

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL040722\
 Data File : VL038844.D
 Acq On : 7 Apr 2022 16:55
 Operator : SY/AP
 Sample : N2273-01
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA L
 ClientSampleId :
 1160-1A-1

Quant Time: Apr 08 05:24:17 2022
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL040522AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Apr 06 06:12:53 2022
 QLast Update : Wed Apr 06 06:12:53 2022
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.69	49	1287908	10.00	ppbv	0.03
33) 1,4-Difluorobenzene	7.19	114	3174755	10.00	ppbv	0.02
55) Chlorobenzene-d5	12.10	117	2774519	10.00	ppbv	0.03

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.43	95	2166372	10.29	ppbv	0.03
Spiked Amount	10.000	Range	65 - 135	Recovery	=	102.90%

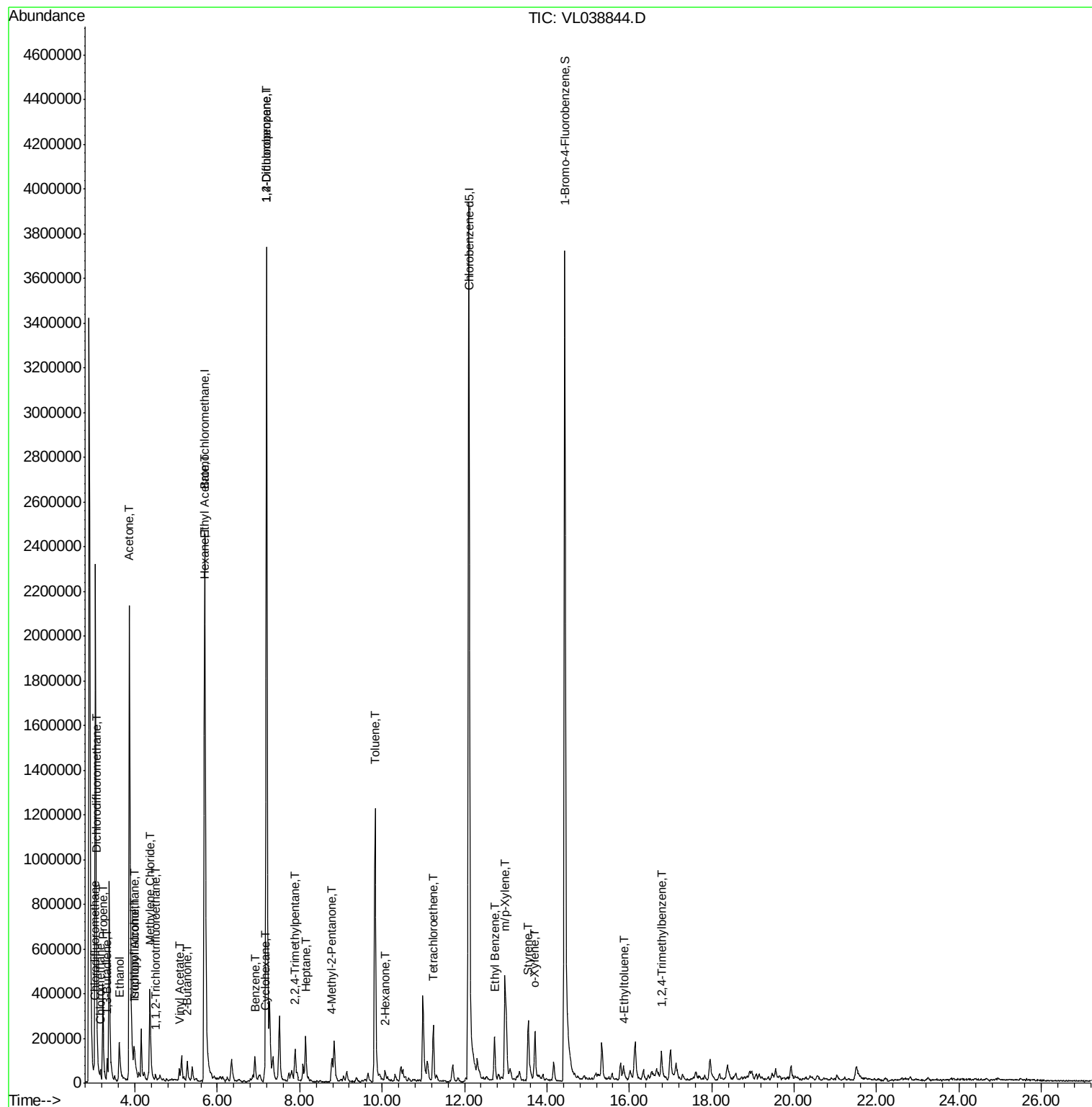
Target Compounds					Ovalue
2) Dichlorodifluoromethane	3.07	85	52286	0.286 ppbv	93
3) Chlorodifluoromethane	3.01	51	66983	0.426 ppbv	94
4) Chloromethane	3.16	50	36094	0.443 ppbv #	72
9) Propene	3.22	41	131962	1.587 ppbv	93
10) Heptane	8.14	43	104583	0.499 ppbv	99
11) Trichlorofluoromethane	3.97	101	35584	0.242 ppbv	99
12) 1,1,2-Trichlorotrifluoroet	4.50	101	5482	0.049 ppbv #	58
13) Ethanol	3.62	45	88305	17.473 ppbv #	100
15) Acetone	3.86	43	3019629	23.550 ppbv	97
16) 1,3-Butadiene	3.33	39	24641	0.336 ppbv #	48
19) Isopropyl Alcohol	3.99	45	121511	1.854 ppbv #	100
20) Methylene Chloride	4.37	84	156949	3.375 ppbv	89
23) Vinyl Acetate	5.09	43	7041	0.056 ppbv #	1
25) Ethyl Acetate	5.71	43	418112	1.285 ppbv #	92
26) Hexane	5.71	57	168826	1.140 ppbv #	59
30) Cyclohexane	7.15	84	15341	0.118 ppbv #	17
34) 2-Butanone	5.27	43	114991	0.917 ppbv	92
36) Benzene	6.91	78	94575	0.327 ppbv	96
39) 1,2-Dichloropropane	7.19	63	818195	7.407 ppbv #	27
44) 2,2,4-Trimethylpentane	7.89	57	73585	0.150 ppbv #	1
50) 4-Methyl-2-Pentanone	8.77	43	38011	0.135 ppbv #	39
51) 2-Hexanone	10.07	43	9508	0.045 ppbv #	47
52) Tetrachloroethene	11.25	164	36434	0.361 ppbv	90
53) Toluene	9.82	91	901119	2.703 ppbv	98
58) Ethyl Benzene	12.73	91	178528	0.431 ppbv	89
59) m/p-Xylene	12.99	91	18334	0.053 ppbv #	1
60) o-Xylene	13.71	91	178935	0.549 ppbv	99
61) Styrene	13.55	104	164169	0.827 ppbv	93
72) 4-Ethyltoluene	15.87	105	13507	0.035 ppbv #	55
74) 1,2,4-Trimethylbenzene	16.79	105	29387	0.080 ppbv #	64

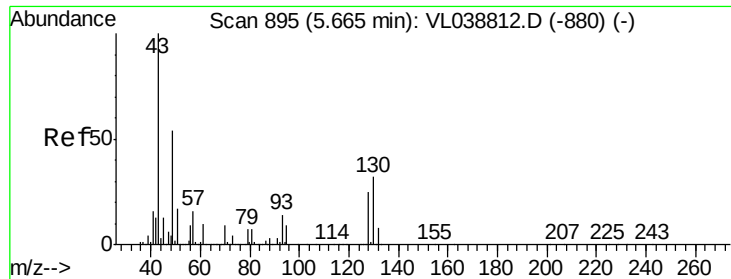
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL040722\
Data File : VL038844.D
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Operator : SY/AP
Sample : N2273-01
Misc : 400mL/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
1160-1A-1

Quant Time: Apr 08 05:24:17 2022
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL040522AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Apr 06 06:12:53 2022
QLast Update : Wed Apr 06 06:12:53 2022
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.69 Instrument: MSVOA_1

Delta R.T. ClientSampleId:

Lab File: 1160-1A-1

Acq: 7 Apr 2022 16:55

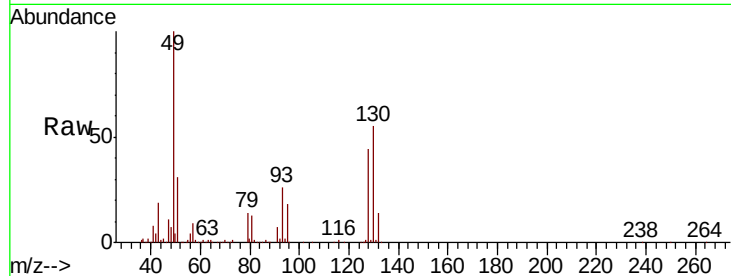
Tot Ion: 49 Resp: 1287908

Ion Ratio Lower Upper

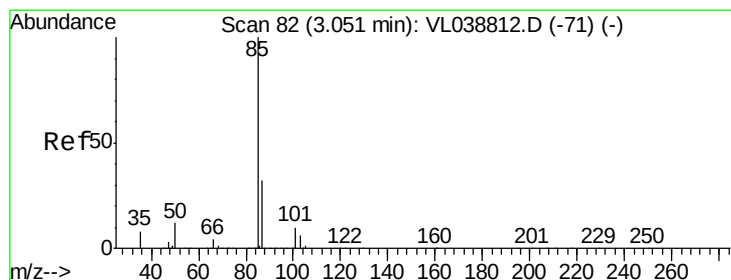
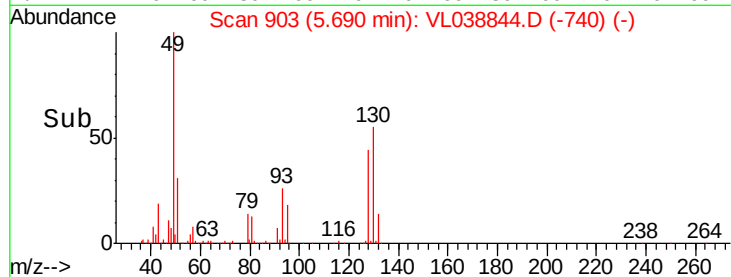
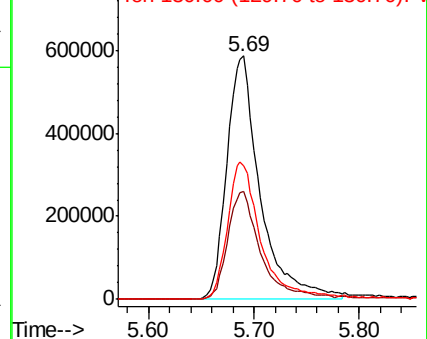
49 100

128 45.7 24.1 72.3

130 57.7 30.9 92.8



Abundance Ion 49.10 (48.80 to 49.80): VL0
Ion 128.00 (127.70 to 128.70): V
Ion 130.00 (129.70 to 130.70): V



#2

Dichlorodifluoromethane

Concen: 0.286 ppbv

RT: 3.07 min Scan# 88

Delta R.T. 0.02 min

Lab File: VL038844.D

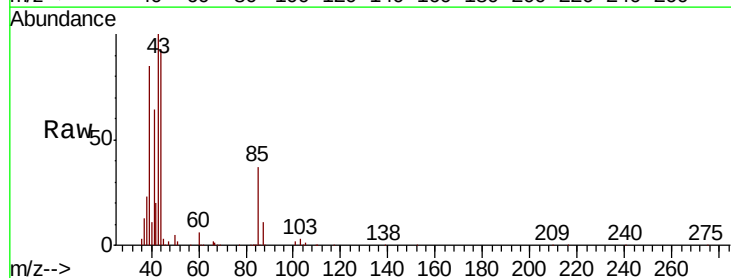
Acq: 7 Apr 2022 16:55

Tgt Ion: 85 Resp: 52286

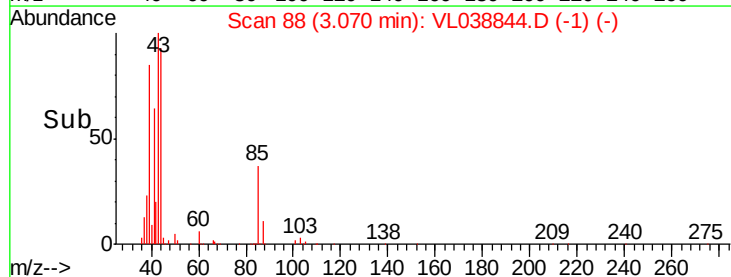
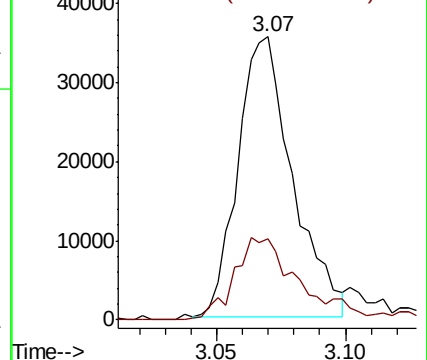
Ion Ratio Lower Upper

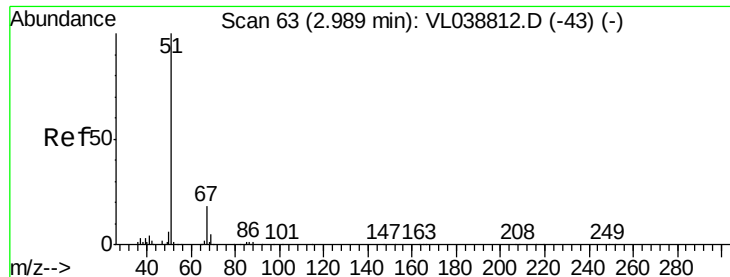
85 100

87 28.7 25.9 38.9



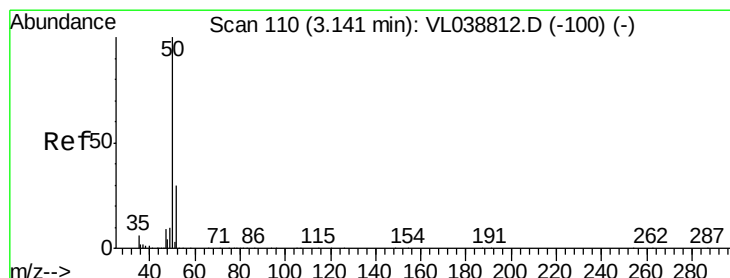
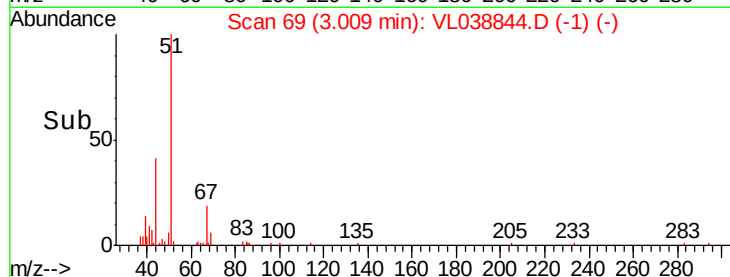
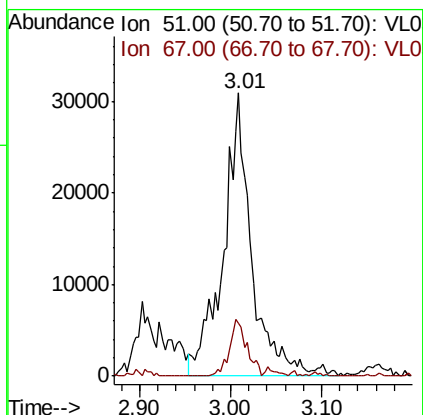
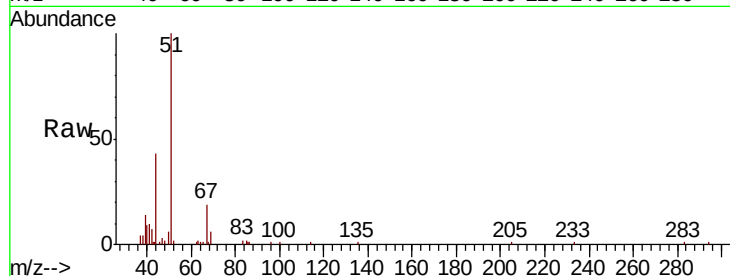
Abundance Ion 85.00 (84.70 to 85.70): VL0
Ion 87.00 (86.70 to 87.70): VL0





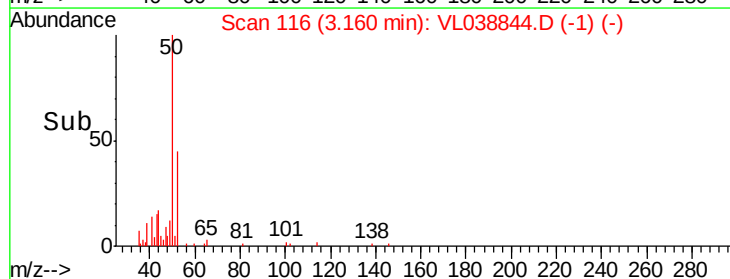
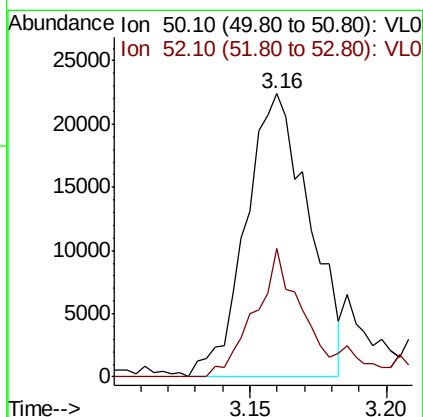
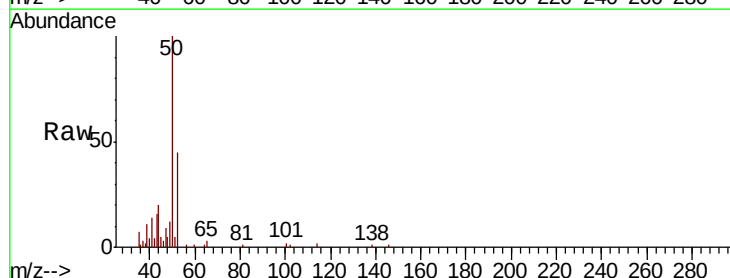
#3
 Chlorodifluoromethane
 Concen: 0.426 ppbv
 RT: 3.01
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 7 Apr 2022 16:55

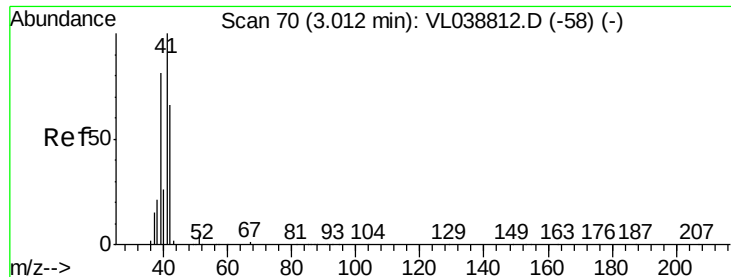
Tot Ion: 51 Resp: 66983
 Ion Ratio Lower Upper
 51 100
 67 14.1 13.4 20.0



#4
 Chloromethane
 Concen: 0.443 ppbv
 RT: 3.16 min Scan# 116
 Delta R.T. 0.02 min
 Lab File: VL038844.D
 Acq: 7 Apr 2022 16:55

Tgt Ion: 50 Resp: 36094
 Ion Ratio Lower Upper
 50 100
 52 45.5 24.3 36.5#





#9

Propene

Concen: 1.587 ppbv

RT: 3.22 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

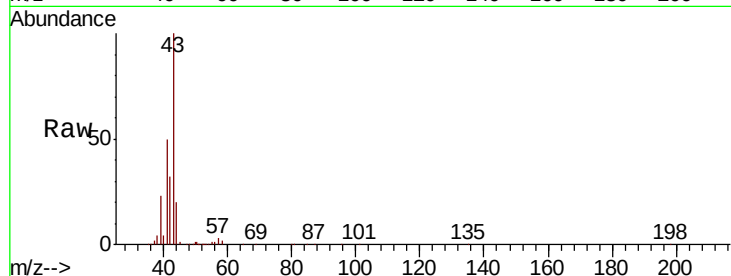
Acq: 7 Apr 2022 16:55

Tot Ion: 41 Resp: 131962

Ion Ratio Lower Upper

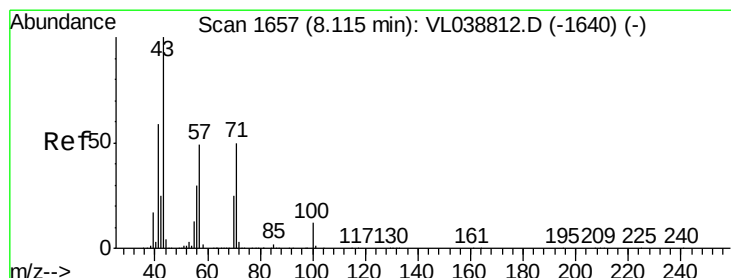
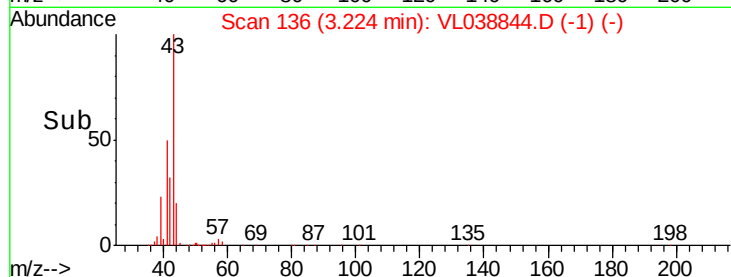
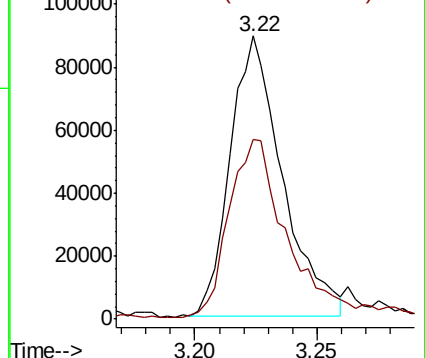
41 100

42 73.6 54.2 81.4



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0



#10

Heptane

Concen: 0.499 ppbv

RT: 8.14 min Scan# 1666

Delta R.T. 0.03 min

Lab File: VL038844.D

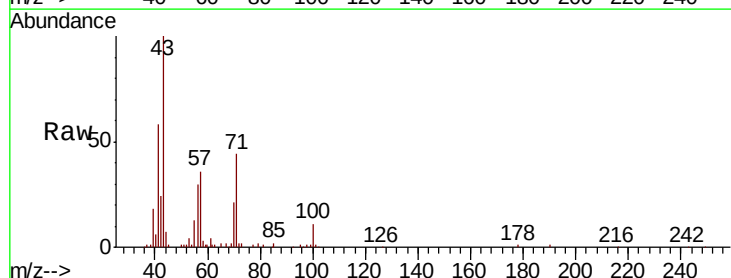
Acq: 7 Apr 2022 16:55

Tgt Ion: 43 Resp: 104583

Ion Ratio Lower Upper

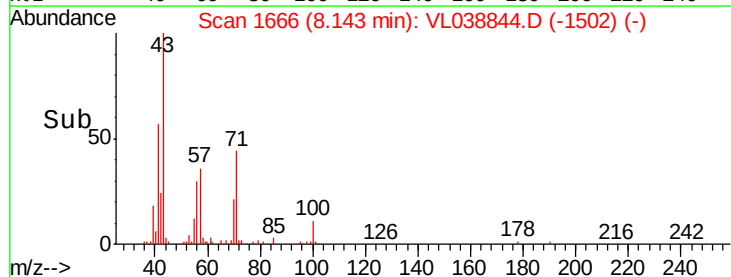
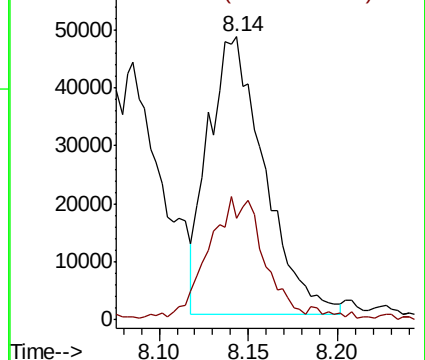
43 100

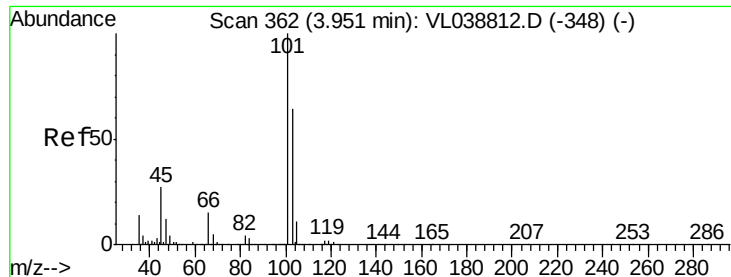
57 48.2 39.3 58.9



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 57.10 (56.80 to 57.80): VL0





#11

Trichlorofluoromethane

Concen: 0.242 ppbv

RT: 3.97 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

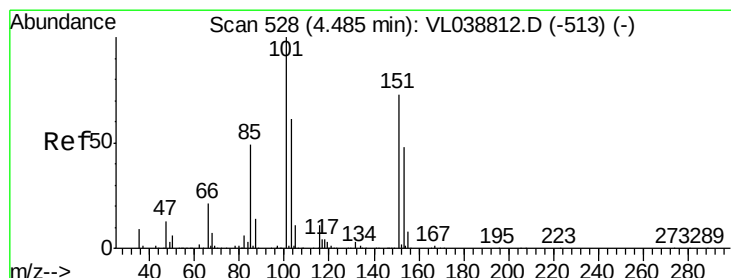
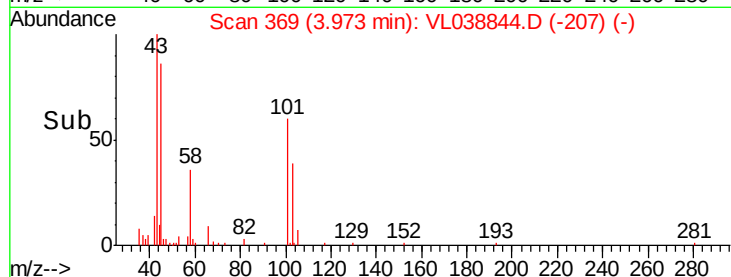
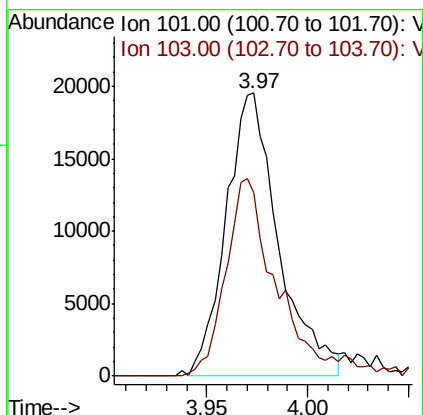
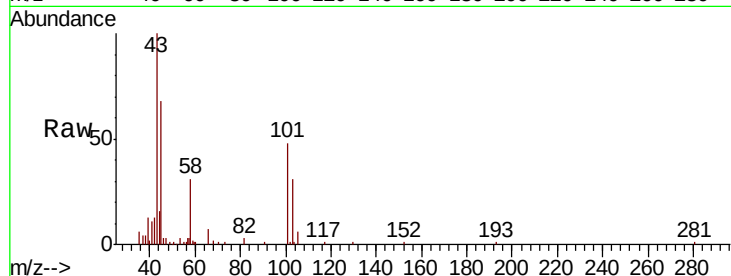
Acq: 7 Apr 2022 16:55

Tot Ion:101 Resp: 35584

Ion Ratio Lower Upper

101 100

103 63.7 51.4 77.0



#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.049 ppbv

RT: 4.50 min Scan# 533

Delta R.T. 0.02 min

Lab File: VL038844.D

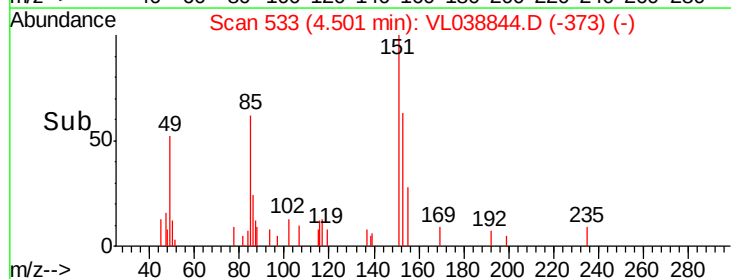
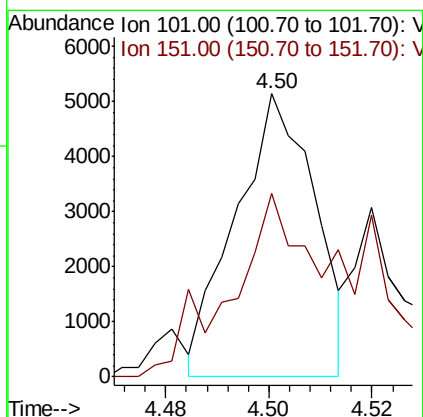
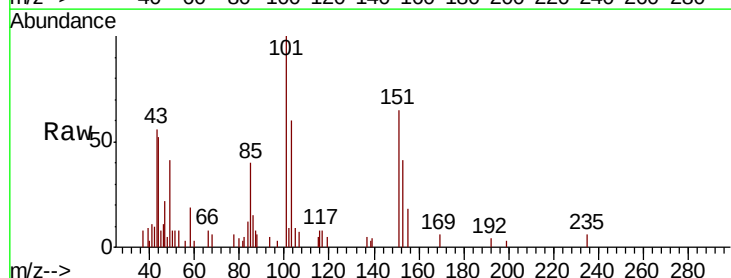
Acq: 7 Apr 2022 16:55

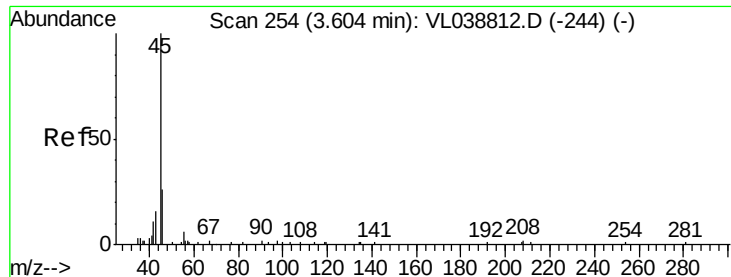
Tgt Ion:101 Resp: 5482

Ion Ratio Lower Upper

101 100

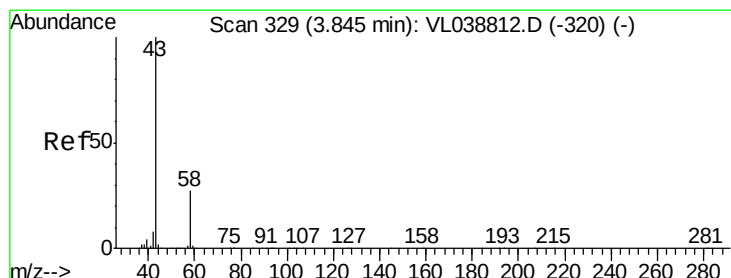
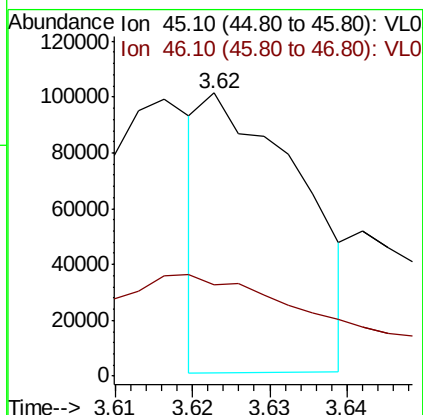
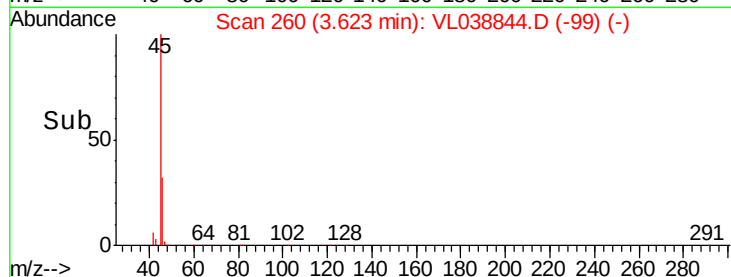
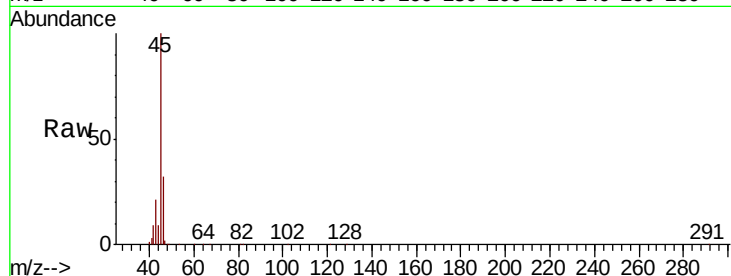
151 110.5 59.9 89.9#





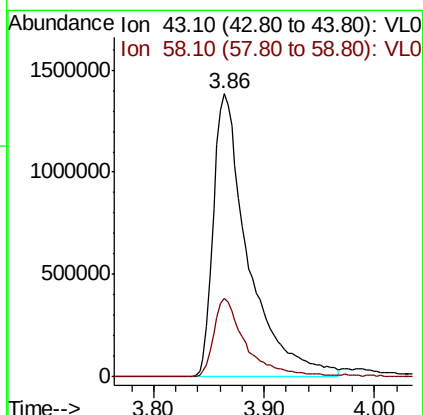
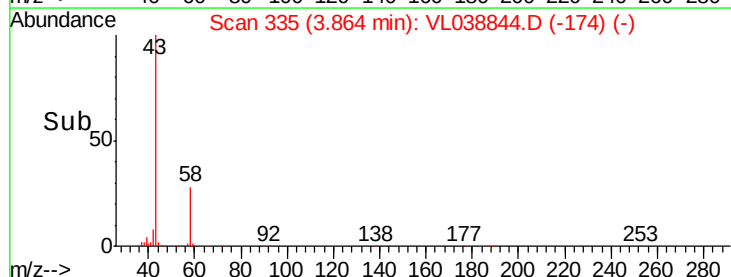
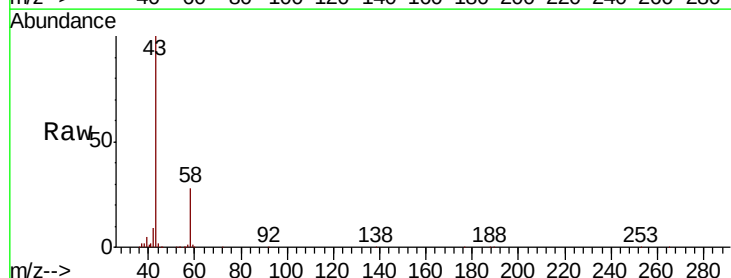
#13
Ethanol
Concen: 17.473 ppbv
RT: 3.62
Delta R.T. MSVOA_L
Lab File: ClientSampleId:
Acq: 7 Apr 2022 16:55

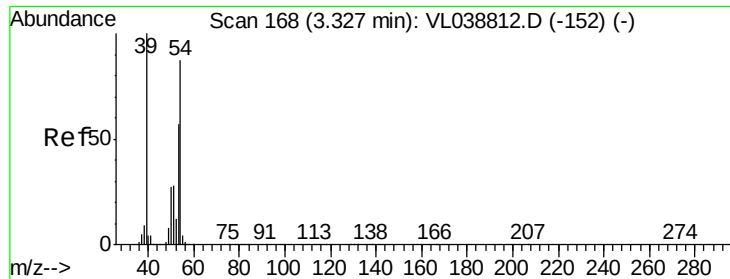
Tot Ion: 45 Resp: 88305
Ion Ratio Lower Upper
45 100
46 116.9 0.0 0.0#



#15
Acetone
Concen: 23.550 ppbv
RT: 3.86 min Scan# 335
Delta R.T. 0.02 min
Lab File: VL038844.D
Acq: 7 Apr 2022 16:55

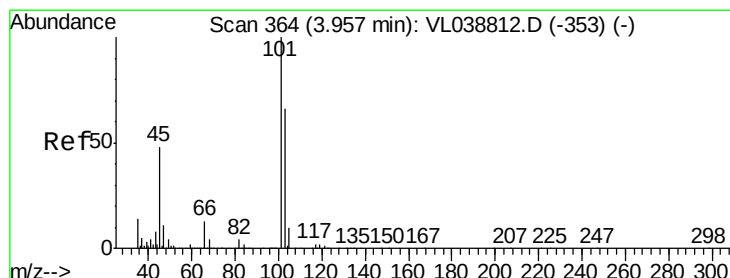
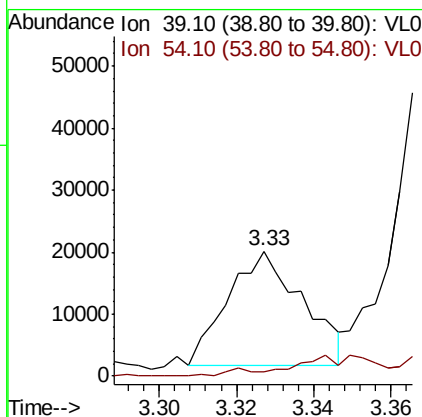
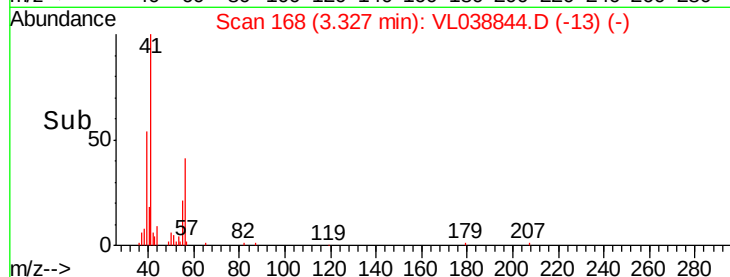
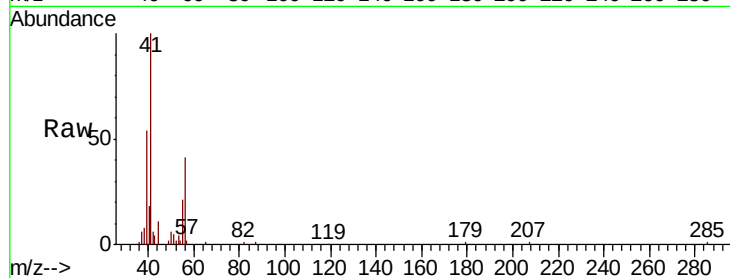
Tgt Ion: 43 Resp: 3019629
Ion Ratio Lower Upper
43 100
58 26.6 22.5 33.7





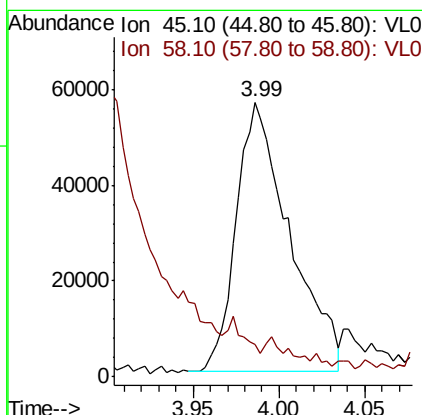
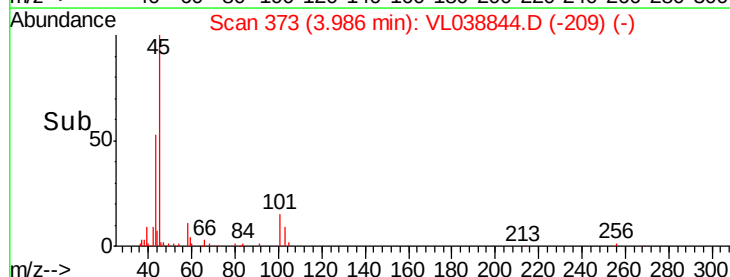
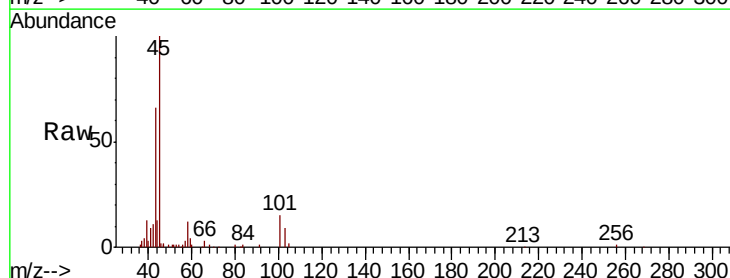
#16
 1,3-Butadiene
 Concen: 0.336 ppbv
 RT: 3.33
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 7 Apr 2022 16:55

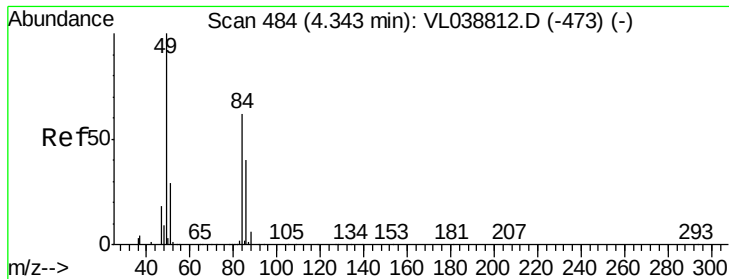
Tot Ion: 39 Resp: 24641
 Ion Ratio Lower Upper
 39 100
 54 34.6 64.8 97.2#



#19
 Isopropyl Alcohol
 Concen: 1.854 ppbv
 RT: 3.99 min Scan# 373
 Delta R.T. 0.03 min
 Lab File: VL038844.D
 Acq: 7 Apr 2022 16:55

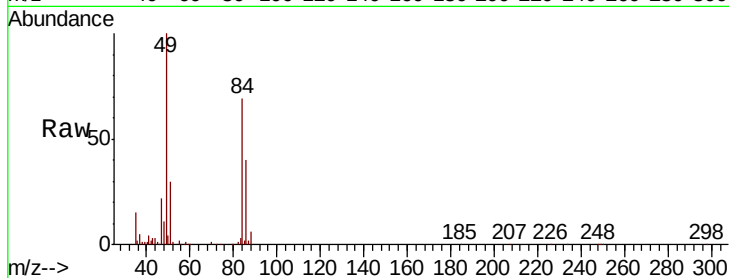
Tgt Ion: 45 Resp: 121511
 Ion Ratio Lower Upper
 45 100
 58 0.0 0.0 0.0





#20
Methylene Chloride
Concen: 3.375 ppbv
RT: 4.37
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId :
Acq: 7 Apr 2022 16:55

Tot Ion:	84	Resp:	156949
Ion	Ratio	Lower	Upper
84	100		
49	144.1	129.4	194.0
51	43.7	37.4	56.2
86	57.6	51.4	77.2



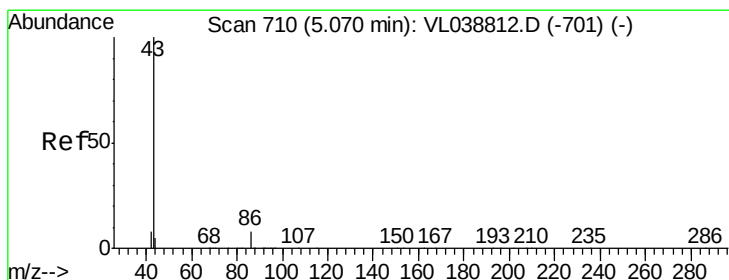
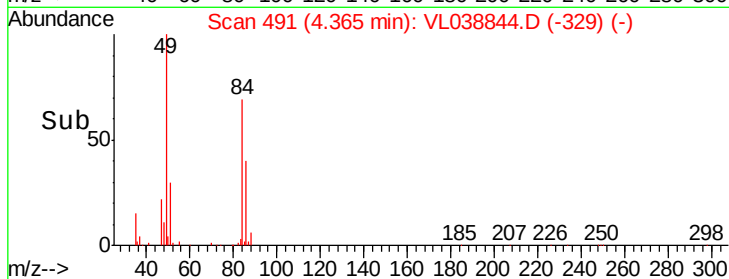
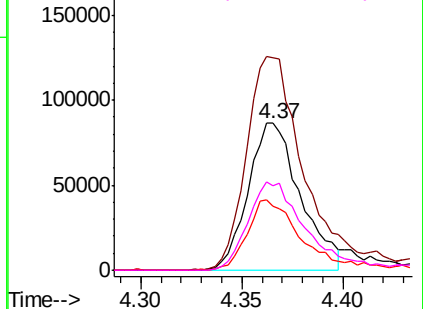
Abundance

Ion 84.00 (83.70 to 84.70): VL0

Ion 49.10 (48.80 to 49.80): VL0

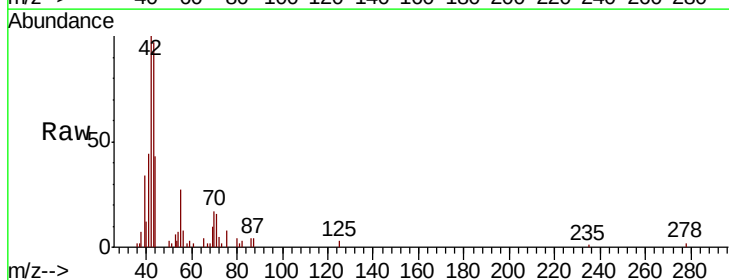
Ion 51.10 (50.80 to 51.80): VL0

Ion 86.00 (85.70 to 86.70): VL0



#23
Vinyl Acetate
Concen: 0.056 ppbv
RT: 5.09 min Scan# 715
Delta R.T.: 0.02 min
Lab File: VL038844.D
Acq: 7 Apr 2022 16:55

Tgt Ion:	43	Resp:	7041
Ion	Ratio	Lower	Upper
43	100		
86	5.1	5.8	8.6#
42	91.0	7.8	11.6#
44	15.5	3.6	5.4#



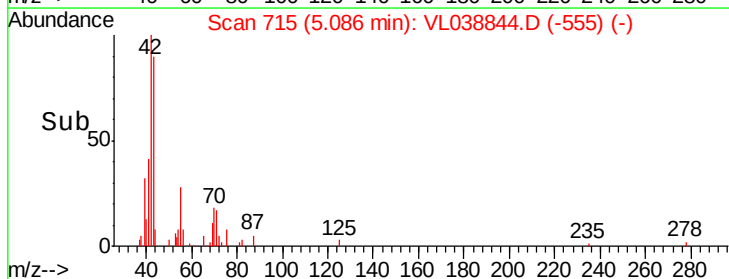
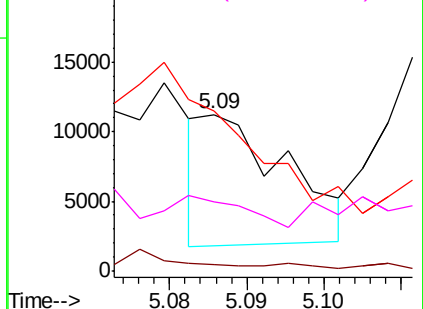
Abundance

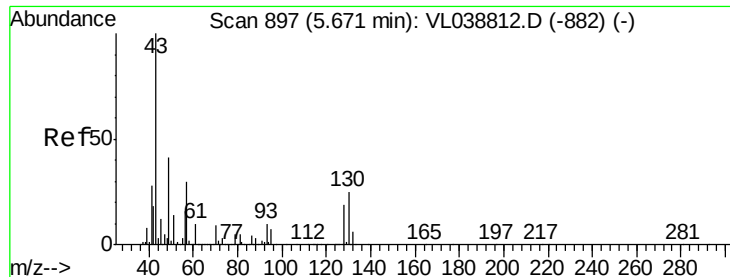
Ion 43.10 (42.80 to 43.80): VL0

Ion 86.10 (85.80 to 86.80): VL0

Ion 42.10 (41.80 to 42.80): VL0

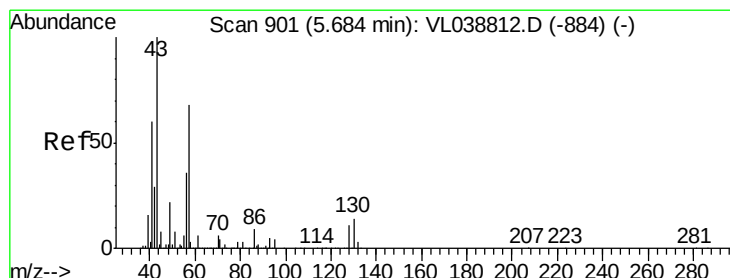
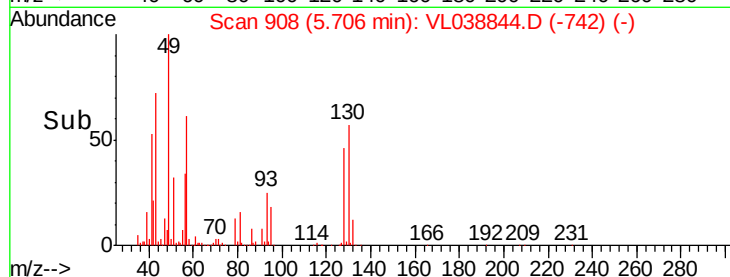
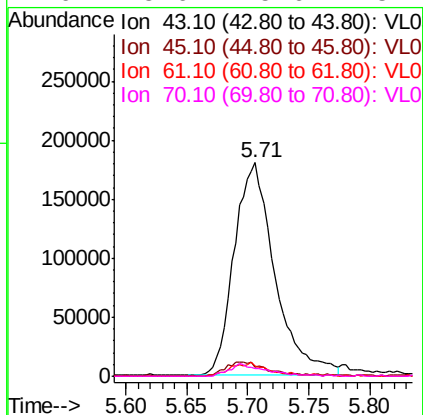
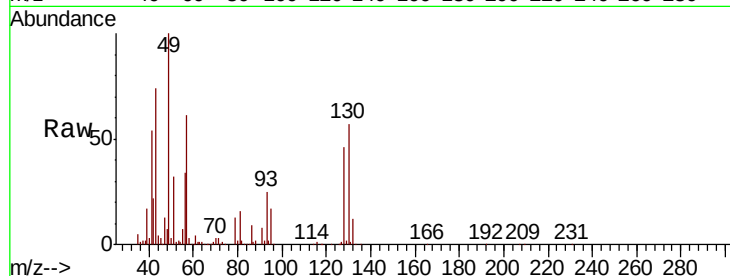
Ion 44.10 (43.80 to 44.80): VL0





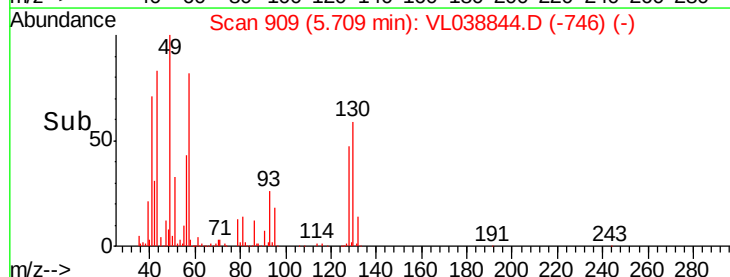
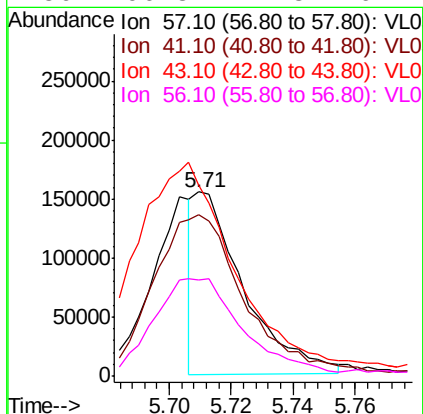
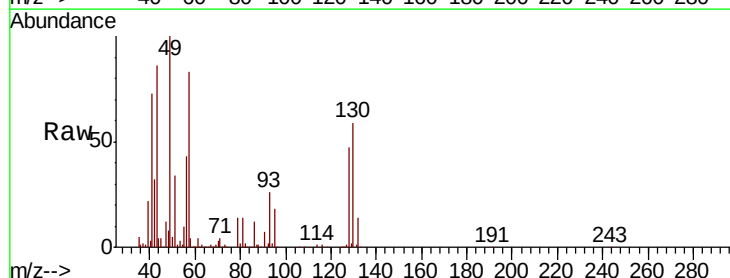
#25
Ethyl Acetate
Concen: 1.285 ppbv
RT: 5.71 min
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 7 Apr 2022 16:55

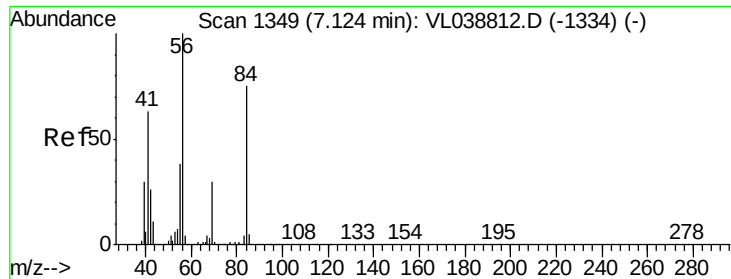
Tot Ion:	43	Resp:	418112
Ion	Ratio	Lower	Upper
43	100		
45	7.2	8.4	12.6#
61	6.5	7.9	11.9#
70	5.6	5.6	8.4#



#26
Hexane
Concen: 1.140 ppbv
RT: 5.71 min Scan# 909
Delta R.T. 0.03 min
Lab File: VL038844.D
Acq: 7 Apr 2022 16:55

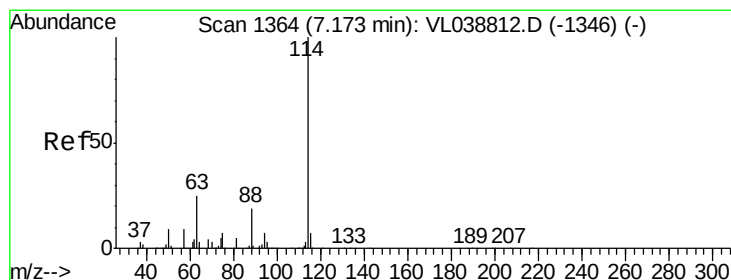
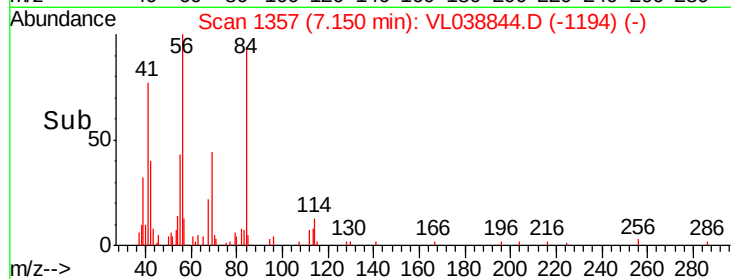
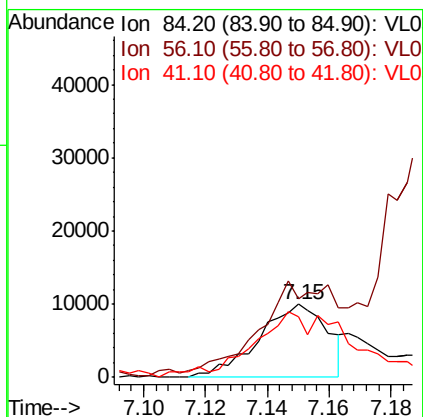
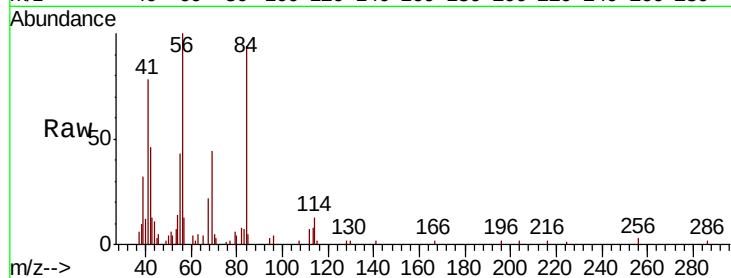
Tgt Ion:	57	Resp:	168826
Ion	Ratio	Lower	Upper
57	100		
41	174.9	72.0	108.0#
43	256.8	186.6	280.0
56	106.3	42.8	64.2#





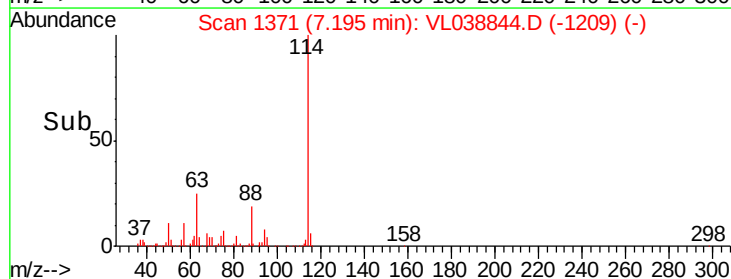
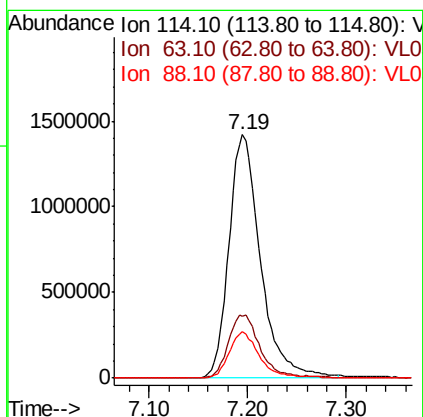
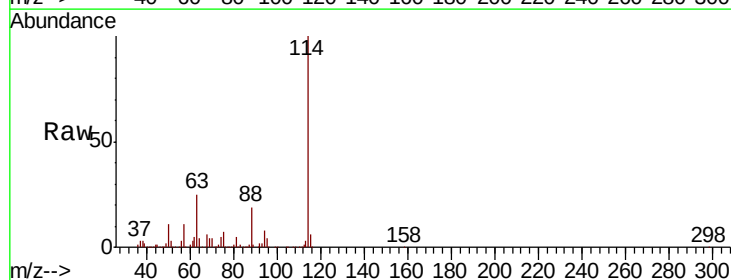
#30
Cyclohexane
Concen: 0.118 ppbv
RT: 7.15 min
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId:
Acq: 7 Apr 2022 16:55

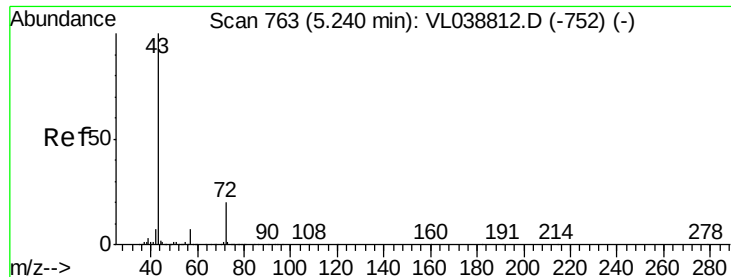
Tot Ion	84	Resp	15341
Ion Ratio	Lower	Upper	
84	100		
56	0.0	114.4	171.6#
41	113.2	69.0	103.4#



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.19 min Scan# 1371
Delta R.T.: 0.02 min
Lab File: VL038844.D
Acq: 7 Apr 2022 16:55

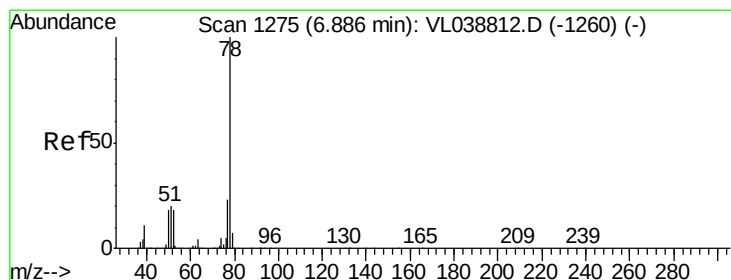
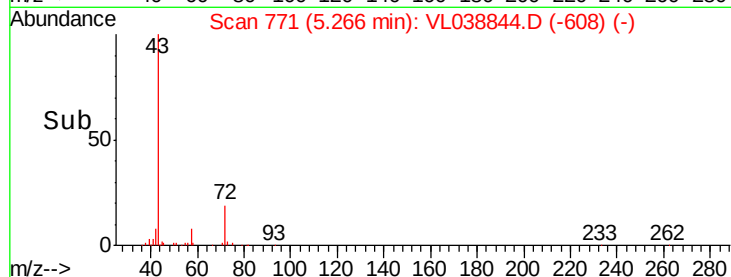
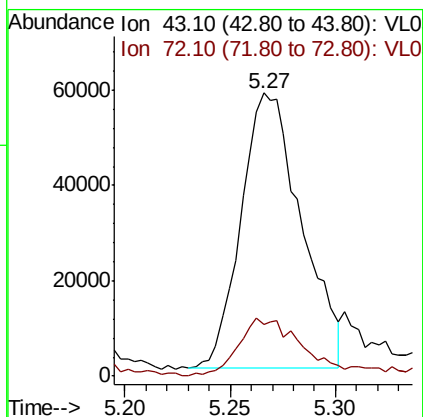
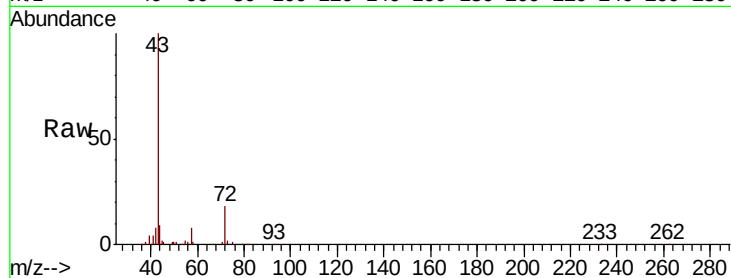
Tgt Ion	114	Resp	3174755
Ion Ratio	Lower	Upper	
114	100		
63	26.7	19.8	29.8
88	18.5	14.2	21.4





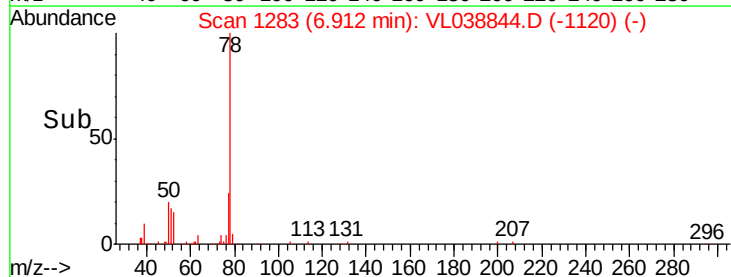
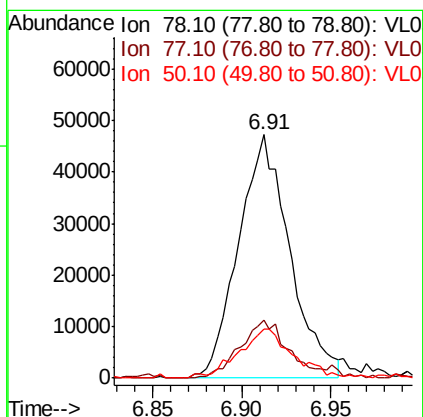
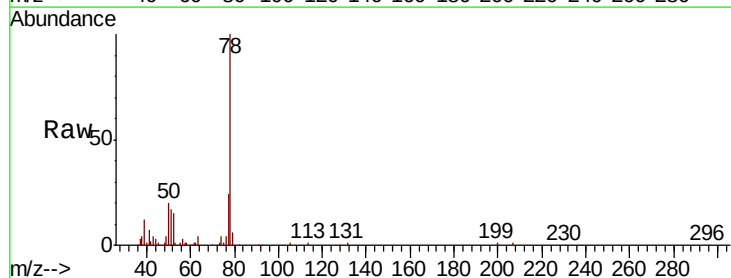
#34
 2-Butanone
 Concen: 0.917 ppbv
 RT: 5.27
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 1160-1A-1
 Acq: 7 Apr 2022 16:55

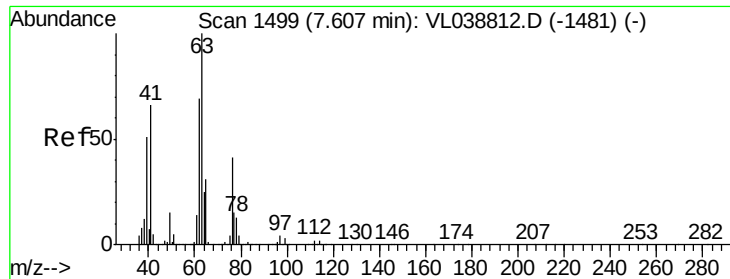
Tot Ion: 43 Resp: 114991
 Ion Ratio Lower Upper
 43 100
 72 25.0 16.9 25.3



#36
 Benzene
 Concen: 0.327 ppbv
 RT: 6.91 min Scan# 1283
 Delta R.T. 0.03 min
 Lab File: VL038844.D
 Acq: 7 Apr 2022 16:55

Tgt Ion: 78 Resp: 94575
 Ion Ratio Lower Upper
 78 100
 77 24.0 18.2 27.2
 50 20.4 14.0 21.0





#39

1,2-Dichloropropane

Concen: 7.407 ppbv

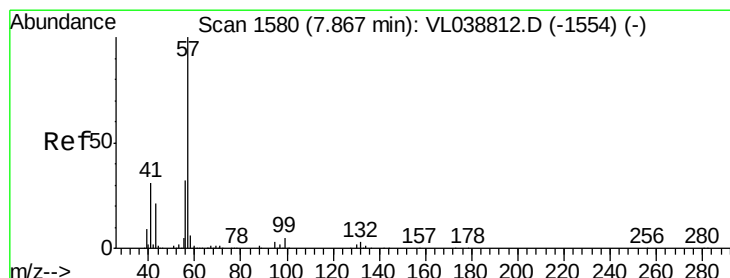
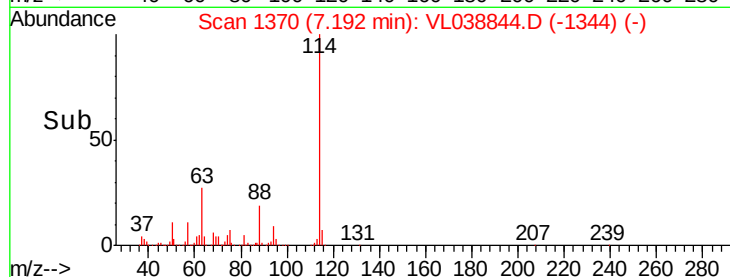
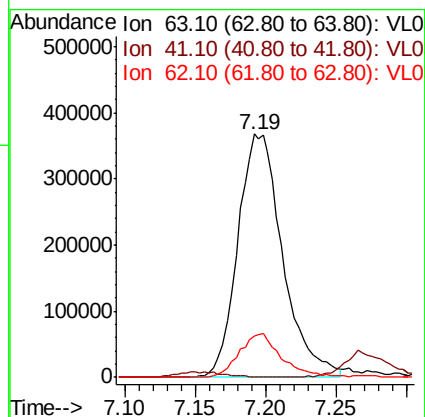
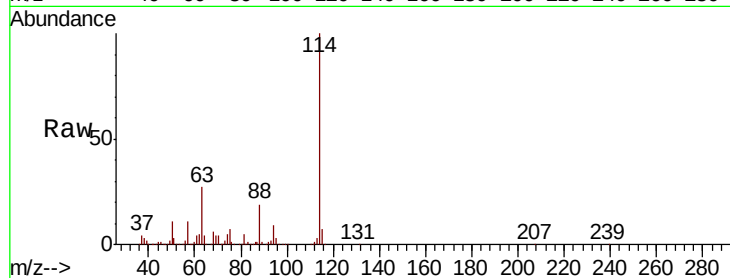
RT: 7.19 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

Acq: 7 Apr 2022 16:55

Tot Ion:	63	Resp:	818195
Ion	Ratio	Lower	Upper
63	100		
41	0.0	53.0	79.6#
62	17.0	55.0	82.4#



#44

2,2,4-Trimethylpentane

Concen: 0.150 ppbv

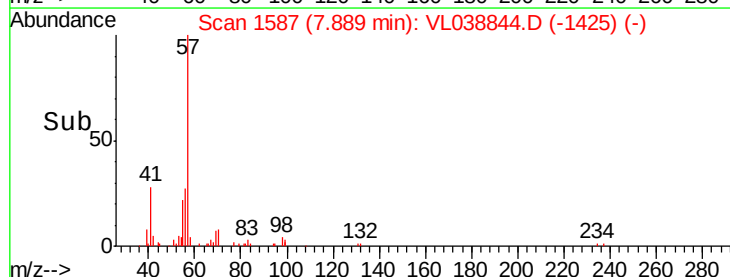
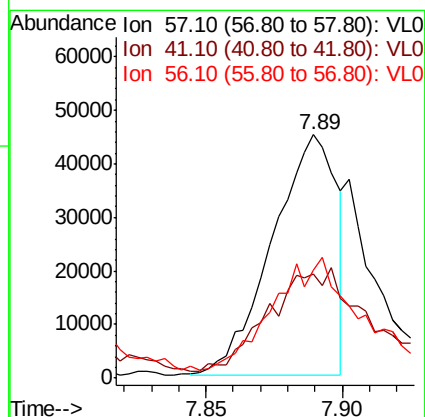
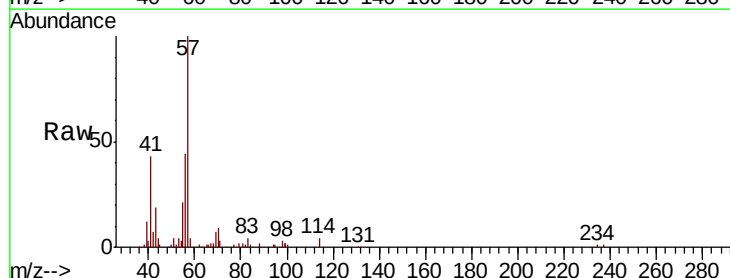
RT: 7.89 min Scan# 1587

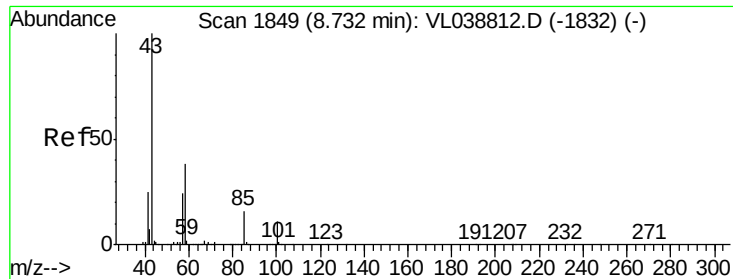
Delta R.T. 0.02 min

Lab File: VL038844.D

Acq: 7 Apr 2022 16:55

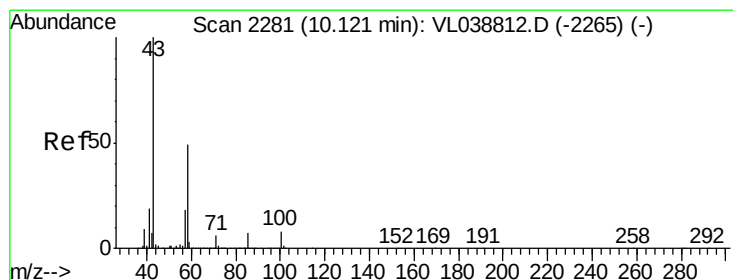
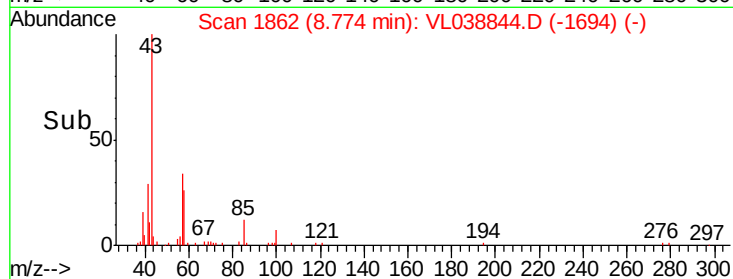
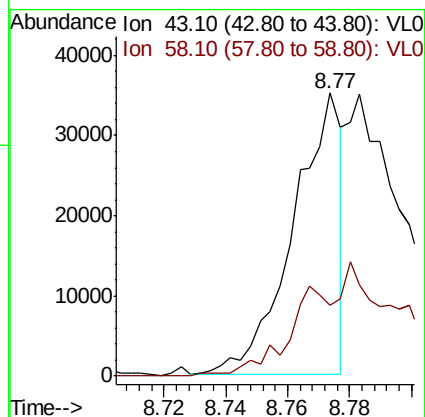
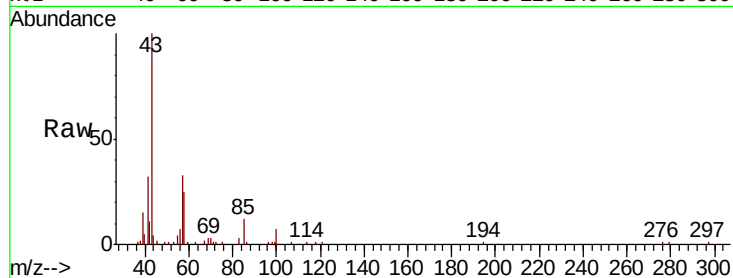
Tgt Ion:	57	Resp:	73585
Ion	Ratio	Lower	Upper
57	100		
41	94.1	25.0	37.4#
56	87.0	25.3	37.9#





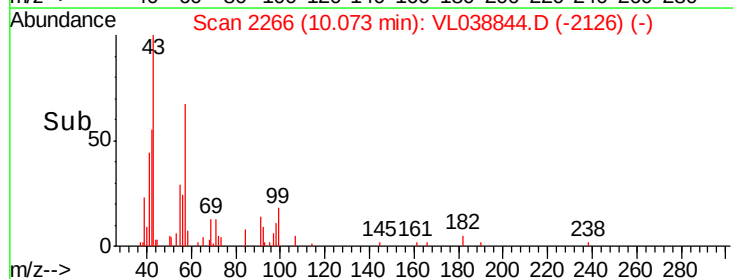
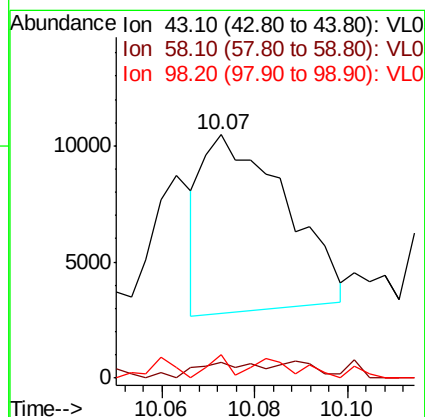
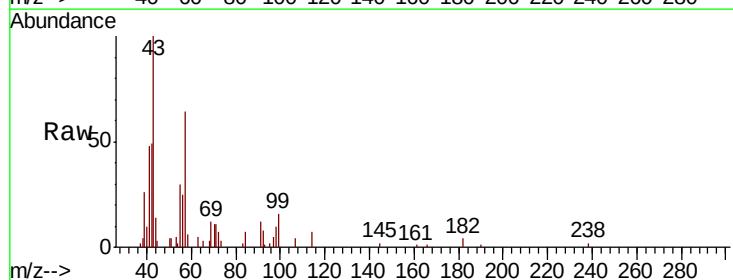
#50
 4-Methyl-2-Pentanone
 Concen: 0.135 ppbv
 RT: 8.77
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId:
 1160-1A-1
 Acq: 7 Apr 2022 16:55

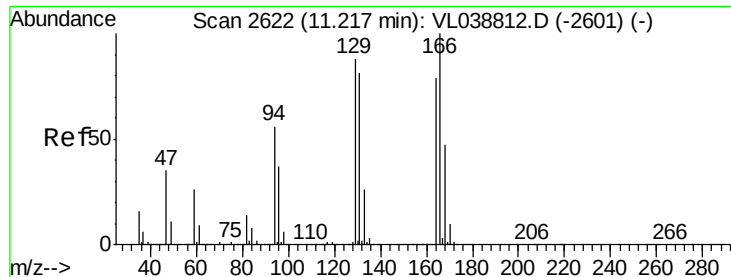
Tot Ion: 43 Resp: 38011
 Ion Ratio Lower Upper
 43 100
 58 0.0 29.0 43.6#



#51
 2-Hexanone
 Concen: 0.045 ppbv
 RT: 10.07 min Scan# 2266
 Delta R.T. -0.05 min
 Lab File: VL038844.D
 Acq: 7 Apr 2022 16:55

Tgt Ion: 43 Resp: 9508
 Ion Ratio Lower Upper
 43 100
 58 14.3 41.4 62.0#
 98 14.2 0.1 0.1#





#52

Tetrachloroethene

Concen: 0.361 ppbv

RT: 11.25

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 7 Apr 2022 16:55

Tot Ion:164 Resp: 36434

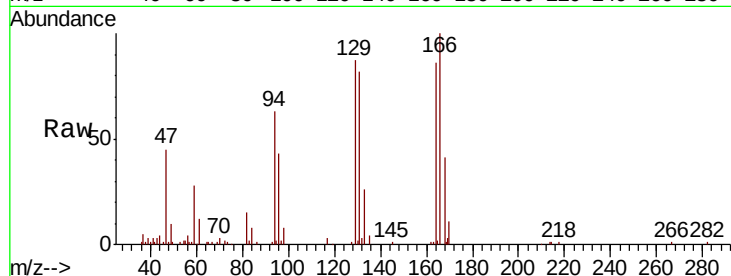
Ion Ratio Lower Upper

164 100

166 113.1 101.0 151.6

129 100.1 88.7 133.1

131 94.2 81.8 122.6

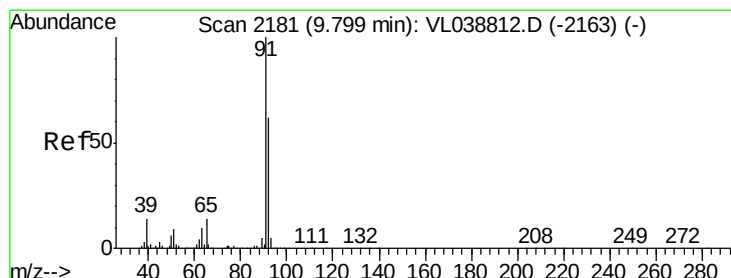
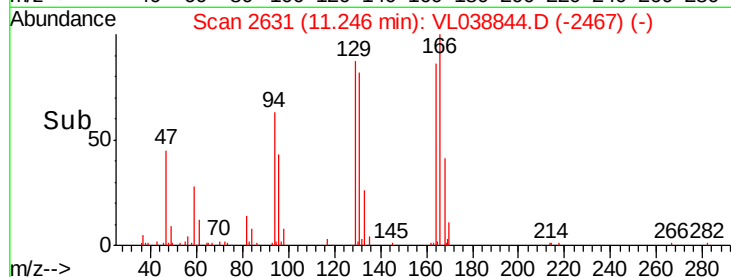
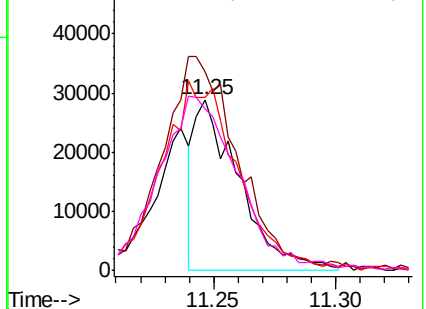


Abundance Ion 163.90 (163.60 to 164.60): V

Ion 165.90 (165.60 to 166.60): V

Ion 129.00 (128.70 to 129.70): V

Ion 131.00 (130.70 to 131.70): V



#53

Toluene

Concen: 2.703 ppbv

RT: 9.82 min Scan# 2188

Delta R.T. 0.02 min

Lab File: VL038844.D

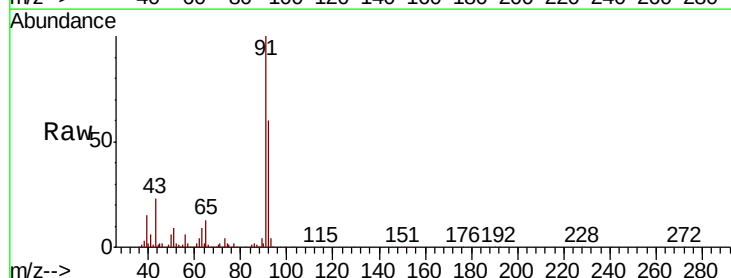
Acq: 7 Apr 2022 16:55

Tgt Ion: 91 Resp: 901119

Ion Ratio Lower Upper

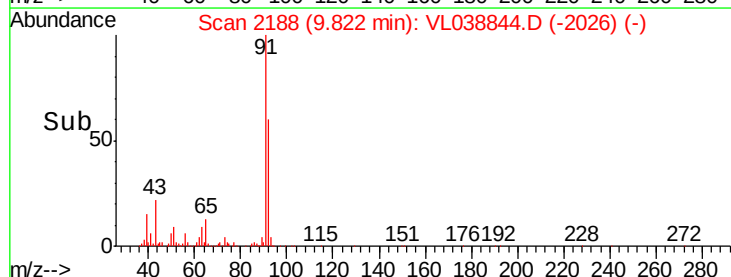
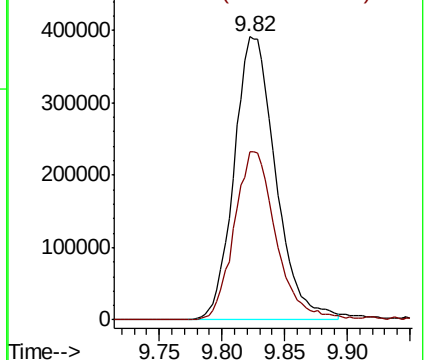
91 100

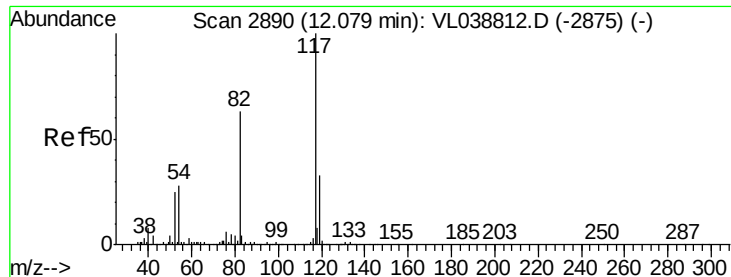
92 59.9 49.2 73.8



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.10 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 7 Apr 2022 16:55

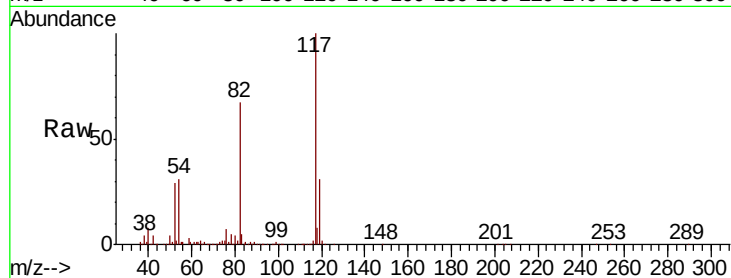
Tot Ion:117 Resp: 2774519

Ion Ratio Lower Upper

117 100

82 71.7 53.0 79.6

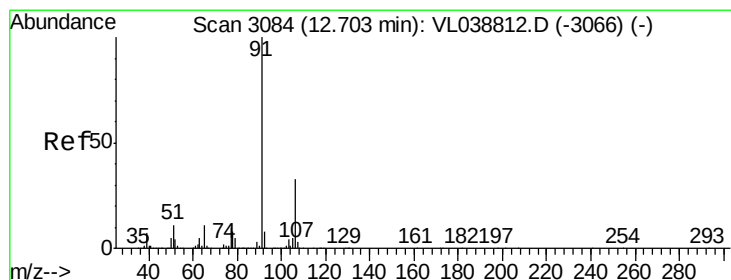
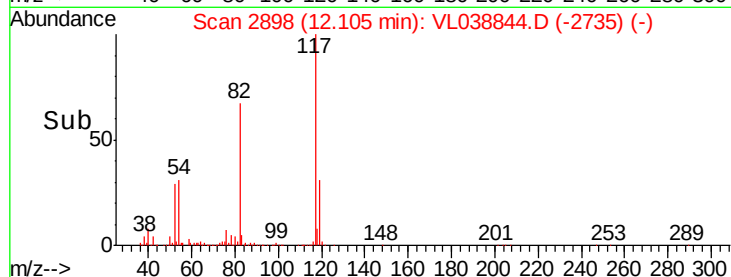
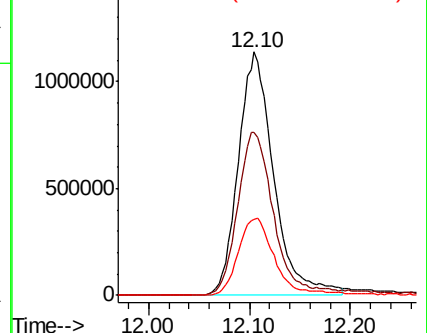
119 32.6 24.9 37.3



Abundance Ion 117.10 (116.80 to 117.80): V

Ion 82.10 (81.80 to 82.80): VL0

Ion 119.10 (118.80 to 119.80): V



#58

Ethyl Benzene

Concen: 0.431 ppbv

RT: 12.73 min Scan# 3092

Delta R.T. 0.03 min

Lab File: VL038844.D

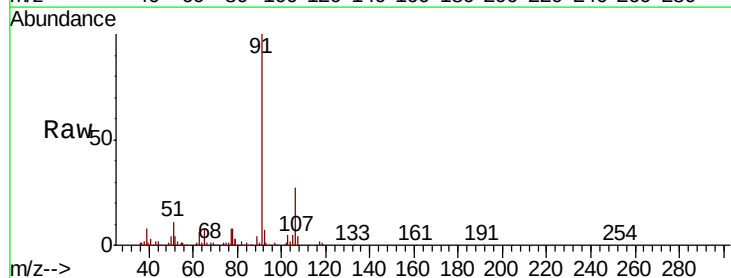
Acq: 7 Apr 2022 16:55

Tgt Ion: 91 Resp: 178528

Ion Ratio Lower Upper

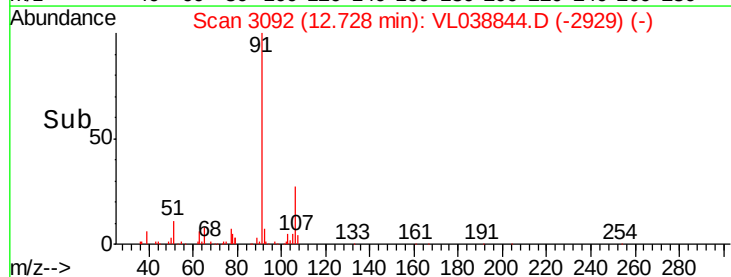
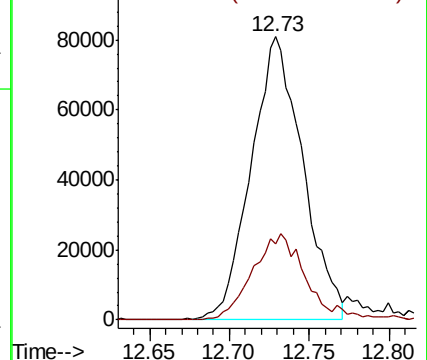
91 100

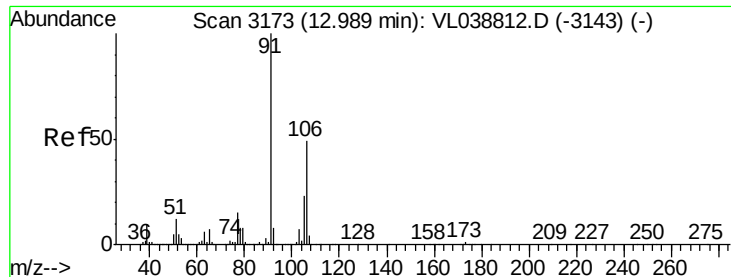
106 27.1 26.7 40.1



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V





#59

m/p-Xylene

Concen: 0.053 ppbv

RT: 12.99

Delta R.T. MSVOA_1

Lab File: ClientSampleId :

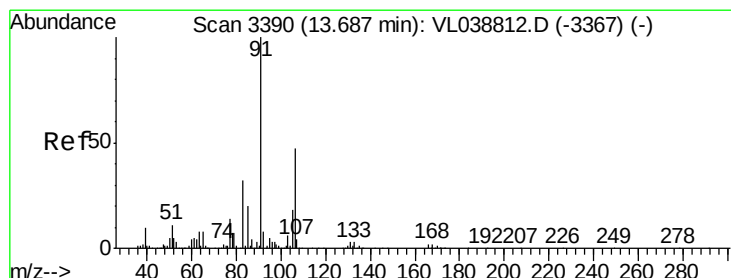
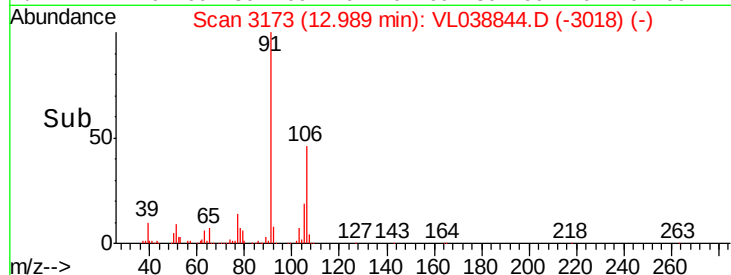
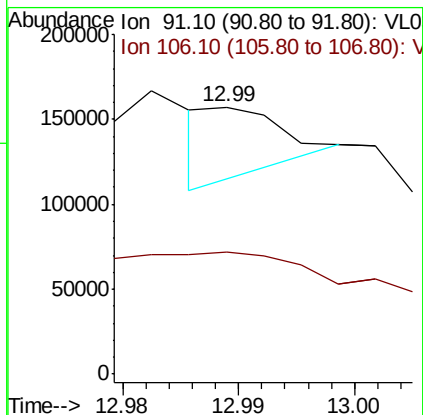
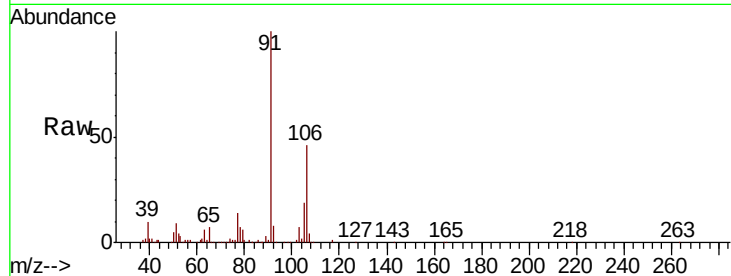
Acq: 7 Apr 2022 16:55

Tot Ion: 91 Resp: 18334

Ion Ratio Lower Upper

91 100

106 1349.2 37.1 55.7#



#60

o-Xylene

Concen: 0.549 ppbv

RT: 13.71 min Scan# 3397

Delta R.T. 0.02 min

Lab File: VL038844.D

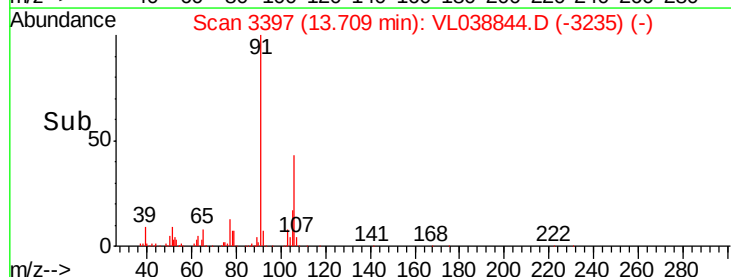
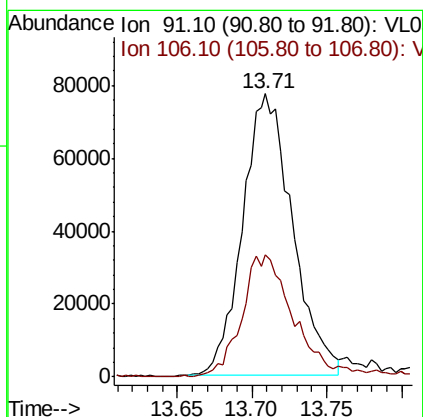
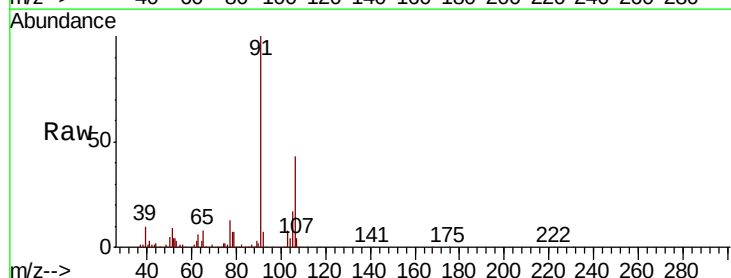
Acq: 7 Apr 2022 16:55

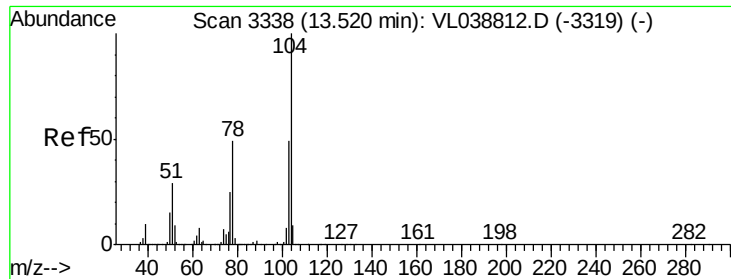
Tgt Ion: 91 Resp: 178935

Ion Ratio Lower Upper

91 100

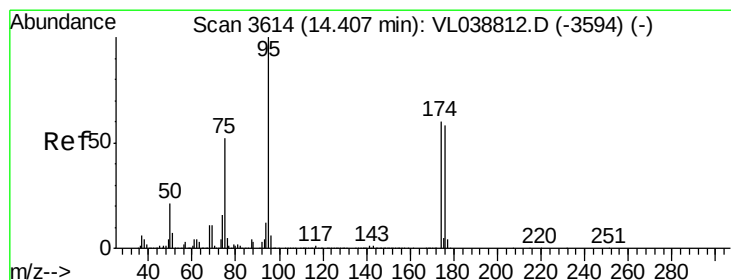
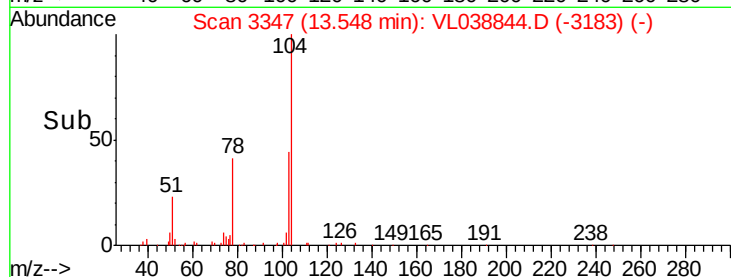
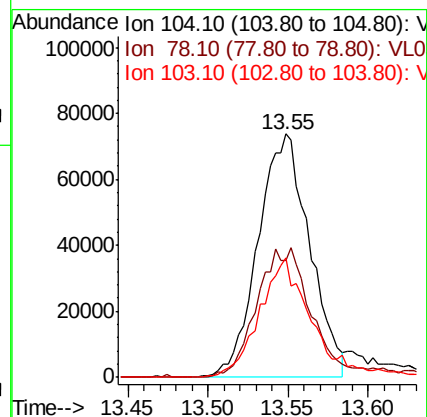
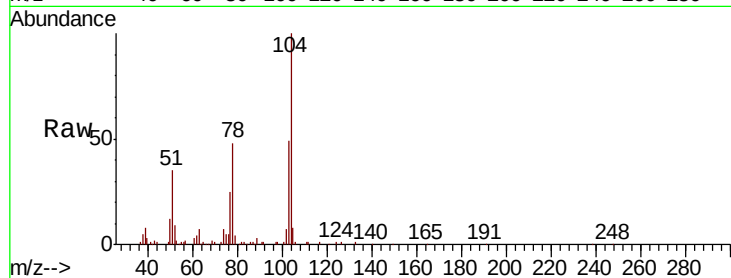
106 46.9 23.8 71.4





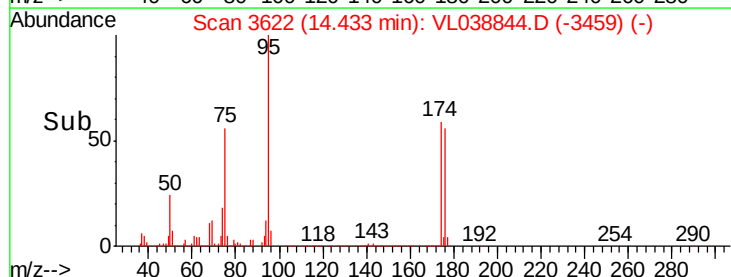
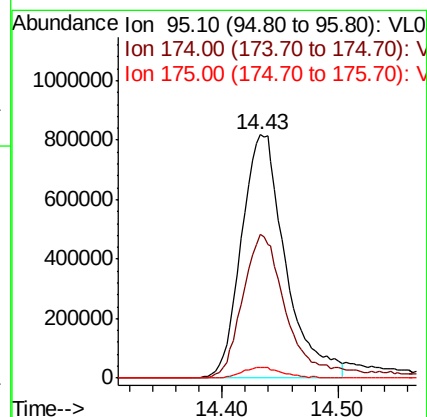
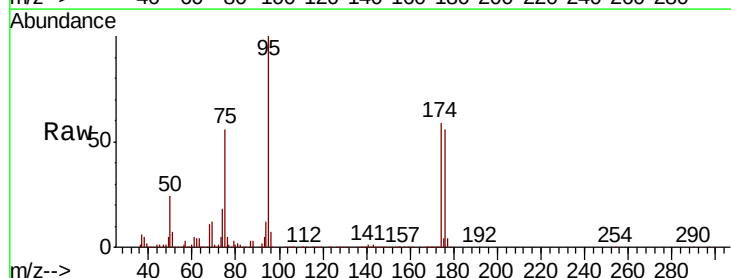
#61
Stvrene
Concen: 0.827 ppbv
RT: 13.55
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 7 Apr 2022 16:55

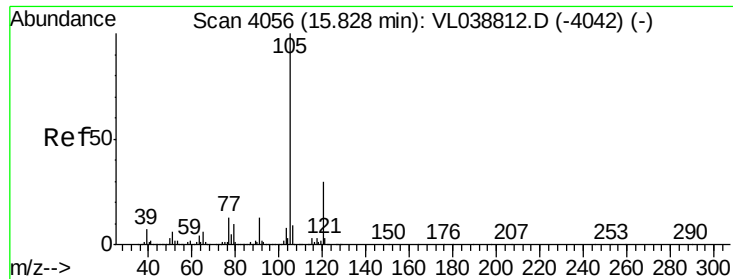
Tot Ion:	104	Resp:	164169
Ion	Ratio	Lower	Upper
104	100		
78	59.1	40.5	60.7
103	50.1	39.0	58.4



#68
1-Bromo-4-Fluorobenzene
Concen: 10.294 ppbv
RT: 14.43 min Scan# 3622
Delta R.T. 0.03 min
Lab File: VL038844.D
Acq: 7 Apr 2022 16:55

Tgt Ion:	95	Resp:	2166372
Ion	Ratio	Lower	Upper
95	100		
174	62.6	52.0	78.0
175	4.4	4.0	6.0





#72

4-Ethyltoluene

Concen: 0.035 ppbv

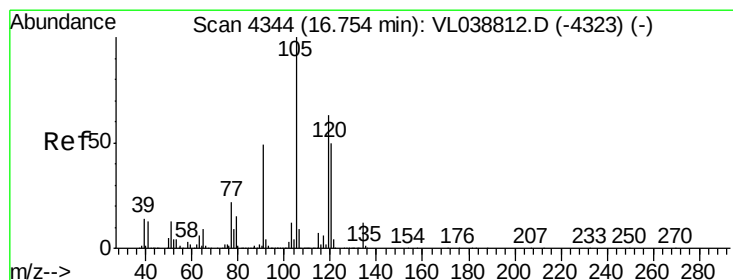
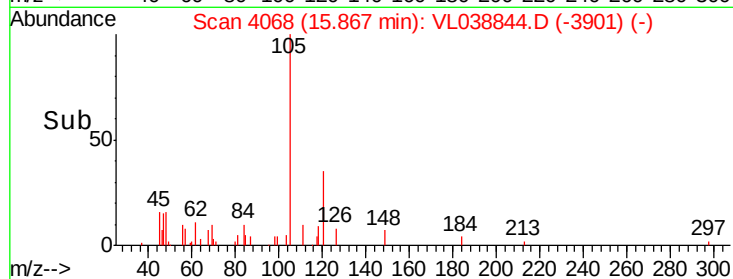
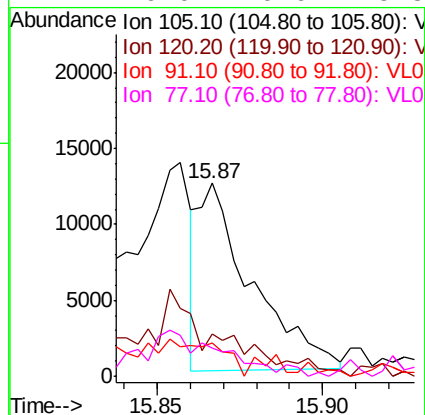
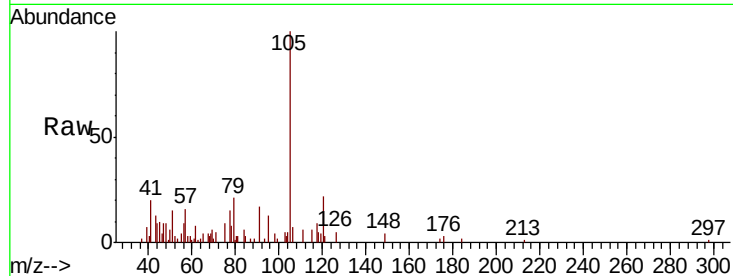
RT: 15.87 min

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 7 Apr 2022 16:55

Tot Ion:	105	Resp:	13507
Ion	Ratio	Lower	Upper
105	100		
120	0.0	24.3	36.5#
91	0.0	9.4	14.2#
77	0.0	10.6	15.8#



#74

1,2,4-Trimethylbenzene

Concen: 0.080 ppbv

RT: 16.79 min Scan# 4354

Delta R.T. 0.03 min

Lab File: VL038844.D

Acq: 7 Apr 2022 16:55

Tgt Ion:	105	Resp:	29387
Ion	Ratio	Lower	Upper
105	100		
120	31.7	39.8	59.8#
91	10.1	39.4	59.0#
77	17.6	17.3	25.9

