

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL101221\
 Data File : VL037842.D
 Acq On : 12 Oct 2021 23:11
 Operator : SY/AP
 Sample : M4079-16
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA L
 ClientSampleId :
 C0P05

Manual Integrations
 APPROVED

Reviewed By : Semsettin Yesilyurt 10/14/2021
 Supervised By : Mahesh Dadoda 10/15/2021

Quant Time: Oct 14 02:20:50 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	5.66	49	1362568	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.17	114	3861620	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.08	117	3312398	10.00	ppbv	-0.01

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene 14.41 95 2368673 10.23 ppbv 0.00
 Spiked Amount 10.000 Range 65 - 135 Recovery = 102.30%

Target Compounds

						Ovalue
2) Dichlorodifluoromethane	3.05	85	38886	0.179	ppbv	99
3) Chlorodifluoromethane	2.98	51	52574m	0.201	ppbv	
4) Chloromethane	3.14	50	35539	0.371	ppbv	97
9) Propene	3.01	41	128602	1.335	ppbv	93
10) Heptane	8.11	43	44093m	0.202	ppbv	
11) Trichlorofluoromethane	3.95	101	40320m	0.208	ppbv	
13) Ethanol	3.61	45	719448	91.323	ppbv	78
15) Acetone	3.84	43	6807596	55.655	ppbv	98
17) tert-Butyl alcohol	4.29	59	124183	0.986	ppbv	95
19) Isopropyl Alcohol	3.97	45	347316	4.564	ppbv #	96
20) Methylene Chloride	4.34	84	558080	9.030	ppbv	91
26) Hexane	5.68	57	419623	2.483	ppbv #	26
27) Carbon Disulfide	4.54	76	22113m	0.148	ppbv	
29) Chloroform	5.75	83	210038	0.869	ppbv	98
34) 2-Butanone	5.24	43	1638784	10.512	ppbv	99
35) Carbon Tetrachloride	7.02	117	8630m	0.039	ppbv	
36) Benzene	6.88	78	111560	0.338	ppbv	95
37) 1,2-Dichloroethane	6.30	62	130433	0.840	ppbv	100
38) Trichloroethene	7.83	130	54228m	0.416	ppbv	
44) 2,2,4-Trimethylpentane	7.86	57	98236m	0.177	ppbv	
51) 2-Hexanone	10.14	43	117509m	1.297	ppbv	
52) Tetrachloroethene	11.22	164	3449284	26.879	ppbv	97
53) Toluene	9.80	91	2105933	5.761	ppbv	100
58) Ethyl Benzene	12.70	91	172856m	0.389	ppbv	
59) m/p-Xylene	12.96	91	518997m	1.359	ppbv	
60) o-Xylene	13.69	91	199494m	0.545	ppbv	
61) Styrene	13.51	104	76139	0.430	ppbv	96
74) 1,2,4-Trimethylbenzene	16.74	105	86149m	0.217	ppbv	

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

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MSVOA_L
ClientSampleId :
C0P05

Manual Integrations
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Quant Time: Oct 14 02:20:50 2021

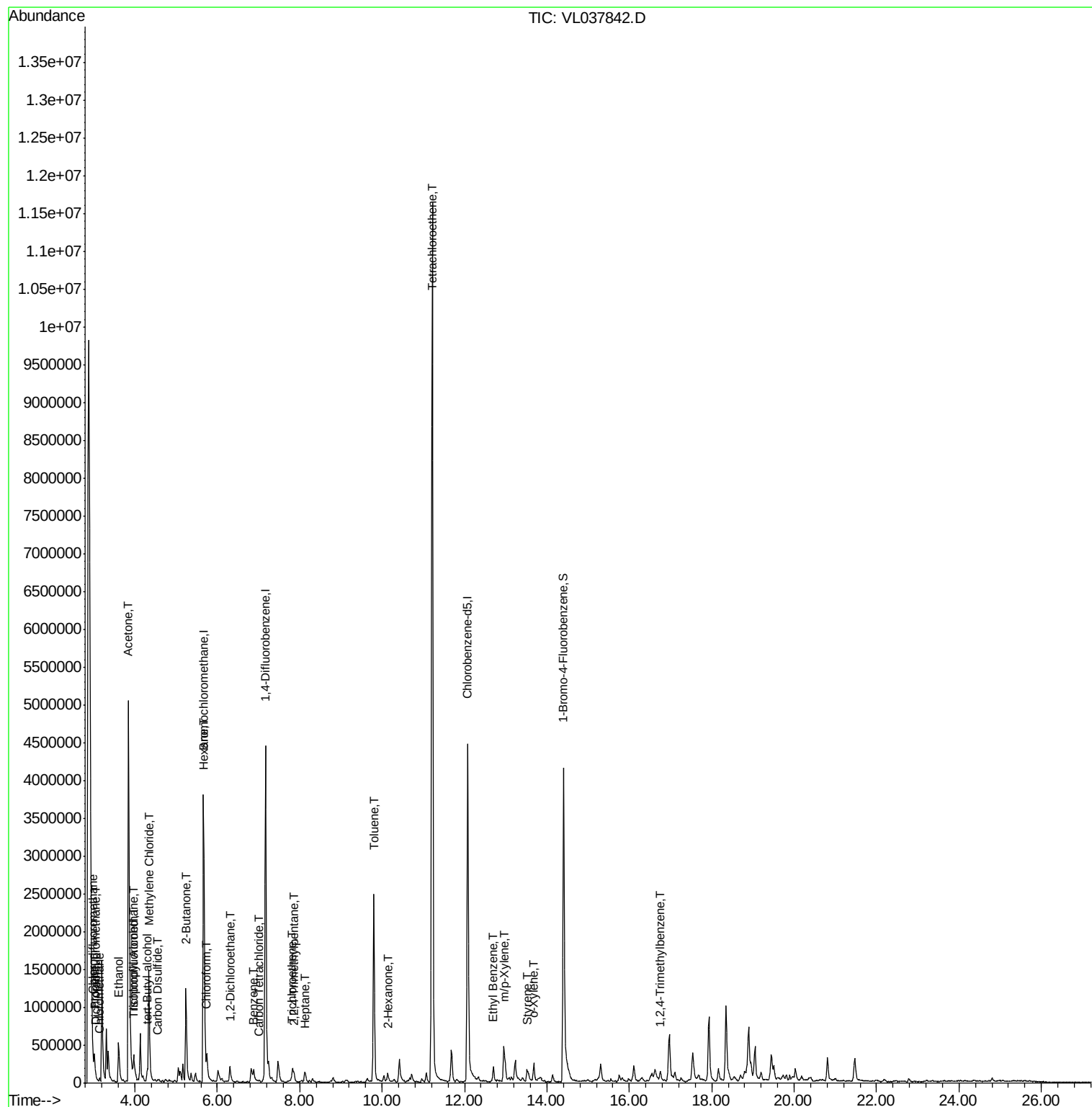
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL100421

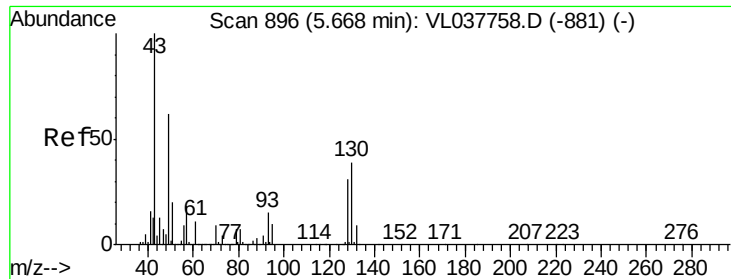
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument:

QLast Update : Mon Oct 04 17:43:54 2021

Response via : Initial Calibration

Reviewed By :Semsettin Yesilyurt 10/14/2021
Supervised By :Mahesh Dadoda 10/15/2021





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.66 Instrument: MSVOA_L

Delta R.T. ClientSampleId:

Lab File: COP05

Acq: 12 Oct 2021 23:11

Tot Ion:

Ion Ratio

49 100

128 52.

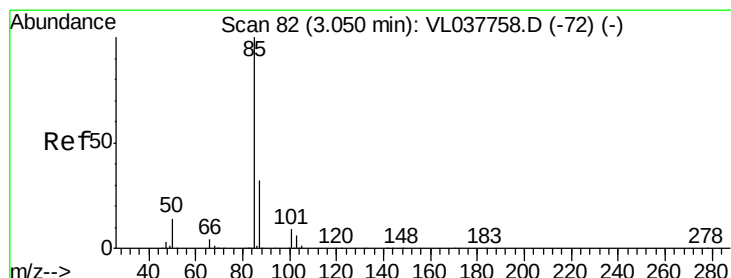
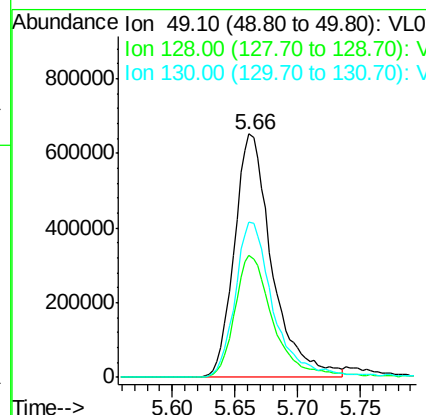
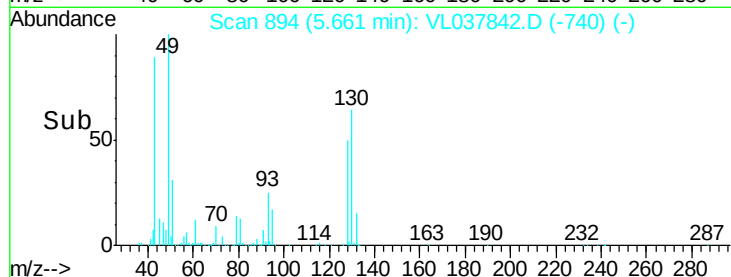
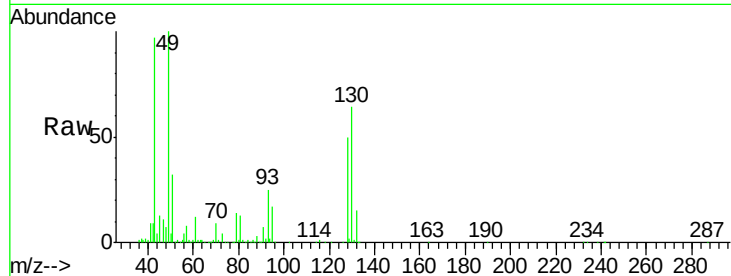
130 65.

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 10/14/2021

Supervised By :Mahesh Dadoda 10/15/2021



#2

Dichlorodifluoromethane

Concen: 0.179 ppbv

RT: 3.05 min Scan# 81

Delta R.T. -0.00 min

Lab File: VL037842.D

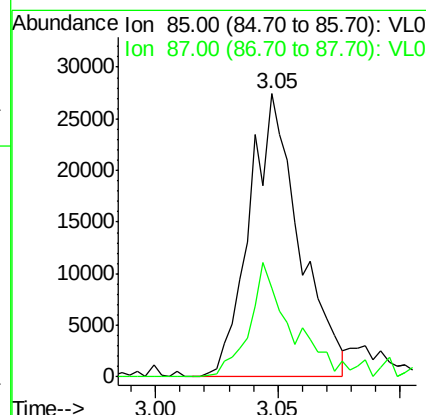
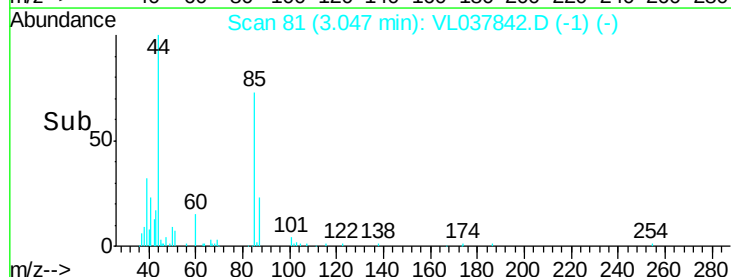
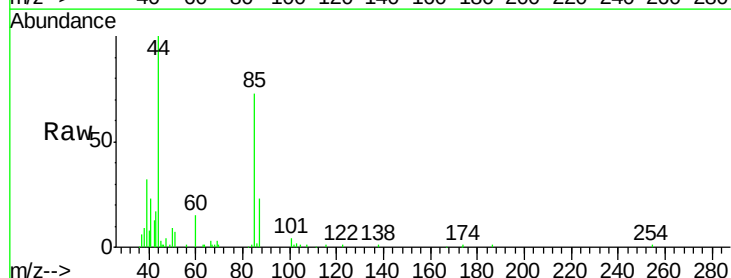
Acq: 12 Oct 2021 23:11

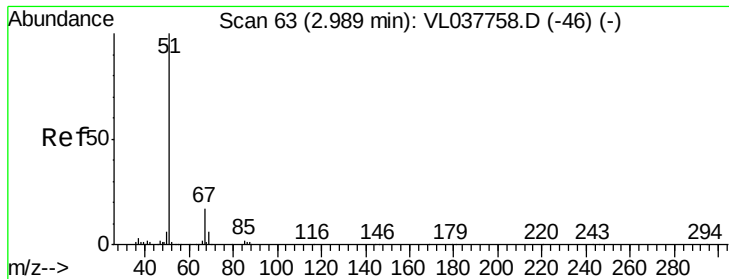
Tgt Ion: 85 Resp: 38886

Ion Ratio Lower Upper

85 100

87 31.3 25.7 38.5





#3

Chlorodifluoromethane

Concen: 0.201 ppbv m

RT: 2.98 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 12 Oct 2021 23:11 COP05

Tot Ion:

Ion Ratio

51 100

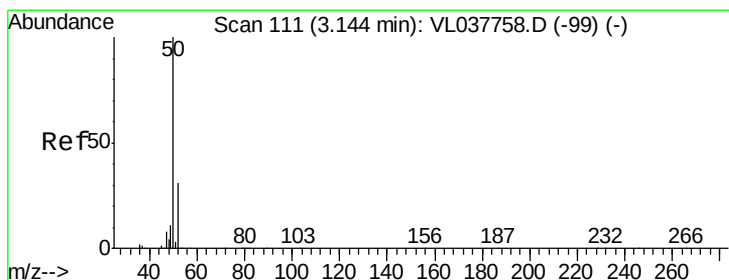
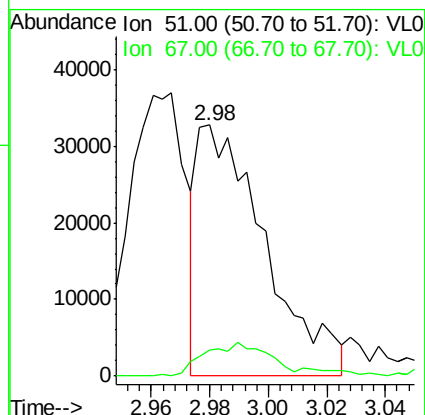
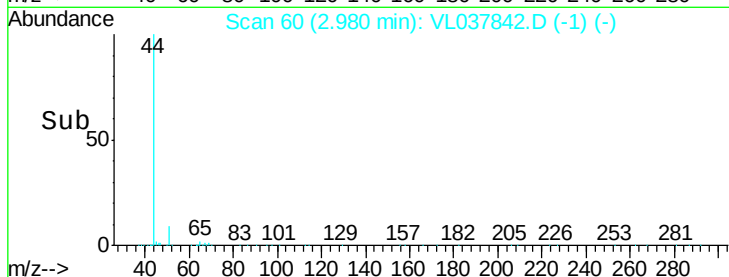
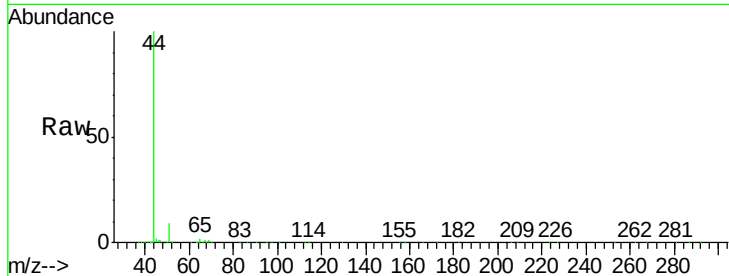
67 1.

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 10/14/2021

Supervised By :Mahesh Dadoda 10/15/2021



#4

Chloromethane

Concen: 0.371 ppbv

RT: 3.14 min Scan# 109

Delta R.T. -0.01 min

Lab File: VL037842.D

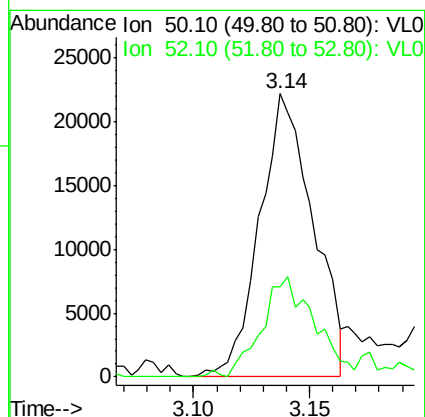
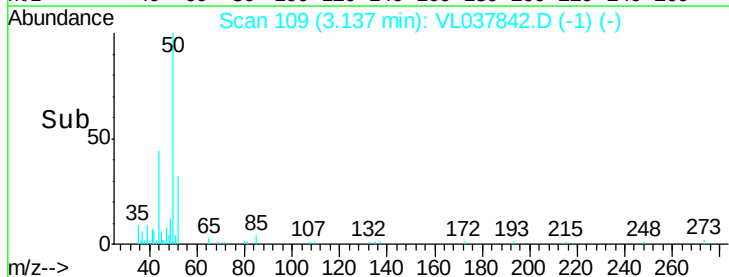
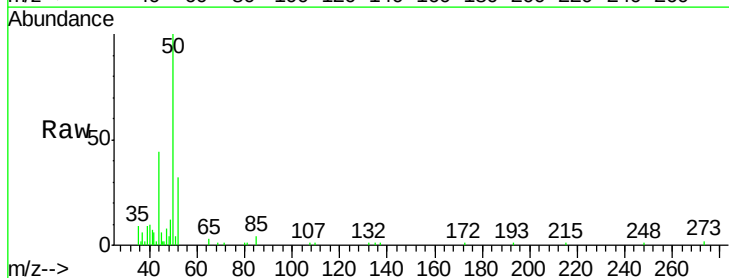
Acq: 12 Oct 2021 23:11

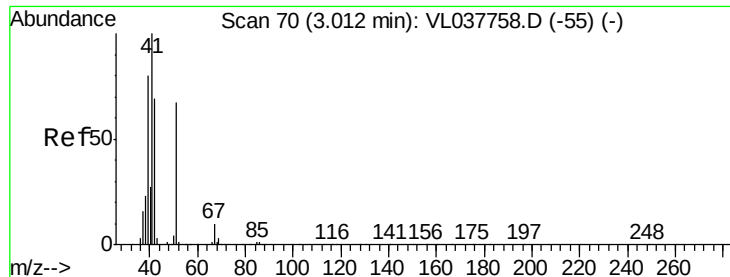
Tgt Ion: 50 Resp: 35539

Ion Ratio Lower Upper

50 100

52 32.0 24.4 36.6



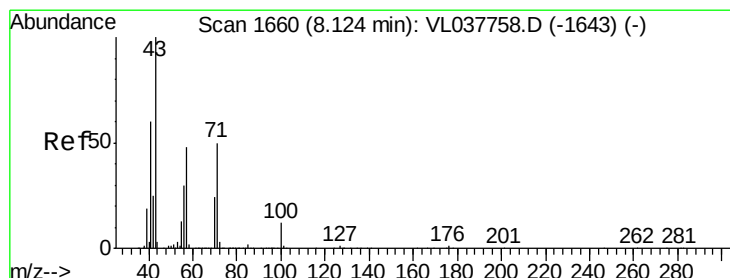
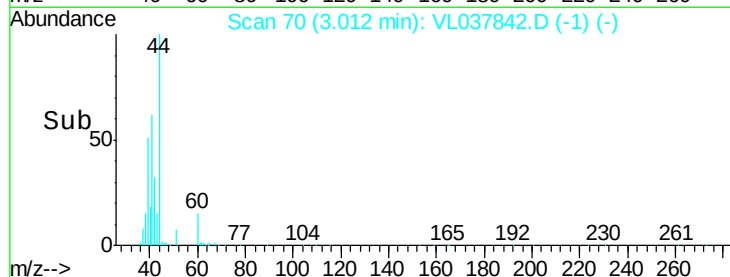
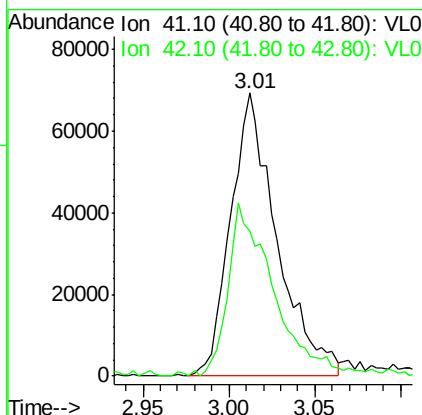
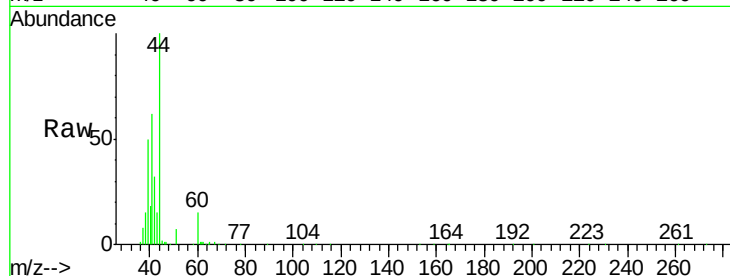


#9
 Propene
 Concen: 1.335 ppbv
 RT: 3.01
 Delta R.T.: MSVOA_L
 Lab File: ClientSampleId :
 Acq: 12 Oct 2021 23:11

Tot Ion:
 Ion Ratio
 41 100
 42 62.

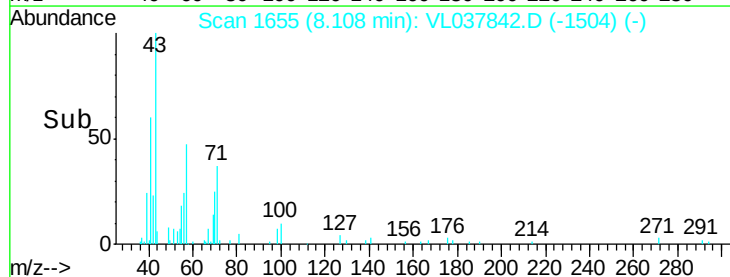
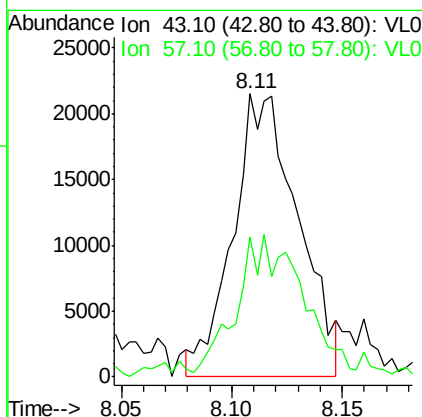
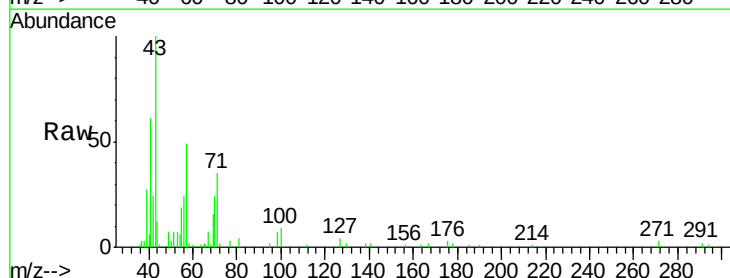
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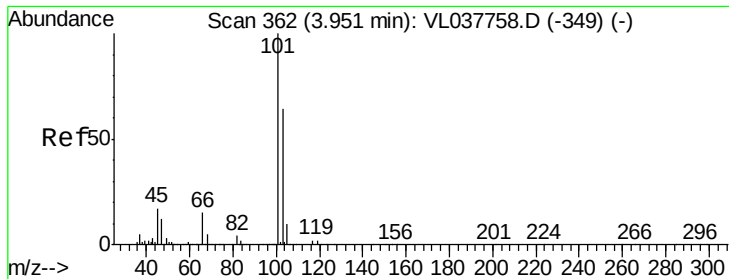
Reviewed By :Semsettin Yesilyurt 10/14/2021
 Supervised By :Mahesh Dadoda 10/15/2021



#10
 Heptane
 Concen: 0.202 ppbv m
 RT: 8.11 min Scan# 1655
 Delta R.T. -0.02 min
 Lab File: VL037842.D
 Acq: 12 Oct 2021 23:11

Tgt Ion: 43 Resp: 44093
 Ion Ratio Lower Upper
 43 100
 57 56.1 40.0 60.0



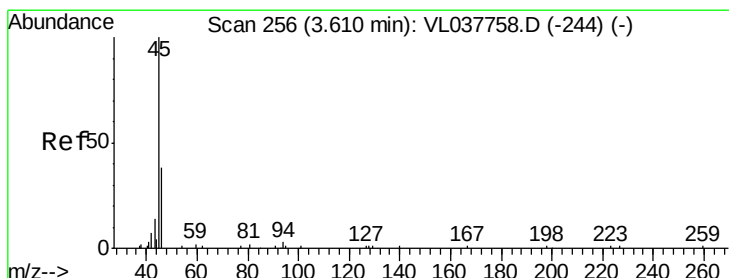
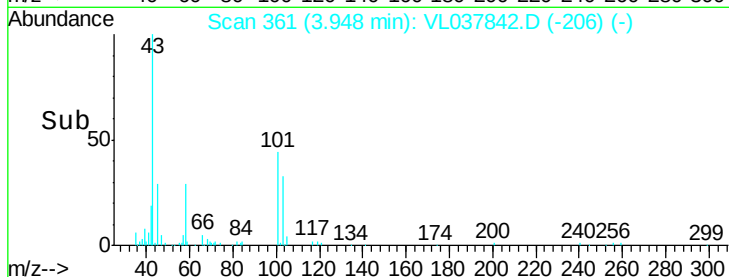
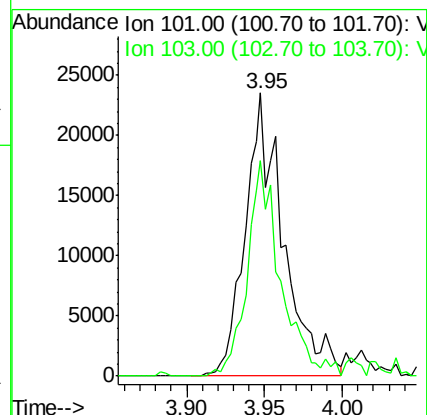
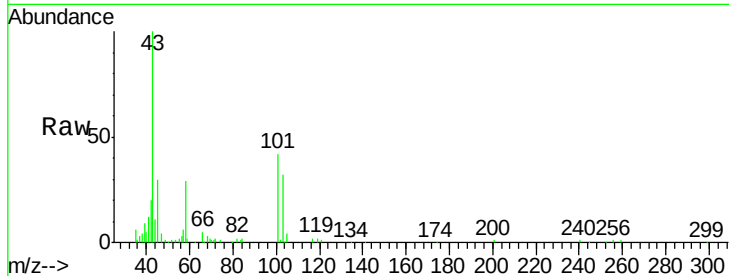


#11
 Trichlorofluoromethane
 Concen: 0.208 ppbv m
 RT: 3.95
 Instrument: MSVOA_L
 Delta R.T.:
 Lab File: ClientSampleId :
 Acq: 12 Oct 2021 23:11

Tot Ion:1
 Ion Rati
 101 100
 103 76.

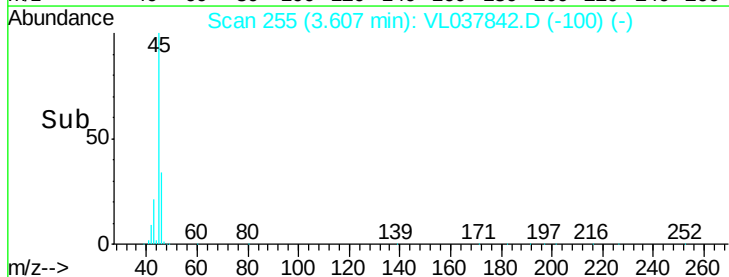
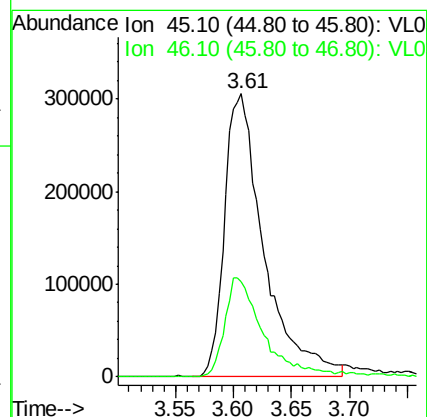
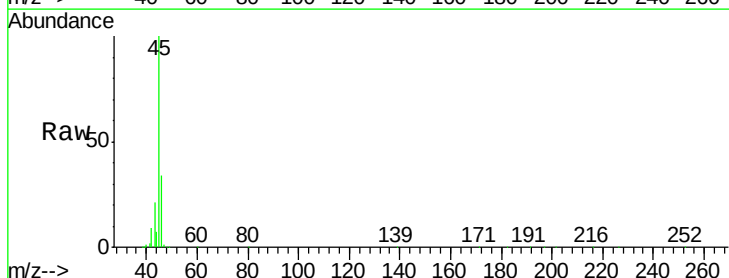
Manual Integrations
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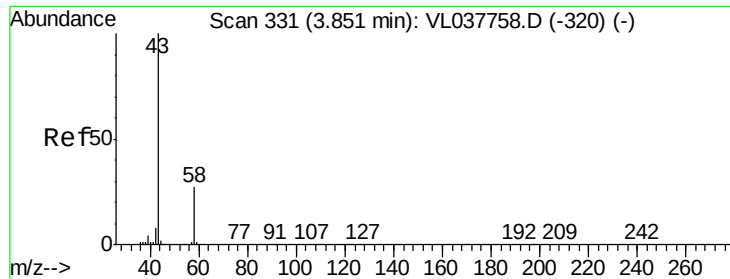
Reviewed By :Semsettin Yesilyurt 10/14/2021
 Supervised By :Mahesh Dadoda 10/15/2021



#13
 Ethanol
 Concen: 91.323 ppbv
 RT: 3.61 min Scan# 255
 Delta R.T. -0.00 min
 Lab File: VL037842.D
 Acq: 12 Oct 2021 23:11

Tgt Ion: 45 Resp: 719448
 Ion Ratio Lower Upper
 45 100
 46 35.7 20.2 81.0





#15

Acetone

Concen: 55.655 ppbv

RT: 3.84

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 12 Oct 2021 23:11

Tot Ion:

Ion Ratio

43 100

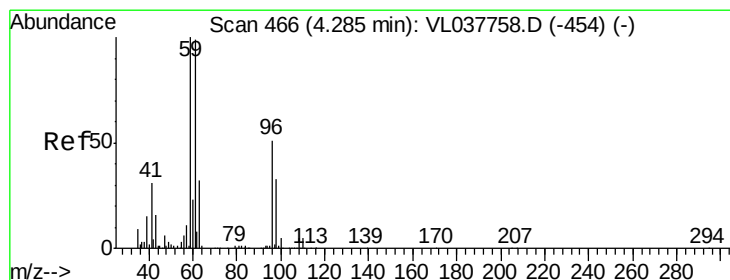
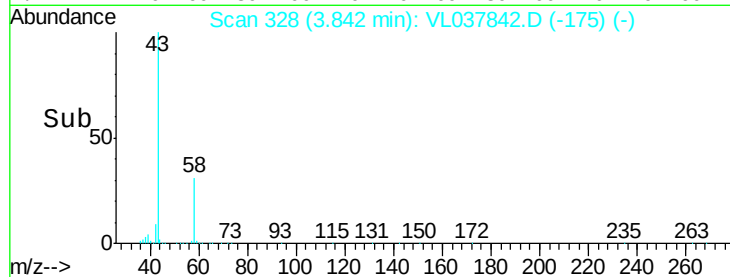
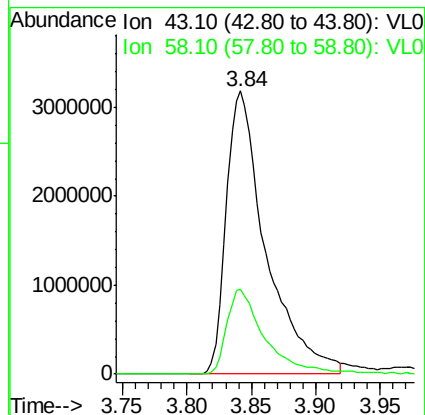
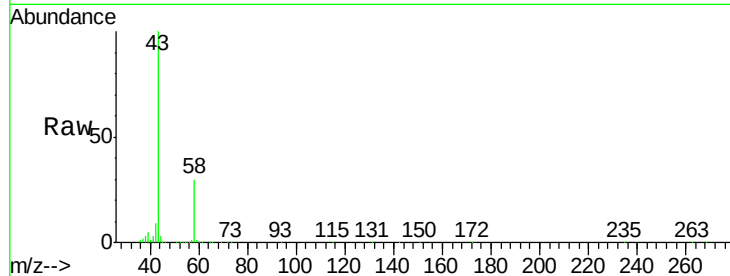
58 29.

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 10/14/2021

Supervised By :Mahesh Dadoda 10/15/2021



#17

tert-Butyl alcohol

Concen: 0.986 ppbv

RT: 4.29 min Scan# 469

Delta R.T. 0.01 min

Lab File: VL037842.D

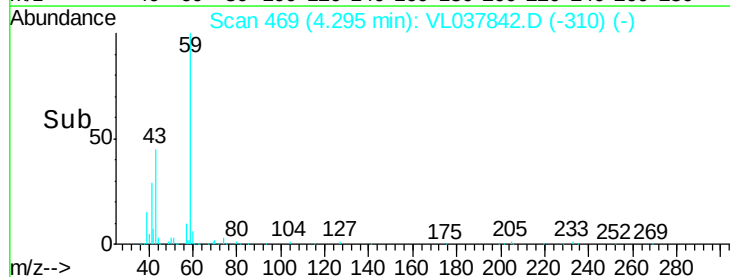
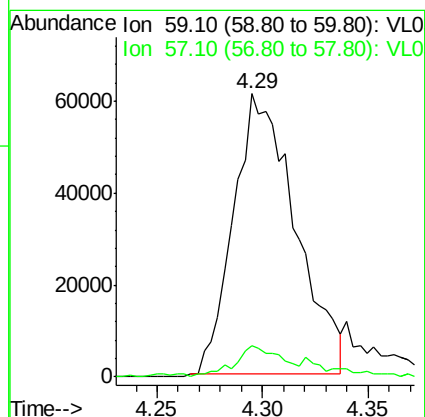
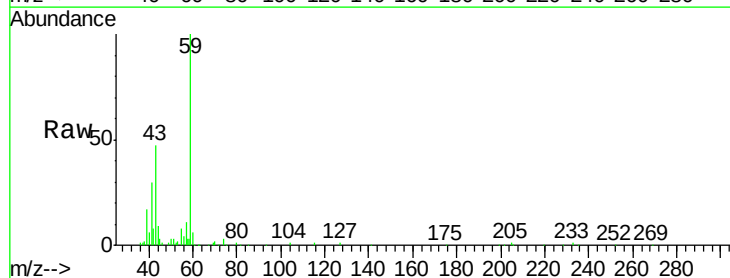
Acq: 12 Oct 2021 23:11

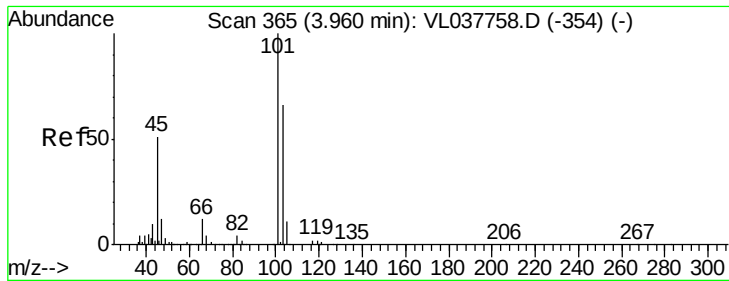
Tgt Ion: 59 Resp: 124183

Ion Ratio Lower Upper

59 100

57 12.5 8.6 13.0





#19

Isopropyl Alcohol

Concen: 4.564 ppbv

RT: 3.97

Delta R.T.

Lab File:

Acq: 12 Oct 2021 23:11

Instrument : MSVOA_1
ClientSampleId : COP05

Tot Ion:

Ion Ratio

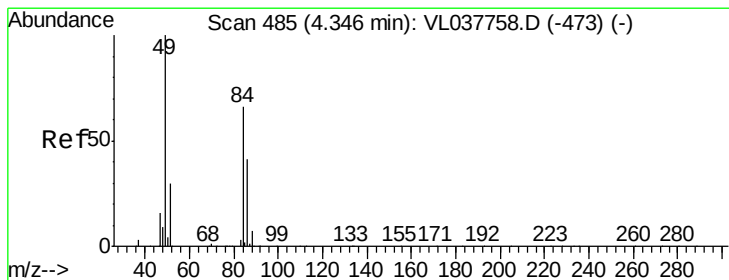
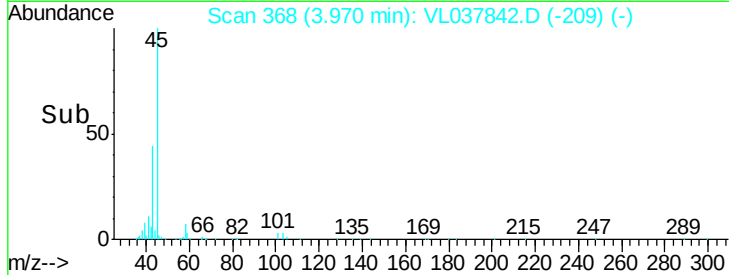
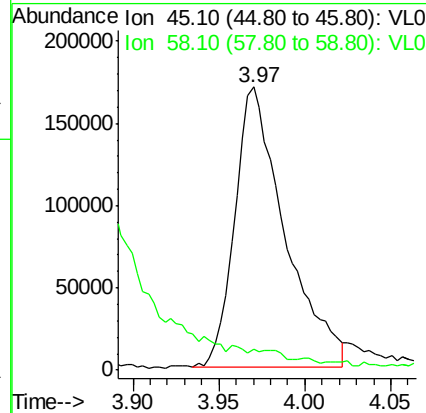
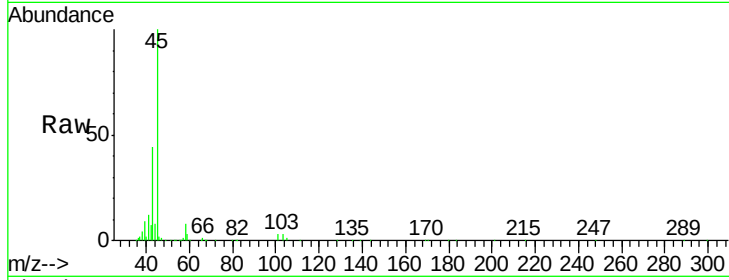
45 100

58 0.

Manual Integrations

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Reviewed By : Semsettin Yesilyurt 10/14/2021
Supervised By : Mahesh Dadoda 10/15/2021



#20

Methylene Chloride

Concen: 9.030 ppbv

RT: 4.34 min Scan# 483

Delta R.T. -0.01 min

Lab File: VL037842.D

Acq: 12 Oct 2021 23:11

Tgt Ion: 84 Resp: 558080

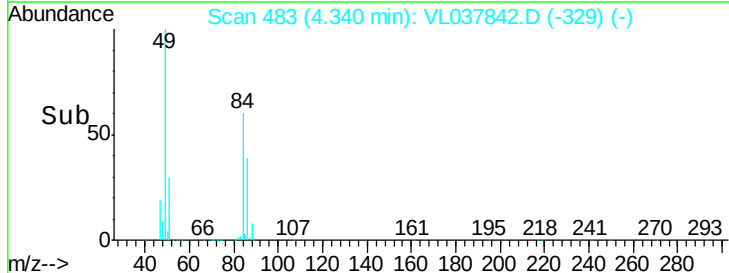
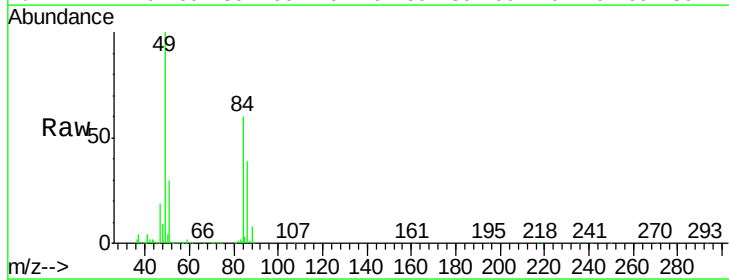
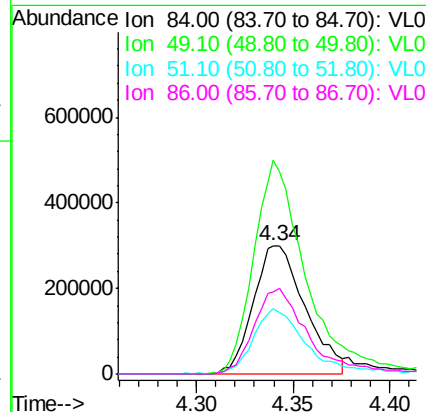
Ion Ratio Lower Upper

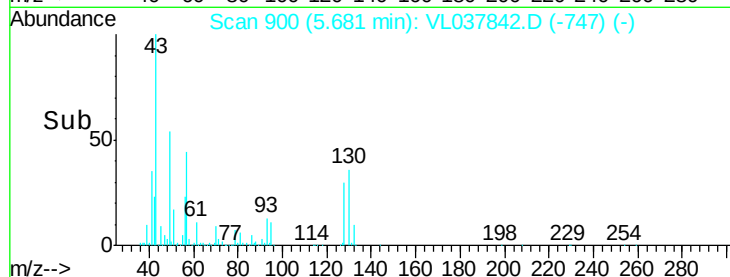
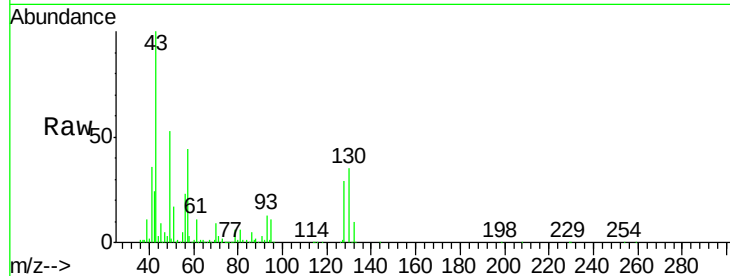
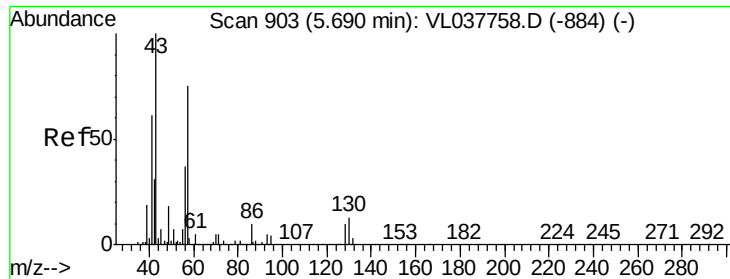
84 100

49 166.3 120.7 181.1

51 50.0 36.2 54.4

86 64.3 49.6 74.4



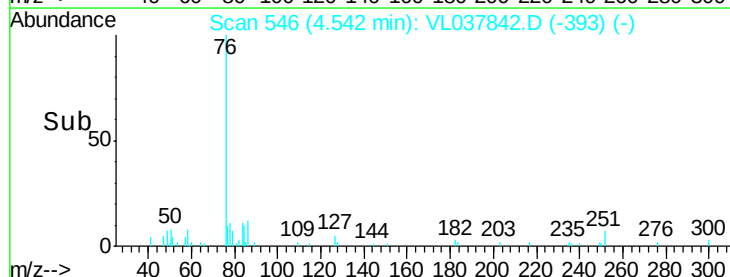
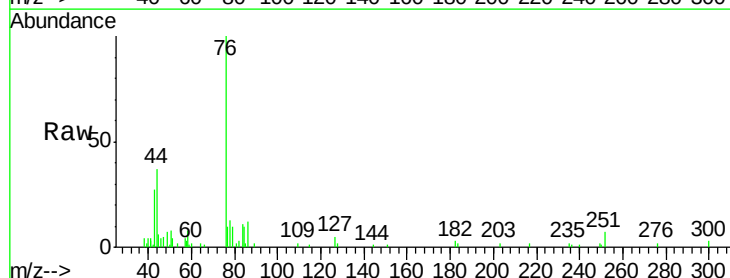
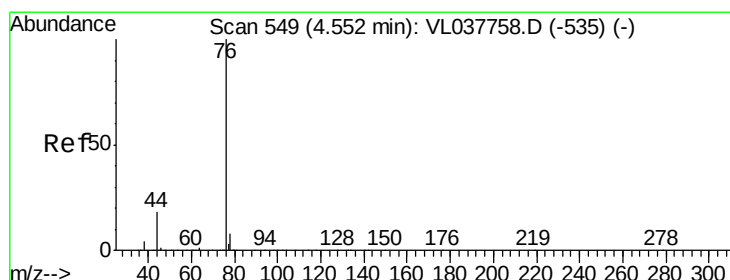
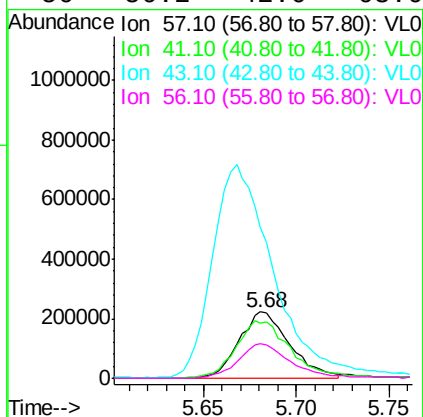


#26
Hexane
Concen: 2.483 ppbv
RT: 5.68
Delta R.T.: MSVOA_L
Lab File: ClientSampleId :
COP05
Acq: 12 Oct 2021 23:11

Tot Ion:
Ion Ratio
57 100
41 96.
43 398.
56 56.2 42.0 63.0

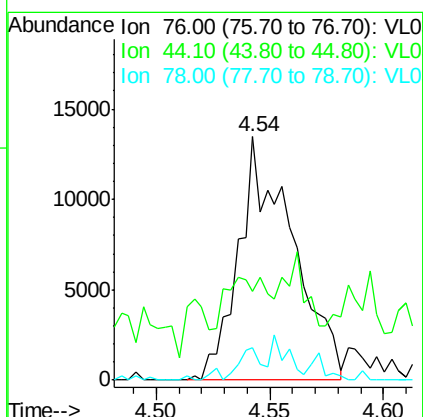
Manual Integrations
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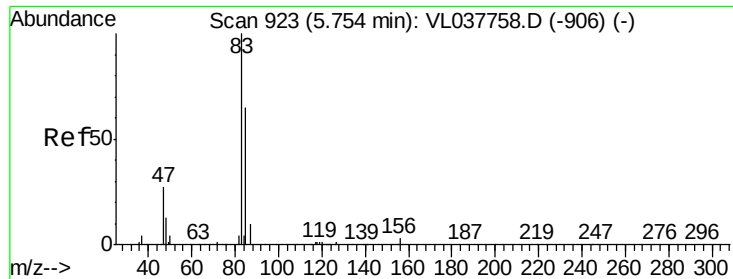
Reviewed By :Semsettin Yesilyurt 10/14/2021
Supervised By :Mahesh Dadoda 10/15/2021



#27
Carbon Disulfide
Concen: 0.148 ppbv m
RT: 4.54 min Scan# 546
Delta R.T. -0.01 min
Lab File: VL037842.D
Acq: 12 Oct 2021 23:11

Tgt Ion: 76 Resp: 22113
Ion Ratio Lower Upper
76 100
44 67.0 14.3 21.5#
78 14.9 7.8 11.6#



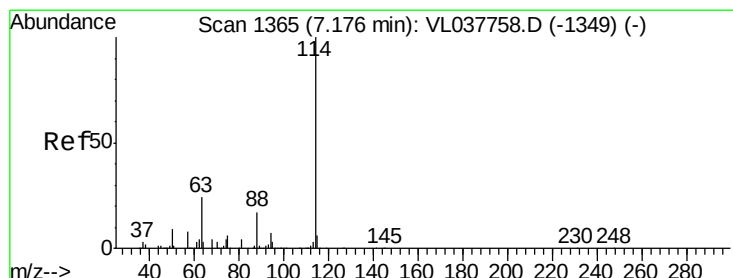
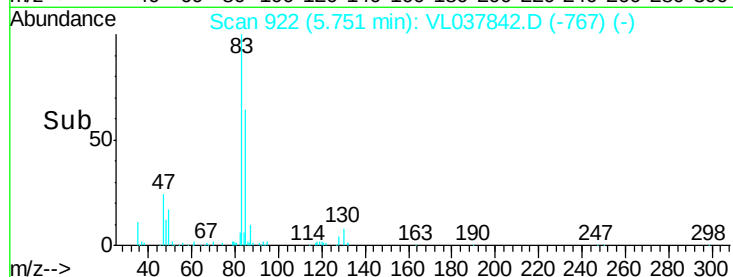
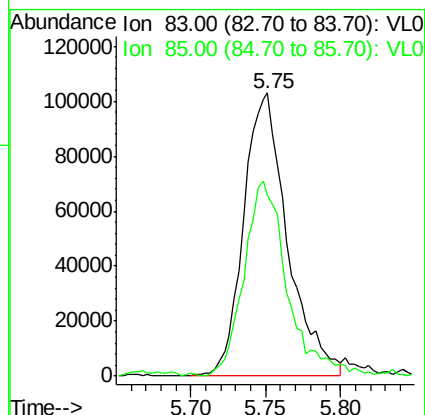
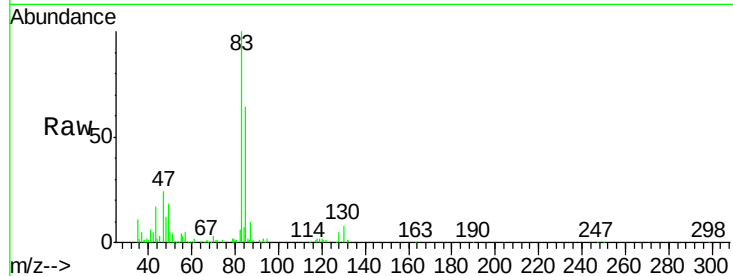


#29
Chloroform
Concen: 0.869 ppbv
RT: 5.75
Delta R.T.: MSVOA_L
Lab File: ClientSampleId :
COP05
Acq: 12 Oct 2021 23:11

Tot Ion:
Ion Ratio
83 100
85 62.

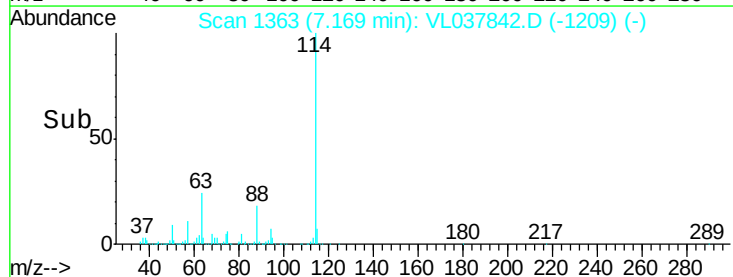
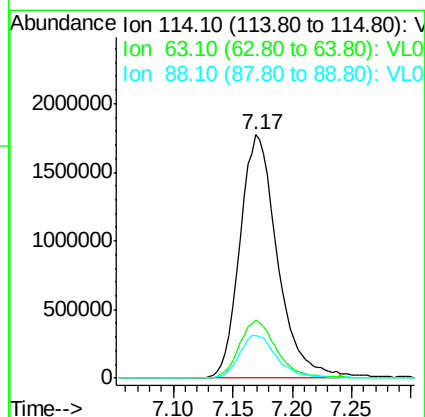
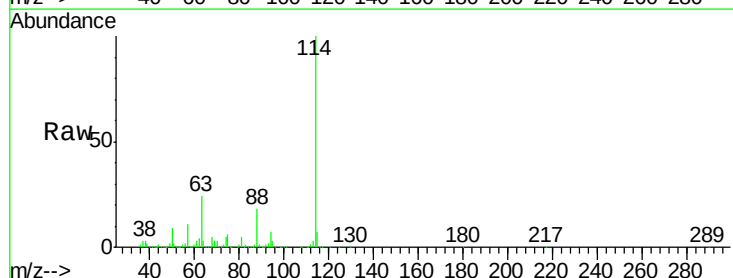
Manual Integrations
APPROVED

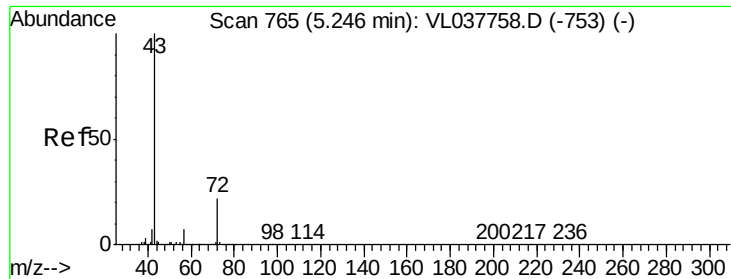
Reviewed By :Semsettin Yesilyurt 10/14/2021
Supervised By :Mahesh Dadoda 10/15/2021



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.17 min Scan# 1363
Delta R.T. -0.01 min
Lab File: VL037842.D
Acq: 12 Oct 2021 23:11

Tgt Ion:114 Resp: 3861620
Ion Ratio Lower Upper
114 100
63 23.8 19.4 29.2
88 17.9 14.4 21.6



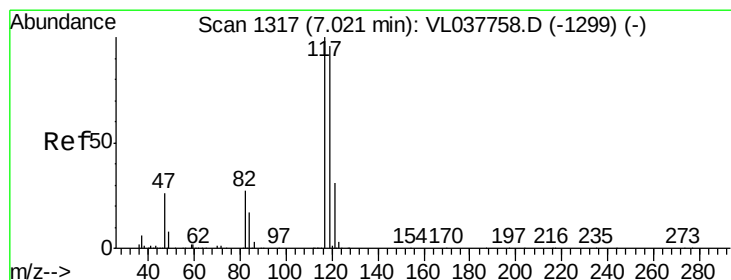
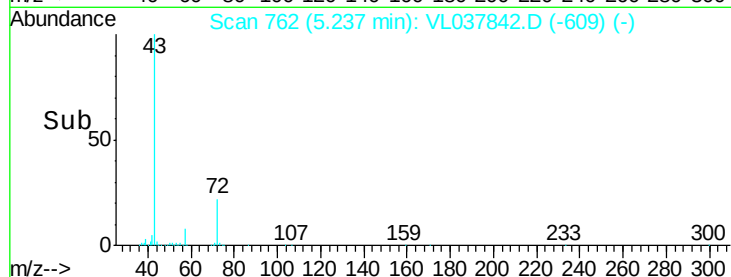
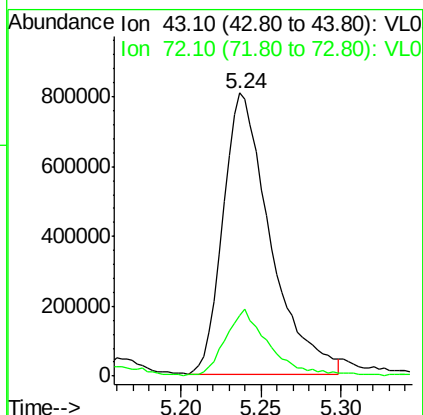
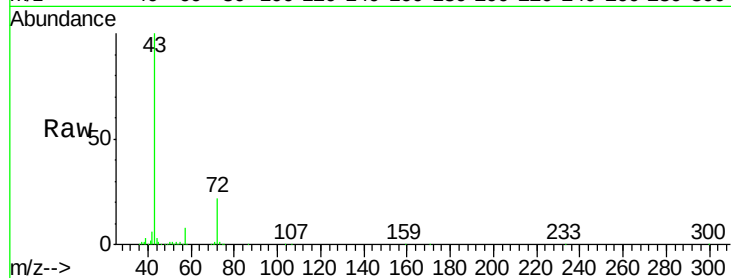


#34
2-Butanone
Concen: 10.512 ppbv
RT: 5.24
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId:
COP05
Acq: 12 Oct 2021 23:11

Tot Ion:
Ion Ratio
43 100
72 22.

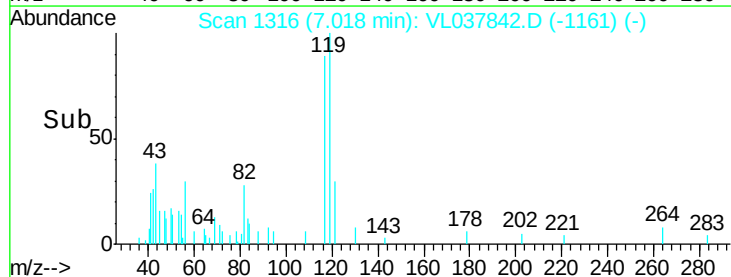
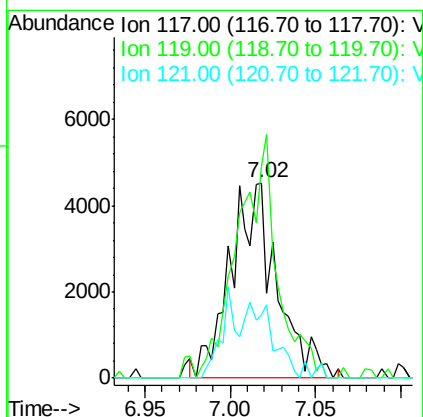
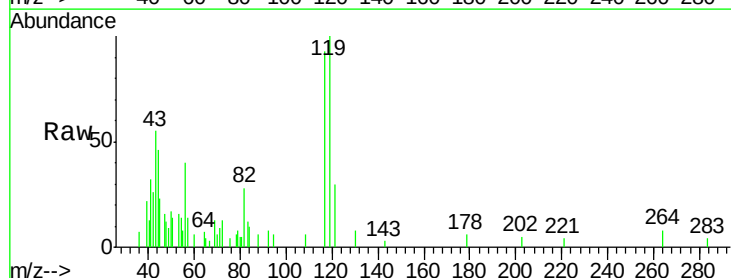
Manual Integrations
APPROVED

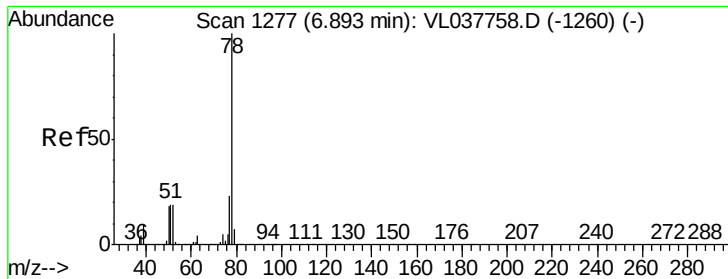
Reviewed By :Semsettin Yesilyurt 10/14/2021
Supervised By :Mahesh Dadoda 10/15/2021



#35
Carbon Tetrachloride
Concen: 0.039 ppbv m
RT: 7.02 min Scan# 1316
Delta R.T. -0.00 min
Lab File: VL037842.D
Acq: 12 Oct 2021 23:11

Tgt Ion:117 Resp: 8630
Ion Ratio Lower Upper
117 100
119 108.1 76.5 114.7
121 32.2 24.9 37.3



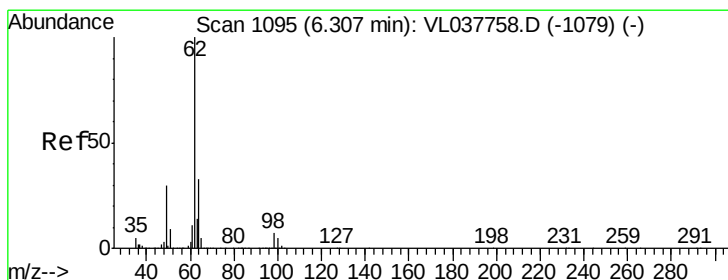
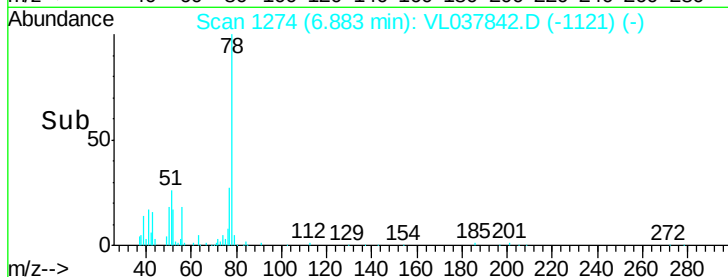
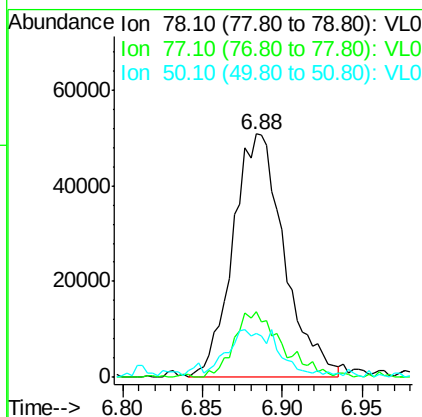
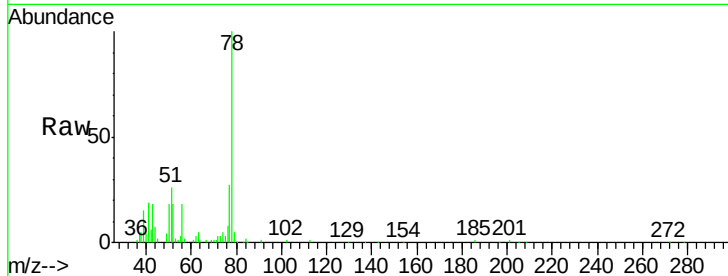


#36
Benzene
Concen: 0.338 ppbv
RT: 6.88
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 12 Oct 2021 23:11
COP05

Tot Ion:
Ion Ratio
78 100
77 25.
50 16.

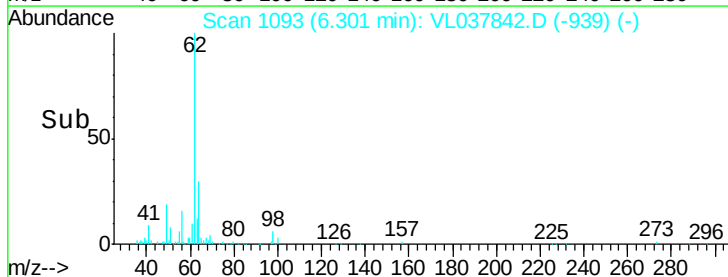
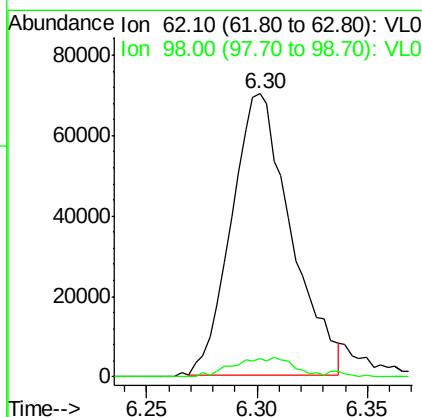
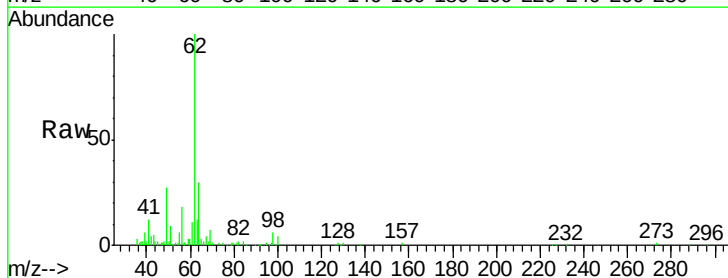
Manual Integrations
APPROVED

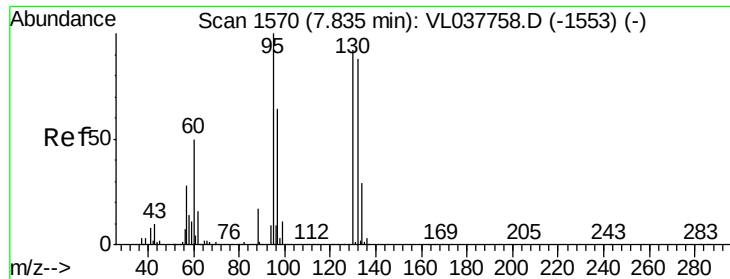
Reviewed By :Semsettin Yesilyurt 10/14/2021
Supervised By :Mahesh Dadoda 10/15/2021



#37
1,2-Dichloroethane
Concen: 0.840 ppbv
RT: 6.30 min Scan# 1093
Delta R.T. -0.01 min
Lab File: VL037842.D
Acq: 12 Oct 2021 23:11

Tgt Ion: 62 Resp: 130433
Ion Ratio Lower Upper
62 100
98 7.6 6.1 9.1





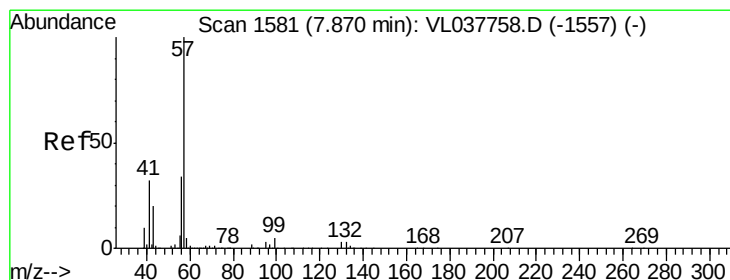
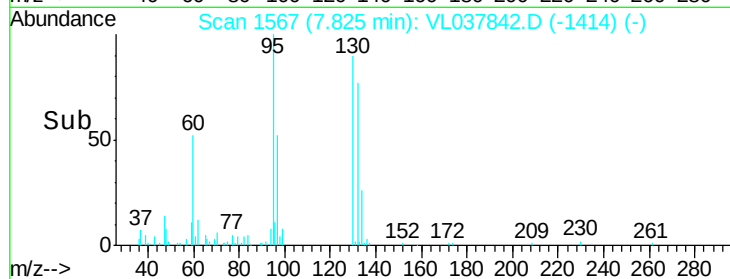
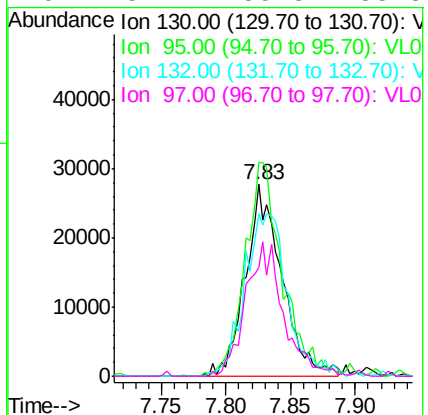
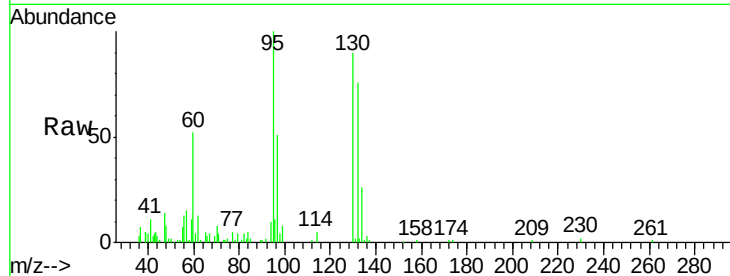
#38
 Trichloroethene
 Concen: 0.416 ppbv m
 RT: 7.83
 Instrument: MSVOA_L
 Delta R.T.
 Lab File: ClientSampleId :
 Acq: 12 Oct 2021 23:11

Tot Ion: 1
 Ion Ratio
 130 100
 95 111.
 132 84.
 97 57.1 55.8 83.8

Manual Integrations

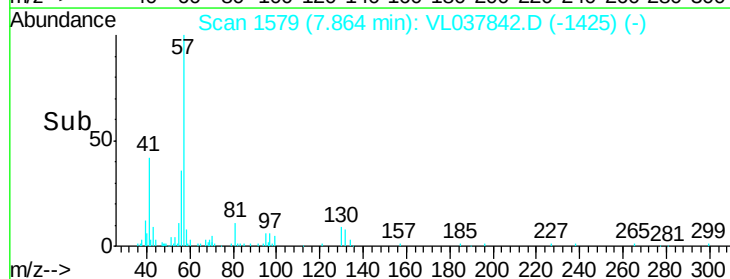
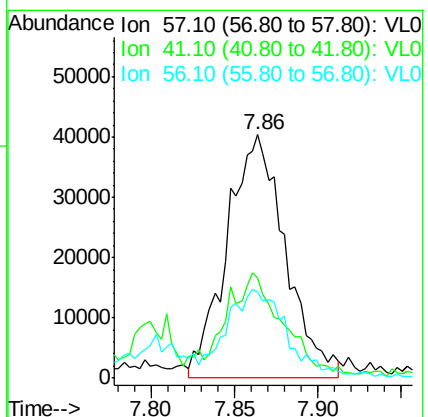
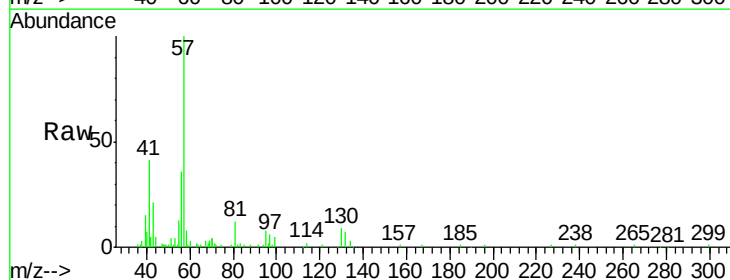
APPROVED

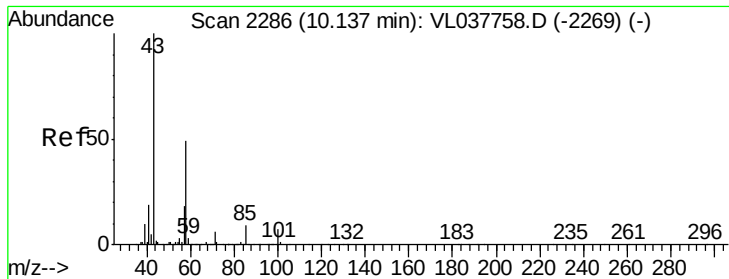
Reviewed By :Semsettin Yesilyurt 10/14/2021
 Supervised By :Mahesh Dadoda 10/15/2021



#44
 2,2,4-Trimethylpentane
 Concen: 0.177 ppbv m
 RT: 7.86 min Scan# 1579
 Delta R.T. -0.01 min
 Lab File: VL037842.D
 Acq: 12 Oct 2021 23:11

Tgt Ion: 57 Resp: 98236
 Ion Ratio Lower Upper
 57 100
 41 42.6 25.6 38.4#
 56 40.1 25.5 38.3#





#51

2-Hexanone

Concen: 1.297 ppbv m

RT: 10.14

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 12 Oct 2021 23:11

Tot Ion:

Ion Ratio

43 100

58 0.

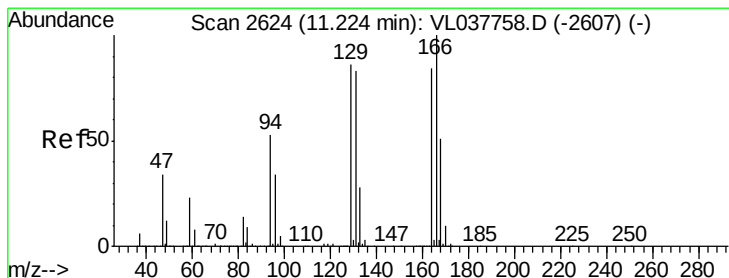
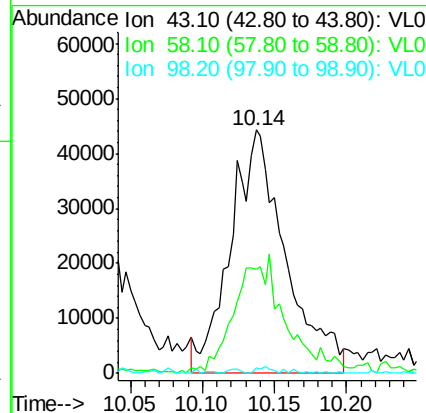
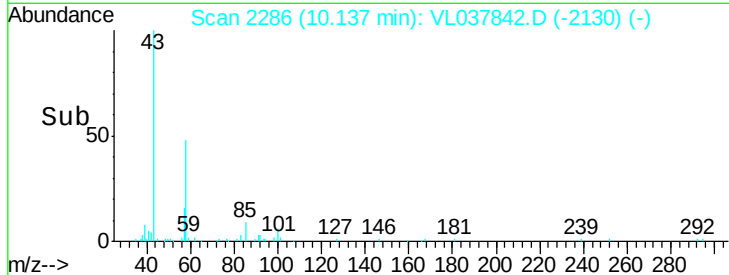
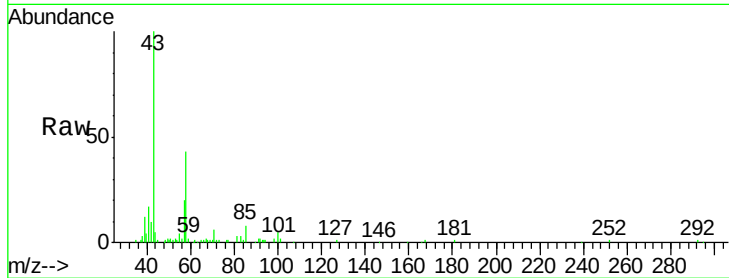
98 0.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 10/14/2021

Supervised By :Mahesh Dadoda 10/15/2021



#52

Tetrachloroethene

Concen: 26.879 ppbv

RT: 11.22 min Scan# 2622

Delta R.T. -0.01 min

Lab File: VL037842.D

Acq: 12 Oct 2021 23:11

Tgt Ion:164 Resp: 3449284

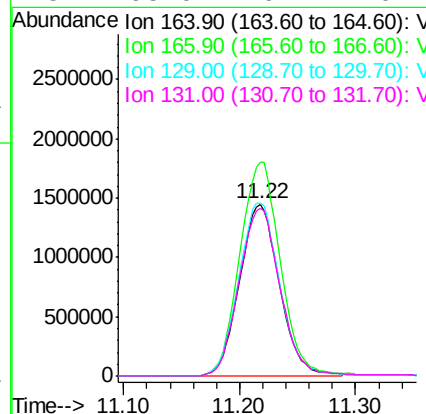
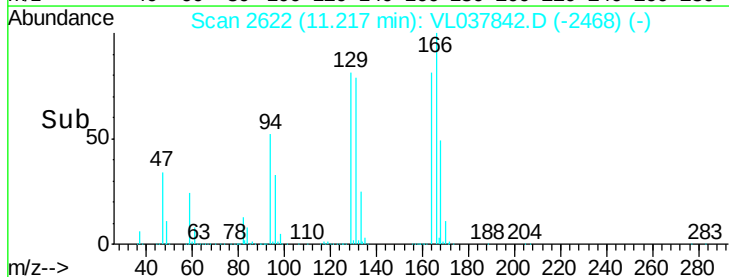
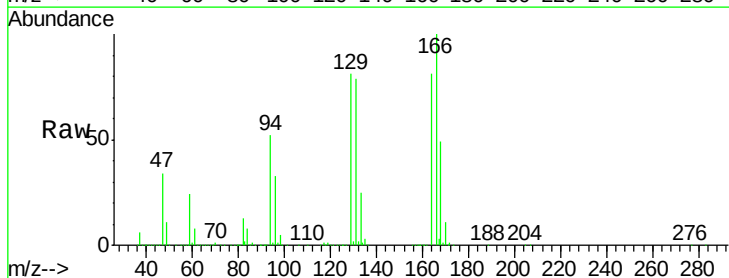
Ion Ratio Lower Upper

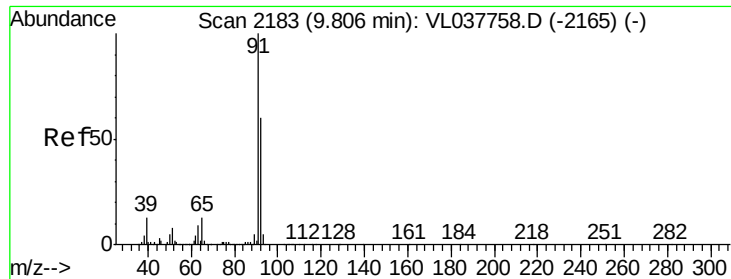
164 100

166 124.1 95.4 143.2

129 100.5 82.2 123.4

131 98.0 79.4 119.2



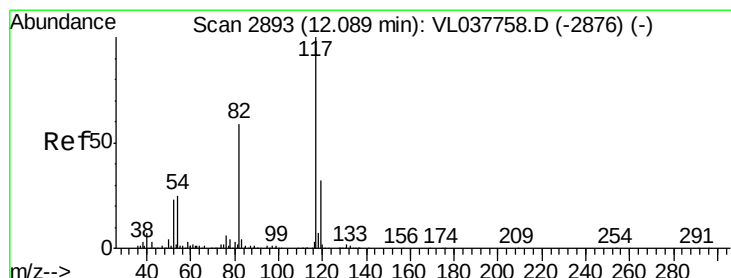
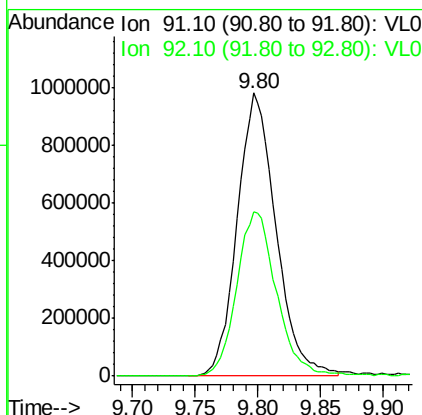
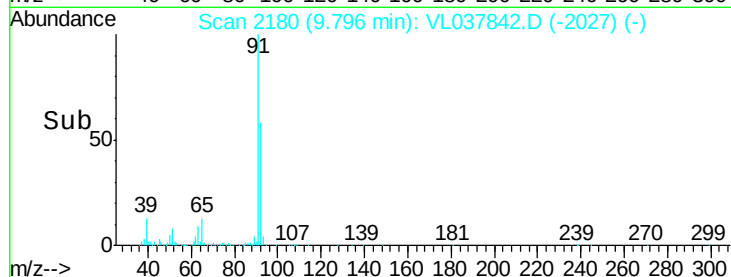
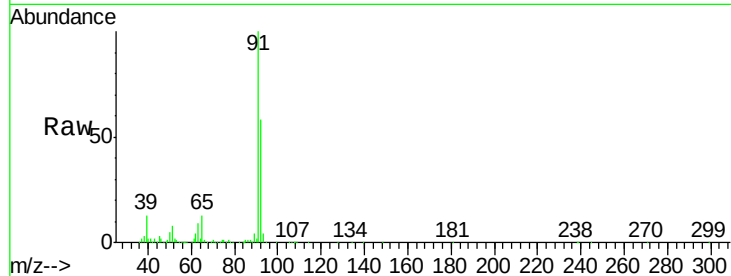


#53
Toluene
Concen: 5.761 ppbv
RT: 9.80
Delta R.T.: MSVOA_L
Lab File: ClientSampleId :
Acq: 12 Oct 2021 23:11

Tot Ion:
Ion Ratio
91 100
92 60.

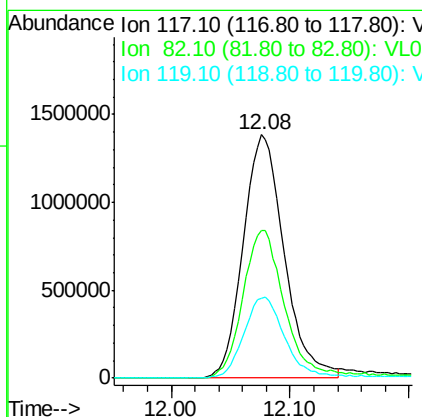
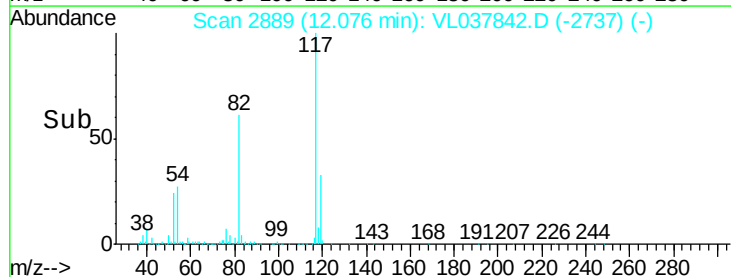
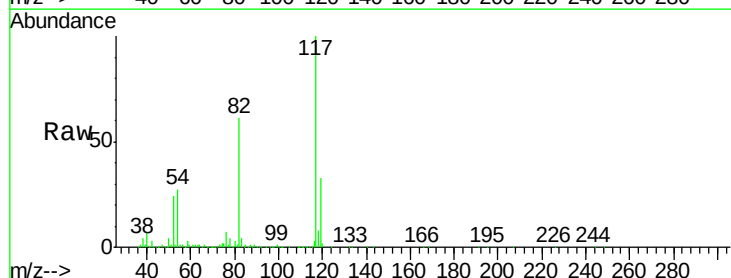
Manual Integrations
APPROVED

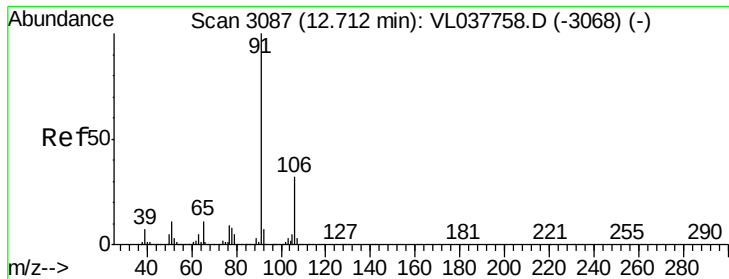
Reviewed By :Semsettin Yesilyurt 10/14/2021
Supervised By :Mahesh Dadoda 10/15/2021



#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.08 min Scan# 2889
Delta R.T. -0.01 min
Lab File: VL037842.D
Acq: 12 Oct 2021 23:11

Tgt Ion:117 Resp: 3312398
Ion Ratio Lower Upper
117 100
82 64.6 52.2 78.2
119 34.6 26.0 39.0





#58

Ethyl Benzene

Concen: 0.389 ppbv m

RT: 12.70

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 12 Oct 2021 23:11

Tot Ion:

Ion Ratio

91 100

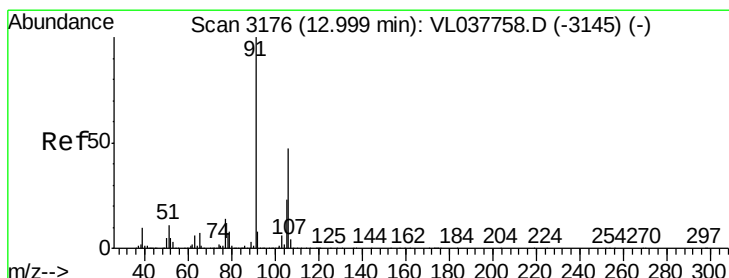
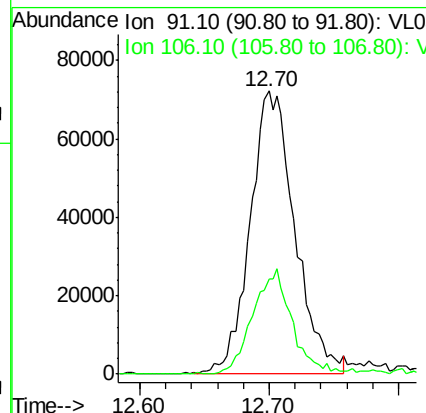
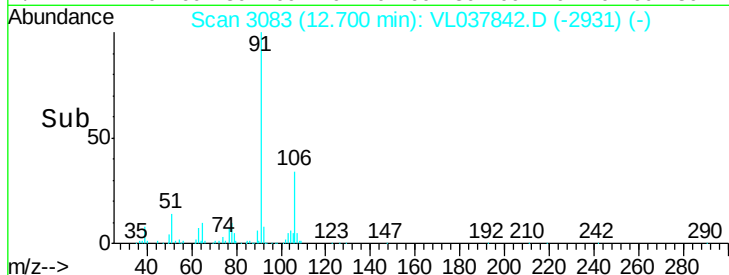
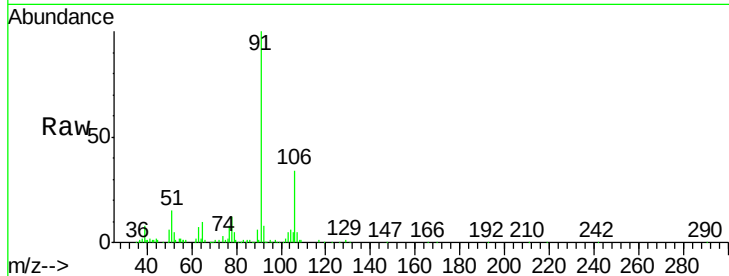
106 33.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 10/14/2021

Supervised By :Mahesh Dadoda 10/15/2021



#59

m/p-Xylene

Concen: 1.359 ppbv m

RT: 12.96 min Scan# 3163

Delta R.T. -0.04 min

Lab File: VL037842.D

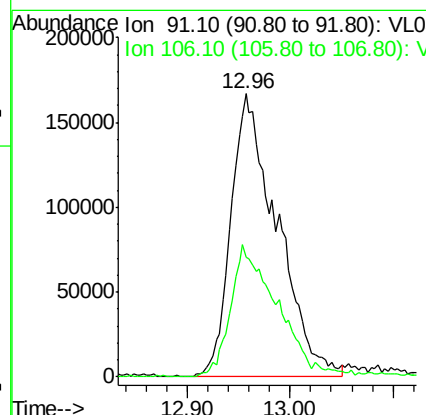
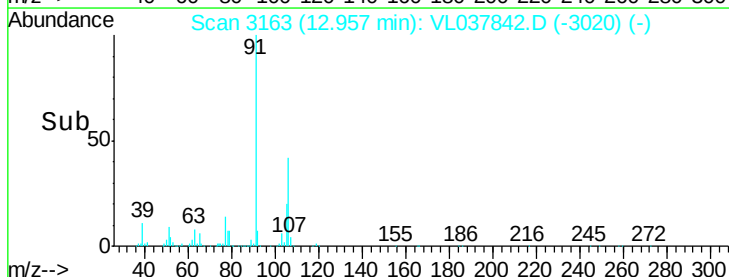
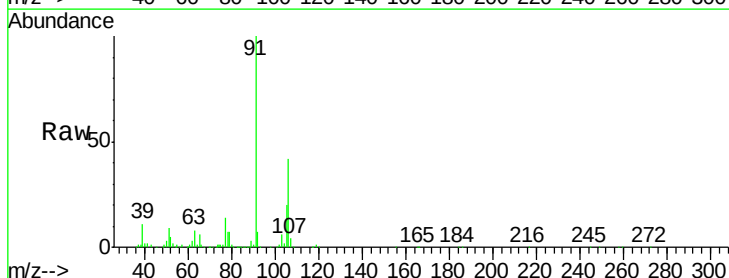
Acq: 12 Oct 2021 23:11

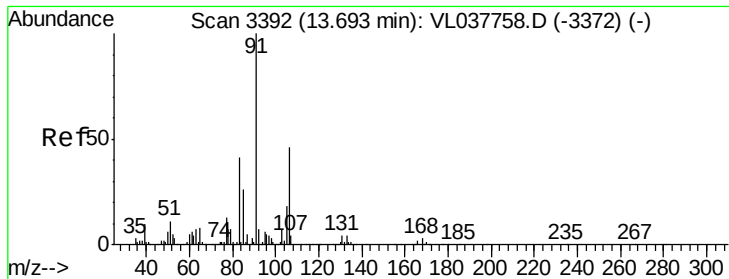
Tgt Ion: 91 Resp: 518997

Ion Ratio Lower Upper

91 100

106 0.0 36.7 55.1#



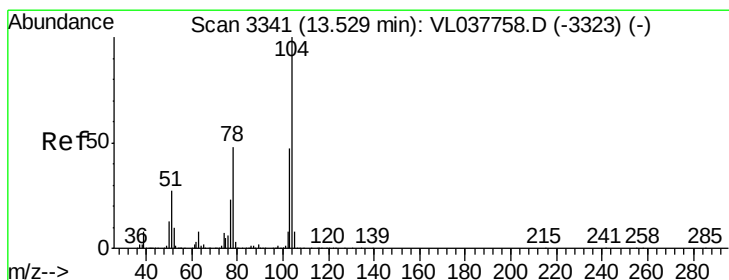
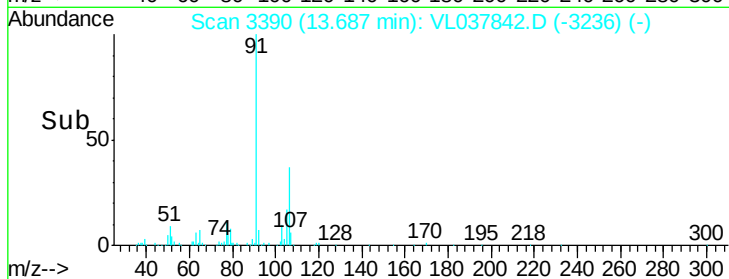
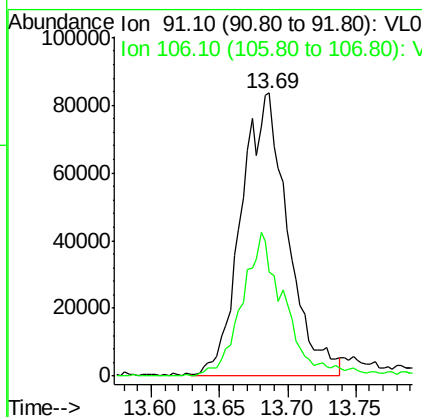
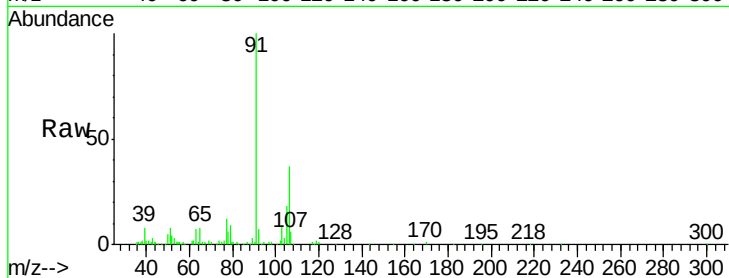


#60
o-Xylene
Concen: 0.545 ppbv m
RT: 13.69
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 12 Oct 2021 23:11
COP05

Tot Ion:
Ion Ratio
91 100
106 0.

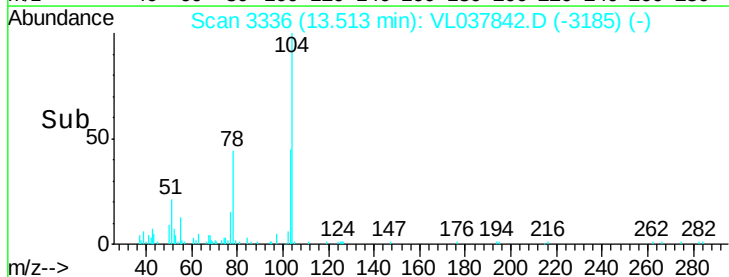
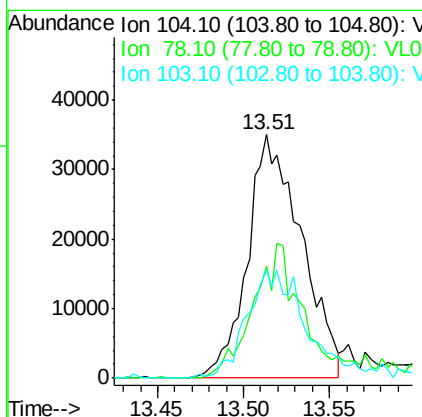
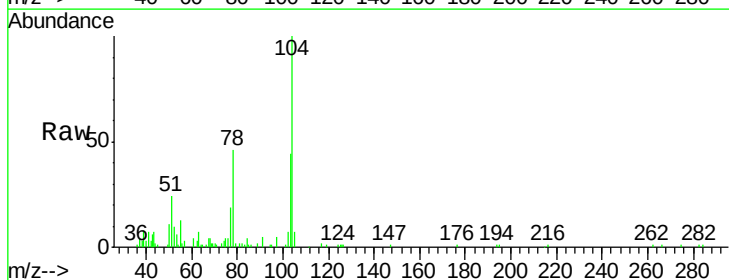
Manual Integrations
APPROVED

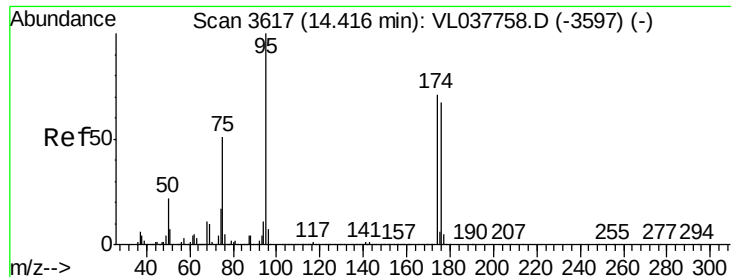
Reviewed By :Semsettin Yesilyurt 10/14/2021
Supervised By :Mahesh Dadoda 10/15/2021



#61
Styrene
Concen: 0.430 ppbv
RT: 13.51 min Scan# 3336
Delta R.T. -0.02 min
Lab File: VL037842.D
Acq: 12 Oct 2021 23:11

Tgt Ion:104 Resp: 76139
Ion Ratio Lower Upper
104 100
78 54.6 40.6 61.0
103 51.8 39.6 59.4





#68

1-Bromo-4-Fluorobenzene

Concen: 10.226 ppbv

RT: 14.41

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

COP05

Acq: 12 Oct 2021 23:11

Tot Ion:

Ion Ratio

95 100

174 75.

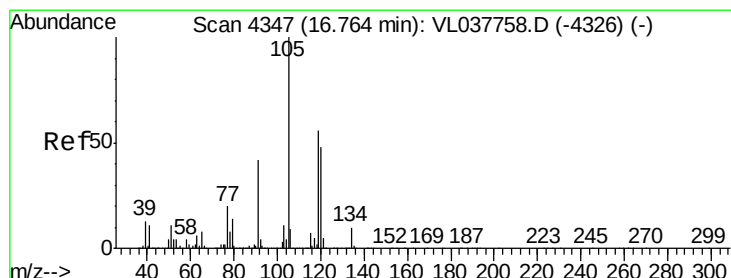
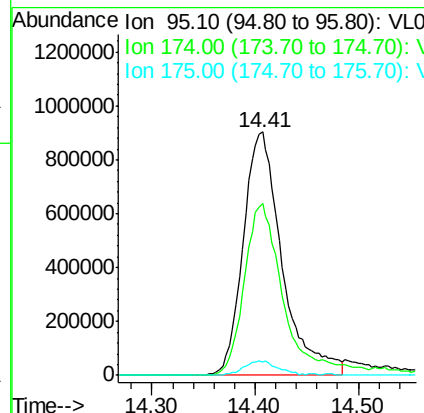
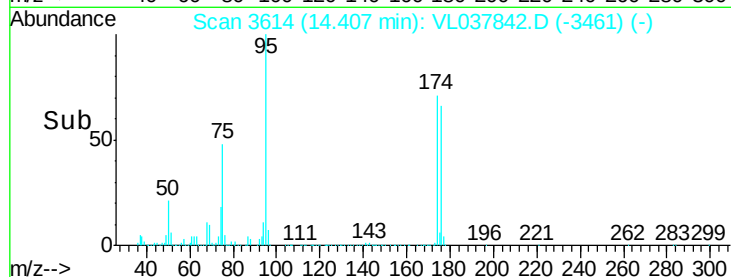
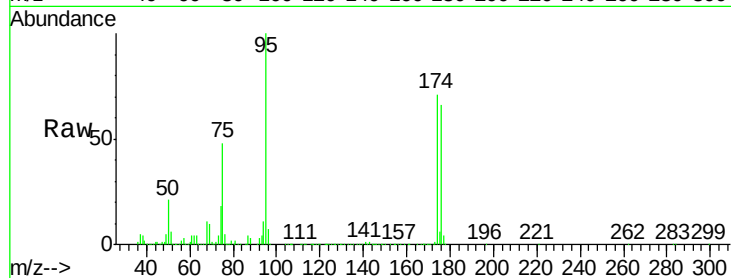
175 5.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 10/14/2021

Supervised By :Mahesh Dadoda 10/15/2021



#74

1,2,4-Trimethylbenzene

Concen: 0.217 ppbv m

RT: 16.74 min Scan# 4341

Delta R.T. -0.02 min

Lab File: VL037842.D

Acq: 12 Oct 2021 23:11

Tgt Ion:105 Resp: 86149

Ion Ratio Lower Upper

105 100

120 38.7 38.4 57.6

91 10.9 34.2 51.2#

77 13.4 15.8 23.8#

