

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL112321\
 Data File : VL038098.D
 Acq On : 23 Nov 2021 14:06
 Operator : SY/AP
 Sample : M4805-02DUP
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA L
 ClientSampleId :
 IA-PURE-BARREDUP

Manual Integrations
 APPROVED

Quant Time: Nov 28 11:50:35 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL111821A
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument:
 QLast Update : Thu Nov 18 13:16:09 2021
 Response via : Initial Calibration

Reviewed By :Semsettin Yesilyurt 11/29/2021
 Supervised By :Mahesh Dadoda 11/29/2021

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.67	49	968457	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.17	114	2658950	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.08	117	2227092	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.41	95	1766624	11.00	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	110.00%

Target Compounds

	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.06	85	28359m	0.177	ppbv	
4) Chloromethane	3.15	50	31700	0.458	ppbv	91
9) Propene	3.03	41	473705m	6.324	ppbv	
10) Heptane	8.12	43	77598m	0.419	ppbv	
11) Trichlorofluoromethane	3.96	101	399490	2.626	ppbv	99
13) Ethanol	3.64	45	21212284	2930.560	ppbv	98
15) Acetone	3.85	43	4608198	54.881	ppbv	100
19) Isopropyl Alcohol	4.00	45	7551647	124.472	ppbv #	98
20) Methylene Chloride	4.35	84	80945	1.721	ppbv	92
25) Ethyl Acetate	5.68	43	386857	1.386	ppbv #	96
26) Hexane	5.69	57	133132m	0.990	ppbv	
27) Carbon Disulfide	4.56	76	72334	0.600	ppbv #	88
29) Chloroform	5.76	83	46146	0.233	ppbv	86
30) Cyclohexane	7.13	84	13279m	0.109	ppbv	
34) 2-Butanone	5.24	43	348148	3.247	ppbv	100
35) Carbon Tetrachloride	7.01	117	21631m	0.116	ppbv	
36) Benzene	6.89	78	121677	0.459	ppbv	94
41) Tetrahydrofuran	6.06	42	26244m	0.394	ppbv	
44) 2,2,4-Trimethylpentane	7.87	57	193327	0.436	ppbv #	92
50) 4-Methyl-2-Pentanone	8.74	43	35939m	0.221	ppbv	
52) Tetrachloroethene	11.22	164	9215m	0.094	ppbv	
53) Toluene	9.81	91	559575	1.834	ppbv	100
58) Ethyl Benzene	12.70	91	117899m	0.320	ppbv	
59) m/p-Xylene	12.96	91	180674	0.583	ppbv	100
60) o-Xylene	13.68	91	63056	0.219	ppbv	94
61) Styrene	13.52	104	58300	0.378	ppbv	88
69) p-Isopropyltoluene	17.64	119	77324m	0.197	ppbv	
74) 1,2,4-Trimethylbenzene	16.76	105	64317m	0.205	ppbv	

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

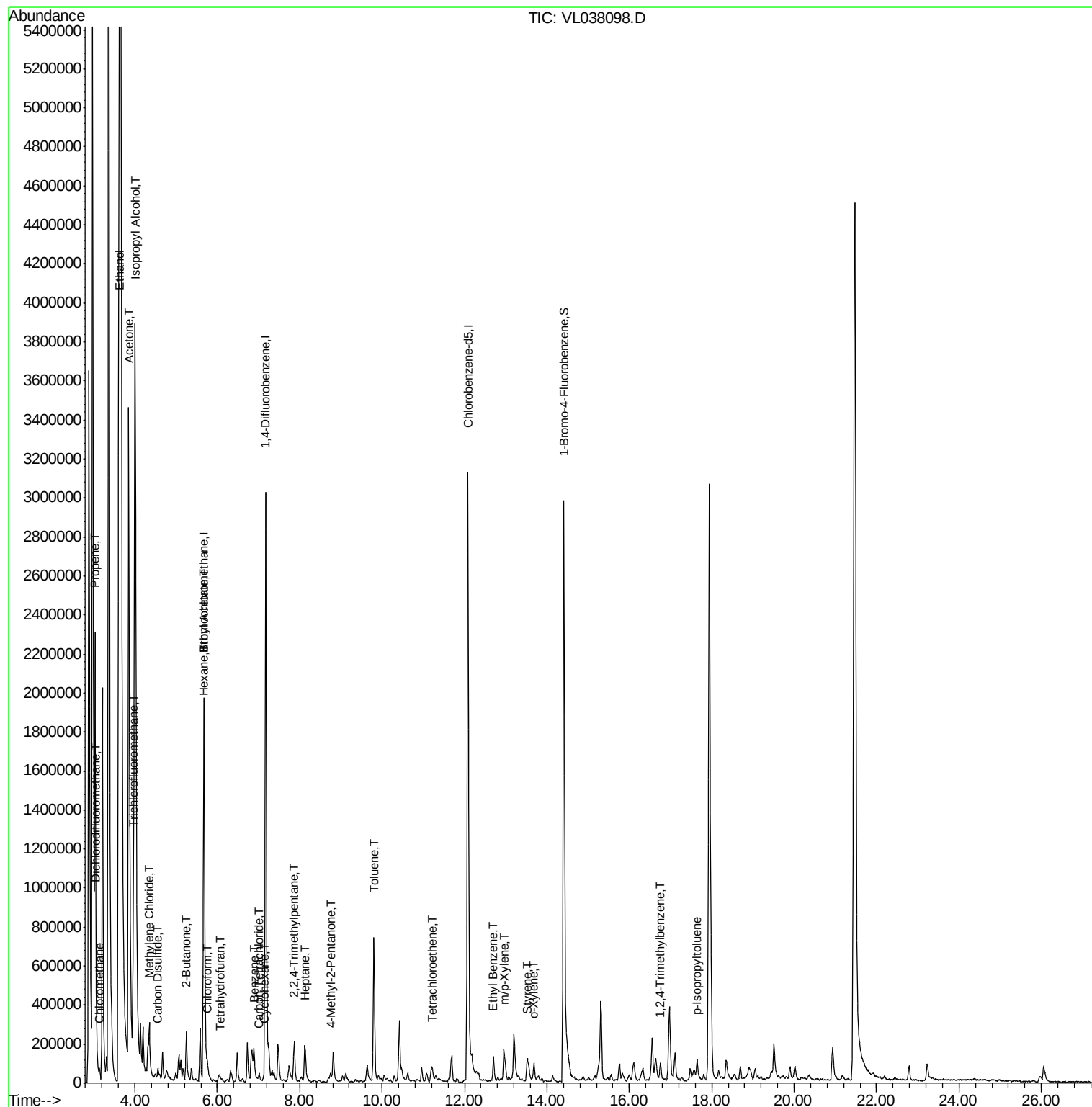
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL112321\
Data File : VL038098.D
Acq On : 23 Nov 2021 14:06
Operator : SY/AP
Sample : M4805-02DUP
Misc : 400mL/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

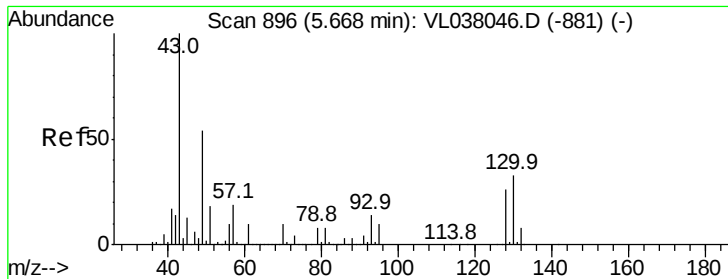
Instrument :
MSVOA_L
ClientSampleId :
IA-PURE-BARREDUP

Quant Time: Nov 28 11:50:35 2021
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL111821
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument:
QLast Update : Thu Nov 18 13:16:09 2021
Response via : Initial Calibration

Manual Integrations
APPROVED

Reviewed By : Semsettin Yesilyurt 11/29/2021
Supervised By : Mahesh Dadoda 11/29/2021





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.67 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

Acq: 23 Nov 2021 14:00

Tot Ion:

Ion Ratio

49 100

128 49.

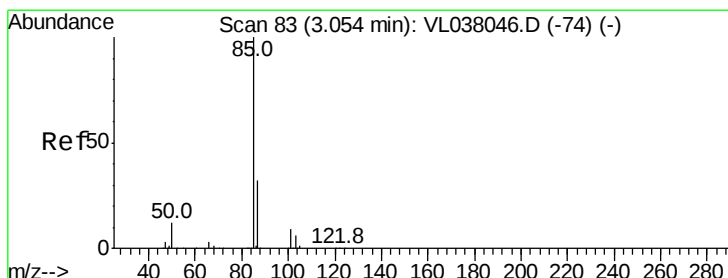
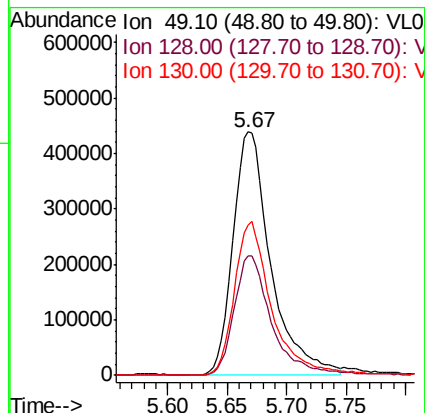
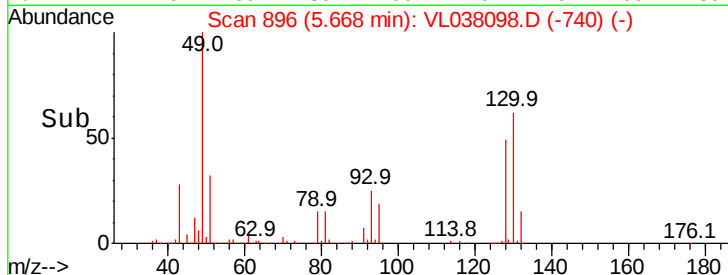
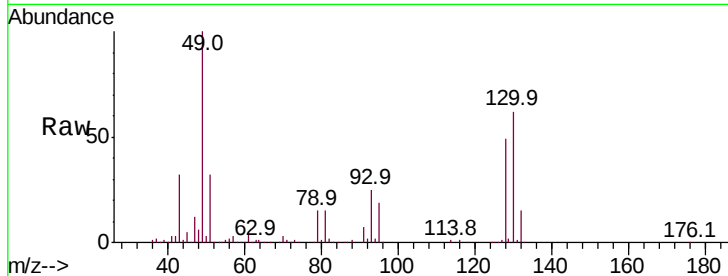
130 62.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 11/29/2021

Supervised By :Mahesh Dadoda 11/29/2021



#2

Dichlorodifluoromethane

Concen: 0.177 ppbv m

RT: 3.06 min Scan# 85

Delta R.T. 0.01 min

Lab File: VL038098.D

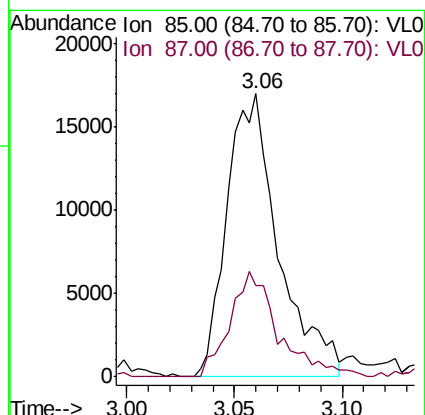
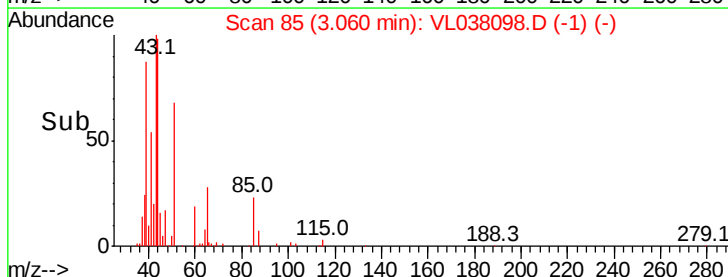
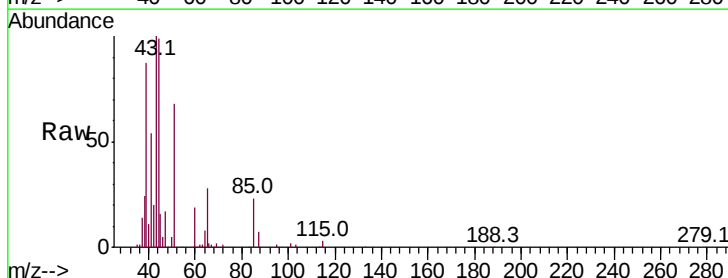
Acq: 23 Nov 2021 14:06

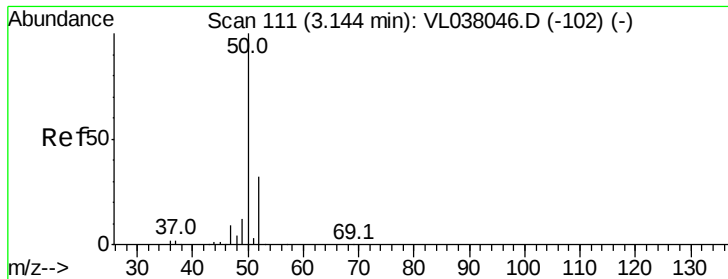
Tgt Ion: 85 Resp: 28359

Ion Ratio Lower Upper

85 100

87 32.2 25.8 38.6





#4

Chloromethane

Concen: 0.458 ppbv

RT: 3.15 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 23 Nov 2021 14:00

Tot Ion:

Ion Ratio

50 100

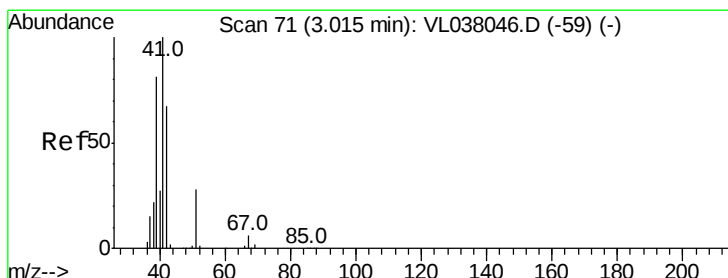
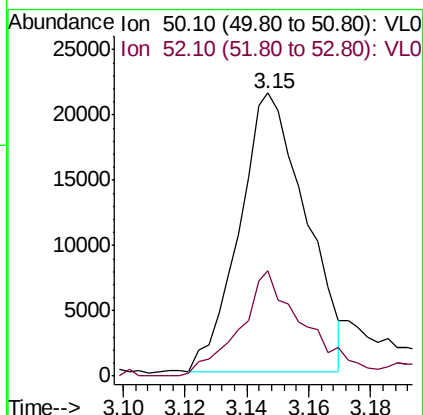
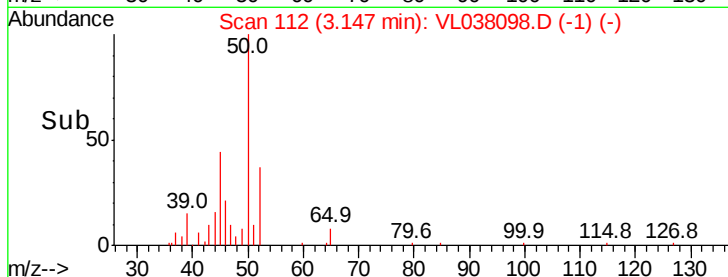
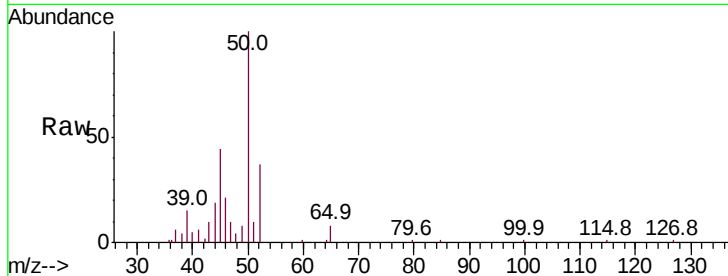
52 36.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 11/29/2021

Supervised By :Mahesh Dadoda 11/29/2021



#9

Propene

Concen: 6.324 ppbv m

RT: 3.03 min Scan# 76

Delta R.T. 0.02 min

Lab File: VL038098.D

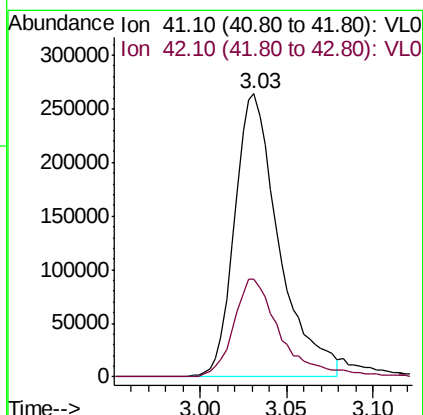
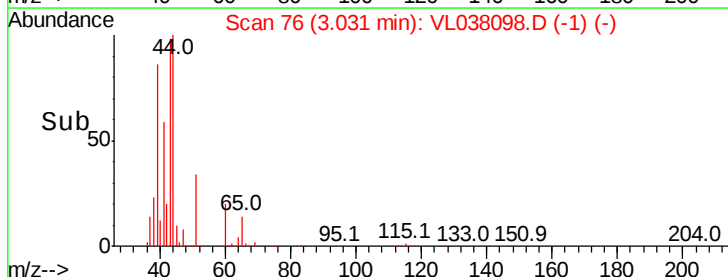
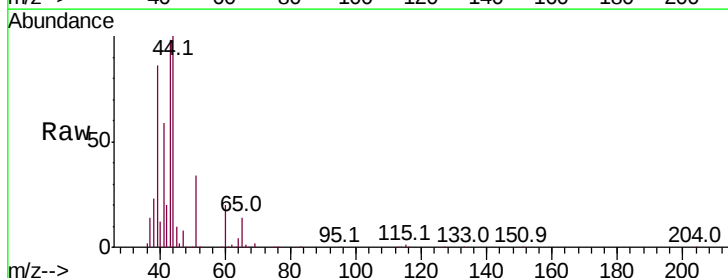
Acq: 23 Nov 2021 14:06

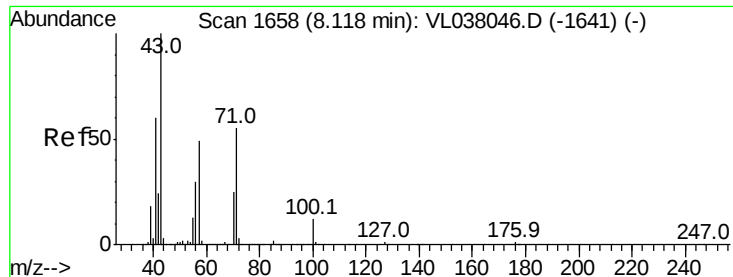
Tgt Ion: 41 Resp: 473705

Ion Ratio Lower Upper

41 100

42 101.9 53.8 80.8#





#10

Heptane

Concen: 0.419 ppbv m

RT: 8.12 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

Acq: 23 Nov 2021 14:00

Tot Ion:

Ion Ratio

43 100

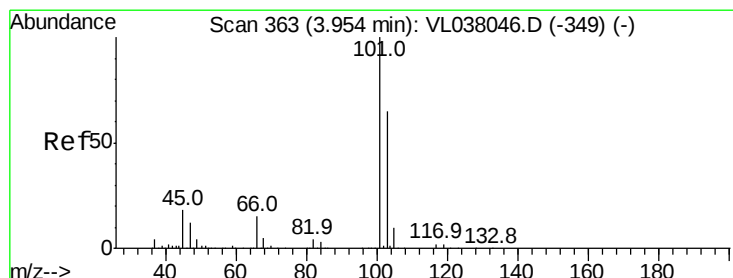
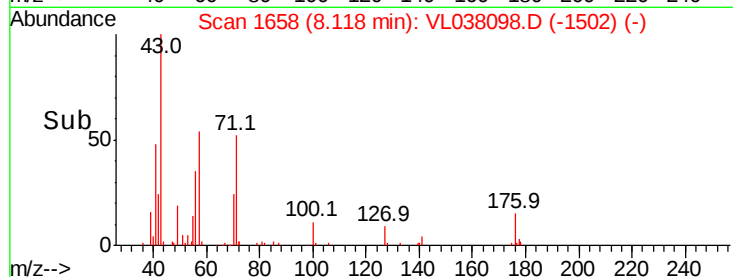
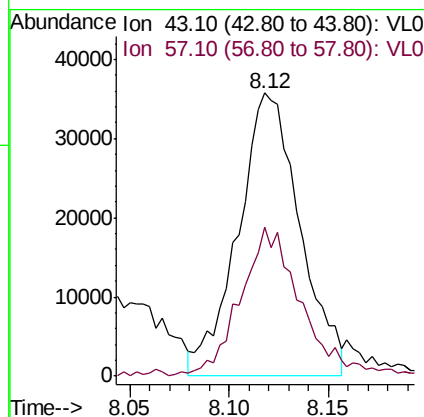
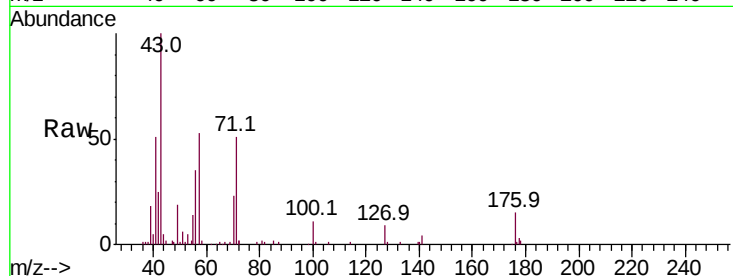
57 52.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 11/29/2021

Supervised By :Mahesh Dadoda 11/29/2021



#11

Trichlorofluoromethane

Concen: 2.626 ppbv

RT: 3.96 min Scan# 364

Delta R.T. 0.00 min

Lab File: VL038098.D

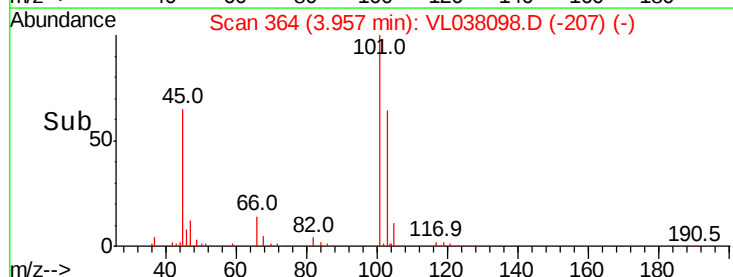
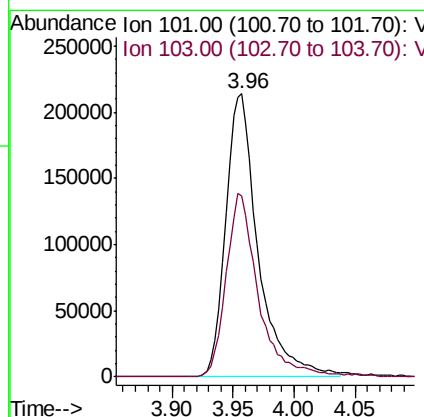
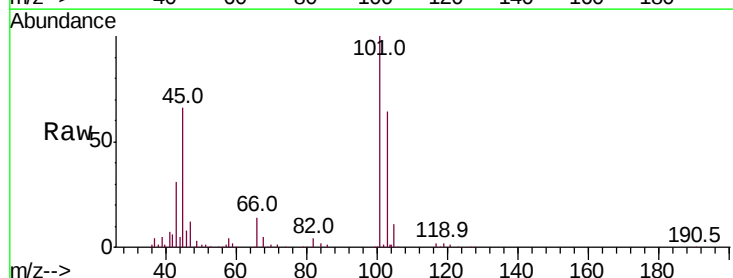
Acq: 23 Nov 2021 14:06

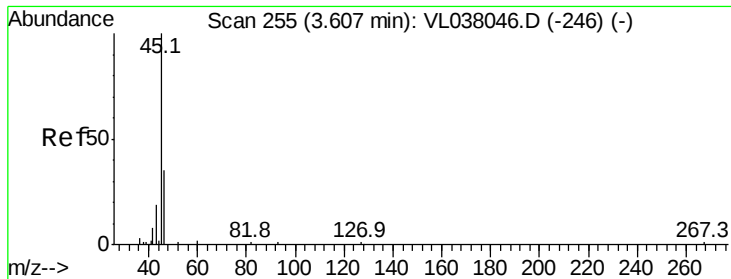
Tgt Ion:101 Resp: 399490

Ion Ratio Lower Upper

101 100

103 63.9 51.8 77.6



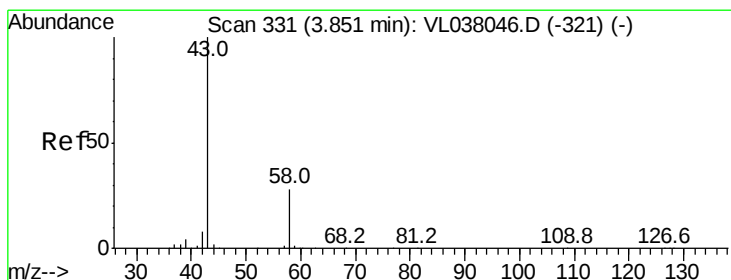
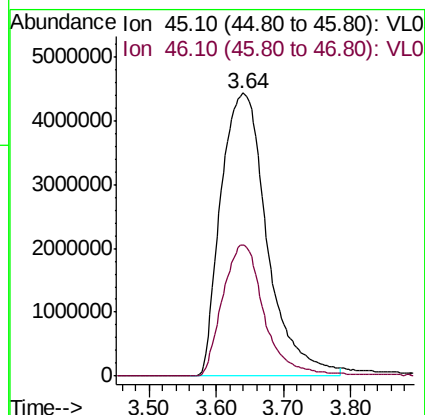
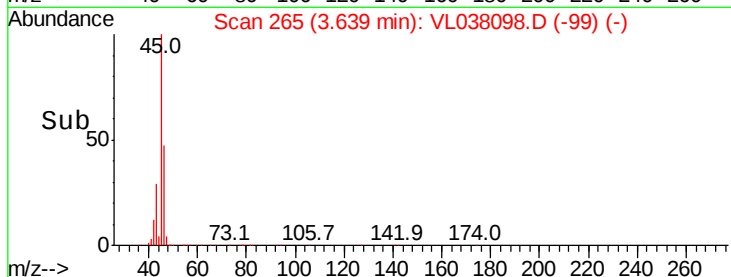
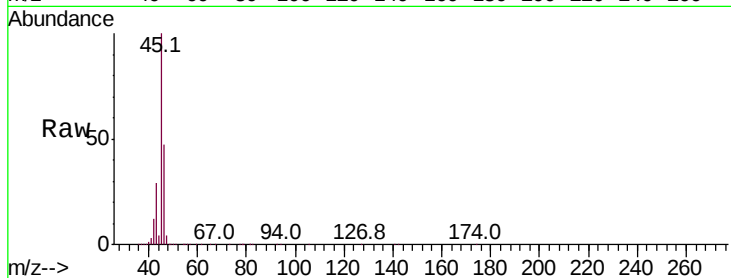


#13
Ethanol
Concen: 2930.560 ppbv
RT: 3.64
Instrument : MSVOA_1
Delta R.T. :
Lab File: ClientSampleId :
Acq: 23 Nov 2021 14:00

Tot Ion:
Ion Ratio
45 100
46 42.

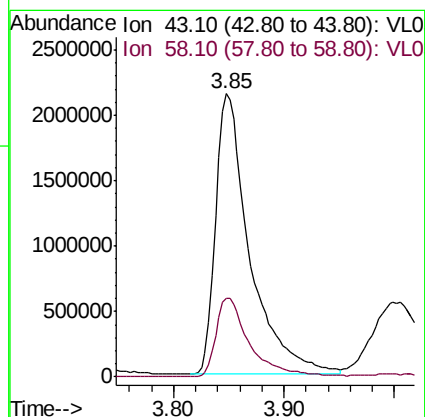
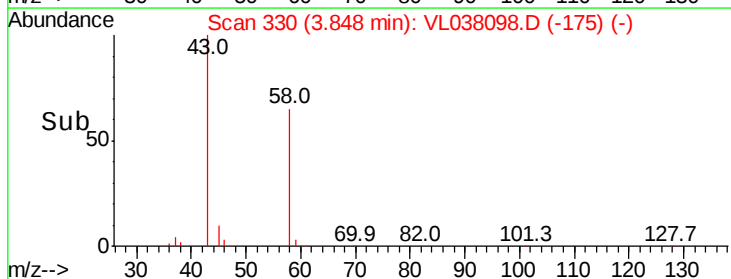
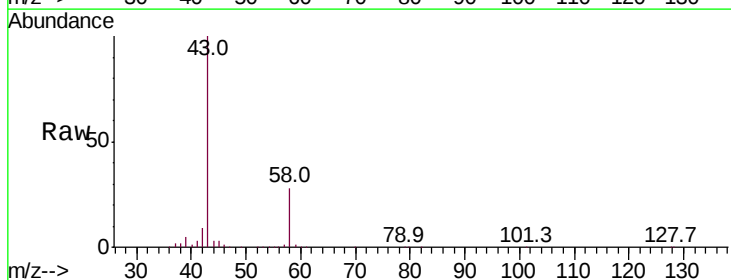
Manual Integrations
APPROVED

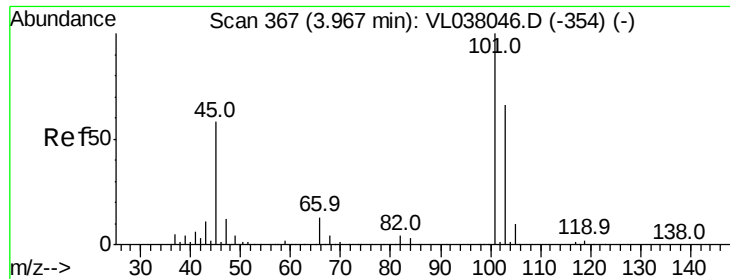
Reviewed By :Semsettin Yesilyurt 11/29/2021
Supervised By :Mahesh Dadoda 11/29/2021



#15
Acetone
Concen: 54.881 ppbv
RT: 3.85 min Scan# 330
Delta R.T. -0.00 min
Lab File: VL038098.D
Acq: 23 Nov 2021 14:06

Tgt Ion: 43 Resp: 4608198
Ion Ratio Lower Upper
43 100
58 27.9 22.4 33.6





#19

Isopropyl Alcohol

Concen: 124.472 ppbv

RT: 4.00

Delta R.T. MSVOA.L

Lab File: ClientSampleId :

Acq: 23 Nov 2021 14:00

Tot Ion:

Ion Ratio

45 100

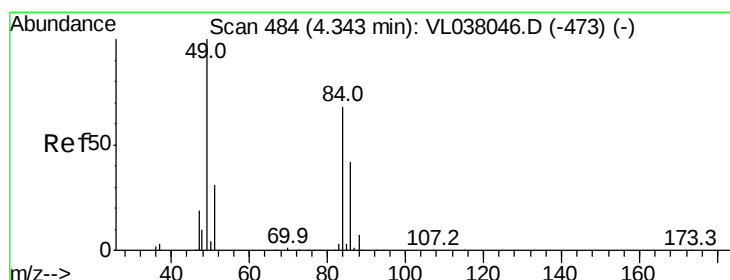
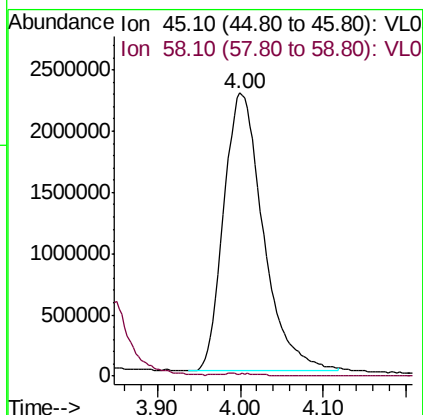
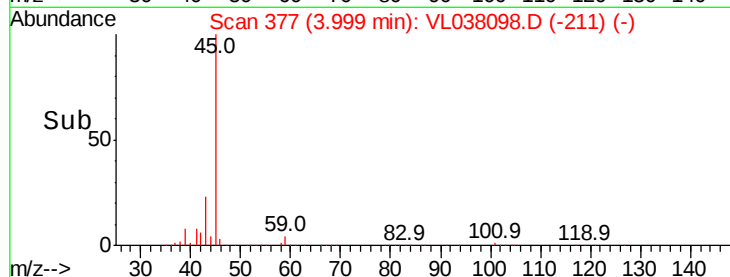
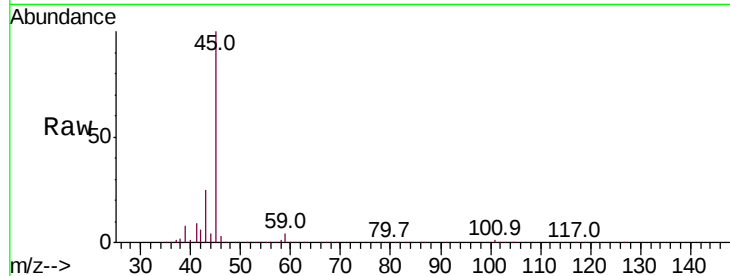
58 1.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 11/29/2021

Supervised By :Mahesh Dadoda 11/29/2021



#20

Methylene Chloride

Concen: 1.721 ppbv

RT: 4.35 min Scan# 485

Delta R.T. 0.00 min

Lab File: VL038098.D

Acq: 23 Nov 2021 14:06

Tgt Ion: 84 Resp: 80945

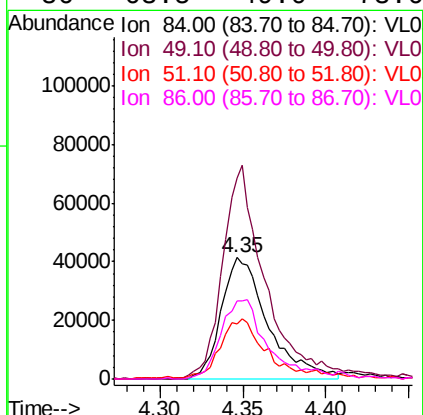
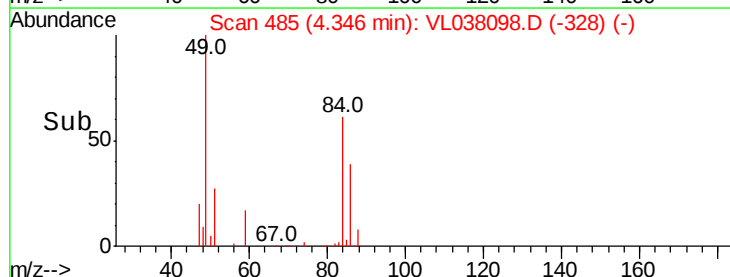
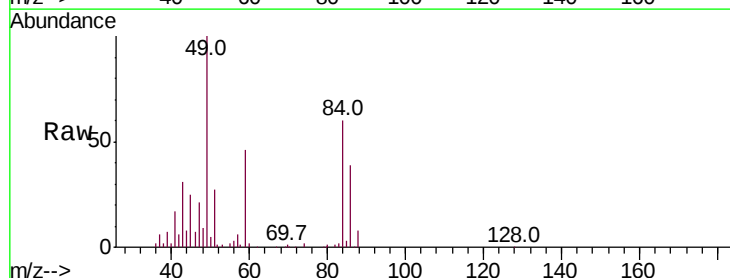
Ion Ratio Lower Upper

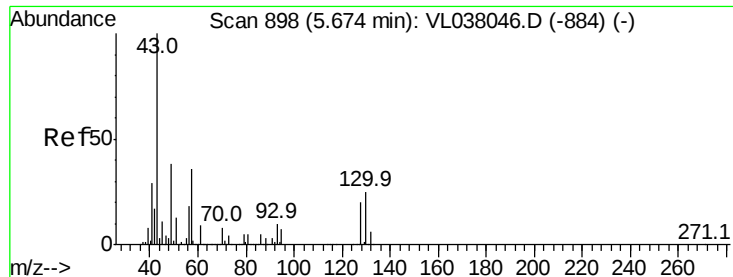
84 100

49 162.4 118.2 177.2

51 43.6 36.8 55.2

86 63.5 49.0 73.6



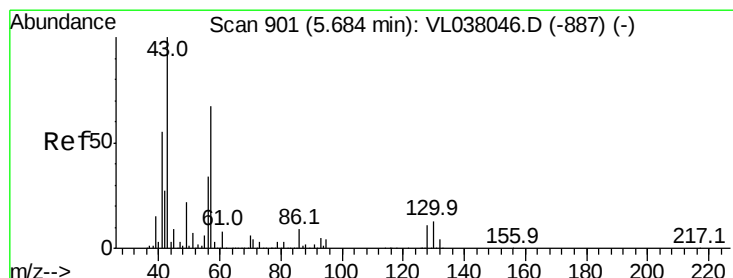
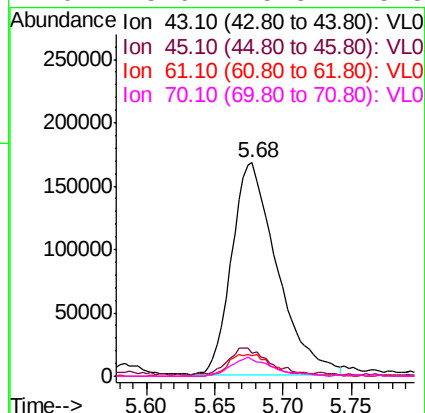
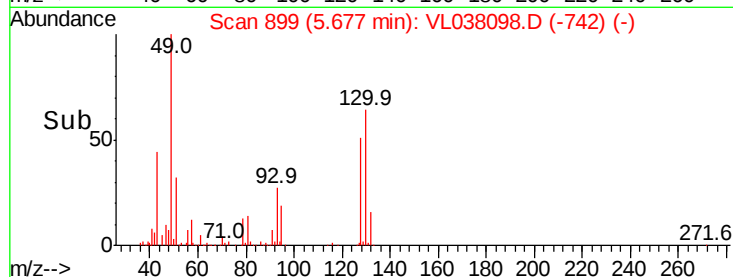
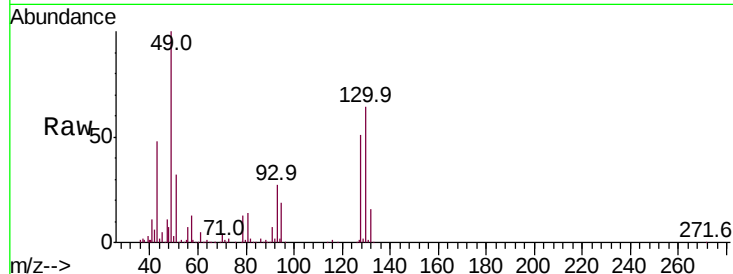


#25
Ethyl Acetate
Concen: 1.386 ppbv
RT: 5.68
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId:
Acq: 23 Nov 2021 14:00

Tot Ion:
Ion Ratio
43 100
45 12.
61 10.
70 8.6 5.8 8.8

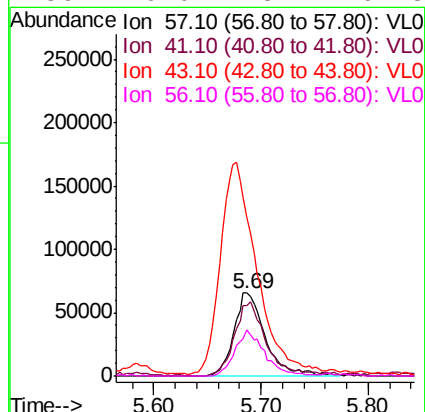
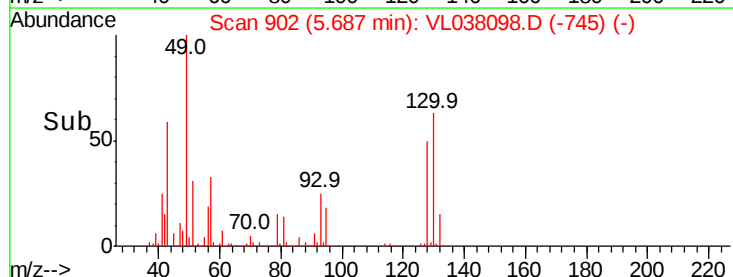
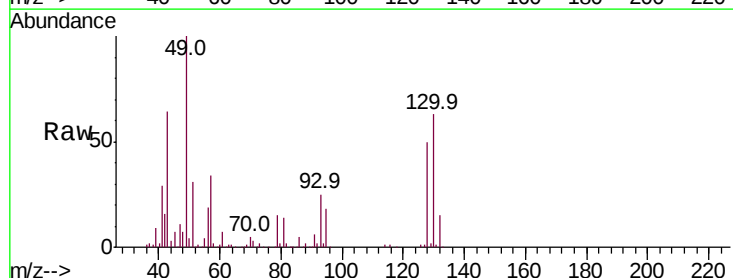
Manual Integrations
APPROVED

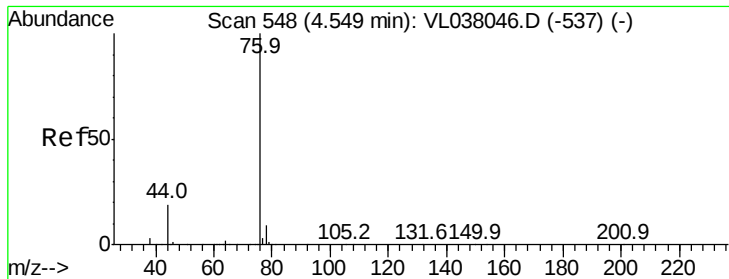
Reviewed By :Semsettin Yesilyurt 11/29/2021
Supervised By :Mahesh Dadoda 11/29/2021



#26
Hexane
Concen: 0.990 ppbv m
RT: 5.69 min Scan# 902
Delta R.T.: 0.00 min
Lab File: VL038098.D
Acq: 23 Nov 2021 14:06

Tgt Ion: 57 Resp: 133132
Ion Ratio Lower Upper
57 100
41 0.0 71.4 107.2#
43 0.0 174.6 261.8#
56 0.0 43.2 64.8#



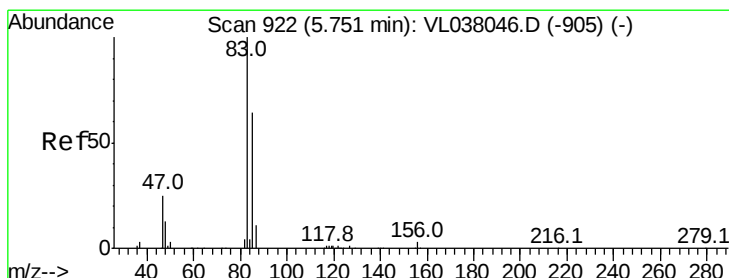
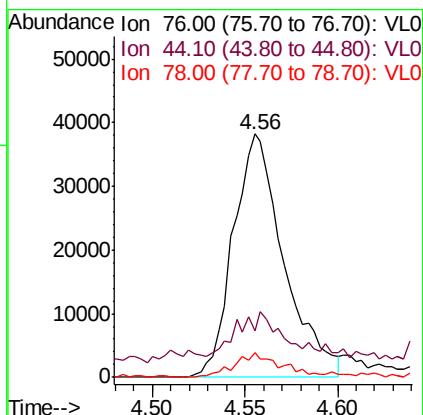
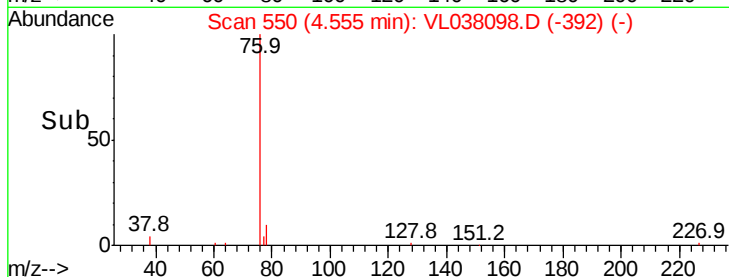
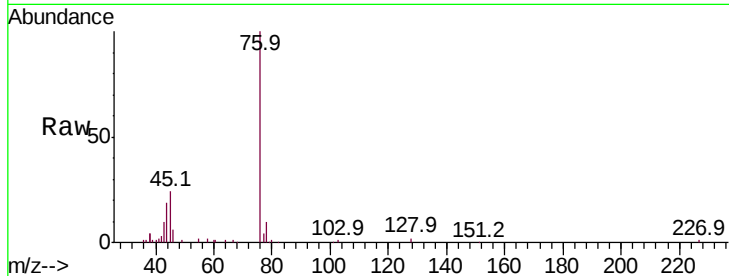


#27
Carbon Disulfide
Concen: 0.600 ppbv
RT: 4.56
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 23 Nov 2021 14:00

Tot Ion:
Ion Ratio
76 100
44 25.
78 10.

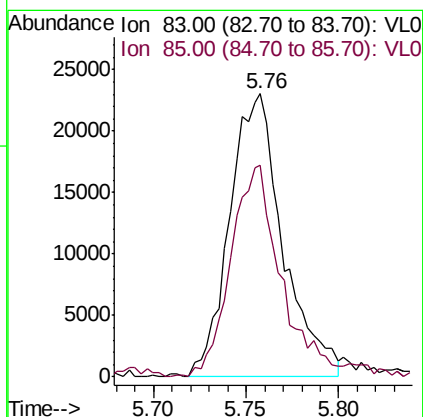
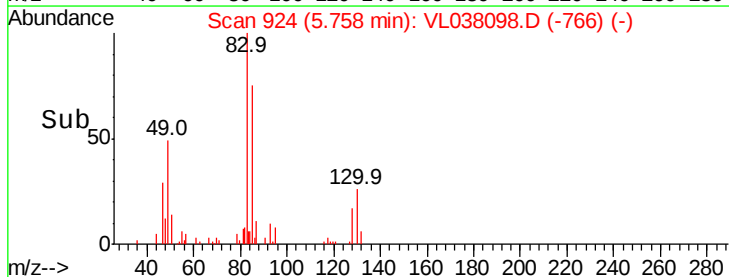
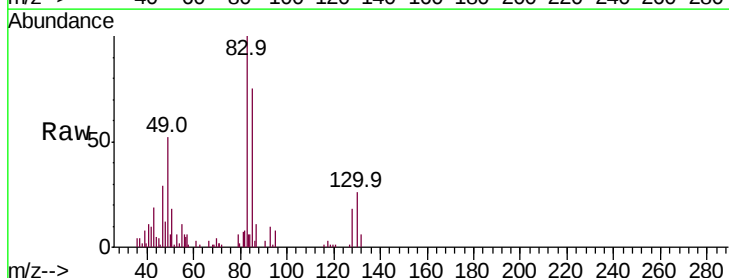
Manual Integrations
APPROVED

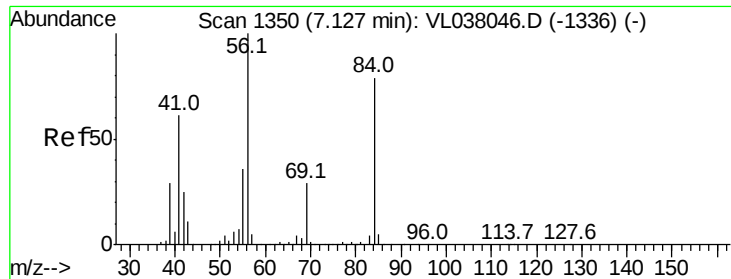
Reviewed By :Semsettin Yesilyurt 11/29/2021
Supervised By :Mahesh Dadoda 11/29/2021



#29
Chloroform
Concen: 0.233 ppbv
RT: 5.76 min Scan# 924
Delta R.T. 0.01 min
Lab File: VL038098.D
Acq: 23 Nov 2021 14:06

Tgt Ion: 83 Resp: 46146
Ion Ratio Lower Upper
83 100
85 74.8 51.0 76.6



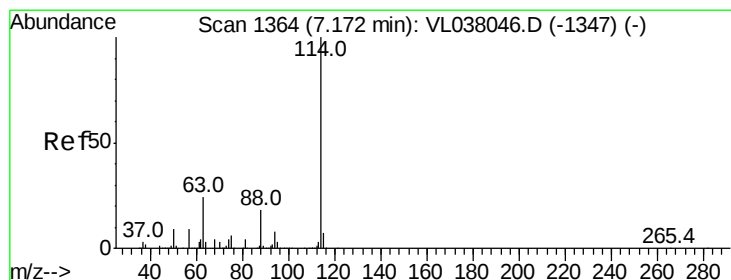
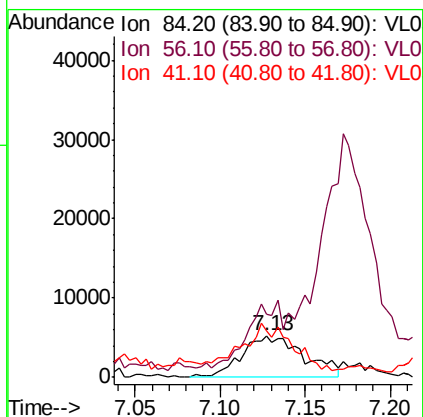
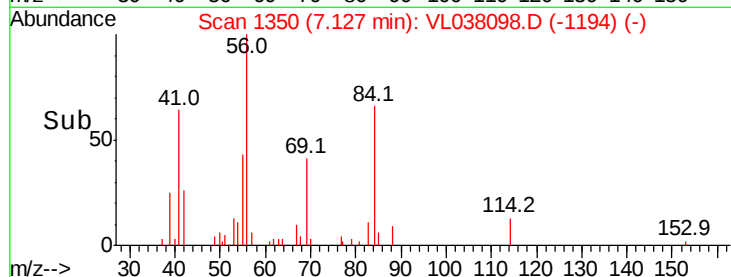
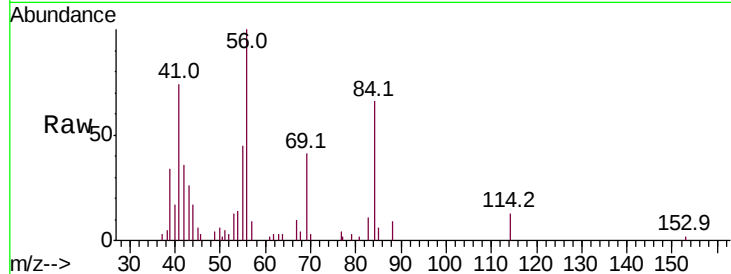


#30
Cvclohexane
Concen: 0.109 ppbv m
RT: 7.13
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId :
Acq: 23 Nov 2021 14:00

Tot Ion:
Ion Ratio
84 100
56 0.
41 134.

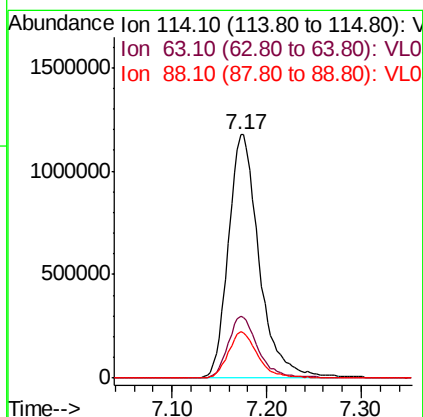
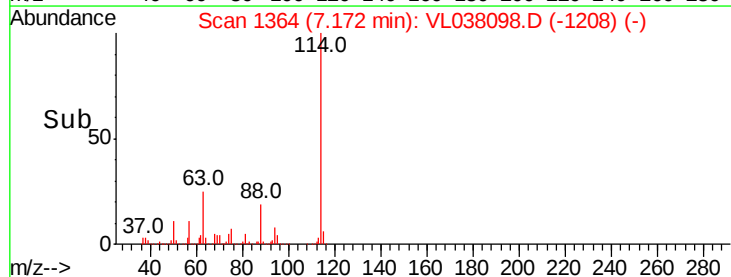
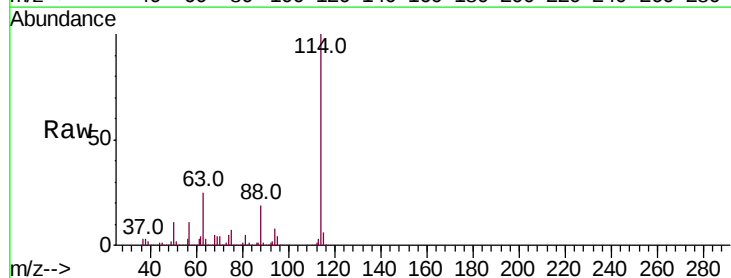
Manual Integrations
APPROVED

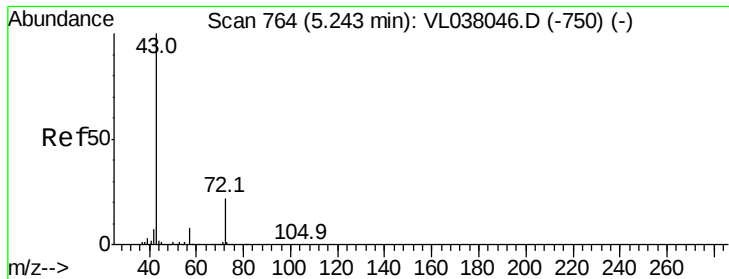
Reviewed By :Semsettin Yesilyurt 11/29/2021
Supervised By :Mahesh Dadoda 11/29/2021



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.17 min Scan# 1364
Delta R.T. 0.00 min
Lab File: VL038098.D
Acq: 23 Nov 2021 14:06

Tgt Ion:114 Resp: 2658950
Ion Ratio Lower Upper
114 100
63 24.9 19.7 29.5
88 18.6 14.4 21.6





#34

2-Butanone

Concen: 3.247 ppbv

RT: 5.24 Instrument: MSVOA_1

Delta R.T.

Lab File: ClientSampleId:

Acq: 23 Nov 2021 14:00

Tot Ion:

Ion Ratio

43 100

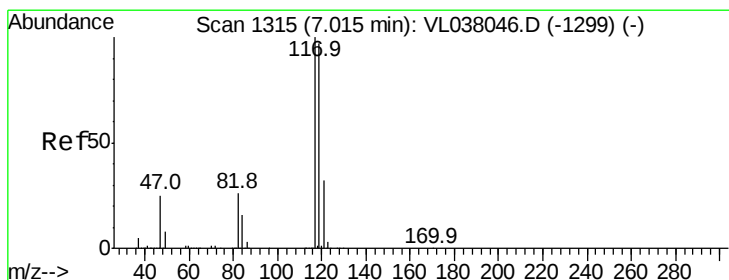
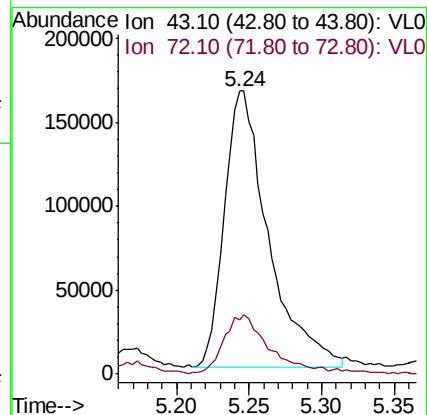
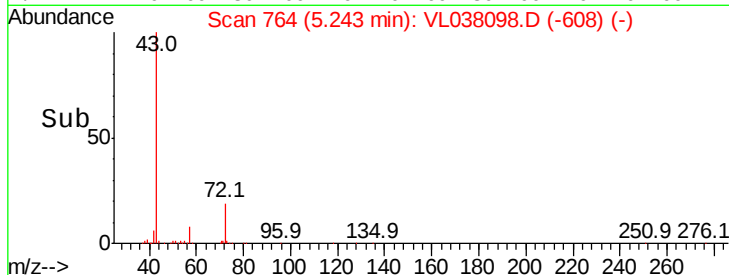
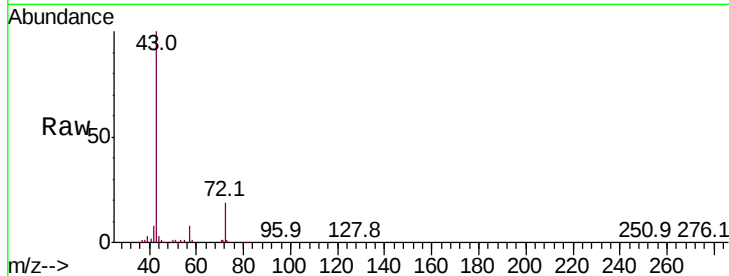
72 23.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 11/29/2021

Supervised By :Mahesh Dadoda 11/29/2021



#35

Carbon Tetrachloride

Concen: 0.116 ppbv m

RT: 7.01 min Scan# 1315

Delta R.T. 0.00 min

Lab File: VL038098.D

Acq: 23 Nov 2021 14:06

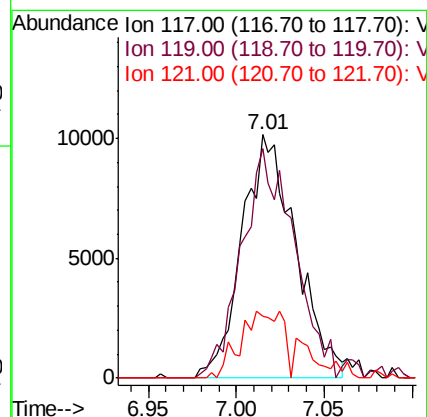
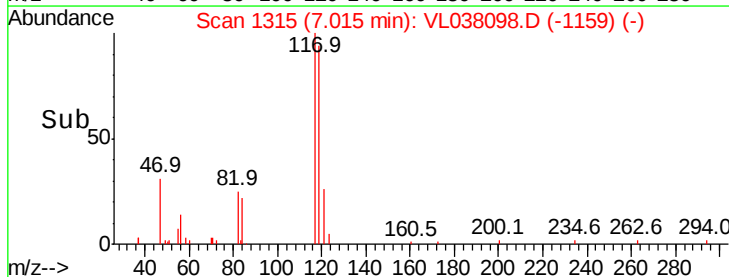
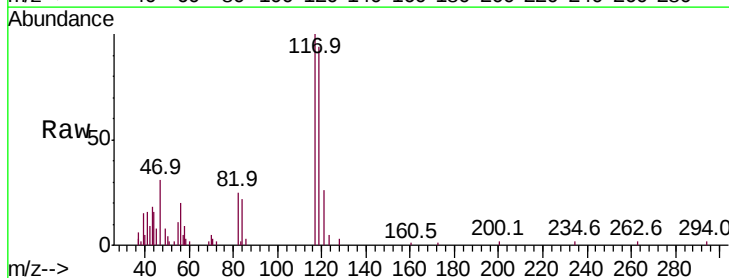
Tgt Ion:117 Resp: 21631

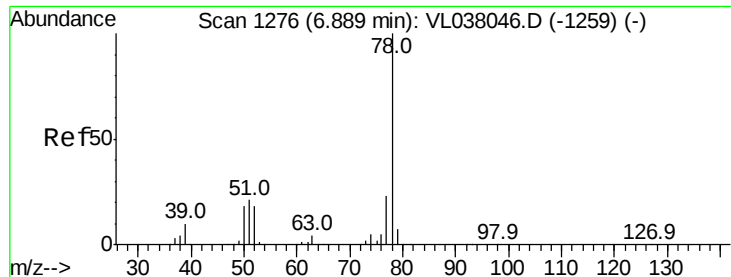
Ion Ratio Lower Upper

117 100

119 94.1 77.7 116.5

121 25.6 25.6 38.4



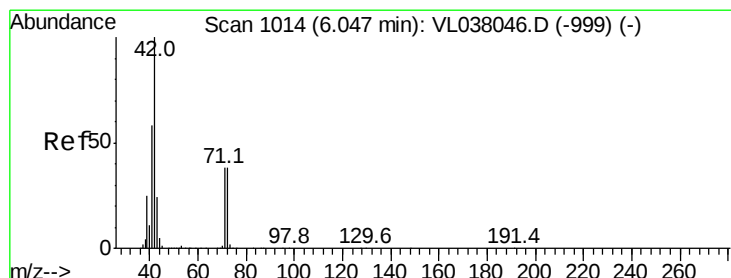
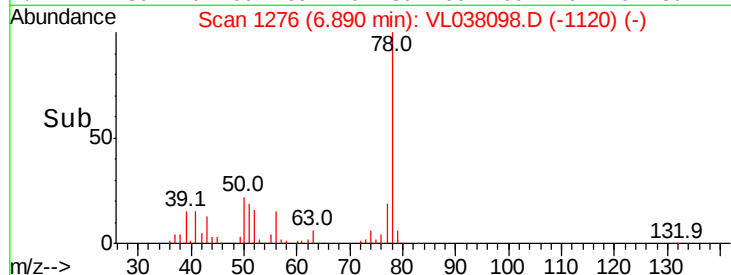
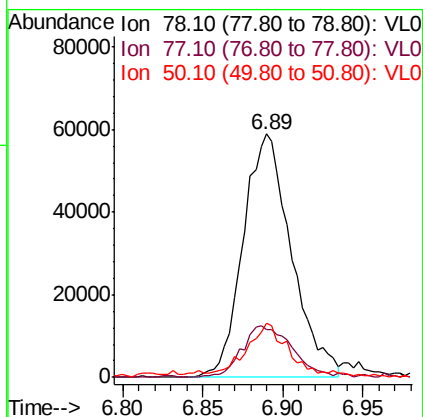
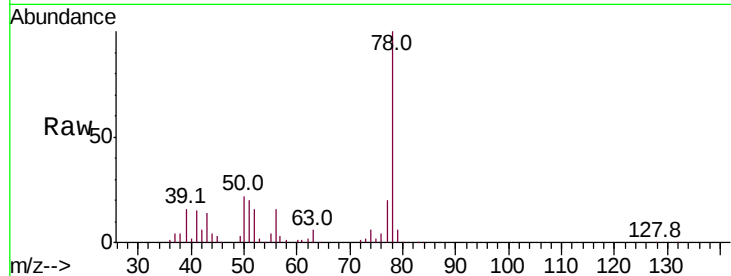


#36
Benzene
Concen: 0.459 ppbv
RT: 6.89
Instrument: MSVOA_L
Delta R.T.:
ClientSampleId:
Lab File: IA-PURE-BARREDUP
Acq: 23 Nov 2021 14:00

Tot Ion:
Ion Ratio
78 100
77 19.
50 20.

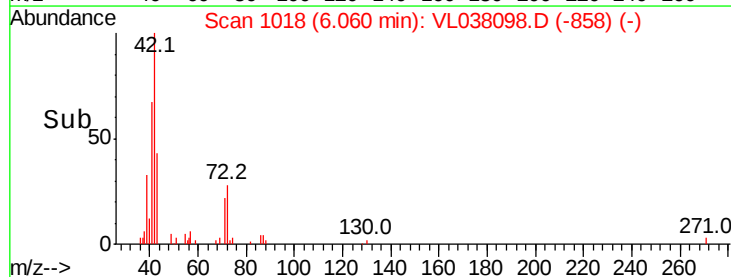
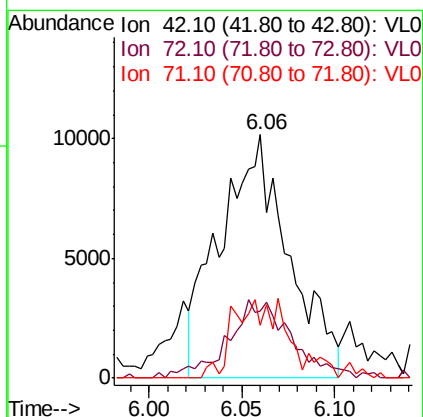
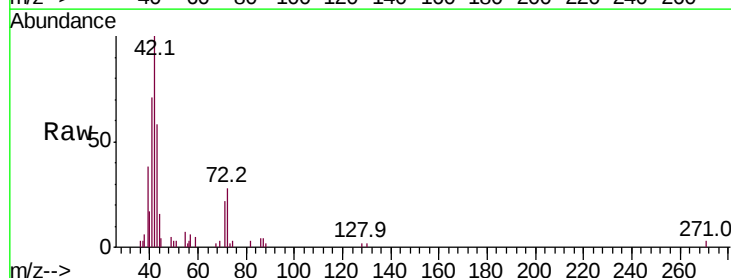
Manual Integrations
APPROVED

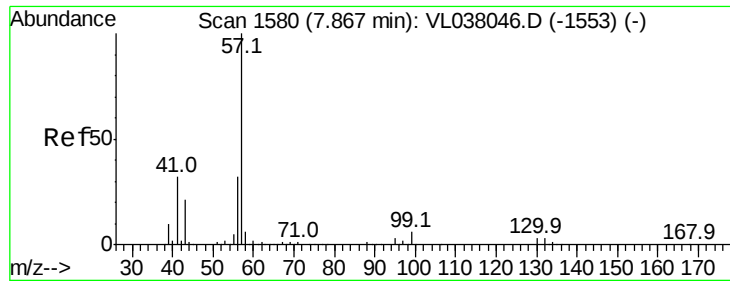
Reviewed By :Semsettin Yesilyurt 11/29/2021
Supervised By :Mahesh Dadoda 11/29/2021



#41
Tetrahydrofuran
Concen: 0.394 ppbv m
RT: 6.06 min Scan# 1018
Delta R.T. 0.01 min
Lab File: VL038098.D
Acq: 23 Nov 2021 14:06

Tgt Ion: 42 Resp: 26244
Ion Ratio Lower Upper
42 100
72 0.0 31.7 47.5#
71 0.0 30.6 46.0#





#44

2,2,4-Trimethylpentane

Concen: 0.436 ppbv

RT: 7.87 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

Acq: 23 Nov 2021 14:00

Tot Ion:

Ion Ratio

57 100

41 35.

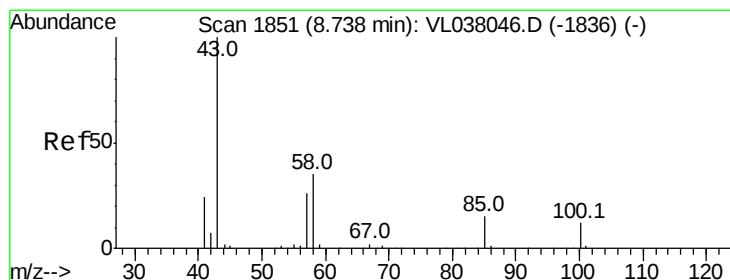
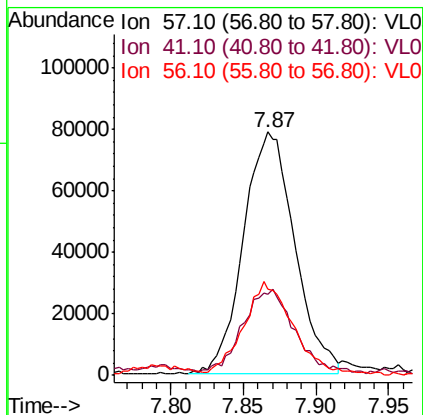
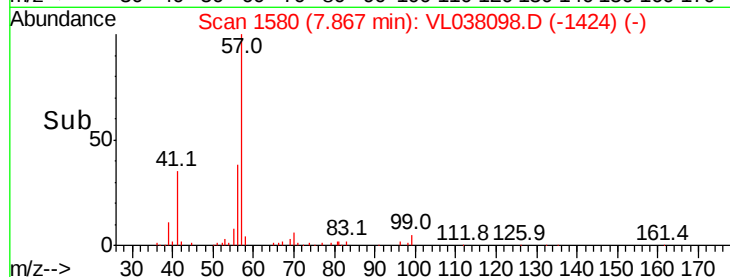
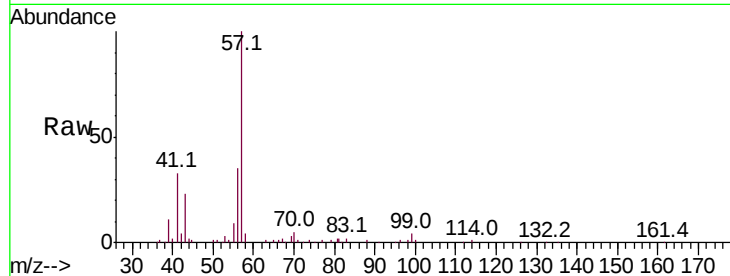
56 38.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 11/29/2021

Supervised By :Mahesh Dadoda 11/29/2021



#50

4-Methyl-2-Pentanone

Concen: 0.221 ppbv m

RT: 8.74 min Scan# 1853

Delta R.T. 0.01 min

Lab File: VL038098.D

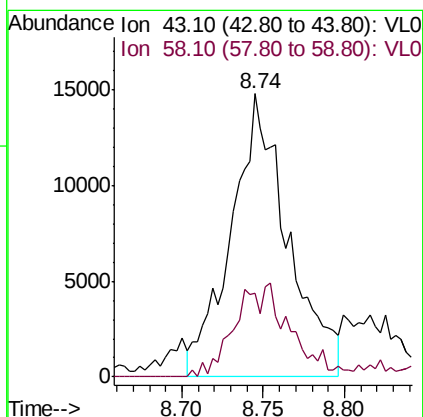
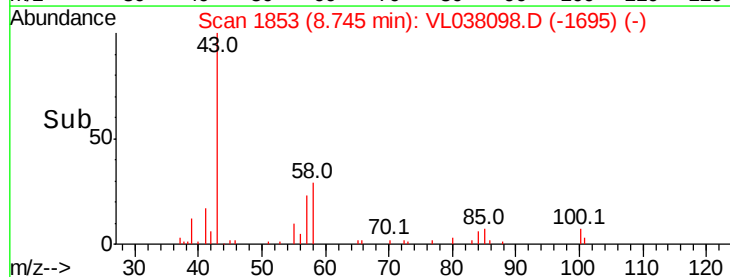
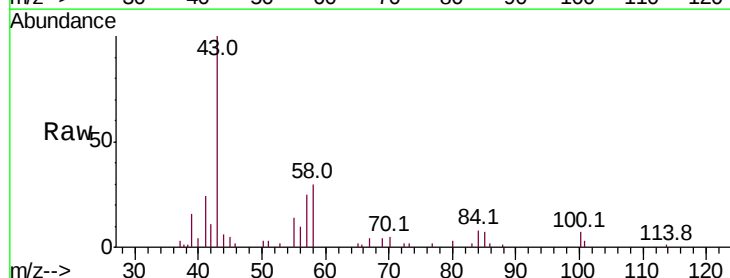
Acq: 23 Nov 2021 14:06

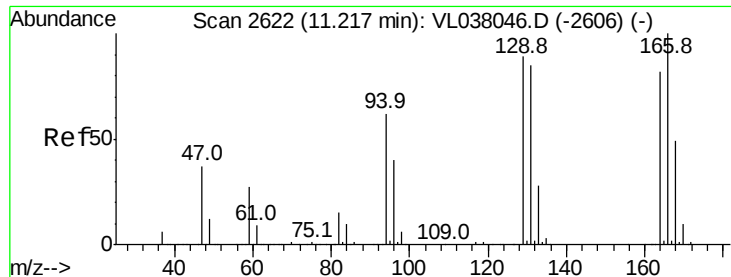
Tgt Ion: 43 Resp: 35939

Ion Ratio Lower Upper

43 100

58 0.0 29.4 44.2#





#52

Tetrachloroethene

Concen: 0.094 ppbv m

RT: 11.22

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 23 Nov 2021 14:00

Tot Ion:1

Ion Rati

164 100

166 125.

129 94.

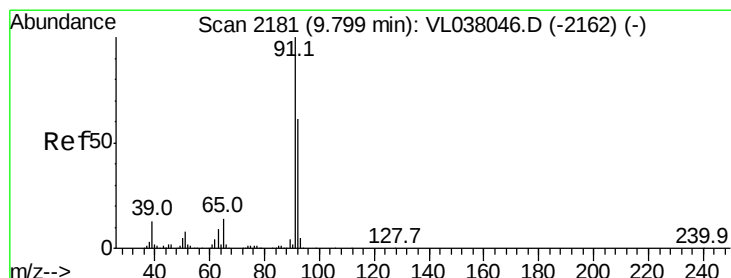
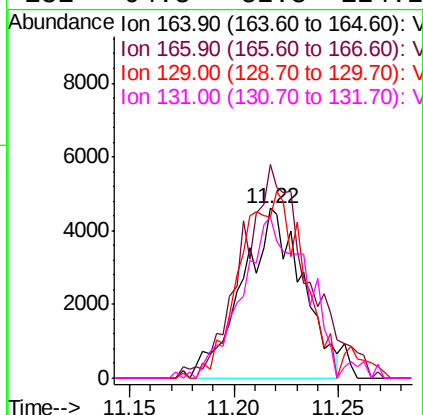
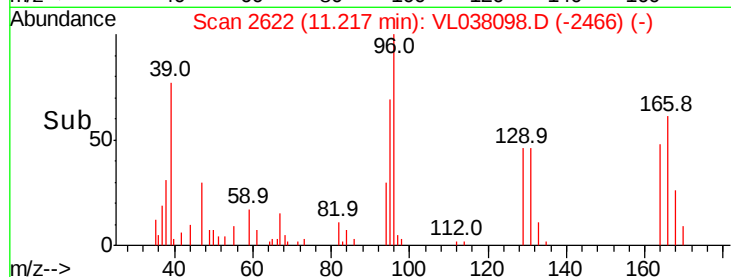
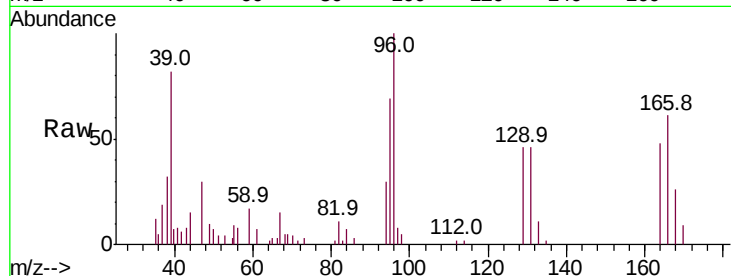
131 94.8

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 11/29/2021

Supervised By :Mahesh Dadoda 11/29/2021



#53

Toluene

Concen: 1.834 ppbv

RT: 9.81 min Scan# 2183

Delta R.T. 0.01 min

Lab File: VL038098.D

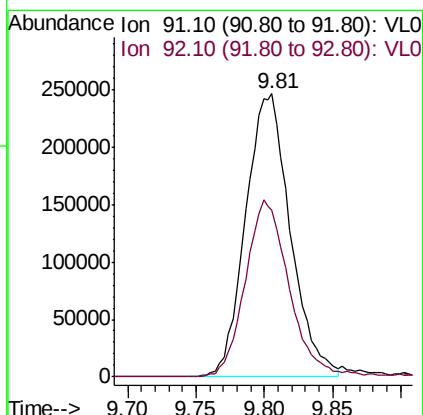
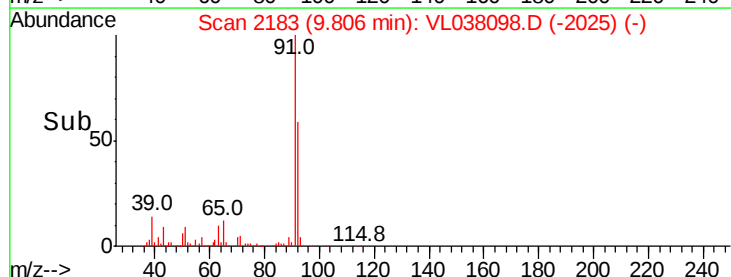
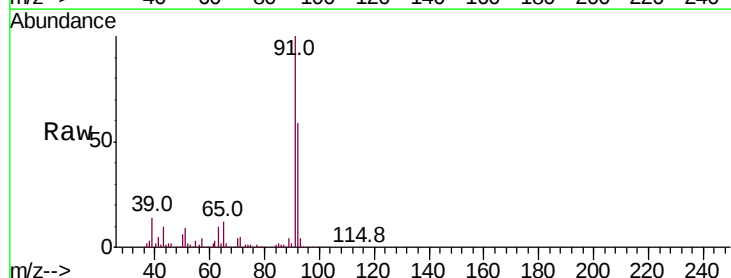
Acq: 23 Nov 2021 14:06

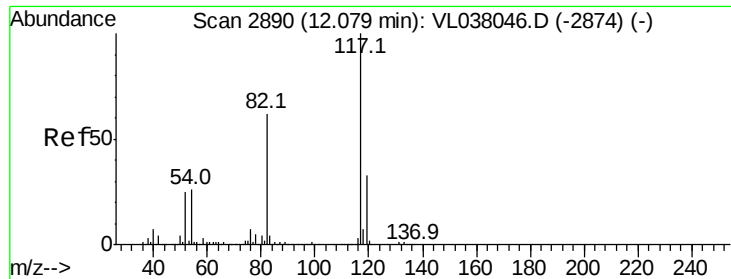
Tgt Ion: 91 Resp: 559575

Ion Ratio Lower Upper

91 100

92 62.4 49.7 74.5



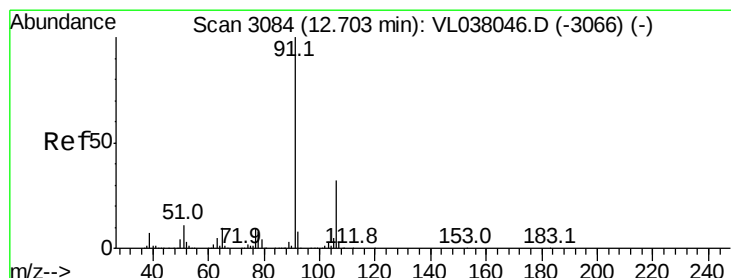
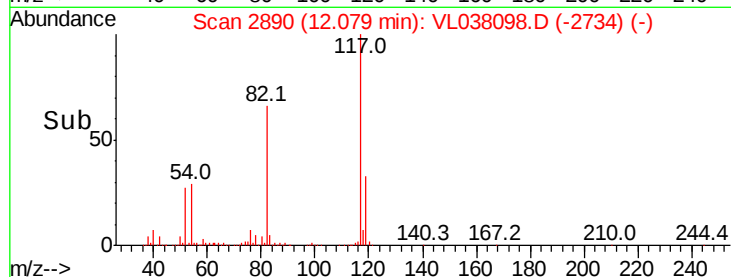
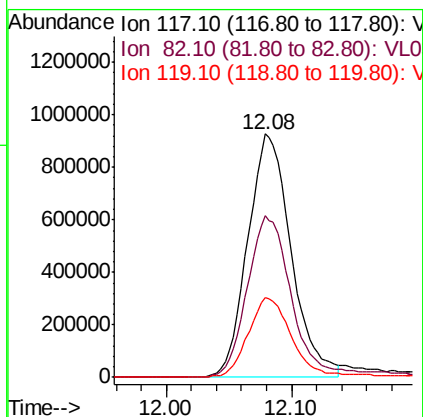
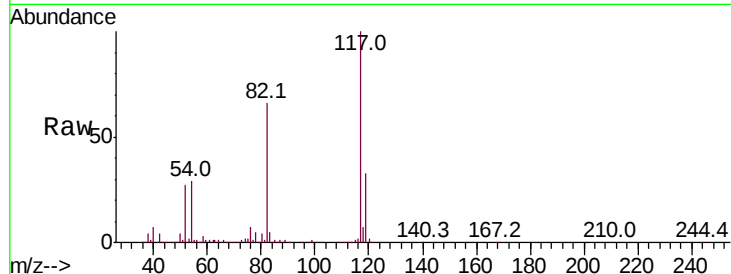


#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.08 min
Instrument: MSVOA_1
Delta R.T.: 0.00 min
Lab File: ClientSampleId :
IA-PURE-BARREDUP
Acq: 23 Nov 2021 14:00

Tot Ion: 1
Ion Ratio
117 100
82 72.
119 34.

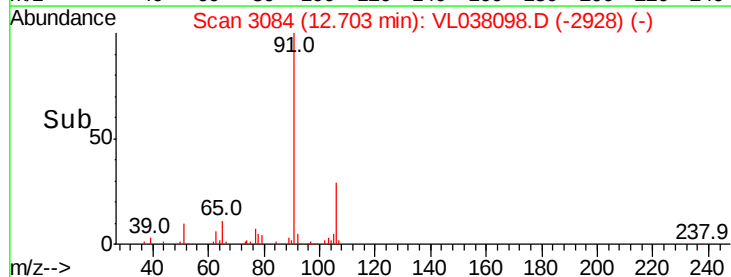
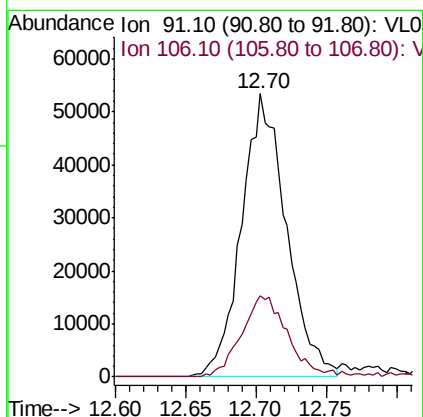
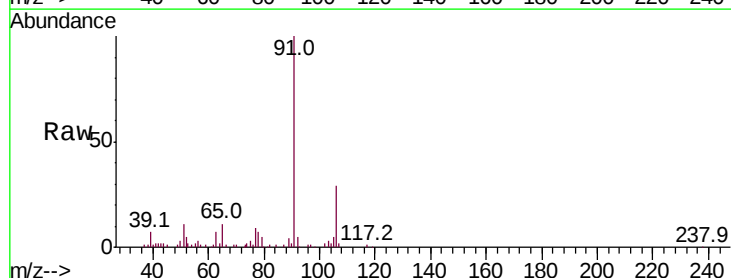
Manual Integrations
APPROVED

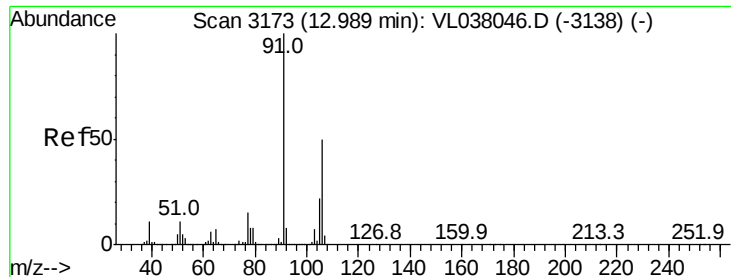
Reviewed By :Semsettin Yesilyurt 11/29/2021
Supervised By :Mahesh Dadoda 11/29/2021



#58
Ethyl Benzene
Concen: 0.320 ppbv m
RT: 12.70 min Scan# 3084
Delta R.T.: 0.00 min
Lab File: VL038098.D
Acq: 23 Nov 2021 14:06

Tgt Ion: 91 Resp: 117899
Ion Ratio Lower Upper
91 100
106 28.7 25.8 38.6





#59

m/p-Xylene

Concen: 0.583 ppbv

RT: 12.96

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 23 Nov 2021 14:00

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 11/29/2021

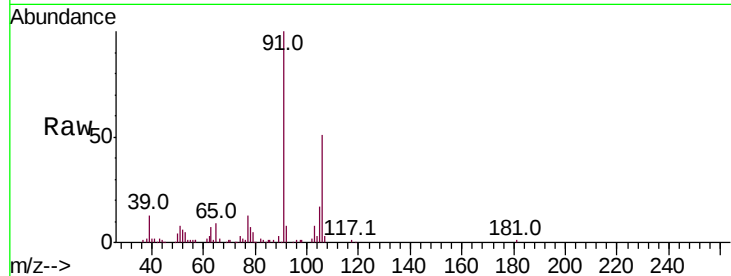
Supervised By :Mahesh Dadoda 11/29/2021

Tot Ion:

Ion Ratio

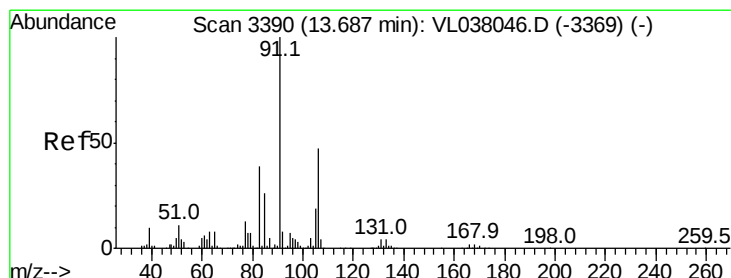
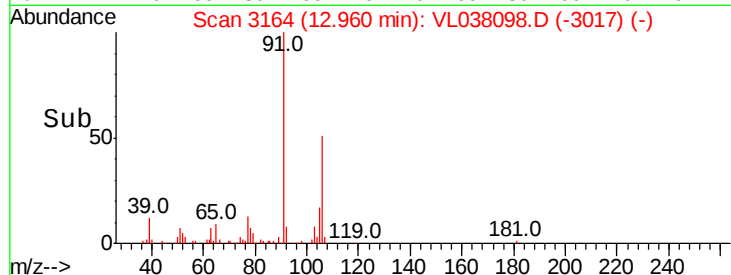
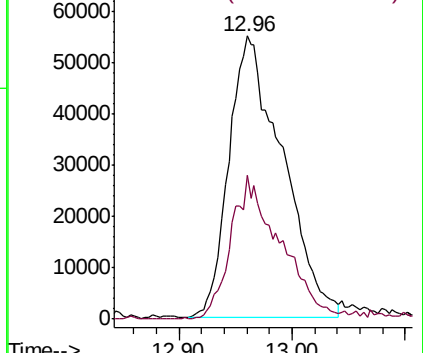
91 100

106 47.



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V



#60

o-Xylene

Concen: 0.219 ppbv

RT: 13.68 min Scan# 3389

Delta R.T. -0.00 min

Lab File: VL038098.D

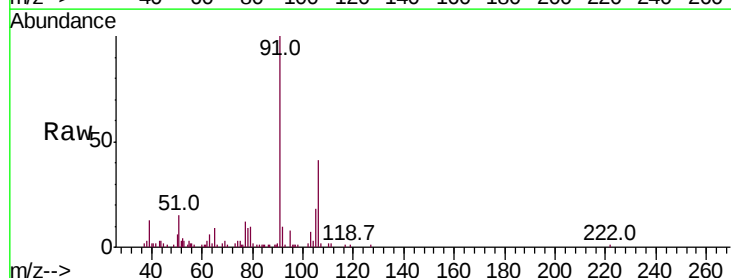
Acq: 23 Nov 2021 14:06

Tgt Ion: 91 Resp: 63056

Ion Ratio Lower Upper

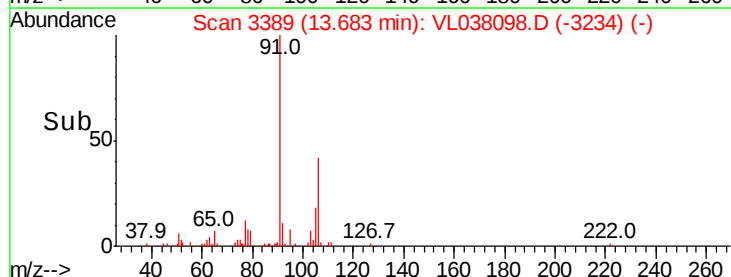
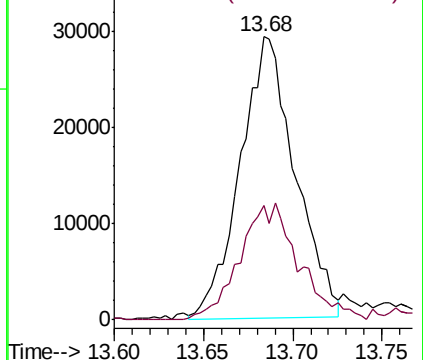
91 100

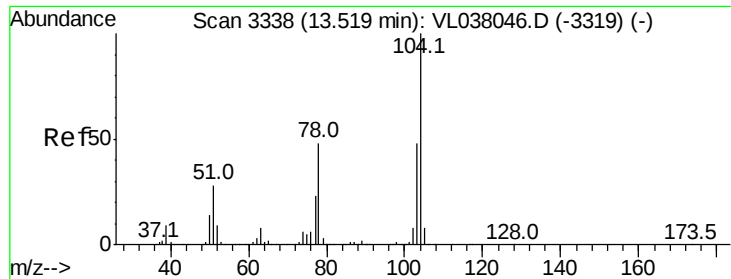
106 44.4 24.2 72.6



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V



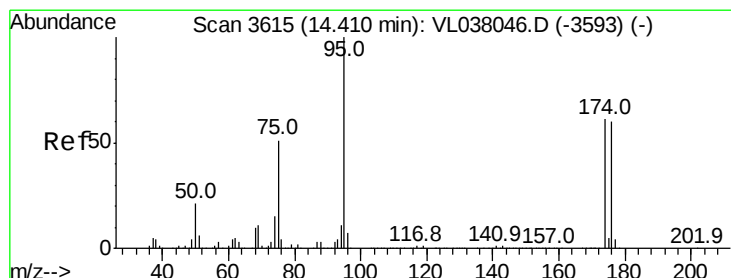
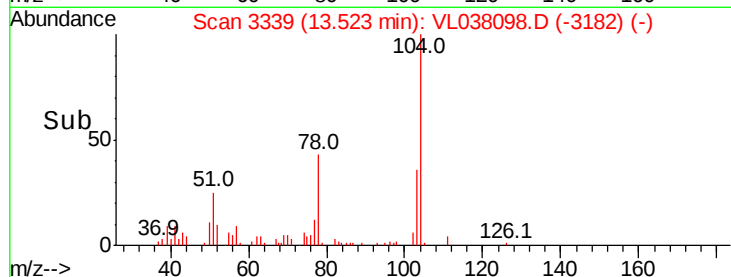
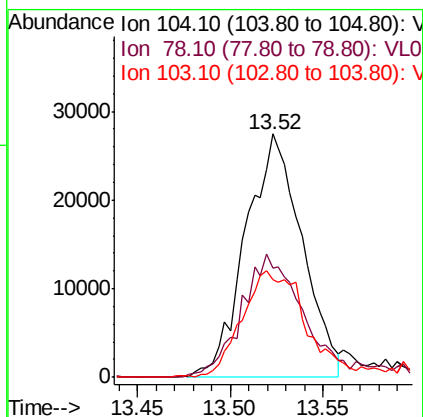
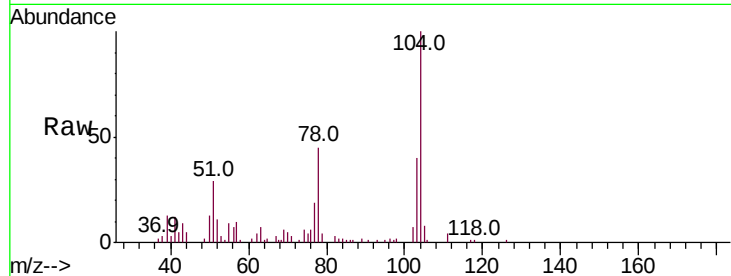


#61
Stvrene
Concen: 0.378 ppbv
RT: 13.52
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 23 Nov 2021 14:06

Tot Ion:1
Ion Rati
104 100
78 59.
103 53.

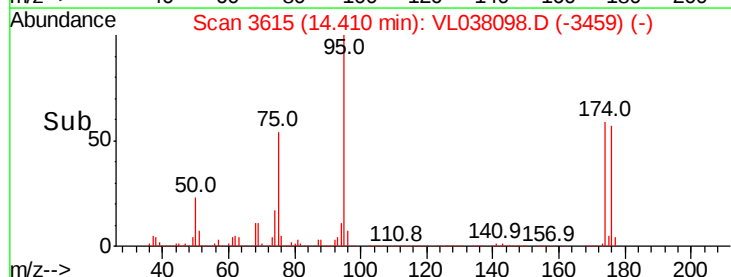
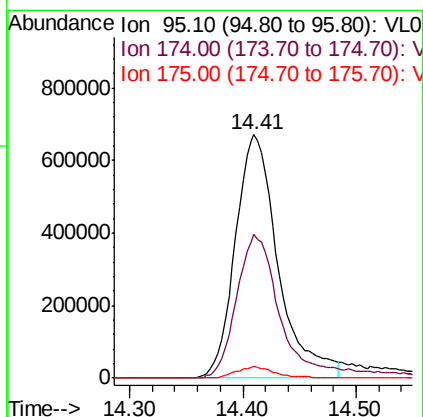
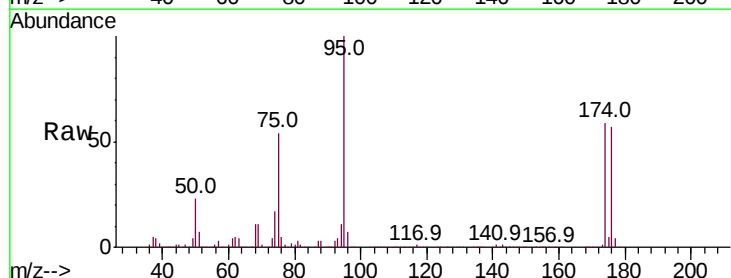
Manual Integrations
APPROVED

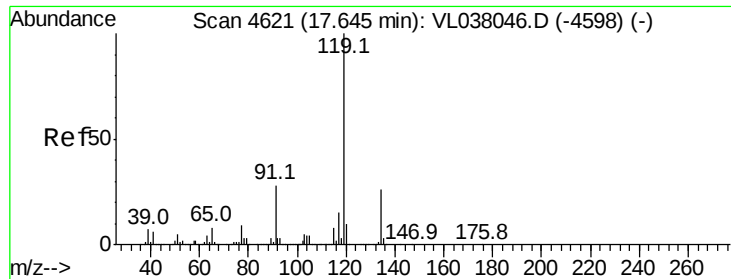
Reviewed By :Semsettin Yesilyurt 11/29/2021
Supervised By :Mahesh Dadoda 11/29/2021



#68
1-Bromo-4-Fluorobenzene
Concen: 10.997 ppbv
RT: 14.41 min Scan# 3615
Delta R.T. 0.00 min
Lab File: VL038098.D
Acq: 23 Nov 2021 14:06

Tgt Ion: 95 Resp: 1766624
Ion Ratio Lower Upper
95 100
174 63.2 53.1 79.7
175 4.8 4.0 6.0





#69

p-Isopropyltoluene

Concen: 0.197 ppbv m

RT: 17.64

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 23 Nov 2021 14:00

Tot Ion:1

Ion Ratio

119 100

134 25.

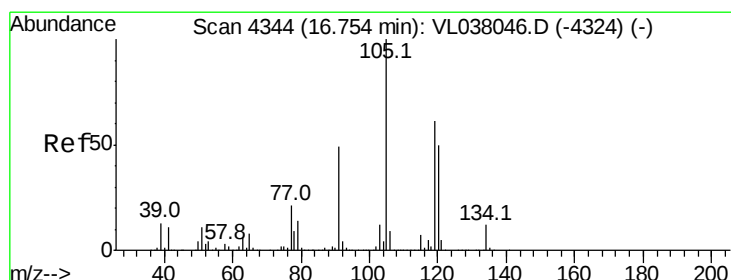
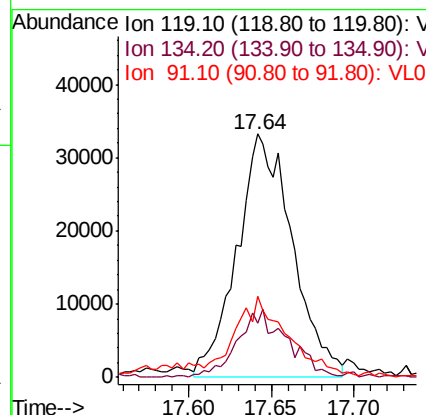
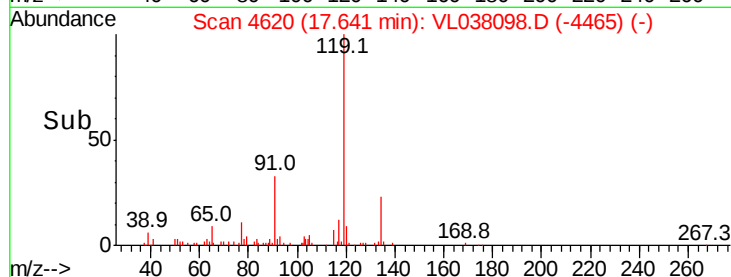
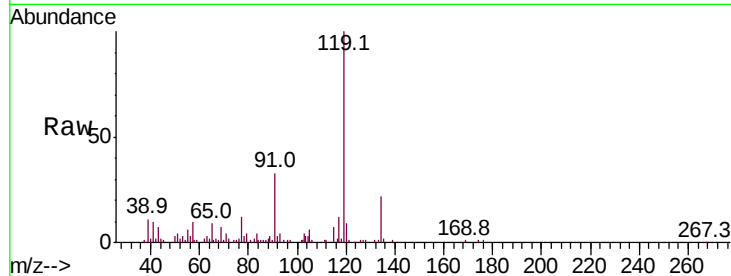
91 36.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 11/29/2021

Supervised By :Mahesh Dadoda 11/29/2021



#74

1,2,4-Trimethylbenzene

Concen: 0.205 ppbv m

RT: 16.76 min Scan# 4345

Delta R.T. 0.00 min

Lab File: VL038098.D

Acq: 23 Nov 2021 14:06

Tgt Ion:105 Resp: 64317

Ion Ratio Lower Upper

105 100

120 35.2 40.1 60.1#

91 13.5 39.8 59.8#

77 13.2 16.6 25.0#

