

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL050922\
 Data File : VL039009.D
 Acq On : 10 May 2022 5:40
 Operator : SY/AP
 Sample : N2696-05
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA L
 ClientSampleId :
 IA1

Manual Integrations
 APPROVED

Reviewed By : Semsettin Yesilyurt 05/10/2022
 Supervised By : Mahesh Dadoda 05/11/2022

Quant Time: May 11 11:26:56 2022
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL050522A
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument:
 QLast Update : Thu May 05 10:12:15 2022
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.65	49	1015924	10.00	ppbv	-0.02
33) 1,4-Difluorobenzene	7.15	114	2982211	10.00	ppbv	-0.02
55) Chlorobenzene-d5	12.05	117	2643568	10.00	ppbv	-0.03

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.38	95	1939903	9.27	ppbv	-0.03
Spiked Amount	10.000	Range	65 - 135	Recovery	=	92.70%

Target Compounds

	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.04	85	92731	0.583	ppbv	98
3) Chlorodifluoromethane	2.98	51	52603m	0.417	ppbv	
4) Chloromethane	3.13	50	34012	0.539	ppbv #	86
9) Propene	3.00	41	264037	4.796	ppbv	90
10) Heptane	8.09	43	274761	2.034	ppbv	95
11) Trichlorofluoromethane	3.93	101	26564	0.194	ppbv #	71
13) Ethanol	3.59	45	629269	161.518	ppbv	88
15) Acetone	3.83	43	557405	5.816	ppbv #	59
17) tert-Butyl alcohol	4.29	59	66410m	0.902	ppbv	
19) Isopropyl Alcohol	3.95	45	127522m	2.799	ppbv	
20) Methylene Chloride	4.33	84	206345	5.713	ppbv	93
26) Hexane	5.66	57	819555	8.042	ppbv #	39
30) Cyclohexane	7.10	84	137004	1.606	ppbv	84
32) 1,1,1-Trichloroethane	6.49	97	35024m	0.212	ppbv	
34) 2-Butanone	5.22	43	112033	0.736	ppbv #	90
35) Carbon Tetrachloride	6.98	117	8760m	0.045	ppbv	
36) Benzene	6.86	78	763908	2.993	ppbv	97
44) 2,2,4-Trimethylpentane	7.84	57	1138067	2.541	ppbv #	94
50) 4-Methyl-2-Pentanone	8.73	43	63024	0.236	ppbv	90
52) Tetrachloroethene	11.19	164	148096	1.624	ppbv	96
53) Toluene	9.77	91	2140085	7.482	ppbv	97
58) Ethyl Benzene	12.67	91	479736	1.261	ppbv	97
59) m/p-Xylene	12.93	91	1413595	4.352	ppbv	92
60) o-Xylene	13.65	91	568763	1.861	ppbv	97
61) Styrene	13.49	104	39511m	0.242	ppbv	
65) tert-Butylbenzene	16.73	119	81211m	0.207	ppbv	
70) n-Butylbenzene	18.52	91	69751m	0.145	ppbv	
72) 4-Ethyltoluene	15.80	105	215227	0.618	ppbv	94
73) 1,3,5-Trimethylbenzene	15.96	105	178634	0.570	ppbv	98
74) 1,2,4-Trimethylbenzene	16.72	105	720164	2.097	ppbv #	65
79) Naphthalene	22.15	128	225956m	0.810	ppbv	

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

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL050922\
Data File : VL039009.D
Acq On : 10 May 2022 5:40
Operator : SY/AP
Sample : N2696-05
Misc : 400mL/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA1

Manual Integrations
APPROVED

Quant Time: May 11 11:26:56 2022

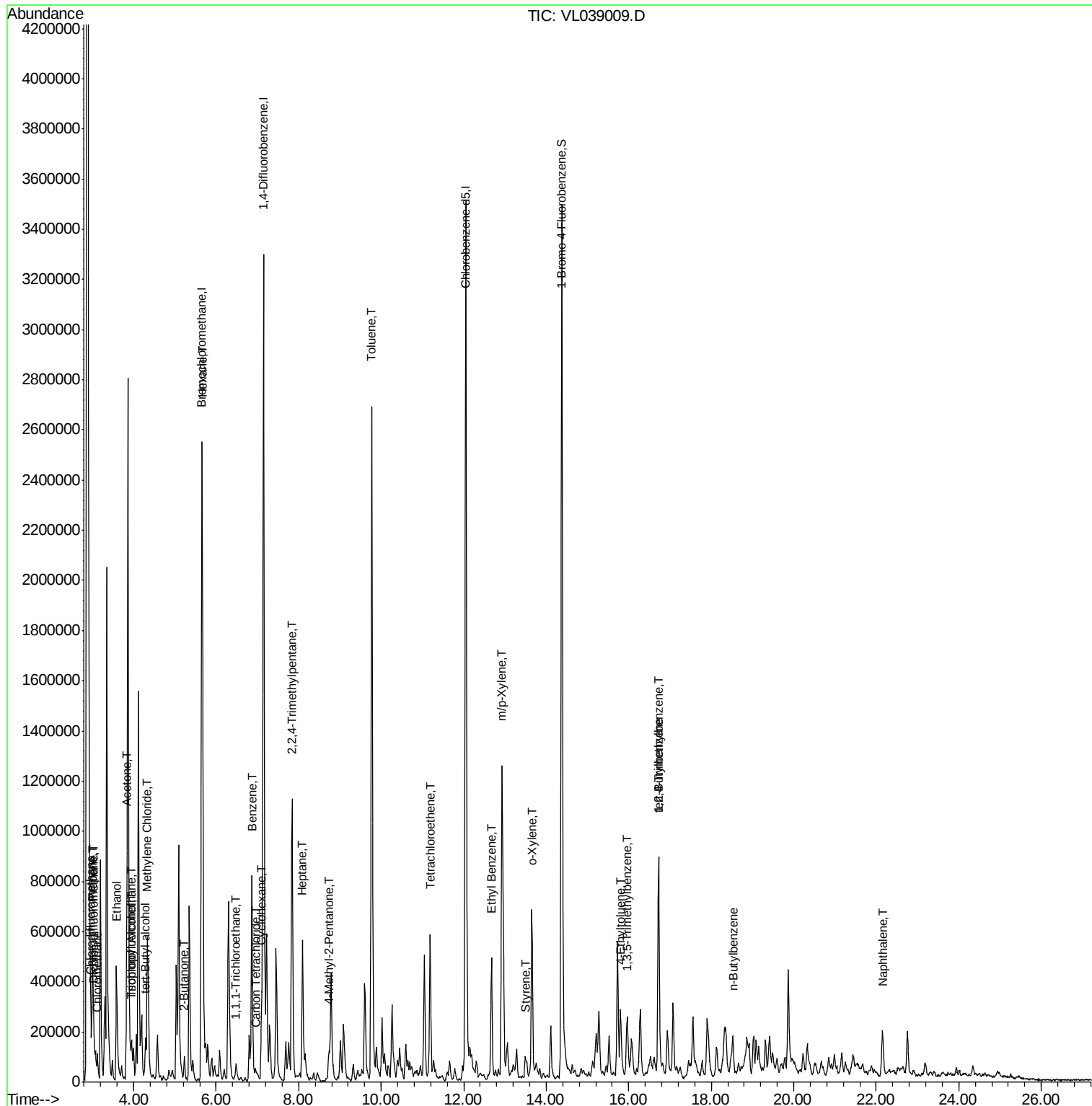
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL050522

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

QLast Update : Thu May 05 10:12:15 2022

Response via : Initial Calibration

Reviewed By :Semsettin Yesilyurt 05/10/2022
Supervised By :Mahesh Dadoda 05/11/2022





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.65 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 10 May 2022 5:40

Tot Ion:

Ion Ratio

49 100

128 54.

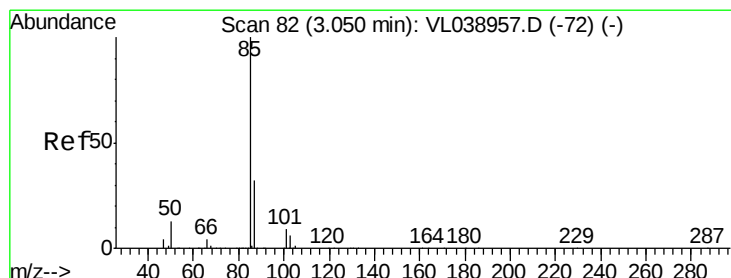
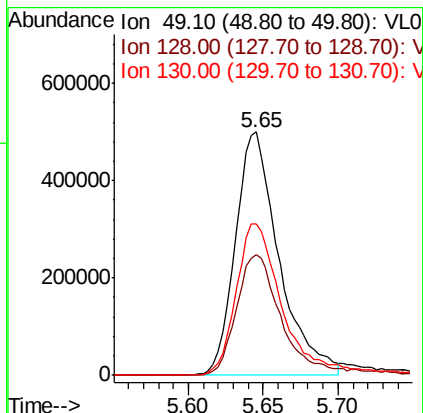
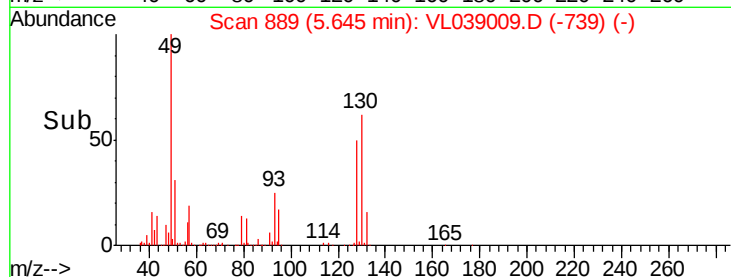
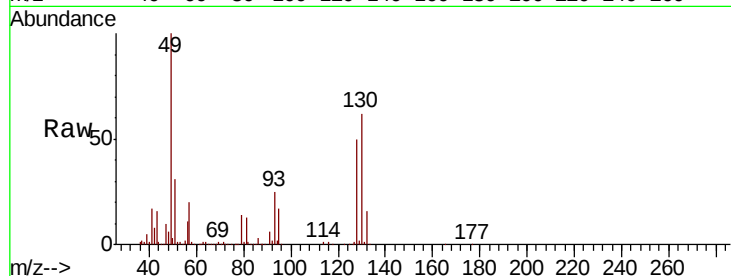
130 67.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 05/10/2022

Supervised By :Mahesh Dadoda 05/11/2022



#2

Dichlorodifluoromethane

Concen: 0.583 ppbv

RT: 3.04 min Scan# 79

Delta R.T. -0.01 min

Lab File: VL039009.D

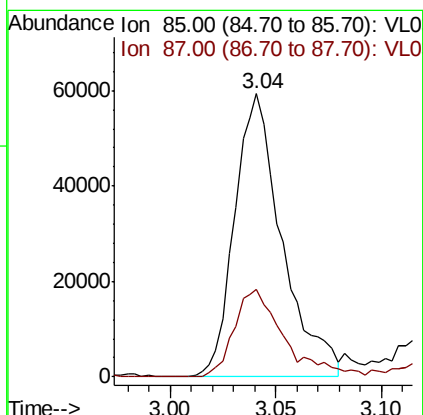
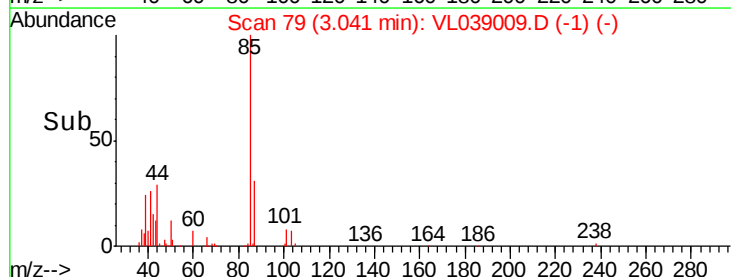
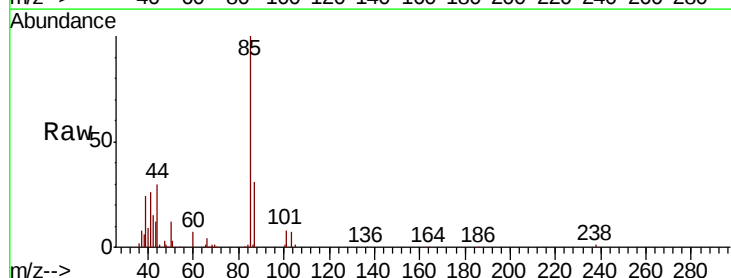
Acq: 10 May 2022 5:40

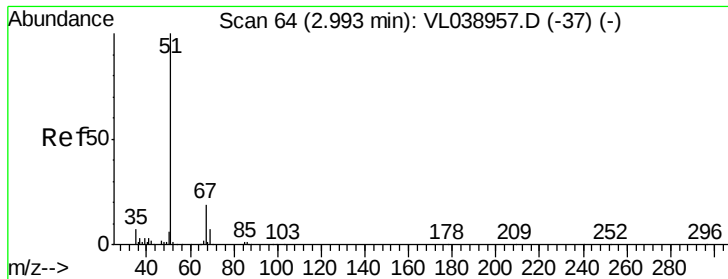
Tgt Ion: 85 Resp: 92731

Ion Ratio Lower Upper

85 100

87 30.7 25.7 38.5





#3

Chlorodifluoromethane

Concen: 0.417 ppbv m

RT: 2.98 Instrument: MSVOA_1

Delta R.T. ClientSampleId:

Lab File: IA1

Acq: 10 May 2022 3:40

Tot Ion:

Ion Ratio

51 100

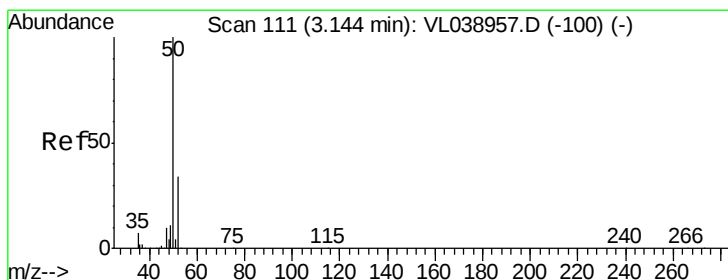
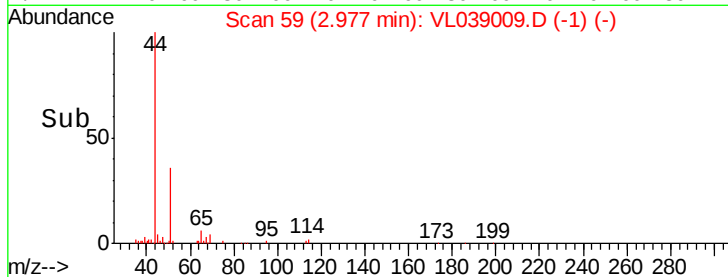
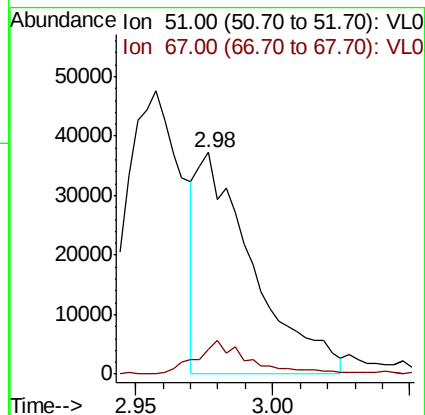
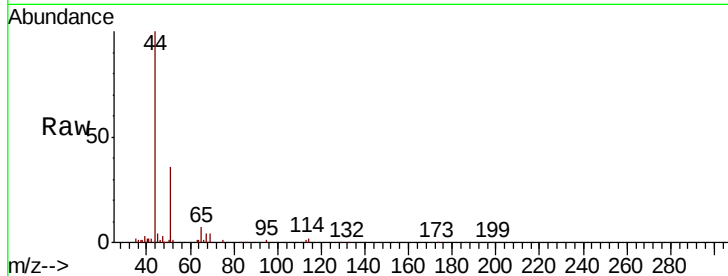
67 15.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 05/10/2022

Supervised By :Mahesh Dadoda 05/11/2022



#4

Chloromethane

Concen: 0.539 ppbv

RT: 3.13 min Scan# 107

Delta R.T. -0.01 min

Lab File: VL039009.D

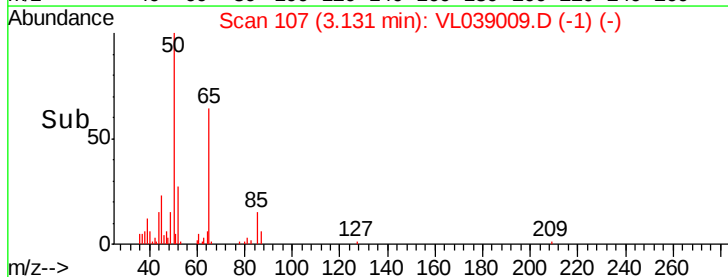
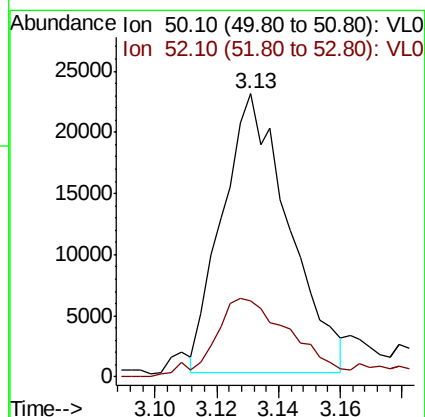
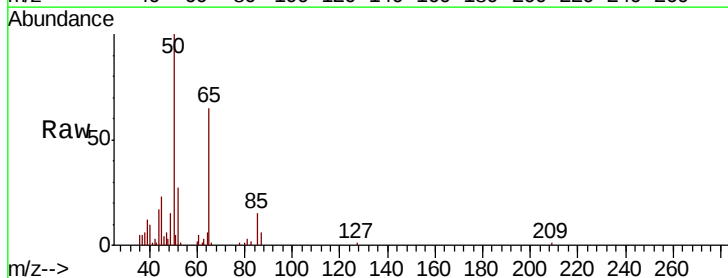
Acq: 10 May 2022 5:40

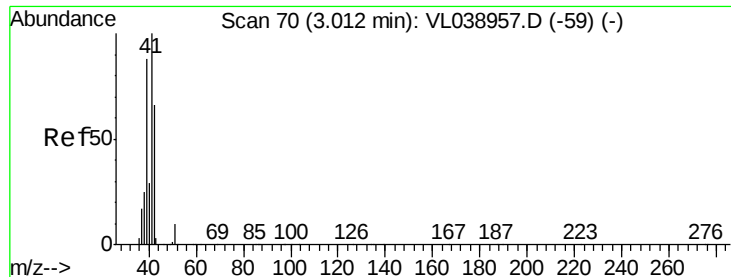
Tgt Ion: 50 Resp: 34012

Ion Ratio Lower Upper

50 100

52 26.1 27.3 40.9#



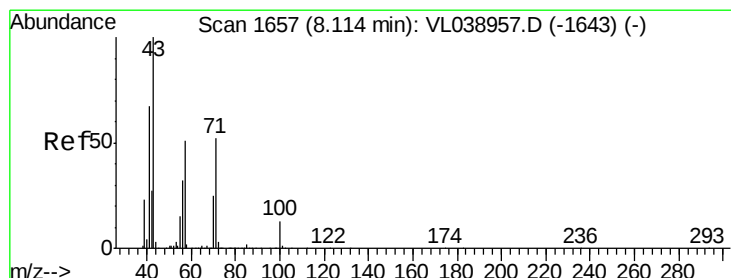
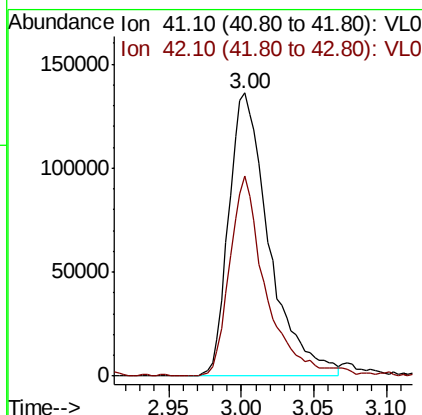
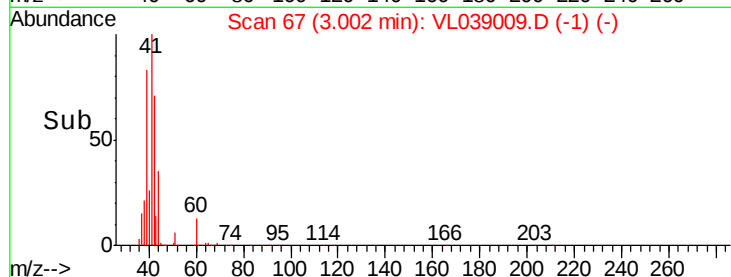
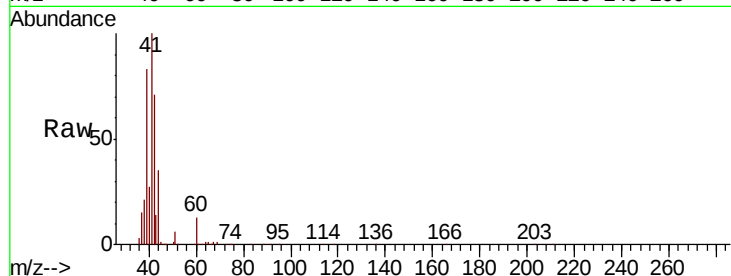


#9
 Propene
 Concen: 4.796 ppbv
 RT: 3.00
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 10 May 2022 3:40

Tot Ion:
 Ion Ratio
 41 100
 42 64.

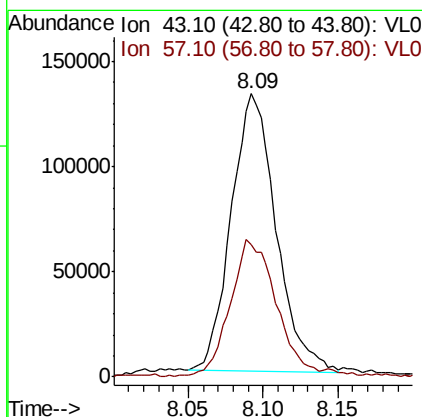
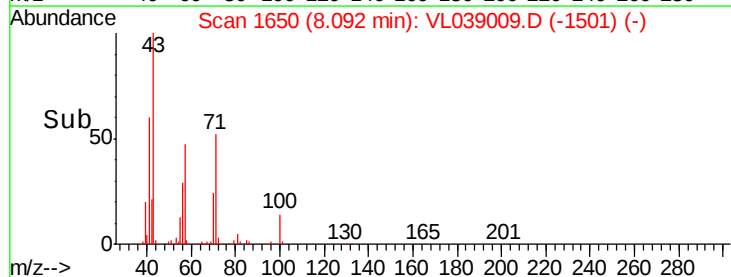
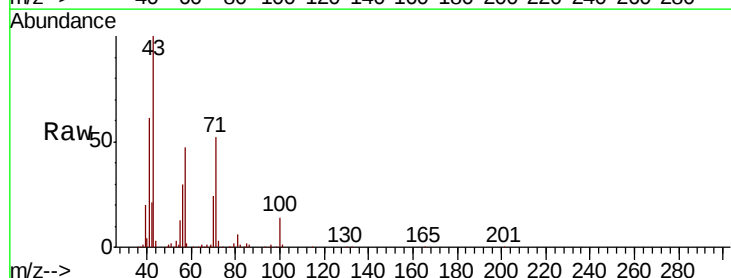
Manual Integrations
 APPROVED

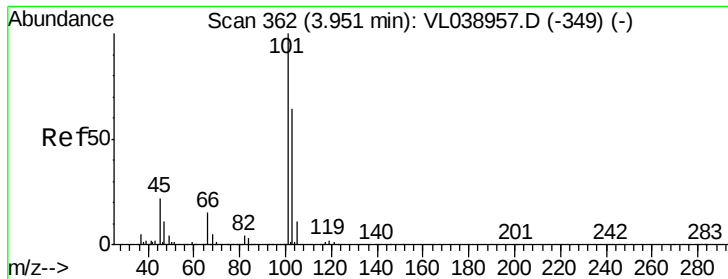
Reviewed By :Semsettin Yesilyurt 05/10/2022
 Supervised By :Mahesh Dadoda 05/11/2022



#10
 Heptane
 Concen: 2.034 ppbv
 RT: 8.09 min Scan# 1650
 Delta R.T. -0.02 min
 Lab File: VL039009.D
 Acq: 10 May 2022 5:40

Tgt Ion: 43 Resp: 274761
 Ion Ratio Lower Upper
 43 100
 57 53.7 40.5 60.7





#11

Trichlorofluoromethane

Concen: 0.194 ppbv

RT: 3.93 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 10 May 2022 3:40

Tot Ion:1

Ion Rati

101 100

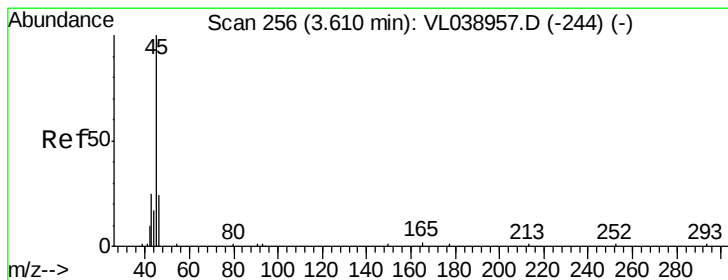
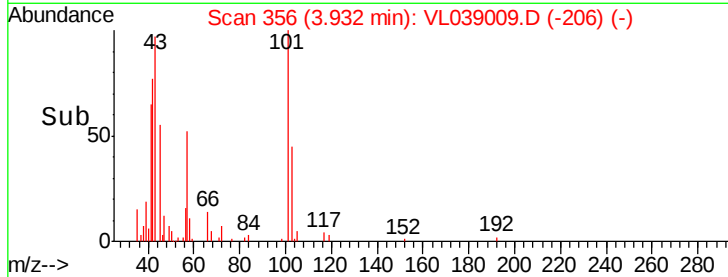
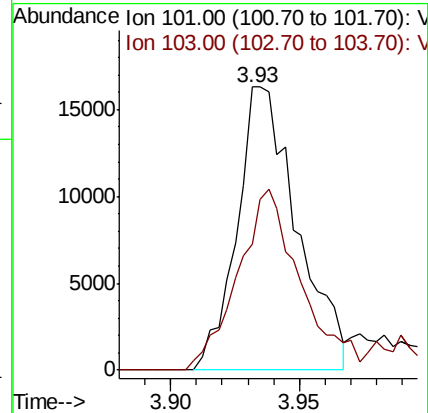
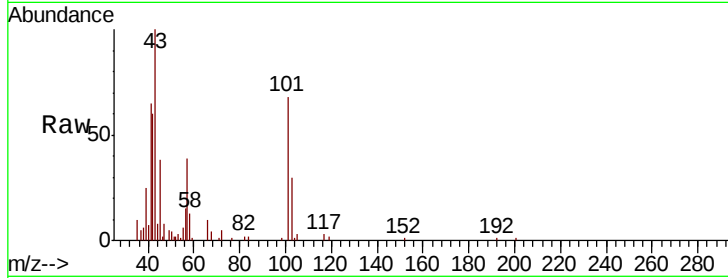
103 41.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 05/10/2022

Supervised By :Mahesh Dadoda 05/11/2022



#13

Ethanol

Concen: 161.518 ppbv

RT: 3.59 min Scan# 249

Delta R.T. -0.02 min

Lab File: VL039009.D

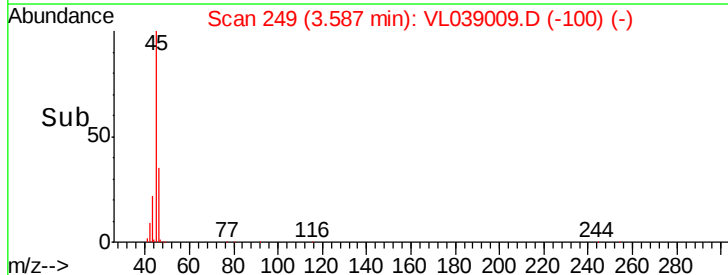
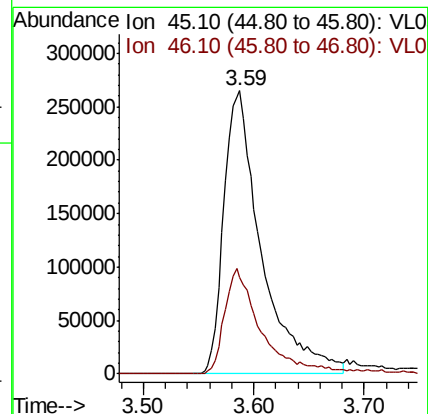
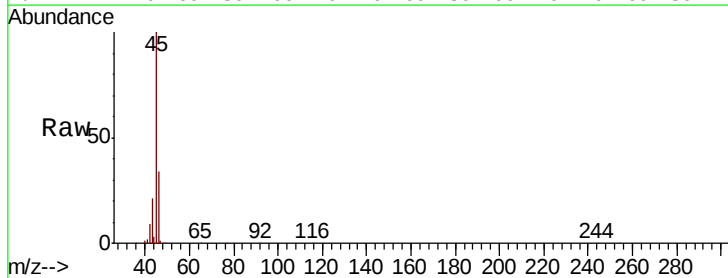
Acq: 10 May 2022 5:40

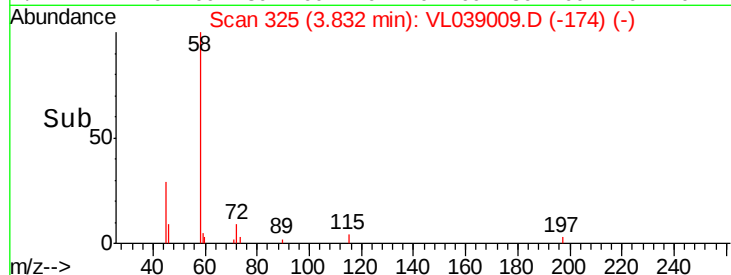
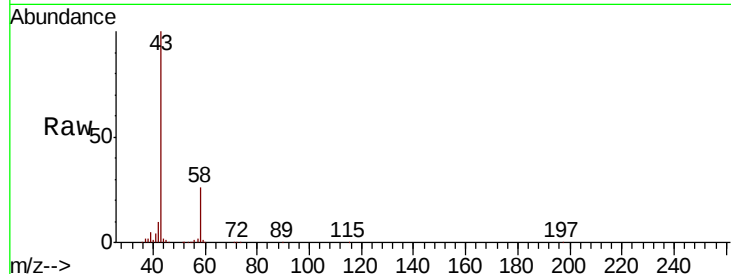
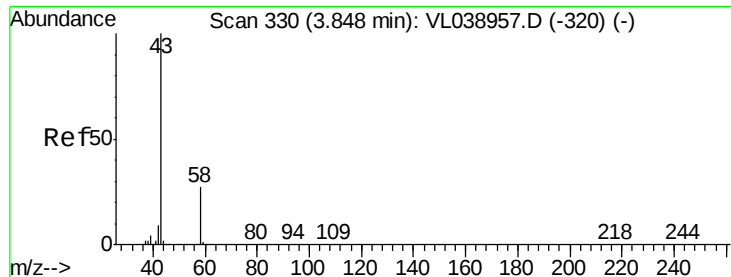
Tgt Ion: 45 Resp: 629269

Ion Ratio Lower Upper

45 100

46 37.4 18.0 72.2



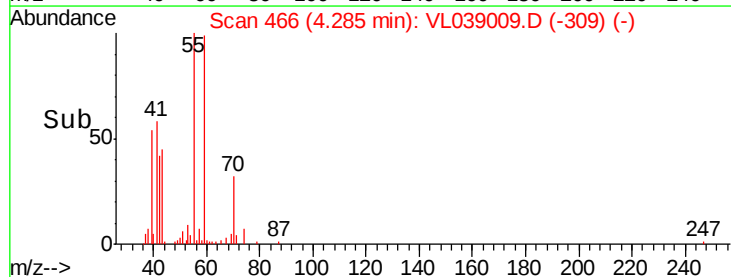
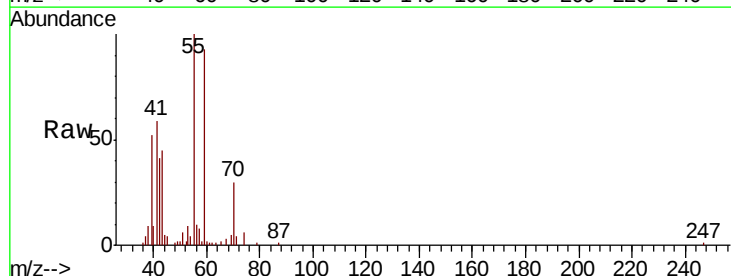
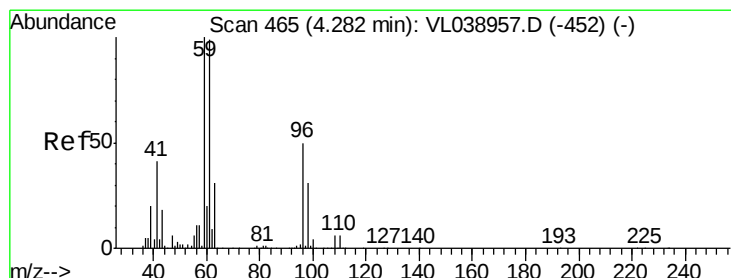
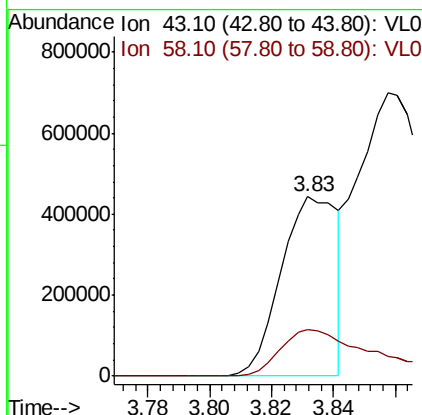


#15
Acetone
Concen: 5.816 ppbv
RT: 3.83
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 10 May 2022 5:40

Tot Ion:
Ion Ratio
43 100
58 47.

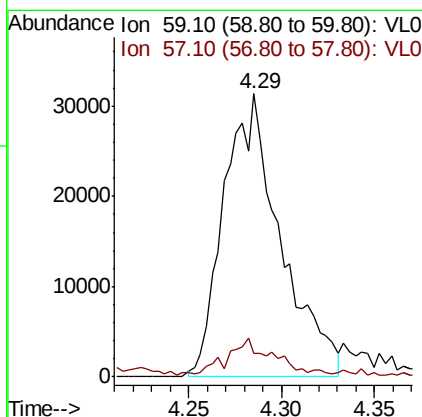
Manual Integrations
APPROVED

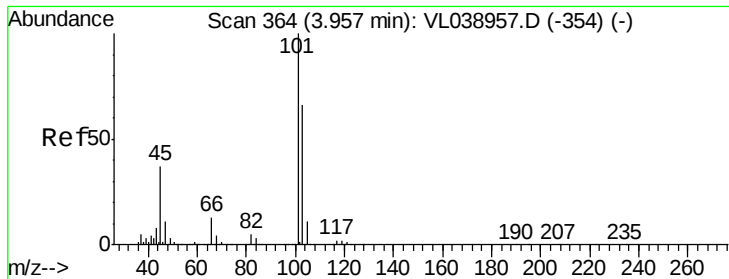
Reviewed By :Semsettin Yesilyurt 05/10/2022
Supervised By :Mahesh Dadoda 05/11/2022



#17
tert-Butyl alcohol
Concen: 0.902 ppbv m
RT: 4.29 min Scan# 466
Delta R.T. 0.00 min
Lab File: VL039009.D
Acq: 10 May 2022 5:40

Tgt Ion: 59 Resp: 66410
Ion Ratio Lower Upper
59 100
57 0.0 9.2 13.8#





#19

Isopropyl Alcohol

Concen: 2.799 ppbv m

RT: 3.95

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 10 May 2022 3:40

Tot Ion:

Ion Ratio

45 100

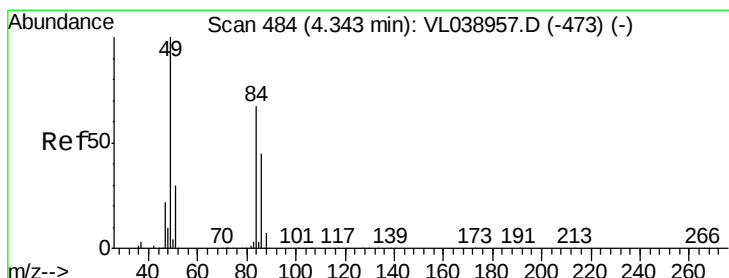
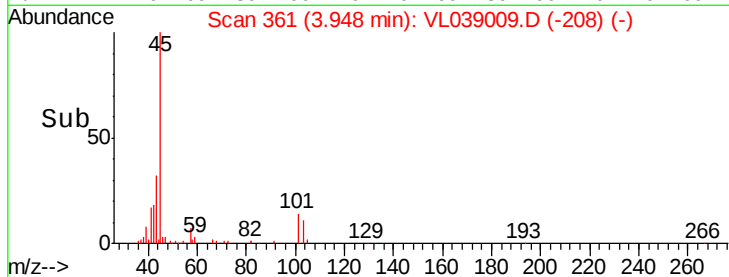
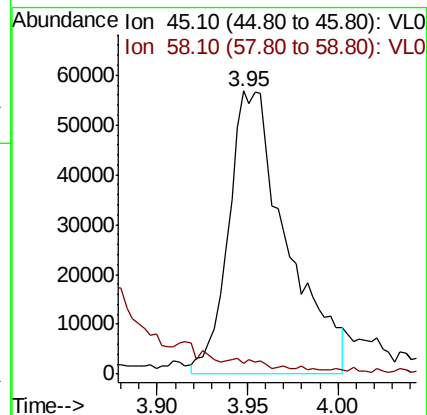
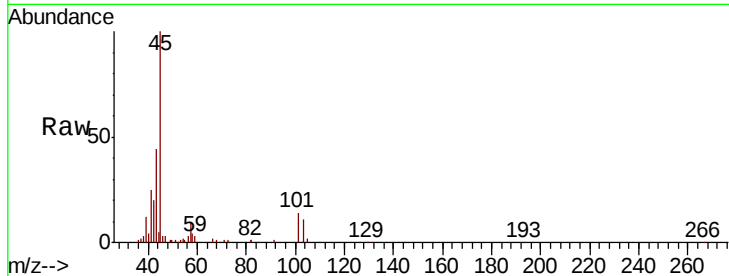
58 0.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 05/10/2022

Supervised By :Mahesh Dadoda 05/11/2022



#20

Methylene Chloride

Concen: 5.713 ppbv

RT: 4.33 min Scan# 479

Delta R.T. -0.02 min

Lab File: VL039009.D

Acq: 10 May 2022 5:40

Tgt Ion: 84 Resp: 206345

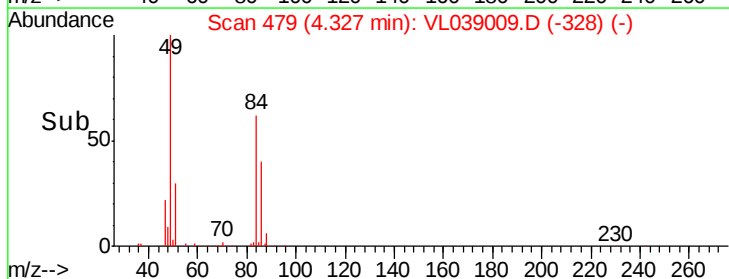
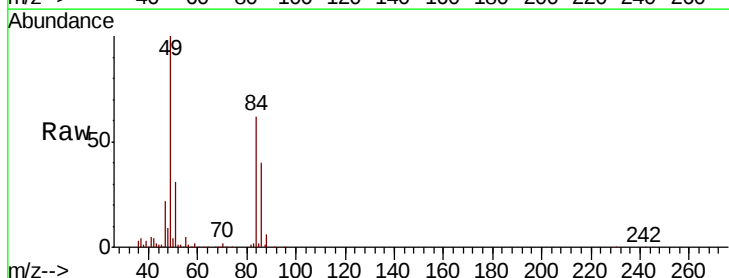
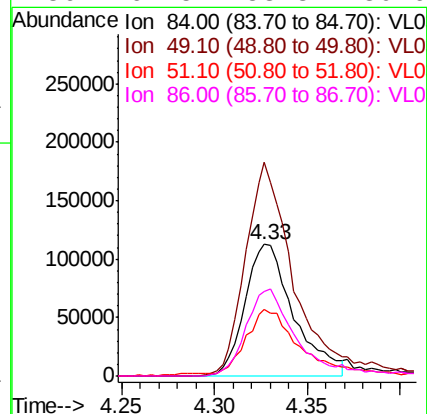
Ion Ratio Lower Upper

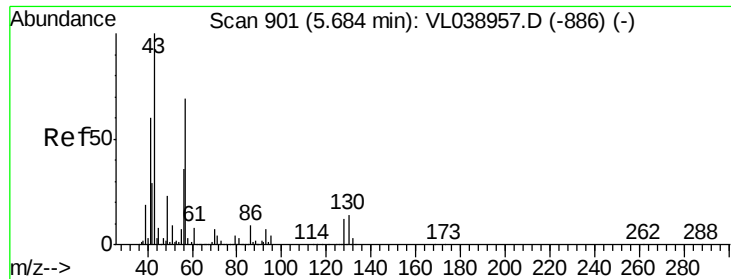
84 100

49 162.1 119.9 179.9

51 48.1 35.7 53.5

86 64.5 53.8 80.6



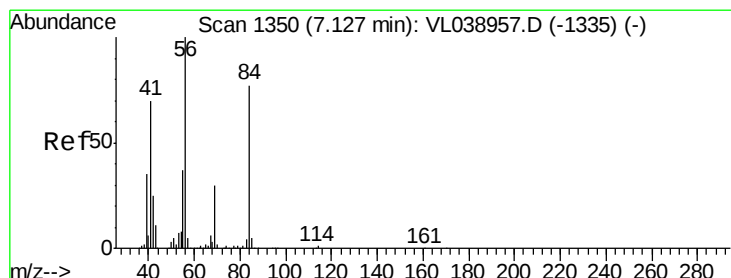
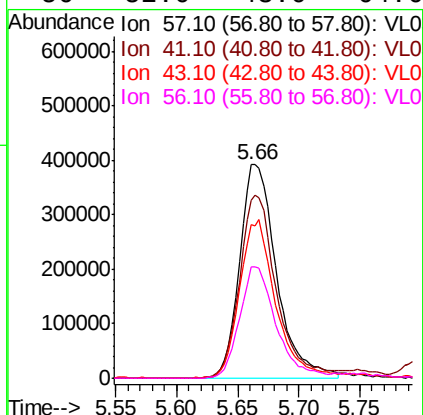
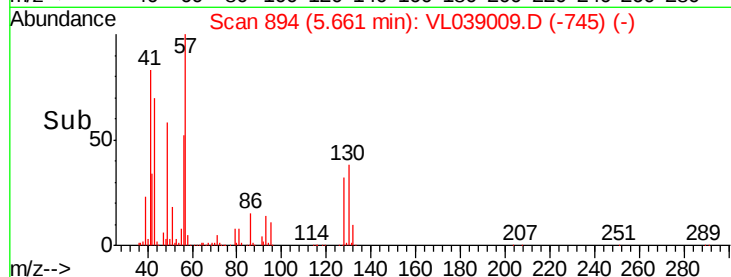
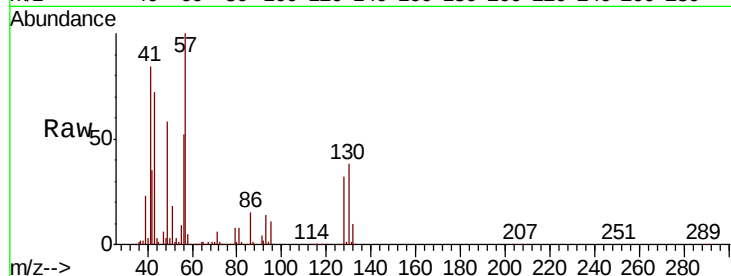


#26
Hexane
Concen: 8.042 ppbv
RT: 5.66
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 10 May 2022 5:40

Tot Ion:
Ion Ratio
57 100
41 89.
43 75.
56 52.0 43.0 64.6

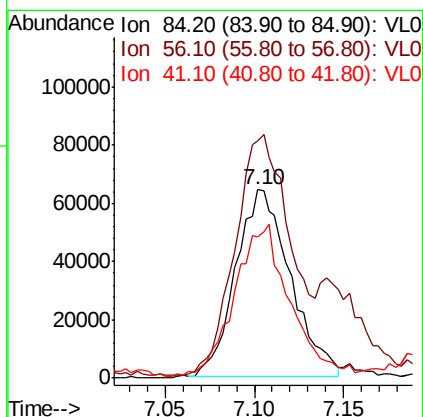
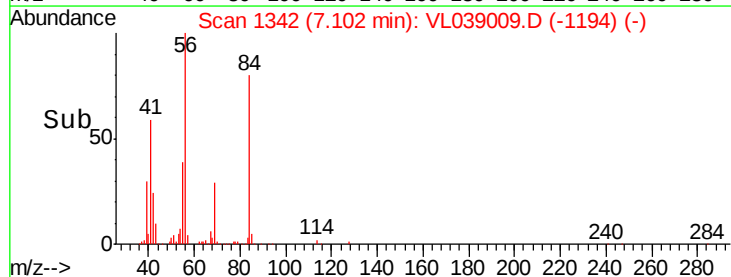
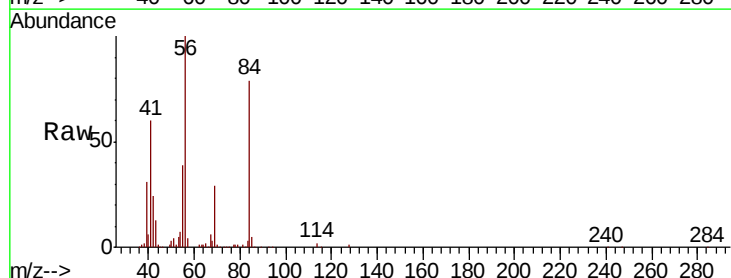
Manual Integrations
APPROVED

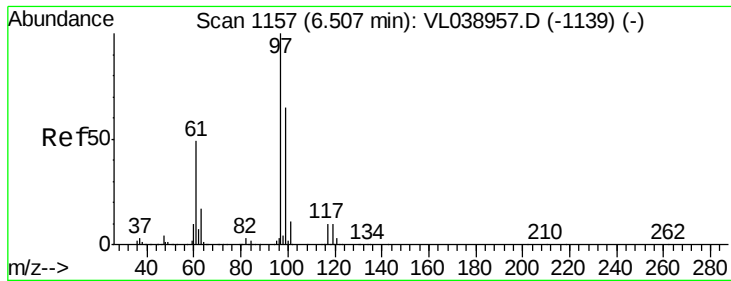
Reviewed By :Semsettin Yesilyurt 05/10/2022
Supervised By :Mahesh Dadoda 05/11/2022



#30
Cyclohexane
Concen: 1.606 ppbv
RT: 7.10 min Scan# 1342
Delta R.T. -0.03 min
Lab File: VL039009.D
Acq: 10 May 2022 5:40

Tgt Ion: 84 Resp: 137004
Ion Ratio Lower Upper
84 100
56 171.0 115.3 172.9
41 83.0 72.0 108.0



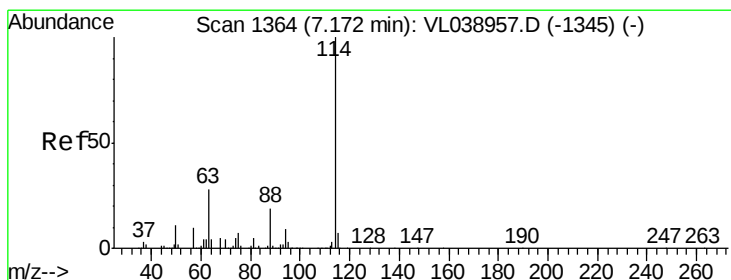
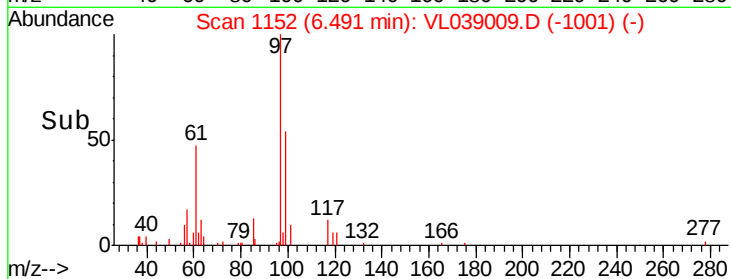
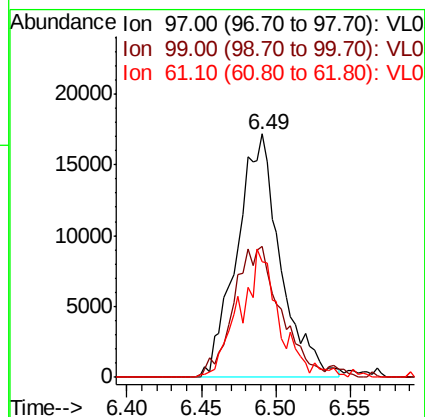
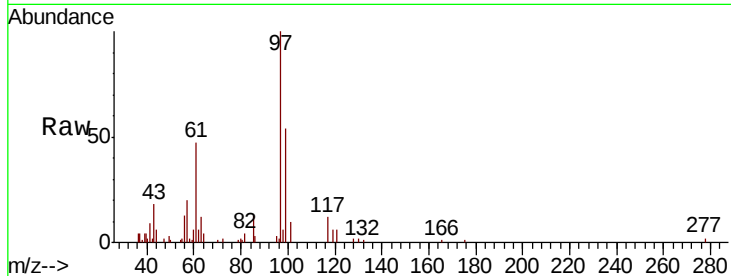


#32
 1,1,1-Trichloroethane
 Concen: 0.212 ppbv m
 RT: 6.49 Instrument : MSVOA_1
 Delta R.T. :
 Lab File: ClientSampleId :
 Acq: 10 May 2022 5:40

Tot Ion:
 Ion Ratio
 97 100
 99 0.
 61 0.

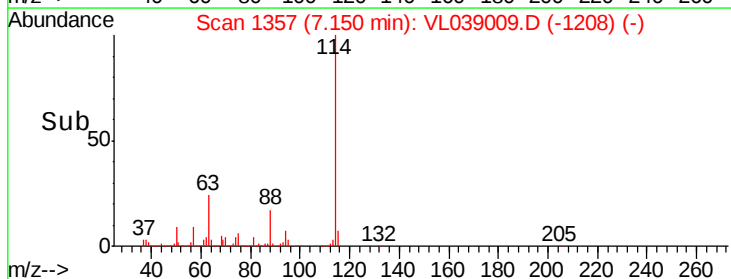
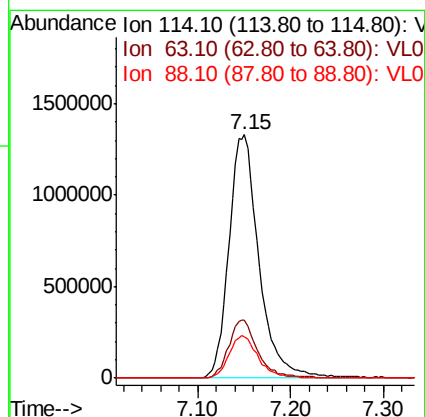
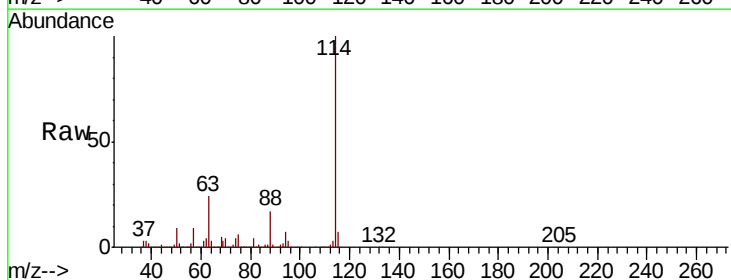
Manual Integrations
 APPROVED

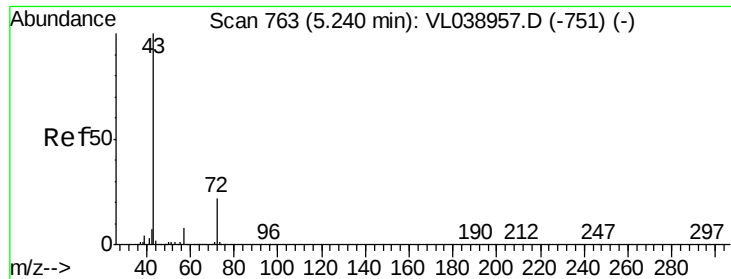
Reviewed By :Semsettin Yesilyurt 05/10/2022
 Supervised By :Mahesh Dadoda 05/11/2022



#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.15 min Scan# 1357
 Delta R.T. -0.02 min
 Lab File: VL039009.D
 Acq: 10 May 2022 5:40

Tgt Ion:114 Resp: 2982211
 Ion Ratio Lower Upper
 114 100
 63 23.3 22.6 33.8
 88 17.3 15.4 23.0



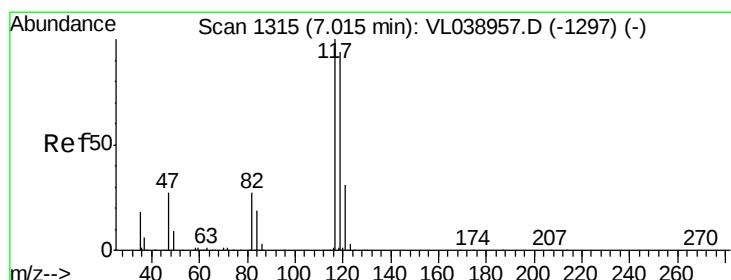
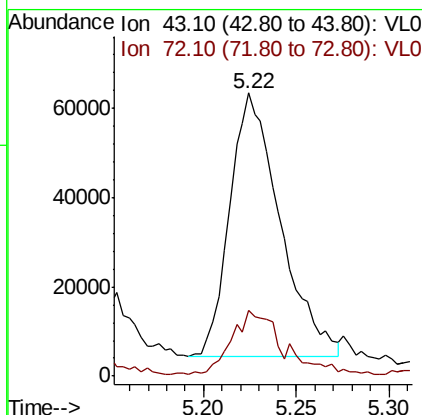
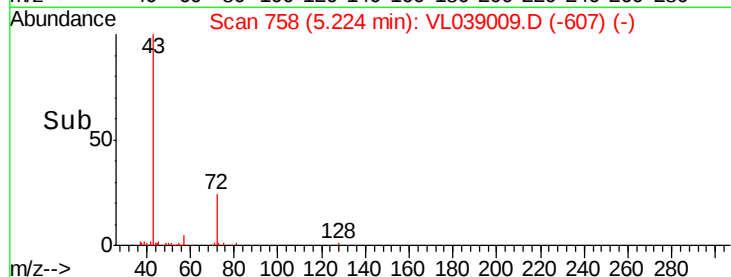
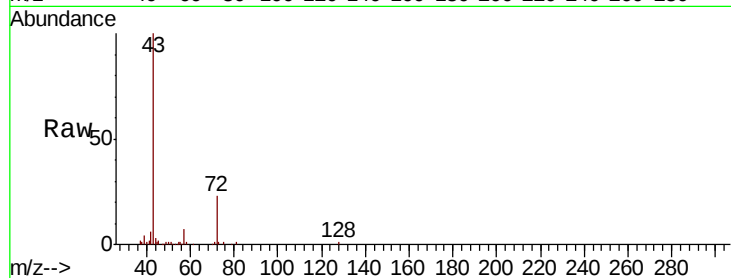


#34
2-Butanone
Concen: 0.736 ppbv
RT: 5.22
Delta R.T. MSVOA_L
Lab File: ClientSampled :
Acq: 10 May 2022 5:40

Tot Ion:
Ion Ratio
43 100
72 27.

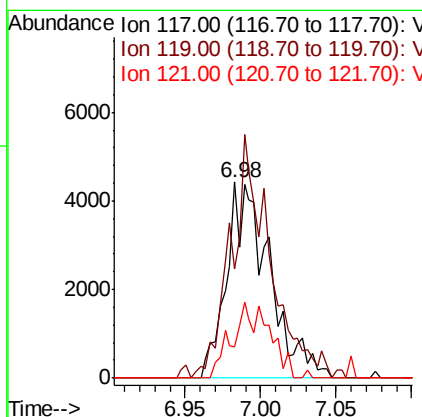
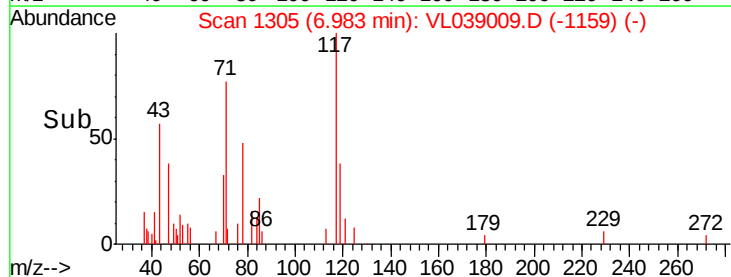
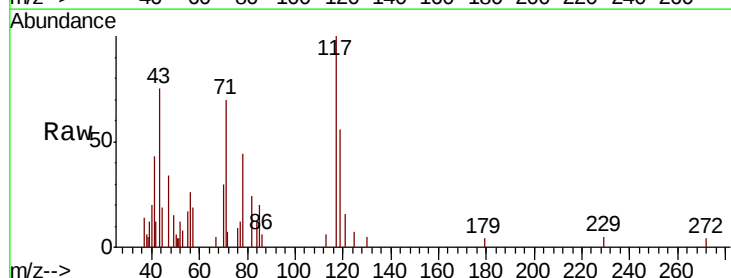
Manual Integrations
APPROVED

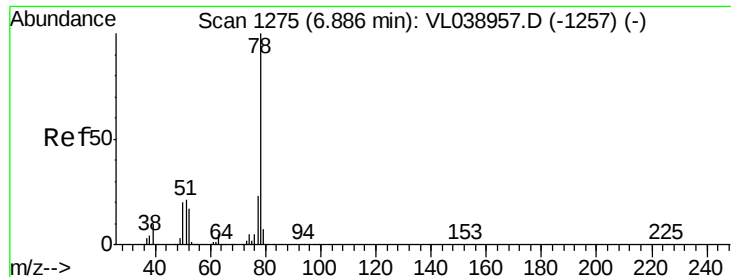
Reviewed By :Semsettin Yesilyurt 05/10/2022
Supervised By :Mahesh Dadoda 05/11/2022



#35
Carbon Tetrachloride
Concen: 0.045 ppbv m
RT: 6.98 min Scan# 1305
Delta R.T. -0.03 min
Lab File: VL039009.D
Acq: 10 May 2022 5:40

Tgt Ion:117 Resp: 8760
Ion Ratio Lower Upper
117 100
119 55.6 75.2 112.8#
121 15.8 24.6 37.0#



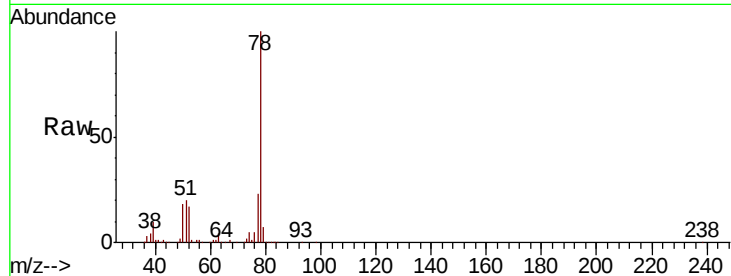


#36
Benzene
Concen: 2.993 ppbv
RT: 6.86
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 10 May 2022 5:40

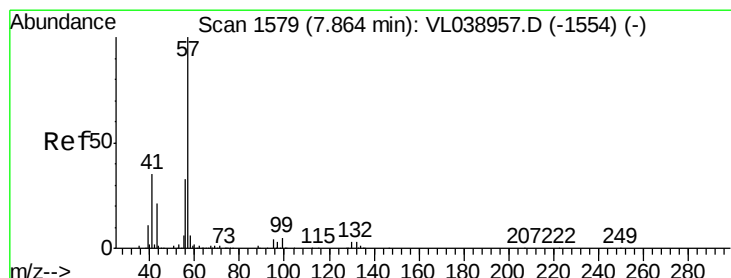
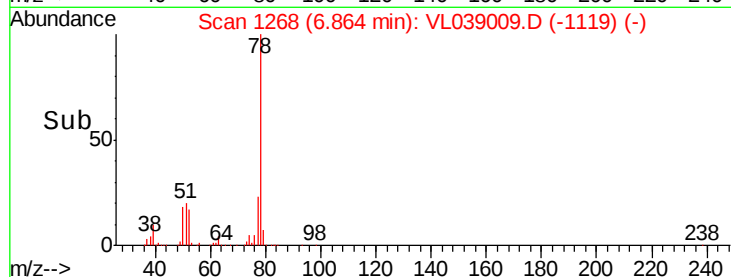
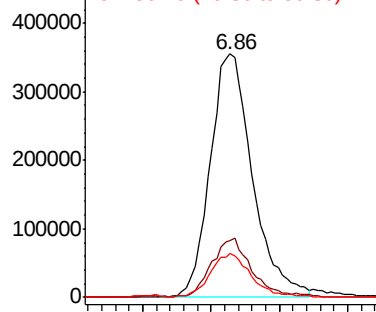
Tot Ion:
Ion Ratio
78 100
77 22.
50 17.

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 05/10/2022
Supervised By :Mahesh Dadoda 05/11/2022

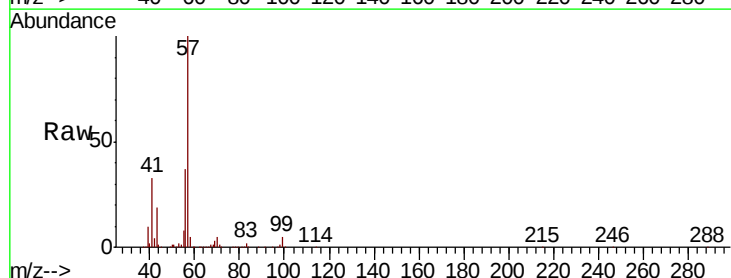


Abundance Ion 78.10 (77.80 to 78.80): VL0
Ion 77.10 (76.80 to 77.80): VL0
Ion 50.10 (49.80 to 50.80): VL0

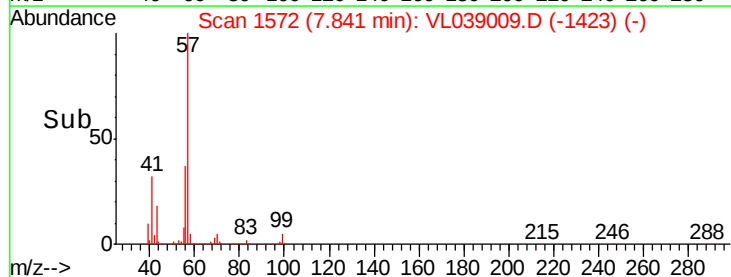
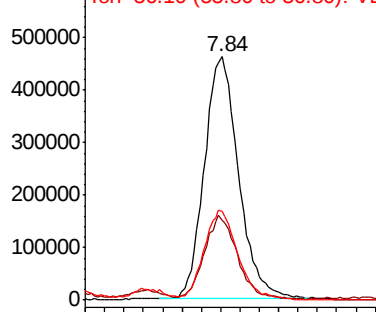


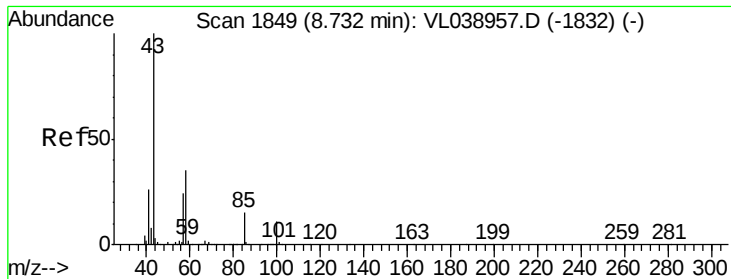
#44
2,2,4-Trimethylpentane
Concen: 2.541 ppbv
RT: 7.84 min Scan# 1572
Delta R.T. -0.02 min
Lab File: VL039009.D
Acq: 10 May 2022 5:40

Tgt Ion: 57 Resp: 1138067
Ion Ratio Lower Upper
57 100
41 33.1 26.3 39.5
56 37.3 24.6 37.0#



Abundance Ion 57.10 (56.80 to 57.80): VL0
Ion 41.10 (40.80 to 41.80): VL0
Ion 56.10 (55.80 to 56.80): VL0



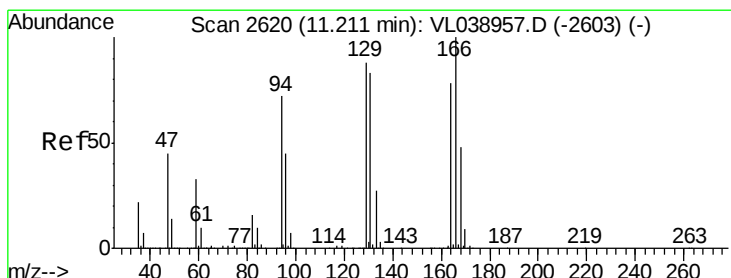
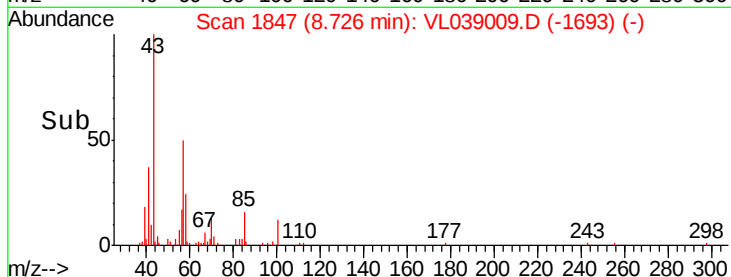
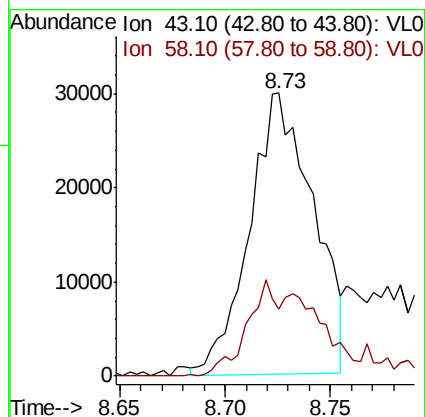
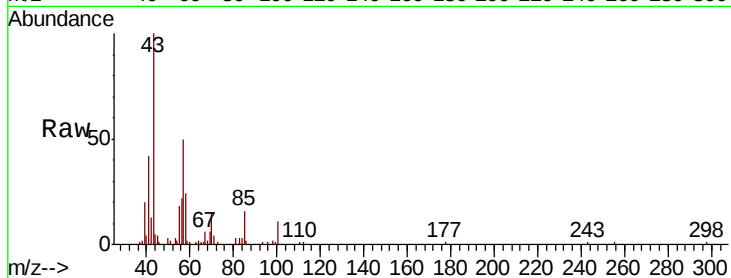


#50
4-Methyl-2-pentanone
Concen: 0.236 ppbv
RT: 8.73
Delta R.T.: MSVOA_L
Lab File: ClientSampled :
Acq: 10 May 2022 5:40

Tot Ion:
Ion Ratio
43 100
58 41.

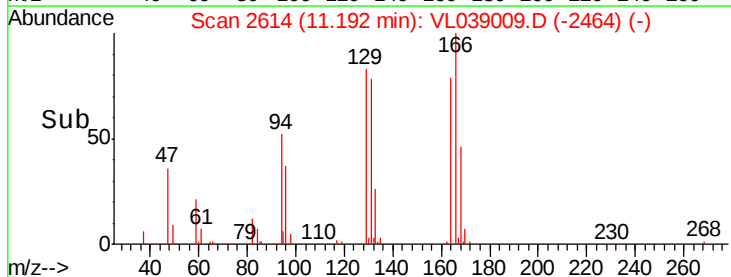
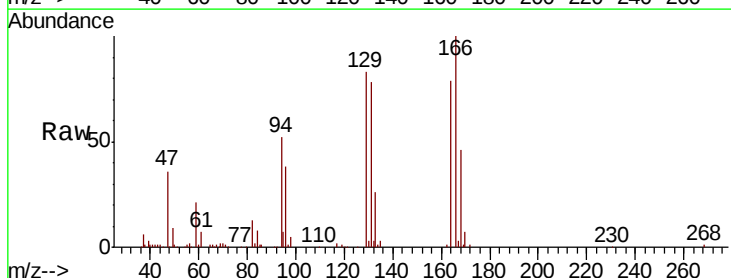
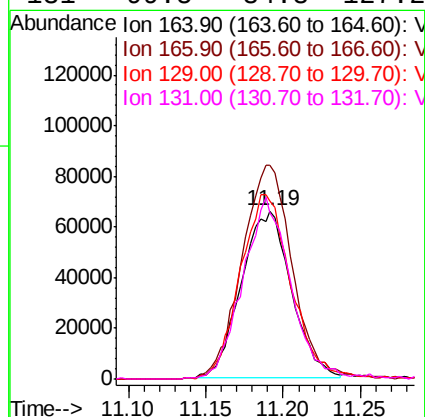
Manual Integrations
APPROVED

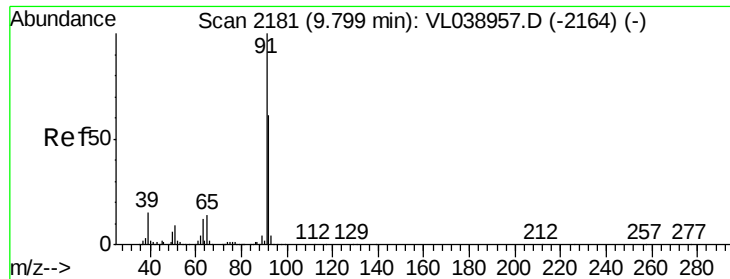
Reviewed By :Semsettin Yesilyurt 05/10/2022
Supervised By :Mahesh Dadoda 05/11/2022



#52
Tetrachloroethene
Concen: 1.624 ppbv
RT: 11.19 min Scan# 2614
Delta R.T.: -0.02 min
Lab File: VL039009.D
Acq: 10 May 2022 5:40

Tgt Ion:164 Resp: 148096
Ion Ratio Lower Upper
164 100
166 127.6 102.5 153.7
129 106.1 90.1 135.1
131 99.5 84.8 127.2





#53

Toluene

Concen: 7.482 ppbv

RT: 9.77

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 10 May 2022 5:40

Tot Ion:

Ion Ratio

91 100

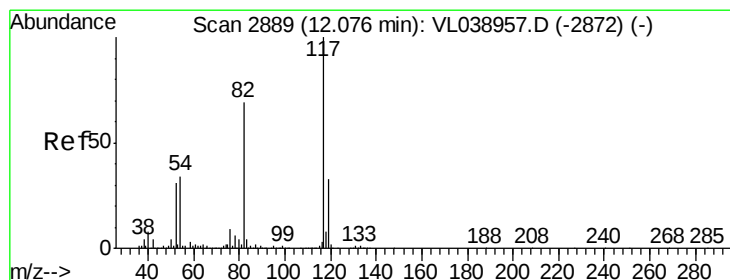
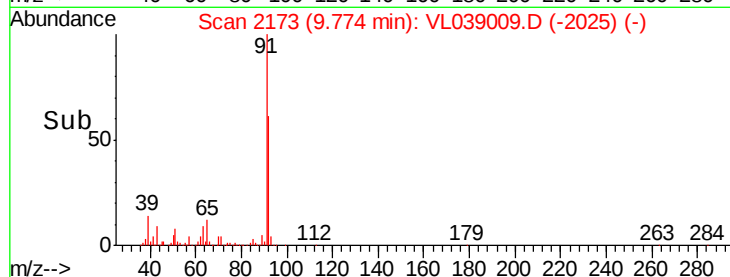
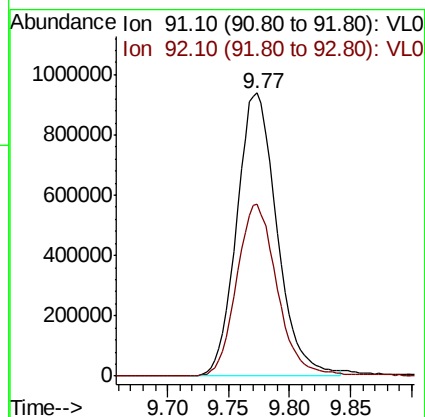
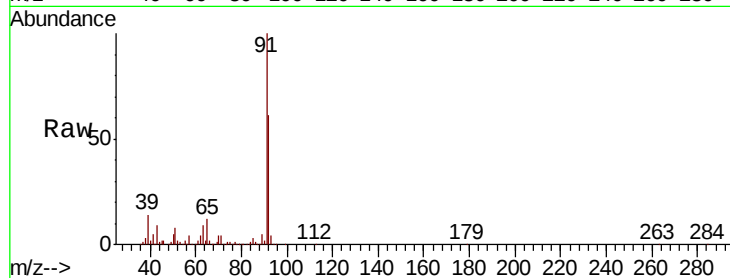
92 62.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 05/10/2022

Supervised By :Mahesh Dadoda 05/11/2022



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.05 min Scan# 2881

Delta R.T. -0.03 min

Lab File: VL039009.D

Acq: 10 May 2022 5:40

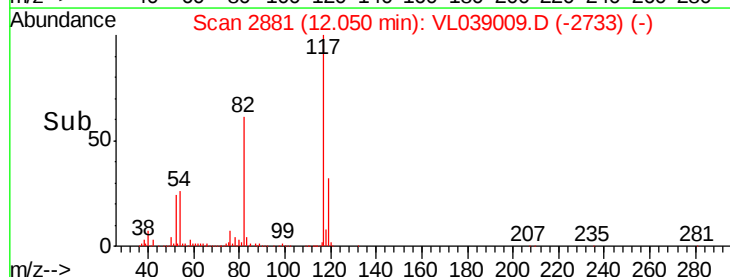
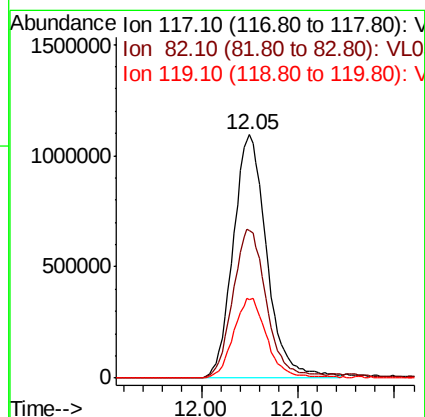
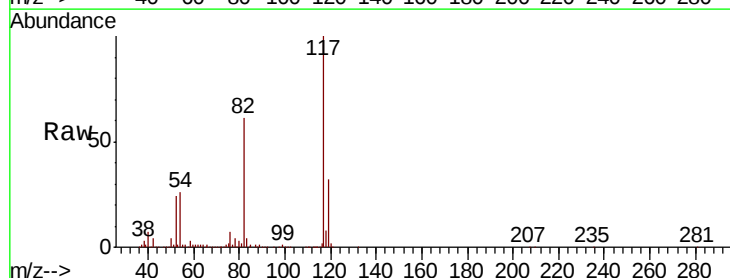
Tgt Ion:117 Resp: 2643568

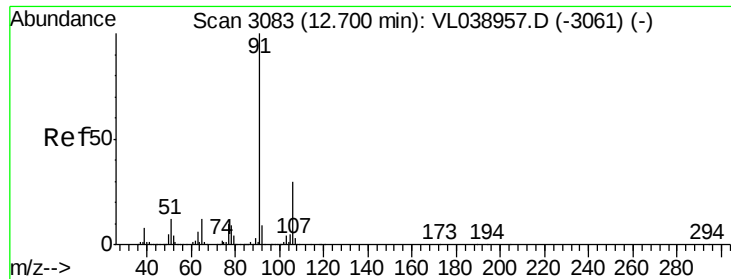
Ion Ratio Lower Upper

117 100

82 61.2 57.0 85.6

119 32.7 27.2 40.8



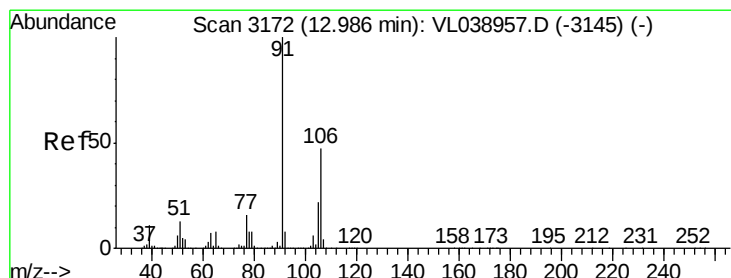
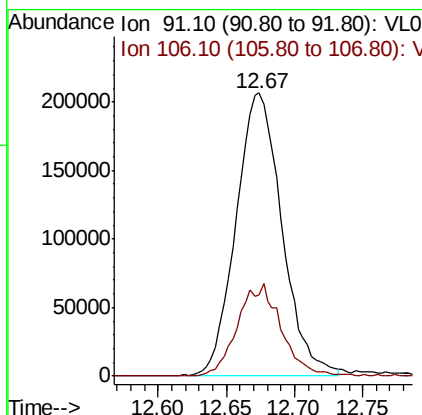
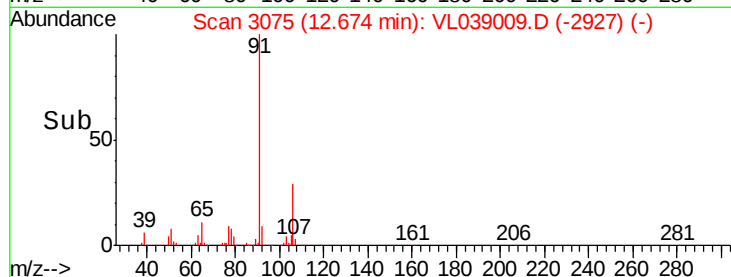
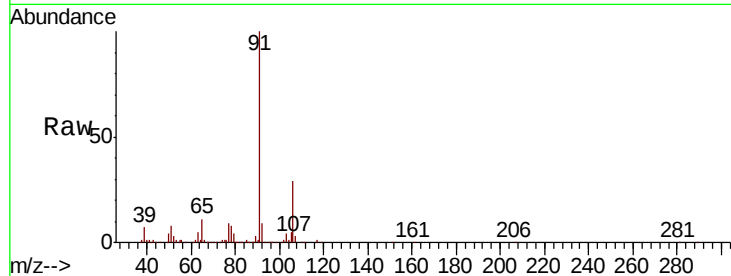


#58
Ethyl Benzene
Concen: 1.261 ppbv
RT: 12.67 min
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId :
Acq: 10 May 2022 5:40

Tot Ion:
Ion Ratio
91 100
106 28.

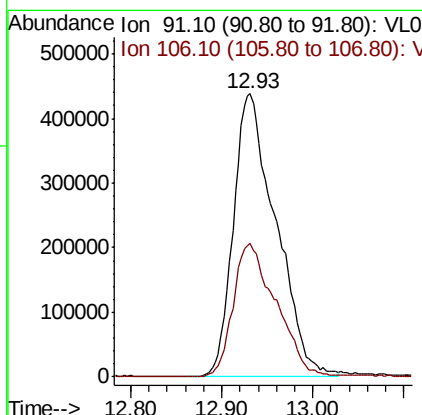
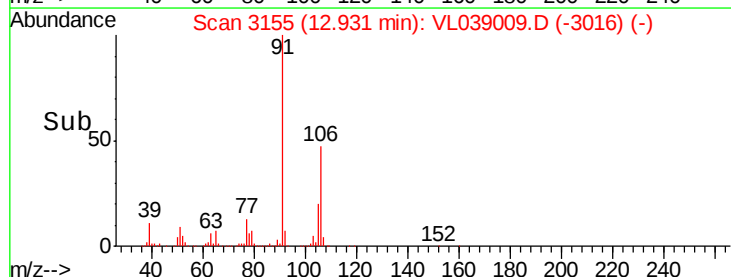
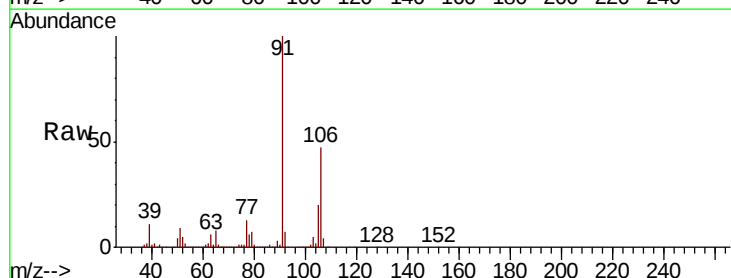
Manual Integrations
APPROVED

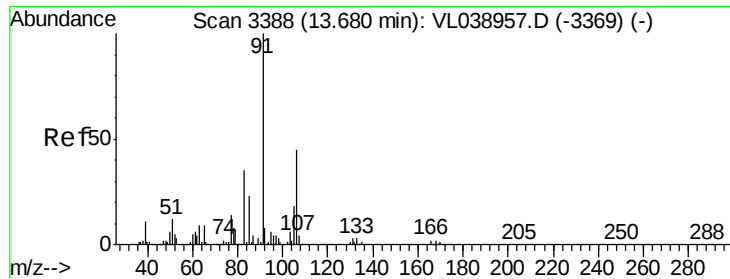
Reviewed By :Semsettin Yesilyurt 05/10/2022
Supervised By :Mahesh Dadoda 05/11/2022



#59
m/p-Xylene
Concen: 4.352 ppbv
RT: 12.93 min Scan# 3155
Delta R.T. -0.05 min
Lab File: VL039009.D
Acq: 10 May 2022 5:40

Tgt Ion: 91 Resp: 1413595
Ion Ratio Lower Upper
91 100
106 48.1 34.6 52.0



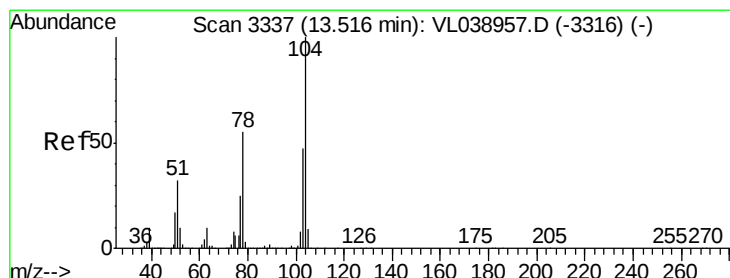
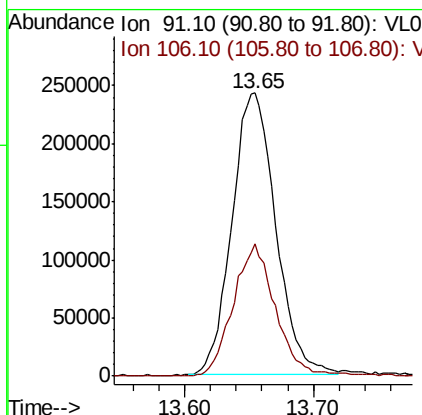
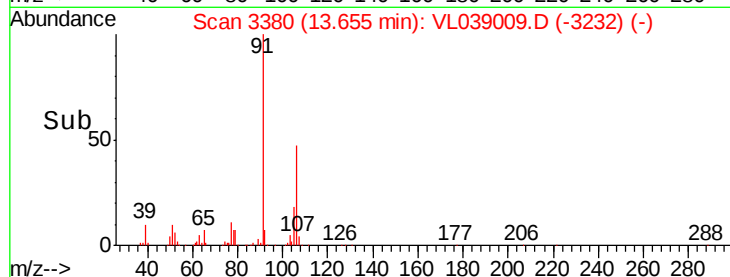
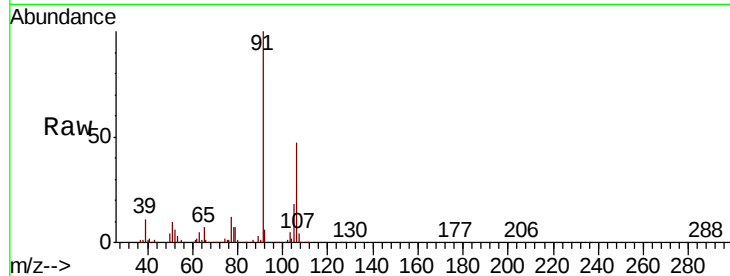


#60
o-Xylene
Concen: 1.861 ppbv
RT: 13.65 min
Delta R.T.: MSVOA_L
Lab File: ClientSampleId :
Acq: 10 May 2022 5:40

Tot Ion:
Ion Ratio
91 100
106 46.

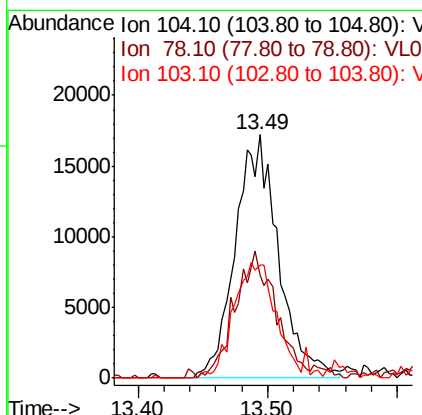
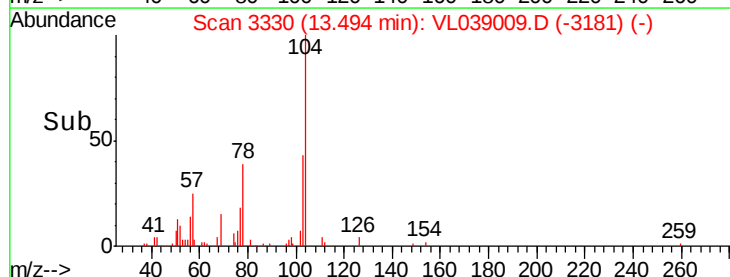
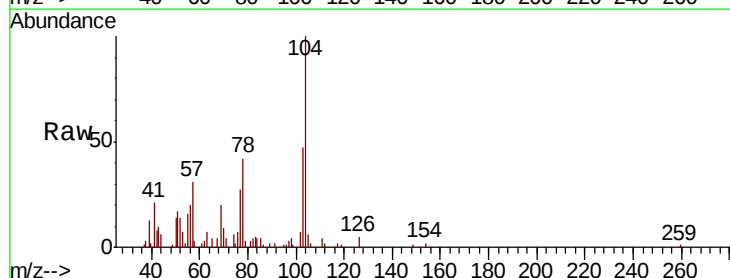
Manual Integrations
APPROVED

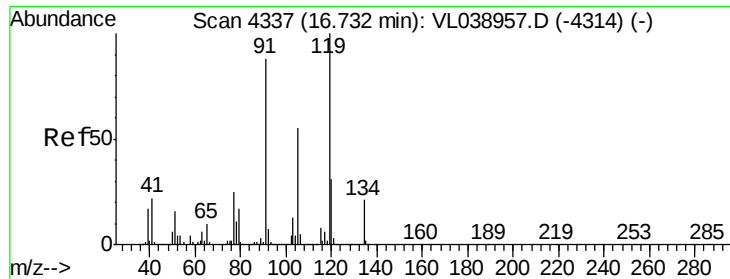
Reviewed By :Semsettin Yesilyurt 05/10/2022
Supervised By :Mahesh Dadoda 05/11/2022



#61
Styrene
Concen: 0.242 ppbv m
RT: 13.49 min Scan# 3330
Delta R.T.: -0.02 min
Lab File: VL039009.D
Acq: 10 May 2022 5:40

Tgt Ion:104 Resp: 39511
Ion Ratio Lower Upper
104 100
78 52.5 46.4 69.6
103 48.6 39.3 58.9



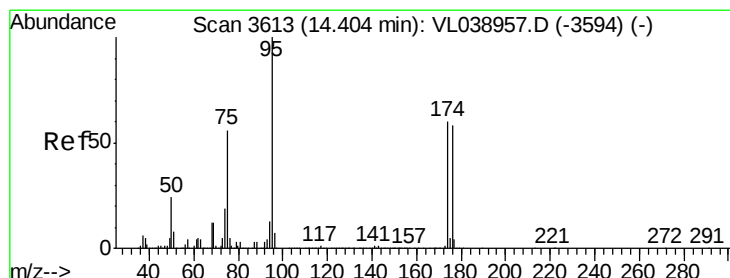
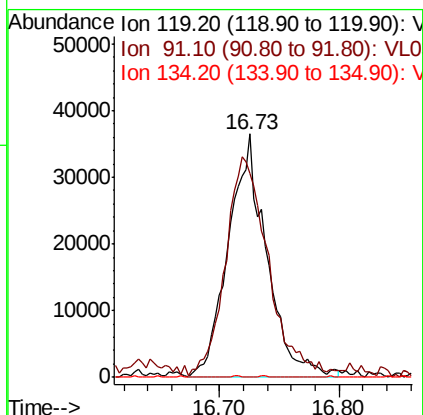
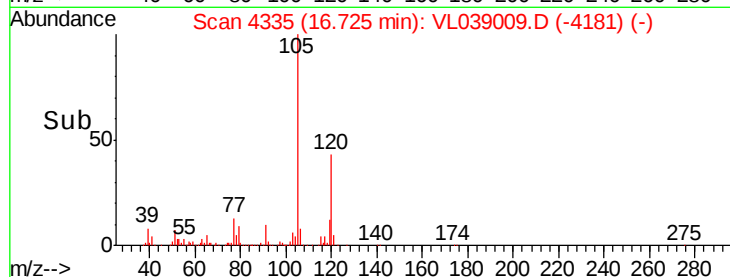
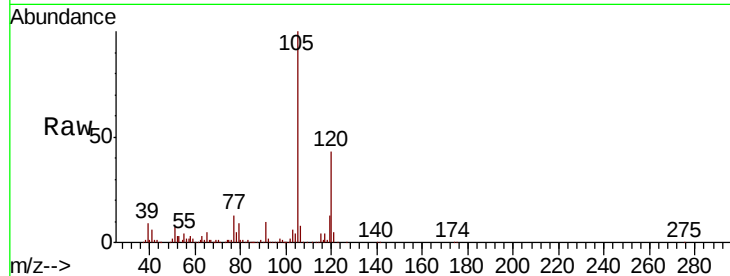


#65
tert-Butylbenzene
Concen: 0.207 ppbv m
RT: 16.73 min
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId :
Acq: 10 May 2022 5:40

Tot Ion: 1
Ion Ratio
119 100
91 105.
134 0.

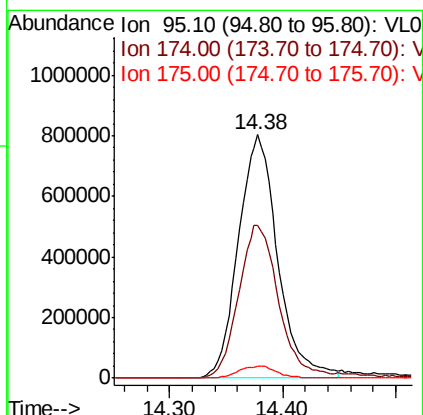
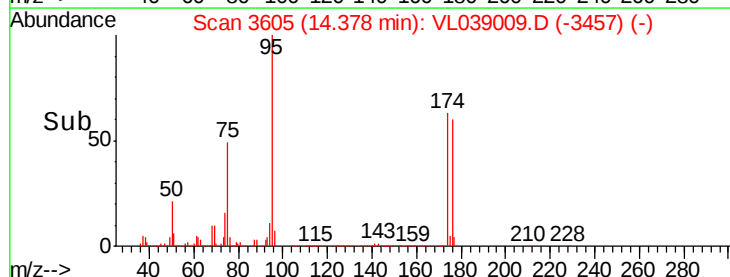
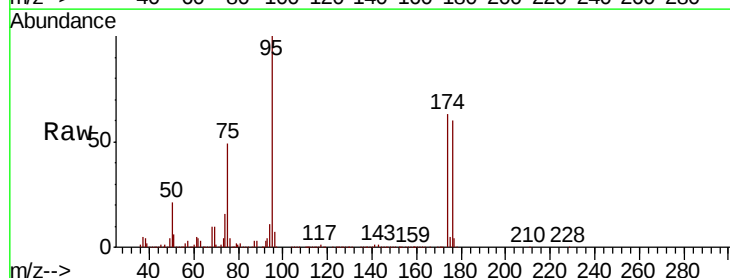
Manual Integrations
APPROVED

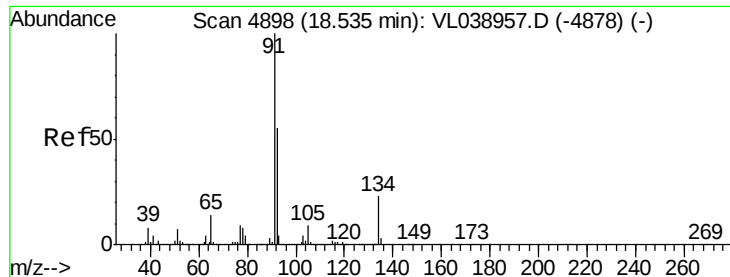
Reviewed By : Semsettin Yesilyurt 05/10/2022
Supervised By : Mahesh Dadoda 05/11/2022



#68
1-Bromo-4-Fluorobenzene
Concen: 9.266 ppbv
RT: 14.38 min Scan# 3605
Delta R.T.: -0.03 min
Lab File: VL039009.D
Acq: 10 May 2022 5:40

Tgt Ion: 95 Resp: 1939903
Ion Ratio Lower Upper
95 100
174 67.2 50.8 76.2
175 5.0 3.8 5.6



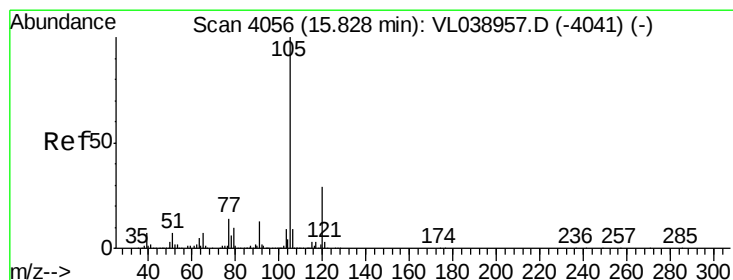
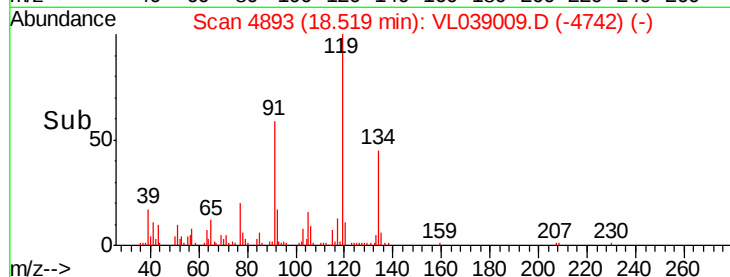
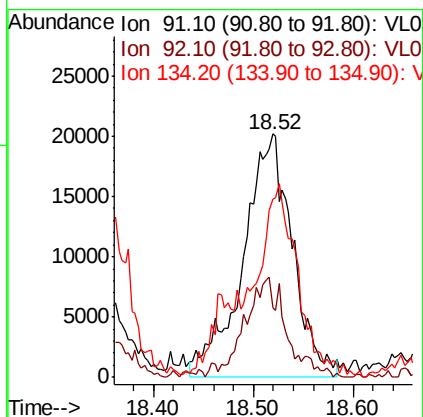
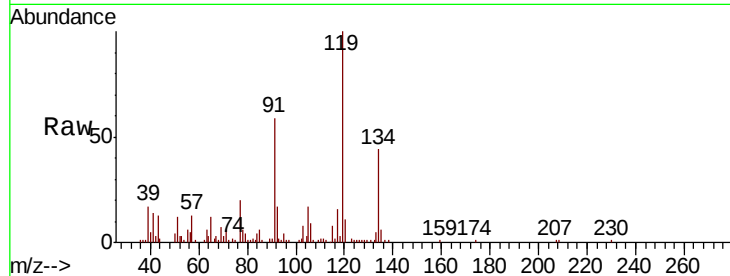


#70
n-Butylbenzene
Concen: 0.145 ppbv m
RT: 18.52
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId :
Acq: 10 May 2022 5:40

Tot Ion:
Ion Ratio
91 100
92 0.
134 0.

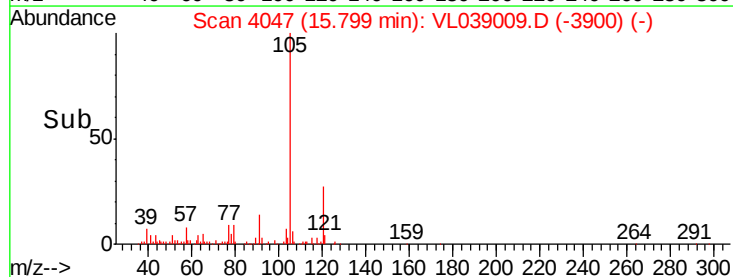
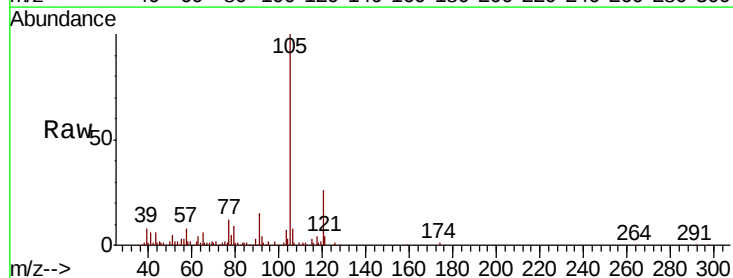
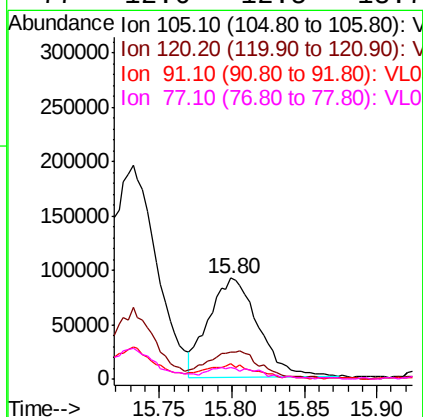
Manual Integrations
APPROVED

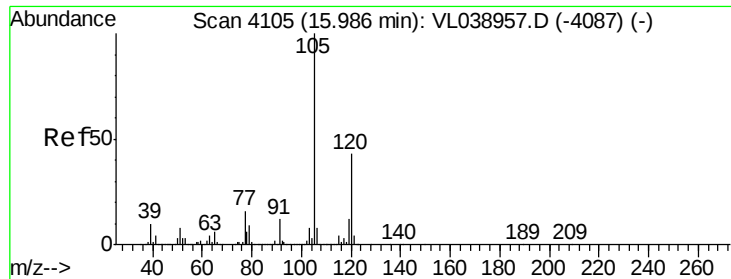
Reviewed By :Semsettin Yesilyurt 05/10/2022
Supervised By :Mahesh Dadoda 05/11/2022



#72
4-Ethyltoluene
Concen: 0.618 ppbv
RT: 15.80 min Scan# 4047
Delta R.T. -0.03 min
Lab File: VL039009.D
Acq: 10 May 2022 5:40

Tgt Ion:105 Resp: 215227
Ion Ratio Lower Upper
105 100
120 32.1 23.4 35.0
91 15.2 10.6 16.0
77 12.6 12.5 18.7





#73

1,3,5-Trimethylbenzene

Concen: 0.570 ppbv

RT: 15.96

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 10 May 2022 5:40

Tot Ion:1

Ion Rati

105 100

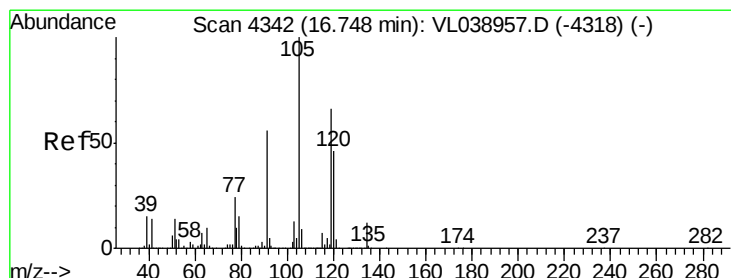
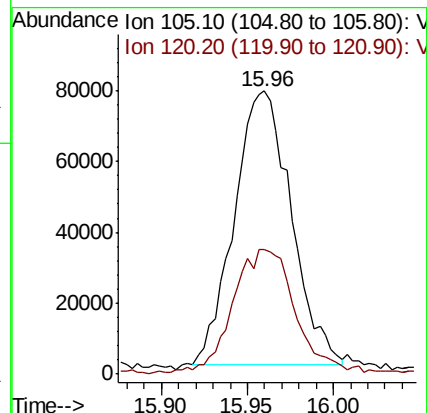
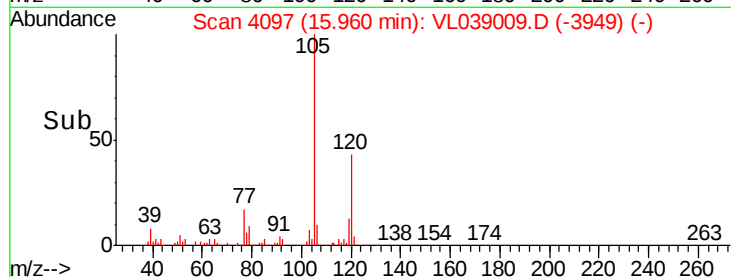
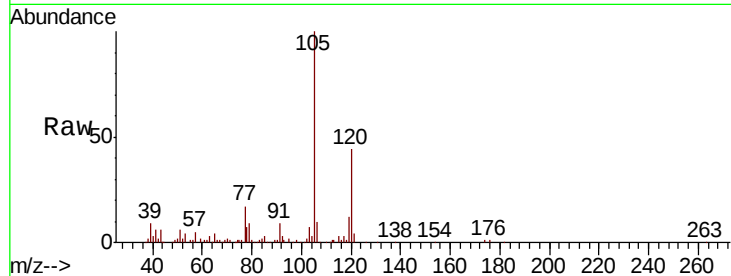
120 44.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 05/10/2022

Supervised By :Mahesh Dadoda 05/11/2022



#74

1,2,4-Trimethylbenzene

Concen: 2.097 ppbv

RT: 16.72 min Scan# 4334

Delta R.T. -0.03 min

Lab File: VL039009.D

Acq: 10 May 2022 5:40

Tgt Ion:105 Resp: 720164

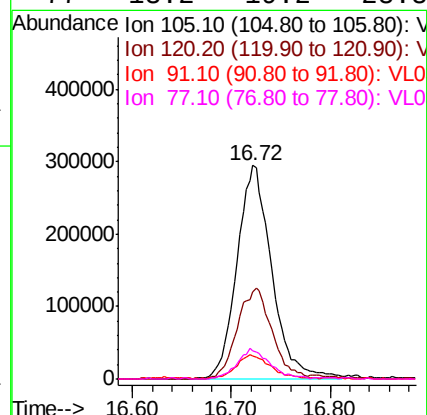
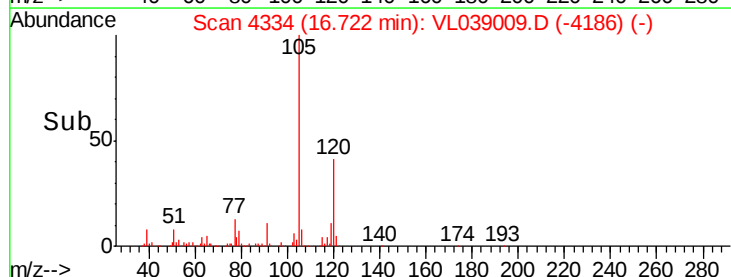
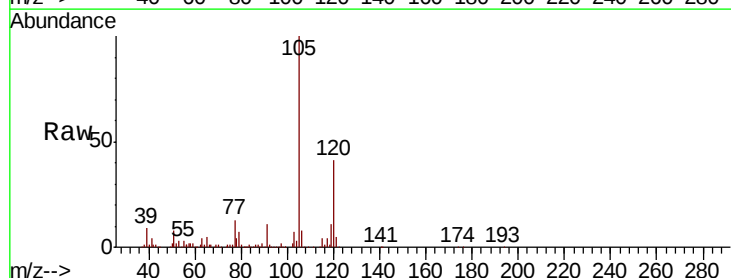
Ion Ratio Lower Upper

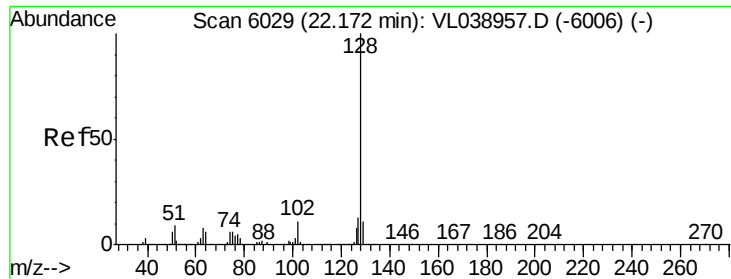
105 100

120 40.8 36.9 55.3

91 10.7 45.0 67.4#

77 13.2 19.2 28.8#





#79

Naphthalene

Concen: 0.810 ppbv m

RT: 22.15

Delta R.T: MSVOA_L

Lab File: ClientSampleId :

Acq: 10 May 2022 3.40

Tot Ion:1

Ion Rati

128 100

127 12.

129 10.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 05/10/2022

Supervised By :Mahesh Dadoda 05/11/2022

