

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_L\DATA\VL100521\
 Data File : VL037780.D
 Acq On : 5 Oct 2021 19:18
 Operator : SY/AP
 Sample : M4012-07
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 C0P09

Quant Time: Oct 06 04:47:47 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL100421AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Oct 04 17:43:54 2021
 QLast Update : Mon Oct 04 17:43:54 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.65	49	1276382	10.00	ppbv	-0.02
33) 1,4-Difluorobenzene	7.15	114	3671855	10.00	ppbv	-0.02
55) Chlorobenzene-d5	12.06	117	3087928	10.00	ppbv	-0.03

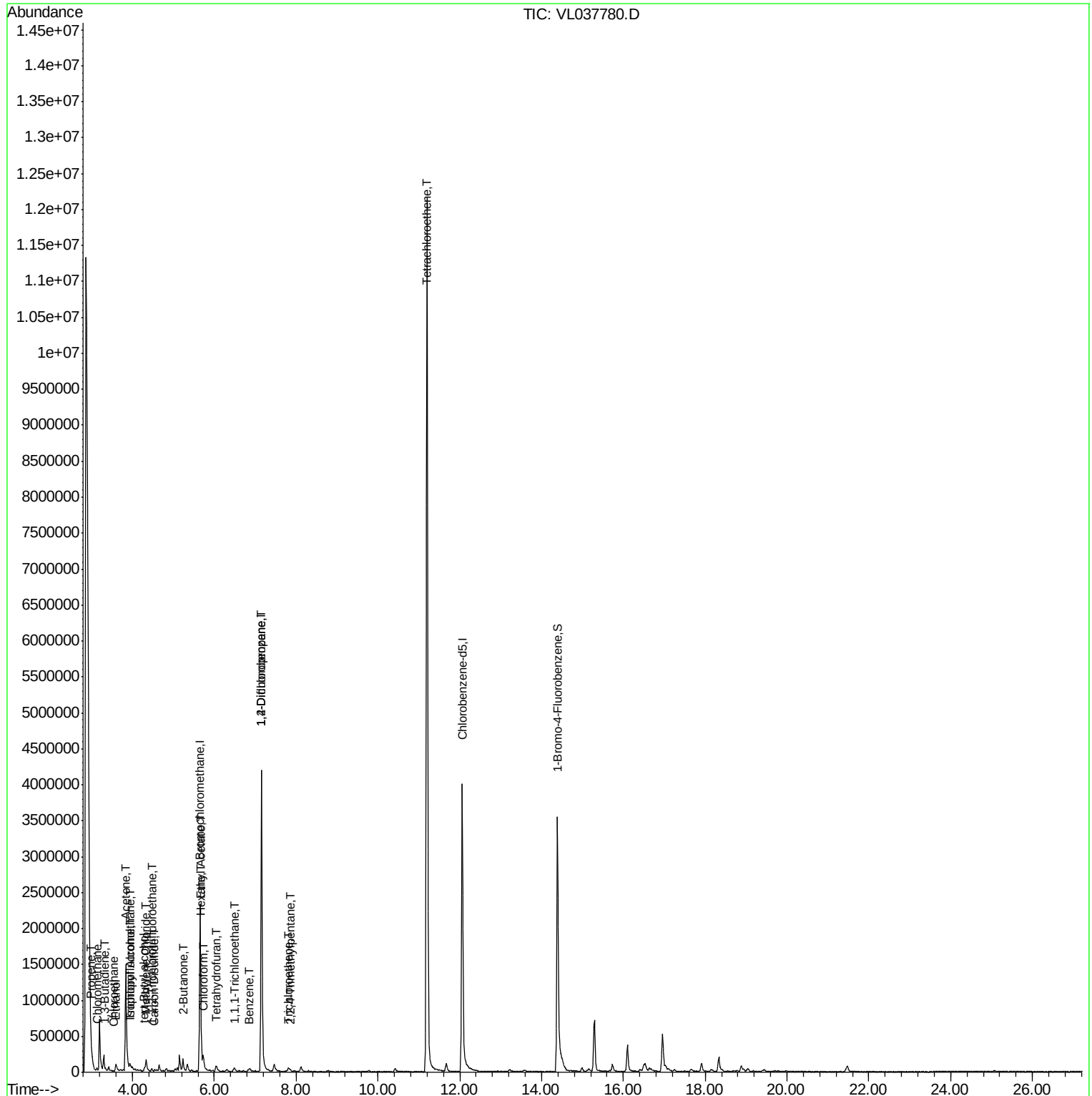
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.39	95	1928511	8.93	ppbv	-0.03
Spiked Amount	10.000	Range	65 - 135	Recovery	=	89.30%

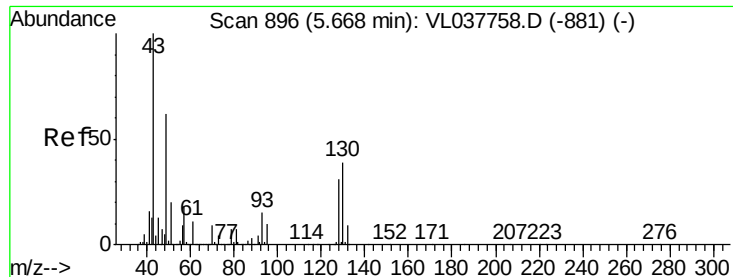
Target Compounds						Qvalue
4) Chloromethane	3.13	50	25027	0.279	ppbv	89
7) Chloroethane	3.54	64	851	0.028	ppbv #	77
9) Propene	3.00	41	16387	0.182	ppbv #	66
11) Trichlorofluoromethane	3.95	101	3808	0.021	ppbv	86
12) 1,1,2-Trichlorotrifluoroet	4.47	101	2866	0.021	ppbv #	1
13) Ethanol	3.60	45	63479	8.602	ppbv #	27
15) Acetone	3.83	43	1921820	16.773	ppbv	90
16) 1,3-Butadiene	3.33	39	2780	0.033	ppbv #	11
17) tert-Butyl alcohol	4.29	59	40598	0.344	ppbv	95
19) Isopropyl Alcohol	3.95	45	16002	0.224	ppbv #	1
20) Methylene Chloride	4.33	84	56289	0.972	ppbv	94
25) Ethyl Acetate	5.67	43	63444	0.197	ppbv #	79
26) Hexane	5.67	57	46909	0.296	ppbv #	35
27) Carbon Disulfide	4.54	76	11480	0.082	ppbv #	31
29) Chloroform	5.74	83	105375	0.466	ppbv	95
32) 1,1,1-Trichloroethane	6.48	97	9593	0.045	ppbv #	1
34) 2-Butanone	5.23	43	123557	0.834	ppbv #	46
36) Benzene	6.87	78	11773	0.038	ppbv #	57
38) Trichloroethene	7.81	130	3852	0.031	ppbv #	72
39) 1,2-Dichloropropane	7.15	63	843068	7.147	ppbv #	28
41) Tetrahydrofuran	6.05	42	29646	0.408	ppbv #	36
44) 2,2,4-Trimethylpentane	7.85	57	12164	0.023	ppbv #	1
52) Tetrachloroethene	11.20	164	3641021	29.840	ppbv	97

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

```
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA_L\DATA\VL100521\  
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Acq On    : 5 Oct 2021 19:18  
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Sample    : M4012-07  
Misc      : 400mL/MSVOA_L  
ALS Vial  : 1 Sample Multiplier: 1
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Quant Time: Oct 06 04:47:47 2021
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA_L\METHODS\VL100421AIR.M
Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA_L Mon Oct 04 17:43:54 2021
QLast Update : Mon Oct 04 17:43:54 2021
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.65 min Scan# 890

Delta R.T. -0.02 min

Lab File: VL037780.D

Acq: 5 Oct 2021 19:18

Instrument :

MSVOA_L

ClientSampleId :

C0P09

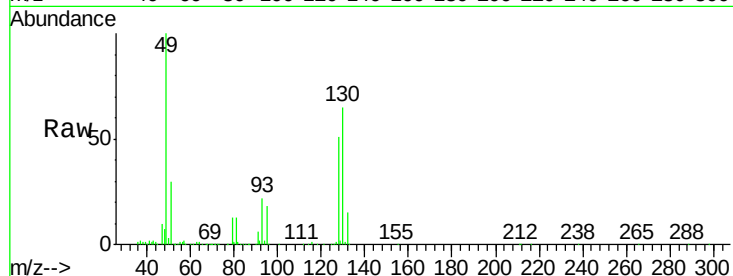
Tgt Ion: 49 Resp: 1276382

Ion Ratio Lower Upper

49 100

128 51.3 27.1 81.3

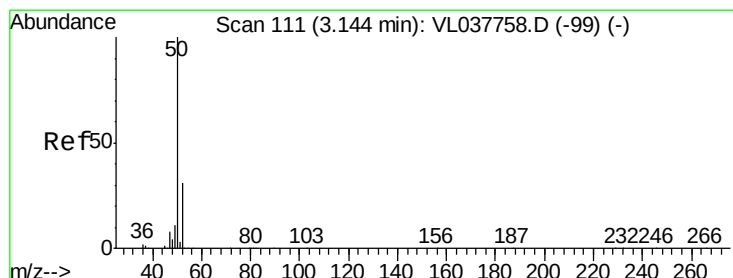
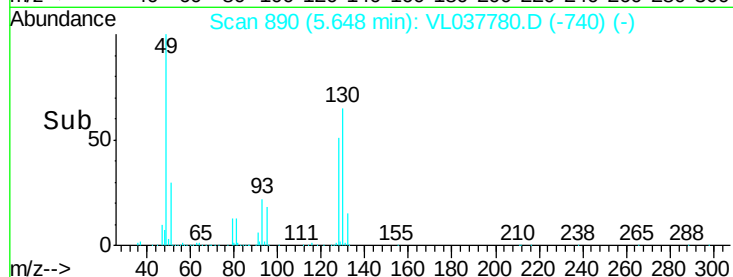
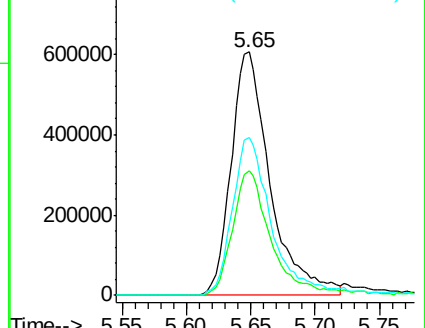
130 68.0 33.2 99.6



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0



#4

Chloromethane

Concen: 0.279 ppbv

RT: 3.13 min Scan# 106

Delta R.T. -0.02 min

Lab File: VL037780.D

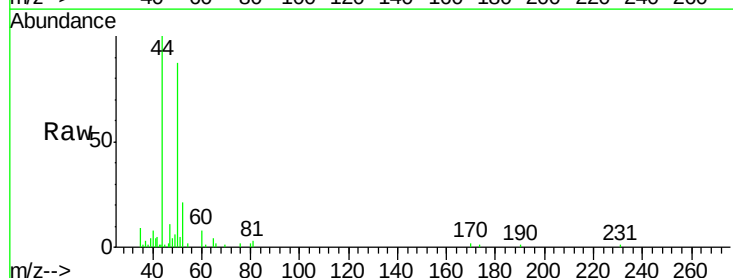
Acq: 5 Oct 2021 19:18

Tgt Ion: 50 Resp: 25027

Ion Ratio Lower Upper

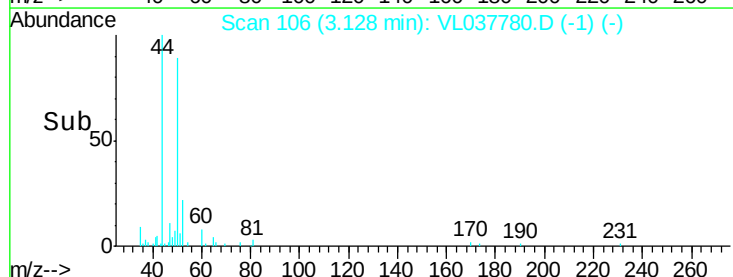
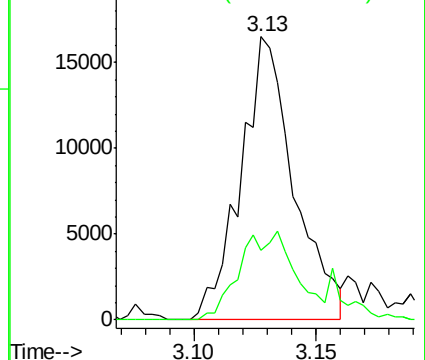
50 100

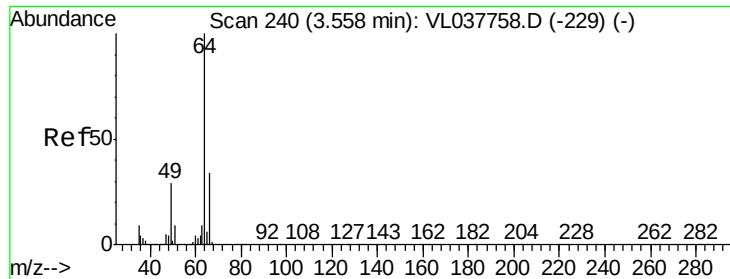
52 24.5 24.4 36.6



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#7

Chloroethane

Concen: 0.028 ppbv

RT: 3.54 min Scan# 235

Delta R.T. -0.02 min

Lab File: VL037780.D

Acq: 5 Oct 2021 19:18

Instrument :

MSVOA_L

ClientSampleId :

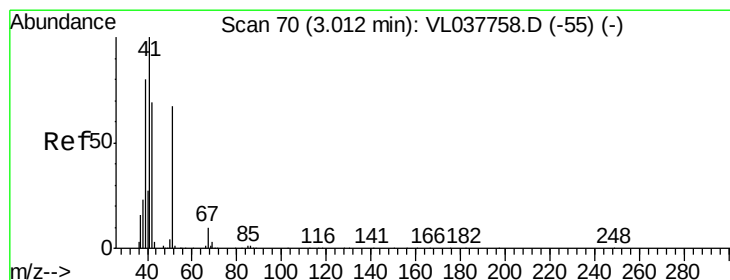
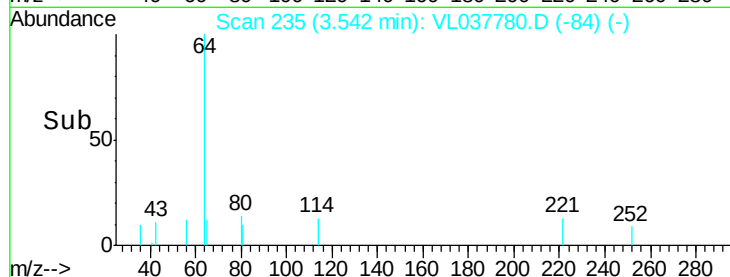
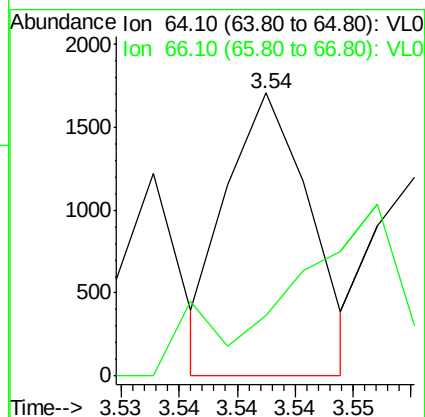
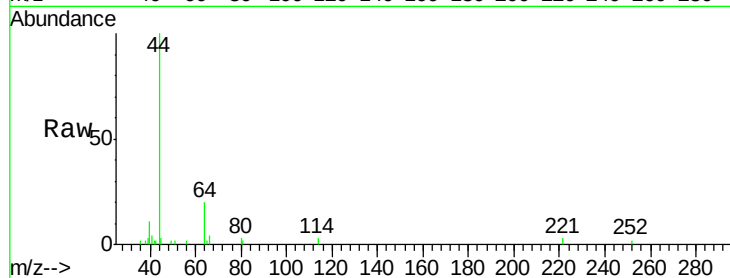
C0P09

Tgt Ion: 64 Resp: 851

Ion Ratio Lower Upper

64 100

66 21.3 27.5 41.3#



#9

Propene

Concen: 0.182 ppbv

RT: 3.00 min Scan# 66

Delta R.T. -0.01 min

Lab File: VL037780.D

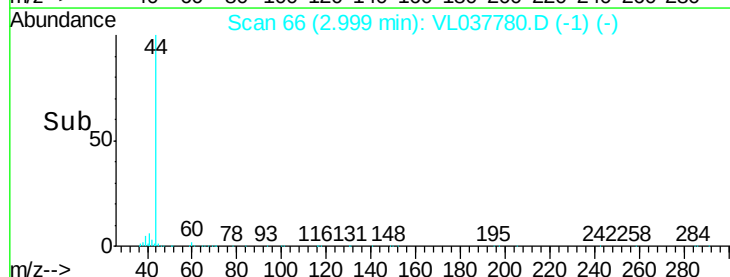
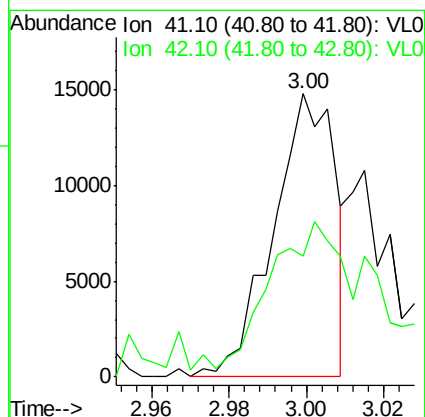
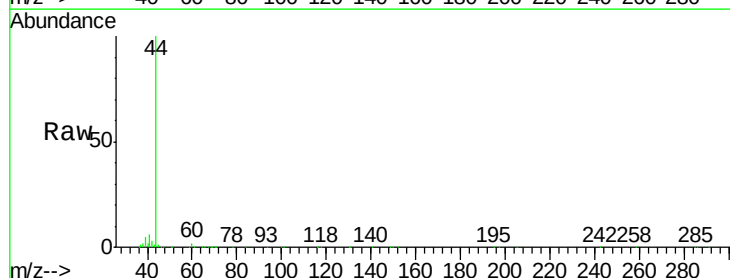
Acq: 5 Oct 2021 19:18

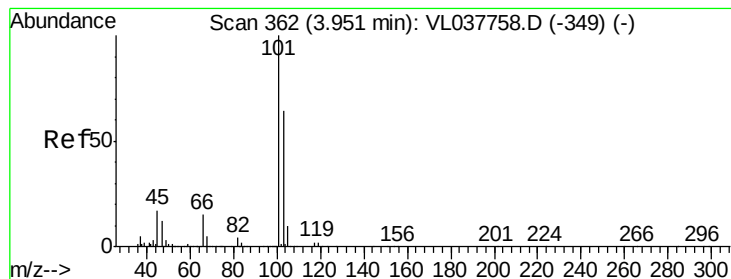
Tgt Ion: 41 Resp: 16387

Ion Ratio Lower Upper

41 100

42 95.4 54.2 81.2#





#11

Trichlorofluoromethane

Concen: 0.021 ppbv

RT: 3.95 min Scan# 363

Delta R.T. 0.00 min

Lab File: VL037780.D

Acq: 5 Oct 2021 19:18

Instrument :

MSVOA_L

ClientSampleId :

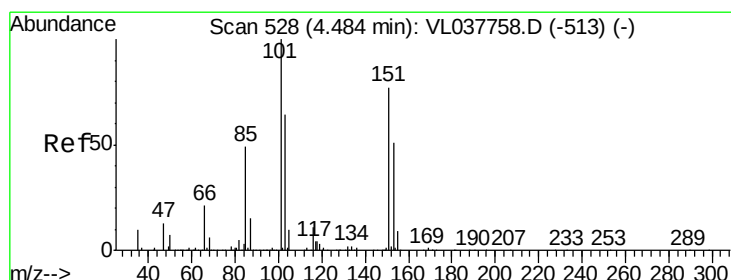
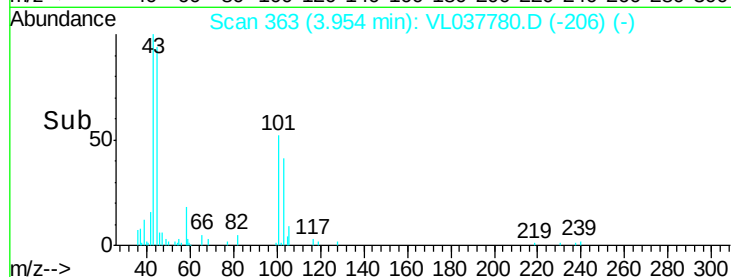
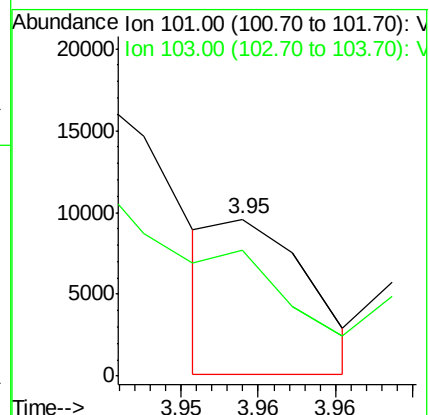
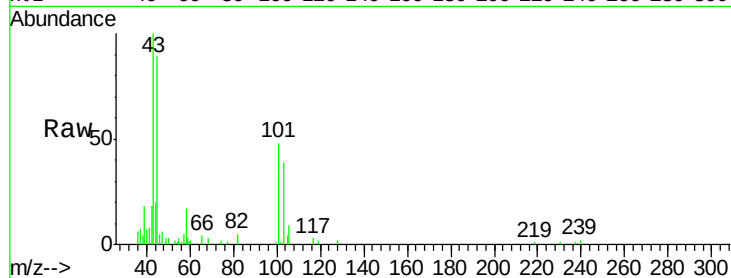
C0P09

Tgt Ion:101 Resp: 3808

Ion Ratio Lower Upper

101 100

103 75.8 51.5 77.3



#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.021 ppbv

RT: 4.47 min Scan# 522

Delta R.T. -0.02 min

Lab File: VL037780.D

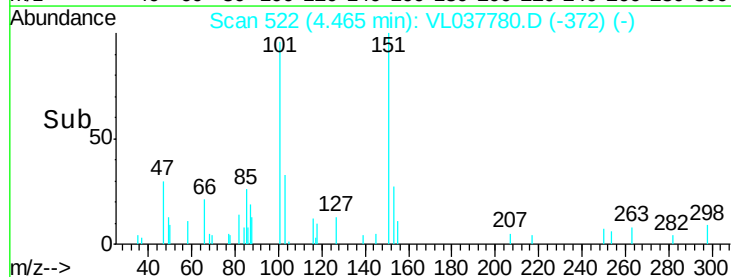
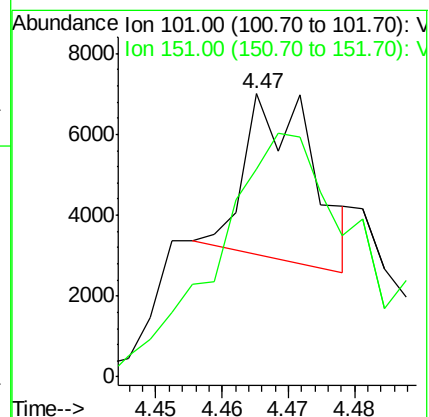
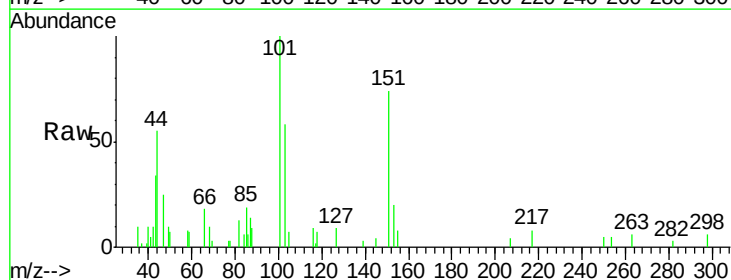
Acq: 5 Oct 2021 19:18

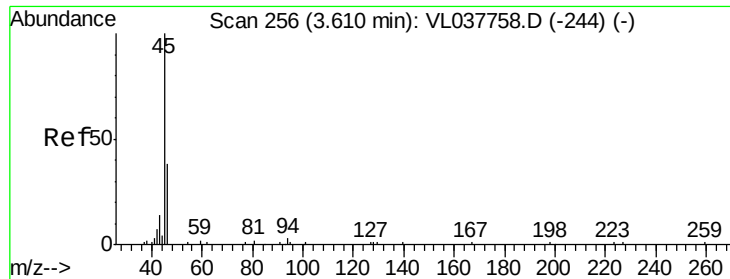
Tgt Ion:101 Resp: 2866

Ion Ratio Lower Upper

101 100

151 360.9 62.9 94.3#

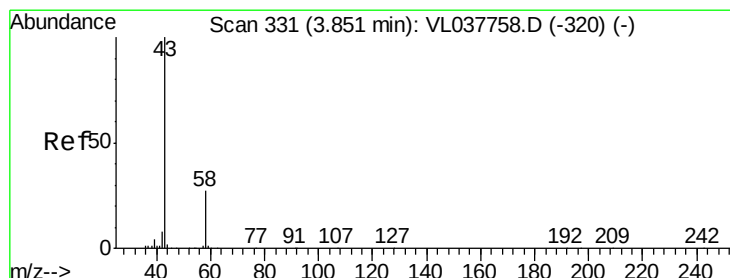
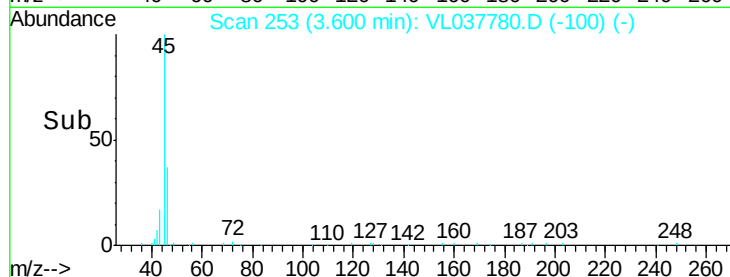
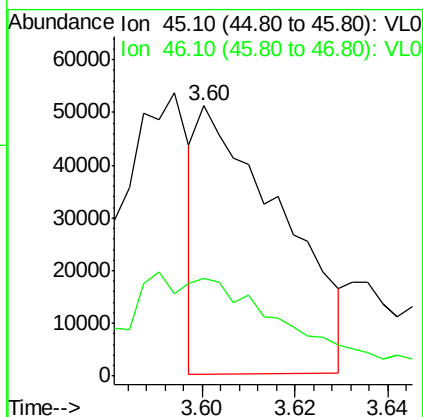
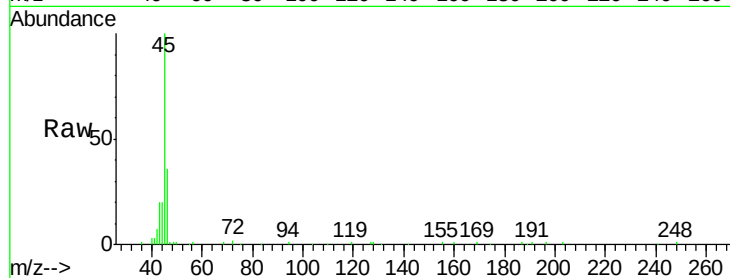




#13
Ethanol
Concen: 8.602 ppbv
RT: 3.60 min Scan# 253
Delta R.T. -0.01 min
Lab File: VL037780.D
Acq: 5 Oct 2021 19:18

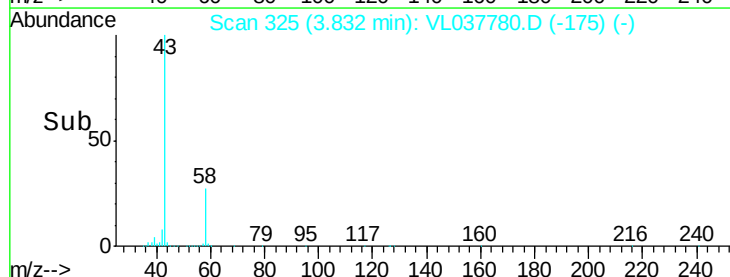
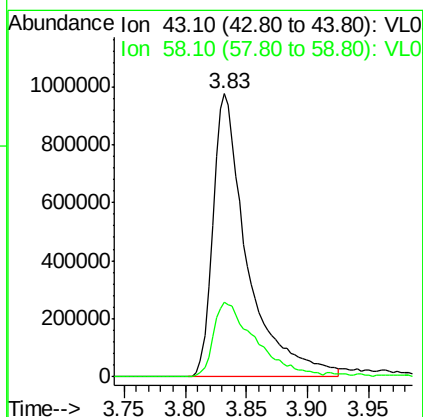
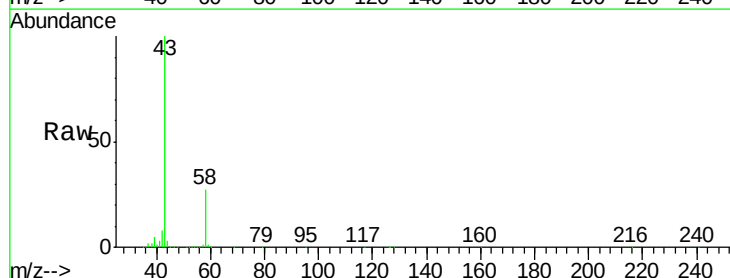
Instrument :
MSVOA_L
ClientSampleId :
C0P09

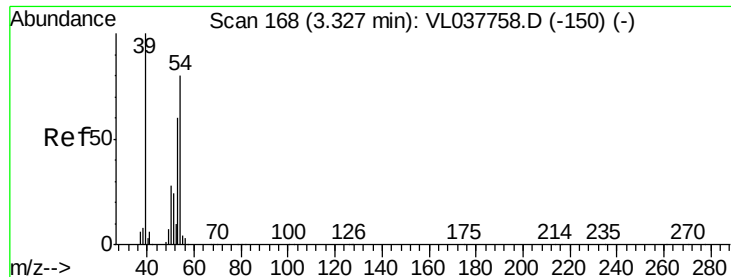
Tgt Ion: 45 Resp: 63479
Ion Ratio Lower Upper
45 100
46 0.0 20.2 81.0#



#15
Acetone
Concen: 16.773 ppbv
RT: 3.83 min Scan# 325
Delta R.T. -0.02 min
Lab File: VL037780.D
Acq: 5 Oct 2021 19:18

Tgt Ion: 43 Resp: 1921820
Ion Ratio Lower Upper
43 100
58 34.1 23.0 34.6

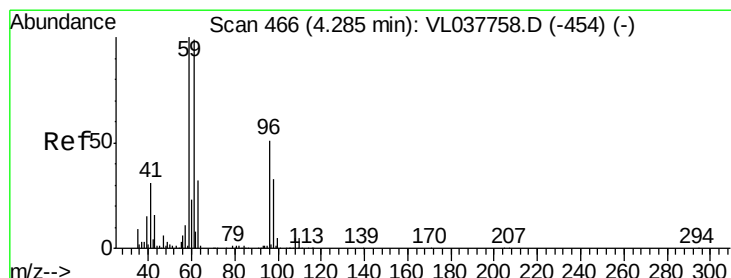
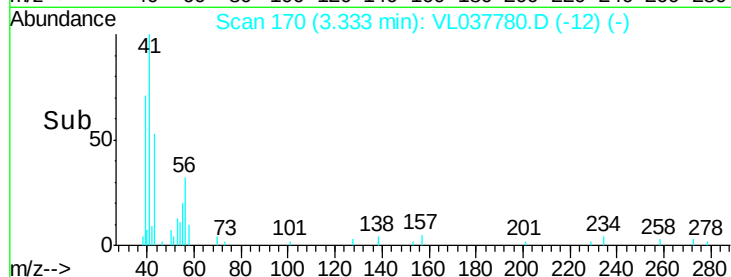
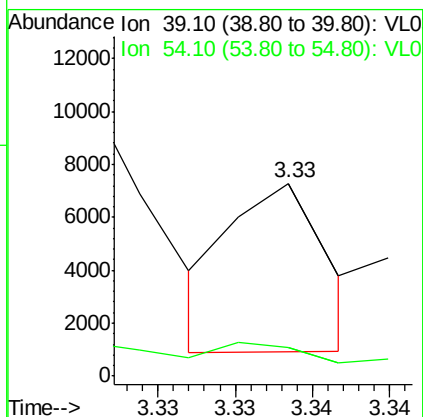
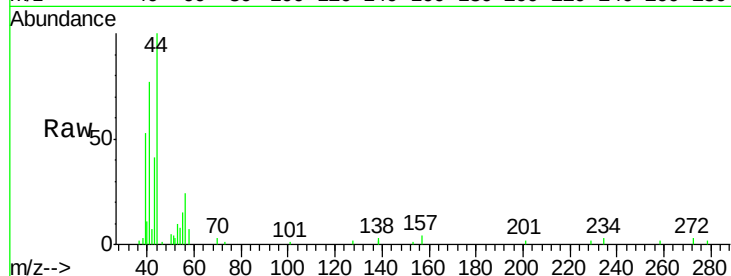




#16
1,3-Butadiene
Concen: 0.033 ppbv
RT: 3.33 min Scan# 170
Delta R.T. 0.01 min
Lab File: VL037780.D
Acq: 5 Oct 2021 19:18

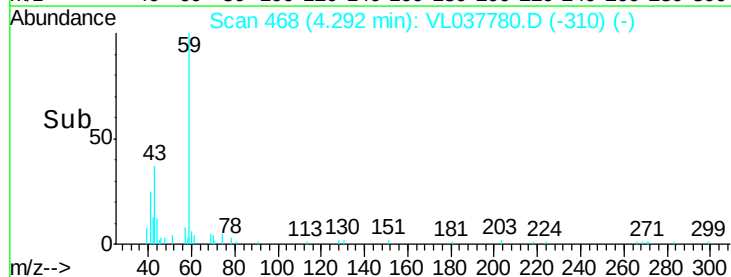
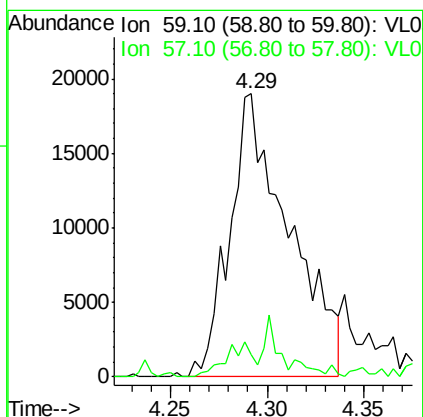
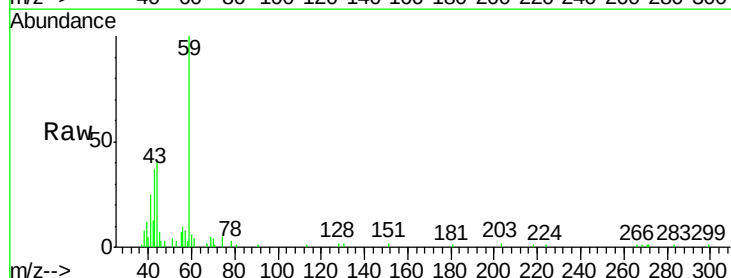
Instrument :
MSVOA_L
ClientSampleId :
C0P09

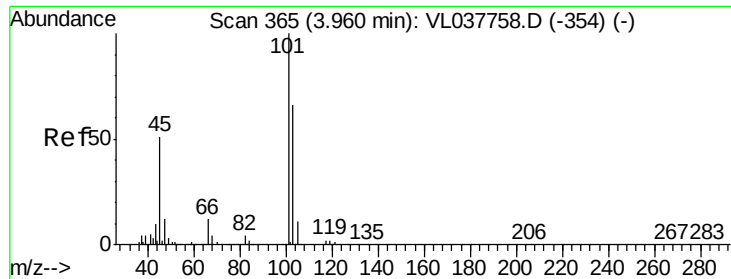
Tgt Ion: 39 Resp: 2780
Ion Ratio Lower Upper
39 100
54 0.0 61.7 92.5#



#17
tert-Butyl alcohol
Concen: 0.344 ppbv
RT: 4.29 min Scan# 468
Delta R.T. 0.01 min
Lab File: VL037780.D
Acq: 5 Oct 2021 19:18

Tgt Ion: 59 Resp: 40598
Ion Ratio Lower Upper
59 100
57 12.5 8.6 13.0





#19

Isopropyl Alcohol

Concen: 0.224 ppbv

RT: 3.95 min Scan# 363

Delta R.T. -0.01 min

Lab File: VL037780.D

Acq: 5 Oct 2021 19:18

Instrument :

MSVOA_L

ClientSampleId :

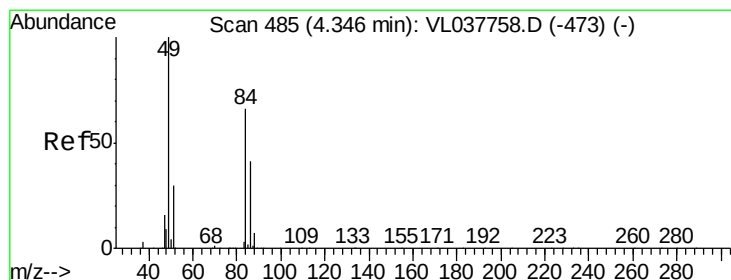
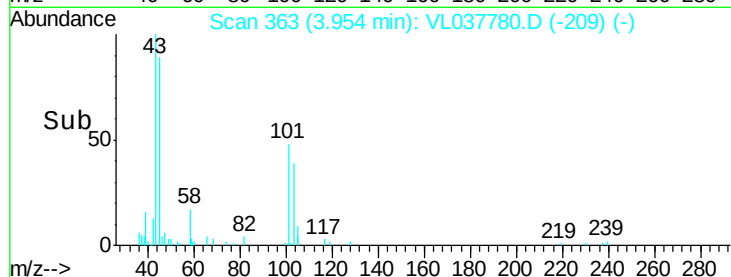
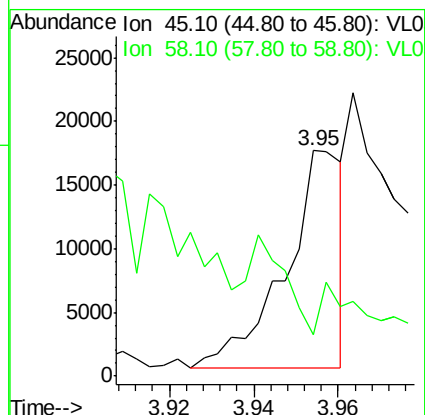
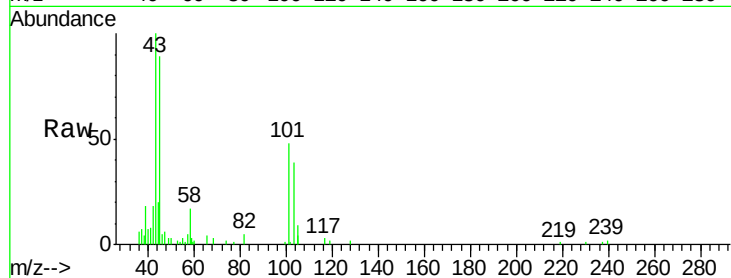
C0P09

Tgt Ion: 45 Resp: 16002

Ion Ratio Lower Upper

45 100

58 213.4 1.1 1.7#



#20

Methylene Chloride

Concen: 0.972 ppbv

RT: 4.33 min Scan# 481

Delta R.T. -0.01 min

Lab File: VL037780.D

Acq: 5 Oct 2021 19:18

Tgt Ion: 84 Resp: 56289

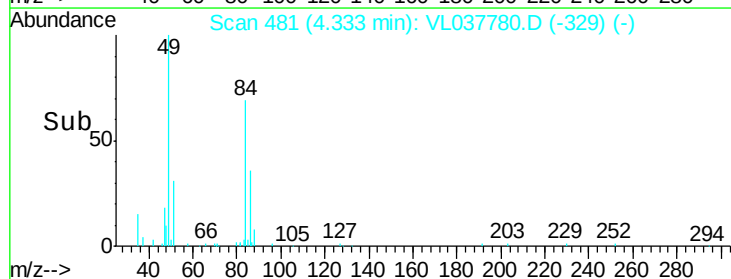
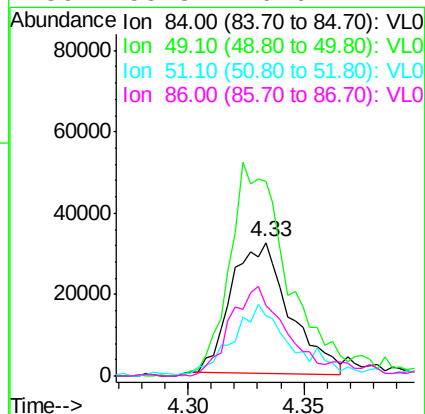
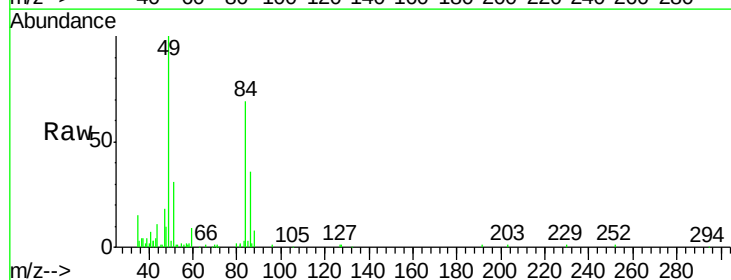
Ion Ratio Lower Upper

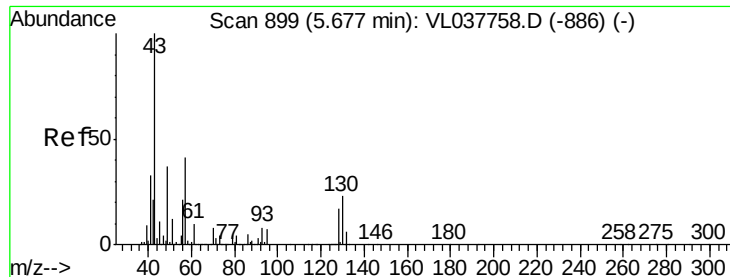
84 100

49 144.1 120.7 181.1

51 45.1 36.2 54.4

86 53.8 49.6 74.4

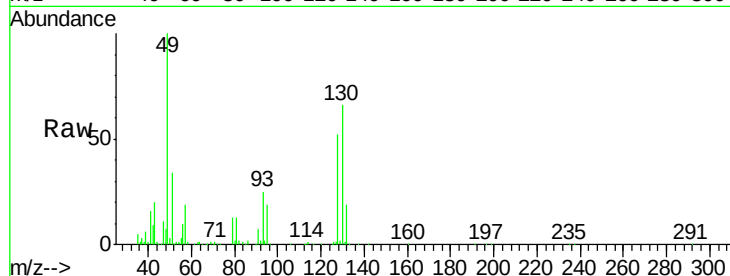




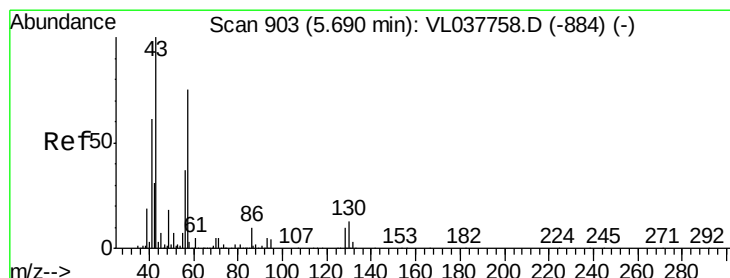
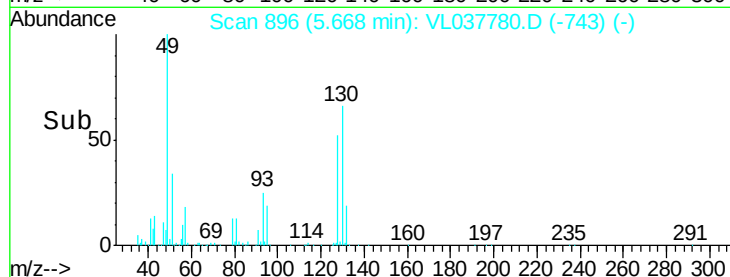
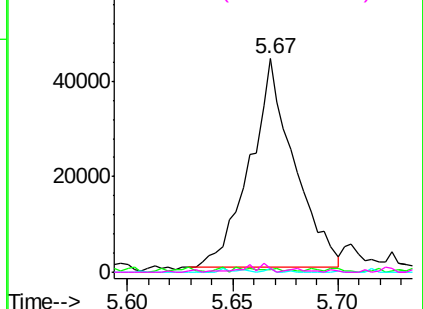
#25
Ethyl Acetate
Concen: 0.197 ppbv
RT: 5.67 min Scan# 896
Delta R.T. -0.01 min
Lab File: VL037780.D
Acq: 5 Oct 2021 19:18

Instrument :
MSVOA_L
ClientSampleId :
C0P09

Tgt Ion:	43	Resp:	63444
Ion	Ratio	Lower	Upper
43	100		
45	1.8	8.1	12.1#
61	0.9	7.5	11.3#
70	2.4	5.9	8.9#

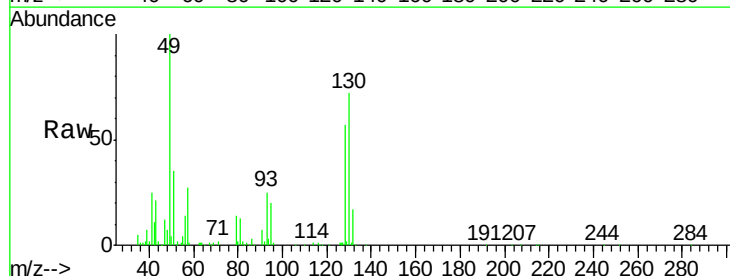


Abundance Ion 43.10 (42.80 to 43.80): VL0
Ion 45.10 (44.80 to 45.80): VL0
Ion 61.10 (60.80 to 61.80): VL0
Ion 70.10 (69.80 to 70.80): VL0

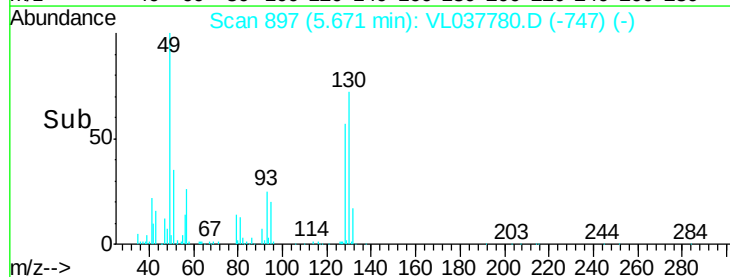
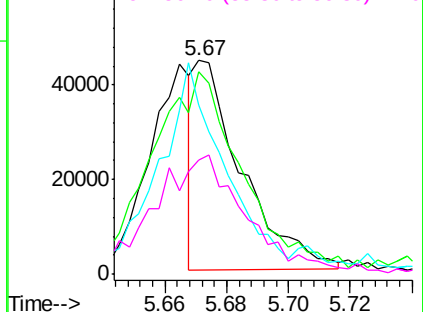


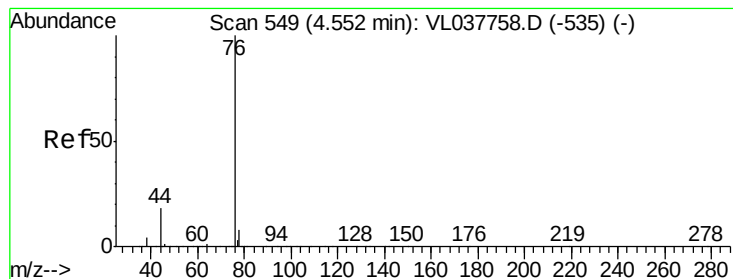
#26
Hexane
Concen: 0.296 ppbv
RT: 5.67 min Scan# 897
Delta R.T. -0.02 min
Lab File: VL037780.D
Acq: 5 Oct 2021 19:18

Tgt Ion:	57	Resp:	46909
Ion	Ratio	Lower	Upper
57	100		
41	201.3	69.6	104.4#
43	159.9	171.4	257.0#
56	118.1	42.0	63.0#



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





#27

Carbon Disulfide

Concen: 0.082 ppbv

RT: 4.54 min Scan# 544

Delta R.T. -0.02 min

Lab File: VL037780.D

Acq: 5 Oct 2021 19:18

Instrument :

MSVOA_L

ClientSampleId :

C0P09

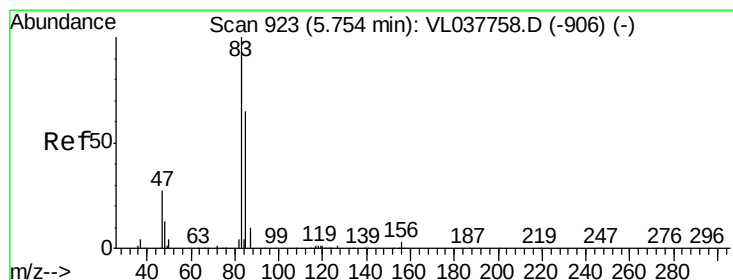
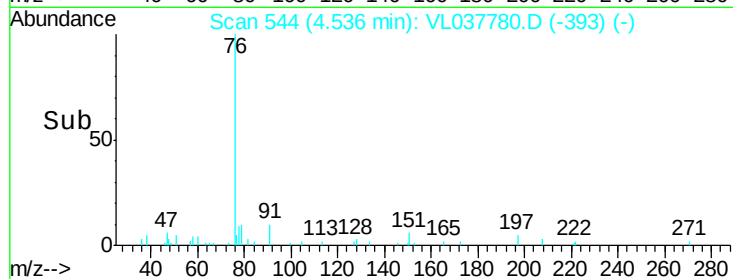
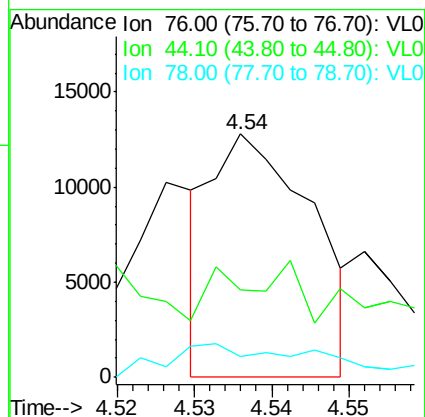
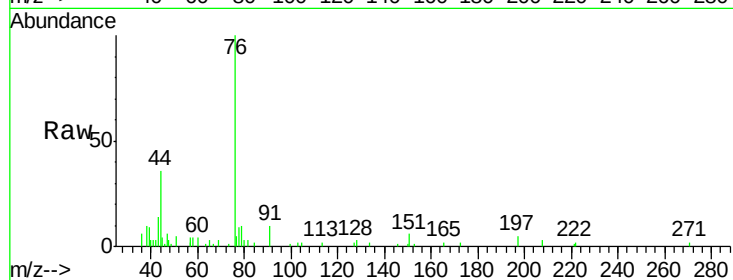
Tgt Ion: 76 Resp: 11480

Ion Ratio Lower Upper

76 100

44 55.7 14.3 21.5#

78 23.3 7.8 11.6#



#29

Chloroform

Concen: 0.466 ppbv

RT: 5.74 min Scan# 917

Delta R.T. -0.02 min

Lab File: VL037780.D

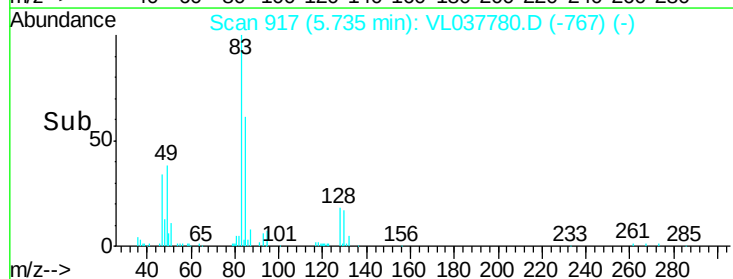
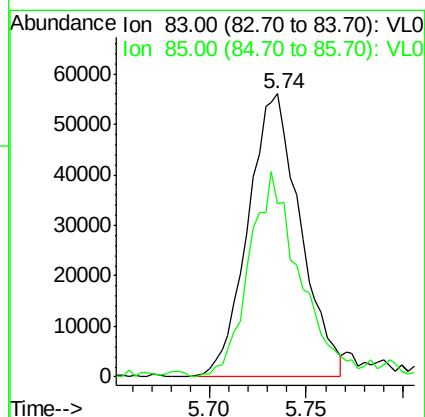
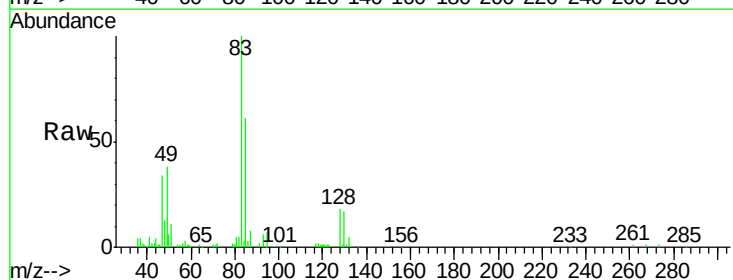
Acq: 5 Oct 2021 19:18

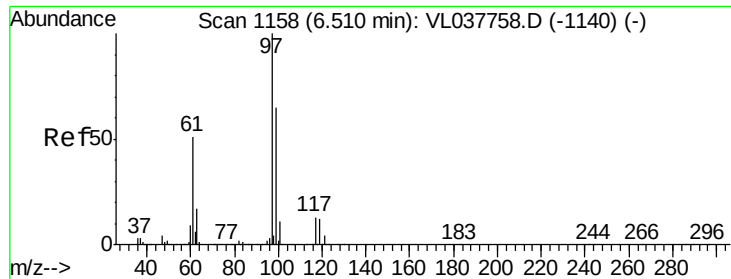
Tgt Ion: 83 Resp: 105375

Ion Ratio Lower Upper

83 100

85 61.2 51.8 77.8





#32

1,1,1-Trichloroethane

Concen: 0.045 ppbv

RT: 6.48 min Scan# 1150

Delta R.T. -0.03 min

Lab File: VL037780.D

Acq: 5 Oct 2021 19:18

Instrument :

MSVOA_L

ClientSampleId :

C0P09

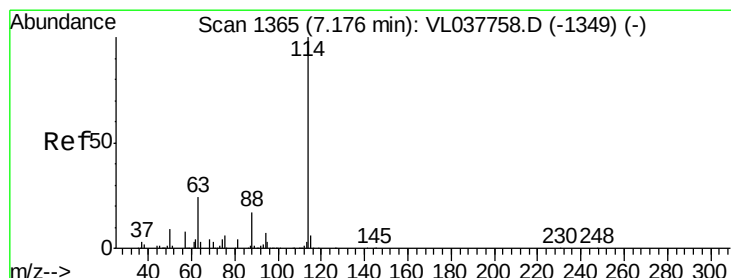
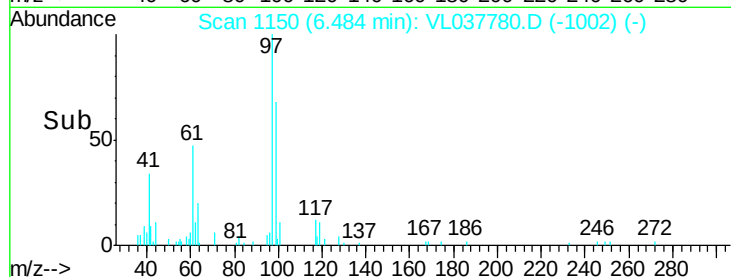
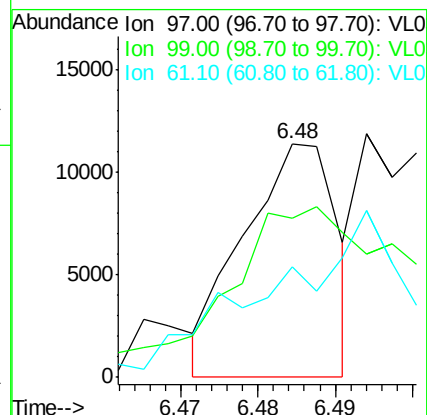
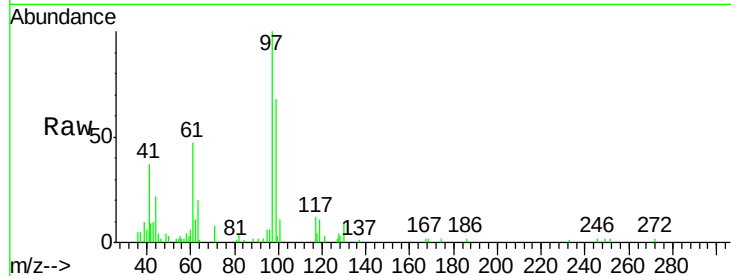
Tgt Ion: 97 Resp: 9593

Ion Ratio Lower Upper

97 100

99 186.5 52.6 78.8#

61 0.0 40.2 60.4#



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.15 min Scan# 1358

Delta R.T. -0.02 min

Lab File: VL037780.D

Acq: 5 Oct 2021 19:18

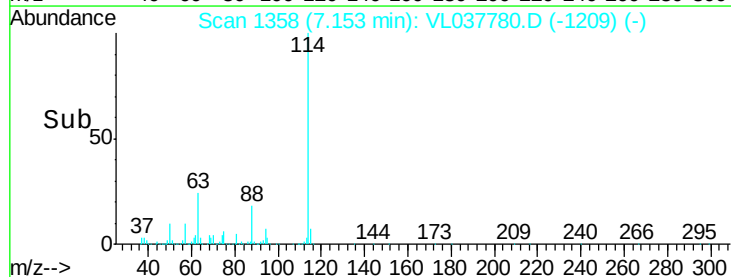
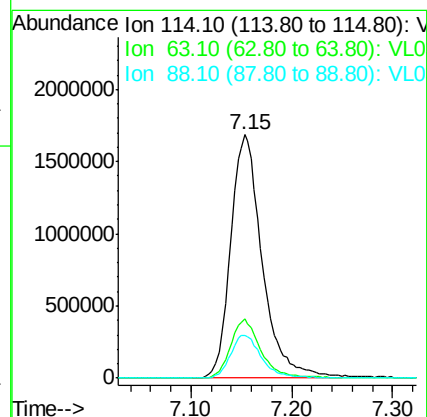
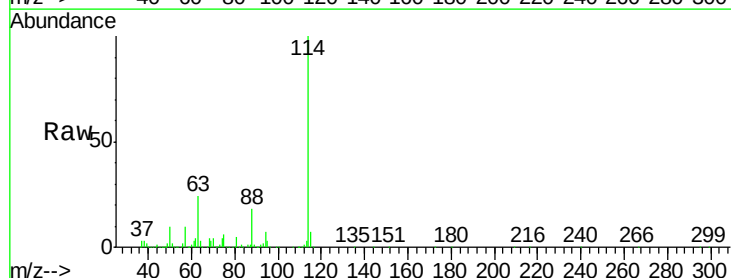
Tgt Ion: 114 Resp: 3671855

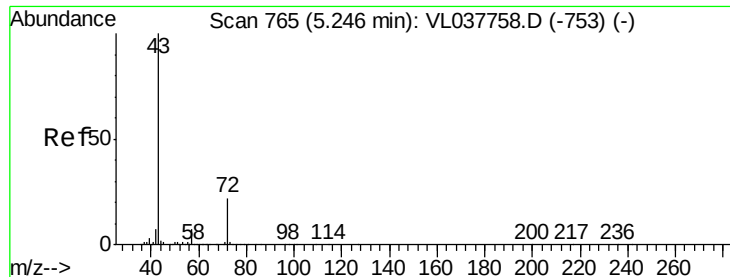
Ion Ratio Lower Upper

114 100

63 23.6 19.4 29.2

88 17.5 14.4 21.6

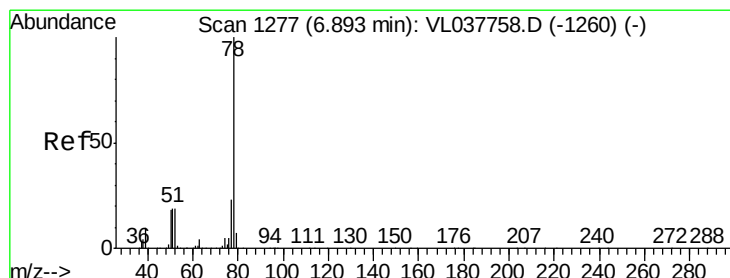
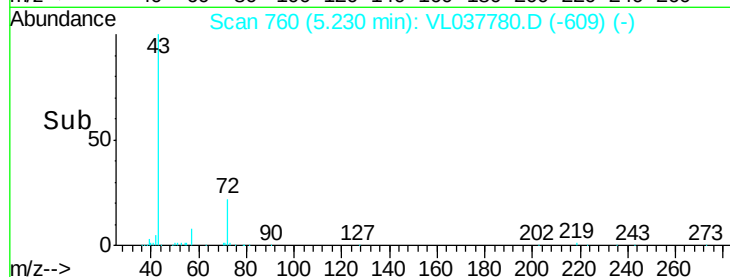
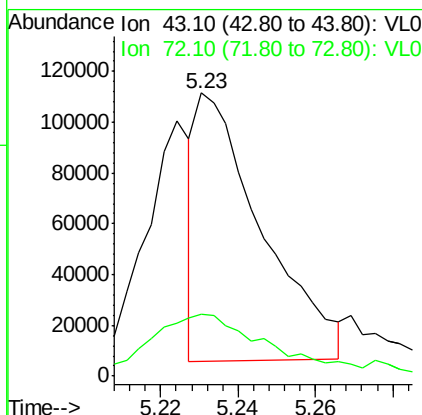
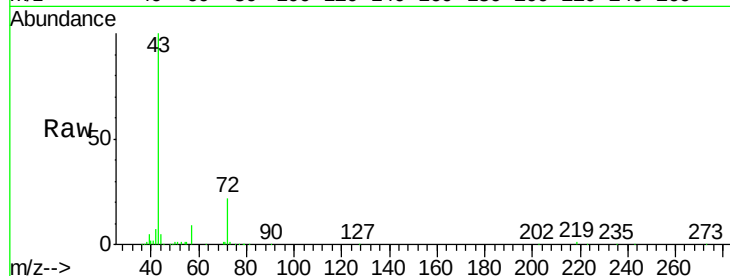




#34
2-Butanone
Concen: 0.834 ppbv
RT: 5.23 min Scan# 760
Delta R.T. -0.02 min
Lab File: VL037780.D
Acq: 5 Oct 2021 19:18

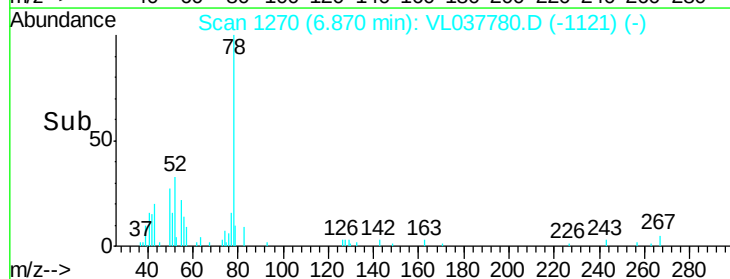
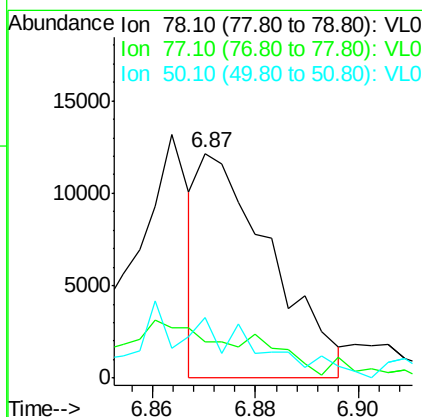
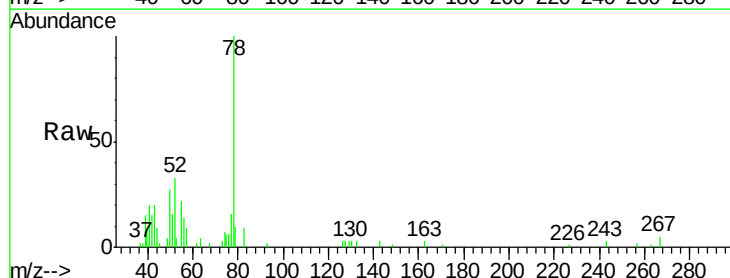
Instrument :
MSVOA_L
ClientSampleId :
C0P09

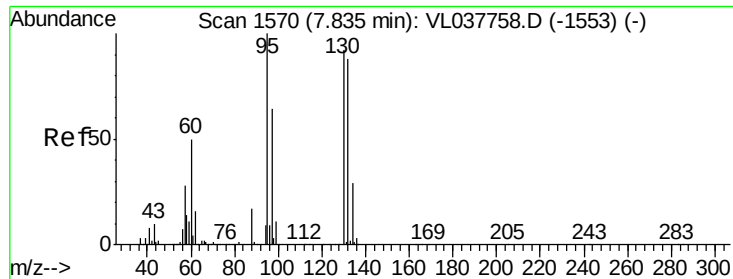
Tgt Ion: 43 Resp: 123557
Ion Ratio Lower Upper
43 100
72 48.7 18.2 27.2#



#36
Benzene
Concen: 0.038 ppbv
RT: 6.87 min Scan# 1270
Delta R.T. -0.02 min
Lab File: VL037780.D
Acq: 5 Oct 2021 19:18

Tgt Ion: 78 Resp: 11773
Ion Ratio Lower Upper
78 100
77 7.7 18.8 28.2#
50 43.7 14.7 22.1#

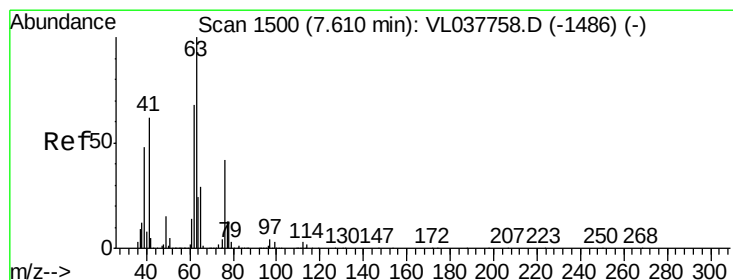
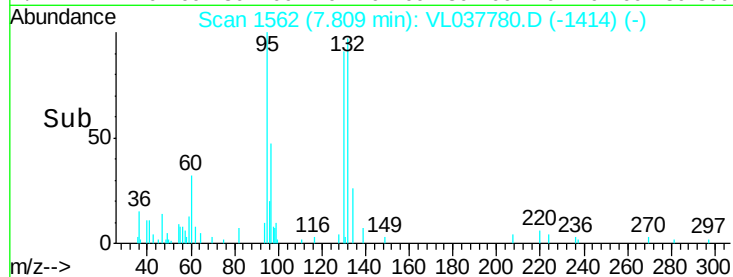
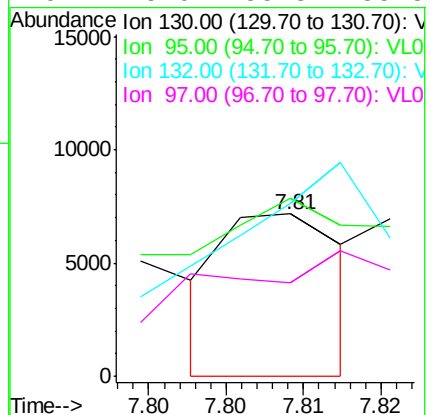
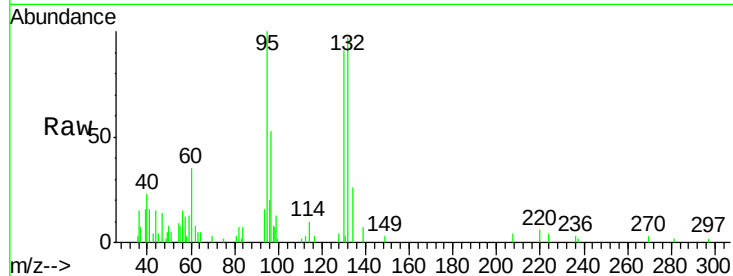




#38
 Trichloroethene
 Concen: 0.031 ppbv
 RT: 7.81 min Scan# 1562
 Delta R.T. -0.03 min
 Lab File: VL037780.D
 Acq: 5 Oct 2021 19:18

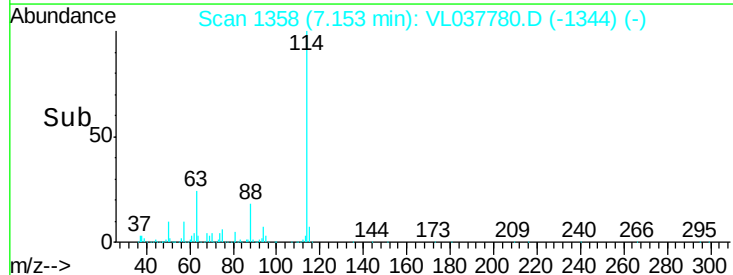
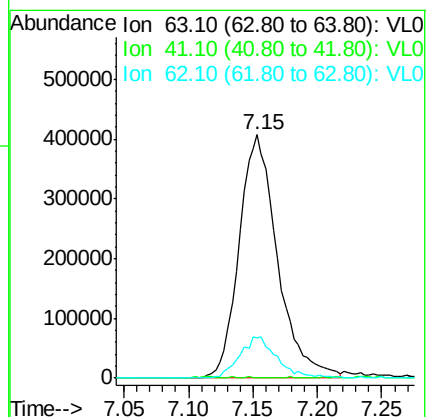
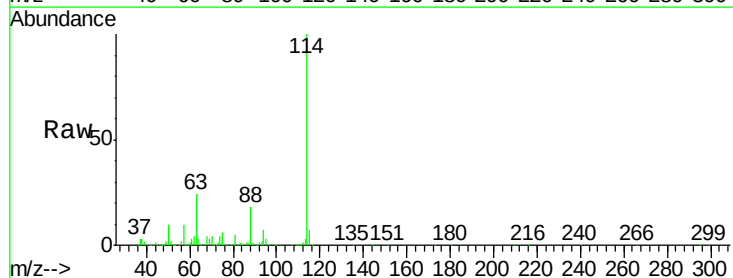
Instrument :
 MSVOA_L
 ClientSampleId :
 C0P09

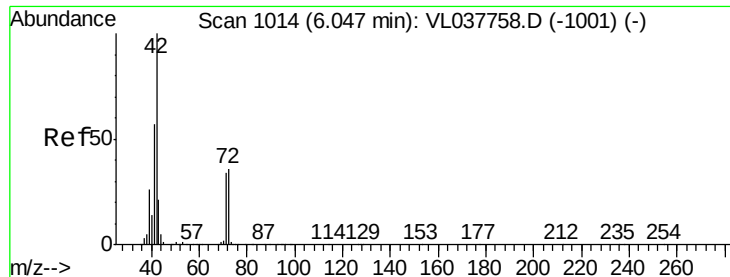
Tgt Ion:130 Resp: 3852
 Ion Ratio Lower Upper
 130 100
 95 86.4 87.4 131.0#
 132 96.4 76.8 115.2
 97 8.0 55.8 83.8#



#39
 1,2-Dichloropropane
 Concen: 7.147 ppbv
 RT: 7.15 min Scan# 1358
 Delta R.T. -0.46 min
 Lab File: VL037780.D
 Acq: 5 Oct 2021 19:18

Tgt Ion: 63 Resp: 843068
 Ion Ratio Lower Upper
 63 100
 41 0.0 49.8 74.6#
 62 16.5 54.6 82.0#

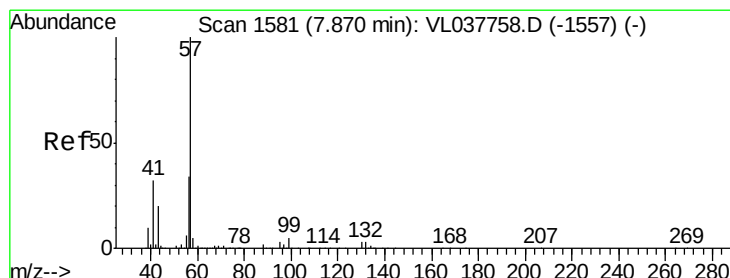
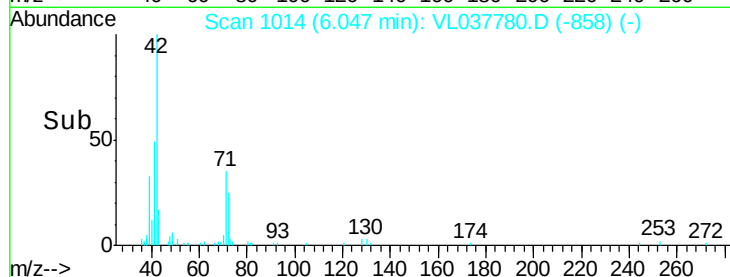
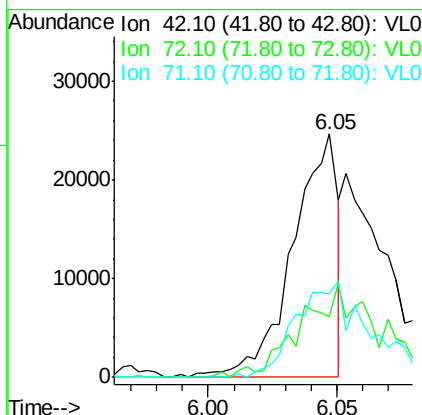
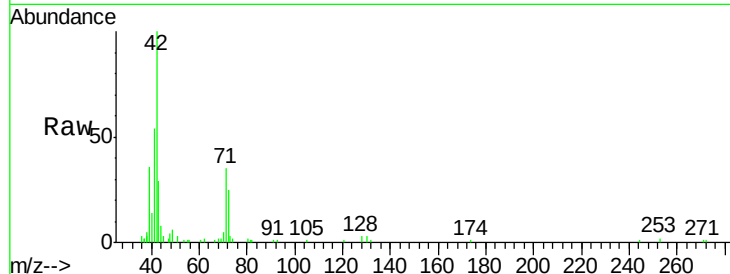




#41
Tetrahydrofuran
Concen: 0.408 ppbv
RT: 6.05 min Scan# 1014
Delta R.T. 0.00 min
Lab File: VL037780.D
Acq: 5 Oct 2021 19:18

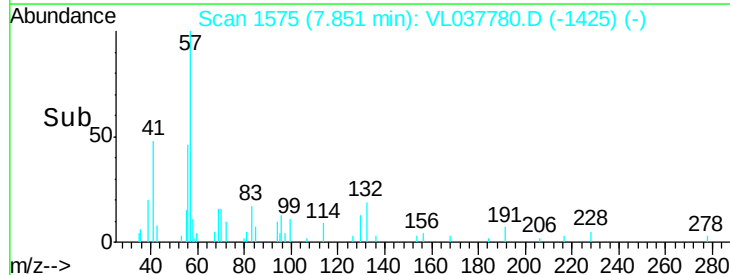
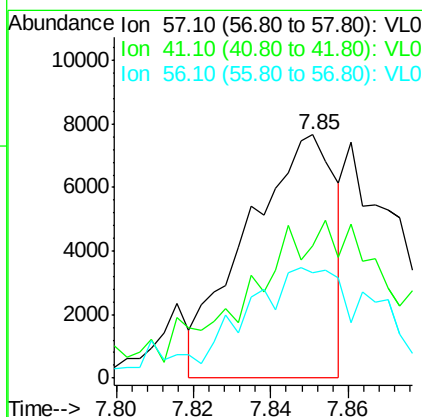
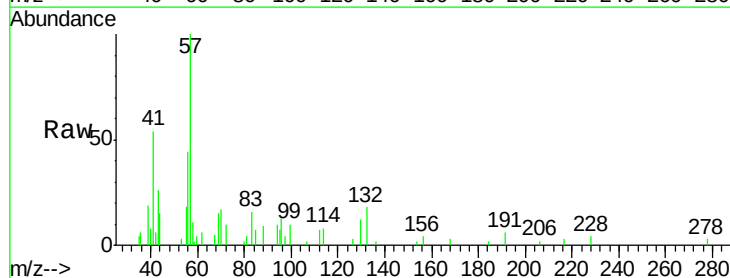
Instrument :
MSVOA_L
ClientSampleId :
C0P09

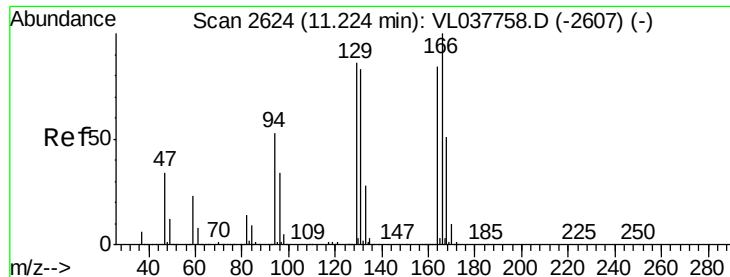
Tgt Ion: 42 Resp: 29646
Ion Ratio Lower Upper
42 100
72 0.0 31.9 47.9#
71 0.0 30.3 45.5#



#44
2,2,4-Trimethylpentane
Concen: 0.023 ppbv
RT: 7.85 min Scan# 1575
Delta R.T. -0.02 min
Lab File: VL037780.D
Acq: 5 Oct 2021 19:18

Tgt Ion: 57 Resp: 12164
Ion Ratio Lower Upper
57 100
41 115.5 25.6 38.4#
56 75.8 25.5 38.3#





#52

Tetrachloroethene

Concen: 29.840 ppbv

RT: 11.20 min Scan# 2617

Delta R.T. -0.02 min

Lab File: VL037780.D

Acq: 5 Oct 2021 19:18

Instrument :

MSVOA_L

ClientSampleId :

C0P09

Tgt Ion:164 Resp: 3641021

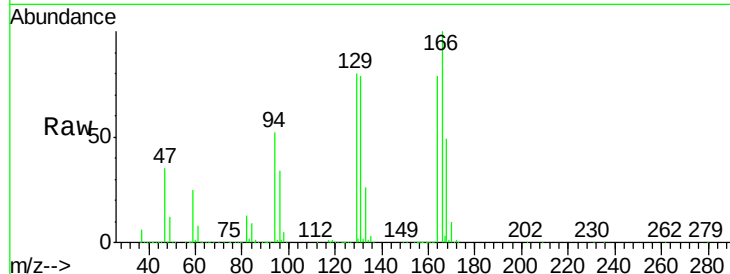
Ion Ratio Lower Upper

164 100

166 125.8 95.4 143.2

129 101.3 82.2 123.4

131 99.1 79.4 119.2



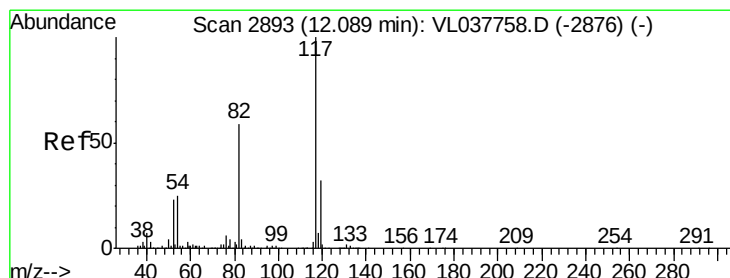
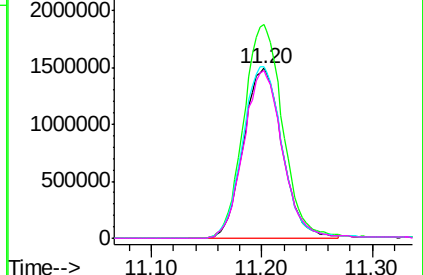
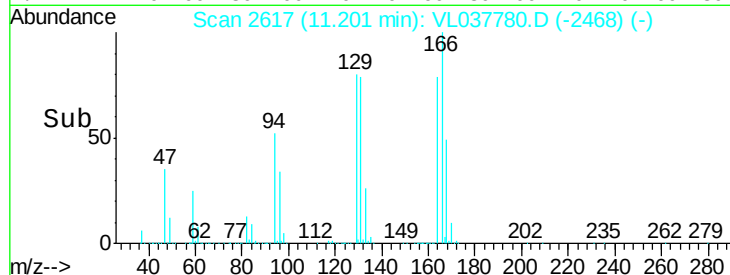
Abundance Ion 163.90 (163.60 to 164.60): V

Ion 165.90 (165.60 to 166.60): V

Ion 129.00 (128.70 to 129.70): V

Ion 131.00 (130.70 to 131.70): V

Time-->



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.06 min Scan# 2883

Delta R.T. -0.03 min

Lab File: VL037780.D

Acq: 5 Oct 2021 19:18

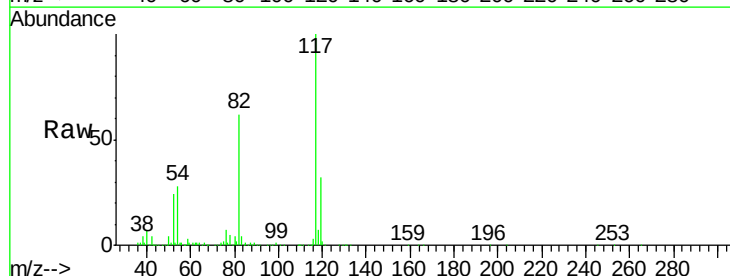
Tgt Ion:117 Resp: 3087928

Ion Ratio Lower Upper

117 100

82 62.8 52.2 78.2

119 34.3 26.0 39.0

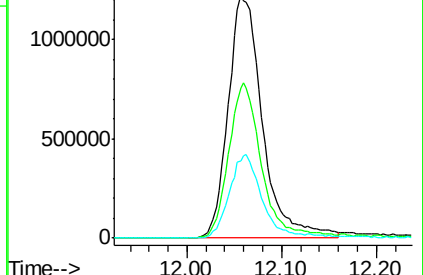
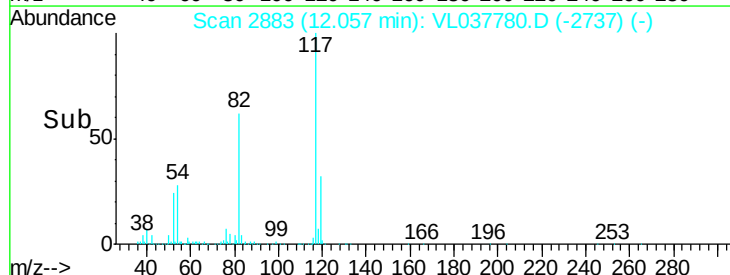


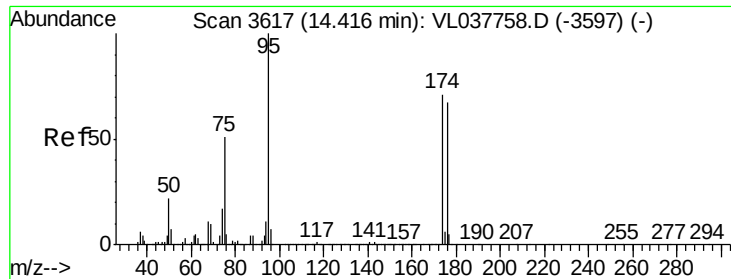
Abundance Ion 117.10 (116.80 to 117.80): V

Ion 82.10 (81.80 to 82.80): V

Ion 119.10 (118.80 to 119.80): V

Time-->





#68

1-Bromo-4-Fluorobenzene

Concen: 8.931 ppbv

RT: 14.39 min Scan# 3609

Delta R.T. -0.03 min

Lab File: VL037780.D

Acq: 5 Oct 2021 19:18

Instrument :

MSVOA_L

ClientSampleId :

C0P09

Tgt Ion: 95 Resp: 1928511

Ion Ratio Lower Upper

95 100

174 80.3 57.8 86.6

175 5.8 4.7 7.1

