

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032222\
 Data File : VL038701.D
 Acq On : 23 Mar 2022 2:23
 Operator : SY/AP
 Sample : N2046-01DUP
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 C0P89DUP

Manual Integrations
 APPROVED

Reviewed By : Semsettin Yesilyurt 03/23/2022
 Supervised By : Mahesh Dadoda 03/25/2022

Quant Time: Mar 28 05:08:37 2022

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL032122A

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

QLast Update : Mon Mar 21 17:09:26 2022

Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.65	49	836120	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.15	114	2299244	10.00	ppbv	-0.01
55) Chlorobenzene-d5	12.06	117	2114183	10.00	ppbv	-0.02

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.39	95	1528199	9.43	ppbv	-0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	=	94.30%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	3.04	85	18618	0.17	ppbv	96
3) Chlorodifluoromethane	2.98	51	35654	0.40	ppbv #	89
4) Chloromethane	3.13	50	8845	0.18	ppbv	94
9) Propene	3.01	41	93451	2.19	ppbv	91
11) Trichlorofluoromethane	3.94	101	18830	0.19	ppbv	86
13) Ethanol	3.59	45	267095	56.79	ppbv	98
15) Acetone	3.83	43	1475205	20.45	ppbv	93
17) tert-Butyl alcohol	4.28	59	59083	0.94	ppbv	98
19) Isopropyl Alcohol	3.95	45	142486	3.56	ppbv #	1
20) Methylene Chloride	4.33	84	49078	1.62	ppbv	96
26) Hexane	5.67	57	73613	0.91	ppbv #	59
27) Carbon Disulfide	4.53	76	13627	0.17	ppbv #	61
29) Chloroform	5.74	83	108604	0.83	ppbv	97
30) Cyclohexane	7.11	84	16653m	0.24	ppbv	
32) 1,1,1-Trichloroethane	6.49	97	18116	0.14	ppbv	97
34) 2-Butanone	5.22	43	1678523	18.44	ppbv	98
35) Carbon Tetrachloride	7.00	117	4873m	0.04	ppbv	
36) Benzene	6.87	78	33516	0.19	ppbv	98
38) Trichloroethene	7.81	130	10055	0.14	ppbv	89
41) Tetrahydrofuran	6.04	42	41840	0.62	ppbv	97
51) 2-Hexanone	10.12	43	140380	1.16	ppbv #	98
52) Tetrachloroethene	11.20	164	4314011	66.43	ppbv	94
53) Toluene	9.78	91	694372	3.64	ppbv	99
58) Ethyl Benzene	12.69	91	43350m	0.18	ppbv	
59) m/p-Xylene	12.94	91	78449m	0.36	ppbv	
60) o-Xylene	13.67	91	33881	0.17	ppbv	95
61) Styrene	13.50	104	12748m	0.11	ppbv	
69) p-Isopropyltoluene	17.63	119	39579m	0.12	ppbv	
74) 1,2,4-Trimethylbenzene	16.74	105	31203	0.13	ppbv #	75
75) 1,3-Dichlorobenzene	16.97	146	42505m	0.28	ppbv	

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

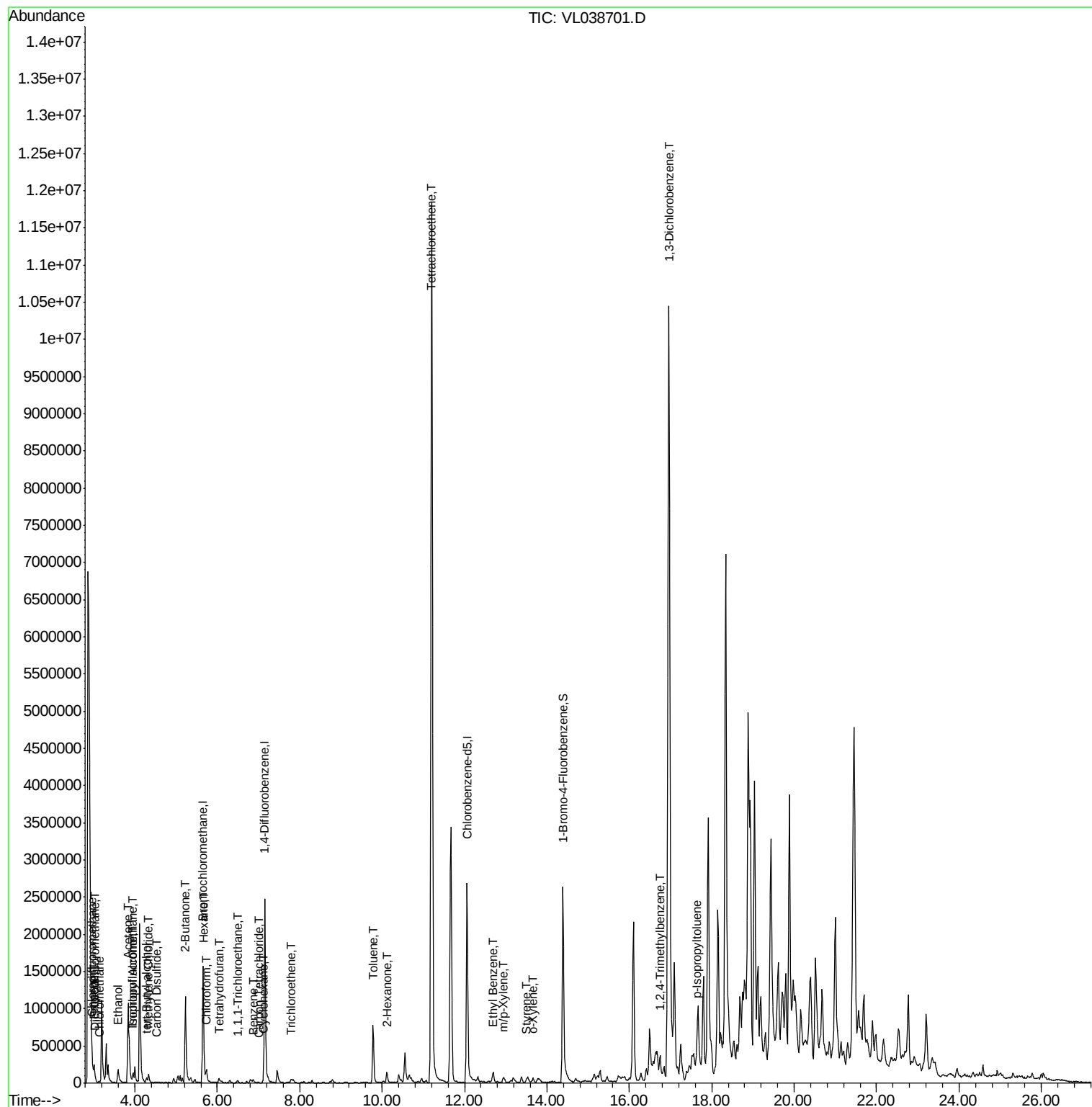
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032222\
Data File : VL038701.D
Acq On : 23 Mar 2022 2:23
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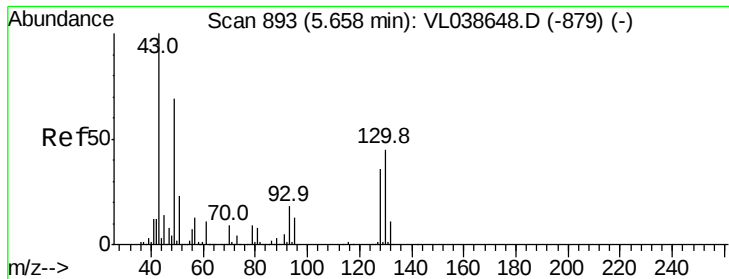
Instrument :
MSVOA_L
ClientSampleId :
C0P89DUP

Quant Time: Mar 28 05:08:37 2022
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL032122.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument:
QLast Update : Mon Mar 21 17:09:26 2022
Response via : Initial Calibration

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 03/23/2022
Supervised By :Mahesh Dadoda 03/25/2022





#1

Bromochloromethane

Concen: 10.00 ppbv

RT: 5.65 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 23 Mar 2022 2:23

Tgt Ion:

Ion Ratio

49 100

128 55.

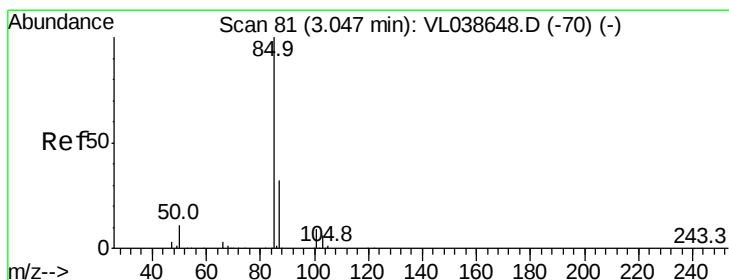
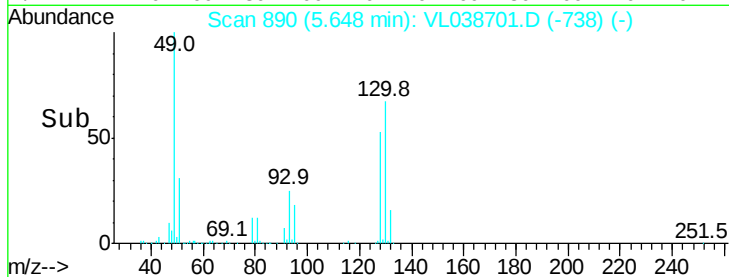
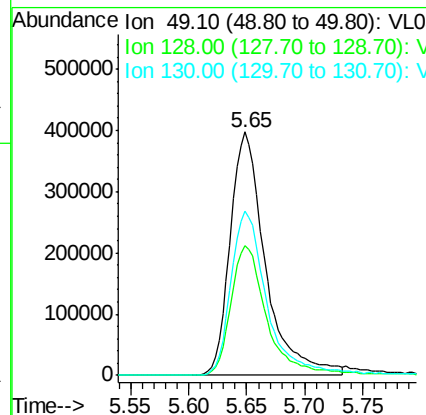
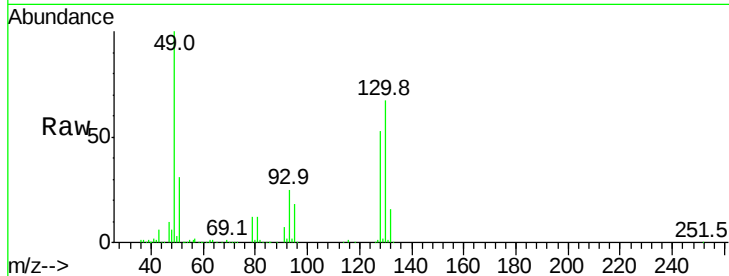
130 70.

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 03/23/2022

Supervised By :Mahesh Dadoda 03/25/2022



#2

Dichlorodifluoromethane

Concen: 0.17 ppbv

RT: 3.04 min Scan# 79

Delta R.T. -0.01 min

Lab File: VL038701.D

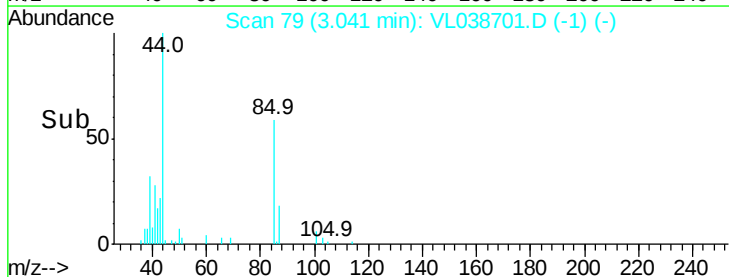
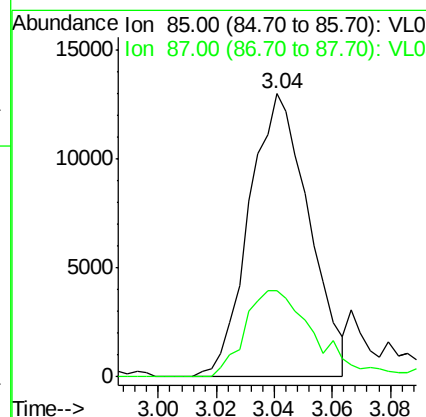
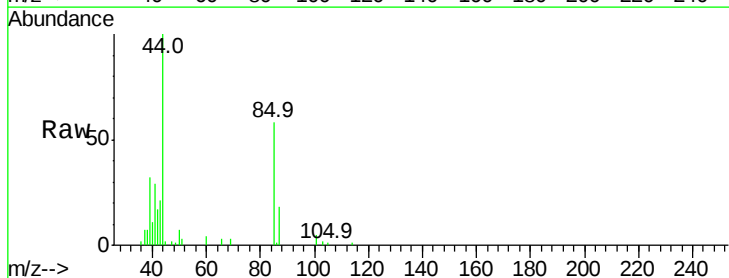
Acq: 23 Mar 2022 2:23

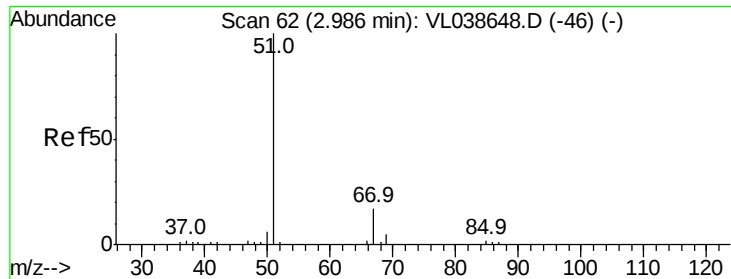
Tgt Ion: 85 Resp: 18618

Ion Ratio Lower Upper

85 100

87 30.3 26.0 39.0





#3

Chlorodifluoromethane

Concen: 0.40 ppbv

RT: 2.98 Instrument: MSVOA_L

Delta R.T.:

Lab File: ClientSampleId:

Acq: 23 Mar 2022 2:23

Tgt Ion:

Ion Ratio

51 100

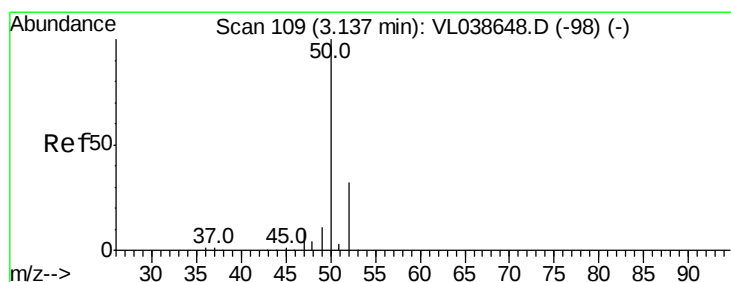
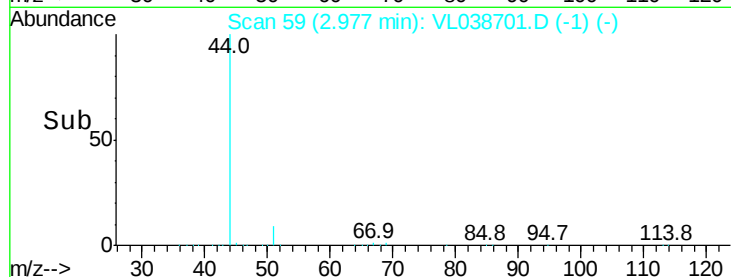
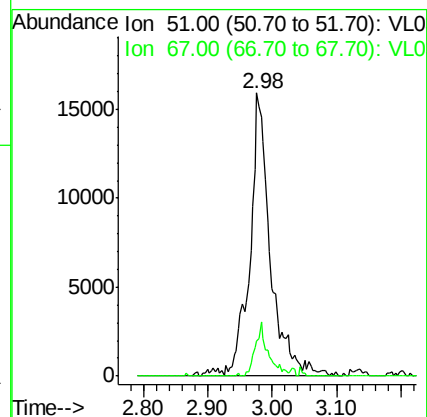
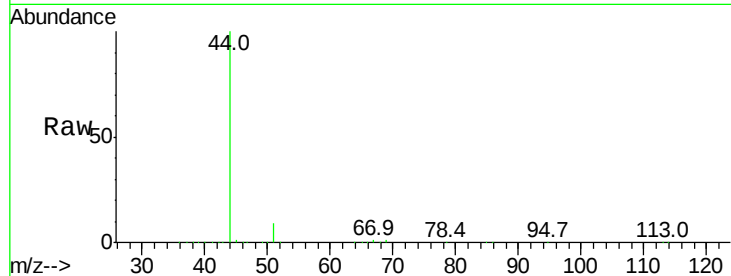
67 12.

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 03/23/2022

Supervised By :Mahesh Dadoda 03/25/2022



#4

Chloromethane

Concen: 0.18 ppbv

RT: 3.13 min Scan# 108

Delta R.T. -0.00 min

Lab File: VL038701.D

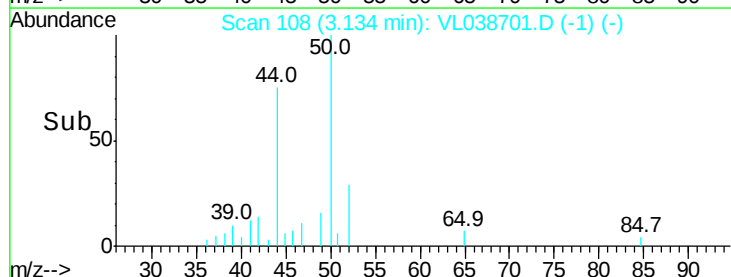
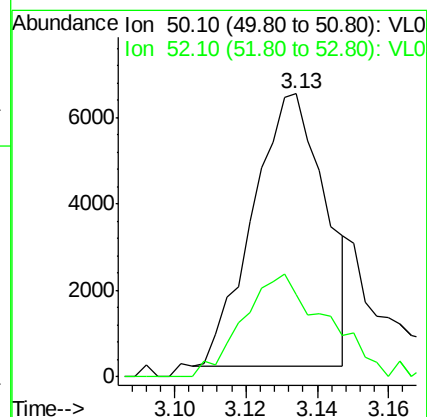
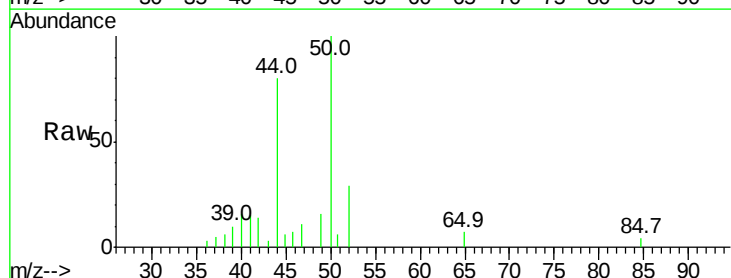
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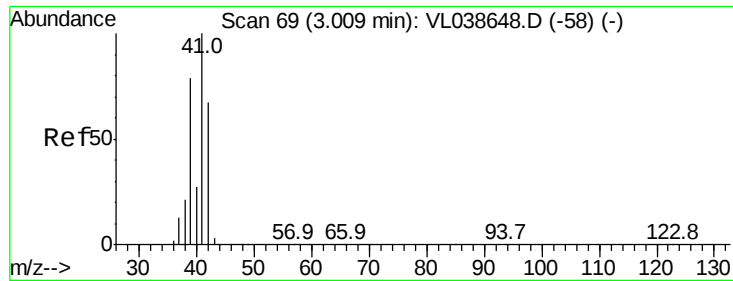
Tgt Ion: 50 Resp: 8845

Ion Ratio Lower Upper

50 100

52 28.5 25.5 38.3





#9

Propene

Concen: 2.19 ppbv

RT: 3.01 Instrument: MSVOA_1

Delta R.T. -0.01 min

Lab File: ClientSampleId :

Acq: 23 Mar 2022 2:23

Tgt Ion:

Ion Ratio

41 100

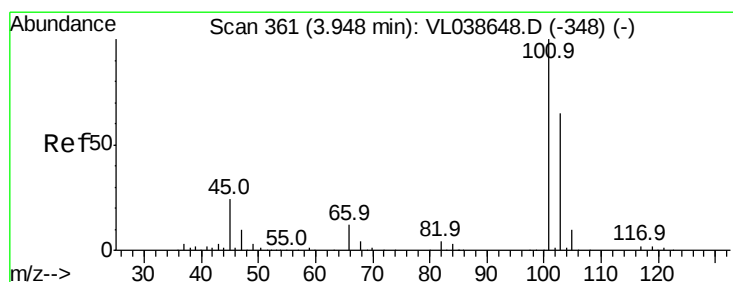
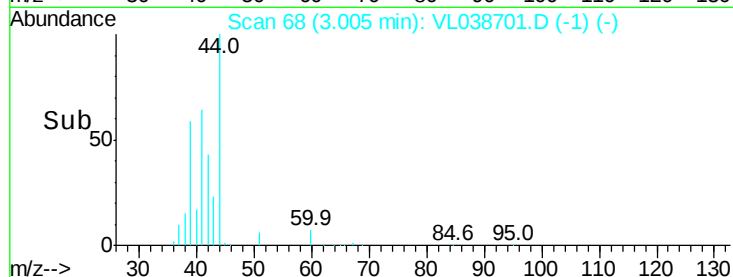
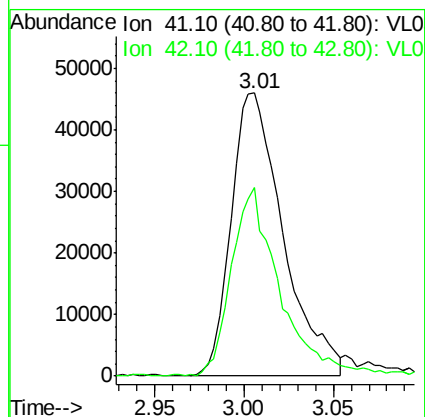
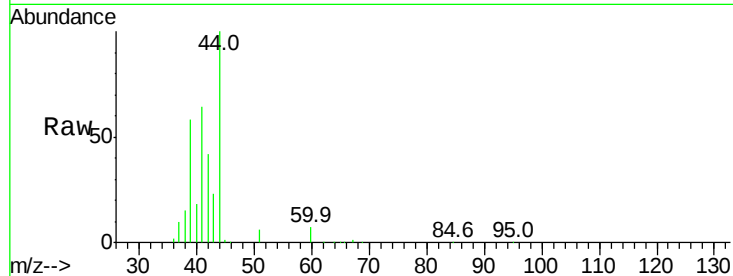
42 63.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 03/23/2022

Supervised By :Mahesh Dadoda 03/25/2022



#11

Trichlorofluoromethane

Concen: 0.19 ppbv

RT: 3.94 min Scan# 358

Delta R.T. -0.01 min

Lab File: VL038701.D

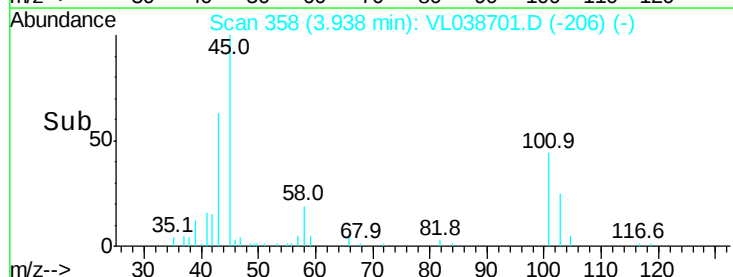
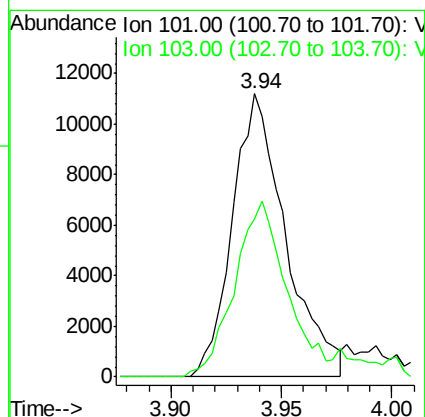
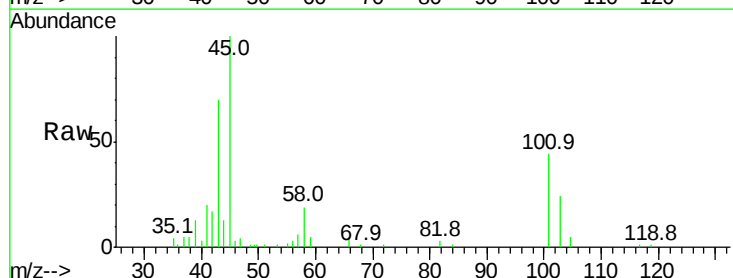
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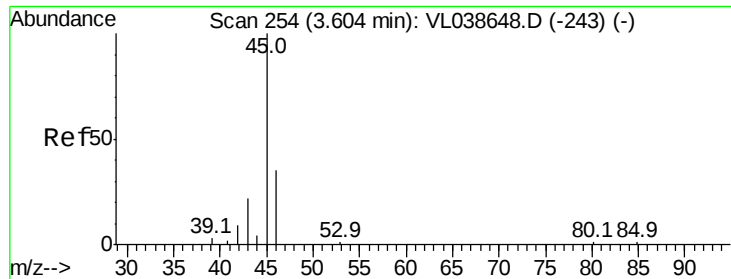
Tgt Ion:101 Resp: 18830

Ion Ratio Lower Upper

101 100

103 53.8 51.9 77.9



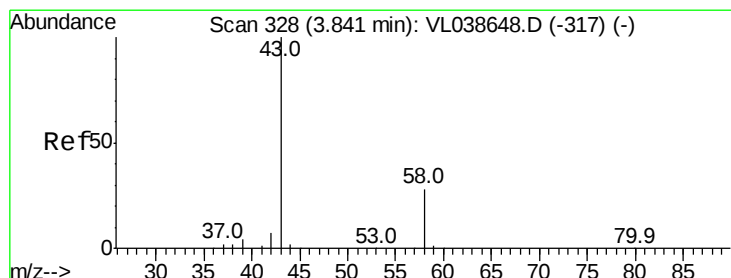
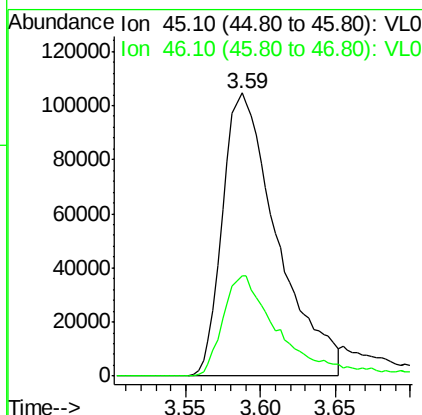
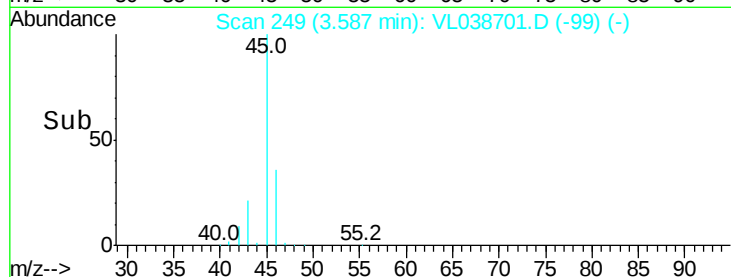
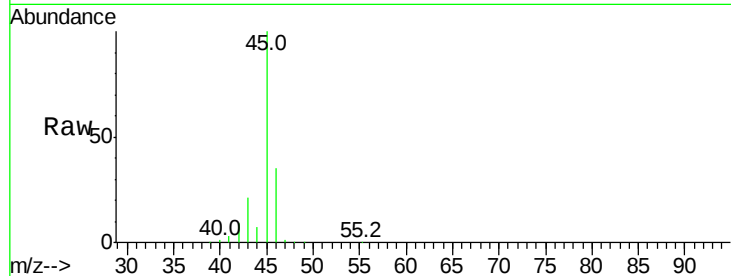


#13
 Ethanol
 Concen: 56.79 ppbv
 RT: 3.59
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 23 Mar 2022 2:23

Tgt Ion:
 Ion Ratio
 45 100
 46 39.

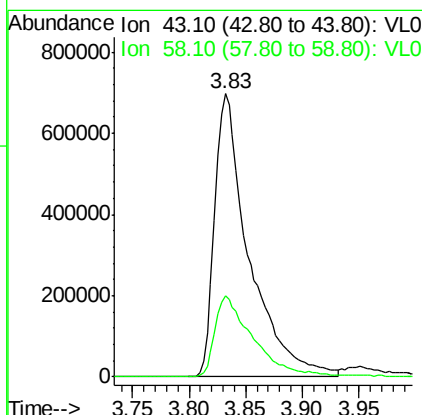
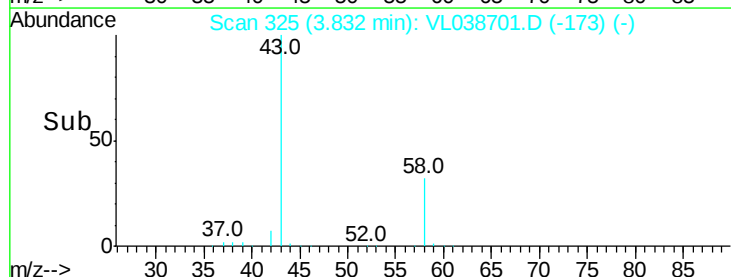
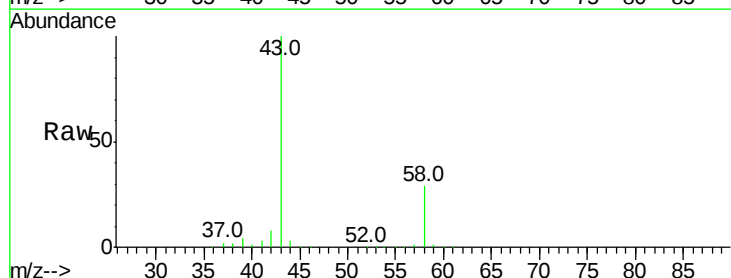
Manual Integrations
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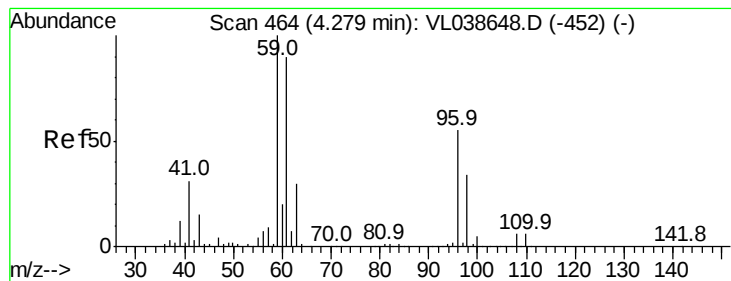
Reviewed By :Semsettin Yesilyurt 03/23/2022
 Supervised By :Mahesh Dadoda 03/25/2022



#15
 Acetone
 Concen: 20.45 ppbv
 RT: 3.83 min Scan# 325
 Delta R.T. -0.01 min
 Lab File: VL038701.D
 Acq: 23 Mar 2022 2:23

Tgt Ion: 43 Resp: 1475205
 Ion Ratio Lower Upper
 43 100
 58 32.7 23.3 34.9





#17

tert-Butyl alcohol

Concen: 0.94 ppbv

RT: 4.28 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 23 Mar 2022 2:23

Tgt Ion:

Ion Ratio

59 100

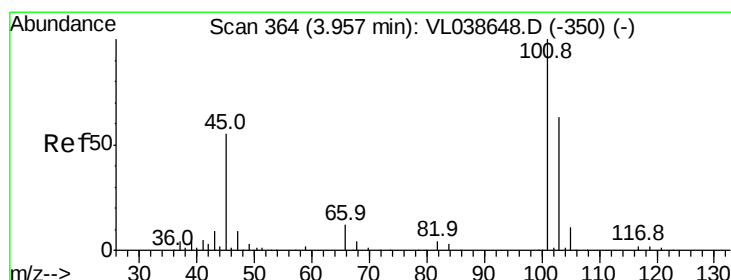
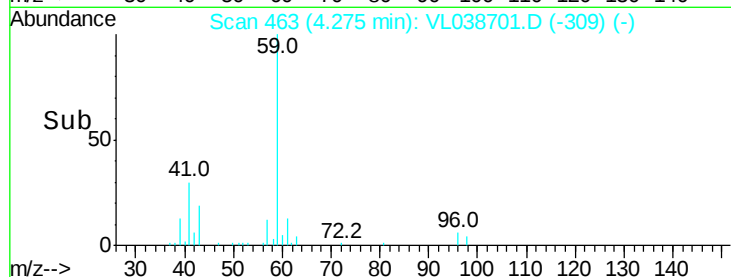
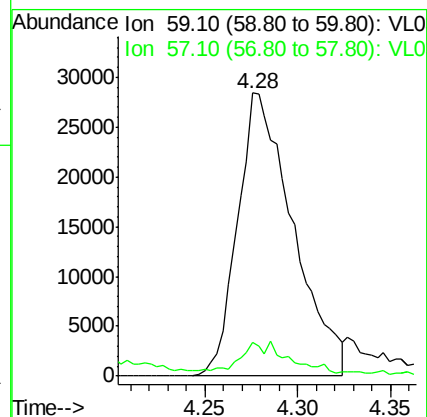
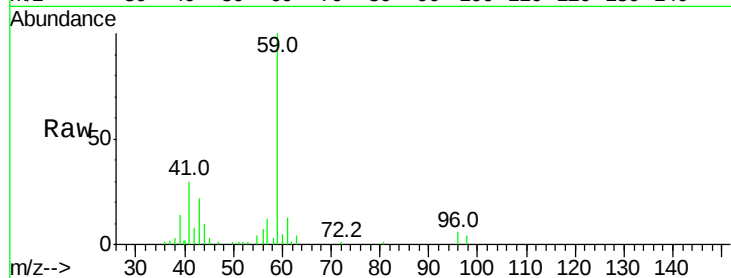
57 11.

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 03/23/2022

Supervised By :Mahesh Dadoda 03/25/2022



#19

Isopropyl Alcohol

Concen: 3.56 ppbv

RT: 3.95 min Scan# 363

Delta R.T. -0.00 min

Lab File: VL038701.D

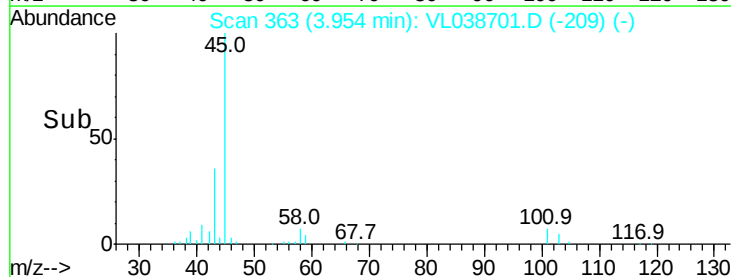
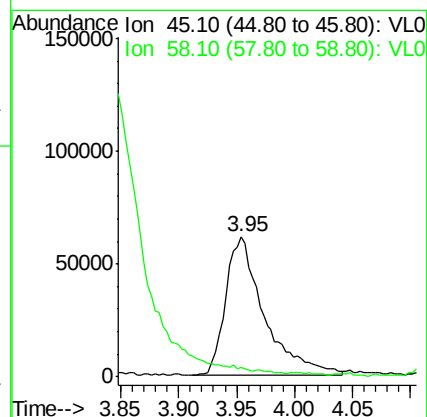
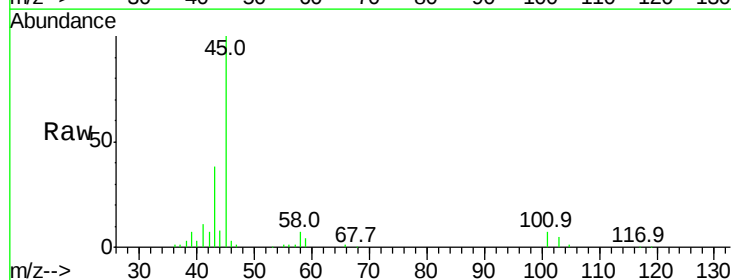
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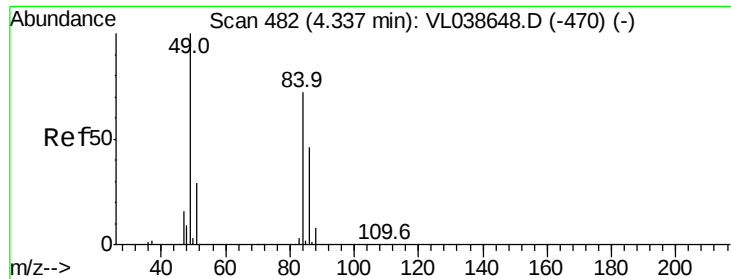
Tgt Ion: 45 Resp: 142486

Ion Ratio Lower Upper

45 100

58 338.5 2.3 3.5#





#20

Methylene Chloride

Concen: 1.62 ppbv

RT: 4.33

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 23 Mar 2022 2:23

Tgt Ion:

Ion Ratio

84 100

49 136.

51 44.

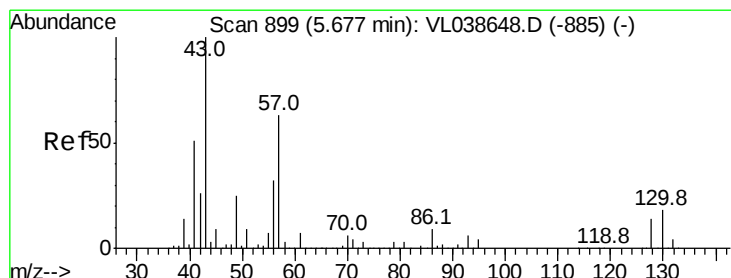
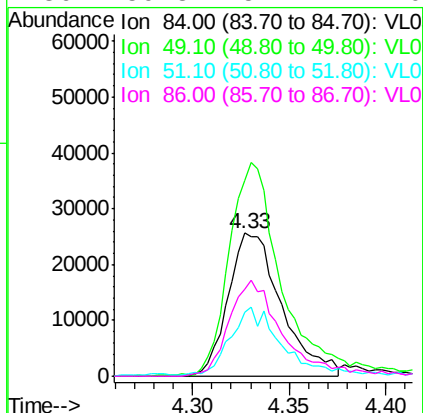
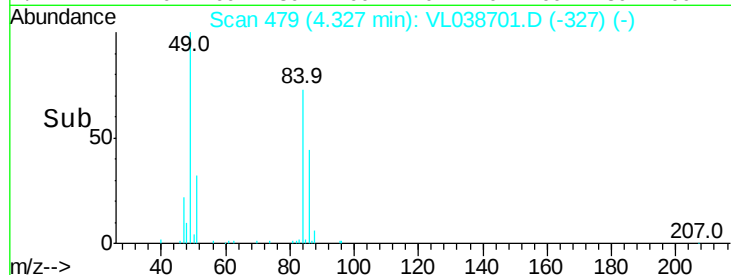
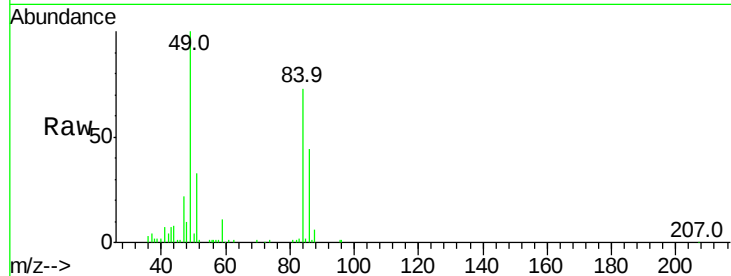
86 59.8 51.4 77.0

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 03/23/2022

Supervised By :Mahesh Dadoda 03/25/2022



#26

Hexane

Concen: 0.91 ppbv

RT: 5.67 min Scan# 896

Delta R.T. -0.01 min

Lab File: VL038701.D

Acq: 23 Mar 2022 2:23

Tgt Ion: 57 Resp: 73613

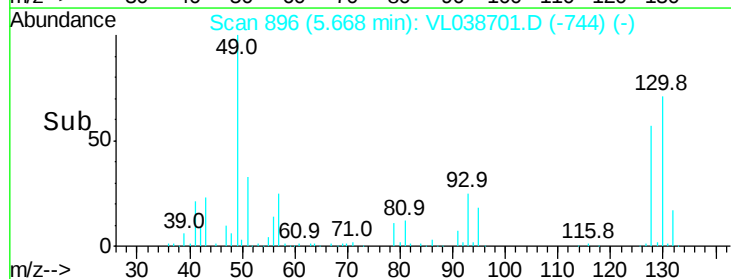
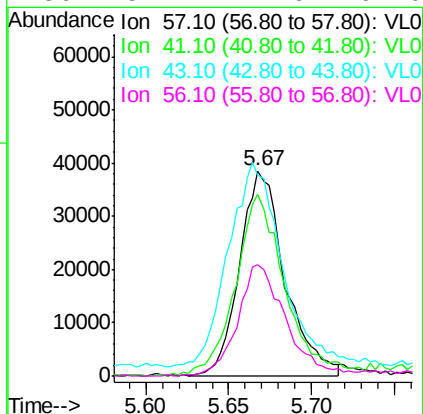
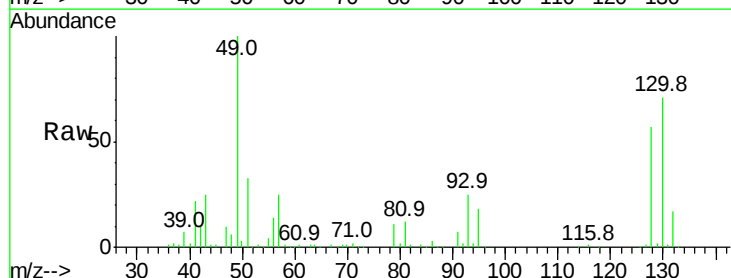
Ion Ratio Lower Upper

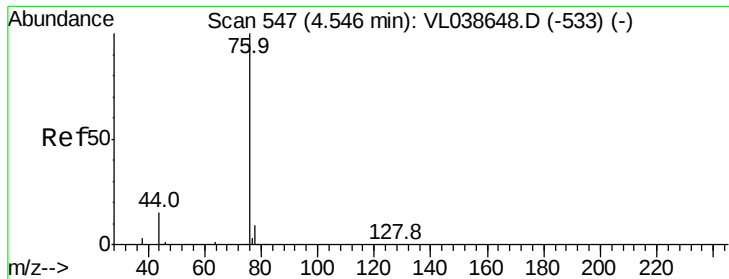
57 100

41 103.2 67.0 100.4#

43 136.6 184.2 276.2#

56 57.7 42.6 64.0





#27

Carbon Disulfide

Concen: 0.17 ppbv

RT: 4.53 Instrument: MSVOA_1

Delta R.T.:

Lab File: ClientSampleId:

Acq: 23 Mar 2022 2:23

Tgt Ion:

Ion Ratio

76 100

44 40.

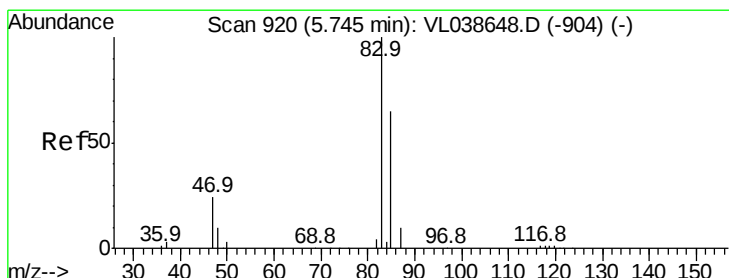
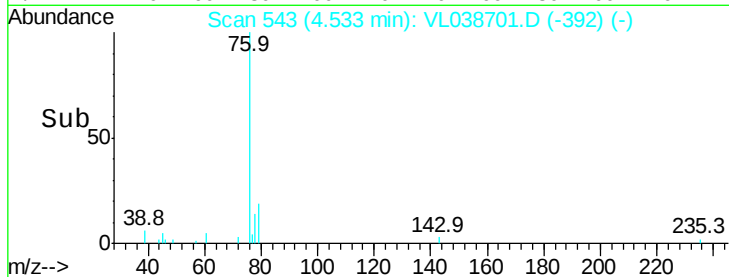
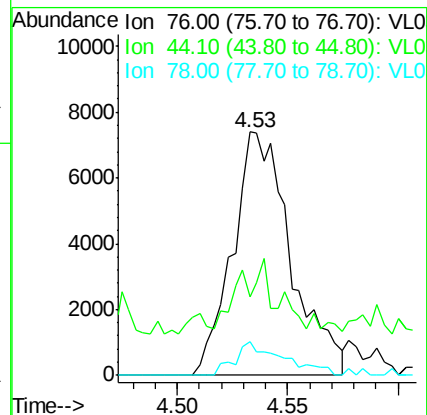
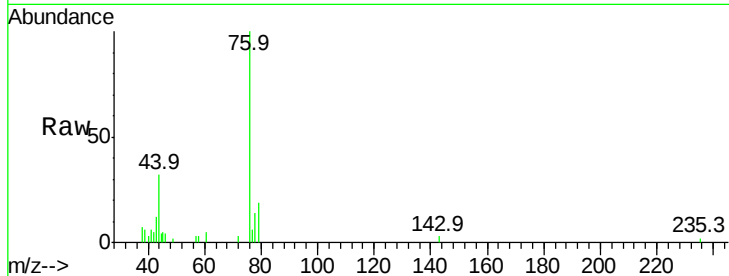
78 11.

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 03/23/2022

Supervised By :Mahesh Dadoda 03/25/2022



#29

Chloroform

Concen: 0.83 ppbv

RT: 5.74 min Scan# 917

Delta R.T. -0.01 min

Lab File: VL038701.D

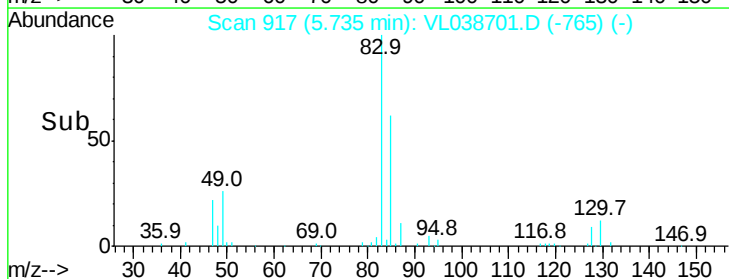
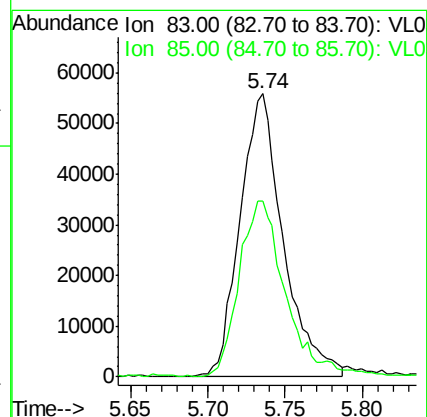
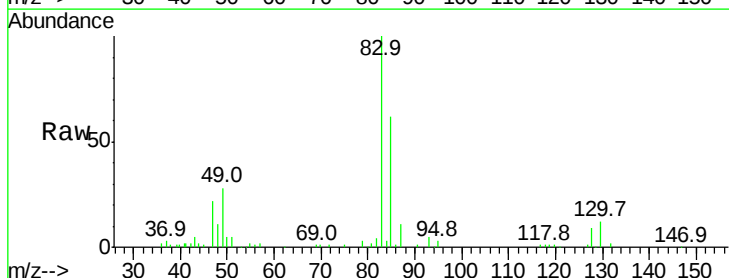
Acq: 23 Mar 2022 2:23

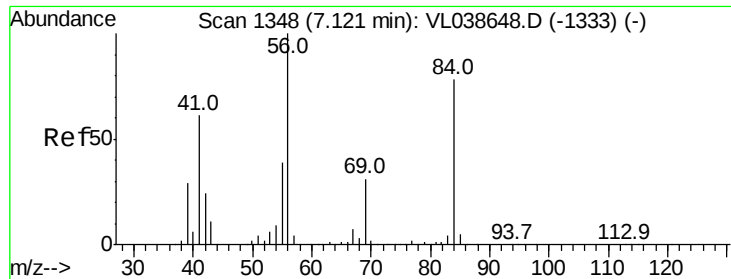
Tgt Ion: 83 Resp: 108604

Ion Ratio Lower Upper

83 100

85 62.0 51.7 77.5



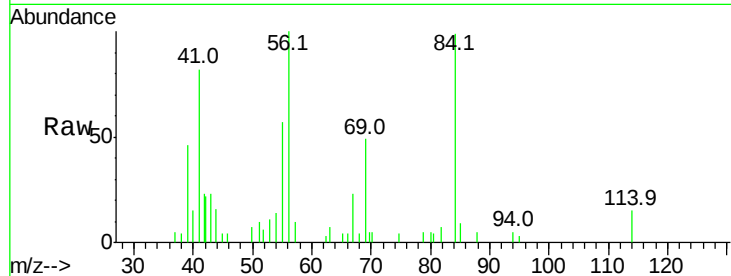


#30
Cyclohexane
Concen: 0.24 ppbv m
RT: 7.11
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId :
Acq: 23 Mar 2022 2:23

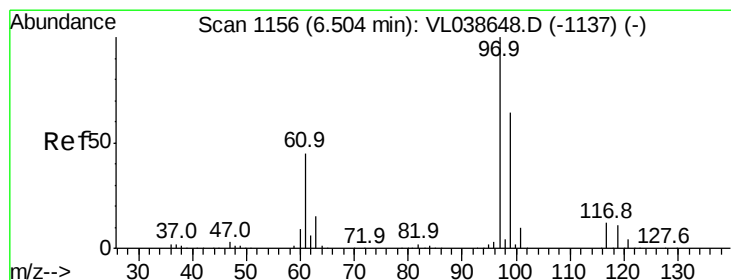
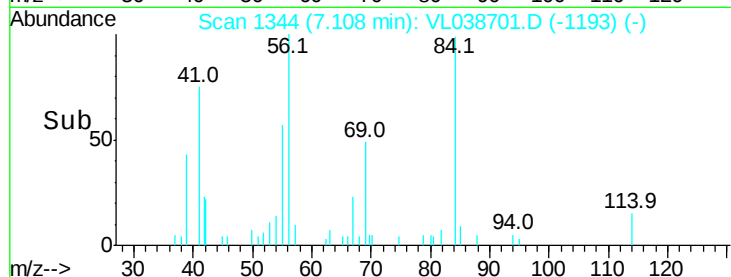
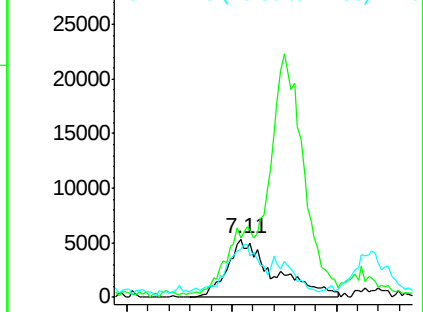
Tgt Ion:
Ion Ratio
84 100
56 0.
41 87.

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Reviewed By :Semsettin Yesilyurt 03/23/2022
Supervised By :Mahesh Dadoda 03/25/2022

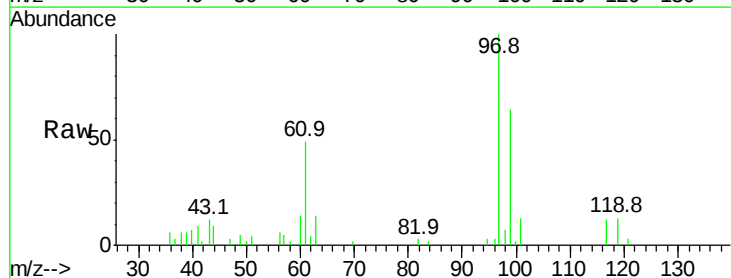


Abundance Ion 84.20 (83.90 to 84.90): VL0
Ion 56.10 (55.80 to 56.80): VL0
Ion 41.10 (40.80 to 41.80): VL0

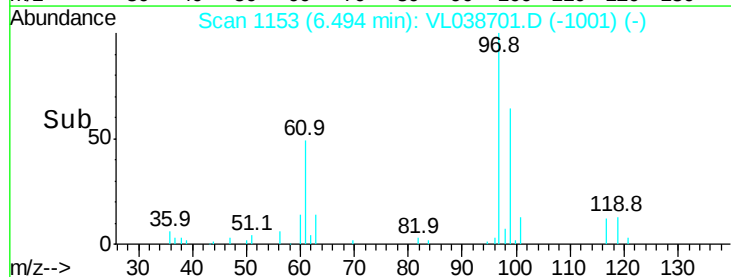
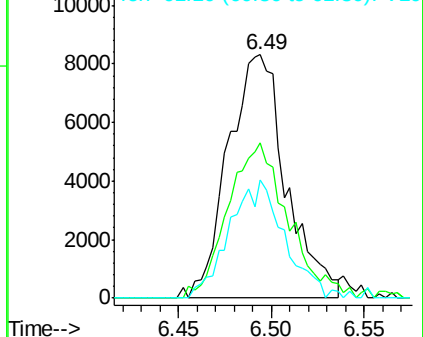


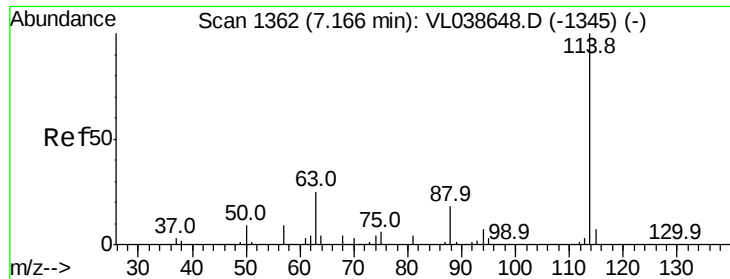
#32
1,1,1-Trichloroethane
Concen: 0.14 ppbv
RT: 6.49 min Scan# 1153
Delta R.T. -0.01 min
Lab File: VL038701.D
Acq: 23 Mar 2022 2:23

Tgt Ion: 97 Resp: 18116
Ion Ratio Lower Upper
97 100
99 67.7 51.8 77.8
61 46.5 36.7 55.1



Abundance Ion 97.00 (96.70 to 97.70): VL0
Ion 99.00 (98.70 to 99.70): VL0
Ion 61.10 (60.80 to 61.80): VL0



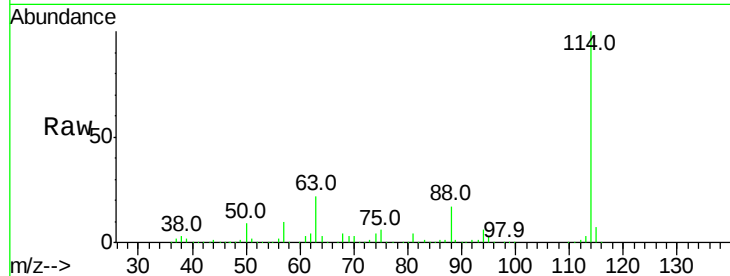


#33
 1,4-Difluorobenzene
 Concen: 10.00 ppbv
 RT: 7.15
 Instrument: MSVOA_L
 Delta R.T.:
 Lab File: ClientSampleId :
 Acq: 23 Mar 2022 2:23

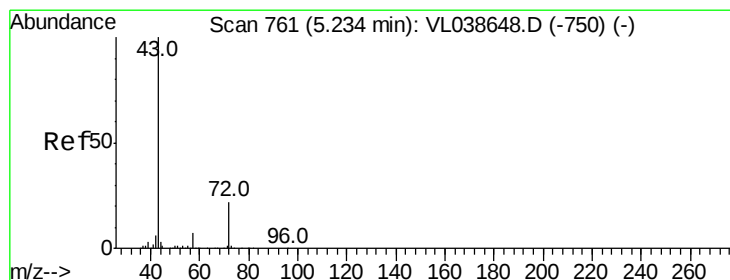
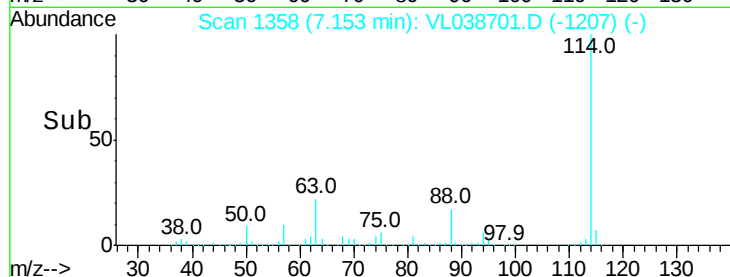
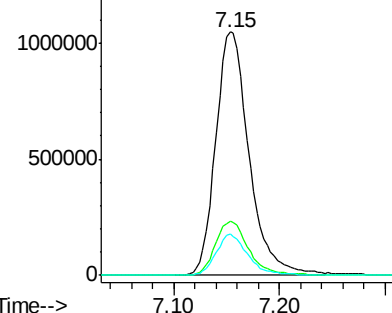
Tgt Ion: 1
 Ion Ratio
 114 100
 63 22.
 88 16.

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Reviewed By : Semsettin Yesilyurt 03/23/2022
 Supervised By : Mahesh Dadoda 03/25/2022

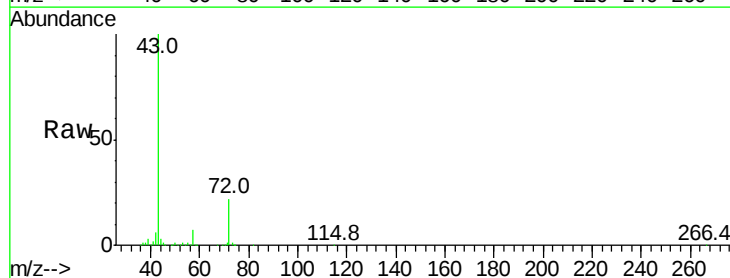


Abundance Ion 114.10 (113.80 to 114.80): VL0
 Ion 63.10 (62.80 to 63.80): VL0
 Ion 88.10 (87.80 to 88.80): VL0

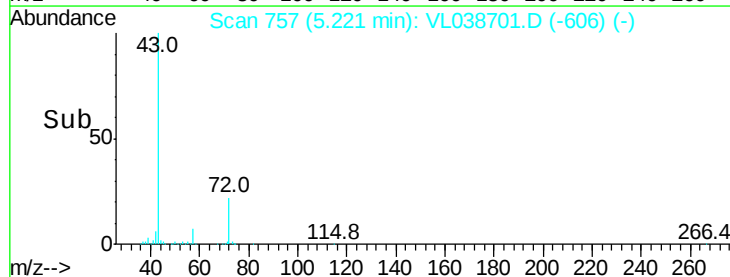
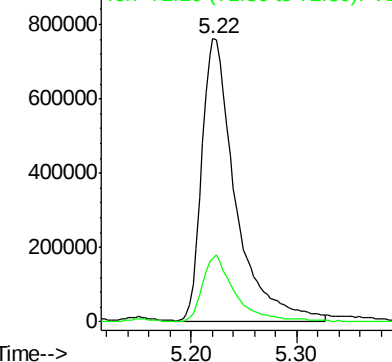


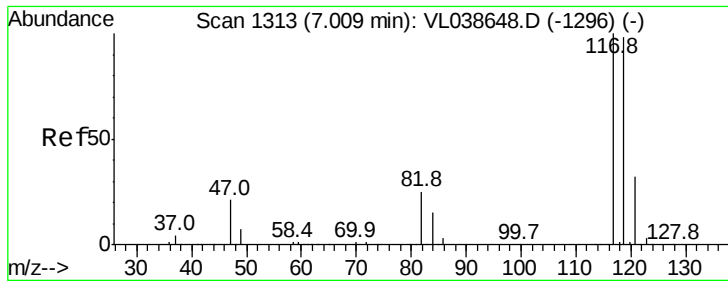
#34
 2-Butanone
 Concen: 18.44 ppbv
 RT: 5.22 min Scan# 757
 Delta R.T. -0.01 min
 Lab File: VL038701.D
 Acq: 23 Mar 2022 2:23

Tgt Ion: 43 Resp: 1678523
 Ion Ratio Lower Upper
 43 100
 72 23.2 17.8 26.8



Abundance Ion 43.10 (42.80 to 43.80): VL0
 Ion 72.10 (71.80 to 72.80): VL0



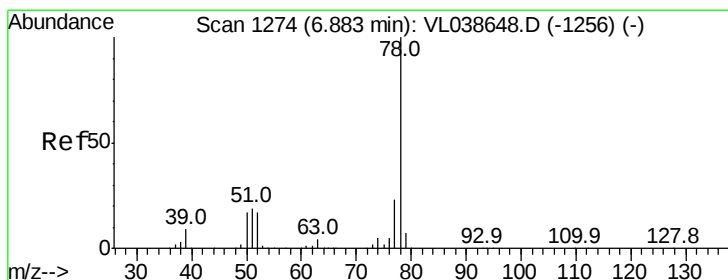
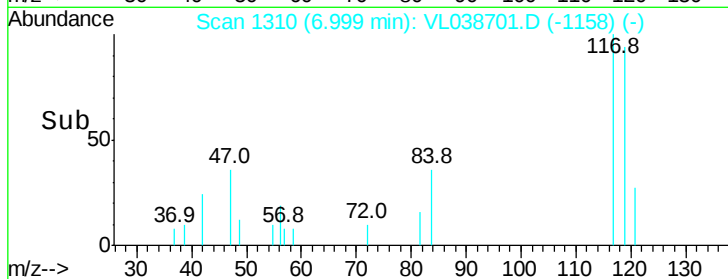
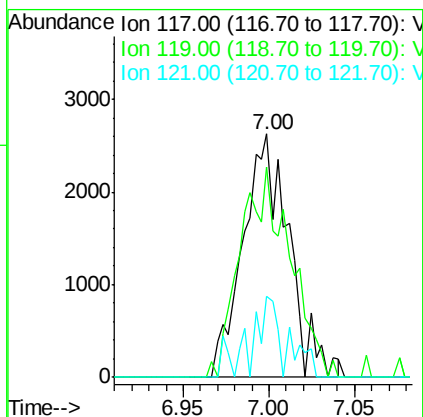
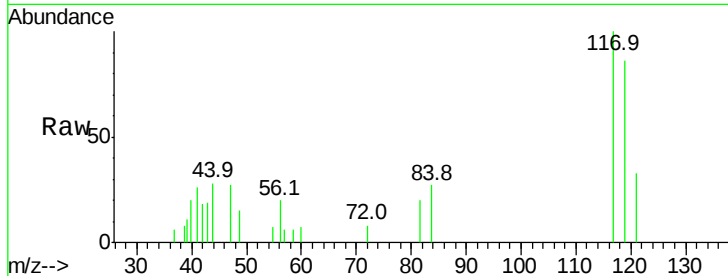


#35
Carbon Tetrachloride
Concen: 0.04 ppbv m
RT: 7.00
Instrument: MSVOA_L
Delta R.T.:
Lab File: ClientSampleId :
COP89DUP
Acq: 23 Mar 2022 2:23

Tgt Ion: 117
Ion Ratio: 100
117 100
119 86.
121 33.

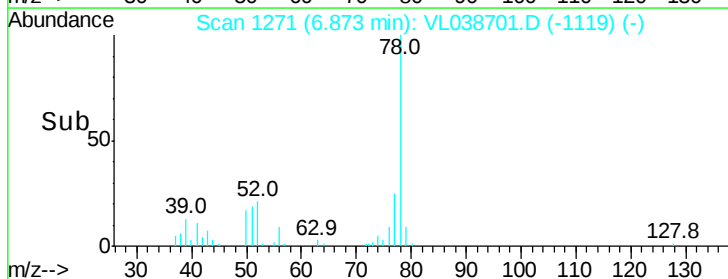
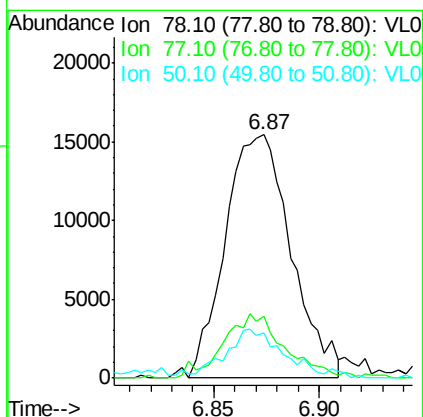
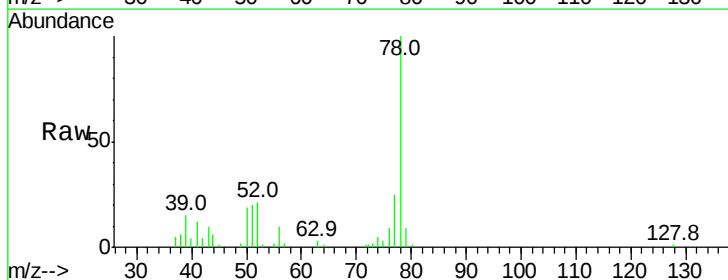
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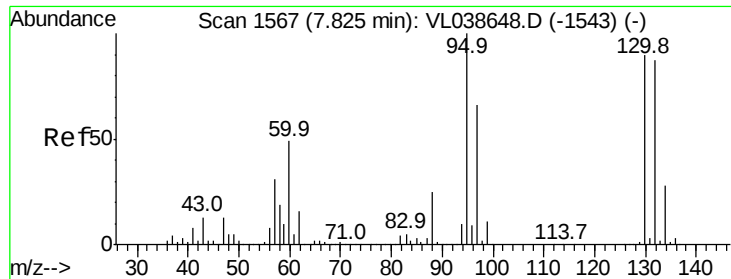
Reviewed By : Semsettin Yesilyurt 03/23/2022
Supervised By : Mahesh Dadoda 03/25/2022



#36
Benzene
Concen: 0.19 ppbv
RT: 6.87 min Scan# 1271
Delta R.T. -0.01 min
Lab File: VL038701.D
Acq: 23 Mar 2022 2:23

Tgt Ion: 78 Resp: 33516
Ion Ratio Lower Upper
78 100
77 24.4 18.1 27.1
50 16.8 13.6 20.4





#38

Trichloroethene

Concen: 0.14 ppbv

RT: 7.81 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 23 Mar 2022 2:23

Tgt Ion:1

Ion Ratio

130 100

95 92.

132 87.

97 68.6

58.2

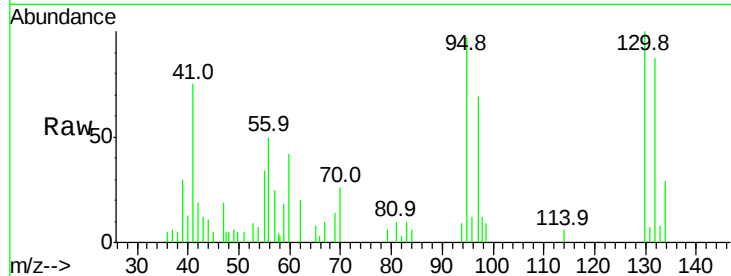
87.4

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Reviewed By :Semsettin Yesilyurt 03/23/2022

Supervised By :Mahesh Dadoda 03/25/2022

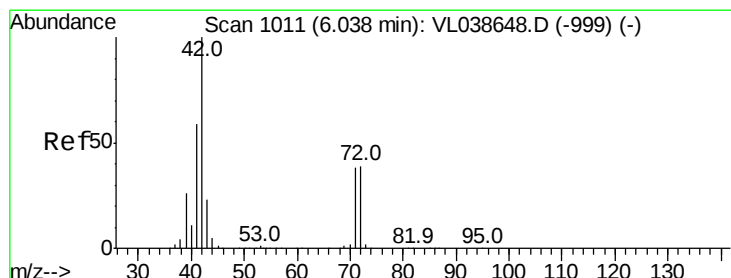
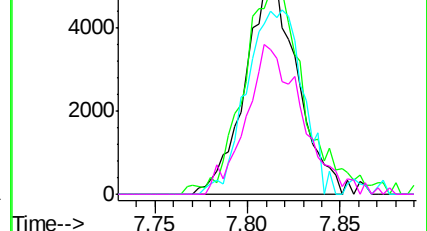
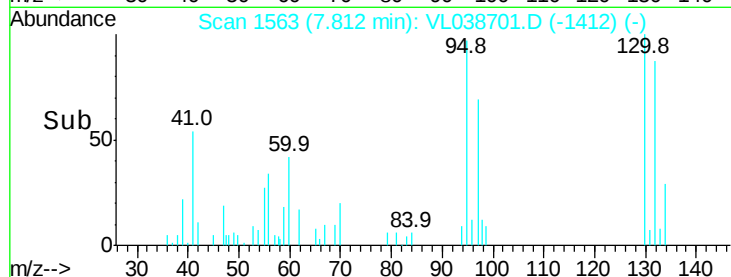


Abundance Ion 130.00 (129.70 to 130.70): V

Ion 95.00 (94.70 to 95.70): VL0

Ion 132.00 (131.70 to 132.70): V

Ion 97.00 (96.70 to 97.70): VL0



#41

Tetrahydrofuran

Concen: 0.62 ppbv

RT: 6.04 min Scan# 1011

Delta R.T. -0.00 min

Lab File: VL038701.D

Acq: 23 Mar 2022 2:23

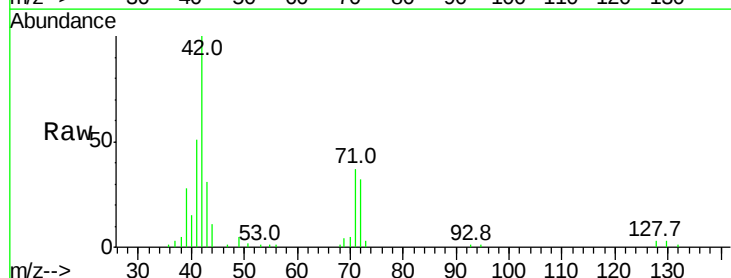
Tgt Ion: 42 Resp: 41840

Ion Ratio Lower Upper

42 100

72 44.1 32.5 48.7

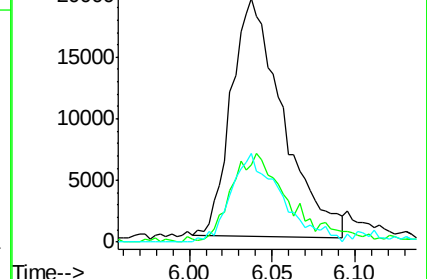
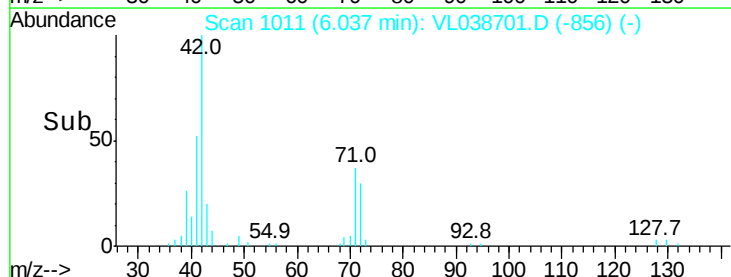
71 38.9 31.4 47.2

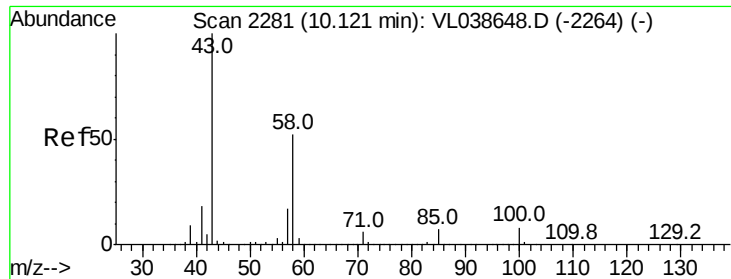


Abundance Ion 42.10 (41.80 to 42.80): VL0

Ion 72.10 (71.80 to 72.80): VL0

Ion 71.10 (70.80 to 71.80): VL0



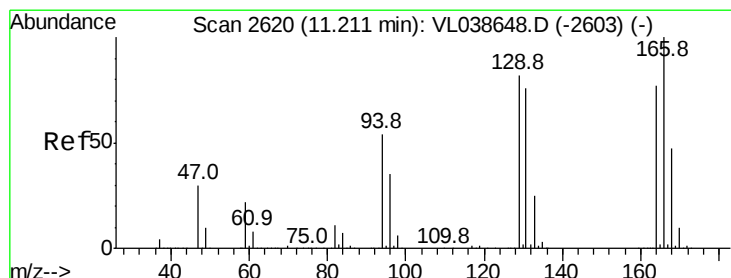
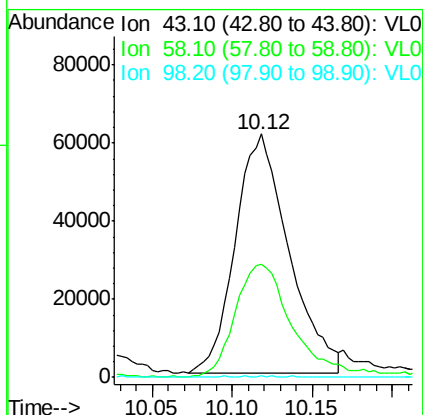
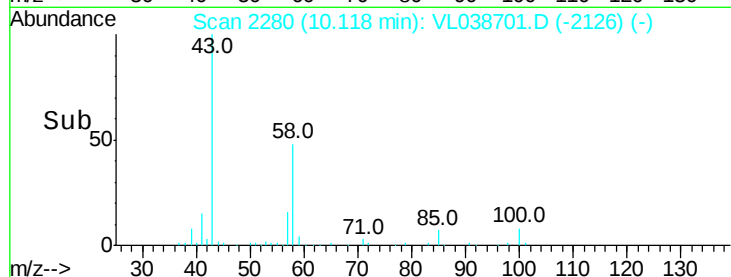
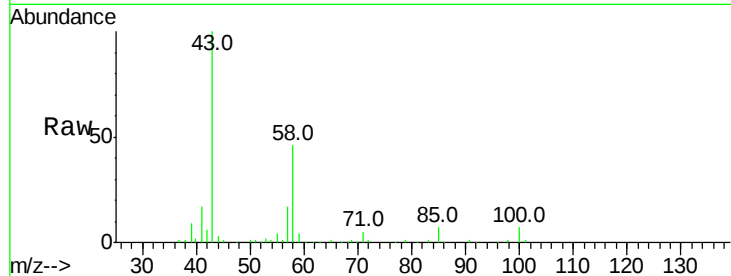


#51
2-Hexanone
Concen: 1.16 ppbv
RT: 10.12
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 23 Mar 2022 2:23

Tgt Ion:
Ion Ratio
43 100
58 53.
98 0.

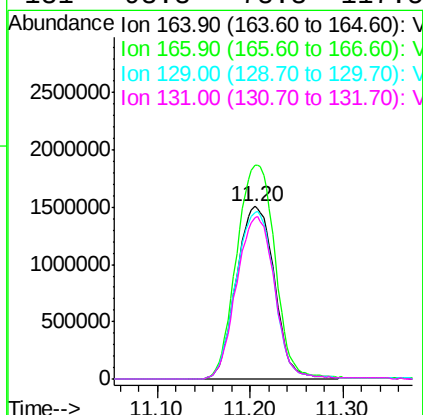
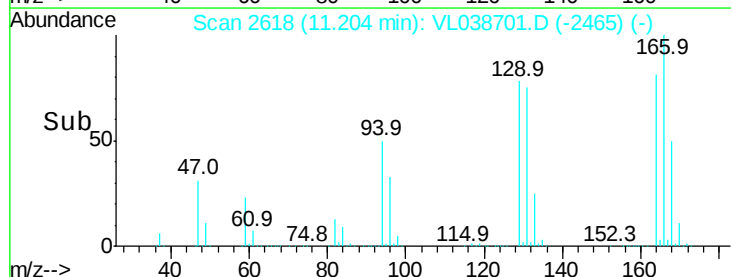
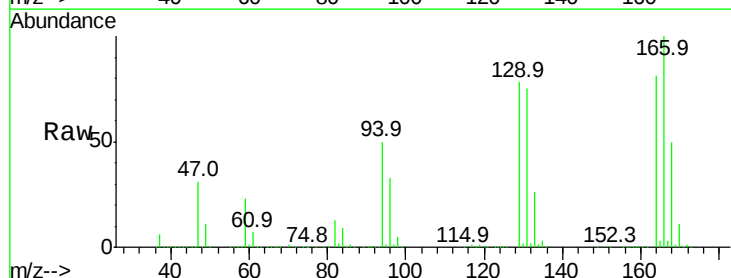
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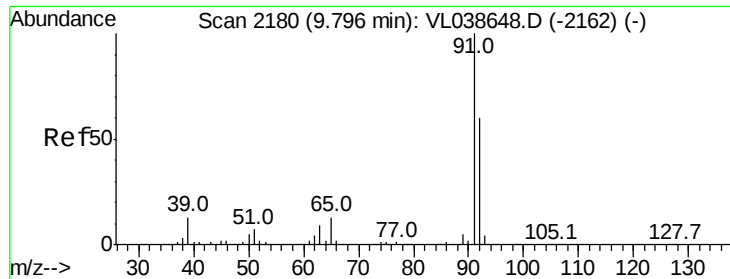
Reviewed By :Semsettin Yesilyurt 03/23/2022
Supervised By :Mahesh Dadoda 03/25/2022



#52
Tetrachloroethene
Concen: 66.43 ppbv
RT: 11.20 min Scan# 2618
Delta R.T. -0.01 min
Lab File: VL038701.D
Acq: 23 Mar 2022 2:23

Tgt Ion:164 Resp: 4314011
Ion Ratio Lower Upper
164 100
166 123.9 103.3 154.9
129 96.5 85.2 127.8
131 93.3 78.3 117.5





#53

Toluene

Concen: 3.64 ppbv

RT: 9.78

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 23 Mar 2022 2:23

Tgt Ion:

Ion Ratio

91 100

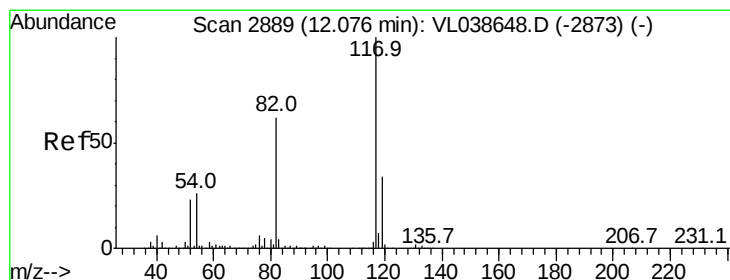
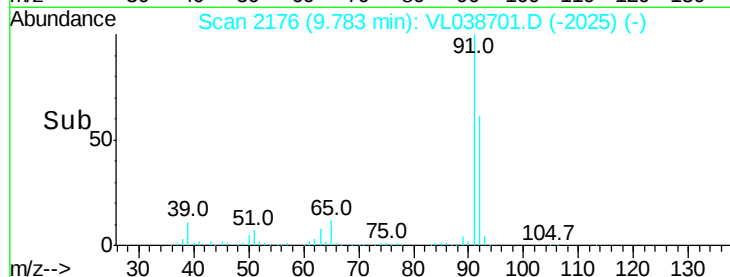
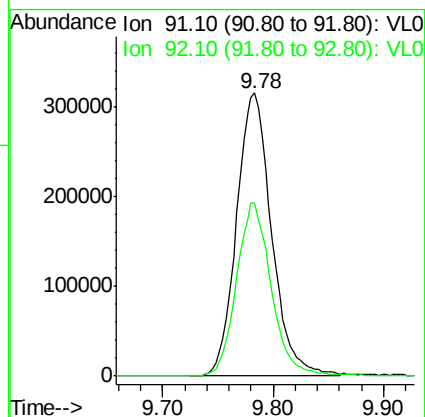
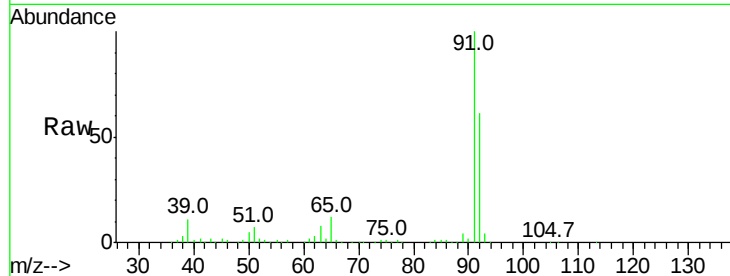
92 61.

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APPROVED

Reviewed By :Semsettin Yesilyurt 03/23/2022

Supervised By :Mahesh Dadoda 03/25/2022



#55

Chlorobenzene-d5

Concen: 10.00 ppbv

RT: 12.06 min Scan# 2884

Delta R.T. -0.02 min

Lab File: VL038701.D

Acq: 23 Mar 2022 2:23

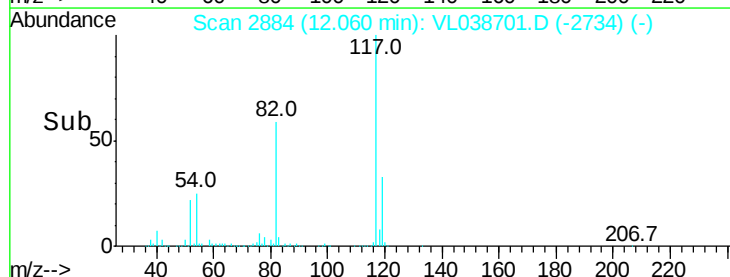
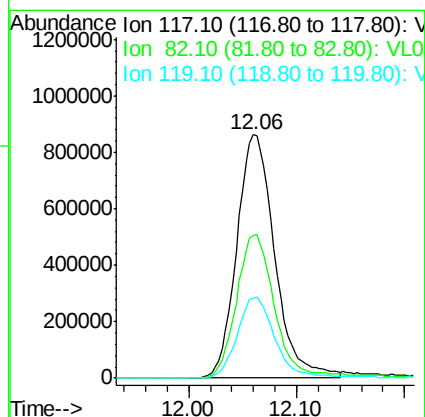
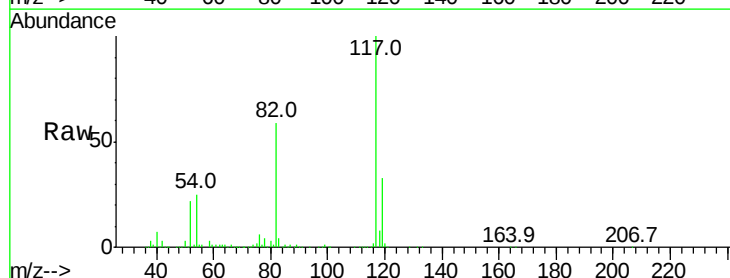
Tgt Ion:117 Resp: 2114183

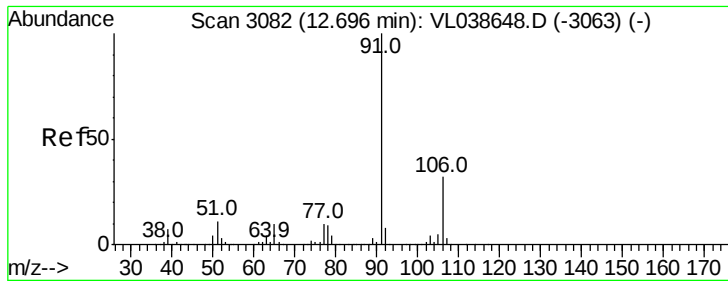
Ion Ratio Lower Upper

117 100

82 61.1 51.6 77.4

119 33.7 26.9 40.3



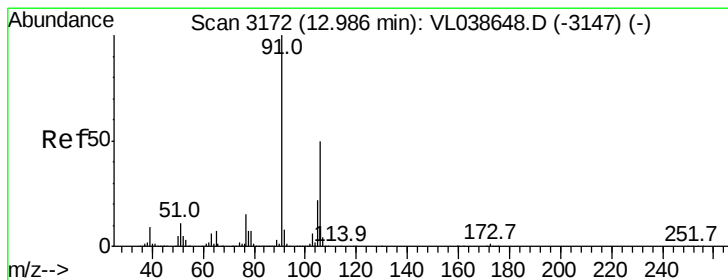
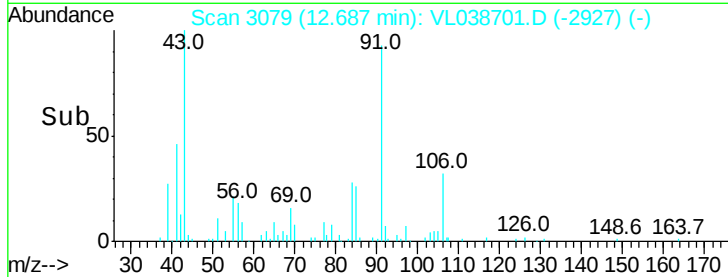
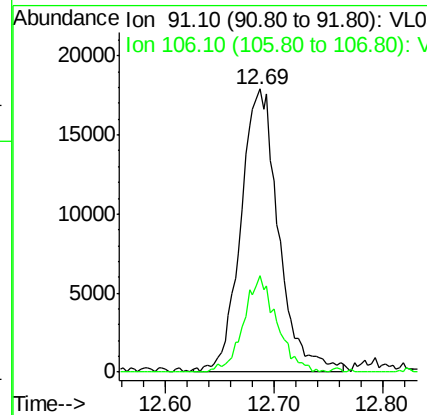
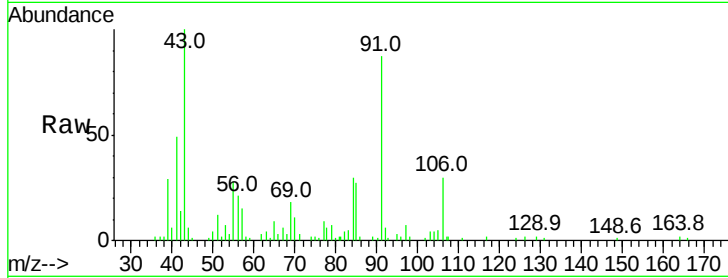


#58
Ethyl Benzene
Concen: 0.18 ppbv m
RT: 12.69
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId:
COP89DUP
Acq: 23 Mar 2022 2:23

Tgt Ion:
Ion Ratio
91 100
106 34.

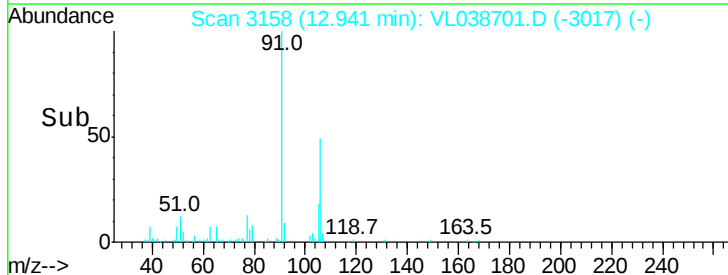
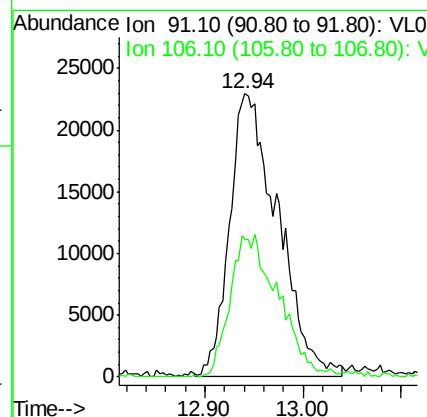
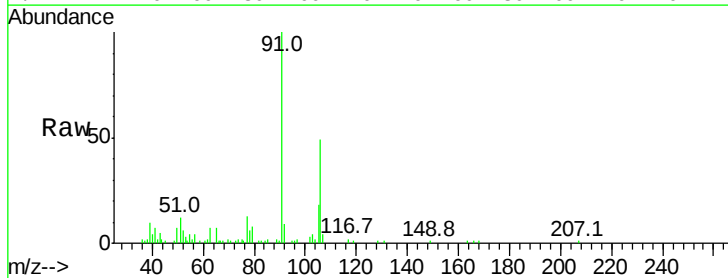
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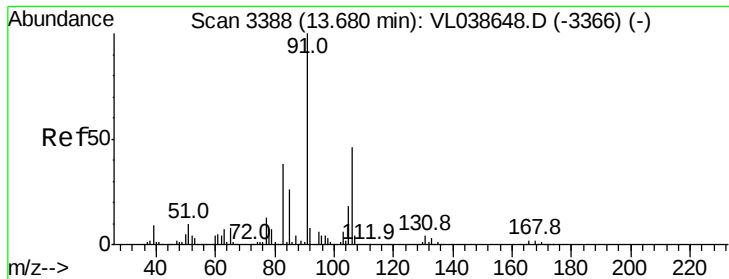
Reviewed By :Semsettin Yesilyurt 03/23/2022
Supervised By :Mahesh Dadoda 03/25/2022



#59
m/p-Xylene
Concen: 0.36 ppbv m
RT: 12.94 min Scan# 3158
Delta R.T. -0.05 min
Lab File: VL038701.D
Acq: 23 Mar 2022 2:23

Tgt Ion: 91 Resp: 78449
Ion Ratio Lower Upper
91 100
106 0.0 37.2 55.8#



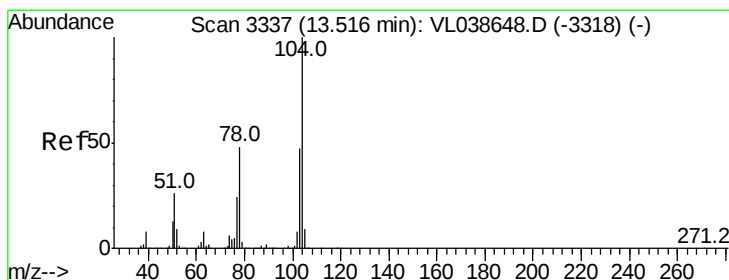
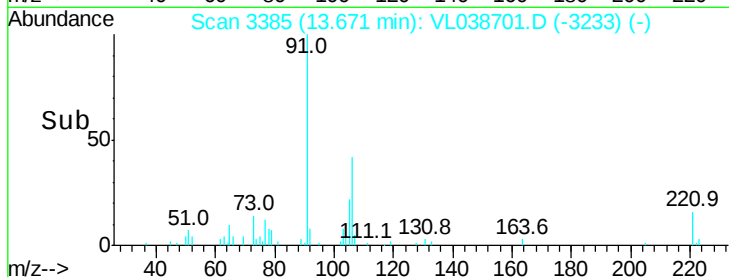
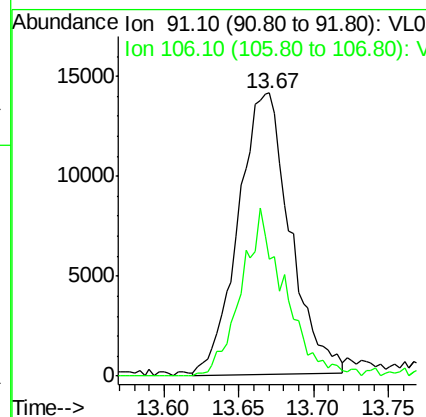
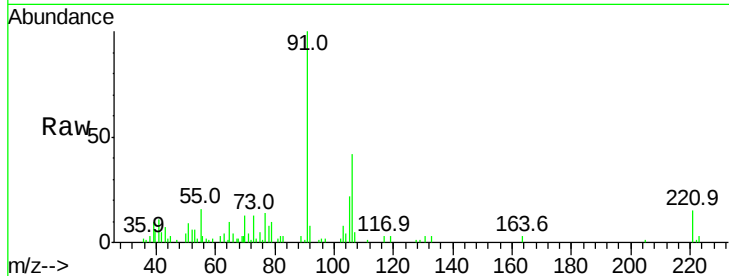


#60
o-Xylene
Concen: 0.17 ppbv
RT: 13.67
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
COP89DUP
Acq: 23 Mar 2022 2:23

Tgt Ion:
Ion Ratio
91 100
106 50.

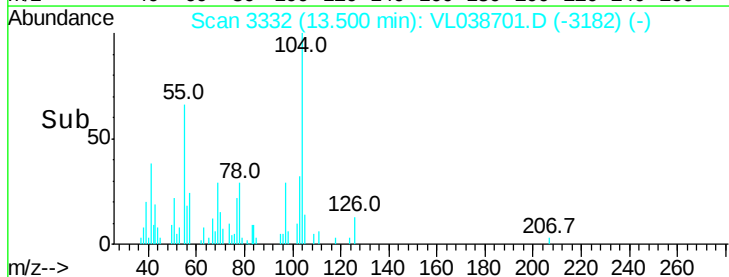
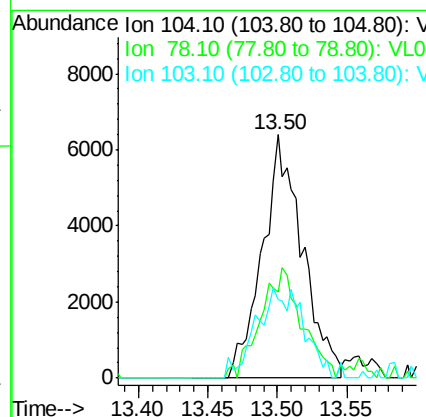
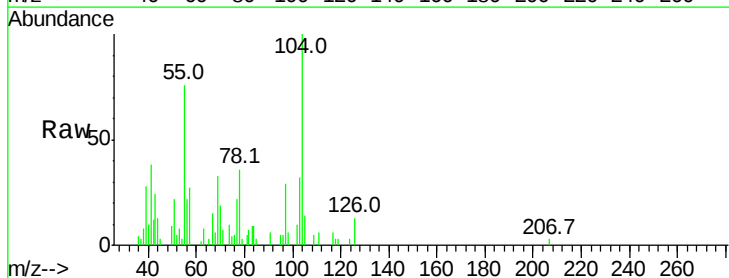
Manual Integrations
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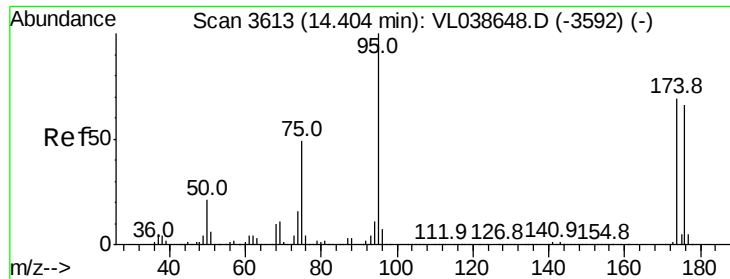
Reviewed By :Semsettin Yesilyurt 03/23/2022
Supervised By :Mahesh Dadoda 03/25/2022



#61
Styrene
Concen: 0.11 ppbv m
RT: 13.50 min Scan# 3332
Delta R.T. -0.02 min
Lab File: VL038701.D
Acq: 23 Mar 2022 2:23

Tgt Ion:104 Resp: 12748
Ion Ratio Lower Upper
104 100
78 51.7 39.0 58.4
103 43.9 37.8 56.8



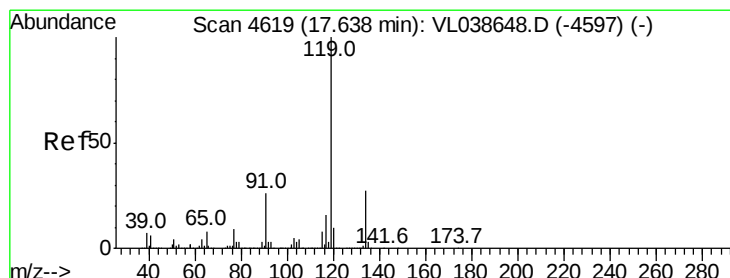
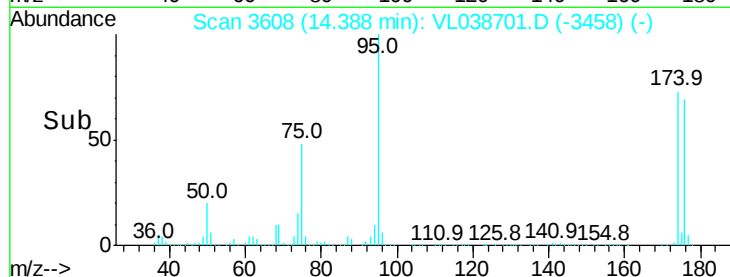
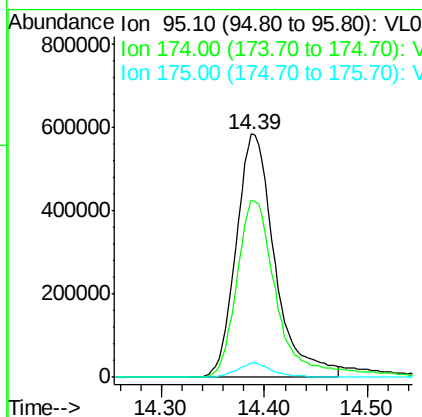
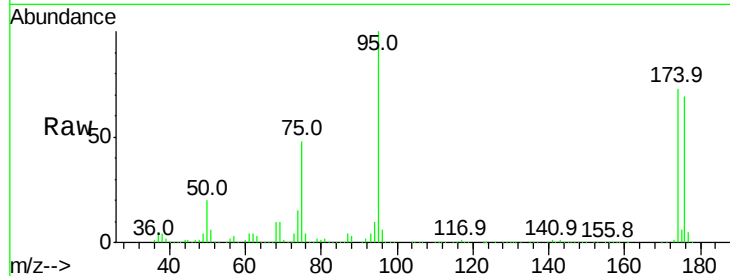


#68
 1-Bromo-4-Fluorobenzene
 Concen: 9.43 ppbv
 RT: 14.39
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 23 Mar 2022 2:23

Tgt Ion:
 Ion Ratio
 95 100
 174 77.
 175 5.

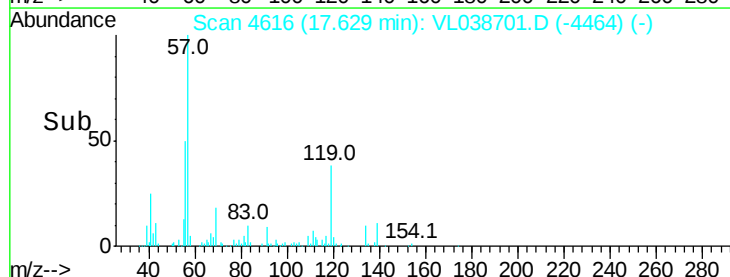
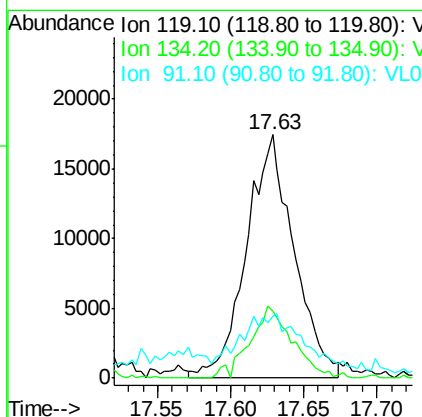
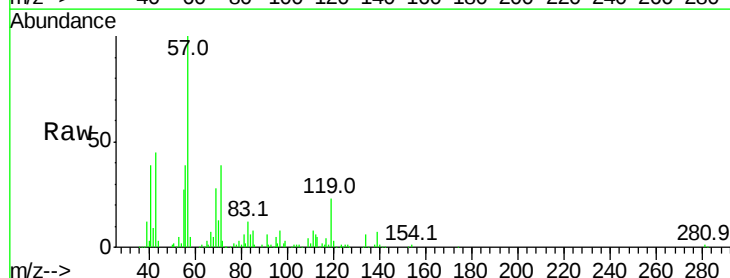
Manual Integrations
 APPROVED

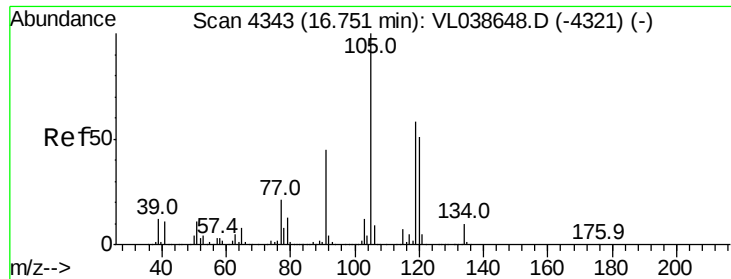
Reviewed By :Semsettin Yesilyurt 03/23/2022
 Supervised By :Mahesh Dadoda 03/25/2022



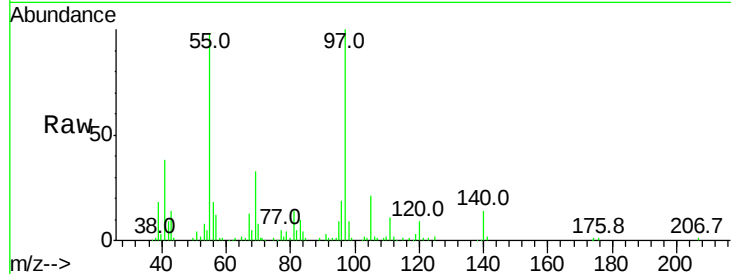
#69
 p-Isopropyltoluene
 Concen: 0.12 ppbv m
 RT: 17.63 min Scan# 4616
 Delta R.T. -0.01 min
 Lab File: VL038701.D
 Acq: 23 Mar 2022 2:23

Tgt Ion:119 Resp: 39579
 Ion Ratio Lower Upper
 119 100
 134 0.0 21.2 31.8#
 91 0.0 21.4 32.2#





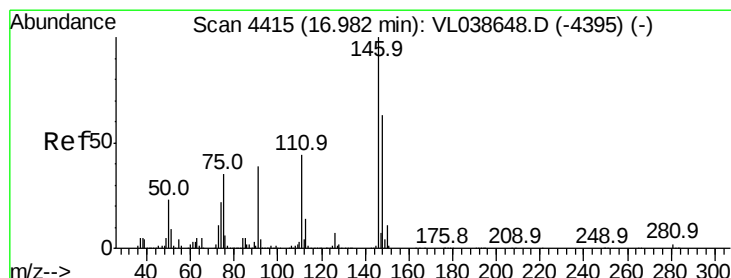
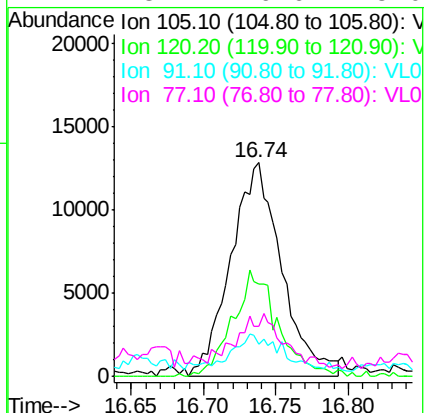
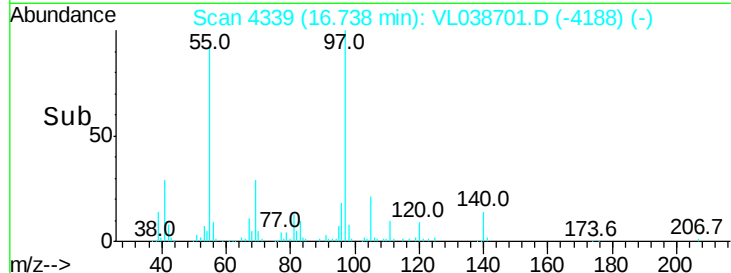
#74
1,2,4-Trimethylbenzene
Concen: 0.13 ppbv
RT: 16.74 min
Delta R.T.: MSVOA_L
Lab File: ClientSampleId :
Acq: 23 Mar 2022 2:23



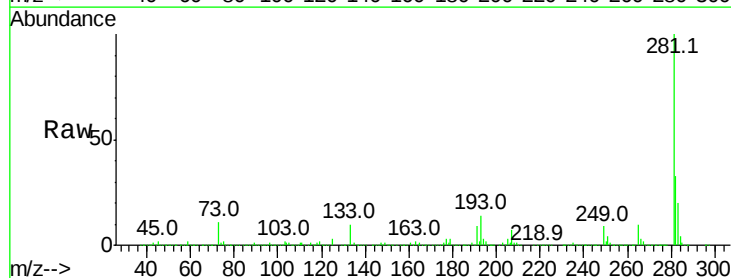
Tgt Ion: 105.10 (104.80 to 105.80): V
Ion Ratio: 100
105 100
120 44.
91 11.
77 18.1 16.6 25.0

Manual Integrations
APPROVED

Reviewed By : Semsettin Yesilyurt 03/23/2022
Supervised By : Mahesh Dadoda 03/25/2022



#75
1,3-Dichlorobenzene
Concen: 0.28 ppbv m
RT: 16.97 min Scan# 4410
Delta R.T.: -0.02 min
Lab File: VL038701.D
Acq: 23 Mar 2022 2:23



Tgt Ion: 146 Resp: 42505
Ion Ratio Lower Upper
146 100
111 239.7 22.2 66.6#
148 109.5 32.5 97.5#

