

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL060121\
 Data File : VL037092.D
 Acq On : 2 Jun 2021 5:32
 Operator : SY/AP
 Sample : M2548-07
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

Quant Time: Jun 02 06:50:30 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL051821AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue May 18 12:00:15 2021
 QLast Update : Tue May 18 12:00:15 2021
 Response via : Initial Calibration

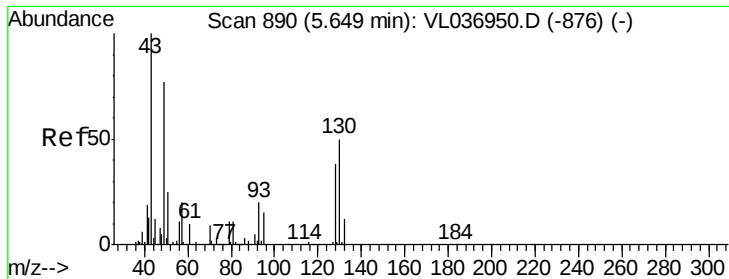
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.65	49	1327905	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.16	114	4035425	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.07	117	3545228	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.39	95	2698011	10.13	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	101.30%

Target Compounds					Ovalue
2) Dichlorodifluoromethane	3.04	85	74311	0.330	ppbv 89
3) Chlorodifluoromethane	2.98	51	104724	0.430	ppbv # 87
4) Chloromethane	3.13	50	44377	0.536	ppbv 89
9) Propene	3.19	41	202578	2.325	ppbv 86
10) Heptane	8.11	43	8161	0.038	ppbv # 41
11) Trichlorofluoromethane	3.94	101	73812	0.354	ppbv 93
13) Ethanol	3.59	45	5255942	452.204	ppbv 95
15) Acetone	3.83	43	1861008	13.683	ppbv 94
16) 1,3-Butadiene	3.34	39	39746	0.470	ppbv # 18
17) tert-Butyl alcohol	4.28	59	5672	0.046	ppbv # 72
19) Isopropyl Alcohol	3.96	45	761212	10.411	ppbv # 38
20) Methylene Chloride	4.33	84	221680	3.041	ppbv 98
21) Allyl Chloride	4.29	41	8066	0.079	ppbv # 64
25) Ethyl Acetate	5.67	43	245076	0.750	ppbv # 82
26) Hexane	5.67	57	323375	1.937	ppbv # 48
29) Chloroform	5.73	83	43997	0.187	ppbv 86
34) 2-Butanone	5.24	43	80216	0.546	ppbv 93
36) Benzene	6.87	78	35892	0.103	ppbv 93
39) 1,2-Dichloropropane	7.16	63	953413	7.120	ppbv # 25
50) 4-Methyl-2-Pentanone	8.74	43	13203	0.054	ppbv # 1
53) Toluene	9.78	91	319832	0.773	ppbv 98
69) p-Isopropyltoluene	17.64	119	34229	0.057	ppbv # 52
74) 1,2,4-Trimethylbenzene	16.75	105	16584	0.036	ppbv # 53

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.65 min Scan# 891

Delta R.T. 0.00 min

Lab File: VL037092.D

Acq: 2 Jun 2021 5:32

Instrument :
MSVOA_L
ClientSampled :

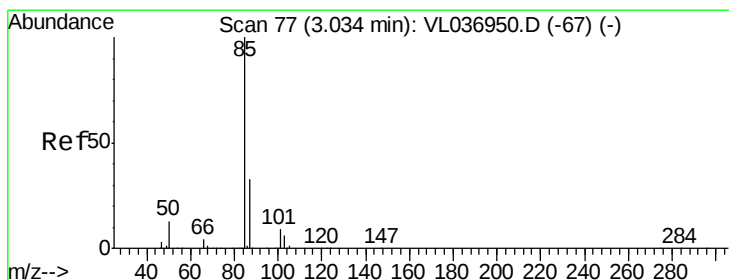
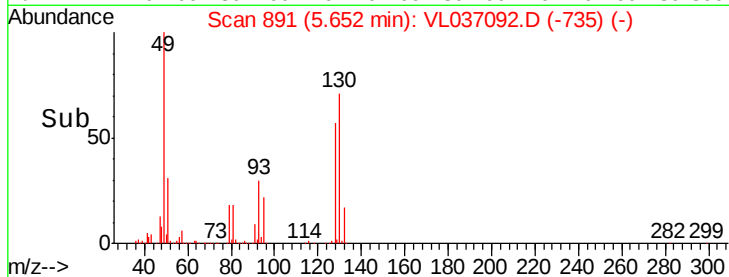
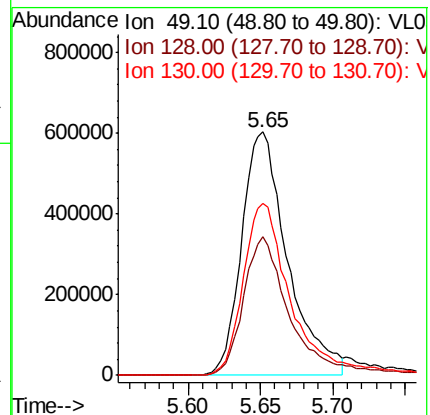
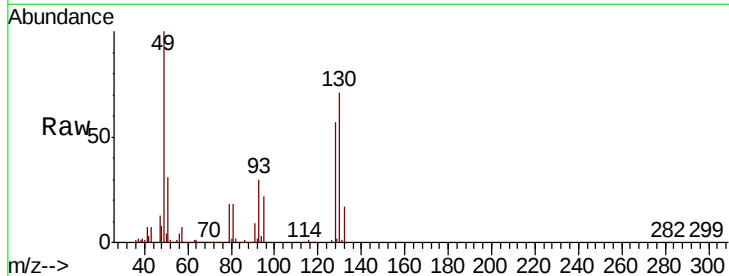
Tot Ion: 49 Resp: 1327905

Ion Ratio Lower Upper

49 100

128 59.1 26.9 80.7

130 75.2 33.8 101.4



#2

Dichlorodifluoromethane

Concen: 0.330 ppbv

RT: 3.04 min Scan# 78

Delta R.T. 0.00 min

Lab File: VL037092.D

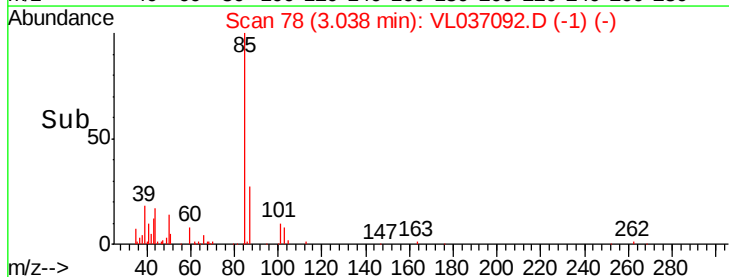
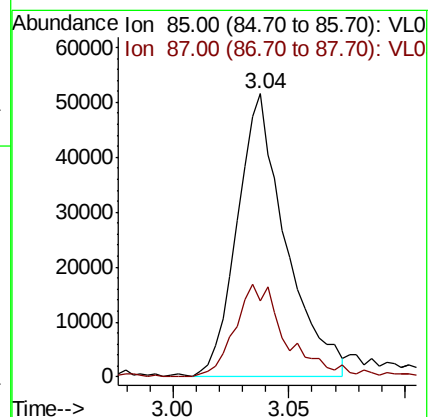
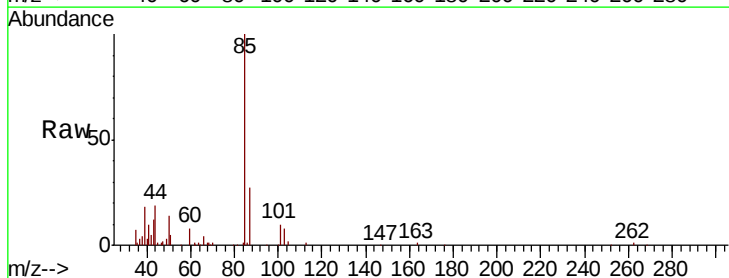
Acq: 2 Jun 2021 5:32

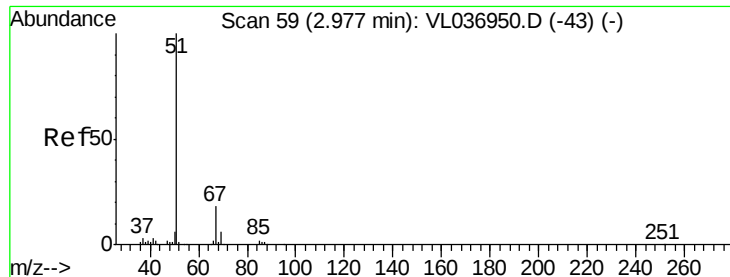
Tgt Ion: 85 Resp: 74311

Ion Ratio Lower Upper

85 100

87 27.2 26.6 39.8





#3

Chlorodifluoromethane

Concen: 0.430 ppbv

RT: 2.98 min Scan# 59

Delta R.T. -0.00 min

Lab File: VL037092.D

Acq: 2 Jun 2021 5:32

Instrument :

MSVOA_L

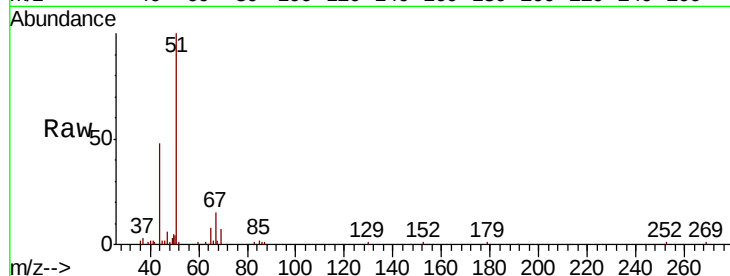
ClientSampleId :

Tot Ion: 51 Resp: 104724

Ion Ratio Lower Upper

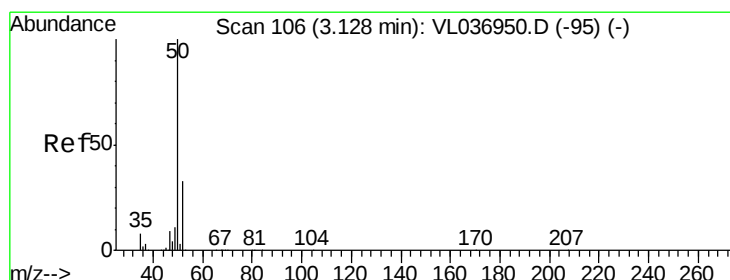
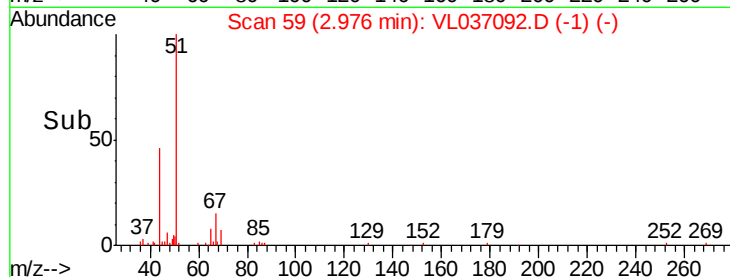
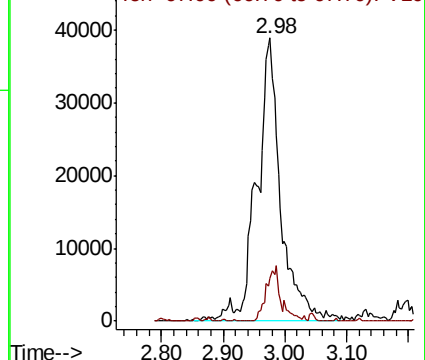
51 100

67 12.5 14.6 21.8#



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.536 ppbv

RT: 3.13 min Scan# 107

Delta R.T. 0.00 min

Lab File: VL037092.D

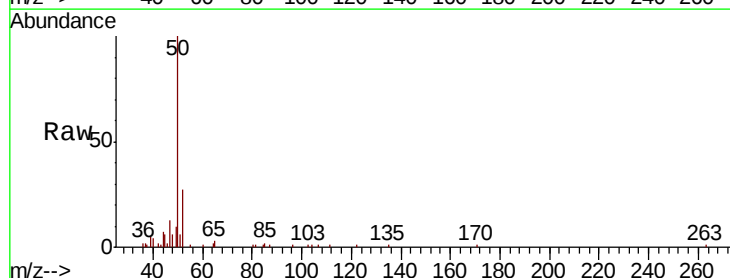
Acq: 2 Jun 2021 5:32

Tgt Ion: 50 Resp: 44377

Ion Ratio Lower Upper

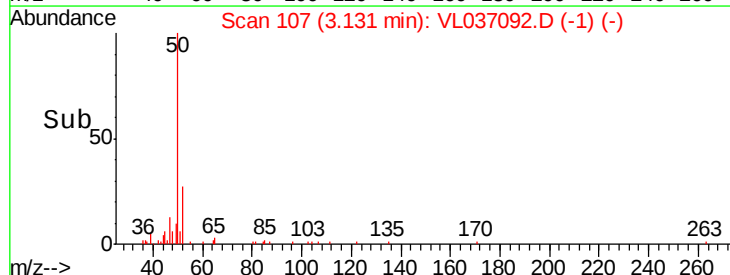
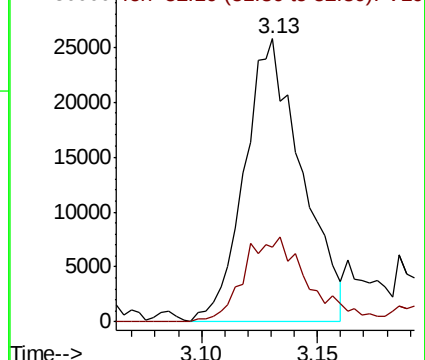
50 100

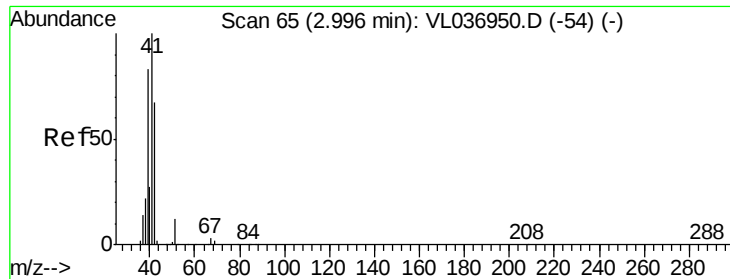
52 26.6 26.1 39.1



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#9

Propene

Concen: 2.325 ppbv

RT: 3.19 min Scan# 125

Delta R.T. 0.19 min

Lab File: VL037092.D

Acq: 2 Jun 2021 5:32

Instrument :

MSVOA_L

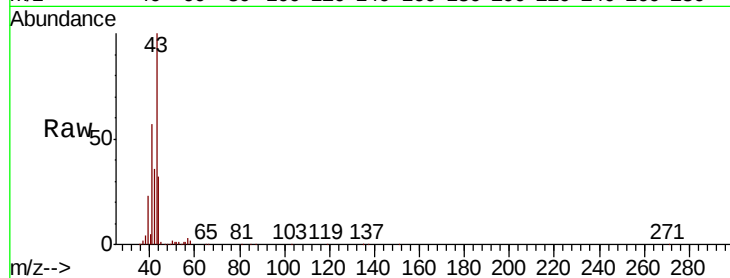
ClientSampled :

Tot Ion: 41 Resp: 202578

Ion Ratio Lower Upper

41 100

42 78.7 53.9 80.9



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0

3.19

150000

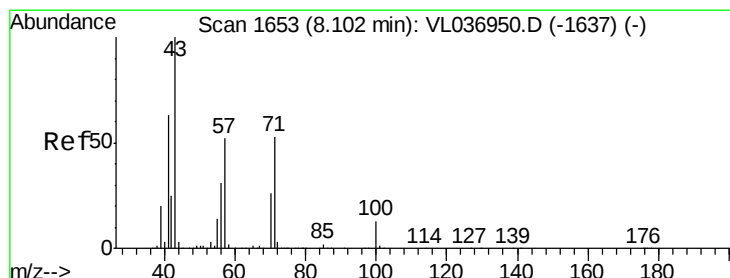
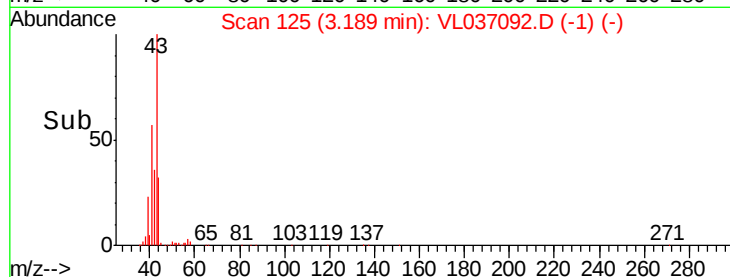
100000

50000

0

3.15 3.20 3.25

Time-->



#10

Heptane

Concen: 0.038 ppbv

RT: 8.11 min Scan# 1655

Delta R.T. 0.01 min

Lab File: VL037092.D

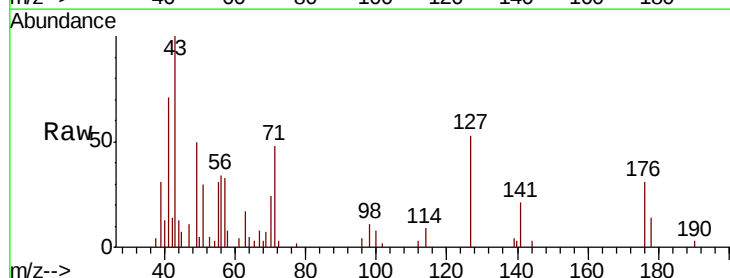
Acq: 2 Jun 2021 5:32

Tgt Ion: 43 Resp: 8161

Ion Ratio Lower Upper

43 100

57 92.5 41.0 61.6#



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 57.10 (56.80 to 57.80): VL0

8.11

8000

6000

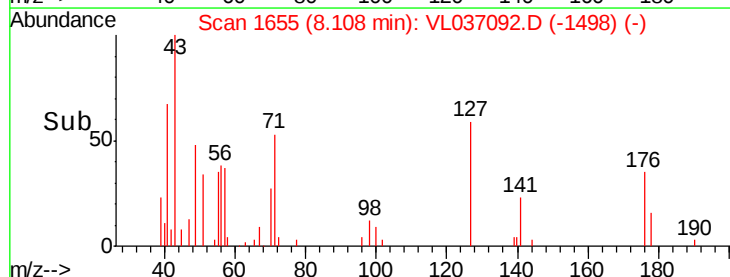
4000

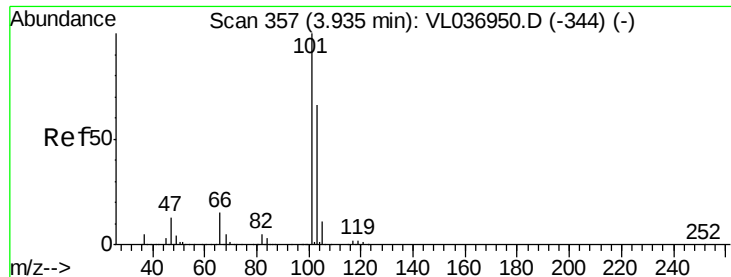
2000

0

8.10 8.12 8.14

Time-->

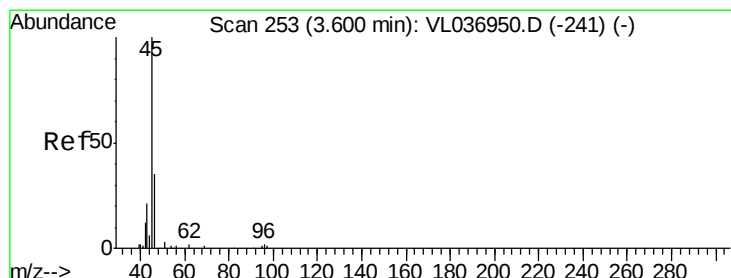
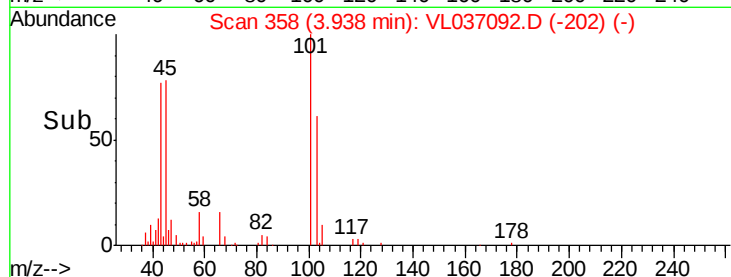
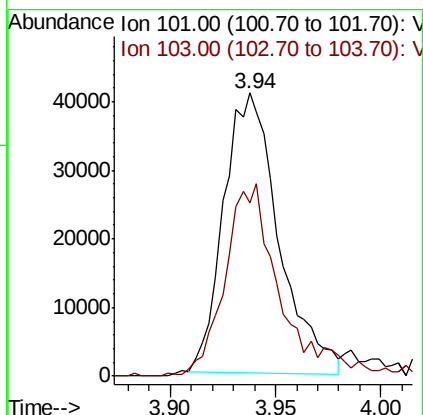
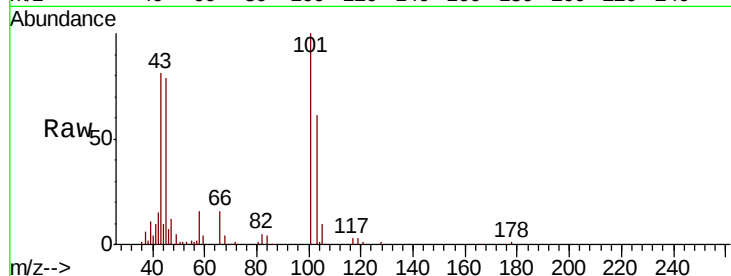




#11
 Trichlorofluoromethane
 Concen: 0.354 ppbv
 RT: 3.94 min Scan# 358
 Delta R.T. 0.00 min
 Lab File: VL037092.D
 Acq: 2 Jun 2021 5:32

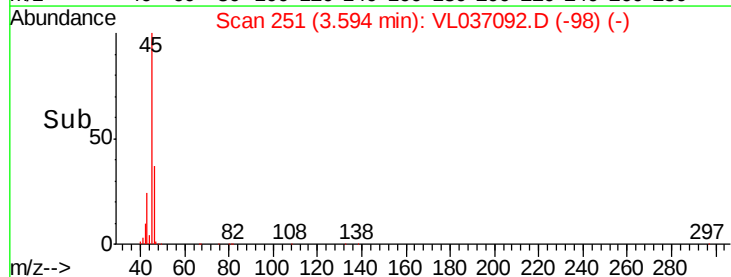
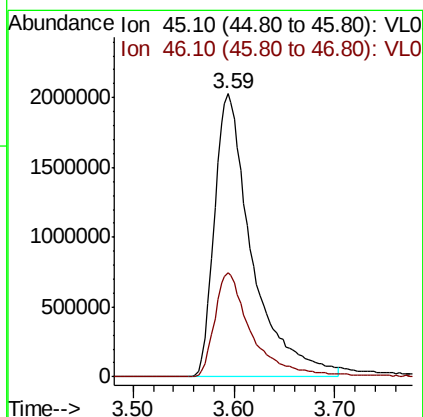
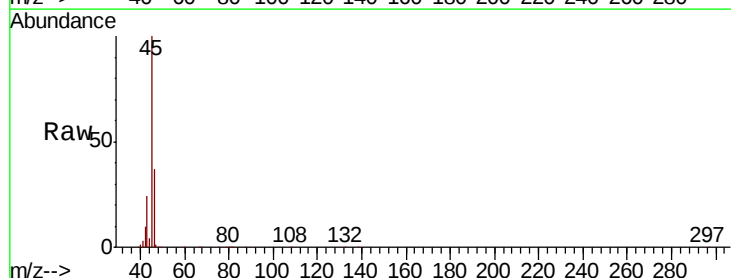
Instrument :
 MSVOA_L
 ClientSampleId :

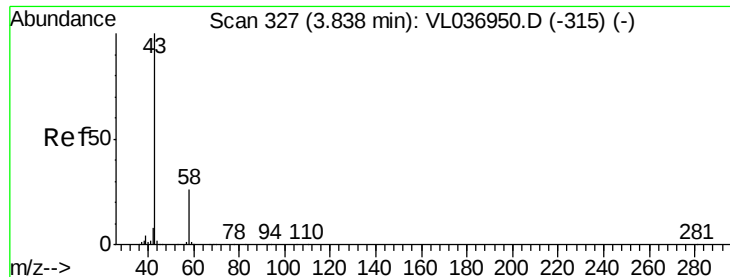
Tot Ion:101 Resp: 73812
 Ion Ratio Lower Upper
 101 100
 103 60.0 52.6 79.0



#13
 Ethanol
 Concen: 452.204 ppbv
 RT: 3.59 min Scan# 251
 Delta R.T. -0.01 min
 Lab File: VL037092.D
 Acq: 2 Jun 2021 5:32

Tgt Ion: 45 Resp: 5255942
 Ion Ratio Lower Upper
 45 100
 46 37.5 16.3 65.3





#15

Acetone

Concen: 13.683 ppbv

RT: 3.83 min Scan# 326

Delta R.T. -0.00 min

Lab File: VL037092.D

Acq: 2 Jun 2021 5:32

Instrument :

MSVOA_L

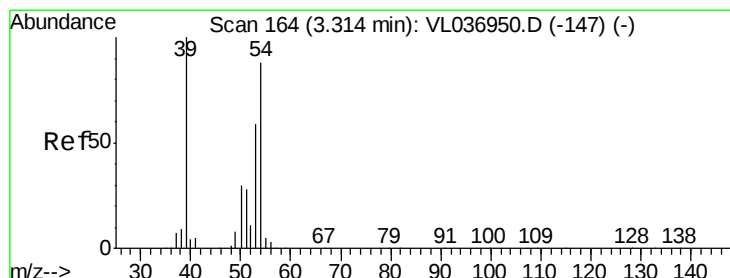
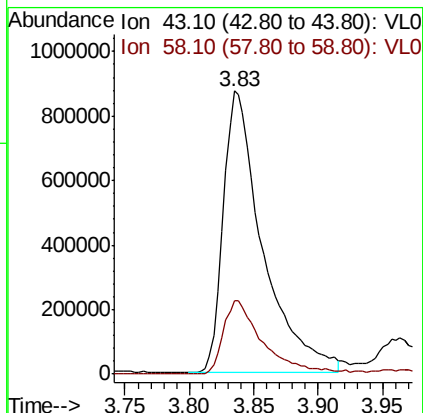
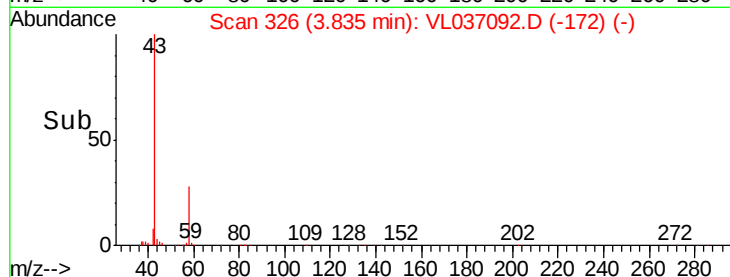
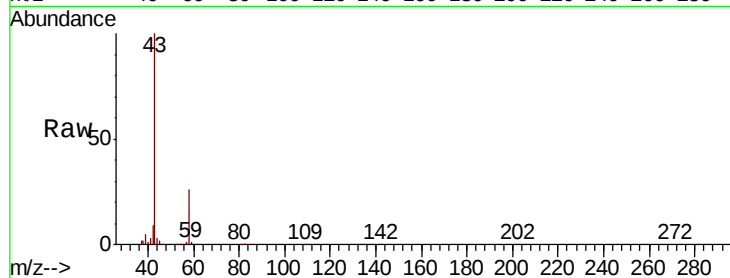
ClientSampled :

Tot Ion: 43 Resp: 1861008

Ion Ratio Lower Upper

43 100

58 26.8 24.0 36.0



#16

1,3-Butadiene

Concen: 0.470 ppbv

RT: 3.34 min Scan# 173

Delta R.T. 0.03 min

Lab File: VL037092.D

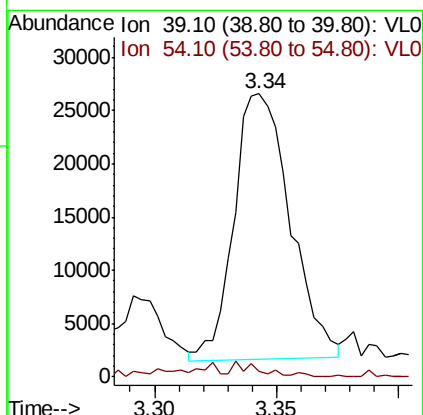
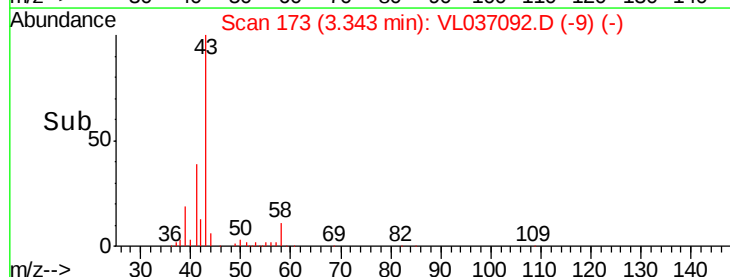
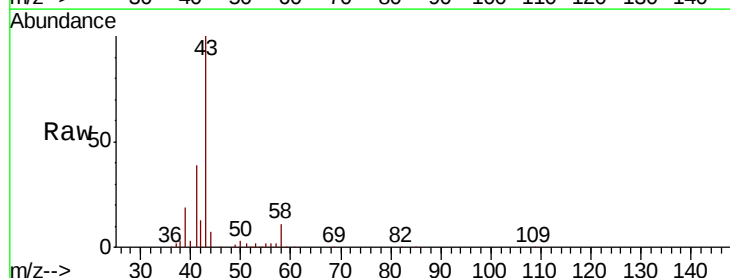
Acq: 2 Jun 2021 5:32

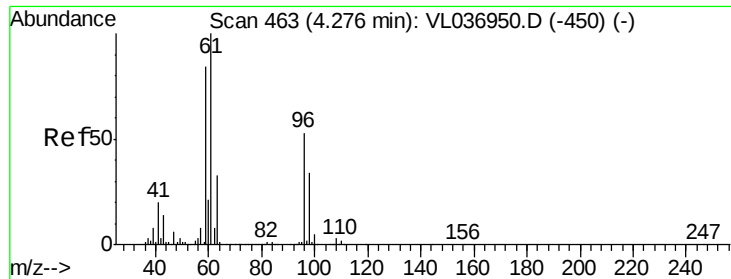
Tgt Ion: 39 Resp: 39746

Ion Ratio Lower Upper

39 100

54 6.8 63.2 94.8#



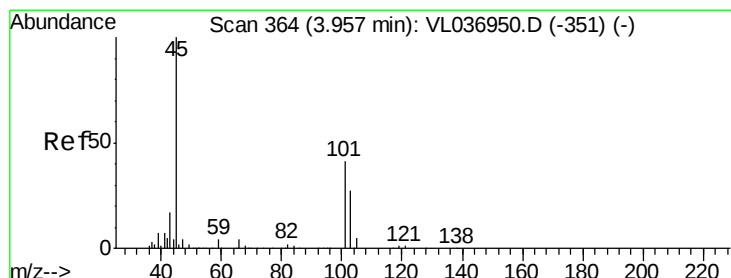
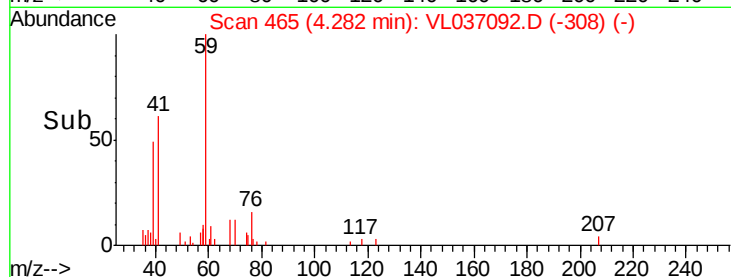
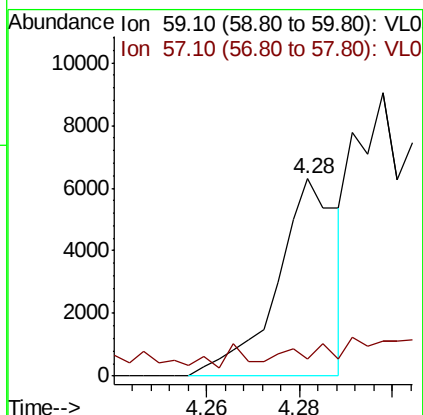
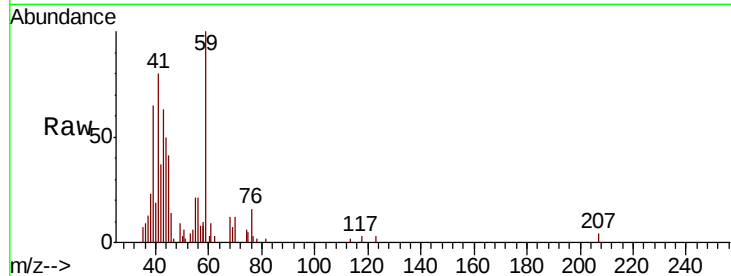


#17

tert-Butyl alcohol
 Concen: 0.046 ppbv
 RT: 4.28 min Scan# 465
 Delta R.T. 0.01 min
 Lab File: VL037092.D
 Acq: 2 Jun 2021 5:32

Instrument :
 MSVOA_L
 ClientSampleId :

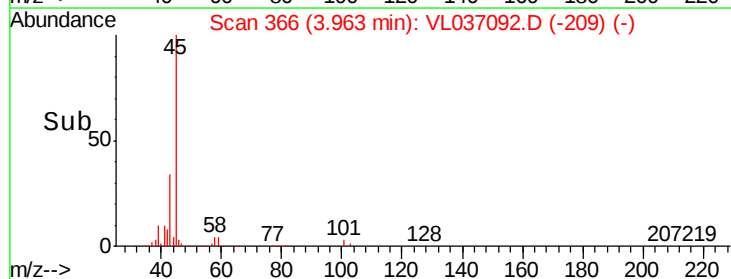
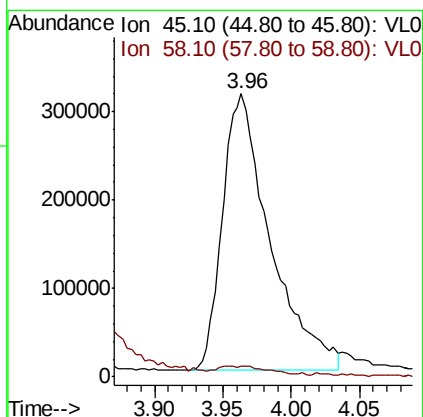
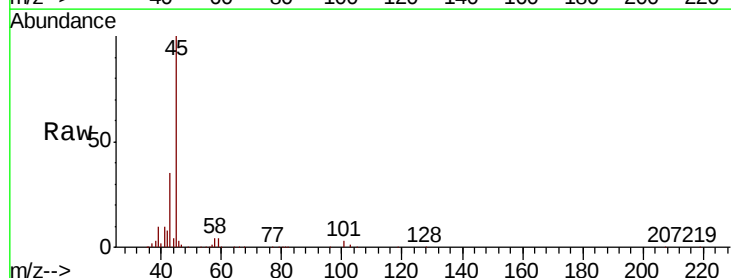
Tot Ion: 59 Resp: 5672
 Ion Ratio Lower Upper
 59 100
 57 0.0 8.3 12.5#

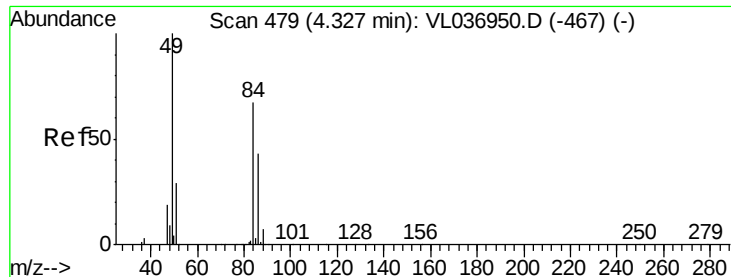


#19

Isopropyl Alcohol
 Concen: 10.411 ppbv
 RT: 3.96 min Scan# 366
 Delta R.T. 0.01 min
 Lab File: VL037092.D
 Acq: 2 Jun 2021 5:32

Tgt Ion: 45 Resp: 761212
 Ion Ratio Lower Upper
 45 100
 58 5.6 37.2 55.8#





#20

Methylene Chloride

Concen: 3.041 ppbv

RT: 4.33 min Scan# 480

Delta R.T. 0.00 min

Lab File: VL037092.D

Acq: 2 Jun 2021 5:32

Instrument :

MSVOA_L

ClientSampleId :

Tot Ion: 84 Resp: 221680

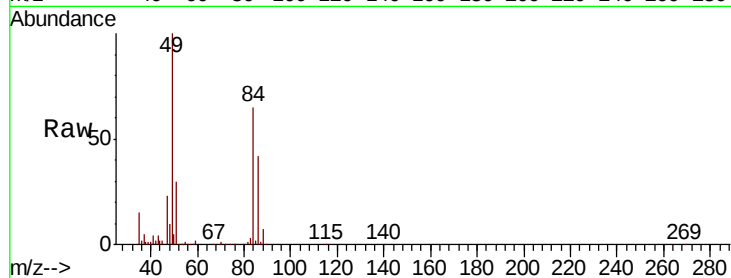
Ion Ratio Lower Upper

84 100

49 152.2 119.8 179.6

51 45.3 35.1 52.7

86 63.8 50.9 76.3

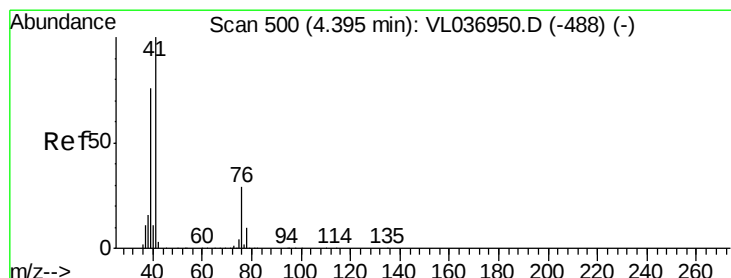
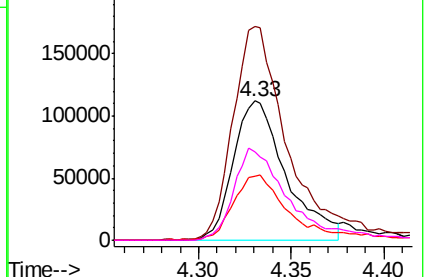
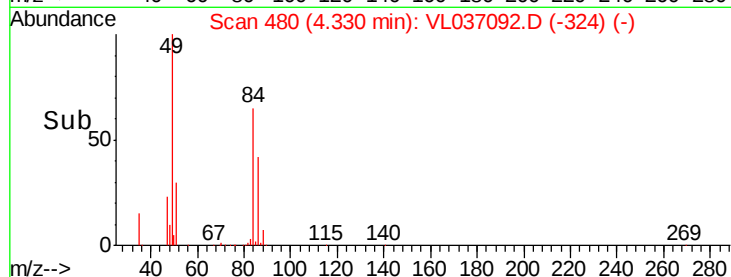


Abundance Ion 84.00 (83.70 to 84.70): VL0

Ion 49.10 (48.80 to 49.80): VL0

Ion 51.10 (50.80 to 51.80): VL0

Ion 86.00 (85.70 to 86.70): VL0



#21

Allyl Chloride

Concen: 0.079 ppbv

RT: 4.29 min Scan# 469

Delta R.T. -0.10 min

Lab File: VL037092.D

Acq: 2 Jun 2021 5:32

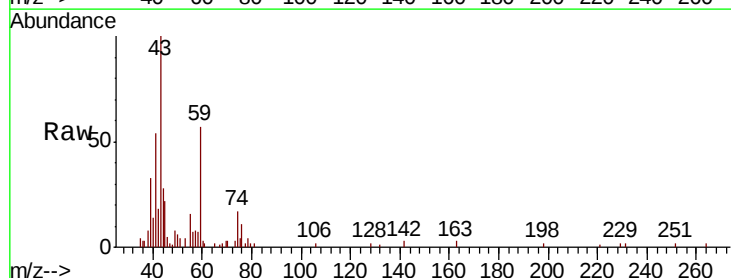
Tgt Ion: 41 Resp: 8066

Ion Ratio Lower Upper

41 100

76 38.0 24.9 37.3#

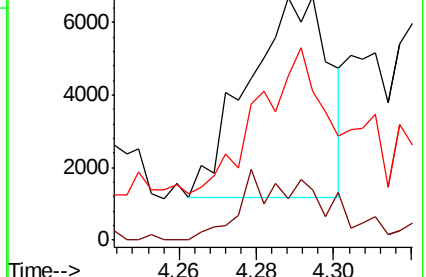
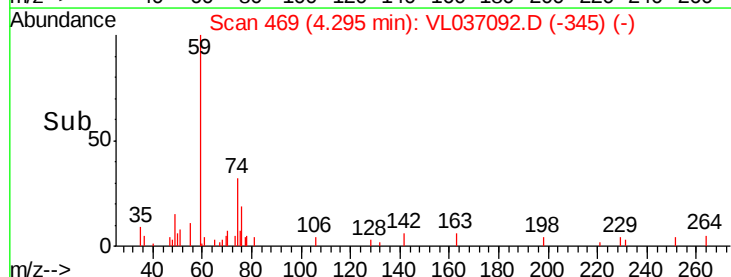
39 119.9 63.7 95.5#

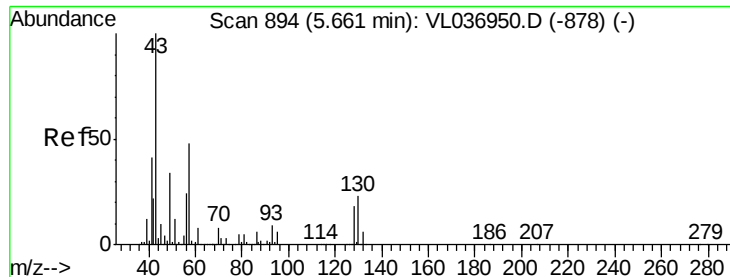


Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 76.10 (75.80 to 76.80): VL0

Ion 39.10 (38.80 to 39.80): VL0

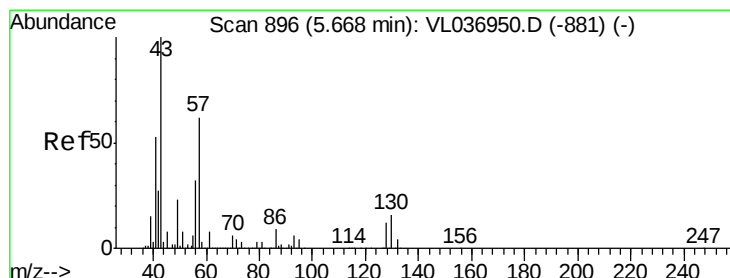
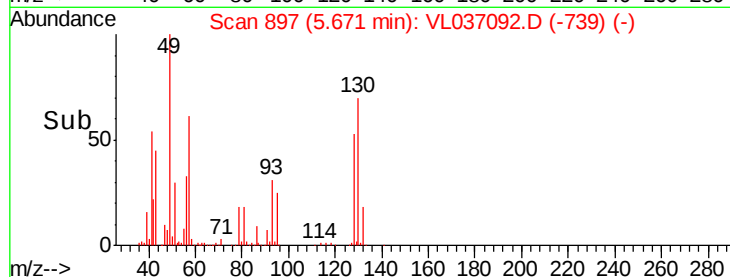
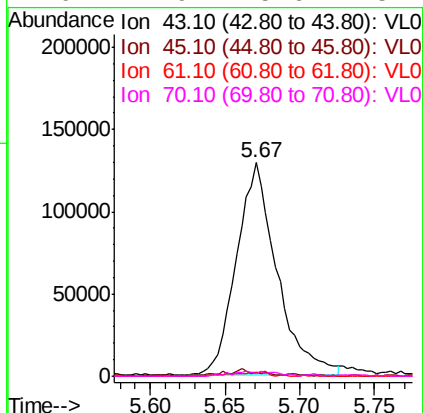
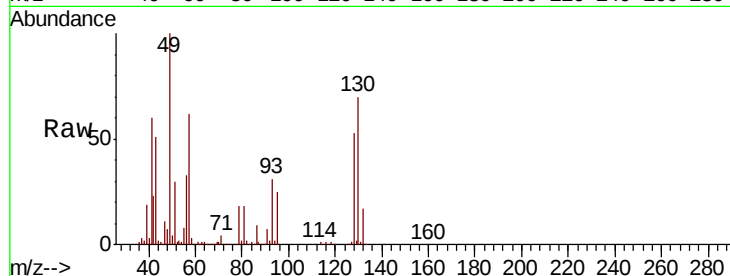




#25
Ethyl Acetate
Concen: 0.750 ppbv
RT: 5.67 min Scan# 897
Delta R.T. 0.01 min
Lab File: VL037092.D
Acq: 2 Jun 2021 5:32

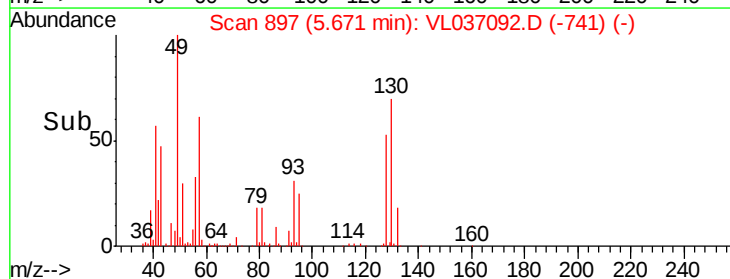
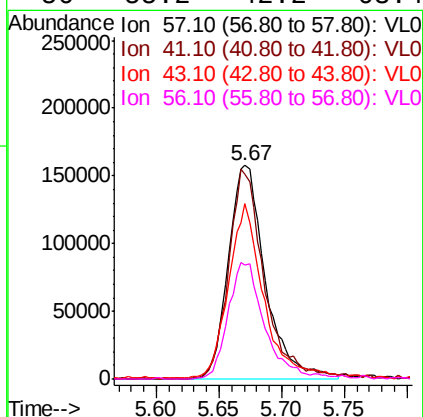
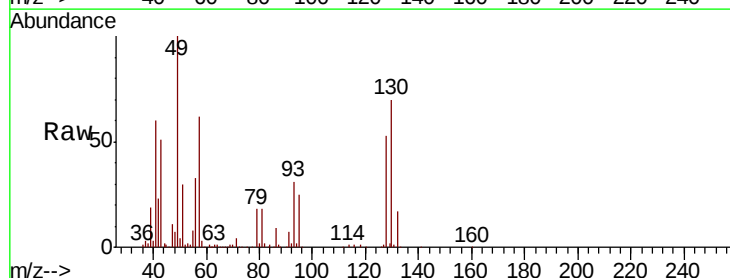
Instrument :
MSVOA_L
ClientSampleId :

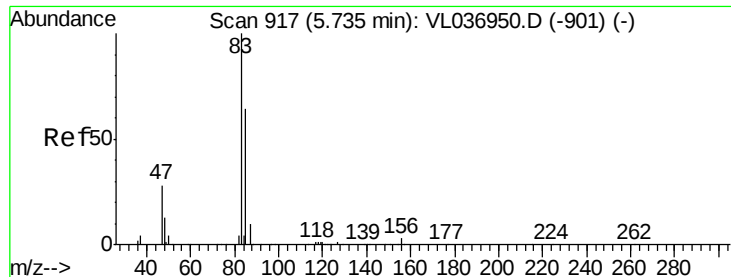
Tot Ion:	43	Resp:	245076
Ion	Ratio	Lower	Upper
43	100		
45	3.1	7.8	11.8#
61	2.1	7.8	11.8#
70	2.9	5.6	8.4#



#26
Hexane
Concen: 1.937 ppbv
RT: 5.67 min Scan# 897
Delta R.T. 0.00 min
Lab File: VL037092.D
Acq: 2 Jun 2021 5:32

Tgt Ion:	57	Resp:	323375
Ion	Ratio	Lower	Upper
57	100		
41	96.4	70.5	105.7
43	79.3	165.8	248.8#
56	55.2	42.2	63.4

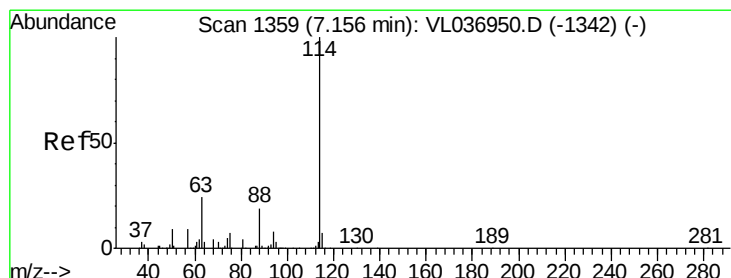
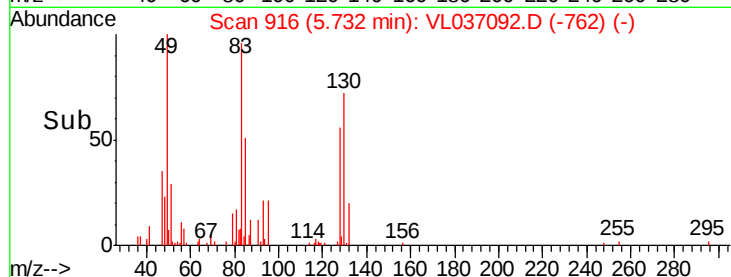
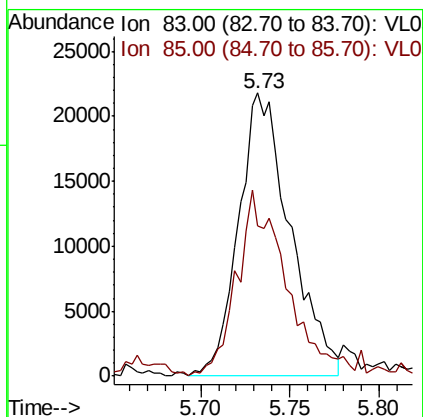
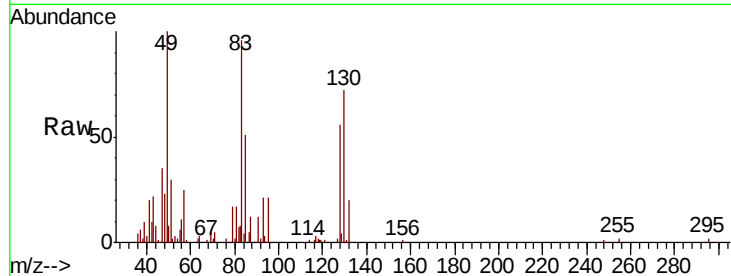




#29
Chloroform
Concen: 0.187 ppbv
RT: 5.73 min Scan# 916
Delta R.T. -0.00 min
Lab File: VL037092.D
Acq: 2 Jun 2021 5:32

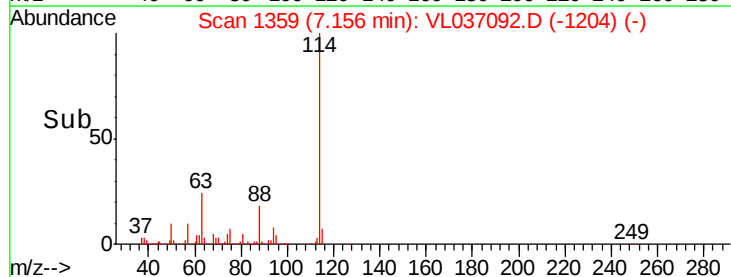
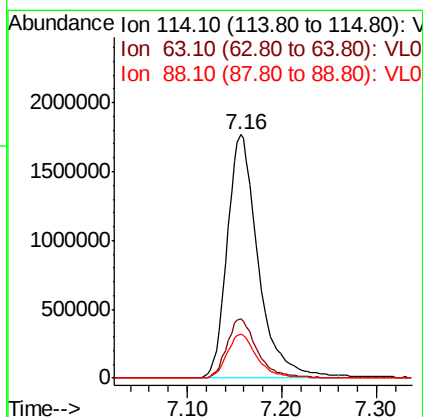
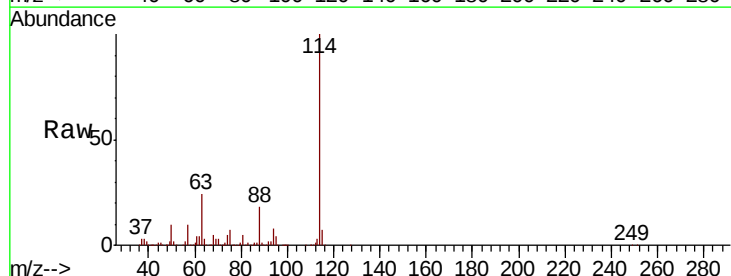
Instrument :
MSVOA_L
ClientSampled :

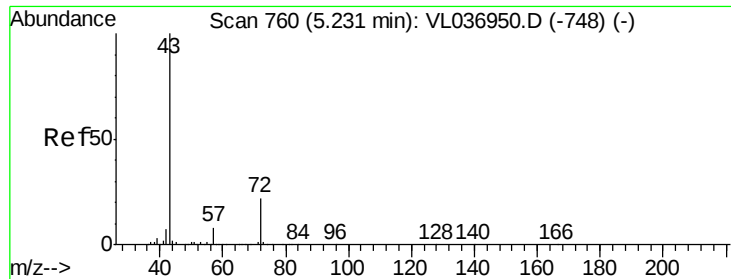
Tot Ion: 83 Resp: 43997
Ion Ratio Lower Upper
83 100
85 52.9 51.1 76.7



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.16 min Scan# 1359
Delta R.T. -0.00 min
Lab File: VL037092.D
Acq: 2 Jun 2021 5:32

Tgt Ion: 114 Resp: 4035425
Ion Ratio Lower Upper
114 100
63 24.3 19.6 29.4
88 17.8 14.6 21.8

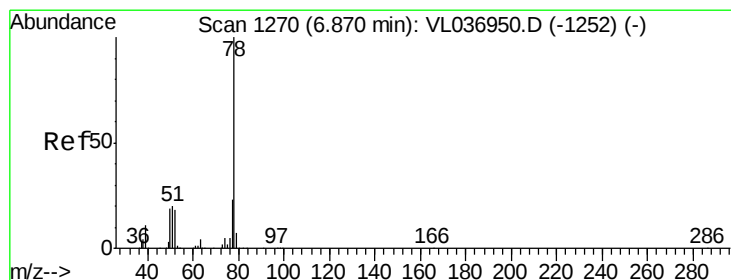
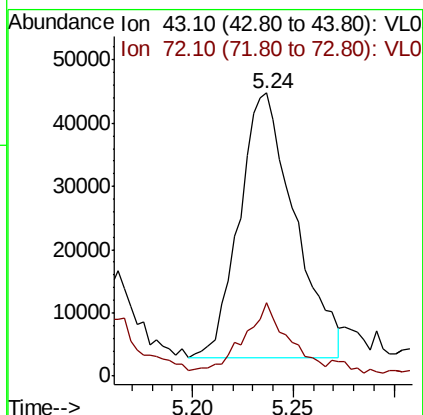
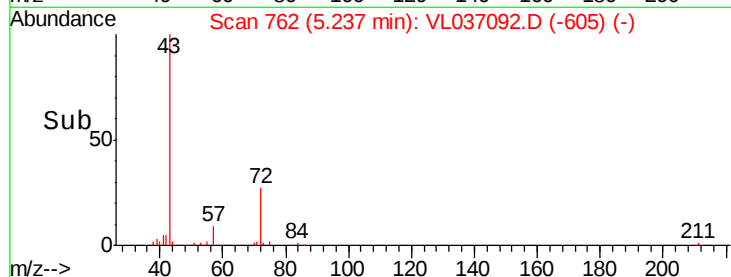
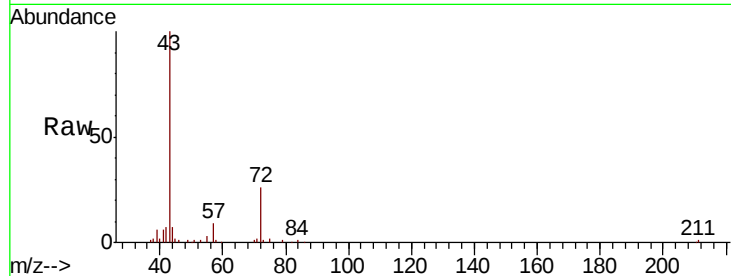




#34
2-Butanone
Concen: 0.546 ppbv
RT: 5.24 min Scan# 762
Delta R.T. 0.01 min
Lab File: VL037092.D
Acq: 2 Jun 2021 5:32

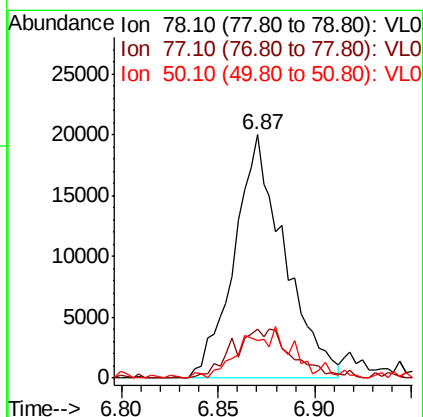
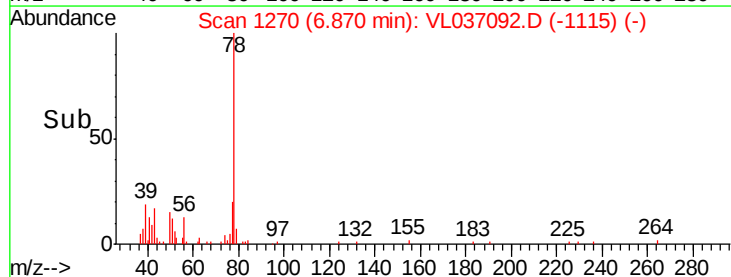
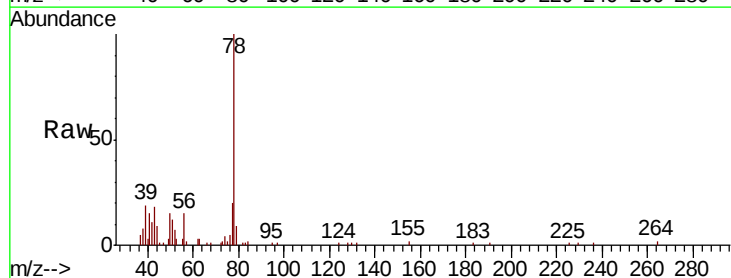
Instrument :
MSVOA_L
ClientSampleId :

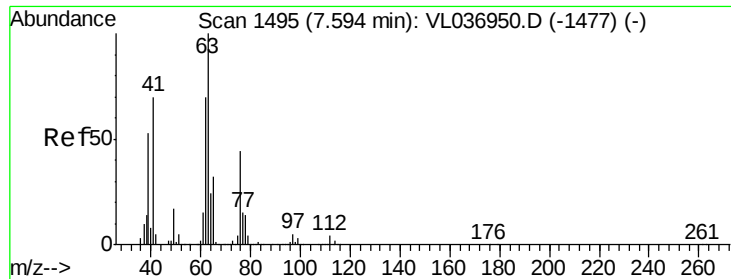
Tot Ion: 43 Resp: 80216
Ion Ratio Lower Upper
43 100
72 27.4 19.0 28.4



#36
Benzene
Concen: 0.103 ppbv
RT: 6.87 min Scan# 1270
Delta R.T. -0.00 min
Lab File: VL037092.D
Acq: 2 Jun 2021 5:32

Tgt Ion: 78 Resp: 35892
Ion Ratio Lower Upper
78 100
77 20.0 18.6 28.0
50 15.5 15.0 22.4

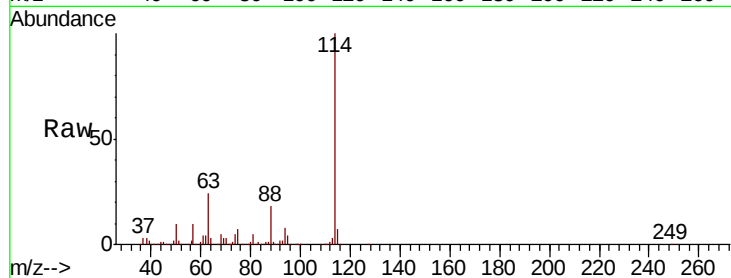




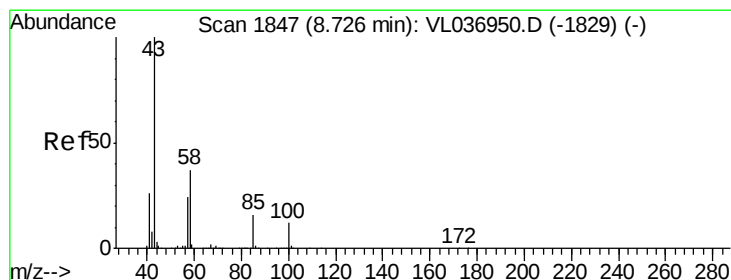
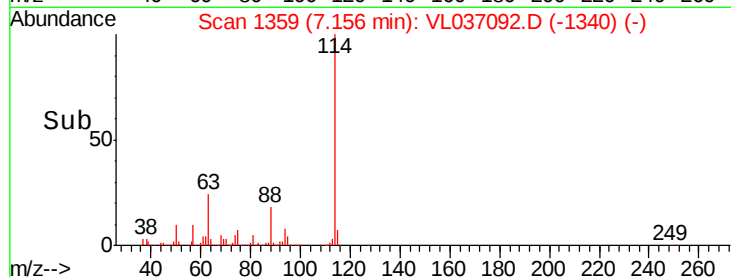
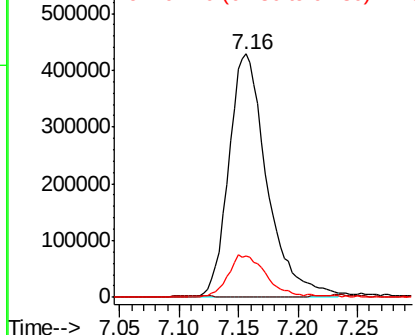
#39
 1,2-Dichloropropane
 Concen: 7.120 ppbv
 RT: 7.16 min Scan# 1359
 Delta R.T. -0.44 min
 Lab File: VL037092.D
 Acq: 2 Jun 2021 5:32

Instrument :
 MSVOA_L
 ClientSampleID :

Tot Ion: 63 Resp: 953413
 Ion Ratio Lower Upper
 63 100
 41 0.0 55.7 83.5#
 62 17.1 56.2 84.4#

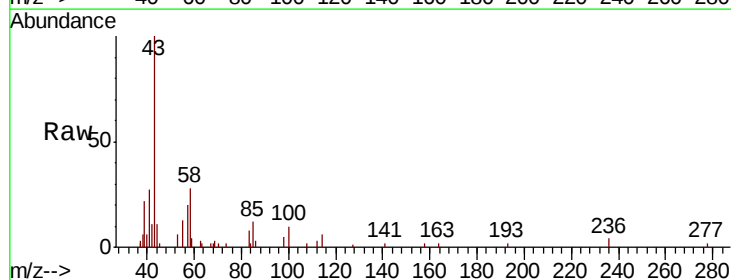


Abundance Ion 63.10 (62.80 to 63.80): VL0
 Ion 41.10 (40.80 to 41.80): VL0
 Ion 62.10 (61.80 to 62.80): VL0

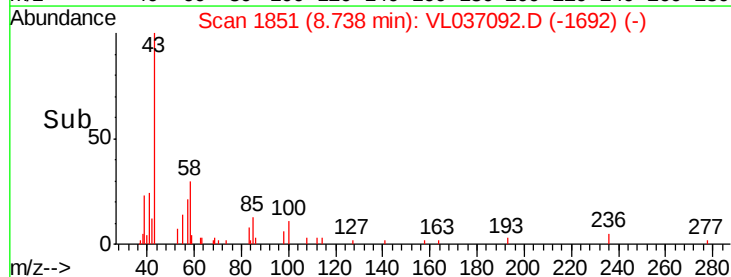
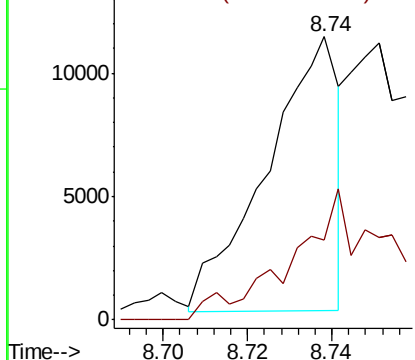


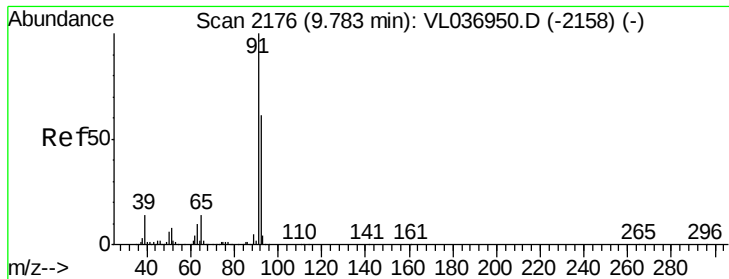
#50
 4-Methyl-2-Pentanone
 Concen: 0.054 ppbv
 RT: 8.74 min Scan# 1851
 Delta R.T. 0.01 min
 Lab File: VL037092.D
 Acq: 2 Jun 2021 5:32

Tgt Ion: 43 Resp: 13203
 Ion Ratio Lower Upper
 43 100
 58 95.5 29.4 44.2#



Abundance Ion 43.10 (42.80 to 43.80): VL0
 Ion 58.10 (57.80 to 58.80): VL0





#53

Toluene

Concen: 0.773 ppbv

RT: 9.78 min Scan# 2176

Delta R.T. -0.00 min

Lab File: VL037092.D

Acq: 2 Jun 2021 5:32

Instrument :

MSVOA_L

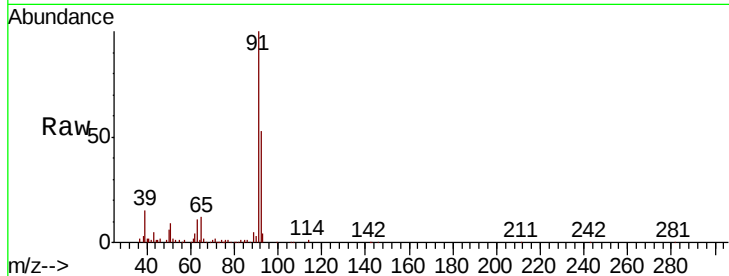
ClientSampleId :

Tot Ion: 91 Resp: 319832

Ion Ratio Lower Upper

91 100

92 60.2 49.5 74.3



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0

9.78

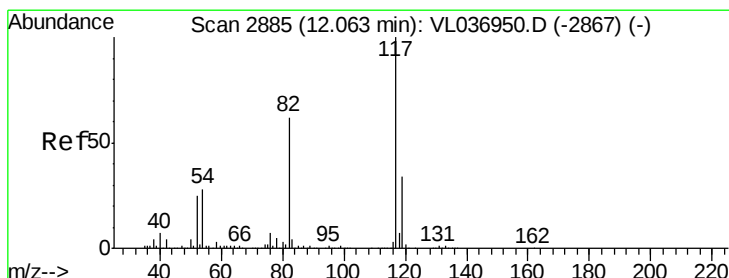
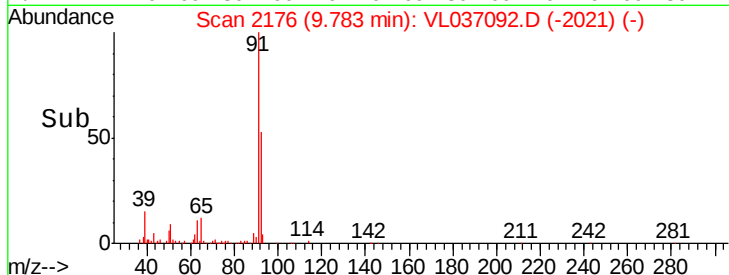
150000

100000

50000

0

Time-->



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.07 min Scan# 2886

Delta R.T. 0.00 min

Lab File: VL037092.D

Acq: 2 Jun 2021 5:32

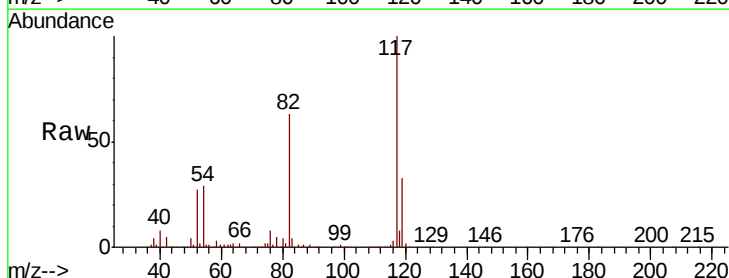
Tgt Ion: 117 Resp: 3545228

Ion Ratio Lower Upper

117 100

82 65.6 52.6 79.0

119 35.0 46.6 70.0#



Abundance Ion 117.10 (116.80 to 117.80): V

Ion 82.10 (81.80 to 82.80): VL0

Ion 119.10 (118.80 to 119.80): V

12.07

2000000

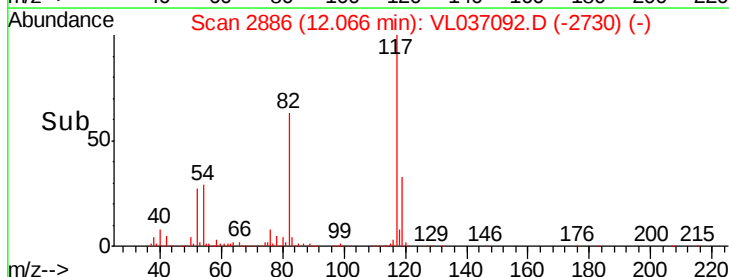
1500000

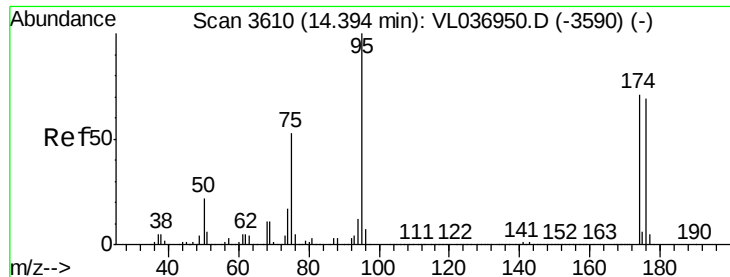
1000000

500000

0

Time-->

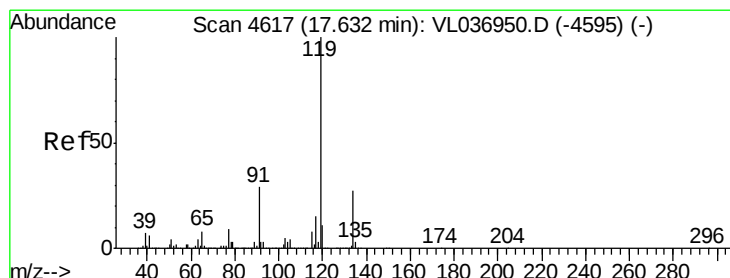
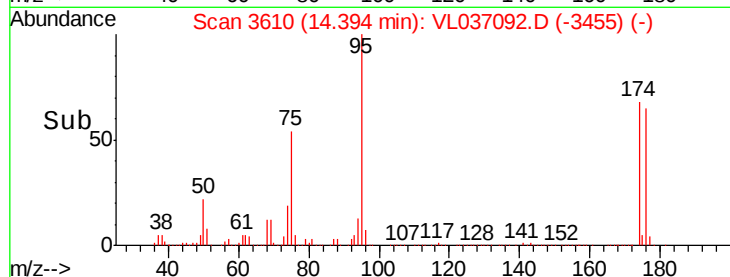
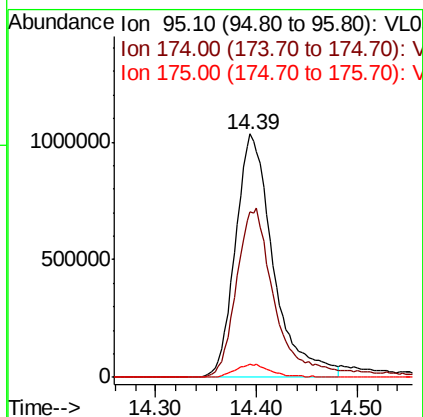
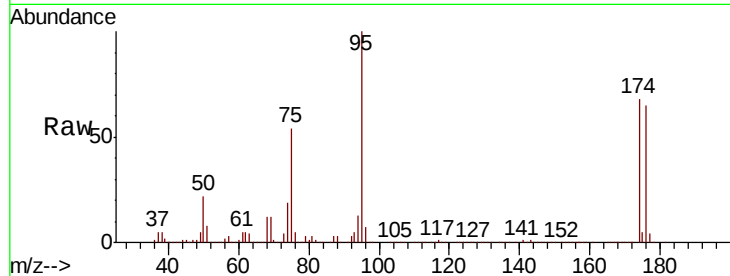




#68
1-Bromo-4-Fluorobenzene
Concen: 10.131 ppbv
RT: 14.39 min Scan# 3610
Delta R.T. -0.00 min
Lab File: VL037092.D
Acq: 2 Jun 2021 5:32

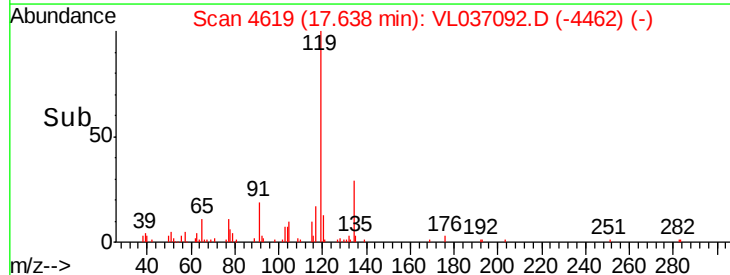
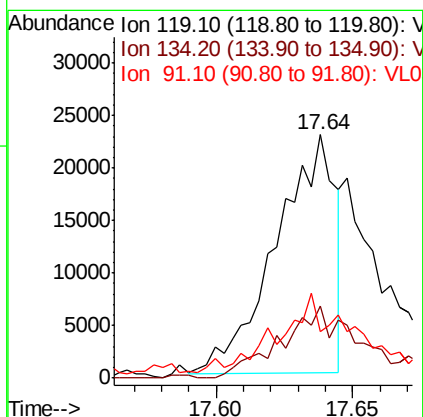
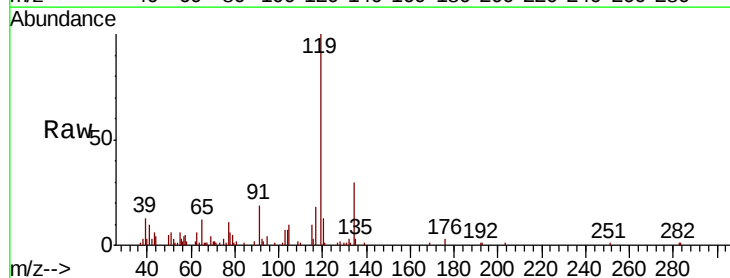
Instrument :
MSVOA_L
ClientSampleId :

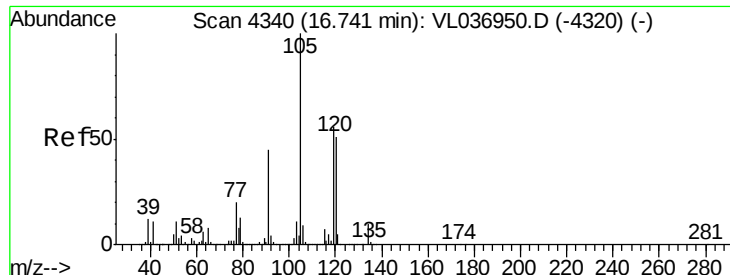
Tot Ion: 95 Resp: 2698011
Ion Ratio Lower Upper
95 100
174 73.8 58.4 87.6
175 5.4 4.4 6.6



#69
p-Isopropyltoluene
Concen: 0.057 ppbv
RT: 17.64 min Scan# 4619
Delta R.T. 0.01 min
Lab File: VL037092.D
Acq: 2 Jun 2021 5:32

Tgt Ion: 119 Resp: 34229
Ion Ratio Lower Upper
119 100
134 46.5 21.2 31.8#
91 57.3 22.2 33.4#





#74
 1,2,4-Trimethylbenzene
 Concen: 0.036 ppbv
 RT: 16.75 min Scan# 4342
 Delta R.T. 0.01 min
 Lab File: VL037092.D
 Acq: 2 Jun 2021 5:32

Instrument :
 MSVOA_L
 ClientSampleId :

Tot Ion:	105	Resp:	16584
Ion	Ratio	Lower	Upper
105	100		
120	26.9	40.6	61.0#
91	2.1	37.4	56.0#
77	6.1	16.2	24.4#

