

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL080421\
 Data File : VL037337.D
 Acq On : 5 Aug 2021 10:38
 Operator : SY/AP
 Sample : M3239-03
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

Quant Time: Aug 05 11:10:08 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	984859	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.17	114	3291009	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.07	117	2718446	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.40	95	1849934	9.96	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	99.60%

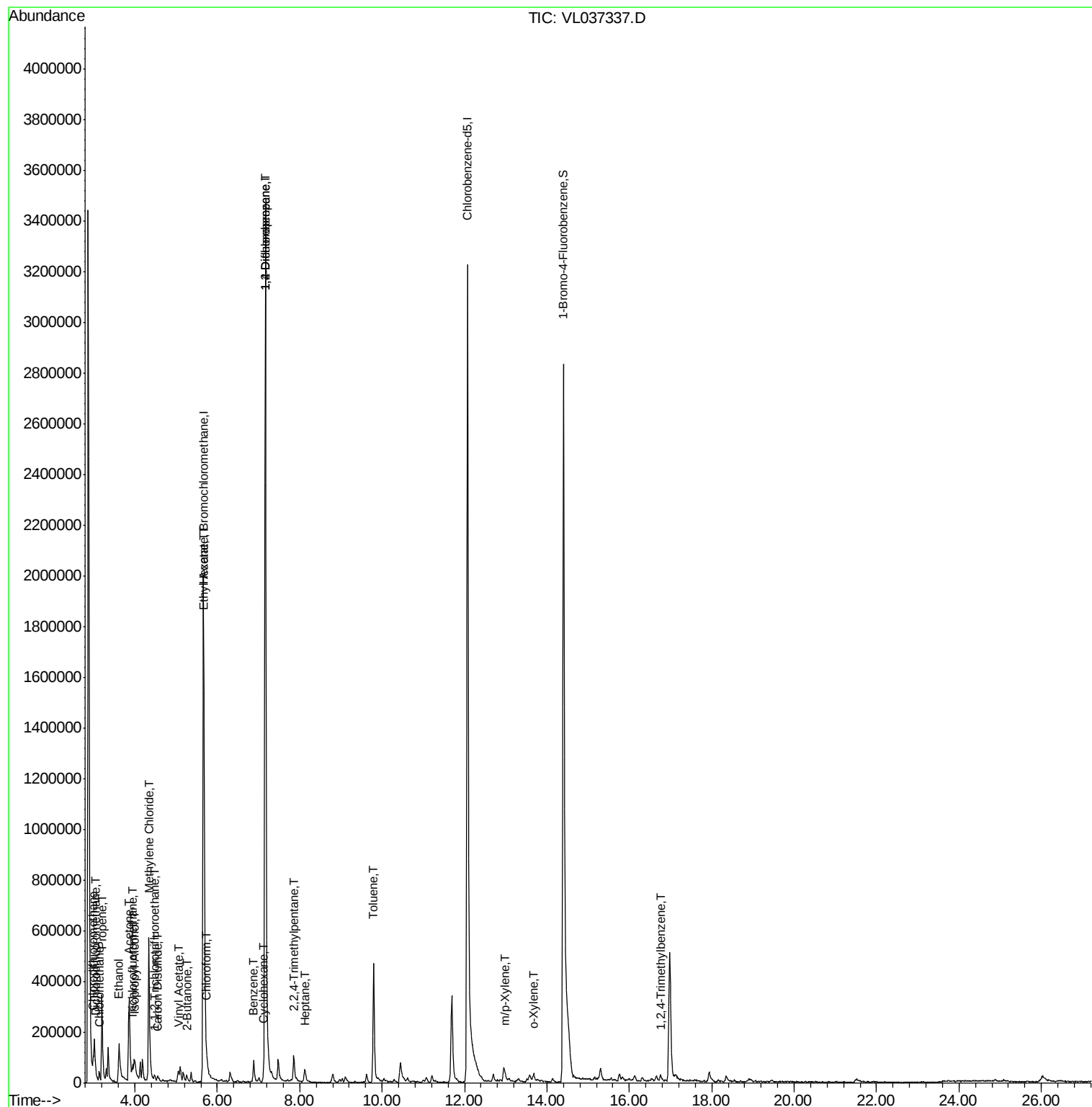
Target Compounds					Ovalue
2) Dichlorodifluoromethane	3.04	85	37373	0.187	ppbv 99
3) Chlorodifluoromethane	2.98	51	121892	0.609	ppbv # 91
4) Chloromethane	3.13	50	32937	0.459	ppbv 94
9) Propene	3.20	41	112318	1.551	ppbv 84
10) Heptane	8.11	43	6886	0.041	ppbv # 25
11) Trichlorofluoromethane	3.94	101	35631	0.194	ppbv 96
12) 1,1,2-Trichlorotrifluoroet	4.48	101	7365	0.055	ppbv # 74
13) Ethanol	3.61	45	254327	23.320	ppbv 96
15) Acetone	3.85	43	466629	4.362	ppbv 99
19) Isopropyl Alcohol	3.99	45	55256	0.933	ppbv # 60
20) Methylene Chloride	4.34	84	251002	2.834	ppbv 95
23) Vinyl Acetate	5.06	43	6493	0.040	ppbv # 1
25) Ethyl Acetate	5.68	43	193920	0.697	ppbv # 81
26) Hexane	5.68	57	267564	1.719	ppbv # 49
27) Carbon Disulfide	4.54	76	18194	0.144	ppbv # 48
29) Chloroform	5.74	83	10568	0.054	ppbv 91
30) Cyclohexane	7.12	84	4157	0.035	ppbv # 1
34) 2-Butanone	5.25	43	37081	0.325	ppbv # 88
36) Benzene	6.88	78	40785	0.138	ppbv 95
39) 1,2-Dichloropropane	7.16	63	711593	6.452	ppbv # 29
44) 2,2,4-Trimethylpentane	7.86	57	103535	0.211	ppbv # 91
53) Toluene	9.80	91	395718	1.132	ppbv 99
59) m/p-Xylene	12.99	91	10345	0.031	ppbv # 29
60) o-Xylene	13.68	91	11408	0.037	ppbv # 26
74) 1,2,4-Trimethylbenzene	16.76	105	11271	0.032	ppbv # 81

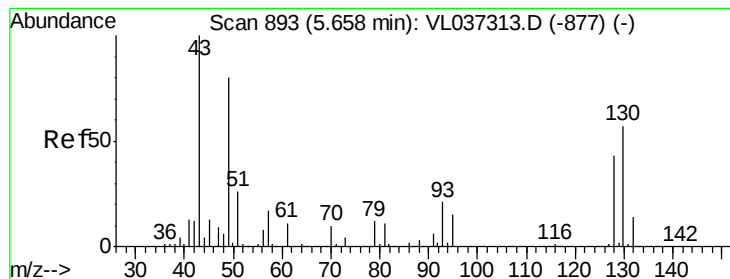
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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QLast Update : Wed Aug 04 22:53:01 2021
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#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.66 min Scan# 893

Delta R.T. 0.00 min

Lab File: VL037337.D

Acq: 5 Aug 2021 10:38

Instrument :

MSVOA_L

ClientSampled :

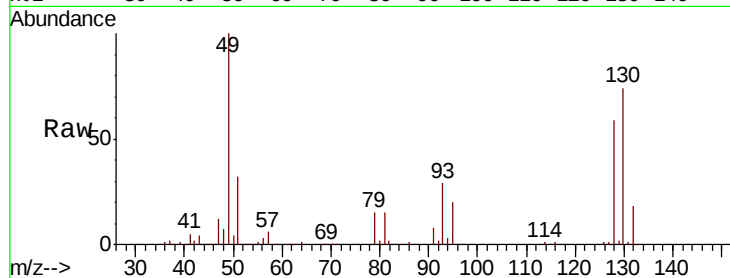
Tot Ion: 49 Resp: 984859

Ion Ratio Lower Upper

49 100

128 62.4 29.8 89.5

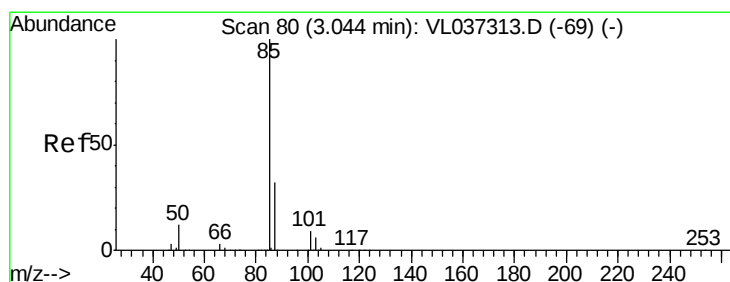
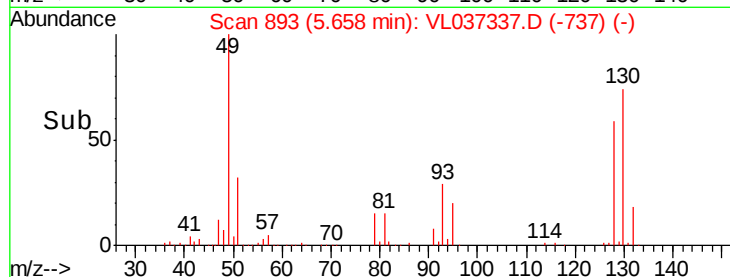
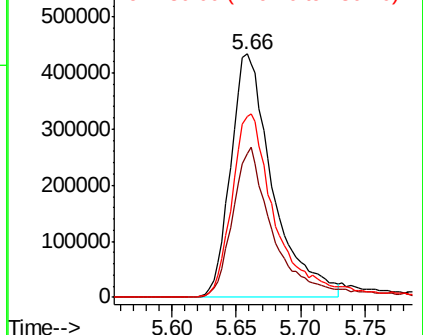
130 81.2 37.5 112.7



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V



#2

Dichlorodifluoromethane

Concen: 0.187 ppbv

RT: 3.04 min Scan# 80

Delta R.T. 0.00 min

Lab File: VL037337.D

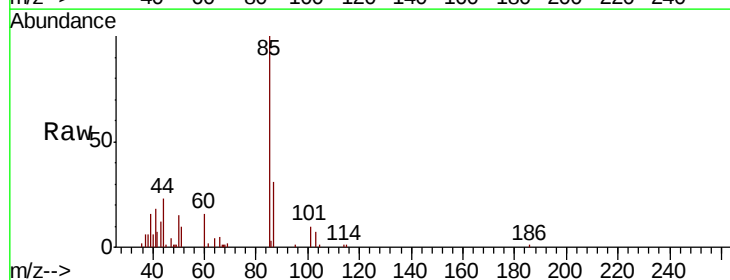
Acq: 5 Aug 2021 10:38

Tgt Ion: 85 Resp: 37373

Ion Ratio Lower Upper

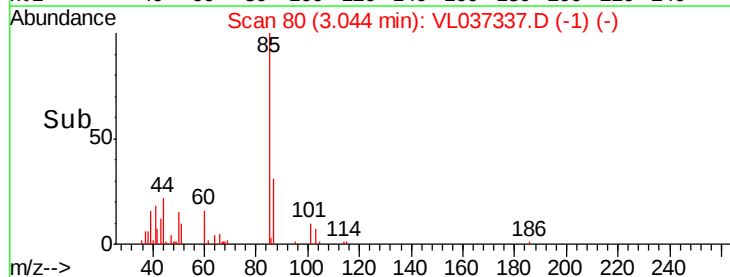
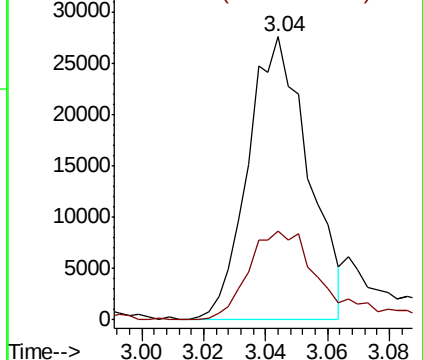
85 100

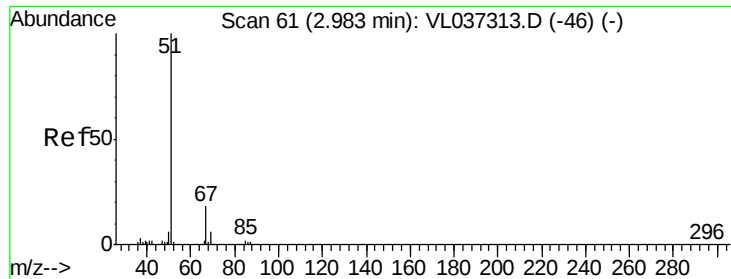
87 31.4 25.5 38.3



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.609 ppbv

RT: 2.98 min Scan# 61

Delta R.T. 0.00 min

Lab File: VL037337.D

Acq: 5 Aug 2021 10:38

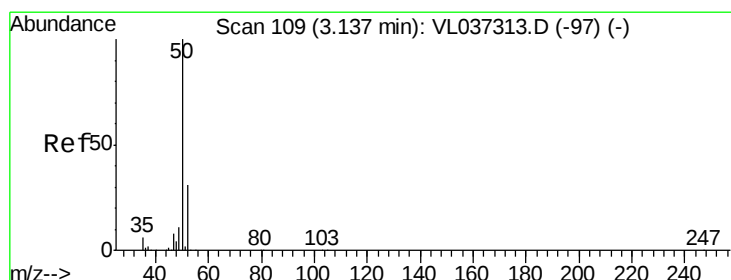
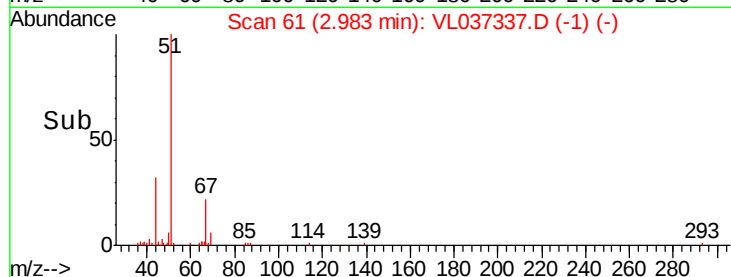
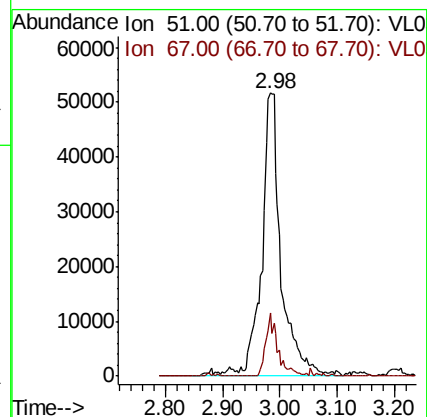
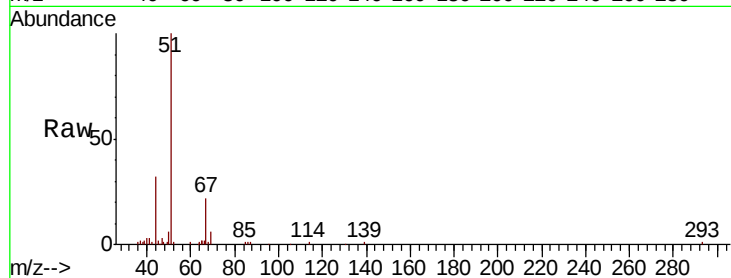
Instrument :
MSVOA_L
ClientSampled :

Tot Ion: 51 Resp: 121892

Ion Ratio Lower Upper

51 100

67 13.9 14.2 21.2#



#4

Chloromethane

Concen: 0.459 ppbv

RT: 3.13 min Scan# 108

Delta R.T. -0.00 min

Lab File: VL037337.D

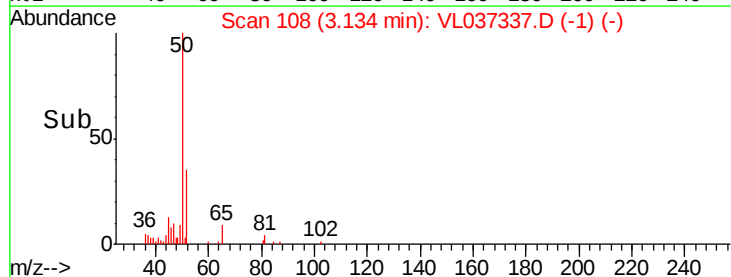
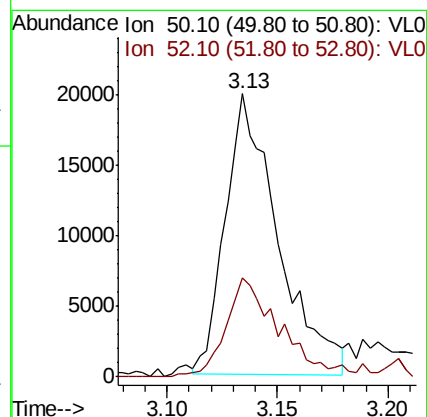
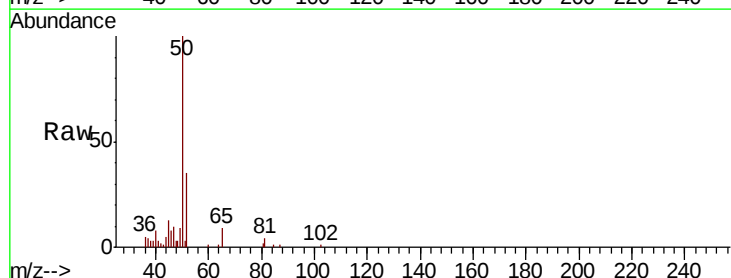
Acq: 5 Aug 2021 10:38

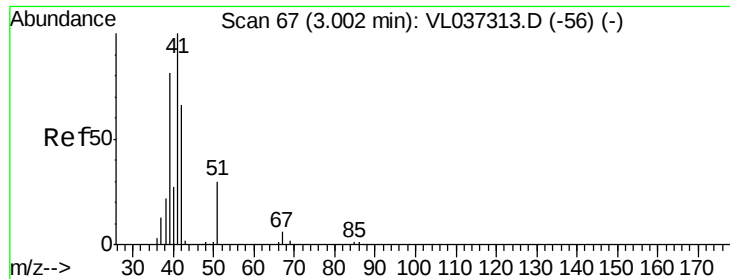
Tgt Ion: 50 Resp: 32937

Ion Ratio Lower Upper

50 100

52 34.7 25.1 37.7





#9

Propene

Concen: 1.551 ppbv

RT: 3.20 min Scan# 128

Delta R.T. 0.20 min

Lab File: VL037337.D

Acq: 5 Aug 2021 10:38

Instrument :

MSVOA_L

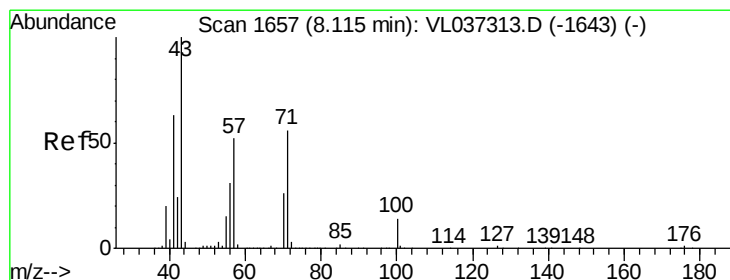
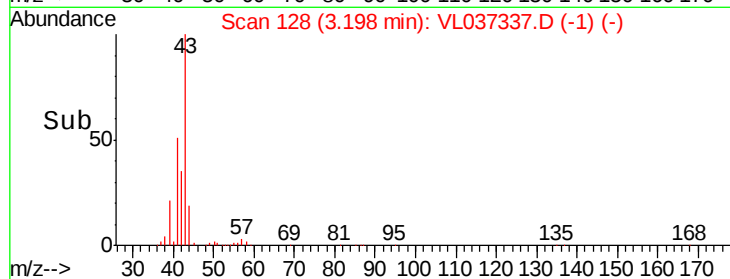
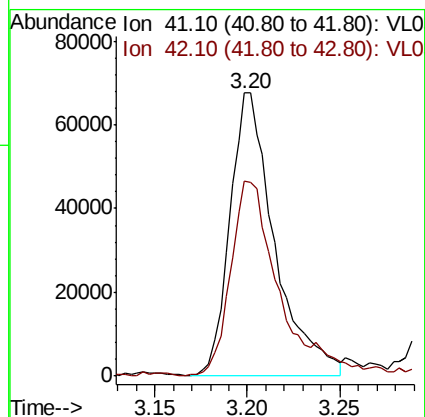
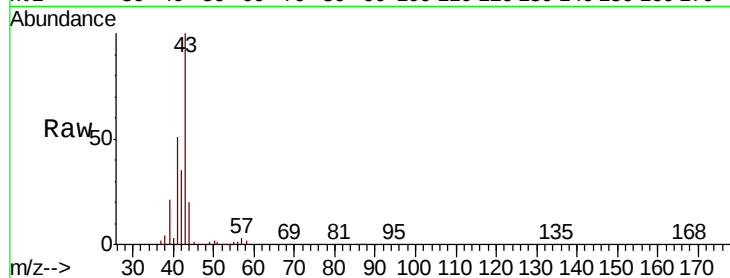
ClientSampleId :

Tot Ion: 41 Resp: 112318

Ion Ratio Lower Upper

41 100

42 80.1 53.8 80.8



#10

Heptane

Concen: 0.041 ppbv

RT: 8.11 min Scan# 1656

Delta R.T. -0.00 min

Lab File: VL037337.D

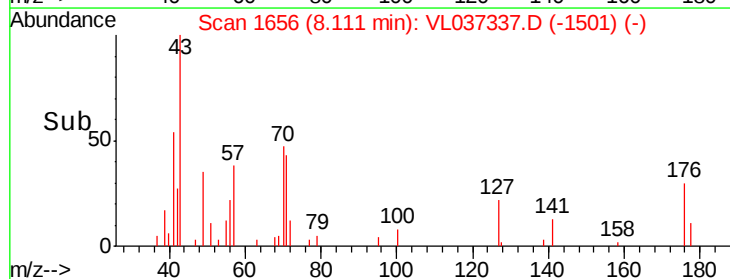
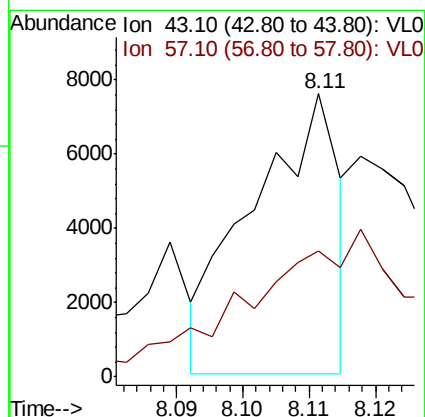
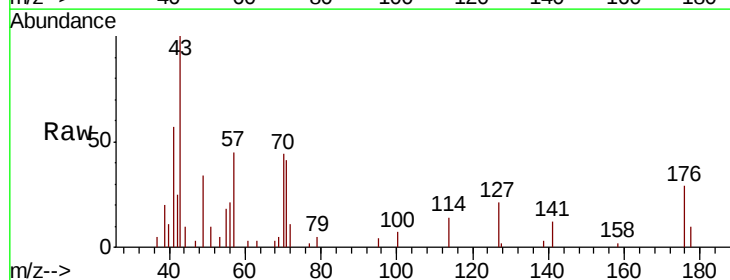
Acq: 5 Aug 2021 10:38

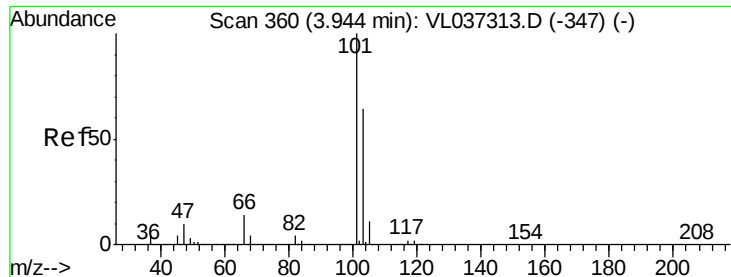
Tgt Ion: 43 Resp: 6886

Ion Ratio Lower Upper

43 100

57 0.0 42.4 63.6#

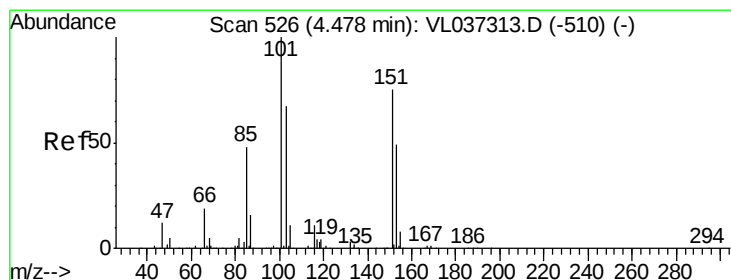
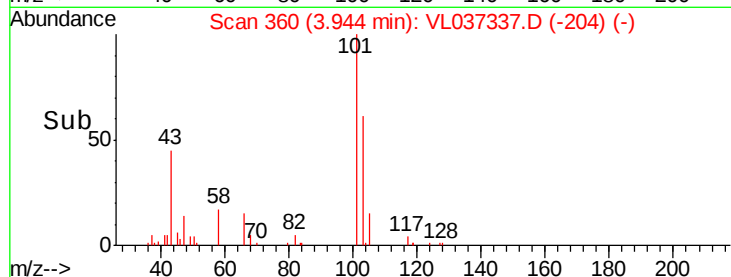
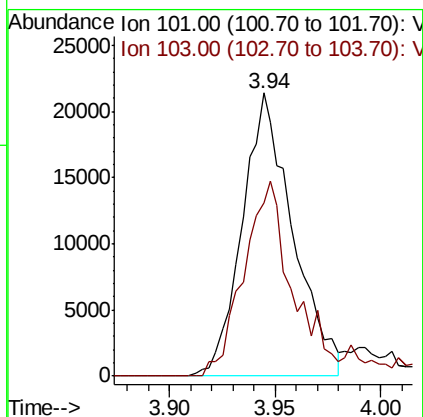
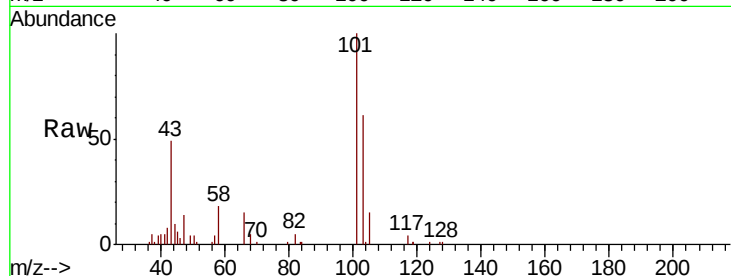




#11
 Trichlorofluoromethane
 Concen: 0.194 ppbv
 RT: 3.94 min Scan# 360
 Delta R.T. 0.00 min
 Lab File: VL037337.D
 Acq: 5 Aug 2021 10:38

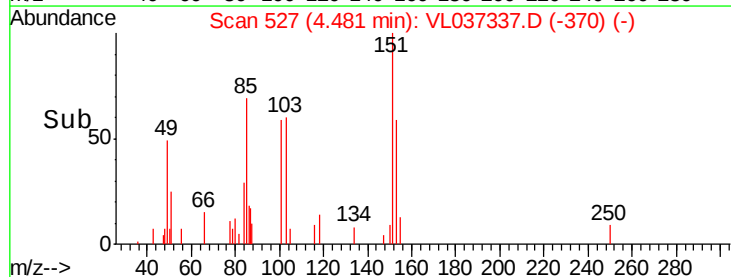
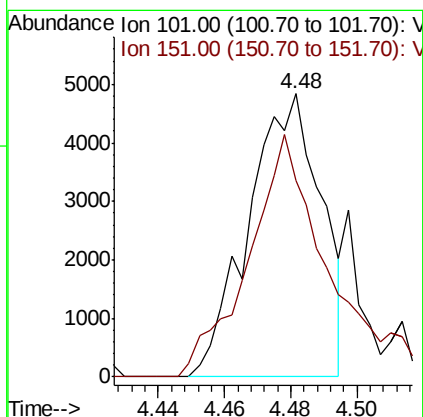
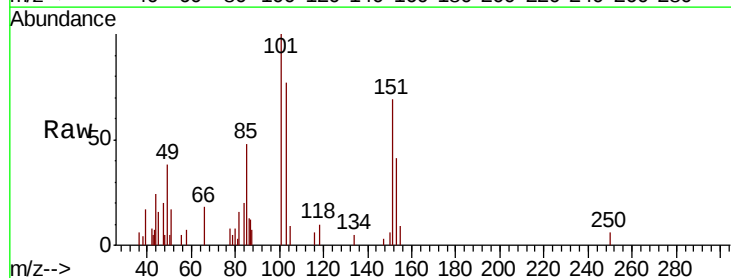
Instrument :
 MSVOA_L
 ClientSampleId :

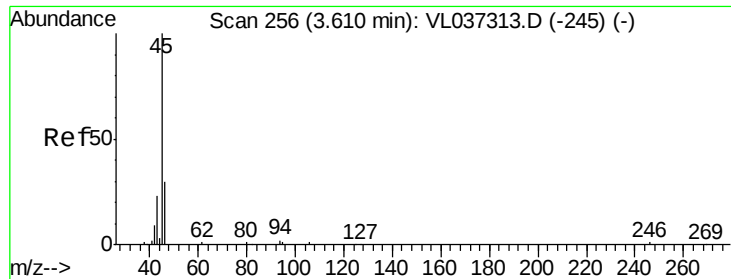
Tot Ion:101 Resp: 35631
 Ion Ratio Lower Upper
 101 100
 103 61.0 51.6 77.4



#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.055 ppbv
 RT: 4.48 min Scan# 527
 Delta R.T. 0.00 min
 Lab File: VL037337.D
 Acq: 5 Aug 2021 10:38

Tgt Ion:101 Resp: 7365
 Ion Ratio Lower Upper
 101 100
 151 98.1 60.6 91.0#





#13

Ethanol

Concen: 23.320 ppbv

RT: 3.61 min Scan# 256

Delta R.T. 0.00 min

Lab File: VL037337.D

Acq: 5 Aug 2021 10:38

Instrument :

MSVOA_L

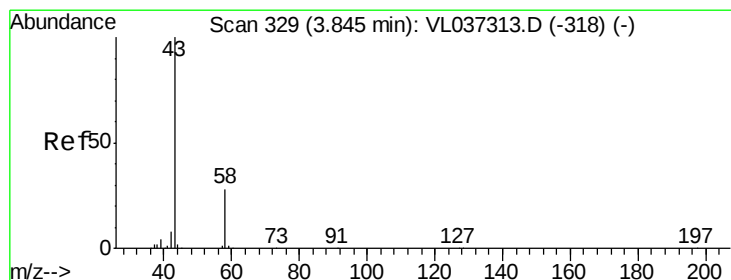
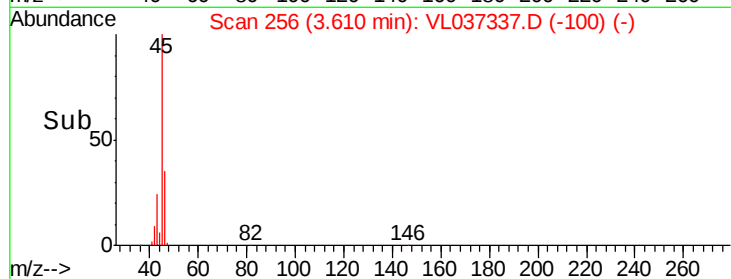
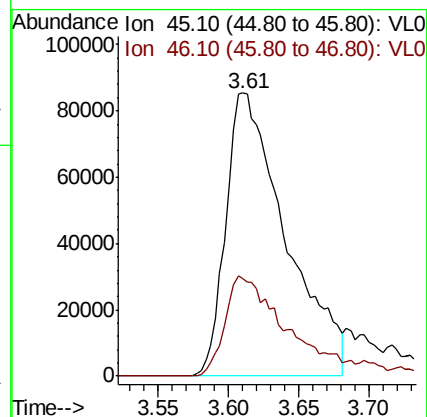
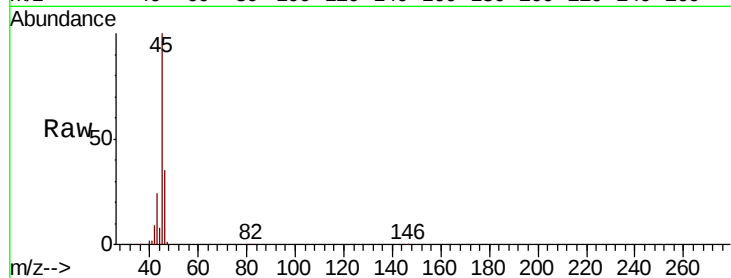
ClientSampleId :

Tot Ion: 45 Resp: 254327

Ion Ratio Lower Upper

45 100

46 39.1 16.6 66.4



#15

Acetone

Concen: 4.362 ppbv

RT: 3.85 min Scan# 331

Delta R.T. 0.01 min

Lab File: VL037337.D

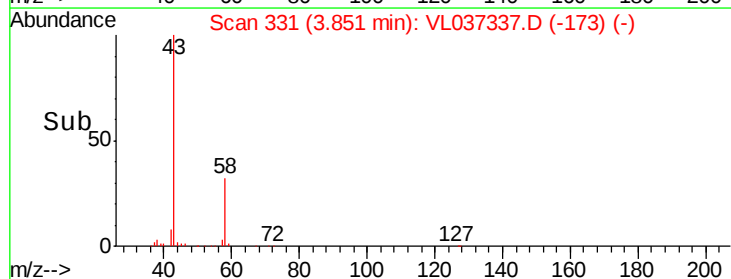
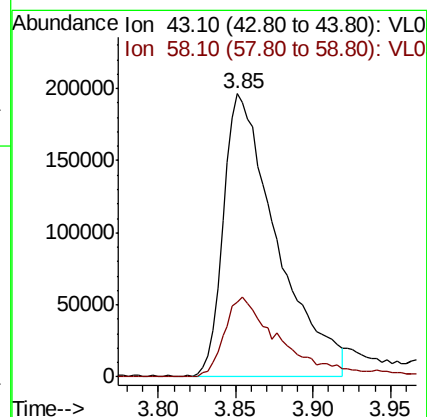
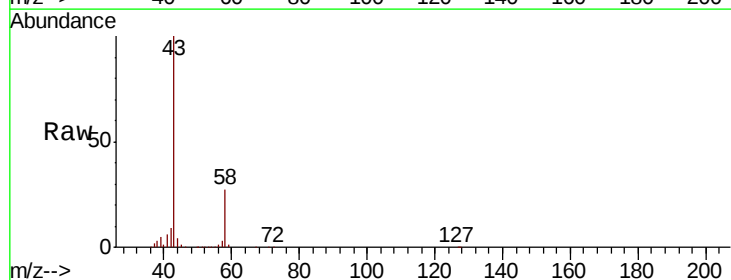
Acq: 5 Aug 2021 10:38

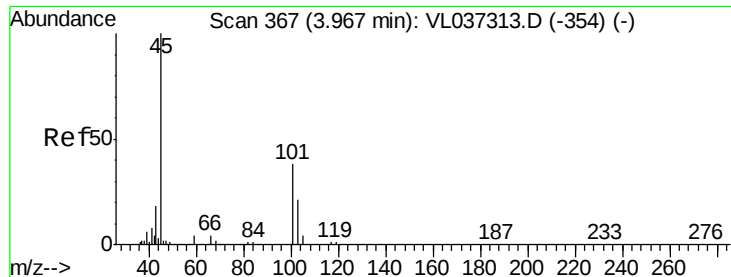
Tgt Ion: 43 Resp: 466629

Ion Ratio Lower Upper

43 100

58 32.1 25.3 37.9

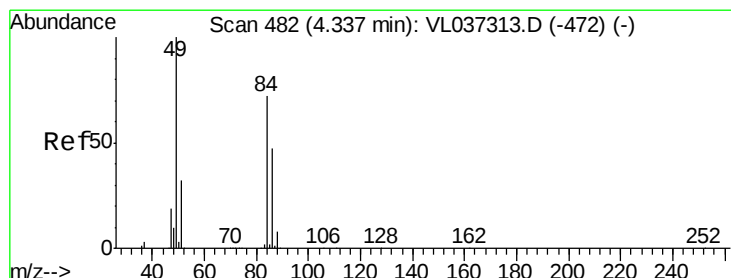
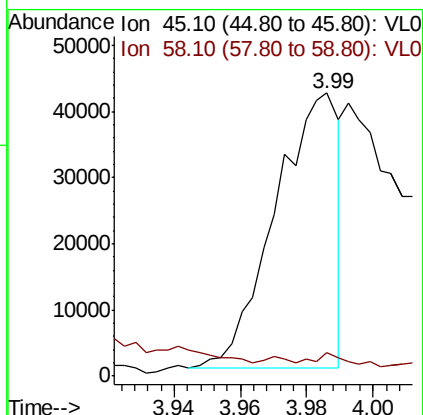
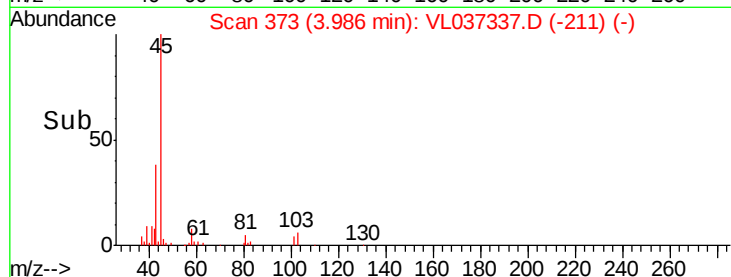
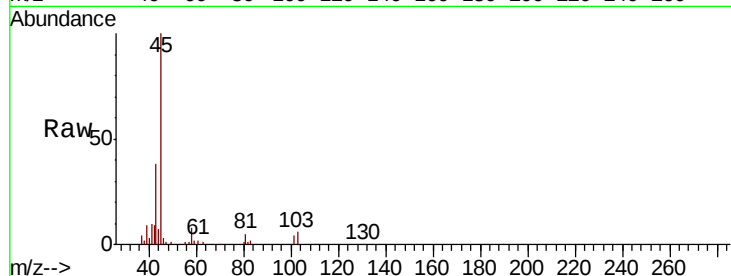




#19
Isopropyl Alcohol
Concen: 0.933 ppbv
RT: 3.99 min Scan# 373
Delta R.T. 0.02 min
Lab File: VL037337.D
Acq: 5 Aug 2021 10:38

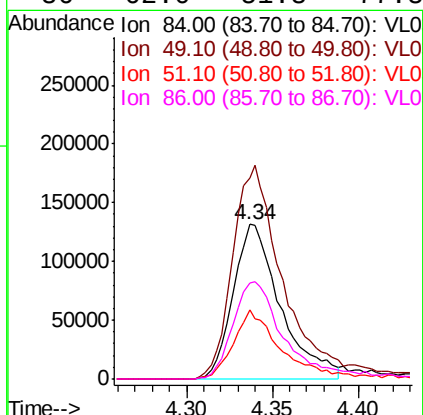
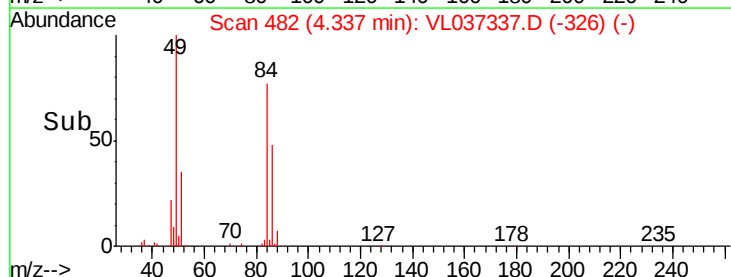
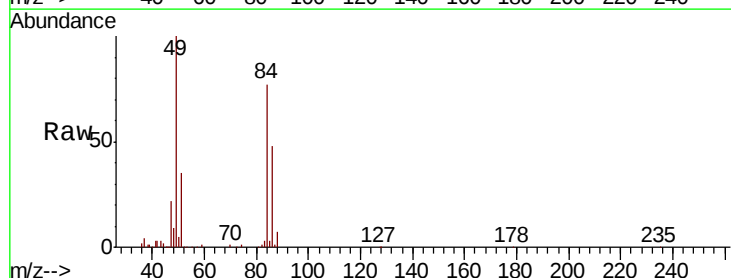
Instrument :
MSVOA_L
ClientSampleId :

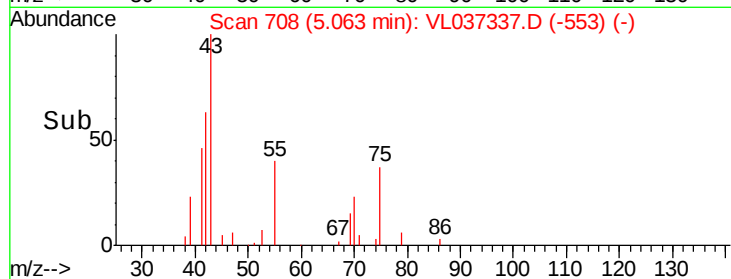
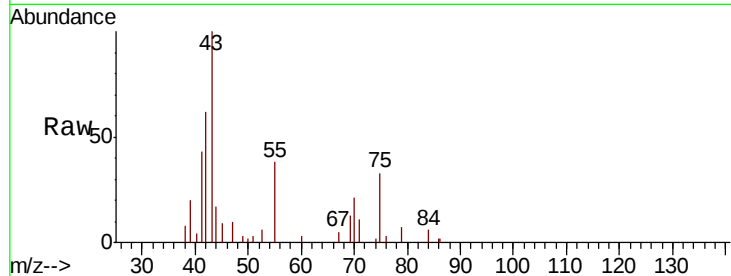
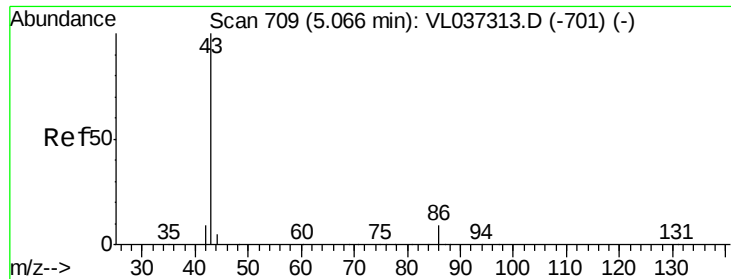
Tot Ion: 45 Resp: 55256
Ion Ratio Lower Upper
45 100
58 16.1 1.8 2.8#



#20
Methylene Chloride
Concen: 2.834 ppbv
RT: 4.34 min Scan# 482
Delta R.T. 0.00 min
Lab File: VL037337.D
Acq: 5 Aug 2021 10:38

Tgt Ion: 84 Resp: 251002
Ion Ratio Lower Upper
84 100
49 129.9 110.4 165.6
51 44.9 35.8 53.6
86 62.0 51.8 77.8

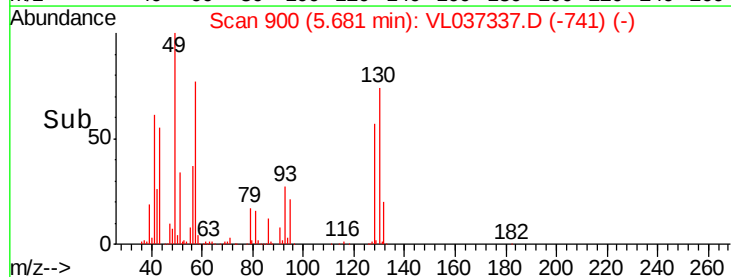
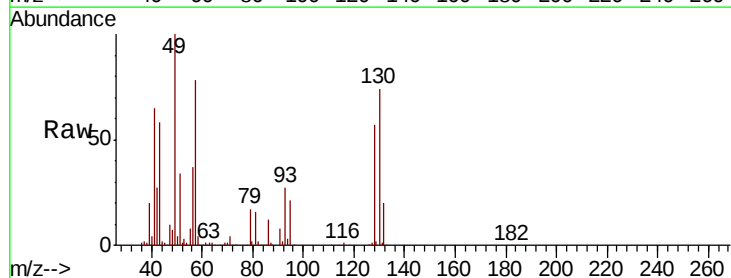
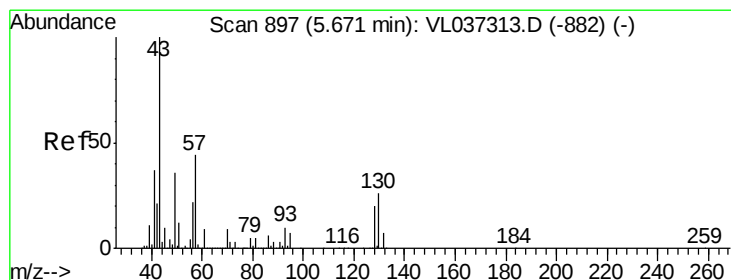
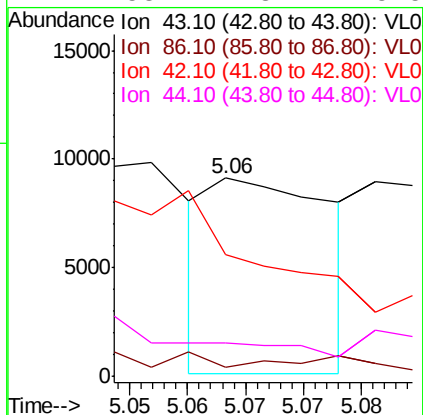




#23
 Vinyl Acetate
 Concen: 0.040 ppbv
 RT: 5.06 min Scan# 708
 Delta R.T. -0.00 min
 Lab File: VL037337.D
 Acq: 5 Aug 2021 10:38

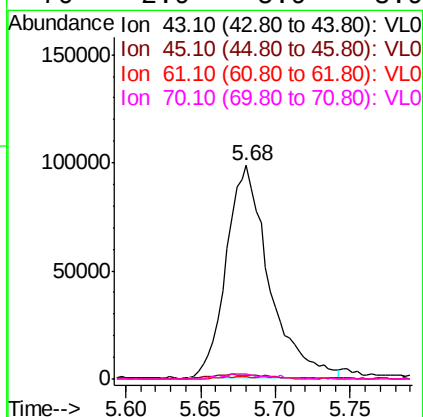
Instrument :
 MSVOA_L
 ClientSampled :

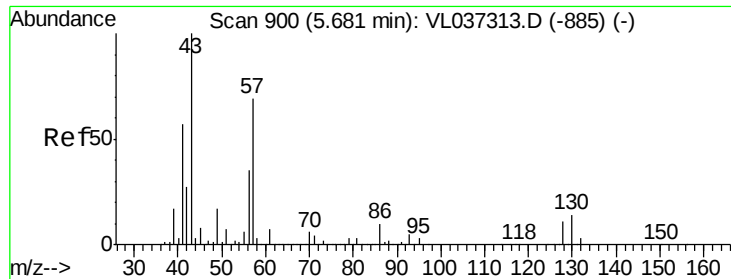
Tot Ion:	43	Resp:	6493
Ion	Ratio	Lower	Upper
43	100		
86	0.0	6.2	9.2#
42	95.5	7.7	11.5#
44	58.2	3.7	5.5#



#25
 Ethyl Acetate
 Concen: 0.697 ppbv
 RT: 5.68 min Scan# 900
 Delta R.T. 0.01 min
 Lab File: VL037337.D
 Acq: 5 Aug 2021 10:38

Tgt Ion:	43	Resp:	193920
Ion	Ratio	Lower	Upper
43	100		
45	3.2	7.8	11.8#
61	1.5	8.6	12.8#
70	2.9	5.9	8.9#

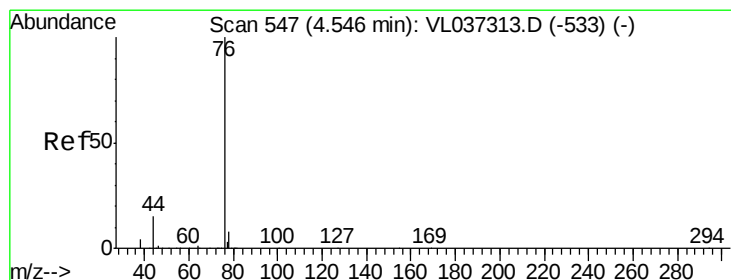
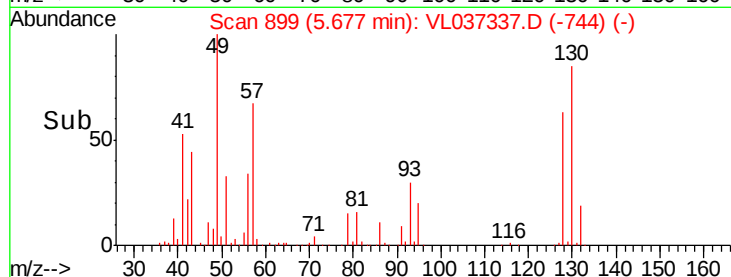
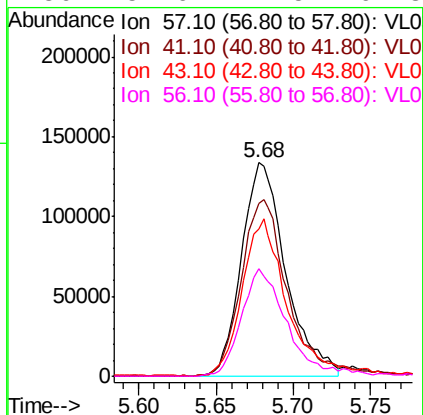
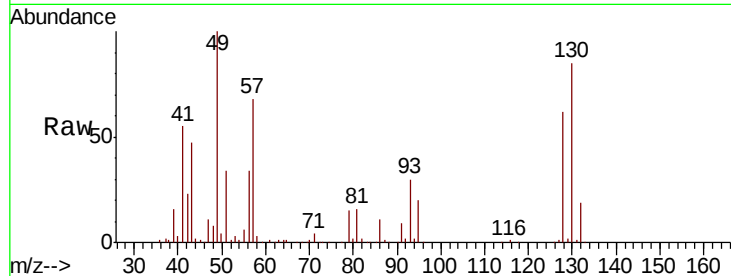




#26
Hexane
Concen: 1.719 ppbv
RT: 5.68 min Scan# 899
Delta R.T. -0.00 min
Lab File: VL037337.D
Acq: 5 Aug 2021 10:38

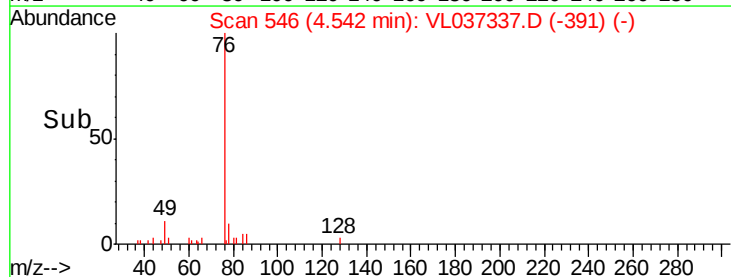
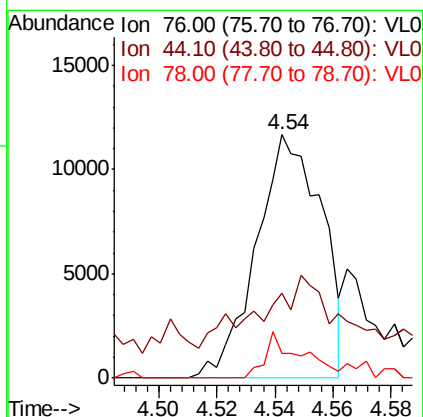
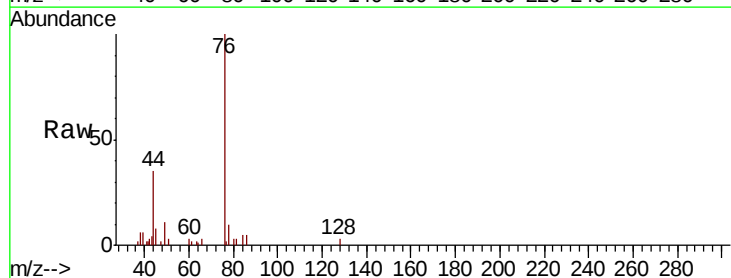
Instrument :
MSVOA_L
ClientSampled :

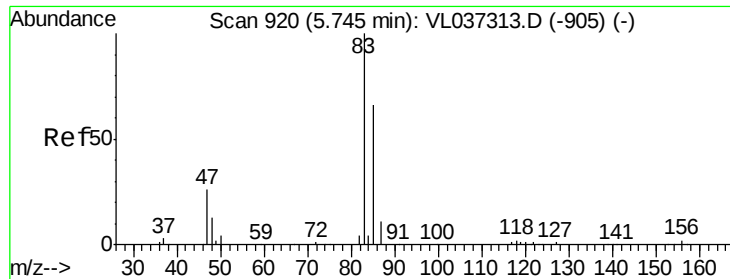
Tot Ion:	57	Resp:	267564
Ion	Ratio	Lower	Upper
57	100		
41	87.9	67.5	101.3
43	75.7	163.0	244.4#
56	52.6	41.5	62.3



#27
Carbon Disulfide
Concen: 0.144 ppbv
RT: 4.54 min Scan# 546
Delta R.T. -0.00 min
Lab File: VL037337.D
Acq: 5 Aug 2021 10:38

Tgt Ion:	76	Resp:	18194
Ion	Ratio	Lower	Upper
76	100		
44	49.6	13.1	19.7#
78	13.3	8.0	12.0#

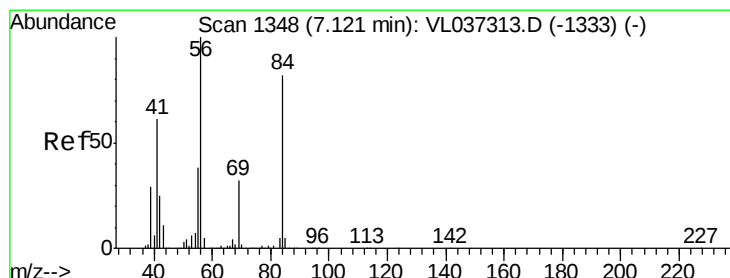
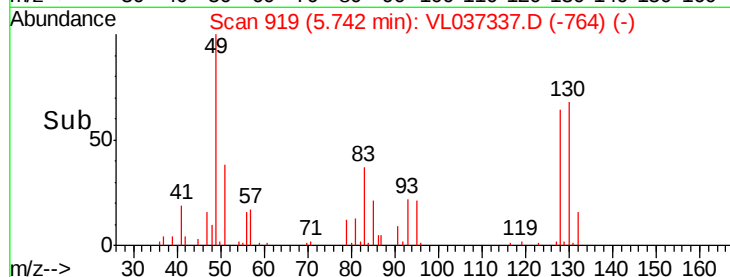
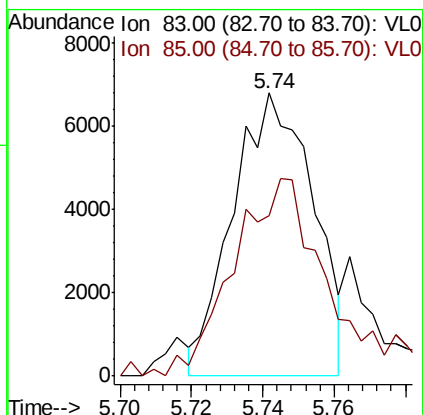
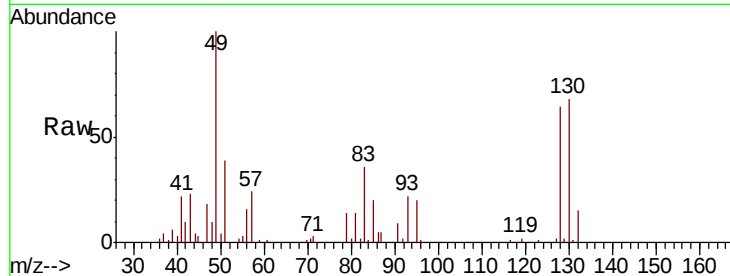




#29
Chloroform
Concen: 0.054 ppbv
RT: 5.74 min Scan# 919
Delta R.T. -0.00 min
Lab File: VL037337.D
Acq: 5 Aug 2021 10:38

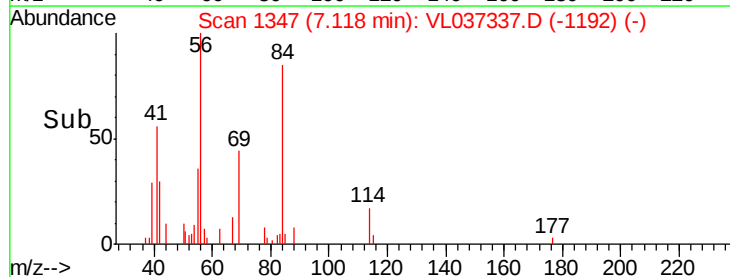
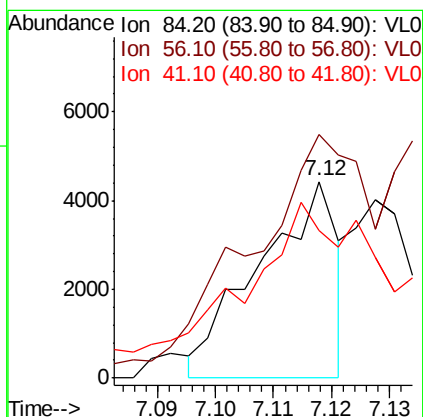
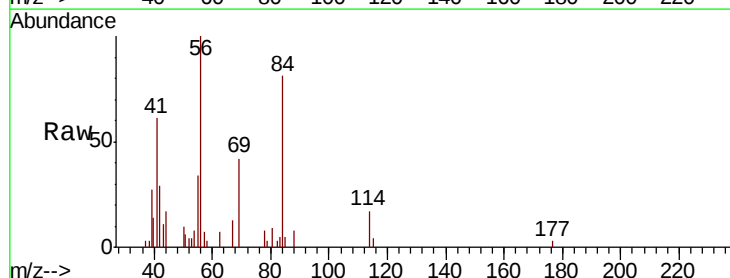
Instrument :
MSVOA_L
ClientSampleId :

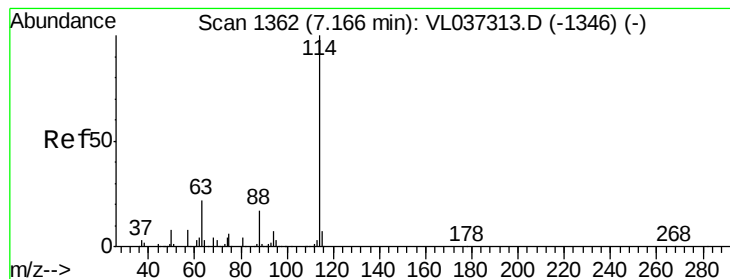
Tot Ion: 83 Resp: 10568
Ion Ratio Lower Upper
83 100
85 58.9 52.6 79.0



#30
Cyclohexane
Concen: 0.035 ppbv
RT: 7.12 min Scan# 1347
Delta R.T. -0.00 min
Lab File: VL037337.D
Acq: 5 Aug 2021 10:38

Tgt Ion: 84 Resp: 4157
Ion Ratio Lower Upper
84 100
56 0.0 105.2 157.8#
41 181.9 61.3 91.9#





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.17 min Scan# 1362

Delta R.T. 0.00 min

Lab File: VL037337.D

Acq: 5 Aug 2021 10:38

Instrument :

MSVOA_L

ClientSampleId :

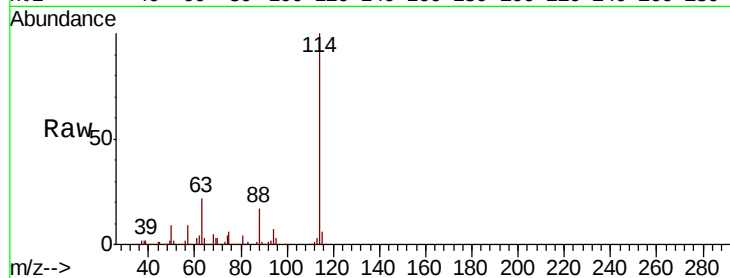
Tot Ion:114 Resp: 3291009

Ion Ratio Lower Upper

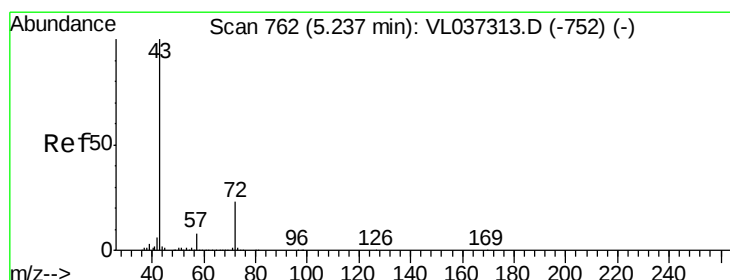
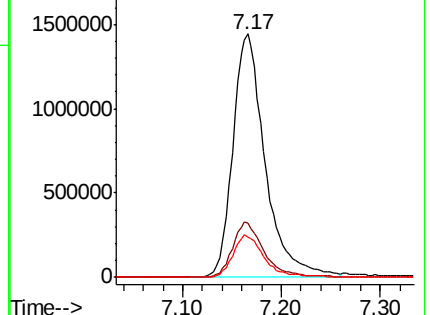
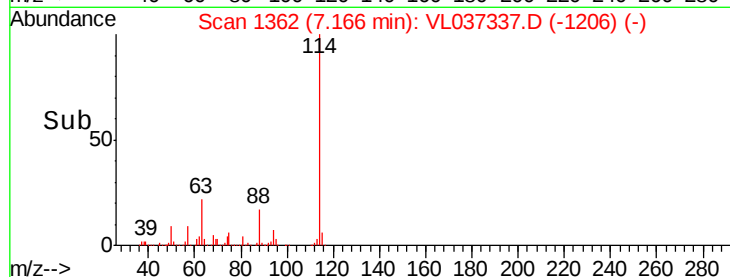
114 100

63 22.6 18.1 27.1

88 17.2 13.8 20.8



Abundance Ion 114.10 (113.80 to 114.80): VL0
Ion 63.10 (62.80 to 63.80): VL0
Ion 88.10 (87.80 to 88.80): VL0



#34

2-Butanone

Concen: 0.325 ppbv

RT: 5.25 min Scan# 767

Delta R.T. 0.02 min

Lab File: VL037337.D

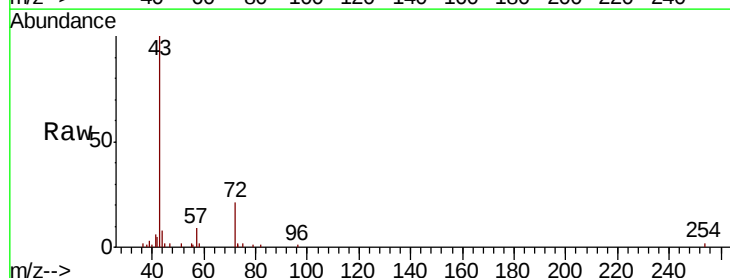
Acq: 5 Aug 2021 10:38

Tgt Ion: 43 Resp: 37081

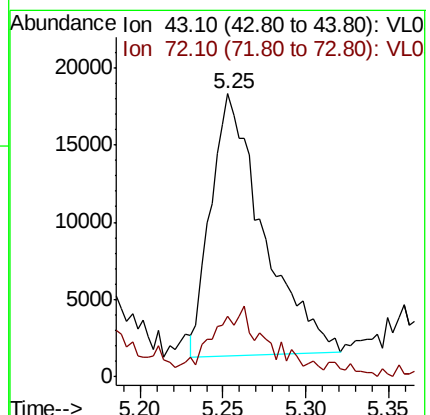
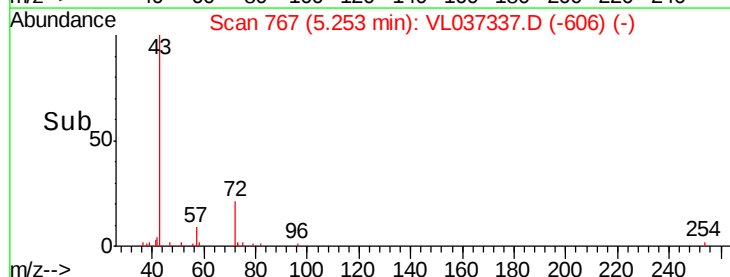
Ion Ratio Lower Upper

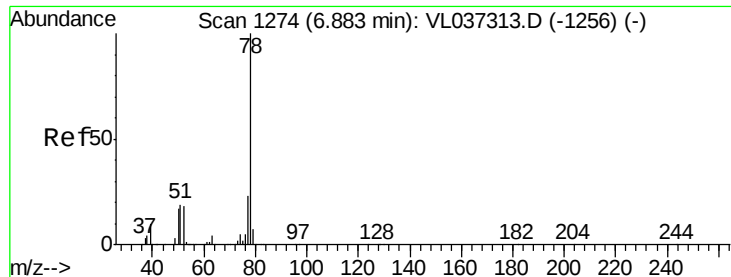
43 100

72 31.6 20.3 30.5#



Abundance Ion 43.10 (42.80 to 43.80): VL0
Ion 72.10 (71.80 to 72.80): VL0

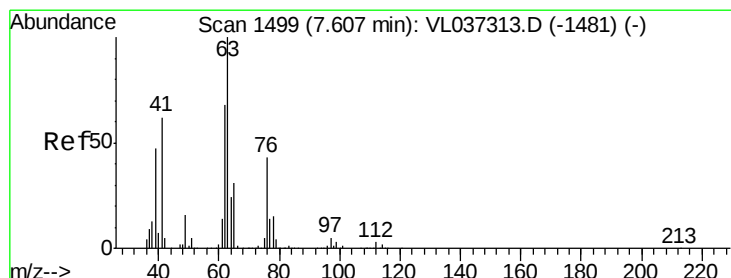
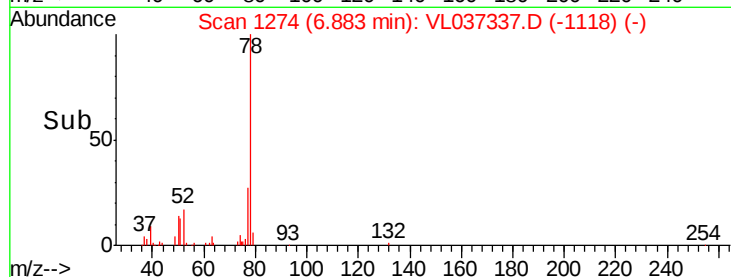
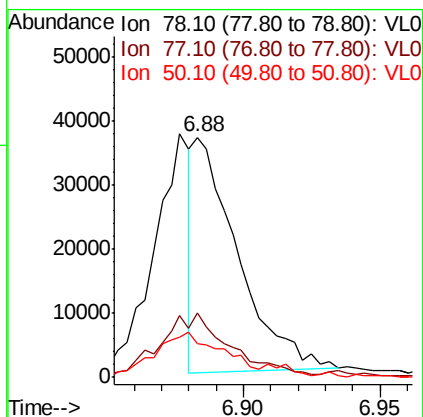
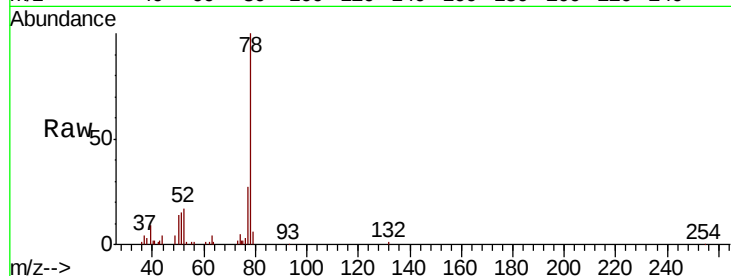




#36
Benzene
Concen: 0.138 ppbv
RT: 6.88 min Scan# 1274
Delta R.T. 0.00 min
Lab File: VL037337.D
Acq: 5 Aug 2021 10:38

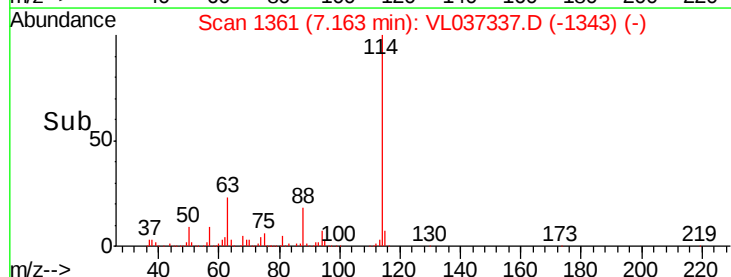
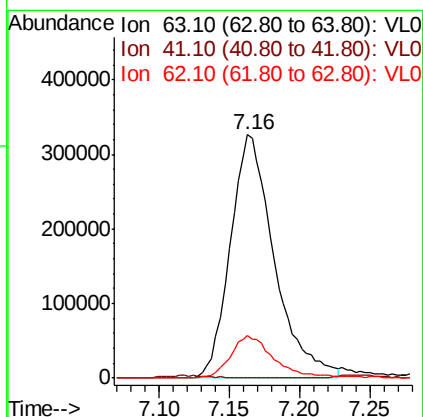
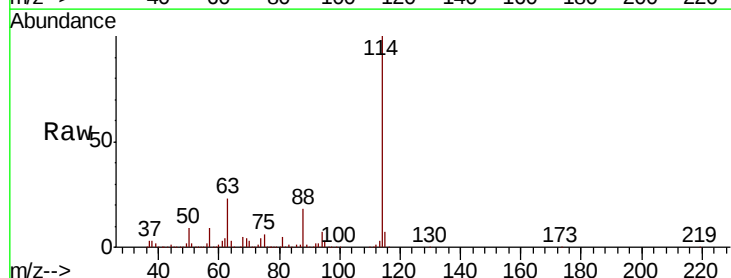
Instrument :
MSVOA_L
ClientSampleId :

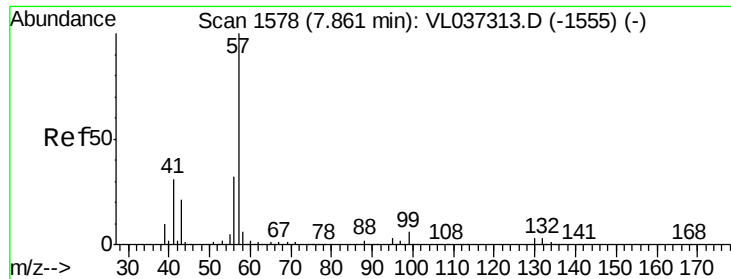
Tot Ion: 78 Resp: 40785
Ion Ratio Lower Upper
78 100
77 24.6 18.7 28.1
50 13.9 13.7 20.5



#39
1,2-Dichloropropane
Concen: 6.452 ppbv
RT: 7.16 min Scan# 1361
Delta R.T. -0.44 min
Lab File: VL037337.D
Acq: 5 Aug 2021 10:38

Tgt Ion: 63 Resp: 711593
Ion Ratio Lower Upper
63 100
41 0.0 49.2 73.8#
62 17.6 54.2 81.4#

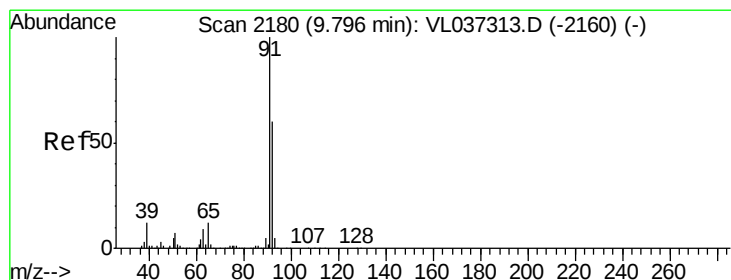
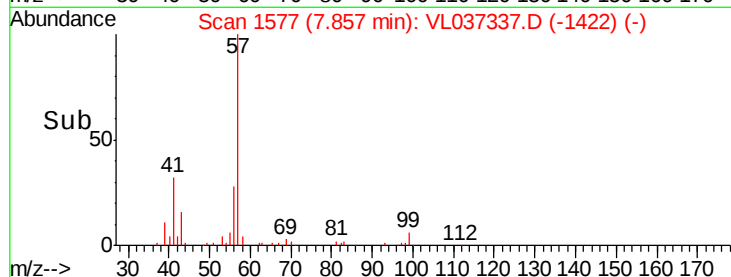
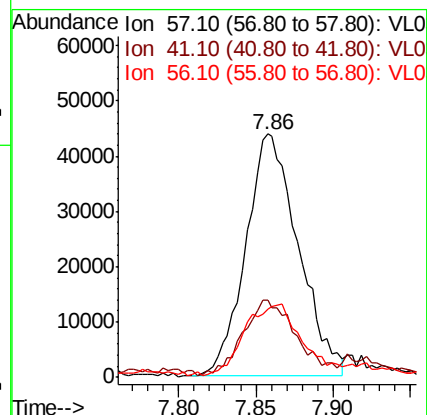
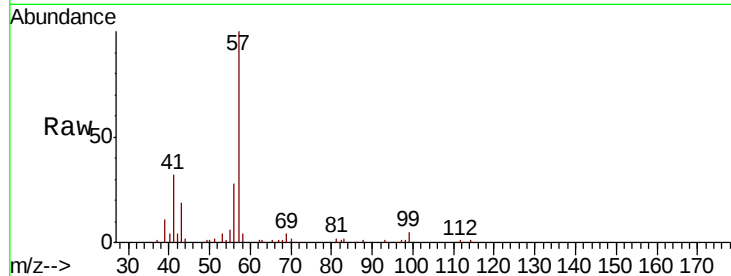




#44
 2,2,4-Trimethylpentane
 Concen: 0.211 ppbv
 RT: 7.86 min Scan# 1577
 Delta R.T. -0.00 min
 Lab File: VL037337.D
 Acq: 5 Aug 2021 10:38

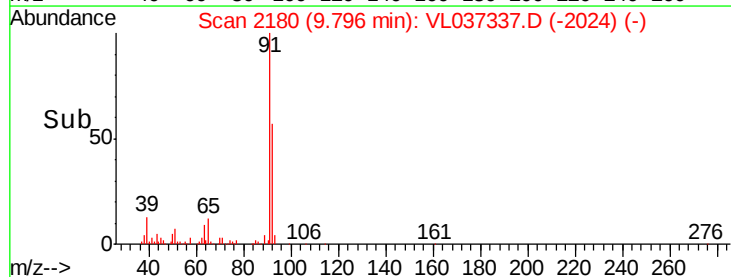
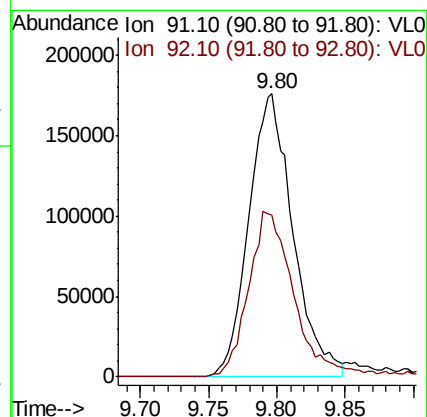
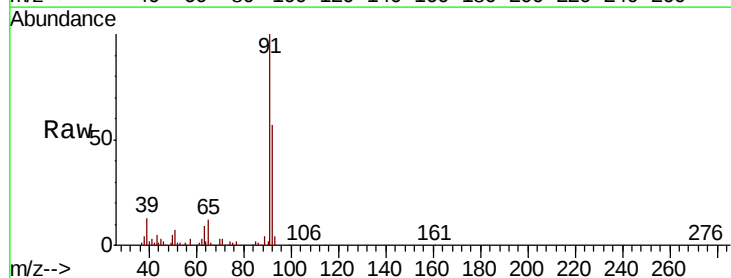
Instrument :
 MSVOA_L
 ClientSampled :

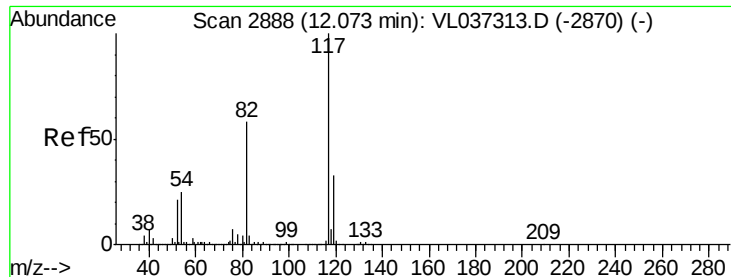
Tot Ion	57	Resp	103535
Ion Ratio	Lower	Upper	
57	100		
41	33.0	24.3	36.5
56	38.4	25.0	37.6#



#53
 Toluene
 Concen: 1.132 ppbv
 RT: 9.80 min Scan# 2180
 Delta R.T. 0.00 min
 Lab File: VL037337.D
 Acq: 5 Aug 2021 10:38

Tgt Ion	91	Resp	395718
Ion Ratio	Lower	Upper	
91	100		
92	62.0	48.8	73.2

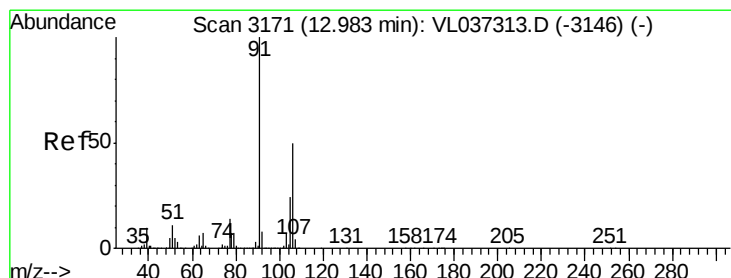
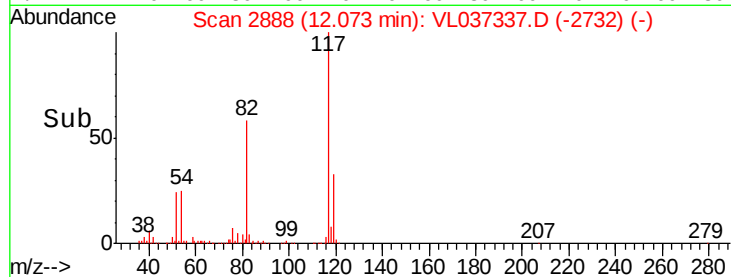
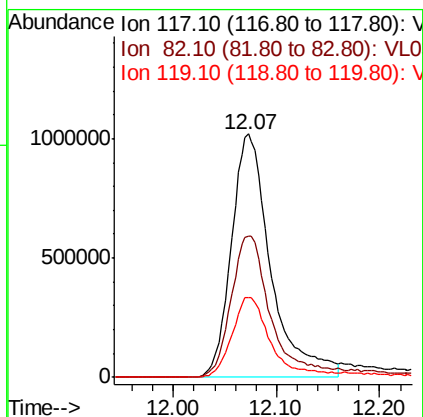
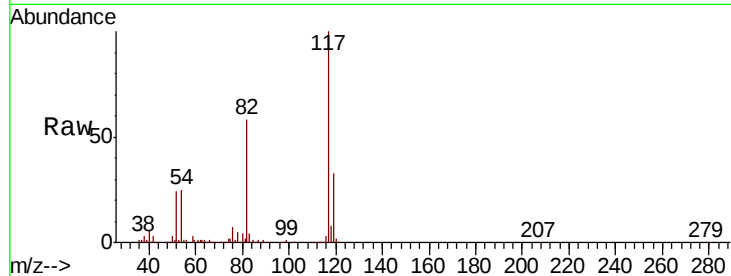




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.07 min Scan# 2888
Delta R.T. 0.00 min
Lab File: VL037337.D
Acq: 5 Aug 2021 10:38

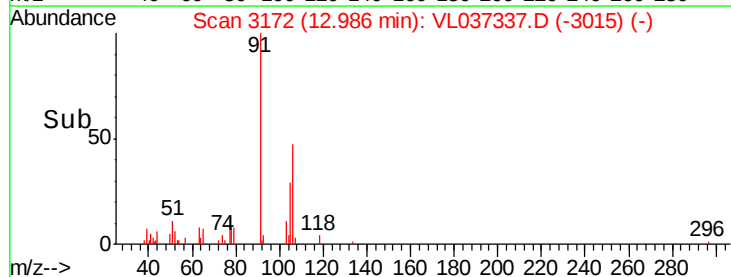
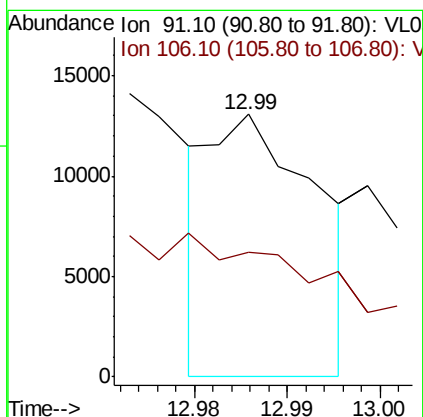
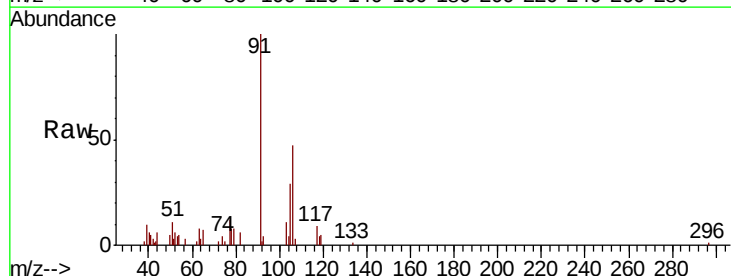
Instrument :
MSVOA_L
ClientSampleId :

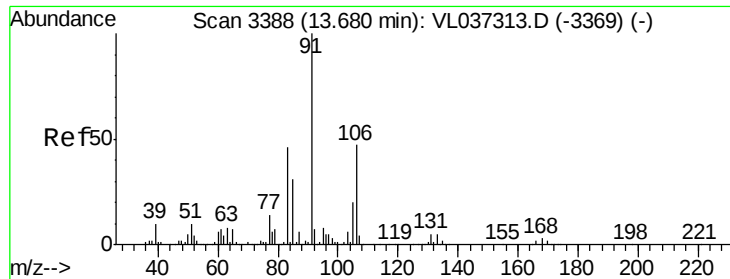
Tot Ion:117 Resp: 2718446
Ion Ratio Lower Upper
117 100
82 64.1 50.3 75.5
119 36.5 48.2 72.2#



#59
m/p-Xylene
Concen: 0.031 ppbv
RT: 12.99 min Scan# 3172
Delta R.T. 0.00 min
Lab File: VL037337.D
Acq: 5 Aug 2021 10:38

Tgt Ion: 91 Resp: 10345
Ion Ratio Lower Upper
91 100
106 0.0 37.8 56.8#

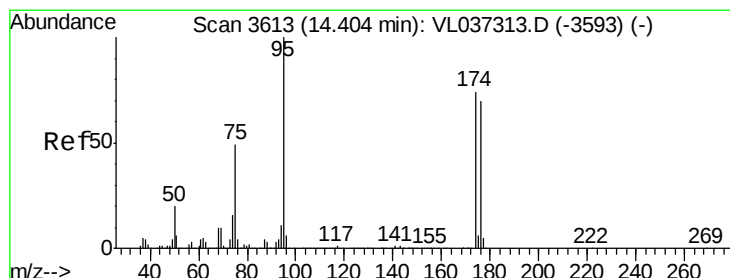
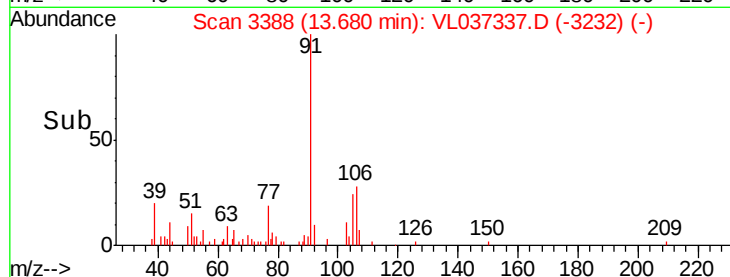
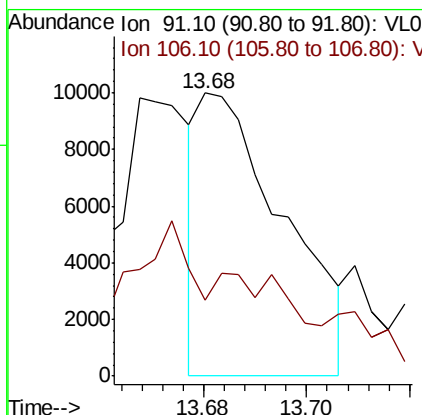
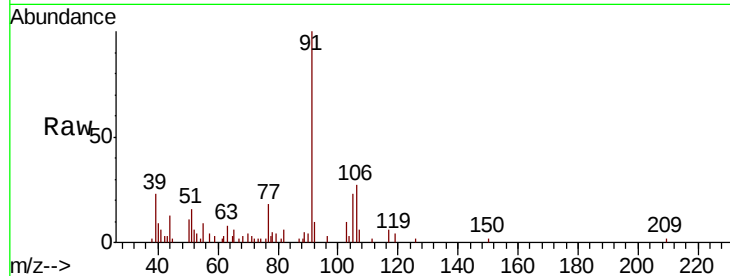




#60
o-Xylene
Concen: 0.037 ppbv
RT: 13.68 min Scan# 3388
Delta R.T. 0.00 min
Lab File: VL037337.D
Acq: 5 Aug 2021 10:38

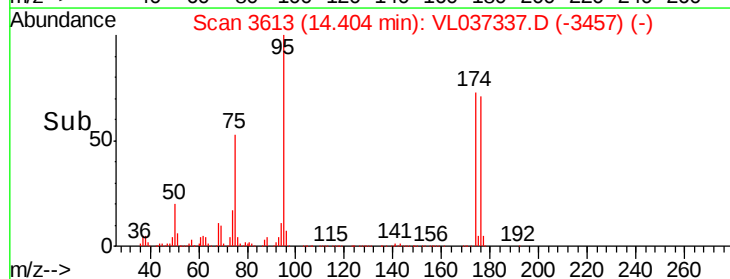
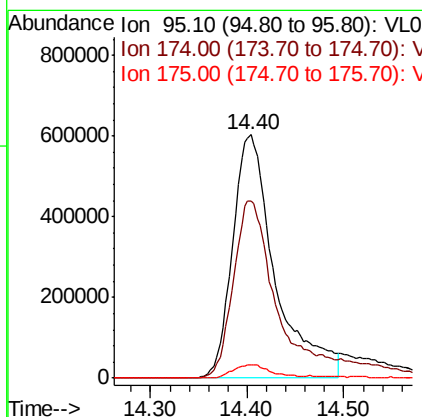
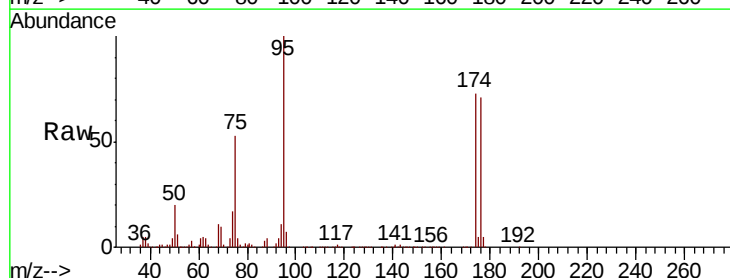
Instrument :
MSVOA_L
ClientSampled :

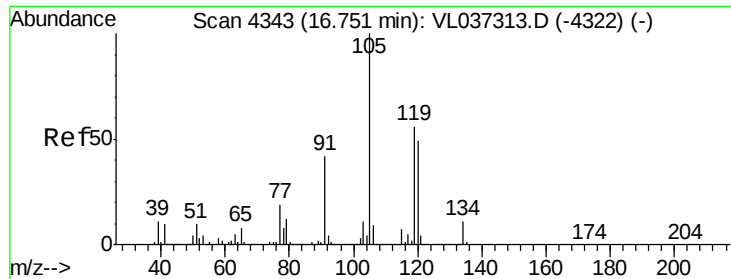
Tot Ion: 91 Resp: 11408
Ion Ratio Lower Upper
91 100
106 0.0 26.3 78.8#



#68
1-Bromo-4-Fluorobenzene
Concen: 9.962 ppbv
RT: 14.40 min Scan# 3613
Delta R.T. 0.00 min
Lab File: VL037337.D
Acq: 5 Aug 2021 10:38

Tgt Ion: 95 Resp: 1849934
Ion Ratio Lower Upper
95 100
174 82.6 66.9 100.3
175 6.1 5.1 7.7





#74
 1,2,4-Trimethylbenzene
 Concen: 0.032 ppbv
 RT: 16.76 min Scan# 4346
 Delta R.T. 0.01 min
 Lab File: VL037337.D
 Acq: 5 Aug 2021 10:38

Instrument :
 MSVOA_L
 ClientSampleId :

Tot Ion:	105	Resp:	11271
Ion	Ratio	Lower	Upper
105	100		
120	40.4	39.6	59.4
91	25.7	34.5	51.7#
77	10.9	15.3	22.9#

