

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX112719\  
 Data File : VX013657.D  
 Acq On : 27 Nov 2019 17:24  
 Operator : JC/SP  
 Sample : K5962-14  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 18 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 BFB

Quant Time: Nov 28 03:31:32 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X112619W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Nov 26 15:53:00 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.65  | 168  | 649477   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.85  | 114  | 1047249  | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.11 | 117  | 941830   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.07 | 152  | 441097   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 6.05  | 65   | 377788   | 50.11 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 100.22% |          |
| 35) Dibromofluoromethane    | 5.49  | 113  | 312209   | 48.22 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 96.44%  |          |
| 50) Toluene-d8              | 8.71  | 98   | 1238448  | 49.10 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 98.20%  |          |
| 62) 4-Bromofluorobenzene    | 11.14 | 95   | 424346   | 46.65 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 93.30%  |          |

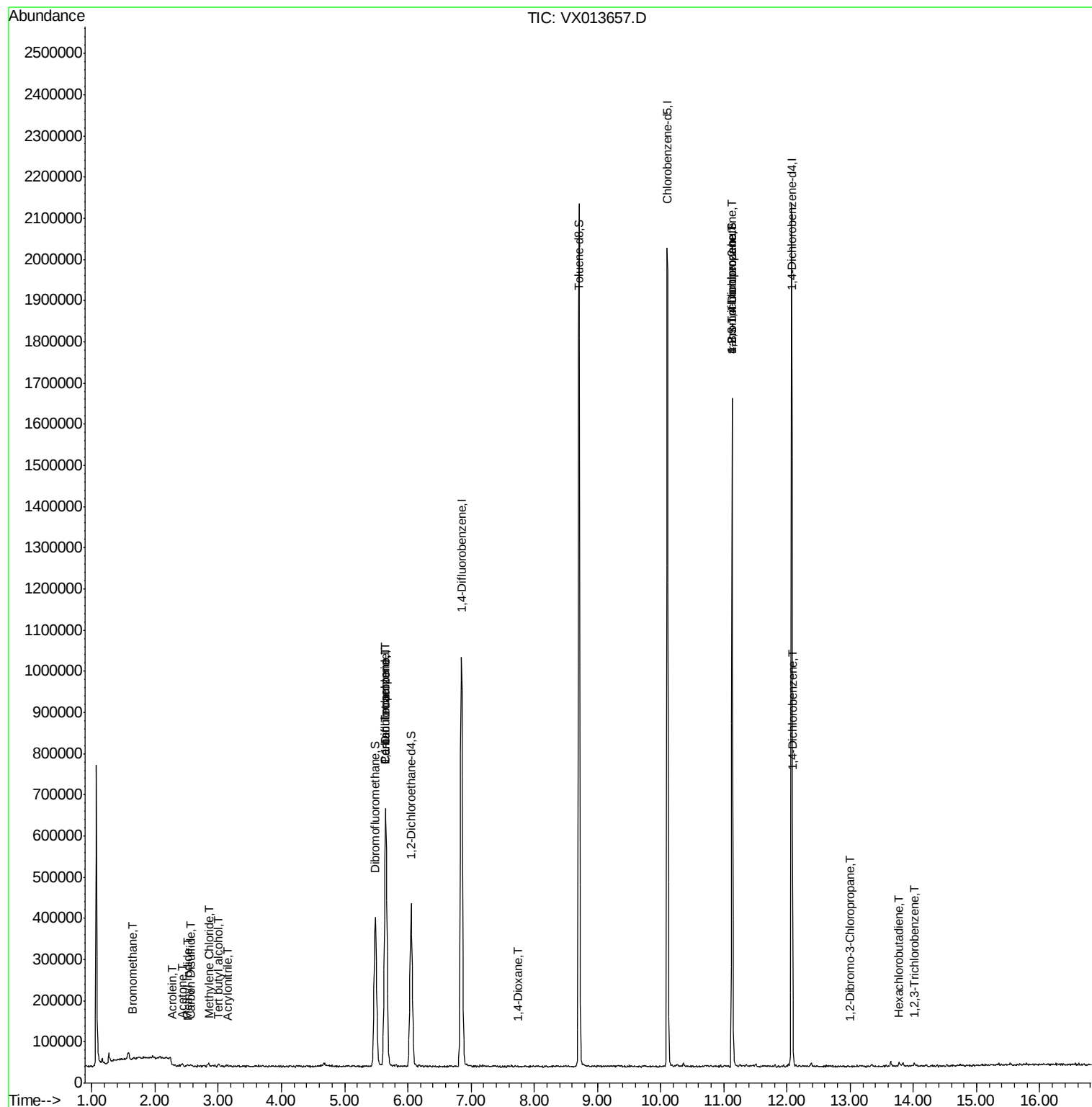
| Target Compounds               | R.T.  | QIon | Response | Conc   | Units  | Qvalue |
|--------------------------------|-------|------|----------|--------|--------|--------|
| 5) Bromomethane                | 1.64  | 94   | 1647     | 0.269  | ug/l # | 43     |
| 10) Methyl Iodide              | 2.52  | 142  | 2562     | 0.342  | ug/l # | 52     |
| 11) Tert butyl alcohol         | 3.01  | 59   | 2924     | 1.571  | ug/l # | 93     |
| 13) Acrolein                   | 2.27  | 56   | 151      | 6.122  | ug/l # | 1      |
| 15) Acrylonitrile              | 3.14  | 53   | 1994     | 0.519  | ug/l # | 27     |
| 16) Acetone                    | 2.43  | 43   | 7447     | 2.001  | ug/l # | 75     |
| 17) Carbon Disulfide           | 2.56  | 76   | 4411     | 0.250  | ug/l # | 91     |
| 20) Methylene Chloride         | 2.85  | 84   | 3632     | 0.508  | ug/l # | 82     |
| 36) 1,1-Dichloropropene        | 5.65  | 75   | 44058    | 4.635  | ug/l # | 51     |
| 38) Carbon Tetrachloride       | 5.65  | 117  | 58685    | 6.695  | ug/l # | 15     |
| 49) 1,4-Dioxane                | 7.73  | 88   | 247      | 1.294  | ug/l # | 1      |
| 76) 1,2,3-Trichloropropane     | 11.13 | 75   | 211620   | 21.330 | ug/l # | 40     |
| 81) trans-1,4-Dichloro-2-buten | 11.13 | 75   | 211620   | 58.356 | ug/l # | 11     |
| 88) 1,4-Dichlorobenzene        | 12.09 | 146  | 3416     | 0.230  | ug/l # | 71     |
| 92) 1,2-Dibromo-3-Chloropropan | 12.99 | 75   | 648      | 0.277  | ug/l # | 68     |
| 94) Hexachlorobutadiene        | 13.78 | 225  | 1471     | 0.305  | ug/l   | 66     |
| 96) 1,2,3-Trichlorobenzene     | 14.01 | 180  | 2239     | 0.225  | ug/l   | 75     |

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

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA X\DATA\VX112719\  
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Sample : K5962-14  
Misc : 5.0mL/MSVOA X/WATER  
ALS Vial : 18 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :  
BFB

Quant Time: Nov 28 03:31:32 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X112619W.M  
Quant Title : SW846 8260  
QLast Update : Tue Nov 26 15:53:00 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.65 min Scan# 781

Delta R.T. 0.00 min

Lab File: VX013657.D

Acq: 27 Nov 2019 17:24

Instrument :

MSVOA\_X

ClientSampleId :

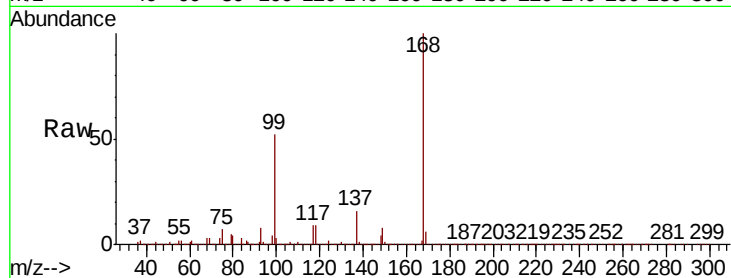
BFB

Tot Ion:168 Resp: 649477

Ion Ratio Lower Upper

168 100

99 51.6 39.8 59.8



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

5.65

250000

200000

150000

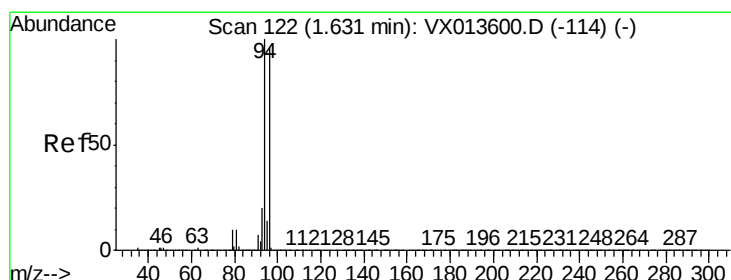
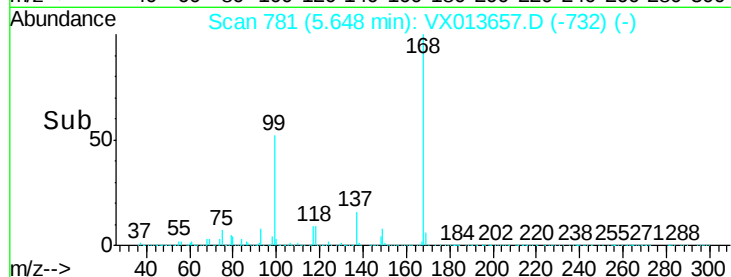
100000

50000

0

Time-->

5.50 5.60 5.70 5.80



#5

Bromomethane

Concen: 0.269 ug/l

RT: 1.64 min Scan# 124

Delta R.T. 0.01 min

Lab File: VX013657.D

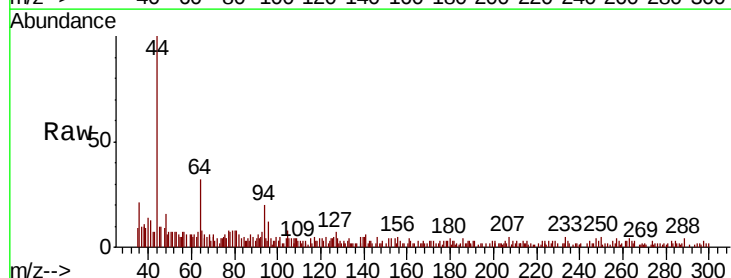
Acq: 27 Nov 2019 17:24

Tgt Ion: 94 Resp: 1647

Ion Ratio Lower Upper

94 100

96 40.9 77.0 115.4#



Abundance Ion 93.90 (93.60 to 94.60): VX0

Ion 95.90 (95.60 to 96.60): VX0

1.64

1200

1000

800

600

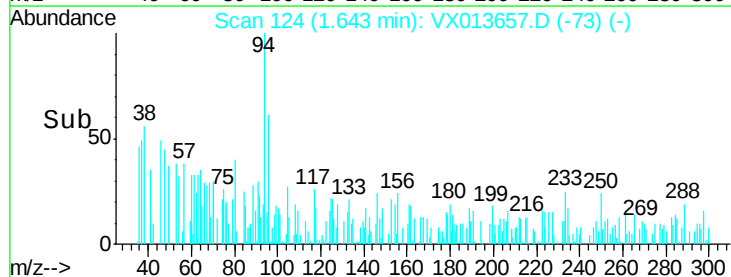
400

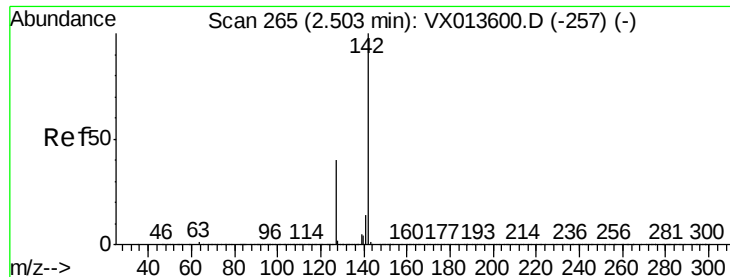
200

0

Time-->

1.60 1.65 1.70

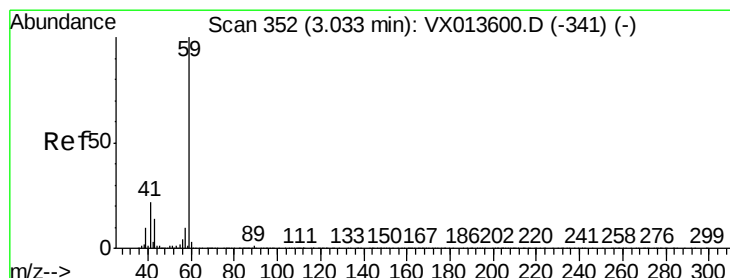
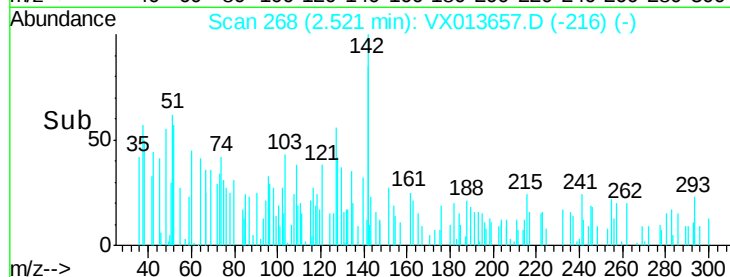
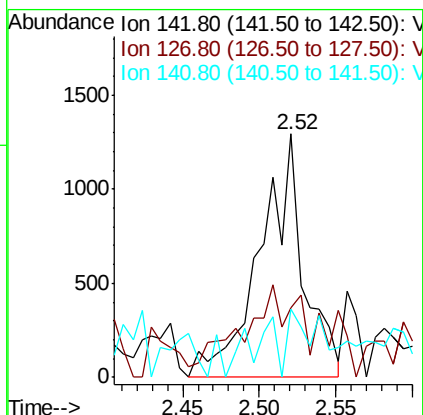
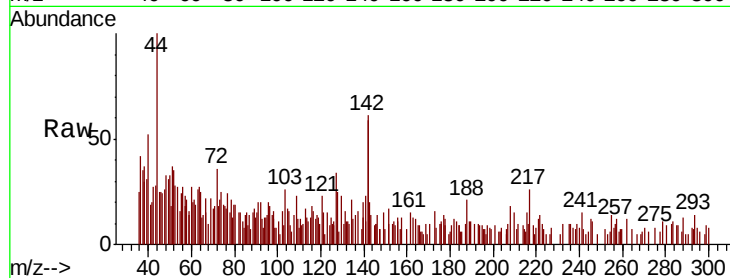




#10  
Methvl Iodide  
Concen: 0.342 ug/l  
RT: 2.52 min Scan# 268  
Delta R.T. 0.02 min  
Lab File: VX013657.D  
Acq: 27 Nov 2019 17:24

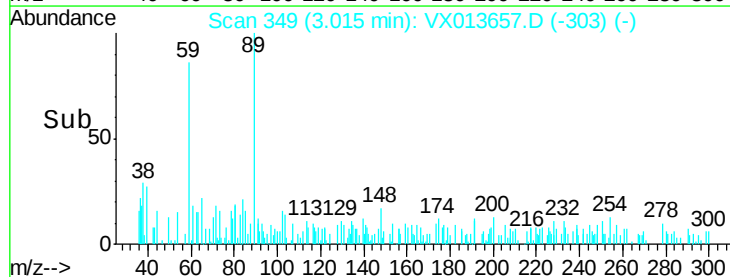
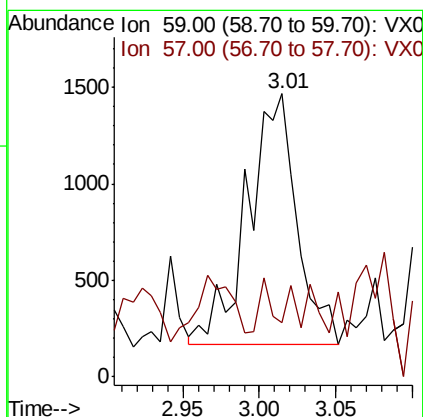
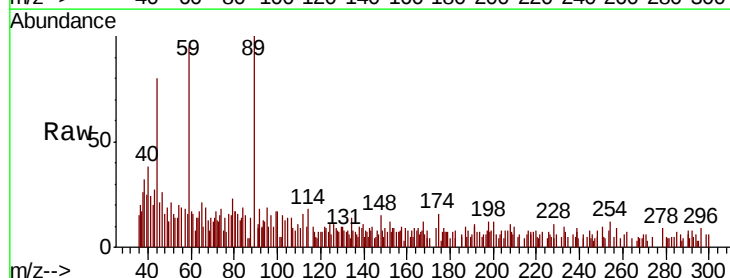
Instrument :  
MSVOA\_X  
ClientSampleId :  
BFB

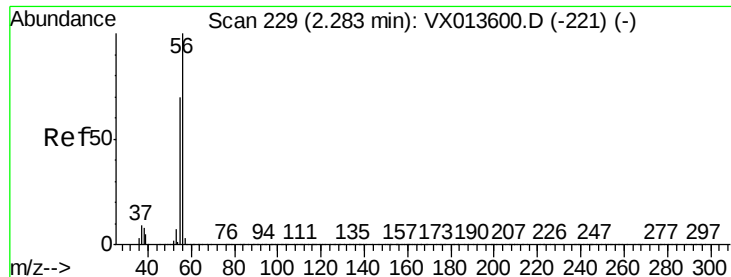
Tot Ion:142 Resp: 2562  
Ion Ratio Lower Upper  
142 100  
127 0.0 31.0 46.4#  
141 11.4 11.6 17.4#



#11  
Tert butyl alcohol  
Concen: 1.571 ug/l  
RT: 3.01 min Scan# 349  
Delta R.T. -0.02 min  
Lab File: VX013657.D  
Acq: 27 Nov 2019 17:24

Tgt Ion: 59 Resp: 2924  
Ion Ratio Lower Upper  
59 100  
57 7.0 7.8 11.6#





#13

Acrolein

Concen: 6.122 ug/l

RT: 2.27 min Scan# 227

Delta R.T. -0.01 min

Lab File: VX013657.D

Acq: 27 Nov 2019 17:24

Instrument :

MSVOA\_X

ClientSampled :

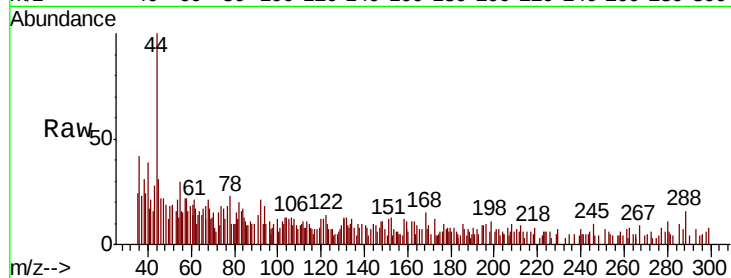
BFB

Tot Ion: 56 Resp: 151

Ion Ratio Lower Upper

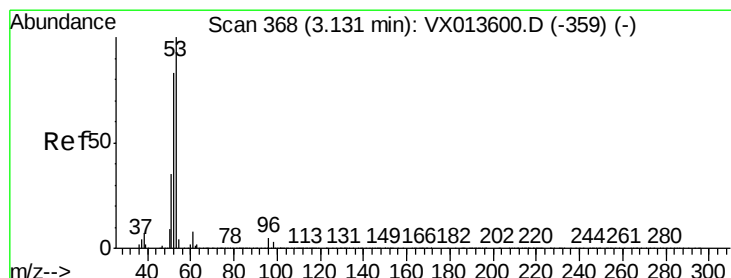
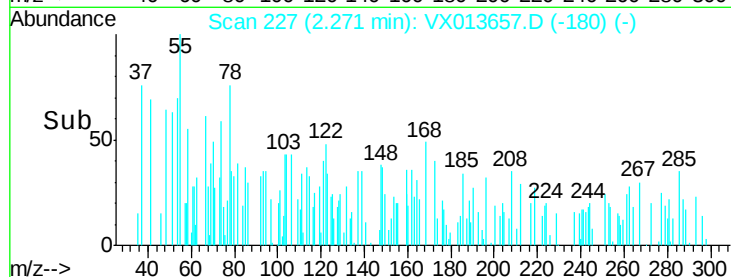
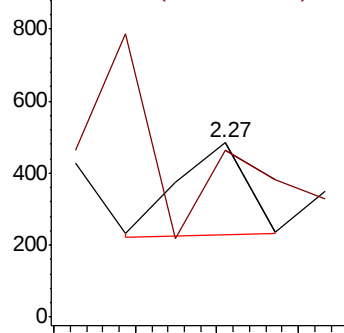
56 100

55 257.6 56.2 84.4#



Abundance Ion 56.00 (55.70 to 56.70): VX0

Ion 55.00 (54.70 to 55.70): VX0



#15

Acrylonitrile

Concen: 0.519 ug/l

RT: 3.14 min Scan# 370

Delta R.T. 0.01 min

Lab File: VX013657.D

Acq: 27 Nov 2019 17:24

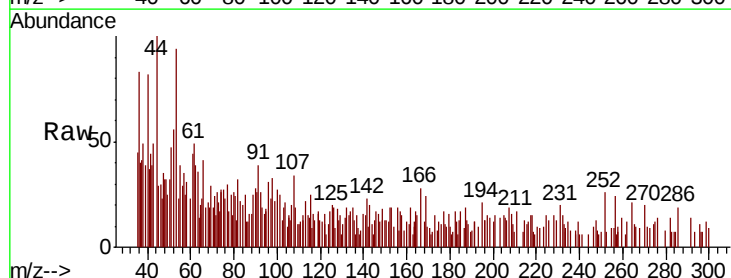
Tgt Ion: 53 Resp: 1994

Ion Ratio Lower Upper

53 100

52 0.0 66.2 99.2#

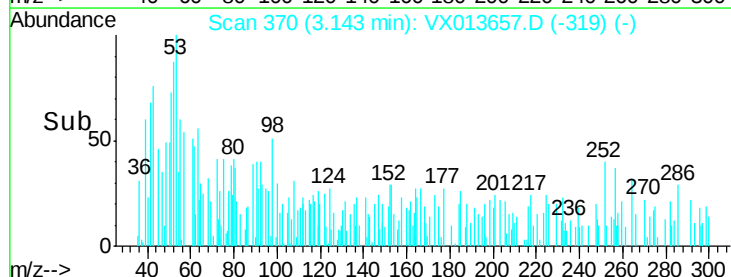
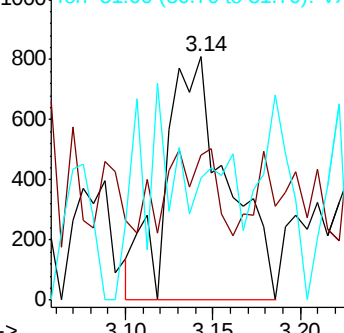
51 18.8 29.0 43.6#

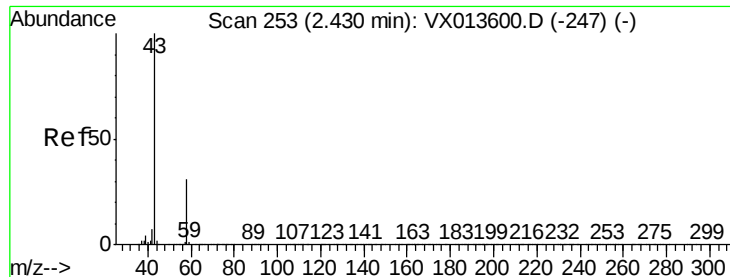


Abundance Ion 53.00 (52.70 to 53.70): VX0

Ion 52.00 (51.70 to 52.70): VX0

Ion 51.00 (50.70 to 51.70): VX0

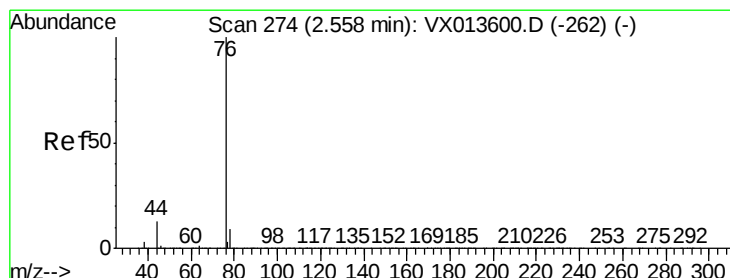
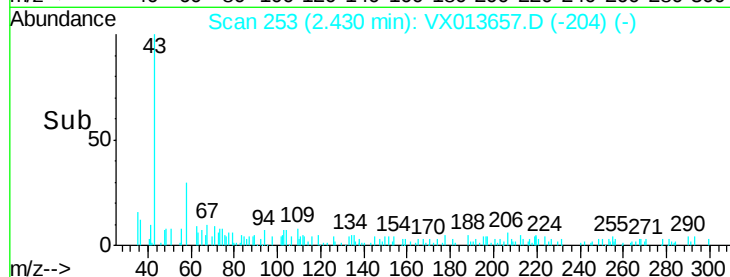
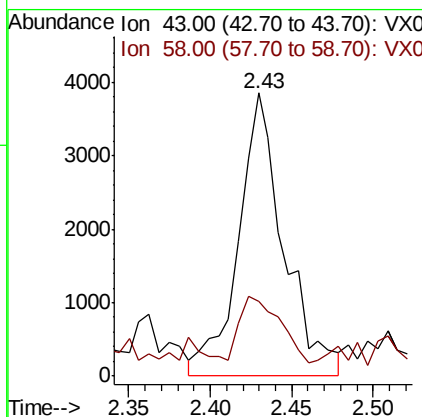
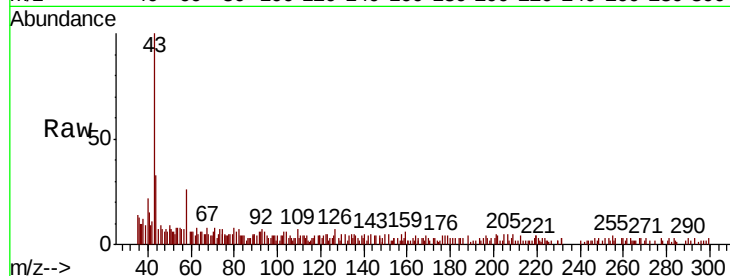




#16  
Acetone  
Concen: 2.001 ug/l  
RT: 2.43 min Scan# 253  
Delta R.T. 0.00 min  
Lab File: VX013657.D  
Acq: 27 Nov 2019 17:24

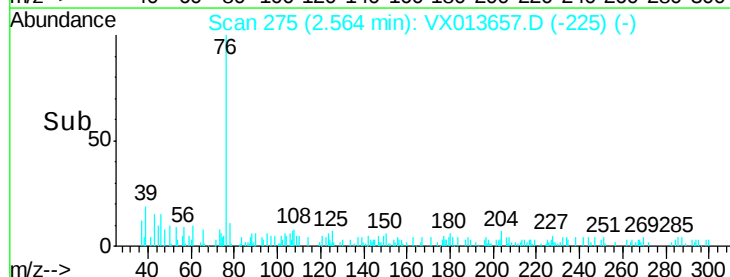
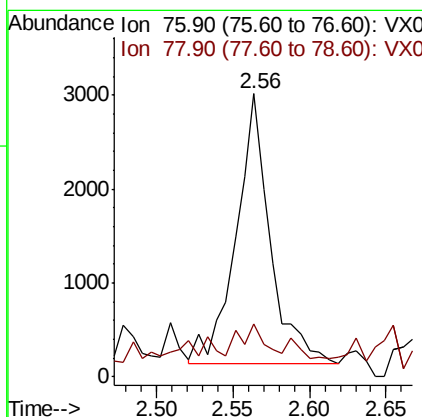
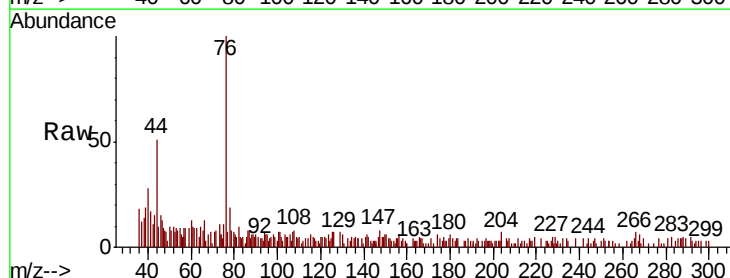
Instrument :  
MSVOA\_X  
ClientSampleId :  
BFB

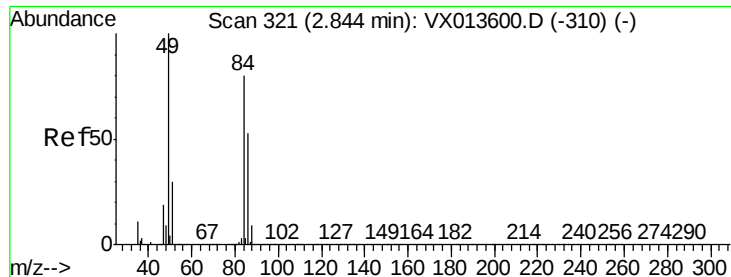
Tot Ion: 43 Resp: 7447  
Ion Ratio Lower Upper  
43 100  
58 17.0 24.6 36.8#



#17  
Carbon Disulfide  
Concen: 0.250 ug/l  
RT: 2.56 min Scan# 275  
Delta R.T. 0.01 min  
Lab File: VX013657.D  
Acq: 27 Nov 2019 17:24

Tgt Ion: 76 Resp: 4411  
Ion Ratio Lower Upper  
76 100  
78 12.3 7.2 10.8#

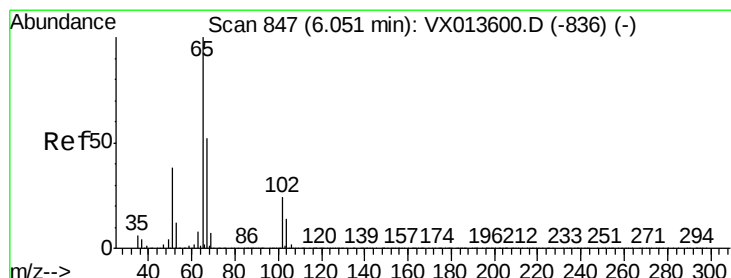
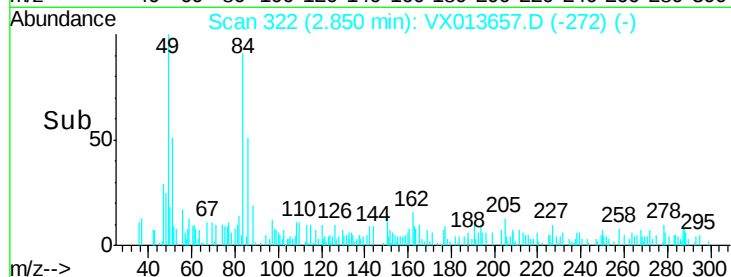
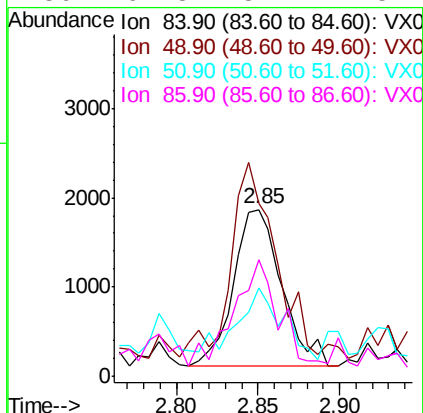
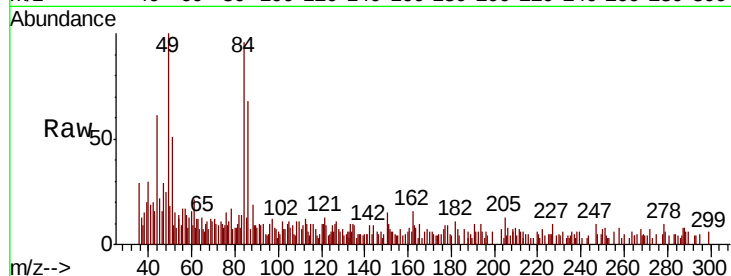




#20  
Methylene Chloride  
Concen: 0.508 ug/l  
RT: 2.85 min Scan# 322  
Delta R.T. 0.01 min  
Lab File: VX013657.D  
Acq: 27 Nov 2019 17:24

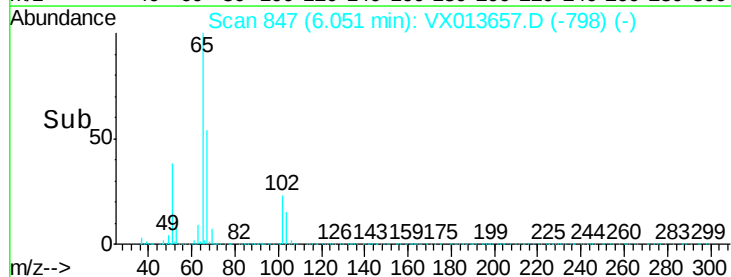
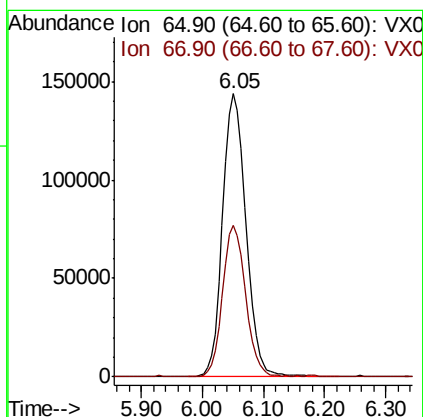
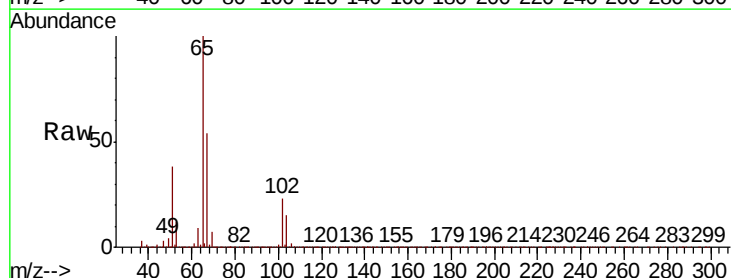
Instrument :  
MSVOA\_X  
ClientSampleId :  
BFB

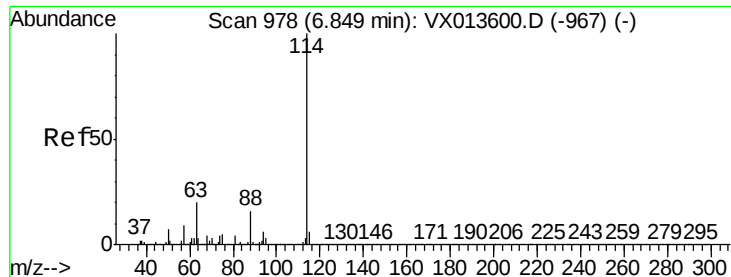
Tot Ion: 84 Resp: 3632  
Ion Ratio Lower Upper  
84 100  
49 90.9 99.7 149.5#  
51 39.8 29.9 44.9  
86 67.8 52.2 78.4



#33  
1,2-Dichloroethane-d4  
Concen: 50.111 ug/l  
RT: 6.05 min Scan# 847  
Delta R.T. 0.00 min  
Lab File: VX013657.D  
Acq: 27 Nov 2019 17:24

Tgt Ion: 65 Resp: 377788  
Ion Ratio Lower Upper  
65 100  
67 52.8 0.0 104.4





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 6.85 min Scan# 978

Delta R.T. 0.00 min

Lab File: VX013657.D

Acq: 27 Nov 2019 17:24

Instrument :

MSVOA\_X

ClientSampleId :

BFB

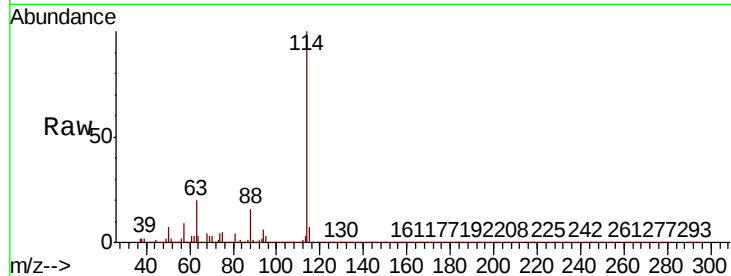
Tot Ion:114 Resp: 1047249

Ion Ratio Lower Upper

114 100

63 19.8 0.0 39.6

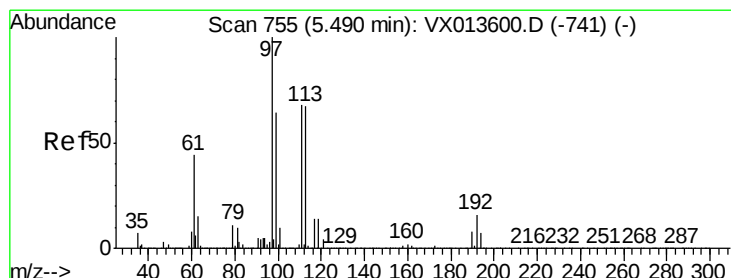
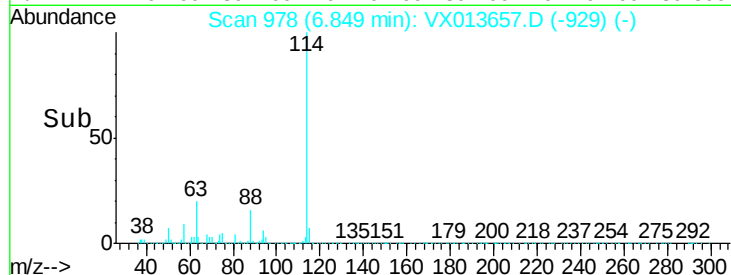
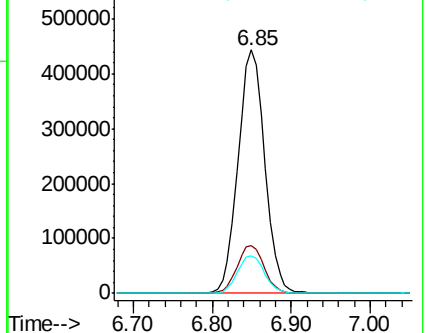
88 15.6 0.0 31.4



Abundance Ion 113.90 (113.60 to 114.60): V

Ion 63.00 (62.70 to 63.70): VX0

Ion 87.90 (87.60 to 88.60): VX0



#35

Dibromofluoromethane

Concen: 48.223 ug/l

RT: 5.49 min Scan# 755

Delta R.T. 0.00 min

Lab File: VX013657.D

Acq: 27 Nov 2019 17:24

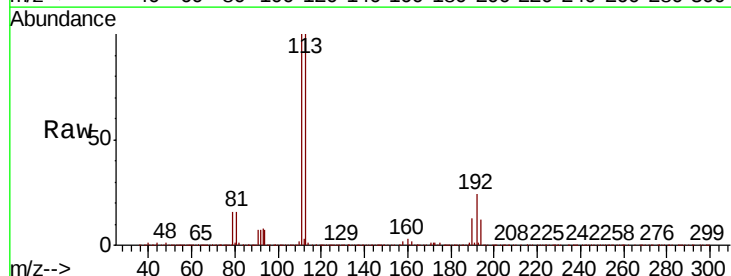
Tgt Ion:113 Resp: 312209

Ion Ratio Lower Upper

113 100

111 103.0 83.6 125.4

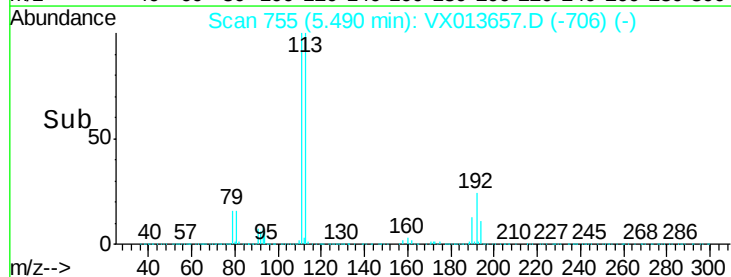
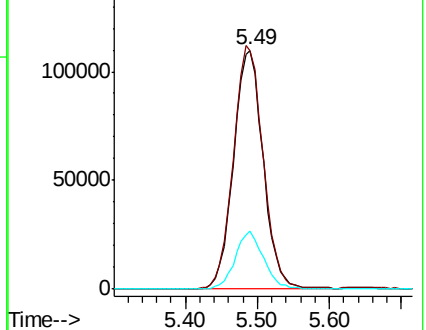
192 23.6 19.2 28.8

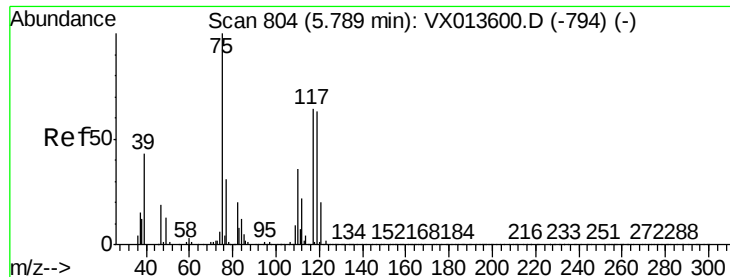


Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V

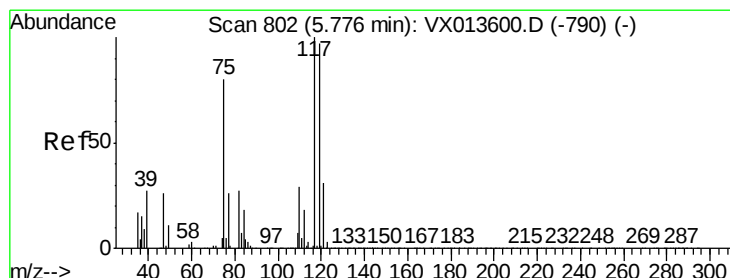
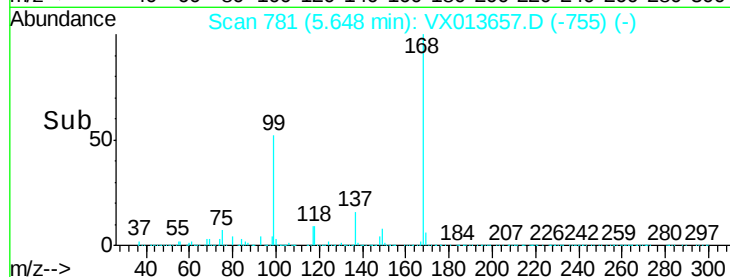
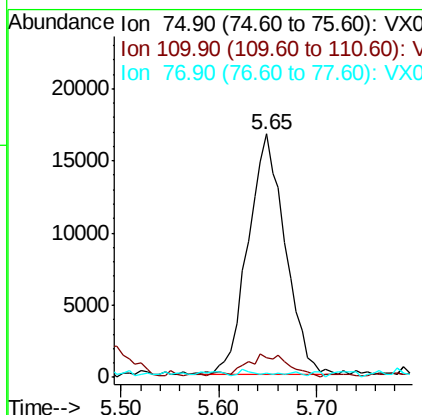
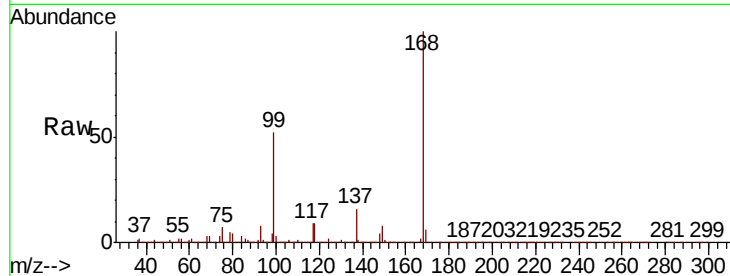




#36  
 1,1-Dichloropropene  
 Concen: 4.635 ug/l  
 RT: 5.65 min Scan# 781  
 Delta R.T. -0.14 min  
 Lab File: VX013657.D  
 Acq: 27 Nov 2019 17:24

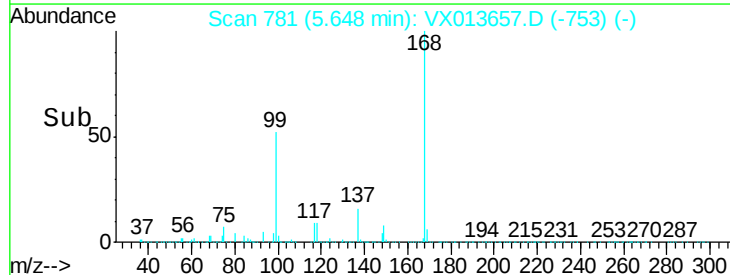
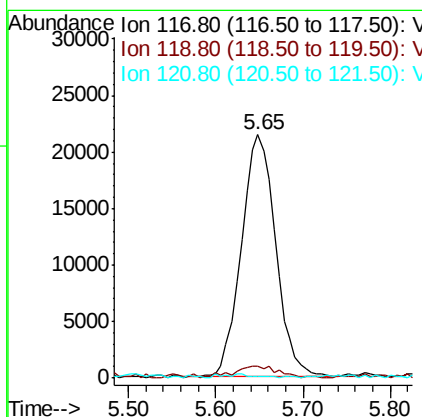
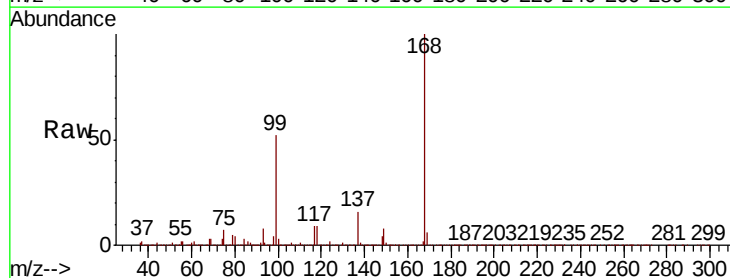
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 BFB

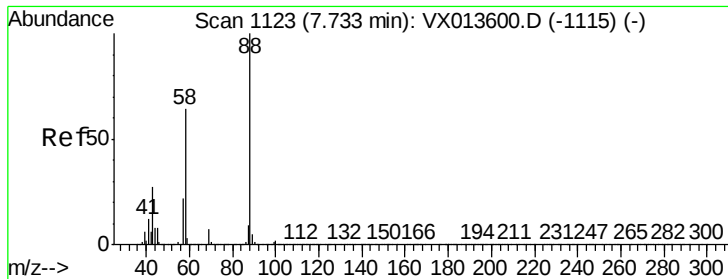
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 110     | 10.6  | 18.1  | 54.1# |
| 77      | 0.0   | 24.5  | 36.7# |



#38  
 Carbon Tetrachloride  
 Concen: 6.695 ug/l  
 RT: 5.65 min Scan# 781  
 Delta R.T. -0.13 min  
 Lab File: VX013657.D  
 Acq: 27 Nov 2019 17:24

| Tgt Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 117     | 100   |       |        |
| 119     | 3.9   | 77.5  | 116.3# |
| 121     | 0.0   | 25.0  | 37.6#  |





#49

1,4-Dioxane

Concen: 1.294 ug/l

RT: 7.73 min Scan# 1123

Delta R.T. 0.00 min

Lab File: VX013657.D

Acq: 27 Nov 2019 17:24

Instrument :

MSVOA\_X

ClientSampled :

BFB

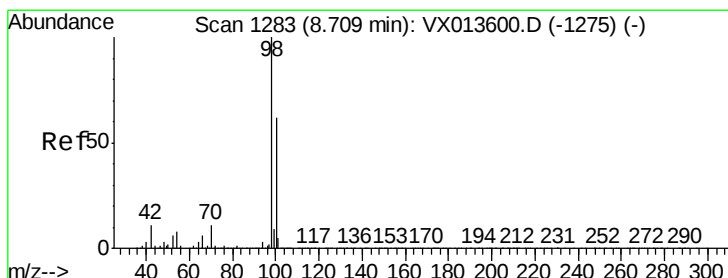
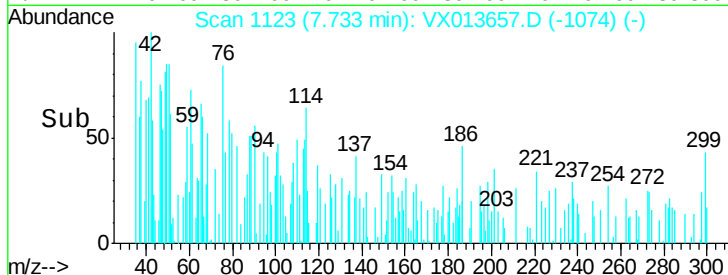
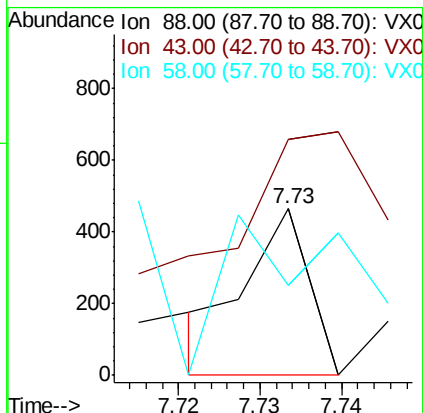
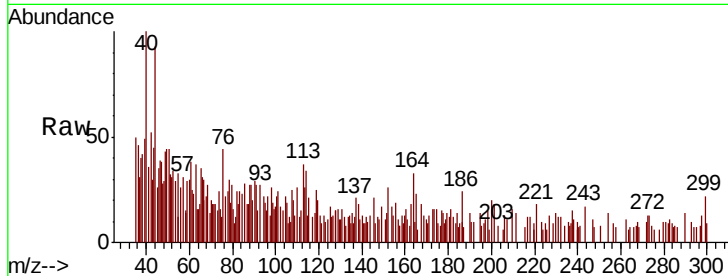
Tot Ion: 88 Resp: 247

Ion Ratio Lower Upper

88 100

43 327.5 25.8 38.6#

58 191.9 54.6 82.0#



#50

Toluene-d8

Concen: 49.097 ug/l

RT: 8.71 min Scan# 1283

Delta R.T. 0.00 min

Lab File: VX013657.D

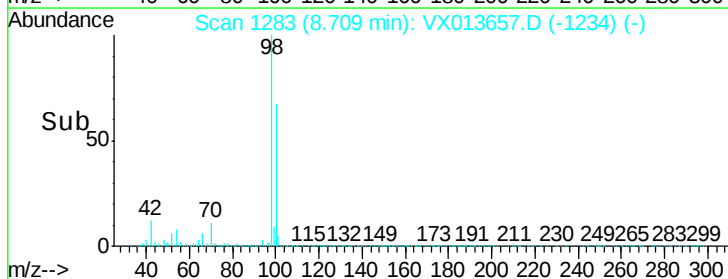
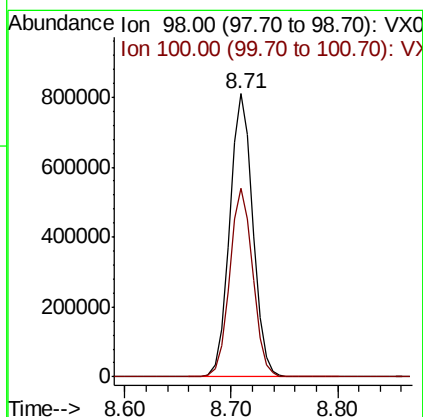
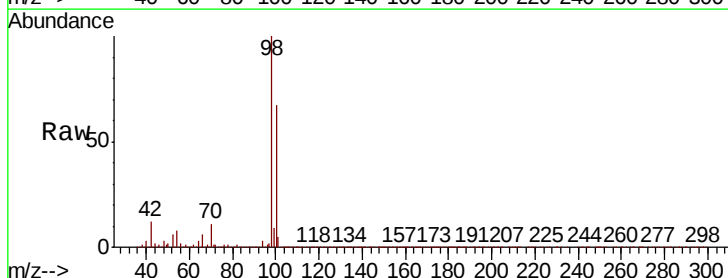
Acq: 27 Nov 2019 17:24

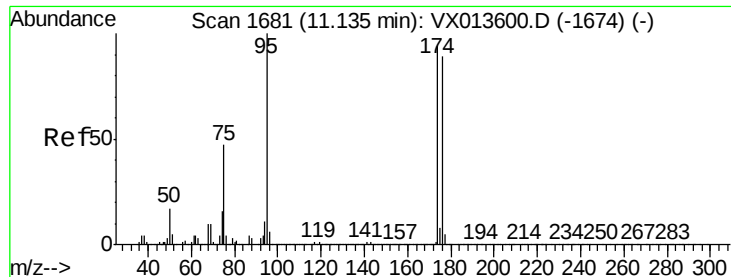
Tgt Ion: 98 Resp: 1238448

Ion Ratio Lower Upper

98 100

100 66.3 53.1 79.7

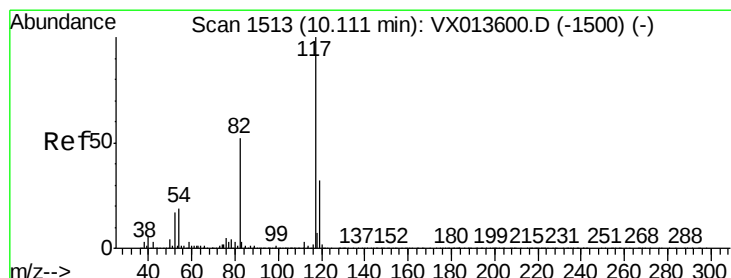
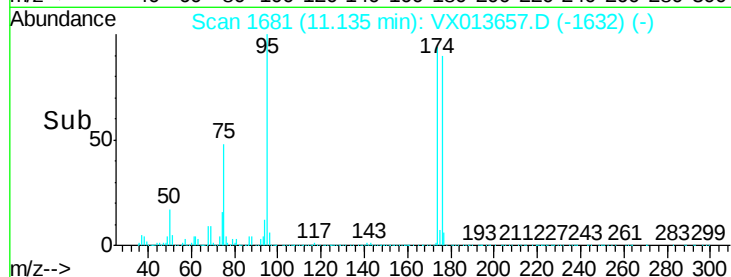
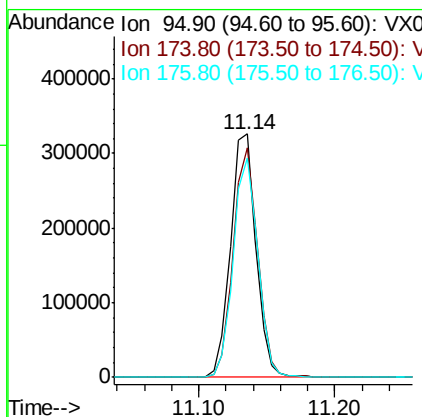
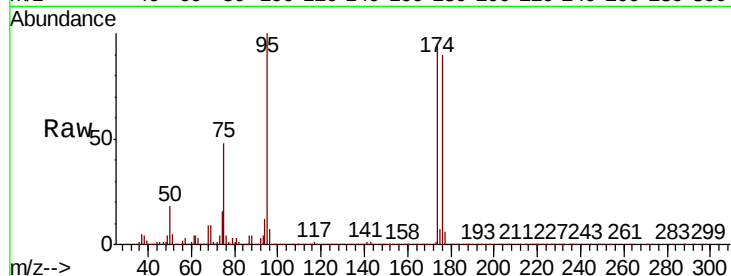




#62  
4-Bromofluorobenzene  
Concen: 46.652 ug/l  
RT: 11.14 min Scan# 1681  
Delta R.T. 0.00 min  
Lab File: VX013657.D  
Acq: 27 Nov 2019 17:24

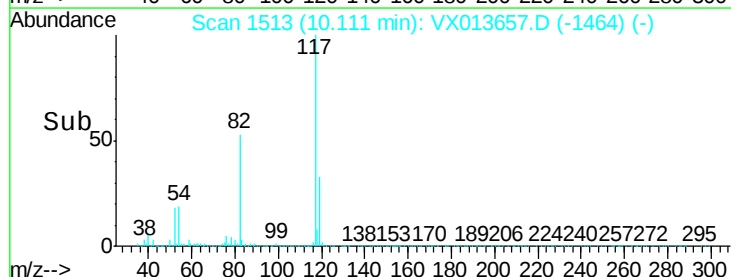
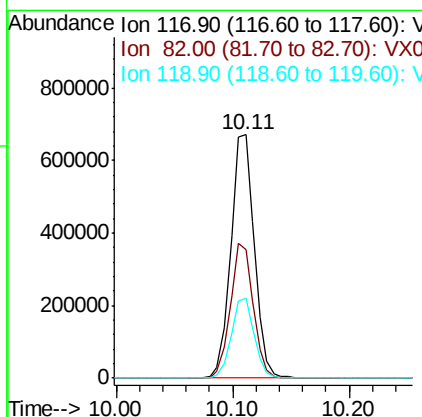
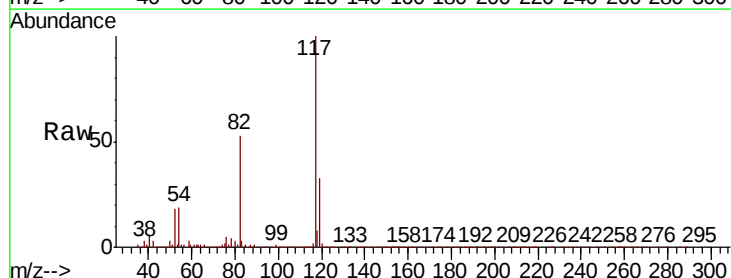
Instrument :  
MSVOA\_X  
ClientSampleId :  
BFB

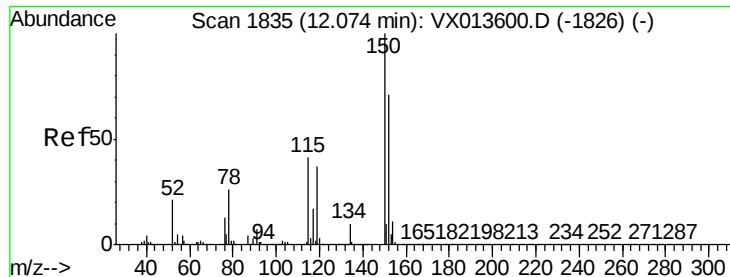
Tot Ion: 95 Resp: 424346  
Ion Ratio Lower Upper  
95 100  
174 91.1 0.0 180.0  
176 87.8 0.0 173.6



#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 10.11 min Scan# 1513  
Delta R.T. 0.00 min  
Lab File: VX013657.D  
Acq: 27 Nov 2019 17:24

Tgt Ion: 117 Resp: 941830  
Ion Ratio Lower Upper  
117 100  
82 52.5 41.8 62.8  
119 32.7 25.8 38.8





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 12.07 min Scan# 1835

Delta R.T. 0.00 min

Lab File: VX013657.D

Acq: 27 Nov 2019 17:24

Instrument :

MSVOA\_X

ClientSampleId :

BFB

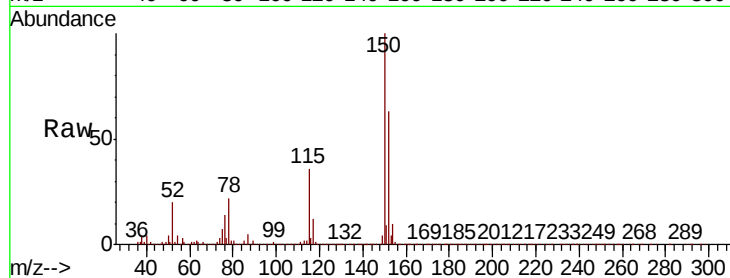
Tot Ion:152 Resp: 441097

Ion Ratio Lower Upper

152 100

115 56.0 38.4 115.1

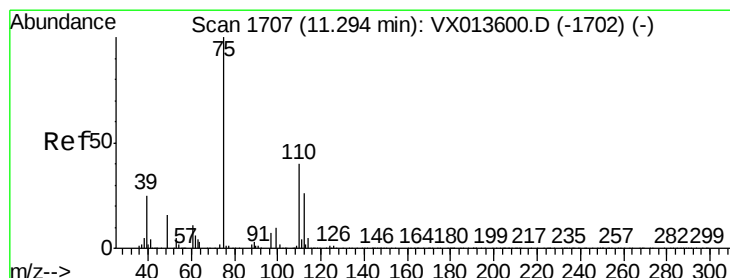
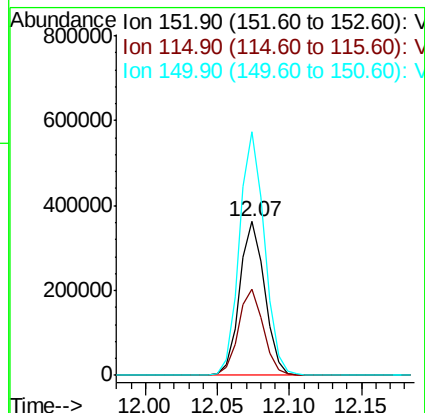
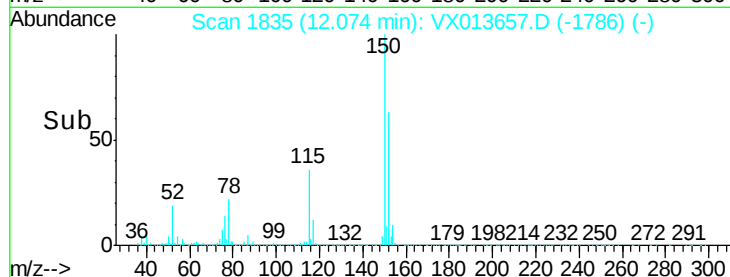
150 158.7 0.0 346.8



Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V



#76

1,2,3-Trichloropropane

Concen: 21.330 ug/l

RT: 11.13 min Scan# 1680

Delta R.T. -0.16 min

Lab File: VX013657.D

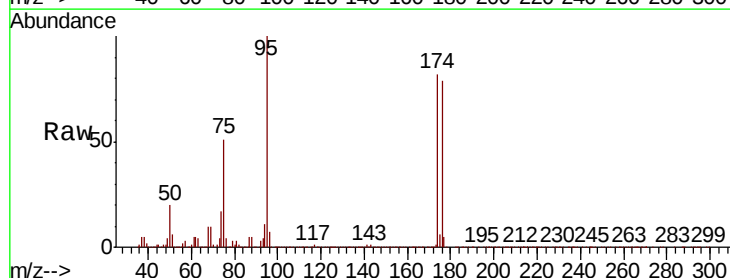
Acq: 27 Nov 2019 17:24

Tgt Ion: 75 Resp: 211620

Ion Ratio Lower Upper

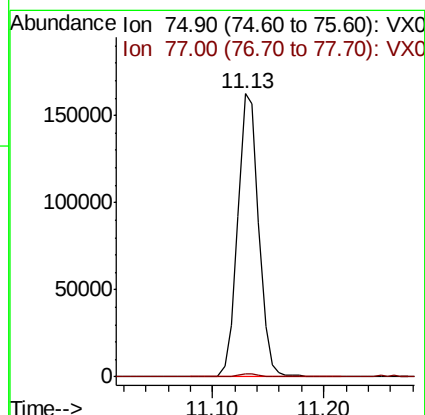
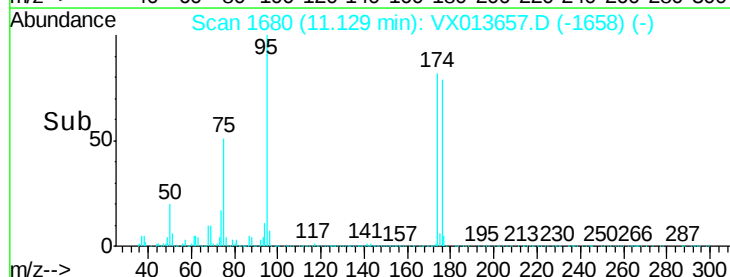
75 100

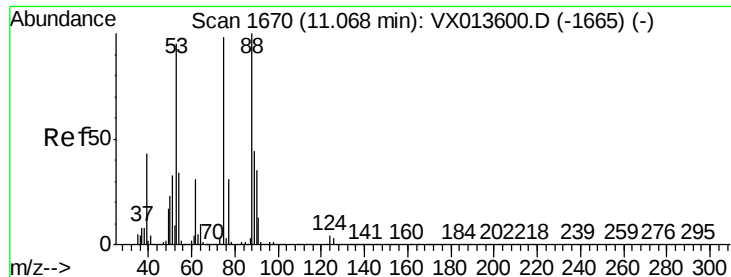
77 1.7 19.1 57.5#



Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 77.00 (76.70 to 77.70): VX0

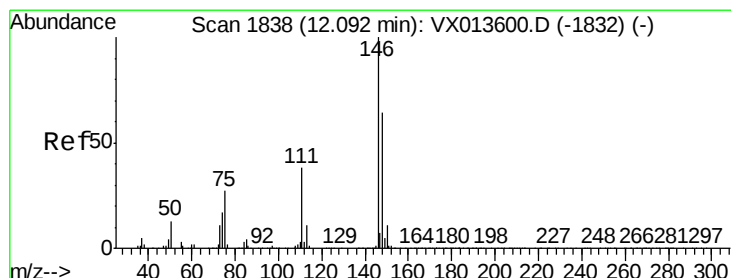
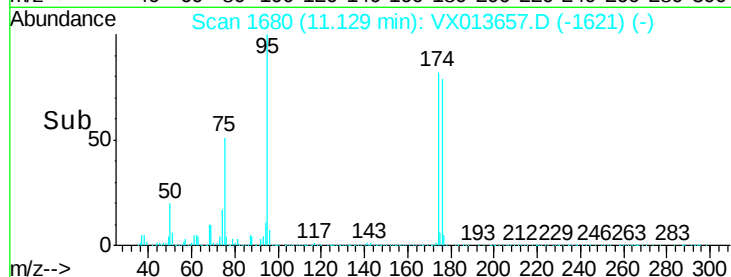
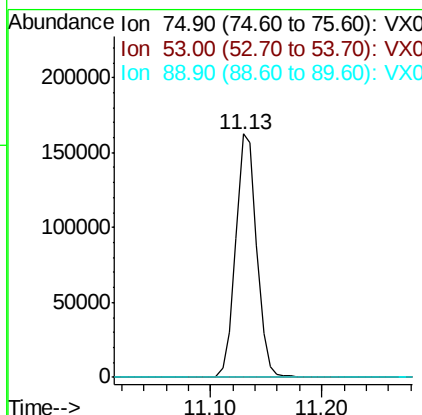
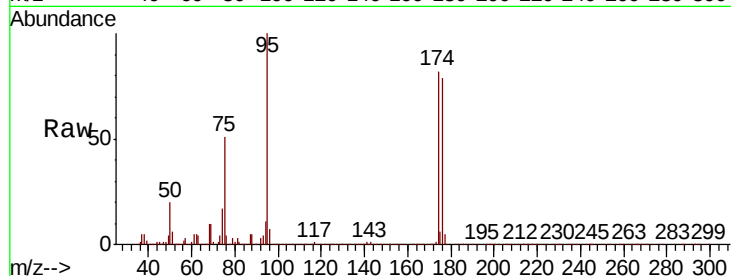




#81  
trans-1,4-Dichloro-2-butene  
Concen: 58.356 ug/l  
RT: 11.13 min Scan# 1680  
Delta R.T. 0.06 min  
Lab File: VX013657.D  
Acq: 27 Nov 2019 17:24

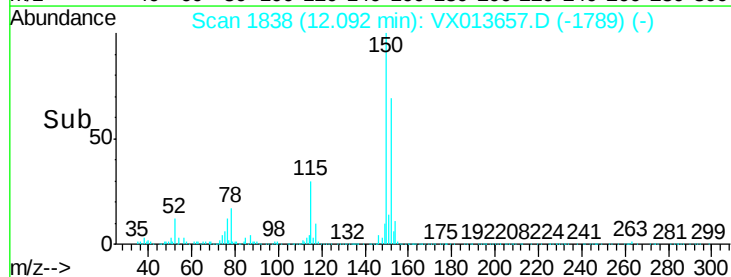
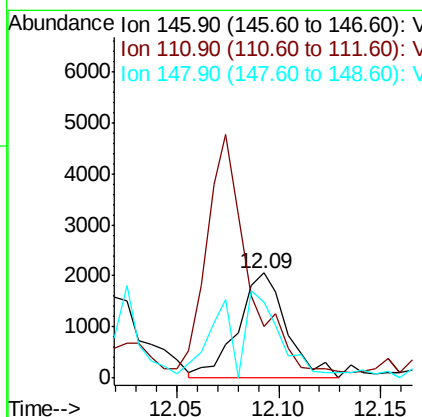
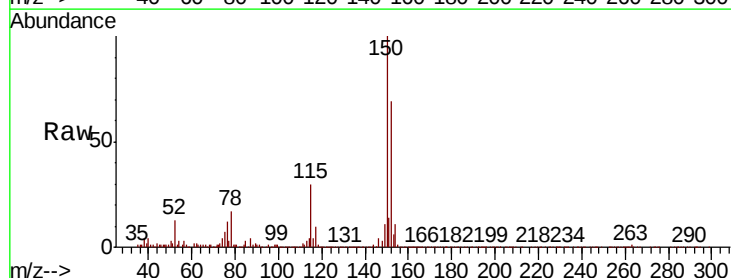
Instrument :  
MSVOA\_X  
ClientSampleId :  
BFB

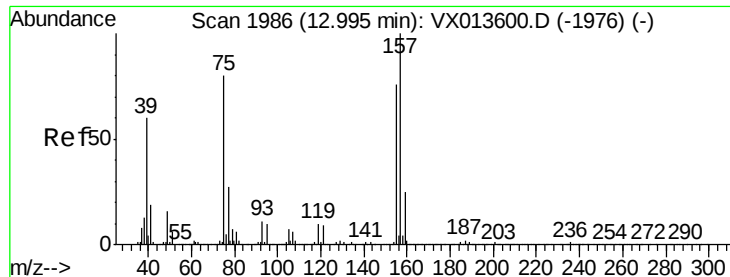
Tot Ion: 75 Resp: 211620  
Ion Ratio Lower Upper  
75 100  
53 0.0 78.2 117.2#  
89 0.0 35.4 53.2#



#88  
1,4-Dichlorobenzene  
Concen: 0.230 ug/l  
RT: 12.09 min Scan# 1838  
Delta R.T. 0.00 min  
Lab File: VX013657.D  
Acq: 27 Nov 2019 17:24

Tgt Ion: 146 Resp: 3416  
Ion Ratio Lower Upper  
146 100  
111 0.0 18.9 56.9#  
148 57.4 31.9 95.5





#92

1,2-Dibromo-3-Chloropropane

Concen: 0.277 ug/l

RT: 12.99 min Scan# 1985

Delta R.T. -0.01 min

Lab File: VX013657.D

Acq: 27 Nov 2019 17:24

Instrument :

MSVOA\_X

ClientSampled :

BFB

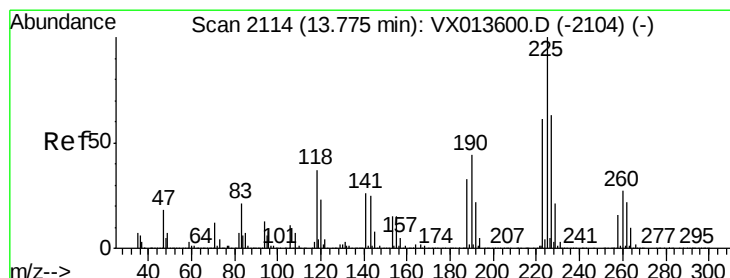
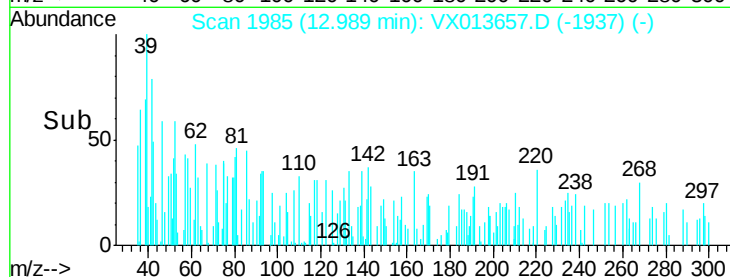
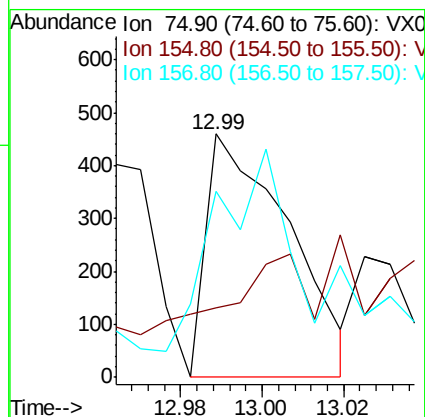
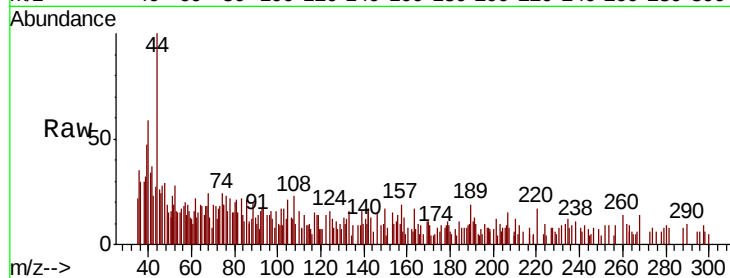
Tot Ion: 75 Resp: 648

Ion Ratio Lower Upper

75 100

155 27.5 47.6 142.8#

157 120.1 62.1 186.2



#94

Hexachlorobutadiene

Concen: 0.305 ug/l

RT: 13.78 min Scan# 2114

Delta R.T. 0.00 min

Lab File: VX013657.D

Acq: 27 Nov 2019 17:24

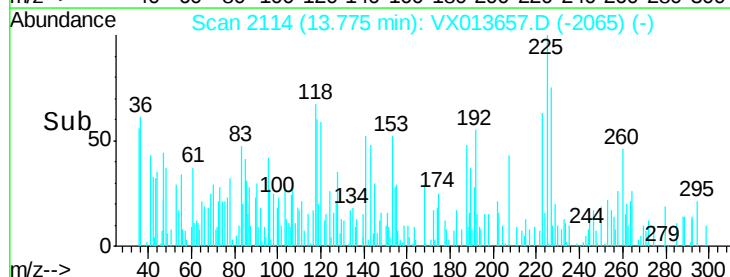
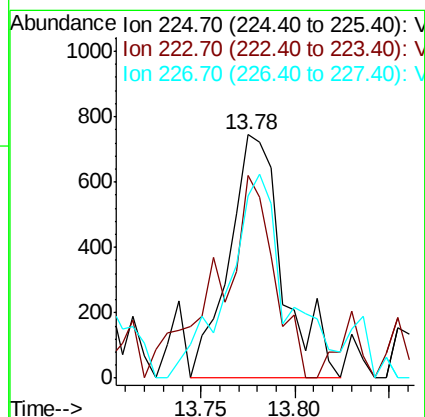
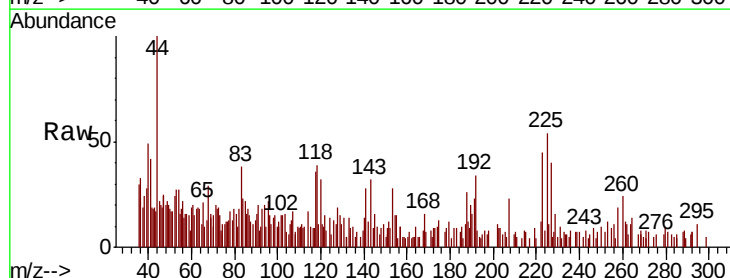
Tgt Ion: 225 Resp: 1471

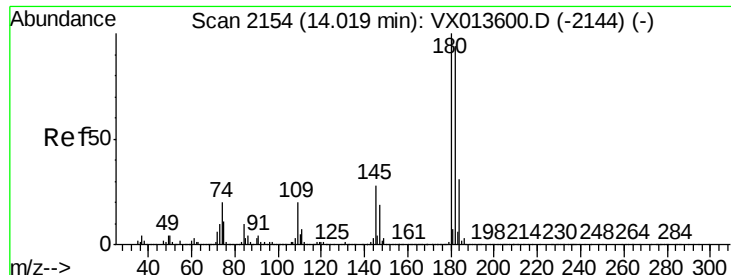
Ion Ratio Lower Upper

225 100

223 88.2 31.9 95.5

227 92.7 32.1 96.3





#96  
 1,2,3-Trichlorobenzene  
 Concen: 0.225 ug/l  
 RT: 14.01 min Scan# 2153  
 Delta R.T. -0.01 min  
 Lab File: VX013657.D  
 Acq: 27 Nov 2019 17:24

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 BFB

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 120.9 | 47.6  | 142.8 |
| 145     | 42.2  | 15.0  | 45.0  |

