

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL030322\
 Data File : VL038517.D
 Acq On : 3 Mar 2022 17:13
 Operator : SY/AP
 Sample : N1791-01
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

Quant Time: Mar 04 04:33:53 2022
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL022222AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue Feb 22 19:45:51 2022
 QLast Update : Tue Feb 22 19:45:51 2022
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.65	49	784465	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.16	114	1787948	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.06	117	1529683	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.39	95	1281390	10.12	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	101.20%

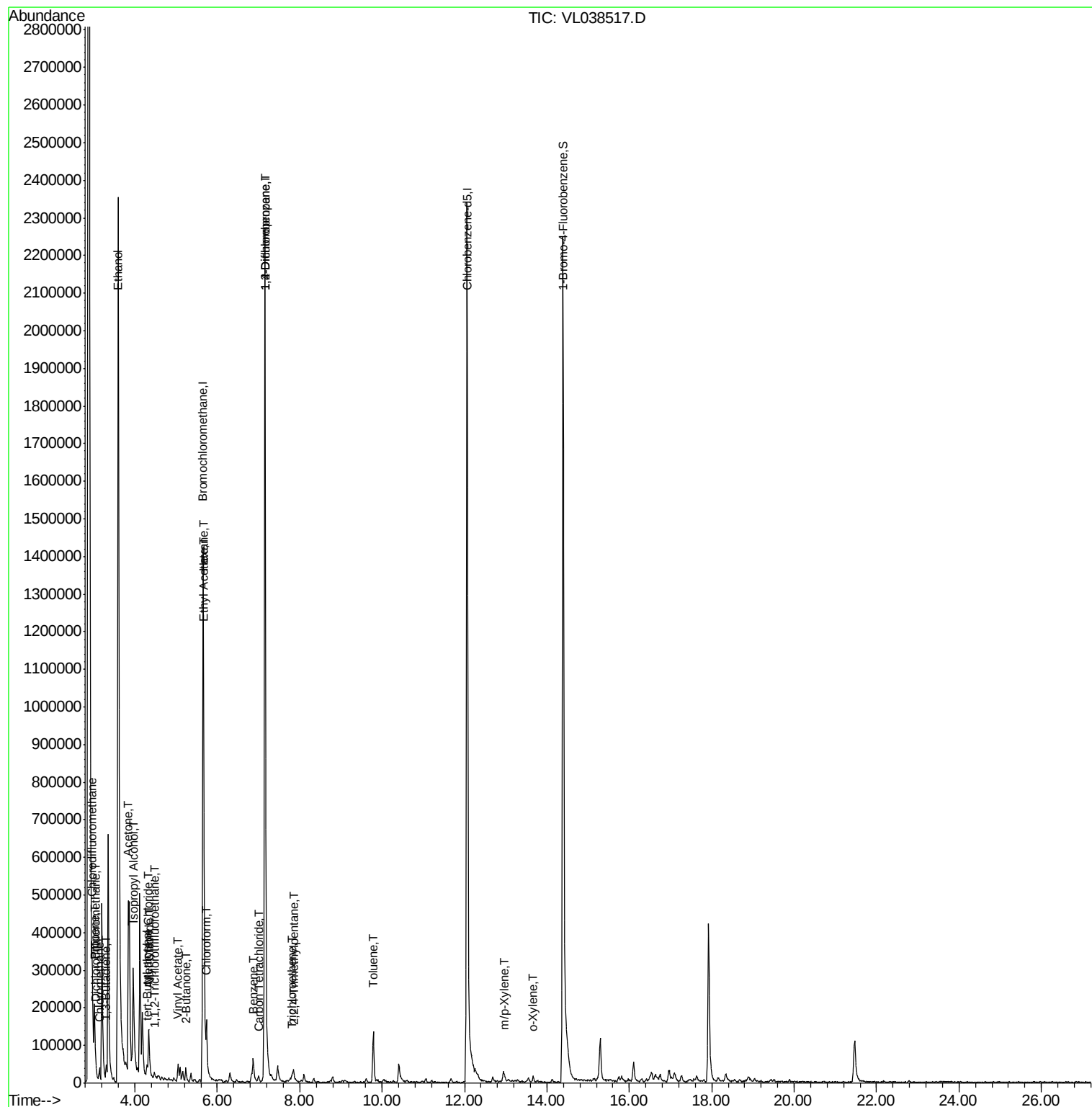
Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.05	85	32396	0.261	ppbv #	80
3) Chlorodifluoromethane	2.96	51	207749	1.500	ppbv #	66
4) Chloromethane	3.14	50	34673	0.720	ppbv	97
9) Propene	3.01	41	61194	1.338	ppbv	90
12) 1,1,2-Trichlorotrifluoroet	4.48	101	3252	0.037	ppbv #	42
13) Ethanol	3.59	45	3278611	718.293	ppbv	89
15) Acetone	3.84	43	651307	9.763	ppbv	95
16) 1,3-Butadiene	3.31	39	2936	0.066	ppbv #	1
17) tert-Butyl alcohol	4.29	59	12657	0.190	ppbv #	72
19) Isopropyl Alcohol	3.96	45	319182	8.262	ppbv #	95
20) Methylene Chloride	4.33	84	32487	0.983	ppbv	95
21) Allyl Chloride	4.35	41	1982	0.035	ppbv #	1
23) Vinyl Acetate	5.05	43	29271	0.331	ppbv #	56
25) Ethyl Acetate	5.67	43	89946	0.502	ppbv #	85
26) Hexane	5.67	57	99530	1.226	ppbv #	46
29) Chloroform	5.74	83	93921	0.709	ppbv	94
34) 2-Butanone	5.23	43	38843	0.691	ppbv #	90
35) Carbon Tetrachloride	7.00	117	4249	0.034	ppbv #	87
36) Benzene	6.87	78	43965	0.279	ppbv	97
38) Trichloroethene	7.82	130	3551	0.062	ppbv #	69
39) 1,2-Dichloropropane	7.15	63	483425	7.711	ppbv #	25
44) 2,2,4-Trimethylpentane	7.85	57	13361	0.049	ppbv #	1
53) Toluene	9.78	91	99272	0.581	ppbv	97
59) m/p-Xylene	12.97	91	6290	0.035	ppbv #	33
60) o-Xylene	13.67	91	5498	0.032	ppbv #	26

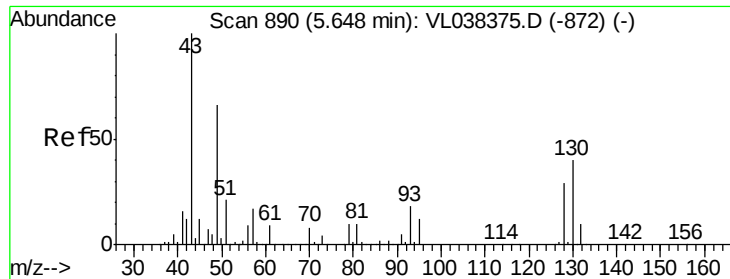
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.65 Instrument:

Delta R.T. MSVOA_L

Lab File:

Acq: 3 Mar 2022 17:13

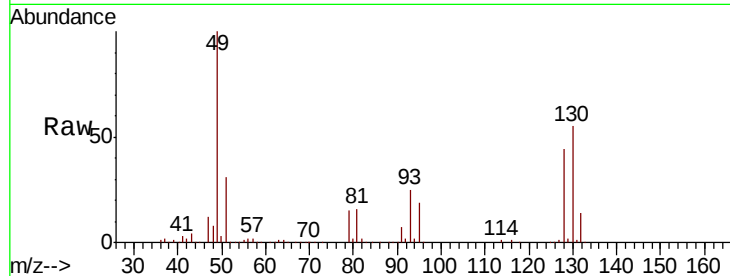
Tot Ion: 49 Resp: 784465

Ion Ratio Lower Upper

49 100

128 44.5 24.3 72.9

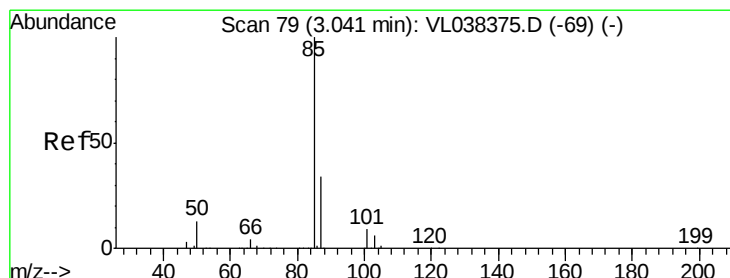
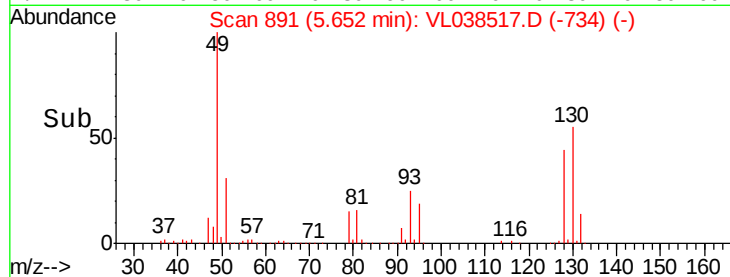
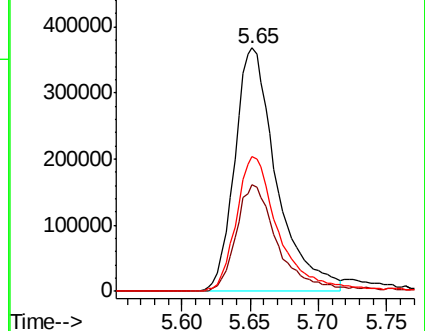
130 57.6 30.1 90.5



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: 0.261 ppbv

RT: 3.05 min Scan# 81

Delta R.T. 0.01 min

Lab File: VL038517.D

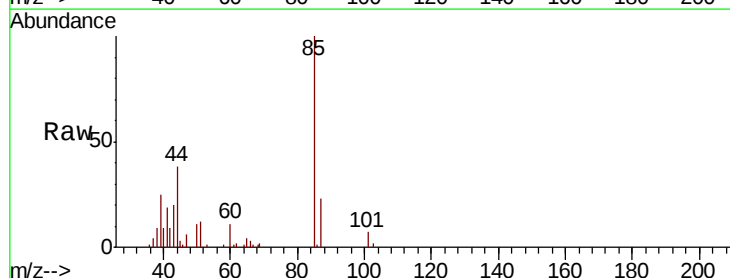
Acq: 3 Mar 2022 17:13

Tgt Ion: 85 Resp: 32396

Ion Ratio Lower Upper

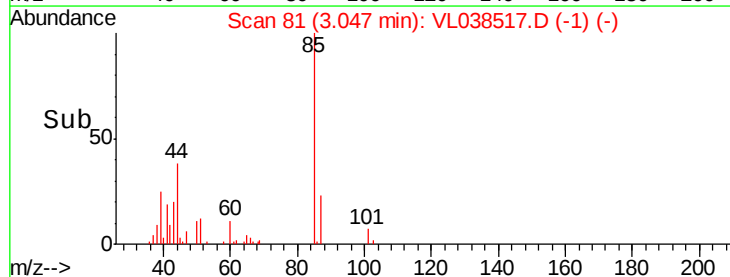
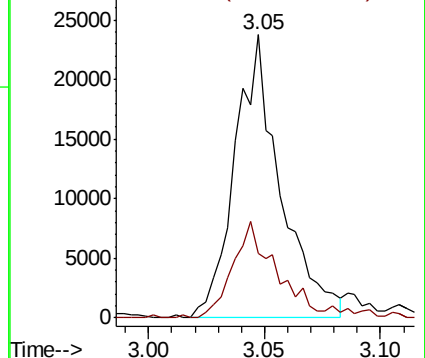
85 100

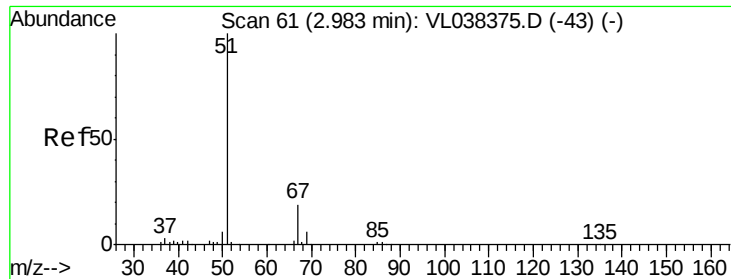
87 22.7 27.4 41.0#



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 1.500 ppbv

RT: 2.96 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

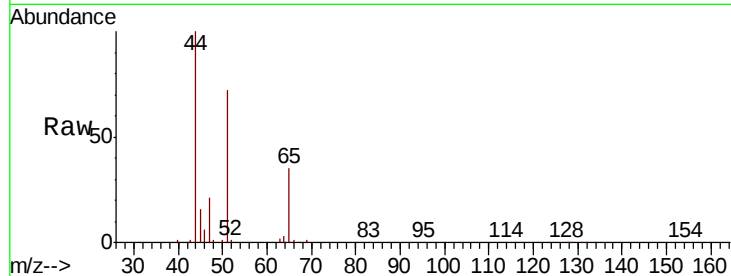
Acq: 3 Mar 2022 17:13

Tot Ion: 51 Resp: 207749

Ion Ratio Lower Upper

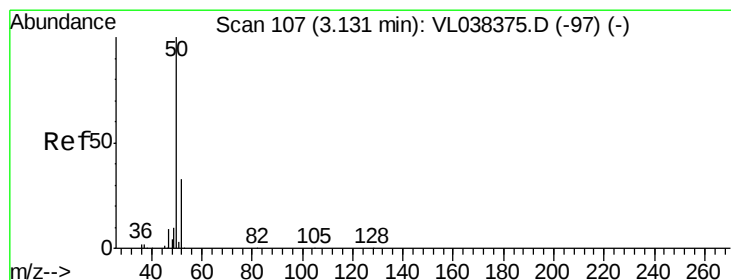
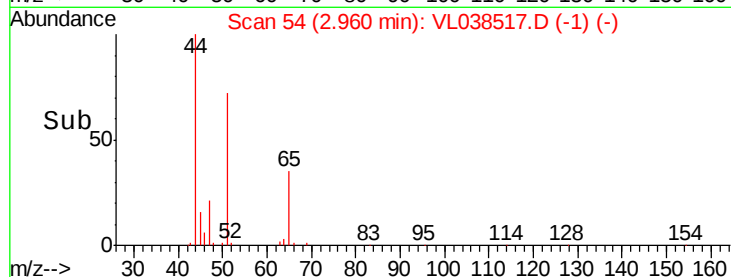
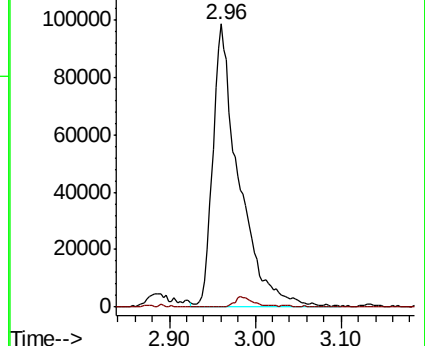
51 100

67 3.2 14.7 22.1#



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.720 ppbv

RT: 3.14 min Scan# 109

Delta R.T. 0.01 min

Lab File: VL038517.D

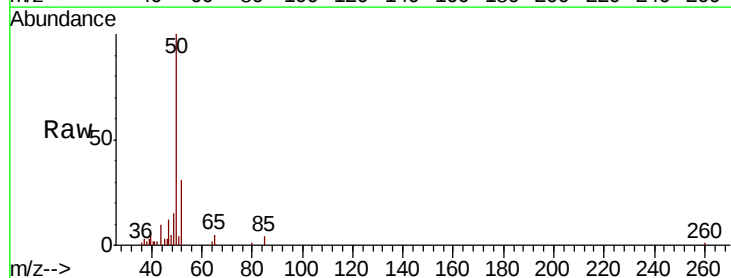
Acq: 3 Mar 2022 17:13

Tgt Ion: 50 Resp: 34673

Ion Ratio Lower Upper

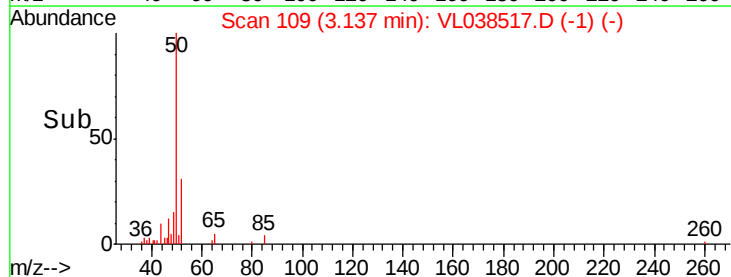
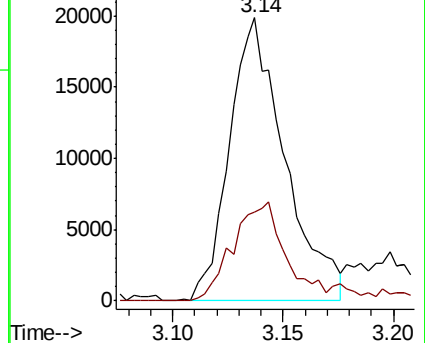
50 100

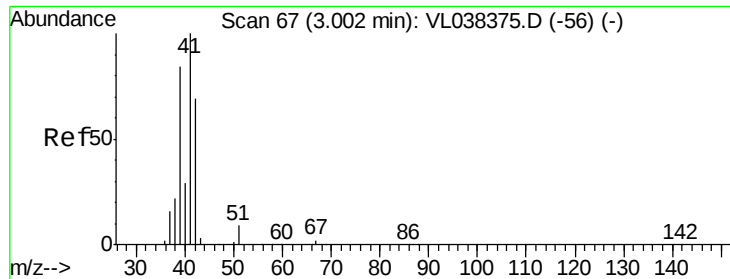
52 31.2 26.5 39.7



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#9

Propene

Concen: 1.338 ppbv

RT: 3.01 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

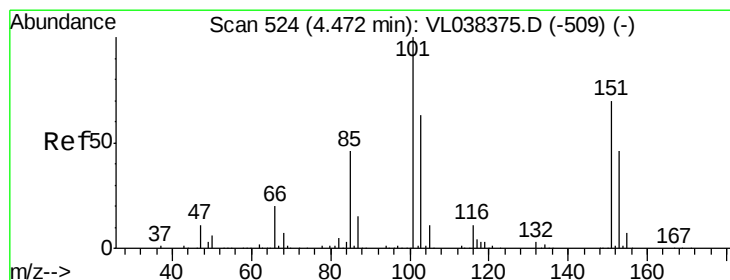
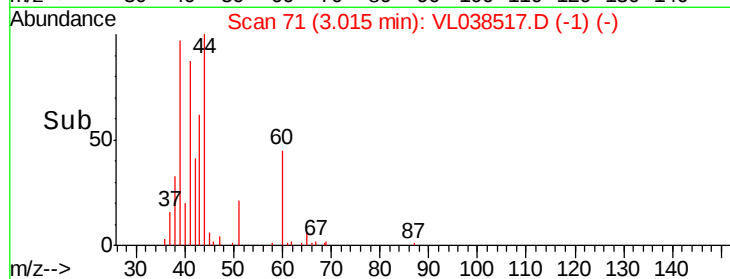
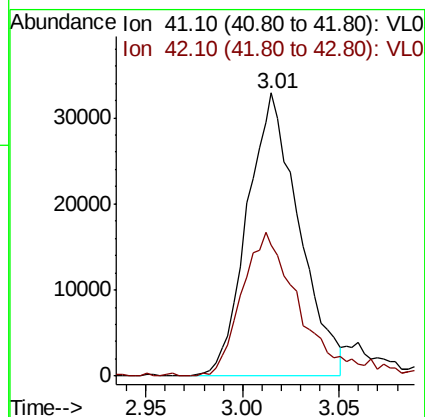
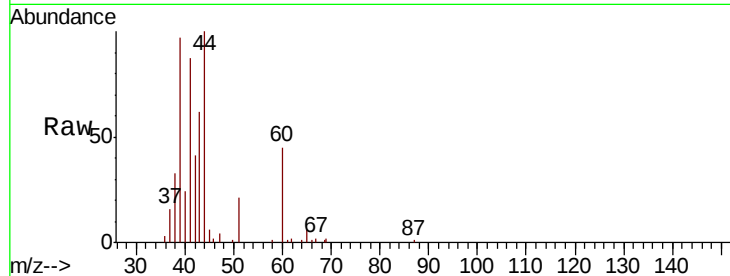
Acq: 3 Mar 2022 17:13

Tot Ion: 41 Resp: 61194

Ion Ratio Lower Upper

41 100

42 60.4 54.6 82.0



#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.037 ppbv

RT: 4.48 min Scan# 526

Delta R.T. 0.01 min

Lab File: VL038517.D

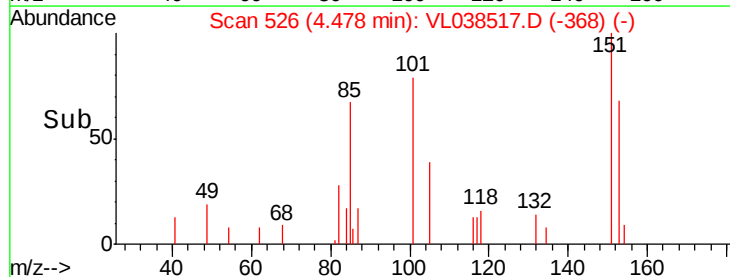
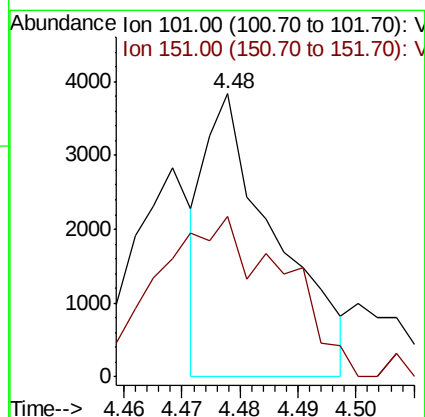
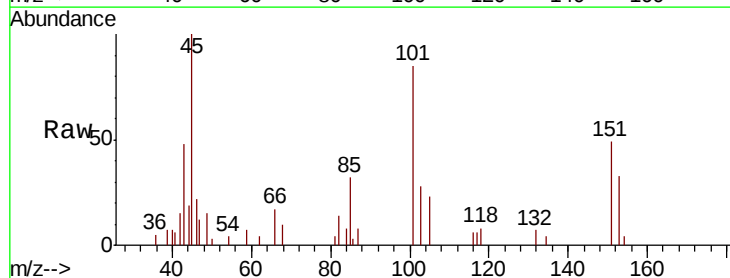
Acq: 3 Mar 2022 17:13

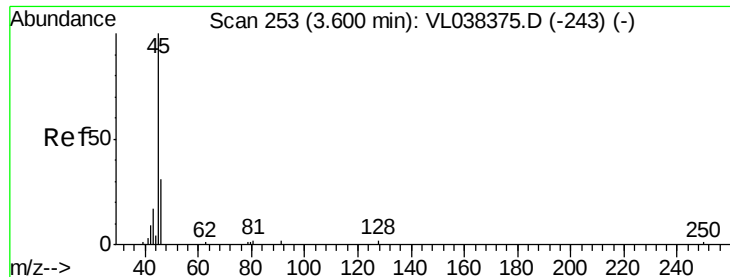
Tgt Ion: 101 Resp: 3252

Ion Ratio Lower Upper

101 100

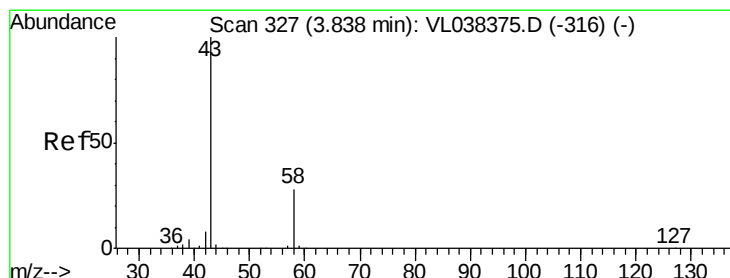
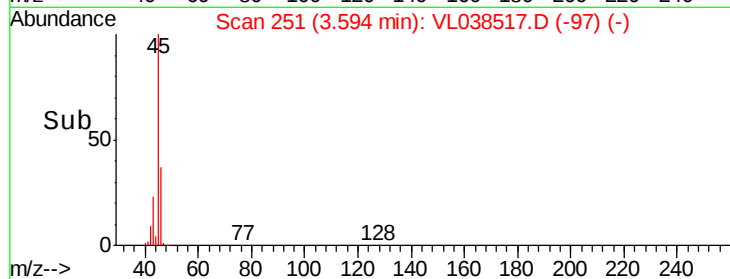
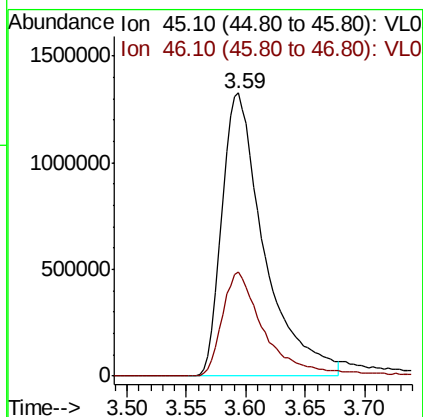
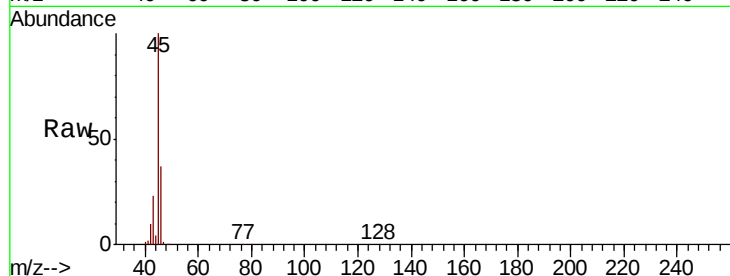
151 117.6 55.9 83.9#





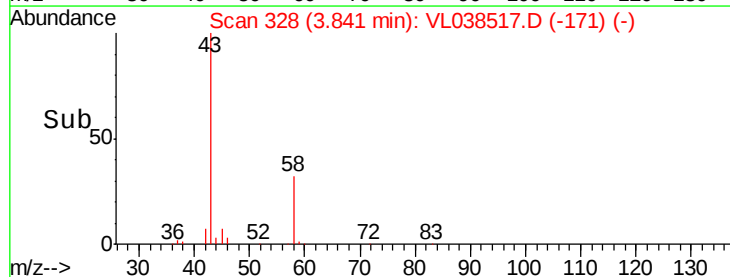
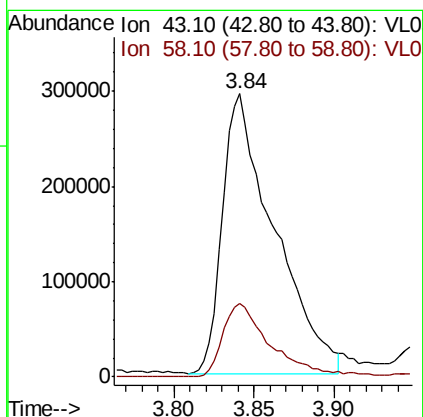
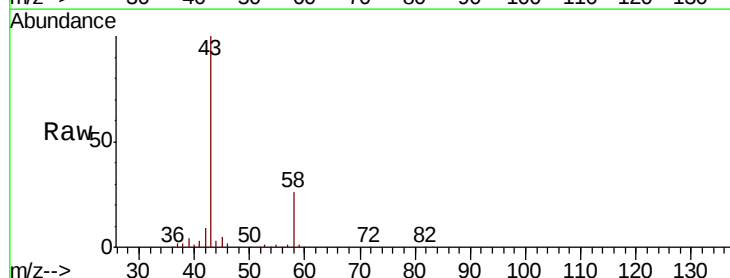
#13
 Ethanol
 Concen: 718.293 ppbv
 RT: 3.59
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 3 Mar 2022 17:13

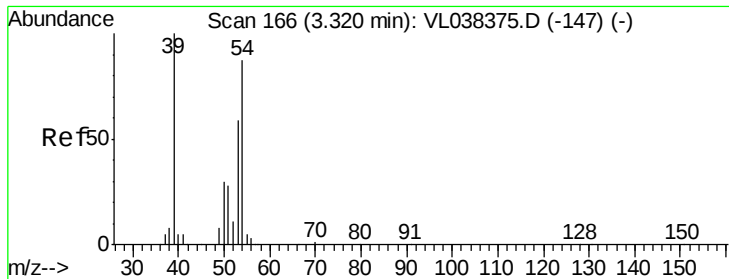
Tot Ion: 45 Resp: 3278611
 Ion Ratio Lower Upper
 45 100
 46 38.4 18.2 72.8



#15
 Acetone
 Concen: 9.763 ppbv
 RT: 3.84 min Scan# 328
 Delta R.T. 0.00 min
 Lab File: VL038517.D
 Acq: 3 Mar 2022 17:13

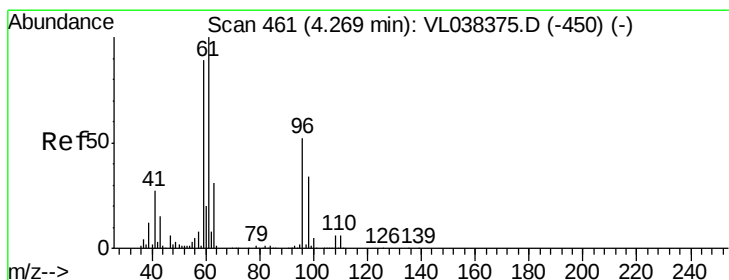
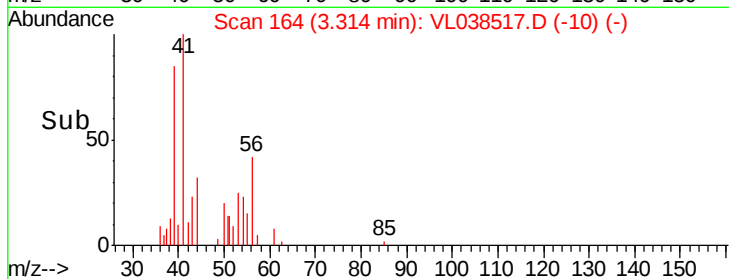
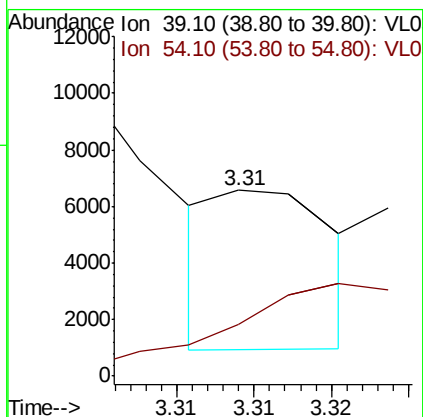
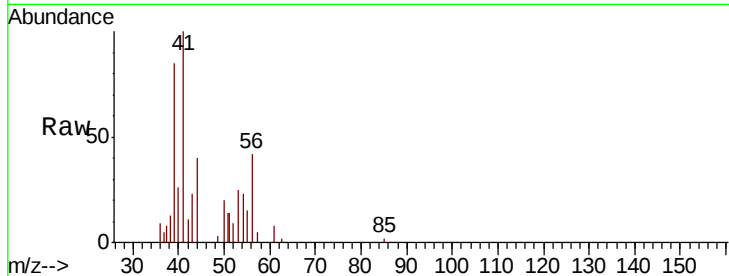
Tgt Ion: 43 Resp: 651307
 Ion Ratio Lower Upper
 43 100
 58 24.6 21.7 32.5





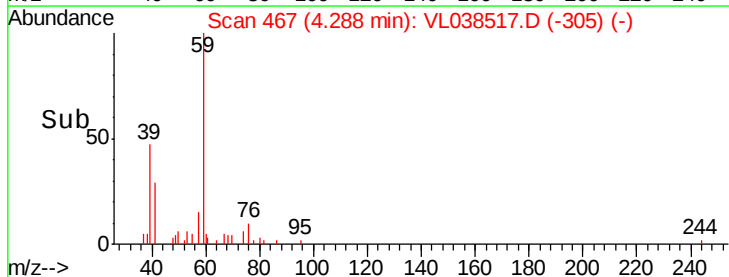
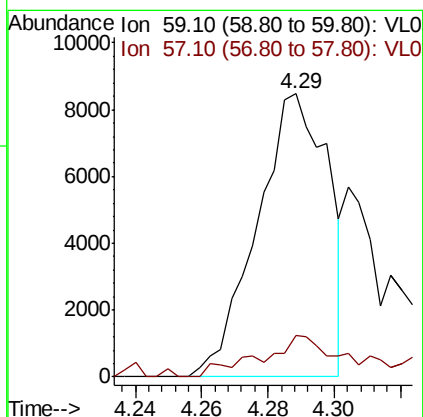
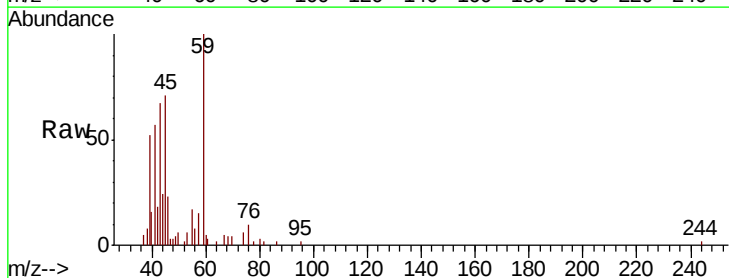
#16
1,3-Butadiene
Concen: 0.066 ppbv
RT: 3.31 Instrument: MSVOA_L
Delta R.T. ClientSampleId:
Lab File:
Acq: 3 Mar 2022 17:13

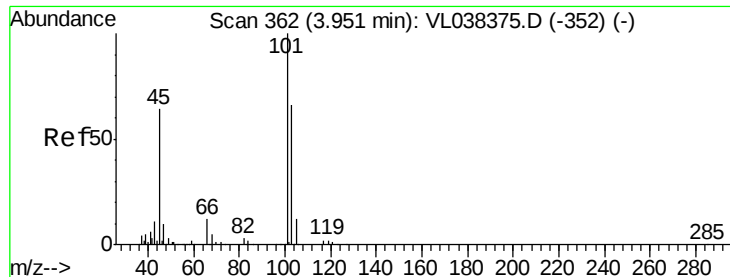
Tot Ion: 39 Resp: 2936
Ion Ratio Lower Upper
39 100
54 284.3 60.3 90.5#



#17
tert-Butyl alcohol
Concen: 0.190 ppbv
RT: 4.29 min Scan# 467
Delta R.T. 0.02 min
Lab File: VL038517.D
Acq: 3 Mar 2022 17:13

Tgt Ion: 59 Resp: 12657
Ion Ratio Lower Upper
59 100
57 21.0 8.4 12.6#





#19

Isopropyl Alcohol

Concen: 8.262 ppbv

RT: 3.96 Instrument:

Delta R.T. MSVOA.L

Lab File: ClientSampleId:

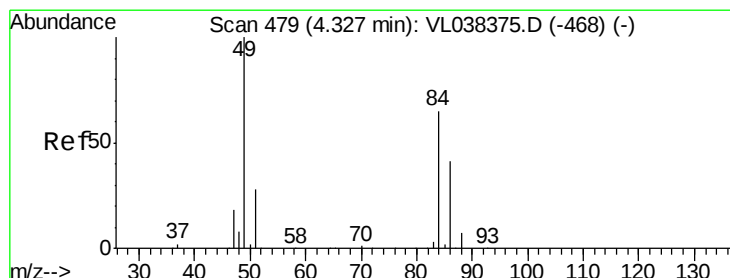
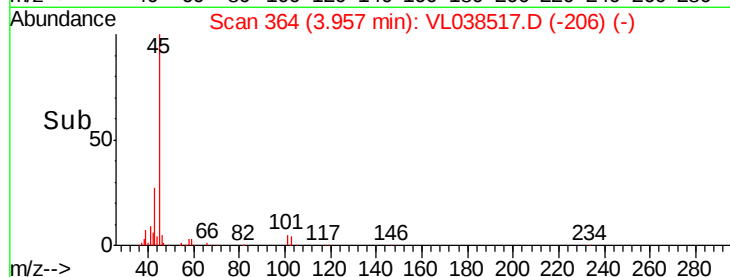
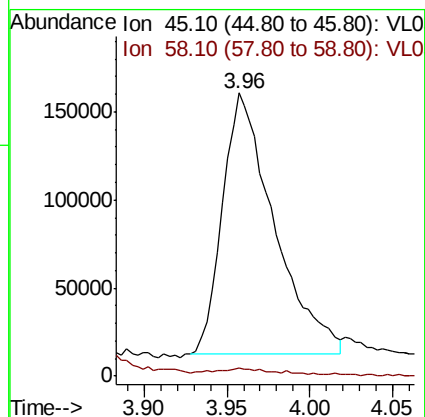
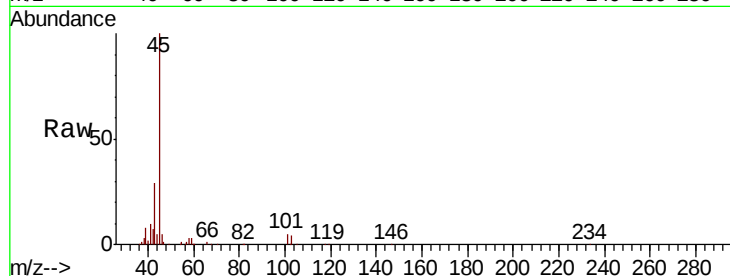
Acq: 3 Mar 2022 17:13

Tot Ion: 45 Resp: 319182

Ion Ratio Lower Upper

45 100

58 4.1 1.8 2.8#



#20

Methylene Chloride

Concen: 0.983 ppbv

RT: 4.33 min Scan# 481

Delta R.T. 0.01 min

Lab File: VL038517.D

Acq: 3 Mar 2022 17:13

Tgt Ion: 84 Resp: 32487

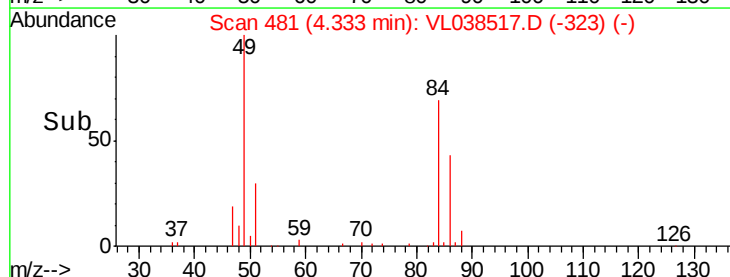
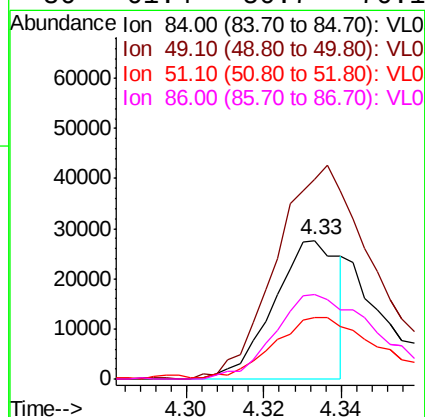
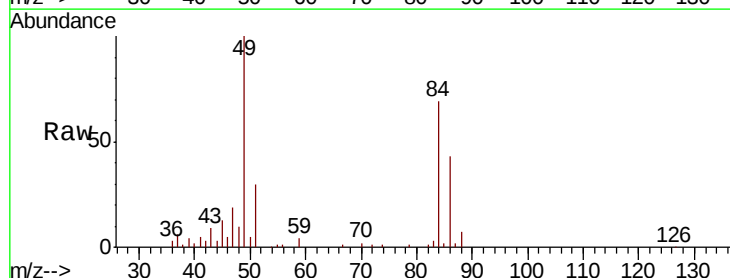
Ion Ratio Lower Upper

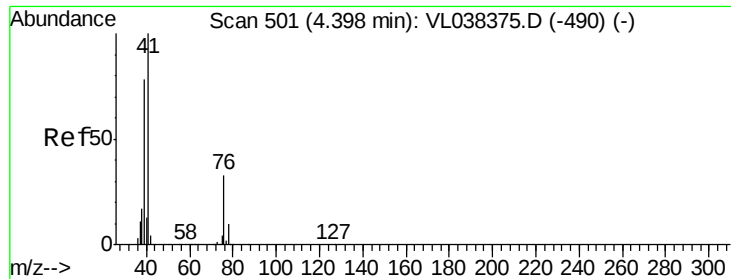
84 100

49 144.4 122.4 183.6

51 42.8 33.3 49.9

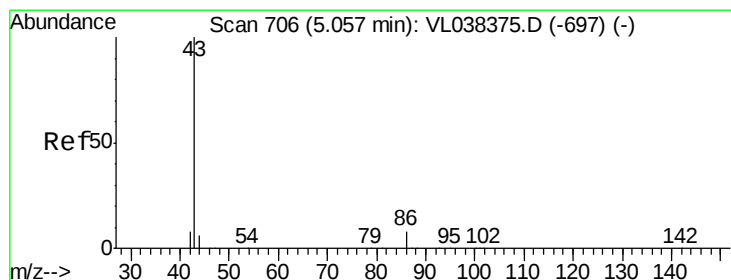
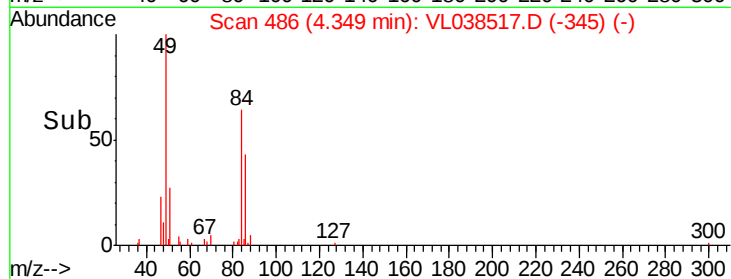
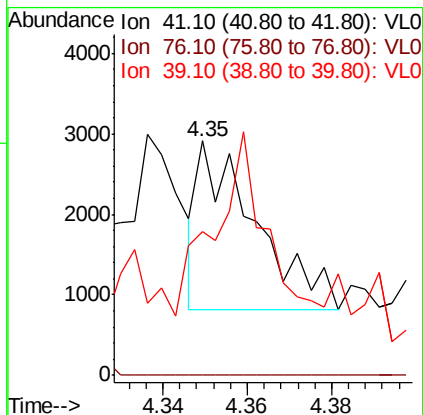
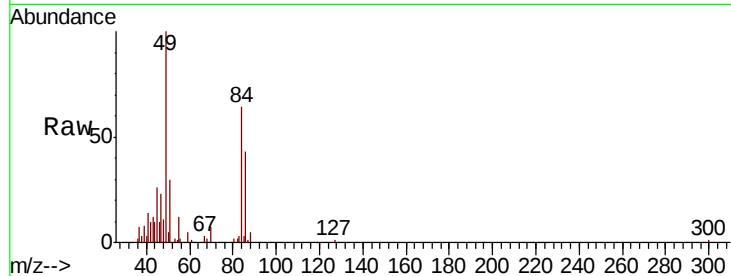
86 61.4 50.7 76.1





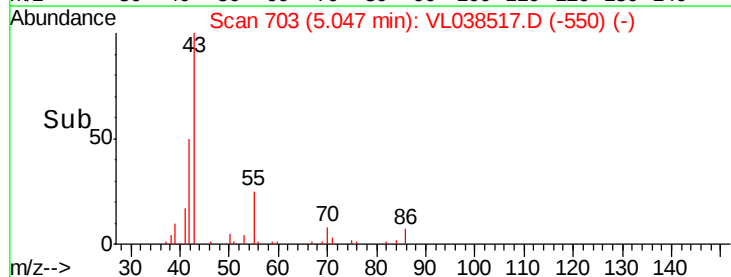
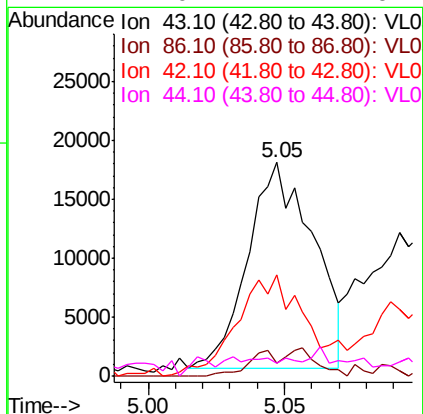
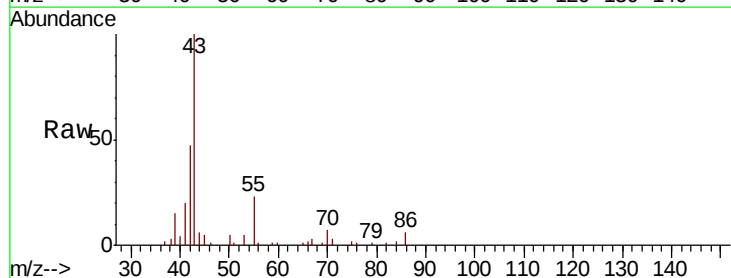
#21
 Allvl Chloride
 Concen: 0.035 ppbv
 RT: 4.35
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 3 Mar 2022 17:13

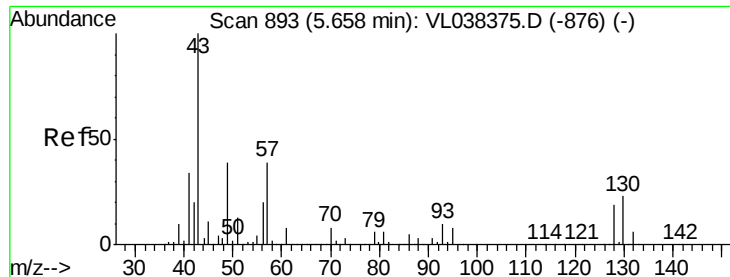
Tot Ion	Ratio	Lower	Upper
41	100		
76	0.0	25.4	38.0#
39	239.8	63.0	94.6#



#23
 Vinyl Acetate
 Concen: 0.331 ppbv
 RT: 5.05 min Scan# 703
 Delta R.T. -0.01 min
 Lab File: VL038517.D
 Acq: 3 Mar 2022 17:13

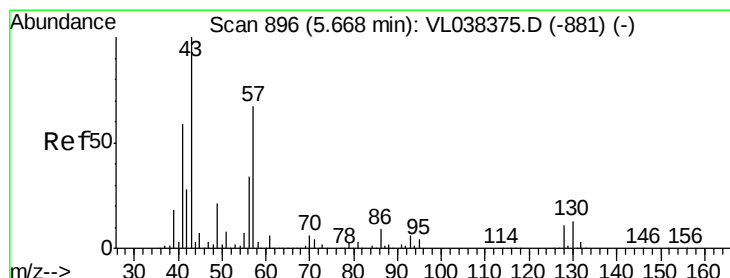
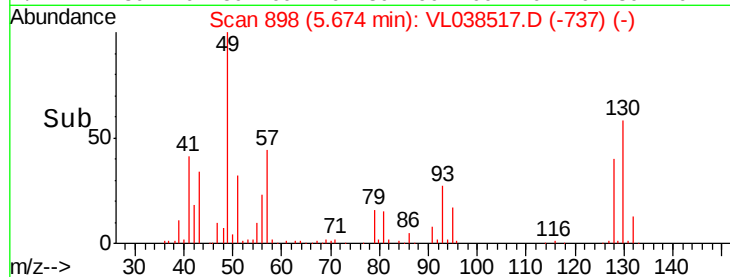
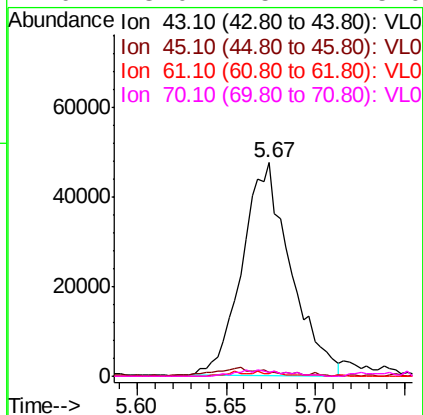
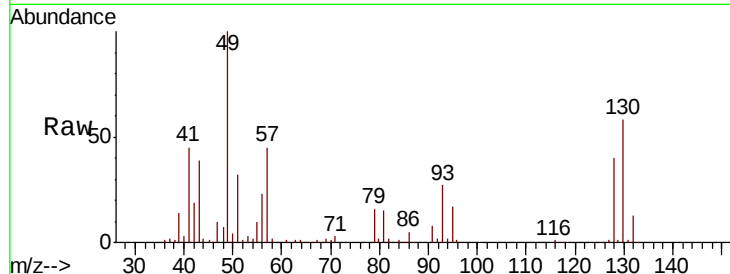
Tgt Ion	Ratio	Lower	Upper
43	100		
86	6.2	5.8	8.6
42	43.8	7.4	11.0#
44	2.0	4.2	6.2#





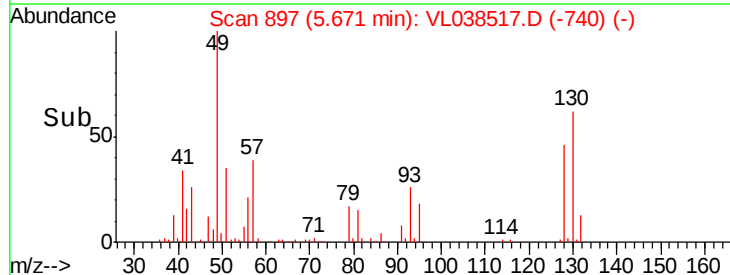
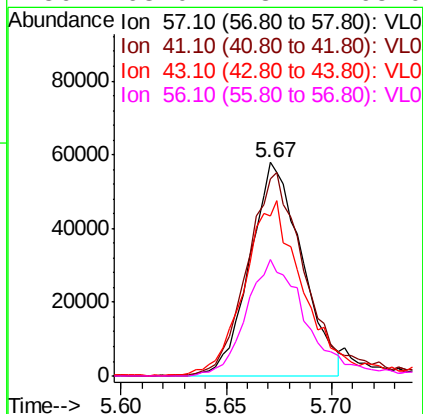
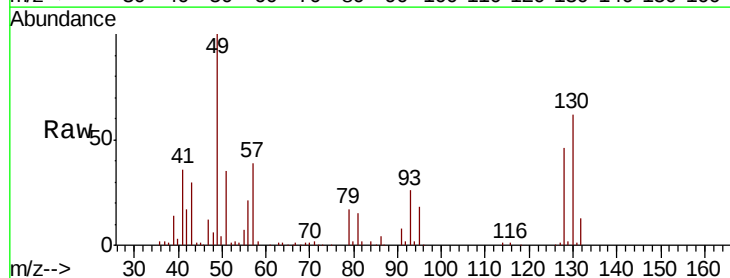
#25
Ethyl Acetate
Concen: 0.502 ppbv
RT: 5.67 min
Delta R.T. MSVOA_L
Lab File: ClientSampleId:
Acq: 3 Mar 2022 17:13

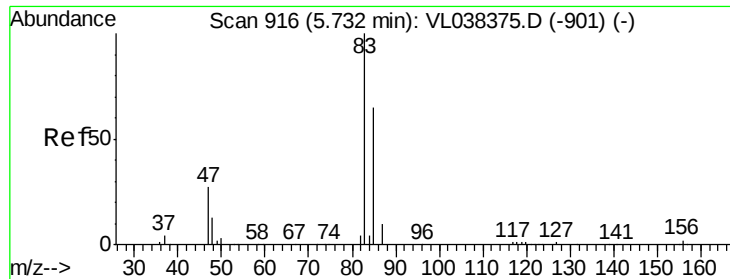
Tot Ion:	43	Resp:	89946
Ion	Ratio	Lower	Upper
43	100		
45	5.0	7.8	11.6#
61	2.2	7.5	11.3#
70	3.0	5.4	8.0#



#26
Hexane
Concen: 1.226 ppbv
RT: 5.67 min Scan# 897
Delta R.T. 0.00 min
Lab File: VL038517.D
Acq: 3 Mar 2022 17:13

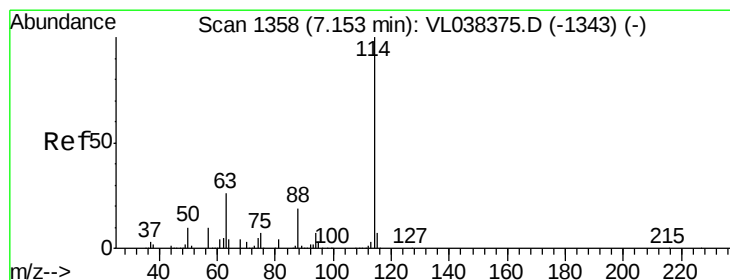
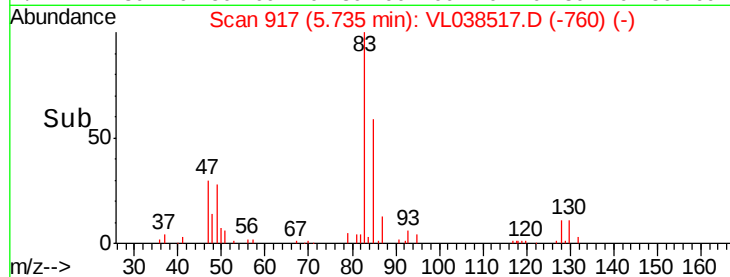
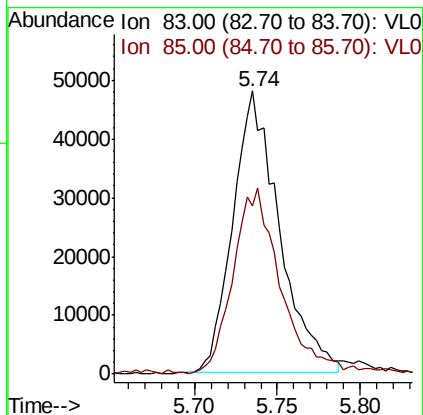
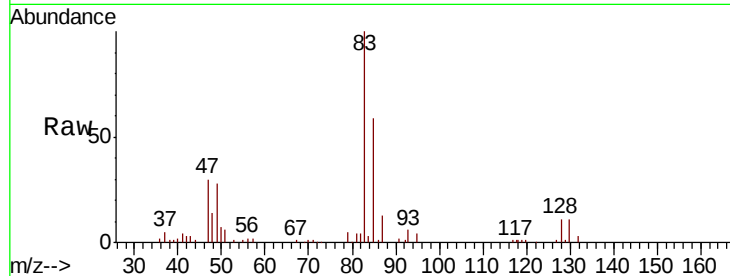
Tgt Ion:	57	Resp:	99530
Ion	Ratio	Lower	Upper
57	100		
41	111.4	73.1	109.7#
43	98.5	181.0	271.4#
56	63.0	43.4	65.0





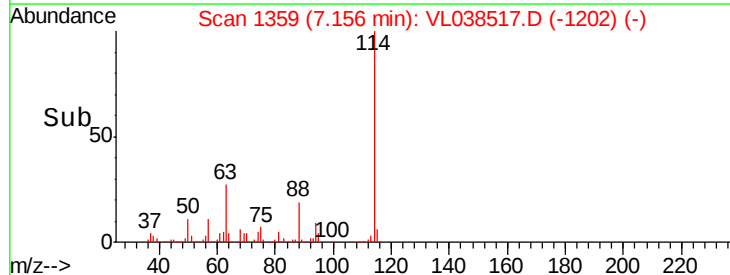
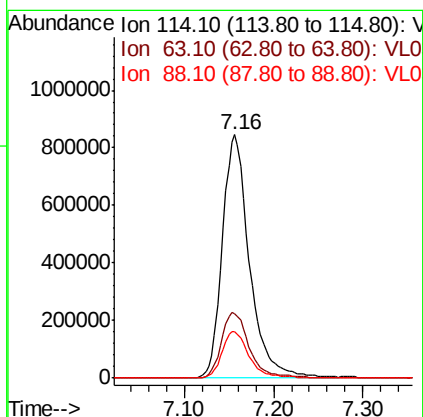
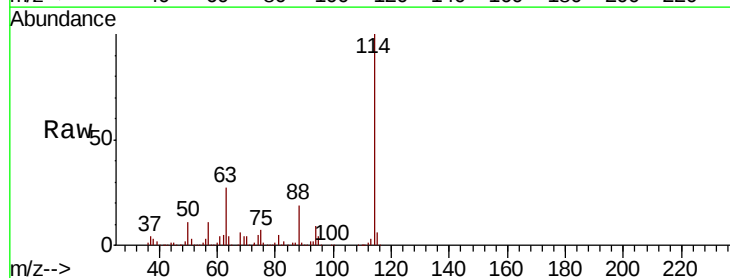
#29
Chloroform
Concen: 0.709 ppbv
RT: 5.74
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId :
Acq: 3 Mar 2022 17:13

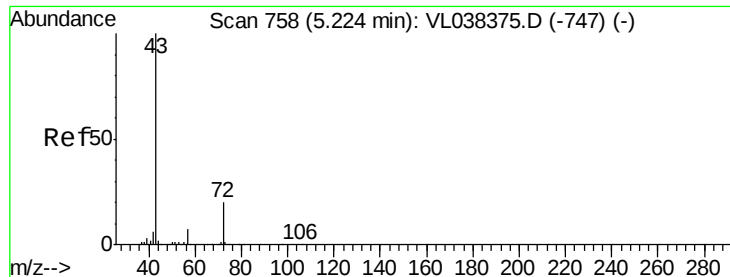
Tot Ion: 83 Resp: 93921
Ion Ratio Lower Upper
83 100
85 59.7 51.6 77.4



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.16 min Scan# 1359
Delta R.T. 0.00 min
Lab File: VL038517.D
Acq: 3 Mar 2022 17:13

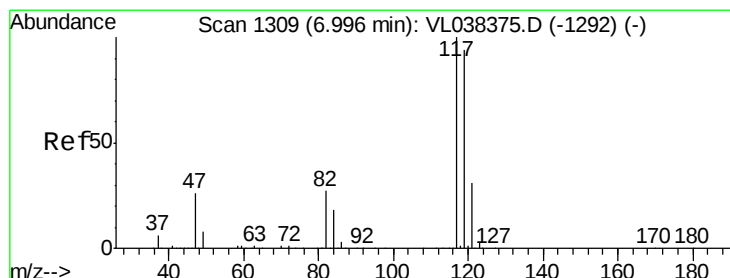
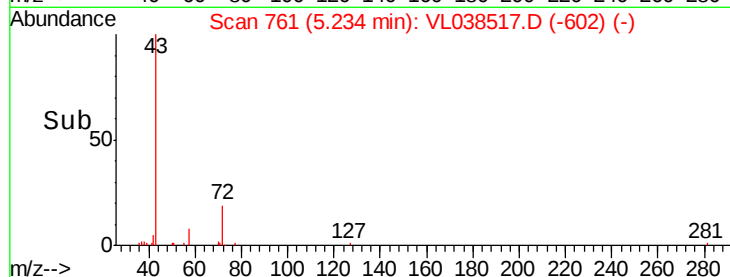
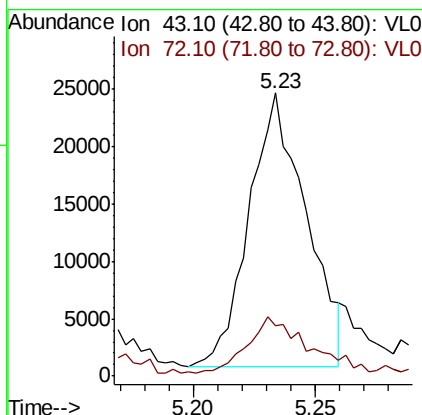
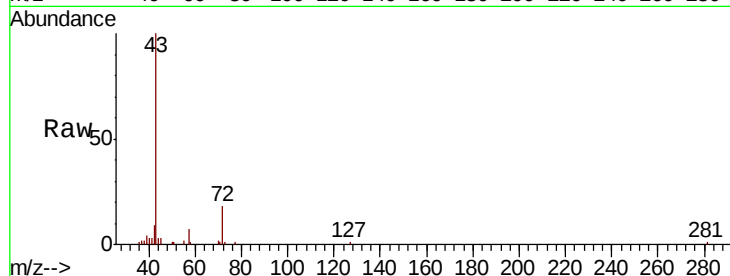
Tgt Ion: 114 Resp: 1787948
Ion Ratio Lower Upper
114 100
63 27.7 22.2 33.2
88 19.1 15.2 22.8





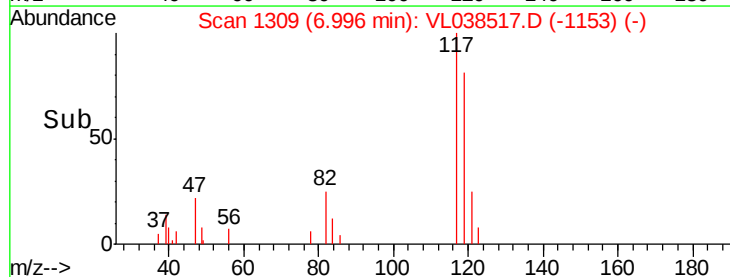
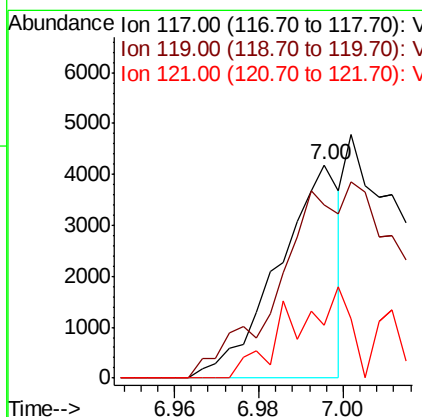
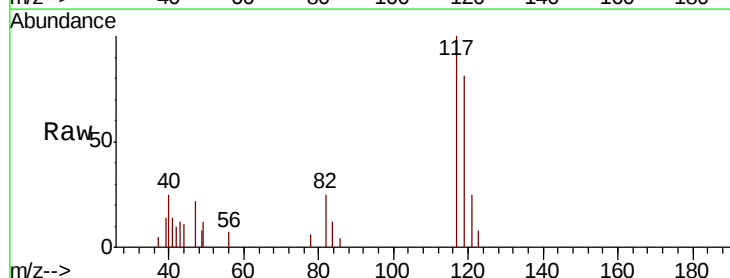
#34
2-Butanone
Concen: 0.691 ppbv
RT: 5.23
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 3 Mar 2022 17:13

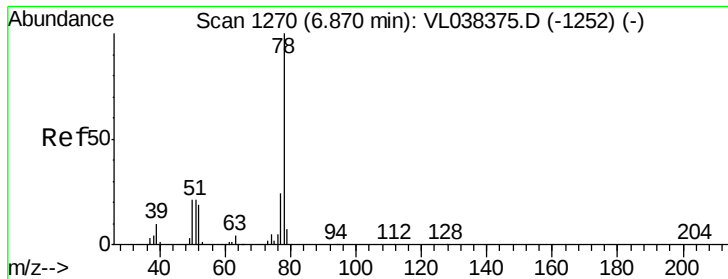
Tot Ion: 43 Resp: 38843
Ion Ratio Lower Upper
43 100
72 26.4 17.4 26.2#



#35
Carbon Tetrachloride
Concen: 0.034 ppbv
RT: 7.00 min Scan# 1309
Delta R.T. 0.00 min
Lab File: VL038517.D
Acq: 3 Mar 2022 17:13

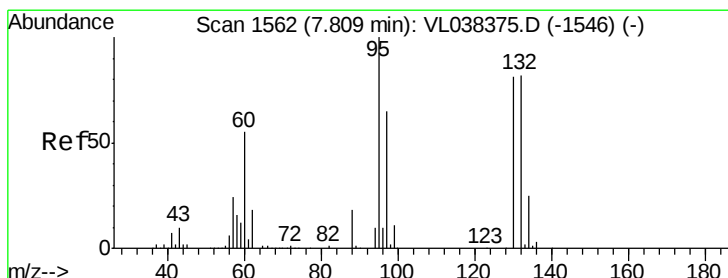
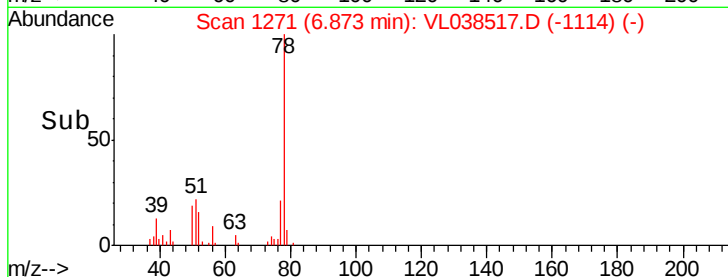
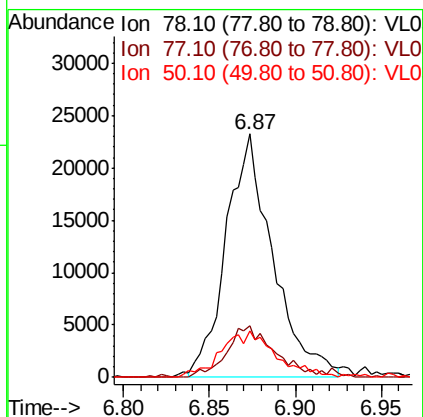
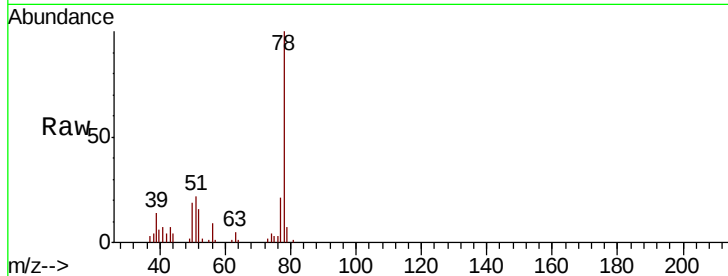
Tgt Ion: 117 Resp: 4249
Ion Ratio Lower Upper
117 100
119 81.2 74.9 112.3
121 24.5 24.8 37.2#





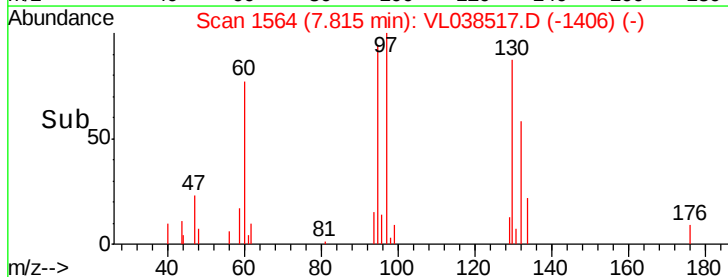
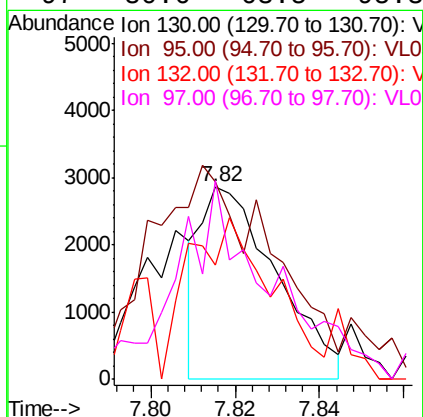
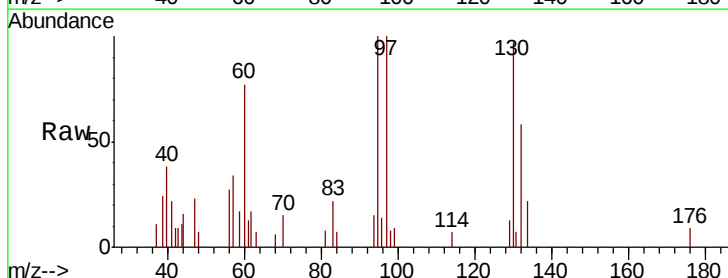
#36
Benzene
Concen: 0.279 ppbv
RT: 6.87 min
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 3 Mar 2022 17:13

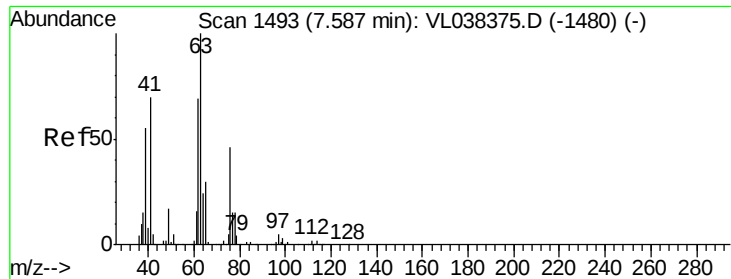
Tot Ion	Ratio	Lower	Upper
78	100		
77	21.6	19.0	28.6
50	19.7	16.6	24.8



#38
Trichloroethene
Concen: 0.062 ppbv
RT: 7.82 min Scan# 1564
Delta R.T. 0.01 min
Lab File: VL038517.D
Acq: 3 Mar 2022 17:13

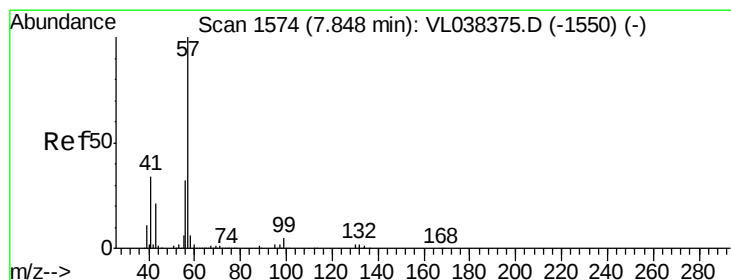
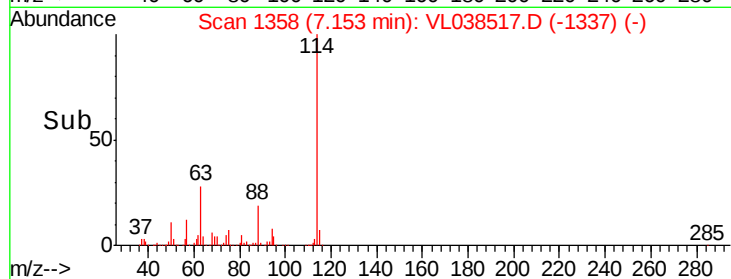
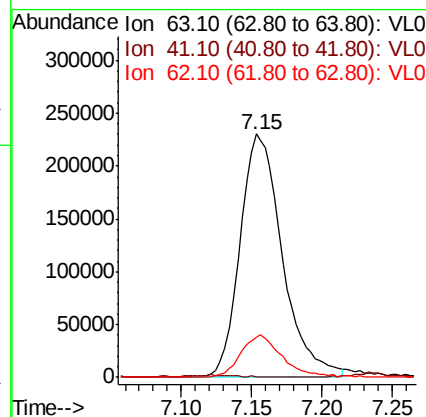
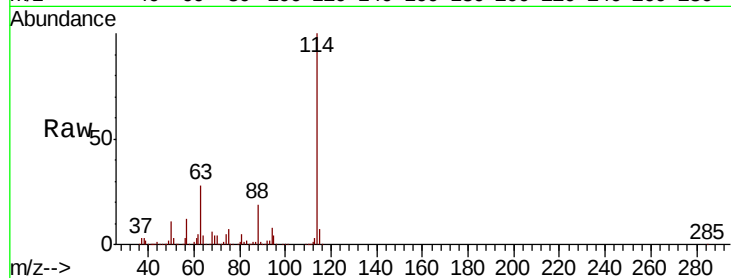
Tgt Ion	Ratio	Lower	Upper
130	100		
95	108.9	98.1	147.1
132	24.0	80.3	120.5
97	80.6	63.5	95.3





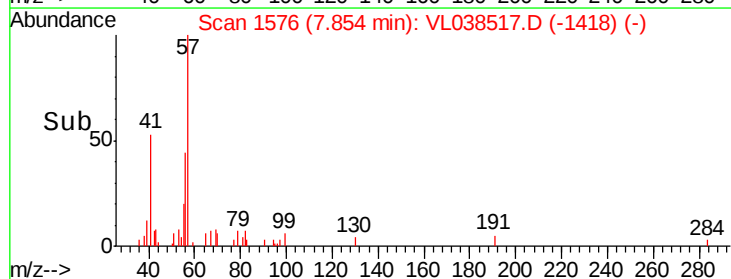
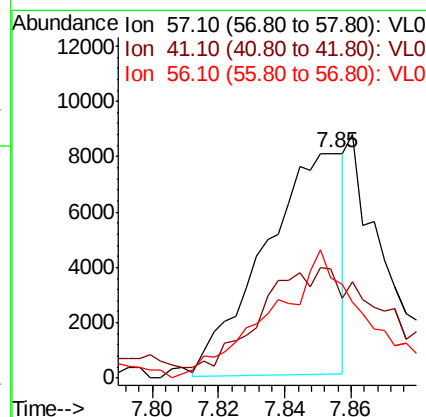
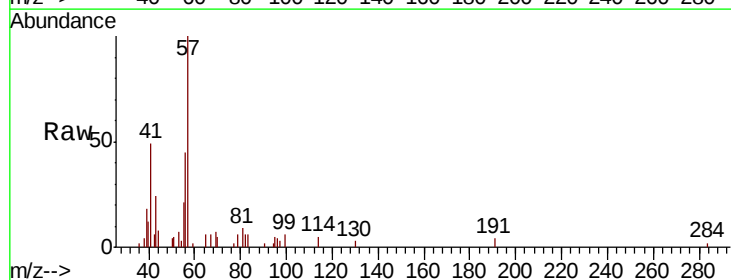
#39
 1,2-Dichloropropane
 Concen: 7.711 ppbv
 RT: 7.15 Instrument :
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 3 Mar 2022 17:13

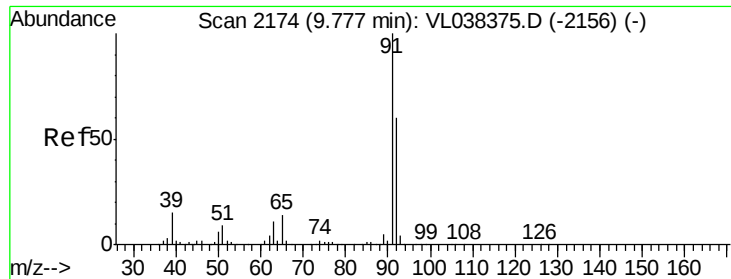
Tot Ion	Ratio	Lower	Upper
63	100		
41	0.0	56.1	84.1#
62	16.2	55.5	83.3#



#44
 2,2,4-Trimethylpentane
 Concen: 0.049 ppbv
 RT: 7.85 min Scan# 1576
 Delta R.T. 0.01 min
 Lab File: VL038517.D
 Acq: 3 Mar 2022 17:13

Tgt Ion	Ratio	Lower	Upper
57	100		
41	107.3	26.6	39.8#
56	85.0	25.0	37.6#





#53

Toluene

Concen: 0.581 ppbv

RT: 9.78 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

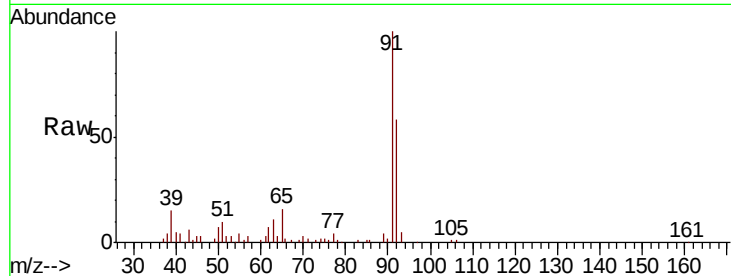
Acq: 3 Mar 2022 17:13

Tot Ion: 91 Resp: 99272

Ion Ratio Lower Upper

91 100

92 62.4 48.2 72.4



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0

9.78

50000

40000

30000

20000

10000

0

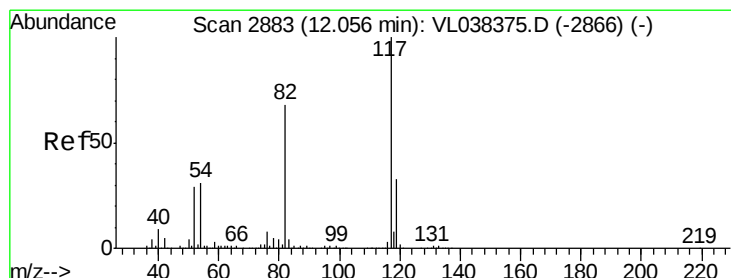
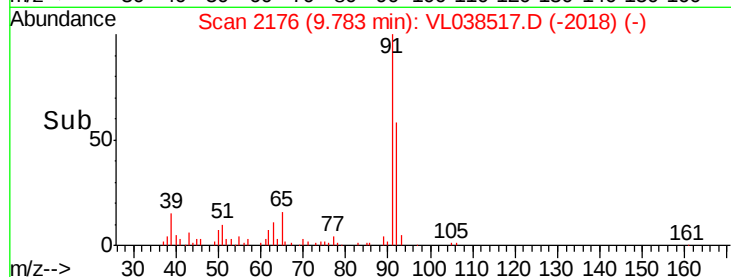
Time-->

9.70

9.75

9.80

9.85



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.06 min Scan# 2885

Delta R.T. 0.01 min

Lab File: VL038517.D

Acq: 3 Mar 2022 17:13

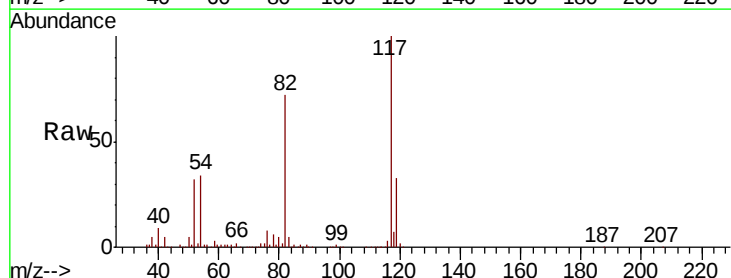
Tgt Ion: 117 Resp: 1529683

Ion Ratio Lower Upper

117 100

82 74.4 54.9 82.3

119 32.8 46.1 69.1#



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

12.06

800000

600000

400000

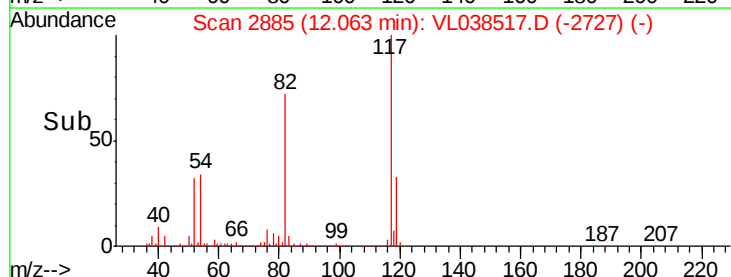
200000

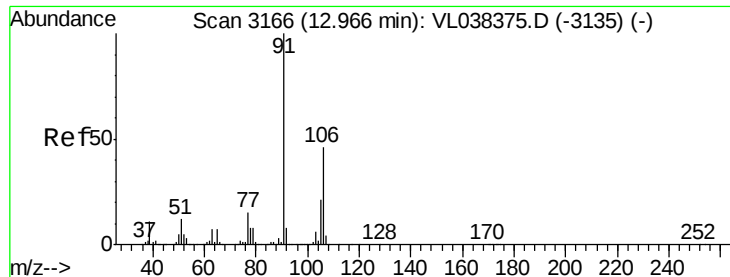
0

Time-->

12.00

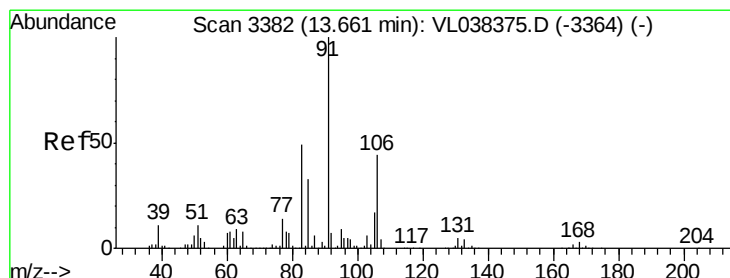
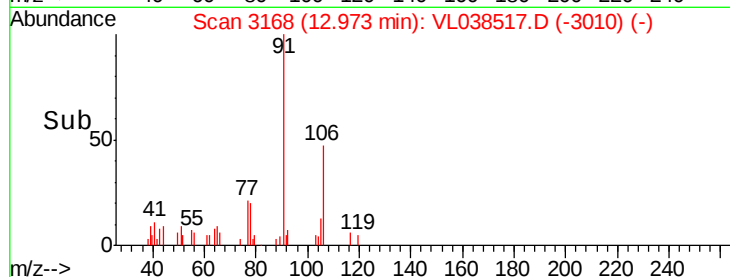
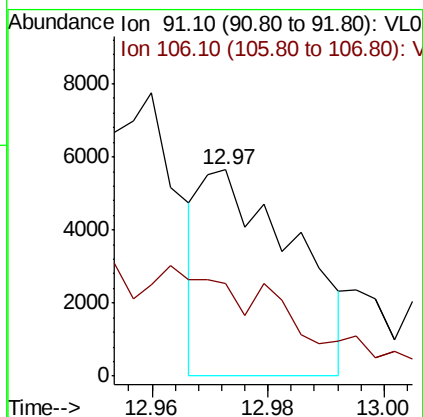
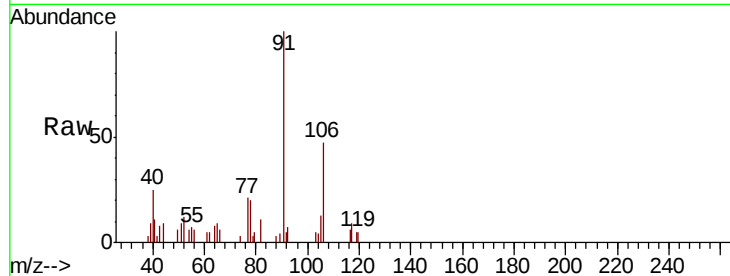
12.10





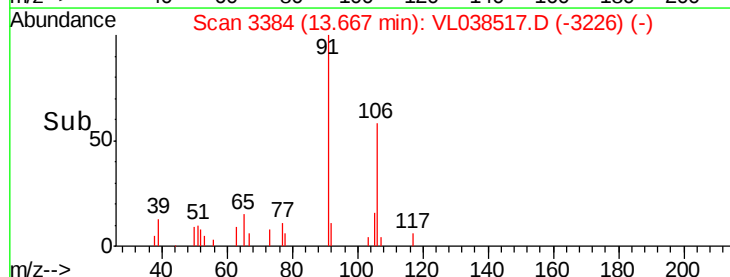
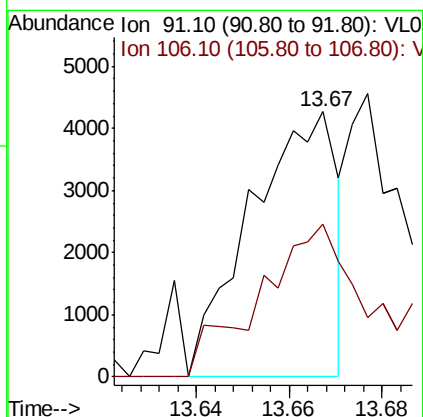
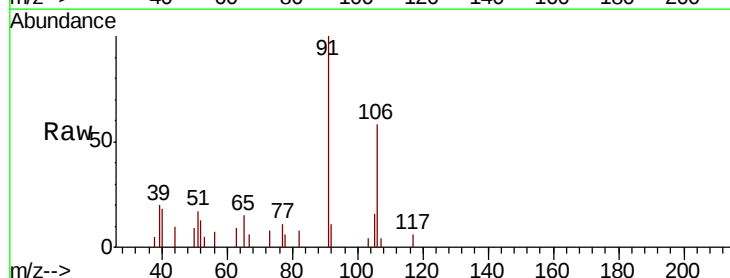
#59
m/p-Xylene
Concen: 0.035 ppbv
RT: 12.97 min
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 3 Mar 2022 17:13

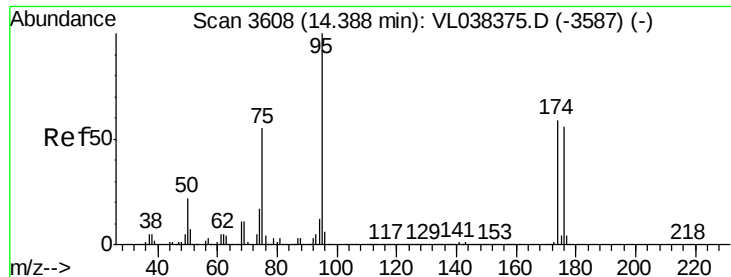
Tot Ion: 91 Resp: 6290
Ion Ratio Lower Upper
91 100
106 0.0 34.4 51.6#



#60
o-Xylene
Concen: 0.032 ppbv
RT: 13.67 min Scan# 3384
Delta R.T. 0.01 min
Lab File: VL038517.D
Acq: 3 Mar 2022 17:13

Tgt Ion: 91 Resp: 5498
Ion Ratio Lower Upper
91 100
106 91.7 21.9 65.5#





#68

1-Bromo-4-Fluorobenzene

Concen: 10.124 ppbv

RT: 14.39

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 3 Mar 2022 17:15

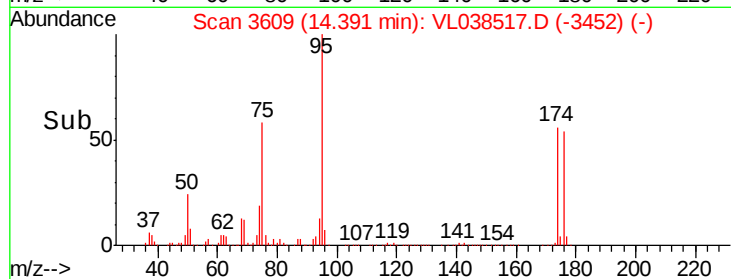
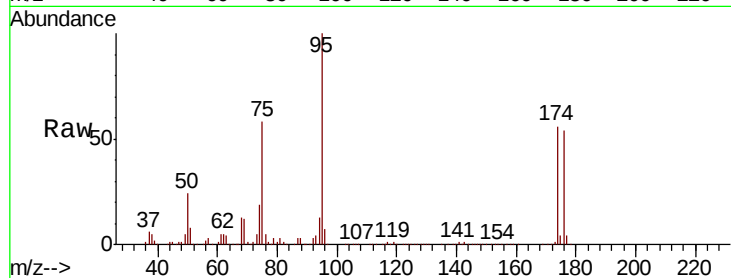
Tot Ion: 95 Resp: 1281390

Ion Ratio Lower Upper

95 100

174 60.5 49.0 73.4

175 4.4 3.6 5.4



Abundance Ion 95.10 (94.80 to 95.80): VL0

Ion 174.00 (173.70 to 174.70): V

Ion 175.00 (174.70 to 175.70): V

