

Data File : VL033180.D
Acq On : 6 Feb 2019 11:57
Operator : SY/AP
Sample : K1289-01DL 2X
Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
1000DL

Quant Time: Feb 20 06:18:22 2019
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL020519AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Feb 20 06:00:52 2019
QLast Update : Wed Feb 20 06:00:52 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.76	49	845674	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.29	114	1967422	10.00	ppbv	-0.01
55) Chlorobenzene-d5	12.24	117	2237550	10.00	ppbv	0.00

System Monitoring Compounds
68) 1-Bromo-4-Fluorobenzene 14.57 95 1841465 10.56 ppbv 0.00
Spiked Amount 10.000 Range 65 - 135 Recovery = 105.60%

Target Compounds						Qvalue
5) Vinyl Chloride	3.29	62	484490	8.630	ppbv	98
7) Chloroethane	3.29	64	154589	8.423	ppbv #	42
9) Propene	3.04	41	375851	7.641	ppbv	99
13) Ethanol	3.66	45	17016	1.018	ppbv	98
14) Bromoethene	3.79	108	9579	0.245	ppbv #	96
15) Acetone	3.91	43	34448	0.362	ppbv	97
16) 1,3-Butadiene	3.04	39	326069	7.210	ppbv #	5
17) tert-Butyl alcohol	4.35	59	22837	1.248	ppbv #	74
18) 1,1-Dichloroethene	4.35	96	318563	7.845	ppbv	97
20) Methylene Chloride	4.41	84	27614	0.729	ppbv	94
24) 1,1-Dichloroethane	5.09	63	1350210	11.560	ppbv	100
25) Ethyl Acetate	5.78	43	887106	4.141	ppbv #	76
26) Hexane	5.78	57	1289521	12.823	ppbv #	42
32) 1,1,1-Trichloroethane	6.62	97	5958	0.035	ppbv #	34
34) 2-Butanone	5.78	43	882513	7.072	ppbv #	54
39) 1,2-Dichloropropane	7.29	63	509028	6.464	ppbv #	25
41) Tetrahydrofuran	5.78	42	463590	6.009	ppbv #	50
47) 1,1,2-Trichloroethane	9.61	97	790036	9.674	ppbv	97
48) Dibromochloromethane	10.45	129	1125639	8.749	ppbv	100
53) Toluene	9.94	91	1757938	7.445	ppbv	99
54) 1,2-Dibromoethane	10.76	107	1184198	9.241	ppbv	96
57) Chlorobenzene	12.30	112	1847949	9.334	ppbv	95

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

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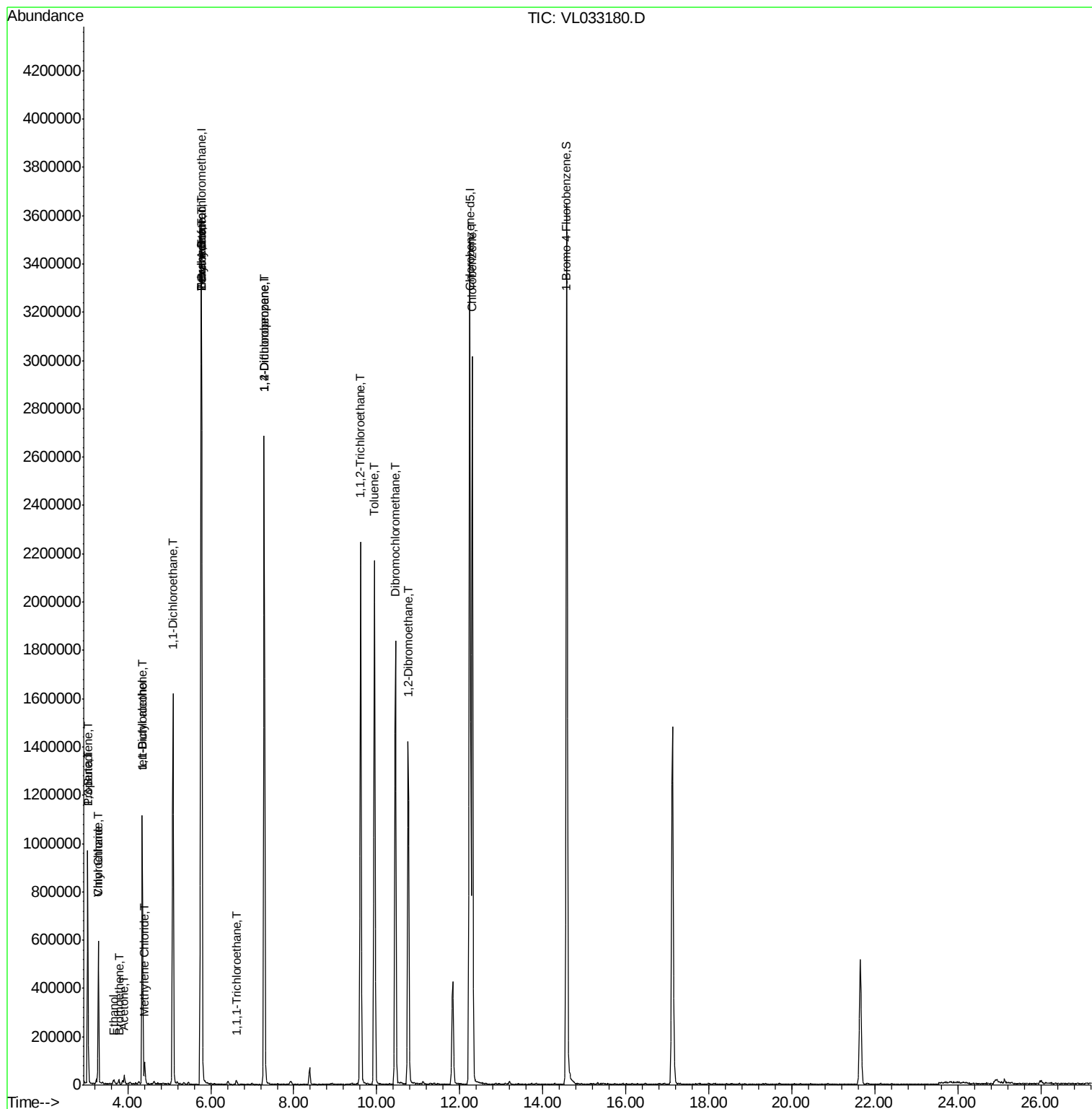
Quant Time: Feb 20 06:18:22 2019

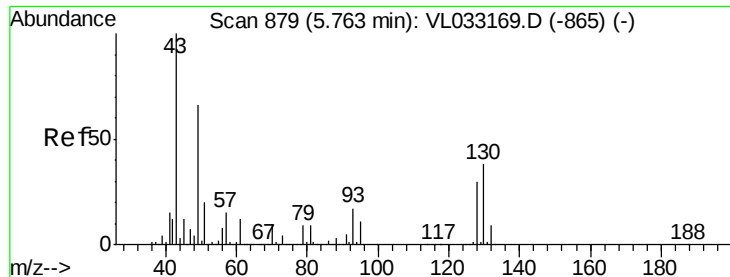
Quant Method : Z:\V0ASRV\HPCHEM1\MSV0A_L\METHODS\VL020519AIR.M

Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA_LWed Feb 20 06:00:52 2019

QLast Update : Wed Feb 20 06:00:52 2019

Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.76 min Scan# 877

Delta R.T. -0.01 min

Lab File: VL033180.D

Acq: 6 Feb 2019 11:57

Instrument :
MSVOA_L
ClientSampleId :
1000DL

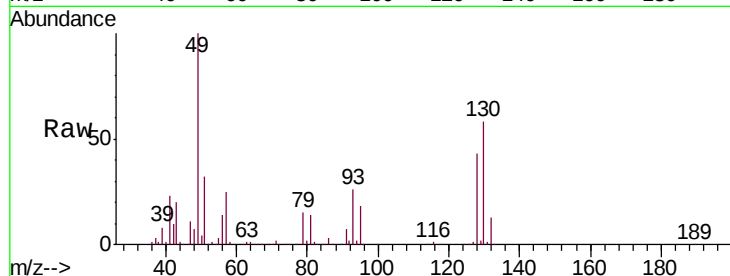
Tgt Ion: 49 Resp: 845674

Ion Ratio Lower Upper

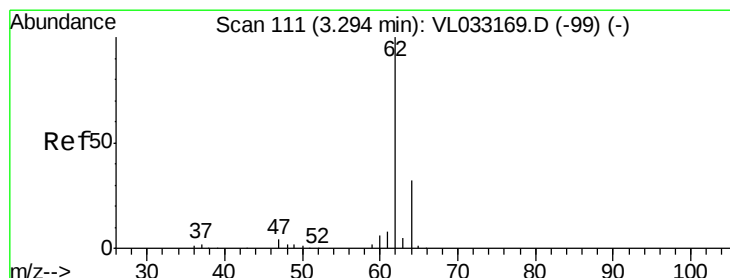
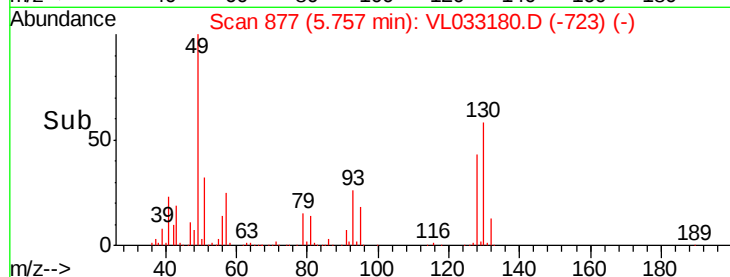
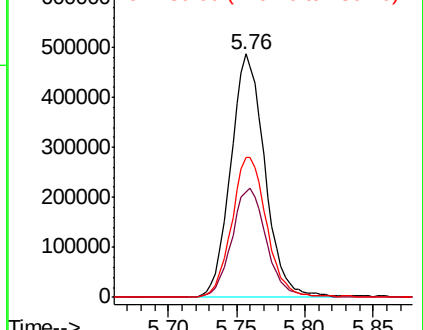
49 100

128 46.1 23.6 71.0

130 59.7 30.3 91.0



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



#5

Vinyl Chloride

Concen: 8.630 ppbv

RT: 3.29 min Scan# 110

Delta R.T. -0.00 min

Lab File: VL033180.D

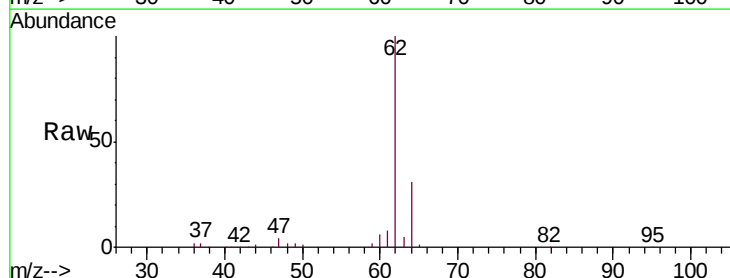
Acq: 6 Feb 2019 11:57

Tgt Ion: 62 Resp: 484490

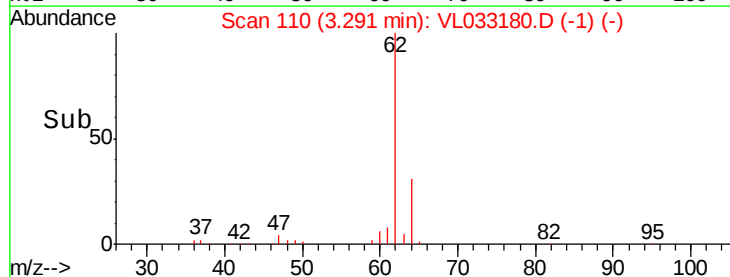
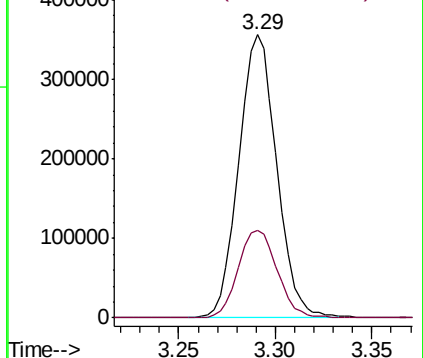
Ion Ratio Lower Upper

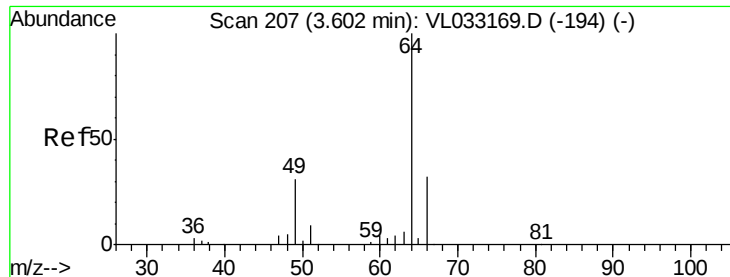
62 100

64 31.0 25.6 38.4



Abundance Ion 62.10 (61.80 to 62.80): VL0
Ion 64.10 (63.80 to 64.80): VL0





#7

Chloroethane

Concen: 8.423 ppbv

RT: 3.29 min Scan# 110

Delta R.T. -0.31 min

Lab File: VL033180.D

Acq: 6 Feb 2019 11:57

Instrument :

MSVOA_L

ClientSampleId :

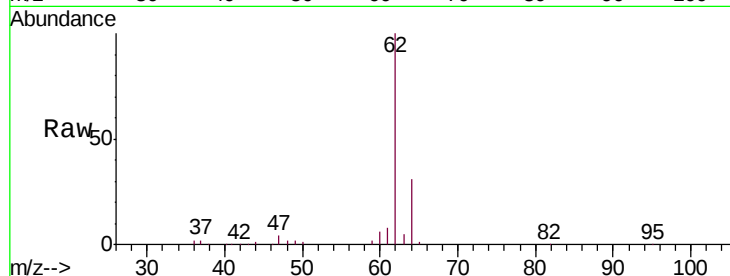
1000DL

Tgt Ion: 64 Resp: 154589

Ion Ratio Lower Upper

64 100

66 0.0 26.0 39.0#



Abundance Ion 64.10 (63.80 to 64.80): VL0

Ion 66.10 (65.80 to 66.80): VL0

3.29

120000

100000

80000

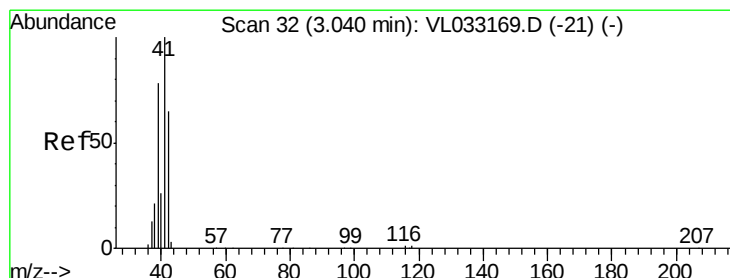
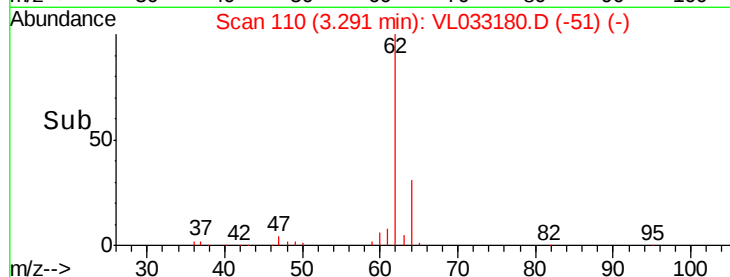
60000

40000

20000

0

Time-->



#9

Propene

Concen: 7.641 ppbv

RT: 3.04 min Scan# 31

Delta R.T. -0.00 min

Lab File: VL033180.D

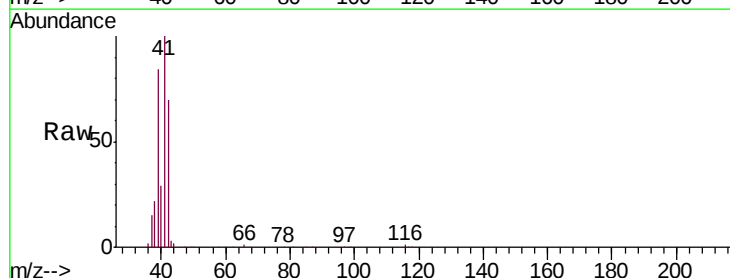
Acq: 6 Feb 2019 11:57

Tgt Ion: 41 Resp: 375851

Ion Ratio Lower Upper

41 100

42 69.4 55.0 82.6



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0

3.04

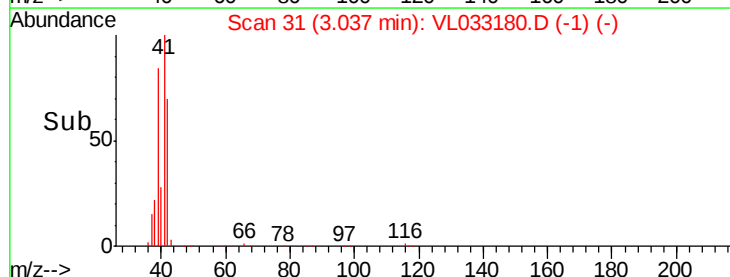
300000

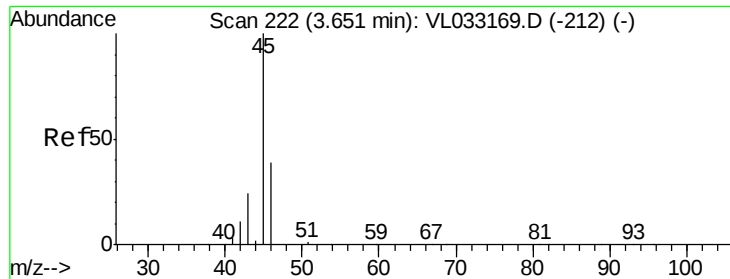
200000

100000

0

Time-->





#13

Ethanol

Concen: 1.018 ppbv

RT: 3.66 min Scan# 224

Delta R.T. 0.01 min

Lab File: VL033180.D

Acq: 6 Feb 2019 11:57

Instrument :

MSVOA_L

ClientSampleId :

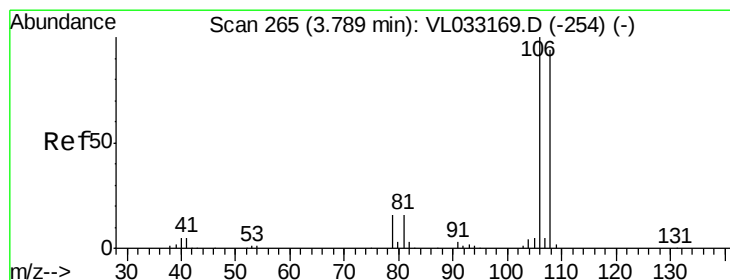
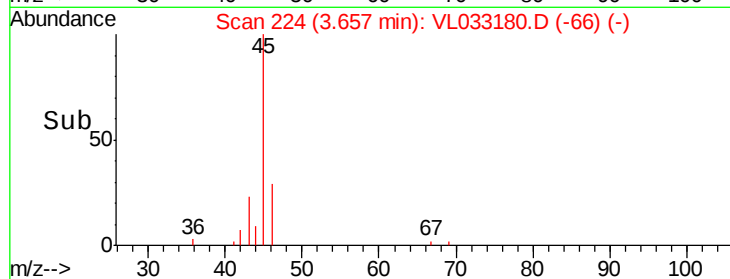
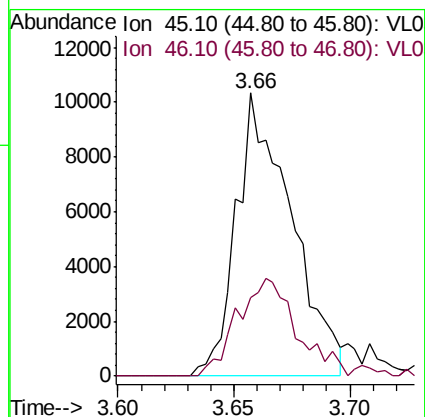
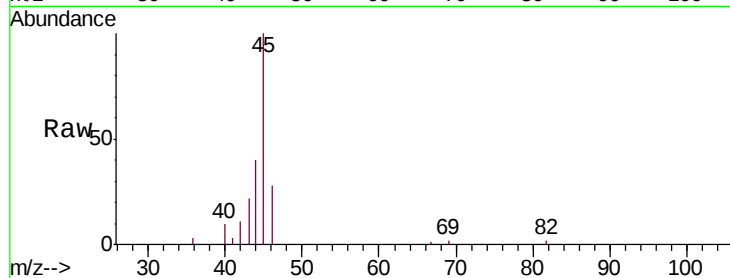
1000DL

Tgt Ion: 45 Resp: 17016

Ion Ratio Lower Upper

45 100

46 39.1 15.0 60.2



#14

Bromoethene

Concen: 0.245 ppbv

RT: 3.79 min Scan# 265

Delta R.T. 0.00 min

Lab File: VL033180.D

Acq: 6 Feb 2019 11:57

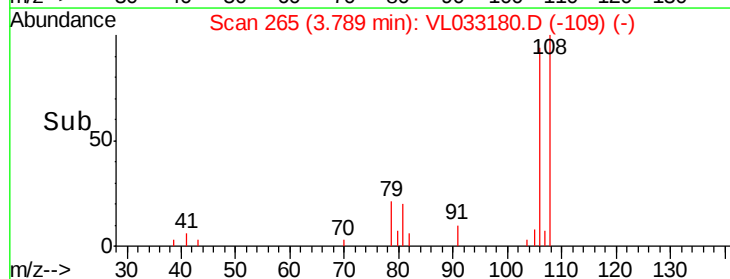
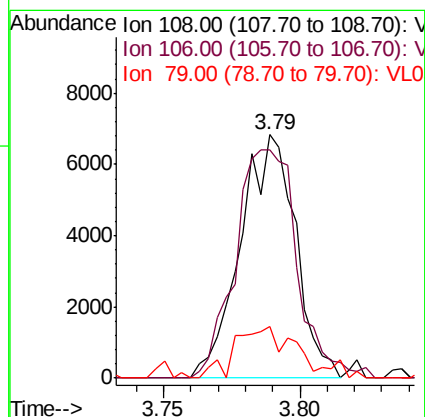
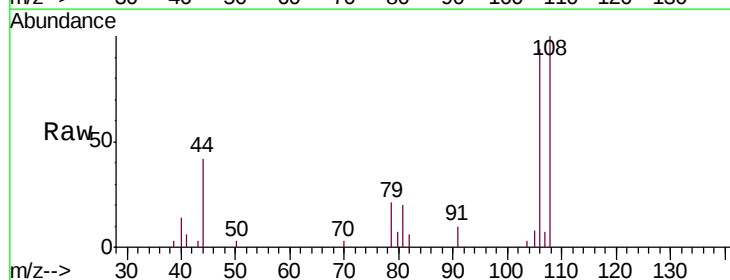
Tgt Ion: 108 Resp: 9579

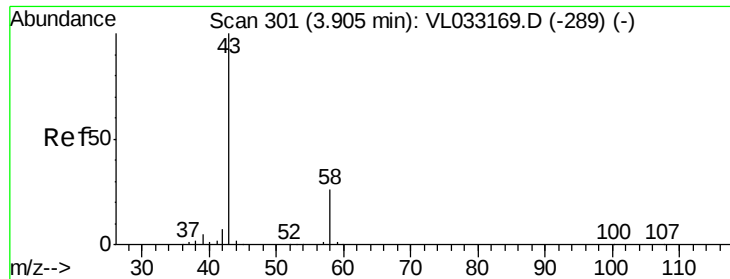
Ion Ratio Lower Upper

108 100

106 105.0 86.0 129.0

79 24.7 14.5 21.7#





#15

Acetone

Concen: 0.362 ppbv

RT: 3.91 min Scan# 303

Delta R.T. 0.01 min

Lab File: VL033180.D

Acq: 6 Feb 2019 11:57

Instrument :

MSVOA_L

ClientSampleId :

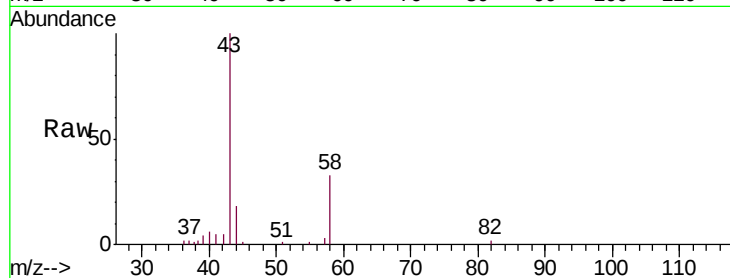
1000DL

Tgt Ion: 43 Resp: 34448

Ion Ratio Lower Upper

43 100

58 27.9 21.1 31.7



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0

25000

20000

15000

10000

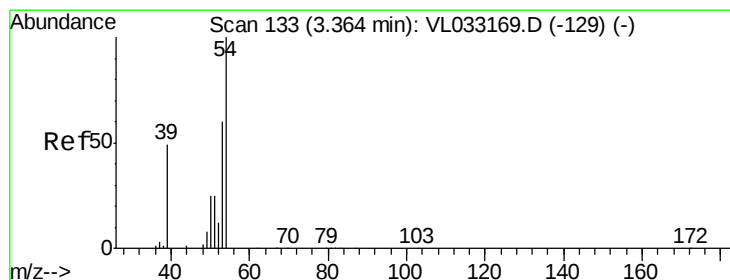
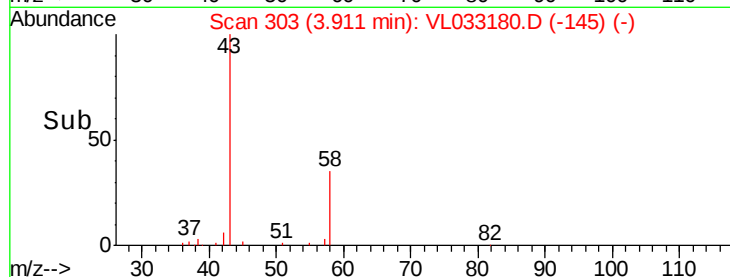
5000

0

Time-->

3.85 3.90 3.95

3.91



#16

1,3-Butadiene

Concen: 7.210 ppbv

RT: 3.04 min Scan# 31

Delta R.T. -0.33 min

Lab File: VL033180.D

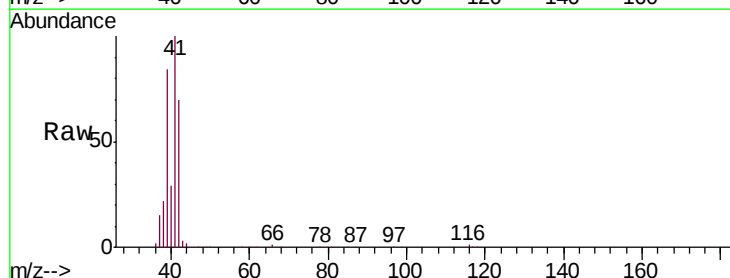
Acq: 6 Feb 2019 11:57

Tgt Ion: 39 Resp: 326069

Ion Ratio Lower Upper

39 100

54 0.1 71.3 106.9#



Abundance Ion 39.10 (38.80 to 39.80): VL0

Ion 54.10 (53.80 to 54.80): VL0

250000

200000

150000

100000

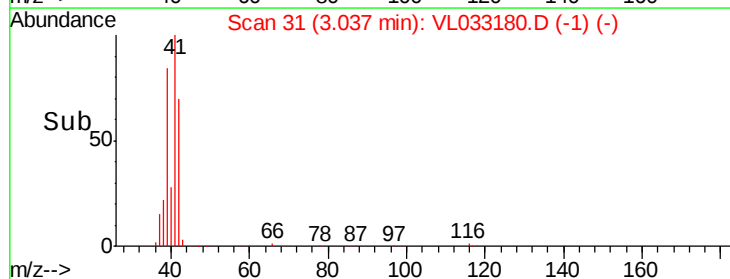
50000

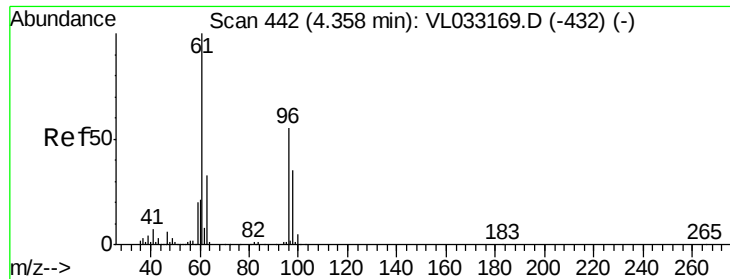
0

Time-->

3.00 3.05 3.10

3.04

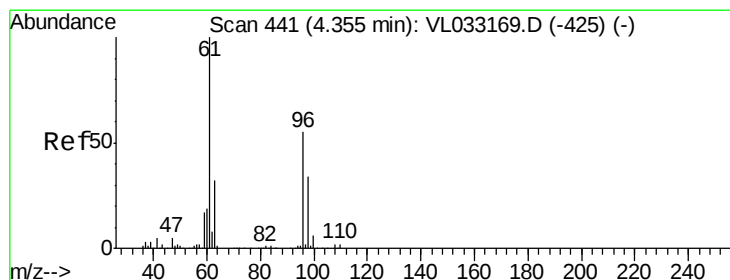
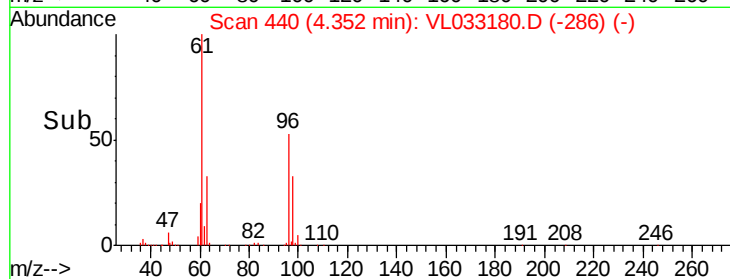
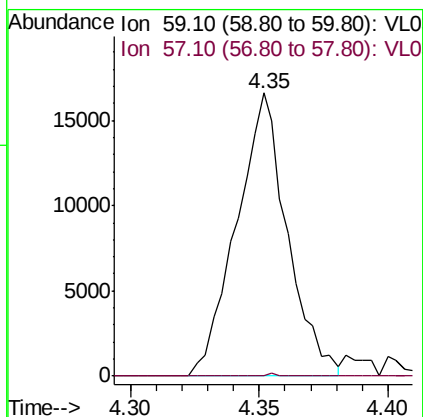
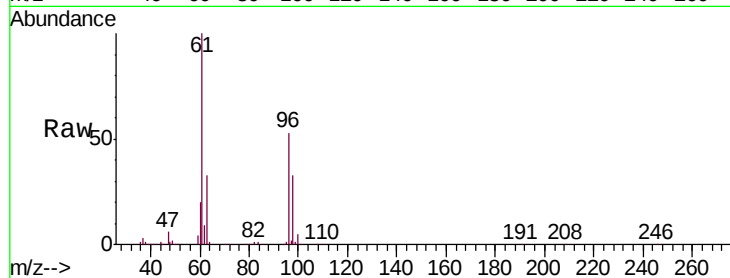




#17
tert-Butyl alcohol
Concen: 1.248 ppbv
RT: 4.35 min Scan# 440
Delta R.T. -0.01 min
Lab File: VL033180.D
Acq: 6 Feb 2019 11:57

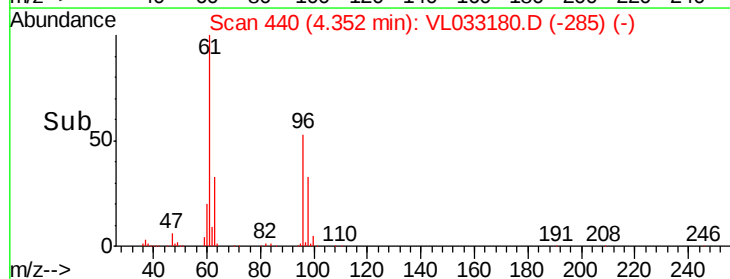
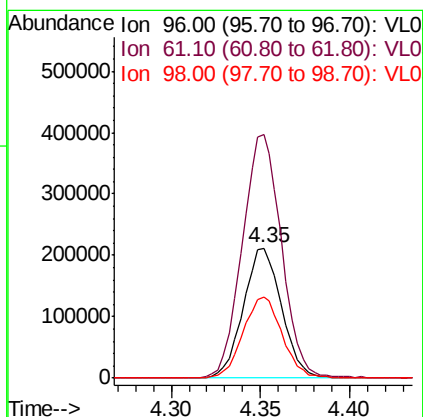
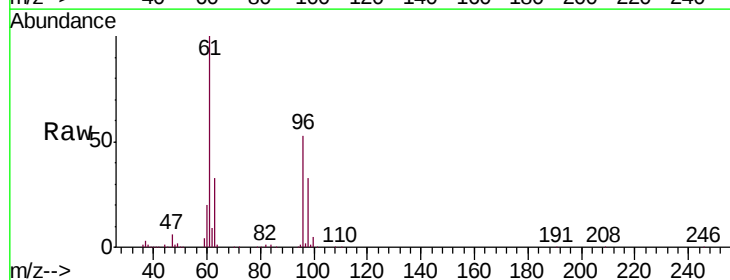
Instrument :
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1000DL

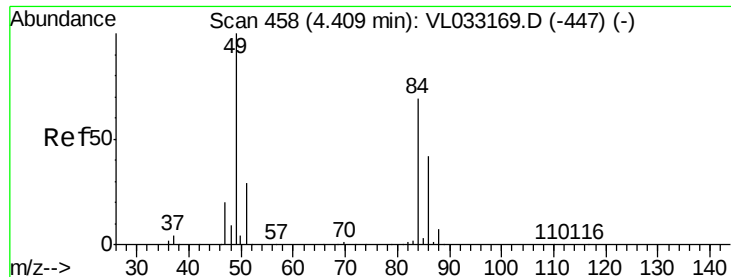
Tgt Ion: 59 Resp: 22837
Ion Ratio Lower Upper
59 100
57 0.0 7.6 11.4#



#18
1,1-Dichloroethene
Concen: 7.845 ppbv
RT: 4.35 min Scan# 440
Delta R.T. -0.00 min
Lab File: VL033180.D
Acq: 6 Feb 2019 11:57

Tgt Ion: 96 Resp: 318563
Ion Ratio Lower Upper
96 100
61 187.1 145.0 217.6
98 61.8 50.0 75.0

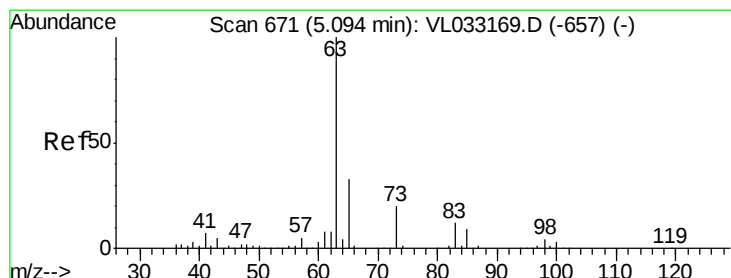
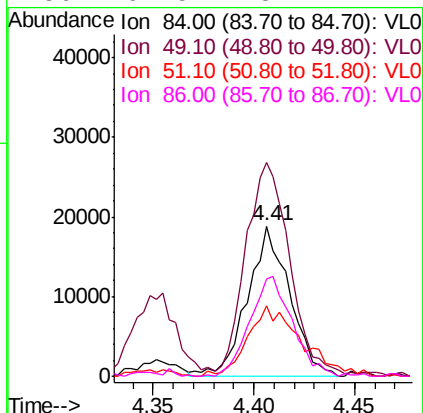
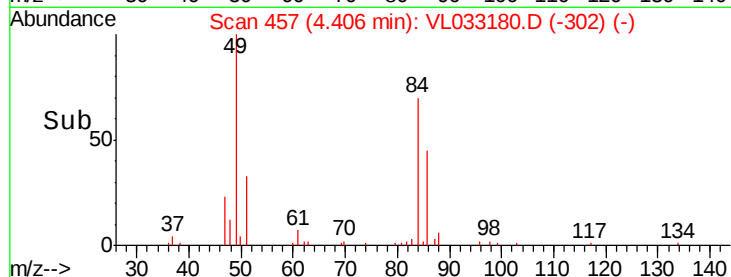
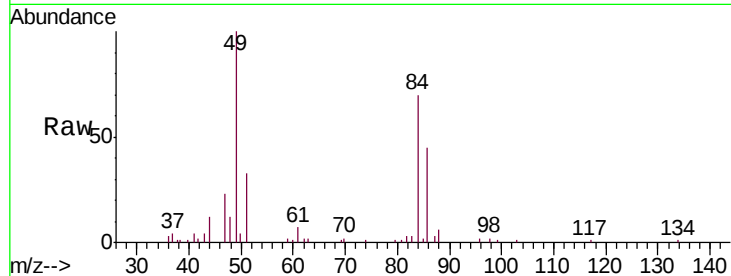




#20
Methylene Chloride
Concen: 0.729 ppbv
RT: 4.41 min Scan# 457
Delta R.T. -0.00 min
Lab File: VL033180.D
Acq: 6 Feb 2019 11:57

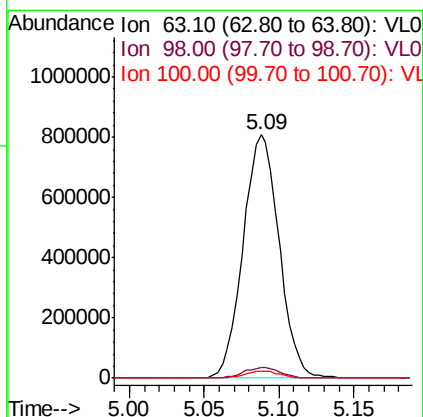
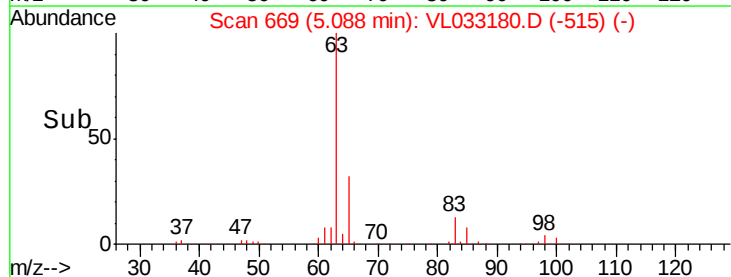
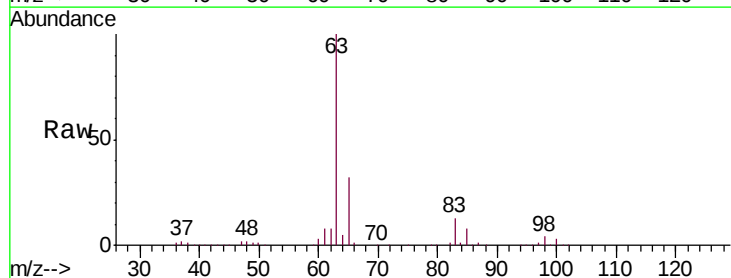
Instrument :
MSVOA_L
ClientSampleId :
1000DL

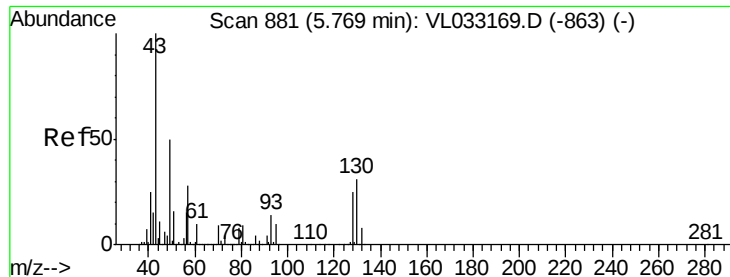
Tgt Ion: 84 Resp: 27614
Ion Ratio Lower Upper
84 100
49 138.0 115.8 173.8
51 45.6 33.0 49.6
86 64.5 48.2 72.2



#24
1,1-Dichloroethane
Concen: 11.560 ppbv
RT: 5.09 min Scan# 669
Delta R.T. -0.01 min
Lab File: VL033180.D
Acq: 6 Feb 2019 11:57

Tgt Ion: 63 Resp: 1350210
Ion Ratio Lower Upper
63 100
98 4.1 2.1 6.5
100 2.8 1.4 4.2





#25

Ethyl Acetate

Concen: 4.141 ppbv

RT: 5.78 min Scan# 883

Delta R.T. 0.01 min

Lab File: VL033180.D

Acq: 6 Feb 2019 11:57

Instrument :

MSVOA_L

ClientSampleId :

1000DL

Tgt Ion: 43 Resp: 887106

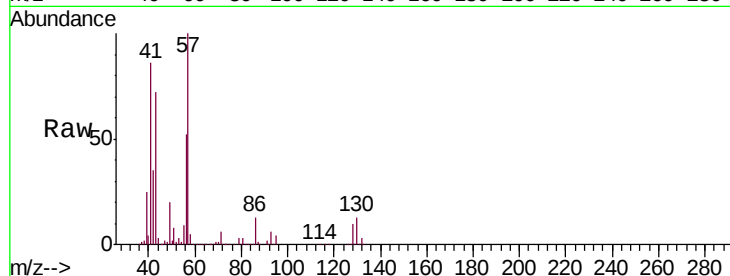
Ion Ratio Lower Upper

43 100

45 0.1 7.9 11.9#

61 0.1 7.5 11.3#

70 1.3 5.8 8.8#



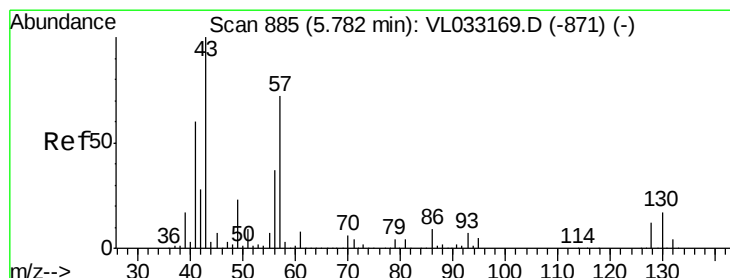
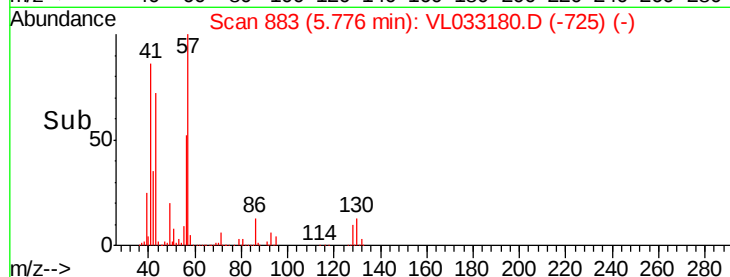
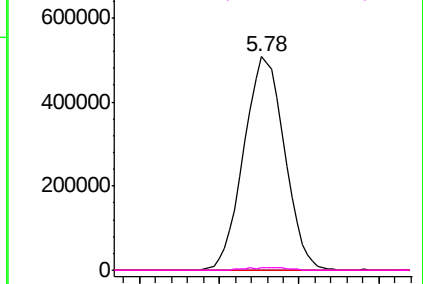
Abundance

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: 12.823 ppbv

RT: 5.78 min Scan# 884

Delta R.T. -0.00 min

Lab File: VL033180.D

Acq: 6 Feb 2019 11:57

Tgt Ion: 57 Resp: 1289521

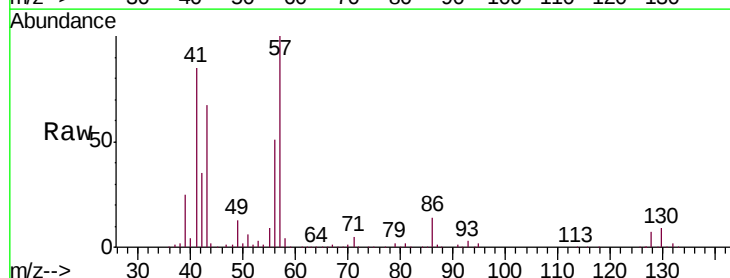
Ion Ratio Lower Upper

57 100

41 85.7 69.4 104.2

43 69.0 176.7 265.1#

56 51.7 41.4 62.0



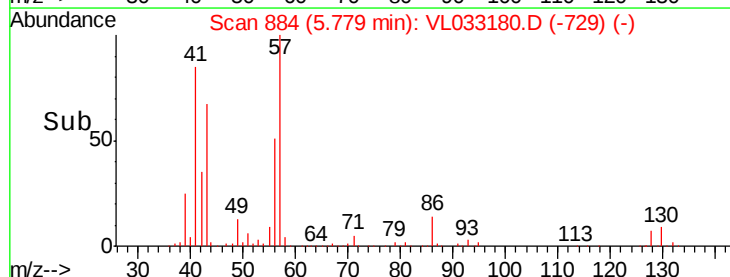
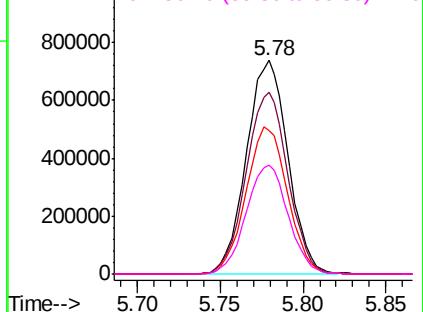
Abundance

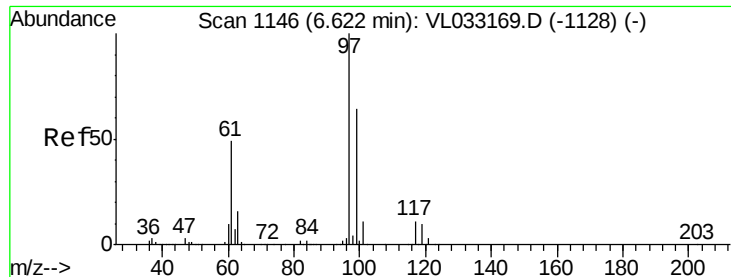
Ion 57.10 (56.80 to 57.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 43.10 (42.80 to 43.80): VL0

Ion 56.10 (55.80 to 56.80): VL0





#32

1,1,1-Trichloroethane

Concen: 0.035 ppbv

RT: 6.62 min Scan# 1144

Delta R.T. -0.01 min

Lab File: VL033180.D

Acq: 6 Feb 2019 11:57

Instrument :

MSVOA_L

ClientSampleID :

1000DL

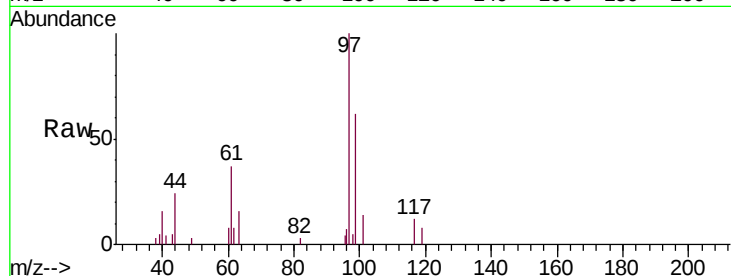
Tgt Ion: 97 Resp: 5958

Ion Ratio Lower Upper

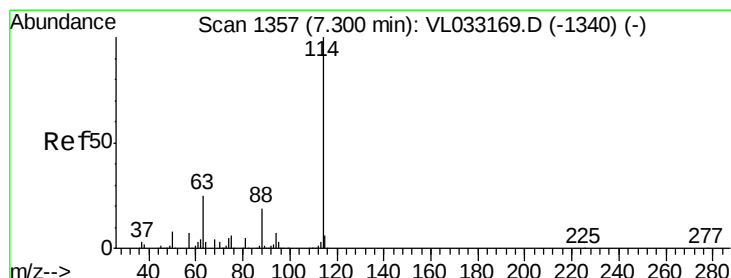
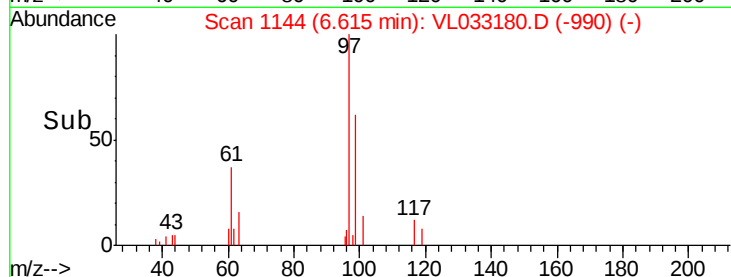
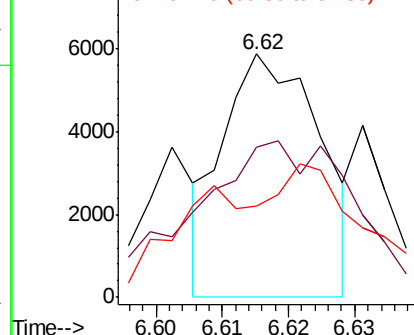
97 100

99 113.4 51.4 77.2#

61 96.6 38.8 58.2#



Abundance Ion 97.00 (96.70 to 97.70): VL0
Ion 99.00 (98.70 to 99.70): VL0
Ion 61.10 (60.80 to 61.80): VL0



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.29 min Scan# 1353

Delta R.T. -0.01 min

Lab File: VL033180.D

Acq: 6 Feb 2019 11:57

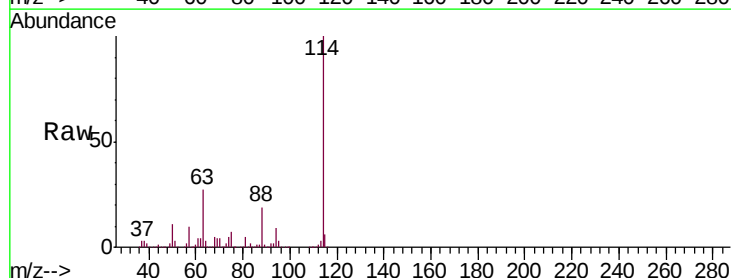
Tgt Ion: 114 Resp: 1967422

Ion Ratio Lower Upper

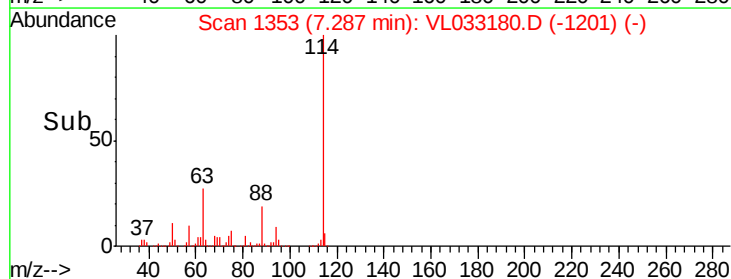
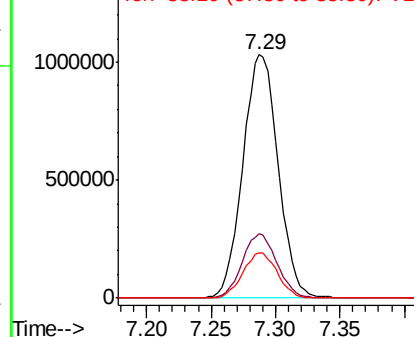
114 100

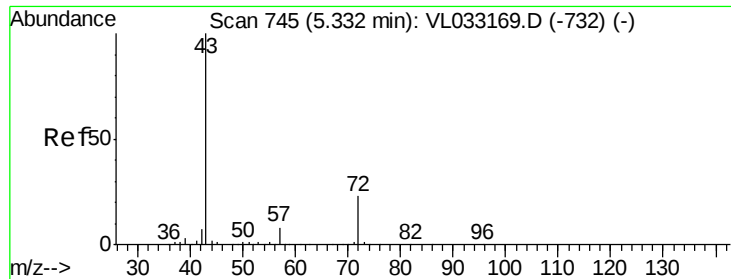
63 26.0 20.8 31.2

88 18.3 14.6 22.0



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

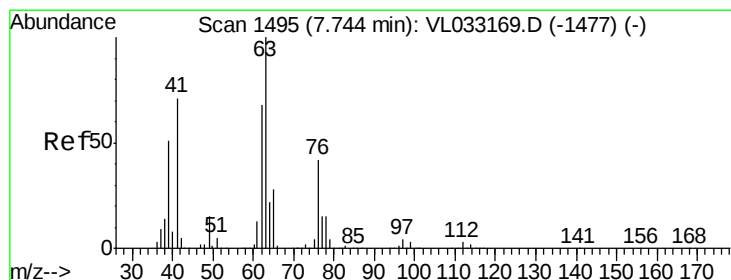
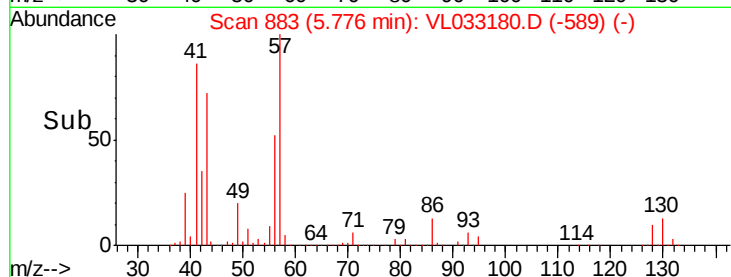
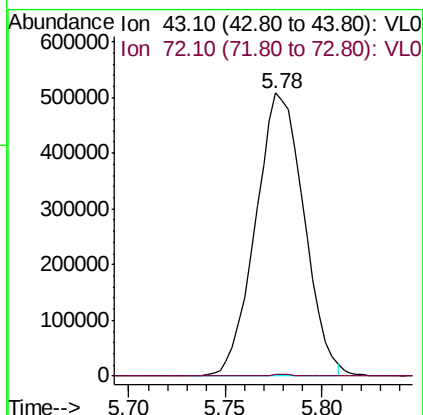
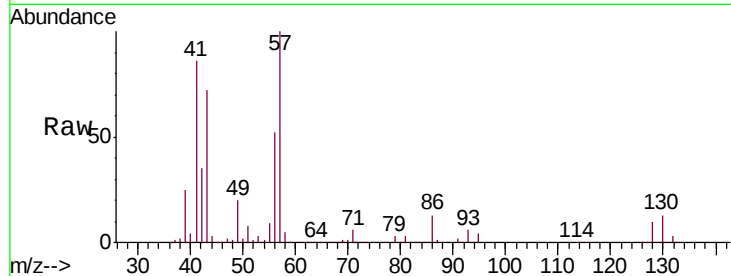




#34
 2-Butanone
 Concen: 7.072 ppbv
 RT: 5.78 min Scan# 883
 Delta R.T. 0.44 min
 Lab File: VL033180.D
 Acq: 6 Feb 2019 11:57

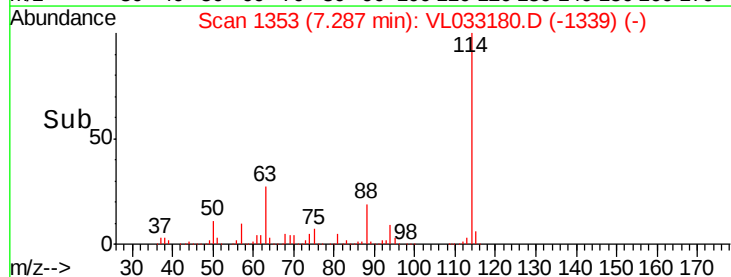
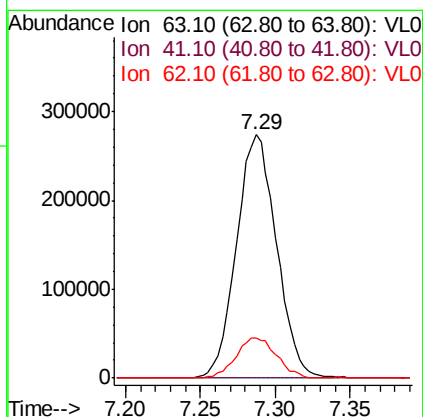
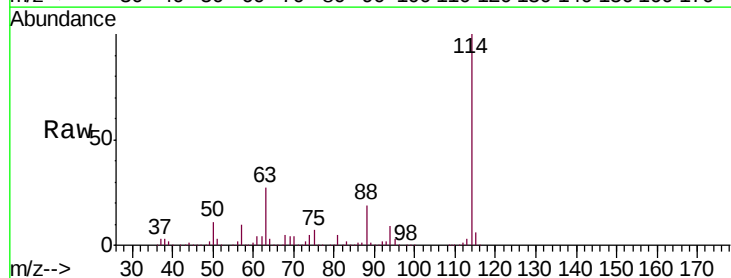
Instrument :
 MSVOA_L
 ClientSampleID :
 1000DL

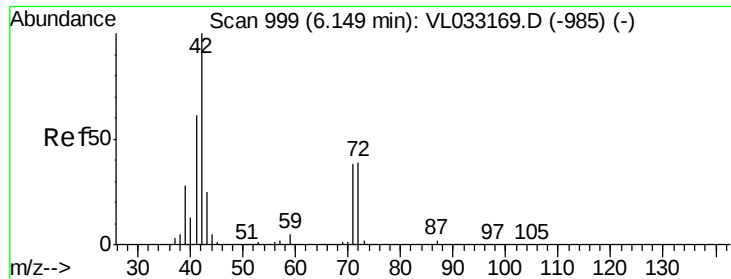
Tgt Ion: 43 Resp: 882513
 Ion Ratio Lower Upper
 43 100
 72 0.0 17.8 26.6#



#39
 1,2-Dichloropropane
 Concen: 6.464 ppbv
 RT: 7.29 min Scan# 1353
 Delta R.T. -0.46 min
 Lab File: VL033180.D
 Acq: 6 Feb 2019 11:57

Tgt Ion: 63 Resp: 509028
 Ion Ratio Lower Upper
 63 100
 41 0.1 56.4 84.6#
 62 16.5 54.2 81.4#





#41

Tetrahydrofuran

Concen: 6.009 ppbv

RT: 5.78 min Scan# 884

Delta R.T. -0.37 min

Lab File: VL033180.D

Acq: 6 Feb 2019 11:57

Instrument :

MSVOA_L

ClientSampleId :

1000DL

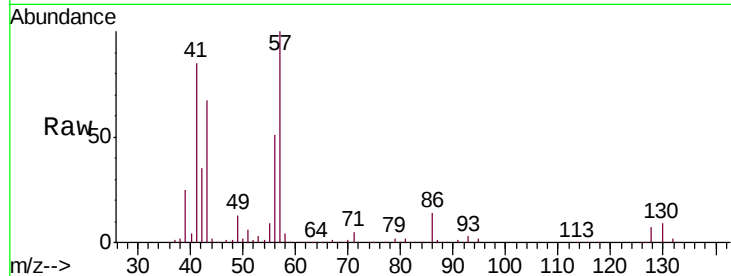
Tgt Ion: 42 Resp: 463590

Ion Ratio Lower Upper

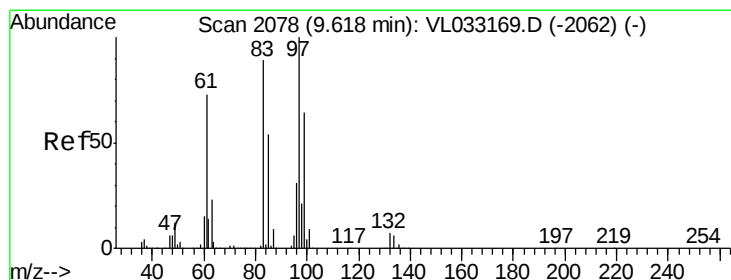
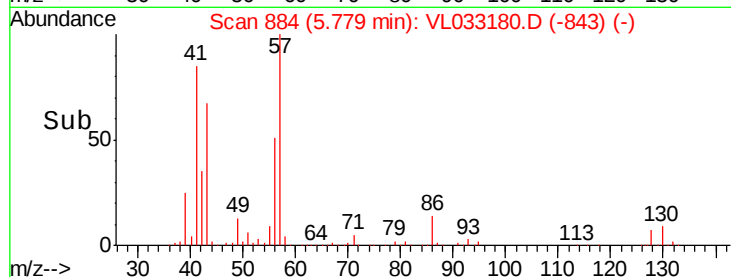
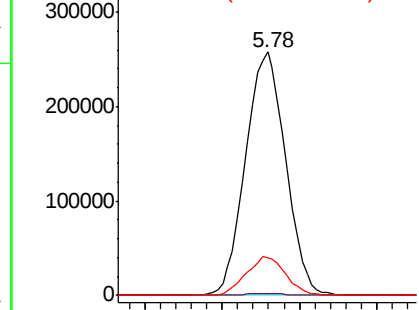
42 100

72 0.8 31.4 47.2#

71 15.6 30.2 45.2#



Abundance Ion 42.10 (41.80 to 42.80): VL0
Ion 72.10 (71.80 to 72.80): VL0
Ion 71.10 (70.80 to 71.80): VL0



#47

1,1,2-Trichloroethane

Concen: 9.674 ppbv

RT: 9.61 min Scan# 2076

Delta R.T. -0.01 min

Lab File: VL033180.D

Acq: 6 Feb 2019 11:57

Tgt Ion: 97 Resp: 790036

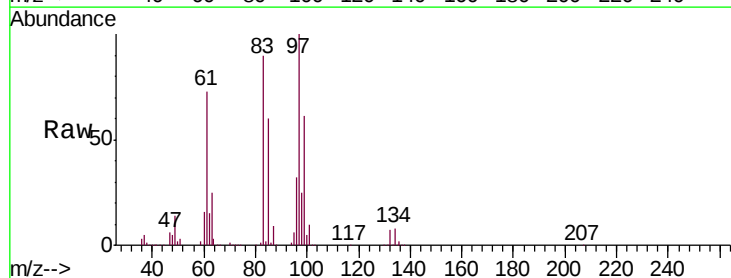
Ion Ratio Lower Upper

97 100

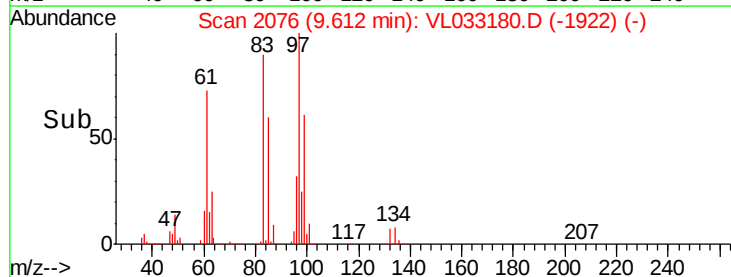
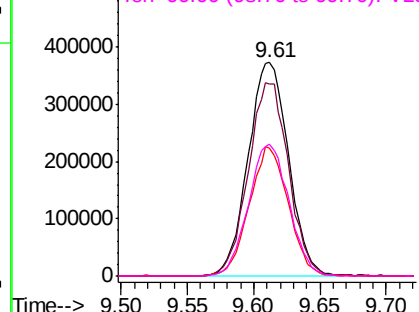
83 89.9 71.4 107.2

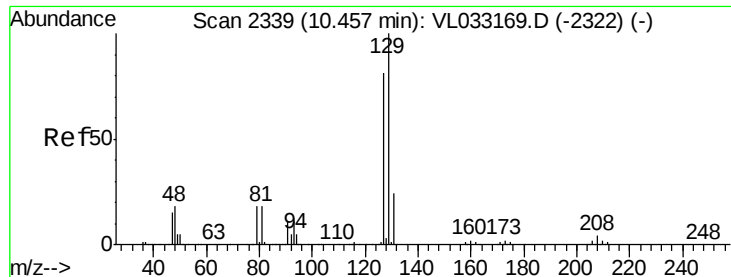
85 59.6 43.5 65.3

99 61.5 51.4 77.0



Abundance Ion 97.00 (96.70 to 97.70): VL0
Ion 83.00 (82.70 to 83.70): VL0
Ion 85.00 (84.70 to 85.70): VL0
Ion 99.00 (98.70 to 99.70): VL0





#48

Dibromochloromethane

Concen: 8.749 ppbv

RT: 10.45 min Scan# 2336

Delta R.T. -0.01 min

Lab File: VL033180.D

Acq: 6 Feb 2019 11:57

Instrument :

MSVOA_L

ClientSampleId :

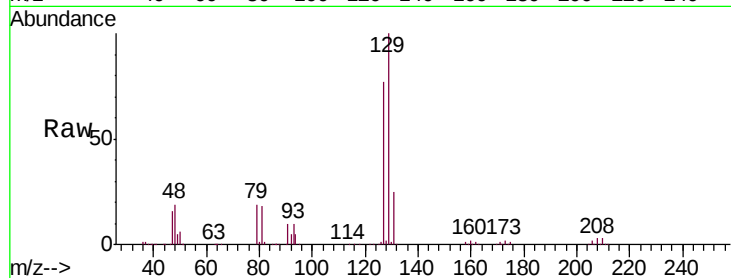
1000DL

Tgt Ion:129 Resp: 1125639

Ion Ratio Lower Upper

129 100

127 78.5 39.1 117.3



Abundance Ion 129.00 (128.70 to 129.70): V

Ion 127.00 (126.70 to 127.70): V

10.45

600000

500000

400000

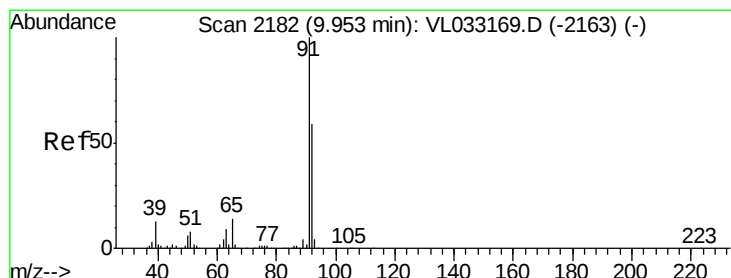
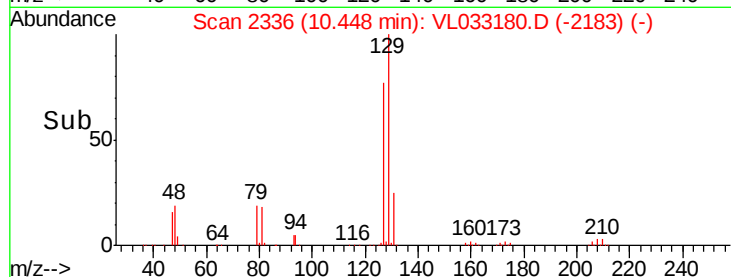
300000

200000

100000

0

Time-->



#53

Toluene

Concen: 7.445 ppbv

RT: 9.94 min Scan# 2179

Delta R.T. -0.01 min

Lab File: VL033180.D

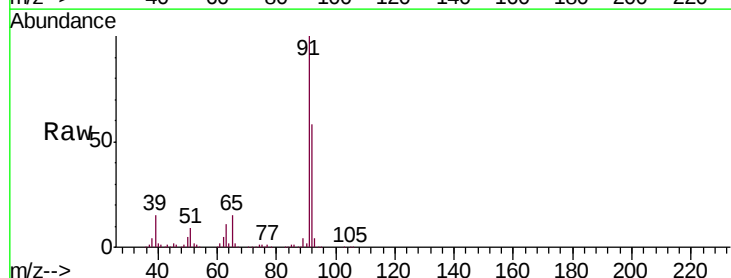
Acq: 6 Feb 2019 11:57

Tgt Ion: 91 Resp: 1757938

Ion Ratio Lower Upper

91 100

92 59.5 48.0 72.0



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0

1000000

800000

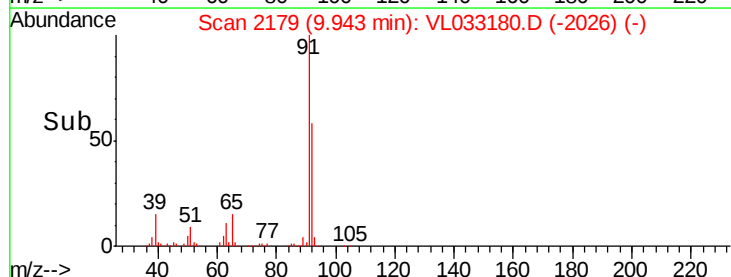
600000

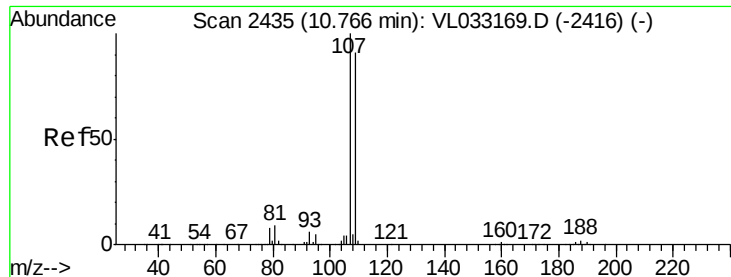
400000

200000

0

Time-->





#54

1,2-Dibromoethane

Concen: 9.241 ppbv

RT: 10.76 min Scan# 2432

Delta R.T. -0.01 min

Lab File: VL033180.D

Acq: 6 Feb 2019 11:57

Instrument :

MSVOA_L

ClientSampleId :

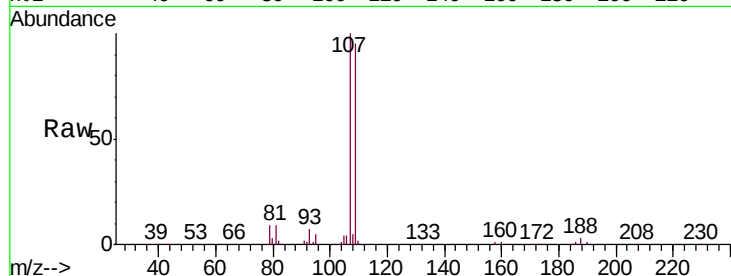
1000DL

Tgt Ion:107 Resp: 1184198

Ion Ratio Lower Upper

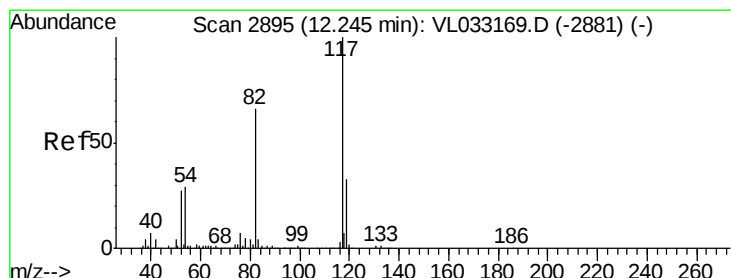
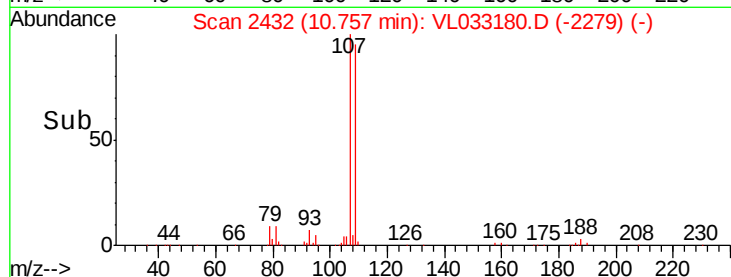
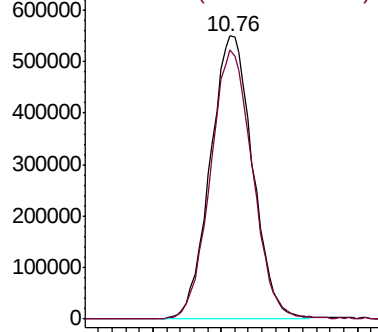
107 100

109 94.9 73.2 109.8



Abundance Ion 107.00 (106.70 to 107.70): V

Ion 109.00 (108.70 to 109.70): V



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.24 min Scan# 2893

Delta R.T. -0.01 min

Lab File: VL033180.D

Acq: 6 Feb 2019 11:57

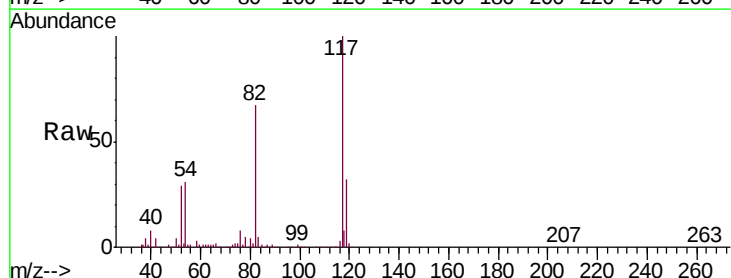
Tgt Ion:117 Resp: 2237550

Ion Ratio Lower Upper

117 100

82 66.7 53.8 80.8

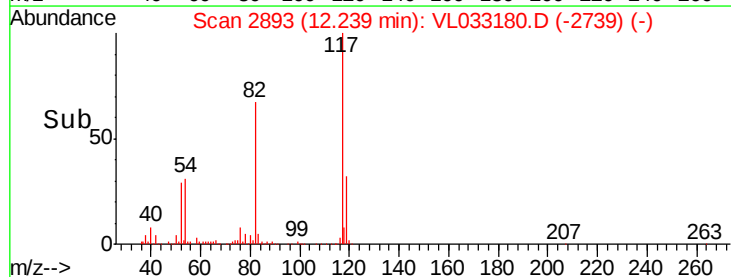
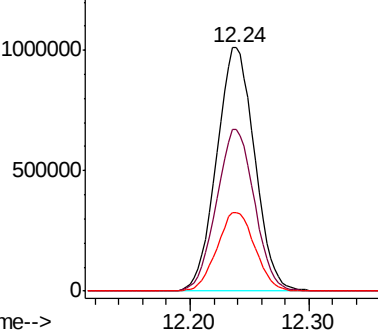
119 32.7 46.9 70.3#

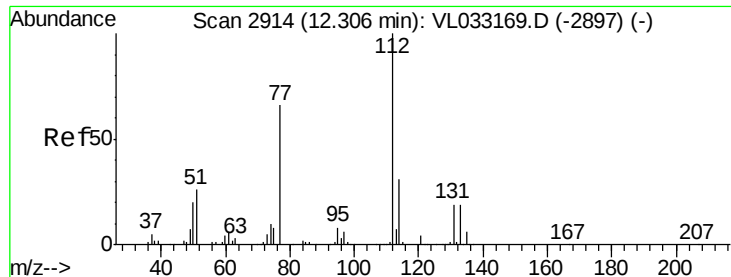


Abundance Ion 117.10 (116.80 to 117.80): V

Ion 82.10 (81.80 to 82.80): V

Ion 119.10 (118.80 to 119.80): V

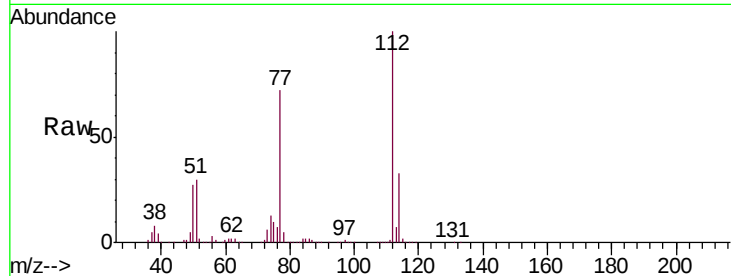




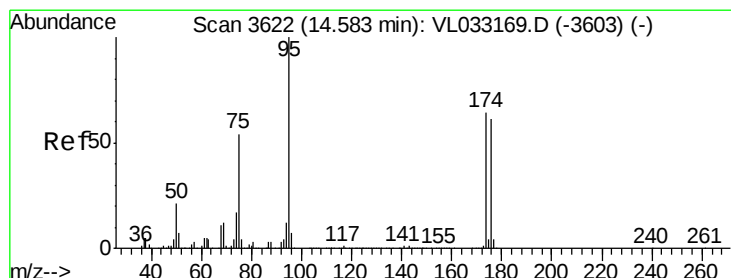
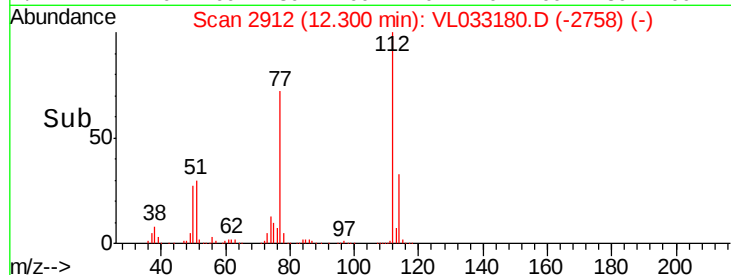
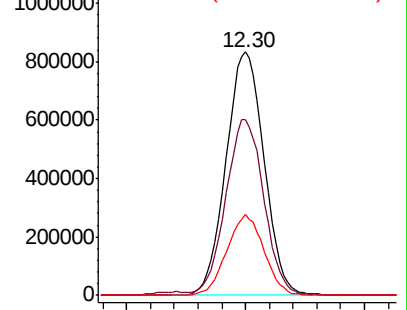
#57
Chlorobenzene
Concen: 9.334 ppbv
RT: 12.30 min Scan# 2912
Delta R.T. -0.01 min
Lab File: VL033180.D
Acq: 6 Feb 2019 11:57

Instrument :
MSVOA_L
ClientSampled :
1000DL

Tgt Ion: 112 Resp: 1847949
Ion Ratio Lower Upper
112 100
77 71.9 54.0 81.0
114 32.9 27.9 34.1

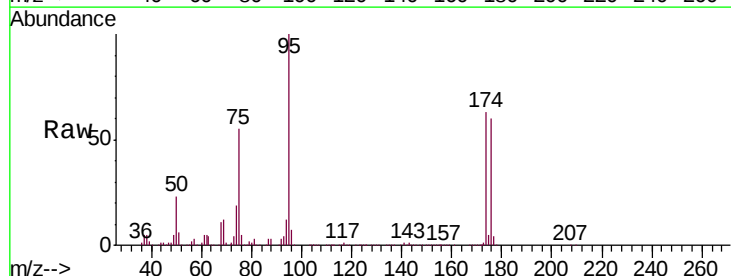


Abundance Ion 112.10 (111.80 to 112.80): V
Ion 77.10 (76.80 to 77.80): VL0
Ion 114.10 (113.80 to 114.80): V



#68
1-Bromo-4-Fluorobenzene
Concen: 10.560 ppbv
RT: 14.57 min Scan# 3619
Delta R.T. -0.01 min
Lab File: VL033180.D
Acq: 6 Feb 2019 11:57

Tgt Ion: 95 Resp: 1841465
Ion Ratio Lower Upper
95 100
174 63.8 51.1 76.7
175 4.6 3.8 5.6



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

