

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_L\DATA\VL032019\  
 Data File : VL033409.D  
 Acq On : 21 Mar 2019 3:34  
 Operator : SY/AP  
 Sample : K1975-04DL 40X  
 Misc : 400ml/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 SV2DL

Quant Time: Mar 21 12:42:09 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_L\METHODS\VL031519AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Mar 15 14:52:14 2019  
 QLast Update : Fri Mar 15 14:52:14 2019  
 Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.76  | 49   | 1202459  | 10.00 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 7.29  | 114  | 2830903  | 10.00 | ppbv  | -0.01    |
| 55) Chlorobenzene-d5    | 12.24 | 117  | 1778443  | 10.00 | ppbv  | 0.00     |

System Monitoring Compounds

|                             |        |       |          |          |      |         |
|-----------------------------|--------|-------|----------|----------|------|---------|
| 68) 1-Bromo-4-Fluorobenzene | 14.58  | 95    | 1326815  | 10.07    | ppbv | 0.00    |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 100.70% |

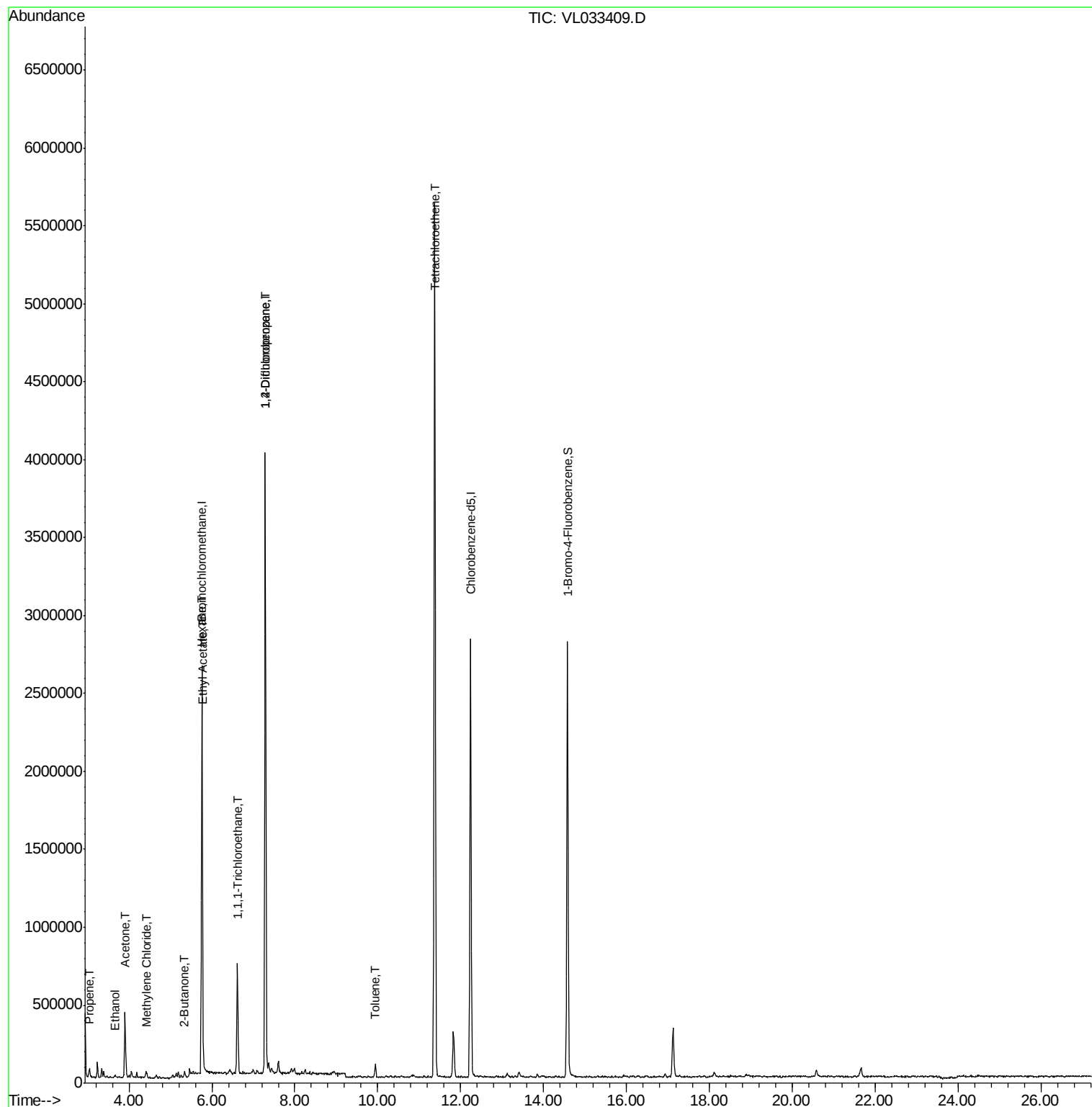
| Target Compounds          | R.T.  | QIon | Response | Conc   | Units  | Qvalue |
|---------------------------|-------|------|----------|--------|--------|--------|
| 9) Propene                | 3.04  | 41   | 9079     | 0.147  | ppbv # | 63     |
| 13) Ethanol               | 3.65  | 45   | 3545     | 0.121  | ppbv # | 38     |
| 15) Acetone               | 3.90  | 43   | 445154   | 2.382  | ppbv   | 99     |
| 20) Methylene Chloride    | 4.41  | 84   | 11221    | 0.184  | ppbv # | 85     |
| 25) Ethyl Acetate         | 5.78  | 43   | 10843    | 0.040  | ppbv # | 82     |
| 26) Hexane                | 5.77  | 57   | 12115    | 0.100  | ppbv # | 1      |
| 32) 1,1,1-Trichloroethane | 6.61  | 97   | 427046   | 2.187  | ppbv   | 99     |
| 34) 2-Butanone            | 5.35  | 43   | 39665    | 0.213  | ppbv   | 95     |
| 39) 1,2-Dichloropropane   | 7.29  | 63   | 725148   | 7.643  | ppbv # | 23     |
| 52) Tetrachloroethene     | 11.37 | 164  | 1437009  | 13.615 | ppbv   | 98     |
| 53) Toluene               | 9.95  | 91   | 61018    | 0.212  | ppbv   | 96     |

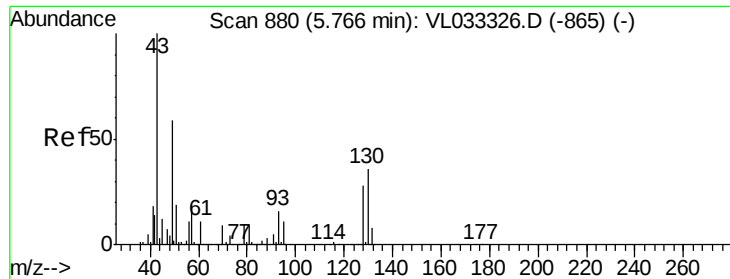
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA\_L\DATA\VL032019\  
Data File : VL033409.D  
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Misc : 400ml/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
SV2DL

Quant Time: Mar 21 12:42:09 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_L\METHODS\VL031519AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Mar 15 14:52:14 2019  
QLast Update : Fri Mar 15 14:52:14 2019  
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.76 min Scan# 878

Delta R.T. -0.01 min

Lab File: VL033409.D

Acq: 21 Mar 2019 3:34

Instrument :

MSVOA\_L

ClientSampleId :

SV2DL

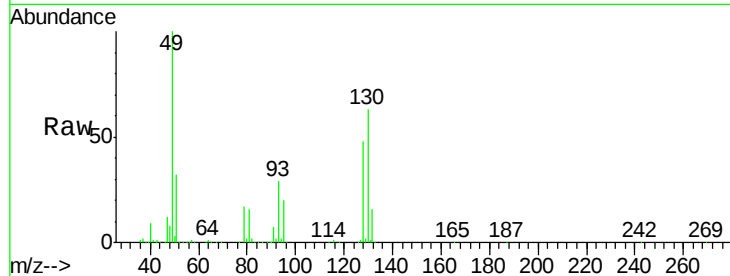
Tgt Ion: 49 Resp: 1202459

Ion Ratio Lower Upper

49 100

128 48.5 23.5 70.6

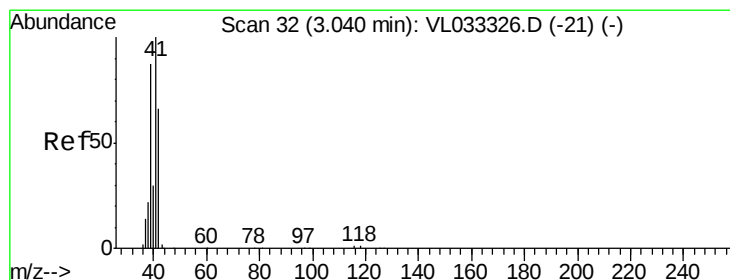
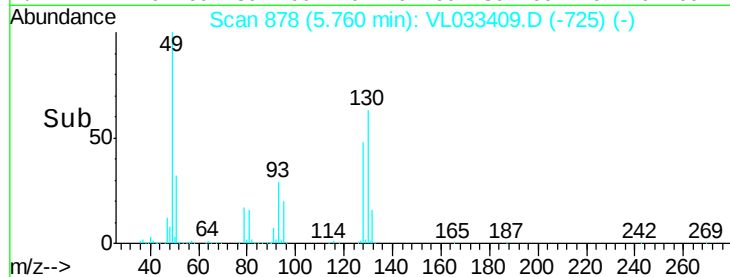
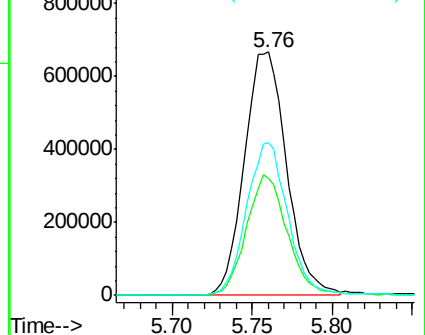
130 61.8 30.1 90.3



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



#9

Propene

Concen: 0.147 ppbv

RT: 3.04 min Scan# 31

Delta R.T. -0.00 min

Lab File: VL033409.D

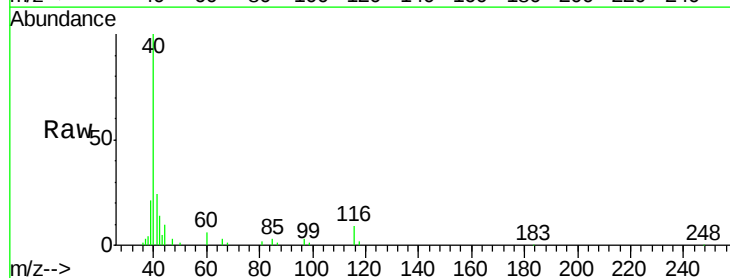
Acq: 21 Mar 2019 3:34

Tgt Ion: 41 Resp: 9079

Ion Ratio Lower Upper

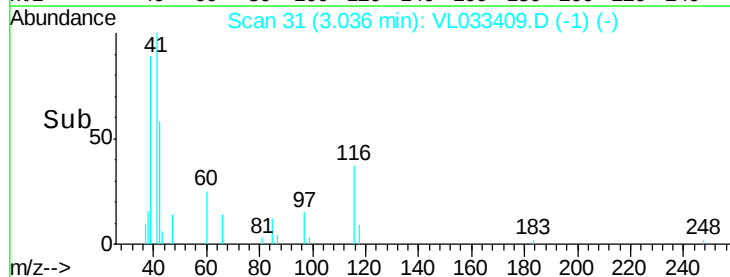
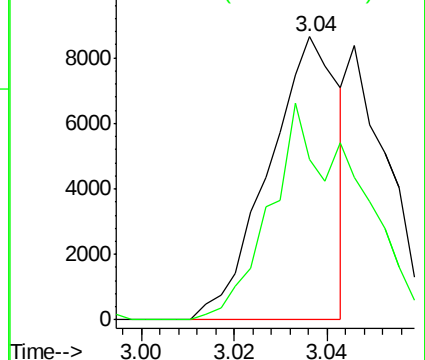
41 100

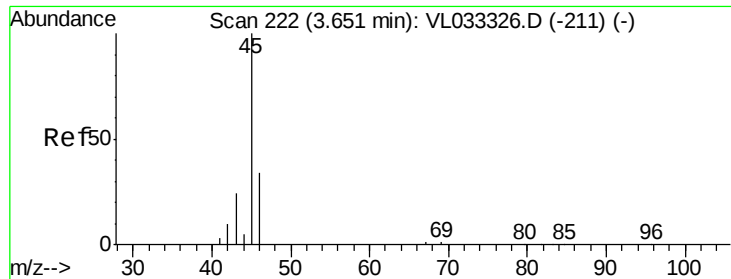
42 98.9 55.2 82.8#



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0

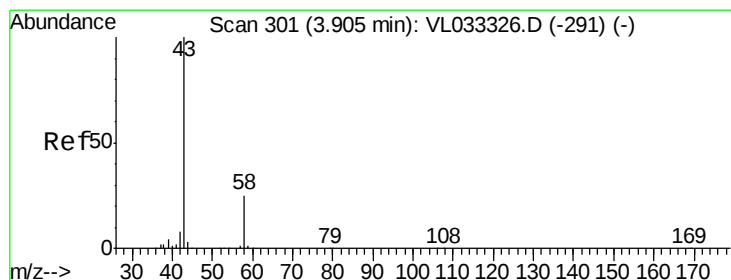
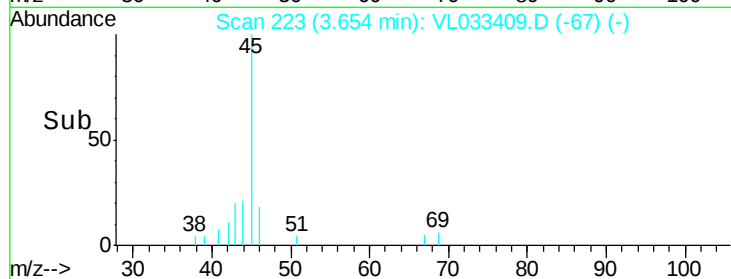
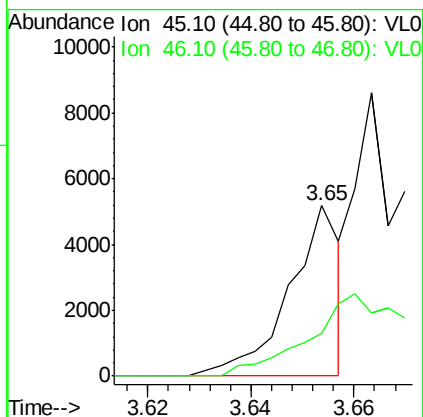
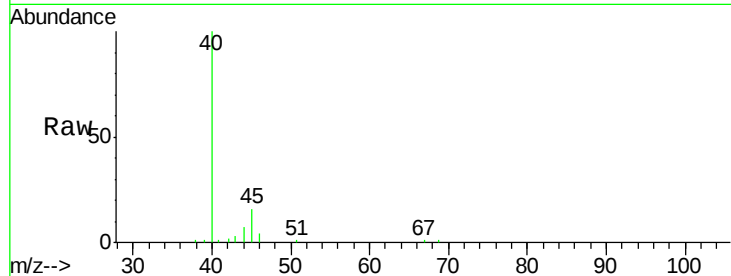




#13  
Ethanol  
Concen: 0.121 ppbv  
RT: 3.65 min Scan# 223  
Delta R.T. 0.00 min  
Lab File: VL033409.D  
Acq: 21 Mar 2019 3:34

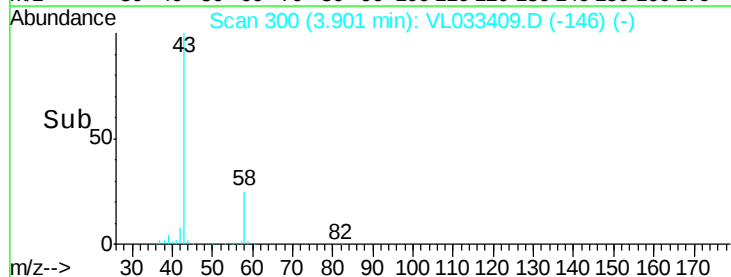
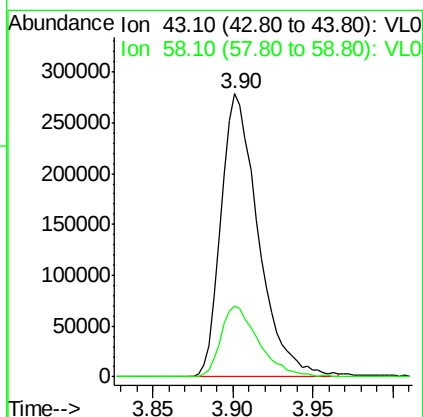
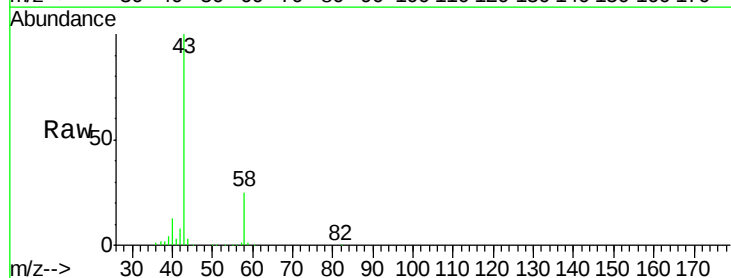
Instrument :  
MSVOA\_L  
ClientSampleId :  
SV2DL

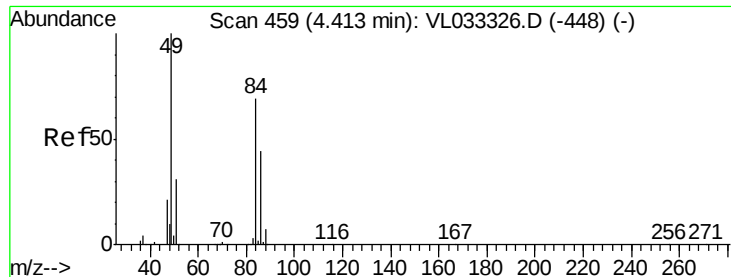
Tgt Ion: 45 Resp: 3545  
Ion Ratio Lower Upper  
45 100  
46 0.0 14.9 59.7#



#15  
Acetone  
Concen: 2.382 ppbv  
RT: 3.90 min Scan# 300  
Delta R.T. -0.00 min  
Lab File: VL033409.D  
Acq: 21 Mar 2019 3:34

Tgt Ion: 43 Resp: 445154  
Ion Ratio Lower Upper  
43 100  
58 25.8 20.4 30.6





#20

Methylene Chloride

Concen: 0.184 ppbv

RT: 4.41 min Scan# 459

Delta R.T. -0.00 min

Lab File: VL033409.D

Acq: 21 Mar 2019 3:34

Instrument :

MSVOA\_L

ClientSampleId :

SV2DL

Tgt Ion: 84 Resp: 11221

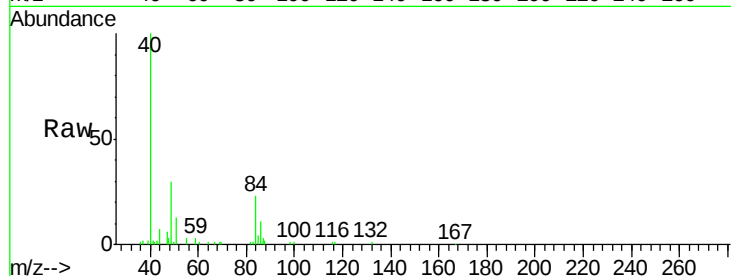
Ion Ratio Lower Upper

84 100

49 129.0 115.4 173.0

51 54.2 35.8 53.6#

86 46.6 50.6 75.8#

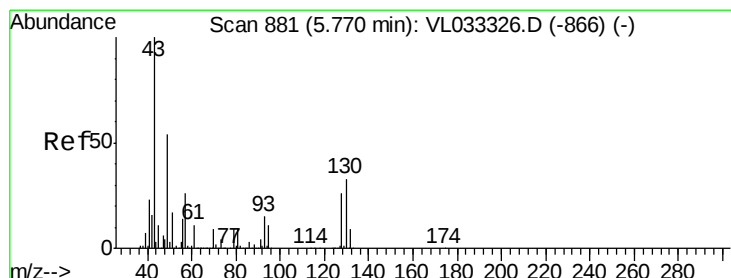
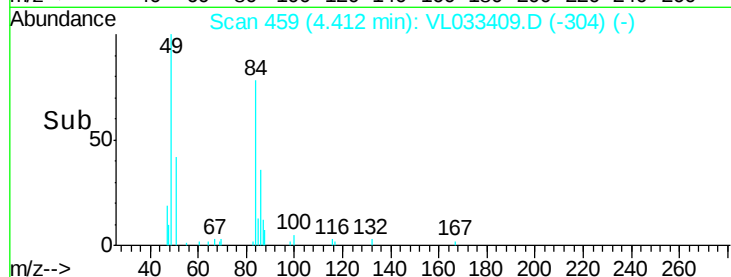
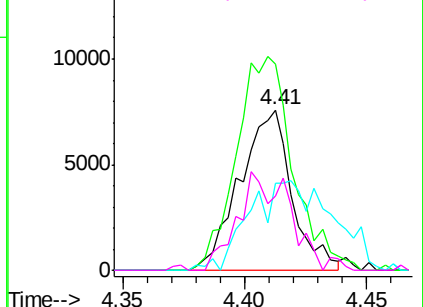


Abundance Ion 84.00 (83.70 to 84.70): VL0

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



#25

Ethyl Acetate

Concen: 0.040 ppbv

RT: 5.78 min Scan# 883

Delta R.T. 0.01 min

Lab File: VL033409.D

Acq: 21 Mar 2019 3:34

Tgt Ion: 43 Resp: 10843

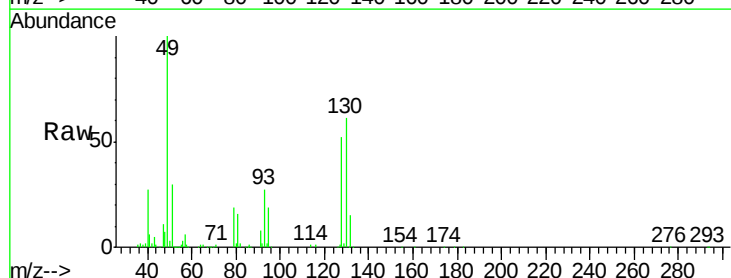
Ion Ratio Lower Upper

43 100

45 2.4 7.9 11.9#

61 0.0 7.4 11.2#

70 5.0 5.7 8.5#

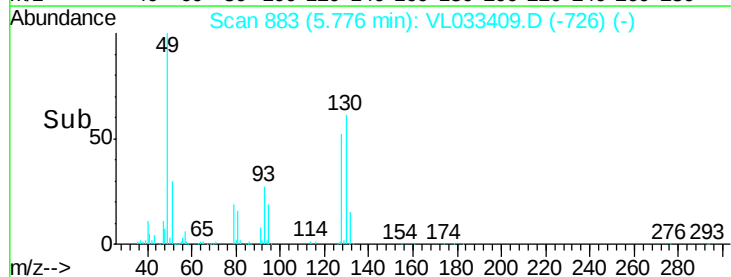
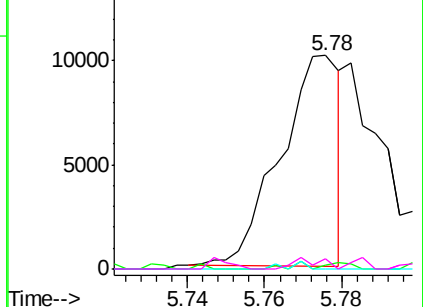


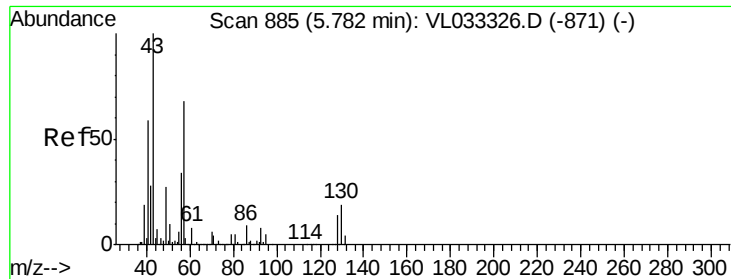
Abundance Ion 43.10 (42.80 to 43.80): VL0

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

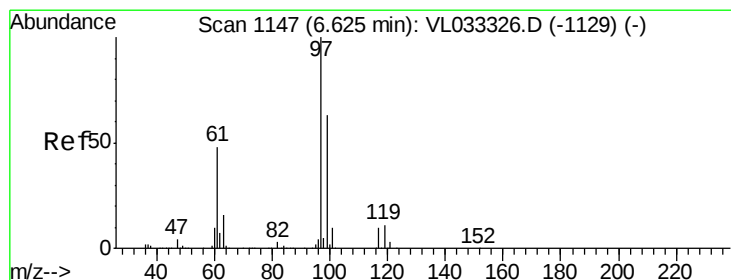
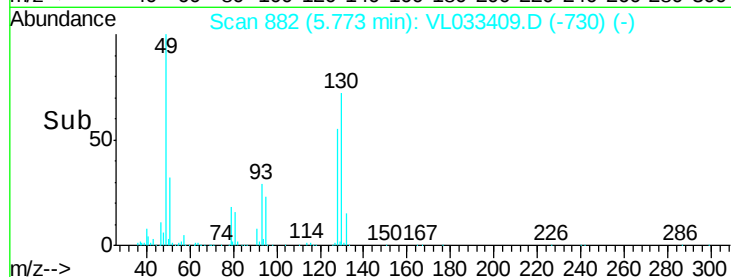
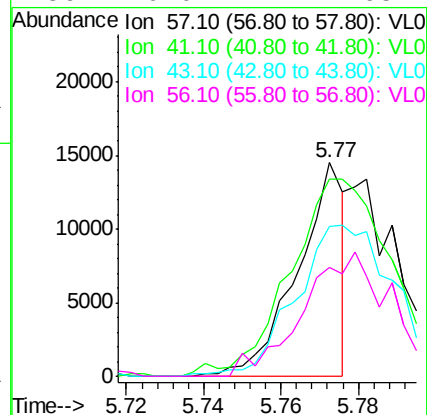
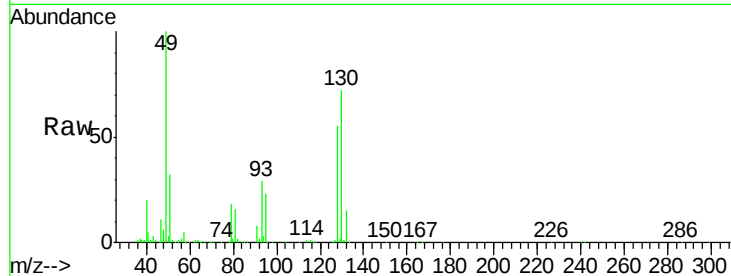




#26  
Hexane  
Concen: 0.100 ppbv  
RT: 5.77 min Scan# 882  
Delta R.T. -0.01 min  
Lab File: VL033409.D  
Acq: 21 Mar 2019 3:34

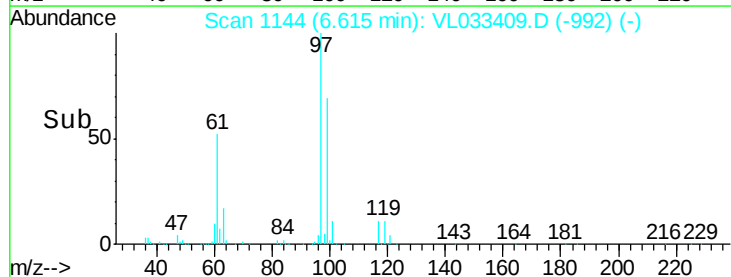
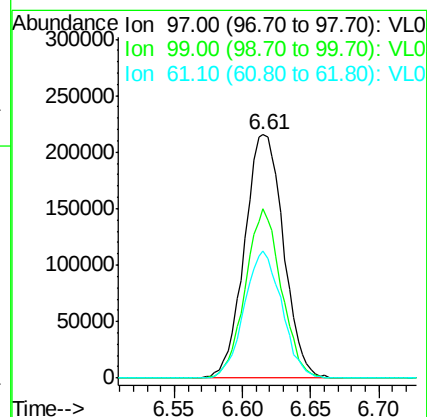
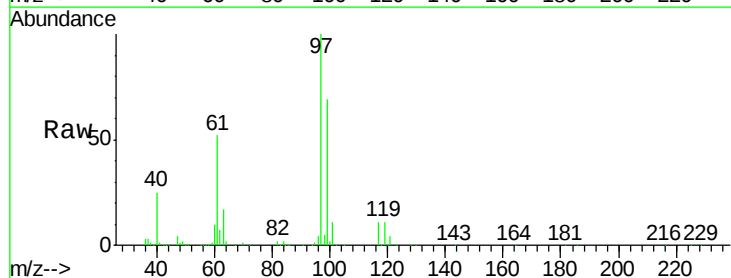
Instrument :  
MSVOA\_L  
ClientSampleId :  
SV2DL

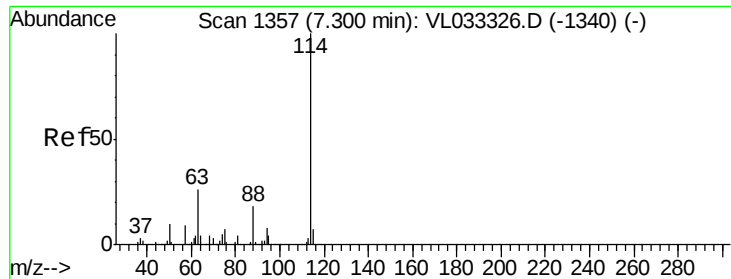
Tgt Ion: 57 Resp: 12115  
Ion Ratio Lower Upper  
57 100  
41 209.1 70.5 105.7#  
43 0.0 181.8 272.8#  
56 0.0 42.2 63.2#



#32  
1,1,1-Trichloroethane  
Concen: 2.187 ppbv  
RT: 6.61 min Scan# 1144  
Delta R.T. -0.01 min  
Lab File: VL033409.D  
Acq: 21 Mar 2019 3:34

Tgt Ion: 97 Resp: 427046  
Ion Ratio Lower Upper  
97 100  
99 64.2 51.0 76.6  
61 50.6 39.3 58.9

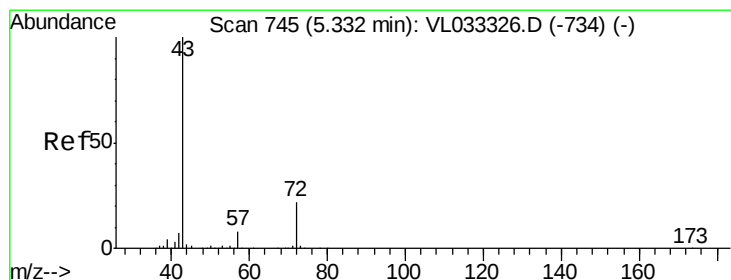
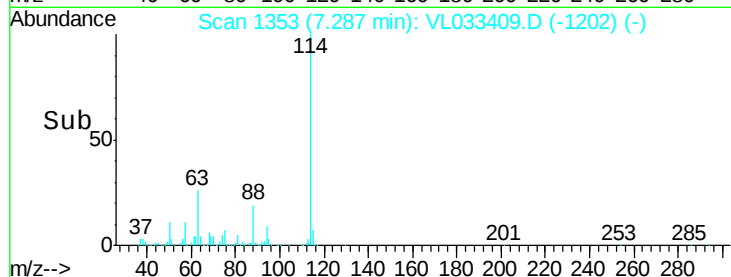
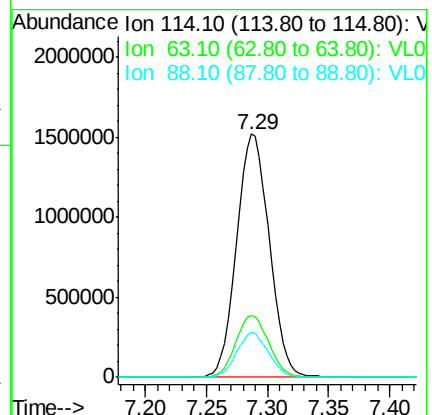
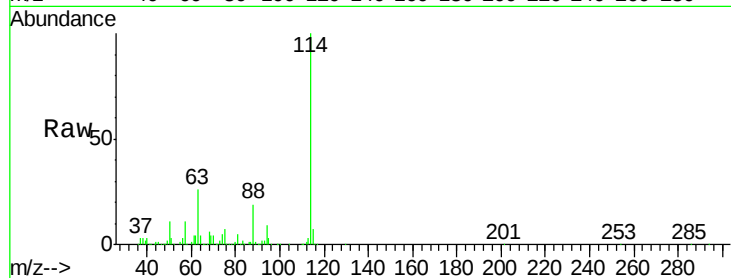




#33  
 1,4-Difluorobenzene  
 Concen: 10.000 ppbv  
 RT: 7.29 min Scan# 1353  
 Delta R.T. -0.01 min  
 Lab File: VL033409.D  
 Acq: 21 Mar 2019 3:34

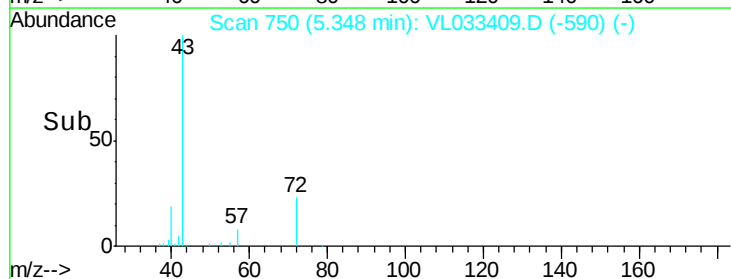
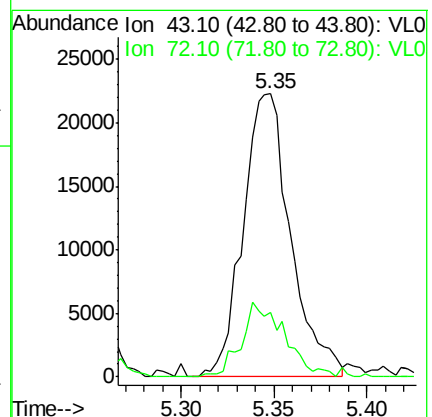
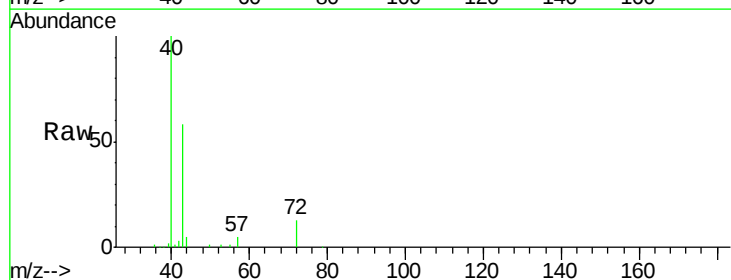
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 SV2DL

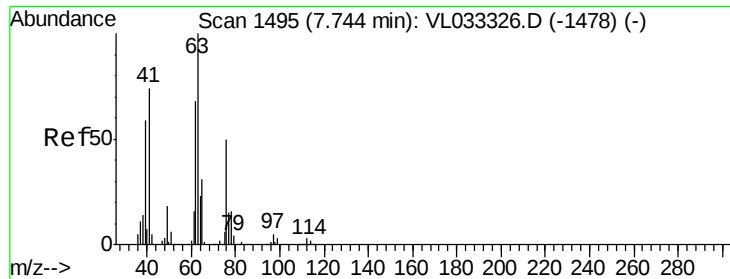
Tgt Ion: 114 Resp: 2830903  
 Ion Ratio Lower Upper  
 114 100  
 63 25.7 21.4 32.2  
 88 18.0 14.5 21.7



#34  
 2-Butanone  
 Concen: 0.213 ppbv  
 RT: 5.35 min Scan# 750  
 Delta R.T. 0.02 min  
 Lab File: VL033409.D  
 Acq: 21 Mar 2019 3:34

Tgt Ion: 43 Resp: 39665  
 Ion Ratio Lower Upper  
 43 100  
 72 24.3 17.7 26.5





#39

1,2-Dichloropropane

Concen: 7.643 ppbv

RT: 7.29 min Scan# 1353

Delta R.T. -0.46 min

Lab File: VL033409.D

Acq: 21 Mar 2019 3:34

Instrument :

MSVOA\_L

ClientSampleId :

SV2DL

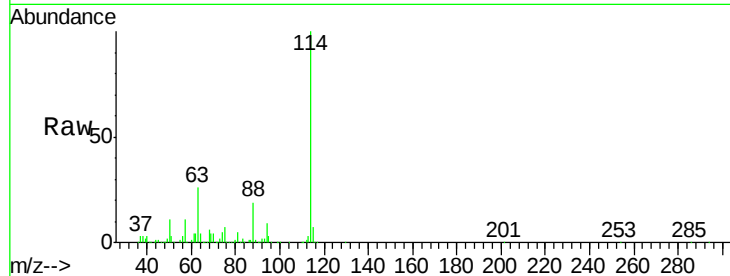
Tgt Ion: 63 Resp: 725148

Ion Ratio Lower Upper

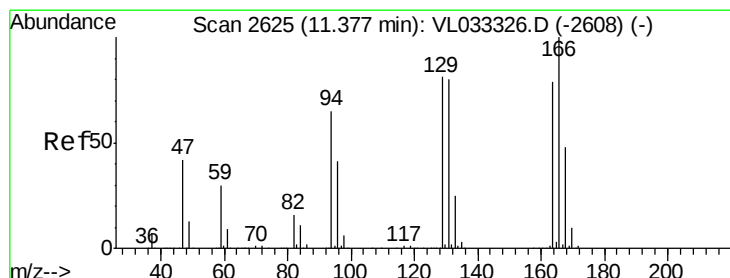
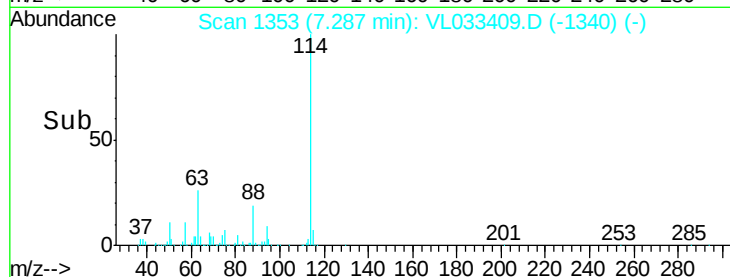
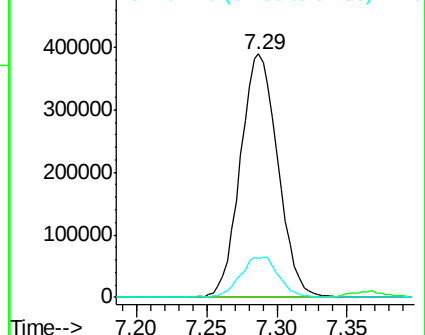
63 100

41 0.0 59.5 89.3#

62 16.0 54.7 82.1#



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



#52

Tetrachloroethene

Concen: 13.615 ppbv

RT: 11.37 min Scan# 2624

Delta R.T. -0.00 min

Lab File: VL033409.D

Acq: 21 Mar 2019 3:34

Tgt Ion:164 Resp: 1437009

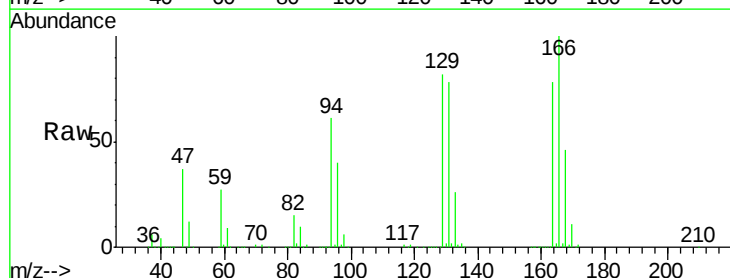
Ion Ratio Lower Upper

164 100

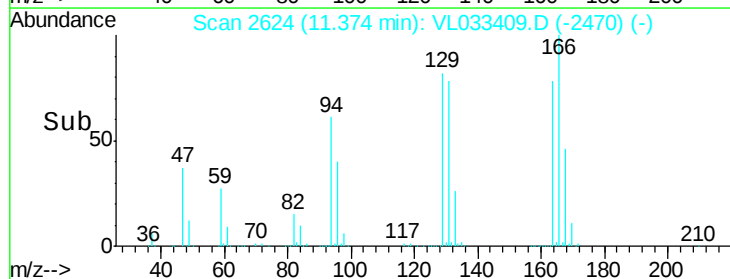
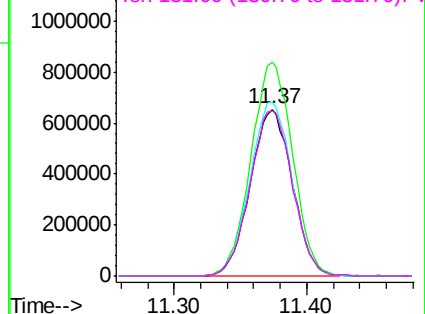
166 128.1 101.5 152.3

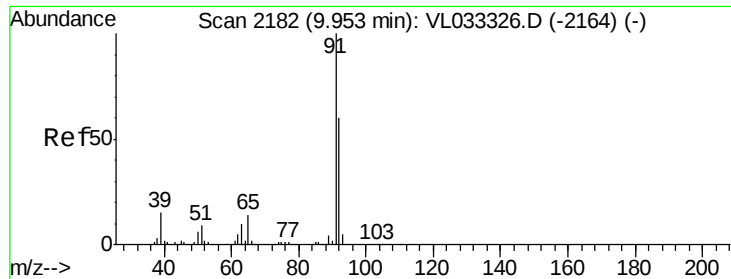
129 104.5 82.2 123.2

131 99.3 81.1 121.7



Abundance Ion 163.90 (163.60 to 164.60): V  
Ion 165.90 (165.60 to 166.60): V  
Ion 129.00 (128.70 to 129.70): V  
Ion 131.00 (130.70 to 131.70): V





#53

Toluene

Concen: 0.212 ppbv

RT: 9.95 min Scan# 2180

Delta R.T. -0.01 min

Lab File: VL033409.D

Acq: 21 Mar 2019 3:34

Instrument :

MSVOA\_L

ClientSampleId :

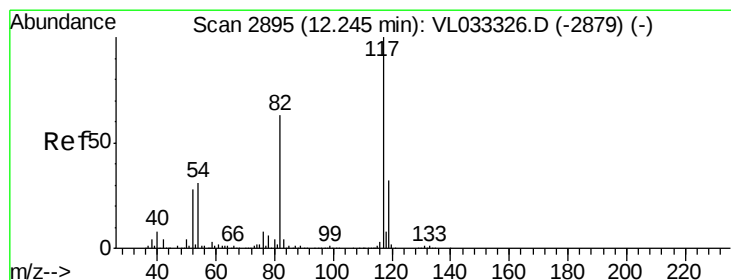
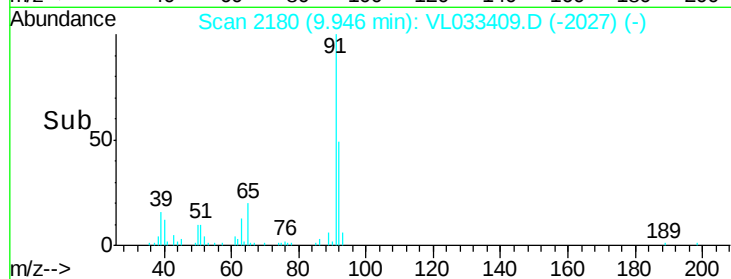
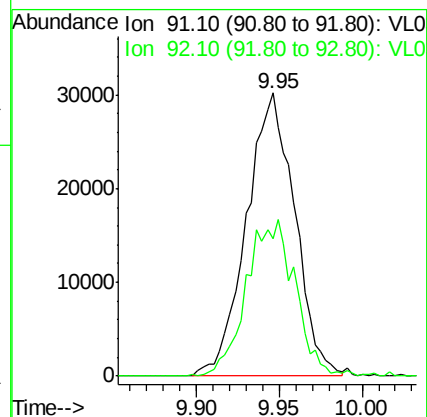
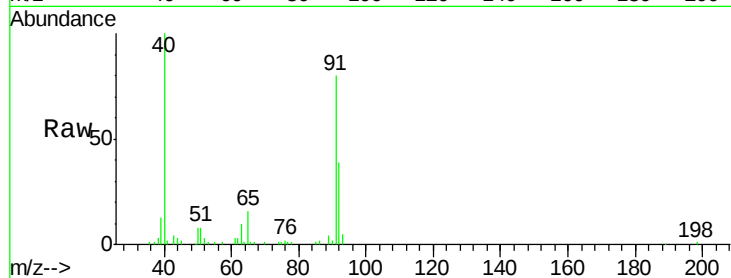
SV2DL

Tgt Ion: 91 Resp: 61018

Ion Ratio Lower Upper

91 100

92 55.9 47.4 71.0



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.24 min Scan# 2893

Delta R.T. -0.01 min

Lab File: VL033409.D

Acq: 21 Mar 2019 3:34

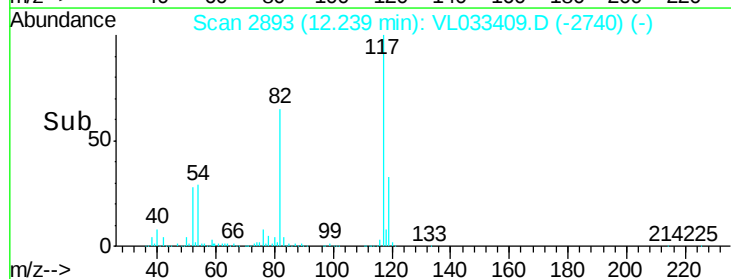
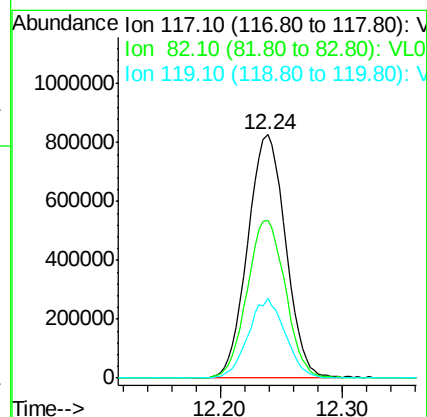
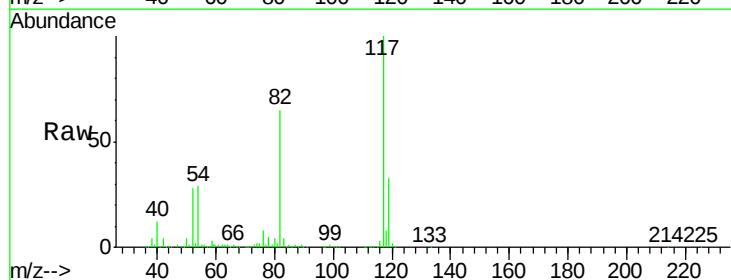
Tgt Ion: 117 Resp: 1778443

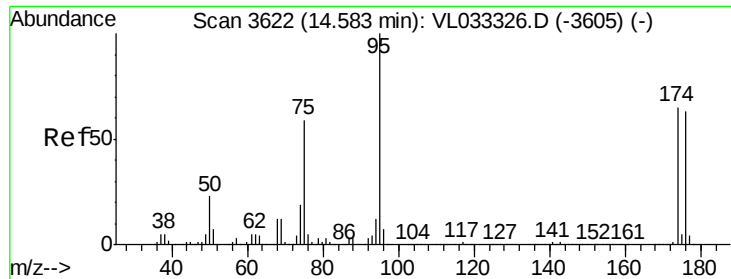
Ion Ratio Lower Upper

117 100

82 65.6 53.4 80.2

119 32.1 27.3 40.9





#68

1-Bromo-4-Fluorobenzene

Concen: 10.068 ppbv

RT: 14.58 min Scan# 3620

Delta R.T. -0.01 min

Lab File: VL033409.D

Acq: 21 Mar 2019 3:34

Instrument :

MSVOA\_L

ClientSampleId :

SV2DL

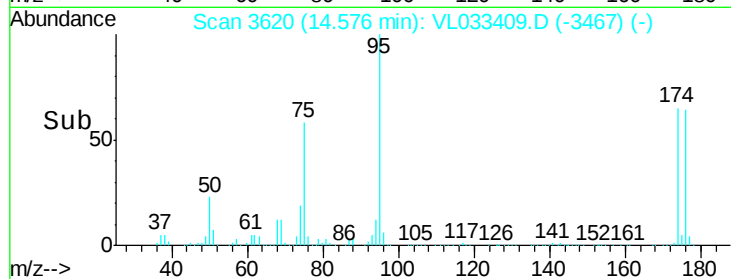
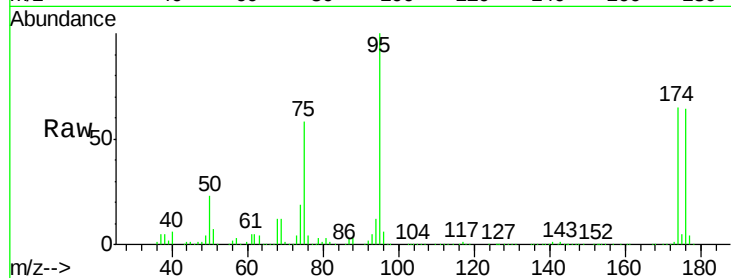
Tgt Ion: 95 Resp: 1326815

Ion Ratio Lower Upper

95 100

174 65.8 51.5 77.3

175 4.8 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

