

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL101221\
 Data File : VL037844.D
 Acq On : 13 Oct 2021 00:30
 Operator : SY/AP
 Sample : M4143-01
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA L
 ClientSampleId :
 1ST-FLOOR

Manual Integrations
 APPROVED

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

Quant Time: Oct 14 22:28:36 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	1284107	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.17	114	3726181	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.08	117	3191508	10.00	ppbv	-0.01

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.40	95	2181692	9.78	ppbv	-0.01
Spiked Amount	10.000	Range	65 - 135	Recovery	=	97.80%

Target Compounds

					Ovalue
2) Dichlorodifluoromethane	3.05	85	41591m	0.203	ppbv
3) Chlorodifluoromethane	2.99	51	51318m	0.208	ppbv
4) Chloromethane	3.14	50	38030m	0.421	ppbv
9) Propene	3.01	41	108518	1.195	ppbv
10) Heptane	8.12	43	39688	0.192	ppbv #
11) Trichlorofluoromethane	3.95	101	40380	0.221	ppbv #
13) Ethanol	3.61	45	677392	91.239	ppbv
15) Acetone	3.84	43	6707070	58.183	ppbv
17) tert-Butyl alcohol	4.30	59	120286	1.013	ppbv
19) Isopropyl Alcohol	3.97	45	336342	4.690	ppbv #
20) Methylene Chloride	4.34	84	586198	10.064	ppbv
25) Ethyl Acetate	5.67	43	1534068	4.742	ppbv #
26) Hexane	5.68	57	430237m	2.701	ppbv
27) Carbon Disulfide	4.55	76	22645	0.160	ppbv #
29) Chloroform	5.75	83	205306	0.902	ppbv #
30) Cyclohexane	7.12	84	18493m	0.137	ppbv
34) 2-Butanone	5.24	43	1581882	10.516	ppbv
35) Carbon Tetrachloride	7.01	117	9033m	0.043	ppbv
36) Benzene	6.89	78	106064	0.333	ppbv
37) 1,2-Dichloroethane	6.30	62	121948	0.814	ppbv #
38) Trichloroethene	7.83	130	52256m	0.416	ppbv
44) 2,2,4-Trimethylpentane	7.86	57	97703m	0.183	ppbv
51) 2-Hexanone	10.14	43	70887	0.811	ppbv #
52) Tetrachloroethene	11.22	164	3351243	27.065	ppbv
53) Toluene	9.80	91	2059395	5.839	ppbv
58) Ethyl Benzene	12.70	91	161869	0.378	ppbv
59) m/p-Xylene	12.96	91	499367m	1.357	ppbv
60) o-Xylene	13.68	91	187800	0.533	ppbv
61) Styrene	13.52	104	72092m	0.423	ppbv
74) 1,2,4-Trimethylbenzene	16.75	105	85062m	0.223	ppbv

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

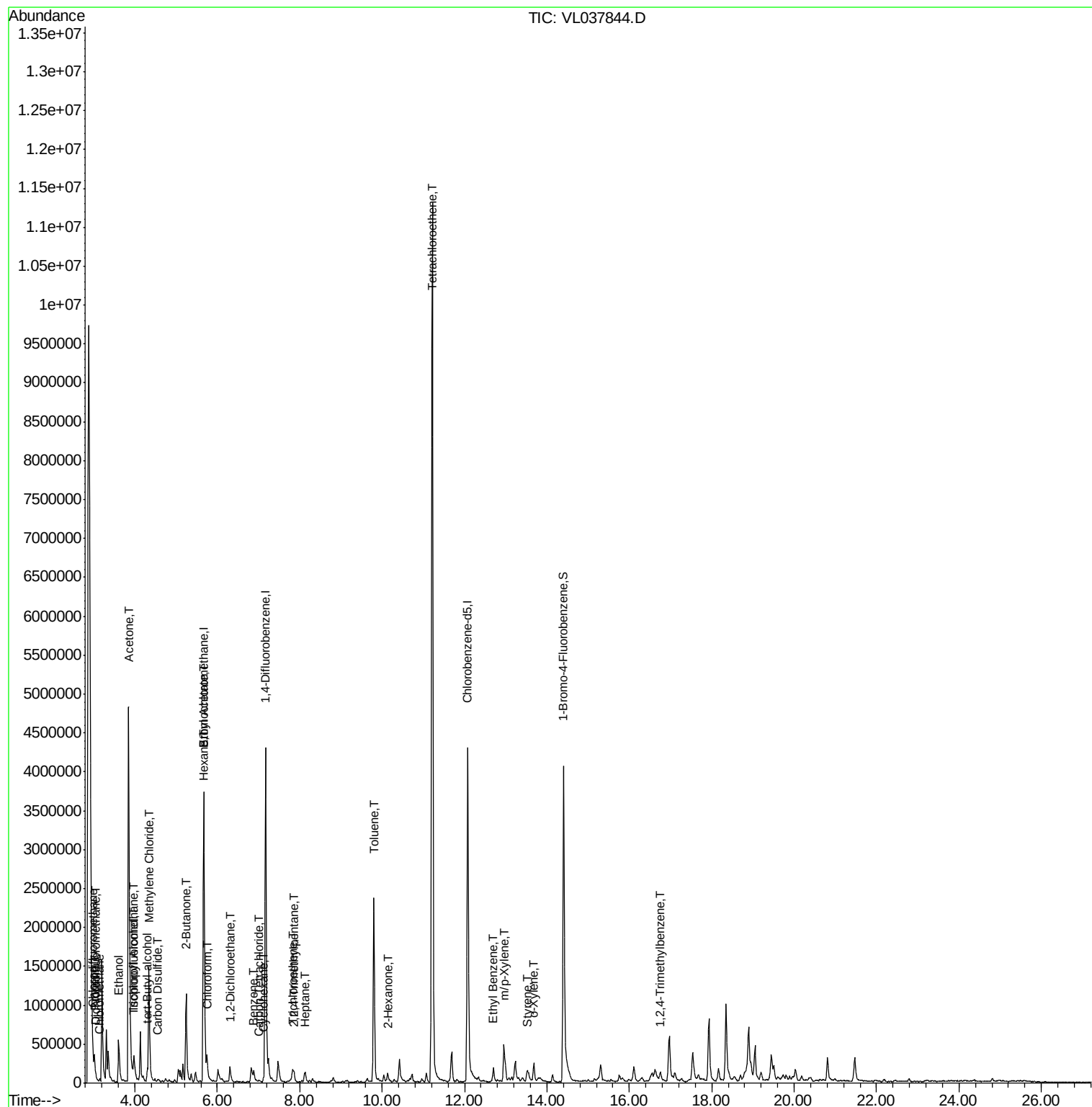
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL101221\
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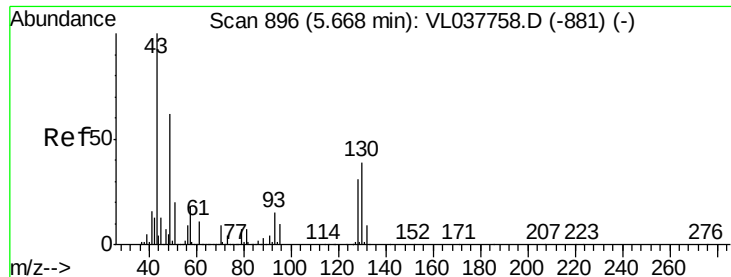
Instrument :
MSVOA_L
ClientSampleId :
1ST-FLOOR

Quant Time: Oct 14 22:28:36 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
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#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.66 Instrument: MSVOA_1

Delta R.T. ClientSampleId:

Lab File: 1ST-FLOOR

Acq: 13 Oct 2021 00:30

Tot Ion:

Ion Ratio

49 100

128 52.

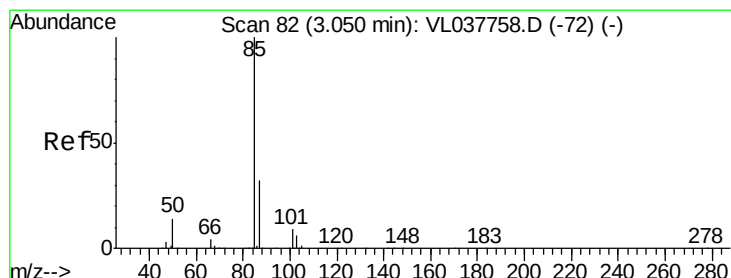
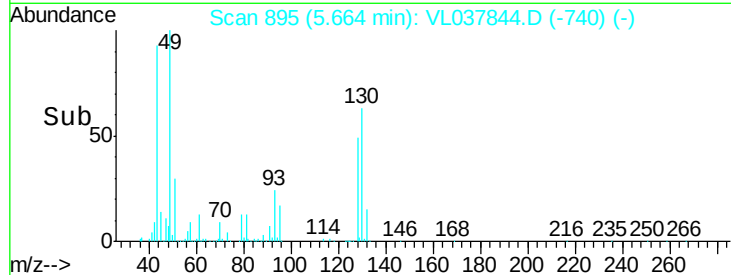
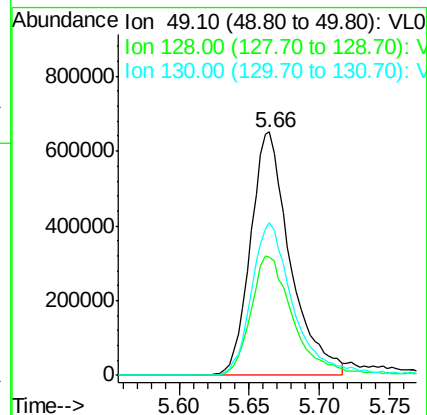
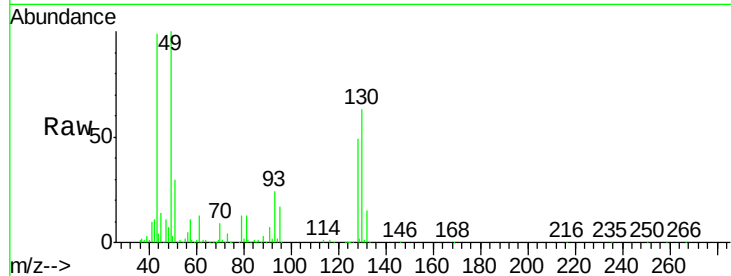
130 67.

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 10/14/2021

Supervised By :Mahesh Dadoda 10/15/2021



#2

Dichlorodifluoromethane

Concen: 0.203 ppbv m

RT: 3.05 min Scan# 81

Delta R.T. -0.00 min

Lab File: VL037844.D

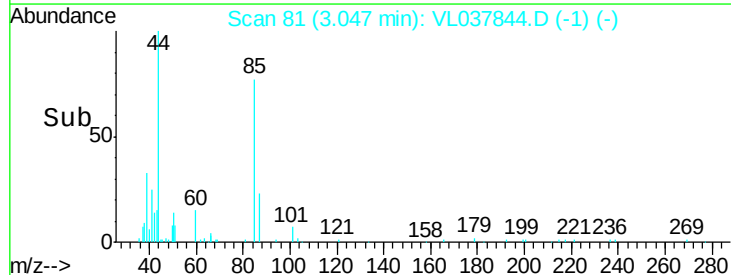
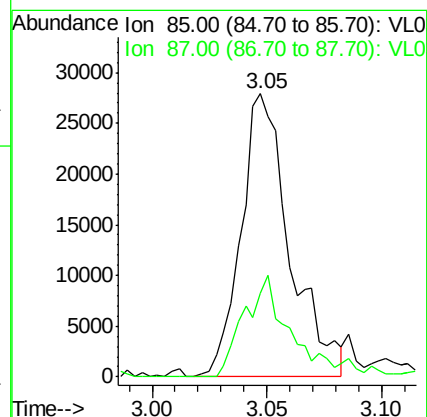
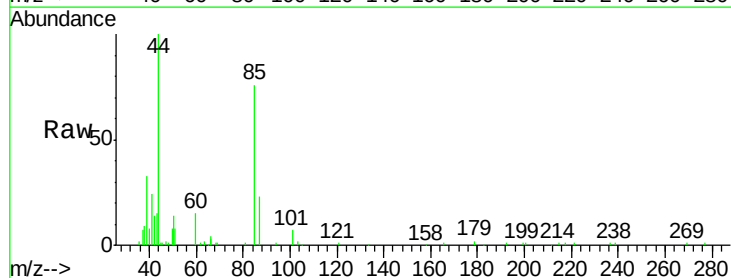
Acq: 13 Oct 2021 00:30

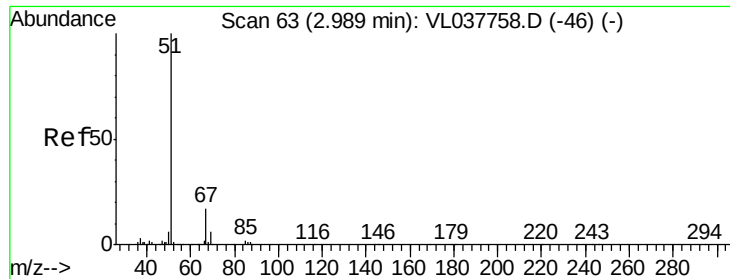
Tgt Ion: 85 Resp: 41591

Ion Ratio Lower Upper

85 100

87 29.6 25.7 38.5





#3

Chlorodifluoromethane

Concen: 0.208 ppbv m

RT: 2.99 Instrument: MSVOA_L

Delta R.T. ClientSampleId:

Lab File: 1ST-FLOOR

Acq: 13 Oct 2021 00:30

Tot Ion:

Ion Ratio

51 100

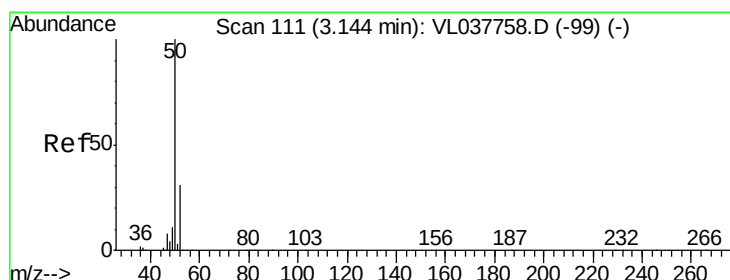
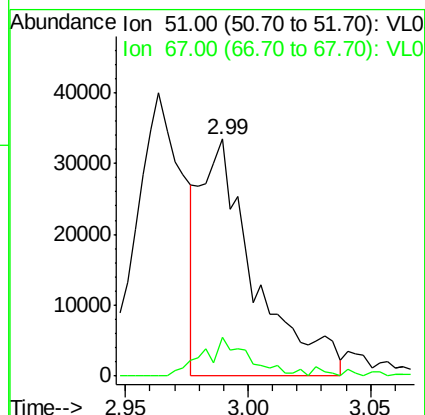
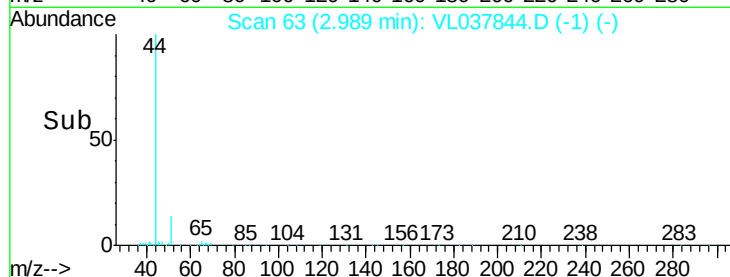
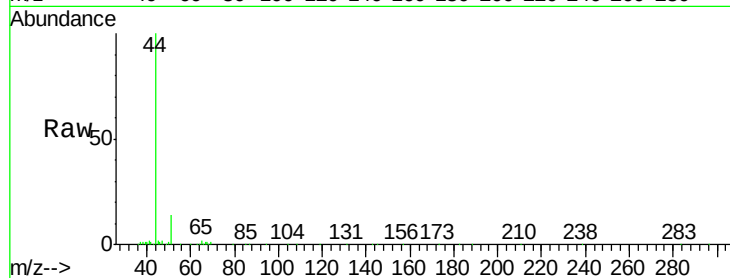
67 16.

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 10/14/2021

Supervised By :Mahesh Dadoda 10/15/2021



#4

Chloromethane

Concen: 0.421 ppbv m

RT: 3.14 min Scan# 109

Delta R.T. -0.01 min

Lab File: VL037844.D

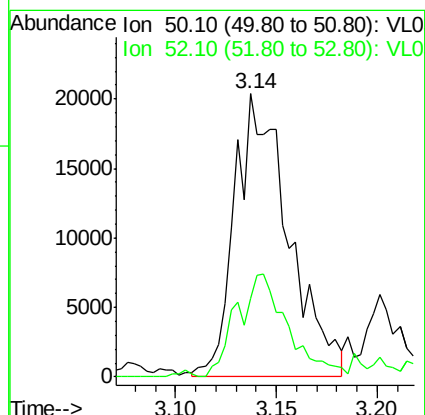
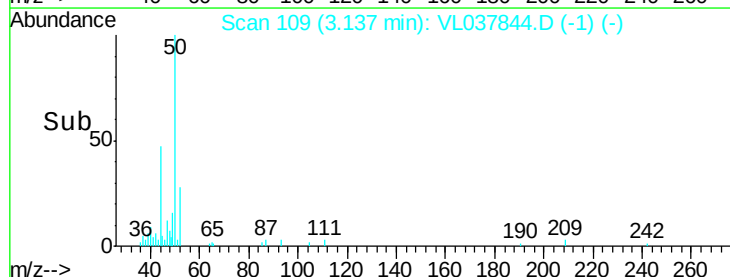
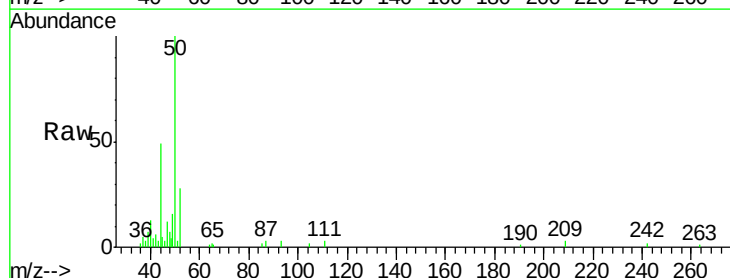
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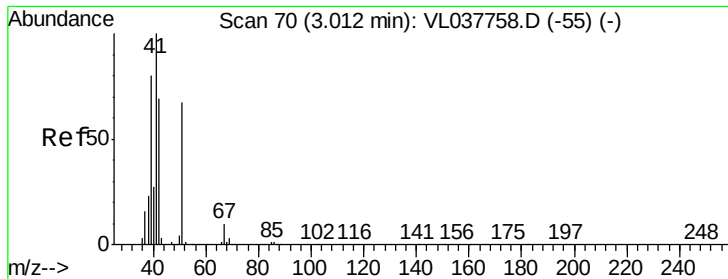
Tgt Ion: 50 Resp: 38030

Ion Ratio Lower Upper

50 100

52 27.8 24.4 36.6





#9

Propene

Concen: 1.195 ppbv

RT: 3.01

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 13 Oct 2021 00:30

Tot Ion:

Ion Ratio

41 100

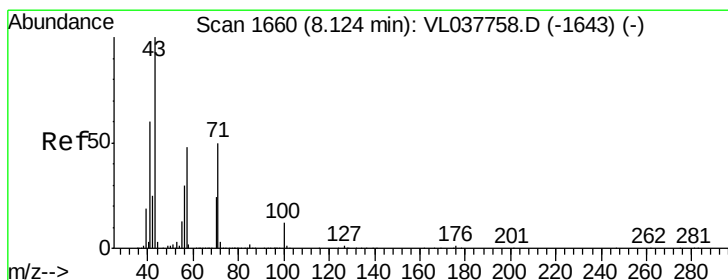
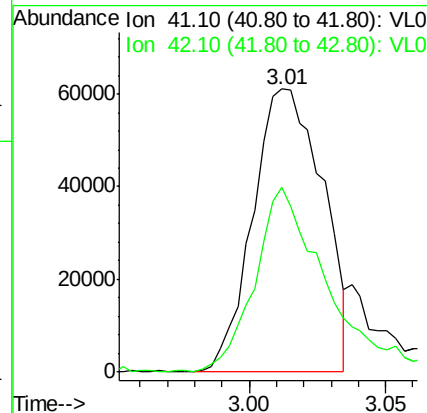
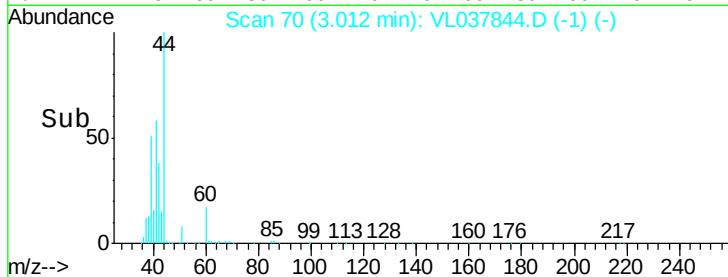
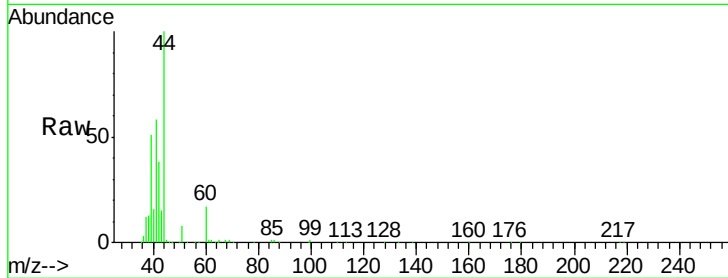
42 66.

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 10/14/2021

Supervised By :Mahesh Dadoda 10/15/2021



#10

Heptane

Concen: 0.192 ppbv

RT: 8.12 min Scan# 1659

Delta R.T. -0.00 min

Lab File: VL037844.D

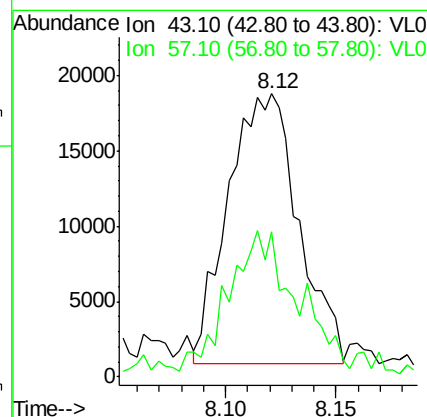
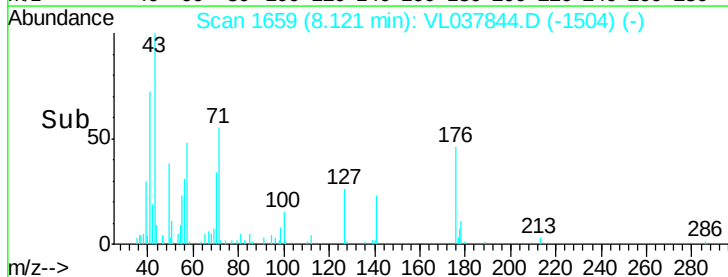
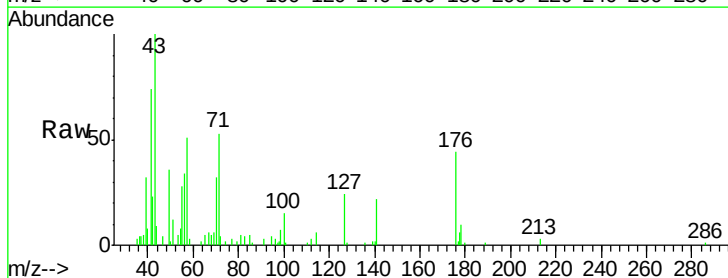
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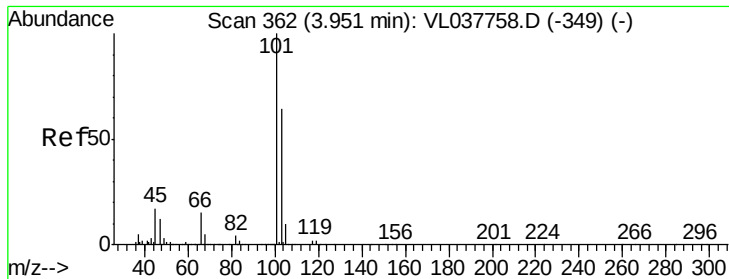
Tgt Ion: 43 Resp: 39688

Ion Ratio Lower Upper

43 100

57 63.2 40.0 60.0#



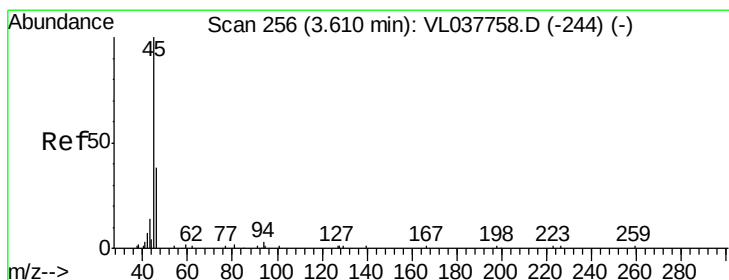
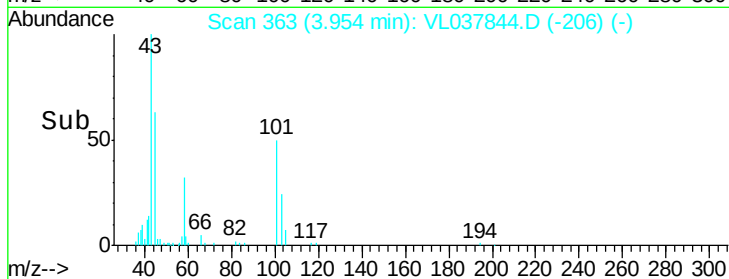
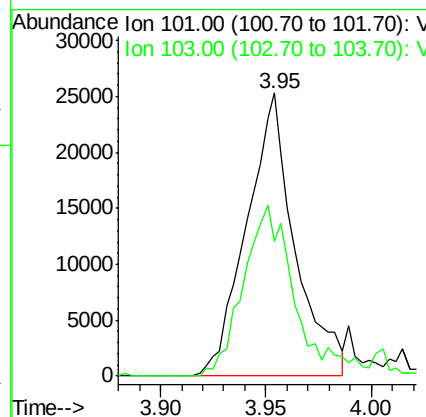
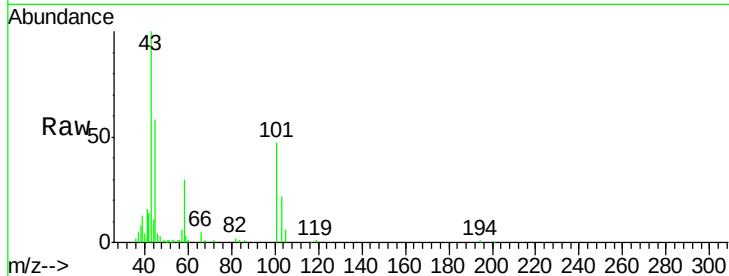


#11
 Trichlorofluoromethane
 Concen: 0.221 ppbv
 RT: 3.95
 Delta R.T.:
 Lab File: MSVOA_L
 ClientSampleId:
 Acq: 13 Oct 2021 00:30

Tot Ion:1
 Ion Rati
 101 100
 103 47.

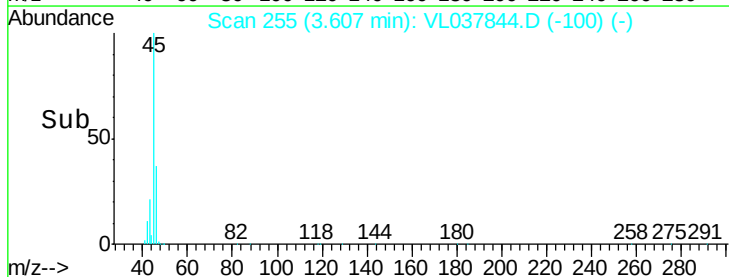
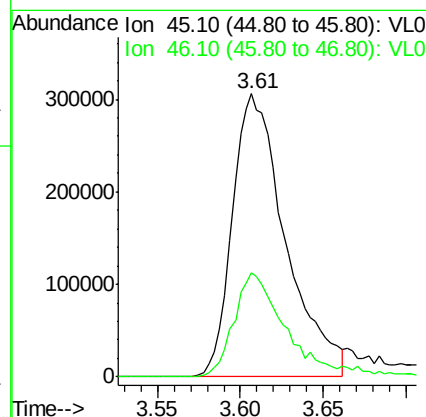
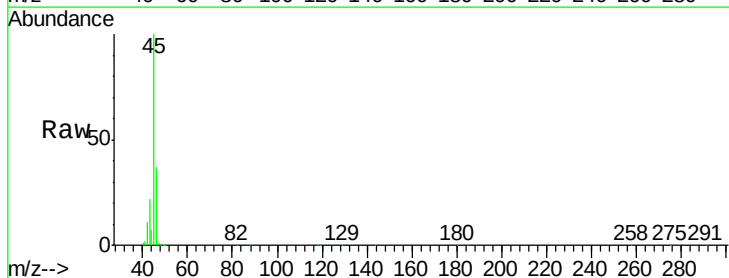
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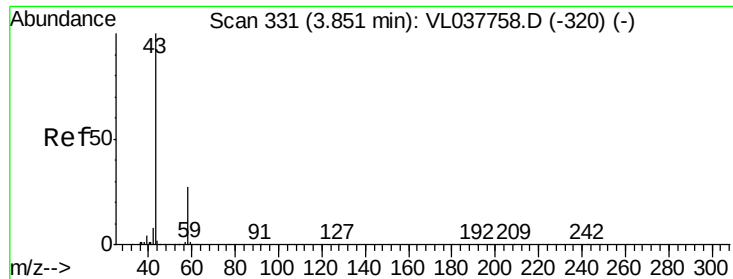
Reviewed By :Semsettin Yesilyurt 10/14/2021
 Supervised By :Mahesh Dadoda 10/15/2021



#13
 Ethanol
 Concen: 91.239 ppbv
 RT: 3.61 min Scan# 255
 Delta R.T. -0.00 min
 Lab File: VL037844.D
 Acq: 13 Oct 2021 00:30

Tgt Ion: 45 Resp: 677392
 Ion Ratio Lower Upper
 45 100
 46 37.3 20.2 81.0





#15

Acetone

Concen: 58.183 ppbv

RT: 3.84

Delta R.T. MSVOA_L

Lab File: ClientSampled :

Acq: 13 Oct 2021 00:30

Tot Ion:

Ion Ratio

43 100

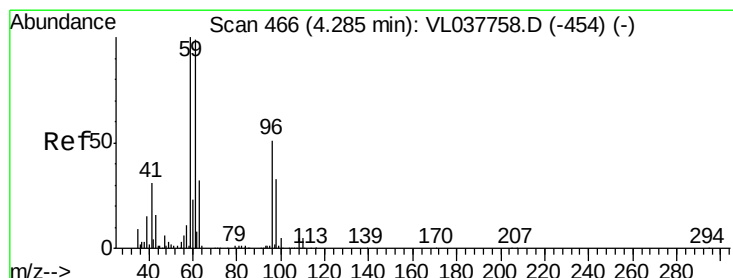
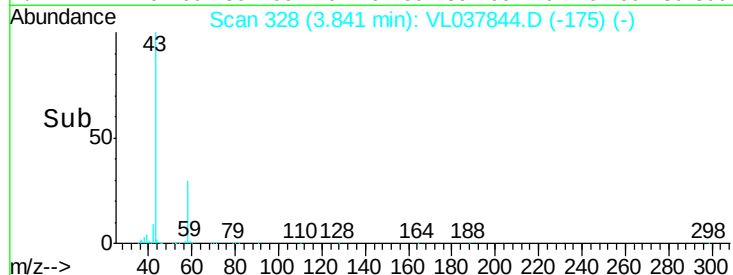
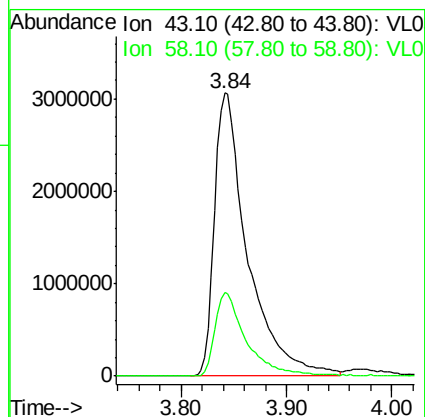
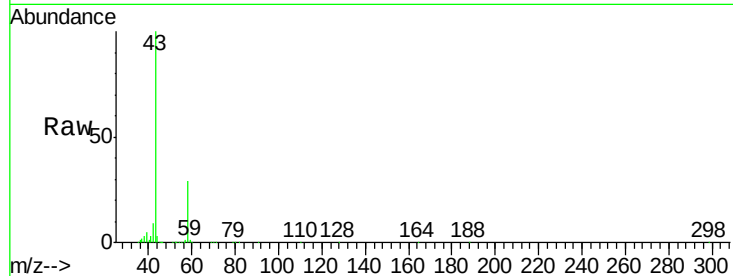
58 28.

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: 1.013 ppbv

RT: 4.30 min Scan# 472

Delta R.T. 0.02 min

Lab File: VL037844.D

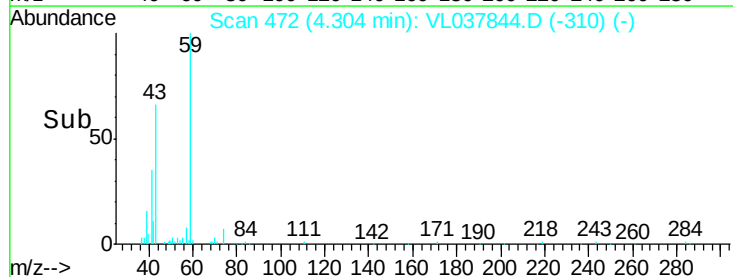
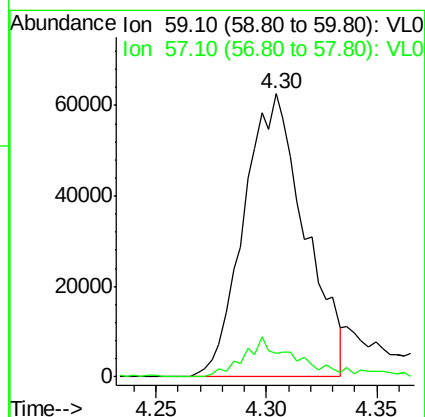
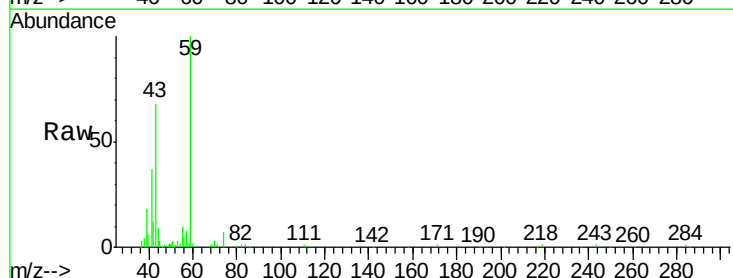
Acq: 13 Oct 2021 00:30

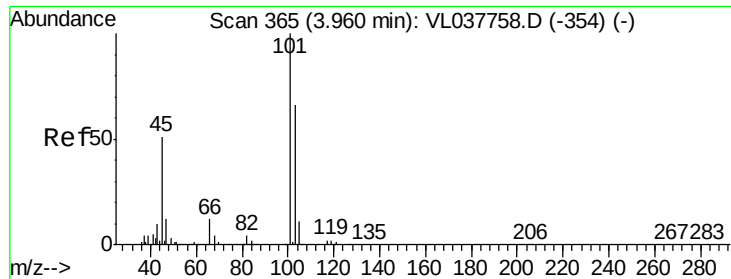
Tgt Ion: 59 Resp: 120286

Ion Ratio Lower Upper

59 100

57 10.3 8.6 13.0





#19

Isopropyl Alcohol

Concen: 4.690 ppbv

RT: 3.97 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 13 Oct 2021 00:30

Tot Ion:

Ion Ratio

45 100

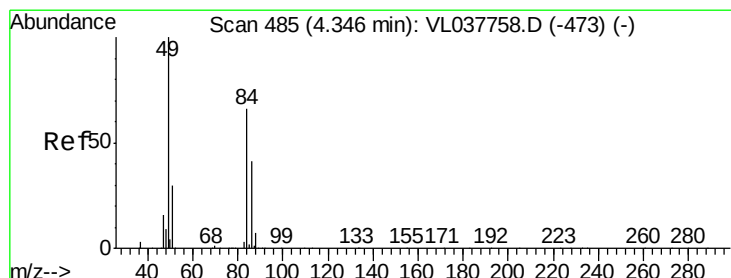
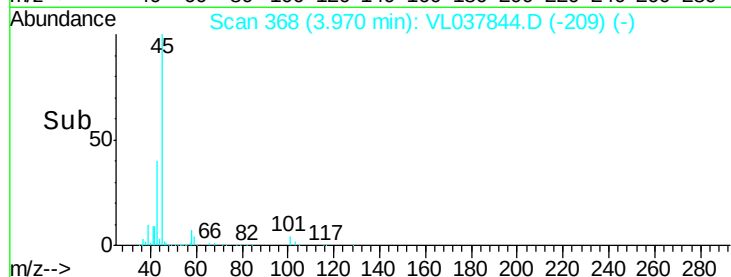
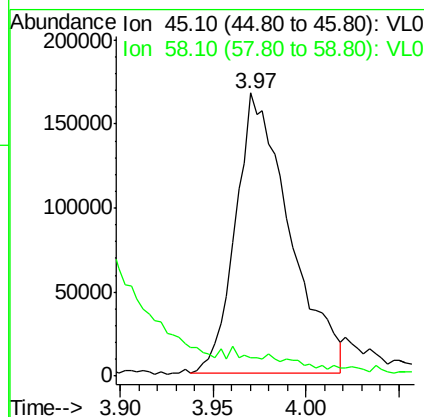
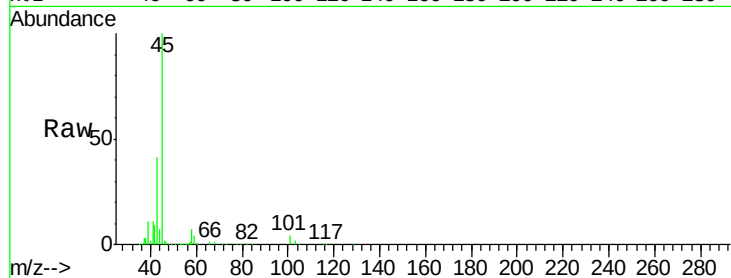
58 556.

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 10/14/2021

Supervised By :Mahesh Dadoda 10/15/2021



#20

Methylene Chloride

Concen: 10.064 ppbv

RT: 4.34 min Scan# 483

Delta R.T. -0.01 min

Lab File: VL037844.D

Acq: 13 Oct 2021 00:30

Tgt Ion: 84 Resp: 586198

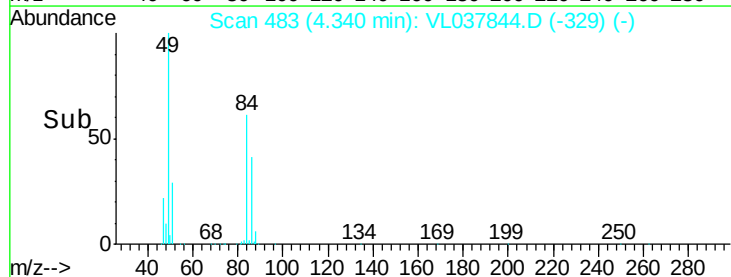
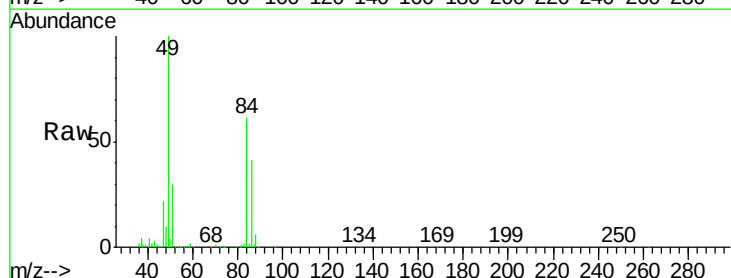
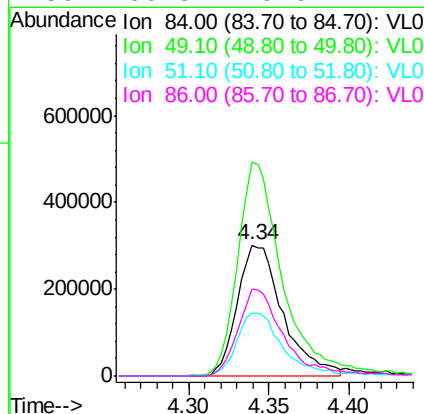
Ion Ratio Lower Upper

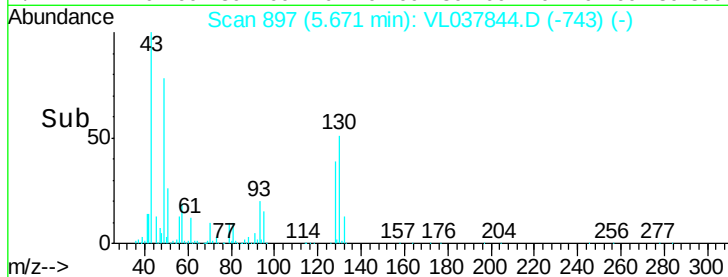
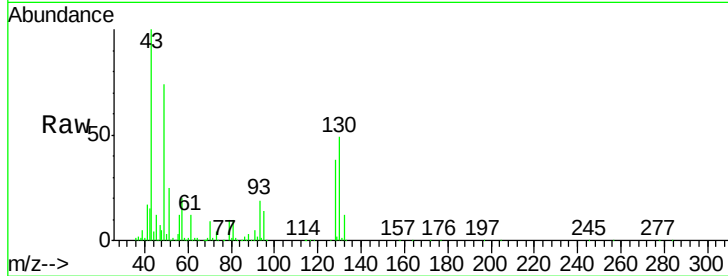
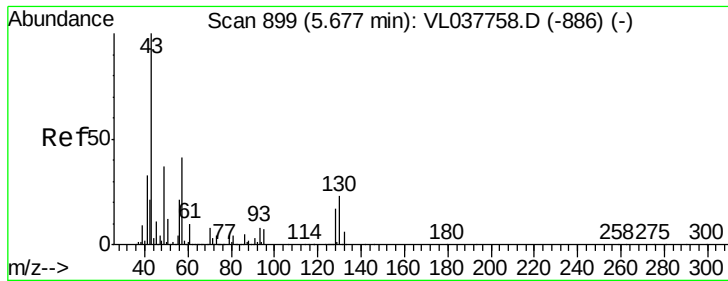
84 100

49 162.5 120.7 181.1

51 47.4 36.2 54.4

86 66.3 49.6 74.4



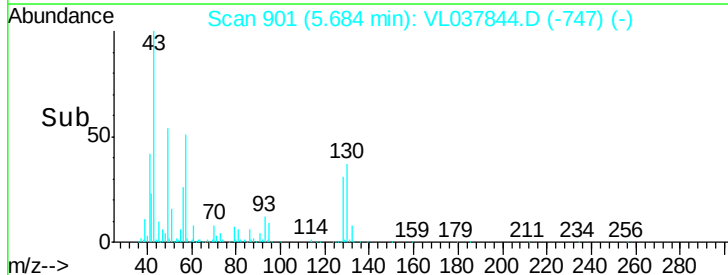
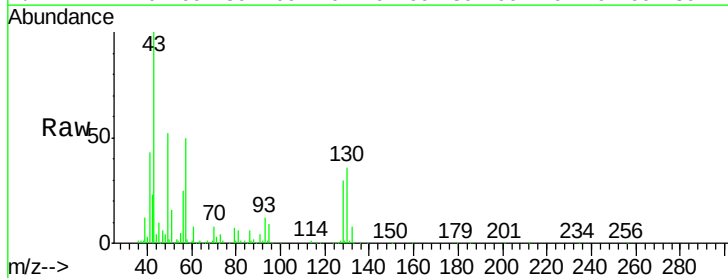
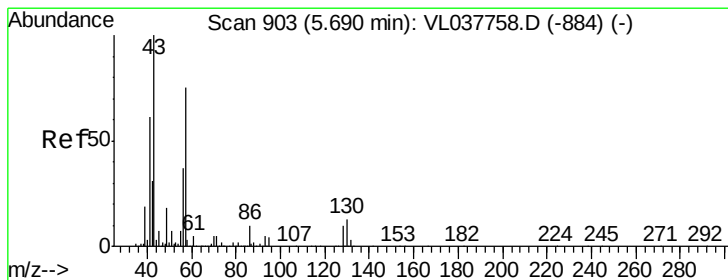
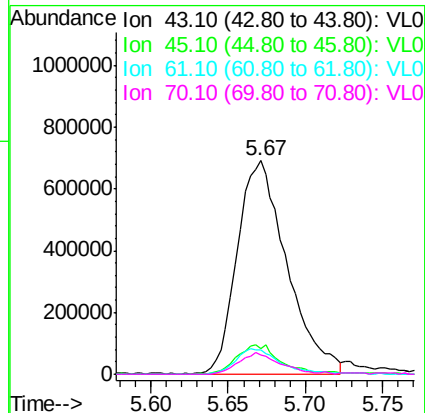


#25
Ethyl Acetate
Concen: 4.742 ppbv
RT: 5.67
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId:
Acq: 13 Oct 2021 00:30

Tot Ion:
Ion Ratio
43 100
45 12.
61 11.
70 9.3 5.9 8.9#

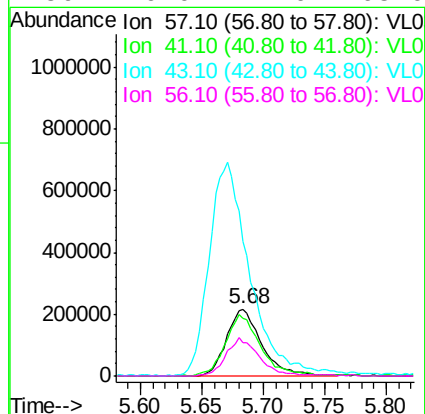
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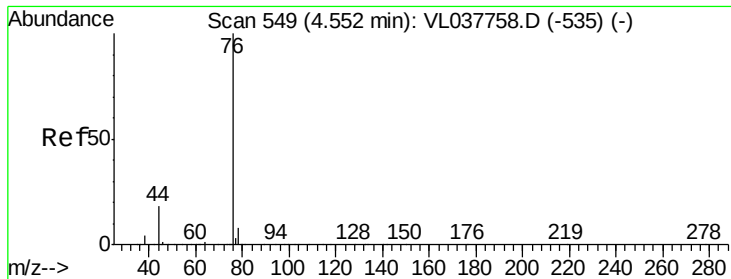
Reviewed By :Semsettin Yesilyurt 10/14/2021
Supervised By :Mahesh Dadoda 10/15/2021



#26
Hexane
Concen: 2.701 ppbv m
RT: 5.68 min Scan# 901
Delta R.T. -0.01 min
Lab File: VL037844.D
Acq: 13 Oct 2021 00:30

Tgt Ion: 57 Resp: 430237
Ion Ratio Lower Upper
57 100
41 0.0 69.6 104.4#
43 0.0 171.4 257.0#
56 0.0 42.0 63.0#





#27

Carbon Disulfide

Concen: 0.160 ppbv

RT: 4.55 Instrument: MSVOA_L

Delta R.T. ClientSampleId:

Lab File: 1ST-FLOOR

Acq: 13 Oct 2021 00:30

Tot Ion:

Ion Ratio

76 100

44 31.

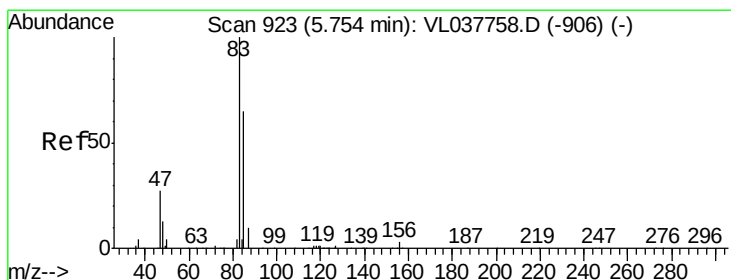
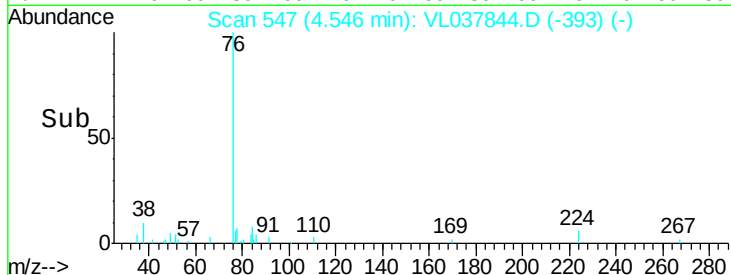
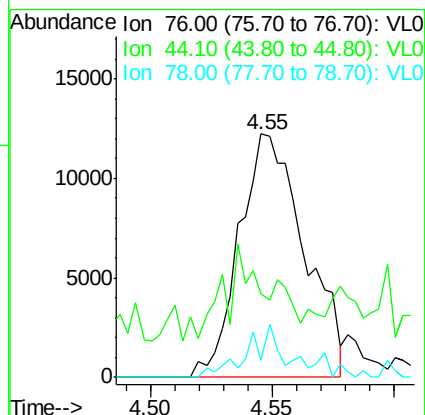
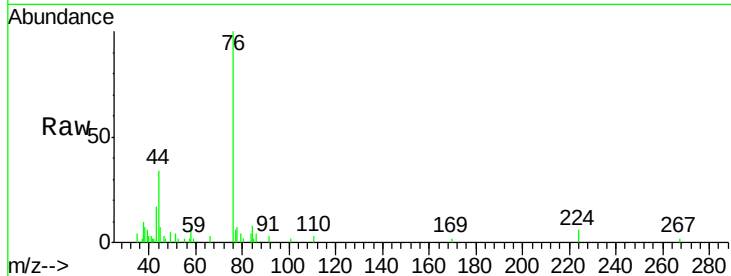
78 14.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 10/14/2021

Supervised By :Mahesh Dadoda 10/15/2021



#29

Chloroform

Concen: 0.902 ppbv

RT: 5.75 min Scan# 922

Delta R.T. -0.00 min

Lab File: VL037844.D

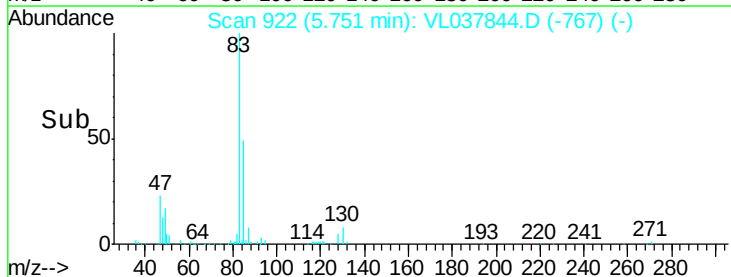
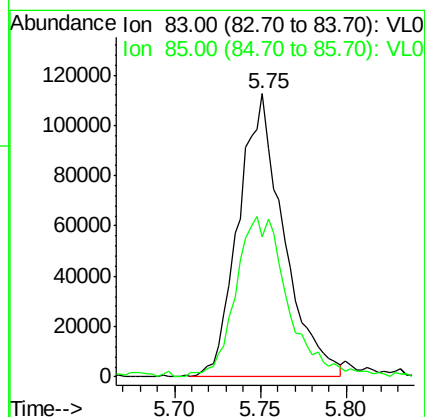
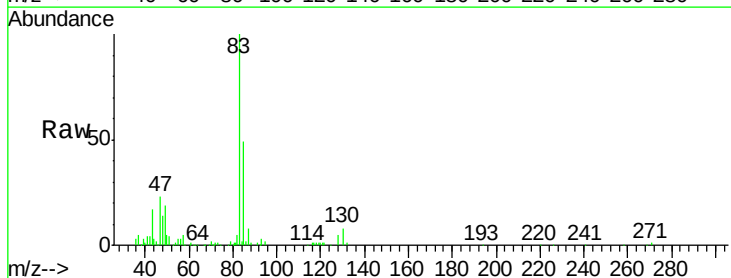
Acq: 13 Oct 2021 00:30

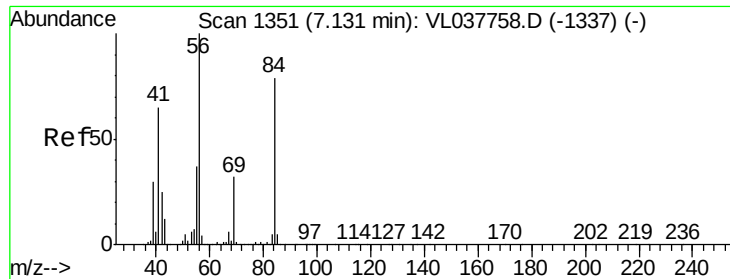
Tgt Ion: 83 Resp: 205306

Ion Ratio Lower Upper

83 100

85 47.8 51.8 77.8#



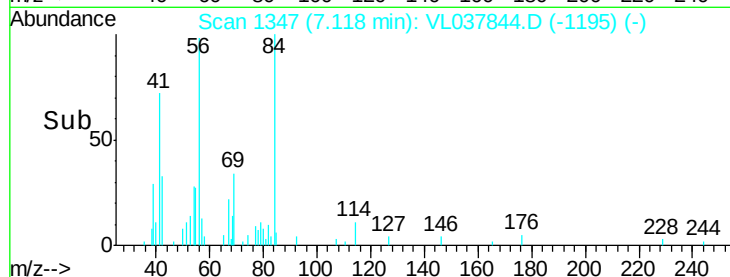
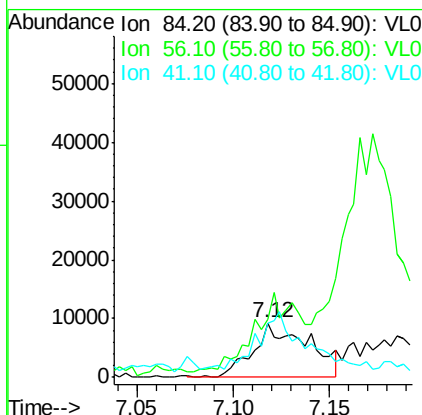
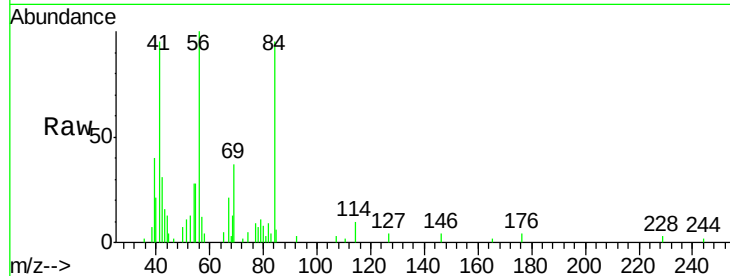


#30
Cvclohexane
Concen: 0.137 ppbv m
RT: 7.12 Instrument : MSVOA_L
Delta R.T. :
Lab File: ClientSampleId :
Acq: 13 Oct 2021 00:30

Tot Ion:
Ion Ratio
84 100
56 0.
41 114.

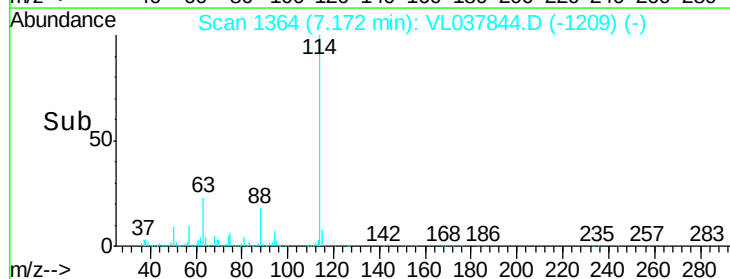
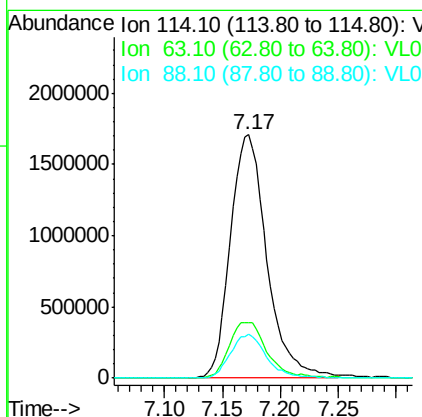
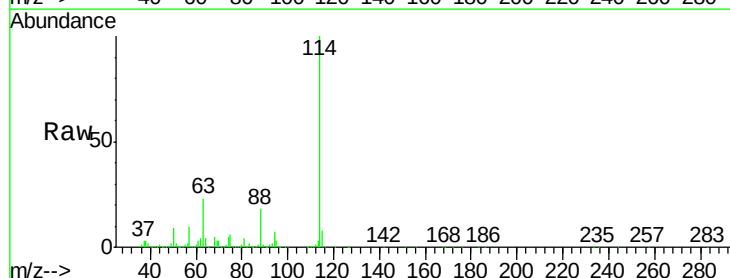
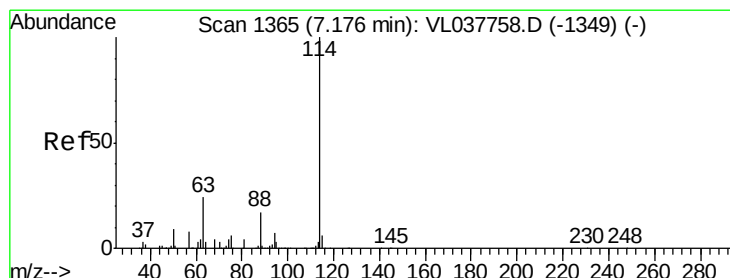
Manual Integrations
APPROVED

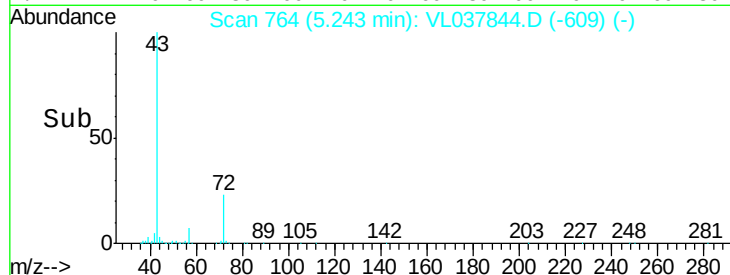
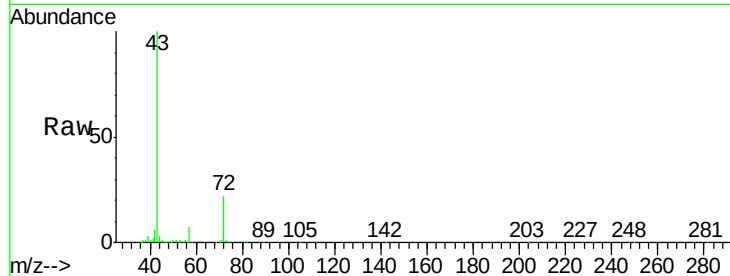
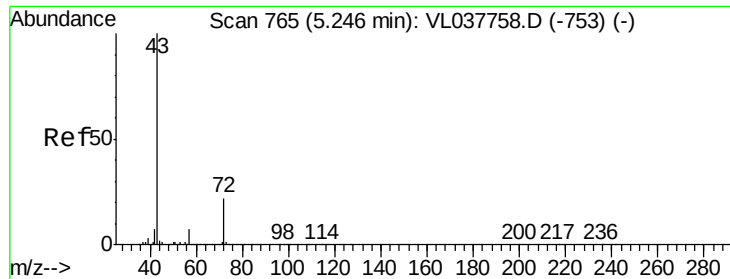
Reviewed By :Semsettin Yesilyurt 10/14/2021
Supervised By :Mahesh Dadoda 10/15/2021



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.17 min Scan# 1364
Delta R.T. -0.00 min
Lab File: VL037844.D
Acq: 13 Oct 2021 00:30

Tgt Ion:114 Resp: 3726181
Ion Ratio Lower Upper
114 100
63 24.1 19.4 29.2
88 18.0 14.4 21.6



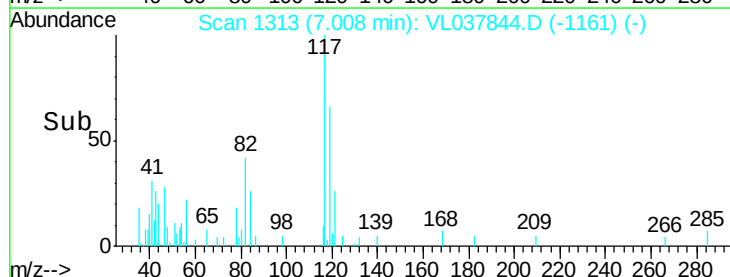
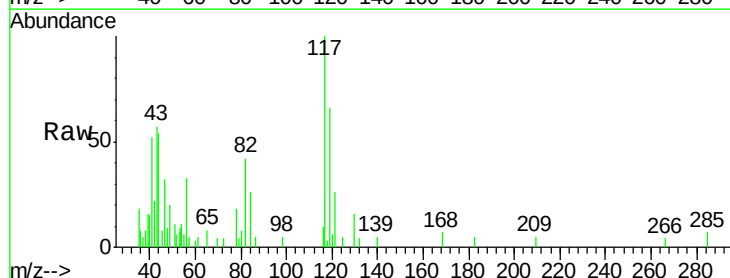
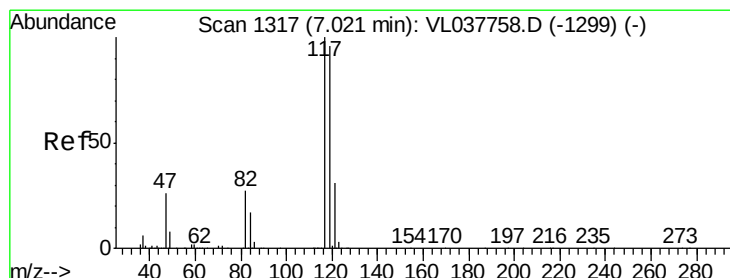
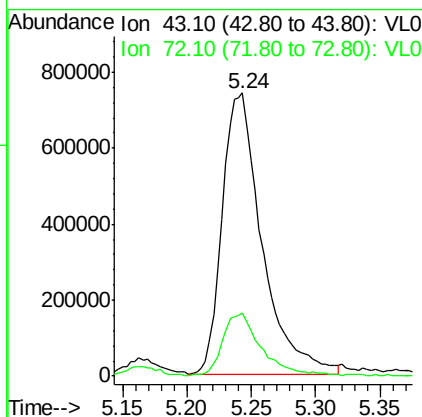


#34
2-Butanone
Concen: 10.516 ppbv
RT: 5.24
Instrument: MSVOA_L
Delta R.T.:
Lab File: ClientSampleId:
Acq: 13 Oct 2021 00:30

Tot Ion:
Ion Ratio
43 100
72 22.

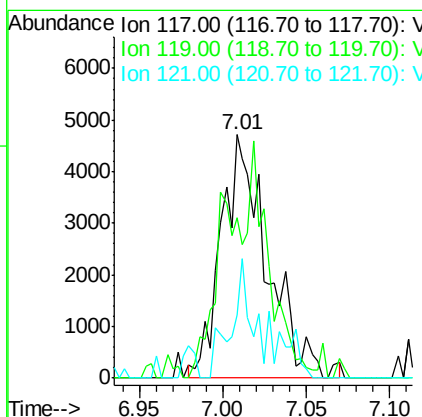
Manual Integrations
APPROVED

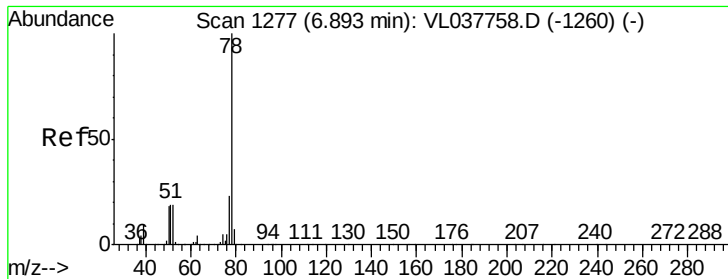
Reviewed By :Semsettin Yesilyurt 10/14/2021
Supervised By :Mahesh Dadoda 10/15/2021



#35
Carbon Tetrachloride
Concen: 0.043 ppbv m
RT: 7.01 min Scan# 1313
Delta R.T. -0.01 min
Lab File: VL037844.D
Acq: 13 Oct 2021 00:30

Tgt Ion:117 Resp: 9033
Ion Ratio Lower Upper
117 100
119 65.7 76.5 114.7#
121 25.9 24.9 37.3





#36

Benzene

Concen: 0.333 ppbv

RT: 6.89 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 13 Oct 2021 00:30 1ST-FLOOR

Tot Ion:

Ion Ratio

78 100

77 23.

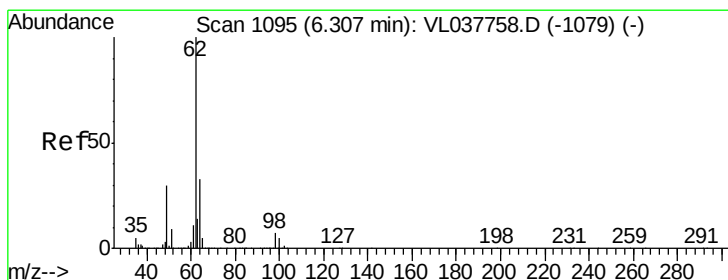
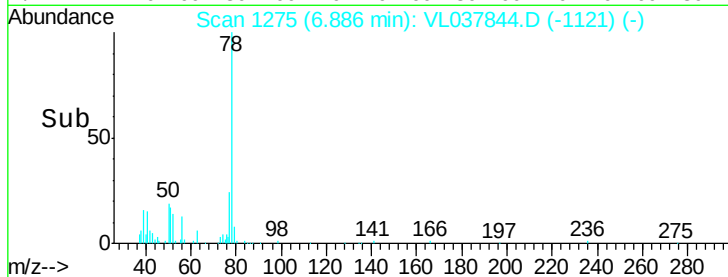
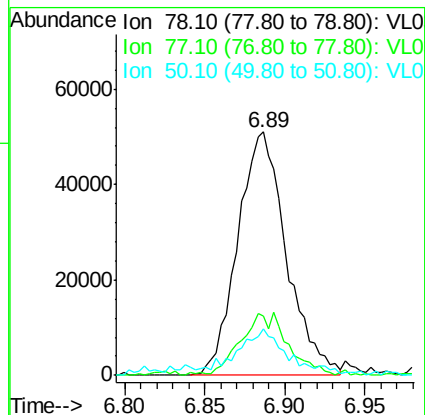
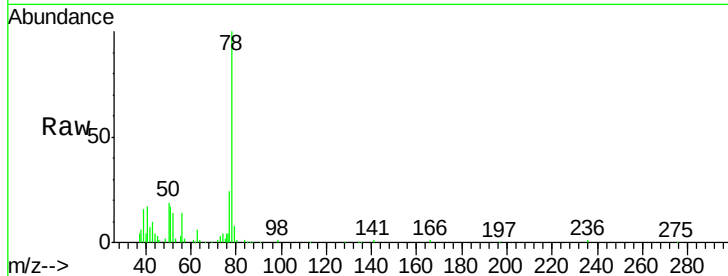
50 18.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 10/14/2021

Supervised By :Mahesh Dadoda 10/15/2021



#37

1,2-Dichloroethane

Concen: 0.814 ppbv

RT: 6.30 min Scan# 1092

Delta R.T. -0.01 min

Lab File: VL037844.D

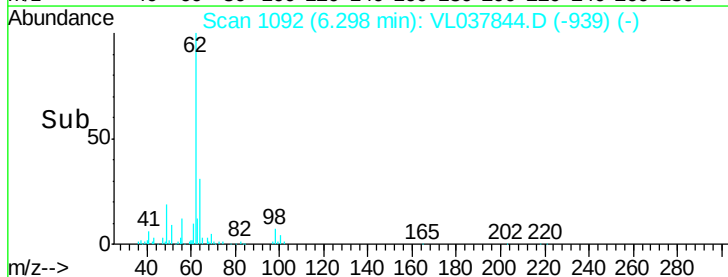
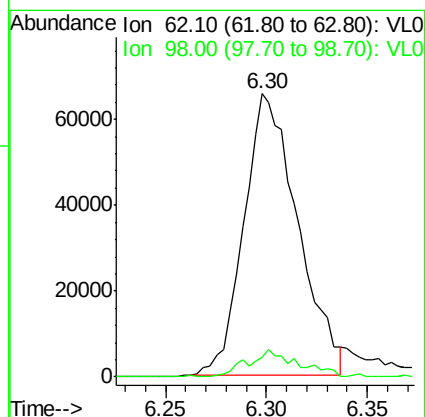
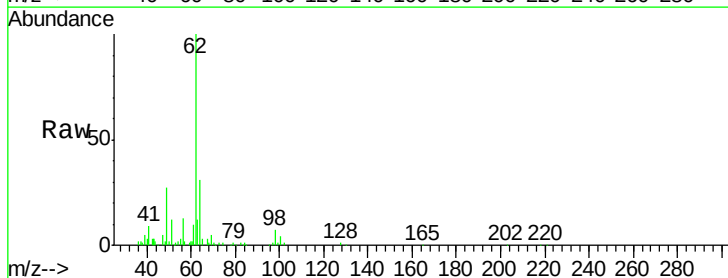
Acq: 13 Oct 2021 00:30

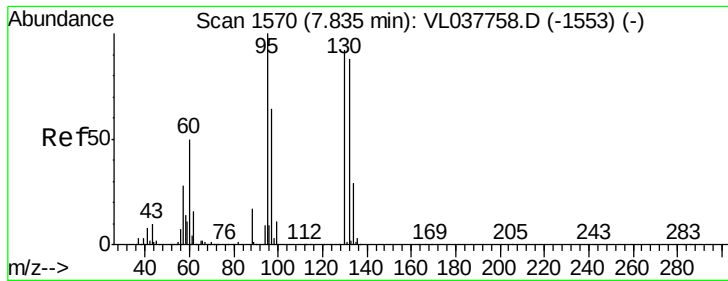
Tgt Ion: 62 Resp: 121948

Ion Ratio Lower Upper

62 100

98 9.3 6.1 9.1#





#38

Trichloroethene

Concen: 0.416 ppbv m

RT: 7.83 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 13 Oct 2021 00:30

Tot Ion:1

Ion Ratio

130 100

95 83.

132 101.

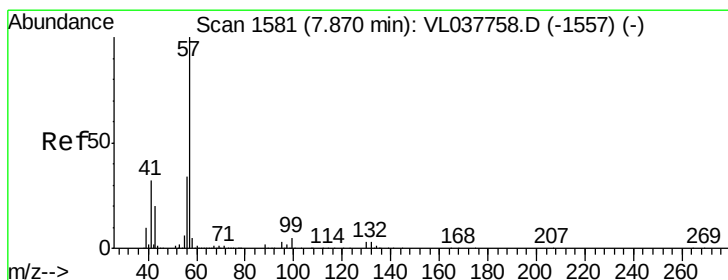
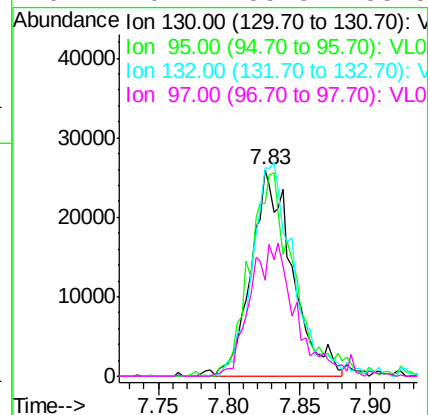
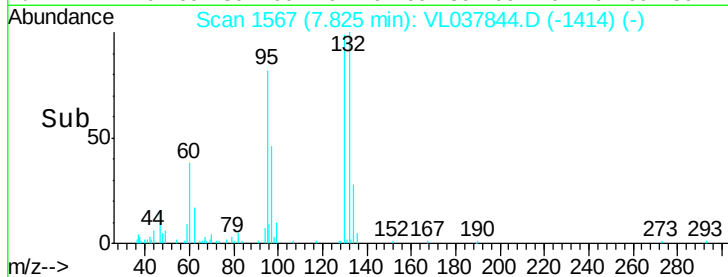
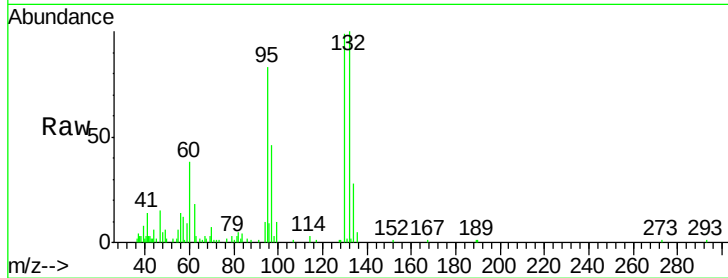
97 46.4 55.8 83.8#

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 10/14/2021

Supervised By :Mahesh Dadoda 10/15/2021



#44

2,2,4-Trimethylpentane

Concen: 0.183 ppbv m

RT: 7.86 min Scan# 1578

Delta R.T. -0.01 min

Lab File: VL037844.D

Acq: 13 Oct 2021 00:30

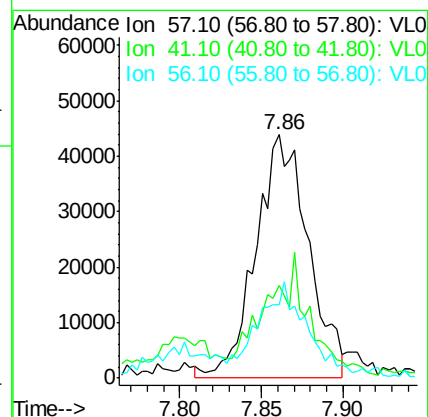
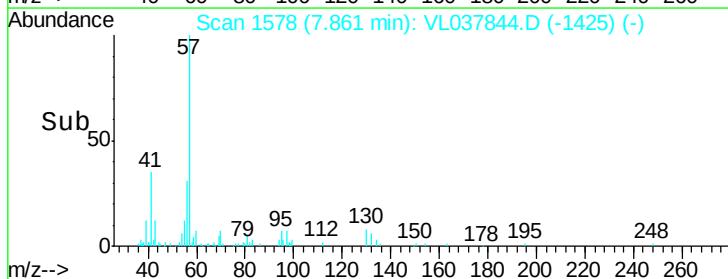
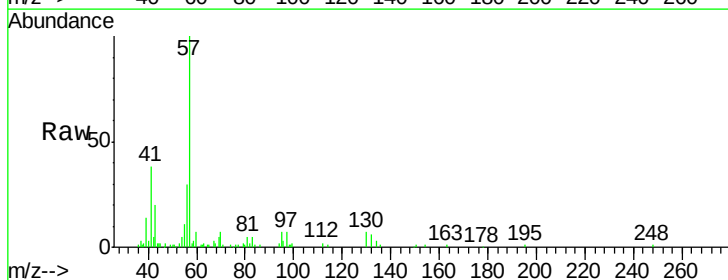
Tgt Ion: 57 Resp: 97703

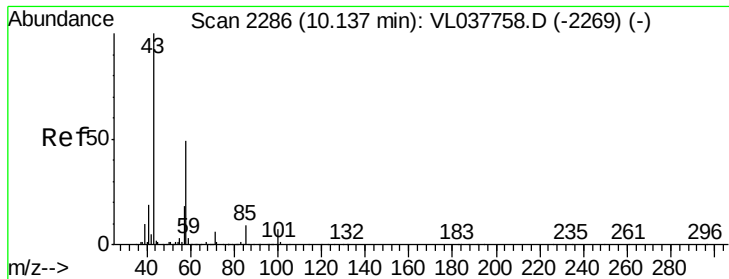
Ion Ratio Lower Upper

57 100

41 44.6 25.6 38.4#

56 0.0 25.5 38.3#





#51

2-Hexanone

Concen: 0.811 ppbv

RT: 10.14

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 13 Oct 2021 00:30

Tot Ion:

Ion Ratio

43 100

58 68.

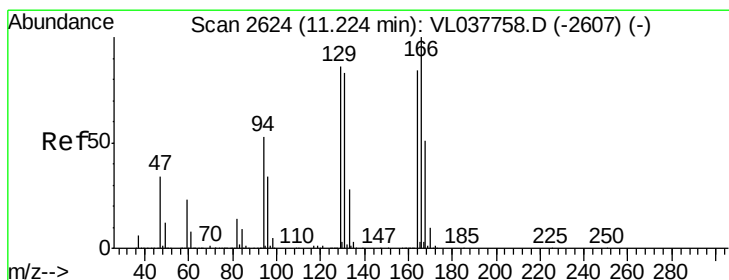
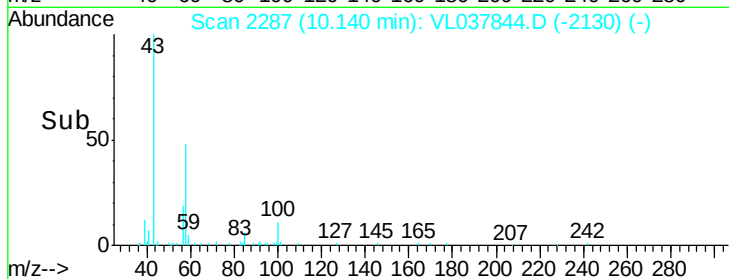
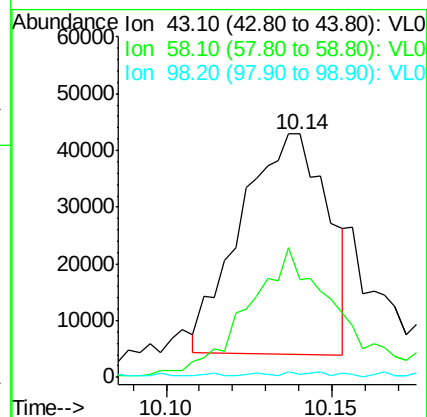
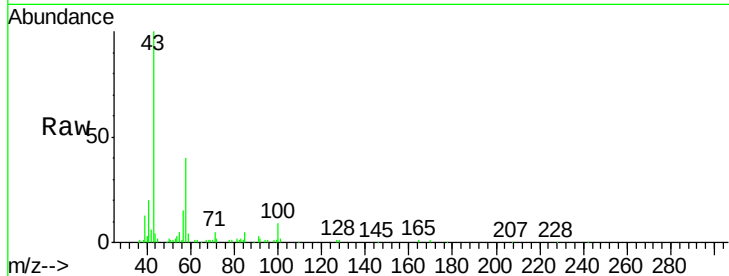
98 0.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 10/14/2021

Supervised By :Mahesh Dadoda 10/15/2021



#52

Tetrachloroethene

Concen: 27.065 ppbv

RT: 11.22 min Scan# 2623

Delta R.T. -0.00 min

Lab File: VL037844.D

Acq: 13 Oct 2021 00:30

Tgt Ion:164 Resp: 3351243

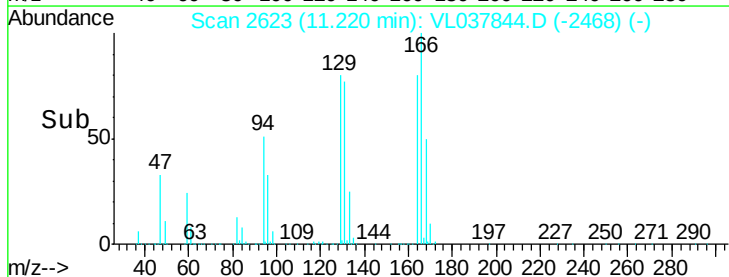
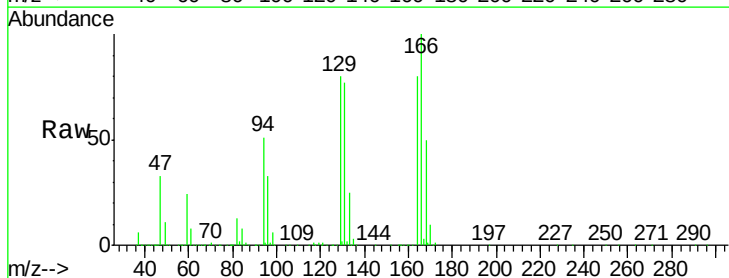
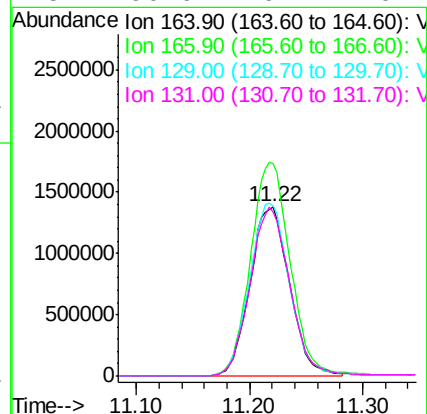
Ion Ratio Lower Upper

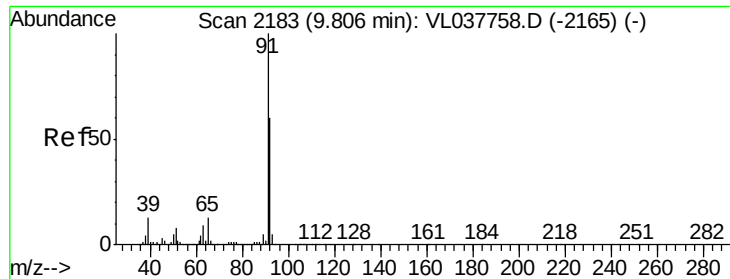
164 100

166 125.5 95.4 143.2

129 100.2 82.2 123.4

131 96.6 79.4 119.2





#53

Toluene

Concen: 5.839 ppbv

RT: 9.80

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 13 Oct 2021 00:30

Tot Ion:

Ion Ratio

91 100

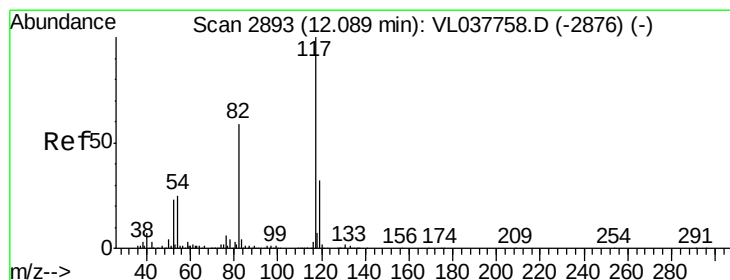
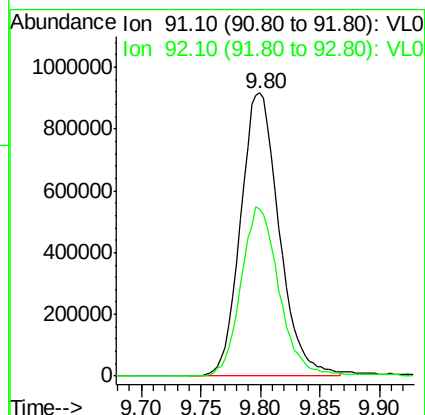
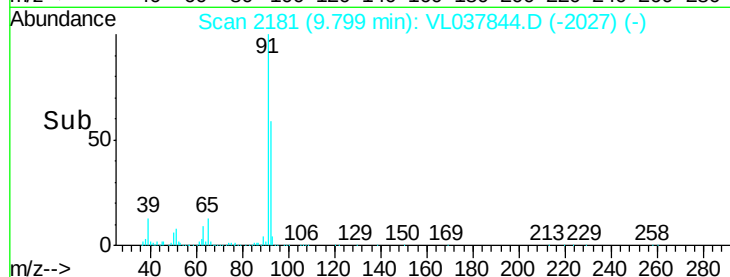
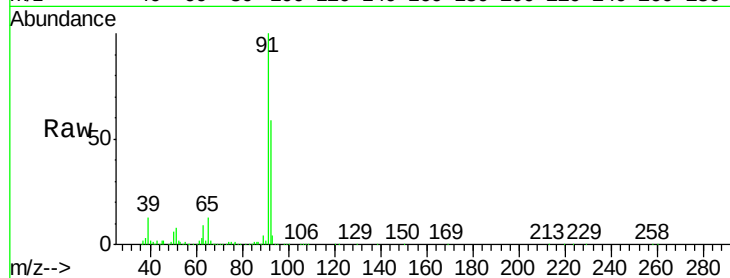
92 59.

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: VL037844.D

Acq: 13 Oct 2021 00:30

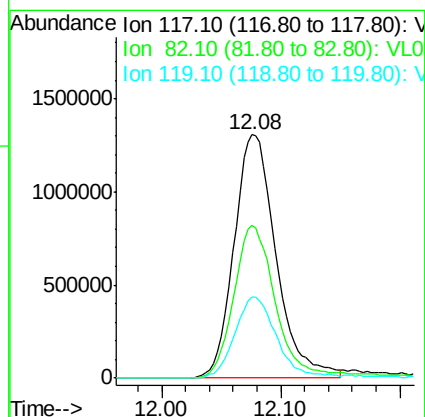
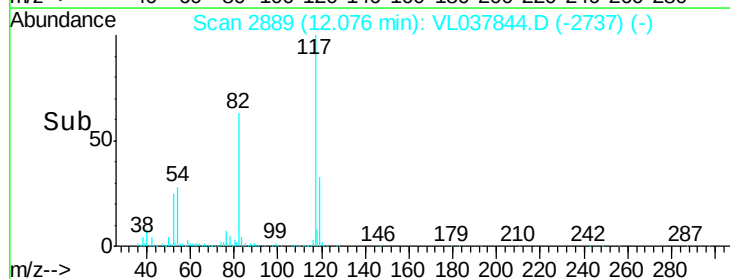
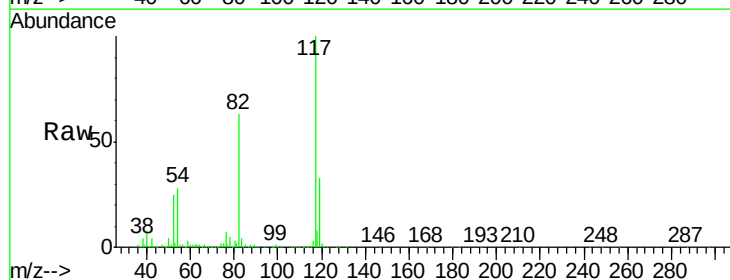
Tgt Ion:117 Resp: 3191508

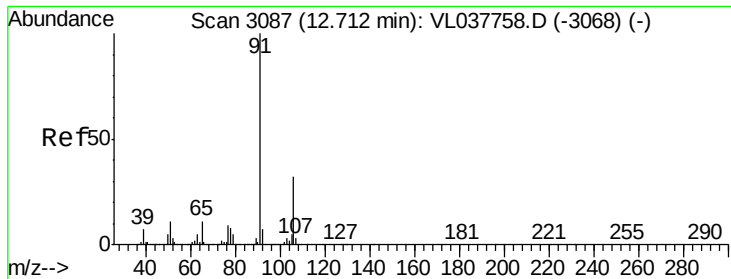
Ion Ratio Lower Upper

117 100

82 65.6 52.2 78.2

119 34.2 26.0 39.0





#58

Ethyl Benzene

Concen: 0.378 ppbv

RT: 12.70

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 13 Oct 2021 00:30

Tot Ion:

Ion Ratio

91 100

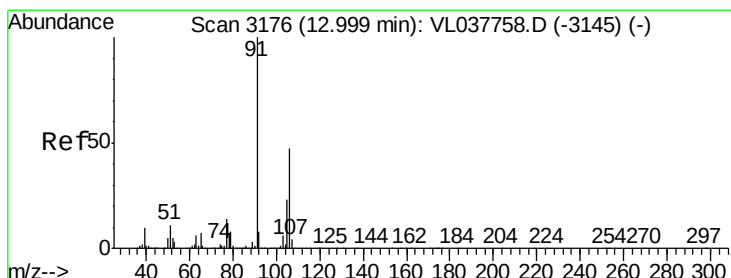
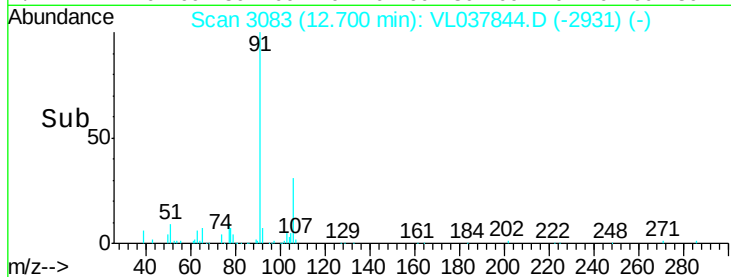
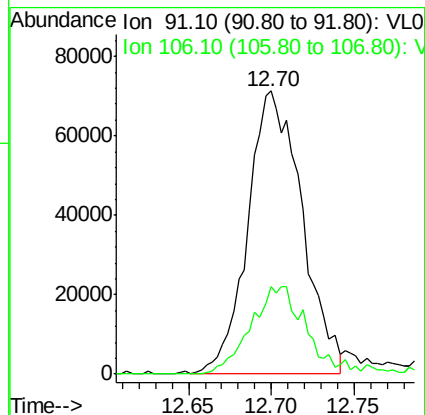
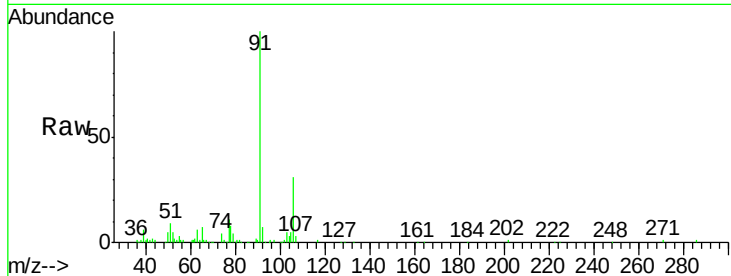
106 31.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 10/14/2021

Supervised By :Mahesh Dadoda 10/15/2021



#59

m/p-Xylene

Concen: 1.357 ppbv m

RT: 12.96 min Scan# 3163

Delta R.T. -0.04 min

Lab File: VL037844.D

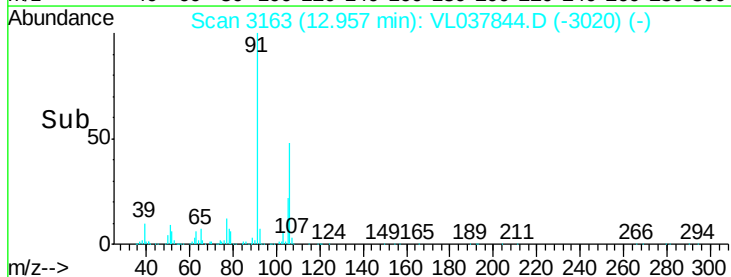
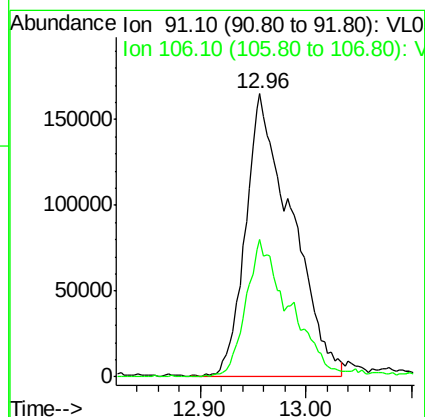
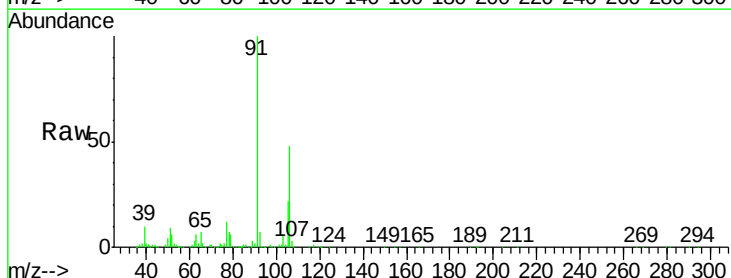
Acq: 13 Oct 2021 00:30

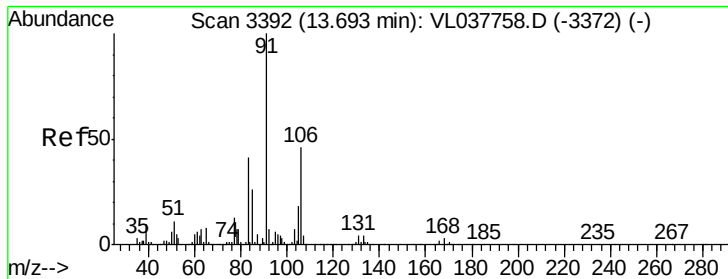
Tgt Ion: 91 Resp: 499367

Ion Ratio Lower Upper

91 100

106 0.0 36.7 55.1#





#60

o-Xylene

Concen: 0.533 ppbv

RT: 13.68

Delta R.T.

Lab File:

Acq: 13 Oct 2021 00:30

Instrument :

MSVOA_1

ClientSampleId :

1ST-FLOOR

Tot Ion:

Ion Ratio

91 100

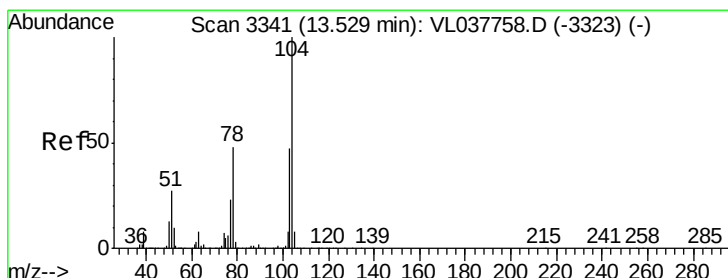
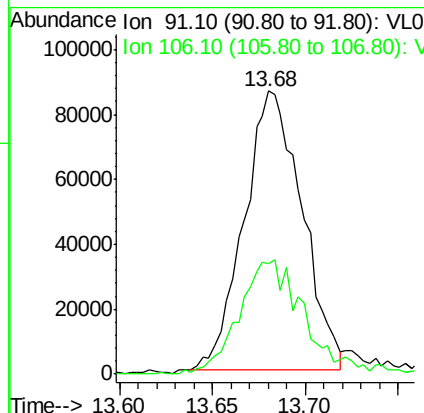
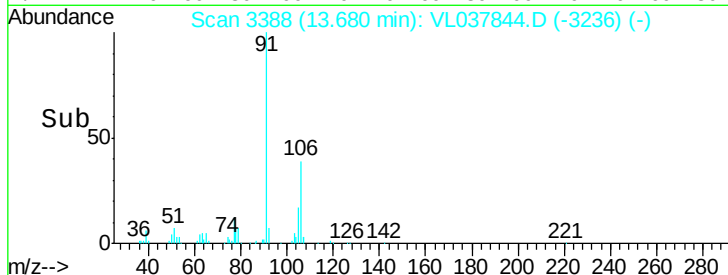
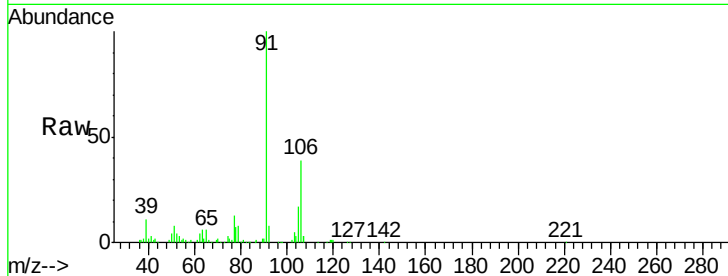
106 46.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 10/14/2021

Supervised By :Mahesh Dadoda 10/15/2021



#61

Styrene

Concen: 0.423 ppbv m

RT: 13.52 min Scan# 3337

Delta R.T. -0.01 min

Lab File: VL037844.D

Acq: 13 Oct 2021 00:30

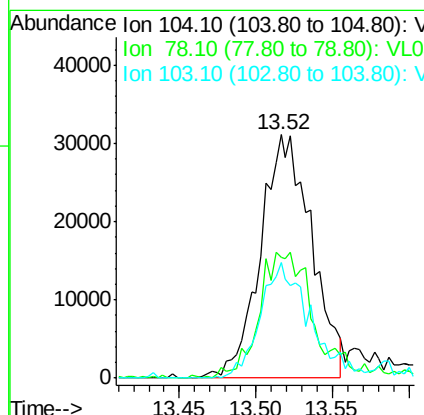
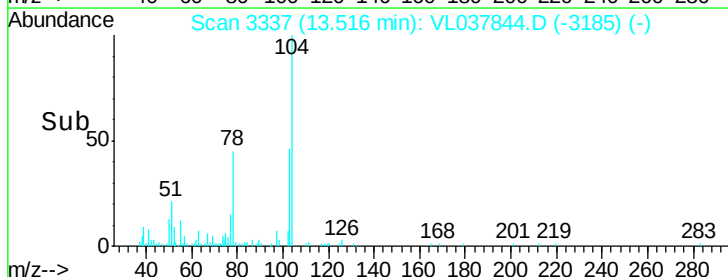
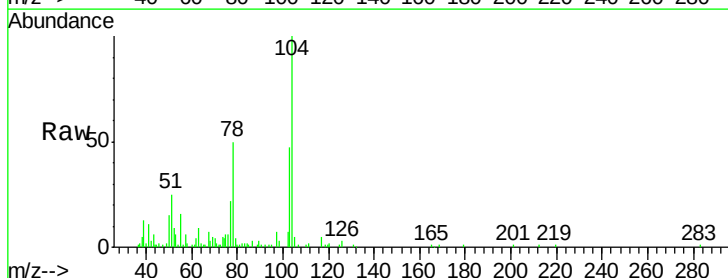
Tgt Ion:104 Resp: 72092

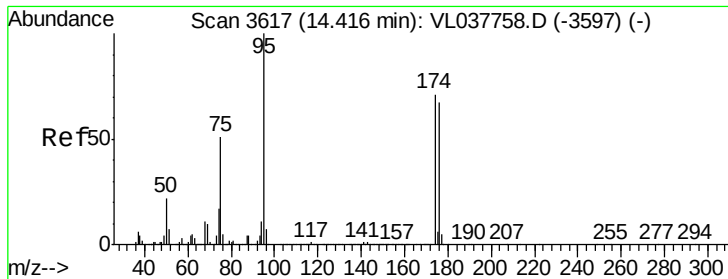
Ion Ratio Lower Upper

104 100

78 0.0 40.6 61.0#

103 46.3 39.6 59.4





#68

1-Bromo-4-Fluorobenzene

Concen: 9.775 ppbv

RT: 14.40

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 13 Oct 2021 00:30

Tot Ion:

Ion Ratio

95 100

174 77.

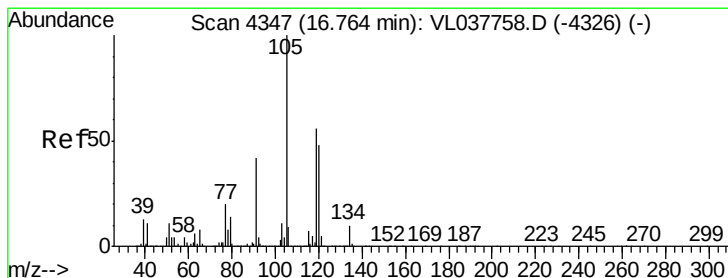
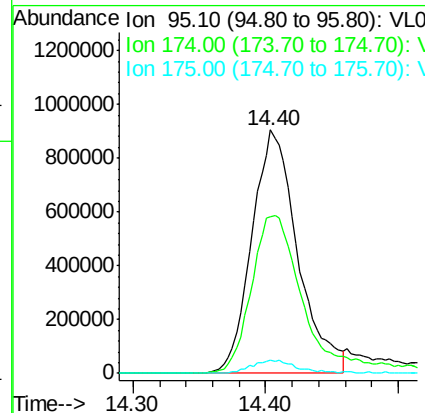
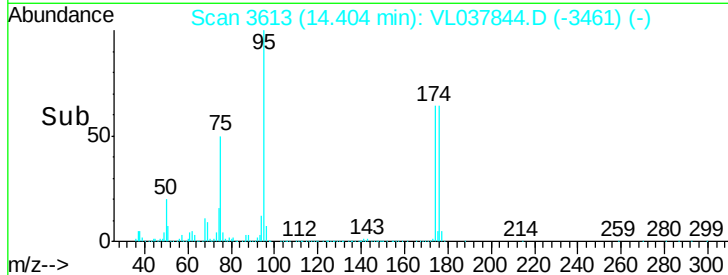
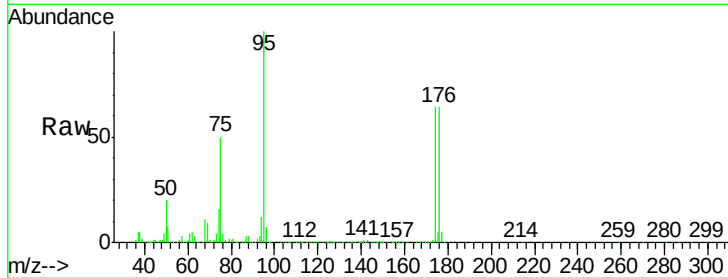
175 5.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 10/14/2021

Supervised By :Mahesh Dadoda 10/15/2021



#74

1,2,4-Trimethylbenzene

Concen: 0.223 ppbv m

RT: 16.75 min Scan# 4342

Delta R.T. -0.02 min

Lab File: VL037844.D

Acq: 13 Oct 2021 00:30

Tgt Ion:105 Resp: 85062

Ion Ratio Lower Upper

105 100

120 41.0 38.4 57.6

91 12.3 34.2 51.2#

77 15.1 15.8 23.8#

