

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_L\DATA\VL010220\
 Data File : VL034551.D
 Acq On : 2 Jan 2020 18:00
 Operator : SY/AP
 Sample : K6473-03
 Misc : 400ml/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 50-1

Quant Time: Jan 03 01:11:20 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL123019AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Dec 30 14:58:50 2019
 QLast Update : Mon Dec 30 14:58:50 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.67	49	914276	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.19	114	1833806	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.12	117	1762748	10.00	ppbv	0.00

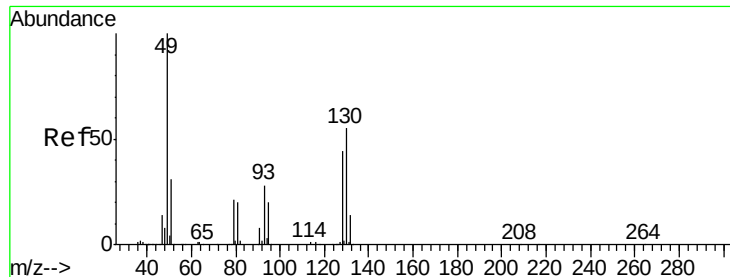
System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.46	95	1495224	10.17	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	101.70%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	3.01	85	41341	0.287	ppbv	95
3) Chlorodifluoromethane	2.96	51	41159	0.378	ppbv #	88
4) Chloromethane	3.11	50	31157	0.482	ppbv	92
9) Propene	3.17	41	38480	0.916	ppbv	85
10) Heptane	8.14	43	2459	0.023	ppbv #	26
11) Trichlorofluoromethane	3.93	101	43784	0.262	ppbv	87
12) 1,1,2-Trichlorotrifluoroet	4.47	101	5312	0.050	ppbv #	42
13) Ethanol	3.58	45	73747	6.329	ppbv #	38
15) Acetone	3.83	43	447745	3.356	ppbv	99
16) 1,3-Butadiene	3.27	39	2857	0.056	ppbv #	39
19) Isopropyl Alcohol	3.96	45	67314	0.779	ppbv #	89
20) Methylene Chloride	4.33	84	33346	0.635	ppbv	95
23) Vinyl Acetate	5.06	43	16417	0.107	ppbv #	89
25) Ethyl Acetate	5.69	43	33513	0.161	ppbv #	86
26) Hexane	5.68	57	40824	0.465	ppbv #	38
30) Cyclohexane	7.14	84	1451	0.022	ppbv #	1
34) 2-Butanone	5.25	43	40371	0.308	ppbv	97
36) Benzene	6.90	78	26964	0.169	ppbv #	88
38) Trichloroethene	7.85	130	3704	0.057	ppbv #	60
39) 1,2-Dichloropropane	7.19	63	533143	8.111	ppbv #	21
53) Toluene	9.84	91	100556	0.573	ppbv	99

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

```
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA_L\DATA\VL010220\  
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Acq On    : 2 Jan 2020 18:00  
Operator  : SY/AP  
Sample    : K6473-03  
Misc      : 400ml/MSVOA_L  
ALS Vial  : 1 Sample Multiplier: 1
```



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.67 min Scan# 896

Delta R.T. -0.01 min

Lab File: VL034551.D

Acq: 2 Jan 2020 18:00

Instrument :

MSVOA_L

ClientSampleId :

50-1

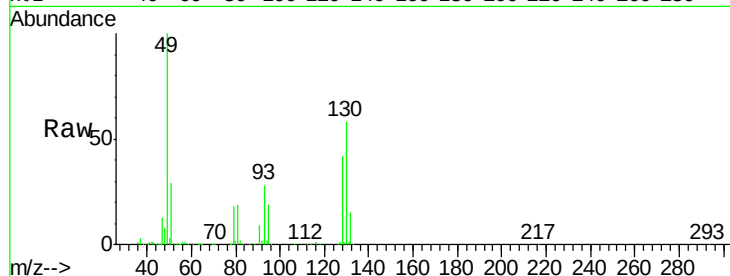
Tgt Ion: 49 Resp: 914276

Ion Ratio Lower Upper

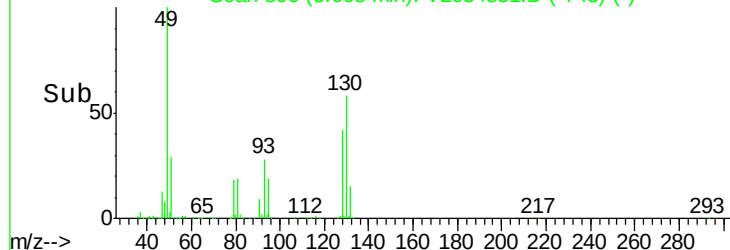
49 100

128 44.8 22.4 67.2

130 56.9 28.3 85.0



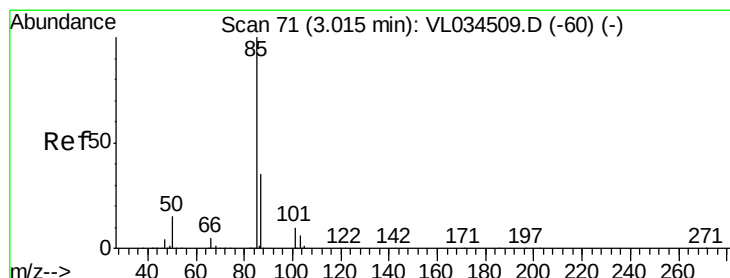
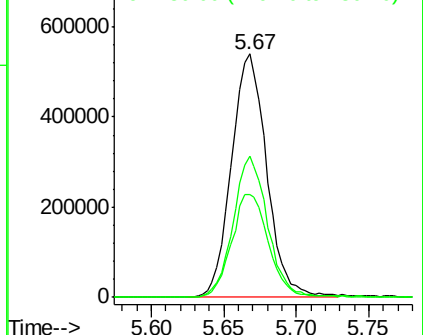
Scan 896 (5.668 min): VL034551.D (-743) (-)



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: 0.287 ppbv

RT: 3.01 min Scan# 71

Delta R.T. -0.00 min

Lab File: VL034551.D

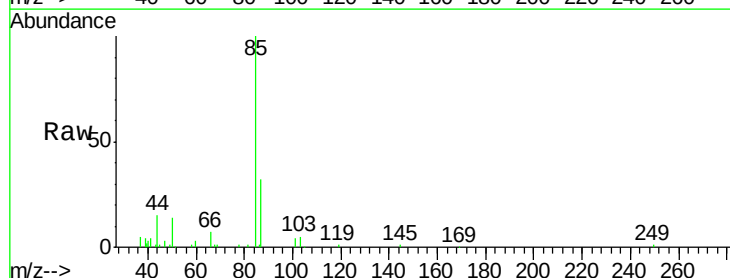
Acq: 2 Jan 2020 18:00

Tgt Ion: 85 Resp: 41341

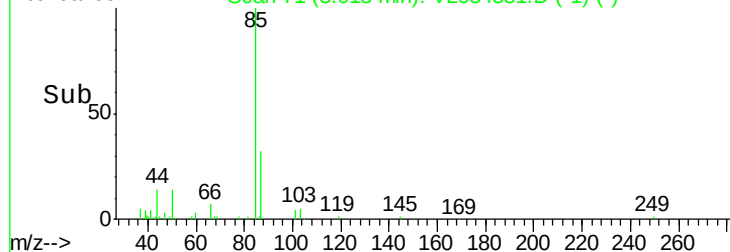
Ion Ratio Lower Upper

85 100

87 32.1 27.9 41.9

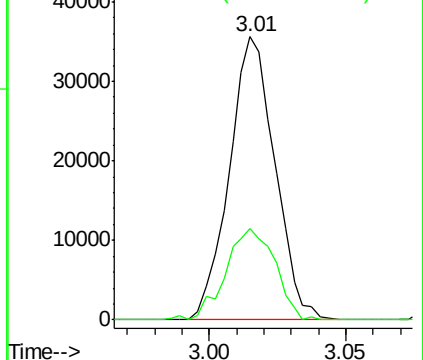


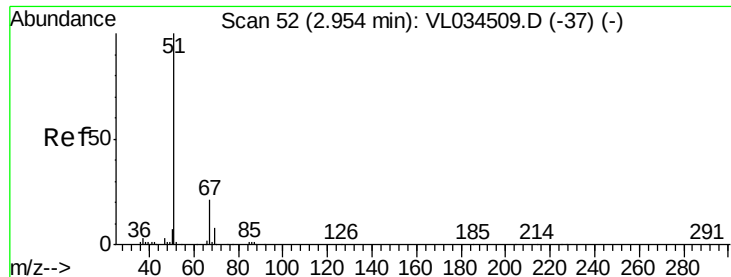
Scan 71 (3.015 min): VL034551.D (-1) (-)



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.378 ppbv

RT: 2.96 min Scan# 53

Delta R.T. 0.00 min

Lab File: VL034551.D

Acq: 2 Jan 2020 18:00

Instrument :

MSVOA_L

ClientSampleId :

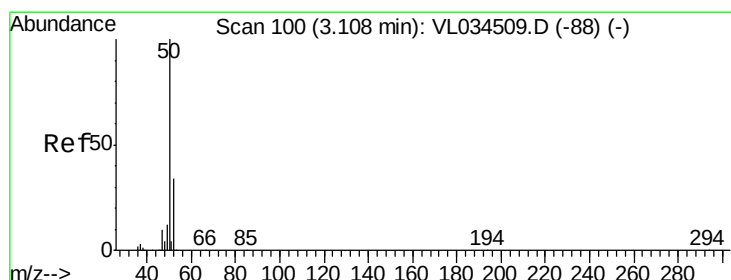
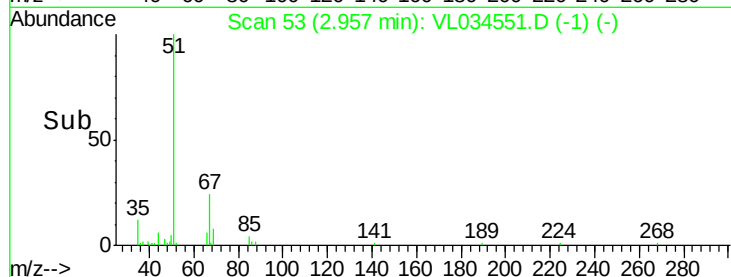
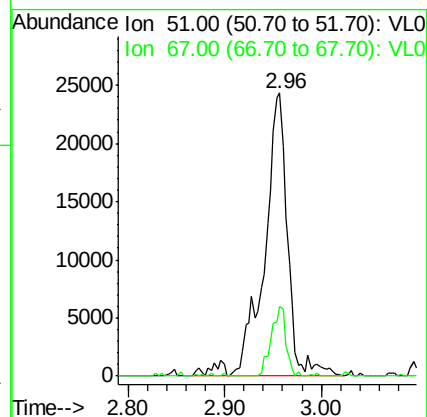
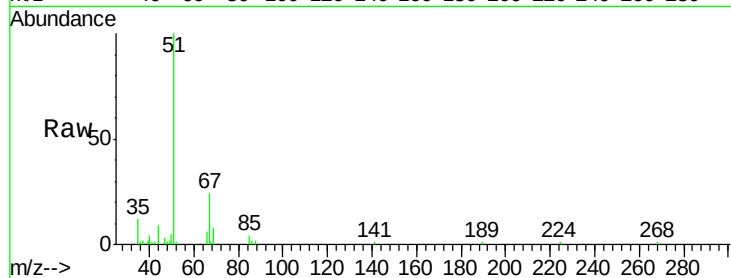
50-1

Tgt Ion: 51 Resp: 41159

Ion Ratio Lower Upper

51 100

67 15.3 16.8 25.2#



#4

Chloromethane

Concen: 0.482 ppbv

RT: 3.11 min Scan# 101

Delta R.T. 0.00 min

Lab File: VL034551.D

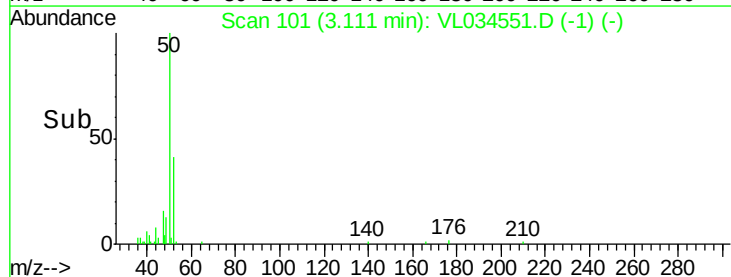
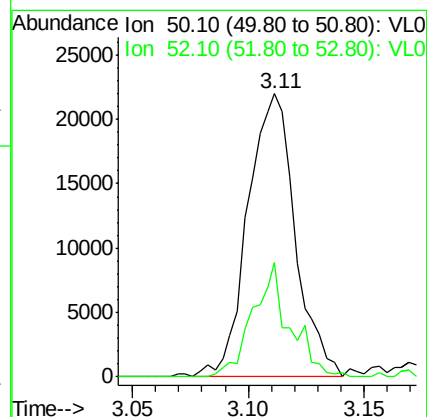
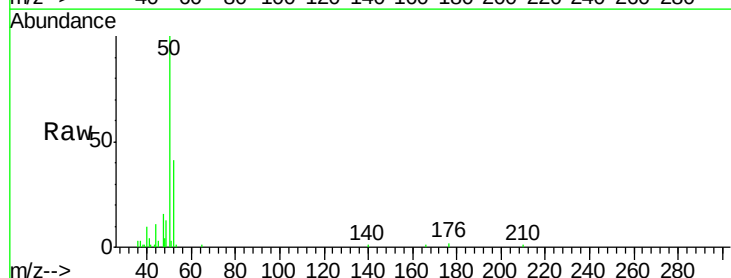
Acq: 2 Jan 2020 18:00

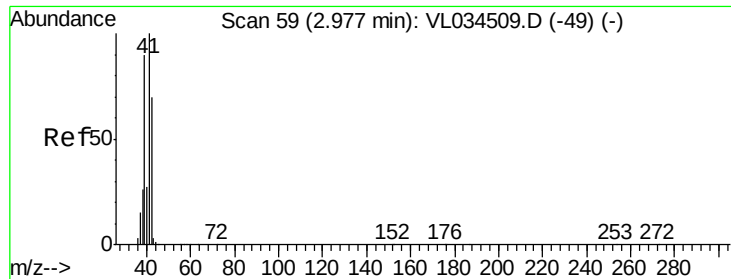
Tgt Ion: 50 Resp: 31157

Ion Ratio Lower Upper

50 100

52 39.4 27.6 41.4





#9

Propene

Concen: 0.916 ppbv

RT: 3.17 min Scan# 120

Delta R.T. 0.20 min

Lab File: VL034551.D

Acq: 2 Jan 2020 18:00

Instrument :

MSVOA_L

ClientSampleId :

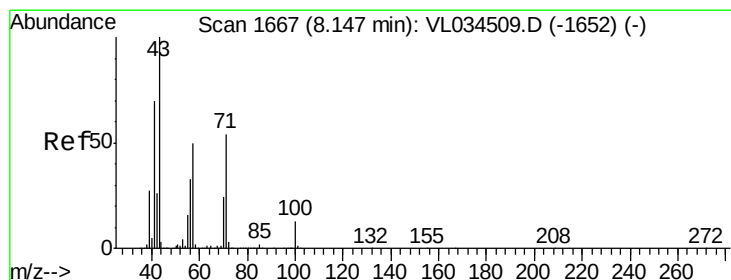
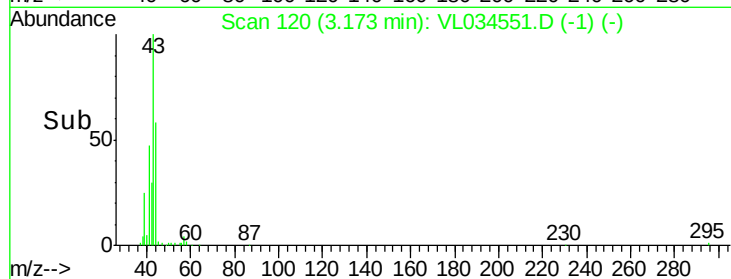
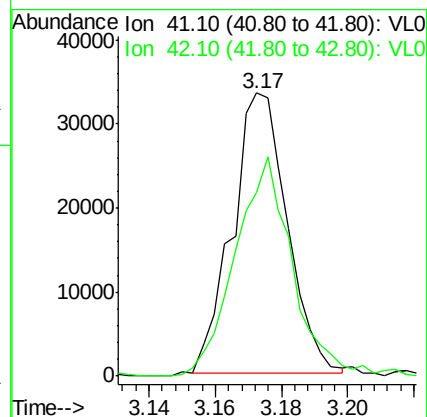
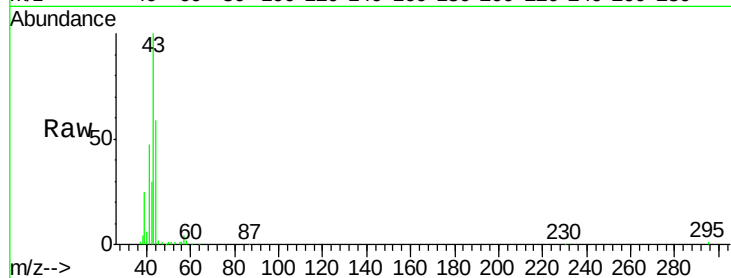
50-1

Tgt Ion: 41 Resp: 38480

Ion Ratio Lower Upper

41 100

42 81.8 55.8 83.6



#10

Heptane

Concen: 0.023 ppbv

RT: 8.14 min Scan# 1664

Delta R.T. -0.01 min

Lab File: VL034551.D

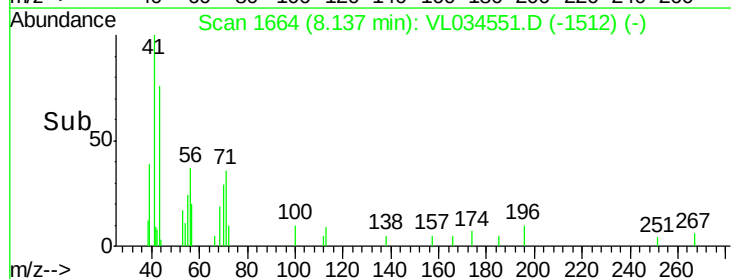
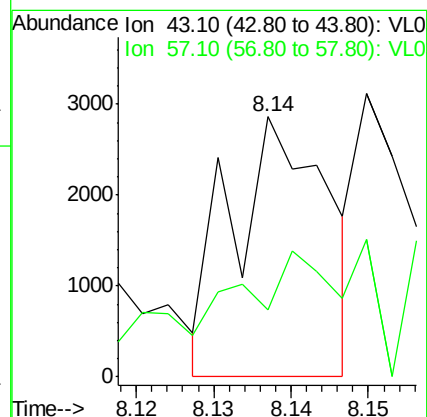
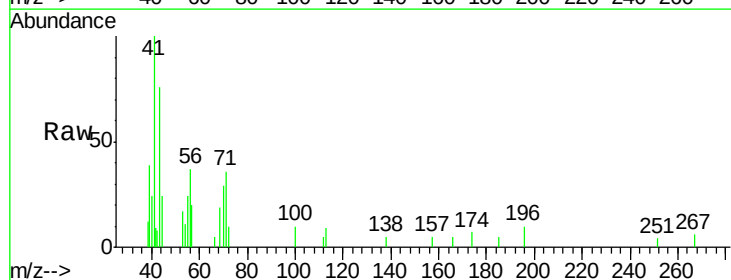
Acq: 2 Jan 2020 18:00

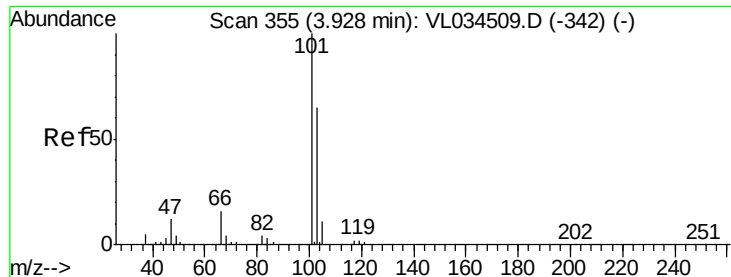
Tgt Ion: 43 Resp: 2459

Ion Ratio Lower Upper

43 100

57 0.0 41.0 61.6#





#11

Trichlorofluoromethane

Concen: 0.262 ppbv

RT: 3.93 min Scan# 355

Delta R.T. -0.00 min

Lab File: VL034551.D

Acq: 2 Jan 2020 18:00

Instrument :

MSVOA_L

ClientSampleId :

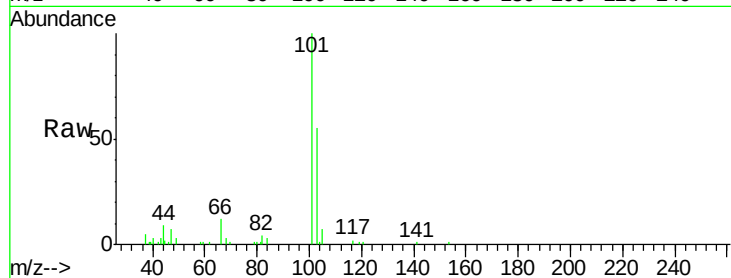
50-1

Tgt Ion:101 Resp: 43784

Ion Ratio Lower Upper

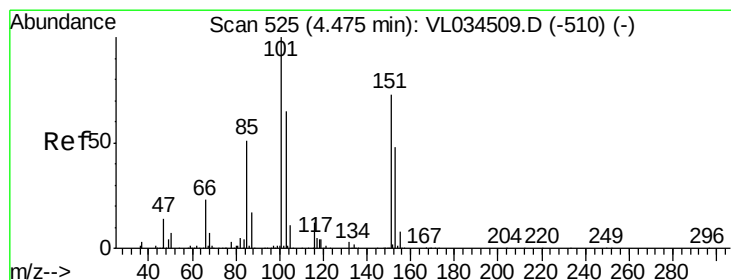
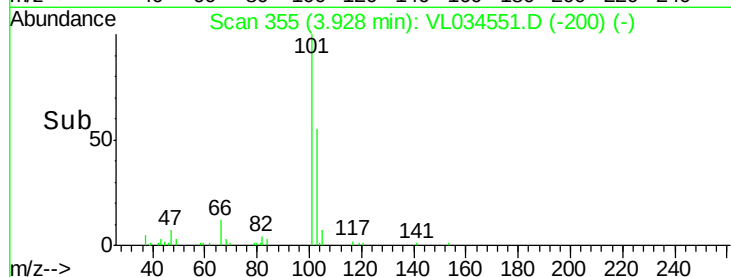
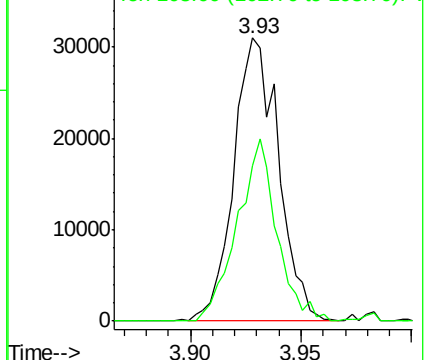
101 100

103 54.7 52.1 78.1



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 103.00 (102.70 to 103.70): V



#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.050 ppbv

RT: 4.47 min Scan# 523

Delta R.T. -0.01 min

Lab File: VL034551.D

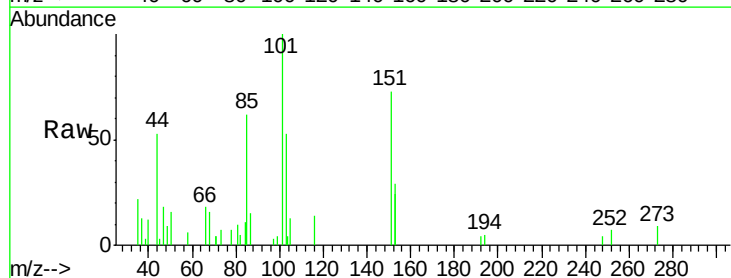
Acq: 2 Jan 2020 18:00

Tgt Ion:101 Resp: 5312

Ion Ratio Lower Upper

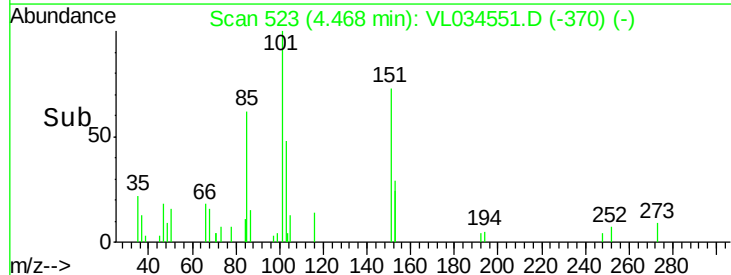
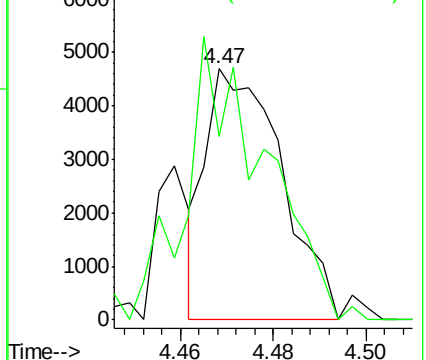
101 100

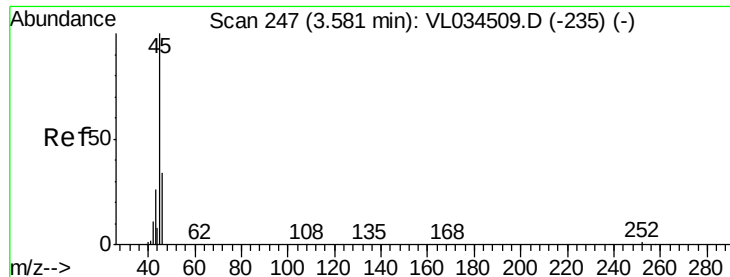
151 120.7 57.8 86.6#



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 151.00 (150.70 to 151.70): V

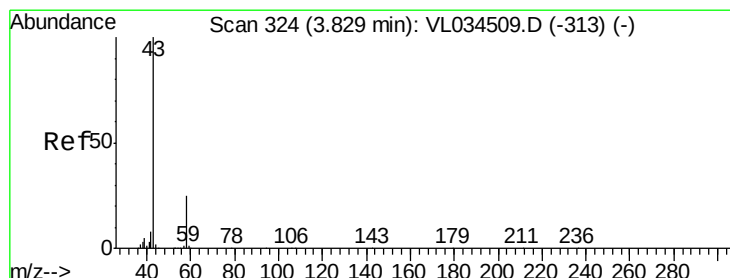
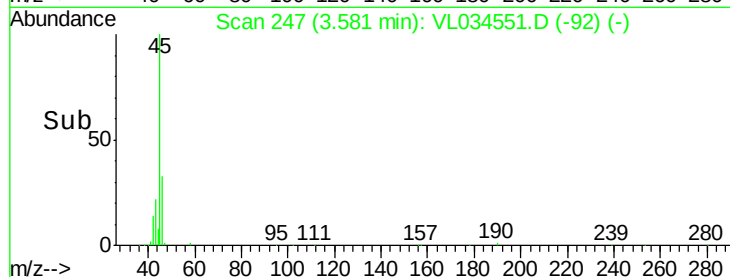
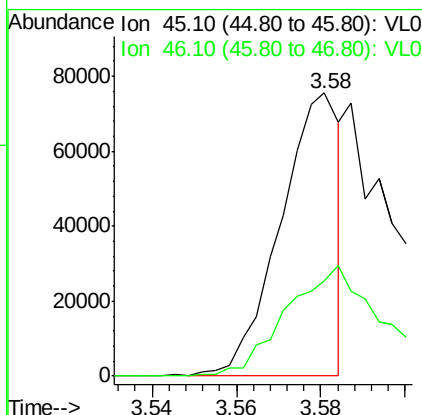
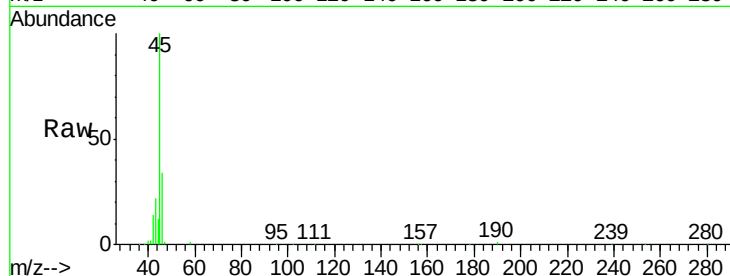




#13
Ethanol
Concen: 6.329 ppbv
RT: 3.58 min Scan# 247
Delta R.T. -0.00 min
Lab File: VL034551.D
Acq: 2 Jan 2020 18:00

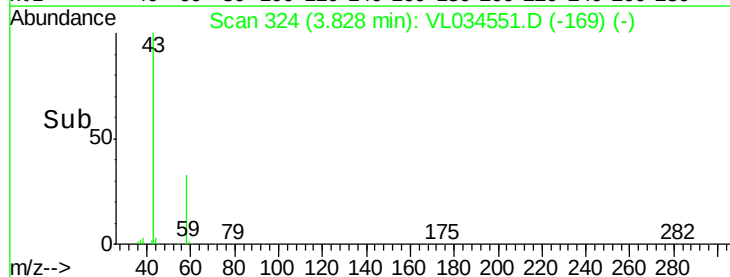
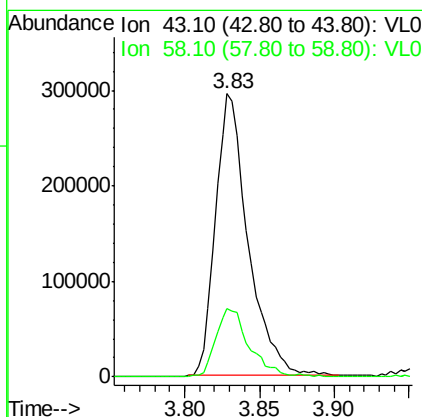
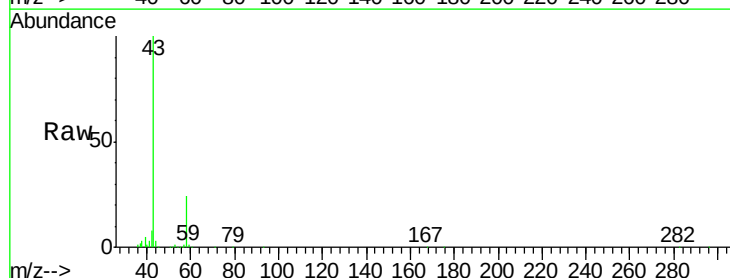
Instrument :
MSVOA_L
ClientSampleId :
50-1

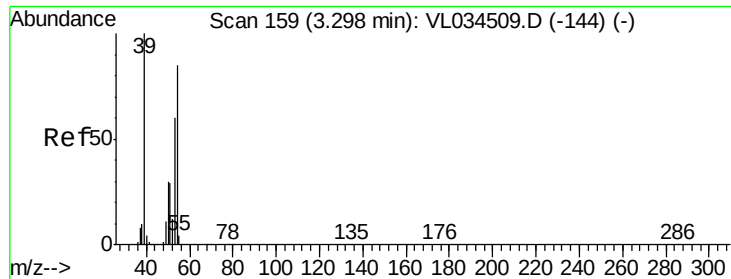
Tgt Ion: 45 Resp: 73747
Ion Ratio Lower Upper
45 100
46 0.0 14.9 59.7#



#15
Acetone
Concen: 3.356 ppbv
RT: 3.83 min Scan# 324
Delta R.T. -0.00 min
Lab File: VL034551.D
Acq: 2 Jan 2020 18:00

Tgt Ion: 43 Resp: 447745
Ion Ratio Lower Upper
43 100
58 25.1 20.4 30.6

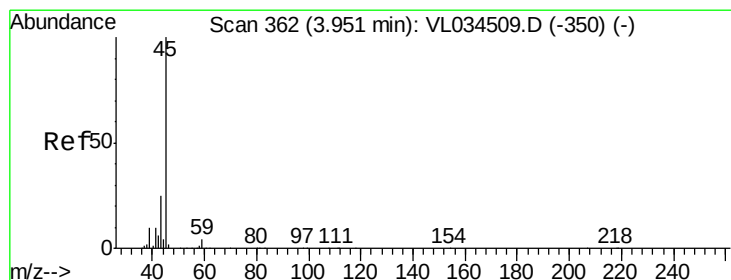
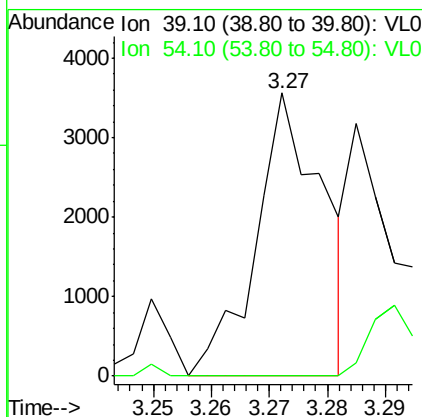
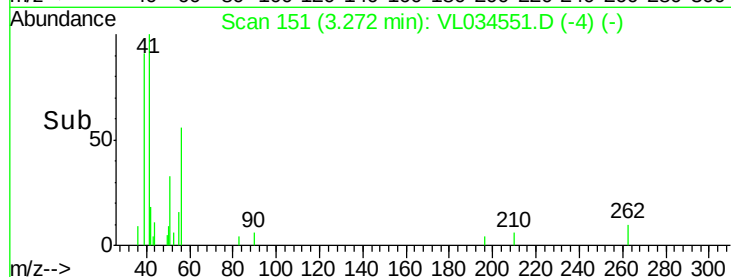
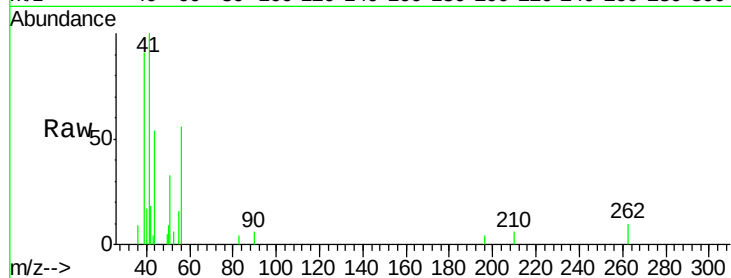




#16
 1,3-Butadiene
 Concen: 0.056 ppbv
 RT: 3.27 min Scan# 151
 Delta R.T. -0.03 min
 Lab File: VL034551.D
 Acq: 2 Jan 2020 18:00

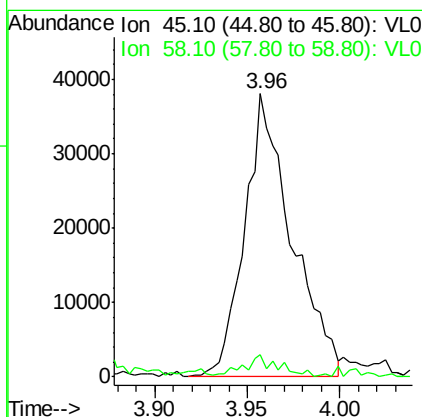
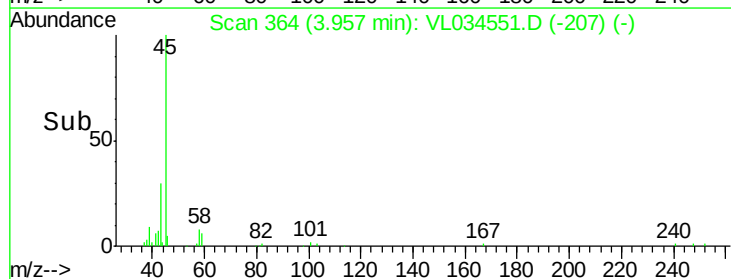
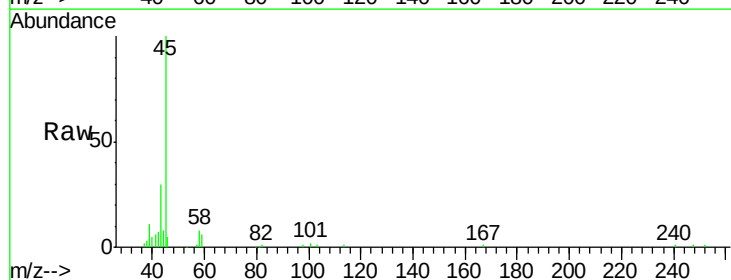
Instrument :
 MSVOA_L
 ClientSampleId :
 50-1

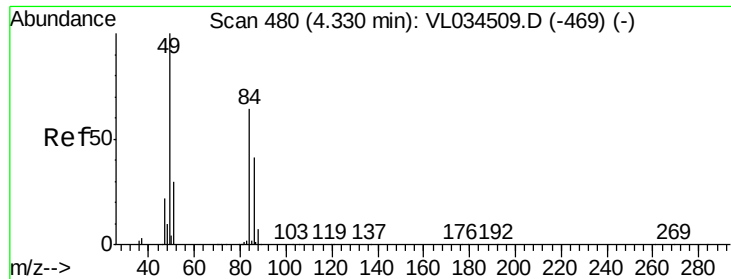
Tgt Ion: 39 Resp: 2857
 Ion Ratio Lower Upper
 39 100
 54 27.4 66.2 99.2#



#19
 Isopropyl Alcohol
 Concen: 0.779 ppbv
 RT: 3.96 min Scan# 364
 Delta R.T. 0.01 min
 Lab File: VL034551.D
 Acq: 2 Jan 2020 18:00

Tgt Ion: 45 Resp: 67314
 Ion Ratio Lower Upper
 45 100
 58 5.7 1.4 2.0#

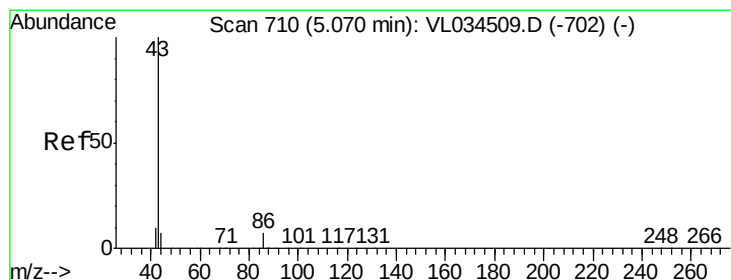
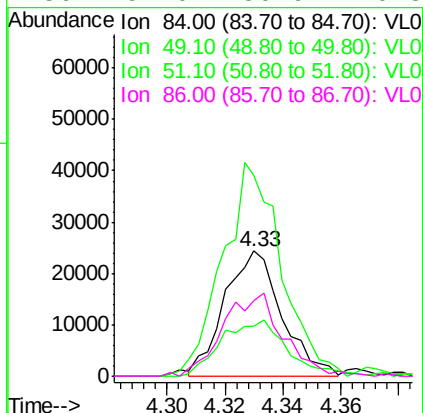
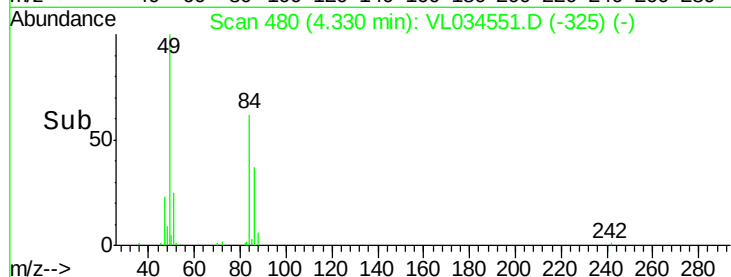
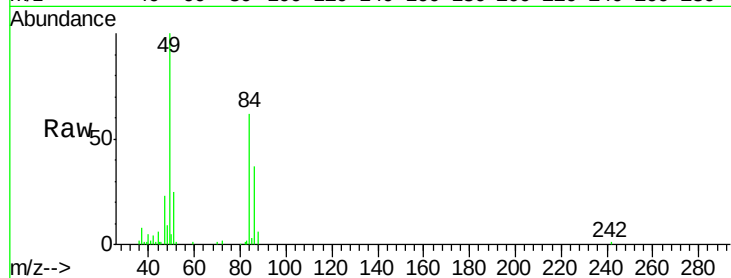




#20
Methylene Chloride
Concen: 0.635 ppbv
RT: 4.33 min Scan# 480
Delta R.T. -0.00 min
Lab File: VL034551.D
Acq: 2 Jan 2020 18:00

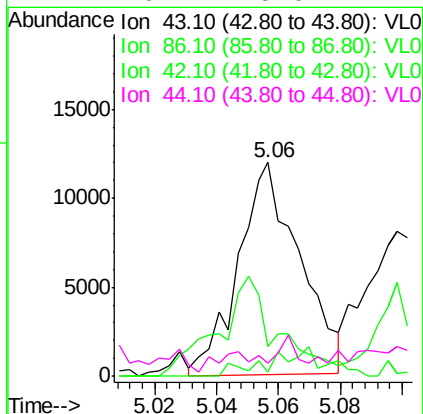
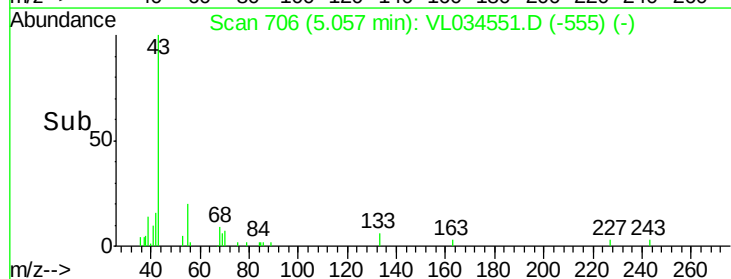
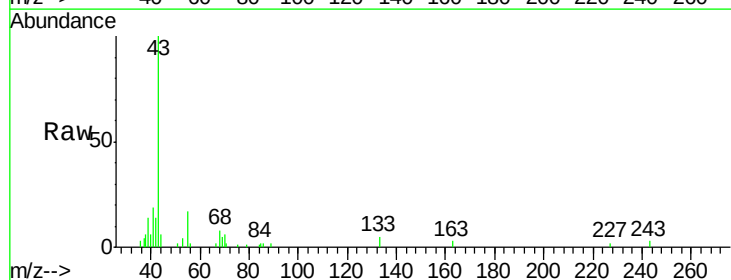
Instrument :
MSVOA_L
ClientSampled :
50-1

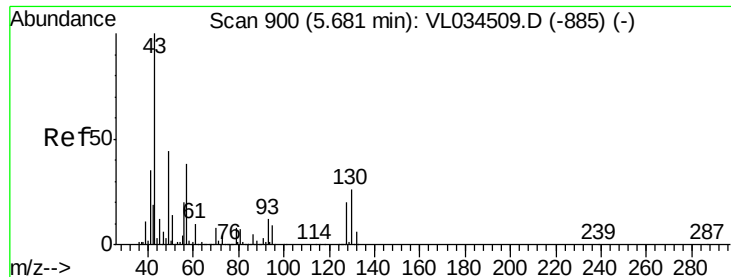
Tgt Ion:	84	Resp:	33346
Ion	Ratio	Lower	Upper
84	100		
49	156.5	124.4	186.6
51	38.4	37.0	55.6
86	57.0	50.9	76.3



#23
Vinyl Acetate
Concen: 0.107 ppbv
RT: 5.06 min Scan# 706
Delta R.T. -0.01 min
Lab File: VL034551.D
Acq: 2 Jan 2020 18:00

Tgt Ion:	43	Resp:	16417
Ion	Ratio	Lower	Upper
43	100		
86	1.9	5.4	8.2#
42	9.1	8.9	13.3
44	0.4	5.0	7.4#





#25

Ethyl Acetate

Concen: 0.161 ppbv

RT: 5.69 min Scan# 902

Delta R.T. 0.01 min

Lab File: VL034551.D

Acq: 2 Jan 2020 18:00

Instrument :

MSVOA_L

ClientSampleId :

50-1

Tgt Ion: 43 Resp: 33513

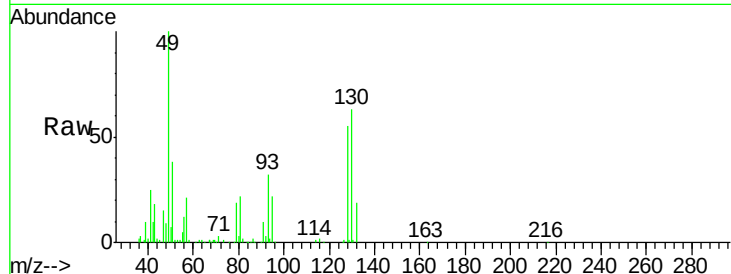
Ion Ratio Lower Upper

43 100

45 6.0 8.3 12.5#

61 3.1 7.8 11.6#

70 2.7 5.8 8.8#

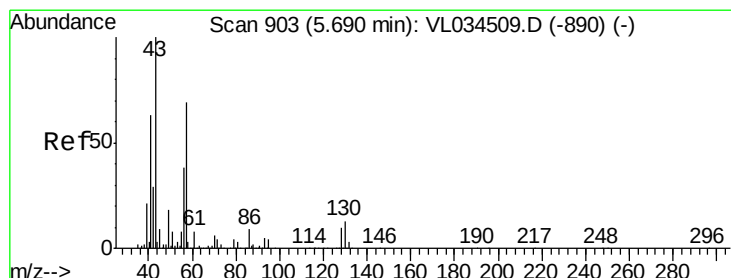
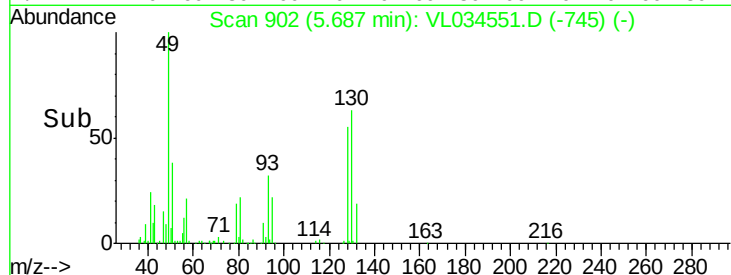
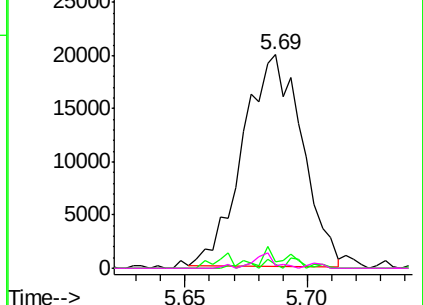


Abundance Ion 43.10 (42.80 to 43.80): VL0

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: 0.465 ppbv

RT: 5.68 min Scan# 901

Delta R.T. -0.01 min

Lab File: VL034551.D

Acq: 2 Jan 2020 18:00

Tgt Ion: 57 Resp: 40824

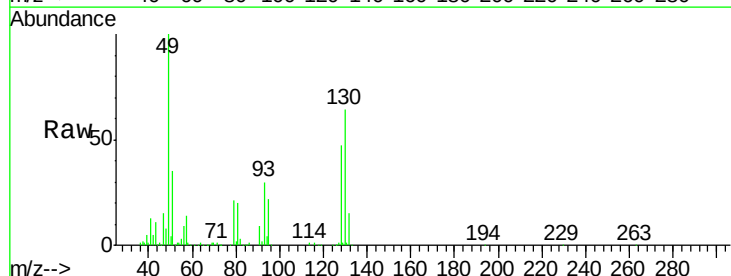
Ion Ratio Lower Upper

57 100

41 114.9 75.3 112.9#

43 86.3 189.4 284.2#

56 64.8 42.8 64.2#

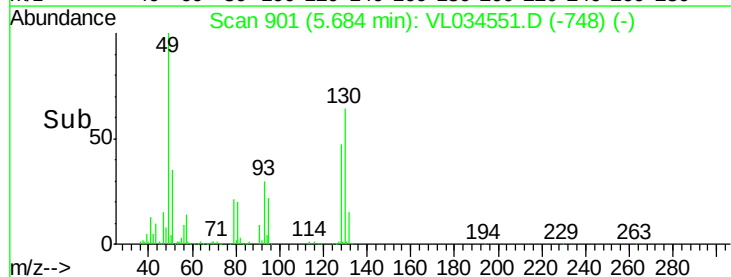
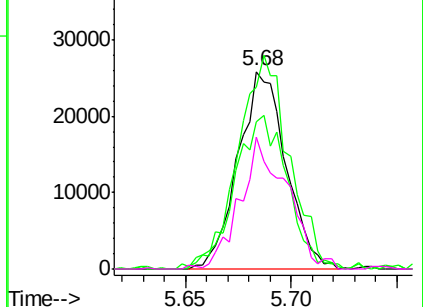


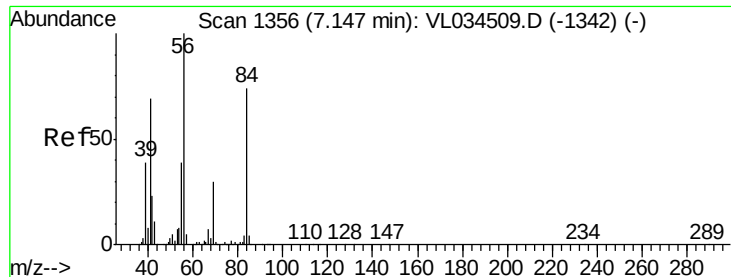
Abundance Ion 57.10 (56.80 to 57.80): VL0

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

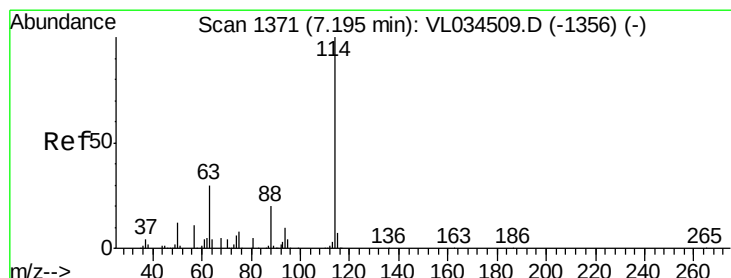
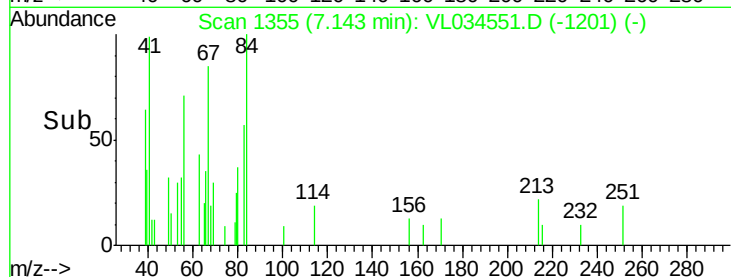
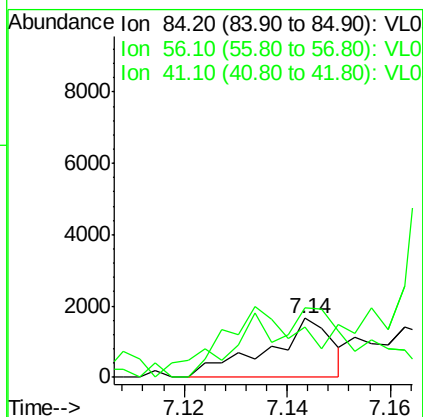
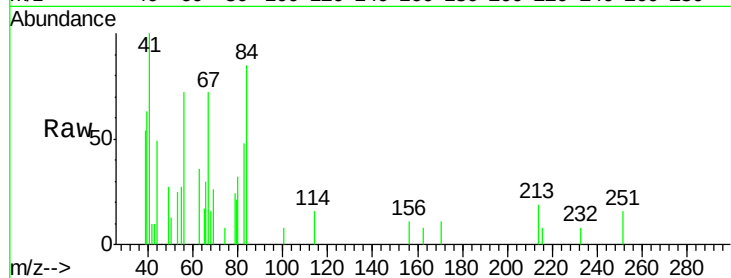




#30
Cyclohexane
Concen: 0.022 ppbv
RT: 7.14 min Scan# 1355
Delta R.T. -0.00 min
Lab File: VL034551.D
Acq: 2 Jan 2020 18:00

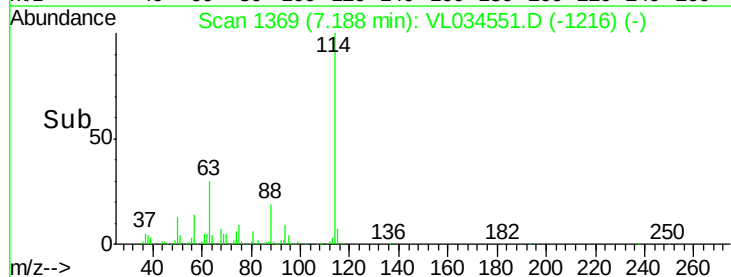
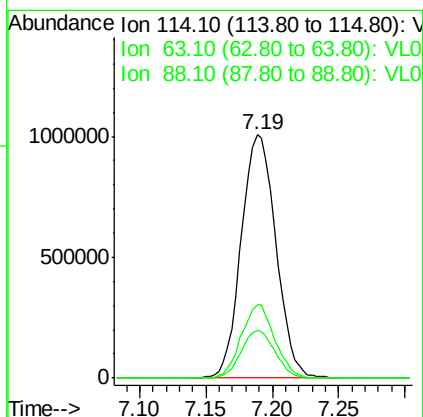
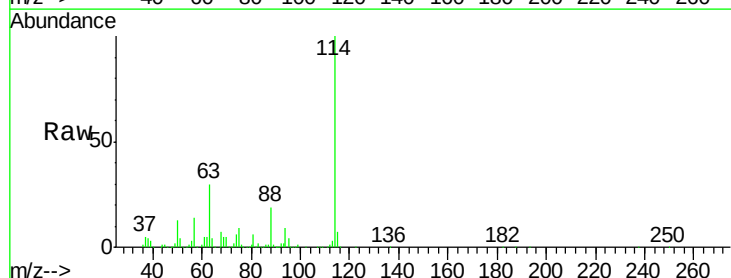
Instrument :
MSVOA_L
ClientSampleId :
50-1

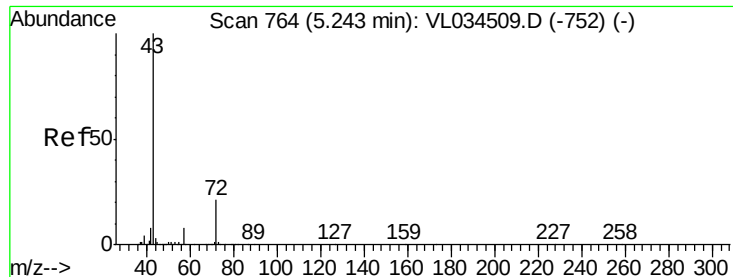
Tgt Ion: 84 Resp: 1451
Ion Ratio Lower Upper
84 100
56 0.0 112.7 169.1#
41 283.5 73.0 109.4#



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.19 min Scan# 1369
Delta R.T. -0.01 min
Lab File: VL034551.D
Acq: 2 Jan 2020 18:00

Tgt Ion: 114 Resp: 1833806
Ion Ratio Lower Upper
114 100
63 29.1 24.1 36.1
88 19.1 15.7 23.5

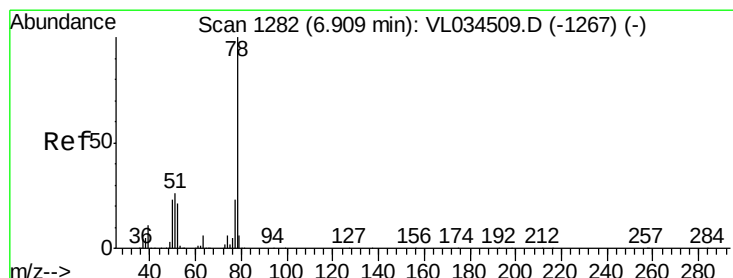
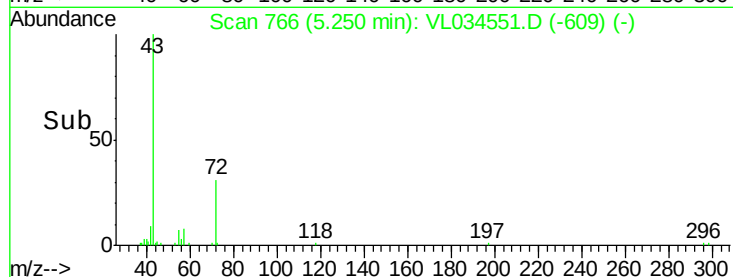
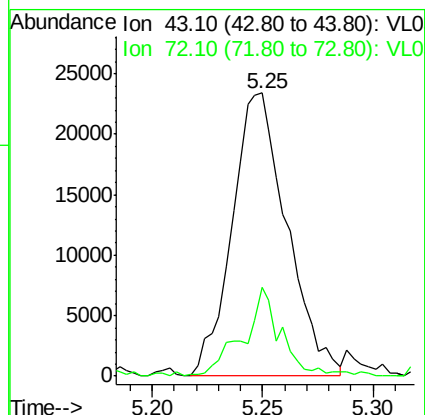
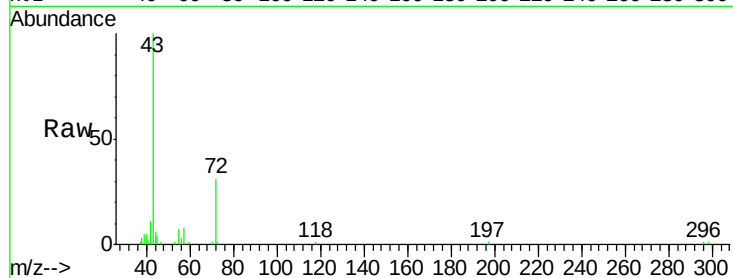




#34
2-Butanone
Concen: 0.308 ppbv
RT: 5.25 min Scan# 766
Delta R.T. 0.01 min
Lab File: VL034551.D
Acq: 2 Jan 2020 18:00

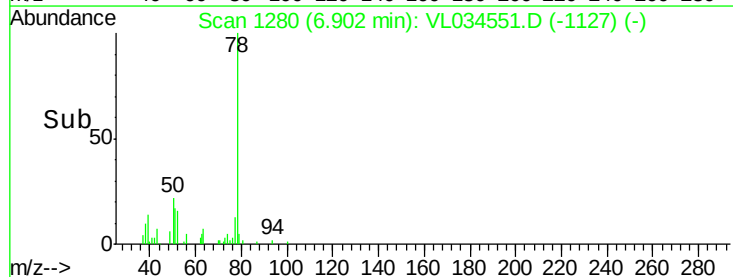
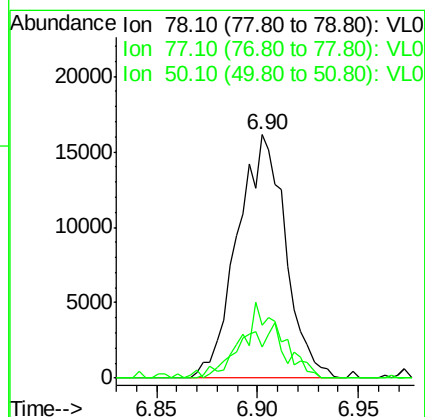
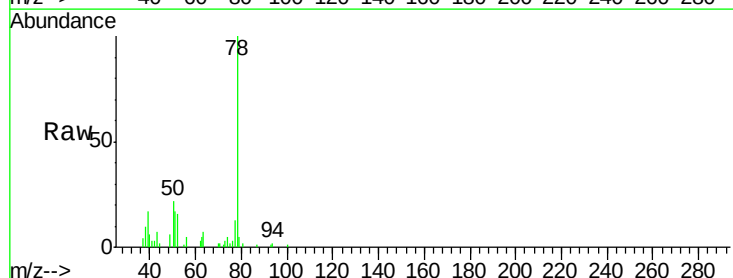
Instrument :
MSVOA_L
ClientSampleId :
50-1

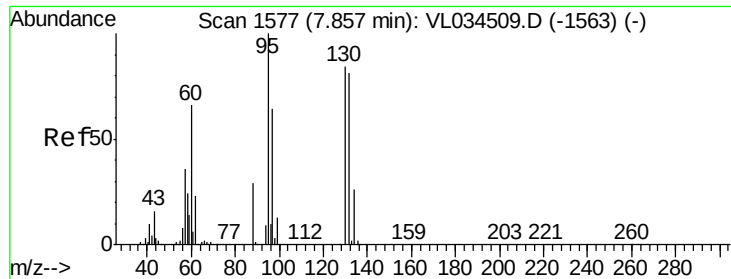
Tgt Ion: 43 Resp: 40371
Ion Ratio Lower Upper
43 100
72 22.5 17.0 25.4



#36
Benzene
Concen: 0.169 ppbv
RT: 6.90 min Scan# 1280
Delta R.T. -0.01 min
Lab File: VL034551.D
Acq: 2 Jan 2020 18:00

Tgt Ion: 78 Resp: 26964
Ion Ratio Lower Upper
78 100
77 12.9 18.6 28.0#
50 21.9 18.8 28.2





#38

Trichloroethene

Concen: 0.057 ppbv

RT: 7.85 min Scan# 1576

Delta R.T. -0.00 min

Lab File: VL034551.D

Acq: 2 Jan 2020 18:00

Instrument :

MSVOA_L

ClientSampleId :

50-1

Tgt Ion: 130 Resp: 3704

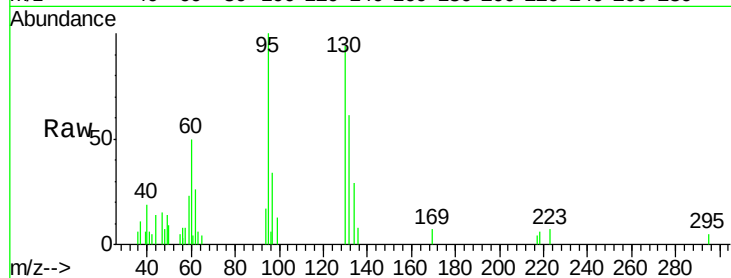
Ion Ratio Lower Upper

130 100

95 98.9 94.2 141.2

132 66.2 76.1 114.1#

97 0.0 60.2 90.2#

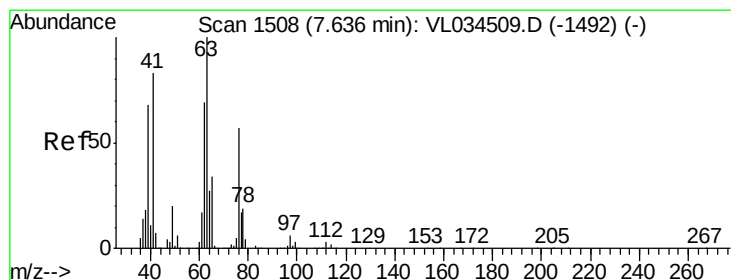
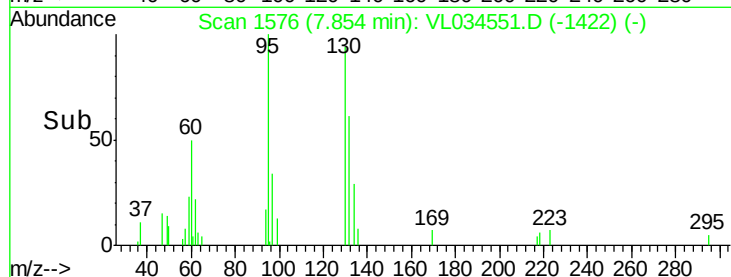
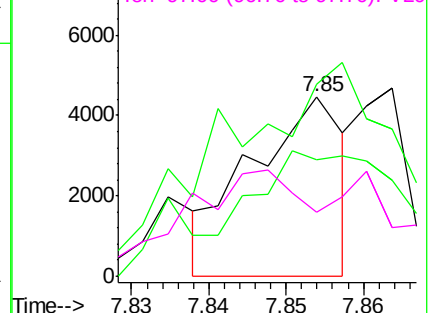


Abundance Ion 130.00 (129.70 to 130.70): V

Ion 95.00 (94.70 to 95.70): VL0

Ion 132.00 (131.70 to 132.70): V

Ion 97.00 (96.70 to 97.70): VL0



#39

1,2-Dichloropropane

Concen: 8.111 ppbv

RT: 7.19 min Scan# 1369

Delta R.T. -0.45 min

Lab File: VL034551.D

Acq: 2 Jan 2020 18:00

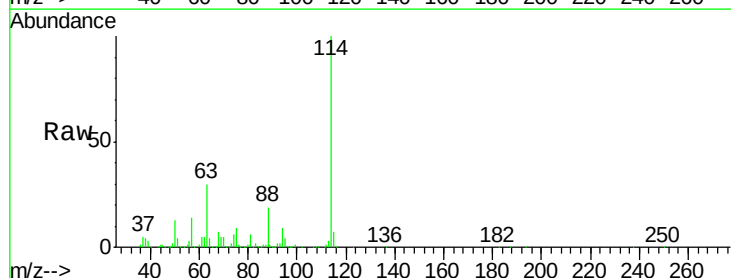
Tgt Ion: 63 Resp: 533143

Ion Ratio Lower Upper

63 100

41 0.0 66.1 99.1#

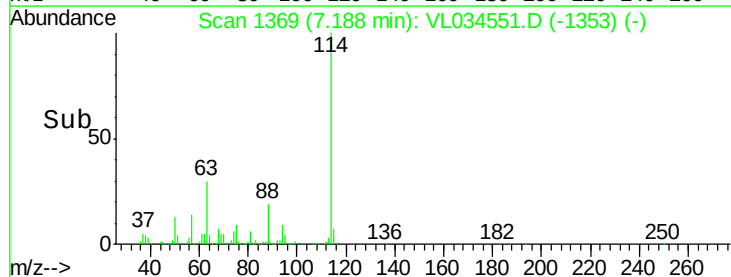
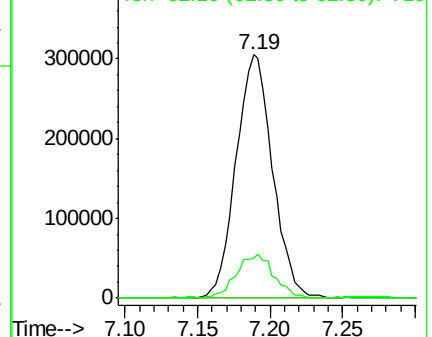
62 16.5 54.9 82.3#

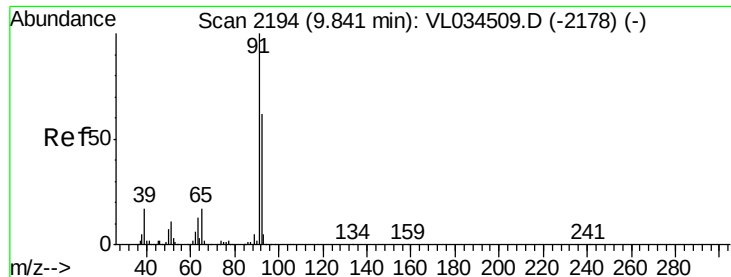


Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 62.10 (61.80 to 62.80): VL0





#53

Toluene

Concen: 0.573 ppbv

RT: 9.84 min Scan# 2193

Delta R.T. -0.00 min

Lab File: VL034551.D

Acq: 2 Jan 2020 18:00

Instrument :

MSVOA_L

ClientSampleId :

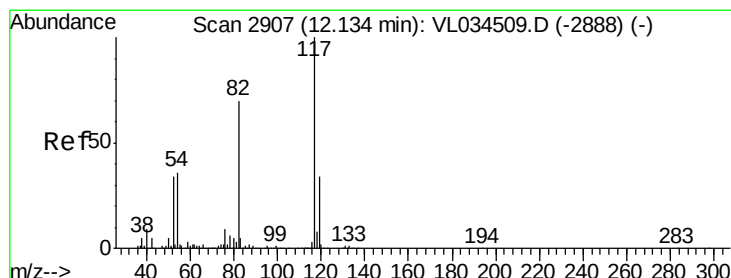
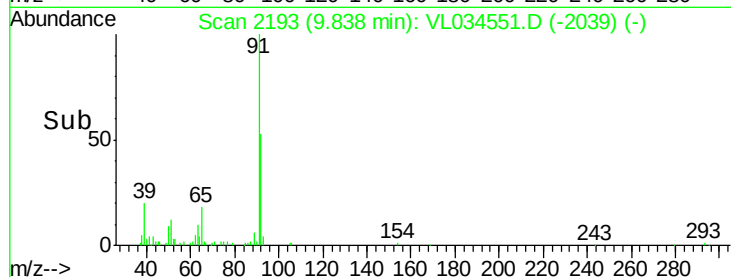
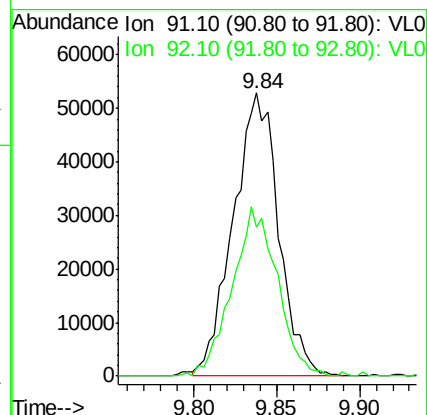
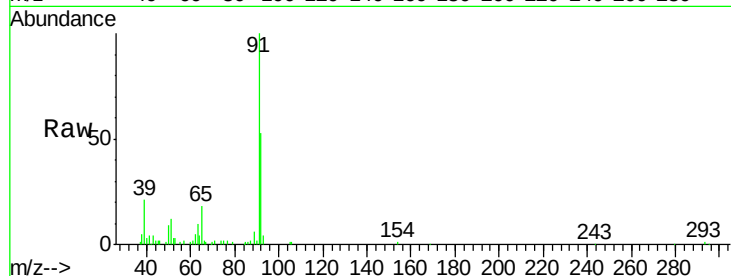
50-1

Tgt Ion: 91 Resp: 100556

Ion Ratio Lower Upper

91 100

92 59.5 48.4 72.6



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.12 min Scan# 2904

Delta R.T. -0.01 min

Lab File: VL034551.D

Acq: 2 Jan 2020 18:00

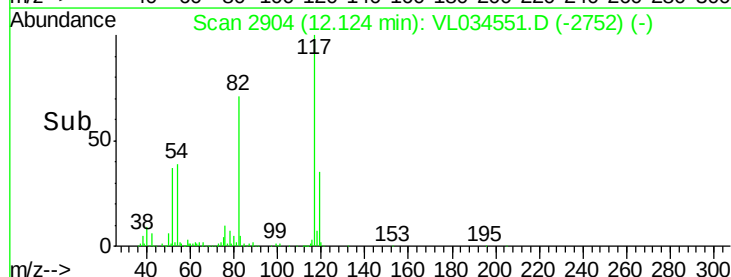
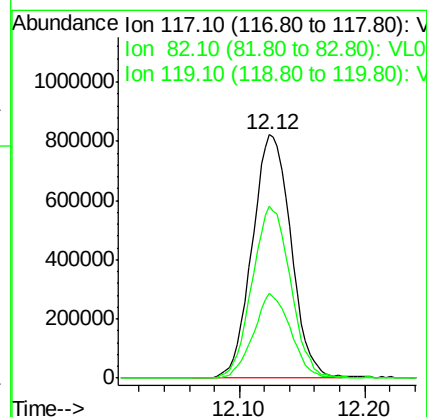
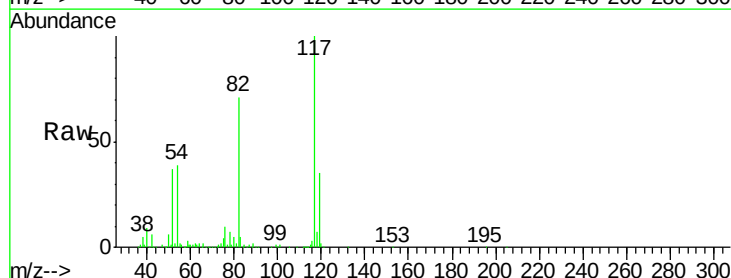
Tgt Ion: 117 Resp: 1762748

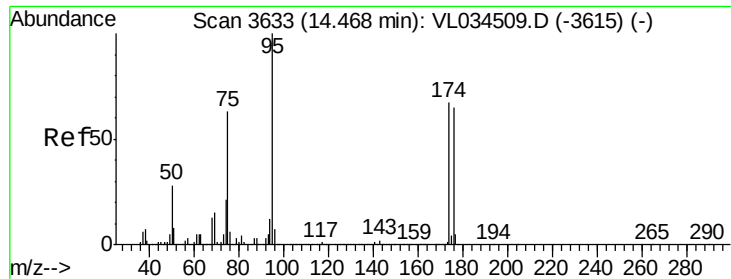
Ion Ratio Lower Upper

117 100

82 70.8 56.2 84.4

119 33.8 27.1 40.7





#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.165 ppbv
 RT: 14.46 min Scan# 3631
 Delta R.T. -0.01 min
 Lab File: VL034551.D
 Acq: 2 Jan 2020 18:00

Instrument :
 MSVOA_L
 ClientSampleId :
 50-1

Tgt Ion: 95 Resp: 1495224
 Ion Ratio Lower Upper
 95 100
 174 63.4 52.4 78.6
 175 4.6 3.9 5.9

