

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL102721\
 Data File : VL037917.D
 Acq On : 27 Oct 2021 15:38
 Operator : SY/AP
 Sample : M4377-01
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA L
 ClientSampleId :
 VMP-5-MANIFOLD

Manual Integrations
 APPROVED

Reviewed By : Semsettin Yesilyurt 10/28/2021
 Supervised By : Mahesh Dadoda 10/29/2021

Quant Time: Oct 28 12:53:02 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL100421A
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument:
 QLast Update : Mon Oct 04 17:43:54 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.69	49	1276424	10.00	ppbv	0.02
33) 1,4-Difluorobenzene	7.19	114	3779274	10.00	ppbv	0.02
55) Chlorobenzene-d5	12.10	117	3308786	10.00	ppbv	0.02

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.43	95	2123417	9.18	ppbv	0.01
Spiked Amount	10.000	Range	65 - 135	Recovery	=	91.80%

Target Compounds

						Ovalue
2) Dichlorodifluoromethane	3.07	85	27990	0.137	ppbv	89
9) Propene	3.04	41	3079536m	34.125	ppbv	
10) Heptane	8.14	43	43323m	0.211	ppbv	
11) Trichlorofluoromethane	3.97	101	55859m	0.307	ppbv	
13) Ethanol	3.62	45	5581337	756.281	ppbv	80
15) Acetone	3.87	43	1104917m	9.643	ppbv	
17) tert-Butyl alcohol	4.32	59	63226	0.536	ppbv	99
19) Isopropyl Alcohol	3.99	45	2503555	35.120	ppbv #	98
20) Methylene Chloride	4.36	84	301594	5.209	ppbv	98
26) Hexane	5.71	57	302623	1.911	ppbv #	49
29) Chloroform	5.77	83	627171	2.771	ppbv	99
30) Cyclohexane	7.15	84	14065m	0.105	ppbv	
34) 2-Butanone	5.26	43	219741	1.440	ppbv	92
35) Carbon Tetrachloride	7.04	117	12786m	0.060	ppbv	
36) Benzene	6.91	78	50047	0.155	ppbv	92
41) Tetrahydrofuran	6.08	42	116132m	1.554	ppbv	
44) 2,2,4-Trimethylpentane	7.89	57	118196	0.218	ppbv #	59
52) Tetrachloroethene	11.24	164	8069m	0.064	ppbv	
53) Toluene	9.82	91	330235	0.923	ppbv	100
58) Ethyl Benzene	12.72	91	68272m	0.154	ppbv	
59) m/p-Xylene	12.99	91	233063m	0.611	ppbv	
60) o-Xylene	13.71	91	78902	0.216	ppbv	99
61) Styrene	13.55	104	21642m	0.122	ppbv	

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

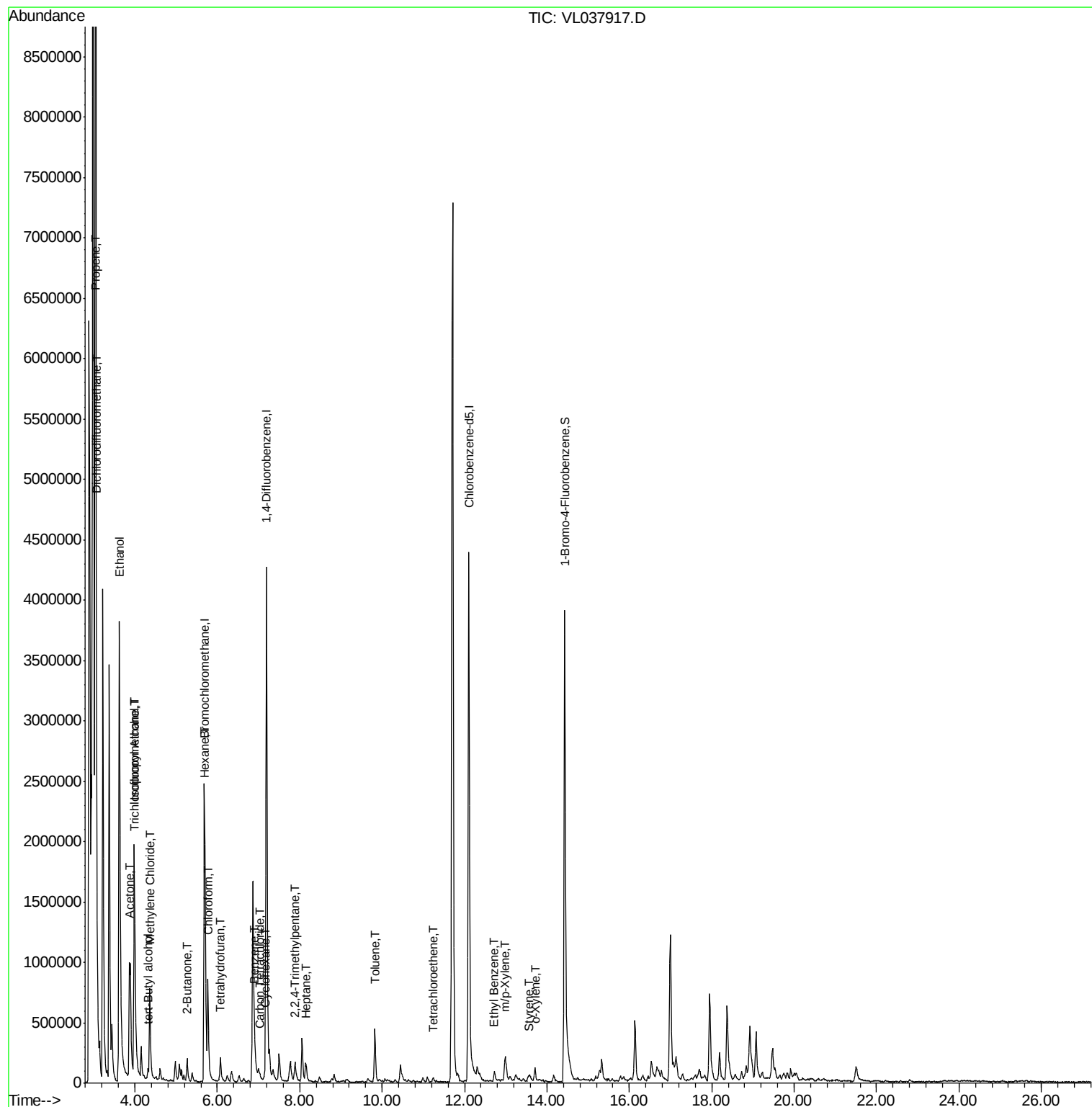
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL102721\
Data File : VL037917.D
Acq On : 27 Oct 2021 15:38
Operator : SY/AP
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Misc : 400mL/MSVOA L
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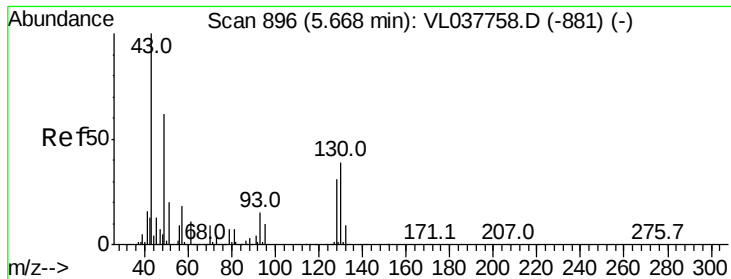
Instrument :
MSVOA_L
ClientSampleId :
VMP-5-MANIFOLD

Quant Time: Oct 28 12:53:02 2021
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL100421
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument:
QLast Update : Mon Oct 04 17:43:54 2021
Response via : Initial Calibration

Manual Integrations
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Supervised By :Mahesh Dadoda 10/29/2021





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.69

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 27 Oct 2021 15:38

Tot Ion:

Ion Ratio

49 100

128 51.

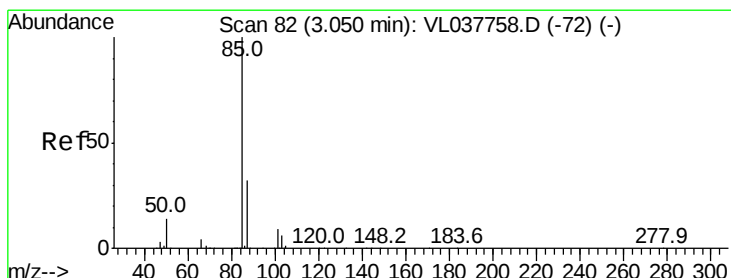
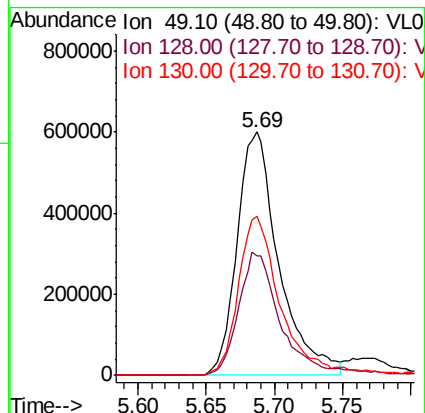
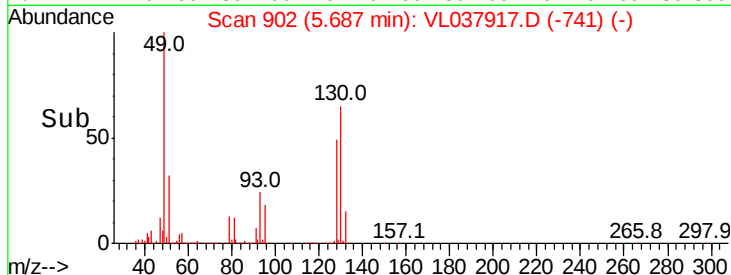
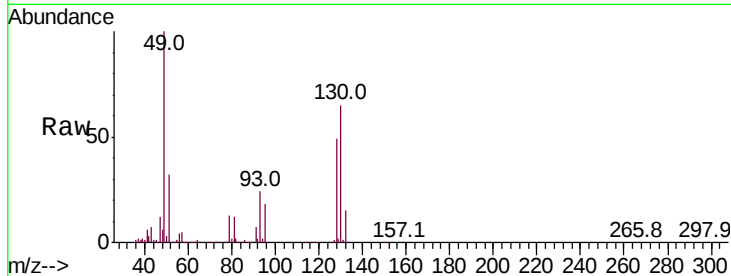
130 68.

Manual Integrations

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Supervised By :Mahesh Dadoda 10/29/2021



#2

Dichlorodifluoromethane

Concen: 0.137 ppbv

RT: 3.07 min Scan# 88

Delta R.T. 0.02 min

Lab File: VL037917.D

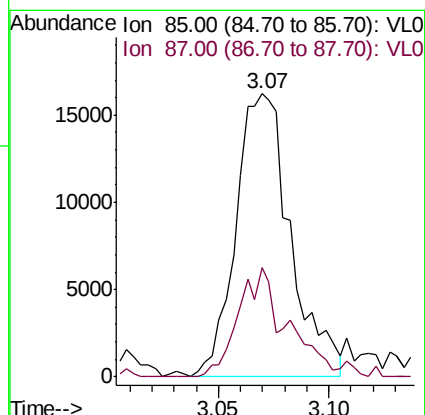
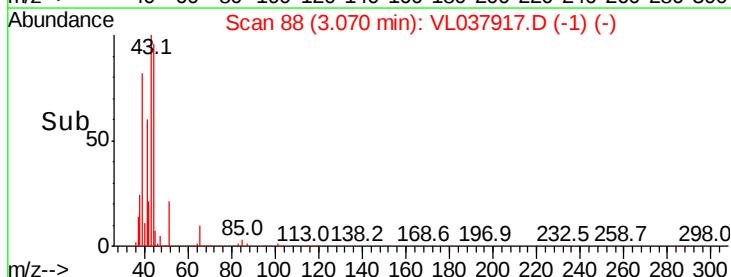
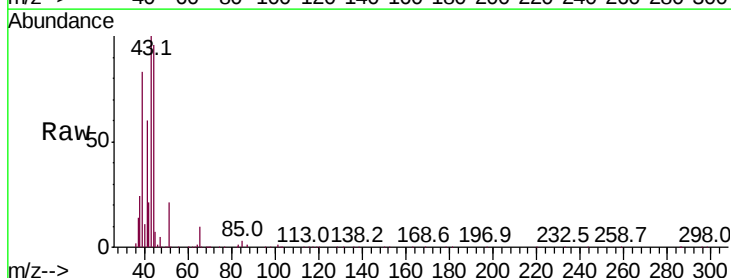
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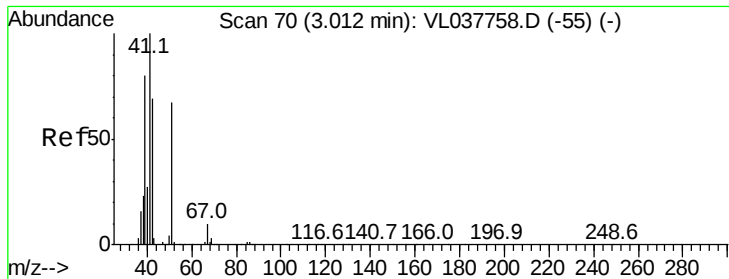
Tgt Ion: 85 Resp: 27990

Ion Ratio Lower Upper

85 100

87 38.4 25.7 38.5





#9

Propene

Concen: 34.125 ppbv m

RT: 3.04

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 27 Oct 2021 15:38

Tot Ion:

Ion Ratio

41 100

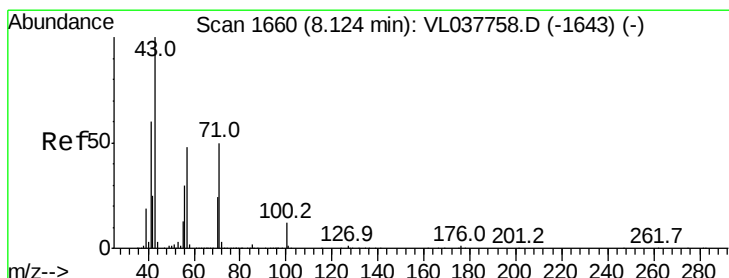
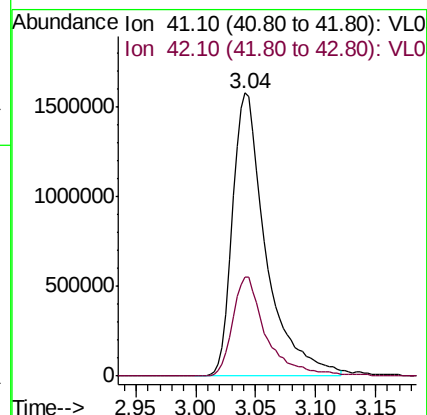
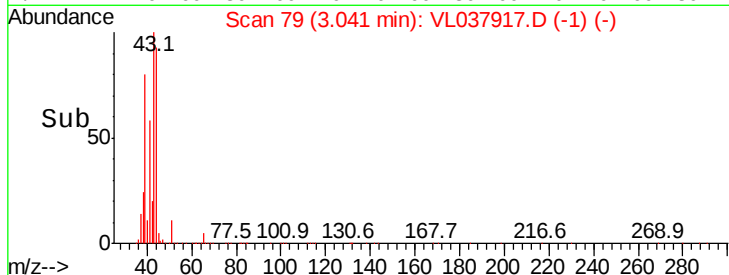
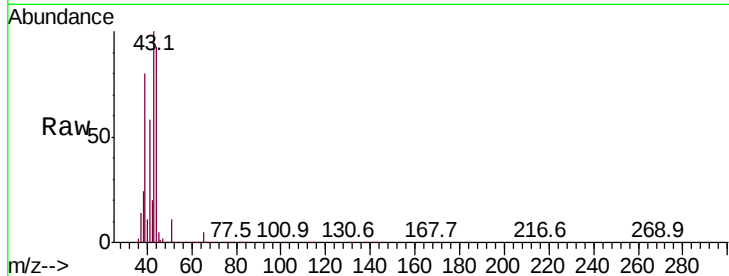
42 33.

Manual Integrations

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Supervised By :Mahesh Dadoda 10/29/2021



#10

Heptane

Concen: 0.211 ppbv m

RT: 8.14 min Scan# 1664

Delta R.T. 0.01 min

Lab File: VL037917.D

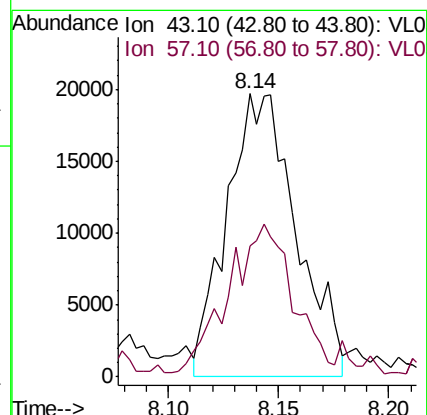
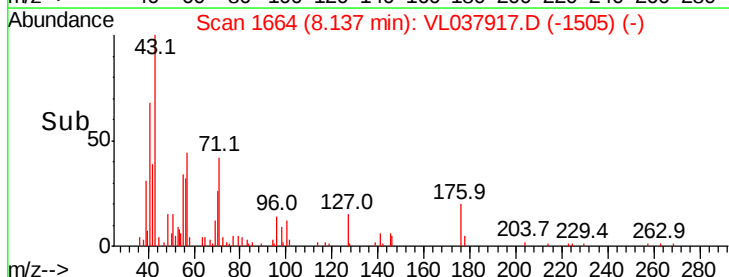
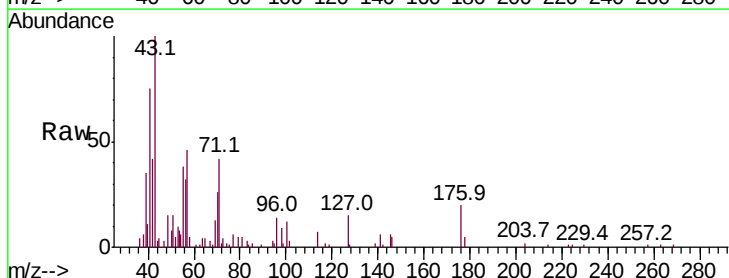
Acq: 27 Oct 2021 15:38

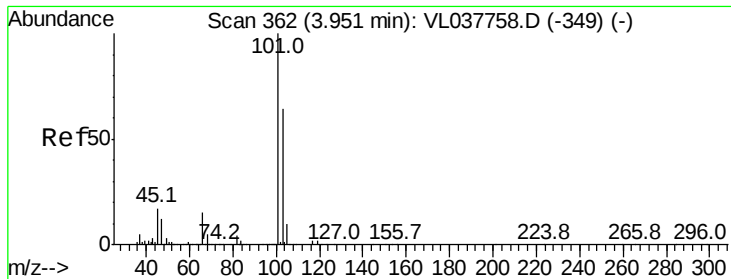
Tgt Ion: 43 Resp: 43323

Ion Ratio Lower Upper

43 100

57 58.8 40.0 60.0



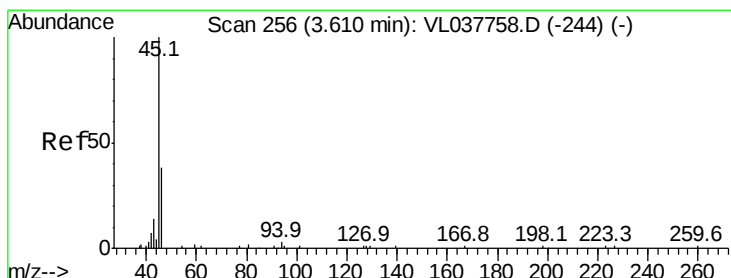
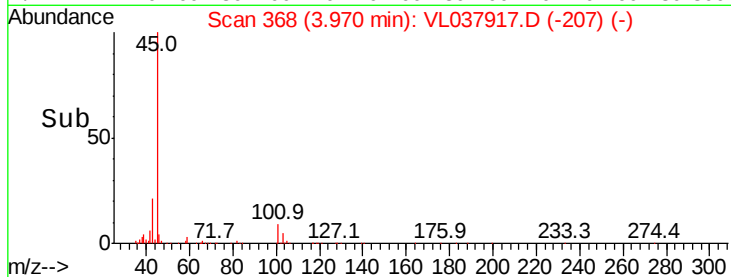
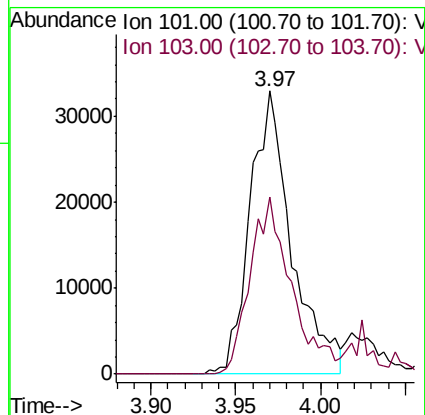
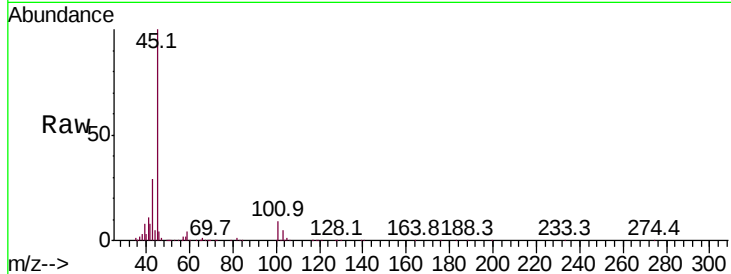


#11
 Trichlorofluoromethane
 Concen: 0.307 ppbv m
 RT: 3.97
 Instrument: MSVOA_L
 Delta R.T.:
 Lab File: ClientSampleId:
 VMP-5-MANIFOLD
 Acq: 27 Oct 2021 15:38

Tot Ion:1
 Ion Rati
 101 100
 103 62.

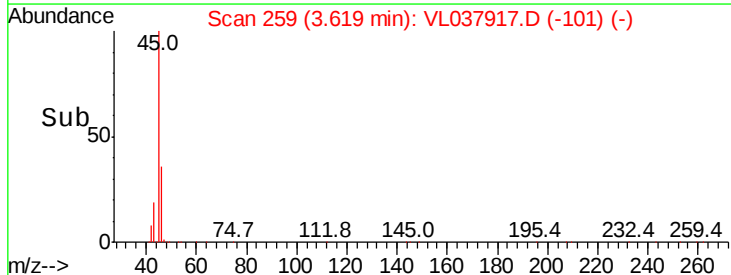
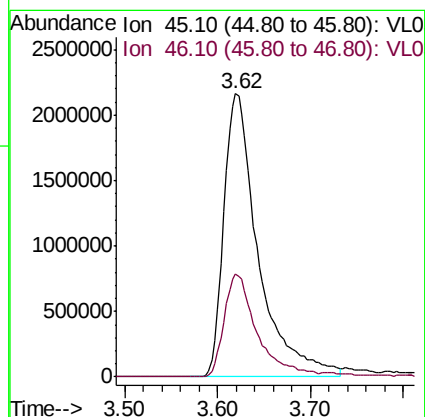
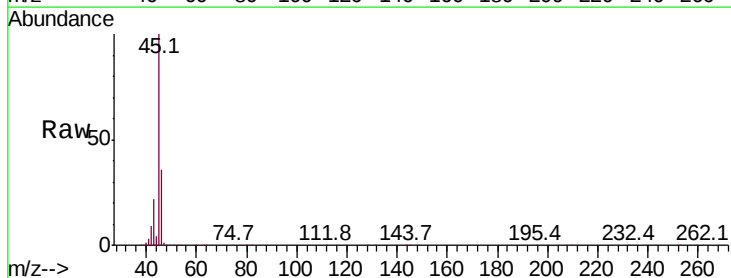
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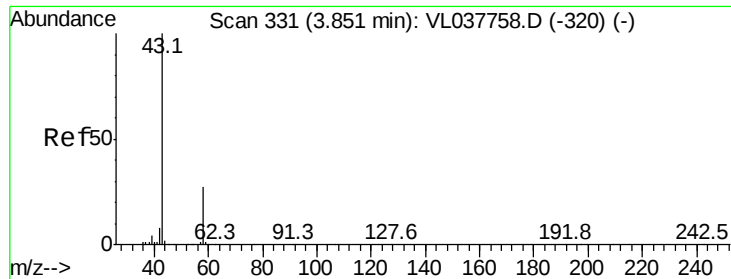
Reviewed By :Semsettin Yesilyurt 10/28/2021
 Supervised By :Mahesh Dadoda 10/29/2021



#13
 Ethanol
 Concen: 756.281 ppbv
 RT: 3.62 min Scan# 259
 Delta R.T. 0.01 min
 Lab File: VL037917.D
 Acq: 27 Oct 2021 15:38

Tgt Ion: 45 Resp: 5581337
 Ion Ratio Lower Upper
 45 100
 46 37.1 20.2 81.0





#15

Acetone

Concen: 9.643 ppbv m

RT: 3.87

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 27 Oct 2021 15:38 VMP-5-MANIFOLD

Tot Ion:

Ion Ratio

43 100

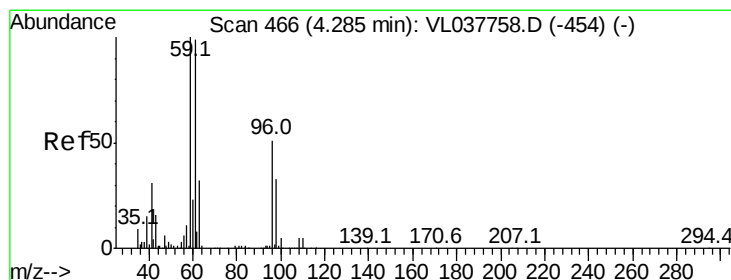
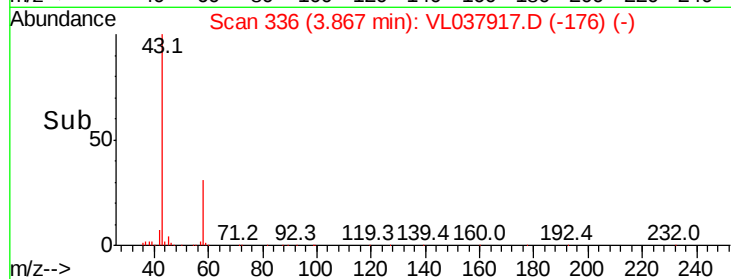
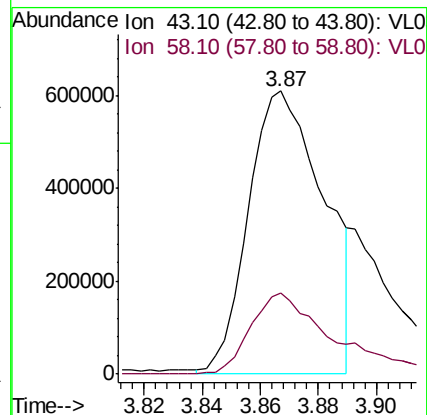
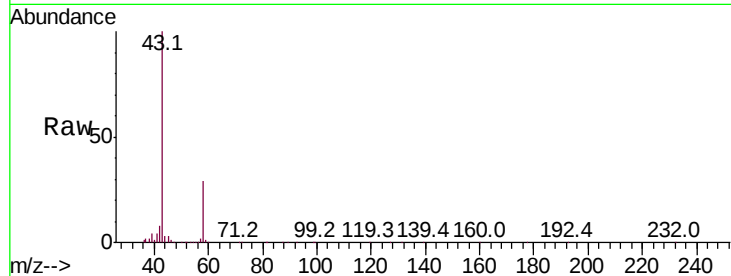
58 32.

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 10/28/2021

Supervised By :Mahesh Dadoda 10/29/2021



#17

tert-Butyl alcohol

Concen: 0.536 ppbv

RT: 4.32 min Scan# 477

Delta R.T. 0.04 min

Lab File: VL037917.D

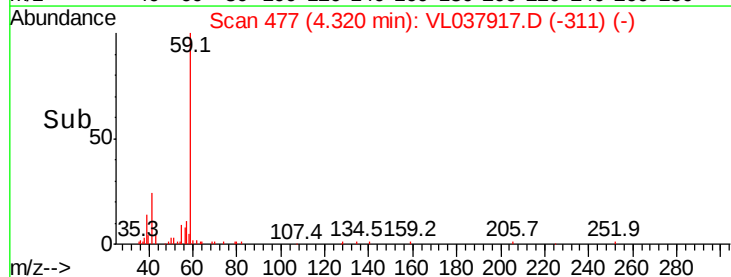
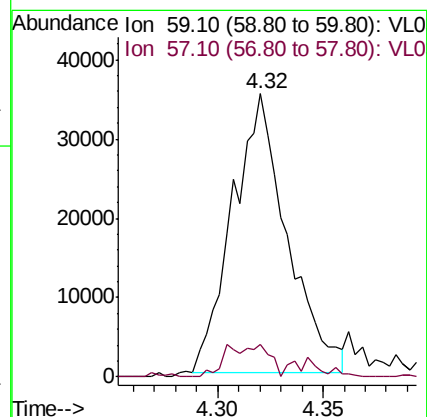
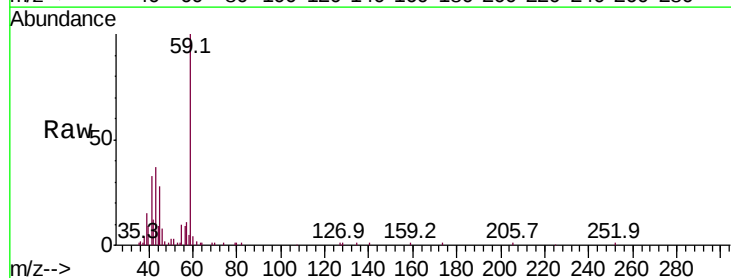
Acq: 27 Oct 2021 15:38

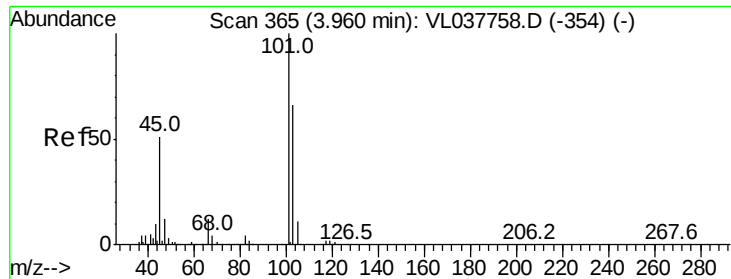
Tgt Ion: 59 Resp: 63226

Ion Ratio Lower Upper

59 100

57 10.6 8.6 13.0





#19

Isopropyl Alcohol

Concen: 35.120 ppbv

RT: 3.99

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 27 Oct 2021 15:38

Tot Ion:

Ion Ratio

45 100

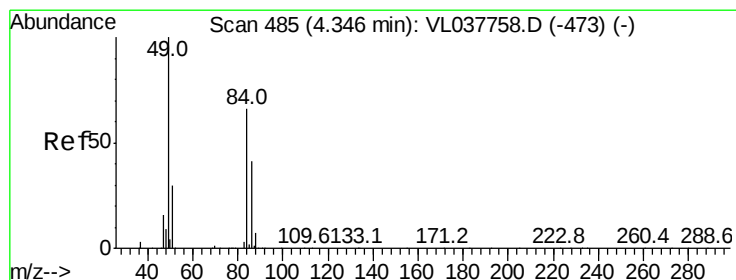
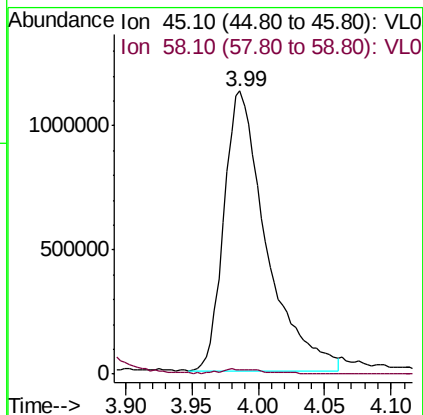
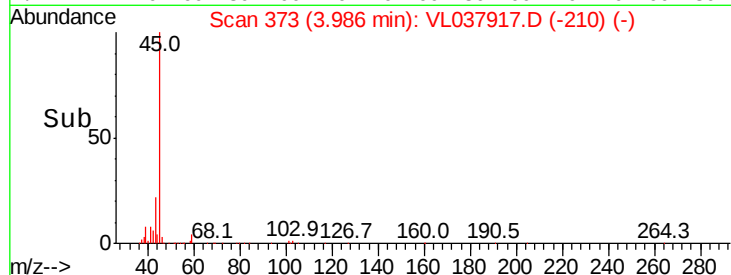
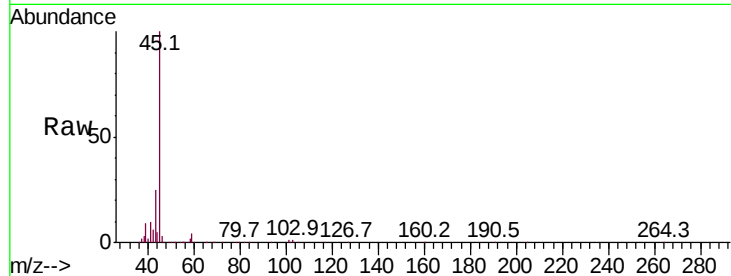
58 2.

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 10/28/2021

Supervised By :Mahesh Dadoda 10/29/2021



#20

Methylene Chloride

Concen: 5.209 ppbv

RT: 4.36 min Scan# 490

Delta R.T. 0.02 min

Lab File: VL037917.D

Acq: 27 Oct 2021 15:38

Tgt Ion: 84 Resp: 301594

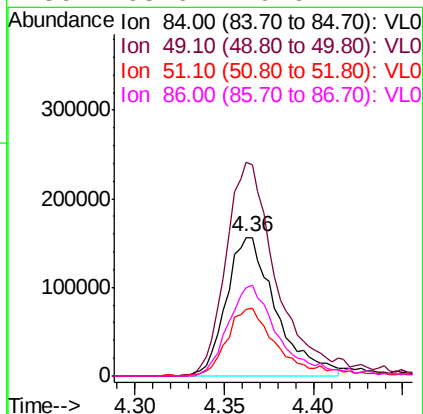
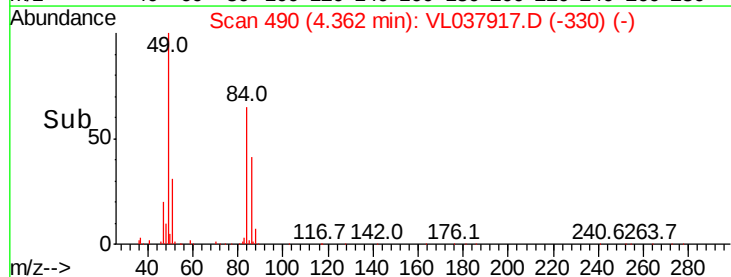
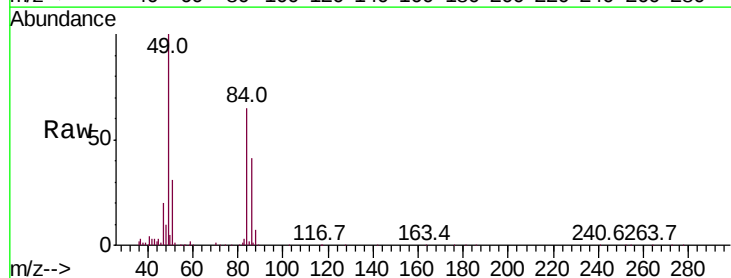
Ion Ratio Lower Upper

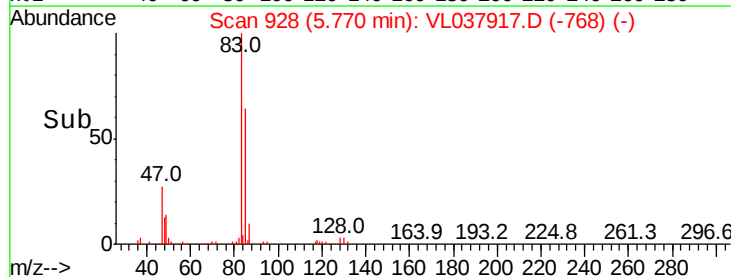
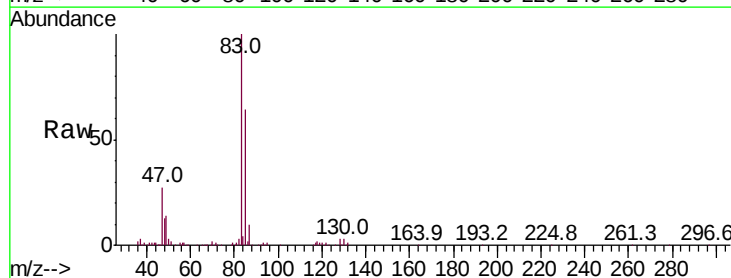
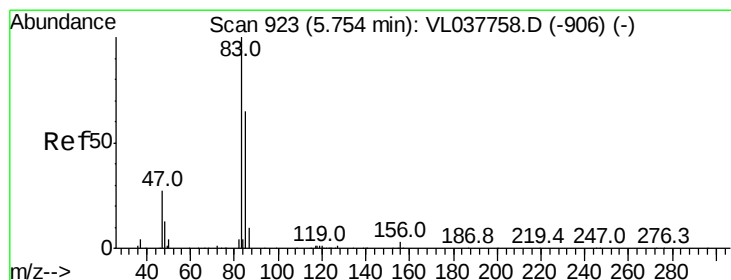
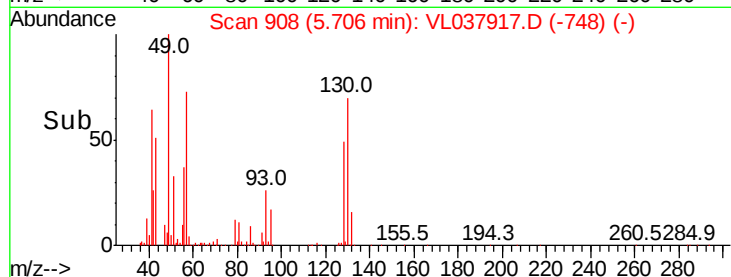
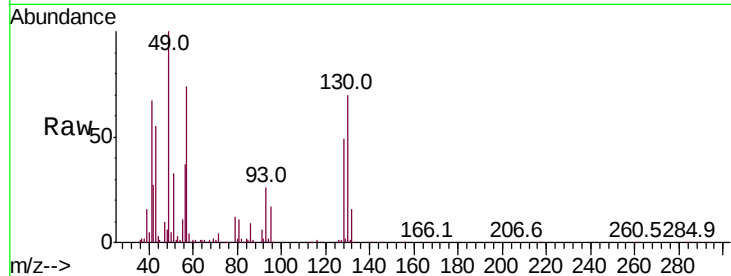
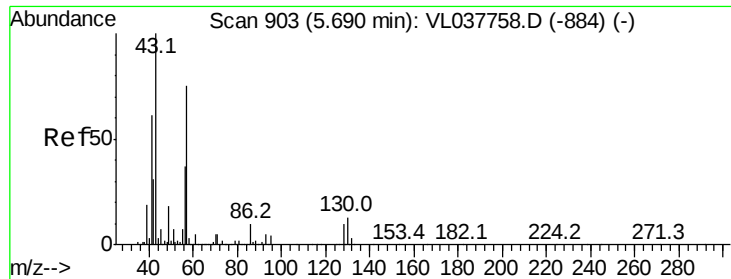
84 100

49 153.8 120.7 181.1

51 47.6 36.2 54.4

86 63.6 49.6 74.4



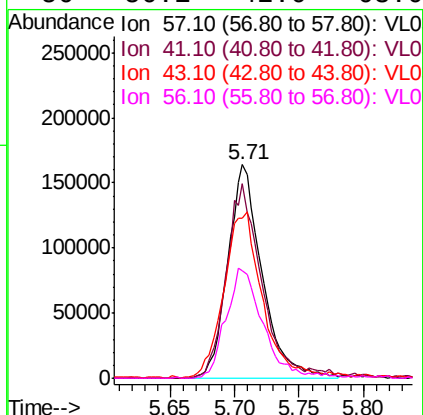


#26
Hexane
Concen: 1.911 ppbv
RT: 5.71
Delta R.T.: MSVOA_L
Lab File: ClientSampleId :
Acq: 27 Oct 2021 15:38 VMP-5-MANIFOLD

Tot Ion:
Ion Ratio
57 100
41 96.
43 89.
56 56.1 42.0 63.0

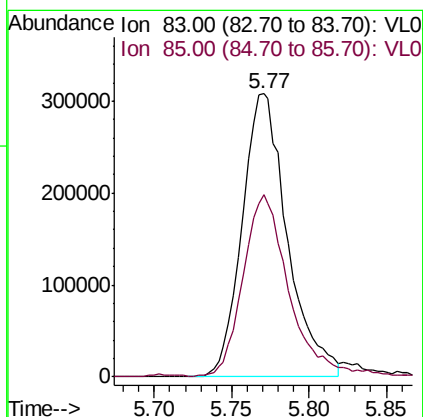
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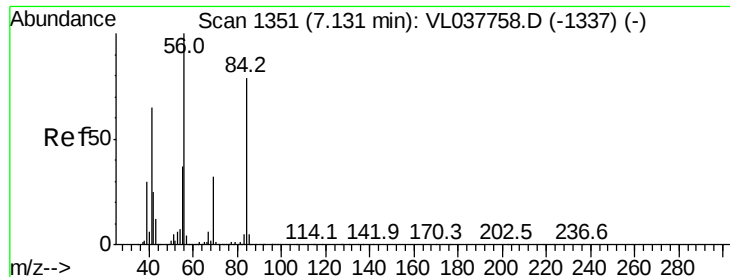
Reviewed By :Semsettin Yesilyurt 10/28/2021
Supervised By :Mahesh Dadoda 10/29/2021



#29
Chloroform
Concen: 2.771 ppbv
RT: 5.77 min Scan# 928
Delta R.T.: 0.02 min
Lab File: VL037917.D
Acq: 27 Oct 2021 15:38

Tgt Ion: 83 Resp: 627171
Ion Ratio Lower Upper
83 100
85 64.1 51.8 77.8



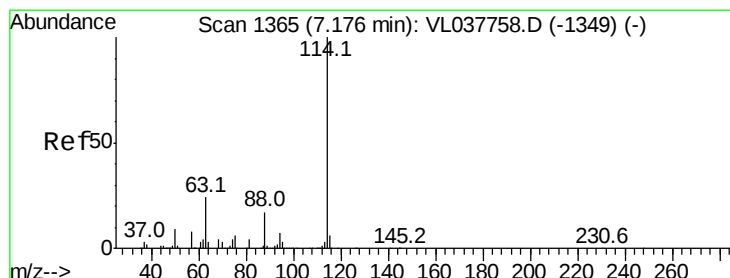
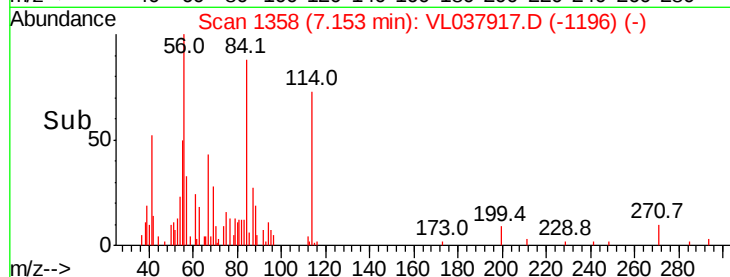
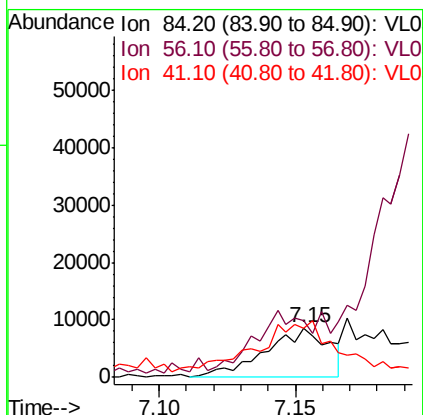
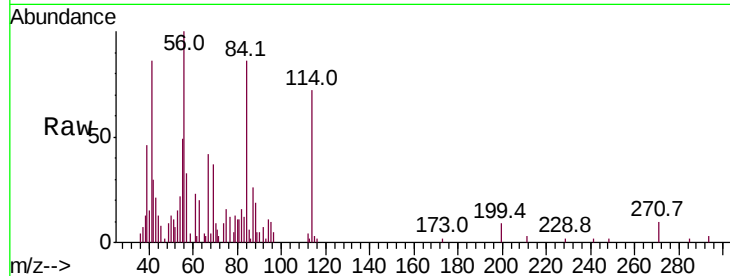


#30
Cvclohexane
Concen: 0.105 ppbv m
RT: 7.15
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId:
Acq: 27 Oct 2021 15:38

Tot Ion:
Ion Ratio
84 100
56 0.
41 155.

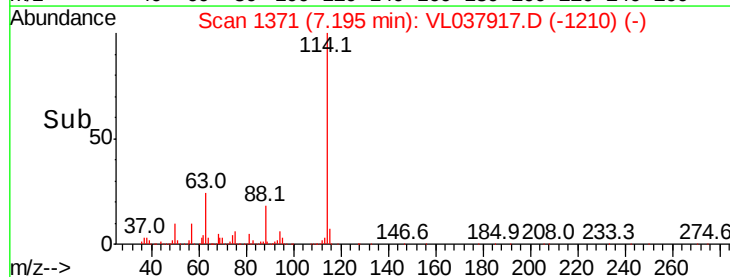
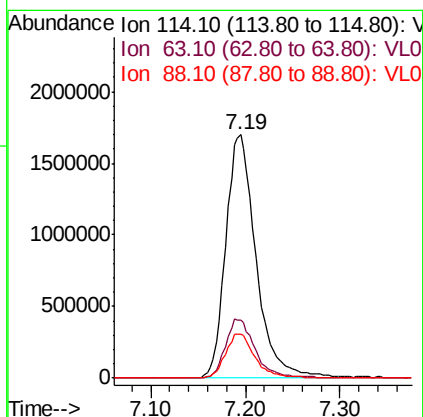
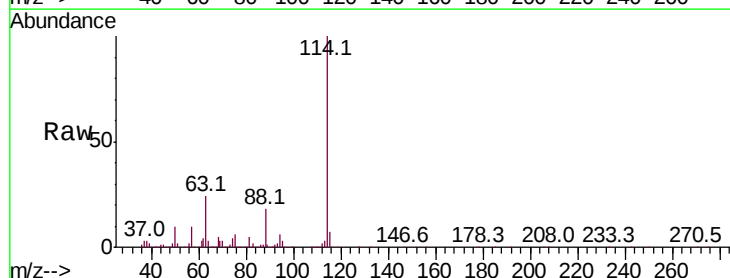
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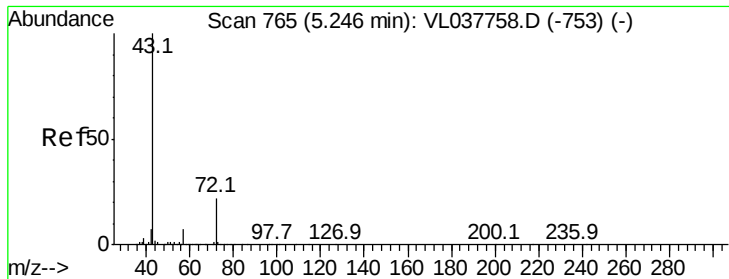
Reviewed By :Semsettin Yesilyurt 10/28/2021
Supervised By :Mahesh Dadoda 10/29/2021



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.19 min Scan# 1371
Delta R.T. 0.02 min
Lab File: VL037917.D
Acq: 27 Oct 2021 15:38

Tgt Ion:114 Resp: 3779274
Ion Ratio Lower Upper
114 100
63 23.9 19.4 29.2
88 17.9 14.4 21.6



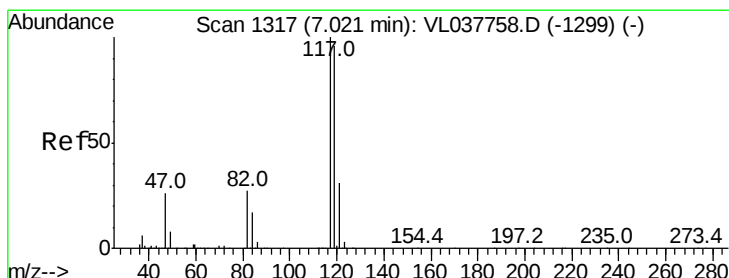
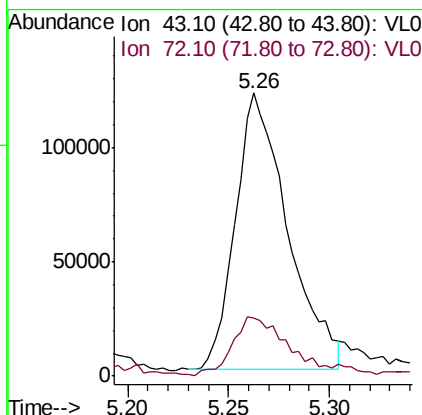
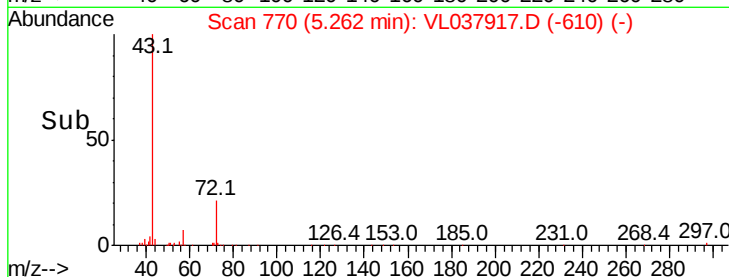
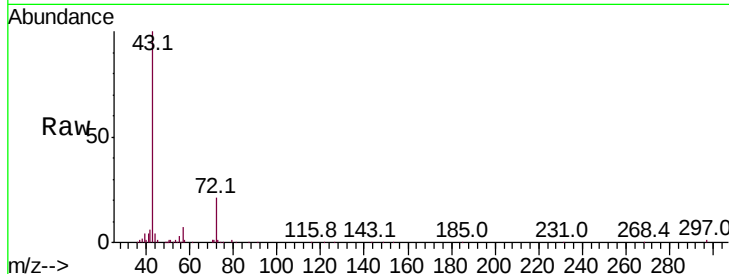


#34
2-Butanone
Concen: 1.440 ppbv
RT: 5.26
Delta R.T. MSVOA_L
Lab File: ClientSampled :
Acq: 27 Oct 2021 15:38

Tot Ion:
Ion Ratio
43 100
72 26.

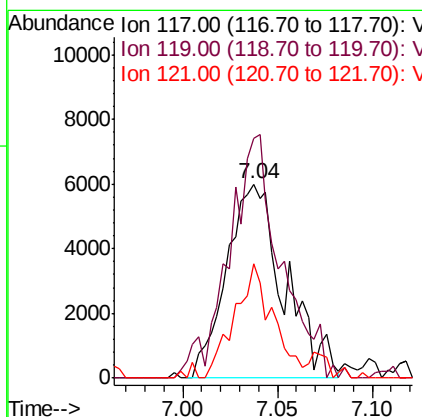
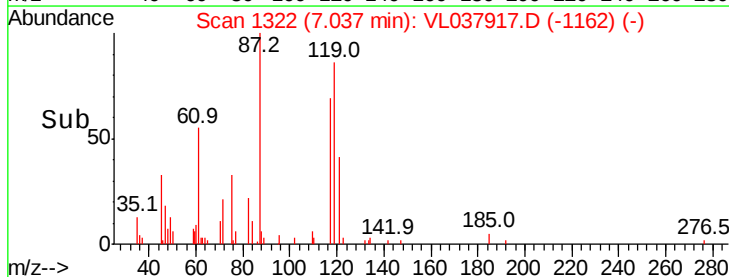
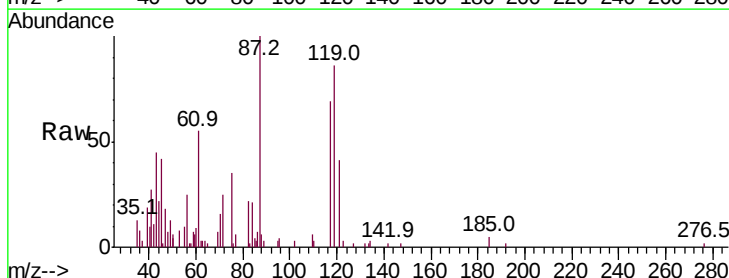
Manual Integrations
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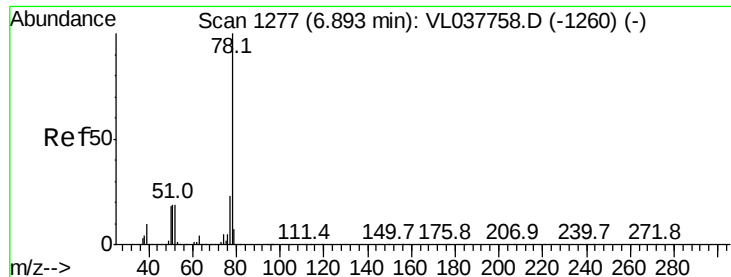
Reviewed By :Semsettin Yesilyurt 10/28/2021
Supervised By :Mahesh Dadoda 10/29/2021



#35
Carbon Tetrachloride
Concen: 0.060 ppbv m
RT: 7.04 min Scan# 1322
Delta R.T. 0.02 min
Lab File: VL037917.D
Acq: 27 Oct 2021 15:38

Tgt Ion:117 Resp: 12786
Ion Ratio Lower Upper
117 100
119 123.6 76.5 114.7#
121 58.8 24.9 37.3#



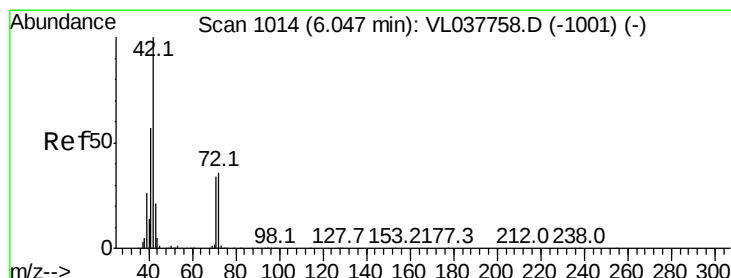
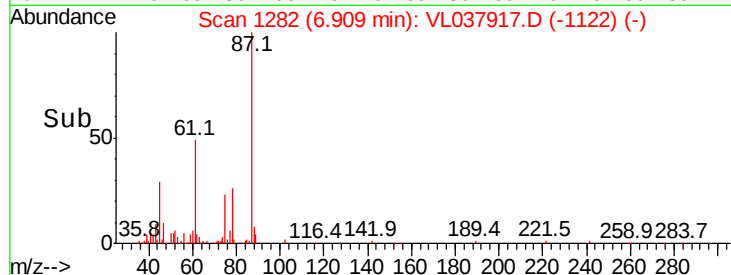
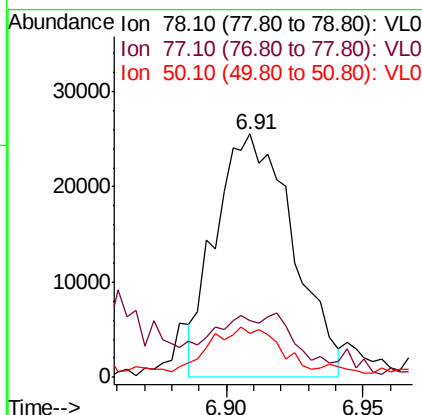
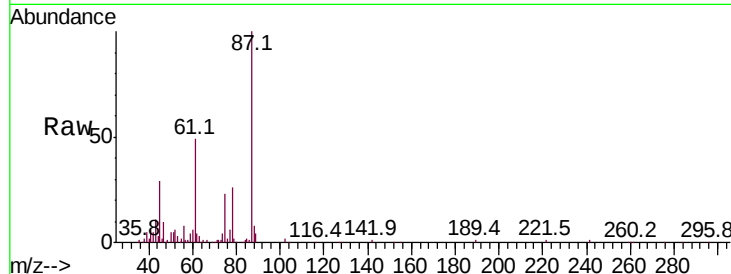


#36
Benzene
Concen: 0.155 ppbv
RT: 6.91
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 27 Oct 2021 15:38

Tot Ion:
Ion Ratio
78 100
77 19.
50 15.

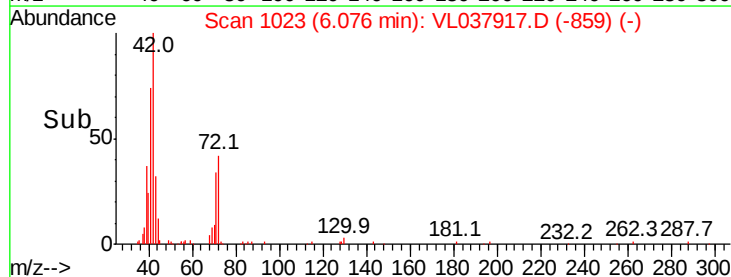
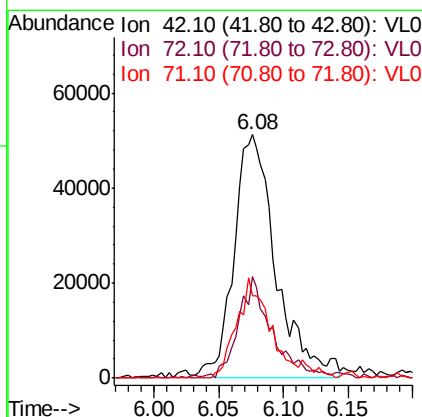
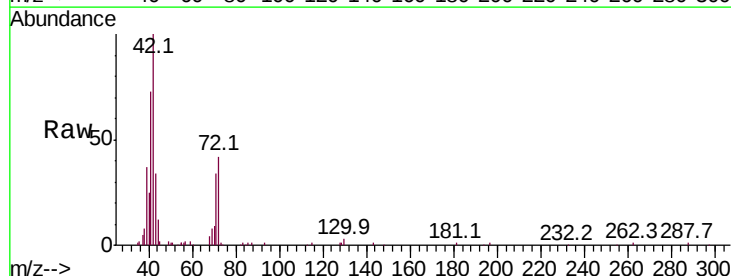
Manual Integrations
APPROVED

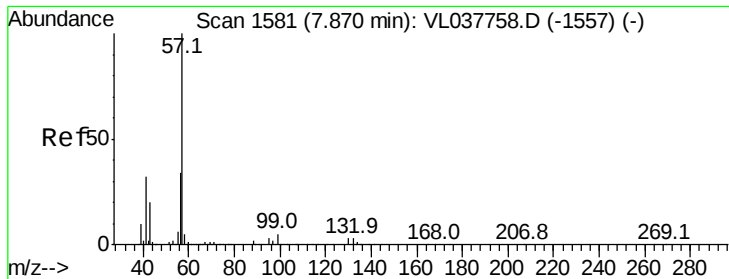
Reviewed By :Semsettin Yesilyurt 10/28/2021
Supervised By :Mahesh Dadoda 10/29/2021



#41
Tetrahydrofuran
Concen: 1.554 ppbv m
RT: 6.08 min Scan# 1023
Delta R.T. 0.03 min
Lab File: VL037917.D
Acq: 27 Oct 2021 15:38

Tgt Ion: 42 Resp: 116132
Ion Ratio Lower Upper
42 100
72 35.0 31.9 47.9
71 35.1 30.3 45.5



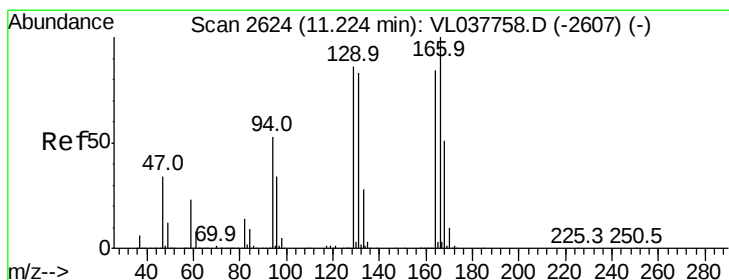
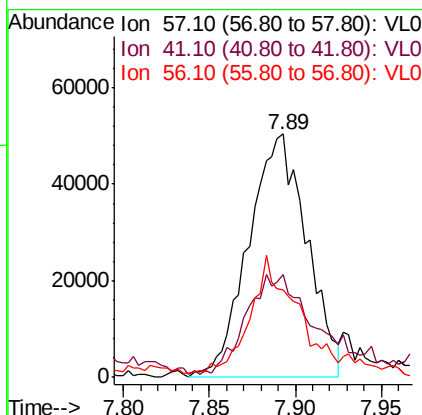
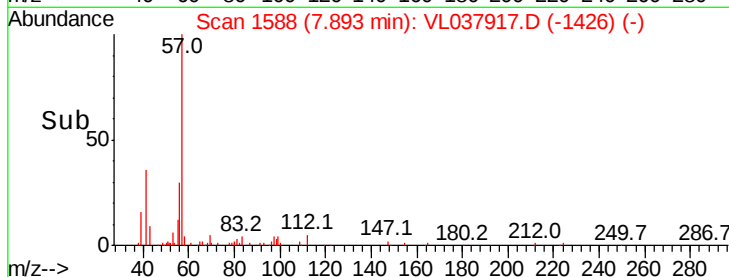
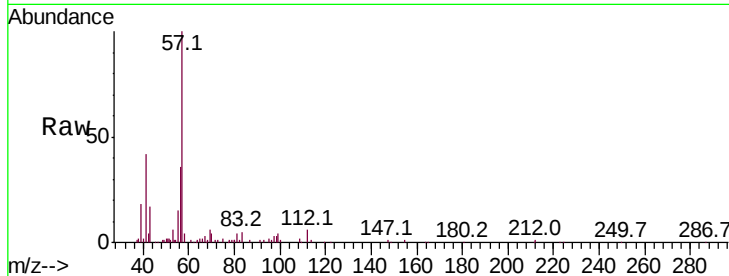


#44
2,2,4-Trimethylpentane
Concen: 0.218 ppbv
RT: 7.89
Delta R.T. MSVOA_L
Lab File: ClientSampleId:
Acq: 27 Oct 2021 15:38

Tot Ion:
Ion Ratio
57 100
41 60.
56 49.

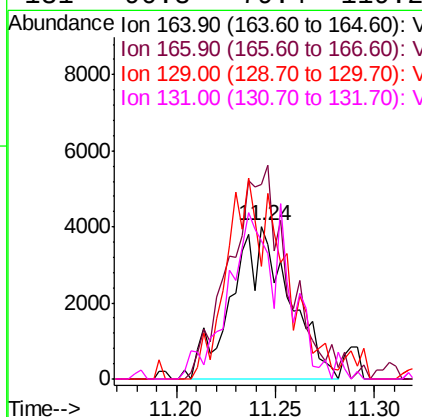
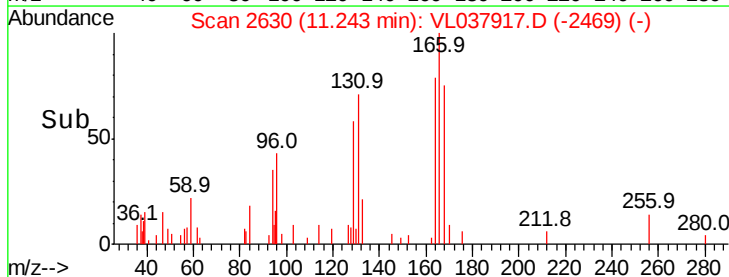
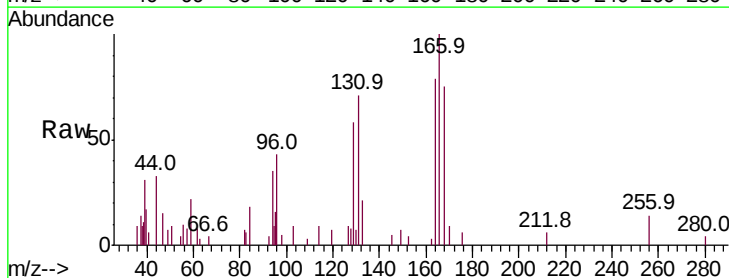
Manual Integrations
APPROVED

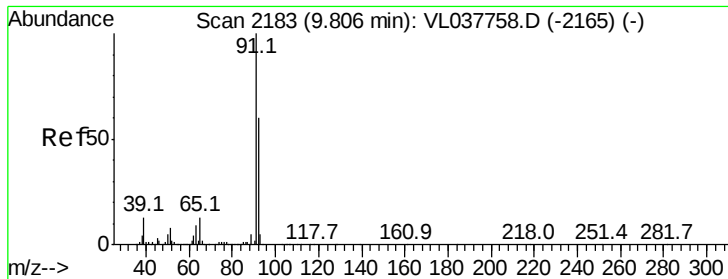
Reviewed By :Semsettin Yesilyurt 10/28/2021
Supervised By :Mahesh Dadoda 10/29/2021



#52
Tetrachloroethene
Concen: 0.064 ppbv m
RT: 11.24 min Scan# 2630
Delta R.T. 0.02 min
Lab File: VL037917.D
Acq: 27 Oct 2021 15:38

Tgt Ion:164 Resp: 8069
Ion Ratio Lower Upper
164 100
166 127.3 95.4 143.2
129 73.9 82.2 123.4#
131 90.8 79.4 119.2





#53

Toluene

Concen: 0.923 ppbv

RT: 9.82 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 27 Oct 2021 15:38 VMP-5-MANIFOLD

Tot Ion:

Ion Ratio

91 100

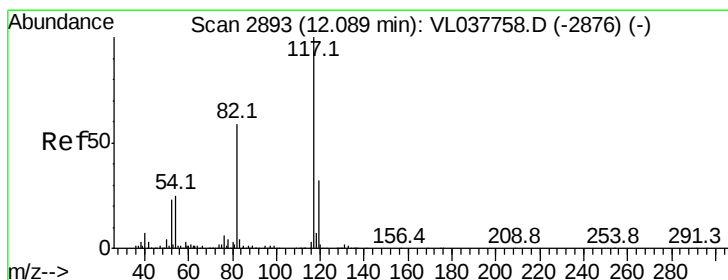
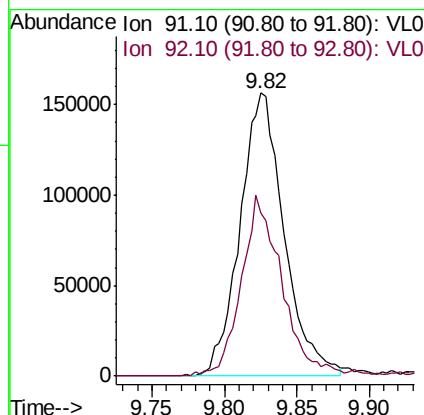
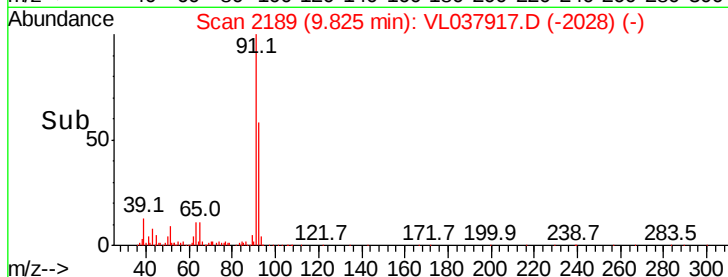
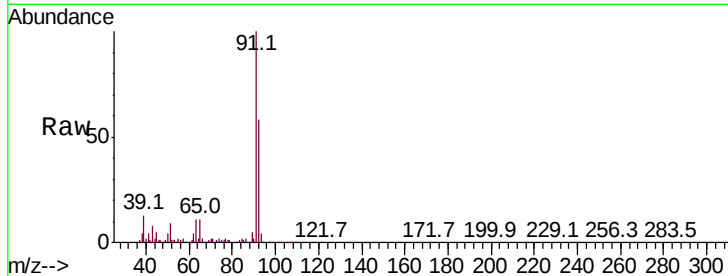
92 60.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 10/28/2021

Supervised By :Mahesh Dadoda 10/29/2021



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.10 min Scan# 2898

Delta R.T. 0.02 min

Lab File: VL037917.D

Acq: 27 Oct 2021 15:38

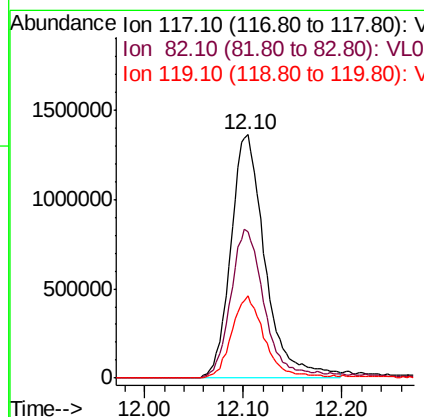
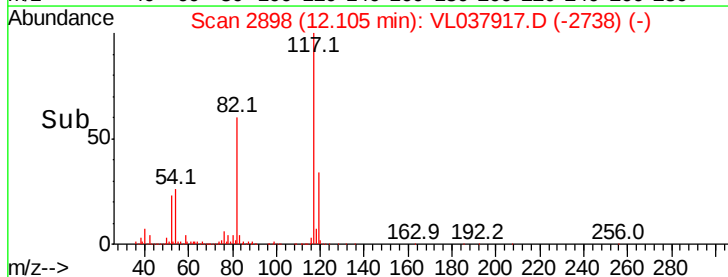
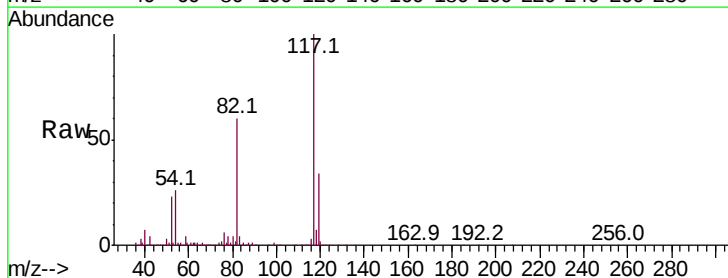
Tgt Ion:117 Resp: 3308786

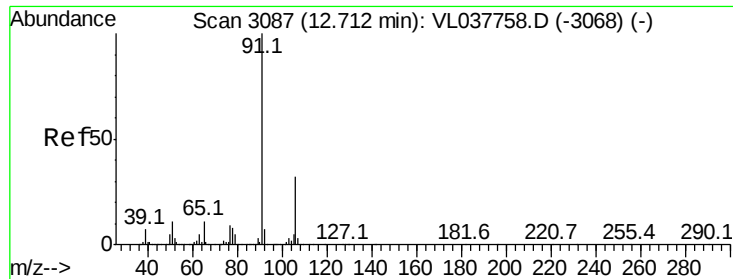
Ion Ratio Lower Upper

117 100

82 63.1 52.2 78.2

119 34.0 26.0 39.0





#58

Ethyl Benzene

Concen: 0.154 ppbv m

RT: 12.72

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 27 Oct 2021 15:38

Tot Ion:

Ion Ratio

91 100

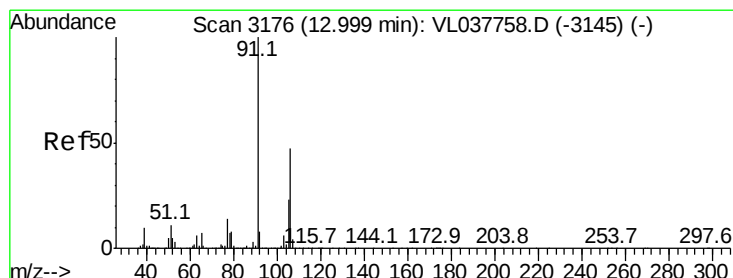
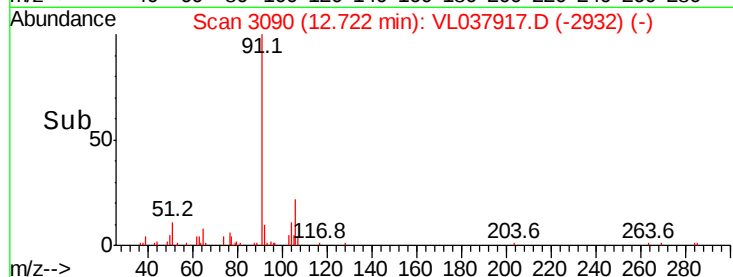
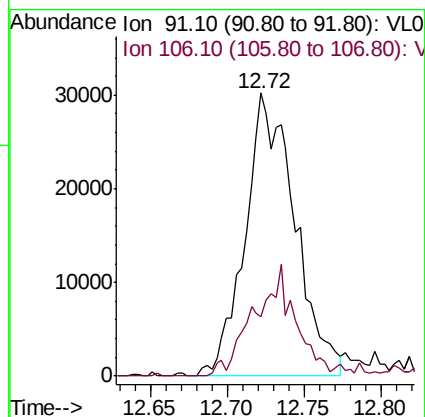
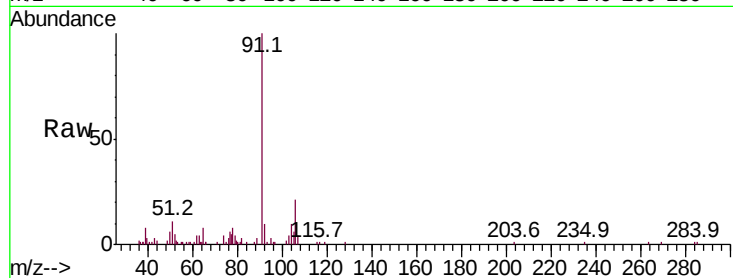
106 21.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 10/28/2021

Supervised By :Mahesh Dadoda 10/29/2021



#59

m/p-Xylene

Concen: 0.611 ppbv m

RT: 12.99 min Scan# 3172

Delta R.T. -0.01 min

Lab File: VL037917.D

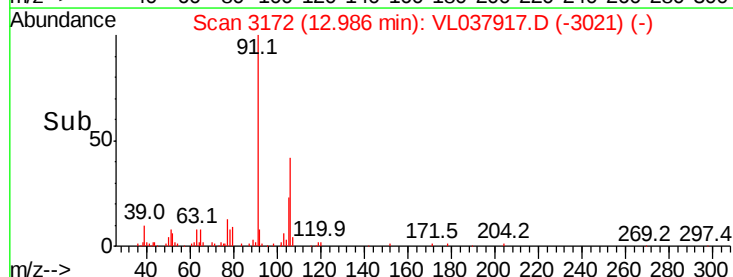
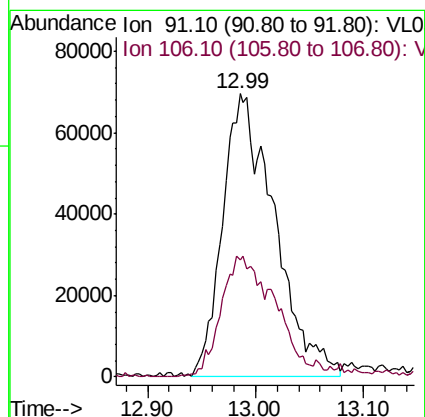
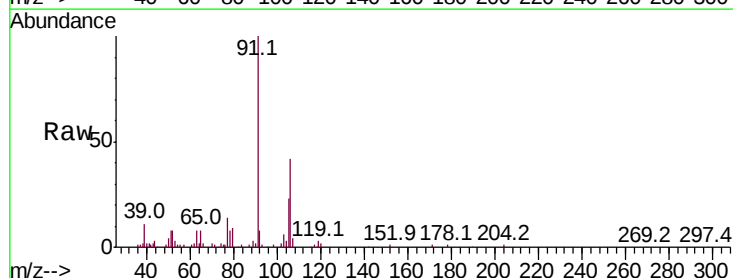
Acq: 27 Oct 2021 15:38

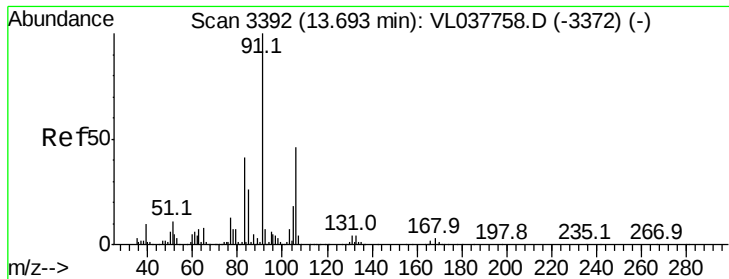
Tgt Ion: 91 Resp: 233063

Ion Ratio Lower Upper

91 100

106 0.0 36.7 55.1#



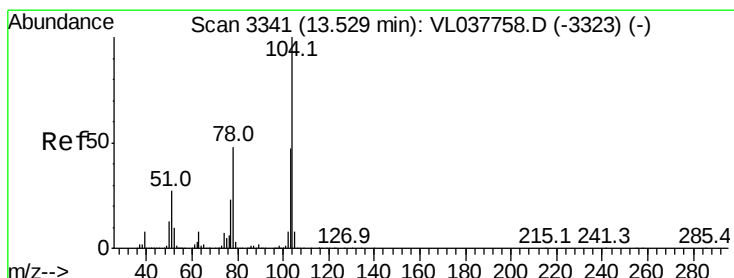
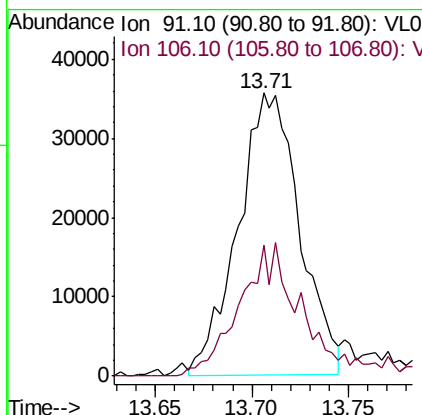
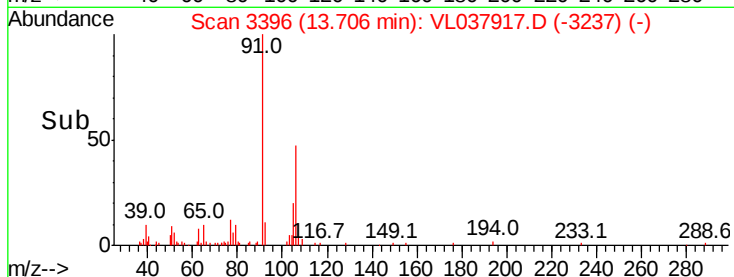
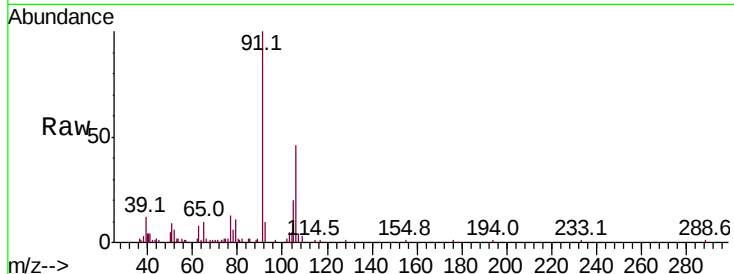


#60
o-Xylene
Concen: 0.216 ppbv
RT: 13.71
Delta R.T. MSVOA_L
Lab File: ClientSampled :
VMP-5-MANIFOLD
Acq: 27 Oct 2021 15:38

Tot Ion:
Ion Ratio
91 100
106 46.

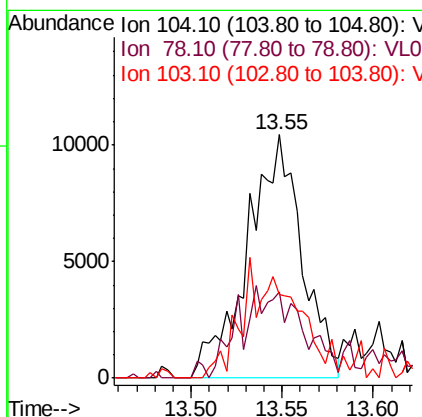
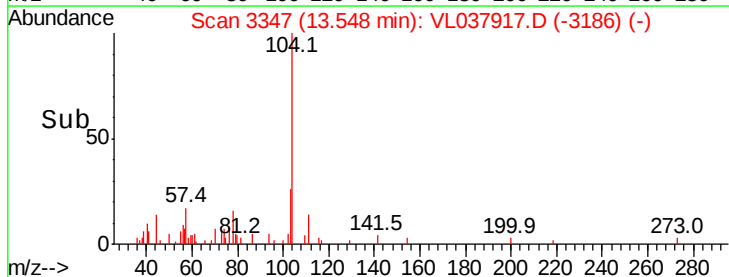
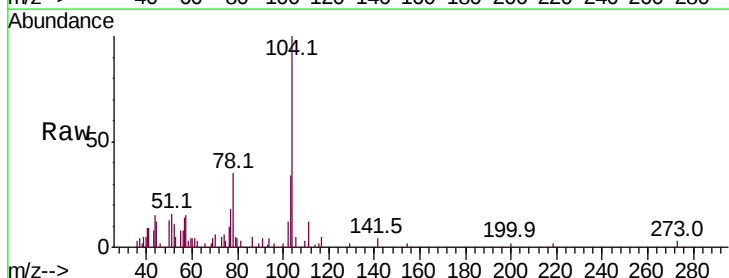
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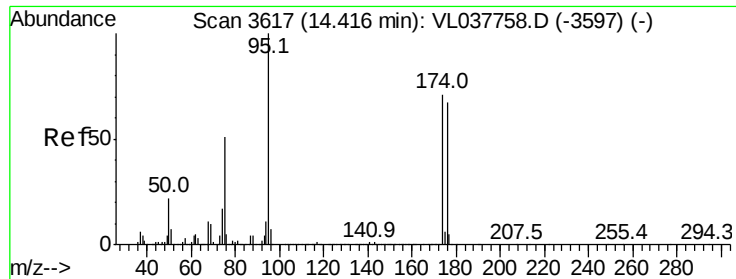
Reviewed By :Semsettin Yesilyurt 10/28/2021
Supervised By :Mahesh Dadoda 10/29/2021



#61
Styrene
Concen: 0.122 ppbv m
RT: 13.55 min Scan# 3347
Delta R.T. 0.02 min
Lab File: VL037917.D
Acq: 27 Oct 2021 15:38

Tgt Ion:104 Resp: 21642
Ion Ratio Lower Upper
104 100
78 0.0 40.6 61.0#
103 0.0 39.6 59.4#





#68

1-Bromo-4-Fluorobenzene

Concen: 9.177 ppbv

RT: 14.43

Delta R.T

Lab File: ClientSampleId :

Acq: 27 Oct 2021 15:38

Tot Ion:

Ion Ratio

95 100

174 79.

175 5.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 10/28/2021

Supervised By :Mahesh Dadoda 10/29/2021

