

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL080421\
 Data File : VL037329.D
 Acq On : 5 Aug 2021 5:22
 Operator : SY/AP
 Sample : M3211-01DL 10X
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

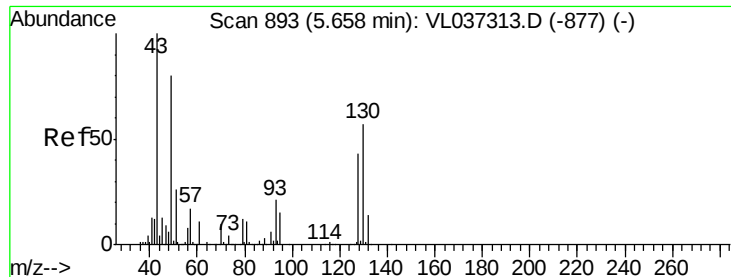
Quant Time: Aug 05 05:52:07 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL080421AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Aug 04 22:53:01 2021
 QLast Update : Wed Aug 04 22:53:01 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.66	49	1125152	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.17	114	3739185	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.08	117	3253916	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.41	95	2268603	10.21	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	102.10%

Target Compounds					Ovalue
2) Dichlorodifluoromethane	3.05	85	11445	0.050 ppbv #	79
4) Chloromethane	3.13	50	2497	0.030 ppbv	94
9) Propene	3.01	41	3905	0.047 ppbv #	1
13) Ethanol	3.62	45	12543	1.007 ppbv #	46
15) Acetone	3.84	43	376330	3.079 ppbv #	88
16) 1,3-Butadiene	3.31	39	3267	0.041 ppbv #	26
20) Methylene Chloride	4.34	84	279930	2.766 ppbv	97
25) Ethyl Acetate	5.68	43	110992	0.349 ppbv #	78
26) Hexane	5.68	57	170289	0.958 ppbv #	48
29) Chloroform	5.74	83	21323	0.095 ppbv	93
32) 1,1,1-Trichloroethane	6.50	97	16164	0.075 ppbv #	29
34) 2-Butanone	5.25	43	120335	0.927 ppbv #	88
38) Trichloroethene	7.83	130	39325	0.267 ppbv #	89
39) 1,2-Dichloropropane	7.17	63	817861	6.527 ppbv #	29
41) Tetrahydrofuran	6.05	42	304174	4.215 ppbv	98
52) Tetrachloroethene	11.21	164	288618	1.991 ppbv	95
53) Toluene	9.80	91	272438	0.686 ppbv	97
66) Benzyl Chloride	16.98	91	829	0.044 ppbv #	60

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.66 min Scan# 893

Delta R.T. -0.00 min

Lab File: VL037329.D

Acq: 5 Aug 2021 5:22

Instrument :

MSVOA_L

ClientSampleId :

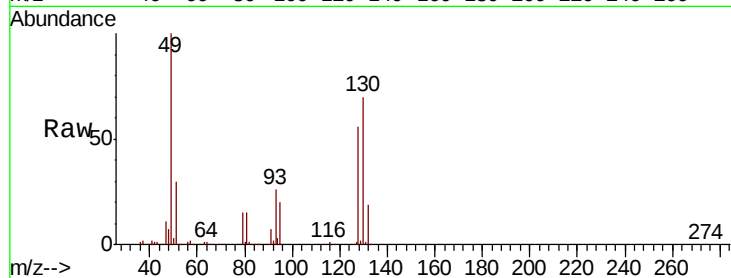
Tot Ion: 49 Resp: 1125152

Ion Ratio Lower Upper

49 100

128 60.1 29.8 89.5

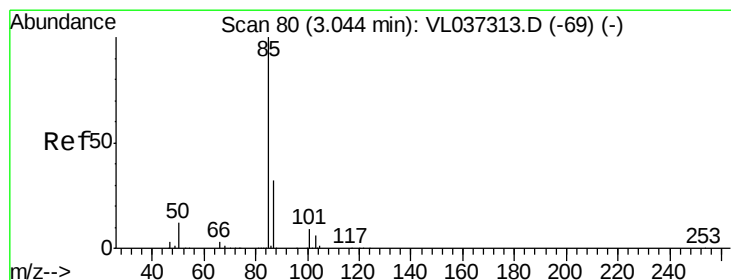
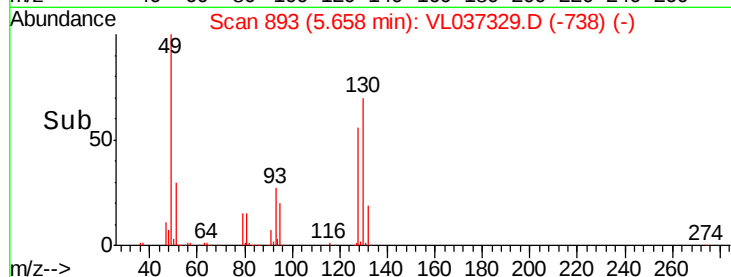
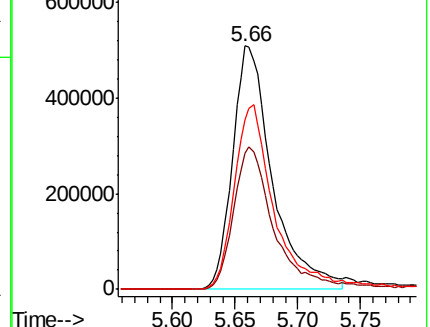
130 79.3 37.5 112.7



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



#2

Dichlorodifluoromethane

Concen: 0.050 ppbv

RT: 3.05 min Scan# 81

Delta R.T. 0.00 min

Lab File: VL037329.D

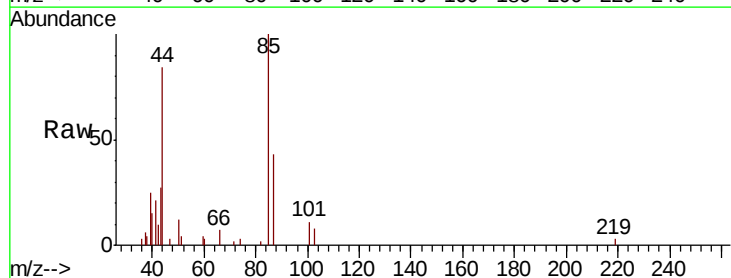
Acq: 5 Aug 2021 5:22

Tgt Ion: 85 Resp: 11445

Ion Ratio Lower Upper

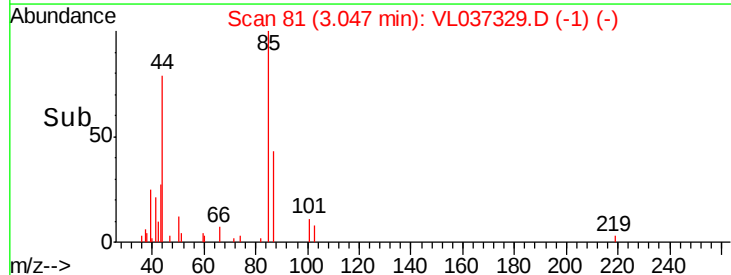
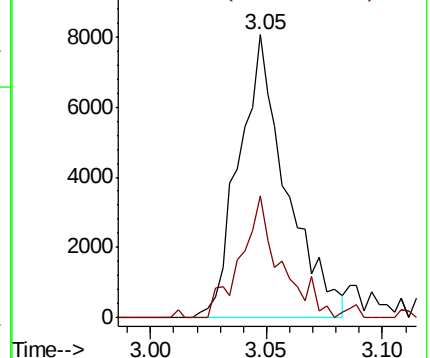
85 100

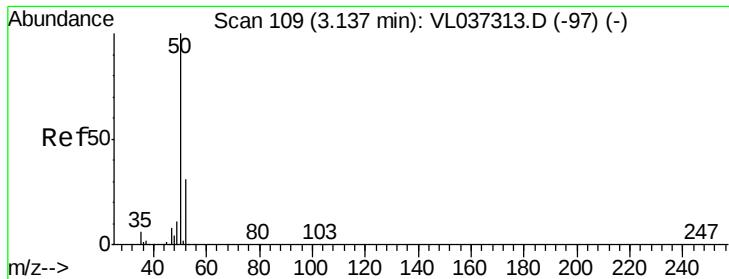
87 43.3 25.5 38.3#



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#4

Chloromethane

Concen: 0.030 ppbv

RT: 3.13 min Scan# 107

Delta R.T. -0.01 min

Lab File: VL037329.D

Acq: 5 Aug 2021 5:22

Instrument :

MSVOA_L

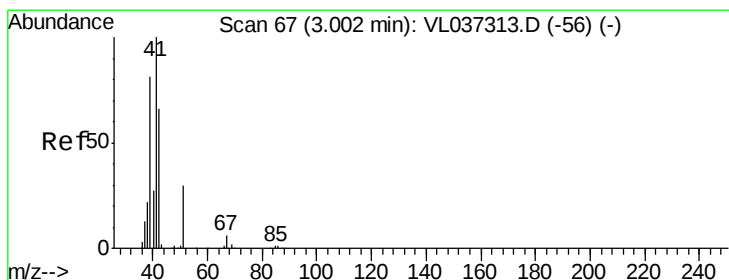
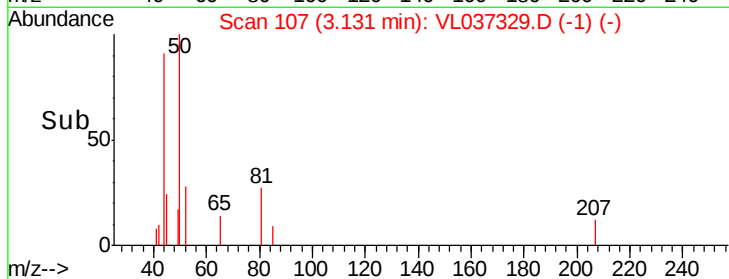
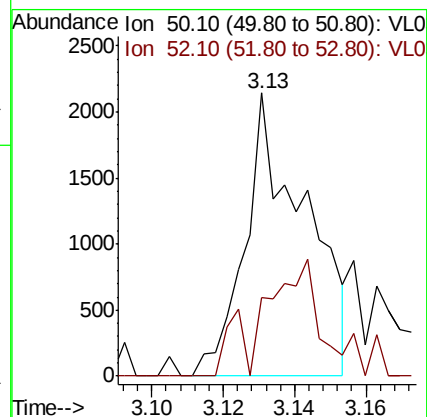
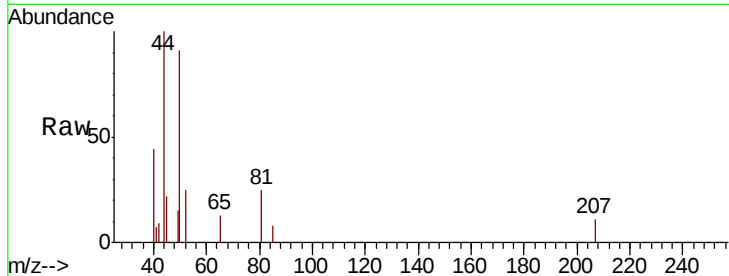
ClientSampleId :

Tot Ion: 50 Resp: 2497

Ion Ratio Lower Upper

50 100

52 28.0 25.1 37.7



#9

Propene

Concen: 0.047 ppbv

RT: 3.01 min Scan# 68

Delta R.T. 0.00 min

Lab File: VL037329.D

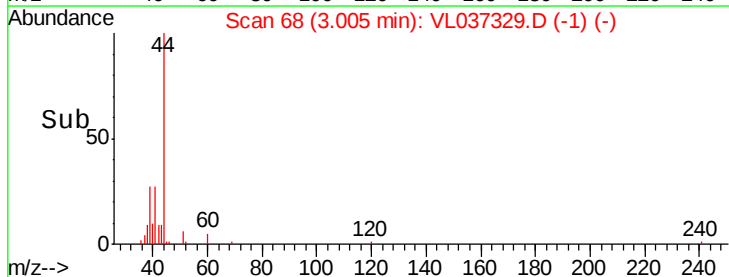
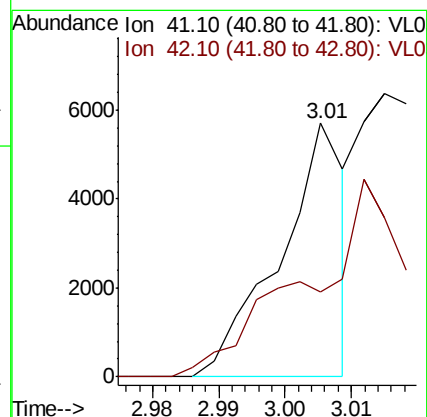
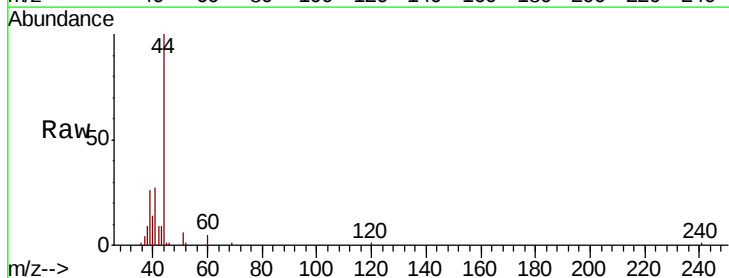
Acq: 5 Aug 2021 5:22

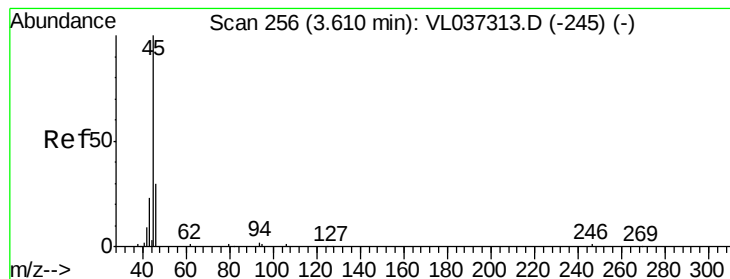
Tgt Ion: 41 Resp: 3905

Ion Ratio Lower Upper

41 100

42 193.2 53.8 80.8#





#13

Ethanol

Concen: 1.007 ppbv

RT: 3.62 min Scan# 258

Delta R.T. 0.01 min

Lab File: VL037329.D

Acq: 5 Aug 2021 5:22

Instrument :

MSVOA_L

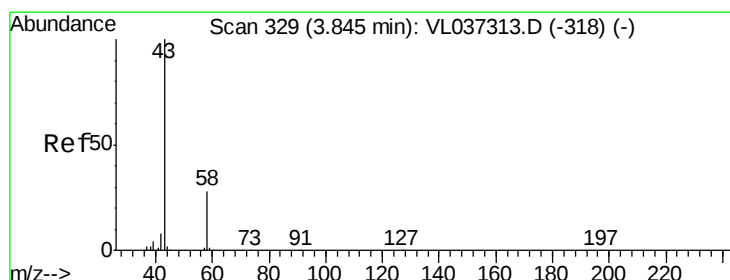
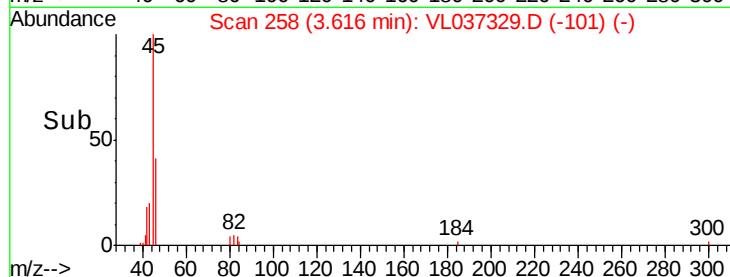
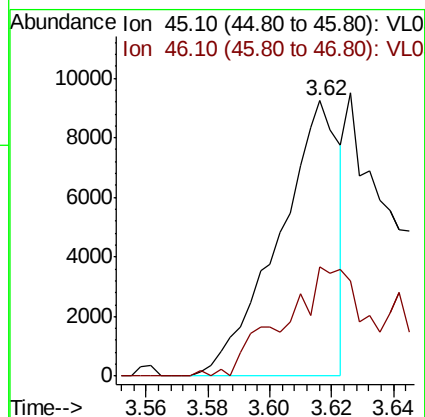
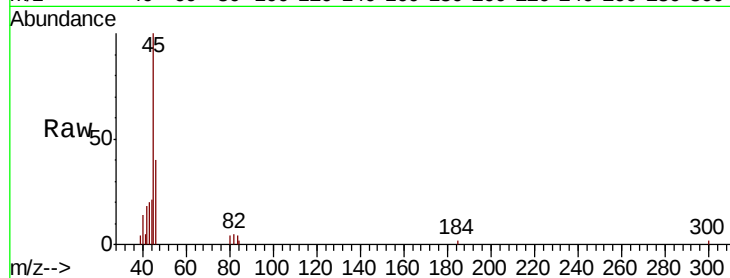
ClientSampleId :

Tot Ion: 45 Resp: 12543

Ion Ratio Lower Upper

45 100

46 75.5 16.6 66.4#



#15

Acetone

Concen: 3.079 ppbv

RT: 3.84 min Scan# 329

Delta R.T. -0.00 min

Lab File: VL037329.D

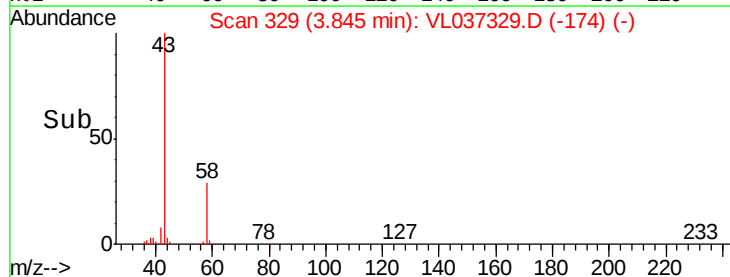
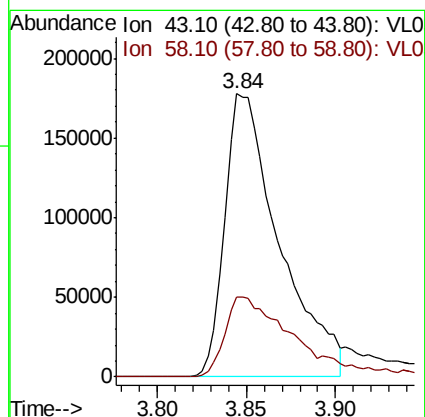
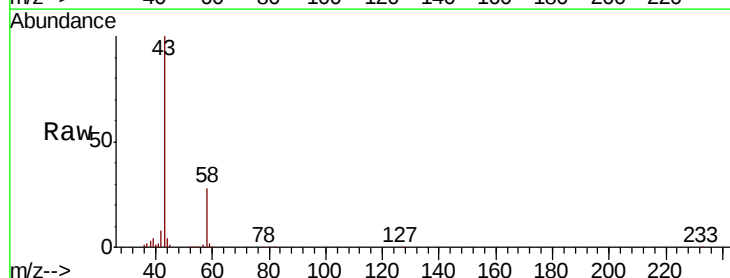
Acq: 5 Aug 2021 5:22

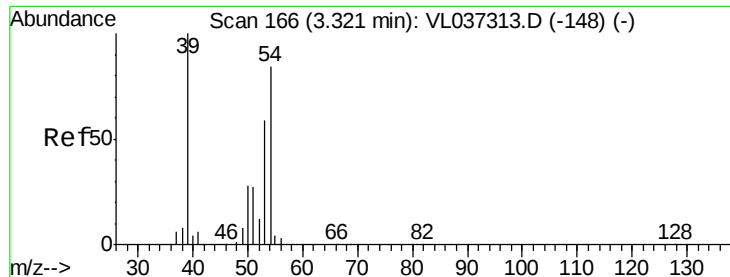
Tgt Ion: 43 Resp: 376330

Ion Ratio Lower Upper

43 100

58 38.3 25.3 37.9#

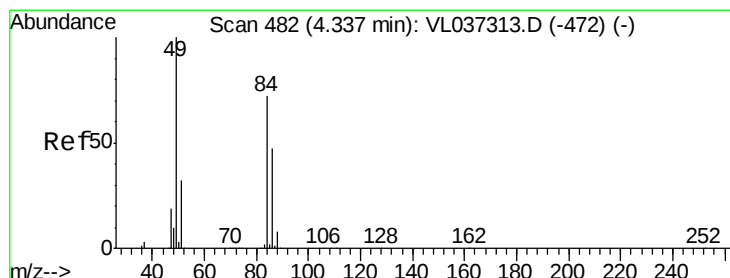
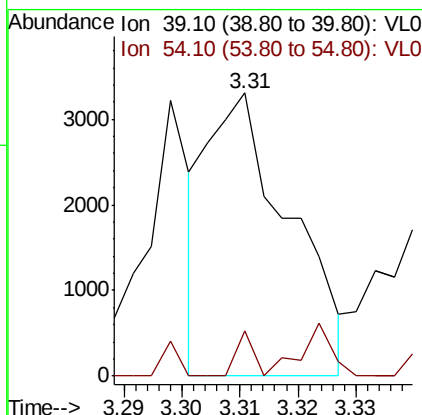
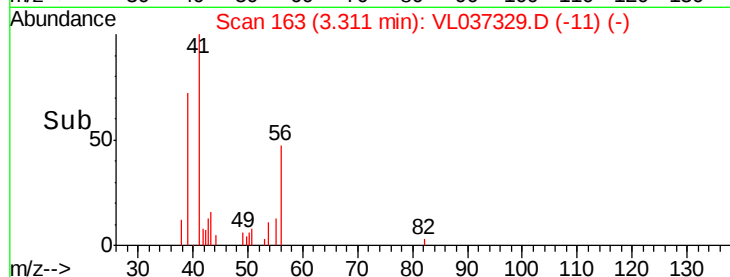
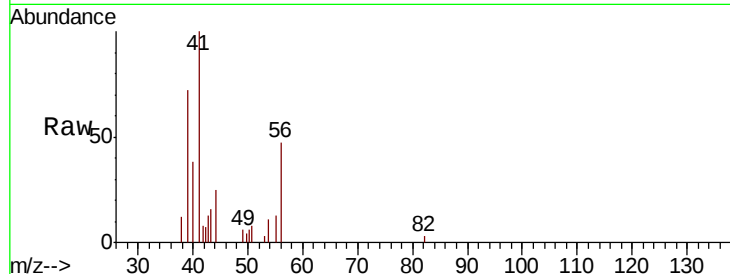




#16
 1,3-Butadiene
 Concen: 0.041 ppbv
 RT: 3.31 min Scan# 163
 Delta R.T. -0.01 min
 Lab File: VL037329.D
 Acq: 5 Aug 2021 5:22

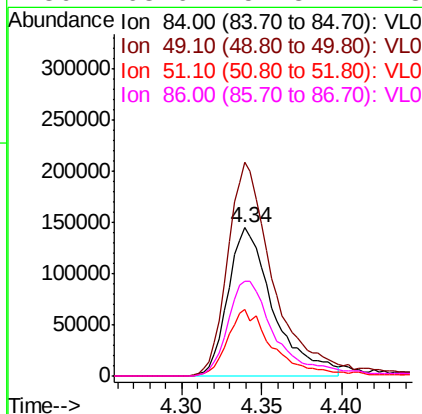
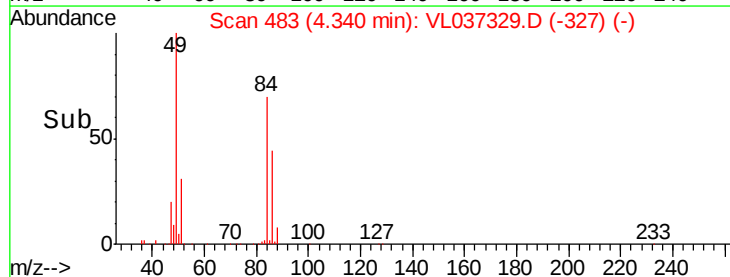
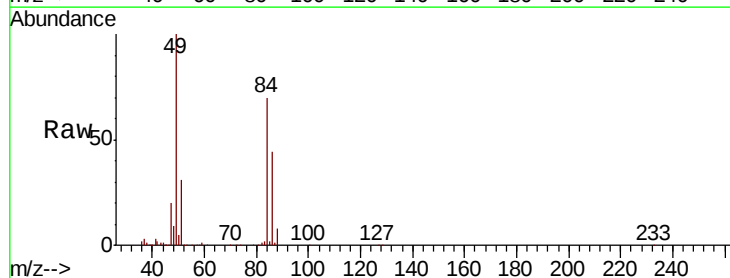
Instrument :
 MSVOA_L
 ClientSampleId :

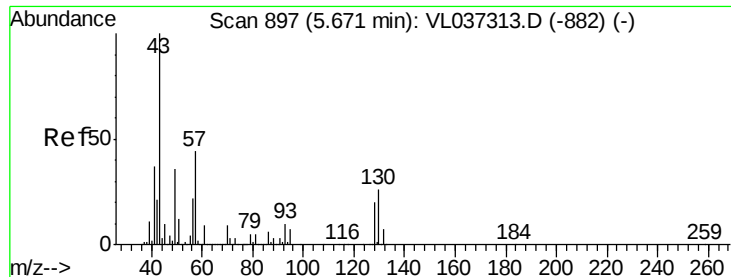
Tot Ion: 39 Resp: 3267
 Ion Ratio Lower Upper
 39 100
 54 15.7 66.1 99.1#



#20
 Methylene Chloride
 Concen: 2.766 ppbv
 RT: 4.34 min Scan# 483
 Delta R.T. 0.00 min
 Lab File: VL037329.D
 Acq: 5 Aug 2021 5:22

Tgt Ion: 84 Resp: 279930
 Ion Ratio Lower Upper
 84 100
 49 143.6 110.4 165.6
 51 44.6 35.8 53.6
 86 63.6 51.8 77.8

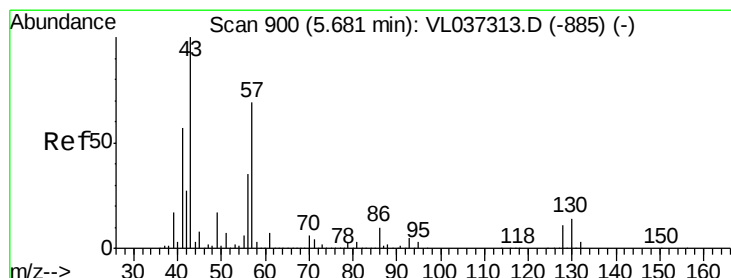
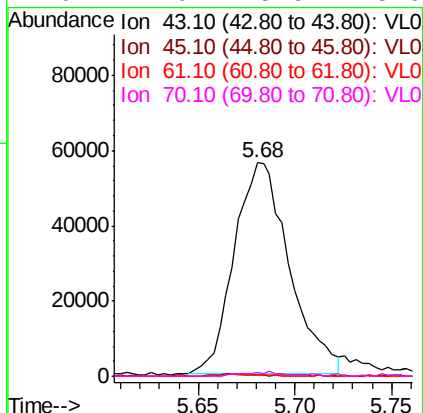
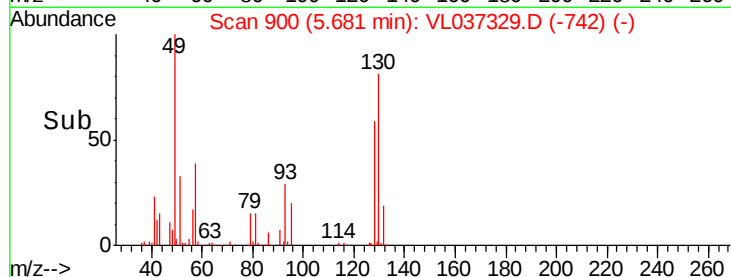
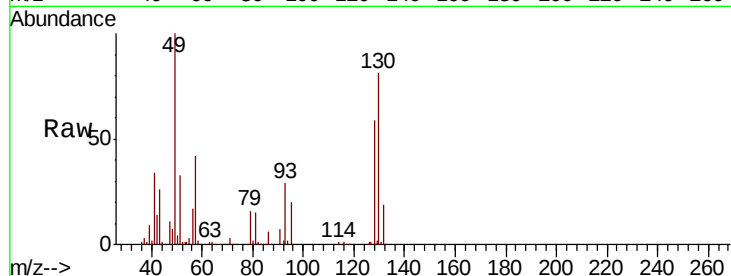




#25
Ethyl Acetate
Concen: 0.349 ppbv
RT: 5.68 min Scan# 900
Delta R.T. 0.01 min
Lab File: VL037329.D
Acq: 5 Aug 2021 5:22

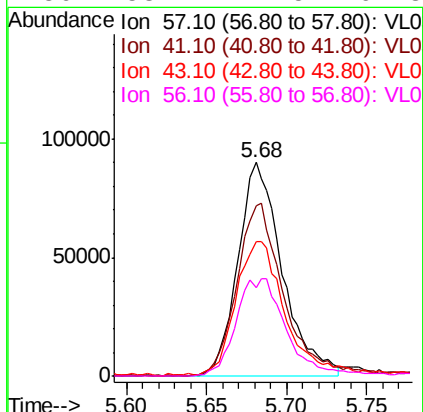
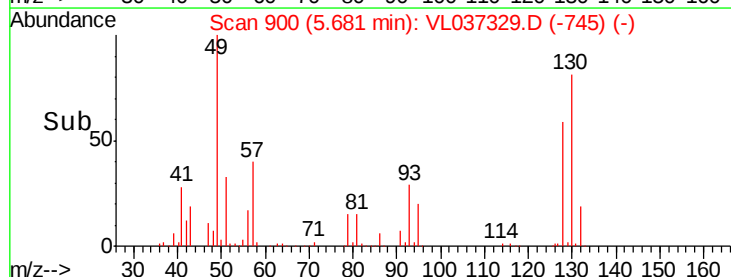
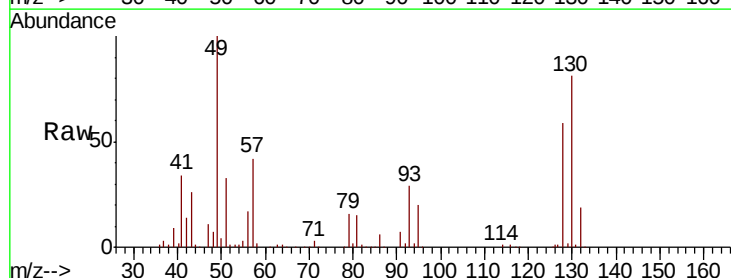
Instrument :
MSVOA_L
ClientSampleId :

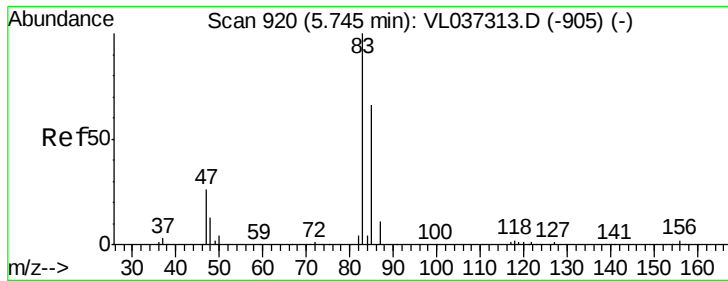
Tot Ion:	43	Resp:	110992
Ion	Ratio	Lower	Upper
43	100		
45	1.3	7.8	11.8#
61	0.7	8.6	12.8#
70	2.0	5.9	8.9#



#26
Hexane
Concen: 0.958 ppbv
RT: 5.68 min Scan# 900
Delta R.T. -0.00 min
Lab File: VL037329.D
Acq: 5 Aug 2021 5:22

Tgt Ion:	57	Resp:	170289
Ion	Ratio	Lower	Upper
57	100		
41	87.6	67.5	101.3
43	72.5	163.0	244.4#
56	53.2	41.5	62.3

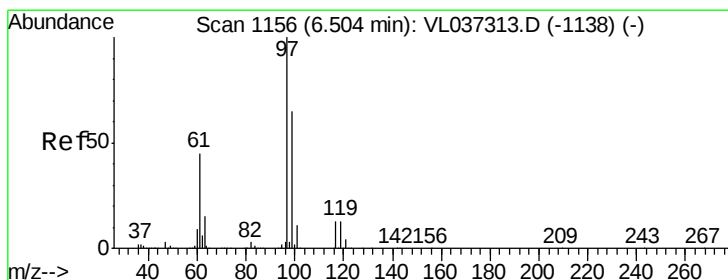
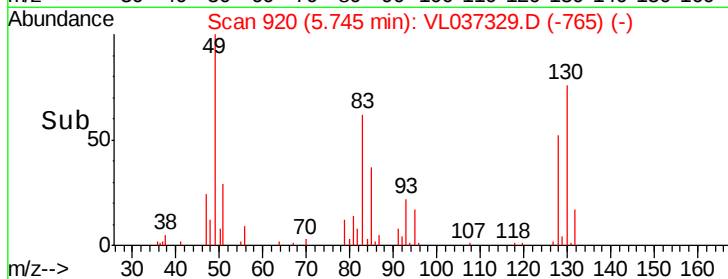
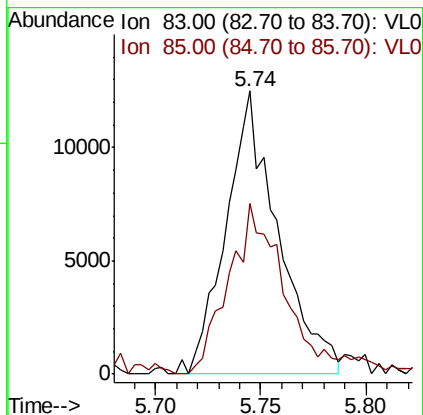
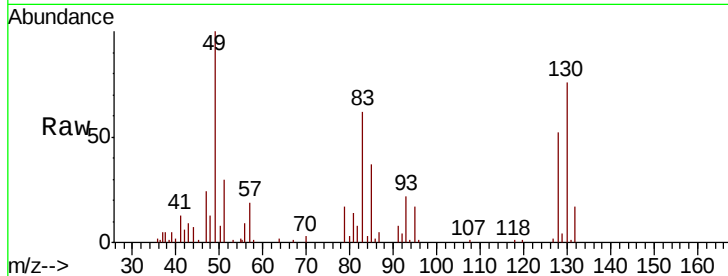




#29
Chloroform
Concen: 0.095 ppbv
RT: 5.74 min Scan# 920
Delta R.T. -0.00 min
Lab File: VL037329.D
Acq: 5 Aug 2021 5:22

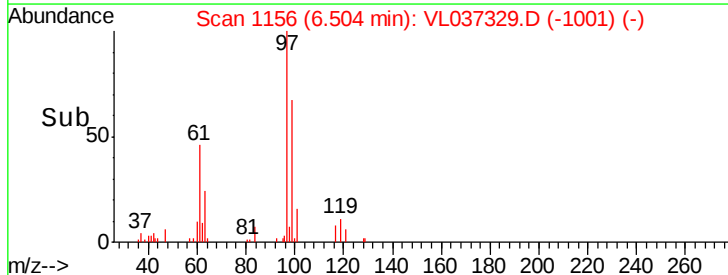
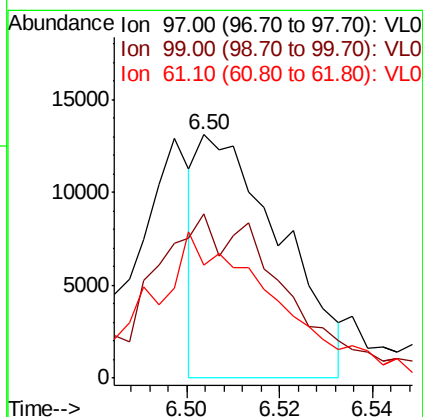
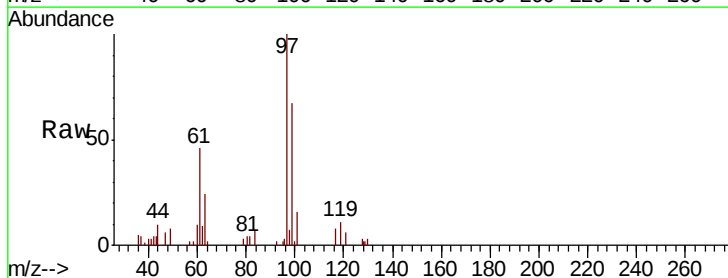
Instrument :
MSVOA_L
ClientSampled :

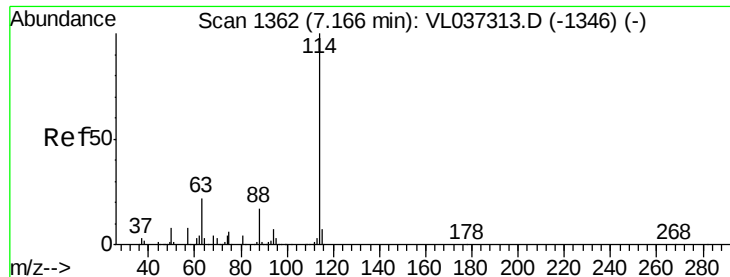
Tot Ion: 83 Resp: 21323
Ion Ratio Lower Upper
83 100
85 60.5 52.6 79.0



#32
1,1,1-Trichloroethane
Concen: 0.075 ppbv
RT: 6.50 min Scan# 1156
Delta R.T. -0.00 min
Lab File: VL037329.D
Acq: 5 Aug 2021 5:22

Tgt Ion: 97 Resp: 16164
Ion Ratio Lower Upper
97 100
99 118.2 52.3 78.5#
61 98.1 37.2 55.8#

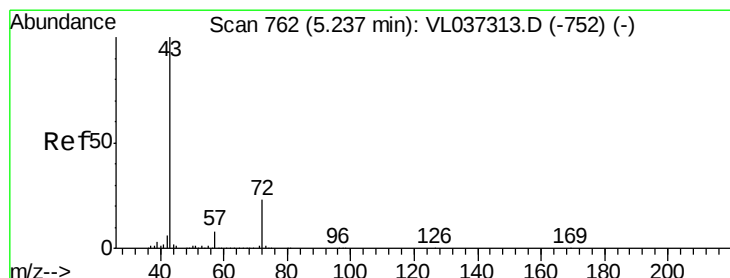
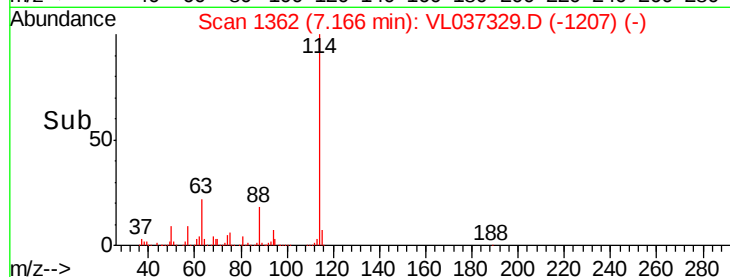
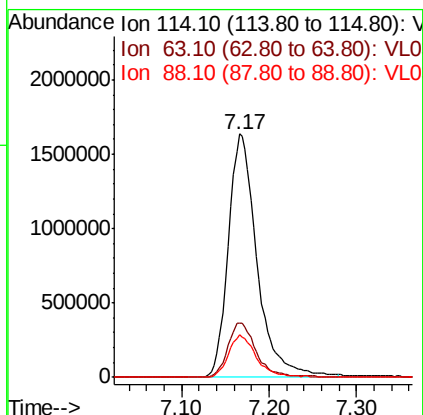
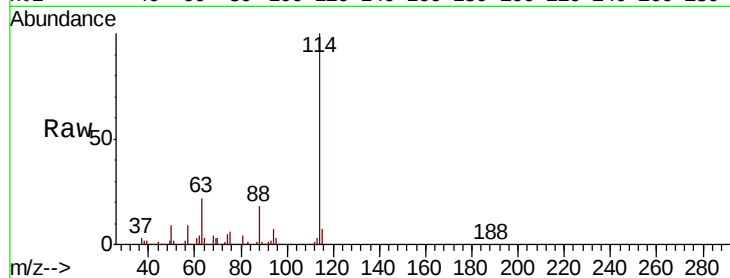




#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.17 min Scan# 1362
 Delta R.T. -0.00 min
 Lab File: VL037329.D
 Acq: 5 Aug 2021 5:22

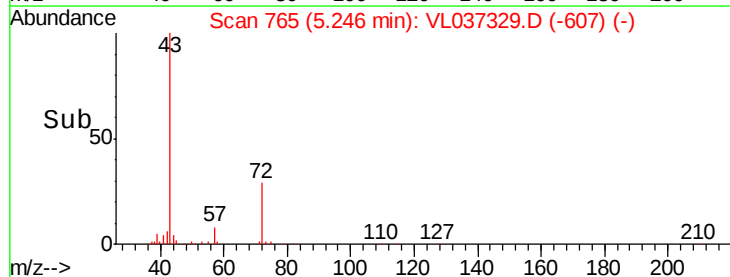
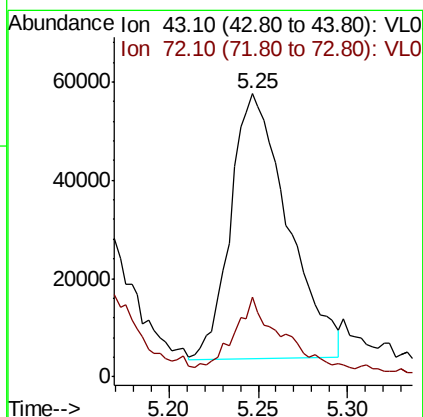
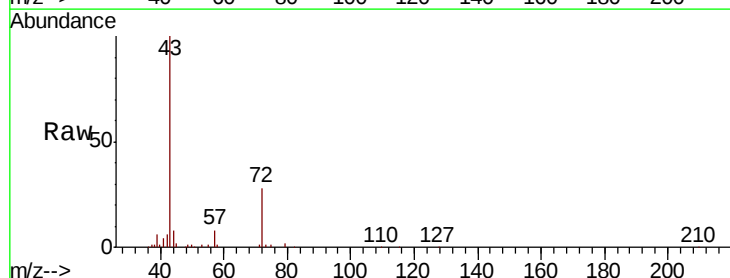
Instrument :
 MSVOA_L
 ClientSampleId :

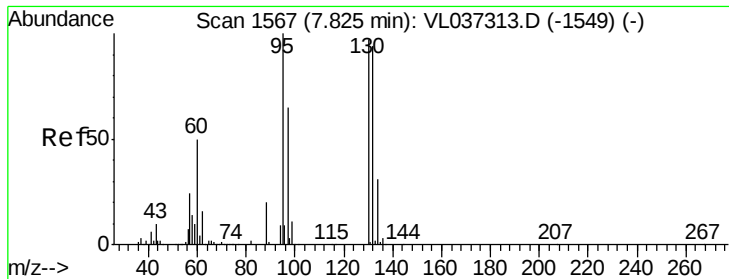
Tot Ion:114 Resp: 3739185
 Ion Ratio Lower Upper
 114 100
 63 22.5 18.1 27.1
 88 17.1 13.8 20.8



#34
 2-Butanone
 Concen: 0.927 ppbv
 RT: 5.25 min Scan# 765
 Delta R.T. 0.01 min
 Lab File: VL037329.D
 Acq: 5 Aug 2021 5:22

Tgt Ion: 43 Resp: 120335
 Ion Ratio Lower Upper
 43 100
 72 31.7 20.3 30.5#

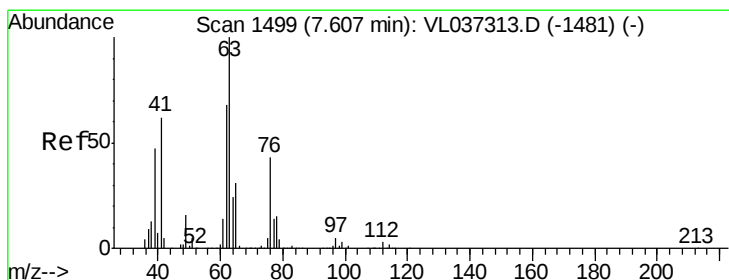
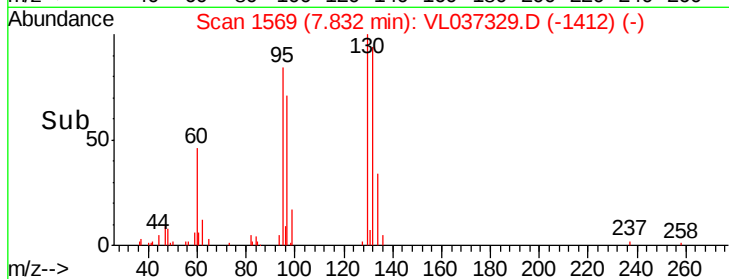
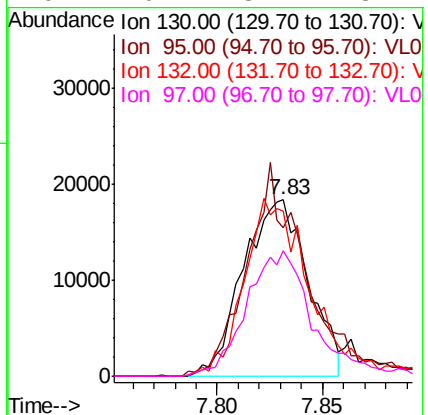
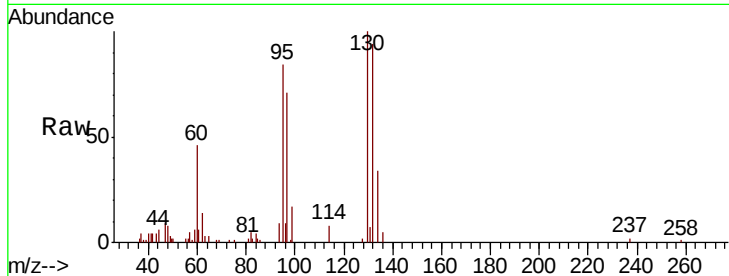




#38
 Trichloroethene
 Concen: 0.267 ppbv
 RT: 7.83 min Scan# 1569
 Delta R.T. 0.01 min
 Lab File: VL037329.D
 Acq: 5 Aug 2021 5:22

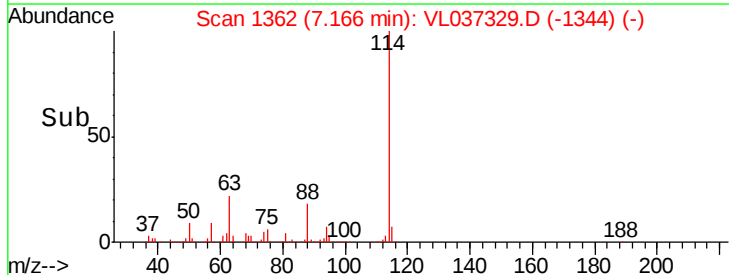
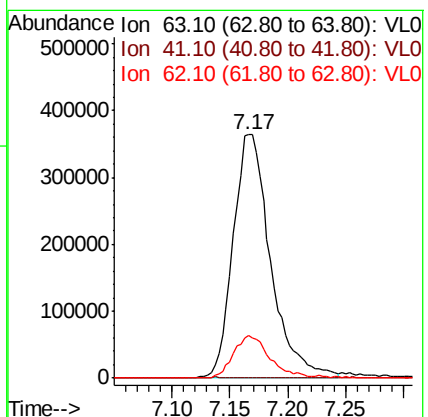
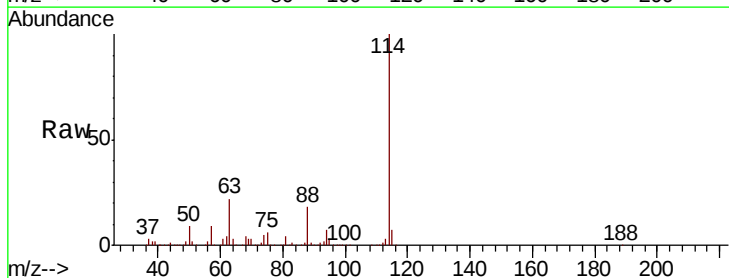
Instrument :
 MSVOA_L
 ClientSampleId :

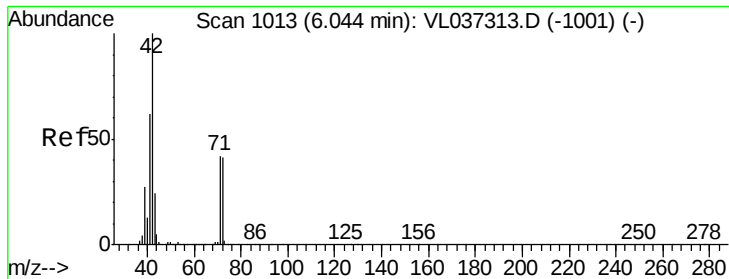
Tot Ion:130 Resp: 39325
 Ion Ratio Lower Upper
 130 100
 95 81.7 82.8 124.2#
 132 92.8 78.2 117.4
 97 70.2 54.2 81.2



#39
 1,2-Dichloropropane
 Concen: 6.527 ppbv
 RT: 7.17 min Scan# 1362
 Delta R.T. -0.44 min
 Lab File: VL037329.D
 Acq: 5 Aug 2021 5:22

Tgt Ion: 63 Resp: 817861
 Ion Ratio Lower Upper
 63 100
 41 0.0 49.2 73.8#
 62 17.5 54.2 81.4#

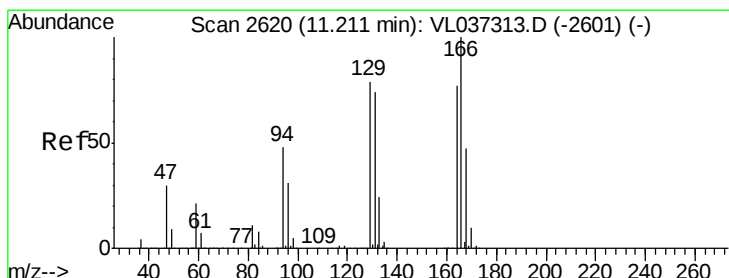
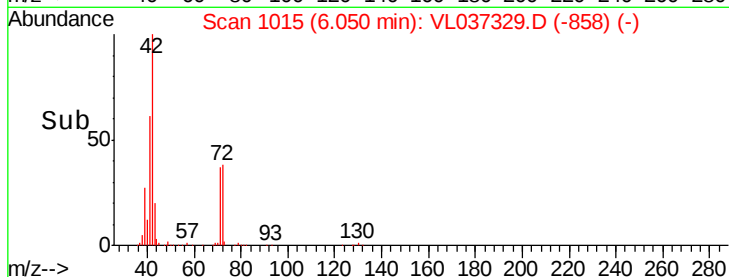
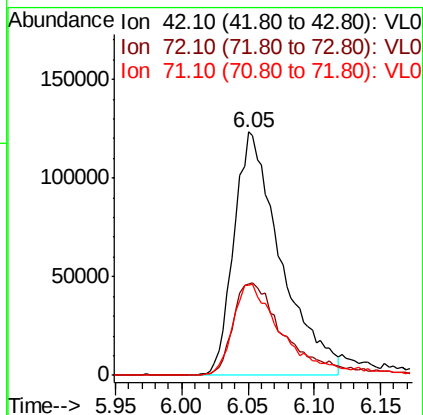
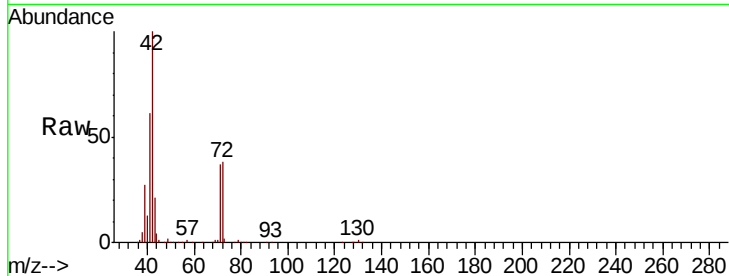




#41
Tetrahydrofuran
Concen: 4.215 ppbv
RT: 6.05 min Scan# 1015
Delta R.T. 0.01 min
Lab File: VL037329.D
Acq: 5 Aug 2021 5:22

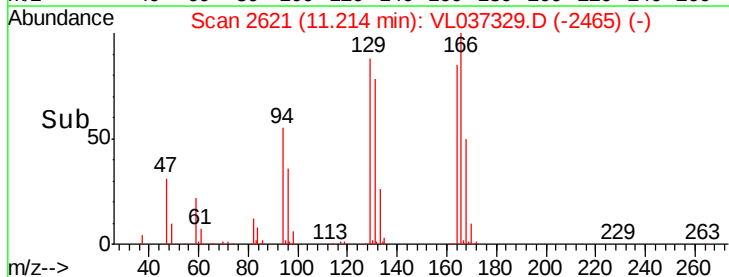
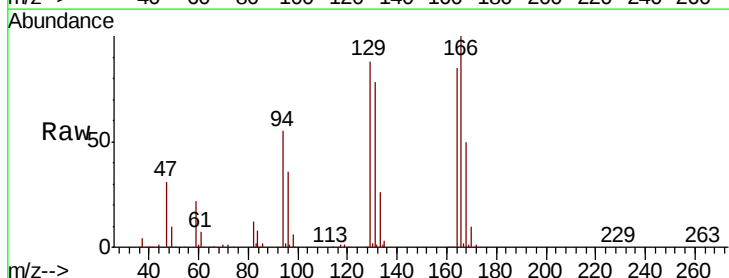
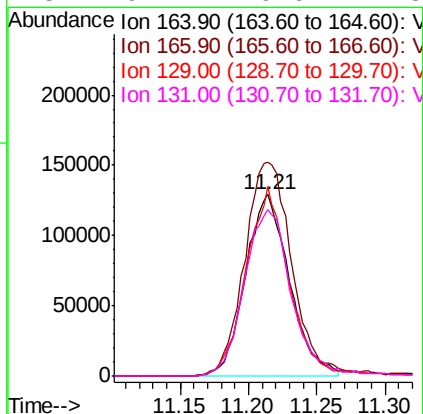
Instrument :
MSVOA_L
ClientSampleId :

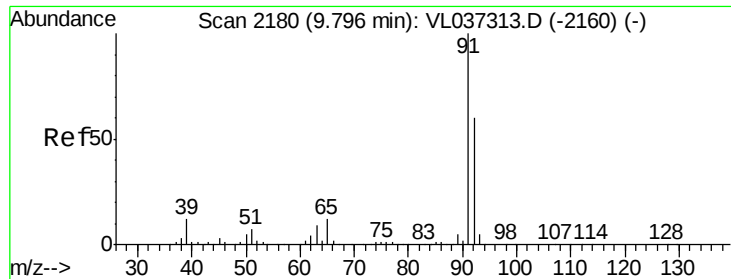
Tot Ion: 42 Resp: 304174
Ion Ratio Lower Upper
42 100
72 44.4 33.6 50.4
71 40.6 33.0 49.4



#52
Tetrachloroethene
Concen: 1.991 ppbv
RT: 11.21 min Scan# 2621
Delta R.T. 0.00 min
Lab File: VL037329.D
Acq: 5 Aug 2021 5:22

Tgt Ion: 164 Resp: 288618
Ion Ratio Lower Upper
164 100
166 117.8 103.4 155.2
129 104.1 82.2 123.2
131 92.1 76.6 114.8





#53

Toluene

Concen: 0.686 ppbv

RT: 9.80 min Scan# 2181

Delta R.T. 0.00 min

Lab File: VL037329.D

Acq: 5 Aug 2021 5:22

Instrument :

MSVOA_L

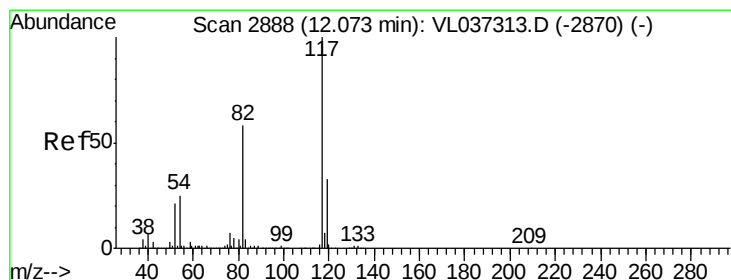
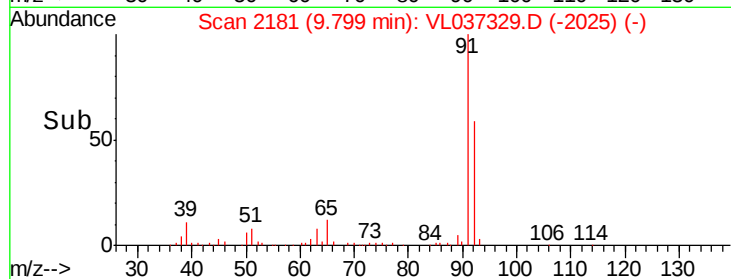
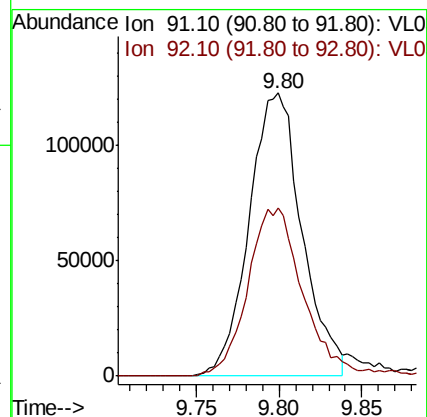
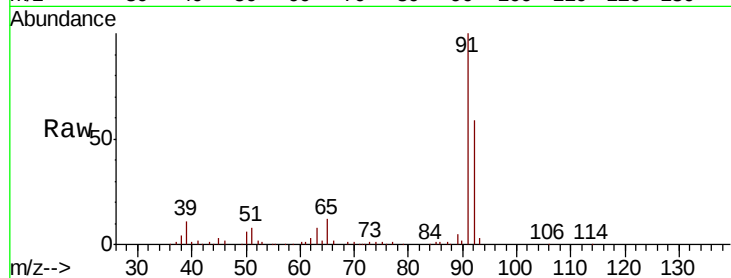
ClientSampled :

Tot Ion: 91 Resp: 272438

Ion Ratio Lower Upper

91 100

92 63.4 48.8 73.2



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.08 min Scan# 2889

Delta R.T. 0.00 min

Lab File: VL037329.D

Acq: 5 Aug 2021 5:22

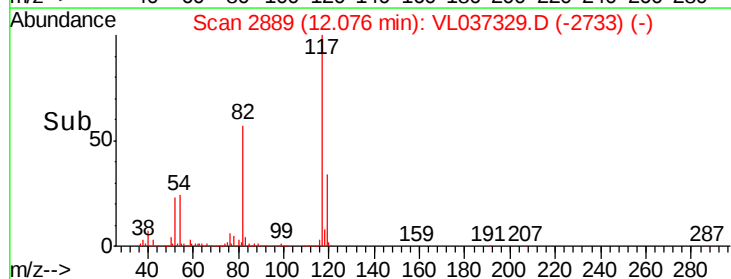
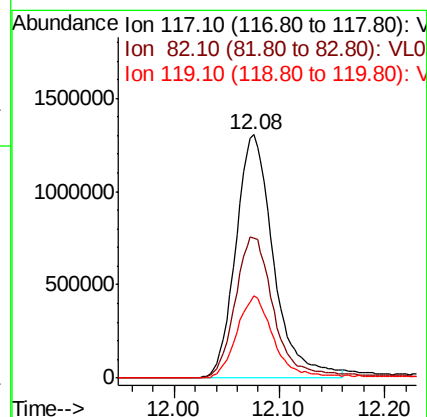
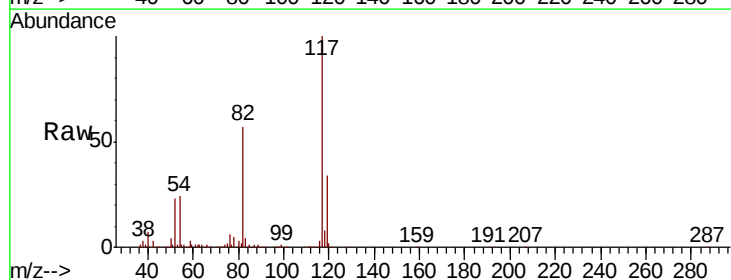
Tgt Ion: 117 Resp: 3253916

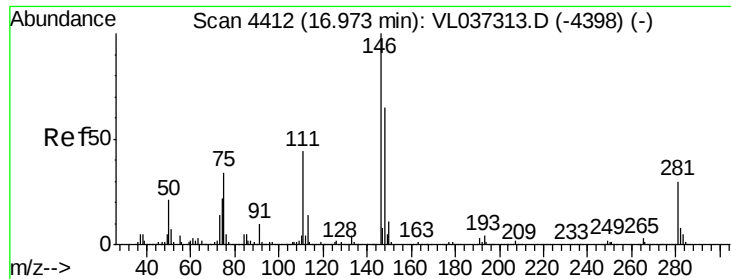
Ion Ratio Lower Upper

117 100

82 62.7 50.3 75.5

119 34.3 48.2 72.2#

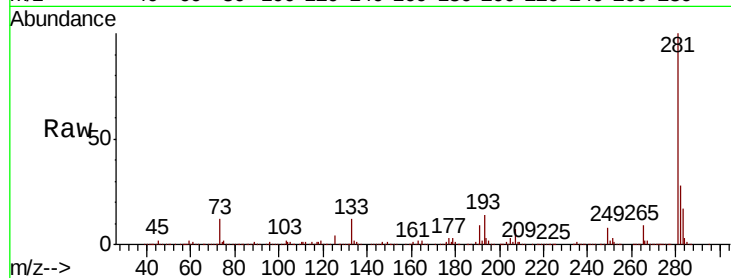




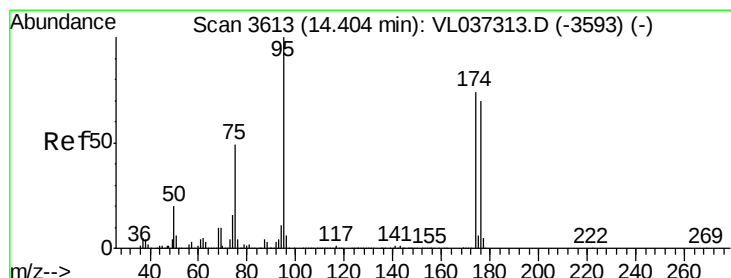
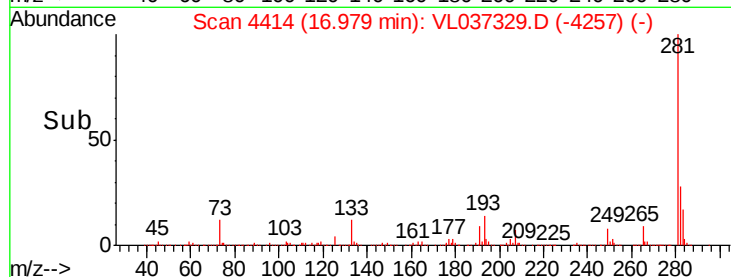
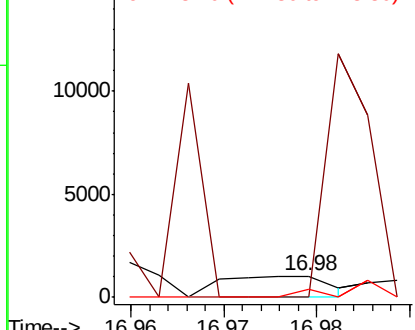
#66
Benzvl Chloride
Concen: 0.044 ppbv
RT: 16.98 min Scan# 4414
Delta R.T. 0.01 min
Lab File: VL037329.D
Acq: 5 Aug 2021 5:22

Instrument :
MSVOA_L
ClientSampleId :

Tot Ion: 91 Resp: 829
Ion Ratio Lower Upper
91 100
126 0.0 17.8 26.6#
128 0.0 5.8 8.6#

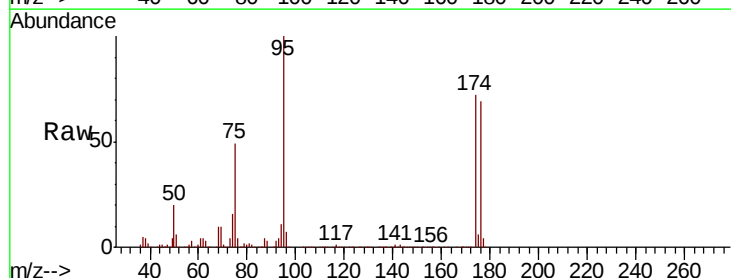


Abundance Ion 91.10 (90.80 to 91.80): VL0
Ion 126.10 (125.80 to 126.80): V
Ion 128.10 (127.80 to 128.80): V



#68
1-Bromo-4-Fluorobenzene
Concen: 10.207 ppbv
RT: 14.41 min Scan# 3614
Delta R.T. 0.00 min
Lab File: VL037329.D
Acq: 5 Aug 2021 5:22

Tgt Ion: 95 Resp: 2268603
Ion Ratio Lower Upper
95 100
174 79.9 66.9 100.3
175 5.7 5.1 7.7



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

