

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX051719\  
 Data File : VX009670.D  
 Acq On : 17 May 2019 18:31  
 Operator : JC/SP  
 Sample : K2906-06  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 21 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 FEQC-TB-051619

Quant Time: May 18 04:52:08 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X042919W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu May 09 07:31:15 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.67  | 168  | 164224   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.86  | 114  | 258223   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.12 | 117  | 227040   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 95117    | 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   | 109579   | 48.88 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 97.76% |          |
| 35) Dibromofluoromethane    | 5.50  | 113  | 80379    | 49.52 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 99.04% |          |
| 50) Toluene-d8              | 8.71  | 98   | 326526   | 49.82 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 99.64% |          |
| 62) 4-Bromofluorobenzene    | 11.13 | 95   | 106394   | 44.68 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 89.36% |          |

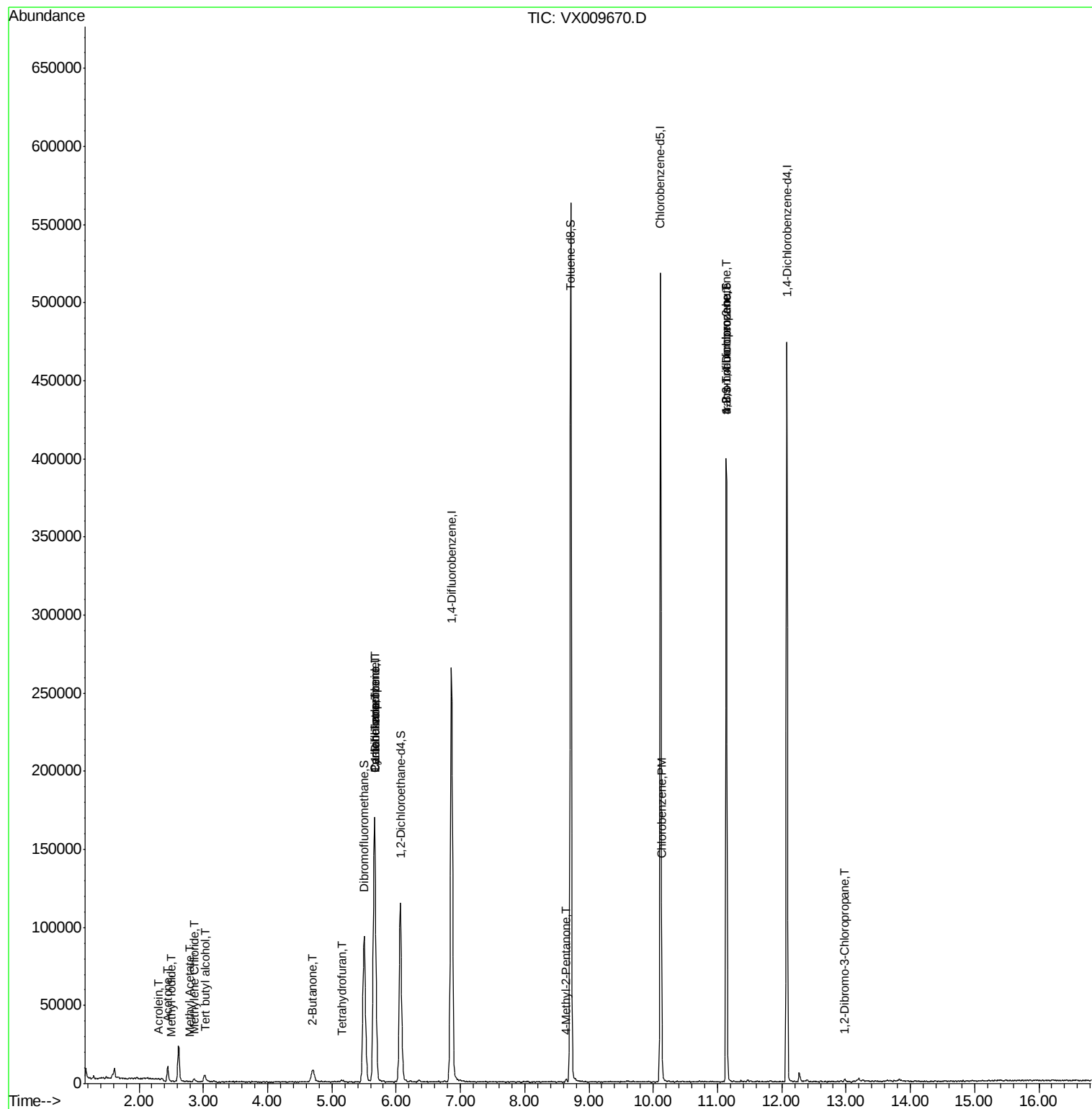
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 10) Methyl Iodide              | 2.51  | 142  | 180      | 4.685     | ug/l # | 73     |
| 11) Tert butyl alcohol         | 3.03  | 59   | 3199     | 6.165     | ug/l # | 75     |
| 13) Acrolein                   | 2.29  | 56   | 165      | 0.351     | ug/l # | 2      |
| 16) Acetone                    | 2.45  | 43   | 9947     | 8.263     | ug/l   | 99     |
| 18) Methyl Acetate             | 2.78  | 43   | 982      | 0.343     | ug/l # | 69     |
| 20) Methylene Chloride         | 2.86  | 84   | 675      | 0.346     | ug/l   | 88     |
| 25) 2-Butanone                 | 4.69  | 43   | 2759     | 1.475     | ug/l   | 95     |
| 28) Bromochloromethane         | 5.03  | 49   | 67       | Below Cal | #      | 20     |
| 29) Tetrahydrofuran            | 5.16  | 42   | 1226     | 1.018     | ug/l # | 70     |
| 31) Cyclohexane                | 5.67  | 56   | 3700     | 1.116     | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 5.66  | 75   | 13134    | 5.473     | ug/l # | 51     |
| 38) Carbon Tetrachloride       | 5.67  | 117  | 15476    | 7.098     | ug/l # | 16     |
| 51) 4-Methyl-2-Pentanone       | 8.65  | 43   | 1191     | 0.341     | ug/l   | 90     |
| 65) Chlorobenzene              | 10.13 | 112  | 2061     | 0.454     | ug/l   | 91     |
| 76) 1,2,3-Trichloropropane     | 11.13 | 75   | 54577    | 24.736    | ug/l # | 34     |
| 81) trans-1,4-Dichloro-2-buten | 11.13 | 75   | 54577    | 63.291    | ug/l # | 10     |
| 92) 1,2-Dibromo-3-Chloropropan | 12.97 | 75   | 368      | 0.636     | ug/l # | 2      |

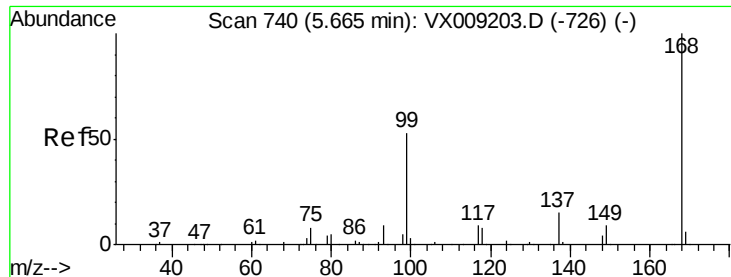
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA X\DATA\VX051719\  
Data File : VX009670.D  
Acq On : 17 May 2019 18:31  
Operator : JC/SP  
Sample : K2906-06  
Misc : 5.0mL/MSVOA X/WATER  
ALS Vial : 21 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :  
FEQC-TB-051619

Quant Time: May 18 04:52:08 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X042919W.M  
Quant Title : SW846 8260  
QLast Update : Thu May 09 07:31:15 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.67 min Scan# 740

Delta R.T. 0.00 min

Lab File: VX009670.D

Acq: 17 May 2019 18:31

Instrument :

MSVOA\_X

ClientSampleId :

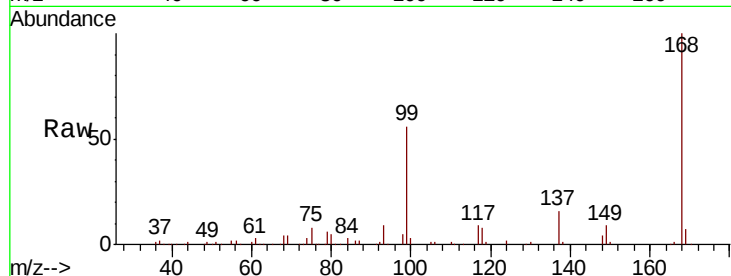
FEQC-TB-051619

Tot Ion:168 Resp: 164224

Ion Ratio Lower Upper

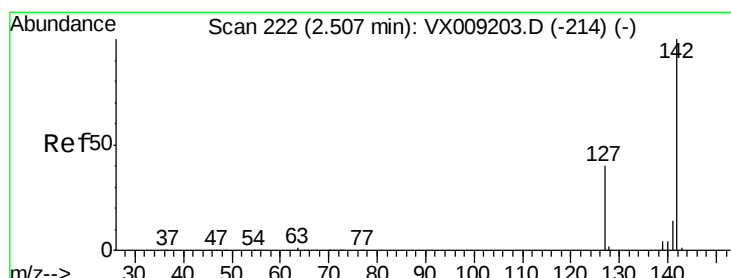
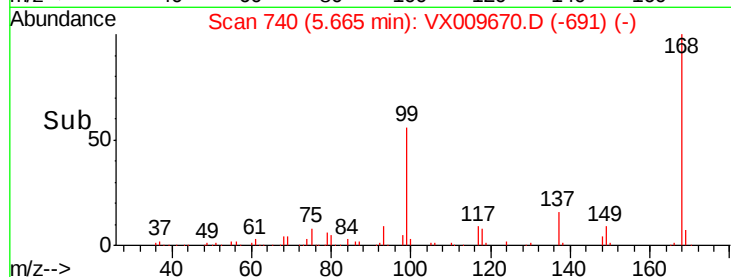
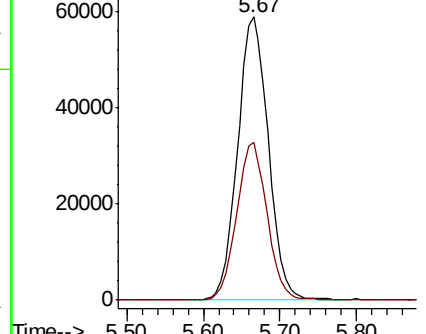
168 100

99 55.8 42.3 63.5



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0



#10

Methyl Iodide

Concen: 4.685 ug/l

RT: 2.51 min Scan# 222

Delta R.T. 0.00 min

Lab File: VX009670.D

Acq: 17 May 2019 18:31

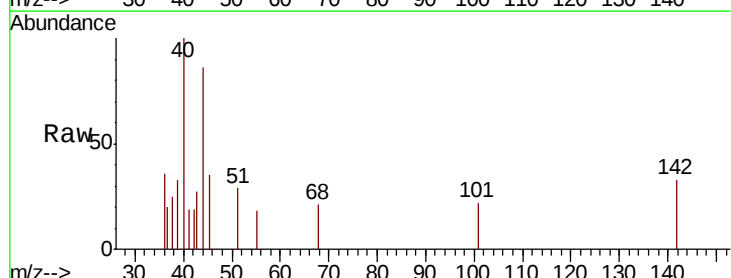
Tgt Ion:142 Resp: 180

Ion Ratio Lower Upper

142 100

127 25.6 32.7 49.1#

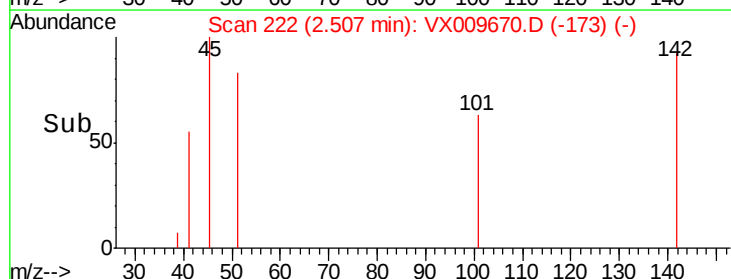
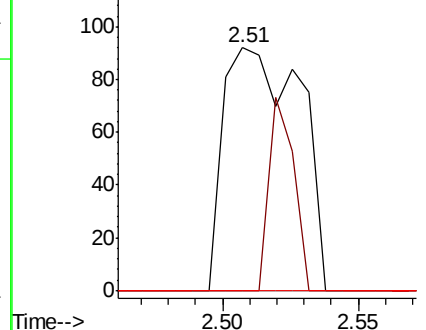
141 0.0 11.5 17.3#

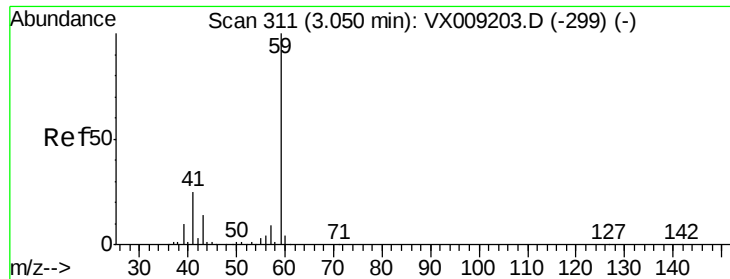


Abundance Ion 141.80 (141.50 to 142.50): V

Ion 126.80 (126.50 to 127.50): V

Ion 140.80 (140.50 to 141.50): V

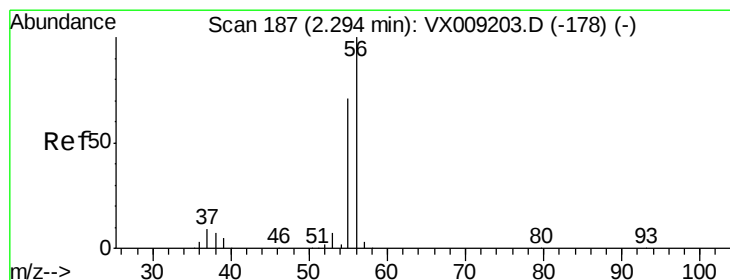
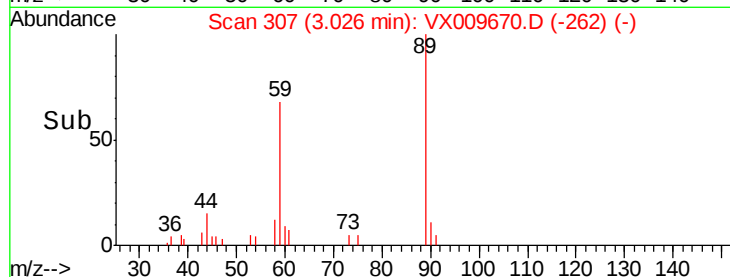
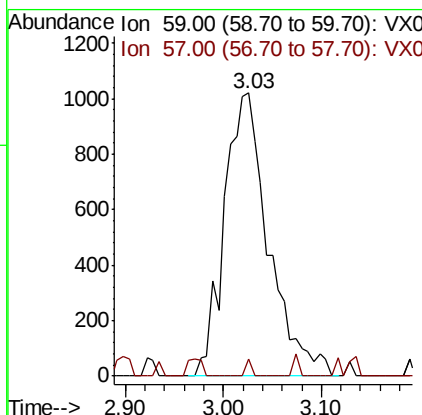
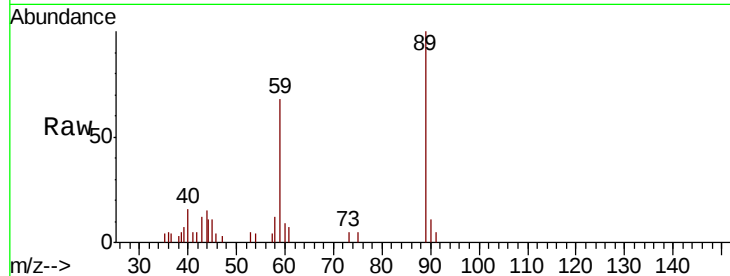




#11  
Tert butyl alcohol  
Concen: 6.165 ug/l  
RT: 3.03 min Scan# 307  
Delta R.T. -0.02 min  
Lab File: VX009670.D  
Acq: 17 May 2019 18:31

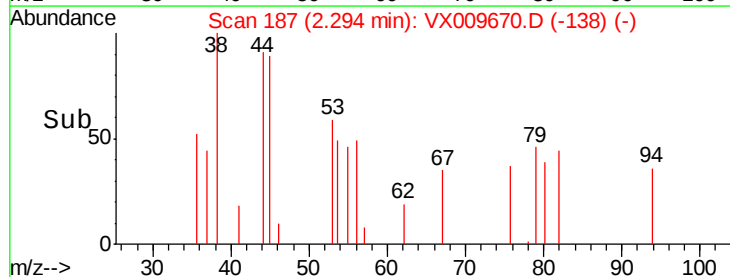
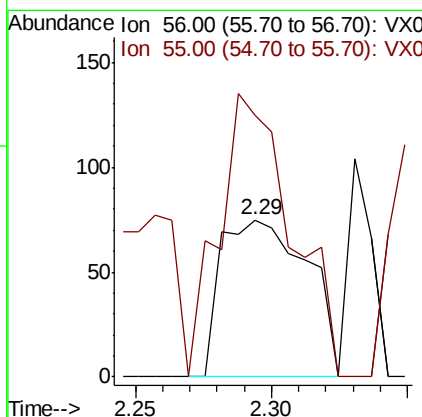
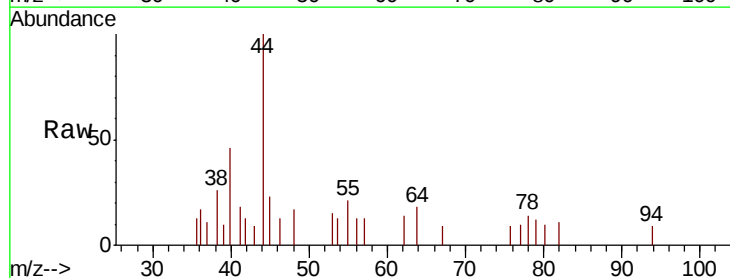
Instrument :  
MSVOA\_X  
ClientSampleId :  
FEQC-TB-051619

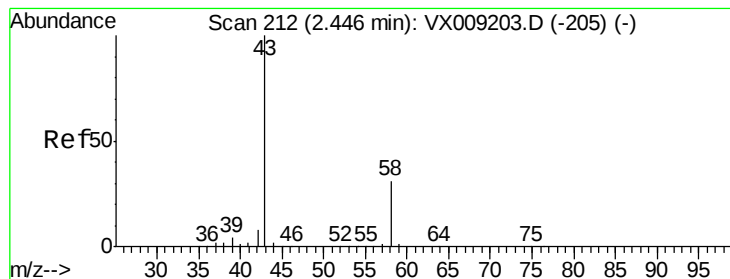
Tot Ion: 59 Resp: 3199  
Ion Ratio Lower Upper  
59 100  
57 0.7 8.2 12.2#



#13  
Acrolein  
Concen: 0.351 ug/l  
RT: 2.29 min Scan# 187  
Delta R.T. 0.00 min  
Lab File: VX009670.D  
Acq: 17 May 2019 18:31

Tgt Ion: 56 Resp: 165  
Ion Ratio Lower Upper  
56 100  
55 151.5 56.6 85.0#





#16

Acetone

Concen: 8.263 ug/l

RT: 2.45 min Scan# 212

Delta R.T. 0.00 min

Lab File: VX009670.D

Acq: 17 May 2019 18:31

Instrument :

MSVOA\_X

ClientSampleId :

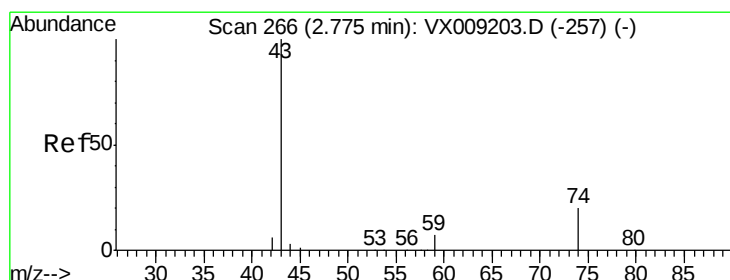
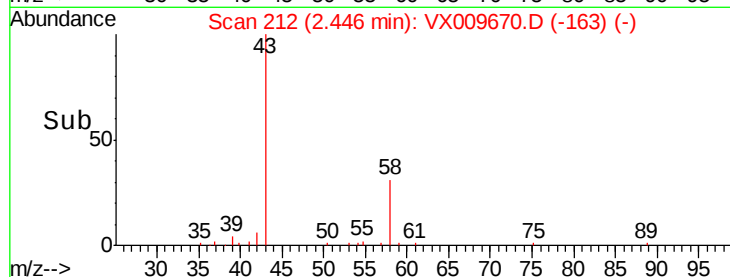
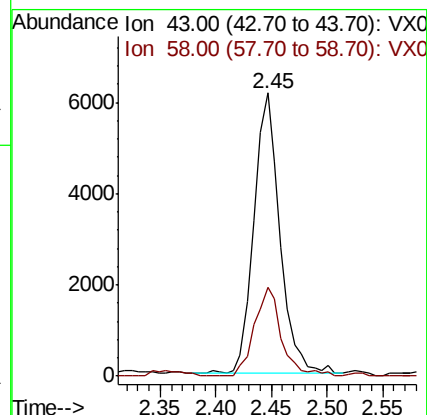
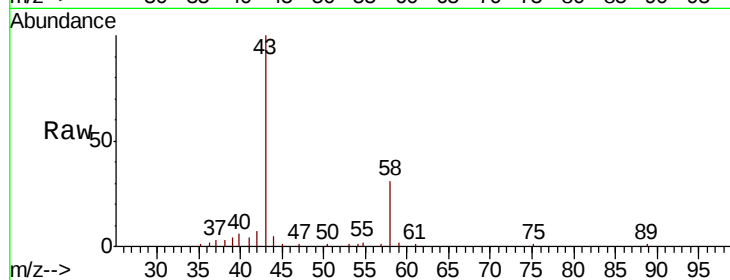
FEQC-TB-051619

Tot Ion: 43 Resp: 9947

Ion Ratio Lower Upper

43 100

58 31.7 24.9 37.3



#18

Methyl Acetate

Concen: 0.343 ug/l

RT: 2.78 min Scan# 267

Delta R.T. 0.01 min

Lab File: VX009670.D

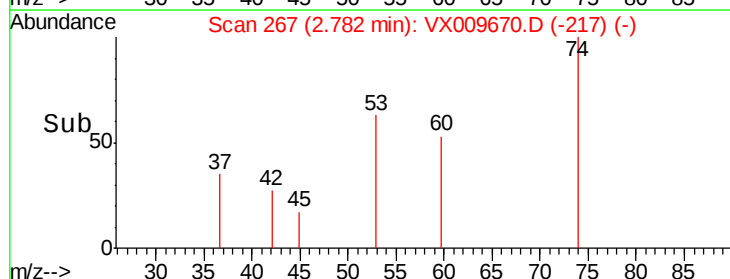
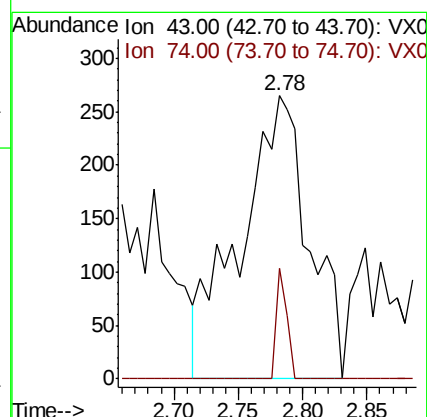
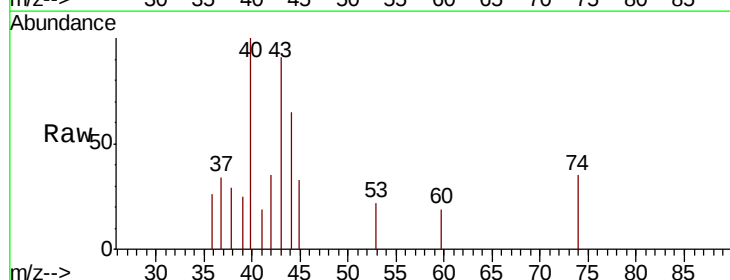
Acq: 17 May 2019 18:31

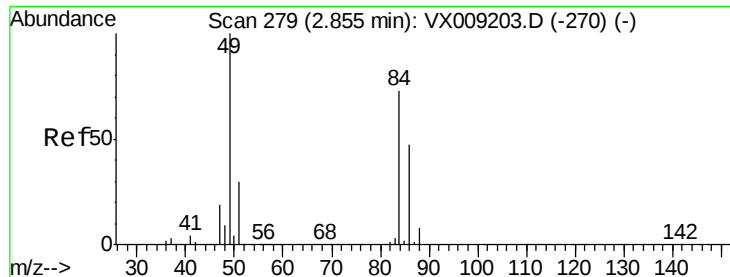
Tgt Ion: 43 Resp: 982

Ion Ratio Lower Upper

43 100

74 6.0 16.2 24.4#

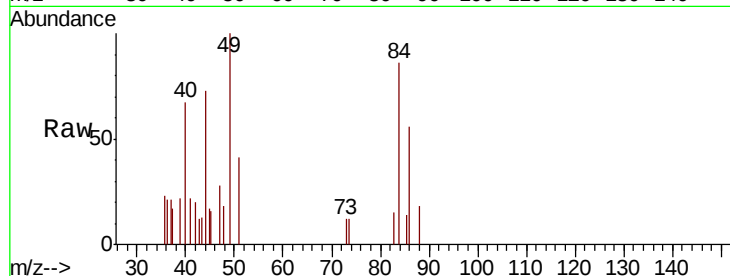




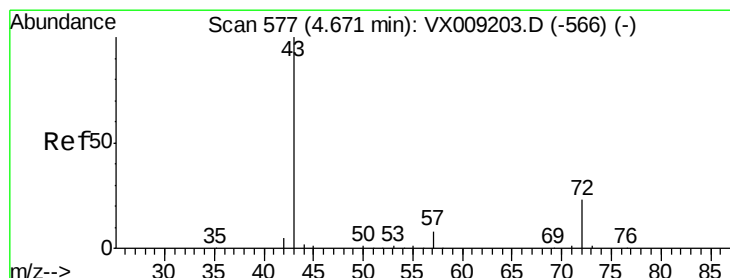
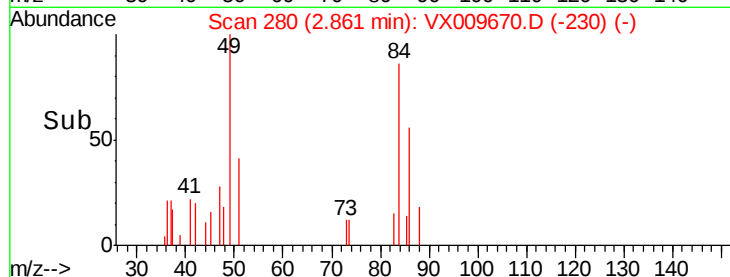
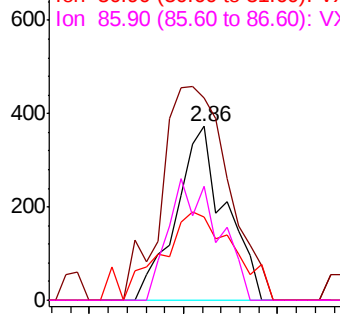
#20  
Methvlene Chloride  
Concen: 0.346 ug/l  
RT: 2.86 min Scan# 280  
Delta R.T. 0.01 min  
Lab File: VX009670.D  
Acq: 17 May 2019 18:31

Instrument :  
MSVOA\_X  
ClientSampleId :  
FEQC-TB-051619

Tot Ion: 84 Resp: 675  
Ion Ratio Lower Upper  
84 100  
49 116.4 109.9 164.9  
51 47.5 32.7 49.1  
86 65.7 52.0 78.0

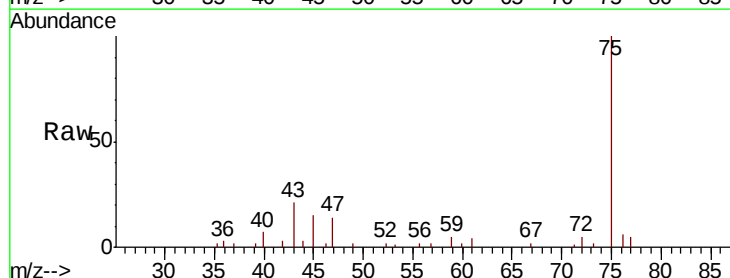


Abundance Ion 83.90 (83.60 to 84.60): VX0  
Ion 48.90 (48.60 to 49.60): VX0  
Ion 50.90 (50.60 to 51.60): VX0  
Ion 85.90 (85.60 to 86.60): VX0

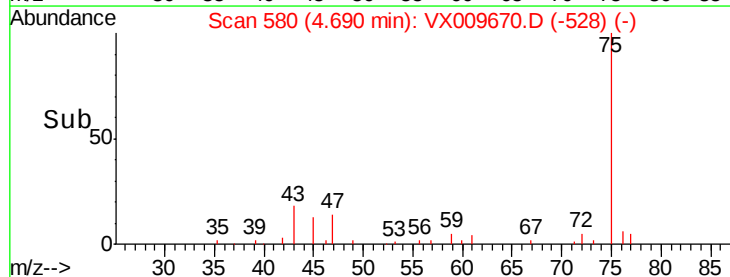
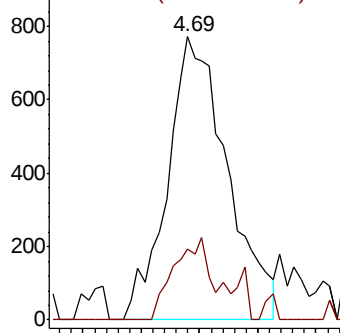


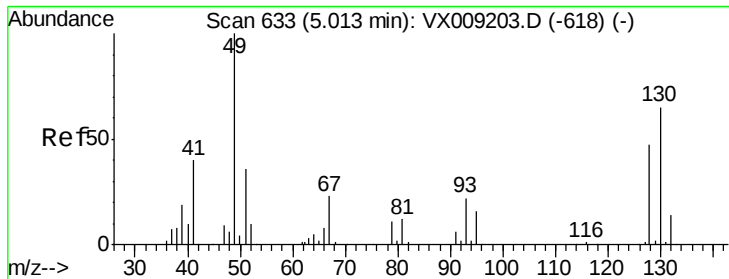
#25  
2-Butanone  
Concen: 1.475 ug/l  
RT: 4.69 min Scan# 580  
Delta R.T. 0.02 min  
Lab File: VX009670.D  
Acq: 17 May 2019 18:31

Tgt Ion: 43 Resp: 2759  
Ion Ratio Lower Upper  
43 100  
72 25.3 18.2 27.2



Abundance Ion 43.00 (42.70 to 43.70): VX0  
Ion 72.00 (71.70 to 72.70): VX0





#28

Bromochloromethane

Concen: Below Cal

RT: 5.03 min Scan# 635

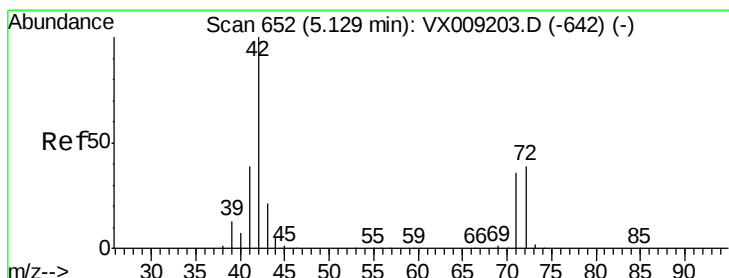
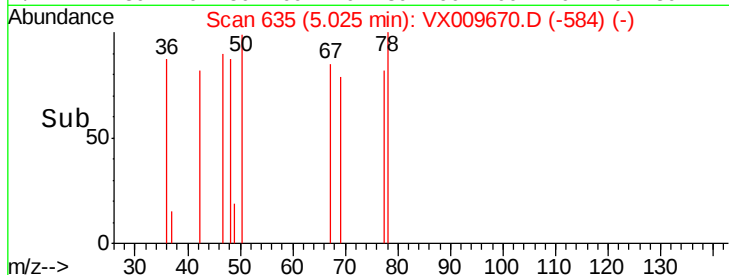
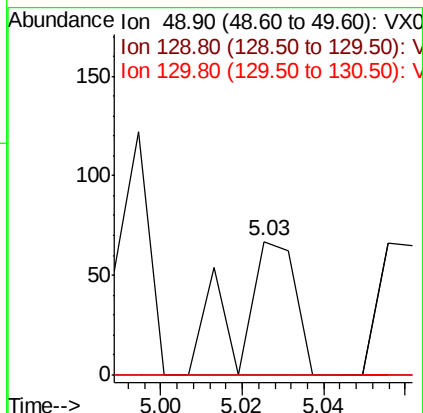
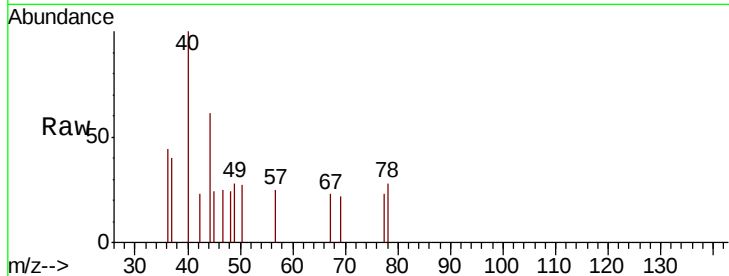
Delta R.T. 0.01 min

Lab File: VX009670.D

Acq: 17 May 2019 18:31

Instrument :  
MSVOA\_X  
ClientSampleId :  
FEQC-TB-051619

Tot Ion: 49 Resp: 67  
Ion Ratio Lower Upper  
49 100  
129 0.0 0.0 3.8  
130 0.0 51.2 76.8#



#29

Tetrahydrofuran

Concen: 1.018 ug/l

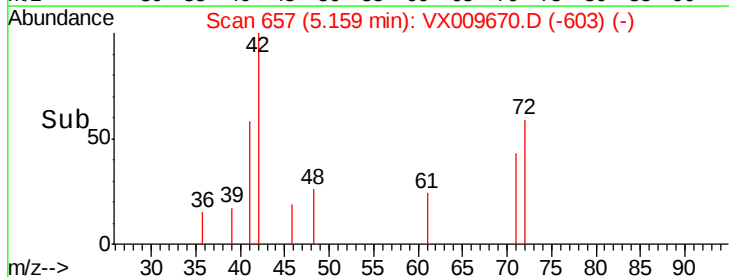
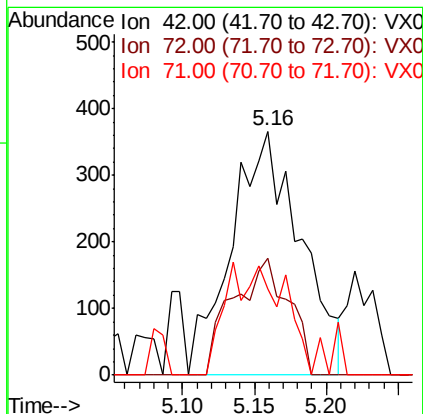
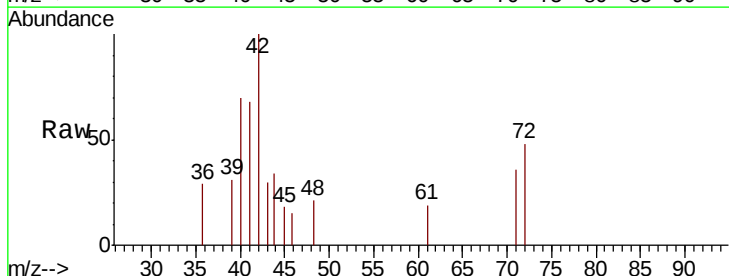
RT: 5.16 min Scan# 657

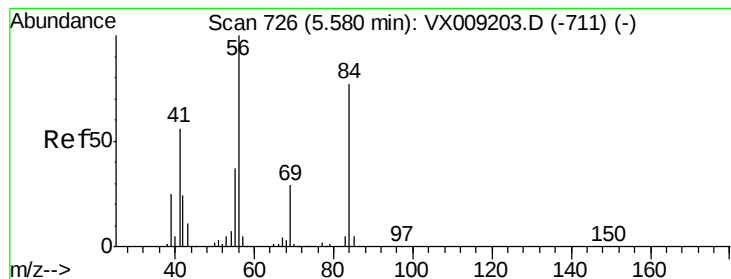
Delta R.T. 0.03 min

Lab File: VX009670.D

Acq: 17 May 2019 18:31

Tgt Ion: 42 Resp: 1226  
Ion Ratio Lower Upper  
42 100  
72 38.5 30.4 45.6  
71 0.0 28.6 43.0#





#31

Cyclohexane

Concen: 1.116 ug/l

RT: 5.67 min Scan# 740

Delta R.T. 0.09 min

Lab File: VX009670.D

Acq: 17 May 2019 18:31

Instrument :

MSVOA\_X

ClientSampleId :

FEQC-TB-051619

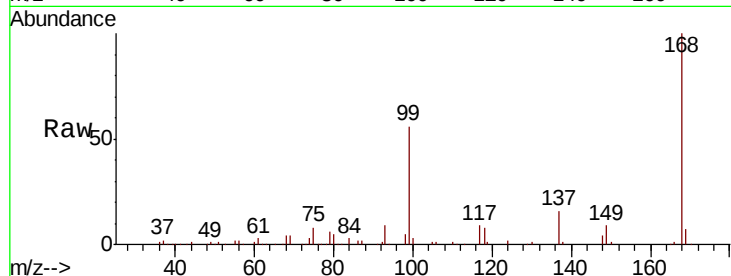
Tot Ion: 56 Resp: 3700

Ion Ratio Lower Upper

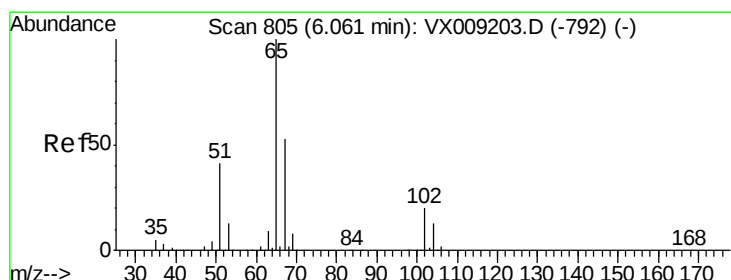
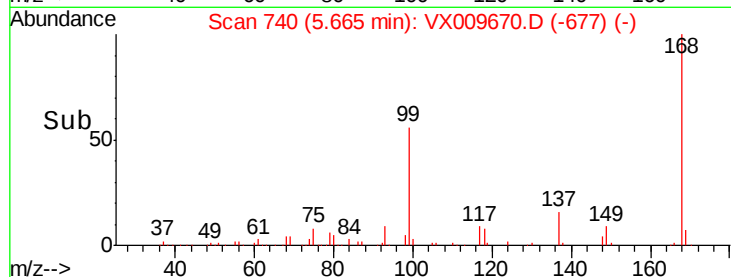
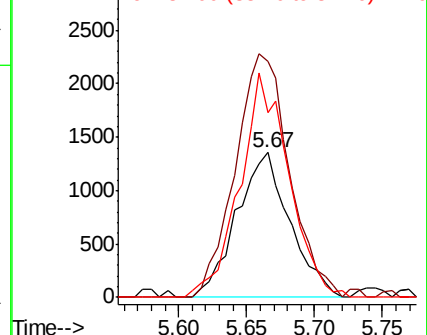
56 100

69 163.1 23.4 35.0#

84 122.2 61.9 92.9#



Abundance Ion 56.00 (55.70 to 56.70): VX0  
Ion 69.00 (68.70 to 69.70): VX0  
Ion 84.00 (83.70 to 84.70): VX0



#33

1,2-Dichloroethane-d4

Concen: 48.879 ug/l

RT: 6.06 min Scan# 805

Delta R.T. 0.00 min

Lab File: VX009670.D

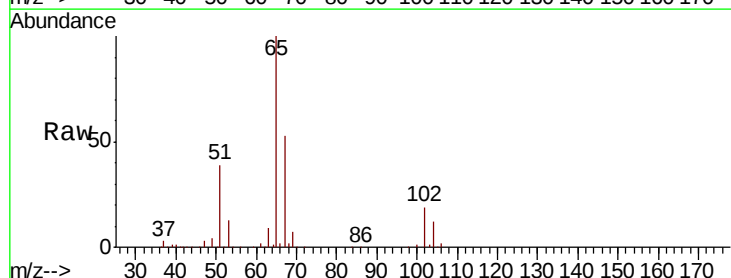
Acq: 17 May 2019 18:31

Tgt Ion: 65 Resp: 109579

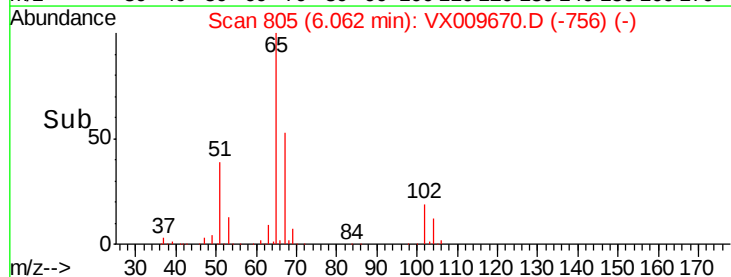
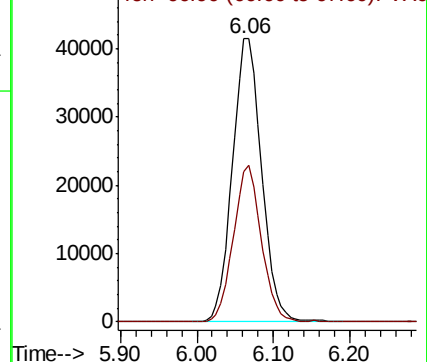
Ion Ratio Lower Upper

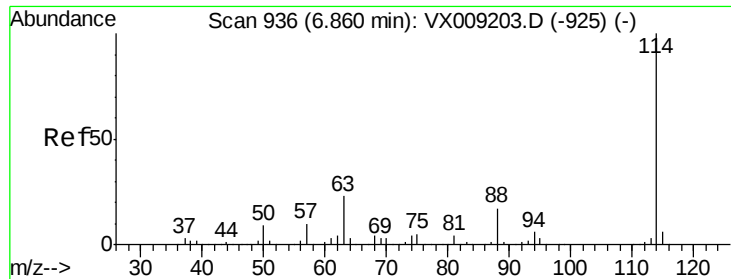
65 100

67 53.1 0.0 106.6



Abundance Ion 64.90 (64.60 to 65.60): VX0  
Ion 66.90 (66.60 to 67.60): VX0

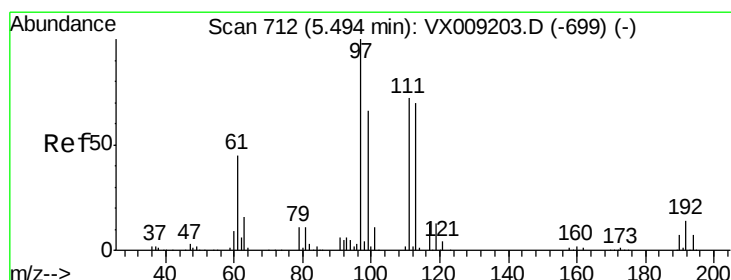
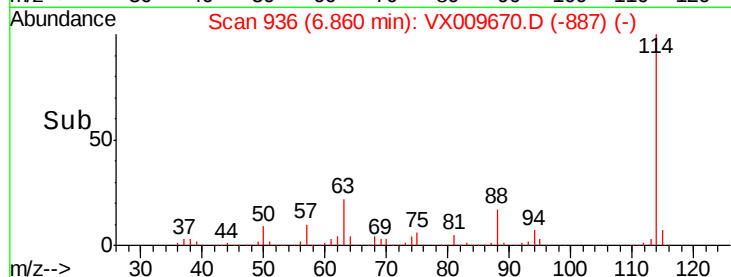
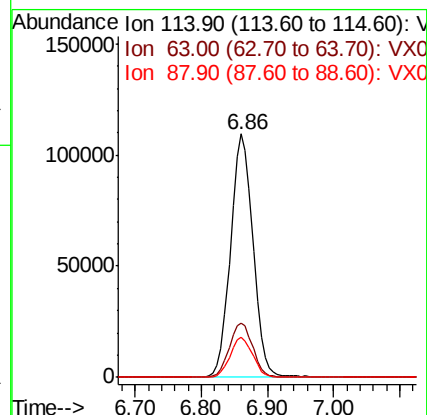
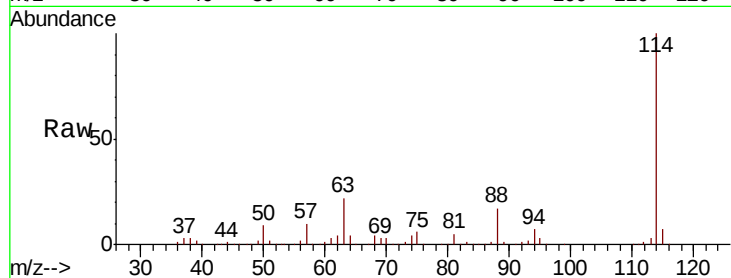




#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 6.86 min Scan# 936  
 Delta R.T. 0.00 min  
 Lab File: VX009670.D  
 Acq: 17 May 2019 18:31

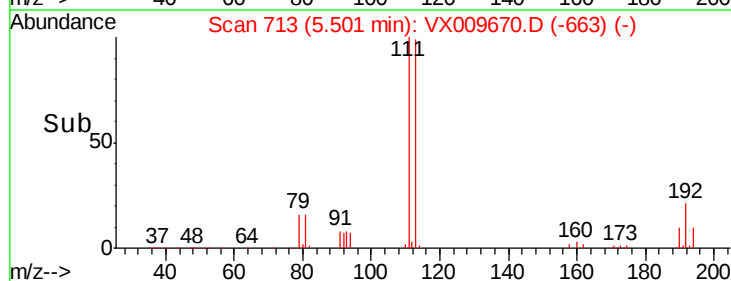
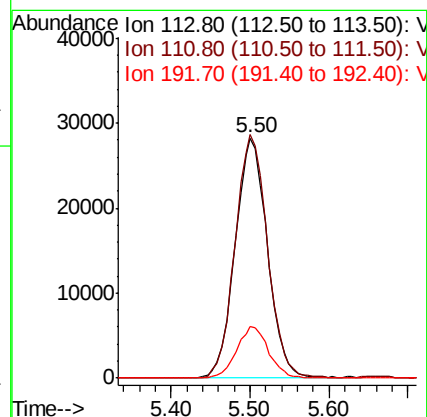
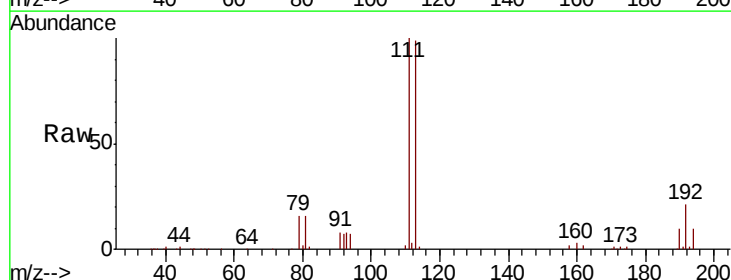
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 FEQC-TB-051619

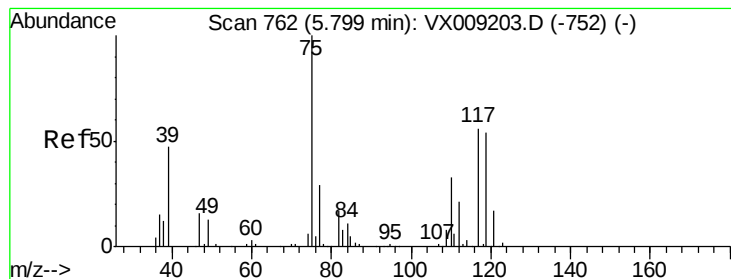
Tot Ion:114 Resp: 258223  
 Ion Ratio Lower Upper  
 114 100  
 63 22.4 0.0 45.6  
 88 16.6 0.0 33.2



#35  
 Dibromofluoromethane  
 Concen: 49.516 ug/l  
 RT: 5.50 min Scan# 713  
 Delta R.T. 0.01 min  
 Lab File: VX009670.D  
 Acq: 17 May 2019 18:31

Tgt Ion:113 Resp: 80379  
 Ion Ratio Lower Upper  
 113 100  
 111 101.8 82.8 124.2  
 192 21.2 17.0 25.6





#36

1,1-Dichloropropene

Concen: 5.473 ug/l

RT: 5.66 min Scan# 739

Delta R.T. -0.14 min

Lab File: VX009670.D

Acq: 17 May 2019 18:31

Instrument :

MSVOA\_X

ClientSampleId :

FEQC-TB-051619

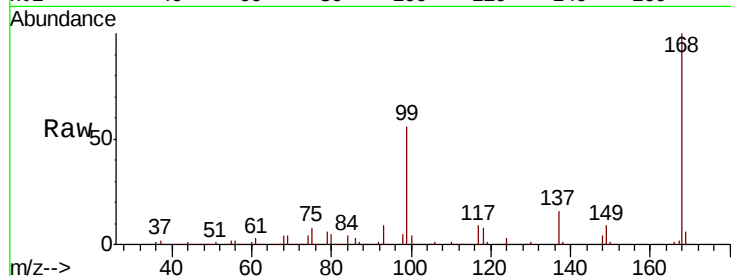
Tot Ion: 75 Resp: 13134

Ion Ratio Lower Upper

75 100

110 9.4 16.9 50.6#

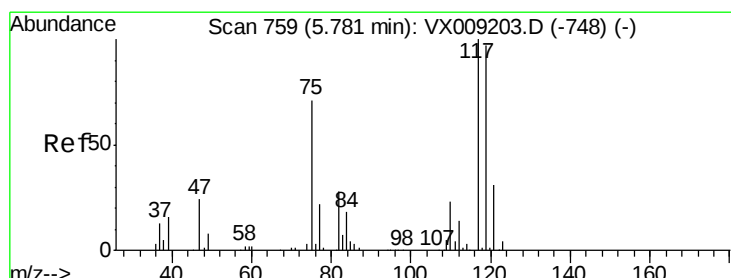
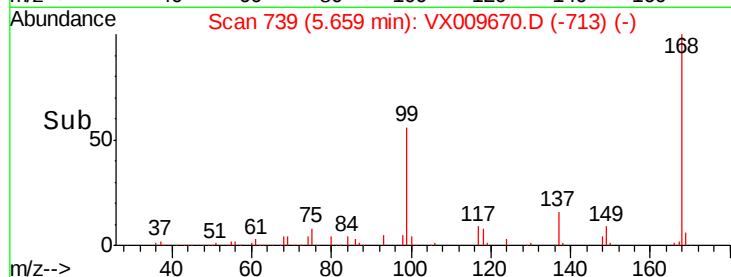
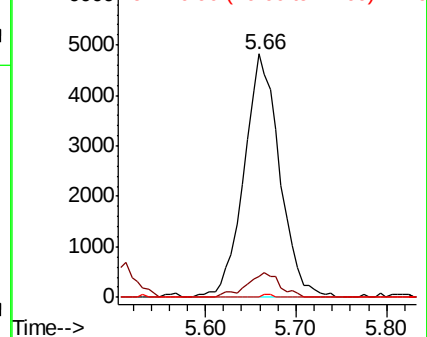
77 0.3 24.8 37.2#



Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 109.90 (109.60 to 110.60): V

Ion 76.90 (76.60 to 77.60): VX0



#38

Carbon Tetrachloride

Concen: 7.098 ug/l

RT: 5.67 min Scan# 740

Delta R.T. -0.12 min

Lab File: VX009670.D

Acq: 17 May 2019 18:31

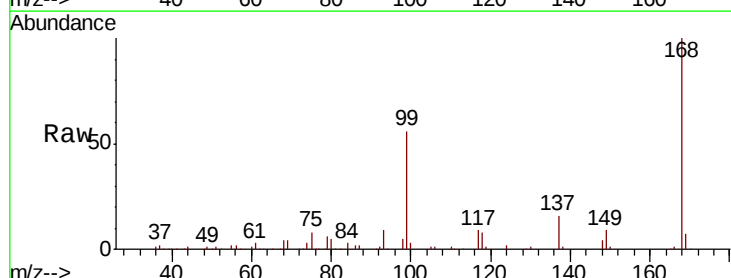
Tgt Ion:117 Resp: 15476

Ion Ratio Lower Upper

117 100

119 6.0 77.5 116.3#

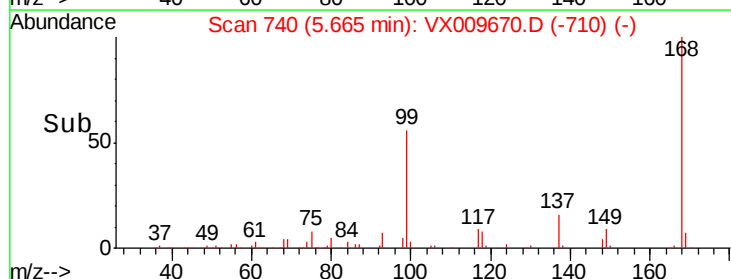
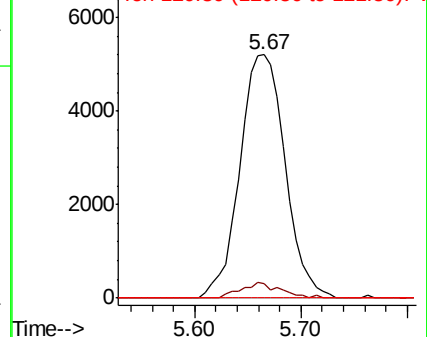
121 0.0 24.7 37.1#

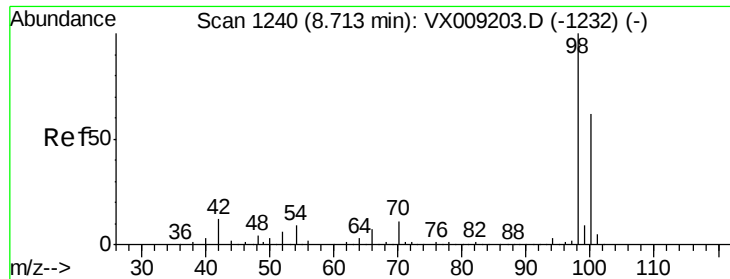


Abundance Ion 116.80 (116.50 to 117.50): V

Ion 118.80 (118.50 to 119.50): V

Ion 120.80 (120.50 to 121.50): V

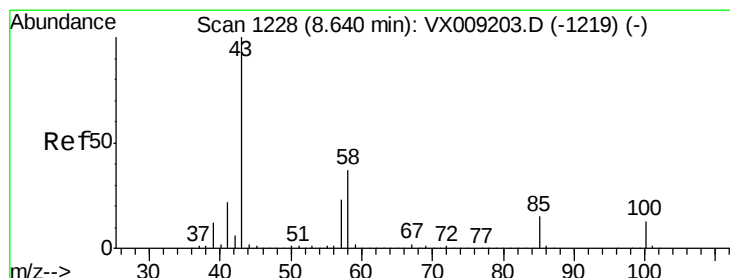
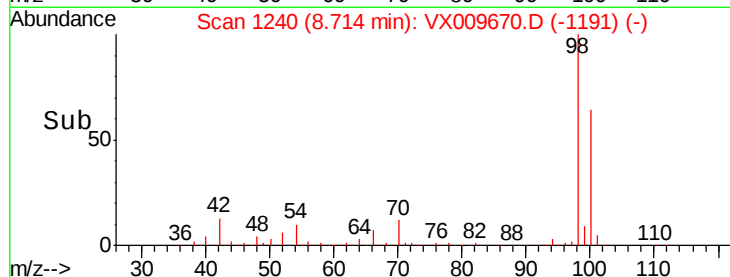
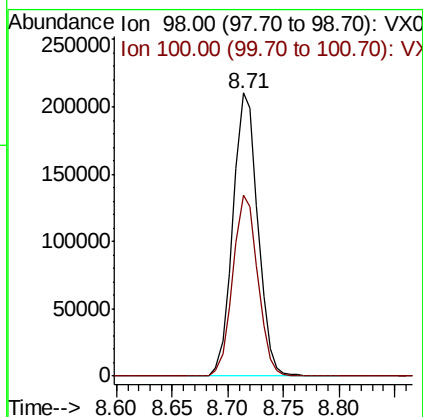
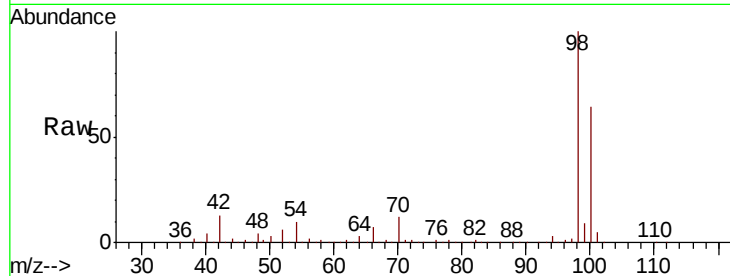




#50  
Toluene-d8  
Concen: 49.824 ug/l  
RT: 8.71 min Scan# 1240  
Delta R.T. 0.00 min  
Lab File: VX009670.D  
Acq: 17 May 2019 18:31

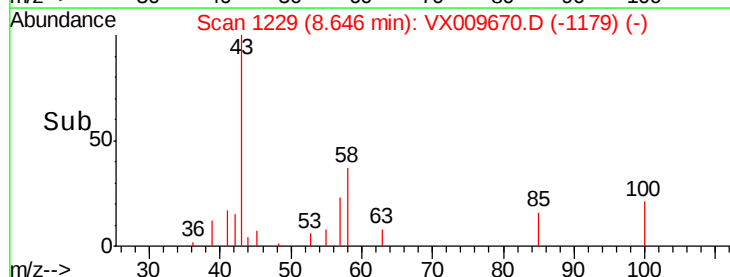
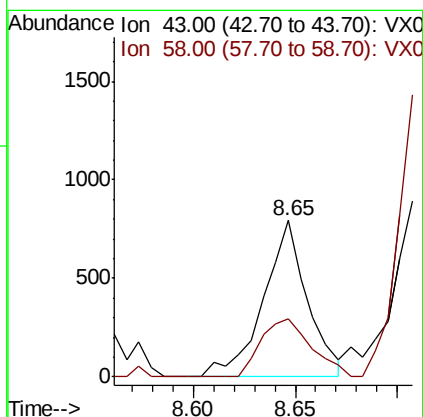
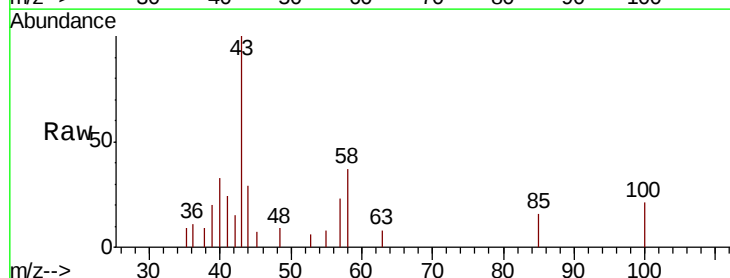
Instrument :  
MSVOA\_X  
ClientSampleId :  
FEQC-TB-051619

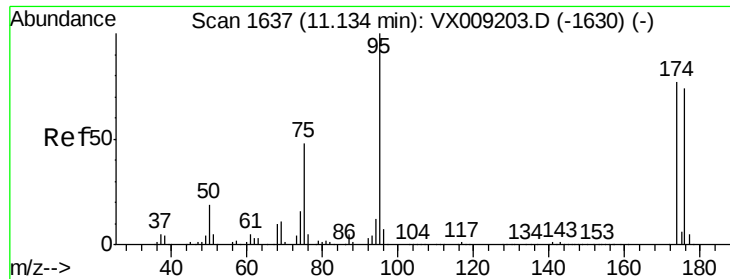
Tot Ion: 98 Resp: 326526  
Ion Ratio Lower Upper  
98 100  
100 64.1 51.2 76.8



#51  
4-Methyl-2-Pentanone  
Concen: 0.341 ug/l  
RT: 8.65 min Scan# 1229  
Delta R.T. 0.01 min  
Lab File: VX009670.D  
Acq: 17 May 2019 18:31

Tgt Ion: 43 Resp: 1191  
Ion Ratio Lower Upper  
43 100  
58 42.7 29.5 44.3

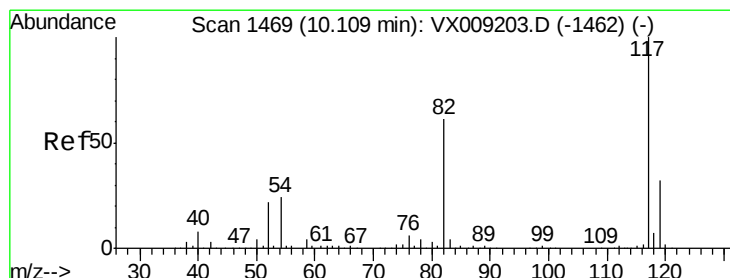
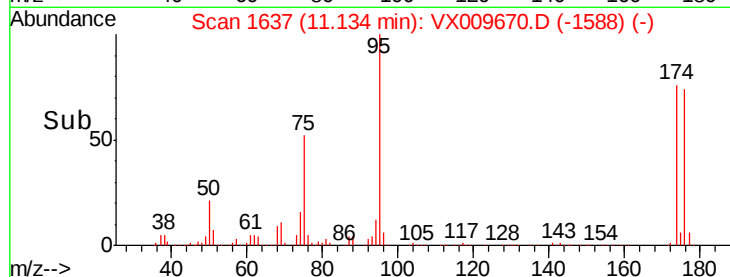
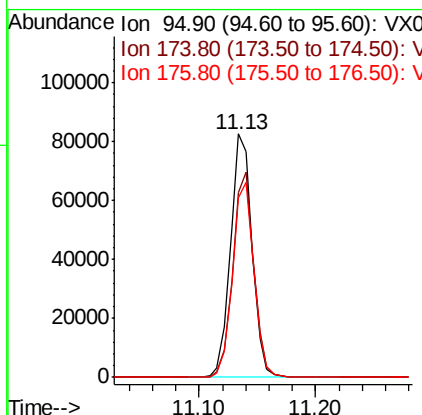
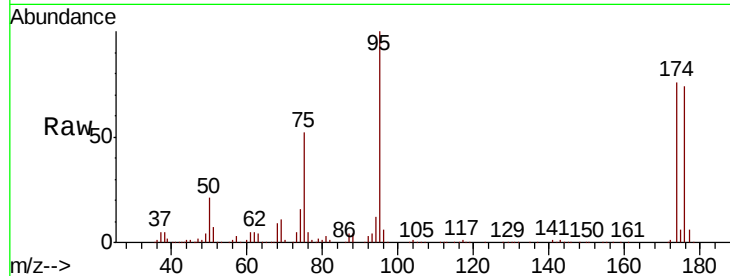




#62  
4-Bromofluorobenzene  
Concen: 44.678 ug/l  
RT: 11.13 min Scan# 1637  
Delta R.T. 0.00 min  
Lab File: VX009670.D  
Acq: 17 May 2019 18:31

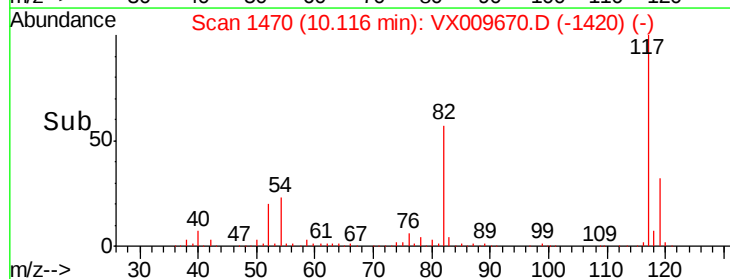
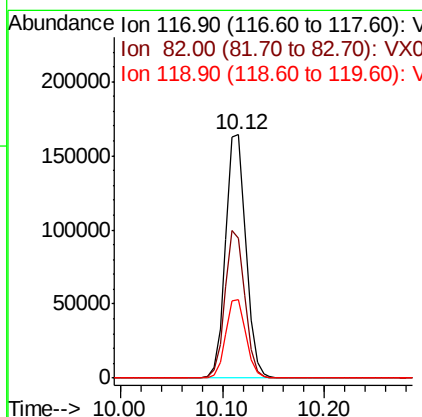
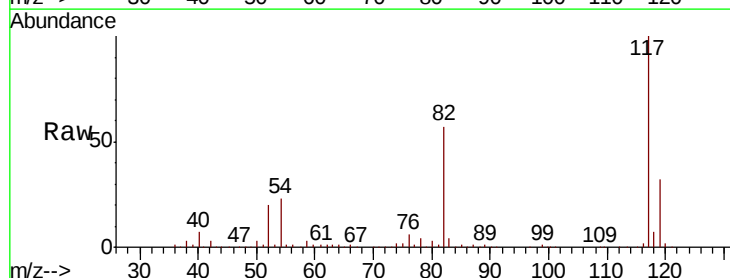
Instrument :  
MSVOA\_X  
ClientSampleId :  
FEQC-TB-051619

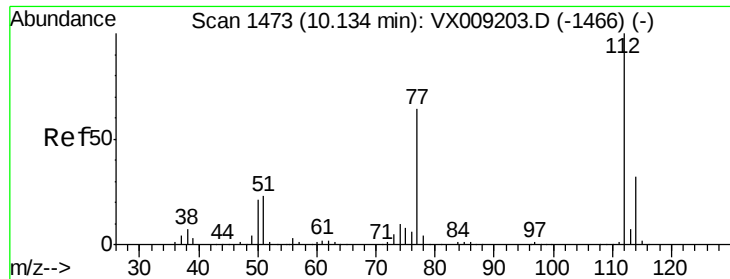
Tot Ion: 95 Resp: 106394  
Ion Ratio Lower Upper  
95 100  
174 82.8 0.0 161.6  
176 79.7 0.0 159.2



#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 10.12 min Scan# 1470  
Delta R.T. 0.01 min  
Lab File: VX009670.D  
Acq: 17 May 2019 18:31

Tgt Ion: 117 Resp: 227040  
Ion Ratio Lower Upper  
117 100  
82 57.5 48.8 73.2  
119 32.5 25.8 38.6

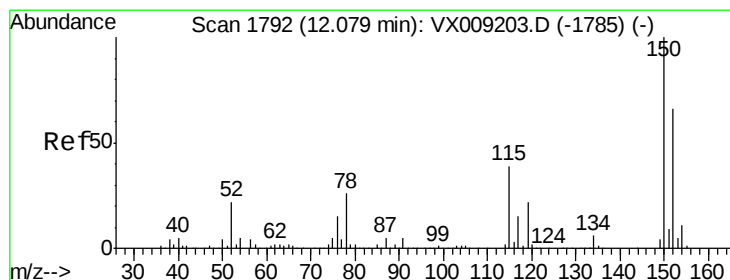
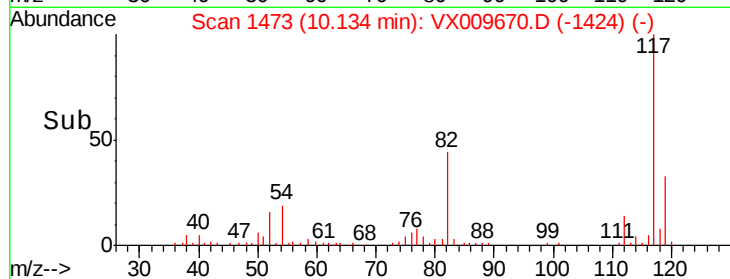
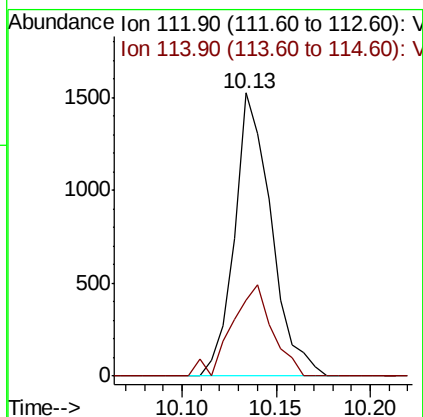
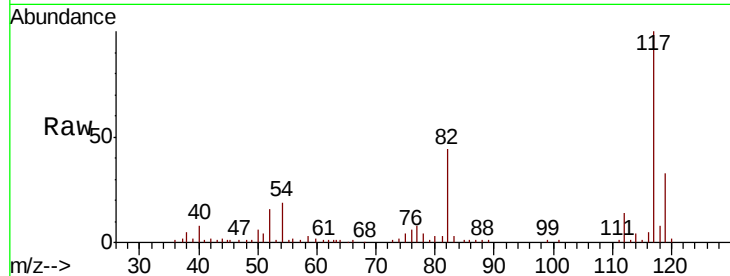




#65  
Chlorobenzene  
Concen: 0.454 ug/l  
RT: 10.13 min Scan# 1473  
Delta R.T. 0.00 min  
Lab File: VX009670.D  
Acq: 17 May 2019 18:31

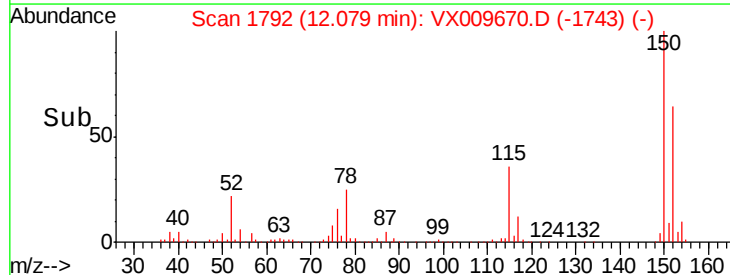
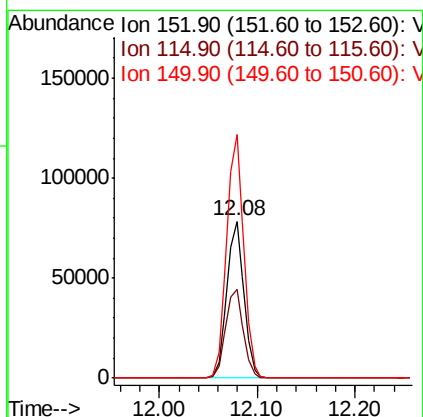
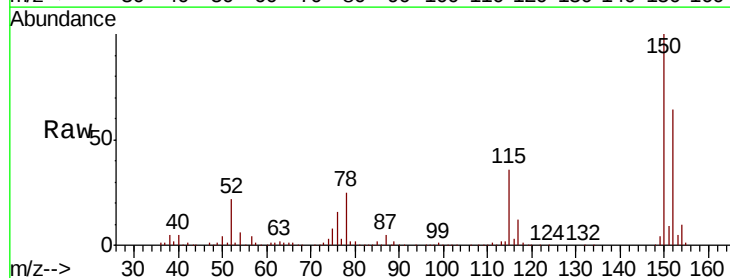
Instrument :  
MSVOA\_X  
ClientSampleId :  
FEQC-TB-051619

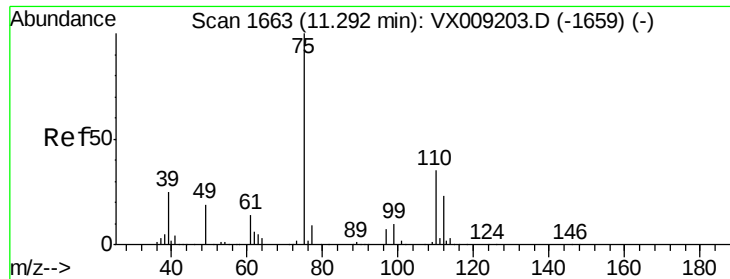
Tot Ion:112 Resp: 2061  
Ion Ratio Lower Upper  
112 100  
114 26.9 25.5 38.3



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 12.08 min Scan# 1792  
Delta R.T. 0.00 min  
Lab File: VX009670.D  
Acq: 17 May 2019 18:31

Tgt Ion:152 Resp: 95117  
Ion Ratio Lower Upper  
152 100  
115 58.4 41.2 123.6  
150 155.9 0.0 346.4





#76

1,2,3-Trichloropropane

Concen: 24.736 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. -0.16 min

Lab File: VX009670.D

Acq: 17 May 2019 18:31

Instrument :

MSVOA\_X

ClientSampleId :

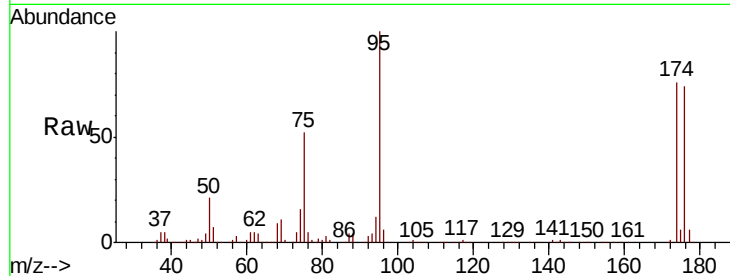
FEQC-TB-051619

Tot Ion: 75 Resp: 54577

Ion Ratio Lower Upper

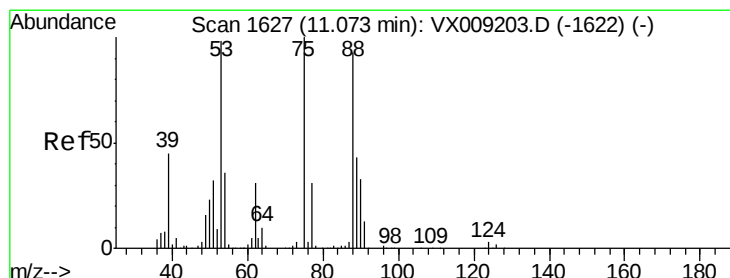
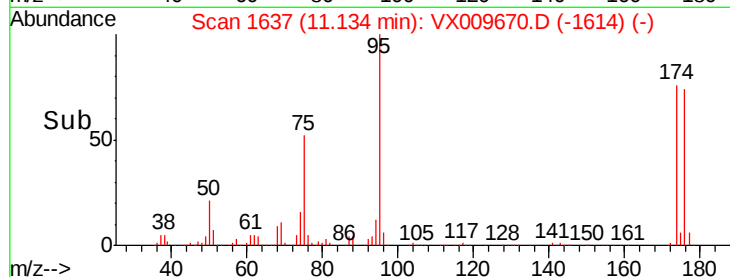
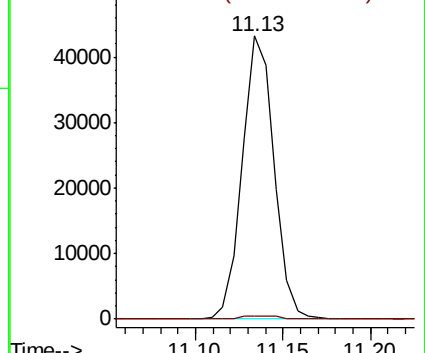
75 100

77 1.5 22.1 66.1#



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: 63.291 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. 0.06 min

Lab File: VX009670.D

Acq: 17 May 2019 18:31

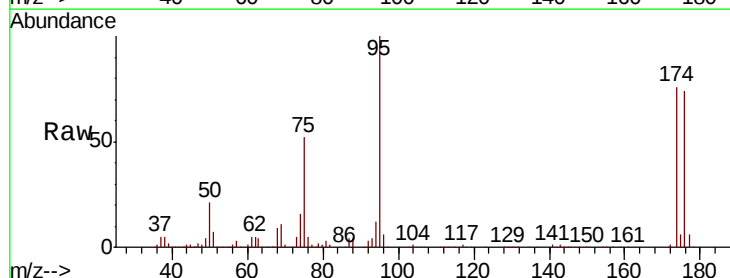
Tgt Ion: 75 Resp: 54577

Ion Ratio Lower Upper

75 100

53 0.1 79.0 118.6#

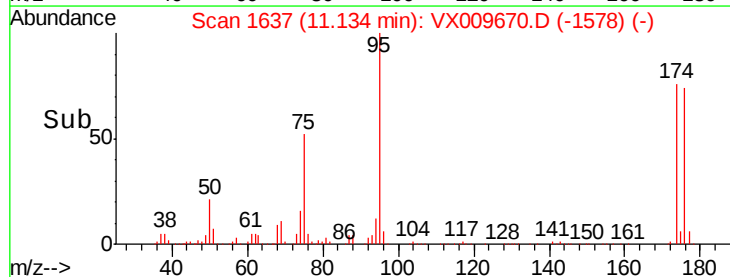
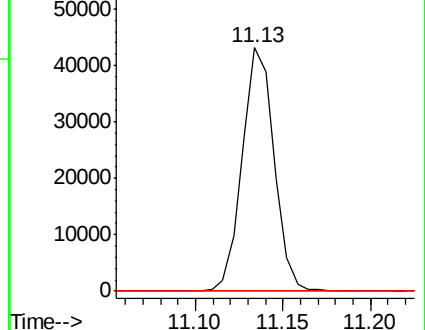
89 0.0 34.7 52.1#

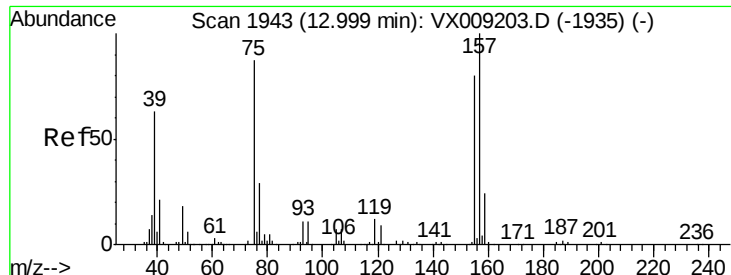


Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 53.00 (52.70 to 53.70): VX0

Ion 88.90 (88.60 to 89.60): VX0





#92

1,2-Dibromo-3-Chloropropane

Concen: 0.636 ug/l

RT: 12.97 min Scan# 1938

Delta R.T. -0.03 min

Lab File: VX009670.D

Acq: 17 May 2019 18:31

Instrument :

MSVOA\_X

ClientSampleId :

FEQC-TB-051619

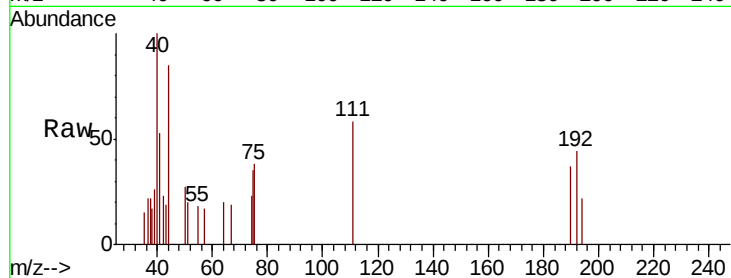
Tot Ion: 75 Resp: 368

Ion Ratio Lower Upper

75 100

155 0.0 42.0 126.0#

157 0.0 53.2 159.6#



Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 154.80 (154.50 to 155.50): V

Ion 156.80 (156.50 to 157.50): V

