

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_L\DATA\VL022322\
 Data File : VL038417.D
 Acq On : 23 Feb 2022 21:07
 Operator : SY/AP
 Sample : N1605-01
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 BG-GC

Quant Time: Feb 24 07:30:37 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	756473	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.16	114	2055227	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.06	117	1782917	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.39	95	1330597	9.02	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	90.20%

Target Compounds

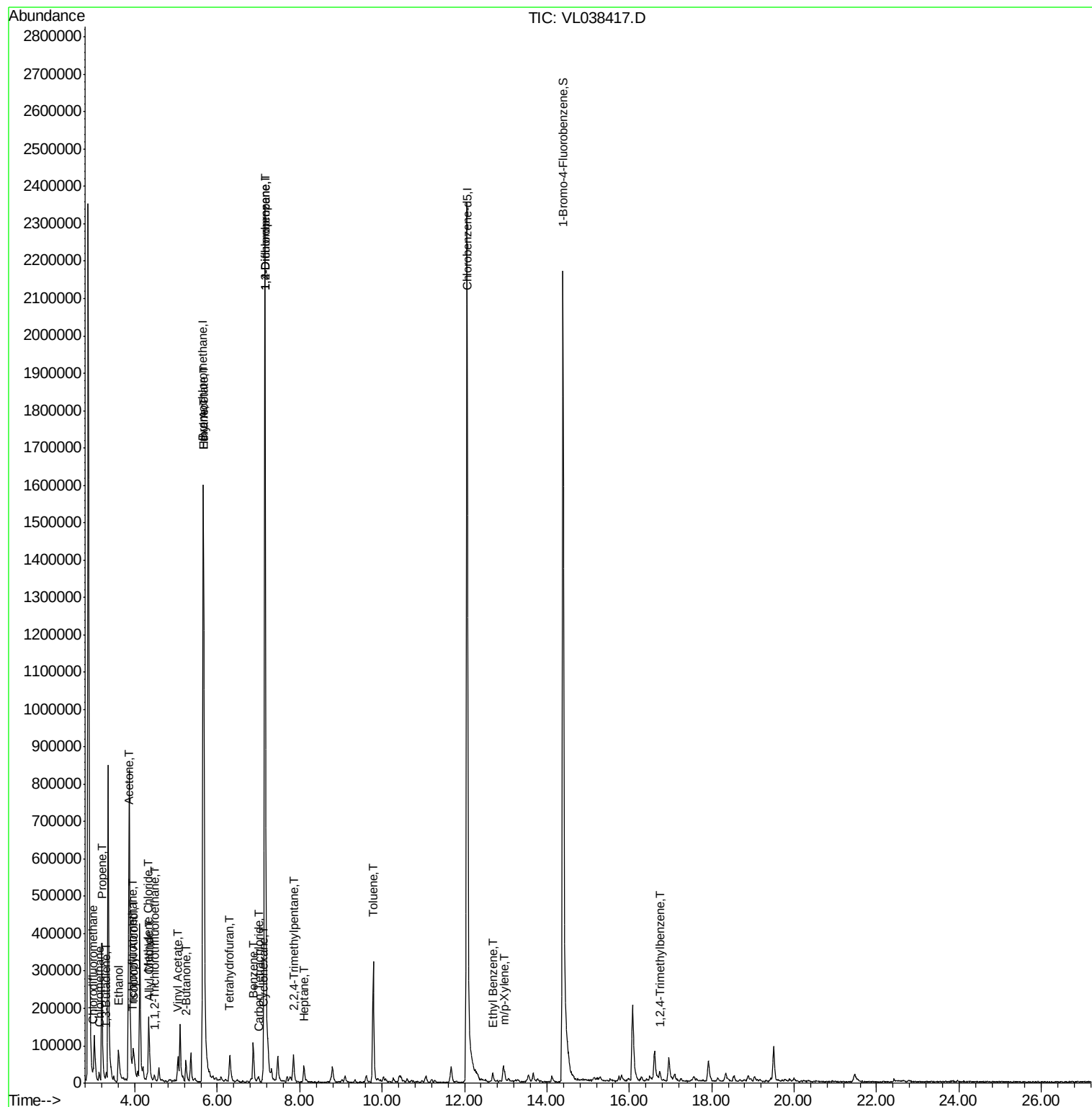
	R.T.	QIon	Response	Conc	Units	Qvalue
3) Chlorodifluoromethane	2.98	51	36753	0.28	ppbv #	91
4) Chloromethane	3.13	50	25968	0.56	ppbv #	88
9) Propene	3.20	41	118033	2.68	ppbv	92
10) Heptane	8.10	43	18966	0.18	ppbv	89
11) Trichlorofluoromethane	3.94	101	23331	0.20	ppbv	92
12) 1,1,2-Trichlorotrifluoroet	4.47	101	5153	0.06	ppbv	85
13) Ethanol	3.60	45	69584	15.81	ppbv #	50
15) Acetone	3.84	43	272499	4.24	ppbv #	66
16) 1,3-Butadiene	3.30	39	4749	0.11	ppbv #	12
19) Isopropyl Alcohol	3.96	45	38508	1.03	ppbv #	93
20) Methylene Chloride	4.34	84	63844	2.00	ppbv	88
21) Allyl Chloride	4.36	41	2687	0.05	ppbv #	1
23) Vinyl Acetate	5.04	43	14548	0.17	ppbv #	1
25) Ethyl Acetate	5.67	43	274203	1.59	ppbv #	79
26) Hexane	5.67	57	389165	4.97	ppbv #	42
30) Cyclohexane	7.11	84	3940	0.06	ppbv #	1
34) 2-Butanone	5.24	43	70153	1.09	ppbv #	89
35) Carbon Tetrachloride	7.00	117	5440	0.04	ppbv #	77
36) Benzene	6.87	78	96603	0.53	ppbv #	91
39) 1,2-Dichloropropane	7.15	63	505049	7.01	ppbv #	25
41) Tetrahydrofuran	6.29	42	1606	0.04	ppbv #	38
44) 2,2,4-Trimethylpentane	7.85	57	58571	0.19	ppbv #	74
53) Toluene	9.78	91	256818	1.31	ppbv	100
58) Ethyl Benzene	12.69	91	7739	0.03	ppbv #	86
59) m/p-Xylene	12.97	91	14318	0.07	ppbv #	33
74) 1,2,4-Trimethylbenzene	16.74	105	7398	0.04	ppbv #	56

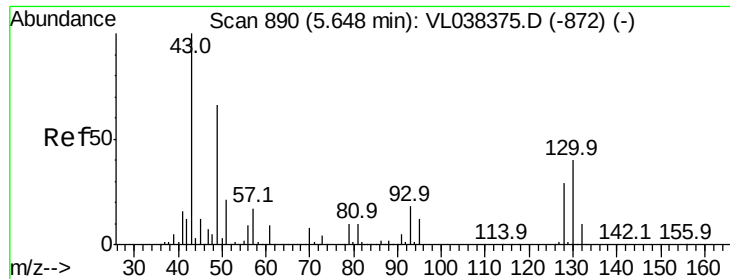
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Instrument :
MSVOA_L
ClientSampleId :
BG-GC

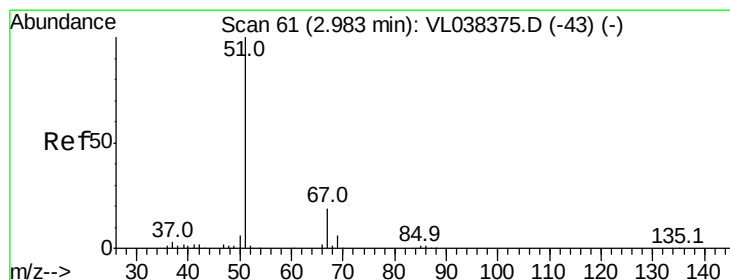
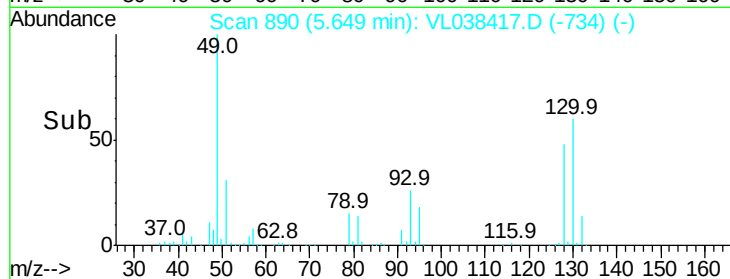
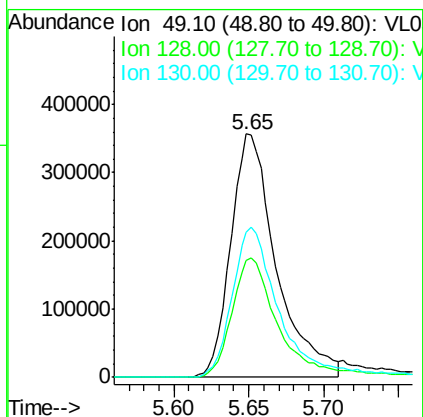
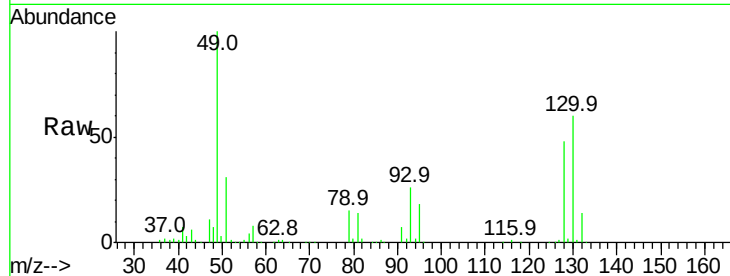
Quant Time: Feb 24 07:30:37 2022
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL022222AIR.M
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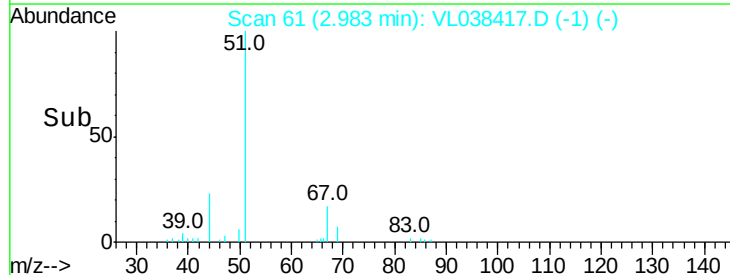
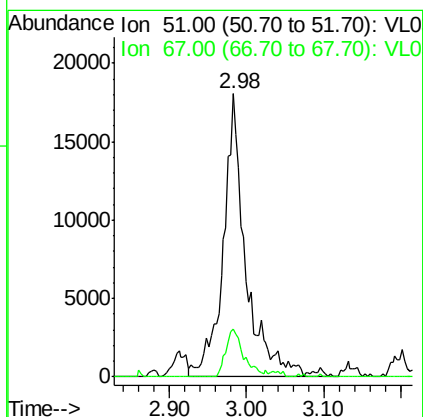
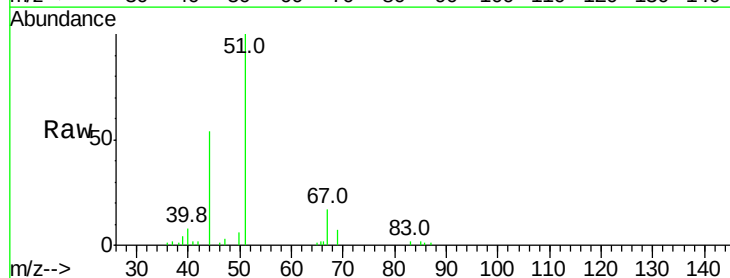
#1
 Bromochloromethane
 Concen: 10.00 ppbv
 RT: 5.65
 Instrument: MSVOA_L
 Delta R.T.:
 Lab File: ClientSampleId :
 BG-GC
 Acq: 23 Feb 2022 21:07

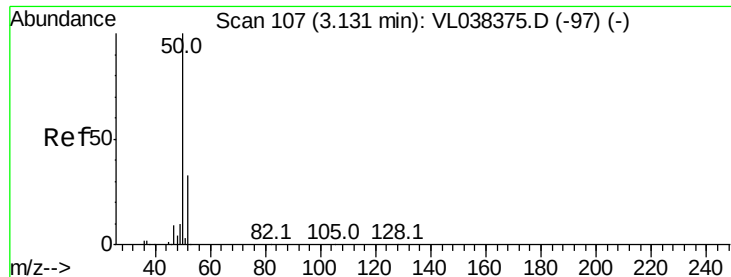
Tgt Ion: 49 Resp: 756473
 Ion Ratio Lower Upper
 49 100
 128 52.4 24.3 72.9
 130 67.0 30.1 90.5



#3
 Chlorodifluoromethane
 Concen: 0.28 ppbv
 RT: 2.98 min Scan# 61
 Delta R.T. 0.00 min
 Lab File: VL038417.D
 Acq: 23 Feb 2022 21:07

Tgt Ion: 51 Resp: 36753
 Ion Ratio Lower Upper
 51 100
 67 14.4 14.7 22.1#





#4

Chloromethane

Concen: 0.56 ppbv

RT: 3.13 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

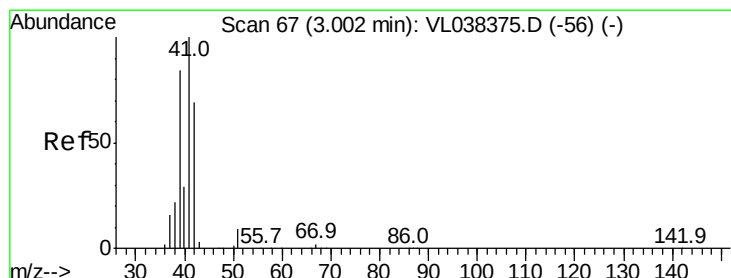
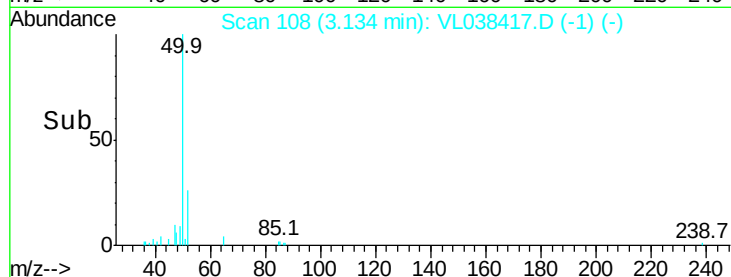
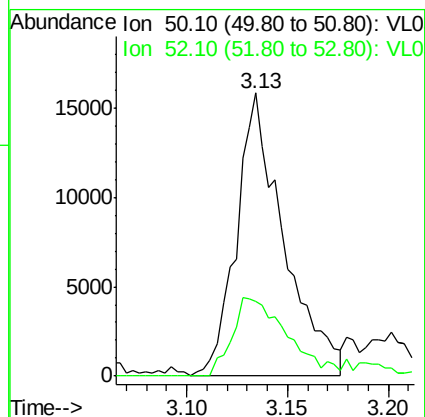
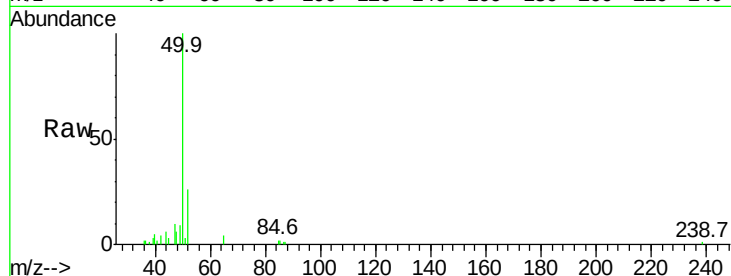
Acq: 23 Feb 2022 21:07 BG-GC

Tgt Ion: 50 Resp: 25968

Ion Ratio Lower Upper

50 100

52 26.4 26.5 39.7#



#9

Propene

Concen: 2.68 ppbv

RT: 3.20 min Scan# 128

Delta R.T. 0.20 min

Lab File: VL038417.D

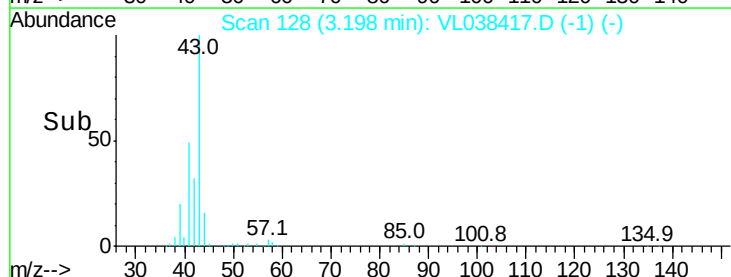
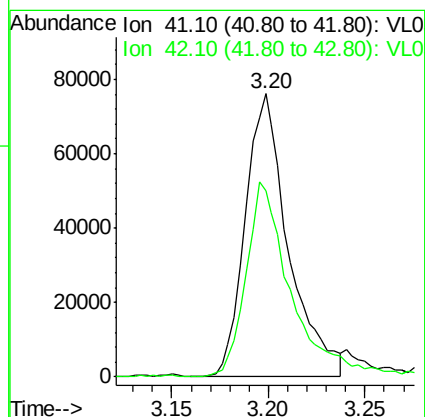
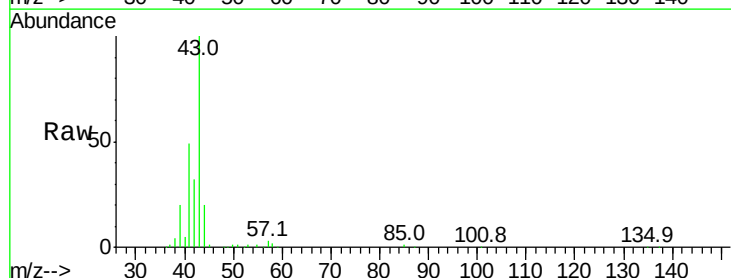
Acq: 23 Feb 2022 21:07

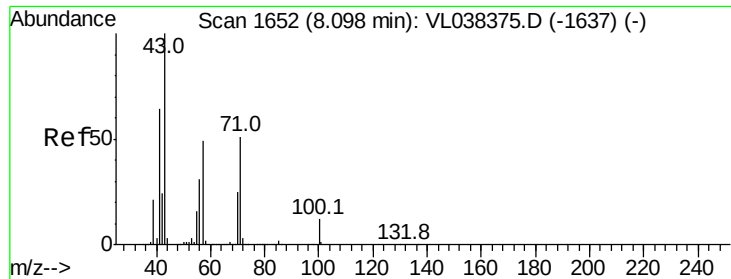
Tgt Ion: 41 Resp: 118033

Ion Ratio Lower Upper

41 100

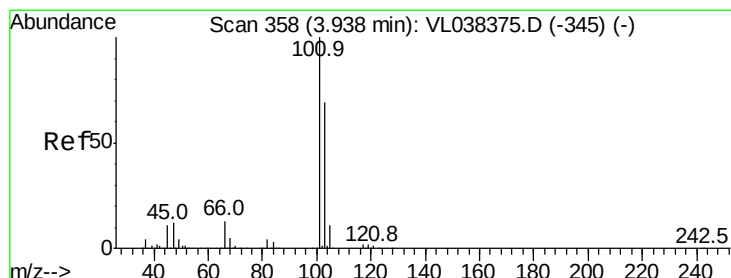
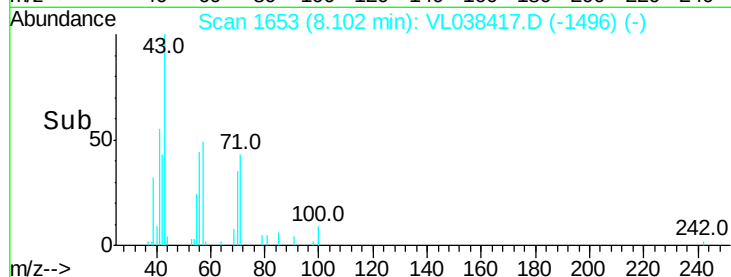
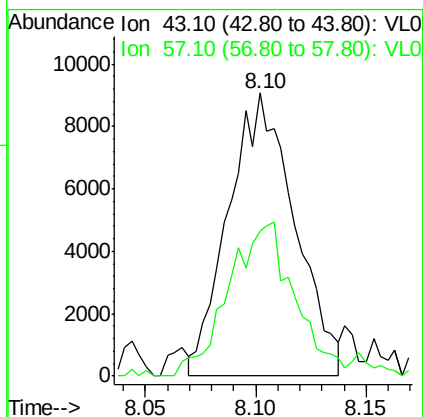
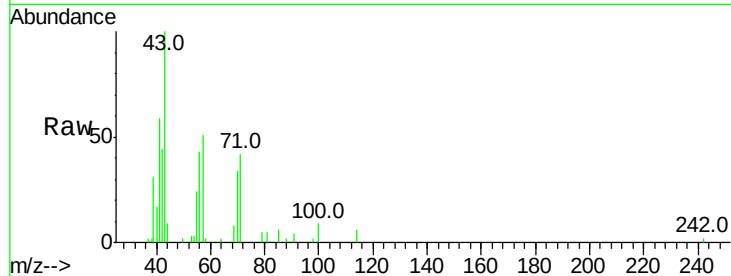
42 74.7 54.6 82.0





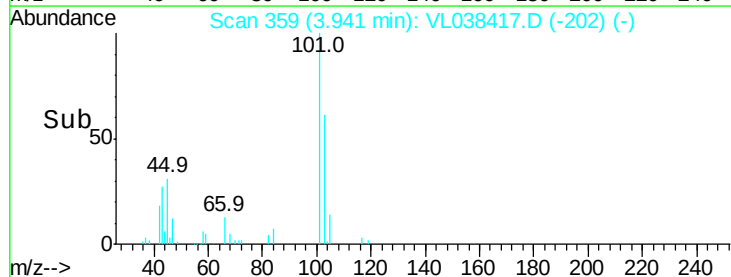
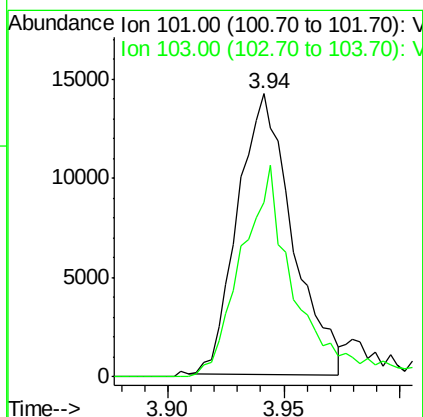
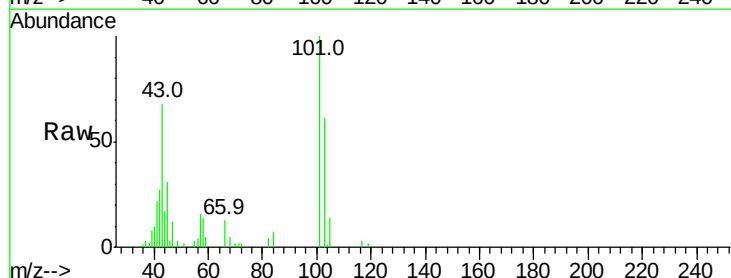
#10
 Heptane
 Concen: 0.18 ppbv
 RT: 8.10
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 23 Feb 2022 21:07

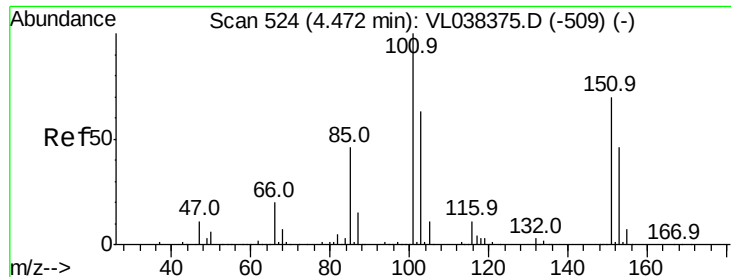
Tgt Ion: 43 Resp: 18966
 Ion Ratio Lower Upper
 43 100
 57 57.0 39.8 59.8



#11
 Trichlorofluoromethane
 Concen: 0.20 ppbv
 RT: 3.94 min Scan# 359
 Delta R.T. 0.00 min
 Lab File: VL038417.D
 Acq: 23 Feb 2022 21:07

Tgt Ion: 101 Resp: 23331
 Ion Ratio Lower Upper
 101 100
 103 62.1 55.0 82.4





#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.06 ppbv

RT: 4.47 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

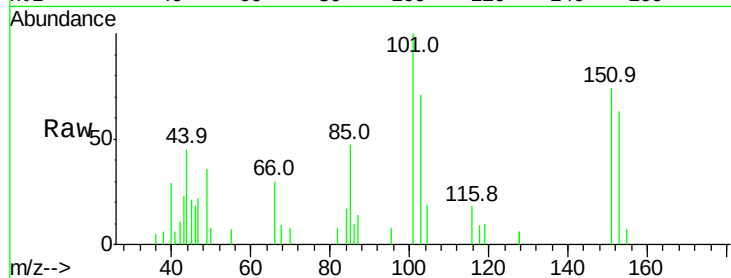
Acq: 23 Feb 2022 21:07 BG-GC

Tgt Ion: 101 Resp: 5153

Ion Ratio Lower Upper

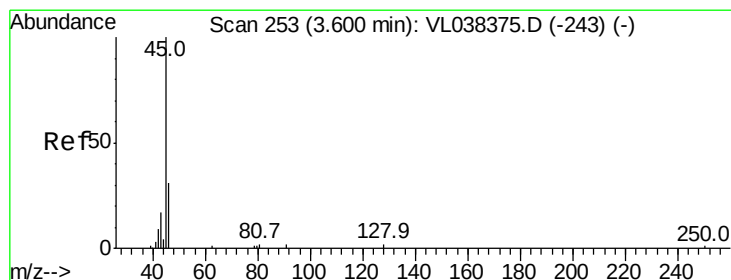
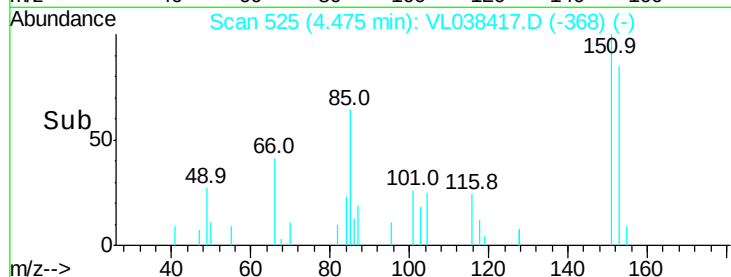
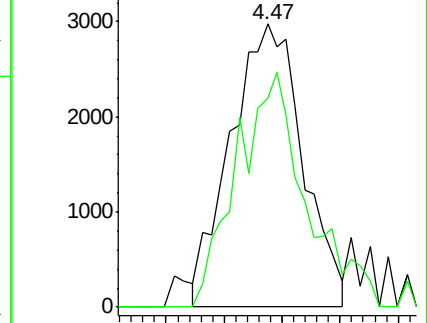
101 100

151 82.3 55.9 83.9



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 151.00 (150.70 to 151.70): V



#13

Ethanol

Concen: 15.81 ppbv

RT: 3.60 min Scan# 253

Delta R.T. 0.00 min

Lab File: VL038417.D

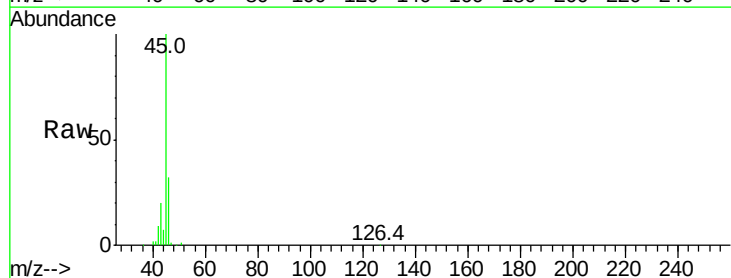
Acq: 23 Feb 2022 21:07

Tgt Ion: 45 Resp: 69584

Ion Ratio Lower Upper

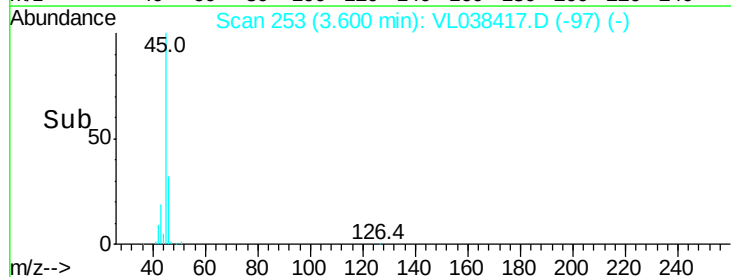
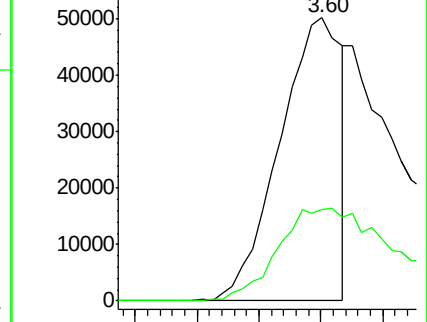
45 100

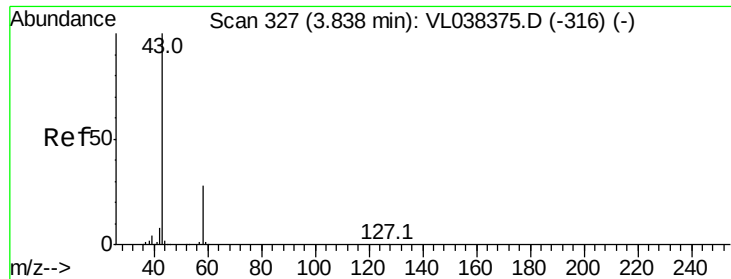
46 78.3 18.2 72.8#



Abundance Ion 45.10 (44.80 to 45.80): VL0

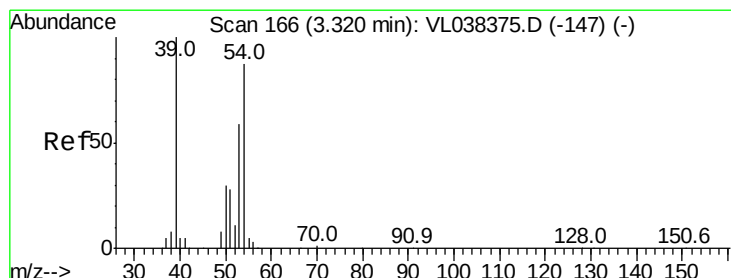
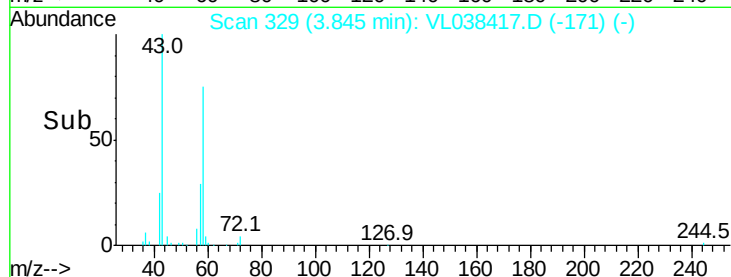
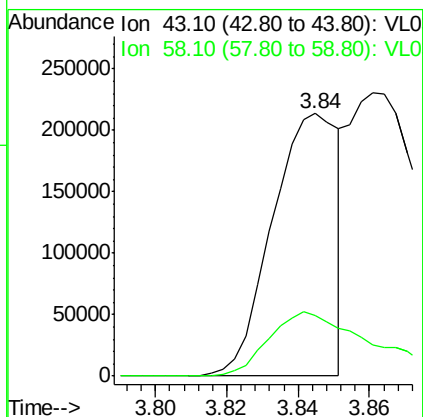
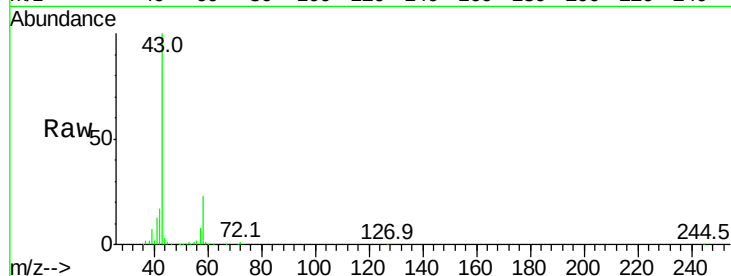
Ion 46.10 (45.80 to 46.80): VL0





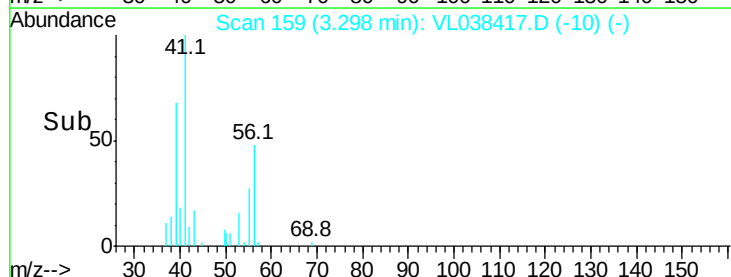
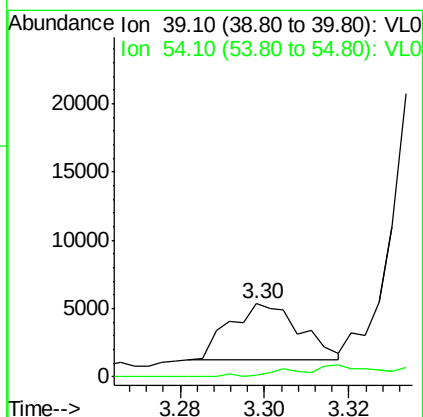
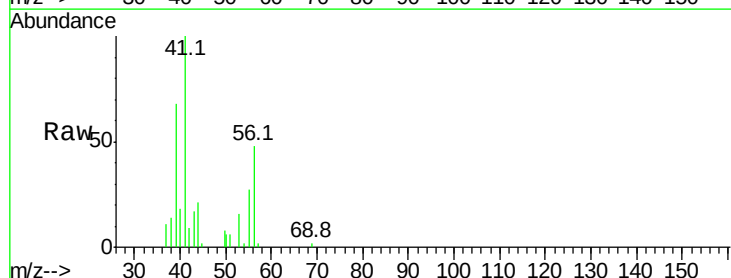
#15
Acetone
Concen: 4.24 ppbv
RT: 3.84
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 23 Feb 2022 21:07

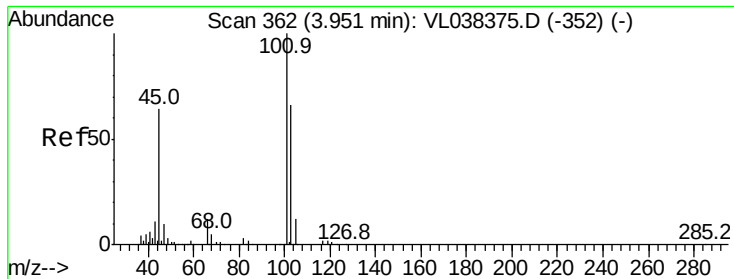
Tgt Ion: 43 Resp: 272499
Ion Ratio Lower Upper
43 100
58 44.7 21.7 32.5#



#16
1,3-Butadiene
Concen: 0.11 ppbv
RT: 3.30 min Scan# 159
Delta R.T. -0.02 min
Lab File: VL038417.D
Acq: 23 Feb 2022 21:07

Tgt Ion: 39 Resp: 4749
Ion Ratio Lower Upper
39 100
54 0.0 60.3 90.5#





#19

Isopropyl Alcohol

Concen: 1.03 ppbv

RT: 3.96 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

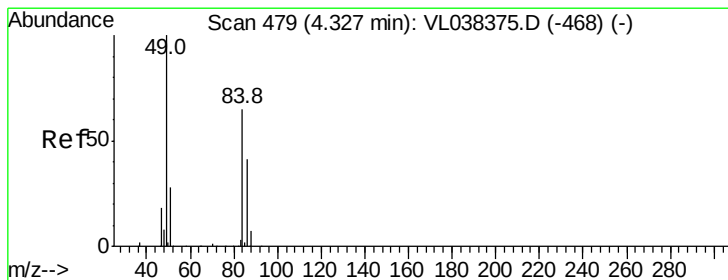
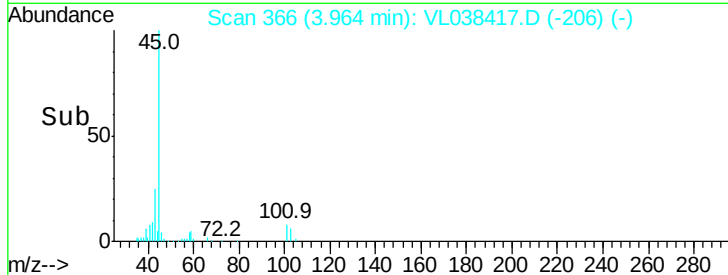
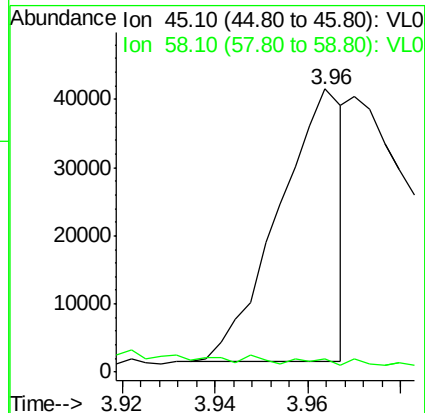
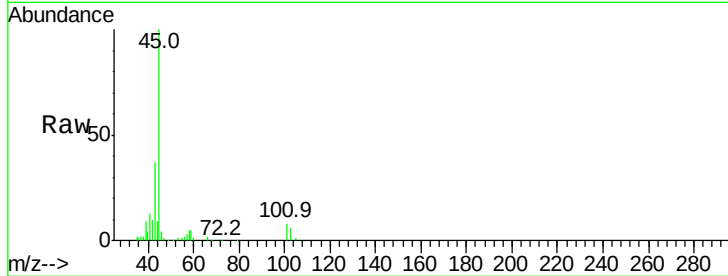
Acq: 23 Feb 2022 21:07 BG-GC

Tgt Ion: 45 Resp: 38508

Ion Ratio Lower Upper

45 100

58 0.0 1.8 2.8#



#20

Methylene Chloride

Concen: 2.00 ppbv

RT: 4.34 min Scan# 482

Delta R.T. 0.01 min

Lab File: VL038417.D

Acq: 23 Feb 2022 21:07

Tgt Ion: 84 Resp: 63844

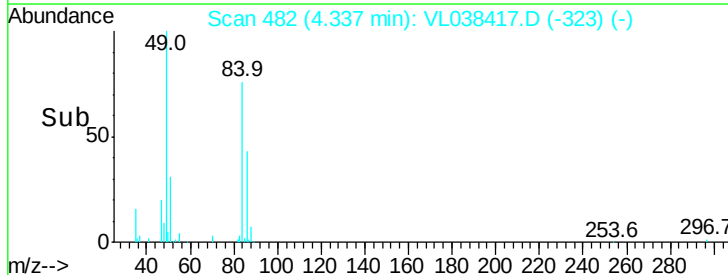
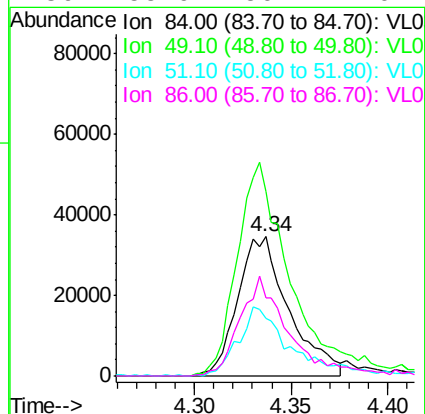
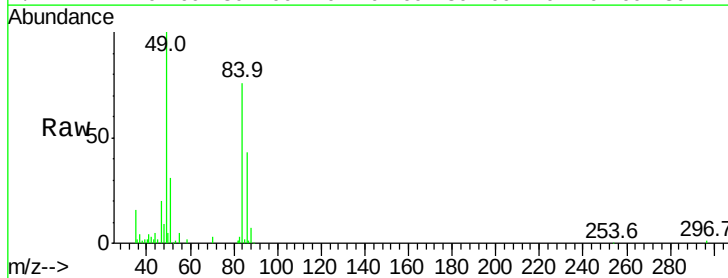
Ion Ratio Lower Upper

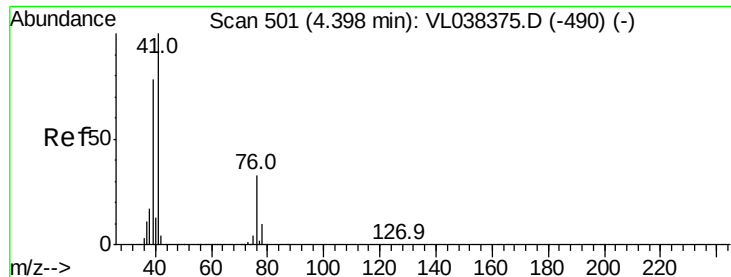
84 100

49 132.2 122.4 183.6

51 41.3 33.3 49.9

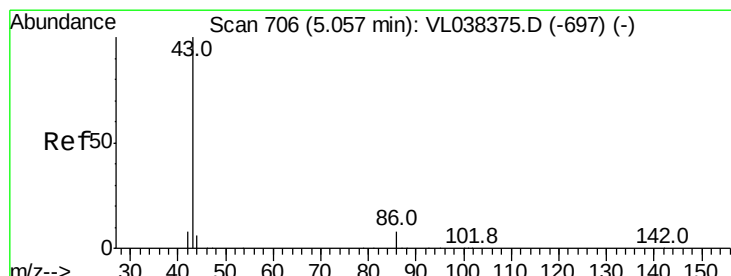
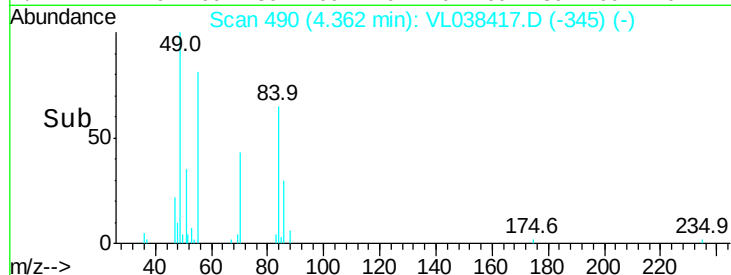
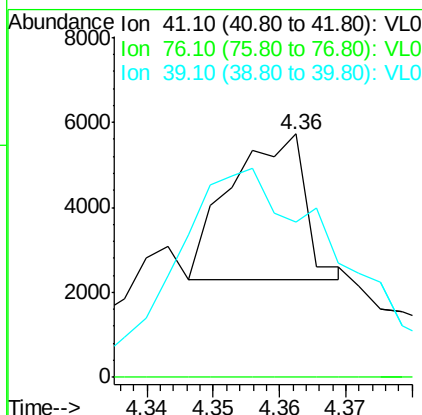
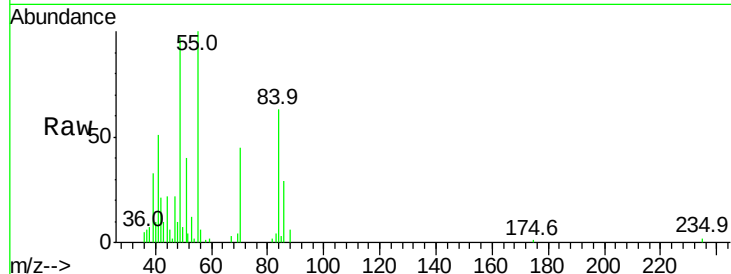
86 55.9 50.7 76.1





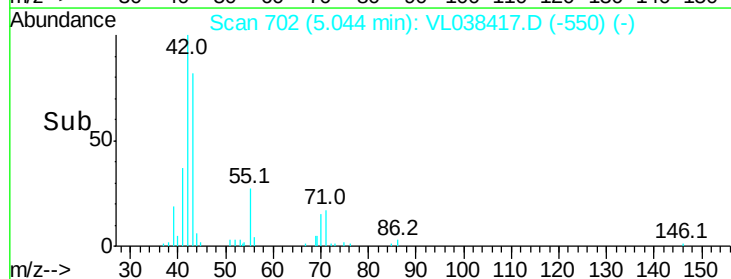
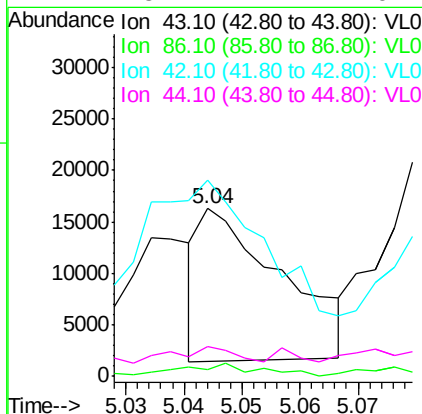
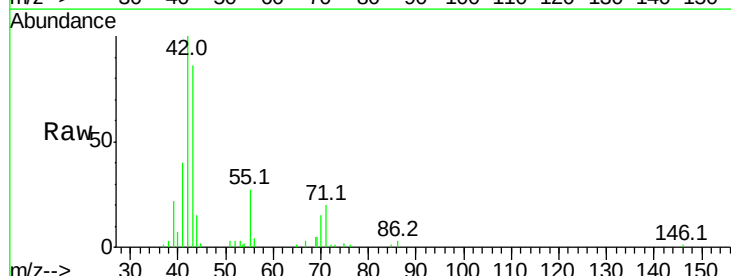
#21
 Allyl Chloride
 Concen: 0.05 ppbv
 RT: 4.36
 Instrument: MSVOA_1
 Delta R.T.:
 Lab File: ClientSampleId:
 BG-GC
 Acq: 23 Feb 2022 21:07

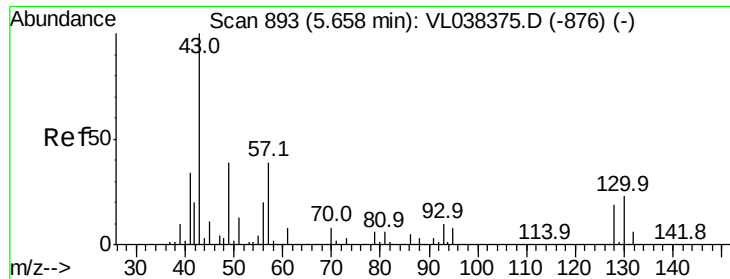
Tgt Ion: 41 Resp: 2687
 Ion Ratio Lower Upper
 41 100
 76 0.0 25.4 38.0#
 39 303.7 63.0 94.6#



#23
 Vinyl Acetate
 Concen: 0.17 ppbv
 RT: 5.04 min Scan# 702
 Delta R.T. -0.01 min
 Lab File: VL038417.D
 Acq: 23 Feb 2022 21:07

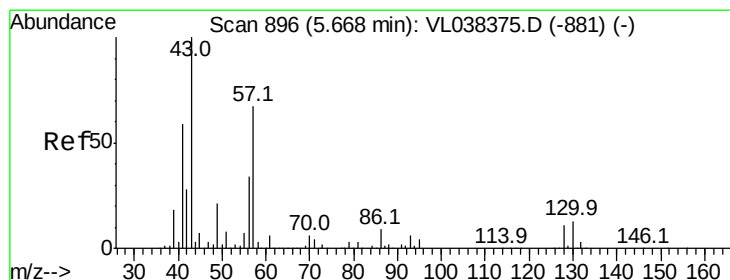
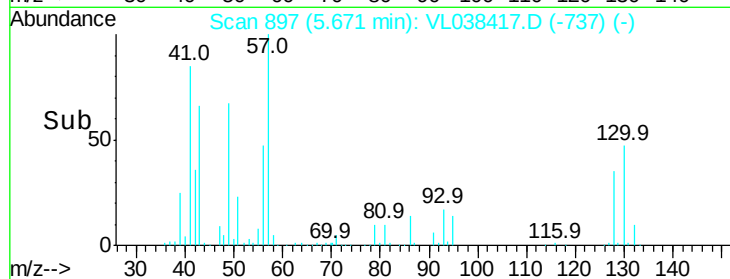
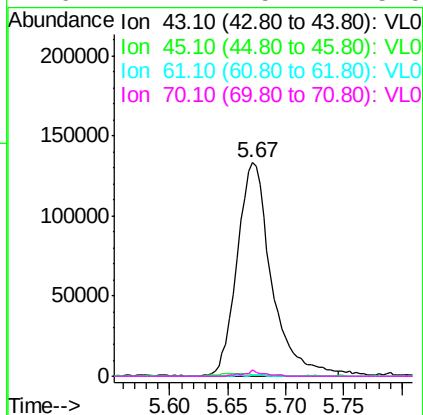
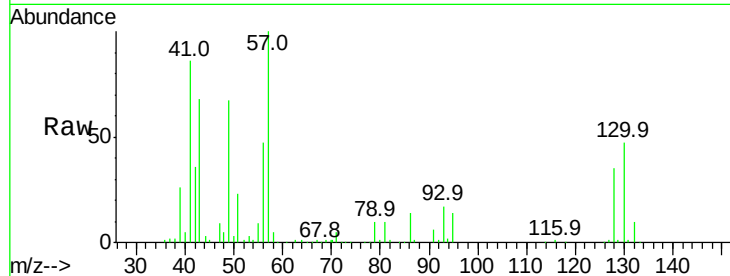
Tgt Ion: 43 Resp: 14548
 Ion Ratio Lower Upper
 43 100
 86 3.4 5.8 8.6#
 42 150.1 7.4 11.0#
 44 15.7 4.2 6.2#





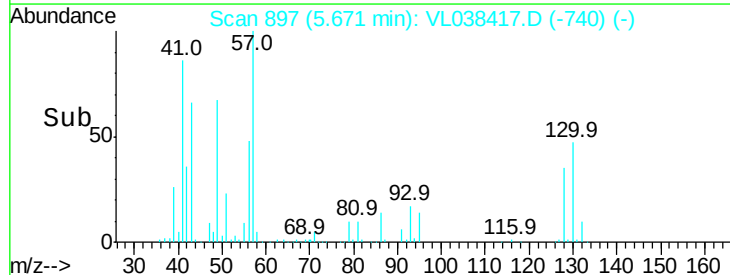
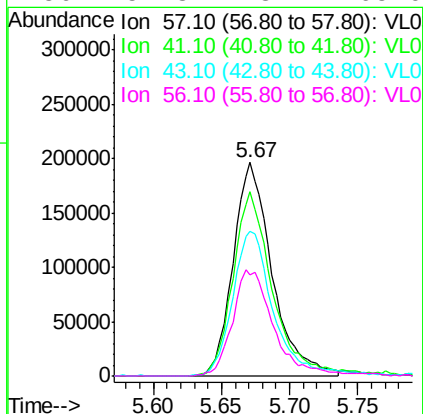
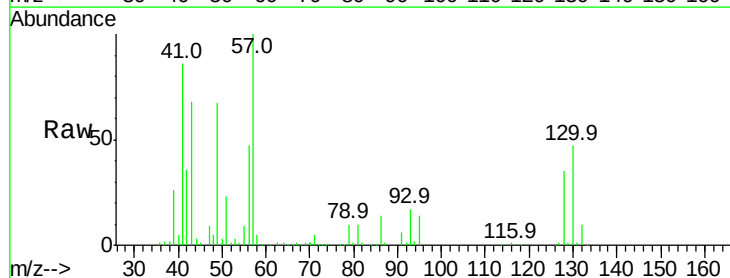
#25
Ethyl Acetate
Concen: 1.59 ppbv
RT: 5.67
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 23 Feb 2022 21:07

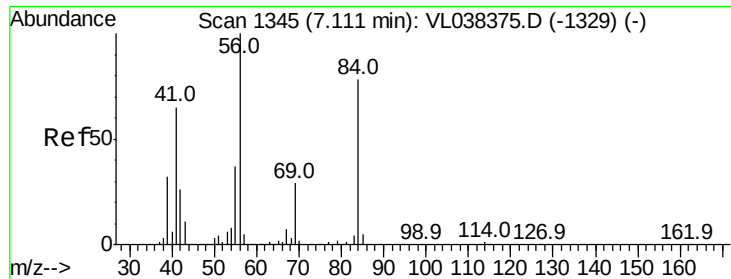
Tgt Ion:	43	Resp:	274203
Ion	Ratio	Lower	Upper
43	100		
45	1.6	7.8	11.6#
61	0.3	7.5	11.3#
70	1.7	5.4	8.0#



#26
Hexane
Concen: 4.97 ppbv
RT: 5.67 min Scan# 897
Delta R.T. 0.00 min
Lab File: VL038417.D
Acq: 23 Feb 2022 21:07

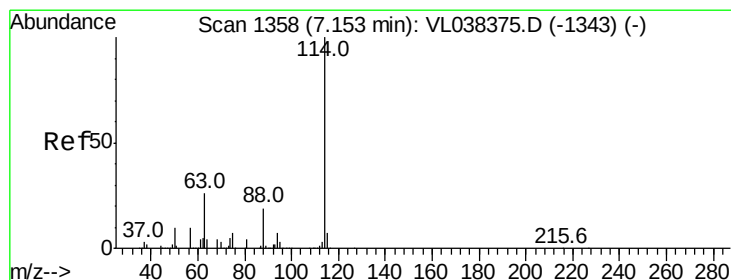
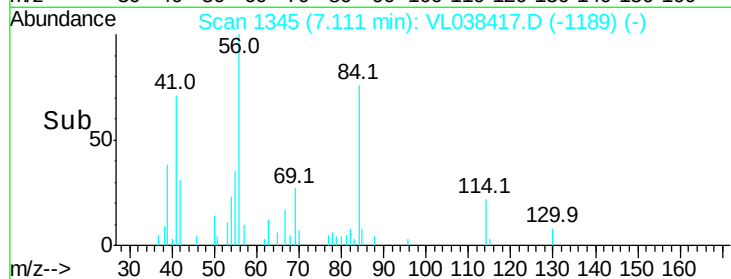
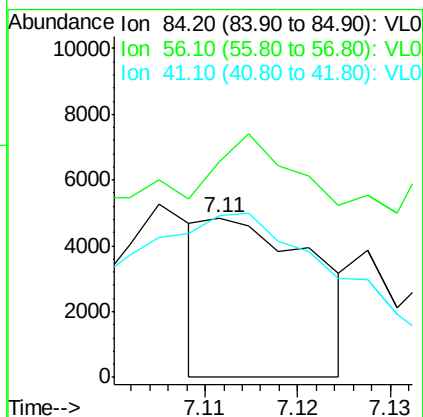
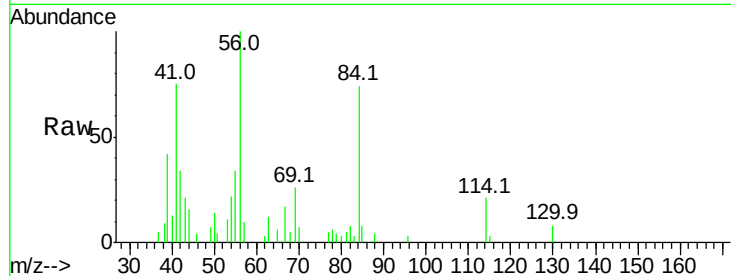
Tgt Ion:	57	Resp:	389165
Ion	Ratio	Lower	Upper
57	100		
41	88.9	73.1	109.7
43	71.4	181.0	271.4#
56	52.8	43.4	65.0





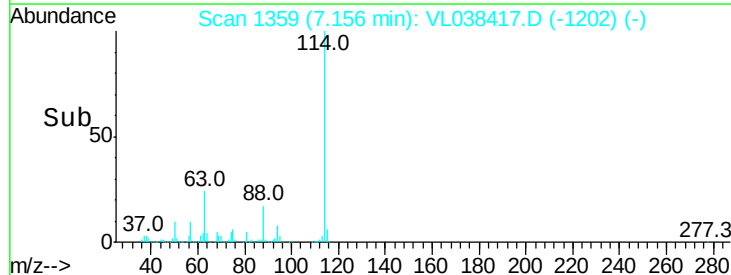
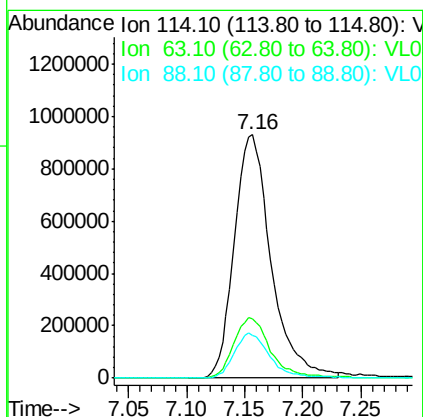
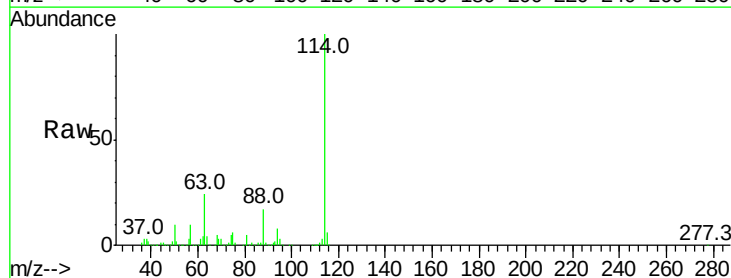
#30
Cyclohexane
Concen: 0.06 ppbv
RT: 7.11 min
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId:
Acq: 23 Feb 2022 21:07

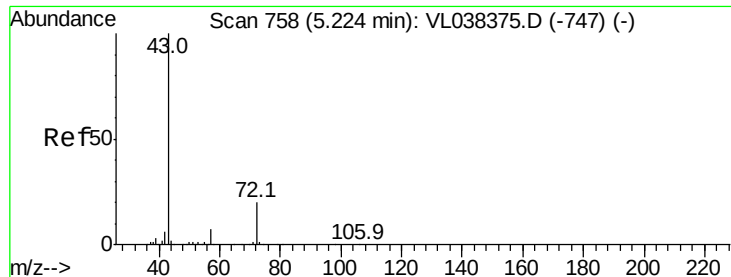
Tgt Ion: 84 Resp: 3940
Ion Ratio Lower Upper
84 100
56 0.0 116.2 174.4#
41 299.1 74.3 111.5#



#33
1,4-Difluorobenzene
Concen: 10.00 ppbv
RT: 7.16 min Scan# 1359
Delta R.T.: 0.00 min
Lab File: VL038417.D
Acq: 23 Feb 2022 21:07

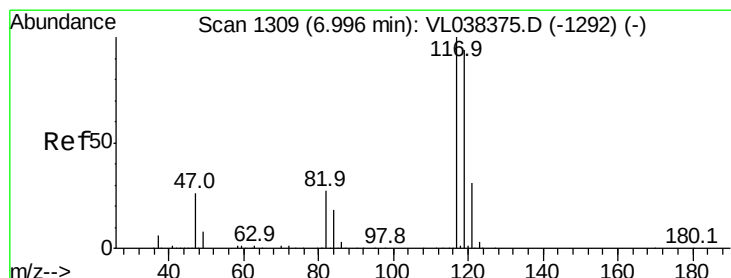
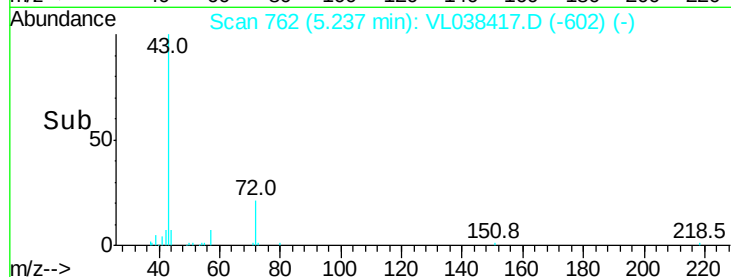
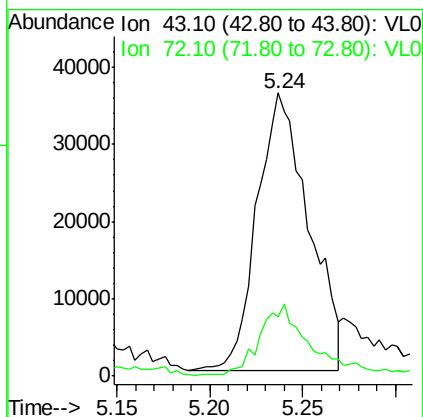
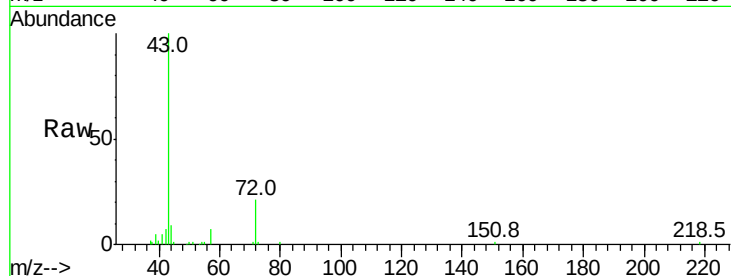
Tgt Ion: 114 Resp: 2055227
Ion Ratio Lower Upper
114 100
63 25.3 22.2 33.2
88 18.2 15.2 22.8





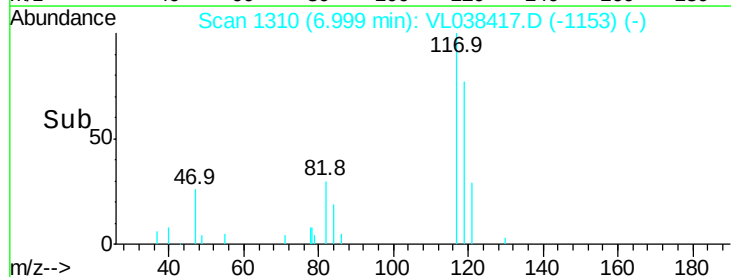
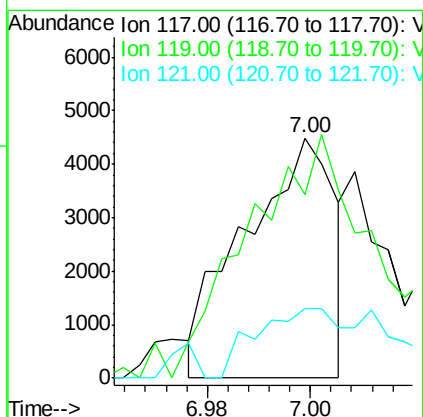
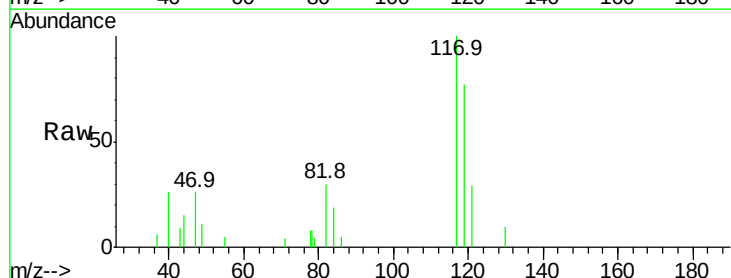
#34
2-Butanone
Concen: 1.09 ppbv
RT: 5.24
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 23 Feb 2022 21:07

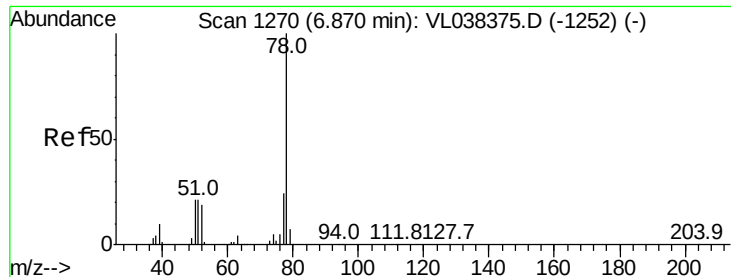
Tgt Ion: 43 Resp: 70153
Ion Ratio Lower Upper
43 100
72 27.2 17.4 26.2#



#35
Carbon Tetrachloride
Concen: 0.04 ppbv
RT: 7.00 min Scan# 1310
Delta R.T. 0.00 min
Lab File: VL038417.D
Acq: 23 Feb 2022 21:07

Tgt Ion: 117 Resp: 5440
Ion Ratio Lower Upper
117 100
119 72.8 74.9 112.3#
121 16.9 24.8 37.2#





#36

Benzene

Concen: 0.53 ppbv

RT: 6.87 Instrument: MSVOA_1

Delta R.T.

Lab File: ClientSampleId:

Acq: 23 Feb 2022 21:07

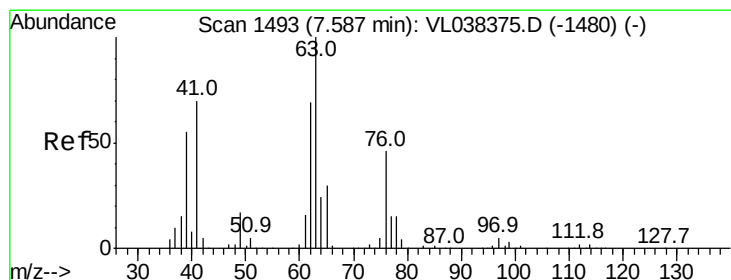
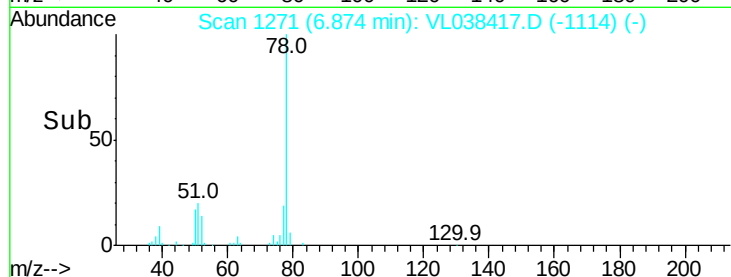
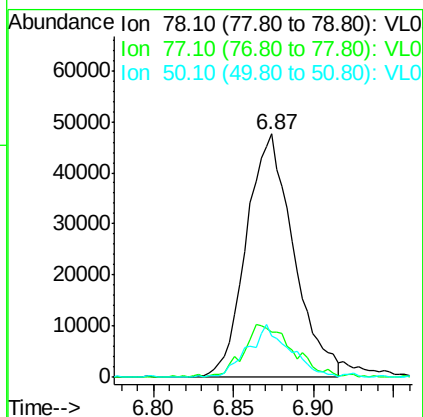
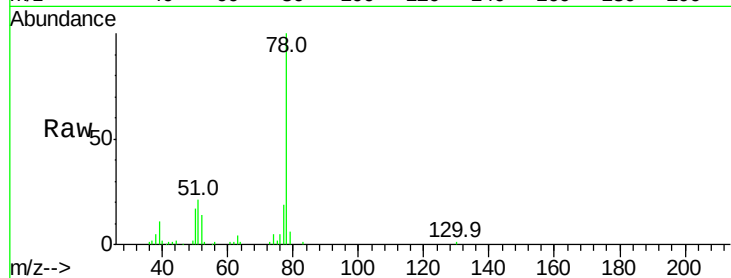
Tgt Ion: 78 Resp: 96603

Ion Ratio Lower Upper

78 100

77 18.8 19.0 28.6#

50 17.2 16.6 24.8



#39

1,2-Dichloropropane

Concen: 7.01 ppbv

RT: 7.15 min Scan# 1358

Delta R.T. -0.43 min

Lab File: VL038417.D

Acq: 23 Feb 2022 21:07

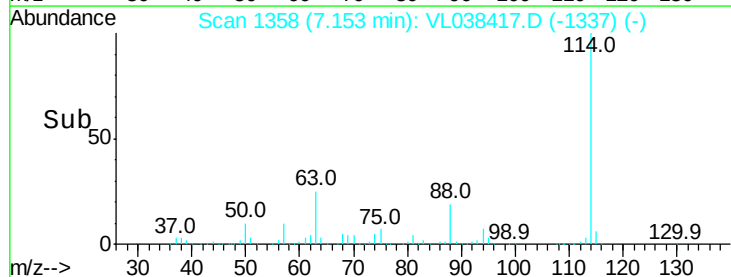
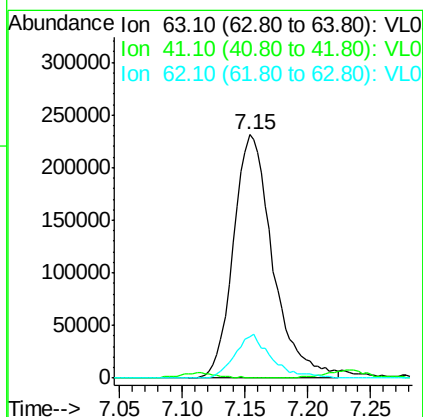
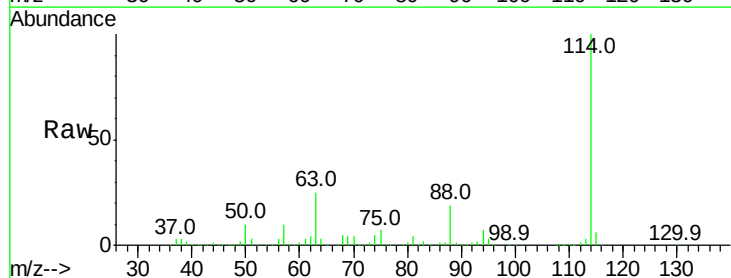
Tgt Ion: 63 Resp: 505049

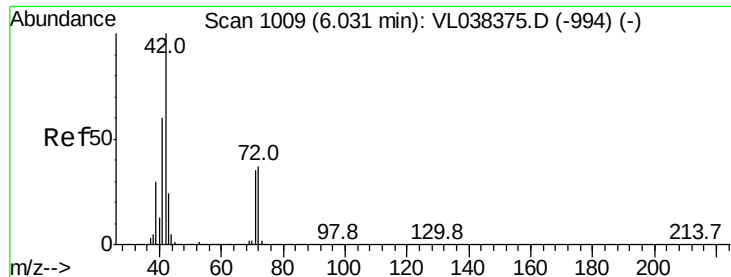
Ion Ratio Lower Upper

63 100

41 0.0 56.1 84.1#

62 16.8 55.5 83.3#





#41

Tetrahydrofuran

Concen: 0.04 ppbv

RT: 6.29 Instrument: MSVOA_1

Delta R.T. 0.00

Lab File: ClientSampleId: BG-GC

Acq: 23 Feb 2022 21:07

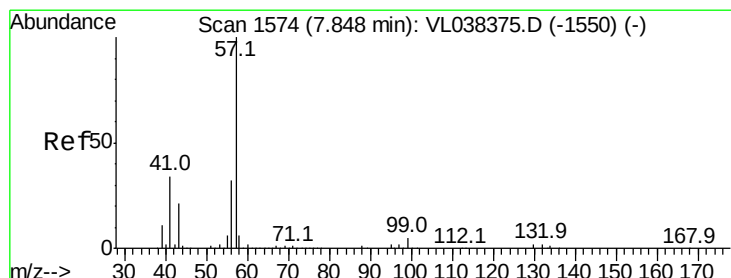
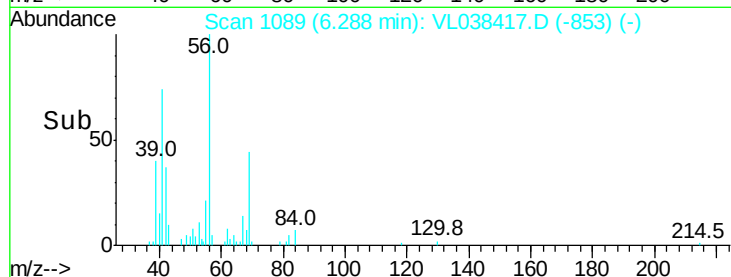
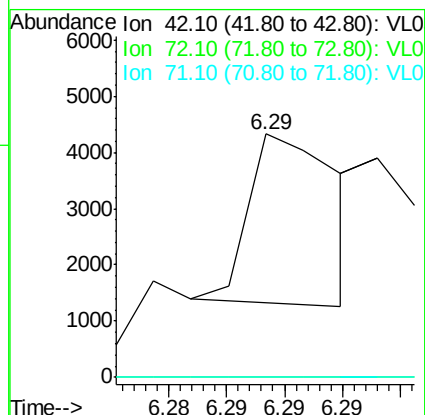
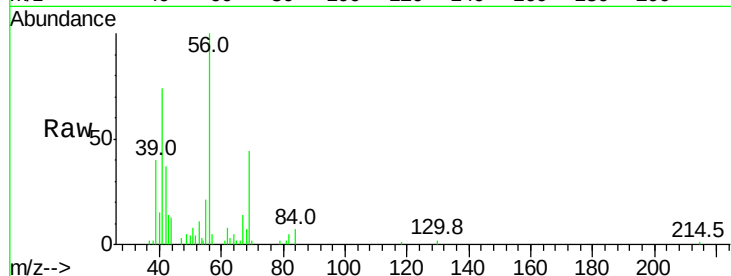
Tgt Ion: 42 Resp: 1606

Ion Ratio Lower Upper

42 100

72 0.0 29.9 44.9#

71 0.0 28.6 42.8#



#44

2,2,4-Trimethylpentane

Concen: 0.19 ppbv

RT: 7.85 min Scan# 1575

Delta R.T. 0.00 min

Lab File: VL038417.D

Acq: 23 Feb 2022 21:07

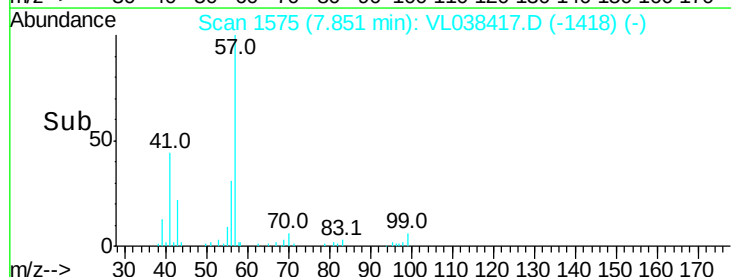
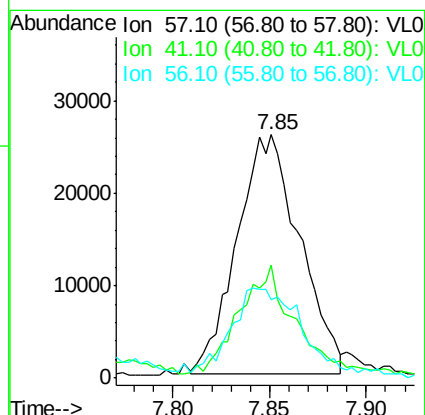
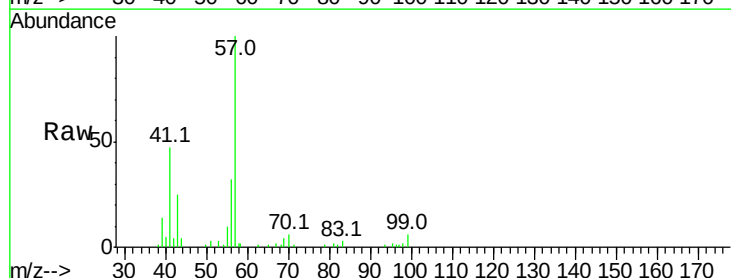
Tgt Ion: 57 Resp: 58571

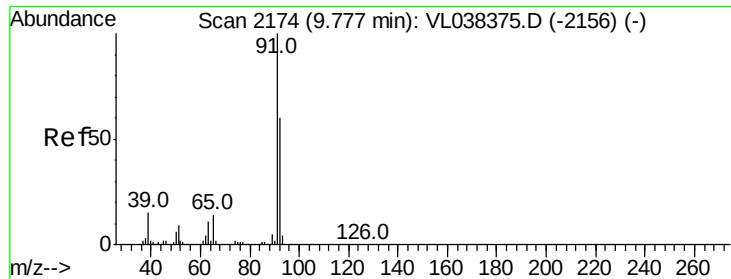
Ion Ratio Lower Upper

57 100

41 48.3 26.6 39.8#

56 45.3 25.0 37.6#





#53

Toluene

Concen: 1.31 ppbv

RT: 9.78 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

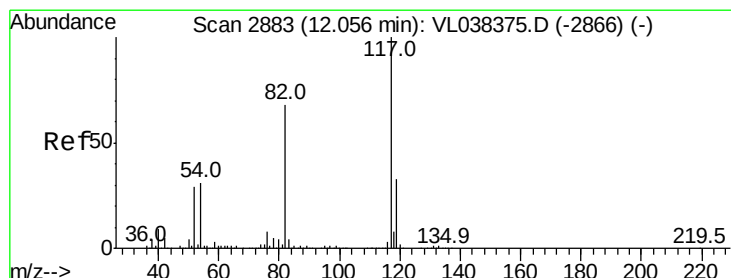
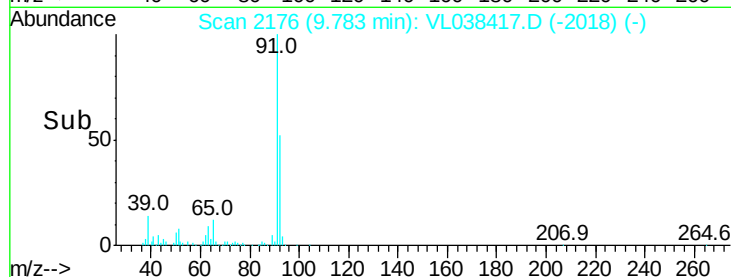
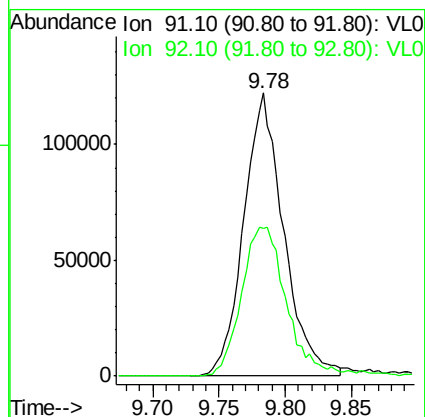
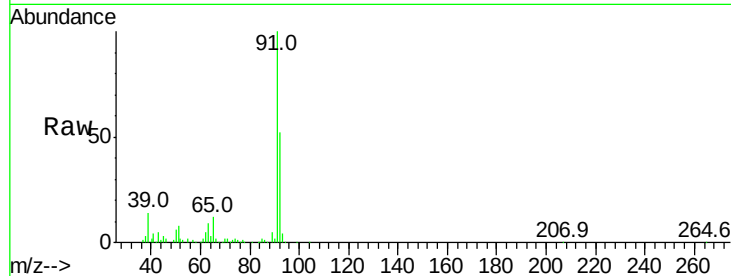
Acq: 23 Feb 2022 21:07 BG-GC

Tgt Ion: 91 Resp: 256818

Ion Ratio Lower Upper

91 100

92 60.3 48.2 72.4



#55

Chlorobenzene-d5

Concen: 10.00 ppbv

RT: 12.06 min Scan# 2885

Delta R.T. 0.01 min

Lab File: VL038417.D

Acq: 23 Feb 2022 21:07

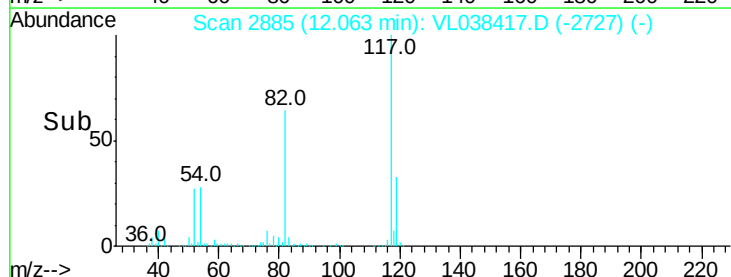
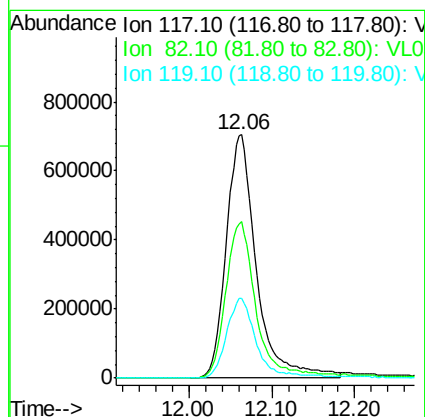
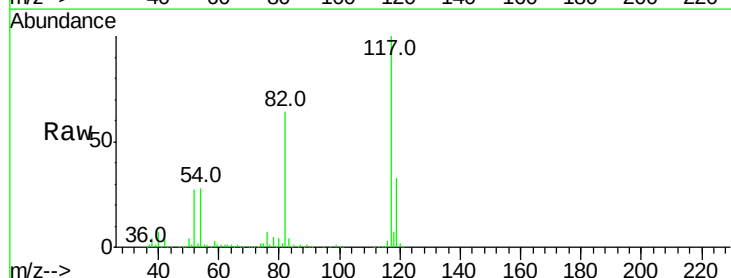
Tgt Ion: 117 Resp: 1782917

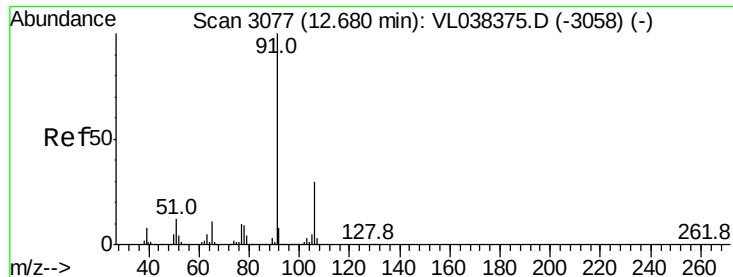
Ion Ratio Lower Upper

117 100

82 66.7 54.9 82.3

119 33.3 46.1 69.1#





#58

Ethyl Benzene

Concen: 0.03 ppbv

RT: 12.69

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

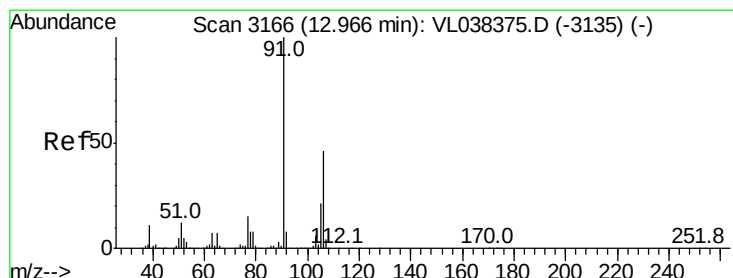
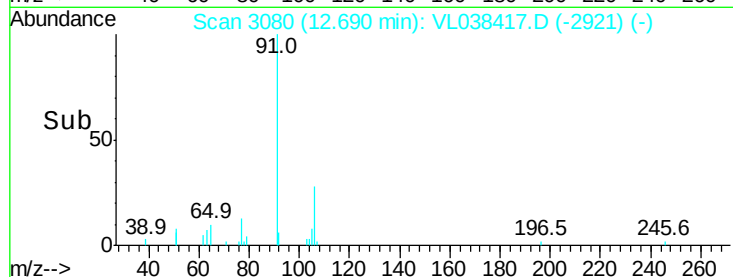
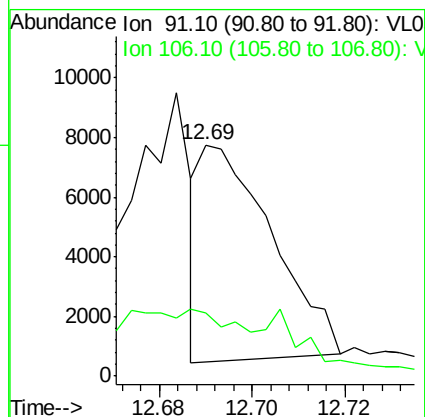
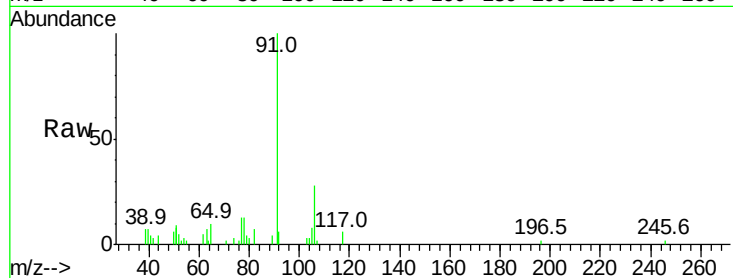
Acq: 23 Feb 2022 21:07

Tgt Ion: 91 Resp: 7739

Ion Ratio Lower Upper

91 100

106 22.6 24.0 36.0#



#59

m/p-Xylene

Concen: 0.07 ppbv

RT: 12.97 min Scan# 3166

Delta R.T. 0.00 min

Lab File: VL038417.D

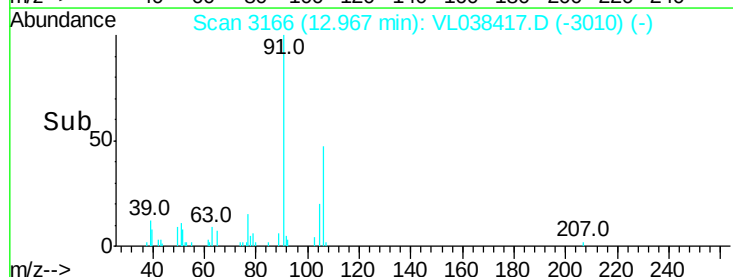
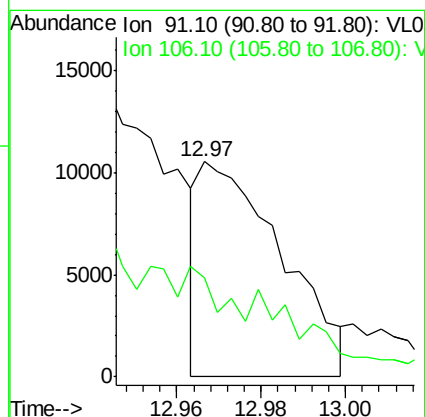
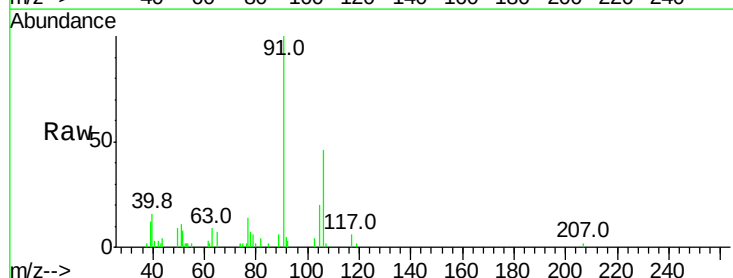
Acq: 23 Feb 2022 21:07

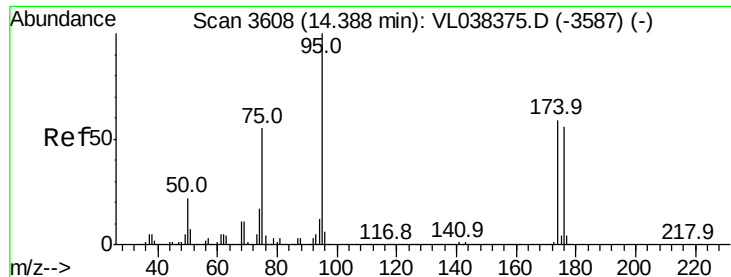
Tgt Ion: 91 Resp: 14318

Ion Ratio Lower Upper

91 100

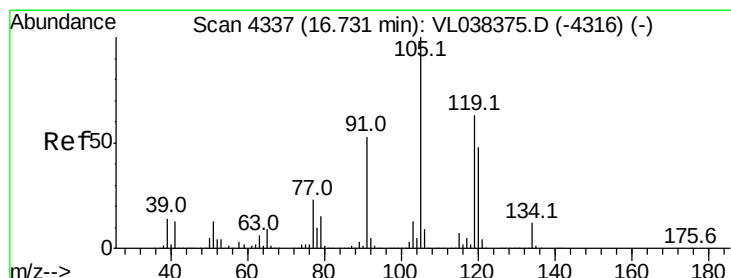
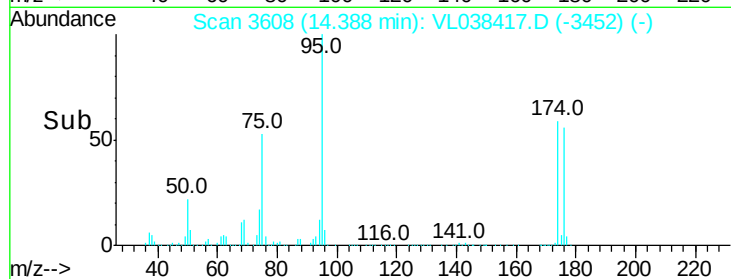
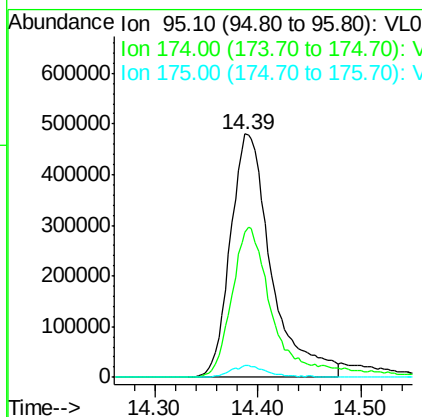
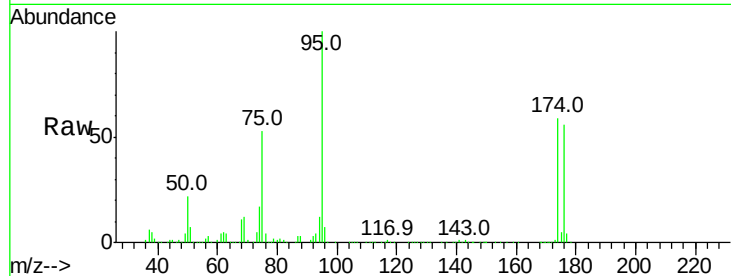
106 0.0 34.4 51.6#





#68
 1-Bromo-4-Fluorobenzene
 Concen: 9.02 ppbv
 RT: 14.39
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 BG-GC
 Acq: 23 Feb 2022 21:07

Tgt Ion: 95 Resp: 1330597
 Ion Ratio Lower Upper
 95 100
 174 64.8 49.0 73.4
 175 4.3 3.6 5.4



#74
 1,2,4-Trimethylbenzene
 Concen: 0.04 ppbv
 RT: 16.74 min Scan# 4341
 Delta R.T. 0.01 min
 Lab File: VL038417.D
 Acq: 23 Feb 2022 21:07

Tgt Ion: 105 Resp: 7398
 Ion Ratio Lower Upper
 105 100
 120 14.1 38.2 57.4#
 91 24.2 42.7 64.1#
 77 5.3 18.5 27.7#

