

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL050922\
 Data File : VL038994.D
 Acq On : 9 May 2022 19:43
 Operator : SY/AP
 Sample : N2724-02DL 4X
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA1DL

Quant Time: May 10 05:44:54 2022
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL050522AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu May 05 10:12:15 2022
 QLast Update : Thu May 05 10:12:15 2022
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.65	49	1174819	10.00	ppbv	-0.02
33) 1,4-Difluorobenzene	7.15	114	2717658	10.00	ppbv	-0.02
55) Chlorobenzene-d5	12.05	117	2279757	10.00	ppbv	-0.02

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.38	95	1886178	10.45	ppbv	-0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	=	104.50%

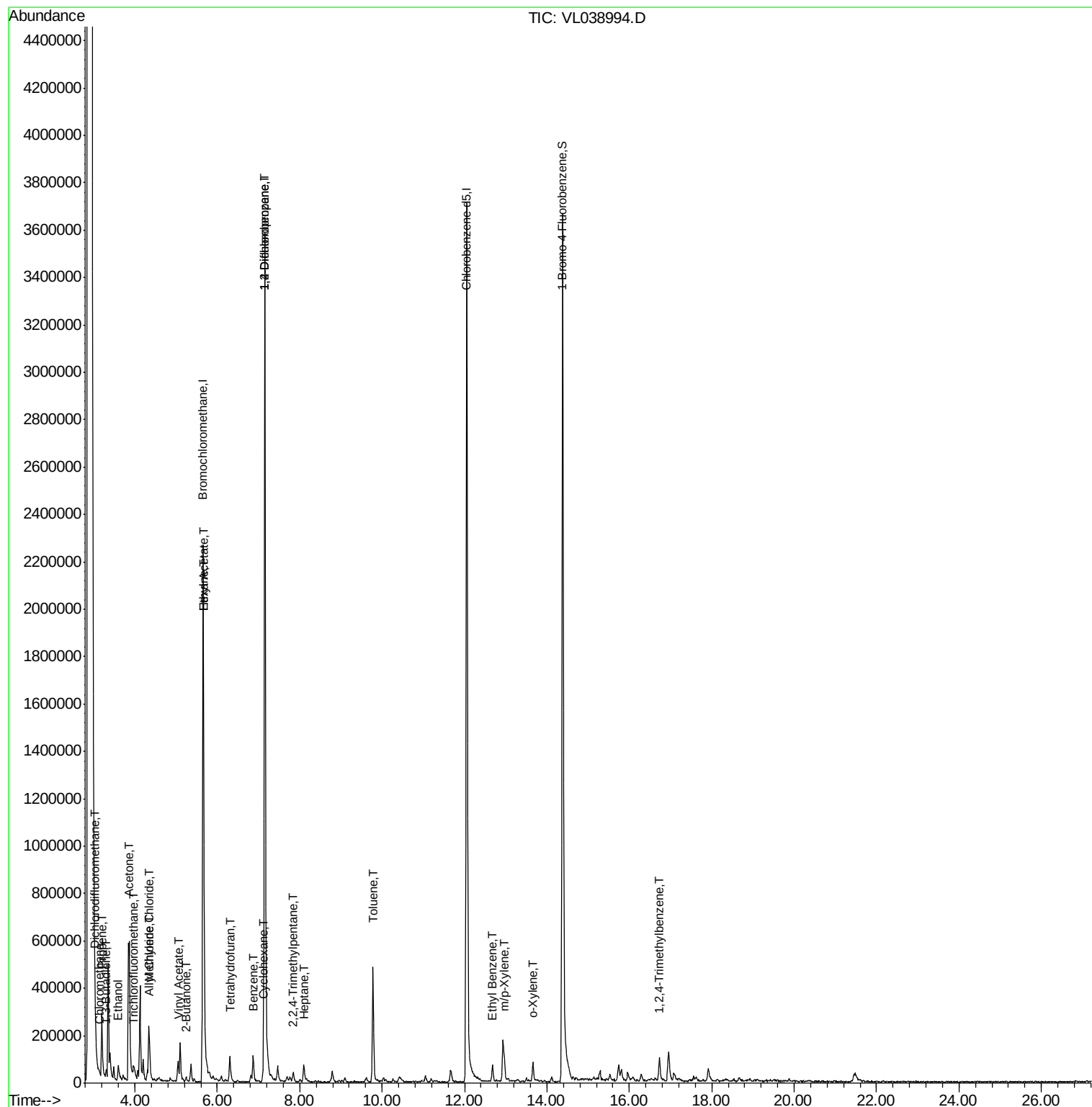
Target Compounds					Ovalue
2) Dichlorodifluoromethane	3.04	85	27280	0.148 ppbv	96
4) Chloromethane	3.13	50	4653	0.064 ppbv #	79
9) Propene	3.20	41	80754	1.268 ppbv	98
10) Heptane	8.10	43	28808	0.184 ppbv #	83
11) Trichlorofluoromethane	3.94	101	8258	0.052 ppbv	90
13) Ethanol	3.60	45	30197	6.703 ppbv #	31
15) Acetone	3.84	43	821332	7.411 ppbv	95
16) 1,3-Butadiene	3.30	39	10996	0.173 ppbv #	36
20) Methylene Chloride	4.34	84	75026	1.796 ppbv #	96
21) Allyl Chloride	4.36	41	11553	0.153 ppbv #	1
23) Vinyl Acetate	5.06	43	6132	0.070 ppbv #	53
25) Ethyl Acetate	5.67	43	124212	0.468 ppbv #	79
26) Hexane	5.67	57	176609	1.499 ppbv #	39
30) Cyclohexane	7.11	84	11978	0.121 ppbv #	10
34) 2-Butanone	5.24	43	19031	0.137 ppbv #	89
36) Benzene	6.87	78	88677	0.381 ppbv	96
39) 1,2-Dichloropropane	7.15	63	761587	8.416 ppbv #	26
41) Tetrahydrofuran	6.30	42	10197	0.109 ppbv #	37
44) 2,2,4-Trimethylpentane	7.84	57	15602	0.038 ppbv #	1
53) Toluene	9.78	91	367408	1.409 ppbv	99
58) Ethyl Benzene	12.67	91	27179	0.083 ppbv	92
59) m/p-Xylene	12.98	91	26614	0.095 ppbv #	33
60) o-Xylene	13.66	91	56173	0.213 ppbv	94
74) 1,2,4-Trimethylbenzene	16.73	105	38150	0.129 ppbv #	63

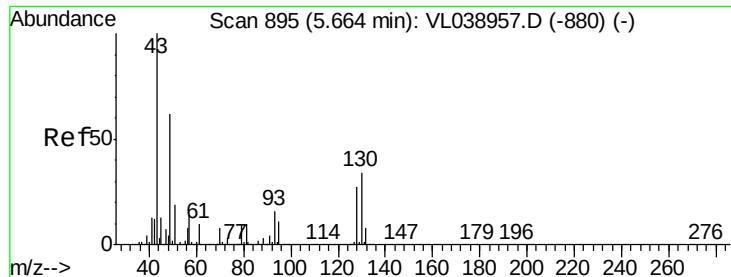
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.65 Instrument: MSVOA_1

Delta R.T. ClientSampleId:

Lab File: IA1DL

Acq: 9 May 2022 19:43

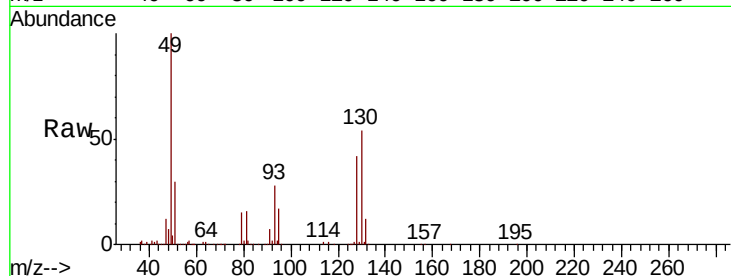
Tot Ion: 49 Resp: 1174819

Ion Ratio Lower Upper

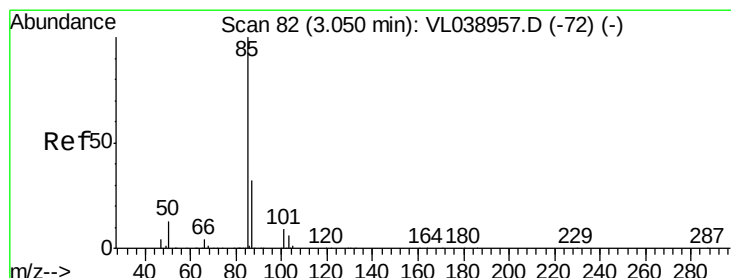
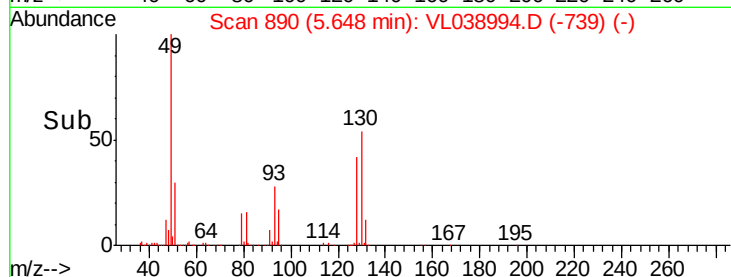
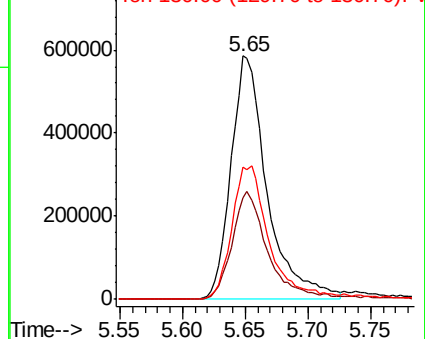
49 100

128 45.8 23.3 69.8

130 59.1 29.8 89.3



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: 0.148 ppbv

RT: 3.04 min Scan# 79

Delta R.T. -0.01 min

Lab File: VL038994.D

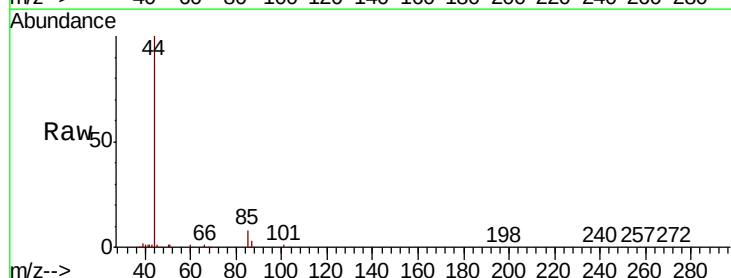
Acq: 9 May 2022 19:43

Tgt Ion: 85 Resp: 27280

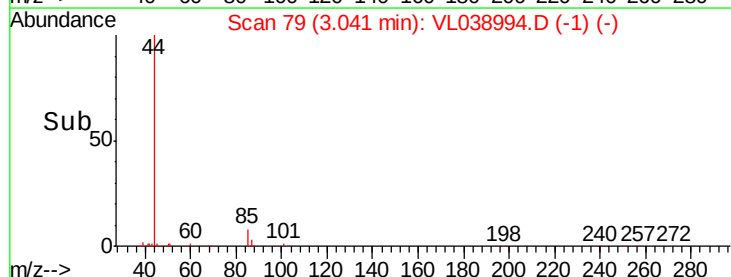
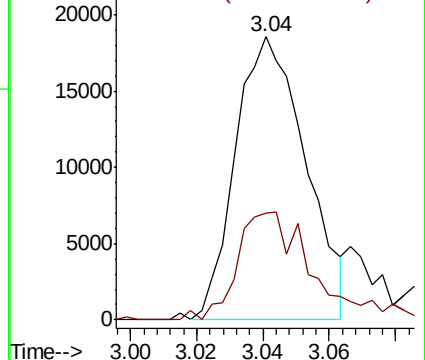
Ion Ratio Lower Upper

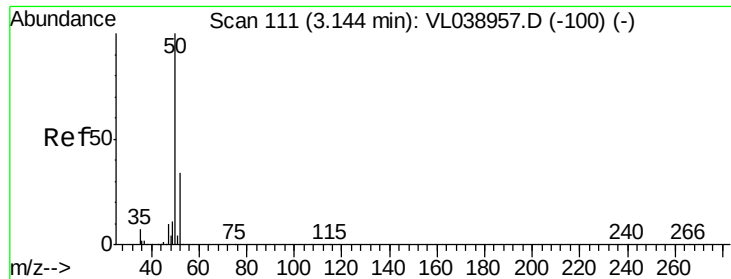
85 100

87 34.4 25.7 38.5



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





#4

Chloromethane

Concen: 0.064 ppbv

RT: 3.13 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

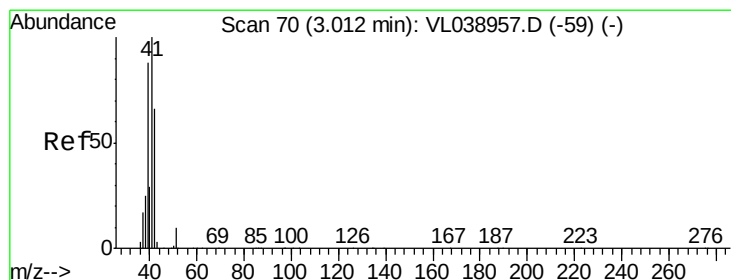
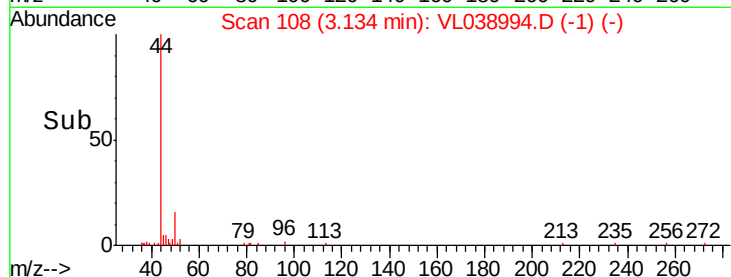
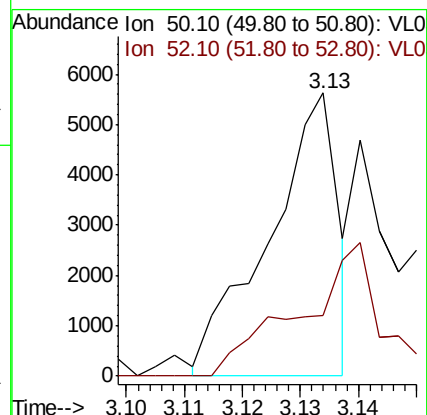
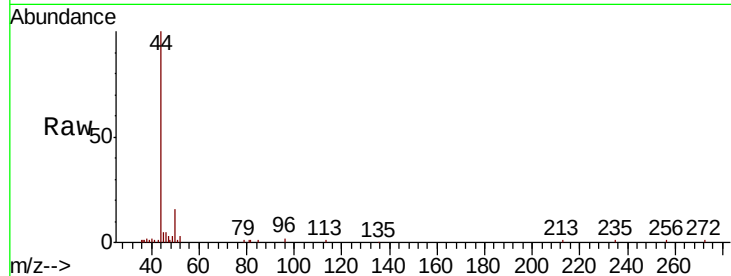
Acq: 9 May 2022 19:43

Tot Ion: 50 Resp: 4653

Ion Ratio Lower Upper

50 100

52 21.9 27.3 40.9#



#9

Propene

Concen: 1.268 ppbv

RT: 3.20 min Scan# 127

Delta R.T. 0.18 min

Lab File: VL038994.D

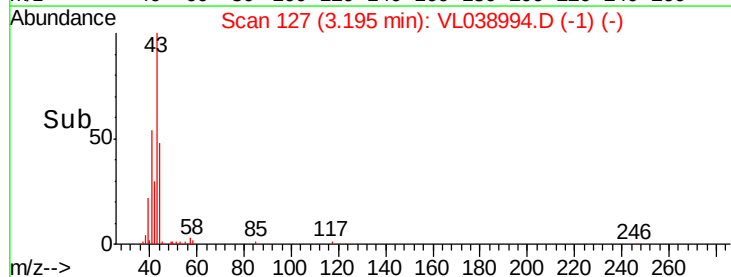
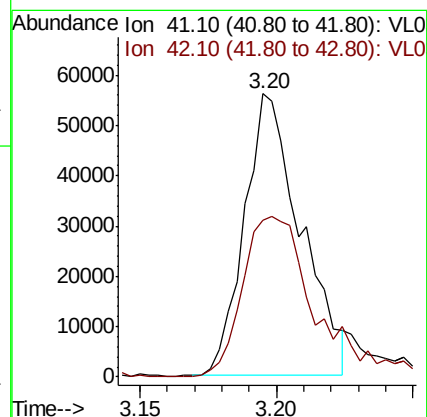
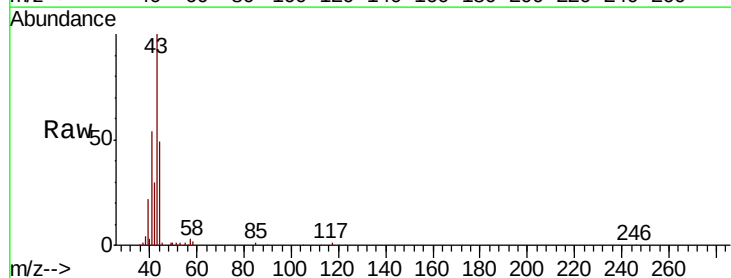
Acq: 9 May 2022 19:43

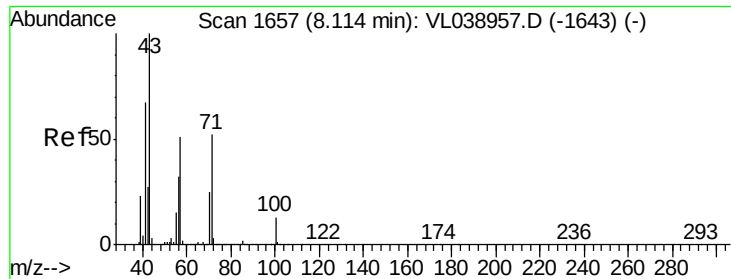
Tgt Ion: 41 Resp: 80754

Ion Ratio Lower Upper

41 100

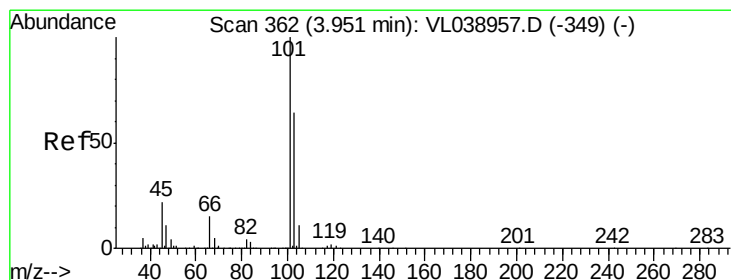
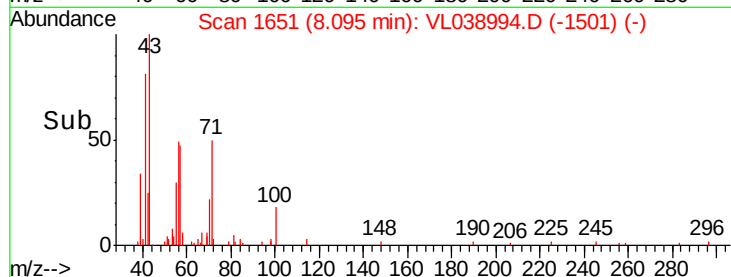
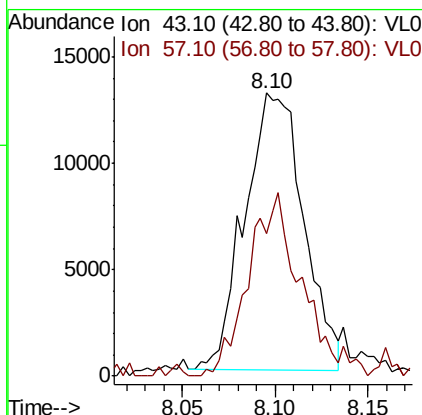
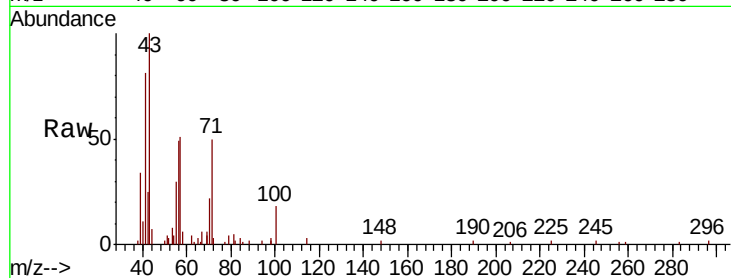
42 74.4 58.3 87.5





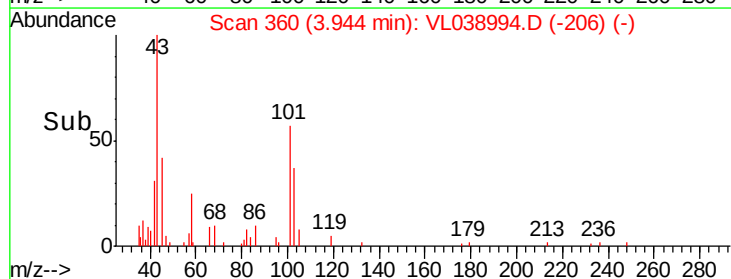
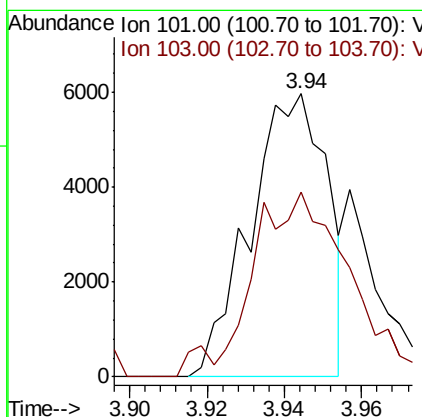
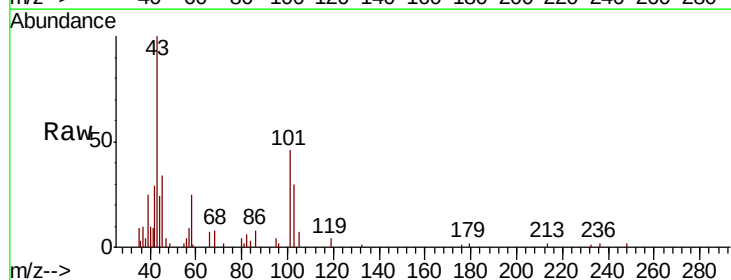
#10
 Heptane
 Concen: 0.184 ppbv
 RT: 8.10
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 9 May 2022 19:43

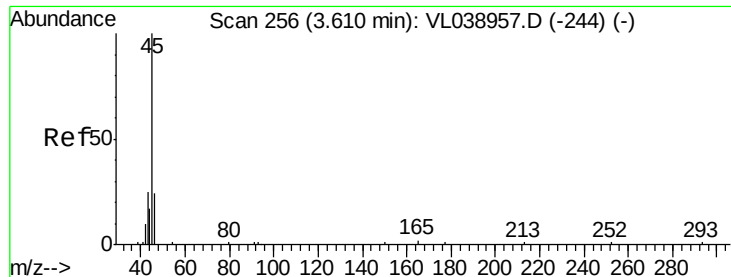
Tot Ion: 43 Resp: 28808
 Ion Ratio Lower Upper
 43 100
 57 62.0 40.5 60.7#



#11
 Trichlorofluoromethane
 Concen: 0.052 ppbv
 RT: 3.94 min Scan# 360
 Delta R.T. -0.01 min
 Lab File: VL038994.D
 Acq: 9 May 2022 19:43

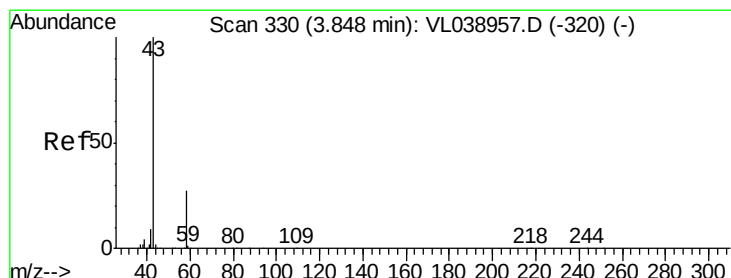
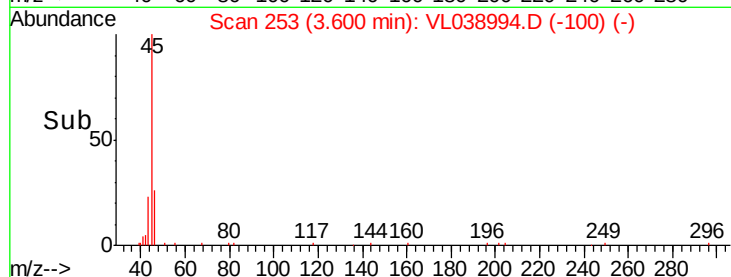
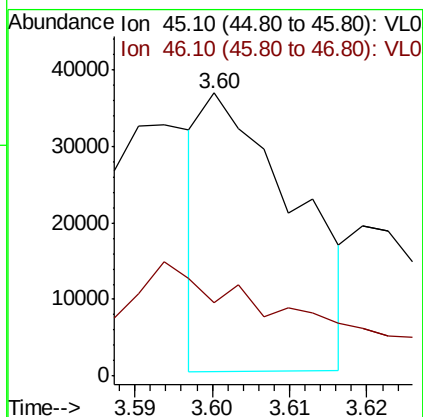
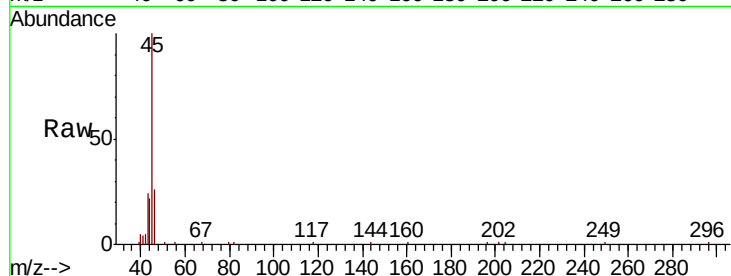
Tgt Ion: 101 Resp: 8258
 Ion Ratio Lower Upper
 101 100
 103 56.3 51.5 77.3





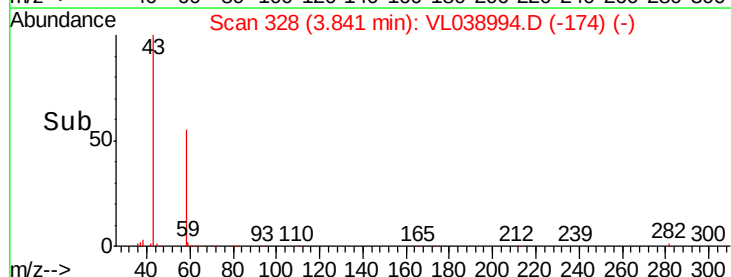
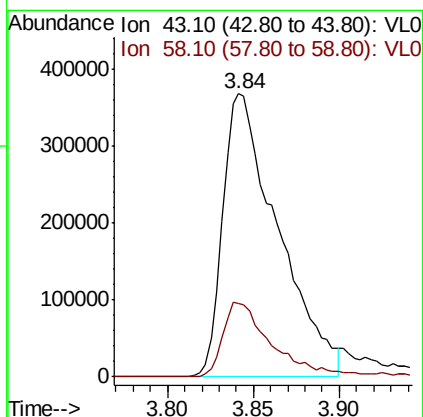
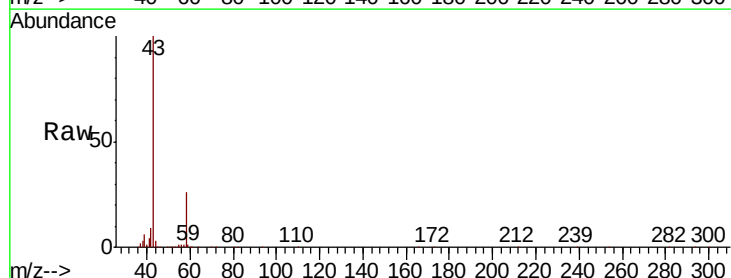
#13
Ethanol
Concen: 6.703 ppbv
RT: 3.60
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 9 May 2022 19:43

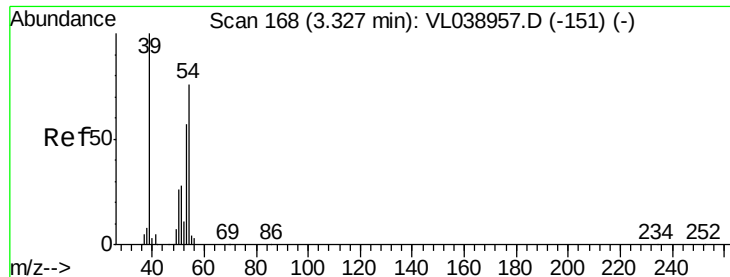
Tot Ion: 45 Resp: 30197
Ion Ratio Lower Upper
45 100
46 0.0 18.0 72.2#



#15
Acetone
Concen: 7.411 ppbv
RT: 3.84 min Scan# 328
Delta R.T. -0.01 min
Lab File: VL038994.D
Acq: 9 May 2022 19:43

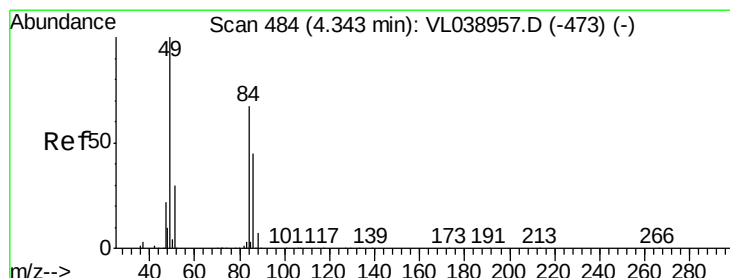
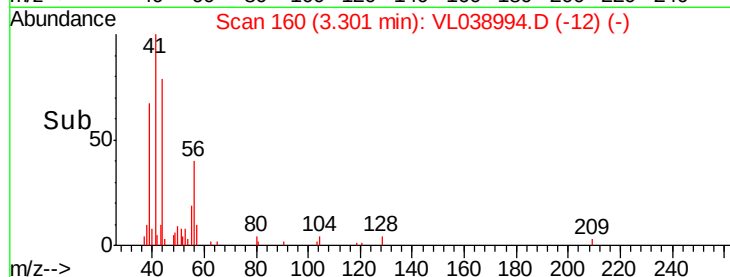
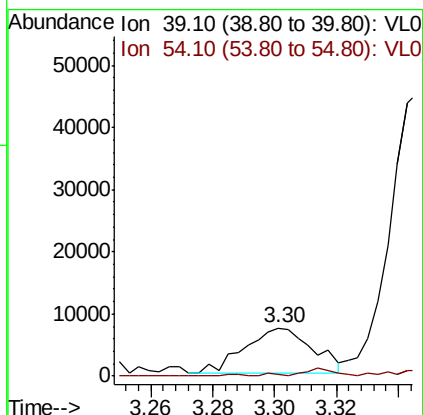
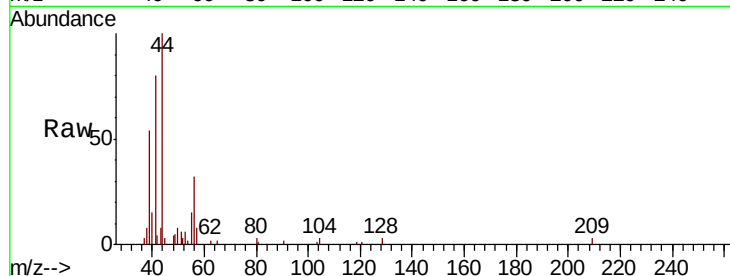
Tgt Ion: 43 Resp: 821332
Ion Ratio Lower Upper
43 100
58 24.3 21.3 31.9





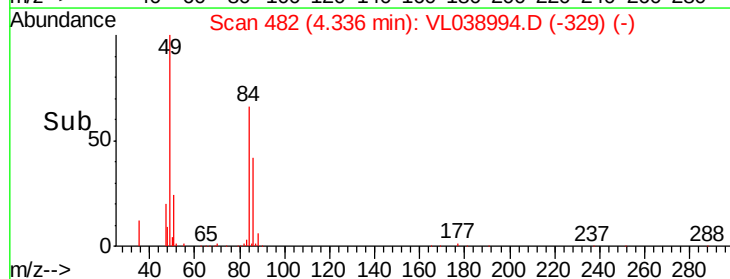
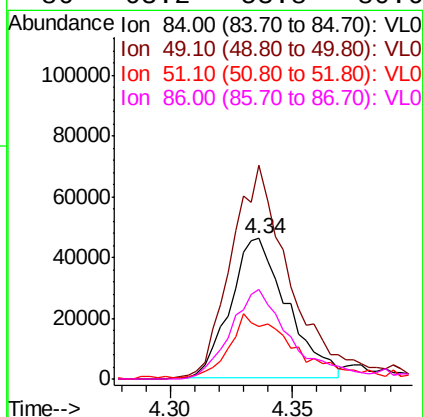
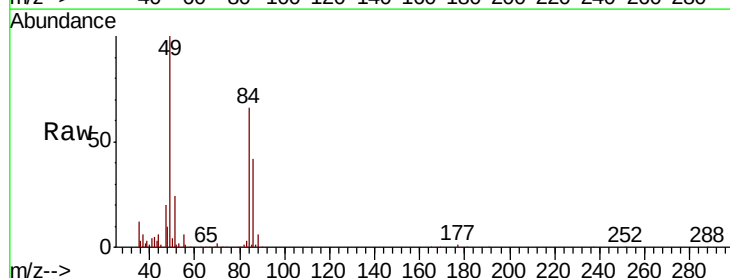
#16
 1,3-Butadiene
 Concen: 0.173 ppbv
 RT: 3.30
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 9 May 2022 19:43

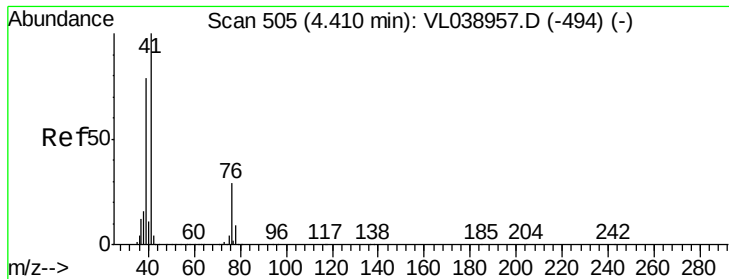
Tot Ion: 39 Resp: 10996
 Ion Ratio Lower Upper
 39 100
 54 24.2 65.2 97.8#



#20
 Methylene Chloride
 Concen: 1.796 ppbv
 RT: 4.34 min Scan# 482
 Delta R.T. -0.01 min
 Lab File: VL038994.D
 Acq: 9 May 2022 19:43

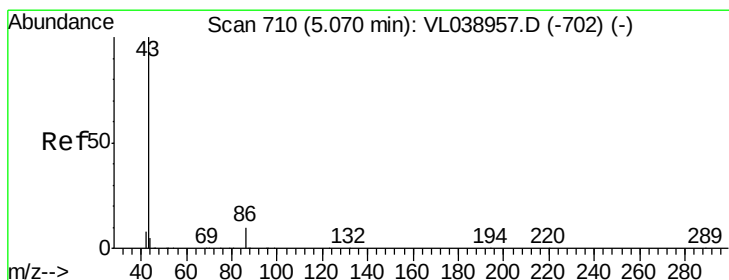
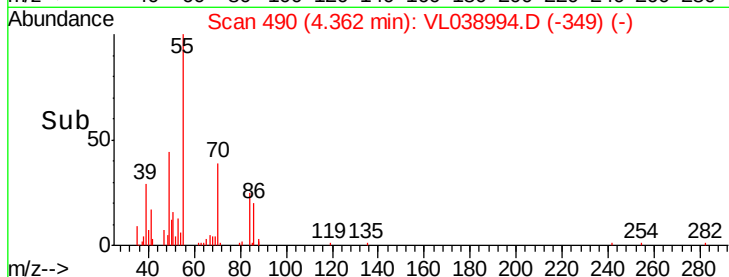
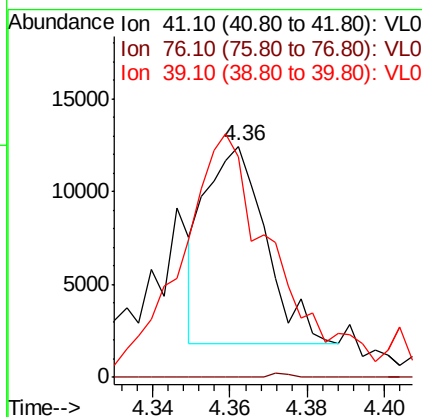
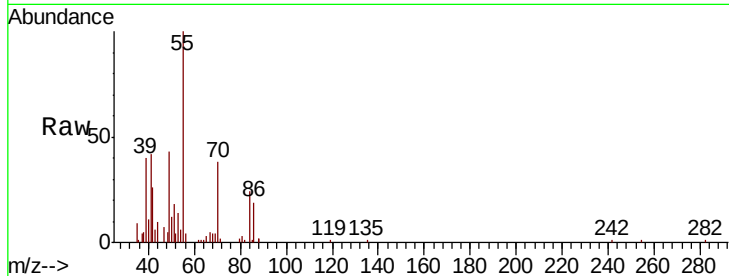
Tgt Ion: 84 Resp: 75026
 Ion Ratio Lower Upper
 84 100
 49 149.8 119.9 179.9
 51 34.8 35.7 53.5#
 86 63.2 53.8 80.6





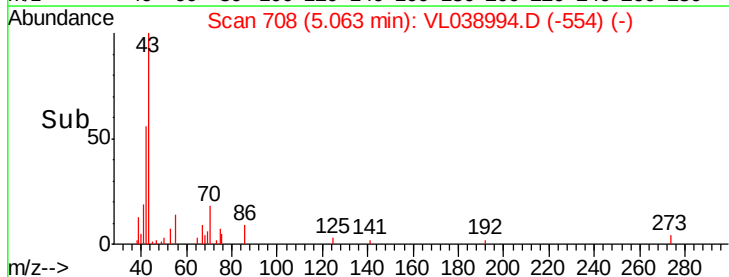
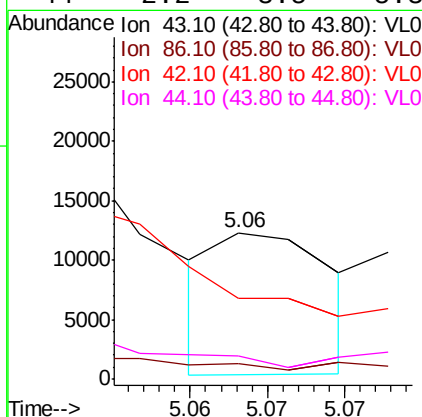
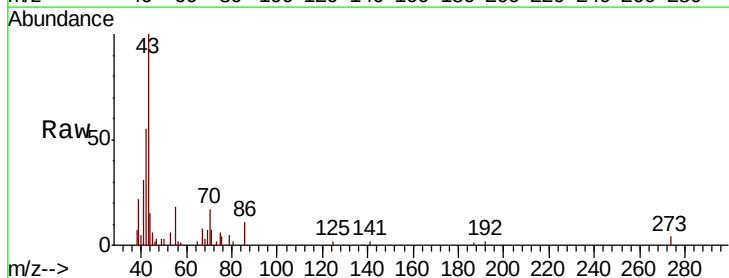
#21
 Allvl Chloride
 Concen: 0.153 ppbv
 RT: 4.36
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 9 May 2022 19:43

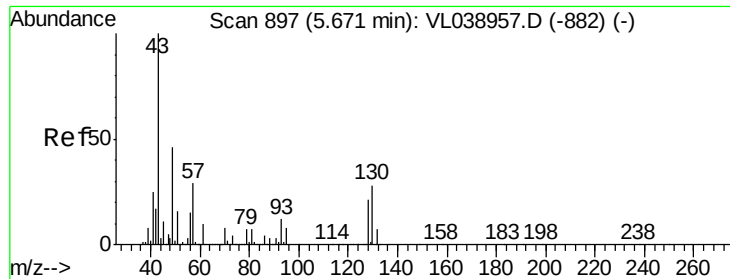
Tot Ion: 41 Resp: 11553
 Ion Ratio Lower Upper
 41 100
 76 0.7 24.2 36.4#
 39 210.5 63.8 95.8#



#23
 Vinyl Acetate
 Concen: 0.070 ppbv
 RT: 5.06 min Scan# 708
 Delta R.T. -0.01 min
 Lab File: VL038994.D
 Acq: 9 May 2022 19:43

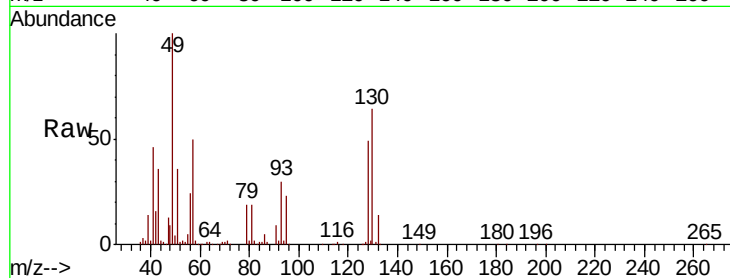
Tgt Ion: 43 Resp: 6132
 Ion Ratio Lower Upper
 43 100
 86 3.1 6.6 9.8#
 42 43.6 8.1 12.1#
 44 2.2 3.5 5.3#





#25
Ethyl Acetate
Concen: 0.468 ppbv
RT: 5.67 min
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 9 May 2022 19:43

Tot Ion:	43	Resp:	124212
Ion	Ratio	Lower	Upper
43	100		
45	2.2	8.1	12.1#
61	0.7	7.8	11.6#
70	2.0	5.6	8.4#



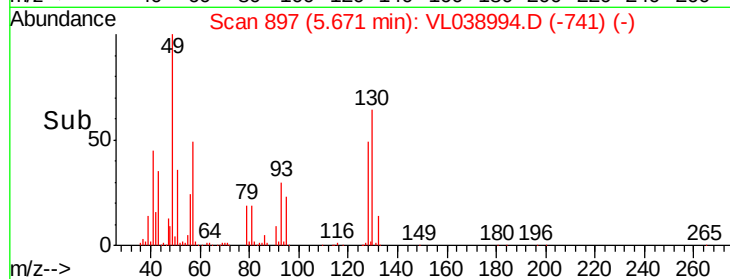
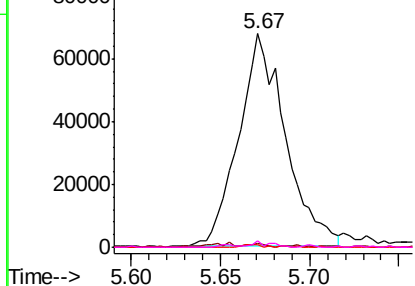
Abundance

Ion 43.10 (42.80 to 43.80): VL0

Ion 45.10 (44.80 to 45.80): VL0

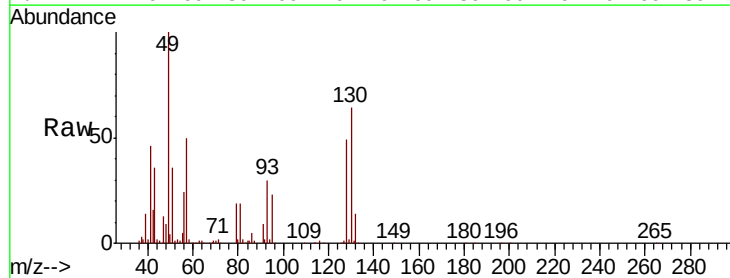
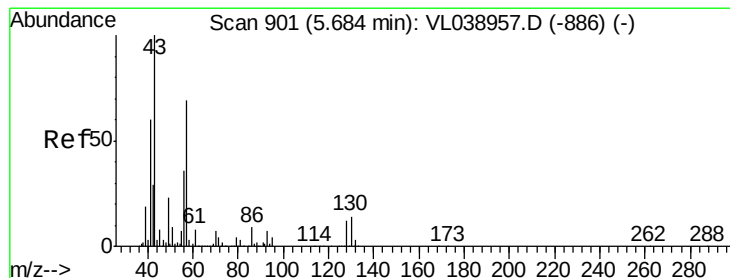
Ion 61.10 (60.80 to 61.80): VL0

Ion 70.10 (69.80 to 70.80): VL0



#26
Hexane
Concen: 1.499 ppbv
RT: 5.67 min Scan# 897
Delta R.T. -0.01 min
Lab File: VL038994.D
Acq: 9 May 2022 19:43

Tgt Ion:	57	Resp:	176609
Ion	Ratio	Lower	Upper
57	100		
41	95.6	75.2	112.8
43	73.0	190.8	286.2#
56	54.1	43.0	64.6



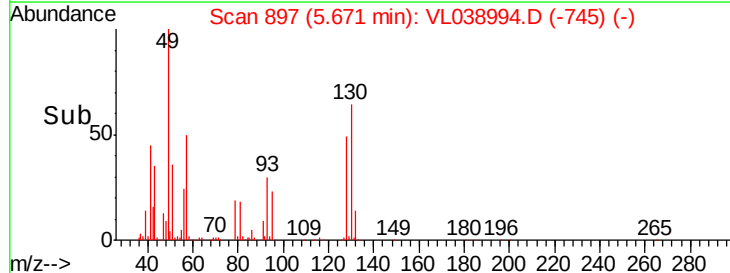
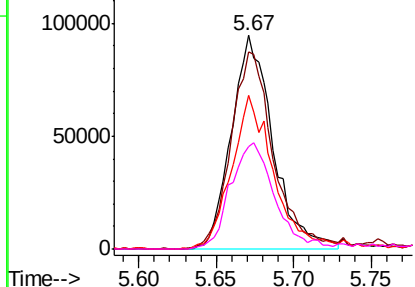
Abundance

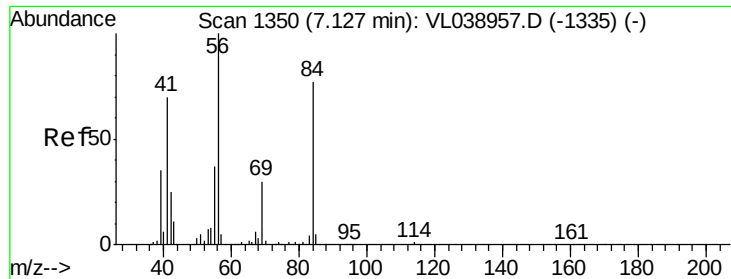
Ion 57.10 (56.80 to 57.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 43.10 (42.80 to 43.80): VL0

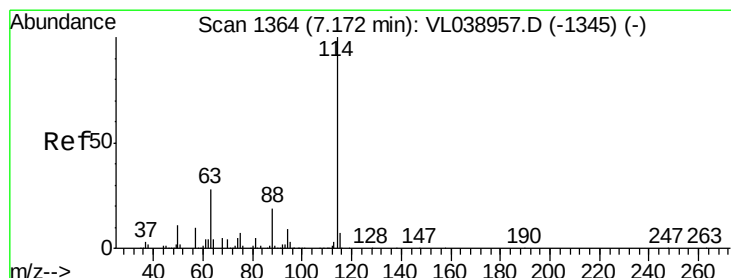
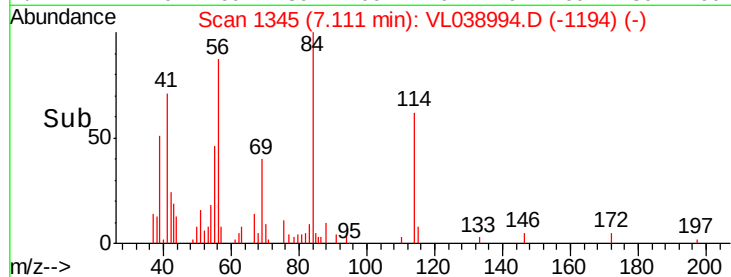
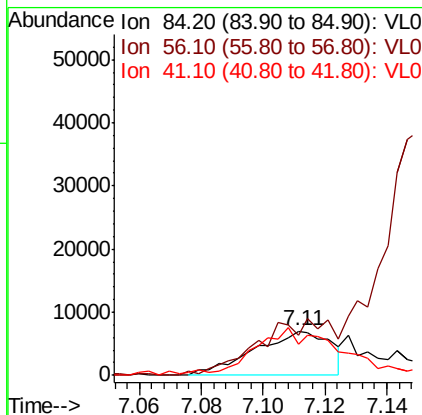
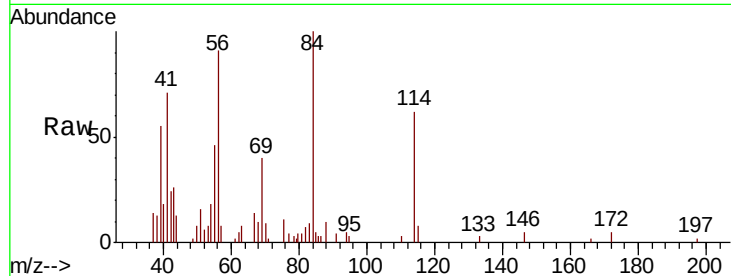
Ion 56.10 (55.80 to 56.80): VL0





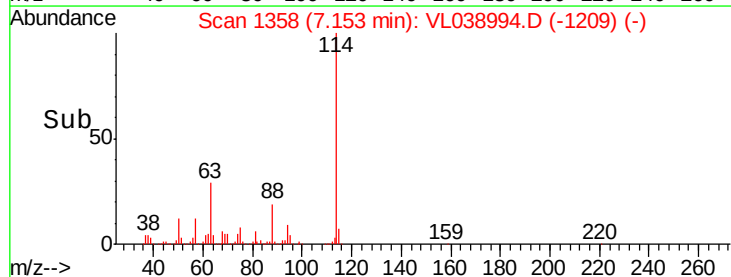
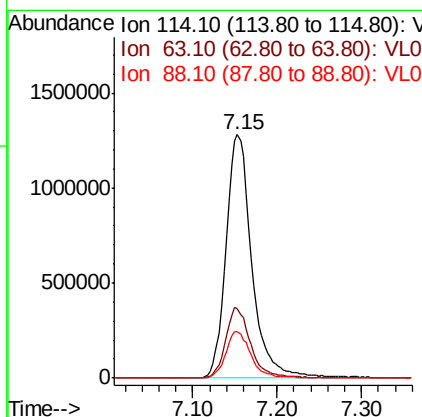
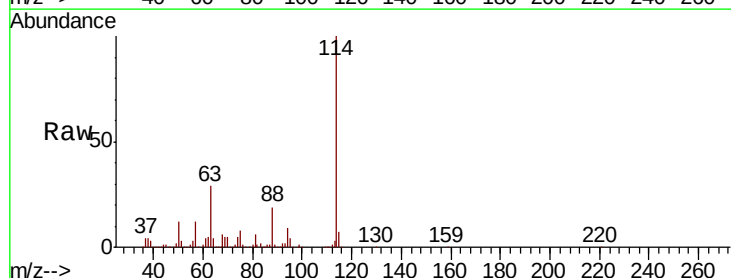
#30
Cyclohexane
Concen: 0.121 ppbv
RT: 7.11 min
Delta R.T.: MSVOA_L
Lab File: ClientSampleId :
Acq: 9 May 2022 19:43

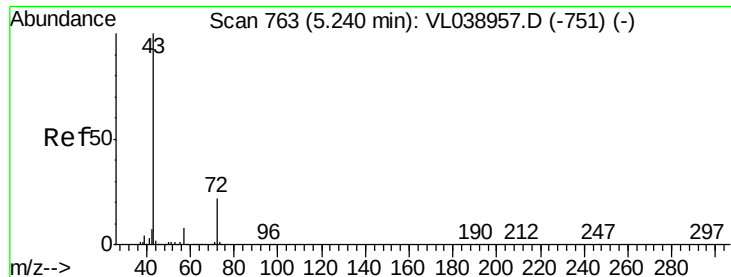
Tot Ion: 84 Resp: 11978
Ion Ratio Lower Upper
84 100
56 0.0 115.3 172.9#
41 135.3 72.0 108.0#



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.15 min Scan# 1358
Delta R.T.: -0.02 min
Lab File: VL038994.D
Acq: 9 May 2022 19:43

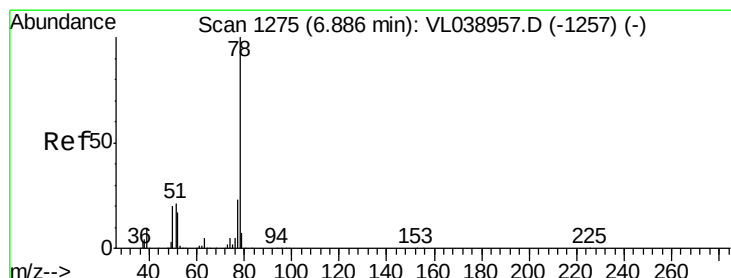
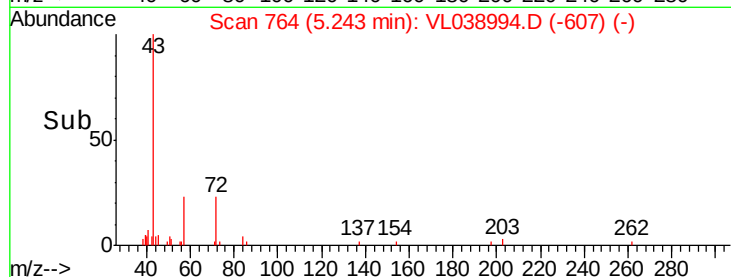
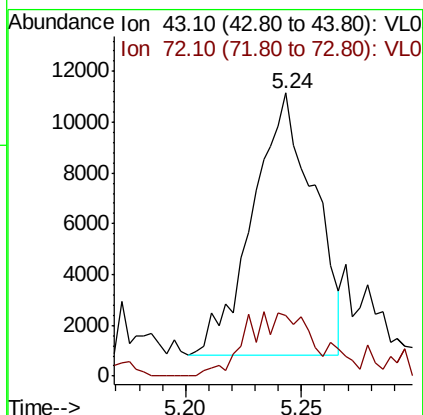
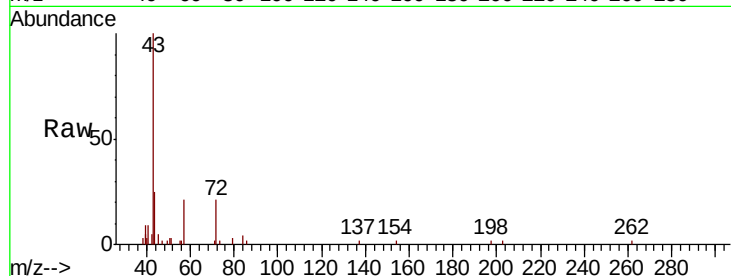
Tgt Ion: 114 Resp: 2717658
Ion Ratio Lower Upper
114 100
63 28.5 22.6 33.8
88 19.1 15.4 23.0





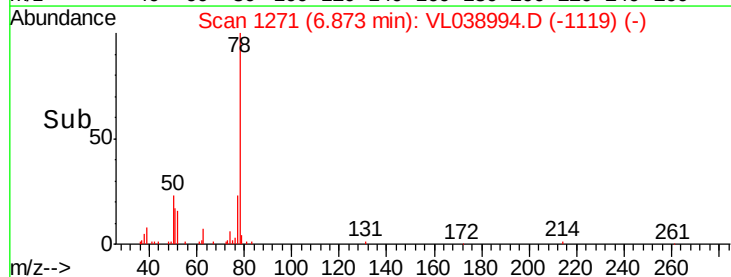
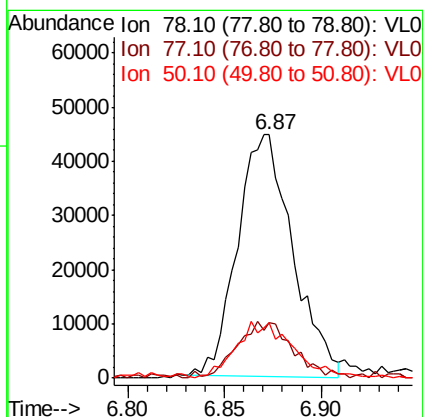
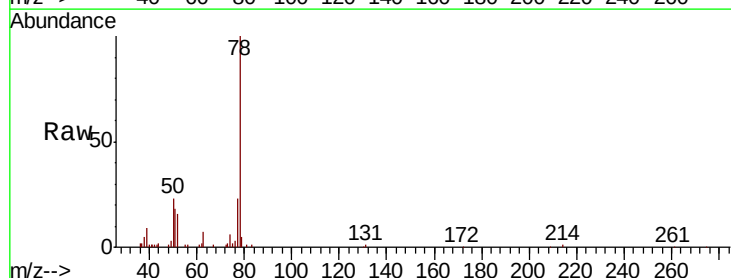
#34
2-Butanone
Concen: 0.137 ppbv
RT: 5.24
Delta R.T. MSVOA_L
Lab File: ClientSampled :
Acq: 9 May 2022 19:43

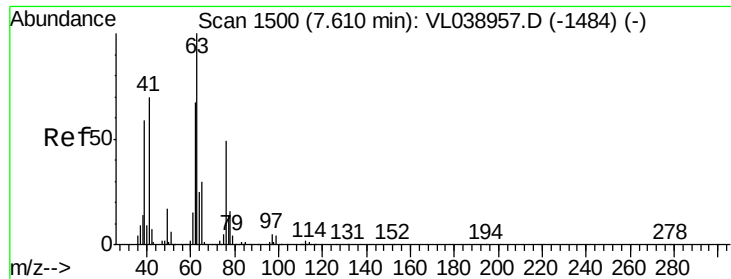
Tot Ion: 43 Resp: 19031
Ion Ratio Lower Upper
43 100
72 27.6 17.8 26.6#



#36
Benzene
Concen: 0.381 ppbv
RT: 6.87 min Scan# 1271
Delta R.T. -0.01 min
Lab File: VL038994.D
Acq: 9 May 2022 19:43

Tgt Ion: 78 Resp: 88677
Ion Ratio Lower Upper
78 100
77 23.7 18.6 28.0
50 22.8 15.6 23.4





#39

1,2-Dichloropropane

Concen: 8.416 ppbv

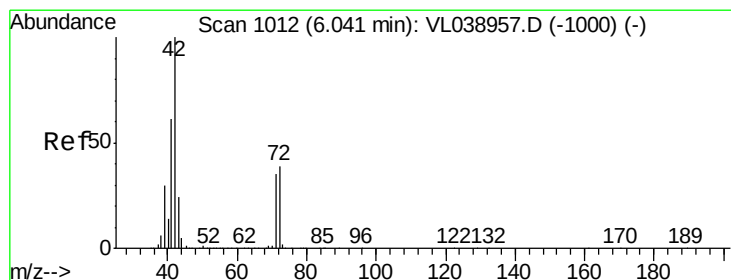
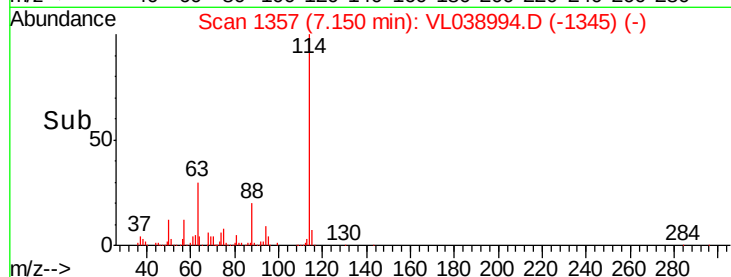
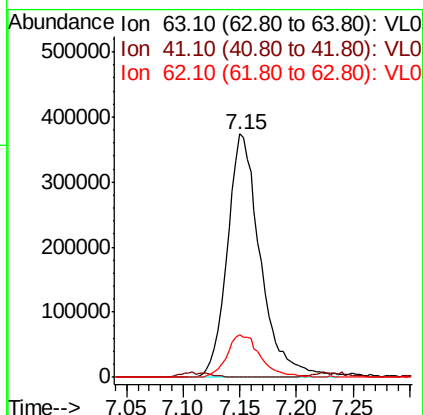
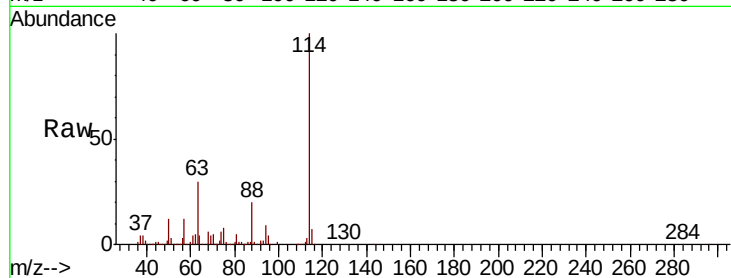
RT: 7.15 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 9 May 2022 19:43

Tot Ion:	63	Resp:	761587
Ion	Ratio	Lower	Upper
63	100		
41	0.0	55.9	83.9#
62	17.8	53.8	80.6#



#41

Tetrahydrofuran

Concen: 0.109 ppbv

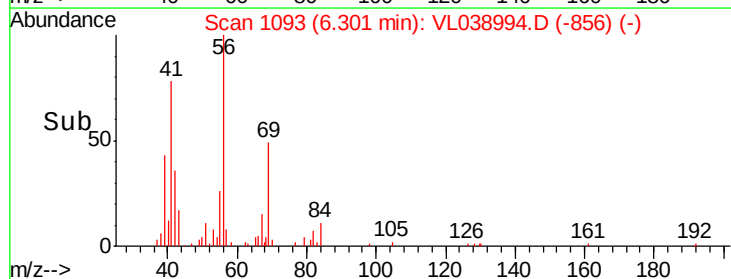
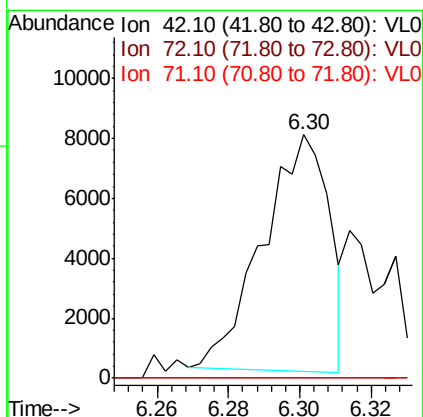
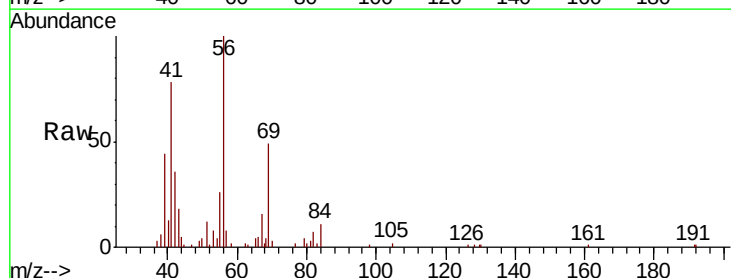
RT: 6.30 min Scan# 1093

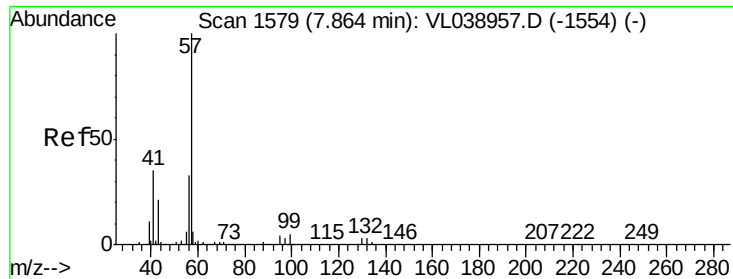
Delta R.T. 0.26 min

Lab File: VL038994.D

Acq: 9 May 2022 19:43

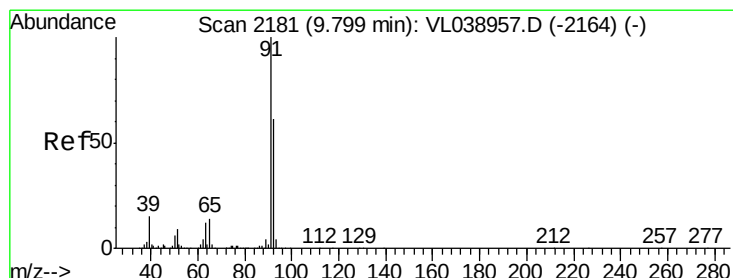
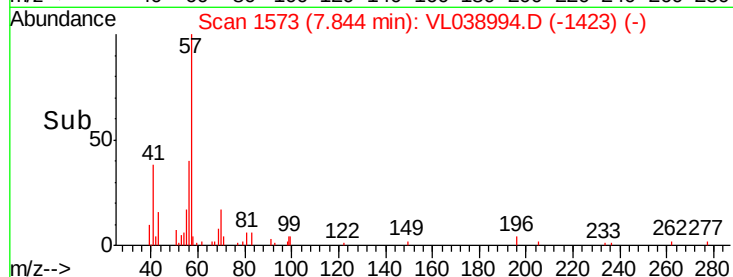
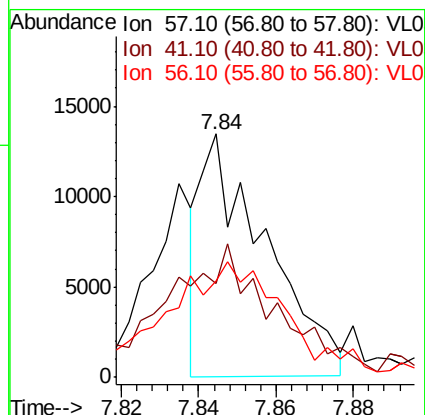
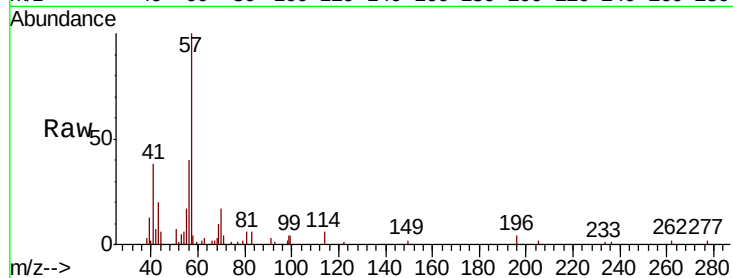
Tgt Ion:	42	Resp:	10197
Ion	Ratio	Lower	Upper
42	100		
72	0.7	31.8	47.6#
71	0.0	30.6	45.8#





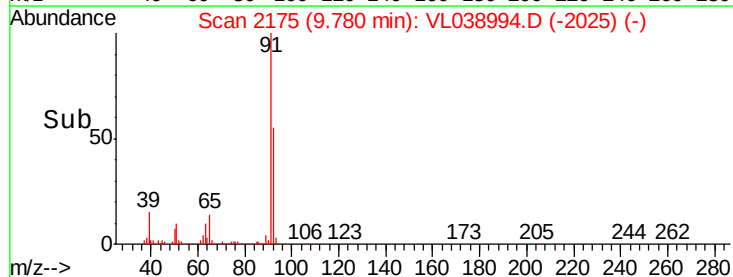
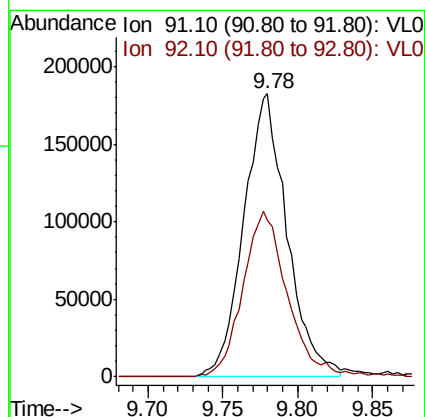
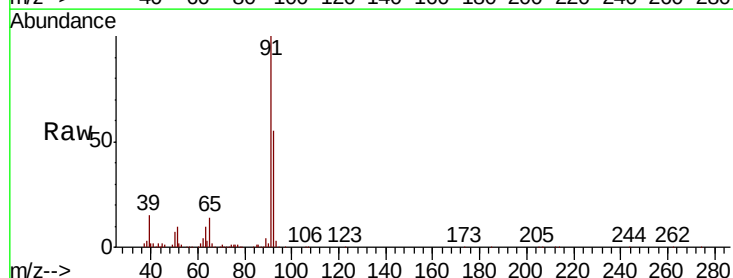
#44
 2,2,4-Trimethylpentane
 Concen: 0.038 ppbv
 RT: 7.84
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 9 May 2022 19:43

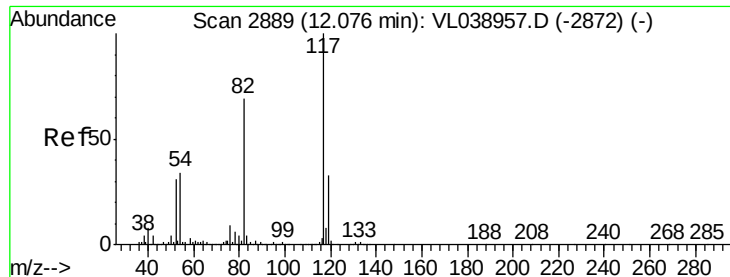
Tot Ion	57	Resp	15602
Ion Ratio	Lower	Upper	
57	100		
41	100.0	26.3	39.5#
56	92.6	24.6	37.0#



#53
 Toluene
 Concen: 1.409 ppbv
 RT: 9.78 min Scan# 2175
 Delta R.T. -0.02 min
 Lab File: VL038994.D
 Acq: 9 May 2022 19:43

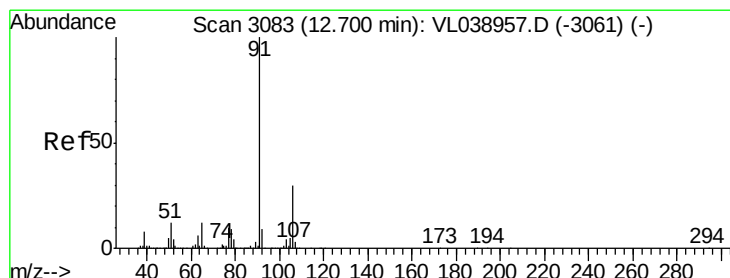
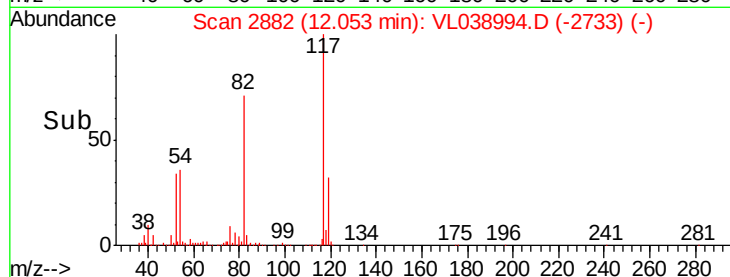
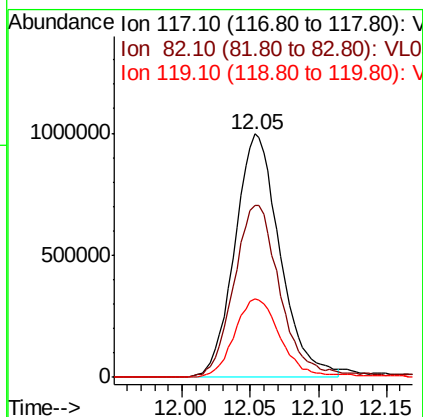
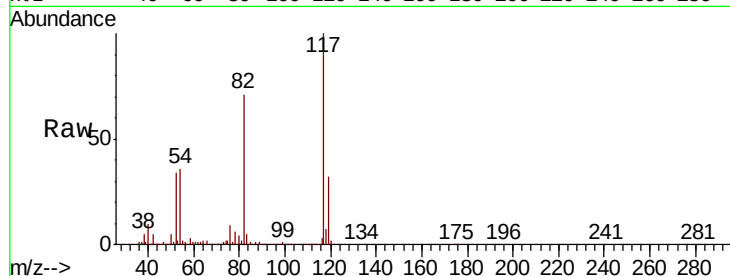
Tgt Ion	91	Resp	367408
Ion Ratio	Lower	Upper	
91	100		
92	60.8	48.2	72.2





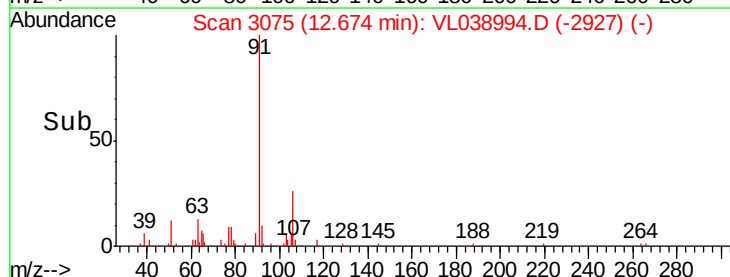
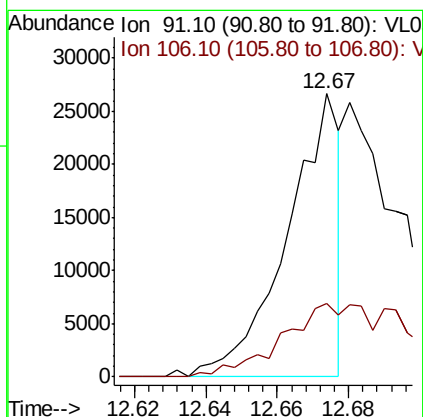
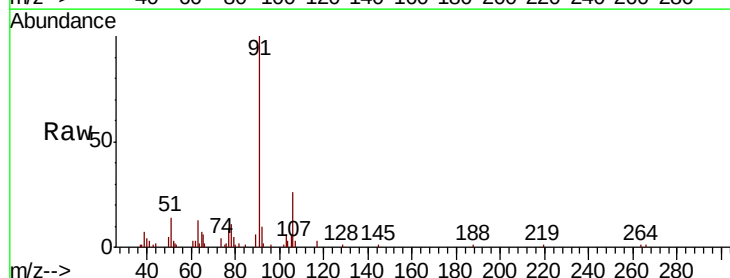
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.05 min
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId :
Acq: 9 May 2022 19:43

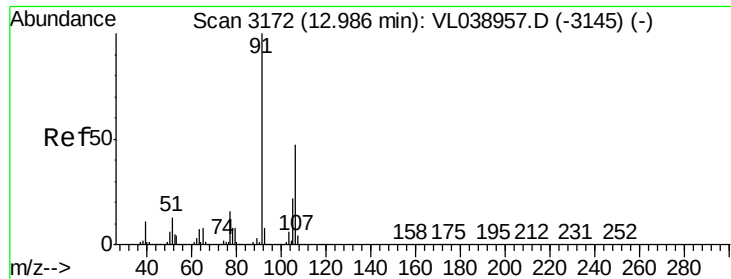
Tot Ion:117 Resp: 2279757
Ion Ratio Lower Upper
117 100
82 75.5 57.0 85.6
119 33.8 27.2 40.8



#58
Ethyl Benzene
Concen: 0.083 ppbv
RT: 12.67 min Scan# 3075
Delta R.T. -0.03 min
Lab File: VL038994.D
Acq: 9 May 2022 19:43

Tgt Ion: 91 Resp: 27179
Ion Ratio Lower Upper
91 100
106 25.8 24.2 36.4





#59

m/p-Xylene

Concen: 0.095 ppbv

RT: 12.98

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

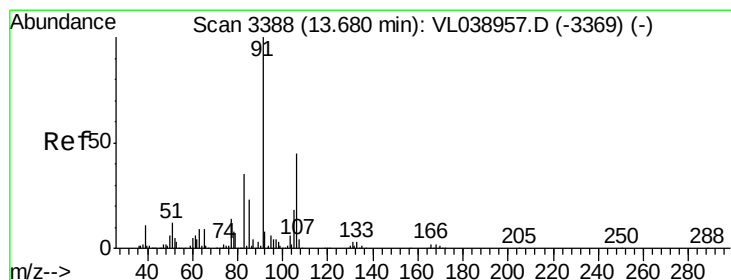
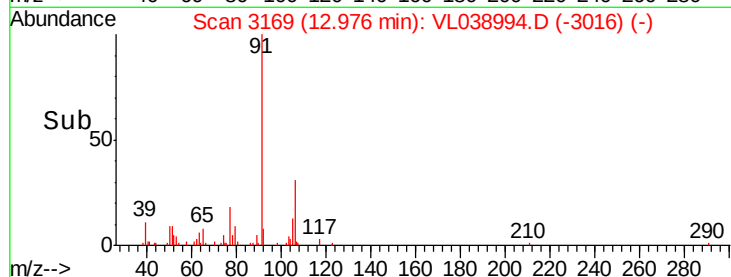
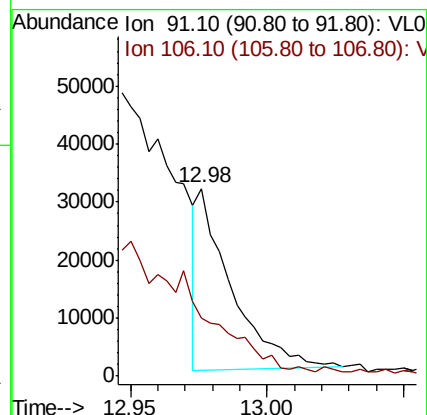
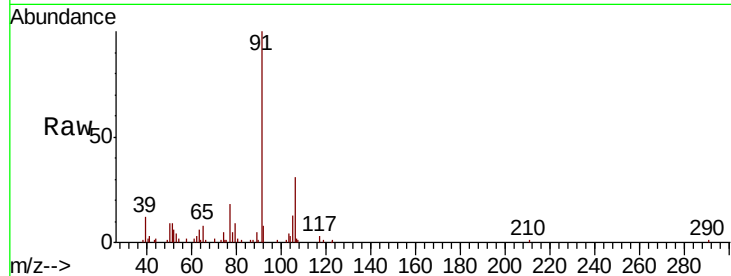
Acq: 9 May 2022 19:43

Tot Ion: 91 Resp: 26614

Ion Ratio Lower Upper

91 100

106 0.0 34.6 52.0#



#60

o-Xylene

Concen: 0.213 ppbv

RT: 13.66 min Scan# 3381

Delta R.T. -0.02 min

Lab File: VL038994.D

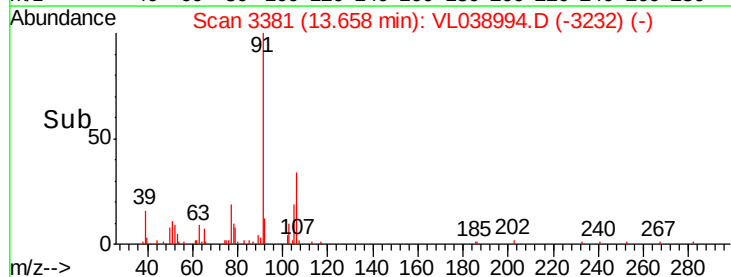
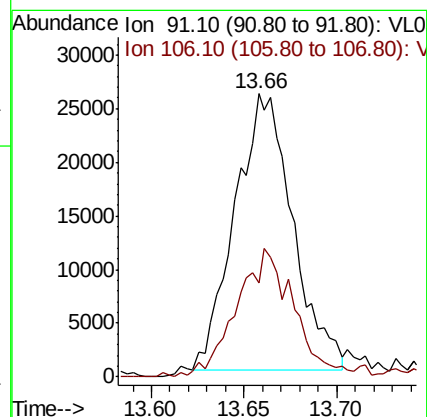
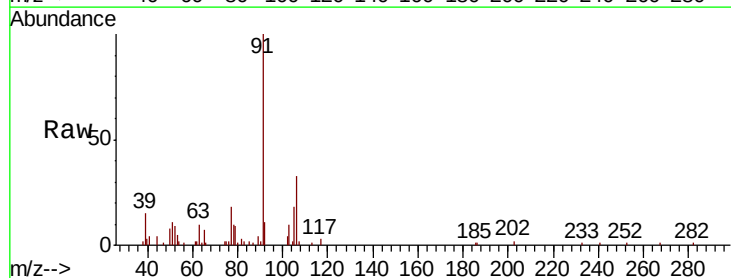
Acq: 9 May 2022 19:43

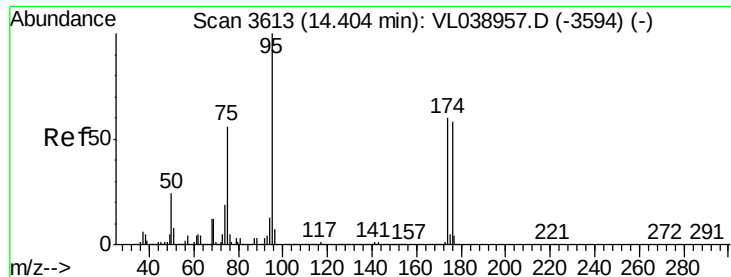
Tgt Ion: 91 Resp: 56173

Ion Ratio Lower Upper

91 100

106 48.1 22.2 66.6





#68

1-Bromo-4-Fluorobenzene

Concen: 10.447 ppbv

RT: 14.38

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 9 May 2022 19:43

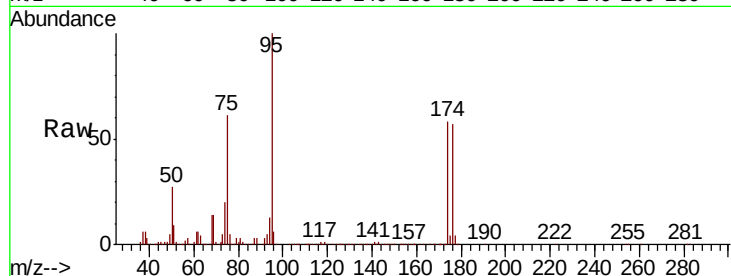
Tot Ion: 95 Resp: 1886178

Ion Ratio Lower Upper

95 100

174 61.8 50.8 76.2

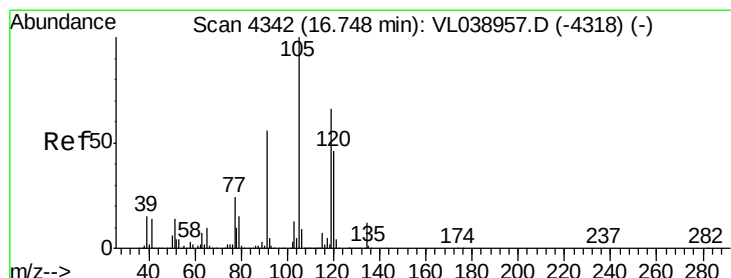
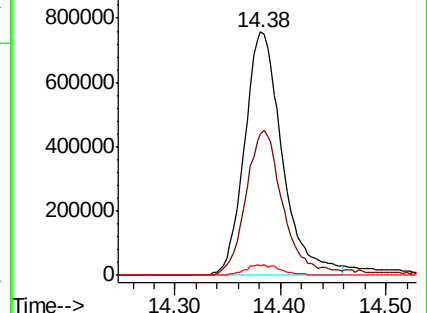
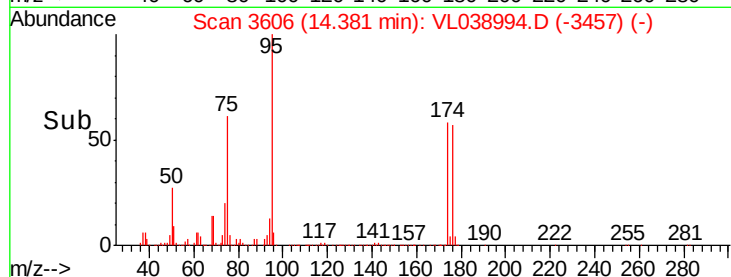
175 4.5 3.8 5.6



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



#74

1,2,4-Trimethylbenzene

Concen: 0.129 ppbv

RT: 16.73 min Scan# 4336

Delta R.T. -0.02 min

Lab File: VL038994.D

Acq: 9 May 2022 19:43

Tgt Ion:105 Resp: 38150

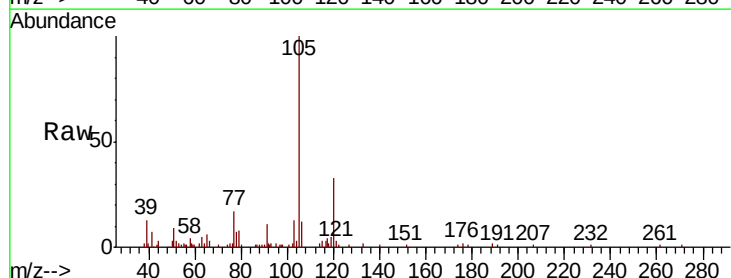
Ion Ratio Lower Upper

105 100

120 33.1 36.9 55.3#

91 12.6 45.0 67.4#

77 15.9 19.2 28.8#



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

