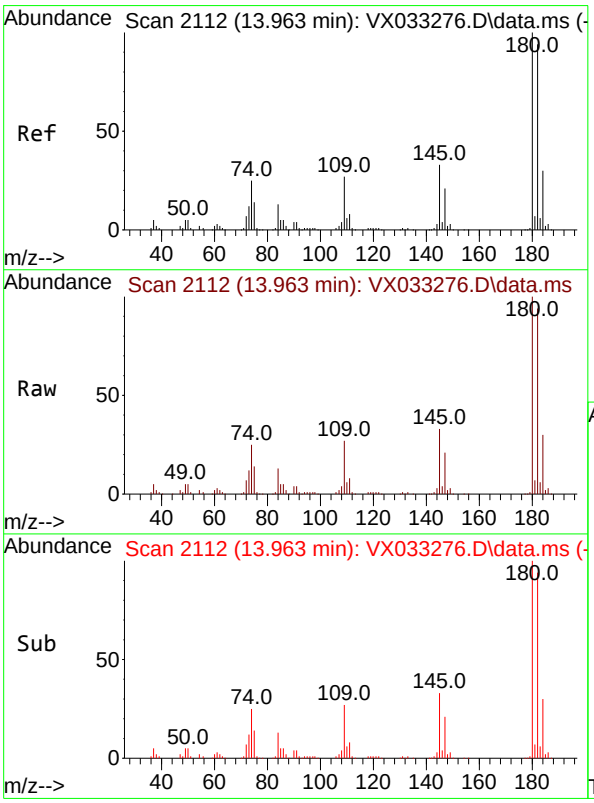
Ion	Ratio	Lower	Upper
128	100		
127	13.0	10.2	15.4
129	11.1	8.9	13.3



Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

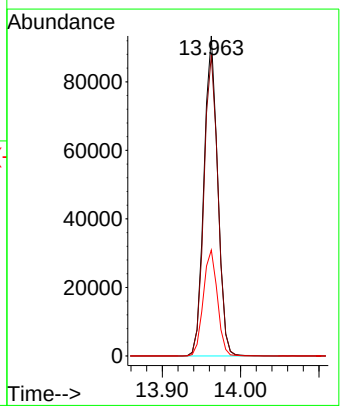
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022



#96
1,2,3-Trichlorobenzene
Concen: 49.483 ug/l
RT: 13.963 min Scan# 2112
Delta R.T. -0.000 min
Lab File: VX033276.D
Acq: 07 Dec 2022 10:55

Tgt Ion:180 Resp: 113042

Ion	Ratio	Lower	Upper
180	100		
182	96.1	47.5	142.6
145	33.9	16.9	50.6



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX120722\
Data File : VX033277.D
Acq On : 07 Dec 2022 11:18
Operator : JC/MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 07 11:46:33 2022
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X120722W.M
Quant Title : SW846 8260
QLast Update : Wed Dec 07 09:47:15 2022
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.556	168	165055	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.763	114	255123	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.055	117	234757	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.024	152	114385	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.958	65	92117	51.808	ug/l	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 103.620%			
35) Dibromofluoromethane	5.391	113	106926	74.342	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 148.680%#			
50) Toluene-d8	8.653	98	231771	49.636	ug/l	0.00
Spiked Amount 50.000	Range 92 - 112		Recovery = 99.280%			
62) 4-Bromofluorobenzene	11.079	95	181855	96.253	ug/l	0.00
Spiked Amount 50.000	Range 83 - 123		Recovery = 192.500%#			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.166	85	113964	90.376	ug/l	96
3) Chloromethane	1.294	50	120662	88.636	ug/l	97
4) Vinyl Chloride	1.374	62	141536	93.376	ug/l	99
5) Bromomethane	1.618	94	103035	91.668	ug/l	97
6) Chloroethane	1.691	64	98459	79.790	ug/l	98
7) Trichlorofluoromethane	1.886	101	260418	88.522	ug/l	99
8) Diethyl Ether	2.136	74	91426	98.713	ug/l	97
9) 1,1,2-Trichlorotrifluo...	2.331	101	147980	95.703	ug/l	99
10) Methyl Iodide	2.453	142	168388	95.129	ug/l	98
11) Tert butyl alcohol	3.081	59	153047m	600.649	ug/l	
12) 1,1-Dichloroethene	2.319	96	144956	100.637	ug/l	98
13) Acrolein	2.239	56	168892	577.055	ug/l	100
14) Allyl chloride	2.666	41	231599	99.594	ug/l	95
15) Acrylonitrile	3.069	53	384195	533.084	ug/l	98
16) Acetone	2.392	43	332080	442.372	ug/l	98
17) Carbon Disulfide	2.514	76	371702	93.405	ug/l	100
18) Methyl Acetate	2.709	43	217517	104.676	ug/l	97
19) Methyl tert-butyl Ether	3.117	73	504714	101.037	ug/l	100
20) Methylene Chloride	2.788	84	157499	87.090	ug/l	92
21) trans-1,2-Dichloroethene	3.093	96	160881	97.643	ug/l	99
22) Diisopropyl ether	3.764	45	494701	97.699	ug/l	98
23) Vinyl Acetate	3.721	43	1966313	496.095	ug/l	98
24) 1,1-Dichloroethane	3.611	63	281027	96.987	ug/l	100
25) 2-Butanone	4.568	43	529242	511.283	ug/l	100
26) 2,2-Dichloropropane	4.477	77	220013	94.433	ug/l	98
27) cis-1,2-Dichloroethene	4.489	96	190459	101.740	ug/l	97
28) Bromochloromethane	4.897	49	114001	89.540	ug/l	95
29) Tetrahydrofuran	5.013	42	350450	533.548	ug/l	97
30) Chloroform	5.093	83	317680	97.890	ug/l	99
31) Cyclohexane	5.477	56	251166	96.437	ug/l	94
32) 1,1,1-Trichloroethane	5.385	97	286297	98.509	ug/l	98
36) 1,1-Dichloropropene	5.696	75	229465	99.777	ug/l	100
37) Ethyl Acetate	4.715	43	213345	106.332	ug/l	100
38) Carbon Tetrachloride	5.678	117	255340	100.085	ug/l	96
39) Methylcyclohexane	7.385	83	269308	102.633	ug/l	98
40) Benzene	6.037	78	653275	101.314	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX120722\
Data File : VX033277.D
Acq On : 07 Dec 2022 11:18
Operator : JC/MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 07 11:46:33 2022
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X120722W.M
Quant Title : SW846 8260
QLast Update : Wed Dec 07 09:47:15 2022
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	4.922	41	118380	104.856	ug/l		96
42) 1,2-Dichloroethane	6.086	62	249168	95.974	ug/l		98
43) Isopropyl Acetate	6.342	43	349609	105.360	ug/l		97
44) Trichloroethene	7.129	130	184157	101.780	ug/l		99
45) 1,2-Dichloropropane	7.434	63	165570	103.903	ug/l		99
46) Dibromomethane	7.580	93	124128	99.831	ug/l		98
47) Bromodichloromethane	7.824	83	250677	104.337	ug/l		100
48) Methyl methacrylate	7.696	41	178559	104.542	ug/l		93
49) 1,4-Dioxane	7.708	88	81715	2599.008	ug/l		98
51) 4-Methyl-2-Pentanone	8.574	43	1063088	519.198	ug/l		96
52) Toluene	8.720	92	431003	101.600	ug/l		99
53) t-1,3-Dichloropropene	8.982	75	261464	110.875	ug/l		99
54) cis-1,3-Dichloropropene	8.366	75	280027	108.114	ug/l		90
55) 1,1,2-Trichloroethane	9.153	97	178523	103.364	ug/l		98
56) Ethyl methacrylate	9.116	69	264710	111.239	ug/l	#	91
57) 1,3-Dichloropropane	9.311	76	285374	102.351	ug/l		100
58) 2-Chloroethyl Vinyl ether	8.244	63	601216	532.046	ug/l		98
59) 2-Hexanone	9.433	43	776936	513.655	ug/l		94
60) Dibromochloromethane	9.525	129	203673	109.532	ug/l		100
61) 1,2-Dibromoethane	9.610	107	192450	105.569	ug/l		99
64) Tetrachloroethene	9.275	164	155777	93.745	ug/l		96
65) Chlorobenzene	10.079	112	466180	99.602	ug/l		99
66) 1,1,1,2-Tetrachloroethane	10.165	131	179053	104.407	ug/l		100
67) Ethyl Benzene	10.195	91	832367	100.255	ug/l		99
68) m/p-Xylenes	10.305	106	656555	201.944	ug/l		97
69) o-Xylene	10.640	106	318285	101.180	ug/l		97
70) Styrene	10.659	104	537696	104.480	ug/l		98
71) Bromoform	10.799	173	147977	112.541	ug/l	#	99
73) Isopropylbenzene	10.963	105	842073	103.020	ug/l		99
74) N-amyl acetate	10.842	43	293580	105.583	ug/l		96
75) 1,1,2,2-Tetrachloroethane	11.213	83	253116	102.600	ug/l		99
76) 1,2,3-Trichloropropane	11.238	75	227655m	105.091	ug/l		
77) Bromobenzene	11.201	156	206162	102.556	ug/l		98
78) n-propylbenzene	11.305	91	957635	102.470	ug/l		99
79) 2-Chlorotoluene	11.366	91	562746	99.144	ug/l		99
80) 1,3,5-Trimethylbenzene	11.451	105	707491	103.034	ug/l		99
81) trans-1,4-Dichloro-2-b...	11.018	75	78356	117.572	ug/l		91
82) 4-Chlorotoluene	11.457	91	662404	99.587	ug/l		99
83) tert-Butylbenzene	11.713	119	704229	103.031	ug/l		98
84) 1,2,4-Trimethylbenzene	11.750	105	694969	101.503	ug/l		98
85) sec-Butylbenzene	11.890	105	841254	102.877	ug/l		99
86) p-Isopropyltoluene	12.012	119	721390	104.124	ug/l		99
87) 1,3-Dichlorobenzene	11.969	146	382452	101.433	ug/l		99
88) 1,4-Dichlorobenzene	12.043	146	377754	97.826	ug/l		99
89) n-Butylbenzene	12.335	91	616947	103.367	ug/l		98
90) Hexachloroethane	12.542	117	123879	108.833	ug/l		98
91) 1,2-Dichlorobenzene	12.335	146	368843	100.562	ug/l		99
92) 1,2-Dibromo-3-Chloropr...	12.945	75	56957	115.714	ug/l		93
93) 1,2,4-Trichlorobenzene	13.591	180	241047	106.614	ug/l		98
94) Hexachlorobutadiene	13.725	225	94278	94.517	ug/l		99
95) Naphthalene	13.774	128	806793	110.304	ug/l		100
96) 1,2,3-Trichlorobenzene	13.963	180	239154	105.480	ug/l		99

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX120722\
Data File : VX033277.D
Acq On : 07 Dec 2022 11:18
Operator : JC/MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

Quant Time: Dec 07 11:46:33 2022
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X120722W.M
Quant Title : SW846 8260
QLast Update : Wed Dec 07 09:47:15 2022
Response via : Initial Calibration

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

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

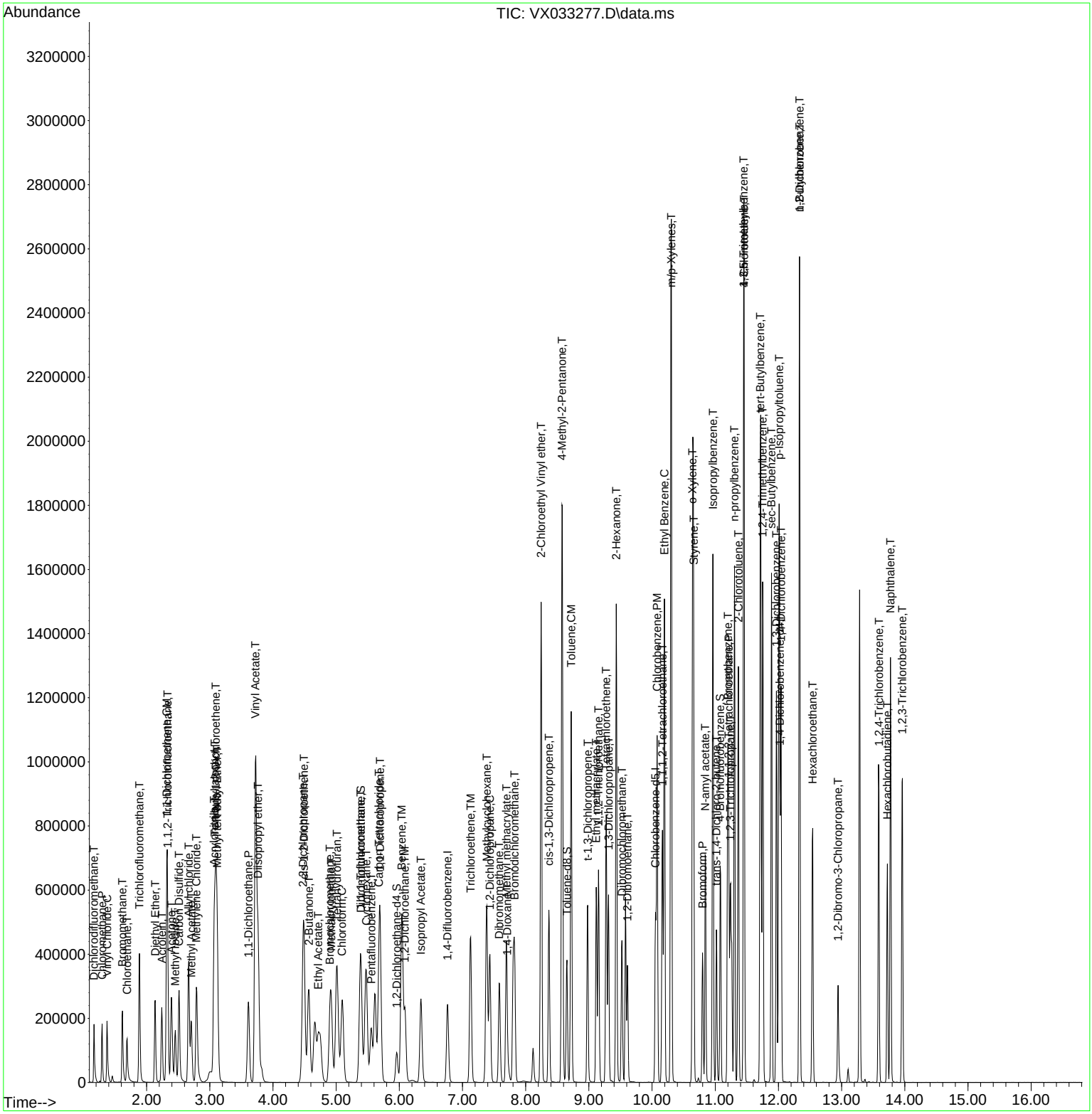
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX120722\
Data File : VX033277.D
Acq On : 07 Dec 2022 11:18
Operator : JC/MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 6 Sample Multiplier: 1

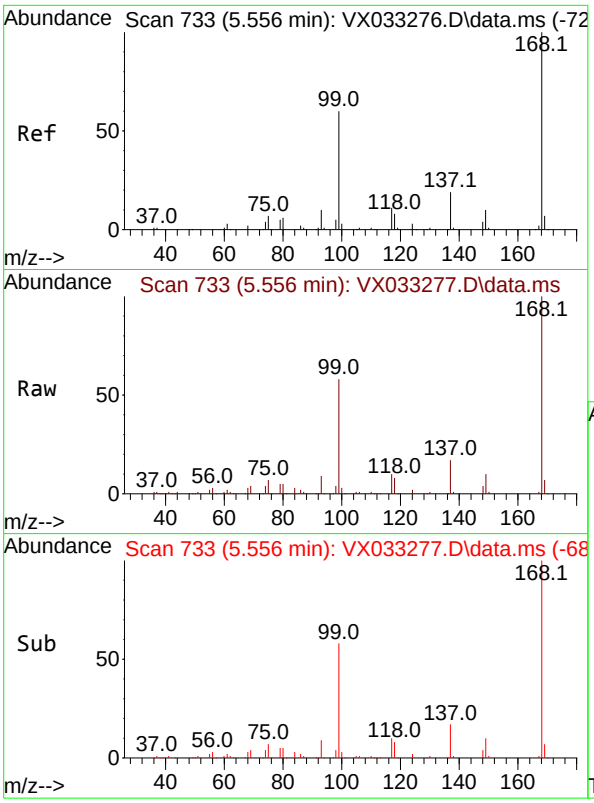
Quant Time: Dec 07 11:46:33 2022
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X120722W.M
Quant Title : SW846 8260
QLast Update : Wed Dec 07 09:47:15 2022
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

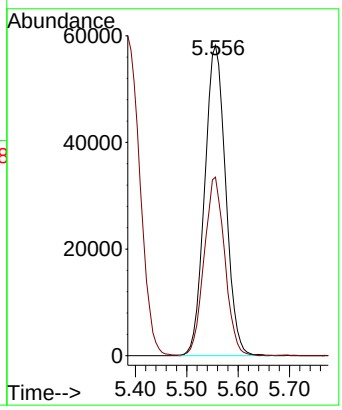




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 5.556 min Scan# 7
Delta R.T. -0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion:168 Resp: 16505

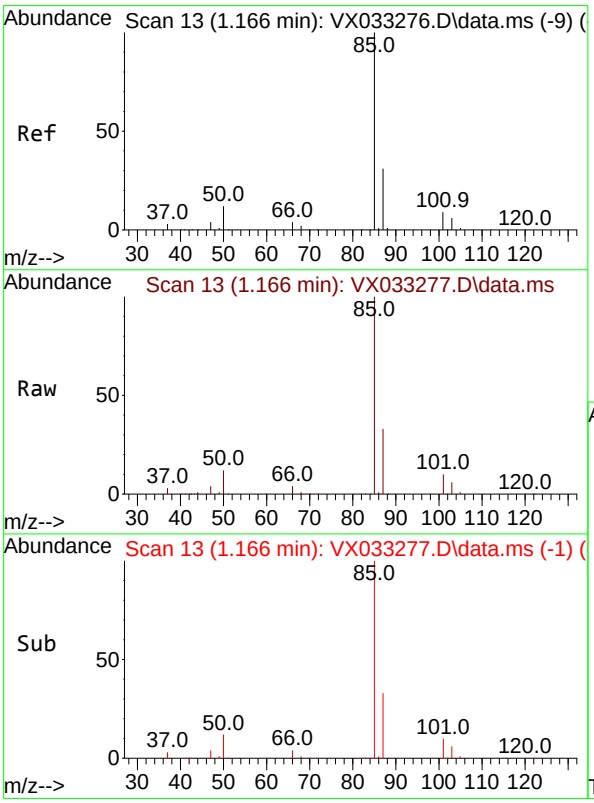
Ion	Ratio	Lower	Upper
168	100		
99	57.4	46.1	69.1



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

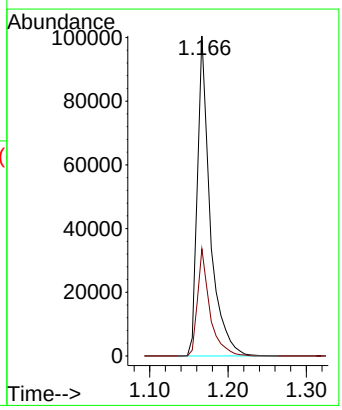
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

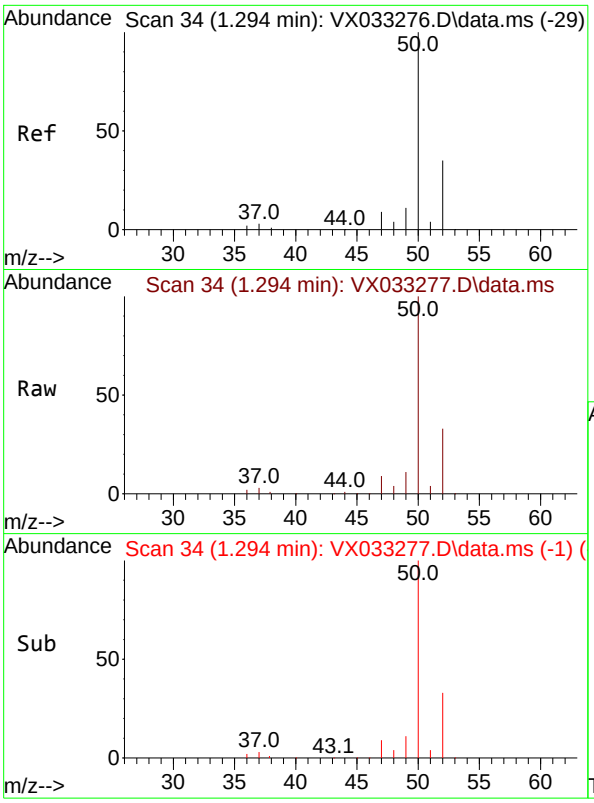


#2
Dichlorodifluoromethane
Concen: 90.376 ug/l
RT: 1.166 min Scan# 13
Delta R.T. 0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion: 85 Resp: 113964

Ion	Ratio	Lower	Upper
85	100		
87	33.5	15.6	46.7

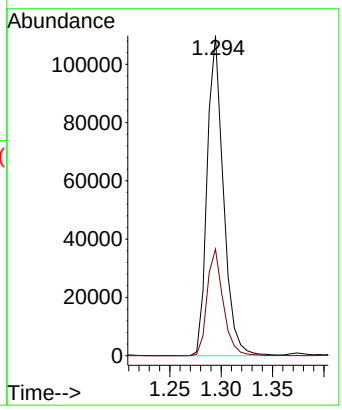




#3
Chloromethane
Concen: 88.636 ug/l
RT: 1.294 min Scan# 3
Delta R.T. 0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion: 50 Resp: 12066

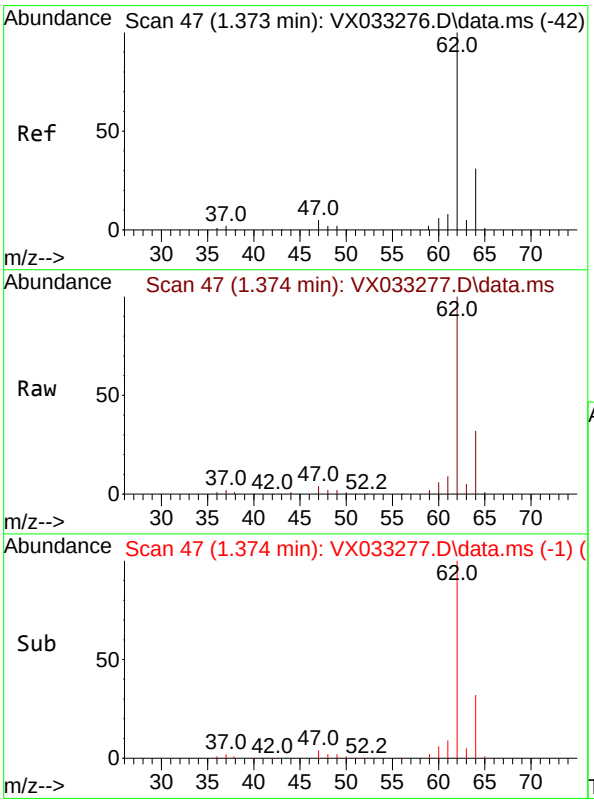
Ion	Ratio	Lower	Upper
50	100		
52	33.3	25.4	38.2



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

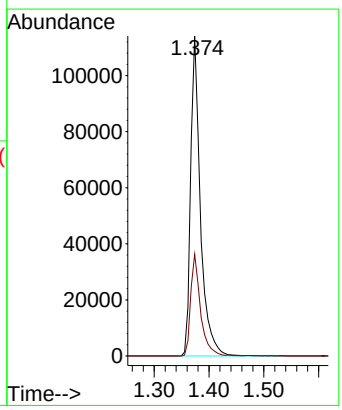
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

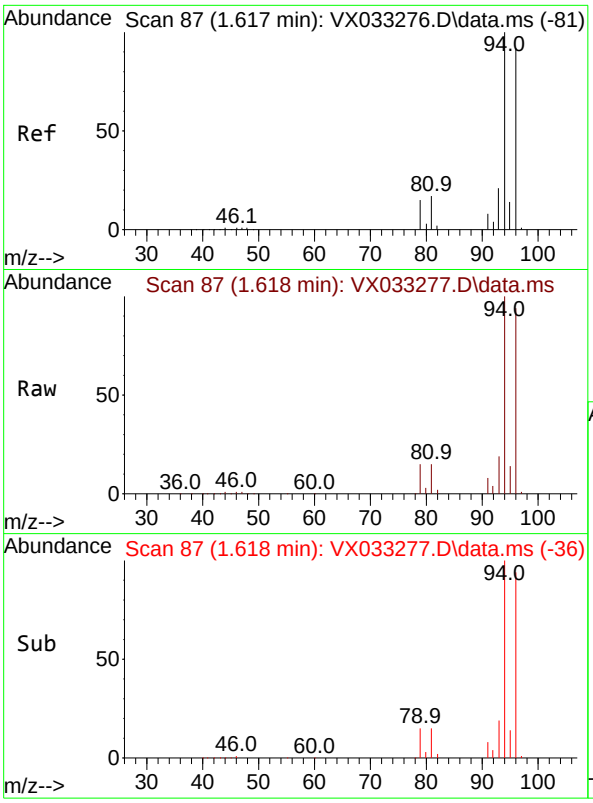


#4
Vinyl Chloride
Concen: 93.376 ug/l
RT: 1.374 min Scan# 47
Delta R.T. -0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion: 62 Resp: 141536

Ion	Ratio	Lower	Upper
62	100		
64	31.8	25.8	38.6





#5
Bromomethane
Concen: 91.668 ug/l
RT: 1.618 min Scan# 8
Delta R.T. 0.013 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

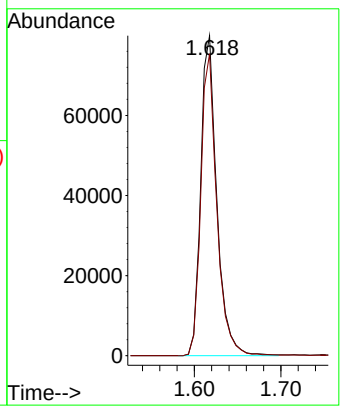
Tgt Ion: 94 Resp: 10303

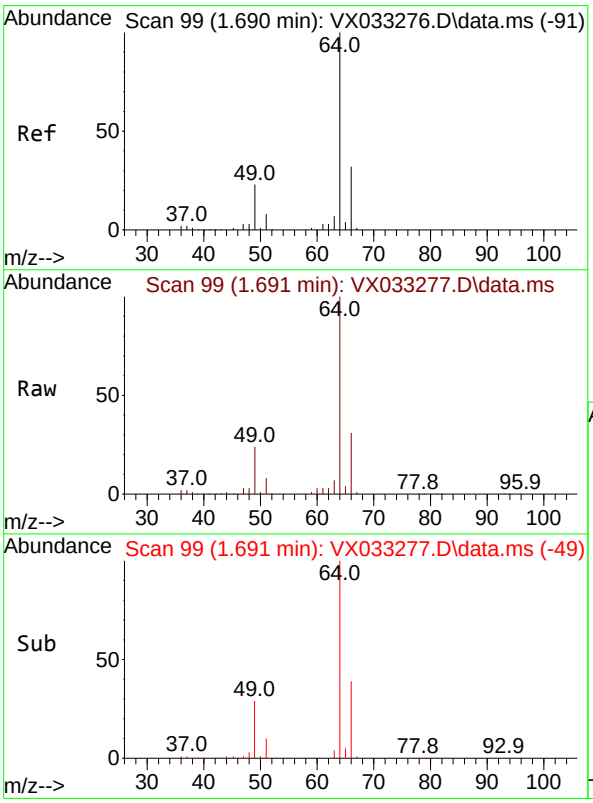
Ion	Ratio	Lower	Upper
94	100		
96	94.4	77.6	116.4

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

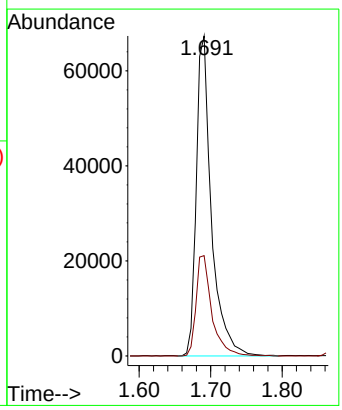


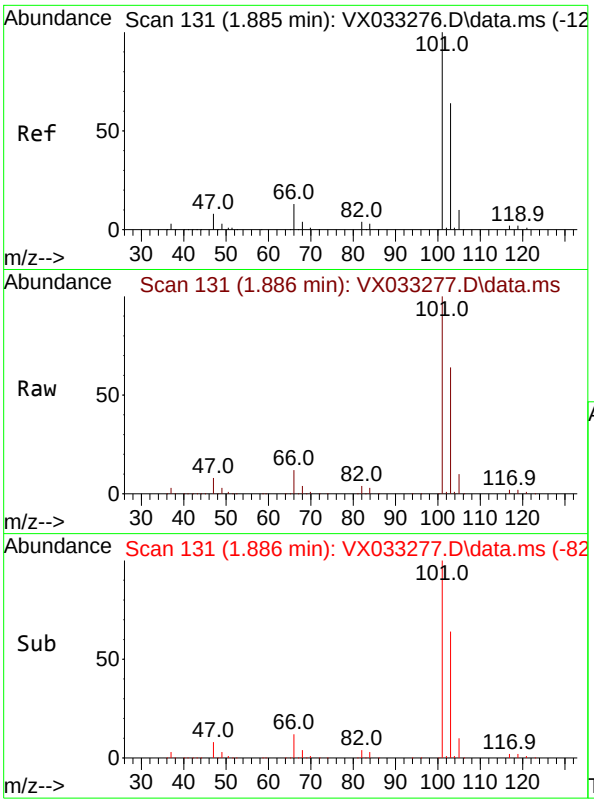


#6
Chloroethane
Concen: 79.790 ug/l
RT: 1.691 min Scan# 99
Delta R.T. 0.006 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion: 64 Resp: 98459

Ion	Ratio	Lower	Upper
64	100		
66	31.3	26.0	39.0

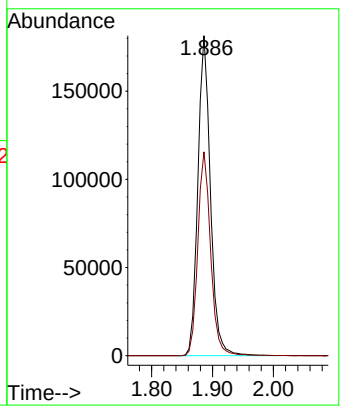




#7
Trichlorofluoromethane
Concen: 88.522 ug/l
RT: 1.886 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion:101 Resp: 26041

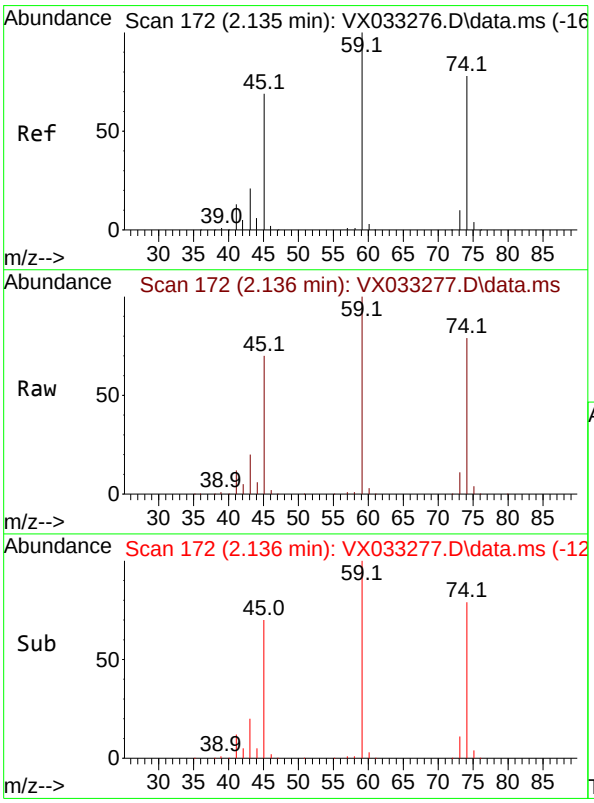
Ion	Ratio	Lower	Upper
101	100		
103	63.7	51.4	77.2



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

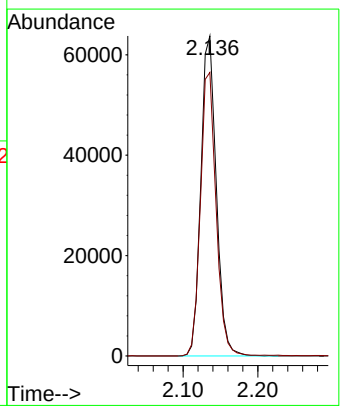
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

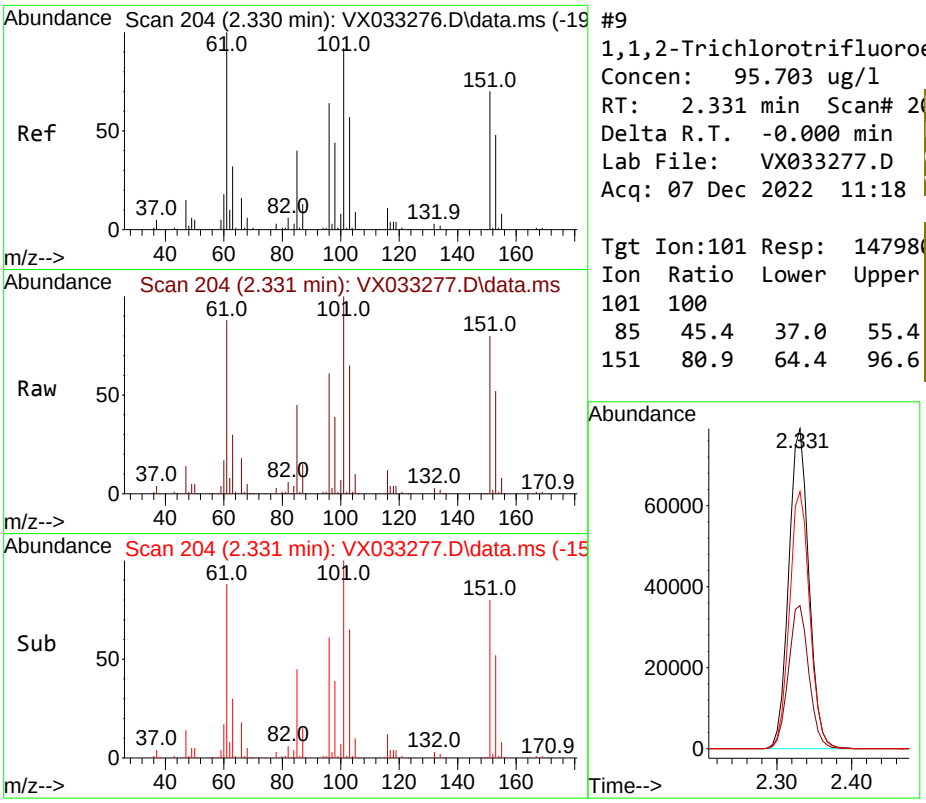


#8
Diethyl Ether
Concen: 98.713 ug/l
RT: 2.136 min Scan# 172
Delta R.T. 0.006 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion: 74 Resp: 91426

Ion	Ratio	Lower	Upper
74	100		
45	90.4	46.6	139.7





#9
1,1,2-Trichlorotrifluoroethane
Concen: 95.703 ug/l
RT: 2.331 min Scan# 2
Delta R.T. -0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

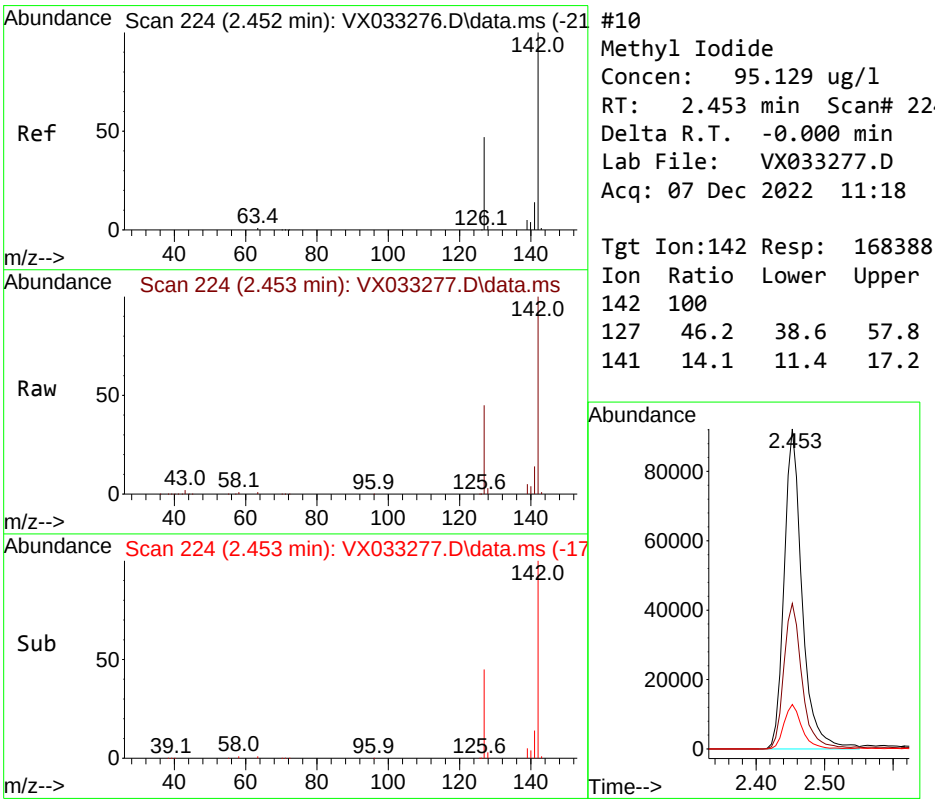
Tgt Ion:101 Resp: 14798

Ion	Ratio	Lower	Upper
101	100		
85	45.4	37.0	55.4
151	80.9	64.4	96.6

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

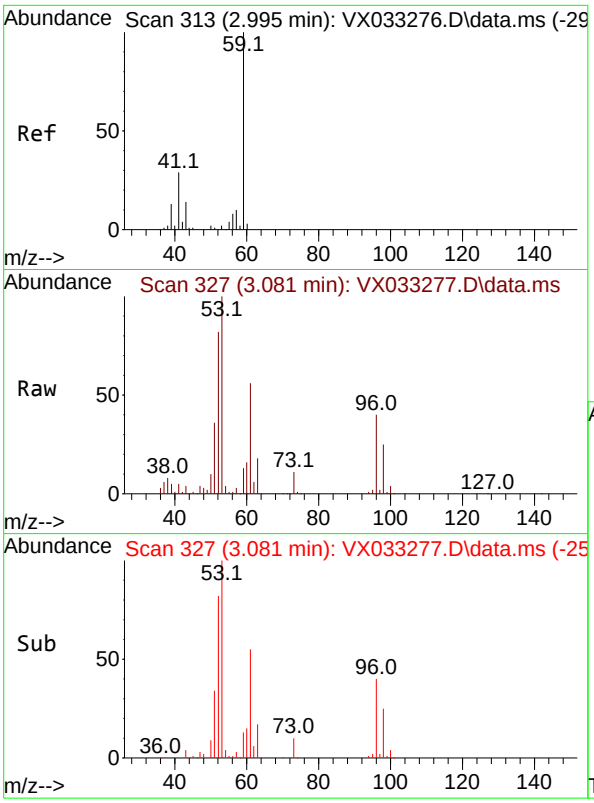
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022



#10
Methyl Iodide
Concen: 95.129 ug/l
RT: 2.453 min Scan# 224
Delta R.T. -0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion:142 Resp: 168388

Ion	Ratio	Lower	Upper
142	100		
127	46.2	38.6	57.8
141	14.1	11.4	17.2



#11
Tert butyl alcohol
Concen: 600.649 ug/l m
RT: 3.081 min Scan# 3
Delta R.T. 0.116 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

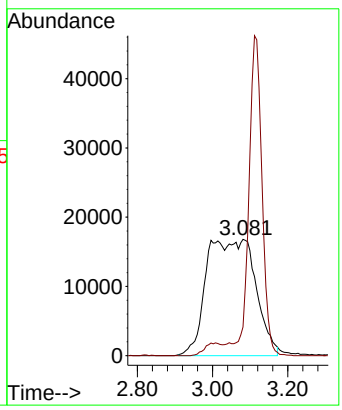
Tgt Ion: 59 Resp: 15304

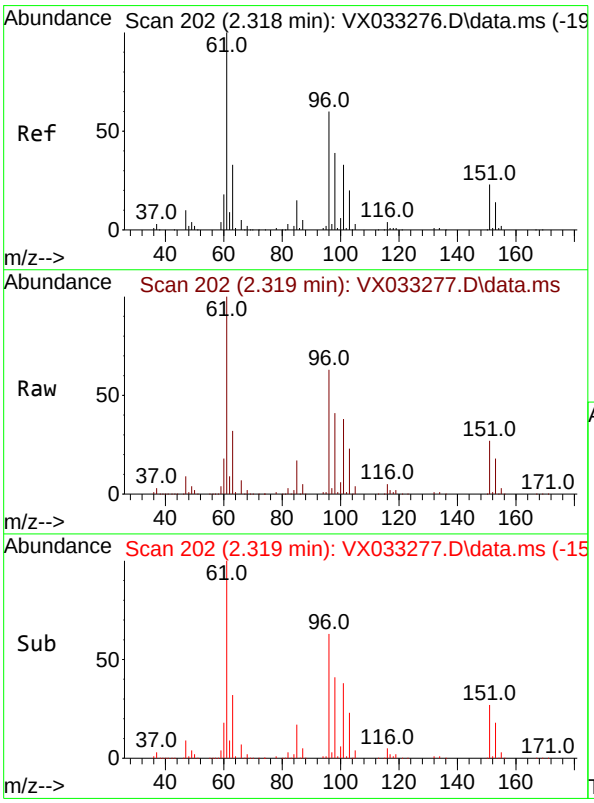
Ion	Ratio	Lower	Upper
59	100		
57	3.8	8.2	12.4

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

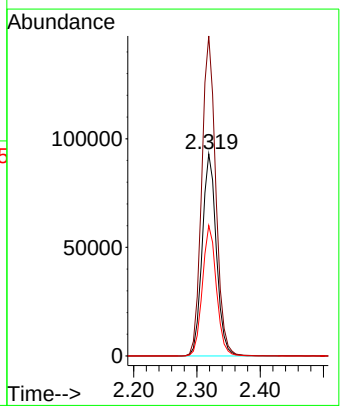


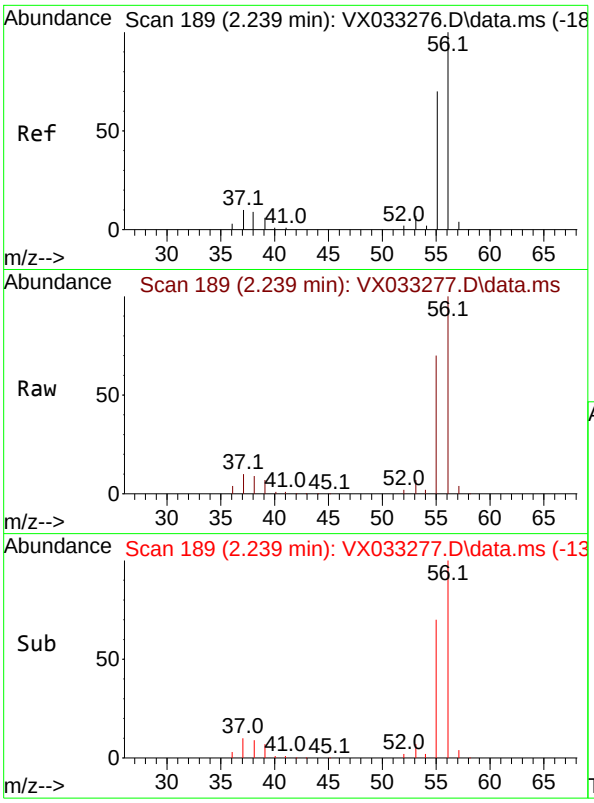


#12
1,1-Dichloroethene
Concen: 100.637 ug/l
RT: 2.319 min Scan# 202
Delta R.T. -0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion: 96 Resp: 144956

Ion	Ratio	Lower	Upper
96	100		
61	158.4	125.1	187.7
98	64.5	50.6	76.0

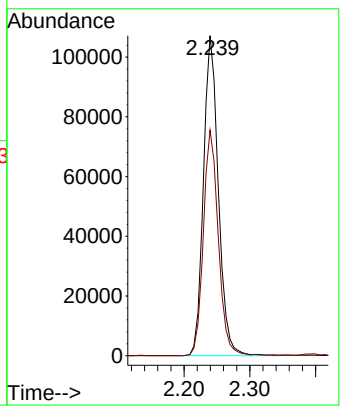




#13
Acrolein
Concen: 577.055 ug/l
RT: 2.239 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion: 56 Resp: 16889

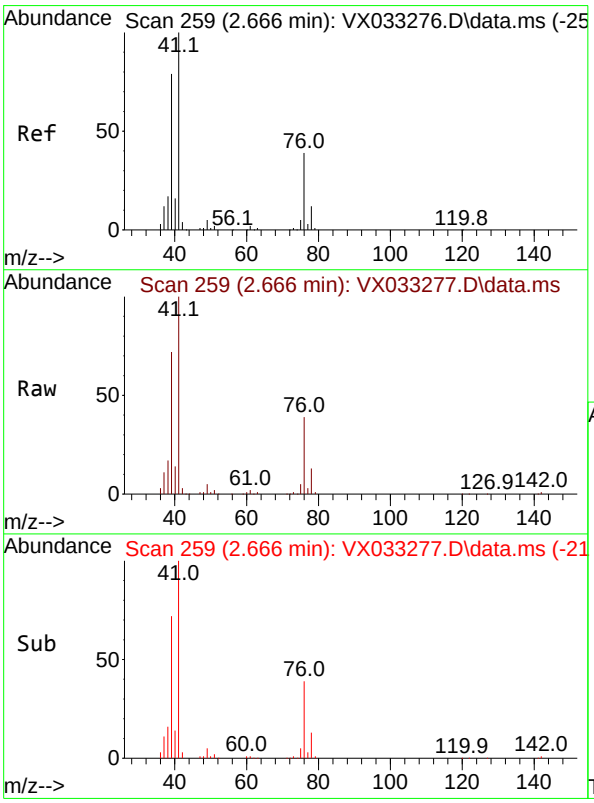
Ion	Ratio	Lower	Upper
56	100		
55	70.8	56.9	85.3



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

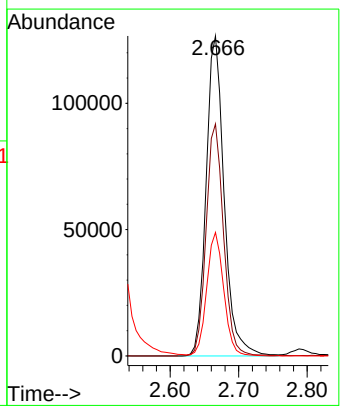
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

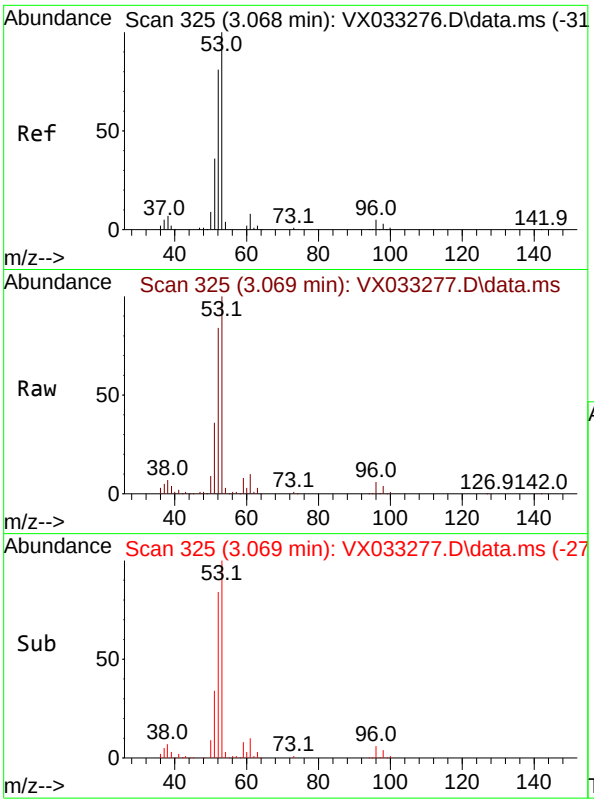


#14
Allyl chloride
Concen: 99.594 ug/l
RT: 2.666 min Scan# 259
Delta R.T. 0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion: 41 Resp: 231599

Ion	Ratio	Lower	Upper
41	100		
39	70.0	61.4	92.2
76	36.5	29.2	43.8

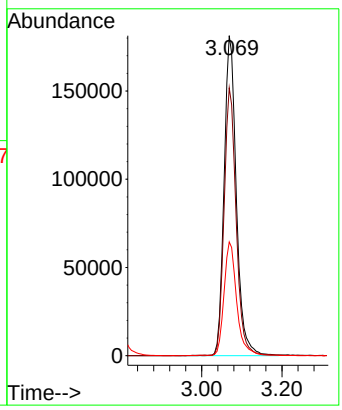




#15
Acrylonitrile
Concen: 533.084 ug/l
RT: 3.069 min Scan# 3
Delta R.T. 0.007 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion: 53 Resp: 38419

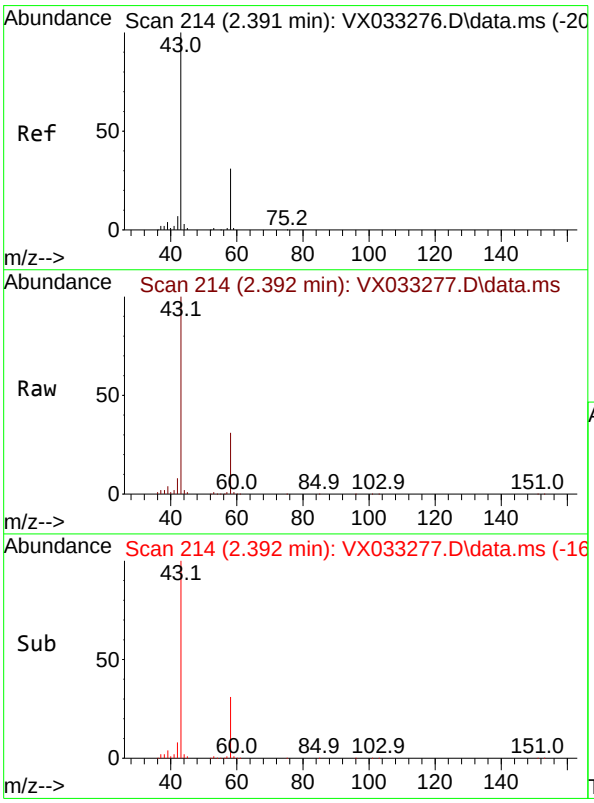
Ion	Ratio	Lower	Upper
53	100		
52	82.5	67.4	101.0
51	36.9	30.3	45.5



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

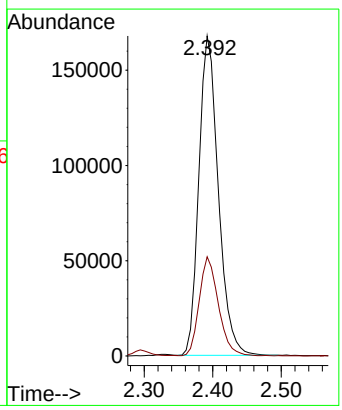
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

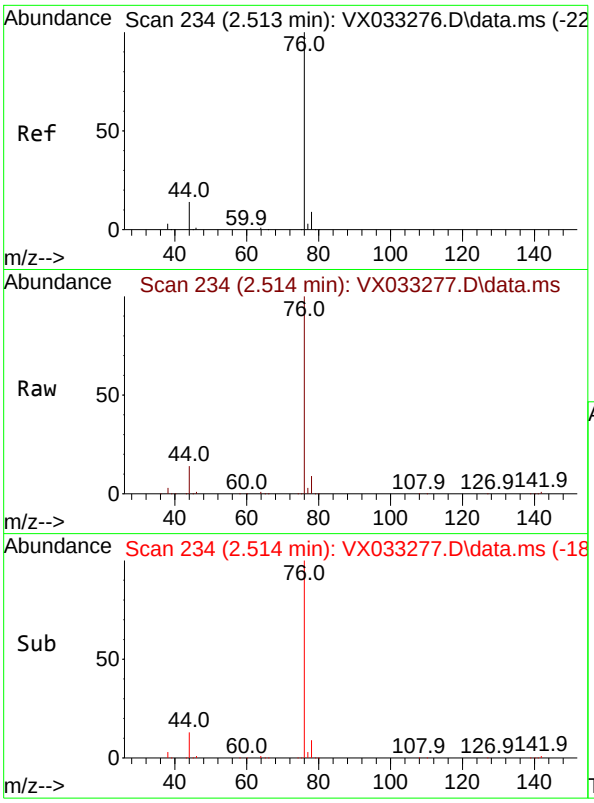


#16
Acetone
Concen: 442.372 ug/l
RT: 2.392 min Scan# 214
Delta R.T. 0.012 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion: 43 Resp: 332080

Ion	Ratio	Lower	Upper
43	100		
58	31.0	23.8	35.8





#17
Carbon Disulfide
Concen: 93.405 ug/l
RT: 2.514 min Scan# 2
Delta R.T. -0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

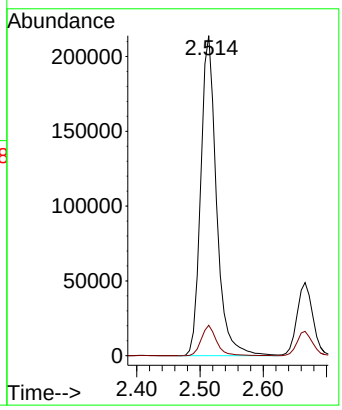
Tgt Ion: 76 Resp: 37170

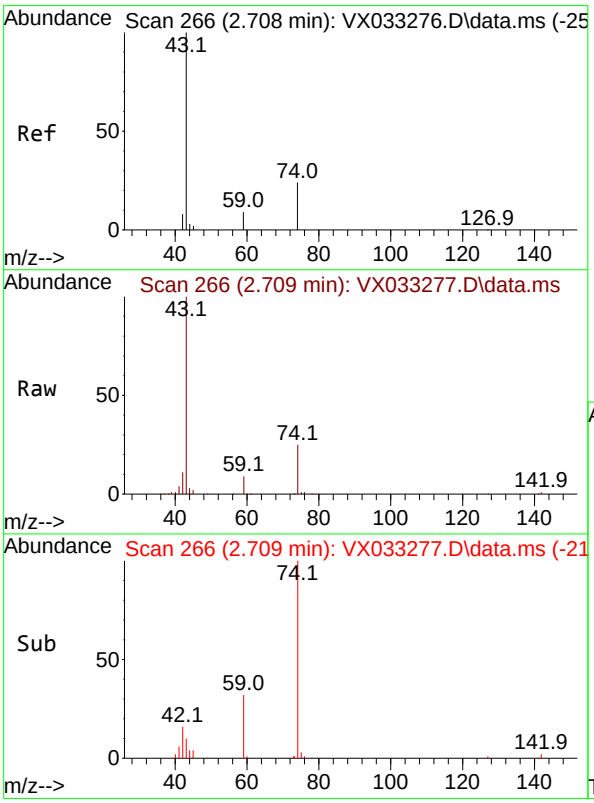
Ion	Ratio	Lower	Upper
76	100		
78	9.5	7.5	11.3

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

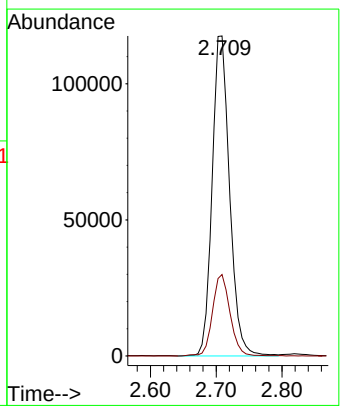


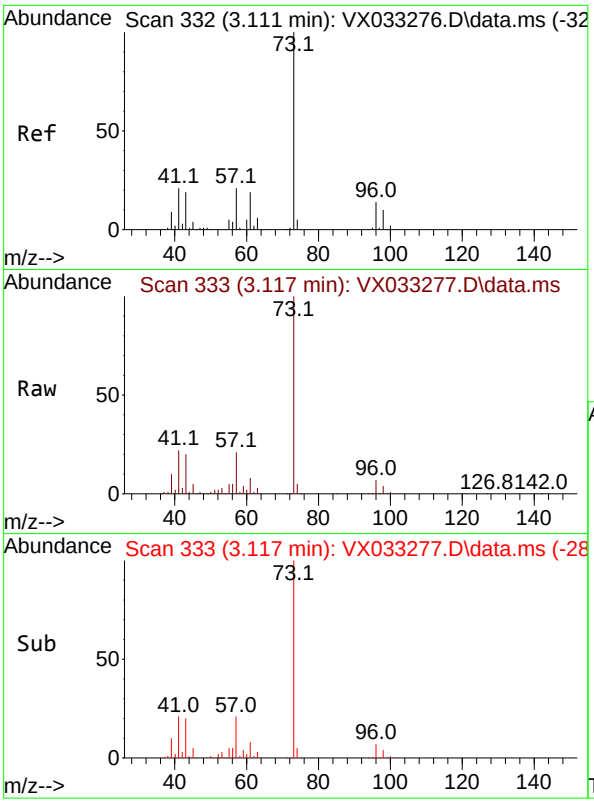


#18
Methyl Acetate
Concen: 104.676 ug/l
RT: 2.709 min Scan# 266
Delta R.T. 0.006 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion: 43 Resp: 217517

Ion	Ratio	Lower	Upper
43	100		
74	25.6	19.4	29.0

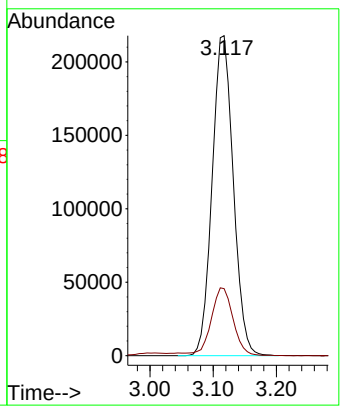




#19
Methyl tert-butyl Ether
Concen: 101.037 ug/l
RT: 3.117 min Scan# 3
Delta R.T. 0.006 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion: 73 Resp: 50471

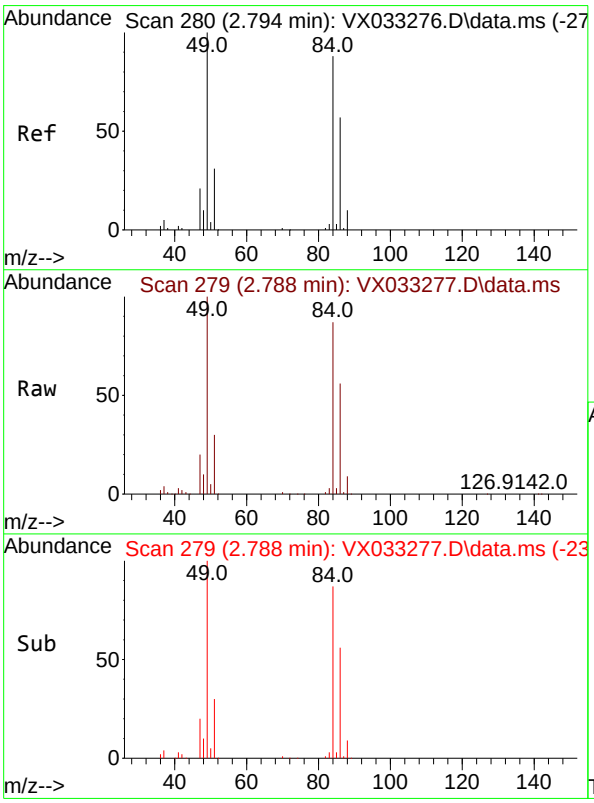
Ion	Ratio	Lower	Upper
73	100		
57	20.9	16.6	25.0



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

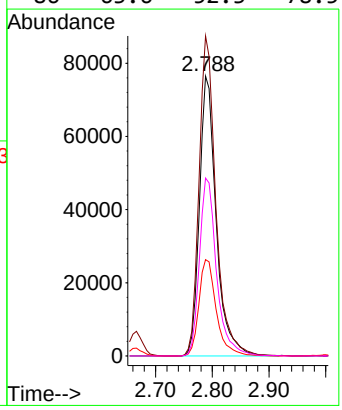
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

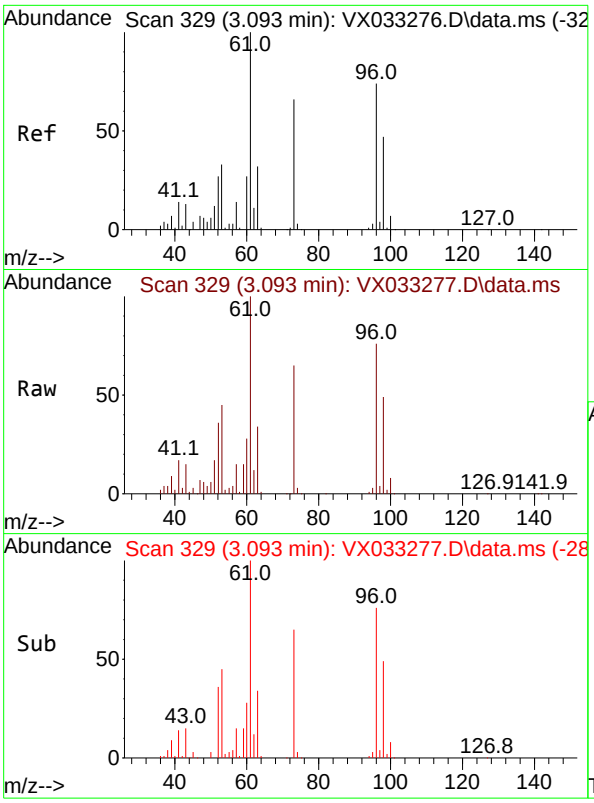


#20
Methylene Chloride
Concen: 87.090 ug/l
RT: 2.788 min Scan# 279
Delta R.T. 0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion: 84 Resp: 157499

Ion	Ratio	Lower	Upper
84	100		
49	114.4	101.0	151.6
51	34.4	31.1	46.7
86	63.6	52.3	78.5

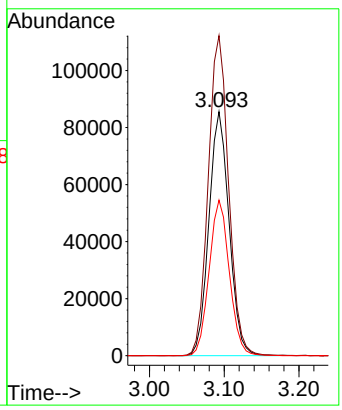




#21
trans-1,2-Dichloroethene
Concen: 97.643 ug/l
RT: 3.093 min Scan# 3
Delta R.T. -0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion: 96 Resp: 16088

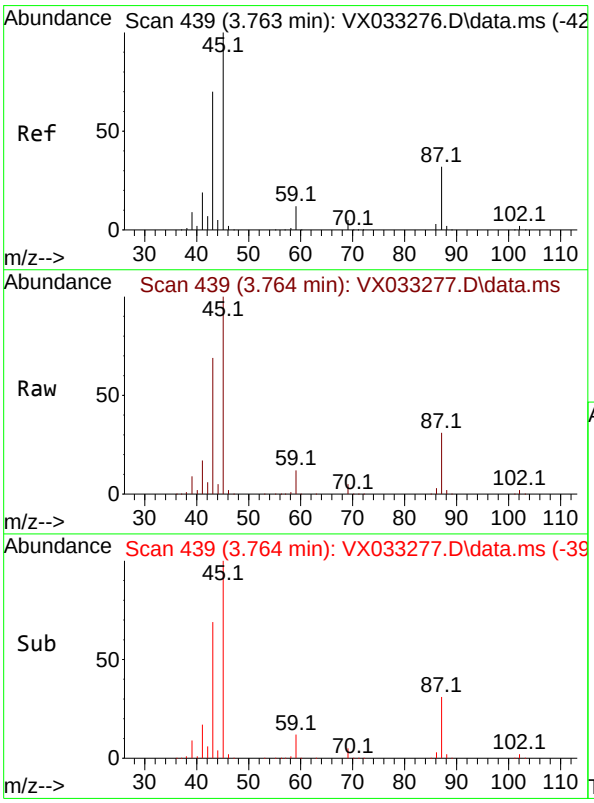
Ion	Ratio	Lower	Upper
96	100		
61	131.1	106.6	160.0
98	63.7	51.0	76.6



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

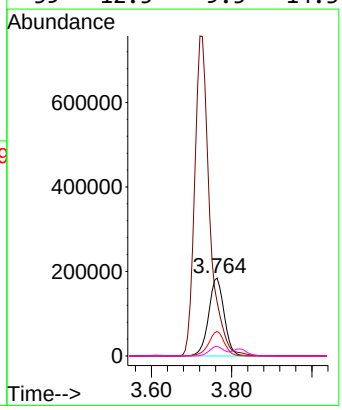
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

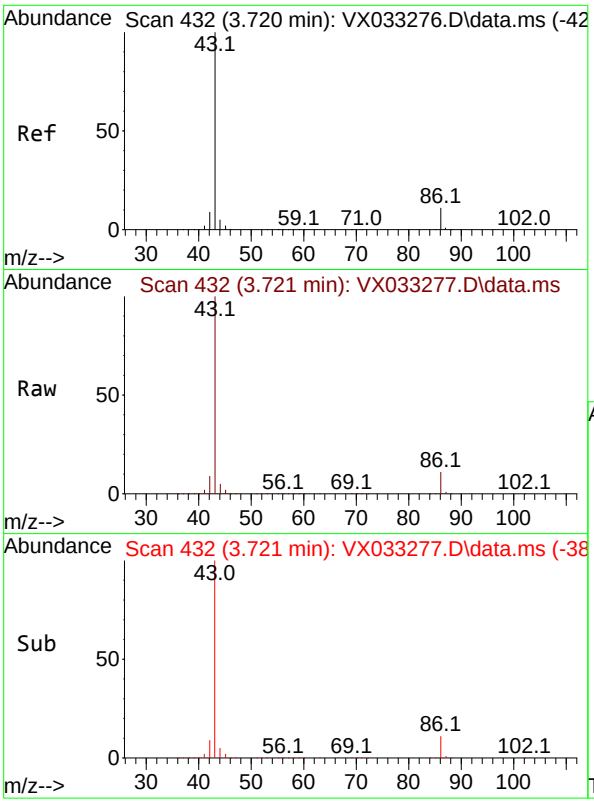


#22
Diisopropyl ether
Concen: 97.699 ug/l
RT: 3.764 min Scan# 439
Delta R.T. 0.001 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion: 45 Resp: 494701

Ion	Ratio	Lower	Upper
45	100		
43	69.3	56.4	84.6
87	31.5	24.4	36.6
59	12.5	9.5	14.3

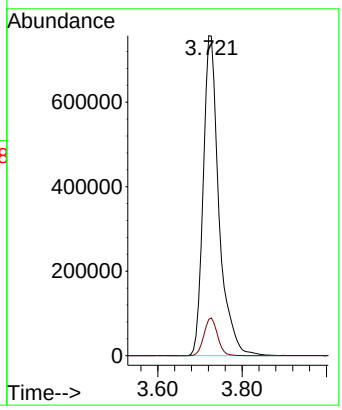




#23
Vinyl Acetate
Concen: 496.095 ug/l
RT: 3.721 min Scan# 4
Delta R.T. -0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion: 43 Resp: 196631

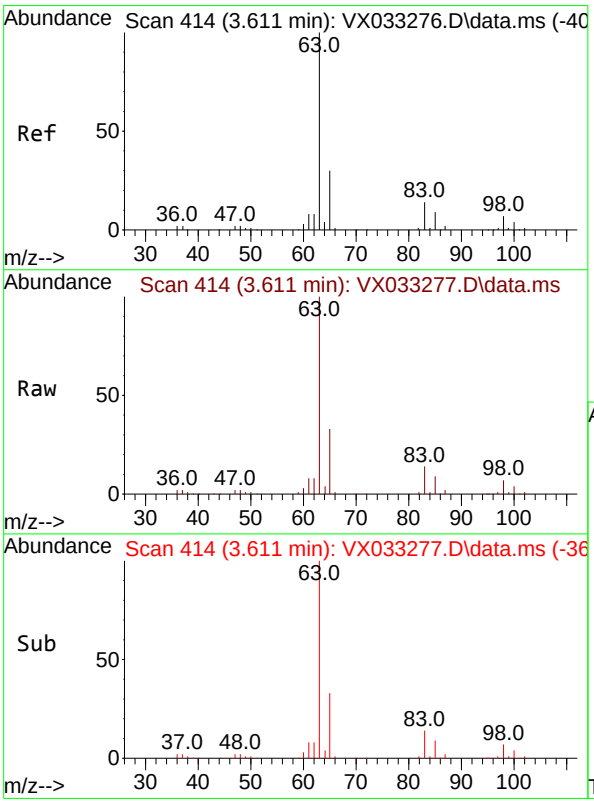
Ion	Ratio	Lower	Upper
43	100		
86	11.4	8.6	12.8



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

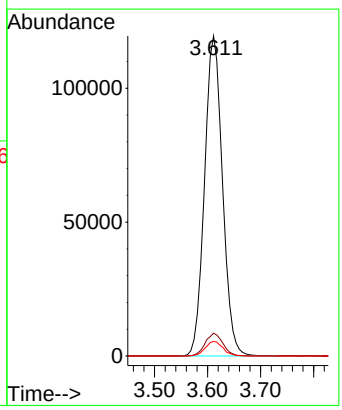
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

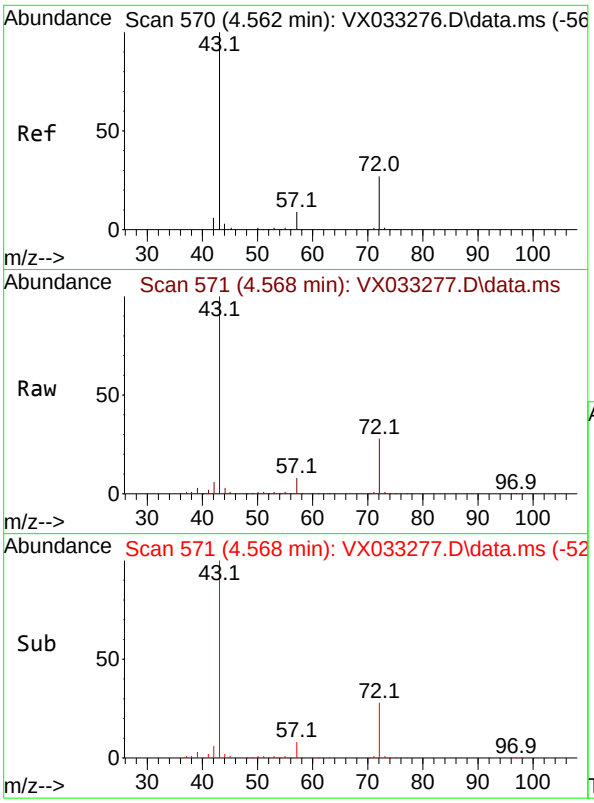


#24
1,1-Dichloroethane
Concen: 96.987 ug/l
RT: 3.611 min Scan# 414
Delta R.T. 0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion: 63 Resp: 281027

Ion	Ratio	Lower	Upper
63	100		
98	7.1	3.5	10.4
100	4.5	2.3	6.8

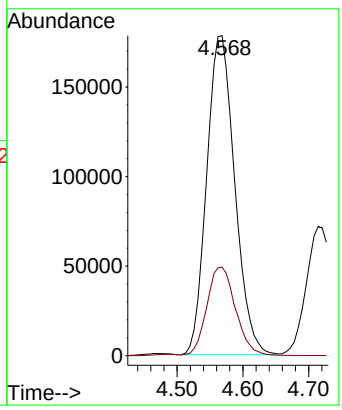




#25
2-Butanone
Concen: 511.283 ug/l
RT: 4.568 min Scan# 5
Delta R.T. 0.012 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion: 43 Resp: 52924

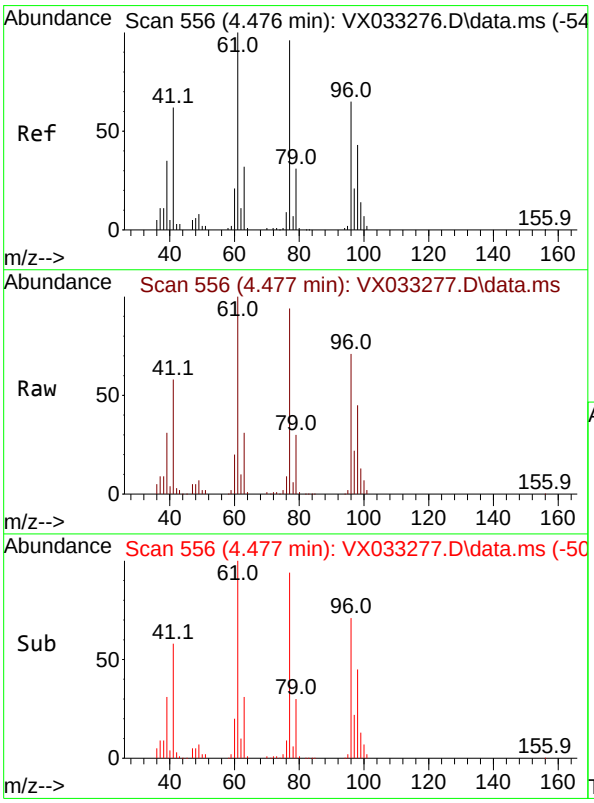
Ion	Ratio	Lower	Upper
43	100		
72	27.5	22.2	33.2



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

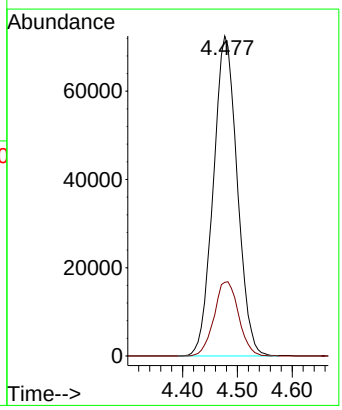
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

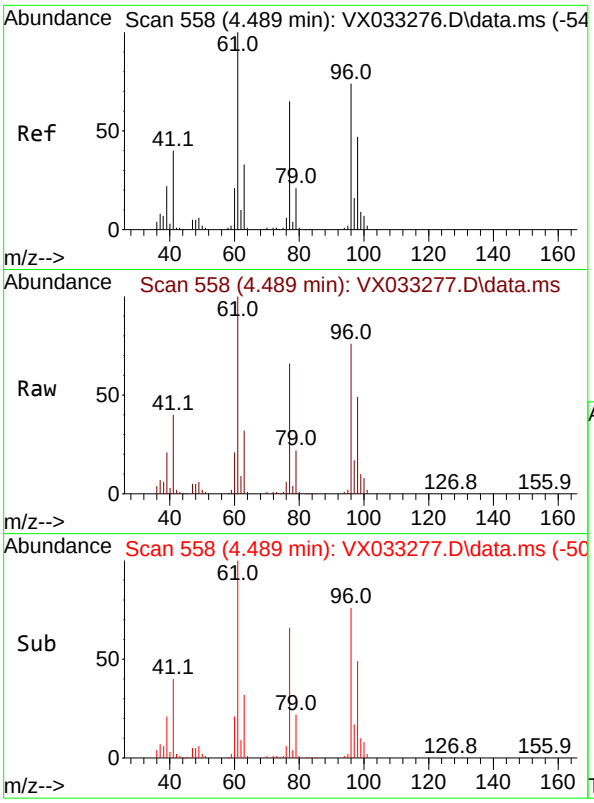


#26
2,2-Dichloropropane
Concen: 94.433 ug/l
RT: 4.477 min Scan# 556
Delta R.T. -0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion: 77 Resp: 220013

Ion	Ratio	Lower	Upper
77	100		
97	23.7	11.4	34.1





#27
cis-1,2-Dichloroethene
Concen: 101.740 ug/l
RT: 4.489 min Scan# 5
Delta R.T. -0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

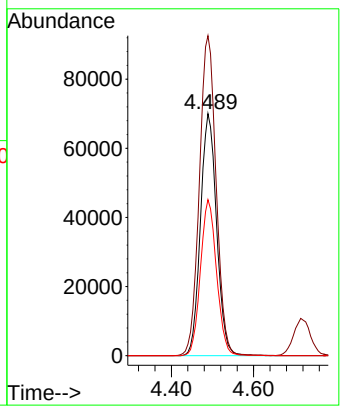
Tgt Ion: 96 Resp: 19045

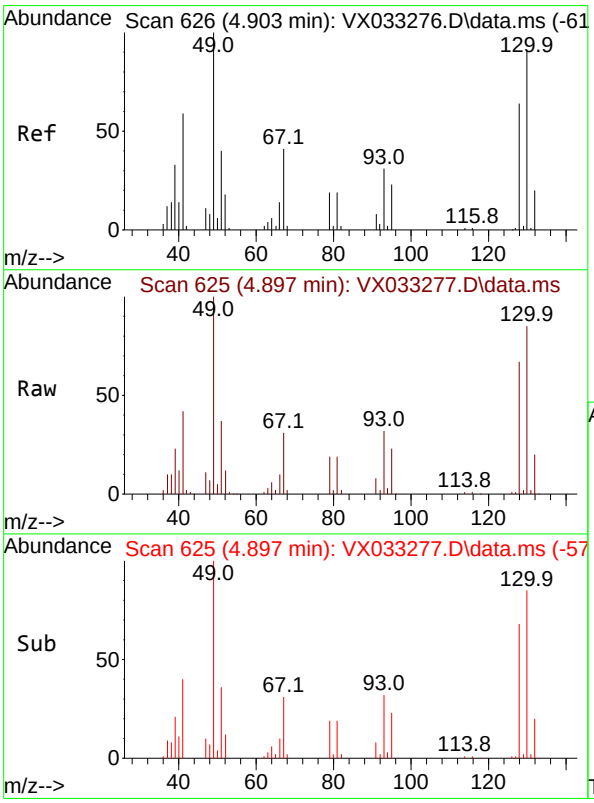
Ion	Ratio	Lower	Upper
96	100		
61	137.6	0.0	286.0
98	64.3	0.0	129.6

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

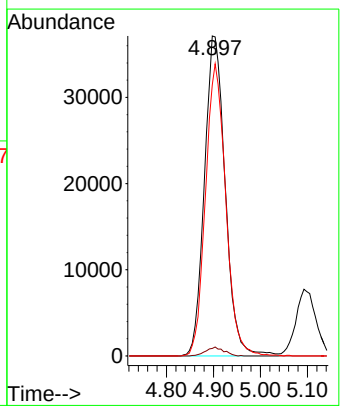


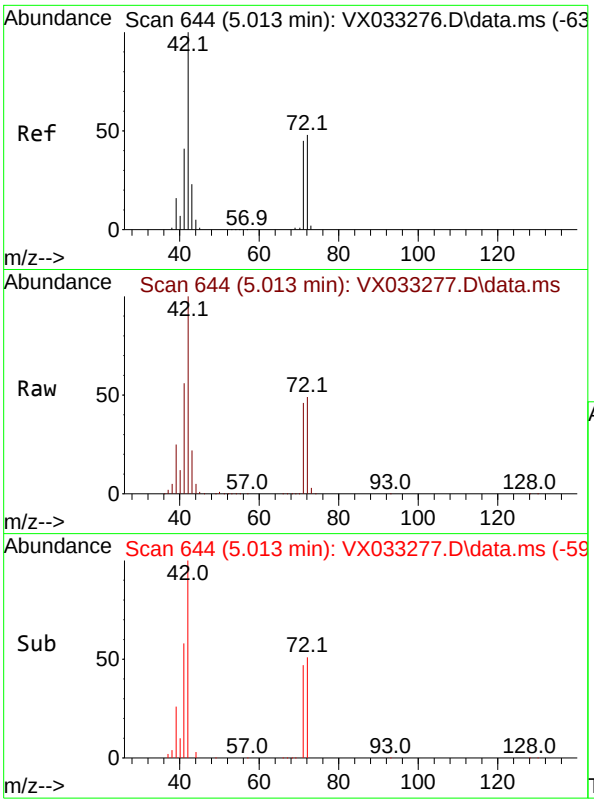


#28
Bromochloromethane
Concen: 89.540 ug/l
RT: 4.897 min Scan# 625
Delta R.T. -0.007 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion: 49 Resp: 114001

Ion	Ratio	Lower	Upper
49	100		
129	2.4	0.0	3.8
130	89.1	67.5	101.3

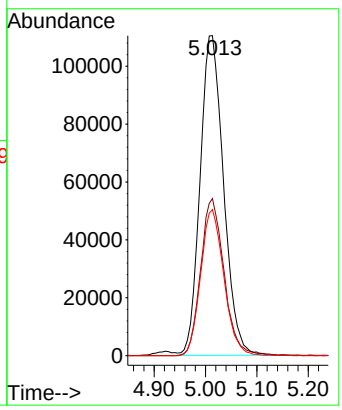




#29
Tetrahydrofuran
Concen: 533.548 ug/l
RT: 5.013 min Scan# 64
Delta R.T. 0.012 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion: 42 Resp: 35045

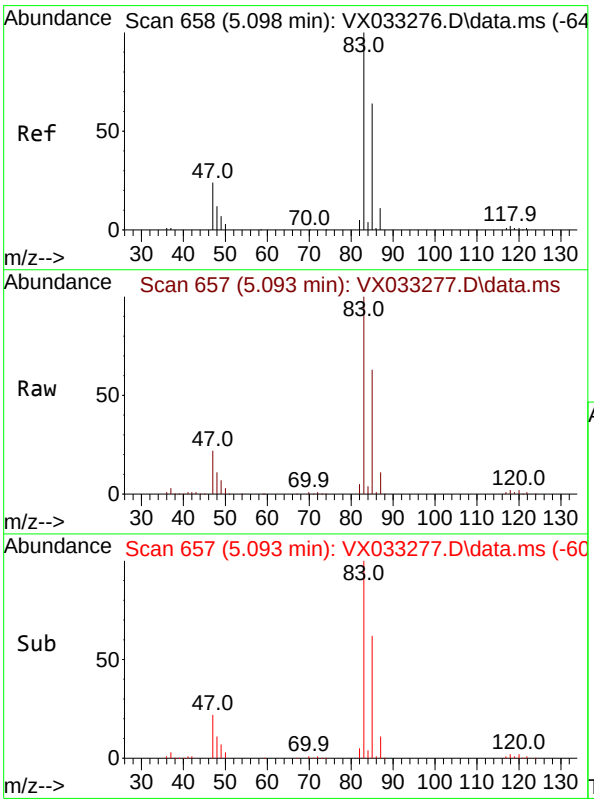
Ion	Ratio	Lower	Upper
42	100		
72	49.1	37.6	56.4
71	45.3	34.7	52.1



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

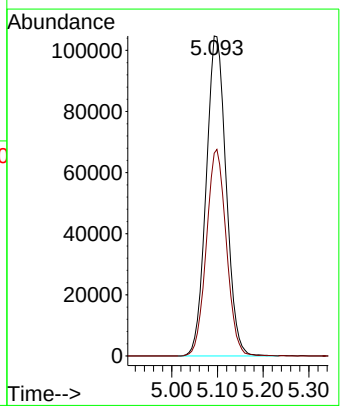
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

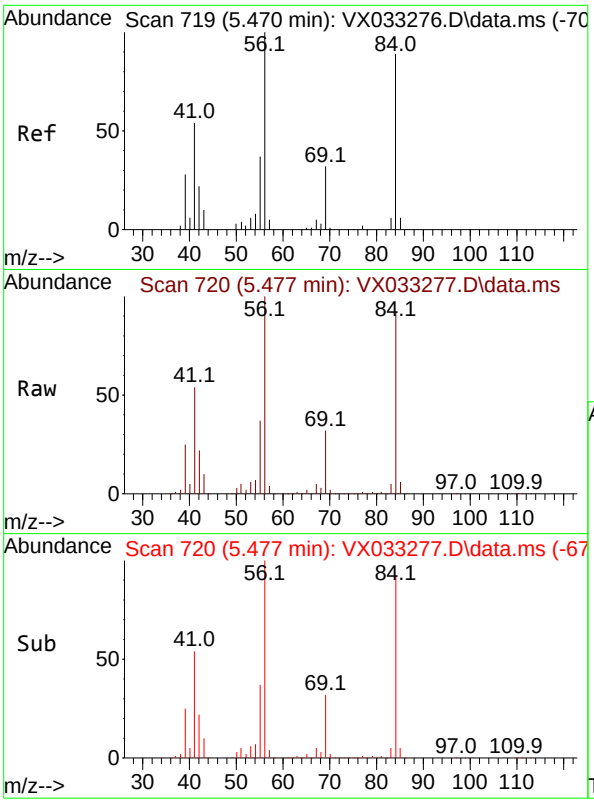


#30
Chloroform
Concen: 97.890 ug/l
RT: 5.093 min Scan# 657
Delta R.T. -0.006 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion: 83 Resp: 317680

Ion	Ratio	Lower	Upper
83	100		
85	63.4	51.1	76.7

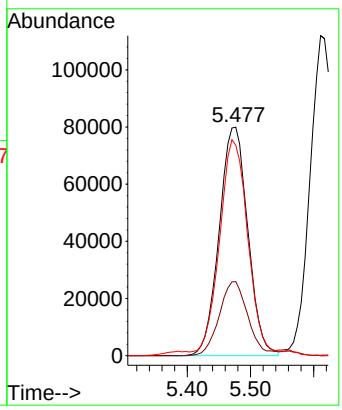




#31
Cyclohexane
Concen: 96.437 ug/l
RT: 5.477 min Scan# 7
Delta R.T. 0.007 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion: 56 Resp: 25116

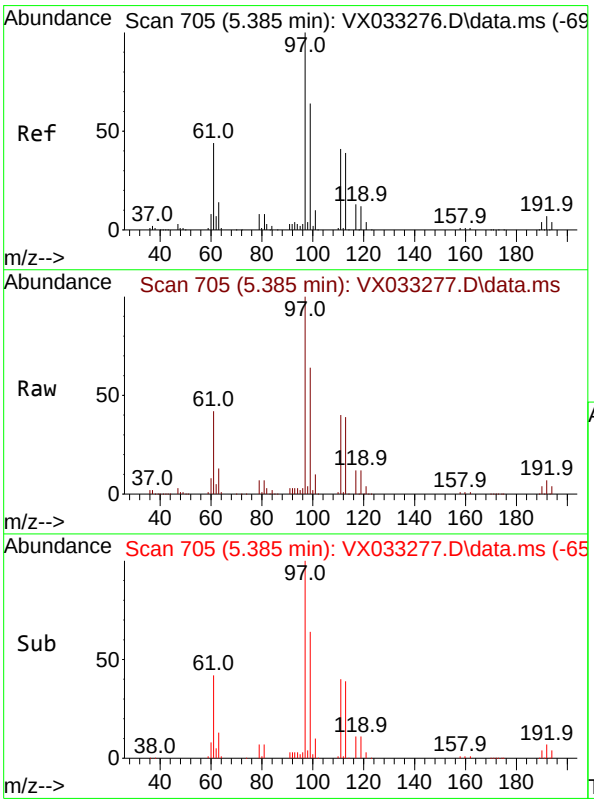
Ion	Ratio	Lower	Upper
56	100		
69	32.4	24.1	36.1
84	90.2	66.9	100.3



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

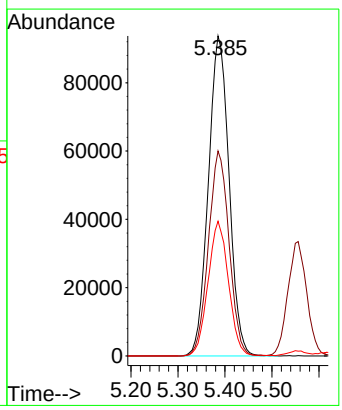
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

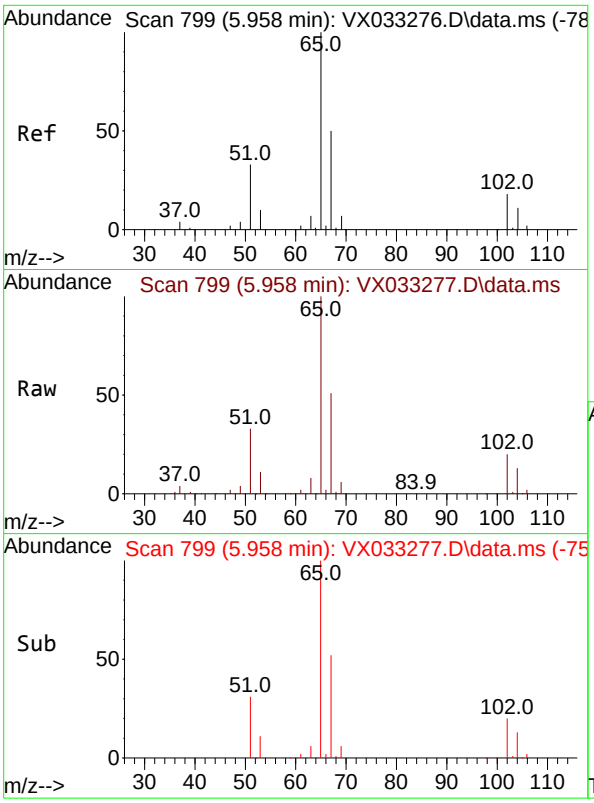


#32
1,1,1-Trichloroethane
Concen: 98.509 ug/l
RT: 5.385 min Scan# 705
Delta R.T. 0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion: 97 Resp: 286297

Ion	Ratio	Lower	Upper
97	100		
99	63.9	51.4	77.0
61	41.7	35.2	52.8





#33
1,2-Dichloroethane-d4
Concen: 51.808 ug/l
RT: 5.958 min Scan# 7
Delta R.T. 0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

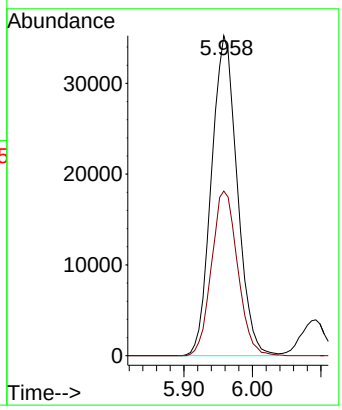
Tgt Ion: 65 Resp: 9211

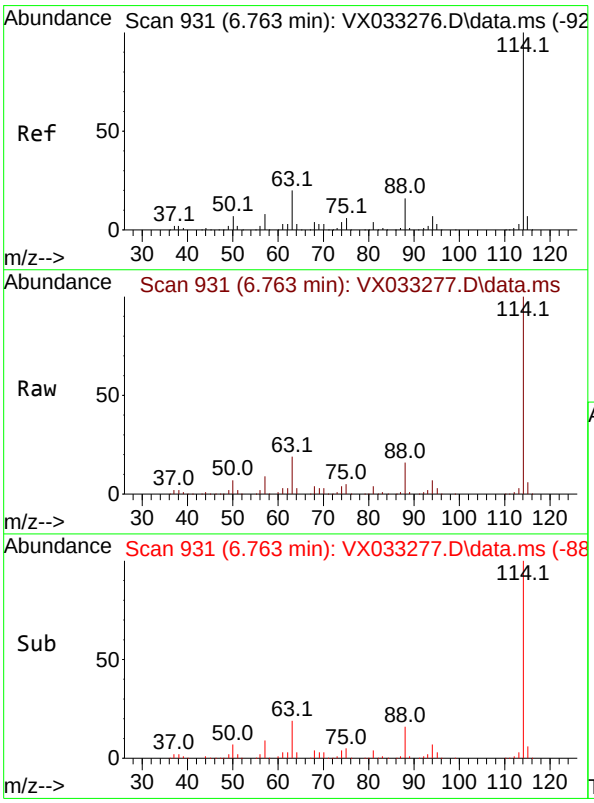
Ion	Ratio	Lower	Upper
65	100		
67	52.0	0.0	101.8

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

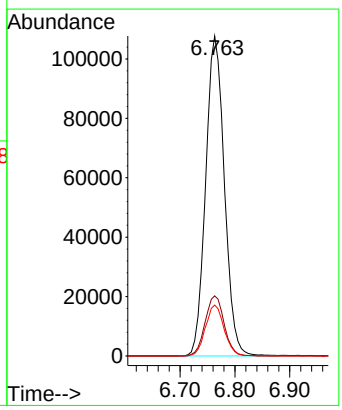


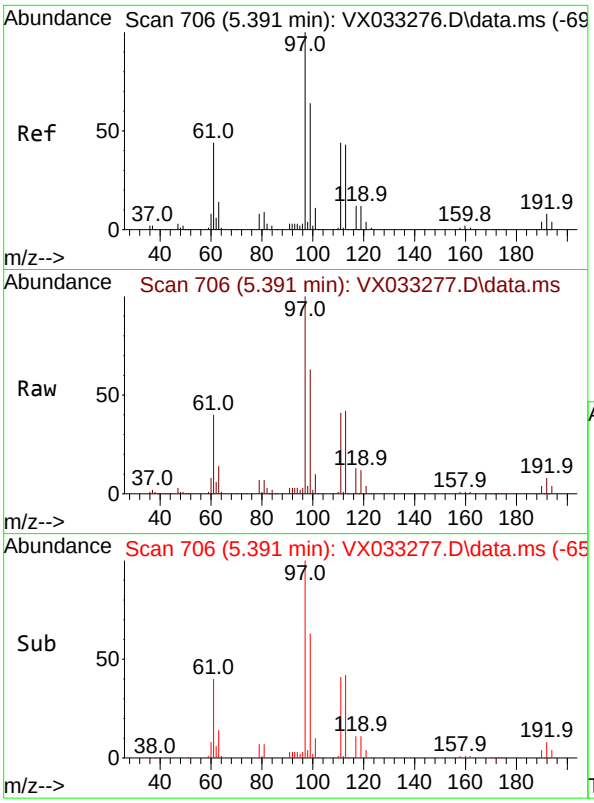


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 6.763 min Scan# 931
Delta R.T. -0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion:114 Resp: 255123

Ion	Ratio	Lower	Upper
114	100		
63	18.8	0.0	41.6
88	15.9	0.0	33.4

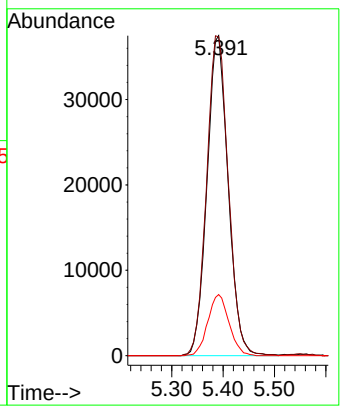




#35
Dibromofluoromethane
Concen: 74.342 ug/l
RT: 5.391 min Scan# 7
Delta R.T. 0.006 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion:113 Resp: 10692

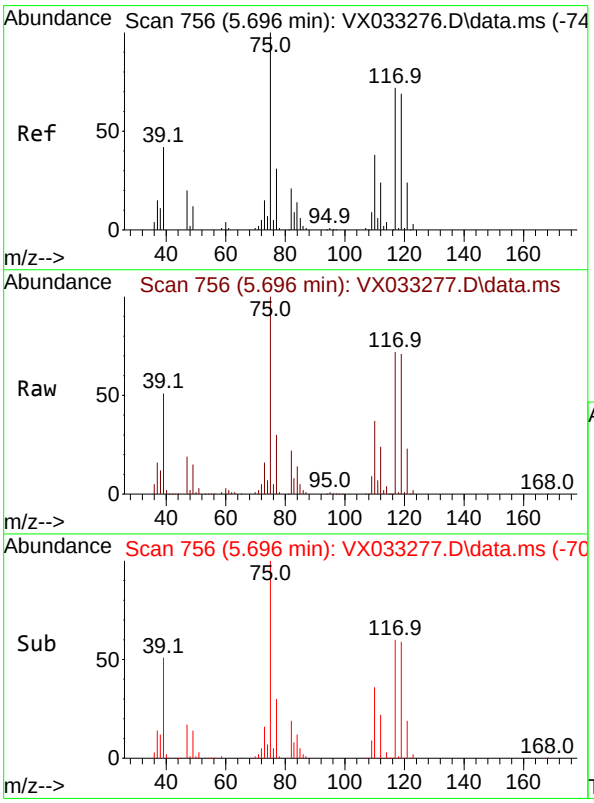
Ion	Ratio	Lower	Upper
113	100		
111	103.1	82.4	123.6
192	19.2	15.4	23.2



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

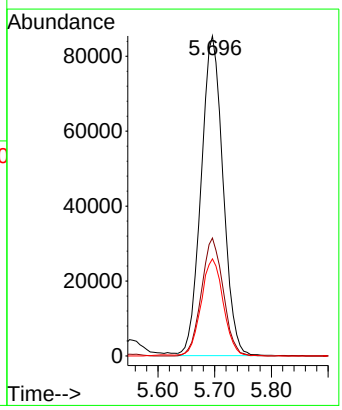
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

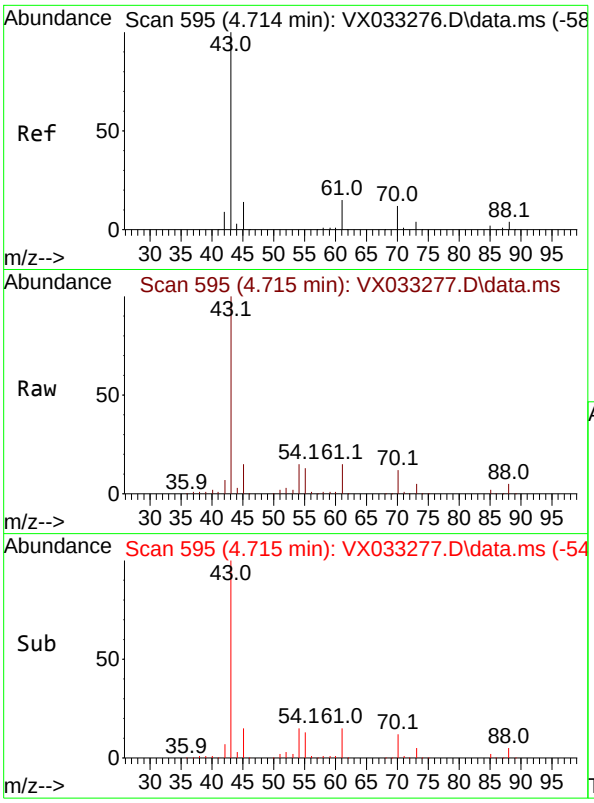


#36
1,1-Dichloropropene
Concen: 99.777 ug/l
RT: 5.696 min Scan# 756
Delta R.T. 0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion: 75 Resp: 229465

Ion	Ratio	Lower	Upper
75	100		
110	36.7	18.4	55.2
77	30.7	24.5	36.7

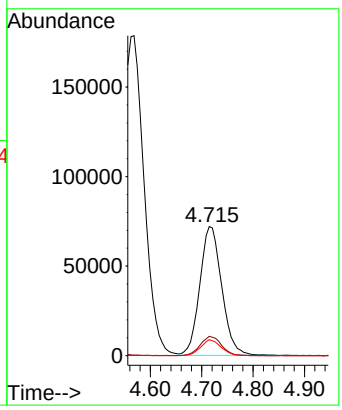




#37
Ethyl Acetate
Concen: 106.332 ug/l
RT: 4.715 min Scan# 5
Delta R.T. -0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion: 43 Resp: 21334

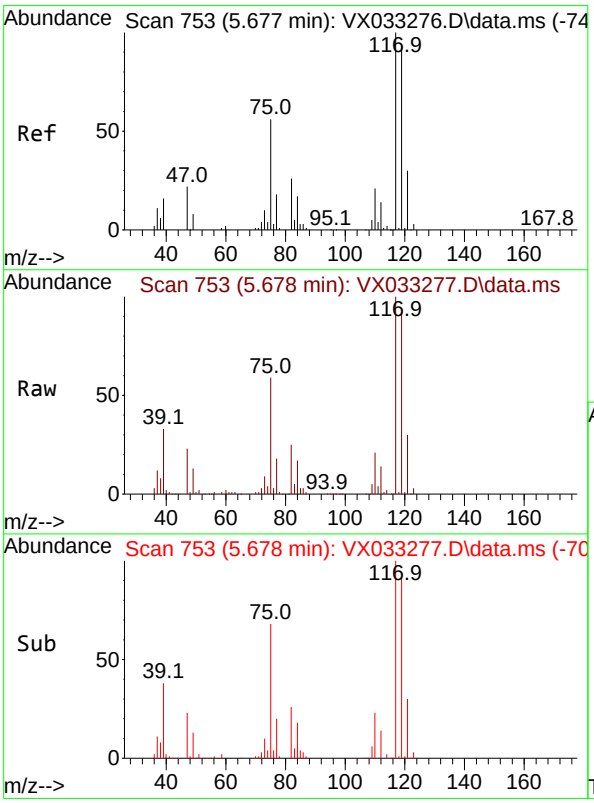
Ion	Ratio	Lower	Upper
43	100		
61	14.6	11.5	17.3
70	11.5	9.1	13.7



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

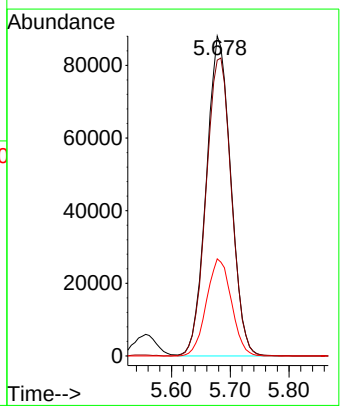
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

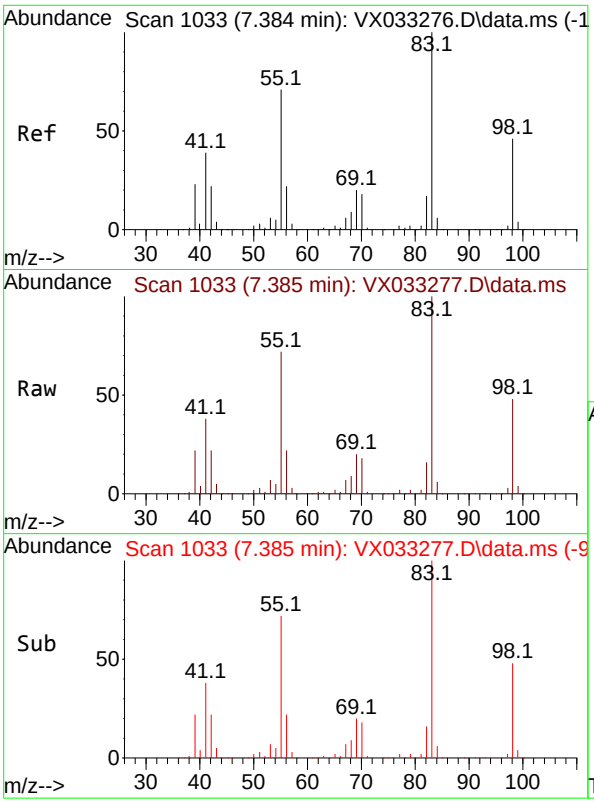


#38
Carbon Tetrachloride
Concen: 100.085 ug/l
RT: 5.678 min Scan# 753
Delta R.T. -0.006 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion:117 Resp: 255340

Ion	Ratio	Lower	Upper
117	100		
119	92.3	77.2	115.8
121	30.3	25.8	38.6

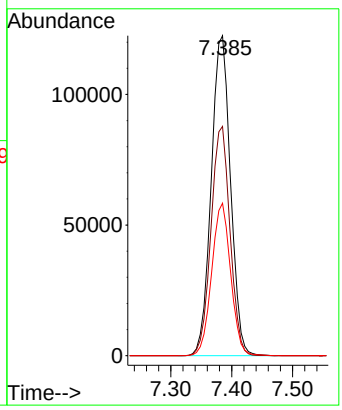




#39
Methylcyclohexane
Concen: 102.633 ug/l
RT: 7.385 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion: 83 Resp: 26930

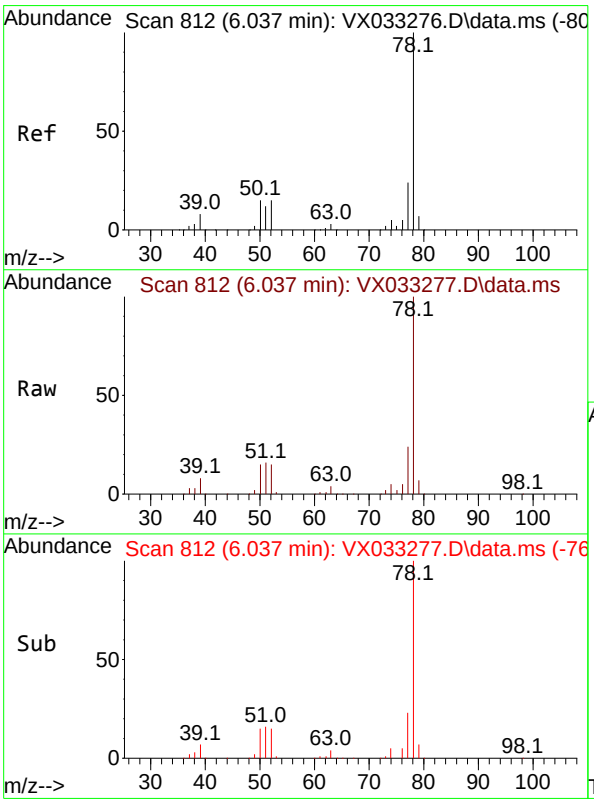
Ion	Ratio	Lower	Upper
83	100		
55	71.7	58.4	87.6
98	47.6	37.2	55.8



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

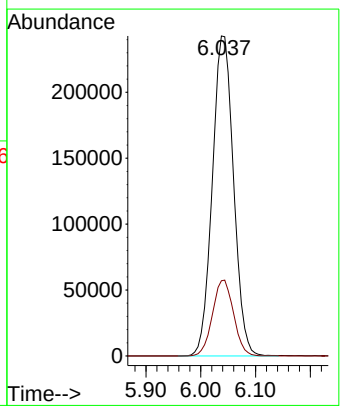
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

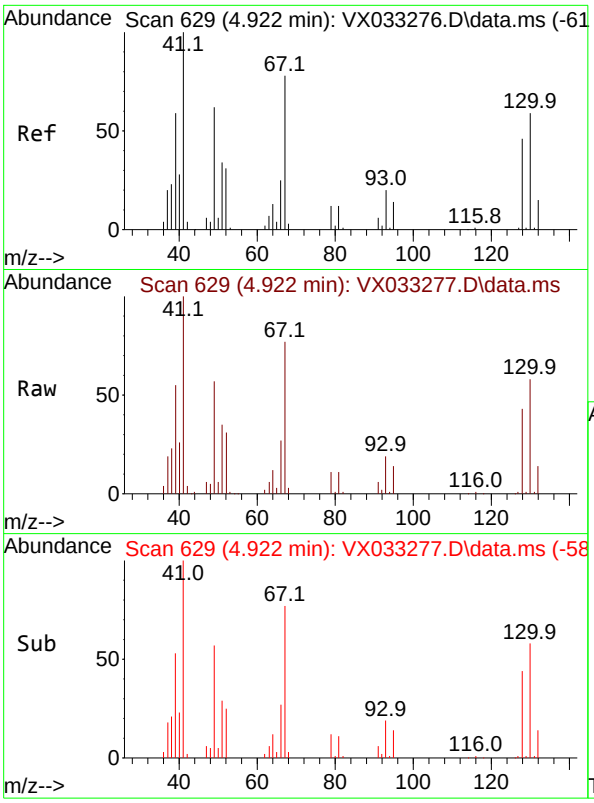


#40
Benzene
Concen: 101.314 ug/l
RT: 6.037 min Scan# 812
Delta R.T. 0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion: 78 Resp: 653275

Ion	Ratio	Lower	Upper
78	100		
77	23.5	19.0	28.4

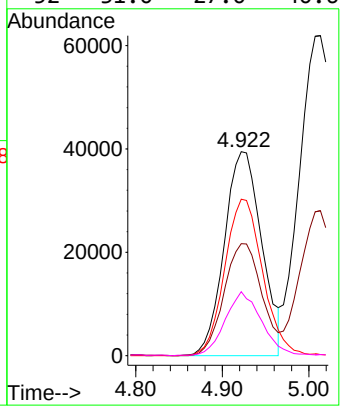




#41
Methacrylonitrile
Concen: 104.856 ug/l
RT: 4.922 min Scan# 6
Delta R.T. -0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion: 41 Resp: 11838

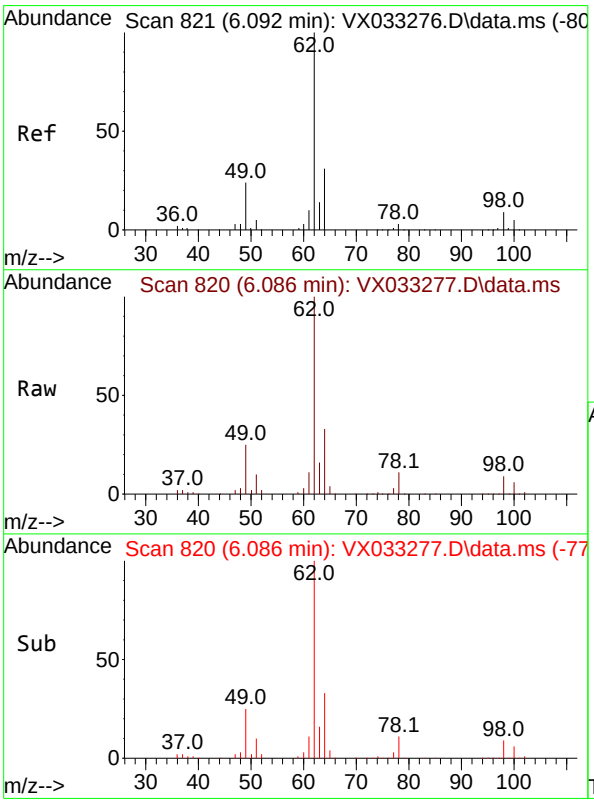
Ion	Ratio	Lower	Upper
41	100		
39	55.4	47.5	71.3
67	78.1	60.5	90.7
52	31.0	27.0	40.6



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

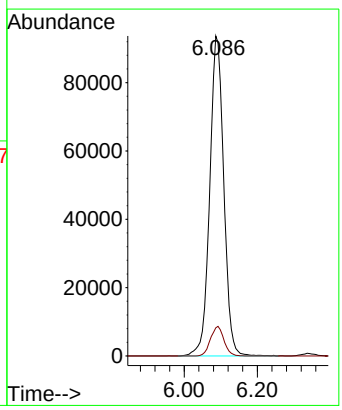
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

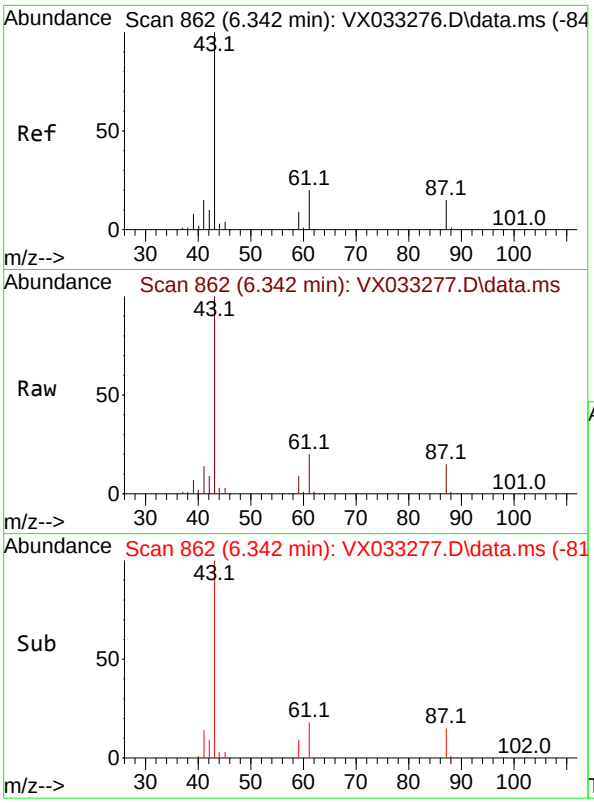


#42
1,2-Dichloroethane
Concen: 95.974 ug/l
RT: 6.086 min Scan# 820
Delta R.T. 0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion: 62 Resp: 249168

Ion	Ratio	Lower	Upper
62	100		
98	8.9	0.0	16.0

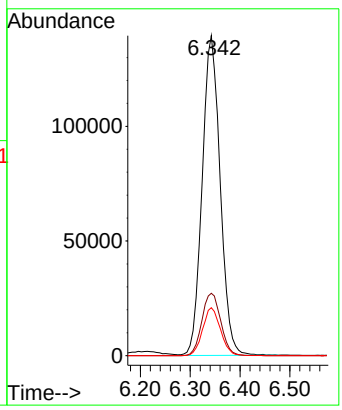




#43
Isopropyl Acetate
Concen: 105.360 ug/l
RT: 6.342 min Scan# 8
Delta R.T. 0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion: 43 Resp: 34960

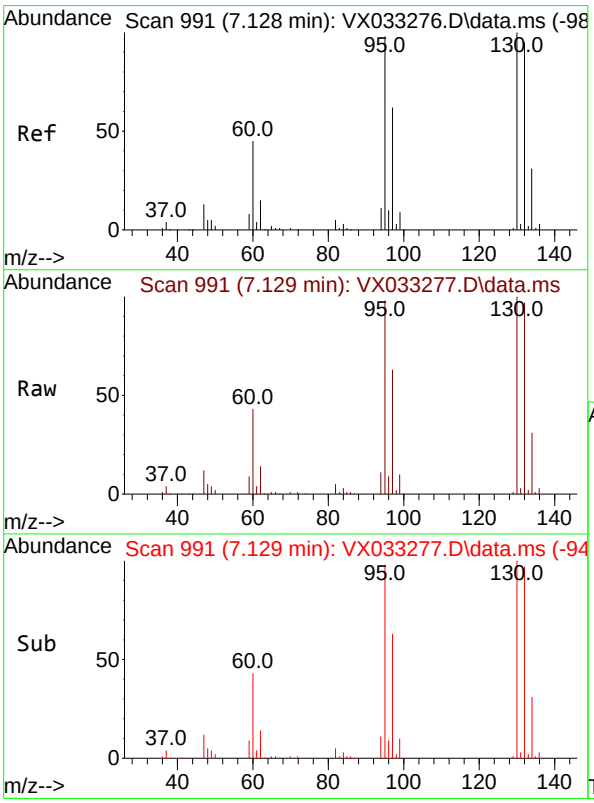
Ion	Ratio	Lower	Upper
43	100		
61	20.4	15.4	23.0
87	14.9	10.8	16.2



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

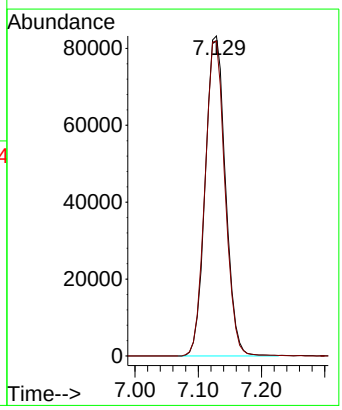
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

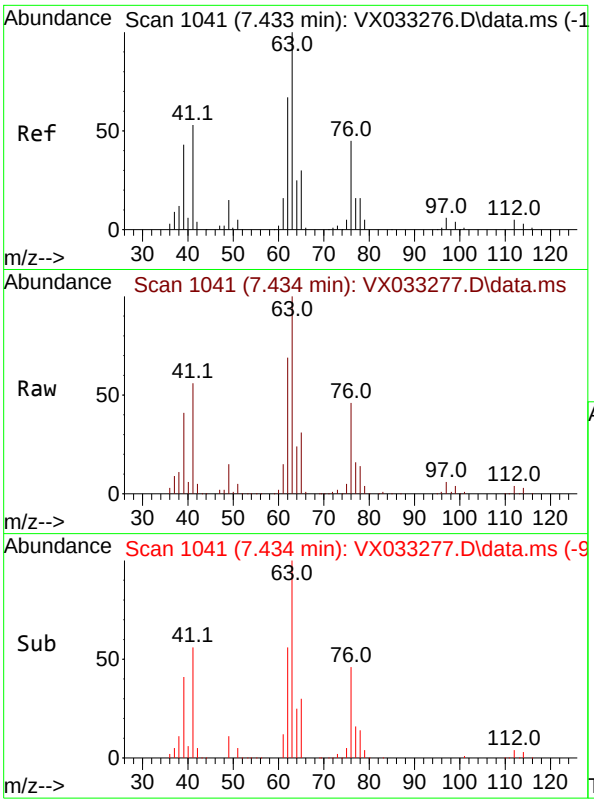


#44
Trichloroethene
Concen: 101.780 ug/l
RT: 7.129 min Scan# 991
Delta R.T. -0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion:130 Resp: 184157

Ion	Ratio	Lower	Upper
130	100		
95	98.3	0.0	195.2

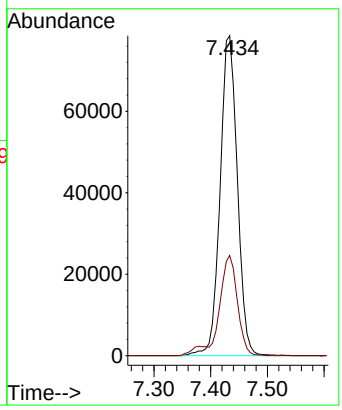




#45
1,2-Dichloropropane
Concen: 103.903 ug/l
RT: 7.434 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion: 63 Resp: 16557

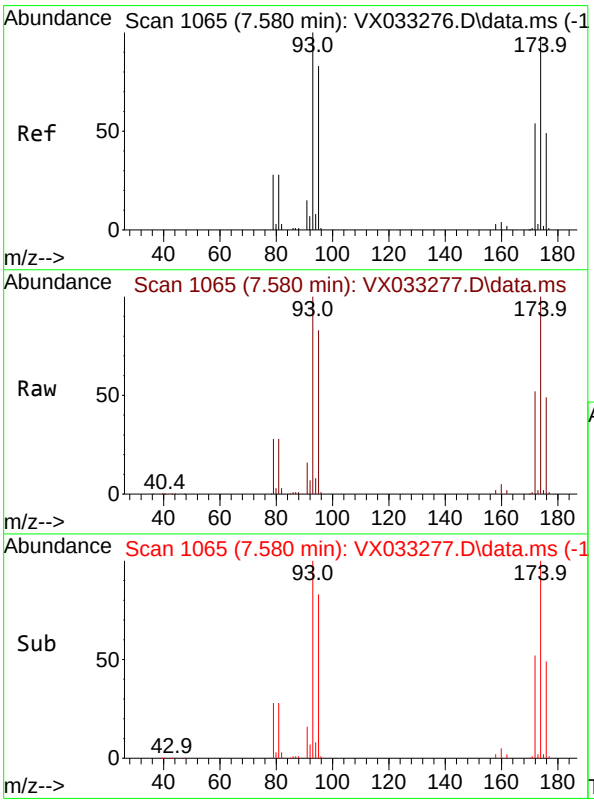
Ion	Ratio	Lower	Upper
63	100		
65	31.3	24.6	36.8



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

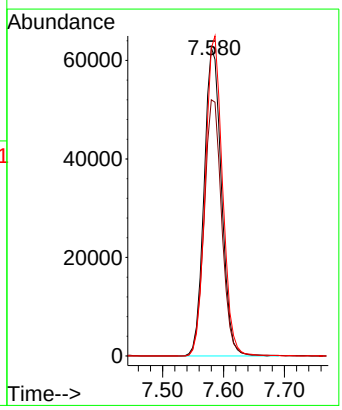
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

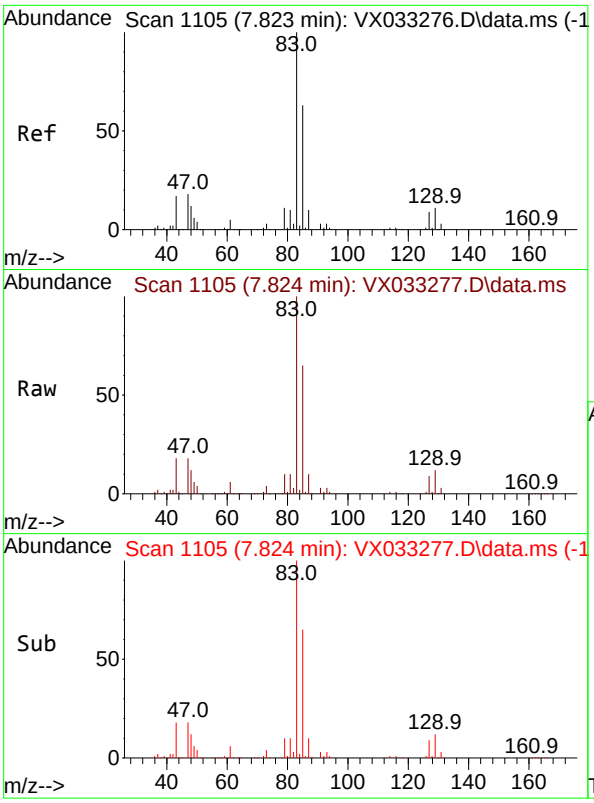


#46
Dibromomethane
Concen: 99.831 ug/l
RT: 7.580 min Scan# 1065
Delta R.T. -0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion: 93 Resp: 124128

Ion	Ratio	Lower	Upper
93	100		
95	83.6	65.8	98.8
174	102.7	79.8	119.6

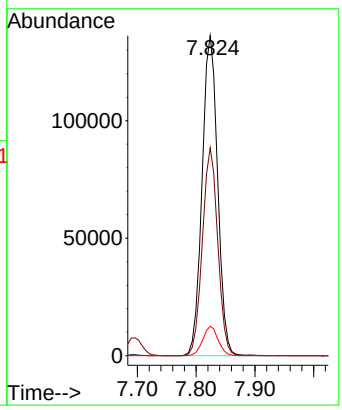




#47
Bromodichloromethane
Concen: 104.337 ug/l
RT: 7.824 min Scan# 11
Delta R.T. -0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion: 83 Resp: 25067

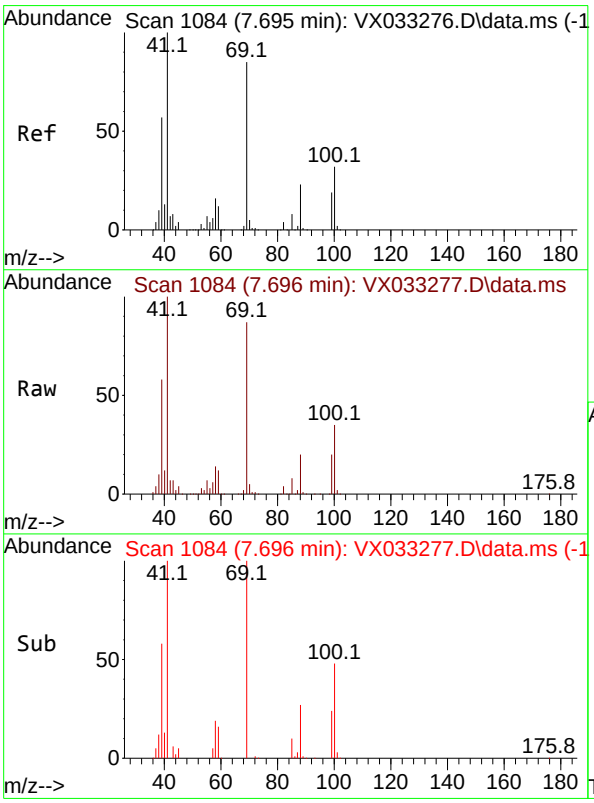
Ion	Ratio	Lower	Upper
83	100		
85	64.9	52.2	78.4
127	9.2	7.4	11.2



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

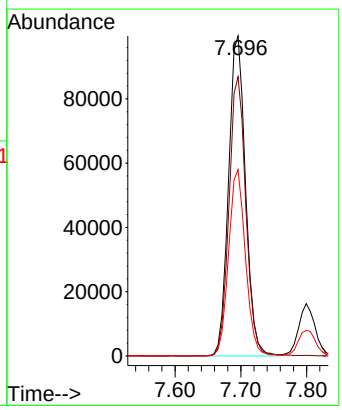
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

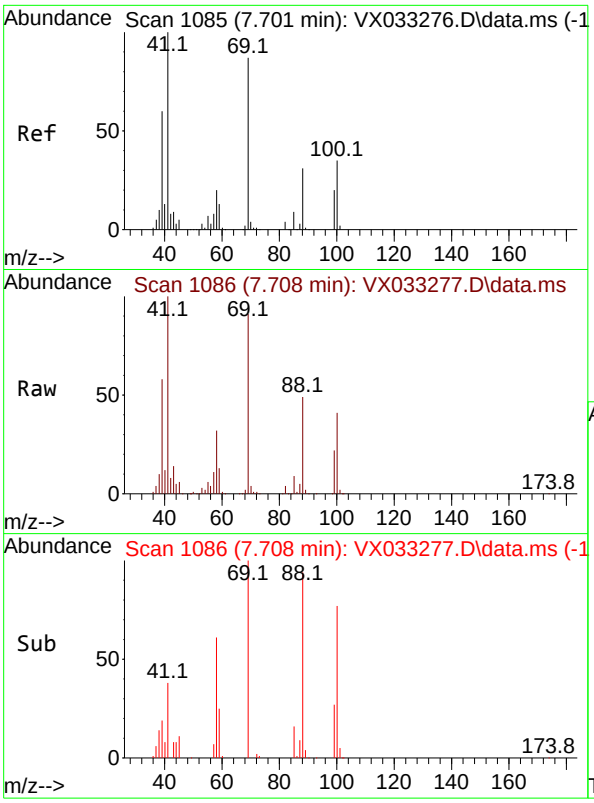


#48
Methyl methacrylate
Concen: 104.542 ug/l
RT: 7.696 min Scan# 1084
Delta R.T. -0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion: 41 Resp: 178559

Ion	Ratio	Lower	Upper
41	100		
69	86.8	65.1	97.7
39	57.9	51.9	77.9





#49
1,4-Dioxane
Concen: 2599.008 ug/l
RT: 7.708 min Scan# 1
Delta R.T. 0.037 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

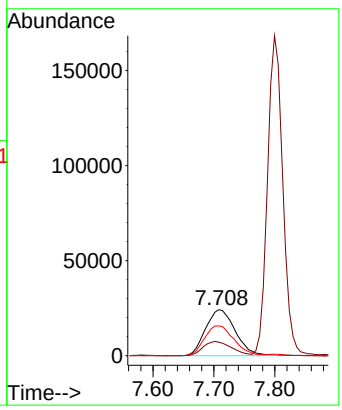
Tgt Ion: 88 Resp: 8171

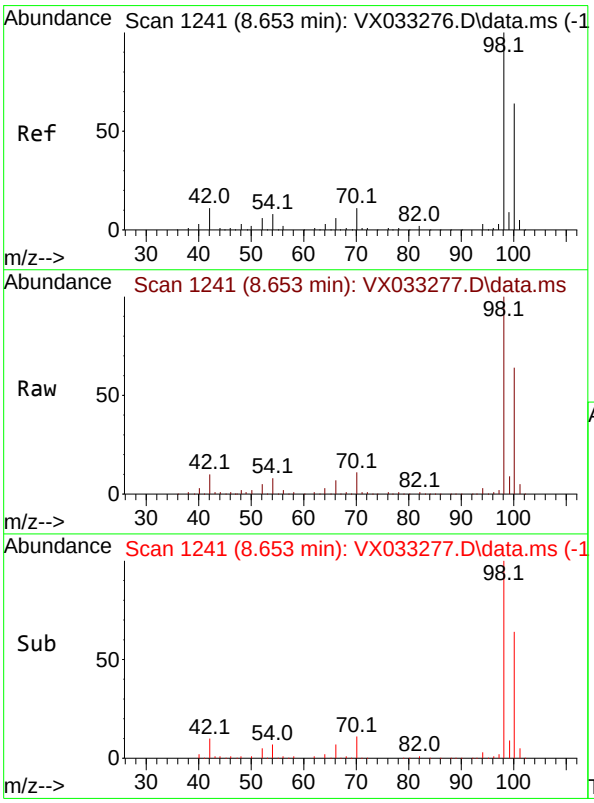
Ion	Ratio	Lower	Upper
88	100		
43	29.3	26.6	39.8
58	64.5	51.7	77.5

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

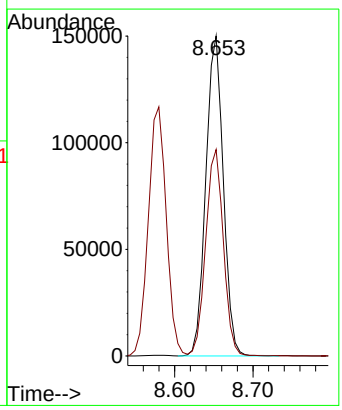


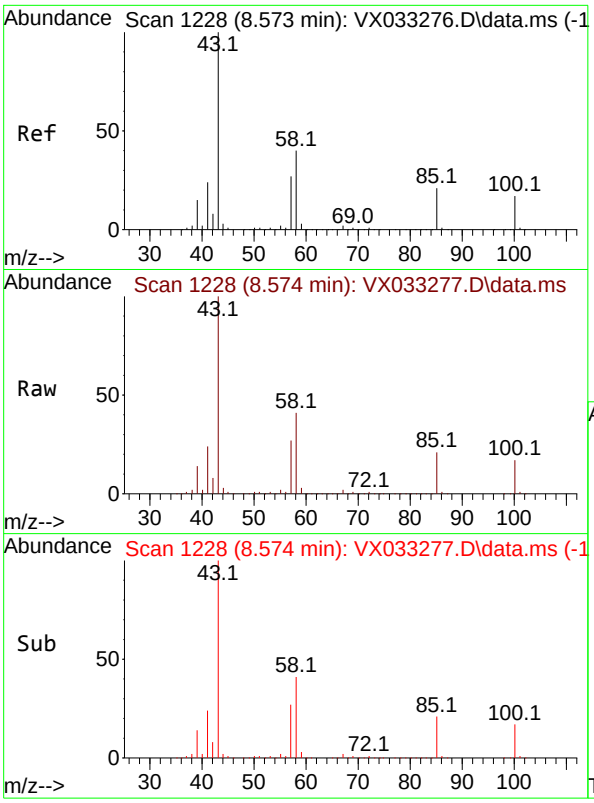


#50
Toluene-d8
Concen: 49.636 ug/l
RT: 8.653 min Scan# 1241
Delta R.T. -0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion: 98 Resp: 231771

Ion	Ratio	Lower	Upper
98	100		
100	65.1	50.9	76.3

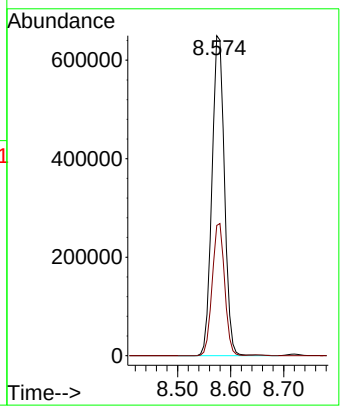




#51
4-Methyl-2-Pentanone
Concen: 519.198 ug/l
RT: 8.574 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion: 43 Resp: 106308

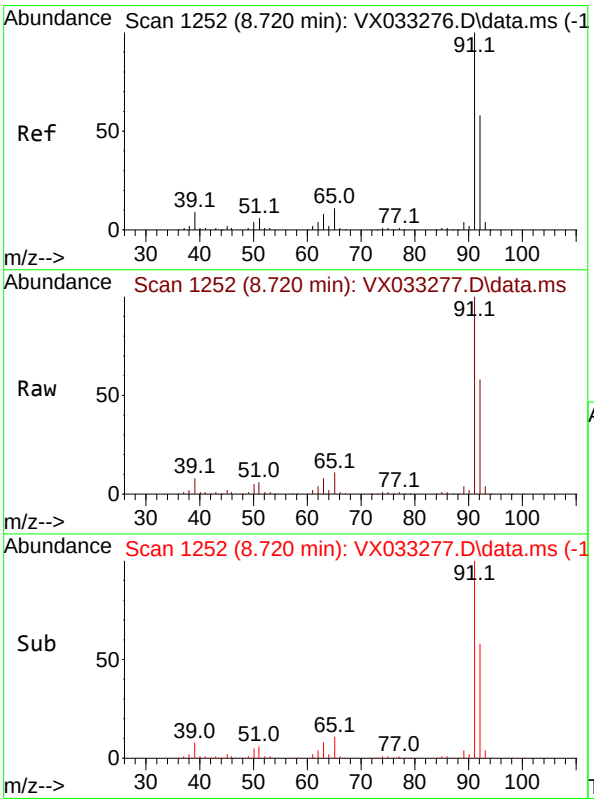
Ion	Ratio	Lower	Upper
43	100		
58	41.2	30.9	46.3



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

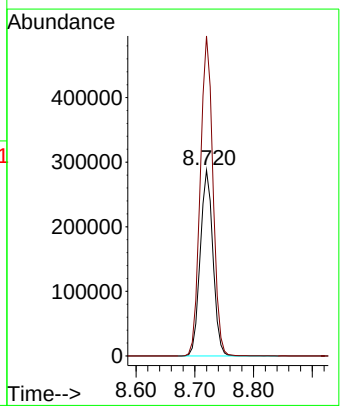
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

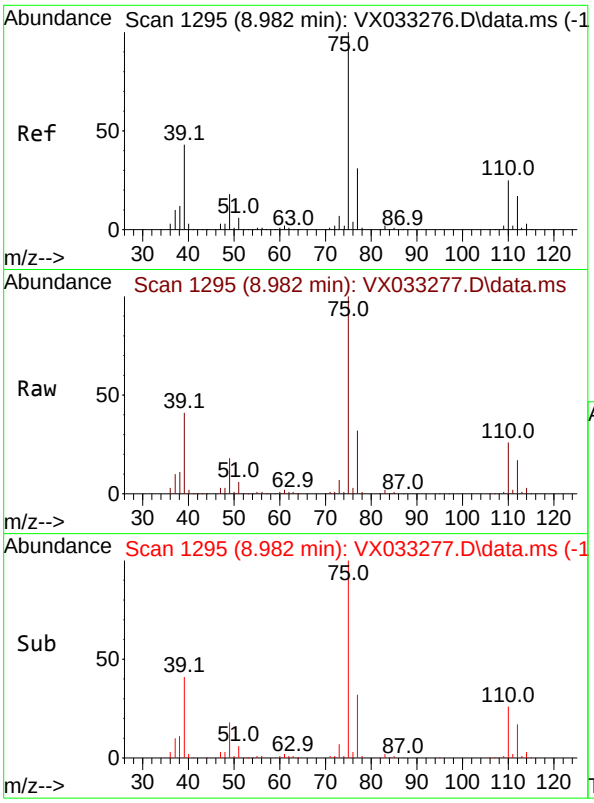


#52
Toluene
Concen: 101.600 ug/l
RT: 8.720 min Scan# 1252
Delta R.T. -0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion: 92 Resp: 431003

Ion	Ratio	Lower	Upper
92	100		
91	171.9	138.3	207.5

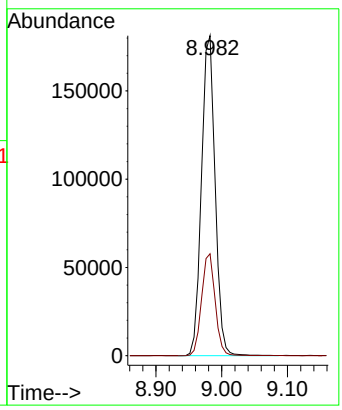




#53
t-1,3-Dichloropropene
Concen: 110.875 ug/l
RT: 8.982 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion: 75 Resp: 26146

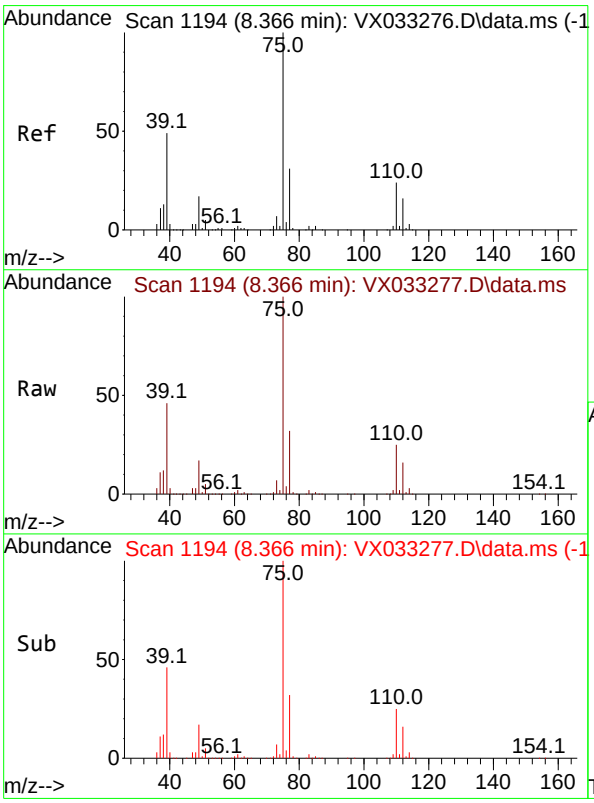
Ion	Ratio	Lower	Upper
75	100		
77	31.8	25.1	37.7



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

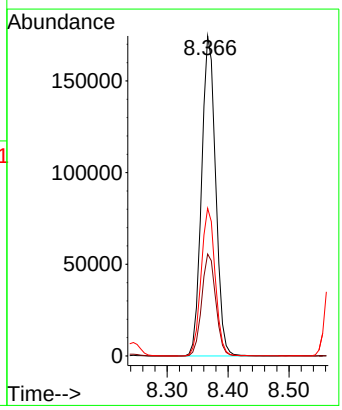
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

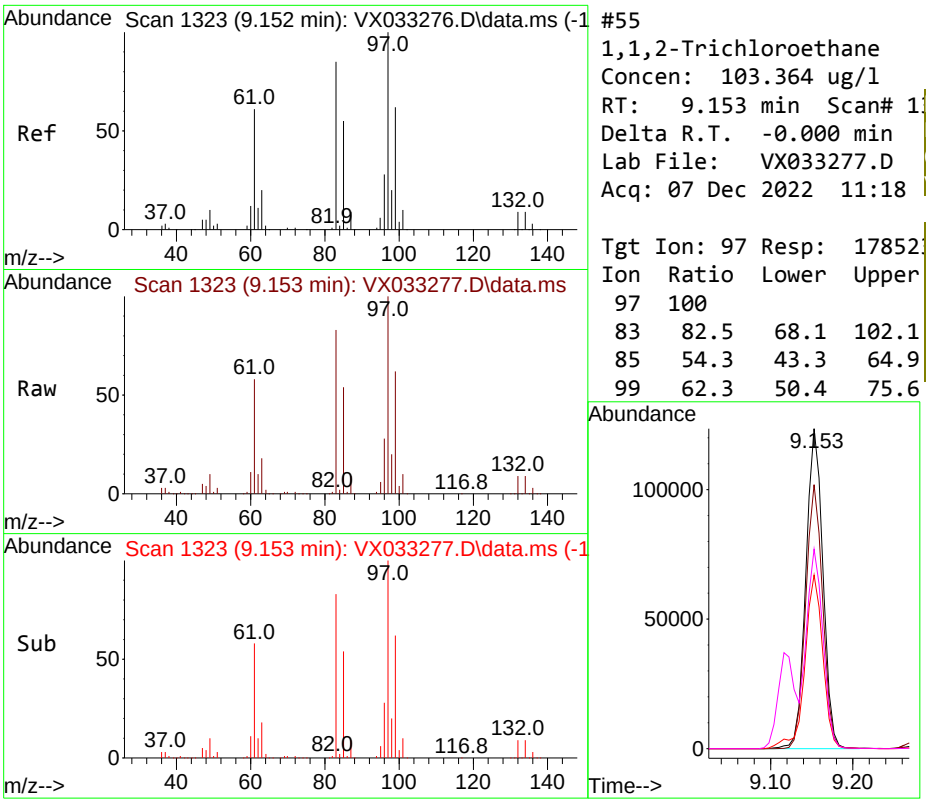


#54
cis-1,3-Dichloropropene
Concen: 108.114 ug/l
RT: 8.366 min Scan# 1194
Delta R.T. 0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion: 75 Resp: 280027

Ion	Ratio	Lower	Upper
75	100		
77	31.8	25.1	37.7
39	46.2	45.5	68.3





#55
1,1,2-Trichloroethane
Concen: 103.364 ug/l
RT: 9.153 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

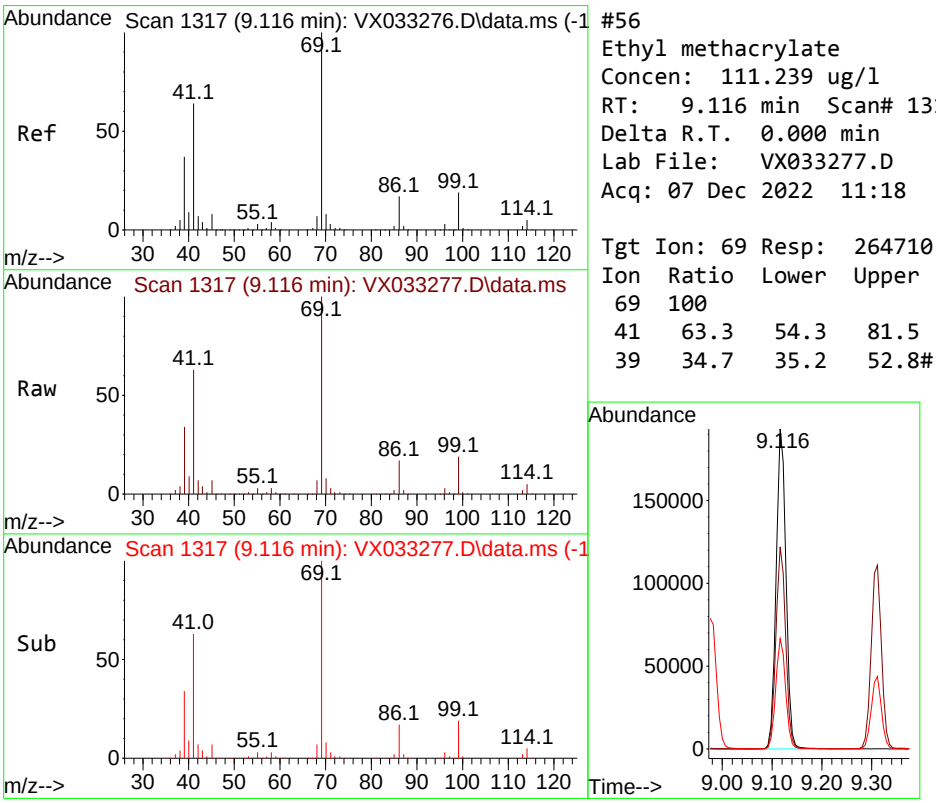
Tgt Ion: 97 Resp: 17852

Ion	Ratio	Lower	Upper
97	100		
83	82.5	68.1	102.1
85	54.3	43.3	64.9
99	62.3	50.4	75.6

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

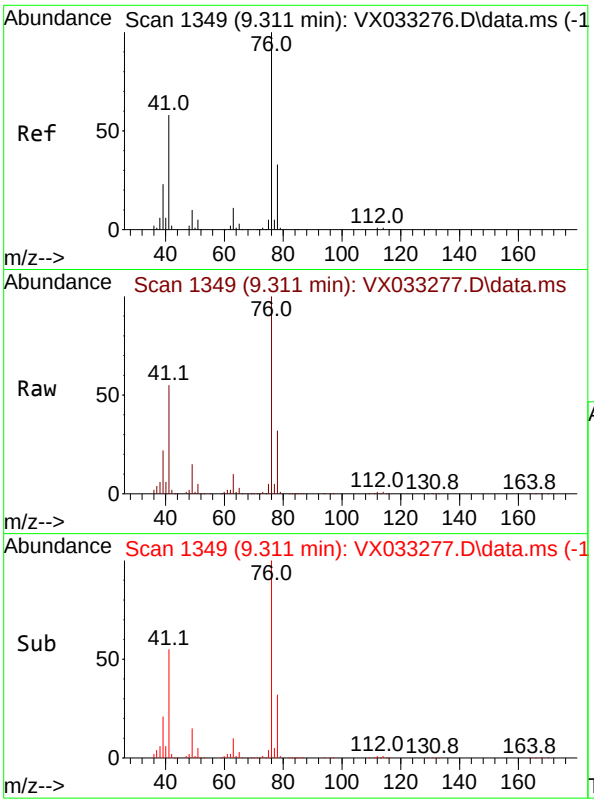
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022



#56
Ethyl methacrylate
Concen: 111.239 ug/l
RT: 9.116 min Scan# 1317
Delta R.T. 0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion: 69 Resp: 264710

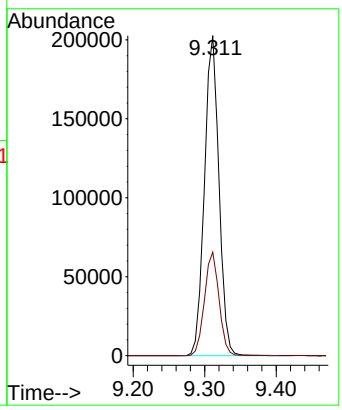
Ion	Ratio	Lower	Upper
69	100		
41	63.3	54.3	81.5
39	34.7	35.2	52.8#



#57
1,3-Dichloropropane
Concen: 102.351 ug/l
RT: 9.311 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion: 76 Resp: 28537

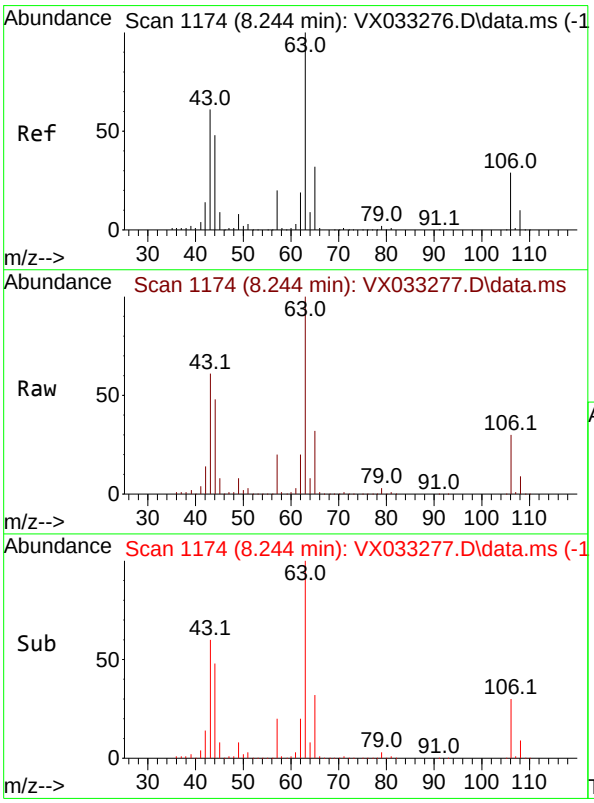
Ion	Ratio	Lower	Upper
76	100		
78	32.4	26.0	39.0



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

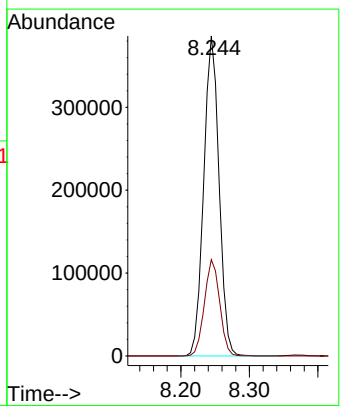
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

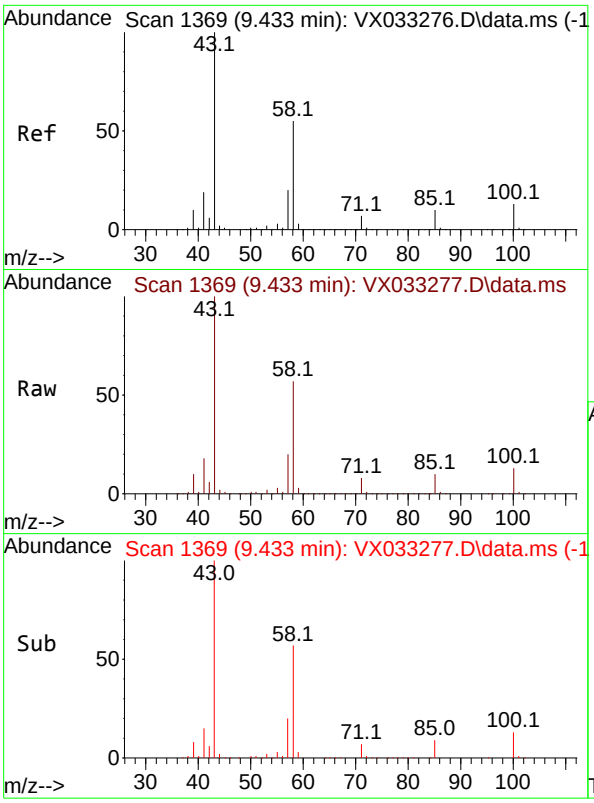


#58
2-Chloroethyl Vinyl ether
Concen: 532.046 ug/l
RT: 8.244 min Scan# 1174
Delta R.T. 0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion: 63 Resp: 601216

Ion	Ratio	Lower	Upper
63	100		
106	30.0	23.3	34.9





#59
2-Hexanone
Concen: 513.655 ug/l
RT: 9.433 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

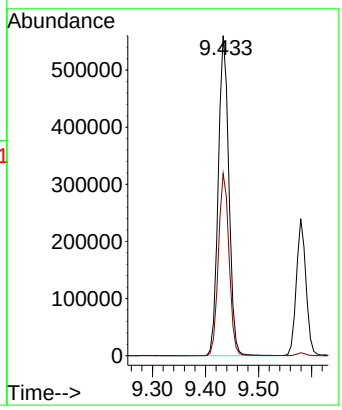
Tgt Ion: 43 Resp: 77693

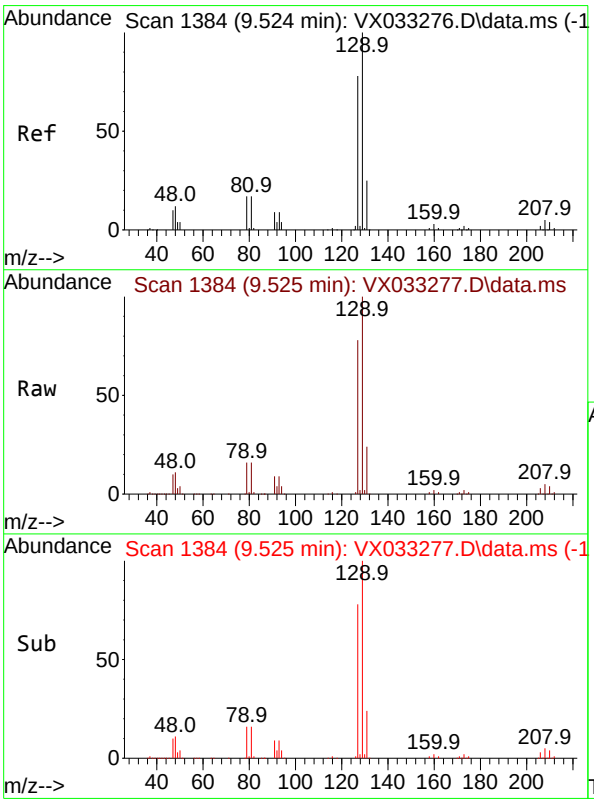
Ion	Ratio	Lower	Upper
43	100		
58	57.2	26.5	79.5

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

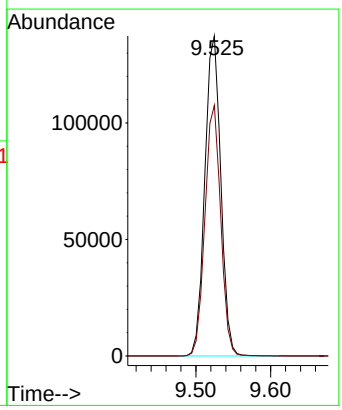


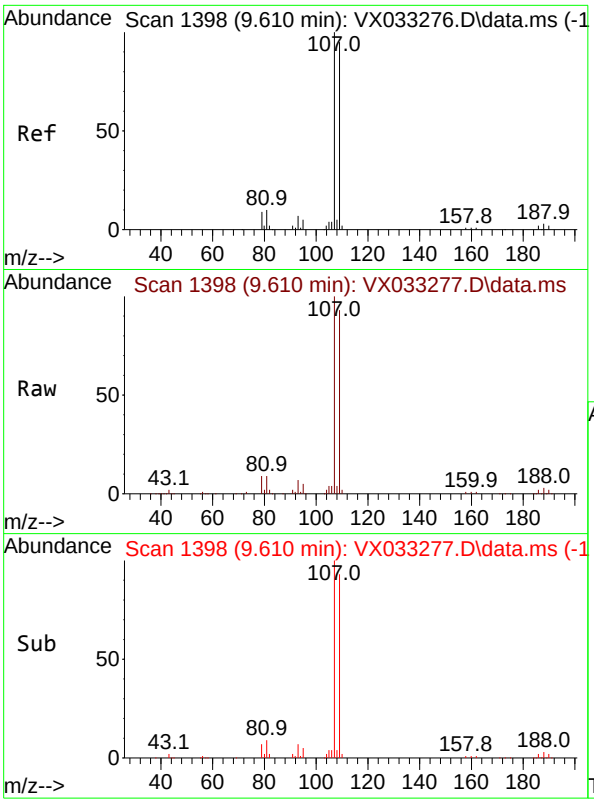


#60
Dibromochloromethane
Concen: 109.532 ug/l
RT: 9.525 min Scan# 1384
Delta R.T. -0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion:129 Resp: 203673

Ion	Ratio	Lower	Upper
129	100		
127	77.6	38.6	115.8

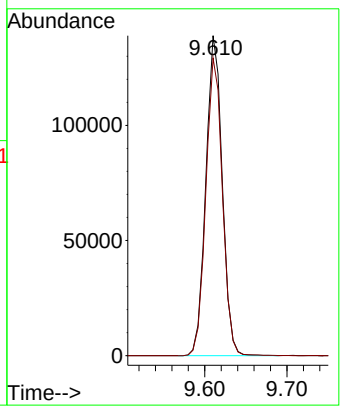




#61
1,2-Dibromoethane
Concen: 105.569 ug/l
RT: 9.610 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion:107 Resp: 19245

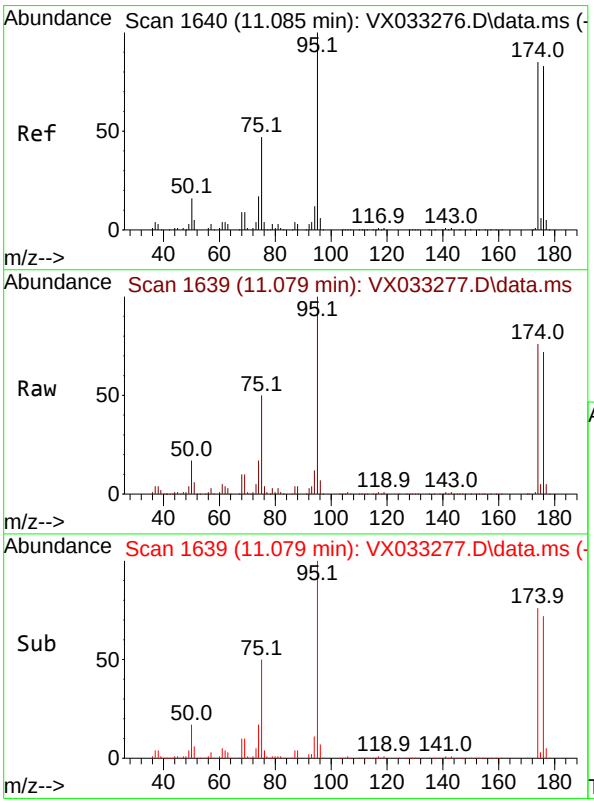
Ion	Ratio	Lower	Upper
107	100		
109	94.2	76.0	114.0



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

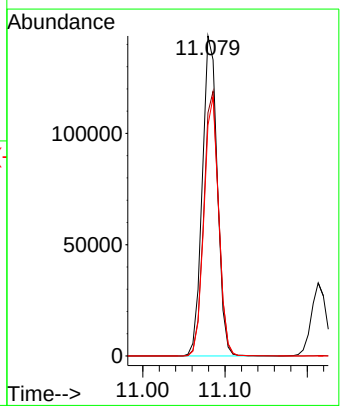
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

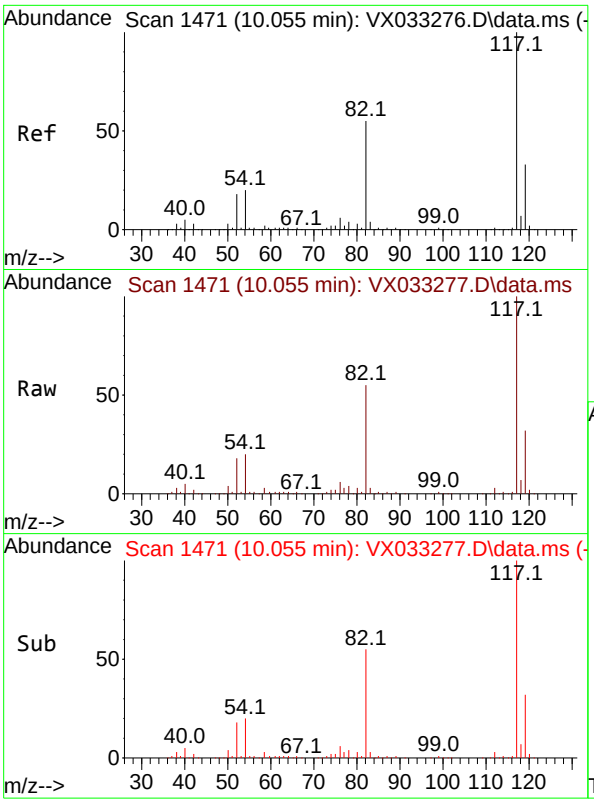


#62
4-Bromofluorobenzene
Concen: 96.253 ug/l
RT: 11.079 min Scan# 1639
Delta R.T. 0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion: 95 Resp: 181855

Ion	Ratio	Lower	Upper
95	100		
174	81.9	0.0	164.0
176	79.6	0.0	154.4

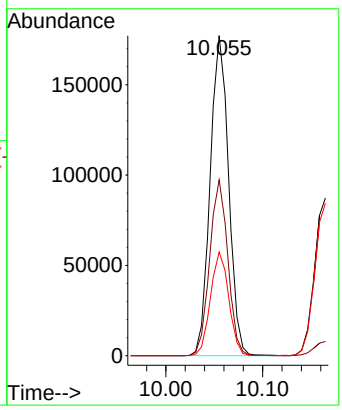




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.055 min Scan# 14
Delta R.T. 0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion:117 Resp: 23475

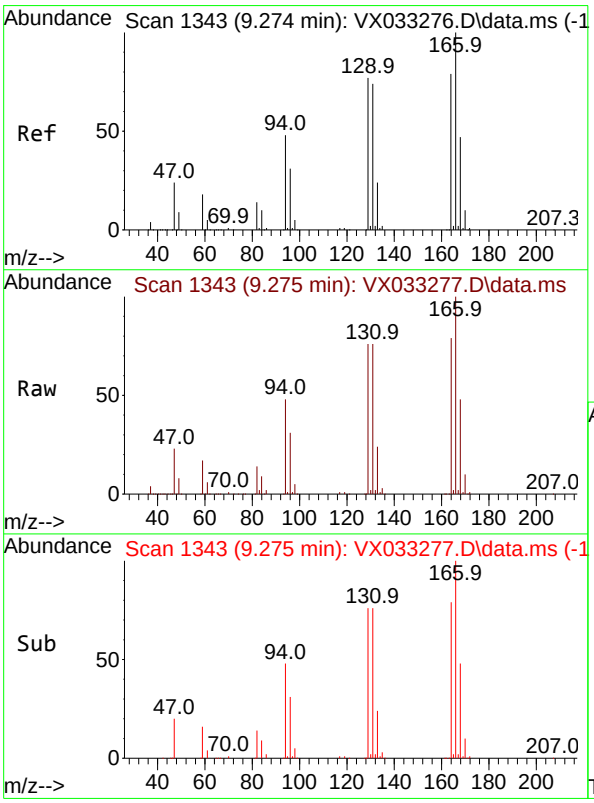
Ion	Ratio	Lower	Upper
117	100		
82	54.9	44.3	66.5
119	32.4	25.7	38.5



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

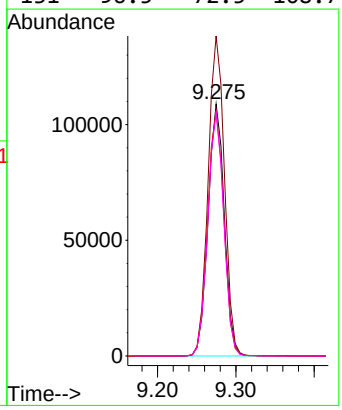
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

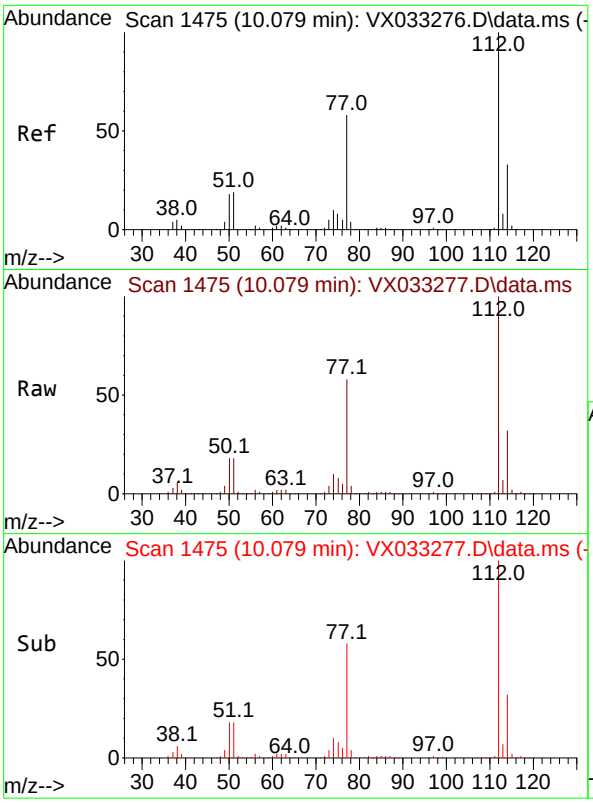


#64
Tetrachloroethene
Concen: 93.745 ug/l
RT: 9.275 min Scan# 1343
Delta R.T. -0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion:164 Resp: 155777

Ion	Ratio	Lower	Upper
164	100		
166	127.0	105.4	158.2
129	97.1	78.2	117.2
131	96.5	72.5	108.7

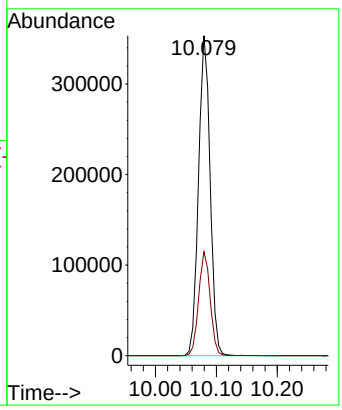




#65
Chlorobenzene
Concen: 99.602 ug/l
RT: 10.079 min Scan# 14
Delta R.T. 0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion:112 Resp: 46618

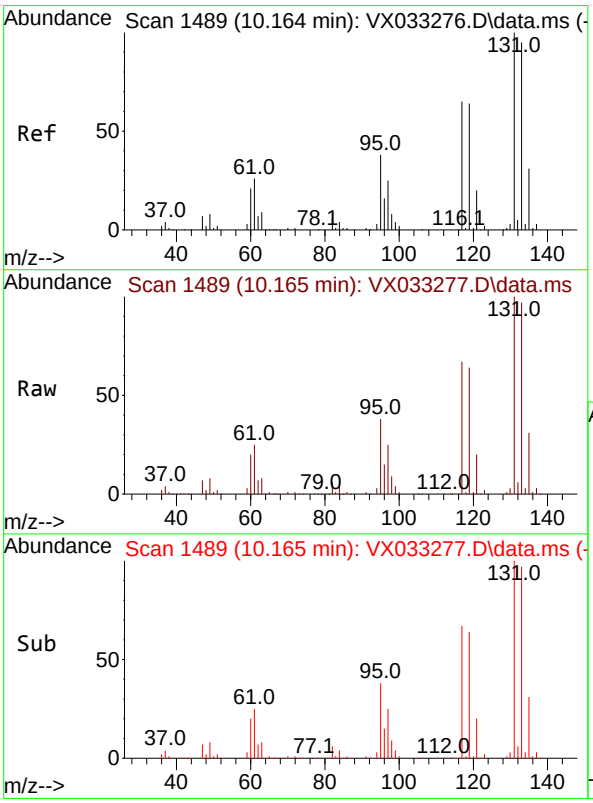
Ion	Ratio	Lower	Upper
112	100		
114	32.5	25.4	38.2



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

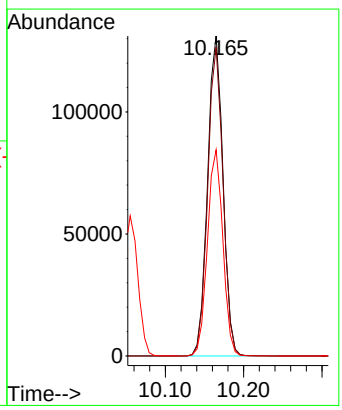
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

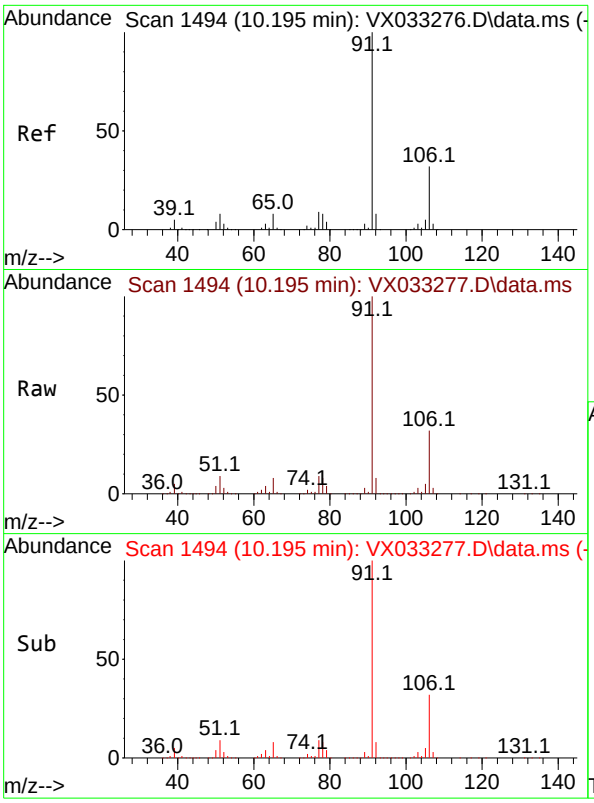


#66
1,1,1,2-Tetrachloroethane
Concen: 104.407 ug/l
RT: 10.165 min Scan# 1489
Delta R.T. -0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion:131 Resp: 179053

Ion	Ratio	Lower	Upper
131	100		
133	95.7	47.6	142.9
119	64.5	32.4	97.0





#67
Ethyl Benzene
Concen: 100.255 ug/l
RT: 10.195 min Scan# 14
Delta R.T. 0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

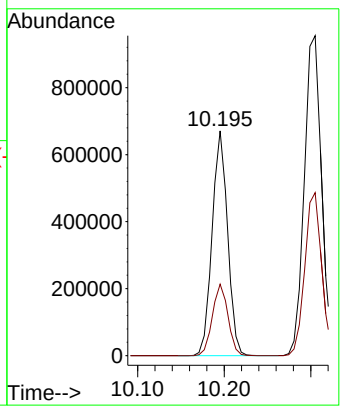
Tgt Ion: 91 Resp: 83236

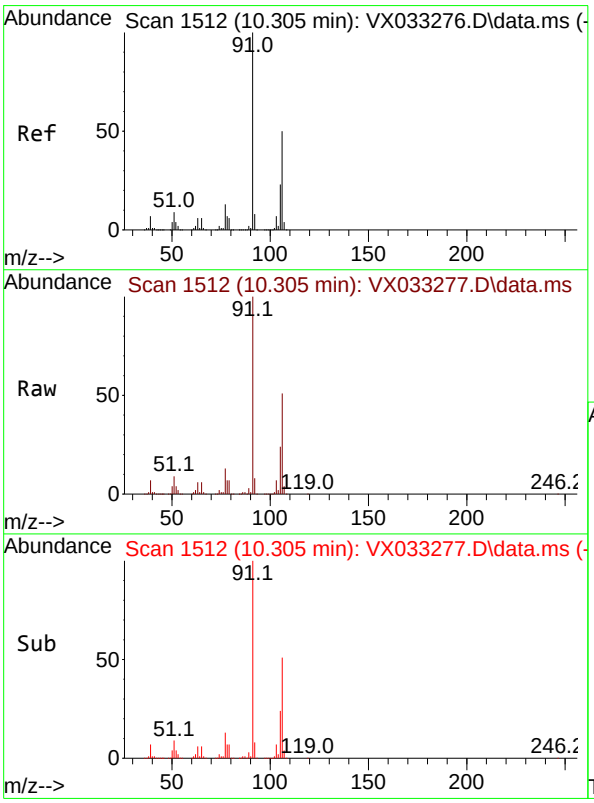
Ion	Ratio	Lower	Upper
91	100		
106	31.8	25.0	37.6

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

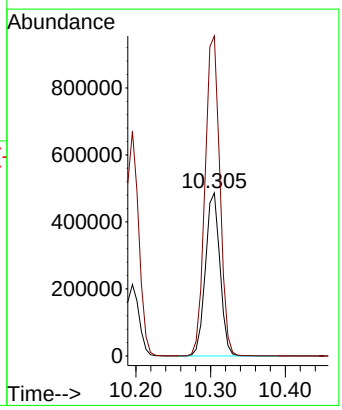


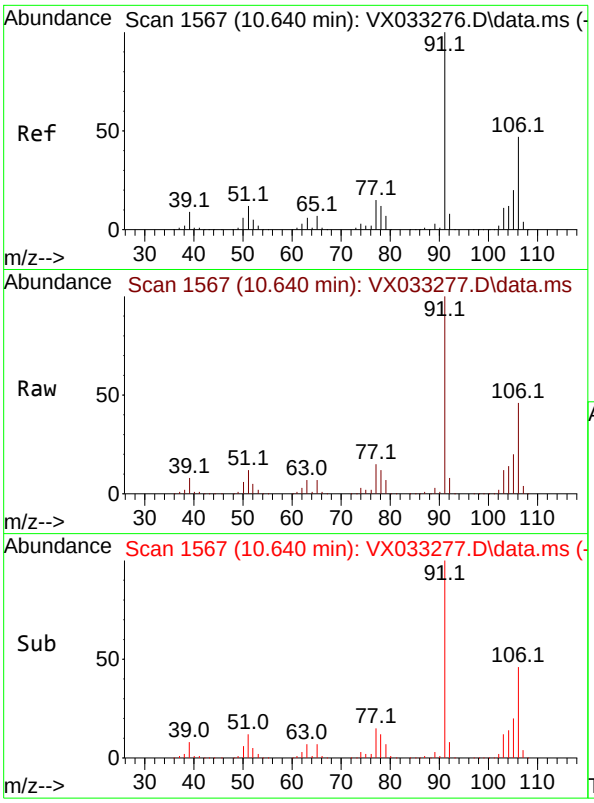


#68
m/p-Xylenes
Concen: 201.944 ug/l
RT: 10.305 min Scan# 1512
Delta R.T. 0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion:106 Resp: 656555

Ion	Ratio	Lower	Upper
106	100		
91	200.3	164.5	246.7

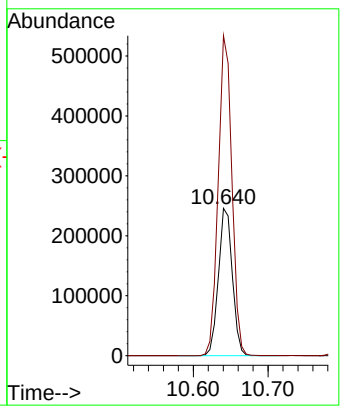




#69
o-Xylene
Concen: 101.180 ug/l
RT: 10.640 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion:106 Resp: 31828

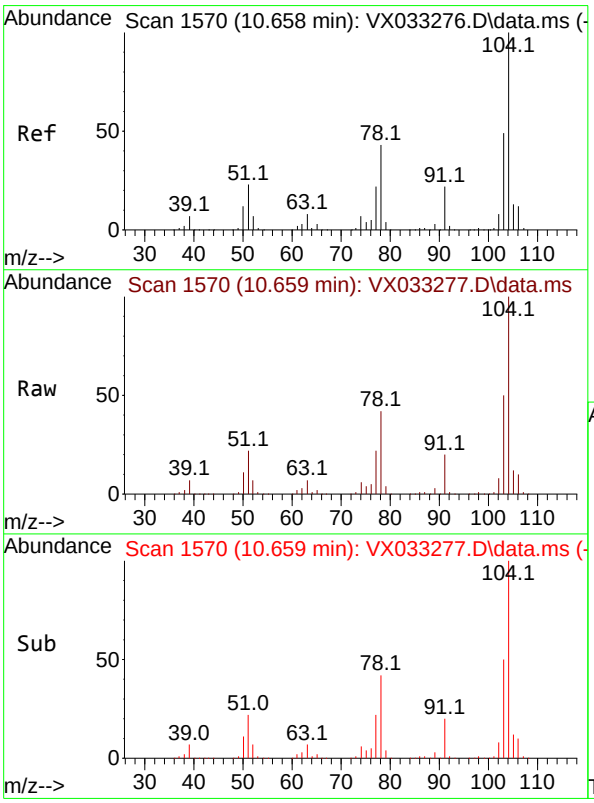
Ion	Ratio	Lower	Upper
106	100		
91	213.4	109.2	327.6



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

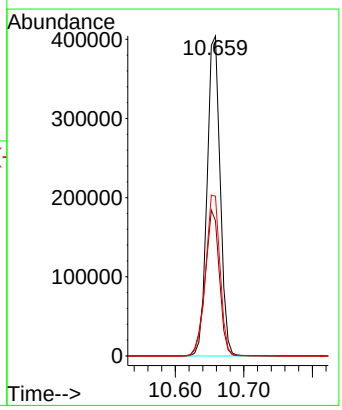
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

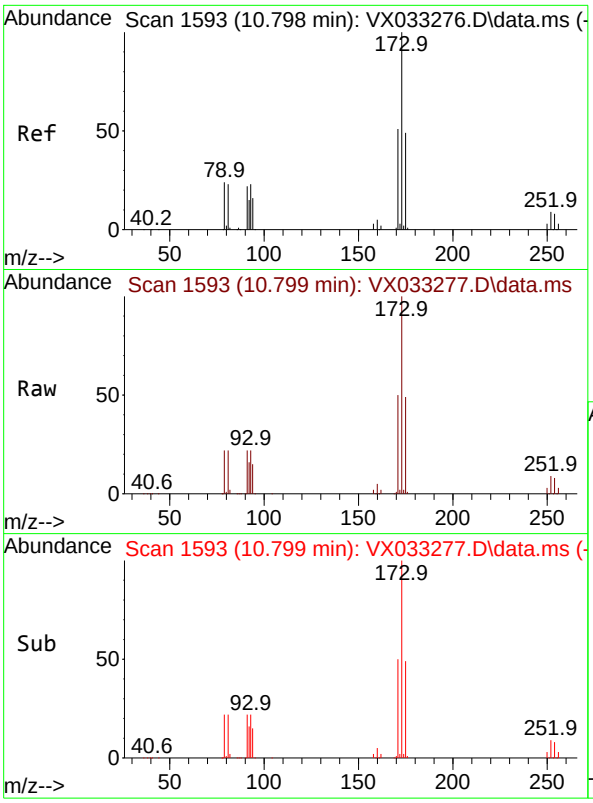


#70
Styrene
Concen: 104.480 ug/l
RT: 10.659 min Scan# 1570
Delta R.T. -0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion:104 Resp: 537696

Ion	Ratio	Lower	Upper
104	100		
78	49.7	41.8	62.8
103	55.4	44.5	66.7

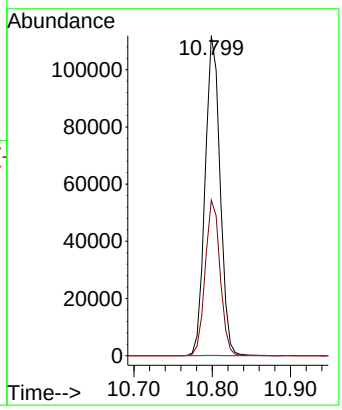




#71
Bromoform
Concen: 112.541 ug/l
RT: 10.799 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion:173 Resp: 14797

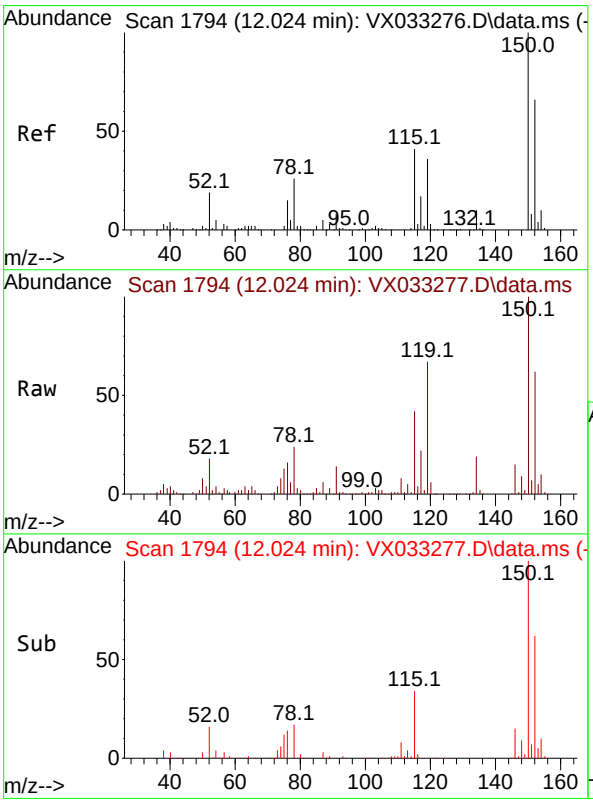
Ion	Ratio	Lower	Upper
173	100		
175	48.4	23.9	71.8
254	0.1	0.0	0.0



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

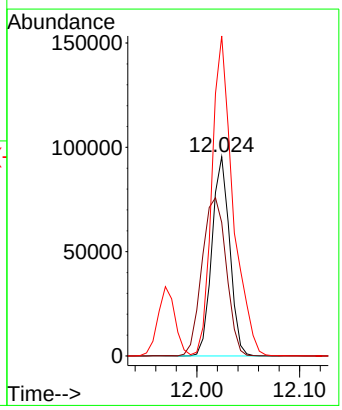
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

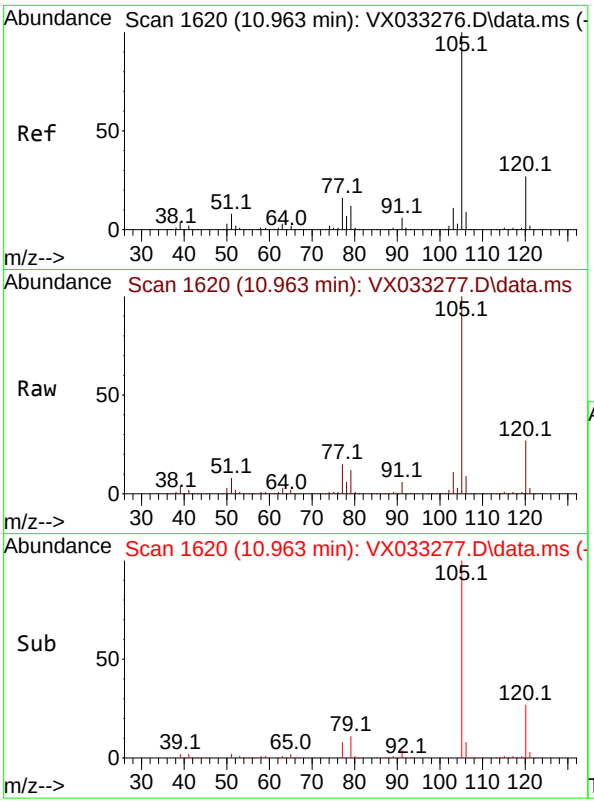


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.024 min Scan# 1794
Delta R.T. 0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion:152 Resp: 114385

Ion	Ratio	Lower	Upper
152	100		
115	108.7	44.0	132.0
150	191.0	0.0	351.8

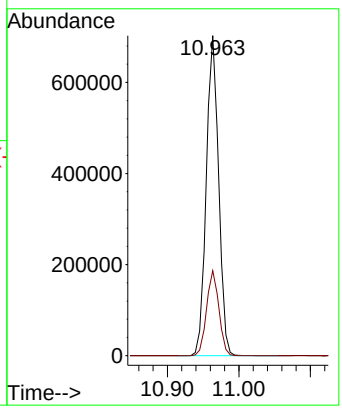




#73
Isopropylbenzene
Concen: 103.020 ug/l
RT: 10.963 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion:105 Resp: 84207

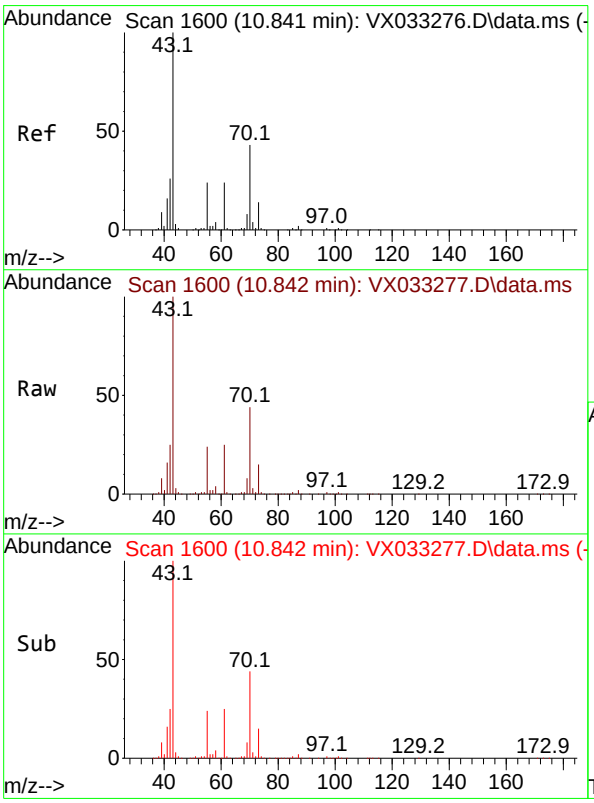
Ion	Ratio	Lower	Upper
105	100		
120	26.5	13.1	39.3



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

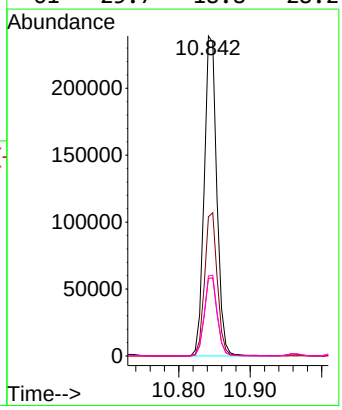
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

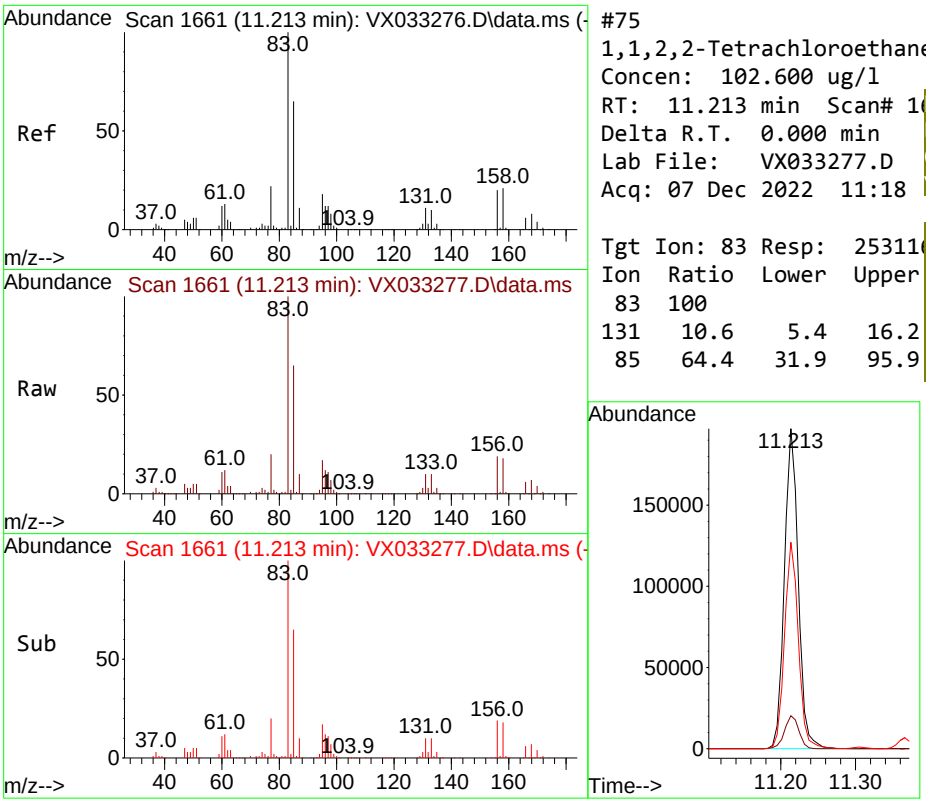


#74
N-amyl acetate
Concen: 105.583 ug/l
RT: 10.842 min Scan# 1600
Delta R.T. 0.001 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion: 43 Resp: 293580

Ion	Ratio	Lower	Upper
43	100		
70	45.1	33.6	50.4
55	25.0	19.4	29.2
61	25.7	18.8	28.2





#75
1,1,2,2-Tetrachloroethane
Concen: 102.600 ug/l
RT: 11.213 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

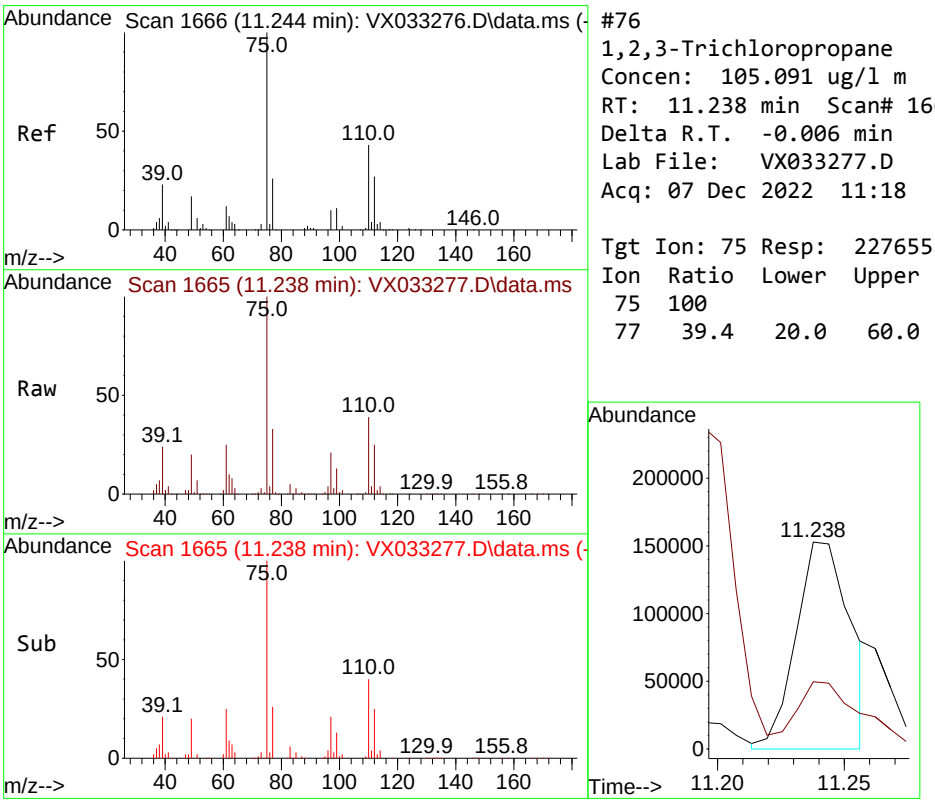
Tgt Ion: 83 Resp: 25311

Ion	Ratio	Lower	Upper
83	100		
131	10.6	5.4	16.2
85	64.4	31.9	95.9

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

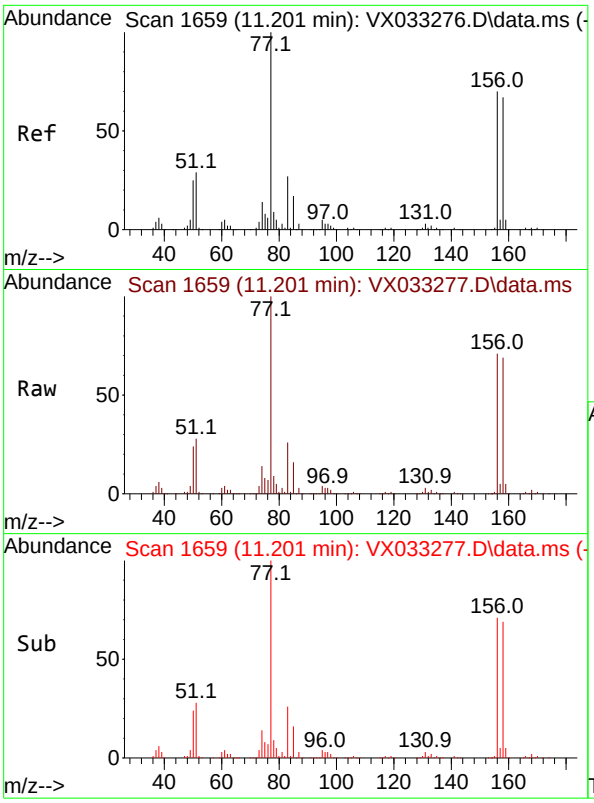
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022



#76
1,2,3-Trichloropropane
Concen: 105.091 ug/l m
RT: 11.238 min Scan# 1665
Delta R.T. -0.006 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion: 75 Resp: 227655

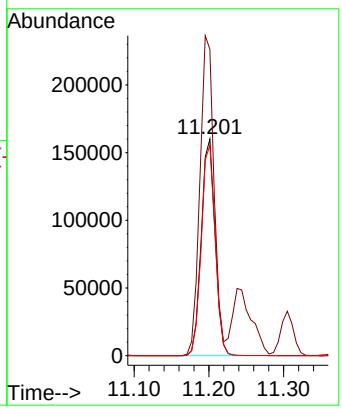
Ion	Ratio	Lower	Upper
75	100		
77	39.4	20.0	60.0



#77
Bromobenzene
Concen: 102.556 ug/l
RT: 11.201 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion:156 Resp: 20616

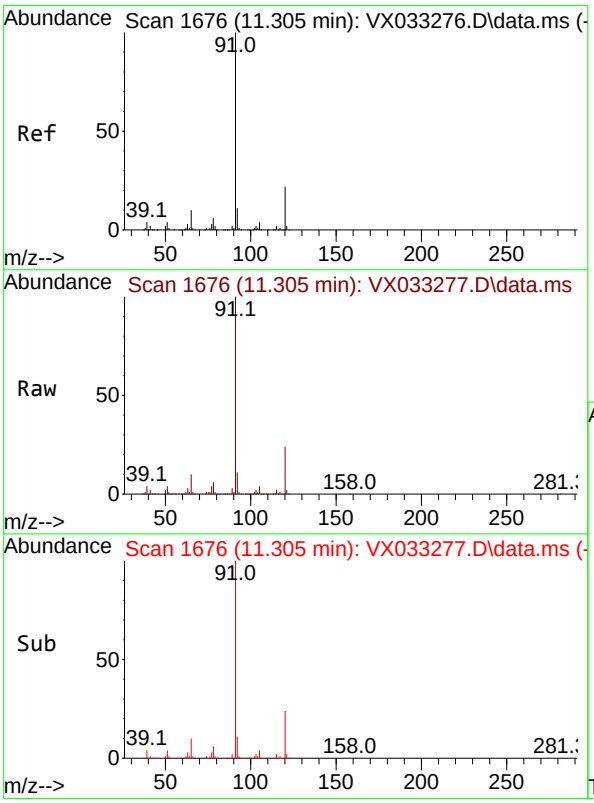
Ion	Ratio	Lower	Upper
156	100		
77	149.5	76.1	228.4
158	96.8	48.8	146.3



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

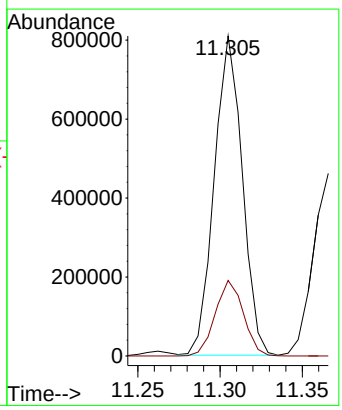
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

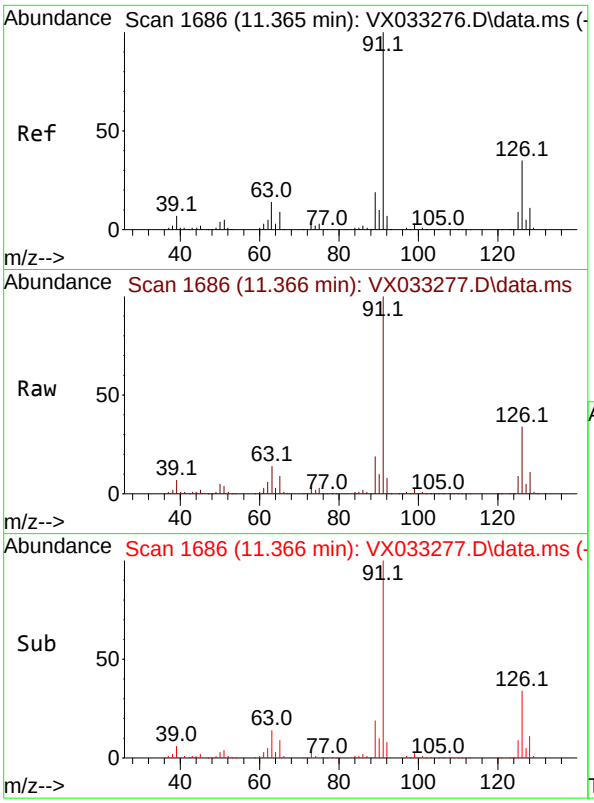


#78
n-propylbenzene
Concen: 102.470 ug/l
RT: 11.305 min Scan# 1676
Delta R.T. -0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion: 91 Resp: 957635

Ion	Ratio	Lower	Upper
91	100		
120	23.8	11.6	34.8

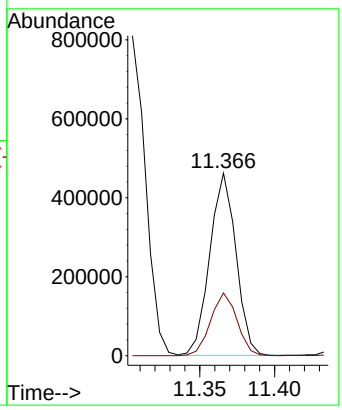




#79
2-Chlorotoluene
Concen: 99.144 ug/l
RT: 11.366 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion: 91 Resp: 56274

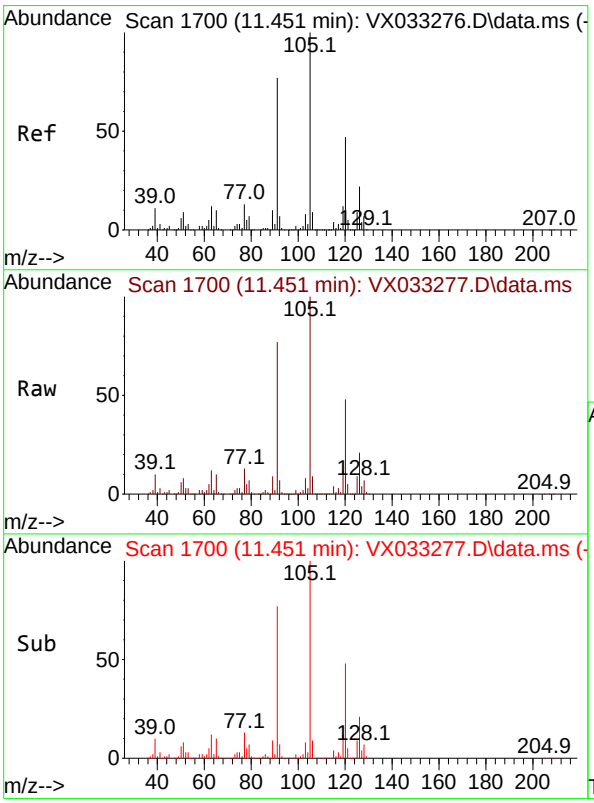
Ion	Ratio	Lower	Upper
91	100		
126	34.6	17.1	51.2



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

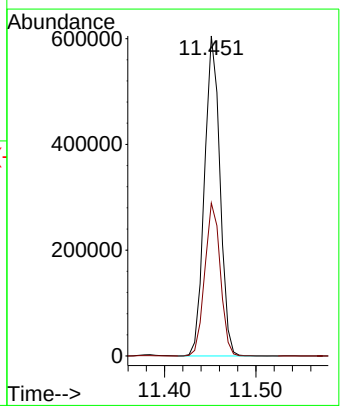
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

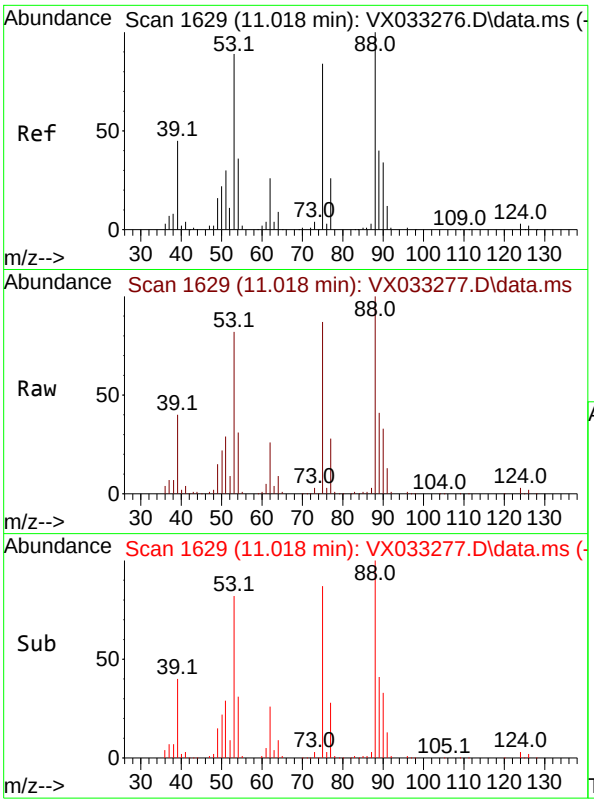


#80
1,3,5-Trimethylbenzene
Concen: 103.034 ug/l
RT: 11.451 min Scan# 1700
Delta R.T. 0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion:105 Resp: 707491

Ion	Ratio	Lower	Upper
105	100		
120	48.0	23.6	71.0

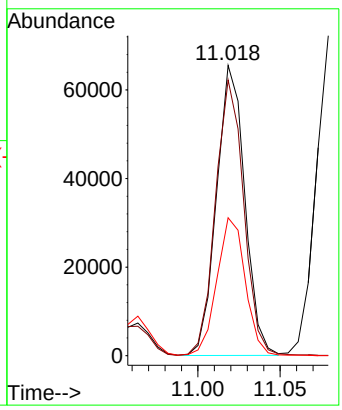




#81
trans-1,4-Dichloro-2-butene
Concen: 117.572 ug/l
RT: 11.018 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion: 75 Resp: 7835

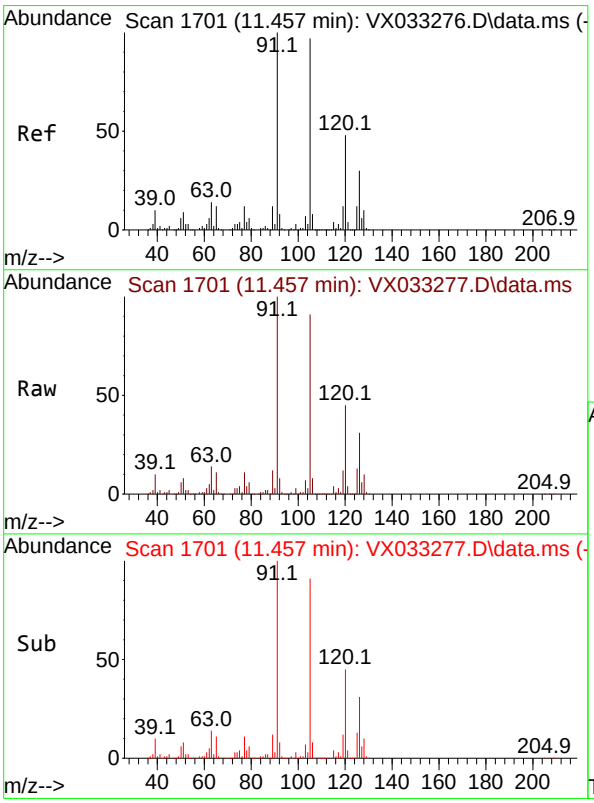
Ion	Ratio	Lower	Upper
75	100		
53	94.8	86.9	130.3
89	48.0	38.3	57.5



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

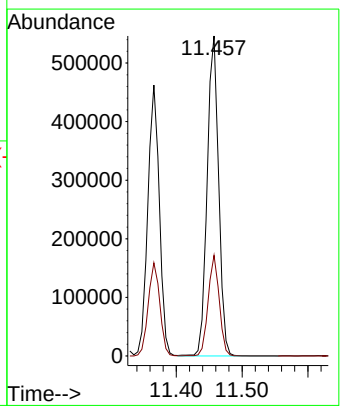
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

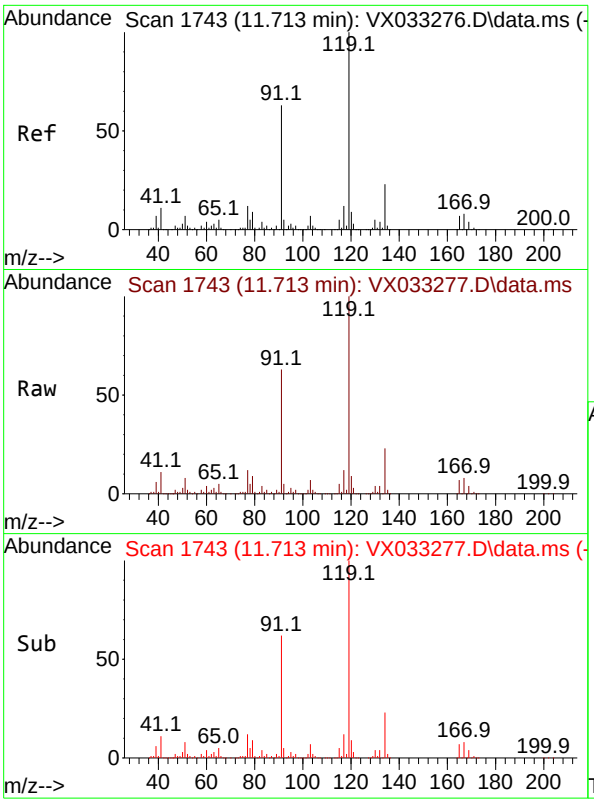


#82
4-Chlorotoluene
Concen: 99.587 ug/l
RT: 11.457 min Scan# 1701
Delta R.T. 0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion: 91 Resp: 662404

Ion	Ratio	Lower	Upper
91	100		
126	30.4	14.8	44.4

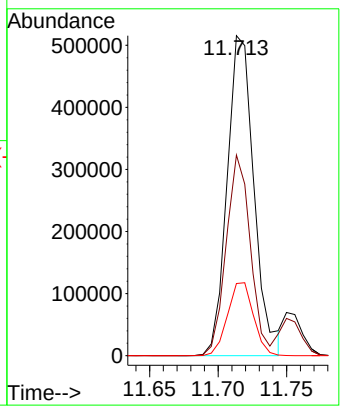




#83
tert-Butylbenzene
Concen: 103.031 ug/l
RT: 11.713 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion:119 Resp: 70422

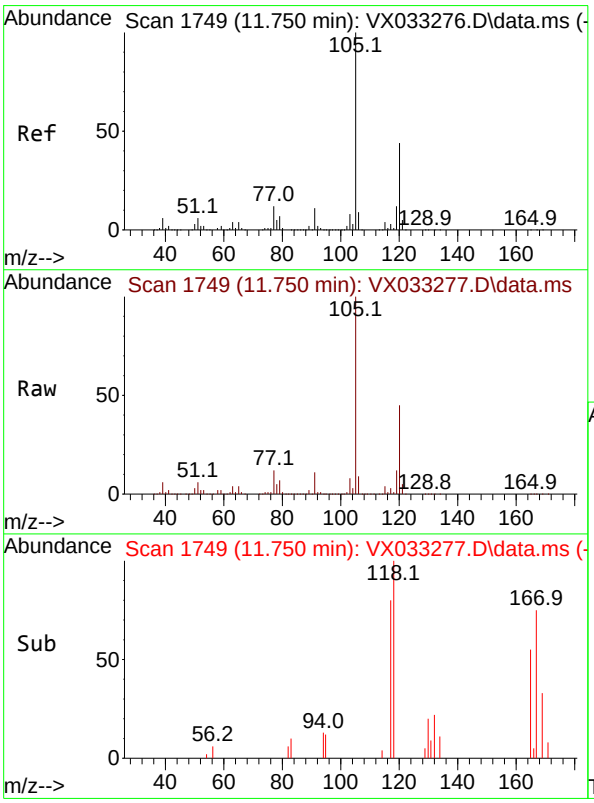
Ion	Ratio	Lower	Upper
119	100		
91	56.6	29.4	88.2
134	22.1	11.0	33.0



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

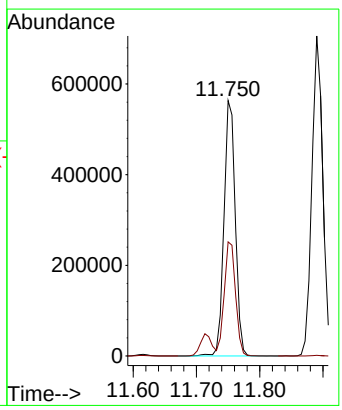
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

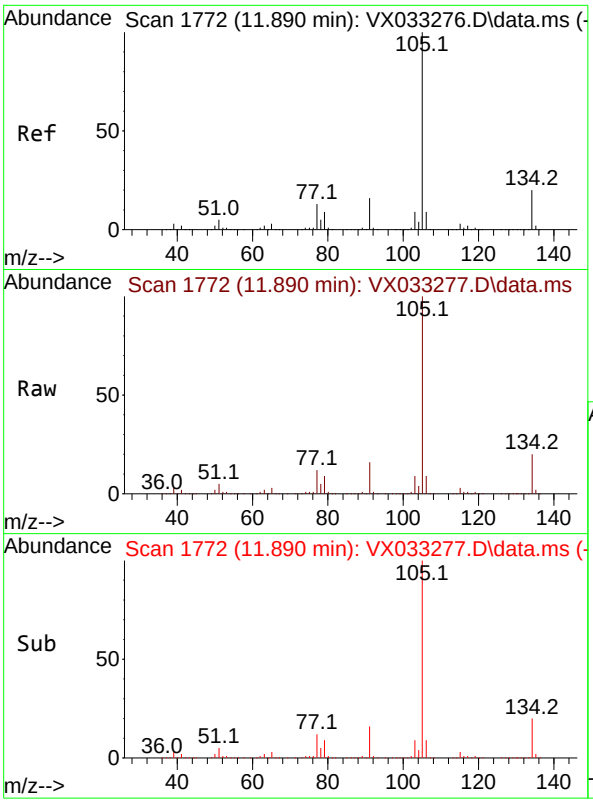


#84
1,2,4-Trimethylbenzene
Concen: 101.503 ug/l
RT: 11.750 min Scan# 1749
Delta R.T. -0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion:105 Resp: 694969

Ion	Ratio	Lower	Upper
105	100		
120	44.7	21.9	65.5

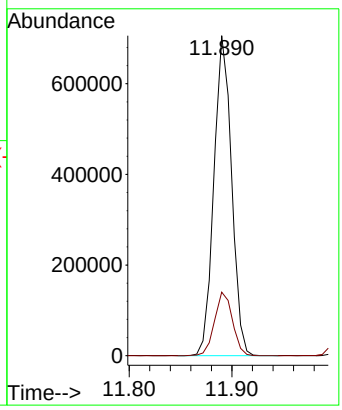




#85
sec-Butylbenzene
Concen: 102.877 ug/l
RT: 11.890 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion:105 Resp: 84125

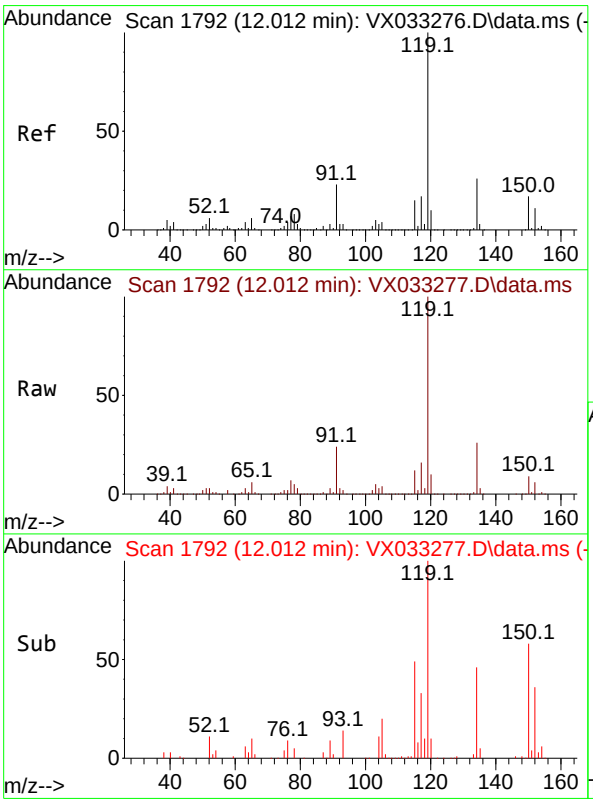
Ion	Ratio	Lower	Upper
105	100		
134	20.1	9.9	29.7



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

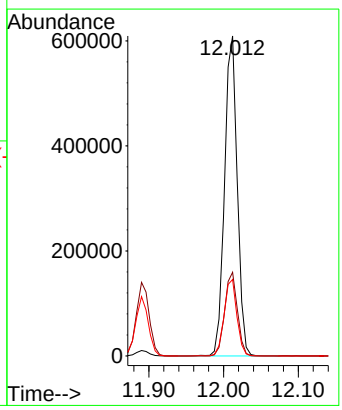
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

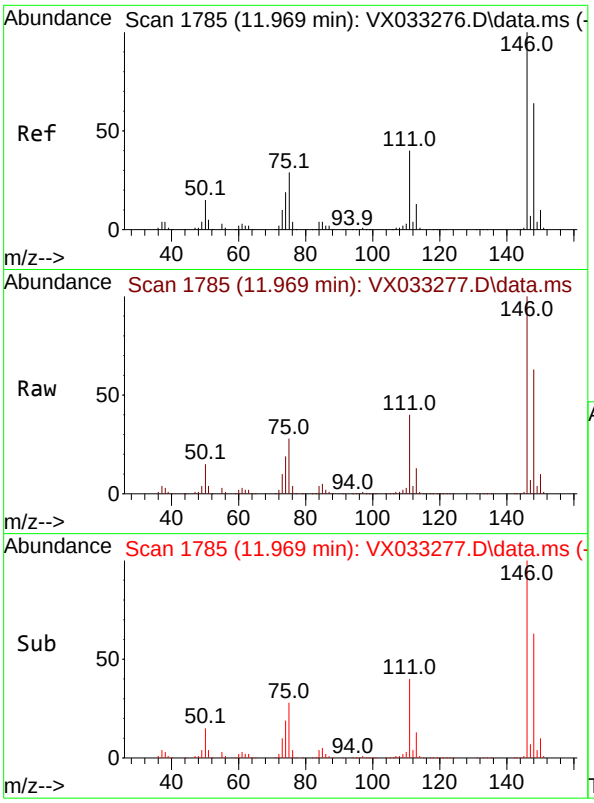


#86
p-Isopropyltoluene
Concen: 104.124 ug/l
RT: 12.012 min Scan# 1792
Delta R.T. 0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion:119 Resp: 721390

Ion	Ratio	Lower	Upper
119	100		
134	26.1	12.9	38.7
91	24.0	12.5	37.5

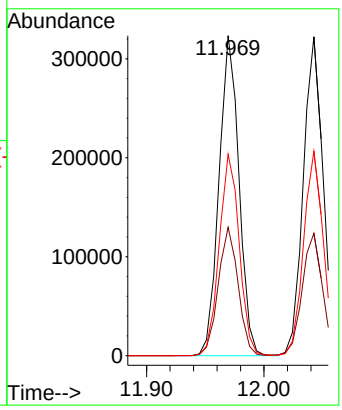




#87
1,3-Dichlorobenzene
Concen: 101.433 ug/l
RT: 11.969 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion:146 Resp: 38245

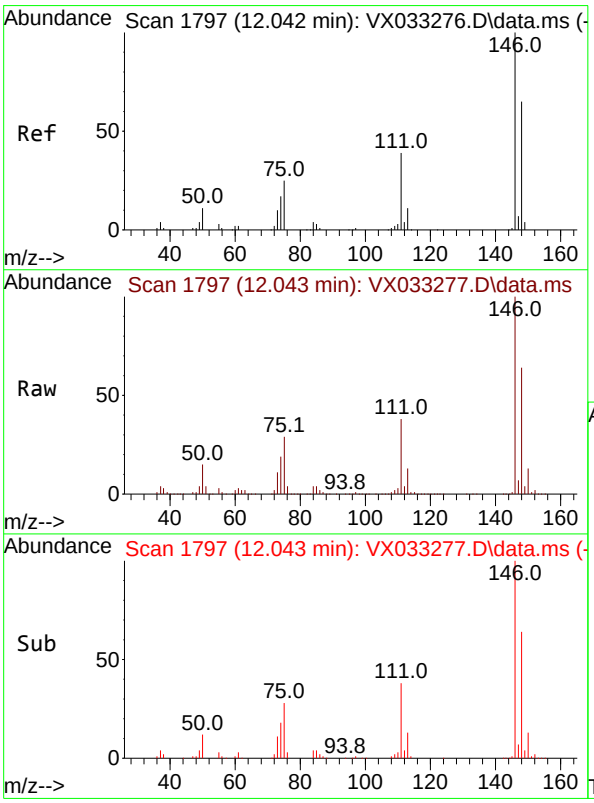
Ion	Ratio	Lower	Upper
146	100		
111	40.0	20.6	61.8
148	63.1	31.7	95.1



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

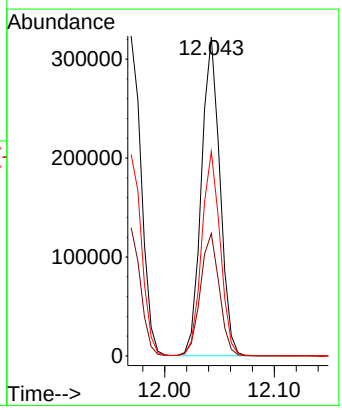
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

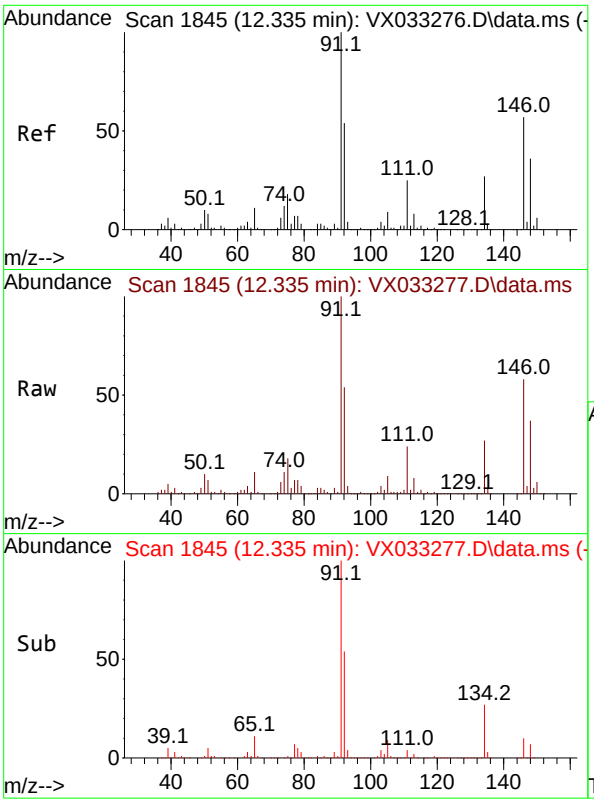


#88
1,4-Dichlorobenzene
Concen: 97.826 ug/l
RT: 12.043 min Scan# 1797
Delta R.T. 0.001 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion:146 Resp: 377754

Ion	Ratio	Lower	Upper
146	100		
111	39.4	20.5	61.6
148	63.9	32.2	96.6

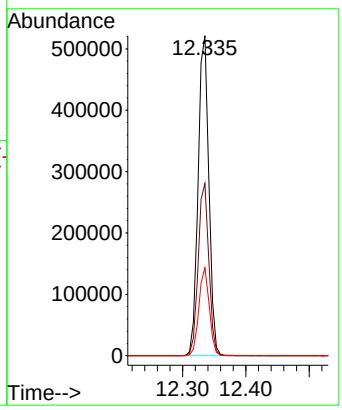




#89
n-Butylbenzene
Concen: 103.367 ug/l
RT: 12.335 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion: 91 Resp: 61694

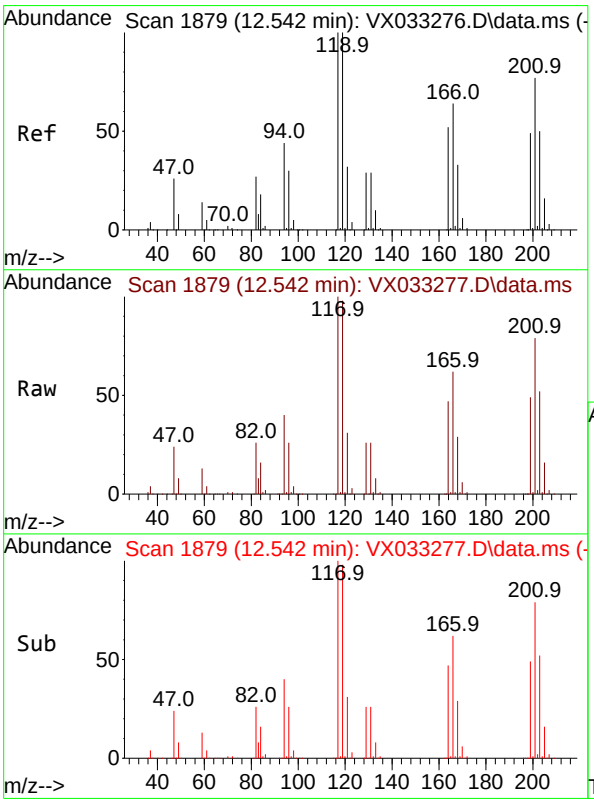
Ion	Ratio	Lower	Upper
91	100		
92	53.4	26.2	78.6
134	26.6	12.9	38.6



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

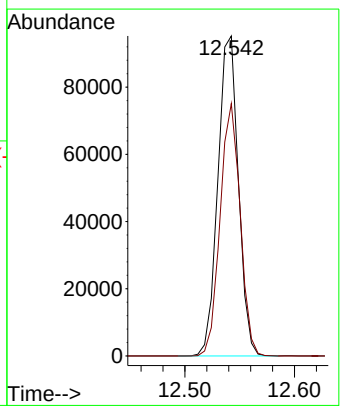
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

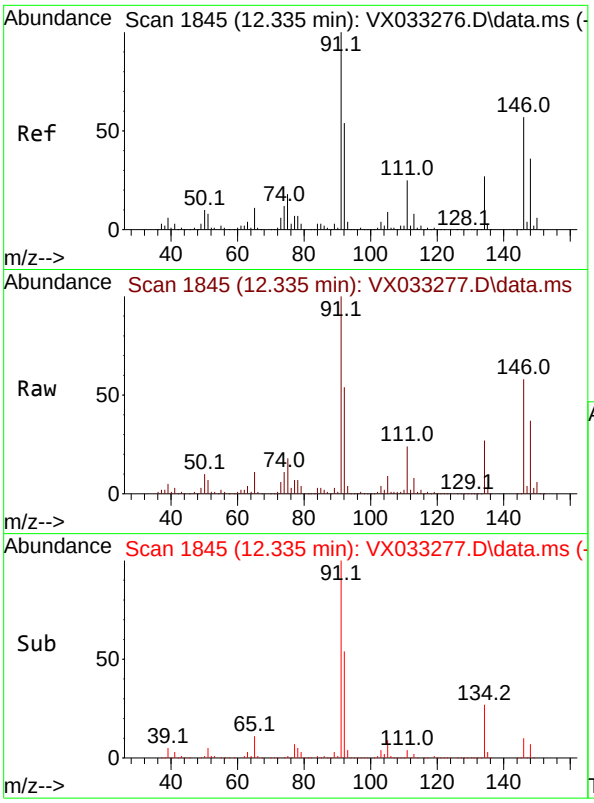


#90
Hexachloroethane
Concen: 108.833 ug/l
RT: 12.542 min Scan# 1879
Delta R.T. 0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion:117 Resp: 123879

Ion	Ratio	Lower	Upper
117	100		
201	77.1	37.6	112.9

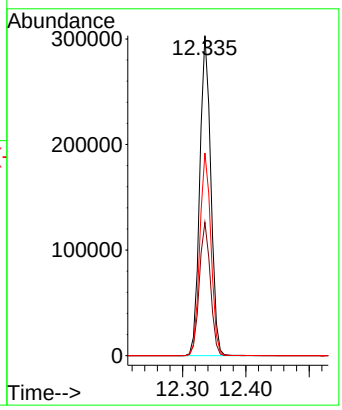




#91
1,2-Dichlorobenzene
Concen: 100.562 ug/l
RT: 12.335 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion:146 Resp: 36884

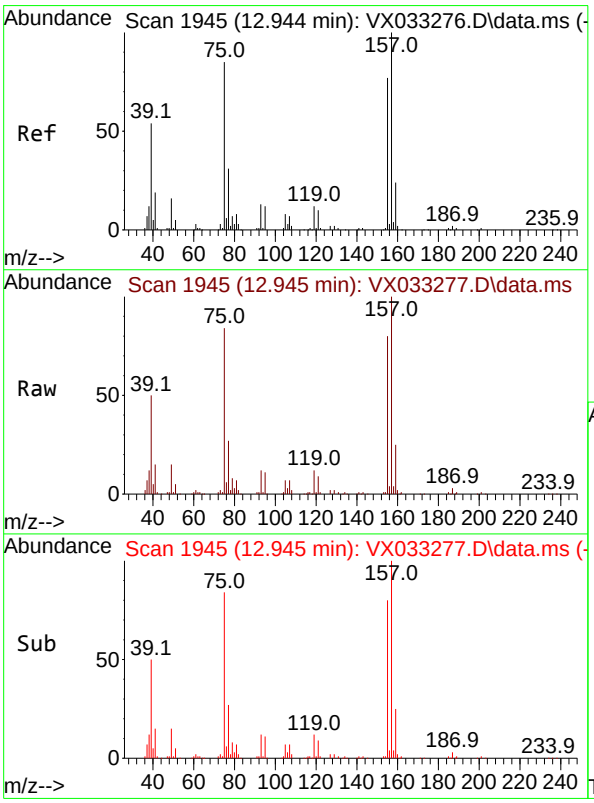
Ion	Ratio	Lower	Upper
146	100		
111	41.7	21.5	64.5
148	63.8	32.0	96.2



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

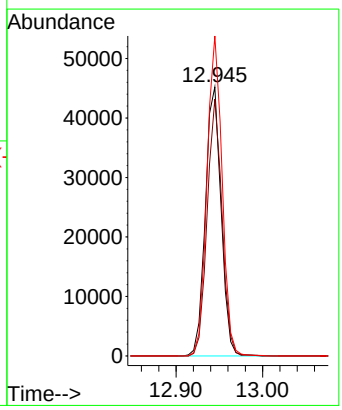
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

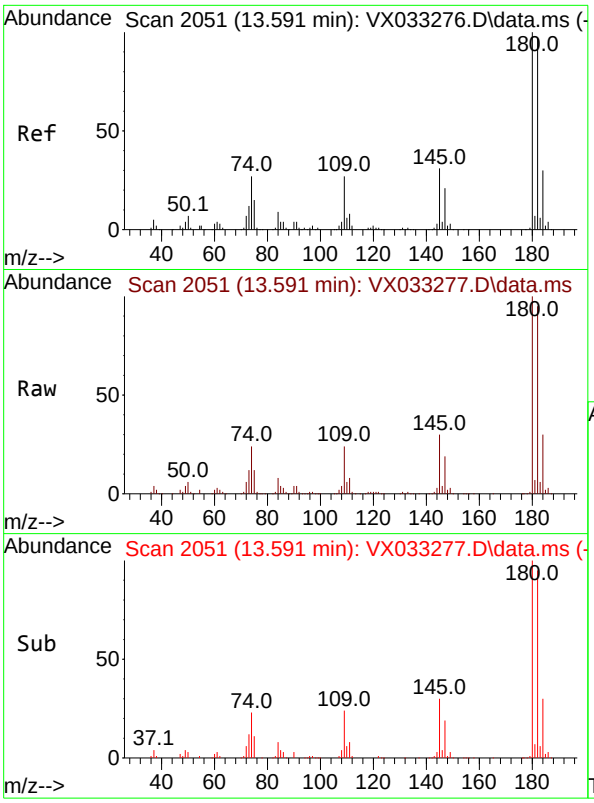


#92
1,2-Dibromo-3-Chloropropane
Concen: 115.714 ug/l
RT: 12.945 min Scan# 1945
Delta R.T. -0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion: 75 Resp: 56957

Ion	Ratio	Lower	Upper
75	100		
155	90.3	41.6	124.8
157	114.6	54.1	162.4

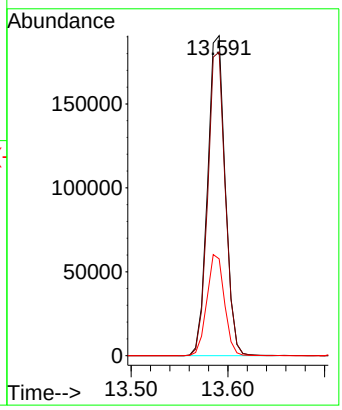




#93
1,2,4-Trichlorobenzene
Concen: 106.614 ug/l
RT: 13.591 min Scan# 2
Delta R.T. 0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion:180 Resp: 24104

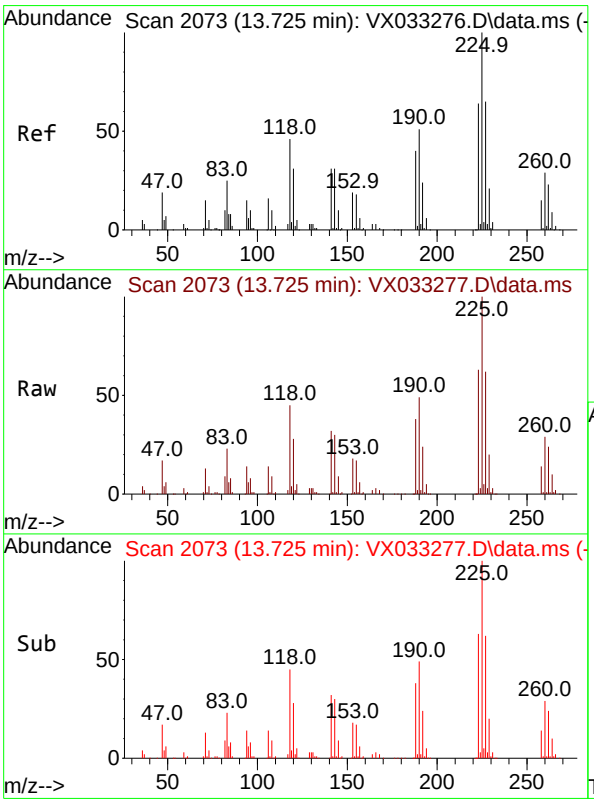
Ion	Ratio	Lower	Upper
180	100		
182	95.0	48.4	145.0
145	31.5	16.2	48.5



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

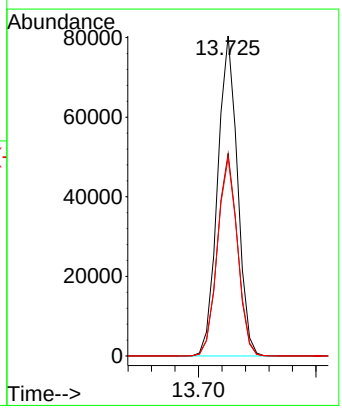
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

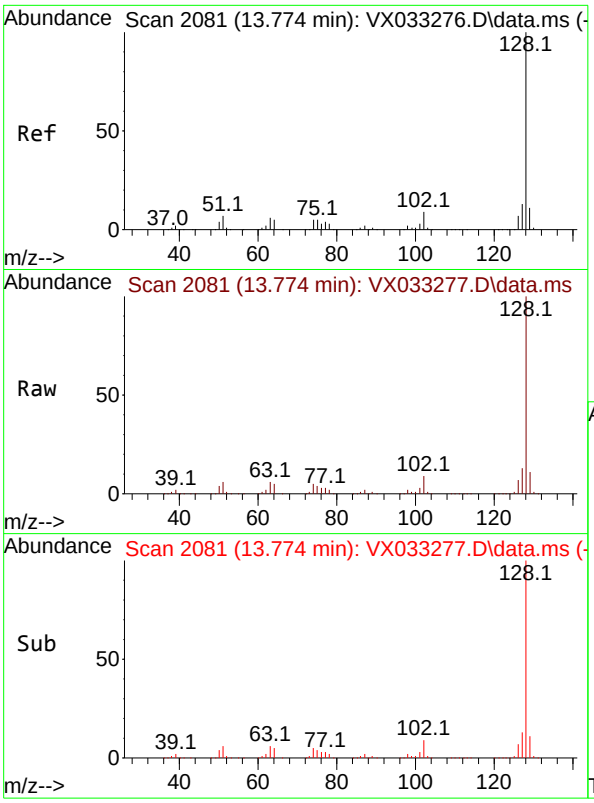


#94
Hexachlorobutadiene
Concen: 94.517 ug/l
RT: 13.725 min Scan# 2073
Delta R.T. 0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion:225 Resp: 94278

Ion	Ratio	Lower	Upper
225	100		
223	63.3	31.9	95.9
227	62.9	31.9	95.5

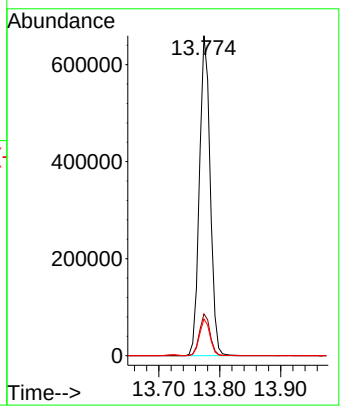




#95
Naphthalene
Concen: 110.304 ug/l
RT: 13.774 min Scan# 2
Delta R.T. -0.006 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion:128 Resp: 80679

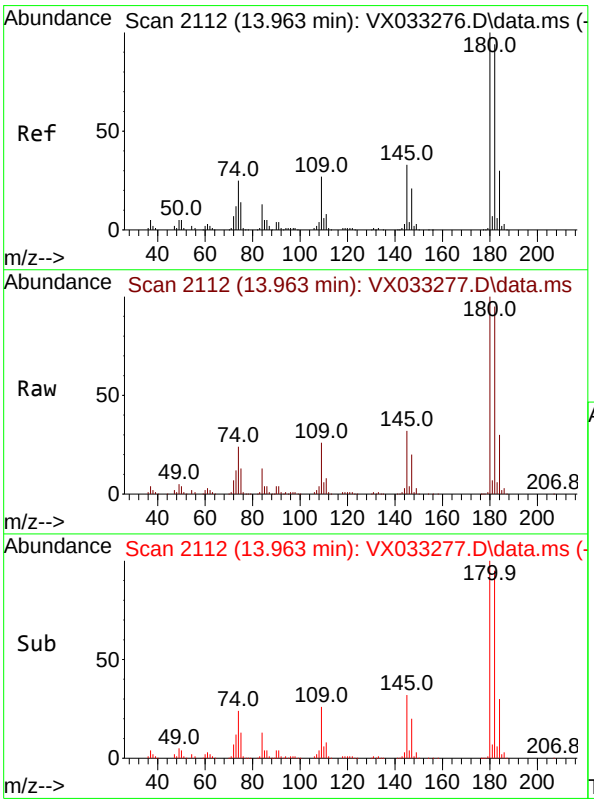
Ion	Ratio	Lower	Upper
128	100		
127	12.9	10.2	15.4
129	11.1	8.9	13.3



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

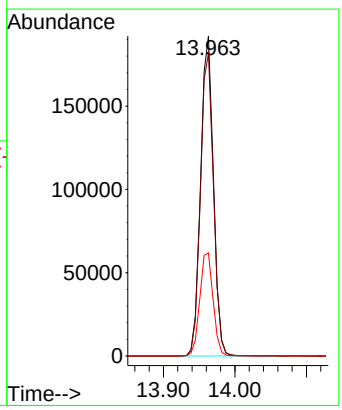
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022



#96
1,2,3-Trichlorobenzene
Concen: 105.480 ug/l
RT: 13.963 min Scan# 2112
Delta R.T. -0.000 min
Lab File: VX033277.D
Acq: 07 Dec 2022 11:18

Tgt Ion:180 Resp: 239154

Ion	Ratio	Lower	Upper
180	100		
182	95.6	47.5	142.6
145	33.5	16.9	50.6



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX120722\
Data File : VX033278.D
Acq On : 07 Dec 2022 11:42
Operator : JC/MD
Sample : VSTDICC150
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 07 12:10:16 2022
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X120722W.M
Quant Title : SW846 8260
QLast Update : Wed Dec 07 09:47:15 2022
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.556	168	128972	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.763	114	222944	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.055	117	208305	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.024	152	99577	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.958	65	129821	93.441	ug/l	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 186.880%#			
35) Dibromofluoromethane	5.391	113	151294	120.373	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 240.740%#			
50) Toluene-d8	8.653	98	309454	75.838	ug/l	0.00
Spiked Amount 50.000	Range 92 - 112		Recovery = 151.680%#			
62) 4-Bromofluorobenzene	11.079	95	244909	148.337	ug/l	0.00
Spiked Amount 50.000	Range 83 - 123		Recovery = 296.680%#			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.166	85	122657	124.483	ug/l	98
3) Chloromethane	1.294	50	157314	147.891	ug/l	97
4) Vinyl Chloride	1.374	62	167807	141.681	ug/l	98
5) Bromomethane	1.617	94	140122	159.542	ug/l	96
6) Chloroethane	1.691	64	115495	119.781	ug/l	100
7) Trichlorofluoromethane	1.886	101	283240	123.217	ug/l	99
8) Diethyl Ether	2.136	74	133256	184.129	ug/l	95
9) 1,1,2-Trichlorotrifluo...	2.325	101	158793	131.427	ug/l	98
10) Methyl Iodide	2.453	142	219915	158.998	ug/l	97
11) Tert butyl alcohol	3.093	59	222821m	1119.143	ug/l	
12) 1,1-Dichloroethene	2.319	96	172262	153.054	ug/l	99
13) Acrolein	2.239	56	253022m	1106.369	ug/l	
14) Allyl chloride	2.666	41	303647	167.109	ug/l	93
15) Acrylonitrile	3.068	53	557830	990.556	ug/l	98
16) Acetone	2.392	43	469301	800.072	ug/l	98
17) Carbon Disulfide	2.514	76	444725	143.021	ug/l	100
18) Methyl Acetate	2.709	43	318234	195.990	ug/l	97
19) Methyl tert-butyl Ether	3.117	73	730692	187.198	ug/l	99
20) Methylene Chloride	2.788	84	224037	158.542	ug/l	91
21) trans-1,2-Dichloroethene	3.093	96	205904	159.931	ug/l	98
22) Diisopropyl ether	3.763	45	677264	171.174	ug/l	99
23) Vinyl Acetate	3.727	43	2785251	899.311	ug/l	96
24) 1,1-Dichloroethane	3.611	63	382012	168.724	ug/l	99
25) 2-Butanone	4.568	43	743566	919.306	ug/l	99
26) 2,2-Dichloropropane	4.477	77	275691	151.437	ug/l	97
27) cis-1,2-Dichloroethene	4.489	96	258191	176.507	ug/l	96
28) Bromochloromethane	4.903	49	158318	159.137	ug/l	93
29) Tetrahydrofuran	5.013	42	490232	955.173	ug/l	96
30) Chloroform	5.099	83	423786	167.120	ug/l	98
31) Cyclohexane	5.477	56	261384	128.438	ug/l	92
32) 1,1,1-Trichloroethane	5.385	97	346522	152.589	ug/l	98
36) 1,1-Dichloropropene	5.696	75	267855	133.281	ug/l	98
37) Ethyl Acetate	4.721	43	303375	173.027	ug/l	99
38) Carbon Tetrachloride	5.678	117	297622	133.497	ug/l	98
39) Methylcyclohexane	7.385	83	259458	113.151	ug/l	98
40) Benzene	6.037	78	859288	152.499	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX120722\
Data File : VX033278.D
Acq On : 07 Dec 2022 11:42
Operator : JC/MD
Sample : VSTDICC150
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 07 12:10:16 2022
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X120722W.M
Quant Title : SW846 8260
QLast Update : Wed Dec 07 09:47:15 2022
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
41) Methacrylonitrile	4.928	41	168569	170.863 ug/l		96
42) 1,2-Dichloroethane	6.086	62	345058	152.092 ug/l		97
43) Isopropyl Acetate	6.342	43	507740	175.101 ug/l		97
44) Trichloroethene	7.129	130	232626	147.125 ug/l		99
45) 1,2-Dichloropropane	7.434	63	226079	162.353 ug/l		100
46) Dibromomethane	7.580	93	177123	163.014 ug/l		98
47) Bromodichloromethane	7.824	83	344310	163.993 ug/l		98
48) Methyl methacrylate	7.696	41	252825	169.388 ug/l		92
49) 1,4-Dioxane	7.720	88	115303	4196.625 ug/l		96
51) 4-Methyl-2-Pentanone	8.580	43	1480794	827.584 ug/l		95
52) Toluene	8.720	92	554420	149.557 ug/l		100
53) t-1,3-Dichloropropene	8.976	75	371247	180.152 ug/l		99
54) cis-1,3-Dichloropropene	8.366	75	392302	173.324 ug/l		90
55) 1,1,2-Trichloroethane	9.153	97	246911	163.595 ug/l		99
56) Ethyl methacrylate	9.116	69	372607	179.181 ug/l	#	90
57) 1,3-Dichloropropane	9.311	76	398683	163.628 ug/l		100
58) 2-Chloroethyl Vinyl ether	8.244	63	863389	874.338 ug/l		98
59) 2-Hexanone	9.439	43	1087532	822.777 ug/l		93
60) Dibromochloromethane	9.525	129	283948	174.743 ug/l		99
61) 1,2-Dibromoethane	9.610	107	272145	170.833 ug/l		99
64) Tetrachloroethene	9.275	164	184932	125.423 ug/l		97
65) Chlorobenzene	10.079	112	615825	148.283 ug/l		99
66) 1,1,1,2-Tetrachloroethane	10.165	131	244812	160.880 ug/l		99
67) Ethyl Benzene	10.195	91	1049730	142.491 ug/l		99
68) m/p-Xylenes	10.305	106	824272	285.726 ug/l		96
69) o-Xylene	10.646	106	414501	148.498 ug/l		96
70) Styrene	10.659	104	710697	155.632 ug/l		98
71) Bromoform	10.799	173	208713	178.889 ug/l	#	100
73) Isopropylbenzene	10.963	105	996208	140.002 ug/l		99
74) N-amyl acetate	10.848	43	414776	171.353 ug/l		95
75) 1,1,2,2-Tetrachloroethane	11.213	83	352906	164.323 ug/l		99
76) 1,2,3-Trichloropropane	11.244	75	309515m	164.127 ug/l		
77) Bromobenzene	11.201	156	272423	155.671 ug/l		100
78) n-propylbenzene	11.305	91	1114633	137.006 ug/l		99
79) 2-Chlorotoluene	11.366	91	703127	142.298 ug/l		98
80) 1,3,5-Trimethylbenzene	11.451	105	849987	142.194 ug/l		99
81) trans-1,4-Dichloro-2-b...	11.018	75	113174	195.069 ug/l		90
82) 4-Chlorotoluene	11.457	91	831705	143.634 ug/l		98
83) tert-Butylbenzene	11.719	119	827149	139.011 ug/l		96
84) 1,2,4-Trimethylbenzene	11.756	105	854067	143.289 ug/l		99
85) sec-Butylbenzene	11.890	105	905800	127.242 ug/l		99
86) p-Isopropyltoluene	12.012	119	797245	132.185 ug/l		99
87) 1,3-Dichlorobenzene	11.969	146	485166	147.810 ug/l		99
88) 1,4-Dichlorobenzene	12.042	146	489915	145.739 ug/l		99
89) n-Butylbenzene	12.335	91	657935	126.627 ug/l		98
90) Hexachloroethane	12.542	117	143263	144.580 ug/l		98
91) 1,2-Dichlorobenzene	12.335	146	484137	151.625 ug/l		99
92) 1,2-Dibromo-3-Chloropr...	12.945	75	82029	191.433 ug/l		92
93) 1,2,4-Trichlorobenzene	13.591	180	298296	151.555 ug/l		98
94) Hexachlorobutadiene	13.725	225	93761	107.977 ug/l		99
95) Naphthalene	13.774	128	1100373	172.814 ug/l		100
96) 1,2,3-Trichlorobenzene	13.963	180	298441	151.203 ug/l		100

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX120722\
Data File : VX033278.D
Acq On : 07 Dec 2022 11:42
Operator : JC/MD
Sample : VSTDICC150
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 07 12:10:16 2022
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X120722W.M
Quant Title : SW846 8260
QLast Update : Wed Dec 07 09:47:15 2022
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

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

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

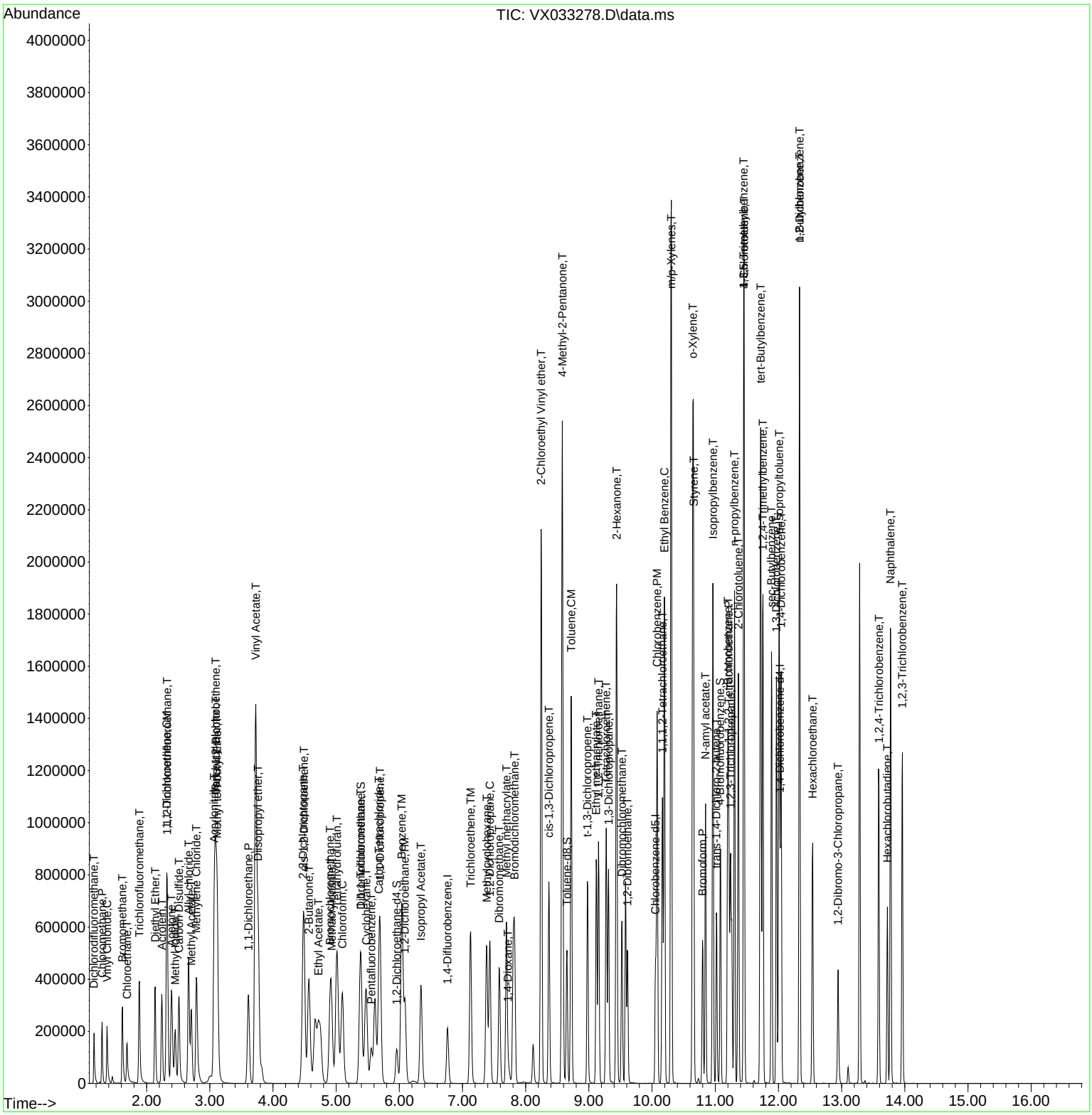
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX120722\
Data File : VX033278.D
Acq On : 07 Dec 2022 11:42
Operator : JC/MD
Sample : VSTDICC150
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 7 Sample Multiplier: 1

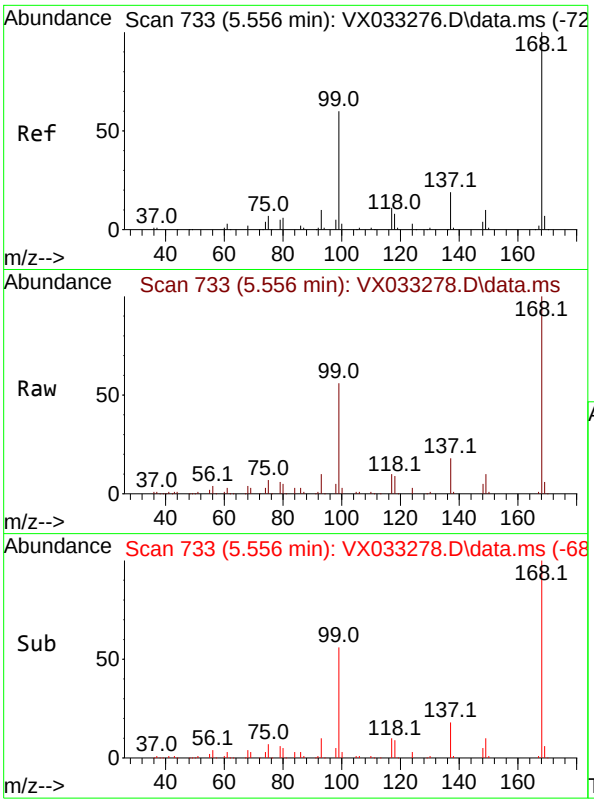
Quant Time: Dec 07 12:10:16 2022
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X120722W.M
Quant Title : SW846 8260
QLast Update : Wed Dec 07 09:47:15 2022
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

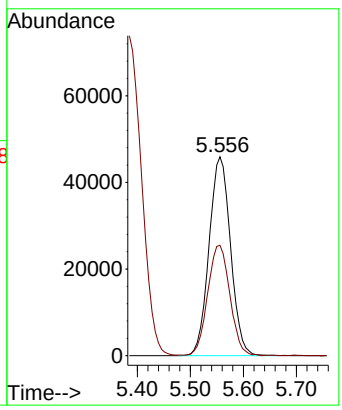




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 5.556 min Scan# 7
Delta R.T. -0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion:168 Resp: 12897

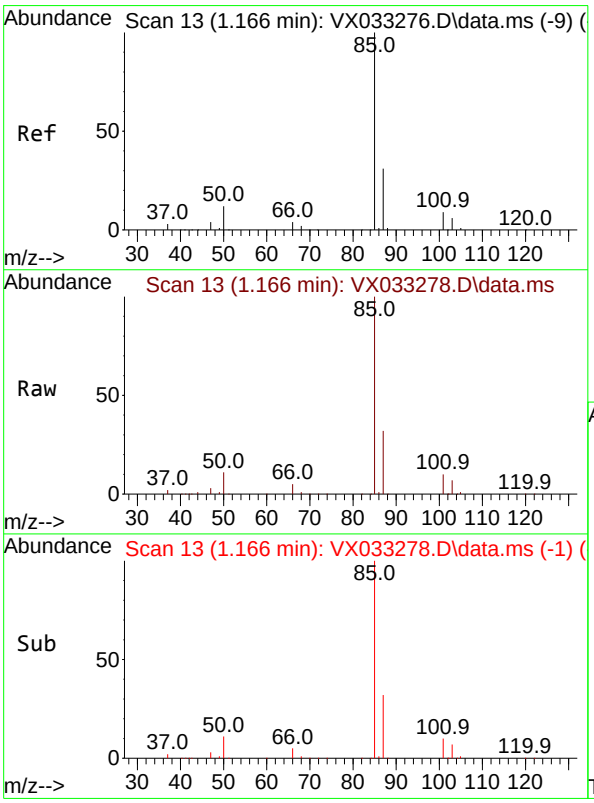
Ion	Ratio	Lower	Upper
168	100		
99	55.4	46.1	69.1



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

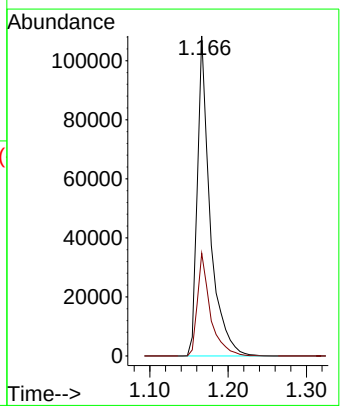
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

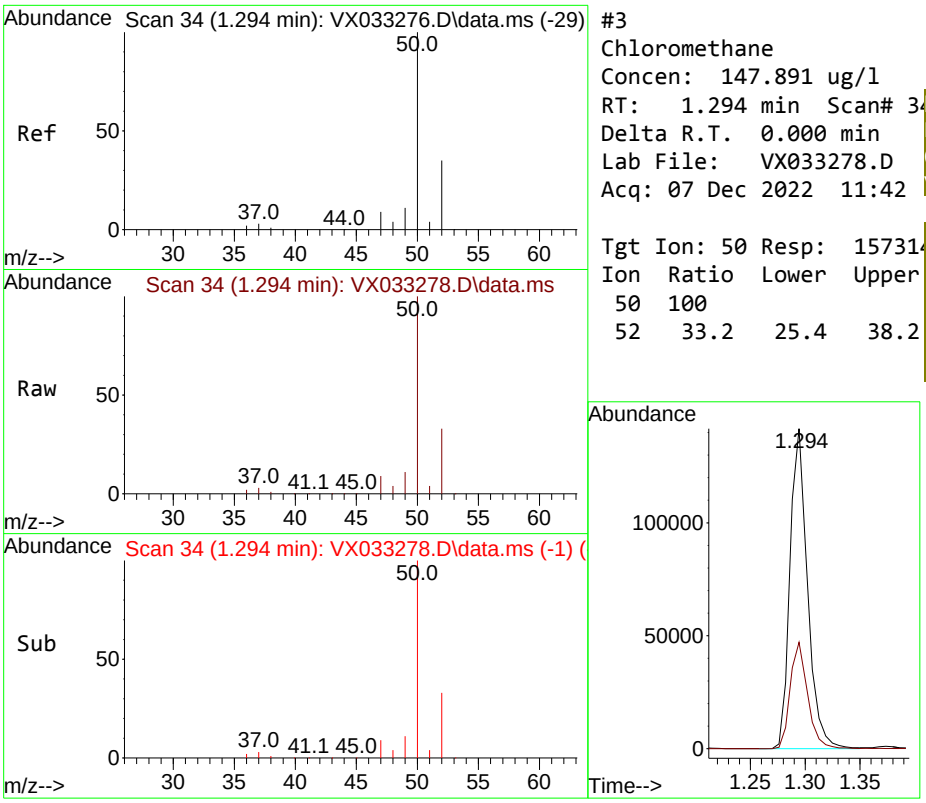


#2
Dichlorodifluoromethane
Concen: 124.483 ug/l
RT: 1.166 min Scan# 13
Delta R.T. 0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion: 85 Resp: 122657

Ion	Ratio	Lower	Upper
85	100		
87	32.1	15.6	46.7





#3
Chloromethane
Concen: 147.891 ug/l
RT: 1.294 min Scan# 34
Delta R.T. 0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

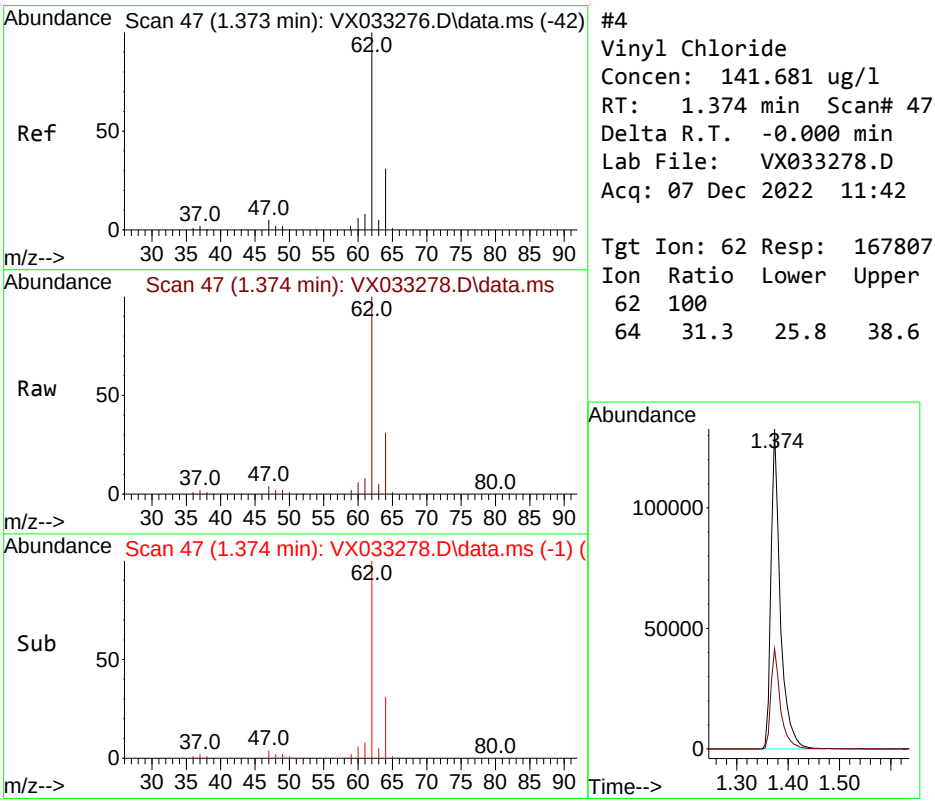
Tgt Ion: 50 Resp: 15731

Ion	Ratio	Lower	Upper
50	100		
52	33.2	25.4	38.2

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations
APPROVED

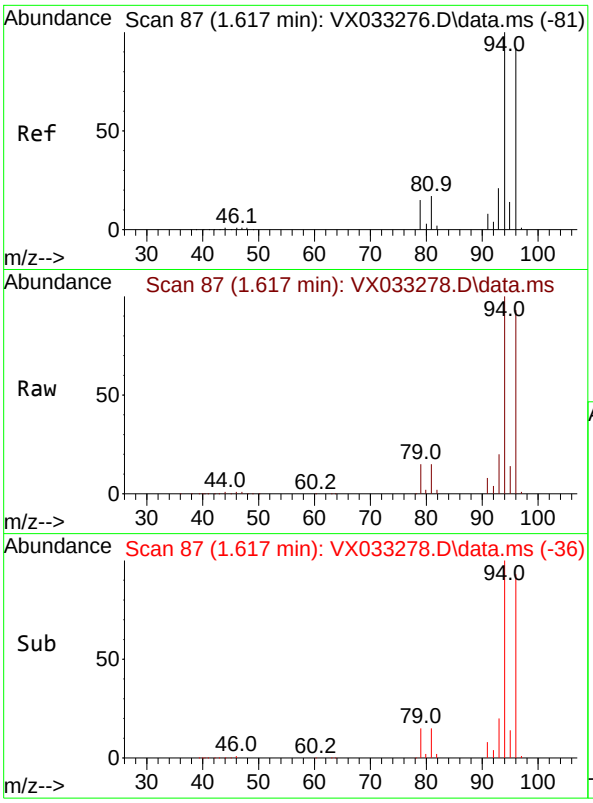
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022



#4
Vinyl Chloride
Concen: 141.681 ug/l
RT: 1.374 min Scan# 47
Delta R.T. -0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion: 62 Resp: 167807

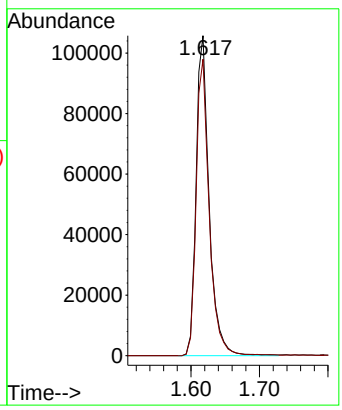
Ion	Ratio	Lower	Upper
62	100		
64	31.3	25.8	38.6



#5
Bromomethane
Concen: 159.542 ug/l
RT: 1.617 min Scan# 8
Delta R.T. 0.012 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion: 94 Resp: 14012

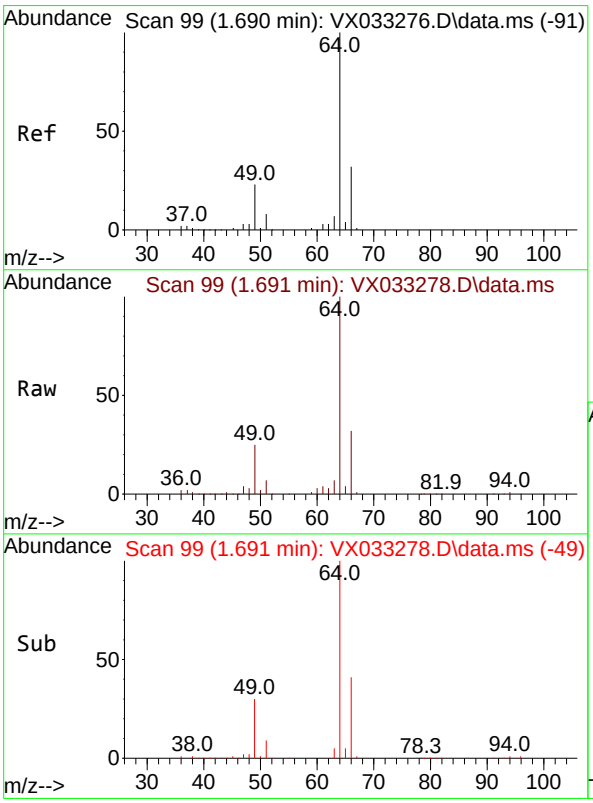
Ion	Ratio	Lower	Upper
94	100		
96	92.6	77.6	116.4



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations
APPROVED

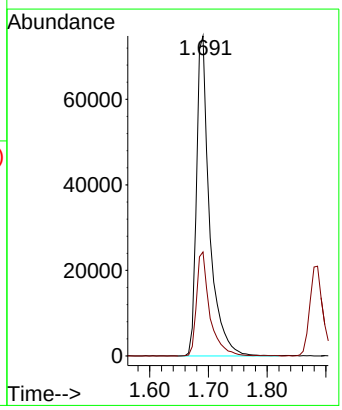
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

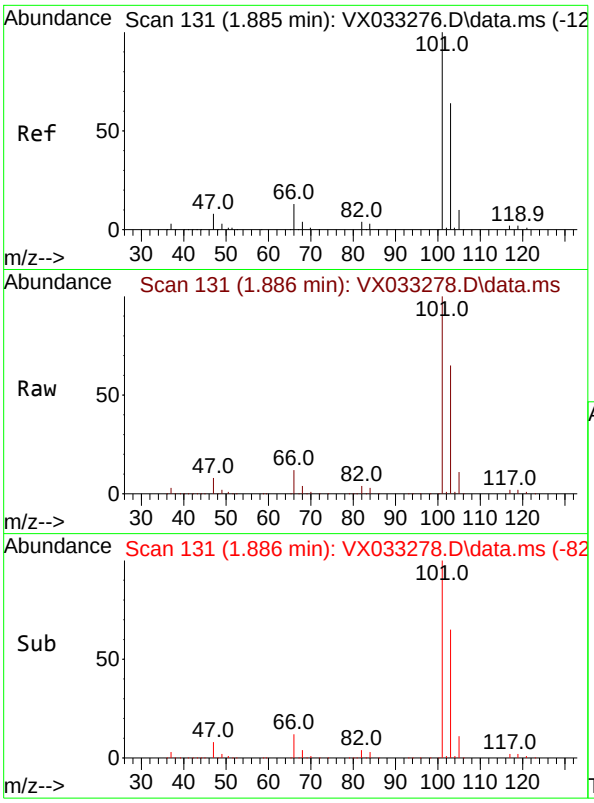


#6
Chloroethane
Concen: 119.781 ug/l
RT: 1.691 min Scan# 99
Delta R.T. 0.006 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion: 64 Resp: 115495

Ion	Ratio	Lower	Upper
64	100		
66	32.5	26.0	39.0





#7
Trichlorofluoromethane
Concen: 123.217 ug/l
RT: 1.886 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

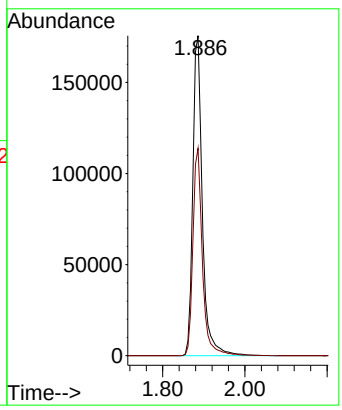
Tgt Ion:101 Resp: 28324

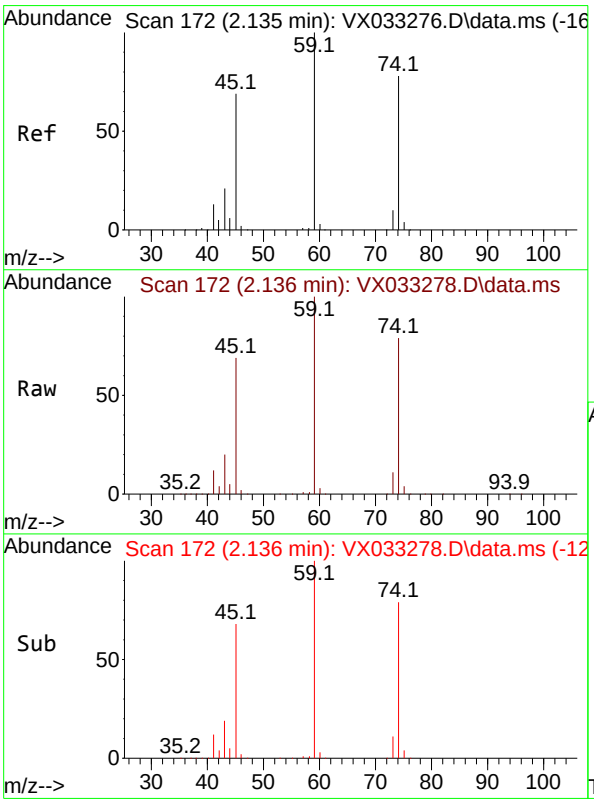
Ion	Ratio	Lower	Upper
101	100		
103	64.8	51.4	77.2

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

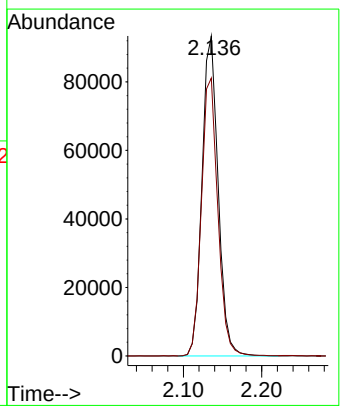


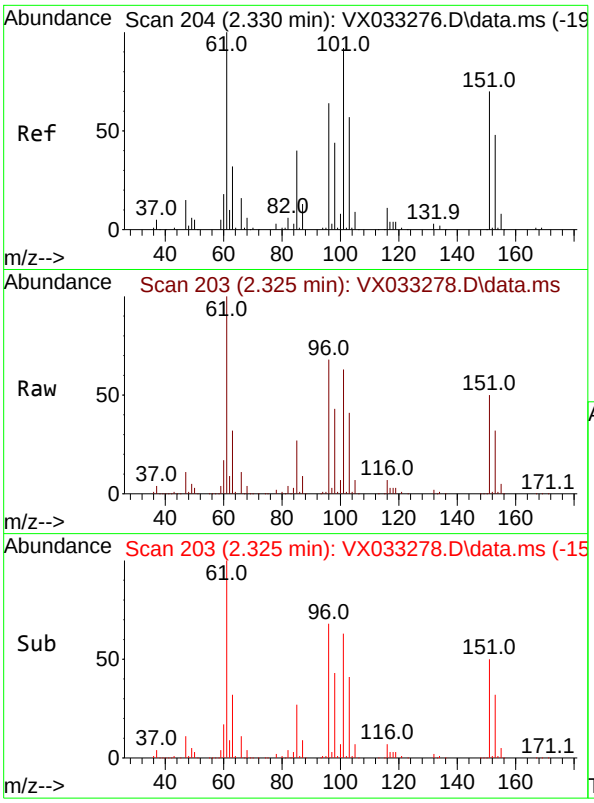


#8
Diethyl Ether
Concen: 184.129 ug/l
RT: 2.136 min Scan# 172
Delta R.T. 0.006 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion: 74 Resp: 133256

Ion	Ratio	Lower	Upper
74	100		
45	88.6	46.6	139.7

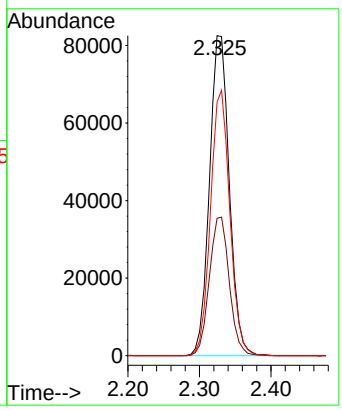




#9
1,1,2-Trichlorotrifluoroethane
Concen: 131.427 ug/l
RT: 2.325 min Scan# 2
Delta R.T. -0.006 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion:101 Resp: 15879

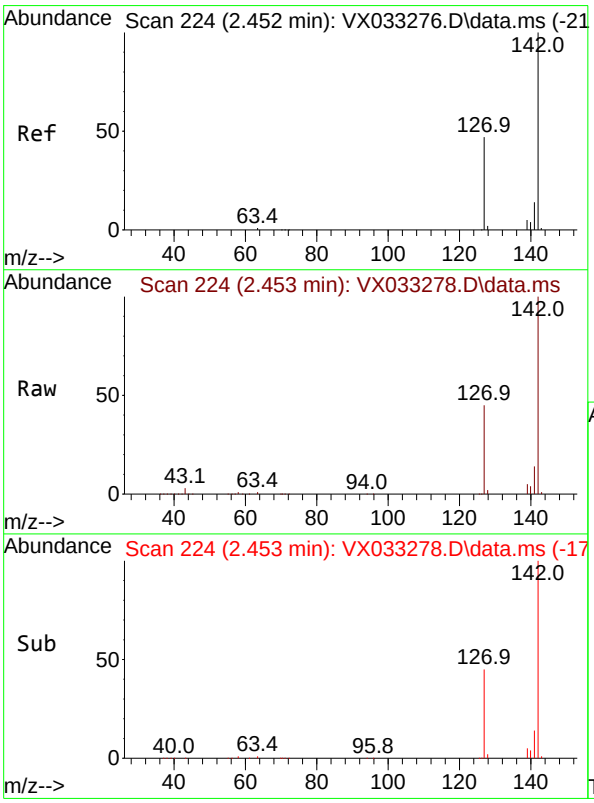
Ion	Ratio	Lower	Upper
101	100		
85	43.6	37.0	55.4
151	81.0	64.4	96.6



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

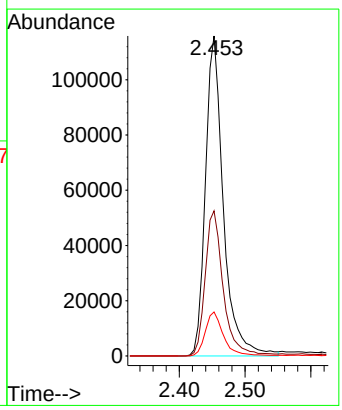
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

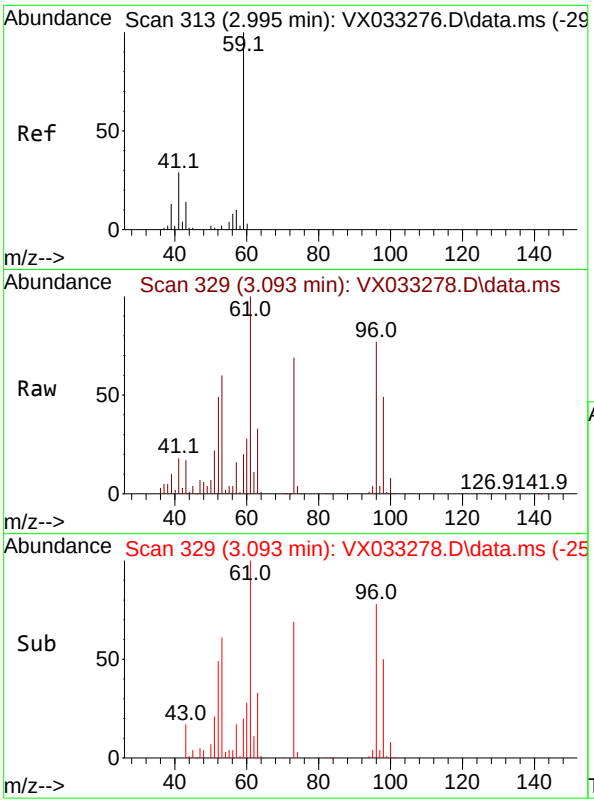


#10
Methyl Iodide
Concen: 158.998 ug/l
RT: 2.453 min Scan# 224
Delta R.T. -0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion:142 Resp: 219915

Ion	Ratio	Lower	Upper
142	100		
127	46.0	38.6	57.8
141	14.1	11.4	17.2

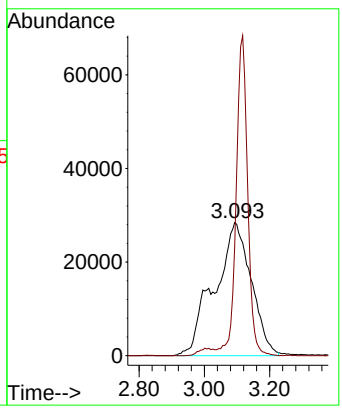




#11
Tert butyl alcohol
Concen: 1119.143 ug/l m
RT: 3.093 min Scan# 3
Delta R.T. 0.128 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion: 59 Resp: 22282

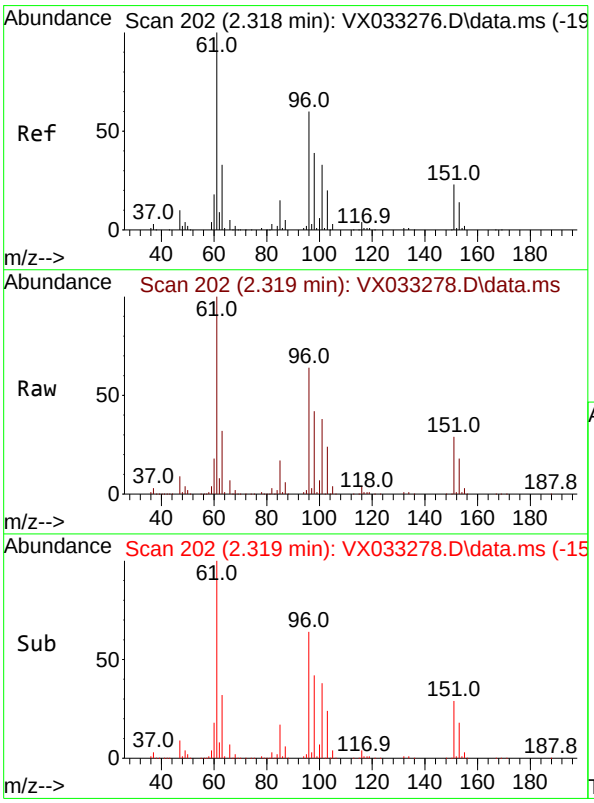
Ion	Ratio	Lower	Upper
59	100		
57	0.0	8.2	12.4



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations
APPROVED

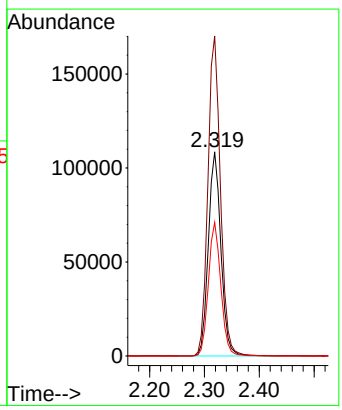
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

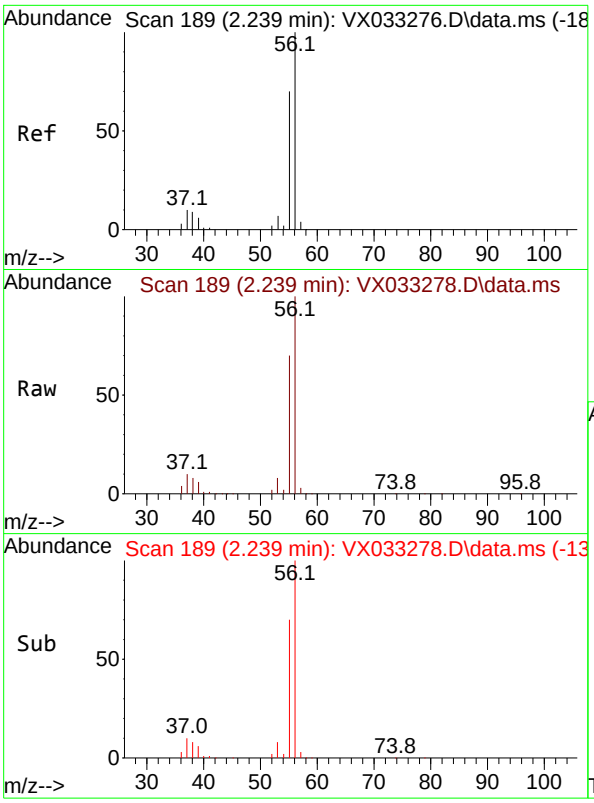


#12
1,1-Dichloroethene
Concen: 153.054 ug/l
RT: 2.319 min Scan# 202
Delta R.T. -0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion: 96 Resp: 172262

Ion	Ratio	Lower	Upper
96	100		
61	156.8	125.1	187.7
98	65.5	50.6	76.0

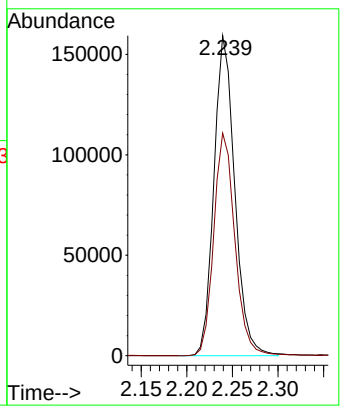




#13
Acrolein
Concen: 1106.369 ug/l m
RT: 2.239 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion: 56 Resp: 25302

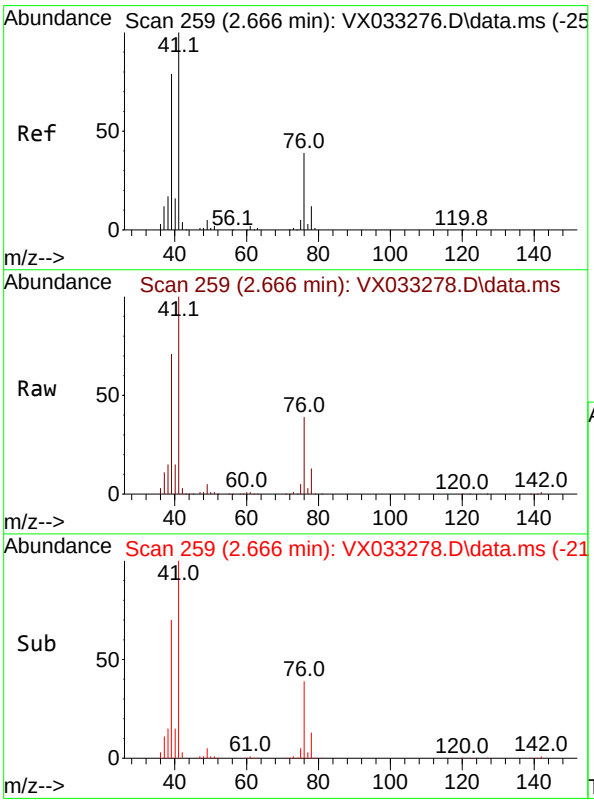
Ion	Ratio	Lower	Upper
56	100		
55	70.8	56.9	85.3



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

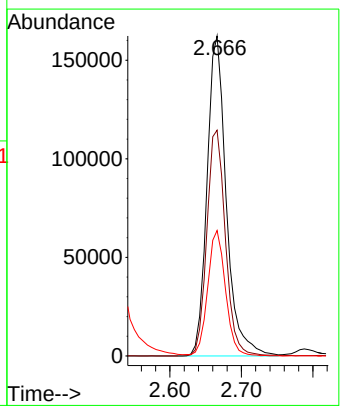
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

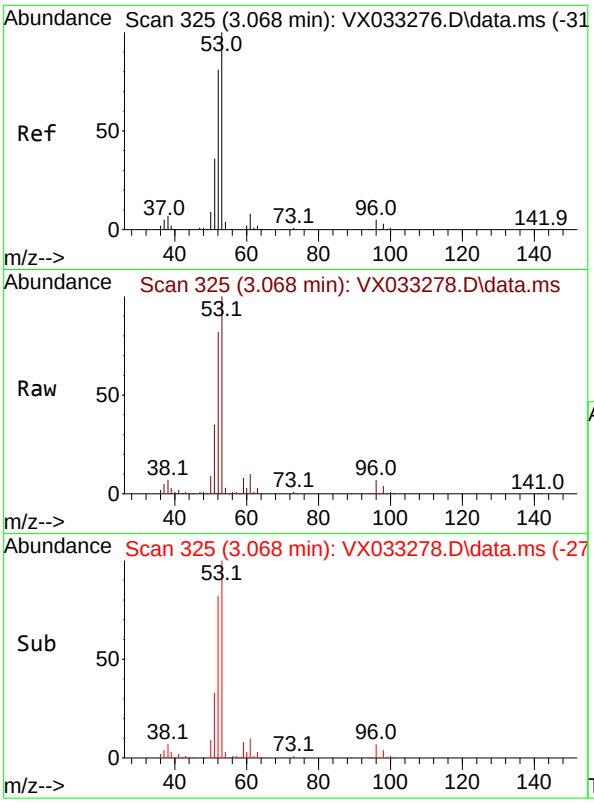


#14
Allyl chloride
Concen: 167.109 ug/l
RT: 2.666 min Scan# 259
Delta R.T. 0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion: 41 Resp: 303647

Ion	Ratio	Lower	Upper
41	100		
39	68.1	61.4	92.2
76	36.5	29.2	43.8

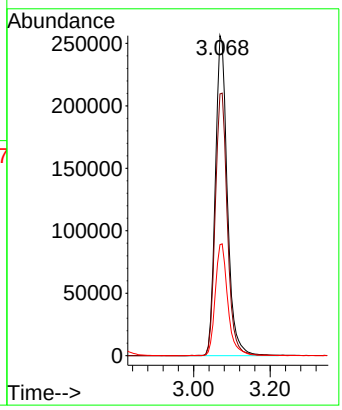




#15
Acrylonitrile
Concen: 990.556 ug/l
RT: 3.068 min Scan# 3
Delta R.T. 0.006 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion: 53 Resp: 55783

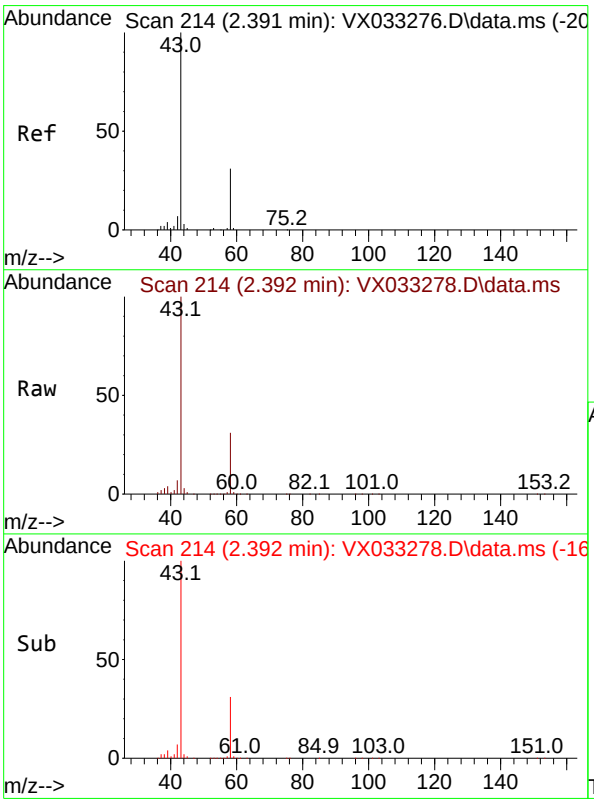
Ion	Ratio	Lower	Upper
53	100		
52	82.8	67.4	101.0
51	36.6	30.3	45.5



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations
APPROVED

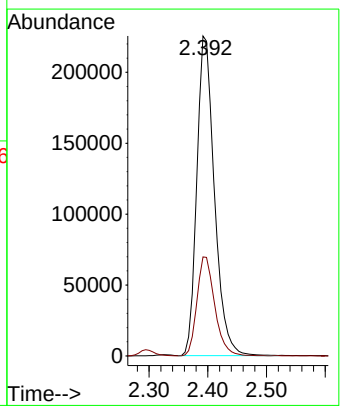
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

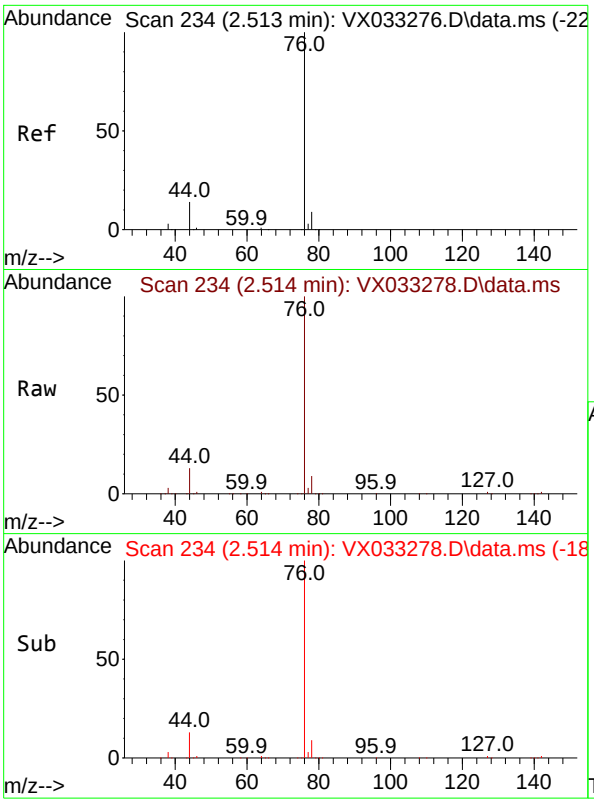


#16
Acetone
Concen: 800.072 ug/l
RT: 2.392 min Scan# 214
Delta R.T. 0.012 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion: 43 Resp: 469301

Ion	Ratio	Lower	Upper
43	100		
58	30.9	23.8	35.8

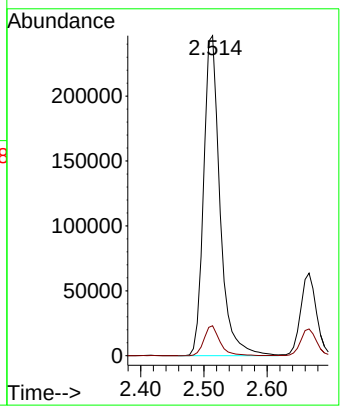




#17
Carbon Disulfide
Concen: 143.021 ug/l
RT: 2.514 min Scan# 2
Delta R.T. -0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion: 76 Resp: 44472

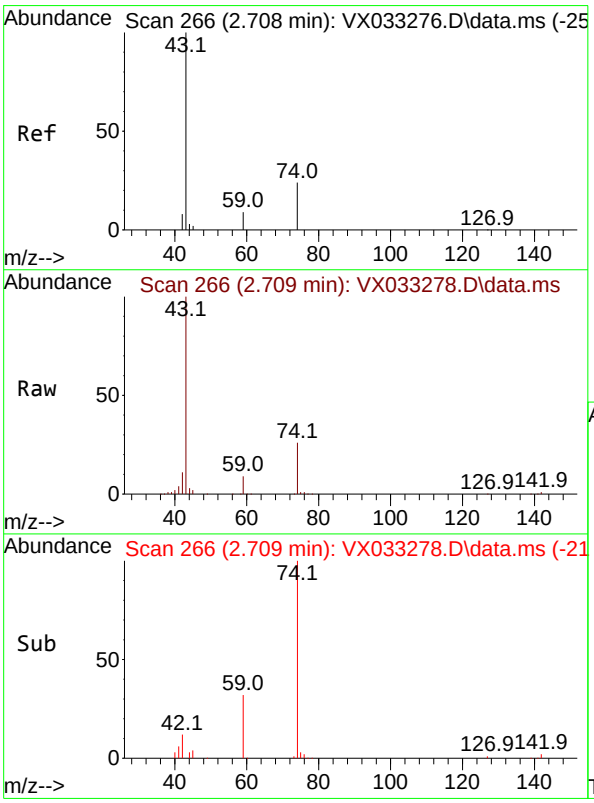
Ion	Ratio	Lower	Upper
76	100		
78	9.3	7.5	11.3



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations
APPROVED

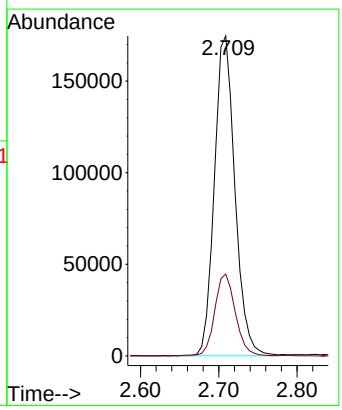
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

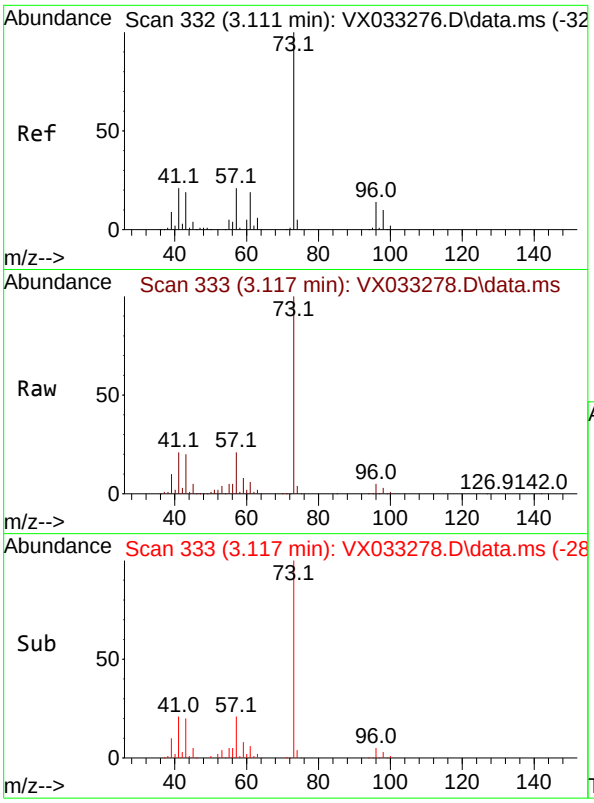


#18
Methyl Acetate
Concen: 195.990 ug/l
RT: 2.709 min Scan# 266
Delta R.T. 0.006 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion: 43 Resp: 318234

Ion	Ratio	Lower	Upper
43	100		
74	25.8	19.4	29.0

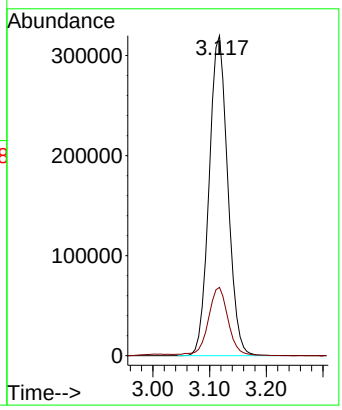




#19
Methyl tert-butyl Ether
Concen: 187.198 ug/l
RT: 3.117 min Scan# 3
Delta R.T. 0.006 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion: 73 Resp: 73069

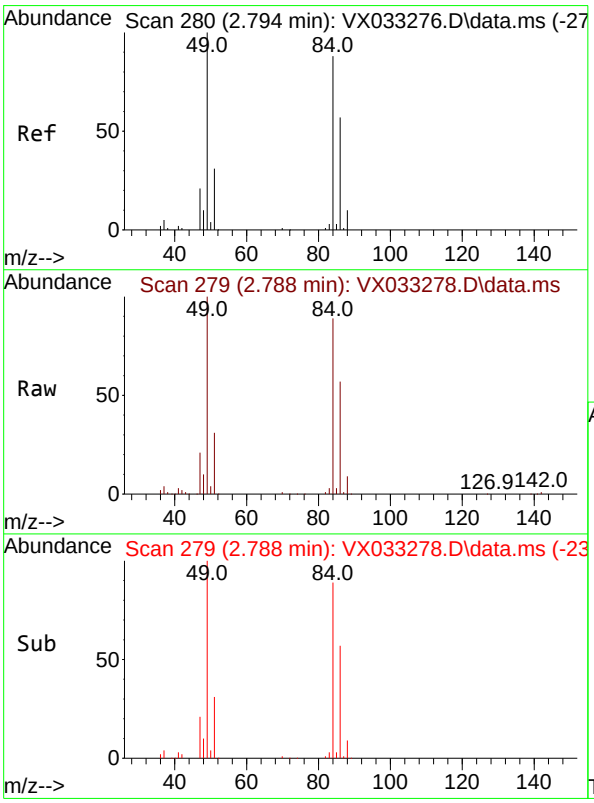
Ion	Ratio	Lower	Upper
73	100		
57	21.3	16.6	25.0



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations
APPROVED

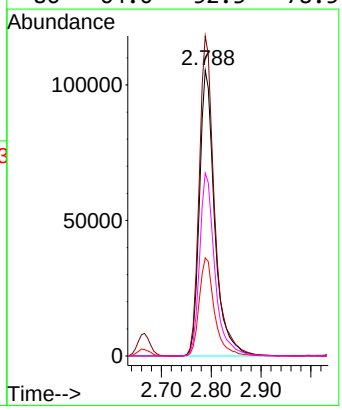
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

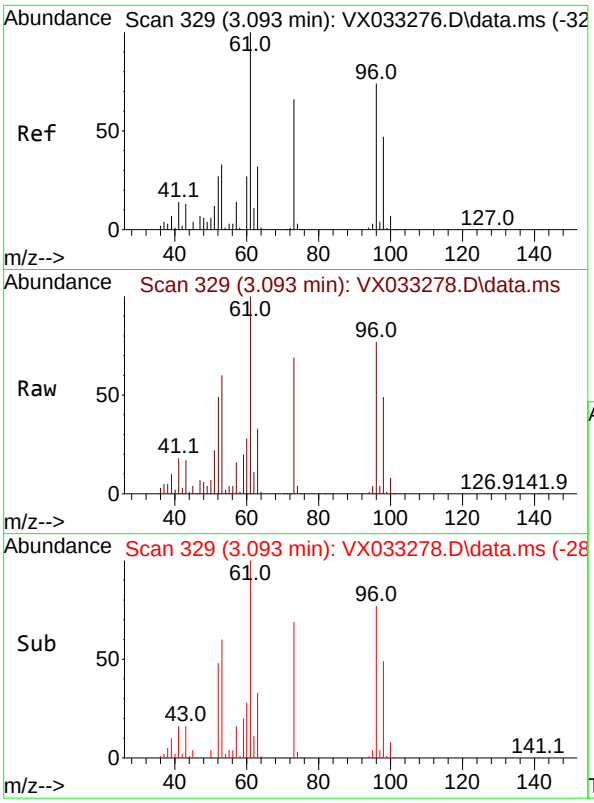


#20
Methylene Chloride
Concen: 158.542 ug/l
RT: 2.788 min Scan# 279
Delta R.T. -0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion: 84 Resp: 224037

Ion	Ratio	Lower	Upper
84	100		
49	112.0	101.0	151.6
51	34.3	31.1	46.7
86	64.0	52.3	78.5

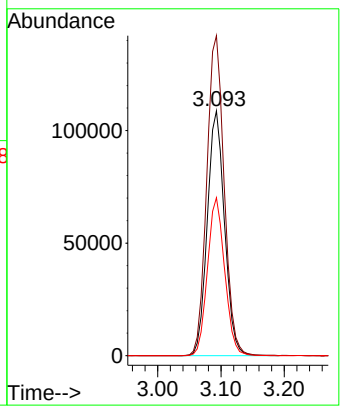




#21
trans-1,2-Dichloroethene
Concen: 159.931 ug/l
RT: 3.093 min Scan# 3
Delta R.T. -0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion: 96 Resp: 20590

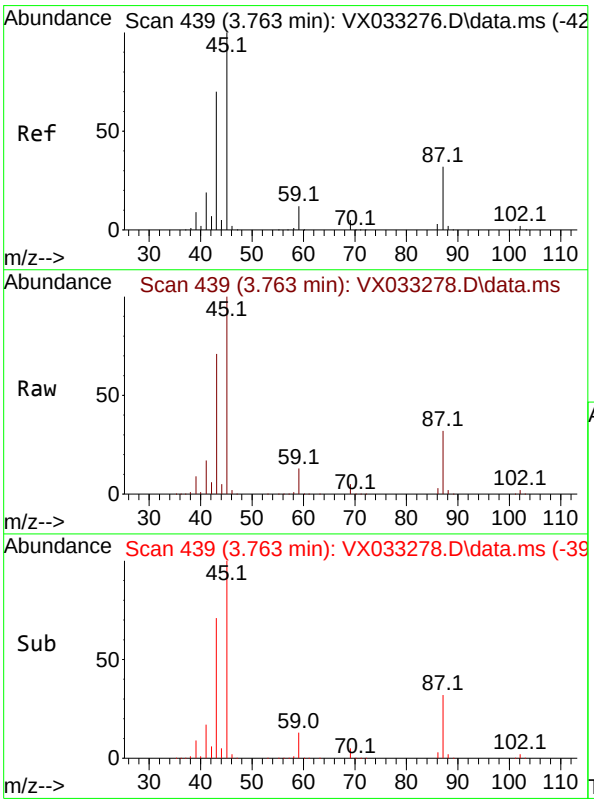
Ion	Ratio	Lower	Upper
96	100		
61	130.7	106.6	160.0
98	64.5	51.0	76.6



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations
APPROVED

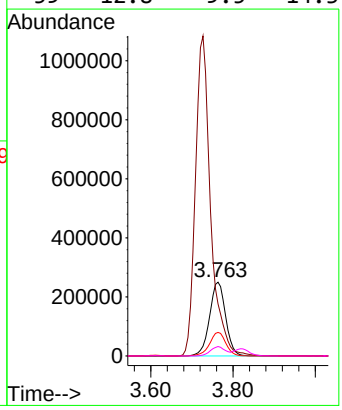
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

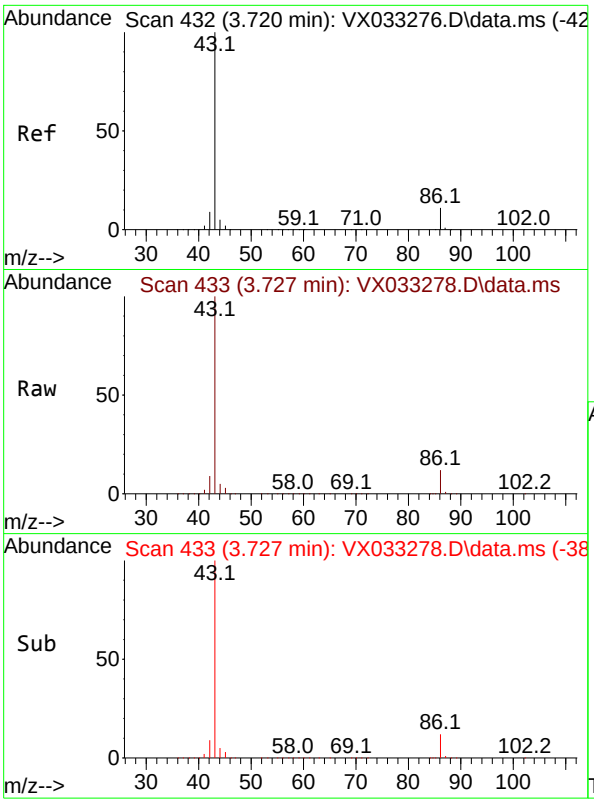


#22
Diisopropyl ether
Concen: 171.174 ug/l
RT: 3.763 min Scan# 439
Delta R.T. 0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion: 45 Resp: 677264

Ion	Ratio	Lower	Upper
45	100		
43	70.6	56.4	84.6
87	31.9	24.4	36.6
59	12.8	9.5	14.3

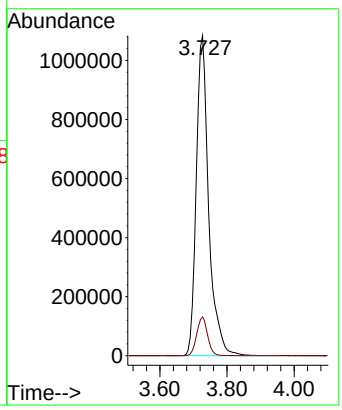




#23
Vinyl Acetate
Concen: 899.311 ug/l
RT: 3.727 min Scan# 4
Delta R.T. 0.006 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion: 43 Resp: 278525

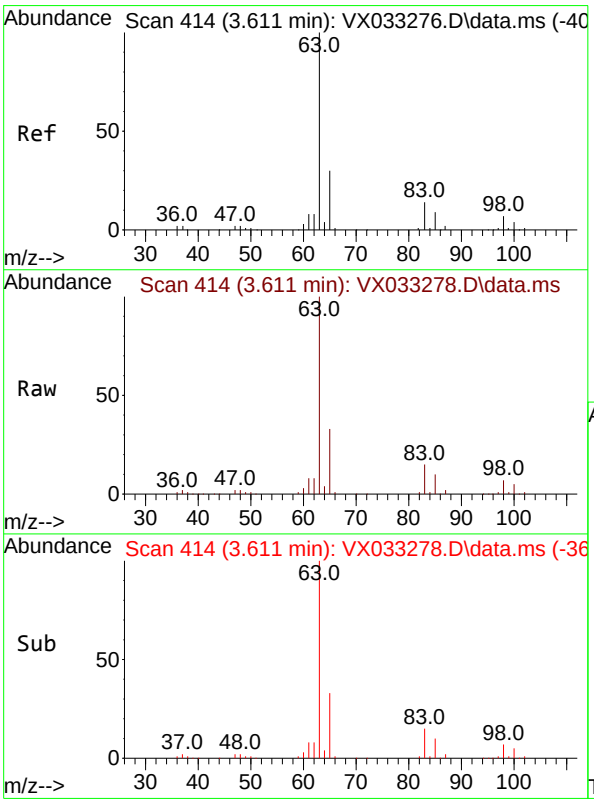
Ion	Ratio	Lower	Upper
43	100		
86	12.1	8.6	12.8



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations
APPROVED

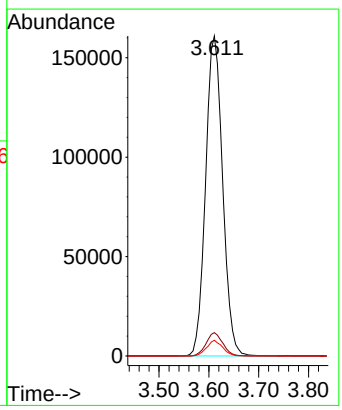
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

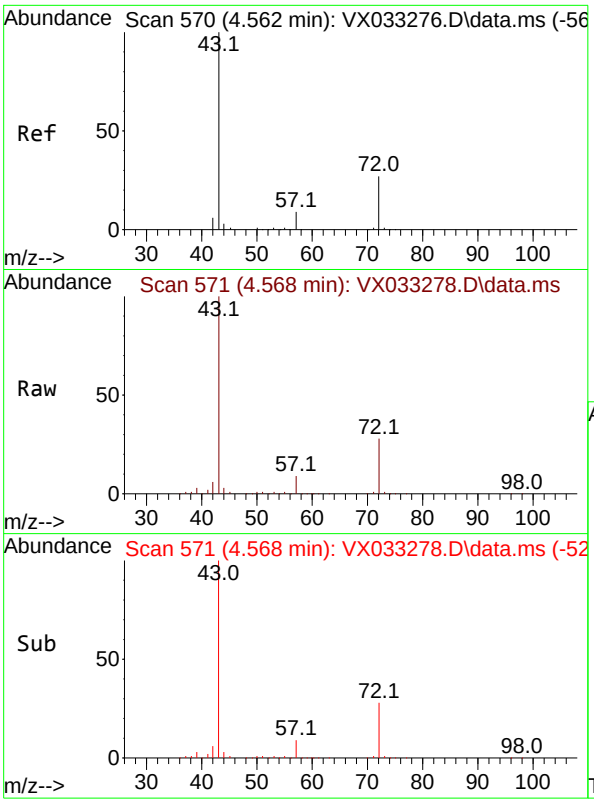


#24
1,1-Dichloroethane
Concen: 168.724 ug/l
RT: 3.611 min Scan# 414
Delta R.T. 0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion: 63 Resp: 382012

Ion	Ratio	Lower	Upper
63	100		
98	7.3	3.5	10.4
100	4.9	2.3	6.8

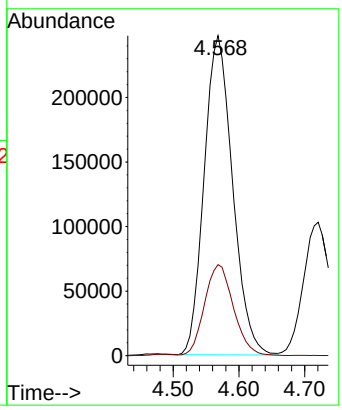




#25
2-Butanone
Concen: 919.306 ug/l
RT: 4.568 min Scan# 5
Delta R.T. 0.012 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion: 43 Resp: 74356

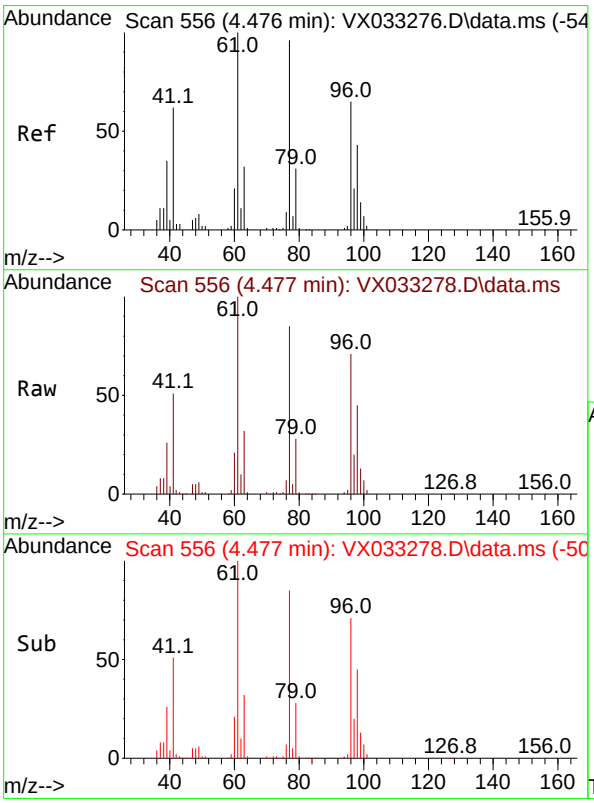
Ion	Ratio	Lower	Upper
43	100		
72	28.4	22.2	33.2



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

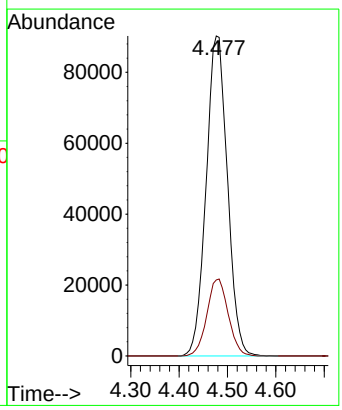
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

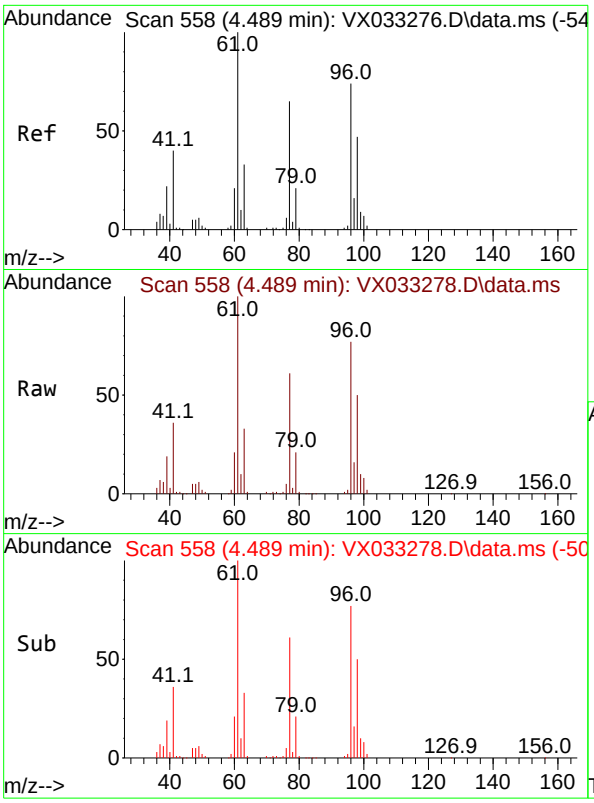


#26
2,2-Dichloropropane
Concen: 151.437 ug/l
RT: 4.477 min Scan# 556
Delta R.T. -0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion: 77 Resp: 275691

Ion	Ratio	Lower	Upper
77	100		
97	24.1	11.4	34.1

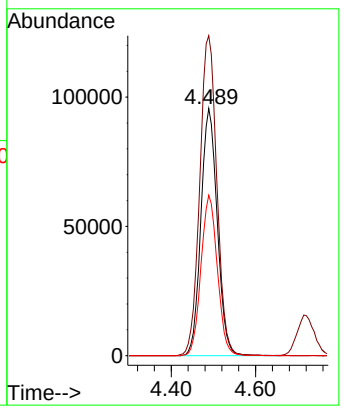




#27
cis-1,2-Dichloroethene
Concen: 176.507 ug/l
RT: 4.489 min Scan# 5
Delta R.T. -0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion: 96 Resp: 25819

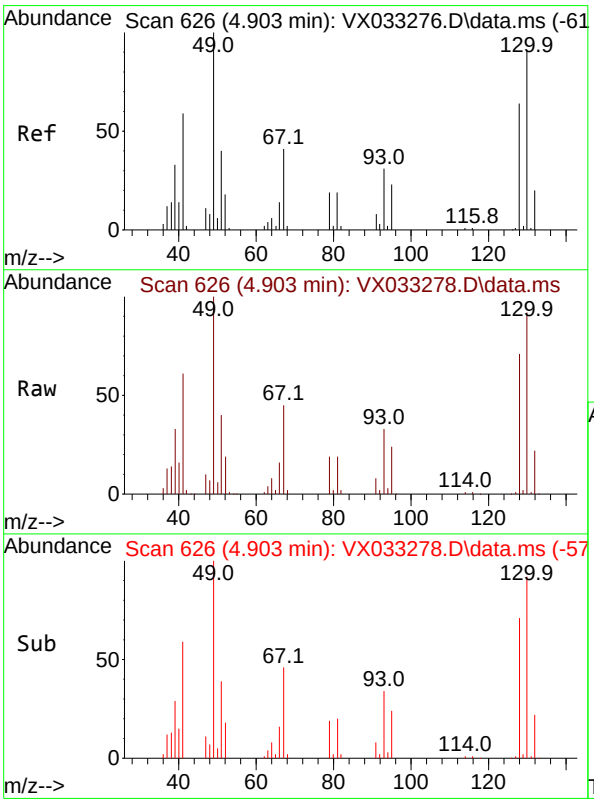
Ion	Ratio	Lower	Upper
96	100		
61	135.5	0.0	286.0
98	65.0	0.0	129.6



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations
APPROVED

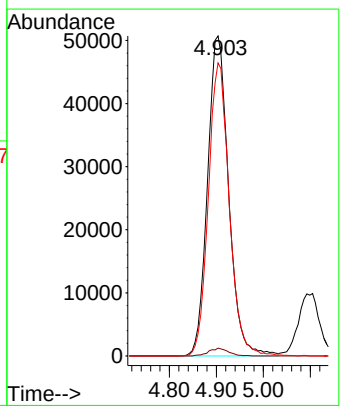
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

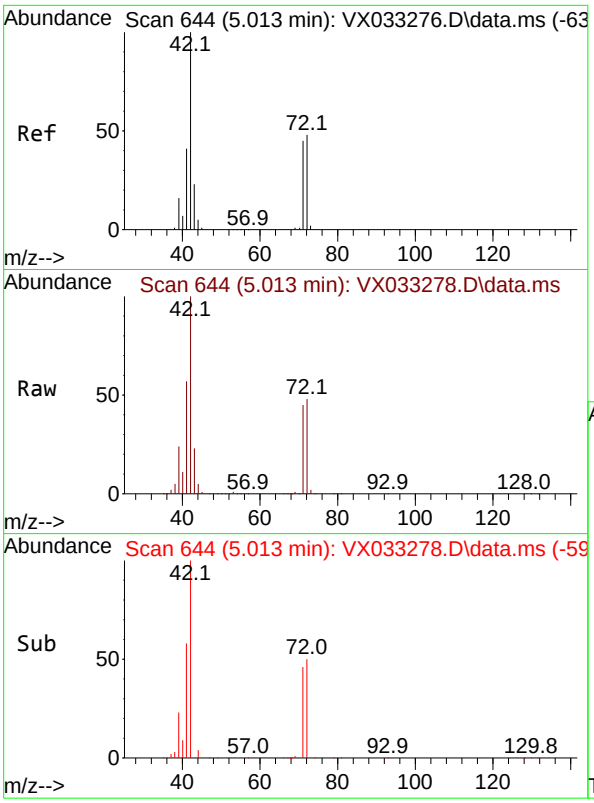


#28
Bromochloromethane
Concen: 159.137 ug/l
RT: 4.903 min Scan# 626
Delta R.T. -0.001 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion: 49 Resp: 158318

Ion	Ratio	Lower	Upper
49	100		
129	2.3	0.0	3.8
130	90.7	67.5	101.3

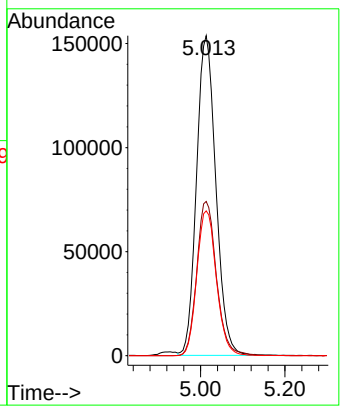




#29
Tetrahydrofuran
Concen: 955.173 ug/l
RT: 5.013 min Scan# 64
Delta R.T. 0.012 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion: 42 Resp: 49023

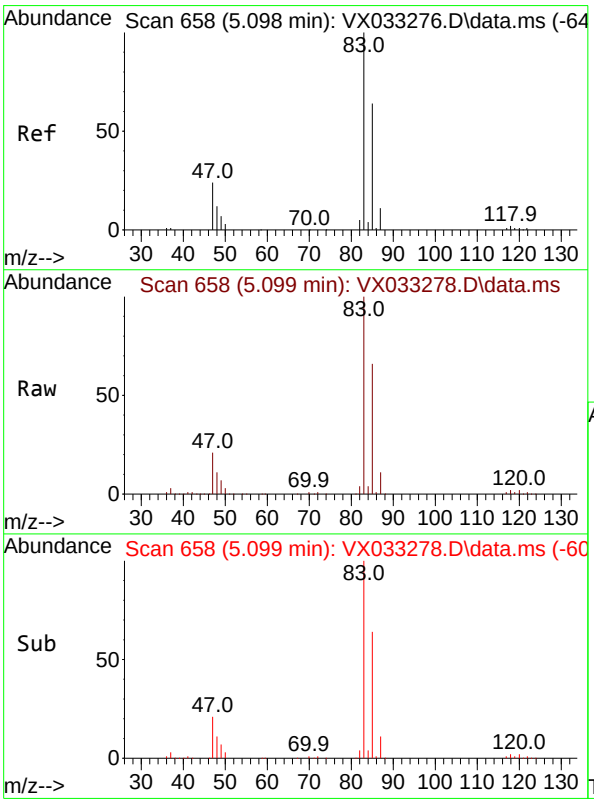
Ion	Ratio	Lower	Upper
42	100		
72	49.3	37.6	56.4
71	45.9	34.7	52.1



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations
APPROVED

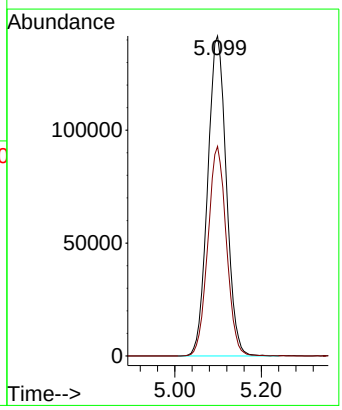
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

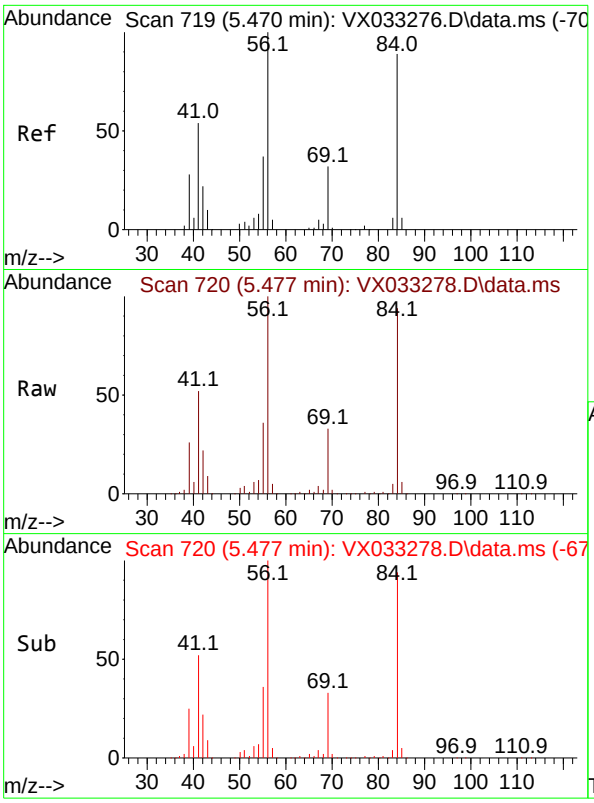


#30
Chloroform
Concen: 167.120 ug/l
RT: 5.099 min Scan# 658
Delta R.T. -0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion: 83 Resp: 423786

Ion	Ratio	Lower	Upper
83	100		
85	65.5	51.1	76.7

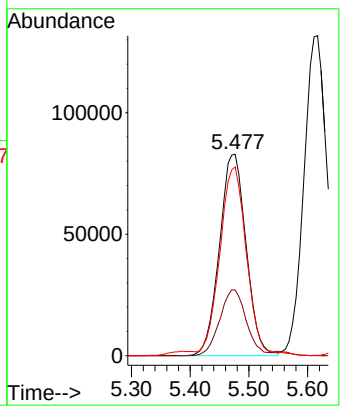




#31
Cyclohexane
Concen: 128.438 ug/l
RT: 5.477 min Scan# 7
Delta R.T. 0.007 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion: 56 Resp: 26138

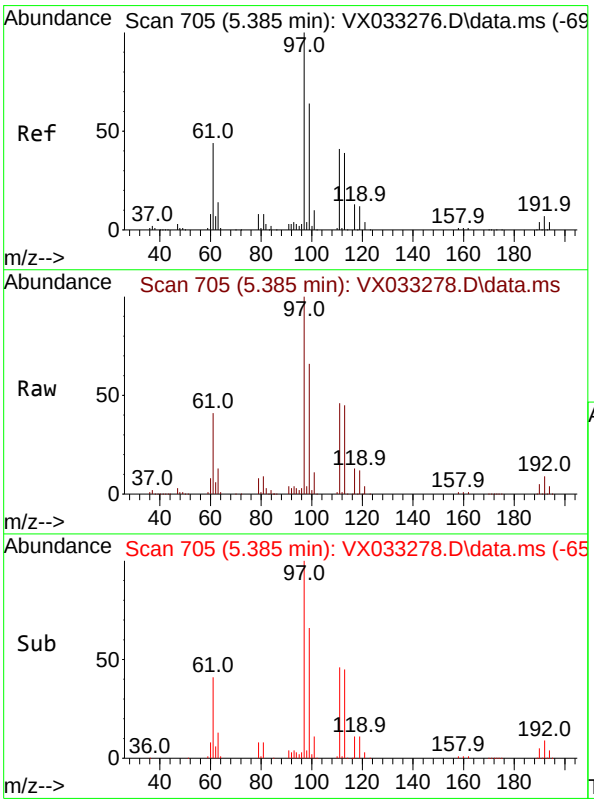
Ion	Ratio	Lower	Upper
56	100		
69	32.7	24.1	36.1
84	92.3	66.9	100.3



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations
APPROVED

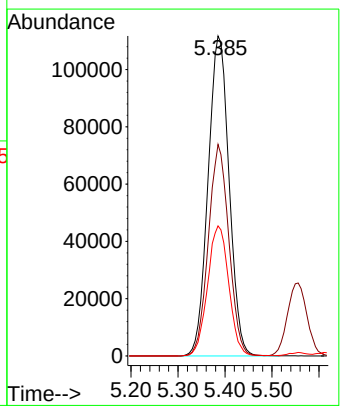
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

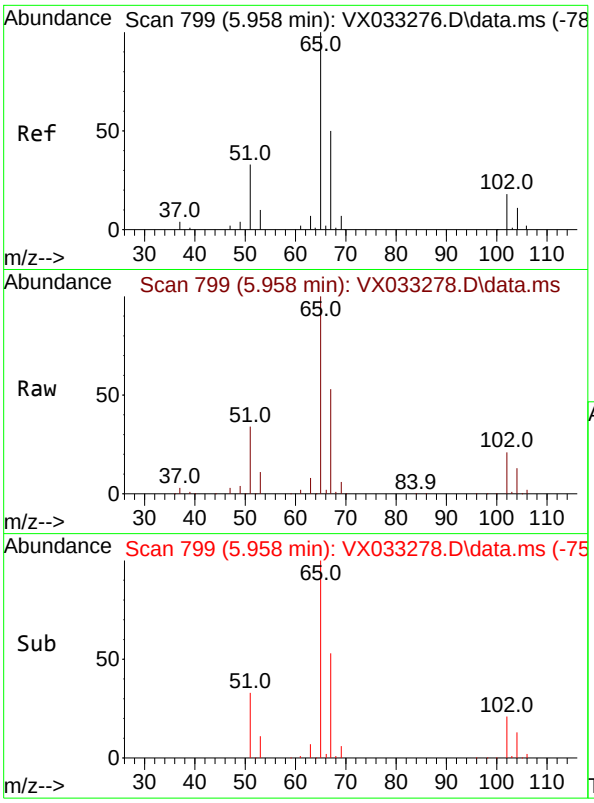


#32
1,1,1-Trichloroethane
Concen: 152.589 ug/l
RT: 5.385 min Scan# 705
Delta R.T. 0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion: 97 Resp: 346522

Ion	Ratio	Lower	Upper
97	100		
99	64.6	51.4	77.0
61	41.1	35.2	52.8

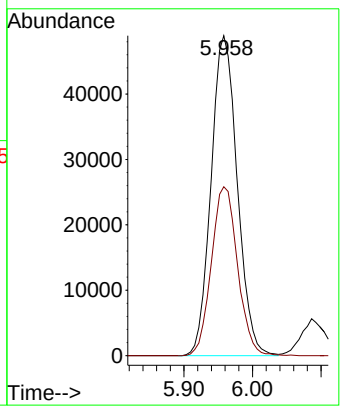




#33
1,2-Dichloroethane-d4
Concen: 93.441 ug/l
RT: 5.958 min Scan# 7
Delta R.T. 0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion: 65 Resp: 12982

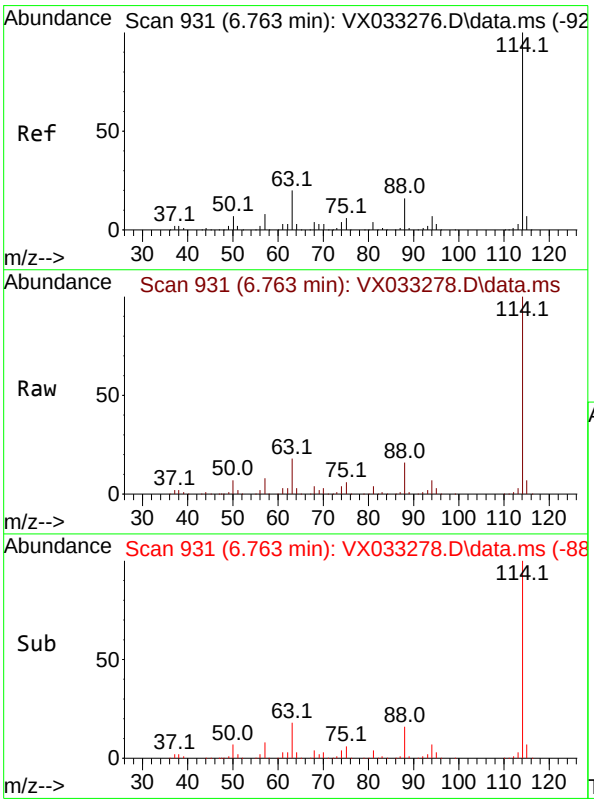
Ion	Ratio	Lower	Upper
65	100		
67	52.8	0.0	101.8



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

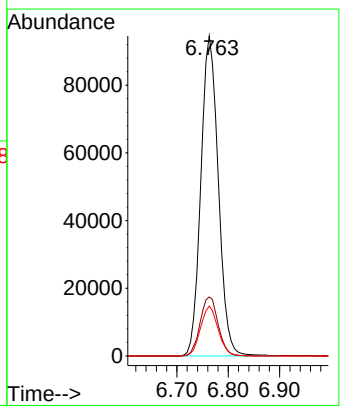
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

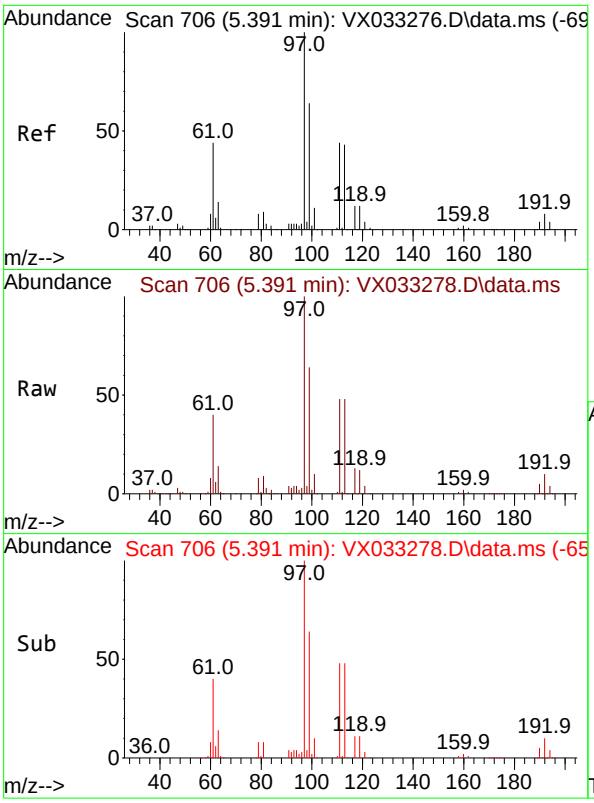


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 6.763 min Scan# 931
Delta R.T. -0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion:114 Resp: 222944

Ion	Ratio	Lower	Upper
114	100		
63	18.4	0.0	41.6
88	15.6	0.0	33.4

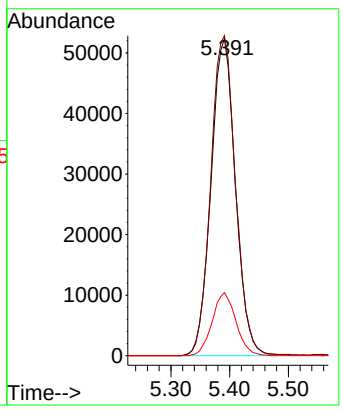




#35
Dibromofluoromethane
Concen: 120.373 ug/l
RT: 5.391 min Scan# 7
Delta R.T. 0.006 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion:113 Resp: 15129

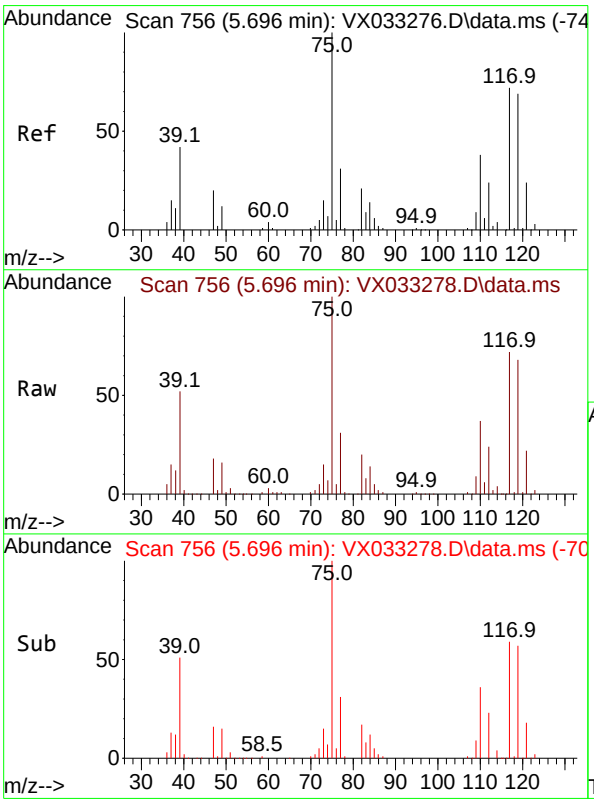
Ion	Ratio	Lower	Upper
113	100		
111	102.3	82.4	123.6
192	19.4	15.4	23.2



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

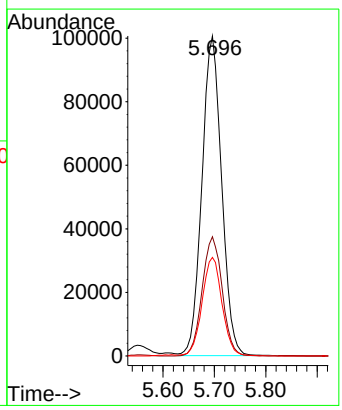
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

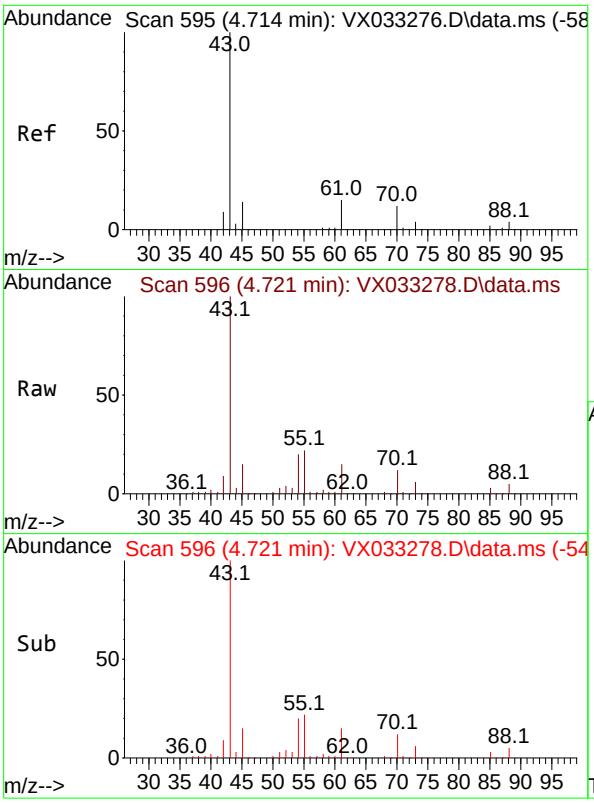


#36
1,1-Dichloropropene
Concen: 133.281 ug/l
RT: 5.696 min Scan# 756
Delta R.T. 0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion: 75 Resp: 267855

Ion	Ratio	Lower	Upper
75	100		
110	37.9	18.4	55.2
77	31.2	24.5	36.7

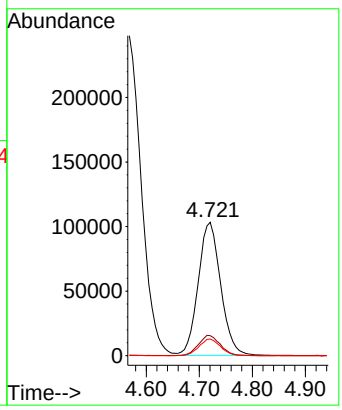




#37
Ethyl Acetate
Concen: 173.027 ug/l
RT: 4.721 min Scan# 5
Delta R.T. 0.006 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion: 43 Resp: 30337

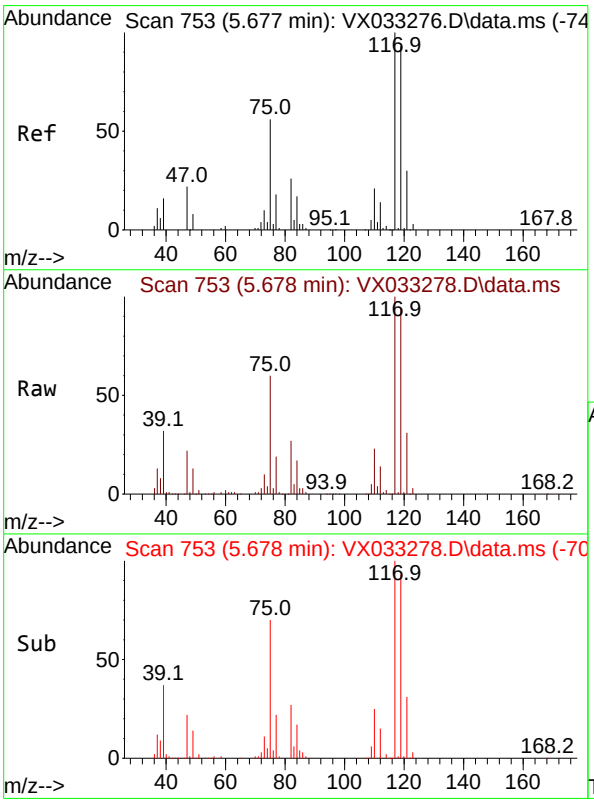
Ion	Ratio	Lower	Upper
43	100		
61	14.9	11.5	17.3
70	12.0	9.1	13.7



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

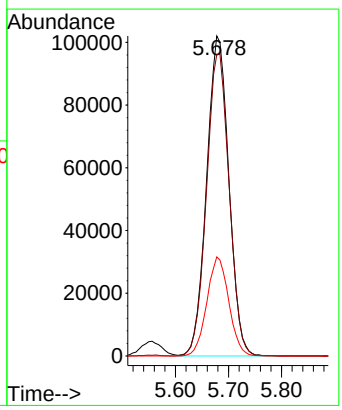
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

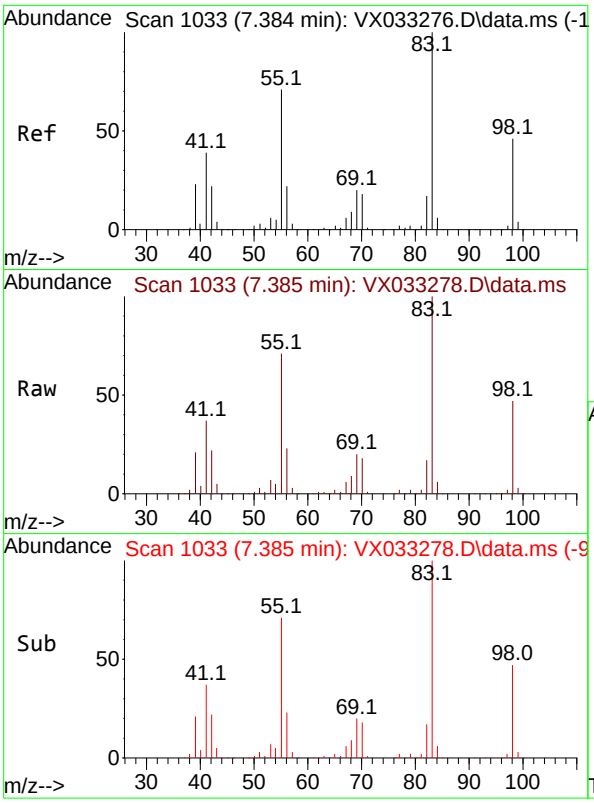


#38
Carbon Tetrachloride
Concen: 133.497 ug/l
RT: 5.678 min Scan# 753
Delta R.T. -0.006 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion:117 Resp: 297622

Ion	Ratio	Lower	Upper
117	100		
119	94.1	77.2	115.8
121	31.0	25.8	38.6

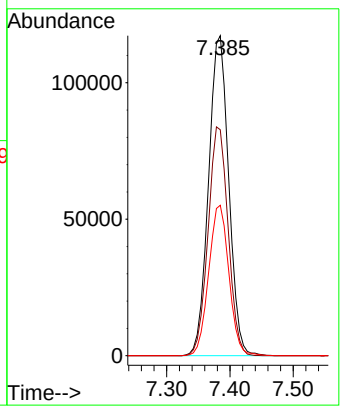




#39
Methylcyclohexane
Concen: 113.151 ug/l
RT: 7.385 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion: 83 Resp: 25945

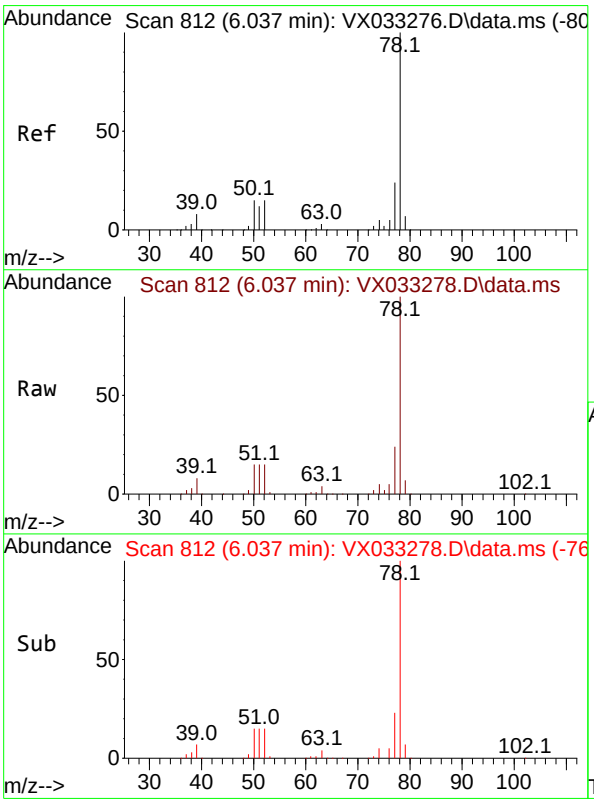
Ion	Ratio	Lower	Upper
83	100		
55	70.6	58.4	87.6
98	47.0	37.2	55.8



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations
APPROVED

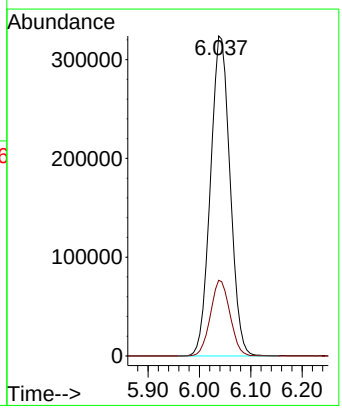
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

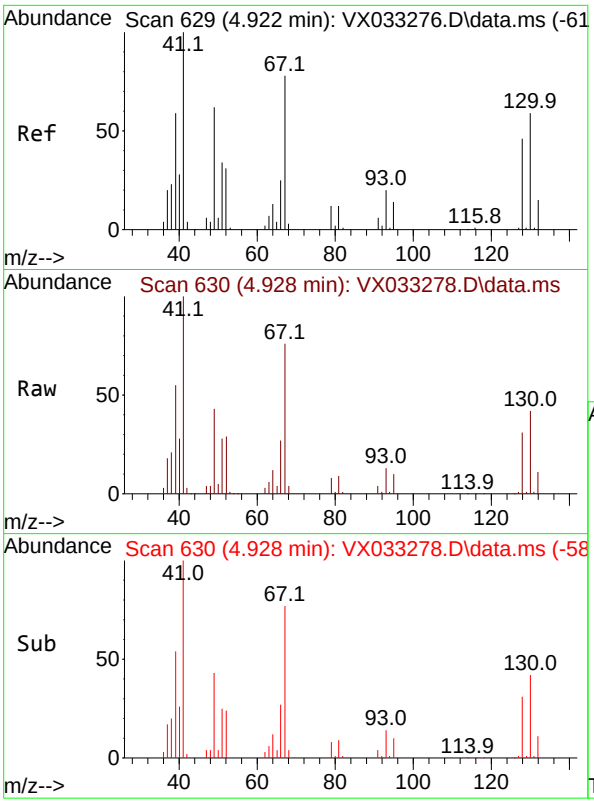


#40
Benzene
Concen: 152.499 ug/l
RT: 6.037 min Scan# 812
Delta R.T. 0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion: 78 Resp: 859288

Ion	Ratio	Lower	Upper
78	100		
77	23.7	19.0	28.4

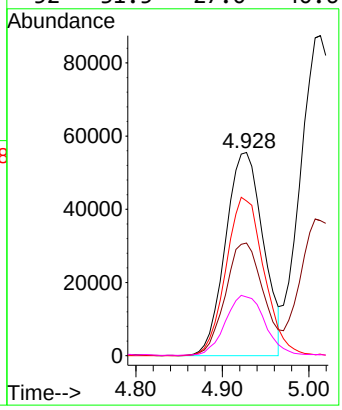




#41
Methacrylonitrile
Concen: 170.863 ug/l
RT: 4.928 min Scan# 6
Delta R.T. 0.006 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion: 41 Resp: 16856

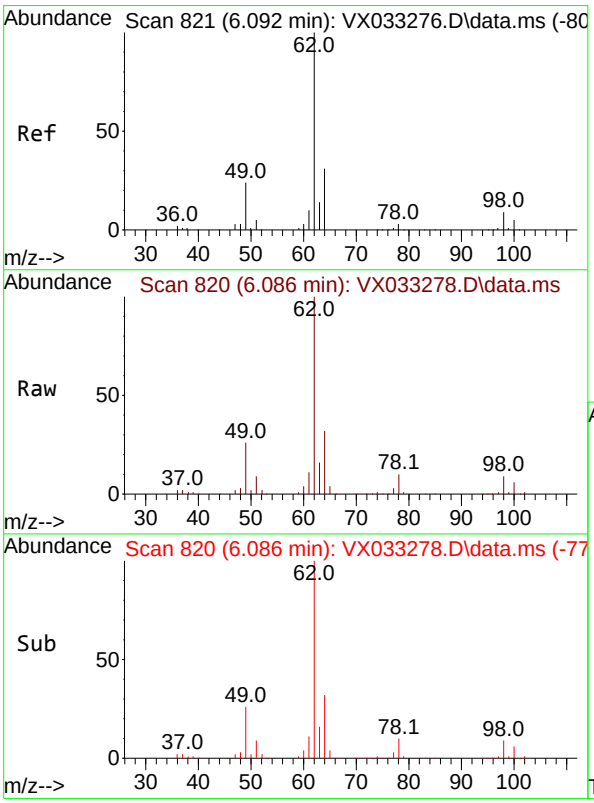
Ion	Ratio	Lower	Upper
41	100		
39	56.8	47.5	71.3
67	78.6	60.5	90.7
52	31.5	27.0	40.6



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations
APPROVED

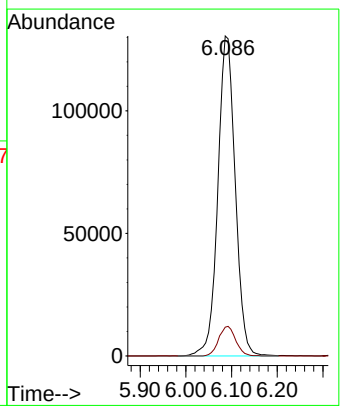
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

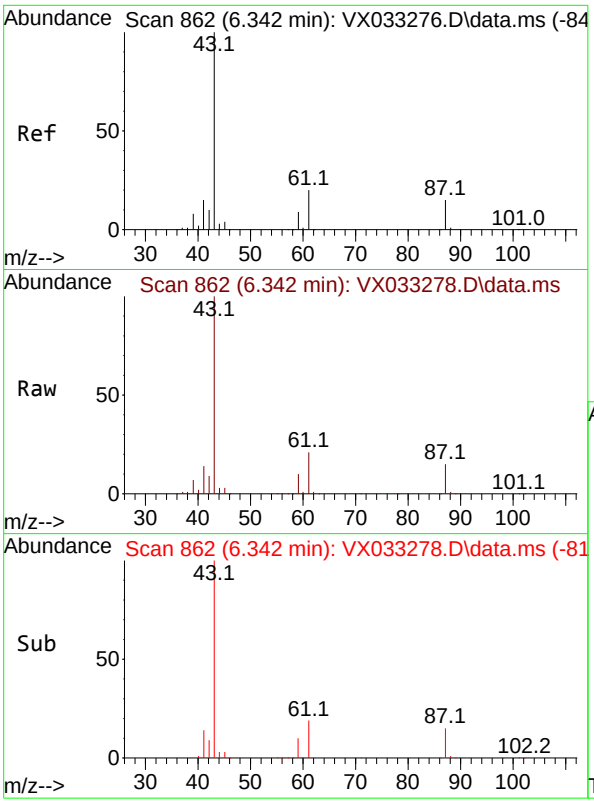


#42
1,2-Dichloroethane
Concen: 152.092 ug/l
RT: 6.086 min Scan# 820
Delta R.T. 0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion: 62 Resp: 345058

Ion	Ratio	Lower	Upper
62	100		
98	9.1	0.0	16.0

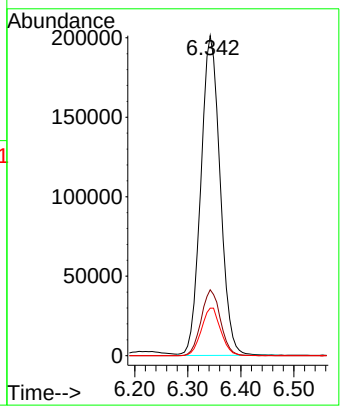




#43
Isopropyl Acetate
Concen: 175.101 ug/l
RT: 6.342 min Scan# 8
Delta R.T. 0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion: 43 Resp: 50774

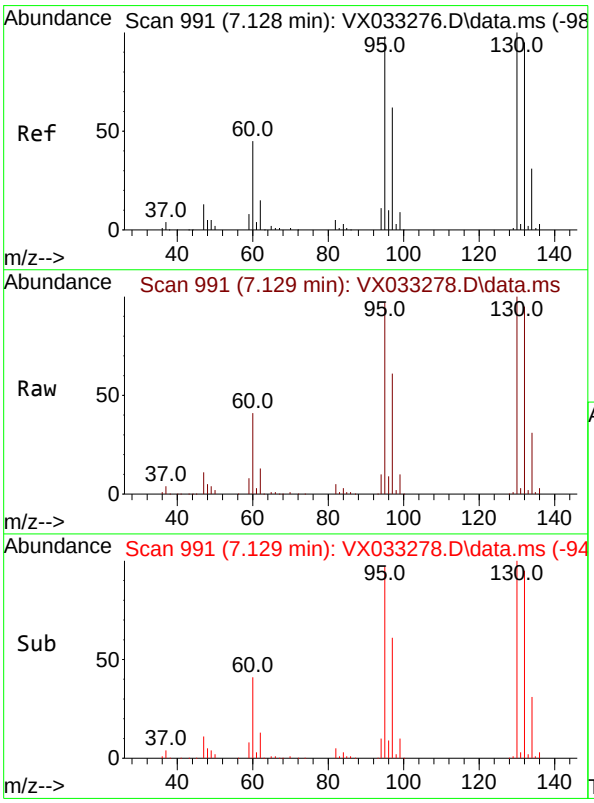
Ion	Ratio	Lower	Upper
43	100		
61	20.6	15.4	23.0
87	14.9	10.8	16.2



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

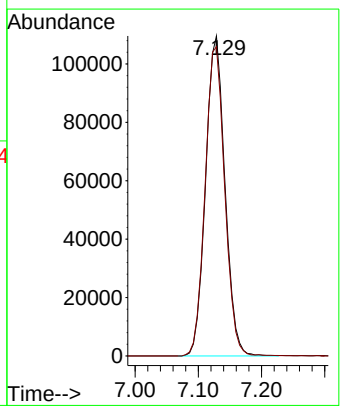
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

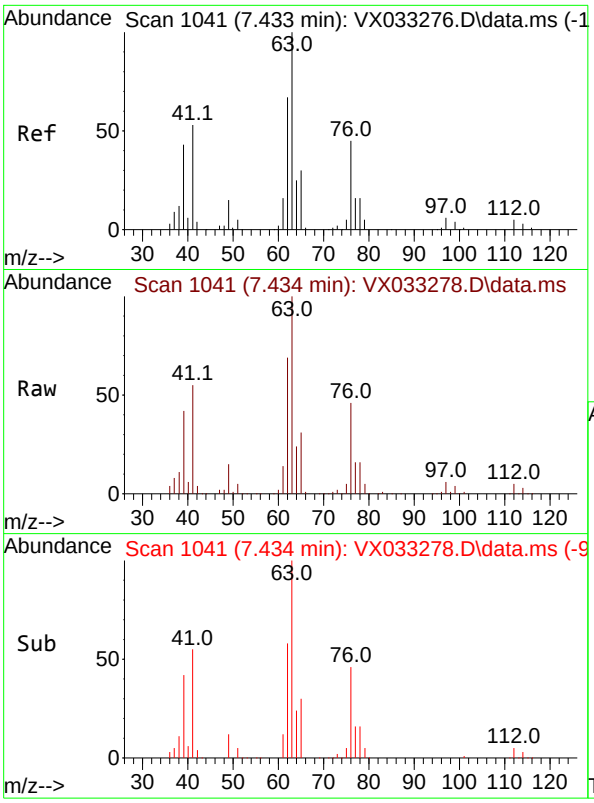


#44
Trichloroethene
Concen: 147.125 ug/l
RT: 7.129 min Scan# 991
Delta R.T. -0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion:130 Resp: 232626

Ion	Ratio	Lower	Upper
130	100		
95	96.6	0.0	195.2

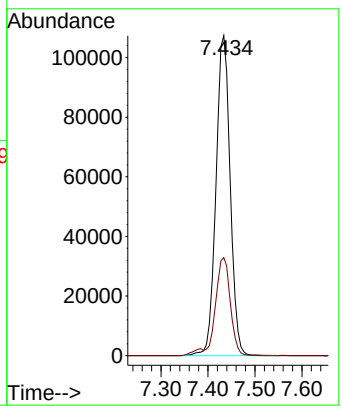




#45
1,2-Dichloropropane
Concen: 162.353 ug/l
RT: 7.434 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion: 63 Resp: 22607

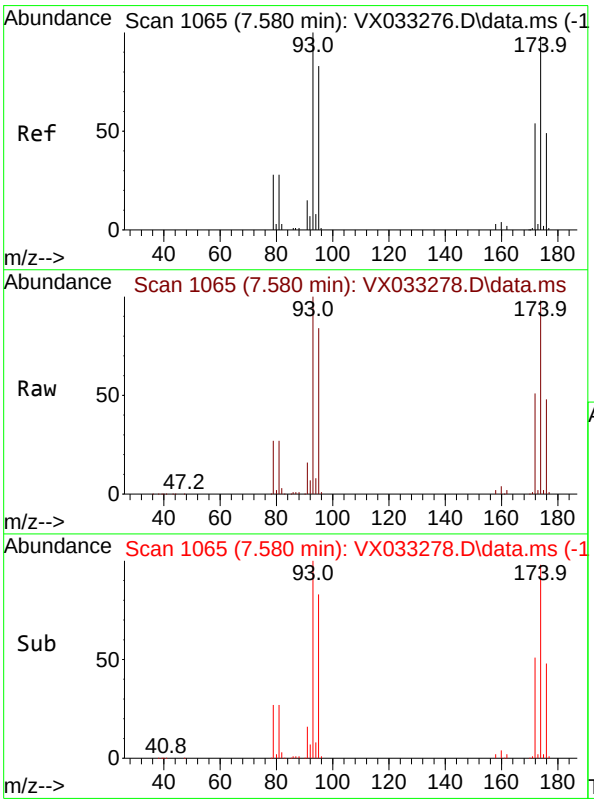
Ion	Ratio	Lower	Upper
63	100		
65	30.6	24.6	36.8



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

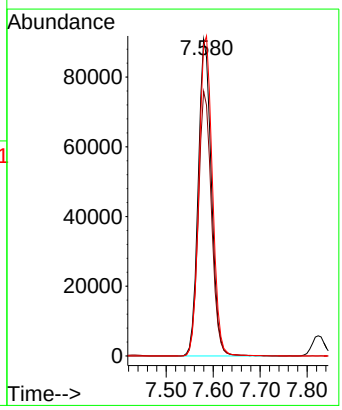
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

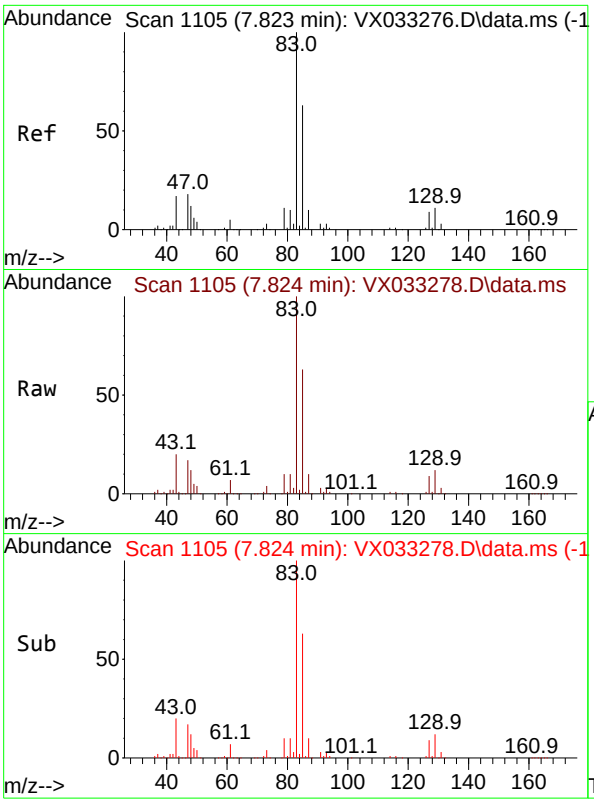


#46
Dibromomethane
Concen: 163.014 ug/l
RT: 7.580 min Scan# 1065
Delta R.T. -0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion: 93 Resp: 177123

Ion	Ratio	Lower	Upper
93	100		
95	83.4	65.8	98.8
174	102.6	79.8	119.6

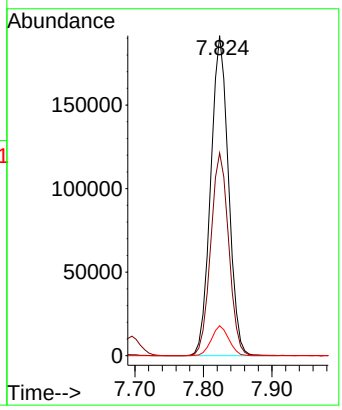




#47
Bromodichloromethane
Concen: 163.993 ug/l
RT: 7.824 min Scan# 11
Delta R.T. -0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion: 83 Resp: 34431

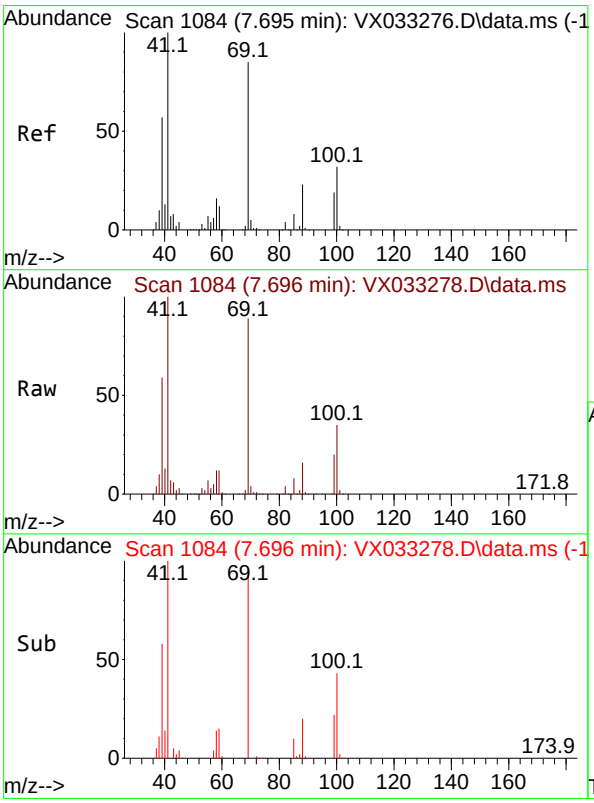
Ion	Ratio	Lower	Upper
83	100		
85	63.4	52.2	78.4
127	9.4	7.4	11.2



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

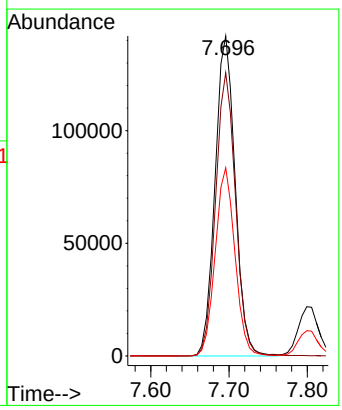
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

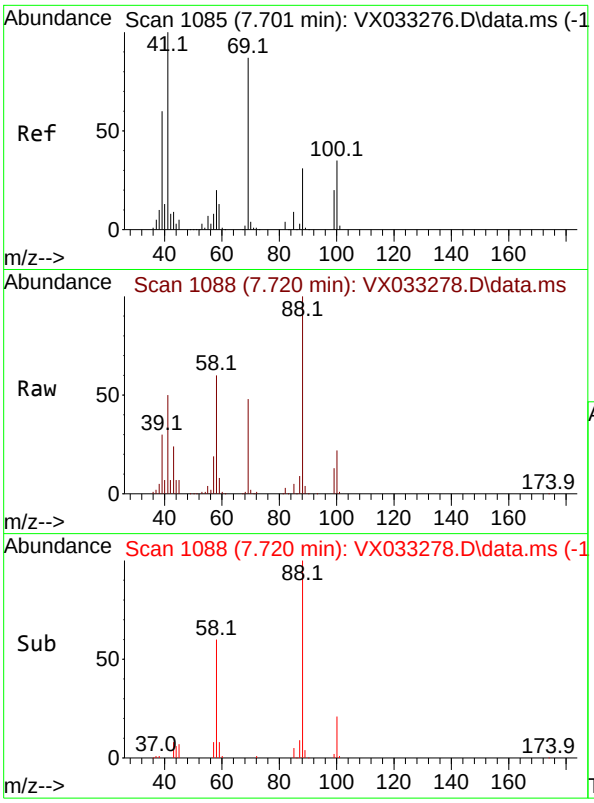


#48
Methyl methacrylate
Concen: 169.388 ug/l
RT: 7.696 min Scan# 1084
Delta R.T. -0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion: 41 Resp: 252825

Ion	Ratio	Lower	Upper
41	100		
69	88.1	65.1	97.7
39	57.9	51.9	77.9





#49
1,4-Dioxane
Concen: 4196.625 ug/l
RT: 7.720 min Scan# 1
Delta R.T. 0.049 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

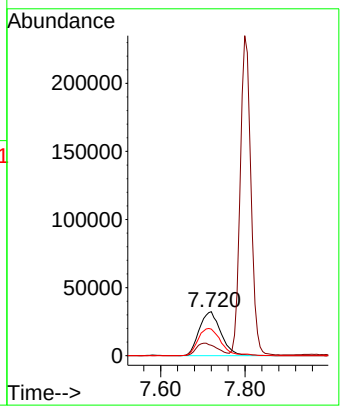
Tgt Ion: 88 Resp: 11530

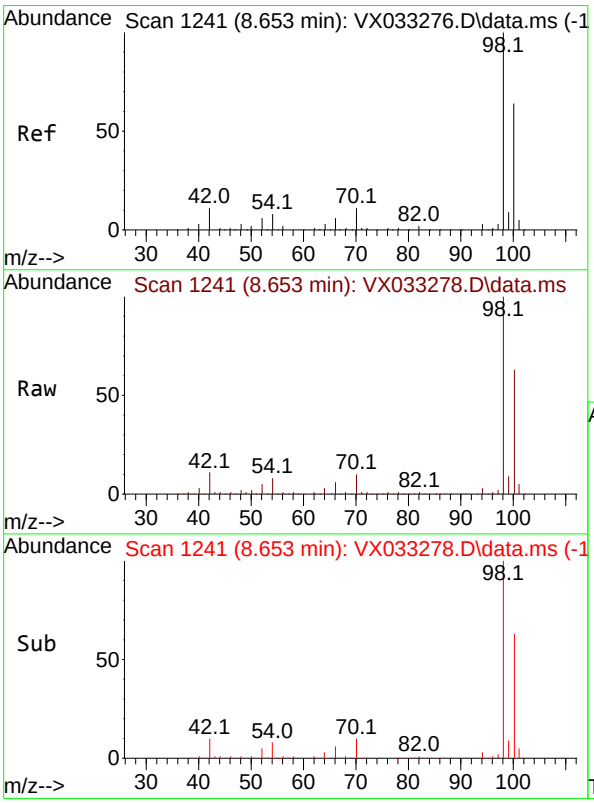
Ion	Ratio	Lower	Upper
88	100		
43	28.1	26.6	39.8
58	63.7	51.7	77.5

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

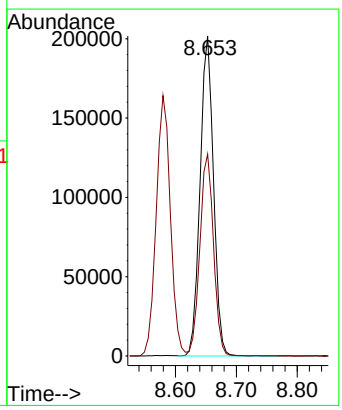


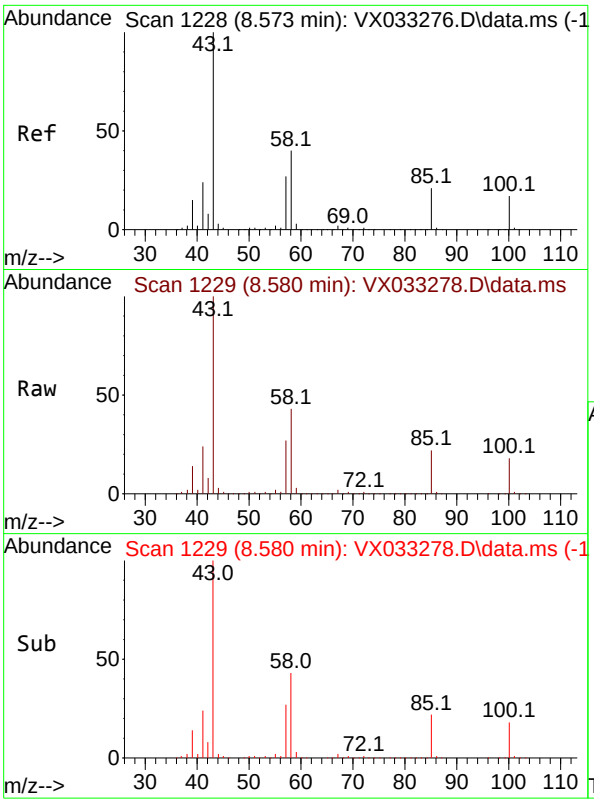


#50
Toluene-d8
Concen: 75.838 ug/l
RT: 8.653 min Scan# 1241
Delta R.T. -0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion: 98 Resp: 309454

Ion	Ratio	Lower	Upper
98	100		
100	64.1	50.9	76.3

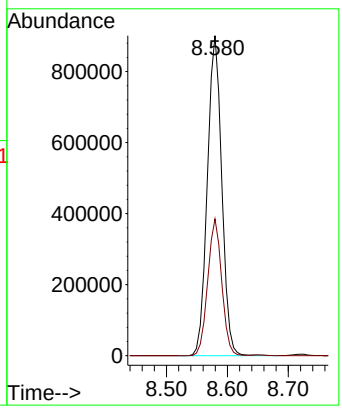




#51
4-Methyl-2-Pentanone
Concen: 827.584 ug/l
RT: 8.580 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion: 43 Resp: 148079

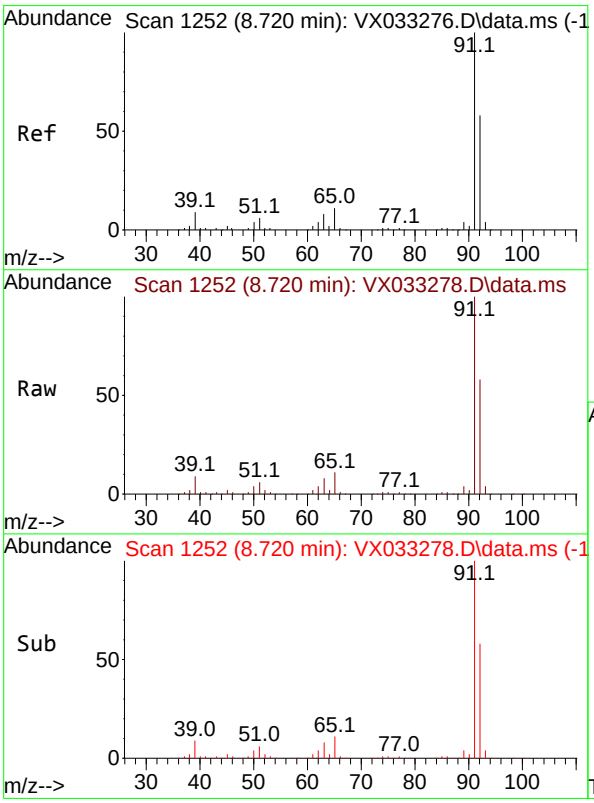
Ion	Ratio	Lower	Upper
43	100		
58	41.6	30.9	46.3



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

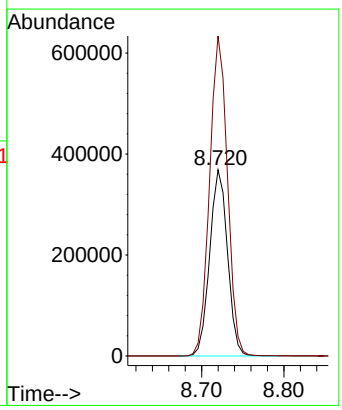
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

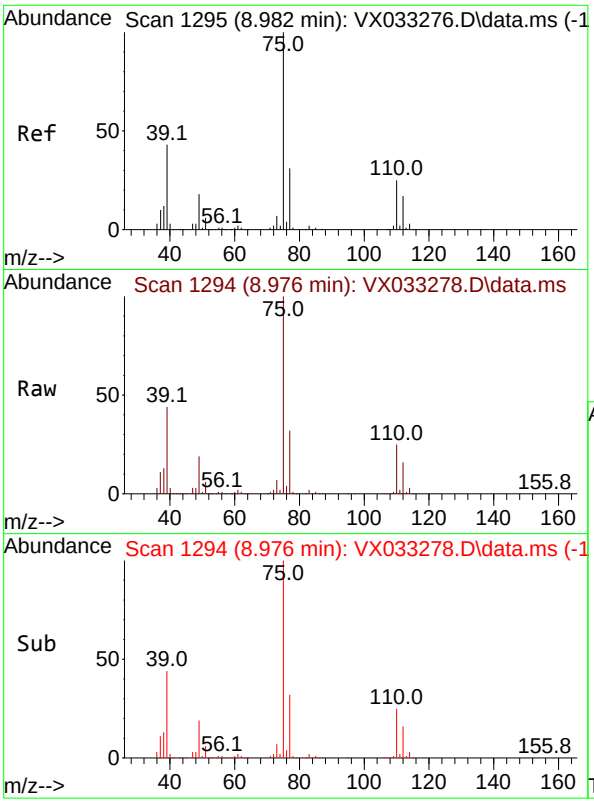


#52
Toluene
Concen: 149.557 ug/l
RT: 8.720 min Scan# 1252
Delta R.T. -0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion: 92 Resp: 554420

Ion	Ratio	Lower	Upper
92	100		
91	172.7	138.3	207.5

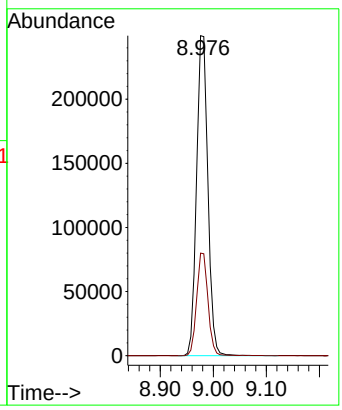




#53
t-1,3-Dichloropropene
Concen: 180.152 ug/l
RT: 8.976 min Scan# 1
Delta R.T. -0.006 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion: 75 Resp: 37124

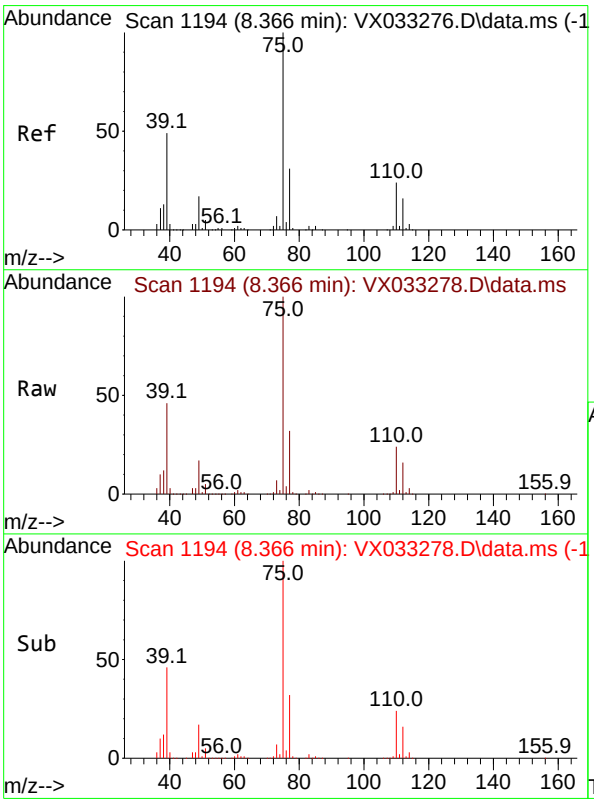
Ion	Ratio	Lower	Upper
75	100		
77	32.0	25.1	37.7



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

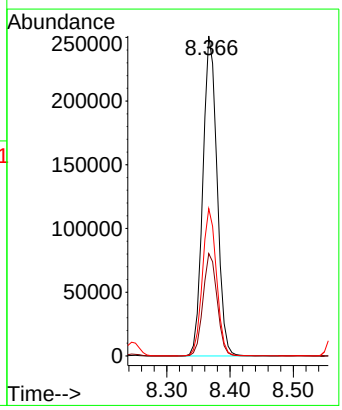
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

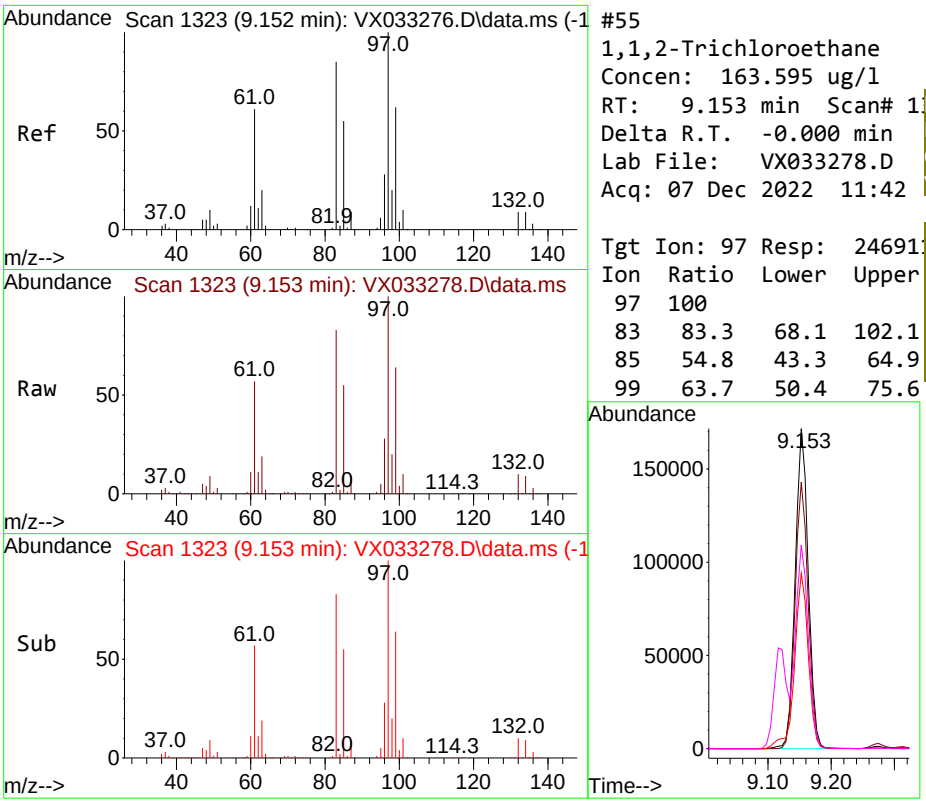


#54
cis-1,3-Dichloropropene
Concen: 173.324 ug/l
RT: 8.366 min Scan# 1194
Delta R.T. 0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion: 75 Resp: 392302

Ion	Ratio	Lower	Upper
75	100		
77	32.0	25.1	37.7
39	46.0	45.5	68.3





#55
1,1,2-Trichloroethane
Concen: 163.595 ug/l
RT: 9.153 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

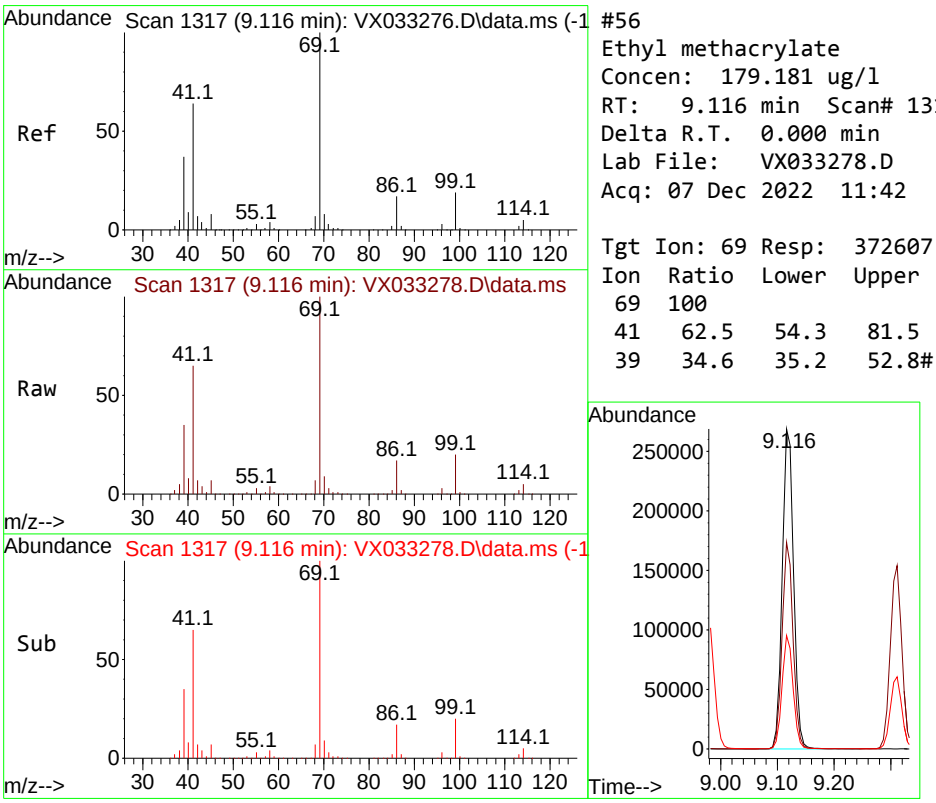
Tgt Ion: 97 Resp: 24691

Ion	Ratio	Lower	Upper
97	100		
83	83.3	68.1	102.1
85	54.8	43.3	64.9
99	63.7	50.4	75.6

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

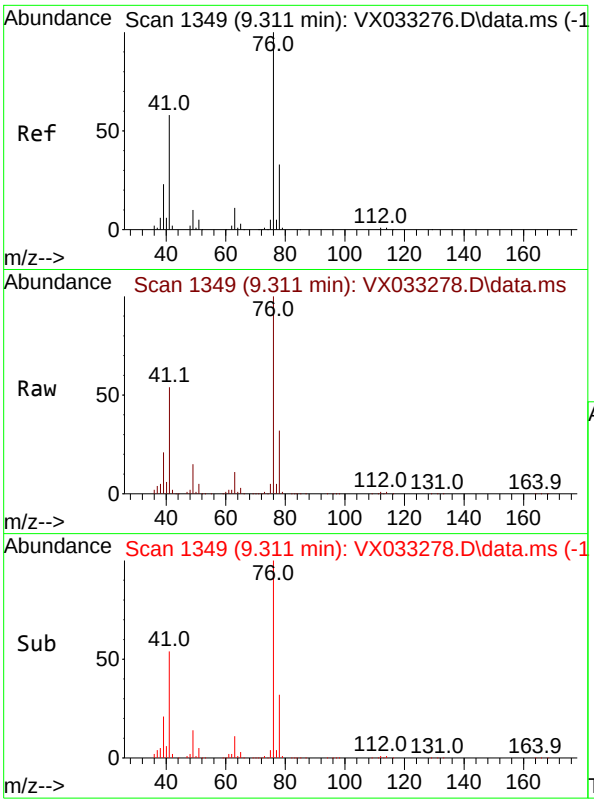
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022



#56
Ethyl methacrylate
Concen: 179.181 ug/l
RT: 9.116 min Scan# 1317
Delta R.T. 0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion: 69 Resp: 372607

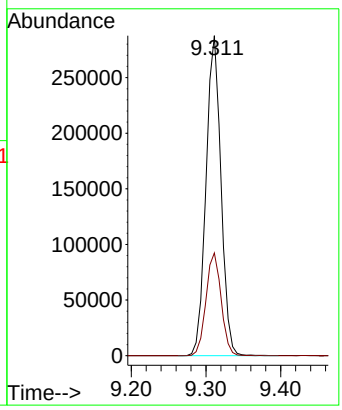
Ion	Ratio	Lower	Upper
69	100		
41	62.5	54.3	81.5
39	34.6	35.2	52.8#



#57
1,3-Dichloropropane
Concen: 163.628 ug/l
RT: 9.311 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion: 76 Resp: 39868

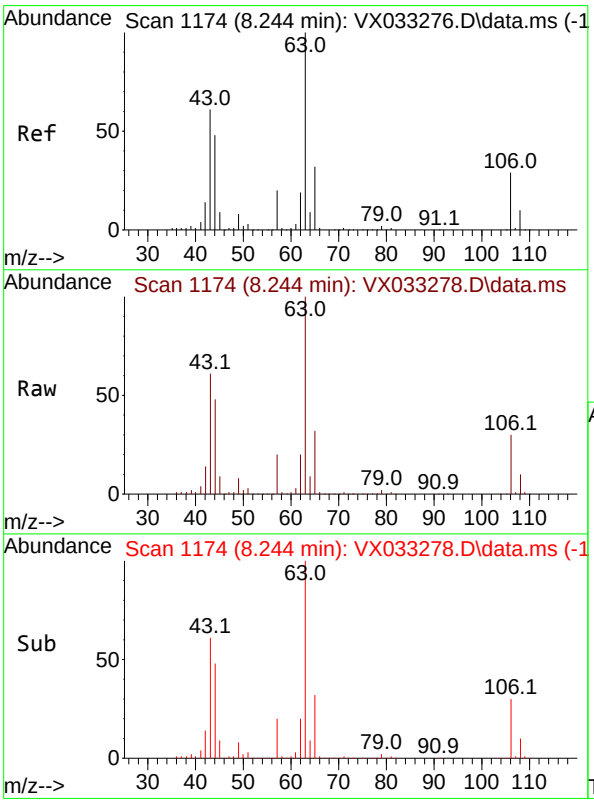
Ion	Ratio	Lower	Upper
76	100		
78	32.6	26.0	39.0



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

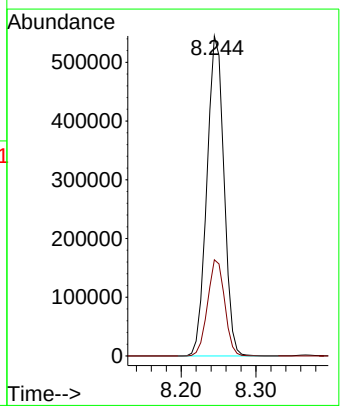
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

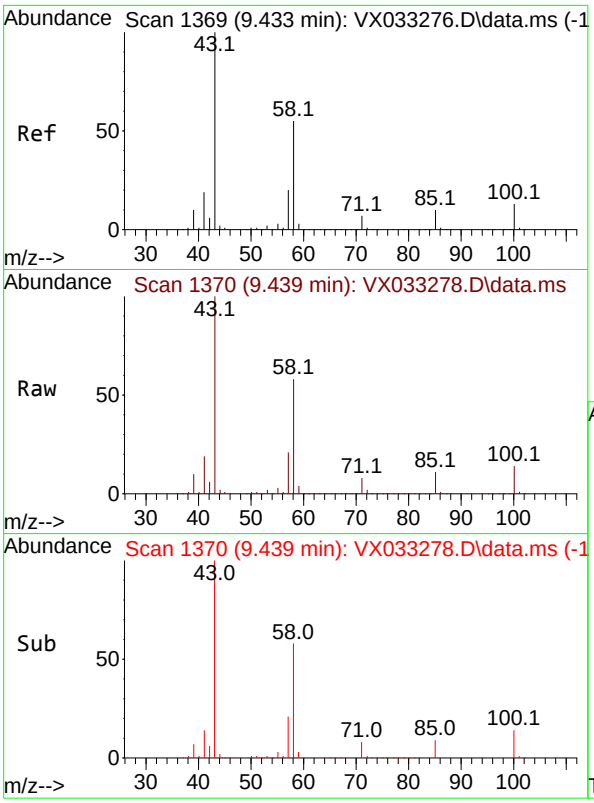


#58
2-Chloroethyl Vinyl ether
Concen: 874.338 ug/l
RT: 8.244 min Scan# 1174
Delta R.T. 0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion: 63 Resp: 863389

Ion	Ratio	Lower	Upper
63	100		
106	30.1	23.3	34.9





#59
2-Hexanone
Concen: 822.777 ug/l
RT: 9.439 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

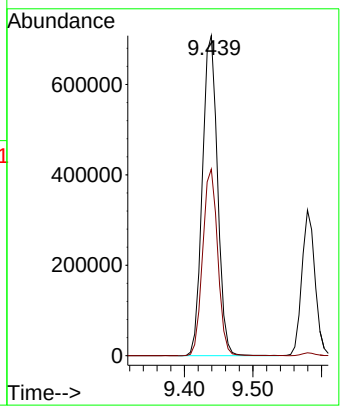
Tgt Ion: 43 Resp: 108753

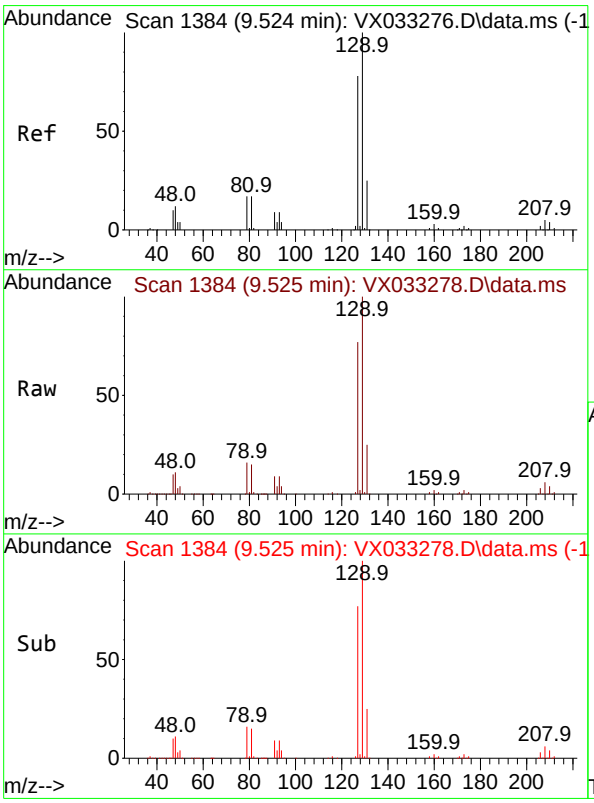
Ion	Ratio	Lower	Upper
43	100		
58	57.8	26.5	79.5

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

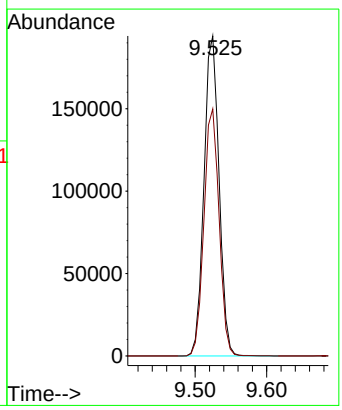


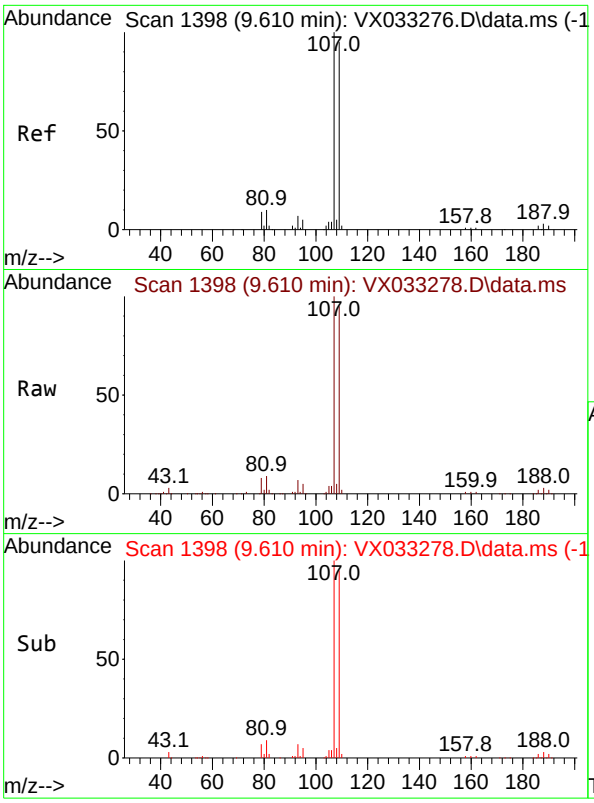


#60
Dibromochloromethane
Concen: 174.743 ug/l
RT: 9.525 min Scan# 1384
Delta R.T. -0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion:129 Resp: 283948

Ion	Ratio	Lower	Upper
129	100		
127	77.7	38.6	115.8

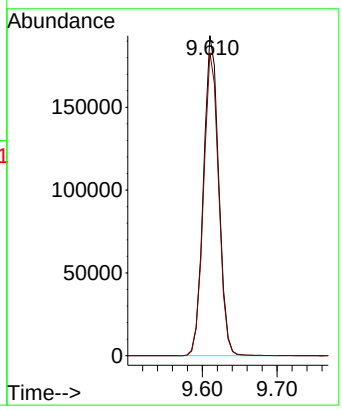




#61
1,2-Dibromoethane
Concen: 170.833 ug/l
RT: 9.610 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion:107 Resp: 27214

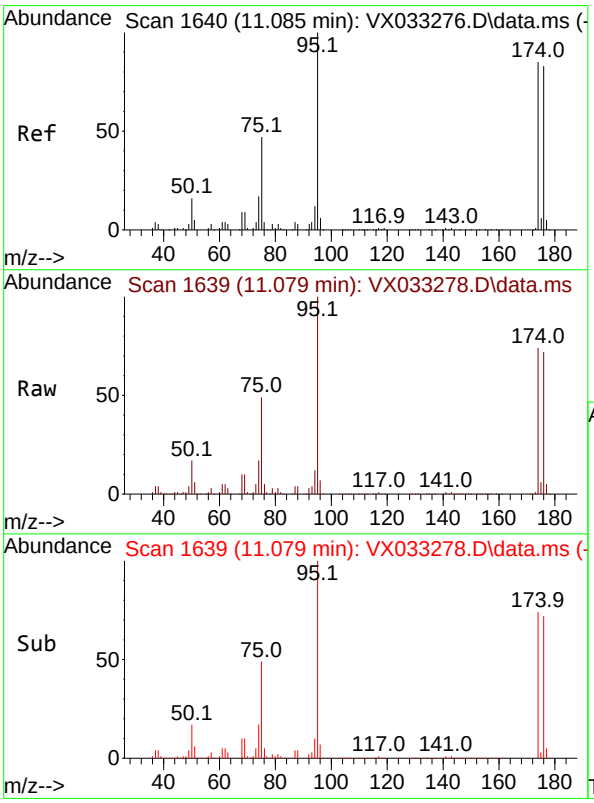
Ion	Ratio	Lower	Upper
107	100		
109	94.2	76.0	114.0



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations
APPROVED

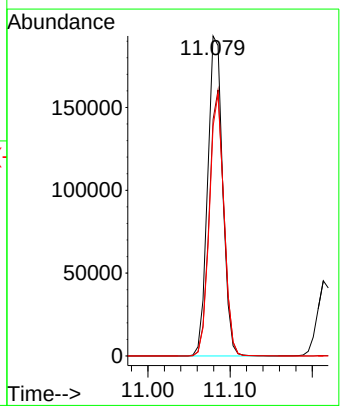
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

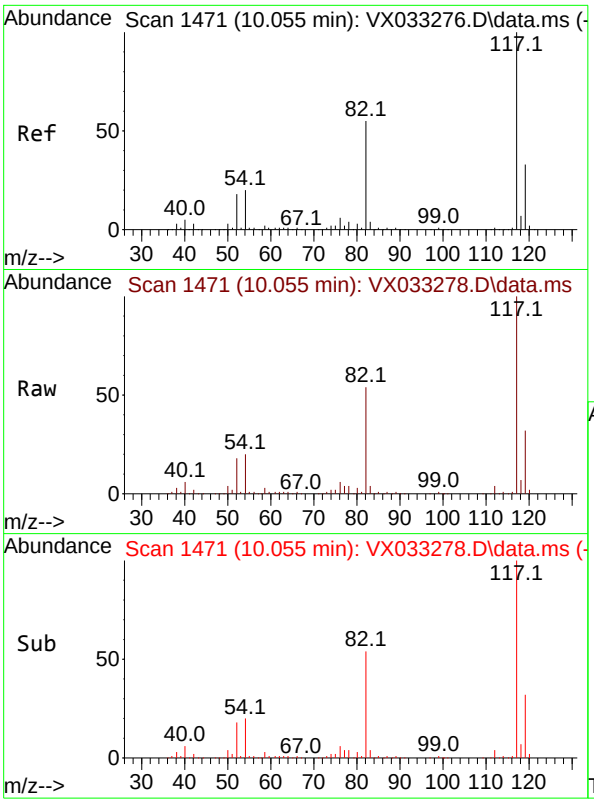


#62
4-Bromofluorobenzene
Concen: 148.337 ug/l
RT: 11.079 min Scan# 1639
Delta R.T. 0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion: 95 Resp: 244909

Ion	Ratio	Lower	Upper
95	100		
174	80.8	0.0	164.0
176	79.3	0.0	154.4

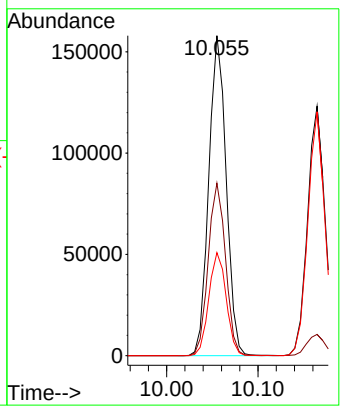




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.055 min Scan# 14
Delta R.T. -0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion:117 Resp: 20830

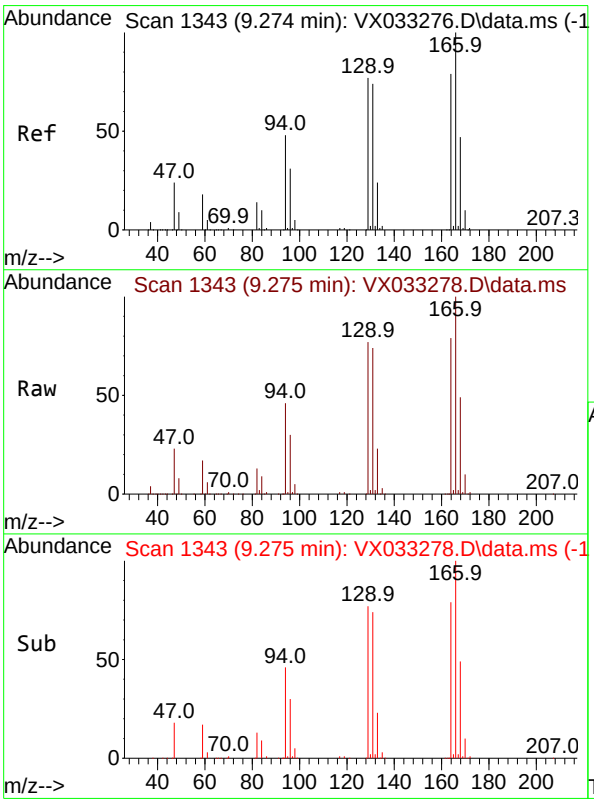
Ion	Ratio	Lower	Upper
117	100		
82	53.9	44.3	66.5
119	32.2	25.7	38.5



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

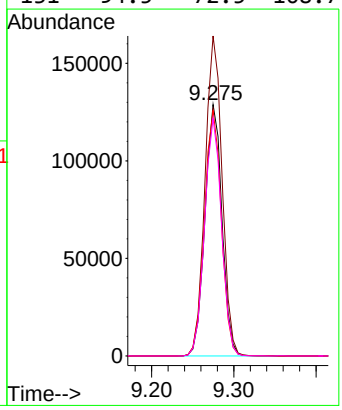
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

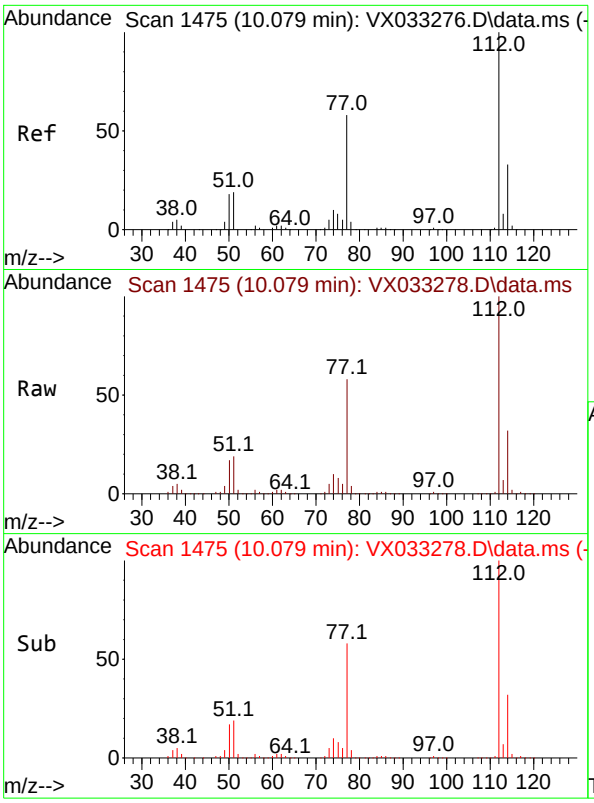


#64
Tetrachloroethene
Concen: 125.423 ug/l
RT: 9.275 min Scan# 1343
Delta R.T. -0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion:164 Resp: 184932

Ion	Ratio	Lower	Upper
164	100		
166	127.3	105.4	158.2
129	97.7	78.2	117.2
131	94.5	72.5	108.7

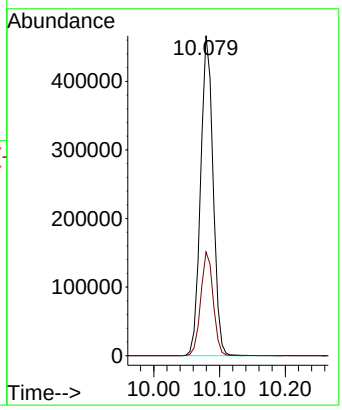




#65
Chlorobenzene
Concen: 148.283 ug/l
RT: 10.079 min Scan# 14
Delta R.T. 0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion:112 Resp: 61582

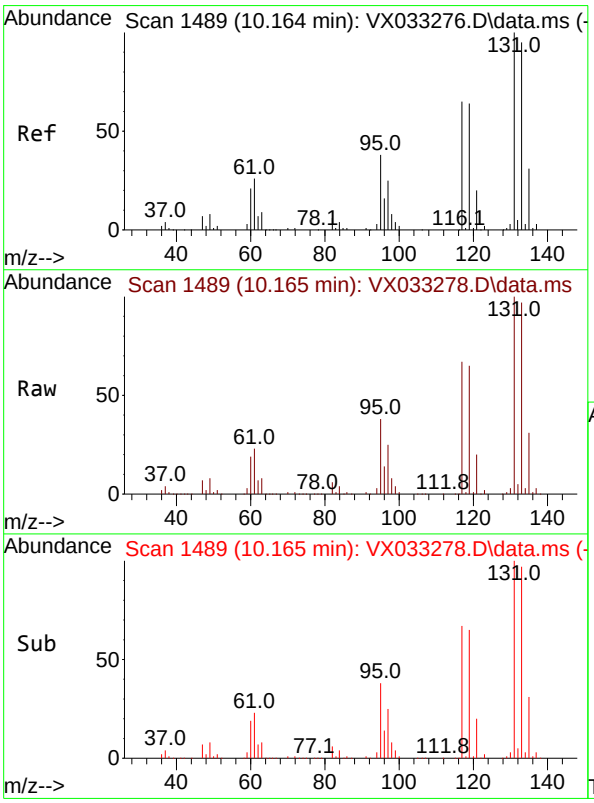
Ion	Ratio	Lower	Upper
112	100		
114	32.4	25.4	38.2



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations
APPROVED

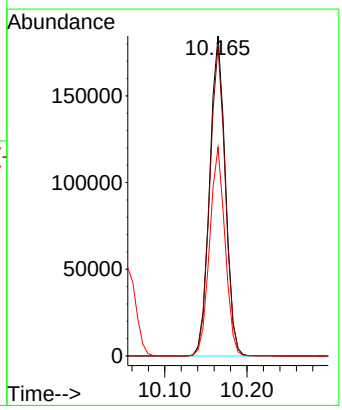
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

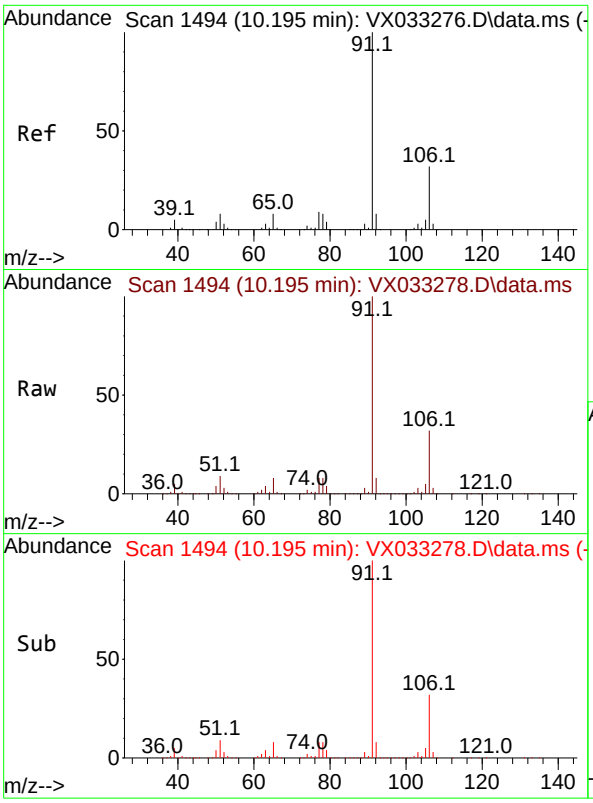


#66
1,1,1,2-Tetrachloroethane
Concen: 160.880 ug/l
RT: 10.165 min Scan# 1489
Delta R.T. -0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion:131 Resp: 244812

Ion	Ratio	Lower	Upper
131	100		
133	95.9	47.6	142.9
119	64.0	32.4	97.0





#67
Ethyl Benzene
Concen: 142.491 ug/l
RT: 10.195 min Scan# 14
Delta R.T. 0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

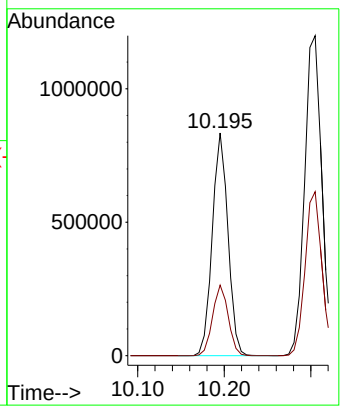
Tgt Ion: 91 Resp: 104973

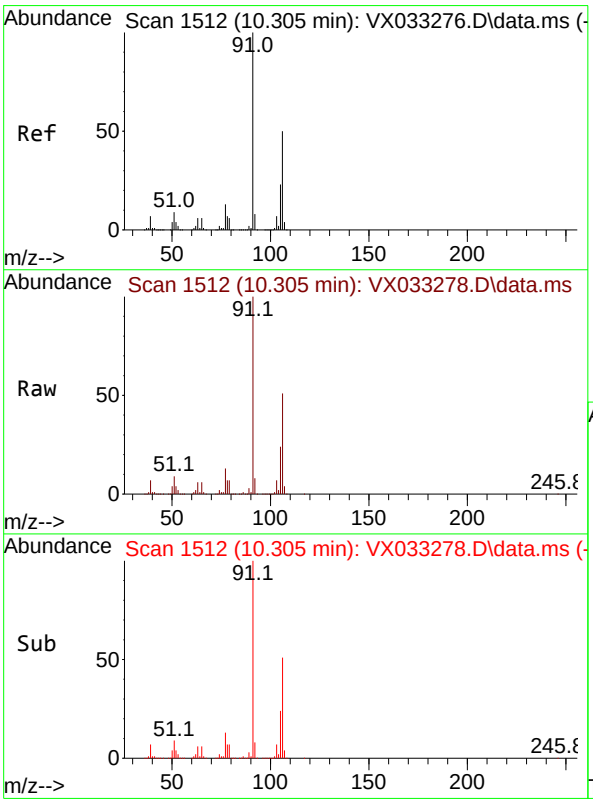
Ion	Ratio	Lower	Upper
91	100		
106	31.7	25.0	37.6

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

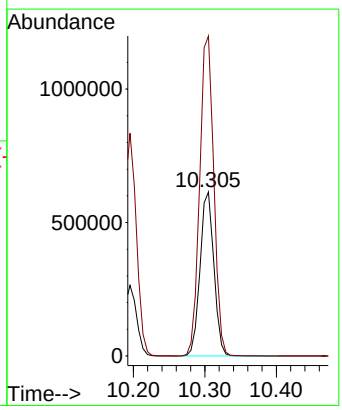


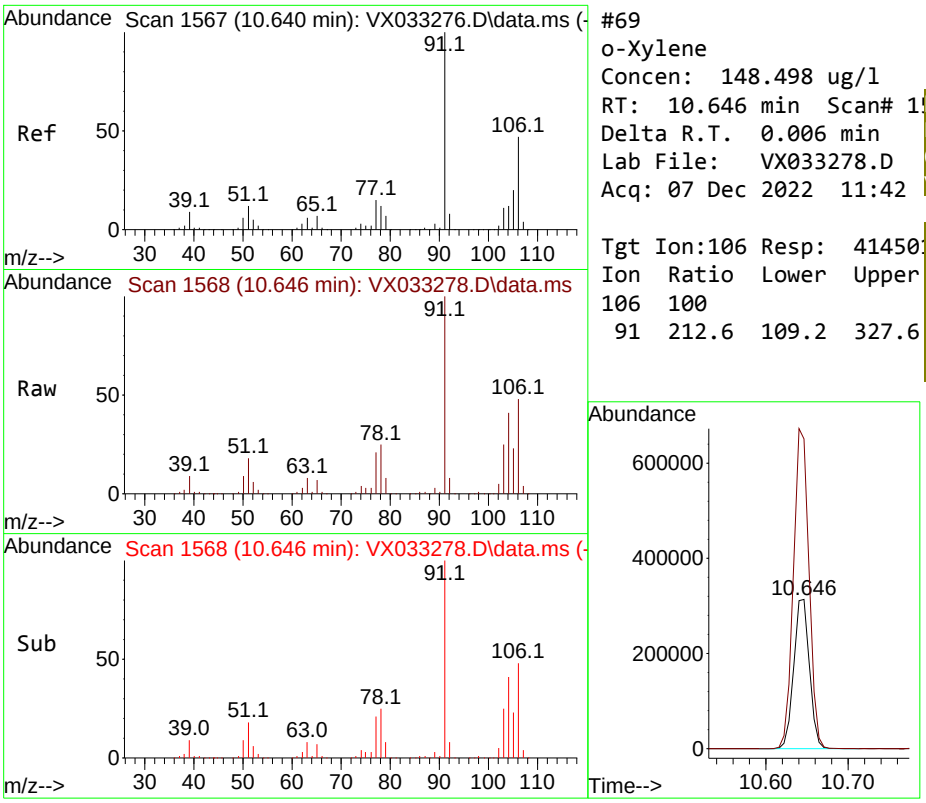


#68
m/p-Xylenes
Concen: 285.726 ug/l
RT: 10.305 min Scan# 1512
Delta R.T. -0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion:106 Resp: 824272

Ion	Ratio	Lower	Upper
106	100		
91	199.5	164.5	246.7





#69
o-Xylene
Concen: 148.498 ug/l
RT: 10.646 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

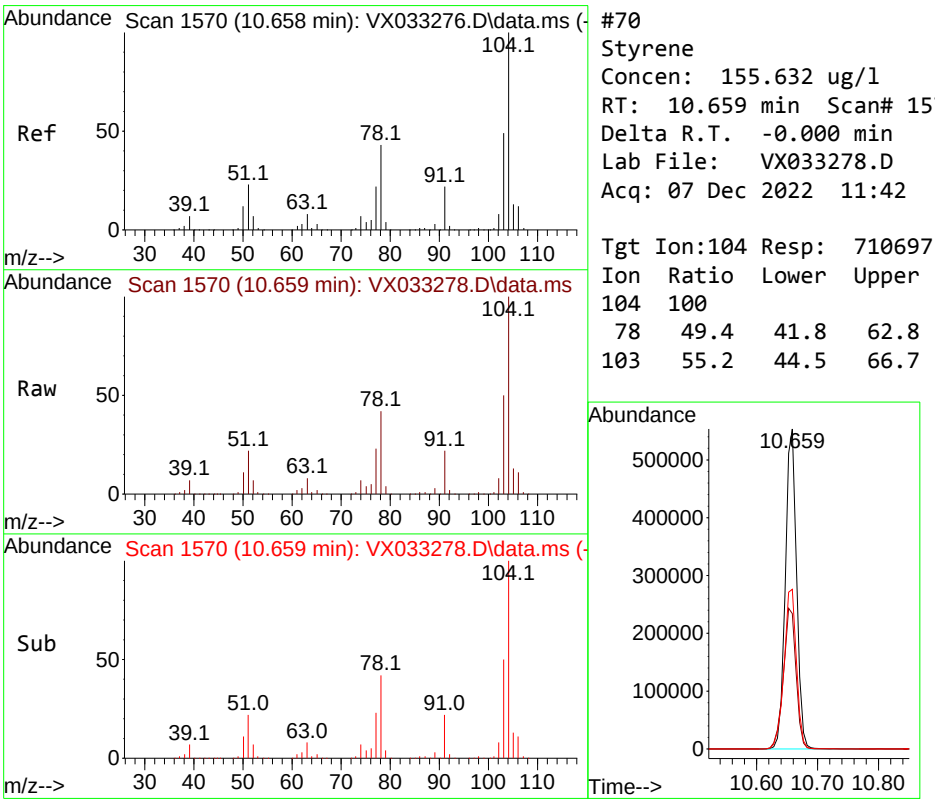
Tgt Ion:106 Resp: 41450

Ion	Ratio	Lower	Upper
106	100		
91	212.6	109.2	327.6

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

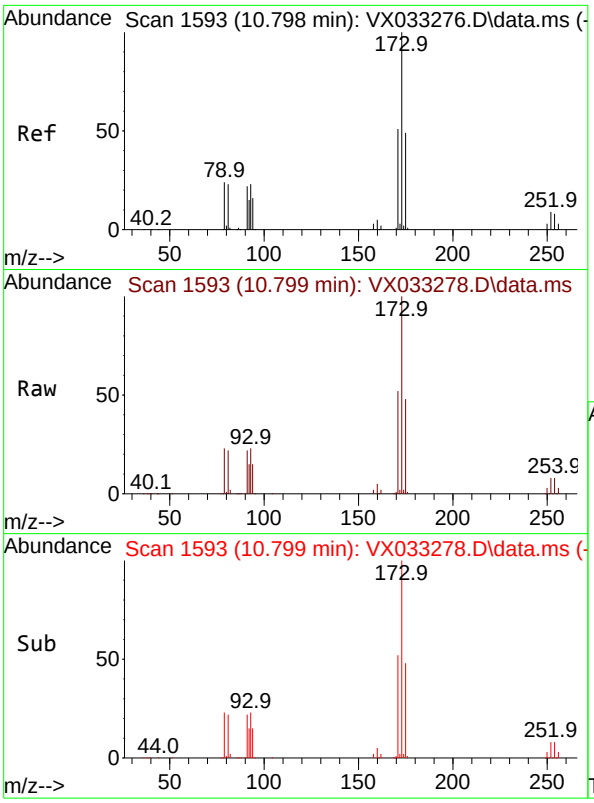
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022



#70
Styrene
Concen: 155.632 ug/l
RT: 10.659 min Scan# 1570
Delta R.T. -0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion:104 Resp: 710697

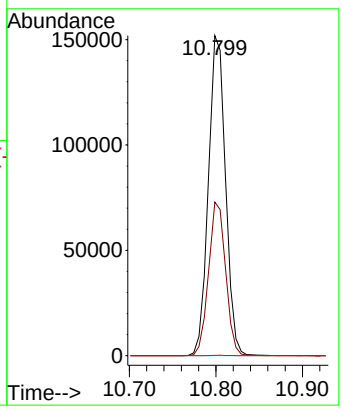
Ion	Ratio	Lower	Upper
104	100		
78	49.4	41.8	62.8
103	55.2	44.5	66.7



#71
Bromoform
Concen: 178.889 ug/l
RT: 10.799 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion:173 Resp: 20871

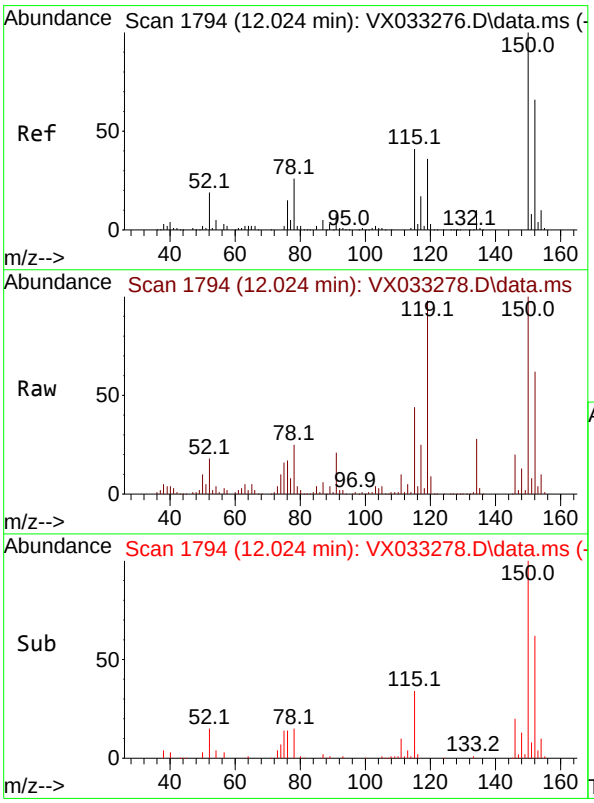
Ion	Ratio	Lower	Upper
173	100		
175	47.8	23.9	71.8
254	0.1	0.0	0.0



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

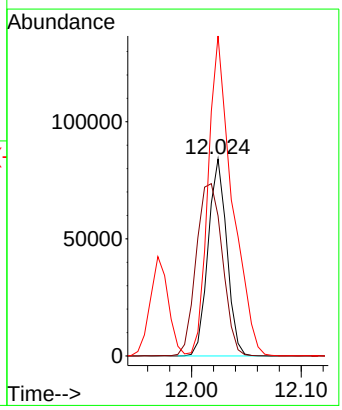
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

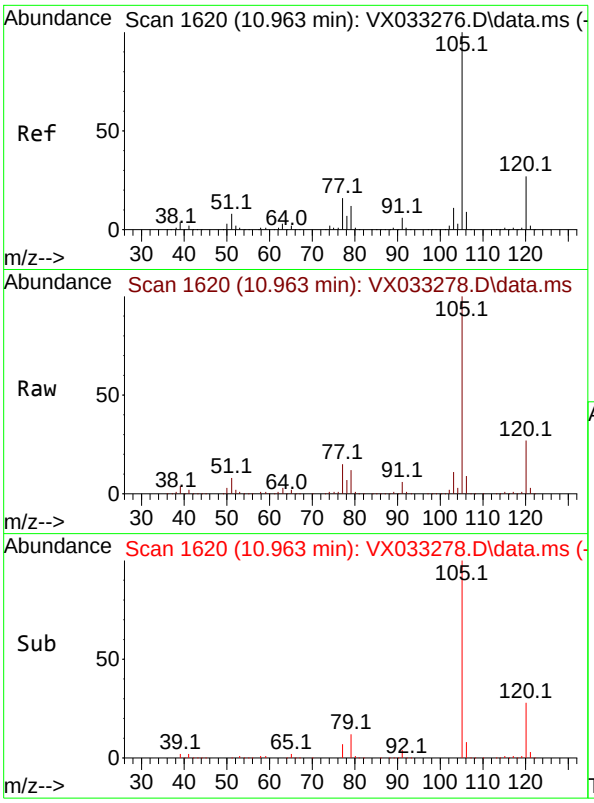


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.024 min Scan# 1794
Delta R.T. 0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion:152 Resp: 99577

Ion	Ratio	Lower	Upper
152	100		
115	122.6	44.0	132.0
150	208.4	0.0	351.8

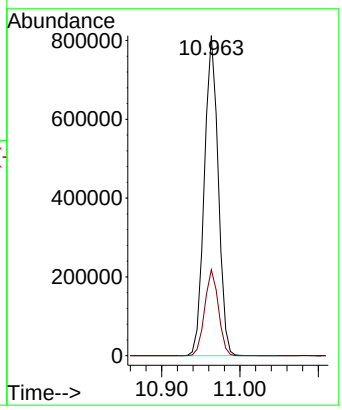




#73
Isopropylbenzene
Concen: 140.002 ug/l
RT: 10.963 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion:105 Resp: 99620

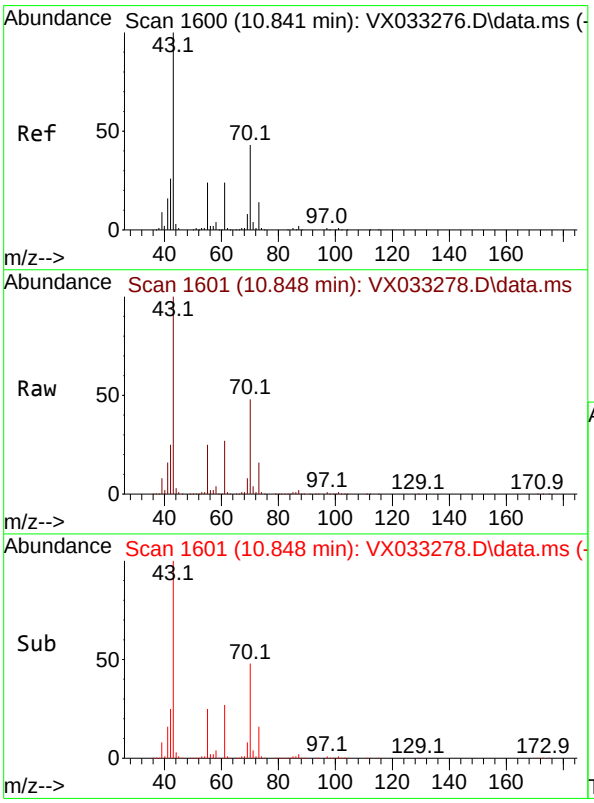
Ion	Ratio	Lower	Upper
105	100		
120	26.6	13.1	39.3



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations
APPROVED

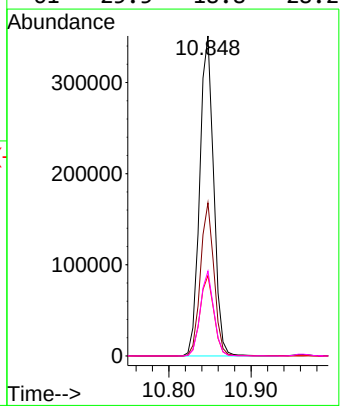
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

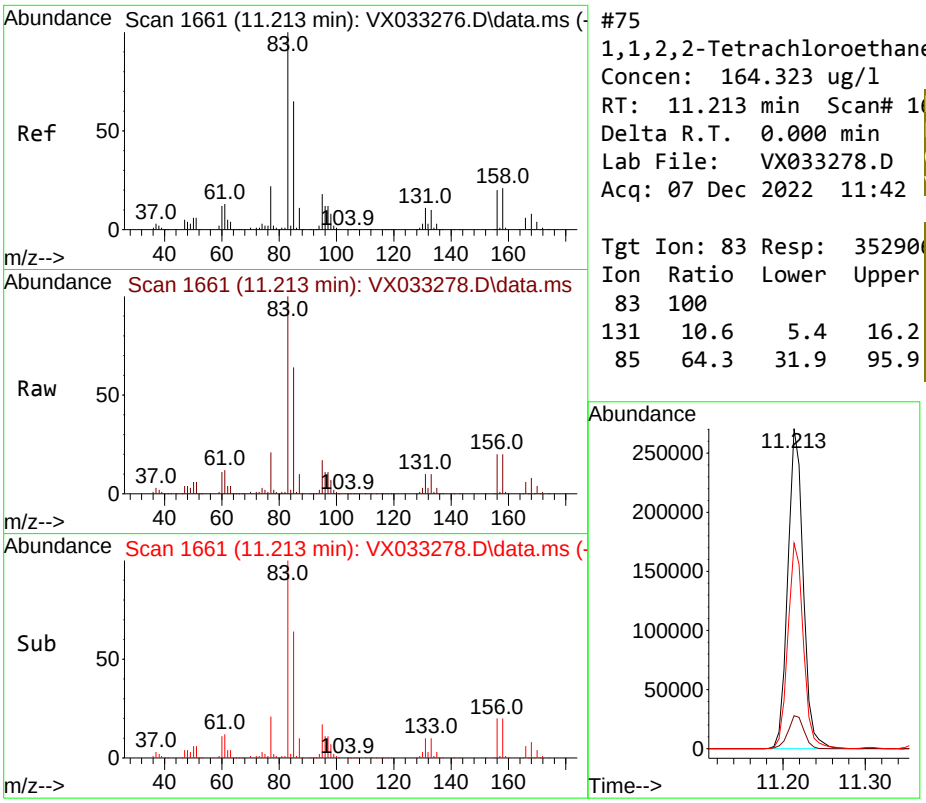


#74
N-amyl acetate
Concen: 171.353 ug/l
RT: 10.848 min Scan# 1601
Delta R.T. 0.007 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion: 43 Resp: 414776

Ion	Ratio	Lower	Upper
43	100		
70	46.2	33.6	50.4
55	24.9	19.4	29.2
61	25.5	18.8	28.2





#75
1,1,2,2-Tetrachloroethane
Concen: 164.323 ug/l
RT: 11.213 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

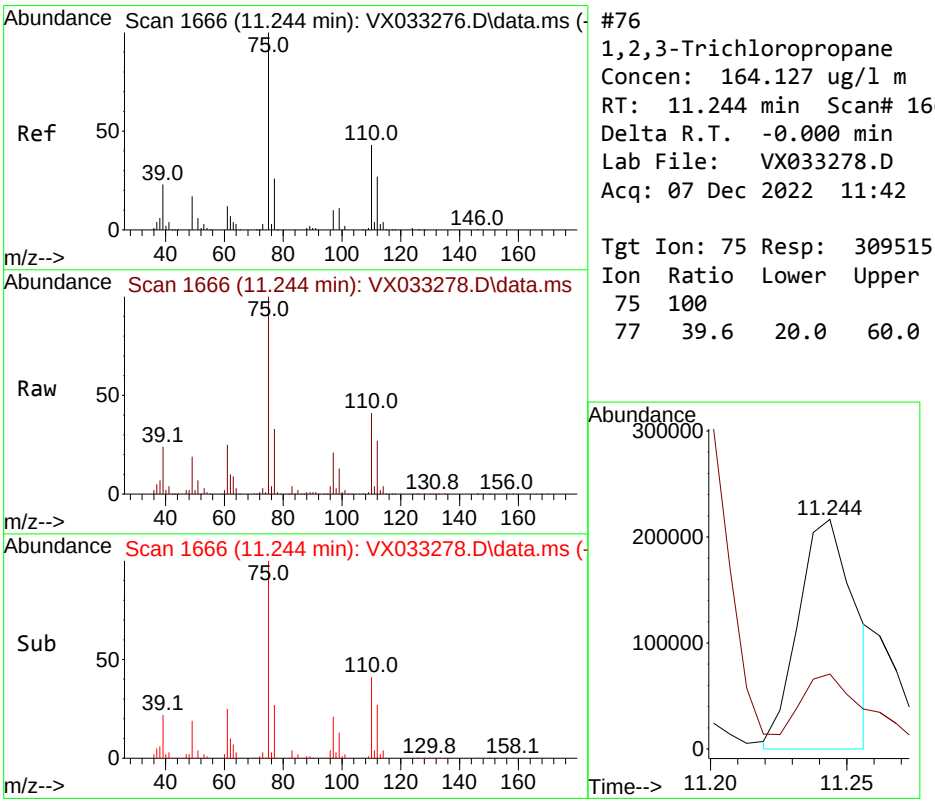
Tgt Ion: 83 Resp: 35290

Ion	Ratio	Lower	Upper
83	100		
131	10.6	5.4	16.2
85	64.3	31.9	95.9

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

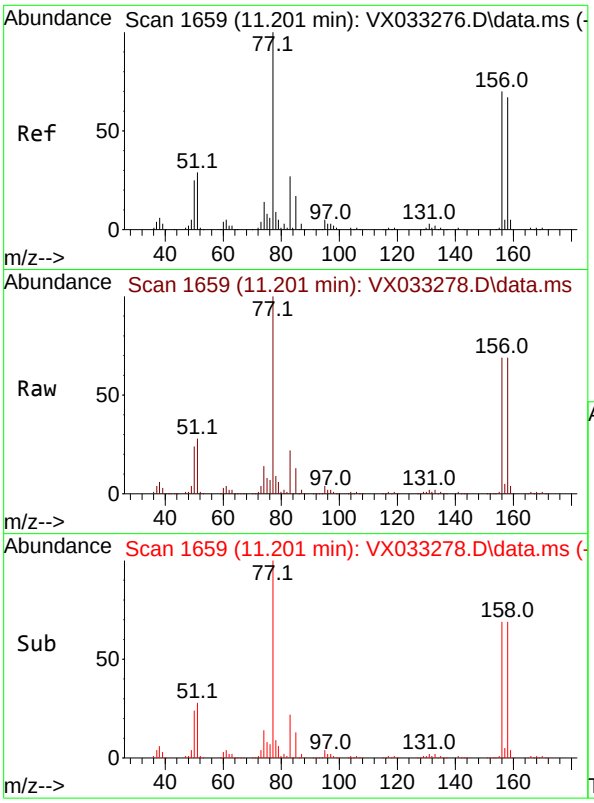
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022



#76
1,2,3-Trichloropropane
Concen: 164.127 ug/l m
RT: 11.244 min Scan# 1666
Delta R.T. -0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion: 75 Resp: 309515

Ion	Ratio	Lower	Upper
75	100		
77	39.6	20.0	60.0



#77
Bromobenzene
Concen: 155.671 ug/l
RT: 11.201 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

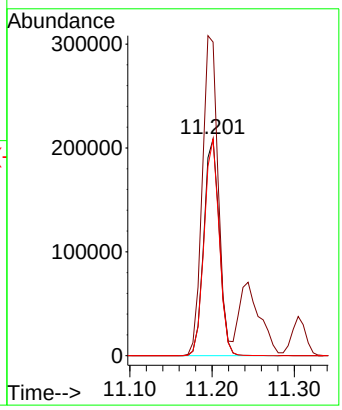
Tgt Ion:156 Resp: 27242

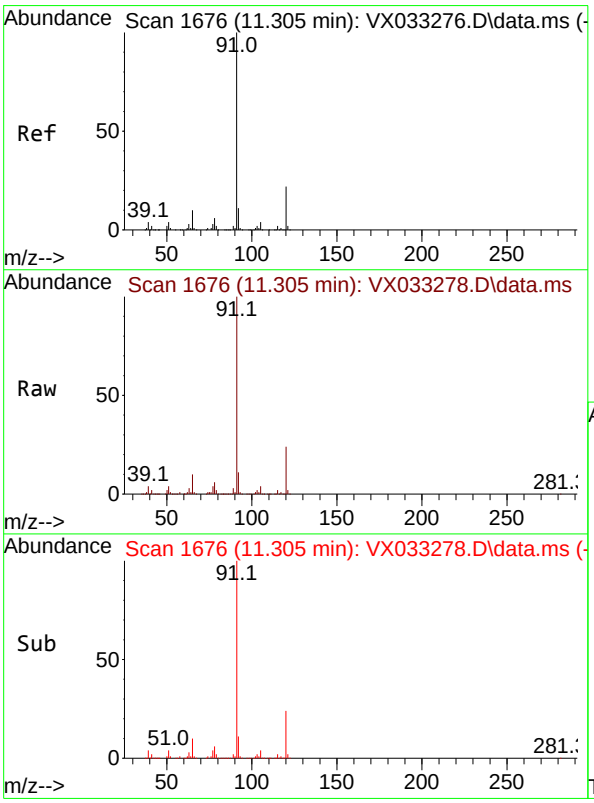
Ion	Ratio	Lower	Upper
156	100		
77	152.0	76.1	228.4
158	97.5	48.8	146.3

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

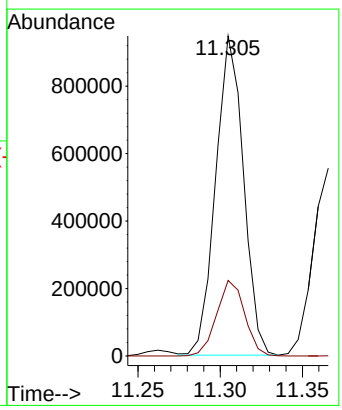


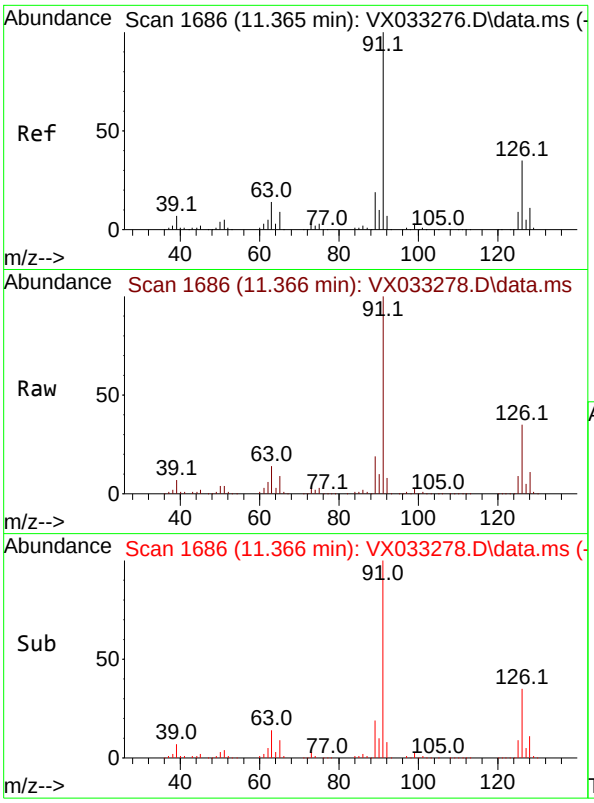


#78
n-propylbenzene
Concen: 137.006 ug/l
RT: 11.305 min Scan# 1676
Delta R.T. -0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion: 91 Resp: 1114633

Ion	Ratio	Lower	Upper
91	100		
120	23.8	11.6	34.8

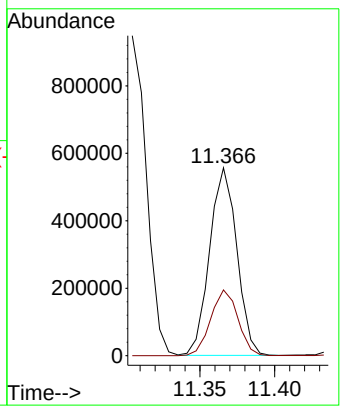




#79
2-Chlorotoluene
Concen: 142.298 ug/l
RT: 11.366 min Scan# 1
Delta R.T. -0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion: 91 Resp: 70312

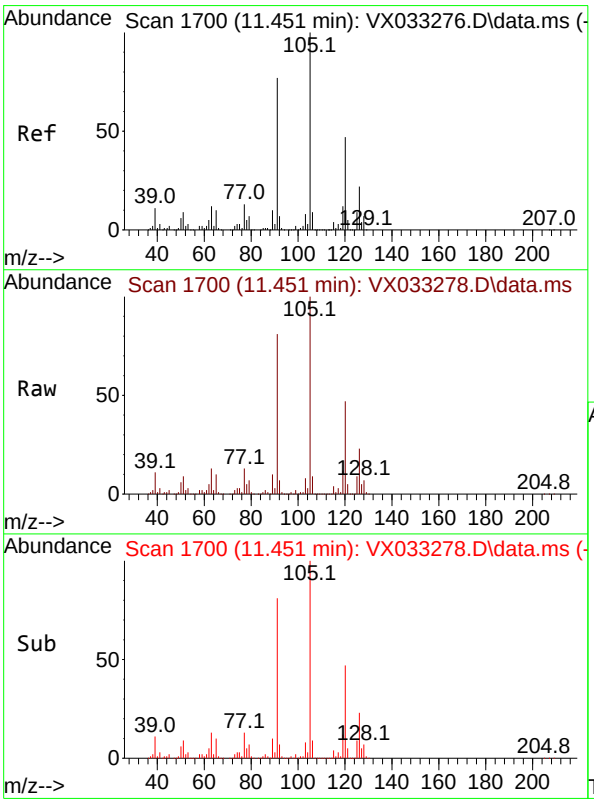
Ion	Ratio	Lower	Upper
91	100		
126	35.1	17.1	51.2



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations
APPROVED

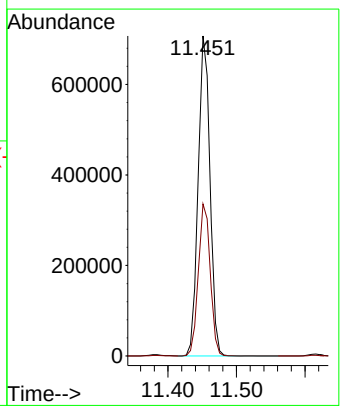
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

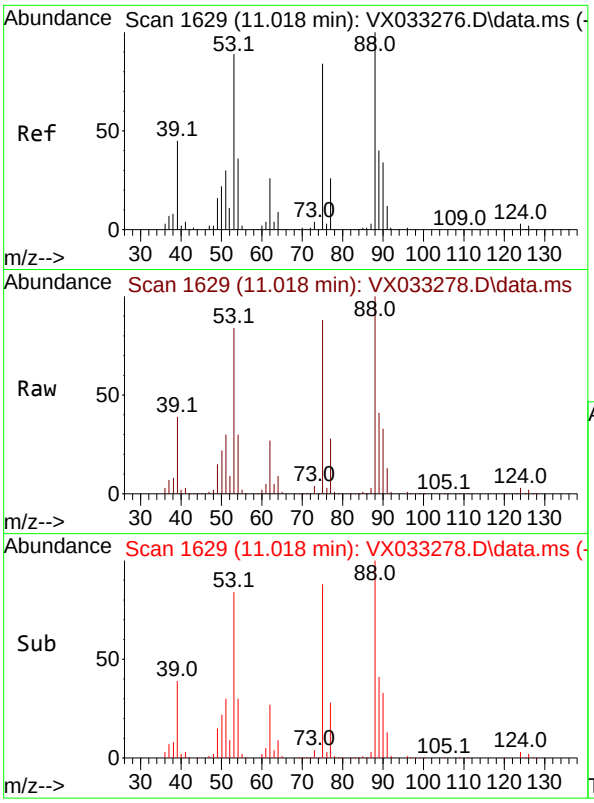


#80
1,3,5-Trimethylbenzene
Concen: 142.194 ug/l
RT: 11.451 min Scan# 1700
Delta R.T. 0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion:105 Resp: 849987

Ion	Ratio	Lower	Upper
105	100		
120	48.0	23.6	71.0

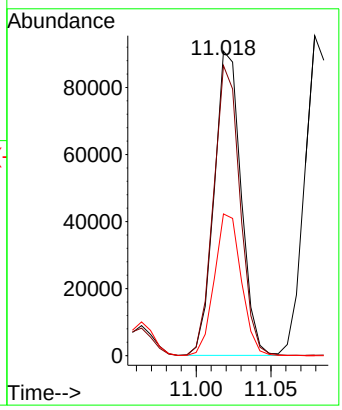




#81
trans-1,4-Dichloro-2-butene
Concen: 195.069 ug/l
RT: 11.018 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion: 75 Resp: 11317

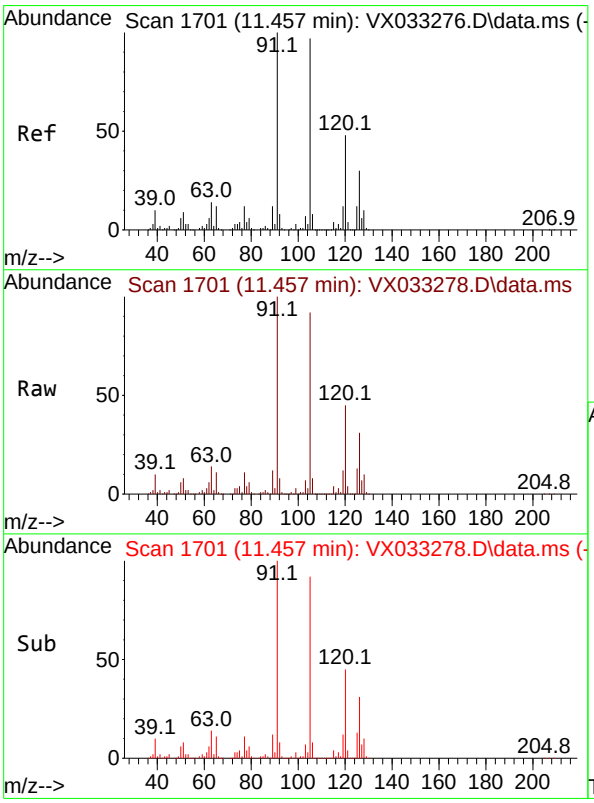
Ion	Ratio	Lower	Upper
75	100		
53	94.1	86.9	130.3
89	46.9	38.3	57.5



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

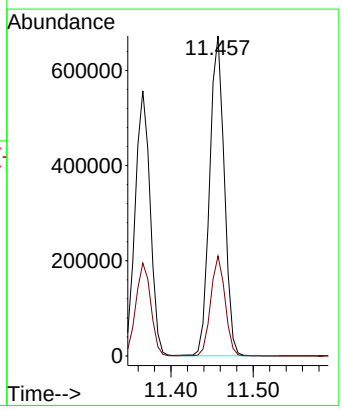
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

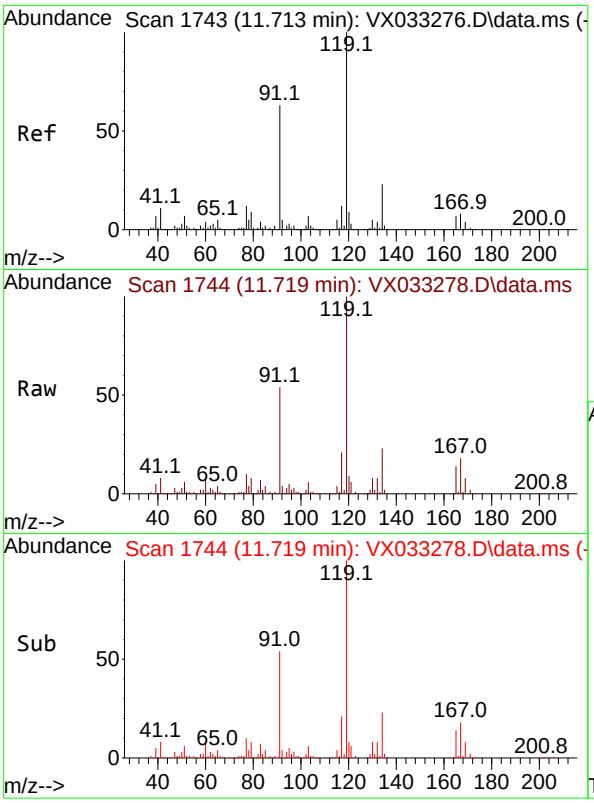


#82
4-Chlorotoluene
Concen: 143.634 ug/l
RT: 11.457 min Scan# 1701
Delta R.T. 0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion: 91 Resp: 831705

Ion	Ratio	Lower	Upper
91	100		
126	30.6	14.8	44.4

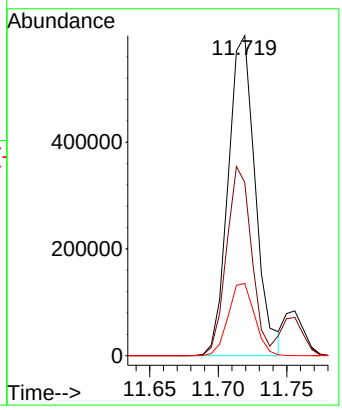




#83
tert-Butylbenzene
Concen: 139.011 ug/l
RT: 11.719 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion:119 Resp: 82714

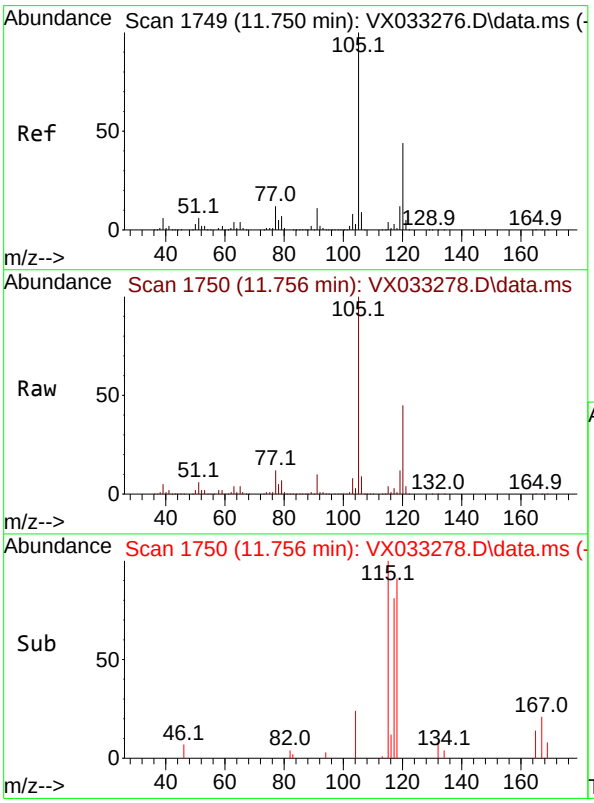
Ion	Ratio	Lower	Upper
119	100		
91	54.8	29.4	88.2
134	21.9	11.0	33.0



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

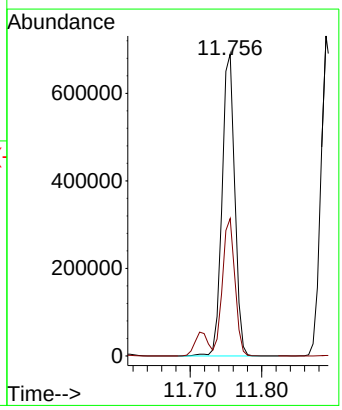
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

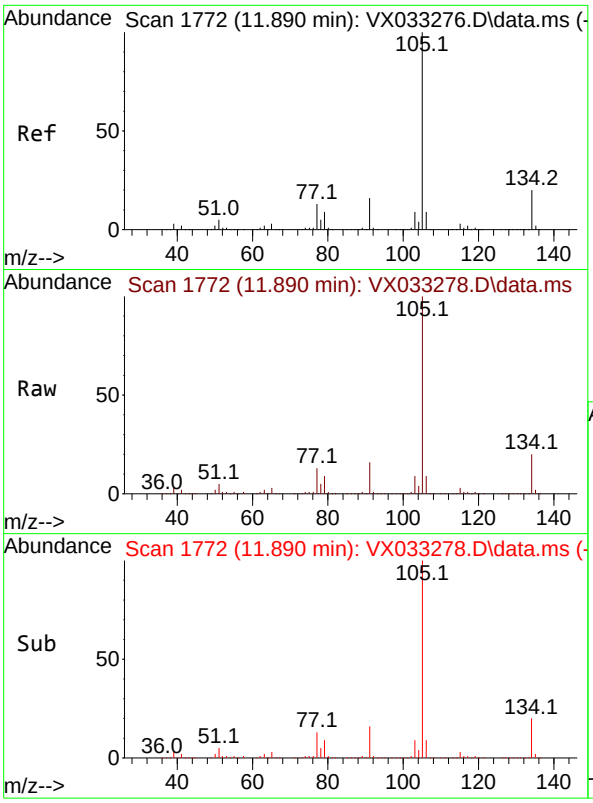


#84
1,2,4-Trimethylbenzene
Concen: 143.289 ug/l
RT: 11.756 min Scan# 1750
Delta R.T. 0.006 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion:105 Resp: 854067

Ion	Ratio	Lower	Upper
105	100		
120	44.6	21.9	65.5





#85
sec-Butylbenzene
Concen: 127.242 ug/l
RT: 11.890 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

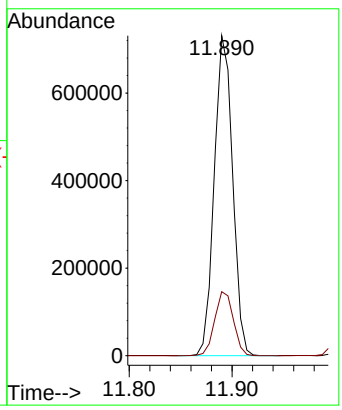
Tgt Ion:105 Resp: 90580

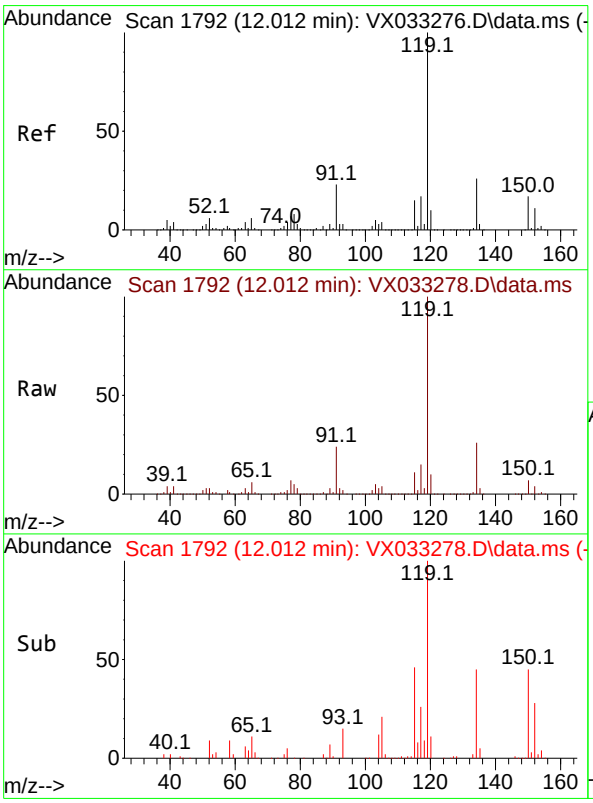
Ion	Ratio	Lower	Upper
105	100		
134	20.3	9.9	29.7

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

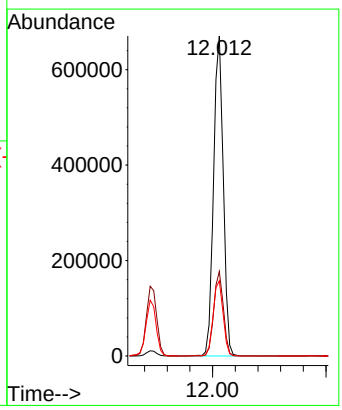


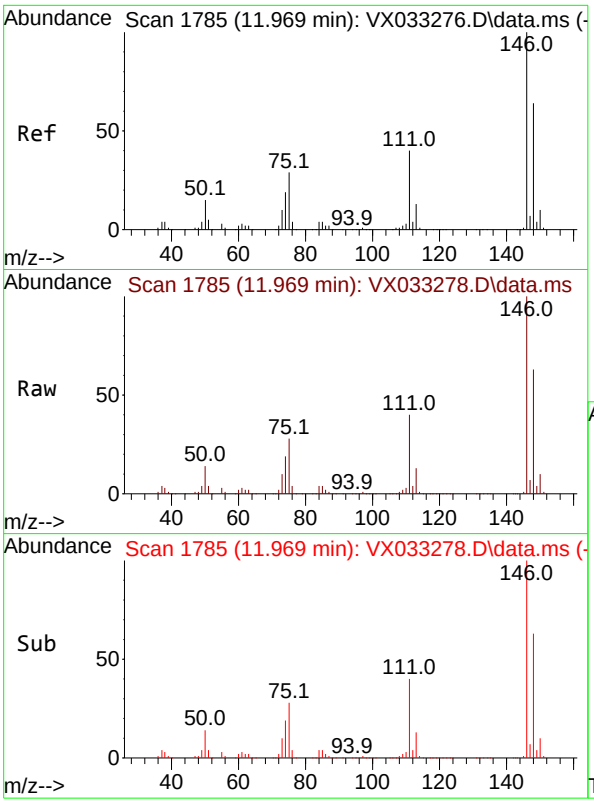


#86
p-Isopropyltoluene
Concen: 132.185 ug/l
RT: 12.012 min Scan# 1792
Delta R.T. -0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion:119 Resp: 797245

Ion	Ratio	Lower	Upper
119	100		
134	26.3	12.9	38.7
91	24.0	12.5	37.5

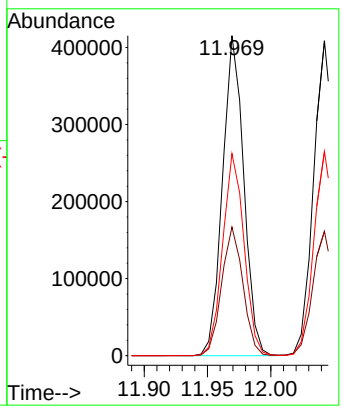




#87
1,3-Dichlorobenzene
Concen: 147.810 ug/l
RT: 11.969 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion:146 Resp: 48516

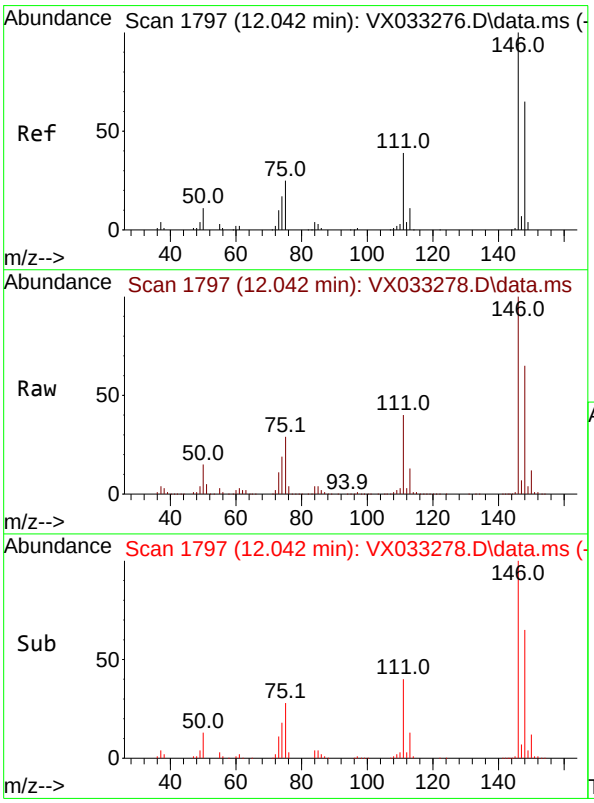
Ion	Ratio	Lower	Upper
146	100		
111	40.3	20.6	61.8
148	63.5	31.7	95.1



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

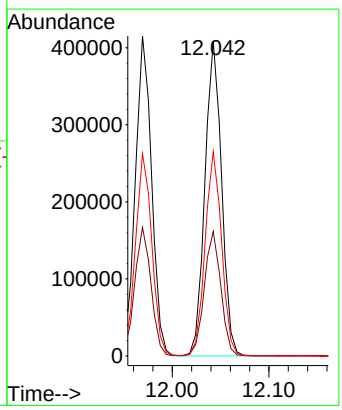
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

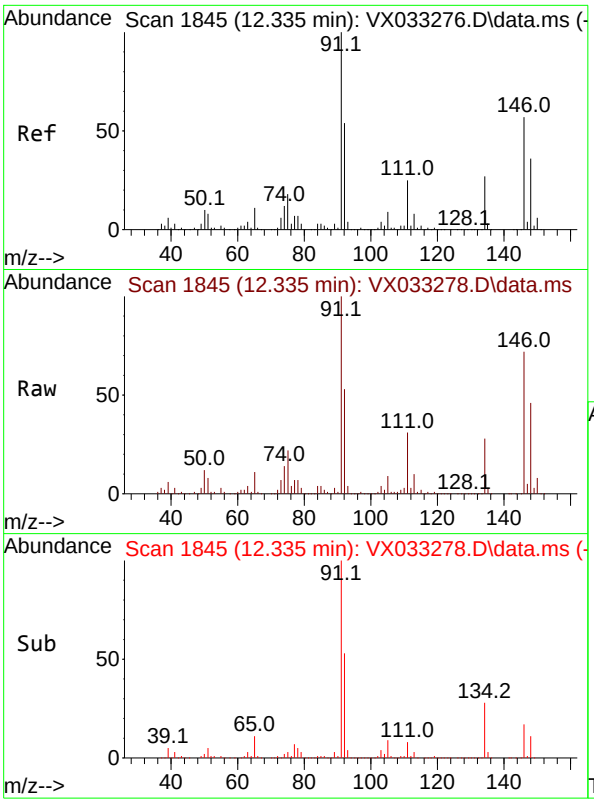


#88
1,4-Dichlorobenzene
Concen: 145.739 ug/l
RT: 12.042 min Scan# 1797
Delta R.T. 0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion:146 Resp: 489915

Ion	Ratio	Lower	Upper
146	100		
111	39.3	20.5	61.6
148	64.2	32.2	96.6

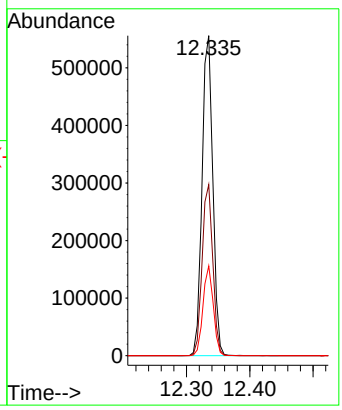




#89
n-Butylbenzene
Concen: 126.627 ug/l
RT: 12.335 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion: 91 Resp: 65793

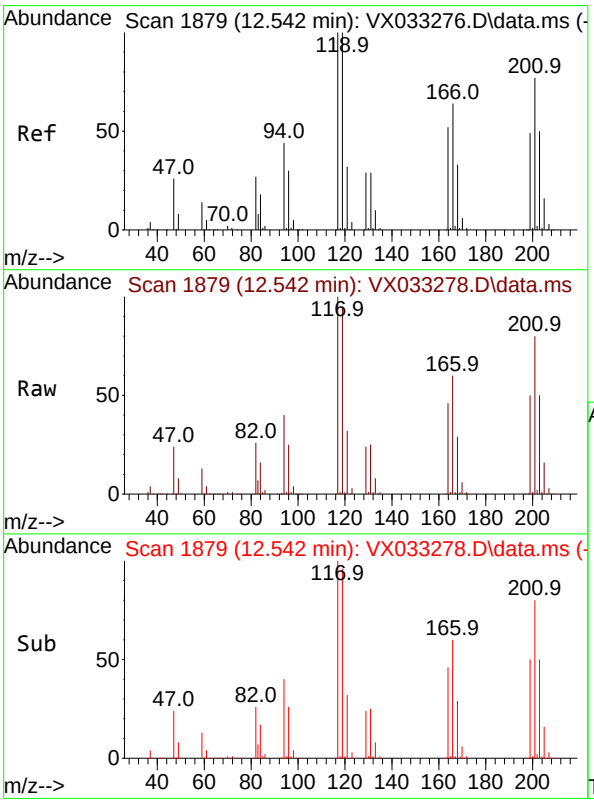
Ion	Ratio	Lower	Upper
91	100		
92	53.2	26.2	78.6
134	26.9	12.9	38.6



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

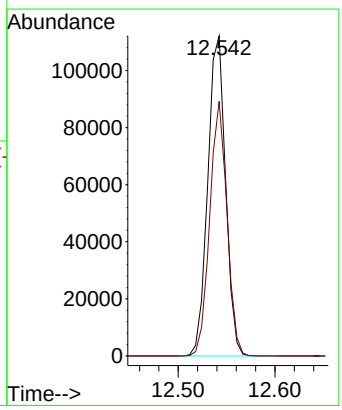
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

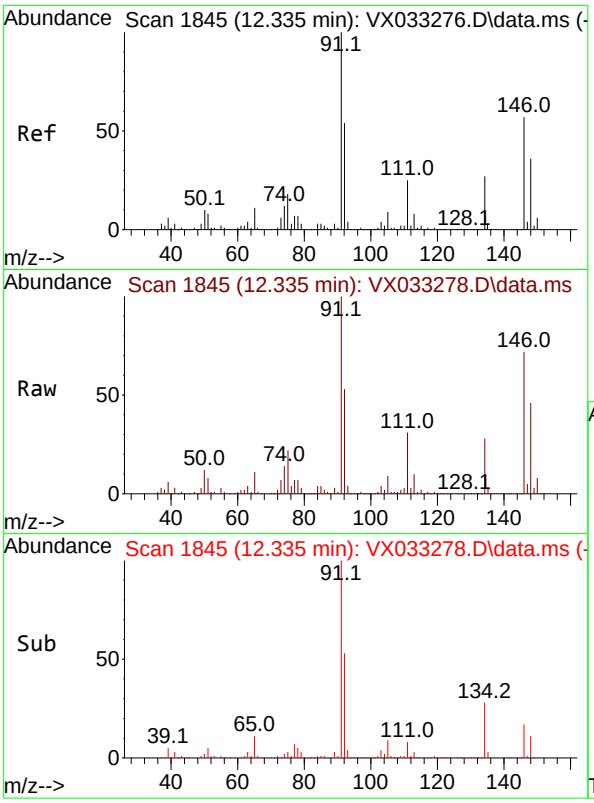


#90
Hexachloroethane
Concen: 144.580 ug/l
RT: 12.542 min Scan# 1879
Delta R.T. 0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion:117 Resp: 143263

Ion	Ratio	Lower	Upper
117	100		
201	76.9	37.6	112.9

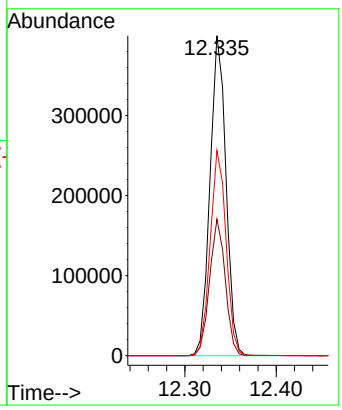




#91
1,2-Dichlorobenzene
Concen: 151.625 ug/l
RT: 12.335 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion:146 Resp: 48413

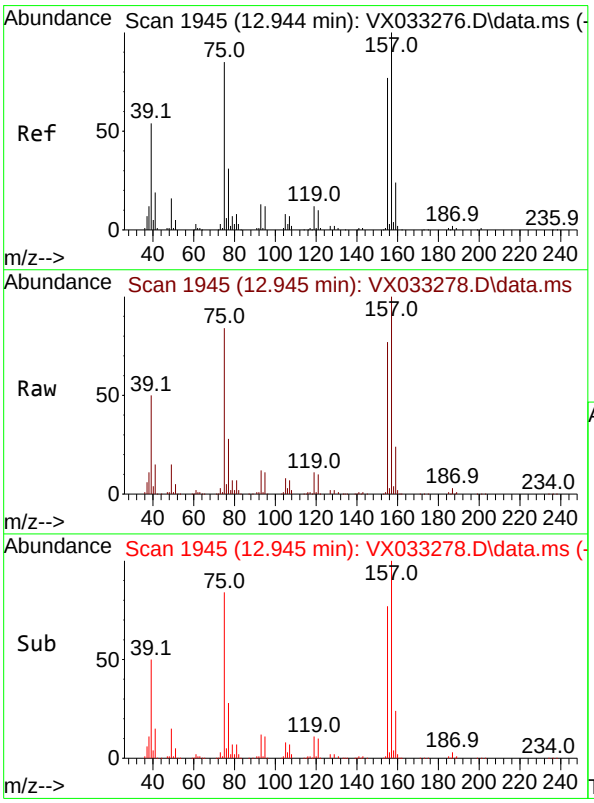
Ion	Ratio	Lower	Upper
146	100		
111	42.0	21.5	64.5
148	64.0	32.0	96.2



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

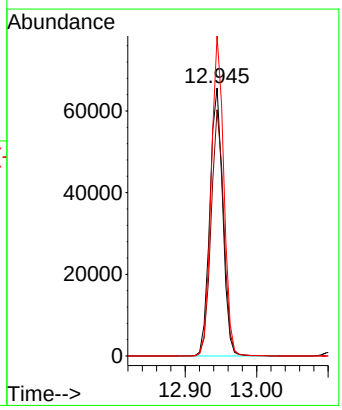
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

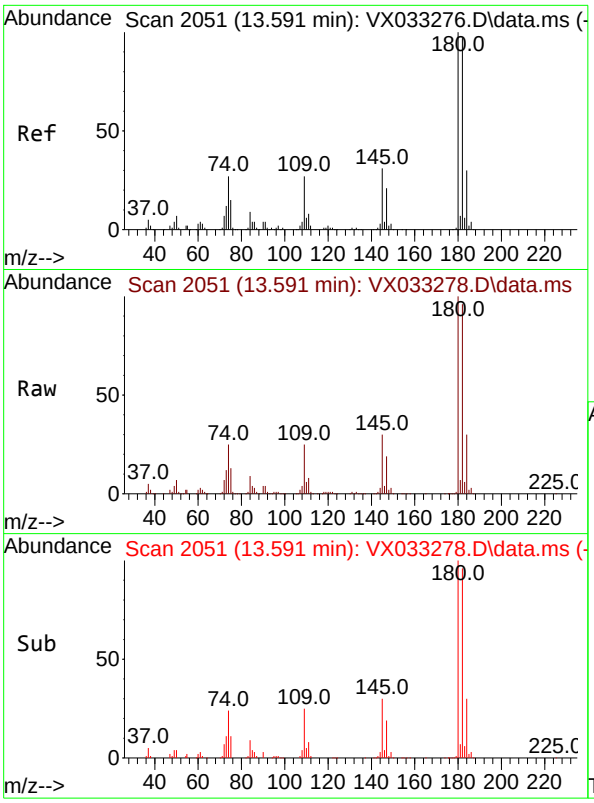


#92
1,2-Dibromo-3-Chloropropane
Concen: 191.433 ug/l
RT: 12.945 min Scan# 1945
Delta R.T. -0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion: 75 Resp: 82029

Ion	Ratio	Lower	Upper
75	100		
155	90.2	41.6	124.8
157	116.8	54.1	162.4

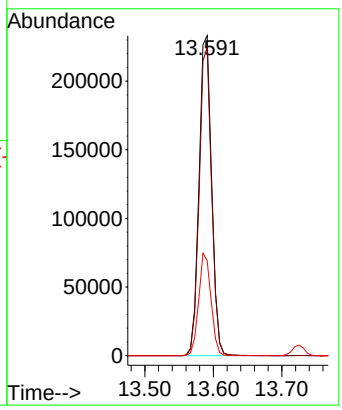




#93
1,2,4-Trichlorobenzene
Concen: 151.555 ug/l
RT: 13.591 min Scan# 2
Delta R.T. -0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion:180 Resp: 29829

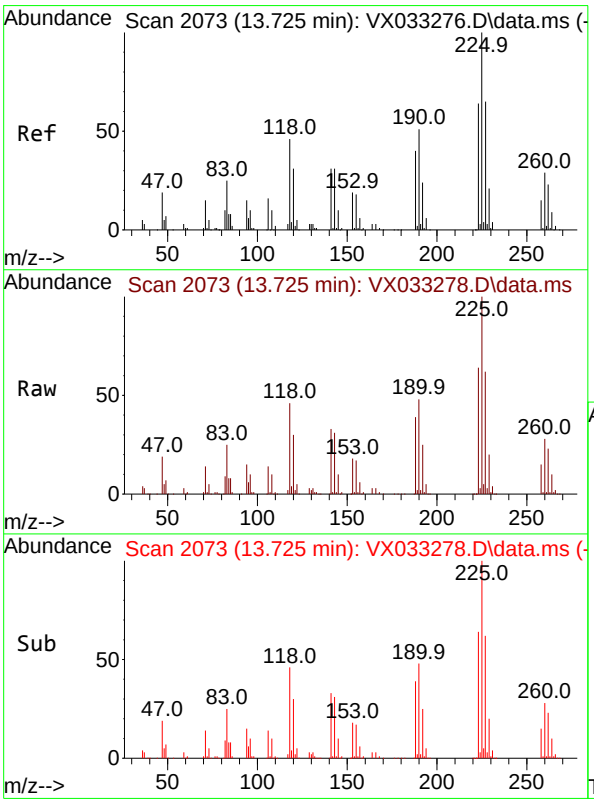
Ion	Ratio	Lower	Upper
180	100		
182	94.9	48.4	145.0
145	31.3	16.2	48.5



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

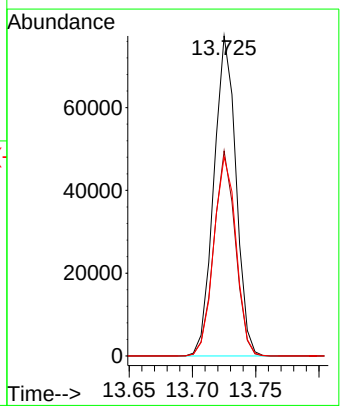
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

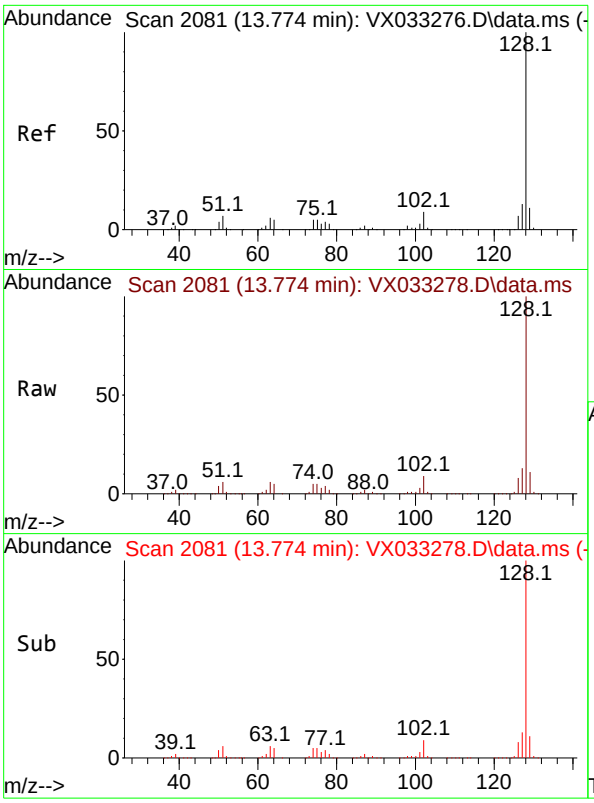


#94
Hexachlorobutadiene
Concen: 107.977 ug/l
RT: 13.725 min Scan# 2073
Delta R.T. 0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion:225 Resp: 93761

Ion	Ratio	Lower	Upper
225	100		
223	62.4	31.9	95.9
227	63.0	31.9	95.5

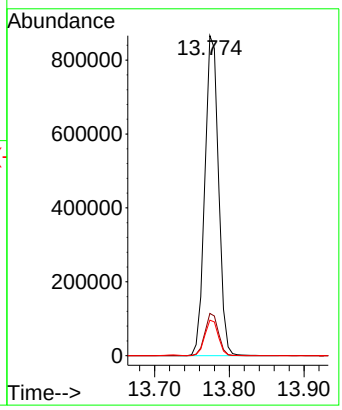




#95
Naphthalene
Concen: 172.814 ug/l
RT: 13.774 min Scan# 2
Delta R.T. -0.006 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion:128 Resp: 110037

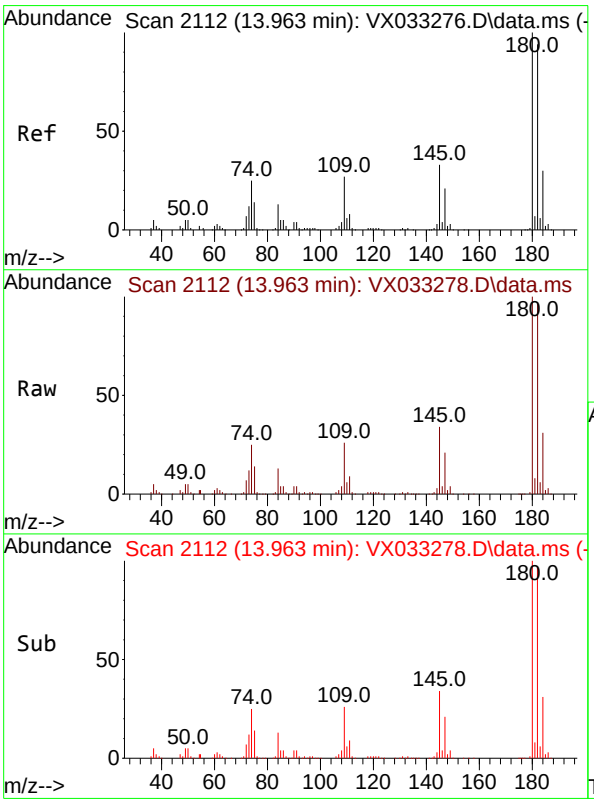
Ion	Ratio	Lower	Upper
128	100		
127	13.0	10.2	15.4
129	11.0	8.9	13.3



Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

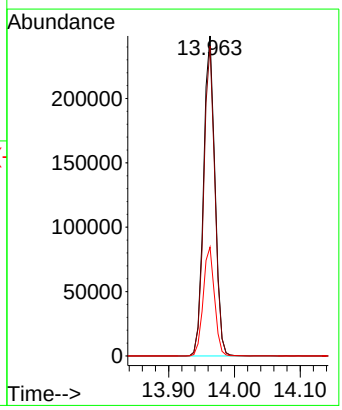
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022



#96
1,2,3-Trichlorobenzene
Concen: 151.203 ug/l
RT: 13.963 min Scan# 2112
Delta R.T. -0.000 min
Lab File: VX033278.D
Acq: 07 Dec 2022 11:42

Tgt Ion:180 Resp: 298441

Ion	Ratio	Lower	Upper
180	100		
182	95.2	47.5	142.6
145	33.9	16.9	50.6



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX120722\
Data File : VX033280.D
Acq On : 07 Dec 2022 12:51
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
ICVVX120722

Manual Integrations APPROVED
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

Quant Time: Dec 08 01:41:57 2022
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X120722W.M
Quant Title : SW846 8260
QLast Update : Wed Dec 07 12:43:54 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.550	168	162415	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.757	114	257660	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.055	117	237524	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.024	152	120258	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.952	65	48832	46.866	ug/l	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 93.740%			
35) Dibromofluoromethane	5.385	113	55536	47.921	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 95.840%			
50) Toluene-d8	8.647	98	121350	50.054	ug/l	0.00
Spiked Amount 50.000	Range 92 - 112		Recovery = 100.100%			
62) 4-Bromofluorobenzene	11.079	95	97770	52.743	ug/l	0.00
Spiked Amount 50.000	Range 83 - 123		Recovery = 105.480%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.166	85	56389	49.702	ug/l	96
3) Chloromethane	1.295	50	59512	45.367	ug/l	96
4) Vinyl Chloride	1.374	62	69954	46.704	ug/l	99
5) Bromomethane	1.618	94	52357	47.632	ug/l	98
6) Chloroethane	1.691	64	53665	47.236	ug/l	96
7) Trichlorofluoromethane	1.886	101	136355	48.490	ug/l	99
8) Diethyl Ether	2.130	74	46097	45.386	ug/l	99
9) 1,1,2-Trichlorotrifluo...	2.331	101	74711	50.085	ug/l	99
10) Methyl Iodide	2.453	142	71219	43.593	ug/l	99
11) Tert butyl alcohol	3.002	59	67251	211.111	ug/l	100
12) 1,1-Dichloroethene	2.319	96	70587	47.939	ug/l	99
13) Acrolein	2.239	56	78806	228.098	ug/l	100
14) Allyl chloride	2.666	41	112896	48.012	ug/l	95
15) Acrylonitrile	3.062	53	179556	227.543	ug/l	100
16) Acetone	2.392	43	166939	216.519	ug/l	99
17) Carbon Disulfide	2.514	76	180946	47.881	ug/l	99
18) Methyl Acetate	2.703	43	102476	45.913	ug/l	97
19) Methyl tert-butyl Ether	3.111	73	245794	48.192	ug/l	100
20) Methylene Chloride	2.788	84	78430	45.612	ug/l	93
21) trans-1,2-Dichloroethene	3.093	96	78497	48.735	ug/l	98
22) Diisopropyl ether	3.757	45	244025	48.438	ug/l	97
23) Vinyl Acetate	3.721	43	958390	245.096	ug/l	98
24) 1,1-Dichloroethane	3.605	63	139554	47.145	ug/l	99
25) 2-Butanone	4.556	43	257566	232.728	ug/l	99
26) 2,2-Dichloropropane	4.471	77	108371	49.784	ug/l	99
27) cis-1,2-Dichloroethene	4.483	96	93344	48.492	ug/l	97
28) Bromochloromethane	4.898	49	59423	47.956	ug/l	93
29) Tetrahydrofuran	5.001	42	167379	233.427	ug/l	98
30) Chloroform	5.093	83	156035	47.482	ug/l	98
31) Cyclohexane	5.471	56	125301	50.601	ug/l	91
32) 1,1,1-Trichloroethane	5.379	97	140838	49.812	ug/l	99
36) 1,1-Dichloropropene	5.690	75	112707	49.882	ug/l	100
37) Ethyl Acetate	4.709	43	101939	47.728	ug/l	100
38) Carbon Tetrachloride	5.678	117	125509	49.578	ug/l	97
39) Methylcyclohexane	7.379	83	134321	53.112	ug/l	99
40) Benzene	6.038	78	322242	48.914	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX120722\
Data File : VX033280.D
Acq On : 07 Dec 2022 12:51
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Dec 08 01:41:57 2022
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X120722W.M
Quant Title : SW846 8260
QLast Update : Wed Dec 07 12:43:54 2022
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
ICVVX120722

Manual Integrations APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	4.916	41	57501	48.856	ug/l		97
42) 1,2-Dichloroethane	6.086	62	124620	47.637	ug/l		98
43) Isopropyl Acetate	6.336	43	167268	48.673	ug/l		97
44) Trichloroethene	7.123	130	90972	50.085	ug/l		99
45) 1,2-Dichloropropane	7.428	63	82041	48.695	ug/l		99
46) Dibromomethane	7.580	93	61420	47.855	ug/l		97
47) Bromodichloromethane	7.818	83	122743	49.061	ug/l		98
48) Methyl methacrylate	7.690	41	86058	48.521	ug/l		94
49) 1,4-Dioxane	7.696	88	39410	974.422	ug/l		97
51) 4-Methyl-2-Pentanone	8.574	43	533877	245.658	ug/l		97
52) Toluene	8.720	92	214134	50.273	ug/l		99
53) t-1,3-Dichloropropene	8.976	75	126110	47.076	ug/l		99
54) cis-1,3-Dichloropropene	8.366	75	136491	51.268	ug/l		90
55) 1,1,2-Trichloroethane	9.153	97	87728	48.997	ug/l		99
56) Ethyl methacrylate	9.116	69	129329	51.302	ug/l		92
57) 1,3-Dichloropropane	9.305	76	142492	49.540	ug/l		100
58) 2-Chloroethyl Vinyl ether	8.238	63	291627	252.823	ug/l		99
59) 2-Hexanone	9.427	43	399172	249.243	ug/l		96
60) Dibromochloromethane	9.519	129	101310	51.356	ug/l		99
61) 1,2-Dibromoethane	9.610	107	96259	50.543	ug/l		99
64) Tetrachloroethene	9.275	164	80126	49.334	ug/l		98
65) Chlorobenzene	10.080	112	237720	49.423	ug/l		100
66) 1,1,1,2-Tetrachloroethane	10.165	131	89447	49.209	ug/l		100
67) Ethyl Benzene	10.195	91	425565	50.786	ug/l		99
68) m/p-Xylenes	10.299	106	335122	102.791	ug/l		98
69) o-Xylene	10.640	106	163154	50.629	ug/l		97
70) Styrene	10.653	104	274901	52.086	ug/l		98
71) Bromoform	10.799	173	73003	50.740	ug/l	#	100
73) Isopropylbenzene	10.964	105	431345	49.486	ug/l		99
74) N-amyl acetate	10.842	43	150450	50.590	ug/l		96
75) 1,1,2,2-Tetrachloroethane	11.213	83	130259	47.106	ug/l		99
76) 1,2,3-Trichloropropane	11.238	75	118011m	48.233	ug/l		
77) Bromobenzene	11.201	156	106101	48.205	ug/l		98
78) n-propylbenzene	11.305	91	494916	50.851	ug/l		99
79) 2-Chlorotoluene	11.366	91	292372	48.608	ug/l		98
80) 1,3,5-Trimethylbenzene	11.451	105	364334	50.214	ug/l		99
81) trans-1,4-Dichloro-2-b...	11.018	75	37394	47.543	ug/l		97
82) 4-Chlorotoluene	11.457	91	339915	48.600	ug/l		98
83) tert-Butylbenzene	11.713	119	363888	50.294	ug/l		98
84) 1,2,4-Trimethylbenzene	11.750	105	360637	49.794	ug/l		99
85) sec-Butylbenzene	11.890	105	435925	51.640	ug/l		100
86) p-Isopropyltoluene	12.012	119	370603	50.922	ug/l		99
87) 1,3-Dichlorobenzene	11.969	146	197172	49.452	ug/l		99
88) 1,4-Dichlorobenzene	12.043	146	197406	48.472	ug/l		99
89) n-Butylbenzene	12.335	91	318727	53.470	ug/l		99
90) Hexachloroethane	12.536	117	61643	49.829	ug/l		97
91) 1,2-Dichlorobenzene	12.335	146	190001	47.664	ug/l		99
92) 1,2-Dibromo-3-Chloropr...	12.945	75	28225	47.255	ug/l		96
93) 1,2,4-Trichlorobenzene	13.591	180	122405	50.844	ug/l		99
94) Hexachlorobutadiene	13.725	225	49918	51.780	ug/l		99
95) Naphthalene	13.774	128	406692	50.644	ug/l		100
96) 1,2,3-Trichlorobenzene	13.963	180	122061	50.061	ug/l		99

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX120722\
Data File : VX033280.D
Acq On : 07 Dec 2022 12:51
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
ICVVX120722

Manual Integrations APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

Quant Time: Dec 08 01:41:57 2022
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X120722W.M
Quant Title : SW846 8260
QLast Update : Wed Dec 07 12:43:54 2022
Response via : Initial Calibration

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

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

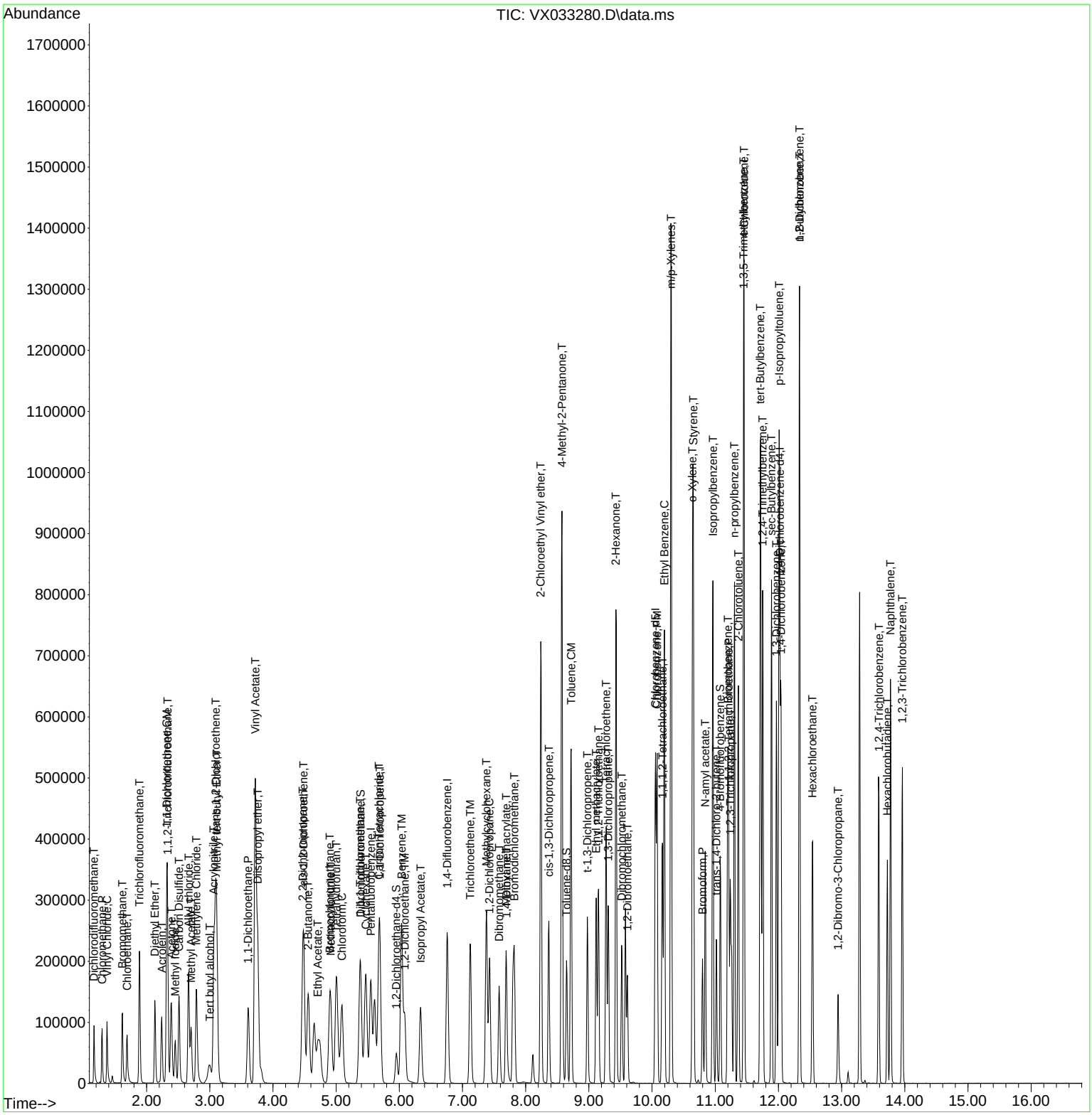
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX120722\
Data File : VX033280.D
Acq On : 07 Dec 2022 12:51
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 9 Sample Multiplier: 1

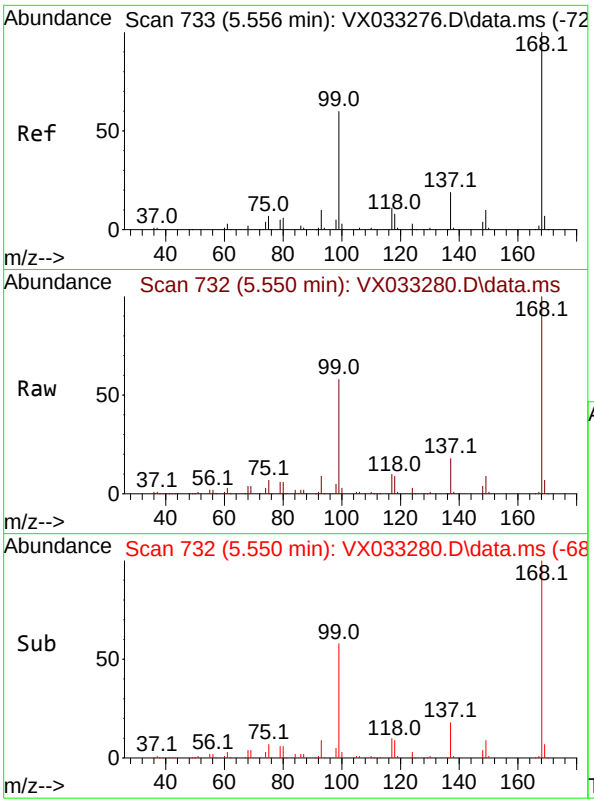
Quant Time: Dec 08 01:41:57 2022
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X120722W.M
Quant Title : SW846 8260
QLast Update : Wed Dec 07 12:43:54 2022
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
ICVVX120722

Manual Integrations APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

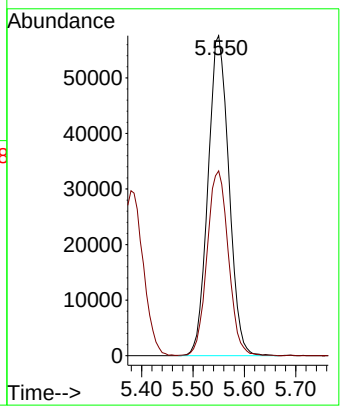




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 5.550 min Scan# 7
Delta R.T. -0.006 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion:168 Resp: 16241

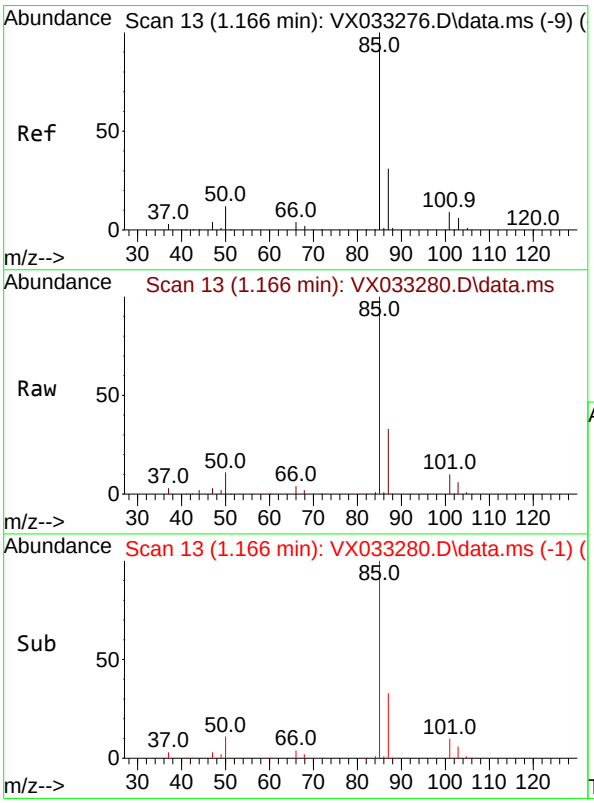
Ion	Ratio	Lower	Upper
168	100		
99	57.8	46.1	69.1



Instrument :
MSVOA_X
ClientSampleId :
ICVVX120722

Manual Integrations
APPROVED

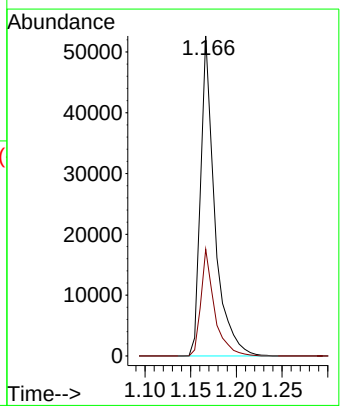
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

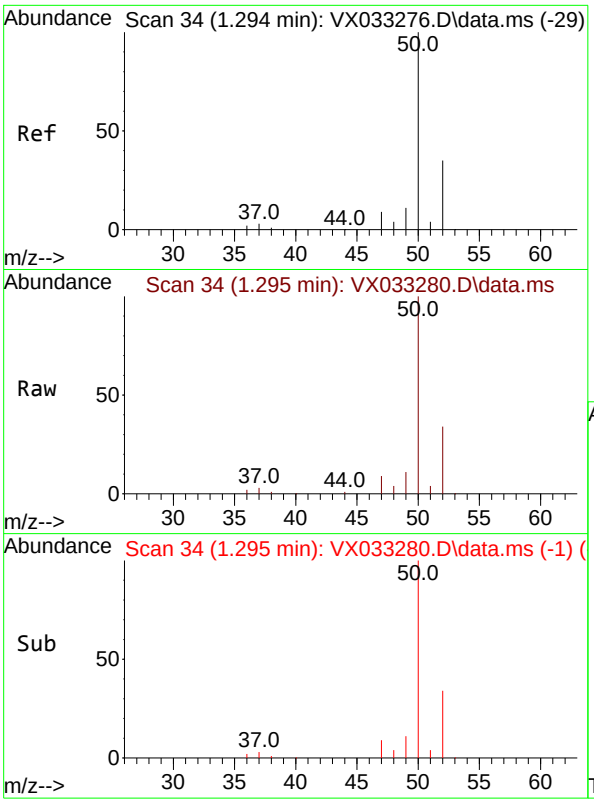


#2
Dichlorodifluoromethane
Concen: 49.702 ug/l
RT: 1.166 min Scan# 13
Delta R.T. 0.000 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion: 85 Resp: 56389

Ion	Ratio	Lower	Upper
85	100		
87	33.4	15.6	46.7

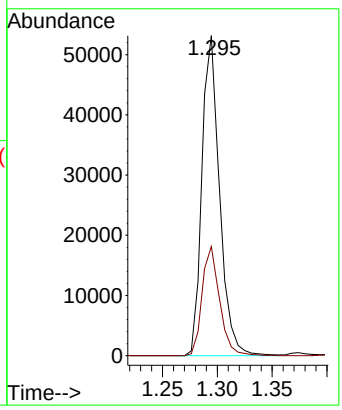




#3
Chloromethane
Concen: 45.367 ug/l
RT: 1.295 min Scan# 34
Delta R.T. 0.000 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion: 50 Resp: 5951

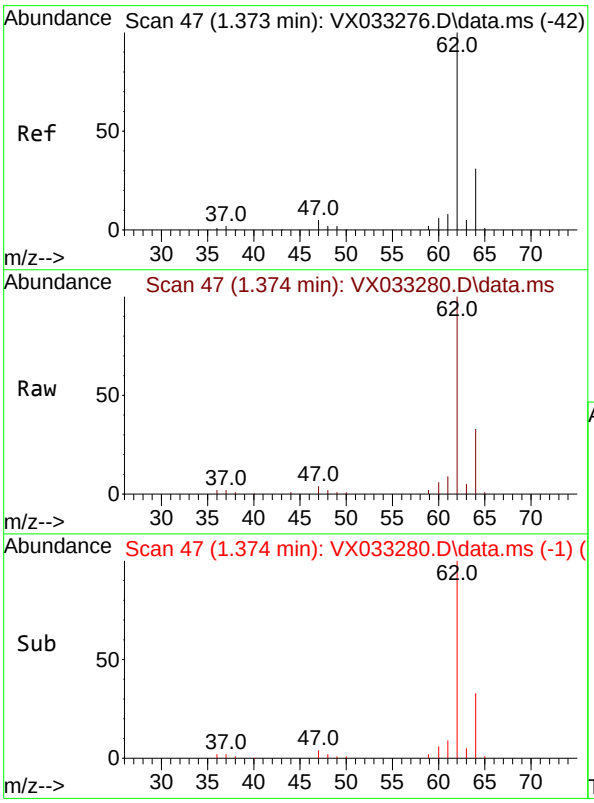
Ion	Ratio	Lower	Upper
50	100		
52	34.1	25.4	38.2



Instrument :
MSVOA_X
ClientSampleId :
ICVVX120722

Manual Integrations APPROVED

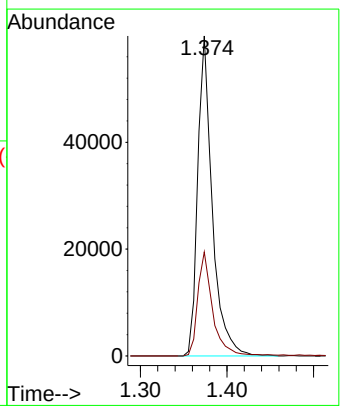
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

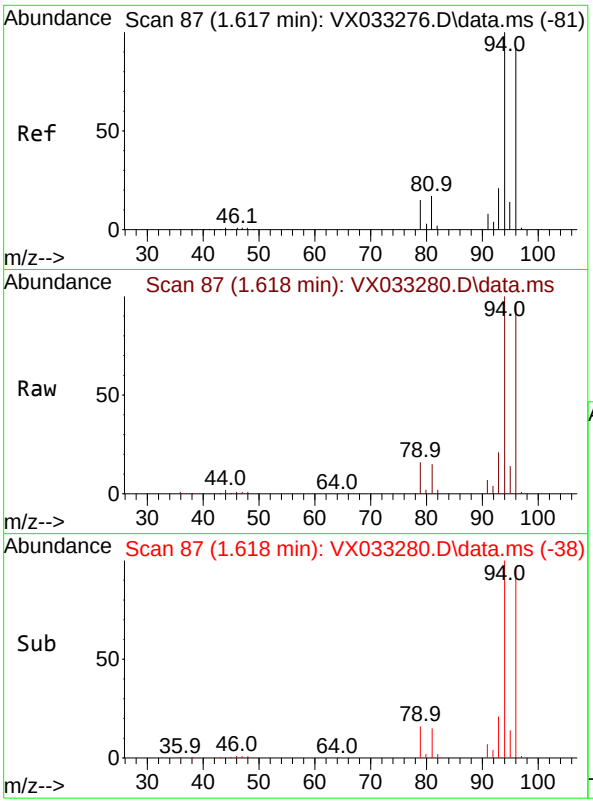


#4
Vinyl Chloride
Concen: 46.704 ug/l
RT: 1.374 min Scan# 47
Delta R.T. 0.000 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion: 62 Resp: 69954

Ion	Ratio	Lower	Upper
62	100		
64	32.5	25.8	38.6

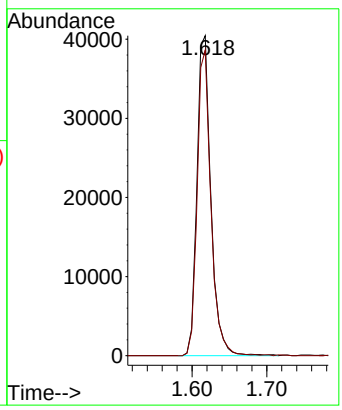




#5
Bromomethane
Concen: 47.632 ug/l
RT: 1.618 min Scan# 8
Delta R.T. 0.000 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion: 94 Resp: 5235

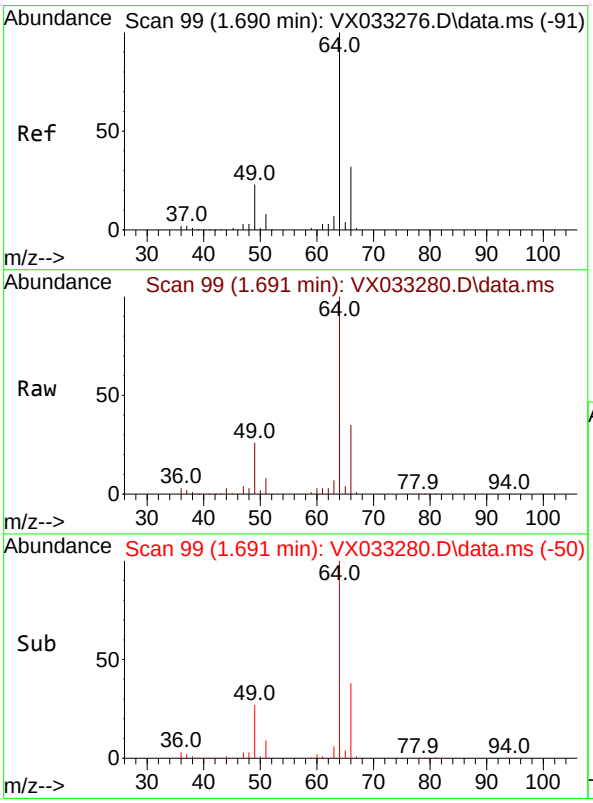
Ion	Ratio	Lower	Upper
94	100		
96	95.5	77.6	116.4



Instrument :
MSVOA_X
ClientSampleId :
ICVVX120722

Manual Integrations
APPROVED

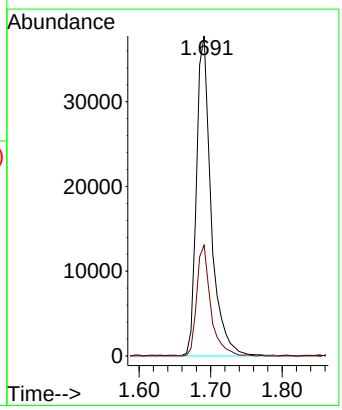
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

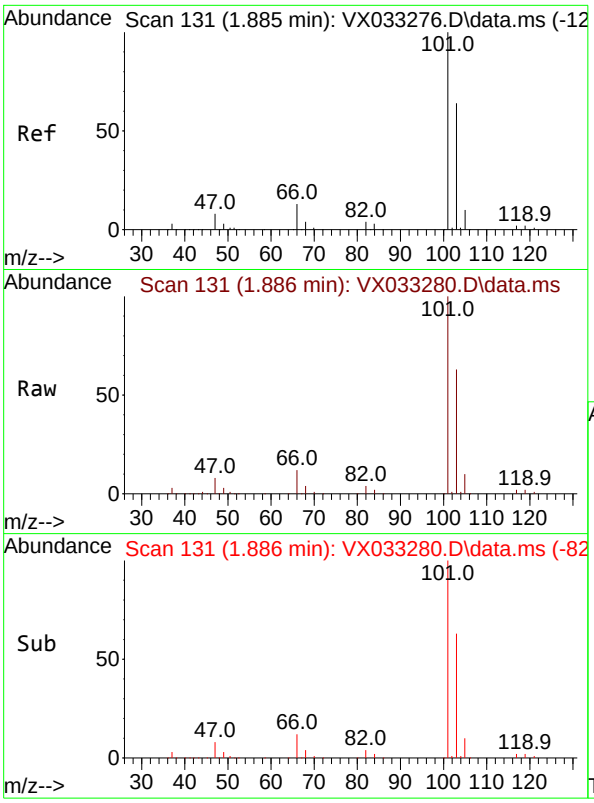


#6
Chloroethane
Concen: 47.236 ug/l
RT: 1.691 min Scan# 99
Delta R.T. 0.000 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion: 64 Resp: 53665

Ion	Ratio	Lower	Upper
64	100		
66	34.6	26.0	39.0





#7
Trichlorofluoromethane
Concen: 48.490 ug/l
RT: 1.886 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

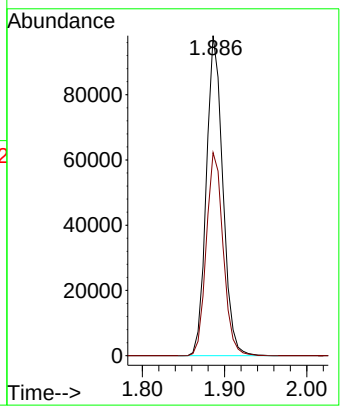
Tgt Ion:101 Resp: 13635

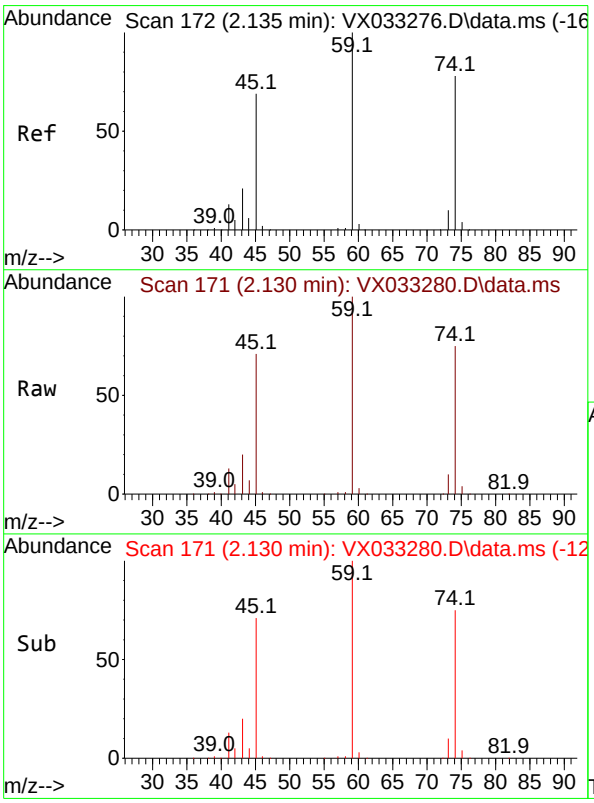
Ion	Ratio	Lower	Upper
101	100		
103	63.5	51.4	77.2

Instrument :
MSVOA_X
ClientSampleId :
ICVVX120722

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

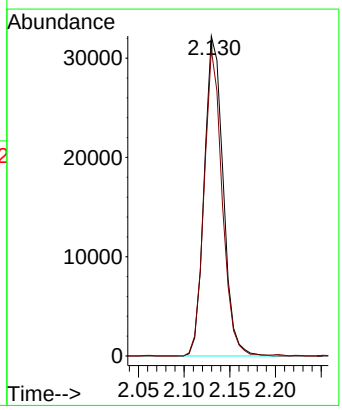


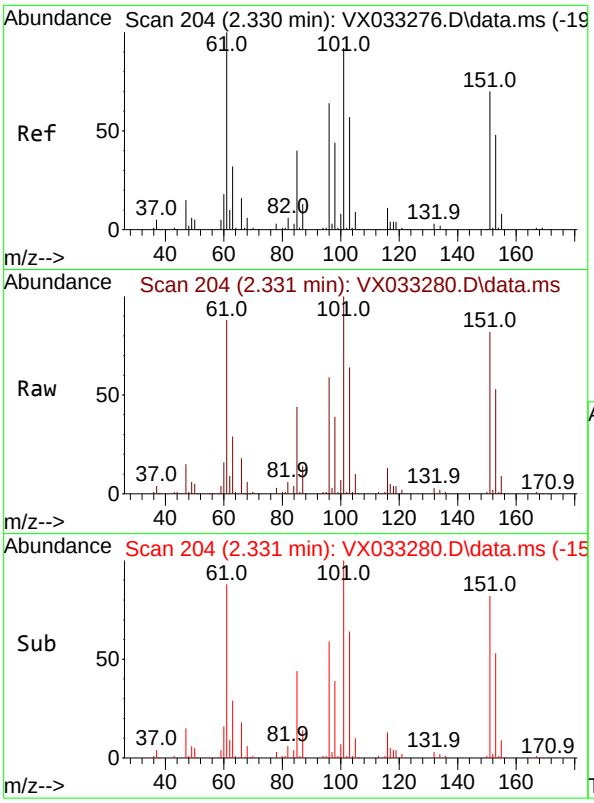


#8
Diethyl Ether
Concen: 45.386 ug/l
RT: 2.130 min Scan# 171
Delta R.T. -0.006 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion: 74 Resp: 46097

Ion	Ratio	Lower	Upper
74	100		
45	92.0	46.6	139.7

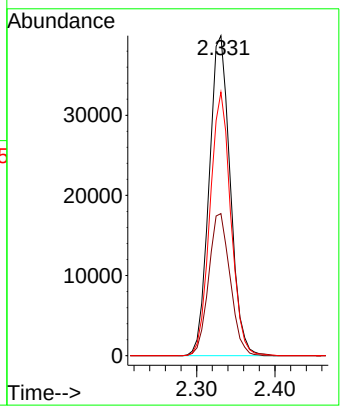




#9
1,1,2-Trichlorotrifluoroethane
Concen: 50.085 ug/l
RT: 2.331 min Scan# 2
Delta R.T. 0.000 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion:101 Resp: 7471

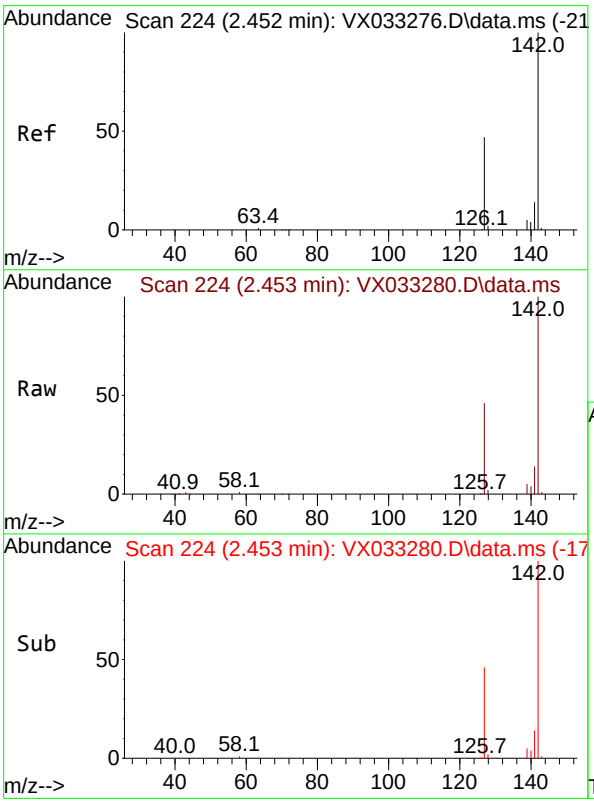
Ion	Ratio	Lower	Upper
101	100		
85	45.2	37.0	55.4
151	81.2	64.4	96.6



Instrument :
MSVOA_X
ClientSampleId :
ICVVX120722

Manual Integrations
APPROVED

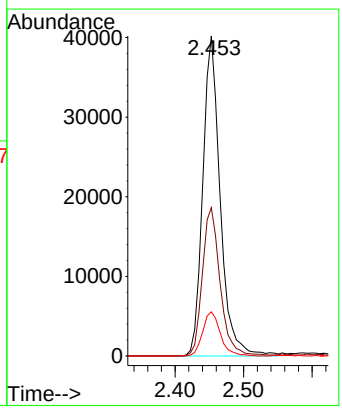
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

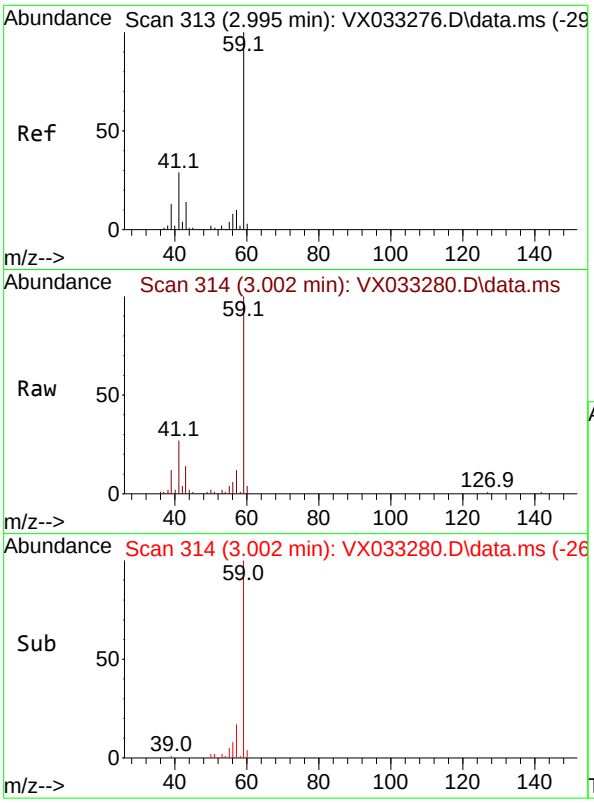


#10
Methyl Iodide
Concen: 43.593 ug/l
RT: 2.453 min Scan# 224
Delta R.T. 0.000 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion:142 Resp: 71219

Ion	Ratio	Lower	Upper
142	100		
127	47.3	38.6	57.8
141	14.0	11.4	17.2





#11
Tert butyl alcohol
Concen: 211.111 ug/l
RT: 3.002 min Scan# 3
Delta R.T. 0.006 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

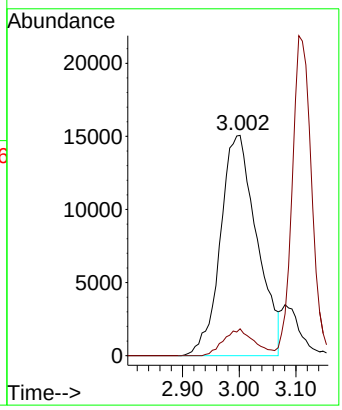
Tgt Ion: 59 Resp: 6725

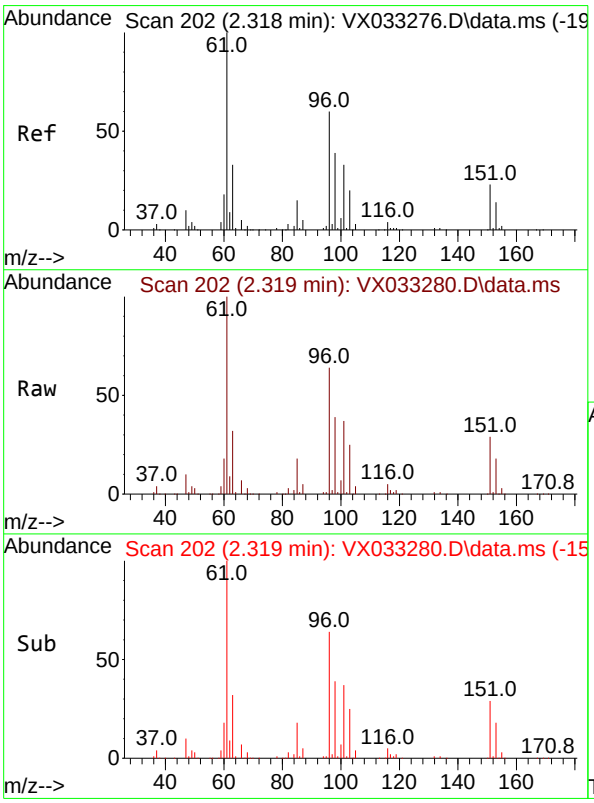
Ion	Ratio	Lower	Upper
59	100		
57	10.3	8.2	12.4

Instrument :
MSVOA_X
ClientSampleId :
ICVVX120722

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

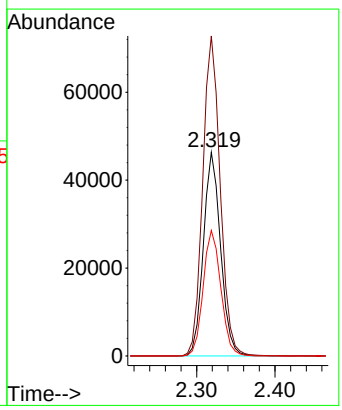


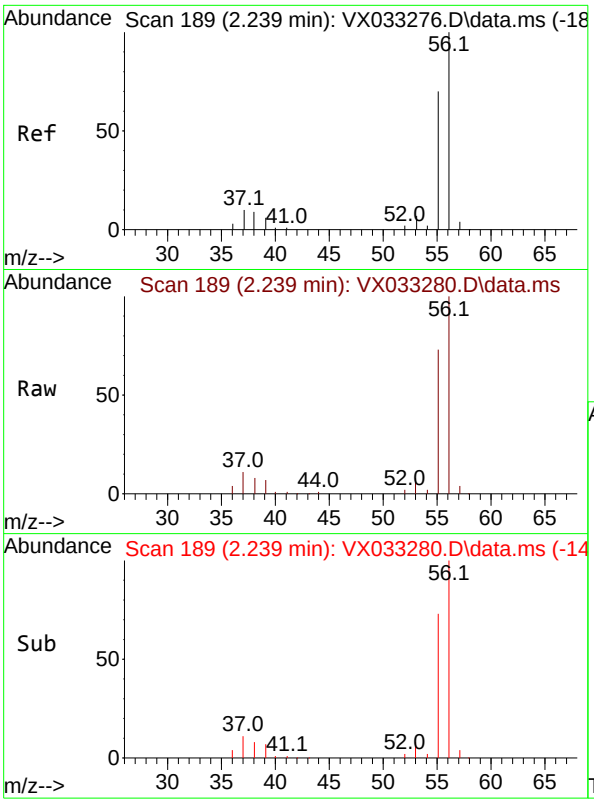


#12
1,1-Dichloroethene
Concen: 47.939 ug/l
RT: 2.319 min Scan# 202
Delta R.T. 0.000 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion: 96 Resp: 70587

Ion	Ratio	Lower	Upper
96	100		
61	157.1	125.1	187.7
98	61.6	50.6	76.0

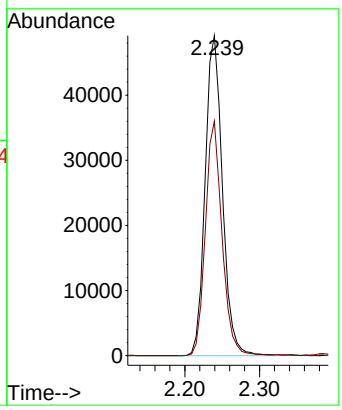




#13
Acrolein
Concen: 228.098 ug/l
RT: 2.239 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion: 56 Resp: 7880

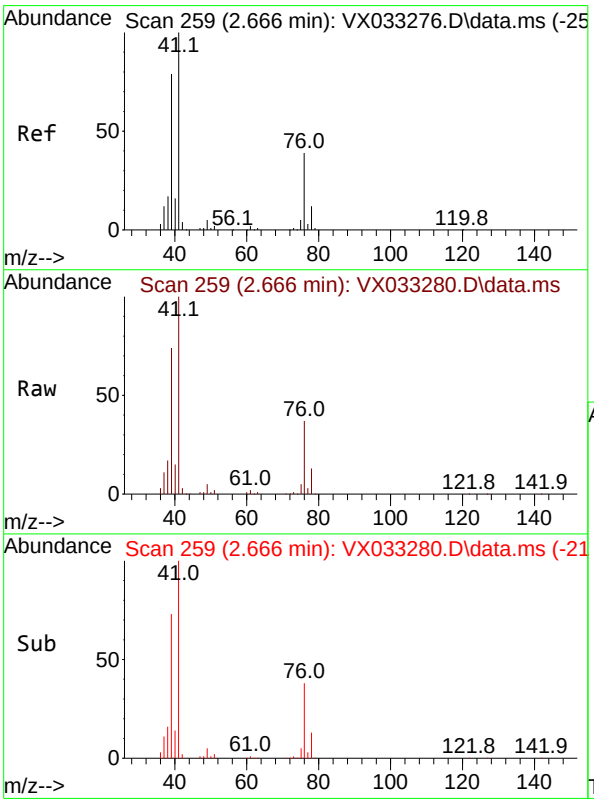
Ion	Ratio	Lower	Upper
56	100		
55	70.7	56.9	85.3



Instrument :
MSVOA_X
ClientSampleId :
ICVVX120722

Manual Integrations APPROVED

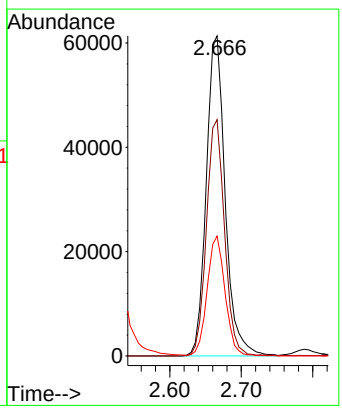
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

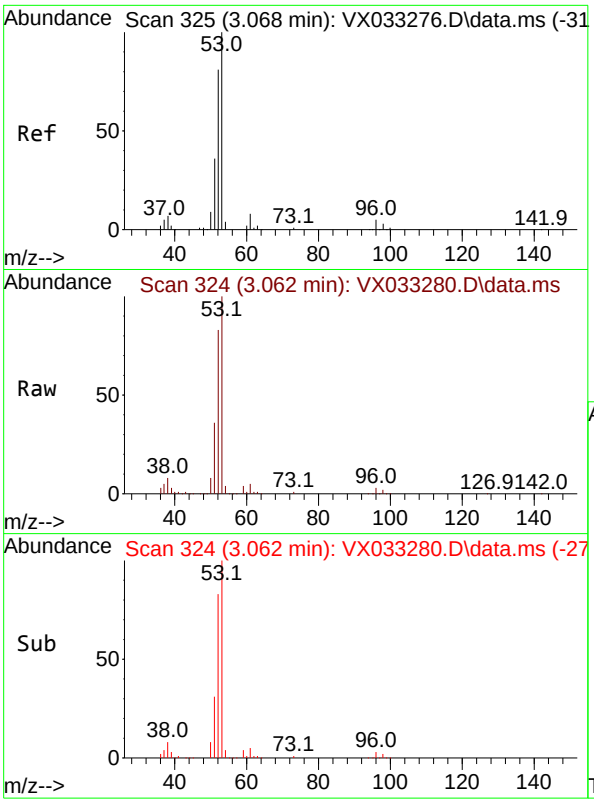


#14
Allyl chloride
Concen: 48.012 ug/l
RT: 2.666 min Scan# 259
Delta R.T. 0.000 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion: 41 Resp: 112896

Ion	Ratio	Lower	Upper
41	100		
39	70.8	61.4	92.2
76	35.6	29.2	43.8

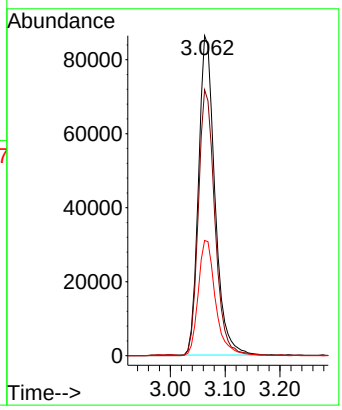




#15
Acrylonitrile
Concen: 227.543 ug/l
RT: 3.062 min Scan# 3
Delta R.T. -0.006 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion: 53 Resp: 17955

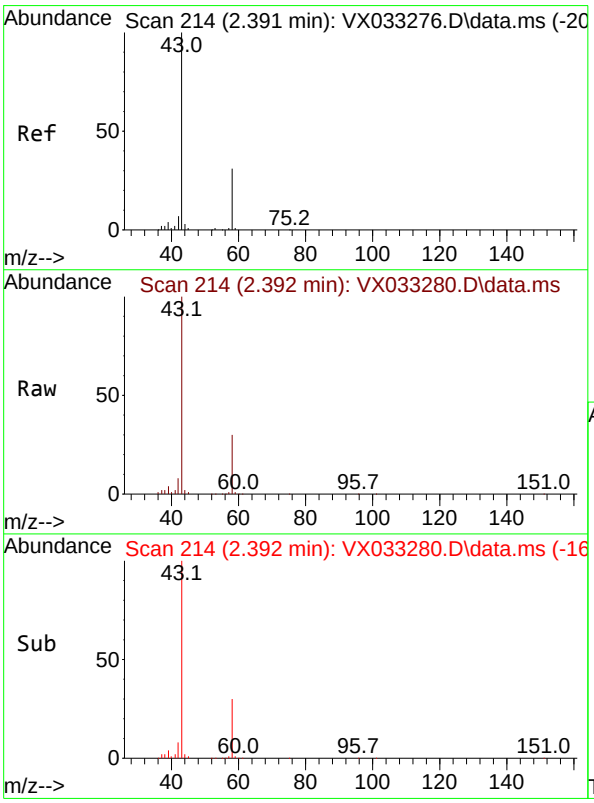
Ion	Ratio	Lower	Upper
53	100		
52	84.1	67.4	101.0
51	37.9	30.3	45.5



Instrument :
MSVOA_X
ClientSampleId :
ICVVX120722

Manual Integrations
APPROVED

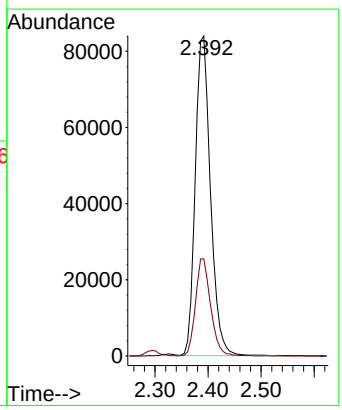
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

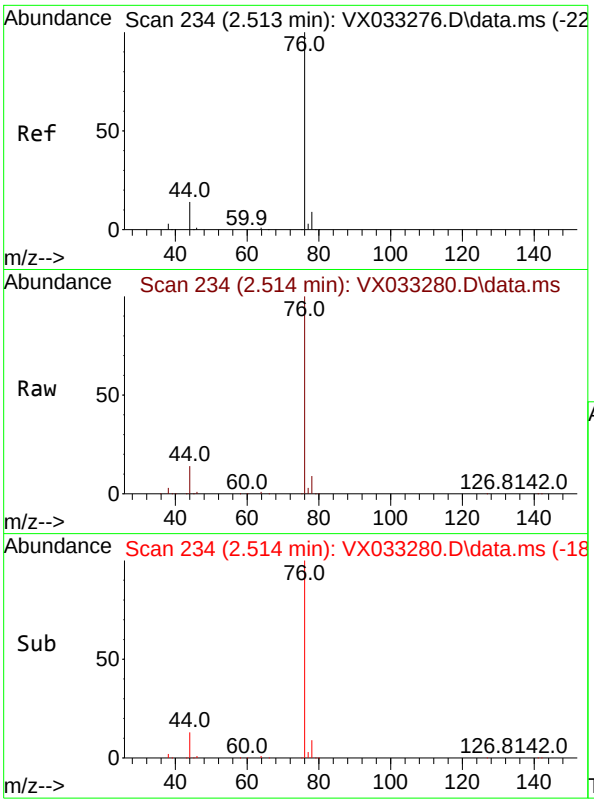


#16
Acetone
Concen: 216.519 ug/l
RT: 2.392 min Scan# 214
Delta R.T. 0.000 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion: 43 Resp: 166939

Ion	Ratio	Lower	Upper
43	100		
58	30.4	23.8	35.8

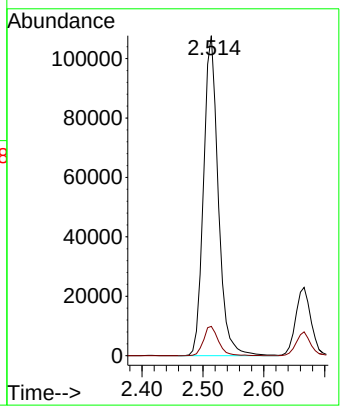




#17
Carbon Disulfide
Concen: 47.881 ug/l
RT: 2.514 min Scan# 2
Delta R.T. 0.000 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion: 76 Resp: 18094

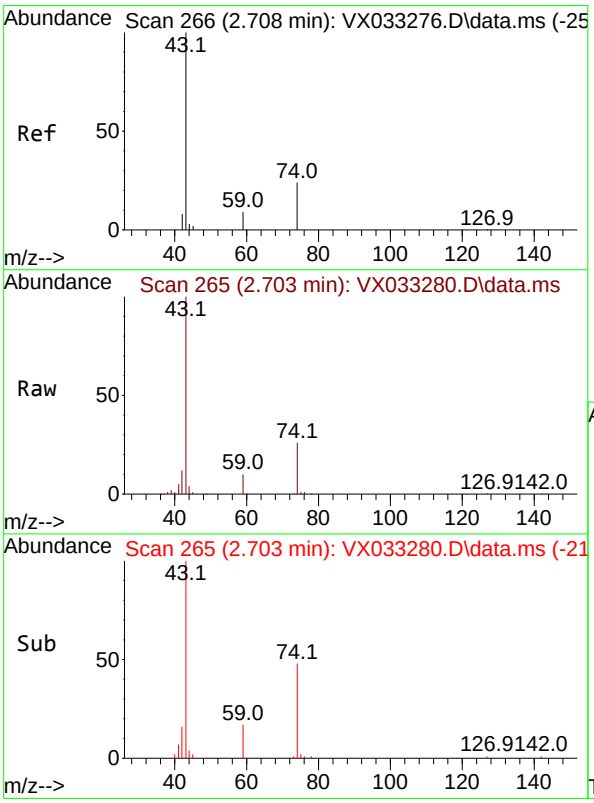
Ion	Ratio	Lower	Upper
76	100		
78	9.2	7.5	11.3



Instrument :
MSVOA_X
ClientSampleId :
ICVVX120722

Manual Integrations
APPROVED

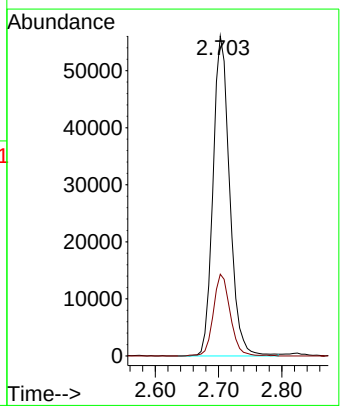
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

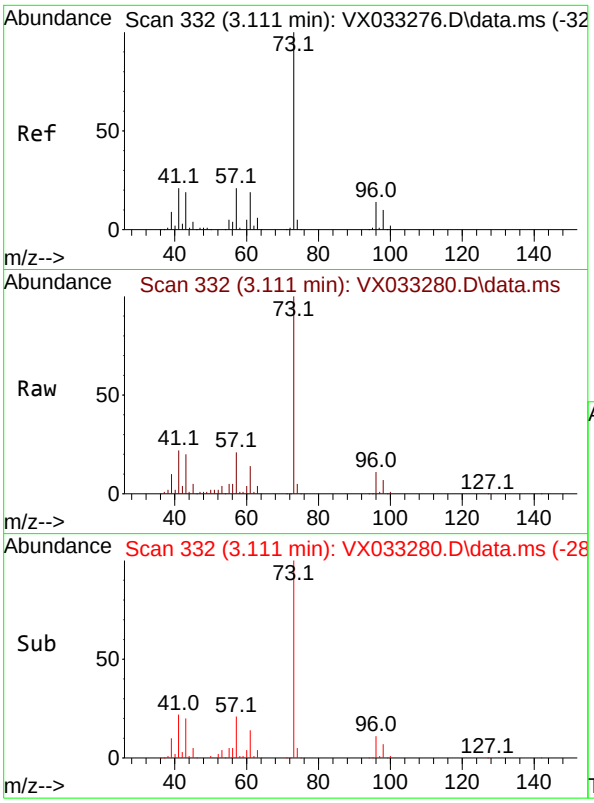


#18
Methyl Acetate
Concen: 45.913 ug/l
RT: 2.703 min Scan# 265
Delta R.T. -0.006 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion: 43 Resp: 102476

Ion	Ratio	Lower	Upper
43	100		
74	25.9	19.4	29.0





#19
Methyl tert-butyl Ether
Concen: 48.192 ug/l
RT: 3.111 min Scan# 3
Delta R.T. 0.000 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

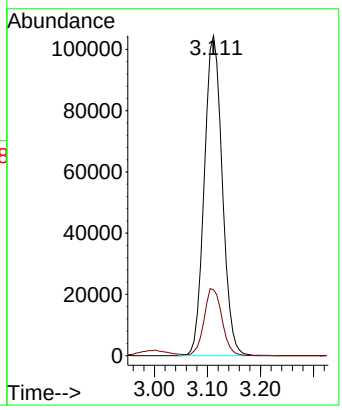
Tgt Ion: 73 Resp: 24579

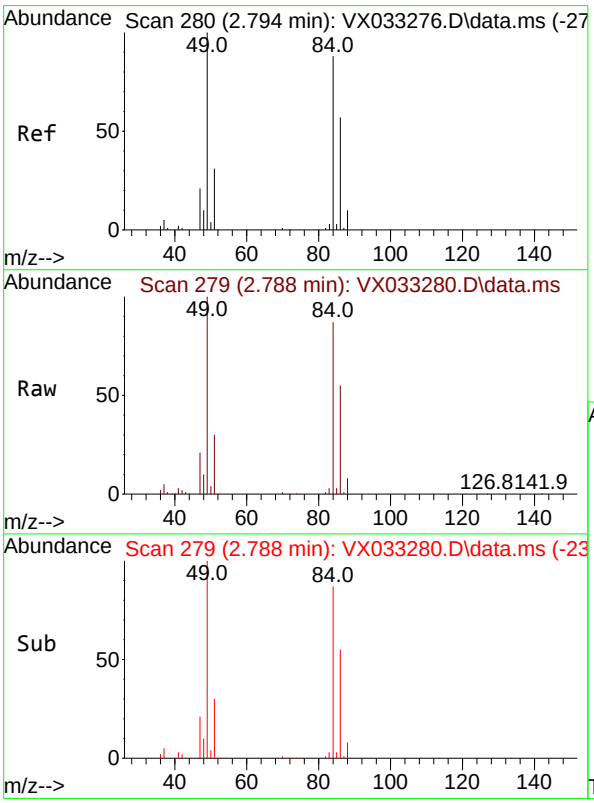
Ion	Ratio	Lower	Upper
73	100		
57	20.6	16.6	25.0

Instrument :
MSVOA_X
ClientSampleId :
ICVVX120722

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

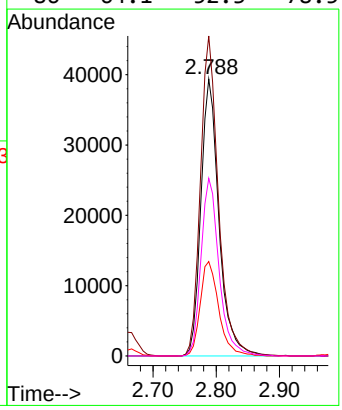


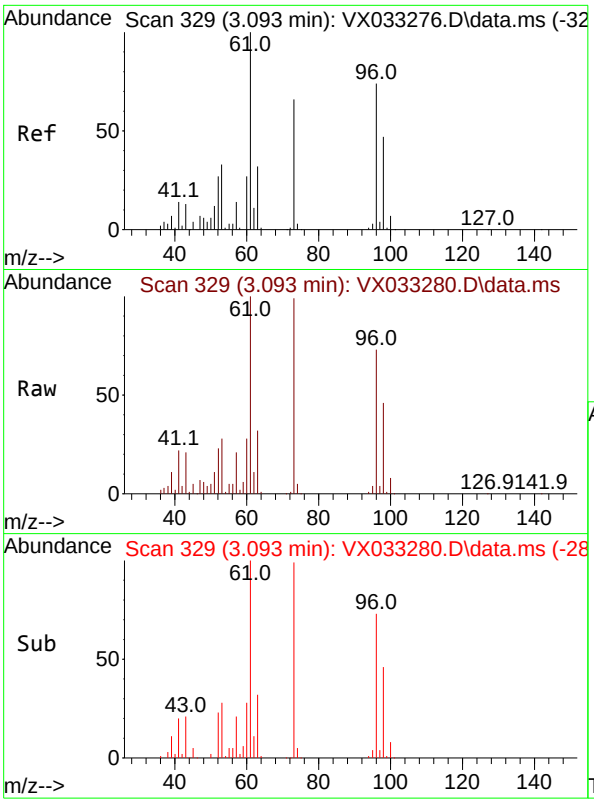


#20
Methylene Chloride
Concen: 45.612 ug/l
RT: 2.788 min Scan# 279
Delta R.T. -0.006 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion: 84 Resp: 78430

Ion	Ratio	Lower	Upper
84	100		
49	115.6	101.0	151.6
51	34.1	31.1	46.7
86	64.1	52.3	78.5

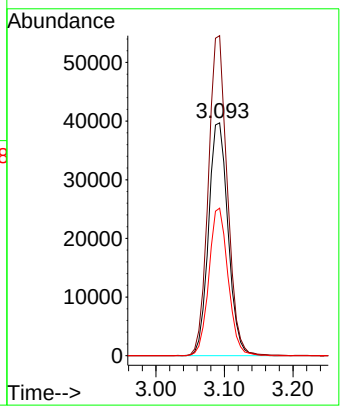




#21
trans-1,2-Dichloroethene
Concen: 48.735 ug/l
RT: 3.093 min Scan# 3
Delta R.T. 0.000 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion: 96 Resp: 7849

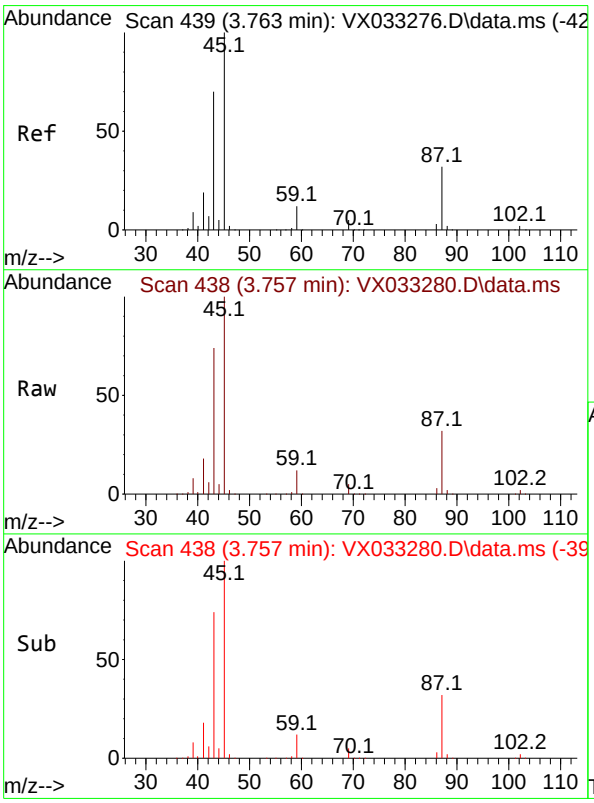
Ion	Ratio	Lower	Upper
96	100		
61	137.3	106.6	160.0
98	63.4	51.0	76.6



Instrument :
MSVOA_X
ClientSampleId :
ICVVX120722

Manual Integrations
APPROVED

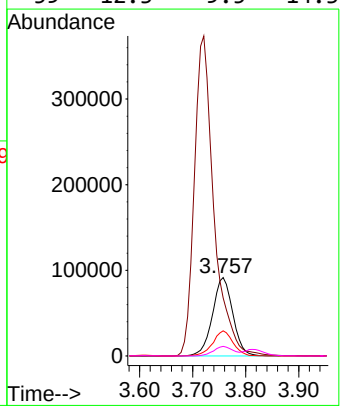
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

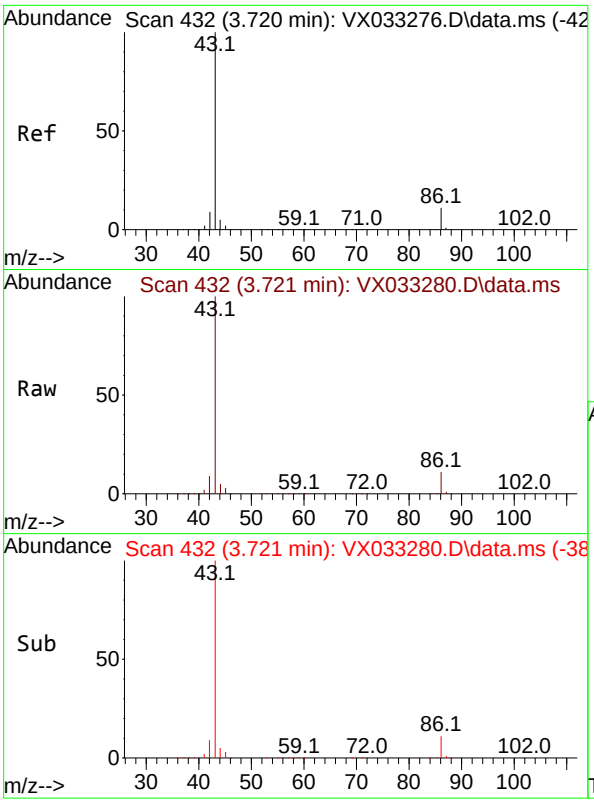


#22
Diisopropyl ether
Concen: 48.438 ug/l
RT: 3.757 min Scan# 438
Delta R.T. -0.006 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion: 45 Resp: 244025

Ion	Ratio	Lower	Upper
45	100		
43	73.2	56.4	84.6
87	32.1	24.4	36.6
59	12.3	9.5	14.3

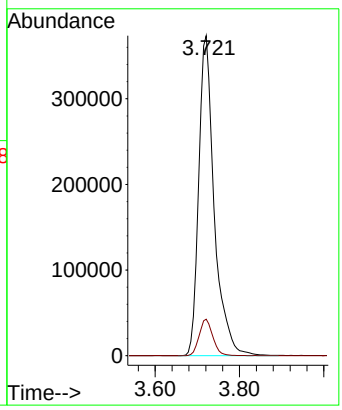




#23
Vinyl Acetate
Concen: 245.096 ug/l
RT: 3.721 min Scan# 4
Delta R.T. 0.000 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion: 43 Resp: 95839

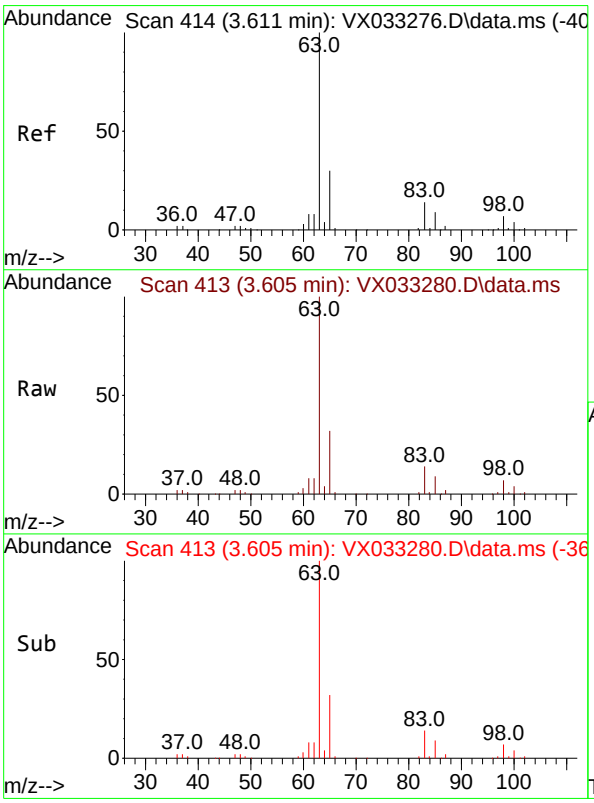
Ion	Ratio	Lower	Upper
43	100		
86	11.4	8.6	12.8



Instrument :
MSVOA_X
ClientSampleId :
ICVVX120722

Manual Integrations
APPROVED

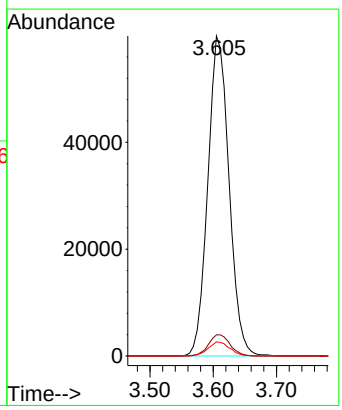
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

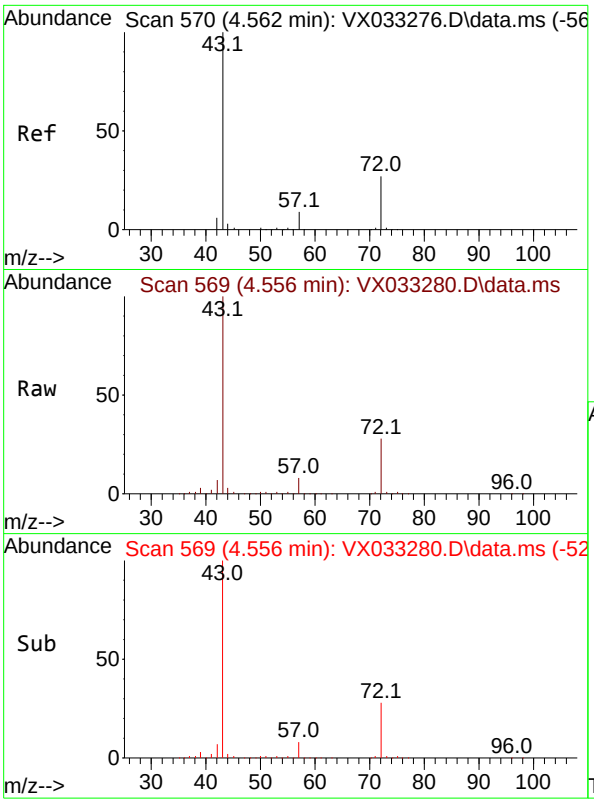


#24
1,1-Dichloroethane
Concen: 47.145 ug/l
RT: 3.605 min Scan# 413
Delta R.T. -0.006 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion: 63 Resp: 139554

Ion	Ratio	Lower	Upper
63	100		
98	6.6	3.5	10.4
100	4.4	2.3	6.8





#25
2-Butanone
Concen: 232.728 ug/l
RT: 4.556 min Scan# 5
Delta R.T. -0.006 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

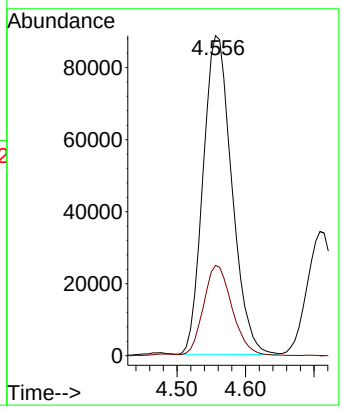
Tgt Ion: 43 Resp: 25756

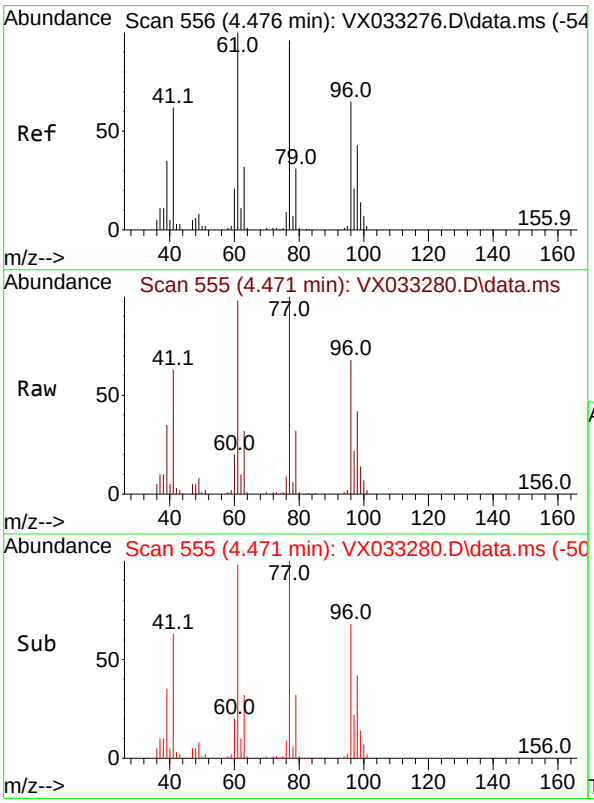
Ion	Ratio	Lower	Upper
43	100		
72	28.1	22.2	33.2

Instrument :
MSVOA_X
ClientSampleId :
ICVVX120722

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

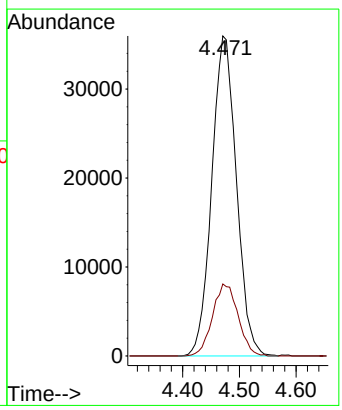


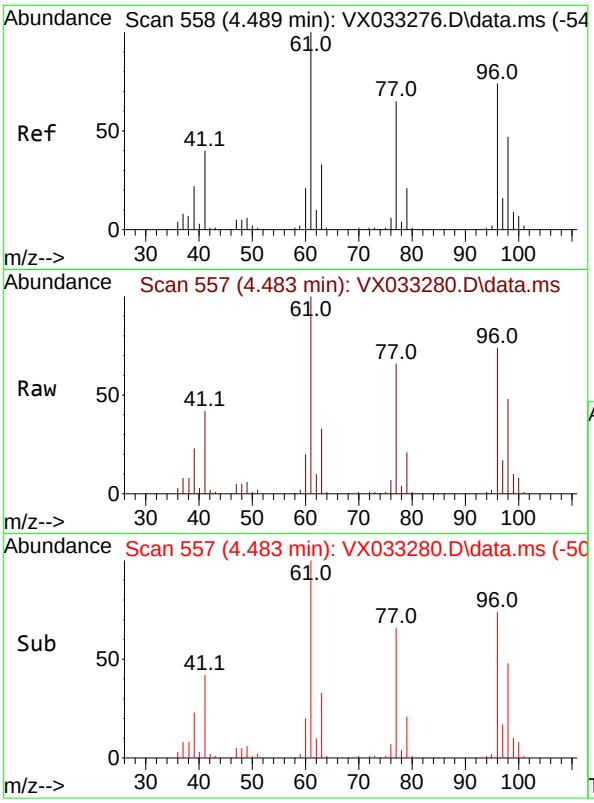


#26
2,2-Dichloropropane
Concen: 49.784 ug/l
RT: 4.471 min Scan# 555
Delta R.T. -0.006 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion: 77 Resp: 108371

Ion	Ratio	Lower	Upper
77	100		
97	23.3	11.4	34.1

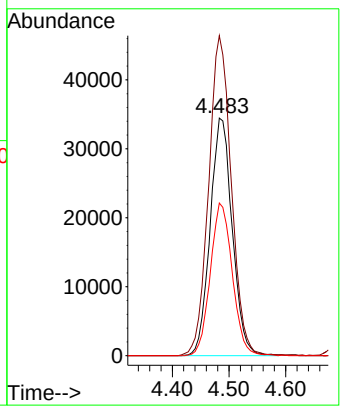




#27
cis-1,2-Dichloroethene
Concen: 48.492 ug/l
RT: 4.483 min Scan# 5
Delta R.T. -0.006 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion: 96 Resp: 9334

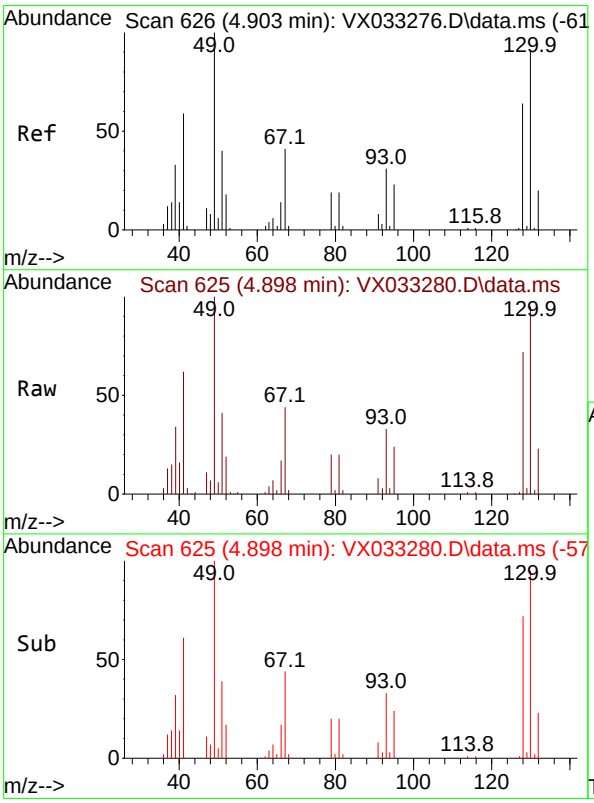
Ion	Ratio	Lower	Upper
96	100		
61	138.1	0.0	286.0
98	63.8	0.0	129.6



Instrument :
MSVOA_X
ClientSampleId :
ICVVX120722

Manual Integrations
APPROVED

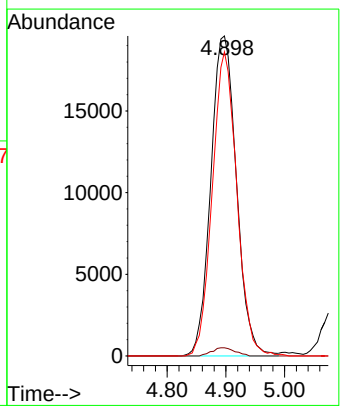
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

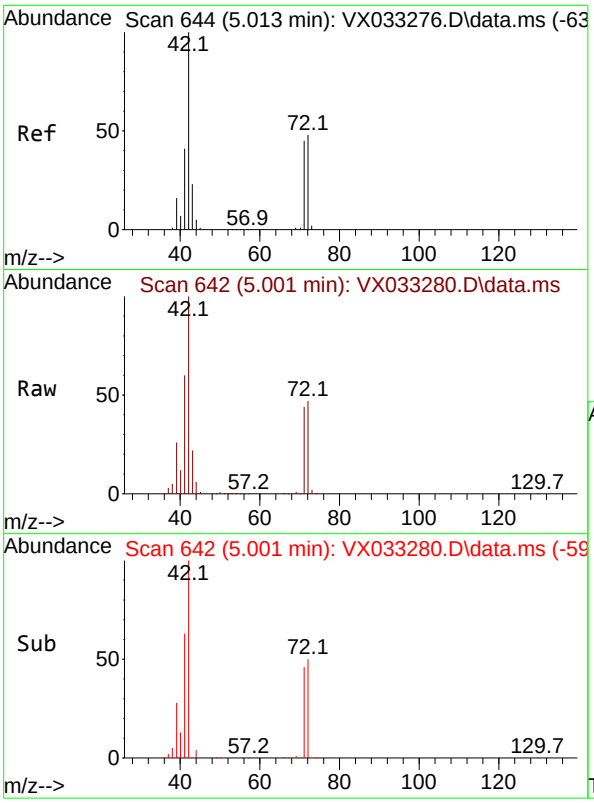


#28
Bromochloromethane
Concen: 47.956 ug/l
RT: 4.898 min Scan# 625
Delta R.T. -0.006 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion: 49 Resp: 59423

Ion	Ratio	Lower	Upper
49	100		
129	2.3	0.0	3.8
130	90.8	67.5	101.3

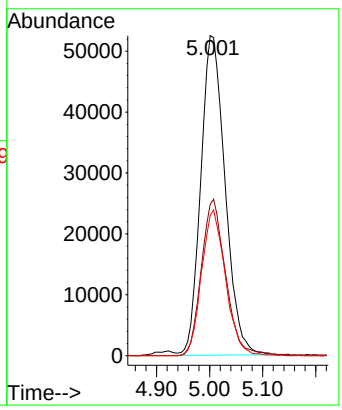




#29
Tetrahydrofuran
Concen: 233.427 ug/l
RT: 5.001 min Scan# 64
Delta R.T. -0.012 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion: 42 Resp: 16737

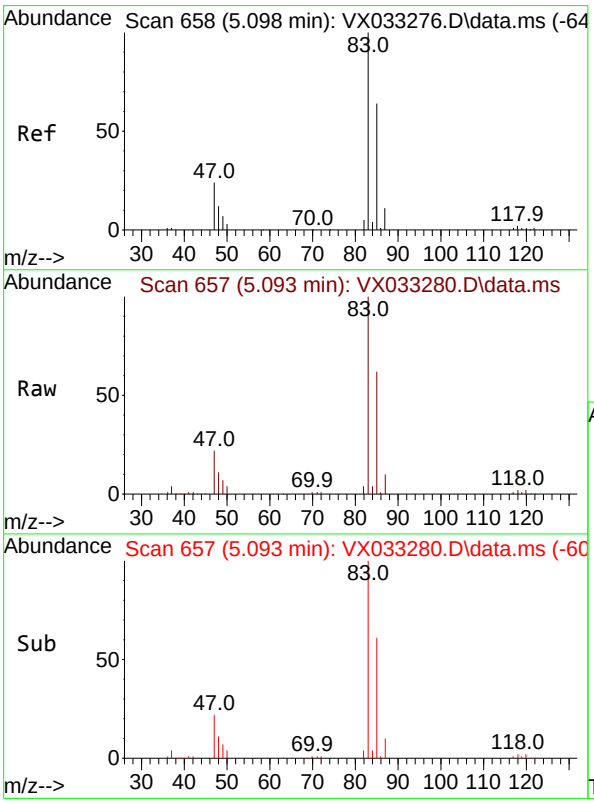
Ion	Ratio	Lower	Upper
42	100		
72	48.8	37.6	56.4
71	44.8	34.7	52.1



Instrument :
MSVOA_X
ClientSampleId :
ICVVX120722

Manual Integrations
APPROVED

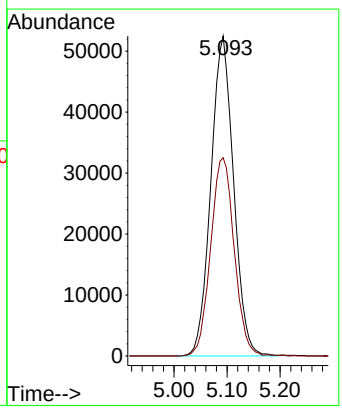
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

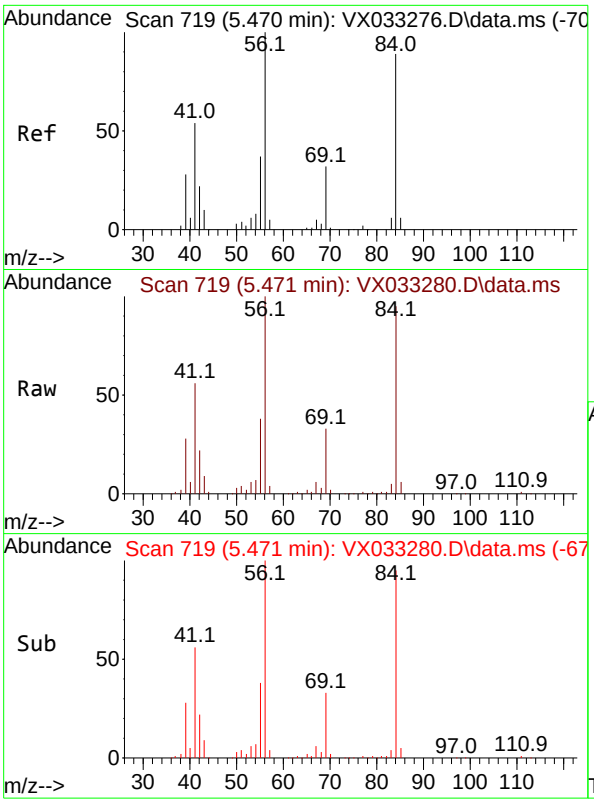


#30
Chloroform
Concen: 47.482 ug/l
RT: 5.093 min Scan# 657
Delta R.T. -0.006 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion: 83 Resp: 156035

Ion	Ratio	Lower	Upper
83	100		
85	62.0	51.1	76.7

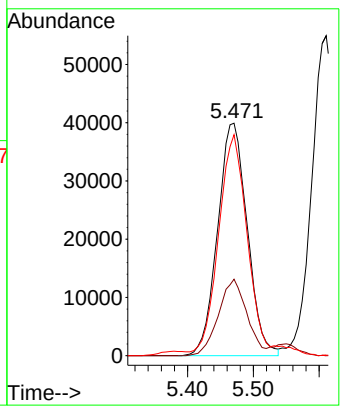




#31
Cyclohexane
Concen: 50.601 ug/l
RT: 5.471 min Scan# 7
Delta R.T. 0.000 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion: 56 Resp: 12530

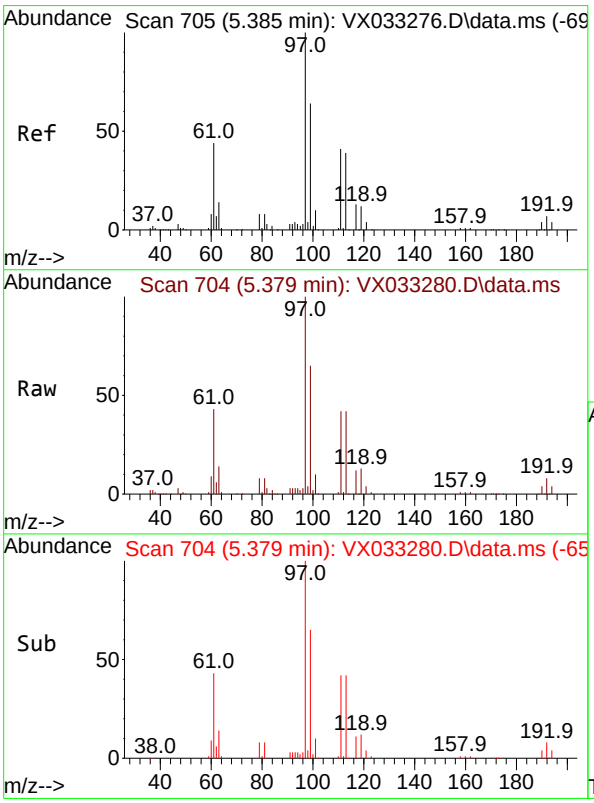
Ion	Ratio	Lower	Upper
56	100		
69	32.9	24.1	36.1
84	93.2	66.9	100.3



Instrument :
MSVOA_X
ClientSampleId :
ICVVX120722

Manual Integrations APPROVED

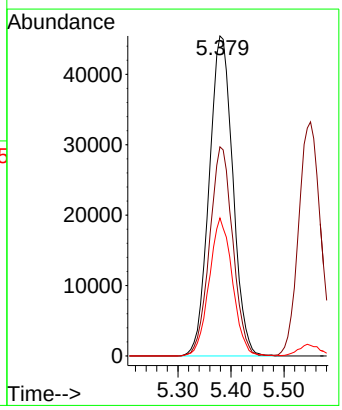
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

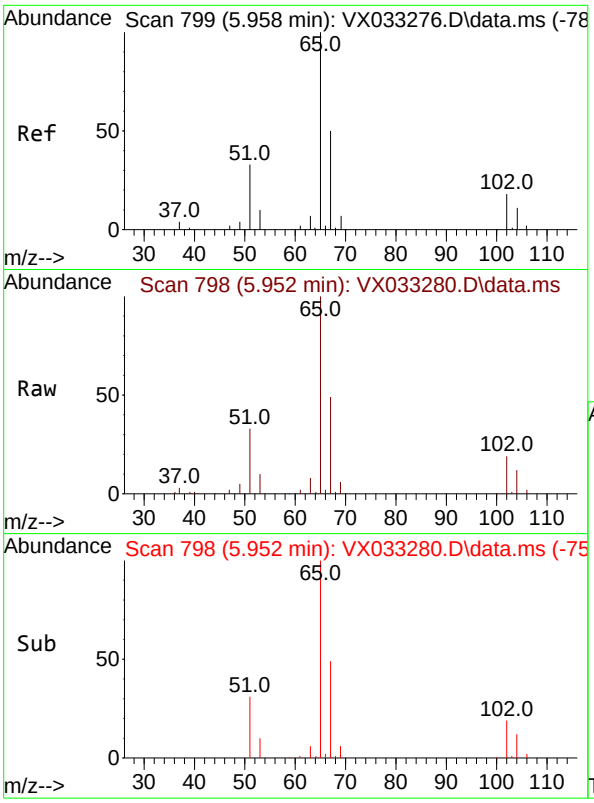


#32
1,1,1-Trichloroethane
Concen: 49.812 ug/l
RT: 5.379 min Scan# 704
Delta R.T. -0.006 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion: 97 Resp: 140838

Ion	Ratio	Lower	Upper
97	100		
99	64.1	51.4	77.0
61	42.4	35.2	52.8

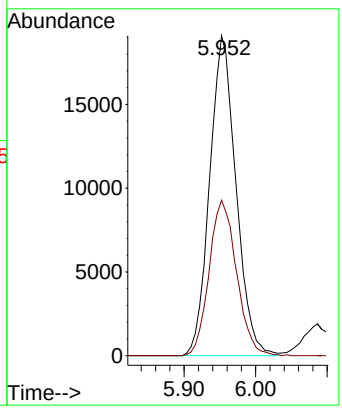




#33
1,2-Dichloroethane-d4
Concen: 46.866 ug/l
RT: 5.952 min Scan# 7
Delta R.T. -0.006 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion: 65 Resp: 4883

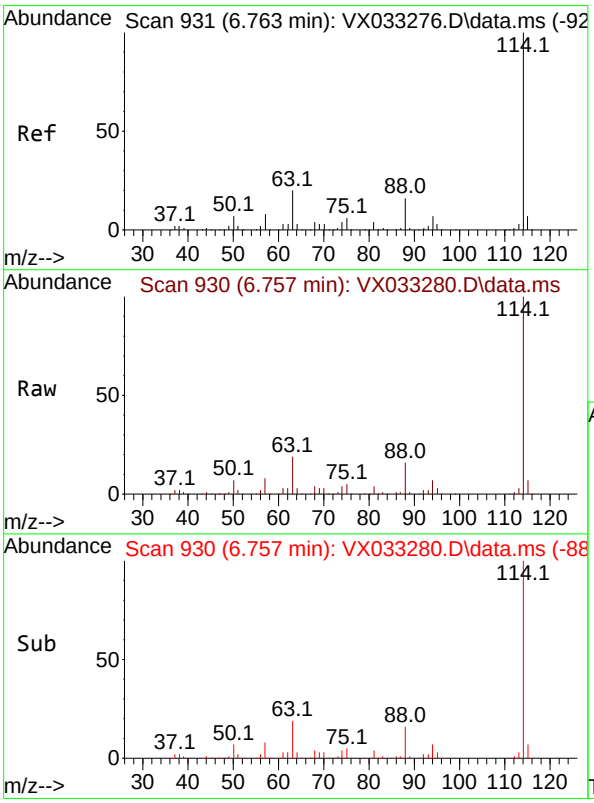
Ion	Ratio	Lower	Upper
65	100		
67	50.5	0.0	101.8



Instrument :
MSVOA_X
ClientSampleId :
ICVVX120722

Manual Integrations
APPROVED

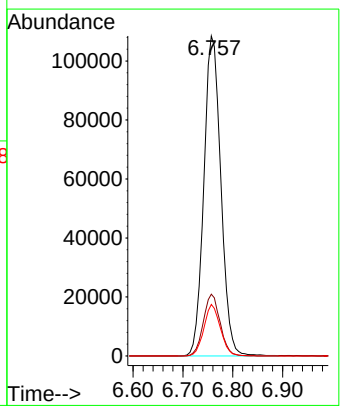
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

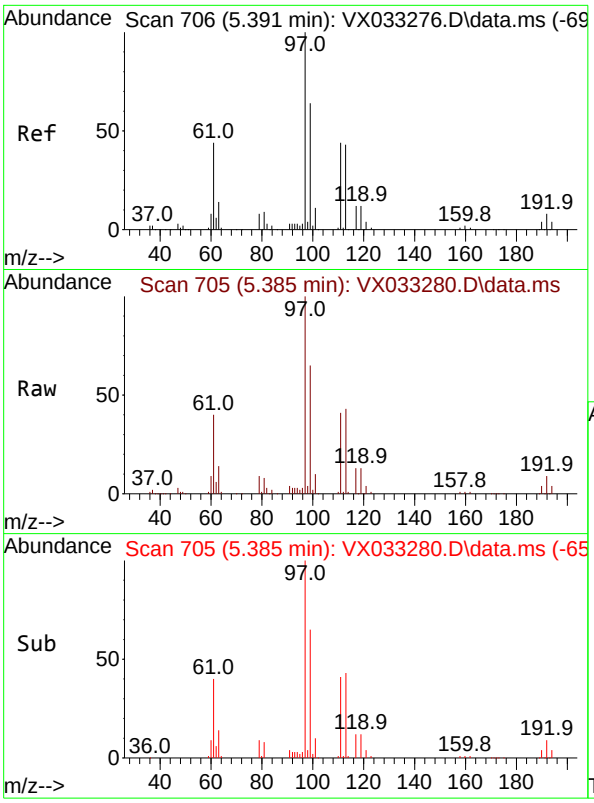


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 6.757 min Scan# 930
Delta R.T. -0.006 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion:114 Resp: 257660

Ion	Ratio	Lower	Upper
114	100		
63	19.3	0.0	41.6
88	16.1	0.0	33.4

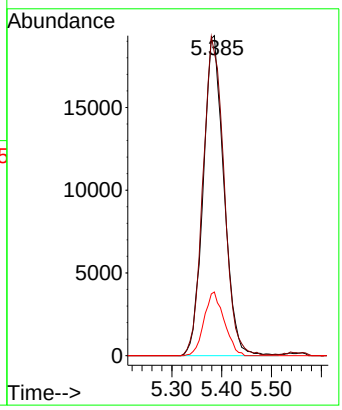




#35
Dibromofluoromethane
Concen: 47.921 ug/l
RT: 5.385 min Scan# 7
Delta R.T. -0.006 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion:113 Resp: 5553

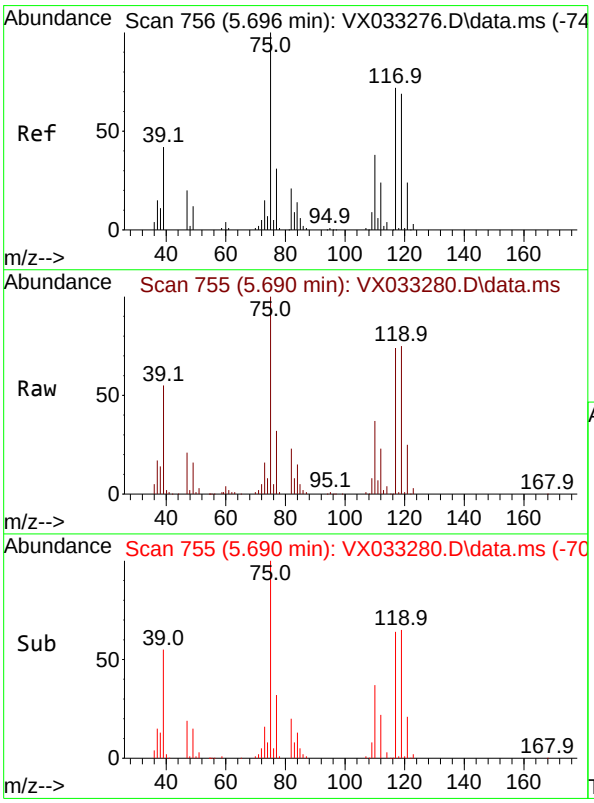
Ion	Ratio	Lower	Upper
113	100		
111	101.6	82.4	123.6
192	19.4	15.4	23.2



Instrument :
MSVOA_X
ClientSampleId :
ICVVX120722

Manual Integrations APPROVED

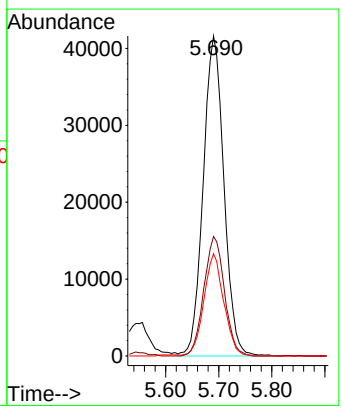
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

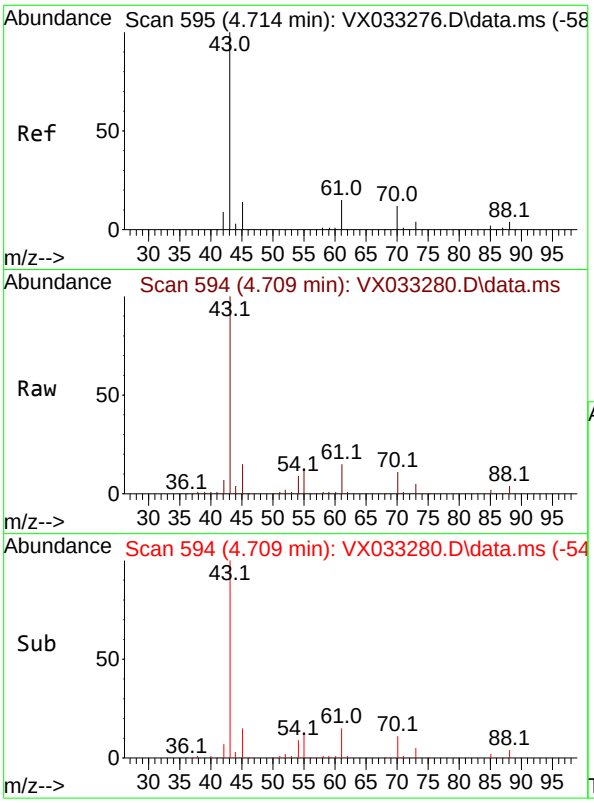


#36
1,1-Dichloropropene
Concen: 49.882 ug/l
RT: 5.690 min Scan# 755
Delta R.T. -0.006 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion: 75 Resp: 112707

Ion	Ratio	Lower	Upper
75	100		
110	37.1	18.4	55.2
77	30.8	24.5	36.7

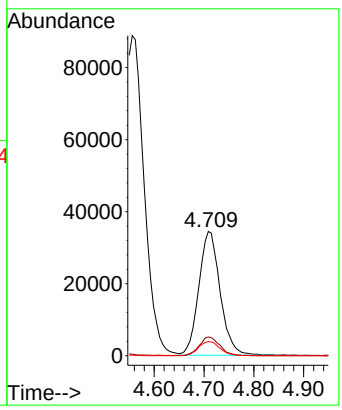




#37
Ethyl Acetate
Concen: 47.728 ug/l
RT: 4.709 min Scan# 5
Delta R.T. -0.006 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion: 43 Resp: 10193

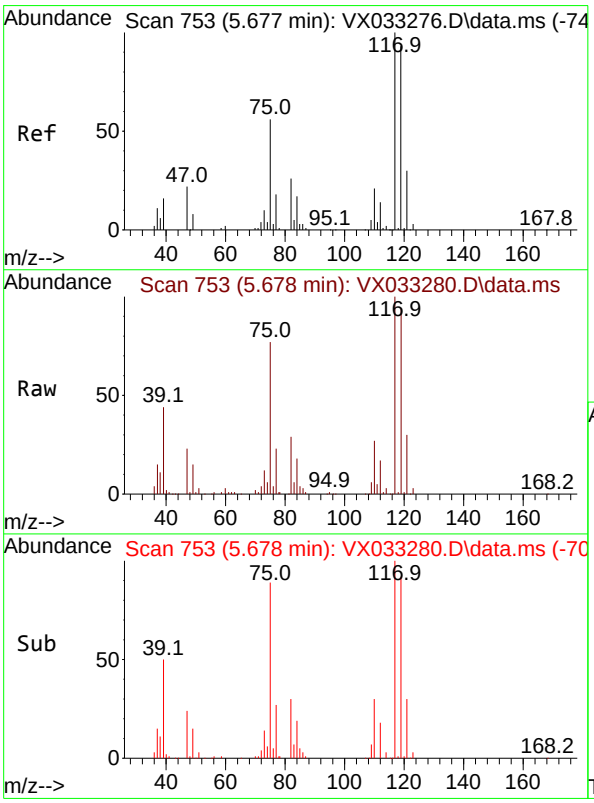
Ion	Ratio	Lower	Upper
43	100		
61	14.7	11.5	17.3
70	11.4	9.1	13.7



Instrument :
MSVOA_X
ClientSampleId :
ICVVX120722

Manual Integrations APPROVED

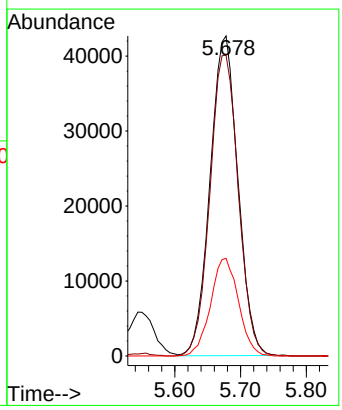
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

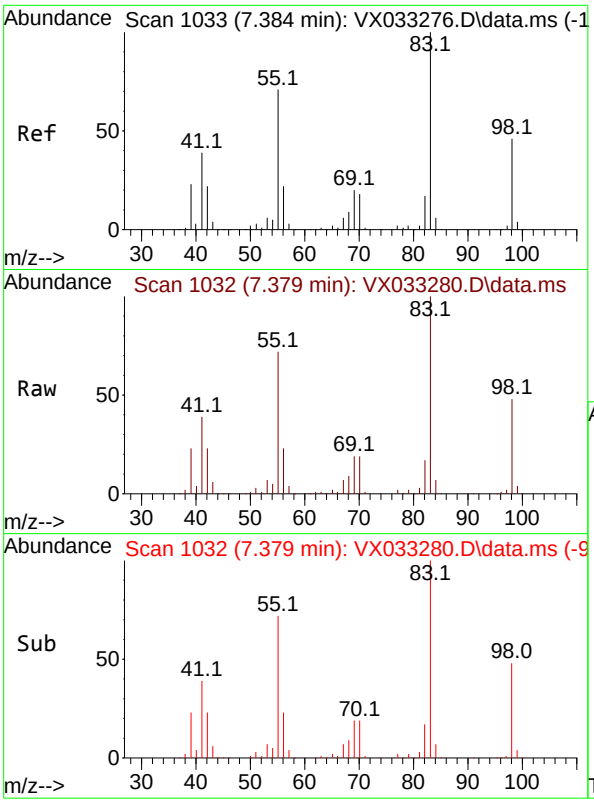


#38
Carbon Tetrachloride
Concen: 49.578 ug/l
RT: 5.678 min Scan# 753
Delta R.T. 0.000 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion:117 Resp: 125509

Ion	Ratio	Lower	Upper
117	100		
119	94.0	77.2	115.8
121	30.5	25.8	38.6

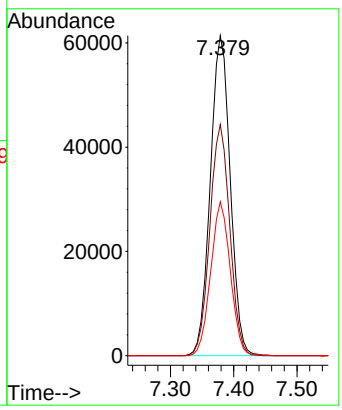




#39
Methylcyclohexane
Concen: 53.112 ug/l
RT: 7.379 min Scan# 1
Delta R.T. -0.006 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion: 83 Resp: 13432

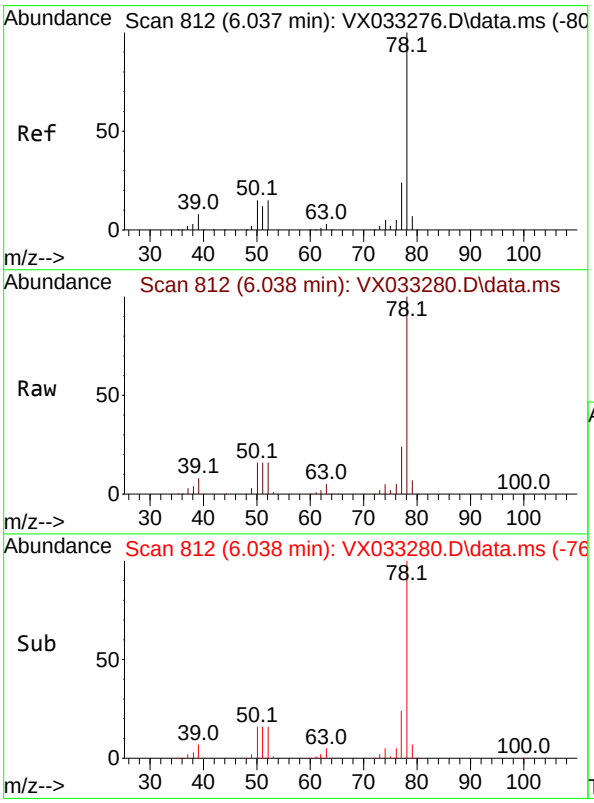
Ion	Ratio	Lower	Upper
83	100		
55	72.2	58.4	87.6
98	48.1	37.2	55.8



Instrument :
MSVOA_X
ClientSampleId :
ICVVX120722

Manual Integrations
APPROVED

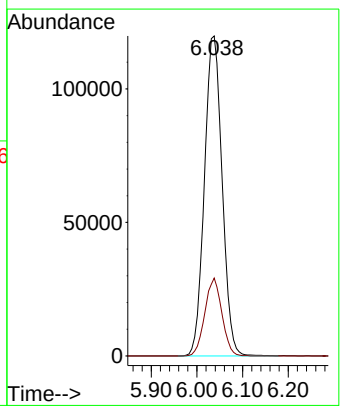
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

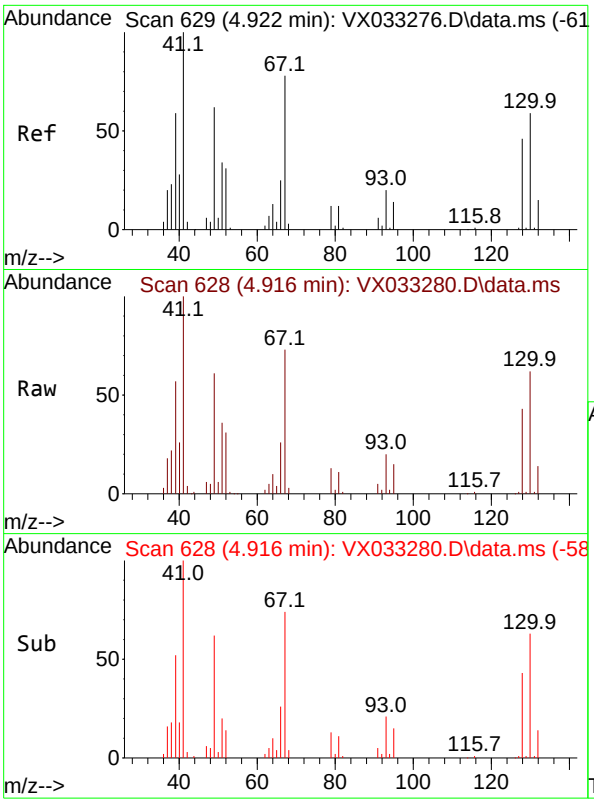


#40
Benzene
Concen: 48.914 ug/l
RT: 6.038 min Scan# 812
Delta R.T. 0.000 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion: 78 Resp: 322242

Ion	Ratio	Lower	Upper
78	100		
77	24.4	19.0	28.4

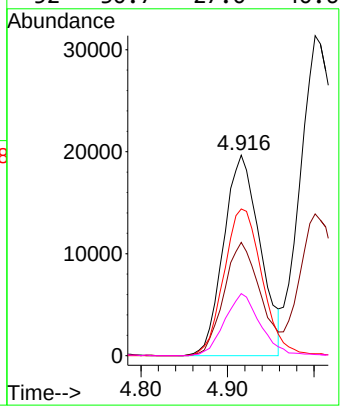




#41
Methacrylonitrile
Concen: 48.856 ug/l
RT: 4.916 min Scan# 6
Delta R.T. -0.006 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion: 41 Resp: 5750

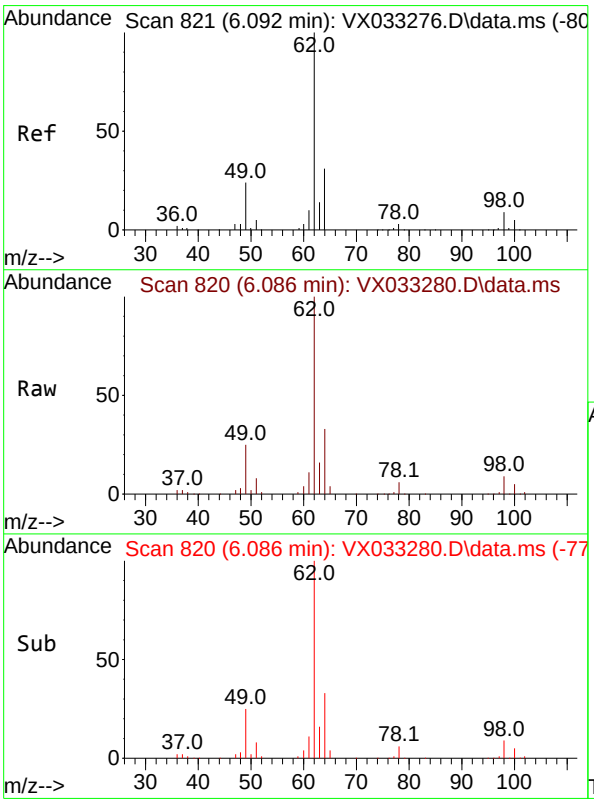
Ion	Ratio	Lower	Upper
41	100		
39	56.2	47.5	71.3
67	76.9	60.5	90.7
52	30.7	27.0	40.6



Instrument :
MSVOA_X
ClientSampleId :
ICVVX120722

Manual Integrations
APPROVED

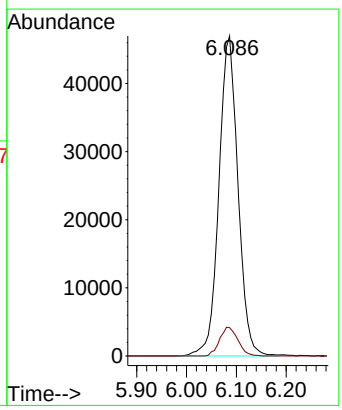
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

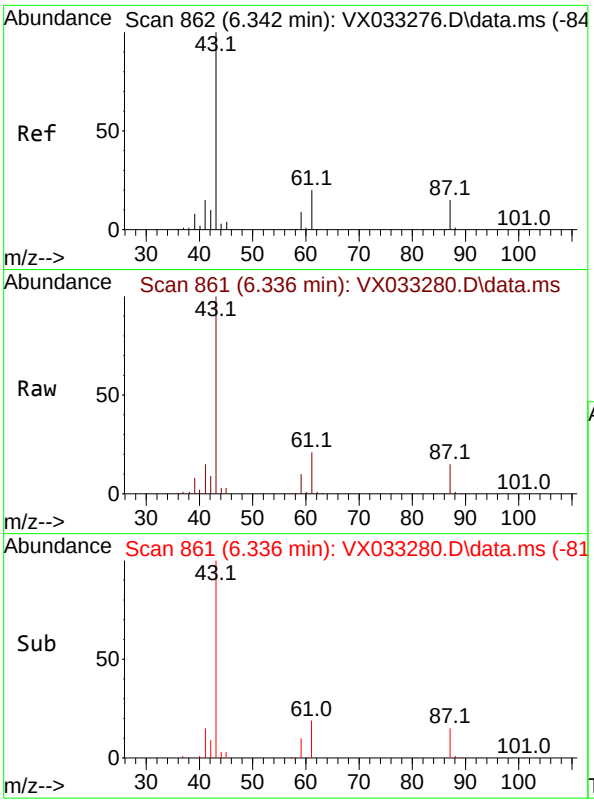


#42
1,2-Dichloroethane
Concen: 47.637 ug/l
RT: 6.086 min Scan# 820
Delta R.T. -0.006 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion: 62 Resp: 124620

Ion	Ratio	Lower	Upper
62	100		
98	8.6	0.0	16.0

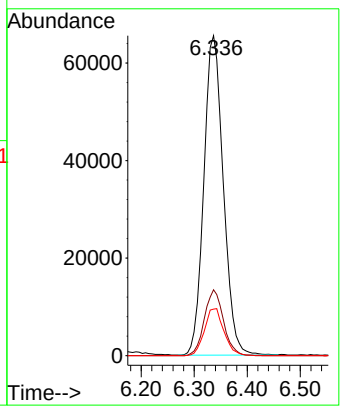




#43
Isopropyl Acetate
Concen: 48.673 ug/l
RT: 6.336 min Scan# 8
Delta R.T. -0.006 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion: 43 Resp: 16726

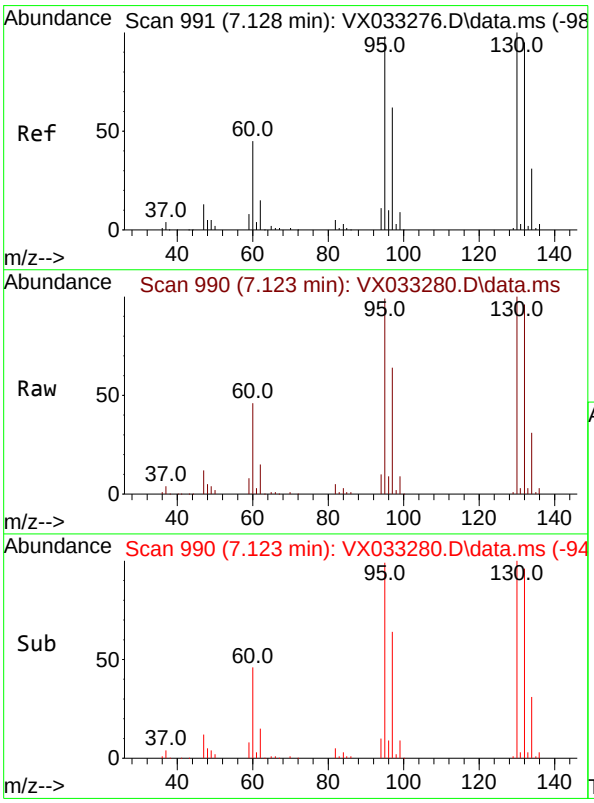
Ion	Ratio	Lower	Upper
43	100		
61	20.2	15.4	23.0
87	14.8	10.8	16.2



Instrument :
MSVOA_X
ClientSampleId :
ICVVX120722

Manual Integrations
APPROVED

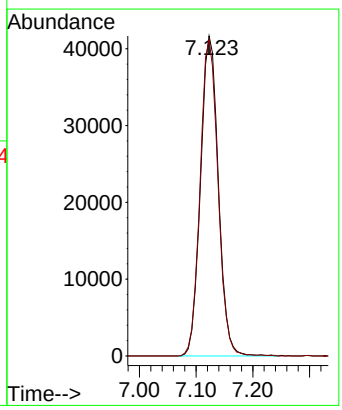
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

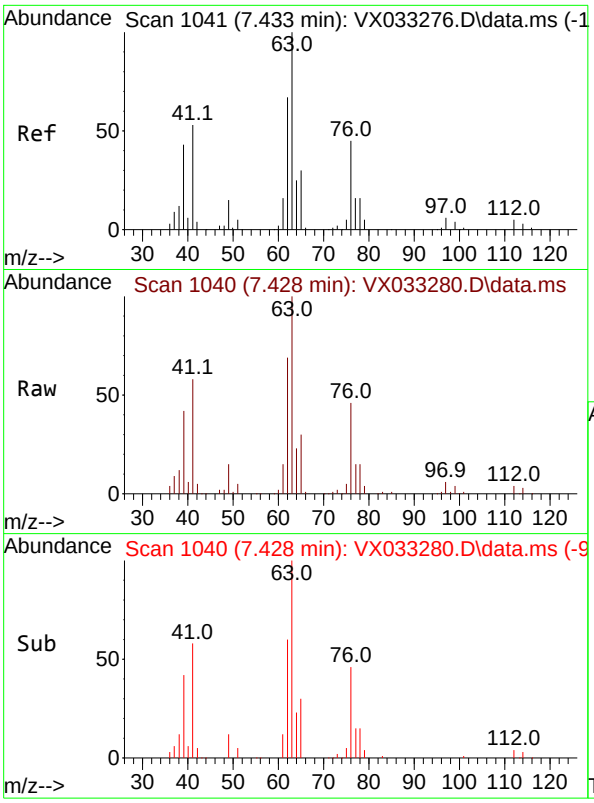


#44
Trichloroethene
Concen: 50.085 ug/l
RT: 7.123 min Scan# 990
Delta R.T. -0.006 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion:130 Resp: 90972

Ion	Ratio	Lower	Upper
130	100		
95	98.8	0.0	195.2

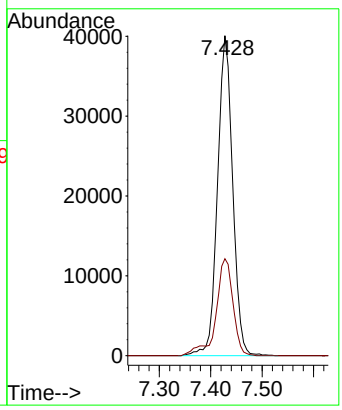




#45
1,2-Dichloropropane
Concen: 48.695 ug/l
RT: 7.428 min Scan# 1
Delta R.T. -0.006 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion: 63 Resp: 8204

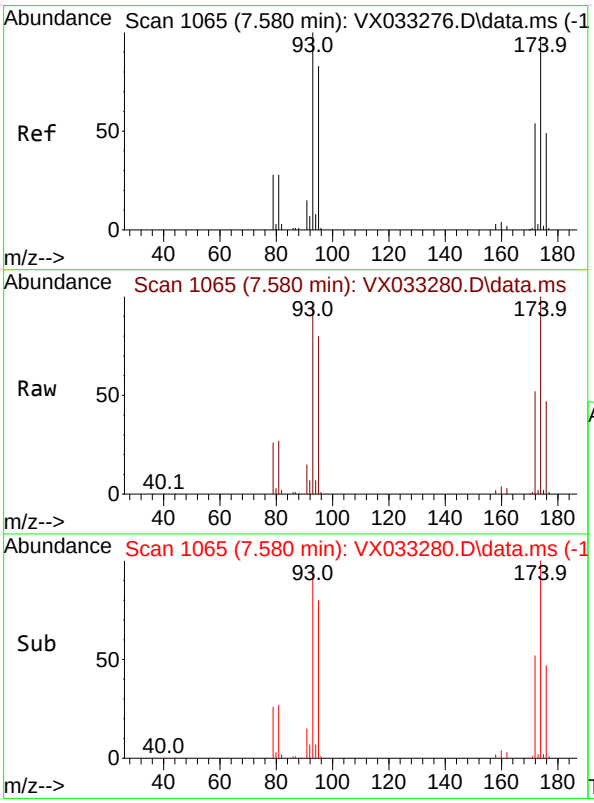
Ion	Ratio	Lower	Upper
63	100		
65	30.3	24.6	36.8



Instrument :
MSVOA_X
ClientSampleId :
ICVVX120722

Manual Integrations APPROVED

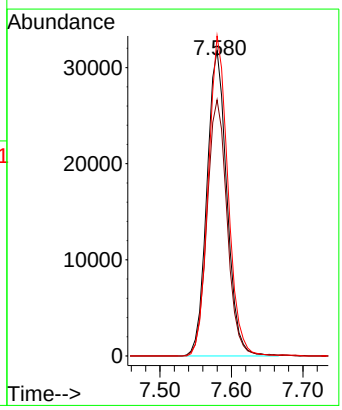
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

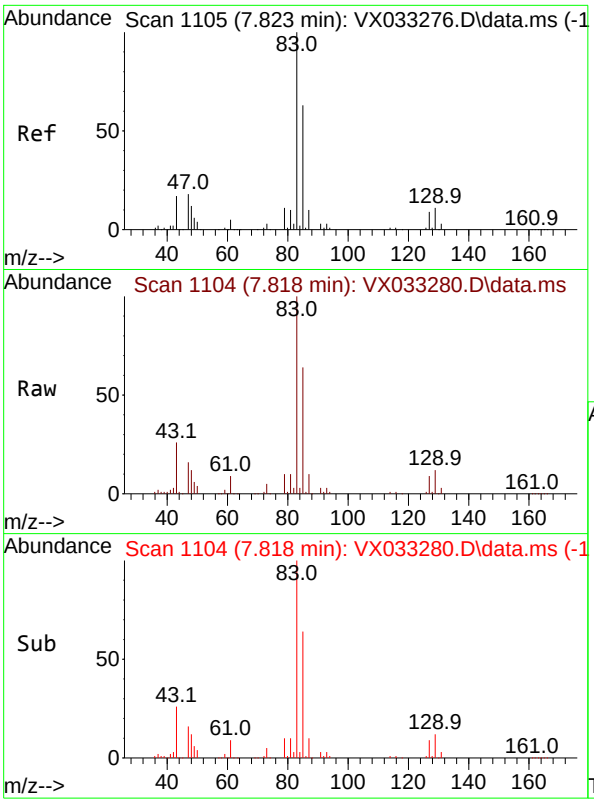


#46
Dibromomethane
Concen: 47.855 ug/l
RT: 7.580 min Scan# 1065
Delta R.T. 0.000 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion: 93 Resp: 61420

Ion	Ratio	Lower	Upper
93	100		
95	84.5	65.8	98.8
174	103.4	79.8	119.6

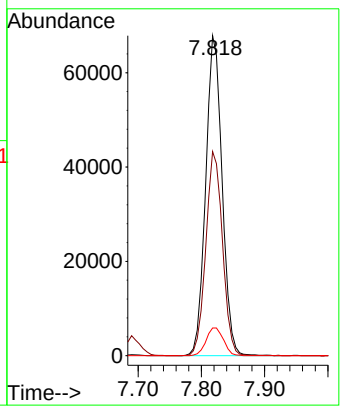




#47
Bromodichloromethane
Concen: 49.061 ug/l
RT: 7.818 min Scan# 11
Delta R.T. -0.006 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion: 83 Resp: 12274

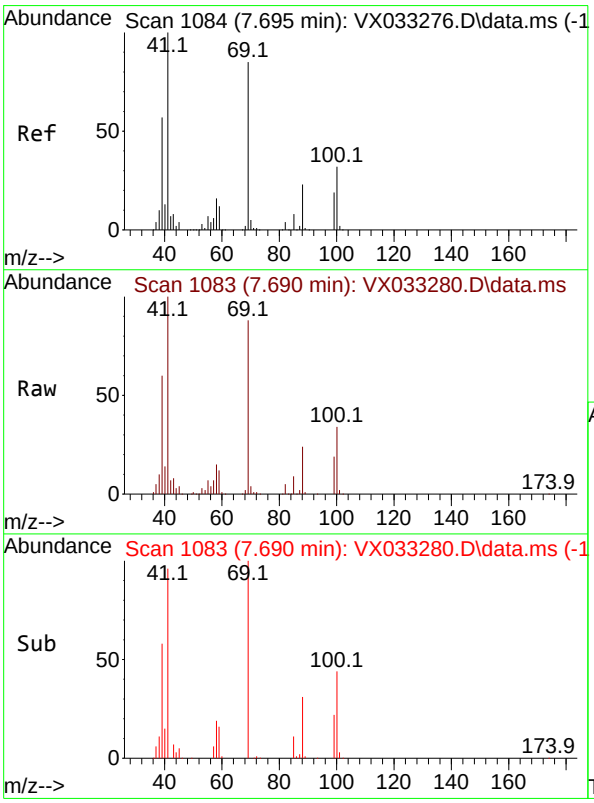
Ion	Ratio	Lower	Upper
83	100		
85	63.8	52.2	78.4
127	8.7	7.4	11.2



Instrument :
MSVOA_X
ClientSampleId :
ICVVX120722

Manual Integrations APPROVED

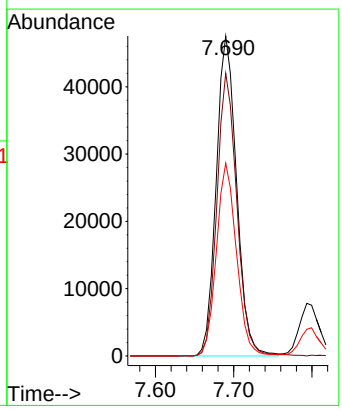
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

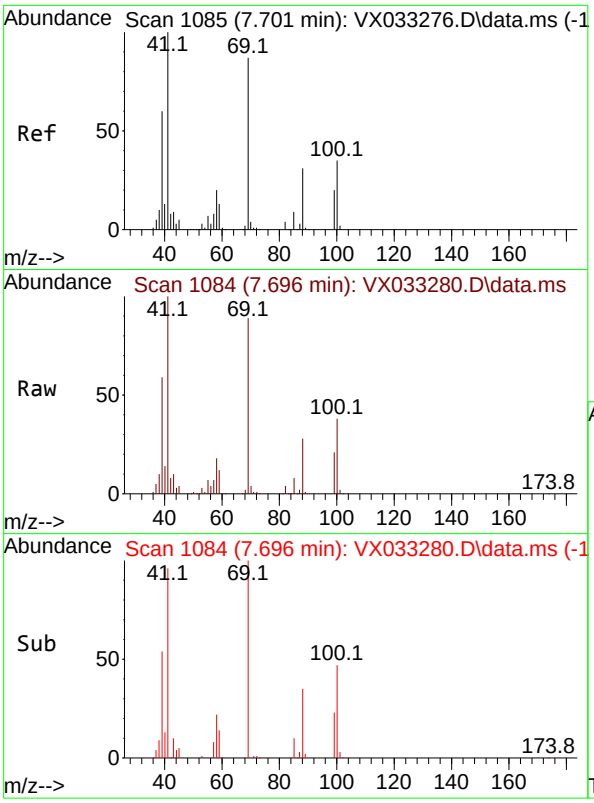


#48
Methyl methacrylate
Concen: 48.521 ug/l
RT: 7.690 min Scan# 1083
Delta R.T. -0.006 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion: 41 Resp: 86058

Ion	Ratio	Lower	Upper
41	100		
69	86.8	65.1	97.7
39	59.4	51.9	77.9





#49
1,4-Dioxane
Concen: 974.422 ug/l
RT: 7.696 min Scan# 1
Delta R.T. -0.006 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

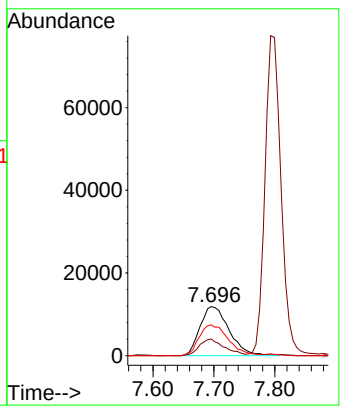
Tgt Ion: 88 Resp: 3941

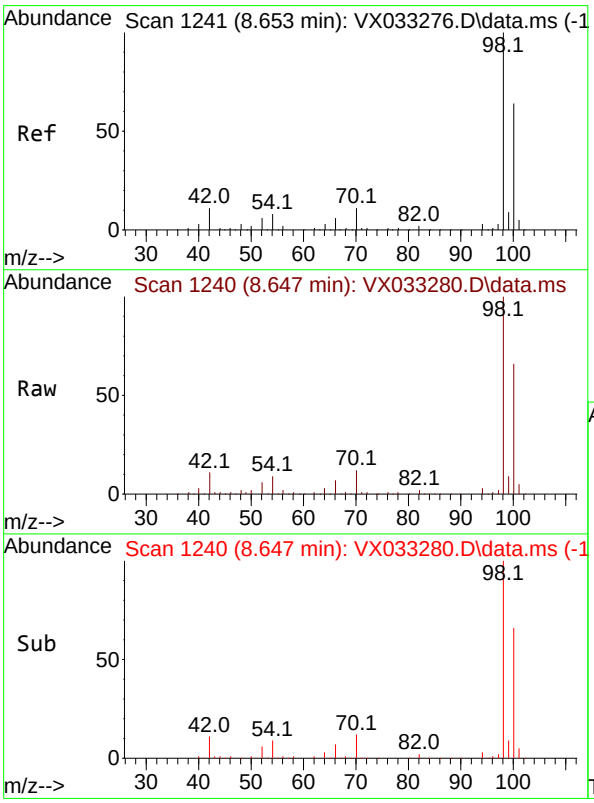
Ion	Ratio	Lower	Upper
88	100		
43	29.4	26.6	39.8
58	63.2	51.7	77.5

Instrument :
MSVOA_X
ClientSampleId :
ICVVX120722

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

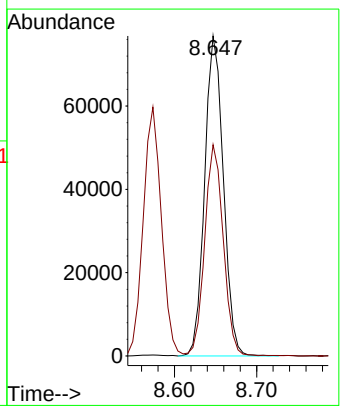


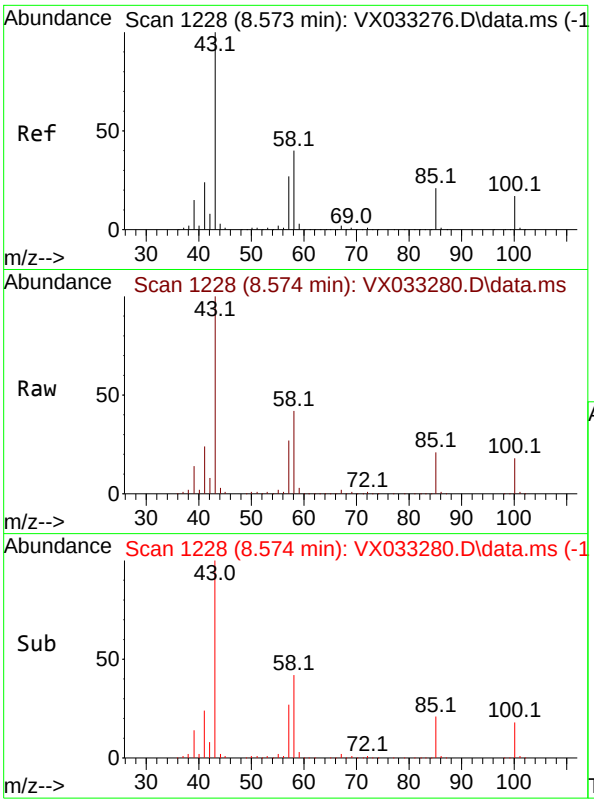


#50
Toluene-d8
Concen: 50.054 ug/l
RT: 8.647 min Scan# 1240
Delta R.T. -0.006 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion: 98 Resp: 121350

Ion	Ratio	Lower	Upper
98	100		
100	65.8	50.9	76.3

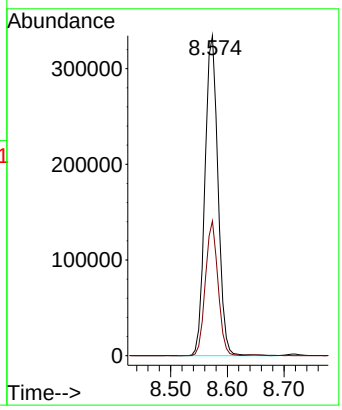




#51
4-Methyl-2-Pentanone
Concen: 245.658 ug/l
RT: 8.574 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion: 43 Resp: 53387

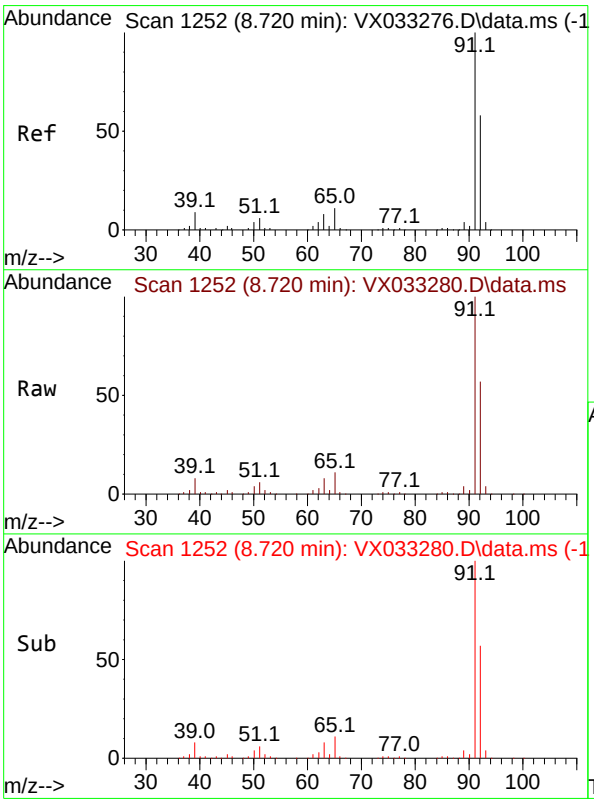
Ion	Ratio	Lower	Upper
43	100		
58	40.5	30.9	46.3



Instrument :
MSVOA_X
ClientSampleId :
ICVVX120722

Manual Integrations
APPROVED

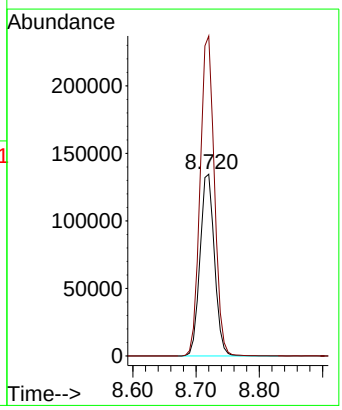
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

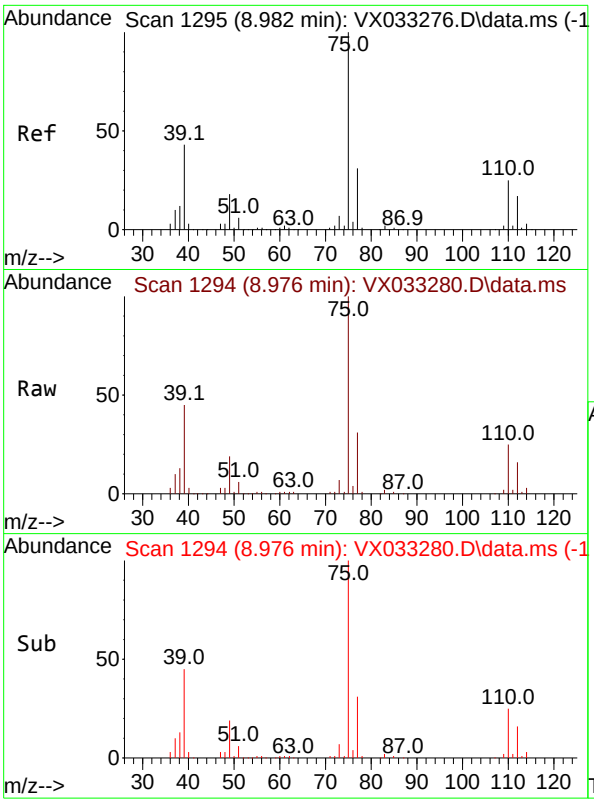


#52
Toluene
Concen: 50.273 ug/l
RT: 8.720 min Scan# 1252
Delta R.T. 0.000 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion: 92 Resp: 214134

Ion	Ratio	Lower	Upper
92	100		
91	174.2	138.3	207.5

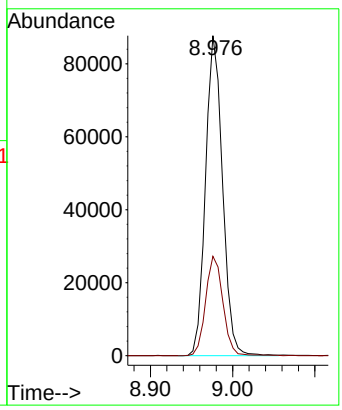




#53
t-1,3-Dichloropropene
Concen: 47.076 ug/l
RT: 8.976 min Scan# 1
Delta R.T. -0.006 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion: 75 Resp: 12611

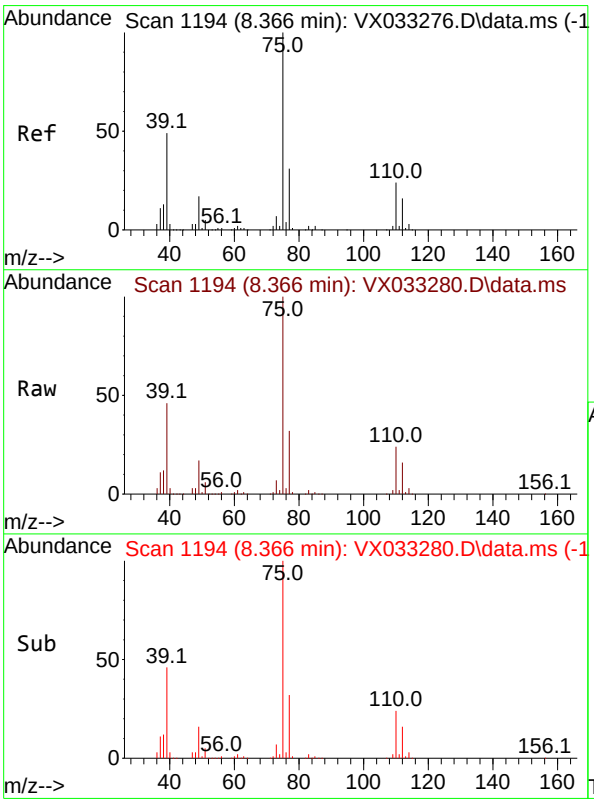
Ion	Ratio	Lower	Upper
75	100		
77	31.0	25.1	37.7



Instrument :
MSVOA_X
ClientSampleId :
ICVVX120722

Manual Integrations
APPROVED

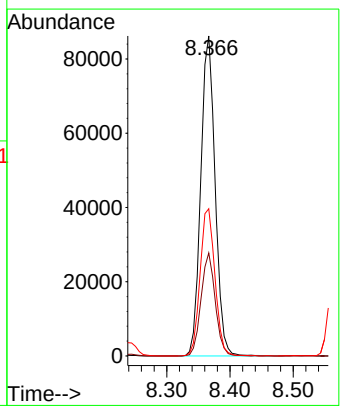
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

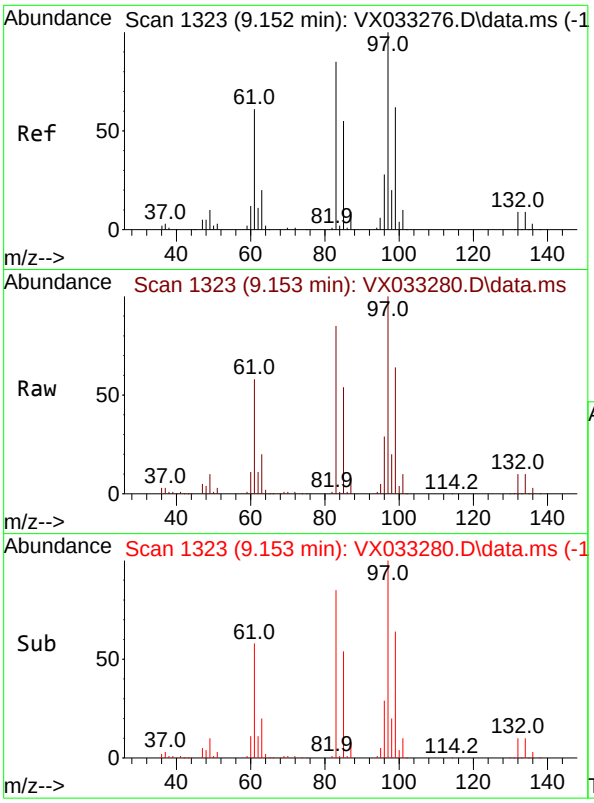


#54
cis-1,3-Dichloropropene
Concen: 51.268 ug/l
RT: 8.366 min Scan# 1194
Delta R.T. 0.000 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion: 75 Resp: 136491

Ion	Ratio	Lower	Upper
75	100		
77	32.2	25.1	37.7
39	46.0	45.5	68.3

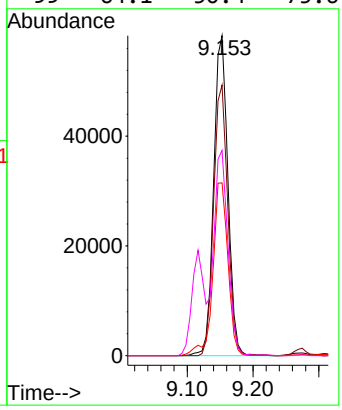




#55
1,1,2-Trichloroethane
Concen: 48.997 ug/l
RT: 9.153 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion: 97 Resp: 8772

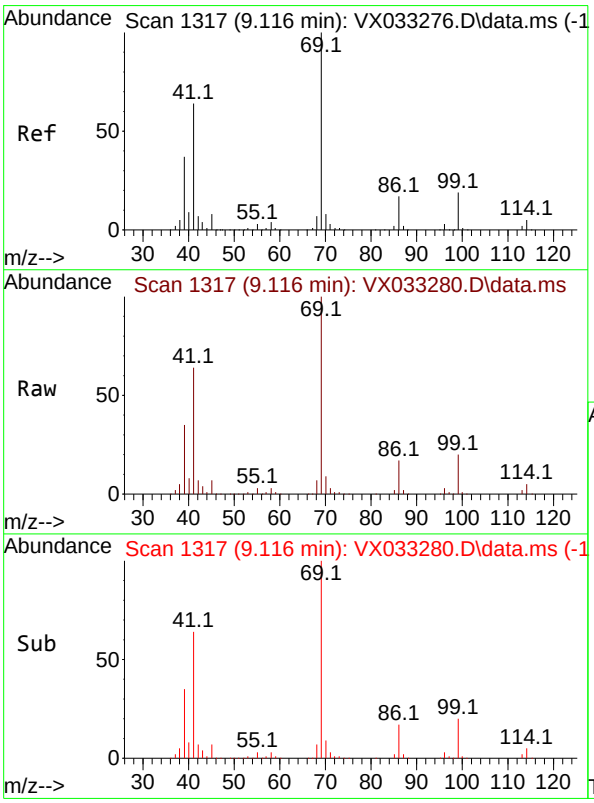
Ion	Ratio	Lower	Upper
97	100		
83	84.6	68.1	102.1
85	54.0	43.3	64.9
99	64.1	50.4	75.6



Instrument :
MSVOA_X
ClientSampleId :
ICVVX120722

Manual Integrations
APPROVED

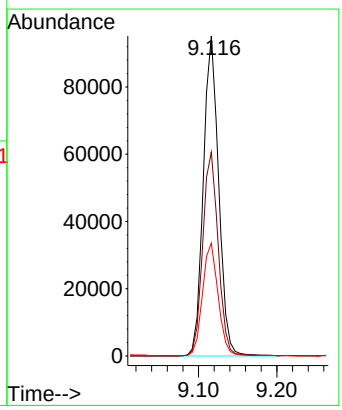
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

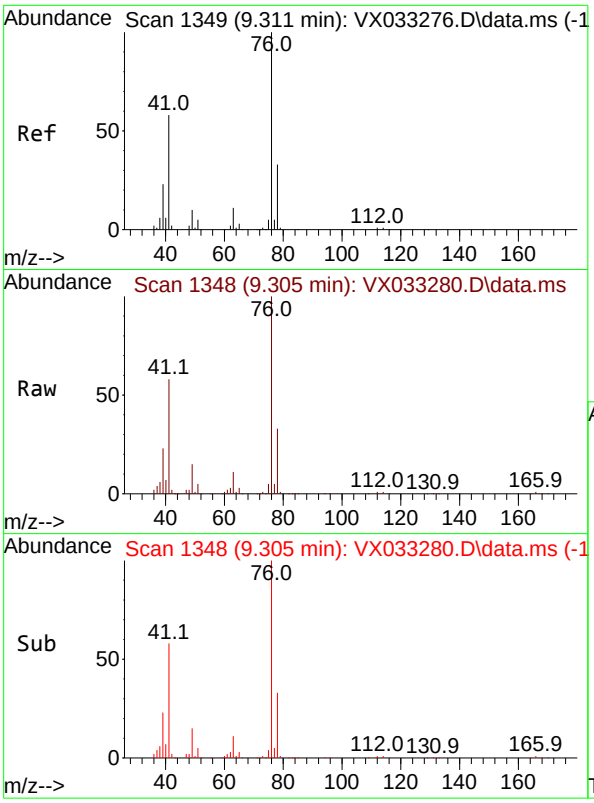


#56
Ethyl methacrylate
Concen: 51.302 ug/l
RT: 9.116 min Scan# 1317
Delta R.T. 0.000 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion: 69 Resp: 129329

Ion	Ratio	Lower	Upper
69	100		
41	64.5	54.3	81.5
39	35.7	35.2	52.8





#57
1,3-Dichloropropane
Concen: 49.540 ug/l
RT: 9.305 min Scan# 1
Delta R.T. -0.006 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

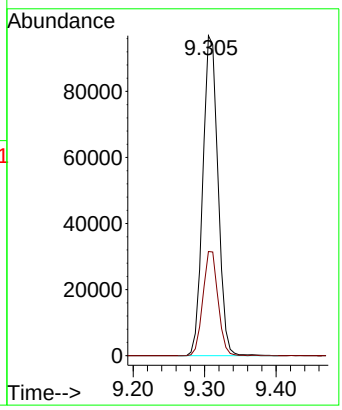
Tgt Ion: 76 Resp: 14249

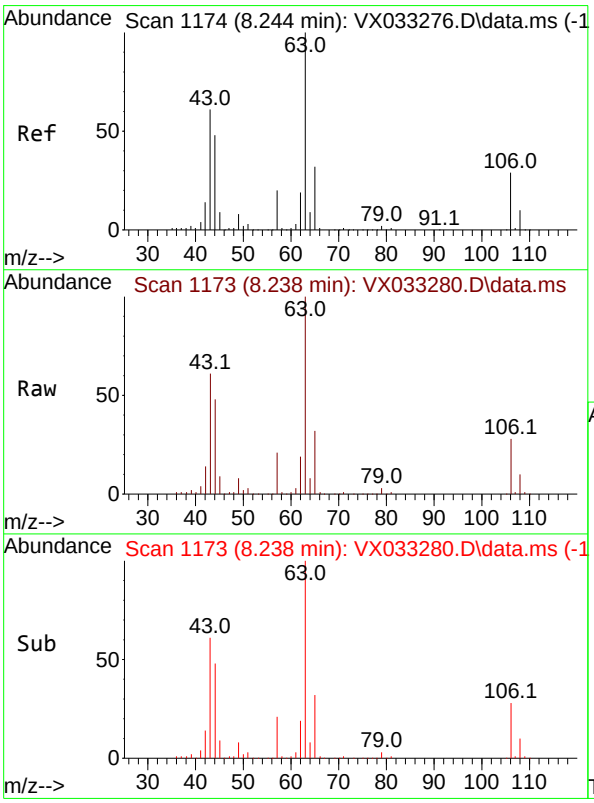
Ion	Ratio	Lower	Upper
76	100		
78	32.5	26.0	39.0

Instrument :
MSVOA_X
ClientSampleId :
ICVVX120722

Manual Integrations APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

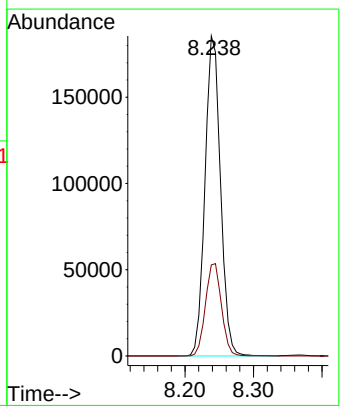


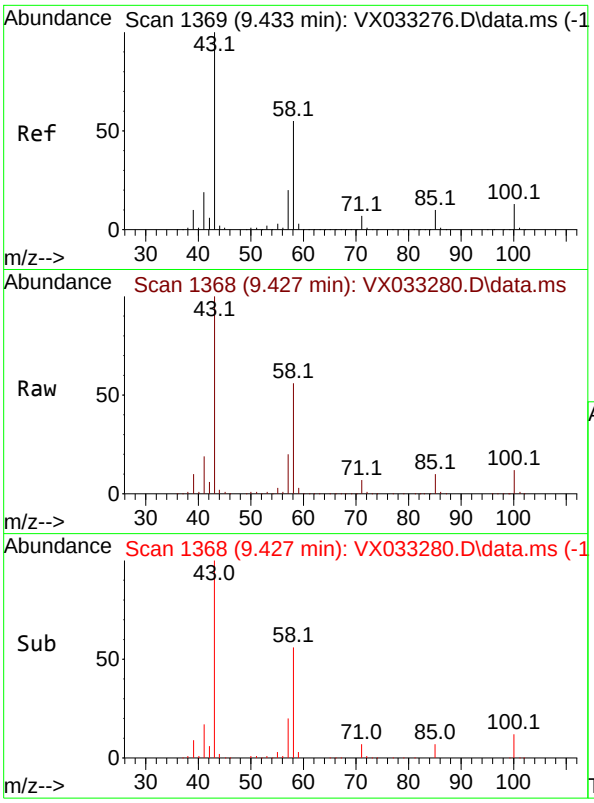


#58
2-Chloroethyl Vinyl ether
Concen: 252.823 ug/l
RT: 8.238 min Scan# 1173
Delta R.T. -0.006 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion: 63 Resp: 291627

Ion	Ratio	Lower	Upper
63	100		
106	29.8	23.3	34.9





#59
2-Hexanone
Concen: 249.243 ug/l
RT: 9.427 min Scan# 1
Delta R.T. -0.006 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

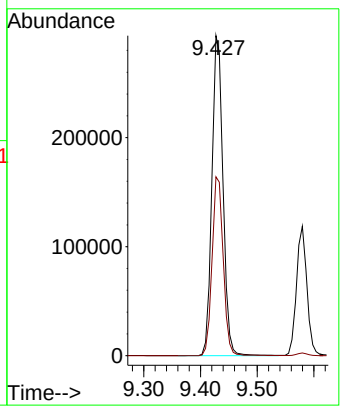
Tgt Ion: 43 Resp: 39917

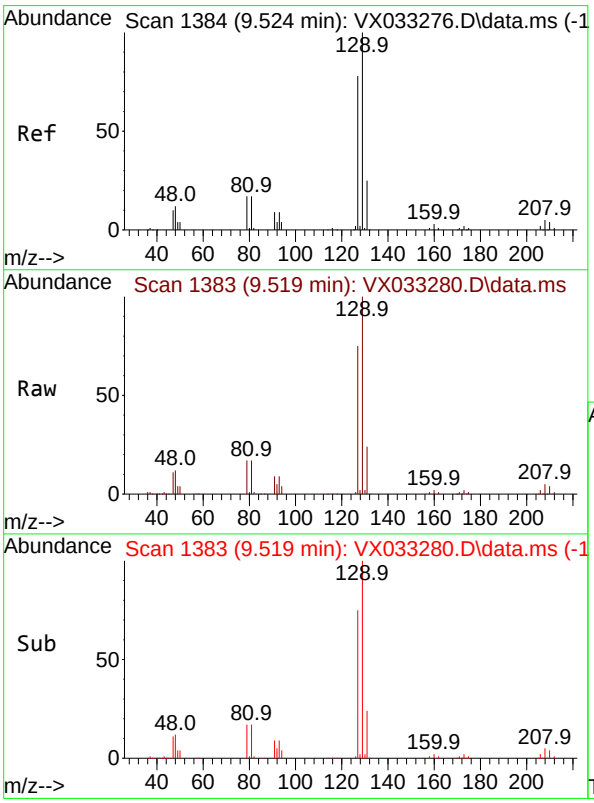
Ion	Ratio	Lower	Upper
43	100		
58	56.1	26.5	79.5

Instrument :
MSVOA_X
ClientSampleId :
ICVVX120722

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

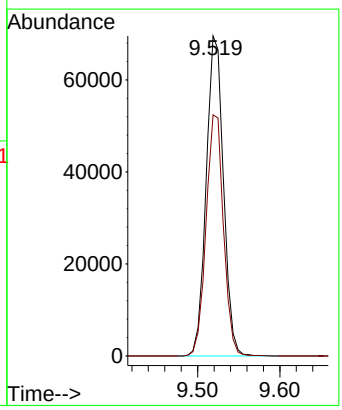


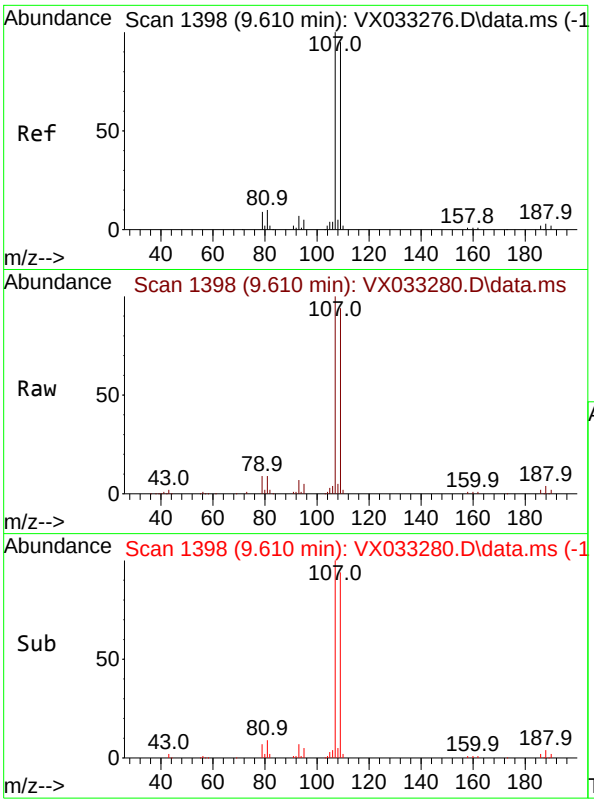


#60
Dibromochloromethane
Concen: 51.356 ug/l
RT: 9.519 min Scan# 1383
Delta R.T. -0.006 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion:129 Resp: 101310

Ion	Ratio	Lower	Upper
129	100		
127	76.1	38.6	115.8

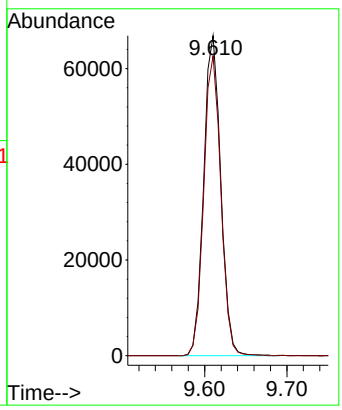




#61
1,2-Dibromoethane
Concen: 50.543 ug/l
RT: 9.610 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion:107 Resp: 9625

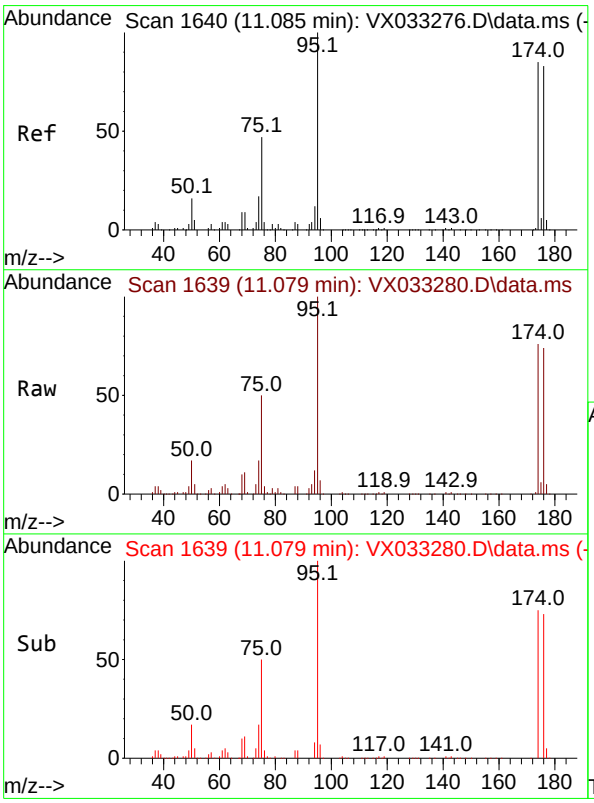
Ion	Ratio	Lower	Upper
107	100		
109	94.0	76.0	114.0



Instrument :
MSVOA_X
ClientSampleId :
ICVVX120722

Manual Integrations APPROVED

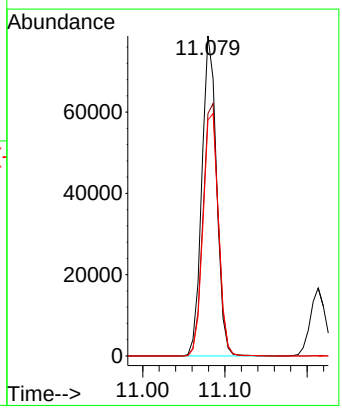
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

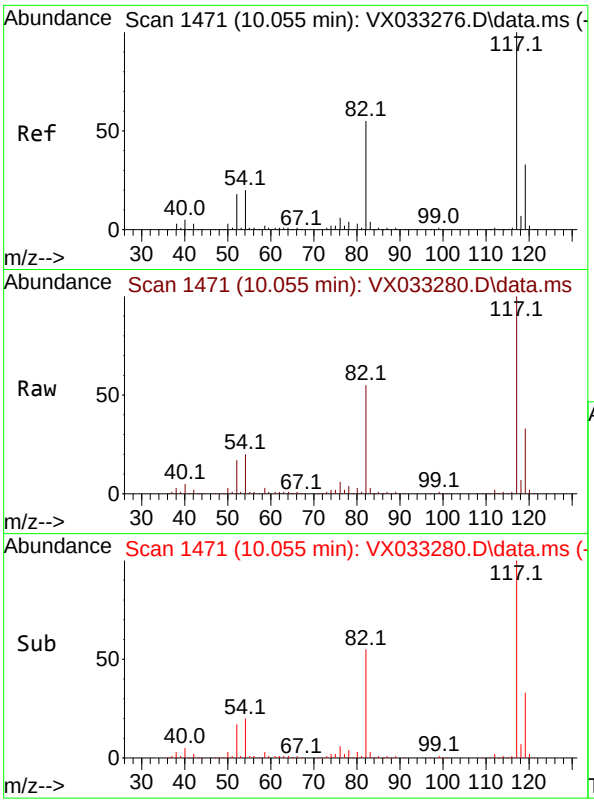


#62
4-Bromofluorobenzene
Concen: 52.743 ug/l
RT: 11.079 min Scan# 1639
Delta R.T. -0.006 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion: 95 Resp: 97770

Ion	Ratio	Lower	Upper
95	100		
174	82.1	0.0	164.0
176	79.5	0.0	154.4

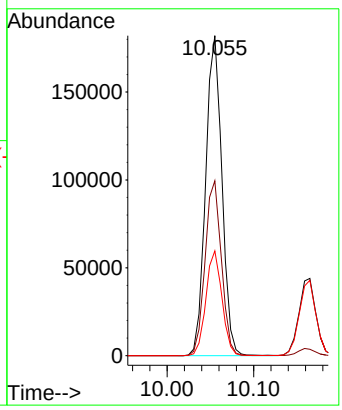




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.055 min Scan# 14
Delta R.T. 0.000 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion:117 Resp: 23752

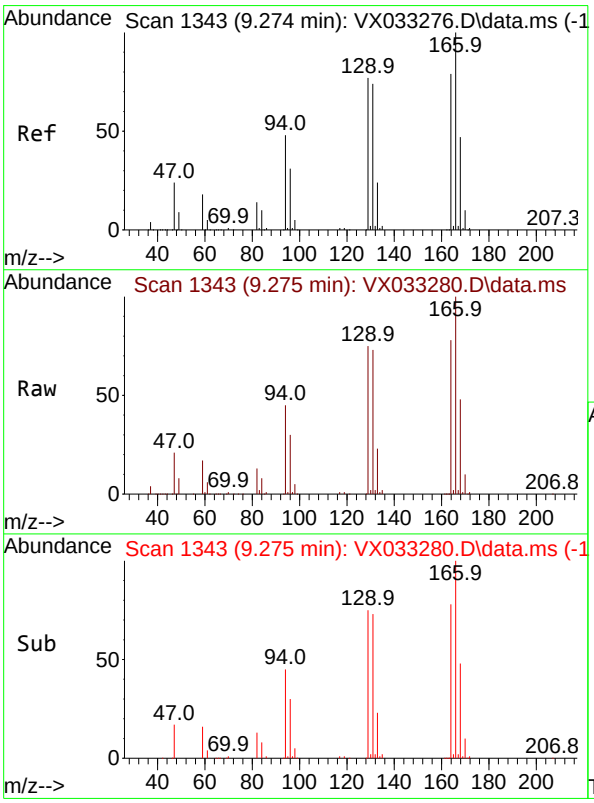
Ion	Ratio	Lower	Upper
117	100		
82	54.7	44.3	66.5
119	32.7	25.7	38.5



Instrument :
MSVOA_X
ClientSampleId :
ICVVX120722

Manual Integrations APPROVED

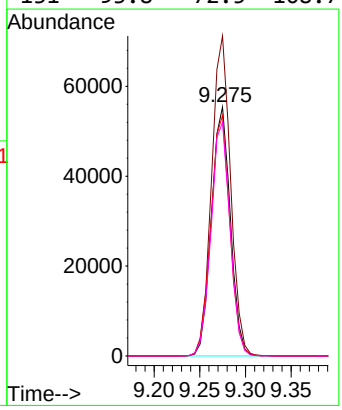
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

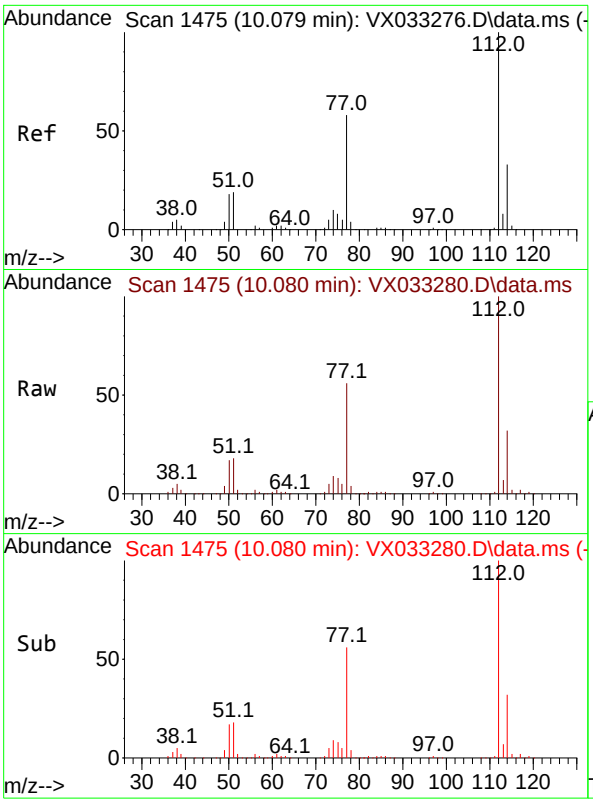


#64
Tetrachloroethene
Concen: 49.334 ug/l
RT: 9.275 min Scan# 1343
Delta R.T. 0.000 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion:164 Resp: 80126

Ion	Ratio	Lower	Upper
164	100		
166	128.6	105.4	158.2
129	96.6	78.2	117.2
131	93.8	72.5	108.7

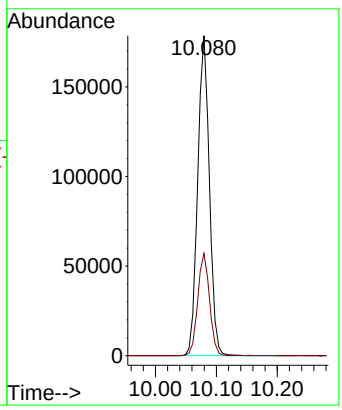




#65
Chlorobenzene
Concen: 49.423 ug/l
RT: 10.080 min Scan# 14
Delta R.T. 0.000 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion:112 Resp: 23772

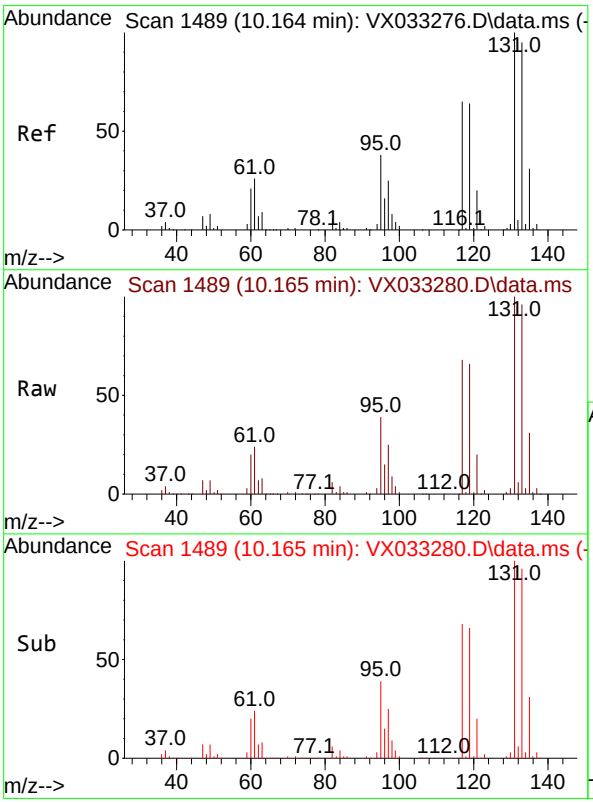
Ion	Ratio	Lower	Upper
112	100		
114	31.9	25.4	38.2



Instrument :
MSVOA_X
ClientSampleId :
ICVVX120722

Manual Integrations
APPROVED

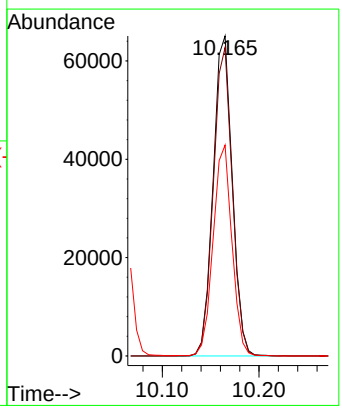
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

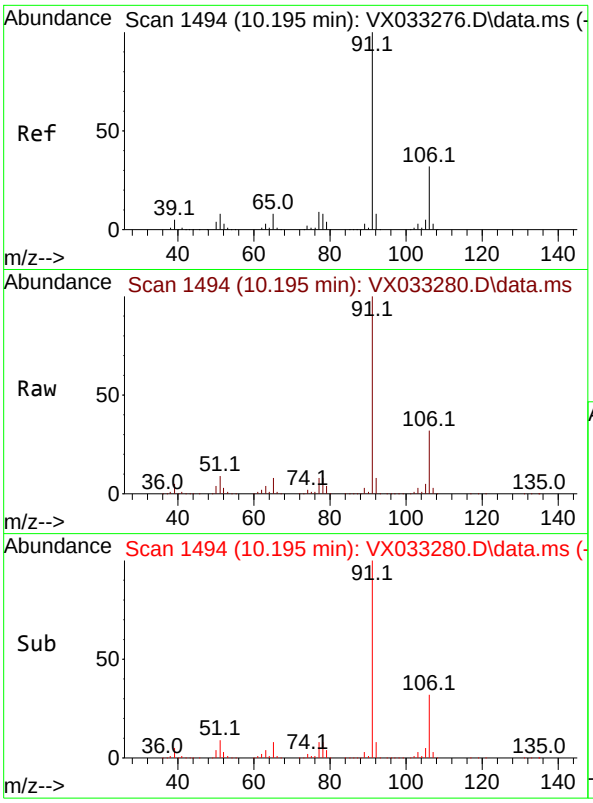


#66
1,1,1,2-Tetrachloroethane
Concen: 49.209 ug/l
RT: 10.165 min Scan# 1489
Delta R.T. 0.000 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion:131 Resp: 89447

Ion	Ratio	Lower	Upper
131	100		
133	95.3	47.6	142.9
119	64.8	32.4	97.0

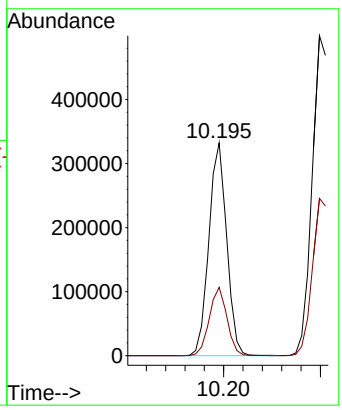




#67
Ethyl Benzene
Concen: 50.786 ug/l
RT: 10.195 min Scan# 14
Delta R.T. 0.000 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion: 91 Resp: 42556

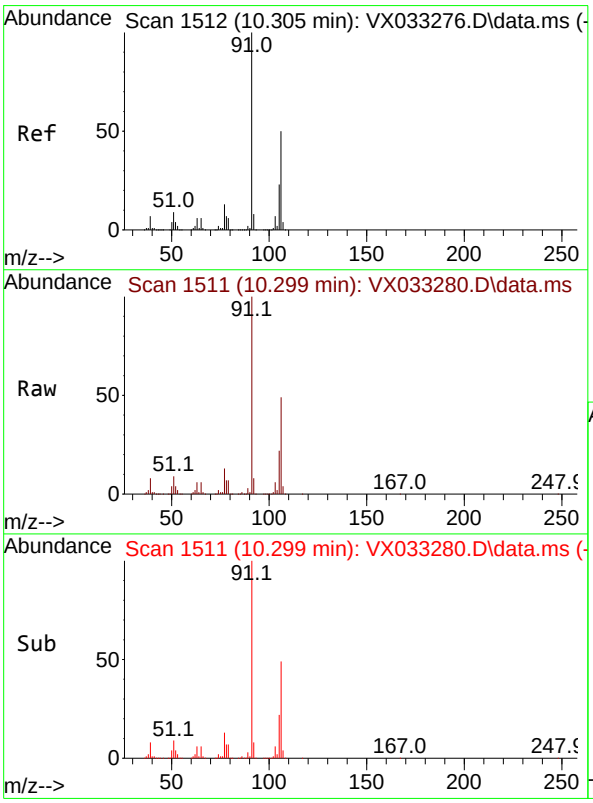
Ion	Ratio	Lower	Upper
91	100		
106	32.1	25.0	37.6



Instrument :
MSVOA_X
ClientSampleId :
ICVVX120722

Manual Integrations
APPROVED

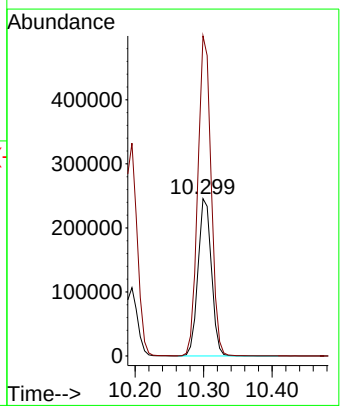
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

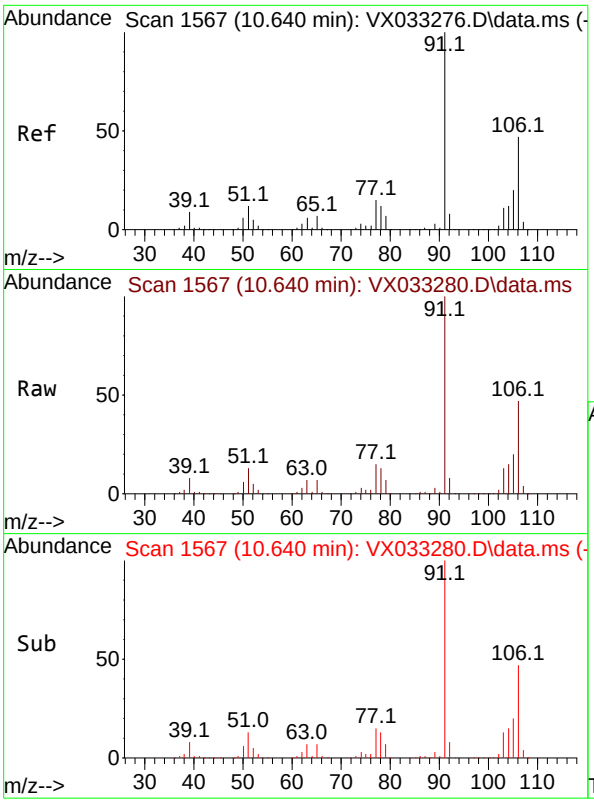


#68
m/p-Xylenes
Concen: 102.791 ug/l
RT: 10.299 min Scan# 1511
Delta R.T. -0.006 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion:106 Resp: 335122

Ion	Ratio	Lower	Upper
106	100		
91	202.2	164.5	246.7

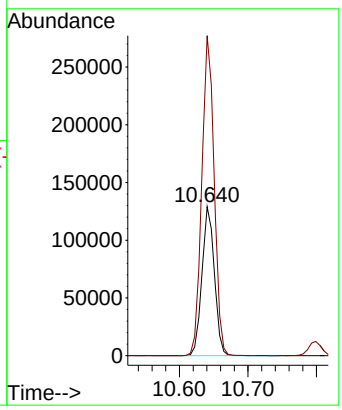




#69
o-Xylene
Concen: 50.629 ug/l
RT: 10.640 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion:106 Resp: 16315

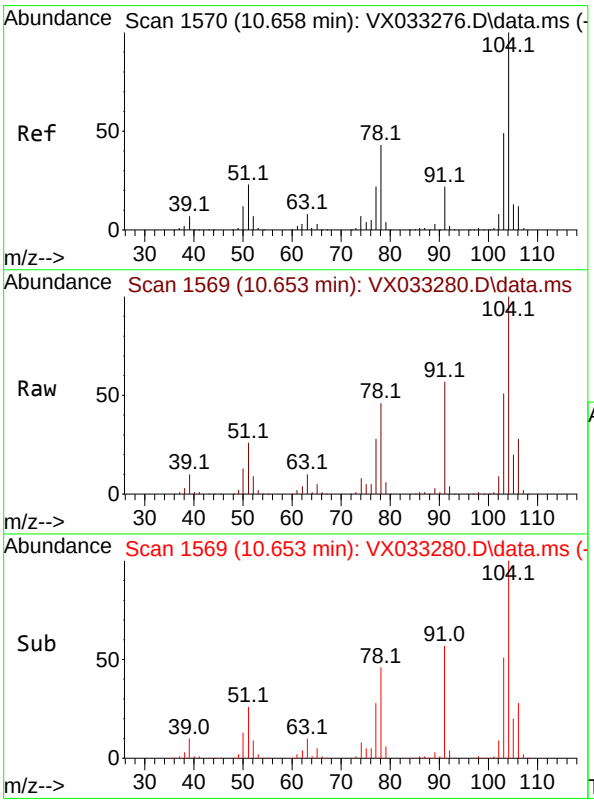
Ion	Ratio	Lower	Upper
106	100		
91	214.0	109.2	327.6



Instrument :
MSVOA_X
ClientSampleId :
ICVVX120722

Manual Integrations APPROVED

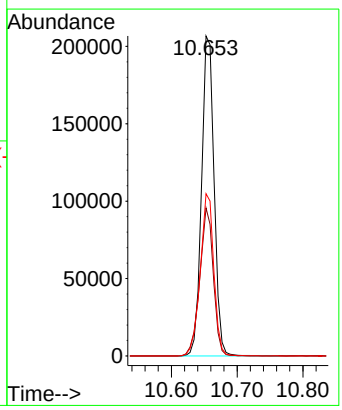
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

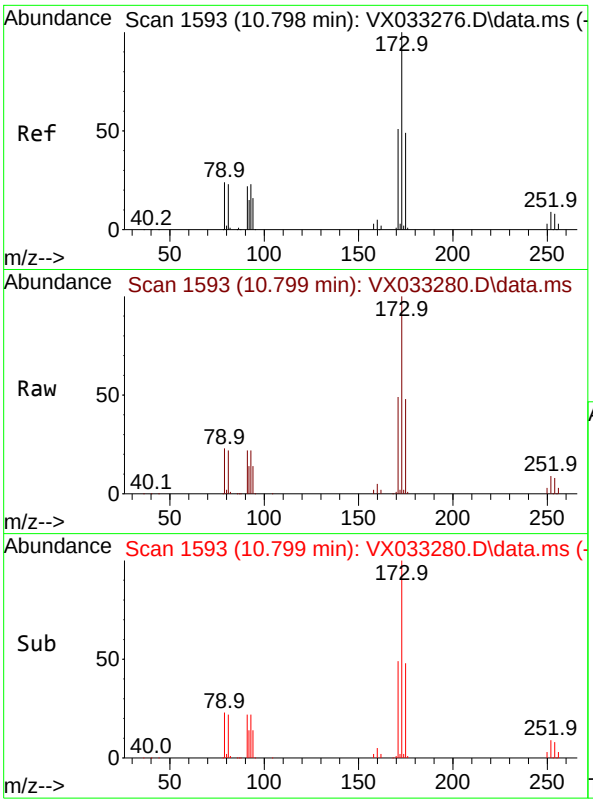


#70
Styrene
Concen: 52.086 ug/l
RT: 10.653 min Scan# 1569
Delta R.T. -0.006 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion:104 Resp: 274901

Ion	Ratio	Lower	Upper
104	100		
78	49.8	41.8	62.8
103	54.8	44.5	66.7

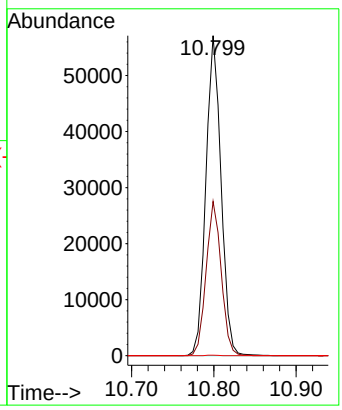




#71
Bromoform
Concen: 50.740 ug/l
RT: 10.799 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion:173 Resp: 7300

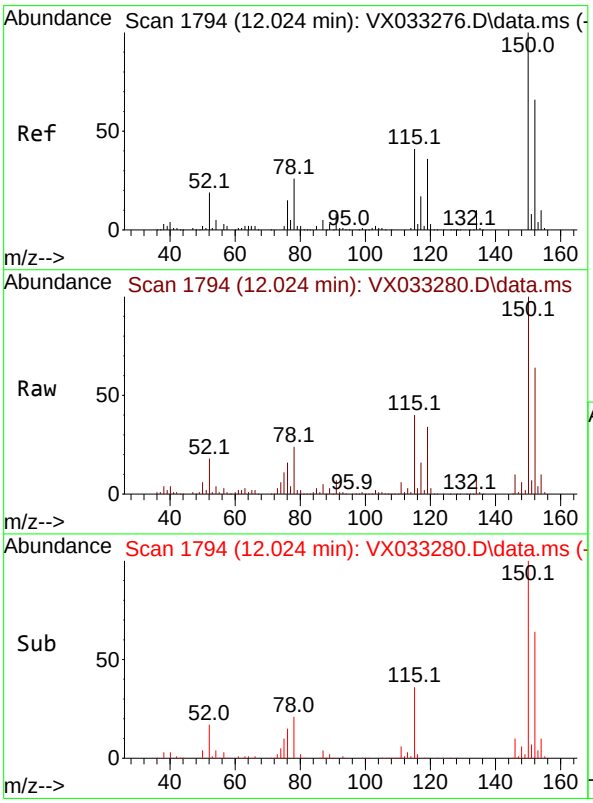
Ion	Ratio	Lower	Upper
173	100		
175	48.1	23.9	71.8
254	0.1	0.0	0.0



Instrument :
MSVOA_X
ClientSampleId :
ICVVX120722

Manual Integrations
APPROVED

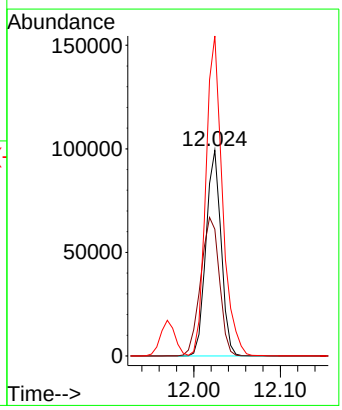
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

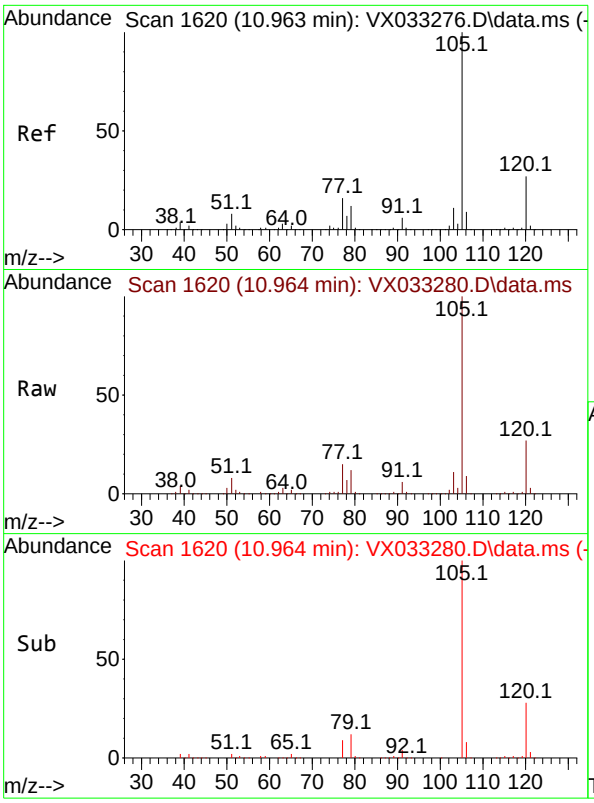


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.024 min Scan# 1794
Delta R.T. 0.000 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion:152 Resp: 120258

Ion	Ratio	Lower	Upper
152	100		
115	83.5	44.0	132.0
150	170.9	0.0	351.8

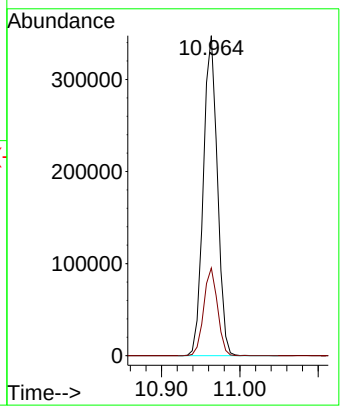




#73
Isopropylbenzene
Concen: 49.486 ug/l
RT: 10.964 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion:105 Resp: 43134

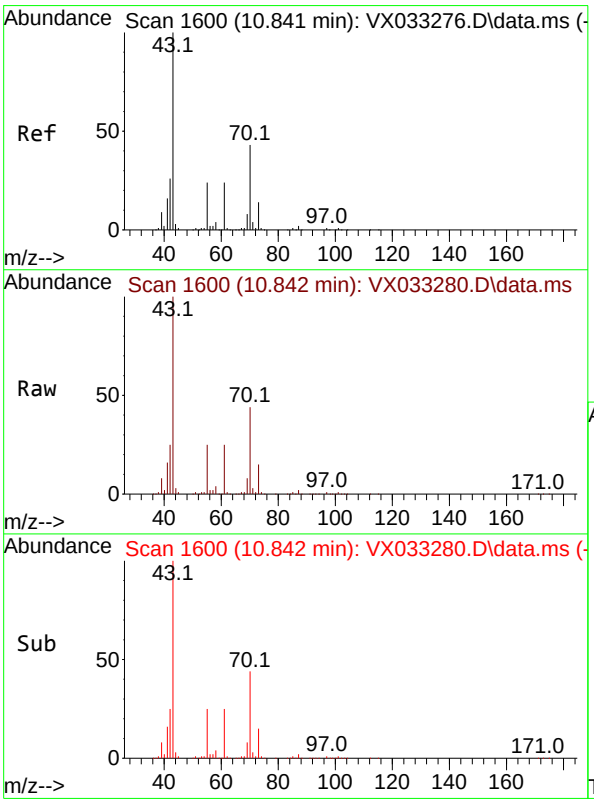
Ion	Ratio	Lower	Upper
105	100		
120	26.9	13.1	39.3



Instrument :
MSVOA_X
ClientSampleId :
ICVVX120722

Manual Integrations
APPROVED

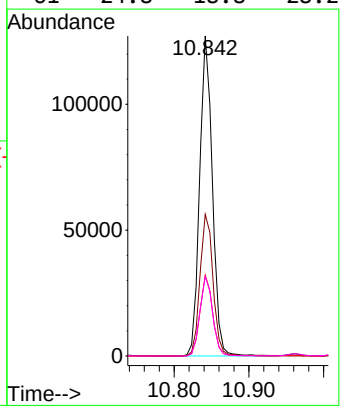
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

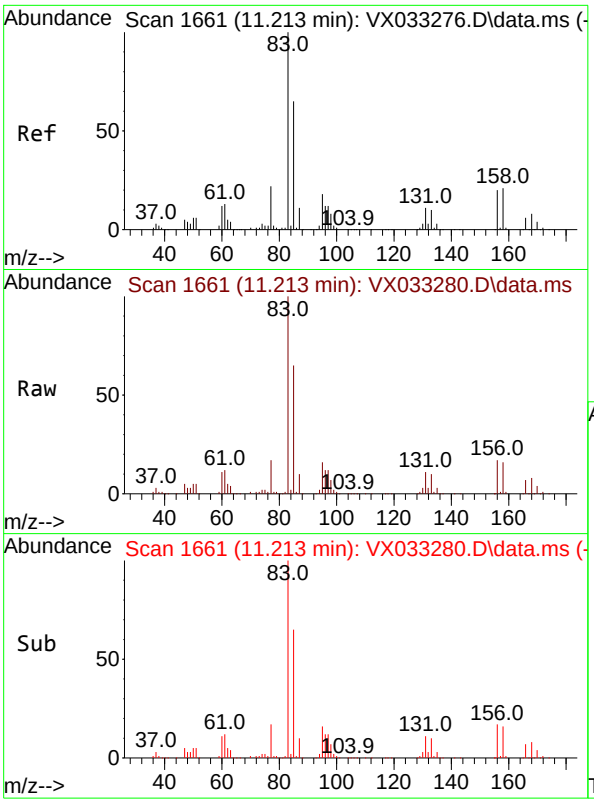


#74
N-amyl acetate
Concen: 50.590 ug/l
RT: 10.842 min Scan# 1600
Delta R.T. 0.000 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion: 43 Resp: 150450

Ion	Ratio	Lower	Upper
43	100		
70	45.5	33.6	50.4
55	25.3	19.4	29.2
61	24.8	18.8	28.2

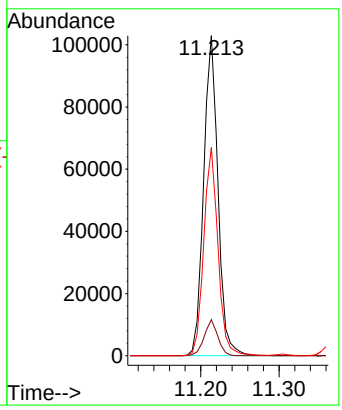




#75
1,1,2,2-Tetrachloroethane
Concen: 47.106 ug/l
RT: 11.213 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion: 83 Resp: 13025

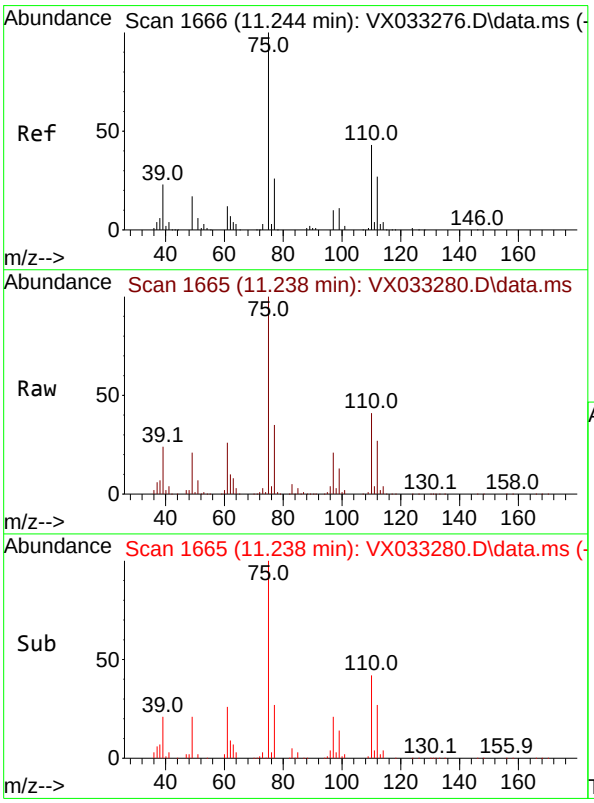
Ion	Ratio	Lower	Upper
83	100		
131	10.6	5.4	16.2
85	64.6	31.9	95.9



Instrument :
MSVOA_X
ClientSampleId :
ICVVX120722

Manual Integrations
APPROVED

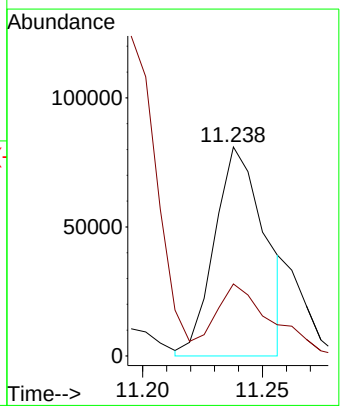
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

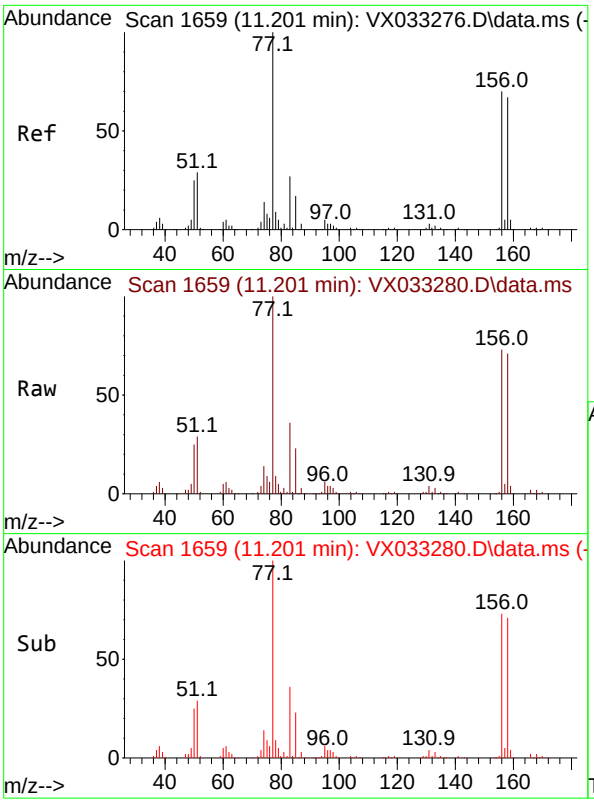


#76
1,2,3-Trichloropropane
Concen: 48.233 ug/l m
RT: 11.238 min Scan# 1665
Delta R.T. -0.006 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion: 75 Resp: 118011

Ion	Ratio	Lower	Upper
75	100		
77	39.3	20.0	60.0

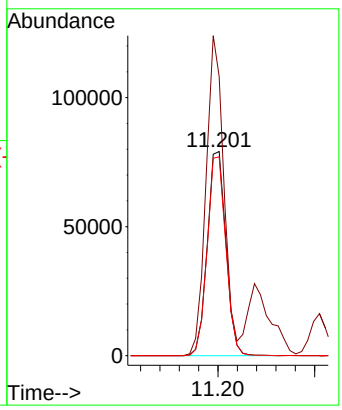




#77
Bromobenzene
Concen: 48.205 ug/l
RT: 11.201 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion:156 Resp: 10610

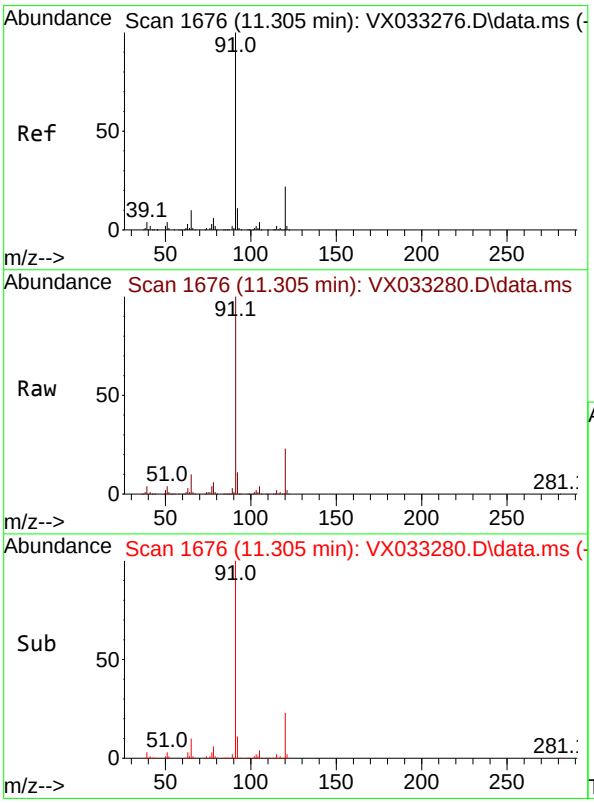
Ion	Ratio	Lower	Upper
156	100		
77	148.6	76.1	228.4
158	97.4	48.8	146.3



Instrument :
MSVOA_X
ClientSampleId :
ICVVX120722

Manual Integrations APPROVED

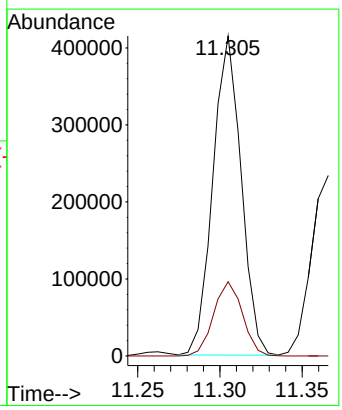
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

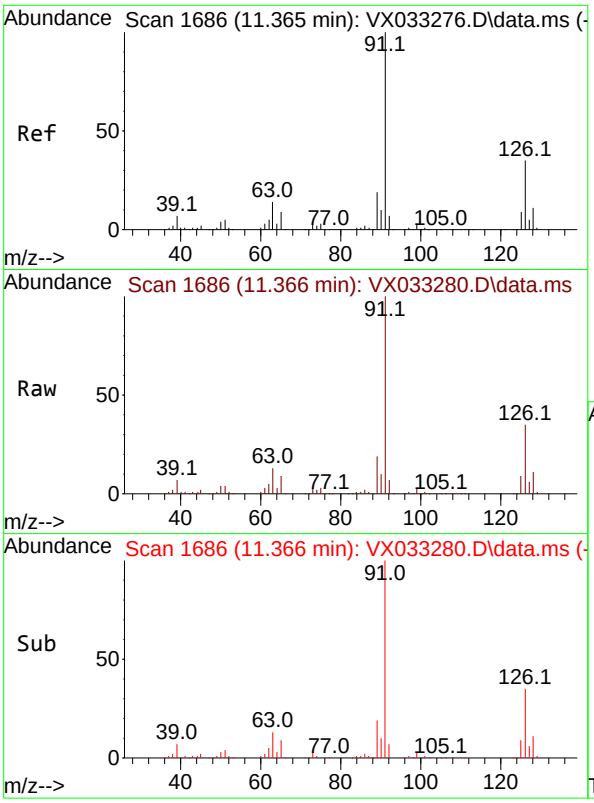


#78
n-propylbenzene
Concen: 50.851 ug/l
RT: 11.305 min Scan# 1676
Delta R.T. 0.000 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion: 91 Resp: 494916

Ion	Ratio	Lower	Upper
91	100		
120	23.8	11.6	34.8

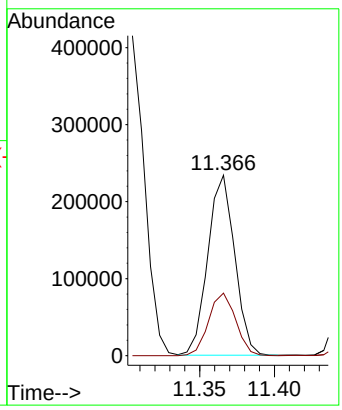




#79
2-Chlorotoluene
Concen: 48.608 ug/l
RT: 11.366 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion: 91 Resp: 29237

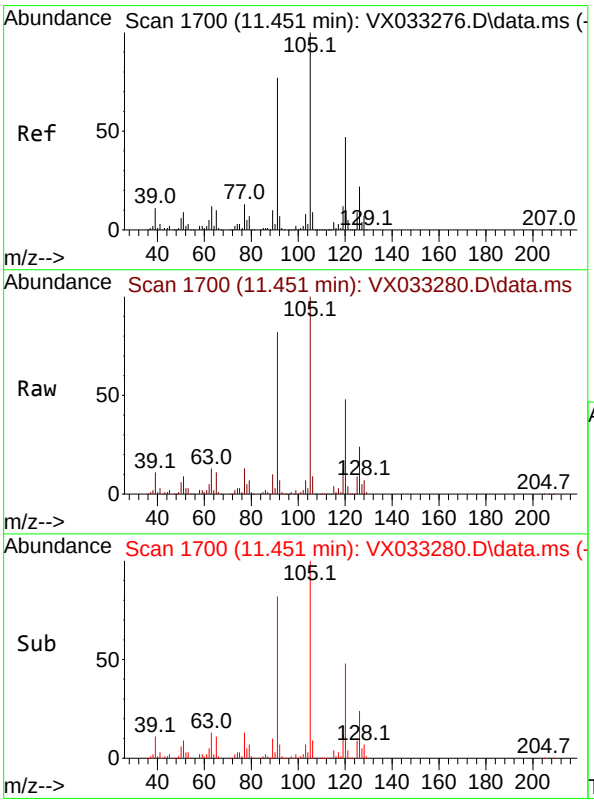
Ion	Ratio	Lower	Upper
91	100		
126	35.0	17.1	51.2



Instrument :
MSVOA_X
ClientSampleId :
ICVVX120722

Manual Integrations
APPROVED

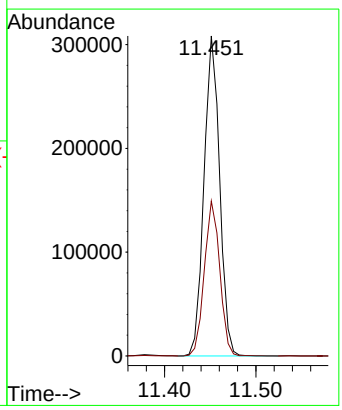
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

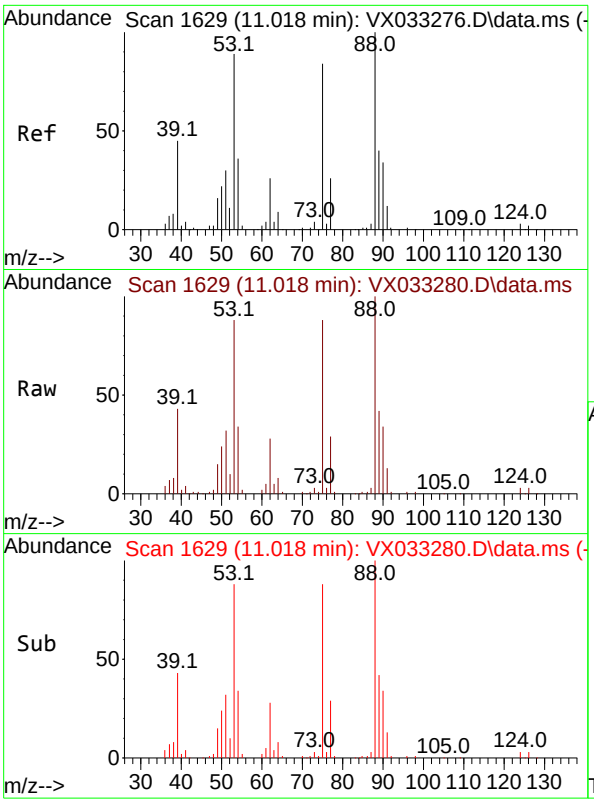


#80
1,3,5-Trimethylbenzene
Concen: 50.214 ug/l
RT: 11.451 min Scan# 1700
Delta R.T. 0.000 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion:105 Resp: 364334

Ion	Ratio	Lower	Upper
105	100		
120	48.0	23.6	71.0

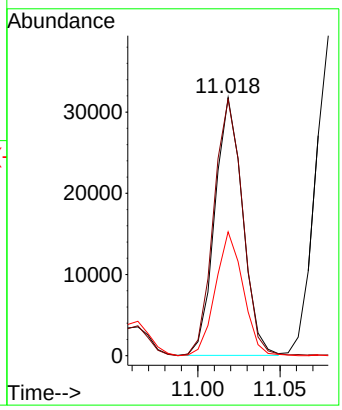




#81
trans-1,4-Dichloro-2-butene
Concen: 47.543 ug/l
RT: 11.018 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion: 75 Resp: 3739

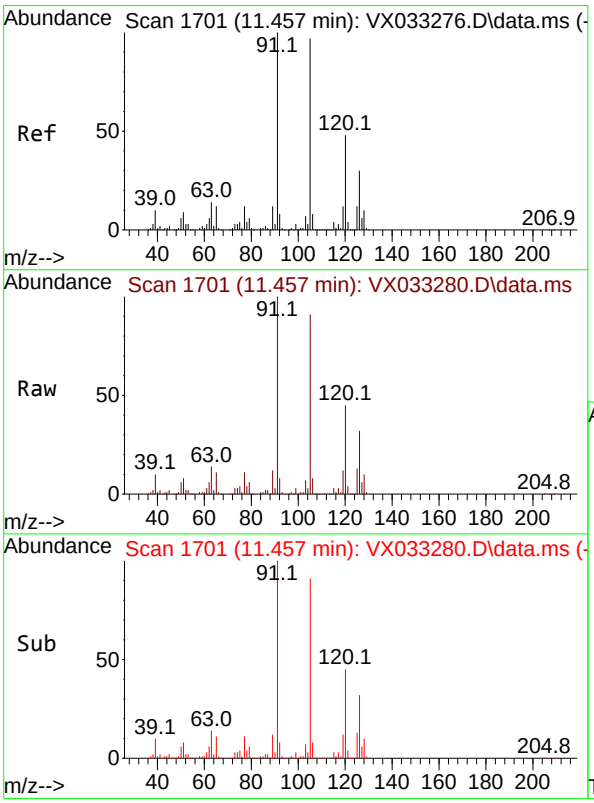
Ion	Ratio	Lower	Upper
75	100		
53	103.5	86.9	130.3
89	47.7	38.3	57.5



Instrument :
MSVOA_X
ClientSampleId :
ICVVX120722

Manual Integrations APPROVED

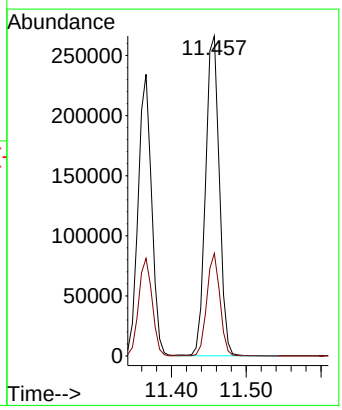
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

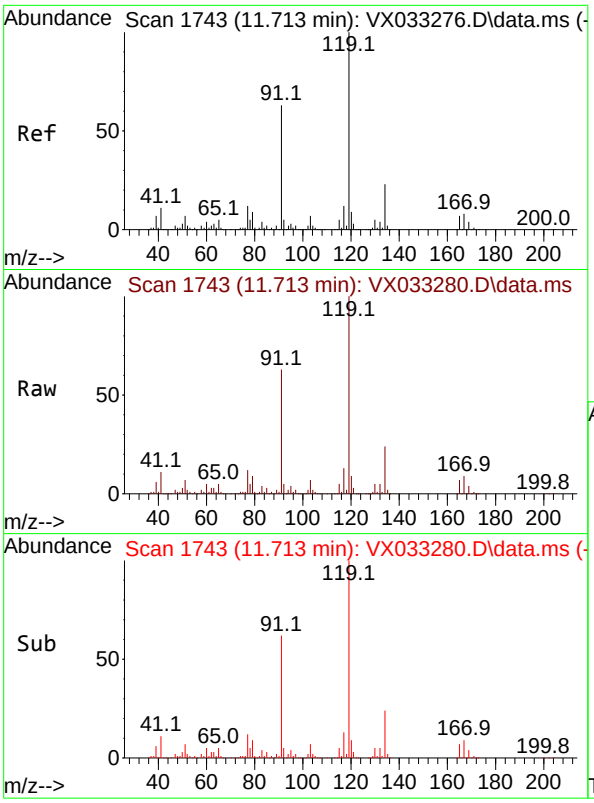


#82
4-Chlorotoluene
Concen: 48.600 ug/l
RT: 11.457 min Scan# 1701
Delta R.T. 0.000 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion: 91 Resp: 339915

Ion	Ratio	Lower	Upper
91	100		
126	30.7	14.8	44.4

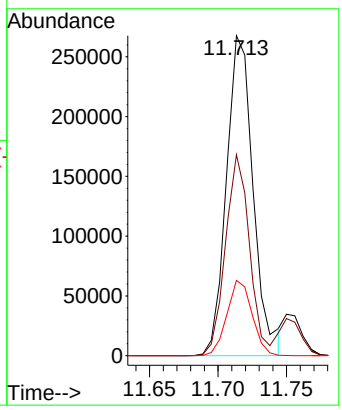




#83
tert-Butylbenzene
Concen: 50.294 ug/l
RT: 11.713 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion:119 Resp: 36388

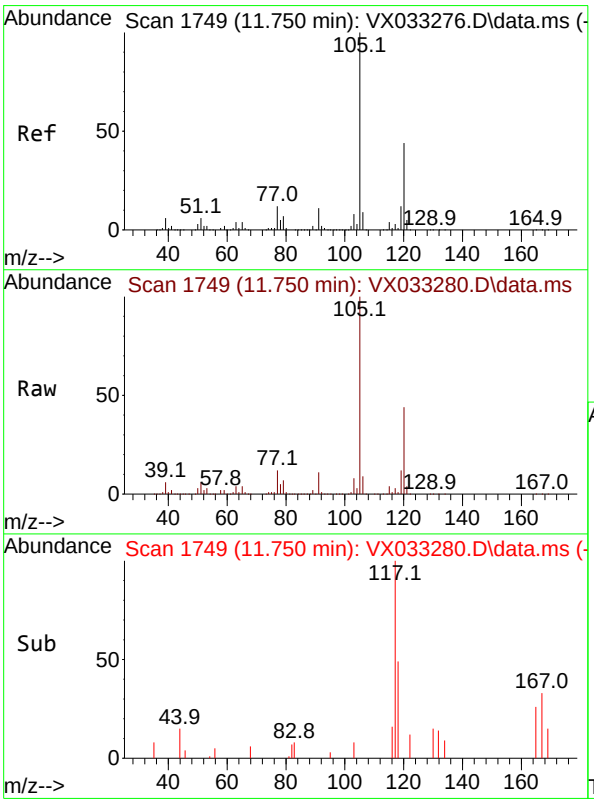
Ion	Ratio	Lower	Upper
119	100		
91	56.4	29.4	88.2
134	22.2	11.0	33.0



Instrument :
MSVOA_X
ClientSampleId :
ICVVX120722

Manual Integrations
APPROVED

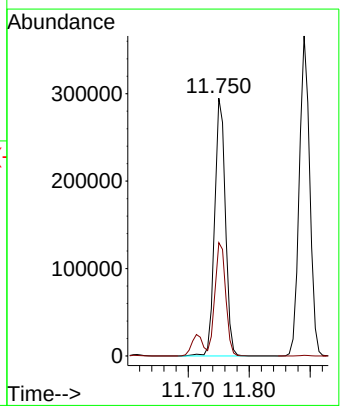
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

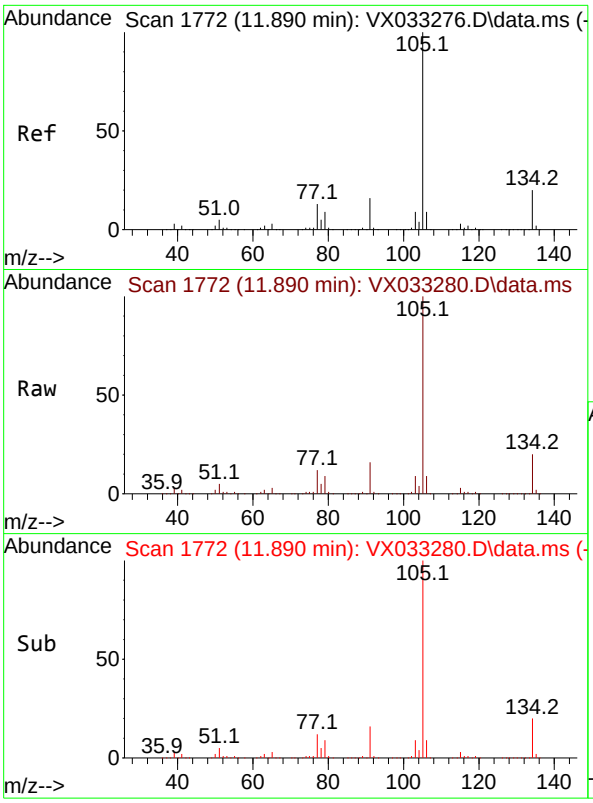


#84
1,2,4-Trimethylbenzene
Concen: 49.794 ug/l
RT: 11.750 min Scan# 1749
Delta R.T. 0.000 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion:105 Resp: 360637

Ion	Ratio	Lower	Upper
105	100		
120	44.0	21.9	65.5





#85
sec-Butylbenzene
Concen: 51.640 ug/l
RT: 11.890 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

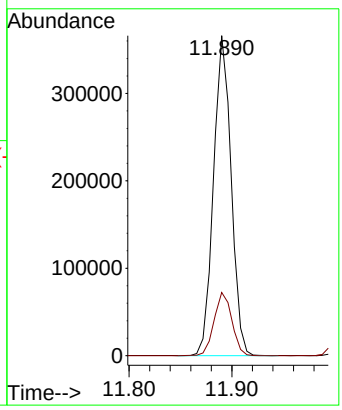
Tgt Ion:105 Resp: 43592

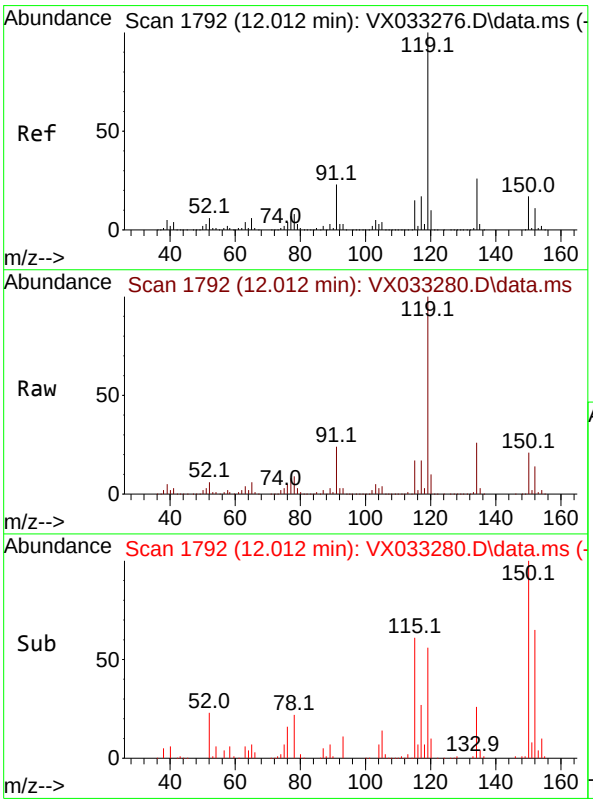
Ion	Ratio	Lower	Upper
105	100		
134	20.0	9.9	29.7

Instrument :
MSVOA_X
ClientSampleId :
ICVVX120722

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

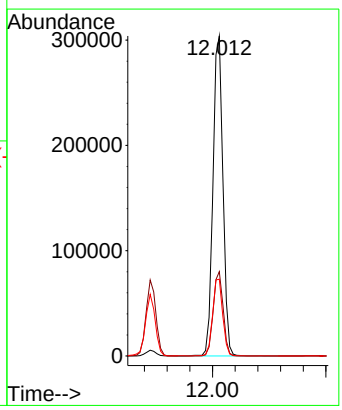


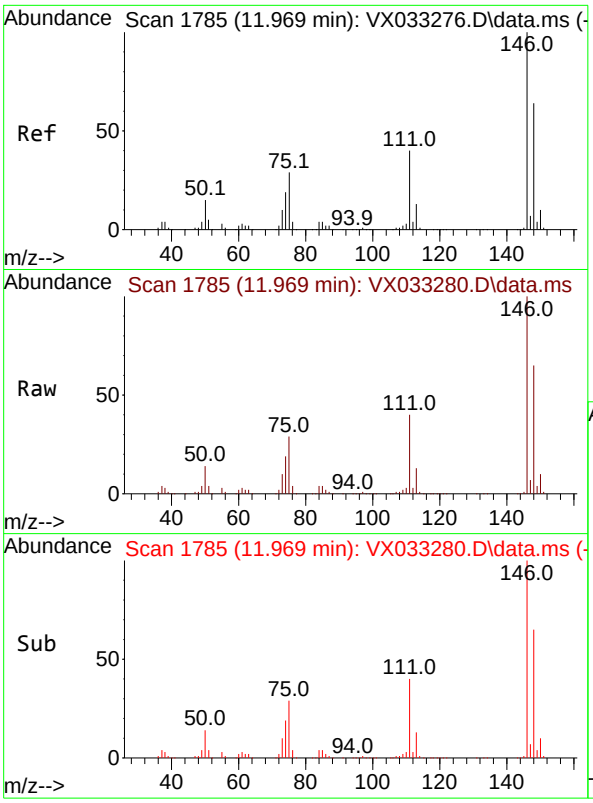


#86
p-Isopropyltoluene
Concen: 50.922 ug/l
RT: 12.012 min Scan# 1792
Delta R.T. 0.000 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion:119 Resp: 370603

Ion	Ratio	Lower	Upper
119	100		
134	26.2	12.9	38.7
91	24.3	12.5	37.5

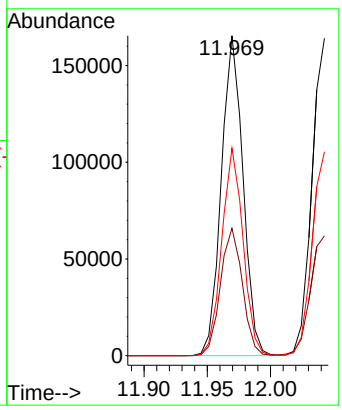




#87
1,3-Dichlorobenzene
Concen: 49.452 ug/l
RT: 11.969 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion:146 Resp: 19717

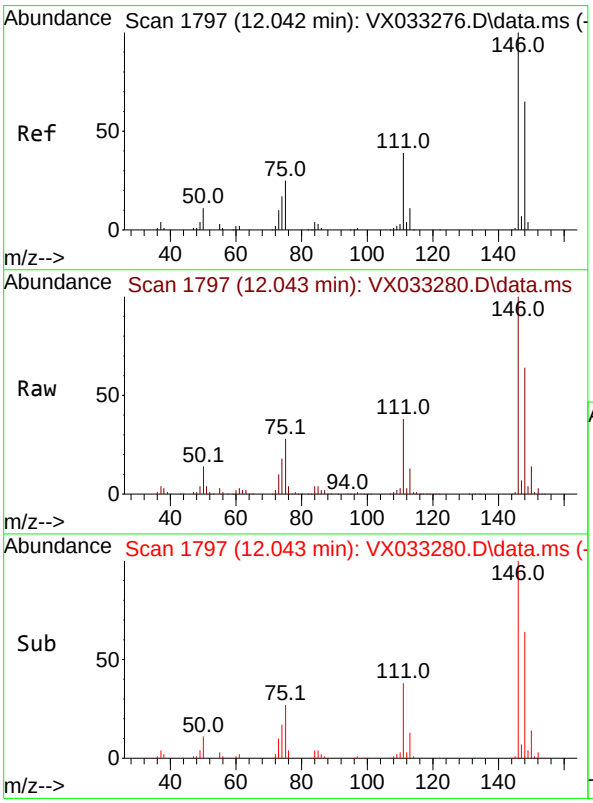
Ion	Ratio	Lower	Upper
146	100		
111	40.3	20.6	61.8
148	63.8	31.7	95.1



Instrument :
MSVOA_X
ClientSampleId :
ICVVX120722

Manual Integrations APPROVED

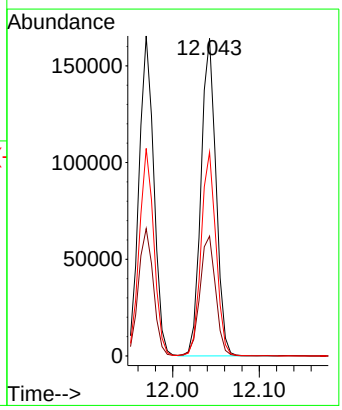
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

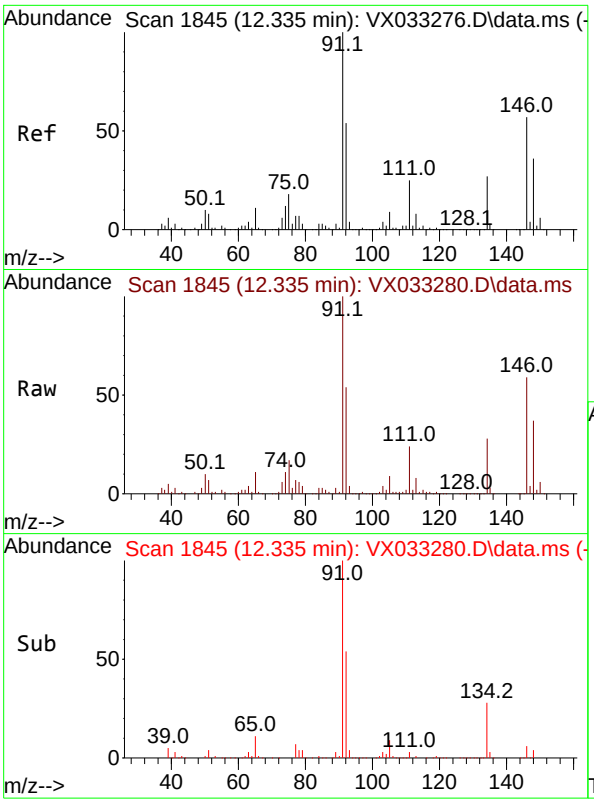


#88
1,4-Dichlorobenzene
Concen: 48.472 ug/l
RT: 12.043 min Scan# 1797
Delta R.T. 0.000 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion:146 Resp: 197406

Ion	Ratio	Lower	Upper
146	100		
111	39.5	20.5	61.6
148	64.0	32.2	96.6

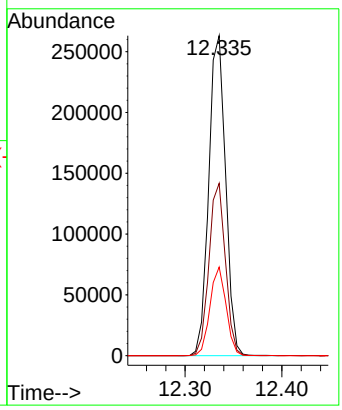




#89
n-Butylbenzene
Concen: 53.470 ug/l
RT: 12.335 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion: 91 Resp: 31872

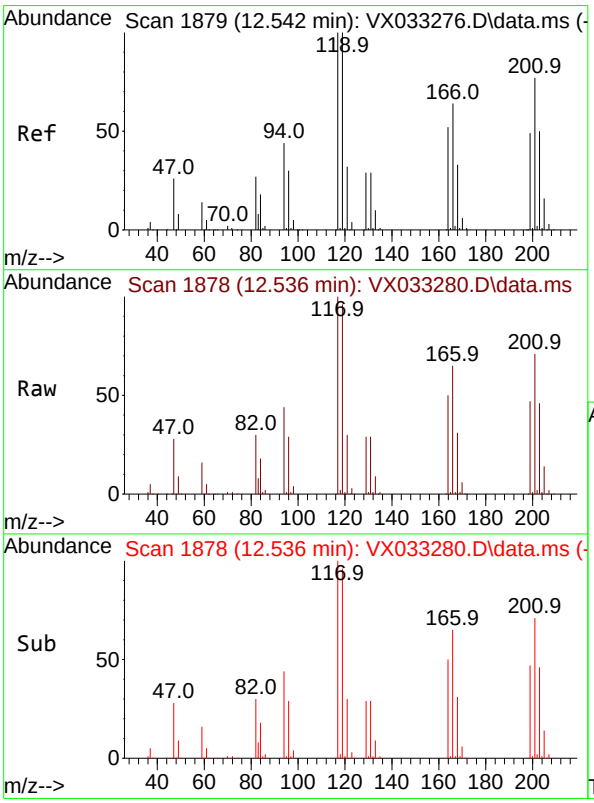
Ion	Ratio	Lower	Upper
91	100		
92	52.8	26.2	78.6
134	26.6	12.9	38.6



Instrument :
MSVOA_X
ClientSampleId :
ICVVX120722

Manual Integrations APPROVED

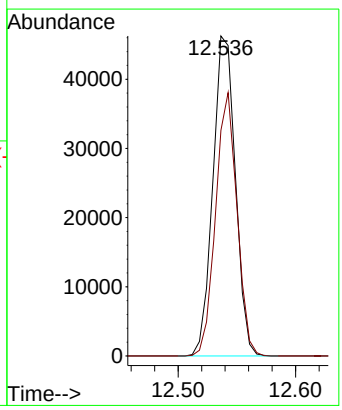
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

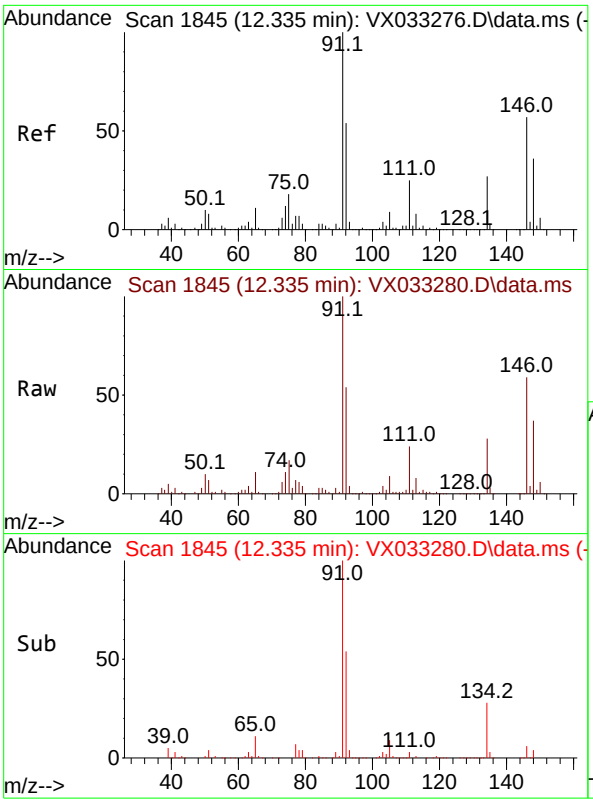


#90
Hexachloroethane
Concen: 49.829 ug/l
RT: 12.536 min Scan# 1878
Delta R.T. -0.006 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion:117 Resp: 61643

Ion	Ratio	Lower	Upper
117	100		
201	78.0	37.6	112.9

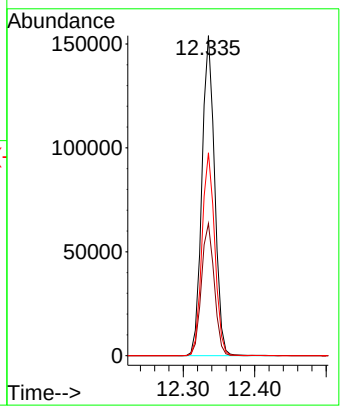




#91
1,2-Dichlorobenzene
Concen: 47.664 ug/l
RT: 12.335 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion:146 Resp: 19000

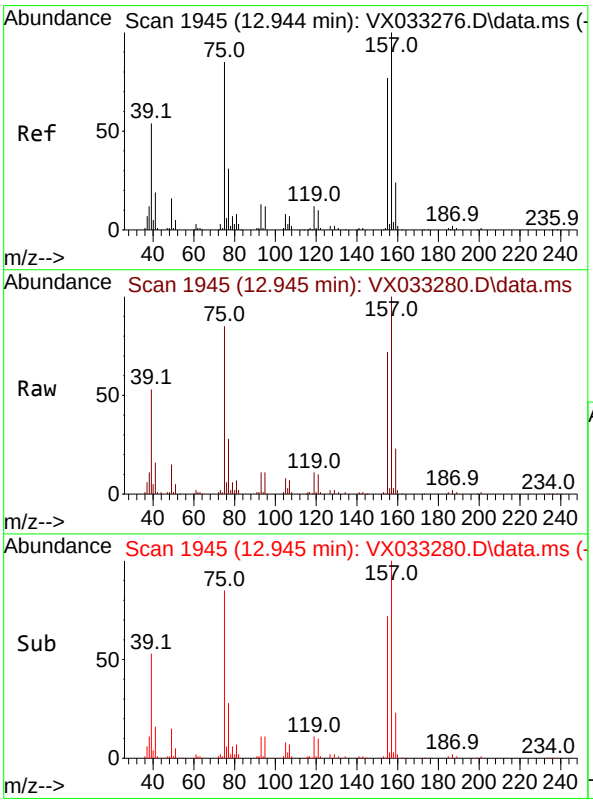
Ion	Ratio	Lower	Upper
146	100		
111	41.6	21.5	64.5
148	63.8	32.0	96.2



Instrument :
MSVOA_X
ClientSampleId :
ICVVX120722

Manual Integrations
APPROVED

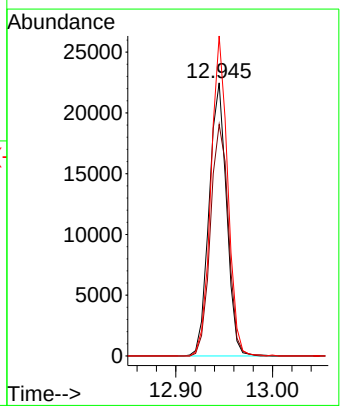
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

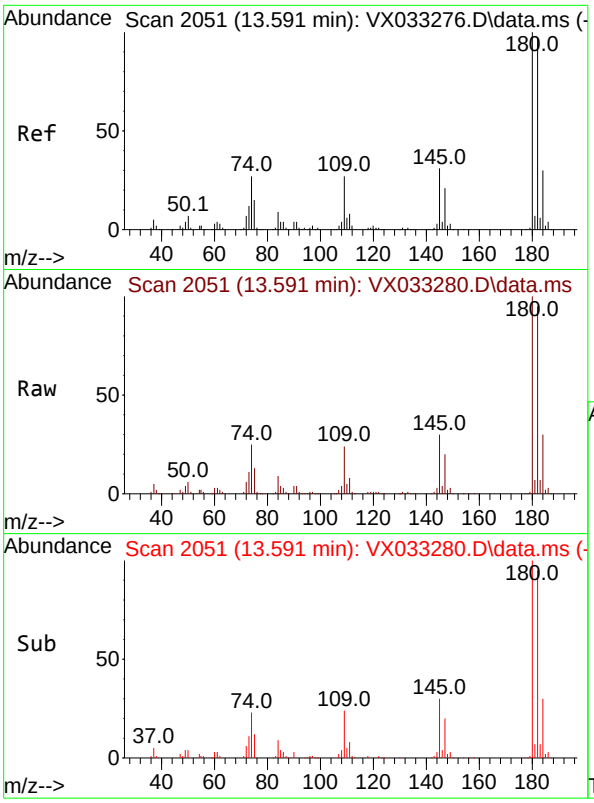


#92
1,2-Dibromo-3-Chloropropane
Concen: 47.255 ug/l
RT: 12.945 min Scan# 1945
Delta R.T. 0.000 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion: 75 Resp: 28225

Ion	Ratio	Lower	Upper
75	100		
155	87.1	41.6	124.8
157	112.1	54.1	162.4

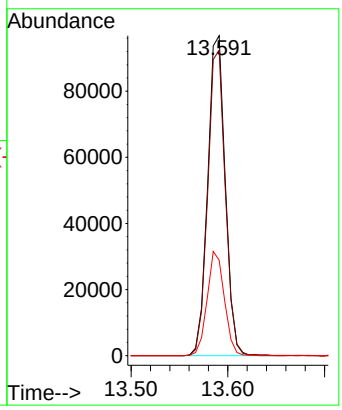




#93
1,2,4-Trichlorobenzene
Concen: 50.844 ug/l
RT: 13.591 min Scan# 2
Delta R.T. 0.000 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion:180 Resp: 12240

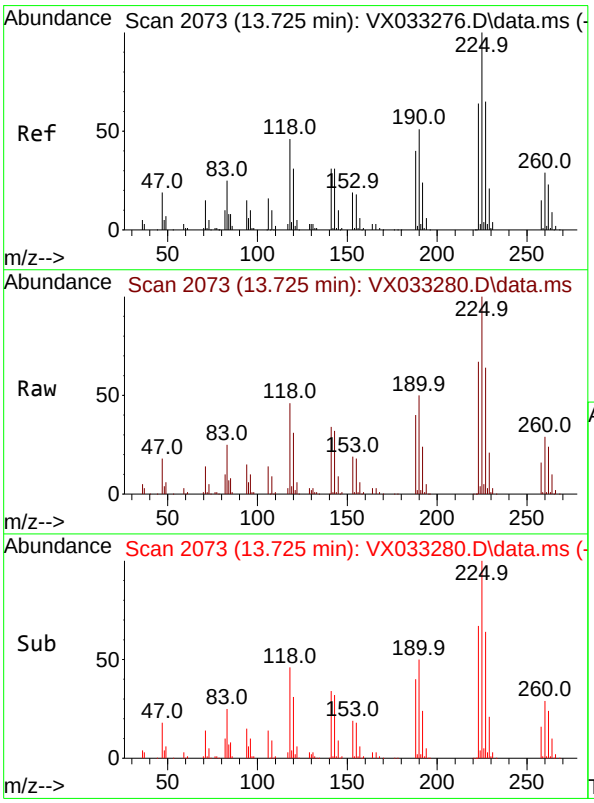
Ion	Ratio	Lower	Upper
180	100		
182	95.2	48.4	145.0
145	31.9	16.2	48.5



Instrument :
MSVOA_X
ClientSampleId :
ICVVX120722

Manual Integrations APPROVED

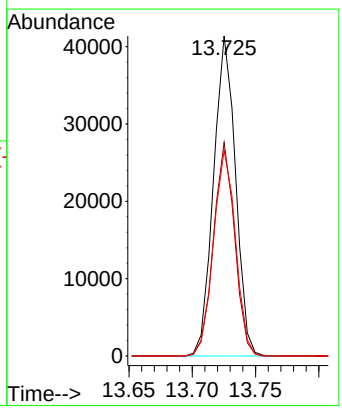
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022

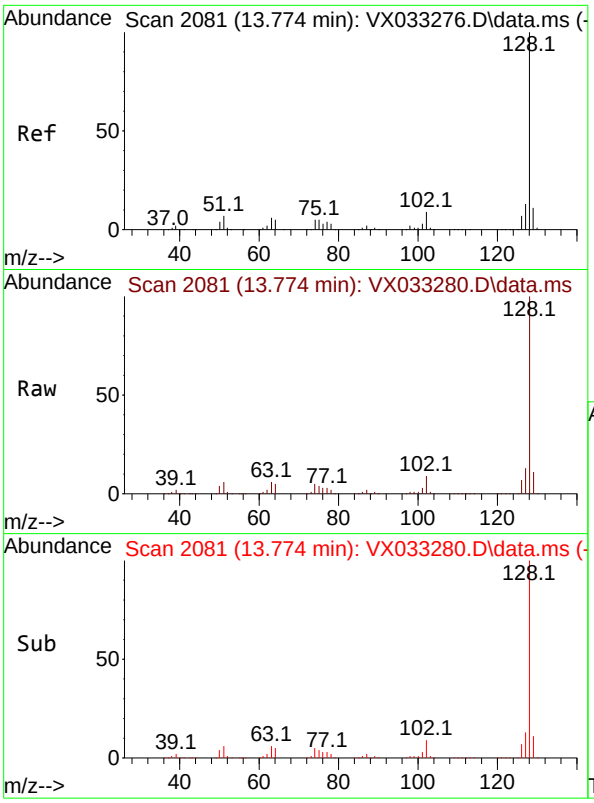


#94
Hexachlorobutadiene
Concen: 51.780 ug/l
RT: 13.725 min Scan# 2073
Delta R.T. 0.000 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion:225 Resp: 49918

Ion	Ratio	Lower	Upper
225	100		
223	64.1	31.9	95.9
227	64.4	31.9	95.5

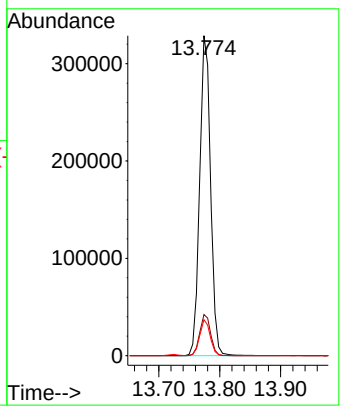




#95
Naphthalene
Concen: 50.644 ug/l
RT: 13.774 min Scan# 2
Delta R.T. 0.000 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion:128 Resp: 40669

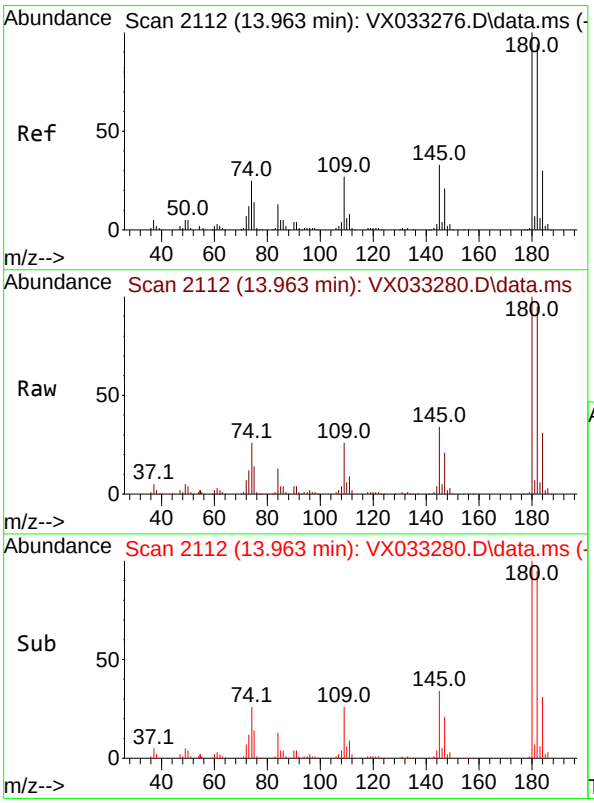
Ion	Ratio	Lower	Upper
128	100		
127	12.9	10.2	15.4
129	10.8	8.9	13.3



Instrument :
MSVOA_X
ClientSampleId :
ICVVX120722

Manual Integrations APPROVED

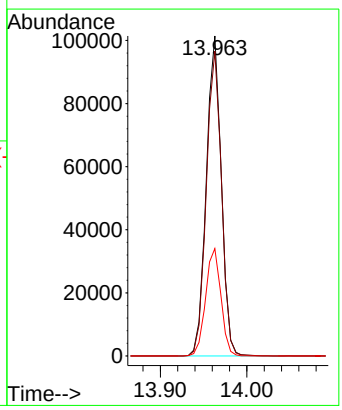
Reviewed By :John Carlone 12/08/2022
Supervised By :Mahesh Dadoda 12/08/2022



#96
1,2,3-Trichlorobenzene
Concen: 50.061 ug/l
RT: 13.963 min Scan# 2112
Delta R.T. 0.000 min
Lab File: VX033280.D
Acq: 07 Dec 2022 12:51

Tgt Ion:180 Resp: 122061

Ion	Ratio	Lower	Upper
180	100		
182	96.2	47.5	142.6
145	34.2	16.9	50.6



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX120722\
Data File : VX033280.D
Acq On : 07 Dec 2022 12:51
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
ICVVX120722

Quant Time: Dec 08 01:41:57 2022
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X120722W.M
Quant Title : SW846 8260
QLast Update : Wed Dec 07 12:43:54 2022
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	102	0.00
2	T	Dichlorodifluoromethane	0.349	0.347	0.6	108	0.00
3	P	Chloromethane	0.404	0.366	9.4	103	0.00
4	C	Vinyl Chloride	0.461	0.431	6.5#	103	0.00
5	T	Bromomethane	0.338	0.322	4.7	110	0.00
6	T	Chloroethane	0.350	0.330	5.7	100	0.00
7	T	Trichlorofluoromethane	0.866	0.840	3.0	105	0.00
8	T	Diethyl Ether	0.313	0.284	9.3	106	0.00
9	T	1,1,2-Trichlorotrifluoroeth	0.459	0.460	-0.2	106	0.00
10	T	Methyl Iodide	0.503	0.439	12.7	91	0.00
11	T	Tert butyl alcohol	0.098	0.083	15.3	106	0.00
12	CM	1,1-Dichloroethene	0.453	0.435	4.0#	105	0.00
13	T	Acrolein	0.106	0.097	8.5	98	0.00
14	T	Allyl chloride	0.724	0.695	4.0	104	0.00
15	T	Acrylonitrile	0.243	0.221	9.1	100	0.00
16	T	Acetone	0.237	0.206	13.1	102	0.00
17	T	Carbon Disulfide	1.163	1.114	4.2	104	0.00
18	T	Methyl Acetate	0.687	0.631	8.2	100	0.00
19	T	Methyl tert-butyl Ether	1.570	1.513	3.6	105	0.00
20	T	Methylene Chloride	0.529	0.483	8.7	105	0.00
21	T	trans-1,2-Dichloroethene	0.496	0.483	2.6	105	0.00
22	T	Diisopropyl ether	1.551	1.502	3.2	102	0.00
23	T	Vinyl Acetate	1.204	1.180	2.0	103	0.00
24	P	1,1-Dichloroethane	0.911	0.859	5.7	104	0.00
25	T	2-Butanone	0.341	0.317	7.0	100	0.00
26	T	2,2-Dichloropropane	0.670	0.667	0.4	105	0.00
27	T	cis-1,2-Dichloroethene	0.593	0.575	3.0	105	0.00
28	T	Bromochloromethane	0.381	0.366	3.9	100	0.00
29	T	Tetrahydrofuran	0.221	0.206	6.8	100	-0.01
30	C	Chloroform	1.012	0.961	5.0#	103	0.00
31	T	Cyclohexane	0.762	0.771	-1.2	106	0.00
32	T	1,1,1-Trichloroethane	0.870	0.867	0.3	104	0.00
33	S	1,2-Dichloroethane-d4	0.321	0.301	6.2	107	0.00
34	I	1,4-Difluorobenzene	1.000	1.000	0.0	101	0.00
35	S	Dibromofluoromethane	0.225	0.216	4.0	107	0.00
36	T	1,1-Dichloropropene	0.438	0.437	0.2	105	0.00
37	T	Ethyl Acetate	0.414	0.396	4.3	101	0.00
38	T	Carbon Tetrachloride	0.491	0.487	0.8	103	0.00
39	T	Methylcyclohexane	0.491	0.521	-6.1	107	0.00
40	TM	Benzene	1.278	1.251	2.1	104	0.00
41	T	Methacrylonitrile	0.228	0.223	2.2	100	0.00
42	TM	1,2-Dichloroethane	0.508	0.484	4.7	102	0.00
43	T	Isopropyl Acetate	0.667	0.649	2.7	102	0.00
44	TM	Trichloroethene	0.352	0.353	-0.3	105	0.00
45	C	1,2-Dichloropropane	0.327	0.318	2.8#	104	0.00
46	T	Dibromomethane	0.249	0.238	4.4	103	0.00
47	T	Bromodichloromethane	0.485	0.476	1.9	103	0.00
48	T	Methyl methacrylate	0.344	0.334	2.9	102	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX120722\
Data File : VX033280.D
Acq On : 07 Dec 2022 12:51
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
ICVVX120722

Quant Time: Dec 08 01:41:57 2022
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X120722W.M
Quant Title : SW846 8260
QLast Update : Wed Dec 07 12:43:54 2022
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	103	0.00
50	S	Toluene-d8	0.470	0.471	-0.2	107	0.00
51	T	4-Methyl-2-Pentanone	0.422	0.414	1.9	101	0.00
52	CM	Toluene	0.827	0.831	-0.5#	103	0.00
53	T	t-1,3-Dichloropropene	0.473	0.489	-3.4	106	0.00
54	T	cis-1,3-Dichloropropene	0.517	0.530	-2.5	105	0.00
55	T	1,1,2-Trichloroethane	0.347	0.340	2.0	103	0.00
56	T	Ethyl methacrylate	0.489	0.502	-2.7	104	0.00
57	T	1,3-Dichloropropane	0.558	0.553	0.9	104	0.00
58	T	2-Chloroethyl Vinyl ether	0.224	0.226	-0.9	102	0.00
59	T	2-Hexanone	0.311	0.310	0.3	102	0.00
60	T	Dibromochloromethane	0.383	0.393	-2.6	105	0.00
61	T	1,2-Dibromoethane	0.370	0.374	-1.1	105	0.00
62	S	4-Bromofluorobenzene	0.360	0.379	-5.3	108	0.00
63	I	Chlorobenzene-d5	1.000	1.000	0.0	102	0.00
64	T	Tetrachloroethene	0.342	0.337	1.5	106	0.00
65	PM	Chlorobenzene	1.013	1.001	1.2	105	0.00
66	T	1,1,1,2-Tetrachloroethane	0.383	0.377	1.6	103	0.00
67	C	Ethyl Benzene	1.764	1.792	-1.6#	105	0.00
68	T	m/p-Xylenes	0.686	0.705	-2.8	106	0.00
69	T	o-Xylene	0.678	0.687	-1.3	104	0.00
70	T	Styrene	1.111	1.157	-4.1	105	0.00
71	P	Bromoform	0.303	0.307	-1.3	103	0.00
72	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	104	0.00
73	T	Isopropylbenzene	3.624	3.587	1.0	105	0.00
74	T	N-amyl acetate	1.236	1.251	-1.2	105	0.00
75	P	1,1,2,2-Tetrachloroethane	1.150	1.083	5.8	104	0.00
76	T	1,2,3-Trichloropropane	1.017	0.981	3.5	106	0.00
77	T	Bromobenzene	0.915	0.882	3.6	106	0.00
78	T	n-propylbenzene	4.047	4.115	-1.7	106	0.00
79	T	2-Chlorotoluene	2.501	2.431	2.8	105	0.00
80	T	1,3,5-Trimethylbenzene	3.017	3.030	-0.4	106	0.00
81	T	trans-1,4-Dichloro-2-butene	0.327	0.311	4.9	104	0.00
82	T	4-Chlorotoluene	2.908	2.827	2.8	106	0.00
83	T	tert-Butylbenzene	3.008	3.026	-0.6	106	0.00
84	T	1,2,4-Trimethylbenzene	3.011	2.999	0.4	106	0.00
85	T	sec-Butylbenzene	3.510	3.625	-3.3	107	0.00
86	T	p-Isopropyltoluene	3.026	3.082	-1.9	107	0.00
87	T	1,3-Dichlorobenzene	1.658	1.640	1.1	107	0.00
88	T	1,4-Dichlorobenzene	1.693	1.642	3.0	107	0.00
89	T	n-Butylbenzene	2.478	2.650	-6.9	110	0.00
90	T	Hexachloroethane	0.514	0.513	0.2	106	0.00
91	T	1,2-Dichlorobenzene	1.657	1.580	4.6	106	0.00
92	T	1,2-Dibromo-3-Chloropropane	0.248	0.235	5.2	105	0.00
93	T	1,2,4-Trichlorobenzene	1.001	1.018	-1.7	111	0.00
94	T	Hexachlorobutadiene	0.401	0.415	-3.5	113	0.00
95	T	Naphthalene	3.339	3.382	-1.3	106	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX120722\
Data File : VX033280.D
Acq On : 07 Dec 2022 12:51
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
ICVVX120722

Quant Time: Dec 08 01:41:57 2022
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X120722W.M
Quant Title : SW846 8260
QLast Update : Wed Dec 07 12:43:54 2022
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	1.014	1.015	-0.1	108	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 6

Evaluate Continuing Calibration Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX120722\
Data File : VX033280.D
Acq On : 07 Dec 2022 12:51
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
ICVVX120722

Quant Time: Dec 08 01:41:57 2022
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X120722W.M
Quant Title : SW846 8260
QLast Update : Wed Dec 07 12:43:54 2022
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	102	0.00
2	T	Dichlorodifluoromethane	50.000	49.702	0.6	108	0.00
3	P	Chloromethane	50.000	45.367	9.3	103	0.00
4	C	Vinyl Chloride	50.000	46.704	6.6#	103	0.00
5	T	Bromomethane	50.000	47.632	4.7	110	0.00
6	T	Chloroethane	50.000	47.236	5.5	100	0.00
7	T	Trichlorofluoromethane	50.000	48.490	3.0	105	0.00
8	T	Diethyl Ether	50.000	45.386	9.2	106	0.00
9	T	1,1,2-Trichlorotrifluoroeth	50.000	50.085	-0.2	106	0.00
10	T	Methyl Iodide	50.000	43.593	12.8	91	0.00
11	T	Tert butyl alcohol	250.000	211.111	15.6	106	0.00
12	CM	1,1-Dichloroethene	50.000	47.939	4.1#	105	0.00
13	T	Acrolein	250.000	228.098	8.8	98	0.00
14	T	Allyl chloride	50.000	48.012	4.0	104	0.00
15	T	Acrylonitrile	250.000	227.543	9.0	100	0.00
16	T	Acetone	250.000	216.519	13.4	102	0.00
17	T	Carbon Disulfide	50.000	47.881	4.2	104	0.00
18	T	Methyl Acetate	50.000	45.913	8.2	100	0.00
19	T	Methyl tert-butyl Ether	50.000	48.192	3.6	105	0.00
20	T	Methylene Chloride	50.000	45.612	8.8	105	0.00
21	T	trans-1,2-Dichloroethene	50.000	48.735	2.5	105	0.00
22	T	Diisopropyl ether	50.000	48.438	3.1	102	0.00
23	T	Vinyl Acetate	250.000	245.096	2.0	103	0.00
24	P	1,1-Dichloroethane	50.000	47.145	5.7	104	0.00
25	T	2-Butanone	250.000	232.728	6.9	100	0.00
26	T	2,2-Dichloropropane	50.000	49.784	0.4	105	0.00
27	T	cis-1,2-Dichloroethene	50.000	48.492	3.0	105	0.00
28	T	Bromochloromethane	50.000	47.956	4.1	100	0.00
29	T	Tetrahydrofuran	250.000	233.427	6.6	100	-0.01
30	C	Chloroform	50.000	47.482	5.0#	103	0.00
31	T	Cyclohexane	50.000	50.601	-1.2	106	0.00
32	T	1,1,1-Trichloroethane	50.000	49.812	0.4	104	0.00
33	S	1,2-Dichloroethane-d4	50.000	46.866	6.3	107	0.00
34	I	1,4-Difluorobenzene	50.000	50.000	0.0	101	0.00
35	S	Dibromofluoromethane	50.000	47.921	4.2	107	0.00
36	T	1,1-Dichloropropene	50.000	49.882	0.2	105	0.00
37	T	Ethyl Acetate	50.000	47.728	4.5	101	0.00
38	T	Carbon Tetrachloride	50.000	49.578	0.8	103	0.00
39	T	Methylcyclohexane	50.000	53.112	-6.2	107	0.00
40	TM	Benzene	50.000	48.914	2.2	104	0.00
41	T	Methacrylonitrile	50.000	48.856	2.3	100	0.00
42	TM	1,2-Dichloroethane	50.000	47.637	4.7	102	0.00
43	T	Isopropyl Acetate	50.000	48.673	2.7	102	0.00
44	TM	Trichloroethene	50.000	50.085	-0.2	105	0.00
45	C	1,2-Dichloropropane	50.000	48.695	2.6#	104	0.00
46	T	Dibromomethane	50.000	47.855	4.3	103	0.00
47	T	Bromodichloromethane	50.000	49.061	1.9	103	0.00
48	T	Methyl methacrylate	50.000	48.521	3.0	102	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX120722\
Data File : VX033280.D
Acq On : 07 Dec 2022 12:51
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
ICVVX120722

Quant Time: Dec 08 01:41:57 2022
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X120722W.M
Quant Title : SW846 8260
QLast Update : Wed Dec 07 12:43:54 2022
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	974.422	2.6	103	0.00
50	S	Toluene-d8	50.000	50.054	-0.1	107	0.00
51	T	4-Methyl-2-Pentanone	250.000	245.658	1.7	101	0.00
52	CM	Toluene	50.000	50.273	-0.5#	103	0.00
53	T	t-1,3-Dichloropropene	50.000	47.076	5.8	106	0.00
54	T	cis-1,3-Dichloropropene	50.000	51.268	-2.5	105	0.00
55	T	1,1,2-Trichloroethane	50.000	48.997	2.0	103	0.00
56	T	Ethyl methacrylate	50.000	51.302	-2.6	104	0.00
57	T	1,3-Dichloropropane	50.000	49.540	0.9	104	0.00
58	T	2-Chloroethyl Vinyl ether	250.000	252.823	-1.1	102	0.00
59	T	2-Hexanone	250.000	249.243	0.3	102	0.00
60	T	Dibromochloromethane	50.000	51.356	-2.7	105	0.00
61	T	1,2-Dibromoethane	50.000	50.543	-1.1	105	0.00
62	S	4-Bromofluorobenzene	50.000	52.743	-5.5	108	0.00
63	I	Chlorobenzene-d5	50.000	50.000	0.0	102	0.00
64	T	Tetrachloroethene	50.000	49.334	1.3	106	0.00
65	PM	Chlorobenzene	50.000	49.423	1.2	105	0.00
66	T	1,1,1,2-Tetrachloroethane	50.000	49.209	1.6	103	0.00
67	C	Ethyl Benzene	50.000	50.786	-1.6#	105	0.00
68	T	m/p-Xylenes	100.000	102.791	-2.8	106	0.00
69	T	o-Xylene	50.000	50.629	-1.3	104	0.00
70	T	Styrene	50.000	52.086	-4.2	105	0.00
71	P	Bromoform	50.000	50.740	-1.5	103	0.00
72	I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	104	0.00
73	T	Isopropylbenzene	50.000	49.486	1.0	105	0.00
74	T	N-amyl acetate	50.000	50.590	-1.2	105	0.00
75	P	1,1,2,2-Tetrachloroethane	50.000	47.106	5.8	104	0.00
76	T	1,2,3-Trichloropropane	50.000	48.233	3.5	106	0.00
77	T	Bromobenzene	50.000	48.205	3.6	106	0.00
78	T	n-propylbenzene	50.000	50.851	-1.7	106	0.00
79	T	2-Chlorotoluene	50.000	48.608	2.8	105	0.00
80	T	1,3,5-Trimethylbenzene	50.000	50.214	-0.4	106	0.00
81	T	trans-1,4-Dichloro-2-butene	50.000	47.543	4.9	104	0.00
82	T	4-Chlorotoluene	50.000	48.600	2.8	106	0.00
83	T	tert-Butylbenzene	50.000	50.294	-0.6	106	0.00
84	T	1,2,4-Trimethylbenzene	50.000	49.794	0.4	106	0.00
85	T	sec-Butylbenzene	50.000	51.640	-3.3	107	0.00
86	T	p-Isopropyltoluene	50.000	50.922	-1.8	107	0.00
87	T	1,3-Dichlorobenzene	50.000	49.452	1.1	107	0.00
88	T	1,4-Dichlorobenzene	50.000	48.472	3.1	107	0.00
89	T	n-Butylbenzene	50.000	53.470	-6.9	110	0.00
90	T	Hexachloroethane	50.000	49.829	0.3	106	0.00
91	T	1,2-Dichlorobenzene	50.000	47.664	4.7	106	0.00
92	T	1,2-Dibromo-3-Chloropropane	50.000	47.255	5.5	105	0.00
93	T	1,2,4-Trichlorobenzene	50.000	50.844	-1.7	111	0.00
94	T	Hexachlorobutadiene	50.000	51.780	-3.6	113	0.00
95	T	Naphthalene	50.000	50.644	-1.3	106	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX120722\
Data File : VX033280.D
Acq On : 07 Dec 2022 12:51
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
ICVVX120722

Quant Time: Dec 08 01:41:57 2022
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X120722W.M
Quant Title : SW846 8260
QLast Update : Wed Dec 07 12:43:54 2022
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	50.061	-0.1	108	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 6

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM Case No.: N6070 SAS No.: N6070 SDG No.: N6070

Instrument ID: MSVOA_X Calibration Date/Time: 12/15/2022 10:10

Lab File ID: VX033430.D Init. Calib. Date(s): 12/07/2022 12/07/2022

Heated Purge: (Y/N) N Init. Calib. Time(s): 09:46 11:42

GC Column: DB-624UI ID: 0.18 (mm)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Vinyl Chloride	0.461	0.393		-14.75	20
1,1-Dichloroethene	0.453	0.431		-4.86	20
1,1-Dichloroethane	0.911	0.850	0.1	-6.7	20
cis-1,2-Dichloroethene	0.593	0.583		-1.69	20
1,1,1-Trichloroethane	0.870	0.894		2.76	20
Benzene	1.278	1.292		1.1	20
1,2-Dichloroethane	0.508	0.505		-0.59	20
Trichloroethene	0.352	0.369		4.83	20
1,1,2-Trichloroethane	0.347	0.365		5.19	20
Tetrachloroethene	0.342	0.348		1.75	20
1,2-Dichloroethane-d4	0.321	0.273		-14.95	20
Dibromofluoromethane	0.225	0.208		-7.56	20
Toluene-d8	0.470	0.455		-3.19	20
4-Bromofluorobenzene	0.360	0.370		2.78	20

All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX121522\
Data File : VX033430.D
Acq On : 15 Dec 2022 10:10
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 16 00:54:39 2022
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X120722W.M
Quant Title : SW846 8260
QLast Update : Wed Dec 07 12:43:54 2022
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.550	168	139266	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.757	114	214327	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.055	117	205390	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.024	152	103647	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.958	65	38081	42.623	ug/l	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 85.240%			
35) Dibromofluoromethane	5.379	113	44592	46.257	ug/l	-0.01
Spiked Amount 50.000	Range 75 - 124		Recovery = 92.520%			
50) Toluene-d8	8.647	98	97560	48.378	ug/l	0.00
Spiked Amount 50.000	Range 92 - 112		Recovery = 96.760%			
62) 4-Bromofluorobenzene	11.079	95	79249	51.395	ug/l	0.00
Spiked Amount 50.000	Range 83 - 123		Recovery = 102.800%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.166	85	47530	48.857	ug/l	95
3) Chloromethane	1.294	50	47138	41.907	ug/l	100
4) Vinyl Chloride	1.374	62	54704	42.593	ug/l	99
5) Bromomethane	1.618	94	35871	38.059	ug/l	97
6) Chloroethane	1.691	64	44508	45.688	ug/l	99
7) Trichlorofluoromethane	1.892	101	84304	34.963	ug/l	99
8) Diethyl Ether	2.130	74	29931	34.367	ug/l	93
9) 1,1,2-Trichlorotrifluo...	2.331	101	66428	51.935	ug/l	99
10) Methyl Iodide	2.453	142	67859	48.441	ug/l	100
11) Tert butyl alcohol	2.995	59	54282m	198.723	ug/l	
12) 1,1-Dichloroethene	2.325	96	59977	47.504	ug/l	94
13) Acrolein	2.239	56	44660	150.751	ug/l	99
14) Allyl chloride	2.666	41	92103	45.680	ug/l	97
15) Acrylonitrile	3.062	53	147306	217.703	ug/l	99
16) Acetone	2.386	43	174360	263.734	ug/l	99
17) Carbon Disulfide	2.514	76	141648	43.713	ug/l	99
18) Methyl Acetate	2.703	43	86757	45.331	ug/l	97
19) Methyl tert-butyl Ether	3.111	73	210433	48.117	ug/l	99
20) Methylene Chloride	2.788	84	65148	44.186	ug/l	92
21) trans-1,2-Dichloroethene	3.093	96	66164	47.906	ug/l	99
22) Diisopropyl ether	3.751	45	211702	49.007	ug/l #	81
23) Vinyl Acetate	3.721	43	796105	237.436	ug/l	97
24) 1,1-Dichloroethane	3.605	63	118365	46.634	ug/l	99
25) 2-Butanone	4.556	43	223330	235.335	ug/l	97
26) 2,2-Dichloropropane	4.477	77	97132	52.038	ug/l	99
27) cis-1,2-Dichloroethene	4.483	96	81133	49.154	ug/l	96
28) Bromochloromethane	4.891	49	51029	48.028	ug/l	93
29) Tetrahydrofuran	5.001	42	132245	215.085	ug/l	96
30) Chloroform	5.086	83	138266	49.069	ug/l	100
31) Cyclohexane	5.471	56	104151	49.051	ug/l	92
32) 1,1,1-Trichloroethane	5.385	97	124544	51.371	ug/l	98
36) 1,1-Dichloropropene	5.690	75	96432	51.308	ug/l	98
37) Ethyl Acetate	4.708	43	81185	45.696	ug/l	99
38) Carbon Tetrachloride	5.678	117	109727	52.107	ug/l	99
39) Methylcyclohexane	7.379	83	115689	54.993	ug/l	97
40) Benzene	6.037	78	276871	50.524	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX121522\
Data File : VX033430.D
Acq On : 15 Dec 2022 10:10
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 16 00:54:39 2022
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X120722W.M
Quant Title : SW846 8260
QLast Update : Wed Dec 07 12:43:54 2022
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	4.916	41	46339	47.333	ug/l		98
42) 1,2-Dichloroethane	6.080	62	108334	49.784	ug/l		98
43) Isopropyl Acetate	6.336	43	136769	47.844	ug/l		97
44) Trichloroethene	7.123	130	79155	52.390	ug/l		96
45) 1,2-Dichloropropane	7.427	63	70651	50.412	ug/l		99
46) Dibromomethane	7.580	93	53766	50.361	ug/l		99
47) Bromodichloromethane	7.818	83	108950	52.352	ug/l		100
48) Methyl methacrylate	7.690	41	70703	47.923	ug/l		93
49) 1,4-Dioxane	7.696	88	29747	884.207	ug/l		98
51) 4-Methyl-2-Pentanone	8.568	43	445493	246.435	ug/l		96
52) Toluene	8.720	92	194022	54.761	ug/l		99
53) t-1,3-Dichloropropene	8.976	75	109761	49.141	ug/l		99
54) cis-1,3-Dichloropropene	8.366	75	117676	53.138	ug/l		90
55) 1,1,2-Trichloroethane	9.153	97	78302	52.574	ug/l		98
56) Ethyl methacrylate	9.116	69	112579	53.687	ug/l	#	90
57) 1,3-Dichloropropane	9.305	76	126034	52.677	ug/l		100
58) 2-Chloroethyl Vinyl ether	8.238	63	229186	238.862	ug/l		98
59) 2-Hexanone	9.427	43	340694	255.739	ug/l		95
60) Dibromochloromethane	9.519	129	90138	54.930	ug/l		100
61) 1,2-Dibromoethane	9.610	107	84315	53.222	ug/l		100
64) Tetrachloroethene	9.275	164	71561	50.953	ug/l		98
65) Chlorobenzene	10.079	112	214048	51.464	ug/l		99
66) 1,1,1,2-Tetrachloroethane	10.159	131	80870	51.451	ug/l		99
67) Ethyl Benzene	10.195	91	381798	52.692	ug/l		97
68) m/p-Xylenes	10.299	106	304061	107.856	ug/l		97
69) o-Xylene	10.640	106	146323	52.510	ug/l		97
70) Styrene	10.652	104	244830	53.646	ug/l		98
71) Bromoform	10.799	173	63916	51.374	ug/l	#	99
73) Isopropylbenzene	10.963	105	390064	51.922	ug/l		99
74) N-amyl acetate	10.841	43	125085	48.802	ug/l		96
75) 1,1,2,2-Tetrachloroethane	11.213	83	113177	47.488	ug/l		99
76) 1,2,3-Trichloropropane	11.238	75	102065m	48.402	ug/l		
77) Bromobenzene	11.195	156	96292	50.759	ug/l		97
78) n-propylbenzene	11.305	91	447548	53.354	ug/l		99
79) 2-Chlorotoluene	11.366	91	265311	51.178	ug/l		98
80) 1,3,5-Trimethylbenzene	11.451	105	328826	52.584	ug/l		99
81) trans-1,4-Dichloro-2-b...	11.018	75	32326	47.686	ug/l		94
82) 4-Chlorotoluene	11.451	91	307861	51.072	ug/l		98
83) tert-Butylbenzene	11.713	119	325763	52.240	ug/l		99
84) 1,2,4-Trimethylbenzene	11.750	105	326303	52.274	ug/l		100
85) sec-Butylbenzene	11.890	105	400794	55.088	ug/l		99
86) p-Isopropyltoluene	12.006	119	340165	54.230	ug/l		98
87) 1,3-Dichlorobenzene	11.969	146	177873	51.761	ug/l		99
88) 1,4-Dichlorobenzene	12.042	146	178208	50.770	ug/l		99
89) n-Butylbenzene	12.329	91	287863	56.031	ug/l		99
90) Hexachloroethane	12.536	117	54653	51.259	ug/l		96
91) 1,2-Dichlorobenzene	12.335	146	170984	49.768	ug/l		99
92) 1,2-Dibromo-3-Chloropr...	12.945	75	22473	43.655	ug/l		91
93) 1,2,4-Trichlorobenzene	13.585	180	109066	52.564	ug/l		99
94) Hexachlorobutadiene	13.725	225	46128	55.517	ug/l		99
95) Naphthalene	13.774	128	347251	50.172	ug/l		99
96) 1,2,3-Trichlorobenzene	13.963	180	106772	50.808	ug/l		99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX121522\
Data File : VX033430.D
Acq On : 15 Dec 2022 10:10
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 16 00:54:39 2022
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X120722W.M
Quant Title : SW846 8260
QLast Update : Wed Dec 07 12:43:54 2022
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

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

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

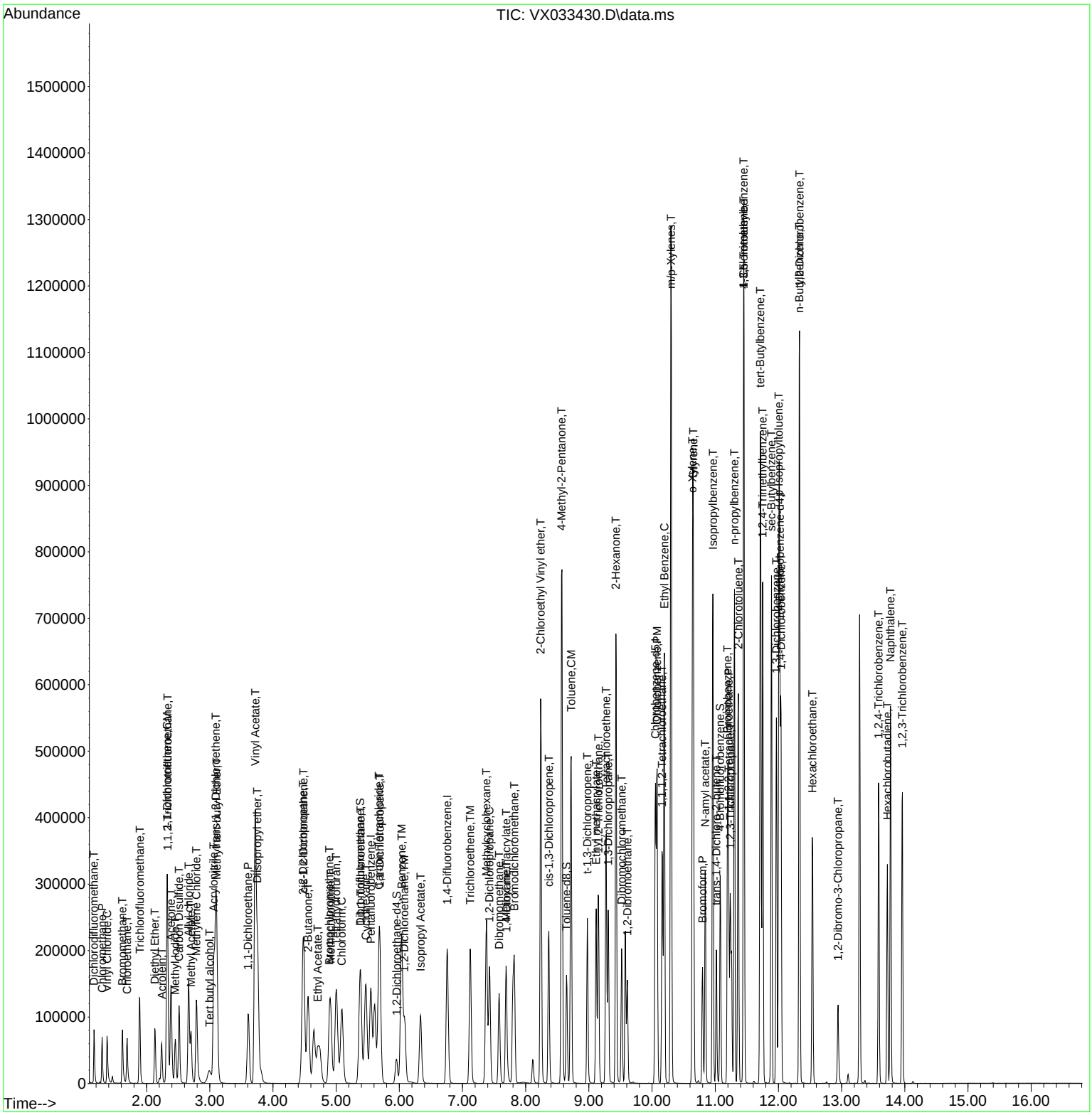
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX121522\
Data File : VX033430.D
Acq On : 15 Dec 2022 10:10
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

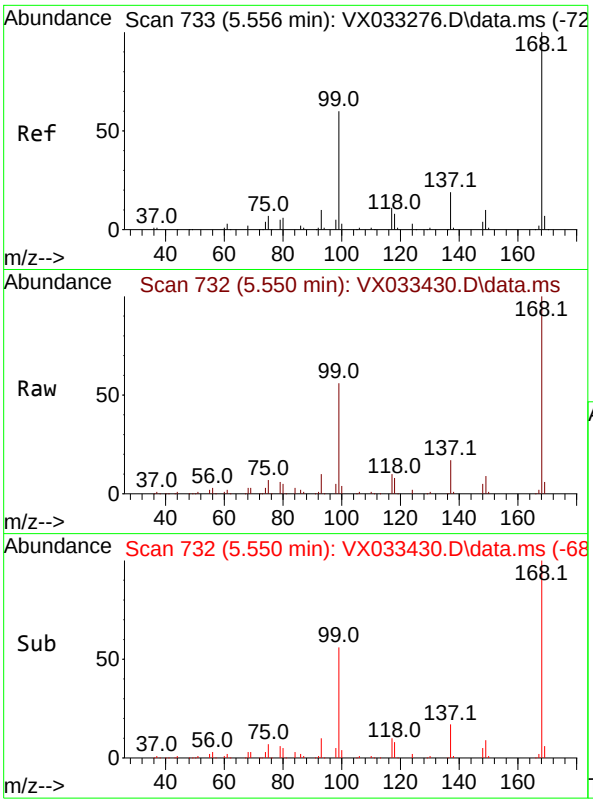
Quant Time: Dec 16 00:54:39 2022
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X120722W.M
Quant Title : SW846 8260
QLast Update : Wed Dec 07 12:43:54 2022
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

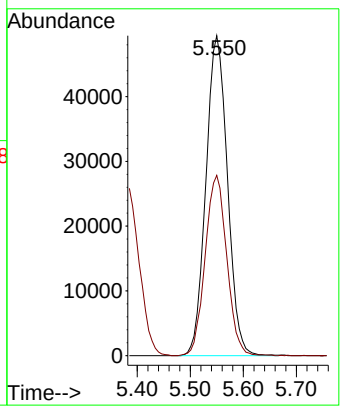




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 5.550 min Scan# 7
Delta R.T. -0.006 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion:168 Resp: 13926

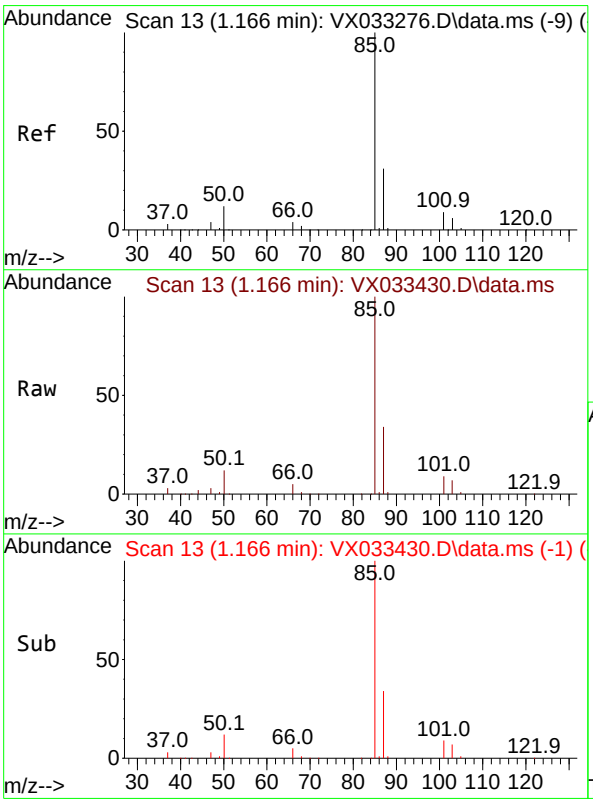
Ion	Ratio	Lower	Upper
168	100		
99	56.4	46.1	69.1



Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

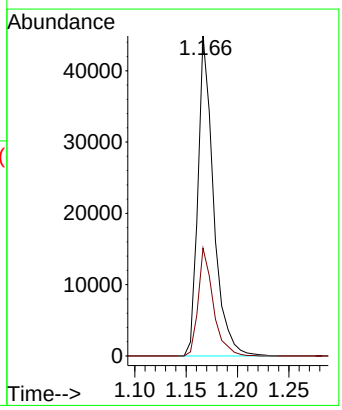
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

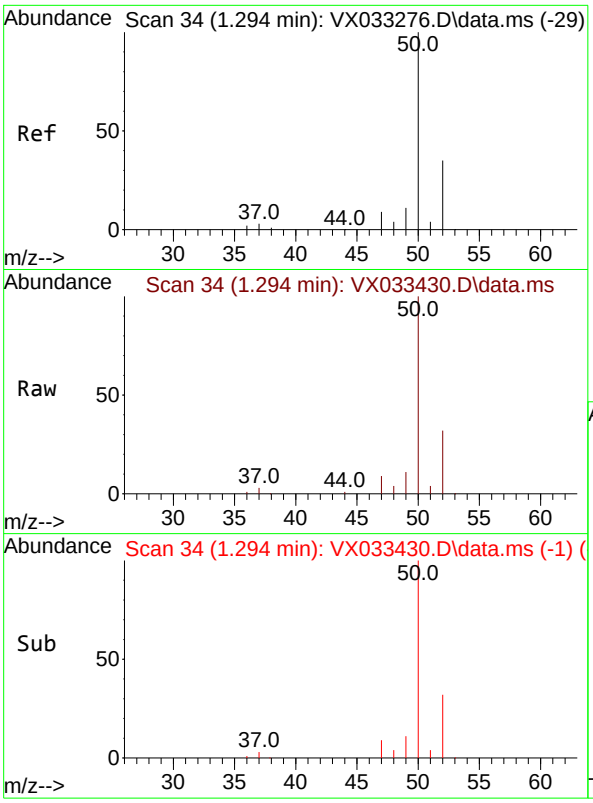


#2
Dichlorodifluoromethane
Concen: 48.857 ug/l
RT: 1.166 min Scan# 13
Delta R.T. 0.000 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion: 85 Resp: 47530

Ion	Ratio	Lower	Upper
85	100		
87	33.7	15.6	46.7

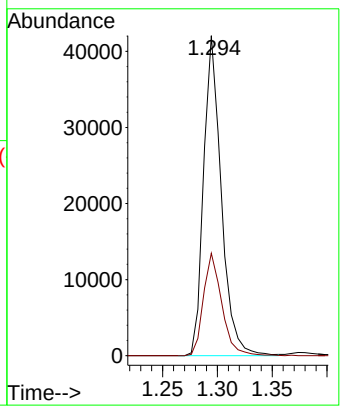




#3
Chloromethane
Concen: 41.907 ug/l
RT: 1.294 min Scan# 34
Delta R.T. 0.000 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion: 50 Resp: 4713

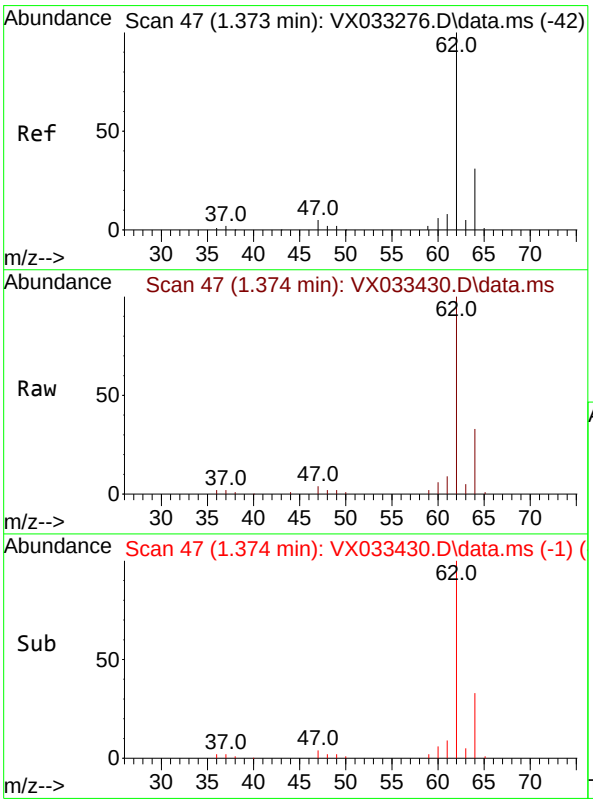
Ion	Ratio	Lower	Upper
50	100		
52	32.0	25.4	38.2



Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

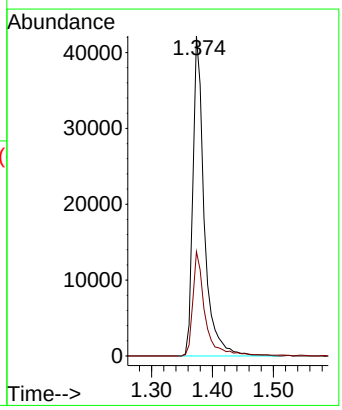
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

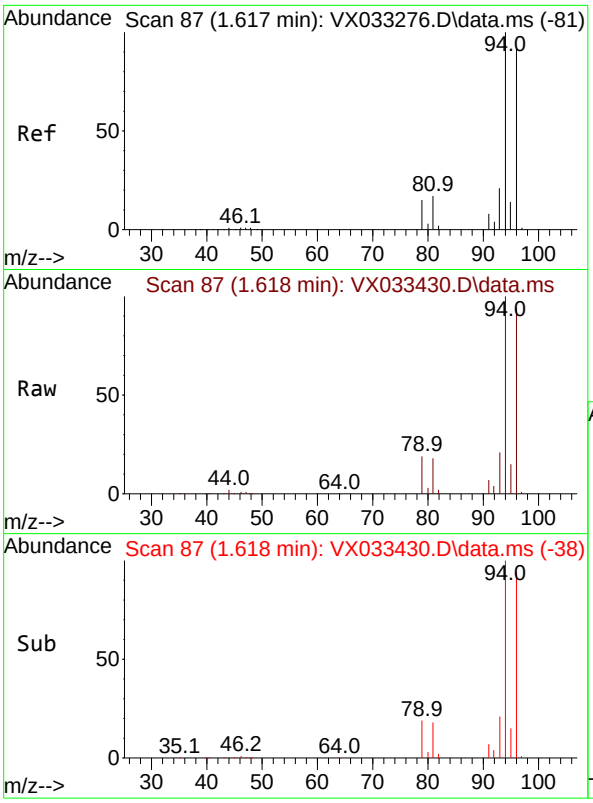


#4
Vinyl Chloride
Concen: 42.593 ug/l
RT: 1.374 min Scan# 47
Delta R.T. 0.000 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion: 62 Resp: 54704

Ion	Ratio	Lower	Upper
62	100		
64	32.6	25.8	38.6

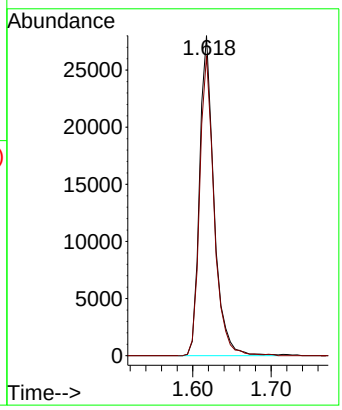




#5
Bromomethane
Concen: 38.059 ug/l
RT: 1.618 min Scan# 8
Delta R.T. 0.000 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion: 94 Resp: 3587

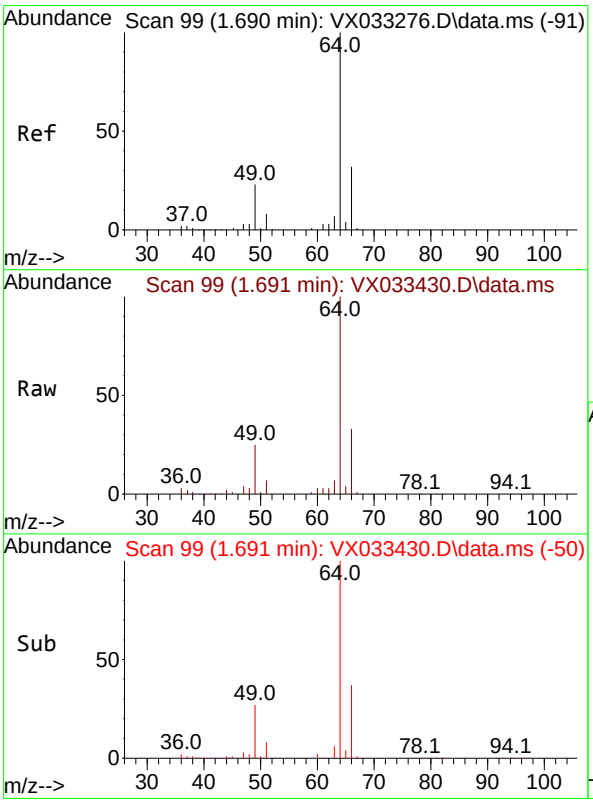
Ion	Ratio	Lower	Upper
94	100		
96	93.8	77.6	116.4



Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

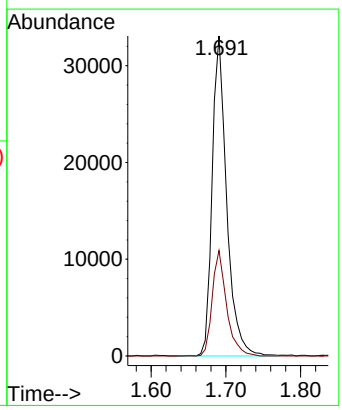
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

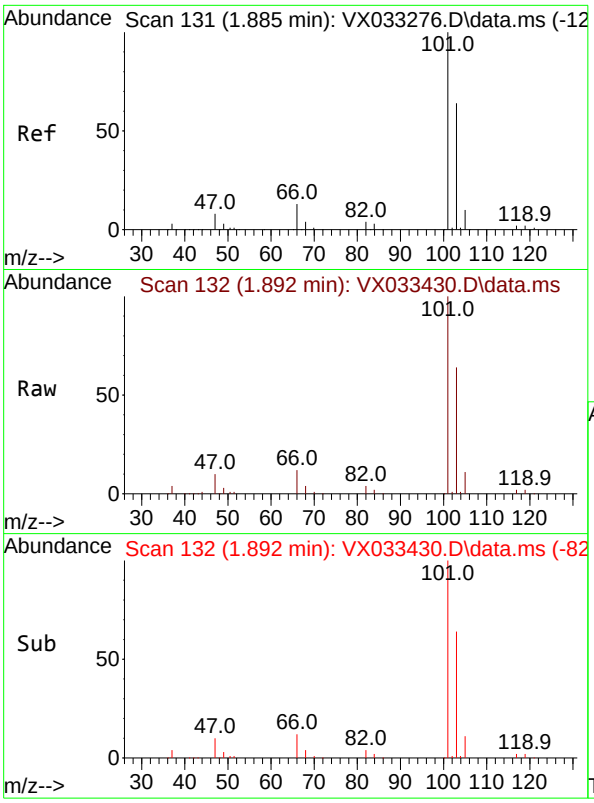


#6
Chloroethane
Concen: 45.688 ug/l
RT: 1.691 min Scan# 99
Delta R.T. 0.000 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion: 64 Resp: 44508

Ion	Ratio	Lower	Upper
64	100		
66	33.0	26.0	39.0

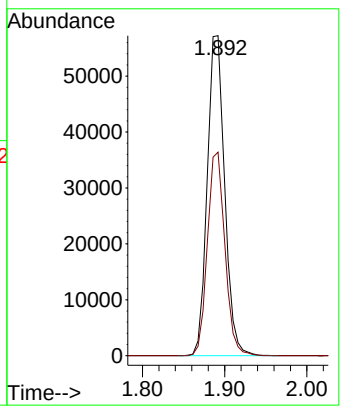




#7
Trichlorofluoromethane
Concen: 34.963 ug/l
RT: 1.892 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion:101 Resp: 8430

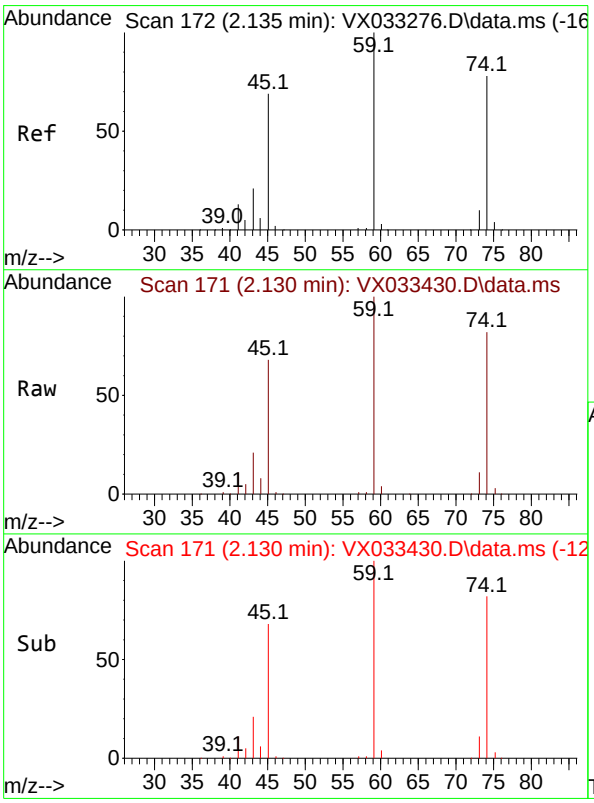
Ion	Ratio	Lower	Upper
101	100		
103	63.6	51.4	77.2



Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

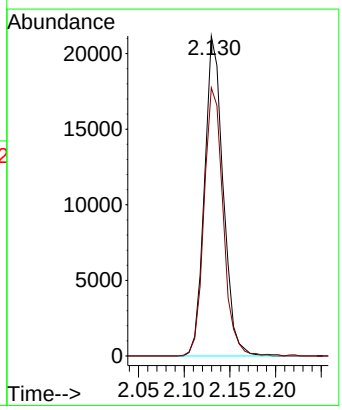
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

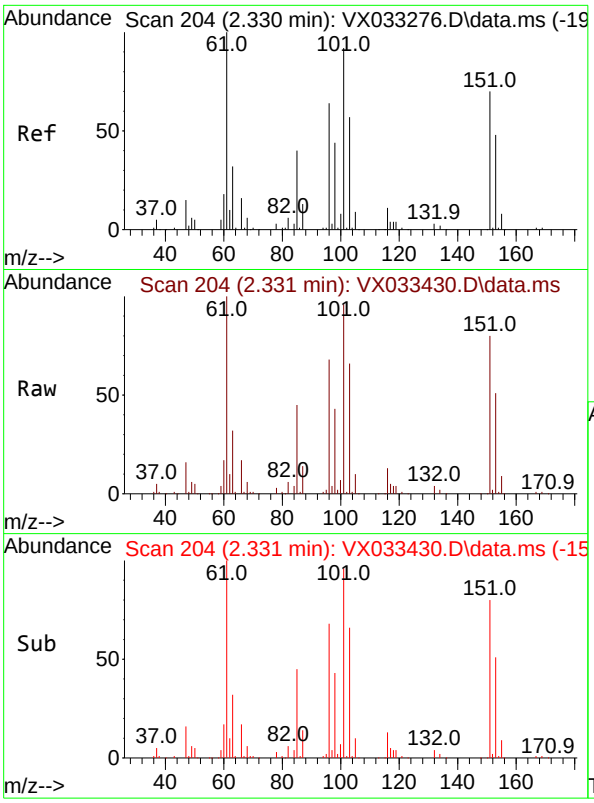


#8
Diethyl Ether
Concen: 34.367 ug/l
RT: 2.130 min Scan# 171
Delta R.T. -0.006 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion: 74 Resp: 29931

Ion	Ratio	Lower	Upper
74	100		
45	86.0	46.6	139.7





#9
1,1,2-Trichlorotrifluoroethane
Concen: 51.935 ug/l
RT: 2.331 min Scan# 2
Delta R.T. 0.000 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

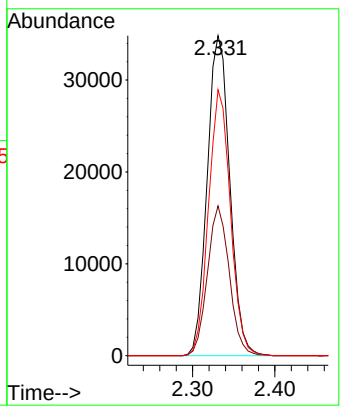
Tgt Ion:101 Resp: 6642

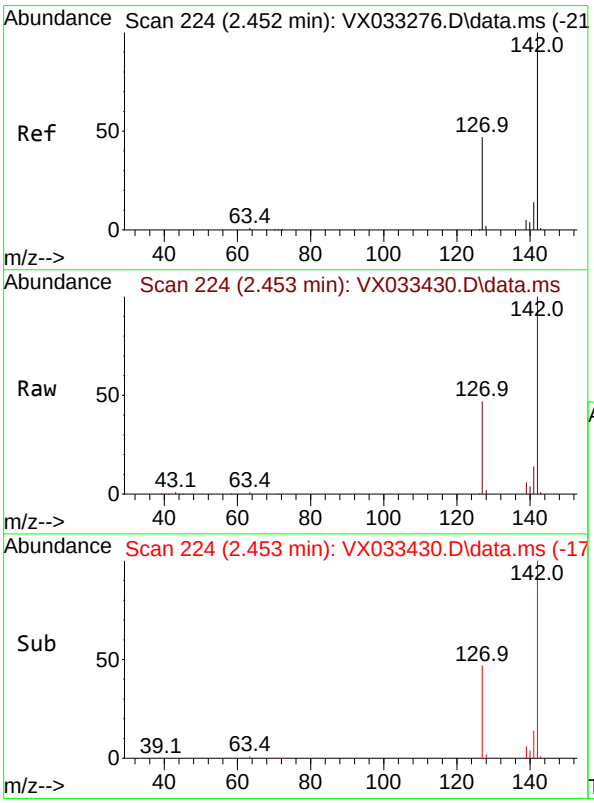
Ion	Ratio	Lower	Upper
101	100		
85	45.3	37.0	55.4
151	80.5	64.4	96.6

Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

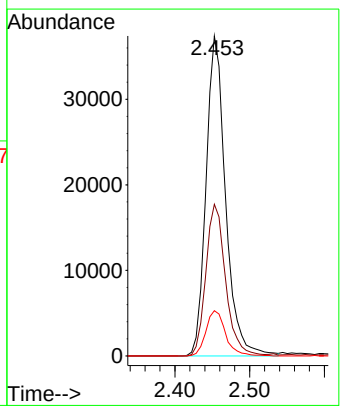


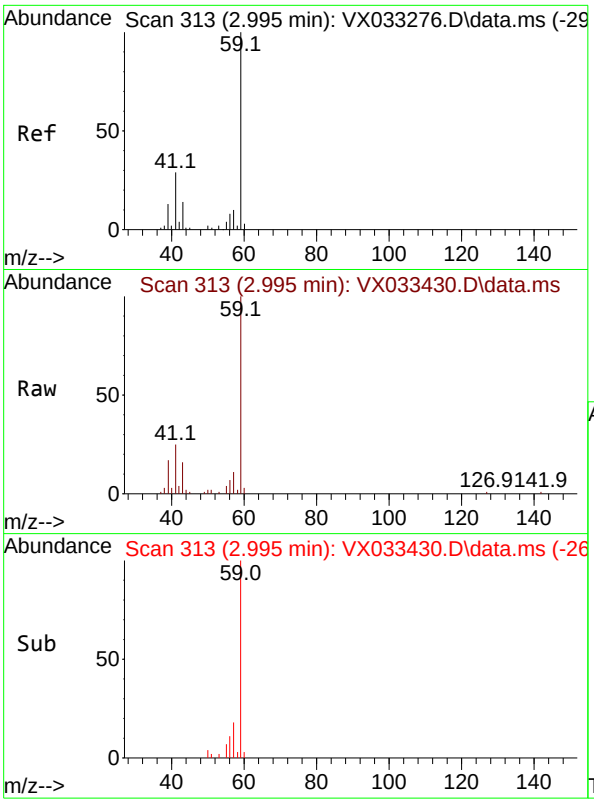


#10
Methyl Iodide
Concen: 48.441 ug/l
RT: 2.453 min Scan# 224
Delta R.T. 0.000 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion:142 Resp: 67859

Ion	Ratio	Lower	Upper
142	100		
127	47.8	38.6	57.8
141	14.3	11.4	17.2





#11
Tert butyl alcohol
Concen: 198.723 ug/l m
RT: 2.995 min Scan# 3
Delta R.T. 0.000 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

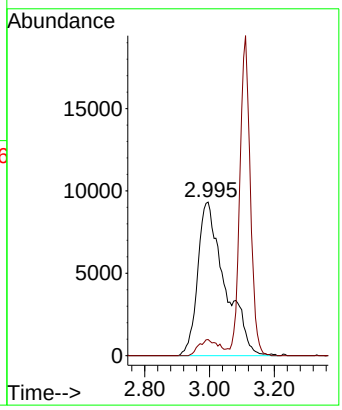
Tgt Ion: 59 Resp: 5428

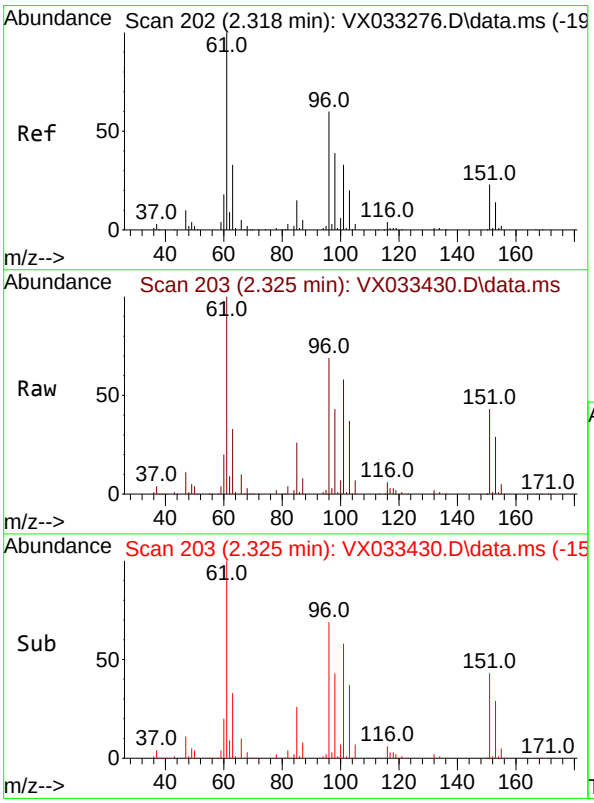
Ion	Ratio	Lower	Upper
59	100		
57	7.8	8.2	12.4

Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

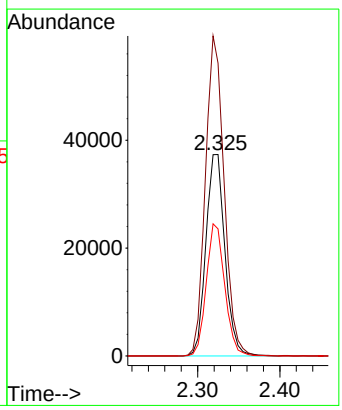


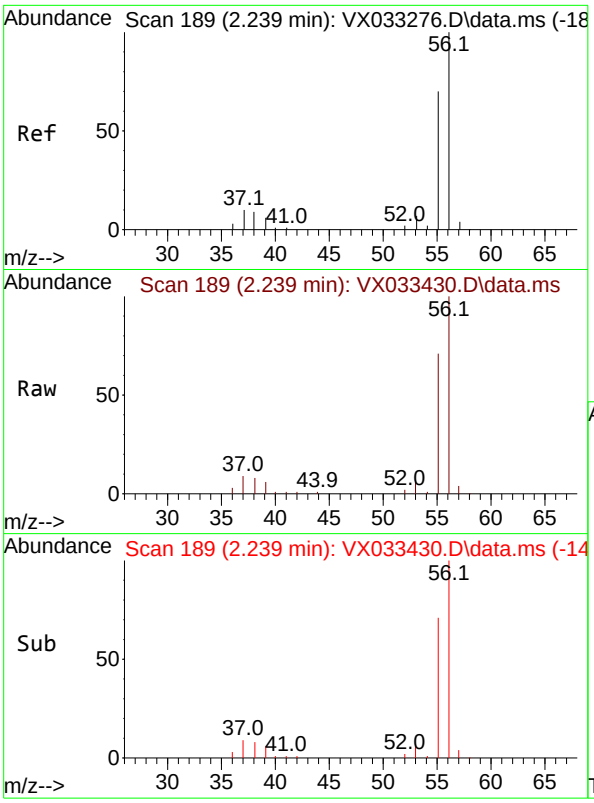


#12
1,1-Dichloroethene
Concen: 47.504 ug/l
RT: 2.325 min Scan# 203
Delta R.T. 0.006 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion: 96 Resp: 59977

Ion	Ratio	Lower	Upper
96	100		
61	145.4	125.1	187.7
98	63.0	50.6	76.0

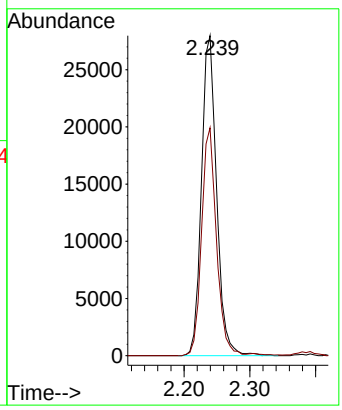




#13
Acrolein
Concen: 150.751 ug/l
RT: 2.239 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion: 56 Resp: 4466

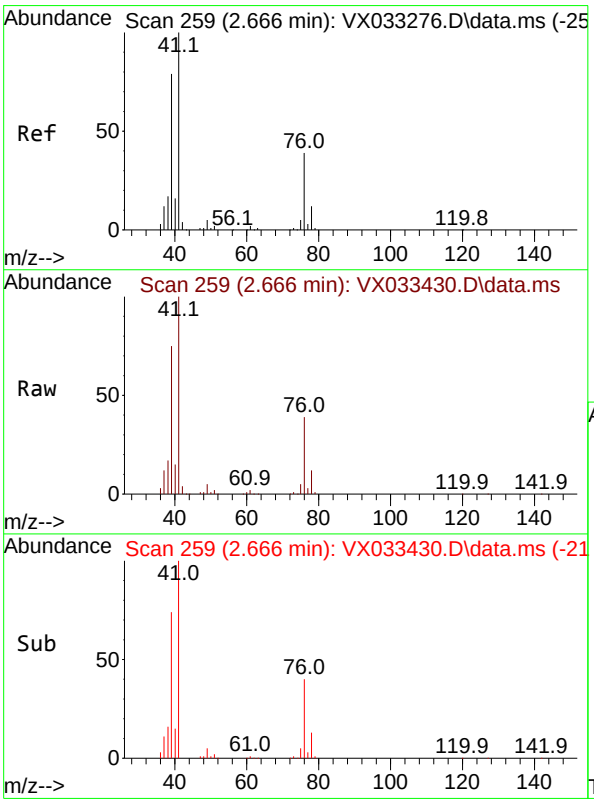
Ion	Ratio	Lower	Upper
56	100		
55	70.1	56.9	85.3



Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

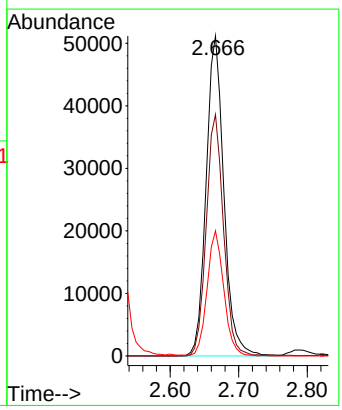
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

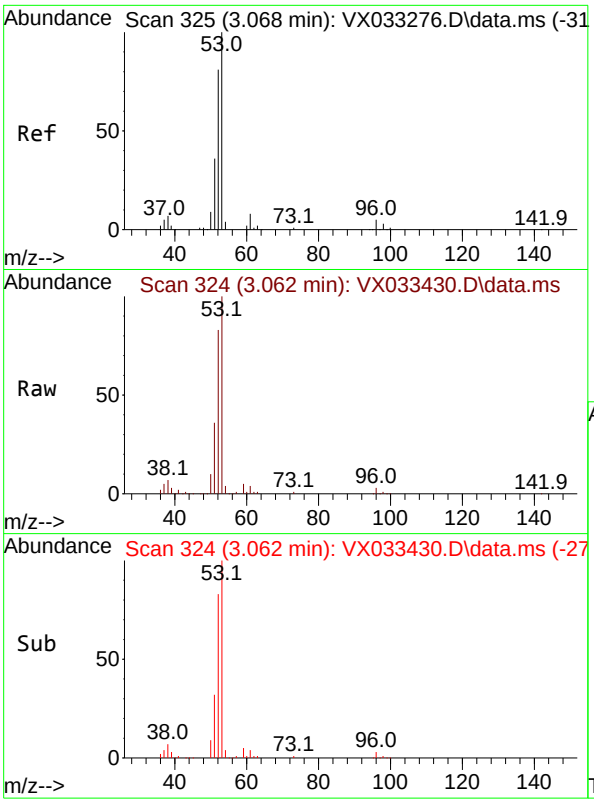


#14
Allyl chloride
Concen: 45.680 ug/l
RT: 2.666 min Scan# 259
Delta R.T. 0.000 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion: 41 Resp: 92103

Ion	Ratio	Lower	Upper
41	100		
39	73.4	61.4	92.2
76	36.9	29.2	43.8

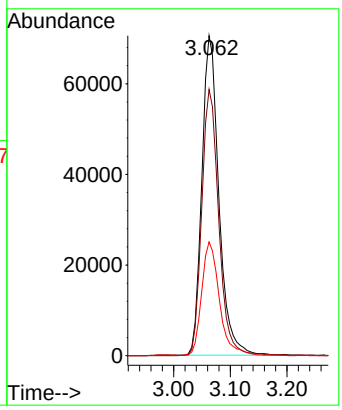




#15
Acrylonitrile
Concen: 217.703 ug/l
RT: 3.062 min Scan# 3
Delta R.T. -0.006 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion: 53 Resp: 14730

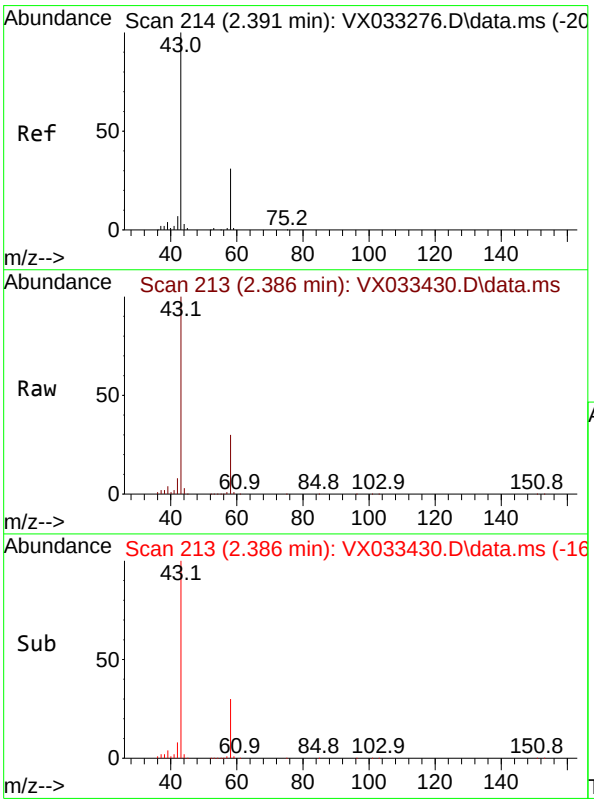
Ion	Ratio	Lower	Upper
53	100		
52	83.3	67.4	101.0
51	37.4	30.3	45.5



Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

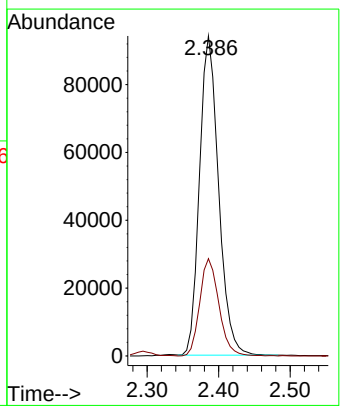
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

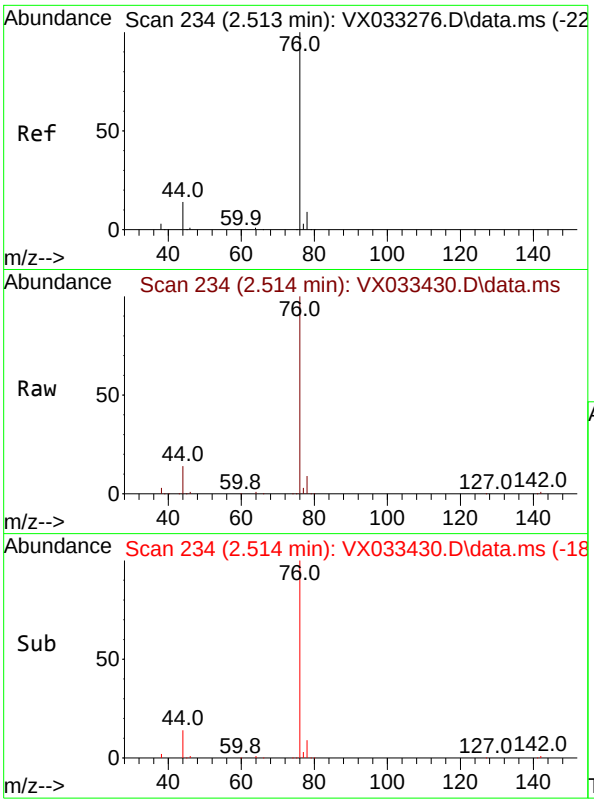


#16
Acetone
Concen: 263.734 ug/l
RT: 2.386 min Scan# 213
Delta R.T. -0.006 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion: 43 Resp: 174360

Ion	Ratio	Lower	Upper
43	100		
58	30.5	23.8	35.8

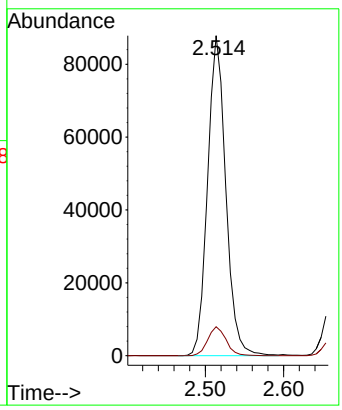




#17
Carbon Disulfide
Concen: 43.713 ug/l
RT: 2.514 min Scan# 2
Delta R.T. 0.000 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion: 76 Resp: 14164

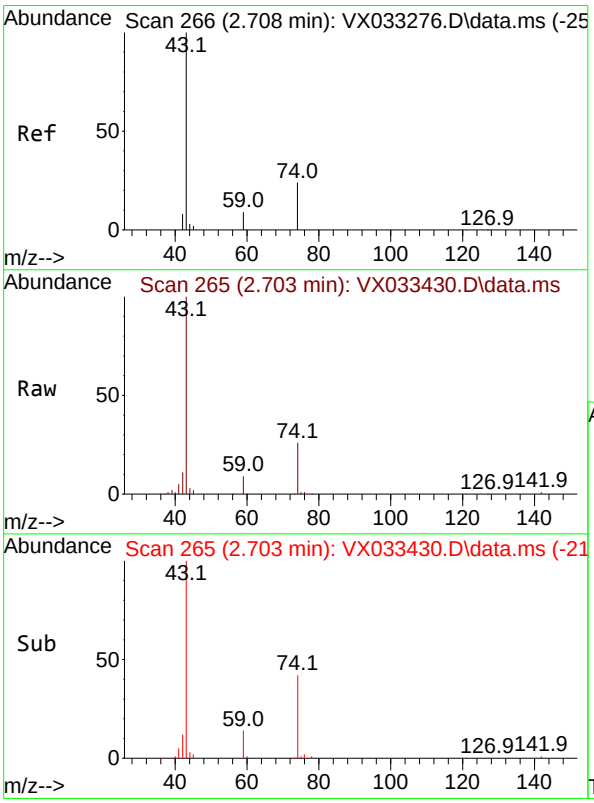
Ion	Ratio	Lower	Upper
76	100		
78	9.1	7.5	11.3



Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

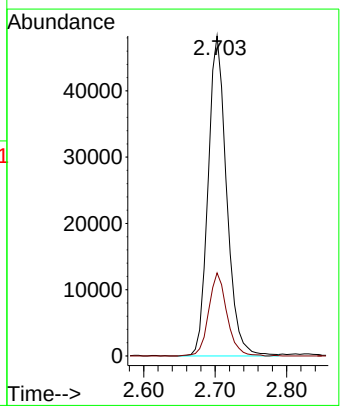
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

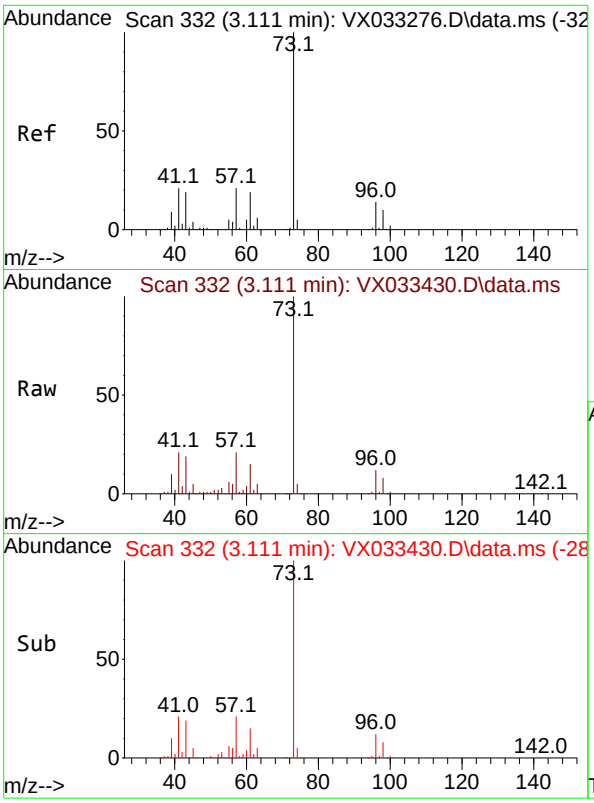


#18
Methyl Acetate
Concen: 45.331 ug/l
RT: 2.703 min Scan# 265
Delta R.T. -0.006 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion: 43 Resp: 86757

Ion	Ratio	Lower	Upper
43	100		
74	25.6	19.4	29.0

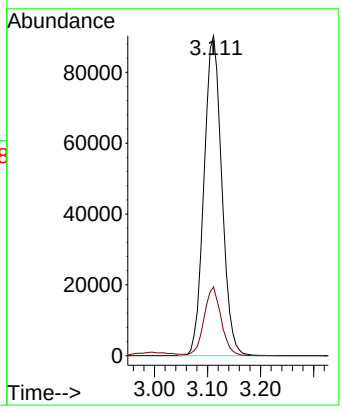




#19
Methyl tert-butyl Ether
Concen: 48.117 ug/l
RT: 3.111 min Scan# 3
Delta R.T. 0.000 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion: 73 Resp: 21043

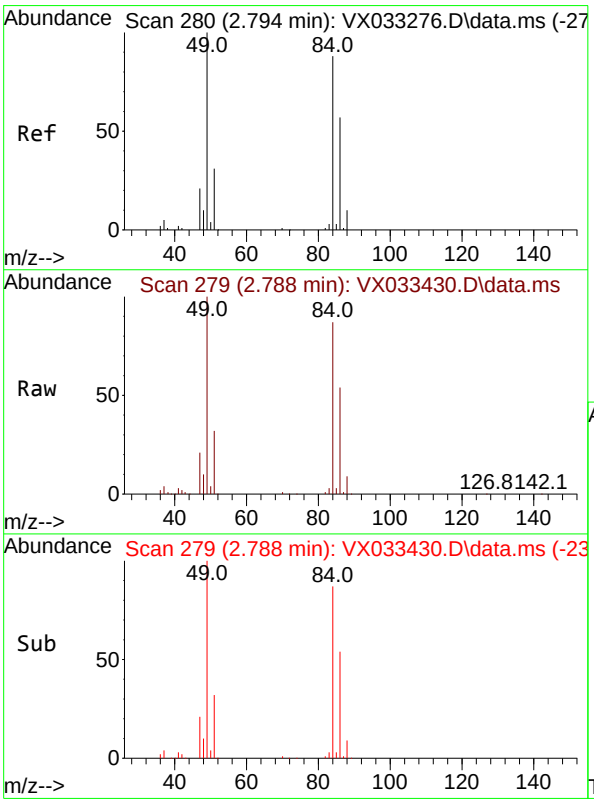
Ion	Ratio	Lower	Upper
73	100		
57	21.5	16.6	25.0



Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

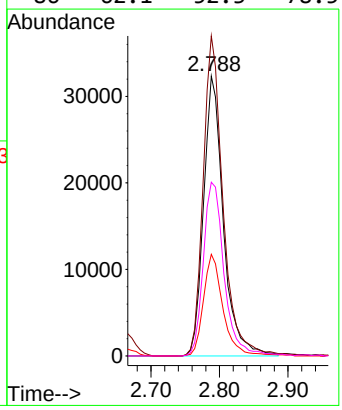
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

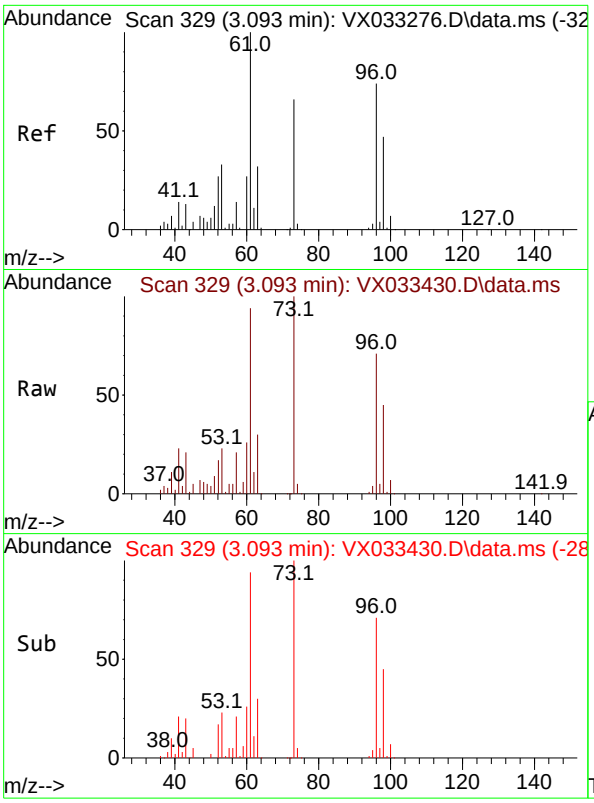


#20
Methylene Chloride
Concen: 44.186 ug/l
RT: 2.788 min Scan# 279
Delta R.T. -0.006 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion: 84 Resp: 65148

Ion	Ratio	Lower	Upper
84	100		
49	114.4	101.0	151.6
51	36.3	31.1	46.7
86	62.1	52.3	78.5

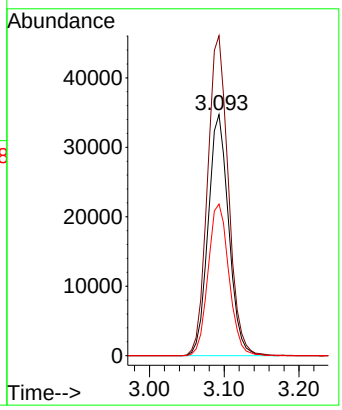




#21
trans-1,2-Dichloroethene
Concen: 47.906 ug/l
RT: 3.093 min Scan# 3
Delta R.T. 0.000 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion: 96 Resp: 6616

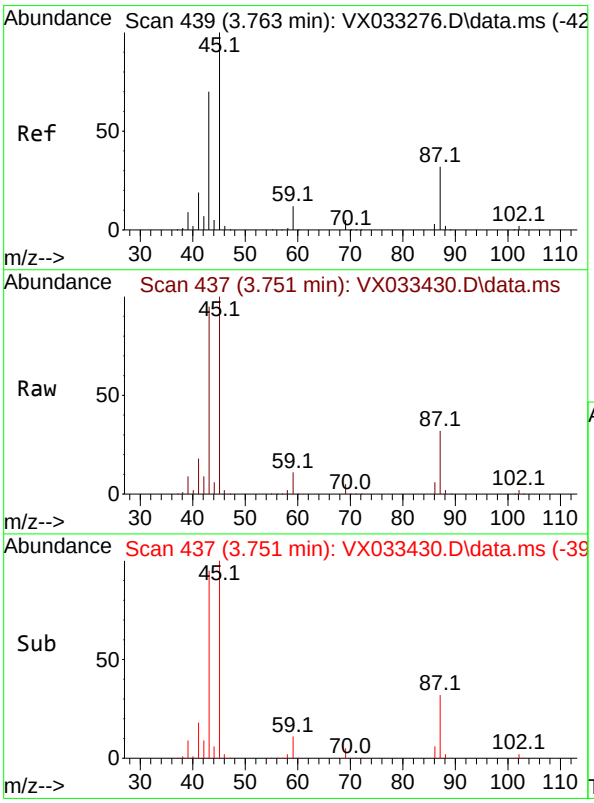
Ion	Ratio	Lower	Upper
96	100		
61	132.7	106.6	160.0
98	62.9	51.0	76.6



Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

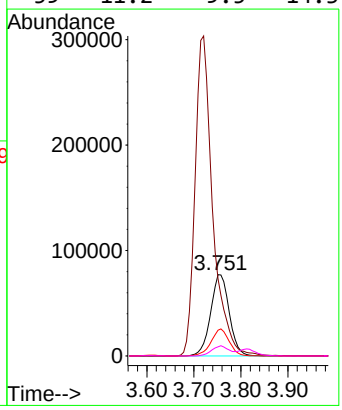
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

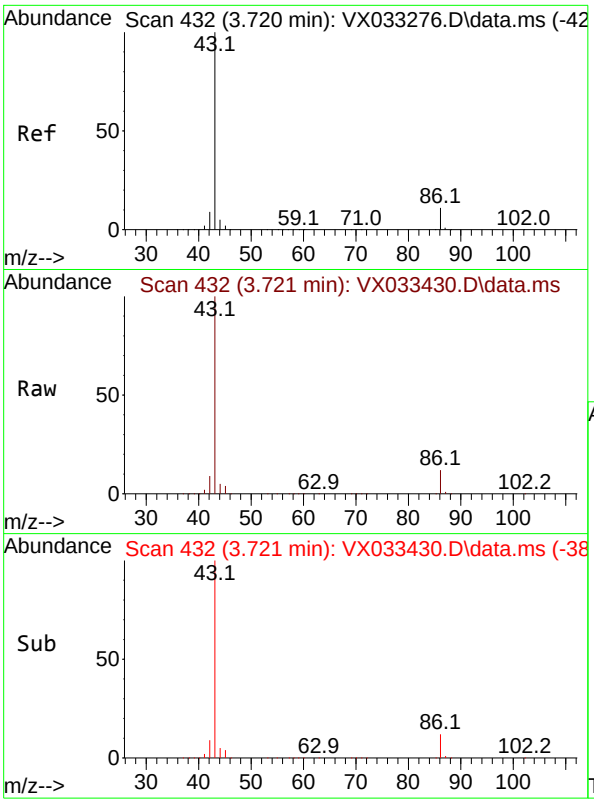


#22
Diisopropyl ether
Concen: 49.007 ug/l
RT: 3.751 min Scan# 437
Delta R.T. -0.012 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion: 45 Resp: 211702

Ion	Ratio	Lower	Upper
45	100		
43	94.6	56.4	84.6#
87	31.8	24.4	36.6
59	11.2	9.5	14.3





#23
Vinyl Acetate
Concen: 237.436 ug/l
RT: 3.721 min Scan# 4
Delta R.T. 0.000 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

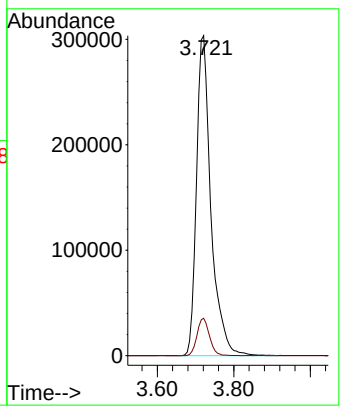
Tgt Ion: 43 Resp: 79610

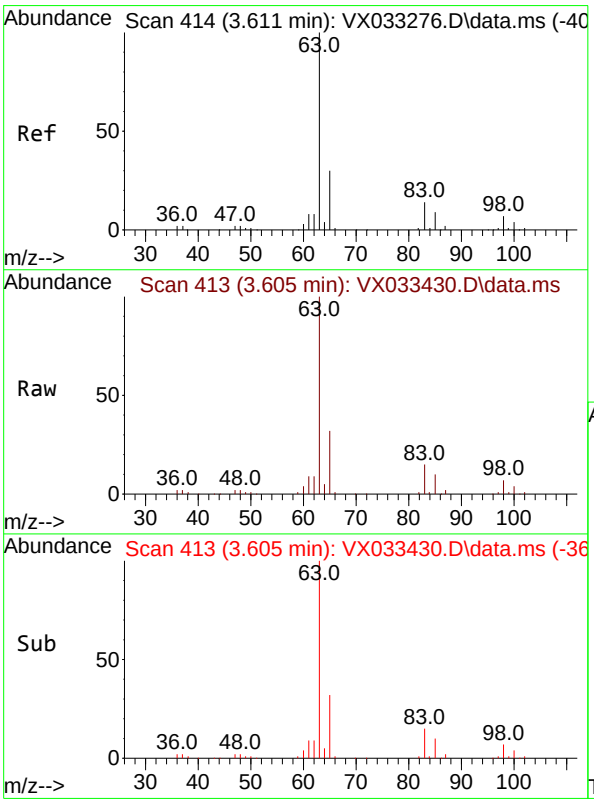
Ion	Ratio	Lower	Upper
43	100		
86	11.7	8.6	12.8

Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

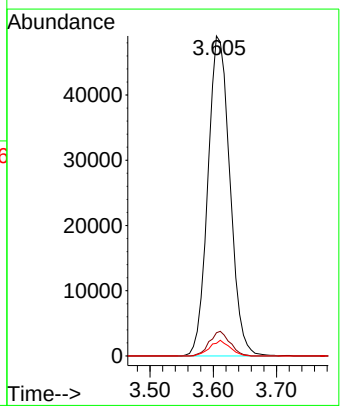


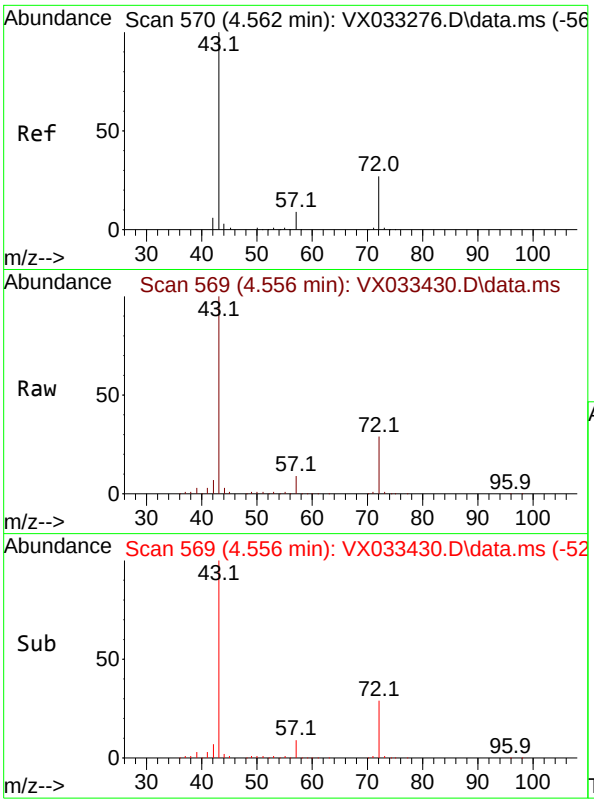


#24
1,1-Dichloroethane
Concen: 46.634 ug/l
RT: 3.605 min Scan# 413
Delta R.T. -0.006 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion: 63 Resp: 118365

Ion	Ratio	Lower	Upper
63	100		
98	7.3	3.5	10.4
100	4.0	2.3	6.8





#25
2-Butanone
Concen: 235.335 ug/l
RT: 4.556 min Scan# 5
Delta R.T. -0.006 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

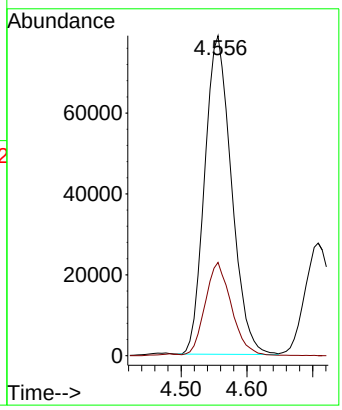
Tgt Ion: 43 Resp: 22333

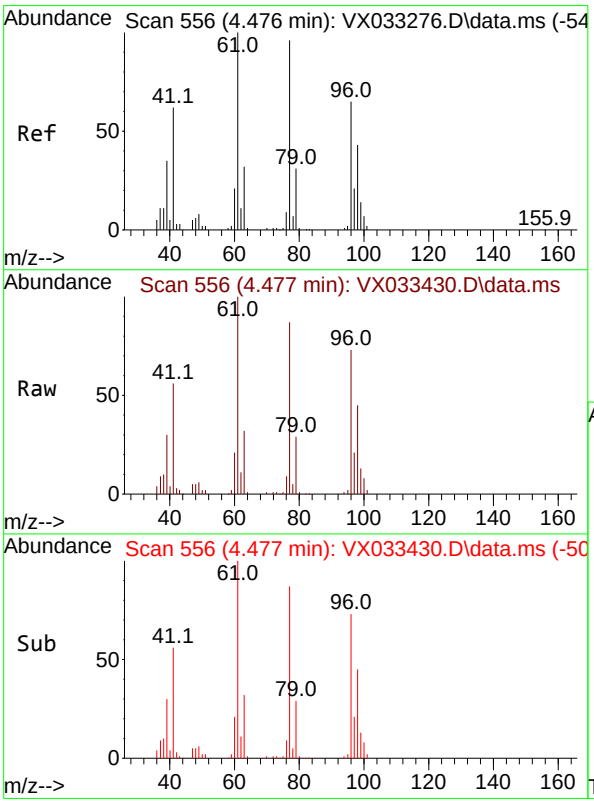
Ion	Ratio	Lower	Upper
43	100		
72	29.2	22.2	33.2

Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

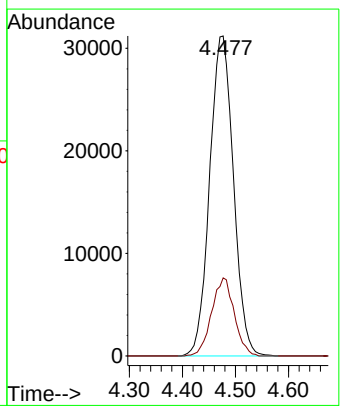


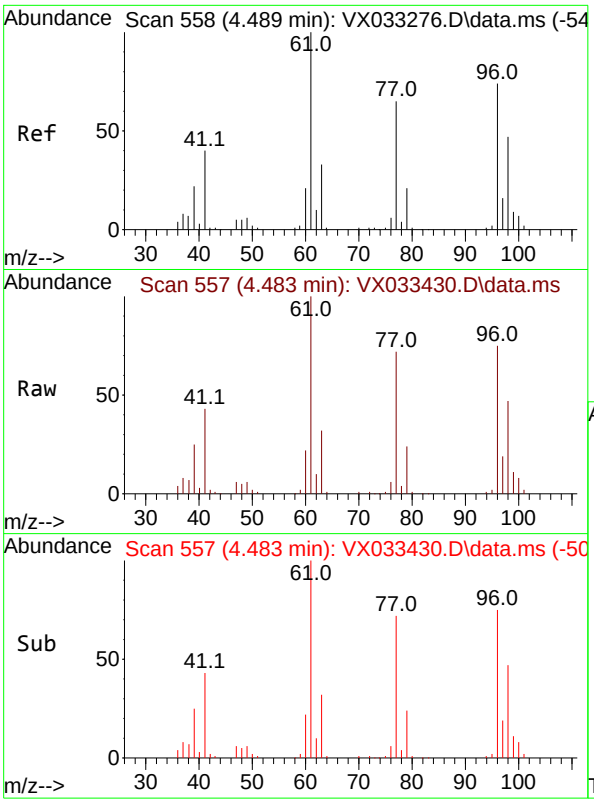


#26
2,2-Dichloropropane
Concen: 52.038 ug/l
RT: 4.477 min Scan# 556
Delta R.T. 0.000 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion: 77 Resp: 97132

Ion	Ratio	Lower	Upper
77	100		
97	23.2	11.4	34.1

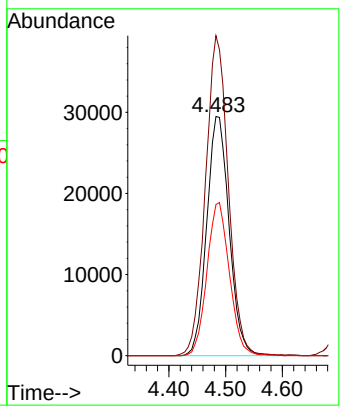




#27
cis-1,2-Dichloroethene
Concen: 49.154 ug/l
RT: 4.483 min Scan# 5
Delta R.T. -0.006 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion: 96 Resp: 8113

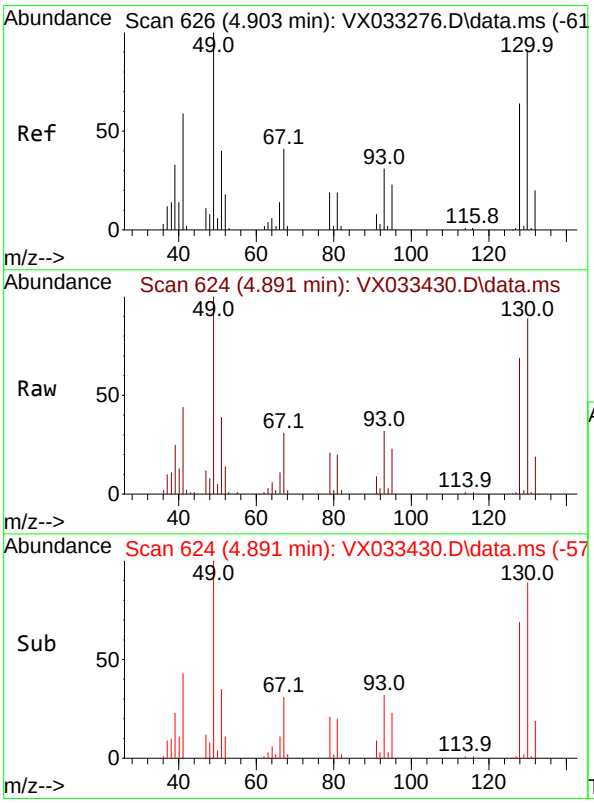
Ion	Ratio	Lower	Upper
96	100		
61	136.4	0.0	286.0
98	64.1	0.0	129.6



Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

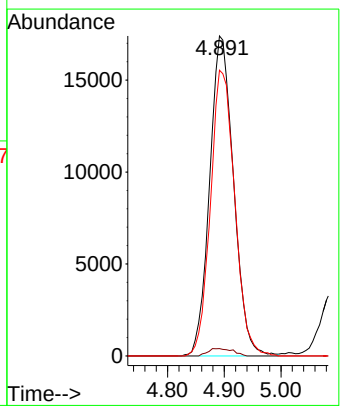
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

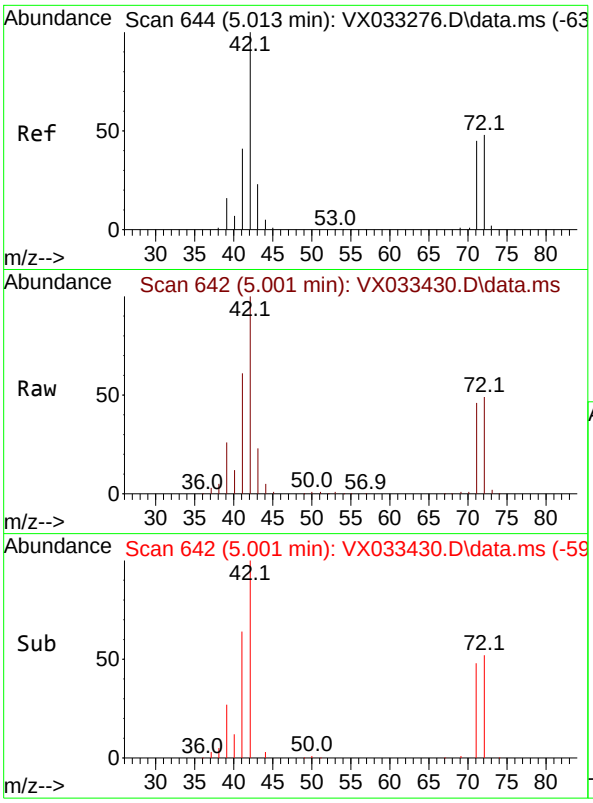


#28
Bromochloromethane
Concen: 48.028 ug/l
RT: 4.891 min Scan# 624
Delta R.T. -0.012 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion: 49 Resp: 51029

Ion	Ratio	Lower	Upper
49	100		
129	2.4	0.0	3.8
130	90.5	67.5	101.3

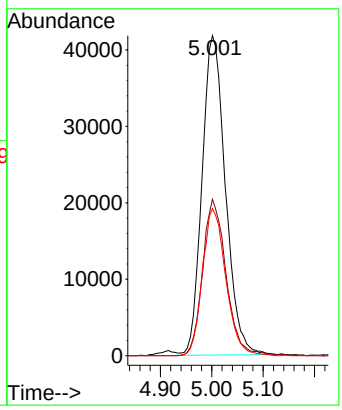




#29
Tetrahydrofuran
Concen: 215.085 ug/l
RT: 5.001 min Scan# 64
Delta R.T. -0.012 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion: 42 Resp: 13224

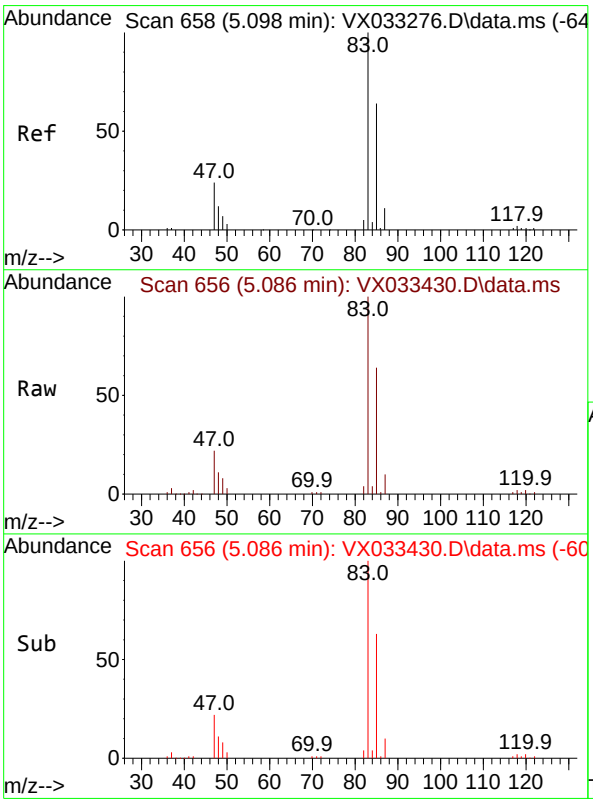
Ion	Ratio	Lower	Upper
42	100		
72	49.2	37.6	56.4
71	46.0	34.7	52.1



Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

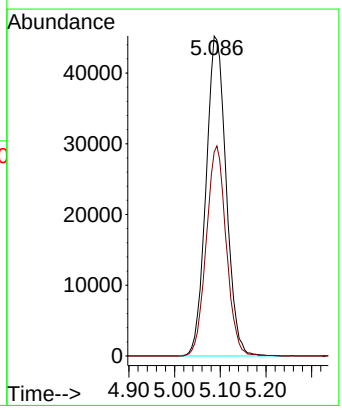
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

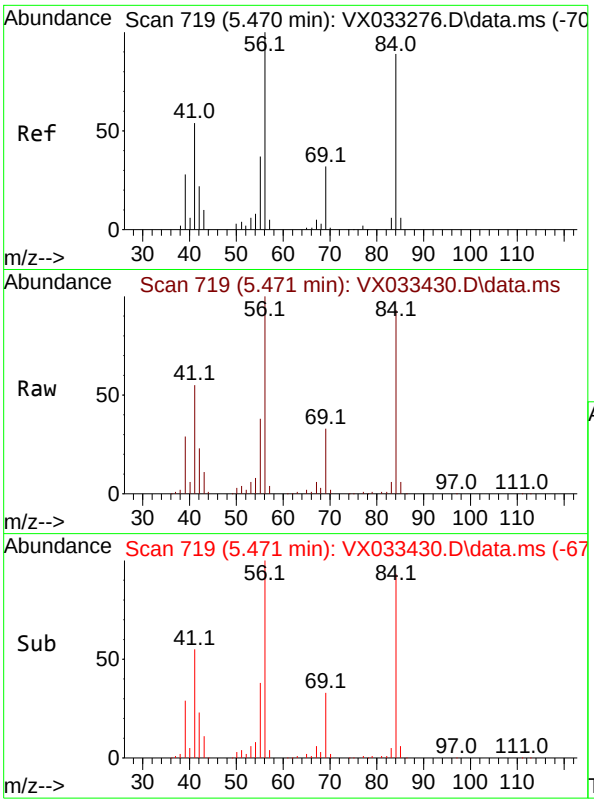


#30
Chloroform
Concen: 49.069 ug/l
RT: 5.086 min Scan# 656
Delta R.T. -0.012 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion: 83 Resp: 138266

Ion	Ratio	Lower	Upper
83	100		
85	63.7	51.1	76.7

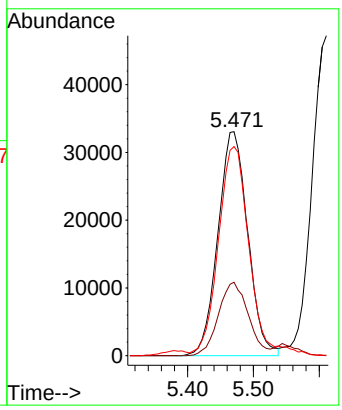




#31
Cyclohexane
Concen: 49.051 ug/l
RT: 5.471 min Scan# 7
Delta R.T. 0.000 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion: 56 Resp: 10415

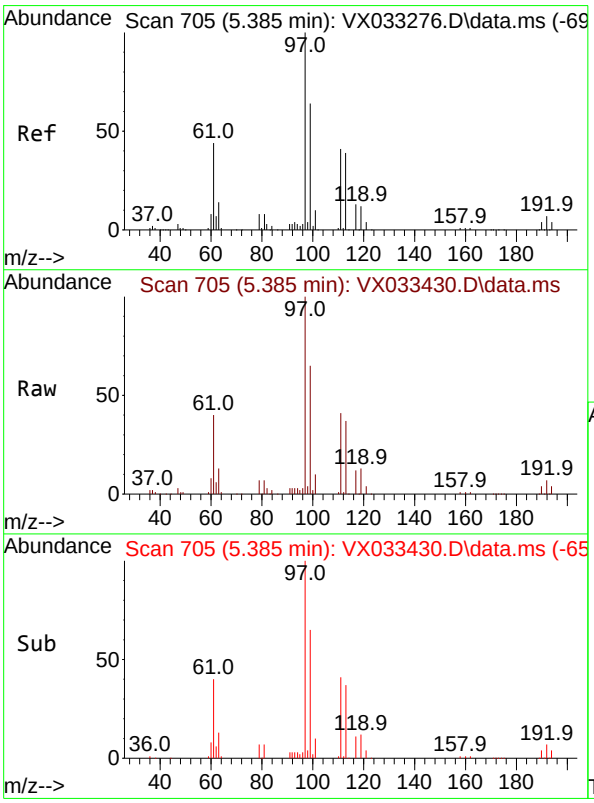
Ion	Ratio	Lower	Upper
56	100		
69	32.8	24.1	36.1
84	91.3	66.9	100.3



Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

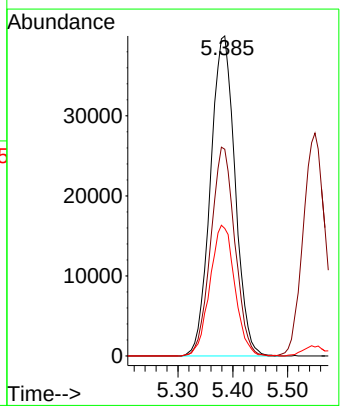
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

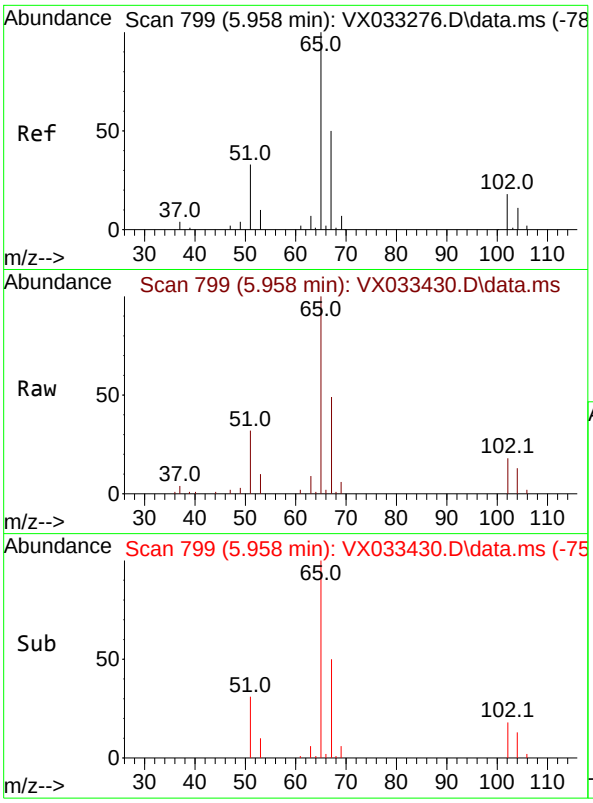


#32
1,1,1-Trichloroethane
Concen: 51.371 ug/l
RT: 5.385 min Scan# 705
Delta R.T. 0.000 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion: 97 Resp: 124544

Ion	Ratio	Lower	Upper
97	100		
99	64.0	51.4	77.0
61	41.4	35.2	52.8

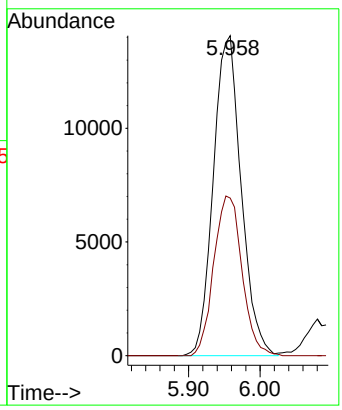




#33
1,2-Dichloroethane-d4
Concen: 42.623 ug/l
RT: 5.958 min Scan# 7
Delta R.T. 0.000 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion: 65 Resp: 3808

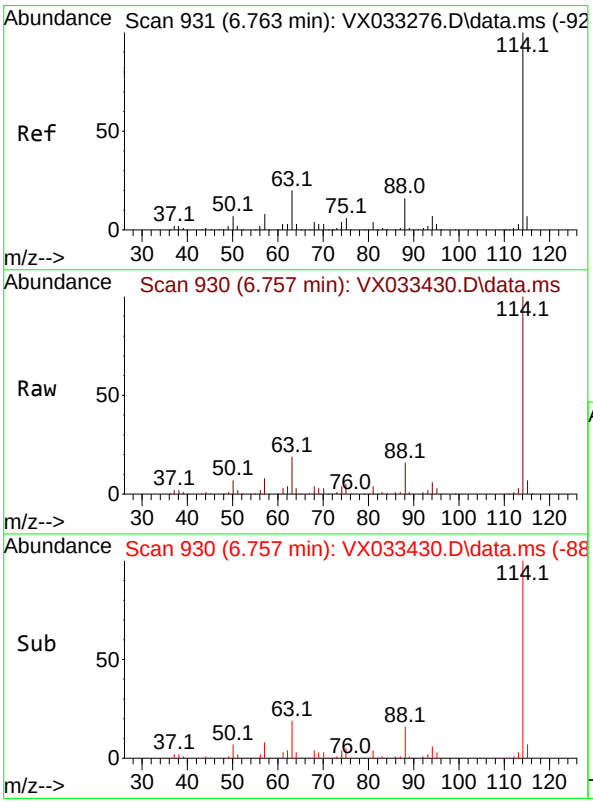
Ion	Ratio	Lower	Upper
65	100		
67	50.5	0.0	101.8



Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

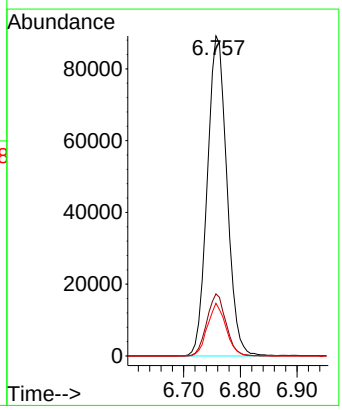
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

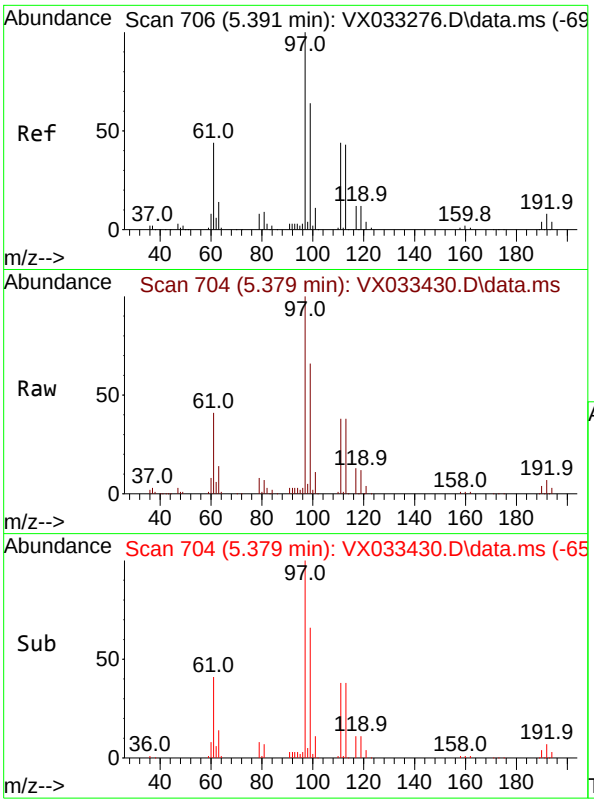


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 6.757 min Scan# 930
Delta R.T. -0.006 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion:114 Resp: 214327

Ion	Ratio	Lower	Upper
114	100		
63	19.4	0.0	41.6
88	16.5	0.0	33.4

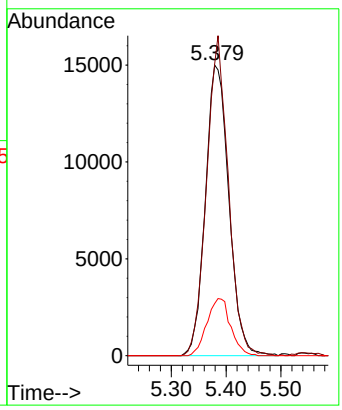




#35
Dibromofluoromethane
Concen: 46.257 ug/l
RT: 5.379 min Scan# 7
Delta R.T. -0.012 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion:113 Resp: 4459

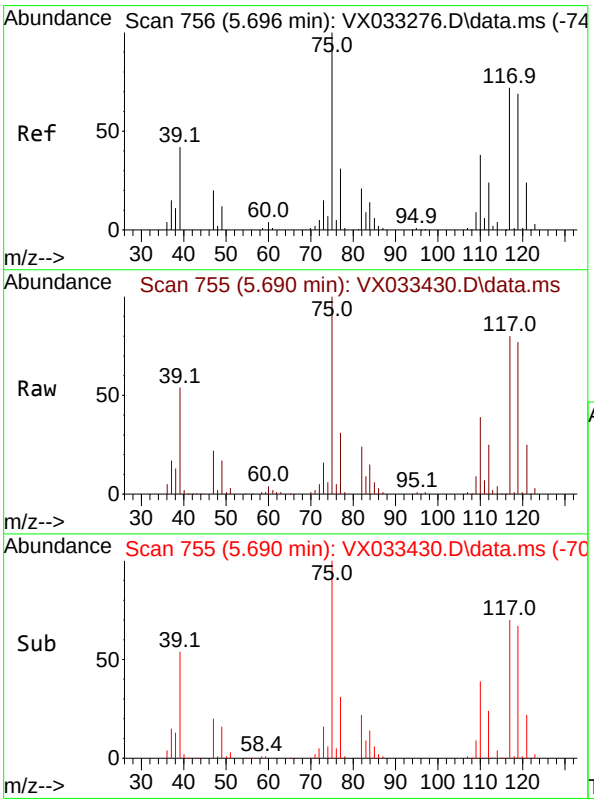
Ion	Ratio	Lower	Upper
113	100		
111	102.1	82.4	123.6
192	19.8	15.4	23.2



Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

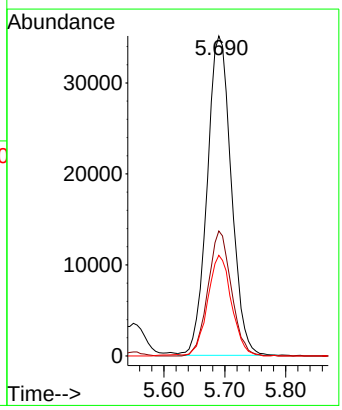
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

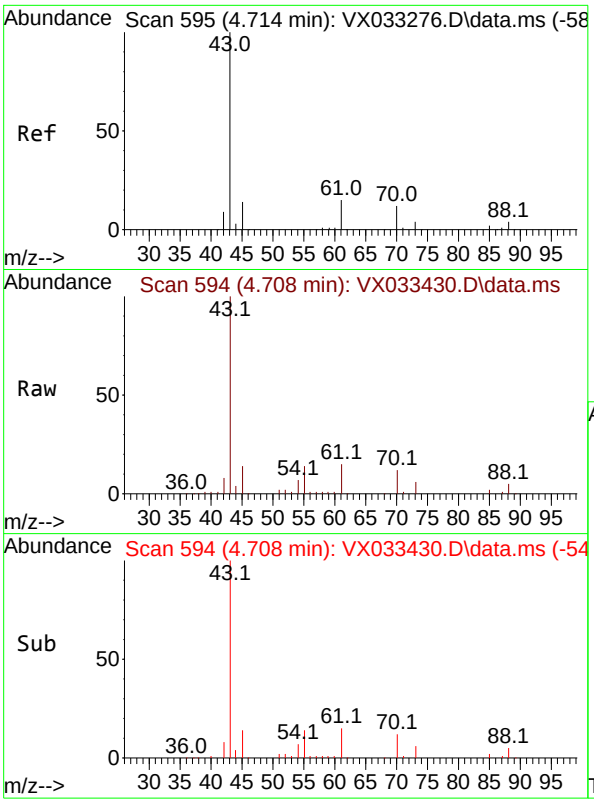


#36
1,1-Dichloropropene
Concen: 51.308 ug/l
RT: 5.690 min Scan# 755
Delta R.T. -0.006 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion: 75 Resp: 96432

Ion	Ratio	Lower	Upper
75	100		
110	38.0	18.4	55.2
77	31.2	24.5	36.7

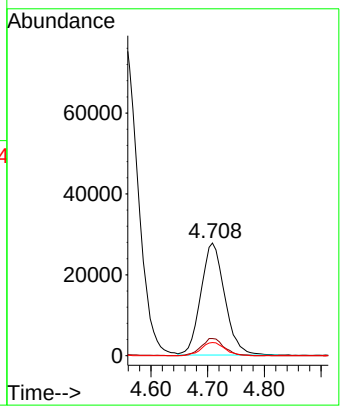




#37
Ethyl Acetate
Concen: 45.696 ug/l
RT: 4.708 min Scan# 5
Delta R.T. -0.006 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion: 43 Resp: 8118

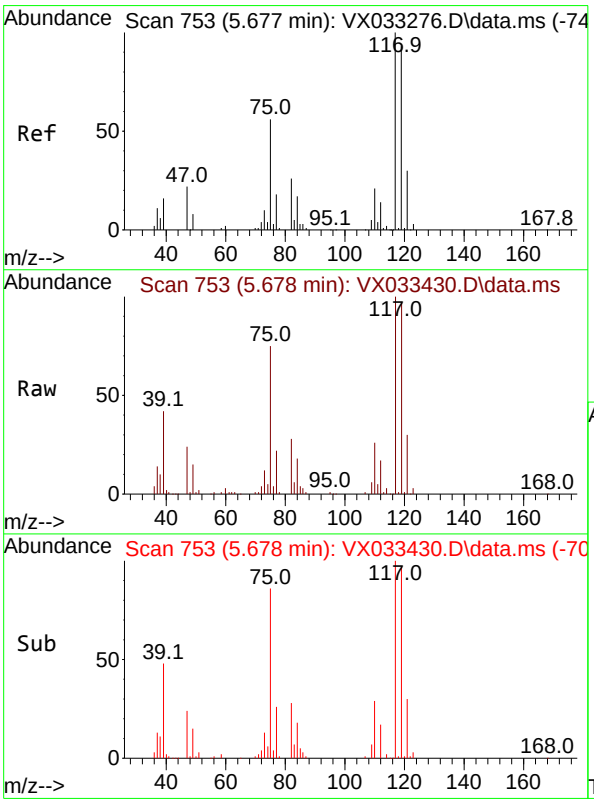
Ion	Ratio	Lower	Upper
43	100		
61	14.8	11.5	17.3
70	11.5	9.1	13.7



Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

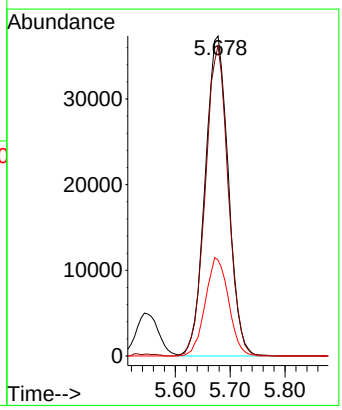
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

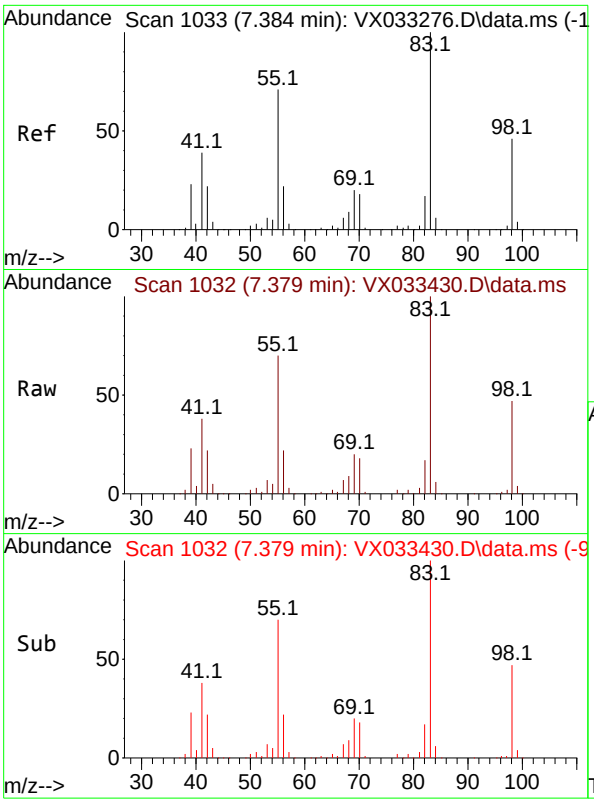


#38
Carbon Tetrachloride
Concen: 52.107 ug/l
RT: 5.678 min Scan# 753
Delta R.T. 0.000 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion:117 Resp: 109727

Ion	Ratio	Lower	Upper
117	100		
119	97.0	77.2	115.8
121	30.0	25.8	38.6

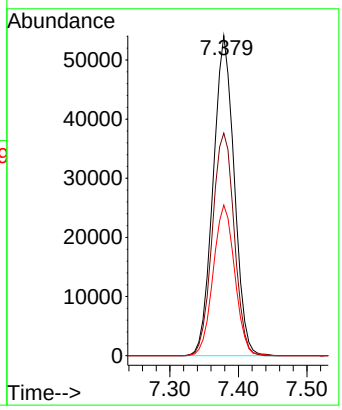




#39
Methylcyclohexane
Concen: 54.993 ug/l
RT: 7.379 min Scan# 1
Delta R.T. -0.006 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion: 83 Resp: 11568

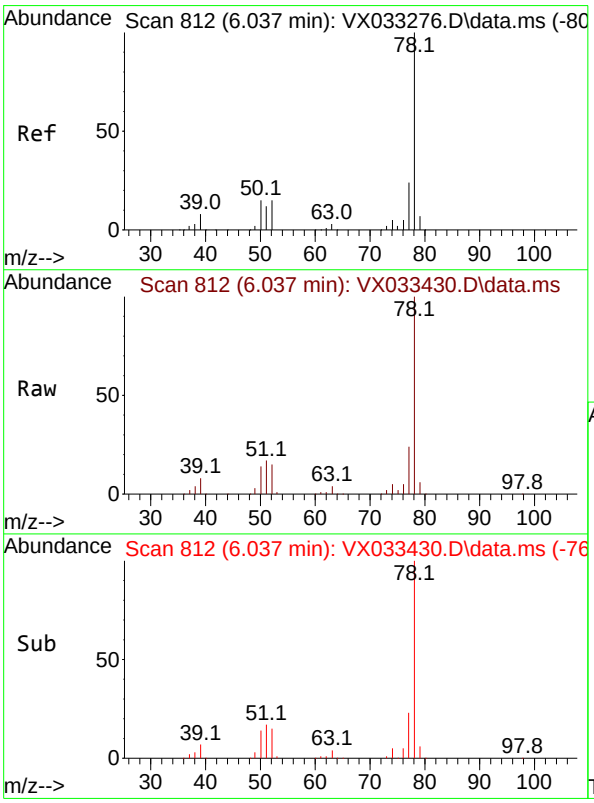
Ion	Ratio	Lower	Upper
83	100		
55	69.5	58.4	87.6
98	47.0	37.2	55.8



Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

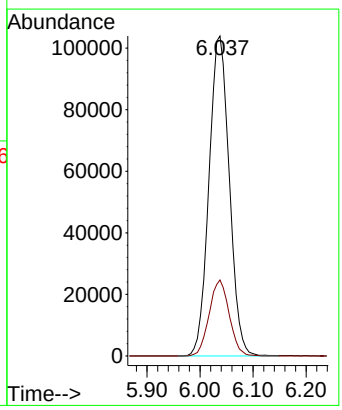
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

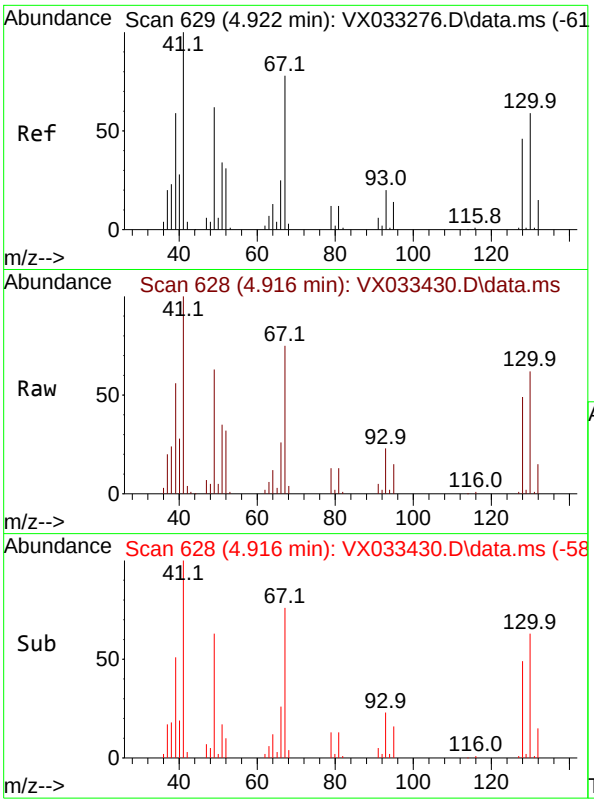


#40
Benzene
Concen: 50.524 ug/l
RT: 6.037 min Scan# 812
Delta R.T. 0.000 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion: 78 Resp: 276871

Ion	Ratio	Lower	Upper
78	100		
77	23.7	19.0	28.4

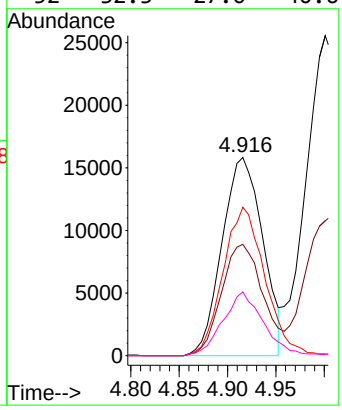




#41
Methacrylonitrile
Concen: 47.333 ug/l
RT: 4.916 min Scan# 6
Delta R.T. -0.006 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion: 41 Resp: 4633

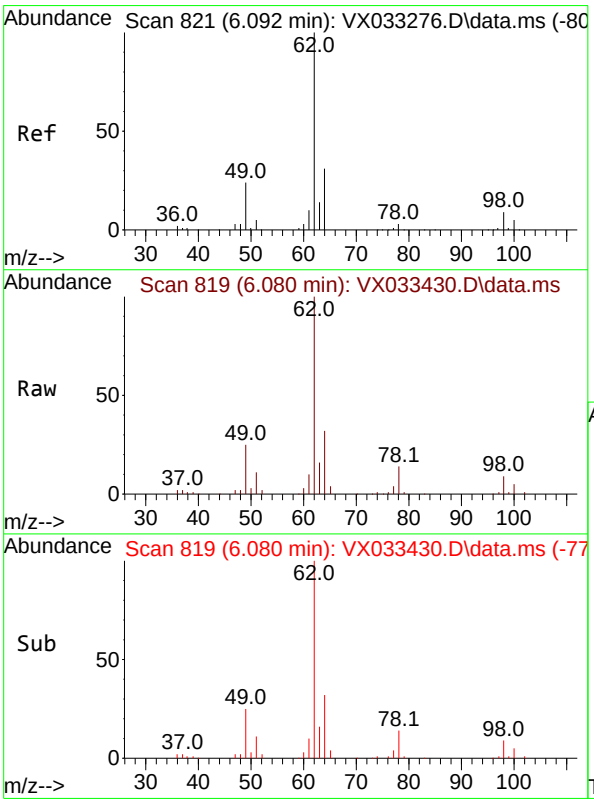
Ion	Ratio	Lower	Upper
41	100		
39	57.9	47.5	71.3
67	77.1	60.5	90.7
52	32.3	27.0	40.6



Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

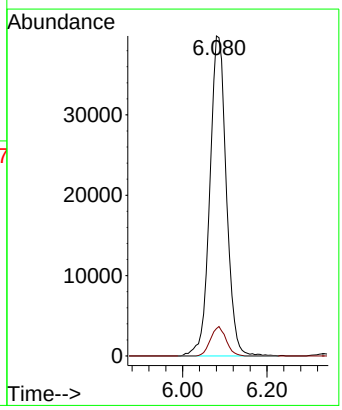
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

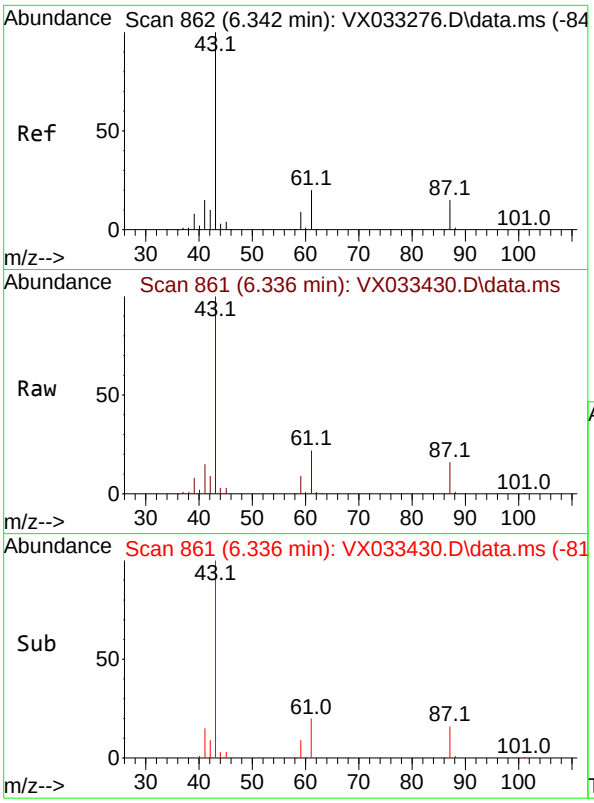


#42
1,2-Dichloroethane
Concen: 49.784 ug/l
RT: 6.080 min Scan# 819
Delta R.T. -0.012 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion: 62 Resp: 108334

Ion	Ratio	Lower	Upper
62	100		
98	8.7	0.0	16.0

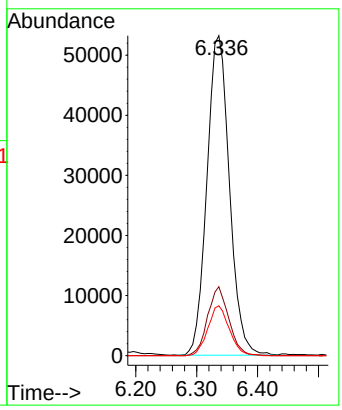




#43
Isopropyl Acetate
Concen: 47.844 ug/l
RT: 6.336 min Scan# 8
Delta R.T. -0.006 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion: 43 Resp: 13676

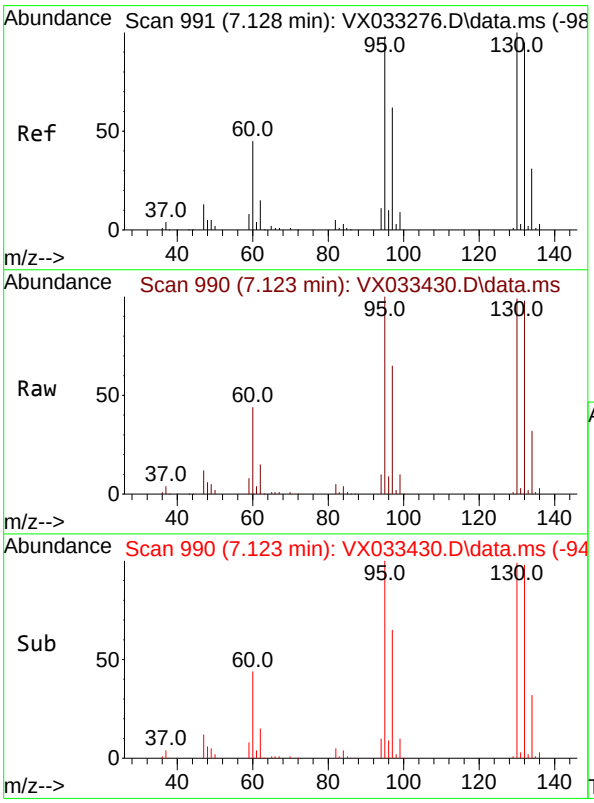
Ion	Ratio	Lower	Upper
43	100		
61	20.3	15.4	23.0
87	14.9	10.8	16.2



Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

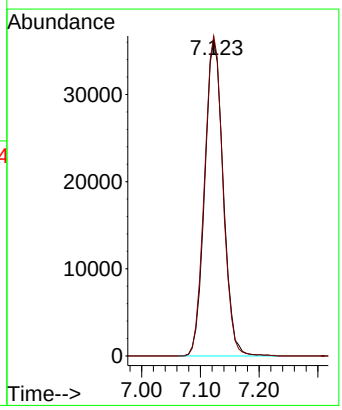
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

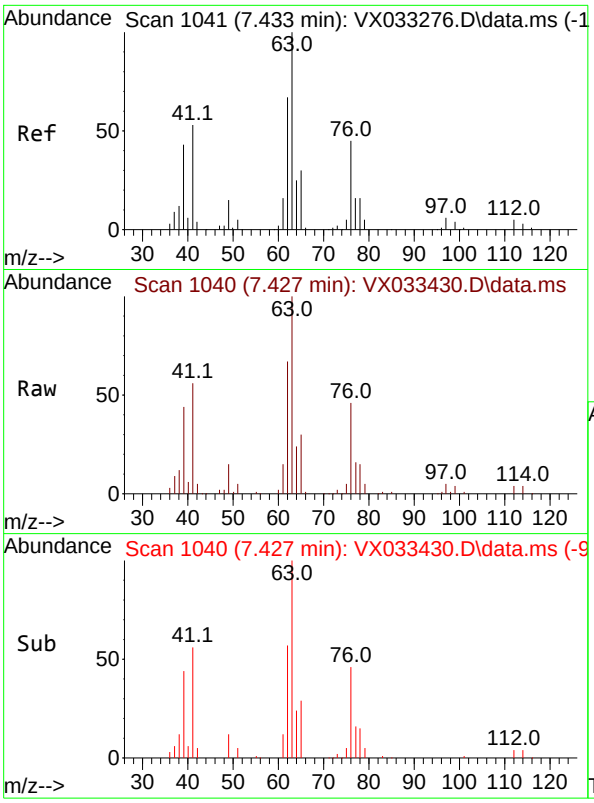


#44
Trichloroethene
Concen: 52.390 ug/l
RT: 7.123 min Scan# 990
Delta R.T. -0.006 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion:130 Resp: 79155

Ion	Ratio	Lower	Upper
130	100		
95	101.4	0.0	195.2

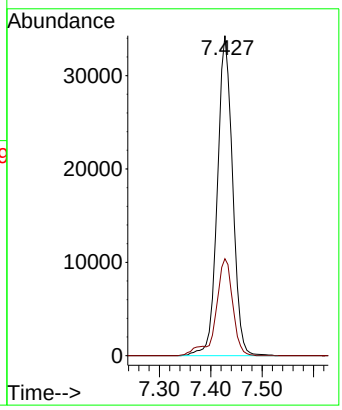




#45
1,2-Dichloropropane
Concen: 50.412 ug/l
RT: 7.427 min Scan# 1
Delta R.T. -0.006 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion: 63 Resp: 7065

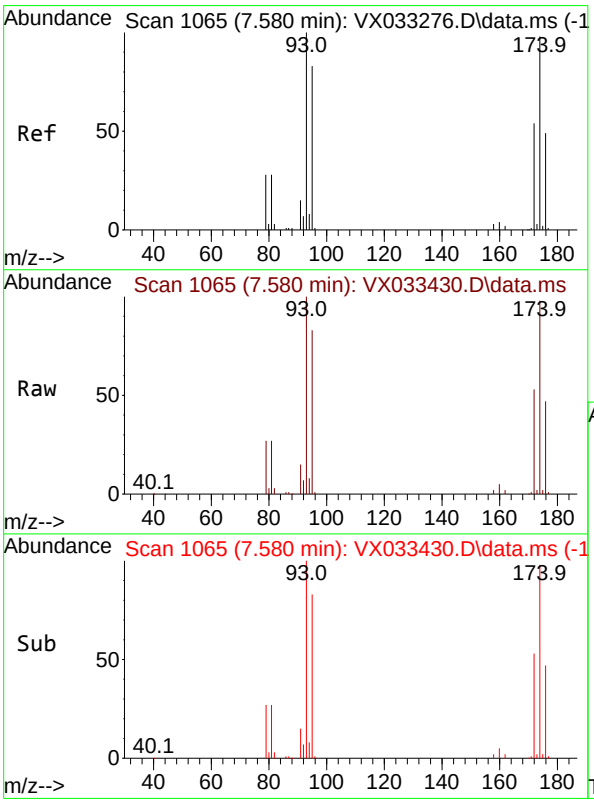
Ion	Ratio	Lower	Upper
63	100		
65	30.3	24.6	36.8



Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

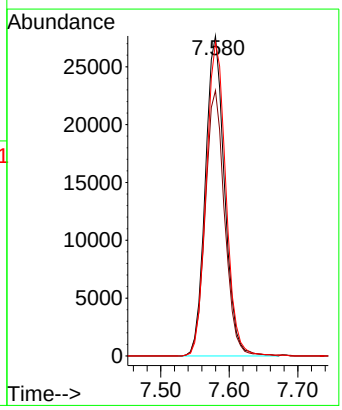
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

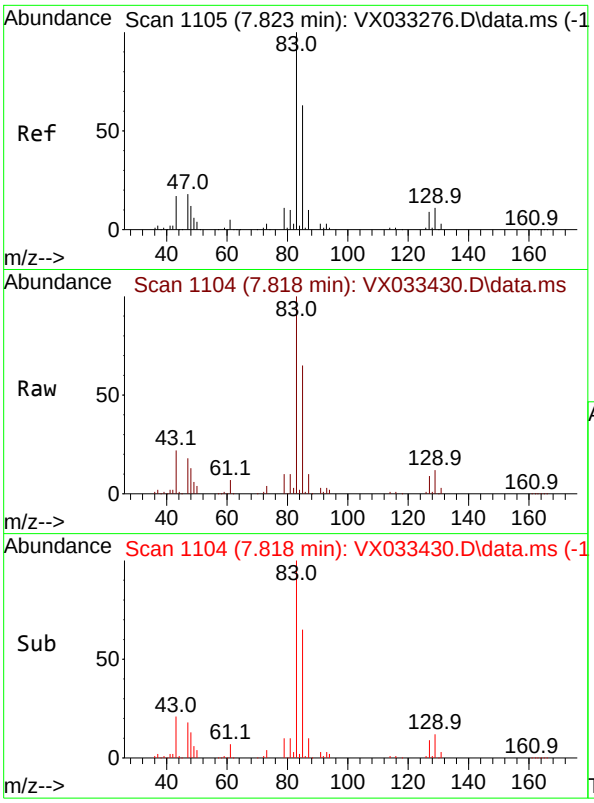


#46
Dibromomethane
Concen: 50.361 ug/l
RT: 7.580 min Scan# 1065
Delta R.T. 0.000 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion: 93 Resp: 53766

Ion	Ratio	Lower	Upper
93	100		
95	84.0	65.8	98.8
174	100.3	79.8	119.6

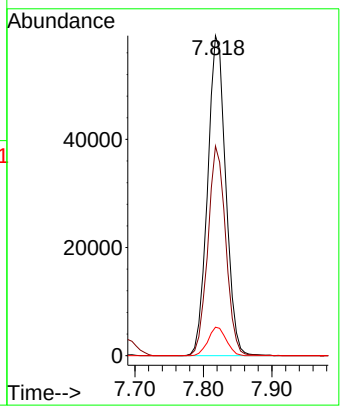




#47
Bromodichloromethane
Concen: 52.352 ug/l
RT: 7.818 min Scan# 1
Delta R.T. -0.006 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion: 83 Resp: 10895

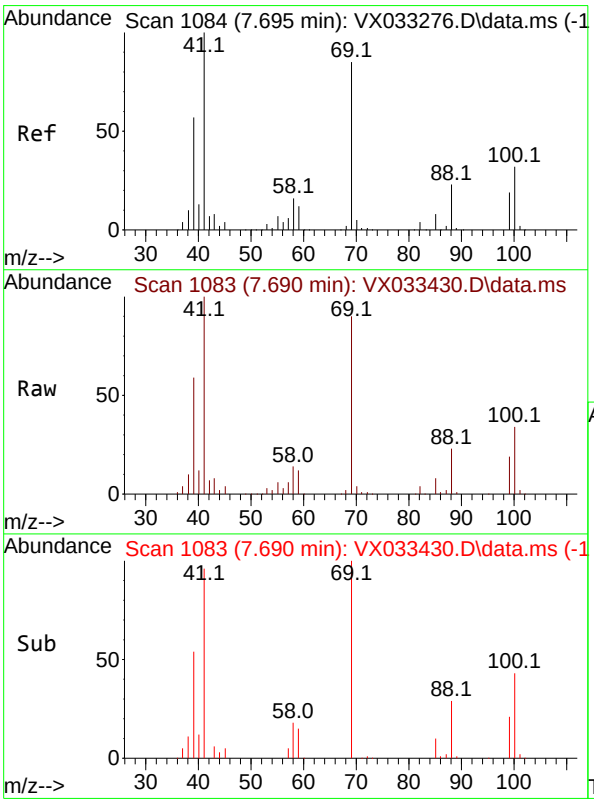
Ion	Ratio	Lower	Upper
83	100		
85	65.5	52.2	78.4
127	8.9	7.4	11.2



Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

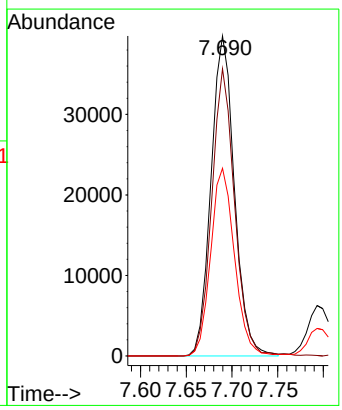
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

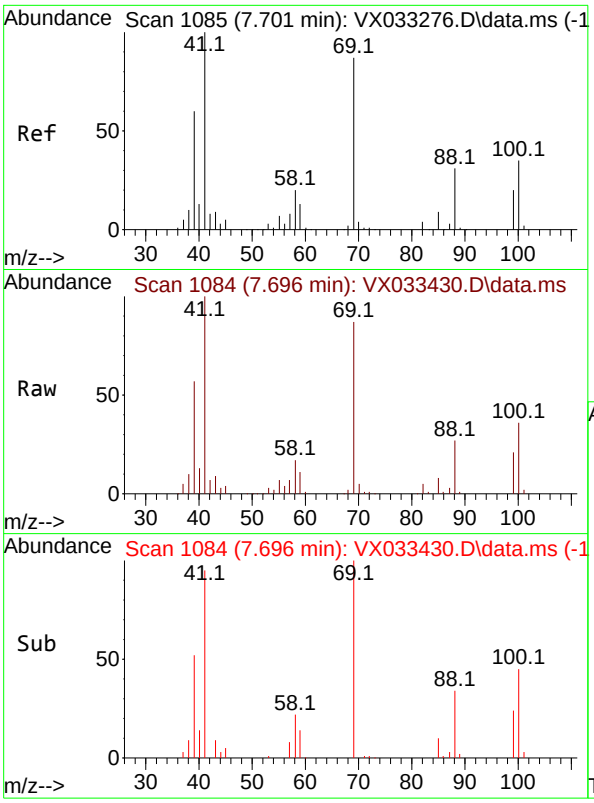


#48
Methyl methacrylate
Concen: 47.923 ug/l
RT: 7.690 min Scan# 1083
Delta R.T. -0.006 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion: 41 Resp: 70703

Ion	Ratio	Lower	Upper
41	100		
69	87.8	65.1	97.7
39	59.8	51.9	77.9

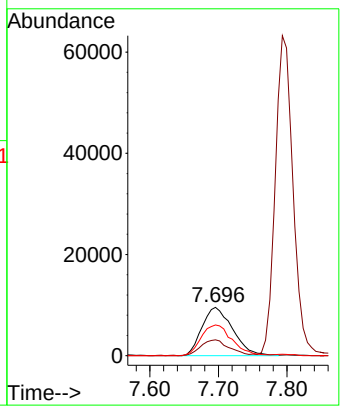




#49
1,4-Dioxane
Concen: 884.207 ug/l
RT: 7.696 min Scan# 1
Delta R.T. -0.006 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion: 88 Resp: 2974

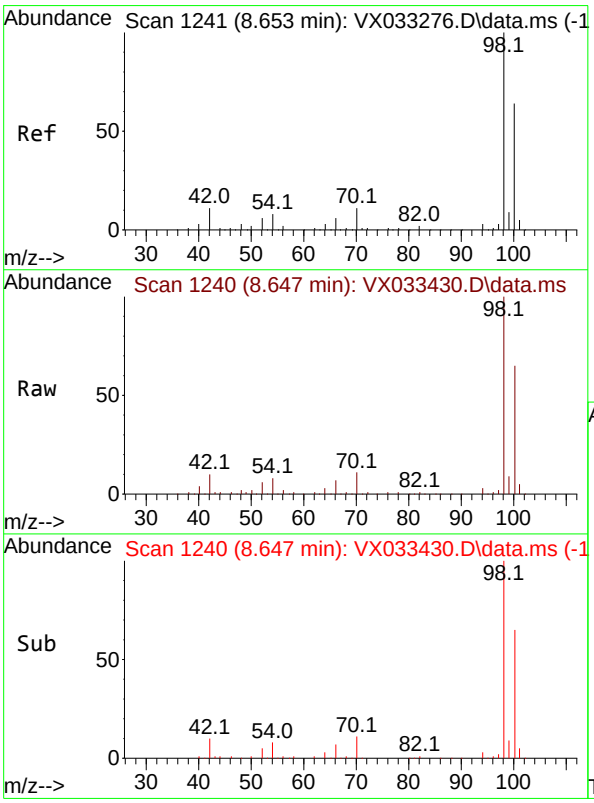
Ion	Ratio	Lower	Upper
88	100		
43	30.2	26.6	39.8
58	63.8	51.7	77.5



Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

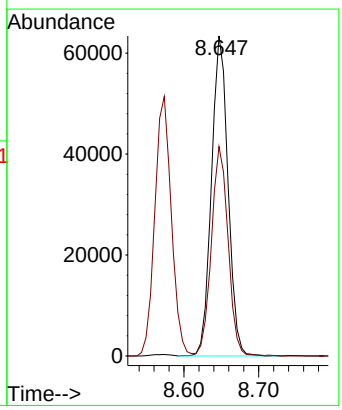
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

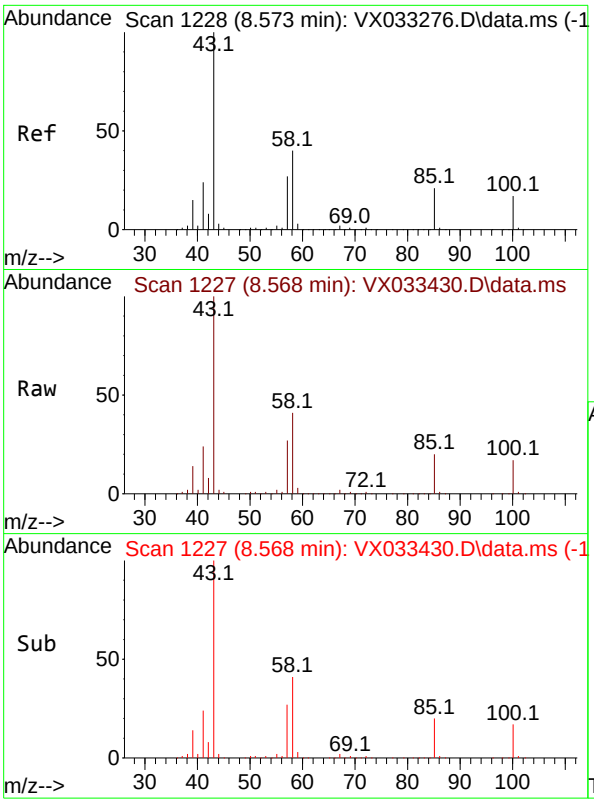


#50
Toluene-d8
Concen: 48.378 ug/l
RT: 8.647 min Scan# 1240
Delta R.T. -0.006 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion: 98 Resp: 97560

Ion	Ratio	Lower	Upper
98	100		
100	65.9	50.9	76.3

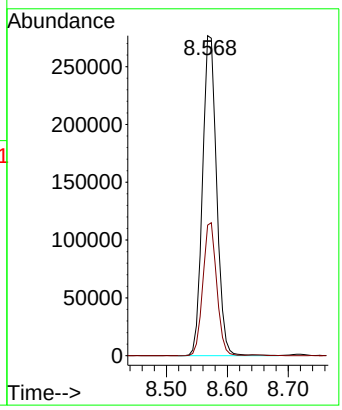




#51
4-Methyl-2-Pentanone
Concen: 246.435 ug/l
RT: 8.568 min Scan# 1
Delta R.T. -0.006 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion: 43 Resp: 44549

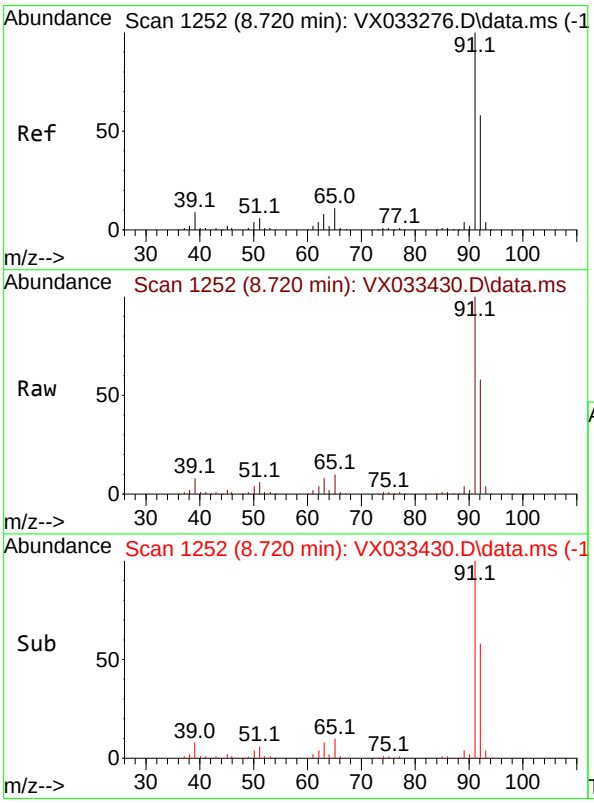
Ion	Ratio	Lower	Upper
43	100		
58	40.8	30.9	46.3



Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

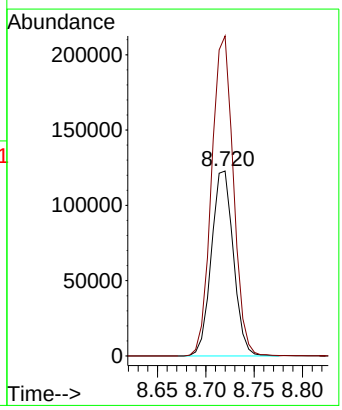
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

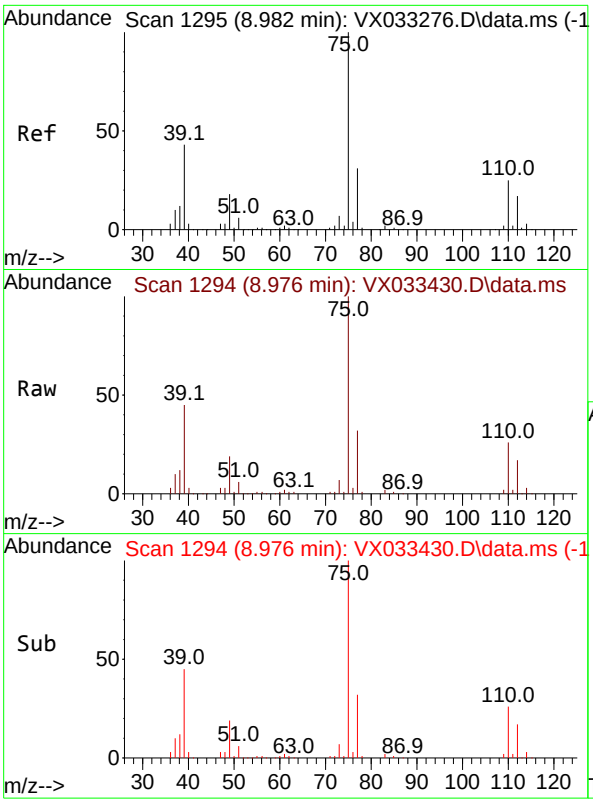


#52
Toluene
Concen: 54.761 ug/l
RT: 8.720 min Scan# 1252
Delta R.T. 0.000 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion: 92 Resp: 194022

Ion	Ratio	Lower	Upper
92	100		
91	171.7	138.3	207.5

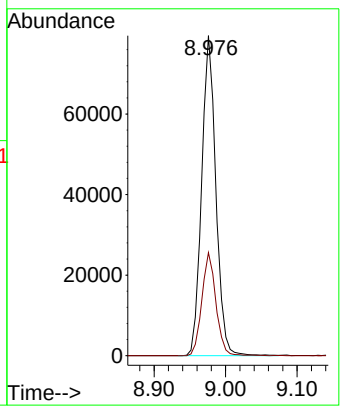




#53
t-1,3-Dichloropropene
Concen: 49.141 ug/l
RT: 8.976 min Scan# 1
Delta R.T. -0.006 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion: 75 Resp: 10976

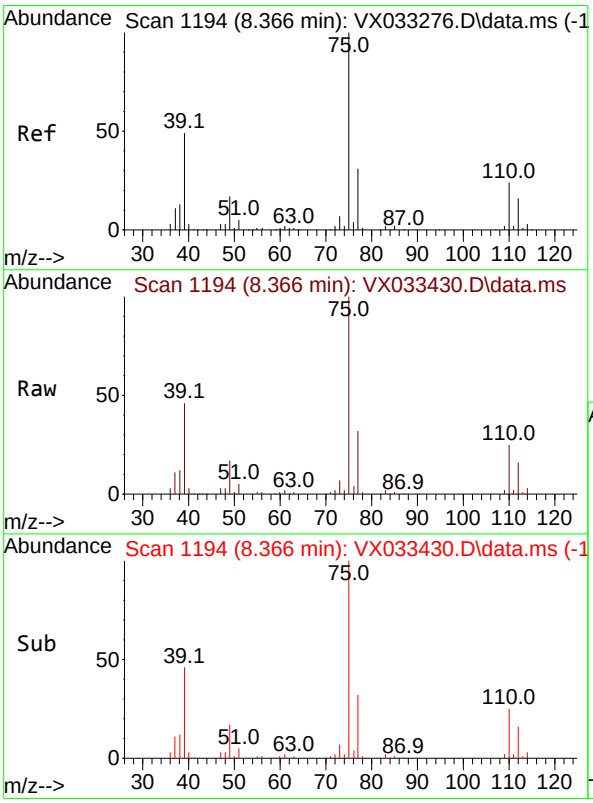
Ion	Ratio	Lower	Upper
75	100		
77	32.2	25.1	37.7



Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

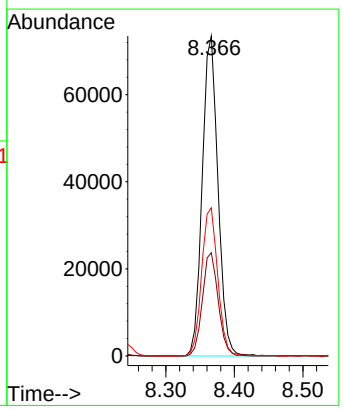
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

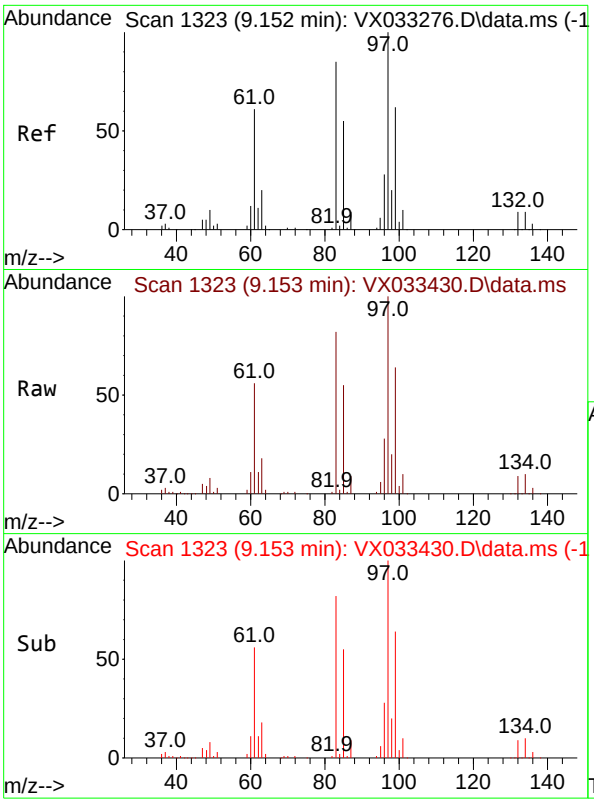


#54
cis-1,3-Dichloropropene
Concen: 53.138 ug/l
RT: 8.366 min Scan# 1194
Delta R.T. 0.000 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion: 75 Resp: 117676

Ion	Ratio	Lower	Upper
75	100		
77	32.2	25.1	37.7
39	46.3	45.5	68.3

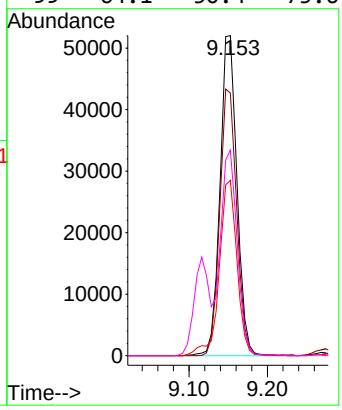




#55
1,1,2-Trichloroethane
Concen: 52.574 ug/l
RT: 9.153 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion: 97 Resp: 7830

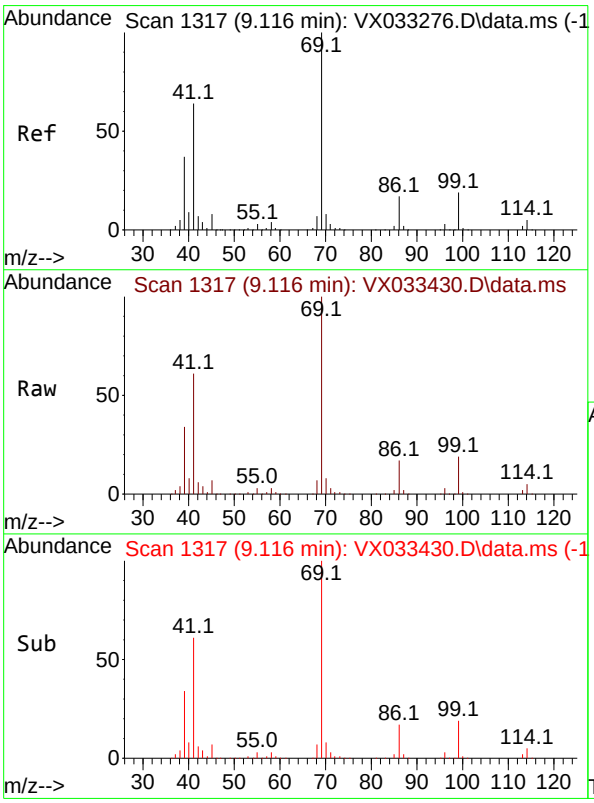
Ion	Ratio	Lower	Upper
97	100		
83	82.1	68.1	102.1
85	54.8	43.3	64.9
99	64.1	50.4	75.6



Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

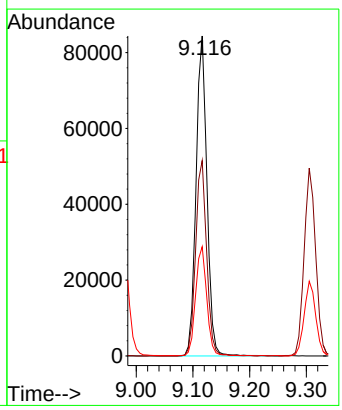
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

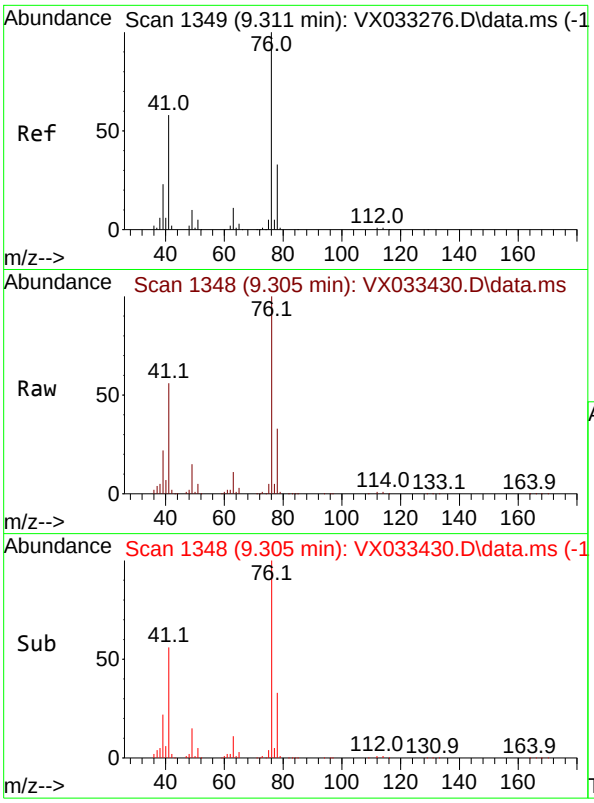


#56
Ethyl methacrylate
Concen: 53.687 ug/l
RT: 9.116 min Scan# 1317
Delta R.T. 0.000 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion: 69 Resp: 112579

Ion	Ratio	Lower	Upper
69	100		
41	62.0	54.3	81.5
39	34.9	35.2	52.8#

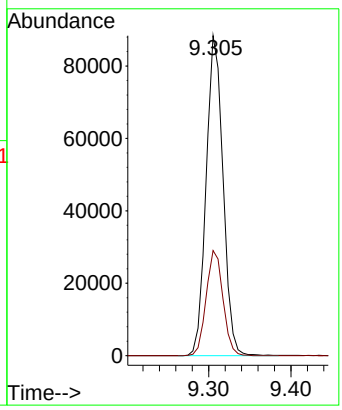




#57
1,3-Dichloropropane
Concen: 52.677 ug/l
RT: 9.305 min Scan# 1
Delta R.T. -0.006 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion: 76 Resp: 12603

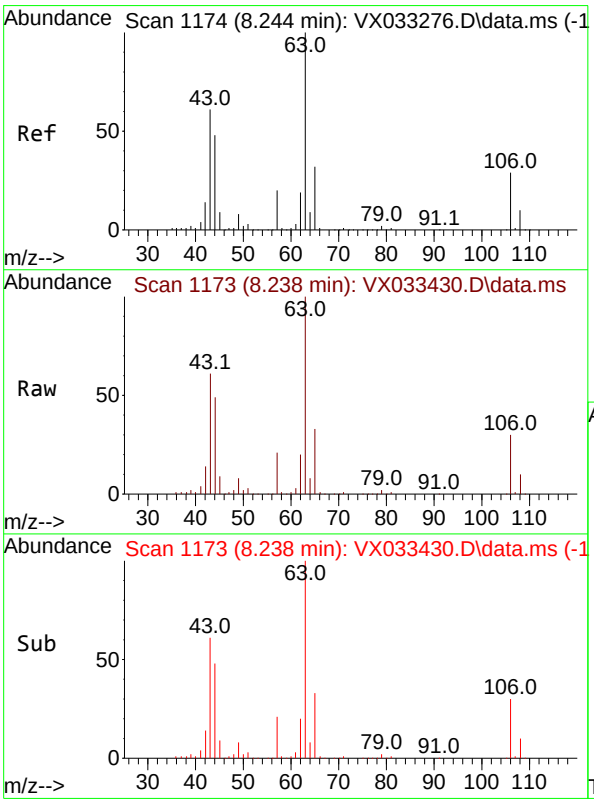
Ion	Ratio	Lower	Upper
76	100		
78	32.7	26.0	39.0



Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

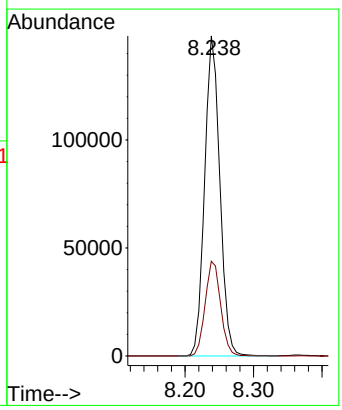
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

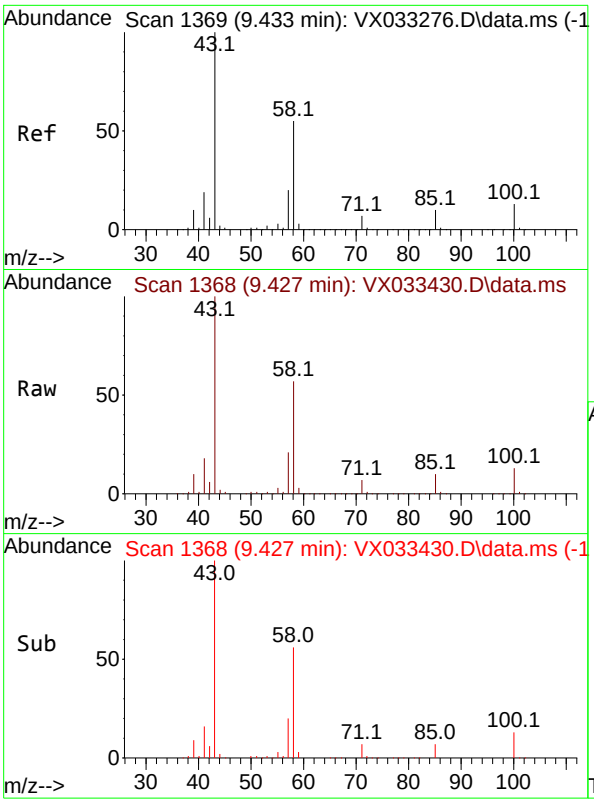


#58
2-Chloroethyl Vinyl ether
Concen: 238.862 ug/l
RT: 8.238 min Scan# 1173
Delta R.T. -0.006 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion: 63 Resp: 229186

Ion	Ratio	Lower	Upper
63	100		
106	30.1	23.3	34.9





#59
2-Hexanone
Concen: 255.739 ug/l
RT: 9.427 min Scan# 1
Delta R.T. -0.006 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

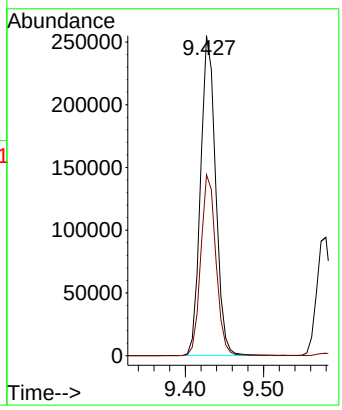
Tgt Ion: 43 Resp: 34069

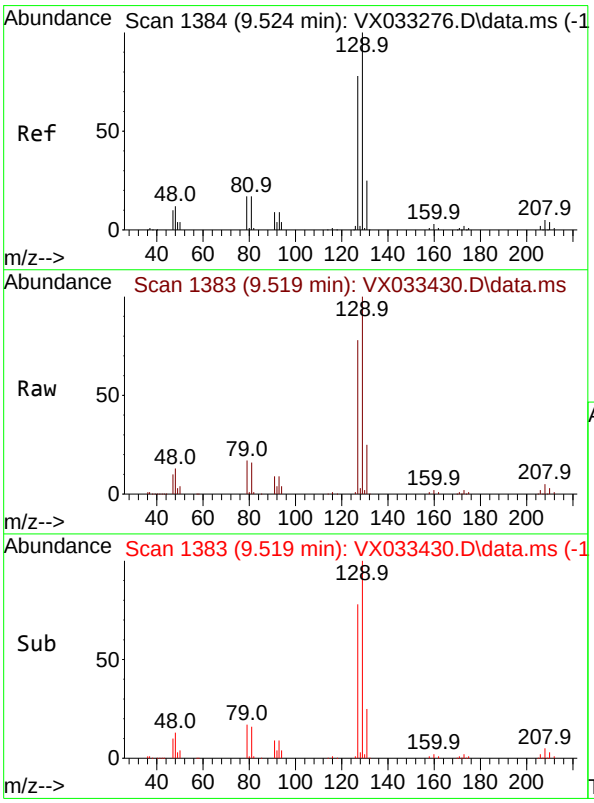
Ion	Ratio	Lower	Upper
43	100		
58	56.8	26.5	79.5

Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

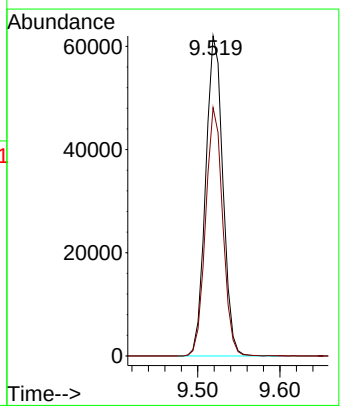


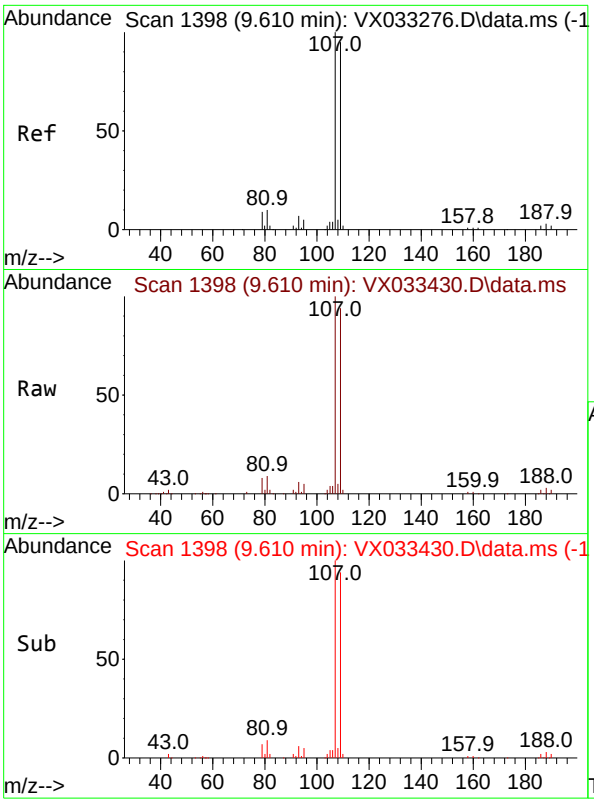


#60
Dibromochloromethane
Concen: 54.930 ug/l
RT: 9.519 min Scan# 1383
Delta R.T. -0.006 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion:129 Resp: 90138

Ion	Ratio	Lower	Upper
129	100		
127	77.1	38.6	115.8

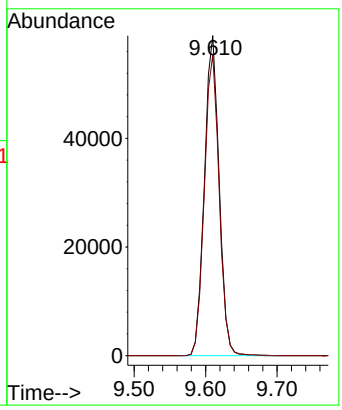




#61
1,2-Dibromoethane
Concen: 53.222 ug/l
RT: 9.610 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion:107 Resp: 8431

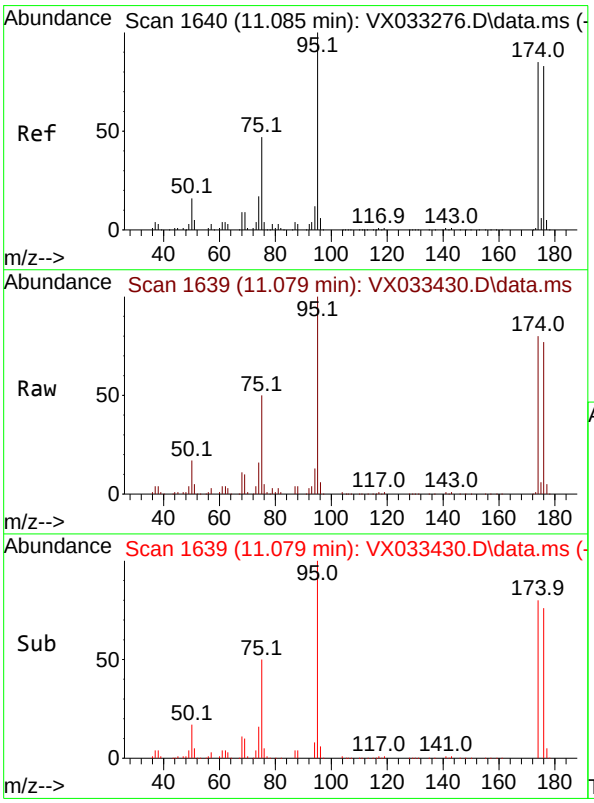
Ion	Ratio	Lower	Upper
107	100		
109	94.7	76.0	114.0



Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

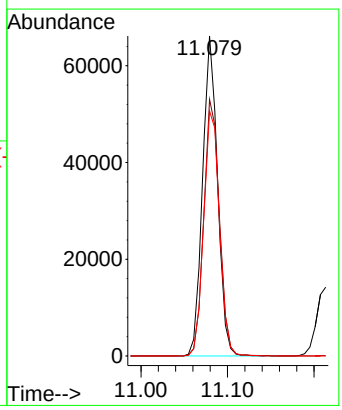
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

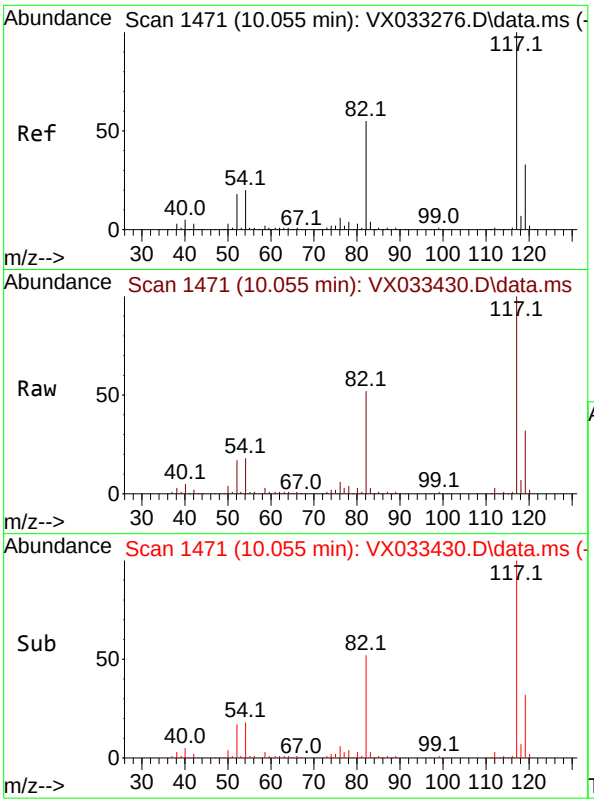


#62
4-Bromofluorobenzene
Concen: 51.395 ug/l
RT: 11.079 min Scan# 1639
Delta R.T. -0.006 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion: 95 Resp: 79249

Ion	Ratio	Lower	Upper
95	100		
174	83.4	0.0	164.0
176	81.0	0.0	154.4

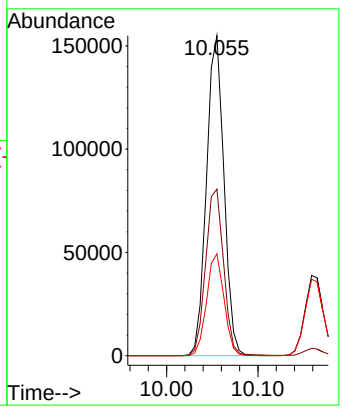




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.055 min Scan# 14
Delta R.T. 0.000 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion:117 Resp: 20539

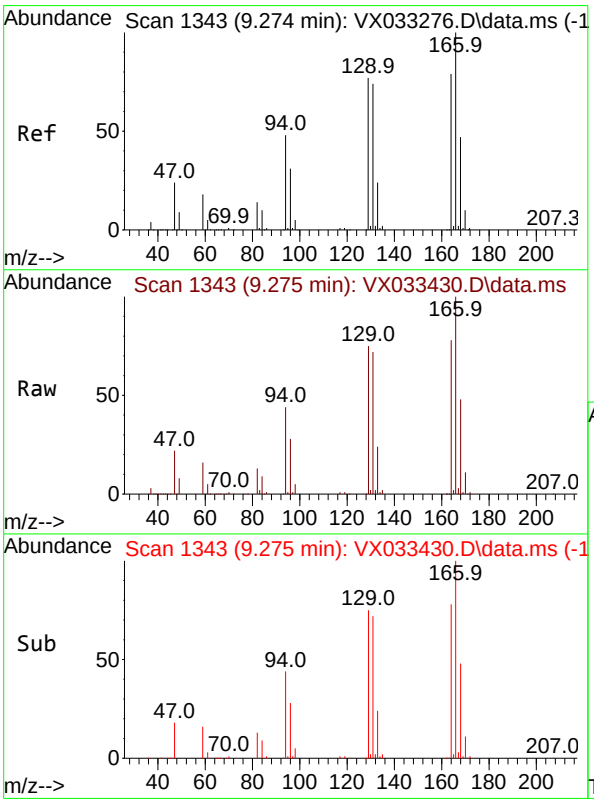
Ion	Ratio	Lower	Upper
117	100		
82	52.1	44.3	66.5
119	31.9	25.7	38.5



Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

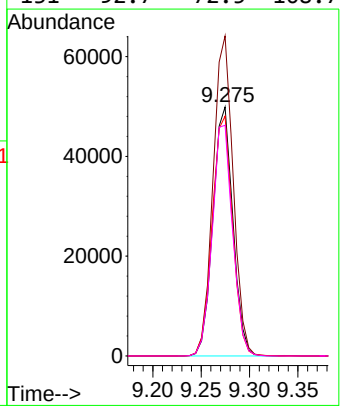
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

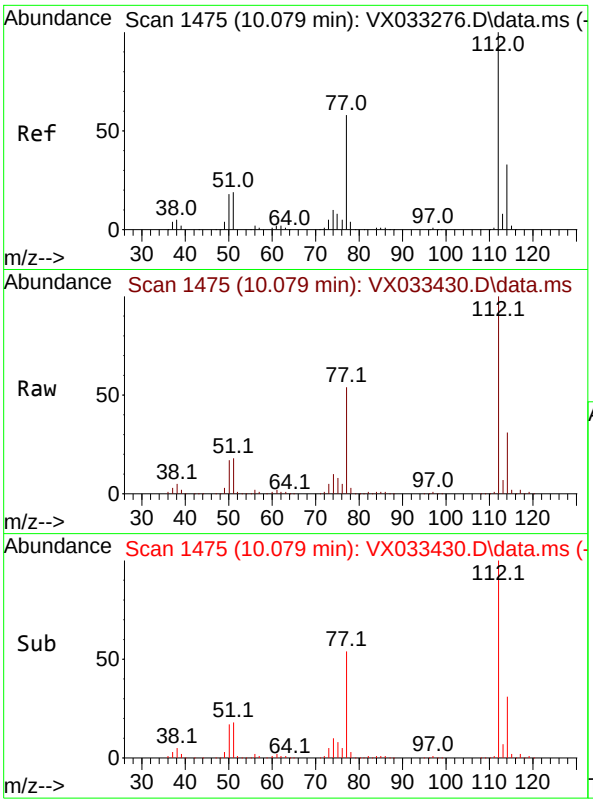


#64
Tetrachloroethene
Concen: 50.953 ug/l
RT: 9.275 min Scan# 1343
Delta R.T. 0.000 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion:164 Resp: 71561

Ion	Ratio	Lower	Upper
164	100		
166	128.5	105.4	158.2
129	96.3	78.2	117.2
131	92.7	72.5	108.7

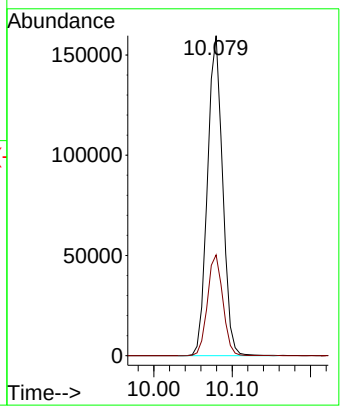




#65
Chlorobenzene
Concen: 51.464 ug/l
RT: 10.079 min Scan# 14
Delta R.T. 0.000 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion:112 Resp: 214048

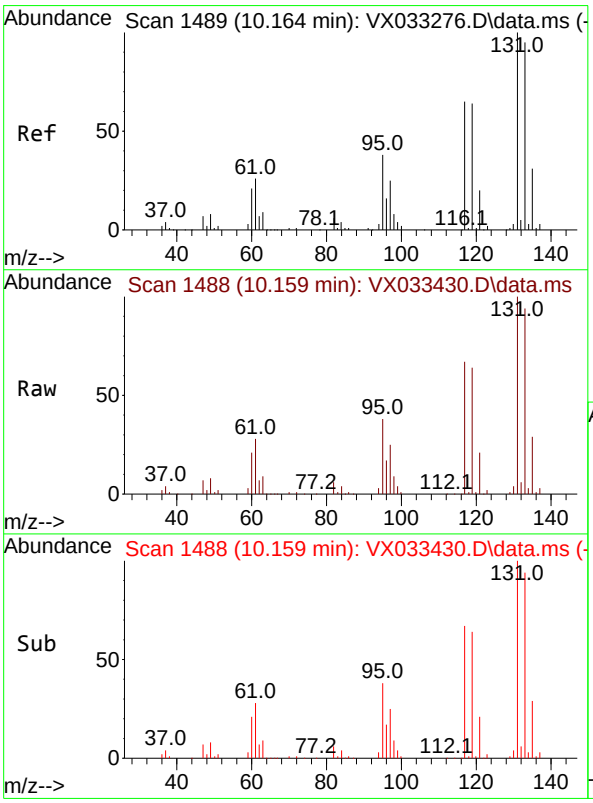
Ion	Ratio	Lower	Upper
112	100		
114	31.5	25.4	38.2



Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

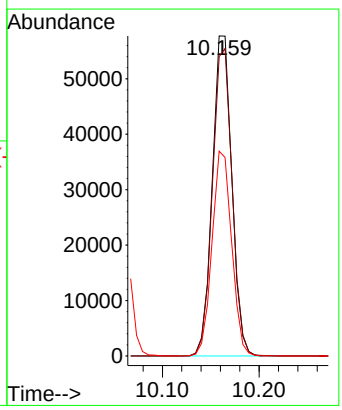
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

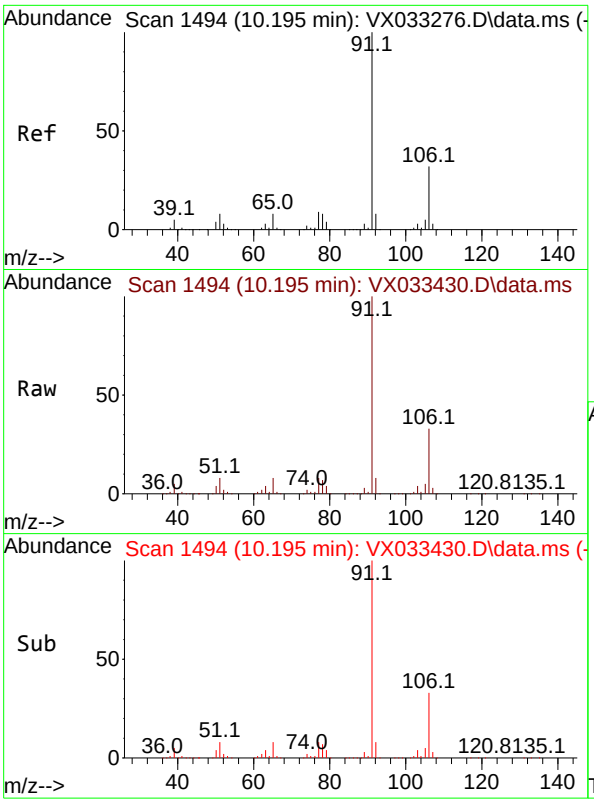


#66
1,1,1,2-Tetrachloroethane
Concen: 51.451 ug/l
RT: 10.159 min Scan# 1488
Delta R.T. -0.006 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion:131 Resp: 80870

Ion	Ratio	Lower	Upper
131	100		
133	96.7	47.6	142.9
119	64.3	32.4	97.0





#67
Ethyl Benzene
Concen: 52.692 ug/l
RT: 10.195 min Scan# 14
Delta R.T. 0.000 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

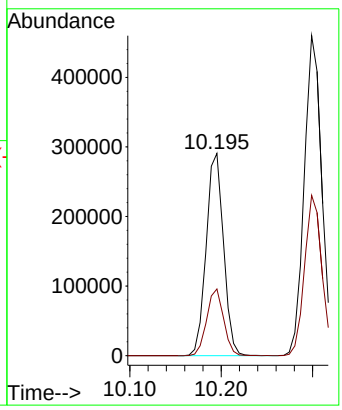
Tgt Ion: 91 Resp: 38179

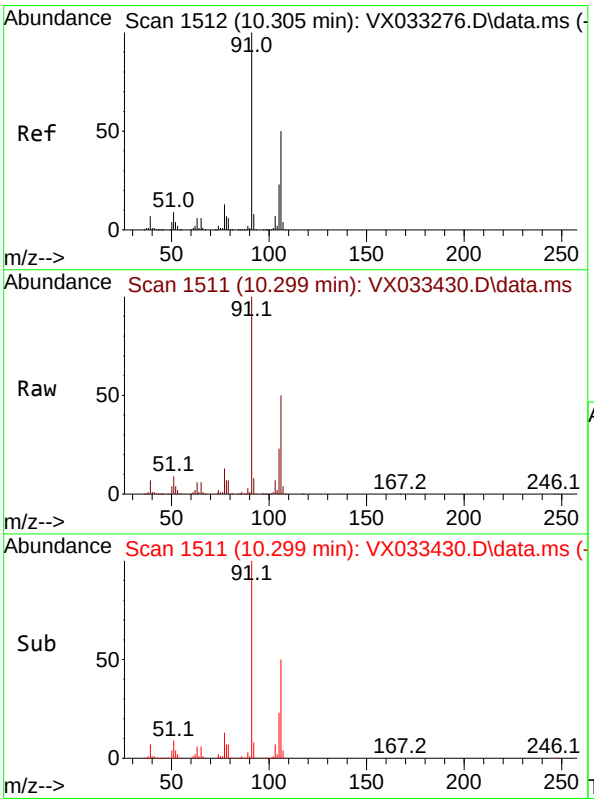
Ion	Ratio	Lower	Upper
91	100		
106	33.0	25.0	37.6

Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

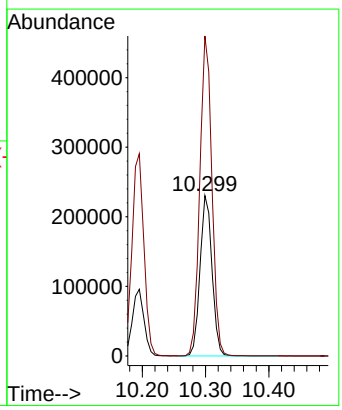


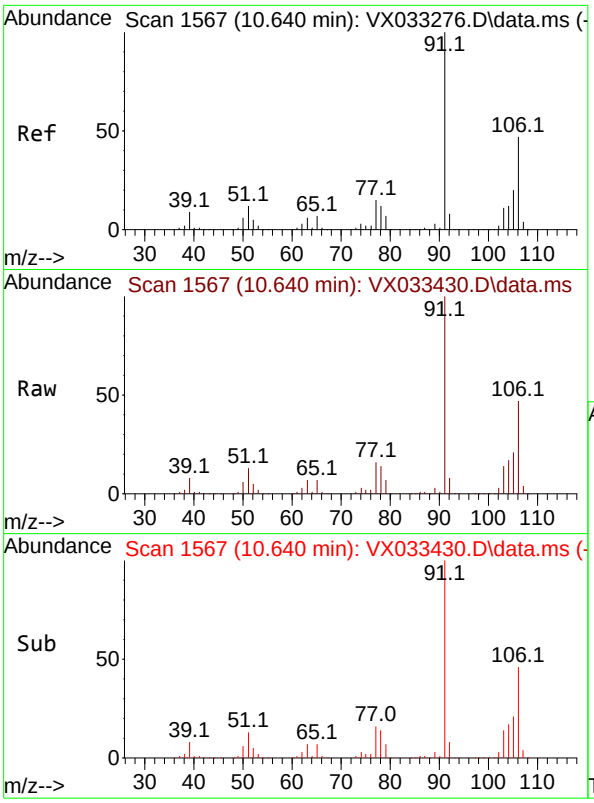


#68
m/p-Xylenes
Concen: 107.856 ug/l
RT: 10.299 min Scan# 1511
Delta R.T. -0.006 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion:106 Resp: 304061

Ion	Ratio	Lower	Upper
106	100		
91	201.4	164.5	246.7

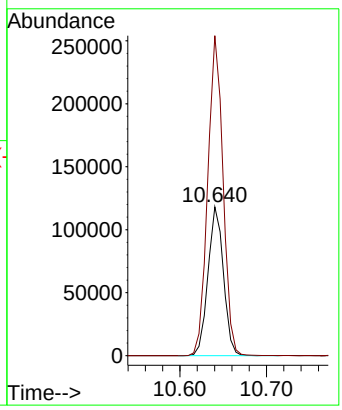




#69
o-Xylene
Concen: 52.510 ug/l
RT: 10.640 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion:106 Resp: 14632

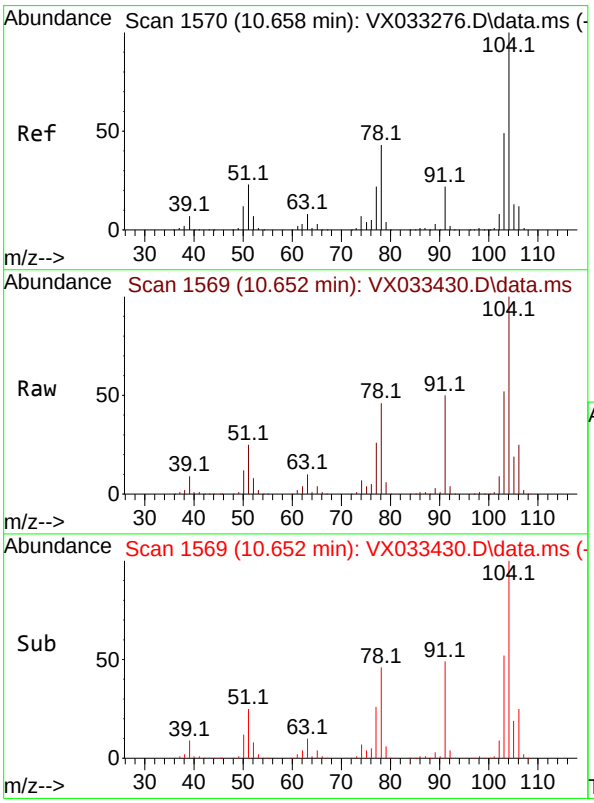
Ion	Ratio	Lower	Upper
106	100		
91	213.3	109.2	327.6



Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

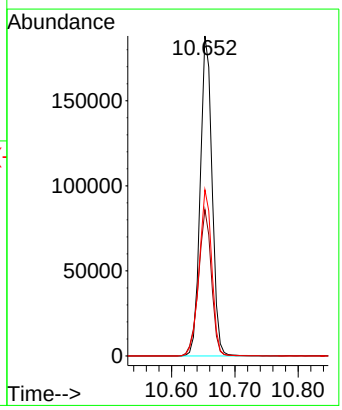
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

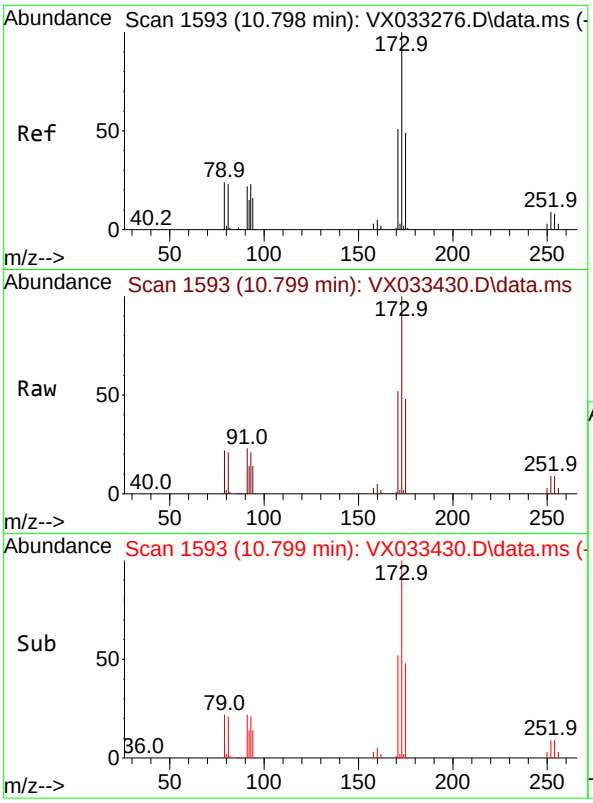


#70
Styrene
Concen: 53.646 ug/l
RT: 10.652 min Scan# 1569
Delta R.T. -0.006 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion:104 Resp: 244830

Ion	Ratio	Lower	Upper
104	100		
78	50.0	41.8	62.8
103	55.8	44.5	66.7

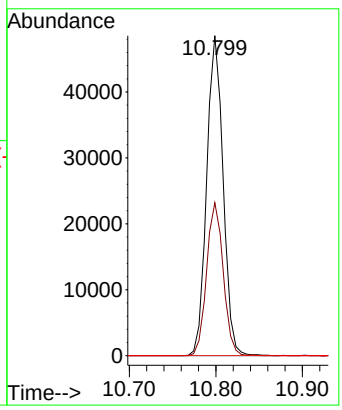




#71
Bromoform
Concen: 51.374 ug/l
RT: 10.799 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

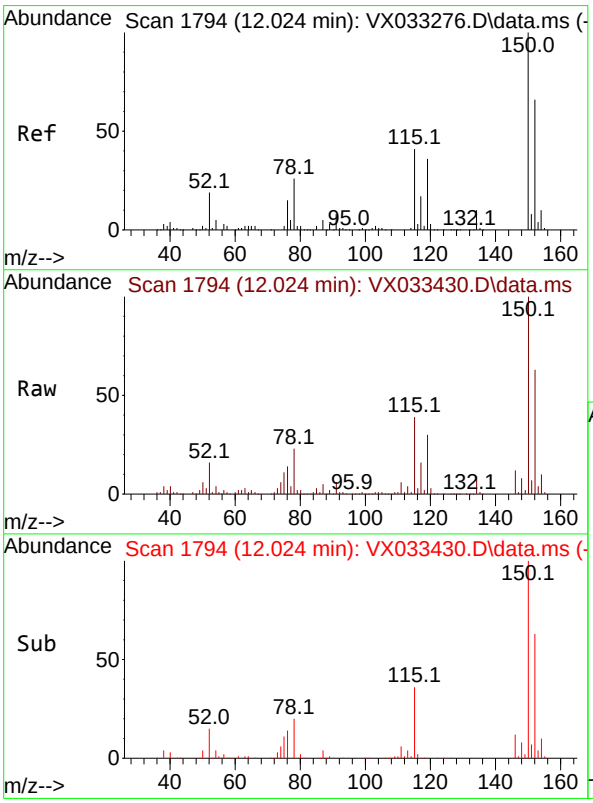
Tgt Ion:173 Resp: 6391

Ion	Ratio	Lower	Upper
173	100		
175	48.4	23.9	71.8
254	0.0	0.0	0.0



Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

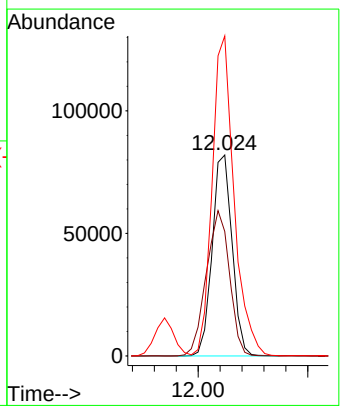
Manual Integrations APPROVED
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

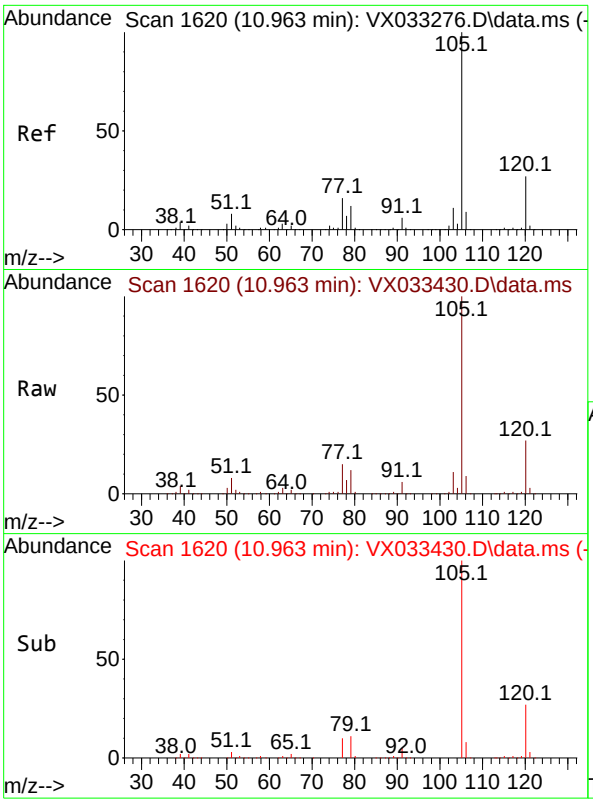


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.024 min Scan# 1794
Delta R.T. 0.000 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion:152 Resp: 103647

Ion	Ratio	Lower	Upper
152	100		
115	84.3	44.0	132.0
150	174.5	0.0	351.8





#73
Isopropylbenzene
Concen: 51.922 ug/l
RT: 10.963 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

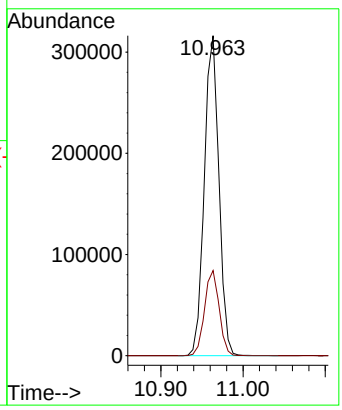
Tgt Ion:105 Resp: 39006

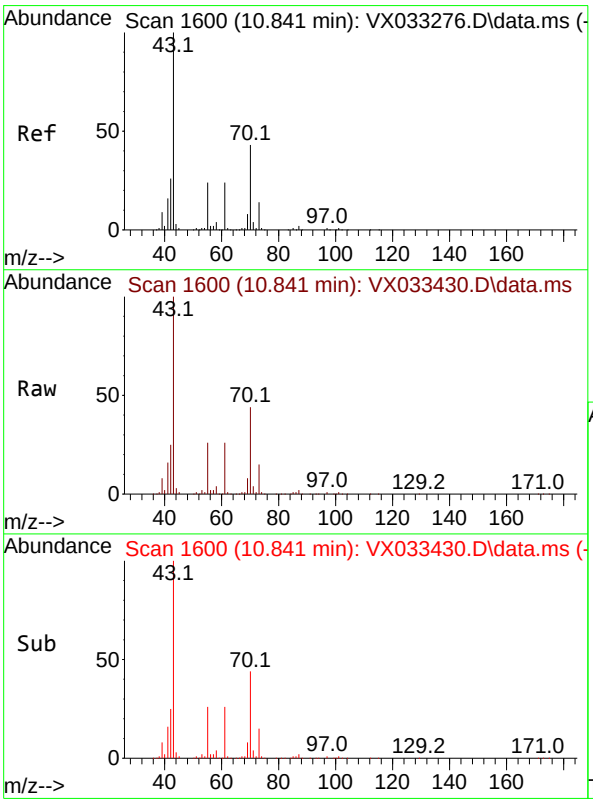
Ion	Ratio	Lower	Upper
105	100		
120	26.6	13.1	39.3

Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

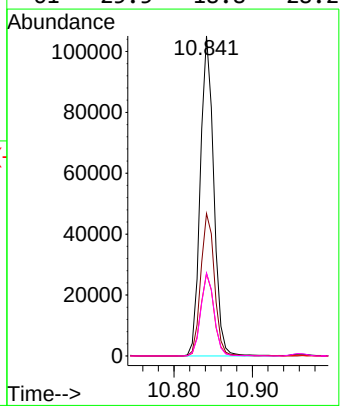


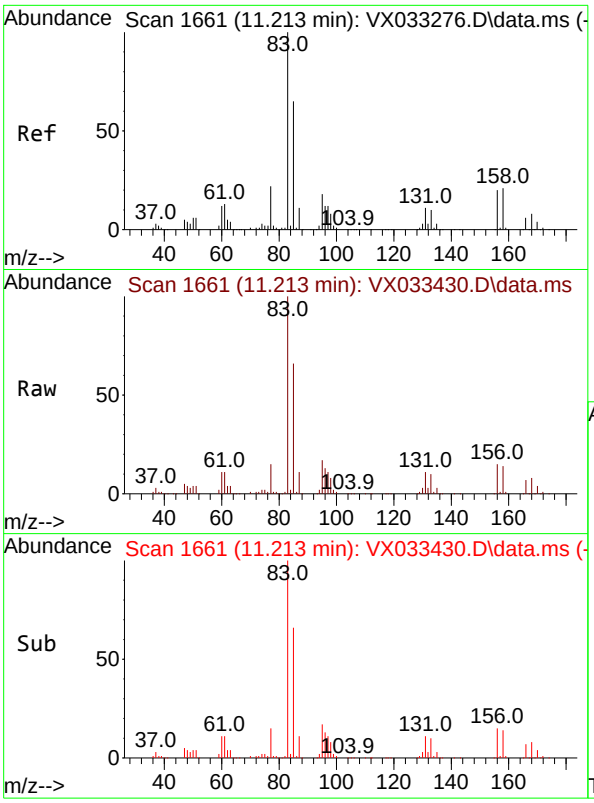


#74
N-amyl acetate
Concen: 48.802 ug/l
RT: 10.841 min Scan# 1600
Delta R.T. 0.000 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion: 43 Resp: 125085

Ion	Ratio	Lower	Upper
43	100		
70	45.3	33.6	50.4
55	25.7	19.4	29.2
61	25.5	18.8	28.2

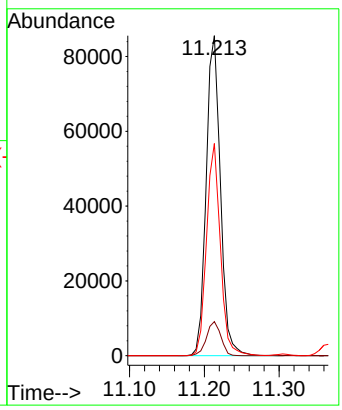




#75
1,1,2,2-Tetrachloroethane
Concen: 47.488 ug/l
RT: 11.213 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion: 83 Resp: 11317

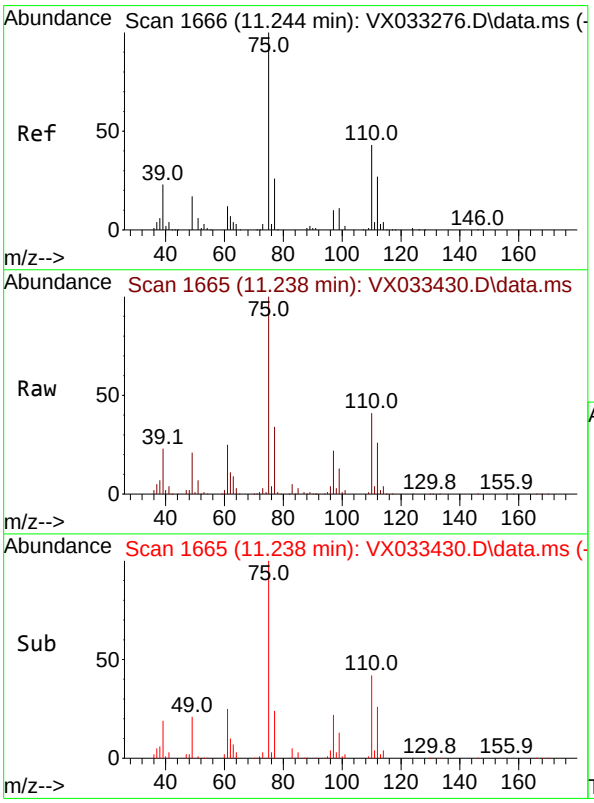
Ion	Ratio	Lower	Upper
83	100		
131	10.8	5.4	16.2
85	64.5	31.9	95.9



Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

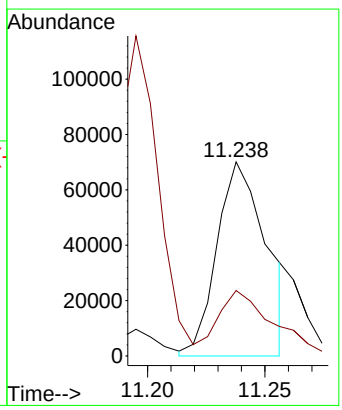
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

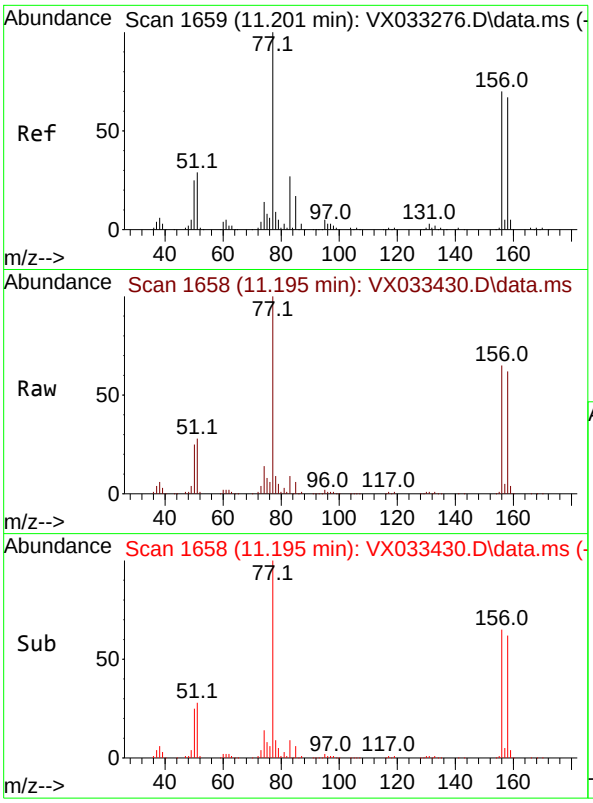


#76
1,2,3-Trichloropropane
Concen: 48.402 ug/l m
RT: 11.238 min Scan# 1665
Delta R.T. -0.006 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion: 75 Resp: 102065

Ion	Ratio	Lower	Upper
75	100		
77	38.4	20.0	60.0

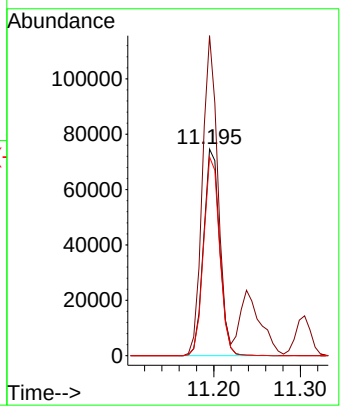




#77
Bromobenzene
Concen: 50.759 ug/l
RT: 11.195 min Scan# 1
Delta R.T. -0.006 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion:156 Resp: 9629

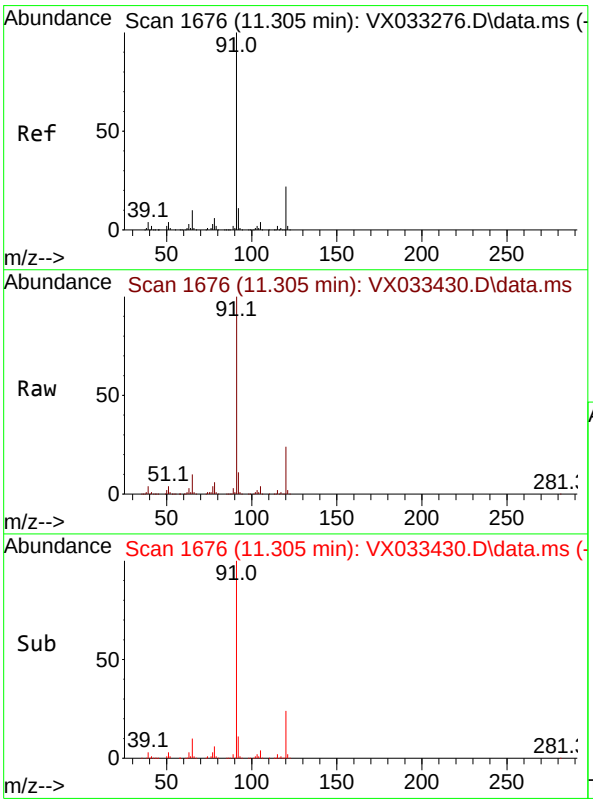
Ion	Ratio	Lower	Upper
156	100		
77	148.0	76.1	228.4
158	95.8	48.8	146.3



Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

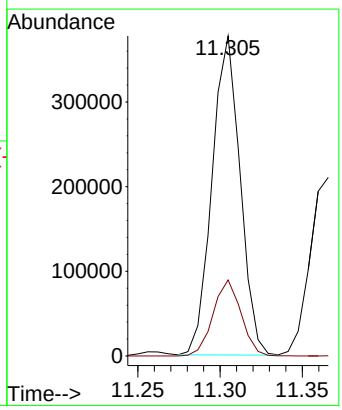
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

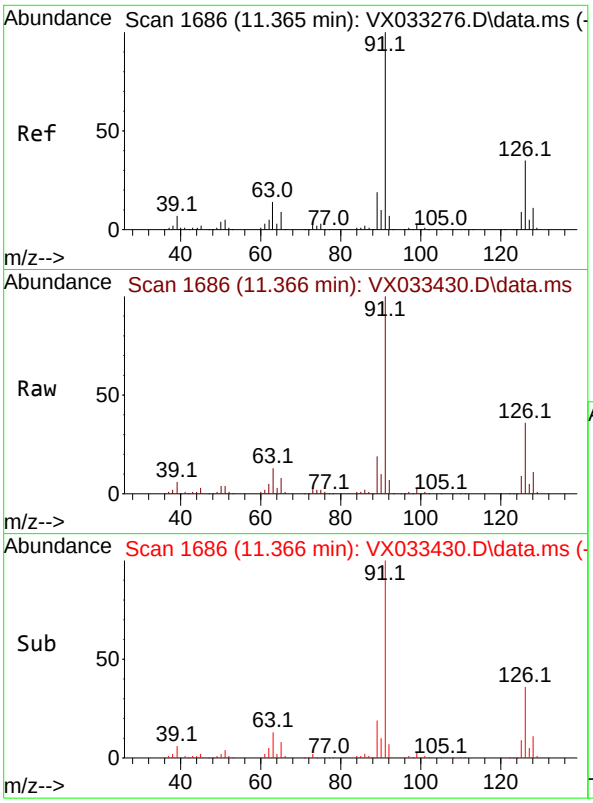


#78
n-propylbenzene
Concen: 53.354 ug/l
RT: 11.305 min Scan# 1676
Delta R.T. 0.000 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion: 91 Resp: 447548

Ion	Ratio	Lower	Upper
91	100		
120	23.7	11.6	34.8





#79
2-Chlorotoluene
Concen: 51.178 ug/l
RT: 11.366 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

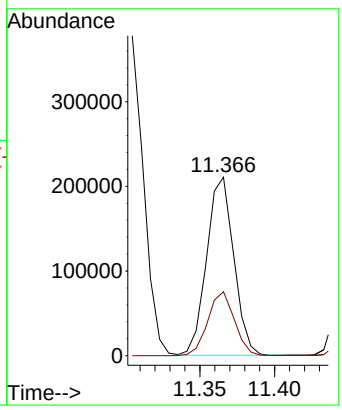
Tgt Ion: 91 Resp: 26531

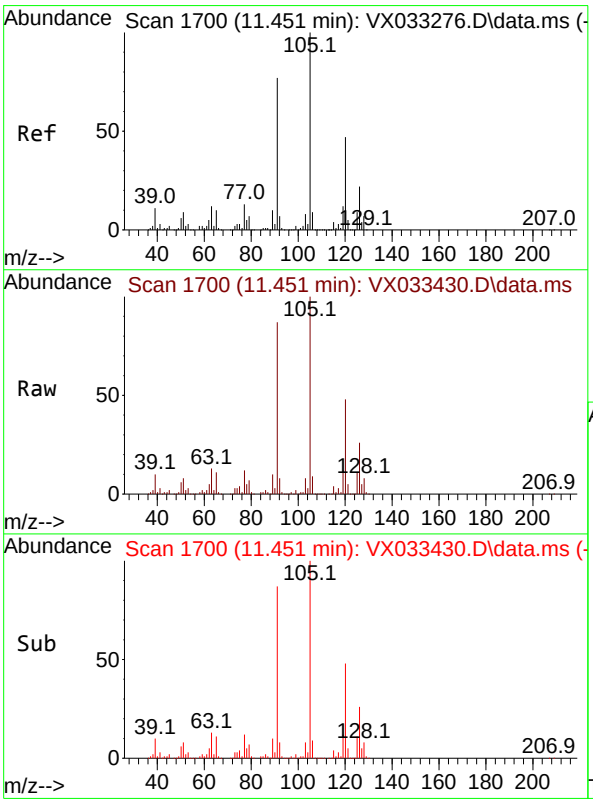
Ion	Ratio	Lower	Upper
91	100		
126	35.3	17.1	51.2

Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

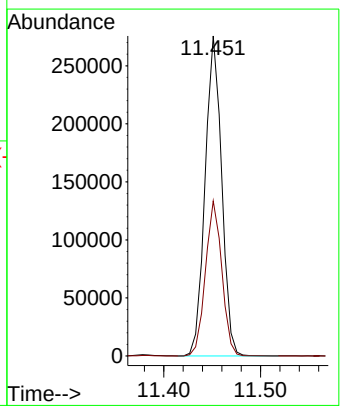


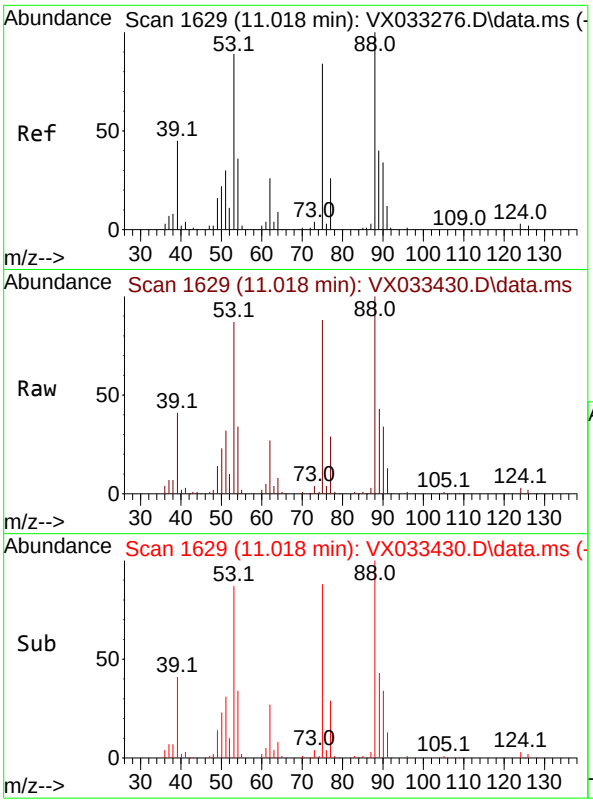


#80
1,3,5-Trimethylbenzene
Concen: 52.584 ug/l
RT: 11.451 min Scan# 1700
Delta R.T. 0.000 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion:105 Resp: 328826

Ion	Ratio	Lower	Upper
105	100		
120	47.9	23.6	71.0

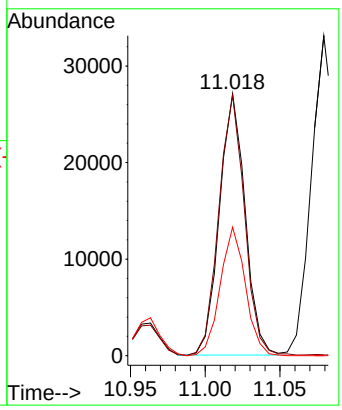




#81
trans-1,4-Dichloro-2-butene
Concen: 47.686 ug/l
RT: 11.018 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

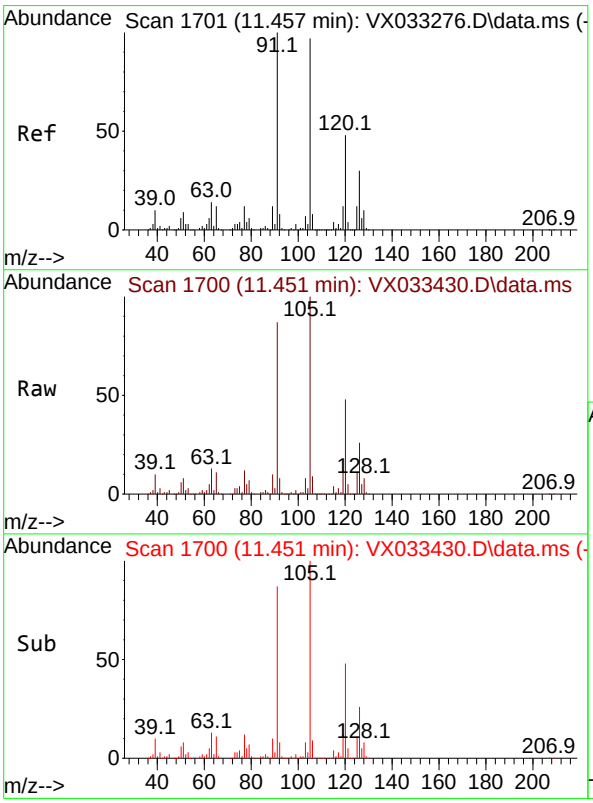
Tgt Ion: 75 Resp: 3232

Ion	Ratio	Lower	Upper
75	100		
53	100.0	86.9	130.3
89	48.3	38.3	57.5



Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

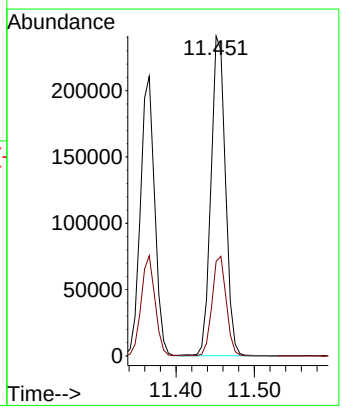
Manual Integrations
APPROVED
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

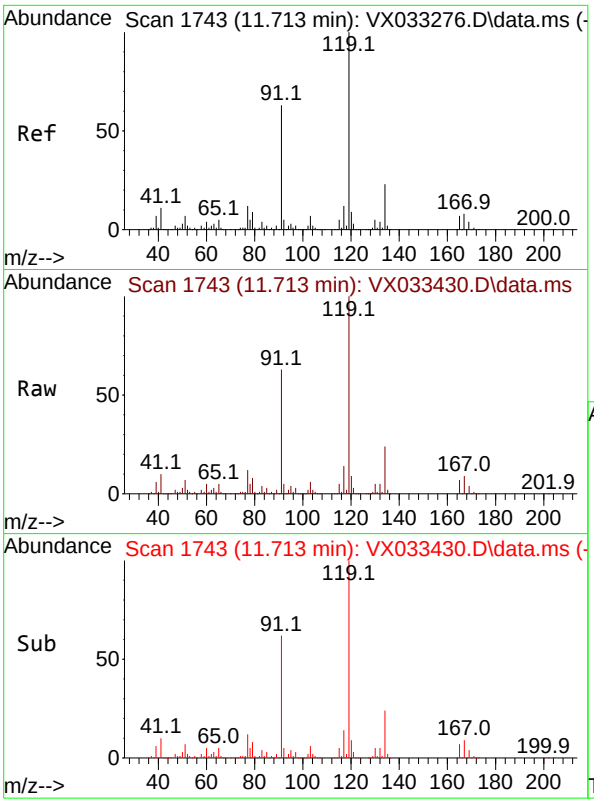


#82
4-Chlorotoluene
Concen: 51.072 ug/l
RT: 11.451 min Scan# 1700
Delta R.T. -0.006 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion: 91 Resp: 307861

Ion	Ratio	Lower	Upper
91	100		
126	30.8	14.8	44.4





#83
tert-Butylbenzene
Concen: 52.240 ug/l
RT: 11.713 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

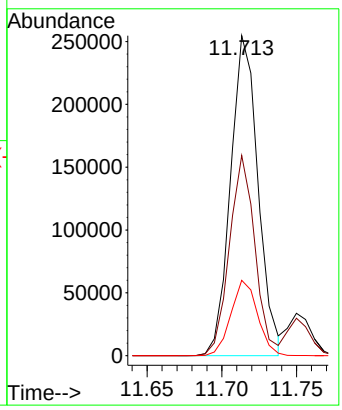
Tgt Ion:119 Resp: 32576

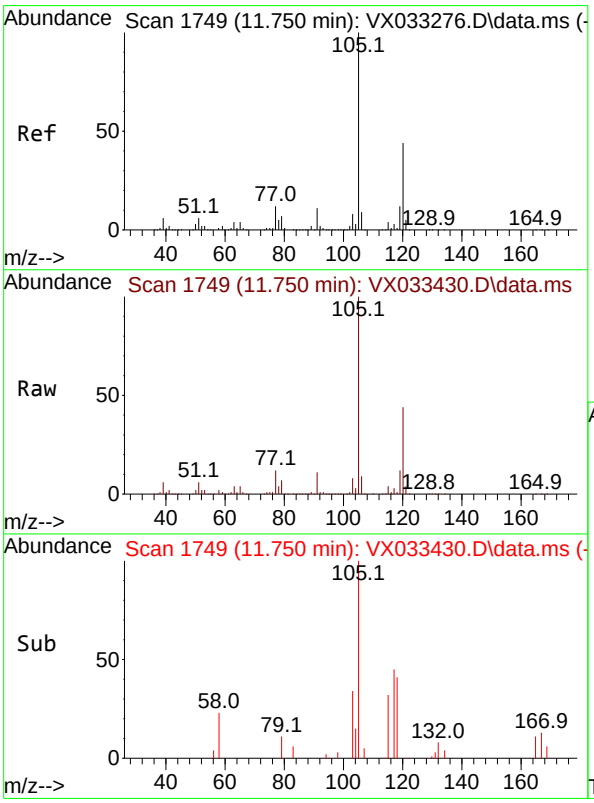
Ion	Ratio	Lower	Upper
119	100		
91	58.2	29.4	88.2
134	22.9	11.0	33.0

Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

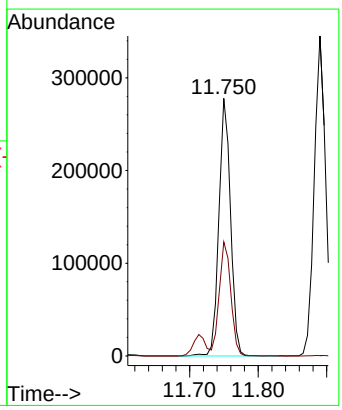


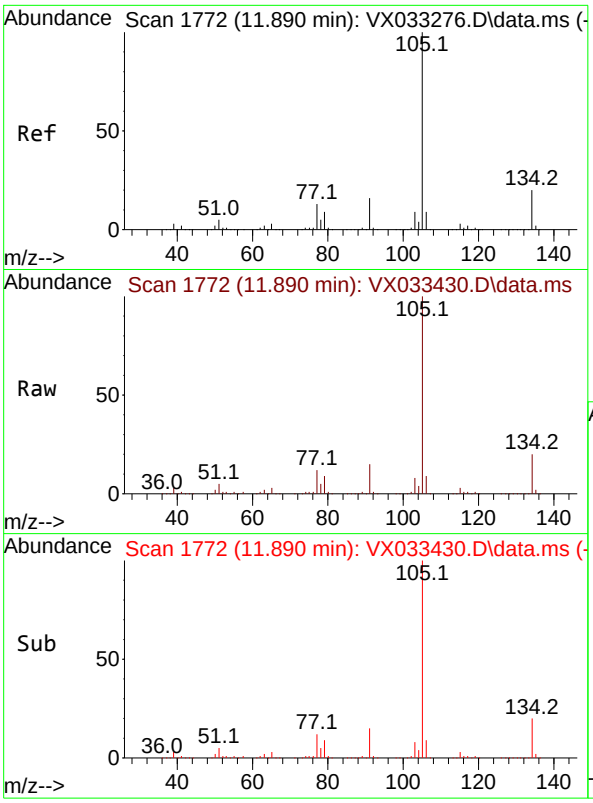


#84
1,2,4-Trimethylbenzene
Concen: 52.274 ug/l
RT: 11.750 min Scan# 1749
Delta R.T. 0.000 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion:105 Resp: 326303

Ion	Ratio	Lower	Upper
105	100		
120	43.9	21.9	65.5





#85
sec-Butylbenzene
Concen: 55.088 ug/l
RT: 11.890 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

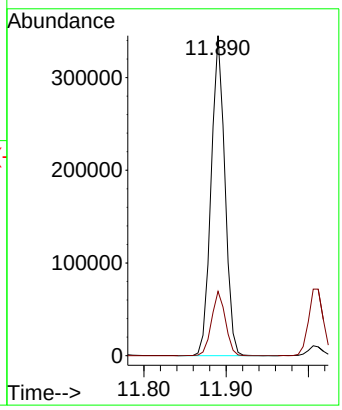
Tgt Ion:105 Resp: 40079

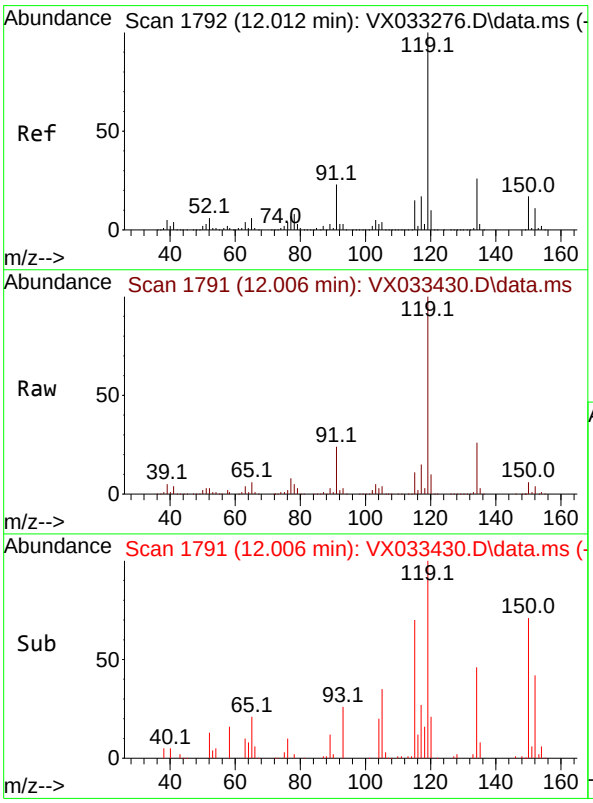
Ion	Ratio	Lower	Upper
105	100		
134	20.2	9.9	29.7

Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

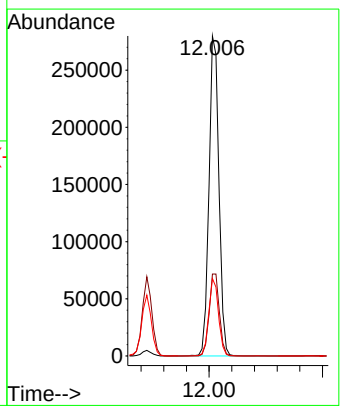


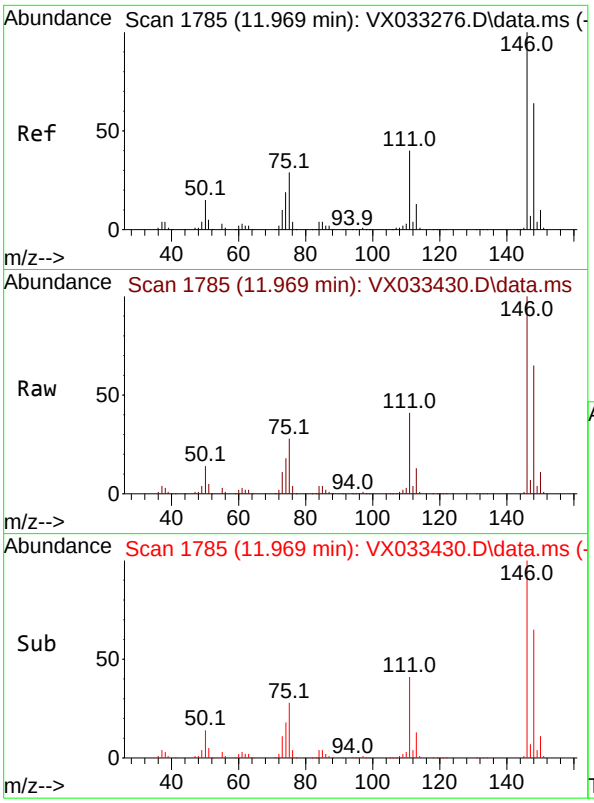


#86
p-Isopropyltoluene
Concen: 54.230 ug/l
RT: 12.006 min Scan# 1791
Delta R.T. -0.006 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion:119 Resp: 340165

Ion	Ratio	Lower	Upper
119	100		
134	26.3	12.9	38.7
91	23.8	12.5	37.5

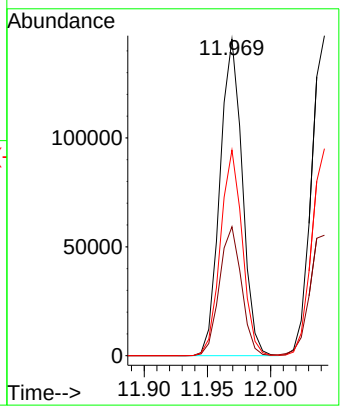




#87
1,3-Dichlorobenzene
Concen: 51.761 ug/l
RT: 11.969 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion:146 Resp: 17787

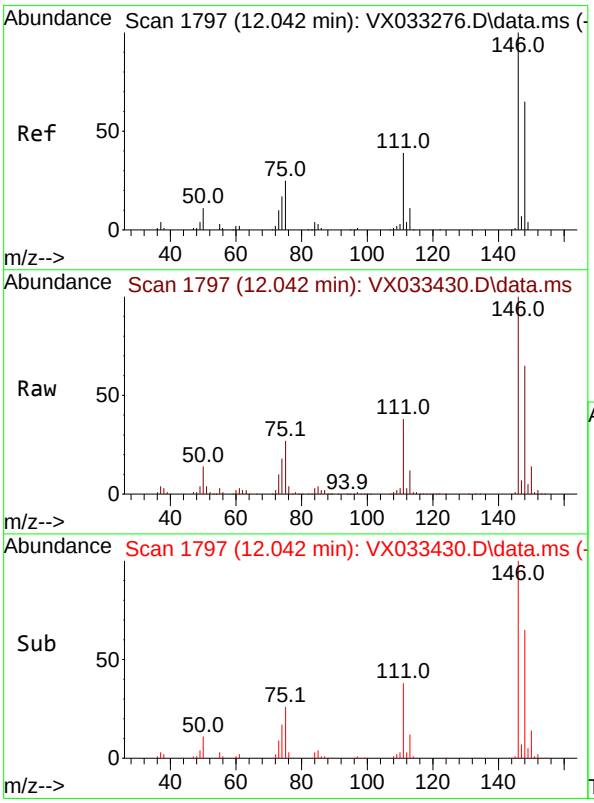
Ion	Ratio	Lower	Upper
146	100		
111	40.4	20.6	61.8
148	63.7	31.7	95.1



Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

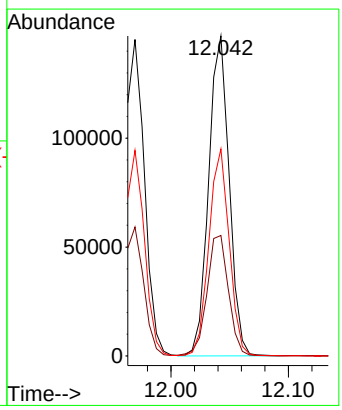
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

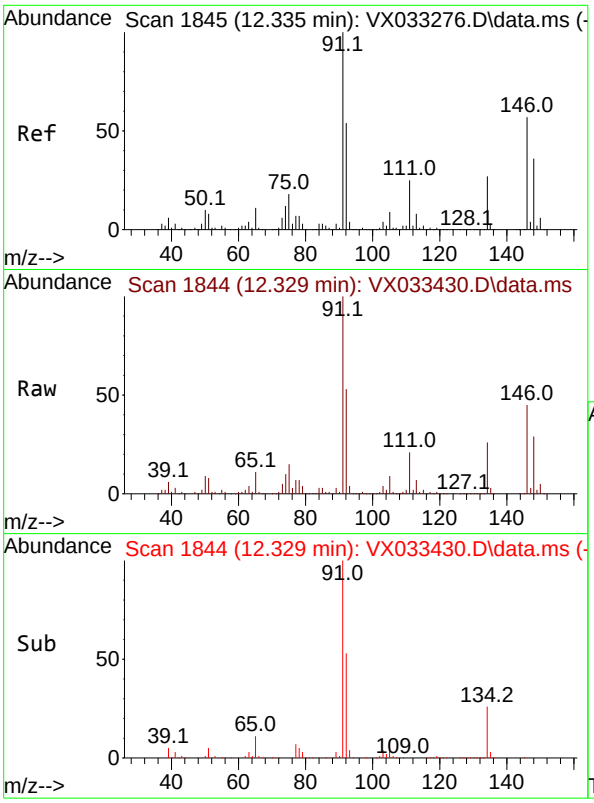


#88
1,4-Dichlorobenzene
Concen: 50.770 ug/l
RT: 12.042 min Scan# 1797
Delta R.T. 0.000 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion:146 Resp: 178208

Ion	Ratio	Lower	Upper
146	100		
111	39.5	20.5	61.6
148	64.3	32.2	96.6

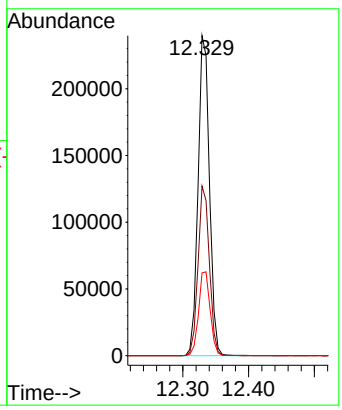




#89
n-Butylbenzene
Concen: 56.031 ug/l
RT: 12.329 min Scan# 1
Delta R.T. -0.006 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion: 91 Resp: 28786

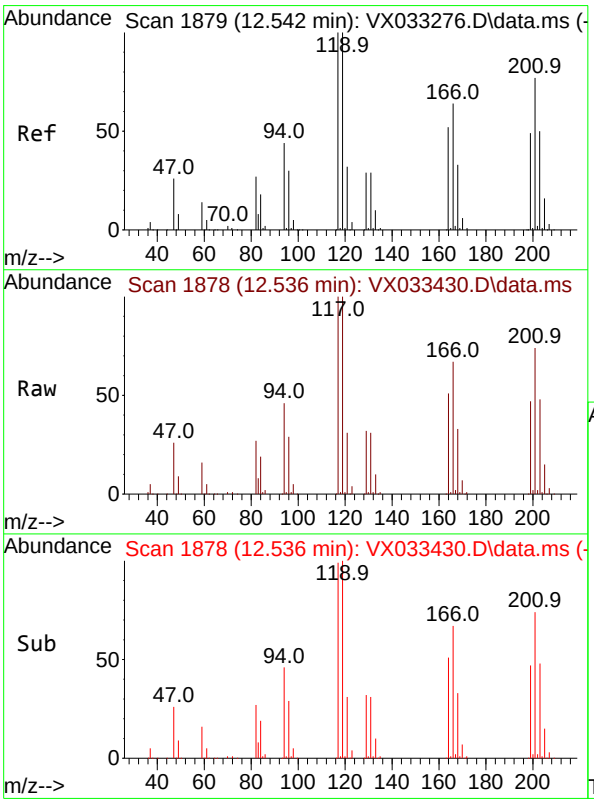
Ion	Ratio	Lower	Upper
91	100		
92	52.7	26.2	78.6
134	26.7	12.9	38.6



Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

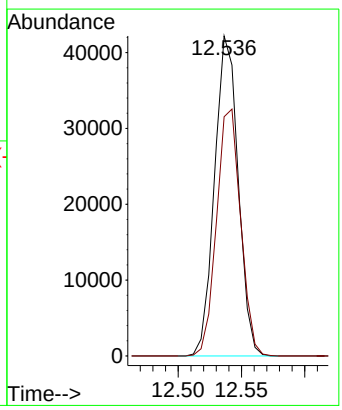
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

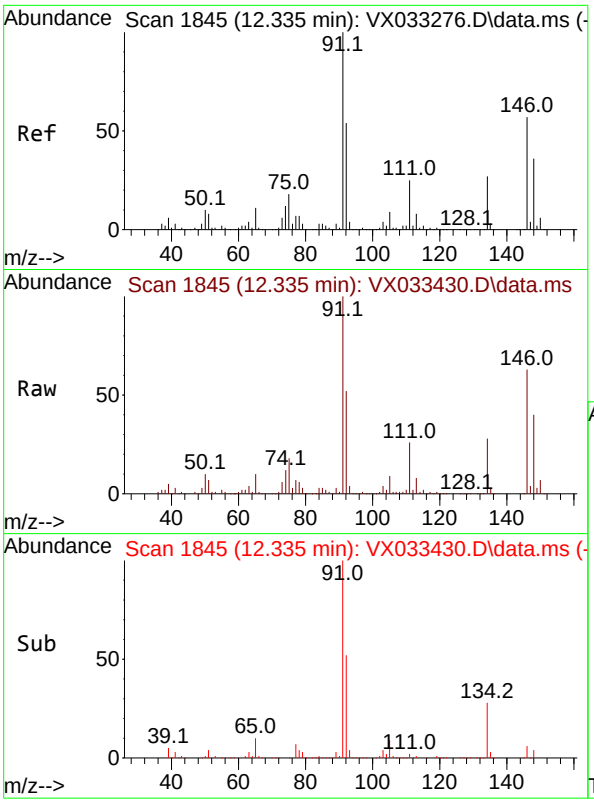


#90
Hexachloroethane
Concen: 51.259 ug/l
RT: 12.536 min Scan# 1878
Delta R.T. -0.006 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion:117 Resp: 54653

Ion	Ratio	Lower	Upper
117	100		
201	78.8	37.6	112.9

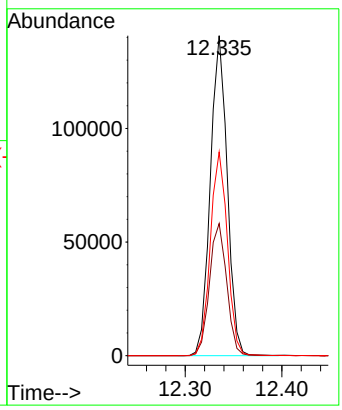




#91
1,2-Dichlorobenzene
Concen: 49.768 ug/l
RT: 12.335 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion:146 Resp: 17098

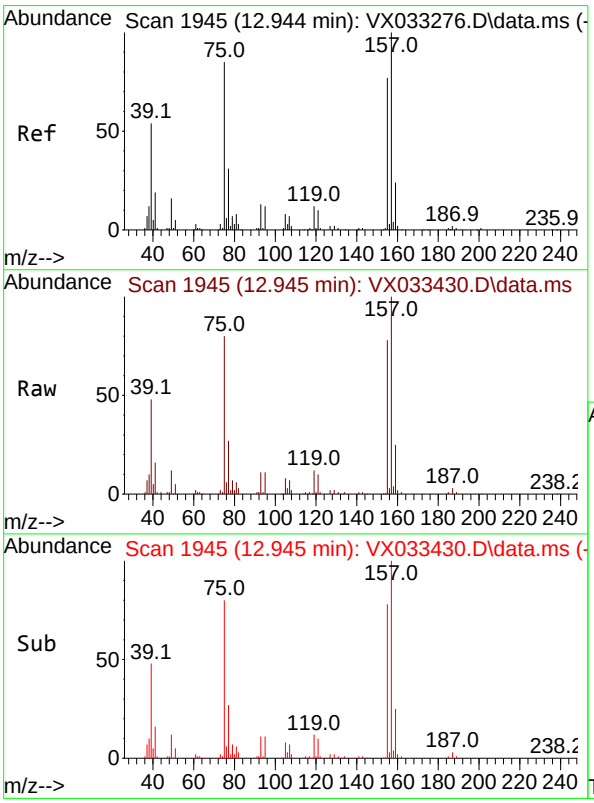
Ion	Ratio	Lower	Upper
146	100		
111	42.2	21.5	64.5
148	64.2	32.0	96.2



Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

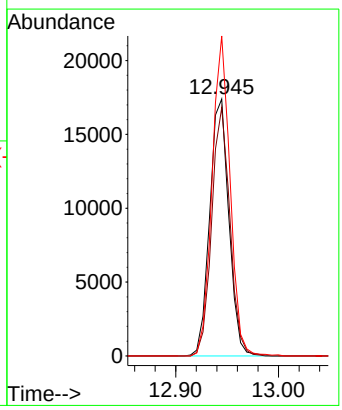
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

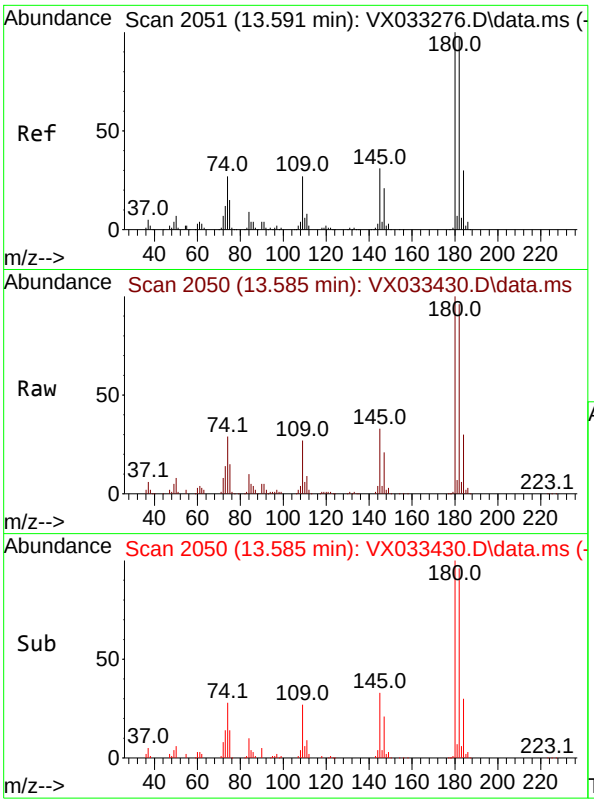


#92
1,2-Dibromo-3-Chloropropane
Concen: 43.655 ug/l
RT: 12.945 min Scan# 1945
Delta R.T. 0.000 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion: 75 Resp: 22473

Ion	Ratio	Lower	Upper
75	100		
155	91.9	41.6	124.8
157	117.0	54.1	162.4

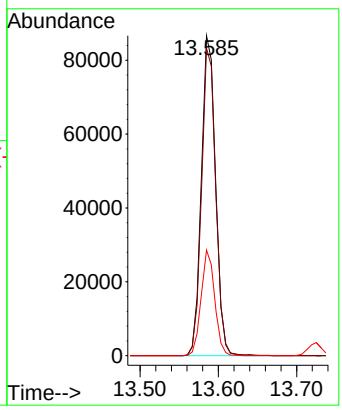




#93
1,2,4-Trichlorobenzene
Concen: 52.564 ug/l
RT: 13.585 min Scan# 2
Delta R.T. -0.006 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion:180 Resp: 10906

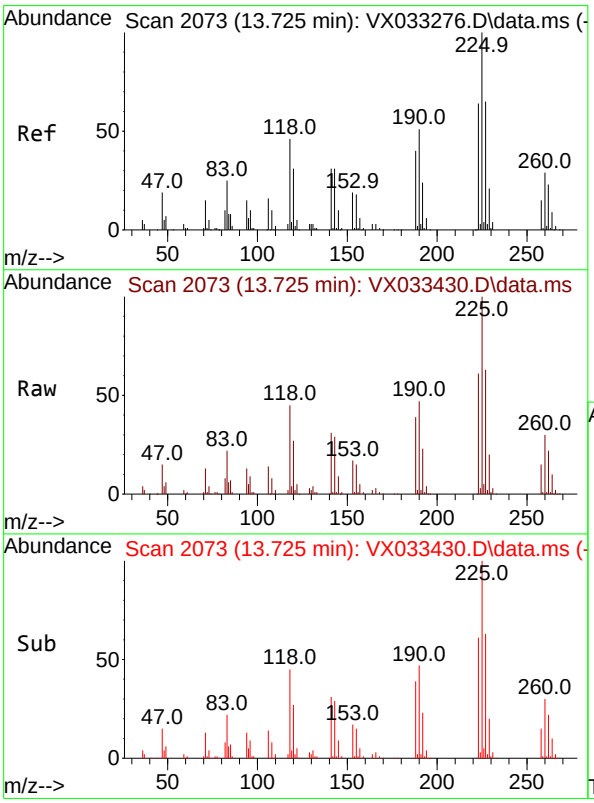
Ion	Ratio	Lower	Upper
180	100		
182	95.7	48.4	145.0
145	31.6	16.2	48.5



Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

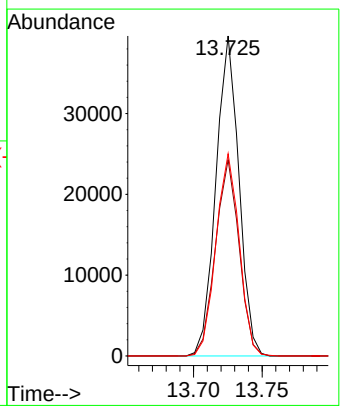
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

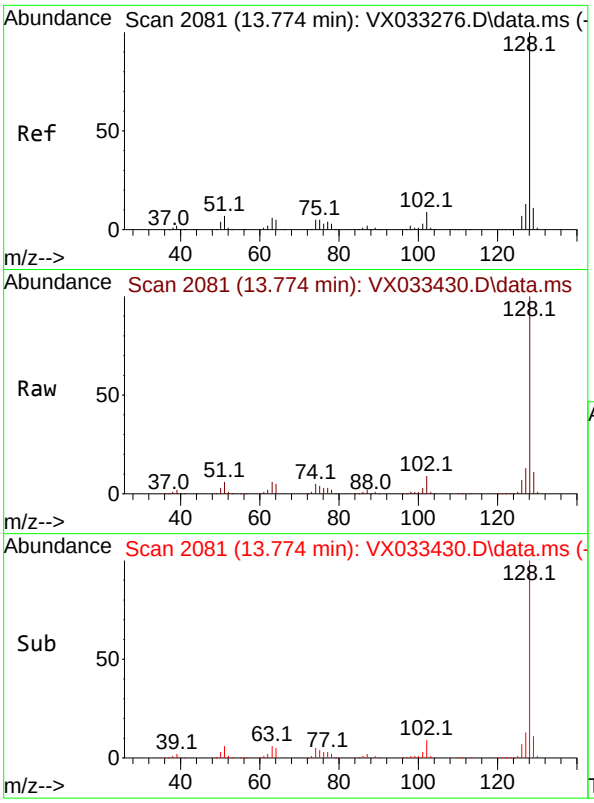


#94
Hexachlorobutadiene
Concen: 55.517 ug/l
RT: 13.725 min Scan# 2073
Delta R.T. 0.000 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion:225 Resp: 46128

Ion	Ratio	Lower	Upper
225	100		
223	62.9	31.9	95.9
227	64.1	31.9	95.5

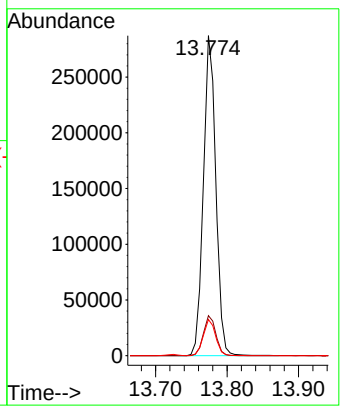




#95
Naphthalene
Concen: 50.172 ug/l
RT: 13.774 min Scan# 2
Delta R.T. 0.000 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion:128 Resp: 34725

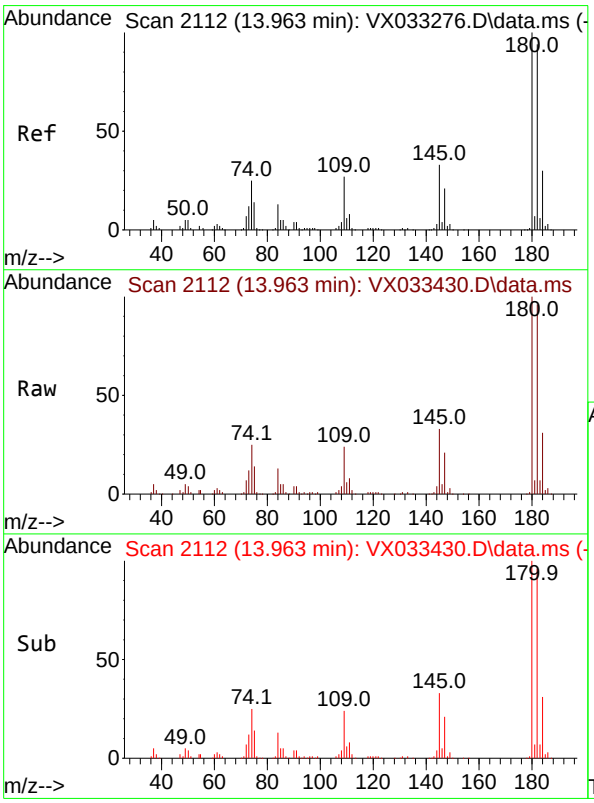
Ion	Ratio	Lower	Upper
128	100		
127	12.5	10.2	15.4
129	11.2	8.9	13.3



Instrument :
MSVOA_X
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

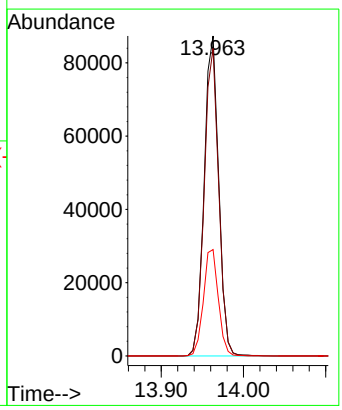
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022



#96
1,2,3-Trichlorobenzene
Concen: 50.808 ug/l
RT: 13.963 min Scan# 2112
Delta R.T. 0.000 min
Lab File: VX033430.D
Acq: 15 Dec 2022 10:10

Tgt Ion:180 Resp: 106772

Ion	Ratio	Lower	Upper
180	100		
182	95.9	47.5	142.6
145	34.3	16.9	50.6



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX121522\
Data File : VX033430.D
Acq On : 15 Dec 2022 10:10
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_X
LabSampleId :
VSTDCCC050

Quant Time: Dec 16 00:54:39 2022
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X120722W.M
Quant Title : SW846 8260
QLast Update : Wed Dec 07 12:43:54 2022
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	88	0.00
2	T	Dichlorodifluoromethane	0.349	0.341	2.3	91	0.00
3	P	Chloromethane	0.404	0.338	16.3	82	0.00
4	C	Vinyl Chloride	0.461	0.393	14.8#	81	0.00
5	T	Bromomethane	0.338	0.258	23.7	75	0.00
6	T	Chloroethane	0.350	0.320	8.6	83	0.00
7	T	Trichlorofluoromethane	0.866	0.605	30.1#	65	0.00
8	T	Diethyl Ether	0.313	0.215	31.3#	69	0.00
9	T	1,1,2-Trichlorotrifluoroeth	0.459	0.477	-3.9	94	0.00
10	T	Methyl Iodide	0.503	0.487	3.2	87	0.00
11	T	Tert butyl alcohol	0.098	0.078	20.4	85	0.00
12	CM	1,1-Dichloroethene	0.453	0.431	4.9#	89	0.00
13	T	Acrolein	0.106	0.064	39.6#	56	0.00
14	T	Allyl chloride	0.724	0.661	8.7	85	0.00
15	T	Acrylonitrile	0.243	0.212	12.8	82	0.00
16	T	Acetone	0.237	0.250	-5.5	107	0.00
17	T	Carbon Disulfide	1.163	1.017	12.6	81	0.00
18	T	Methyl Acetate	0.687	0.623	9.3	85	0.00
19	T	Methyl tert-butyl Ether	1.570	1.511	3.8	90	0.00
20	T	Methylene Chloride	0.529	0.468	11.5	87	0.00
21	T	trans-1,2-Dichloroethene	0.496	0.475	4.2	89	0.00
22	T	Diisopropyl ether	1.551	1.520	2.0	88	-0.01
23	T	Vinyl Acetate	1.204	1.143	5.1	85	0.00
24	P	1,1-Dichloroethane	0.911	0.850	6.7	88	0.00
25	T	2-Butanone	0.341	0.321	5.9	87	0.00
26	T	2,2-Dichloropropane	0.670	0.697	-4.0	94	0.00
27	T	cis-1,2-Dichloroethene	0.593	0.583	1.7	91	0.00
28	T	Bromochloromethane	0.381	0.366	3.9	86	-0.01
29	T	Tetrahydrofuran	0.221	0.190	14.0	79	-0.01
30	C	Chloroform	1.012	0.993	1.9#	91	-0.01
31	T	Cyclohexane	0.762	0.748	1.8	88	0.00
32	T	1,1,1-Trichloroethane	0.870	0.894	-2.8	92	0.00
33	S	1,2-Dichloroethane-d4	0.321	0.273	15.0	83	0.00
34	I	1,4-Difluorobenzene	1.000	1.000	0.0	84	0.00
35	S	Dibromofluoromethane	0.225	0.208	7.6	86	-0.01
36	T	1,1-Dichloropropene	0.438	0.450	-2.7	90	0.00
37	T	Ethyl Acetate	0.414	0.379	8.5	80	0.00
38	T	Carbon Tetrachloride	0.491	0.512	-4.3	90	0.00
39	T	Methylcyclohexane	0.491	0.540	-10.0	92	0.00
40	TM	Benzene	1.278	1.292	-1.1	89	0.00
41	T	Methacrylonitrile	0.228	0.216	5.3	81	0.00
42	TM	1,2-Dichloroethane	0.508	0.505	0.6	89	-0.01
43	T	Isopropyl Acetate	0.667	0.638	4.3	84	0.00
44	TM	Trichloroethene	0.352	0.369	-4.8	92	0.00
45	C	1,2-Dichloropropane	0.327	0.330	-0.9#	90	0.00
46	T	Dibromomethane	0.249	0.251	-0.8	90	0.00
47	T	Bromodichloromethane	0.485	0.508	-4.7	91	0.00
48	T	Methyl methacrylate	0.344	0.330	4.1	84	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX121522\
Data File : VX033430.D
Acq On : 15 Dec 2022 10:10
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_X
LabSampleId :
VSTDCCC050

Quant Time: Dec 16 00:54:39 2022
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X120722W.M
Quant Title : SW846 8260
QLast Update : Wed Dec 07 12:43:54 2022
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	78	0.00
50	S	Toluene-d8	0.470	0.455	3.2	86	0.00
51	T	4-Methyl-2-Pentanone	0.422	0.416	1.4	85	0.00
52	CM	Toluene	0.827	0.905	-9.4#	93	0.00
53	T	t-1,3-Dichloropropene	0.473	0.512	-8.2	92	0.00
54	T	cis-1,3-Dichloropropene	0.517	0.549	-6.2	90	0.00
55	T	1,1,2-Trichloroethane	0.347	0.365	-5.2	92	0.00
56	T	Ethyl methacrylate	0.489	0.525	-7.4	90	0.00
57	T	1,3-Dichloropropane	0.558	0.588	-5.4	92	0.00
58	T	2-Chloroethyl Vinyl ether	0.224	0.214	4.5	80	0.00
59	T	2-Hexanone	0.311	0.318	-2.3	87	0.00
60	T	Dibromochloromethane	0.383	0.421	-9.9	94	0.00
61	T	1,2-Dibromoethane	0.370	0.393	-6.2	92	0.00
62	S	4-Bromofluorobenzene	0.360	0.370	-2.8	88	0.00
63	I	Chlorobenzene-d5	1.000	1.000	0.0	88	0.00
64	T	Tetrachloroethene	0.342	0.348	-1.8	95	0.00
65	PM	Chlorobenzene	1.013	1.042	-2.9	95	0.00
66	T	1,1,1,2-Tetrachloroethane	0.383	0.394	-2.9	93	0.00
67	C	Ethyl Benzene	1.764	1.859	-5.4#	94	0.00
68	T	m/p-Xylenes	0.686	0.740	-7.9	96	0.00
69	T	o-Xylene	0.678	0.712	-5.0	93	0.00
70	T	Styrene	1.111	1.192	-7.3	94	0.00
71	P	Bromoform	0.303	0.311	-2.6	90	0.00
72	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	90	0.00
73	T	Isopropylbenzene	3.624	3.763	-3.8	95	0.00
74	T	N-amyl acetate	1.236	1.207	2.3	88	0.00
75	P	1,1,2,2-Tetrachloroethane	1.150	1.092	5.0	90	0.00
76	T	1,2,3-Trichloropropane	1.017	0.985	3.1	92	0.00
77	T	Bromobenzene	0.915	0.929	-1.5	97	0.00
78	T	n-propylbenzene	4.047	4.318	-6.7	96	0.00
79	T	2-Chlorotoluene	2.501	2.560	-2.4	95	0.00
80	T	1,3,5-Trimethylbenzene	3.017	3.173	-5.2	96	0.00
81	T	trans-1,4-Dichloro-2-butene	0.327	0.312	4.6	90	0.00
82	T	4-Chlorotoluene	2.908	2.970	-2.1	96	0.00
83	T	tert-Butylbenzene	3.008	3.143	-4.5	95	0.00
84	T	1,2,4-Trimethylbenzene	3.011	3.148	-4.5	96	0.00
85	T	sec-Butylbenzene	3.510	3.867	-10.2	98	0.00
86	T	p-Isopropyltoluene	3.026	3.282	-8.5	98	0.00
87	T	1,3-Dichlorobenzene	1.658	1.716	-3.5	96	0.00
88	T	1,4-Dichlorobenzene	1.693	1.719	-1.5	97	0.00
89	T	n-Butylbenzene	2.478	2.777	-12.1	100	0.00
90	T	Hexachloroethane	0.514	0.527	-2.5	94	0.00
91	T	1,2-Dichlorobenzene	1.657	1.650	0.4	95	0.00
92	T	1,2-Dibromo-3-Chloropropane	0.248	0.217	12.5	84	0.00
93	T	1,2,4-Trichlorobenzene	1.001	1.052	-5.1	99	0.00
94	T	Hexachlorobutadiene	0.401	0.445	-11.0	105	0.00
95	T	Naphthalene	3.339	3.350	-0.3	91	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX121522\
Data File : VX033430.D
Acq On : 15 Dec 2022 10:10
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_X
LabSampleId :
VSTDCCC050

Quant Time: Dec 16 00:54:39 2022
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X120722W.M
Quant Title : SW846 8260
QLast Update : Wed Dec 07 12:43:54 2022
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	1.014	1.030	-1.6	94	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 6

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX121522\
Data File : VX033430.D
Acq On : 15 Dec 2022 10:10
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_X
LabSampleId :
VSTDCCC050

Quant Time: Dec 16 00:54:39 2022
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X120722W.M
Quant Title : SW846 8260
QLast Update : Wed Dec 07 12:43:54 2022
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	88	0.00
2	T	Dichlorodifluoromethane	50.000	48.857	2.3	91	0.00
3	P	Chloromethane	50.000	41.907	16.2	82	0.00
4	C	Vinyl Chloride	50.000	42.593	14.8#	81	0.00
5	T	Bromomethane	50.000	38.059	23.9	75	0.00
6	T	Chloroethane	50.000	45.688	8.6	83	0.00
7	T	Trichlorofluoromethane	50.000	34.963	30.1#	65	0.00
8	T	Diethyl Ether	50.000	34.367	31.3#	69	0.00
9	T	1,1,2-Trichlorotrifluoroeth	50.000	51.935	-3.9	94	0.00
10	T	Methyl Iodide	50.000	48.441	3.1	87	0.00
11	T	Tert butyl alcohol	250.000	198.723	20.5	85	0.00
12	CM	1,1-Dichloroethene	50.000	47.504	5.0#	89	0.00
13	T	Acrolein	250.000	150.751	39.7#	56	0.00
14	T	Allyl chloride	50.000	45.680	8.6	85	0.00
15	T	Acrylonitrile	250.000	217.703	12.9	82	0.00
16	T	Acetone	250.000	263.734	-5.5	107	0.00
17	T	Carbon Disulfide	50.000	43.713	12.6	81	0.00
18	T	Methyl Acetate	50.000	45.331	9.3	85	0.00
19	T	Methyl tert-butyl Ether	50.000	48.117	3.8	90	0.00
20	T	Methylene Chloride	50.000	44.186	11.6	87	0.00
21	T	trans-1,2-Dichloroethene	50.000	47.906	4.2	89	0.00
22	T	Diisopropyl ether	50.000	49.007	2.0	88	-0.01
23	T	Vinyl Acetate	250.000	237.436	5.0	85	0.00
24	P	1,1-Dichloroethane	50.000	46.634	6.7	88	0.00
25	T	2-Butanone	250.000	235.335	5.9	87	0.00
26	T	2,2-Dichloropropane	50.000	52.038	-4.1	94	0.00
27	T	cis-1,2-Dichloroethene	50.000	49.154	1.7	91	0.00
28	T	Bromochloromethane	50.000	48.028	3.9	86	-0.01
29	T	Tetrahydrofuran	250.000	215.085	14.0	79	-0.01
30	C	Chloroform	50.000	49.069	1.9#	91	-0.01
31	T	Cyclohexane	50.000	49.051	1.9	88	0.00
32	T	1,1,1-Trichloroethane	50.000	51.371	-2.7	92	0.00
33	S	1,2-Dichloroethane-d4	50.000	42.623	14.8	83	0.00
34	I	1,4-Difluorobenzene	50.000	50.000	0.0	84	0.00
35	S	Dibromofluoromethane	50.000	46.257	7.5	86	-0.01
36	T	1,1-Dichloropropene	50.000	51.308	-2.6	90	0.00
37	T	Ethyl Acetate	50.000	45.696	8.6	80	0.00
38	T	Carbon Tetrachloride	50.000	52.107	-4.2	90	0.00
39	T	Methylcyclohexane	50.000	54.993	-10.0	92	0.00
40	TM	Benzene	50.000	50.524	-1.0	89	0.00
41	T	Methacrylonitrile	50.000	47.333	5.3	81	0.00
42	TM	1,2-Dichloroethane	50.000	49.784	0.4	89	-0.01
43	T	Isopropyl Acetate	50.000	47.844	4.3	84	0.00
44	TM	Trichloroethene	50.000	52.390	-4.8	92	0.00
45	C	1,2-Dichloropropane	50.000	50.412	-0.8#	90	0.00
46	T	Dibromomethane	50.000	50.361	-0.7	90	0.00
47	T	Bromodichloromethane	50.000	52.352	-4.7	91	0.00
48	T	Methyl methacrylate	50.000	47.923	4.2	84	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX121522\
Data File : VX033430.D
Acq On : 15 Dec 2022 10:10
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_X
LabSampleId :
VSTDCCC050

Quant Time: Dec 16 00:54:39 2022
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X120722W.M
Quant Title : SW846 8260
QLast Update : Wed Dec 07 12:43:54 2022
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	884.207	11.6	78	0.00
50	S	Toluene-d8	50.000	48.378	3.2	86	0.00
51	T	4-Methyl-2-Pentanone	250.000	246.435	1.4	85	0.00
52	CM	Toluene	50.000	54.761	-9.5#	93	0.00
53	T	t-1,3-Dichloropropene	50.000	49.141	1.7	92	0.00
54	T	cis-1,3-Dichloropropene	50.000	53.138	-6.3	90	0.00
55	T	1,1,2-Trichloroethane	50.000	52.574	-5.1	92	0.00
56	T	Ethyl methacrylate	50.000	53.687	-7.4	90	0.00
57	T	1,3-Dichloropropane	50.000	52.677	-5.4	92	0.00
58	T	2-Chloroethyl Vinyl ether	250.000	238.862	4.5	80	0.00
59	T	2-Hexanone	250.000	255.739	-2.3	87	0.00
60	T	Dibromochloromethane	50.000	54.930	-9.9	94	0.00
61	T	1,2-Dibromoethane	50.000	53.222	-6.4	92	0.00
62	S	4-Bromofluorobenzene	50.000	51.395	-2.8	88	0.00
63	I	Chlorobenzene-d5	50.000	50.000	0.0	88	0.00
64	T	Tetrachloroethene	50.000	50.953	-1.9	95	0.00
65	PM	Chlorobenzene	50.000	51.464	-2.9	95	0.00
66	T	1,1,1,2-Tetrachloroethane	50.000	51.451	-2.9	93	0.00
67	C	Ethyl Benzene	50.000	52.692	-5.4#	94	0.00
68	T	m/p-Xylenes	100.000	107.856	-7.9	96	0.00
69	T	o-Xylene	50.000	52.510	-5.0	93	0.00
70	T	Styrene	50.000	53.646	-7.3	94	0.00
71	P	Bromoform	50.000	51.374	-2.7	90	0.00
72	I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	90	0.00
73	T	Isopropylbenzene	50.000	51.922	-3.8	95	0.00
74	T	N-amyl acetate	50.000	48.802	2.4	88	0.00
75	P	1,1,2,2-Tetrachloroethane	50.000	47.488	5.0	90	0.00
76	T	1,2,3-Trichloropropane	50.000	48.402	3.2	92	0.00
77	T	Bromobenzene	50.000	50.759	-1.5	97	0.00
78	T	n-propylbenzene	50.000	53.354	-6.7	96	0.00
79	T	2-Chlorotoluene	50.000	51.178	-2.4	95	0.00
80	T	1,3,5-Trimethylbenzene	50.000	52.584	-5.2	96	0.00
81	T	trans-1,4-Dichloro-2-butene	50.000	47.686	4.6	90	0.00
82	T	4-Chlorotoluene	50.000	51.072	-2.1	96	0.00
83	T	tert-Butylbenzene	50.000	52.240	-4.5	95	0.00
84	T	1,2,4-Trimethylbenzene	50.000	52.274	-4.5	96	0.00
85	T	sec-Butylbenzene	50.000	55.088	-10.2	98	0.00
86	T	p-Isopropyltoluene	50.000	54.230	-8.5	98	0.00
87	T	1,3-Dichlorobenzene	50.000	51.761	-3.5	96	0.00
88	T	1,4-Dichlorobenzene	50.000	50.770	-1.5	97	0.00
89	T	n-Butylbenzene	50.000	56.031	-12.1	100	0.00
90	T	Hexachloroethane	50.000	51.259	-2.5	94	0.00
91	T	1,2-Dichlorobenzene	50.000	49.768	0.5	95	0.00
92	T	1,2-Dibromo-3-Chloropropane	50.000	43.655	12.7	84	0.00
93	T	1,2,4-Trichlorobenzene	50.000	52.564	-5.1	99	0.00
94	T	Hexachlorobutadiene	50.000	55.517	-11.0	105	0.00
95	T	Naphthalene	50.000	50.172	-0.3	91	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX121522\
Data File : VX033430.D
Acq On : 15 Dec 2022 10:10
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_X
LabSampleId :
VSTDCCC050

Quant Time: Dec 16 00:54:39 2022
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X120722W.M
Quant Title : SW846 8260
QLast Update : Wed Dec 07 12:43:54 2022
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	50.808	-1.6	94	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 6

CHEMTECH

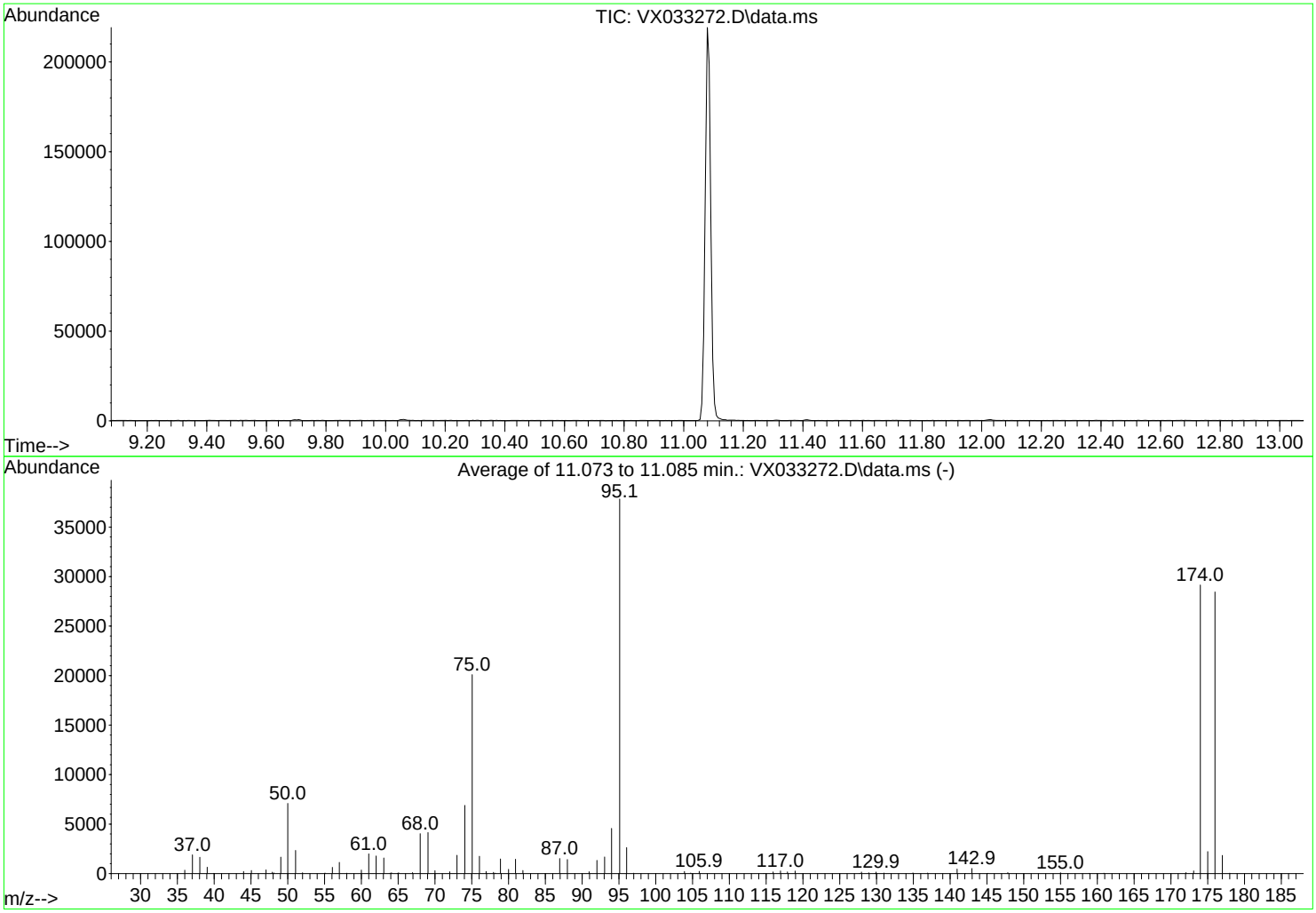
QC SAMPLE DATA

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX120722\
Data File : VX033272.D
Acq On : 07 Dec 2022 09:17
Operator : JC/MD
Sample : BFB
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X120722W.M
Title : SW846 8260
Last Update : Wed Dec 07 12:43:54 2022



AutoFind: Scans 1638, 1639, 1640; Background Corrected with Scan 1632

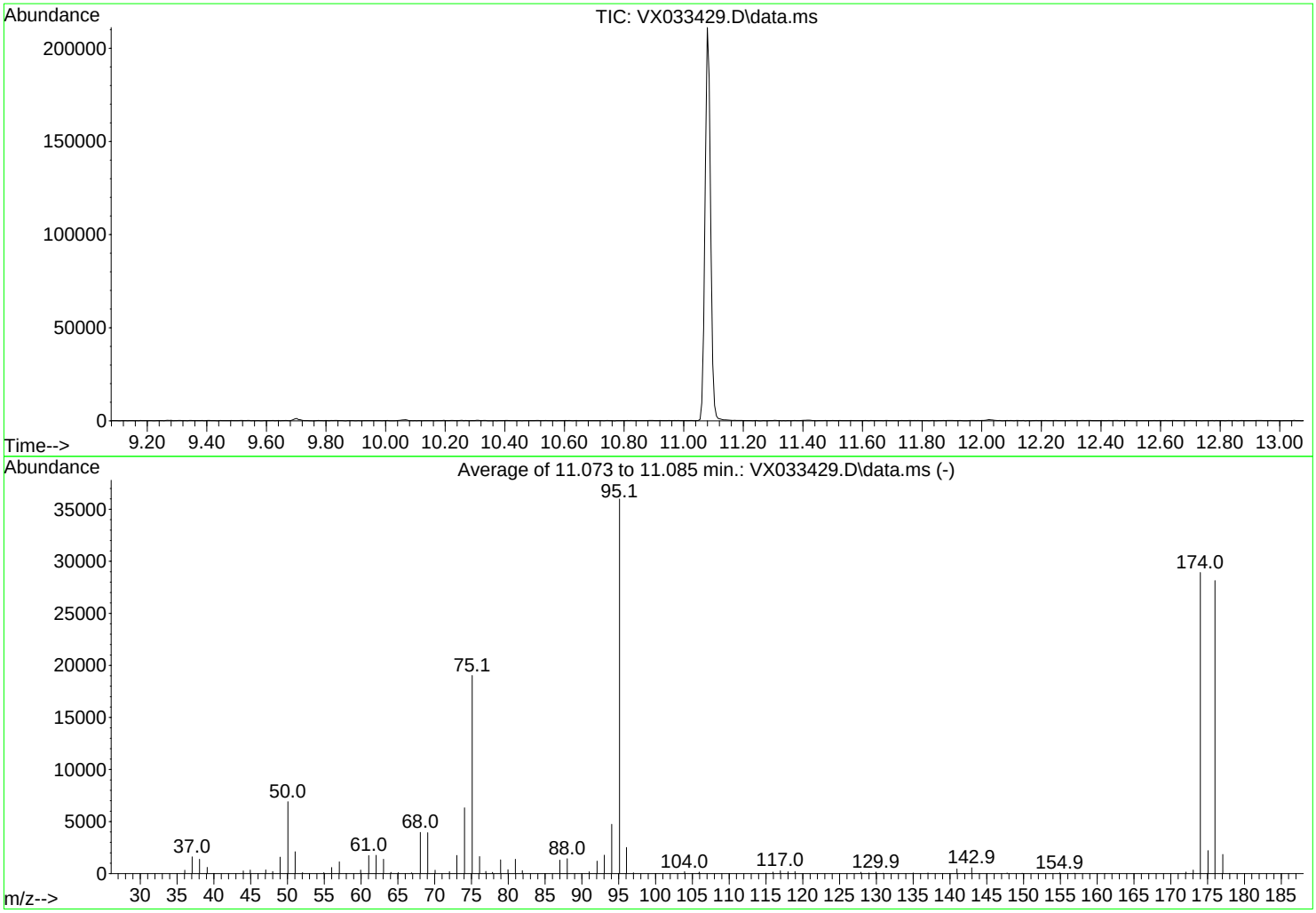
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.7	7090	PASS
75	95	30	60	53.1	20095	PASS
95	95	100	100	100.0	37840	PASS
96	95	5	9	6.9	2623	PASS
173	174	0.00	2	0.9	270	PASS
174	95	50	100	77.0	29149	PASS
175	174	5	9	7.6	2227	PASS
176	174	95	101	97.6	28448	PASS
177	176	5	9	6.5	1841	PASS

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX121522\
Data File : VX033429.D
Acq On : 15 Dec 2022 09:39
Operator : JC/MD
Sample : BFB
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X120722W.M
Title : SW846 8260
Last Update : Wed Dec 07 12:43:54 2022



AutoFind: Scans 1638, 1639, 1640; Background Corrected with Scan 1632

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.2	6908	PASS
75	95	30	60	52.9	19031	PASS
95	95	100	100	100.0	35987	PASS
96	95	5	9	7.0	2518	PASS
173	174	0.00	2	1.2	336	PASS
174	95	50	100	80.4	28931	PASS
175	174	5	9	7.6	2209	PASS
176	174	95	101	97.3	28149	PASS
177	176	5	9	6.6	1847	PASS

CHEMTECH 284 Sheffield Street, Mountainside, NJ 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:	VX1215WBL01	SDG No.:	N6070
Lab Sample ID:	VX1215WBL01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group3
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX033431.D	1		12/15/22 10:39	VX121522

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-01-4	Vinyl Chloride	0.22	U	0.22	1.00	ug/L
75-35-4	1,1-Dichloroethene	0.23	U	0.23	1.00	ug/L
75-34-3	1,1-Dichloroethane	0.20	U	0.20	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	0.17	U	0.17	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	0.18	U	0.18	1.00	ug/L
71-43-2	Benzene	0.16	U	0.16	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.18	U	0.18	1.00	ug/L
79-01-6	Trichloroethene	0.27	U	0.27	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	0.19	U	0.19	1.00	ug/L
127-18-4	Tetrachloroethene	0.18	U	0.18	1.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	43.0		70 (74) - 130 (125)	86%	SPK: 50
1868-53-7	Dibromofluoromethane	43.9		70 (75) - 130 (124)	88%	SPK: 50
2037-26-5	Toluene-d8	42.9		70 (86) - 130 (113)	86%	SPK: 50
460-00-4	4-Bromofluorobenzene	43.5		70 (64) - 130 (133)	87%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	143000	5.55			
540-36-3	1,4-Difluorobenzene	224000	6.757			
3114-55-4	Chlorobenzene-d5	198000	10.055			
3855-82-1	1,4-Dichlorobenzene-d4	92100	12.024			

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_X\Data\VX121522\
Data File : VX033431.D
Acq On : 15 Dec 2022 10:39
Operator : JC/MD
Sample : VX1215WBL01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VX1215WBL01

Quant Time: Dec 16 00:59:15 2022
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X120722W.M
Quant Title : SW846 8260
QLast Update : Wed Dec 07 12:43:54 2022
Response via : Initial Calibration

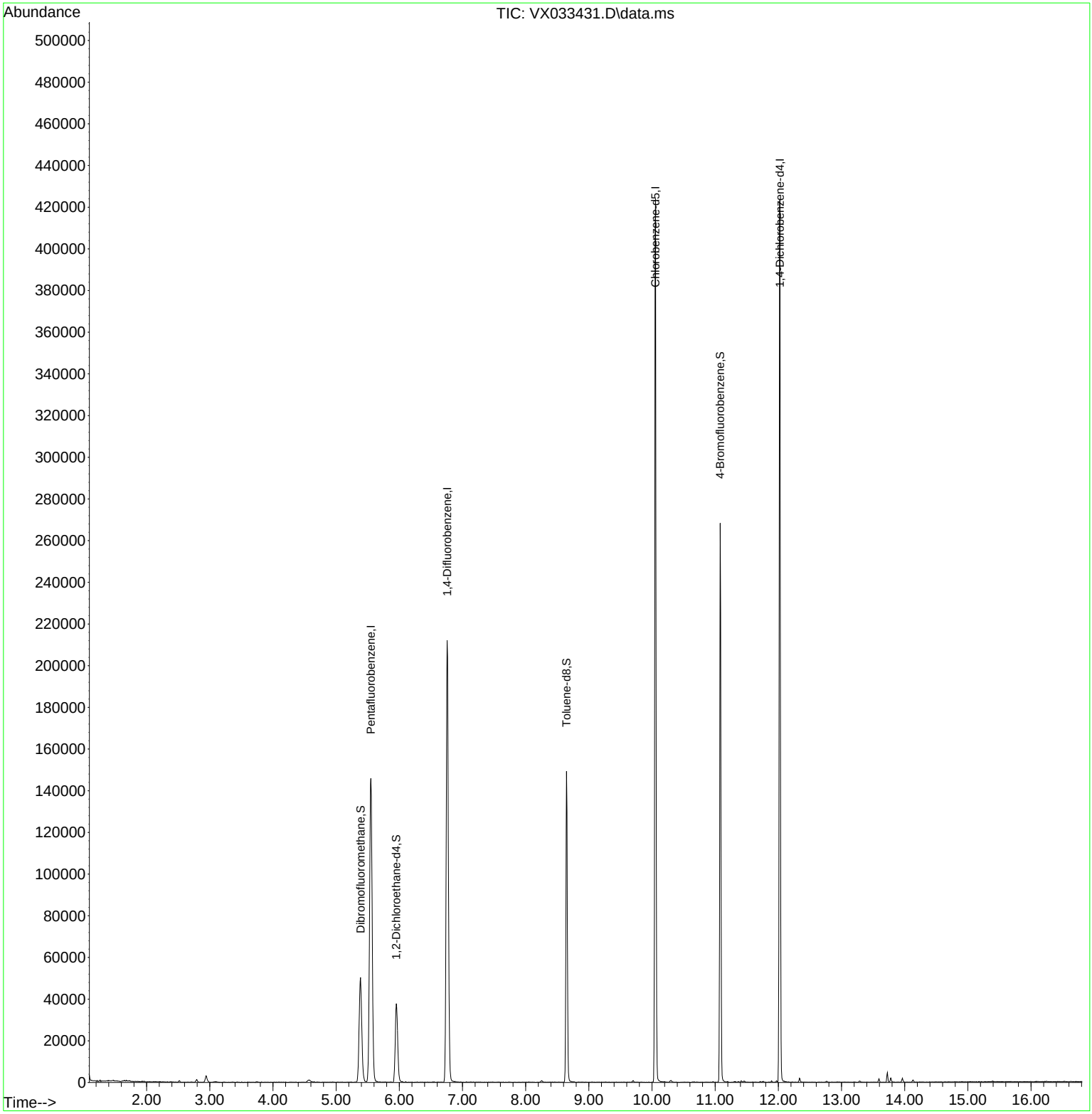
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.550	168	143365	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.757	114	223781	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.055	117	198464	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.024	152	92099	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.952	65	39540	42.991	ug/l	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery =	85.980%		
35) Dibromofluoromethane	5.385	113	44225	43.938	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery =	87.880%		
50) Toluene-d8	8.647	98	90233	42.854	ug/l	0.00
Spiked Amount 50.000	Range 92 - 112		Recovery =	85.700%#		
62) 4-Bromofluorobenzene	11.079	95	70078	43.528	ug/l	0.00
Spiked Amount 50.000	Range 83 - 123		Recovery =	87.060%		
Target Compounds						Qvalue

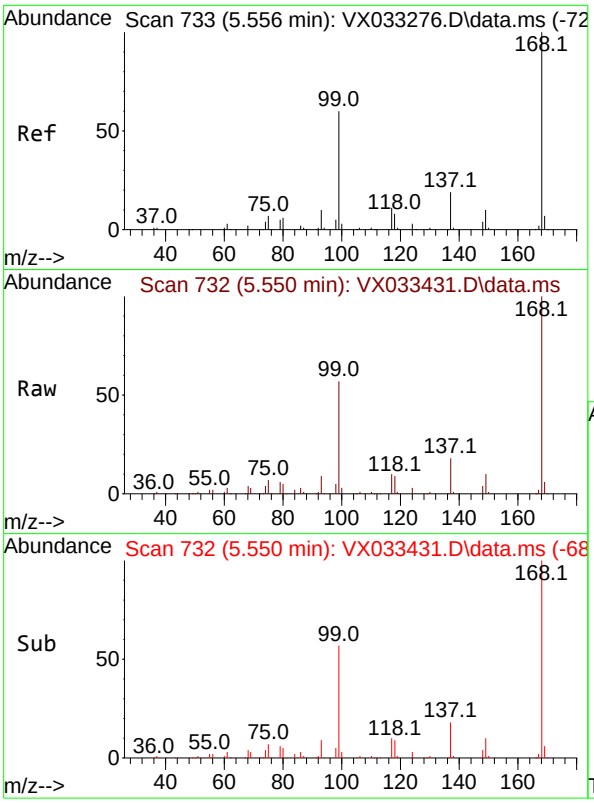
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX121522\
Data File : VX033431.D
Acq On : 15 Dec 2022 10:39
Operator : JC/MD
Sample : VX1215WBL01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VX1215WBL01

Quant Time: Dec 16 00:59:15 2022
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X120722W.M
Quant Title : SW846 8260
QLast Update : Wed Dec 07 12:43:54 2022
Response via : Initial Calibration



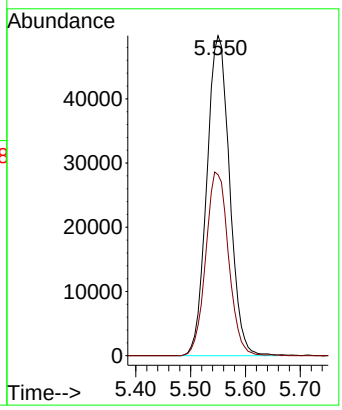


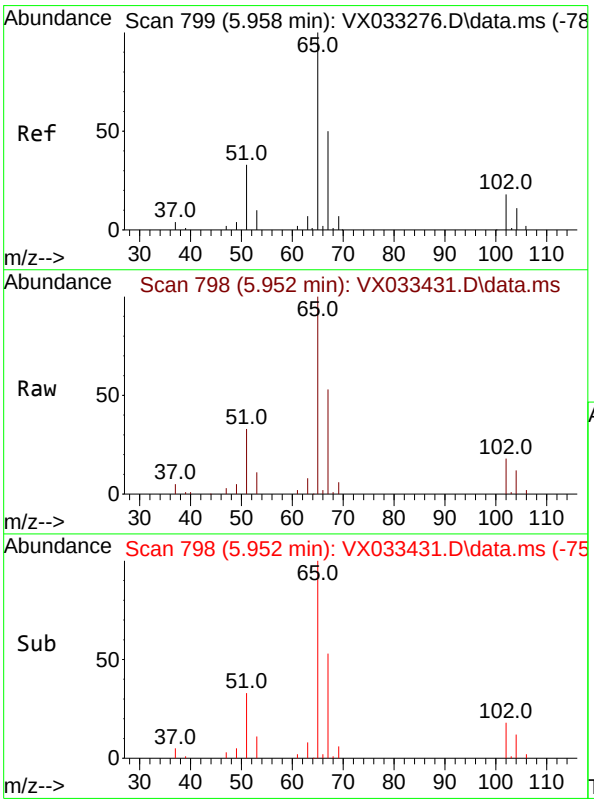
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 5.550 min Scan# 7
Delta R.T. -0.006 min
Lab File: VX033431.D
Acq: 15 Dec 2022 10:39

Instrument :
MSVOA_X
ClientSampleId :
VX1215WBL01

Tgt Ion:168 Resp: 143365

Ion	Ratio	Lower	Upper
168	100		
99	56.5	46.1	69.1

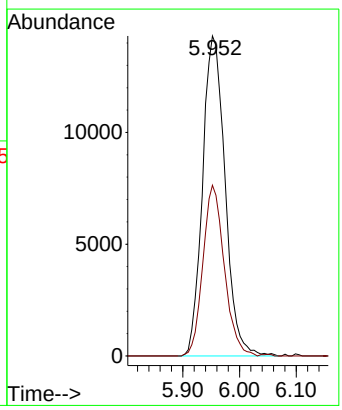


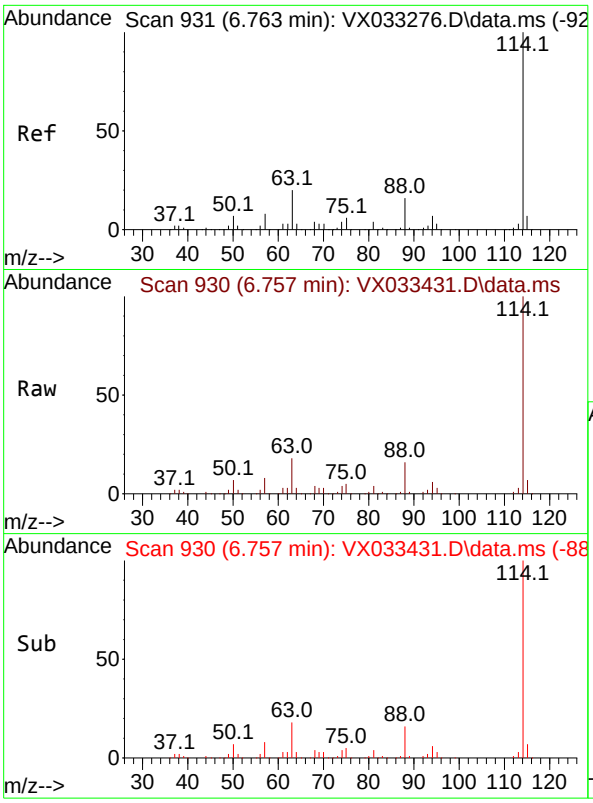


#33
1,2-Dichloroethane-d4
Concen: 42.991 ug/l
RT: 5.952 min Scan# 798
Delta R.T. -0.006 min
Lab File: VX033431.D
Acq: 15 Dec 2022 10:39

Tgt Ion: 65 Resp: 39540

Ion	Ratio	Lower	Upper
65	100		
67	50.6	0.0	101.8



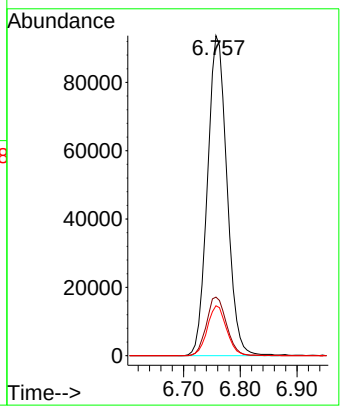


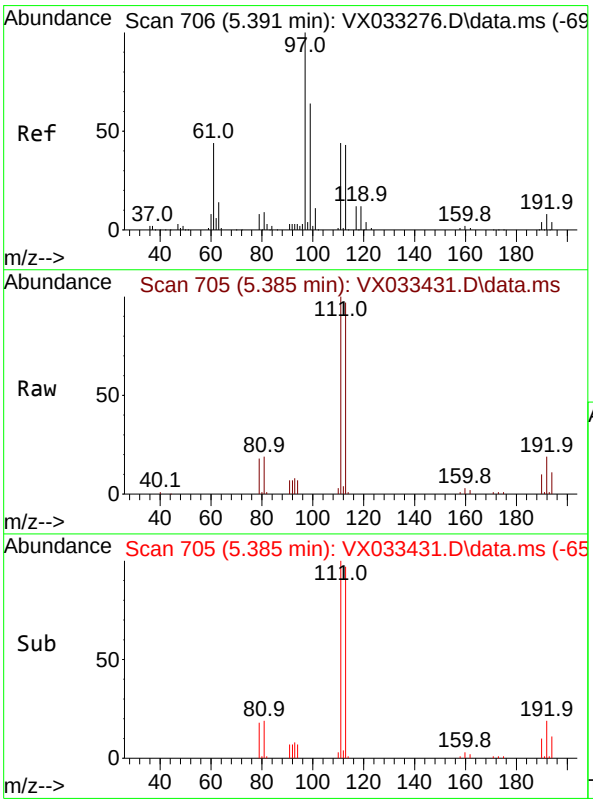
#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 6.757 min Scan# 9
Delta R.T. -0.006 min
Lab File: VX033431.D
Acq: 15 Dec 2022 10:39

Instrument :
MSVOA_X
ClientSampleId :
VX1215WBL01

Tgt Ion:114 Resp: 223781

Ion	Ratio	Lower	Upper
114	100		
63	18.3	0.0	41.6
88	15.6	0.0	33.4

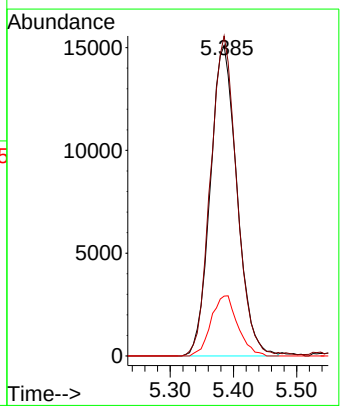


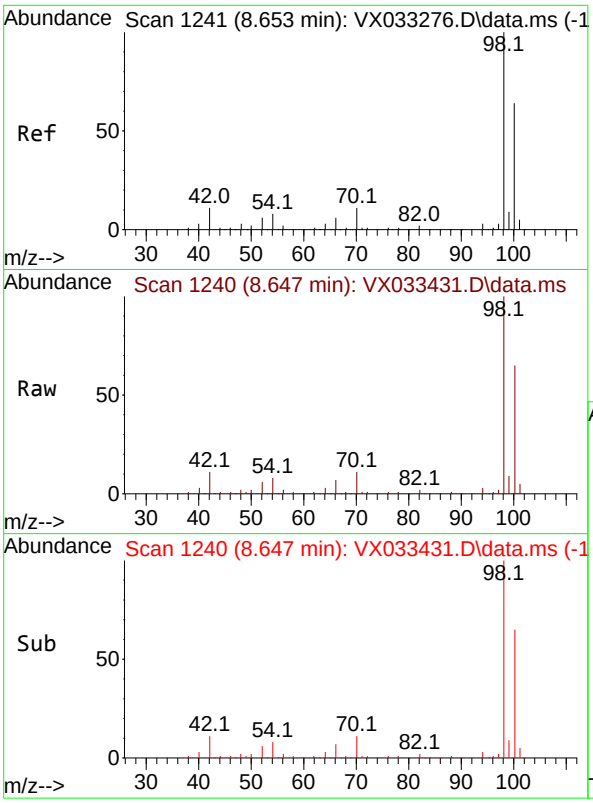


#35
Dibromofluoromethane
Concen: 43.938 ug/l
RT: 5.385 min Scan# 705
Delta R.T. -0.006 min
Lab File: VX033431.D
Acq: 15 Dec 2022 10:39

Tgt Ion:113 Resp: 44225

Ion	Ratio	Lower	Upper
113	100		
111	101.9	82.4	123.6
192	19.3	15.4	23.2



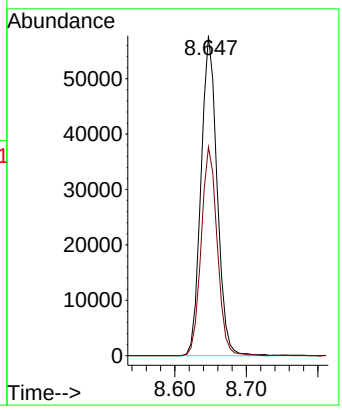


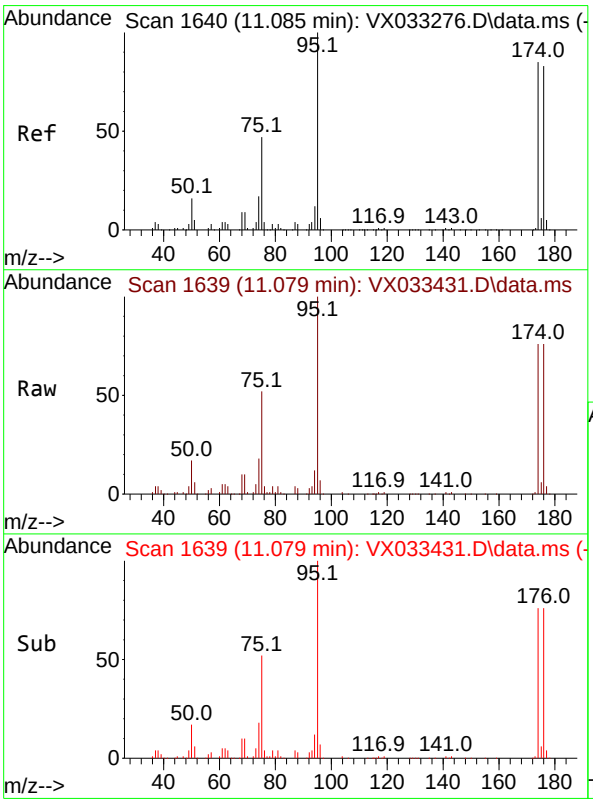
#50
Toluene-d8
Concen: 42.854 ug/l
RT: 8.647 min Scan# 1
Delta R.T. -0.006 min
Lab File: VX033431.D
Acq: 15 Dec 2022 10:39

Instrument :
MSVOA_X
ClientSampleId :
VX1215WBL01

Tgt Ion: 98 Resp: 90233

Ion	Ratio	Lower	Upper
98	100		
100	64.9	50.9	76.3

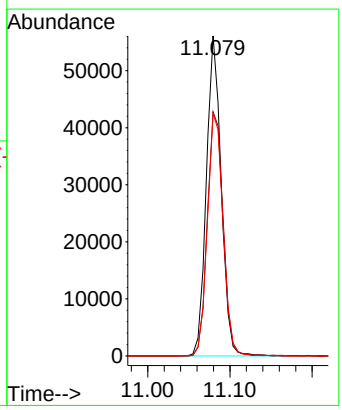


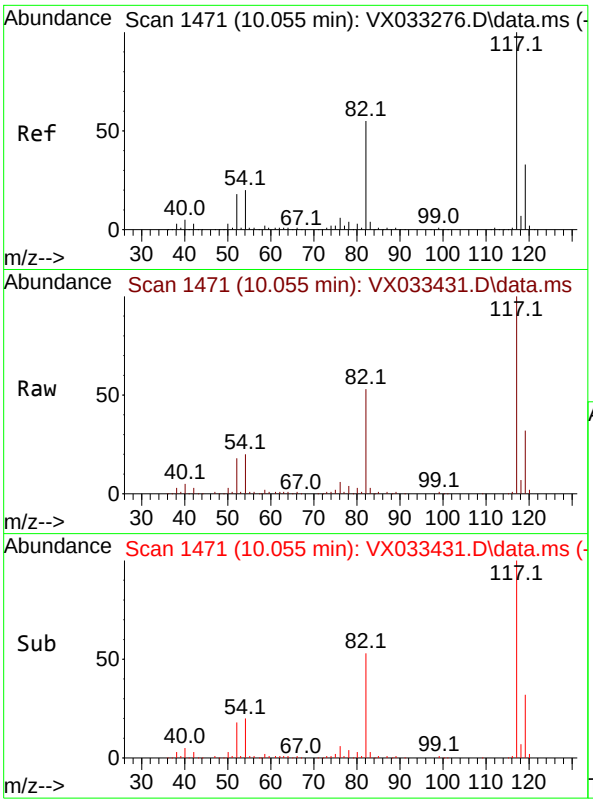


#62
4-Bromofluorobenzene
Concen: 43.528 ug/l
RT: 11.079 min Scan# 1639
Delta R.T. -0.006 min
Lab File: VX033431.D
Acq: 15 Dec 2022 10:39

Tgt Ion: 95 Resp: 70078

Ion	Ratio	Lower	Upper
95	100		
174	81.8	0.0	164.0
176	80.1	0.0	154.4



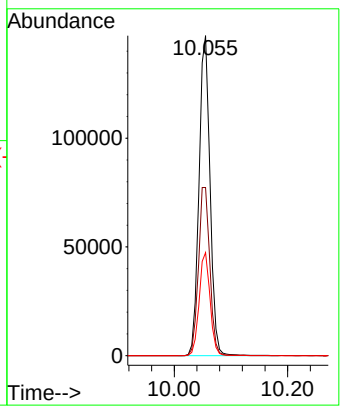


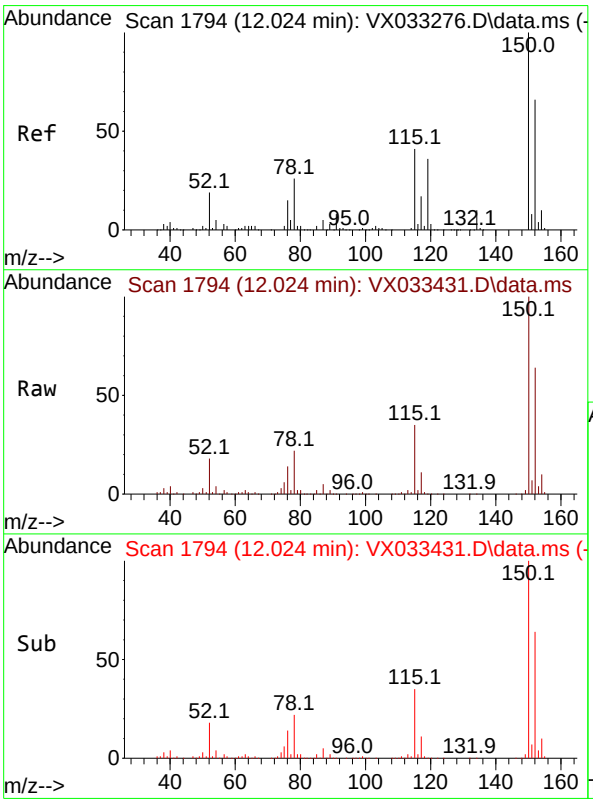
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.055 min Scan# 14
Delta R.T. 0.000 min
Lab File: VX033431.D
Acq: 15 Dec 2022 10:39

Instrument :
MSVOA_X
ClientSampleId :
VX1215WBL01

Tgt Ion:117 Resp: 198464

Ion	Ratio	Lower	Upper
117	100		
82	52.6	44.3	66.5
119	32.2	25.7	38.5

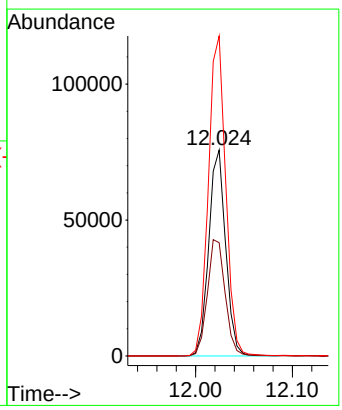




#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.024 min Scan# 1794
Delta R.T. 0.000 min
Lab File: VX033431.D
Acq: 15 Dec 2022 10:39

Tgt Ion:152 Resp: 92099

Ion	Ratio	Lower	Upper
152	100		
115	59.3	44.0	132.0
150	158.8	0.0	351.8



CHEMTECH 284 Sheffield Street, Mountainside, NJ 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:	VX1215WBS01	SDG No.:	N6070
Lab Sample ID:	VX1215WBS01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group3
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX033432.D	1		12/15/22 11:07	VX121522

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-01-4	Vinyl Chloride	19.0		0.22	1.00	ug/L
75-35-4	1,1-Dichloroethene	14.9		0.23	1.00	ug/L
75-34-3	1,1-Dichloroethane	19.9		0.20	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	20.6		0.17	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	21.7		0.18	1.00	ug/L
71-43-2	Benzene	21.3		0.16	1.00	ug/L
107-06-2	1,2-Dichloroethane	21.1		0.18	1.00	ug/L
79-01-6	Trichloroethene	22.2		0.27	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	22.0		0.19	1.00	ug/L
127-18-4	Tetrachloroethene	22.0		0.18	1.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	48.2		70 (74) - 130 (125)	96%	SPK: 50
1868-53-7	Dibromofluoromethane	51.4		70 (75) - 130 (124)	103%	SPK: 50
2037-26-5	Toluene-d8	54.1		70 (86) - 130 (113)	108%	SPK: 50
460-00-4	4-Bromofluorobenzene	58.7		70 (64) - 130 (133)	117%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	144000	5.55			
540-36-3	1,4-Difluorobenzene	223000	6.757			
3114-55-4	Chlorobenzene-d5	208000	10.055			
3855-82-1	1,4-Dichlorobenzene-d4	106000	12.024			

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_X\Data\VX121522\
Data File : VX033432.D
Acq On : 15 Dec 2022 11:07
Operator : JC/MD
Sample : VX1215WBS01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 16 00:59:33 2022
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X120722W.M
Quant Title : SW846 8260
QLast Update : Wed Dec 07 12:43:54 2022
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VX1215WBS01

Manual Integrations APPROVED

Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.550	168	144488	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.757	114	222709	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.055	117	207849	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.024	152	106397	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.952	65	44717	48.241	ug/l	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 96.480%			
35) Dibromofluoromethane	5.379	113	51490	51.403	ug/l	-0.01
Spiked Amount 50.000	Range 75 - 124		Recovery = 102.800%			
50) Toluene-d8	8.647	98	113403	54.117	ug/l	0.00
Spiked Amount 50.000	Range 92 - 112		Recovery = 108.240%			
62) 4-Bromofluorobenzene	11.079	95	93976	58.652	ug/l	0.00
Spiked Amount 50.000	Range 83 - 123		Recovery = 117.300%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.166	85	21017	20.823	ug/l	97
3) Chloromethane	1.294	50	21492	18.417	ug/l	100
4) Vinyl Chloride	1.374	62	25327	19.007	ug/l	99
5) Bromomethane	1.618	94	18247	18.660	ug/l	96
6) Chloroethane	1.691	64	17972	17.782	ug/l	98
7) Trichlorofluoromethane	1.892	101	36958	14.774	ug/l	99
8) Diethyl Ether	2.136	74	12542	13.881	ug/l	97
9) 1,1,2-Trichlorotrifluo...	2.331	101	21618	16.291	ug/l	98
10) Methyl Iodide	2.453	142	24387	16.779	ug/l	99
11) Tert butyl alcohol	2.989	59	26481m	93.442	ug/l	
12) 1,1-Dichloroethene	2.319	96	19552	14.926	ug/l	95
13) Acrolein	2.239	56	17586	57.217	ug/l	99
14) Allyl chloride	2.666	41	40775	19.492	ug/l	96
15) Acrylonitrile	3.062	53	66087	94.140	ug/l	100
16) Acetone	2.386	43	55929	81.540	ug/l	94
17) Carbon Disulfide	2.514	76	62011	18.445	ug/l	99
18) Methyl Acetate	2.703	43	39105	19.694	ug/l	98
19) Methyl tert-butyl Ether	3.111	73	91597	20.187	ug/l	98
20) Methylene Chloride	2.788	84	29965	19.589	ug/l	91
21) trans-1,2-Dichloroethene	3.093	96	29486	20.578	ug/l	96
22) Diisopropyl ether	3.757	45	90796	20.259	ug/l	95
23) Vinyl Acetate	3.721	43	344260	98.964	ug/l	98
24) 1,1-Dichloroethane	3.611	63	52421	19.907	ug/l	99
25) 2-Butanone	4.556	43	101104	102.689	ug/l	99
26) 2,2-Dichloropropane	4.471	77	41358	21.357	ug/l	99
27) cis-1,2-Dichloroethene	4.483	96	35301	20.614	ug/l	95
28) Bromochloromethane	4.897	49	21526	19.528	ug/l	94
29) Tetrahydrofuran	5.007	42	57659	90.388	ug/l	94
30) Chloroform	5.093	83	60255	20.611	ug/l	99
31) Cyclohexane	5.470	56	45256	20.544	ug/l	89
32) 1,1,1-Trichloroethane	5.385	97	54583	21.700	ug/l	98
36) 1,1-Dichloropropene	5.696	75	42941	21.987	ug/l	99
37) Ethyl Acetate	4.708	43	35965	19.481	ug/l	99
38) Carbon Tetrachloride	5.678	117	47373	21.650	ug/l	99
39) Methylcyclohexane	7.379	83	50139	22.937	ug/l	98
40) Benzene	6.037	78	121206	21.286	ug/l	97

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX121522\
Data File : VX033432.D
Acq On : 15 Dec 2022 11:07
Operator : JC/MD
Sample : VX1215WBS01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 16 00:59:33 2022
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X120722W.M
Quant Title : SW846 8260
QLast Update : Wed Dec 07 12:43:54 2022
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VX1215WBS01

Manual Integrations APPROVED

Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	4.922	41	20700	20.348	ug/l		96
42) 1,2-Dichloroethane	6.086	62	47676	21.085	ug/l		98
43) Isopropyl Acetate	6.336	43	59262	19.951	ug/l		98
44) Trichloroethene	7.123	130	34900	22.230	ug/l		98
45) 1,2-Dichloropropane	7.427	63	30977	21.271	ug/l		100
46) Dibromomethane	7.580	93	23654	21.322	ug/l		98
47) Bromodichloromethane	7.818	83	46317	21.418	ug/l		98
48) Methyl methacrylate	7.690	41	31051	20.255	ug/l		95
49) 1,4-Dioxane	7.696	88	13852	396.244	ug/l		99
51) 4-Methyl-2-Pentanone	8.574	43	196268	104.484	ug/l		97
52) Toluene	8.720	92	82715	22.467	ug/l		99
53) t-1,3-Dichloropropene	8.976	75	45497	21.109	ug/l		98
54) cis-1,3-Dichloropropene	8.366	75	49946	21.705	ug/l		91
55) 1,1,2-Trichloroethane	9.153	97	34122	22.048	ug/l		96
56) Ethyl methacrylate	9.116	69	46679	21.423	ug/l		92
57) 1,3-Dichloropropane	9.311	76	53545	21.537	ug/l		99
58) 2-Chloroethyl Vinyl ether	8.238	63	96663	96.952	ug/l		97
59) 2-Hexanone	9.427	43	151387	109.361	ug/l		95
60) Dibromochloromethane	9.519	129	37523	22.006	ug/l		99
61) 1,2-Dibromoethane	9.610	107	36225	22.006	ug/l		99
64) Tetrachloroethene	9.275	164	31276	22.006	ug/l		96
65) Chlorobenzene	10.079	112	93552	22.227	ug/l		100
66) 1,1,1,2-Tetrachloroethane	10.165	131	34924	21.957	ug/l		99
67) Ethyl Benzene	10.195	91	166887	22.759	ug/l		99
68) m/p-Xylenes	10.299	106	130453	45.726	ug/l		98
69) o-Xylene	10.640	106	63279	22.440	ug/l		98
70) Styrene	10.659	104	107707	23.321	ug/l		97
71) Bromoform	10.799	173	26524	21.067	ug/l	#	98
73) Isopropylbenzene	10.963	105	169527	21.983	ug/l		100
74) N-amyl acetate	10.841	43	52796	20.066	ug/l		95
75) 1,1,2,2-Tetrachloroethane	11.213	83	50578	20.673	ug/l		98
76) 1,2,3-Trichloropropane	11.238	75	45106m	20.837	ug/l		
77) Bromobenzene	11.195	156	41846	21.489	ug/l		98
78) n-propylbenzene	11.305	91	193432	22.464	ug/l		99
79) 2-Chlorotoluene	11.366	91	116212	21.838	ug/l		98
80) 1,3,5-Trimethylbenzene	11.451	105	142080	22.133	ug/l		98
81) trans-1,4-Dichloro-2-b...	11.018	75	12707	18.260	ug/l		97
82) 4-Chlorotoluene	11.451	91	133528	21.579	ug/l		97
83) tert-Butylbenzene	11.713	119	143579	22.430	ug/l		97
84) 1,2,4-Trimethylbenzene	11.750	105	143303	22.364	ug/l		99
85) sec-Butylbenzene	11.890	105	173016	23.166	ug/l		99
86) p-Isopropyltoluene	12.012	119	146815	22.801	ug/l		99
87) 1,3-Dichlorobenzene	11.969	146	79123	22.430	ug/l		98
88) 1,4-Dichlorobenzene	12.042	146	79025	21.932	ug/l		100
89) n-Butylbenzene	12.335	91	122594	23.246	ug/l		100
90) Hexachloroethane	12.536	117	22881	20.905	ug/l		97
91) 1,2-Dichlorobenzene	12.335	146	75848	21.506	ug/l		98
92) 1,2-Dibromo-3-Chloropr...	12.945	75	9642	18.246	ug/l		90
93) 1,2,4-Trichlorobenzene	13.591	180	46565	21.862	ug/l		99
94) Hexachlorobutadiene	13.725	225	21139	24.784	ug/l		98
95) Naphthalene	13.774	128	151271	21.291	ug/l		100
96) 1,2,3-Trichlorobenzene	13.963	180	46145	21.391	ug/l		99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX121522\
Data File : VX033432.D
Acq On : 15 Dec 2022 11:07
Operator : JC/MD
Sample : VX1215WBS01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 16 00:59:33 2022
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X120722W.M
Quant Title : SW846 8260
QLast Update : Wed Dec 07 12:43:54 2022
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VX1215WBS01

Manual Integrations APPROVED

Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

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

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

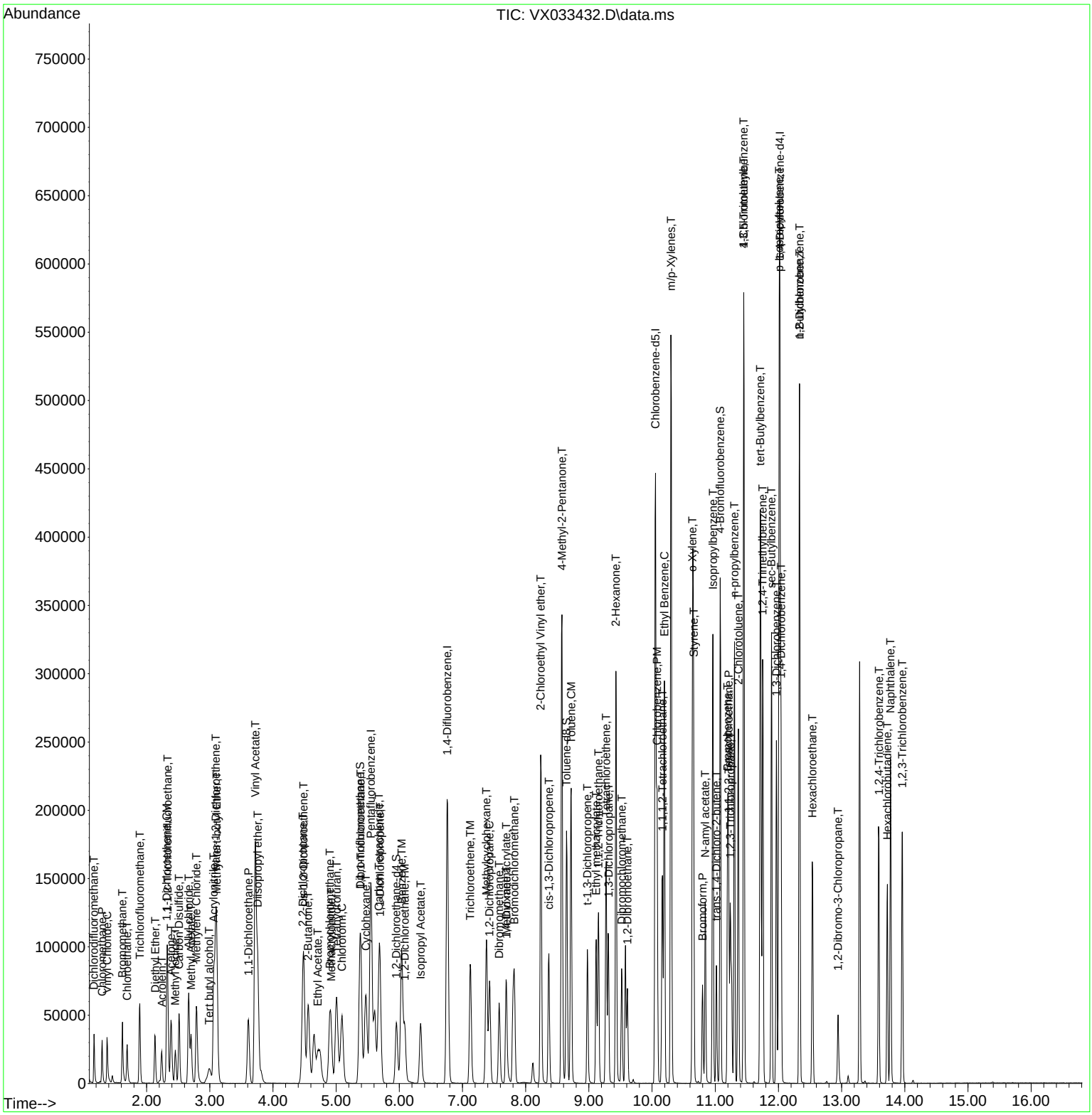
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX121522\
Data File : VX033432.D
Acq On : 15 Dec 2022 11:07
Operator : JC/MD
Sample : VX1215WBS01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 4 Sample Multiplier: 1

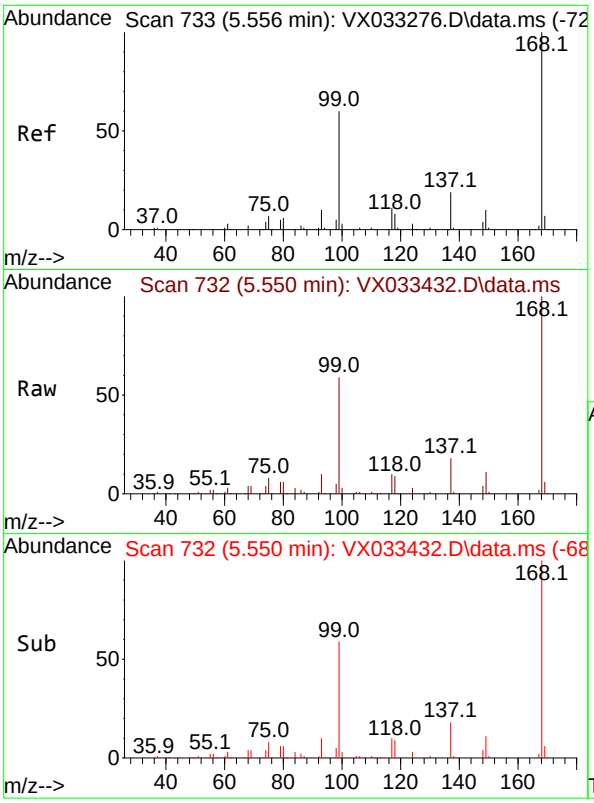
Quant Time: Dec 16 00:59:33 2022
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X120722W.M
Quant Title : SW846 8260
QLast Update : Wed Dec 07 12:43:54 2022
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VX1215WBS01

Manual Integrations APPROVED

Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

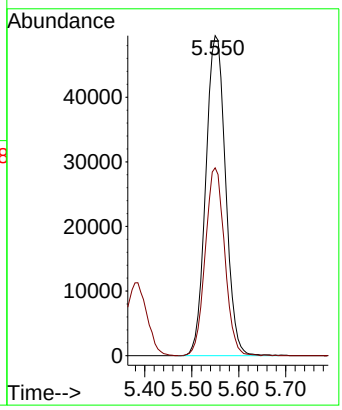




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 5.550 min Scan# 7
Delta R.T. -0.006 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion:168 Resp: 14448

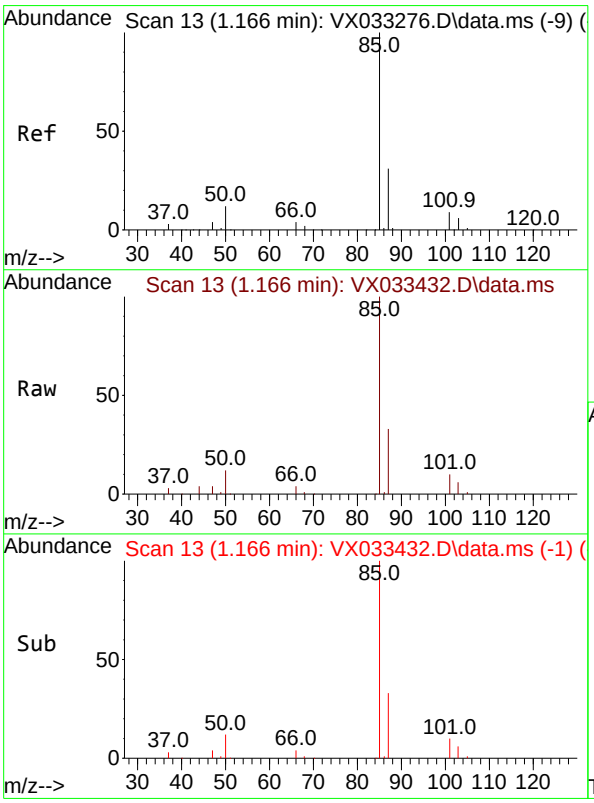
Ion	Ratio	Lower	Upper
168	100		
99	58.7	46.1	69.1



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBS01

Manual Integrations
APPROVED

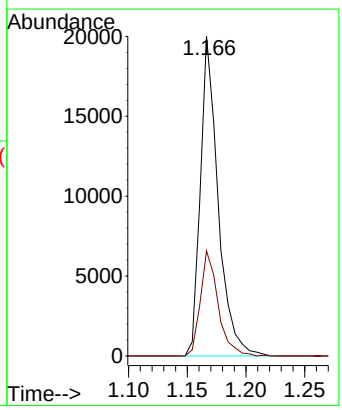
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

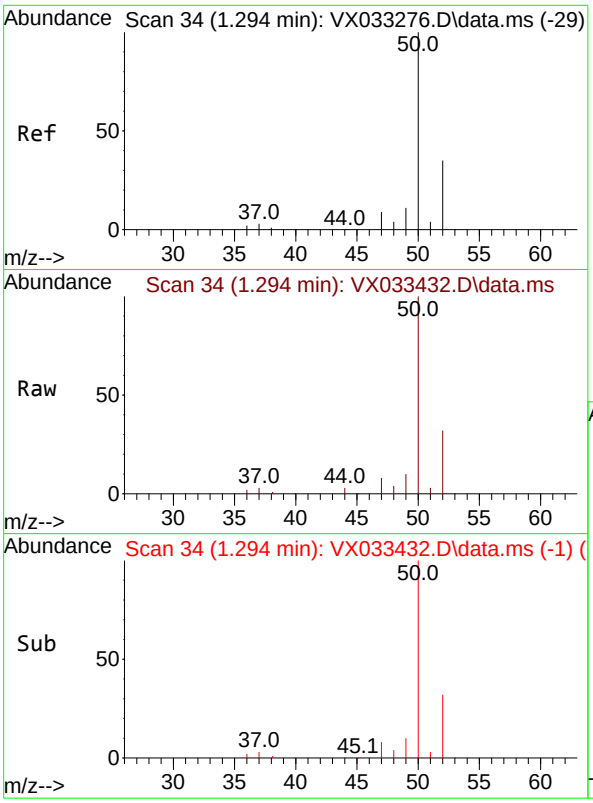


#2
Dichlorodifluoromethane
Concen: 20.823 ug/l
RT: 1.166 min Scan# 13
Delta R.T. 0.000 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion: 85 Resp: 21017

Ion	Ratio	Lower	Upper
85	100		
87	32.8	15.6	46.7

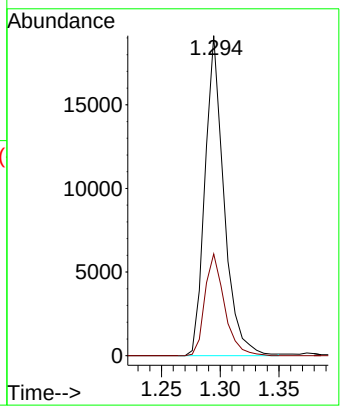




#3
Chloromethane
Concen: 18.417 ug/l
RT: 1.294 min Scan# 34
Delta R.T. 0.000 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion: 50 Resp: 2149

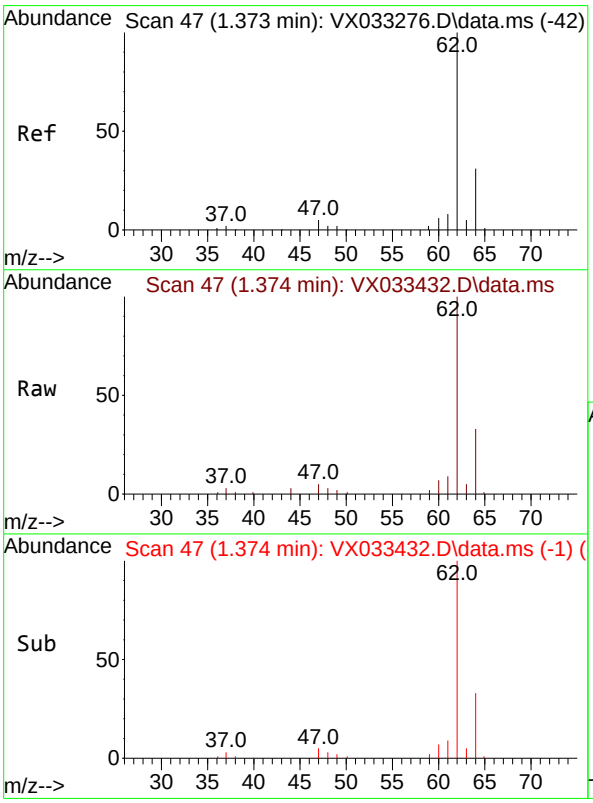
Ion	Ratio	Lower	Upper
50	100		
52	31.8	25.4	38.2



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBS01

Manual Integrations APPROVED

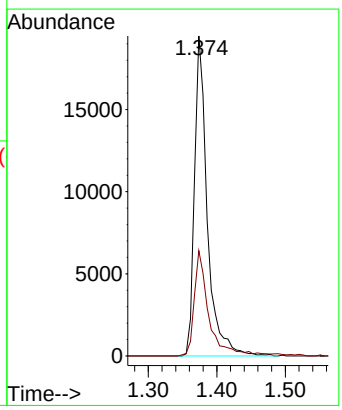
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

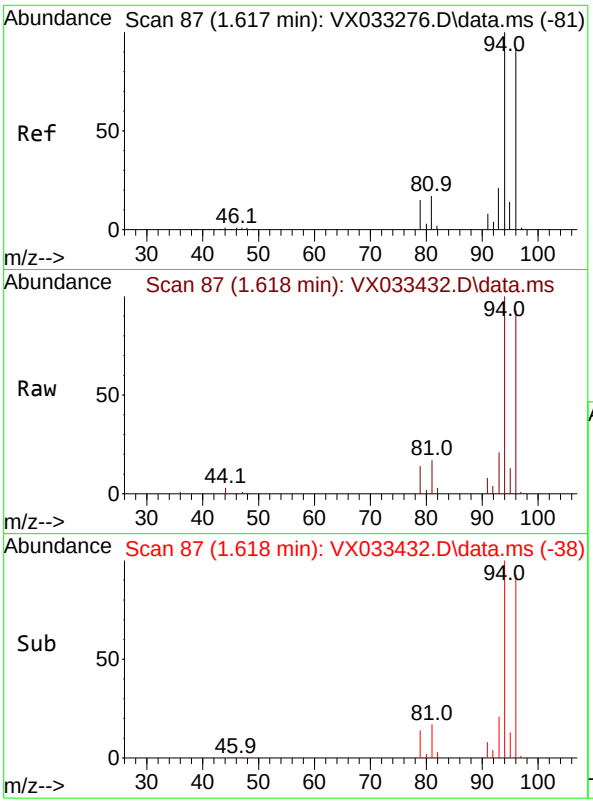


#4
Vinyl Chloride
Concen: 19.007 ug/l
RT: 1.374 min Scan# 47
Delta R.T. 0.000 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion: 62 Resp: 25327

Ion	Ratio	Lower	Upper
62	100		
64	32.9	25.8	38.6

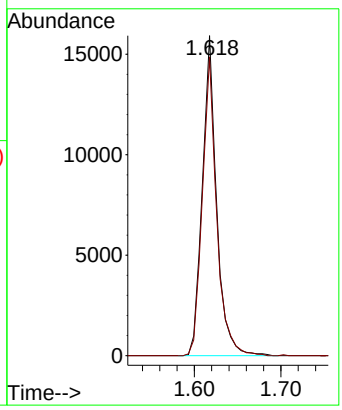




#5
Bromomethane
Concen: 18.660 ug/l
RT: 1.618 min Scan# 8
Delta R.T. 0.000 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion: 94 Resp: 1824

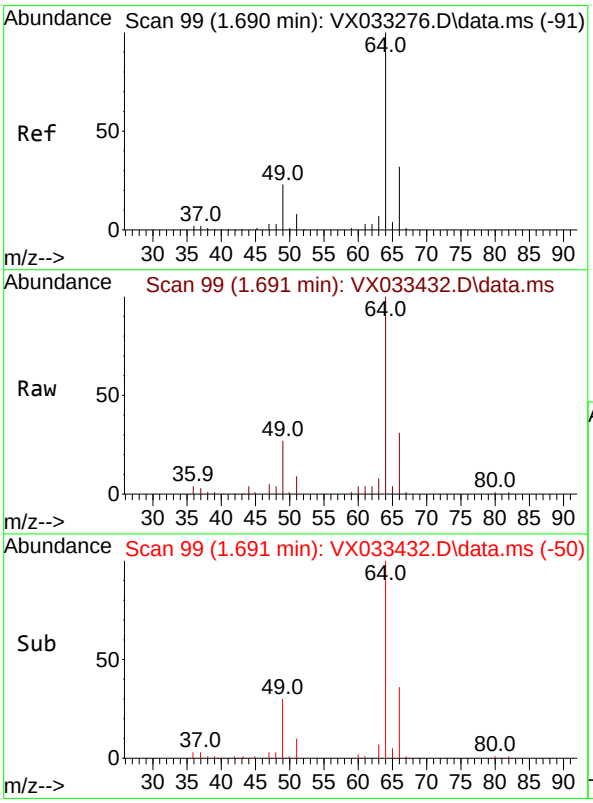
Ion	Ratio	Lower	Upper
94	100		
96	93.4	77.6	116.4



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBS01

Manual Integrations
APPROVED

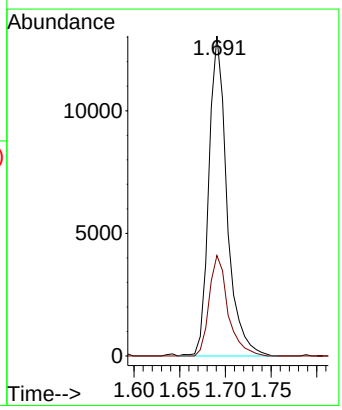
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

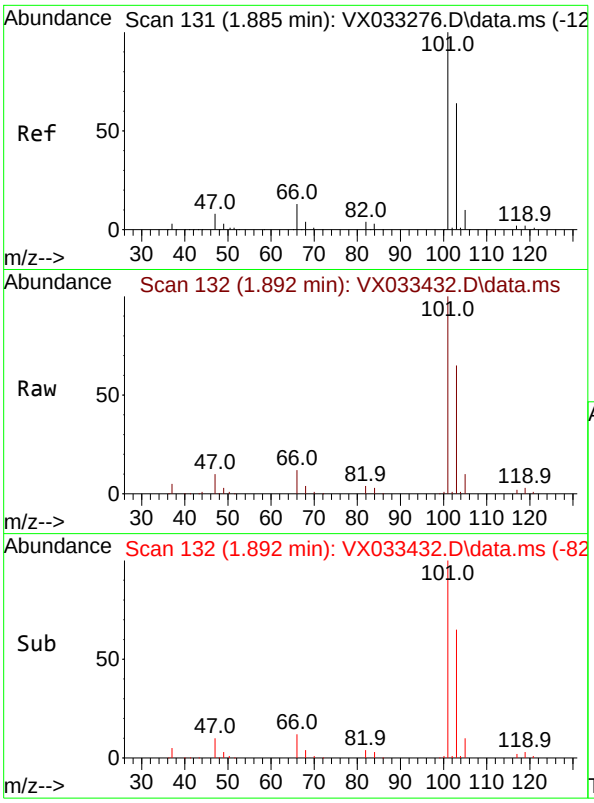


#6
Chloroethane
Concen: 17.782 ug/l
RT: 1.691 min Scan# 99
Delta R.T. 0.000 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion: 64 Resp: 17972

Ion	Ratio	Lower	Upper
64	100		
66	31.4	26.0	39.0

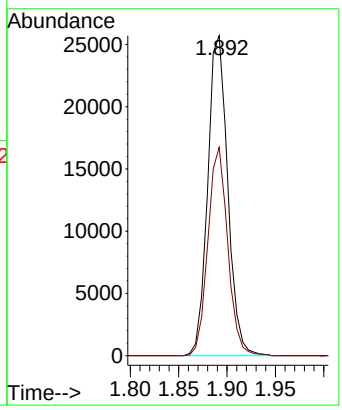




#7
Trichlorofluoromethane
Concen: 14.774 ug/l
RT: 1.892 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion:101 Resp: 3695

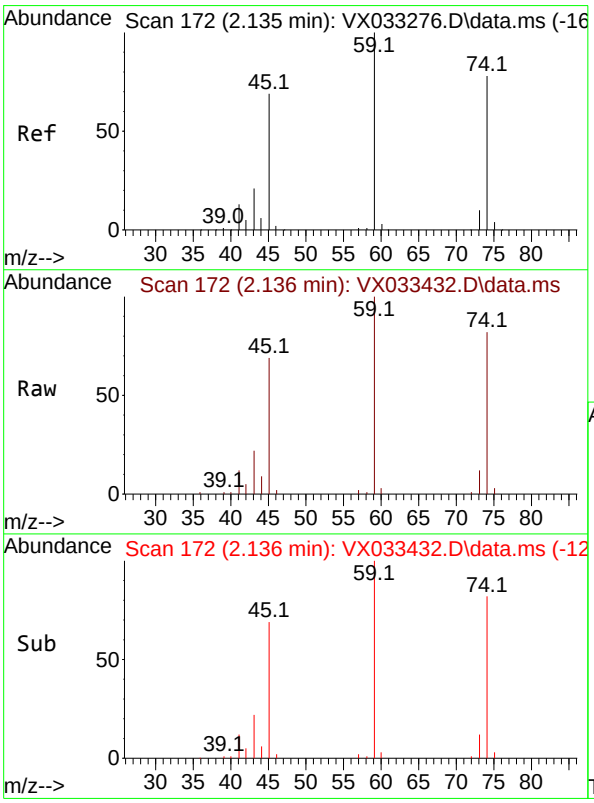
Ion	Ratio	Lower	Upper
101	100		
103	65.1	51.4	77.2



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBS01

Manual Integrations
APPROVED

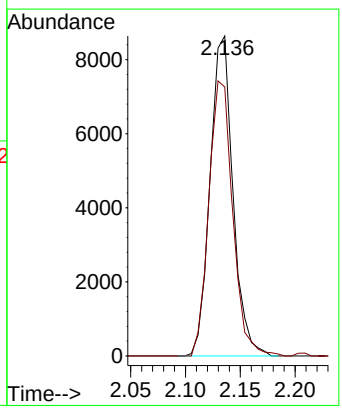
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

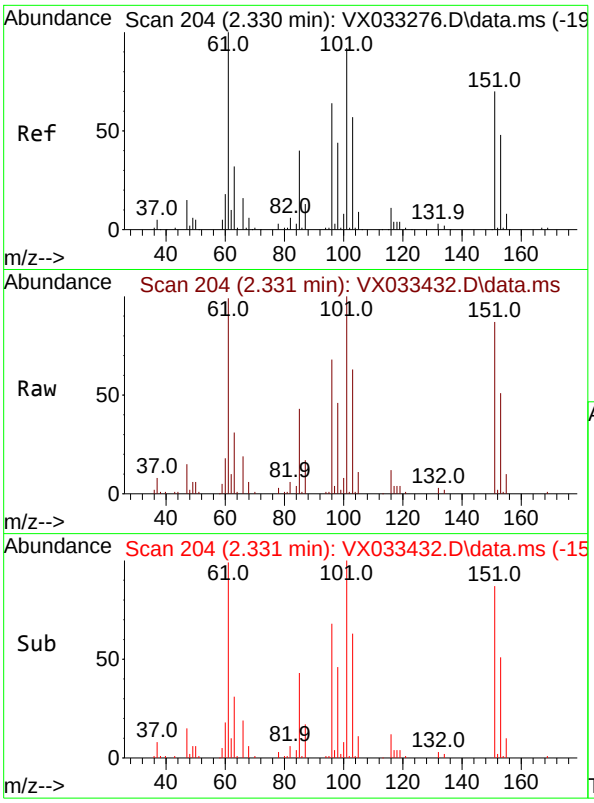


#8
Diethyl Ether
Concen: 13.881 ug/l
RT: 2.136 min Scan# 172
Delta R.T. 0.000 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion: 74 Resp: 12542

Ion	Ratio	Lower	Upper
74	100		
45	90.0	46.6	139.7





#9
1,1,2-Trichlorotrifluoroethane
Concen: 16.291 ug/l
RT: 2.331 min Scan# 2
Delta R.T. 0.000 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

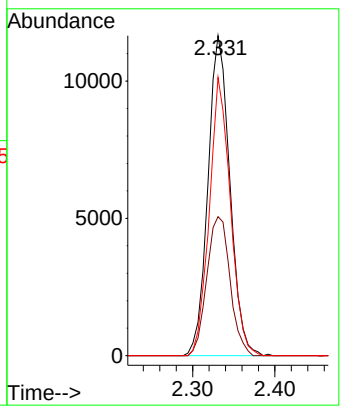
Tgt Ion:101 Resp: 2161

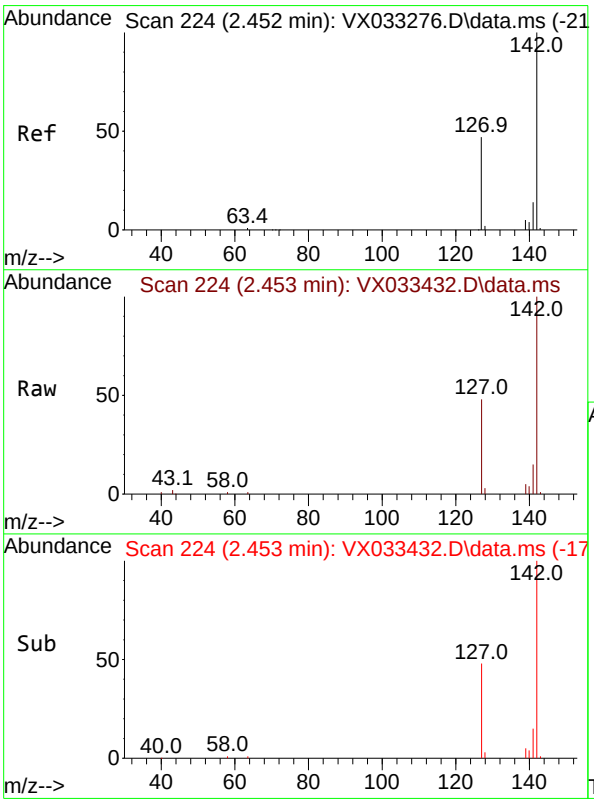
Ion	Ratio	Lower	Upper
101	100		
85	45.9	37.0	55.4
151	83.4	64.4	96.6

Instrument :
MSVOA_X
ClientSampleId :
VX1215WBS01

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

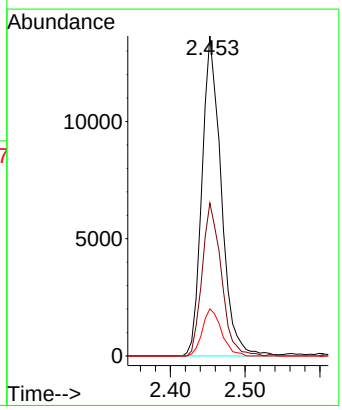


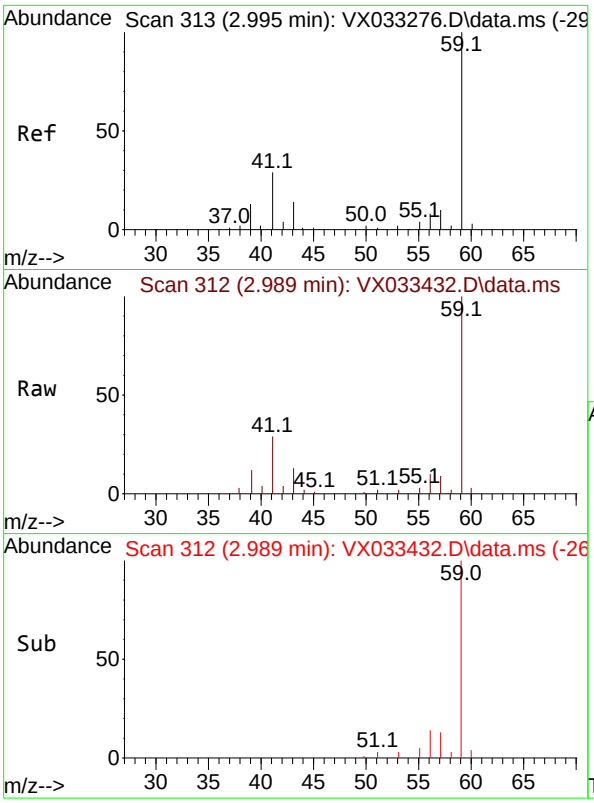


#10
Methyl Iodide
Concen: 16.779 ug/l
RT: 2.453 min Scan# 224
Delta R.T. 0.000 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion:142 Resp: 24387

Ion	Ratio	Lower	Upper
142	100		
127	47.7	38.6	57.8
141	14.6	11.4	17.2

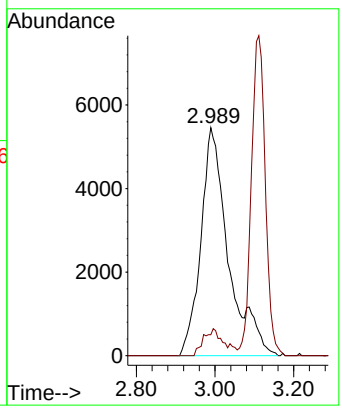




#11
Tert butyl alcohol
Concen: 93.442 ug/l m
RT: 2.989 min Scan# 3
Delta R.T. -0.006 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion: 59 Resp: 2648

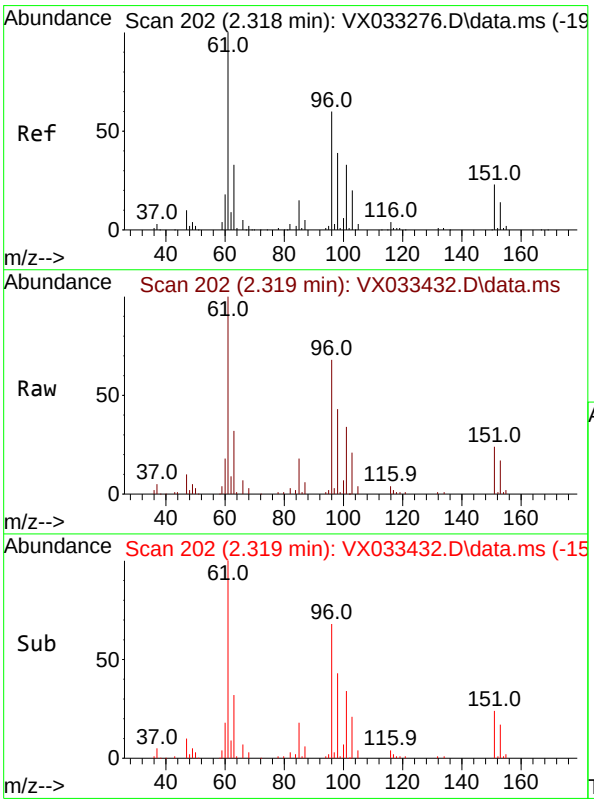
Ion	Ratio	Lower	Upper
59	100		
57	7.5	8.2	12.4



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBS01

Manual Integrations
APPROVED

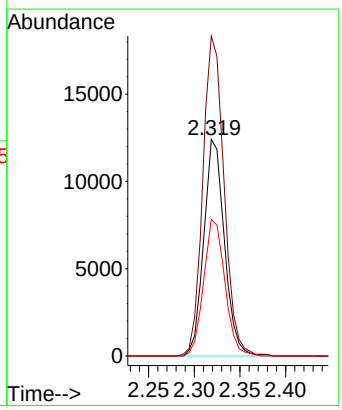
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

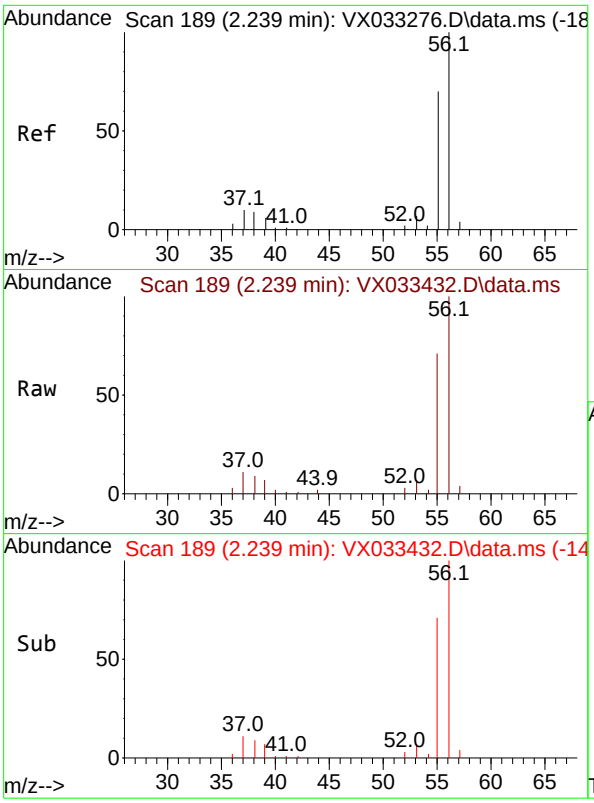


#12
1,1-Dichloroethene
Concen: 14.926 ug/l
RT: 2.319 min Scan# 202
Delta R.T. 0.000 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion: 96 Resp: 19552

Ion	Ratio	Lower	Upper
96	100		
61	147.7	125.1	187.7
98	63.1	50.6	76.0

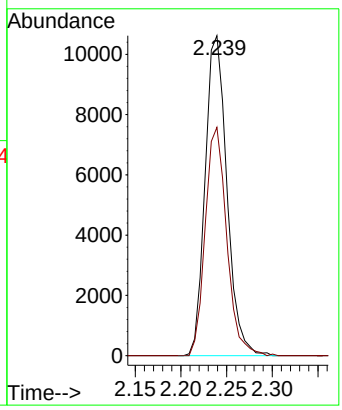




#13
Acrolein
Concen: 57.217 ug/l
RT: 2.239 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion: 56 Resp: 1758

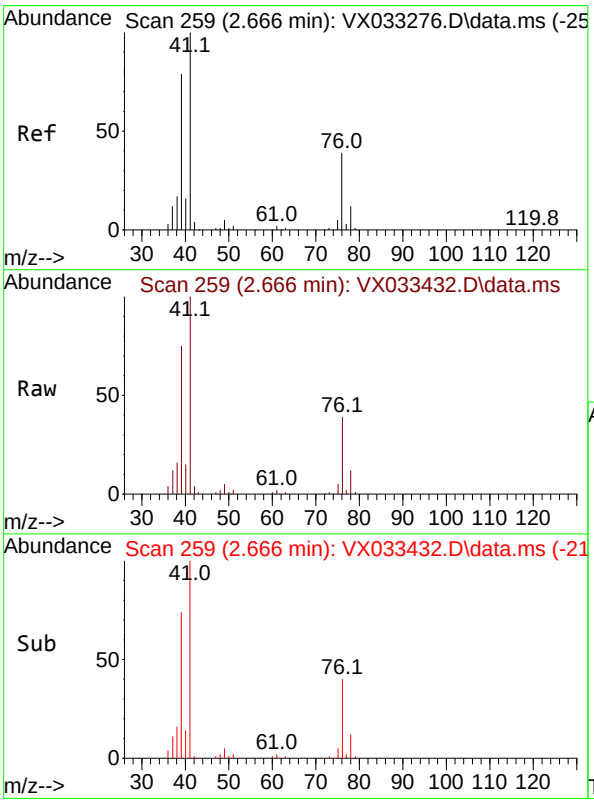
Ion	Ratio	Lower	Upper
56	100		
55	70.5	56.9	85.3



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBS01

Manual Integrations
APPROVED

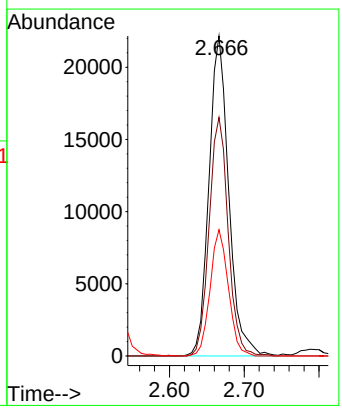
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

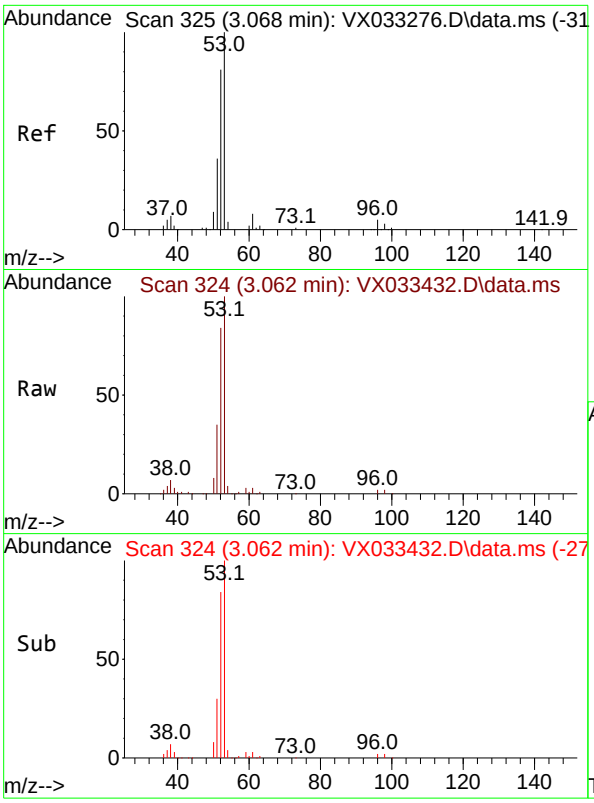


#14
Allyl chloride
Concen: 19.492 ug/l
RT: 2.666 min Scan# 259
Delta R.T. 0.000 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion: 41 Resp: 40775

Ion	Ratio	Lower	Upper
41	100		
39	71.6	61.4	92.2
76	36.4	29.2	43.8

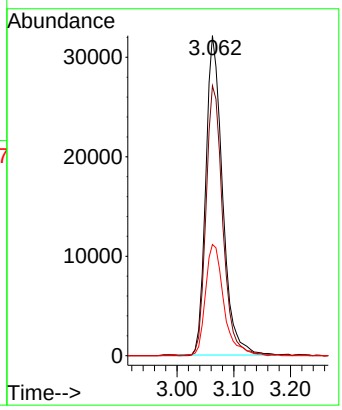




#15
Acrylonitrile
Concen: 94.140 ug/l
RT: 3.062 min Scan# 3
Delta R.T. -0.006 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion: 53 Resp: 6608

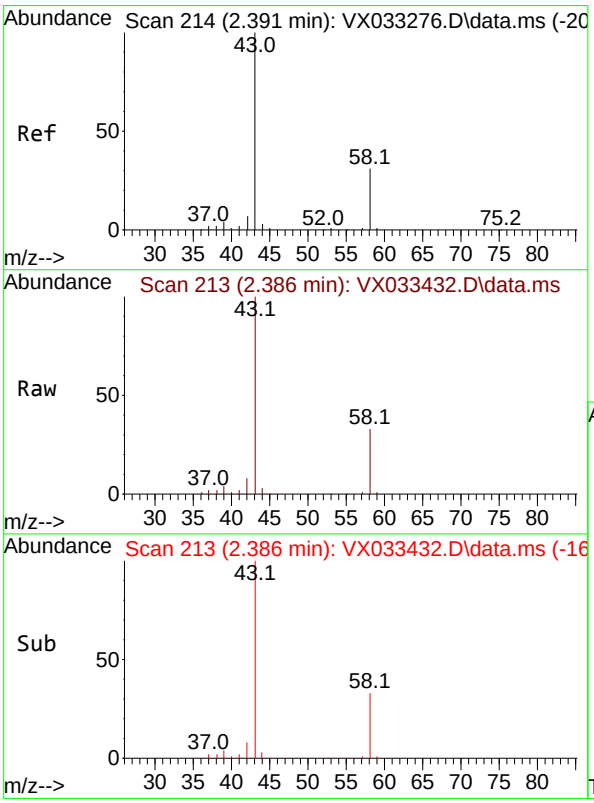
Ion	Ratio	Lower	Upper
53	100		
52	84.5	67.4	101.0
51	38.2	30.3	45.5



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBS01

Manual Integrations
APPROVED

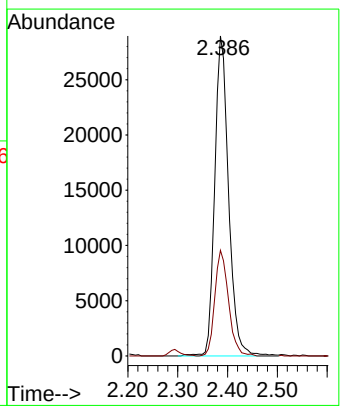
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

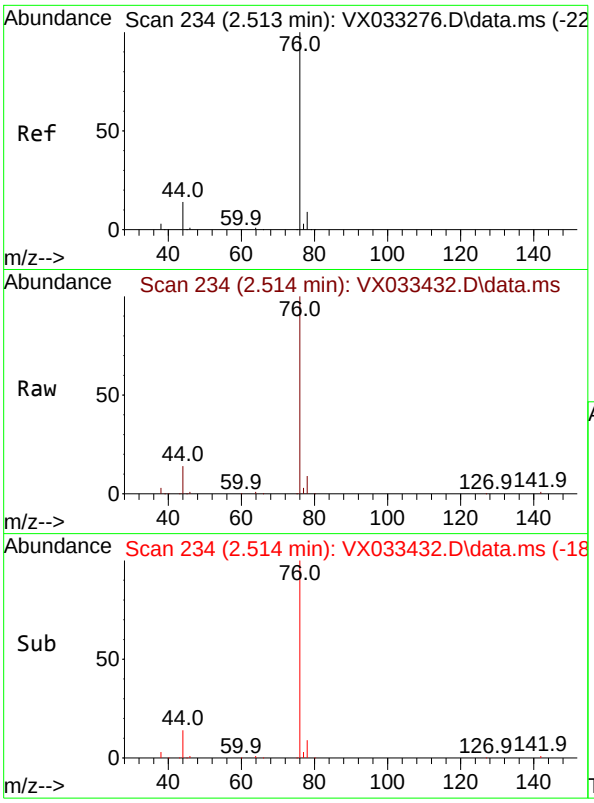


#16
Acetone
Concen: 81.540 ug/l
RT: 2.386 min Scan# 213
Delta R.T. -0.006 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion: 43 Resp: 55929

Ion	Ratio	Lower	Upper
43	100		
58	33.0	23.8	35.8

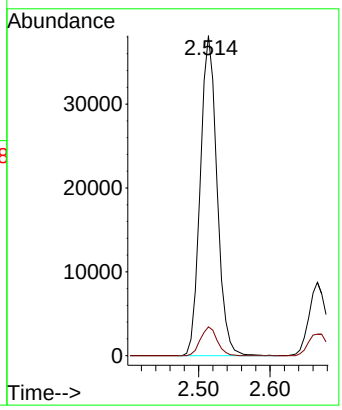




#17
Carbon Disulfide
Concen: 18.445 ug/l
RT: 2.514 min Scan# 2
Delta R.T. 0.000 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion: 76 Resp: 6201

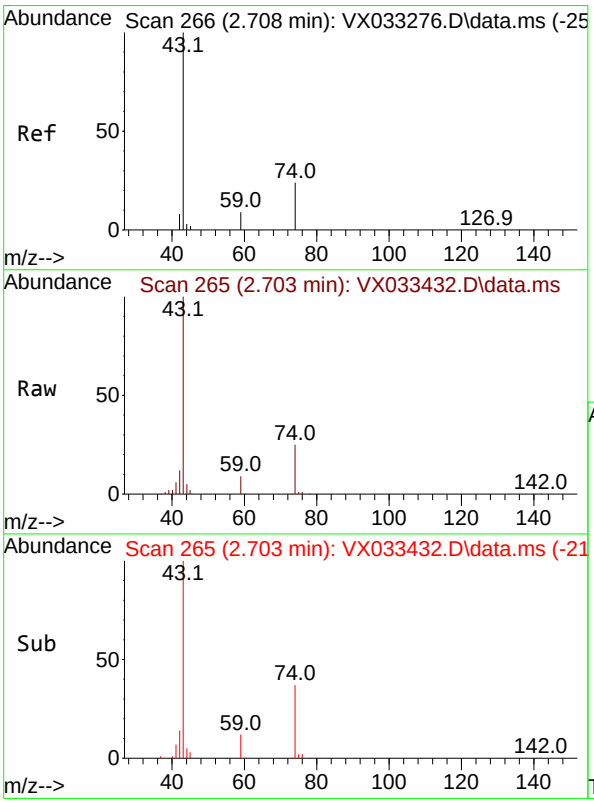
Ion	Ratio	Lower	Upper
76	100		
78	9.0	7.5	11.3



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBS01

Manual Integrations
APPROVED

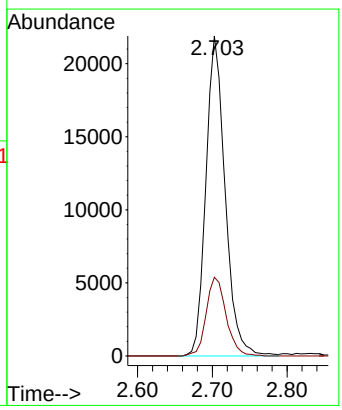
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

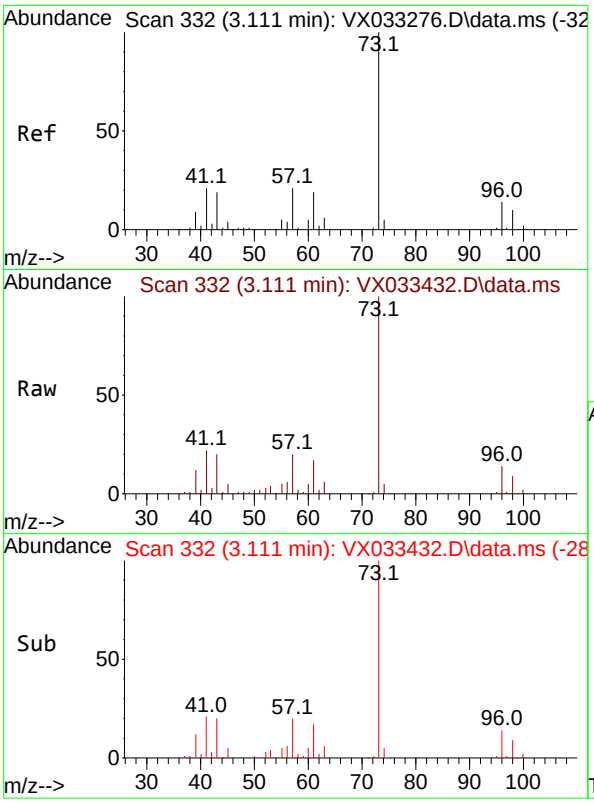


#18
Methyl Acetate
Concen: 19.694 ug/l
RT: 2.703 min Scan# 265
Delta R.T. -0.006 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion: 43 Resp: 39105

Ion	Ratio	Lower	Upper
43	100		
74	25.4	19.4	29.0

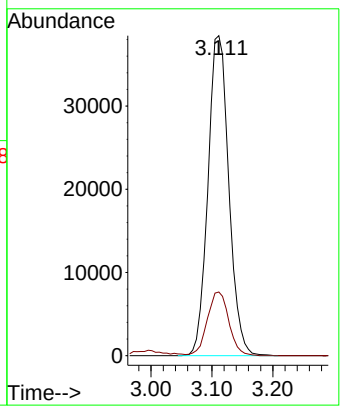




#19
Methyl tert-butyl Ether
Concen: 20.187 ug/l
RT: 3.111 min Scan# 3
Delta R.T. 0.000 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion: 73 Resp: 9159

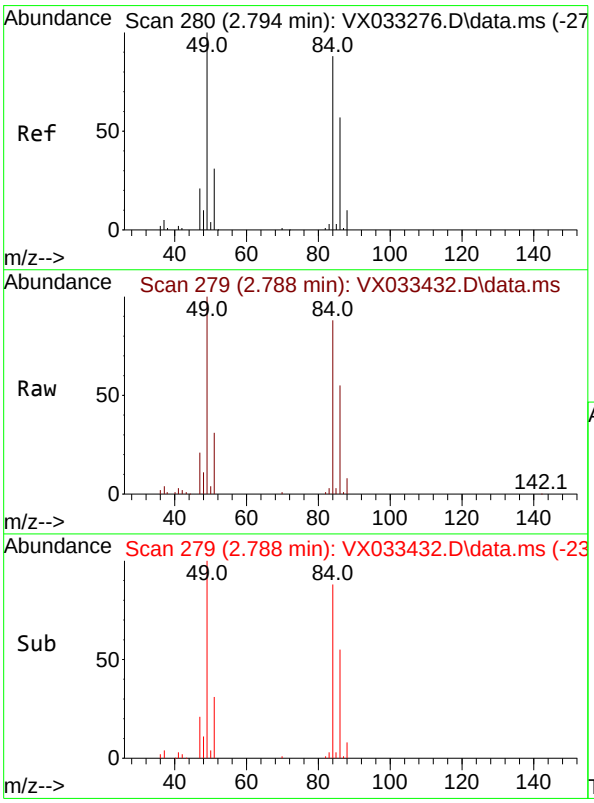
Ion	Ratio	Lower	Upper
73	100		
57	19.9	16.6	25.0



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBS01

Manual Integrations APPROVED

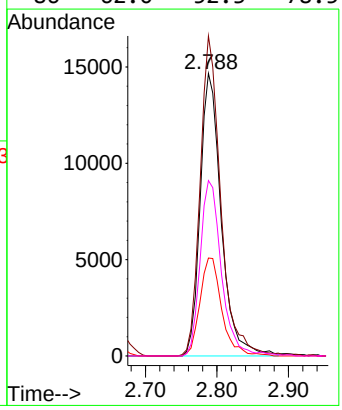
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

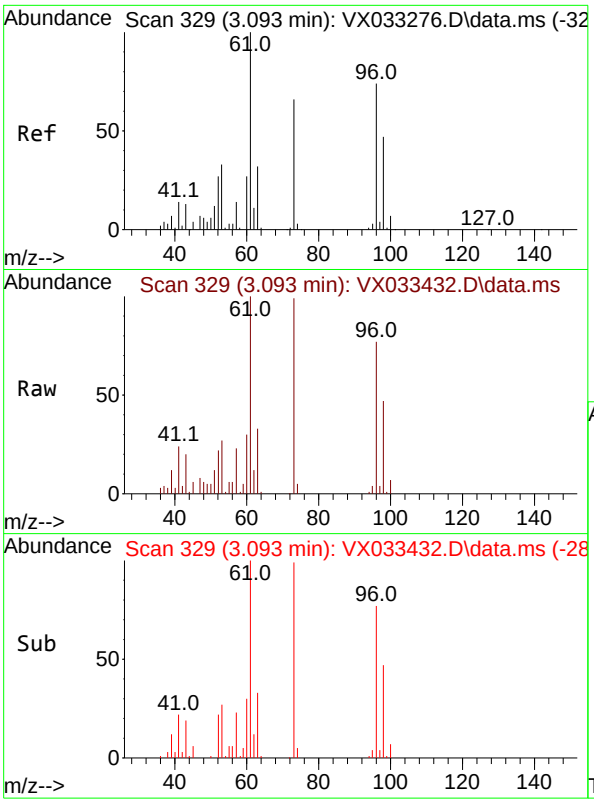


#20
Methylene Chloride
Concen: 19.589 ug/l
RT: 2.788 min Scan# 279
Delta R.T. -0.006 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion: 84 Resp: 29965

Ion	Ratio	Lower	Upper
84	100		
49	113.3	101.0	151.6
51	34.6	31.1	46.7
86	62.0	52.3	78.5

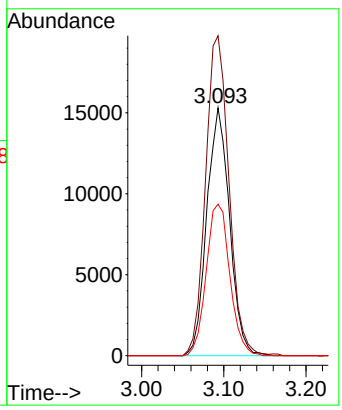




#21
trans-1,2-Dichloroethene
Concen: 20.578 ug/l
RT: 3.093 min Scan# 3
Delta R.T. 0.000 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion: 96 Resp: 2948

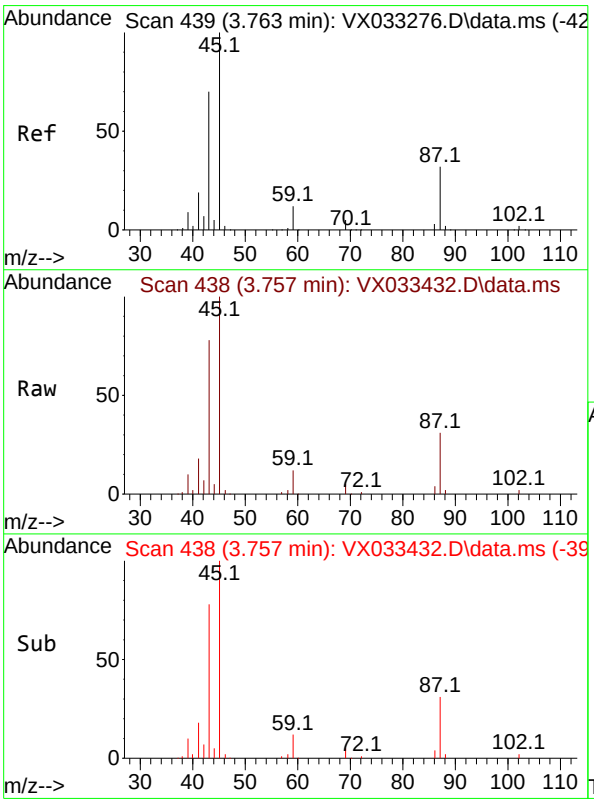
Ion	Ratio	Lower	Upper
96	100		
61	129.1	106.6	160.0
98	61.1	51.0	76.6



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBS01

Manual Integrations
APPROVED

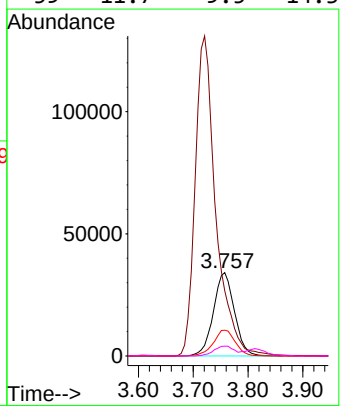
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

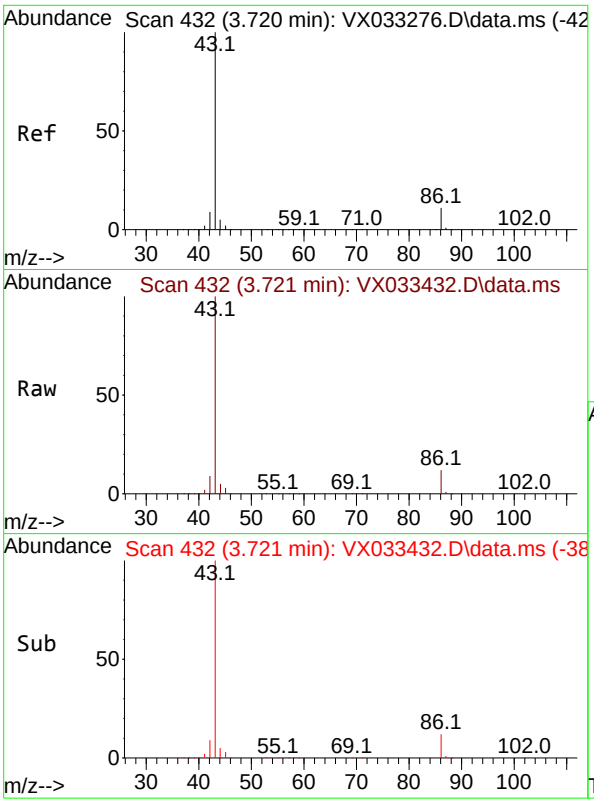


#22
Diisopropyl ether
Concen: 20.259 ug/l
RT: 3.757 min Scan# 438
Delta R.T. -0.006 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion: 45 Resp: 90796

Ion	Ratio	Lower	Upper
45	100		
43	77.4	56.4	84.6
87	31.0	24.4	36.6
59	11.7	9.5	14.3

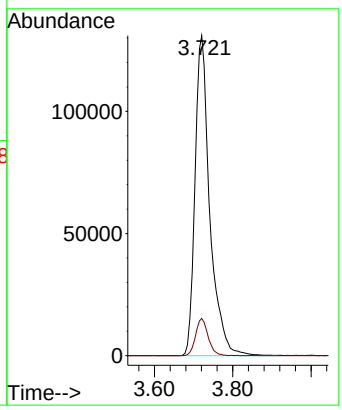




#23
Vinyl Acetate
Concen: 98.964 ug/l
RT: 3.721 min Scan# 4
Delta R.T. 0.000 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion: 43 Resp: 34426

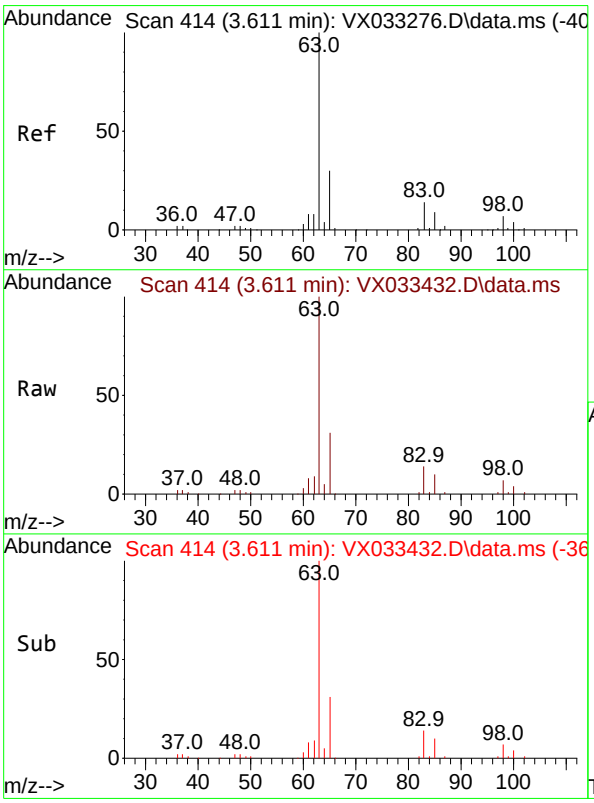
Ion	Ratio	Lower	Upper
43	100		
86	11.6	8.6	12.8



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBS01

Manual Integrations
APPROVED

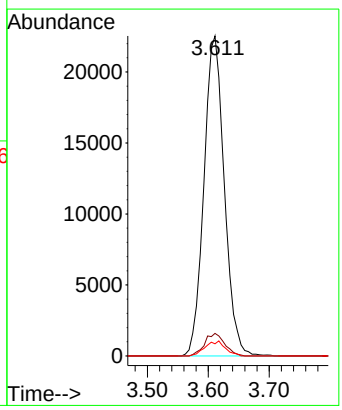
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

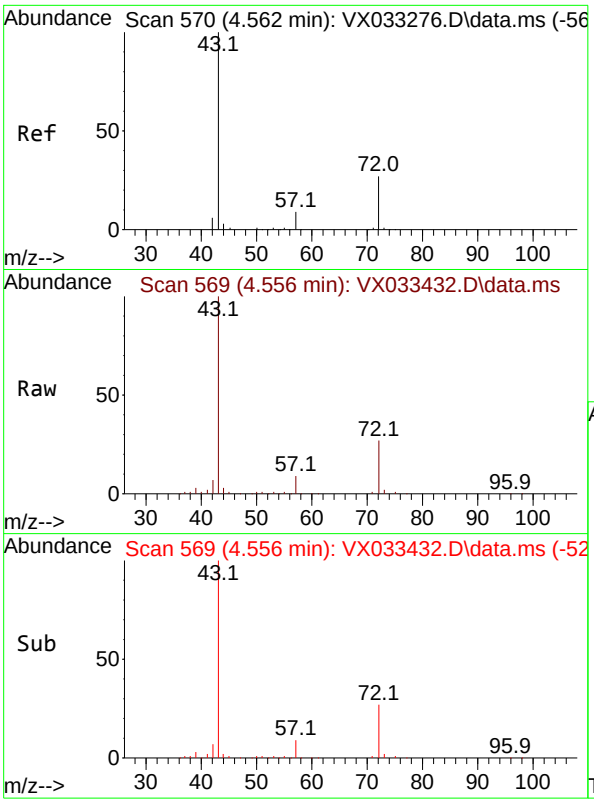


#24
1,1-Dichloroethane
Concen: 19.907 ug/l
RT: 3.611 min Scan# 414
Delta R.T. 0.000 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion: 63 Resp: 52421

Ion	Ratio	Lower	Upper
63	100		
98	7.1	3.5	10.4
100	3.8	2.3	6.8





#25
2-Butanone
Concen: 102.689 ug/l
RT: 4.556 min Scan# 5
Delta R.T. -0.006 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

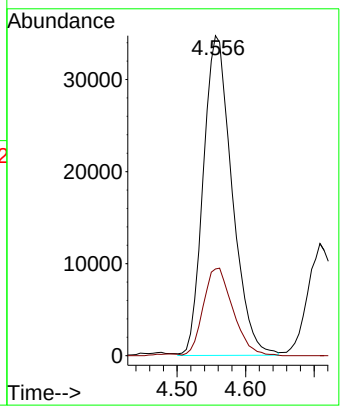
Tgt Ion: 43 Resp: 10110

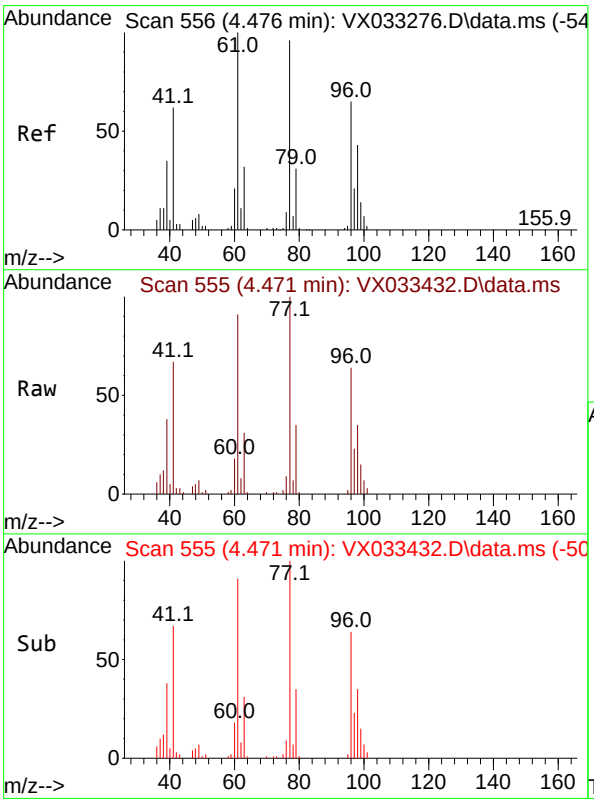
Ion	Ratio	Lower	Upper
43	100		
72	27.1	22.2	33.2

Instrument :
MSVOA_X
ClientSampleId :
VX1215WBS01

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

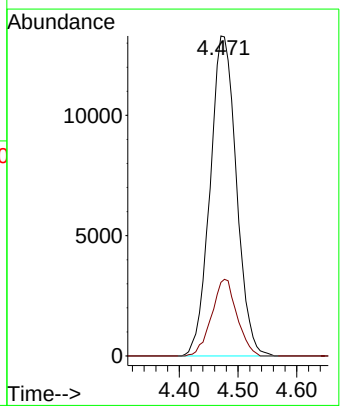


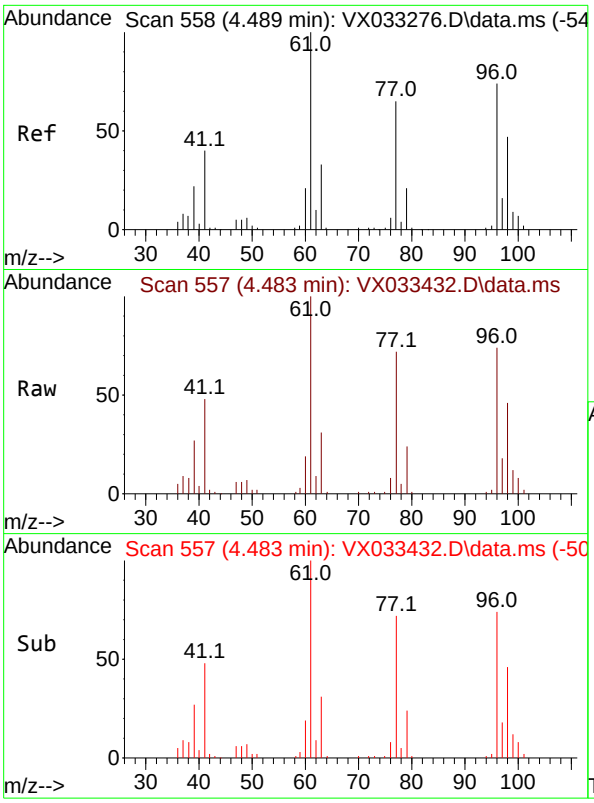


#26
2,2-Dichloropropane
Concen: 21.357 ug/l
RT: 4.471 min Scan# 555
Delta R.T. -0.006 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion: 77 Resp: 41358

Ion	Ratio	Lower	Upper
77	100		
97	23.0	11.4	34.1

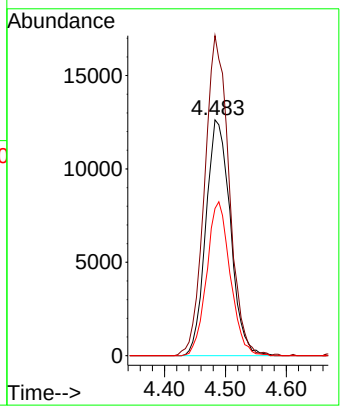




#27
cis-1,2-Dichloroethene
Concen: 20.614 ug/l
RT: 4.483 min Scan# 5
Delta R.T. -0.006 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion: 96 Resp: 3530

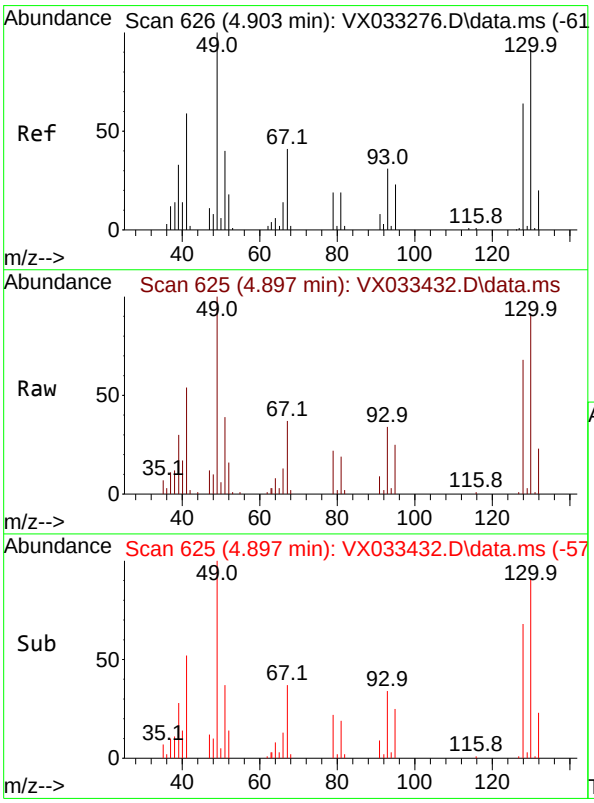
Ion	Ratio	Lower	Upper
96	100		
61	135.7	0.0	286.0
98	62.6	0.0	129.6



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBS01

Manual Integrations
APPROVED

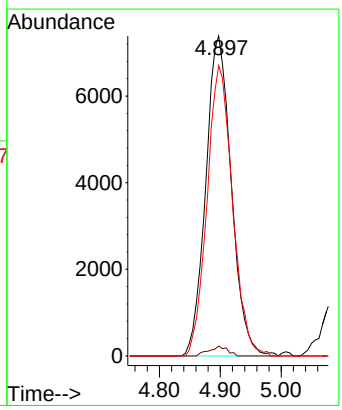
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

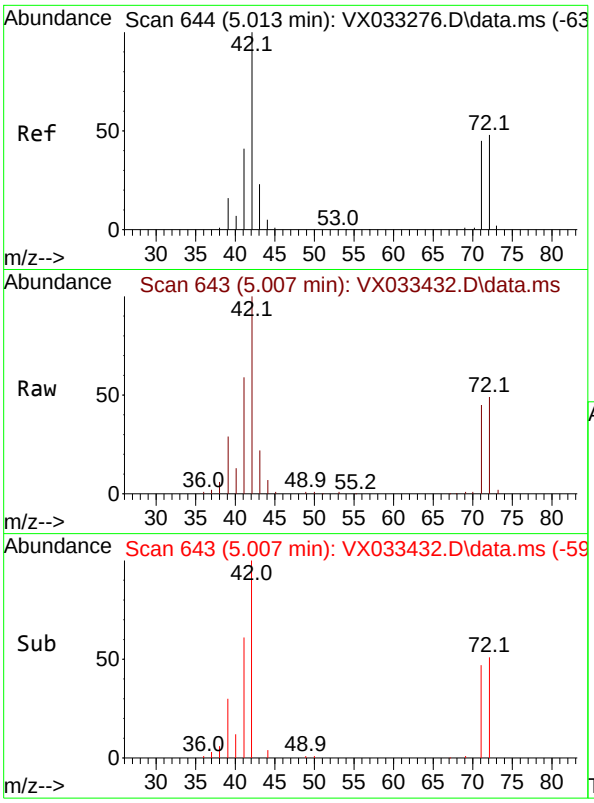


#28
Bromochloromethane
Concen: 19.528 ug/l
RT: 4.897 min Scan# 625
Delta R.T. -0.006 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion: 49 Resp: 21526

Ion	Ratio	Lower	Upper
49	100		
129	2.2	0.0	3.8
130	90.0	67.5	101.3

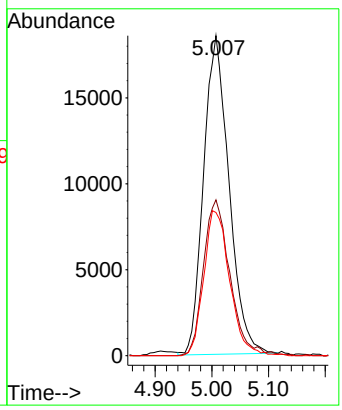




#29
Tetrahydrofuran
Concen: 90.388 ug/l
RT: 5.007 min Scan# 64
Delta R.T. -0.006 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion: 42 Resp: 5765

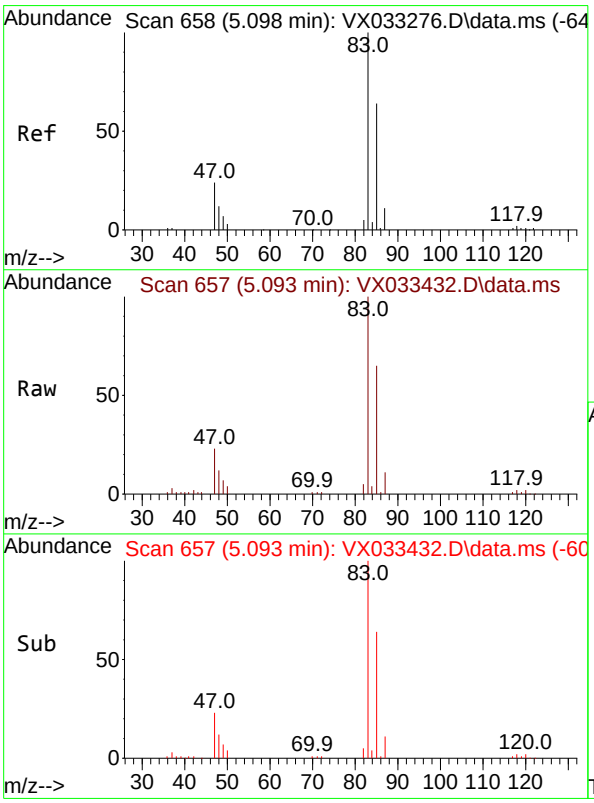
Ion	Ratio	Lower	Upper
42	100		
72	51.1	37.6	56.4
71	46.6	34.7	52.1



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBS01

Manual Integrations
APPROVED

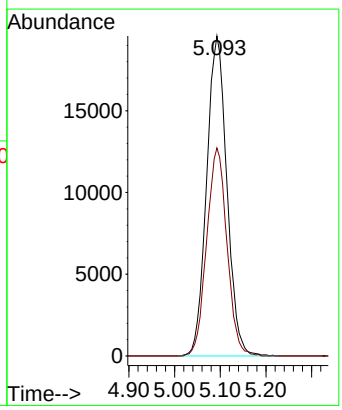
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

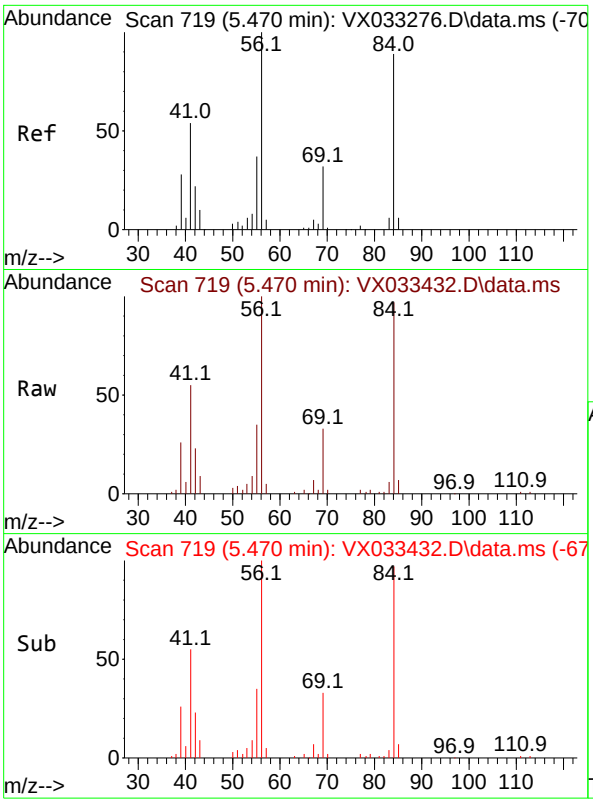


#30
Chloroform
Concen: 20.611 ug/l
RT: 5.093 min Scan# 657
Delta R.T. -0.006 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion: 83 Resp: 60255

Ion	Ratio	Lower	Upper
83	100		
85	65.0	51.1	76.7

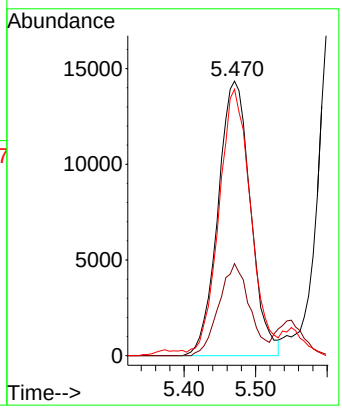




#31
Cyclohexane
Concen: 20.544 ug/l
RT: 5.470 min Scan# 7
Delta R.T. 0.000 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion: 56 Resp: 4525

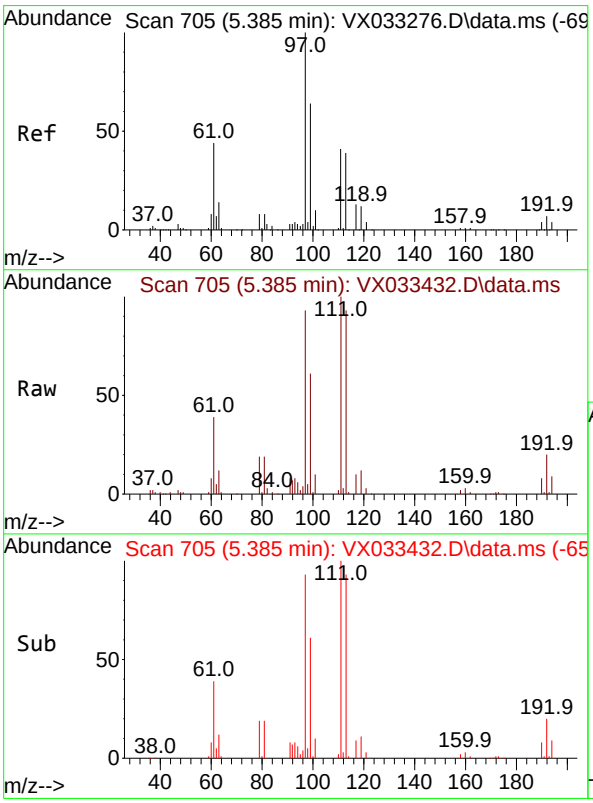
Ion	Ratio	Lower	Upper
56	100		
69	33.5	24.1	36.1
84	95.3	66.9	100.3



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBS01

Manual Integrations
APPROVED

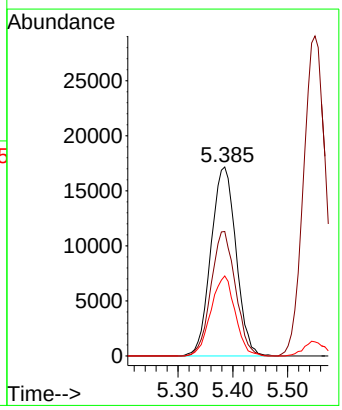
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

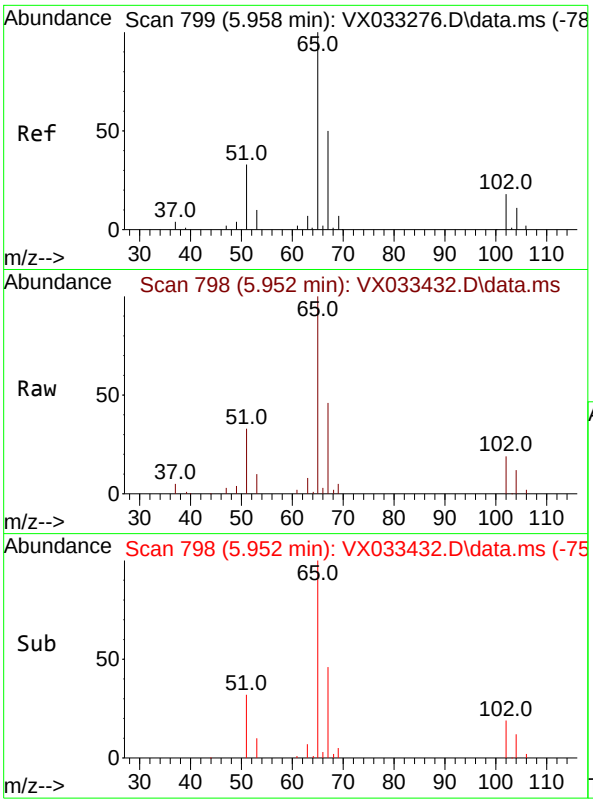


#32
1,1,1-Trichloroethane
Concen: 21.700 ug/l
RT: 5.385 min Scan# 705
Delta R.T. 0.000 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion: 97 Resp: 54583

Ion	Ratio	Lower	Upper
97	100		
99	64.2	51.4	77.0
61	40.9	35.2	52.8

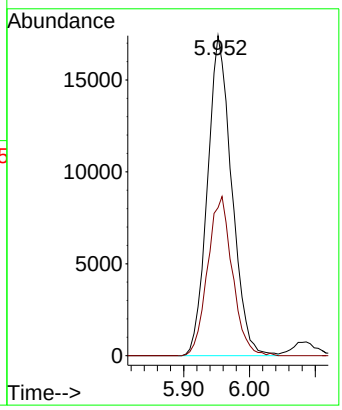




#33
1,2-Dichloroethane-d4
Concen: 48.241 ug/l
RT: 5.952 min Scan# 7
Delta R.T. -0.006 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion: 65 Resp: 4471

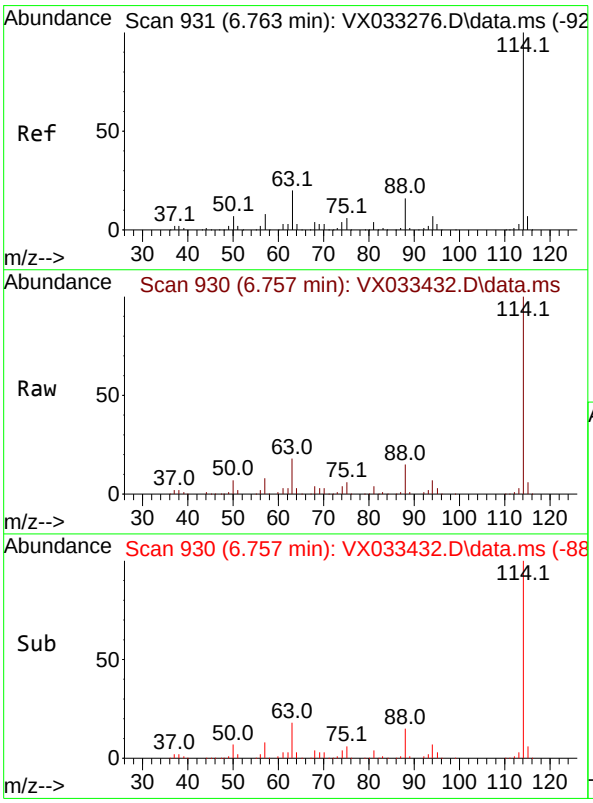
Ion	Ratio	Lower	Upper
65	100		
67	50.7	0.0	101.8



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBS01

Manual Integrations APPROVED

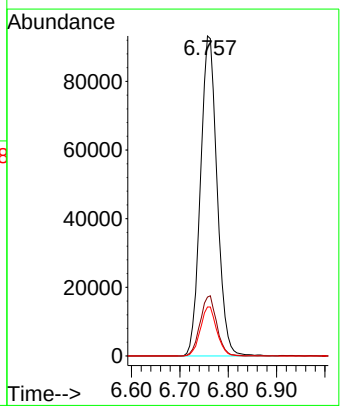
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

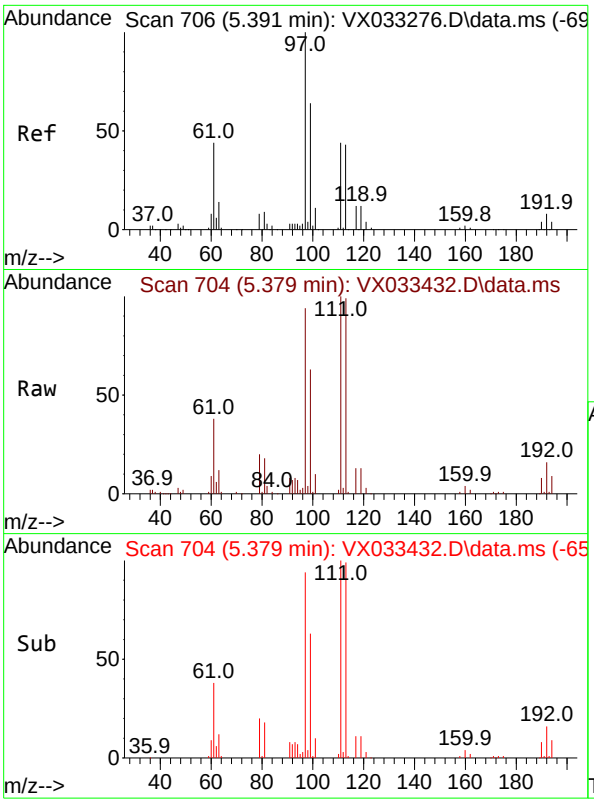


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 6.757 min Scan# 930
Delta R.T. -0.006 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion:114 Resp: 222709

Ion	Ratio	Lower	Upper
114	100		
63	18.4	0.0	41.6
88	15.3	0.0	33.4

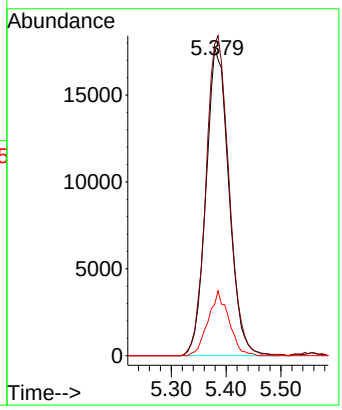




#35
Dibromofluoromethane
Concen: 51.403 ug/l
RT: 5.379 min Scan# 7
Delta R.T. -0.012 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion:113 Resp: 5149

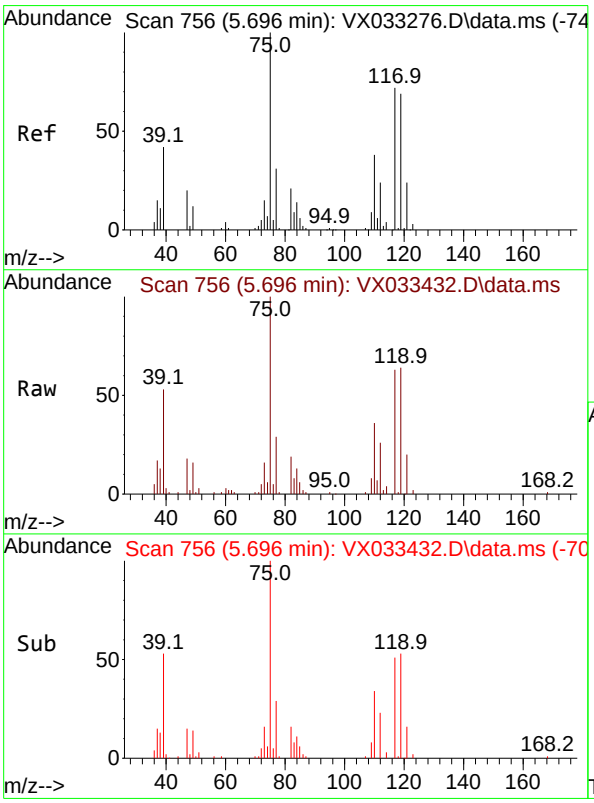
Ion	Ratio	Lower	Upper
113	100		
111	104.4	82.4	123.6
192	19.1	15.4	23.2



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBS01

Manual Integrations APPROVED

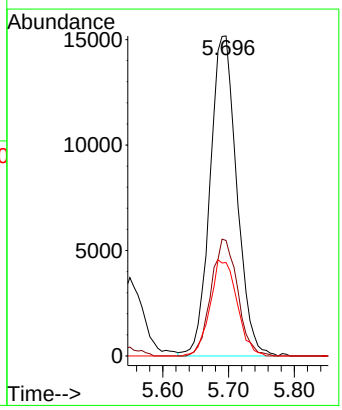
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

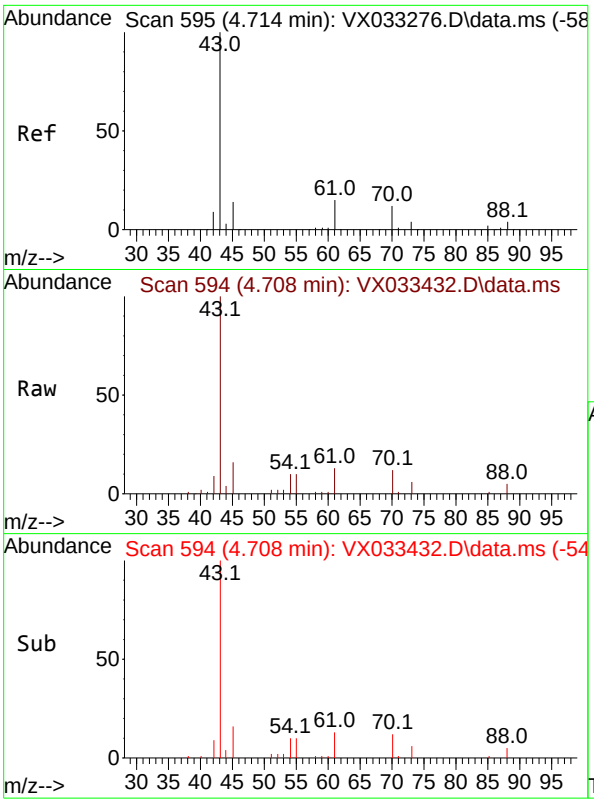


#36
1,1-Dichloropropene
Concen: 21.987 ug/l
RT: 5.696 min Scan# 756
Delta R.T. 0.000 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion: 75 Resp: 42941

Ion	Ratio	Lower	Upper
75	100		
110	36.2	18.4	55.2
77	30.2	24.5	36.7

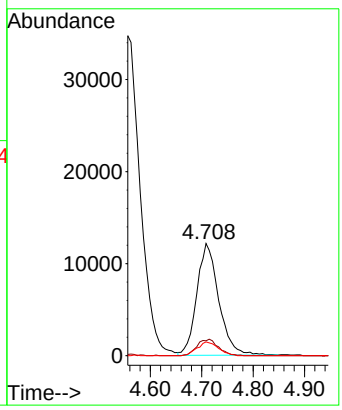




#37
Ethyl Acetate
Concen: 19.481 ug/l
RT: 4.708 min Scan# 5
Delta R.T. -0.006 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion: 43 Resp: 3596

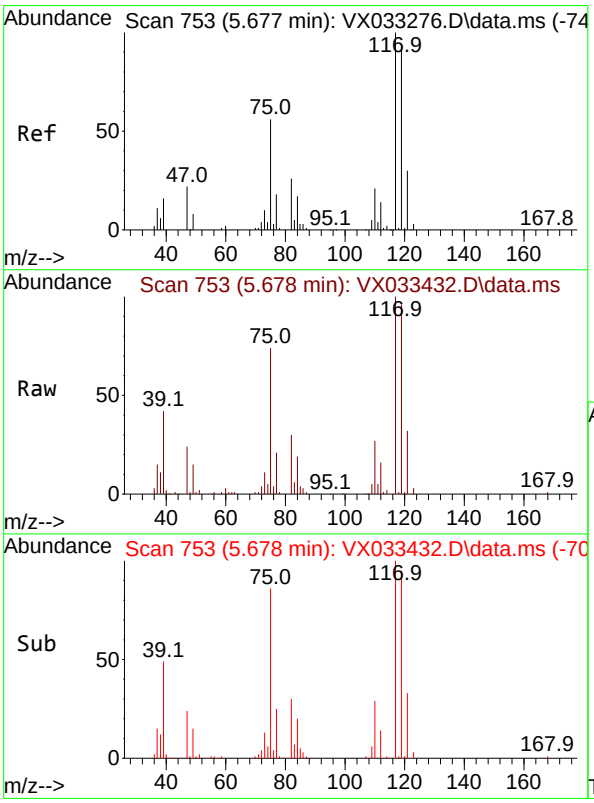
Ion	Ratio	Lower	Upper
43	100		
61	14.4	11.5	17.3
70	11.8	9.1	13.7



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBS01

Manual Integrations
APPROVED

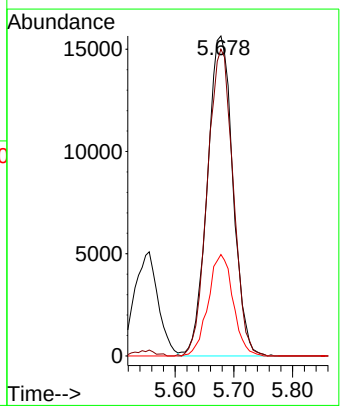
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

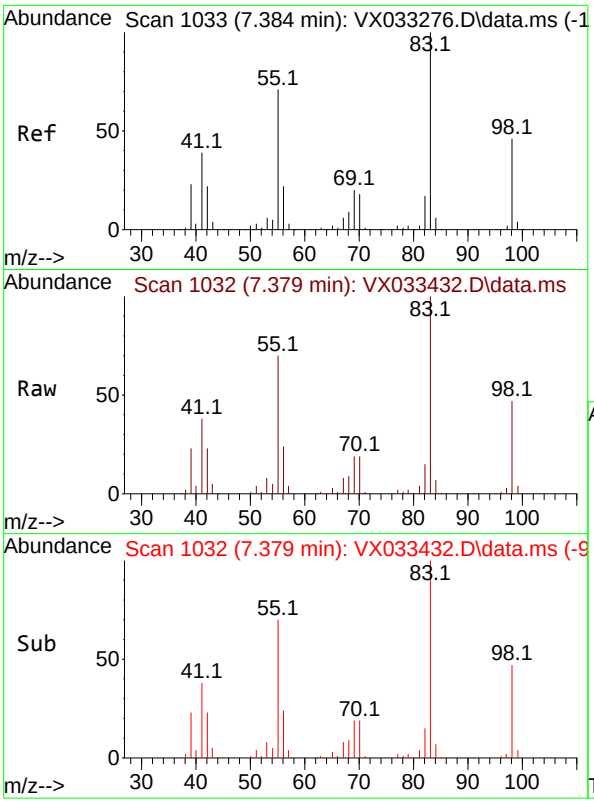


#38
Carbon Tetrachloride
Concen: 21.650 ug/l
RT: 5.678 min Scan# 753
Delta R.T. 0.000 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion:117 Resp: 47373

Ion	Ratio	Lower	Upper
117	100		
119	95.9	77.2	115.8
121	31.7	25.8	38.6

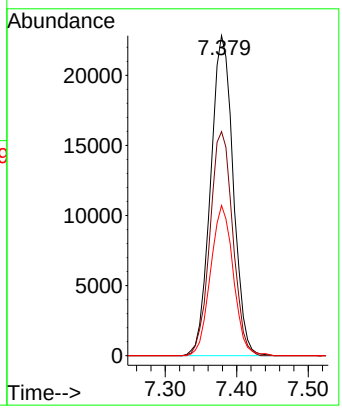




#39
Methylcyclohexane
Concen: 22.937 ug/l
RT: 7.379 min Scan# 1
Delta R.T. -0.006 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion: 83 Resp: 5013

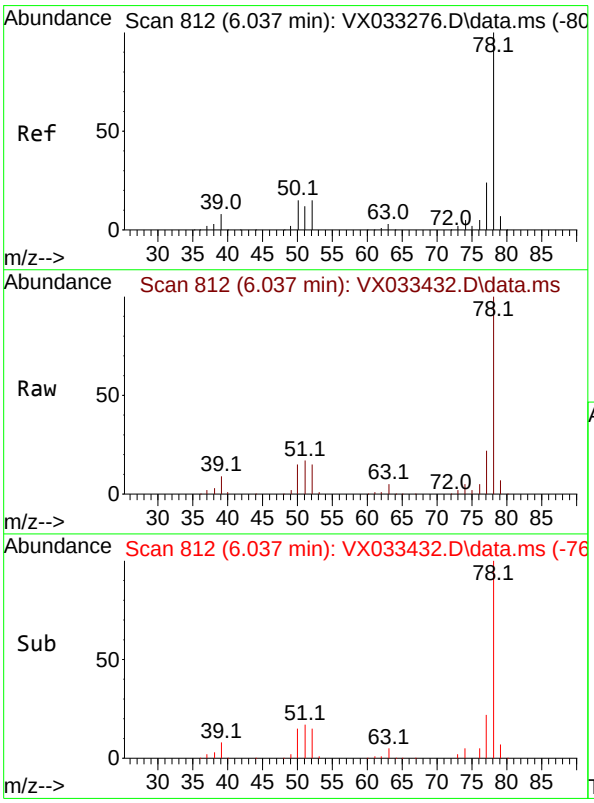
Ion	Ratio	Lower	Upper
83	100		
55	70.0	58.4	87.6
98	46.9	37.2	55.8



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBS01

Manual Integrations
APPROVED

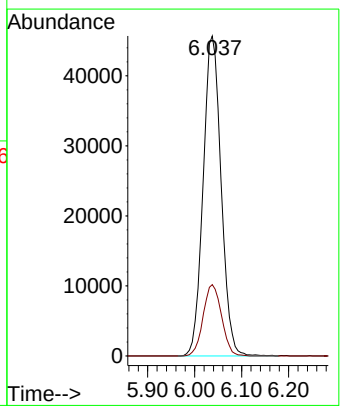
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

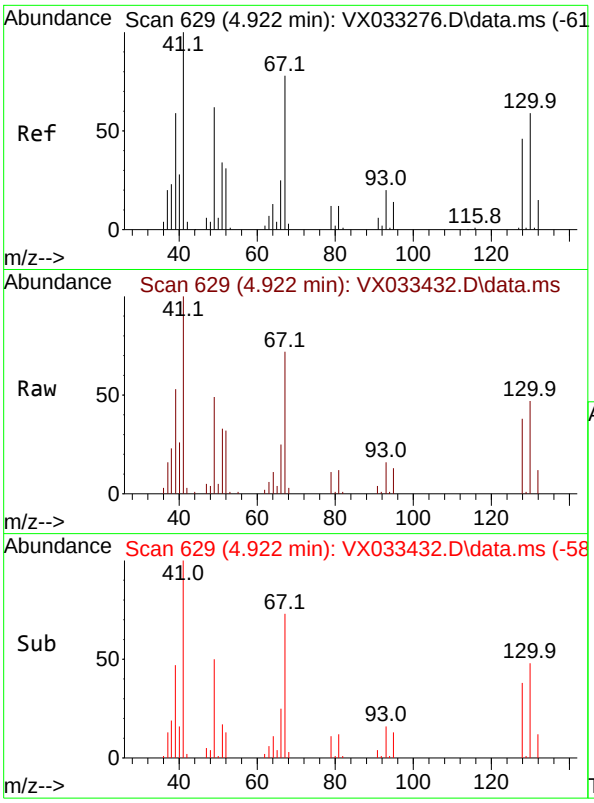


#40
Benzene
Concen: 21.286 ug/l
RT: 6.037 min Scan# 812
Delta R.T. 0.000 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion: 78 Resp: 121206

Ion	Ratio	Lower	Upper
78	100		
77	22.3	19.0	28.4

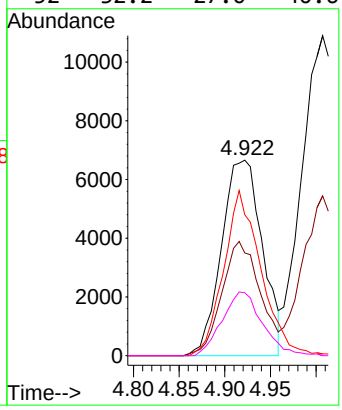




#41
Methacrylonitrile
Concen: 20.348 ug/l
RT: 4.922 min Scan# 6
Delta R.T. 0.000 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion: 41 Resp: 2070

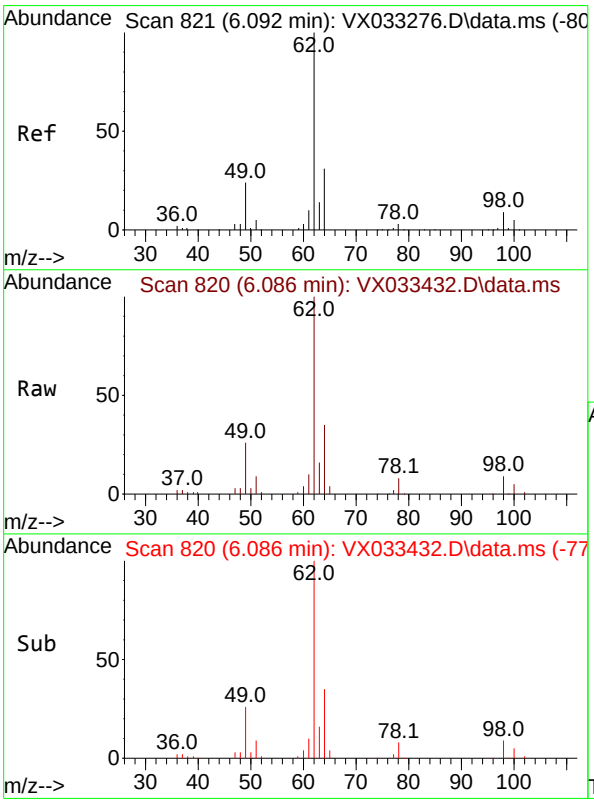
Ion	Ratio	Lower	Upper
41	100		
39	54.8	47.5	71.3
67	77.1	60.5	90.7
52	32.2	27.0	40.6



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBS01

Manual Integrations
APPROVED

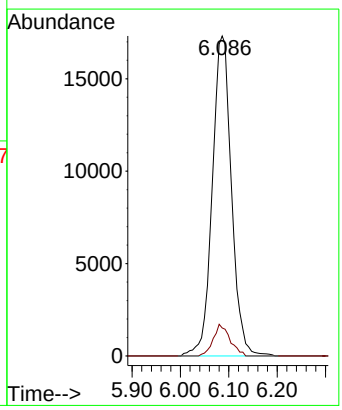
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

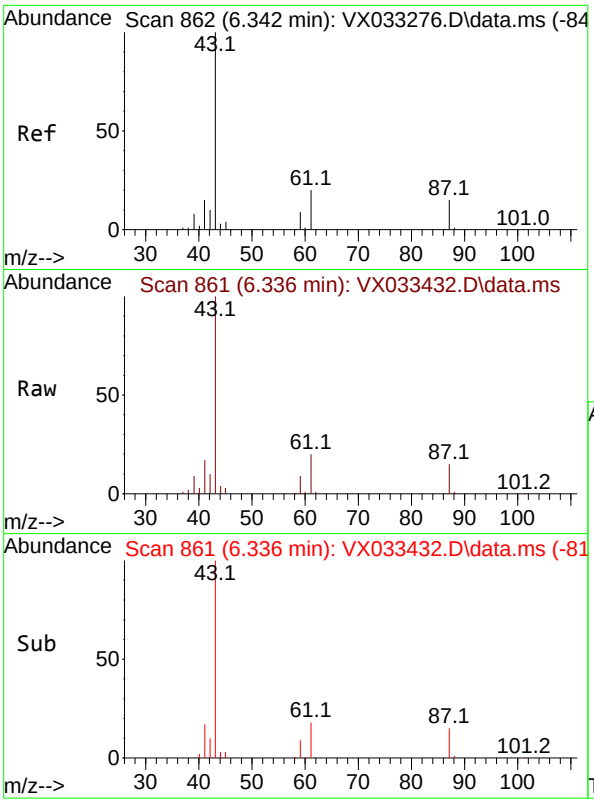


#42
1,2-Dichloroethane
Concen: 21.085 ug/l
RT: 6.086 min Scan# 820
Delta R.T. -0.006 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion: 62 Resp: 47676

Ion	Ratio	Lower	Upper
62	100		
98	8.6	0.0	16.0

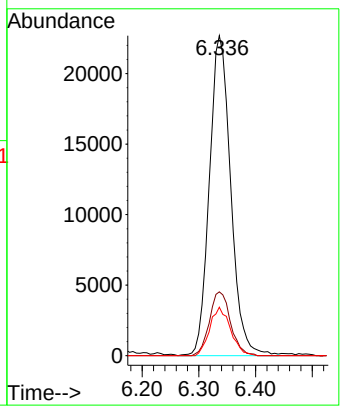




#43
Isopropyl Acetate
Concen: 19.951 ug/l
RT: 6.336 min Scan# 8
Delta R.T. -0.006 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion: 43 Resp: 5926

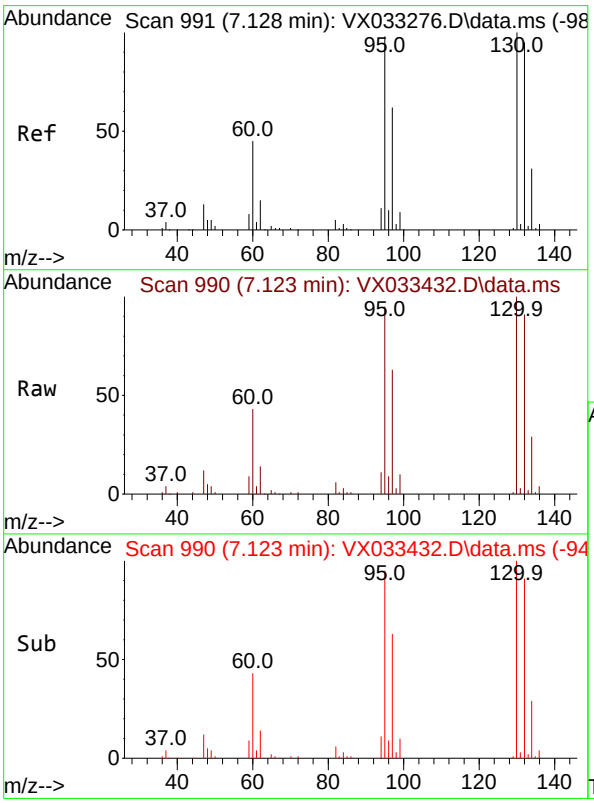
Ion	Ratio	Lower	Upper
43	100		
61	19.7	15.4	23.0
87	14.7	10.8	16.2



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBS01

Manual Integrations
APPROVED

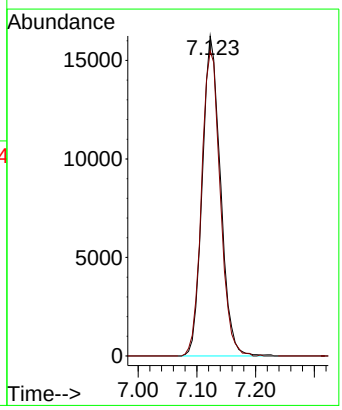
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

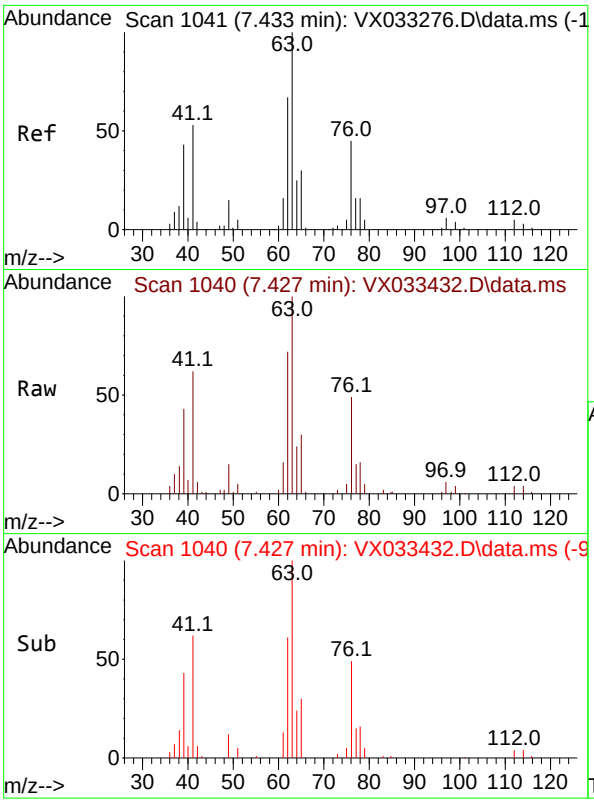


#44
Trichloroethene
Concen: 22.230 ug/l
RT: 7.123 min Scan# 990
Delta R.T. -0.006 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion:130 Resp: 34900

Ion	Ratio	Lower	Upper
130	100		
95	95.3	0.0	195.2

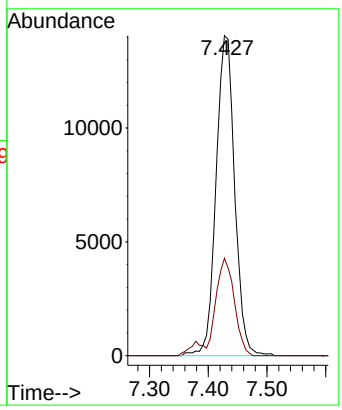




#45
1,2-Dichloropropane
Concen: 21.271 ug/l
RT: 7.427 min Scan# 1
Delta R.T. -0.006 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion: 63 Resp: 3097

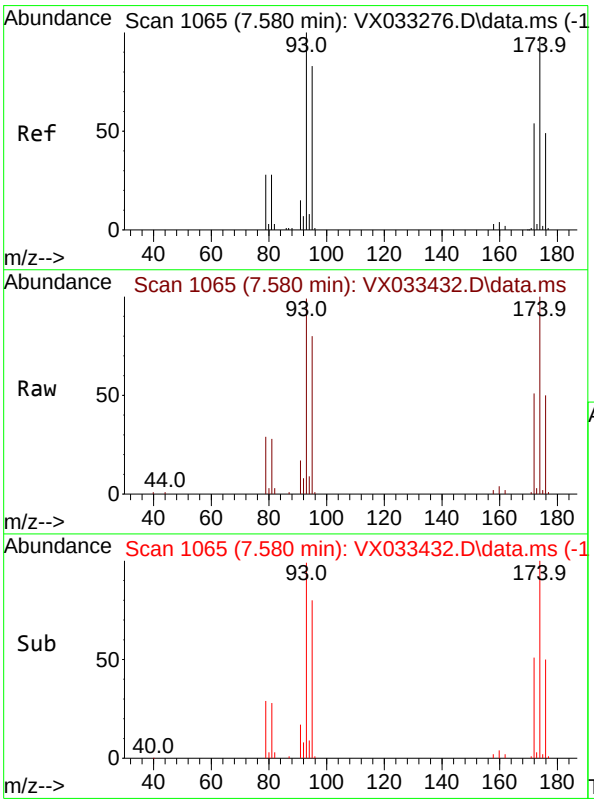
Ion	Ratio	Lower	Upper
63	100		
65	30.4	24.6	36.8



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBS01

Manual Integrations
APPROVED

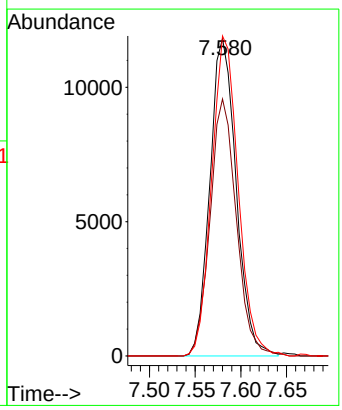
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

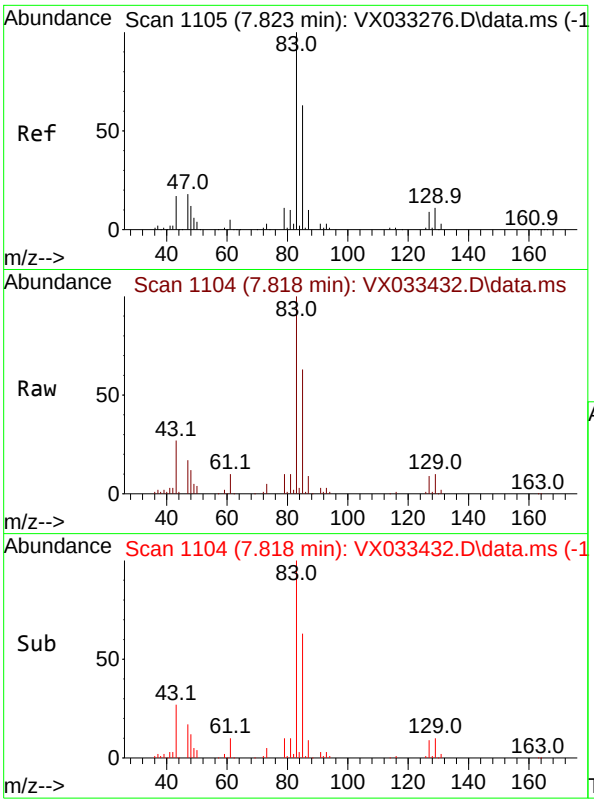


#46
Dibromomethane
Concen: 21.322 ug/l
RT: 7.580 min Scan# 1065
Delta R.T. 0.000 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion: 93 Resp: 23654

Ion	Ratio	Lower	Upper
93	100		
95	80.7	65.8	98.8
174	101.7	79.8	119.6

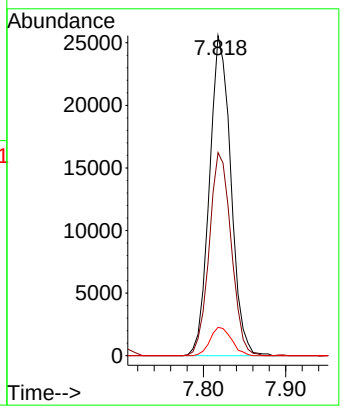




#47
Bromodichloromethane
Concen: 21.418 ug/l
RT: 7.818 min Scan# 1
Delta R.T. -0.006 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion: 83 Resp: 4631

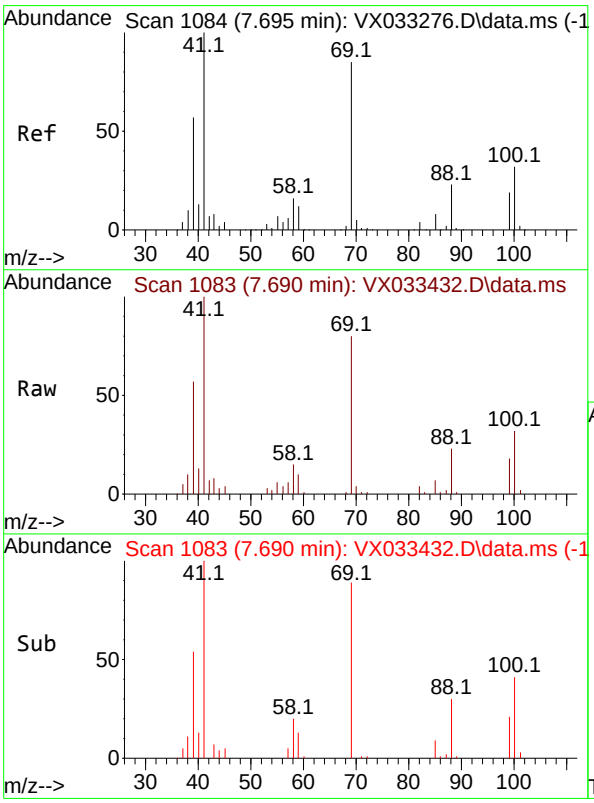
Ion	Ratio	Lower	Upper
83	100		
85	63.4	52.2	78.4
127	8.9	7.4	11.2



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBS01

Manual Integrations
APPROVED

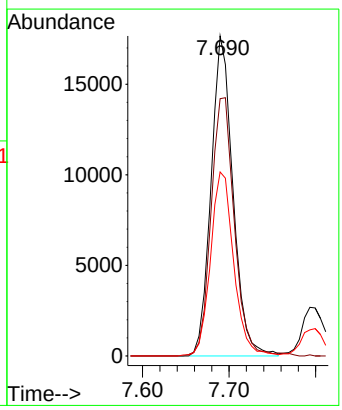
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

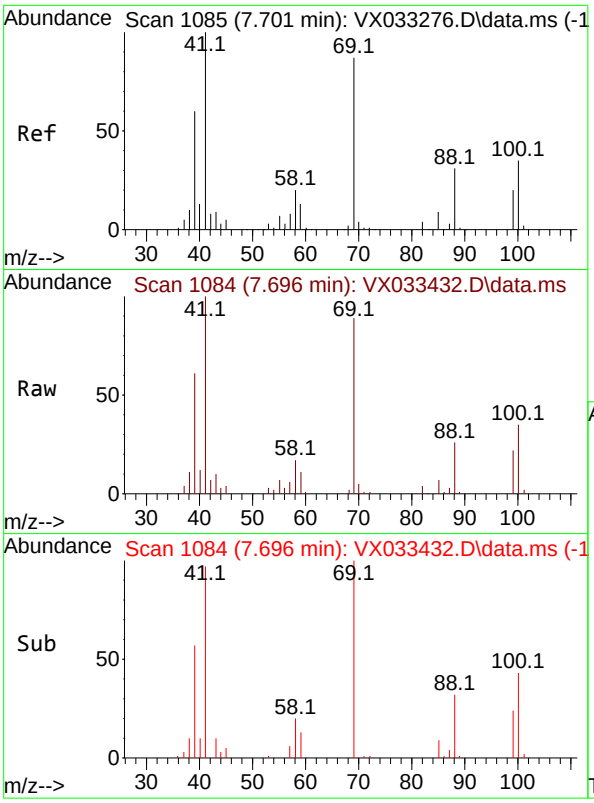


#48
Methyl methacrylate
Concen: 20.255 ug/l
RT: 7.690 min Scan# 1083
Delta R.T. -0.006 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion: 41 Resp: 31051

Ion	Ratio	Lower	Upper
41	100		
69	86.0	65.1	97.7
39	60.8	51.9	77.9





#49
1,4-Dioxane
Concen: 396.244 ug/l
RT: 7.696 min Scan# 1
Delta R.T. -0.006 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

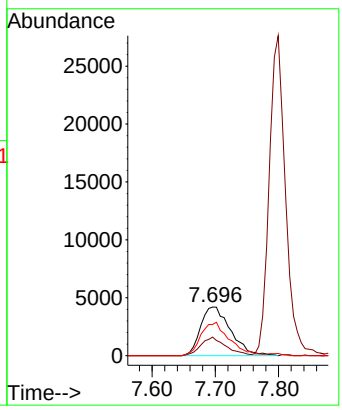
Tgt Ion: 88 Resp: 1385

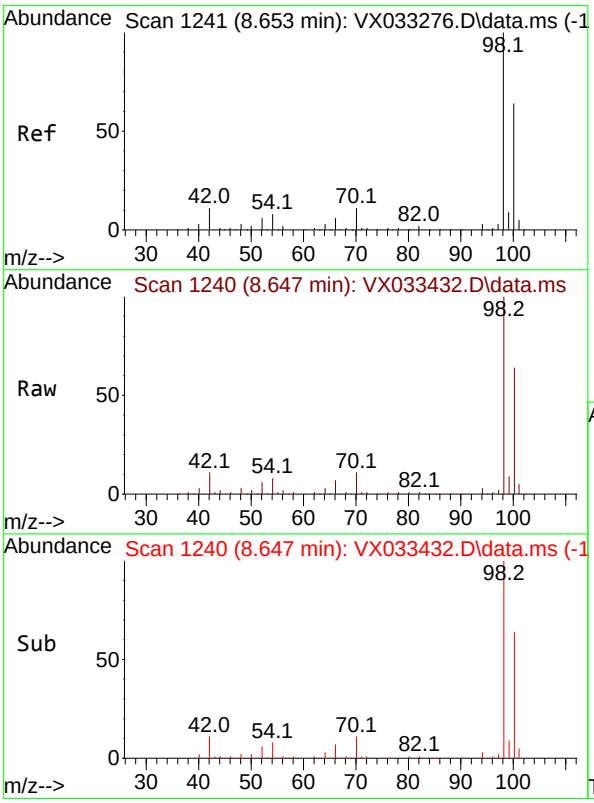
Ion	Ratio	Lower	Upper
88	100		
43	32.0	26.6	39.8
58	64.5	51.7	77.5

Instrument :
MSVOA_X
ClientSampleId :
VX1215WBS01

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

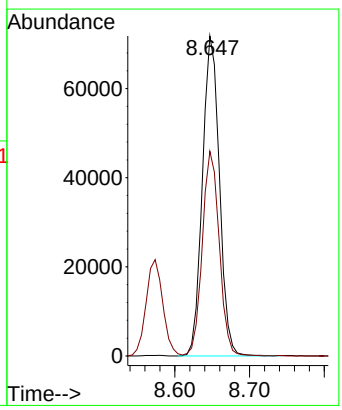


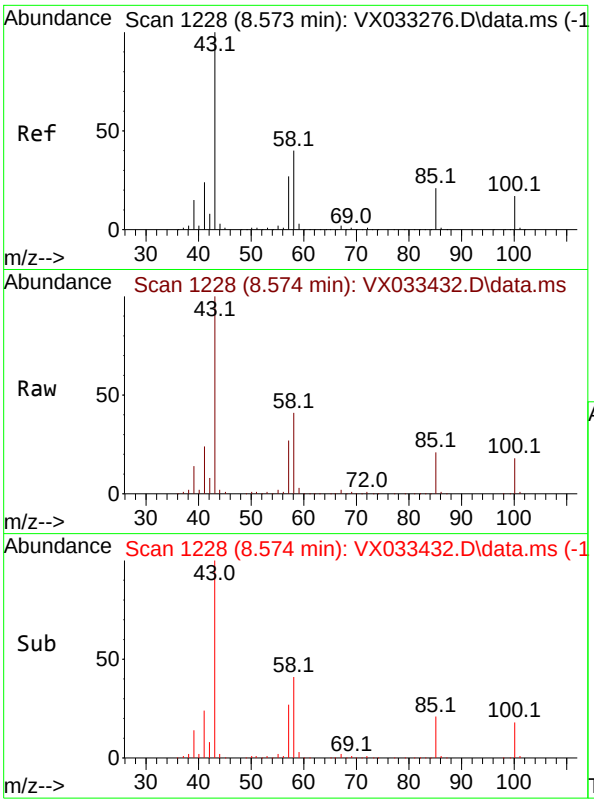


#50
Toluene-d8
Concen: 54.117 ug/l
RT: 8.647 min Scan# 1240
Delta R.T. -0.006 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion: 98 Resp: 113403

Ion	Ratio	Lower	Upper
98	100		
100	63.8	50.9	76.3

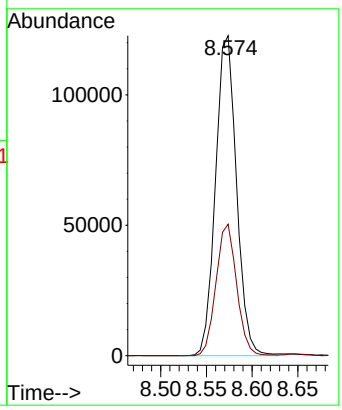




#51
4-Methyl-2-Pentanone
Concen: 104.484 ug/l
RT: 8.574 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion: 43 Resp: 19626

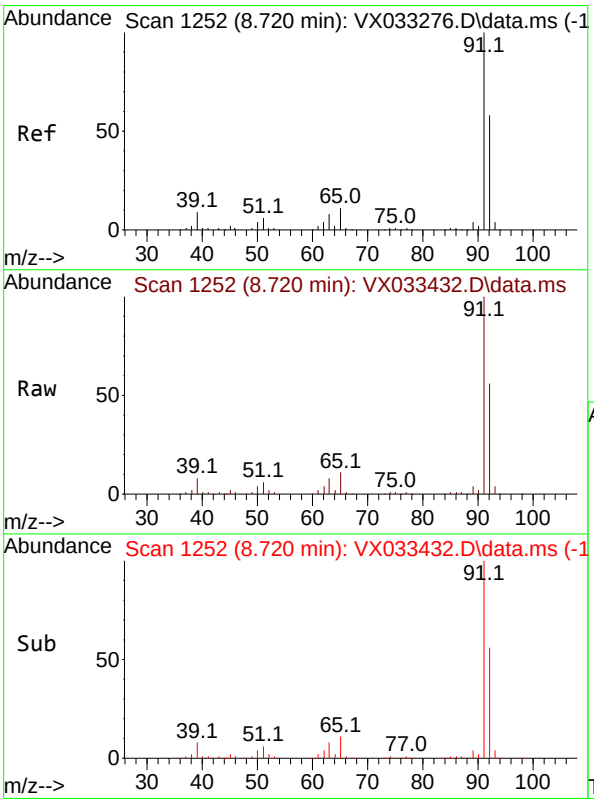
Ion	Ratio	Lower	Upper
43	100		
58	40.5	30.9	46.3



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBS01

Manual Integrations
APPROVED

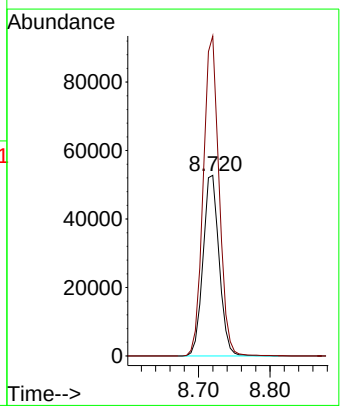
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

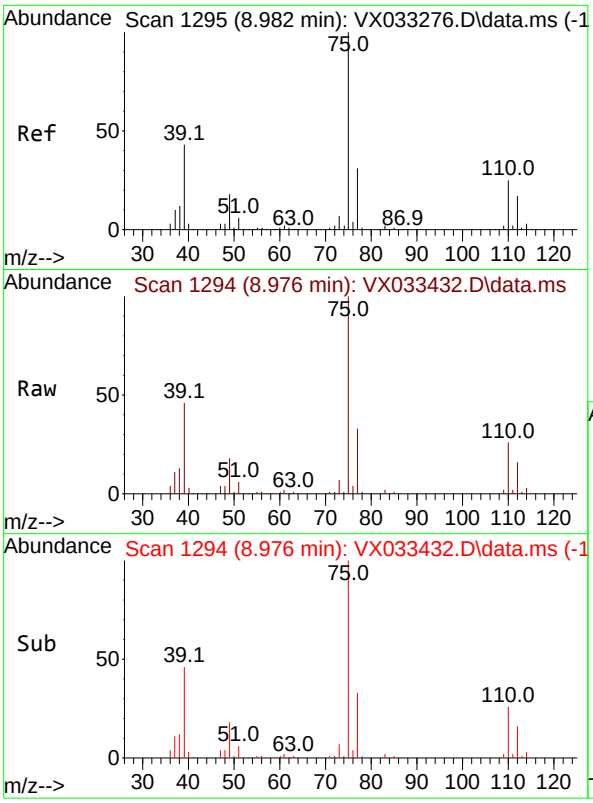


#52
Toluene
Concen: 22.467 ug/l
RT: 8.720 min Scan# 1252
Delta R.T. 0.000 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion: 92 Resp: 82715

Ion	Ratio	Lower	Upper
92	100		
91	173.9	138.3	207.5

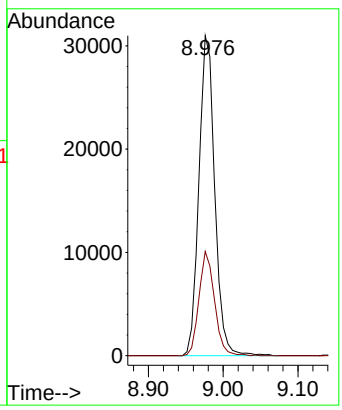




#53
t-1,3-Dichloropropene
Concen: 21.109 ug/l
RT: 8.976 min Scan# 1
Delta R.T. -0.006 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion: 75 Resp: 4549

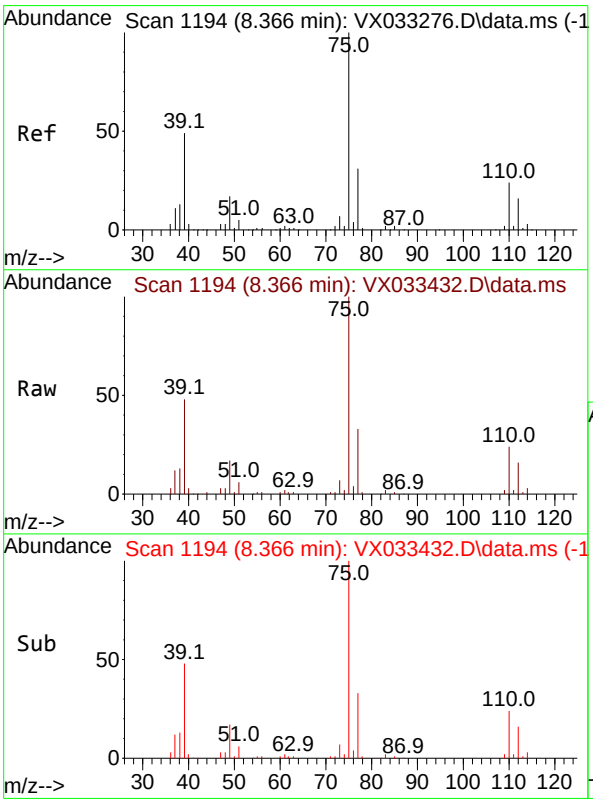
Ion	Ratio	Lower	Upper
75	100		
77	32.6	25.1	37.7



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBS01

Manual Integrations
APPROVED

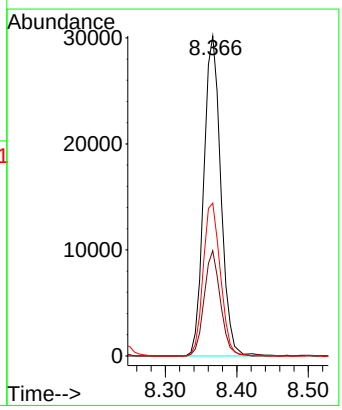
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

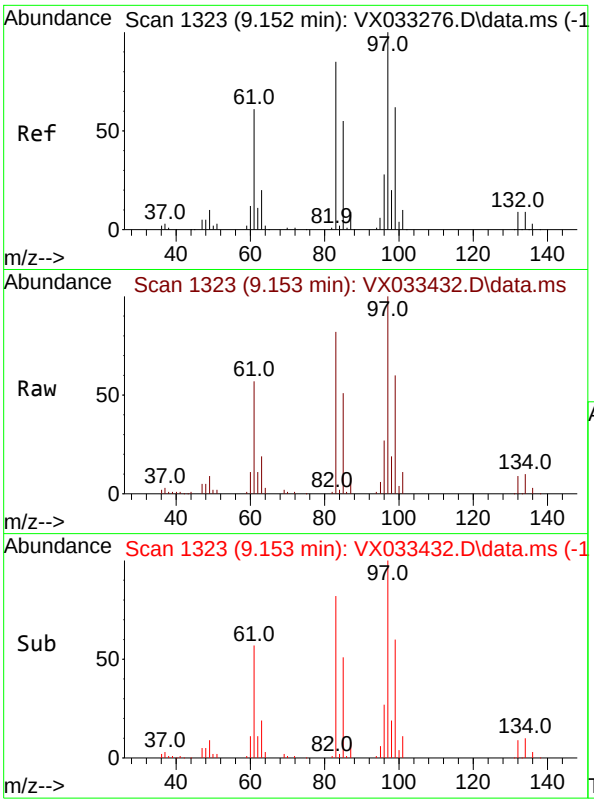


#54
cis-1,3-Dichloropropene
Concen: 21.705 ug/l
RT: 8.366 min Scan# 1194
Delta R.T. 0.000 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion: 75 Resp: 49946

Ion	Ratio	Lower	Upper
75	100		
77	32.9	25.1	37.7
39	47.7	45.5	68.3

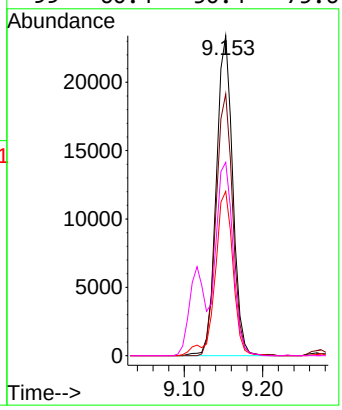




#55
1,1,2-Trichloroethane
Concen: 22.048 ug/l
RT: 9.153 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion: 97 Resp: 3412

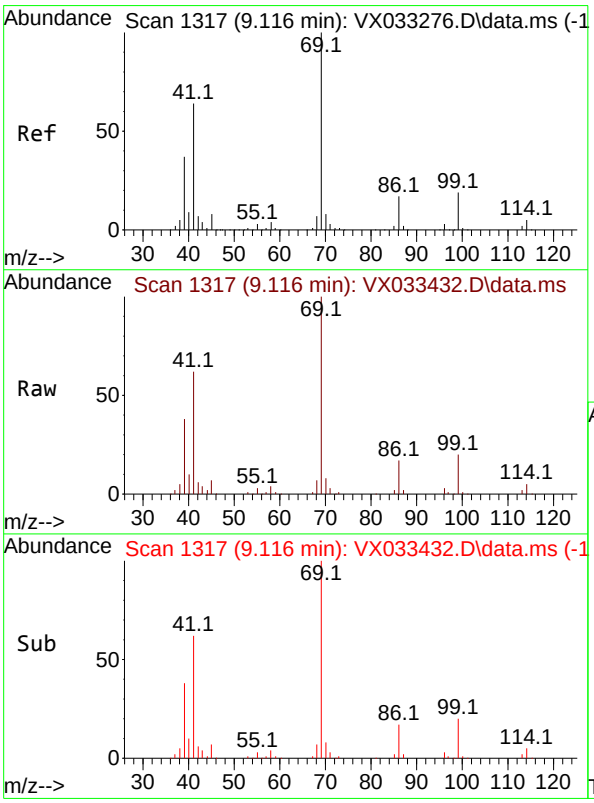
Ion	Ratio	Lower	Upper
97	100		
83	81.8	68.1	102.1
85	51.4	43.3	64.9
99	60.4	50.4	75.6



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBS01

Manual Integrations
APPROVED

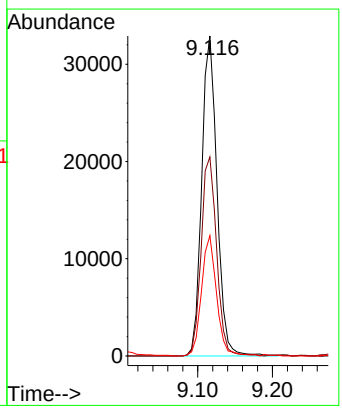
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

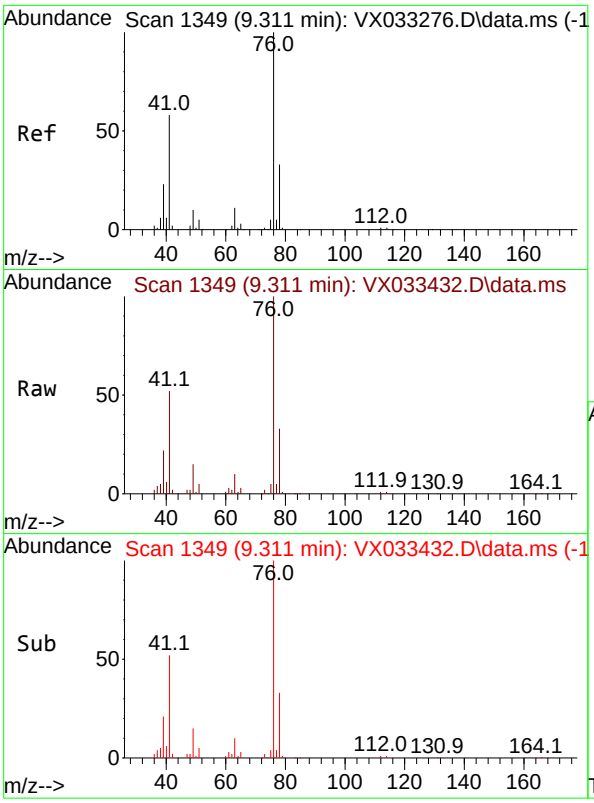


#56
Ethyl methacrylate
Concen: 21.423 ug/l
RT: 9.116 min Scan# 1317
Delta R.T. 0.000 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion: 69 Resp: 46679

Ion	Ratio	Lower	Upper
69	100		
41	63.0	54.3	81.5
39	37.1	35.2	52.8

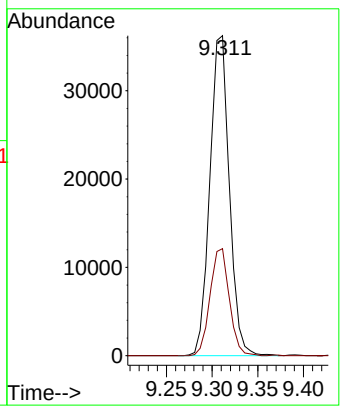




#57
1,3-Dichloropropane
Concen: 21.537 ug/l
RT: 9.311 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion: 76 Resp: 5354

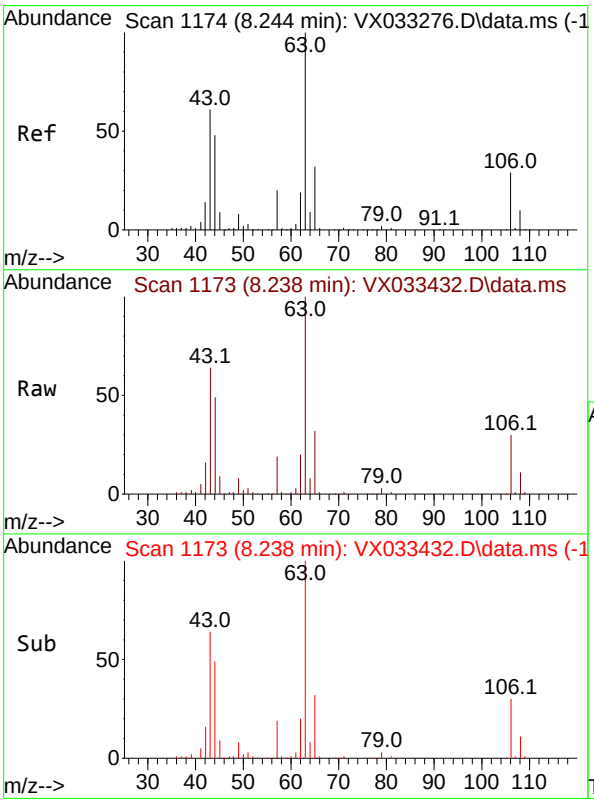
Ion	Ratio	Lower	Upper
76	100		
78	33.1	26.0	39.0



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBS01

Manual Integrations
APPROVED

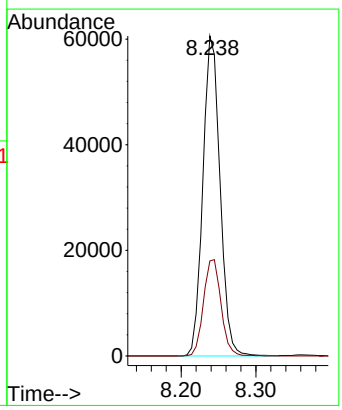
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

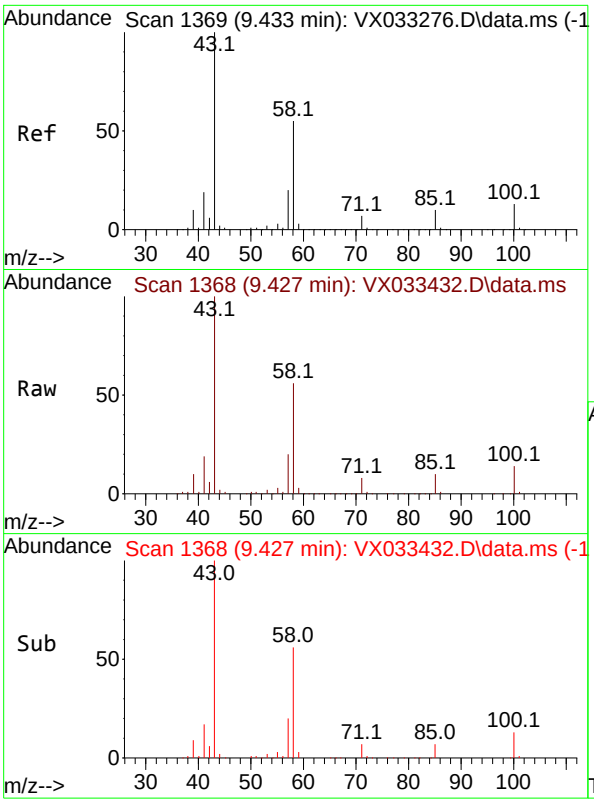


#58
2-Chloroethyl Vinyl ether
Concen: 96.952 ug/l
RT: 8.238 min Scan# 1173
Delta R.T. -0.006 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion: 63 Resp: 96663

Ion	Ratio	Lower	Upper
63	100		
106	30.7	23.3	34.9

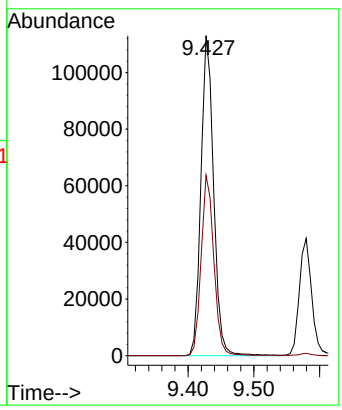




#59
2-Hexanone
Concen: 109.361 ug/l
RT: 9.427 min Scan# 1
Delta R.T. -0.006 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion: 43 Resp: 15138

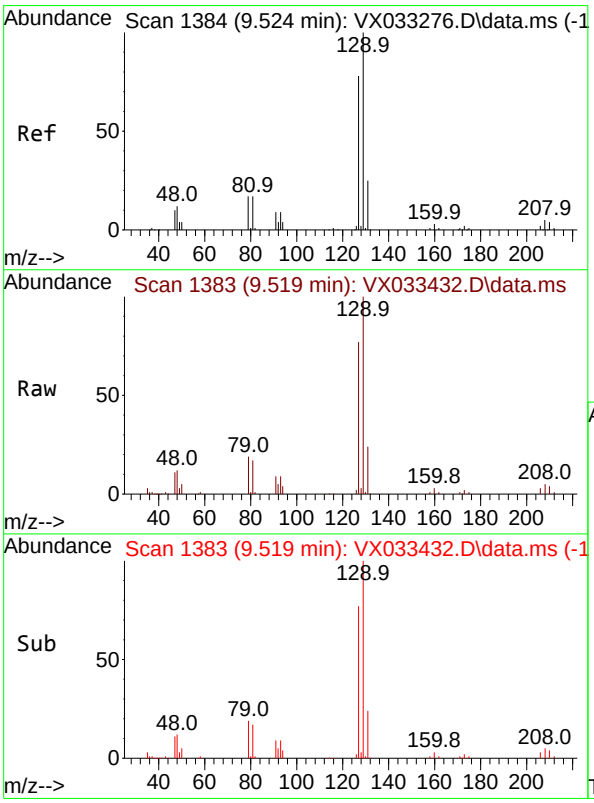
Ion	Ratio	Lower	Upper
43	100		
58	56.4	26.5	79.5



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBS01

Manual Integrations
APPROVED

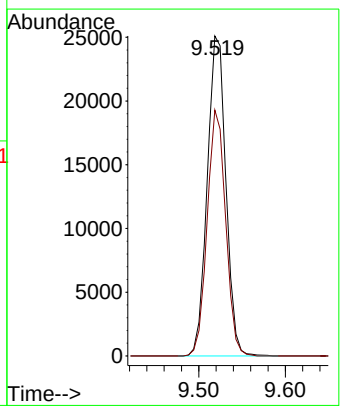
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

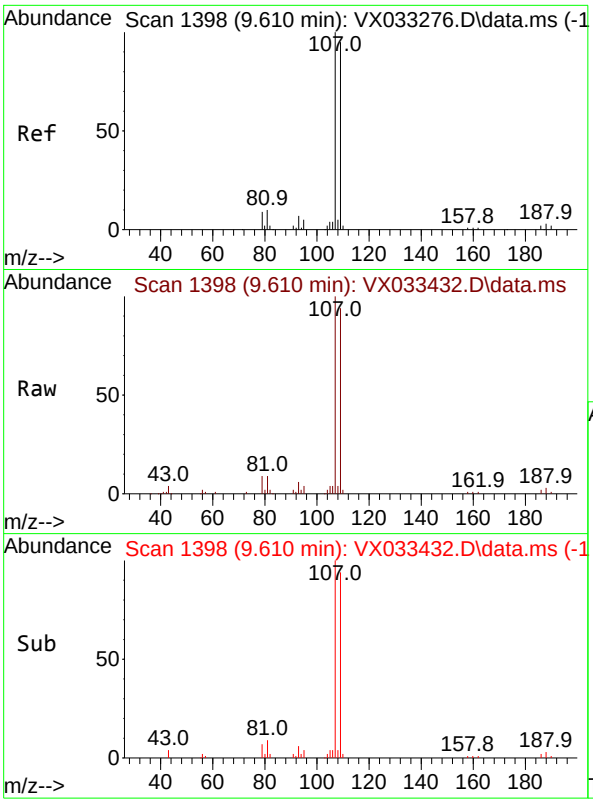


#60
Dibromochloromethane
Concen: 22.006 ug/l
RT: 9.519 min Scan# 1383
Delta R.T. -0.006 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion:129 Resp: 37523

Ion	Ratio	Lower	Upper
129	100		
127	76.1	38.6	115.8

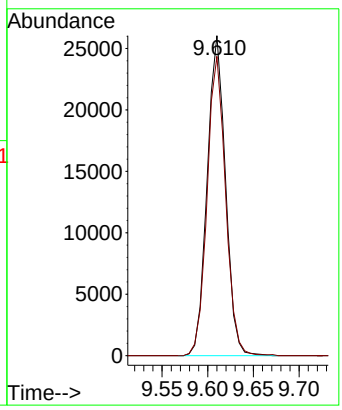




#61
1,2-Dibromoethane
Concen: 22.006 ug/l
RT: 9.610 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion:107 Resp: 3622

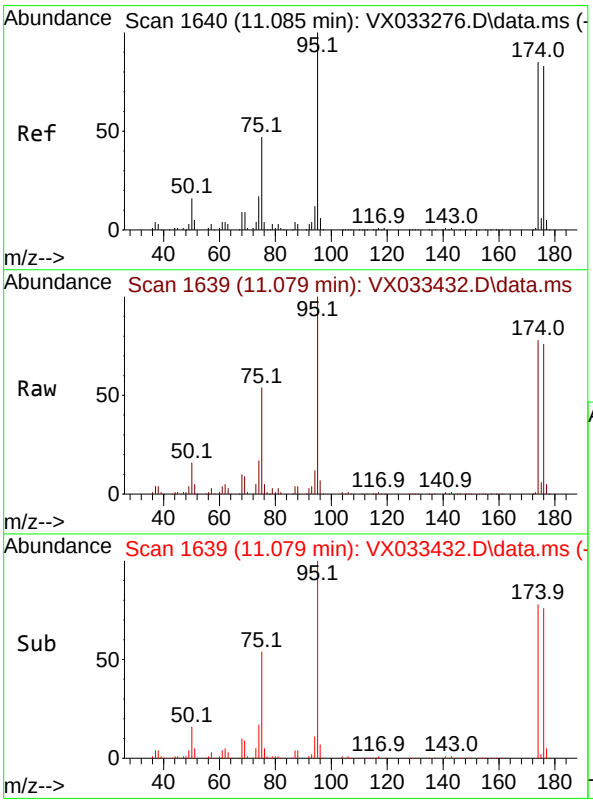
Ion	Ratio	Lower	Upper
107	100		
109	94.4	76.0	114.0



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBS01

Manual Integrations
APPROVED

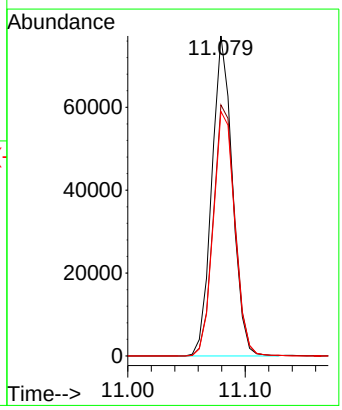
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

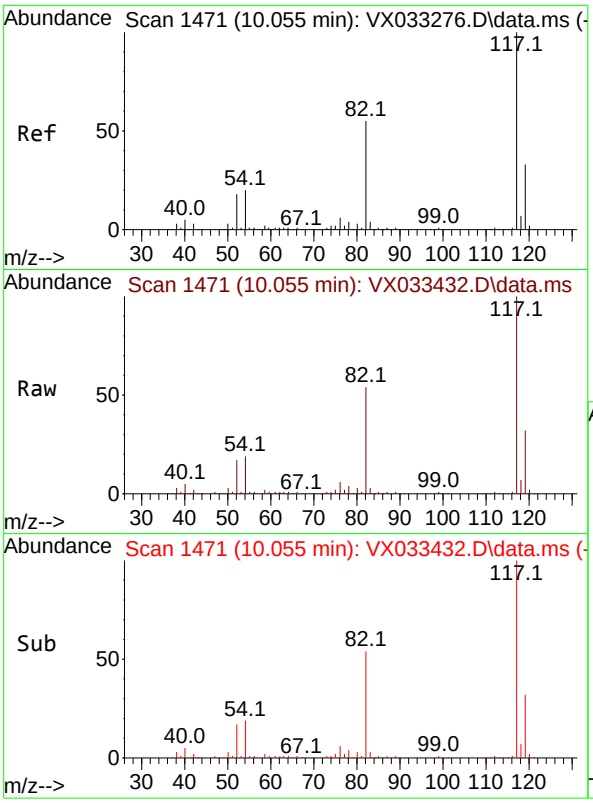


#62
4-Bromofluorobenzene
Concen: 58.652 ug/l
RT: 11.079 min Scan# 1639
Delta R.T. -0.006 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion: 95 Resp: 93976

Ion	Ratio	Lower	Upper
95	100		
174	82.6	0.0	164.0
176	80.1	0.0	154.4

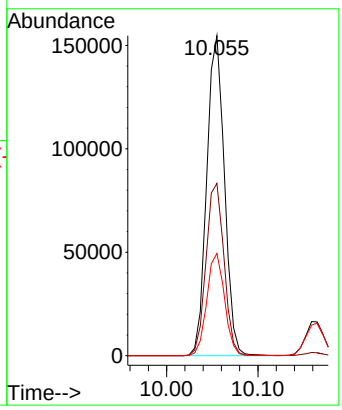




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.055 min Scan# 14
Delta R.T. 0.000 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion:117 Resp: 20784

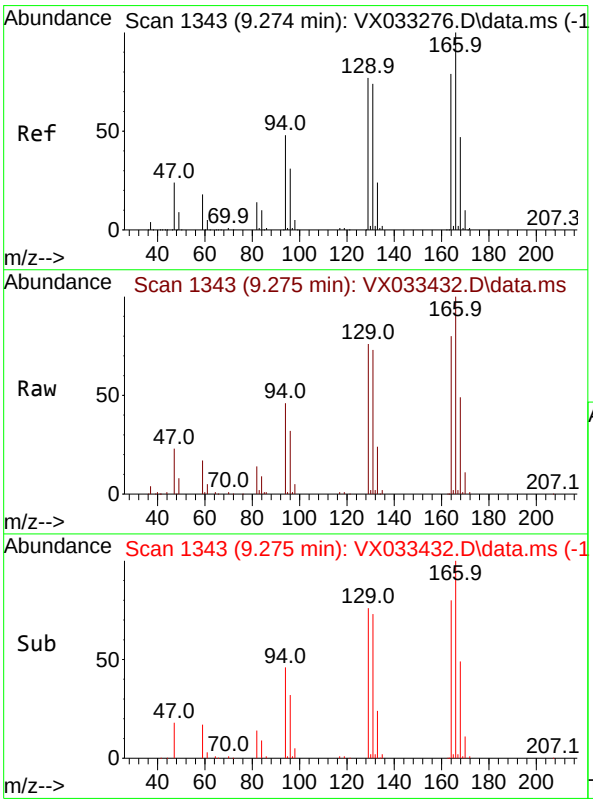
Ion	Ratio	Lower	Upper
117	100		
82	53.8	44.3	66.5
119	32.0	25.7	38.5



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBS01

Manual Integrations
APPROVED

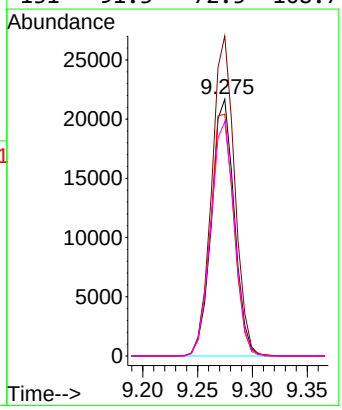
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

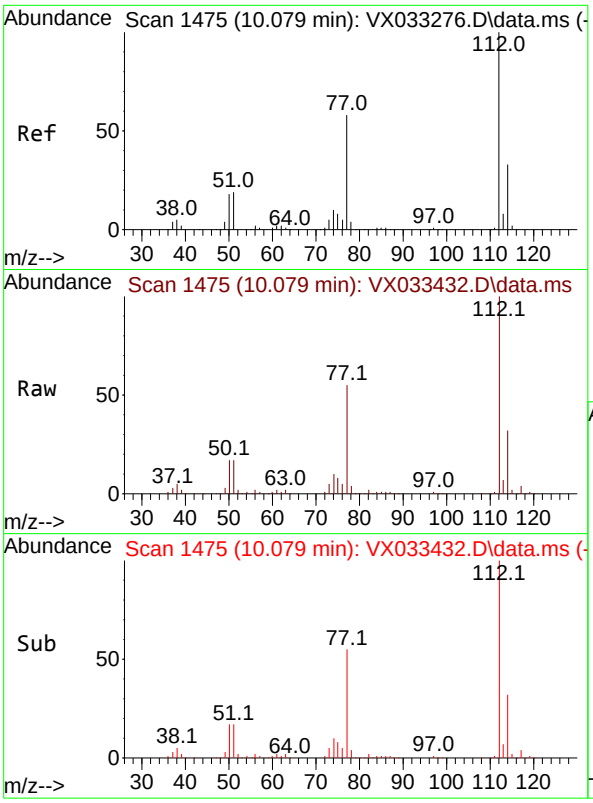


#64
Tetrachloroethene
Concen: 22.006 ug/l
RT: 9.275 min Scan# 1343
Delta R.T. 0.000 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion:164 Resp: 31276

Ion	Ratio	Lower	Upper
164	100		
166	124.6	105.4	158.2
129	94.2	78.2	117.2
131	91.3	72.5	108.7

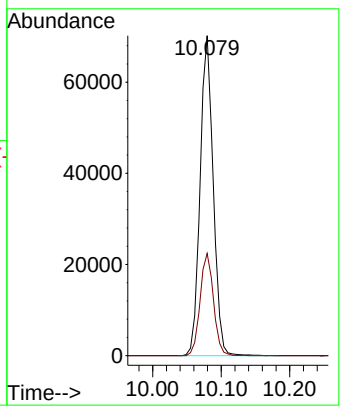




#65
Chlorobenzene
Concen: 22.227 ug/l
RT: 10.079 min Scan# 14
Delta R.T. 0.000 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion:112 Resp: 9355

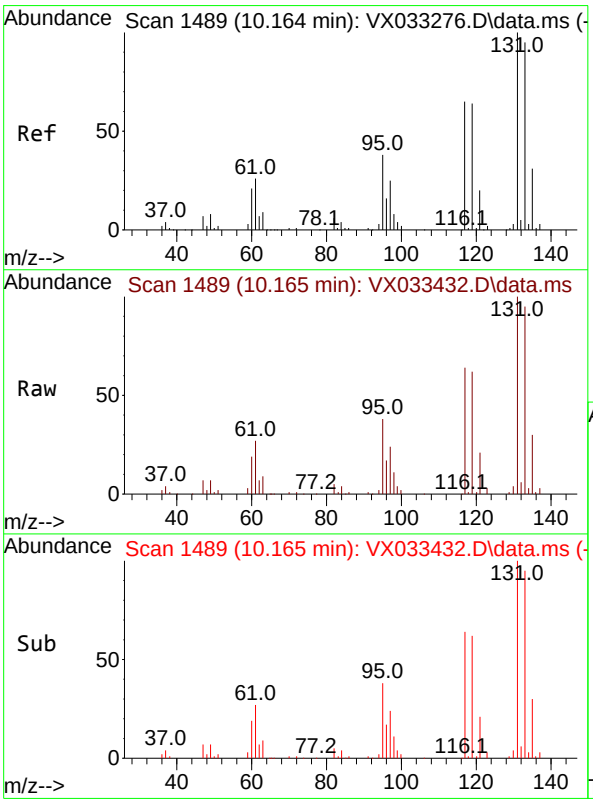
Ion	Ratio	Lower	Upper
112	100		
114	31.9	25.4	38.2



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBS01

Manual Integrations
APPROVED

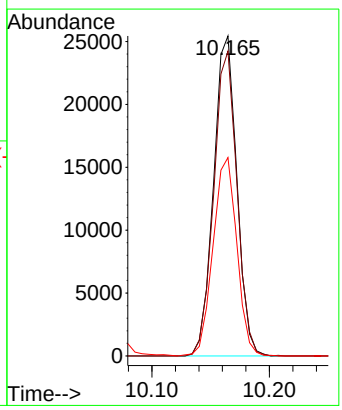
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

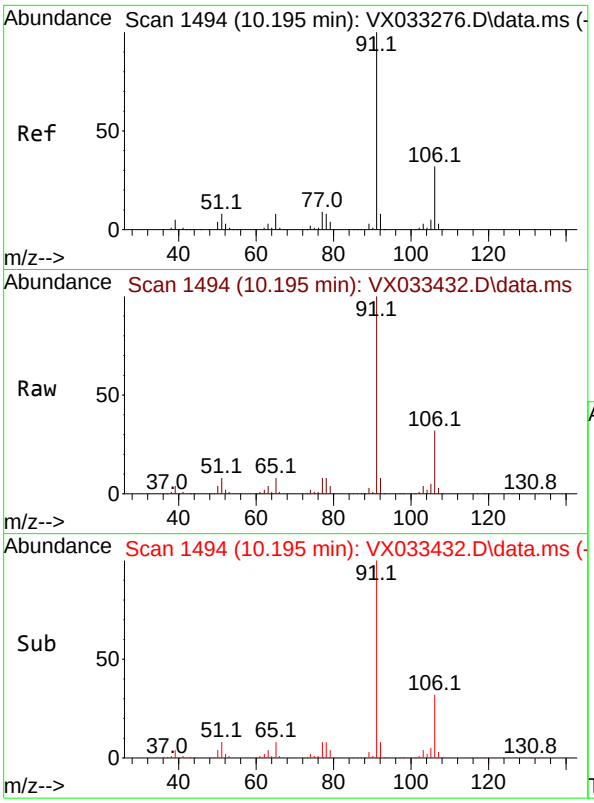


#66
1,1,1,2-Tetrachloroethane
Concen: 21.957 ug/l
RT: 10.165 min Scan# 1489
Delta R.T. 0.000 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion:131 Resp: 34924

Ion	Ratio	Lower	Upper
131	100		
133	95.6	47.6	142.9
119	63.6	32.4	97.0

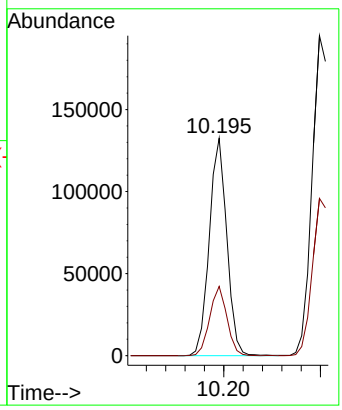




#67
Ethyl Benzene
Concen: 22.759 ug/l
RT: 10.195 min Scan# 14
Delta R.T. 0.000 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion: 91 Resp: 16688

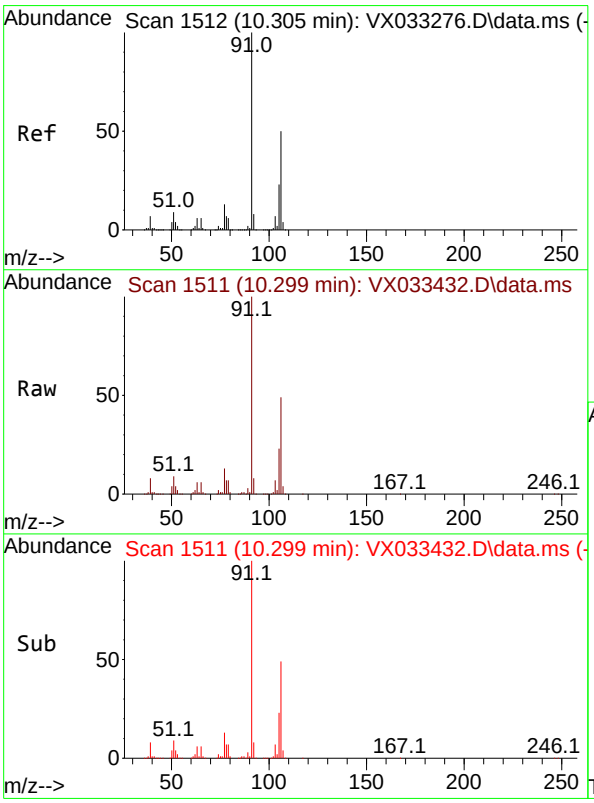
Ion	Ratio	Lower	Upper
91	100		
106	31.9	25.0	37.6



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBS01

Manual Integrations
APPROVED

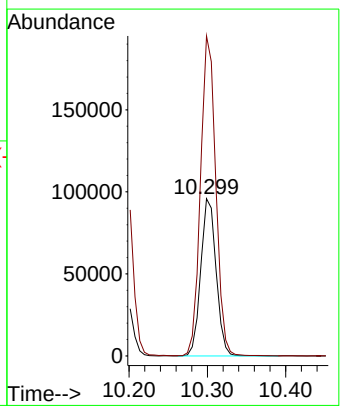
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

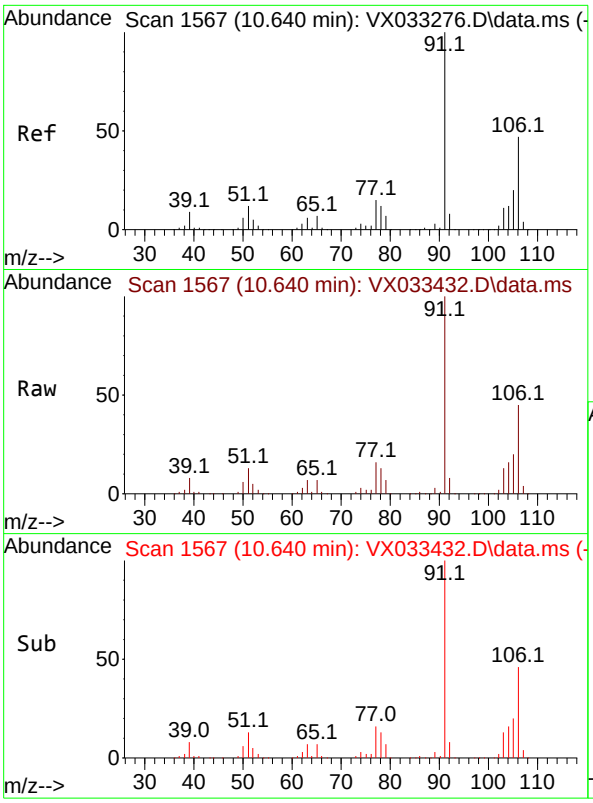


#68
m/p-Xylenes
Concen: 45.726 ug/l
RT: 10.299 min Scan# 1511
Delta R.T. -0.006 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion:106 Resp: 130453

Ion	Ratio	Lower	Upper
106	100		
91	202.3	164.5	246.7

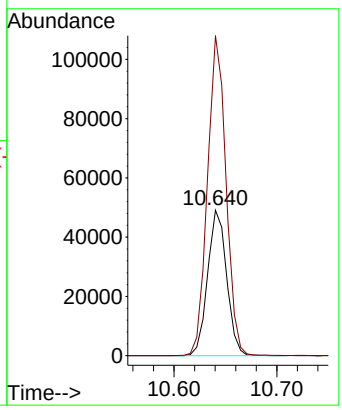




#69
o-Xylene
Concen: 22.440 ug/l
RT: 10.640 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion:106 Resp: 6327

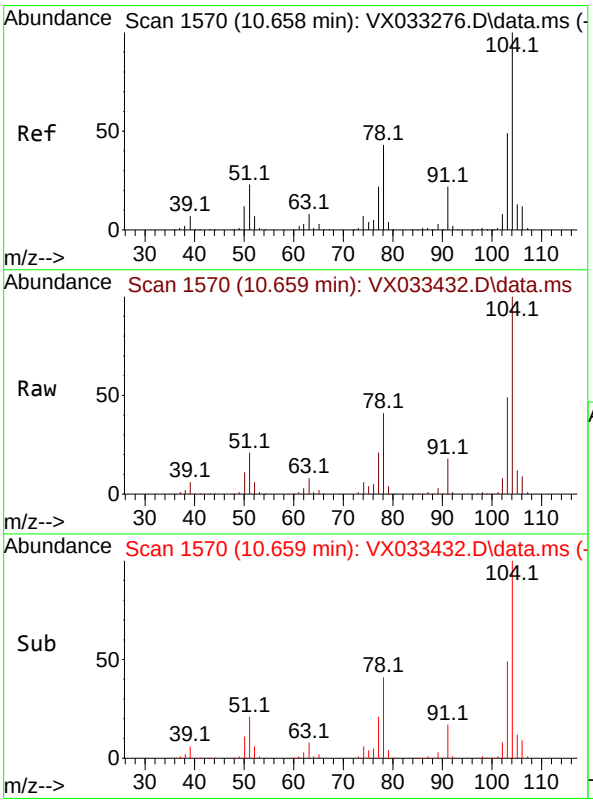
Ion	Ratio	Lower	Upper
106	100		
91	214.5	109.2	327.6



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBS01

Manual Integrations
APPROVED

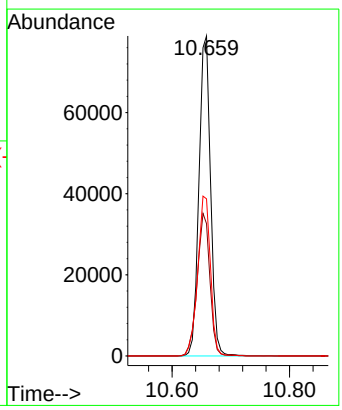
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

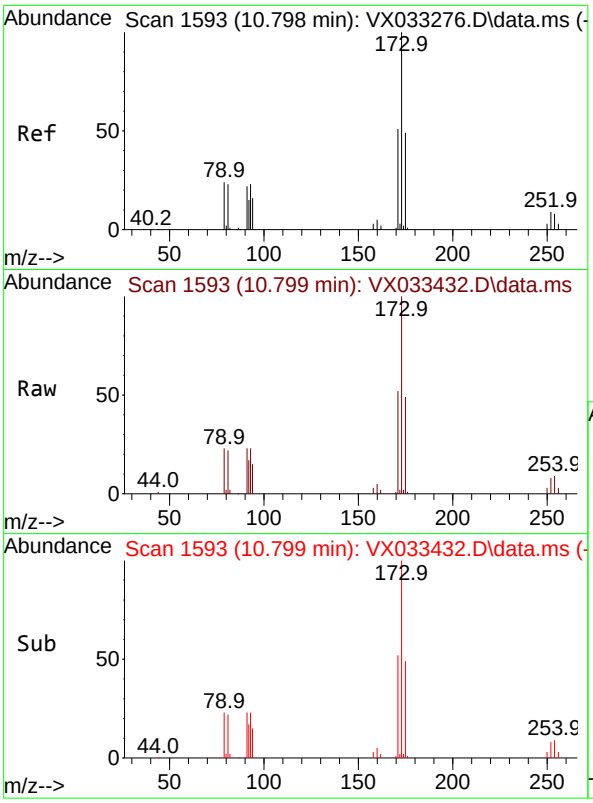


#70
Styrene
Concen: 23.321 ug/l
RT: 10.659 min Scan# 1570
Delta R.T. 0.000 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion:104 Resp: 107707

Ion	Ratio	Lower	Upper
104	100		
78	48.8	41.8	62.8
103	55.0	44.5	66.7

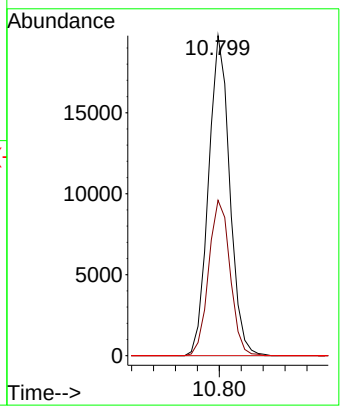




#71
Bromoform
Concen: 21.067 ug/l
RT: 10.799 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion:173 Resp: 2652

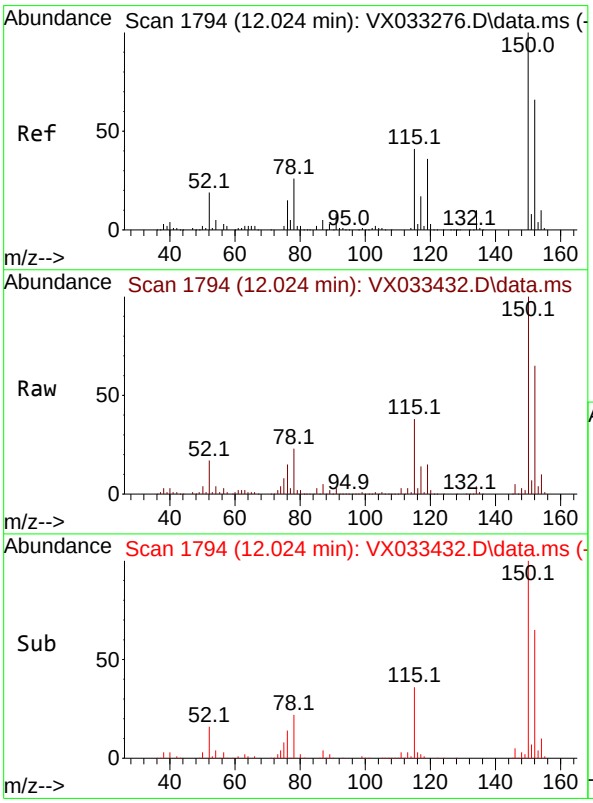
Ion	Ratio	Lower	Upper
173	100		
175	49.1	23.9	71.8
254	0.0	0.0	0.0



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBS01

Manual Integrations APPROVED

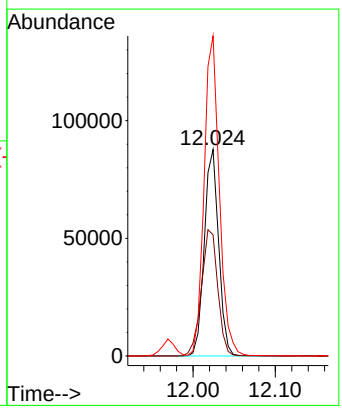
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

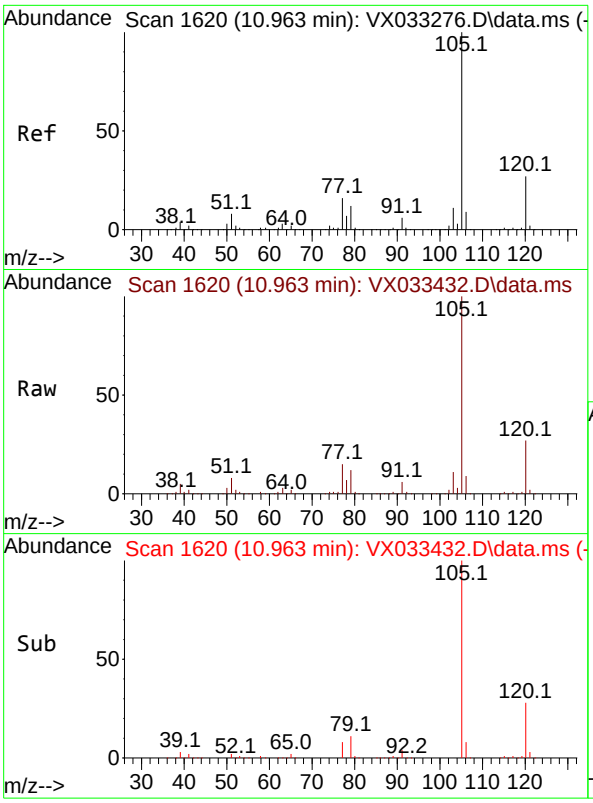


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.024 min Scan# 1794
Delta R.T. 0.000 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion:152 Resp: 106397

Ion	Ratio	Lower	Upper
152	100		
115	69.7	44.0	132.0
150	164.0	0.0	351.8

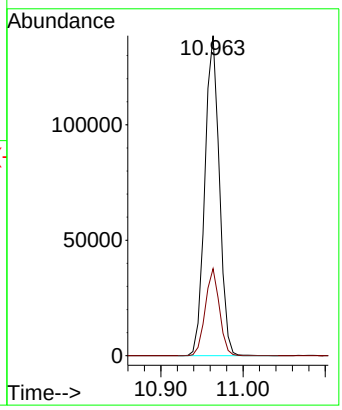




#73
Isopropylbenzene
Concen: 21.983 ug/l
RT: 10.963 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion:105 Resp: 16952

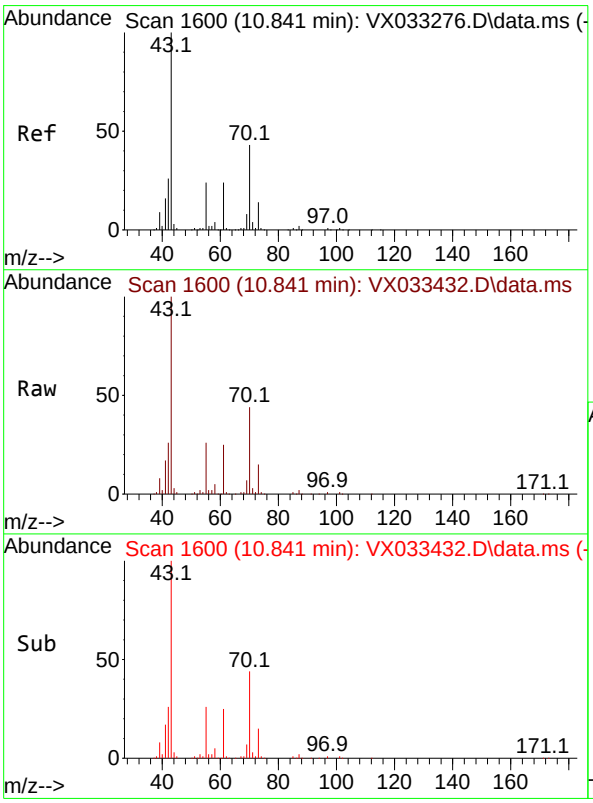
Ion	Ratio	Lower	Upper
105	100		
120	26.4	13.1	39.3



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBS01

Manual Integrations
APPROVED

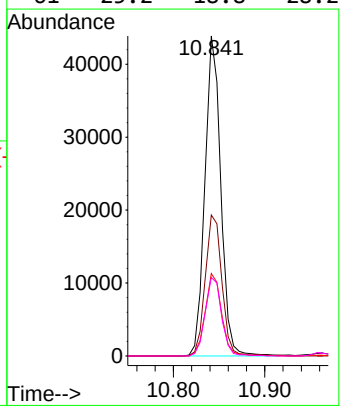
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

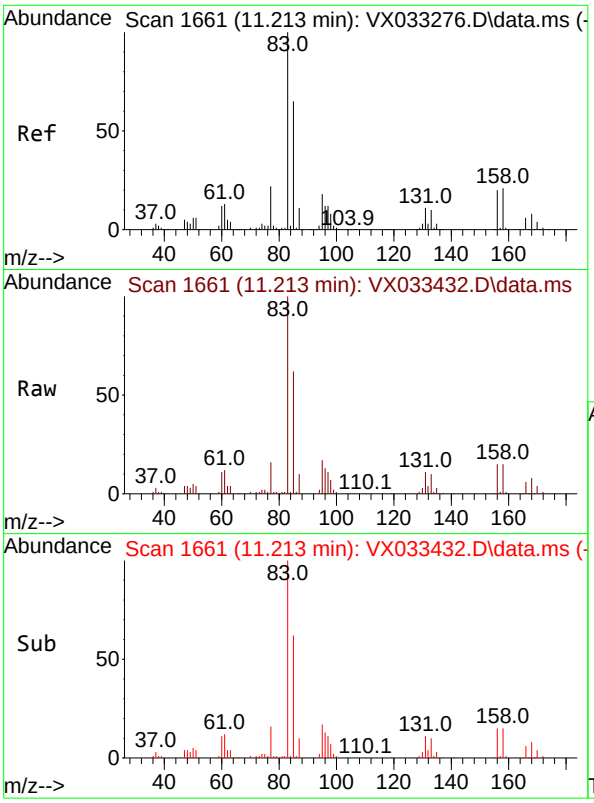


#74
N-amyl acetate
Concen: 20.066 ug/l
RT: 10.841 min Scan# 1600
Delta R.T. 0.000 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion: 43 Resp: 52796

Ion	Ratio	Lower	Upper
43	100		
70	46.1	33.6	50.4
55	26.7	19.4	29.2
61	25.2	18.8	28.2

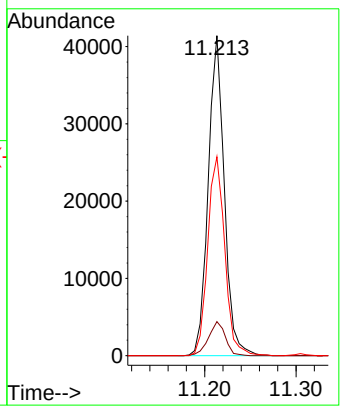




#75
1,1,2,2-Tetrachloroethane
Concen: 20.673 ug/l
RT: 11.213 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion: 83 Resp: 5057

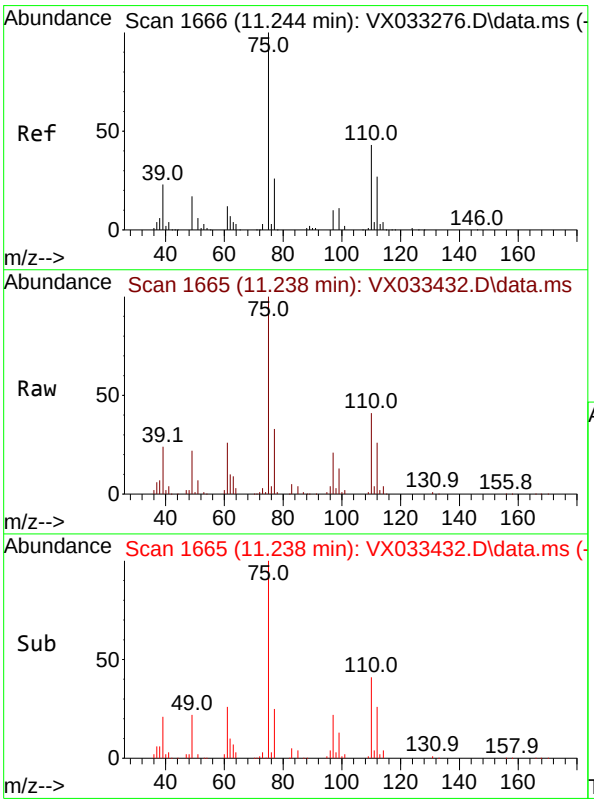
Ion	Ratio	Lower	Upper
83	100		
131	11.2	5.4	16.2
85	66.0	31.9	95.9



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBS01

Manual Integrations
APPROVED

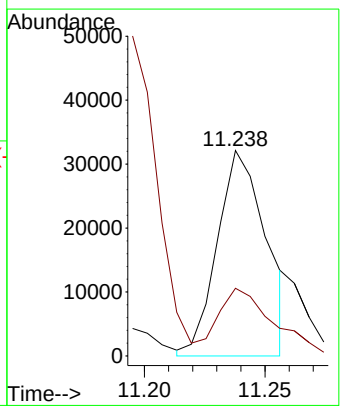
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

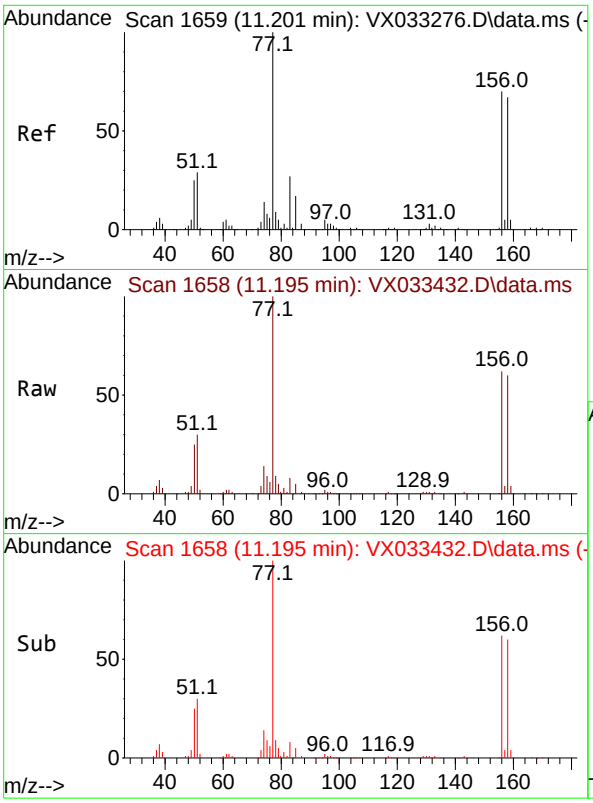


#76
1,2,3-Trichloropropane
Concen: 20.837 ug/l m
RT: 11.238 min Scan# 1665
Delta R.T. -0.006 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion: 75 Resp: 45106

Ion	Ratio	Lower	Upper
75	100		
77	38.1	20.0	60.0

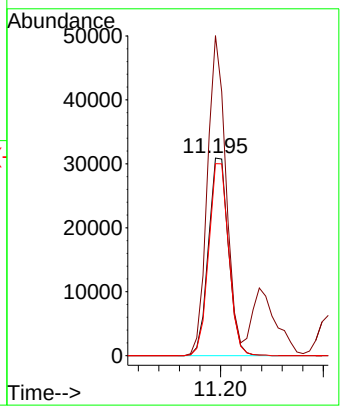




#77
Bromobenzene
Concen: 21.489 ug/l
RT: 11.195 min Scan# 1
Delta R.T. -0.006 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion:156 Resp: 4184

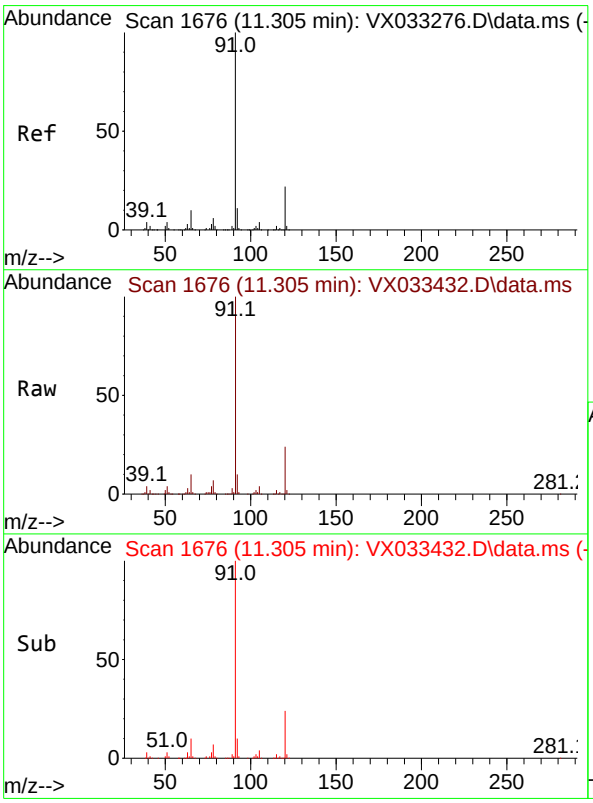
Ion	Ratio	Lower	Upper
156	100		
77	149.6	76.1	228.4
158	96.6	48.8	146.3



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBS01

Manual Integrations
APPROVED

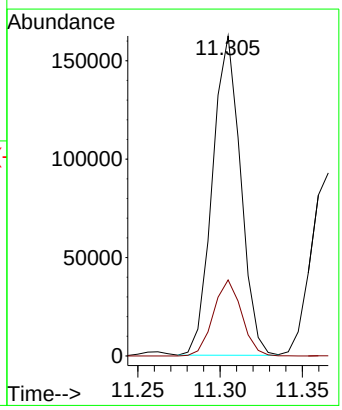
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

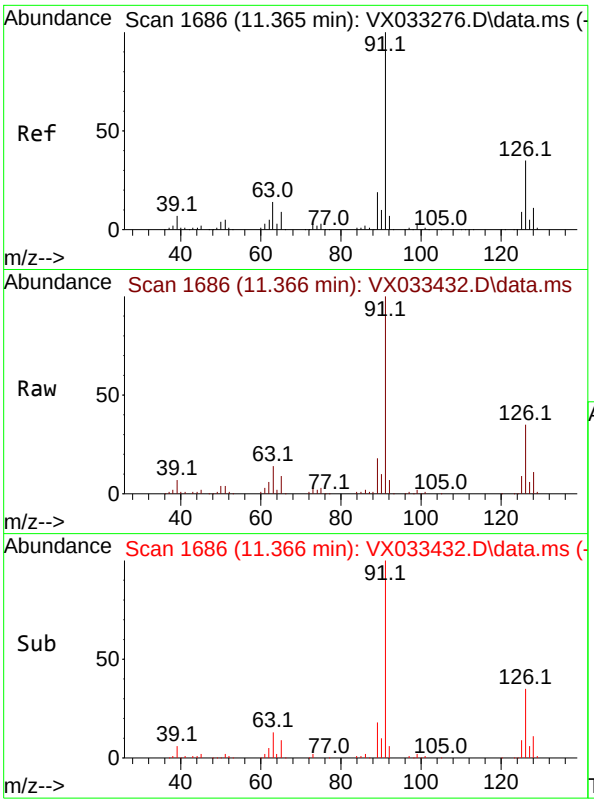


#78
n-propylbenzene
Concen: 22.464 ug/l
RT: 11.305 min Scan# 1676
Delta R.T. 0.000 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion: 91 Resp: 193432

Ion	Ratio	Lower	Upper
91	100		
120	23.8	11.6	34.8





#79
2-Chlorotoluene
Concen: 21.838 ug/l
RT: 11.366 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

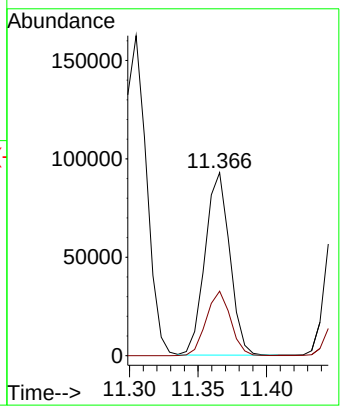
Tgt Ion: 91 Resp: 11621

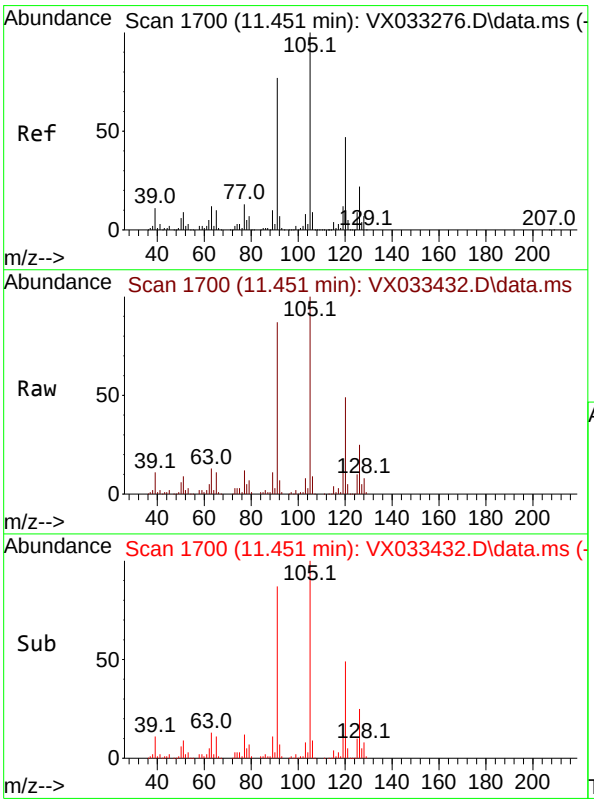
Ion	Ratio	Lower	Upper
91	100		
126	35.0	17.1	51.2

Instrument :
MSVOA_X
ClientSampleId :
VX1215WBS01

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

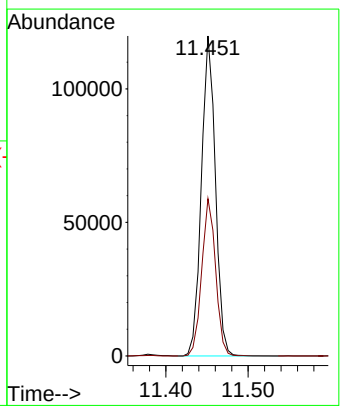


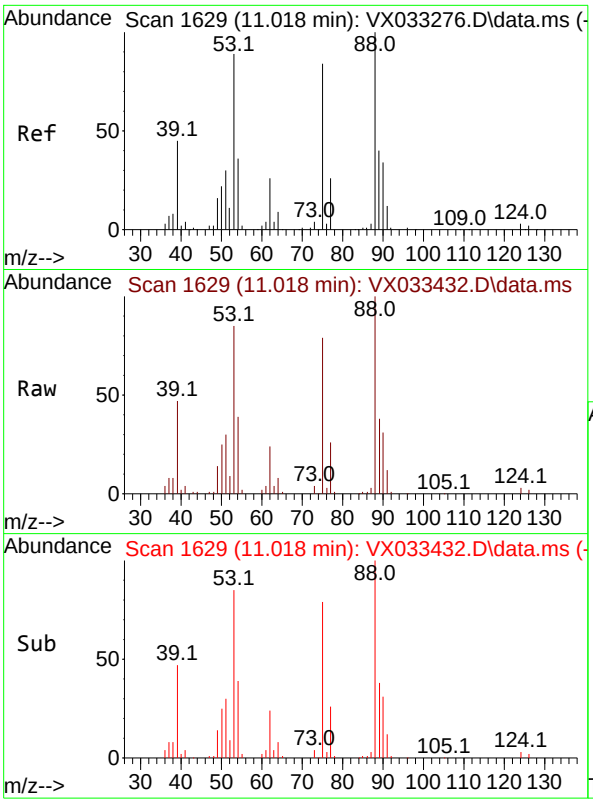


#80
1,3,5-Trimethylbenzene
Concen: 22.133 ug/l
RT: 11.451 min Scan# 1700
Delta R.T. 0.000 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion:105 Resp: 142080

Ion	Ratio	Lower	Upper
105	100		
120	48.7	23.6	71.0





#81
trans-1,4-Dichloro-2-butene
Concen: 18.260 ug/l
RT: 11.018 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

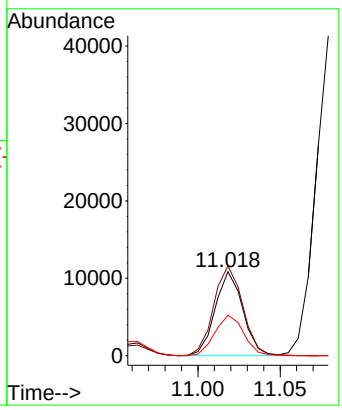
Tgt Ion: 75 Resp: 1270

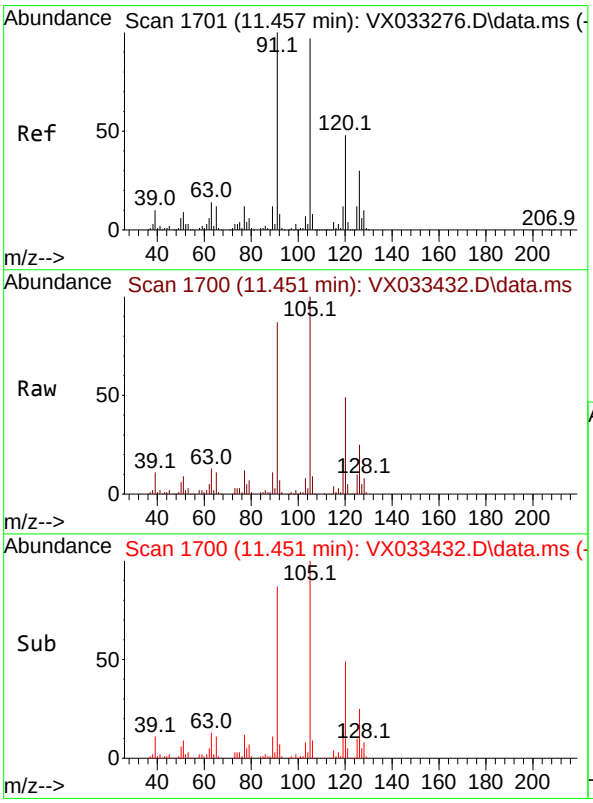
Ion	Ratio	Lower	Upper
75	100		
53	111.9	86.9	130.3
89	50.2	38.3	57.5

Instrument :
MSVOA_X
ClientSampleId :
VX1215WBS01

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

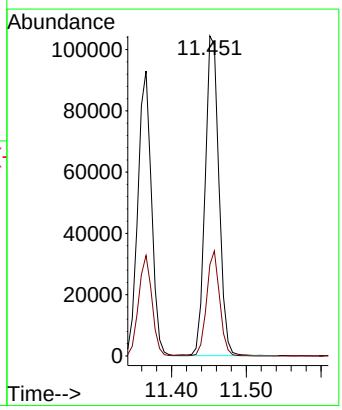


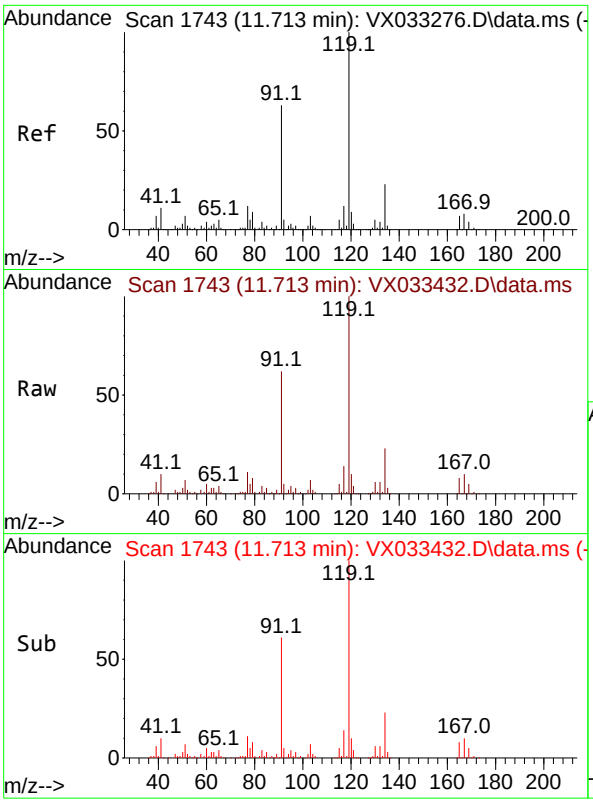


#82
4-Chlorotoluene
Concen: 21.579 ug/l
RT: 11.451 min Scan# 1700
Delta R.T. -0.006 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion: 91 Resp: 133528

Ion	Ratio	Lower	Upper
91	100		
126	31.1	14.8	44.4

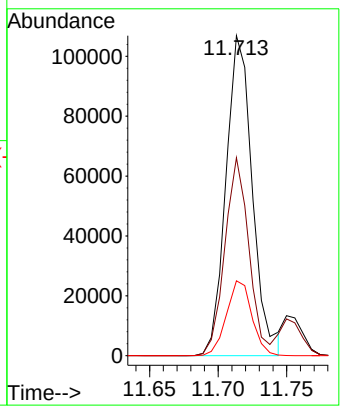




#83
tert-Butylbenzene
Concen: 22.430 ug/l
RT: 11.713 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion:119 Resp: 14357

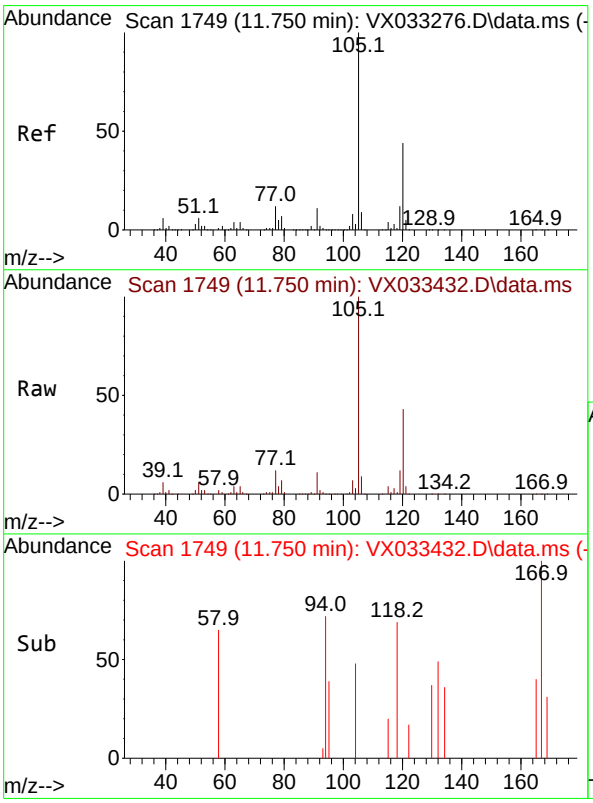
Ion	Ratio	Lower	Upper
119	100		
91	56.5	29.4	88.2
134	22.6	11.0	33.0



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBS01

Manual Integrations
APPROVED

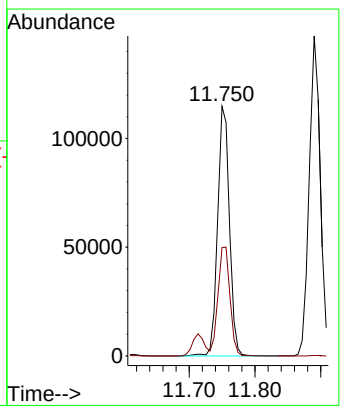
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

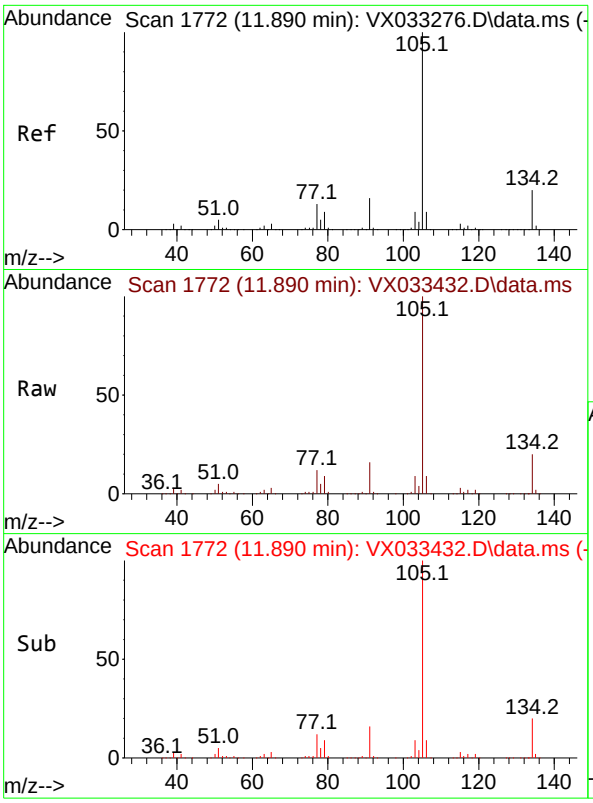


#84
1,2,4-Trimethylbenzene
Concen: 22.364 ug/l
RT: 11.750 min Scan# 1749
Delta R.T. 0.000 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion:105 Resp: 143303

Ion	Ratio	Lower	Upper
105	100		
120	44.3	21.9	65.5

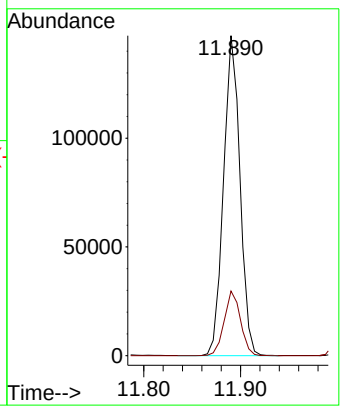




#85
sec-Butylbenzene
Concen: 23.166 ug/l
RT: 11.890 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion:105 Resp: 17301

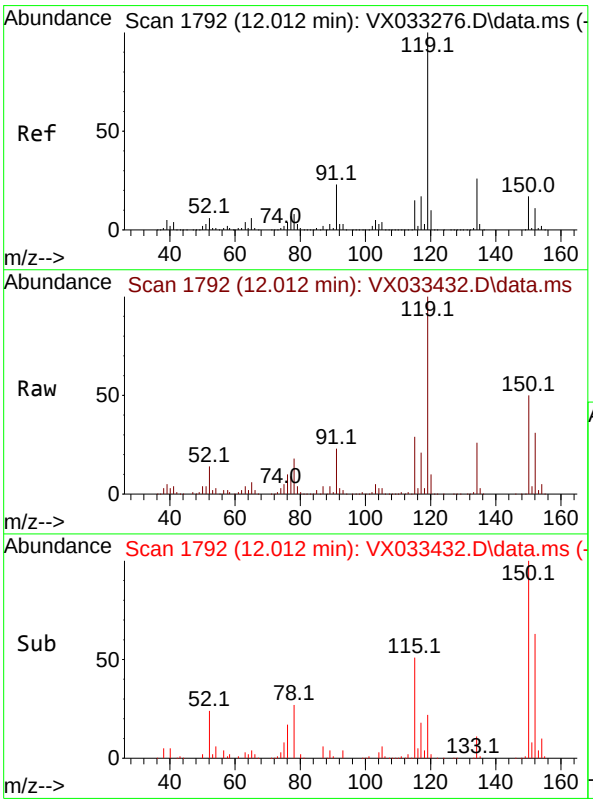
Ion	Ratio	Lower	Upper
105	100		
134	20.1	9.9	29.7



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBS01

Manual Integrations
APPROVED

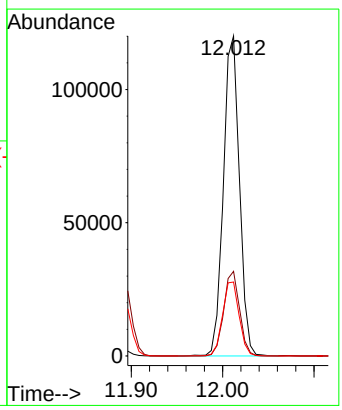
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

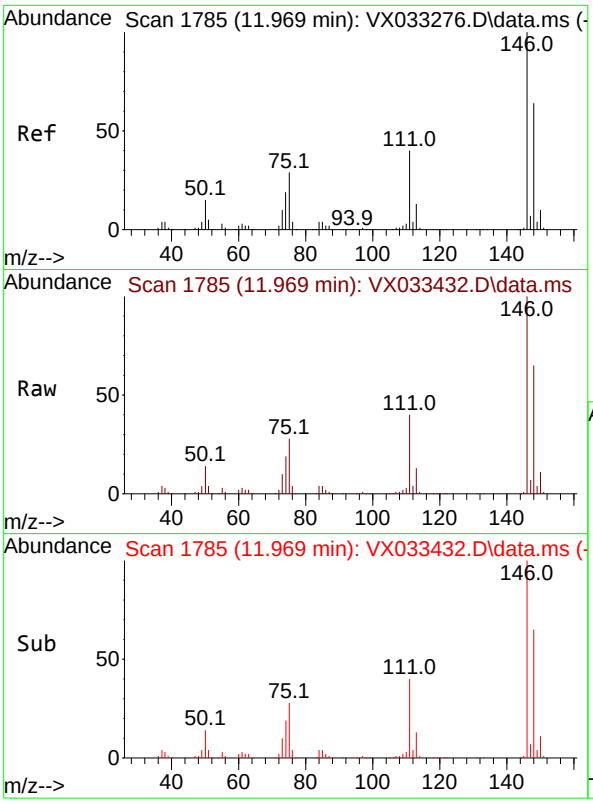


#86
p-Isopropyltoluene
Concen: 22.801 ug/l
RT: 12.012 min Scan# 1792
Delta R.T. 0.000 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion:119 Resp: 146815

Ion	Ratio	Lower	Upper
119	100		
134	26.2	12.9	38.7
91	24.0	12.5	37.5

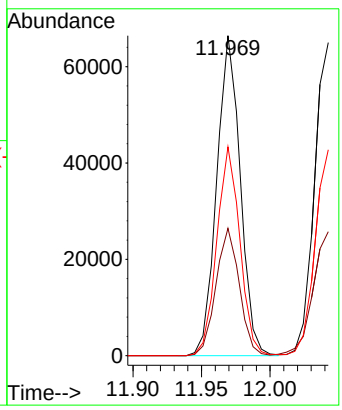




#87
1,3-Dichlorobenzene
Concen: 22.430 ug/l
RT: 11.969 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion:146 Resp: 7912

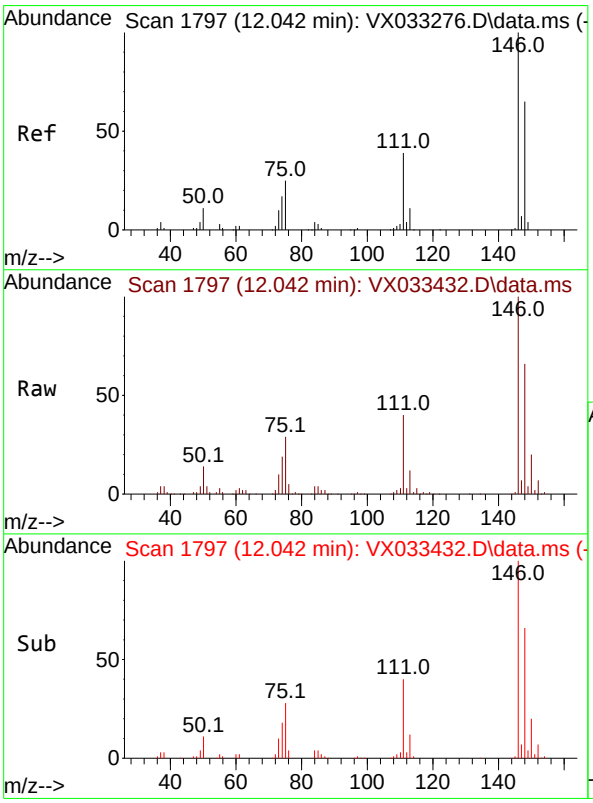
Ion	Ratio	Lower	Upper
146	100		
111	39.6	20.6	61.8
148	64.1	31.7	95.1



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBS01

Manual Integrations
APPROVED

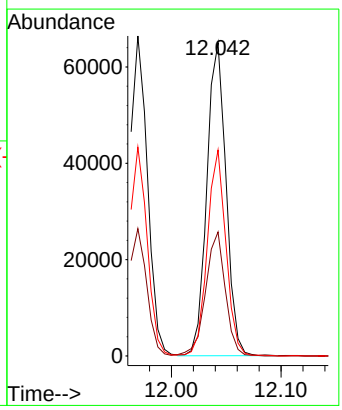
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

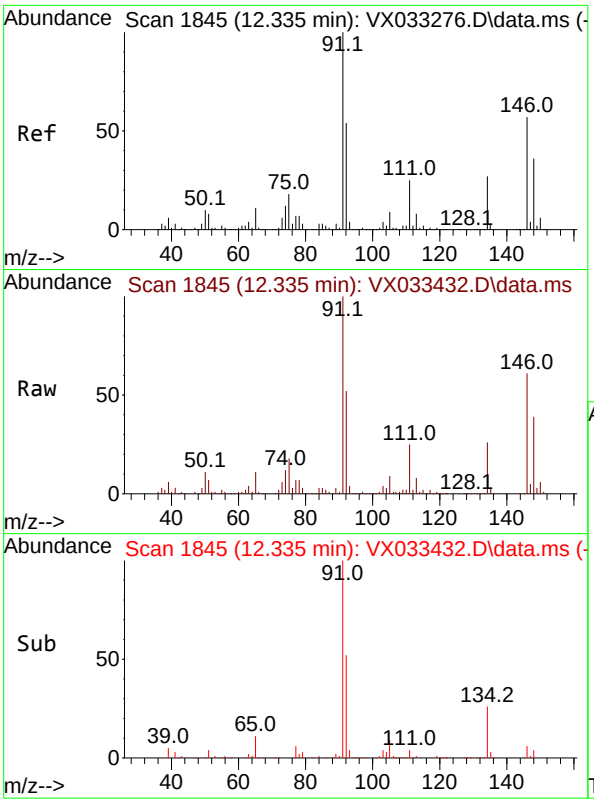


#88
1,4-Dichlorobenzene
Concen: 21.932 ug/l
RT: 12.042 min Scan# 1797
Delta R.T. 0.000 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion:146 Resp: 79025

Ion	Ratio	Lower	Upper
146	100		
111	40.8	20.5	61.6
148	64.1	32.2	96.6

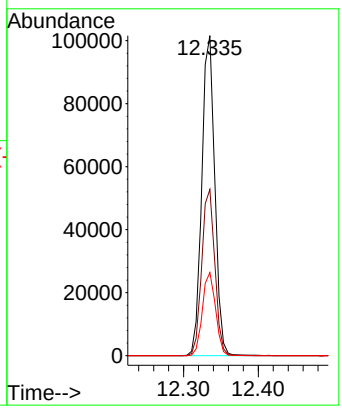




#89
n-Butylbenzene
Concen: 23.246 ug/l
RT: 12.335 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion: 91 Resp: 12259

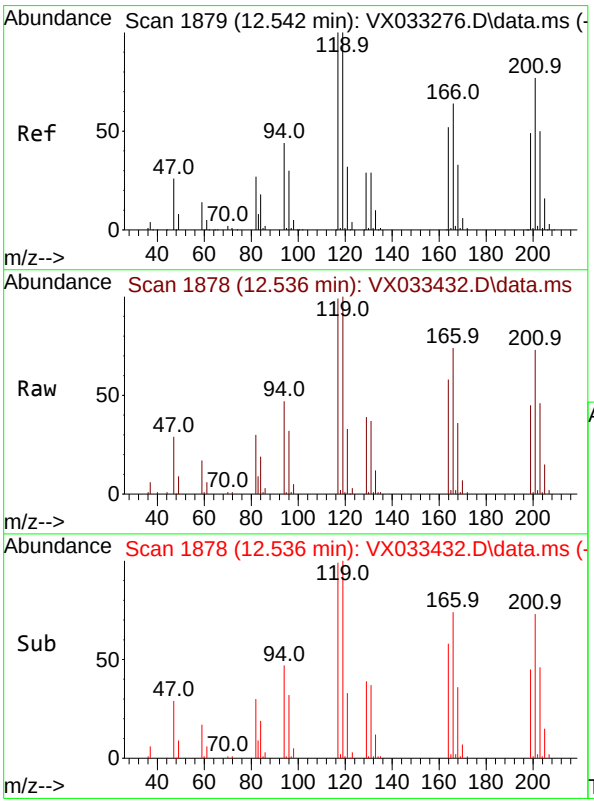
Ion	Ratio	Lower	Upper
91	100		
92	52.5	26.2	78.6
134	26.3	12.9	38.6



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBS01

Manual Integrations APPROVED

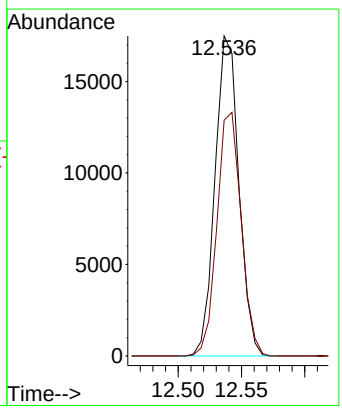
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

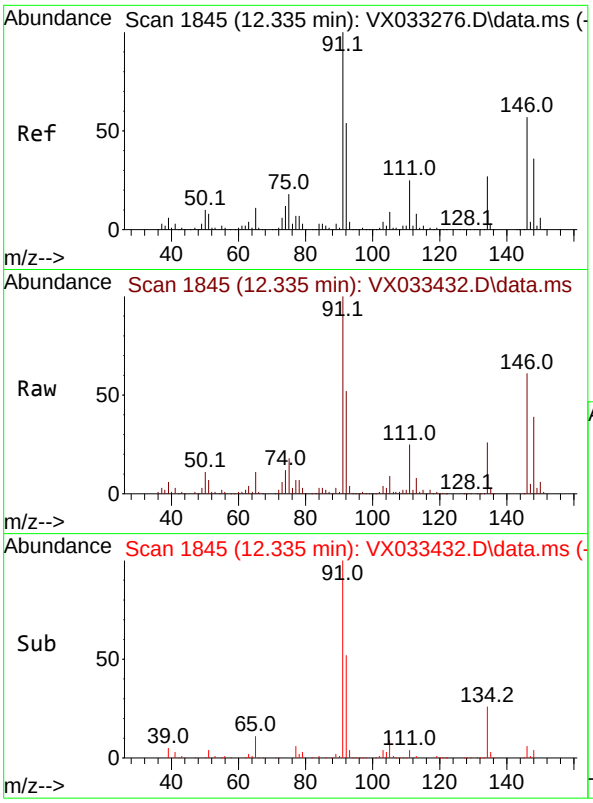


#90
Hexachloroethane
Concen: 20.905 ug/l
RT: 12.536 min Scan# 1878
Delta R.T. -0.006 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion:117 Resp: 22881

Ion	Ratio	Lower	Upper
117	100		
201	77.6	37.6	112.9

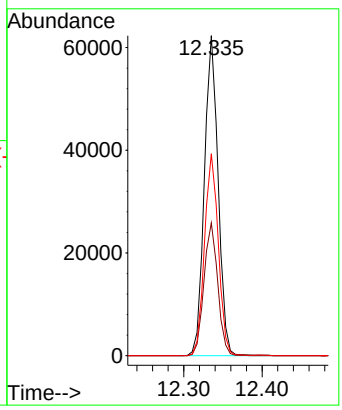




#91
1,2-Dichlorobenzene
Concen: 21.506 ug/l
RT: 12.335 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion:146 Resp: 7584

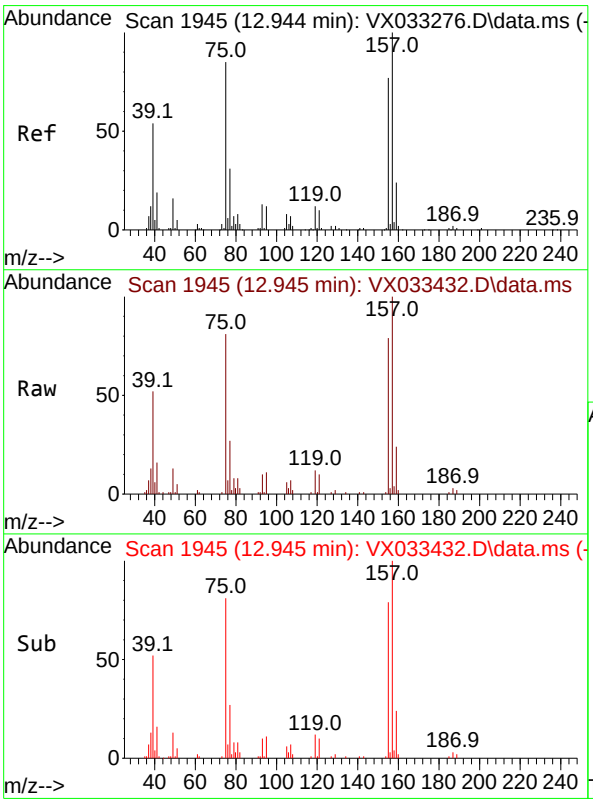
Ion	Ratio	Lower	Upper
146	100		
111	41.5	21.5	64.5
148	63.3	32.0	96.2



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBS01

Manual Integrations
APPROVED

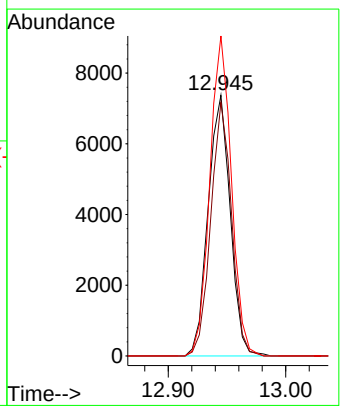
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

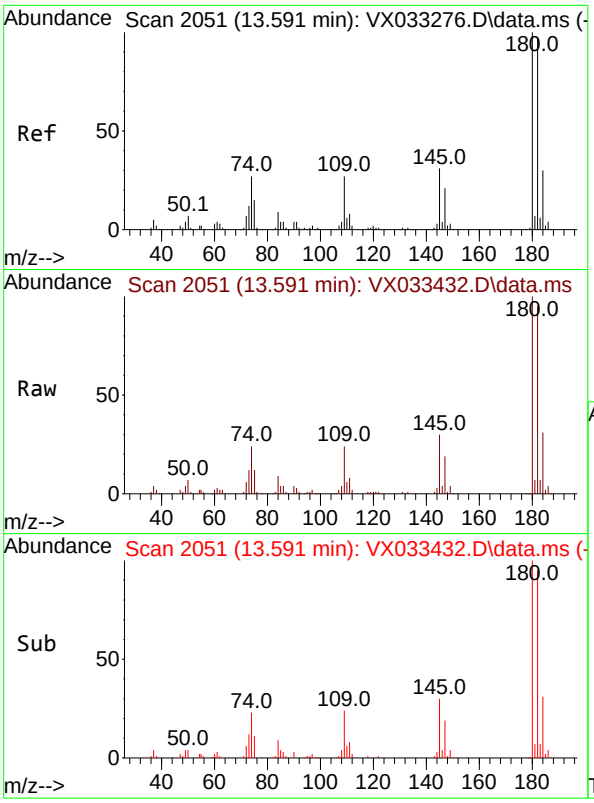


#92
1,2-Dibromo-3-Chloropropane
Concen: 18.246 ug/l
RT: 12.945 min Scan# 1945
Delta R.T. 0.000 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion: 75 Resp: 9642

Ion	Ratio	Lower	Upper
75	100		
155	91.2	41.6	124.8
157	119.7	54.1	162.4

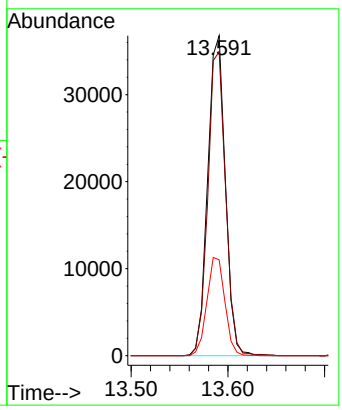




#93
1,2,4-Trichlorobenzene
Concen: 21.862 ug/l
RT: 13.591 min Scan# 2
Delta R.T. 0.000 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion:180 Resp: 4656

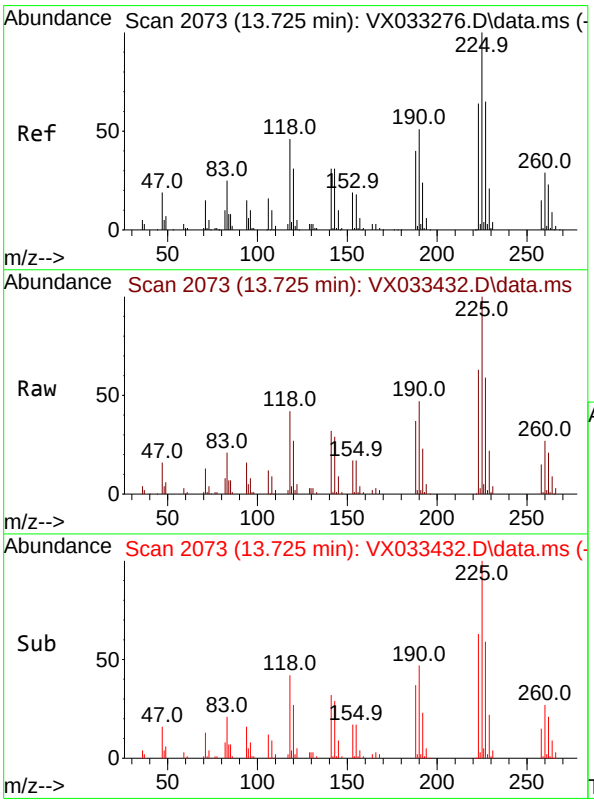
Ion	Ratio	Lower	Upper
180	100		
182	95.7	48.4	145.0
145	31.4	16.2	48.5



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBS01

Manual Integrations
APPROVED

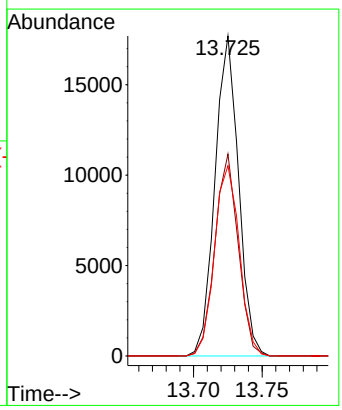
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

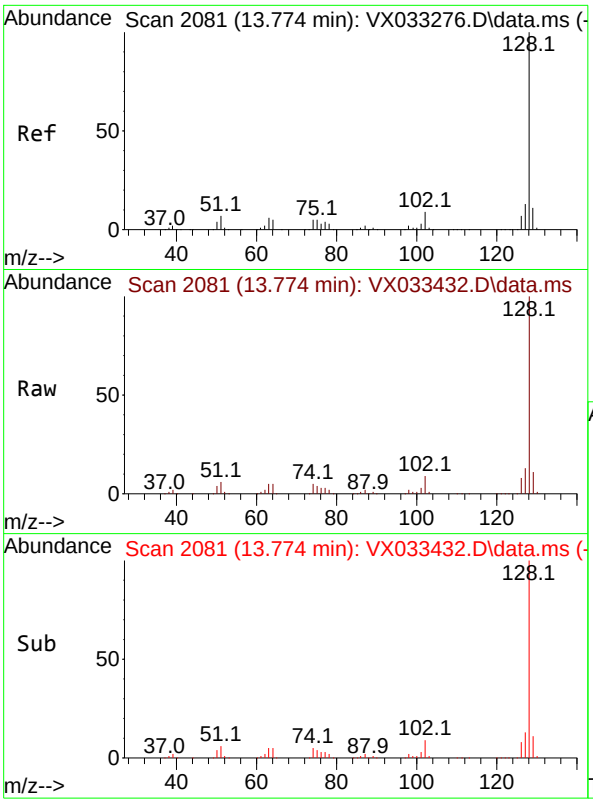


#94
Hexachlorobutadiene
Concen: 24.784 ug/l
RT: 13.725 min Scan# 2073
Delta R.T. 0.000 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion:225 Resp: 21139

Ion	Ratio	Lower	Upper
225	100		
223	62.3	31.9	95.9
227	62.6	31.9	95.5

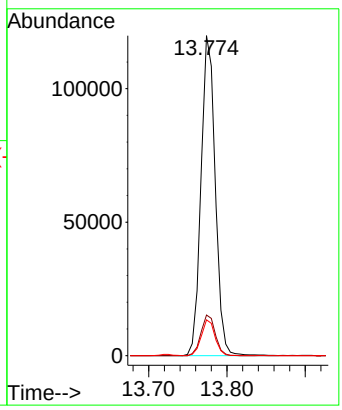




#95
Naphthalene
Concen: 21.291 ug/l
RT: 13.774 min Scan# 2
Delta R.T. 0.000 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion:128 Resp: 15127

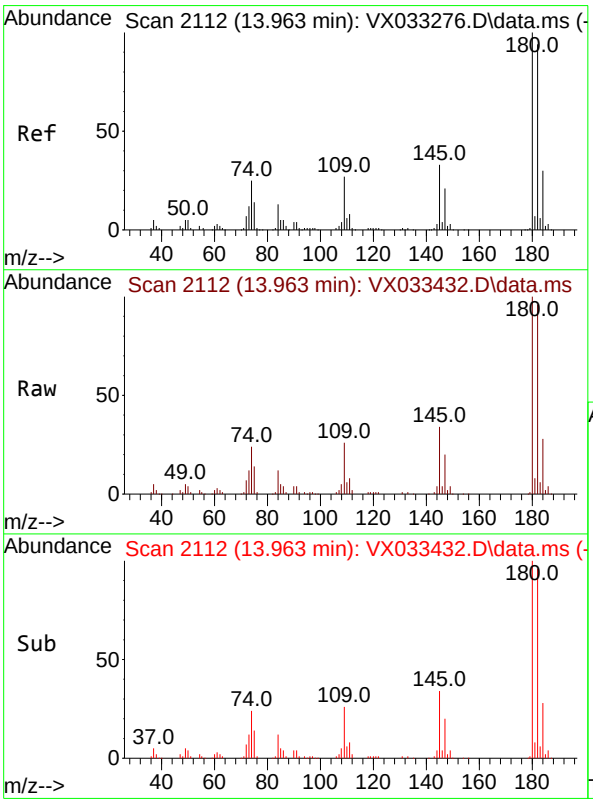
Ion	Ratio	Lower	Upper
128	100		
127	12.8	10.2	15.4
129	10.8	8.9	13.3



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBS01

Manual Integrations
APPROVED

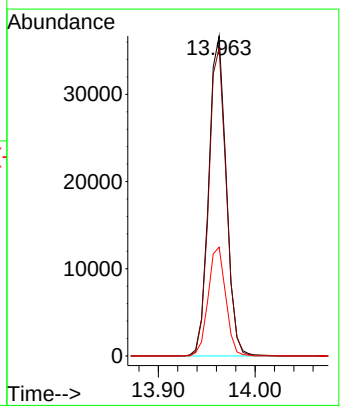
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022



#96
1,2,3-Trichlorobenzene
Concen: 21.391 ug/l
RT: 13.963 min Scan# 2112
Delta R.T. 0.000 min
Lab File: VX033432.D
Acq: 15 Dec 2022 11:07

Tgt Ion:180 Resp: 46145

Ion	Ratio	Lower	Upper
180	100		
182	96.6	47.5	142.6
145	34.1	16.9	50.6



CHEMTECH 284 Sheffield Street, Mountainside, NJ 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:	VX1215WBSD01	SDG No.:	N6070
Lab Sample ID:	VX1215WBSD01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group3
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX033433.D	1		12/15/22 11:46	VX121522

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-01-4	Vinyl Chloride	17.6		0.22	1.00	ug/L
75-35-4	1,1-Dichloroethene	16.8		0.23	1.00	ug/L
75-34-3	1,1-Dichloroethane	18.5		0.20	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	18.7		0.17	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	19.8		0.18	1.00	ug/L
71-43-2	Benzene	19.7		0.16	1.00	ug/L
107-06-2	1,2-Dichloroethane	19.8		0.18	1.00	ug/L
79-01-6	Trichloroethene	21.0		0.27	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	20.5		0.19	1.00	ug/L
127-18-4	Tetrachloroethene	19.9		0.18	1.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	43.0		70 (74) - 130 (125)	86%	SPK: 50
1868-53-7	Dibromofluoromethane	46.0		70 (75) - 130 (124)	92%	SPK: 50
2037-26-5	Toluene-d8	47.4		70 (86) - 130 (113)	95%	SPK: 50
460-00-4	4-Bromofluorobenzene	51.1		70 (64) - 130 (133)	102%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	137000	5.55			
540-36-3	1,4-Difluorobenzene	211000	6.757			
3114-55-4	Chlorobenzene-d5	199000	10.055			
3855-82-1	1,4-Dichlorobenzene-d4	102000	12.024			

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_X\Data\VX121522\
Data File : VX033433.D
Acq On : 15 Dec 2022 11:46
Operator : JC/MD
Sample : VX1215WBSD01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 16 01:00:12 2022
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X120722W.M
Quant Title : SW846 8260
QLast Update : Wed Dec 07 12:43:54 2022
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VX1215WBSD01

Manual Integrations APPROVED

Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.550	168	137295	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.757	114	210886	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.055	117	199474	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.024	152	101751	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.952	65	37856	42.979	ug/l	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 85.960%			
35) Dibromofluoromethane	5.379	113	43658	46.027	ug/l	-0.01
Spiked Amount 50.000	Range 75 - 124		Recovery = 92.060%			
50) Toluene-d8	8.647	98	93958	47.352	ug/l	0.00
Spiked Amount 50.000	Range 92 - 112		Recovery = 94.700%			
62) 4-Bromofluorobenzene	11.079	95	77494	51.077	ug/l	0.00
Spiked Amount 50.000	Range 83 - 123		Recovery = 102.160%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.167	85	18601	19.395	ug/l	95
3) Chloromethane	1.295	50	18825	16.976	ug/l	91
4) Vinyl Chloride	1.374	62	22224	17.552	ug/l	98
5) Bromomethane	1.618	94	13351	14.369	ug/l	97
6) Chloroethane	1.691	64	15485	16.124	ug/l	98
7) Trichlorofluoromethane	1.886	101	34159	14.370	ug/l	95
8) Diethyl Ether	2.130	74	11537	13.437	ug/l	93
9) 1,1,2-Trichlorotrifluo...	2.331	101	25075	19.886	ug/l	99
10) Methyl Iodide	2.453	142	25025	18.120	ug/l	99
11) Tert butyl alcohol	2.995	59	23307m	86.551	ug/l	
12) 1,1-Dichloroethene	2.325	96	20970	16.848	ug/l	94
13) Acrolein	2.239	56	16133	55.239	ug/l	98
14) Allyl chloride	2.666	41	35709	17.965	ug/l	98
15) Acrylonitrile	3.063	53	59810	89.662	ug/l	98
16) Acetone	2.386	43	68941	105.776	ug/l	96
17) Carbon Disulfide	2.514	76	54276	16.990	ug/l	98
18) Methyl Acetate	2.703	43	34358	18.210	ug/l	98
19) Methyl tert-butyl Ether	3.111	73	80781	18.736	ug/l	98
20) Methylene Chloride	2.788	84	26733	18.392	ug/l	92
21) trans-1,2-Dichloroethene	3.093	96	25379	18.640	ug/l	97
22) Diisopropyl ether	3.757	45	79815	18.742	ug/l	94
23) Vinyl Acetate	3.721	43	302179	91.418	ug/l	98
24) 1,1-Dichloroethane	3.605	63	46243	18.481	ug/l	98
25) 2-Butanone	4.556	43	88026	94.090	ug/l	99
26) 2,2-Dichloropropane	4.471	77	36972	20.092	ug/l	99
27) cis-1,2-Dichloroethene	4.483	96	30395	18.679	ug/l	99
28) Bromochloromethane	4.891	49	20374	19.451	ug/l	93
29) Tetrahydrofuran	5.007	42	50878	83.937	ug/l	96
30) Chloroform	5.087	83	53573	19.285	ug/l	98
31) Cyclohexane	5.471	56	39412	18.828	ug/l	90
32) 1,1,1-Trichloroethane	5.373	97	47380	19.823	ug/l	98
36) 1,1-Dichloropropene	5.690	75	36878	19.942	ug/l	99
37) Ethyl Acetate	4.709	43	32990	18.872	ug/l	99
38) Carbon Tetrachloride	5.672	117	41422	19.992	ug/l	99
39) Methylcyclohexane	7.379	83	43709	21.116	ug/l	98
40) Benzene	6.031	78	106012	19.661	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX121522\
Data File : VX033433.D
Acq On : 15 Dec 2022 11:46
Operator : JC/MD
Sample : VX1215WBSD01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 16 01:00:12 2022
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X120722W.M
Quant Title : SW846 8260
QLast Update : Wed Dec 07 12:43:54 2022
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VX1215WBSD01

Manual Integrations APPROVED
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	4.916	41	18338	19.037	ug/l		95
42) 1,2-Dichloroethane	6.086	62	42486	19.843	ug/l		99
43) Isopropyl Acetate	6.336	43	51963	18.474	ug/l		97
44) Trichloroethene	7.123	130	31162	20.962	ug/l		93
45) 1,2-Dichloropropane	7.428	63	27163	19.698	ug/l		98
46) Dibromomethane	7.580	93	20832	19.831	ug/l		99
47) Bromodichloromethane	7.818	83	40366	19.713	ug/l		99
48) Methyl methacrylate	7.690	41	26656	18.363	ug/l		93
49) 1,4-Dioxane	7.702	88	11968	361.544	ug/l		97
51) 4-Methyl-2-Pentanone	8.568	43	169612	95.356	ug/l		97
52) Toluene	8.714	92	72263	20.728	ug/l		99
53) t-1,3-Dichloropropene	8.976	75	39858	19.717	ug/l		98
54) cis-1,3-Dichloropropene	8.366	75	43520	19.973	ug/l	#	87
55) 1,1,2-Trichloroethane	9.153	97	30012	20.480	ug/l		99
56) Ethyl methacrylate	9.116	69	40393	19.577	ug/l		92
57) 1,3-Dichloropropane	9.305	76	46997	19.963	ug/l		98
58) 2-Chloroethyl Vinyl ether	8.238	63	67813	71.829	ug/l		97
59) 2-Hexanone	9.427	43	132391	101.000	ug/l		96
60) Dibromochloromethane	9.519	129	32360	20.042	ug/l		100
61) 1,2-Dibromoethane	9.610	107	31071	19.933	ug/l		100
64) Tetrachloroethene	9.275	164	27206	19.946	ug/l		97
65) Chlorobenzene	10.080	112	81948	20.287	ug/l		100
66) 1,1,1,2-Tetrachloroethane	10.159	131	30166	19.762	ug/l		99
67) Ethyl Benzene	10.195	91	145637	20.695	ug/l		99
68) m/p-Xylenes	10.299	106	112373	41.043	ug/l		98
69) o-Xylene	10.640	106	54826	20.259	ug/l		98
70) Styrene	10.653	104	92716	20.918	ug/l		97
71) Bromoform	10.799	173	22783	18.856	ug/l	#	99
73) Isopropylbenzene	10.964	105	145978	19.794	ug/l		99
74) N-amyl acetate	10.842	43	46798	18.599	ug/l		97
75) 1,1,2,2-Tetrachloroethane	11.213	83	43351	18.529	ug/l		99
76) 1,2,3-Trichloropropane	11.238	75	39670m	19.163	ug/l		
77) Bromobenzene	11.195	156	36437	19.565	ug/l		98
78) n-propylbenzene	11.305	91	166094	20.170	ug/l		99
79) 2-Chlorotoluene	11.366	91	100805	19.808	ug/l		98
80) 1,3,5-Trimethylbenzene	11.451	105	124051	20.207	ug/l		99
81) trans-1,4-Dichloro-2-b...	11.018	75	10907	16.389	ug/l		98
82) 4-Chlorotoluene	11.451	91	116180	19.633	ug/l		99
83) tert-Butylbenzene	11.713	119	125736	20.539	ug/l		97
84) 1,2,4-Trimethylbenzene	11.750	105	123934	20.224	ug/l		99
85) sec-Butylbenzene	11.890	105	148096	20.734	ug/l		99
86) p-Isopropyltoluene	12.006	119	127436	20.695	ug/l		99
87) 1,3-Dichlorobenzene	11.969	146	67747	20.082	ug/l		99
88) 1,4-Dichlorobenzene	12.043	146	67854	19.691	ug/l		99
89) n-Butylbenzene	12.335	91	106000	21.017	ug/l		100
90) Hexachloroethane	12.536	117	19769	18.887	ug/l		98
91) 1,2-Dichlorobenzene	12.335	146	65946	19.552	ug/l		99
92) 1,2-Dibromo-3-Chloropr...	12.945	75	8253	16.330	ug/l		93
93) 1,2,4-Trichlorobenzene	13.591	180	40491	19.878	ug/l		98
94) Hexachlorobutadiene	13.725	225	18460	22.631	ug/l		99
95) Naphthalene	13.774	128	127000	18.691	ug/l		99
96) 1,2,3-Trichlorobenzene	13.963	180	39730	19.258	ug/l		100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX121522\
Data File : VX033433.D
Acq On : 15 Dec 2022 11:46
Operator : JC/MD
Sample : VX1215WBSD01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 16 01:00:12 2022
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X120722W.M
Quant Title : SW846 8260
QLast Update : Wed Dec 07 12:43:54 2022
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VX1215WBSD01

Manual Integrations APPROVED

Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

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

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

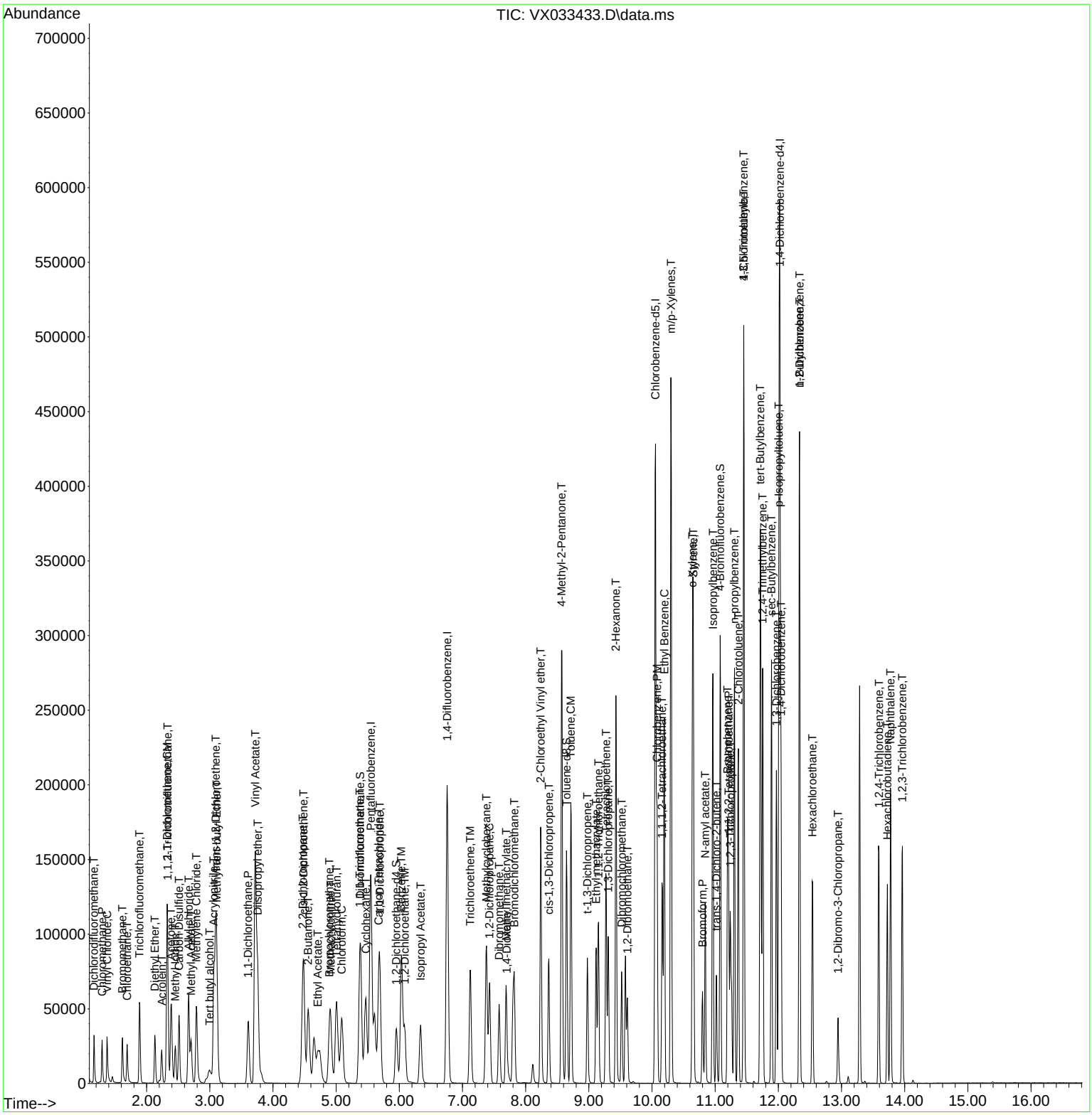
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX121522\
Data File : VX033433.D
Acq On : 15 Dec 2022 11:46
Operator : JC/MD
Sample : VX1215WBSD01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 5 Sample Multiplier: 1

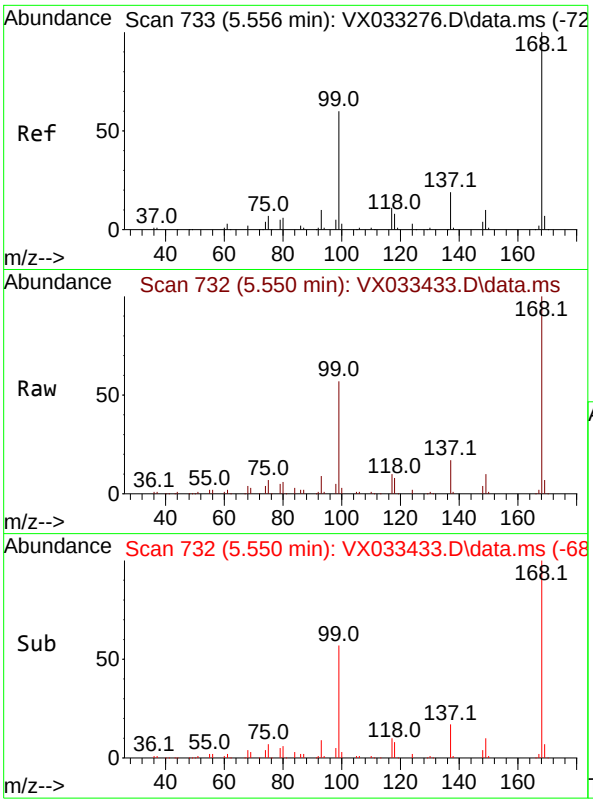
Quant Time: Dec 16 01:00:12 2022
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X120722W.M
Quant Title : SW846 8260
QLast Update : Wed Dec 07 12:43:54 2022
Response via : Initial Calibration

Instrument :
MSVOA_X
ClientSampleId :
VX1215WBSD01

Manual Integrations APPROVED

Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

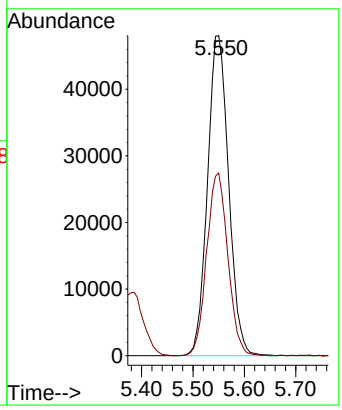




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 5.550 min Scan# 7
Delta R.T. -0.006 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion:168 Resp: 13729

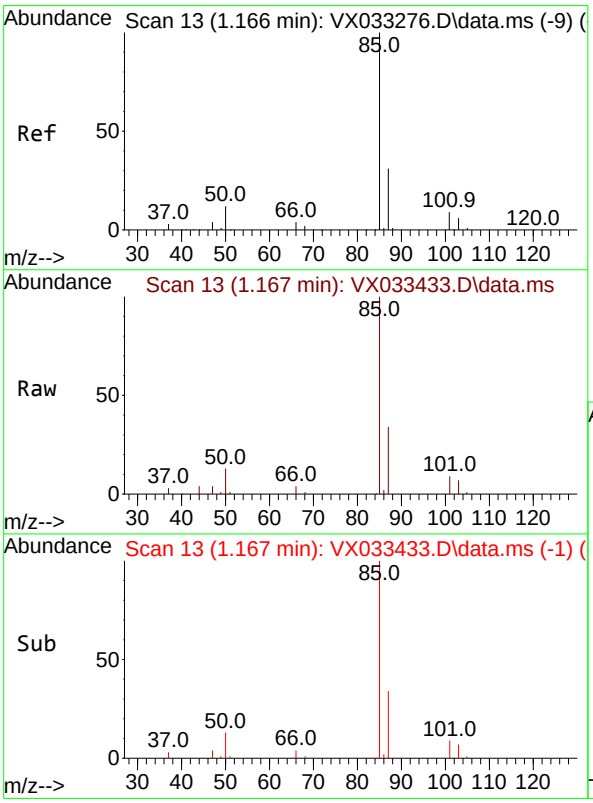
Ion	Ratio	Lower	Upper
168	100		
99	57.1	46.1	69.1



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBSD01

Manual Integrations
APPROVED

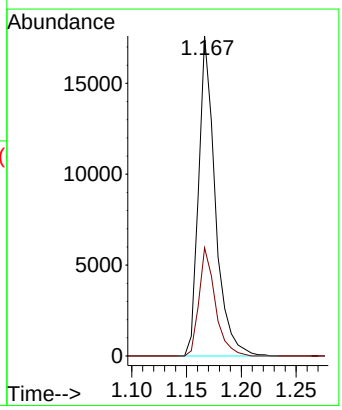
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

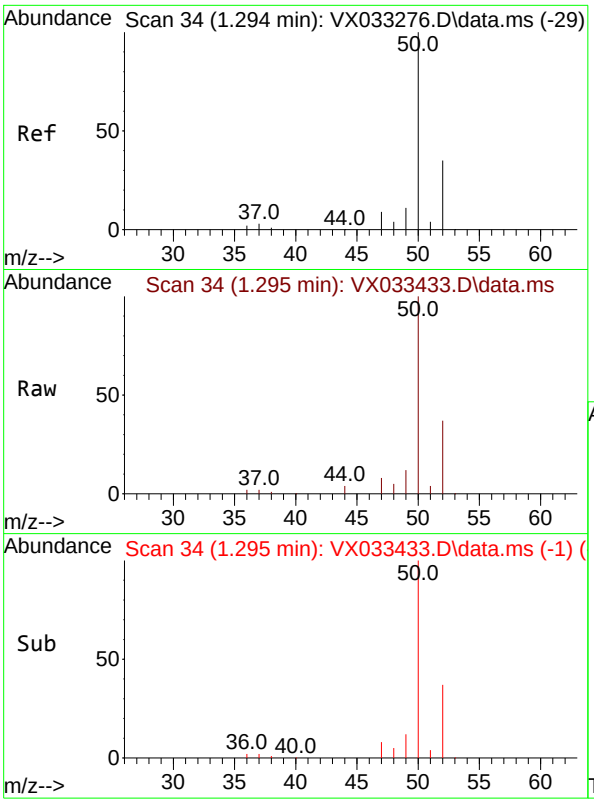


#2
Dichlorodifluoromethane
Concen: 19.395 ug/l
RT: 1.167 min Scan# 13
Delta R.T. 0.000 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion: 85 Resp: 18601

Ion	Ratio	Lower	Upper
85	100		
87	33.8	15.6	46.7

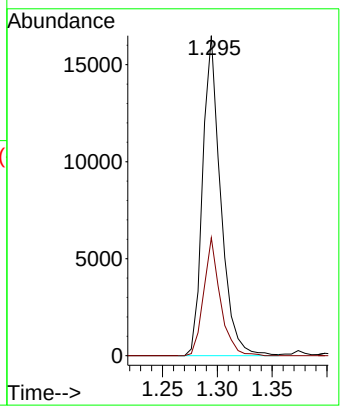




#3
Chloromethane
Concen: 16.976 ug/l
RT: 1.295 min Scan# 34
Delta R.T. 0.000 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion: 50 Resp: 1882

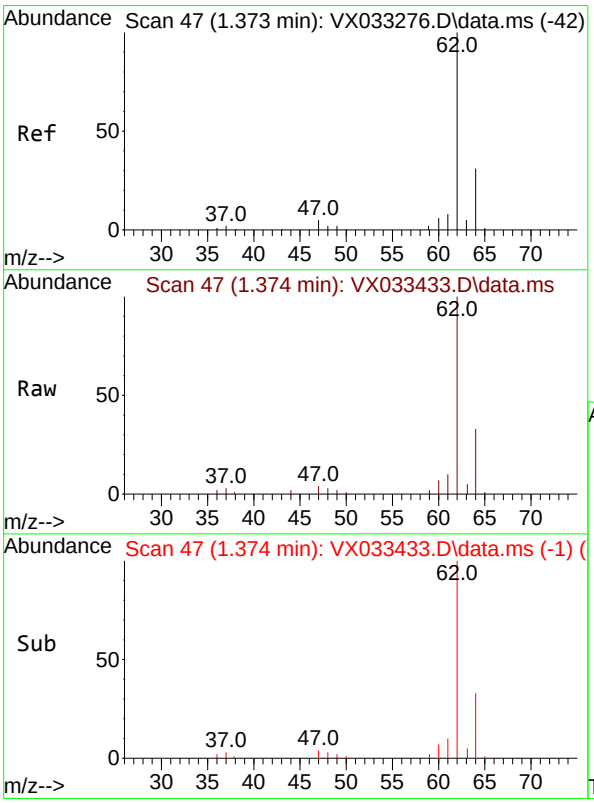
Ion	Ratio	Lower	Upper
50	100		
52	36.9	25.4	38.2



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBSD01

Manual Integrations
APPROVED

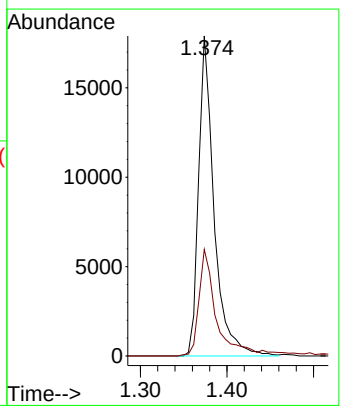
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

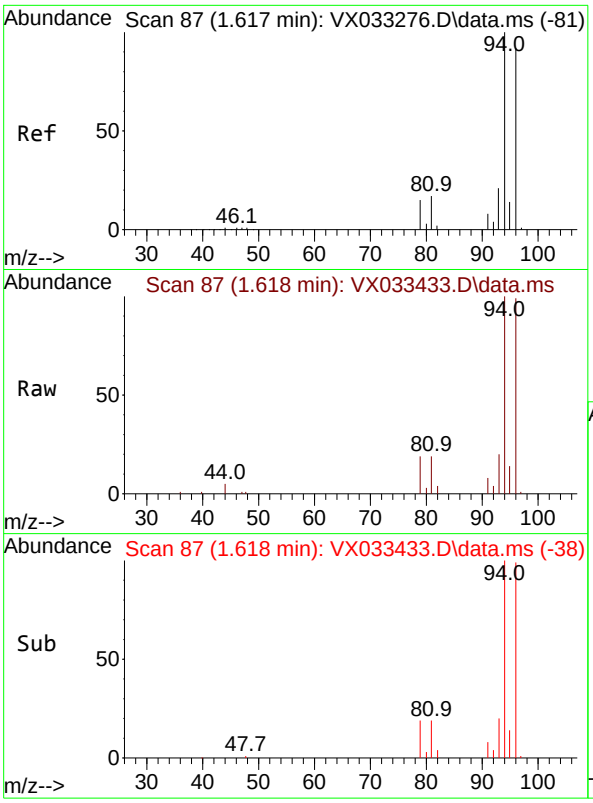


#4
Vinyl Chloride
Concen: 17.552 ug/l
RT: 1.374 min Scan# 47
Delta R.T. 0.000 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion: 62 Resp: 22224

Ion	Ratio	Lower	Upper
62	100		
64	33.3	25.8	38.6

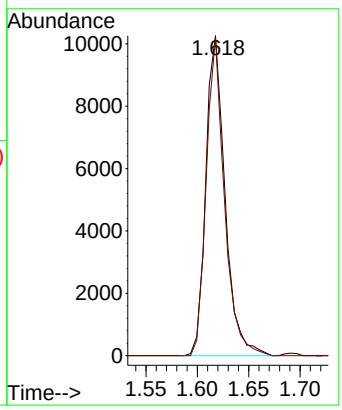




#5
Bromomethane
Concen: 14.369 ug/l
RT: 1.618 min Scan# 8
Delta R.T. 0.000 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion: 94 Resp: 1335

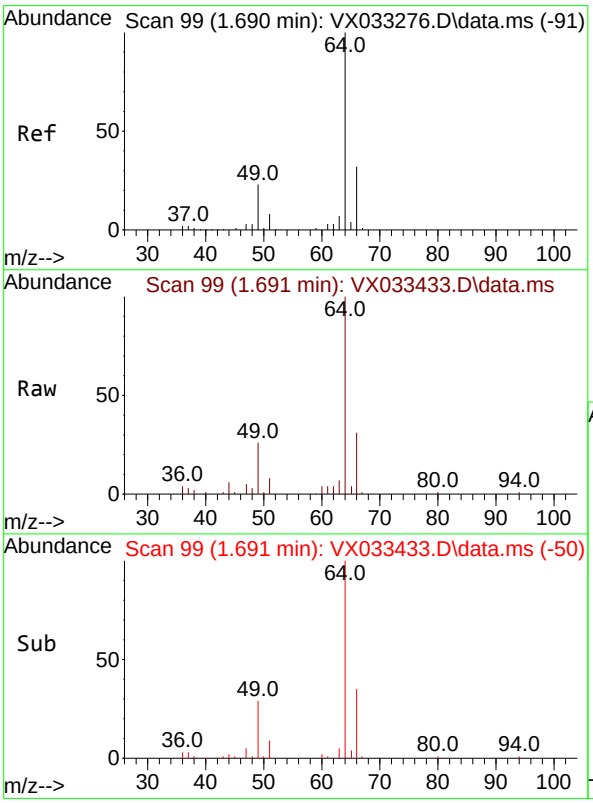
Ion	Ratio	Lower	Upper
94	100		
96	99.5	77.6	116.4



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBSD01

Manual Integrations
APPROVED

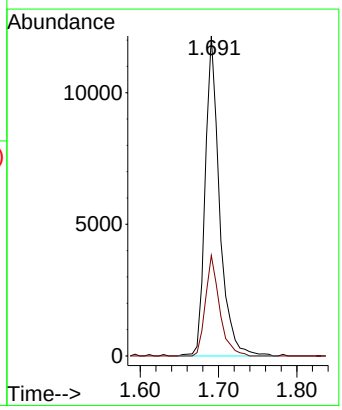
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

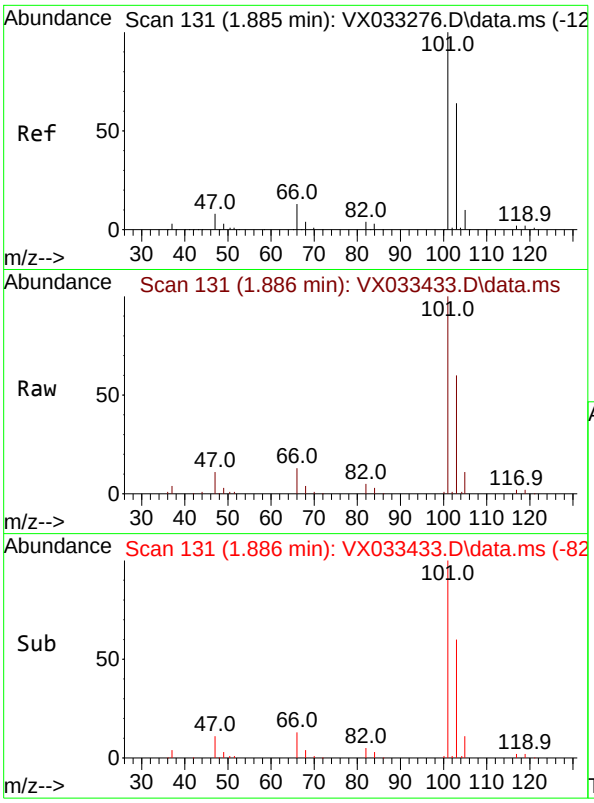


#6
Chloroethane
Concen: 16.124 ug/l
RT: 1.691 min Scan# 99
Delta R.T. 0.000 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion: 64 Resp: 15485

Ion	Ratio	Lower	Upper
64	100		
66	31.4	26.0	39.0





#7
Trichlorofluoromethane
Concen: 14.370 ug/l
RT: 1.886 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

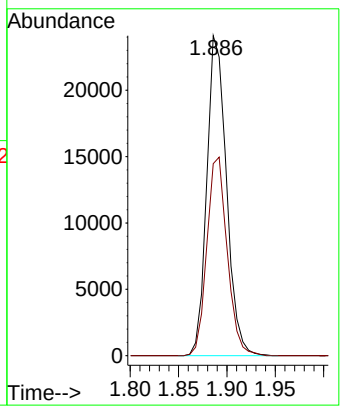
Tgt Ion:101 Resp: 3415

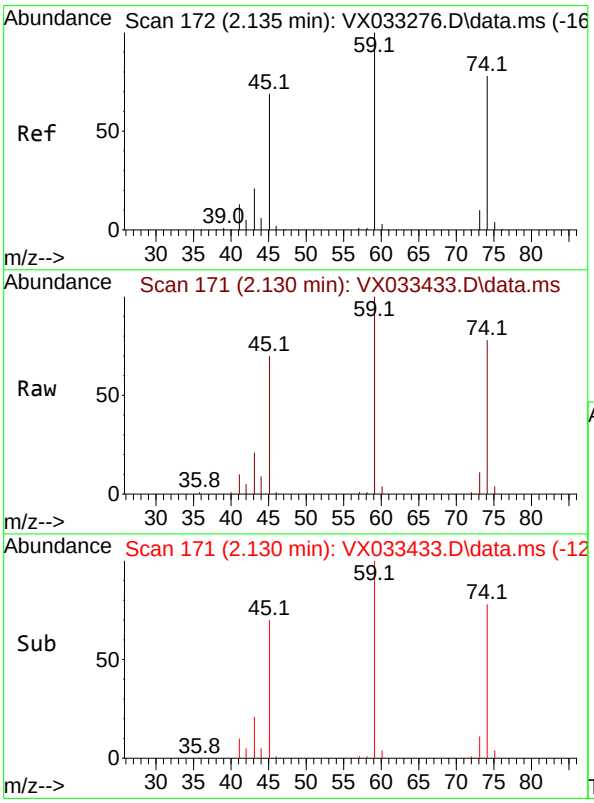
Ion	Ratio	Lower	Upper
101	100		
103	60.0	51.4	77.2

Instrument :
MSVOA_X
ClientSampleId :
VX1215WBSD01

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

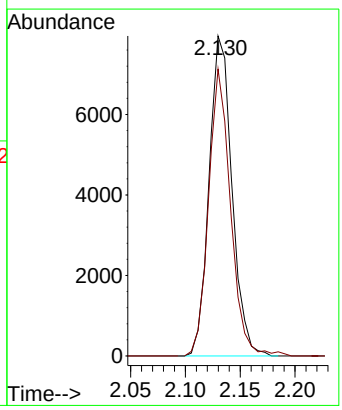


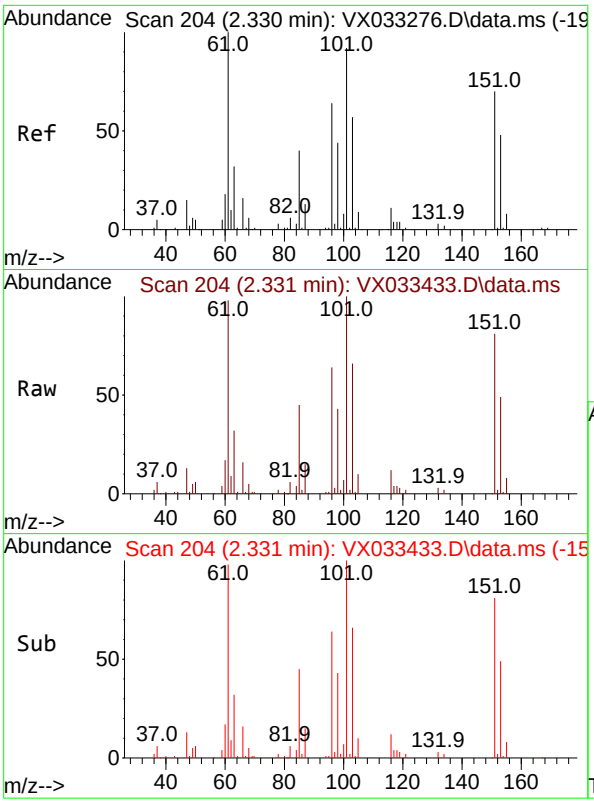


#8
Diethyl Ether
Concen: 13.437 ug/l
RT: 2.130 min Scan# 171
Delta R.T. -0.006 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion: 74 Resp: 11537

Ion	Ratio	Lower	Upper
74	100		
45	86.2	46.6	139.7

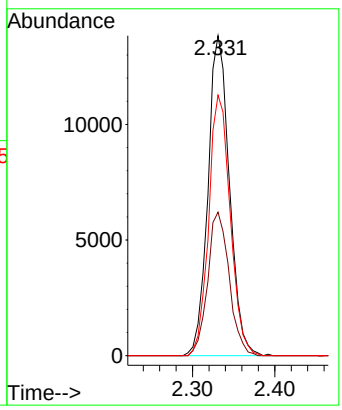




#9
1,1,2-Trichlorotrifluoroethane
Concen: 19.886 ug/l
RT: 2.331 min Scan# 2
Delta R.T. 0.000 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion:101 Resp: 2507

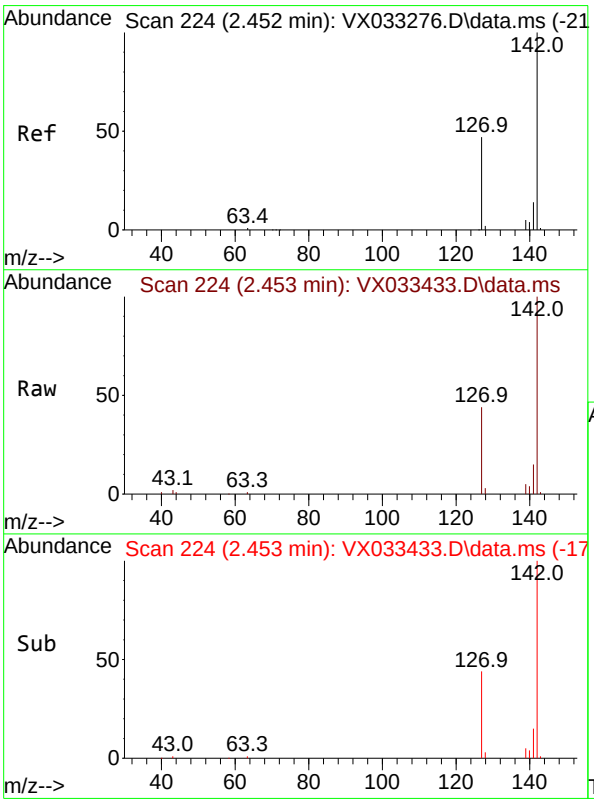
Ion	Ratio	Lower	Upper
101	100		
85	45.0	37.0	55.4
151	81.6	64.4	96.6



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBSD01

Manual Integrations
APPROVED

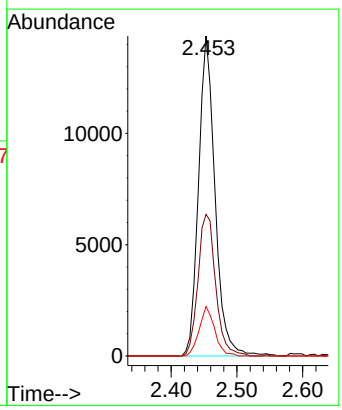
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

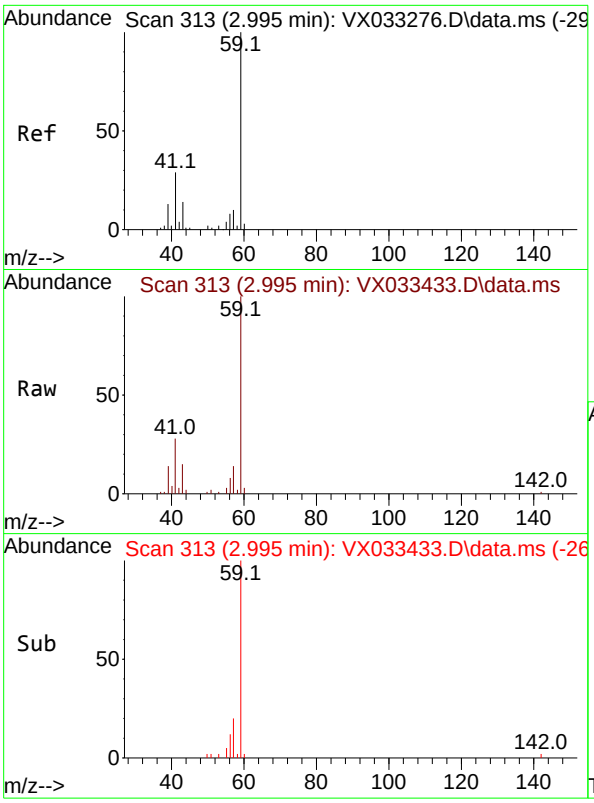


#10
Methyl Iodide
Concen: 18.120 ug/l
RT: 2.453 min Scan# 224
Delta R.T. 0.000 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion:142 Resp: 25025

Ion	Ratio	Lower	Upper
142	100		
127	47.3	38.6	57.8
141	14.5	11.4	17.2

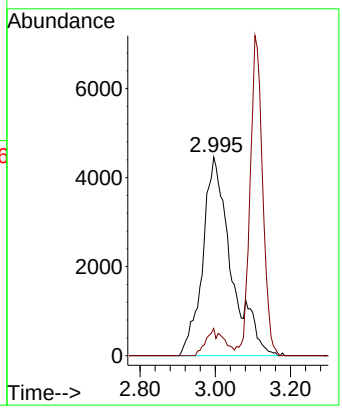




#11
Tert butyl alcohol
Concen: 86.551 ug/l m
RT: 2.995 min Scan# 3
Delta R.T. 0.000 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion: 59 Resp: 2330

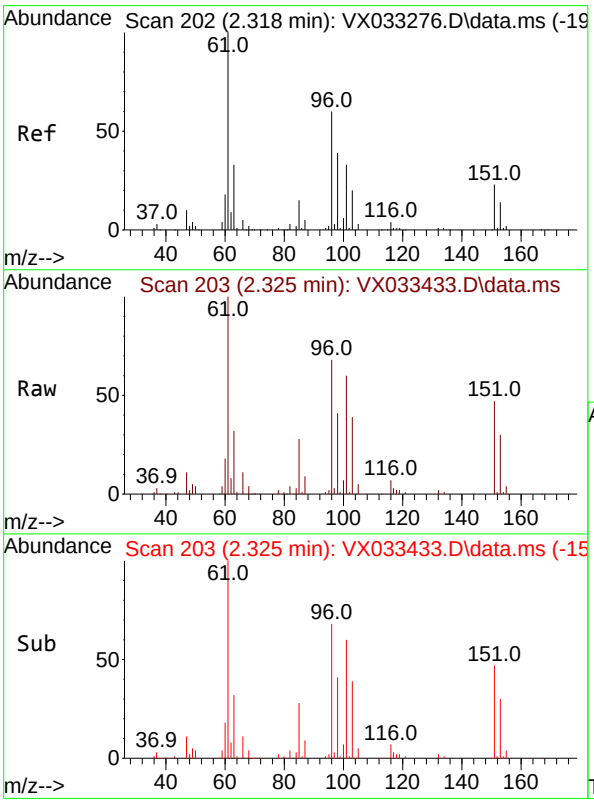
Ion	Ratio	Lower	Upper
59	100		
57	8.7	8.2	12.4



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBSD01

Manual Integrations
APPROVED

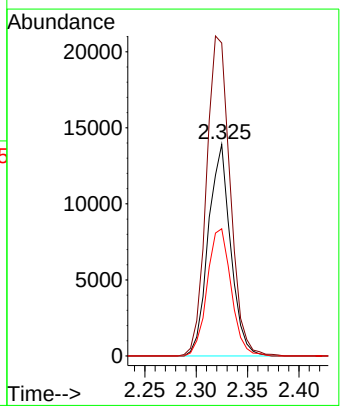
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

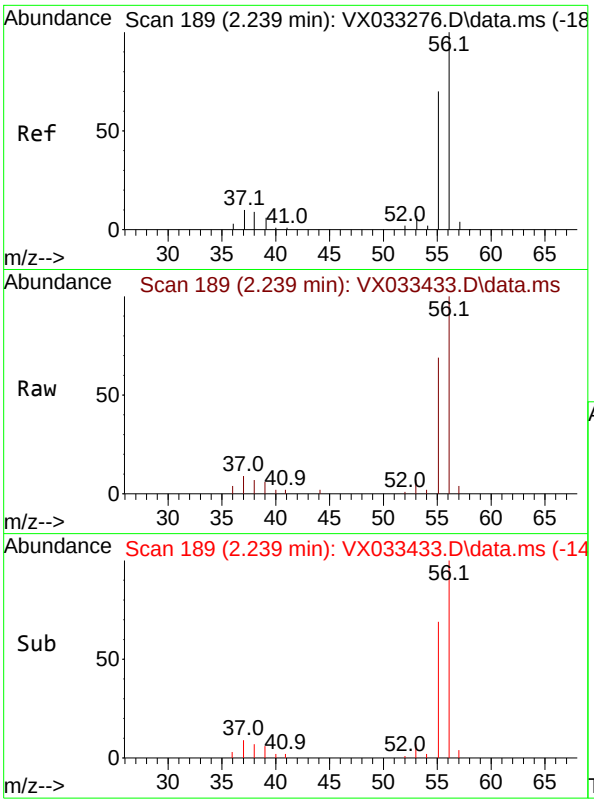


#12
1,1-Dichloroethene
Concen: 16.848 ug/l
RT: 2.325 min Scan# 203
Delta R.T. 0.007 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion: 96 Resp: 20970

Ion	Ratio	Lower	Upper
96	100		
61	147.9	125.1	187.7
98	60.1	50.6	76.0

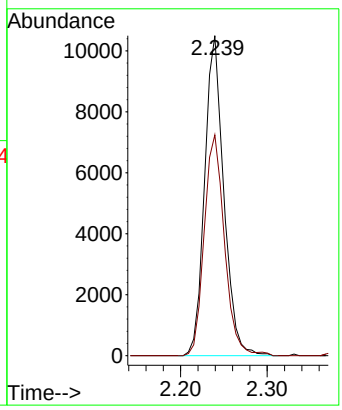




#13
Acrolein
Concen: 55.239 ug/l
RT: 2.239 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion: 56 Resp: 1613

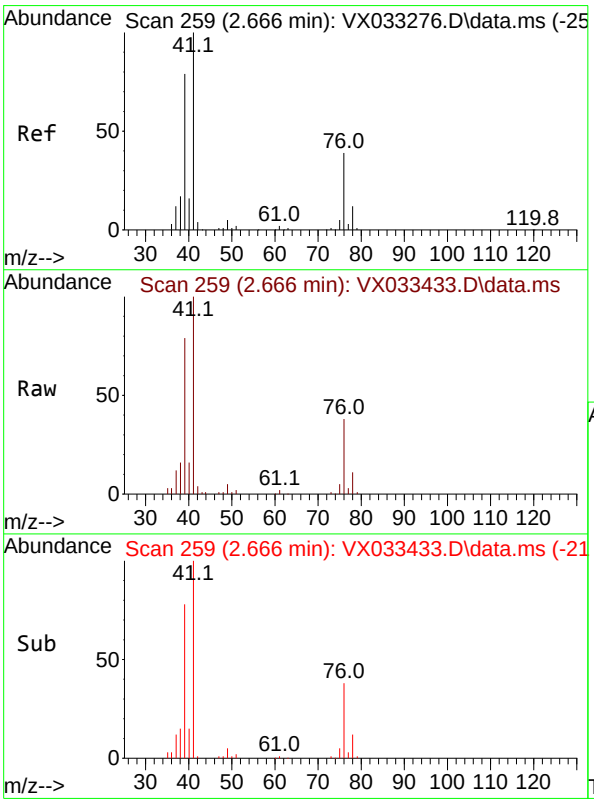
Ion	Ratio	Lower	Upper
56	100		
55	73.0	56.9	85.3



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBSD01

Manual Integrations
APPROVED

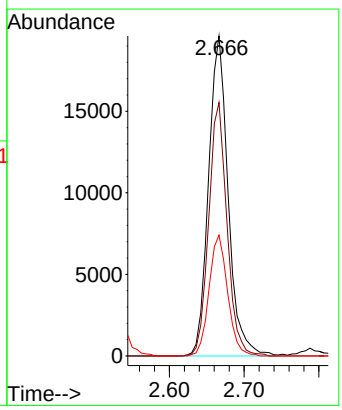
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

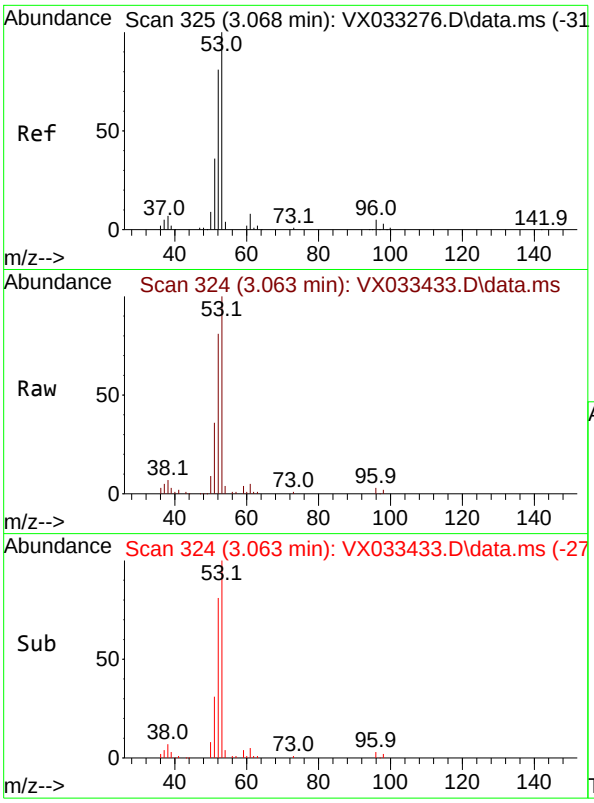


#14
Allyl chloride
Concen: 17.965 ug/l
RT: 2.666 min Scan# 259
Delta R.T. 0.000 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion: 41 Resp: 35709

Ion	Ratio	Lower	Upper
41	100		
39	74.2	61.4	92.2
76	35.9	29.2	43.8

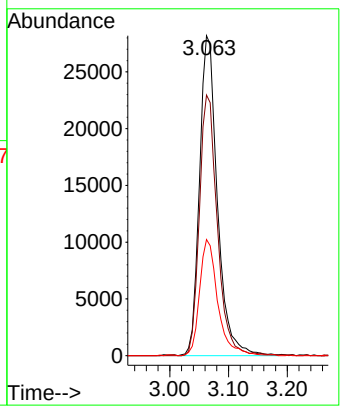




#15
Acrylonitrile
Concen: 89.662 ug/l
RT: 3.063 min Scan# 3
Delta R.T. -0.006 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion: 53 Resp: 5981

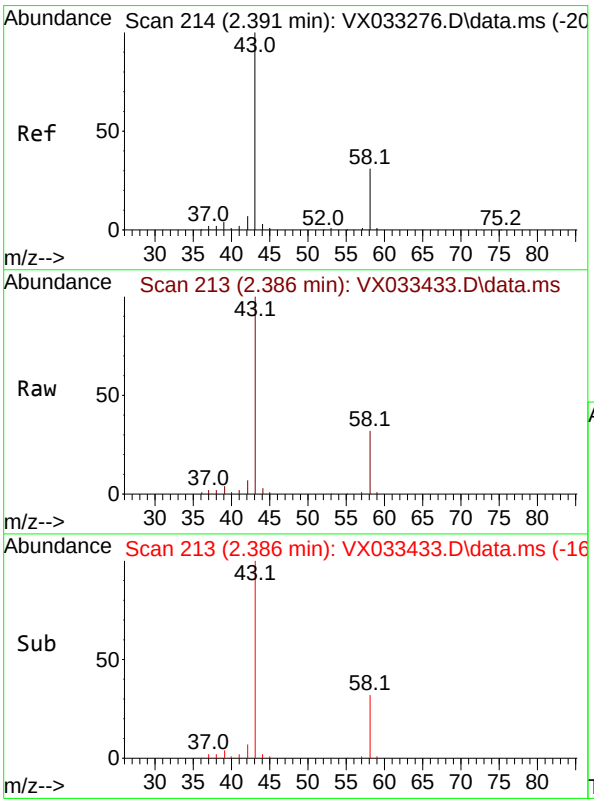
Ion	Ratio	Lower	Upper
53	100		
52	81.6	67.4	101.0
51	37.0	30.3	45.5



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBSD01

Manual Integrations
APPROVED

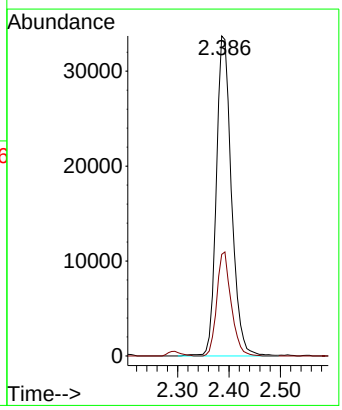
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

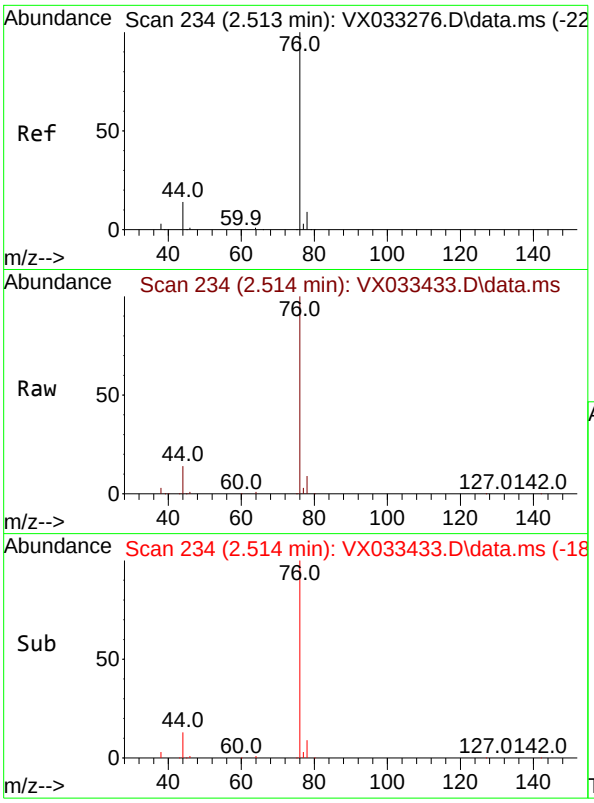


#16
Acetone
Concen: 105.776 ug/l
RT: 2.386 min Scan# 213
Delta R.T. -0.006 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion: 43 Resp: 68941

Ion	Ratio	Lower	Upper
43	100		
58	31.7	23.8	35.8





#17
Carbon Disulfide
Concen: 16.990 ug/l
RT: 2.514 min Scan# 2
Delta R.T. 0.000 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

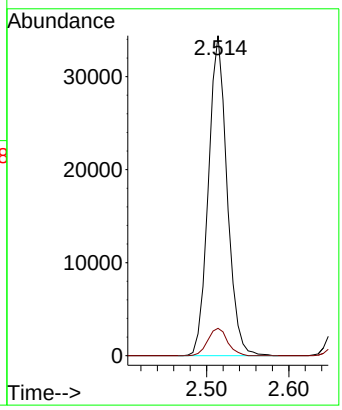
Tgt Ion: 76 Resp: 5427

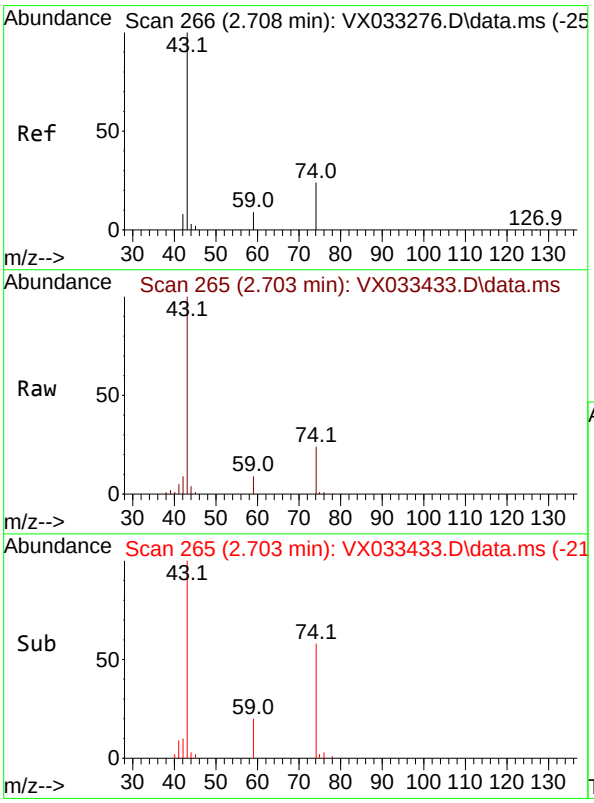
Ion	Ratio	Lower	Upper
76	100		
78	8.5	7.5	11.3

Instrument :
MSVOA_X
ClientSampleId :
VX1215WBSD01

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

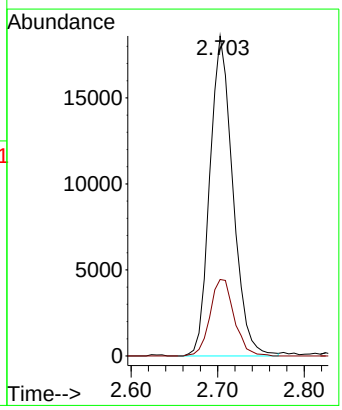


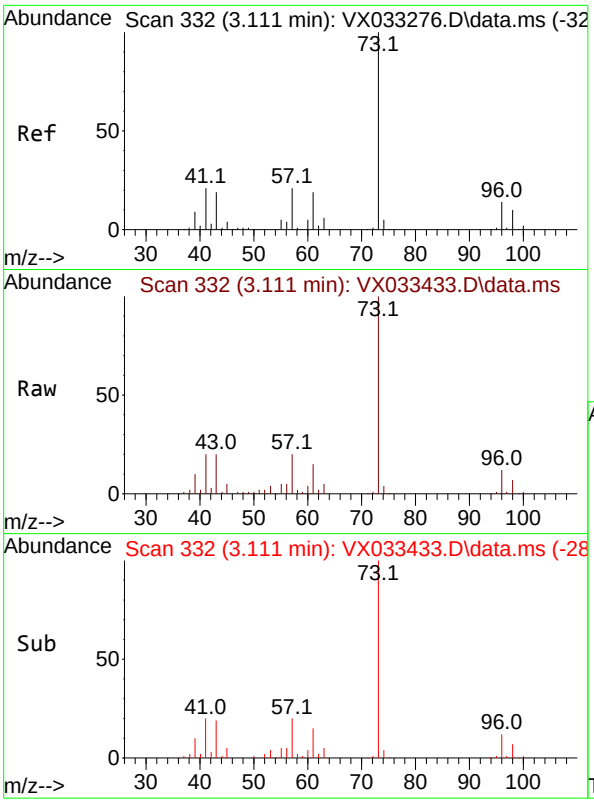


#18
Methyl Acetate
Concen: 18.210 ug/l
RT: 2.703 min Scan# 265
Delta R.T. -0.006 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion: 43 Resp: 34358

Ion	Ratio	Lower	Upper
43	100		
74	25.0	19.4	29.0

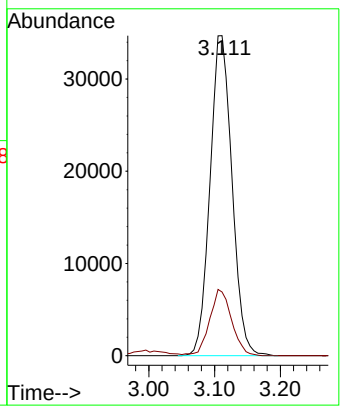




#19
Methyl tert-butyl Ether
Concen: 18.736 ug/l
RT: 3.111 min Scan# 3
Delta R.T. 0.000 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion: 73 Resp: 8078

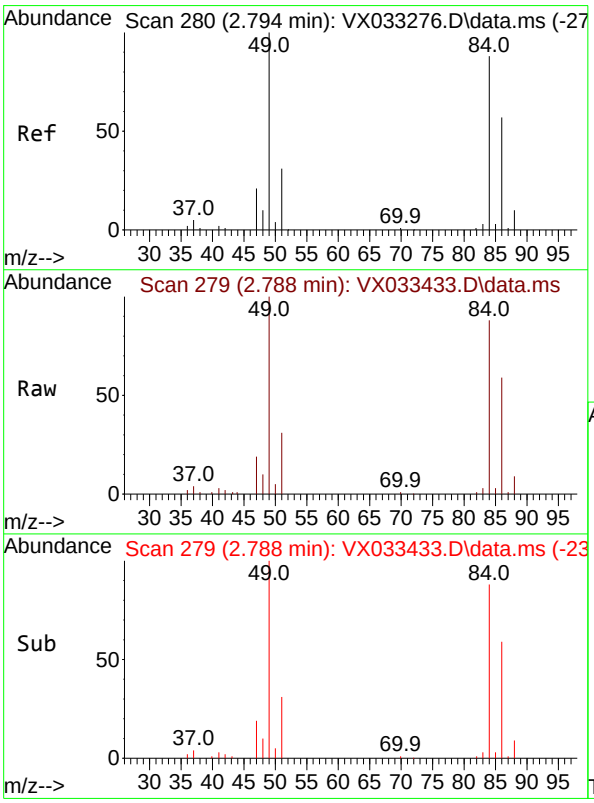
Ion	Ratio	Lower	Upper
73	100		
57	19.9	16.6	25.0



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBSD01

Manual Integrations APPROVED

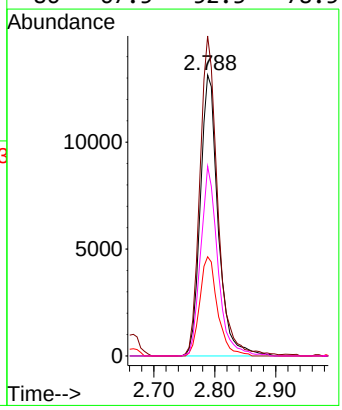
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

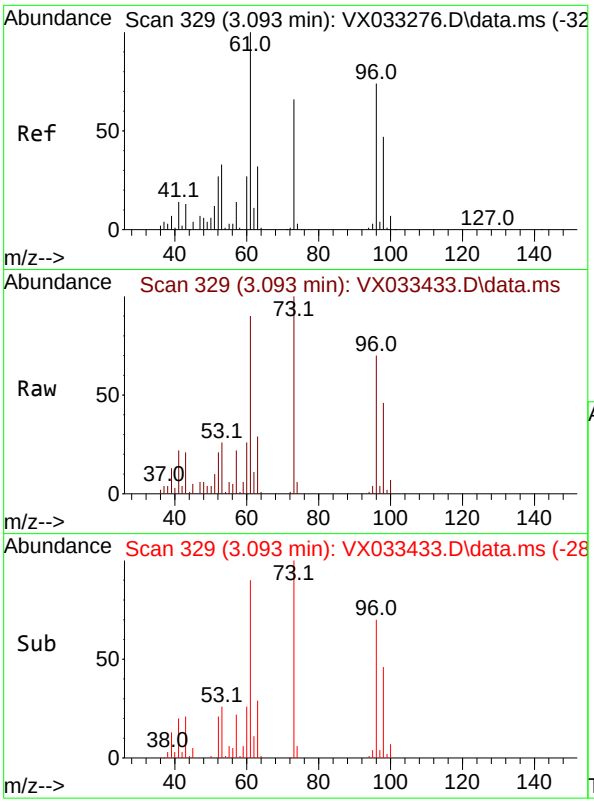


#20
Methylene Chloride
Concen: 18.392 ug/l
RT: 2.788 min Scan# 279
Delta R.T. -0.006 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion: 84 Resp: 26733

Ion	Ratio	Lower	Upper
84	100		
49	113.9	101.0	151.6
51	35.3	31.1	46.7
86	67.5	52.3	78.5

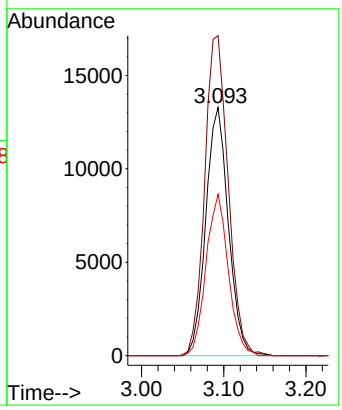




#21
trans-1,2-Dichloroethene
Concen: 18.640 ug/l
RT: 3.093 min Scan# 3
Delta R.T. 0.000 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion: 96 Resp: 2537

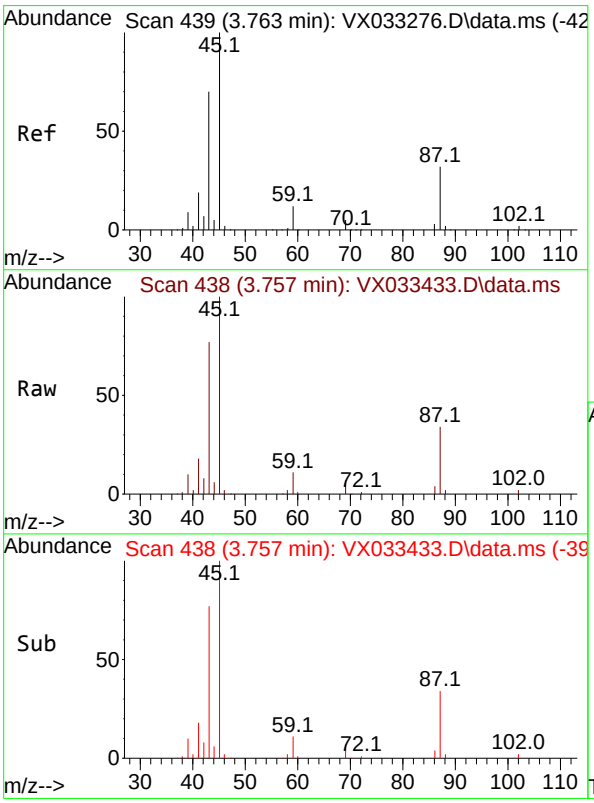
Ion	Ratio	Lower	Upper
96	100		
61	129.0	106.6	160.0
98	65.0	51.0	76.6



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBSD01

Manual Integrations
APPROVED

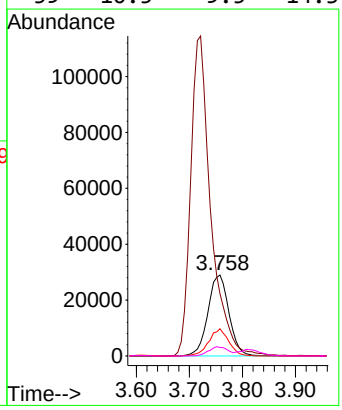
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

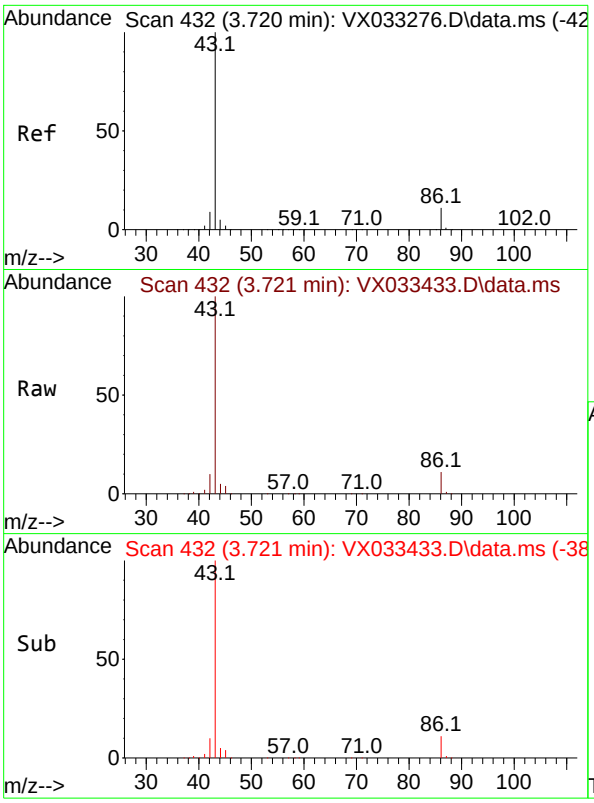


#22
Diisopropyl ether
Concen: 18.742 ug/l
RT: 3.757 min Scan# 438
Delta R.T. -0.006 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion: 45 Resp: 79815

Ion	Ratio	Lower	Upper
45	100		
43	76.3	56.4	84.6
87	33.6	24.4	36.6
59	10.5	9.5	14.3





#23
Vinyl Acetate
Concen: 91.418 ug/l
RT: 3.721 min Scan# 4
Delta R.T. 0.000 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

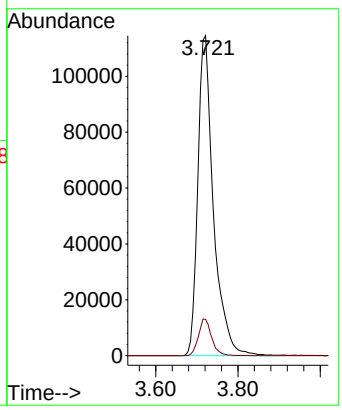
Tgt Ion: 43 Resp: 30217

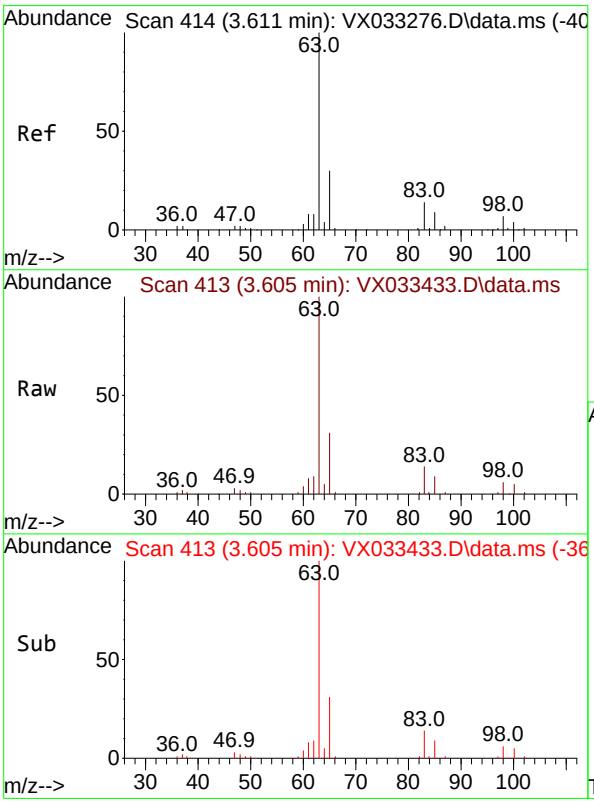
Ion	Ratio	Lower	Upper
43	100		
86	11.3	8.6	12.8

Instrument :
MSVOA_X
ClientSampleId :
VX1215WBSD01

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

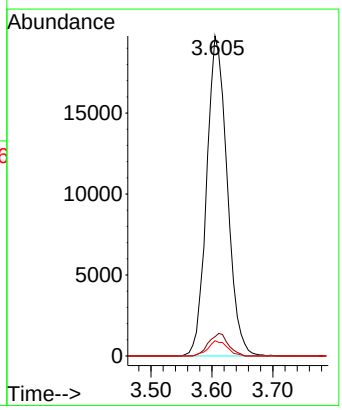


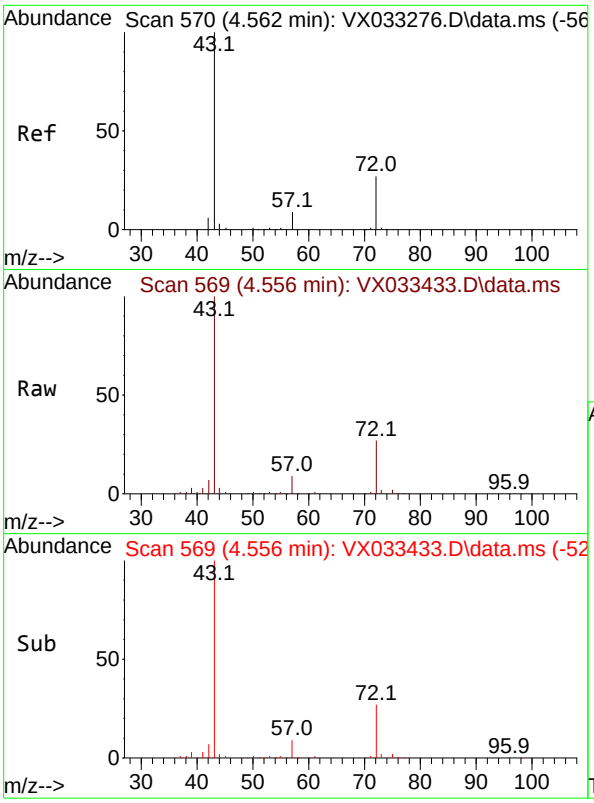


#24
1,1-Dichloroethane
Concen: 18.481 ug/l
RT: 3.605 min Scan# 413
Delta R.T. -0.006 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion: 63 Resp: 46243

Ion	Ratio	Lower	Upper
63	100		
98	6.0	3.5	10.4
100	4.8	2.3	6.8





#25
2-Butanone
Concen: 94.090 ug/l
RT: 4.556 min Scan# 5
Delta R.T. -0.006 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

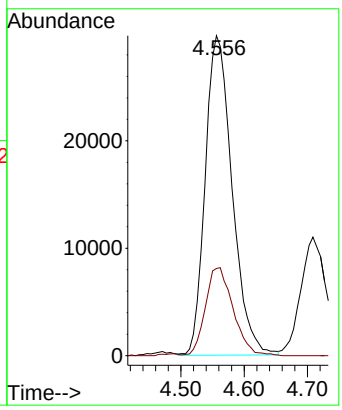
Tgt Ion: 43 Resp: 8802

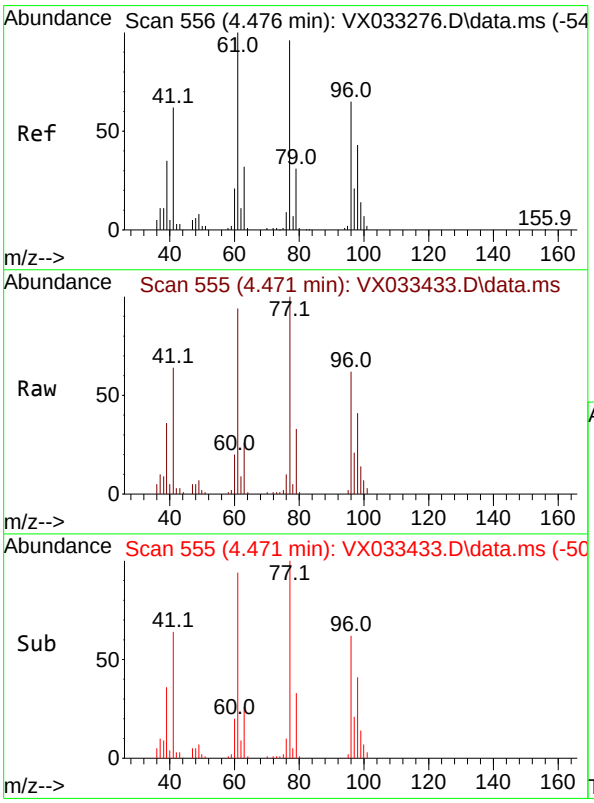
Ion	Ratio	Lower	Upper
43	100		
72	27.2	22.2	33.2

Instrument :
MSVOA_X
ClientSampleId :
VX1215WBSD01

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

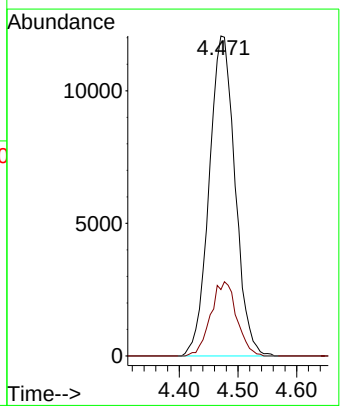


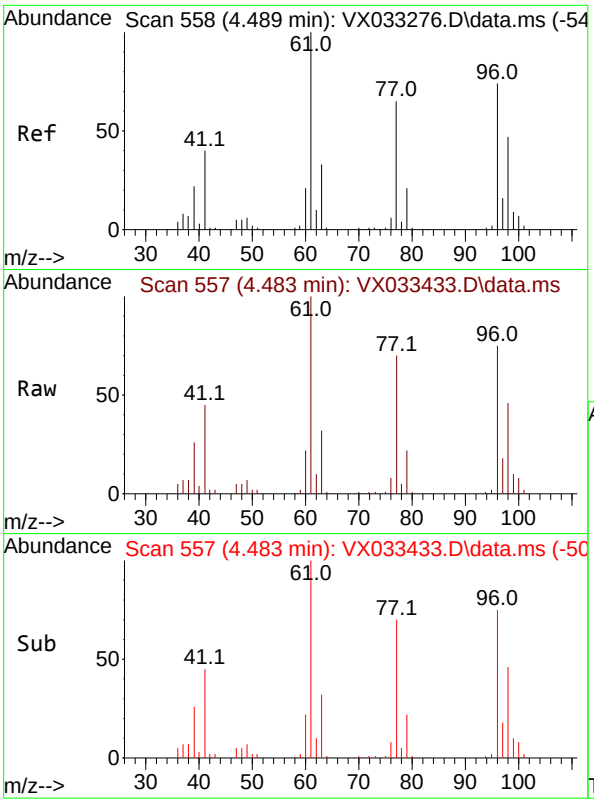


#26
2,2-Dichloropropane
Concen: 20.092 ug/l
RT: 4.471 min Scan# 555
Delta R.T. -0.006 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion: 77 Resp: 36972

Ion	Ratio	Lower	Upper
77	100		
97	23.2	11.4	34.1

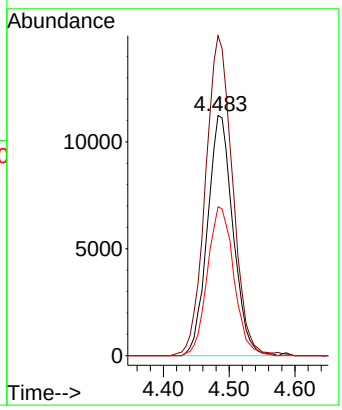




#27
cis-1,2-Dichloroethene
Concen: 18.679 ug/l
RT: 4.483 min Scan# 5
Delta R.T. -0.006 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion: 96 Resp: 3039

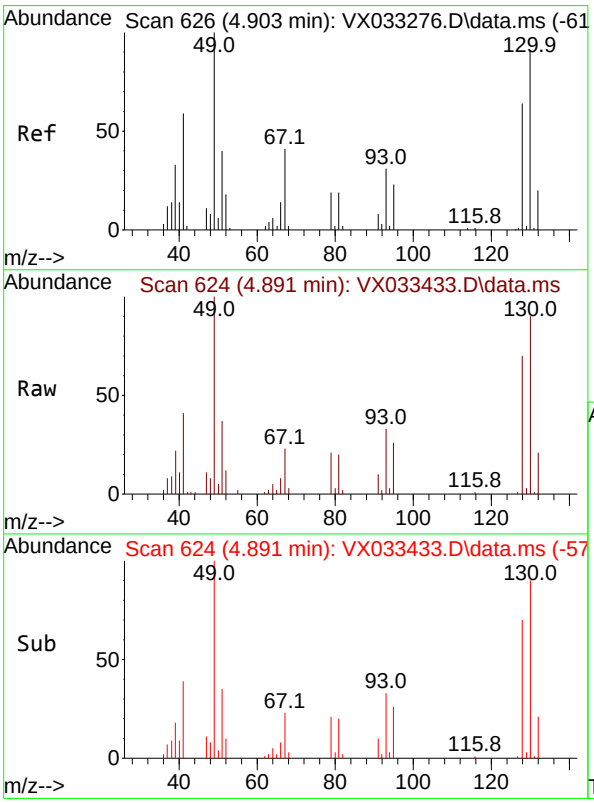
Ion	Ratio	Lower	Upper
96	100		
61	141.1	0.0	286.0
98	64.0	0.0	129.6



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBSD01

Manual Integrations
APPROVED

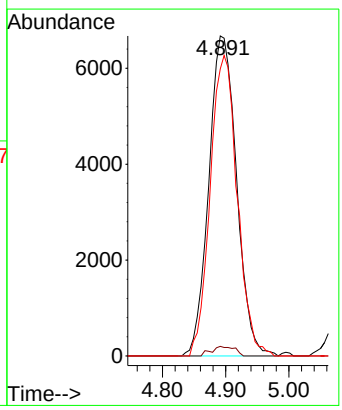
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

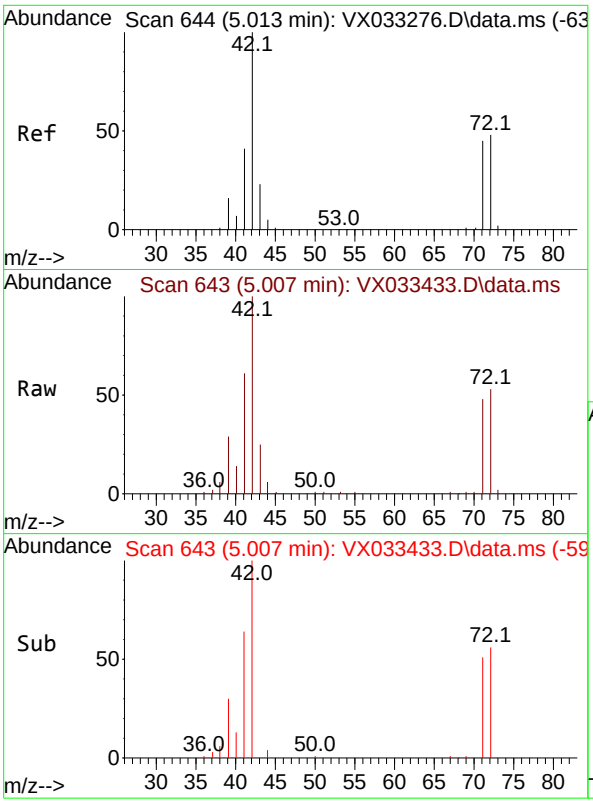


#28
Bromochloromethane
Concen: 19.451 ug/l
RT: 4.891 min Scan# 624
Delta R.T. -0.012 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion: 49 Resp: 20374

Ion	Ratio	Lower	Upper
49	100		
129	2.5	0.0	3.8
130	91.2	67.5	101.3

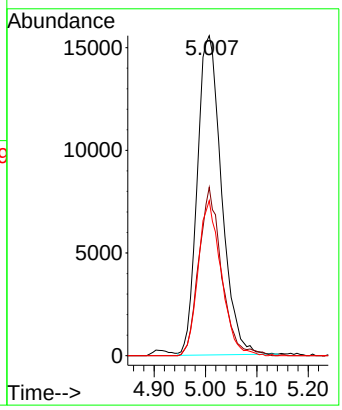




#29
Tetrahydrofuran
Concen: 83.937 ug/l
RT: 5.007 min Scan# 64
Delta R.T. -0.006 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion: 42 Resp: 5087

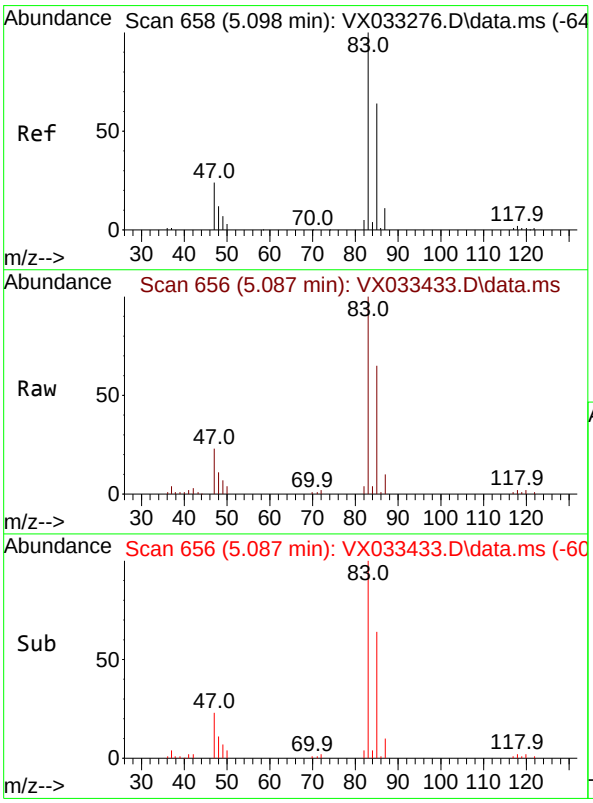
Ion	Ratio	Lower	Upper
42	100		
72	49.6	37.6	56.4
71	46.4	34.7	52.1



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBSD01

Manual Integrations
APPROVED

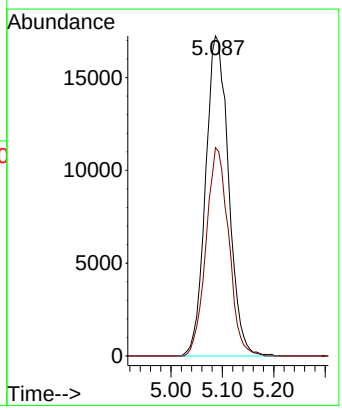
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

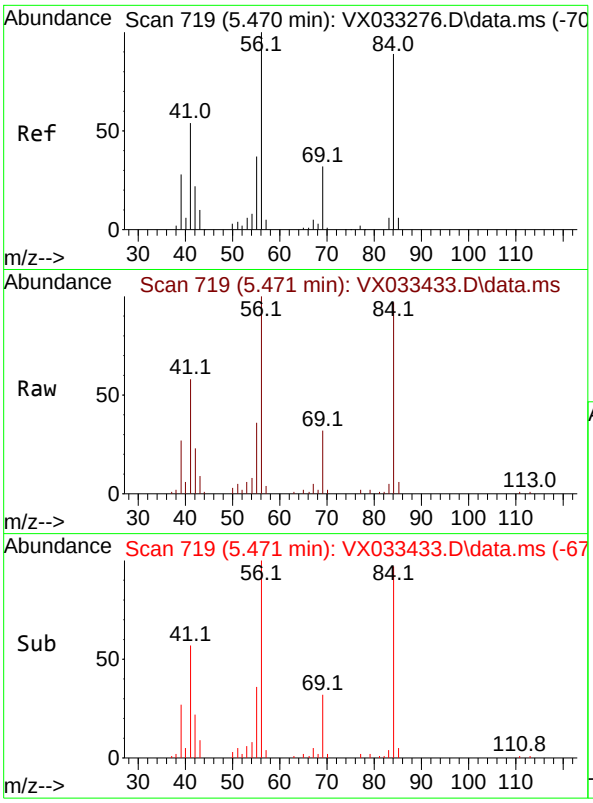


#30
Chloroform
Concen: 19.285 ug/l
RT: 5.087 min Scan# 656
Delta R.T. -0.012 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion: 83 Resp: 53573

Ion	Ratio	Lower	Upper
83	100		
85	65.1	51.1	76.7

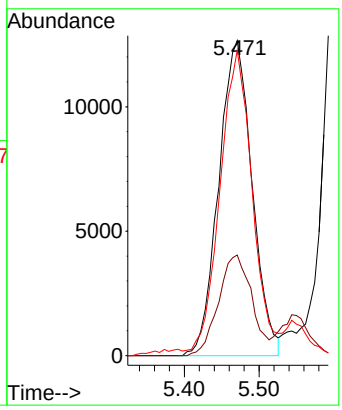




#31
Cyclohexane
Concen: 18.828 ug/l
RT: 5.471 min Scan# 7
Delta R.T. 0.000 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion: 56 Resp: 3941

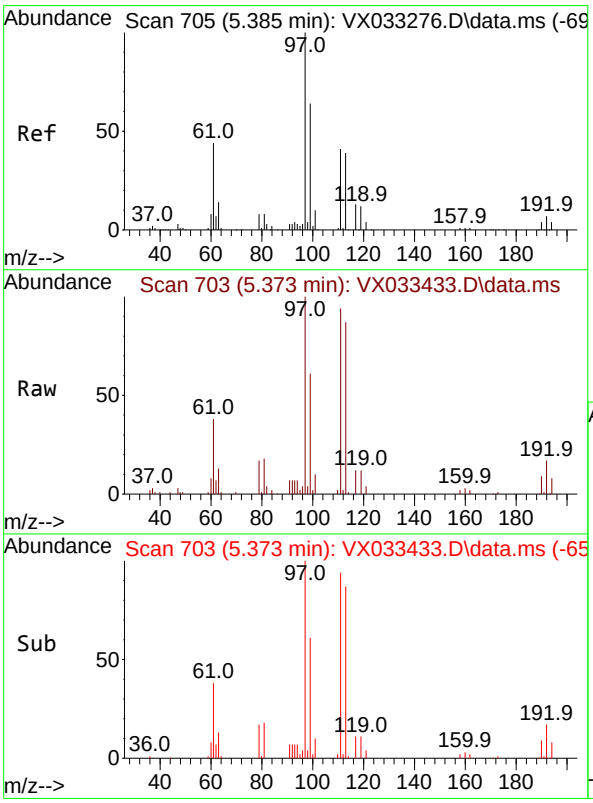
Ion	Ratio	Lower	Upper
56	100		
69	32.0	24.1	36.1
84	95.0	66.9	100.3



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBSD01

Manual Integrations
APPROVED

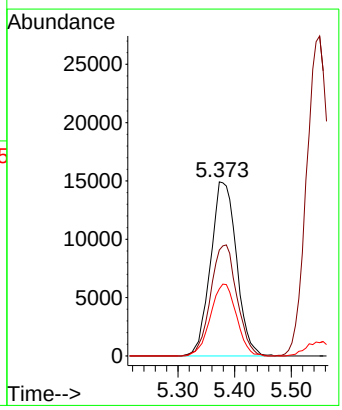
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

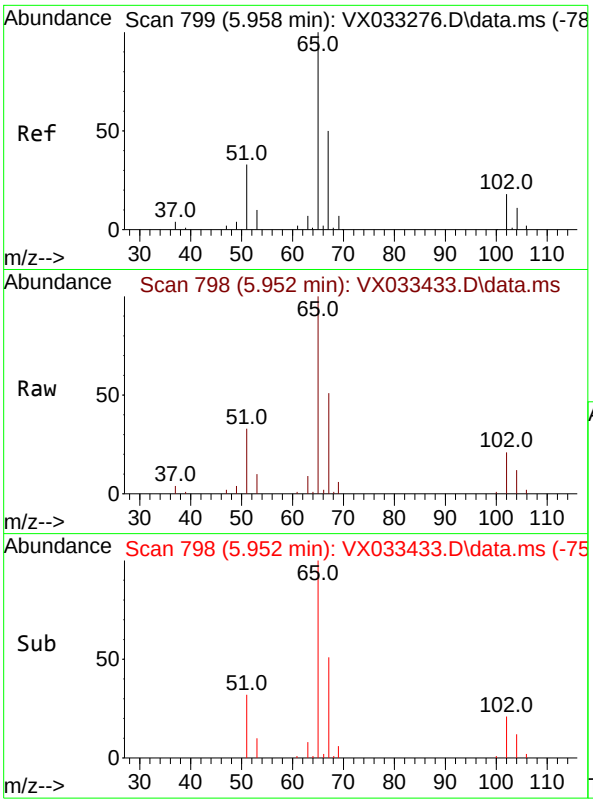


#32
1,1,1-Trichloroethane
Concen: 19.823 ug/l
RT: 5.373 min Scan# 703
Delta R.T. -0.012 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion: 97 Resp: 47380

Ion	Ratio	Lower	Upper
97	100		
99	64.3	51.4	77.0
61	41.2	35.2	52.8

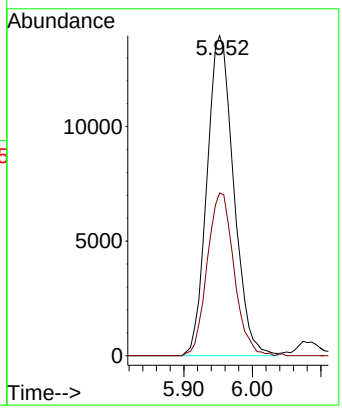




#33
1,2-Dichloroethane-d4
Concen: 42.979 ug/l
RT: 5.952 min Scan# 7
Delta R.T. -0.006 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion: 65 Resp: 3785

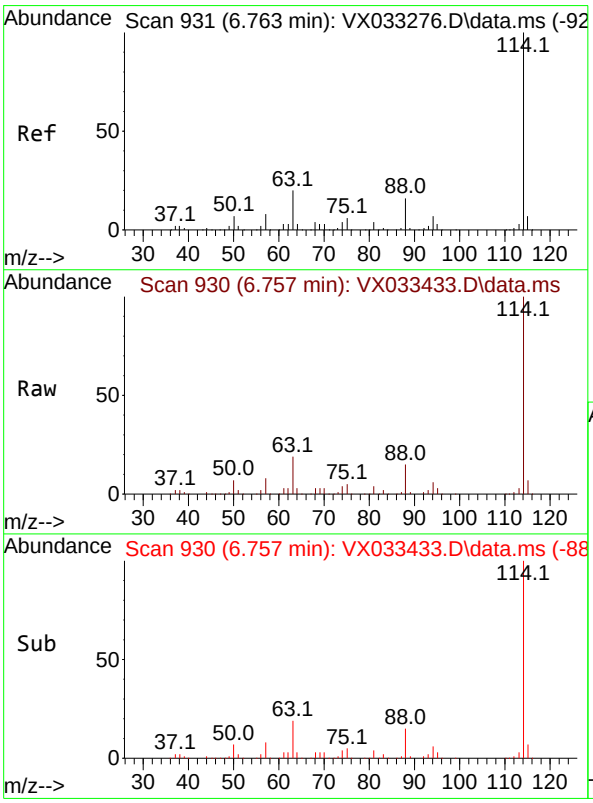
Ion	Ratio	Lower	Upper
65	100		
67	50.9	0.0	101.8



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBSD01

Manual Integrations
APPROVED

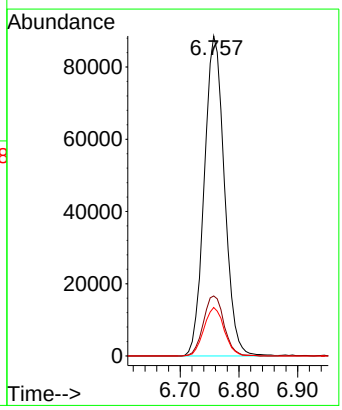
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

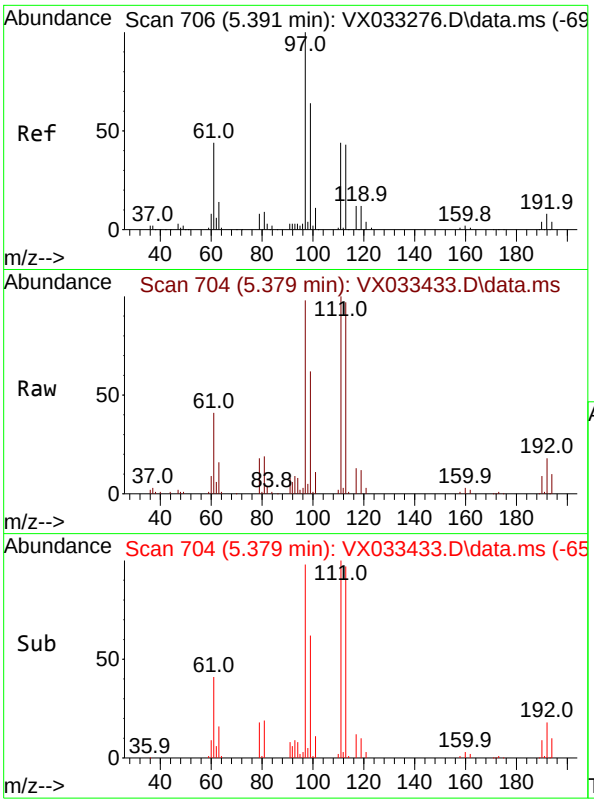


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 6.757 min Scan# 930
Delta R.T. -0.006 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion:114 Resp: 210886

Ion	Ratio	Lower	Upper
114	100		
63	18.8	0.0	41.6
88	15.2	0.0	33.4

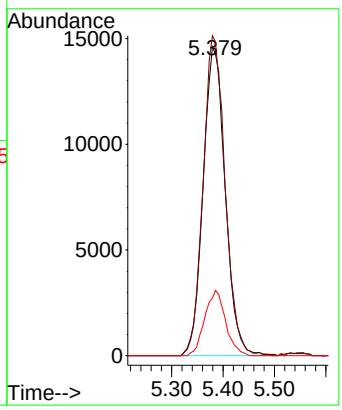




#35
Dibromofluoromethane
Concen: 46.027 ug/l
RT: 5.379 min Scan# 7
Delta R.T. -0.012 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion:113 Resp: 4365

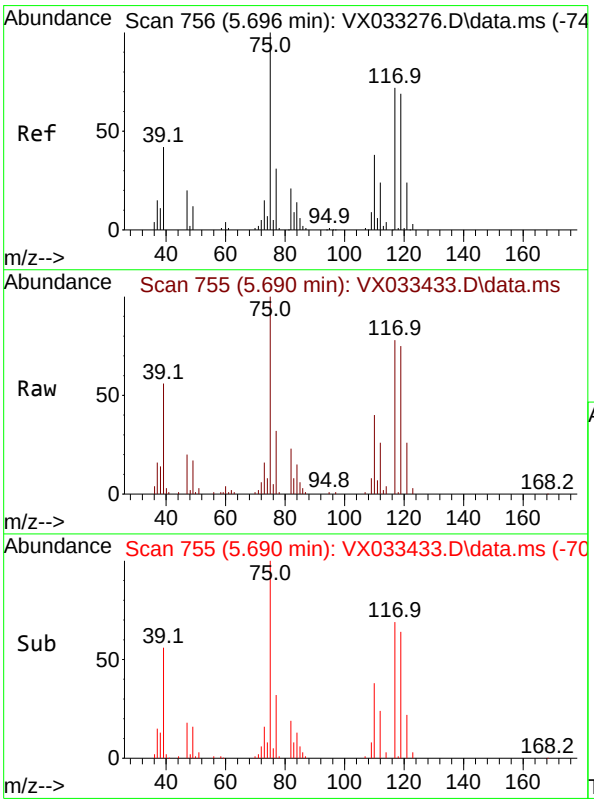
Ion	Ratio	Lower	Upper
113	100		
111	102.8	82.4	123.6
192	19.9	15.4	23.2



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBSD01

Manual Integrations
APPROVED

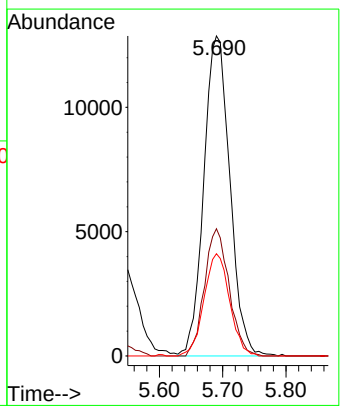
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

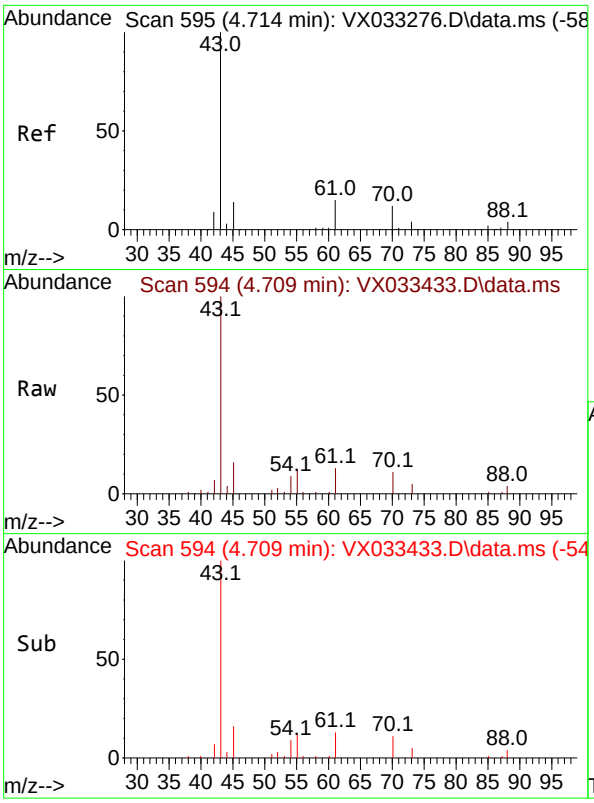


#36
1,1-Dichloropropene
Concen: 19.942 ug/l
RT: 5.690 min Scan# 755
Delta R.T. -0.006 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion: 75 Resp: 36878

Ion	Ratio	Lower	Upper
75	100		
110	37.6	18.4	55.2
77	31.4	24.5	36.7

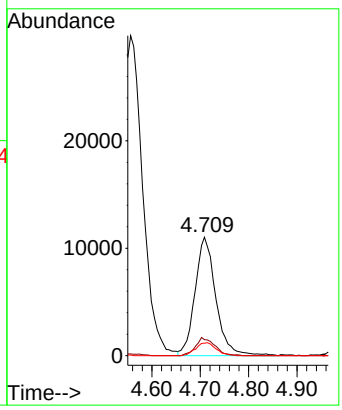




#37
Ethyl Acetate
Concen: 18.872 ug/l
RT: 4.709 min Scan# 5
Delta R.T. -0.006 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion: 43 Resp: 3299

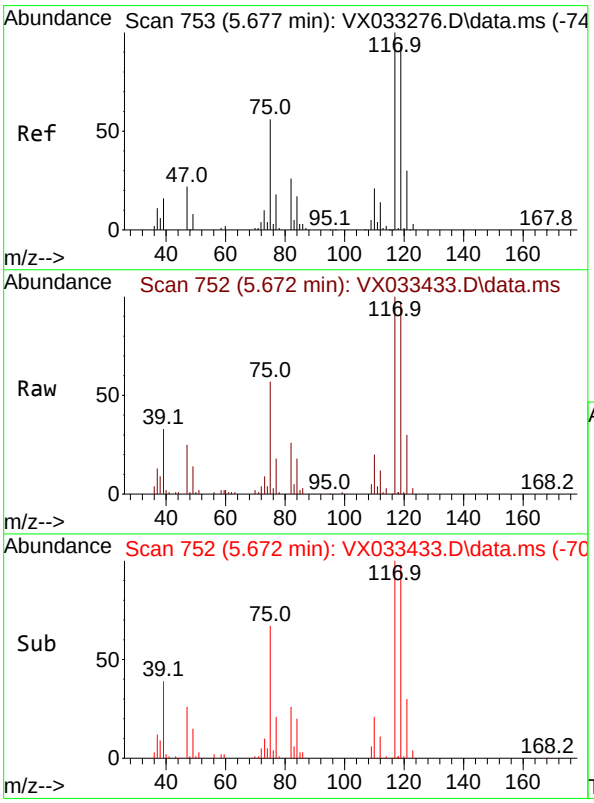
Ion	Ratio	Lower	Upper
43	100		
61	14.0	11.5	17.3
70	10.7	9.1	13.7



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBSD01

Manual Integrations
APPROVED

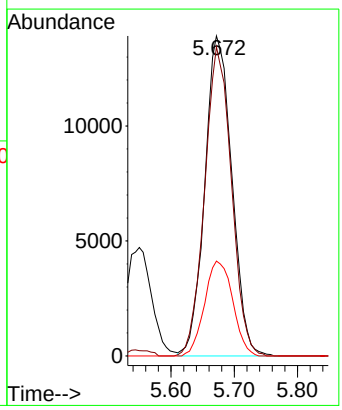
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

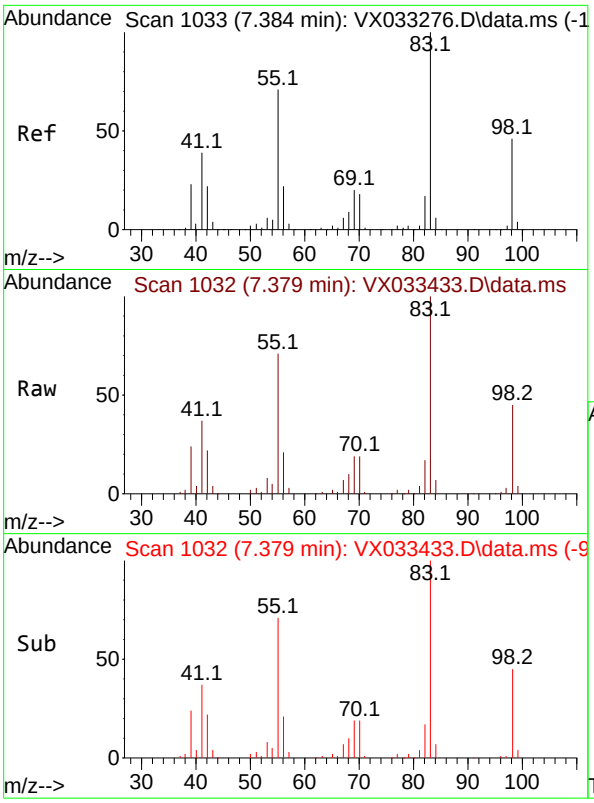


#38
Carbon Tetrachloride
Concen: 19.992 ug/l
RT: 5.672 min Scan# 752
Delta R.T. -0.006 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion:117 Resp: 41422

Ion	Ratio	Lower	Upper
117	100		
119	96.6	77.2	115.8
121	29.7	25.8	38.6

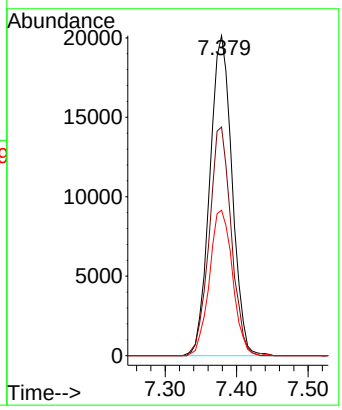




#39
Methylcyclohexane
Concen: 21.116 ug/l
RT: 7.379 min Scan# 1
Delta R.T. -0.006 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion: 83 Resp: 4370

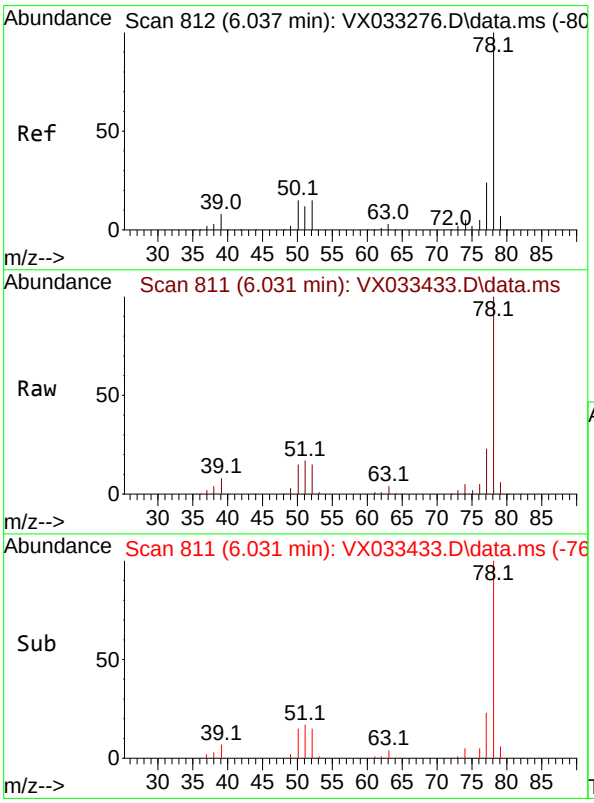
Ion	Ratio	Lower	Upper
83	100		
55	71.4	58.4	87.6
98	45.5	37.2	55.8



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBSD01

Manual Integrations
APPROVED

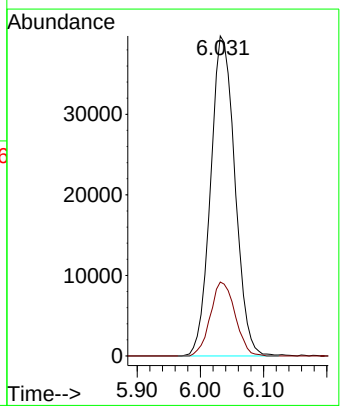
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

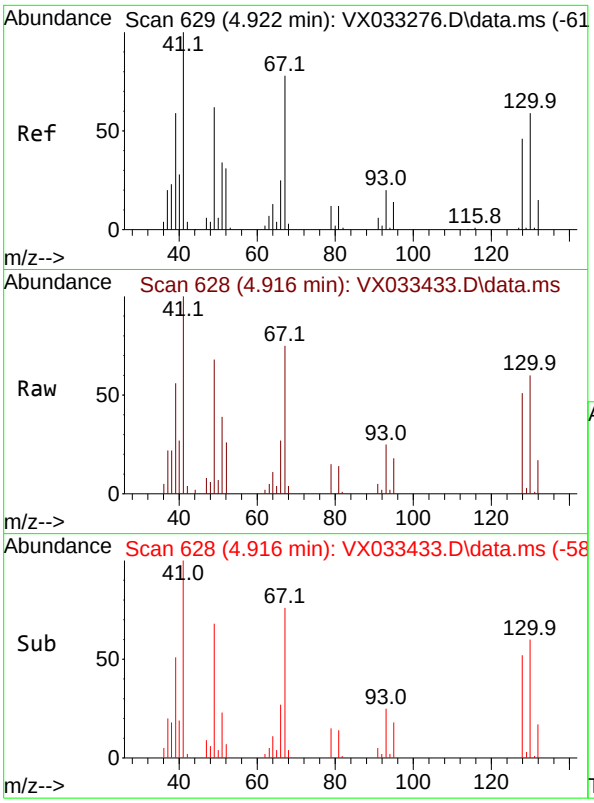


#40
Benzene
Concen: 19.661 ug/l
RT: 6.031 min Scan# 811
Delta R.T. -0.006 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion: 78 Resp: 106012

Ion	Ratio	Lower	Upper
78	100		
77	23.1	19.0	28.4

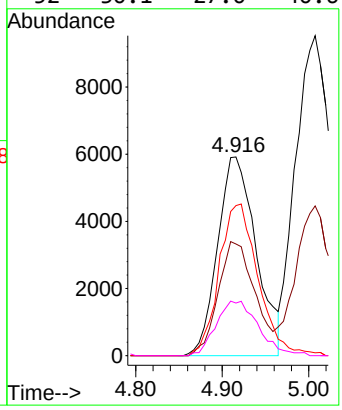




#41
Methacrylonitrile
Concen: 19.037 ug/l
RT: 4.916 min Scan# 6
Delta R.T. -0.006 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion: 41 Resp: 1833

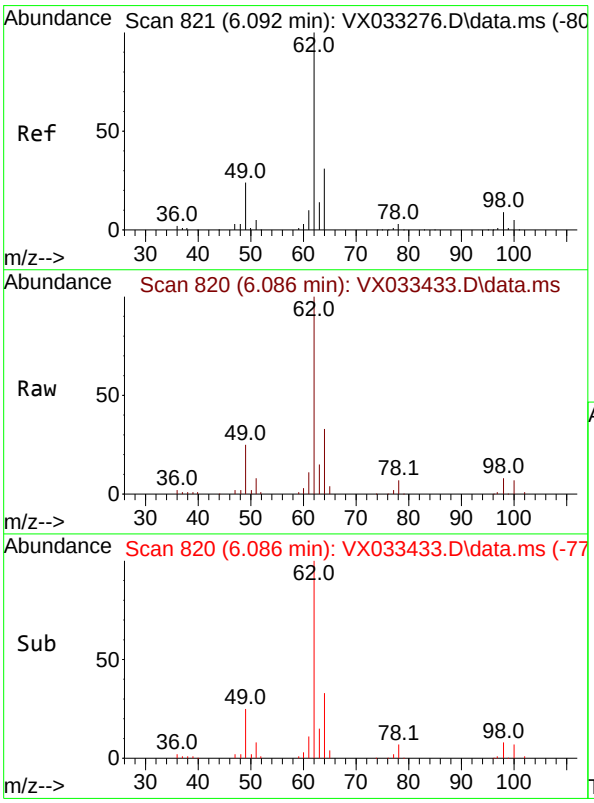
Ion	Ratio	Lower	Upper
41	100		
39	54.4	47.5	71.3
67	77.3	60.5	90.7
52	30.1	27.0	40.6



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBSD01

Manual Integrations
APPROVED

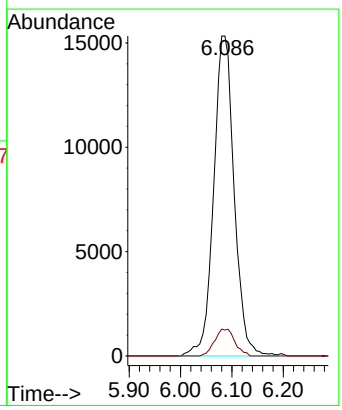
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

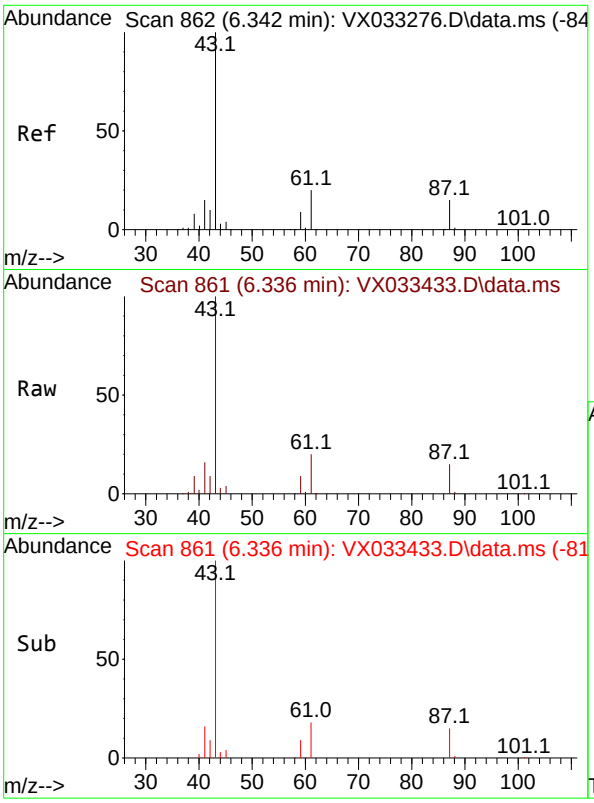


#42
1,2-Dichloroethane
Concen: 19.843 ug/l
RT: 6.086 min Scan# 820
Delta R.T. -0.006 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion: 62 Resp: 42486

Ion	Ratio	Lower	Upper
62	100		
98	8.3	0.0	16.0

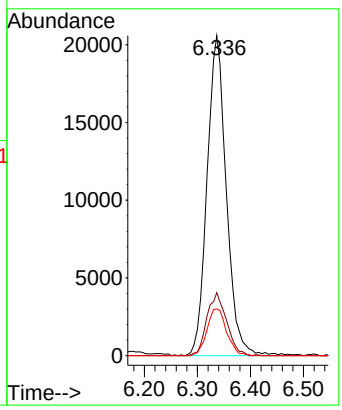




#43
Isopropyl Acetate
Concen: 18.474 ug/l
RT: 6.336 min Scan# 8
Delta R.T. -0.006 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion: 43 Resp: 5196

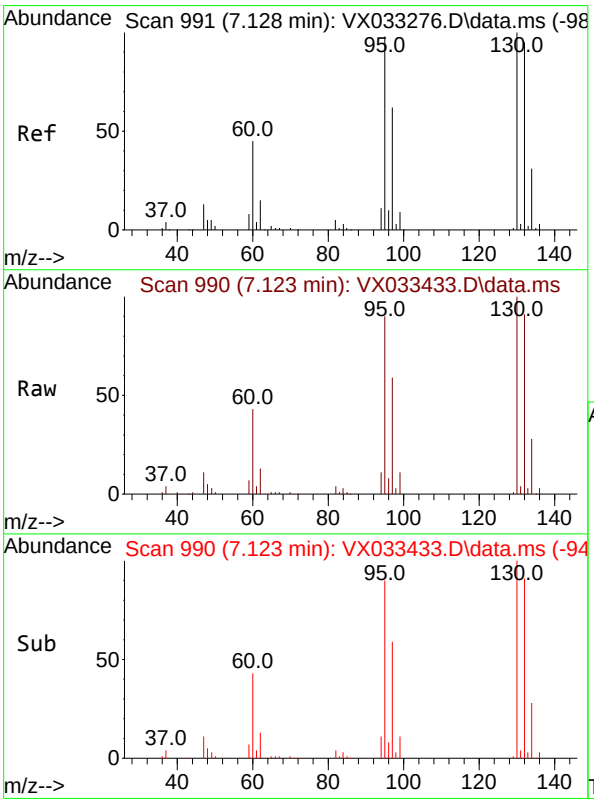
Ion	Ratio	Lower	Upper
43	100		
61	20.1	15.4	23.0
87	14.9	10.8	16.2



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBSD01

Manual Integrations
APPROVED

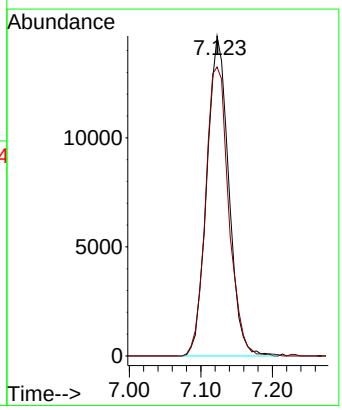
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

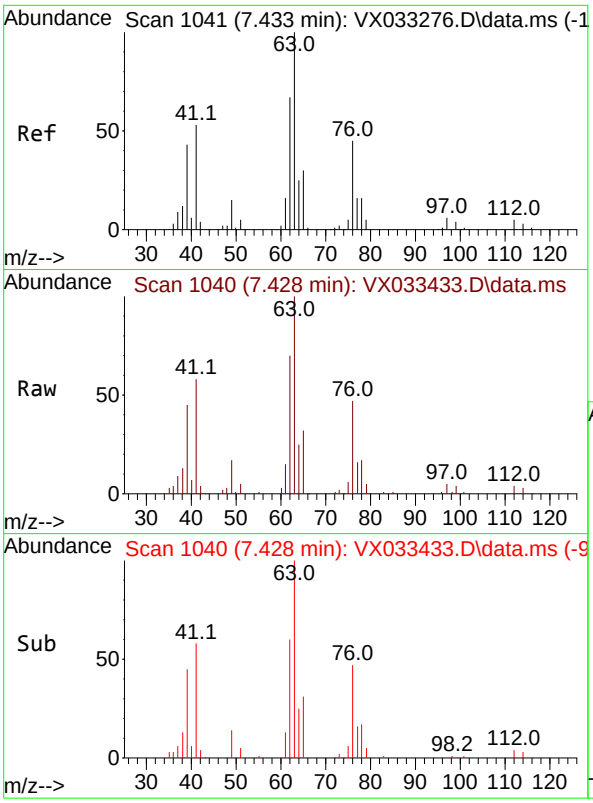


#44
Trichloroethene
Concen: 20.962 ug/l
RT: 7.123 min Scan# 990
Delta R.T. -0.006 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion:130 Resp: 31162

Ion	Ratio	Lower	Upper
130	100		
95	90.3	0.0	195.2

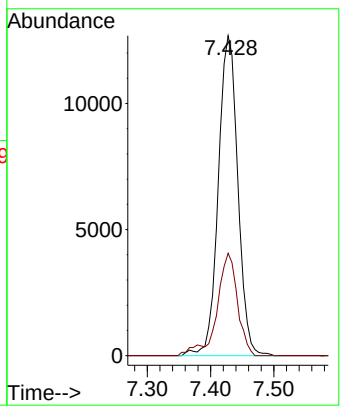




#45
1,2-Dichloropropane
Concen: 19.698 ug/l
RT: 7.428 min Scan# 1
Delta R.T. -0.006 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion: 63 Resp: 2716

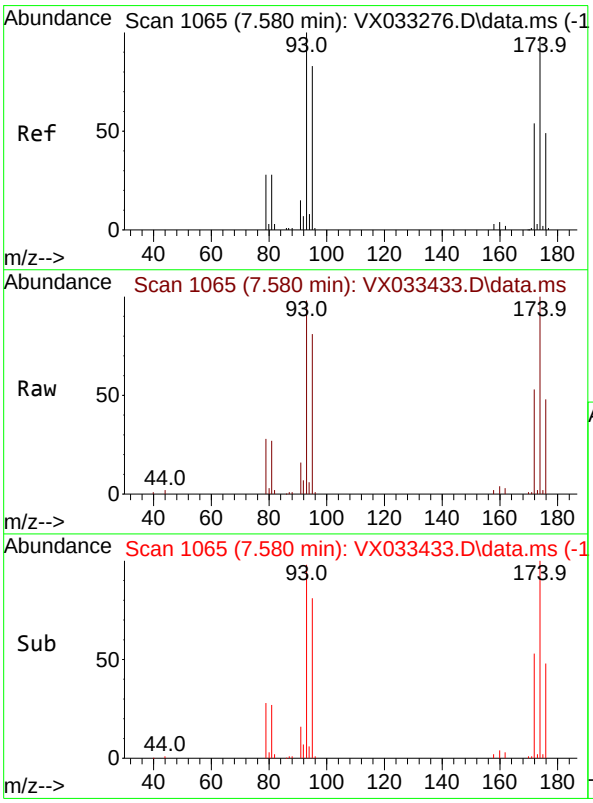
Ion	Ratio	Lower	Upper
63	100		
65	32.0	24.6	36.8



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBSD01

Manual Integrations
APPROVED

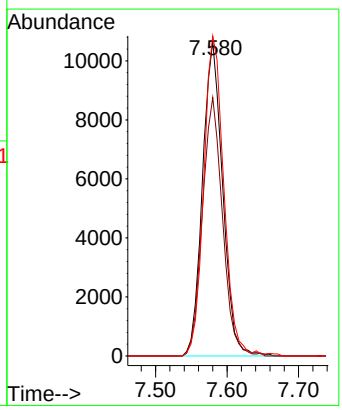
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

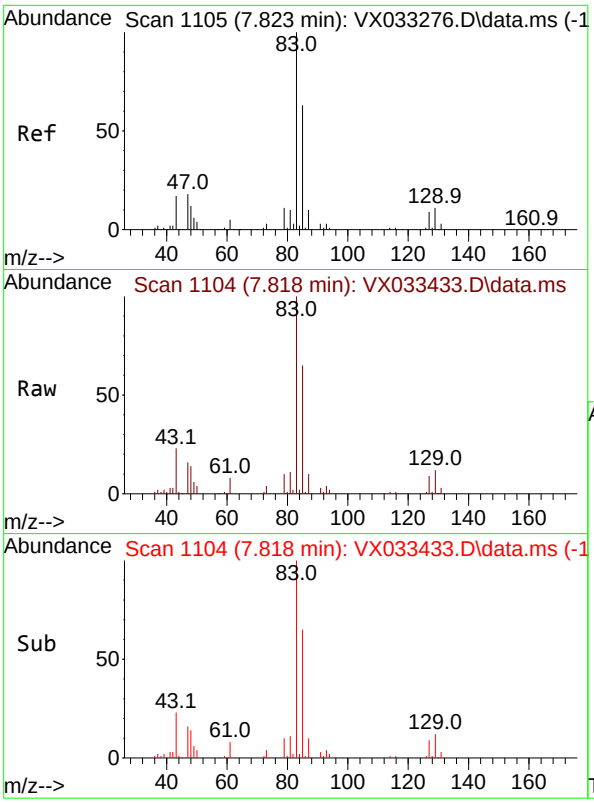


#46
Dibromomethane
Concen: 19.831 ug/l
RT: 7.580 min Scan# 1065
Delta R.T. 0.000 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion: 93 Resp: 20832

Ion	Ratio	Lower	Upper
93	100		
95	82.0	65.8	98.8
174	101.4	79.8	119.6

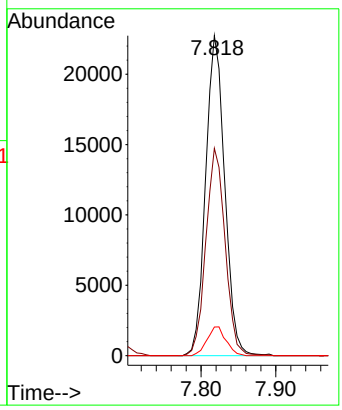




#47
Bromodichloromethane
Concen: 19.713 ug/l
RT: 7.818 min Scan# 1
Delta R.T. -0.006 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion: 83 Resp: 4036

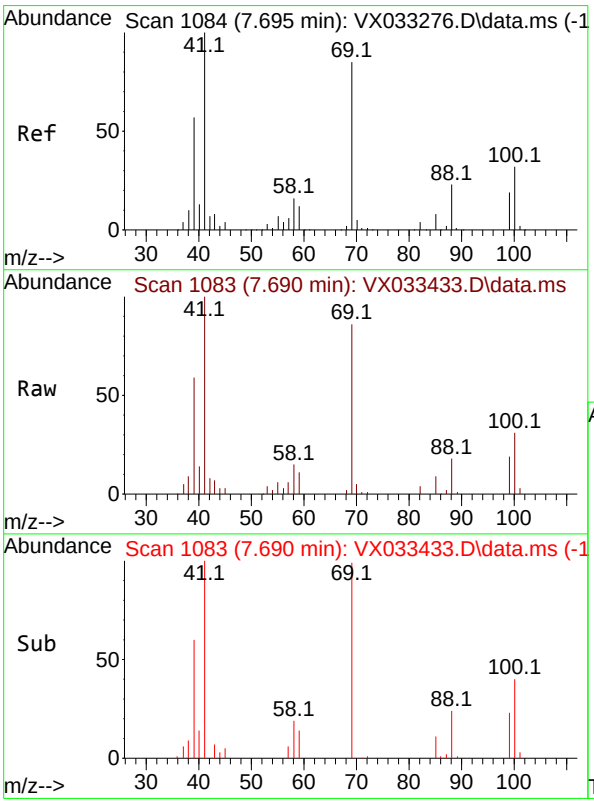
Ion	Ratio	Lower	Upper
83	100		
85	64.8	52.2	78.4
127	8.9	7.4	11.2



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBSD01

Manual Integrations
APPROVED

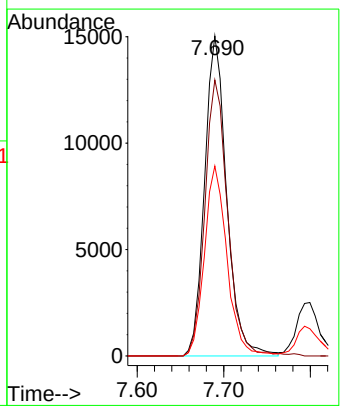
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

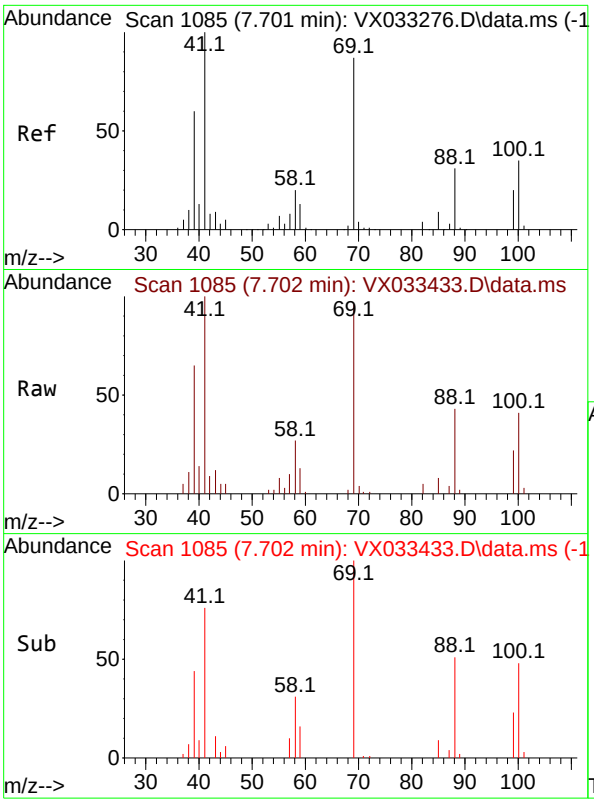


#48
Methyl methacrylate
Concen: 18.363 ug/l
RT: 7.690 min Scan# 1083
Delta R.T. -0.006 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion: 41 Resp: 26656

Ion	Ratio	Lower	Upper
41	100		
69	88.9	65.1	97.7
39	60.8	51.9	77.9

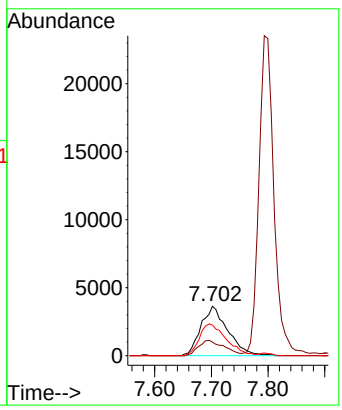




#49
1,4-Dioxane
Concen: 361.544 ug/l
RT: 7.702 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion: 88 Resp: 1196

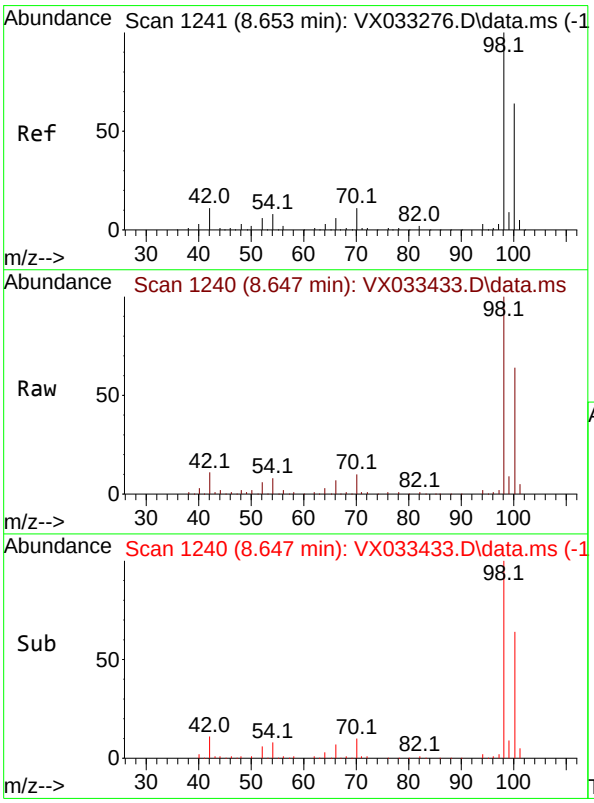
Ion	Ratio	Lower	Upper
88	100		
43	29.7	26.6	39.8
58	64.0	51.7	77.5



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBSD01

Manual Integrations
APPROVED

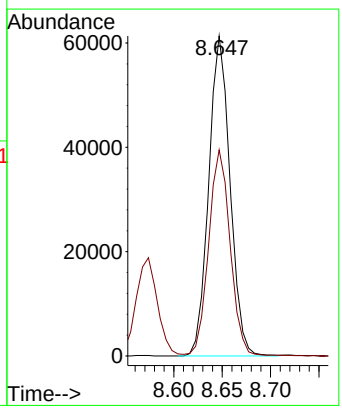
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

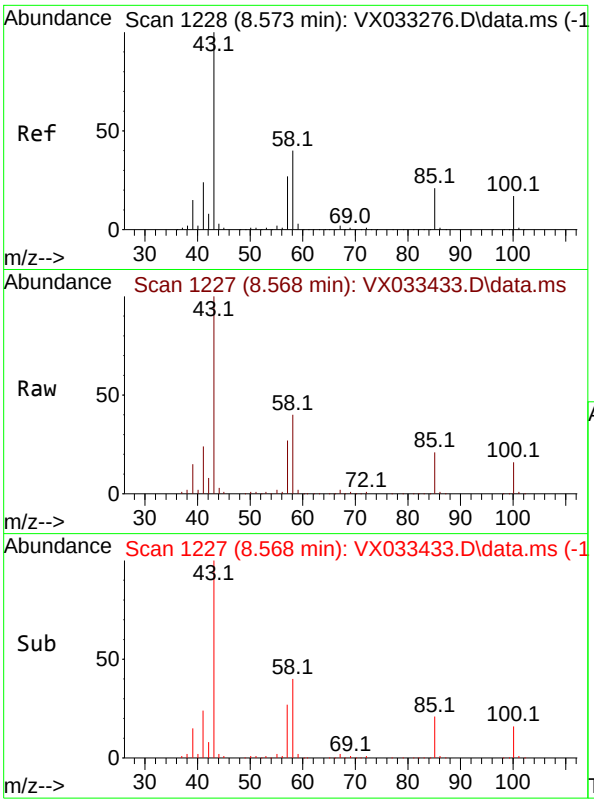


#50
Toluene-d8
Concen: 47.352 ug/l
RT: 8.647 min Scan# 1240
Delta R.T. -0.006 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion: 98 Resp: 93958

Ion	Ratio	Lower	Upper
98	100		
100	65.1	50.9	76.3

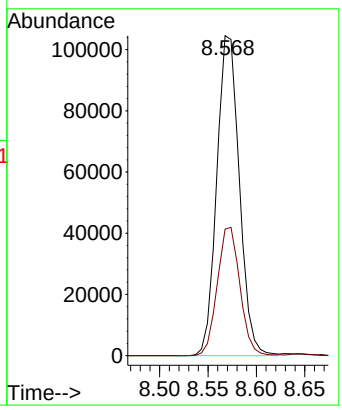




#51
4-Methyl-2-Pentanone
Concen: 95.356 ug/l
RT: 8.568 min Scan# 1
Delta R.T. -0.006 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion: 43 Resp: 16961

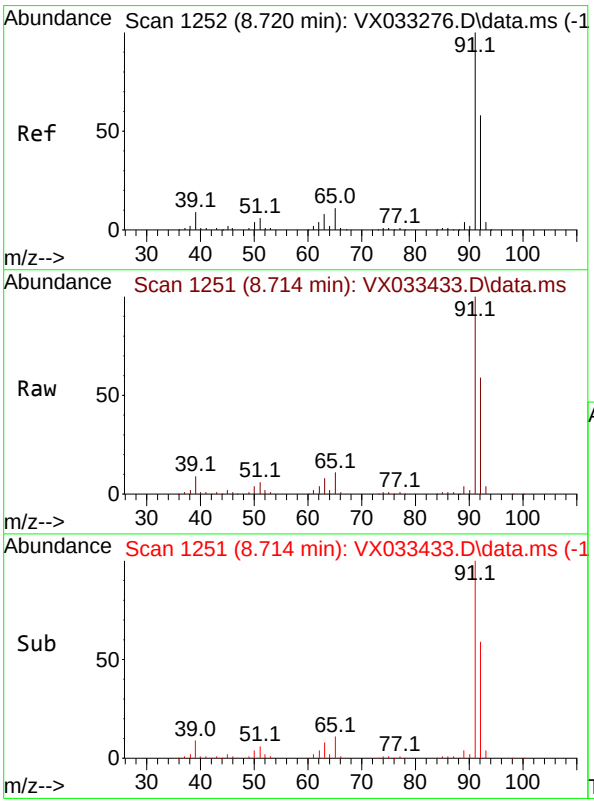
Ion	Ratio	Lower	Upper
43	100		
58	40.4	30.9	46.3



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBSD01

Manual Integrations
APPROVED

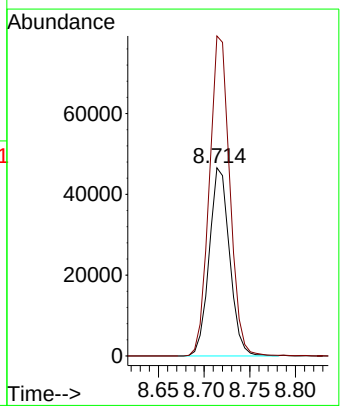
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

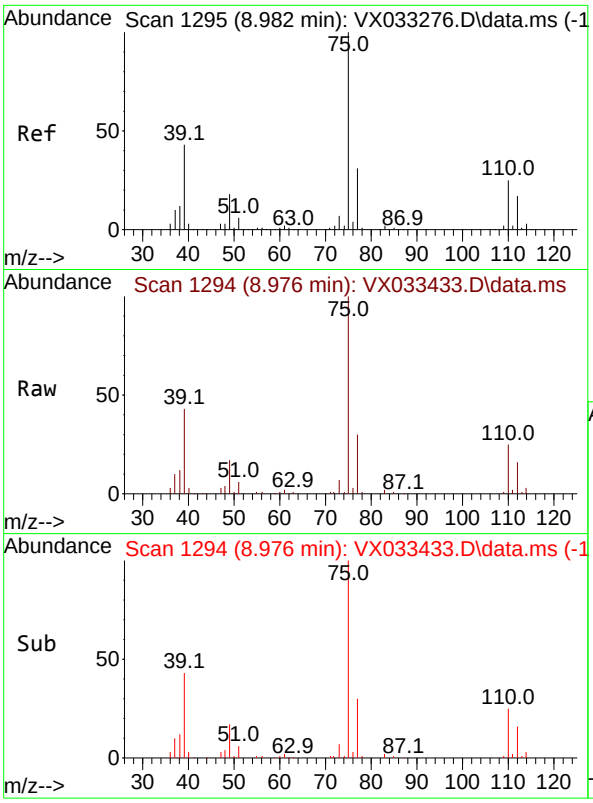


#52
Toluene
Concen: 20.728 ug/l
RT: 8.714 min Scan# 1251
Delta R.T. -0.006 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion: 92 Resp: 72263

Ion	Ratio	Lower	Upper
92	100		
91	171.0	138.3	207.5

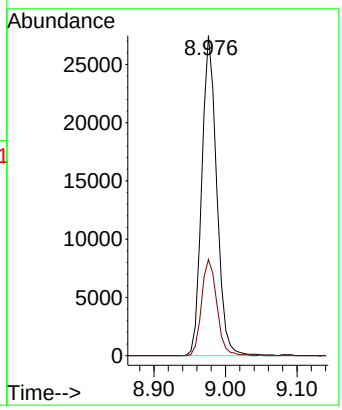




#53
t-1,3-Dichloropropene
Concen: 19.717 ug/l
RT: 8.976 min Scan# 1
Delta R.T. -0.006 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion: 75 Resp: 3985

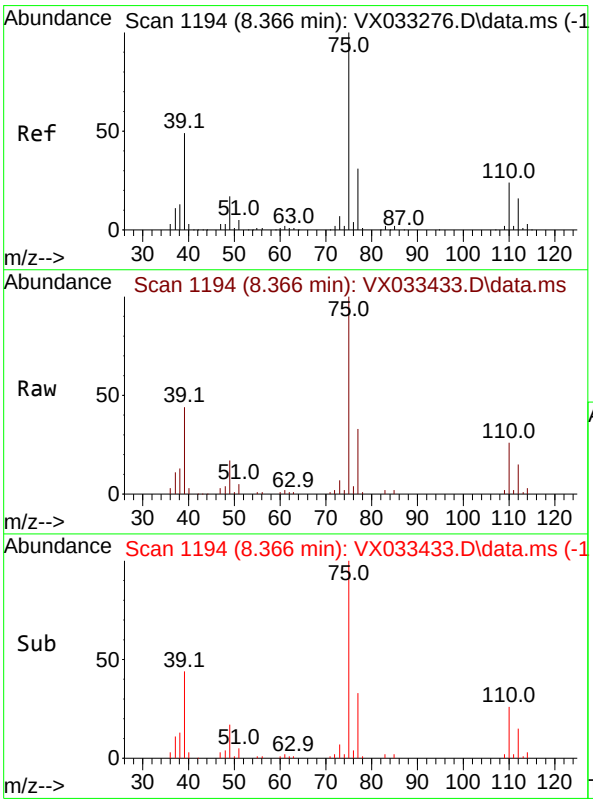
Ion	Ratio	Lower	Upper
75	100		
77	30.1	25.1	37.7



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBSD01

Manual Integrations
APPROVED

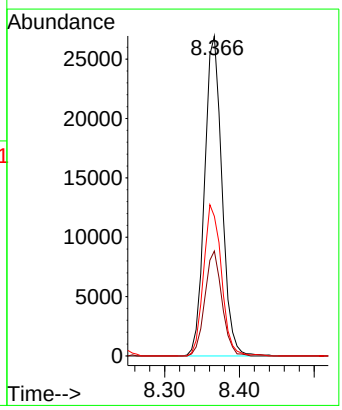
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

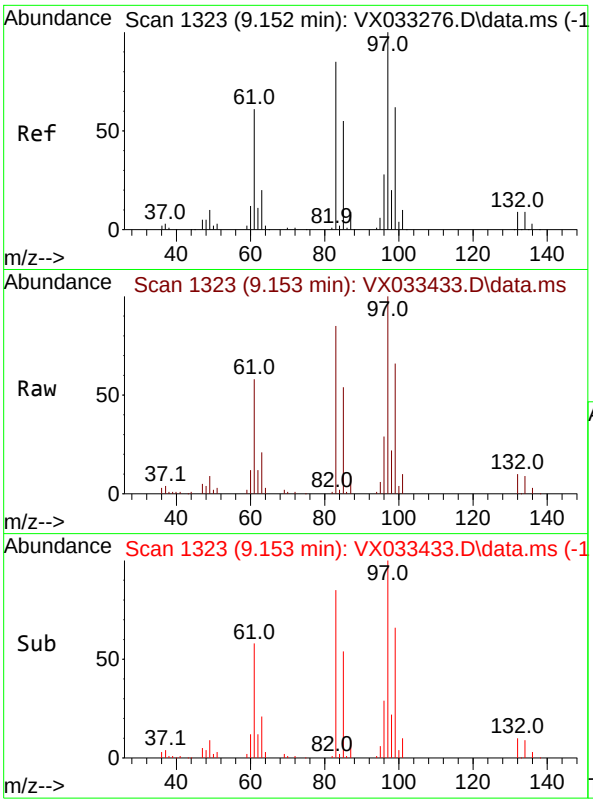


#54
cis-1,3-Dichloropropene
Concen: 19.973 ug/l
RT: 8.366 min Scan# 1194
Delta R.T. 0.000 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion: 75 Resp: 43520

Ion	Ratio	Lower	Upper
75	100		
77	32.8	25.1	37.7
39	43.6	45.5	68.3#

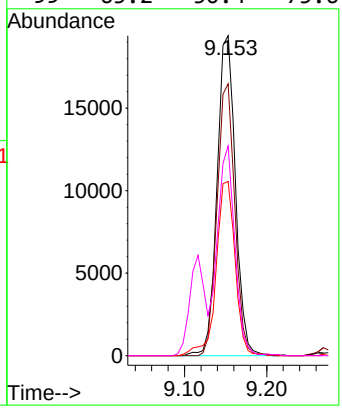




#55
1,1,2-Trichloroethane
Concen: 20.480 ug/l
RT: 9.153 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion: 97 Resp: 3001

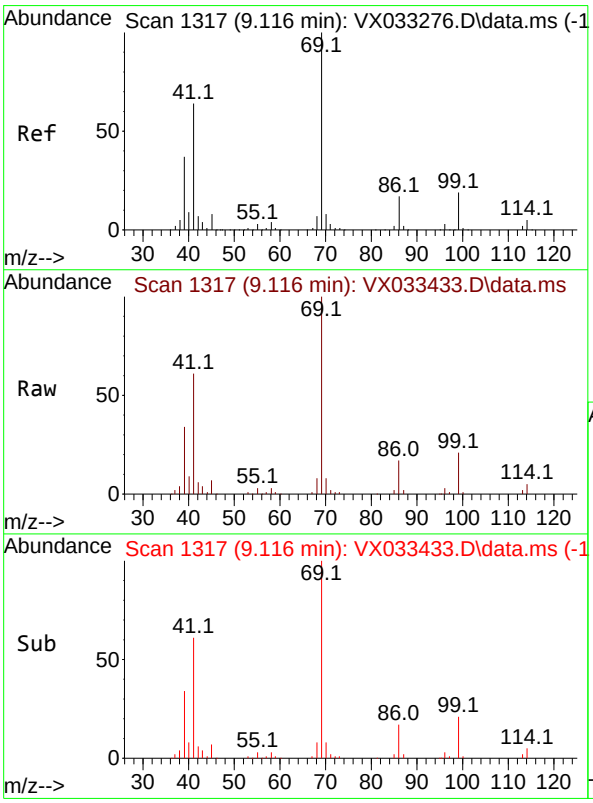
Ion	Ratio	Lower	Upper
97	100		
83	84.9	68.1	102.1
85	54.5	43.3	64.9
99	65.2	50.4	75.6



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBSD01

Manual Integrations
APPROVED

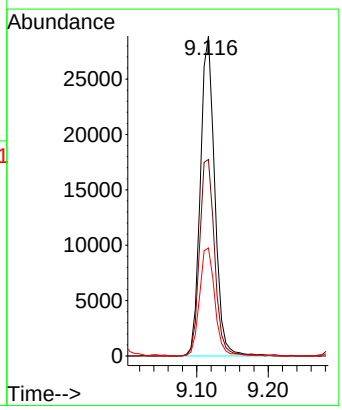
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

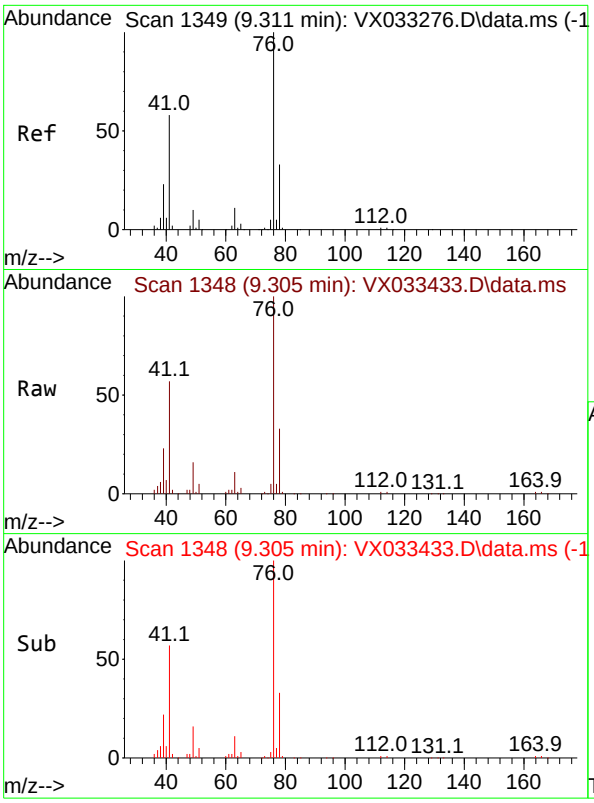


#56
Ethyl methacrylate
Concen: 19.577 ug/l
RT: 9.116 min Scan# 1317
Delta R.T. 0.000 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion: 69 Resp: 40393

Ion	Ratio	Lower	Upper
69	100		
41	64.3	54.3	81.5
39	36.0	35.2	52.8

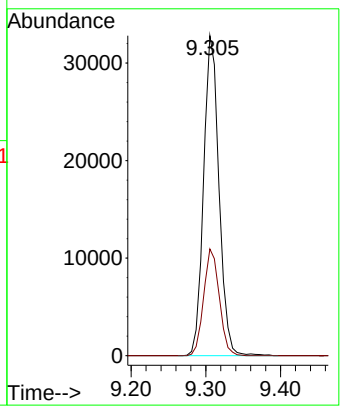




#57
1,3-Dichloropropane
Concen: 19.963 ug/l
RT: 9.305 min Scan# 1
Delta R.T. -0.006 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion: 76 Resp: 4699

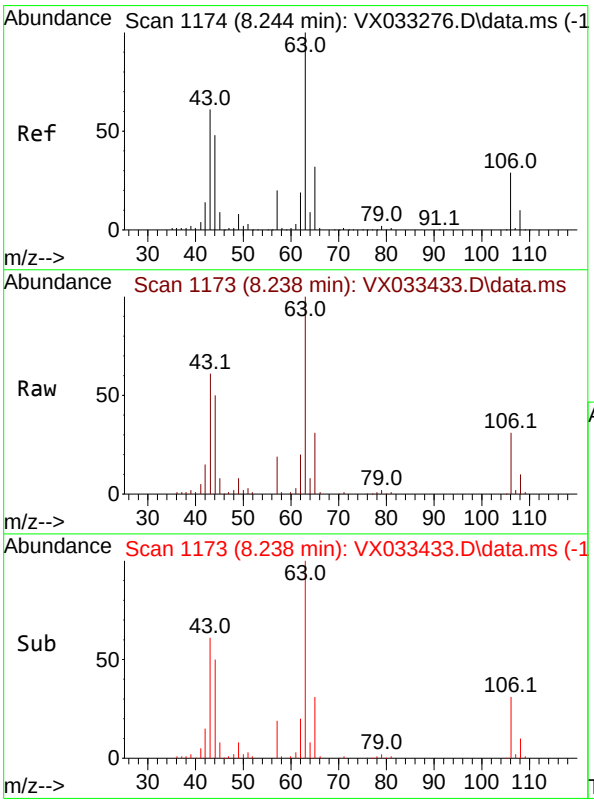
Ion	Ratio	Lower	Upper
76	100		
78	33.8	26.0	39.0



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBSD01

Manual Integrations
APPROVED

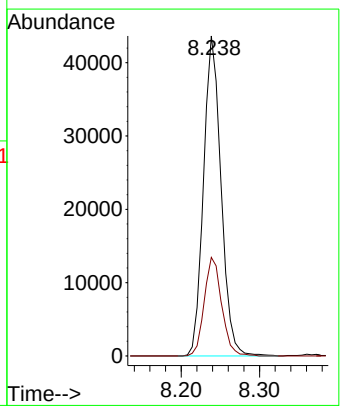
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

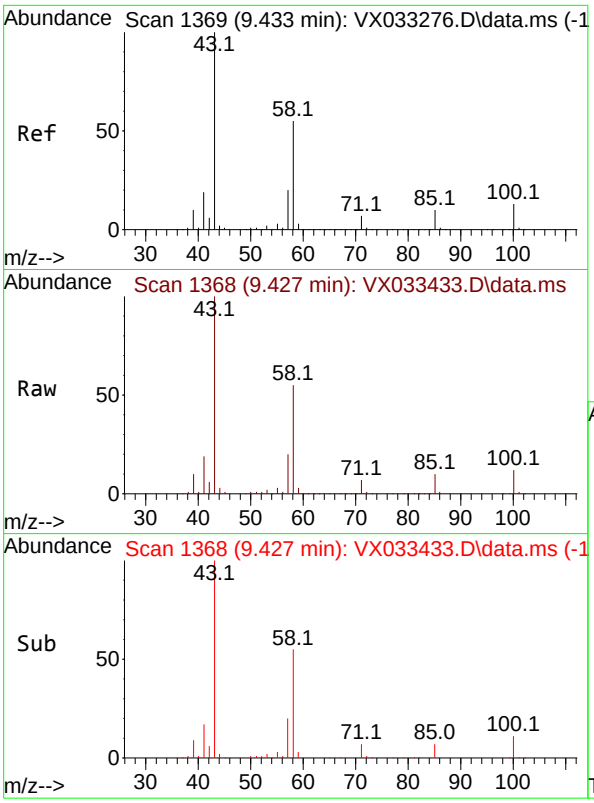


#58
2-Chloroethyl Vinyl ether
Concen: 71.829 ug/l
RT: 8.238 min Scan# 1173
Delta R.T. -0.006 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion: 63 Resp: 67813

Ion	Ratio	Lower	Upper
63	100		
106	30.6	23.3	34.9





#59
2-Hexanone
Concen: 101.000 ug/l
RT: 9.427 min Scan# 1
Delta R.T. -0.006 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

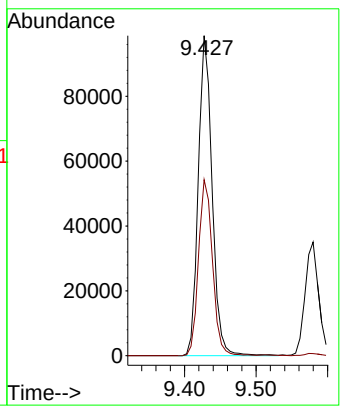
Tgt Ion: 43 Resp: 13239

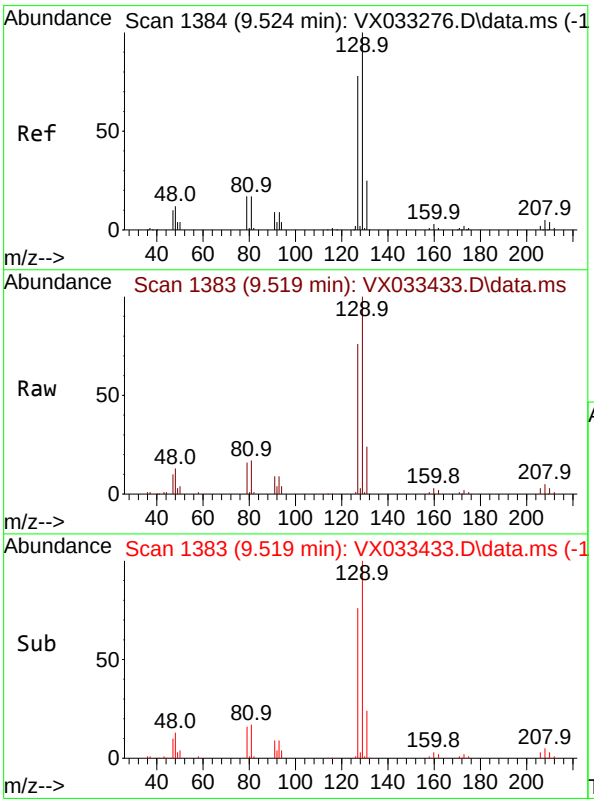
Ion	Ratio	Lower	Upper
43	100		
58	55.6	26.5	79.5

Instrument :
MSVOA_X
ClientSampleId :
VX1215WBSD01

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

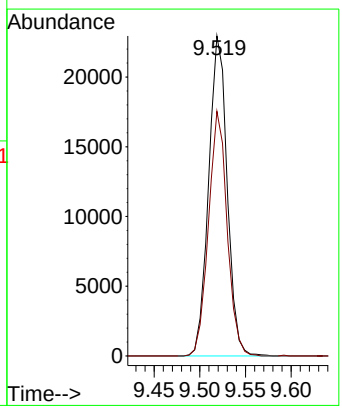


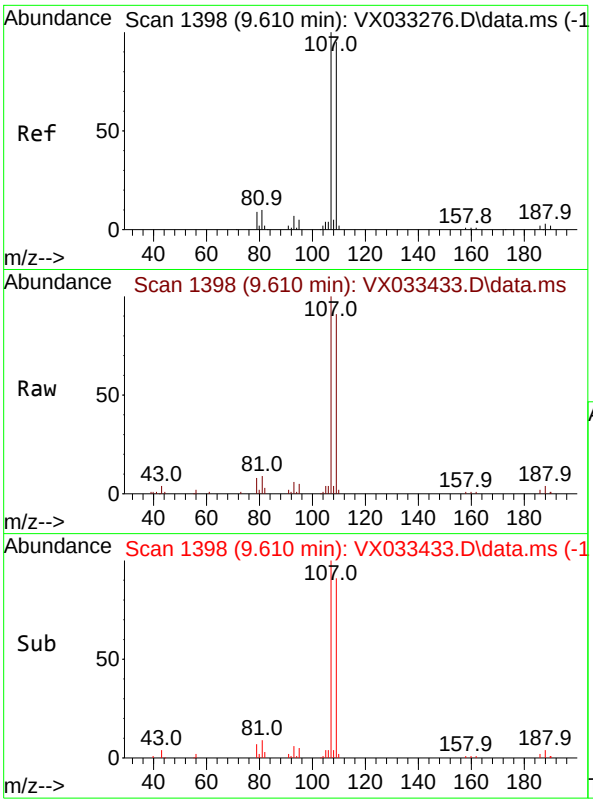


#60
Dibromochloromethane
Concen: 20.042 ug/l
RT: 9.519 min Scan# 1383
Delta R.T. -0.006 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion:129 Resp: 32360

Ion	Ratio	Lower	Upper
129	100		
127	76.9	38.6	115.8





#61
1,2-Dibromoethane
Concen: 19.933 ug/l
RT: 9.610 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

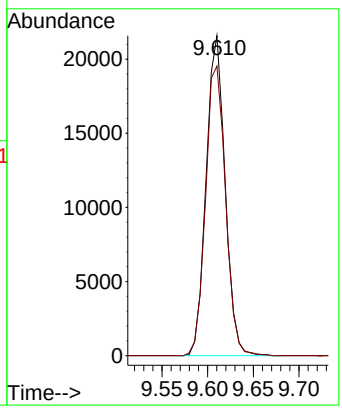
Tgt Ion:107 Resp: 3107

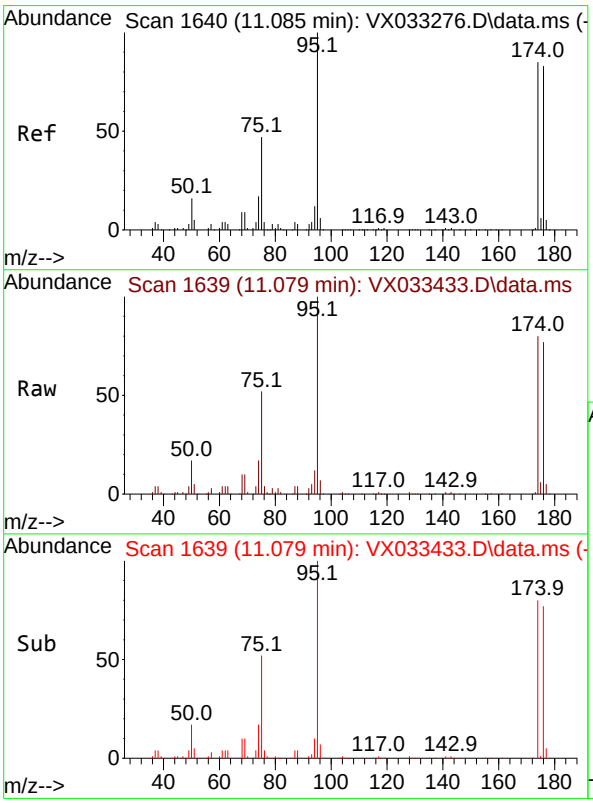
Ion	Ratio	Lower	Upper
107	100		
109	95.4	76.0	114.0

Instrument :
MSVOA_X
ClientSampleId :
VX1215WBSD01

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

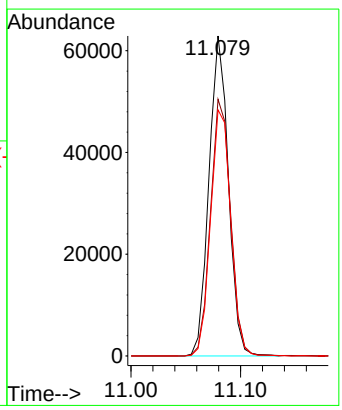


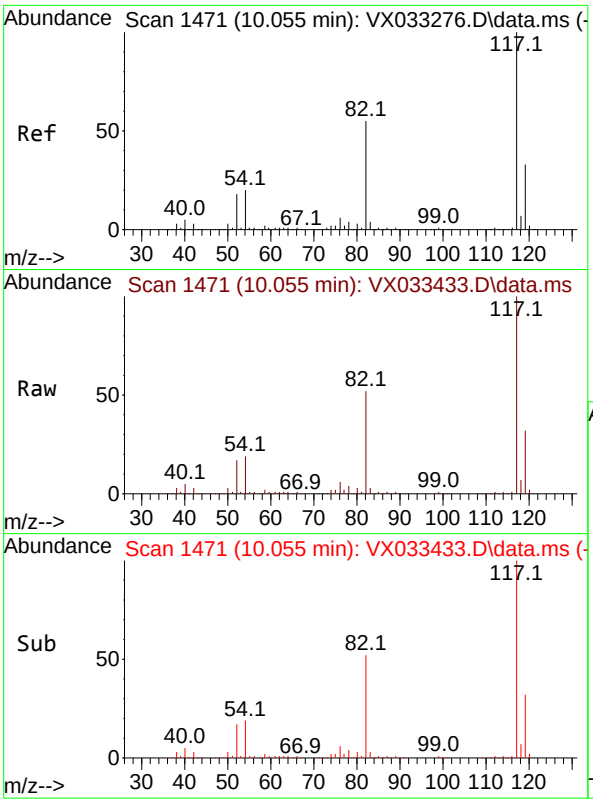


#62
4-Bromofluorobenzene
Concen: 51.077 ug/l
RT: 11.079 min Scan# 1639
Delta R.T. -0.006 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion: 95 Resp: 77494

Ion	Ratio	Lower	Upper
95	100		
174	83.1	0.0	164.0
176	80.0	0.0	154.4

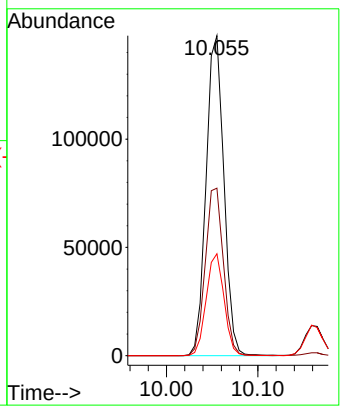




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.055 min Scan# 14
Delta R.T. 0.000 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion:117 Resp: 19947

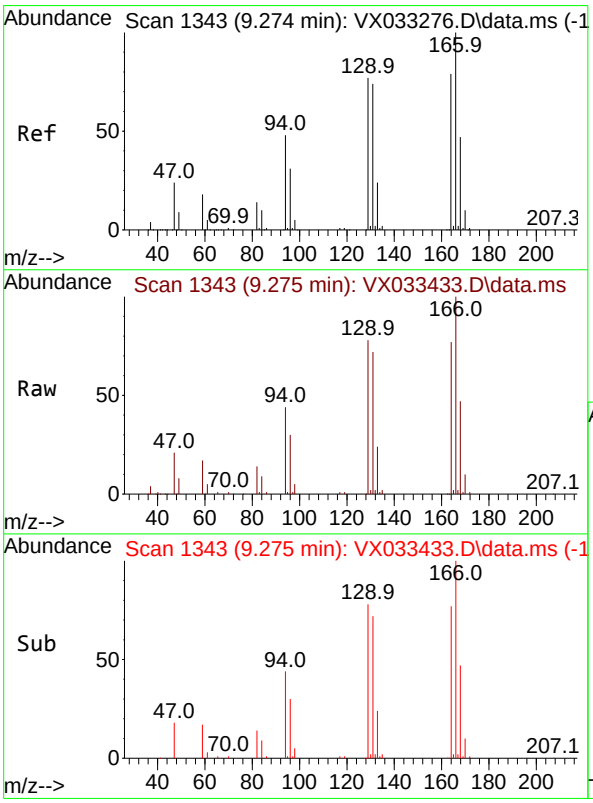
Ion	Ratio	Lower	Upper
117	100		
82	52.4	44.3	66.5
119	31.9	25.7	38.5



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBSD01

Manual Integrations
APPROVED

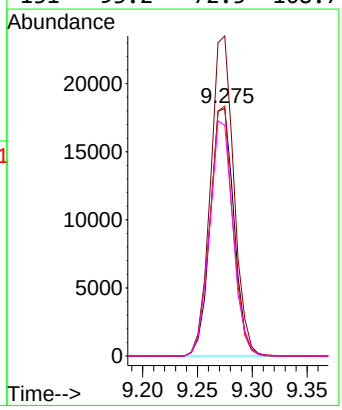
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

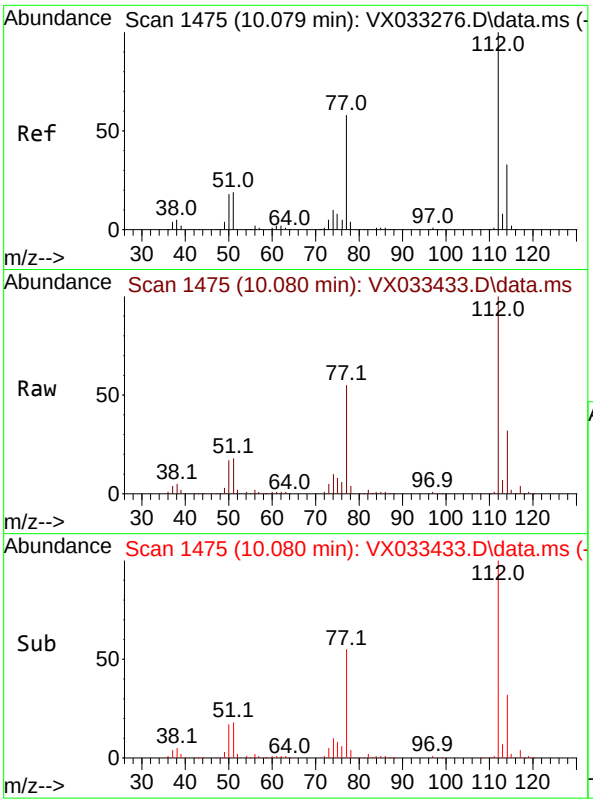


#64
Tetrachloroethene
Concen: 19.946 ug/l
RT: 9.275 min Scan# 1343
Delta R.T. 0.000 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion:164 Resp: 27206

Ion	Ratio	Lower	Upper
164	100		
166	129.3	105.4	158.2
129	100.9	78.2	117.2
131	93.2	72.5	108.7

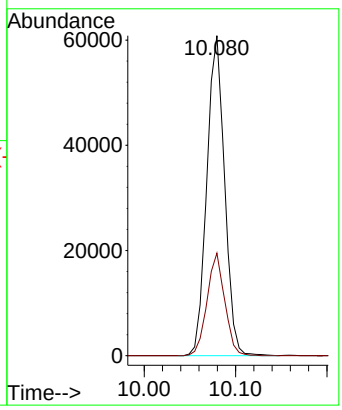




#65
Chlorobenzene
Concen: 20.287 ug/l
RT: 10.080 min Scan# 14
Delta R.T. 0.000 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion:112 Resp: 8194

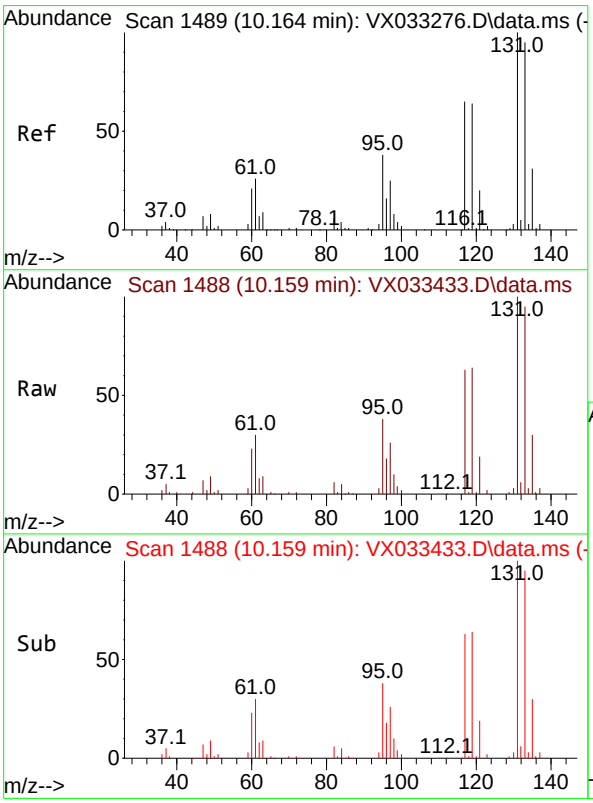
Ion	Ratio	Lower	Upper
112	100		
114	32.1	25.4	38.2



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBSD01

Manual Integrations
APPROVED

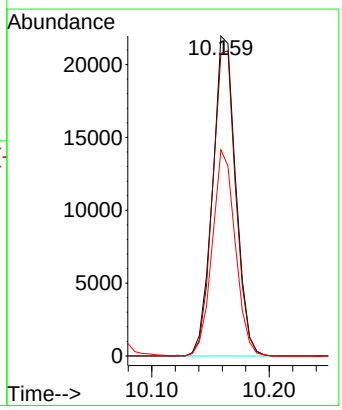
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

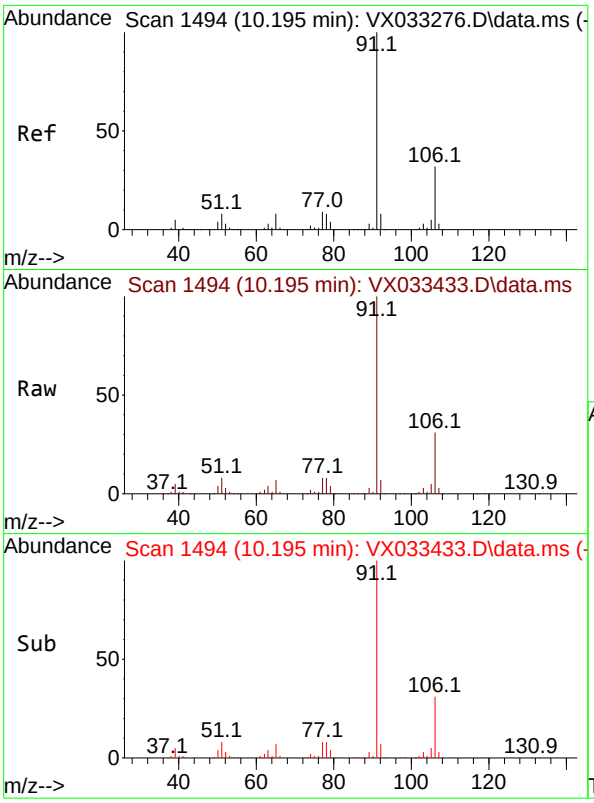


#66
1,1,1,2-Tetrachloroethane
Concen: 19.762 ug/l
RT: 10.159 min Scan# 1488
Delta R.T. -0.006 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion:131 Resp: 30166

Ion	Ratio	Lower	Upper
131	100		
133	95.8	47.6	142.9
119	63.9	32.4	97.0





#67
Ethyl Benzene
Concen: 20.695 ug/l
RT: 10.195 min Scan# 14
Delta R.T. 0.000 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

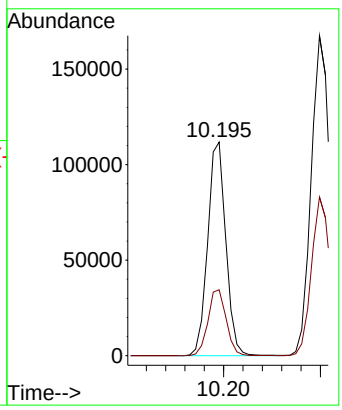
Tgt Ion: 91 Resp: 14563

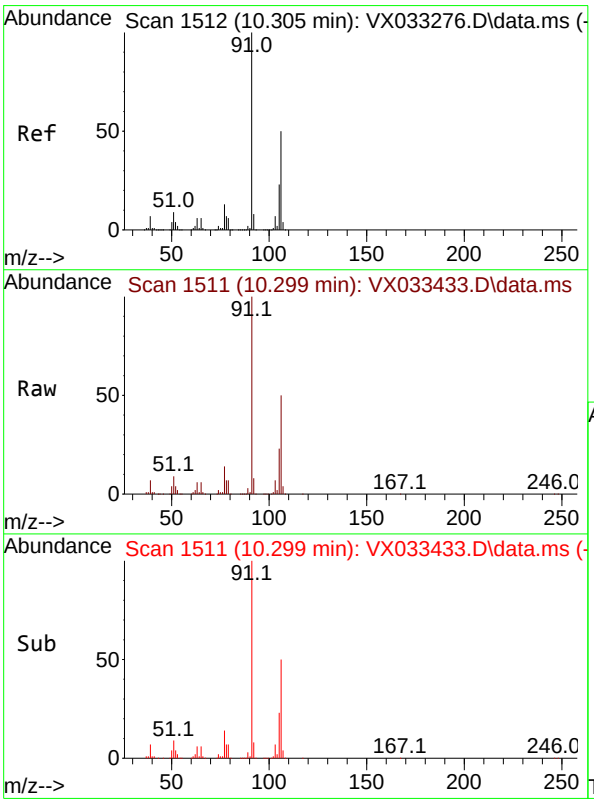
Ion	Ratio	Lower	Upper
91	100		
106	30.9	25.0	37.6

Instrument :
MSVOA_X
ClientSampleId :
VX1215WBSD01

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

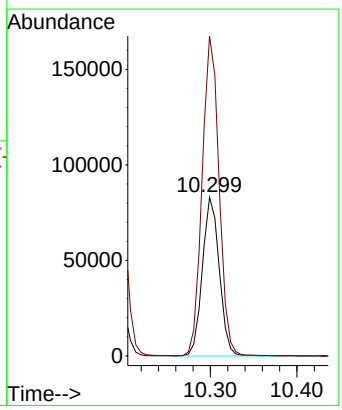


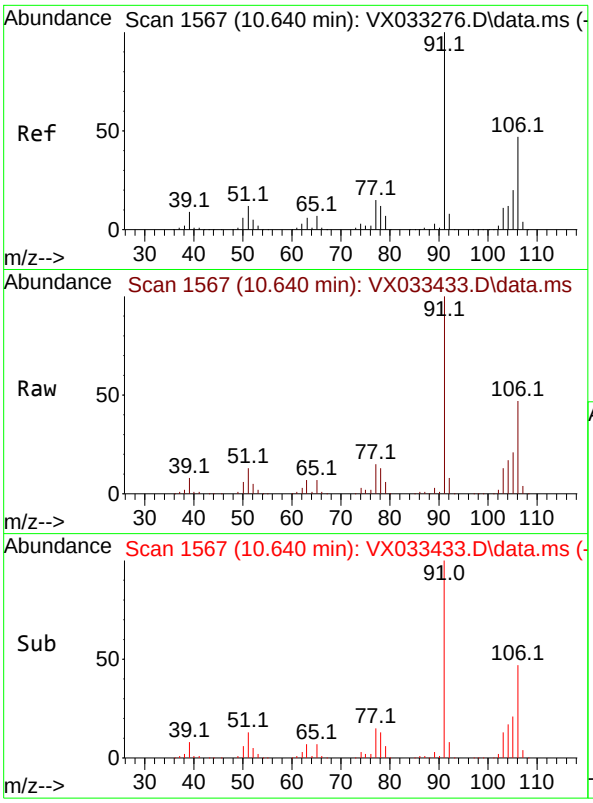


#68
m/p-Xylenes
Concen: 41.043 ug/l
RT: 10.299 min Scan# 1511
Delta R.T. -0.006 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion:106 Resp: 112373

Ion	Ratio	Lower	Upper
106	100		
91	203.0	164.5	246.7

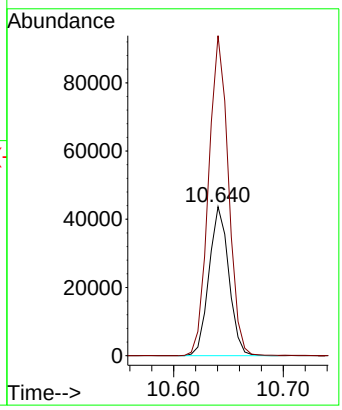




#69
o-Xylene
Concen: 20.259 ug/l
RT: 10.640 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion:106 Resp: 5482

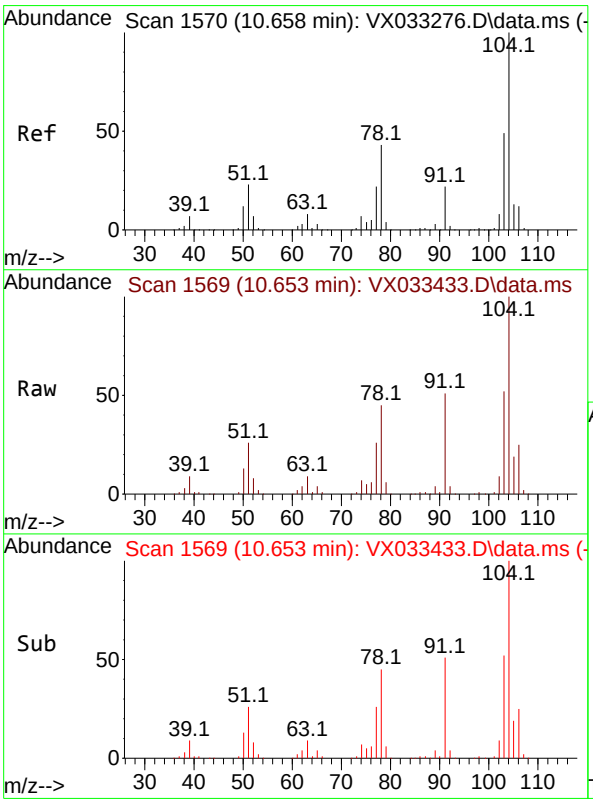
Ion	Ratio	Lower	Upper
106	100		
91	215.4	109.2	327.6



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBSD01

Manual Integrations
APPROVED

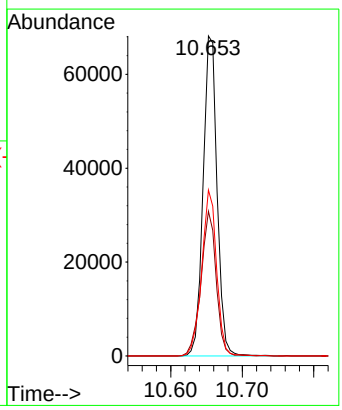
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

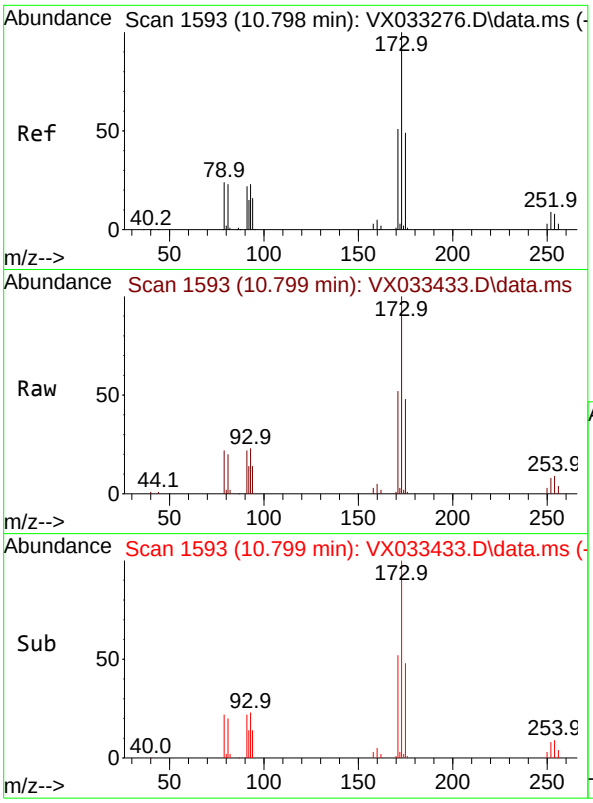


#70
Styrene
Concen: 20.918 ug/l
RT: 10.653 min Scan# 1569
Delta R.T. -0.006 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion:104 Resp: 92716

Ion	Ratio	Lower	Upper
104	100		
78	49.1	41.8	62.8
103	55.1	44.5	66.7

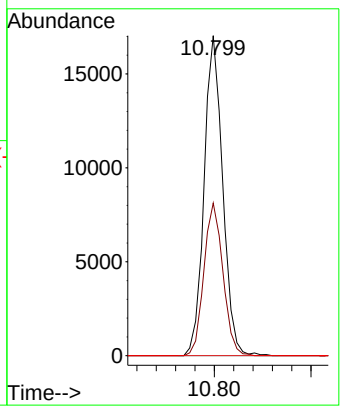




#71
Bromoform
Concen: 18.856 ug/l
RT: 10.799 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

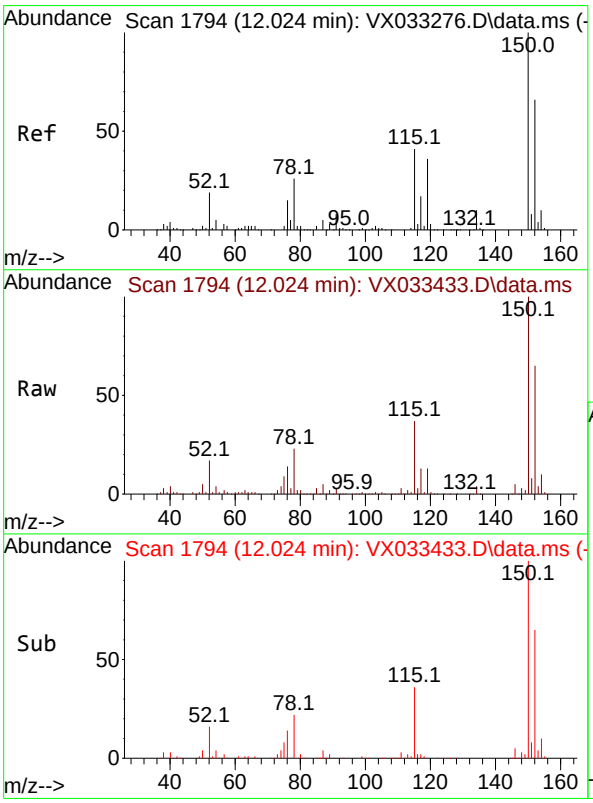
Tgt Ion:173 Resp: 2278

Ion	Ratio	Lower	Upper
173	100		
175	48.8	23.9	71.8
254	0.0	0.0	0.0



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBSD01

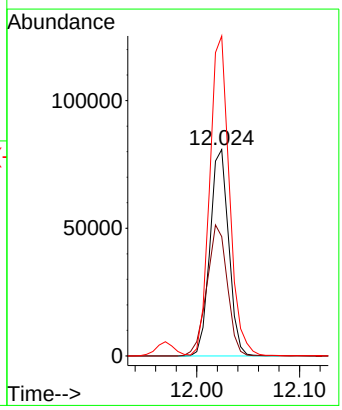
Manual Integrations
APPROVED
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

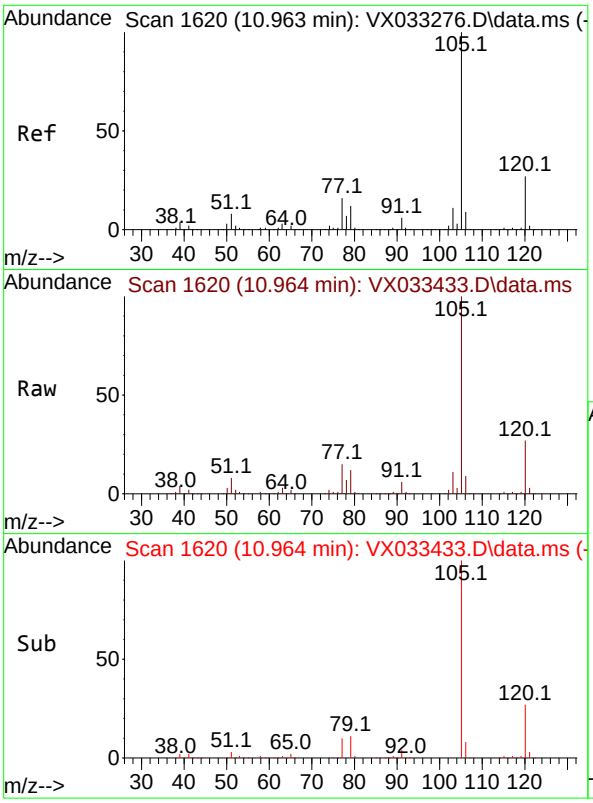


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.024 min Scan# 1794
Delta R.T. 0.000 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion:152 Resp: 101751

Ion	Ratio	Lower	Upper
152	100		
115	69.6	44.0	132.0
150	162.8	0.0	351.8

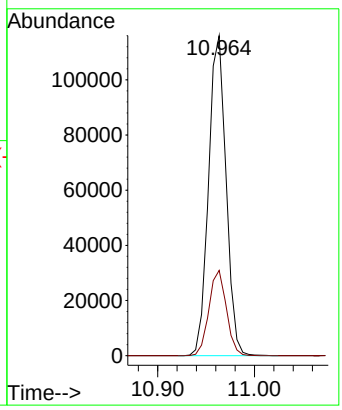




#73
Isopropylbenzene
Concen: 19.794 ug/l
RT: 10.964 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion:105 Resp: 14597

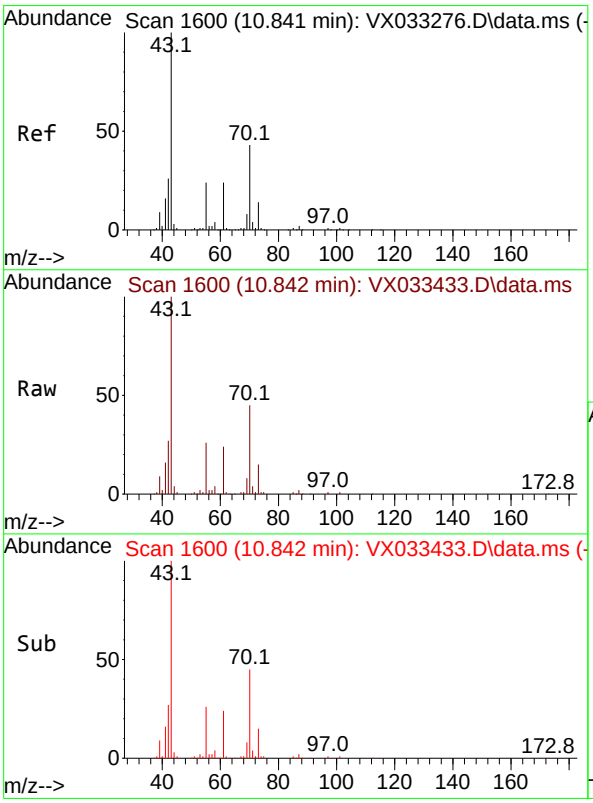
Ion	Ratio	Lower	Upper
105	100		
120	26.6	13.1	39.3



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBSD01

Manual Integrations
APPROVED

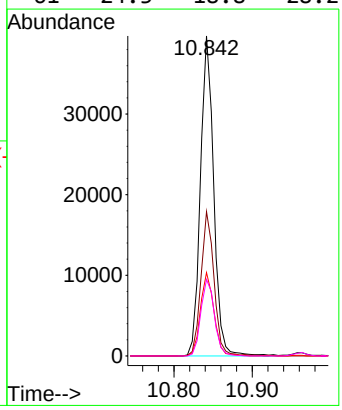
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

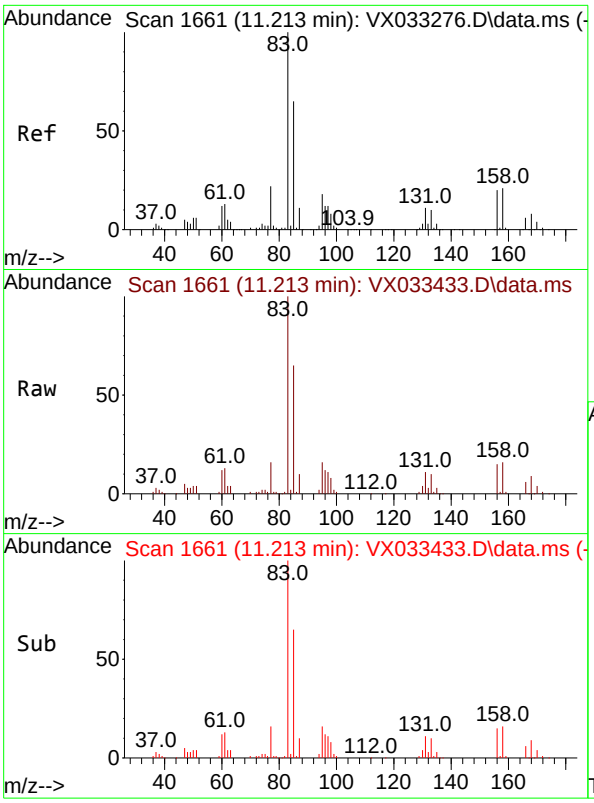


#74
N-amyl acetate
Concen: 18.599 ug/l
RT: 10.842 min Scan# 1600
Delta R.T. 0.000 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion: 43 Resp: 46798

Ion	Ratio	Lower	Upper
43	100		
70	44.4	33.6	50.4
55	26.5	19.4	29.2
61	24.3	18.8	28.2

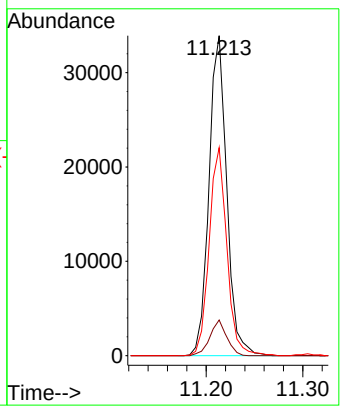




#75
1,1,2,2-Tetrachloroethane
Concen: 18.529 ug/l
RT: 11.213 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion: 83 Resp: 4335

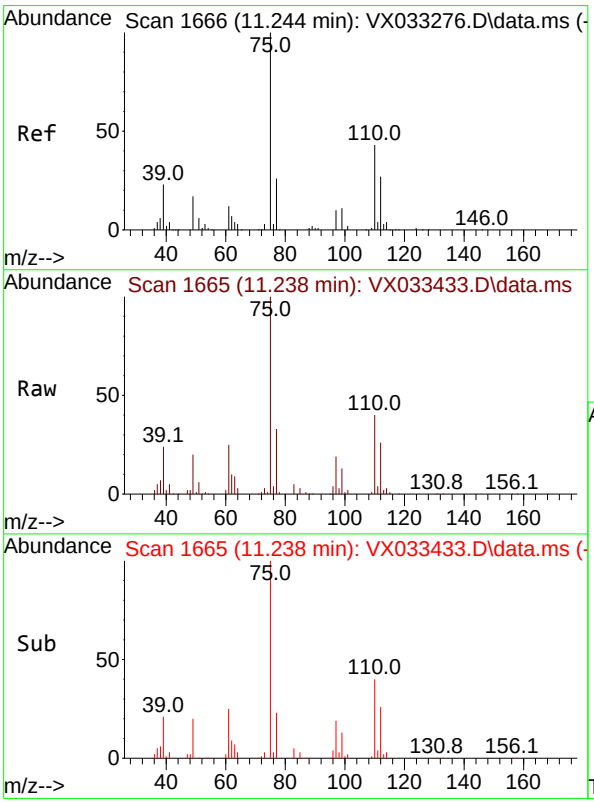
Ion	Ratio	Lower	Upper
83	100		
131	10.6	5.4	16.2
85	64.8	31.9	95.9



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBSD01

Manual Integrations
APPROVED

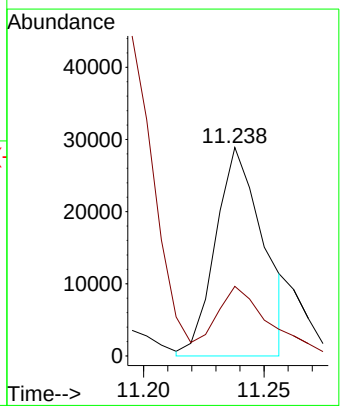
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

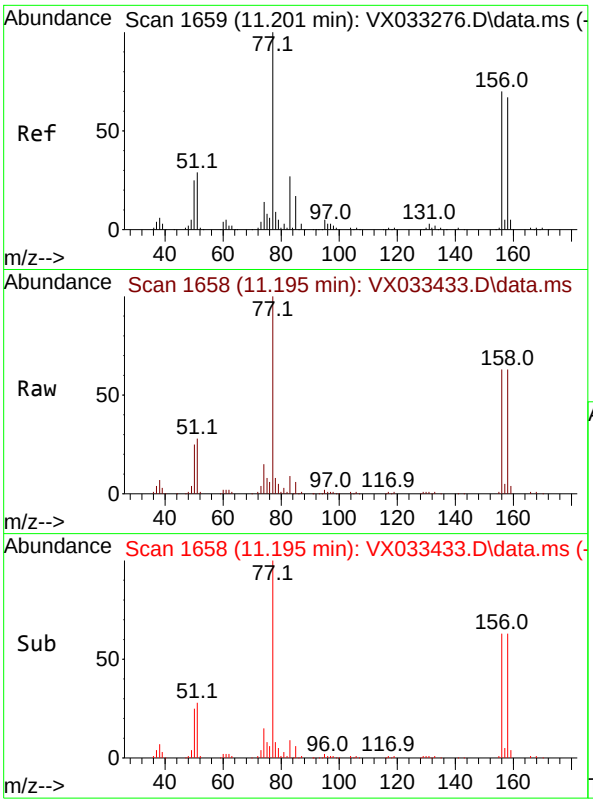


#76
1,2,3-Trichloropropane
Concen: 19.163 ug/l m
RT: 11.238 min Scan# 1665
Delta R.T. -0.006 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion: 75 Resp: 39670

Ion	Ratio	Lower	Upper
75	100		
77	37.6	20.0	60.0

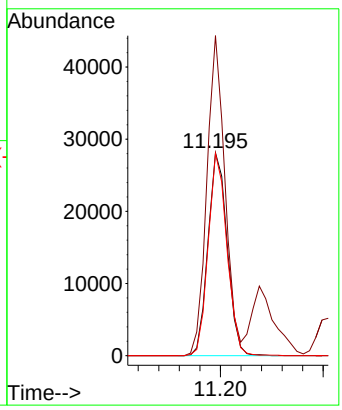




#77
Bromobenzene
Concen: 19.565 ug/l
RT: 11.195 min Scan# 1
Delta R.T. -0.006 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion:156 Resp: 3643

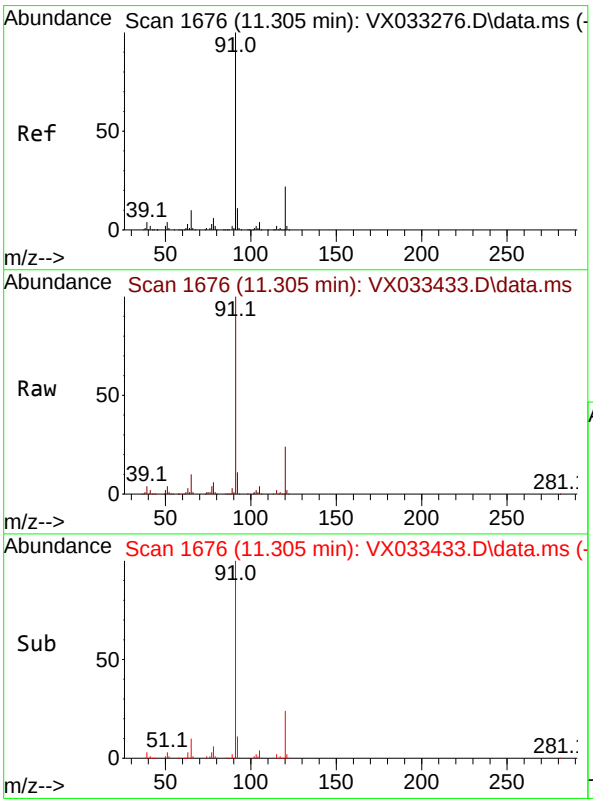
Ion	Ratio	Lower	Upper
156	100		
77	149.1	76.1	228.4
158	97.5	48.8	146.3



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBSD01

Manual Integrations
APPROVED

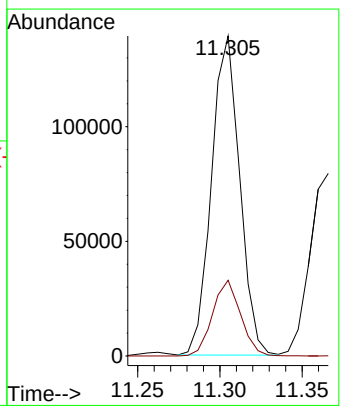
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

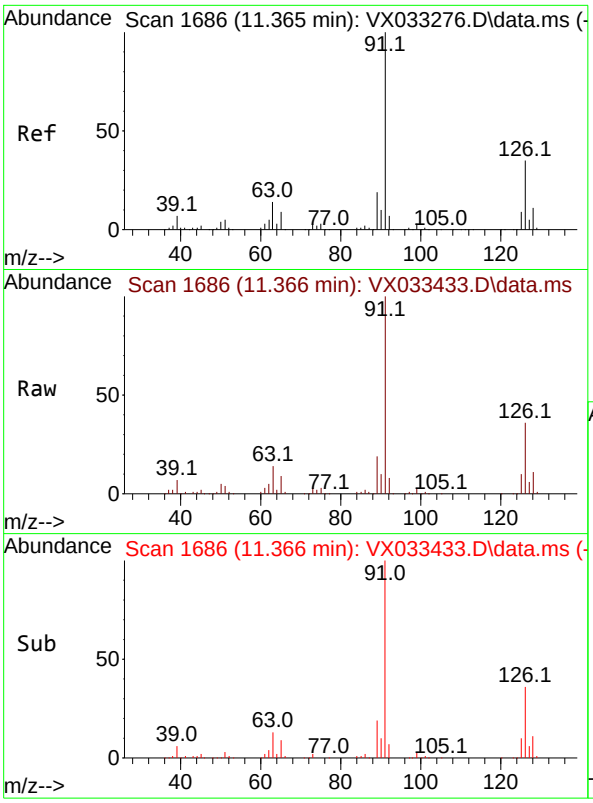


#78
n-propylbenzene
Concen: 20.170 ug/l
RT: 11.305 min Scan# 1676
Delta R.T. 0.000 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion: 91 Resp: 166094

Ion	Ratio	Lower	Upper
91	100		
120	23.6	11.6	34.8





#79
2-Chlorotoluene
Concen: 19.808 ug/l
RT: 11.366 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

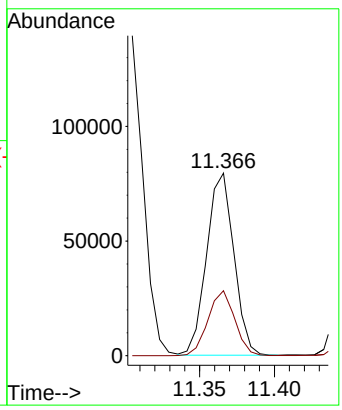
Tgt Ion: 91 Resp: 10080

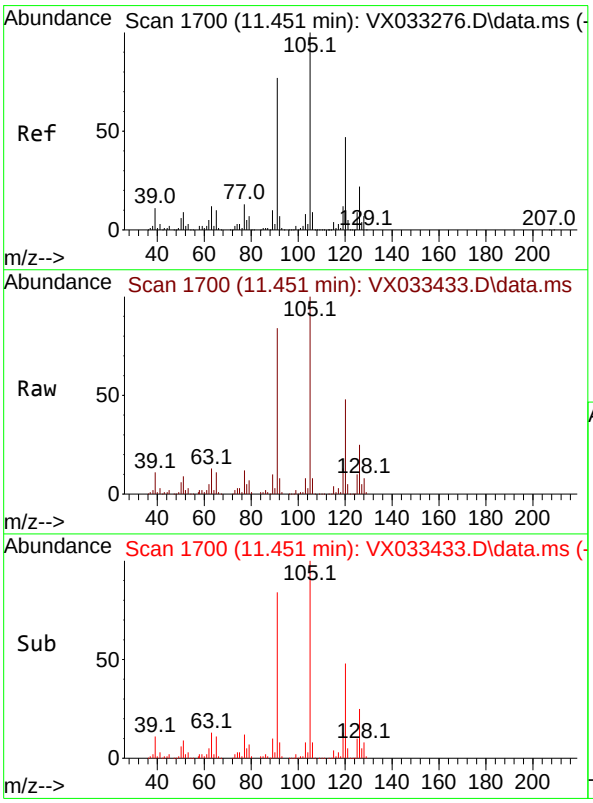
Ion	Ratio	Lower	Upper
91	100		
126	35.0	17.1	51.2

Instrument :
MSVOA_X
ClientSampleId :
VX1215WBSD01

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

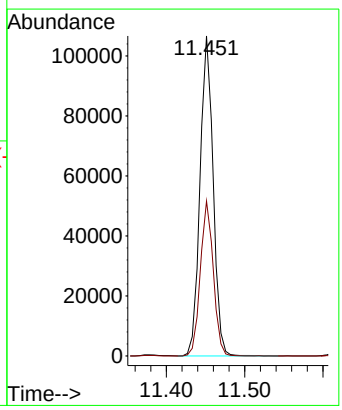


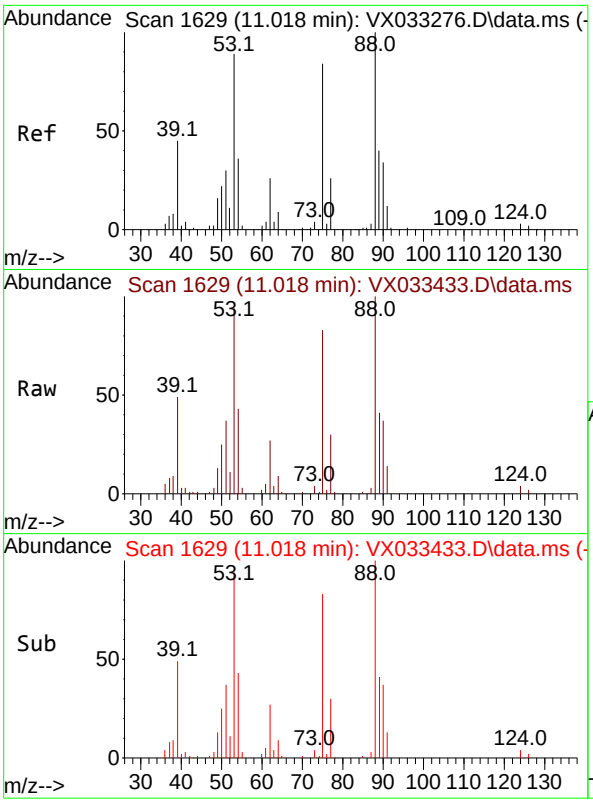


#80
1,3,5-Trimethylbenzene
Concen: 20.207 ug/l
RT: 11.451 min Scan# 1700
Delta R.T. 0.000 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion:105 Resp: 124051

Ion	Ratio	Lower	Upper
105	100		
120	47.7	23.6	71.0

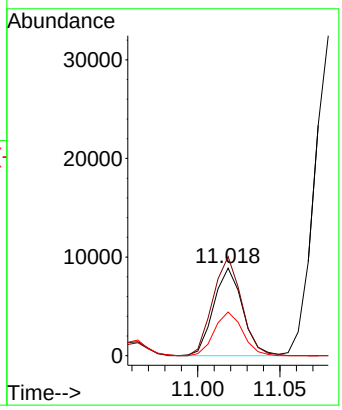




#81
trans-1,4-Dichloro-2-butene
Concen: 16.389 ug/l
RT: 11.018 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion: 75 Resp: 1090

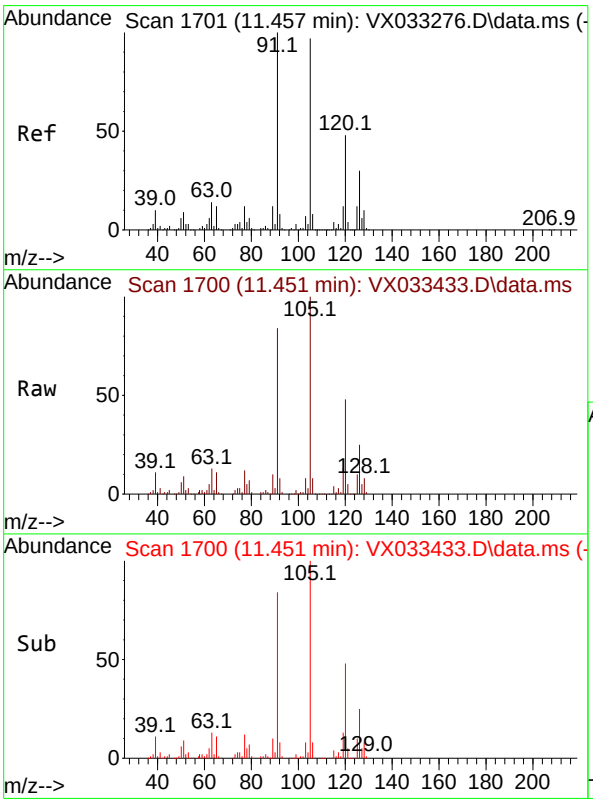
Ion	Ratio	Lower	Upper
75	100		
53	111.6	86.9	130.3
89	48.5	38.3	57.5



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBSD01

Manual Integrations
APPROVED

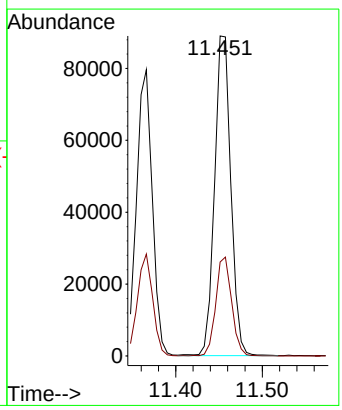
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

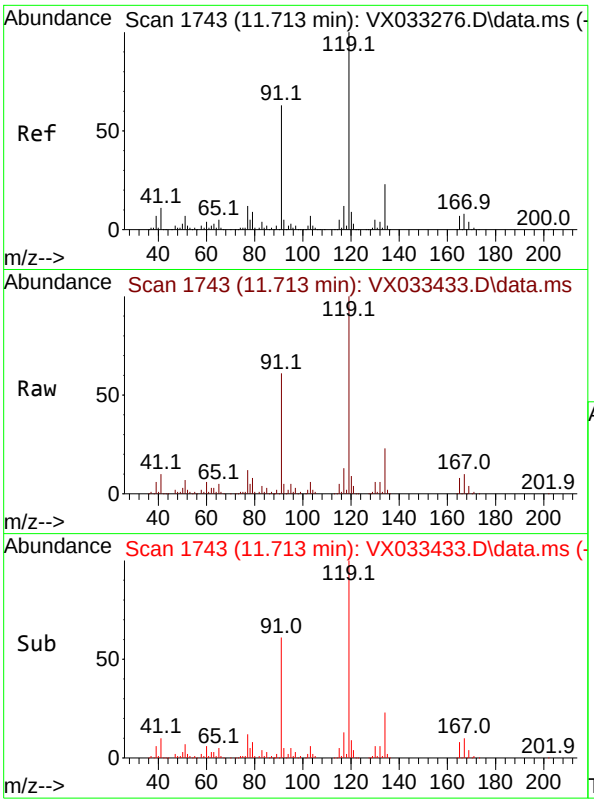


#82
4-Chlorotoluene
Concen: 19.633 ug/l
RT: 11.451 min Scan# 1700
Delta R.T. -0.006 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion: 91 Resp: 116180

Ion	Ratio	Lower	Upper
91	100		
126	30.3	14.8	44.4

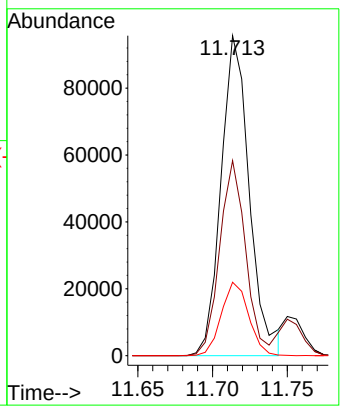




#83
tert-Butylbenzene
Concen: 20.539 ug/l
RT: 11.713 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion:119 Resp: 12573

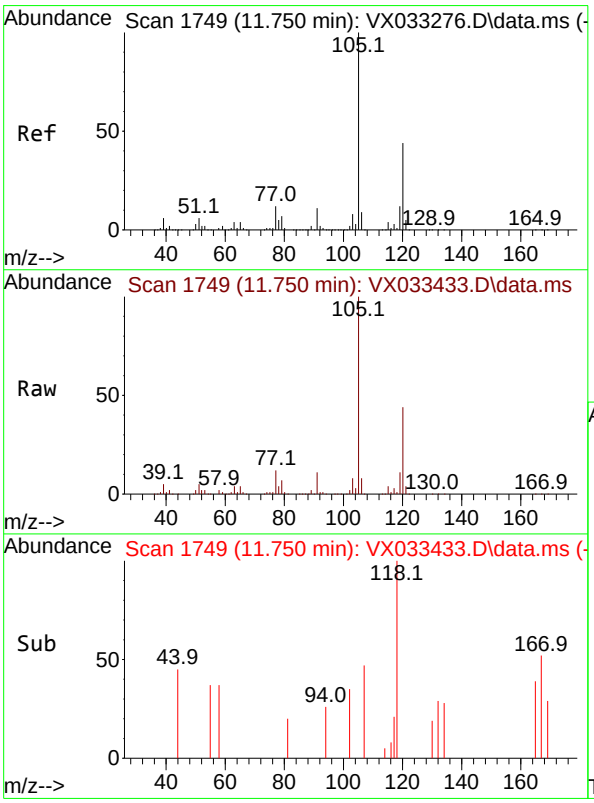
Ion	Ratio	Lower	Upper
119	100		
91	56.1	29.4	88.2
134	22.3	11.0	33.0



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBSD01

Manual Integrations
APPROVED

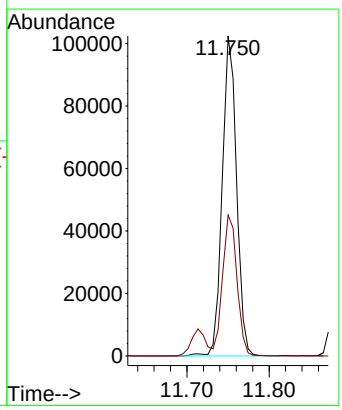
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

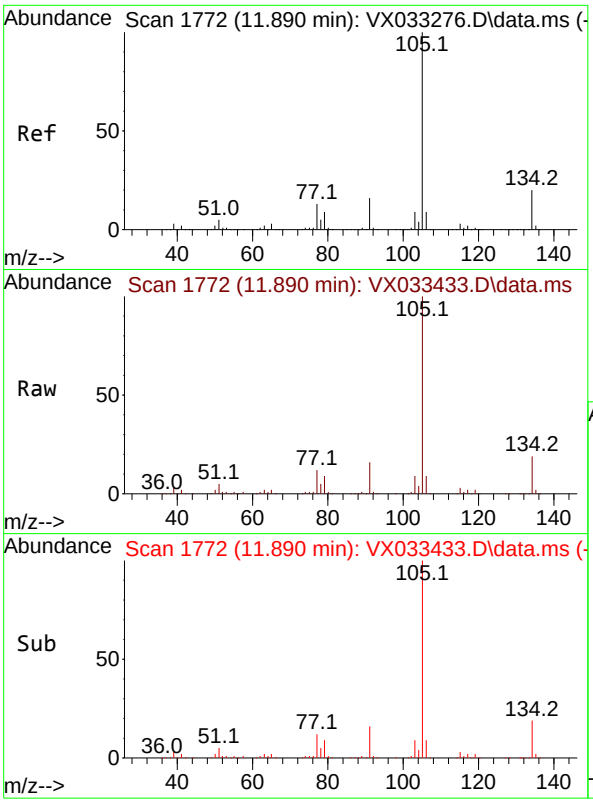


#84
1,2,4-Trimethylbenzene
Concen: 20.224 ug/l
RT: 11.750 min Scan# 1749
Delta R.T. 0.000 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion:105 Resp: 123934

Ion	Ratio	Lower	Upper
105	100		
120	44.2	21.9	65.5

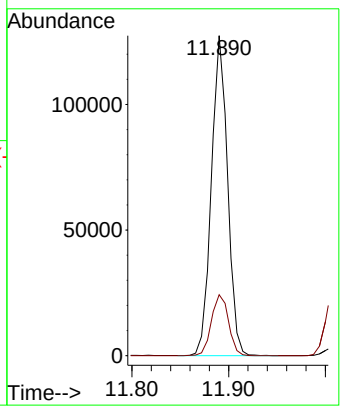




#85
sec-Butylbenzene
Concen: 20.734 ug/l
RT: 11.890 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion:105 Resp: 14809

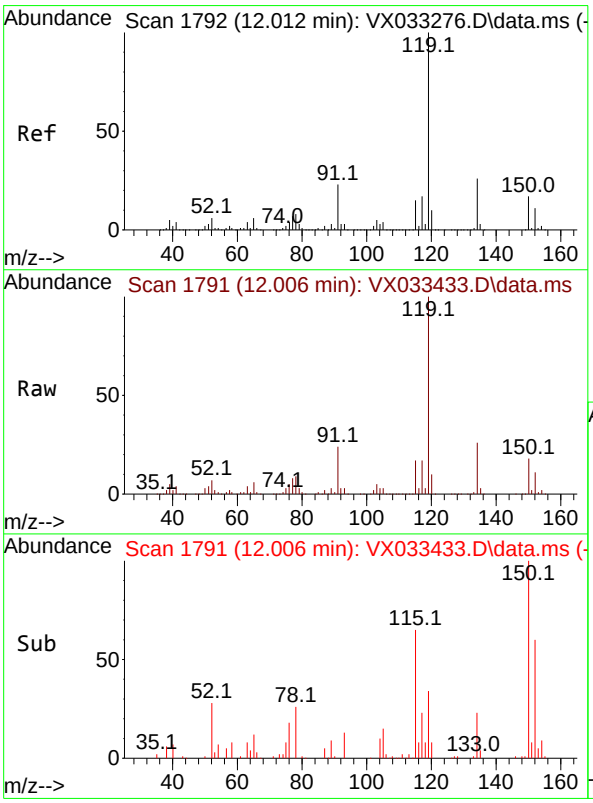
Ion	Ratio	Lower	Upper
105	100		
134	20.2	9.9	29.7



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBSD01

Manual Integrations
APPROVED

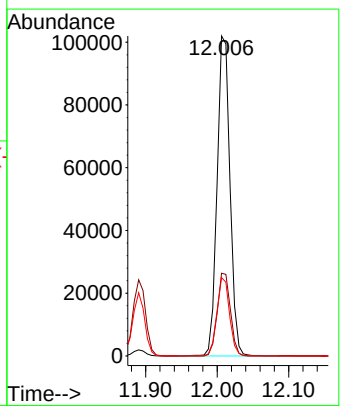
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

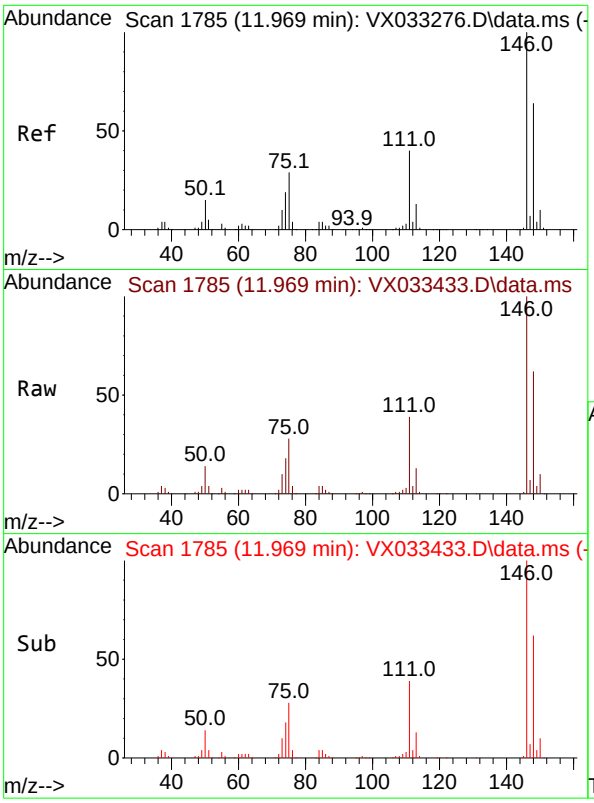


#86
p-Isopropyltoluene
Concen: 20.695 ug/l
RT: 12.006 min Scan# 1791
Delta R.T. -0.006 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion:119 Resp: 127436

Ion	Ratio	Lower	Upper
119	100		
134	26.2	12.9	38.7
91	24.1	12.5	37.5

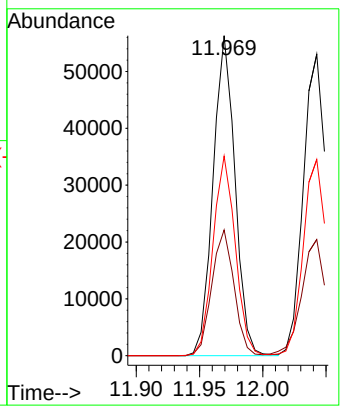




#87
1,3-Dichlorobenzene
Concen: 20.082 ug/l
RT: 11.969 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion:146 Resp: 6774

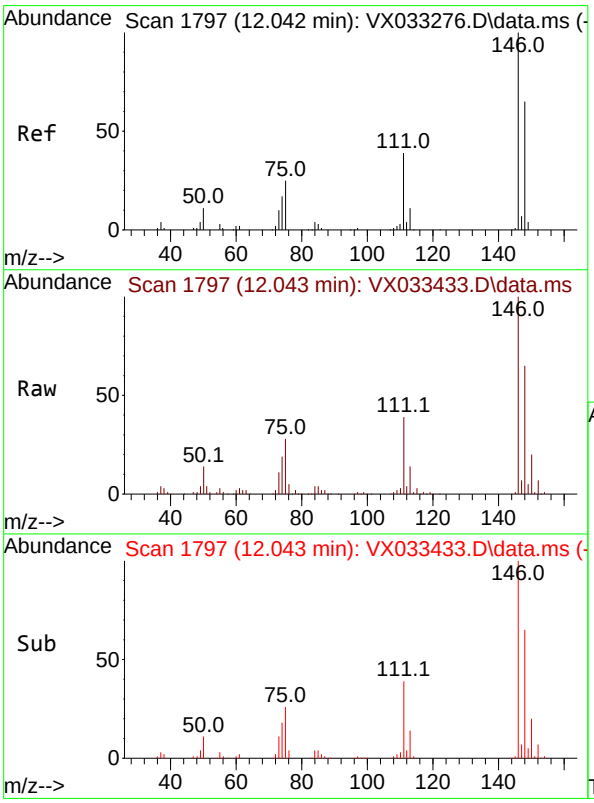
Ion	Ratio	Lower	Upper
146	100		
111	39.9	20.6	61.8
148	63.5	31.7	95.1



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBSD01

Manual Integrations
APPROVED

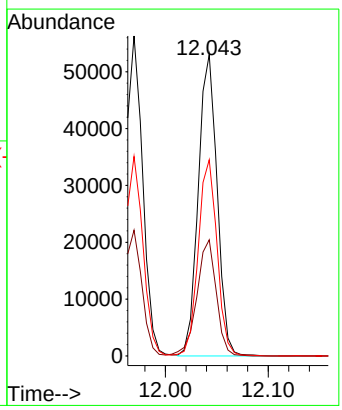
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

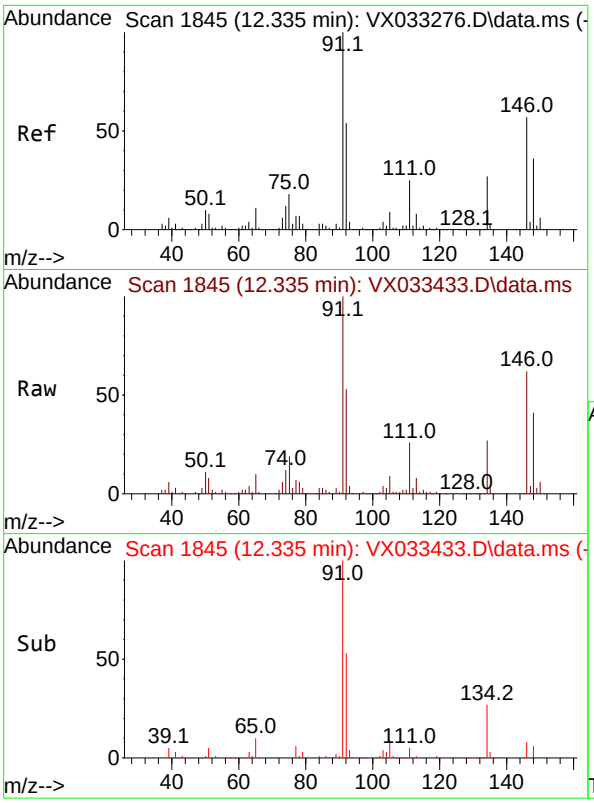


#88
1,4-Dichlorobenzene
Concen: 19.691 ug/l
RT: 12.043 min Scan# 1797
Delta R.T. 0.000 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion:146 Resp: 67854

Ion	Ratio	Lower	Upper
146	100		
111	39.8	20.5	61.6
148	65.2	32.2	96.6





#89
n-Butylbenzene
Concen: 21.017 ug/l
RT: 12.335 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

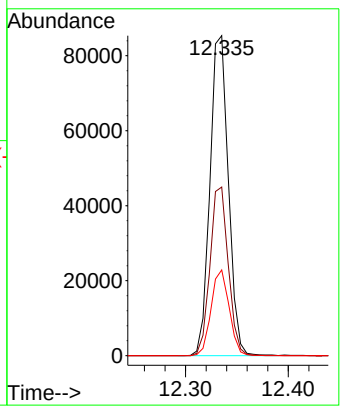
Tgt Ion: 91 Resp: 10600

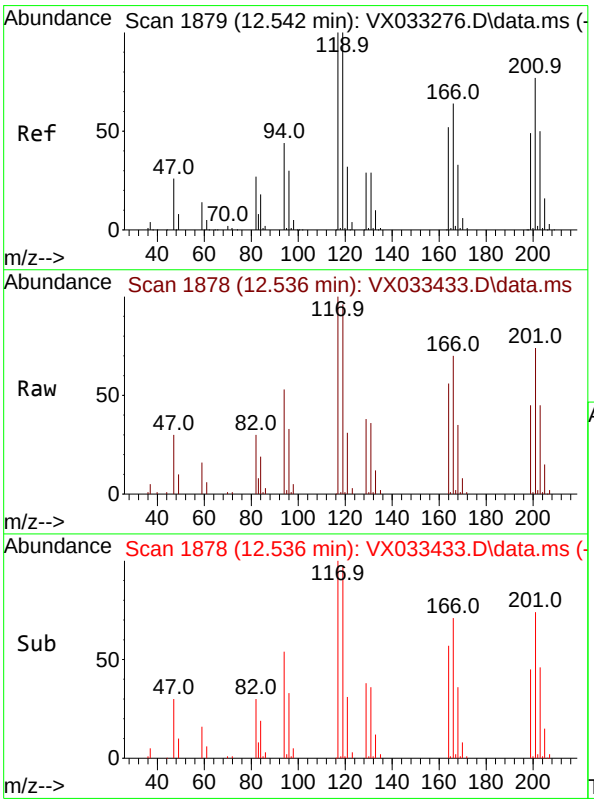
Ion	Ratio	Lower	Upper
91	100		
92	52.4	26.2	78.6
134	26.3	12.9	38.6

Instrument :
MSVOA_X
ClientSampleId :
VX1215WBSD01

Manual Integrations
APPROVED

Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

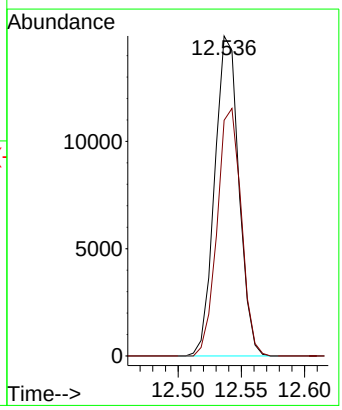


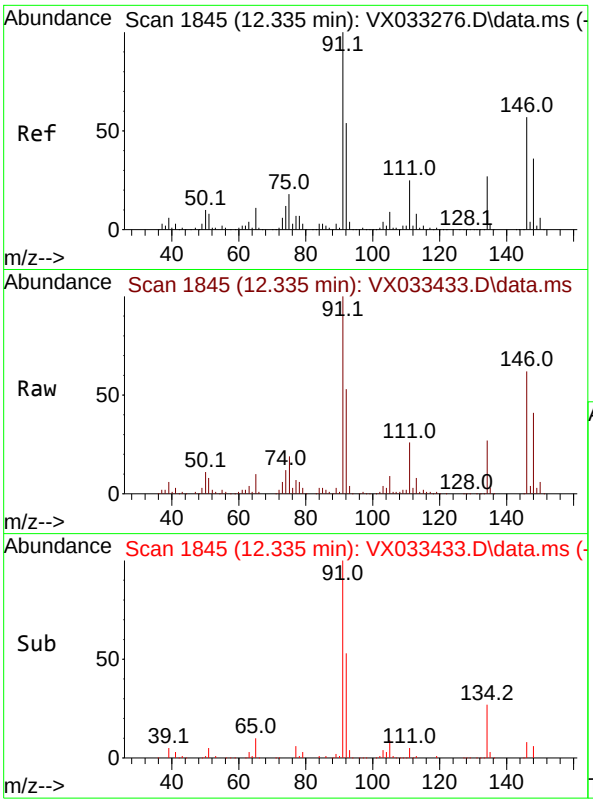


#90
Hexachloroethane
Concen: 18.887 ug/l
RT: 12.536 min Scan# 1878
Delta R.T. -0.006 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion:117 Resp: 19769

Ion	Ratio	Lower	Upper
117	100		
201	77.2	37.6	112.9

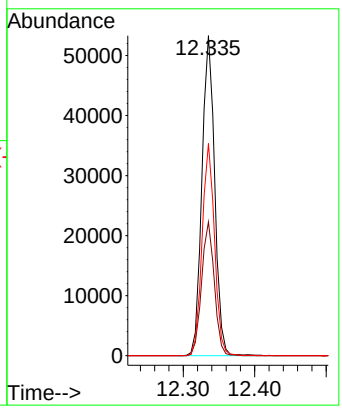




#91
1,2-Dichlorobenzene
Concen: 19.552 ug/l
RT: 12.335 min Scan# 1
Delta R.T. 0.000 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion:146 Resp: 6594

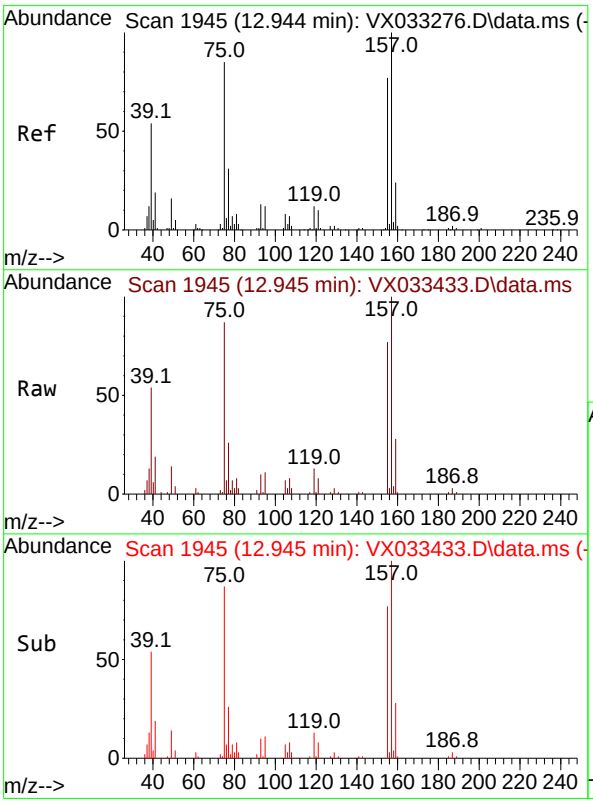
Ion	Ratio	Lower	Upper
146	100		
111	41.6	21.5	64.5
148	64.8	32.0	96.2



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBSD01

Manual Integrations
APPROVED

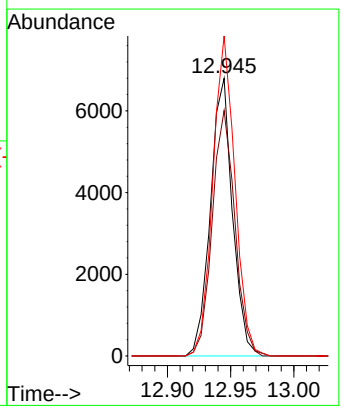
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

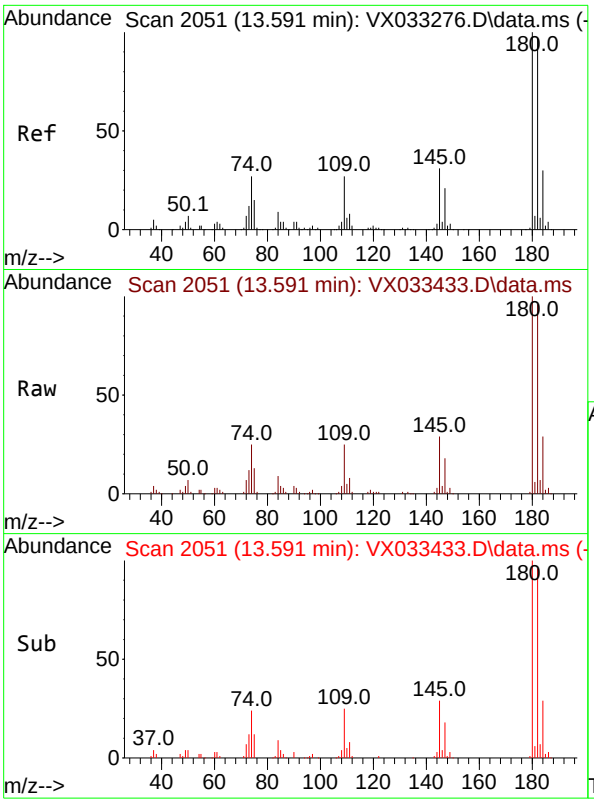


#92
1,2-Dibromo-3-Chloropropane
Concen: 16.330 ug/l
RT: 12.945 min Scan# 1945
Delta R.T. 0.000 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion: 75 Resp: 8253

Ion	Ratio	Lower	Upper
75	100		
155	90.1	41.6	124.8
157	115.1	54.1	162.4

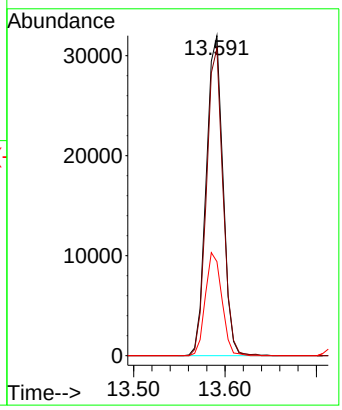




#93
1,2,4-Trichlorobenzene
Concen: 19.878 ug/l
RT: 13.591 min Scan# 2
Delta R.T. 0.000 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion:180 Resp: 4049

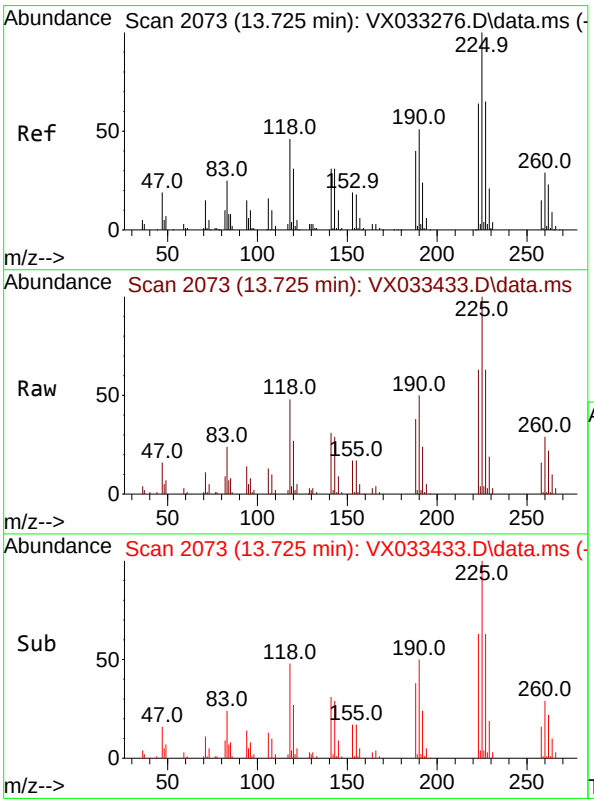
Ion	Ratio	Lower	Upper
180	100		
182	94.7	48.4	145.0
145	31.8	16.2	48.5



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBSD01

Manual Integrations
APPROVED

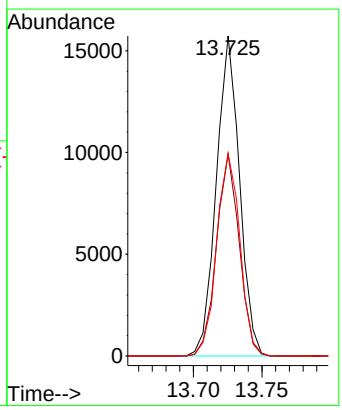
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022

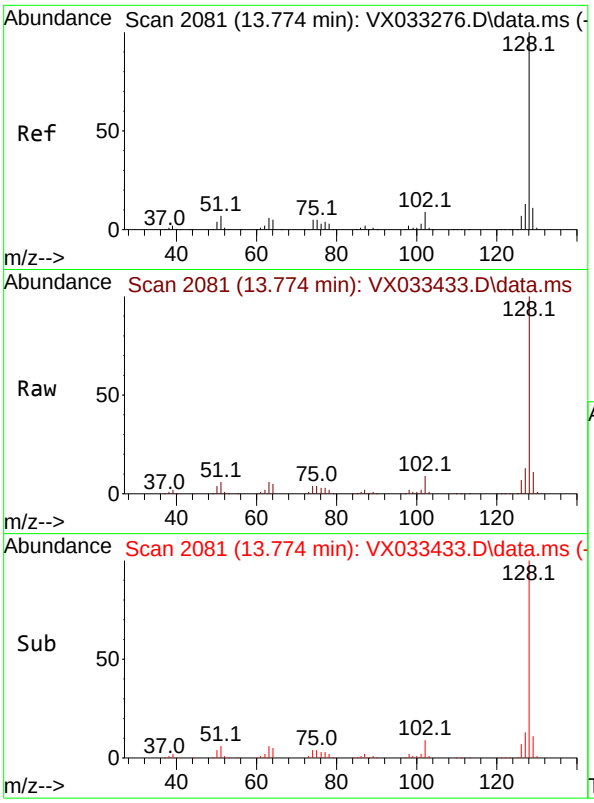


#94
Hexachlorobutadiene
Concen: 22.631 ug/l
RT: 13.725 min Scan# 2073
Delta R.T. 0.000 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion:225 Resp: 18460

Ion	Ratio	Lower	Upper
225	100		
223	62.0	31.9	95.9
227	63.5	31.9	95.5

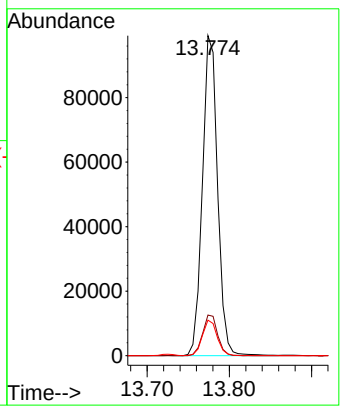




#95
Naphthalene
Concen: 18.691 ug/l
RT: 13.774 min Scan# 2
Delta R.T. 0.000 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion:128 Resp: 12700

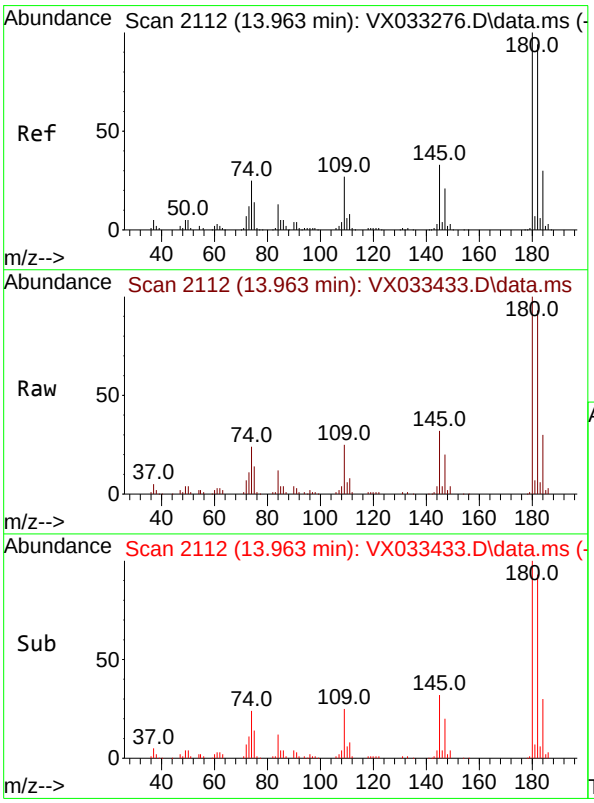
Ion	Ratio	Lower	Upper
128	100		
127	12.5	10.2	15.4
129	10.9	8.9	13.3



Instrument :
MSVOA_X
ClientSampleId :
VX1215WBSD01

Manual Integrations
APPROVED

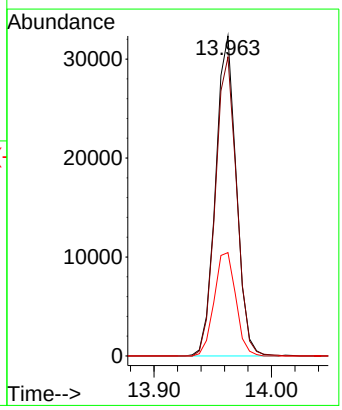
Reviewed By :John Carlone 12/16/2022
Supervised By :Mahesh Dadoda 12/16/2022



#96
1,2,3-Trichlorobenzene
Concen: 19.258 ug/l
RT: 13.963 min Scan# 2112
Delta R.T. 0.000 min
Lab File: VX033433.D
Acq: 15 Dec 2022 11:46

Tgt Ion:180 Resp: 39730

Ion	Ratio	Lower	Upper
180	100		
182	95.4	47.5	142.6
145	33.6	16.9	50.6



CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Manual Integration Report

Sequence:	VX120722	Instrument	MSVOA_x

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICC001	VX033273.D	1,2,3-Trichloropropane	JOHN	12/8/2022 10:12:54 AM	MMDadoda	12/8/2022 10:30:52 AM	Peak Integrated by Software
VSTDICC001	VX033273.D	1,4-Dichlorobenzene	JOHN	12/8/2022 10:12:54 AM	MMDadoda	12/8/2022 10:30:52 AM	Peak Integrated by Software
VSTDICC001	VX033273.D	1,4-Dioxane	JOHN	12/8/2022 10:12:54 AM	MMDadoda	12/8/2022 10:30:52 AM	Peak Integrated by Software
VSTDICC005	VX033274.D	1,2,3-Trichloropropane	JOHN	12/8/2022 10:13:00 AM	MMDadoda	12/8/2022 10:30:54 AM	Peak Integrated by Software
VSTDICC005	VX033274.D	Acrolein	JOHN	12/8/2022 10:13:00 AM	MMDadoda	12/8/2022 10:30:54 AM	Peak Integrated by Software
VSTDICC005	VX033274.D	t-1,3-Dichloropropene	JOHN	12/8/2022 10:13:00 AM	MMDadoda	12/8/2022 10:30:54 AM	Peak Integrated by Software
VSTDICC005	VX033274.D	Tert butyl alcohol	JOHN	12/8/2022 10:13:00 AM	MMDadoda	12/8/2022 10:30:54 AM	Peak Integrated by Software
VSTDICC020	VX033275.D	1,2,3-Trichloropropane	JOHN	12/8/2022 10:13:06 AM	MMDadoda	12/8/2022 10:30:56 AM	Peak Integrated by Software
VSTDICCC050	VX033276.D	1,2,3-Trichloropropane	JOHN	12/8/2022 10:13:12 AM	MMDadoda	12/8/2022 10:30:58 AM	Peak Integrated by Software
VSTDICC100	VX033277.D	1,2,3-Trichloropropane	JOHN	12/8/2022 10:13:19 AM	MMDadoda	12/8/2022 10:31:00 AM	Peak Integrated by Software
VSTDICC100	VX033277.D	Tert butyl alcohol	JOHN	12/8/2022 10:13:19 AM	MMDadoda	12/8/2022 10:31:00 AM	Peak Integrated by Software
VSTDICC150	VX033278.D	1,2,3-Trichloropropane	JOHN	12/8/2022 10:13:24 AM	MMDadoda	12/8/2022 10:31:02 AM	Peak Integrated by Software
VSTDICC150	VX033278.D	Acrolein	JOHN	12/8/2022 10:13:24 AM	MMDadoda	12/8/2022 10:31:02 AM	Peak Integrated by Software

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Manual Integration Report

Sequence:	VX120722	Instrument	MSVOA_x

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICC150	VX033278.D	Tert butyl alcohol	JOHN	12/8/2022 10:13:24 AM	MMDadoda	12/8/2022 10:31:02 AM	Peak Integrated by Software
VSTDICV050	VX033280.D	1,2,3-Trichloropropane	JOHN	12/8/2022 10:13:30 AM	MMDadoda	12/8/2022 10:31:05 AM	Peak Integrated by Software
VSTDCCC050	VX033282.D	1,2,3-Trichloropropane	JOHN	12/8/2022 10:13:36 AM	MMDadoda	12/8/2022 10:31:08 AM	Peak Integrated by Software
VSTDCCC050	VX033307.D	1,2,3-Trichloropropane	JOHN	12/8/2022 10:14:25 AM	MMDadoda	12/8/2022 10:31:17 AM	Peak Integrated by Software

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Manual Integration Report

Sequence:	vx121522	Instrument	MSVOA_x

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDCCC050	VX033430.D	1,2,3-Trichloropropane	JOHN	12/16/2022 9:42:26 AM	MMDadoda	12/16/2022 12:26:26 PM	Peak Integrated by Software
VSTDCCC050	VX033430.D	Tert butyl alcohol	JOHN	12/16/2022 9:42:26 AM	MMDadoda	12/16/2022 12:26:26 PM	Peak Integrated by Software
VX1215WBS01	VX033432.D	1,2,3-Trichloropropane	JOHN	12/16/2022 9:42:32 AM	MMDadoda	12/16/2022 12:26:27 PM	Peak Integrated by Software
VX1215WBS01	VX033432.D	Tert butyl alcohol	JOHN	12/16/2022 9:42:32 AM	MMDadoda	12/16/2022 12:26:27 PM	Peak Integrated by Software
VX1215WBSD01	VX033433.D	1,2,3-Trichloropropane	JOHN	12/16/2022 9:42:38 AM	MMDadoda	12/16/2022 12:26:28 PM	Peak Integrated by Software
VX1215WBSD01	VX033433.D	Tert butyl alcohol	JOHN	12/16/2022 9:42:38 AM	MMDadoda	12/16/2022 12:26:28 PM	Peak Integrated by Software
VSTDCCC050	VX033448.D	1,2,3-Trichloropropane	JOHN	12/16/2022 9:42:44 AM	MMDadoda	12/16/2022 12:26:30 PM	Peak Integrated by Software
VSTDCCC050	VX033448.D	Tert butyl alcohol	JOHN	12/16/2022 9:42:44 AM	MMDadoda	12/16/2022 12:26:30 PM	Peak Integrated by Software

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Instrument ID: MSVOA_X

Daily Analysis Runlog For Sequence/QCBatch ID # VX120722

Review By	John Carlone	Review On	12/8/2022 10:16:51 AM		
Supervise By	Mahesh Dadoda	Supervise On	12/8/2022 10:31:45 AM		
SubDirectory	VX120722	HP Acquire Method	MSVOA_X	HP Processing Method	82X120722W.M

STD. NAME	STD REF.#
Tune/Reschk	VP117343,VP117344
Initial Calibration Stds	VP117345,VP117376,VP117347,VP117348,VP117349,VP117350
CCC	VP117352,VP117353
Internal Standard/PEM	VP115432
ICV/I.BLK	VP117351
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VX033272.D	07 Dec 2022 09:17	JC/MD	Ok
2	VSTDICC001	VX033273.D	07 Dec 2022 09:46	JC/MD	Ok,M
3	VSTDICC005	VX033274.D	07 Dec 2022 10:09	JC/MD	Ok,M
4	VSTDICC020	VX033275.D	07 Dec 2022 10:32	JC/MD	Ok,M
5	VSTDICCC050	VX033276.D	07 Dec 2022 10:55	JC/MD	Ok,M
6	VSTDICC100	VX033277.D	07 Dec 2022 11:18	JC/MD	Ok,M
7	VSTDICC150	VX033278.D	07 Dec 2022 11:42	JC/MD	Ok,M
8	VIBLK	VX033279.D	07 Dec 2022 12:05	JC/MD	Ok
9	VSTDICV050	VX033280.D	07 Dec 2022 12:51	JC/MD	Ok,M
10	BFB	VX033281.D	07 Dec 2022 14:57	JC/MD	Ok
11	VSTDCCC050	VX033282.D	07 Dec 2022 15:25	JC/MD	Ok,M
12	VX1207MBL01	VX033283.D	07 Dec 2022 15:53	JC/MD	Not Ok
13	VX1207WBL01	VX033284.D	07 Dec 2022 16:17	JC/MD	Ok
14	VX1207WBL02	VX033285.D	07 Dec 2022 16:45	JC/MD	Ok
15	VX1207WBS01	VX033286.D	07 Dec 2022 17:13	JC/MD	Ok,M
16	VX1207WBSD01	VX033287.D	07 Dec 2022 17:36	JC/MD	Ok,M
17	N5865-05	VX033288.D	07 Dec 2022 17:59	JC/MD	Ok
18	N5865-07	VX033289.D	07 Dec 2022 18:22	JC/MD	Ok
19	N5875-03	VX033290.D	07 Dec 2022 18:46	JC/MD	Ok
20	N5875-06	VX033291.D	07 Dec 2022 19:09	JC/MD	Ok
21	N5865-09DL	VX033292.D	07 Dec 2022 19:32	JC/MD	Ok
22	N5865-11DL	VX033293.D	07 Dec 2022 19:55	JC/MD	Not Ok
23	N5865-01DL	VX033294.D	07 Dec 2022 20:18	JC/MD	Not Ok

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Instrument ID: MSVOA_X

Daily Analysis Runlog For Sequence/QCBatch ID # VX120722

Review By	John Carlone	Review On	12/8/2022 10:16:51 AM		
Supervise By	Mahesh Dadoda	Supervise On	12/8/2022 10:31:45 AM		
SubDirectory	VX120722	HP Acquire Method	MSVOA_X	HP Processing Method	82X120722W.M

STD. NAME	STD REF.#
Tune/Reschk	VP117343,VP117344
Initial Calibration Stds	VP117345,VP117376,VP117347,VP117348,VP117349,VP117350
CCC	VP117352,VP117353
Internal Standard/PEM	VP115432
ICV/I.BLK	VP117351
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

24	VIBLK	VX033295.D	07 Dec 2022 20:41	JC/MD	Ok
25	N5912-01	VX033296.D	07 Dec 2022 21:05	JC/MD	Dilution
26	N5911-01	VX033297.D	07 Dec 2022 21:28	JC/MD	ReRun
27	N5906-01	VX033298.D	07 Dec 2022 21:51	JC/MD	Ok
28	N5906-02	VX033299.D	07 Dec 2022 22:14	JC/MD	Ok
29	N5906-03	VX033300.D	07 Dec 2022 22:37	JC/MD	Ok
30	N5906-04	VX033301.D	07 Dec 2022 23:00	JC/MD	Ok
31	N5906-05	VX033302.D	07 Dec 2022 23:24	JC/MD	Ok
32	N5906-06	VX033303.D	07 Dec 2022 23:47	JC/MD	Dilution
33	N5906-07	VX033304.D	08 Dec 2022 00:10	JC/MD	Dilution
34	N5906-08	VX033305.D	08 Dec 2022 00:33	JC/MD	Ok
35	N5906-09	VX033306.D	08 Dec 2022 00:56	JC/MD	Dilution
36	VSTDCCC050	VX033307.D	08 Dec 2022 01:19	JC/MD	Ok,M

M : Manual Integration

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Instrument ID: MSVOA_X

Daily Analysis Runlog For Sequence/QCBatch ID # VX121522

Review By	John Carlone	Review On	12/16/2022 9:45:30 AM		
Supervise By	Mahesh Dadoda	Supervise On	12/16/2022 12:26:32 PM		
SubDirectory	VX121522	HP Acquire Method		HP Processing Method	82X120722W.M

STD. NAME	STD REF.#
Tune/Reschk	VP117542
Initial Calibration Stds	
CCC	VP117544,VP117545
Internal Standard/PEM	
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VX033429.D	15 Dec 2022 09:39	JC/MD	Ok
2	VSTDCCC050	VX033430.D	15 Dec 2022 10:10	JC/MD	Ok,M
3	VX1215WBL01	VX033431.D	15 Dec 2022 10:39	JC/MD	Ok
4	VX1215WBS01	VX033432.D	15 Dec 2022 11:07	JC/MD	Ok,M
5	VX1215WBSD01	VX033433.D	15 Dec 2022 11:46	JC/MD	Ok,M
6	N6070-02	VX033434.D	15 Dec 2022 12:09	JC/MD	Ok
7	N6070-01	VX033435.D	15 Dec 2022 12:32	JC/MD	ReRun
8	N6070-03	VX033436.D	15 Dec 2022 12:55	JC/MD	Ok
9	N6070-04	VX033437.D	15 Dec 2022 13:18	JC/MD	Ok
10	N6070-05	VX033438.D	15 Dec 2022 13:41	JC/MD	Ok
11	PB149669TB	VX033439.D	15 Dec 2022 14:04	JC/MD	Ok
12	N6051-02	VX033440.D	15 Dec 2022 14:27	JC/MD	Ok
13	N6070-01	VX033441.D	15 Dec 2022 14:50	JC/MD	Ok
14	PB149652TB	VX033442.D	15 Dec 2022 15:13	JC/MD	Ok
15	PB149654TB	VX033443.D	15 Dec 2022 15:36	JC/MD	Ok
16	N6065-02	VX033444.D	15 Dec 2022 15:59	JC/MD	Ok
17	N6065-05	VX033445.D	15 Dec 2022 16:22	JC/MD	Ok
18	N6067-02	VX033446.D	15 Dec 2022 16:45	JC/MD	Ok
19	N6067-04	VX033447.D	15 Dec 2022 17:08	JC/MD	Ok
20	VSTDCCC050	VX033448.D	15 Dec 2022 17:31	JC/MD	Ok,M

M : Manual Integration

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Instrument ID: MSVOA_X

Daily Analysis Runlog For Sequence/QCBatch ID # VX120722

Review By	John Carlone	Review On	12/8/2022 10:16:51 AM		
Supervise By	Mahesh Dadoda	Supervise On	12/8/2022 10:31:45 AM		
SubDirectory	VX120722	HP Acquire Method	MSVOA_X	HP Processing Method	82X120722W.M

STD. NAME	STD REF.#
Tune/Reschk	VP117343,VP117344
Initial Calibration Stds	VP117345,VP117376,VP117347,VP117348,VP117349,VP117350
CCC	VP117352,VP117353
Internal Standard/PEM	VP115432
ICV/I.BLK	VP117351
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VX033272.D	07 Dec 2022 09:17		JC/MD	Ok
2	VSTDICC001	VSTDICC001	VX033273.D	07 Dec 2022 09:46		JC/MD	Ok,M
3	VSTDICC005	VSTDICC005	VX033274.D	07 Dec 2022 10:09		JC/MD	Ok,M
4	VSTDICC020	VSTDICC020	VX033275.D	07 Dec 2022 10:32	com#13 fail	JC/MD	Ok,M
5	VSTDICCC050	VSTDICCC050	VX033276.D	07 Dec 2022 10:55		JC/MD	Ok,M
6	VSTDICC100	VSTDICC100	VX033277.D	07 Dec 2022 11:18		JC/MD	Ok,M
7	VSTDICC150	VSTDICC150	VX033278.D	07 Dec 2022 11:42		JC/MD	Ok,M
8	VIBLK	VIBLK	VX033279.D	07 Dec 2022 12:05		JC/MD	Ok
9	VSTDICV050	ICVVX120722	VX033280.D	07 Dec 2022 12:51	pH#Lot#V12668	JC/MD	Ok,M
10	BFB	BFB	VX033281.D	07 Dec 2022 14:57		JC/MD	Ok
11	VSTDCCC050	VSTDCCC050	VX033282.D	07 Dec 2022 15:25		JC/MD	Ok,M
12	VX1207MBL01	VX1207MBL01	VX033283.D	07 Dec 2022 15:53	Surrogate Fail	JC/MD	Not Ok
13	VX1207WBL01	VX1207WBL01	VX033284.D	07 Dec 2022 16:17		JC/MD	Ok
14	VX1207WBL02	VX1207WBL02	VX033285.D	07 Dec 2022 16:45		JC/MD	Ok
15	VX1207WBS01	VX1207WBS01	VX033286.D	07 Dec 2022 17:13		JC/MD	Ok,M
16	VX1207WBSD01	VX1207WBSD01	VX033287.D	07 Dec 2022 17:36		JC/MD	Ok,M
17	N5865-05	LEA-5SR	VX033288.D	07 Dec 2022 17:59	vial B pH<2	JC/MD	Ok
18	N5865-07	LEA-5D	VX033289.D	07 Dec 2022 18:22	vial B pH<2	JC/MD	Ok
19	N5875-03	MW-38	VX033290.D	07 Dec 2022 18:46	vial B pH<2	JC/MD	Ok

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Instrument ID: MSVOA_X

Daily Analysis Runlog For Sequence/QCBatch ID # VX120722

Review By	John Carlone	Review On	12/8/2022 10:16:51 AM		
Supervise By	Mahesh Dadoda	Supervise On	12/8/2022 10:31:45 AM		
SubDirectory	VX120722	HP Acquire Method	MSVOA_X	HP Processing Method	82X120722W.M

STD. NAME	STD REF.#
Tune/Reschk	VP117343,VP117344
Initial Calibration Stds	VP117345,VP117376,VP117347,VP117348,VP117349,VP117350
CCC	VP117352,VP117353
Internal Standard/PEM	VP115432
ICV/I.BLK	VP117351
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

20	N5875-06	MW-40	VX033291.D	07 Dec 2022 19:09	vial B pH<2	JC/MD	Ok
21	N5865-09DL	LEA-5IDL	VX033292.D	07 Dec 2022 19:32	vial B pH<2	JC/MD	Ok
22	N5865-11DL	DUP-01DL	VX033293.D	07 Dec 2022 19:55	vial B pH<2	JC/MD	Not Ok
23	N5865-01DL	LEA-7IDL	VX033294.D	07 Dec 2022 20:18	Confirm concentration for cis-1,2-Dichloroethene, not matched	JC/MD	Not Ok
24	VIBLK	VIBLK	VX033295.D	07 Dec 2022 20:41		JC/MD	Ok
25	N5912-01	FMC-TOTE-1207	VX033296.D	07 Dec 2022 21:05	vial A pH<2 Need 10x	JC/MD	Dilution
26	N5911-01	A3594TOG	VX033297.D	07 Dec 2022 21:28	vial A pH<2 E flag in previous sample	JC/MD	ReRun
27	N5906-01	MW-8	VX033298.D	07 Dec 2022 21:51	vial A pH<2	JC/MD	Ok
28	N5906-02	MW-12	VX033299.D	07 Dec 2022 22:14	vial A pH<2	JC/MD	Ok
29	N5906-03	MW-16	VX033300.D	07 Dec 2022 22:37	vial A pH<2	JC/MD	Ok
30	N5906-04	MW-20	VX033301.D	07 Dec 2022 23:00	vial A pH<2	JC/MD	Ok
31	N5906-05	H-3R	VX033302.D	07 Dec 2022 23:24	vial A pH<2	JC/MD	Ok
32	N5906-06	MW-3RR	VX033303.D	07 Dec 2022 23:47	vial A pH<2 Need 5X	JC/MD	Dilution
33	N5906-07	MW-13R	VX033304.D	08 Dec 2022 00:10	vial A pH<2 Need 10x	JC/MD	Dilution
34	N5906-08	MW-24	VX033305.D	08 Dec 2022 00:33	vial A pH<2	JC/MD	Ok
35	N5906-09	MW-28	VX033306.D	08 Dec 2022 00:56	vial A pH<2 Need 5X	JC/MD	Dilution
36	VSTDCCC050	VSTDCCC050EC	VX033307.D	08 Dec 2022 01:19		JC/MD	Ok,M

M : Manual Integration

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Instrument ID: MSVOA_X

Daily Analysis Runlog For Sequence/QCBatch ID # VX121522

Review By	John Carlone	Review On	12/16/2022 9:45:30 AM		
Supervise By	Mahesh Dadoda	Supervise On	12/16/2022 12:26:32 PM		
SubDirectory	VX121522	HP Acquire Method		HP Processing Method	82X120722W.M

STD. NAME	STD REF.#
Tune/Reschk	VP117542
Initial Calibration Stds	
CCC	VP117544,VP117545
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	VX033429.D	15 Dec 2022 09:39		JC/MD	Ok
2	VSTDCCC050	VSTDCCC050	VX033430.D	15 Dec 2022 10:10	pH#Lot#V12668	JC/MD	Ok,M
3	VX1215WBL01	VX1215WBL01	VX033431.D	15 Dec 2022 10:39		JC/MD	Ok
4	VX1215WBS01	VX1215WBS01	VX033432.D	15 Dec 2022 11:07		JC/MD	Ok,M
5	VX1215WBSD01	VX1215WBSD01	VX033433.D	15 Dec 2022 11:46		JC/MD	Ok,M
6	N6070-02	TB-01-121422	VX033434.D	15 Dec 2022 12:09	vial A pH<2 TB	JC/MD	Ok
7	N6070-01	GW-BR-04-226-245-12	VX033435.D	15 Dec 2022 12:32	vial A pH<2 Surrogate Fail	JC/MD	ReRun
8	N6070-03	OWBR-01-160-180-121	VX033436.D	15 Dec 2022 12:55	vial A pH<2	JC/MD	Ok
9	N6070-04	OWBR-02-160-180-121	VX033437.D	15 Dec 2022 13:18	vial A pH<2	JC/MD	Ok
10	N6070-05	OWBR-03-128-148-121	VX033438.D	15 Dec 2022 13:41	vial A pH<2	JC/MD	Ok
11	PB149669TB	PB149669TB	VX033439.D	15 Dec 2022 14:04	vial A pH#6.0	JC/MD	Ok
12	N6051-02	SP-591	VX033440.D	15 Dec 2022 14:27	vial A pH#6.0	JC/MD	Ok
13	N6070-01	GW-BR-04-226-245-12	VX033441.D	15 Dec 2022 14:50	vial B pH<2	JC/MD	Ok
14	PB149652TB	PB149652TB	VX033442.D	15 Dec 2022 15:13	vial A pH#5.0	JC/MD	Ok
15	PB149654TB	PB149654TB	VX033443.D	15 Dec 2022 15:36	vial A pH#5.0	JC/MD	Ok
16	N6065-02	MH-23	VX033444.D	15 Dec 2022 15:59	vial A pH#5.0	JC/MD	Ok
17	N6065-05	TP-S	VX033445.D	15 Dec 2022 16:22	vial A pH#5.0	JC/MD	Ok
18	N6067-02	WC-SOIL-20221214	VX033446.D	15 Dec 2022 16:45	vial A pH#5.0	JC/MD	Ok
19	N6067-04	WC-LIQUID-20221214	VX033447.D	15 Dec 2022 17:08	vial A pH#5.0	JC/MD	Ok

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Instrument ID: MSVOA_X

Daily Analysis Runlog For Sequence/QCBatch ID # VX121522

Review By	John Carlone	Review On	12/16/2022 9:45:30 AM		
Supervise By	Mahesh Dadoda	Supervise On	12/16/2022 12:26:32 PM		
SubDirectory	VX121522	HP Acquire Method		HP Processing Method	82X120722W.M

STD. NAME	STD REF.#
Tune/Reschk	VP117542
Initial Calibration Stds	
CCC	VP117544,VP117545
Internal Standard/PEM	
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

20	VSTDCCC050	VSTDCCC050EC	VX033448.D	15 Dec 2022 17:31		JC/MD	Ok,M

M : Manual Integration

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Prep Standard - Chemical Standard Summary

Order ID : N6070

Test : VOCMS Group3

Prepbatch ID :

Sequence ID/Qc Batch ID: vx121522,

Standard ID :
VP113990,VP115359,VP115432,VP115433,VP116911,VP117244,VP117471,VP117542,VP117544,VP117545,

Chemical ID :
V10601,V11274,V11275,V12010,V12080,V12224,V12411,V12412,V12684,V12685,V12757,V12766,V12779,V12780,V12865,V12866,V12867,V12886,V12889,V13016,V13049,V13051,V13052,V13077,V13078,V13187,V13189,V13213,V13214,V13224,V13363,V13371,V13372,V13373,V13374,W2606,

CHEMTECH

284, Sheffield Street, Mountainside NJ 07092 (908) 789 - 8900

VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
719	8260 Working STD (BCM)-First source, 400PPM	VP113990	07/28/2022	01/28/2023	Semsettin Yesilyurt	None	None	Mahesh Dadoda 07/29/2022

FROM 1.00000ml of V12757 + 1.00000ml of V12766 + 1.00000ml of V12865 + 1.00000ml of V12866 + 1.00000ml of V12867 + 20.00000ml of V13016 = Final Quantity: 25.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1810	8260 Working Std(2-CVE)-800ppm	VP115359	09/14/2022	03/14/2023	Semsettin Yesilyurt	None	None	Mahesh Dadoda 09/14/2022

FROM 1.00000ml of V11274 + 1.00000ml of V11275 + 1.00000ml of V12779 + 1.00000ml of V12780 + 46.00000ml of V13224 = Final Quantity: 50.000 ml

CHEMTECH

284, Sheffield Street, Mountainside NJ 07092 (908) 789 - 8900

VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
247	8260 Internal Standard, 250PPM	VP115432	09/16/2022	01/15/2023	Semsettin Yesilyurt	None	None	Mahesh Dadoda 09/19/2022

FROM 0.25000ml of V12080 + 24.75000ml of V13224 = Final Quantity: 25.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
617	8260 Surrogate, 400PPM	VP115433	09/16/2022	03/14/2023	Semsettin Yesilyurt	None	None	Mahesh Dadoda 09/19/2022

FROM 0.40000ml of V12010 + 24.60000ml of V13224 = Final Quantity: 25.000 ml

CHEMTECH

284, Sheffield Street, Mountainside NJ 07092 (908) 789 - 8900

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	VP116911	11/15/2022	12/19/2022	Semsettin Yesilyurt	None	None	Mahesh Dadoda 11/16/2022

FROM 0.40000ml of V12224 + 1.00000ml of V12411 + 1.00000ml of V12412 + 1.00000ml of V12684 + 1.00000ml of V12685 + 1.00000ml of V12886 + 1.00000ml of V12889 + 1.00000ml of V13077 + 1.00000ml of V13078 + 1.00000ml of V13187 + 1.00000ml of V13189 + 1.30000ml of V13051 + 1.30000ml of V13052 + 1.40000ml of V13049 + 10.60000ml of V13213 = Final Quantity: 25.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
51	8260 Working STD (Acrolein) -first source, 800PPM	VP117244	11/30/2022	12/28/2022	Semsettin Yesilyurt	None	None	Mahesh Dadoda 12/02/2022

FROM 0.40000ml of V13374 + 1.20000ml of V13371 + 1.20000ml of V13372 + 1.20000ml of V13373 + 21.00000ml of V13363 = Final Quantity: 25.000 ml

CHEMTECH

284, Sheffield Street, Mountainside NJ 07092 (908) 789 - 8900

VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
218	BFB, 25PPM	VP117471	12/12/2022	06/12/2023	Semsettin Yesilyurt	None	None	Krupa Patel 12/14/2022

FROM 0.25000ml of V10601 + 24.75000ml of V13214 = Final Quantity: 25.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
589	BFB TUNE CHECK	VP117542	12/15/2022	12/16/2022	John Carlone	None	None	Mahesh Dadoda 12/15/2022

FROM 39.98400ml of W2606 + 0.01600ml of VP117471 = Final Quantity: 40.000 ml

CHEMTECH

284, Sheffield Street, Mountainside NJ 07092 (908) 789 - 8900

VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
620	50 PPB CCC, 8260-Water	VP117544	12/15/2022	12/16/2022	John Carlone	None	None	Mahesh Dadoda 12/15/2022

FROM 39.94450ml of W2606 + 0.00500ml of VP113990 + 0.00500ml of VP115433 + 0.00800ml of VP115432 + 0.01250ml of VP115359 + 0.01250ml of VP116911 + 0.01250ml of VP117244 = 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	VP117545	12/15/2022	12/16/2022	John Carlone	None	None	Mahesh Dadoda 12/15/2022

FROM 39.94450ml of W2606 + 0.00500ml of VP113990 + 0.00500ml of VP115433 + 0.00800ml of VP115432 + 0.01250ml of VP115359 + 0.01250ml of VP116911 + 0.01250ml of VP117244 = Final Quantity: 40.000 ml

CHEMTECH 284 Sheffield Street, Mountainside, NJ 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 #
Restek	30067 / BFB tuneing solution	A0147670	12/12/2023	12/12/2022 / SAM	01/09/2020 / sam	V10601

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)	082620	03/14/2023	09/14/2022 / SAM	09/18/2020 / sam	V11274

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)	082620	03/14/2023	09/14/2022 / SAM	09/18/2020 / sam	V11275

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]	A0173020	03/16/2023	09/16/2022 / SAM	06/04/2021 / SAM	V12010

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]	A0173600	01/15/2023	07/15/2022 / SAM	06/22/2021 / SAM	V12080

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	A0168291	01/25/2023	07/25/2022 / SAM	10/15/2021 / SAM	V12224

CHEMTECH 284 Sheffield Street, Mountainside, NJ 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.	95319 / Revised Additions Mix (Min = 5)	031921	04/14/2023	10/14/2022 / SAM	11/30/2021 / SAM	V12411

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)	031921	04/14/2023	10/14/2022 / SAM	11/30/2021 / SAM	V12412

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, 2000uq/ml, PTM, 1ml	A0177872	04/14/2023	10/14/2022 / SAM	03/07/2022 / SAM	V12684

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, 2000uq/ml, PTM, 1ml	A0177872	04/14/2023	10/14/2022 / SAM	03/07/2022 / SAM	V12685

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	A0176219	01/28/2023	07/28/2022 / SAM	03/25/2022 / SAM	V12757

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	A0176219	01/28/2023	07/28/2022 / SAM	03/25/2022 / SAM	V12766

CHEMTECH 284 Sheffield Street, Mountainside, NJ 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.	95318 / 2-Chloroethyl Vinyl Ether (Min = 5)	121321	03/14/2023	09/14/2022 / SAM	03/30/2022 / SAM	V12779

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	03/14/2023	09/14/2022 / SAM	03/30/2022 / SAM	V12780

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	A0183824	01/28/2023	07/28/2022 / SAM	04/22/2022 / SAM	V12865

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	A0183824	01/28/2023	07/28/2022 / SAM	04/22/2022 / SAM	V12866

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	A0183824	01/28/2023	07/28/2022 / SAM	04/22/2022 / SAM	V12867

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)	042921	04/14/2023	10/14/2022 / SAM	04/26/2022 / SAM	V12886

CHEMTECH 284 Sheffield Street, Mountainside, NJ 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.	95317 / Universal VOA Mega Mix (Min order = 5)	042921	04/14/2023	10/14/2022 / SAM	04/26/2022 / SAM	V12889

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)	0000288323	01/28/2023	07/28/2022 / SAM	07/11/2022 / SAM	V13016

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	A0179406	04/14/2023	10/14/2022 / SAM	08/12/2022 / SAM	V13049

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	A0179406	04/14/2023	10/14/2022 / SAM	08/12/2022 / SAM	V13051

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	A0179406	04/14/2023	10/14/2022 / SAM	08/12/2022 / SAM	V13052

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	A0187424	04/14/2023	10/14/2022 / SAM	08/12/2022 / SAM	V13077

CHEMTECH 284 Sheffield Street, Mountainside, NJ 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 #
Restek	555408 / Custom Standard, Vinyl Acetate Standard w/ Grav [CS 5066-6] TWO SEPARATE LOTS	A0187424	04/14/2023	10/14/2022 / SAM	08/12/2022 / SAM	V13078

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	A0186868	04/14/2023	10/14/2022 / SAM	09/01/2022 / SAM	V13187

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	A0186868	04/14/2023	10/14/2022 / SAM	09/01/2022 / SAM	V13189

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)	22C2362001	05/11/2023	11/11/2022 / pedro	09/13/2022 / SAM	V13213

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)	22C2362001	06/12/2023	12/12/2022 / SAM	09/13/2022 / SAM	V13214

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)	0000288323	03/14/2023	09/14/2022 / SAM	09/13/2022 / SAM	V13224

CHEMTECH 284 Sheffield Street, Mountainside, NJ 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 #
Seidler Chemical	BA9077-02 / Methanol, Purge/Trap (cs=6x1L)	22C2862010	05/29/2023	11/29/2022 / SAM	11/28/2022 / SAM	V13363

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	112822	12/28/2022	11/29/2022 / SAM	11/29/2022 / SAM	V13371

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	112822	12/28/2022	11/29/2022 / SAM	11/29/2022 / SAM	V13372

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	112822	12/28/2022	11/29/2022 / SAM	11/29/2022 / SAM	V13373

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	112822	12/28/2022	11/29/2022 / SAM	11/29/2022 / SAM	V13374

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	DIW / DI Water	Daily Lab-Certified	10/24/2024	10/24/2019 / apatel	10/24/2019 / apatel	W2606

M68A0-VOCMS Group3

CERTIFIED WEIGHT REPORT

Part Number: 95318
Lot Number: 082620
Description: 2-Chloroethyl vinyl ether

Expiration Date: 082623
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 10000
NIST Test ID#: 23060

Weight(s) shown below were combined and diluted to (mL): 30.0

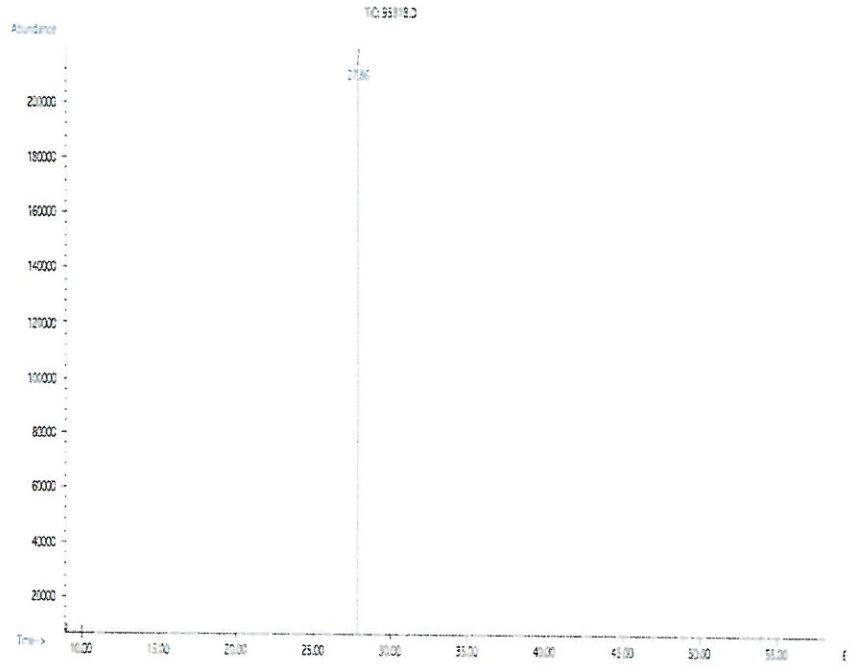
Solvent(s): **Lot#**
Methanol DX932-US

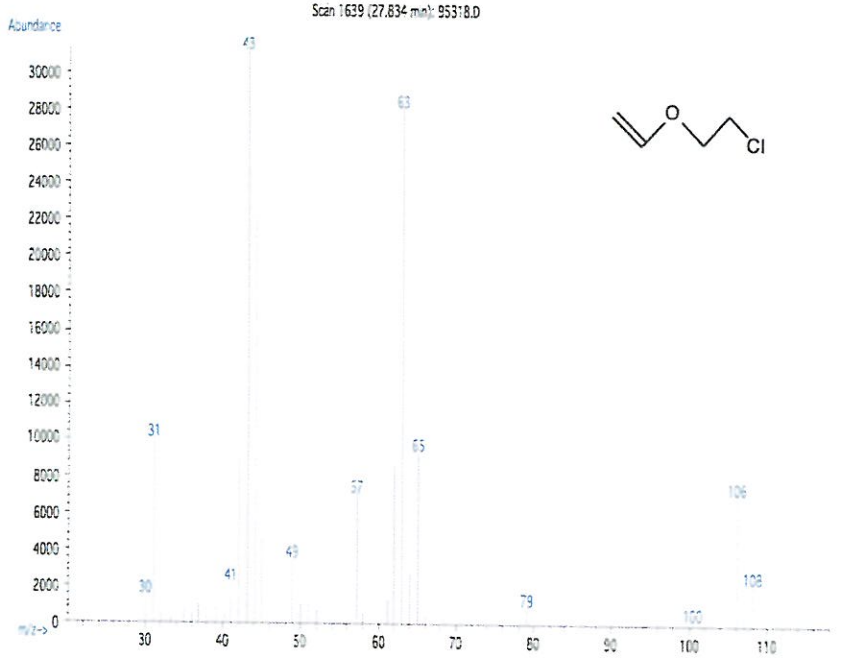
5E-05 Balance Uncertainty
0.002 Flask Uncertainty

Formulated By:	Benson Chan	082620 DATE
Reviewed By:	Pedro L. Rentas	082620 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	0.30284	0.30289	10001.7	40.6	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).

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** May 1, 2015

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

Absolute Standards Inc.

PO Box 5585
Hamden, CT 06518-0585

Phone: 203-281-2917
FAX: 203-281-2922

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.

M68A0-VOCMS Group3

CERTIFIED WEIGHT REPORT

Part Number: 95318
Lot Number: 082620
Description: 2-Chloroethyl vinyl ether

Expiration Date: 082623
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 10000
NIST Test ID#: 23060

Weight(s) shown below were combined and diluted to (mL): 30.0

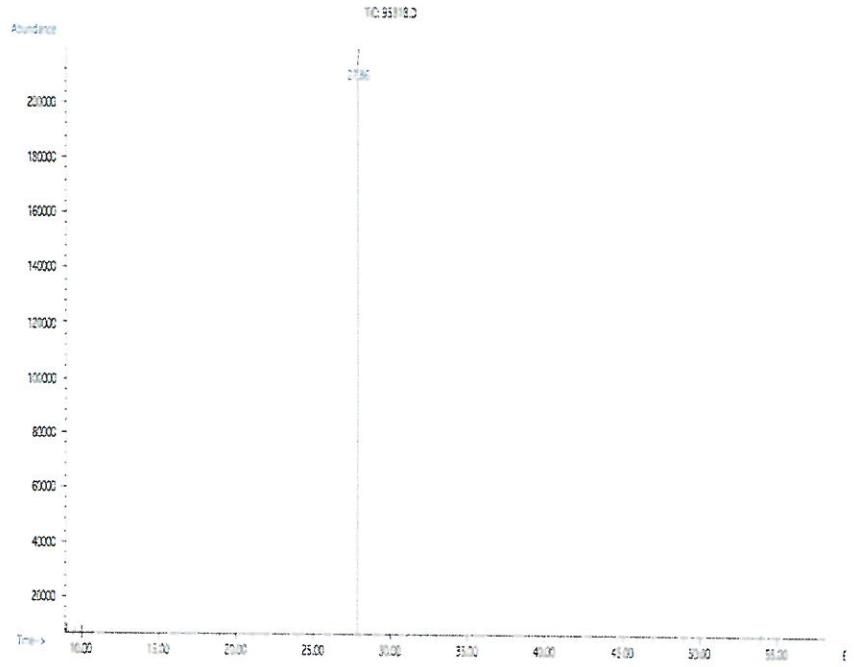
Solvent(s):	Lot#
Methanol	DX932-US

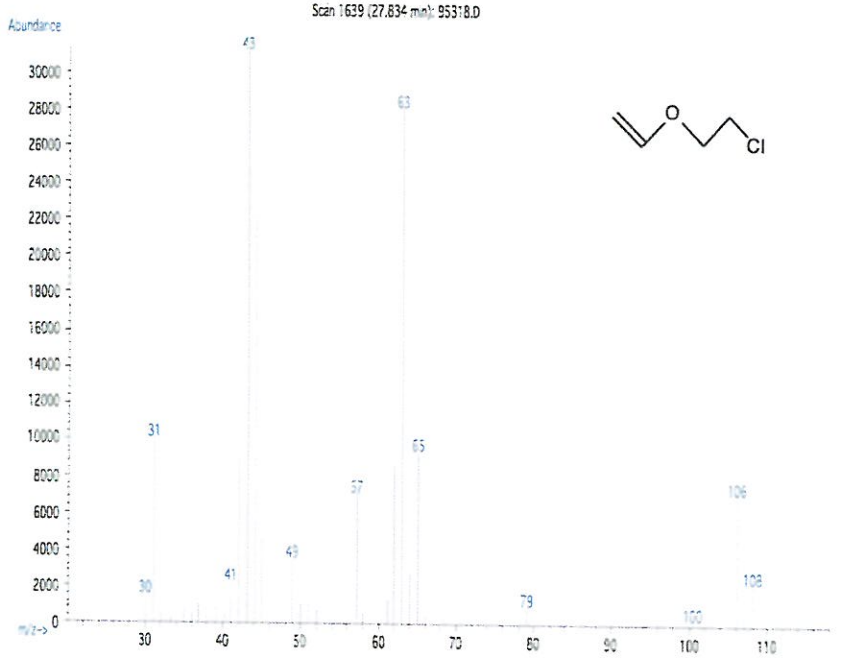
5E-05 Balance Uncertainty
0.002 Flask Uncertainty

Formulated By:	Benson Chan	082620 DATE
Reviewed By:	Pedro L. Rentas	082620 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	0.30284	0.30289	10001.7	40.6	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).

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** May 1, 2015

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

Absolute Standards Inc.

PO Box 5585
Hamden, CT 06518-0585

Phone: 203-281-2917
FAX: 203-281-2922

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: 95318
Lot Number: 121321
Description: 2-Chloroethyl vinyl ether

Solvent(s): Methanol **Lot#** EA899-US

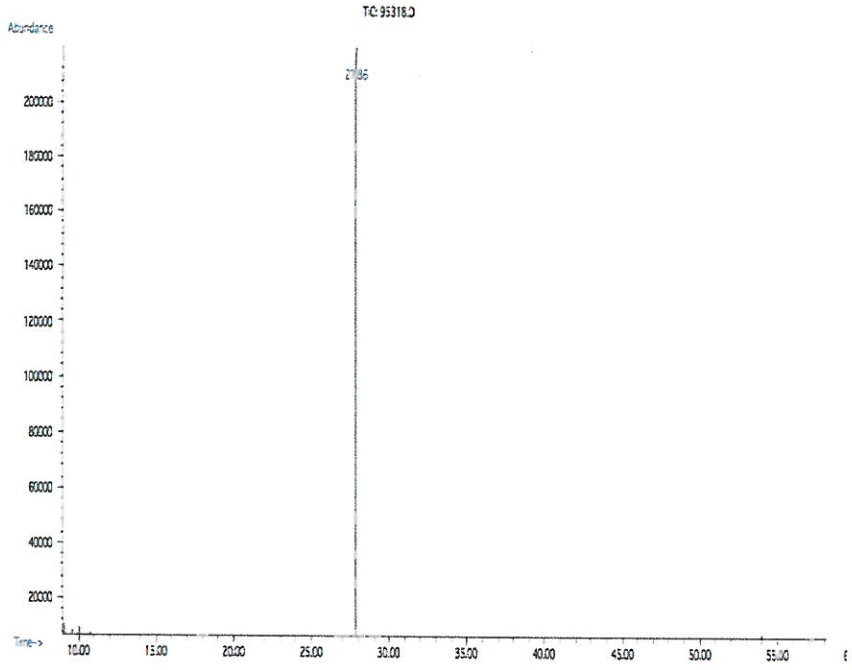
Expiration Date: 121324
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 10000
NIST Test ID#: 6UTB

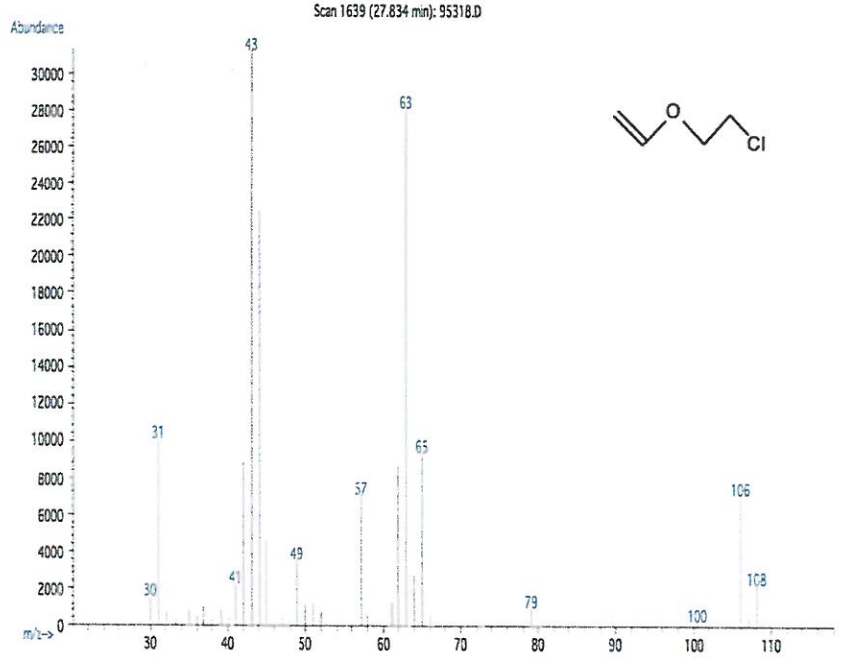
Weight(s) shown below were combined and diluted to (mL): 30.0 | 5E-05 Balance Uncertainty | 0.0003 Flask Uncertainty

		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).

N6070-VOCMS Group3

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: 95318
Lot Number: 121321
Description: 2-Chloroethyl vinyl ether

Solvent(s): Methanol **Lot#** EA899-US

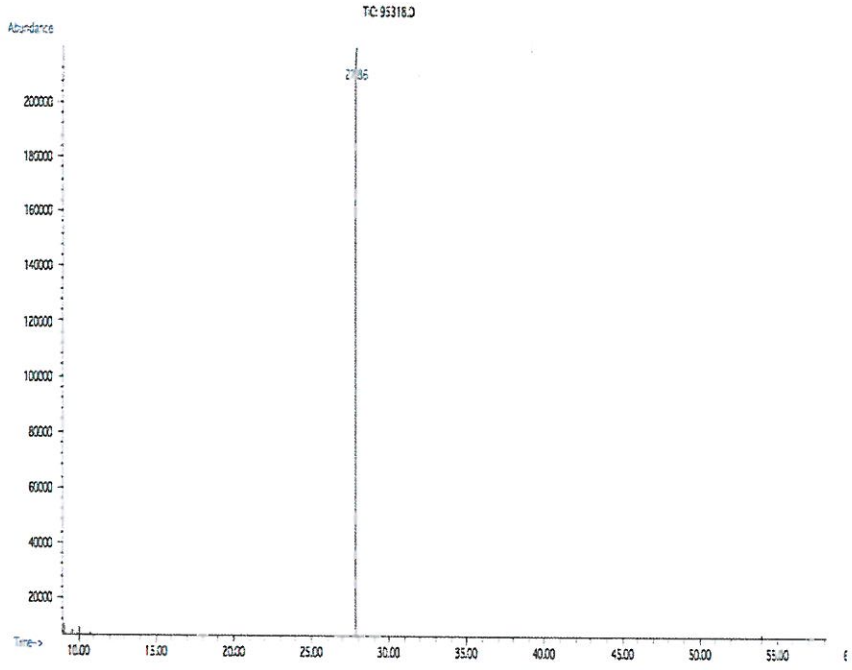
Expiration Date: 121324
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 10000
NIST Test ID#: 6UTB

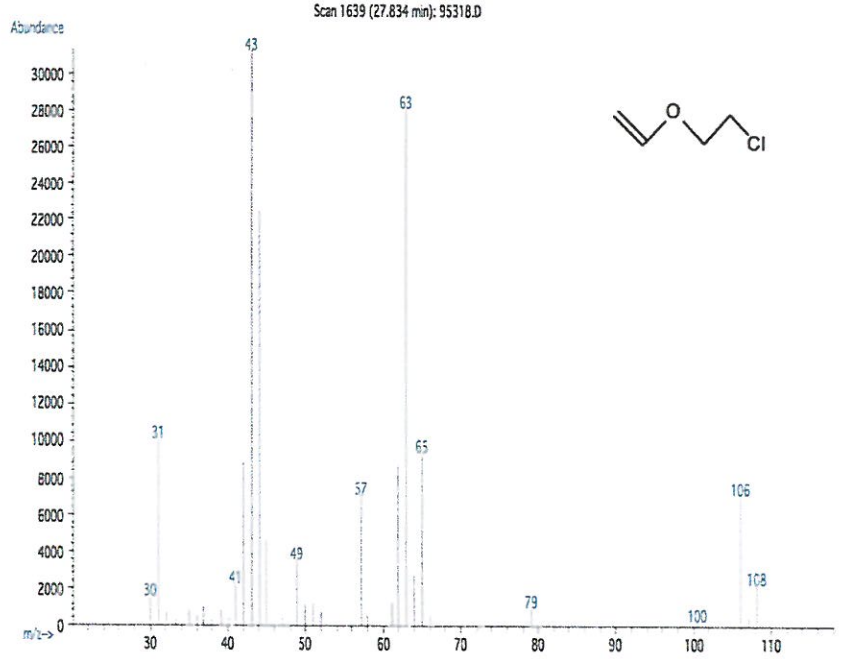
Weight(s) shown below were combined and diluted to (mL): 30.0 | 5E-05 Balance Uncertainty | 0.0003 Flask Uncertainty

		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).

N6070-VOCMS Group3

RESTEK®
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Gravimetric Certificate

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
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. : 555582 **Lot No.:** A0173020

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 : June 30, 2024 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Component #	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	1,2-Dichloroethane-d4	25,060.0 µg/mL	+/- 231.9100 µg/mL	Gravimetric
	CAS # 17060-07-0 (Lot PR-29377)		+/- 1,416.6261 µg/mL	Unstressed
	Purity 99%		+/- 1,449.2417 µg/mL	Stressed
2	1-Bromo-4-fluorobenzene (BFB)	25,188.0 µg/mL	+/- 233.0945 µg/mL	Gravimetric
	CAS # 460-00-4 (Lot 20401KO)		+/- 1,423.8618 µg/mL	Unstressed
	Purity 99%		+/- 1,456.6441 µg/mL	Stressed
3	Dibromofluoromethane	25,212.0 µg/mL	+/- 233.3166 µg/mL	Gravimetric
	CAS # 1868-53-7 (Lot 012021)		+/- 1,425.2185 µg/mL	Unstressed
	Purity 99%		+/- 1,458.0320 µg/mL	Stressed
4	Toluene-d8	25,104.0 µg/mL	+/- 232.3171 µg/mL	Gravimetric
	CAS # 2037-26-5 (Lot PR-31750)		+/- 1,419.1134 µg/mL	Unstressed
	Purity 99%		+/- 1,451.7863 µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Lane Kibe - Mix Technician

Date Mixed: 03-Jun-2021 **Balance:** B251644995

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.

RESTEK

Safety Data Sheet

Revision Date: 05/24/21
www.restek.com

2 Letter ISO country code/language code: US/EN

1. IDENTIFICATION

Catalog Number / Product Name:	**555582 / Custom 8260A/B Surrogate Mix**
Company:	Restek Corporation
Address:	110 Benner Circle Bellefonte, Pa. 16823
Phone#:	814-353-1300
Fax#:	814-353-1309
Emergency#:	800-424-9300 (CHEMTREC) 703-527-3887 (Outside the US)
Email:	www.restek.com
Revision Number:	7
Intended use:	For Laboratory use only

2. HAZARD(S)IDENTIFICATION

Emergency Overview:

GHS Hazard Symbols:



GHS Classification:	Specific Target Organ Systemic Toxicity (STOT) - Single Exposure Category 1 Flammable Liquid Category 2 Acute Toxicity - Dermal Category 3 Acute Toxicity - Oral Category 3
GHS Signal Word:	Danger
GHS Hazard:	Highly flammable liquid and vapour. Toxic if swallowed or in contact with skin. Causes damage to organs.
GHS Precautions:	
Safety Precautions:	Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilation and lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe dust/fume/gas/mist/vapours/spray. Wash hands and skin thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection.
First Aid Measures:	IF SWALLOWED: Immediately call a POISON CENTER/doctor/.... IF ON SKIN: Wash with plenty of soap and water. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. IF exposed: Call a POISON CENTER or doctor/physician. Call a POISON CENTER or doctor/physician if you feel unwell. Specific treatment see section 4. Rinse mouth. Take off immediately all contaminated clothing and wash it before reuse. In case of fire: Use extinguishing media in section 5 for extinction.

Storage: Keep container tightly closed.
Store in a well-ventilated place. Keep cool.
Store locked up.

Disposal: Dispose of contents/container according to section 13 of the SDS.

Single Exposure Target Organs: Specific target organ toxicity - Single exposure - STOT SE 1: H370 Causes damage to organs. (C >= 10 %; No information to prove exclusion of certain routes of exposure); Specific target organ toxicity - Single exposure - STOT SE 2: H371 May cause damage to organs. (3 % <= C <10 %; Concentration limits for acute toxicity cannot be translated into GHS from the DSD especially when minimum classifications are given)

Repeated Exposure Target Organs: No data available

3. COMPOSITION / INFORMATION ON INGREDIENT

Chemical Name	CAS #	EINEC #	% Composition
P&T Methanol	67-56-1	200-659-6	90
1-Bromo-4-fluorobenzene (BFB)	460-00-4	207-300-2	2.5
1,2-dichloroethane-d4	17060-07-0		2.5
dibromofluoromethane	1868-53-7		2.5
toluene-d8	2037-26-5	218-009-5	2.5

4. FIRST-AID MEASURES

Inhalation: Remove to fresh air. If breathing is difficult, have a trained individual administer oxygen. If not breathing, give artificial respiration and have a trained individual administer oxygen. Get medical attention immediately

Eyes: Flush eyes with plenty of water for at least 20 minutes retracting eyelids often. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Get immediate medical attention.

Skin Contact: Wash with soap and water. Remove contaminated clothing and launder. Get medical attention if irritation develops or persists.

Ingestion: Do not induce vomiting and seek medical attention immediately. Drink two glasses of water or milk to dilute. Provide medical care provider with this SDS.

5. FIRE- FIGHTING MEASURES

Extinguishing Media: Use alcohol resistant foam, carbon dioxide, or dry chemical extinguishing agents. Water may be ineffective but water spray can be used extinguish a fire if swept across the base of the flames. Water can absorb heat and keep exposed material from being damaged by fire.

Fire and/or Explosion Hazards: Vapors may be ignited by heat, sparks, flames or other sources of ignition at or above the low flash point giving rise to a fire (Class B). Vapors are heavier than air and may travel to a source of ignition and flash back.

Fire Fighting Methods and Protection: Do not enter fire area without proper protection including self-contained breathing apparatus and full protective equipment. Fight fire from a safe distance and a protected location due to the potential of hazardous vapors and decomposition products. Flammable component(s) of this material may be lighter than water and burn while floating on the surface.

Hazardous Combustion Products: Carbon dioxide, Carbon monoxide

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions and Equipment: Exposure to the spilled material may be severely irritating or toxic. Follow personal protective equipment recommendations found in Section 8 of this SDS. Personal protective equipment needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred, and the expertise of employees in the area responding to the spill. Never exceed any occupational exposure limits.

Methods for Clean-up: Prevent the spread of any spill to minimize harm to human health and the

environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation.

7. HANDLING AND STORAGE

Handling Technical Measures and Precautions: Toxic or severely irritating material. Avoid contacting and avoid breathing the material. Use only in a well ventilated area. Use spark-proof tools and explosion-proof equipment

Storage Technical Measures and Conditions: Store in a cool dry ventilated location. Isolate from incompatible materials and conditions. Keep container(s) closed. Keep away from sources of ignition

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

United States:

Chemical Name	CAS No.	IDLH	ACGIH STEL	ACGIH TLV-TWA	OSHA Exposure Limit
P&T Methanol	67-56-1	6000 ppm IDLH	250 ppm STEL	200 ppm TWA	200 ppm TWA; 260 mg/m3 TWA
1-Bromo-4-fluorobenzene (BFB)	460-00-4	Not established	None Known	Not established	No data available
1,2-dichloroethane-d4	17060-07-0	Not established	None Known	Not established	No data available
dibromofluoromethane	1868-53-7	Not established	None Known	Not established	No data available
toluene-d8	2037-26-5	Not established	None Known	Not established	No data available

Personal Protection:

Engineering Measures: Local exhaust ventilation is recommended when generating excessive levels of vapours from handling or thermal processing.

Respiratory Protection: Respiratory protection may be required to avoid overexposure when handling this product. General or local exhaust ventilation is the preferred means of protection. Use a respirator if general room ventilation is not available or sufficient to eliminate symptoms.If an exposure limit is exceeded or if an operator is experiencing symptoms of inhalation overexposure as explained in Section 3, provide respiratory protection.

Eye Protection: Wear chemically resistant safety glasses with side shields when handling this product. Do not wear contact lenses.

Skin Protection: Wear protective gloves. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance, color:	No data available
Odor:	Mild
Physical State:	No data available
pH:	Not applicable
Vapor Pressure:	No data available
Vapor Density:	1.1 (air = 1)
Boiling Point (°C):	151.5 °C Boiling Point (at 1013.25 hPa) 64.7 °C at 760 mmHg (HSDB)
Melting Point (°C):	-98 °C
Flash Point (°F):	50
Flammability:	Highly Flammable
Upper Flammable/Explosive Limit, % in air:	36
Lower Flammable/Explosive Limit, % in air:	6
Autoignition Temperature (°C):	464 deg C
Decomposition Temperature (°C):	No data available
Specific Gravity:	0.791 - 0.792 g/cm3 at 20 °C
Evaporation Rate:	No data available
Odor Threshold:	No data available
Solubility:	Moderate; 50-99%

Partition Coefficient: n-octanol in water:	No data available
VOC % by weight:	90
Molecular Weight:	32.04

10. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions.
Conditions to Avoid:	None known.
Materials to Avoid / Chemical Incompatiability:	Strong oxidizing agents
Hazardous Decomposition Products:	Carbon dioxide Carbon monoxide

11. TOXICOLOGICAL INFORMATION

Routes of Entry:	Inhalation, Skin Contact, Eye Contact, Ingestion
Target Organs Potentially Affected By Exposure:	Eyes, Central nervous system stimulation, Skin, GI Tract, Respiratory Tract
Chemical Interactions That Change Toxicity:	None Known

Immediate (Acute) Health Effects by Route of Exposure:

Inhalation Irritation:	Can cause moderate respiratory irritation, dizziness, weakness, fatigue, nausea and headache.
Inhalation Toxicity:	Harmful! Can cause systemic damage (see "Target Organs)Methanol can cause central nervous system depression and overexposure can cause damage to the optic nerve resulting in visual impairment or blindness.
Skin Contact:	Can cause moderate skin irritation, defatting, and dermatitis. Not likely to cause permanent damage.
Eye Contact:	Can cause moderate irritation, tearing and reddening, but not likely to permanently injure eye tissue.
Ingestion Irritation:	Irritating to mouth, throat, and stomach. Can cause abdominal discomfort, nausea, vomiting and diarrhea.Highly toxic and may be fatal if swallowed.
Ingestion Toxicity:	Toxic if swallowed. May cause target organ failure and/or death.May be fatal if swallowed.

Long-Term (Chronic) Health Effects:

Carcinogenicity:	No data.
Reproductive and Developmental Toxicity:	No data available to indicate product or any components present at greater than 0.1% may cause birth defects.
Inhalation:	Upon prolonged and/or repeated exposure, can cause moderate respiratory irritation, dizziness, weakness, fatigue, nausea and headache.Harmful! Can cause systemic damage upon prolonged and/or repeated exposure (see "Target Organs)
Skin Contact:	Upon prolonged or repeated contact, can cause moderate skin irritation, defatting, and dermatitis. Not likely to cause permanent damage.
Ingestion:	Toxic if swallowed. May cause target organ failure and/or death.

Component Toxicological Data:

NIOSH:

Chemical Name	CAS No.	LD50/LC50
Benzene, 1-bromo-4-fluoro-	460-00-4	Inhalation LC50 Rat 18 g/m3 4 h; Oral LD50 Rat 2700 mg/kg
Methanol	67-56-1	Inhalation LC50 Rat 22500 ppm 8 h

Component Carcinogenic Data:

OSHA:

Chemical Name	CAS No.
No data available	

ACGIH:

Chemical Name	CAS No.
No data available	

NIOSH:

Chemical Name	CAS No.
No data available	

NTP:

Chemical Name	CAS No.
No data available	

IARC:

Chemical Name	CAS No.	Group No.

12. ECOLOGICAL INFORMATION

Overview:	Moderate ecological hazard. This product may be dangerous to plants and/or wildlife.
Mobility:	No data
Persistence:	No data
Bioaccumulation:	No data
Degradability:	Biodegrades slowly.
Ecological Toxicity Data:	No data available

13. DISPOSAL CONSIDERATIONS

Waste Description of Spent Product:	Spent or discarded material is a hazardous waste.Mixing spent or discarded material with other materials may render the mixture hazardous. Perform a hazardous waste determination on mixtures.
Disposal Methods:	Dispose of by incineration following Federal, State, Local, or Provincial regulations.
Waste Disposal of Packaging:	Comply with all Local, State, Federal, and Provincial Environmental Regulations.

14. TRANSPORTATION INFORMATION

United States:	
DOT Proper Shipping Name:	Flammable liquids, n.o.s. (Methanol)
UN Number:	UN1993
Hazard Class:	3
Packing Group:	II
International:	
IATA Proper Shipping Name:	Flammable liquids, n.o.s. (Methanol)
UN Number:	UN1993
Hazard Class:	3
Packing Group:	II

Marine Pollutant: No

Chemical Name	CAS#	Marine Pollutant	Severe Marine Pollutant
No data available			

15. REGULATORY INFORMATION

United States:

Chemical Name	CAS#	CERCLA	SARA 313	SARA EHS 313	TSCA
P&T Methanol	67-56-1	X	X	-	X
1-Bromo-4-fluorobenzene (BFB)	460-00-4	-	-	-	X
1,2-dichloroethane-d4	17060-07-0	-	-	-	-
dibromofluoromethane	1868-53-7	-	-	-	-
toluene-d8	2037-26-5	-	-	-	-

The following chemicals are listed on CA Prop 65:

Chemical Name	CAS #	Regulation
Methanol	67-56-1	Prop 65 Devolop Tox

State Right To Know Listing:

Chemical Name	CAS#	New Jersey	Massachusetts	Pennsylvania	California

P&T Methanol	67-56-1	X	X	X	X
1-Bromo-4-fluorobenzene (BFB)	460-00-4	-	-	-	-
1,2-dichloroethane-d4	17060-07-0	-	-	-	-
dibromofluoromethane	1868-53-7	-	-	-	-
toluene-d8	2037-26-5	-	-	-	-

16. OTHER INFORMATION

Prior Version Date: 07/20/18

Other Information: Any changes to the SDS compared to previous versions are marked by a vertical line in front of the concerned paragraph.

References: No data available

Disclaimer: Restek Corporation provides the descriptions, data and information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. It is provided for your guidance only. Because many factors may affect processing or application/use, Restek Corporation recommends you perform an assessment to determine the suitability of a product for your particular purpose prior to use. No warranties of any kind, either expressed or implied, including fitness for a particular purpose, are made regarding products described, data or information set forth. In no case shall the descriptions, information, or data provided be considered a part of our terms and conditions of sale. Further, the descriptions, data and information furnished hereunder are given gratis. No obligation or liability for the description, data and information given are assumed. All such being given and accepted at your risk.

RESTEK®
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Gravimetric Certificate

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
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.:** A0173600

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 : June 30, 2024 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Component #	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	1,4-Dichlorobenzene-d4 **CAS #** 3855-82-1 (Lot PR-30447) **Purity** 99%	25,040.0 µg/mL	+/- 231.7249 µg/mL +/- 1,415.4955 µg/mL +/- 1,448.0851 µg/mL	Gravimetric Unstressed Stressed
2	1,4-Difluorobenzene **CAS #** 540-36-3 (Lot MKBN8571V) **Purity** 99%	25,216.0 µg/mL	+/- 233.3536 µg/mL +/- 1,425.4447 µg/mL +/- 1,458.2633 µg/mL	Gravimetric Unstressed Stressed
3	Chlorobenzene-d5 **CAS #** 3114-55-4 (Lot PR-29571) **Purity** 99%	25,120.0 µg/mL	+/- 232.4652 µg/mL +/- 1,420.0178 µg/mL +/- 1,452.7116 µg/mL	Gravimetric Unstressed Stressed
4	Pentafluorobenzene **CAS #** 363-72-4 (Lot MKCK2250) **Purity** 99%	25,092.0 µg/mL	+/- 232.2061 µg/mL +/- 1,418.4350 µg/mL +/- 1,451.0923 µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Walker Workman - Operations Technician I

Date Mixed: 18-Jun-2021 **Balance:** 1128360905

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.

RESTEK

Safety Data Sheet

Revision Date: 05/24/21
www.restek.com

2 Letter ISO country code/language code: US/EN

1. IDENTIFICATION

Catalog Number / Product Name:	**555581 / Custom 8260 Internal Standard Mix**
Company:	Restek Corporation
Address:	110 Benner Circle Bellefonte, Pa. 16823
Phone#:	814-353-1300
Fax#:	814-353-1309
Emergency#:	800-424-9300 (CHEMTREC) 703-527-3887 (Outside the US)
Email:	www.restek.com
Revision Number:	8
Intended use:	For Laboratory use only

2. HAZARD(S)IDENTIFICATION

Emergency Overview:

GHS Hazard Symbols:



GHS Classification:	Specific Target Organ Systemic Toxicity (STOT) - Single Exposure Category 1 Flammable Liquid Category 2 Acute Toxicity - Dermal Category 3 Acute Toxicity - Oral Category 3
GHS Signal Word:	Danger
GHS Hazard:	Highly flammable liquid and vapour. Toxic if swallowed or in contact with skin. Causes damage to organs.
GHS Precautions:	
Safety Precautions:	Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilation and lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe dust/fume/gas/mist/vapours/spray. Wash hands and skin thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection.
First Aid Measures:	IF SWALLOWED: Immediately call a POISON CENTER/doctor/.... IF ON SKIN: Wash with plenty of soap and water. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. IF exposed: Call a POISON CENTER or doctor/physician. Call a POISON CENTER or doctor/physician if you feel unwell. Specific treatment see section 4. Rinse mouth. Take off immediately all contaminated clothing and wash it before reuse. In case of fire: Use extinguishing media in section 5 for extinction.

Storage:	Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up.
Disposal:	Dispose of contents/container according to section 13 of the SDS.
Single Exposure Target Organs:	Specific target organ toxicity - Single exposure - STOT SE 1: H370 Causes damage to organs. (C >= 10 %; No information to prove exclusion of certain routes of exposure); Specific target organ toxicity - Single exposure - STOT SE 2: H371 May cause damage to organs. (3 % <= C <10 %; Concentration limits for acute toxicity cannot be translated into GHS from the DSD especially when minimum classifications are given)
Repeated Exposure Target Organs:	No data available

3. COMPOSITION / INFORMATION ON INGREDIENT

Chemical Name	CAS #	EINEC #	% Composition
P&T Methanol	67-56-1	200-659-6	90
1,4-difluorobenzene	540-36-3	208-742-9	2.5
pentafluorobenzene	363-72-4	206-658-7	2.5
1,4-dichlorobenzene-d4	3855-82-1		2.5
chlorobenzene-d5	3114-55-4	221-482-0	2.5

4. FIRST-AID MEASURES

Inhalation:	Remove to fresh air. If breathing is difficult, have a trained individual administer oxygen. If not breathing, give artificial respiration and have a trained individual administer oxygen. Get medical attention immediately
Eyes:	Flush eyes with plenty of water for at least 20 minutes retracting eyelids often. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Get immediate medical attention.
Skin Contact:	Wash with soap and water. Remove contaminated clothing and launder. Get medical attention if irritation develops or persists.
Ingestion:	Do not induce vomiting and seek medical attention immediately. Drink two glasses of water or milk to dilute. Provide medical care provider with this SDS.

5. FIRE- FIGHTING MEASURES

Extinguishing Media:	Use alcohol resistant foam, carbon dioxide, or dry chemical extinguishing agents. Water may be ineffective but water spray can be used extinguish a fire if swept across the base of the flames. Water can absorb heat and keep exposed material from being damaged by fire. Use alcohol resistant foam, carbon dioxide, dry chemical, or water spray when fighting fires. Water or foam may cause frothing if liquid is burning but it still may be a useful extinguishing agent if carefully applied to the fire. Do not direct a water stream directly into the hot burning liquid.
Fire and/or Explosion Hazards:	Vapors may be ignited by heat, sparks, flames or other sources of ignition at or above the low flash point giving rise to a fire (Class B). Vapors are heavier than air and may travel to a source of ignition and flash back.
Fire Fighting Methods and Protection:	Do not enter fire area without proper protection including self-contained breathing apparatus and full protective equipment. Fight fire from a safe distance and a protected location due to the potential of hazardous vapors and decomposition products. Flammable component(s) of this material may be lighter than water and burn while floating on the surface.
Hazardous Combustion Products:	Carbon dioxide, Carbon monoxide

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions and Equipment:	Exposure to the spilled material may be severely irritating or toxic. Follow personal protective equipment recommendations found in Section 8 of this SDS. Personal protective equipment needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred, and the expertise of employees in the

area responding to the spill. Never exceed any occupational exposure limits.

Methods for Clean-up: Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation.

7. HANDLING AND STORAGE

Handling Technical Measures and Precautions: Toxic or severely irritating material. Avoid contacting and avoid breathing the material. Use only in a well ventilated area. Use spark-proof tools and explosion-proof equipment

Storage Technical Measures and Conditions: Store in a cool dry ventilated location. Isolate from incompatible materials and conditions. Keep container(s) closed. Keep away from sources of ignition

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

United States:

Chemical Name	CAS No.	IDLH	ACGIH STEL	ACGIH TLV-TWA	OSHA Exposure Limit
P&T Methanol	67-56-1	6000 ppm IDLH	250 ppm STEL	200 ppm TWA	200 ppm TWA; 260 mg/m3 TWA
1,4-difluorobenzene	540-36-3	Not established	None Known	Not established	No data available
pentafluorobenzene	363-72-4	Not established	None Known	Not established	No data available
1,4-dichlorobenzene-d4	3855-82-1	Not established	None Known	Not established	No data available
chlorobenzene-d5	3114-55-4	Not established	None Known	Not established	No data available

Personal Protection:

Engineering Measures: Local exhaust ventilation is recommended when generating excessive levels of vapours from handling or thermal processing.

Respiratory Protection: Respiratory protection may be required to avoid overexposure when handling this product. General or local exhaust ventilation is the preferred means of protection. Use a respirator if general room ventilation is not available or sufficient to eliminate symptoms.If an exposure limit is exceeded or if an operator is experiencing symptoms of inhalation overexposure as explained in Section 3, provide respiratory protection.

Eye Protection: Wear chemically resistant safety glasses with side shields when handling this product. Do not wear contact lenses.

Skin Protection: Wear protective gloves. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance, color:	No data available
Odor:	Mild
Physical State:	No data available
pH:	Not applicable
Vapor Pressure:	No data available
Vapor Density:	1.1 (air = 1)
Boiling Point (°C):	64.7 °C at 760 mmHg (HSDB)
Melting Point (°C):	-98 °C
Flash Point (°F):	36
Flammability:	Highly Flammable
Upper Flammable/Explosive Limit, % in air:	36
Lower Flammable/Explosive Limit, % in air:	6
Autoignition Temperature (°C):	464 deg C
Decomposition Temperature (°C):	No data available
Specific Gravity:	0.791 - 0.792 g/cm3 at 20 °C
Evaporation Rate:	No data available

Odor Threshold:	No data available
Solubility:	Moderate; 50-99%
Partition Coefficient: n-octanol in water:	No data available
VOC % by weight:	90
Molecular Weight:	32.04

10. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions.
Conditions to Avoid:	None known.
Materials to Avoid / Chemical Incompatiability:	Strong oxidizing agents
Hazardous Decomposition Products:	Carbon dioxide Carbon monoxide

11. TOXICOLOGICAL INFORMATION

Routes of Entry:	Inhalation, Skin Contact, Eye Contact, Ingestion
Target Organs Potentially Affected By Exposure:	Eyes, Central nervous system stimulation, Skin, GI Tract, Respiratory Tract
Chemical Interactions That Change Toxicity:	None Known

Immediate (Acute) Health Effects by Route of Exposure:

Inhalation Irritation:	Can cause moderate respiratory irritation, dizziness, weakness, fatigue, nausea and headache.
Inhalation Toxicity:	Harmful! Can cause systemic damage (see "Target Organs)Methanol can cause central nervous system depression and overexposure can cause damage to the optic nerve resulting in visual impairment or blindness.
Skin Contact:	Can cause moderate skin irritation, defatting, and dermatitis. Not likely to cause permanent damage.
Eye Contact:	Can cause moderate irritation, tearing and reddening, but not likely to permanently injure eye tissue.
Ingestion Irritation:	Irritating to mouth, throat, and stomach. Can cause abdominal discomfort, nausea, vomiting and diarrhea.Highly toxic and may be fatal if swallowed.
Ingestion Toxicity:	Toxic if swallowed. May cause target organ failure and/or death.May be fatal if swallowed.

Long-Term (Chronic) Health Effects:

Carcinogenicity:	No data.
Reproductive and Developmental Toxicity:	No data available to indicate product or any components present at greater than 0.1% may cause birth defects.
Inhalation:	Upon prolonged and/or repeated exposure, can cause moderate respiratory irritation, dizziness, weakness, fatigue, nausea and headache.Harmful! Can cause systemic damage upon prolonged and/or repeated exposure (see "Target Organs)
Skin Contact:	Upon prolonged or repeated contact, can cause moderate skin irritation, defatting, and dermatitis. Not likely to cause permanent damage.
Skin Absorption:	Upon prolonged or repeated exposure, harmful if absorbed through the skin. May cause severe irritation and systemic damage
Ingestion:	Toxic if swallowed. May cause target organ failure and/or death.

Component Toxicological Data:
NIOSH:

Chemical Name	CAS No.	LD50/LC50
Benzene, 1,2,3,4,5-pentafluoro-	363-72-4	Oral LD50 Rat 2 g/kg
Methanol	67-56-1	Inhalation LC50 Rat 22500 ppm 8 h

Component Carcinogenic Data:
OSHA:

Chemical Name	CAS No.
No data available	

ACGIH:

Chemical Name	CAS No.
No data available	

NIOSH:

Chemical Name	CAS No.
No data available	

NTP:

Chemical Name	CAS No.
No data available	

IARC:

Chemical Name	CAS No.	Group No.

12. ECOLOGICAL INFORMATION

Overview:	Moderate ecological hazard. This product may be dangerous to plants and/or wildlife.
Mobility:	No data
Persistence:	No data
Bioaccumulation:	No data
Degradability:	Biodegrades slowly.
Ecological Toxicity Data:	No data available

13. DISPOSAL CONSIDERATIONS

Waste Description of Spent Product:	Spent or discarded material is a hazardous waste.Mixing spent or discarded material with other materials may render the mixture hazardous. Perform a hazardous waste determination on mixtures.
Disposal Methods:	Dispose of by incineration following Federal, State, Local, or Provincial regulations.
Waste Disposal of Packaging:	Comply with all Local, State, Federal, and Provincial Environmental Regulations.

14. TRANSPORTATION INFORMATION

United States:

DOT Proper Shipping Name:	Flammable liquids, n.o.s. (Methanol, Pentafluorobenzene)
UN Number:	UN1993
Hazard Class:	3
Packing Group:	II

International:

IATA Proper Shipping Name:	Flammable liquids, n.o.s. (Methanol, Pentafluorobenzene)
UN Number:	UN1993
Hazard Class:	3
Packing Group:	II

Marine Pollutant: No

Chemical Name	CAS#	Marine Pollutant	Severe Marine Pollutant
No data available			

15. REGULATORY INFORMATION

United States:

Chemical Name	CAS#	CERCLA	SARA 313	SARA EHS 313	TSCA
P&T Methanol	67-56-1	X	X	-	X
1,4-difluorobenzene	540-36-3	-	-	-	-
pentafluorobenzene	363-72-4	-	-	-	X
1,4-dichlorobenzene-d4	3855-82-1	-	-	-	-
chlorobenzene-d5	3114-55-4	-	-	-	-

The following chemicals are listed on CA Prop 65:

Chemical Name	CAS #	Regulation
Methanol	67-56-1	Prop 65 Devolop Tox

State Right To Know Listing:

Chemical Name	CAS#	New Jersey	Massachusetts	Pennsylvania	California
P&T Methanol	67-56-1	X	X	X	X
1,4-difluorobenzene	540-36-3	-	-	-	-
pentafluorobenzene	363-72-4	-	-	-	-
1,4-dichlorobenzene-d4	3855-82-1	-	-	-	-
chlorobenzene-d5	3114-55-4	-	-	-	-

16. OTHER INFORMATION

Prior Version Date: 12/15/16

Other Information: Any changes to the SDS compared to previous versions are marked by a vertical line in front of the concerned paragraph.

References: No data available

Disclaimer: Restek Corporation provides the descriptions, data and information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. It is provided for your guidance only. Because many factors may affect processing or application/use, Restek Corporation recommends you perform an assessment to determine the suitability of a product for your particular purpose prior to use. No warranties of any kind, either expressed or implied, including fitness for a particular purpose, are made regarding products described, data or information set forth. In no case shall the descriptions, information, or data provided be considered a part of our terms and conditions of sale. Further, the descriptions, data and information furnished hereunder are given gratis. No obligation or liability for the description, data and information given are assumed. All such being given and accepted at your risk.

RESTEK®
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
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. : 30225 **Lot No.:** A0176219

Description : Bromochloromethane Standard

Bromochloromethane 2000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : September 30, 2026 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Bromochloromethane	2,016.0 µg/mL	+/- 11.9744	µg/mL	Gravimetric
	CAS # 74-97-5 (Lot 00008541)		+/- 113.0617	µg/mL	Unstressed
	Purity 99%		+/- 115.7059	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)

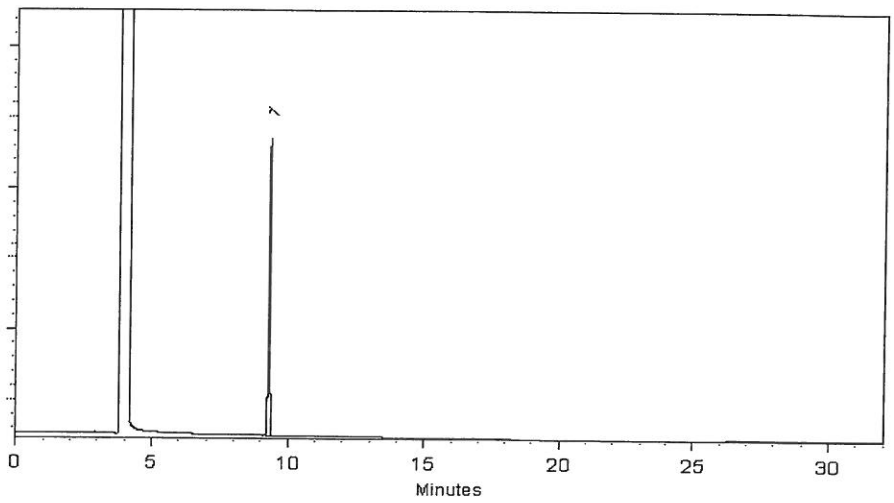
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Dalton Stover - Operations Technician I

Date Mixed: 08-Sep-2021 **Balance:** 1128353505

Marlina Cowan - Operations Tech I

Date Passed: 10-Sep-2021

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.

RESTEK®
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
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. : 30225 **Lot No.:** A0176219

Description : Bromochloromethane Standard

Bromochloromethane 2000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : September 30, 2026 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Bromochloromethane	2,016.0 µg/mL	+/- 11.9744	µg/mL	Gravimetric
	CAS # 74-97-5 (Lot 00008541)		+/- 113.0617	µg/mL	Unstressed
	Purity 99%		+/- 115.7059	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)

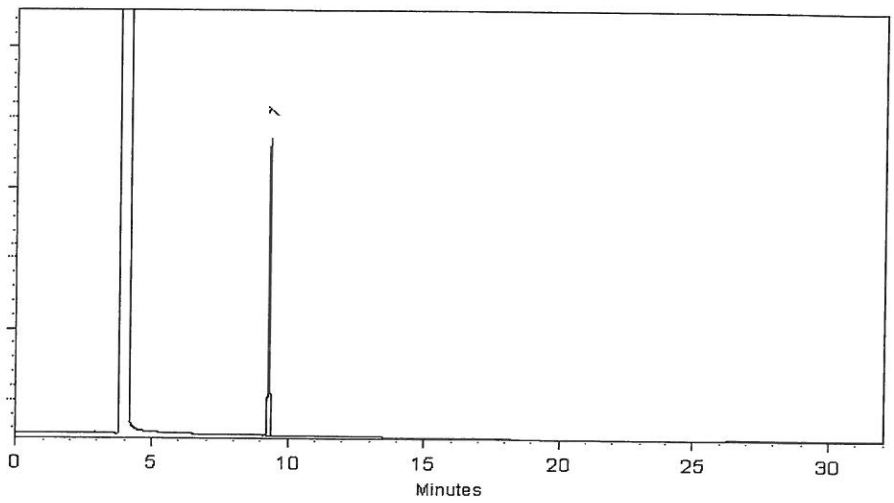
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Dalton Stover - Operations Technician I

Date Mixed: 08-Sep-2021 **Balance:** 1128353505

Marlina Cowan - Operations Tech I

Date Passed: 10-Sep-2021

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.

RESTEK®
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
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. : 30042 **Lot No.:** A0177872

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 : June 30, 2028 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dichlorodifluoromethane (CFC-12) **CAS #** 75-71-8 (Lot 00012554) **Purity** 99%	2,000.9 µg/mL	+/- 13.9607 µg/mL +/- 112.4514 µg/mL +/- 115.0704 µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3 (Lot SHBK6571) **Purity** 99%	2,000.2 µg/mL	+/- 13.2566 µg/mL +/- 112.3274 µg/mL +/- 114.9474 µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4 (Lot 00015559) **Purity** 99%	2,001.1 µg/mL	+/- 13.8225 µg/mL +/- 112.4449 µg/mL +/- 115.0645 µg/mL	Gravimetric Unstressed Stressed
4	Bromomethane (methyl bromide) **CAS #** 74-83-9 (Lot 101604) **Purity** 99%	2,000.2 µg/mL	+/- 13.6930 µg/mL +/- 112.3836 µg/mL +/- 115.0025 µg/mL	Gravimetric Unstressed Stressed
5	Chloroethane (ethyl chloride) **CAS #** 75-00-3 (Lot 107-401039114-1) **Purity** 99%	2,000.5 µg/mL	+/- 15.6153 µg/mL +/- 112.6506 µg/mL +/- 115.2642 µg/mL	Gravimetric Unstressed Stressed
6	Trichlorofluoromethane (CFC-11) **CAS #** 75-69-4 (Lot MKCL8411) **Purity** 99%	2,000.2 µg/mL	+/- 15.8709 µg/mL +/- 112.6692 µg/mL +/- 115.2815 µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

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

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 Suckal - Mix Technician

Date Mixed: 27-Oct-2021 **Balance:** B707717271

Marlina Cowan - Operations Tech I

Date Passed: 02-Nov-2021

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.

RESTEK®

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
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. : 30042 **Lot No.:** A0177872

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 : June 30, 2028 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dichlorodifluoromethane (CFC-12) **CAS #** 75-71-8 (Lot 00012554) **Purity** 99%	2,000.9 µg/mL	+/- 13.9607 µg/mL +/- 112.4514 µg/mL +/- 115.0704 µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3 (Lot SHBK6571) **Purity** 99%	2,000.2 µg/mL	+/- 13.2566 µg/mL +/- 112.3274 µg/mL +/- 114.9474 µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4 (Lot 00015559) **Purity** 99%	2,001.1 µg/mL	+/- 13.8225 µg/mL +/- 112.4449 µg/mL +/- 115.0645 µg/mL	Gravimetric Unstressed Stressed
4	Bromomethane (methyl bromide) **CAS #** 74-83-9 (Lot 101604) **Purity** 99%	2,000.2 µg/mL	+/- 13.6930 µg/mL +/- 112.3836 µg/mL +/- 115.0025 µg/mL	Gravimetric Unstressed Stressed
5	Chloroethane (ethyl chloride) **CAS #** 75-00-3 (Lot 107-401039114-1) **Purity** 99%	2,000.5 µg/mL	+/- 15.6153 µg/mL +/- 112.6506 µg/mL +/- 115.2642 µg/mL	Gravimetric Unstressed Stressed
6	Trichlorofluoromethane (CFC-11) **CAS #** 75-69-4 (Lot MKCL8411) **Purity** 99%	2,000.2 µg/mL	+/- 15.8709 µg/mL +/- 112.6692 µg/mL +/- 115.2815 µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

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

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 Suckal - Mix Technician

Date Mixed: 27-Oct-2021 Balance: B707717271

Marlina Cowan - Operations Tech I

Date Passed: 02-Nov-2021

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.

RESTEK®
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
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. : 30006 **Lot No.:** A0179406

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 : March 31, 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 SHBN3661) **Purity** 99%	5,037.5 µg/mL	+/- 29.2885 µg/mL +/- 303.9347 µg/mL +/- 304.6563 µg/mL	Gravimetric Unstressed Stressed
2	2-Butanone (MEK) **CAS #** 78-93-3 (Lot SHBL5543) **Purity** 99%	5,034.3 µg/mL	+/- 29.2700 µg/mL +/- 303.7436 µg/mL +/- 304.4648 µg/mL	Gravimetric Unstressed Stressed
3	4-Methyl-2-pentanone (MIBK) **CAS #** 108-10-1 (Lot SHBM7956) **Purity** 99%	5,032.2 µg/mL	+/- 29.2575 µg/mL +/- 303.6129 µg/mL +/- 304.3337 µg/mL	Gravimetric Unstressed Stressed
4	2-Hexanone **CAS #** 591-78-6 (Lot MKCL1599) **Purity** 99%	5,033.7 µg/mL	+/- 29.2662 µg/mL +/- 303.7034 µg/mL +/- 304.4245 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)

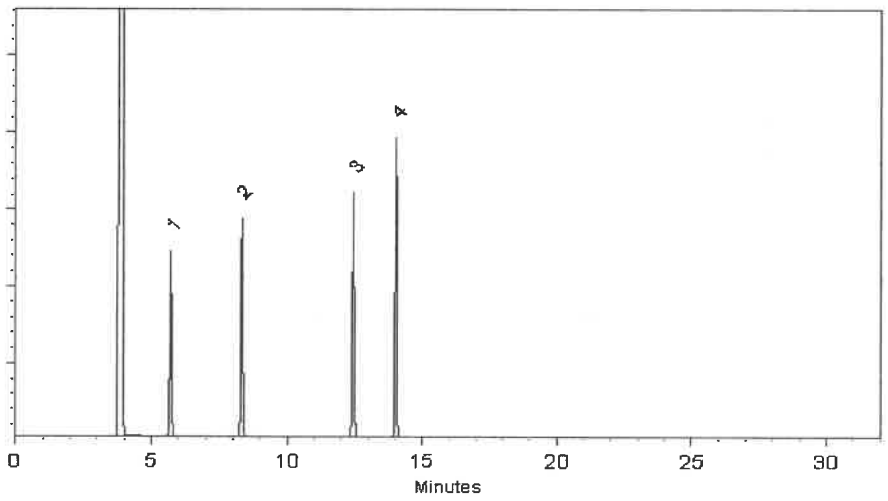
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Sam Moodler - Operations Tech I

Date Mixed: 09-Dec-2021 **Balance:** B707717271

Clara Windle - Operations Technician I

Date Passed: 13-Dec-2021

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.

RESTEK®
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
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. : 30006 **Lot No.:** A0179406

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 : March 31, 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 SHBN3661) **Purity** 99%	5,037.5 µg/mL	+/- 29.2885 µg/mL +/- 303.9347 µg/mL +/- 304.6563 µg/mL	Gravimetric Unstressed Stressed
2	2-Butanone (MEK) **CAS #** 78-93-3 (Lot SHBL5543) **Purity** 99%	5,034.3 µg/mL	+/- 29.2700 µg/mL +/- 303.7436 µg/mL +/- 304.4648 µg/mL	Gravimetric Unstressed Stressed
3	4-Methyl-2-pentanone (MIBK) **CAS #** 108-10-1 (Lot SHBM7956) **Purity** 99%	5,032.2 µg/mL	+/- 29.2575 µg/mL +/- 303.6129 µg/mL +/- 304.3337 µg/mL	Gravimetric Unstressed Stressed
4	2-Hexanone **CAS #** 591-78-6 (Lot MKCL1599) **Purity** 99%	5,033.7 µg/mL	+/- 29.2662 µg/mL +/- 303.7034 µg/mL +/- 304.4245 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)

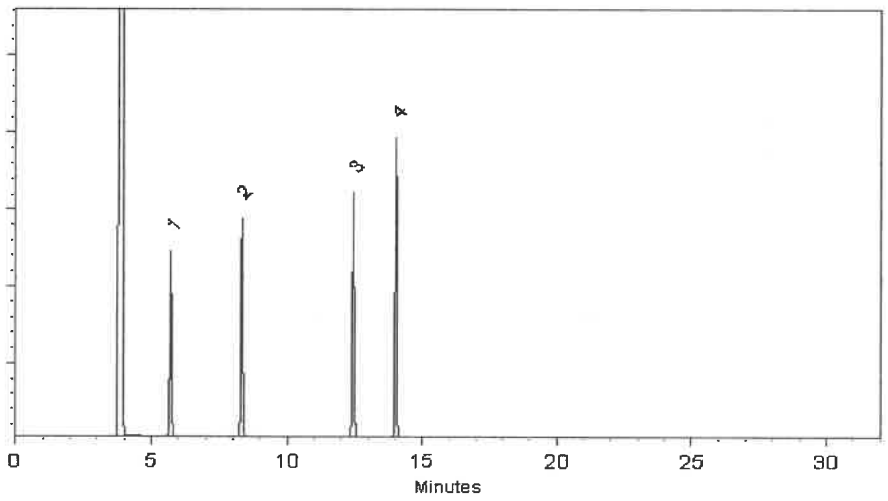
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Sam Moodler - Operations Tech I

Date Mixed: 09-Dec-2021 **Balance:** B707717271

Clara Windle - Operations Technician I

Date Passed: 13-Dec-2021

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.

RESTEK®
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
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. : 30006 **Lot No.:** A0179406

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 : March 31, 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 SHBN3661) **Purity** 99%	5,037.5 µg/mL	+/- 29.2885 µg/mL +/- 303.9347 µg/mL +/- 304.6563 µg/mL	Gravimetric Unstressed Stressed
2	2-Butanone (MEK) **CAS #** 78-93-3 (Lot SHBL5543) **Purity** 99%	5,034.3 µg/mL	+/- 29.2700 µg/mL +/- 303.7436 µg/mL +/- 304.4648 µg/mL	Gravimetric Unstressed Stressed
3	4-Methyl-2-pentanone (MIBK) **CAS #** 108-10-1 (Lot SHBM7956) **Purity** 99%	5,032.2 µg/mL	+/- 29.2575 µg/mL +/- 303.6129 µg/mL +/- 304.3337 µg/mL	Gravimetric Unstressed Stressed
4	2-Hexanone **CAS #** 591-78-6 (Lot MKCL1599) **Purity** 99%	5,033.7 µg/mL	+/- 29.2662 µg/mL +/- 303.7034 µg/mL +/- 304.4245 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)

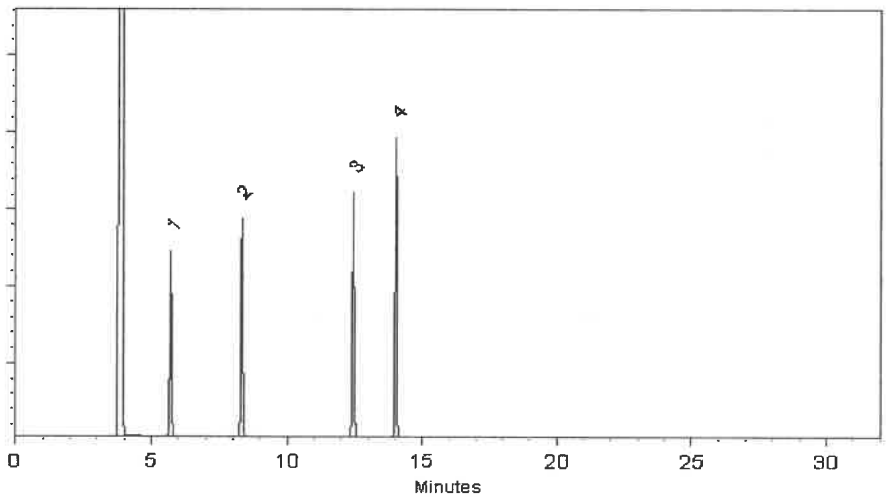
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Sam Moodler - Operations Tech I

Date Mixed: 09-Dec-2021 **Balance:** B707717271

Clara Windle - Operations Technician I

Date Passed: 13-Dec-2021

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.

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
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. : 30225 **Lot No.:** A0183824

Description : Bromochloromethane Standard

Bromochloromethane 2000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2027 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Bromochloromethane		2,000.0 µg/mL	+/- 11.8794	µg/mL	Gravimetric
	CAS # 74-97-5	(Lot 00008541)		+/- 112.1643	µg/mL	Unstressed
	Purity 99%			+/- 114.7876	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)

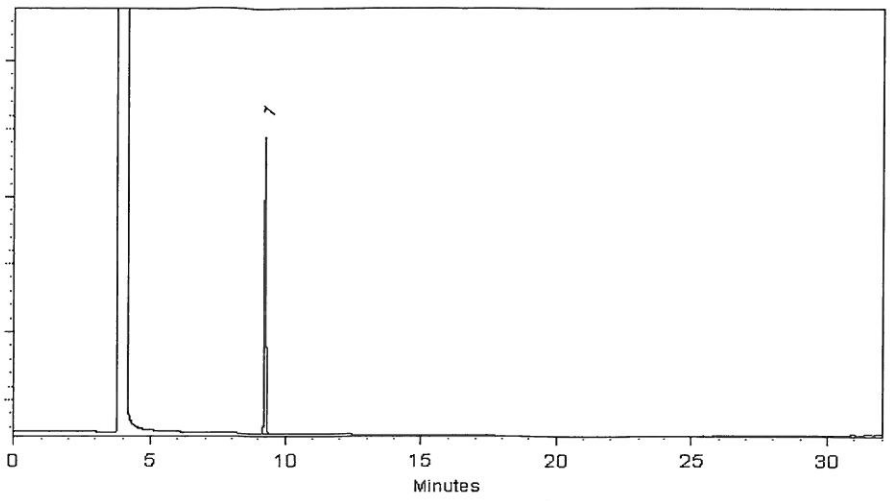
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Jess Hoy - Operations Tech I

Date Mixed: 07-Apr-2022 **Balance:** 1127510105

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 11-Apr-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.

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
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. : 30225 **Lot No.:** A0183824

Description : Bromochloromethane Standard

Bromochloromethane 2000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2027 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Bromochloromethane		2,000.0 µg/mL	+/- 11.8794	µg/mL	Gravimetric
	CAS # 74-97-5	(Lot 00008541)		+/- 112.1643	µg/mL	Unstressed
	Purity 99%			+/- 114.7876	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)

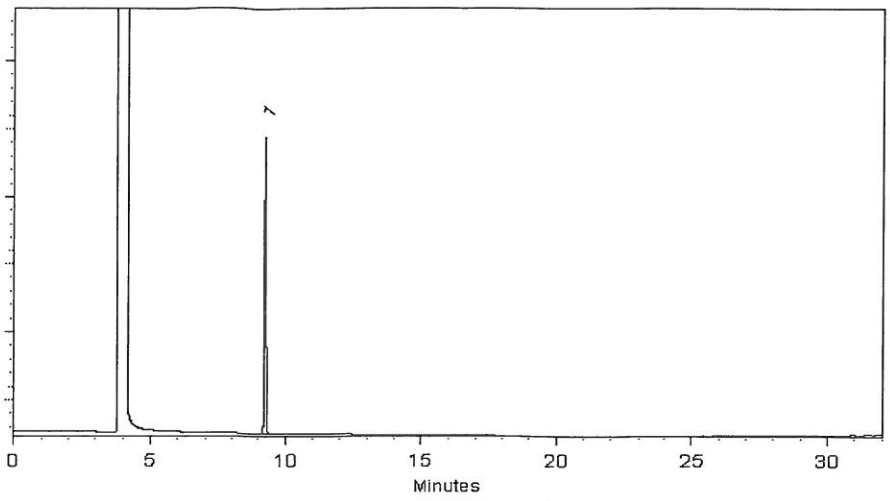
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Jess Hoy - Operations Tech I

Date Mixed: 07-Apr-2022 **Balance:** 1127510105

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 11-Apr-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.

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
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. : 30225 **Lot No.:** A0183824

Description : Bromochloromethane Standard

Bromochloromethane 2000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2027 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Bromochloromethane		2,000.0 µg/mL	+/- 11.8794	µg/mL	Gravimetric
	CAS # 74-97-5	(Lot 00008541)		+/- 112.1643	µg/mL	Unstressed
	Purity 99%			+/- 114.7876	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)

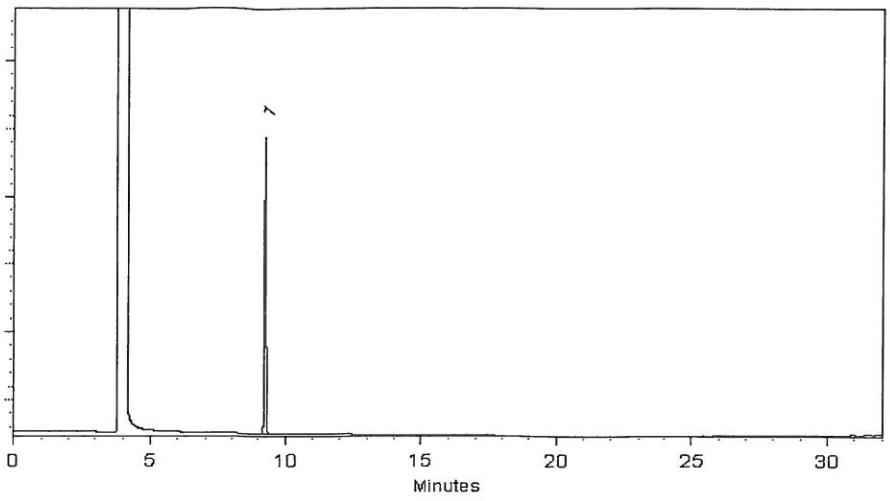
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Jess Hoy - Operations Tech I

Date Mixed: 07-Apr-2022 **Balance:** 1127510105

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 11-Apr-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.

RESTEK®
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Composition

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ilac-MRA

ACCREDITED
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. : 555408-SL **Lot No.:** A0187421

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 : January 31, 2024 **Storage:** -20°C or colder

Handling: This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Vinyl acetate **CAS #** 108-05-4 (Lot RD220630) **Purity** 99%	8,078.0 µg/mL	+/- 47.4062 µg/mL +/- 487.4241 µg/mL +/- 488.5812 µg/mL	Gravimetric Unstressed Stressed

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.

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

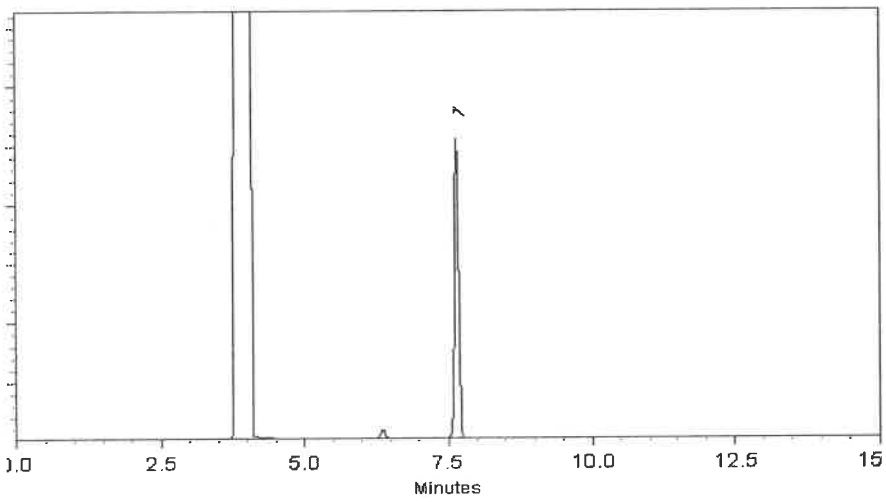
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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: 18-Jul-2022 **Balance:** B251644995

Fang-Yun Weaver - Operations Lead Tech - ARM QC

Date Passed: 26-Jul-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.

RESTEK®
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Composition

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
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. : 555408-SL **Lot No.:** A0187421

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 : January 31, 2024 **Storage:** -20°C or colder

Handling: This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Vinyl acetate **CAS #** 108-05-4 (Lot RD220630) **Purity** 99%	8,078.0 µg/mL	+/- 47.4062 µg/mL +/- 487.4241 µg/mL +/- 488.5812 µg/mL	Gravimetric Unstressed Stressed

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.

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

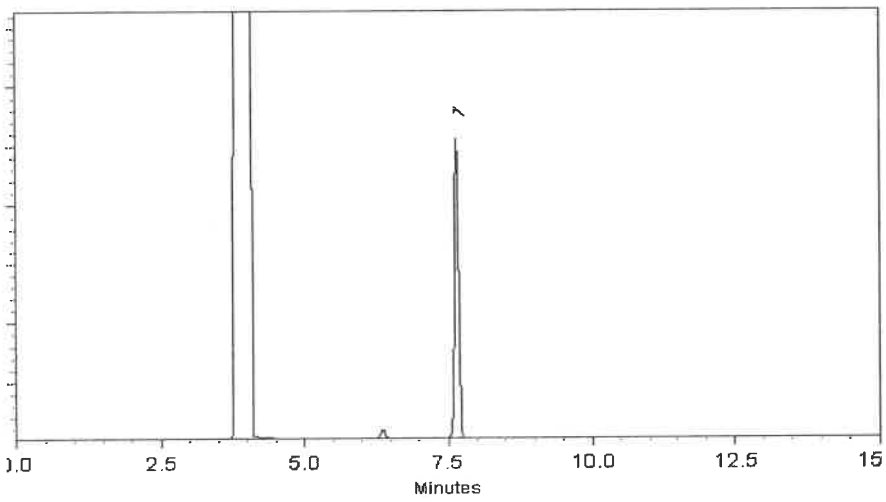
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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: 18-Jul-2022 **Balance:** B251644995

Fang-Yun Weaver - Operations Lead Tech - ARM QC

Date Passed: 26-Jul-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.

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis

avantor™ | J.T.Baker®

Material No.: 9077-02
Batch No.: 22C2362001
Manufactured Date: 2022-02-15
Expiration Date: 2025-02-14
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	< 0.1 ppm
Titrable Acid (µeq/g)	≤ 0.3	0.3
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

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone 610.386.1700

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis

avantor™ | J.T.Baker®

Material No.: 9077-02
Batch No.: 22C2362001
Manufactured Date: 2022-02-15
Expiration Date: 2025-02-14
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	< 0.1 ppm
Titrable Acid (µeq/g)	≤ 0.3	0.3
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

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone 610.386.1700

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis

avantor™ | J.T.Baker®

Material No.: 9077-02
Batch No.: 0000288323
Manufactured Date: 2021-06-11
Expiration Date: 2024-06-10
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (CH_3OH) (by GC, corrected for water)	≥ 99.9 %	< 0.1 %
Residue after Evaporation	≤ 1.0 ppm	< 0.1 ppm
Titrable Acid (µeq/g)	≤ 0.3	< 0.1
Titrable Base (µeq/g)	≤ 0.10	< 0.01
Water (by KF, coulometric)	≤ 0.08 %	< 0.01 %
Volatile Organic Trace Analysis - Below EPA 8260B CRQL	Conforms	Fails

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

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone 610.386.1700

CERTIFIED WEIGHT REPORT

Part Number: 95317
Lot Number: 042921
Description: Universal VOA Megamix
69 components
Expiration Date: 042924
Recommended Storage: Freezer (0 °C)
Nominal Concentration (µg/mL): 2000
NIST Test ID#: 6UTB

Solvent(s): Methanol Lot# DY186-USQ8

5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 100.0 0.012 Flask Uncertainty

Formulated By: Eli Aliaga 042921 DATE
Reviewed By: Pedro L. Rentas 042921 DATE

	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)	060812	NA	NA	NA	2000	99.9	0.2	NA	0.20021	0.20041	2002.0	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	0.20203	0.20233	2003.0	8.2	107-05-1	1 ppm (3mg/m3/8H)	orl-rat 700mg/kg
3.	Carbon disulphide	(0060)	MKCD9604	NA	NA	NA	2000	100	0.2	NA	0.20001	0.20015	2001.4	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	0.21054	0.21060	2000.6	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	0.20726	0.20751	2002.4	8.4	110-57-6	N/A	N/A
6.	Diethyl ether (Ethyl ether)	(0153)	SHBK1918	NA	NA	NA	2000	99.9	0.2	NA	0.20023	0.20046	2002.3	8.1	60-29-7	400ppm (1200mg/m3/8H)	orl-rat 1215mg/kg
7.	Ethyl methacrylate	(0381)	06126PX	NA	NA	NA	2000	99	0.2	NA	0.20203	0.20230	2002.7	8.2	97-63-2	N/A	orl-rat 14800mg/kg
8.	Iodomethane	(0489)	SHBF8718V	NA	NA	NA	2000	99.5	0.2	NA	0.20101	0.20130	2002.8	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	0.20101	0.20123	2002.1	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	0.20203	0.20220	2001.7	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	0.20021	0.20046	2002.5	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	0.20021	0.20048	2002.7	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	0.20203	0.20218	2001.5	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	0.20556	0.20566	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	0.20409	0.20418	2000.9	8.2	76-01-7	N/A	N/A
16.	1,1,2-Trichlorotrifluoroethane	(0474)	18930	NA	NA	NA	2000	99	0.2	NA	0.20203	0.20221	2001.8	8.2	76-13-1	1000 ppm (7600mg/m3/8H)	orl-rat 43g/kg
17.	Bromodichloromethane	35171	100220	0.05	5.00	40018.8	2000	NA	NA	0.017	NA	NA	2000.8	18.4	75-27-4	N/A	orl-rat 916mg/kg
18.	Dibromochloromethane	35171	100220	0.05	5.00	40007.7	2000	NA	NA	0.017	NA	NA	2000.3	18.4	124-48-1	N/A	orl-rat 848mg/kg
19.	cis-1,2-Dichloroethene	35171	100220	0.05	5.00	40012.4	2000	NA	NA	0.017	NA	NA	2000.5	18.4	156-59-2	N/A	N/A
20.	trans-1,2-Dichloroethene	35171	100220	0.05	5.00	40005.6	2000	NA	NA	0.017	NA	NA	2000.2	18.4	156-60-5	N/A	orl-rat 1235mg/kg
21.	Methylene chloride	35171	100220	0.05	5.00	40013.9	2000	NA	NA	0.017	NA	NA	2000.6	18.4	75-09-2	500 ppm	orl-rat 820mg/kg
22.	1,1-Dichloroethene	32251	031821	0.10	10.00	20009.1	2000	NA	NA	0.042	NA	NA	2000.8	19.3	75-35-4	1 ppm (4mg/m3/8H)	orl-rat 200mg/kg
23.	Bromoform	95321	010419	0.10	10.00	20001.7	2000	NA	NA	0.042	NA	NA	2000.1	19.3	75-25-2	0.5 ppm (5mg/m3) (skin)	orl-rat 933mg/kg
24.	Carbon tetrachloride	95321	010419	0.10	10.00	20001.3	2000	NA	NA	0.042	NA	NA	2000.0	19.2	56-23-5	2 ppm (12.6mg/m3/8H)	orl-rat 2350mg/kg
25.	Chloroform	95321	010419	0.10	10.00	20001.8	2000	NA	NA	0.042	NA	NA	2000.1	19.2	67-66-3	50 ppm (240mg/m3) (CL)	orl-rat 908mg/kg
26.	Dibromomethane	95321	010419	0.10	10.00	20001.7	2000	NA	NA	0.042	NA	NA	2000.1	19.3	74-95-3	N/A	orl-rat 108mg/kg
27.	1,1-Dichloroethane	95321	010419	0.10	10.00	20000.8	2000	NA	NA	0.042	NA	NA	2000.0	19.3	75-34-3	100 ppm	orl-rat 725mg/kg
28.	2,2-Dichloropropane	95321	010419	0.10	10.00	20002.1	2000	NA	NA	0.042	NA	NA	2000.1	19.3	594-20-7	N/A	N/A
29.	Tetrachloroethene	95321	010419	0.10	10.00	20002.2	2000	NA	NA	0.042	NA	NA	2000.1	19.3	127-18-4	25 ppm (170mg/m3/8H)(final)	orl-rat 2629mg/kg
30.	1,1,1-Trichloroethane	95321	010419	0.10	10.00	20001.7	2000	NA	NA	0.042	NA	NA	2000.1	19.3	71-55-6	350 ppm (1900mg/m3/8H)	orl-rat 10300mg/kg
31.	1,2-Dibromo-3-chloropropane	35161	011421	0.05	5.00	40001.2	2000	NA	NA	0.017	NA	NA	2000.0	18.4	96-12-8	0.001 ppm	orl-rat 170mg/kg
32.	1,2-Dibromoethane	35161	011421	0.05	5.00	40003.9	2000	NA	NA	0.017	NA	NA	2000.1	18.4	106-93-4	20 ppm (8H)	orl-rat 108mg/kg
33.	1,2-Dichloroethane	35161	011421	0.05	5.00	40004.9	2000	NA	NA	0.017	NA	NA	2000.1	18.4	107-06-2	50 ppm (8H)	orl-rat 670mg/kg
34.	1,2-Dichloropropane	35161	011421	0.05	5.00	40002.2	2000	NA	NA	0.017	NA	NA	2000.0	18.4	78-87-5	75 ppm (350mg/m3/8H)	orl-rat 1947mg/kg
35.	1,3-Dichloropropane	35161	011421	0.05	5.00	40013.9	2000	NA	NA	0.017	NA	NA	2000.6	18.4	142-28-9	N/A	unr-mus 3600mg/kg
36.	1,1-Dichloropropene	35161	011421	0.05	5.00	40015.0	2000	NA	NA	0.017	NA	NA	2000.7	26.1	563-58-6	N/A	N/A
37.	cis-1,3-Dichloropropene	35161	011421	0.05	5.00	40004.4	2000	NA	NA	0.017	NA	NA	2000.1	18.4	10061-01-5	N/A	N/A
38.	trans-1,3-Dichloropropene	35161	011421	0.05	5.00	40009.1	2000	NA	NA	0.017	NA	NA	2000.4	18.5	10061-02-6	N/A	N/A
39.	Hexachloro-1,3-butadiene	35161	011421	0.05	5.00	40003.5	2000	NA	NA	0.017	NA	NA	2000.1	26.4	87-68-3	0.02 ppm (0.24mg/m3/8H)	orl-rat 82mg/kg
40.	1,1,1,2-Tetrachloroethane	35161	011421	0.05	5.00	40011.9	2000	NA	NA	0.017	NA	NA	2000.5	18.4	630-20-6	N/A	orl-rat 670mg/kg
41.	1,1,2,2-Tetrachloroethane	35161	011421	0.05	5.00	40011.0	2000	NA	NA	0.017	NA	NA	2000.5	18.4	79-34-5	5 ppm (35mg/m3/9H)(skin)	orl-rat 800mg/kg
42.	1,1,2-Trichloroethane	35161	011421	0.05	5.00	40000.8	2000	NA	NA	0.017	NA	NA	1999.9	18.4	79-00-5	10 ppm (45mg/m3/8H)(skin)	orl-rat 836mg/kg
43.	Trichloroethene	35161	011421	0.05	5.00	40003.2	2000	NA	NA	0.017	NA	NA	2000.1	18.4	79-01-6	50 ppm (270mg/m3/8H)	orl-mus 2402mg/kg
44.	1,2,3-Trichloropropane	35161	011421	0.05	5.00	40015.2	2000	NA	NA	0.017	NA	NA	2000.7	18.4	96-18-4	10 ppm (60mg/m3/8H)	orl-rat 149.6mg/kg
45.	Benzene	35162	020821	0.05	5.00	40008.9	2000	NA	NA	0.017	NA	NA	2000.3	18.4	71-43-2	1 ppm	orl-rat 4894mg/kg
46.	Bromobenzene	35162	020821	0.05	5.00	40019.0	2000	NA	NA	0.017	NA	NA	2000.9	18.4	108-86-1	N/A	orl-rat 2699mg/kg
47.	n-Butyl benzene	35162	020821	0.05	5.00	40019.8	2000	NA	NA	0.017	NA	NA	2000.9	18.4	104-51-8	N/A	N/A
48.	Ethyl benzene	35162	020821	0.05	5.00	40000.9	2000	NA	NA	0.017	NA	NA	1999.9	18.4	100-41-4	100 ppm (435mg/m3/8H)	orl-rat >2000mg/kg
49.	p-Isopropyl toluene	35162	020821	0.05	5.00	40056.4	2000	NA	NA	0.017	NA	NA	2002.7	18.4	99-87-6	N/A	orl-rat 4750mg/kg
50.	Naphthalene	35162	020821	0.05	5.00	40005.1	2000	NA	NA	0.017	NA	NA	2000.2	18.3	91-20-3	10 ppm (50mg/m3/8H)	orl-rat 490mg/kg
51.	Styrene	35162	020821	0.05	5.00	40022.8	2000	NA	NA	0.017	NA	NA	2001.0	18.4	100-42-5	100 ppm	orl-rat 5000mg/kg
52.	Toluene	35162	020821	0.05	5.00	40008.9	2000	NA	NA	0.017	NA	NA	2000.3	18.4	108-88-3	200 ppm	orl-rat 5000mg/kg
53.	1,2,3-Trichlorobenzene	35162	020821	0.05	5.00	40002.0	2000	NA	NA	0.017	NA	NA	2000.0	18.4	87-61-6	N/A	ipr-mus 1390mg/kg
54.	1,2,4-Trichlorobenzene	35162	020821	0.05	5.00	40027.4	2000	NA	NA	0.017	NA	NA	2001.3	18.4	120-82-1	5 ppm (CL) (40mg/m3)	orl-rat 756mg/kg
55.	1,2,4-Trimethylbenzene	35162	020821	0.05	5.00	40012.4	2000	NA	NA	0.017	NA	NA	2000.5	18.4	95-63-6	N/A	orl-rat 5g/kg
56.	1,3,5-Trimethylbenzene	35162	020821	0.05	5.00	40011.5	2000	NA	NA	0.017	NA	NA	2000.5	18.5	108-67-8	N/A	orl-rat 5000mg/kg
57.	m-Xylene	35162	020821	0.05	5.00	40021.8	2000	NA	NA	0.017	NA	NA	2001.0	18.4	108-38-3	100 ppm (435mg/m3/8H)	orl-rat 5g/kg
58.	tert-Butyl benzene	35163	022521	0.05	5.00	40005.9	2000	NA	NA	0.017	NA	NA	2000.2	18.4	98-06-6	N/A	N/A
59.	sec-Butyl benzene	35163	022521	0.05	5.00	40011.7	2000	NA	NA	0.017	NA	NA	2000.5	18.4	135-98-8	N/A	orl-rat 2240mg/kg
60.	Chlorobenzene	35163	022521	0.05	5.00	40009.0	2000	NA	NA	0.017	NA	NA	2000.4	18.4	108-90-7	75 ppm (350mg/m3/8H)	orl-rat 2290mg/kg
61.	2-Chlorotoluene	35163	022521	0.05	5.00	40002.0	2000	NA	NA	0.017	NA	NA	2000.0	18.4	95-49-8	50 ppm (250mg/m3/8H)	orl-rat 3900mg/kg
62.	4-Chlorotoluene	35163	022521	0.05	5.00	40000.4	2000	NA	NA	0.017	NA	NA	1999.9	18.4	106-43-4	N/A	orl-rat 2100mg/kg
63.	1,2-Dichlorobenzene	35163	022521	0.05	5.00	40004.0	2000	NA	NA	0.017	NA	NA	2000.1	18.4	95-50-1	50 ppm (300mg/m3) (CL)	orl-rat 500mg/kg
64.	1,3-Dichlorobenzene	35163	022521	0.05	5.00	40003.6	2000	NA	NA	0.017	NA	NA	2000.1	18.4	541-73-1	N/A	ipr-mus 1062mg/kg
65.	1,4-Dichlorobenzene	35163	022521	0.05	5.00	40005.0	2000	NA	NA	0.017	NA	NA	2000.2	18.4	106-46-7	75 ppm (450mg/m3/8H)	orl-rat 500mg/kg
66.	Isopropylbenzene	35163	022521	0.05	5.00	40007.4	2000	NA	NA	0.017	NA	NA	2000.3	18.4	98-82-8	50 ppm (245mg/m3/8H)	orl-rat 1400mg/kg
67.	n-Propylbenzene	35163	022521	0.05	5.00	40004.6	2000	NA	NA	0.017	NA	NA	2000.1	18.4	103-65-1	N/A	orl-rat 6040mg/kg
68.	o-Xylene	35163	022521	0.05	5.00	40003.0	2000	NA	NA	0.017	NA	NA	2000.1	18.4	95-47-6	100 ppm (435mg/m3/8H)	ipr-mus 1364mg/kg
69.	p-Xylene	35163	022521	0.05	5.00	40005.0	2000	NA	NA	0.017	NA	NA	2000.2	18.4	106-42-3	100 ppm (435mg/m3/8H)	orl-rat 5g/kg

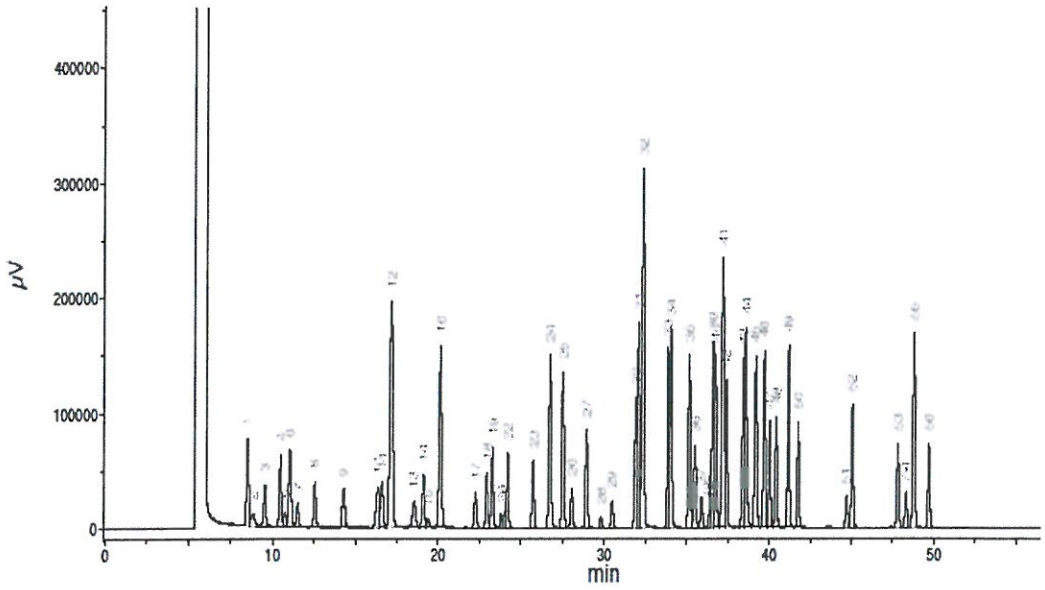
- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty 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).

Run 22, "P95317 L042921 [2000µg/mL in MeOH]"

Run Length: 60.00 min, 35999 points at 10 points/second.
Created: Thu, Apr 29, 2021 at 3:49:30 PM.
Sampled: Sequence "042521-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=4



Peak #	Analyte	FID RT (min.)
1	Ether	8.48
2	1,1,2-Trichloro-1,2,2-trifluoroethane	8.80
3	1,1-Dichloroethene	9.51
4	Acetonitrile	10.44
5	Iodomethane	10.71
6	Allyl chloride	11.02
7	**Carbon disulfide/Methylene chloride**	11.51
8	trans-1,2-Dichloroethene	12.55
9	1,1-Dichloroethane	14.28
10	2,2-Dichloropropane	16.33
11	cis-1,2-Dichloroethene	16.59
12	**Methacrylonitrile/Methyl acrylate/Chloroform**	17.14
13	**Isobutanol/1,1,1-Trichloroethane**	18.52
14	1,1-Dichloropropene	19.08
15	Carbon tetrachloride	19.39
16	**Benzene/1,2-Dichloroethane**	20.10
17	Trichloroethene	22.23
18	1,2-Dichloropropane	22.92
19	Methyl methacrylate	23.26
20	Bromodichloromethane	23.79
21	Dibromomethane	23.98
22	2-Nitropropane	24.18
23	cis-1,3-Dichloropropene	25.71
24	Toluene	26.71
25	**Ethyl methacrylate/trans-1,3-Dichloropropene**	27.50
26	1,1,2-Trichloroethane	28.04
27	**Tetrachloroethene/1,3-Dichloropropane**	29.92
28	Dibromochloromethane	29.79
29	1,2-Dibromoethane	30.46
30	Chlorobenzene	31.89
31	**Ethylbenzene/1,1,1,2-Tetrachloroethane**	32.07
32	**m-Xylene/p-Xylene**	32.33
33	o-Xylene	33.87
34	Styrene	34.04
35	**Isopropylbenzene/Bromoform**	35.14
36	cis-1,4-Dichloro-2-butene	35.49
37	1,1,2,2-Tetrachloroethane	35.90
38	**1,2,3-Trichloropropane**	36.34
39	**n-Propylbenzene**	36.58
40	**trans-1,4-Dichloro-2-butene/Bromobenzene**	36.73
41	**1,3,5-Trimethylbenzene/2-Chlorotoluene**	37.17
42	4-Chlorotoluene	37.38
43	tert-Butylbenzene	38.41
44	**1,2,4-Trimethylbenzene/Pentachloroethane**	38.55
45	sec-Butylbenzene	39.16
46	p-Isopropyltoluene	39.68
47	1,3-Dichlorobenzene	40.01
48	1,4-Dichlorobenzene	40.42
49	n-Butylbenzene	41.16
50	1,2-Dichlorobenzene	41.74
51	1,2-Dibromo-3-chloropropane	44.68
52	Nitrobenzene	45.04
53	1,2,4-Trichlorobenzene	47.80
54	Hexachlorobutadiene	48.29
55	Naphthalene	48.76
56	1,2,3-Trichlorobenzene	49.66

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** May 1, 2019

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: 95317
Lot Number: 042921
Description: Universal VOA Megamix
69 components
Expiration Date: 042924
Recommended Storage: Freezer (0 °C)
Nominal Concentration (µg/mL): 2000
NIST Test ID#: 6UTB

Solvent(s): Methanol Lot# DY186-USQ8

5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 100.0 0.012 Flask Uncertainty

Formulated By: Eli Aliaga 042921 DATE
Reviewed By: Pedro L. Rentas 042921 DATE

	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)	060812	NA	NA	NA	2000	99.9	0.2	NA	0.20021	0.20041	2002.0	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	0.20203	0.20233	2003.0	8.2	107-05-1	1 ppm (3mg/m3/8H)	orl-rat 700mg/kg
3.	Carbon disulphide	(0060)	MKCD9604	NA	NA	NA	2000	100	0.2	NA	0.20001	0.20015	2001.4	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	0.21054	0.21060	2000.6	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	0.20726	0.20751	2002.4	8.4	110-57-6	N/A	N/A
6.	Diethyl ether (Ethyl ether)	(0153)	SHBK1918	NA	NA	NA	2000	99.9	0.2	NA	0.20023	0.20046	2002.3	8.1	60-29-7	400ppm (1200mg/m3/8H)	orl-rat 1215mg/kg
7.	Ethyl methacrylate	(0381)	06126PX	NA	NA	NA	2000	99	0.2	NA	0.20203	0.20230	2002.7	8.2	97-63-2	N/A	orl-rat 14800mg/kg
8.	Iodomethane	(0489)	SHBF8718V	NA	NA	NA	2000	99.5	0.2	NA	0.20101	0.20130	2002.8	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	0.20101	0.20123	2002.1	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	0.20203	0.20220	2001.7	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	0.20021	0.20046	2002.5	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	0.20021	0.20048	2002.7	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	0.20203	0.20218	2001.5	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	0.20556	0.20566	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	0.20409	0.20418	2000.9	8.2	76-01-7	N/A	N/A
16.	1,1,2-Trichlorotrifluoroethane	(0474)	18930	NA	NA	NA	2000	99	0.2	NA	0.20203	0.20221	2001.8	8.2	76-13-1	1000 ppm (7600mg/m3/8H)	orl-rat 43g/kg
17.	Bromodichloromethane	35171	100220	0.05	5.00	40018.8	2000	NA	NA	0.017	NA	NA	2000.8	18.4	75-27-4	N/A	orl-rat 916mg/kg
18.	Dibromochloromethane	35171	100220	0.05	5.00	40007.7	2000	NA	NA	0.017	NA	NA	2000.3	18.4	124-48-1	N/A	orl-rat 848mg/kg
19.	cis-1,2-Dichloroethene	35171	100220	0.05	5.00	40012.4	2000	NA	NA	0.017	NA	NA	2000.5	18.4	156-59-2	N/A	N/A
20.	trans-1,2-Dichloroethene	35171	100220	0.05	5.00	40005.6	2000	NA	NA	0.017	NA	NA	2000.2	18.4	156-60-5	N/A	orl-rat 1235mg/kg
21.	Methylene chloride	35171	100220	0.05	5.00	40013.9	2000	NA	NA	0.017	NA	NA	2000.6	18.4	75-09-2	500 ppm	orl-rat 820mg/kg
22.	1,1-Dichloroethene	32251	031821	0.10	10.00	20009.1	2000	NA	NA	0.042	NA	NA	2000.8	19.3	75-35-4	1 ppm (4mg/m3/8H)	orl-rat 200mg/kg
23.	Bromoform	95321	010419	0.10	10.00	20001.7	2000	NA	NA	0.042	NA	NA	2000.1	19.3	75-25-2	0.5 ppm (5mg/m3) (skin)	orl-rat 933mg/kg
24.	Carbon tetrachloride	95321	010419	0.10	10.00	20001.3	2000	NA	NA	0.042	NA	NA	2000.0	19.2	56-23-5	2 ppm (12.6mg/m3/8H)	orl-rat 2350mg/kg
25.	Chloroform	95321	010419	0.10	10.00	20001.8	2000	NA	NA	0.042	NA	NA	2000.1	19.2	67-66-3	50 ppm (240mg/m3) (CL)	orl-rat 908mg/kg
26.	Dibromomethane	95321	010419	0.10	10.00	20001.7	2000	NA	NA	0.042	NA	NA	2000.1	19.3	74-95-3	N/A	orl-rat 108mg/kg
27.	1,1-Dichloroethane	95321	010419	0.10	10.00	20000.8	2000	NA	NA	0.042	NA	NA	2000.0	19.3	75-34-3	100 ppm	orl-rat 725mg/kg
28.	2,2-Dichloropropane	95321	010419	0.10	10.00	20002.1	2000	NA	NA	0.042	NA	NA	2000.1	19.3	594-20-7	N/A	N/A
29.	Tetrachloroethene	95321	010419	0.10	10.00	20002.2	2000	NA	NA	0.042	NA	NA	2000.1	19.3	127-18-4	25 ppm (170mg/m3/8H)(final)	orl-rat 2629mg/kg
30.	1,1,1-Trichloroethane	95321	010419	0.10	10.00	20001.7	2000	NA	NA	0.042	NA	NA	2000.1	19.3	71-55-6	350 ppm (1900mg/m3/8H)	orl-rat 10300mg/kg
31.	1,2-Dibromo-3-chloropropane	35161	011421	0.05	5.00	40001.2	2000	NA	NA	0.017	NA	NA	2000.0	18.4	96-12-8	0.001 ppm	orl-rat 170mg/kg
32.	1,2-Dibromoethane	35161	011421	0.05	5.00	40003.9	2000	NA	NA	0.017	NA	NA	2000.1	18.4	106-93-4	20 ppm (8H)	orl-rat 108mg/kg
33.	1,2-Dichloroethane	35161	011421	0.05	5.00	40004.9	2000	NA	NA	0.017	NA	NA	2000.1	18.4	107-06-2	50 ppm (8H)	orl-rat 670mg/kg
34.	1,2-Dichloropropane	35161	011421	0.05	5.00	40002.2	2000	NA	NA	0.017	NA	NA	2000.0	18.4	78-87-5	75 ppm (350mg/m3/8H)	orl-rat 1947mg/kg
35.	1,3-Dichloropropane	35161	011421	0.05	5.00	40013.9	2000	NA	NA	0.017	NA	NA	2000.6	18.4	142-28-9	N/A	unr-mus 3600mg/kg
36.	1,1-Dichloropropene	35161	011421	0.05	5.00	40015.0	2000	NA	NA	0.017	NA	NA	2000.7	26.1	563-58-6	N/A	N/A
37.	cis-1,3-Dichloropropene	35161	011421	0.05	5.00	40004.4	2000	NA	NA	0.017	NA	NA	2000.1	18.4	10061-01-5	N/A	N/A
38.	trans-1,3-Dichloropropene	35161	011421	0.05	5.00	40009.1	2000	NA	NA	0.017	NA	NA	2000.4	18.5	10061-02-6	N/A	N/A
39.	Hexachloro-1,3-butadiene	35161	011421	0.05	5.00	40003.5	2000	NA	NA	0.017	NA	NA	2000.1	26.4	87-68-3	0.02 ppm (0.24mg/m3/8H)	orl-rat 82mg/kg
40.	1,1,1,2-Tetrachloroethane	35161	011421	0.05	5.00	40011.9	2000	NA	NA	0.017	NA	NA	2000.5	18.4	630-20-6	N/A	orl-rat 670mg/kg
41.	1,1,2,2-Tetrachloroethane	35161	011421	0.05	5.00	40011.0	2000	NA	NA	0.017	NA	NA	2000.5	18.4	79-34-5	5 ppm (35mg/m3/9H)(skin)	orl-rat 800mg/kg
42.	1,1,2-Trichloroethane	35161	011421	0.05	5.00	40000.8	2000	NA	NA	0.017	NA	NA	1999.9	18.4	79-00-5	10 ppm (45mg/m3/8H)(skin)	orl-rat 836mg/kg
43.	Trichloroethene	35161	011421	0.05	5.00	40003.2	2000	NA	NA	0.017	NA	NA	2000.1	18.4	79-01-6	50 ppm (270mg/m3/8H)	orl-mus 2402mg/kg
44.	1,2,3-Trichloropropane	35161	011421	0.05	5.00	40015.2	2000	NA	NA	0.017	NA	NA	2000.7	18.4	96-18-4	10 ppm (60mg/m3/8H)	orl-rat 149.6mg/kg
45.	Benzene	35162	020821	0.05	5.00	40008.9	2000	NA	NA	0.017	NA	NA	2000.3	18.4	71-43-2	1 ppm	orl-rat 4894mg/kg
46.	Bromobenzene	35162	020821	0.05	5.00	40019.0	2000	NA	NA	0.017	NA	NA	2000.9	18.4	108-86-1	N/A	orl-rat 2699mg/kg
47.	n-Butyl benzene	35162	020821	0.05	5.00	40019.8	2000	NA	NA	0.017	NA	NA	2000.9	18.4	104-51-8	N/A	N/A
48.	Ethyl benzene	35162	020821	0.05	5.00	40000.9	2000	NA	NA	0.017	NA	NA	1999.9	18.4	100-41-4	100 ppm (435mg/m3/8H)	orl-rat >2000mg/kg
49.	p-Isopropyl toluene	35162	020821	0.05	5.00	40056.4	2000	NA	NA	0.017	NA	NA	2002.7	18.4	99-87-6	N/A	orl-rat 4750mg/kg
50.	Naphthalene	35162	020821	0.05	5.00	40005.1	2000	NA	NA	0.017	NA	NA	2000.2	18.3	91-20-3	10 ppm (50mg/m3/8H)	orl-rat 490mg/kg
51.	Styrene	35162	020821	0.05	5.00	40022.8	2000	NA	NA	0.017	NA	NA	2001.0	18.4	100-42-5	100 ppm	orl-rat 5000mg/kg
52.	Toluene	35162	020821	0.05	5.00	40008.9	2000	NA	NA	0.017	NA	NA	2000.3	18.4	108-88-3	200 ppm	orl-rat 5000mg/kg
53.	1,2,3-Trichlorobenzene	35162	020821	0.05	5.00	40002.0	2000	NA	NA	0.017	NA	NA	2000.0	18.4	87-61-6	N/A	ipr-mus 1390mg/kg
54.	1,2,4-Trichlorobenzene	35162	020821	0.05	5.00	40027.4	2000	NA	NA	0.017	NA	NA	2001.3	18.4	120-82-1	5 ppm (CL) (40mg/m3)	orl-rat 756mg/kg
55.	1,2,4-Trimethylbenzene	35162	020821	0.05	5.00	40012.4	2000	NA	NA	0.017	NA	NA	2000.5	18.4	95-63-6	N/A	orl-rat 5g/kg
56.	1,3,5-Trimethylbenzene	35162	020821	0.05	5.00	40011.5	2000	NA	NA	0.017	NA	NA	2000.5	18.5	108-67-8	N/A	orl-rat 5000mg/kg
57.	m-Xylene	35162	020821	0.05	5.00	40021.8	2000	NA	NA	0.017	NA	NA	2001.0	18.4	108-38-3	100 ppm (435mg/m3/8H)	orl-rat 5g/kg
58.	tert-Butyl benzene	35163	022521	0.05	5.00	40005.9	2000	NA	NA	0.017	NA	NA	2000.2	18.4	98-06-6	N/A	N/A
59.	sec-Butyl benzene	35163	022521	0.05	5.00	40011.7	2000	NA	NA	0.017	NA	NA	2000.5	18.4	135-98-8	N/A	orl-rat 2240mg/kg
60.	Chlorobenzene	35163	022521	0.05	5.00	40009.0	2000	NA	NA	0.017	NA	NA	2000.4	18.4	108-90-7	75 ppm (350mg/m3/8H)	orl-rat 2290mg/kg
61.	2-Chlorotoluene	35163	022521	0.05	5.00	40002.0	2000	NA	NA	0.017	NA	NA	2000.0	18.4	95-49-8	50 ppm (250mg/m3/8H)	orl-rat 3900mg/kg
62.	4-Chlorotoluene	35163	022521	0.05	5.00	40000.4	2000	NA	NA	0.017	NA	NA	1999.9	18.4	106-43-4	N/A	orl-rat 2100mg/kg
63.	1,2-Dichlorobenzene	35163	022521	0.05	5.00	40004.0	2000	NA	NA	0.017	NA	NA	2000.1	18.4	95-50-1	50 ppm (300mg/m3) (CL)	orl-rat 500mg/kg
64.	1,3-Dichlorobenzene	35163	022521	0.05	5.00	40003.6	2000	NA	NA	0.017	NA	NA	2000.1	18.4	541-73-1	N/A	ipr-mus 1062mg/kg
65.	1,4-Dichlorobenzene	35163	022521	0.05	5.00	40005.0	2000	NA	NA	0.017	NA	NA	2000.2	18.4	106-46-7	75 ppm (450mg/m3/8H)	orl-rat 500mg/kg
66.	Isopropylbenzene	35163	022521	0.05	5.00	40007.4	2000	NA	NA	0.017	NA	NA	2000.3	18.4	98-82-8	50 ppm (245mg/m3/8H)	orl-rat 1400mg/kg
67.	n-Propylbenzene	35163	022521	0.05	5.00	40004.6	2000	NA	NA	0.017	NA	NA	2000.1	18.4	103-65-1	N/A	orl-rat 6040mg/kg
68.	o-Xylene	35163	022521	0.05	5.00	40003.0	2000	NA	NA	0.017	NA	NA	2000.1	18.4	95-47-6	100 ppm (435mg/m3/8H)	ipr-mus 1364mg/kg
69.	p-Xylene	35163	022521	0.05	5.00	40005.0	2000	NA	NA	0.017	NA	NA	2000.2	18.4	106-42-3	100 ppm (435mg/m3/8H)	orl-rat 5g/kg

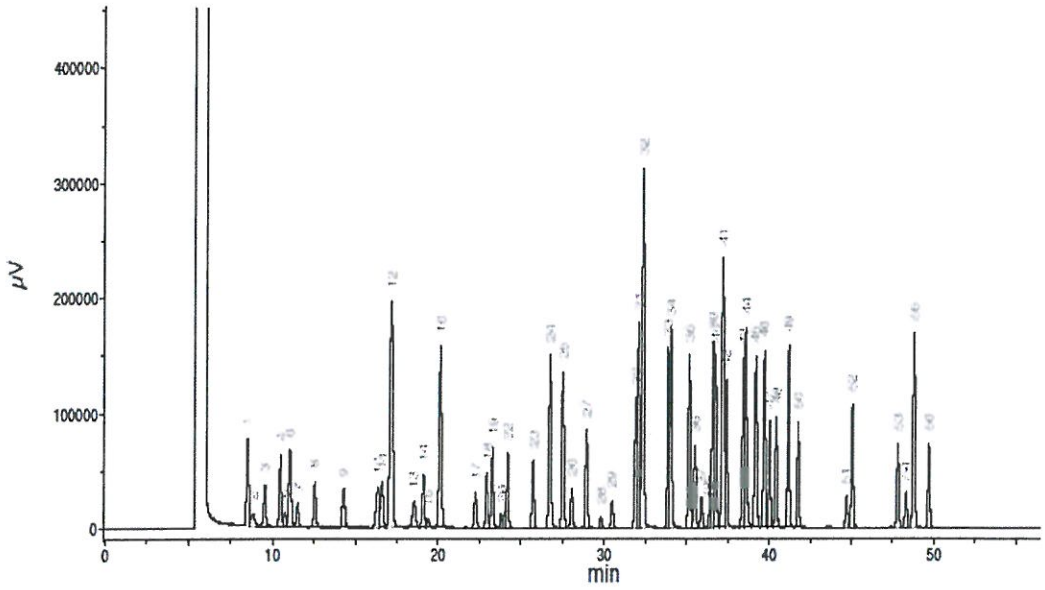
- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty 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).

Run 22, "P95317 L042921 [2000µg/mL in MeOH]"

Run Length: 60.00 min, 35999 points at 10 points/second.
Created: Thu, Apr 29, 2021 at 3:49:30 PM.
Sampled: Sequence "042521-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=4



Peak #	Analyte	FID RT (min.)
1	Ether	8.48
2	1,1,2-Trichloro-1,2,2-trifluoroethane	8.80
3	1,1-Dichloroethene	9.51
4	Acetonitrile	10.44
5	Iodomethane	10.71
6	Allyl chloride	11.02
7	**Carbon disulfide/Methylene chloride**	11.51
8	trans-1,2-Dichloroethene	12.55
9	1,1-Dichloroethane	14.28
10	2,2-Dichloropropane	16.33
11	cis-1,2-Dichloroethene	16.59
12	**Methacrylonitrile/Methyl acrylate/Chloroform**	17.14
13	**Isobutanol/1,1,1-Trichloroethane**	18.52
14	1,1-Dichloropropene	19.08
15	Carbon tetrachloride	19.39
16	**Benzene/1,2-Dichloroethane**	20.10
17	Trichloroethene	22.23
18	1,2-Dichloropropane	22.92
19	Methyl methacrylate	23.26
20	Bromodichloromethane	23.79
21	Dibromomethane	23.98
22	2-Nitropropane	24.18
23	cis-1,3-Dichloropropene	25.71
24	Toluene	26.71
25	**Ethyl methacrylate/trans-1,3-Dichloropropene**	27.50
26	1,1,2-Trichloroethane	28.04
27	**Tetrachloroethene/1,3-Dichloropropane**	29.92
28	Dibromochloromethane	29.79
29	1,2-Dibromoethane	30.46
30	Chlorobenzene	31.89
31	**Ethylbenzene/1,1,1,2-Tetrachloroethane**	32.07
32	**m-Xylene/p-Xylene**	32.33
33	o-Xylene	33.87
34	Styrene	34.04
35	**Isopropylbenzene/Bromoform**	35.14
36	cis-1,4-Dichloro-2-butene	35.49
37	1,1,2,2-Tetrachloroethane	35.90
38	**1,2,3-Trichloropropane**	36.34
39	**n-Propylbenzene**	36.58
40	**trans-1,4-Dichloro-2-butene/Bromobenzene**	36.73
41	**1,3,5-Trimethylbenzene/2-Chlorotoluene**	37.17
42	4-Chlorotoluene	37.38
43	tert-Butylbenzene	38.41
44	**1,2,4-Trimethylbenzene/Pentachloroethane**	38.55
45	sec-Butylbenzene	39.16
46	p-Isopropyltoluene	39.68
47	1,3-Dichlorobenzene	40.01
48	1,4-Dichlorobenzene	40.42
49	n-Butylbenzene	41.16
50	1,2-Dichlorobenzene	41.74
51	1,2-Dibromo-3-chloropropane	44.68
52	Nitrobenzene	45.04
53	1,2,4-Trichlorobenzene	47.80
54	Hexachlorobutadiene	48.29
55	Naphthalene	48.76
56	1,2,3-Trichlorobenzene	49.66

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** May 1, 2019

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.

RESTEK®
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
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. : 30067 **Lot No.:** A0147670

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 : April 30, 2024 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1-Bromo-4-fluorobenzene (BFB)	2,511.0 µg/mL	+/- 14.7360	µg/mL	Gravimetric
	CAS # 460-00-4 (Lot 20401KO)		+/- 140.8035	µg/mL	Unstressed
	Purity 99%		+/- 144.0975	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)

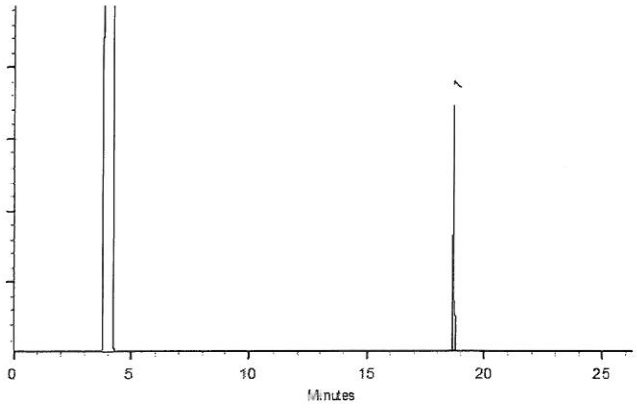
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Dustin J. Lidgett

Dustin Lidgett - Mix Technician

Date Mixed: 01-Apr-2019 **Balance:** 1127510105

Justine Albertson

Justine Albertson - Operations Tech-ARM QC

Date Passed: 04-Apr-2019

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)	< 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.
- 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 Accredit
AR-1539 Certificate Number
https://Absolutestandards.co

CERTIFIED WEIGHT REPORT

Part Number: 91980
Lot Number: 112822
Description: Acrolein

Solvent(s): Water **Lot#** 102422Q

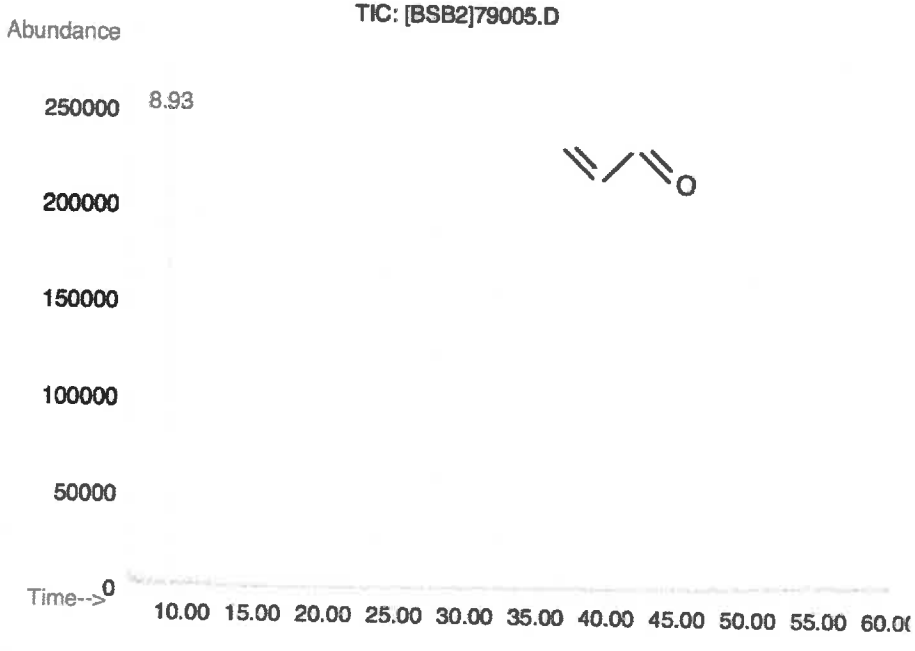
Expiration Date: 122822
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB

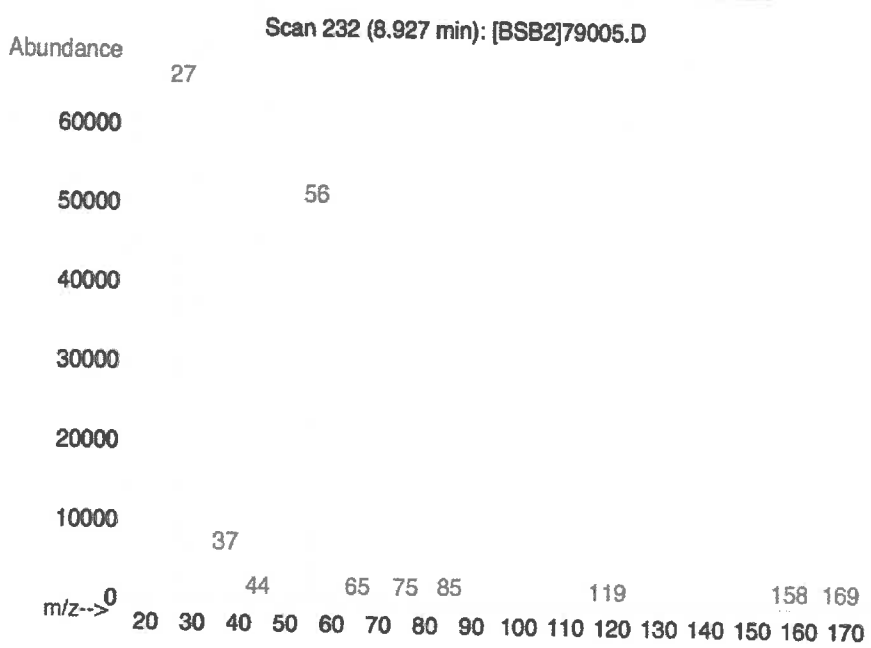
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 10.0
0.002 Flask Uncertainty

		112822
Formulated By:	Benson Chan	DATE
		112822
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	0.05167	5006.3	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 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).

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. Hamden CT, 06514	Emergency Telephone International	**1-352-323-3500**
		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	

Absolute Standards Inc.

PO Box 5585
Hamden, CT 06518-0585

Phone: 203-281-2917
FAX: 203-281-2922

	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.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredit
AR-1539 Certificate Number
https://Absolutestandards.co

CERTIFIED WEIGHT REPORT

Part Number: 91980
Lot Number: 112822
Description: Acrolein

Solvent(s): Water **Lot#** 102422Q

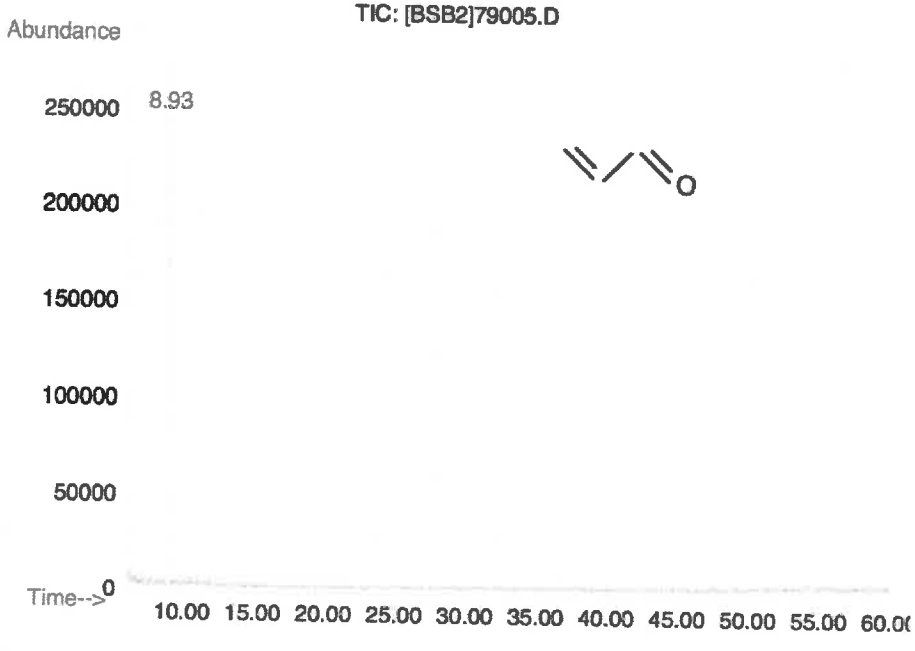
Expiration Date: 122822
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB

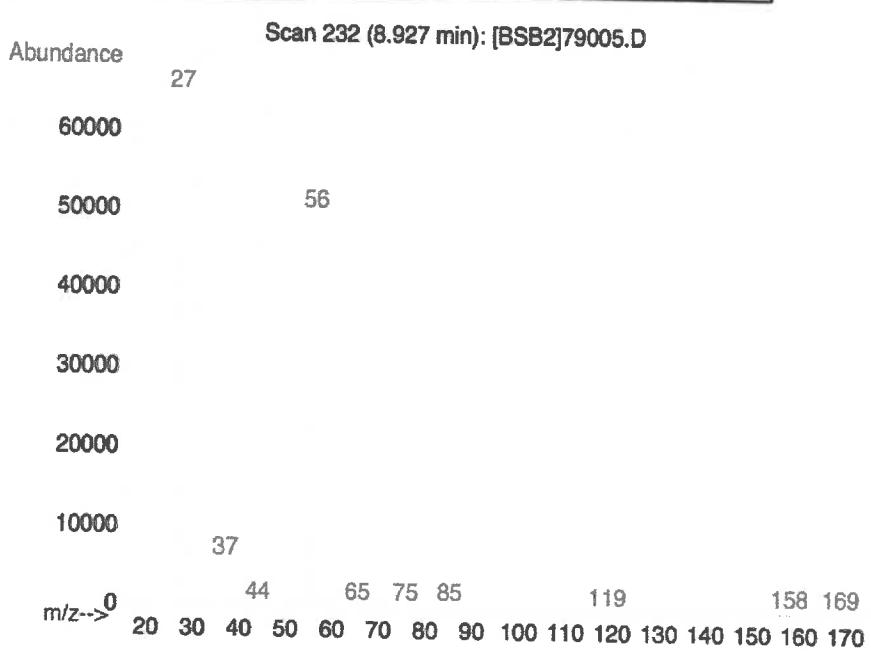
Weight(s) shown below were combined and diluted to (mL): 10.0 | 5E-05 Balance Uncertainty | 0.002 Flask Uncertainty

Formulated By: Benson Chan	112822 DATE
Reviewed By: Pedro L. Rentas	112822 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	0.05167	5006.3	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 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).

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. Hamden CT, 06514	Emergency Telephone International	**1-352-323-3500**
		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	

Absolute Standards Inc.

PO Box 5585
Hamden, CT 06518-0585

Phone: 203-281-2917
FAX: 203-281-2922

	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.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredit
AR-1539 Certificate Number
https://Absolutestandards.co

CERTIFIED WEIGHT REPORT

Part Number: 91980
Lot Number: 112822
Description: Acrolein

Solvent(s): Water **Lot#** 102422Q

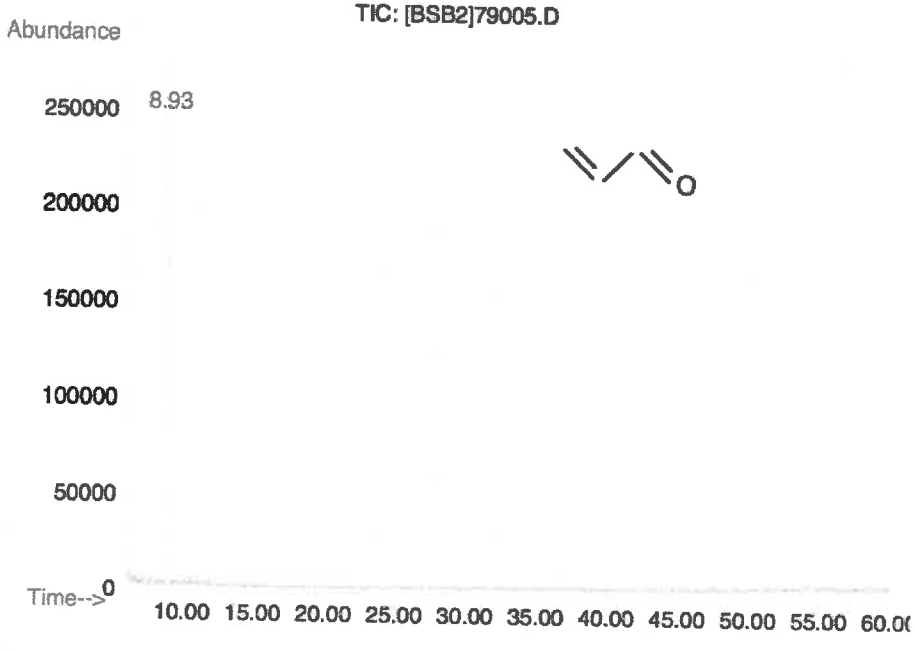
Expiration Date: 122822
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB

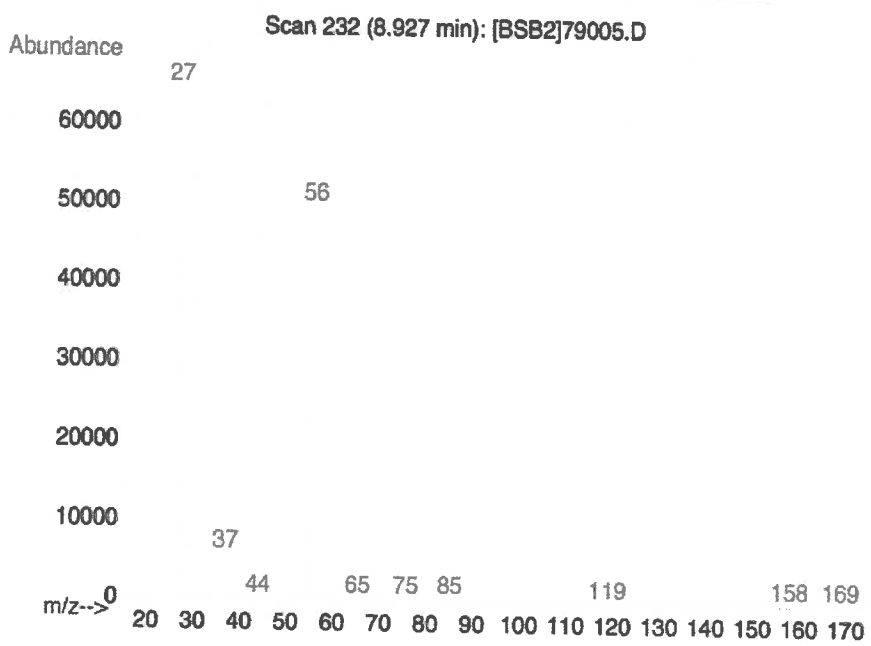
Weight(s) shown below were combined and diluted to (mL): 10.0 | 5E-05 Balance Uncertainty | 0.002 Flask Uncertainty

Formulated By: Benson Chan	112822 DATE
Reviewed By: Pedro L. Rentas	112822 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	0.05167	5006.3	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 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).

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. Hamden CT, 06514	Emergency Telephone International	**1-352-323-3500**
		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	

Absolute Standards Inc.

PO Box 5585
Hamden, CT 06518-0585

Phone: 203-281-2917
FAX: 203-281-2922

	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.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredit
AR-1539 Certificate Number
https://Absolutestandards.co

CERTIFIED WEIGHT REPORT

Part Number: 91980
Lot Number: 112822
Description: Acrolein

Solvent(s): Water **Lot#** 102422Q

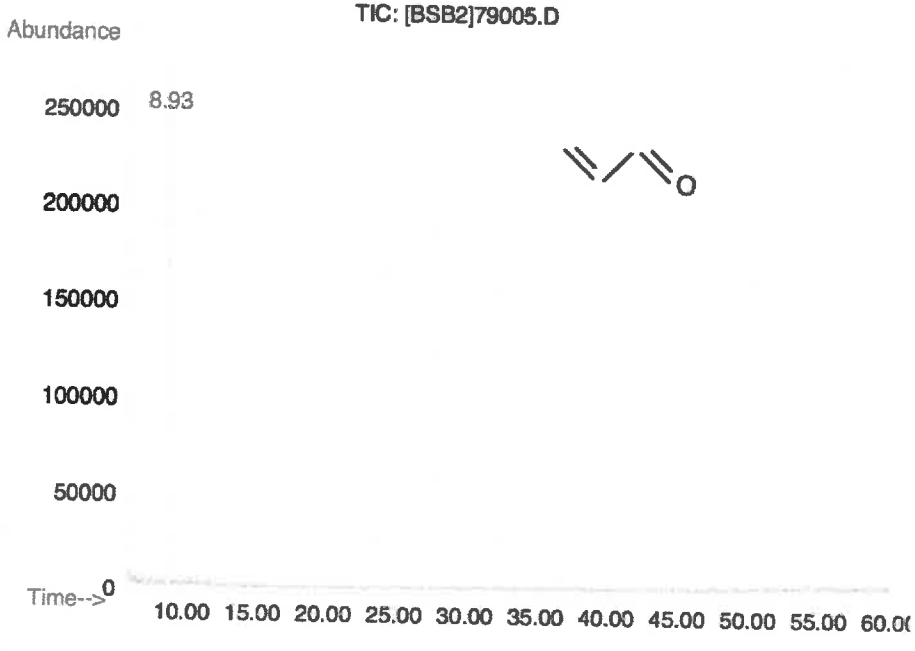
Expiration Date: 122822
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB

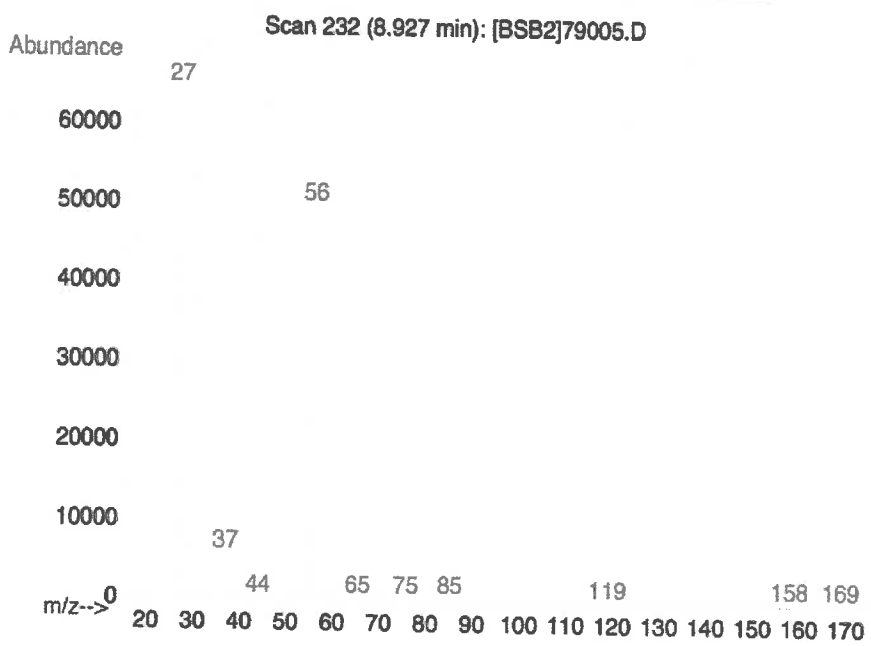
Weight(s) shown below were combined and diluted to (mL): 10.0 | 5E-05 Balance Uncertainty | 0.002 Flask Uncertainty

Formulated By: Benson Chan	112822 DATE
Reviewed By: Pedro L. Rentas	112822 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	0.05167	5006.3	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 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).

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. Hamden CT, 06514	Emergency Telephone International	**1-352-323-3500**
		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	

Absolute Standards Inc.

PO Box 5585
Hamden, CT 06518-0585

Phone: 203-281-2917
FAX: 203-281-2922

	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.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

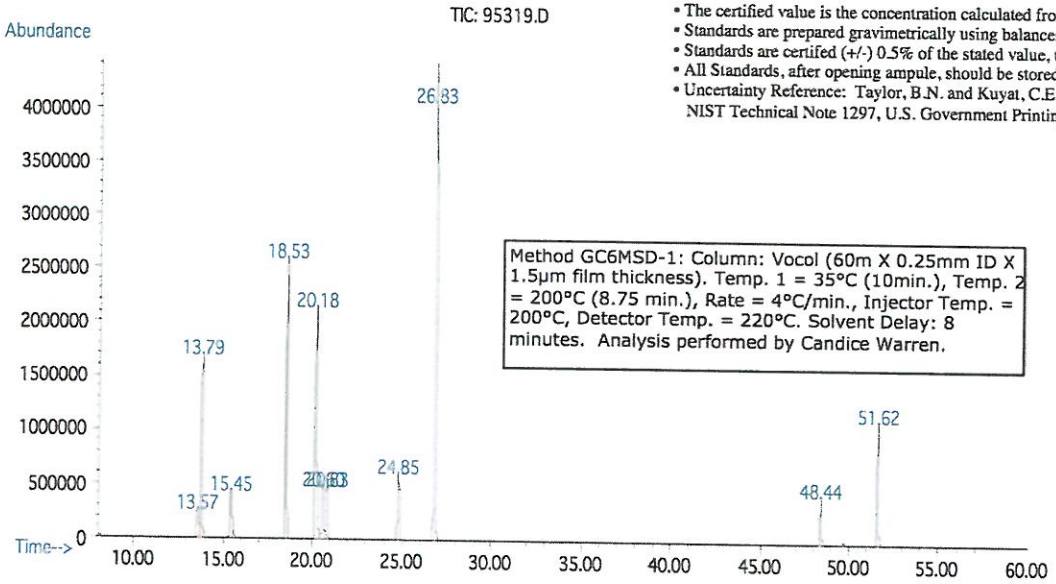
Part Number: 95319
Lot Number: 031921
Description: Revised Additions Mix
11 components
Expiration Date: 031924
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): Varied
NIST Test ID#: 6UTB

Solvent(s): **Lot#**
Methanol DY186-US

5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 100.0 0.012 Flask Uncertainty

Formulated By:	Prashant Chauhan	031921 DATE
Reviewed By:	Pedro L. Rentas	031921 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	1.01040	10002.5	40.5	107-13-1	N/A	orl-rat 78 mg/kg
2. 1-Chlorobutane	1072	MKCM5711	2000	99.99	0.2	0.20003	0.20033	2003.0	8.1	109-69-3	N/A	orl-rat 2670mg/kg
3. Cyclohexane	1023	SHBD2795V	2000	99.5	0.2	0.20101	0.20130	2002.8	8.1	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	0.20220	2001.7	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	4.04110	40005.0	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	0.20230	2002.7	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	0.20235	2003.2	8.2	108-87-2	N/A	N/A
8. Methyl tert-butyl ether (MTBE)	209	02197JJ	2000	99.8	0.2	0.20041	0.20080	2003.9	8.1	1634-04-4	N/A	orl-rat 4g/kg
9. Propionitrile	349	1395468	20000	99	0.2	2.02030	2.02080	20005.0	81.0	107-12-0	N/A	orl-rat 39mg/kg
10. Tetrahydrofuran	380	113886	10000	99.9	0.2	1.00105	1.00140	10003.5	40.1	109-99-9	20 ppm (590mg/m3/8H)	orl-rat 2500mg/kg
11. 1,2,3,4-Tetramethylbenzene	491	AP01	2000	93	0.2	0.21506	0.21536	2002.8	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 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).

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.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

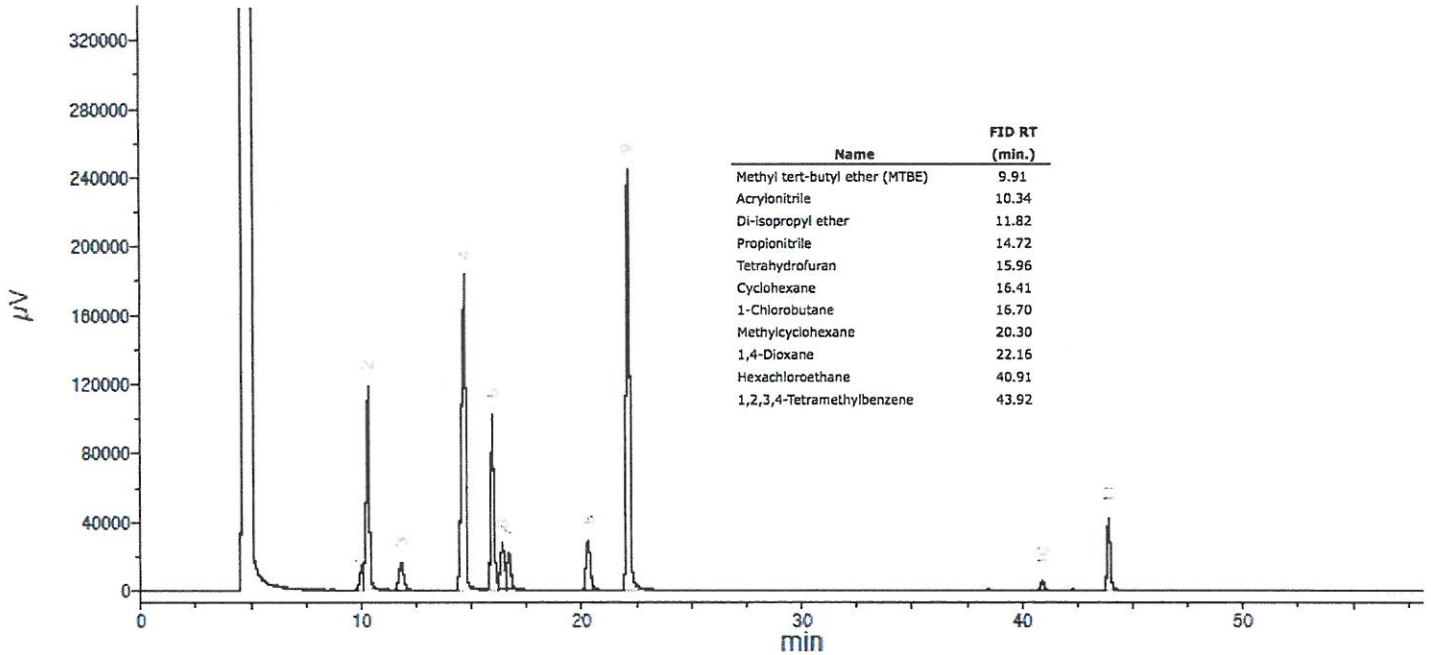
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Run 44, "P95319 L031921 [Varied in MeOH]"

Run Length: 60.00 min, 36000 points at 10 points/second.
Created: Sun, Mar 28, 2021 at 4:18:23 PM.
Sampled: Sequence "032421-GC13M1", Method "GC13-M1".
Analyzed using Method "GC13-M1".

Comments

GC13-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=6



Name	FID RT (min.)
Methyl tert-butyl ether (MTBE)	9.91
Acrylonitrile	10.34
Di-isopropyl ether	11.82
Propionitrile	14.72
Tetrahydrofuran	15.96
Cyclohexane	16.41
1-Chlorobutane	16.70
Methylcyclohexane	20.30
1,4-Dioxane	22.16
Hexachloroethane	40.91
1,2,3,4-Tetramethylbenzene	43.92

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	May 1, 2019

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

Absolute Standards Inc.
PO Box 5585
Hamden, CT 06518-0585
Phone: 203-281-2917
FAX: 203-281-2922

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

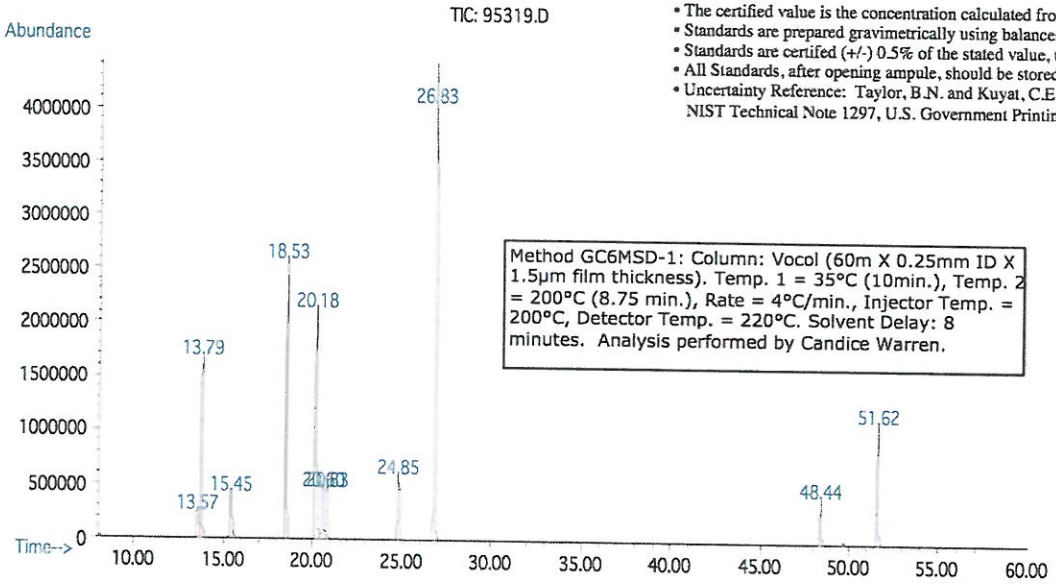
Part Number: 95319
Lot Number: 031921
Description: Revised Additions Mix
11 components
Expiration Date: 031924
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): Varied
NIST Test ID#: 6UTB

Solvent(s): **Lot#**
Methanol DY186-US

5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 100.0 0.012 Flask Uncertainty

Formulated By:	Prashant Chauhan	031921 DATE
Reviewed By:	Pedro L. Rentas	031921 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	1.01040	10002.5	40.5	107-13-1	N/A	orl-rat 78 mg/kg
2. 1-Chlorobutane	1072	MKCM5711	2000	99.99	0.2	0.20003	0.20033	2003.0	8.1	109-69-3	N/A	orl-rat 2670mg/kg
3. Cyclohexane	1023	SHBD2795V	2000	99.5	0.2	0.20101	0.20130	2002.8	8.1	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	0.20220	2001.7	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	4.04110	40005.0	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	0.20230	2002.7	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	0.20235	2003.2	8.2	108-87-2	N/A	N/A
8. Methyl tert-butyl ether (MTBE)	209	02197JJ	2000	99.8	0.2	0.20041	0.20080	2003.9	8.1	1634-04-4	N/A	orl-rat 4g/kg
9. Propionitrile	349	1395468	20000	99	0.2	2.02030	2.02080	20005.0	81.0	107-12-0	N/A	orl-rat 39mg/kg
10. Tetrahydrofuran	380	113886	10000	99.9	0.2	1.00105	1.00140	10003.5	40.1	109-99-9	20 ppm (590mg/m3/8H)	orl-rat 2500mg/kg
11. 1,2,3,4-Tetramethylbenzene	491	AP01	2000	93	0.2	0.21506	0.21536	2002.8	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.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

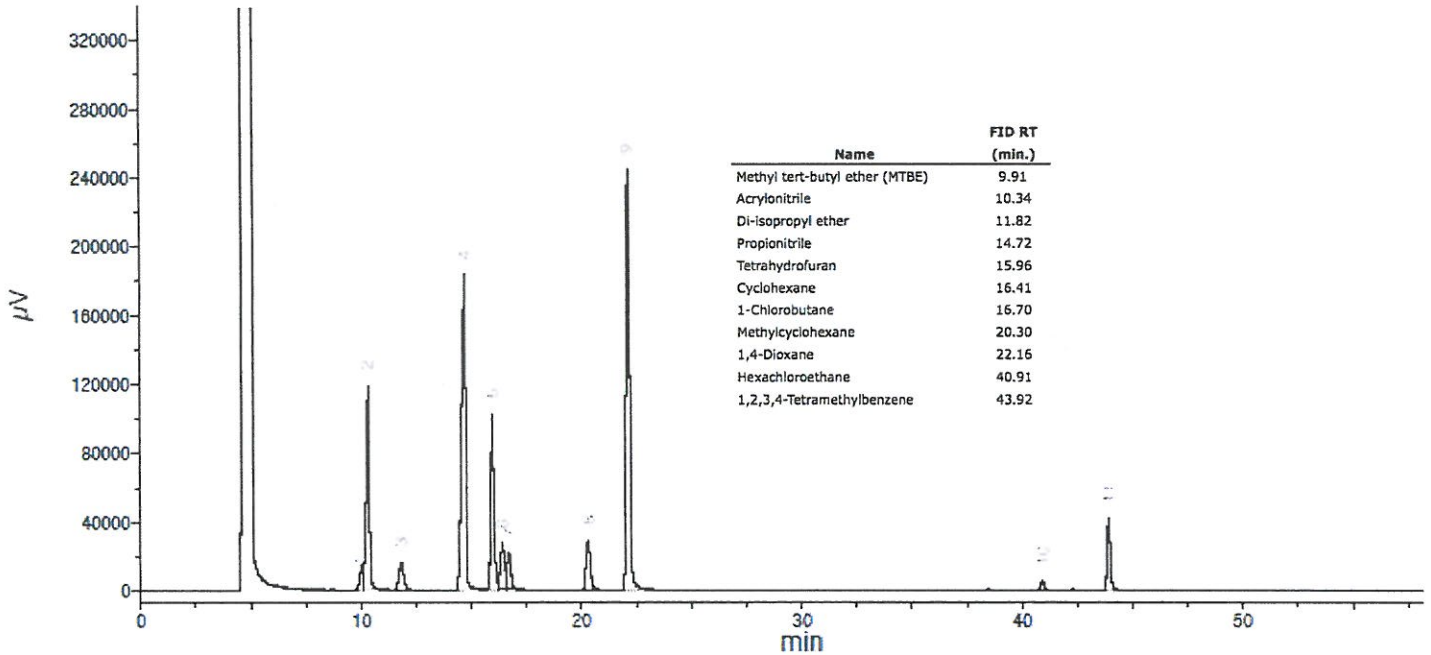
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Run 44, "P95319 L031921 [Varied in MeOH]"

Run Length: 60.00 min, 36000 points at 10 points/second.
Created: Sun, Mar 28, 2021 at 4:18:23 PM.
Sampled: Sequence "032421-GC13M1", Method "GC13-M1".
Analyzed using Method "GC13-M1".

Comments

GC13-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=6



Name	FID RT (min.)
Methyl tert-butyl ether (MTBE)	9.91
Acrylonitrile	10.34
Di-isopropyl ether	11.82
Propionitrile	14.72
Tetrahydrofuran	15.96
Cyclohexane	16.41
1-Chlorobutane	16.70
Methylcyclohexane	20.30
1,4-Dioxane	22.16
Hexachloroethane	40.91
1,2,3,4-Tetramethylbenzene	43.92

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	May 1, 2019

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

Absolute Standards Inc.
PO Box 5585
Hamden, CT 06518-0585
Phone: 203-281-2917
FAX: 203-281-2922

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.

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis

avantor™ | J.T.Baker®

Material No.: 9077-02
Batch No.: 0000288323
Manufactured Date: 2021-06-11
Expiration Date: 2024-06-10
Revision No.: 1

Certificate of Analysis

Test	Specification	Result
Assay (CH_3OH) (by GC, corrected for water)	≥ 99.9 %	100.0 %
Residue after Evaporation	≤ 1.0 ppm	0.5 ppm
Titrable Acid (µeq/g)	≤ 0.3	0.2
Titrable Base (µeq/g)	≤ 0.10	0.05
Water (by KF, coulometric)	≤ 0.08 %	0.01 %
Volatile Organic Trace Analysis - Below EPA 8260B CRQL	Conforms	Fails

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

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone 610.386.1700

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. N6070
COC Number 2035954

CLIENT INFORMATION

REPORT TO BE SENT TO:
COMPANY: Jacobs
ADDRESS: 10 10th Street Suite 1400
CITY Atlanta STATE: GA ZIP: 30309
ATTENTION: Melissa Warren
PHONE: FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: Princeton STC
PROJECT NO.: D3662225 LOCATION: Princeton Junction, NJ
PROJECT MANAGER: Chris English
e-mail: Chris.English@Jacobs.com
PHONE: FAX:

CLIENT BILLING INFORMATION

BILL TO: Chris English PO#:
ADDRESS:
CITY STATE: ZIP:
ATTENTION: PHONE:

DATA TURNAROUND INFORMATION

FAX (RUSH) Rush! DAYS*
HARDCOPY (DATA PACKAGE): 24Hr VOC DAYS*
EDD: 48 Hr 1,4 DXN DAYS*
*TO BE APPROVED BY CHEMTECH
STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS DAYS

DATA DELIVERABLE INFORMATION

❑ Level 1 (Results Only) ❑ Level 4 (QC + Full Raw Data)
❑ Level 2 (Results + QC) ❑ NJ Reduced ❑ US EPA CLP
❑ Level 3 (Results + QC + Raw Data) ❑ NYS ASP A ❑ NYS ASP B ❑ Other
❑ EDD FORMAT

ANALYSIS

Site Specific VOCs | 1,4 DXN | 3 | 4 | 5 | 6 | 7 | 8 | 9

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# OF BOTTLES	PRESERVATIVES 1	2	3	4	5	6	7	8	9	COMMENTS
								A E	E								← Specify Preservatives A-HCl D-NaOH B-HN03 E-ICE C-H2SO4 F-OTHER
1.	GW-BR-04-226-245-121422	GW		X	12-14-22	1030	3	X	X								Rush!
2.	TB-01-121422	DI		X	12-14-22	1035	2	X									
3.	GWBR-01-160-180-121422	GW		X	12-14-22	800	3	X	X								Rush!
4.	GW BR-02-160-180-121422	GW		X	12-14-22	900	3	X	X								Rush!
5.	GW BR-03-128-148-121422	GW		X	12-14-22	1000	3	X	X								Rush!
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.	12-14-22/1600	1. 1600 12-14-22
2.		2.
3.	12-14-22 1730	3. SB

Conditions of bottles or coolers at receipt: ❑ COMPLIANT ❑ NON COMPLIANT ❑ COOLER TEMP 4.2 °C
Comments: See work order for Site Specific VOC List

Page 1 of 1

CLIENT: ❑ Hand Delivered ❑ Other
CHEMTECH: ❑ Picked Up ❑ Field Sampling

Shipment Complete ☑ YES ❑ NO

2/6 WHITE - CHEMTECH COPY FOR RETURN TO CLIENT YELLOW - CHEMTECH COPY PINK - SAMPLER COPY

From: Ynfante, John <John.Ynfante@jacobs.com>
Sent: Thursday, December 22, 2022 10:14 PM
To: Jordan Hedvat; Samantha@chemtech.net
Cc: CHEMTECH-Data@chemtech.net
Subject: RE: [EXTERNAL] Summary Report Details For Project Former Schlumberger Site Princeton NJ-N6070.

Jordan and Samantha,

It was brought to my attention that this report N6070 has some incorrect sample IDs. The first sample GW-BR-04-226-245-121422 is correct, but the other 3 samples need to be corrected to match the chain as listed below:
GW-BR-01-160-180-121422 should be “OWBR-01-160-180-121422”
GW-BR-02-160-180-121422 should be “OWBR-02-160-180-121422”
GW-BR-03-128-148-121422 should be “OWBR-03-128-148-121422”

Please revise and reissue the data. Thanks!

- John Y.

From: CHEMTECH-Data@chemtech.net <CHEMTECH-Data@chemtech.net>
Sent: Monday, December 19, 2022 5:35 PM
To: Murphy, Mary <Mary.Murphy@jacobs.com>; Warren, Melissa <Melissa.Warren@jacobs.com>; Scott, Doug <Doug.Scott@jacobs.com>; Bingeman, Ian <Ian.Bingeman@jacobs.com>; Jones, Philip <Philip.Jones1@jacobs.com>; Garvey, Bethany <Bethany.Garvey@jacobs.com>; khummler@chemtech.net; Ynfante, John <John.Ynfante@jacobs.com>
Subject: [EXTERNAL] Summary Report Details For Project Former Schlumberger Site Princeton NJ-N6070.

To Doug Scott;

Please see the attached Summary Report for the following project, or download the file using your login credentials from the link below.

Order ID	: N6070
Project ID	: Former Schlumberger Site Princeton NJ
Download File	: **https://chemtech.net/secureLogin.aspx**
Order Date	: 12/14/2022 4:13:00 PM

CHEMTECH’s Project Manager : Samantha Beazley , Samantha@chemtech.net , Ext :

CHEMTECH's Sales Executive : Kurt Hummler , khummler@chemtech.net , 908-728-3143 Ext :3143

Thank you for the opportunity to provide you with our services. For any questions please feel free to contact your project manager.

Click Here for our short online customer Survey **//chemtech.net/ClientSurvey.aspx**.

Thank you,

CHEMTECH

Notice: The information transmitted in this e-mail message and in any attachments is intended Solely for the attention of the named addressee(s) and may contain confidential and/or privileged material. Any review, retransmission, dissemination or other use of, or taking of any action in reliance upon, this information by persons or entities other than the intended recipient is strictly prohibited and may be unlawful. If you have received this transmission in error, please notify us immediately by return e-mail, and permanently delete this transmission, including attachments if any, from any computer.

NOTICE - This communication may contain confidential and privileged information that is for the sole use of the intended recipient. Any viewing, copying or distribution of, or reliance on this message by unintended recipients is strictly prohibited. If you have received this message in error, please notify us immediately by replying to the message and deleting it from your computer.

Laboratory Certification

Certified By	License No.
CAS EPA CLP Contract	68HERH20D0011
Connecticut	PH-0649
DOD ELAP (L-A-B)	L2219
Maine	2022022
Maryland	296
New Hampshire	255422
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	P330-21-00137
Texas	T104704488-23-16

CHEMTECH

LOGIN REPORT/SAMPLE TRANSFER

Order ID : N6070 JACO05
Client Name : JACOBS Engineering Grou
Client Contact : Doug Scott
Invoice Name : JACOBS Engineering Grou
Invoice Contact : Doug Scott

Order Date : 12/14/2022 4:13:00 PM
Project Name : Former Schlumberger Site F
Receive DateTime : 12/14/2022 ~~12:00:00 AM~~ 5:30pm
Purchase Order : SB 12-19

Project Mgr :
Report Type : Level 4
EDD Type : CH2MHILL
Hard Copy Date :
Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
N6070-01	GW-BR-04-226-245-121422	Water	12/14/2022	10:30					
					VOCMS Group3		8260-Low		1 Bus. Day
N6070-02	TB-01-121422	Water	12/14/2022	10:35					
					VOCMS Group3		8260-Low		10 Bus. Days
N6070-03	OWBR ~~GW-BR~~-01-160-180-121422	Water	12/14/2022	08:00					
					VOCMS Group3		8260-Low		1 Bus. Day
N6070-04	OWBR ~~GW-BR~~-02-160-180-121422	Water	12/14/2022	09:00					
					VOCMS Group3		8260-Low		1 Bus. Day
N6070-05	OWBR ~~GW-BR~~-03-128-148-121422	Water	12/14/2022	10:00					
	SB 12/28/2022				VOCMS Group3		8260-Low		1 Bus. Day

Relinguished By :
Date / Time : 12-14-22 1740

Received By :
Date / Time : 12/14/22 1740
Storage Area : VOA Refridgerator Room