

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_L\DATA\VL020322\
 Data File : VL038331.D
 Acq On : 3 Feb 2022 12:57
 Operator : SY/AP
 Sample : N1379-01DUP
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA1DUP

Quant Time: Feb 04 08:40:18 2022
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL012422AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Jan 24 14:12:48 2022
 QLast Update : Mon Jan 24 14:12:48 2022
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.65	49	836959	10.00	ppbv	-0.02
33) 1,4-Difluorobenzene	7.16	114	2166830	10.00	ppbv	-0.02
55) Chlorobenzene-d5	12.06	117	1871199	10.00	ppbv	-0.02

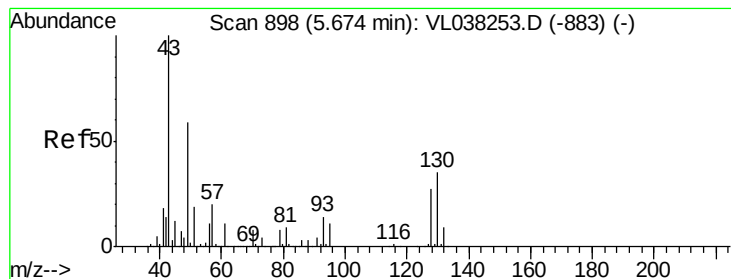
System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.39	95	1486764	10.47	ppbv	-0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	=	104.70%

Target Compounds

					Qvalue
2) Dichlorodifluoromethane	3.04	85	79821	0.448 ppbv	97
3) Chlorodifluoromethane	2.99	51	157207	0.944 ppbv #	87
4) Chloromethane	3.14	50	11383	0.199 ppbv #	77
9) Propene	3.20	41	231097	4.261 ppbv	95
10) Heptane	8.11	43	42802	0.307 ppbv	96
11) Trichlorofluoromethane	3.95	101	29658	0.214 ppbv	99
13) Ethanol	3.59	45	377431	64.821 ppbv	98
15) Acetone	3.85	43	180620	2.448 ppbv #	60
16) 1,3-Butadiene	3.30	39	34619	0.654 ppbv #	50
19) Isopropyl Alcohol	3.96	45	170739	3.699 ppbv #	1
20) Methylene Chloride	4.34	84	15633	0.364 ppbv	91
21) Allyl Chloride	4.36	41	3550	0.054 ppbv #	1
23) Vinyl Acetate	5.05	43	10791	0.101 ppbv #	1
25) Ethyl Acetate	5.67	43	76150	0.369 ppbv #	90
26) Hexane	5.67	57	72672	0.756 ppbv #	56
29) Chloroform	5.74	83	10696	0.068 ppbv	95
30) Cyclohexane	7.12	84	8931	0.107 ppbv #	1
34) 2-Butanone	5.24	43	15499	0.219 ppbv #	53
36) Benzene	6.88	78	164361	0.858 ppbv	98
39) 1,2-Dichloropropane	7.16	63	566453	7.290 ppbv #	25
41) Tetrahydrofuran	6.05	42	1671	0.035 ppbv #	46
43) Methyl Methacrylate	8.00	69	2739	0.040 ppbv #	1
44) 2,2,4-Trimethylpentane	7.85	57	75695	0.224 ppbv #	38
52) Tetrachloroethene	11.20	164	2474	0.037 ppbv #	81
53) Toluene	9.79	91	279756	1.319 ppbv	98
58) Ethyl Benzene	12.69	91	57133	0.208 ppbv	93
59) m/p-Xylene	12.97	91	44241	0.189 ppbv #	32
60) o-Xylene	13.67	91	60413	0.277 ppbv	98
61) Styrene	13.50	104	3233	0.032 ppbv #	26
73) 1,3,5-Trimethylbenzene	15.97	105	8334	0.041 ppbv	93
74) 1,2,4-Trimethylbenzene	16.73	105	23167	0.107 ppbv #	67

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.65 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 3 Feb 2022 12:57

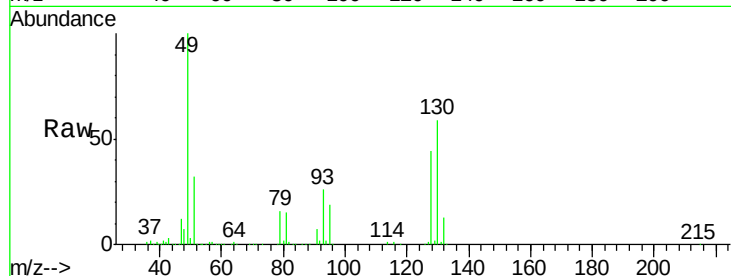
Tgt Ion: 49 Resp: 836959

Ion Ratio Lower Upper

49 100

128 47.8 24.5 73.5

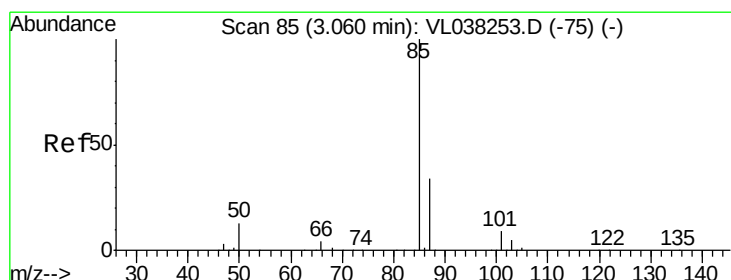
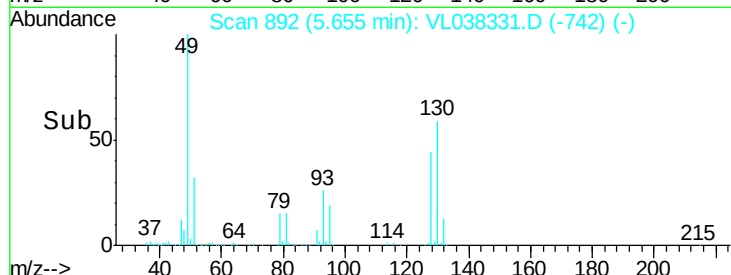
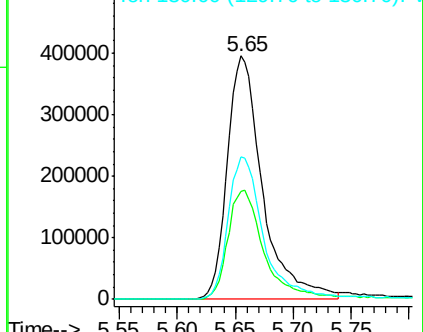
130 60.5 30.1 90.5



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0



#2

Dichlorodifluoromethane

Concen: 0.448 ppbv

RT: 3.04 min Scan# 80

Delta R.T. -0.02 min

Lab File: VL038331.D

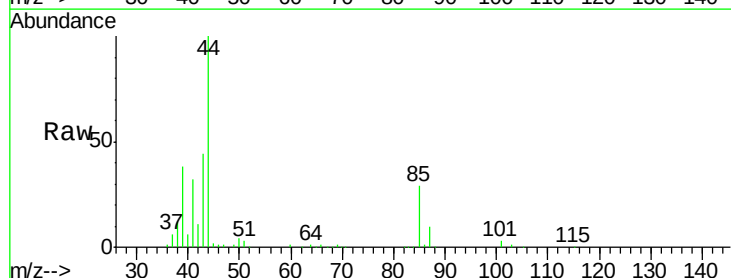
Acq: 3 Feb 2022 12:57

Tgt Ion: 85 Resp: 79821

Ion Ratio Lower Upper

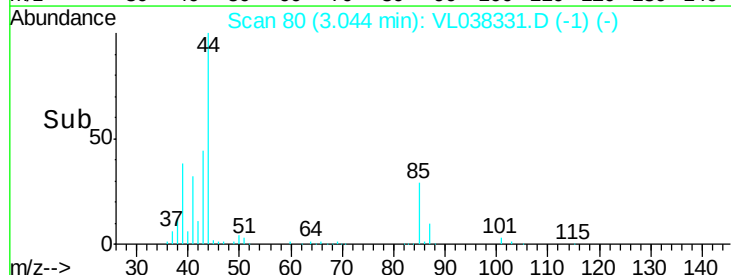
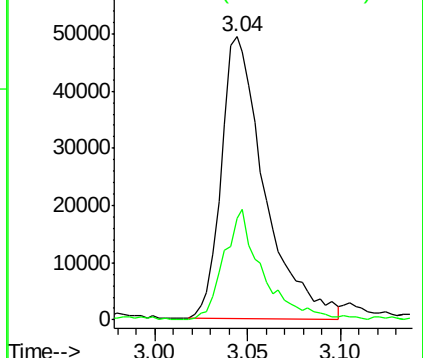
85 100

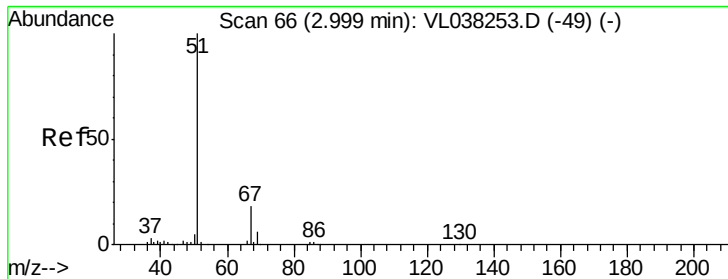
87 35.7 27.0 40.6



Abundance Ion 85.00 (84.70 to 85.70): VL0

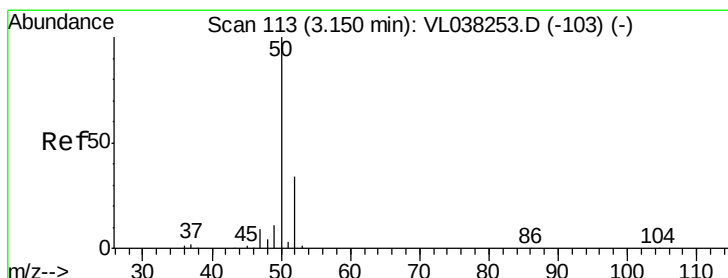
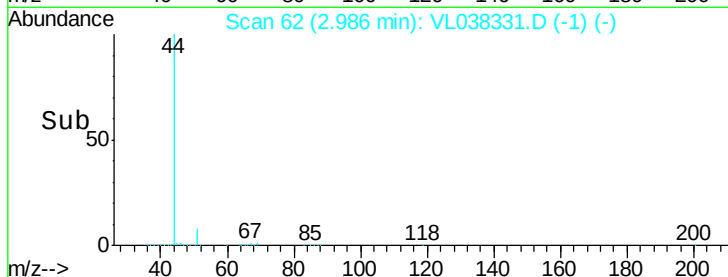
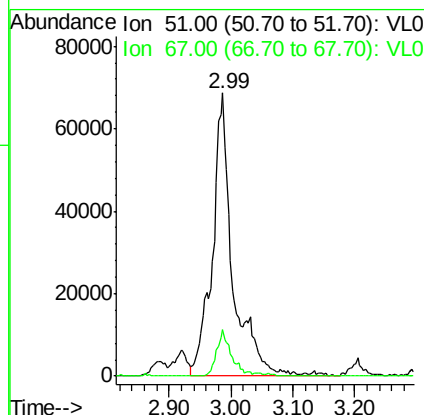
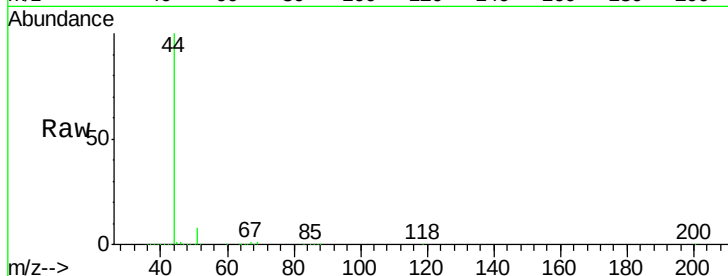
Ion 87.00 (86.70 to 87.70): VL0





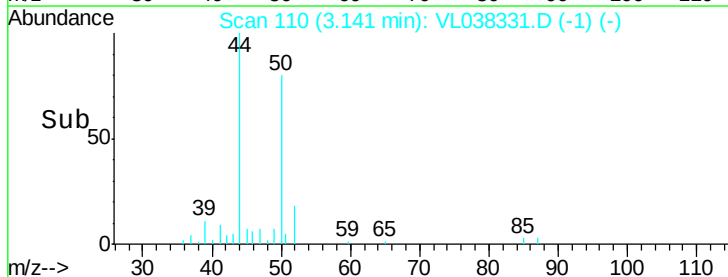
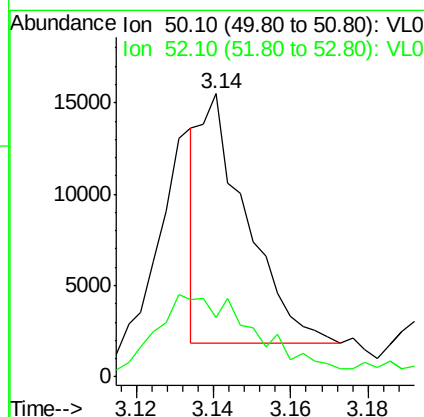
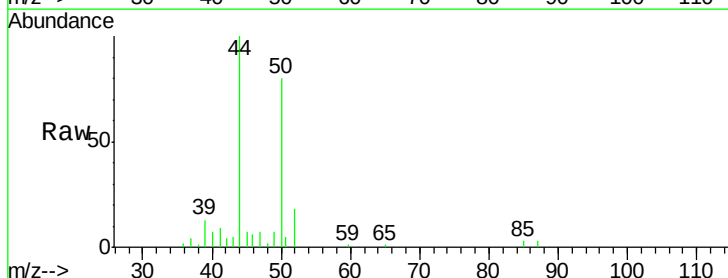
#3
 Chlorodifluoromethane
 Concen: 0.944 ppbv
 RT: 2.99
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 3 Feb 2022 12:57

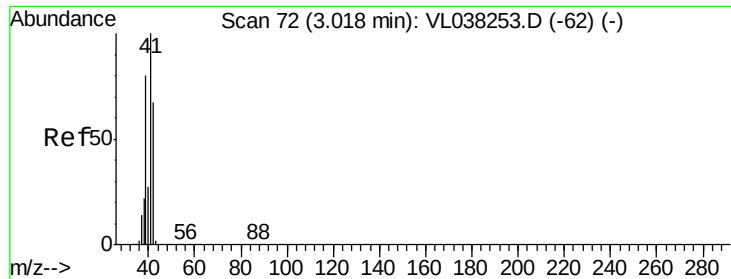
Tgt Ion: 51 Resp: 157207
 Ion Ratio Lower Upper
 51 100
 67 12.3 14.4 21.6#



#4
 Chloromethane
 Concen: 0.199 ppbv
 RT: 3.14 min Scan# 110
 Delta R.T. -0.01 min
 Lab File: VL038331.D
 Acq: 3 Feb 2022 12:57

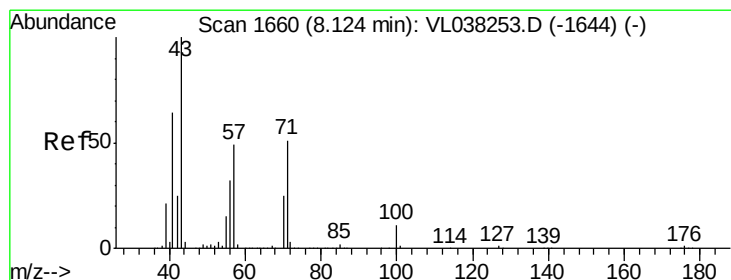
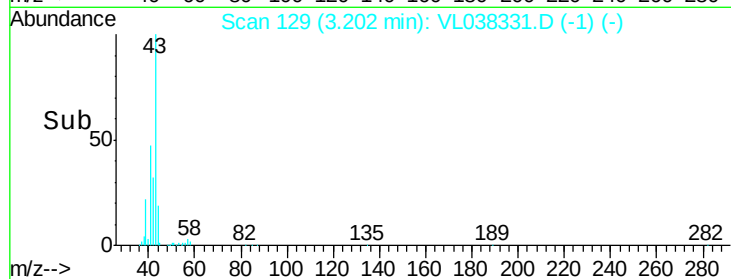
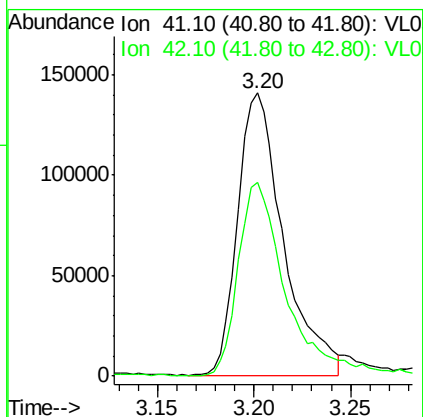
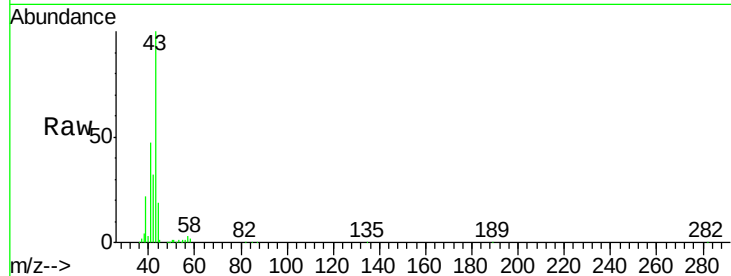
Tgt Ion: 50 Resp: 11383
 Ion Ratio Lower Upper
 50 100
 52 20.6 27.1 40.7#





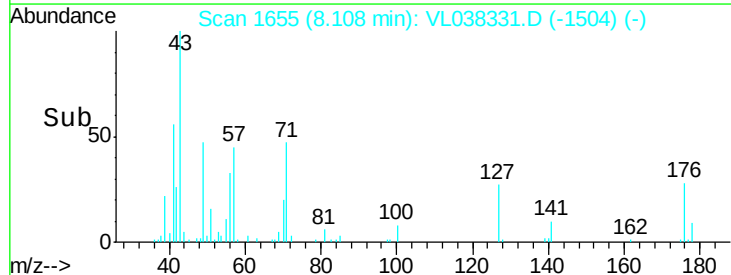
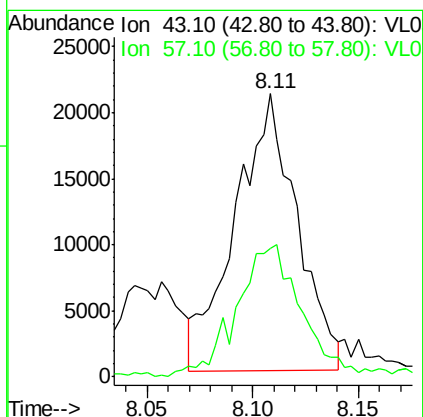
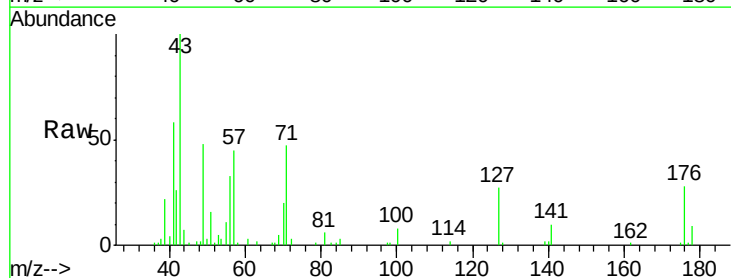
#9
 Propene
 Concen: 4.261 ppbv
 RT: 3.20
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 3 Feb 2022 12:57

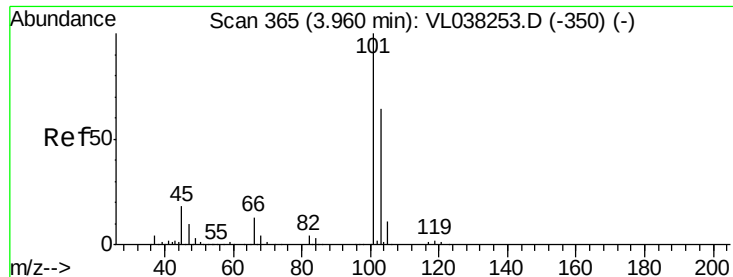
Tgt Ion: 41 Resp: 231097
 Ion Ratio Lower Upper
 41 100
 42 72.4 54.9 82.3



#10
 Heptane
 Concen: 0.307 ppbv
 RT: 8.11 min Scan# 1655
 Delta R.T. -0.02 min
 Lab File: VL038331.D
 Acq: 3 Feb 2022 12:57

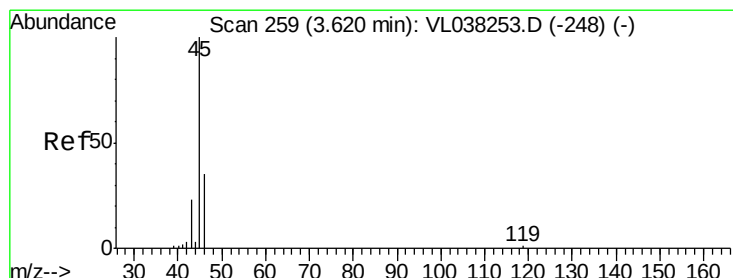
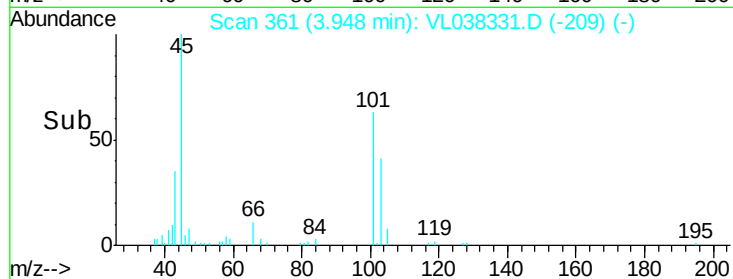
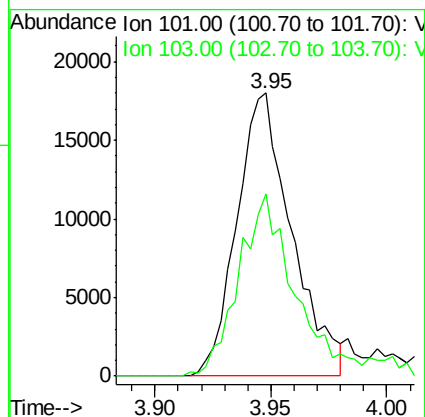
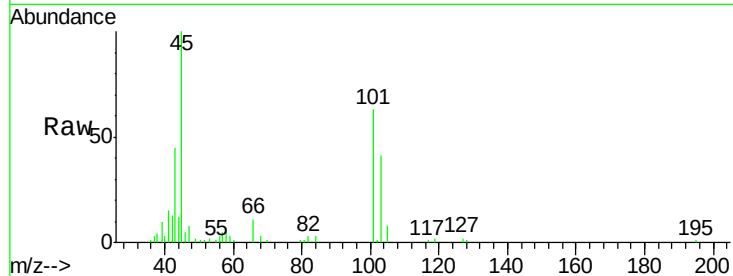
Tgt Ion: 43 Resp: 42802
 Ion Ratio Lower Upper
 43 100
 57 52.2 39.5 59.3





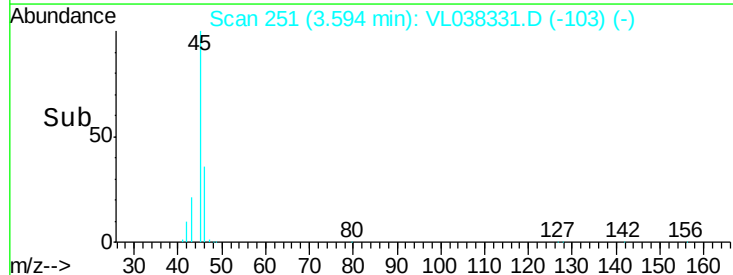
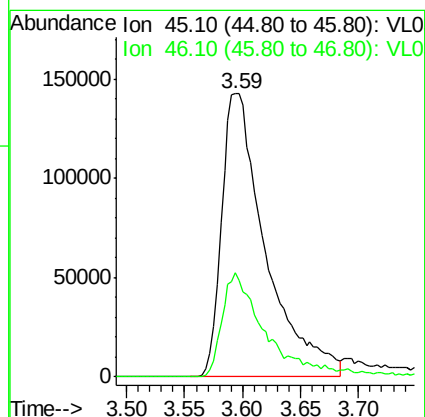
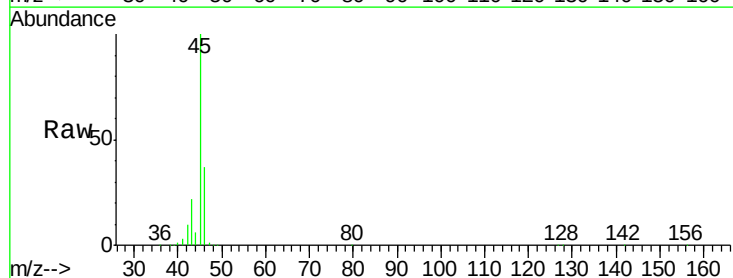
#11
 Trichlorofluoromethane
 Concen: 0.214 ppbv
 RT: 3.95 min
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 3 Feb 2022 12:57

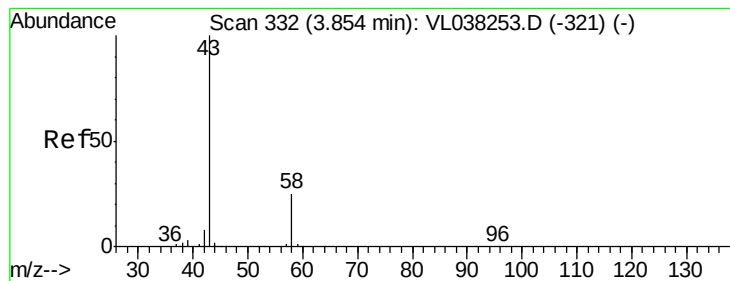
Tgt Ion: 101 Resp: 29658
 Ion Ratio Lower Upper
 101 100
 103 62.9 51.2 76.8



#13
 Ethanol
 Concen: 64.821 ppbv
 RT: 3.59 min Scan# 251
 Delta R.T. -0.03 min
 Lab File: VL038331.D
 Acq: 3 Feb 2022 12:57

Tgt Ion: 45 Resp: 377431
 Ion Ratio Lower Upper
 45 100
 46 37.6 15.4 61.6





#15

Acetone

Concen: 2.448 ppbv

RT: 3.85 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

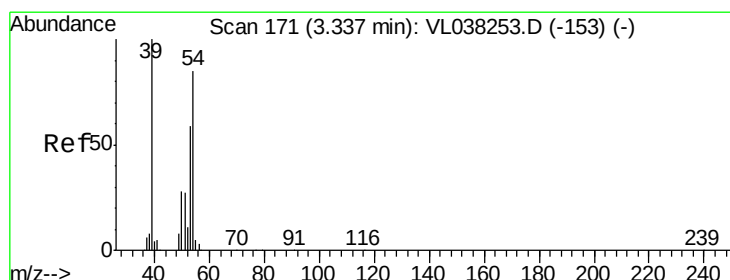
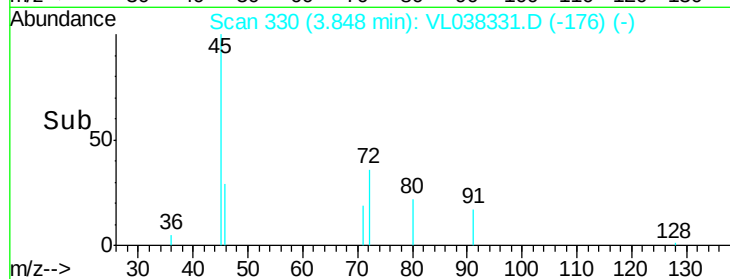
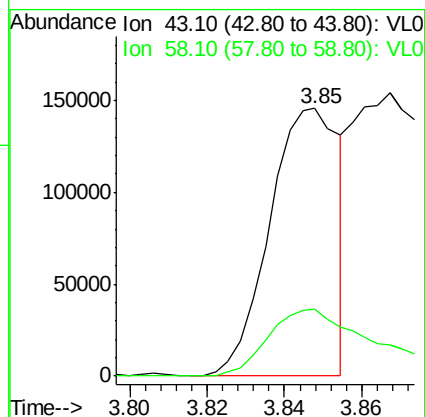
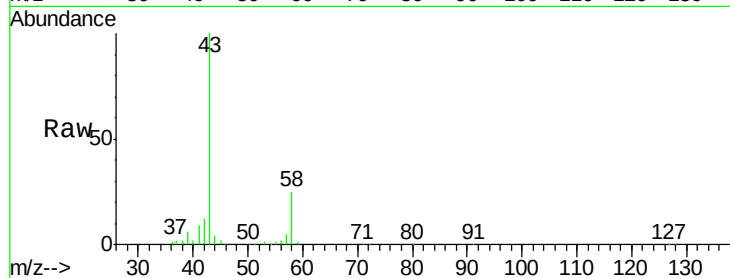
Acq: 3 Feb 2022 12:57

Tgt Ion: 43 Resp: 180620

Ion Ratio Lower Upper

43 100

58 47.7 21.5 32.3#



#16

1,3-Butadiene

Concen: 0.654 ppbv

RT: 3.30 min Scan# 160

Delta R.T. -0.04 min

Lab File: VL038331.D

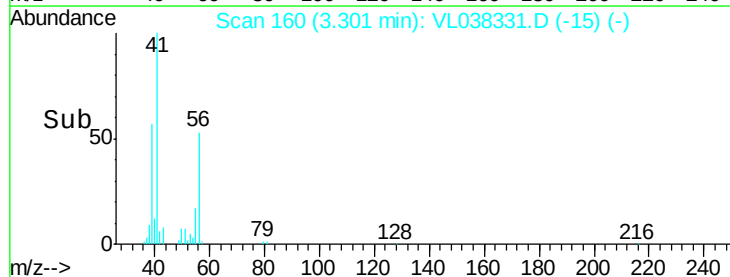
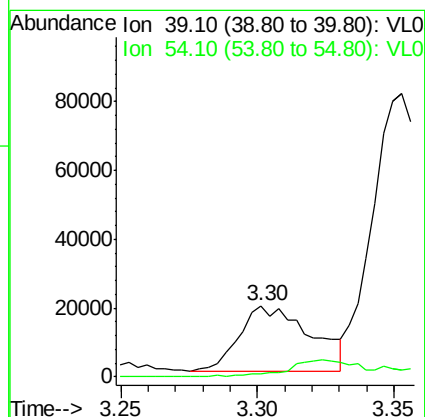
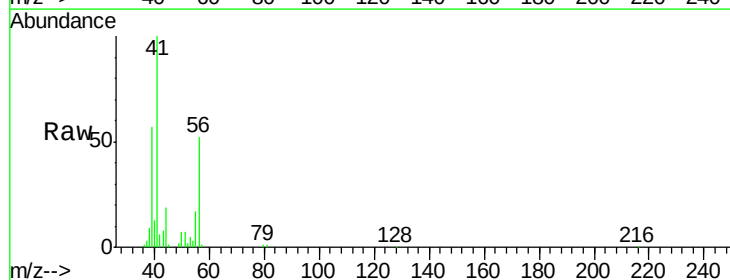
Acq: 3 Feb 2022 12:57

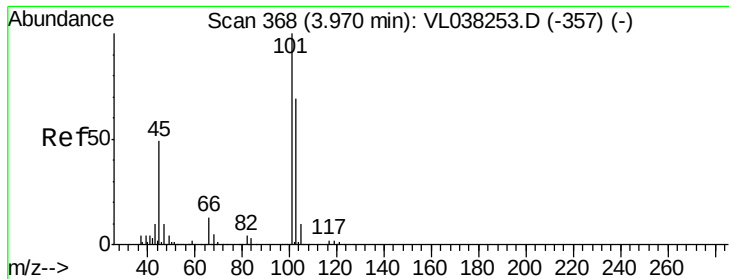
Tgt Ion: 39 Resp: 34619

Ion Ratio Lower Upper

39 100

54 34.8 62.6 94.0#





#19

Isopropyl Alcohol

Concen: 3.699 ppbv

RT: 3.96 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

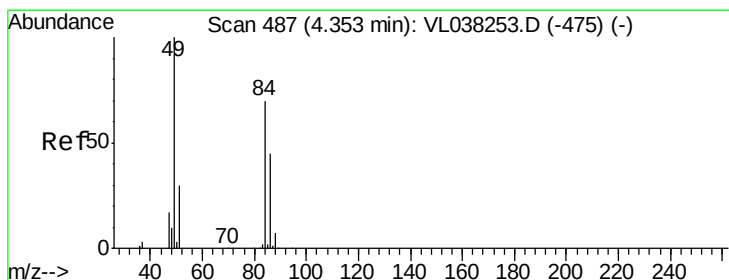
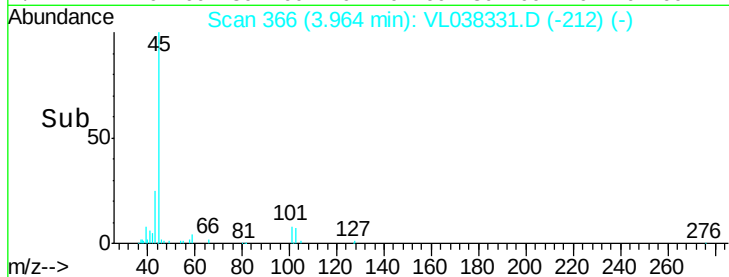
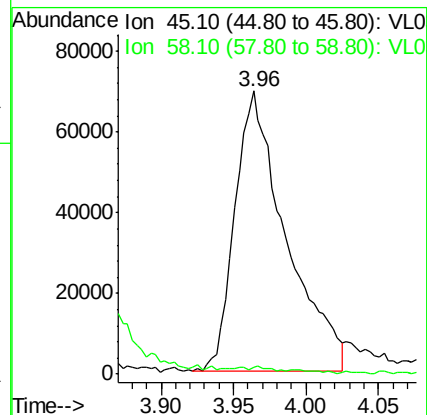
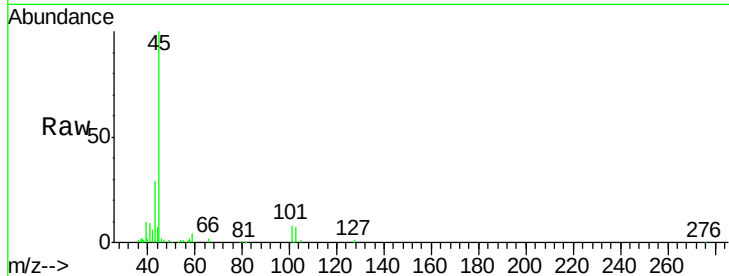
Acq: 3 Feb 2022 12:57

Tgt Ion: 45 Resp: 170739

Ion Ratio Lower Upper

45 100

58 50.4 2.3 3.5#



#20

Methylene Chloride

Concen: 0.364 ppbv

RT: 4.34 min Scan# 484

Delta R.T. -0.01 min

Lab File: VL038331.D

Acq: 3 Feb 2022 12:57

Tgt Ion: 84 Resp: 15633

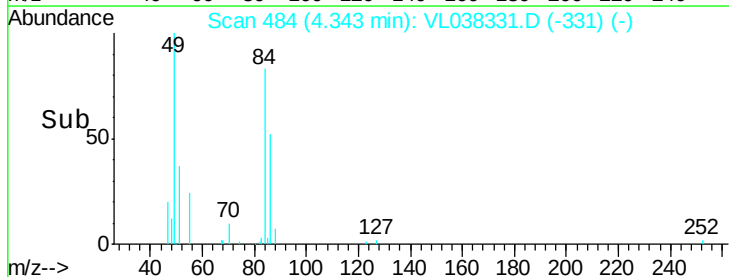
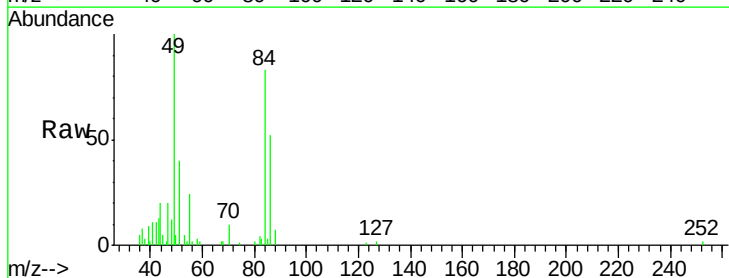
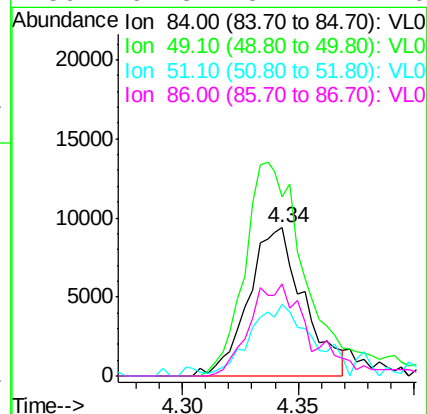
Ion Ratio Lower Upper

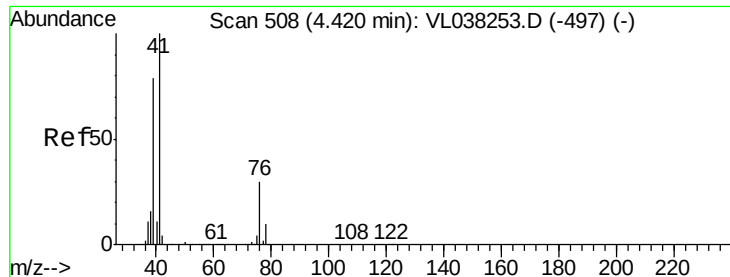
84 100

49 126.0 115.0 172.6

51 42.9 35.0 52.6

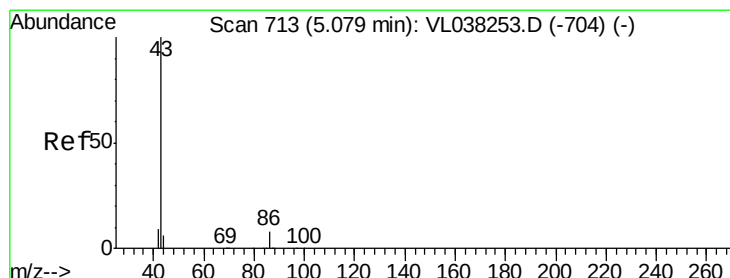
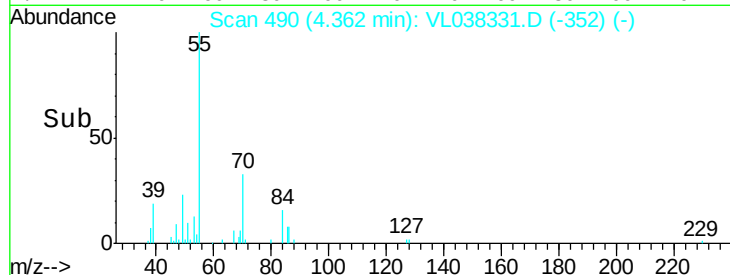
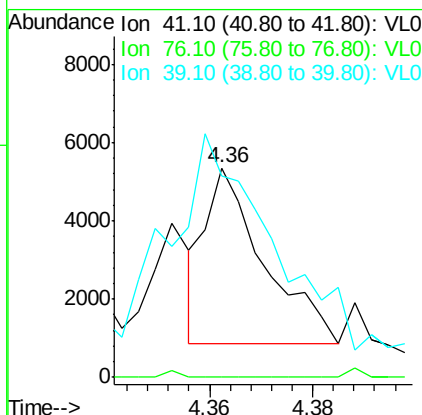
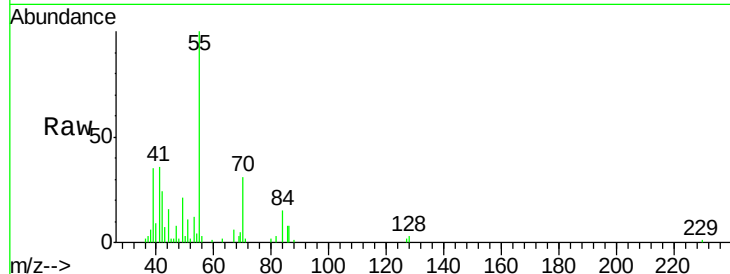
86 62.3 51.4 77.0





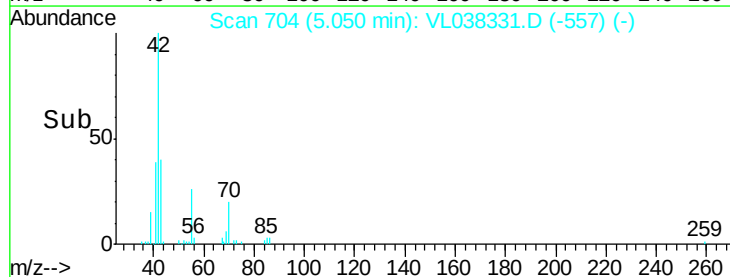
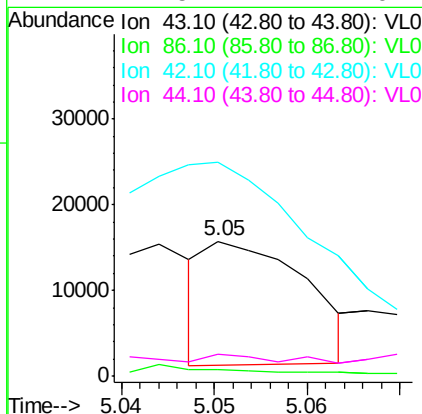
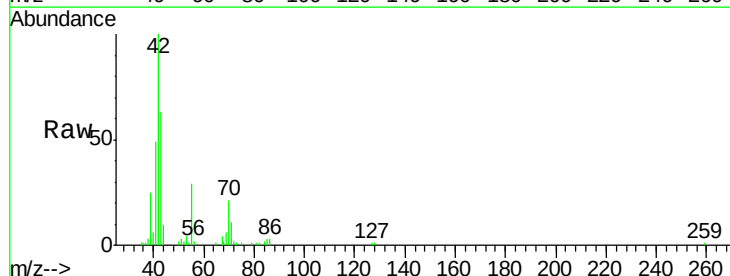
#21
 Allyl Chloride
 Concen: 0.054 ppbv
 RT: 4.36
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 3 Feb 2022 12:57

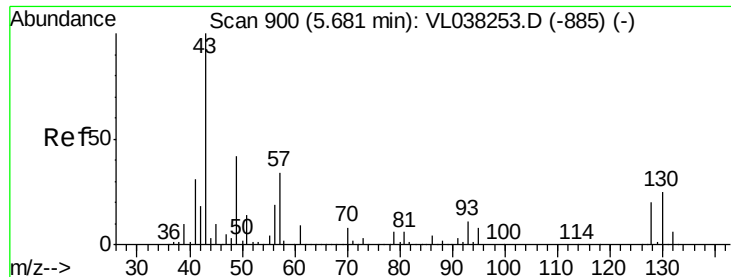
Tgt Ion: 41 Resp: 3550
 Ion Ratio Lower Upper
 41 100
 76 1.4 25.0 37.6#
 39 263.9 63.0 94.6#



#23
 Vinyl Acetate
 Concen: 0.101 ppbv
 RT: 5.05 min Scan# 704
 Delta R.T. -0.03 min
 Lab File: VL038331.D
 Acq: 3 Feb 2022 12:57

Tgt Ion: 43 Resp: 10791
 Ion Ratio Lower Upper
 43 100
 86 2.9 5.7 8.5#
 42 129.5 7.7 11.5#
 44 12.5 4.2 6.4#





#25

Ethyl Acetate

Concen: 0.369 ppbv

RT: 5.67 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 3 Feb 2022 12:57

Tgt Ion: 43 Resp: 76150

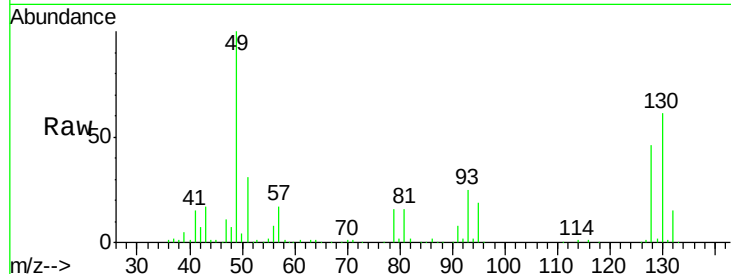
Ion Ratio Lower Upper

43 100

45 7.4 7.9 11.9#

61 4.1 7.8 11.8#

70 3.9 5.4 8.0#



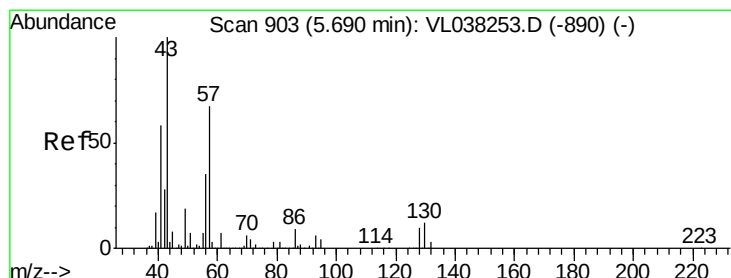
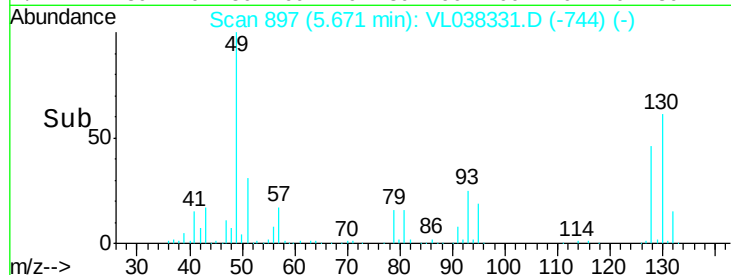
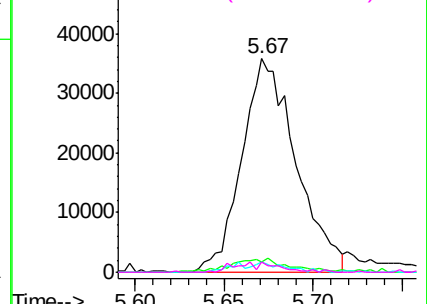
Abundance

Ion 43.10 (42.80 to 43.80): VL0

Ion 45.10 (44.80 to 45.80): VL0

Ion 61.10 (60.80 to 61.80): VL0

Ion 70.10 (69.80 to 70.80): VL0



#26

Hexane

Concen: 0.756 ppbv

RT: 5.67 min Scan# 898

Delta R.T. -0.02 min

Lab File: VL038331.D

Acq: 3 Feb 2022 12:57

Tgt Ion: 57 Resp: 72672

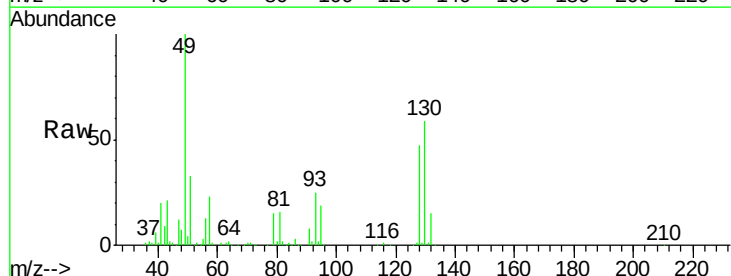
Ion Ratio Lower Upper

57 100

41 100.7 72.8 109.2

43 114.0 177.0 265.6#

56 58.3 43.3 64.9



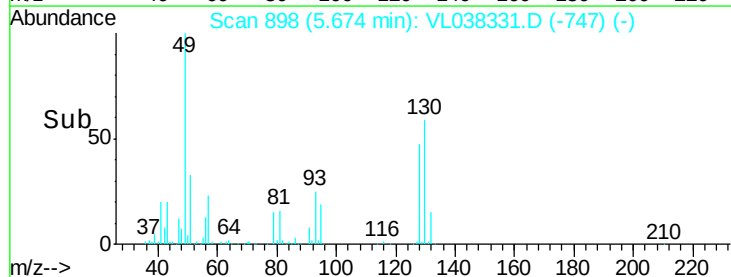
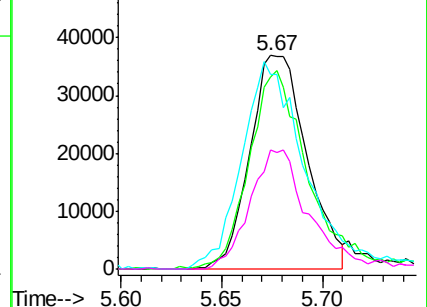
Abundance

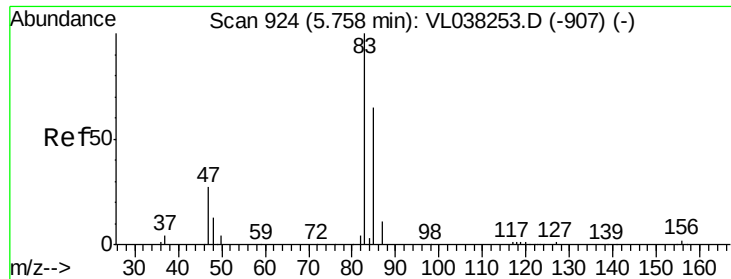
Ion 57.10 (56.80 to 57.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 43.10 (42.80 to 43.80): VL0

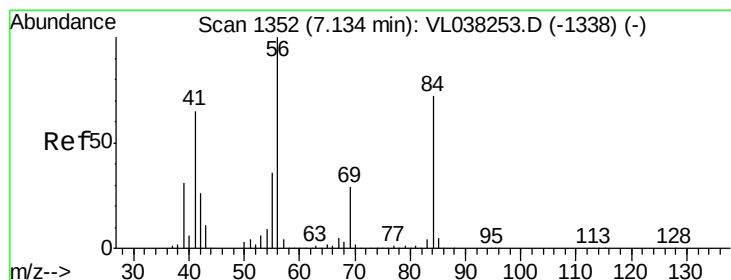
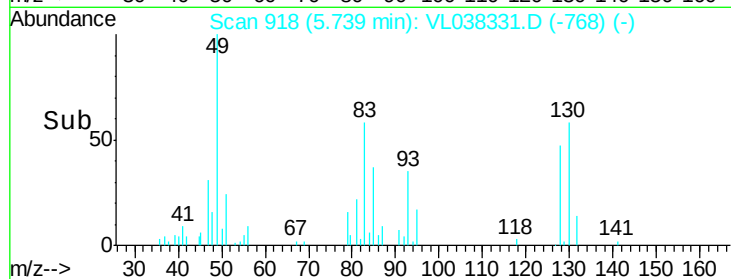
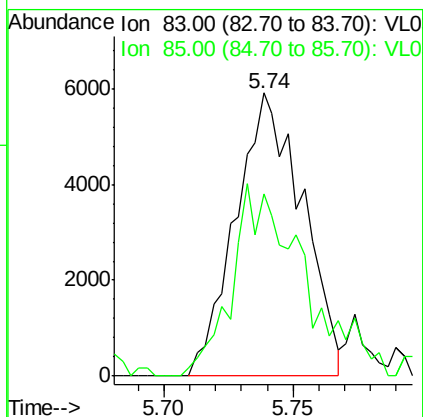
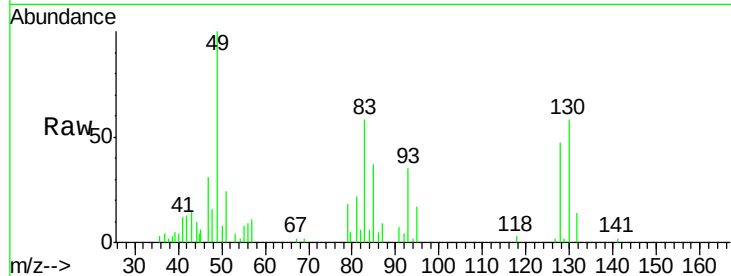
Ion 56.10 (55.80 to 56.80): VL0





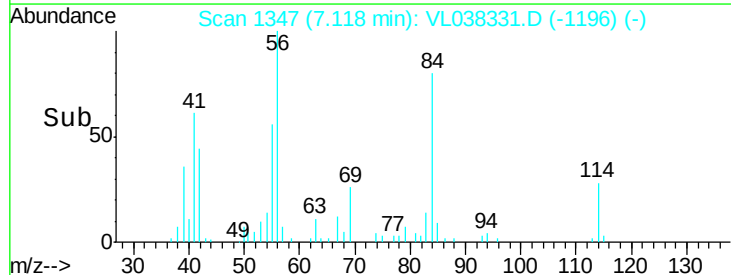
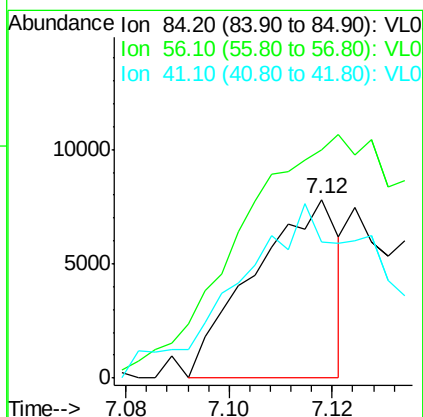
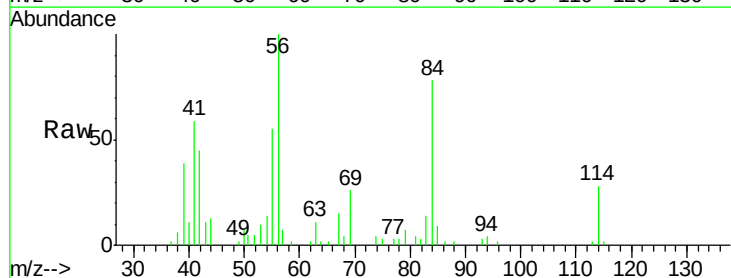
#29
Chloroform
Concen: 0.068 ppbv
RT: 5.74
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 3 Feb 2022 12:57

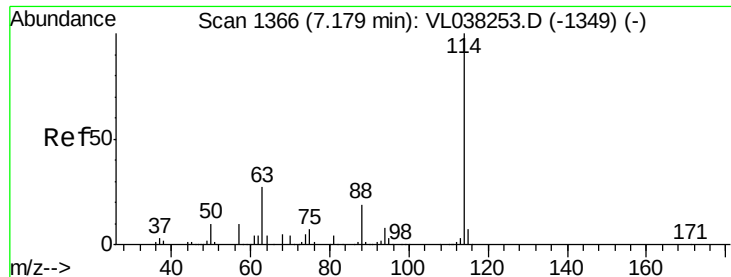
Tgt Ion: 83 Resp: 10696
Ion Ratio Lower Upper
83 100
85 61.2 51.9 77.9



#30
Cyclohexane
Concen: 0.107 ppbv
RT: 7.12 min Scan# 1347
Delta R.T. -0.02 min
Lab File: VL038331.D
Acq: 3 Feb 2022 12:57

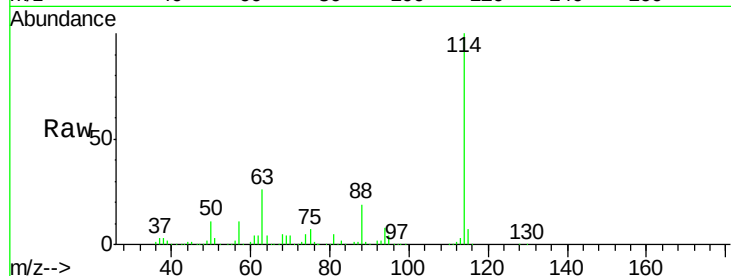
Tgt Ion: 84 Resp: 8931
Ion Ratio Lower Upper
84 100
56 0.0 112.7 169.1#
41 197.4 71.1 106.7#



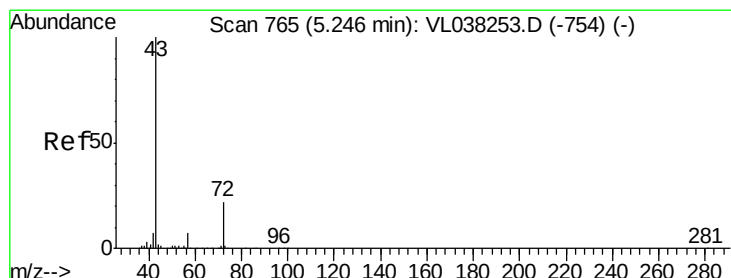
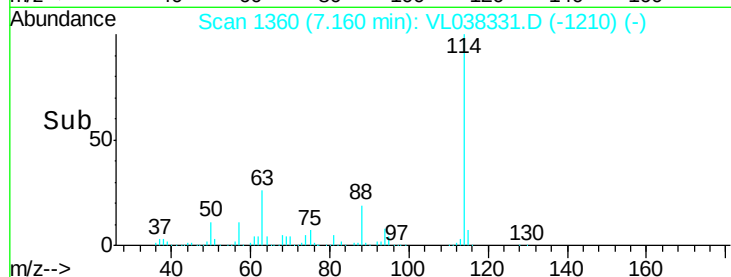
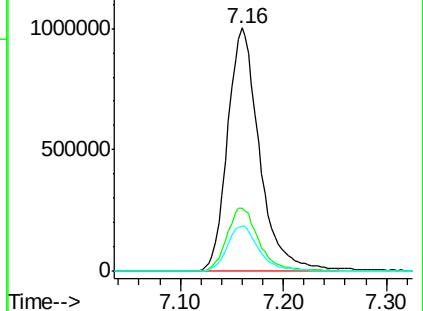


#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.16
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 IA1DUP
 Acq: 3 Feb 2022 12:57

Tgt Ion: 114 Resp: 2166830
 Ion Ratio Lower Upper
 114 100
 63 26.6 22.0 33.0
 88 18.8 15.0 22.6

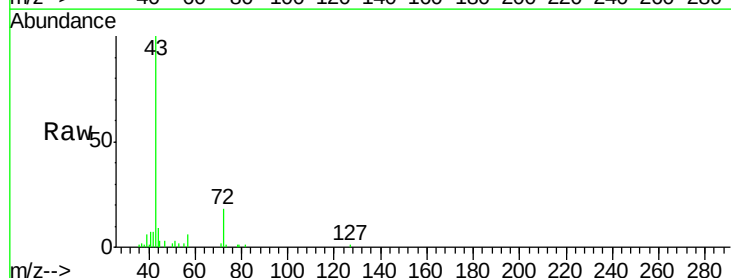


Abundance Ion 114.10 (113.80 to 114.80): V
 Ion 63.10 (62.80 to 63.80): VL0
 Ion 88.10 (87.80 to 88.80): VL0

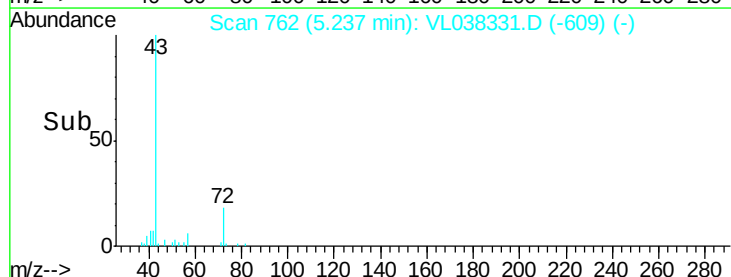
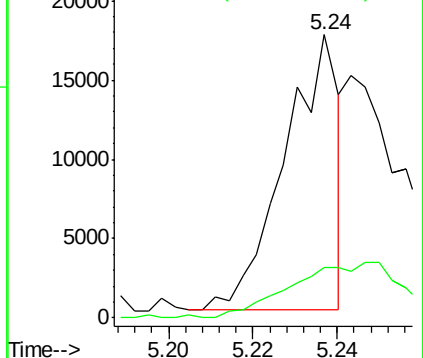


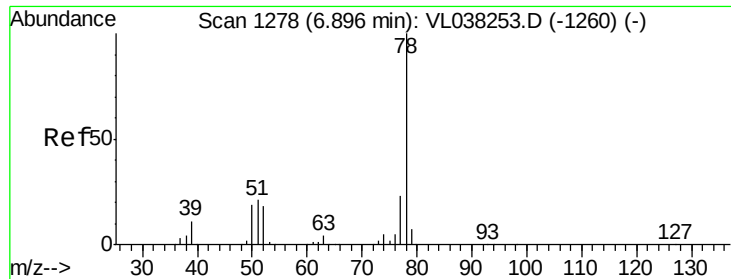
#34
 2-Butanone
 Concen: 0.219 ppbv
 RT: 5.24 min Scan# 762
 Delta R.T. -0.01 min
 Lab File: VL038331.D
 Acq: 3 Feb 2022 12:57

Tgt Ion: 43 Resp: 15499
 Ion Ratio Lower Upper
 43 100
 72 0.0 18.1 27.1#



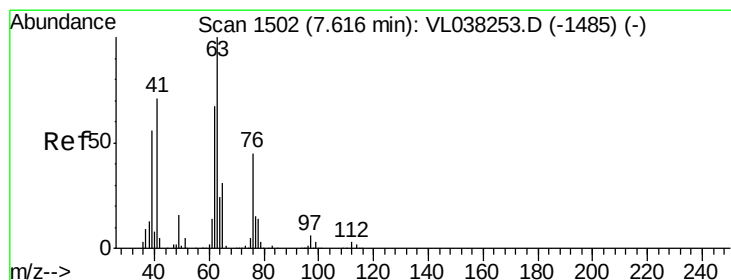
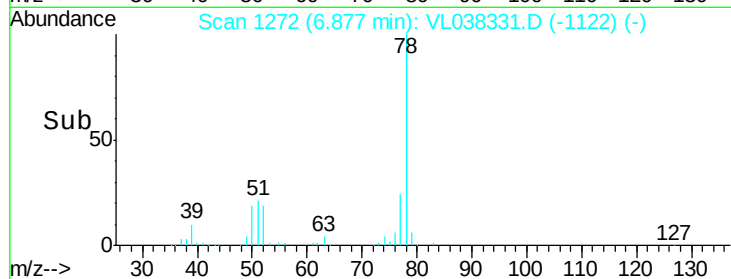
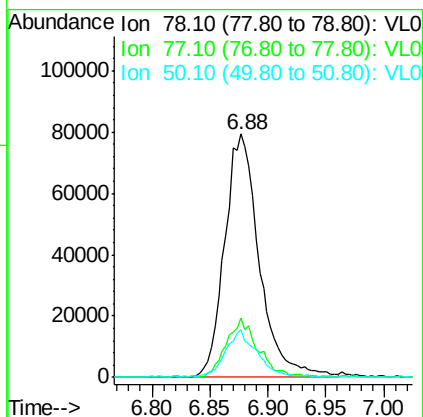
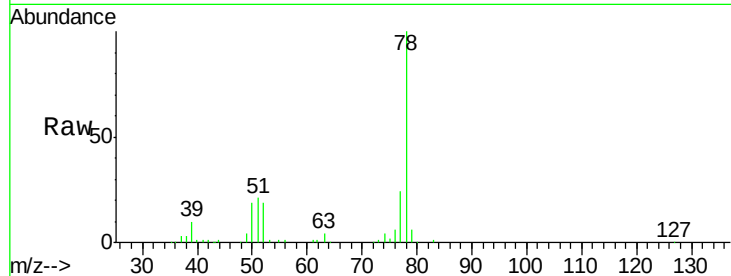
Abundance Ion 43.10 (42.80 to 43.80): VL0
 Ion 72.10 (71.80 to 72.80): VL0





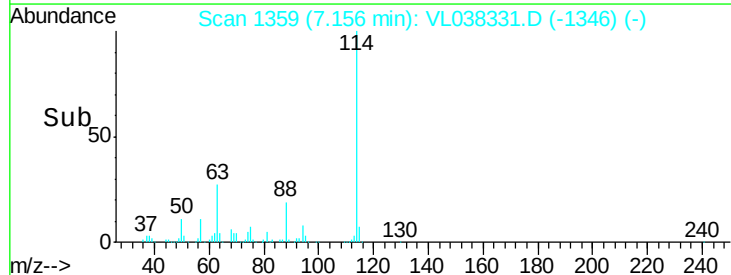
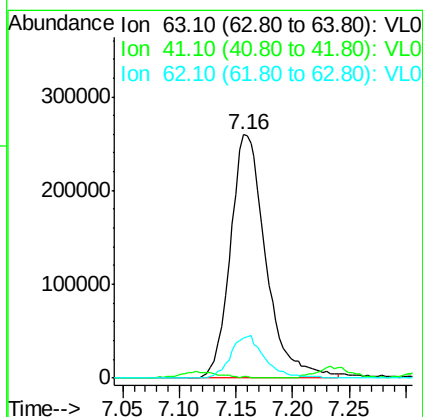
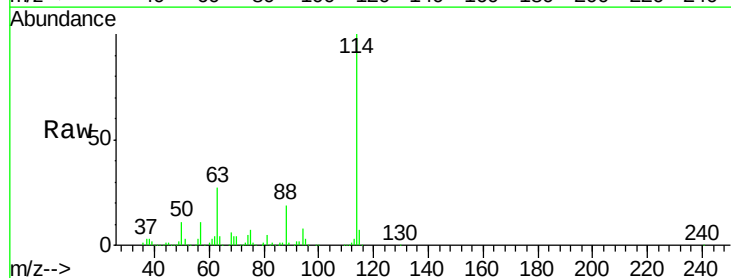
#36
Benzene
Concen: 0.858 ppbv
RT: 6.88
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 3 Feb 2022 12:57

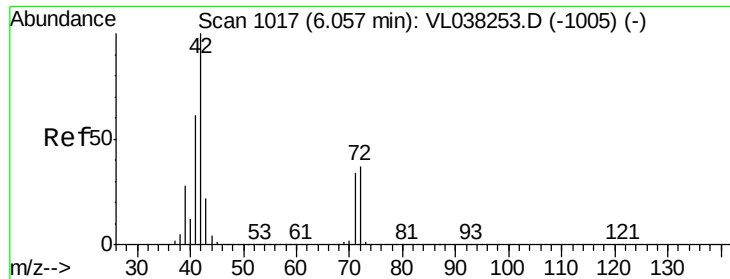
Tgt Ion: 78 Resp: 164361
Ion Ratio Lower Upper
78 100
77 24.2 18.2 27.2
50 19.4 15.1 22.7



#39
1,2-Dichloropropane
Concen: 7.290 ppbv
RT: 7.16 min Scan# 1359
Delta R.T. -0.46 min
Lab File: VL038331.D
Acq: 3 Feb 2022 12:57

Tgt Ion: 63 Resp: 566453
Ion Ratio Lower Upper
63 100
41 0.0 56.6 85.0#
62 16.4 53.9 80.9#





#41

Tetrahydrofuran

Concen: 0.035 ppbv

RT: 6.05 Instrument: MSVOA_1

Delta R.T. ClientSampleId:

Lab File: IA1DUP

Acq: 3 Feb 2022 12:57

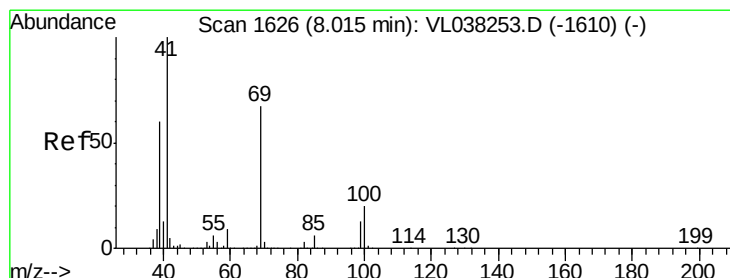
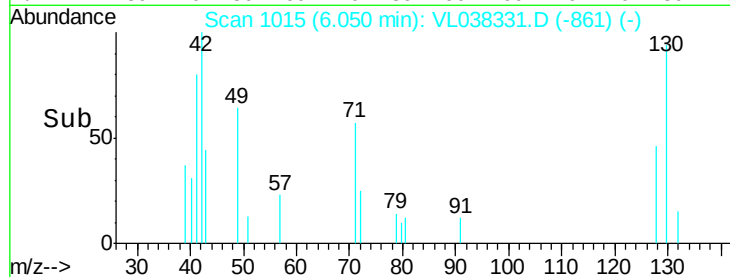
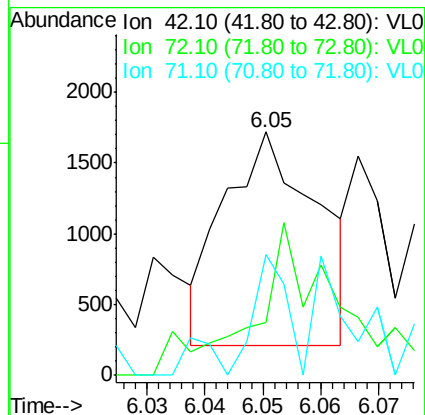
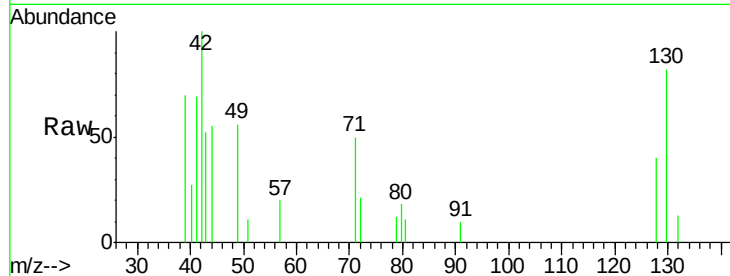
Tgt Ion: 42 Resp: 1671

Ion Ratio Lower Upper

42 100

72 68.2 29.7 44.5#

71 69.7 29.4 44.2#



#43

Methyl Methacrylate

Concen: 0.040 ppbv

RT: 8.00 min Scan# 1620

Delta R.T. -0.02 min

Lab File: VL038331.D

Acq: 3 Feb 2022 12:57

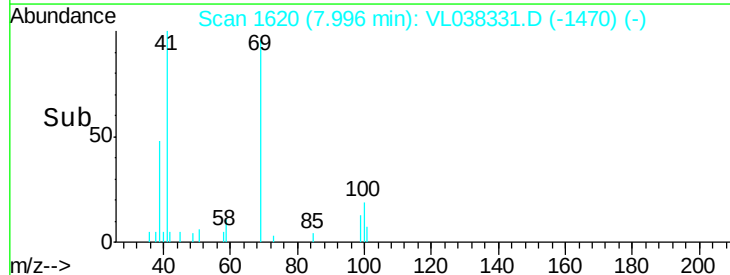
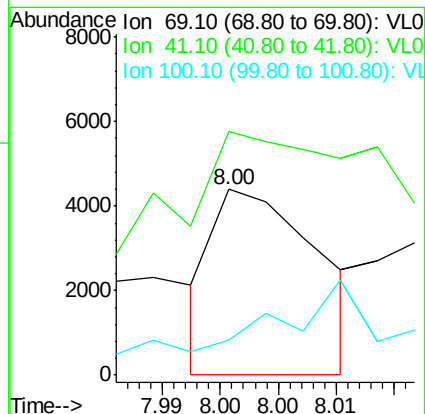
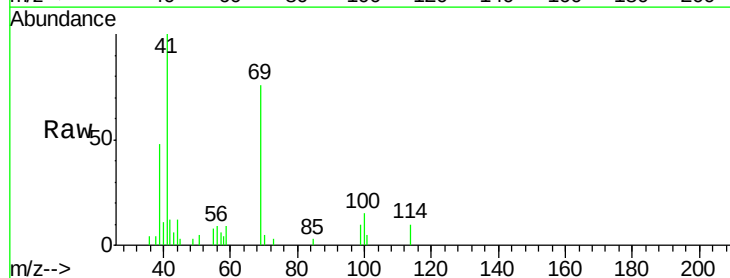
Tgt Ion: 69 Resp: 2739

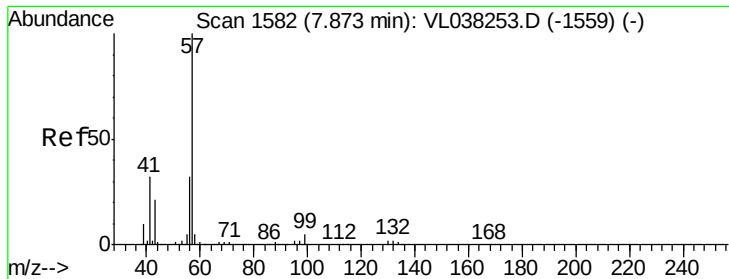
Ion Ratio Lower Upper

69 100

41 607.7 120.9 181.3#

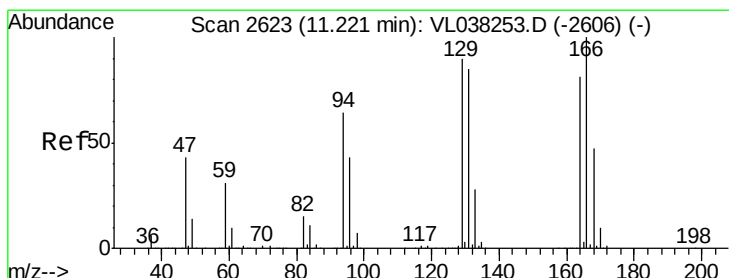
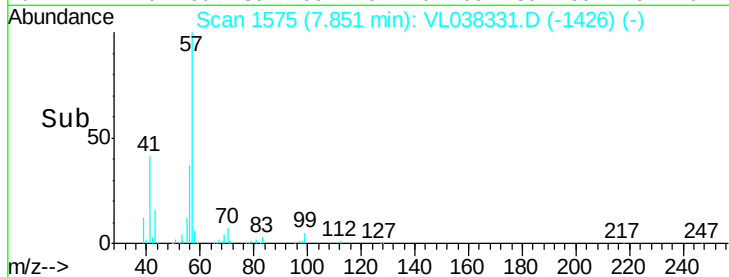
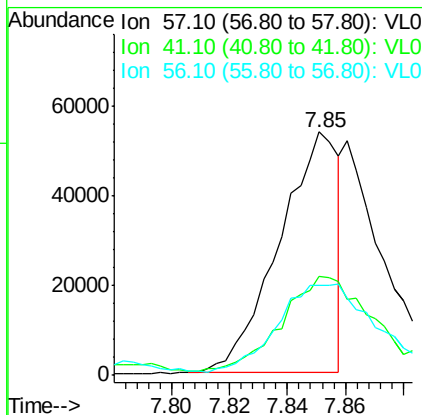
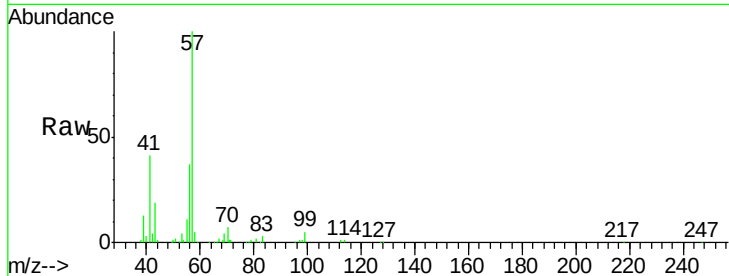
100 0.0 23.4 35.0#





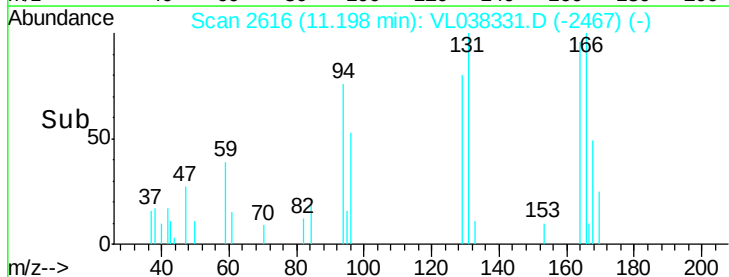
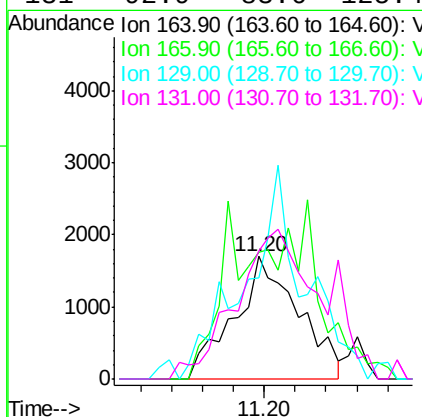
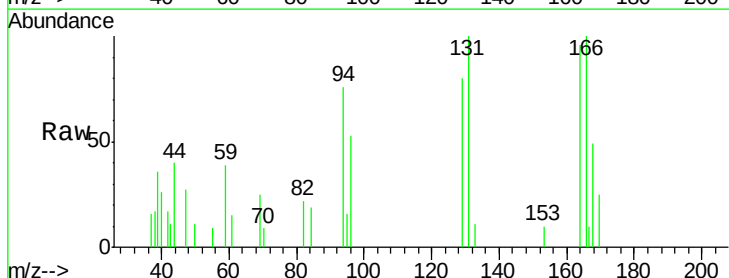
#44
 2,2,4-Trimethylpentane
 Concen: 0.224 ppbv
 RT: 7.85
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 3 Feb 2022 12:57

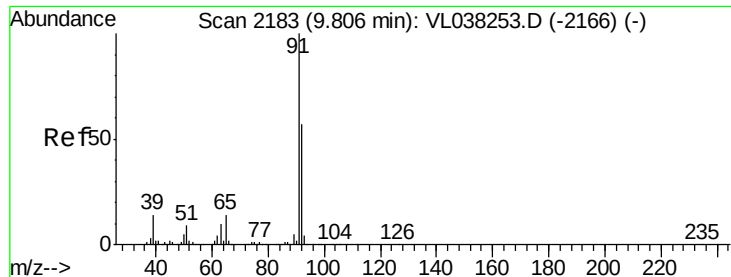
Tgt Ion: 57 Resp: 75695
 Ion Ratio Lower Upper
 57 100
 41 70.5 26.3 39.5#
 56 0.0 25.2 37.8#



#52
 Tetrachloroethene
 Concen: 0.037 ppbv
 RT: 11.20 min Scan# 2616
 Delta R.T. -0.02 min
 Lab File: VL038331.D
 Acq: 3 Feb 2022 12:57

Tgt Ion: 164 Resp: 2474
 Ion Ratio Lower Upper
 164 100
 166 113.6 98.8 148.2
 129 71.0 89.2 133.8#
 131 92.9 83.6 125.4





#53

Toluene

Concen: 1.319 ppbv

RT: 9.79 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

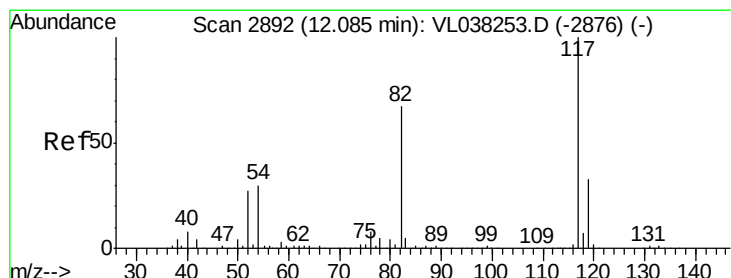
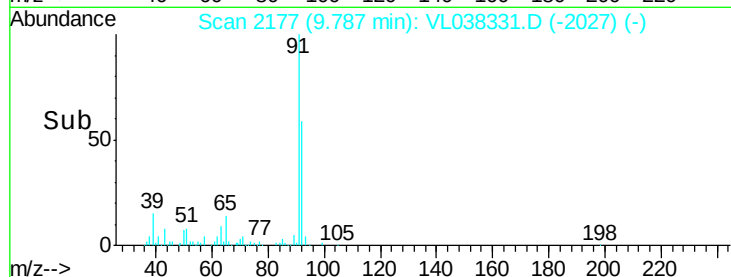
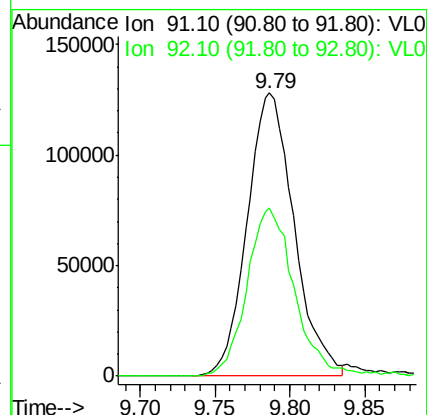
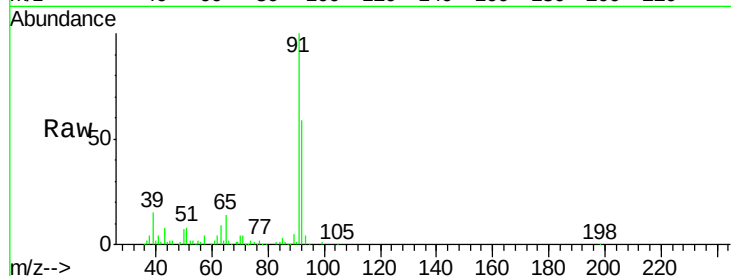
Acq: 3 Feb 2022 12:57

Tgt Ion: 91 Resp: 279756

Ion Ratio Lower Upper

91 100

92 60.8 47.4 71.0



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.06 min Scan# 2885

Delta R.T. -0.02 min

Lab File: VL038331.D

Acq: 3 Feb 2022 12:57

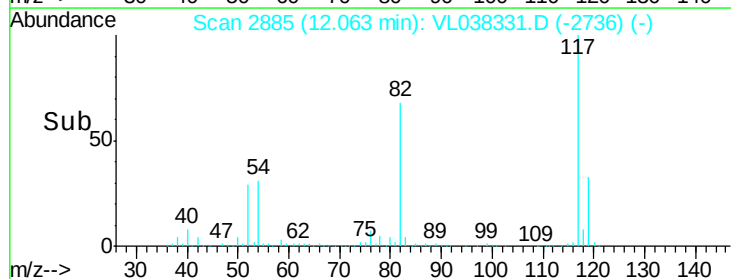
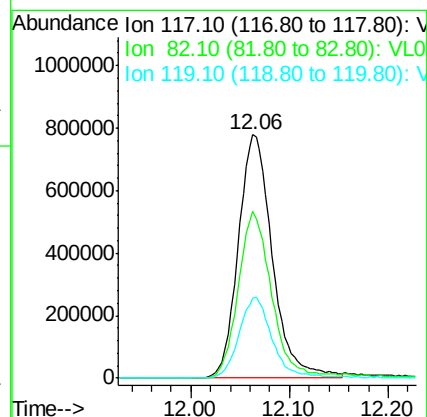
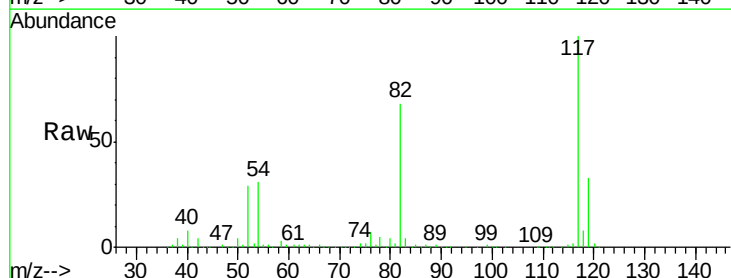
Tgt Ion: 117 Resp: 1871199

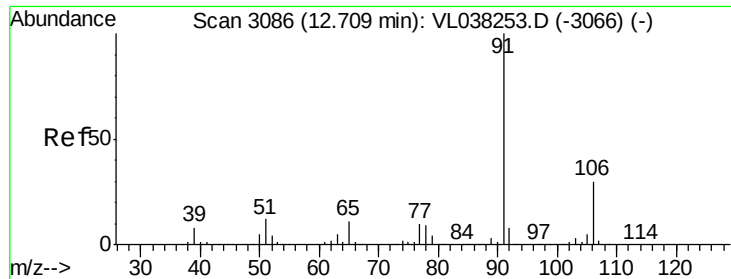
Ion Ratio Lower Upper

117 100

82 68.8 54.4 81.6

119 33.0 45.9 68.9#





#58

Ethyl Benzene

Concen: 0.208 ppbv

RT: 12.69

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

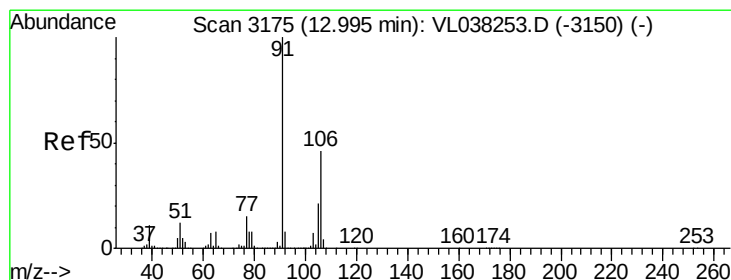
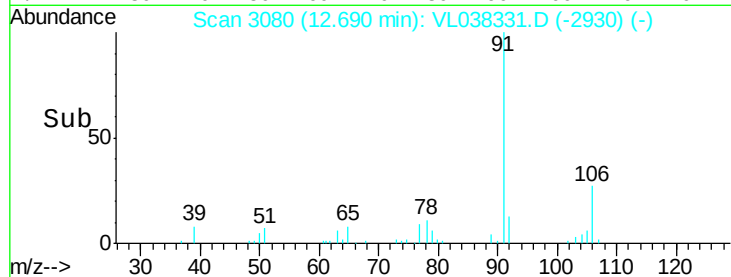
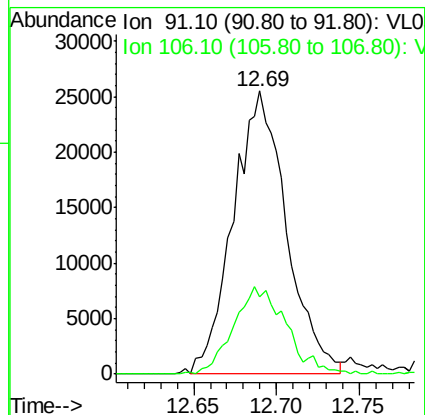
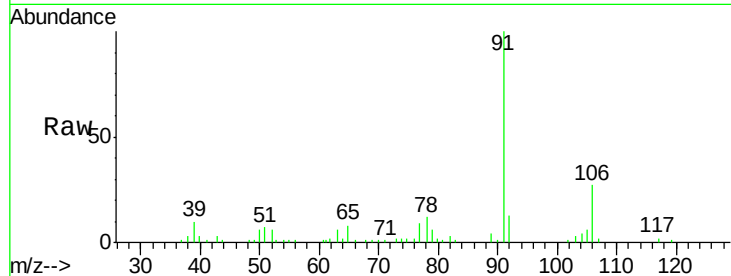
Acq: 3 Feb 2022 12:57

Tgt Ion: 91 Resp: 57133

Ion Ratio Lower Upper

91 100

106 26.6 24.1 36.1



#59

m/p-Xylene

Concen: 0.189 ppbv

RT: 12.97 min Scan# 3167

Delta R.T. -0.03 min

Lab File: VL038331.D

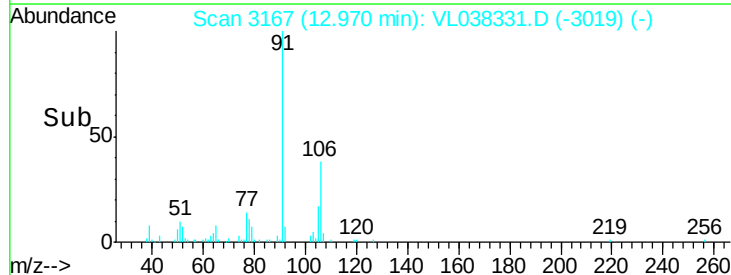
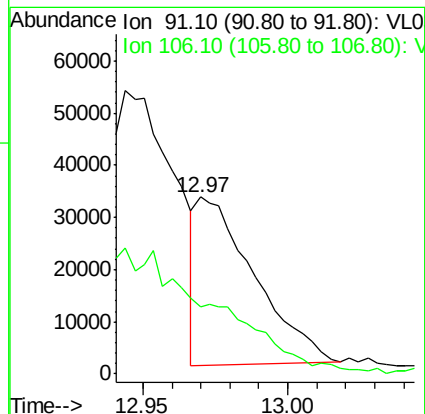
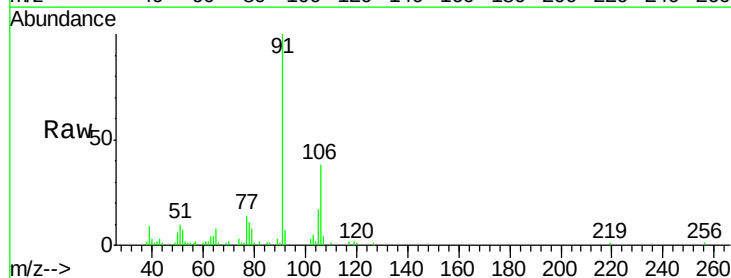
Acq: 3 Feb 2022 12:57

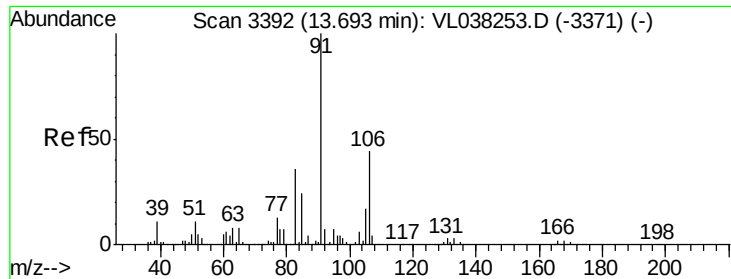
Tgt Ion: 91 Resp: 44241

Ion Ratio Lower Upper

91 100

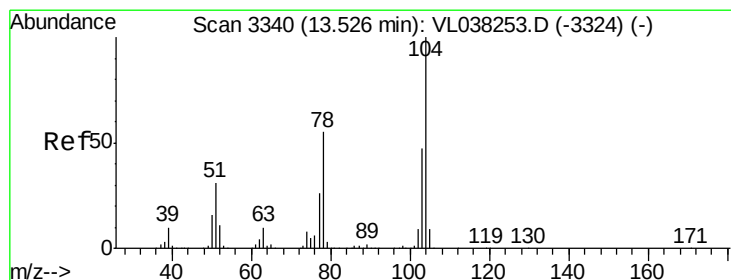
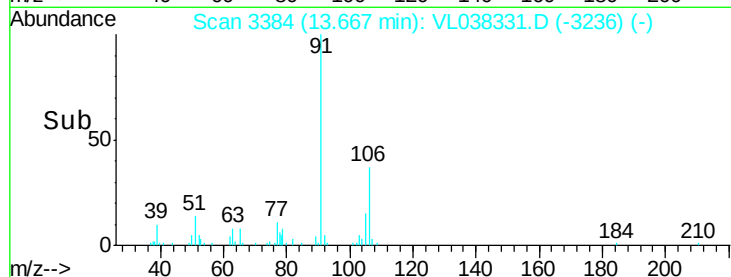
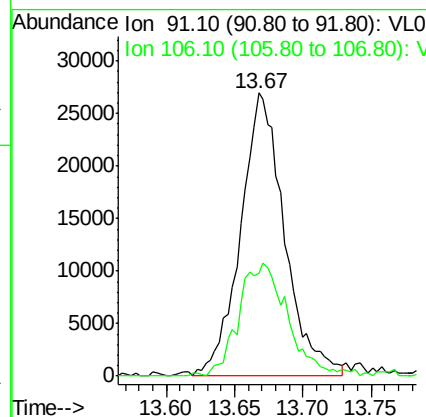
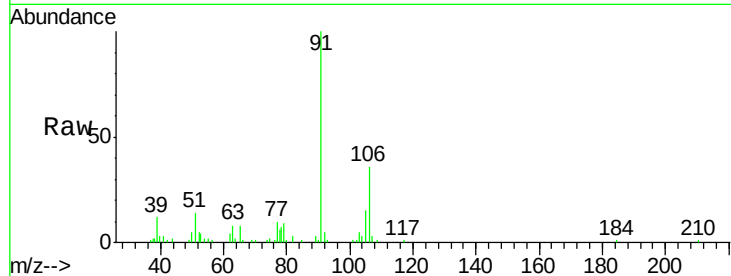
106 0.0 34.8 52.2#





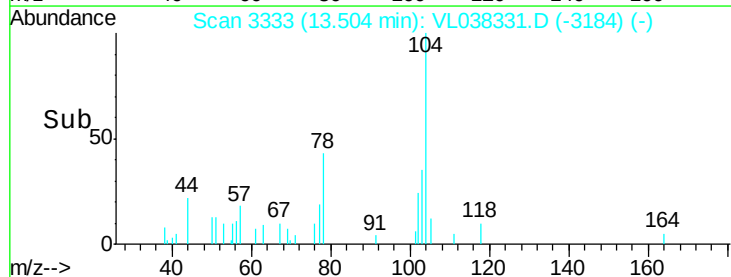
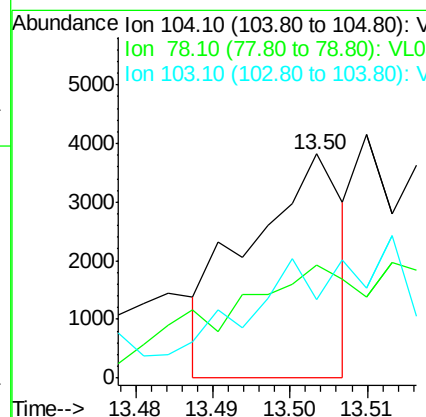
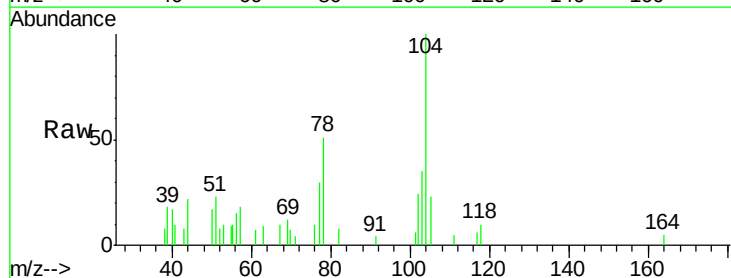
#60
o-Xylene
Concen: 0.277 ppbv
RT: 13.67
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 3 Feb 2022 12:57

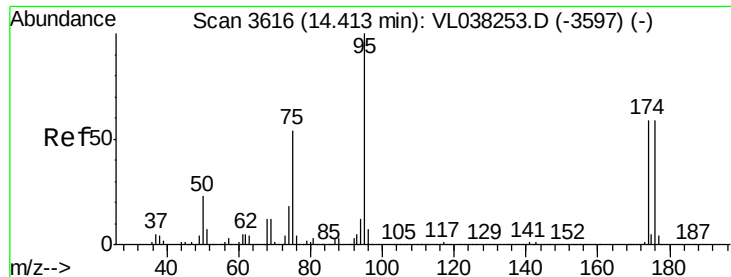
Tgt Ion: 91 Resp: 60413
Ion Ratio Lower Upper
91 100
106 45.9 22.2 66.6



#61
Styrene
Concen: 0.032 ppbv
RT: 13.50 min Scan# 3333
Delta R.T. -0.02 min
Lab File: VL038331.D
Acq: 3 Feb 2022 12:57

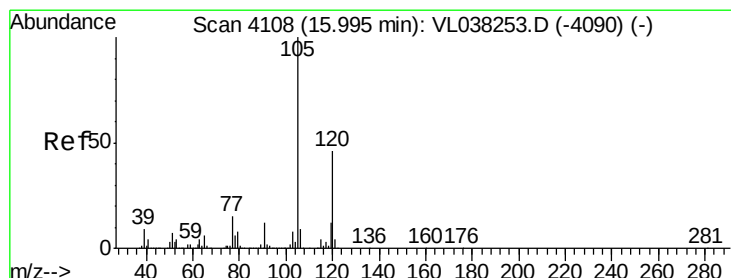
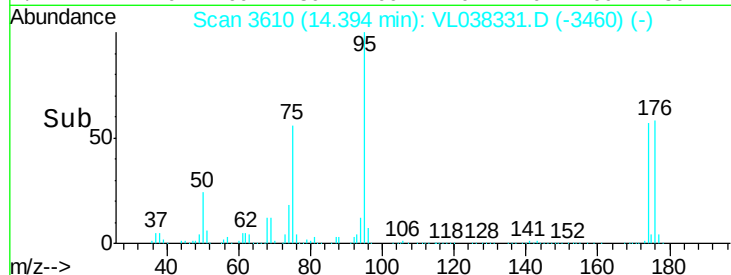
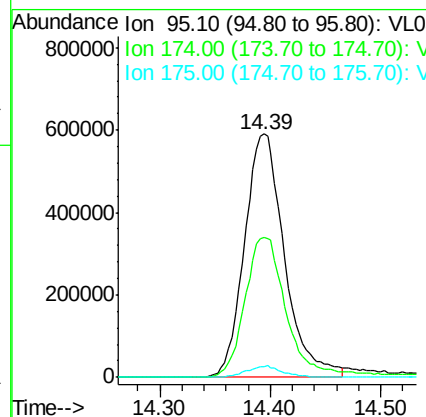
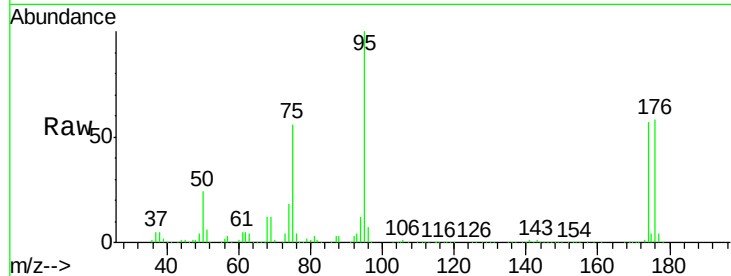
Tgt Ion: 104 Resp: 3233
Ion Ratio Lower Upper
104 100
78 0.0 44.2 66.4#
103 0.0 38.2 57.4#





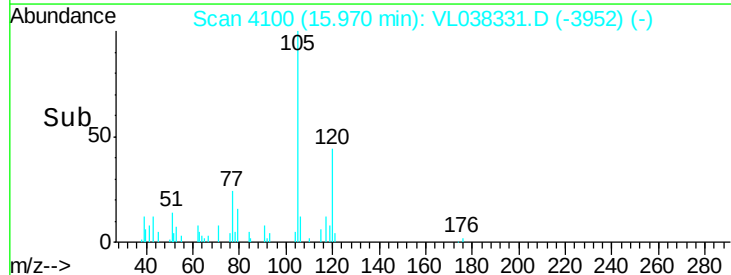
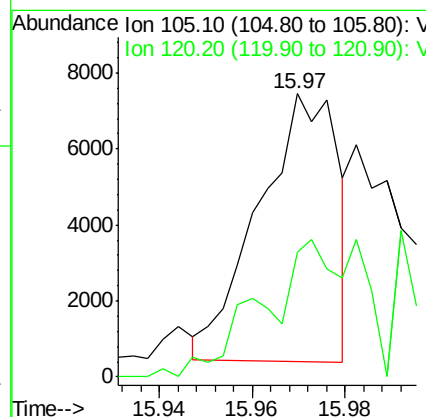
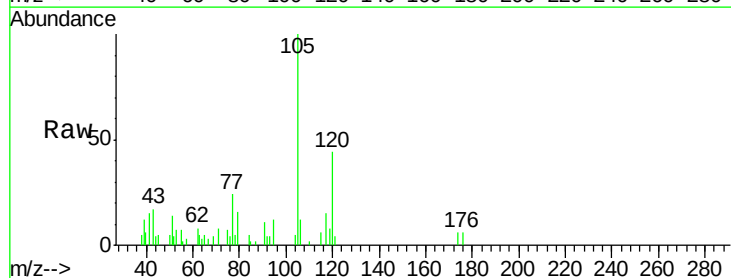
#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.468 ppbv
 RT: 14.39 min
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 3 Feb 2022 12:57

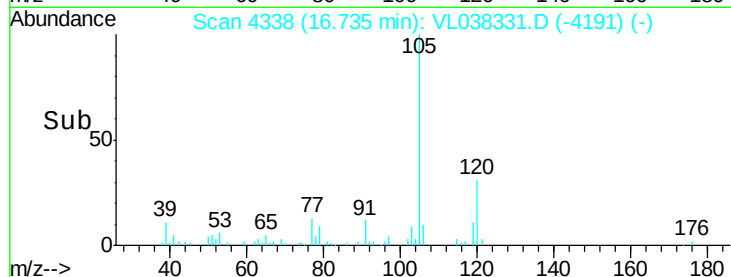
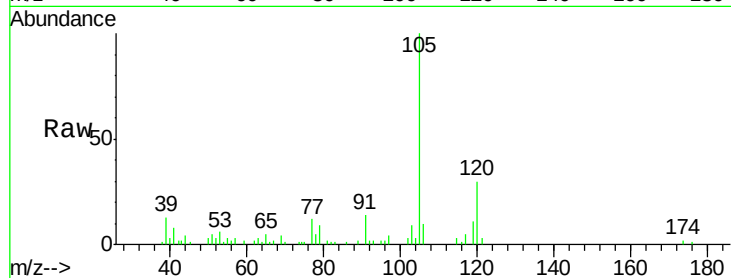
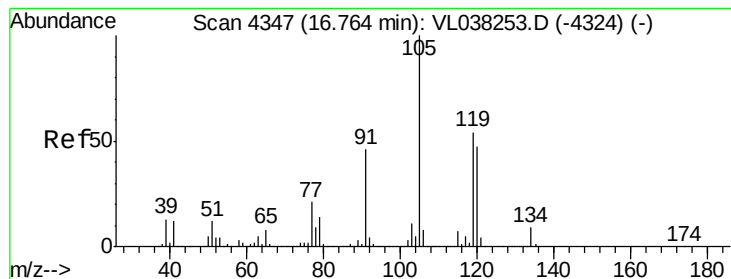
Tgt Ion: 95 Resp: 1486764
 Ion Ratio Lower Upper
 95 100
 174 61.7 48.3 72.5
 175 4.4 3.5 5.3



#73
 1,3,5-Trimethylbenzene
 Concen: 0.041 ppbv
 RT: 15.97 min Scan# 4100
 Delta R.T. -0.03 min
 Lab File: VL038331.D
 Acq: 3 Feb 2022 12:57

Tgt Ion: 105 Resp: 8334
 Ion Ratio Lower Upper
 105 100
 120 50.3 36.6 55.0





#74

1,2,4-Trimethylbenzene

Concen: 0.107 ppbv

RT: 16.73

Delta R.T: MSVOA_L

Lab File: ClientSampleId :

IA1DUP

Acq: 3 Feb 2022 12:57

Tgt Ion:105 Resp: 23167

Ion Ratio Lower Upper

105 100

120 30.3 37.2 55.8#

91 14.6 36.6 55.0#

77 11.7 16.9 25.3#

