

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX120619\  
 Data File : VX013796.D  
 Acq On : 06 Dec 2019 13:56  
 Operator : JC/SP  
 Sample : K6184-09  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 RE123D3-20191203

Quant Time: Dec 07 02:36:48 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  | 639233   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.85  | 114  | 981009   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.11 | 117  | 867645   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.07 | 152  | 376566   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|-----------------------------|-------|------|----------|-------|--------|----------|
| 33) 1,2-Dichloroethane-d4   | 6.06  | 65   | 350880   | 47.29 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 94.58% |          |
| 35) Dibromofluoromethane    | 5.48  | 113  | 294799   | 48.61 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 97.22% |          |
| 50) Toluene-d8              | 8.71  | 98   | 1154446  | 48.86 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 97.72% |          |
| 62) 4-Bromofluorobenzene    | 11.14 | 95   | 383114   | 44.96 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 89.92% |          |

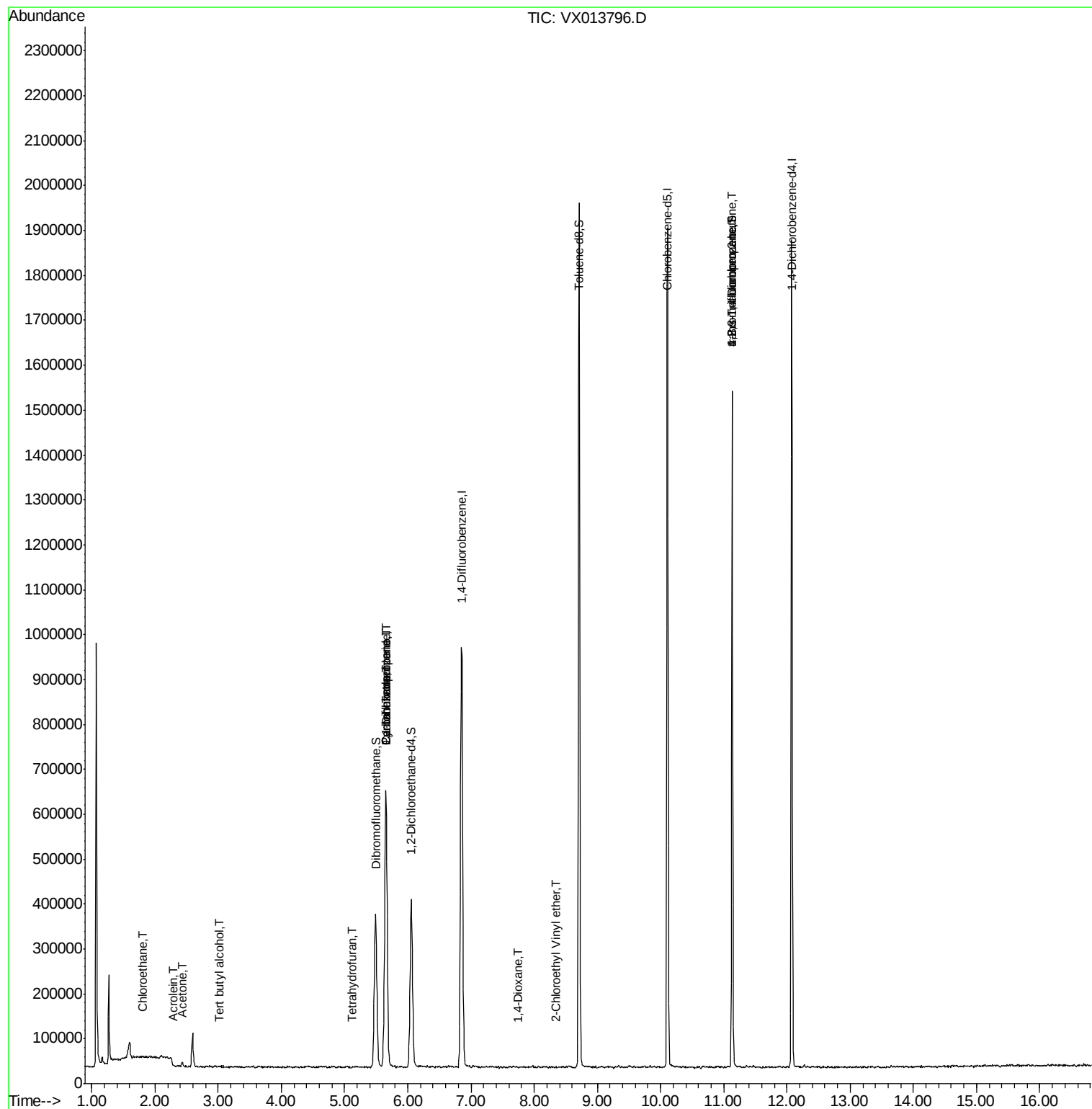
| Target Compounds               | R.T.  | QIon | Response | Conc   | Units  | Qvalue |
|--------------------------------|-------|------|----------|--------|--------|--------|
| 6) Chloroethane                | 1.80  | 64   | 1689     | 0.330  | ug/l   | 99     |
| 11) Tert butyl alcohol         | 3.03  | 59   | 1394     | 0.761  | ug/l # | 27     |
| 13) Acrolein                   | 2.30  | 56   | 380      | 6.307  | ug/l # | 1      |
| 16) Acetone                    | 2.43  | 43   | 10611    | 2.897  | ug/l   | 97     |
| 29) Tetrahydrofuran            | 5.12  | 42   | 708      | 0.211  | ug/l # | 32     |
| 31) Cyclohexane                | 5.65  | 56   | 11887    | 1.085  | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 5.65  | 75   | 41888    | 4.704  | ug/l # | 52     |
| 38) Carbon Tetrachloride       | 5.65  | 117  | 55778    | 6.793  | ug/l # | 14     |
| 49) 1,4-Dioxane                | 7.74  | 88   | 462      | 2.583  | ug/l # | 79     |
| 58) 2-Chloroethyl Vinyl ether  | 8.34  | 63   | 887      | 0.207  | ug/l   | 90     |
| 76) 1,2,3-Trichloropropane     | 11.14 | 75   | 189082   | 22.325 | ug/l # | 39     |
| 81) trans-1,4-Dichloro-2-buten | 11.14 | 75   | 189082   | 61.076 | ug/l # | 11     |

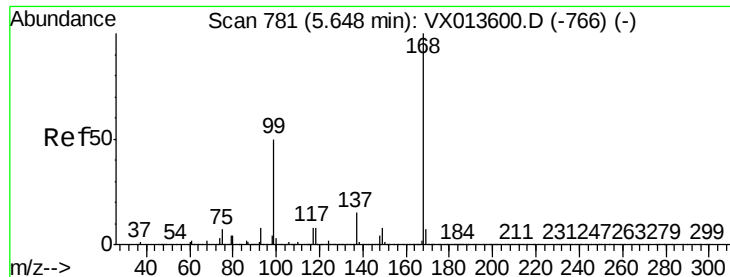
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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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# 782

Delta R.T. 0.01 min

Lab File: VX013796.D

Acq: 06 Dec 2019 13:56

Instrument :

MSVOA\_X

ClientSampleId :

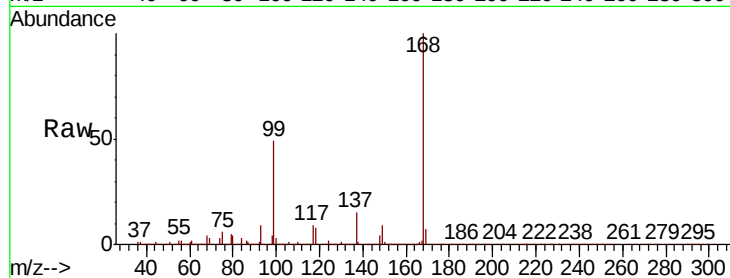
RE123D3-20191203

Tot Ion:168 Resp: 639233

Ion Ratio Lower Upper

168 100

99 49.0 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

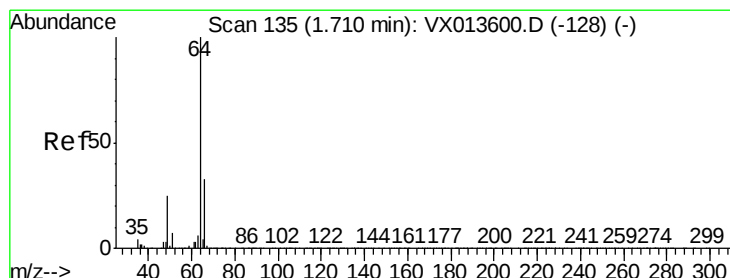
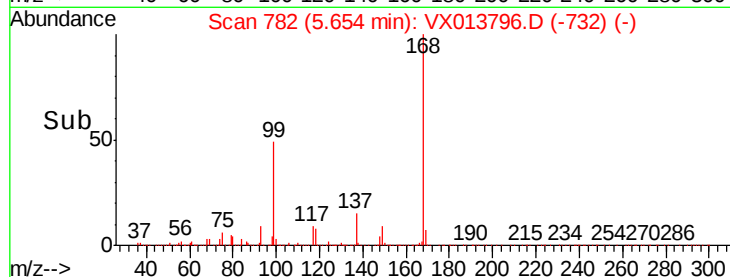
100000

50000

0

Time-->

5.50 5.60 5.70 5.80



#6

Chloroethane

Concen: 0.330 ug/l

RT: 1.80 min Scan# 149

Delta R.T. 0.09 min

Lab File: VX013796.D

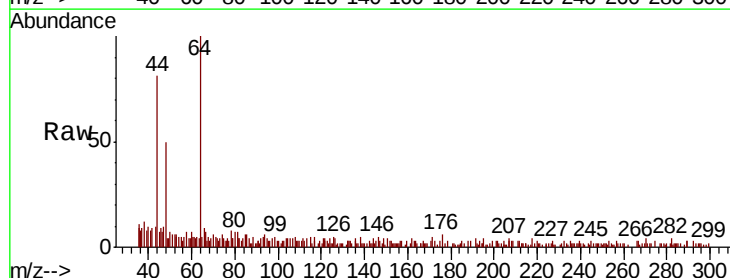
Acq: 06 Dec 2019 13:56

Tgt Ion: 64 Resp: 1689

Ion Ratio Lower Upper

64 100

66 33.1 26.7 40.1



Abundance Ion 63.90 (63.60 to 64.60): VX0

Ion 65.90 (65.60 to 66.60): VX0

1.80

5000

4000

3000

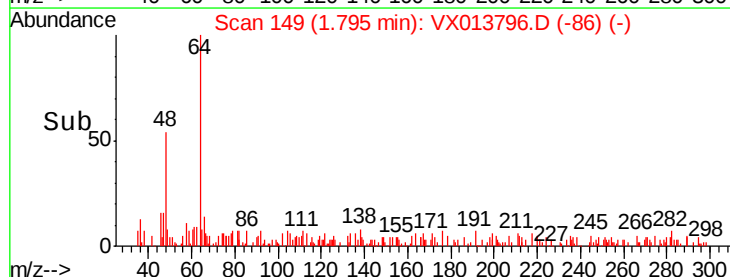
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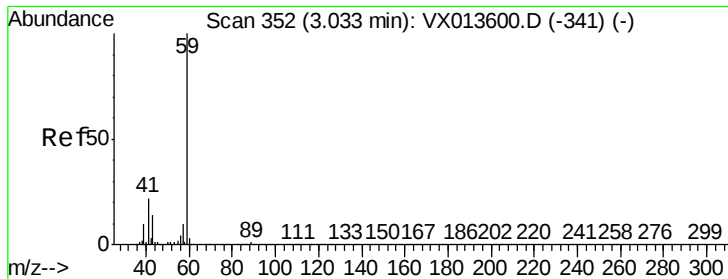
1000

0

Time-->

1.76 1.78 1.80 1.82



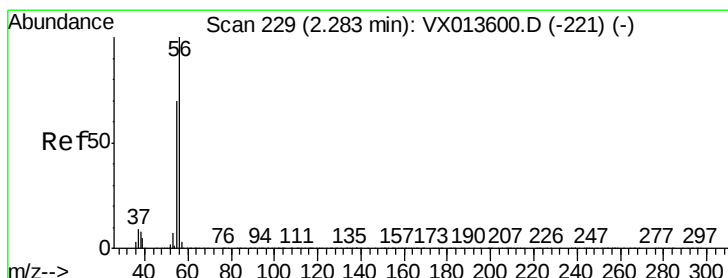
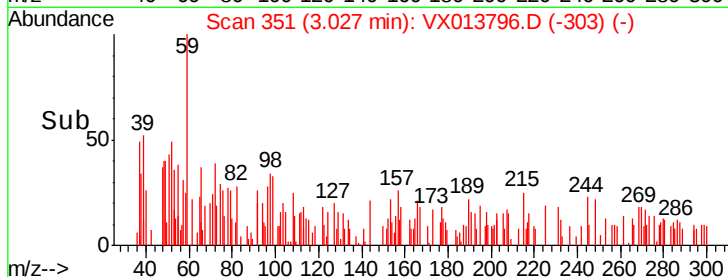
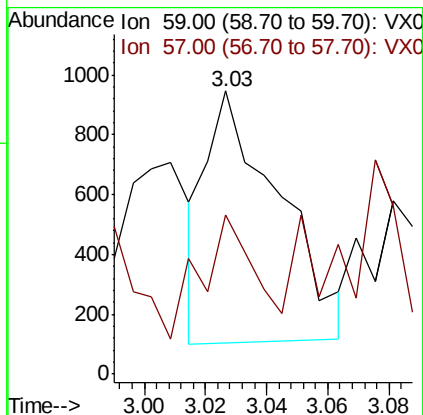
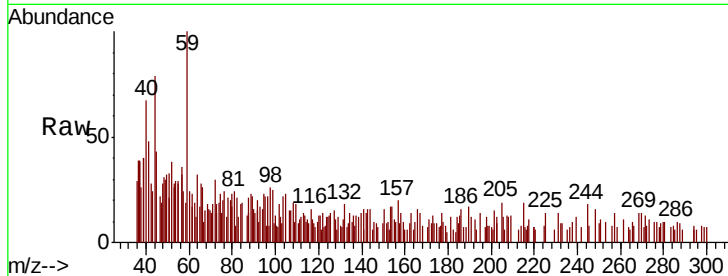


#11

Tert butyl alcohol  
 Concen: 0.761 ug/l  
 RT: 3.03 min Scan# 351  
 Delta R.T. -0.01 min  
 Lab File: VX013796.D  
 Acq: 06 Dec 2019 13:56

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 RE123D3-20191203

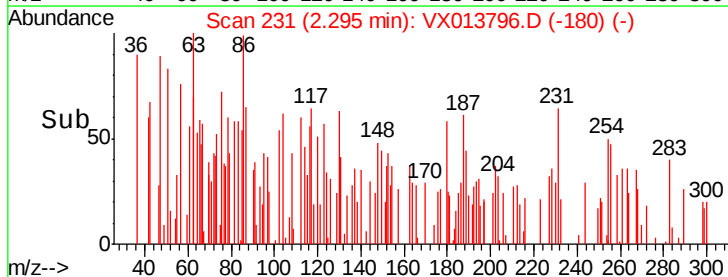
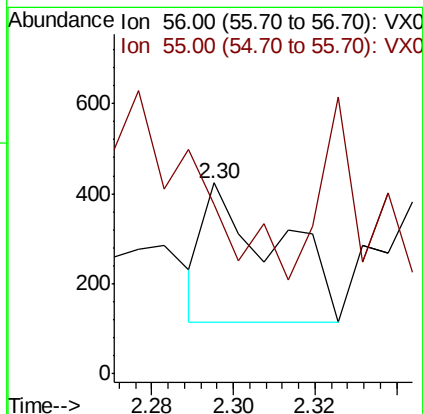
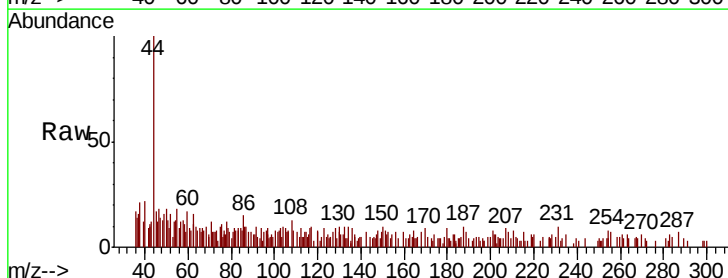
Tot Ion: 59 Resp: 1394  
 Ion Ratio Lower Upper  
 59 100  
 57 36.6 7.8 11.6#

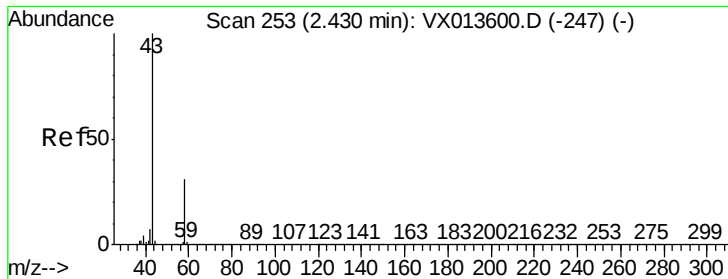


#13

Acrolein  
 Concen: 6.307 ug/l  
 RT: 2.30 min Scan# 231  
 Delta R.T. 0.01 min  
 Lab File: VX013796.D  
 Acq: 06 Dec 2019 13:56

Tgt Ion: 56 Resp: 380  
 Ion Ratio Lower Upper  
 56 100  
 55 226.6 56.2 84.4#

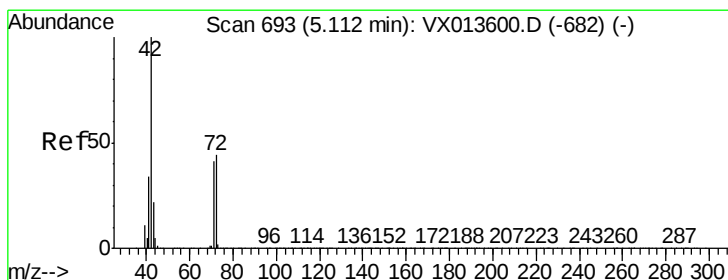
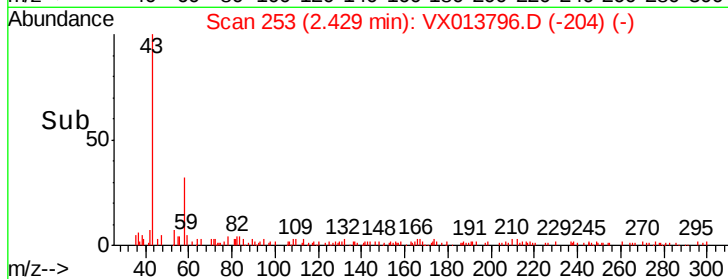
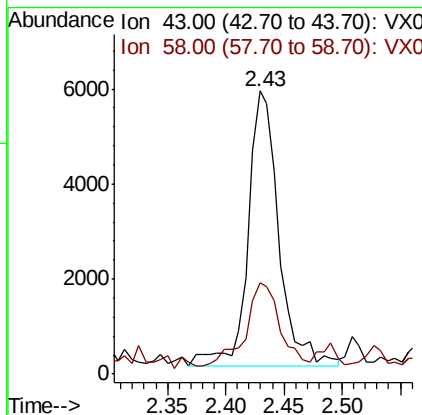
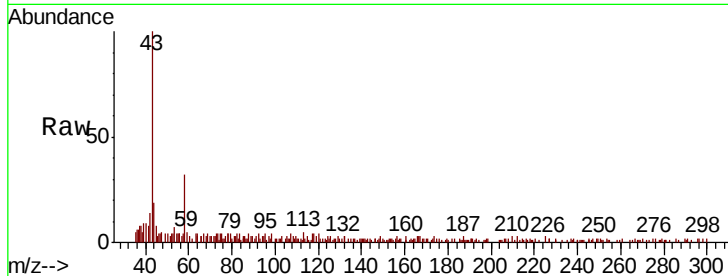




#16  
Acetone  
Concen: 2.897 ug/l  
RT: 2.43 min Scan# 253  
Delta R.T. -0.00 min  
Lab File: VX013796.D  
Acq: 06 Dec 2019 13:56

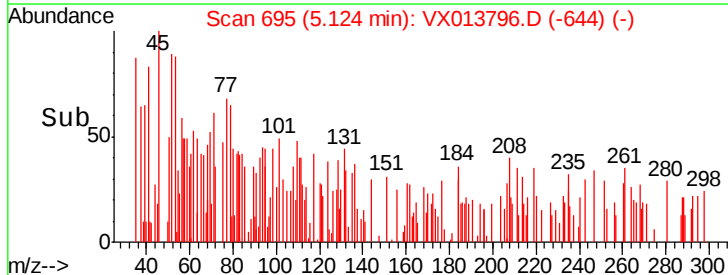
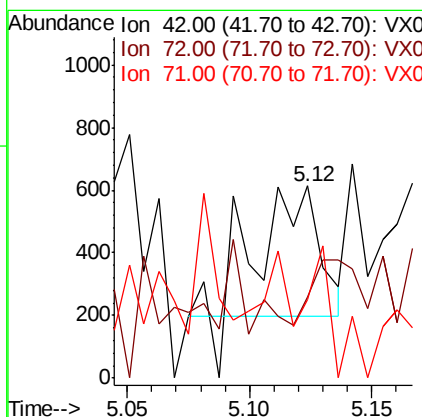
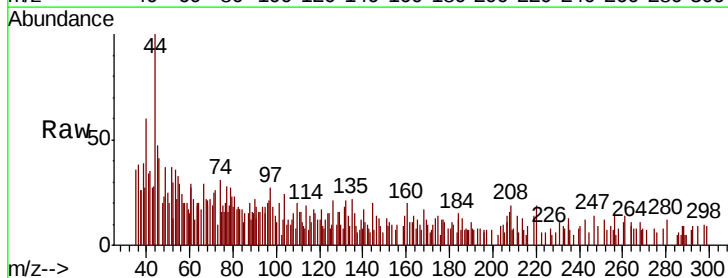
Instrument :  
MSVOA\_X  
ClientSampleId :  
RE123D3-20191203

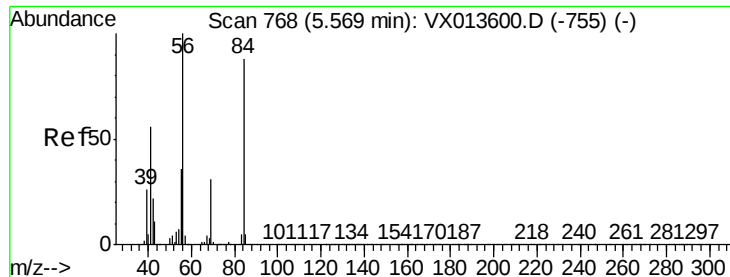
Tot Ion: 43 Resp: 10611  
Ion Ratio Lower Upper  
43 100  
58 29.0 24.6 36.8



#29  
Tetrahydrofuran  
Concen: 0.211 ug/l  
RT: 5.12 min Scan# 695  
Delta R.T. 0.01 min  
Lab File: VX013796.D  
Acq: 06 Dec 2019 13:56

Tgt Ion: 42 Resp: 708  
Ion Ratio Lower Upper  
42 100  
72 0.0 36.3 54.5#  
71 0.0 33.2 49.8#

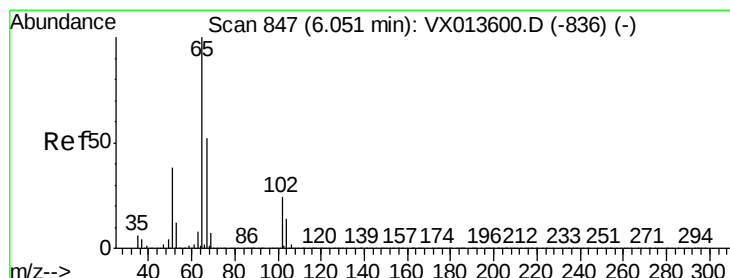
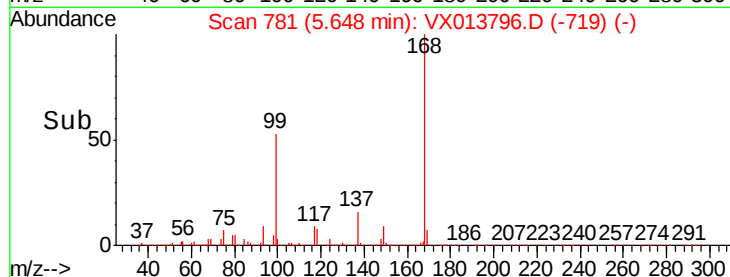
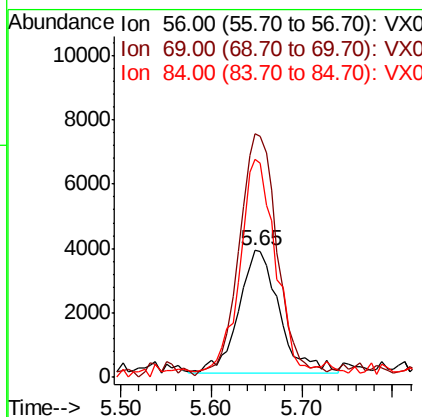
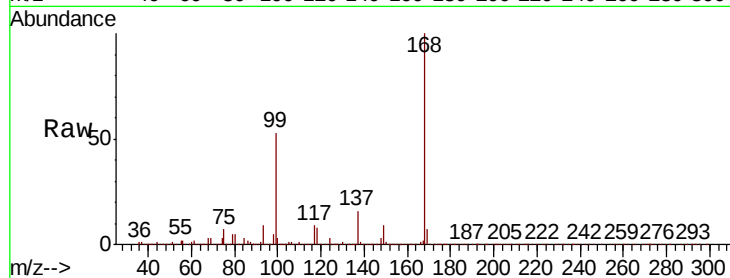




#31  
Cyclohexane  
Concen: 1.085 ug/l  
RT: 5.65 min Scan# 781  
Delta R.T. 0.08 min  
Lab File: VX013796.D  
Acq: 06 Dec 2019 13:56

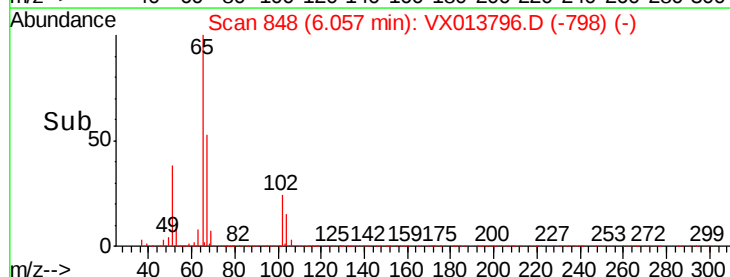
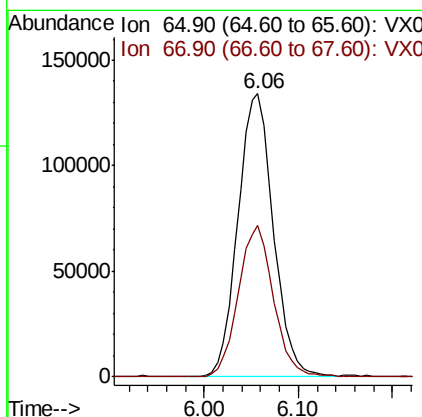
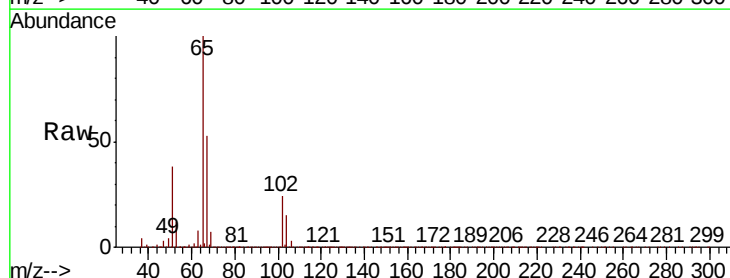
Instrument :  
MSVOA\_X  
ClientSampleId :  
RE123D3-20191203

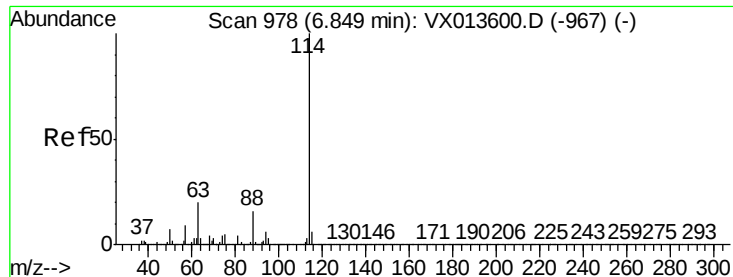
Tot Ion: 56 Resp: 11887  
Ion Ratio Lower Upper  
56 100  
69 196.1 24.6 36.8#  
84 174.9 70.0 105.0#



#33  
1,2-Dichloroethane-d4  
Concen: 47.288 ug/l  
RT: 6.06 min Scan# 848  
Delta R.T. 0.01 min  
Lab File: VX013796.D  
Acq: 06 Dec 2019 13:56

Tgt Ion: 65 Resp: 350880  
Ion Ratio Lower Upper  
65 100  
67 53.6 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: VX013796.D

Acq: 06 Dec 2019 13:56

Instrument :

MSVOA\_X

ClientSampleId :

RE123D3-20191203

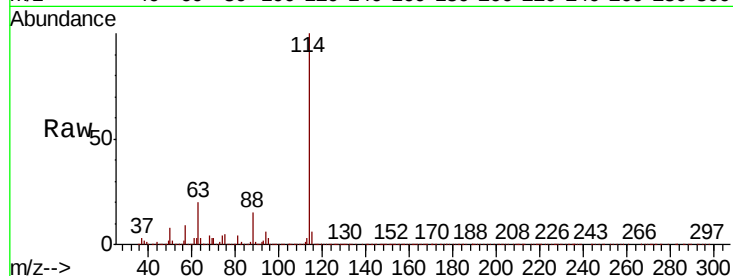
Tot Ion:114 Resp: 981009

Ion Ratio Lower Upper

114 100

63 20.2 0.0 39.6

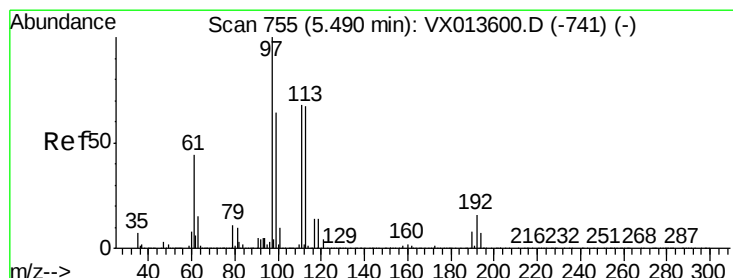
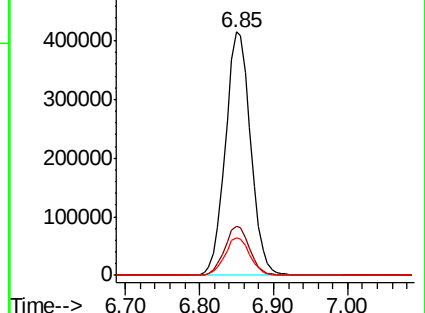
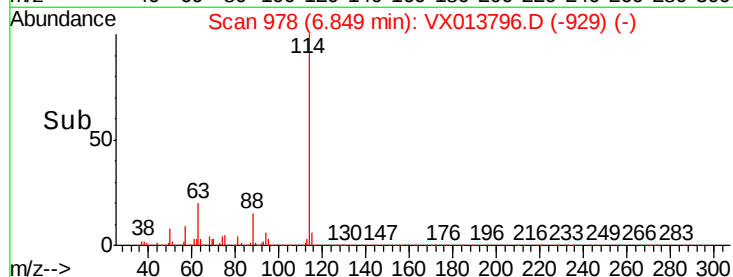
88 15.5 0.0 31.4



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: 48.609 ug/l

RT: 5.48 min Scan# 754

Delta R.T. -0.01 min

Lab File: VX013796.D

Acq: 06 Dec 2019 13:56

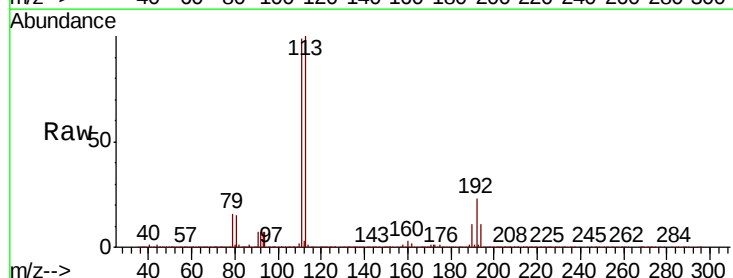
Tgt Ion:113 Resp: 294799

Ion Ratio Lower Upper

113 100

111 101.6 83.6 125.4

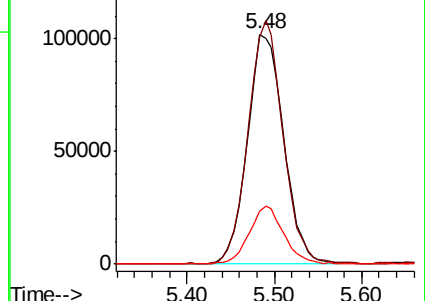
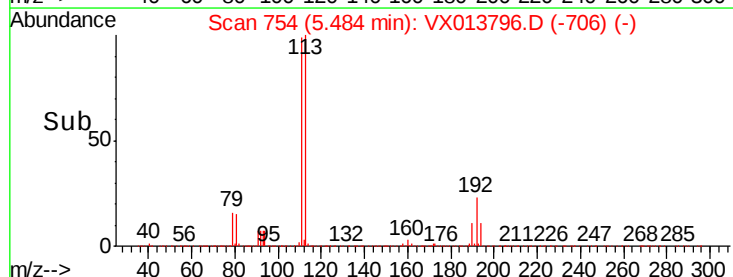
192 23.9 19.2 28.8

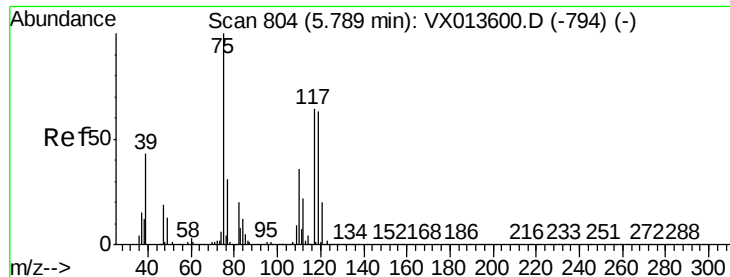


Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V

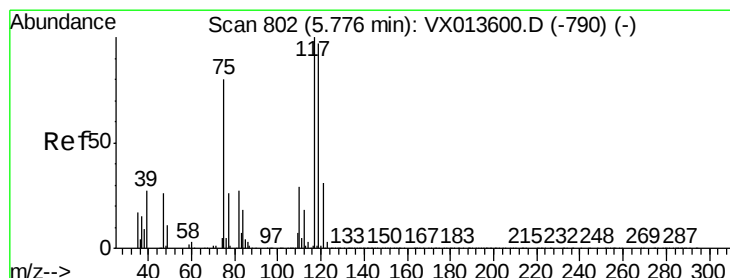
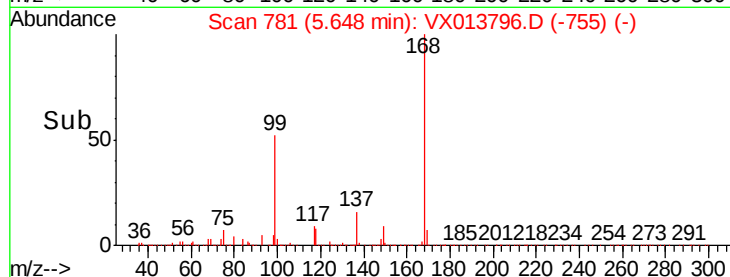
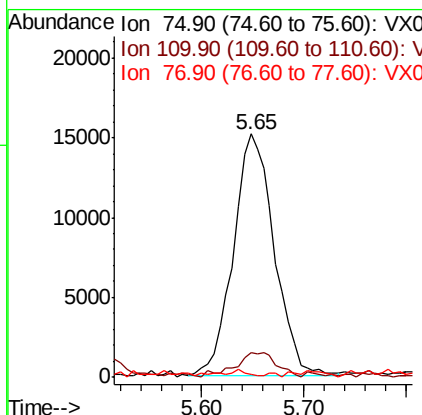
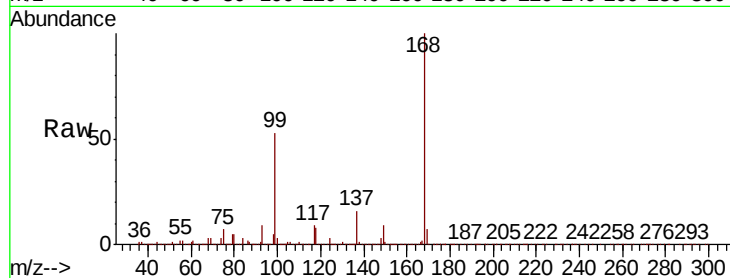




#36  
 1,1-Dichloropropene  
 Concen: 4.704 ug/l  
 RT: 5.65 min Scan# 781  
 Delta R.T. -0.14 min  
 Lab File: VX013796.D  
 Acq: 06 Dec 2019 13:56

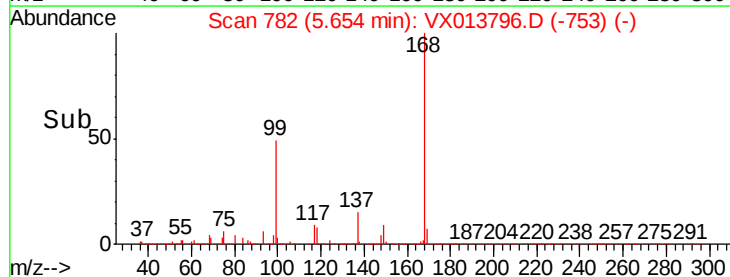
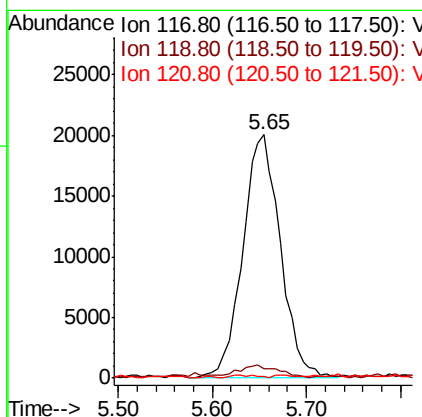
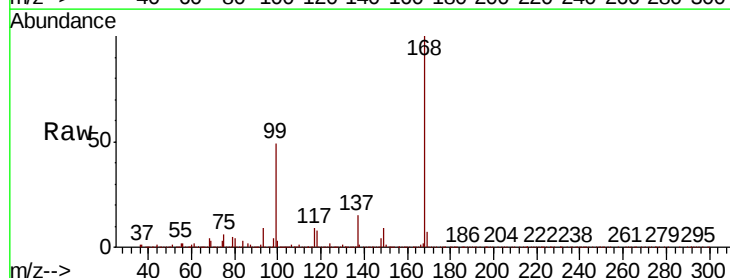
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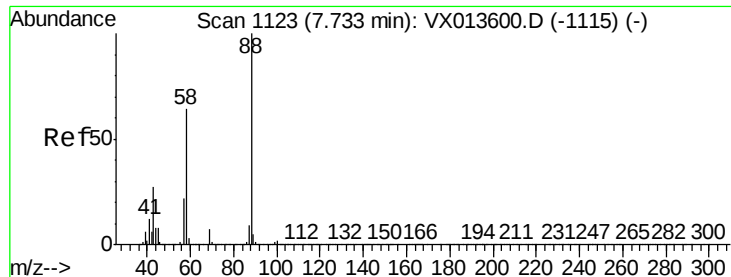
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 110     | 10.5  | 18.1  | 54.1# |
| 77      | 1.7   | 24.5  | 36.7# |



#38  
 Carbon Tetrachloride  
 Concen: 6.793 ug/l  
 RT: 5.65 min Scan# 782  
 Delta R.T. -0.12 min  
 Lab File: VX013796.D  
 Acq: 06 Dec 2019 13:56

| Tgt Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 117     | 100   |       |        |
| 119     | 3.3   | 77.5  | 116.3# |
| 121     | 0.2   | 25.0  | 37.6#  |





#49

1,4-Dioxane

Concen: 2.583 ug/l

RT: 7.74 min Scan# 1124

Delta R.T. 0.01 min

Lab File: VX013796.D

Acq: 06 Dec 2019 13:56

Instrument :

MSVOA\_X

ClientSampleId :

RE123D3-20191203

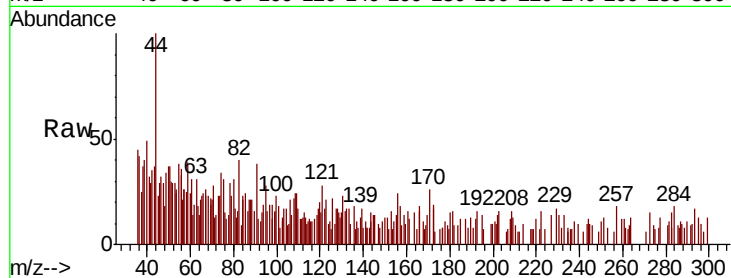
Tot Ion: 88 Resp: 462

Ion Ratio Lower Upper

88 100

43 0.0 25.8 38.6#

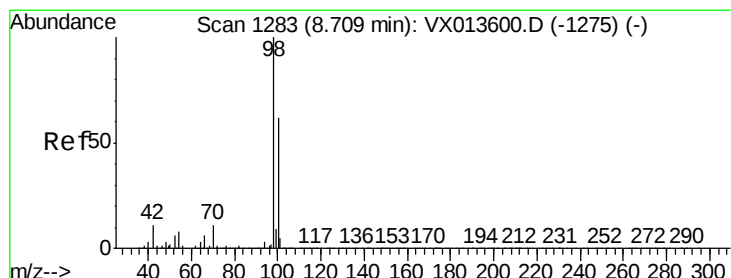
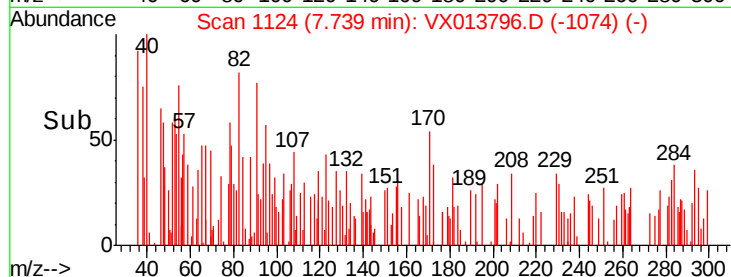
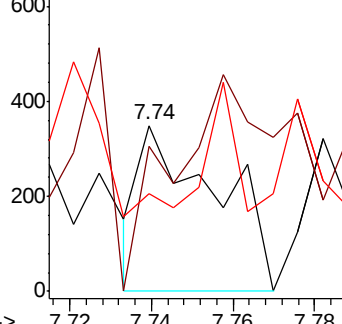
58 71.6 54.6 82.0



Abundance Ion 88.00 (87.70 to 88.70): VX0

Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0



#50

Toluene-d8

Concen: 48.857 ug/l

RT: 8.71 min Scan# 1283

Delta R.T. -0.00 min

Lab File: VX013796.D

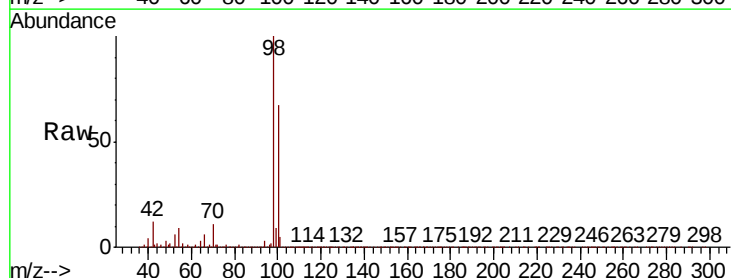
Acq: 06 Dec 2019 13:56

Tgt Ion: 98 Resp: 1154446

Ion Ratio Lower Upper

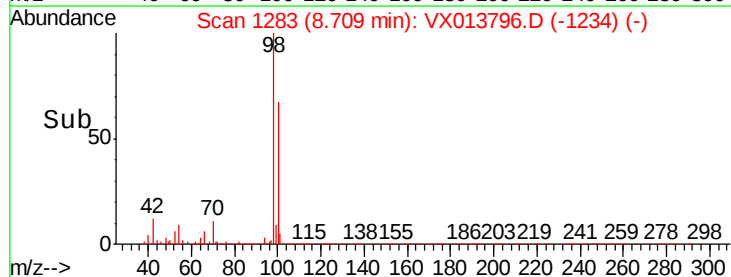
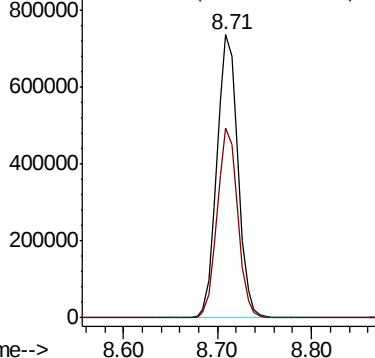
98 100

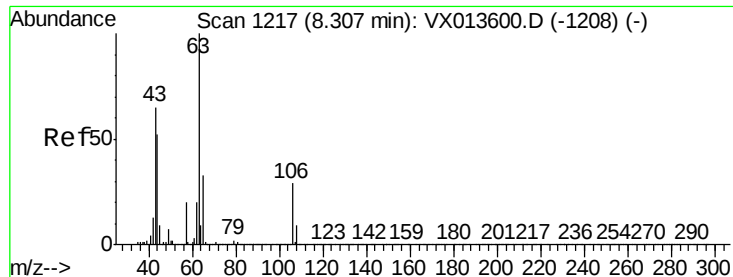
100 65.7 53.1 79.7



Abundance Ion 98.00 (97.70 to 98.70): VX0

Ion 100.00 (99.70 to 100.70): V

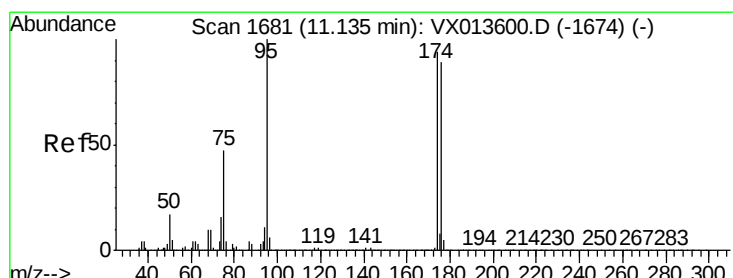
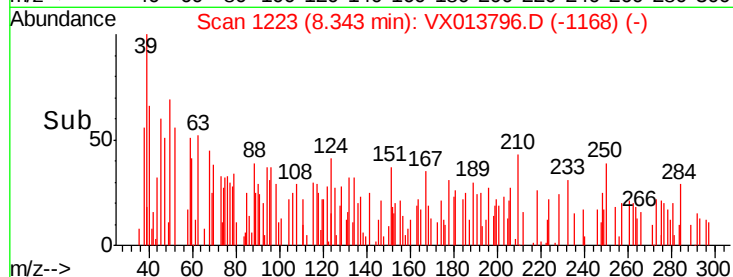
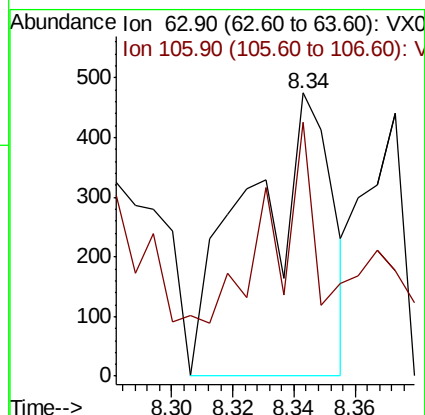
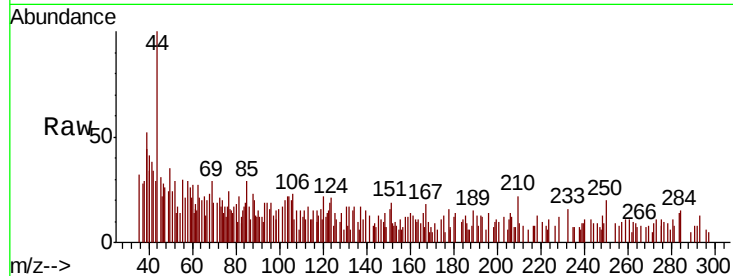




#58  
 2-Chloroethyl Vinyl ether  
 Concen: 0.207 ug/l  
 RT: 8.34 min Scan# 1223  
 Delta R.T. 0.04 min  
 Lab File: VX013796.D  
 Acq: 06 Dec 2019 13:56

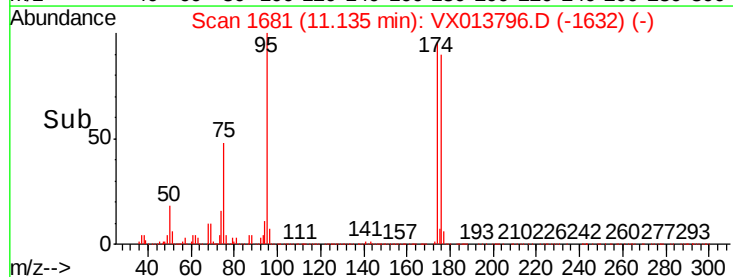
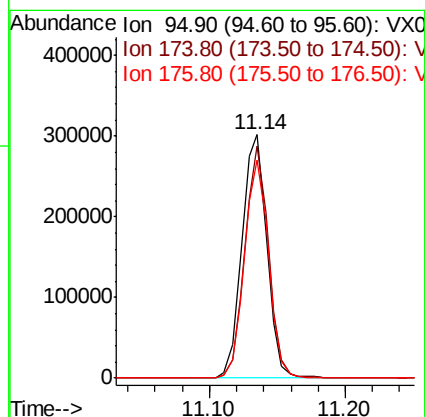
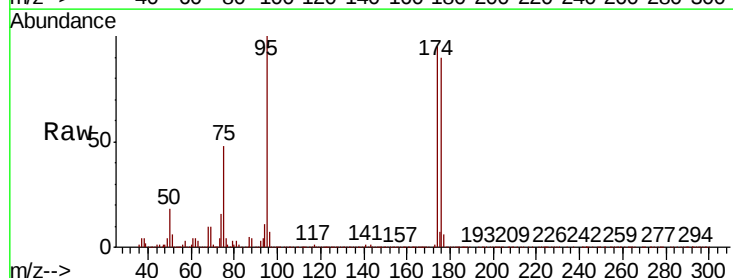
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 RE123D3-20191203

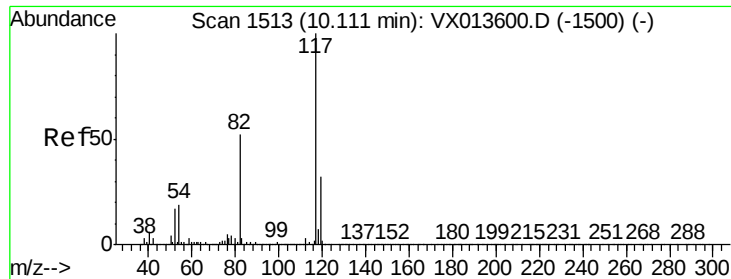
Tot Ion: 63 Resp: 887  
 Ion Ratio Lower Upper  
 63 100  
 106 34.4 23.4 35.0



#62  
 4-Bromofluorobenzene  
 Concen: 44.963 ug/l  
 RT: 11.14 min Scan# 1681  
 Delta R.T. -0.00 min  
 Lab File: VX013796.D  
 Acq: 06 Dec 2019 13:56

Tgt Ion: 95 Resp: 383114  
 Ion Ratio Lower Upper  
 95 100  
 174 91.6 0.0 180.0  
 176 87.9 0.0 173.6

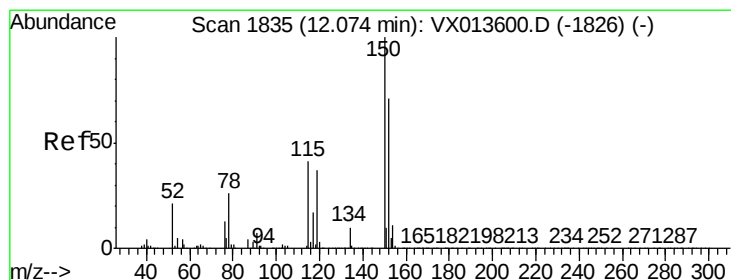
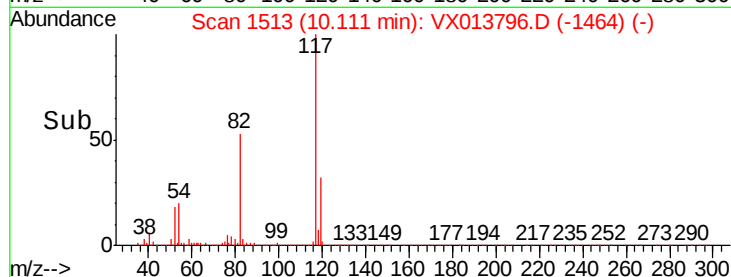
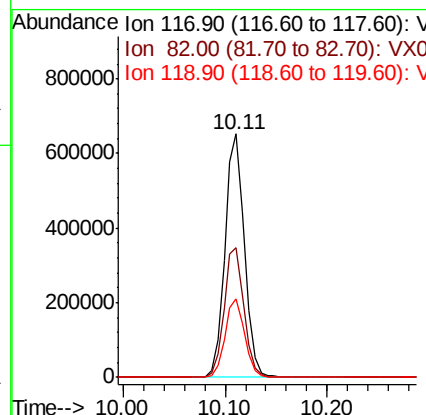
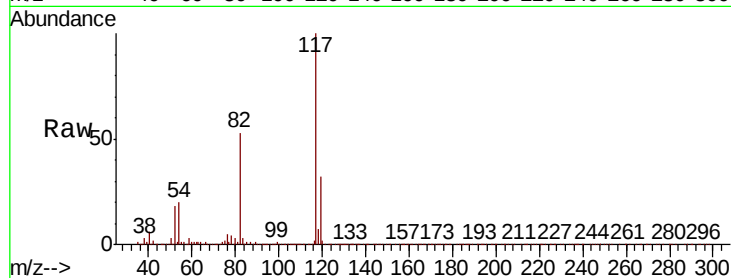




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 10.11 min Scan# 1513  
Delta R.T. -0.00 min  
Lab File: VX013796.D  
Acq: 06 Dec 2019 13:56

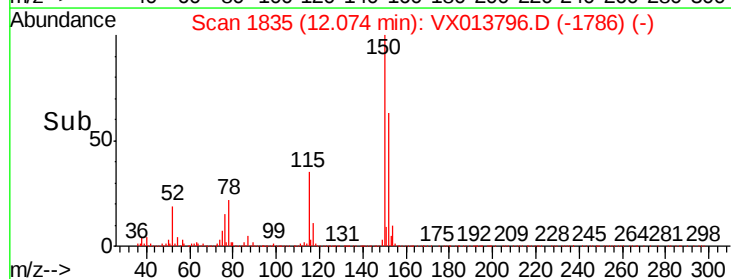
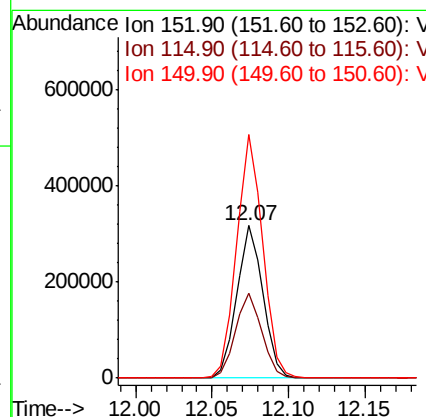
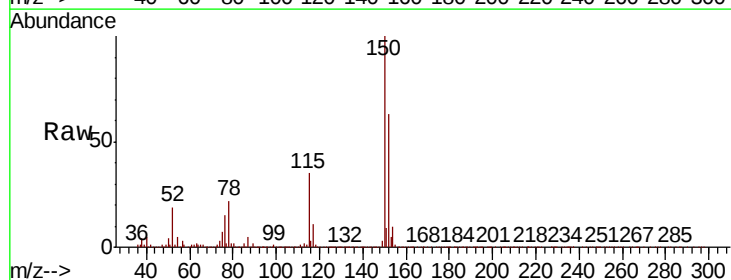
Instrument :  
MSVOA\_X  
ClientSampleId :  
RE123D3-20191203

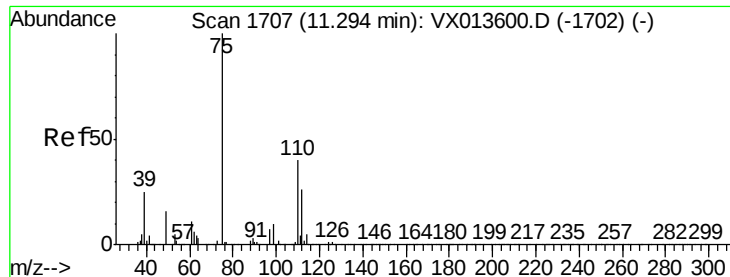
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 117     | 100   |       |       |
| 82      | 53.2  | 41.8  | 62.8  |
| 119     | 32.1  | 25.8  | 38.8  |



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 12.07 min Scan# 1835  
Delta R.T. -0.00 min  
Lab File: VX013796.D  
Acq: 06 Dec 2019 13:56

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 115     | 55.6  | 38.4  | 115.1 |
| 150     | 158.6 | 0.0   | 346.8 |





#76

1,2,3-Trichloropropane

Concen: 22.325 ug/l

RT: 11.14 min Scan# 1681

Delta R.T. -0.16 min

Lab File: VX013796.D

Acq: 06 Dec 2019 13:56

Instrument :

MSVOA\_X

ClientSampleId :

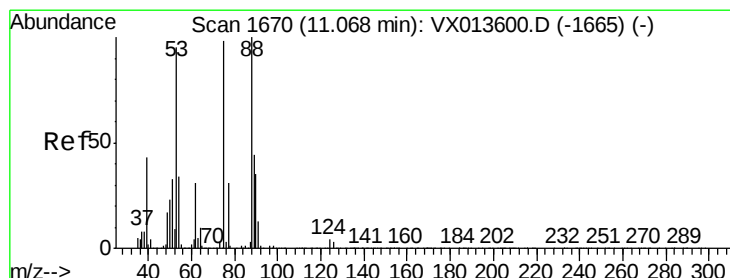
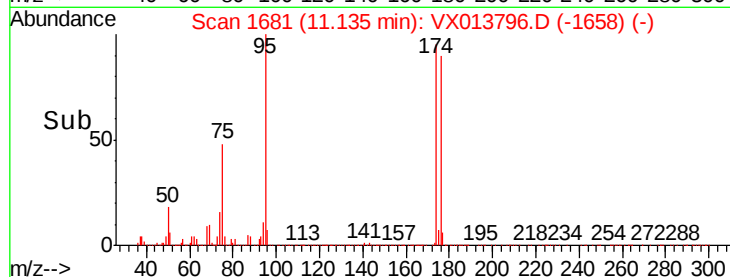
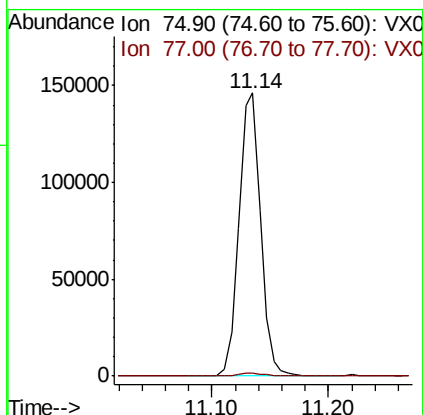
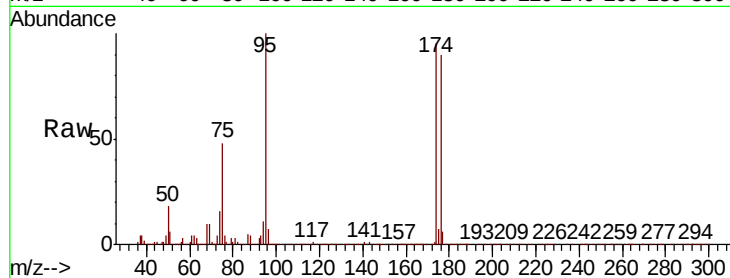
RE123D3-20191203

Tot Ion: 75 Resp: 189082

Ion Ratio Lower Upper

75 100

77 1.4 19.1 57.5#



#81

trans-1,4-Dichloro-2-butene

Concen: 61.076 ug/l

RT: 11.14 min Scan# 1681

Delta R.T. 0.07 min

Lab File: VX013796.D

Acq: 06 Dec 2019 13:56

Tgt Ion: 75 Resp: 189082

Ion Ratio Lower Upper

75 100

53 0.1 78.2 117.2#

89 0.1 35.4 53.2#

