

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL040722\
 Data File : VL038860.D
 Acq On : 8 Apr 2022 3:23
 Operator : SY/AP
 Sample : N2274-02
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA L
 ClientSampleId :
 1161-8-01-SG-2

Quant Time: Apr 11 05:19:08 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	5.70	49	1147597	10.00	ppbv	0.04
33) 1,4-Difluorobenzene	7.21	114	2826596	10.00	ppbv	0.04
55) Chlorobenzene-d5	12.12	117	2528272	10.00	ppbv	0.04

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.45	95	1971222	10.28	ppbv	0.04
Spiked Amount	10.000	Range	65 - 135	Recovery	=	102.80%

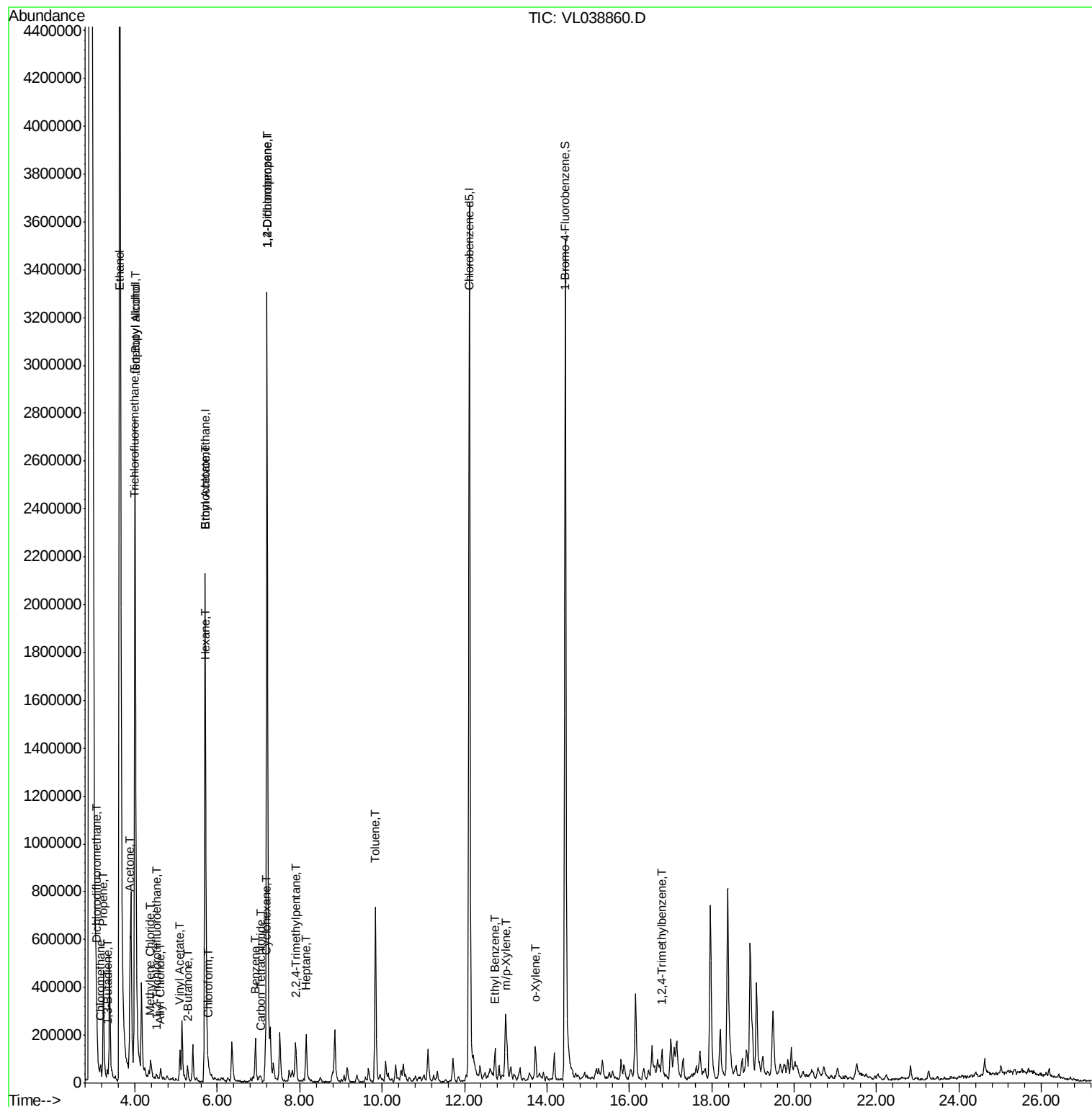
Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.07	85	116159	0.714	ppbv #	88
4) Chloromethane	3.17	50	36114	0.498	ppbv	95
9) Propene	3.23	41	133771	1.805	ppbv	87
10) Heptane	8.16	43	41032	0.220	ppbv #	28
11) Trichlorofluoromethane	3.98	101	32490	0.248	ppbv	99
12) 1,1,2-Trichlorotrifluoroet	4.51	101	3935	0.039	ppbv #	12
13) Ethanol	3.64	45	9941985	2207.779	ppbv #	100
15) Acetone	3.88	43	601592	5.265	ppbv	94
16) 1,3-Butadiene	3.34	39	10669	0.163	ppbv #	9
17) tert-Butyl alcohol	4.00	59	136120	1.329	ppbv	96
19) Isopropyl Alcohol	4.00	45	3927785	67.262	ppbv #	100
20) Methylene Chloride	4.38	84	20686	0.499	ppbv #	77
21) Allyl Chloride	4.62	41	9365	0.109	ppbv #	21
23) Vinyl Acetate	5.10	43	10477	0.094	ppbv #	1
25) Ethyl Acetate	5.71	43	208003	0.717	ppbv	98
26) Hexane	5.72	57	113781	0.862	ppbv	79
29) Chloroform	5.79	83	6430	0.035	ppbv #	65
30) Cyclohexane	7.17	84	36332	0.312	ppbv	95
34) 2-Butanone	5.28	43	43163	0.386	ppbv #	49
35) Carbon Tetrachloride	7.05	117	6175	0.036	ppbv #	75
36) Benzene	6.92	78	164246	0.639	ppbv	98
39) 1,2-Dichloropropane	7.21	63	705714	7.175	ppbv #	25
44) 2,2,4-Trimethylpentane	7.90	57	119762	0.275	ppbv #	68
53) Toluene	9.84	91	587287	1.978	ppbv	98
58) Ethyl Benzene	12.74	91	111199	0.294	ppbv	100
59) m/p-Xylene	13.03	91	68129	0.215	ppbv #	30
60) o-Xylene	13.72	91	64661	0.218	ppbv	65
74) 1,2,4-Trimethylbenzene	16.79	105	80138	0.238	ppbv #	72

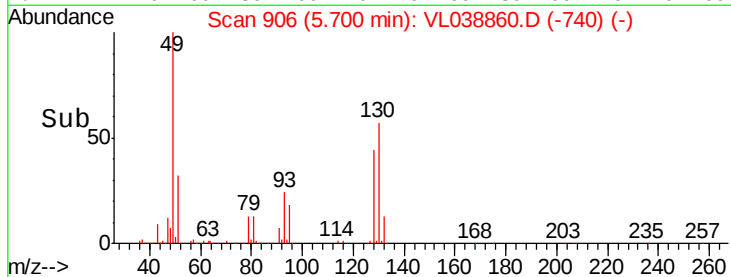
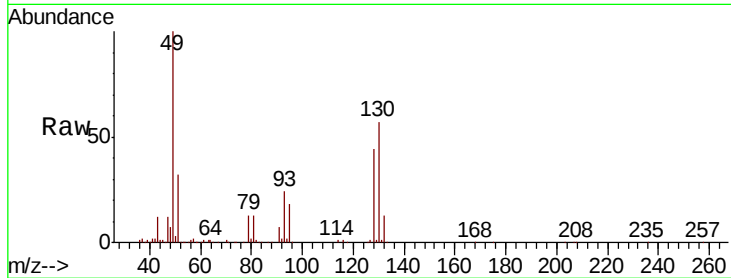
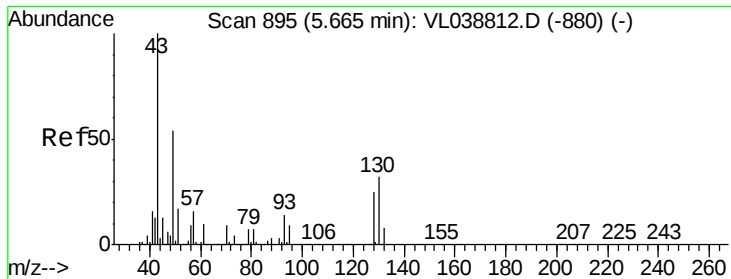
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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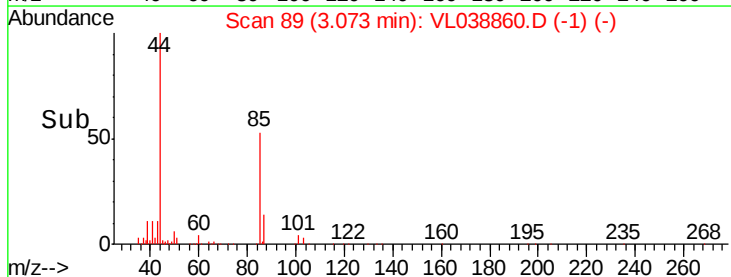
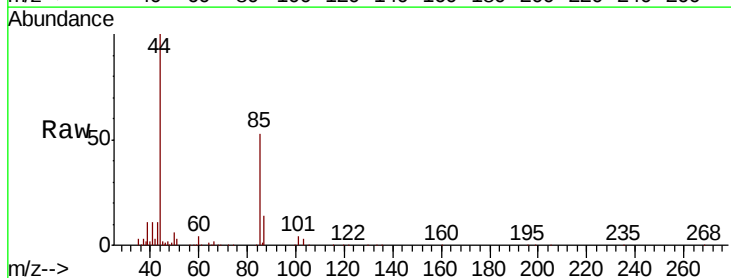
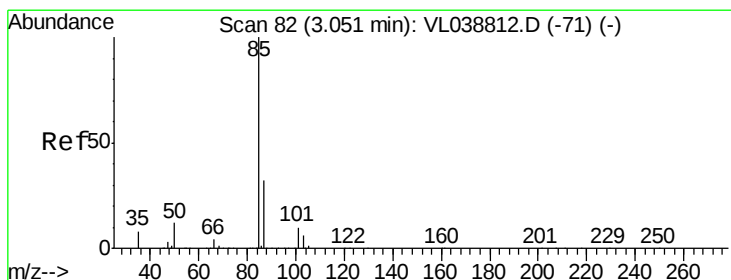
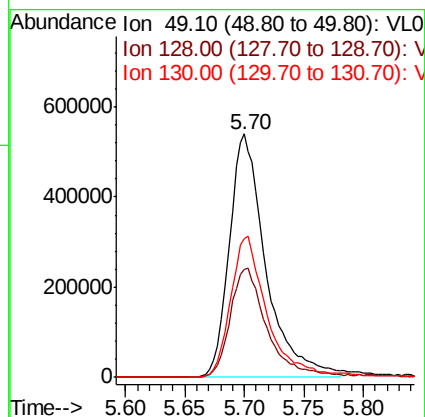
Quant Time: Apr 11 05:19:08 2022
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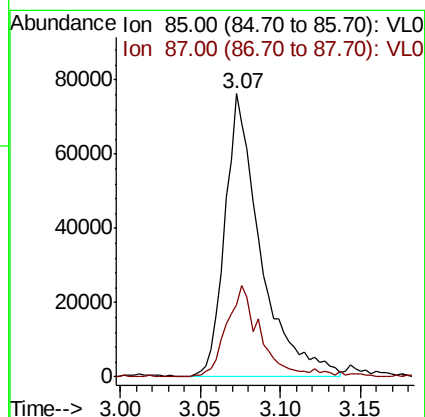
#1
 Bromochloromethane
 Concen: 10.000 ppbv
 RT: 5.70
 Instrument: MSVOA_1
 Delta R.T.:
 Lab File: ClientSampleId:
 1161-8-01-SG-2
 Acq: 8 Apr 2022 3:23

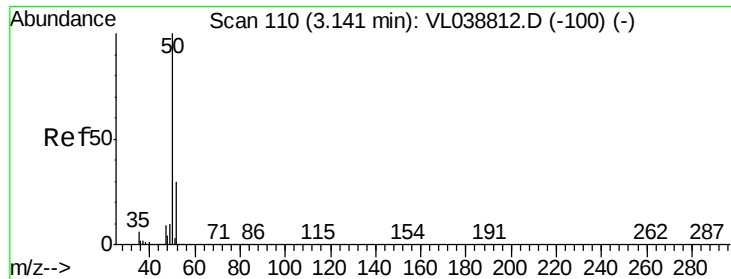
Tot Ion: 49 Resp: 1147597
 Ion Ratio Lower Upper
 49 100
 128 46.6 24.1 72.3
 130 59.0 30.9 92.8



#2
 Dichlorodifluoromethane
 Concen: 0.714 ppbv
 RT: 3.07 min Scan# 89
 Delta R.T. 0.02 min
 Lab File: VL038860.D
 Acq: 8 Apr 2022 3:23

Tgt Ion: 85 Resp: 116159
 Ion Ratio Lower Upper
 85 100
 87 25.5 25.9 38.9#





#4

Chloromethane

Concen: 0.498 ppbv

RT: 3.17 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

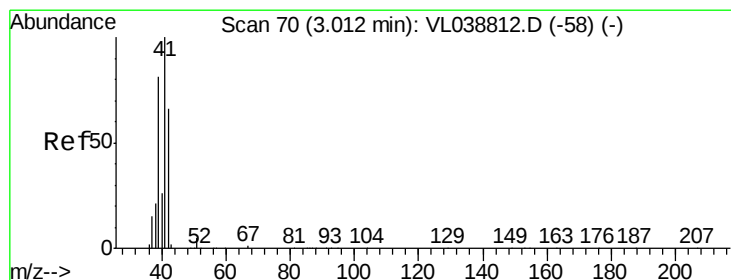
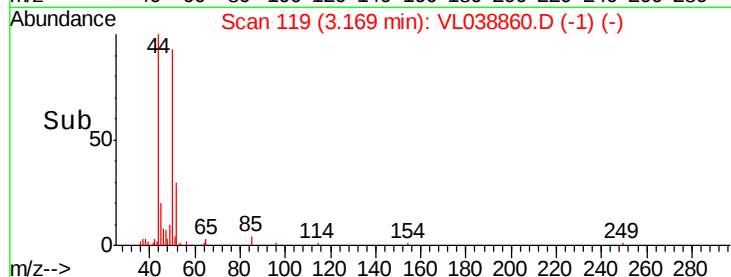
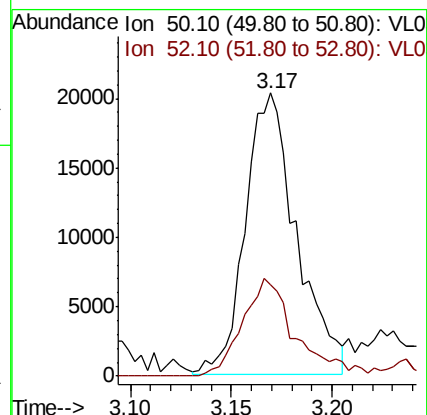
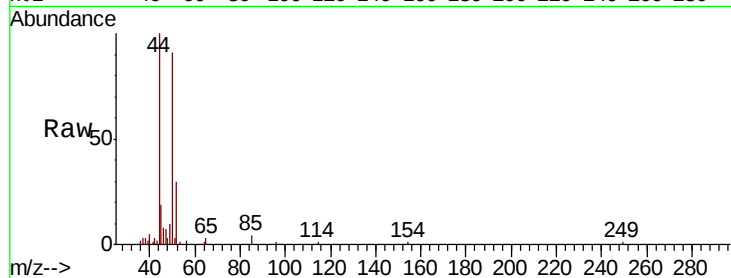
Acq: 8 Apr 2022 3:23

Tot Ion: 50 Resp: 36114

Ion Ratio Lower Upper

50 100

52 32.9 24.3 36.5



#9

Propene

Concen: 1.805 ppbv

RT: 3.23 min Scan# 138

Delta R.T. 0.22 min

Lab File: VL038860.D

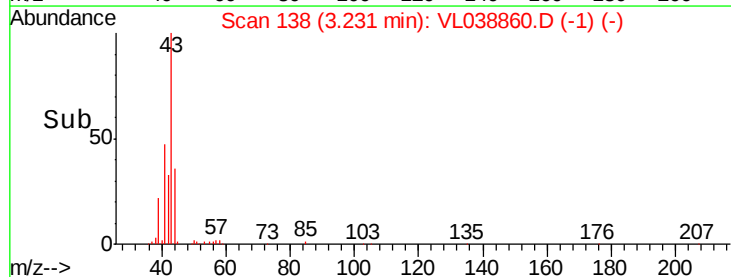
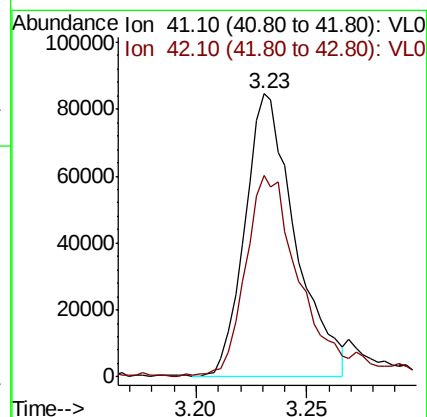
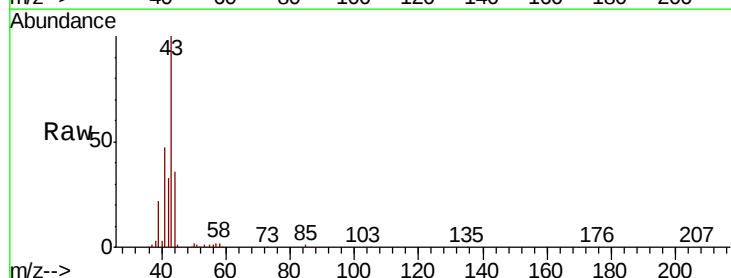
Acq: 8 Apr 2022 3:23

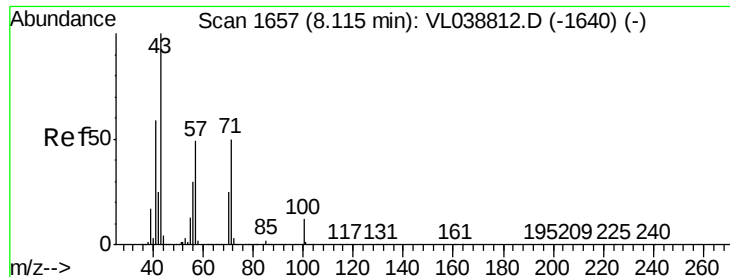
Tgt Ion: 41 Resp: 133771

Ion Ratio Lower Upper

41 100

42 78.5 54.2 81.4





#10

Heptane

Concen: 0.220 ppbv

RT: 8.16 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

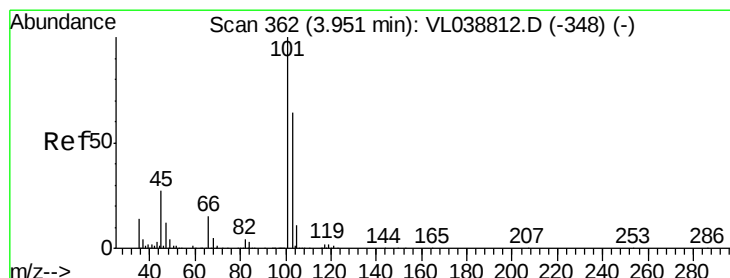
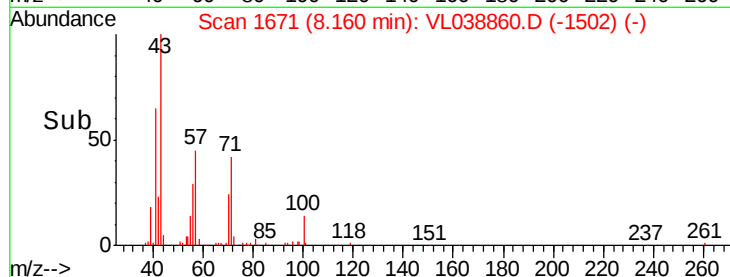
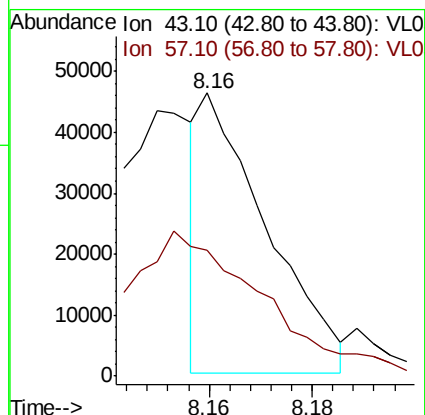
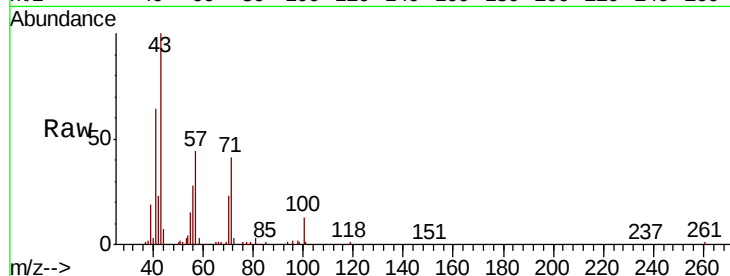
Acq: 8 Apr 2022 3:23

Tot Ion: 43 Resp: 41032

Ion Ratio Lower Upper

43 100

57 0.0 39.3 58.9#



#11

Trichlorofluoromethane

Concen: 0.248 ppbv

RT: 3.98 min Scan# 372

Delta R.T. 0.03 min

Lab File: VL038860.D

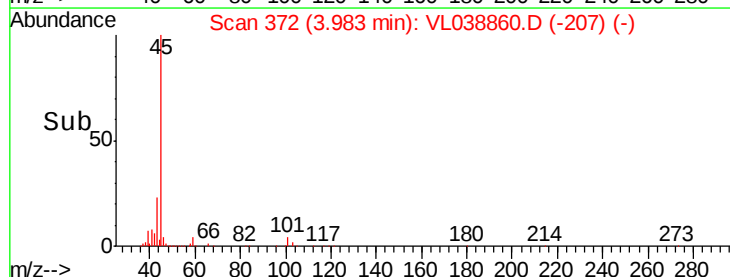
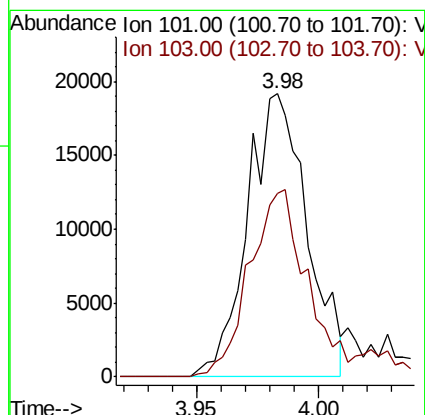
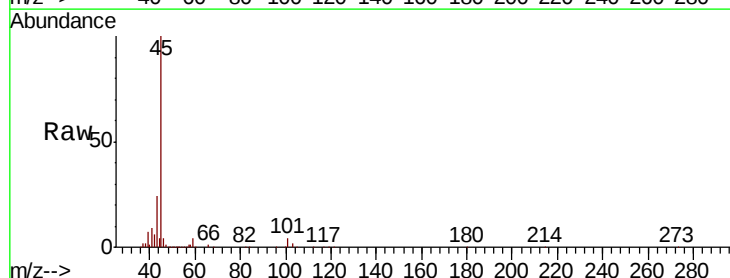
Acq: 8 Apr 2022 3:23

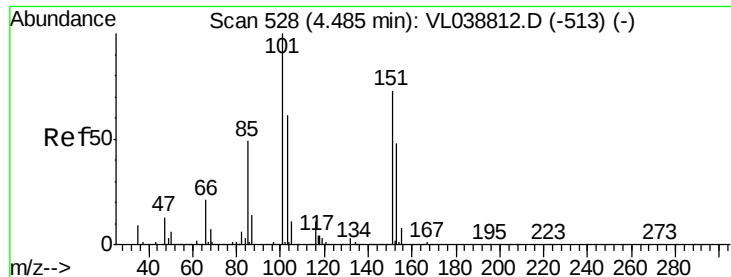
Tgt Ion:101 Resp: 32490

Ion Ratio Lower Upper

101 100

103 64.9 51.4 77.0





#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.039 ppbv

RT: 4.51 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

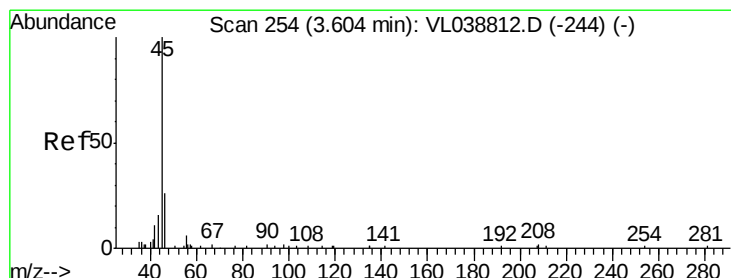
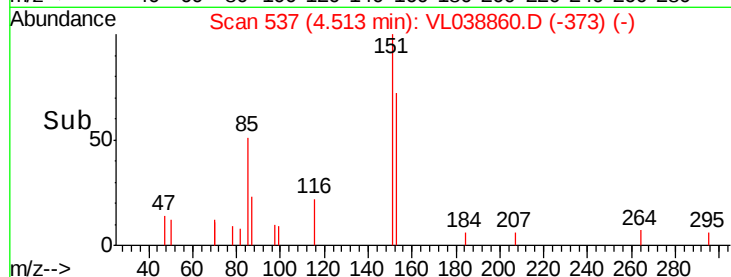
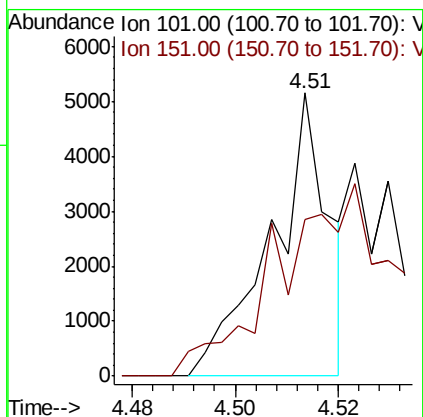
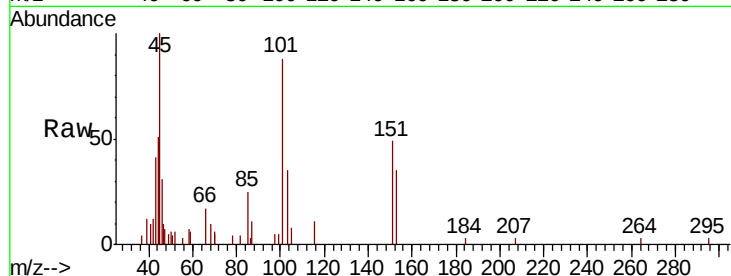
Acq: 8 Apr 2022 3:23

Tot Ion: 101 Resp: 3935

Ion Ratio Lower Upper

101 100

151 0.0 59.9 89.9#



#13

Ethanol

Concen: 2207.779 ppbv

RT: 3.64 min Scan# 264

Delta R.T. 0.03 min

Lab File: VL038860.D

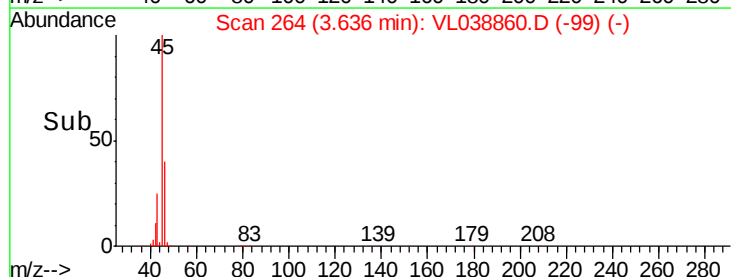
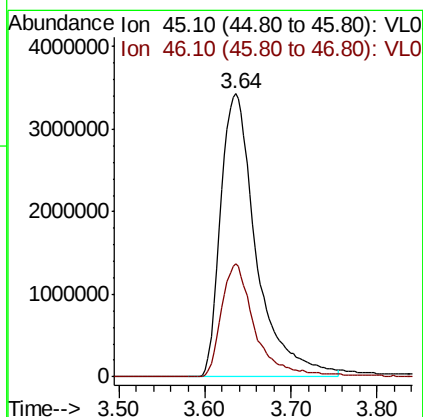
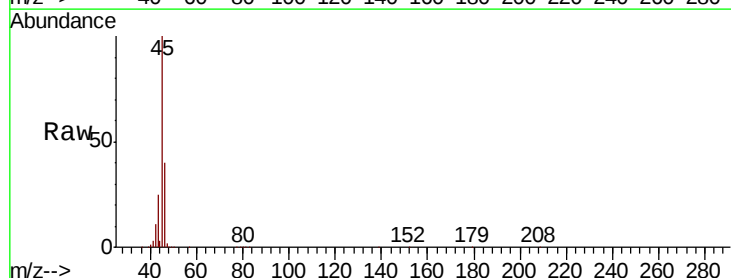
Acq: 8 Apr 2022 3:23

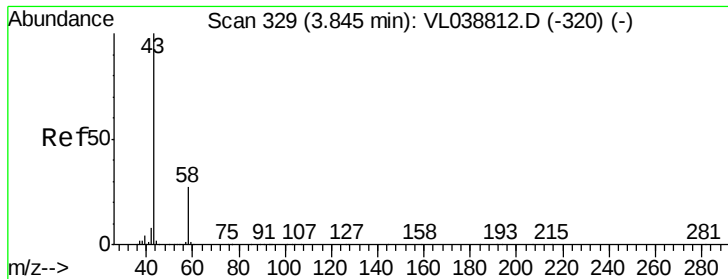
Tgt Ion: 45 Resp: 9941985

Ion Ratio Lower Upper

45 100

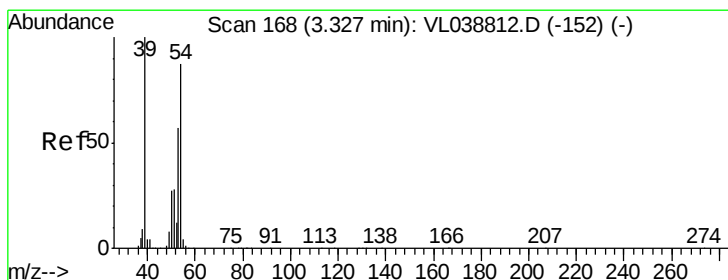
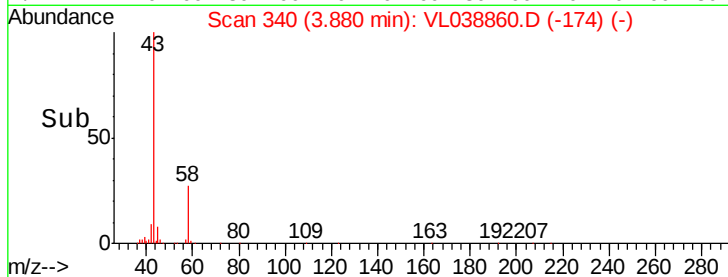
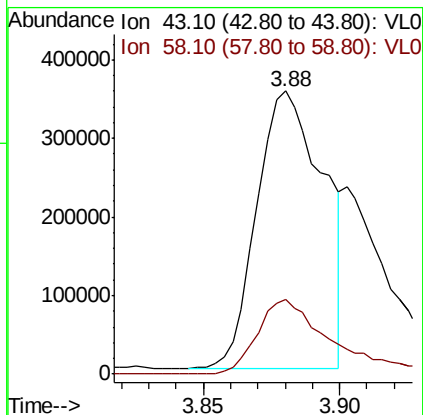
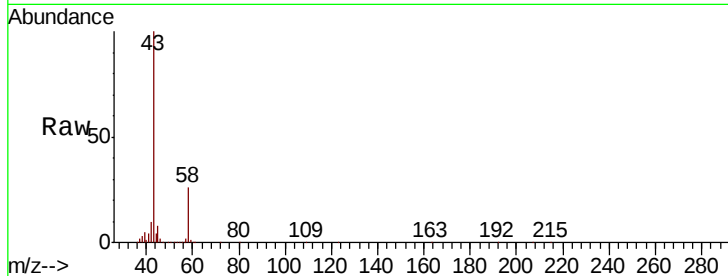
46 38.6 0.0 0.0#





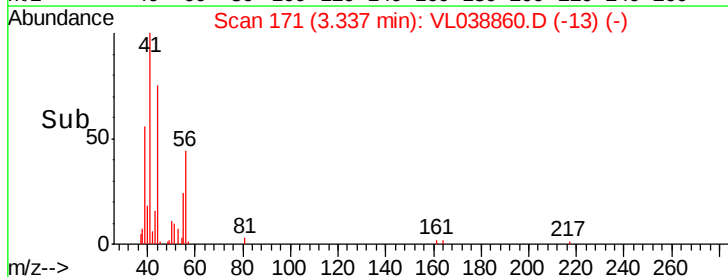
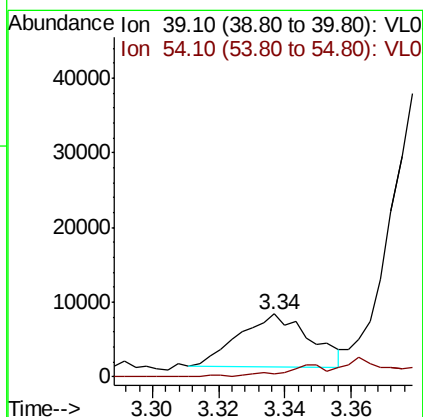
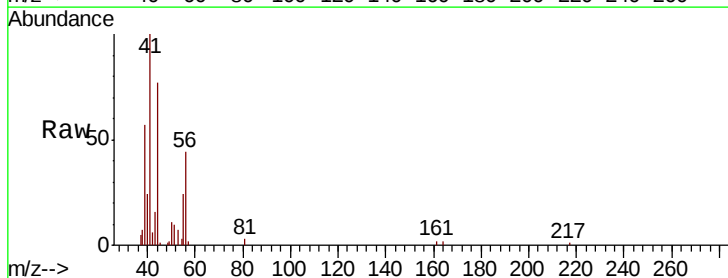
#15
Acetone
Concen: 5.265 ppbv
RT: 3.88
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 8 Apr 2022 3:23

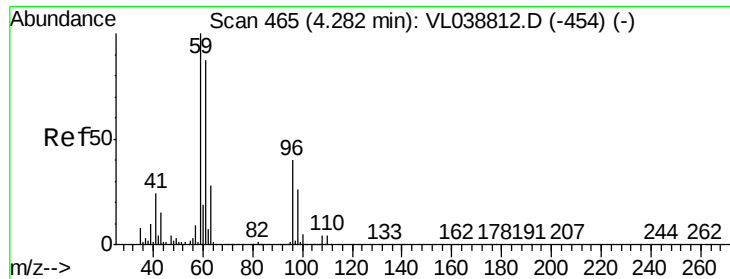
Tot Ion: 43 Resp: 601592
Ion Ratio Lower Upper
43 100
58 31.2 22.5 33.7



#16
1,3-Butadiene
Concen: 0.163 ppbv
RT: 3.34 min Scan# 171
Delta R.T. 0.01 min
Lab File: VL038860.D
Acq: 8 Apr 2022 3:23

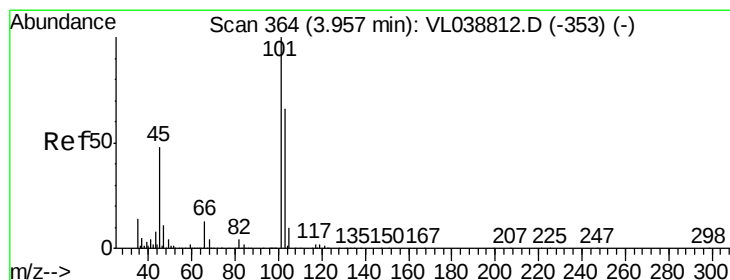
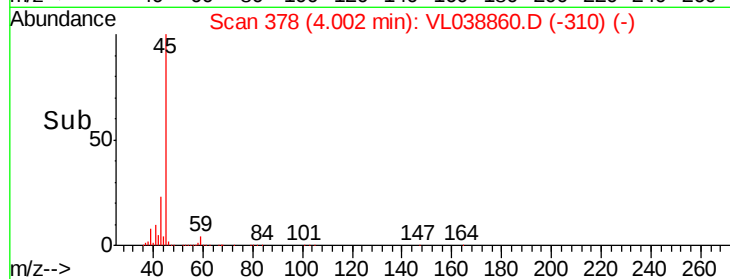
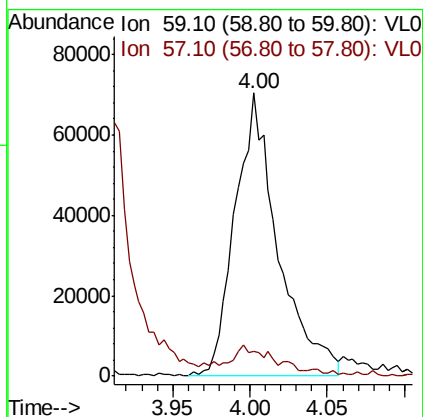
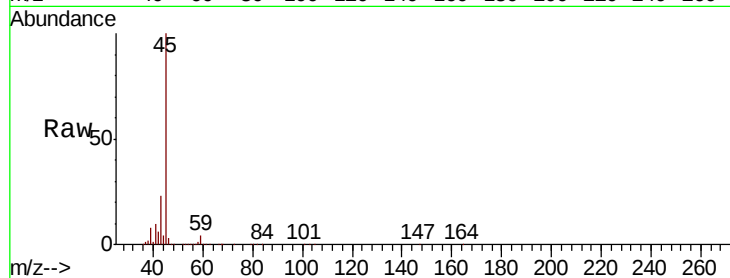
Tgt Ion: 39 Resp: 10669
Ion Ratio Lower Upper
39 100
54 0.0 64.8 97.2#





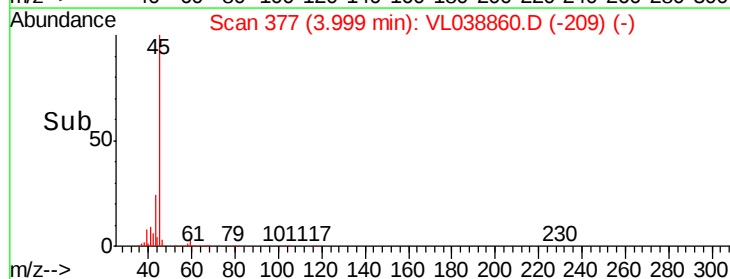
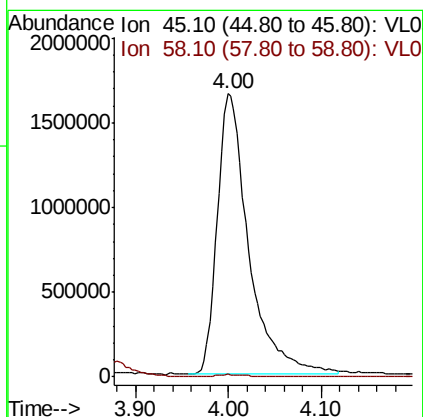
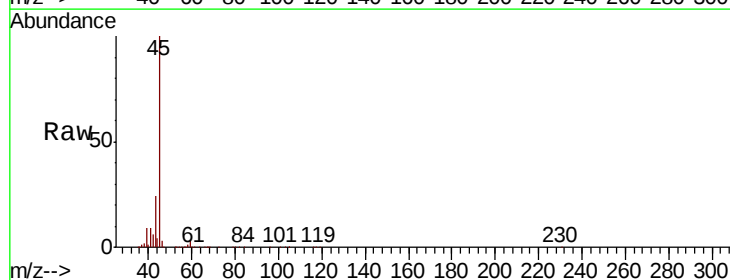
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tert-Butyl alcohol
Concen: 1.329 ppbv
RT: 4.00
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 8 Apr 2022 3:23

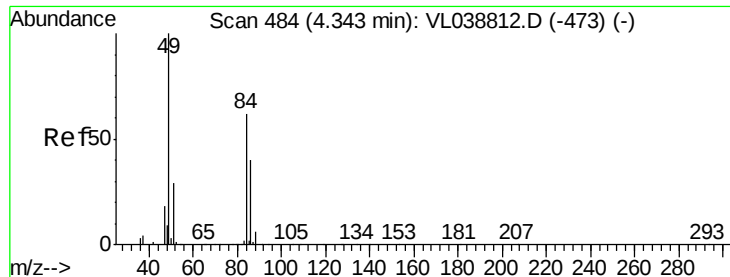
Tot Ion: 59 Resp: 136120
Ion Ratio Lower Upper
59 100
57 12.2 8.5 12.7



#19
Isopropyl Alcohol
Concen: 67.262 ppbv
RT: 4.00 min Scan# 377
Delta R.T. 0.04 min
Lab File: VL038860.D
Acq: 8 Apr 2022 3:23

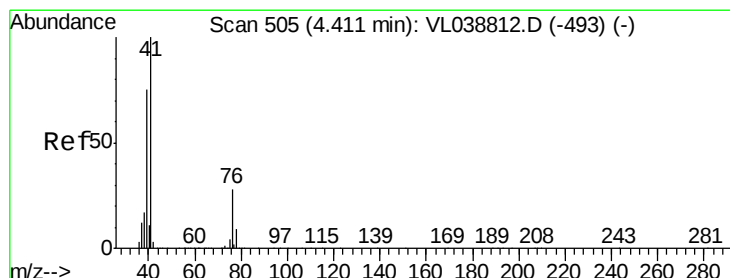
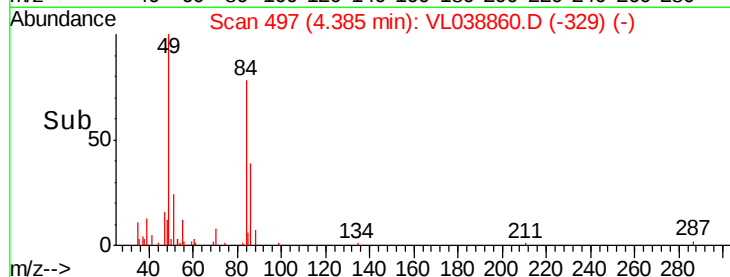
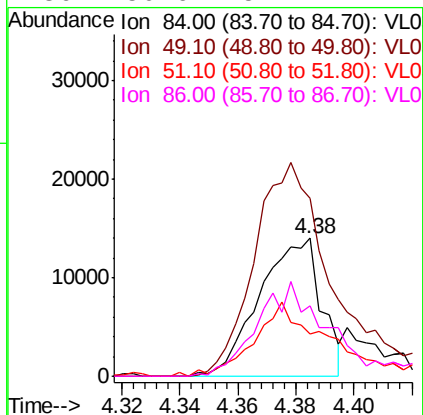
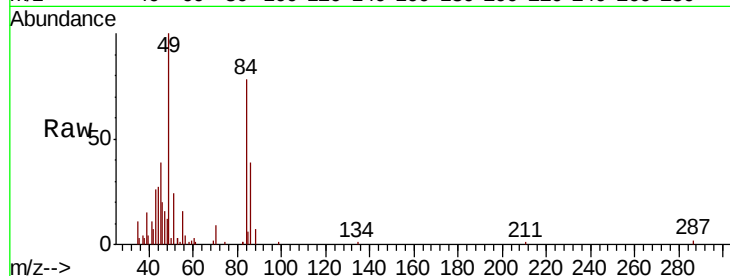
Tgt Ion: 45 Resp: 3927785
Ion Ratio Lower Upper
45 100
58 0.9 0.0 0.0#





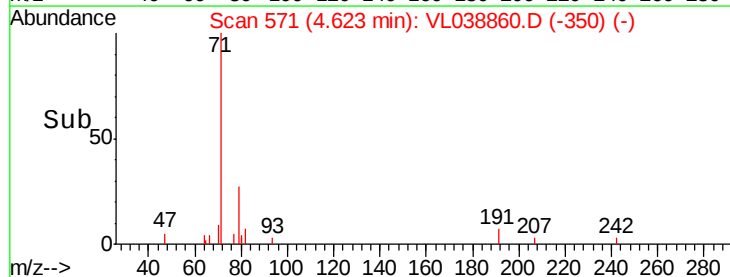
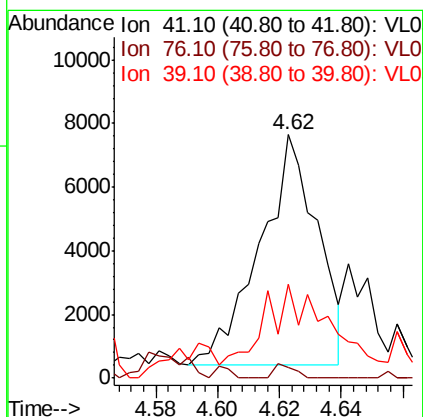
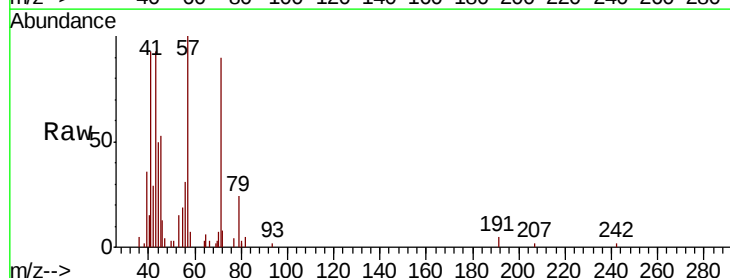
#20
Methylene Chloride
Concen: 0.499 ppbv
RT: 4.38
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId:
Acq: 8 Apr 2022 3:23

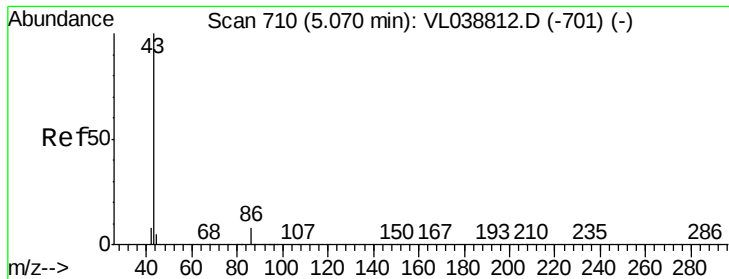
Tot Ion: 84 Resp: 20686
Ion Ratio Lower Upper
84 100
49 128.6 129.4 194.0#
51 31.0 37.4 56.2#
86 50.6 51.4 77.2#



#21
Allyl Chloride
Concen: 0.109 ppbv
RT: 4.62 min Scan# 571
Delta R.T. 0.21 min
Lab File: VL038860.D
Acq: 8 Apr 2022 3:23

Tgt Ion: 41 Resp: 9365
Ion Ratio Lower Upper
41 100
76 2.0 23.7 35.5#
39 0.0 62.0 93.0#





#23

Vinyl Acetate

Concen: 0.094 ppbv

RT: 5.10 Instrument: MSVOA_1

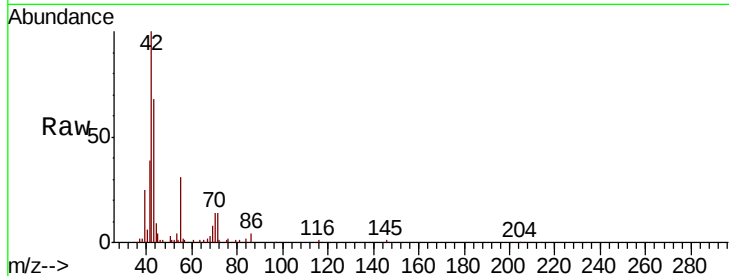
Delta R.T.

Lab File: ClientSampleId:

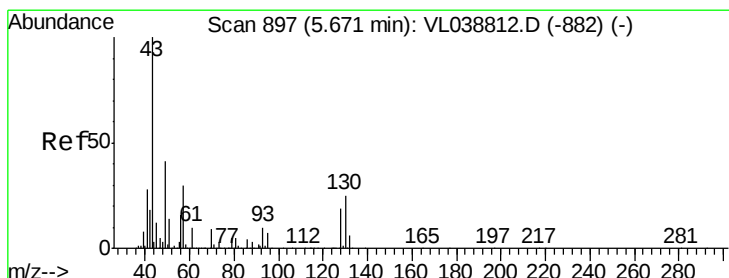
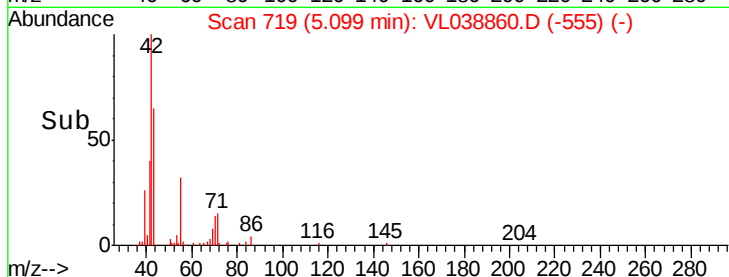
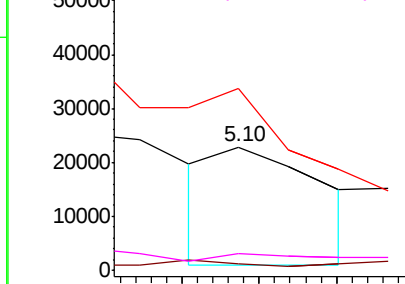
Acq: 8 Apr 2022 3:23

Tot Ion: 43 Resp: 10477

Ion	Ratio	Lower	Upper
43	100		
86	1.9	5.8	8.6#
42	191.9	7.8	11.6#
44	17.0	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: 0.717 ppbv

RT: 5.71 min Scan# 909

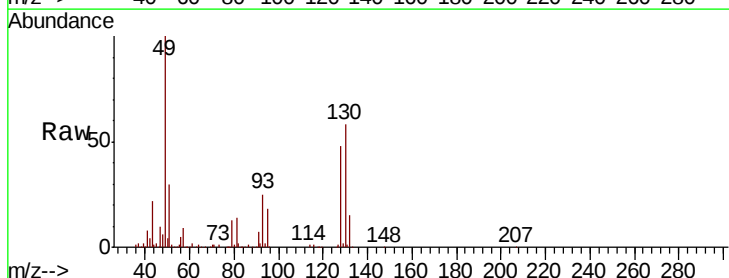
Delta R.T. 0.04 min

Lab File: VL038860.D

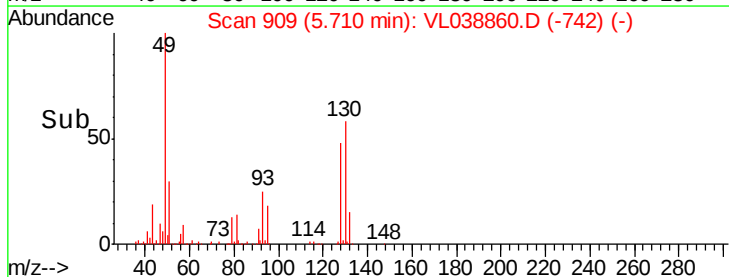
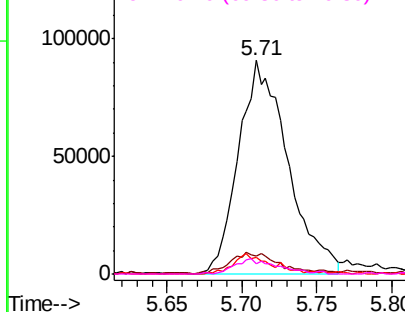
Acq: 8 Apr 2022 3:23

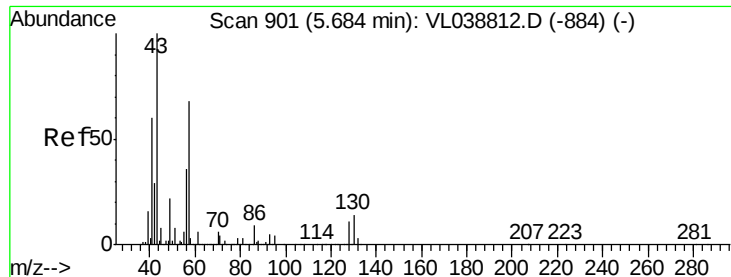
Tgt Ion: 43 Resp: 208003

Ion	Ratio	Lower	Upper
43	100		
45	10.5	8.4	12.6
61	7.9	7.9	11.9
70	6.4	5.6	8.4



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: 0.862 ppbv

RT: 5.72 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 8 Apr 2022 3:23

Tot Ion: 57 Resp: 113781

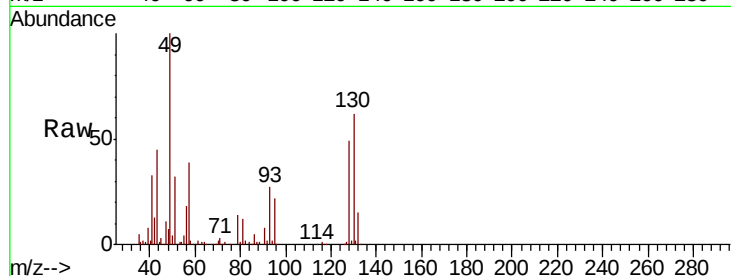
Ion Ratio Lower Upper

57 100

41 102.3 72.0 108.0

43 188.7 186.6 280.0

56 61.3 42.8 64.2

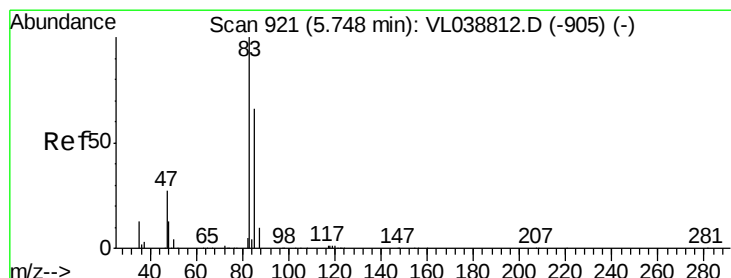
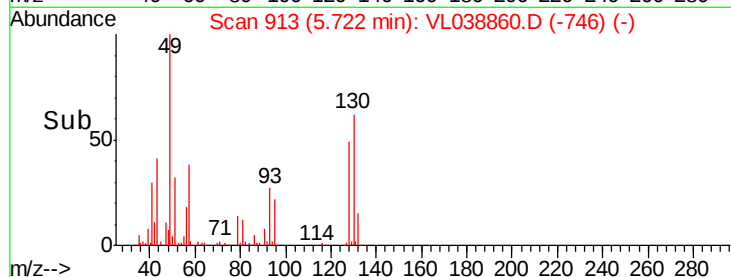
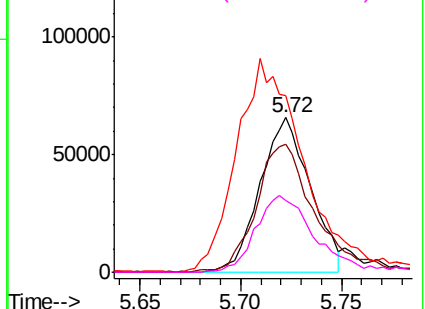


Abundance Ion 57.10 (56.80 to 57.80): VL0

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: 0.035 ppbv

RT: 5.79 min Scan# 933

Delta R.T. 0.04 min

Lab File: VL038860.D

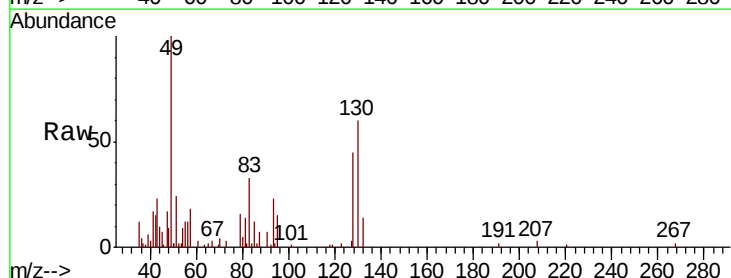
Acq: 8 Apr 2022 3:23

Tgt Ion: 83 Resp: 6430

Ion Ratio Lower Upper

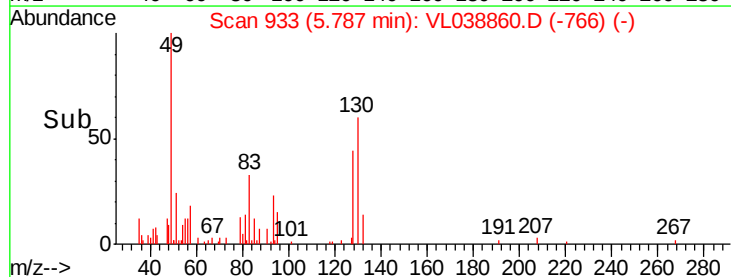
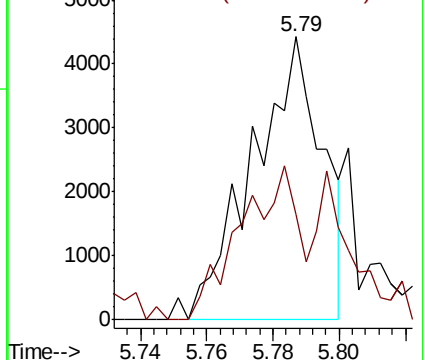
83 100

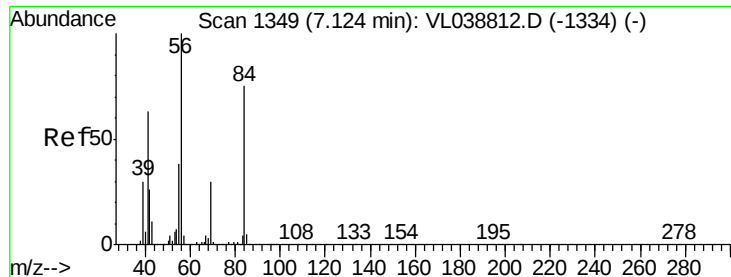
85 37.5 52.5 78.7#



Abundance Ion 83.00 (82.70 to 83.70): VL0

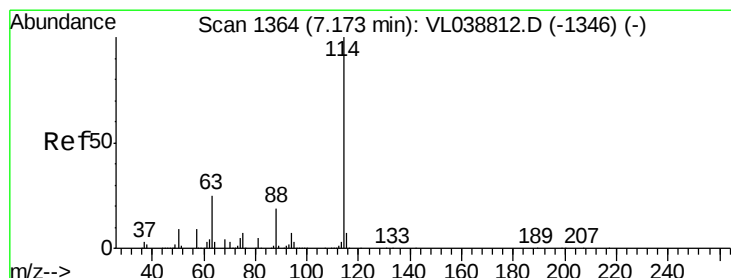
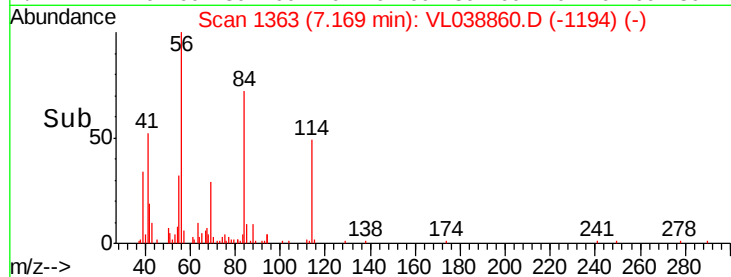
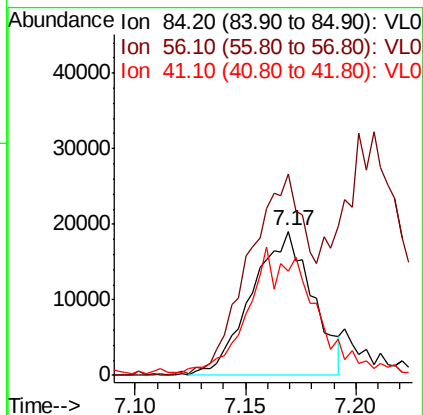
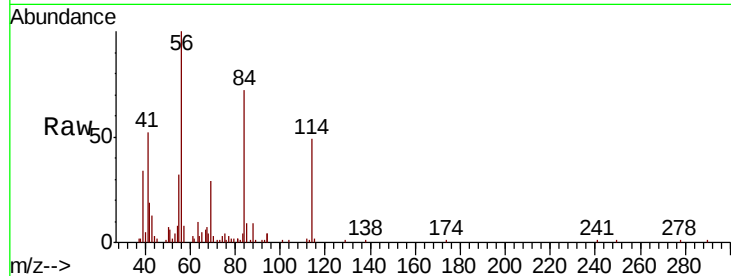
Ion 85.00 (84.70 to 85.70): VL0





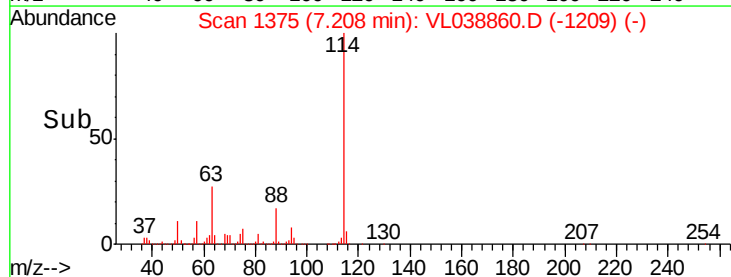
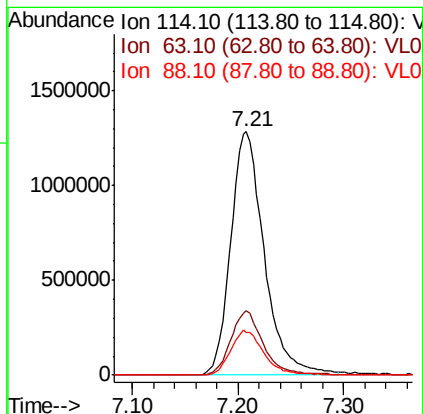
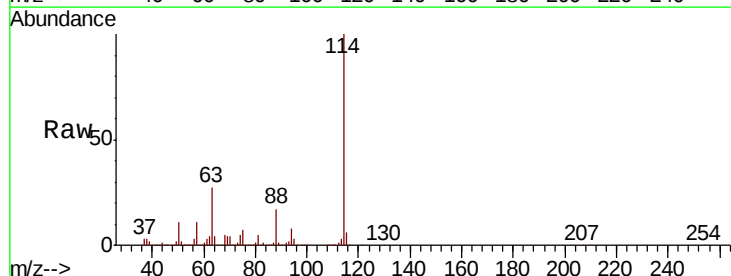
#30
Cvclohexane
Concen: 0.312 ppbv
RT: 7.17
Delta R.T. MSVOA_L
Lab File: ClientSampleId:
Acq: 8 Apr 2022 3:23

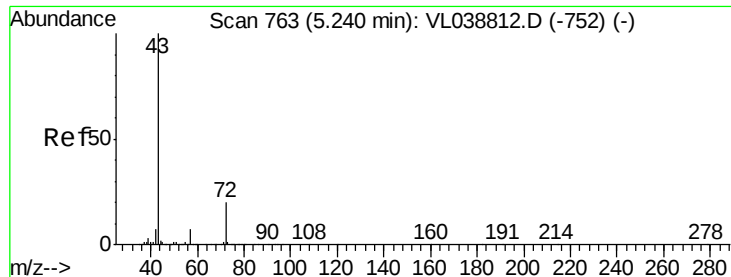
Tot Ion: 84 Resp: 36332
Ion Ratio Lower Upper
84 100
56 145.1 114.4 171.6
41 95.1 69.0 103.4



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.21 min Scan# 1375
Delta R.T. 0.04 min
Lab File: VL038860.D
Acq: 8 Apr 2022 3:23

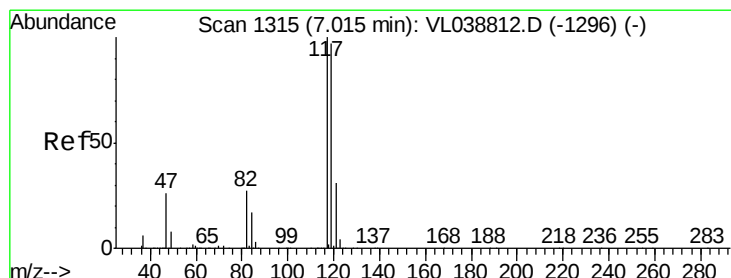
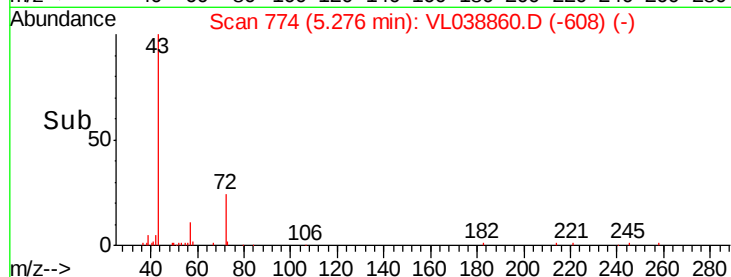
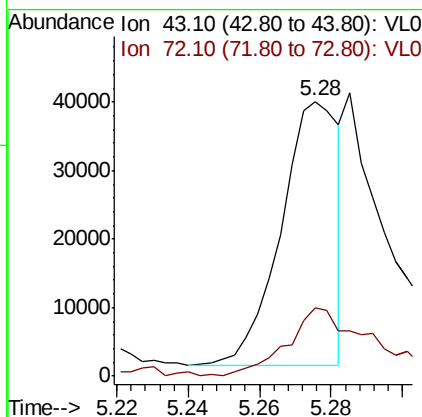
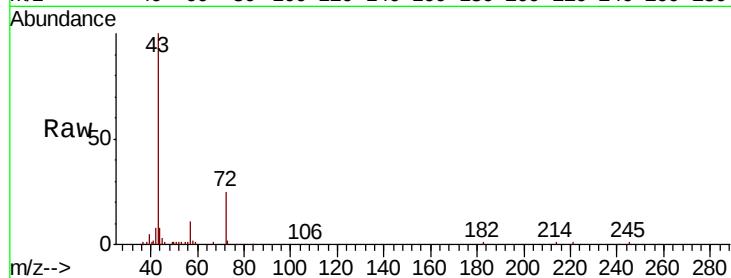
Tgt Ion:114 Resp: 2826596
Ion Ratio Lower Upper
114 100
63 25.7 19.8 29.8
88 18.4 14.2 21.4





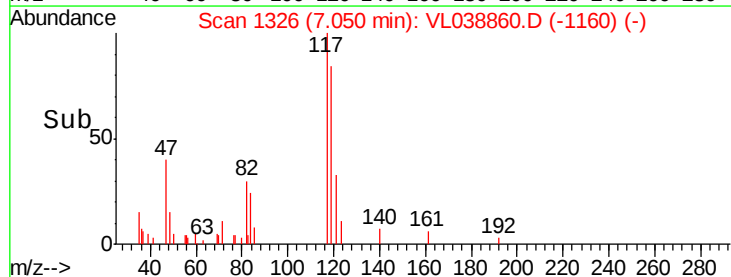
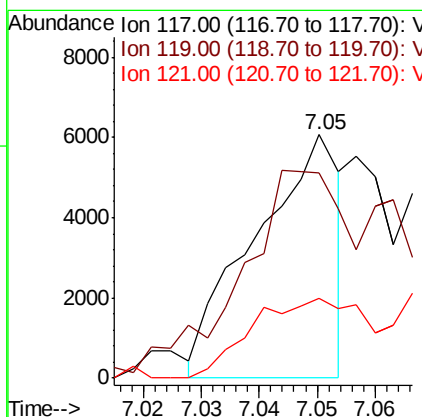
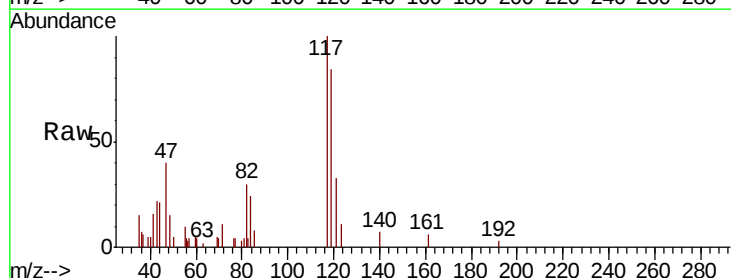
#34
2-Butanone
Concen: 0.386 ppbv
RT: 5.28
Delta R.T. MSVOA_L
Lab File: ClientSampleId:
Acq: 8 Apr 2022 3:23

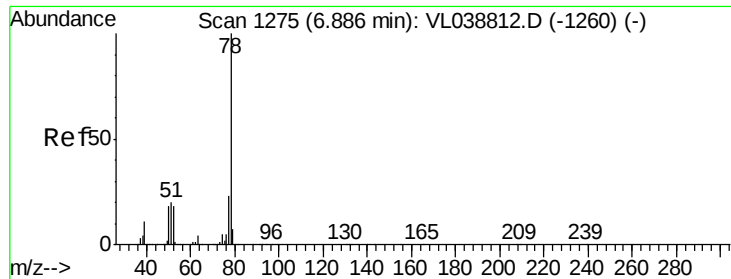
Tot Ion: 43 Resp: 43163
Ion Ratio Lower Upper
43 100
72 44.8 16.9 25.3#



#35
Carbon Tetrachloride
Concen: 0.036 ppbv
RT: 7.05 min Scan# 1326
Delta R.T. 0.04 min
Lab File: VL038860.D
Acq: 8 Apr 2022 3:23

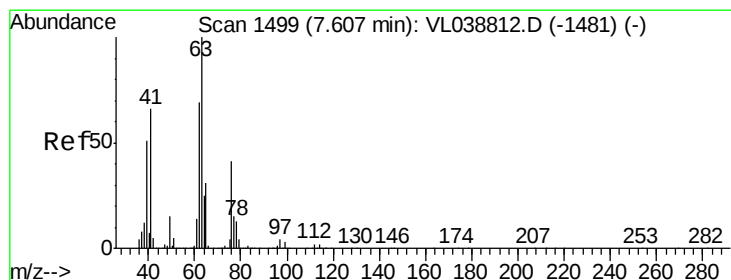
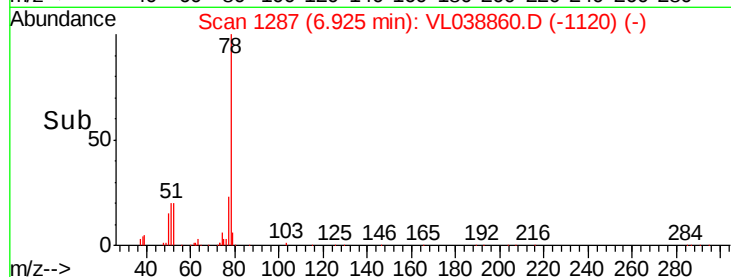
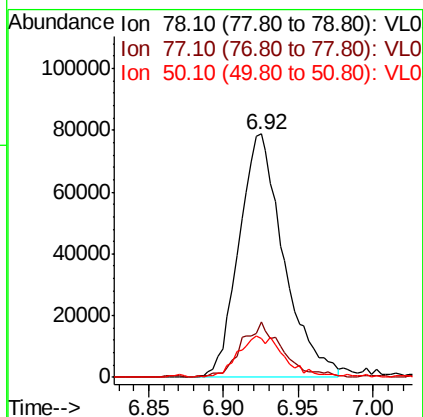
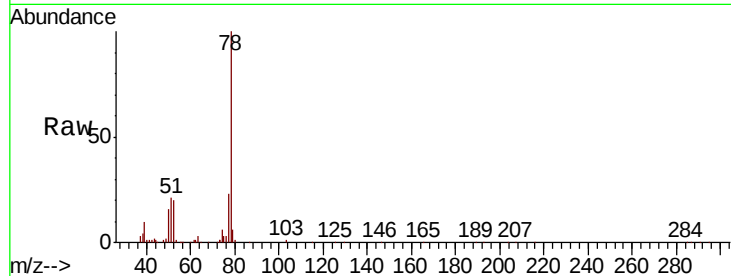
Tgt Ion: 117 Resp: 6175
Ion Ratio Lower Upper
117 100
119 67.4 77.7 116.5#
121 35.0 24.5 36.7





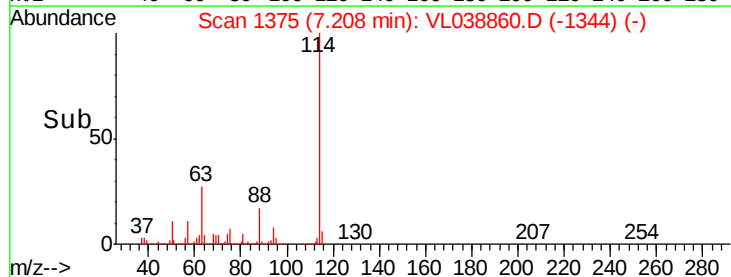
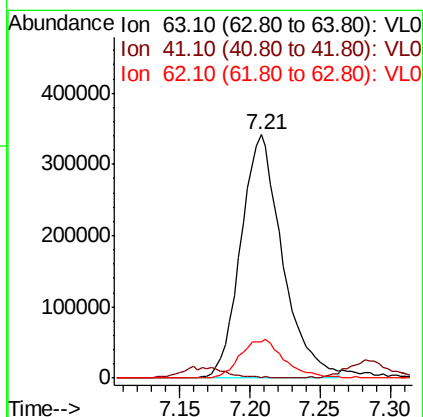
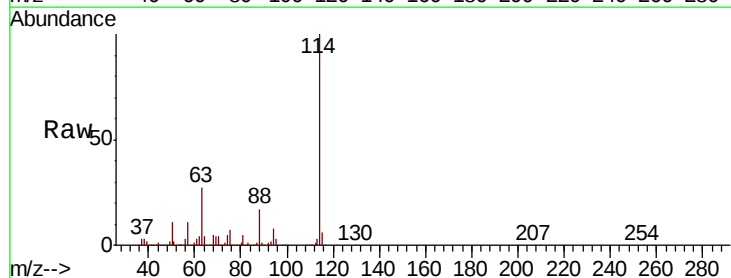
#36
Benzene
Concen: 0.639 ppbv
RT: 6.92
Delta R.T. MSVOA_1
Lab File: ClientSampleId :
Acq: 8 Apr 2022 3:23

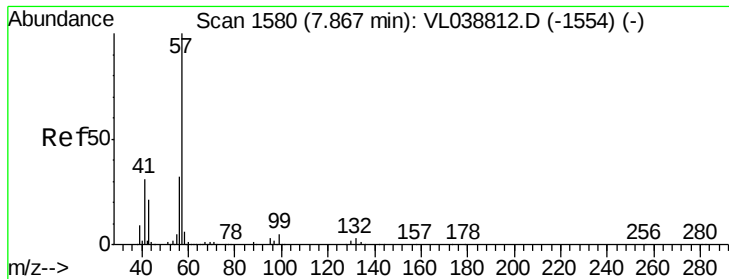
Tot Ion: 78 Resp: 164246
Ion Ratio Lower Upper
78 100
77 22.3 18.2 27.2
50 15.6 14.0 21.0



#39
1,2-Dichloropropane
Concen: 7.175 ppbv
RT: 7.21 min Scan# 1375
Delta R.T. -0.40 min
Lab File: VL038860.D
Acq: 8 Apr 2022 3:23

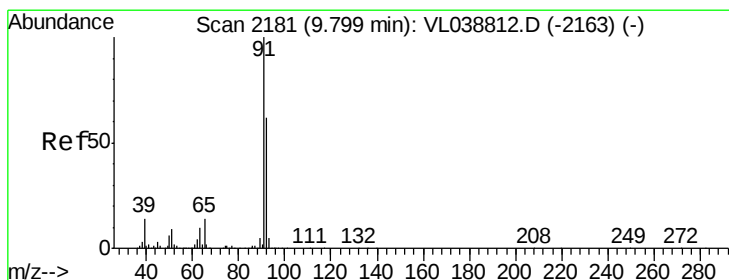
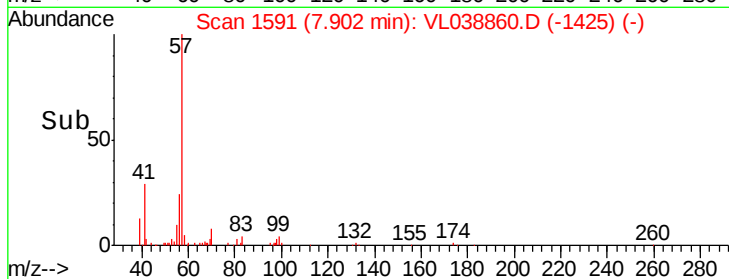
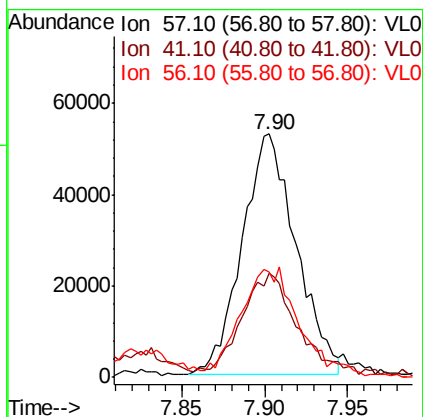
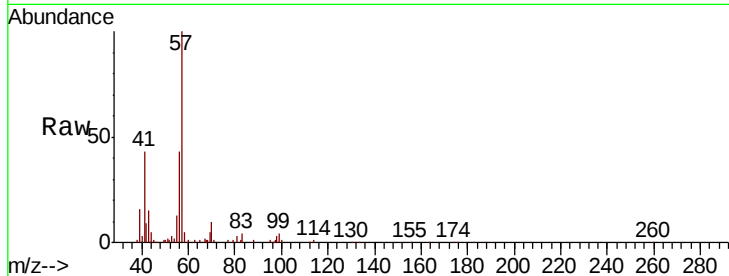
Tgt Ion: 63 Resp: 705714
Ion Ratio Lower Upper
63 100
41 0.0 53.0 79.6#
62 14.6 55.0 82.4#





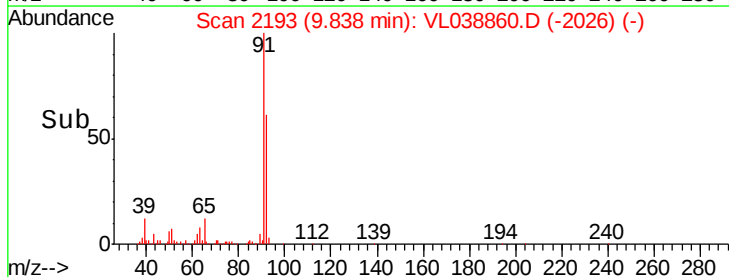
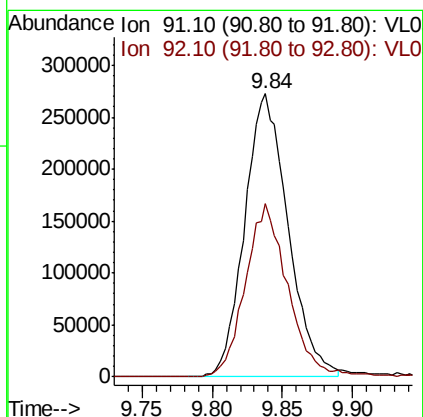
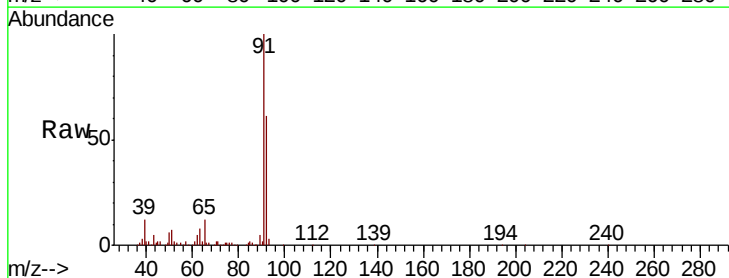
#44
 2,2,4-Trimethylpentane
 Concen: 0.275 ppbv
 RT: 7.90
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 1161-8-01-SG-2
 Acq: 8 Apr 2022 3:23

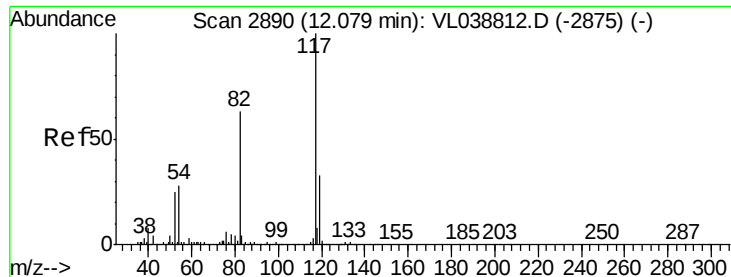
Tot Ion	57	Resp	119762
Ion Ratio	Lower	Upper	
57	100		
41	47.0	25.0	37.4#
56	50.7	25.3	37.9#



#53
 Toluene
 Concen: 1.978 ppbv
 RT: 9.84 min Scan# 2193
 Delta R.T. 0.04 min
 Lab File: VL038860.D
 Acq: 8 Apr 2022 3:23

Tgt Ion	91	Resp	587287
Ion Ratio	Lower	Upper	
91	100		
92	59.8	49.2	73.8





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.12

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 8 Apr 2022 3:23

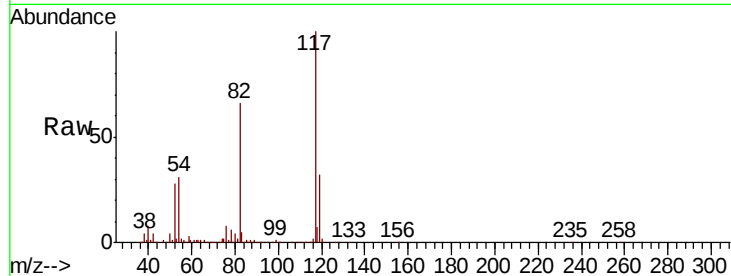
Tot Ion:117 Resp: 2528272

Ion Ratio Lower Upper

117 100

82 66.7 53.0 79.6

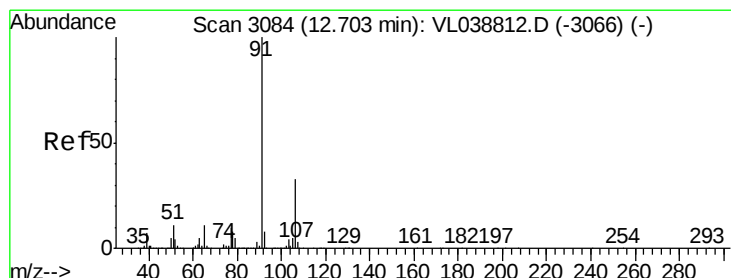
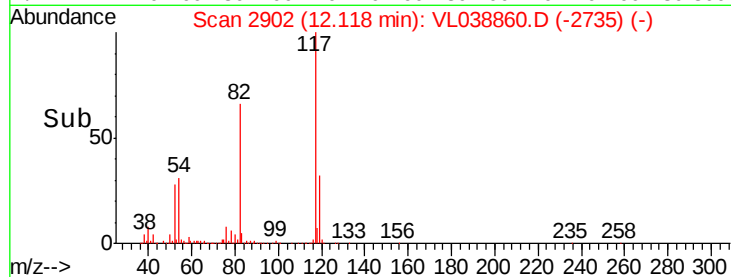
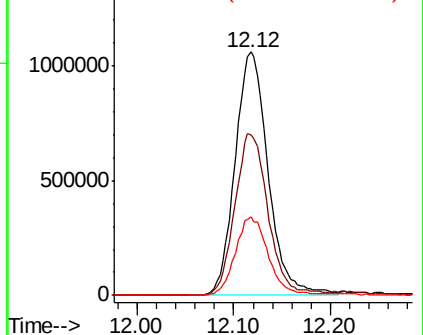
119 32.6 24.9 37.3



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: 0.294 ppbv

RT: 12.74 min Scan# 3096

Delta R.T. 0.04 min

Lab File: VL038860.D

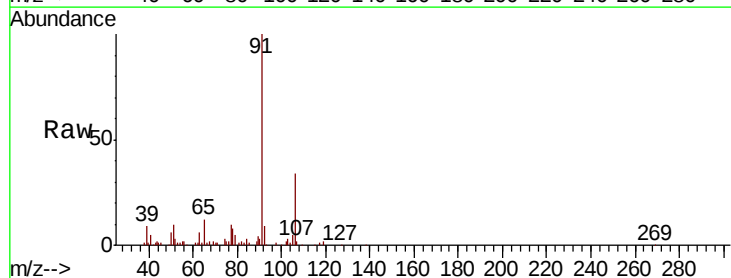
Acq: 8 Apr 2022 3:23

Tgt Ion: 91 Resp: 111199

Ion Ratio Lower Upper

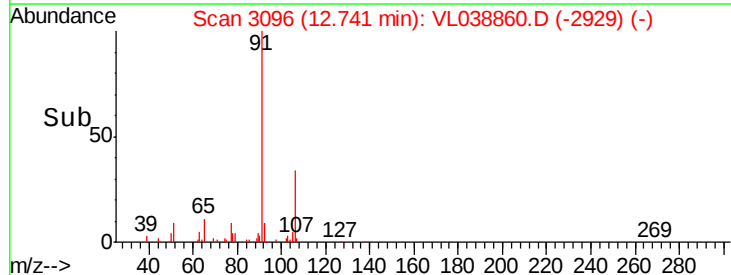
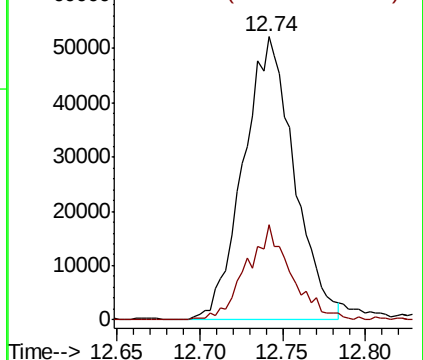
91 100

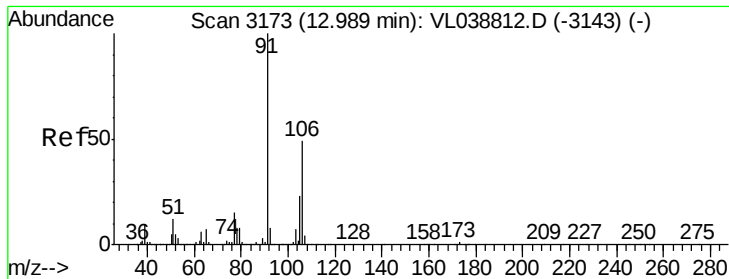
106 33.6 26.7 40.1



Abundance Ion 91.10 (90.80 to 91.80): VL0

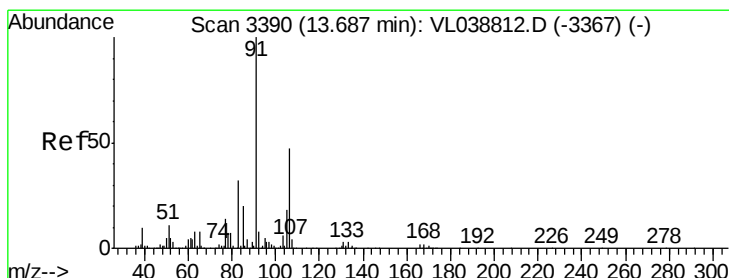
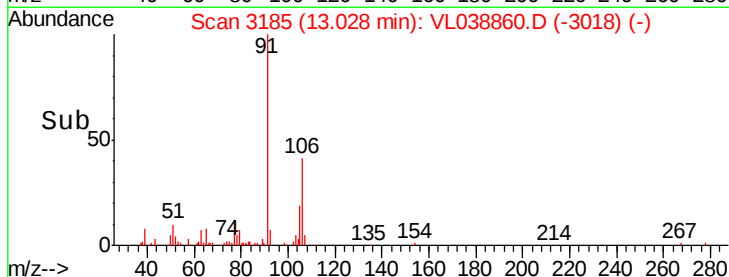
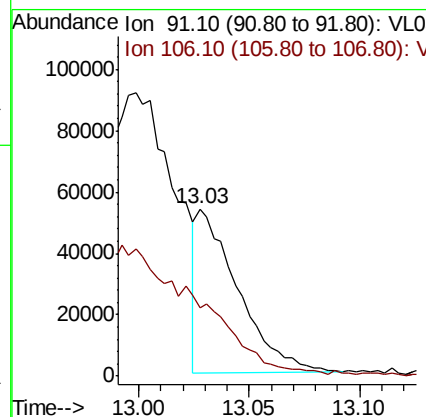
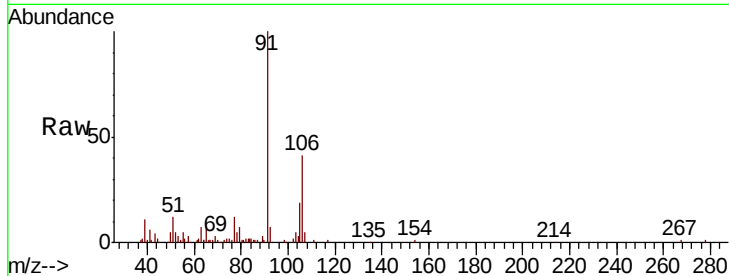
Ion 106.10 (105.80 to 106.80): V





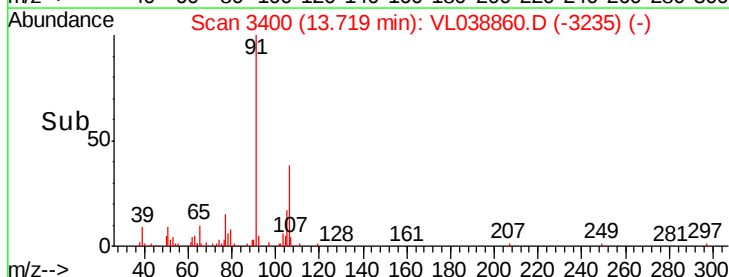
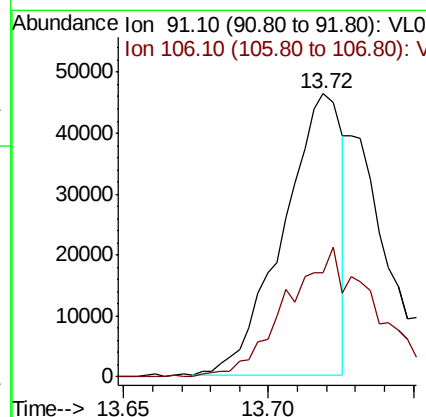
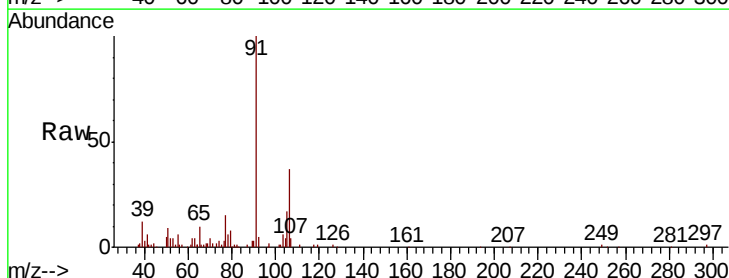
#59
m/p-Xylene
Concen: 0.215 ppbv
RT: 13.03
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 8 Apr 2022 3:23

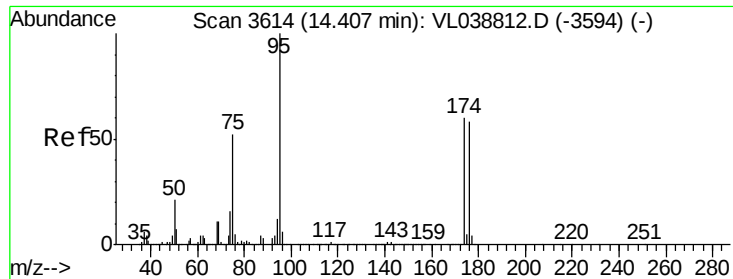
Tot Ion: 91 Resp: 68129
Ion Ratio Lower Upper
91 100
106 0.0 37.1 55.7#



#60
o-Xylene
Concen: 0.218 ppbv
RT: 13.72 min Scan# 3400
Delta R.T. 0.03 min
Lab File: VL038860.D
Acq: 8 Apr 2022 3:23

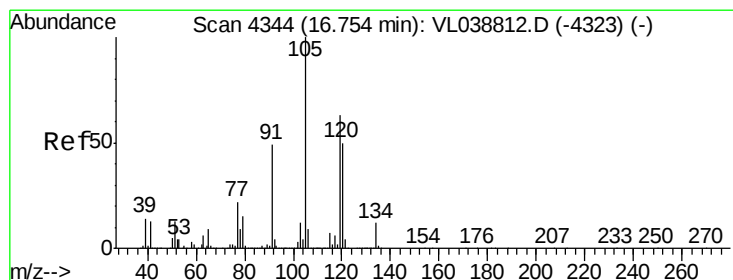
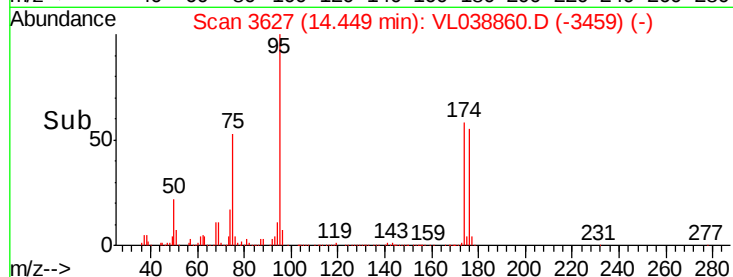
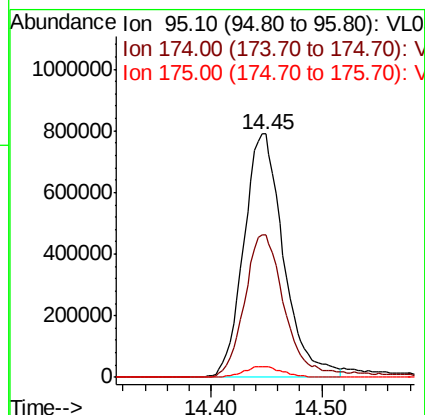
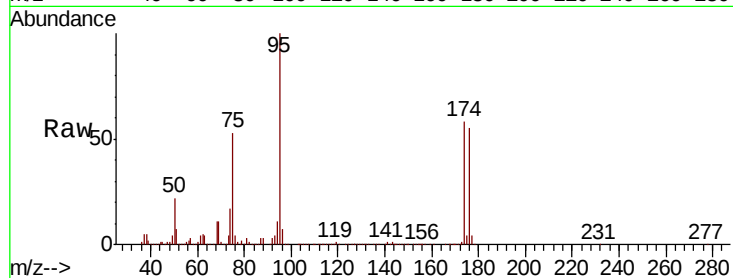
Tgt Ion: 91 Resp: 64661
Ion Ratio Lower Upper
91 100
106 71.0 23.8 71.4





#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.279 ppbv
 RT: 14.45
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 8 Apr 2022 3:23

Tot Ion: 95 Resp: 1971222
 Ion Ratio Lower Upper
 95 100
 174 61.6 52.0 78.0
 175 4.5 4.0 6.0



#74
 1,2,4-Trimethylbenzene
 Concen: 0.238 ppbv
 RT: 16.79 min Scan# 4356
 Delta R.T. 0.04 min
 Lab File: VL038860.D
 Acq: 8 Apr 2022 3:23

Tgt Ion:105 Resp: 80138
 Ion Ratio Lower Upper
 105 100
 120 44.1 39.8 59.8
 91 13.4 39.4 59.0#
 77 12.0 17.3 25.9#

