

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL032322\
 Data File : VL038734.D
 Acq On : 24 Mar 2022 3:09
 Operator : SY/AP
 Sample : N2050-01
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

Quant Time: Mar 24 04:37:07 2022
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL032122AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Mar 21 17:09:26 2022
 QLast Update : Mon Mar 21 17:09:26 2022
 Response via : Initial Calibration

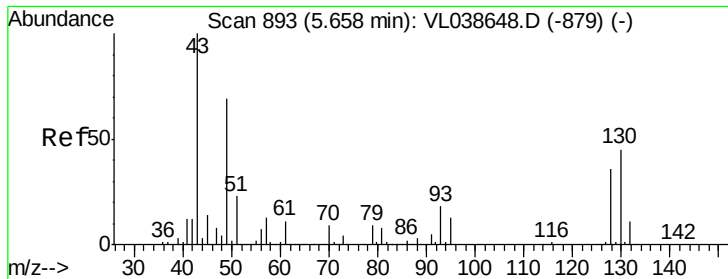
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.66	49	721720	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.17	114	1917582	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.08	117	1764528	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.41	95	1242090	9.18	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	91.80%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.05	85	28802	0.297	ppbv	98
3) Chlorodifluoromethane	2.99	51	35358	0.464	ppbv	92
4) Chloromethane	3.14	50	23349	0.558	ppbv	95
9) Propene	3.02	41	80210	2.180	ppbv	94
11) Trichlorofluoromethane	3.95	101	24630	0.288	ppbv	93
12) 1,1,2-Trichlorotrifluoroet	4.49	101	6153	0.093	ppbv	97
13) Ethanol	3.61	45	52990	13.054	ppbv #	3
15) Acetone	3.85	43	1233378	19.805	ppbv #	88
16) 1,3-Butadiene	3.31	39	120399	3.407	ppbv #	15
17) tert-Butyl alcohol	4.29	59	43287	0.796	ppbv	96
19) Isopropyl Alcohol	3.97	45	12799	0.371	ppbv #	91
20) Methylene Chloride	4.35	84	11705	0.446	ppbv	90
23) Vinyl Acetate	5.06	43	31918	0.529	ppbv #	82
25) Ethyl Acetate	5.33	43	21165	0.135	ppbv #	80
26) Hexane	5.69	57	7539	0.107	ppbv #	1
27) Carbon Disulfide	4.55	76	4513	0.066	ppbv #	86
29) Chloroform	5.75	83	170277	1.515	ppbv	97
34) 2-Butanone	5.24	43	1404533	18.506	ppbv	97
36) Benzene	6.89	78	23116	0.156	ppbv	98
39) 1,2-Dichloropropane	7.17	63	448110	7.745	ppbv #	29
51) 2-Hexanone	10.14	43	117873	1.163	ppbv #	100
52) Tetrachloroethene	11.22	164	932147	17.211	ppbv	98
53) Toluene	9.80	91	51897	0.326	ppbv	99
60) o-Xylene	13.69	91	5180	0.030	ppbv	67
65) tert-Butylbenzene	16.98	119	194987	0.842	ppbv #	25
66) Benzyl Chloride	16.98	91	1463	0.033	ppbv #	65
75) 1,3-Dichlorobenzene	16.99	146	21655	0.169	ppbv #	1

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.66 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 24 Mar 2022 3:09

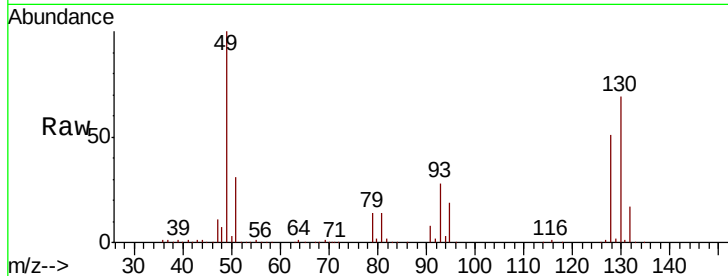
Tot Ion: 49 Resp: 721720

Ion Ratio Lower Upper

49 100

128 55.4 26.2 78.6

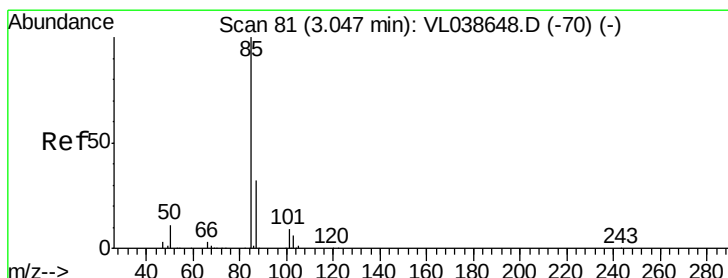
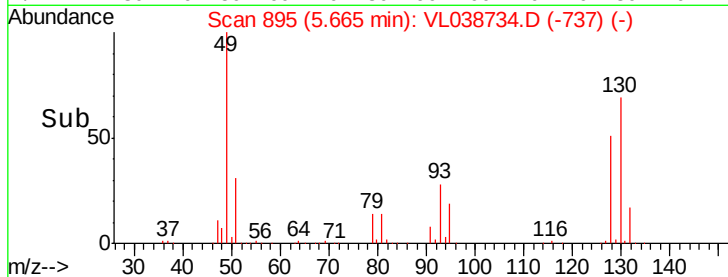
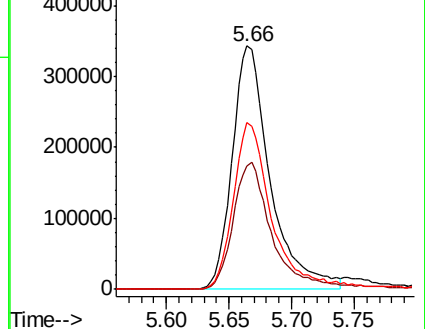
130 71.7 33.7 101.1



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: 0.297 ppbv

RT: 3.05 min Scan# 83

Delta R.T. 0.01 min

Lab File: VL038734.D

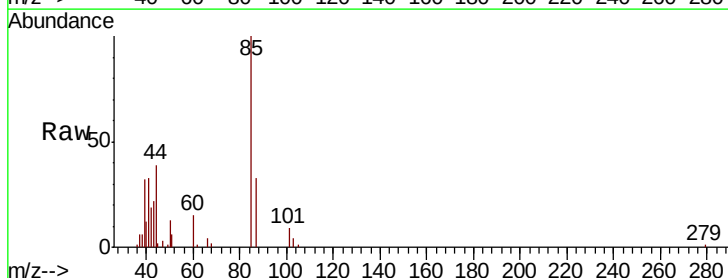
Acq: 24 Mar 2022 3:09

Tgt Ion: 85 Resp: 28802

Ion Ratio Lower Upper

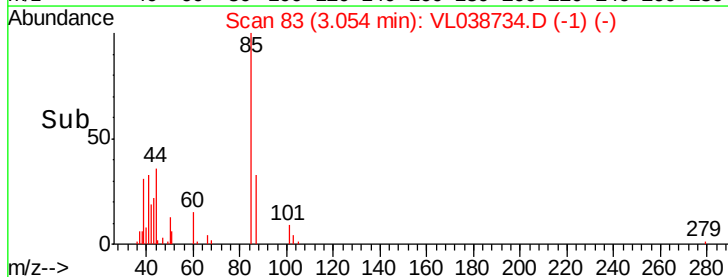
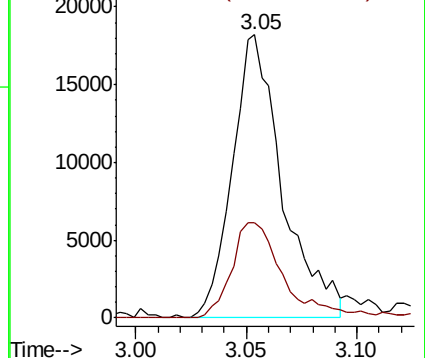
85 100

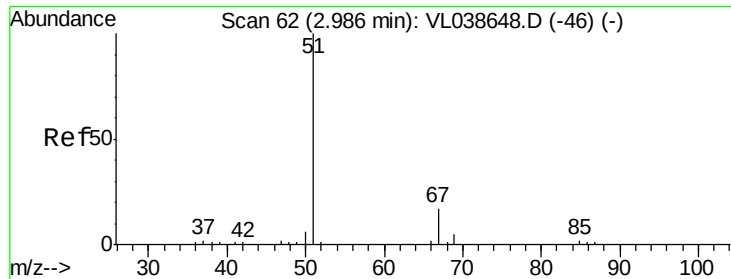
87 33.4 26.0 39.0



Abundance Ion 85.00 (84.70 to 85.70): VL0

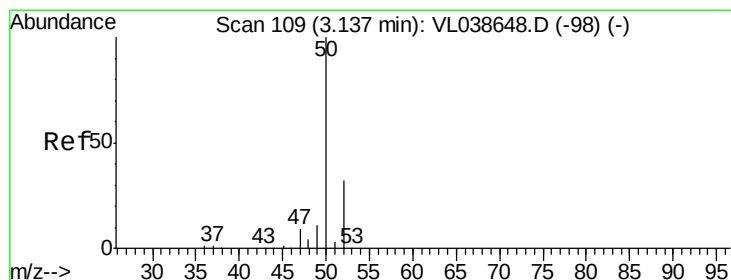
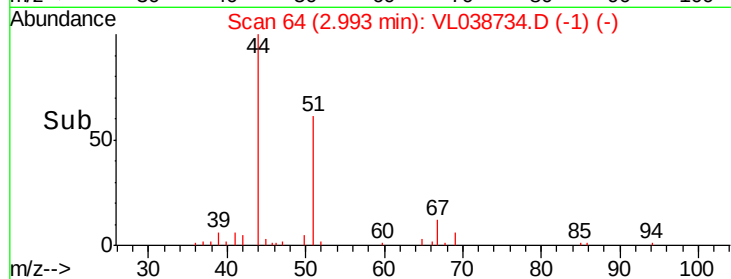
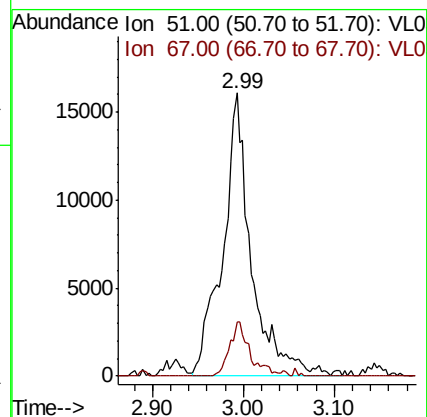
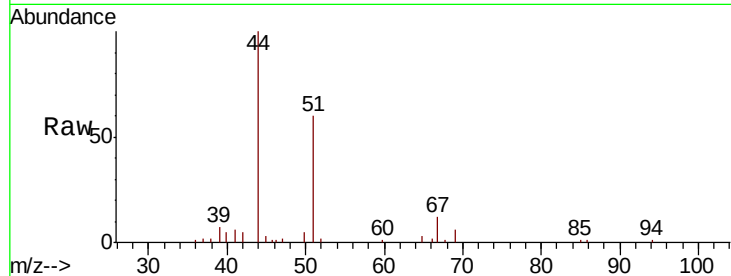
Ion 87.00 (86.70 to 87.70): VL0





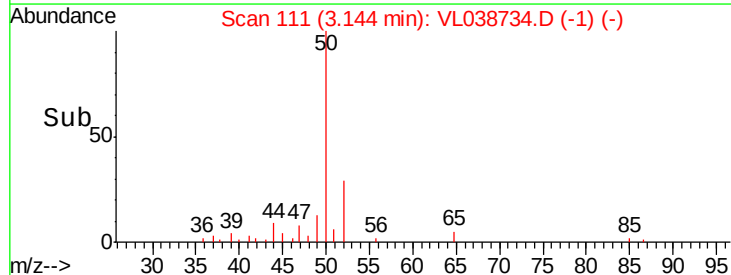
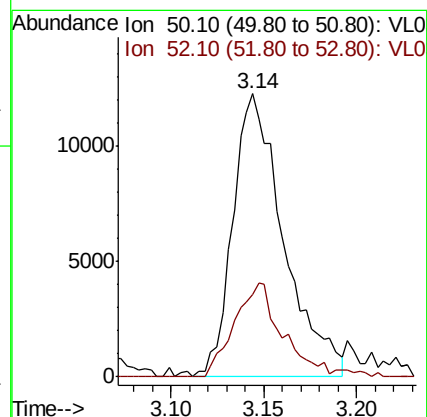
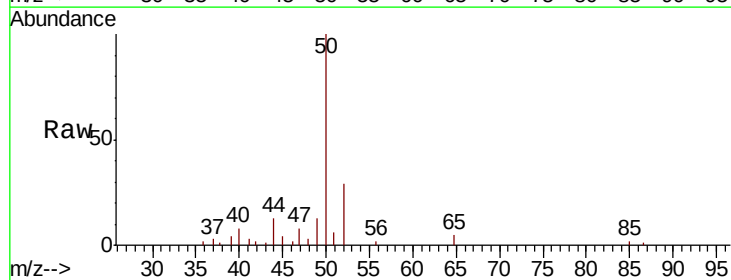
#3
 Chlorodifluoromethane
 Concen: 0.464 ppbv
 RT: 2.99 min
 Instrument: MSVOA_1
 Delta R.T.:
 Lab File: ClientSampleId:
 Acq: 24 Mar 2022 3:09

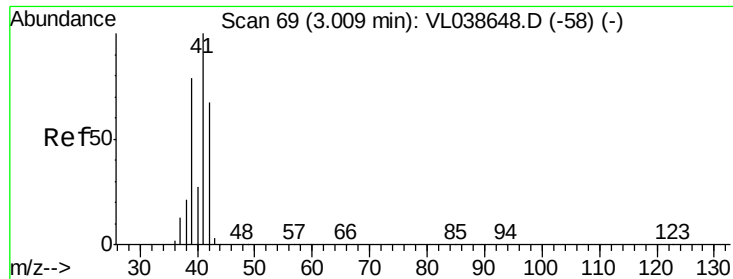
Tot Ion: 51 Resp: 35358
 Ion Ratio Lower Upper
 51 100
 67 14.2 14.1 21.1



#4
 Chloromethane
 Concen: 0.558 ppbv
 RT: 3.14 min Scan# 111
 Delta R.T.: 0.01 min
 Lab File: VL038734.D
 Acq: 24 Mar 2022 3:09

Tgt Ion: 50 Resp: 23349
 Ion Ratio Lower Upper
 50 100
 52 29.2 25.5 38.3





#9

Propene

Concen: 2.180 ppbv

RT: 3.02 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

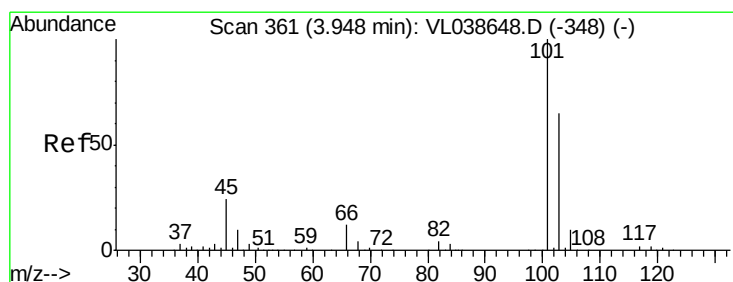
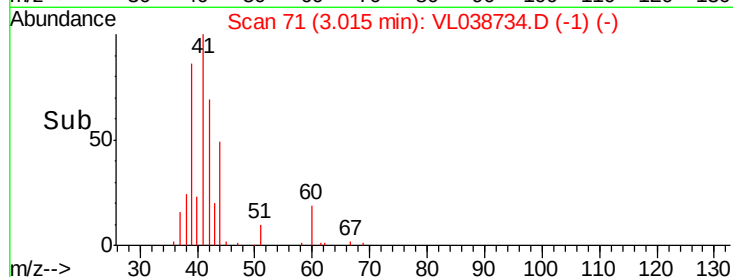
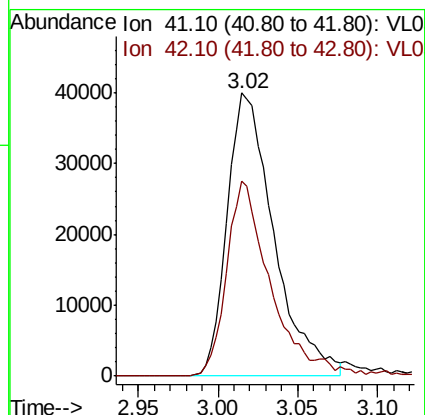
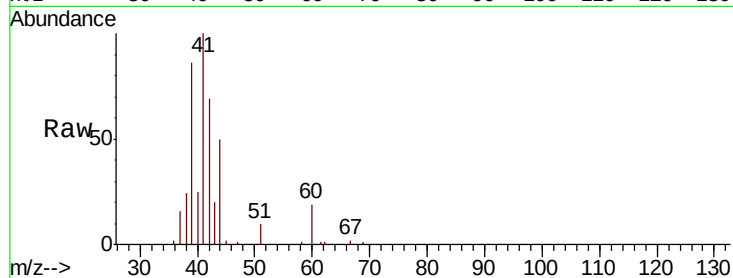
Acq: 24 Mar 2022 3:09

Tot Ion: 41 Resp: 80210

Ion Ratio Lower Upper

41 100

42 65.4 56.2 84.4



#11

Trichlorofluoromethane

Concen: 0.288 ppbv

RT: 3.95 min Scan# 362

Delta R.T. 0.00 min

Lab File: VL038734.D

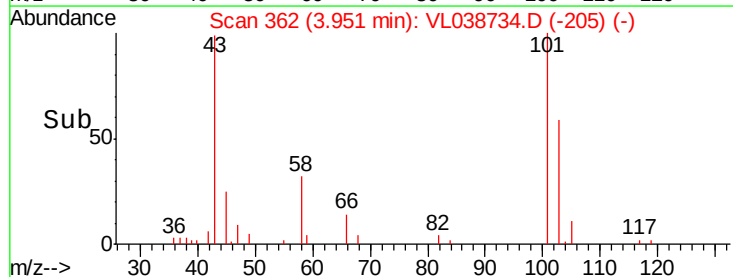
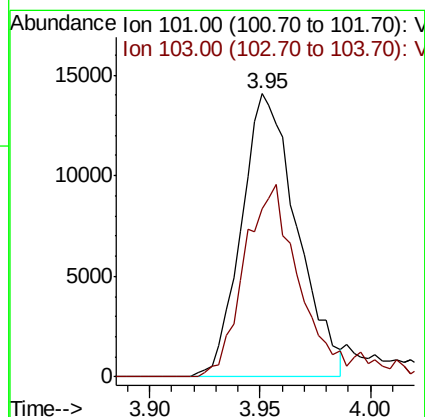
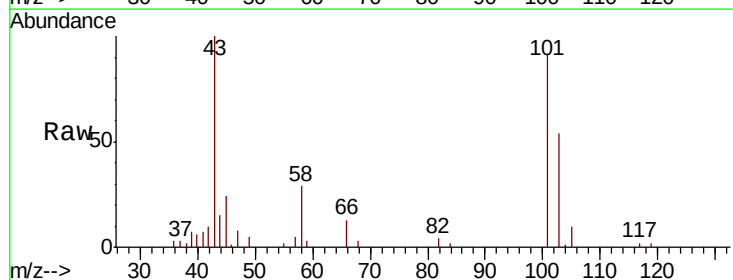
Acq: 24 Mar 2022 3:09

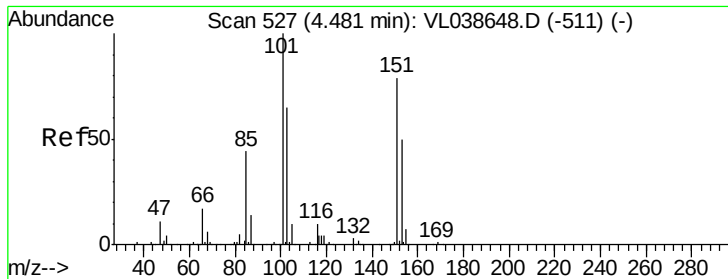
Tgt Ion:101 Resp: 24630

Ion Ratio Lower Upper

101 100

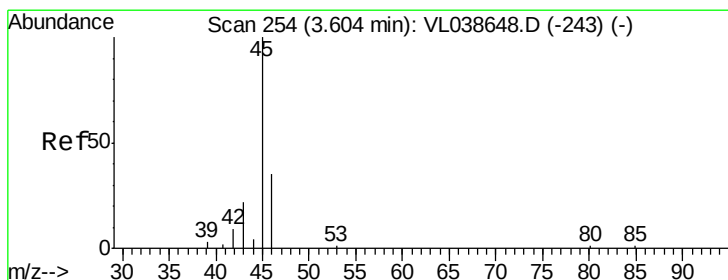
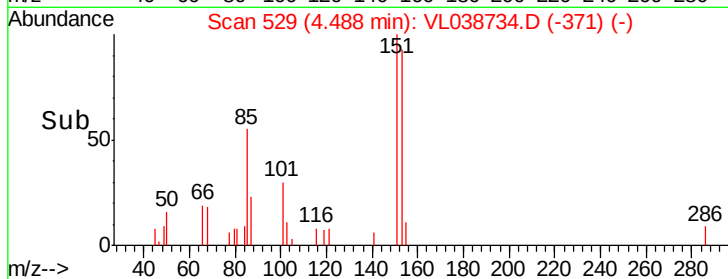
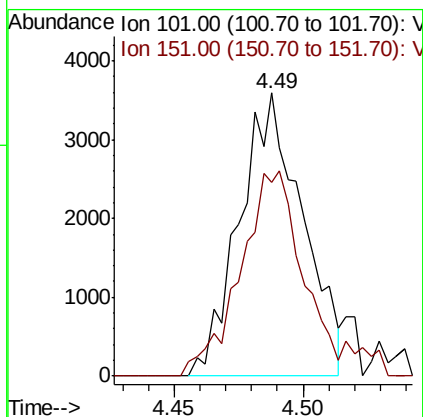
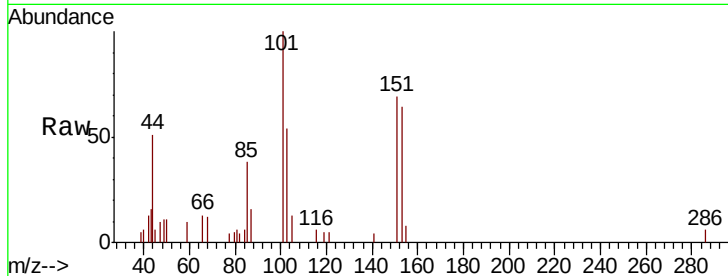
103 59.4 51.9 77.9





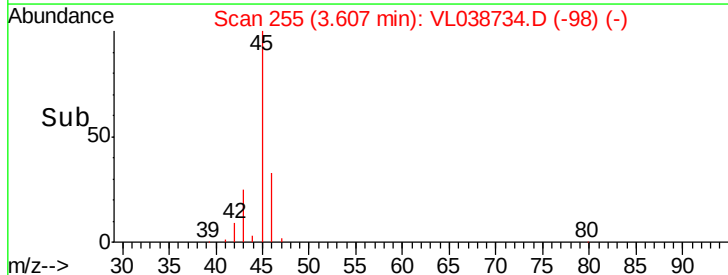
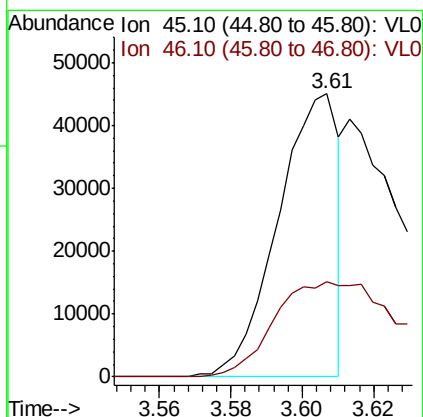
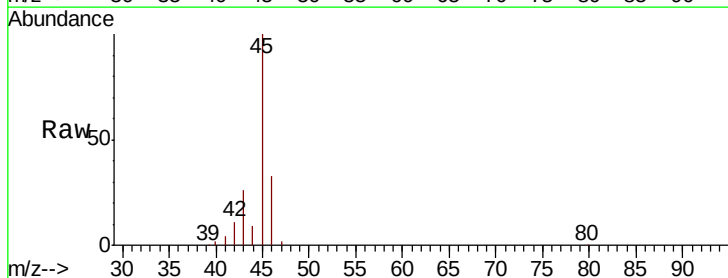
#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.093 ppbv
 RT: 4.49
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 24 Mar 2022 3:09

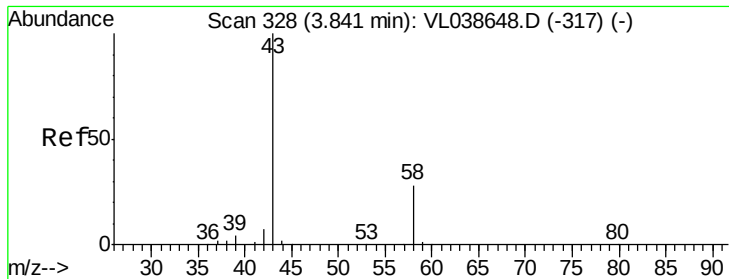
Tot Ion:101 Resp: 6153
 Ion Ratio Lower Upper
 101 100
 151 76.0 62.9 94.3



#13
 Ethanol
 Concen: 13.054 ppbv
 RT: 3.61 min Scan# 255
 Delta R.T. 0.00 min
 Lab File: VL038734.D
 Acq: 24 Mar 2022 3:09

Tgt Ion: 45 Resp: 52990
 Ion Ratio Lower Upper
 45 100
 46 95.9 15.1 60.5#





#15

Acetone

Concen: 19.805 ppbv

RT: 3.85 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

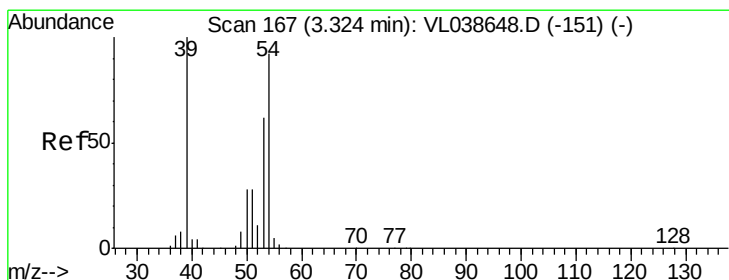
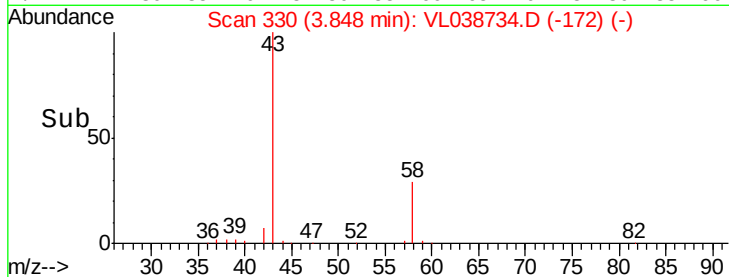
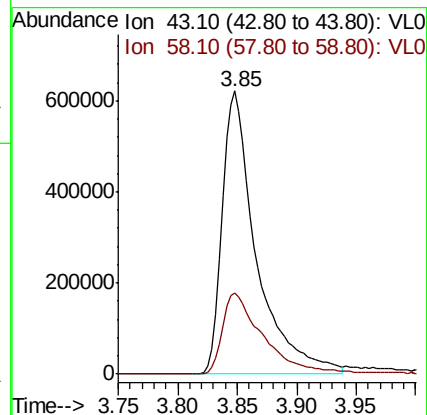
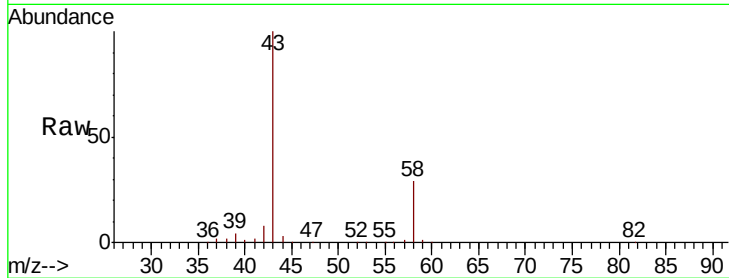
Acq: 24 Mar 2022 3:09

Tot Ion: 43 Resp: 1233378

Ion Ratio Lower Upper

43 100

58 35.6 23.3 34.9#



#16

1,3-Butadiene

Concen: 3.407 ppbv

RT: 3.31 min Scan# 164

Delta R.T. -0.01 min

Lab File: VL038734.D

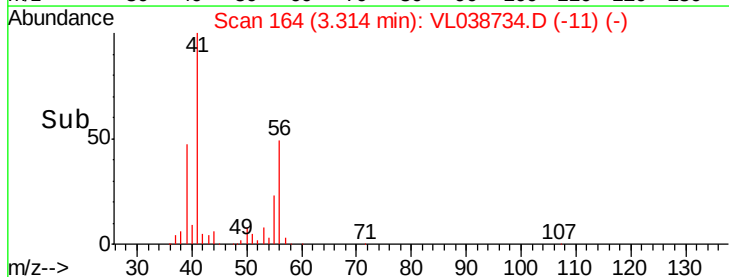
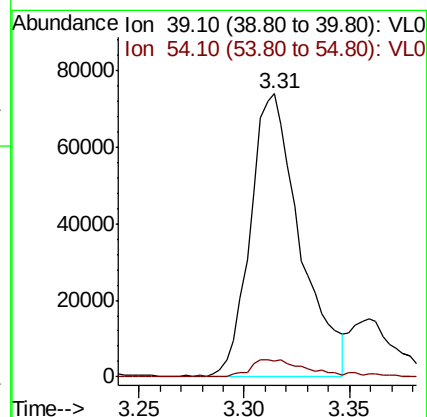
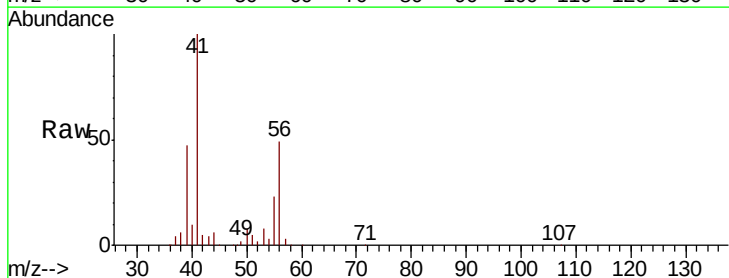
Acq: 24 Mar 2022 3:09

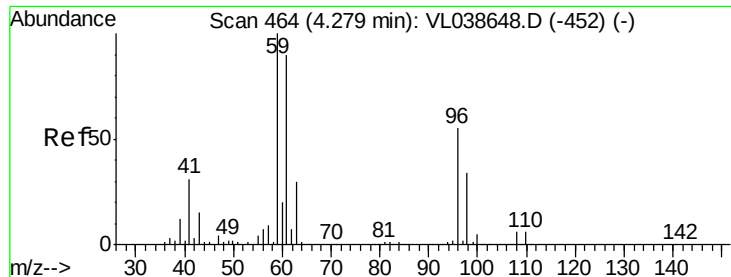
Tgt Ion: 39 Resp: 120399

Ion Ratio Lower Upper

39 100

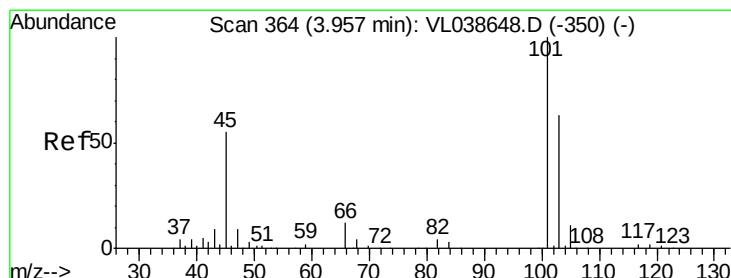
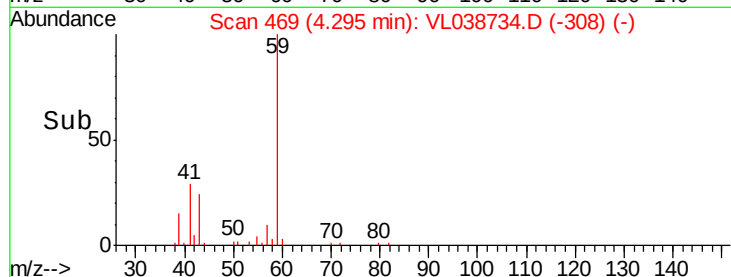
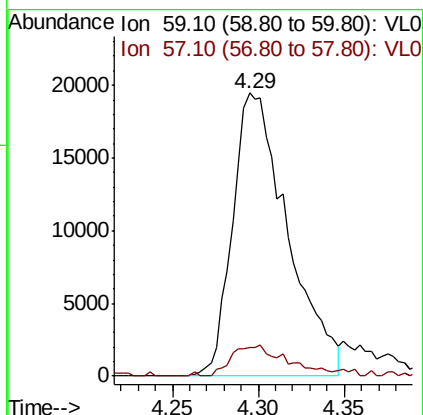
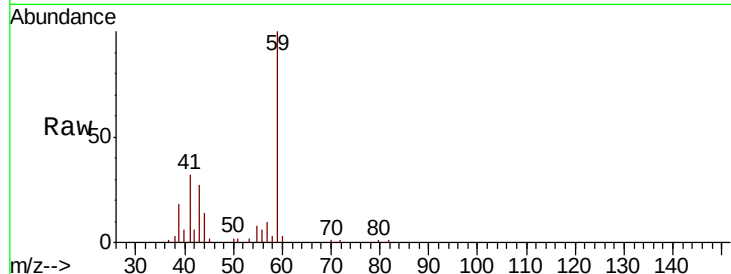
54 7.8 69.1 103.7#





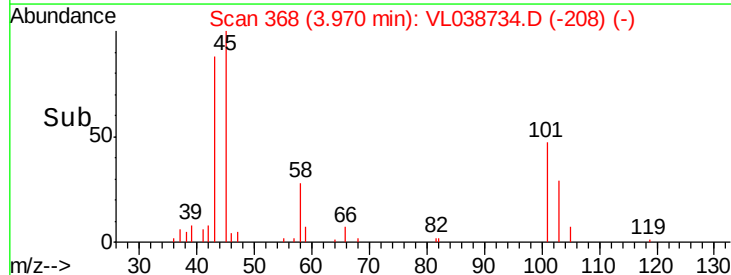
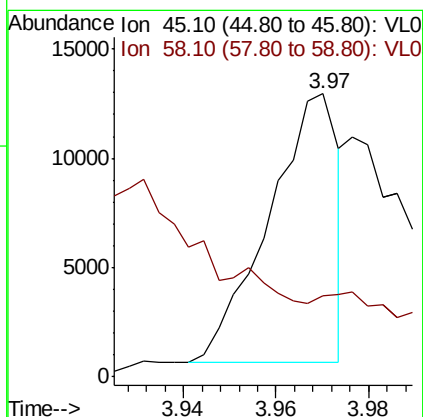
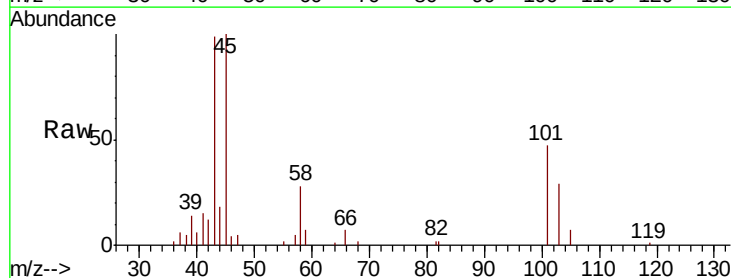
#17
 tert-Butyl alcohol
 Concen: 0.796 ppbv
 RT: 4.29
 Instrument: MSVOA_1
 Delta R.T.:
 Lab File: ClientSampleId :
 Acq: 24 Mar 2022 3:09

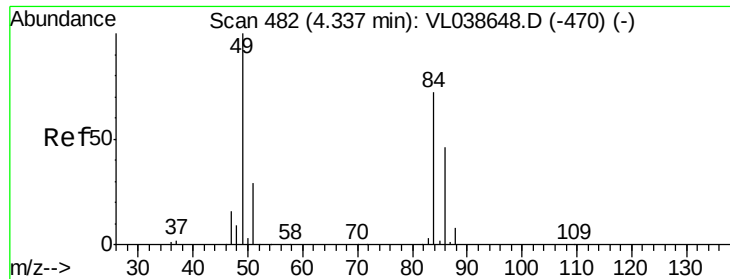
Tot Ion: 59 Resp: 43287
 Ion Ratio Lower Upper
 59 100
 57 11.8 8.2 12.2



#19
 Isopropyl Alcohol
 Concen: 0.371 ppbv
 RT: 3.97 min Scan# 368
 Delta R.T. 0.01 min
 Lab File: VL038734.D
 Acq: 24 Mar 2022 3:09

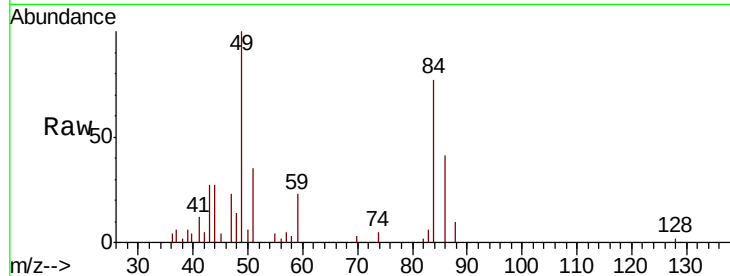
Tgt Ion: 45 Resp: 12799
 Ion Ratio Lower Upper
 45 100
 58 0.0 2.3 3.5#





#20
Methvlene Chloride
Concen: 0.446 ppbv
RT: 4.35
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId :
Acq: 24 Mar 2022 3:09

Tot Ion	84	Resp	11705
Ion Ratio	Lower	Upper	
84	100		
49	126.4	111.2	166.8
51	39.4	32.8	49.2
86	53.8	51.4	77.0



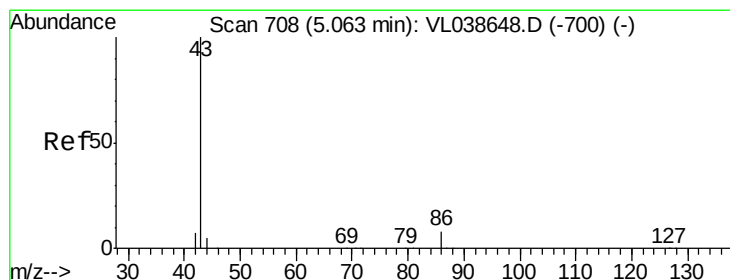
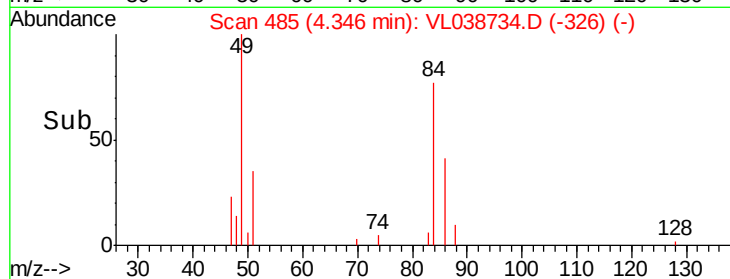
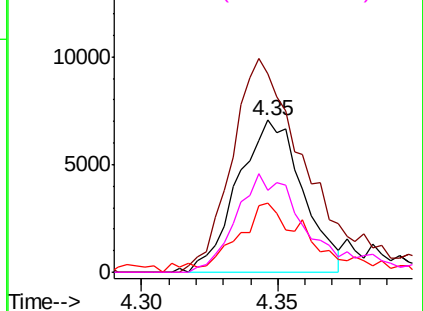
Abundance

Ion 84.00 (83.70 to 84.70): VL0

Ion 49.10 (48.80 to 49.80): VL0

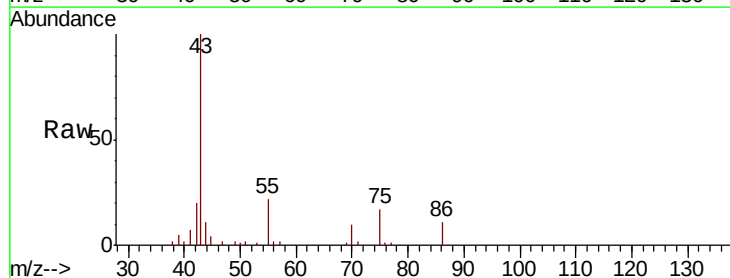
Ion 51.10 (50.80 to 51.80): VL0

Ion 86.00 (85.70 to 86.70): VL0



#23
Vinyl Acetate
Concen: 0.529 ppbv
RT: 5.06 min Scan# 708
Delta R.T. 0.00 min
Lab File: VL038734.D
Acq: 24 Mar 2022 3:09

Tgt Ion	43	Resp	31918
Ion Ratio	Lower	Upper	
43	100		
86	11.8	5.6	8.4#
42	18.4	6.8	10.2#
44	7.9	4.2	6.2#



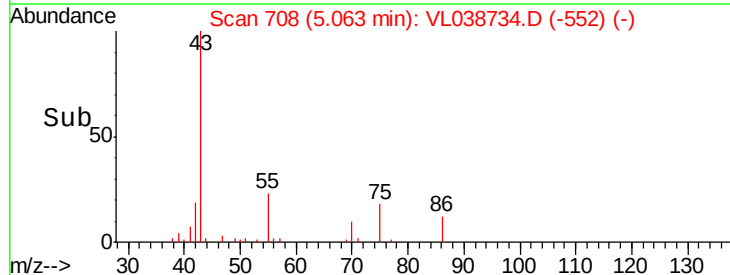
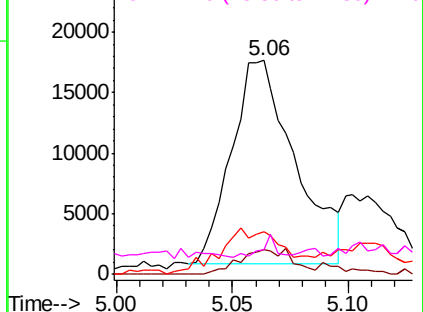
Abundance

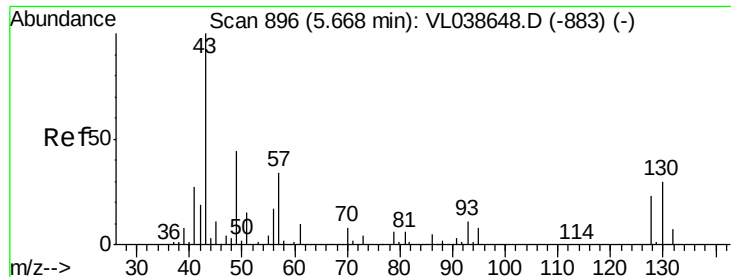
Ion 43.10 (42.80 to 43.80): VL0

Ion 86.10 (85.80 to 86.80): VL0

Ion 42.10 (41.80 to 42.80): VL0

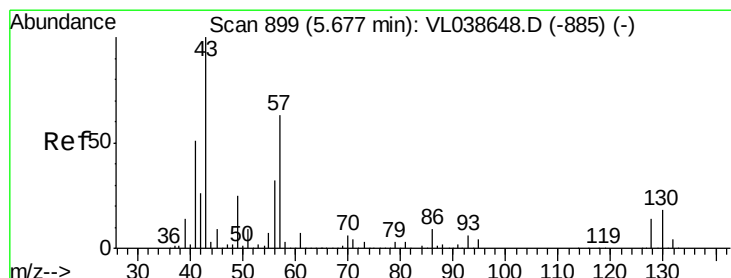
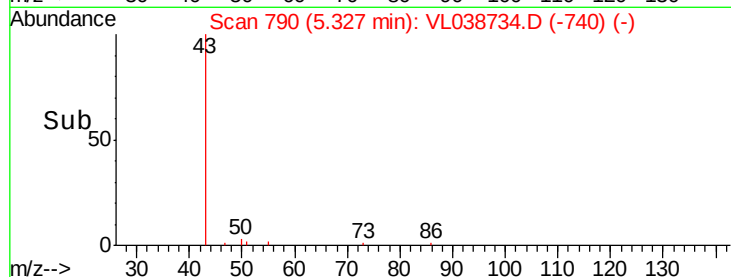
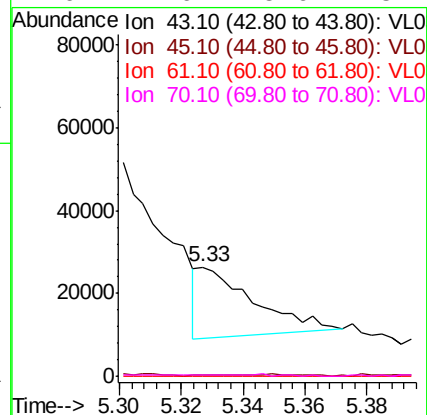
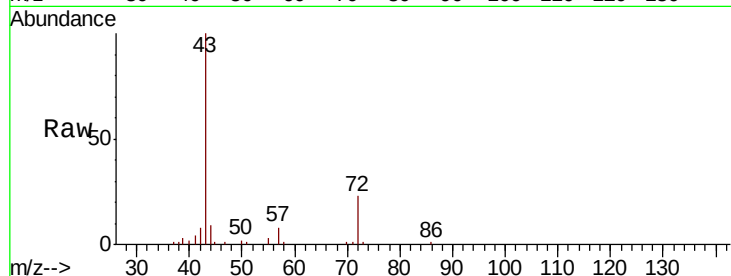
Ion 44.10 (43.80 to 44.80): VL0





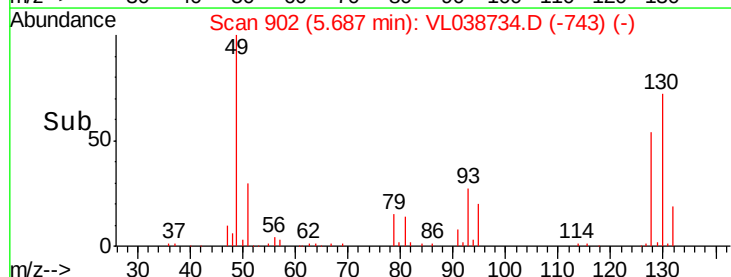
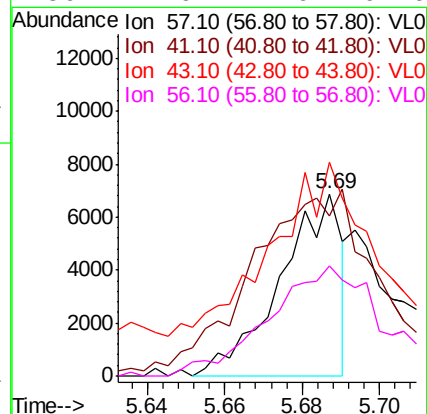
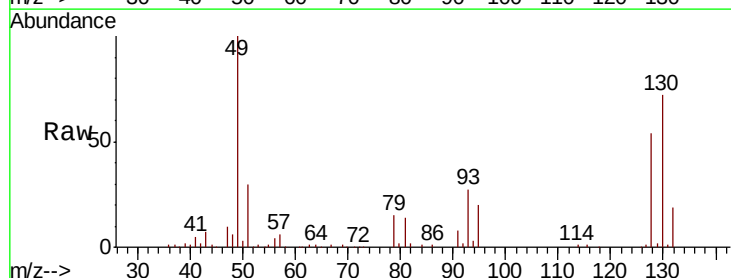
#25
Ethyl Acetate
Concen: 0.135 ppbv
RT: 5.33
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 24 Mar 2022 3:09

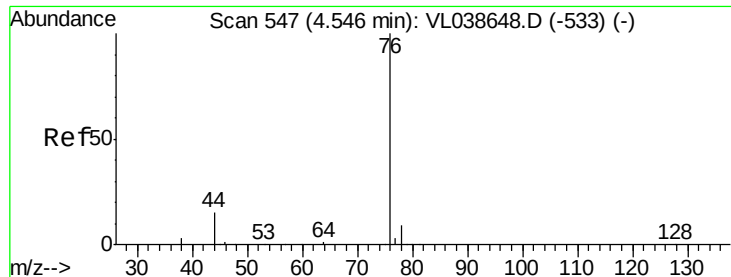
Tot Ion:	43	Resp:	21165
Ion	Ratio	Lower	Upper
43	100		
45	3.8	8.2	12.4#
61	0.0	8.3	12.5#
70	2.6	5.6	8.4#



#26
Hexane
Concen: 0.107 ppbv
RT: 5.69 min Scan# 902
Delta R.T. 0.01 min
Lab File: VL038734.D
Acq: 24 Mar 2022 3:09

Tgt Ion:	57	Resp:	7539
Ion	Ratio	Lower	Upper
57	100		
41	0.0	67.0	100.4#
43	0.0	184.2	276.2#
56	122.9	42.6	64.0#





#27

Carbon Disulfide

Concen: 0.066 ppbv

RT: 4.55 Instrument:

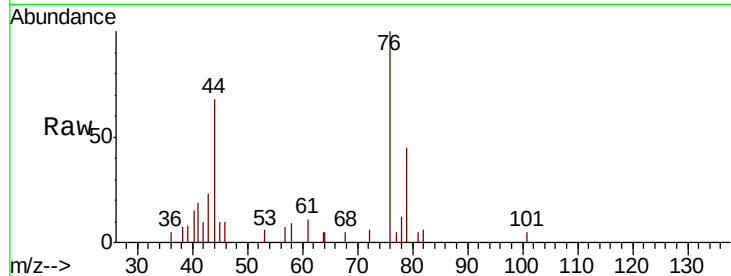
Delta R.T. MSVOA_L

Lab File: ClientSampleId:

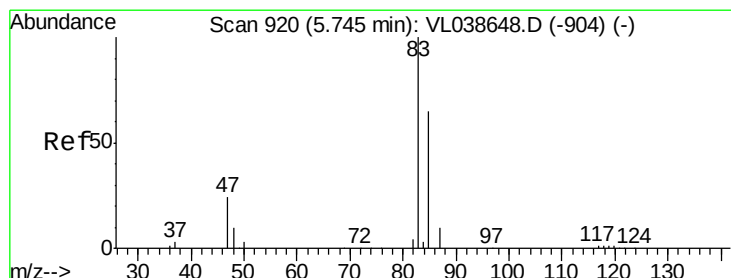
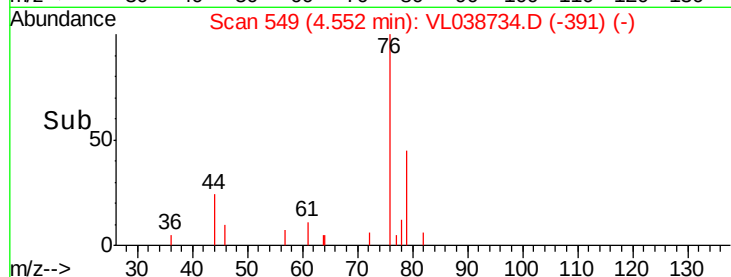
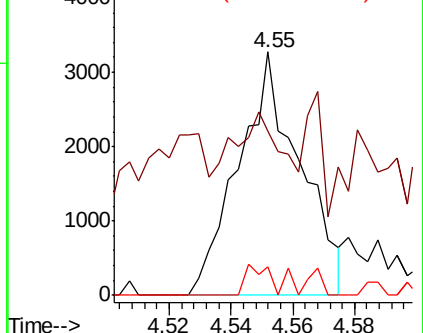
Acq: 24 Mar 2022 3:09

Tot Ion: 76 Resp: 4513

Ion	Ratio	Lower	Upper
76	100		
44	24.0	12.4	18.6#
78	8.7	7.8	11.8



Abundance Ion 76.00 (75.70 to 76.70): VL0
Ion 44.10 (43.80 to 44.80): VL0
Ion 78.00 (77.70 to 78.70): VL0



#29

Chloroform

Concen: 1.515 ppbv

RT: 5.75 min Scan# 921

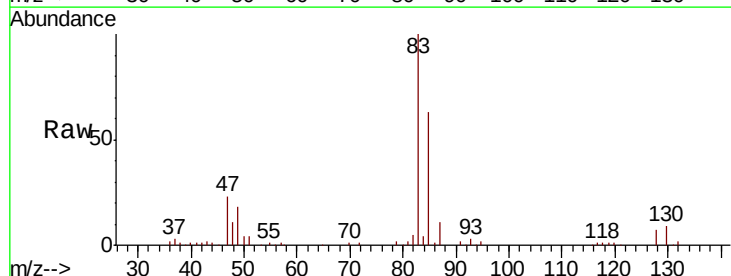
Delta R.T. 0.00 min

Lab File: VL038734.D

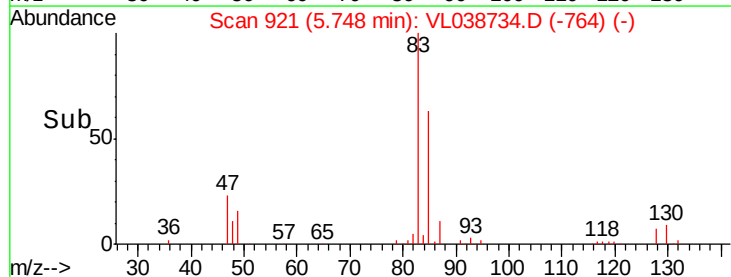
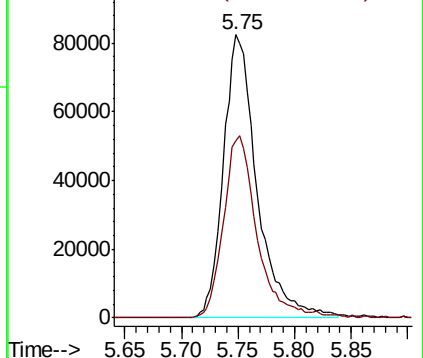
Acq: 24 Mar 2022 3:09

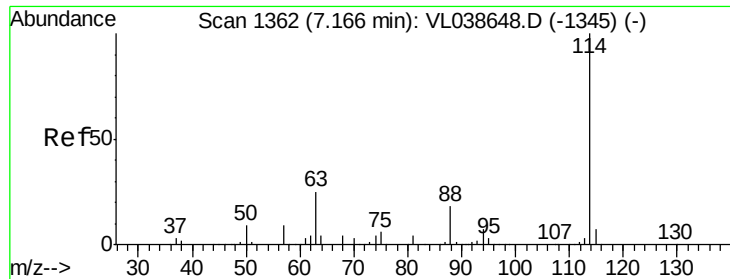
Tgt Ion: 83 Resp: 170277

Ion	Ratio	Lower	Upper
83	100		
85	62.6	51.7	77.5



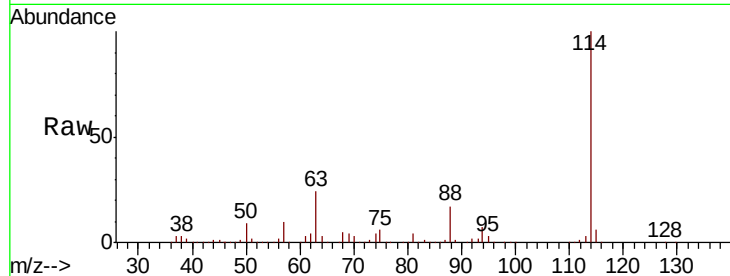
Abundance Ion 83.00 (82.70 to 83.70): VL0
Ion 85.00 (84.70 to 85.70): VL0



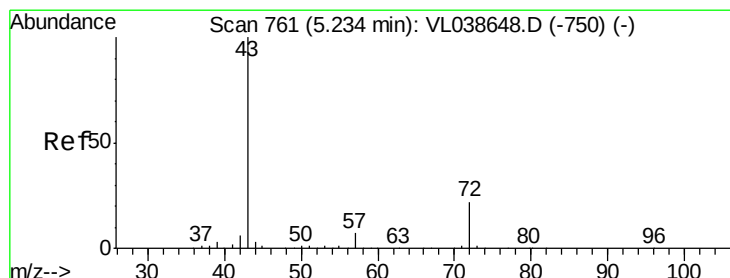
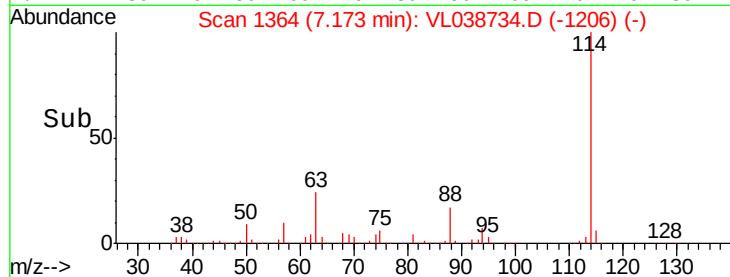
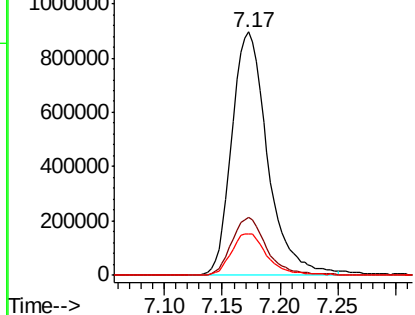


#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.17
 Instrument: MSVOA_L
 Delta R.T.:
 Lab File: ClientSampleId :
 Acq: 24 Mar 2022 3:09

Tot Ion:114 Resp: 1917582
 Ion Ratio Lower Upper
 114 100
 63 23.6 19.4 29.0
 88 17.3 13.9 20.9

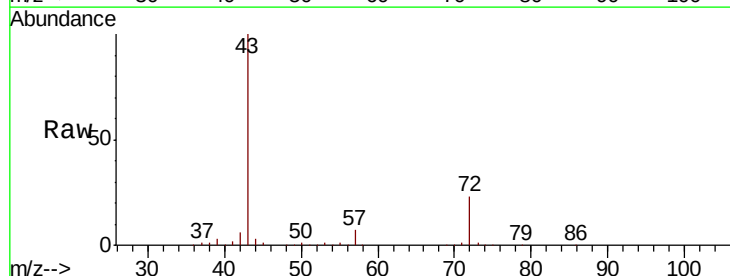


Abundance Ion 114.10 (113.80 to 114.80): VL0
 Ion 63.10 (62.80 to 63.80): VL0
 Ion 88.10 (87.80 to 88.80): VL0

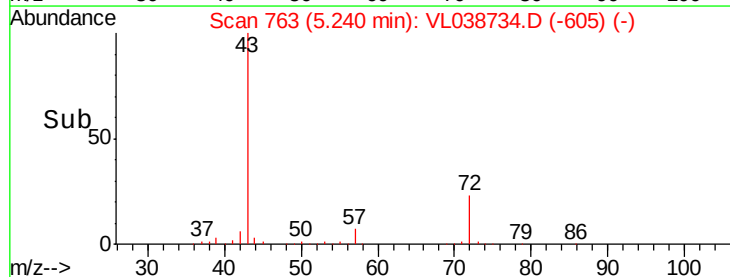
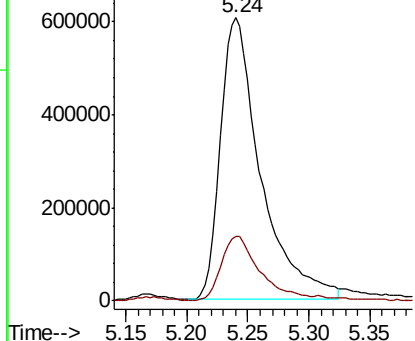


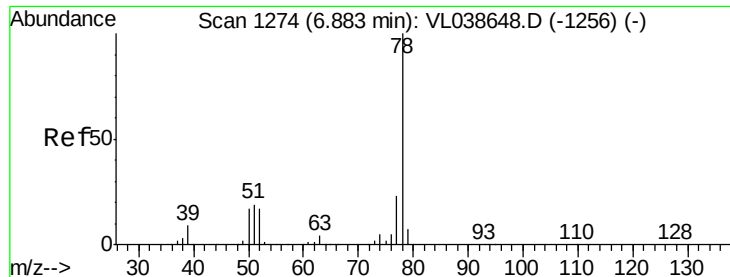
#34
 2-Butanone
 Concen: 18.506 ppbv
 RT: 5.24 min Scan# 763
 Delta R.T. 0.01 min
 Lab File: VL038734.D
 Acq: 24 Mar 2022 3:09

Tgt Ion: 43 Resp: 1404533
 Ion Ratio Lower Upper
 43 100
 72 23.6 17.8 26.8



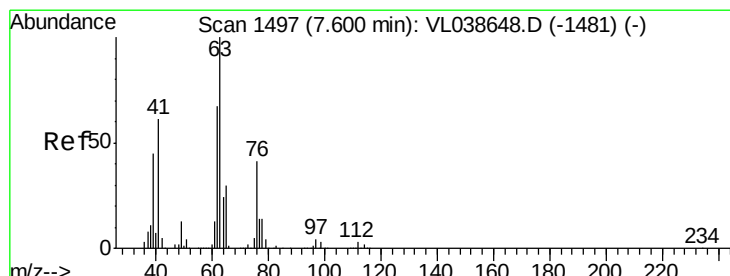
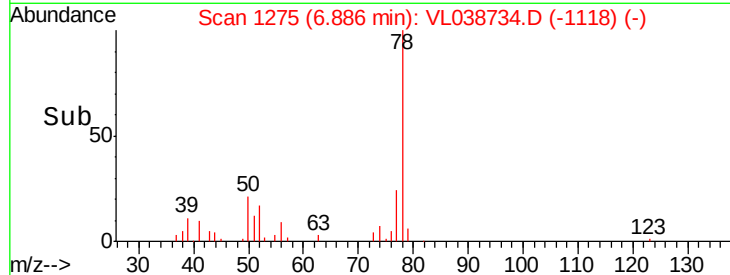
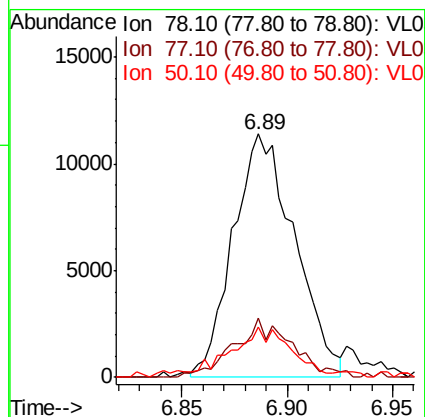
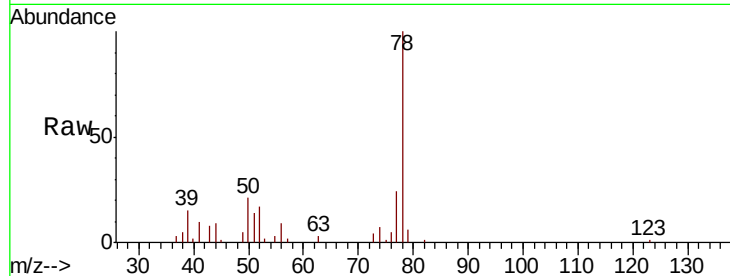
Abundance Ion 43.10 (42.80 to 43.80): VL0
 Ion 72.10 (71.80 to 72.80): VL0





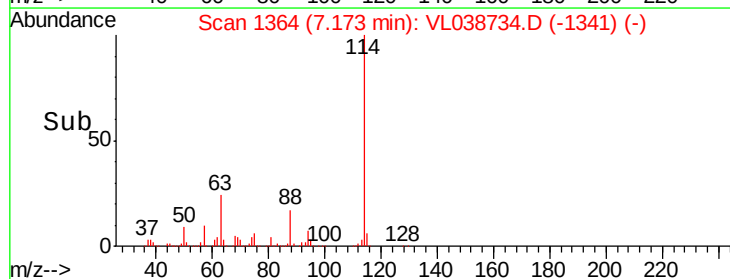
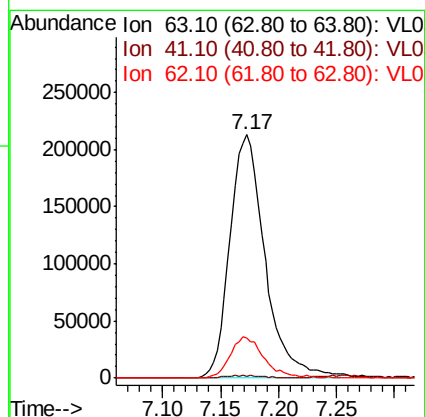
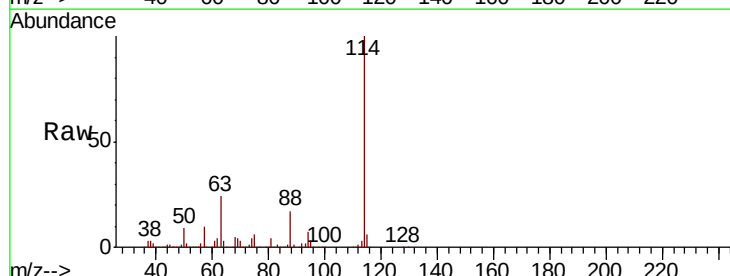
#36
Benzene
Concen: 0.156 ppbv
RT: 6.89
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId:
Acq: 24 Mar 2022 3:09

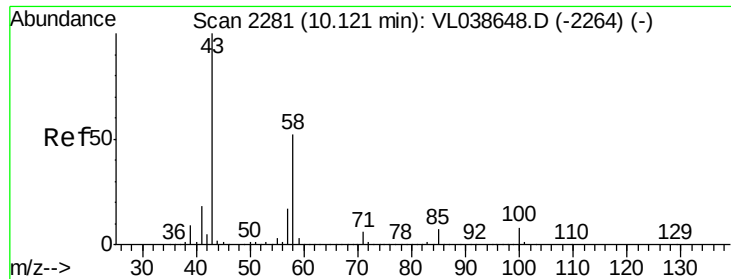
Tot Ion	Ratio	Lower	Upper
78	100		
77	23.0	18.1	27.1
50	19.0	13.6	20.4



#39
1,2-Dichloropropane
Concen: 7.745 ppbv
RT: 7.17 min Scan# 1364
Delta R.T. -0.43 min
Lab File: VL038734.D
Acq: 24 Mar 2022 3:09

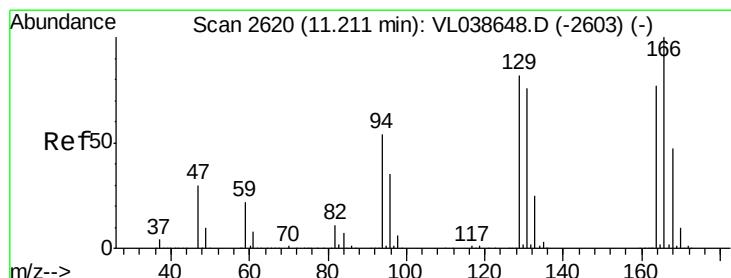
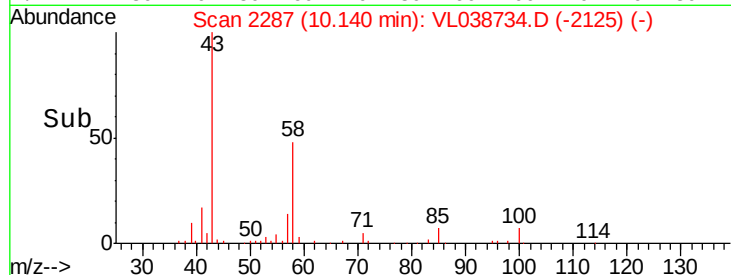
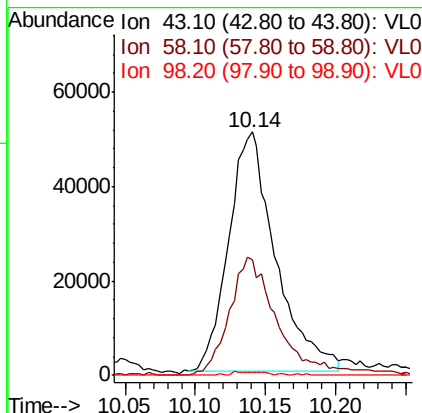
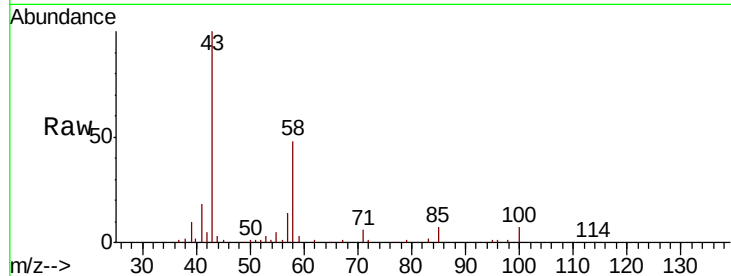
Tgt Ion	Ratio	Lower	Upper
63	100		
41	0.5	49.0	73.6#
62	16.3	53.9	80.9#





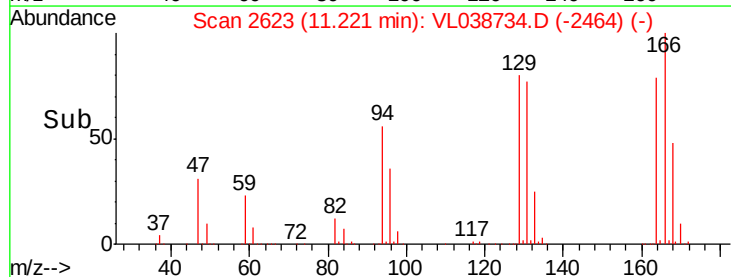
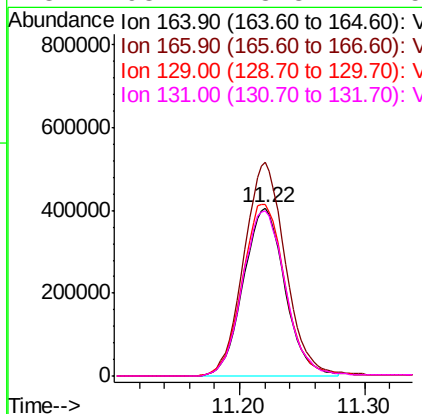
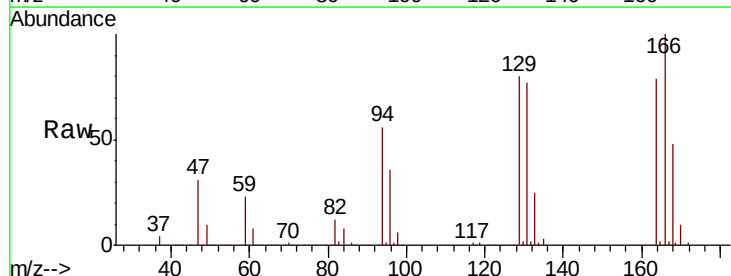
#51
 2-Hexanone
 Concen: 1.163 ppbv
 RT: 10.14 min
 Instrument: MSVOA_L
 Delta R.T.:
 Lab File: ClientSampleId:
 Acq: 24 Mar 2022 3:09

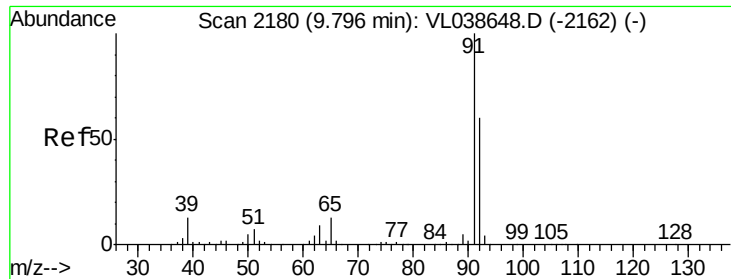
Tot Ion: 43 Resp: 117873
 Ion Ratio Lower Upper
 43 100
 58 51.3 41.2 61.8
 98 1.3 0.2 0.4#



#52
 Tetrachloroethene
 Concen: 17.211 ppbv
 RT: 11.22 min Scan# 2623
 Delta R.T.: 0.01 min
 Lab File: VL038734.D
 Acq: 24 Mar 2022 3:09

Tgt Ion: 164 Resp: 932147
 Ion Ratio Lower Upper
 164 100
 166 127.0 103.3 154.9
 129 101.9 85.2 127.8
 131 98.4 78.3 117.5





#53

Toluene

Concen: 0.326 ppbv

RT: 9.80 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

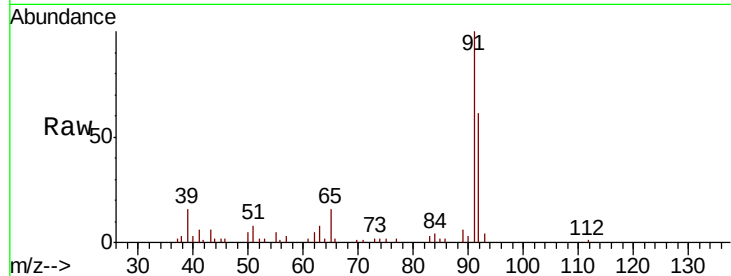
Acq: 24 Mar 2022 3:09

Tot Ion: 91 Resp: 51897

Ion Ratio Lower Upper

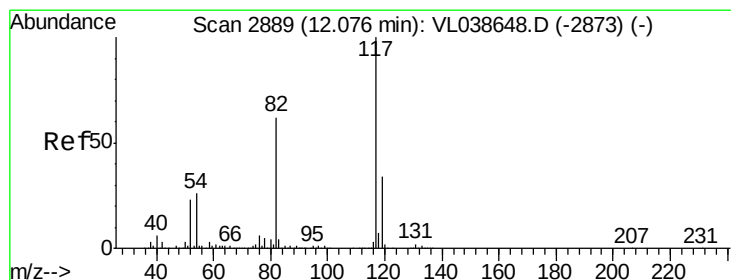
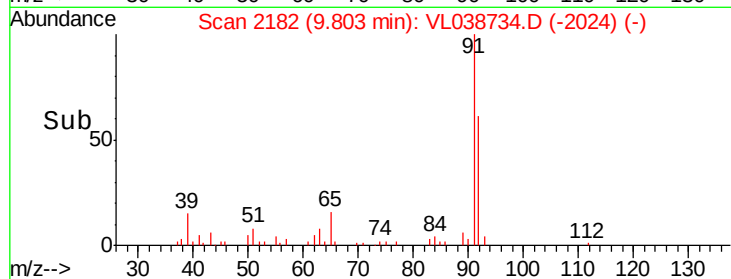
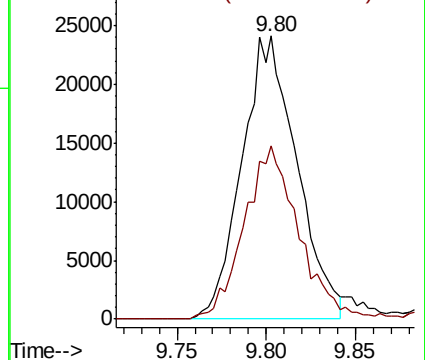
91 100

92 61.7 48.7 73.1



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: 12.08 min Scan# 2890

Delta R.T. 0.00 min

Lab File: VL038734.D

Acq: 24 Mar 2022 3:09

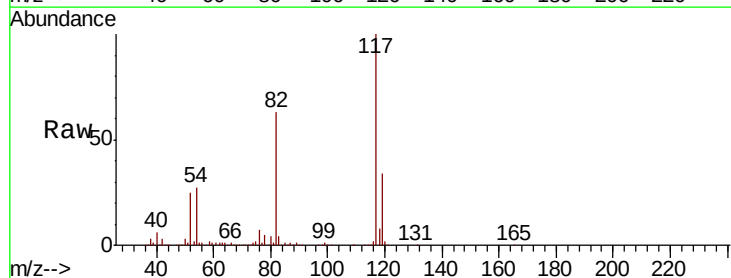
Tgt Ion: 117 Resp: 1764528

Ion Ratio Lower Upper

117 100

82 63.9 51.6 77.4

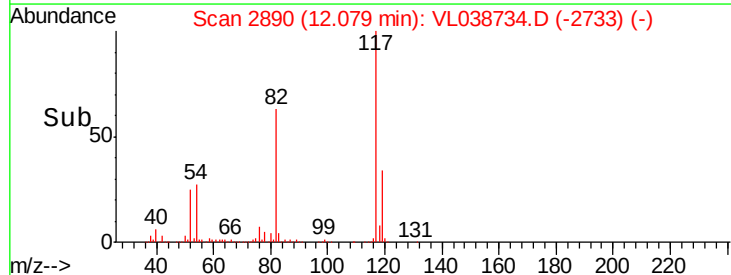
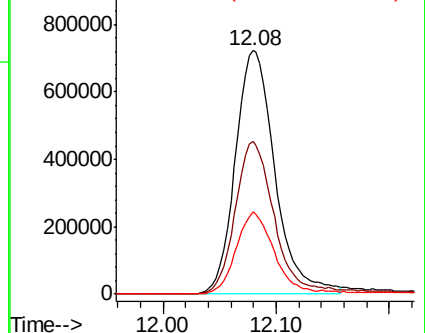
119 34.2 26.9 40.3

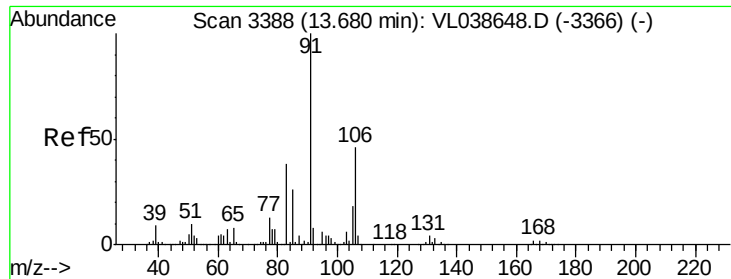


Abundance Ion 117.10 (116.80 to 117.80): V

Ion 82.10 (81.80 to 82.80): VL0

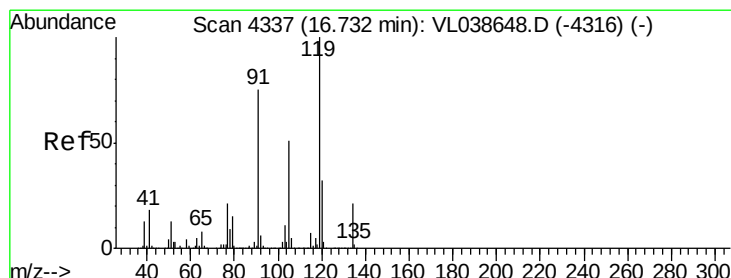
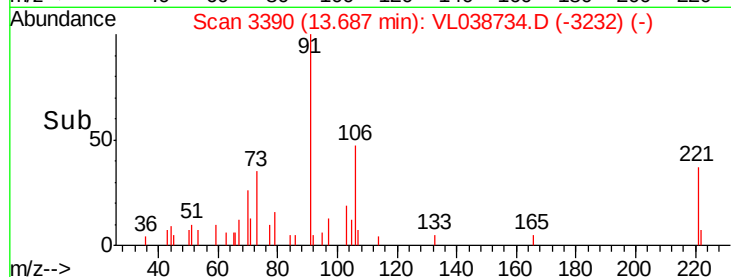
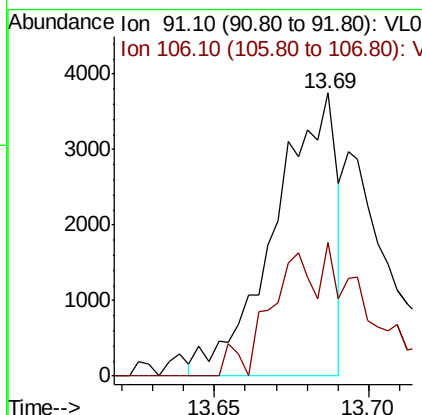
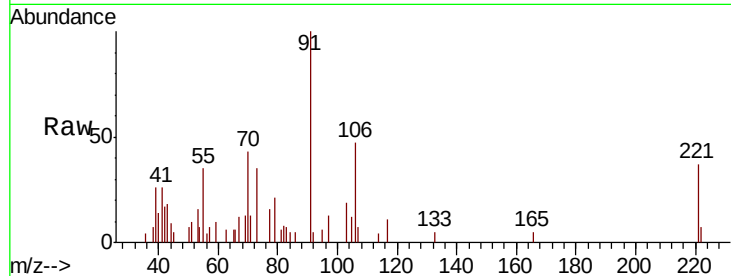
Ion 119.10 (118.80 to 119.80): V





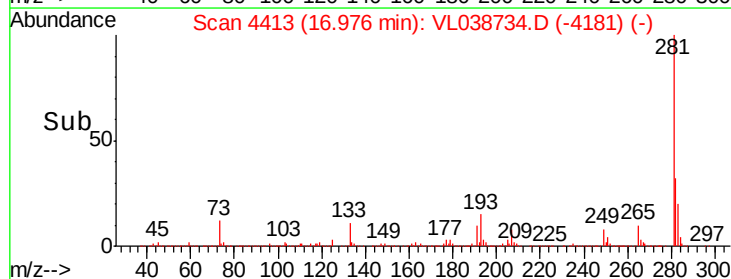
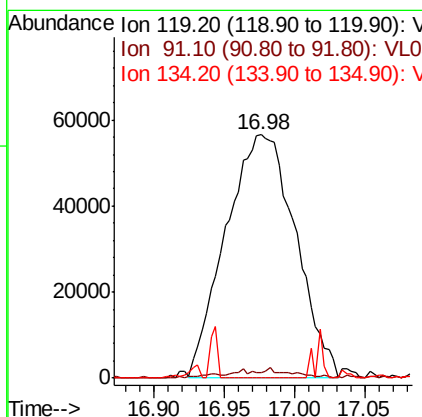
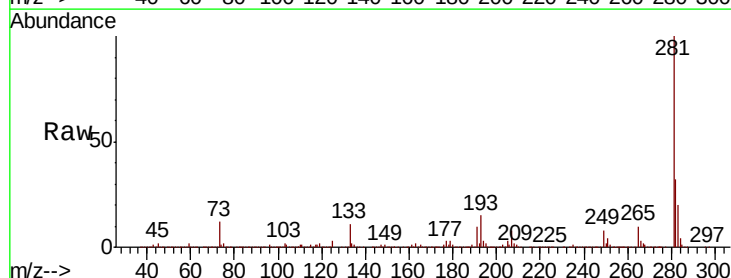
#60
o-Xylene
Concen: 0.030 ppbv
RT: 13.69 min
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId:
Acq: 24 Mar 2022 3:09

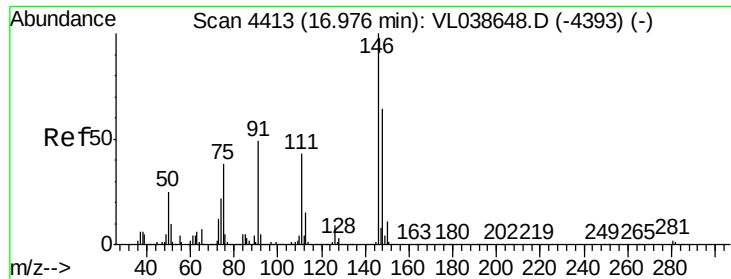
Tot Ion: 91 Resp: 5180
Ion Ratio Lower Upper
91 100
106 69.1 23.5 70.5



#65
tert-Butylbenzene
Concen: 0.842 ppbv
RT: 16.98 min Scan# 4413
Delta R.T. 0.24 min
Lab File: VL038734.D
Acq: 24 Mar 2022 3:09

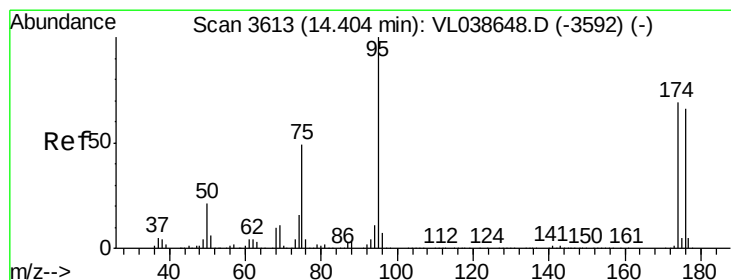
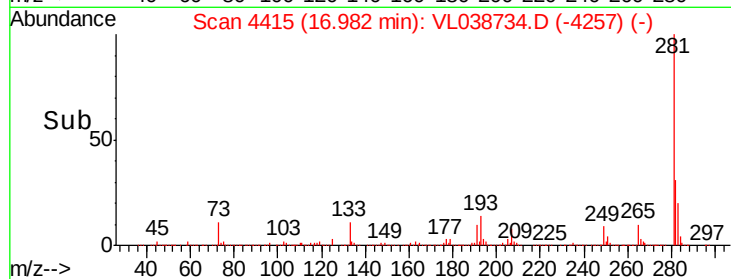
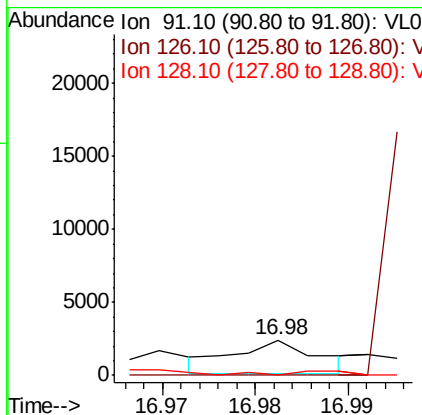
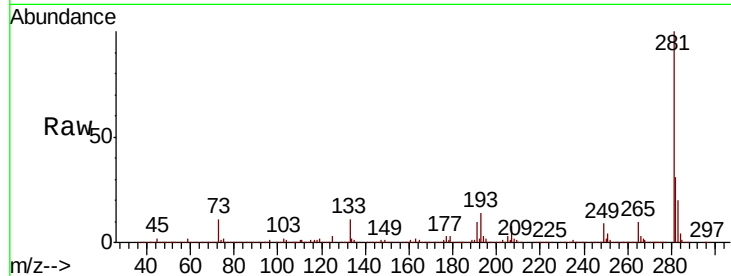
Tgt Ion: 119 Resp: 194987
Ion Ratio Lower Upper
119 100
91 3.3 61.2 91.8#
134 3.1 16.3 24.5#





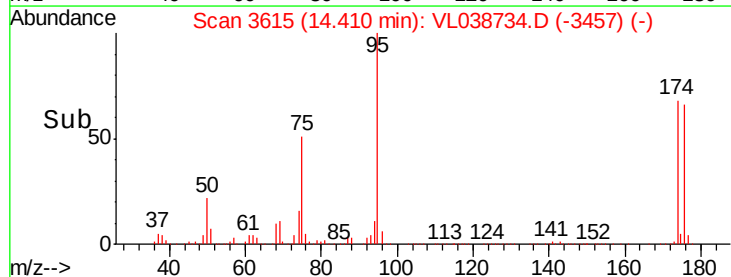
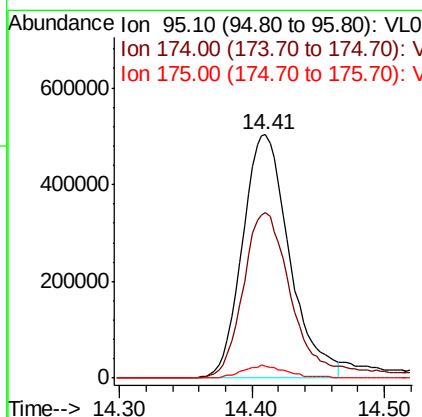
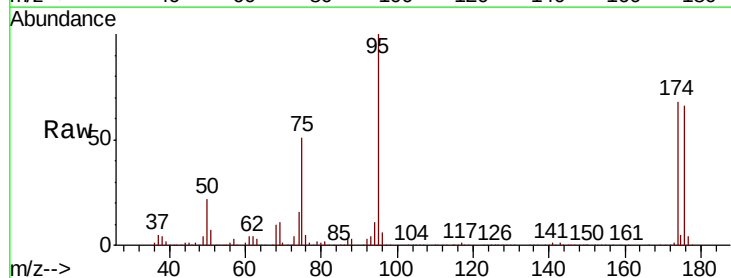
#66
Benzyl Chloride
Concen: 0.033 ppbv
RT: 16.98 min
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId:
Acq: 24 Mar 2022 3:09

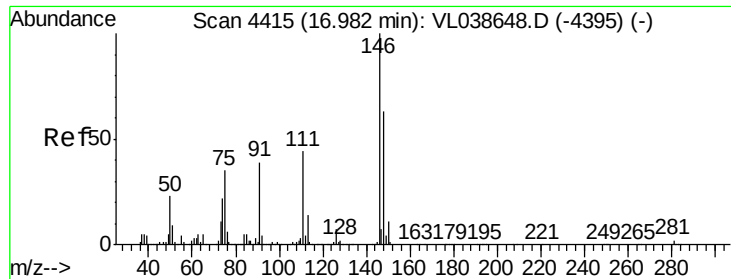
Tot Ion	Ratio	Lower	Upper
91	100		
126	0.0	14.3	21.5#
128	0.0	4.6	6.8#



#68
1-Bromo-4-Fluorobenzene
Concen: 9.181 ppbv
RT: 14.41 min Scan# 3615
Delta R.T. 0.01 min
Lab File: VL038734.D
Acq: 24 Mar 2022 3:09

Tgt Ion	Ratio	Lower	Upper
95	100		
174	74.7	56.1	84.1
175	5.2	4.2	6.2





#75

1,3-Dichlorobenzene

Concen: 0.169 ppbv

RT: 16.99 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 24 Mar 2022 3.09

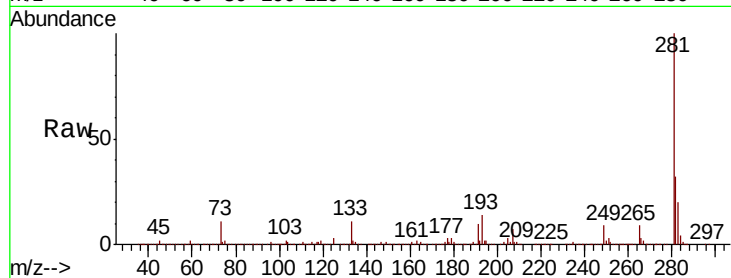
Tot Ion:146 Resp: 21655

Ion Ratio Lower Upper

146 100

111 338.1 22.2 66.6#

148 226.7 32.5 97.5#



Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.10 (110.80 to 111.80): V

Ion 148.00 (147.70 to 148.70): V

