

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\WX052019\  
 Data File : VX009719.D  
 Acq On : 20 May 2019 12:32  
 Operator : JC/SP  
 Sample : K2906-05  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 6 Sample Multiplier: 1

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

Quant Time: May 21 07:40:48 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

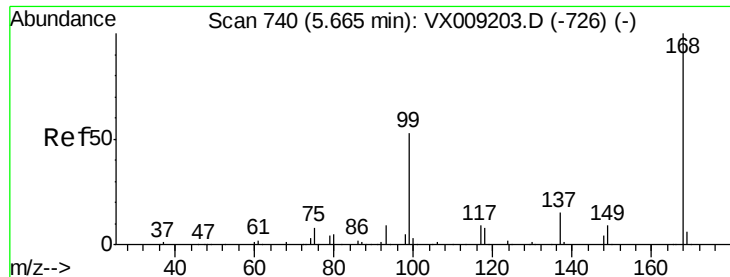
| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.66  | 168  | 169828   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.86  | 114  | 267084   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.11 | 117  | 235793   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 93625    | 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   | 112323   | 48.45 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 96.90%  |          |
| 35) Dibromofluoromethane    | 5.50  | 113  | 83840    | 49.93 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 99.86%  |          |
| 50) Toluene-d8              | 8.71  | 98   | 341191   | 50.33 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 100.66% |          |
| 62) 4-Bromofluorobenzene    | 11.13 | 95   | 108495   | 44.05 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 88.10%  |          |

| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 3) Chloromethane               | 1.33  | 50   | 459      | 0.215     | ug/l   | 92     |
| 10) Methyl Iodide              | 2.51  | 142  | 60       | 4.623     | ug/l # | 42     |
| 11) Tert butyl alcohol         | 3.03  | 59   | 1703     | 3.173     | ug/l # | 79     |
| 13) Acrolein                   | 2.28  | 56   | 197      | 0.405     | ug/l # | 64     |
| 16) Acetone                    | 2.45  | 43   | 8012     | 6.436     | ug/l   | 98     |
| 18) Methyl Acetate             | 2.78  | 43   | 609      | 0.206     | ug/l # | 56     |
| 20) Methylene Chloride         | 2.86  | 84   | 992      | 0.492     | ug/l   | 90     |
| 25) 2-Butanone                 | 4.68  | 43   | 2111     | 1.091     | ug/l # | 85     |
| 28) Bromochloromethane         | 5.01  | 49   | 22       | Below Cal | #      | 20     |
| 31) Cyclohexane                | 5.65  | 56   | 3967     | 1.157     | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 5.66  | 75   | 13068    | 5.265     | ug/l # | 51     |
| 38) Carbon Tetrachloride       | 5.66  | 117  | 15741    | 6.980     | ug/l # | 15     |
| 51) 4-Methyl-2-Pentanone       | 8.64  | 43   | 1258     | 0.348     | ug/l   | 94     |
| 65) Chlorobenzene              | 10.14 | 112  | 1906     | 0.404     | ug/l   | 93     |
| 76) 1,2,3-Trichloropropane     | 11.13 | 75   | 55565    | 25.585    | ug/l # | 34     |
| 81) trans-1,4-Dichloro-2-buten | 11.13 | 75   | 55565    | 65.463    | ug/l # | 10     |
| 92) 1,2-Dibromo-3-Chloropropan | 12.98 | 75   | 279      | 0.490     | ug/l # | 2      |

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





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.66 min Scan# 739

Delta R.T. -0.01 min

Lab File: VX009719.D

Acq: 20 May 2019 12:32

Instrument :

MSVOA\_X

ClientSampleId :

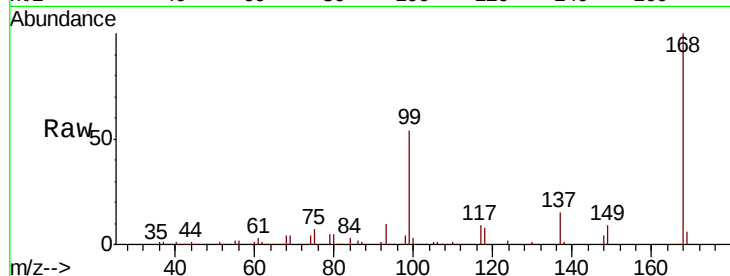
FEQC-FB-051619

Tot Ion:168 Resp: 169828

Ion Ratio Lower Upper

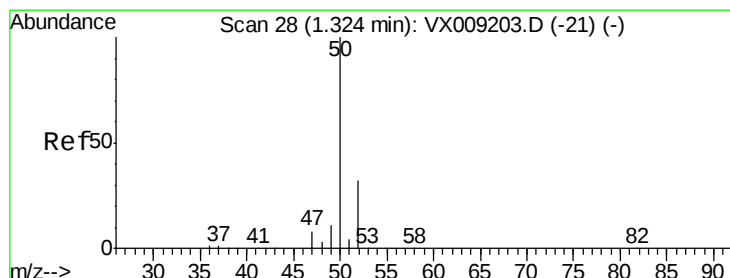
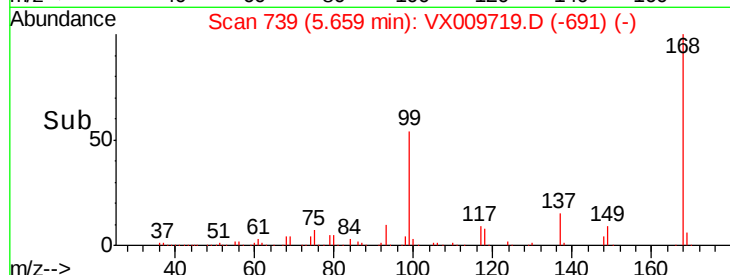
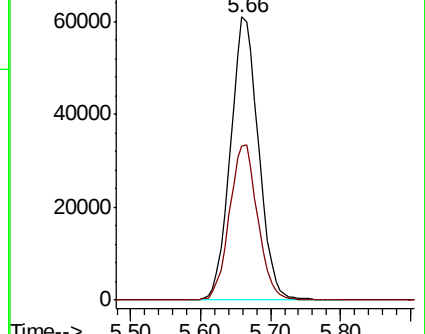
168 100

99 54.4 42.3 63.5



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0



#3

Chloromethane

Concen: 0.215 ug/l

RT: 1.33 min Scan# 29

Delta R.T. 0.01 min

Lab File: VX009719.D

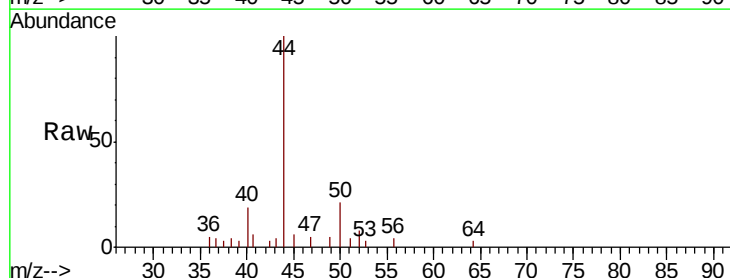
Acq: 20 May 2019 12:32

Tgt Ion: 50 Resp: 459

Ion Ratio Lower Upper

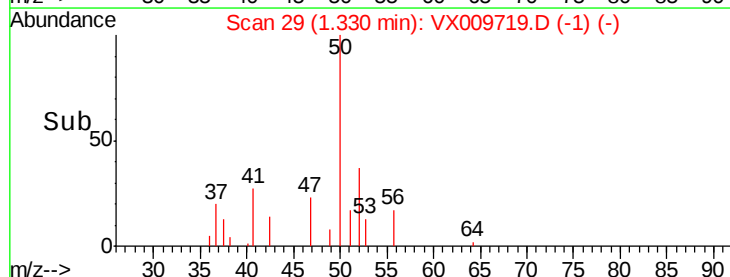
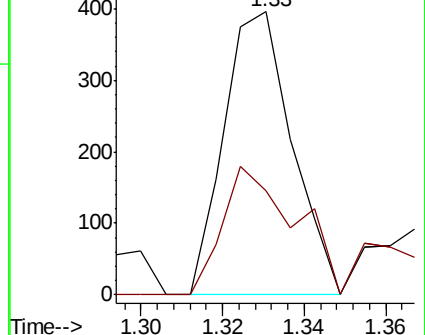
50 100

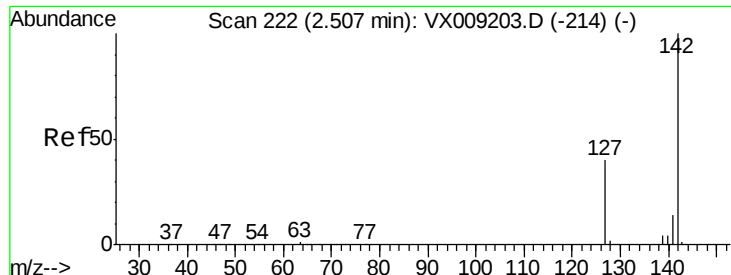
52 36.6 25.9 38.9



Abundance Ion 49.90 (49.60 to 50.60): VX0

Ion 51.90 (51.60 to 52.60): VX0

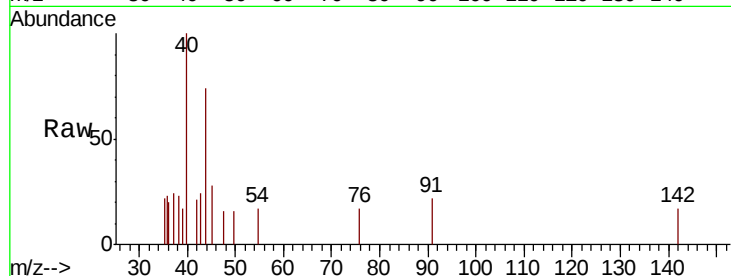




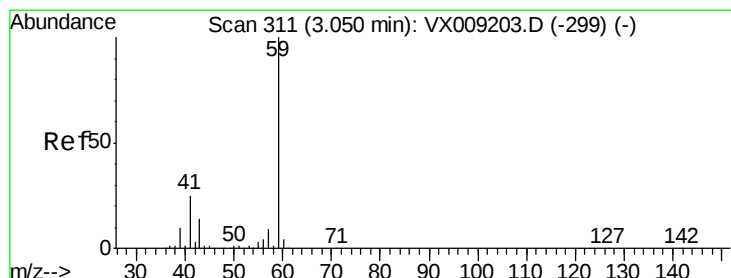
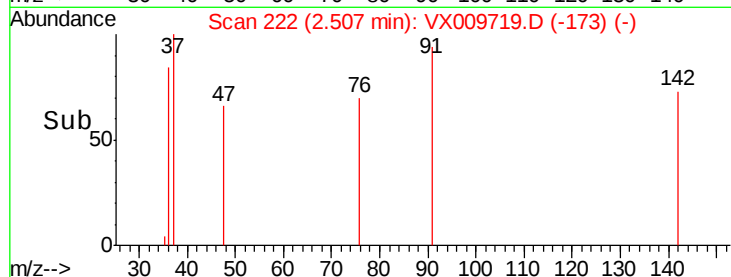
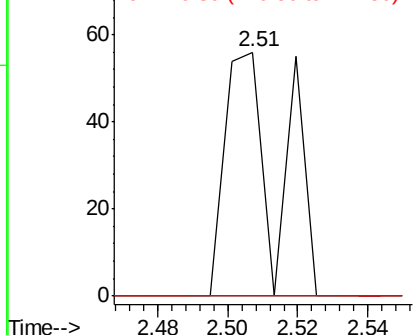
#10  
Methvl Iodide  
Concen: 4.623 ug/l  
RT: 2.51 min Scan# 222  
Delta R.T. 0.00 min  
Lab File: VX009719.D  
Acq: 20 May 2019 12:32

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

Tot Ion:142 Resp: 60  
Ion Ratio Lower Upper  
142 100  
127 0.0 32.7 49.1#  
141 0.0 11.5 17.3#

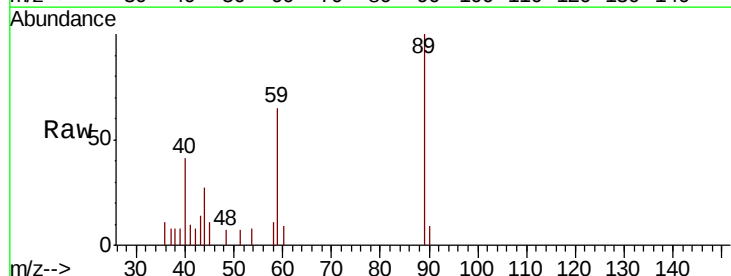


Abundance Ion 141.80 (141.50 to 142.50): V  
Ion 126.80 (126.50 to 127.50): V  
Ion 140.80 (140.50 to 141.50): V

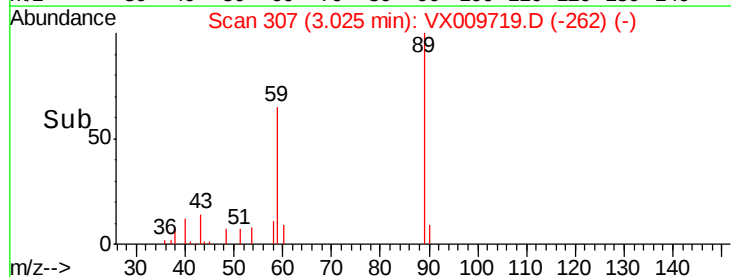
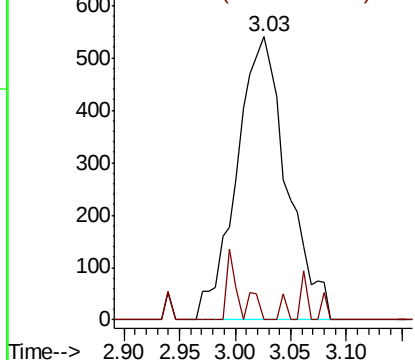


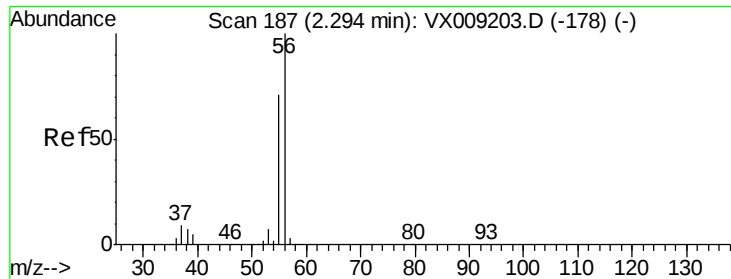
#11  
Tert butyl alcohol  
Concen: 3.173 ug/l  
RT: 3.03 min Scan# 307  
Delta R.T. -0.02 min  
Lab File: VX009719.D  
Acq: 20 May 2019 12:32

Tgt Ion: 59 Resp: 1703  
Ion Ratio Lower Upper  
59 100  
57 2.2 8.2 12.2#



Abundance Ion 59.00 (58.70 to 59.70): VX0  
Ion 57.00 (56.70 to 57.70): VX0

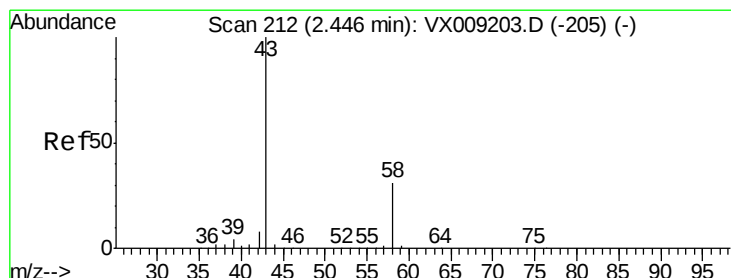
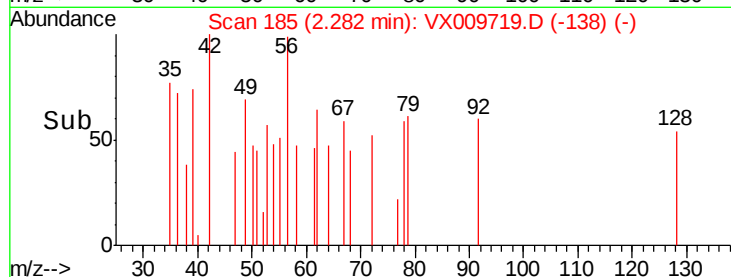
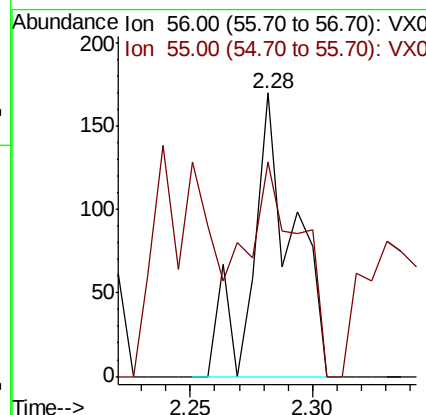
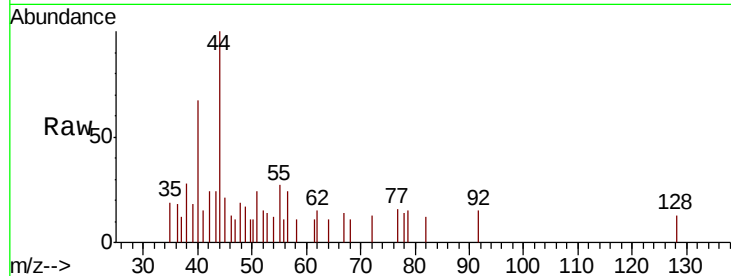




#13  
Acrolein  
Concen: 0.405 ug/l  
RT: 2.28 min Scan# 185  
Delta R.T. -0.01 min  
Lab File: VX009719.D  
Acq: 20 May 2019 12:32

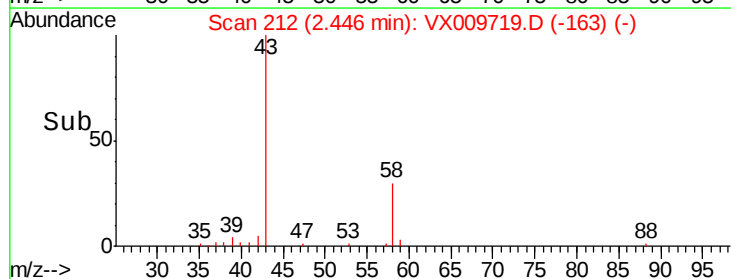
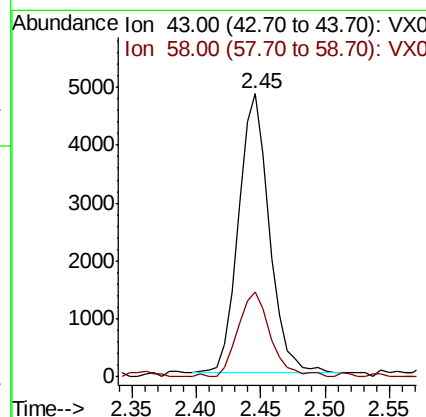
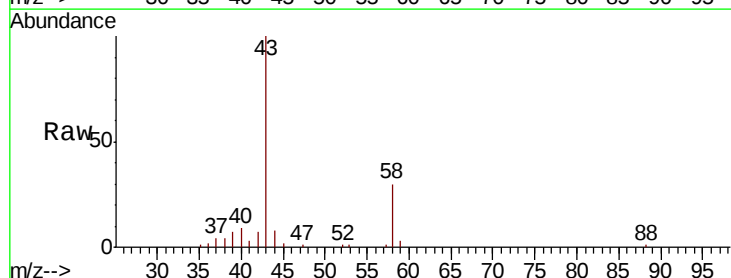
Instrument :  
MSVOA\_X  
ClientSampleId :  
FEQC-FB-051619

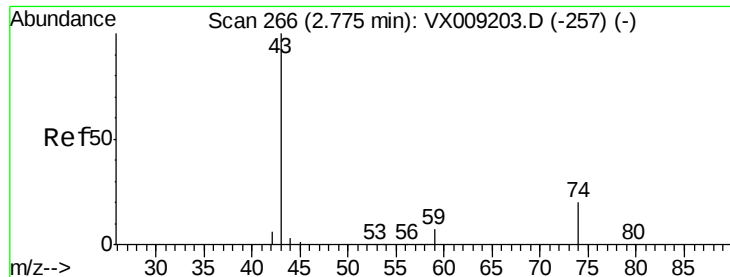
Tot Ion: 56 Resp: 197  
Ion Ratio Lower Upper  
56 100  
55 100.5 56.6 85.0#



#16  
Acetone  
Concen: 6.436 ug/l  
RT: 2.45 min Scan# 212  
Delta R.T. -0.00 min  
Lab File: VX009719.D  
Acq: 20 May 2019 12:32

Tgt Ion: 43 Resp: 8012  
Ion Ratio Lower Upper  
43 100  
58 30.3 24.9 37.3

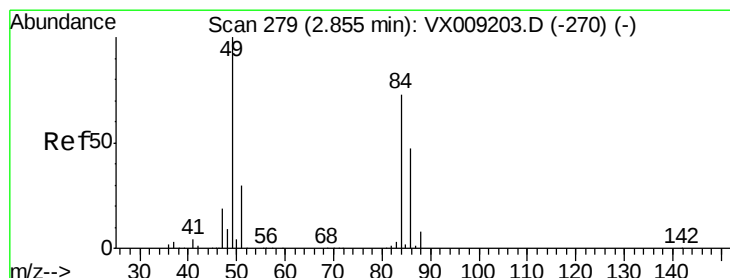
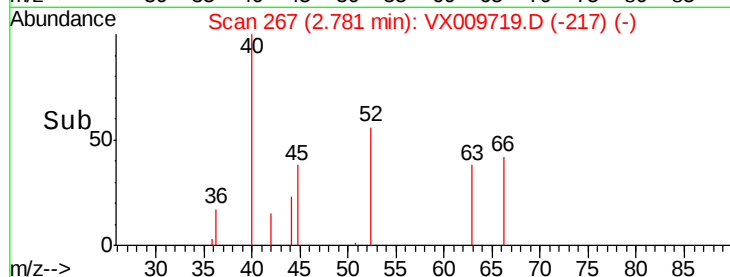
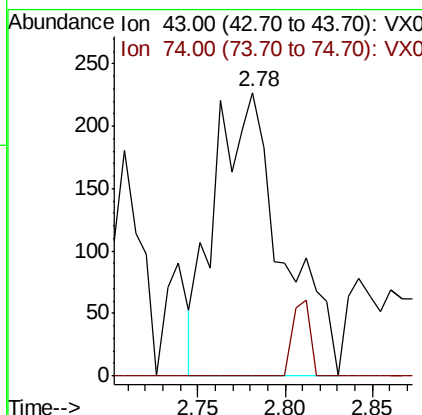
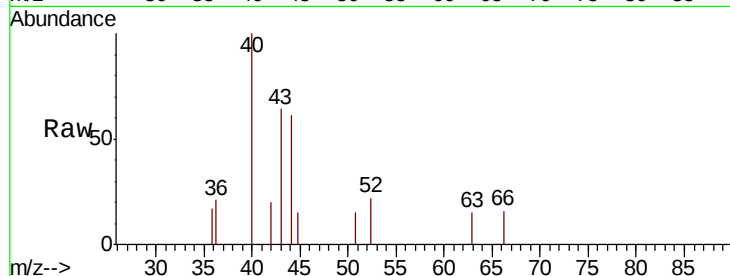




#18  
Methyl Acetate  
Concen: 0.206 ug/l  
RT: 2.78 min Scan# 267  
Delta R.T. 0.01 min  
Lab File: VX009719.D  
Acq: 20 May 2019 12:32

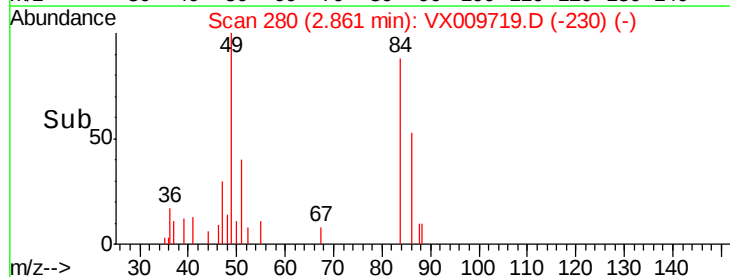
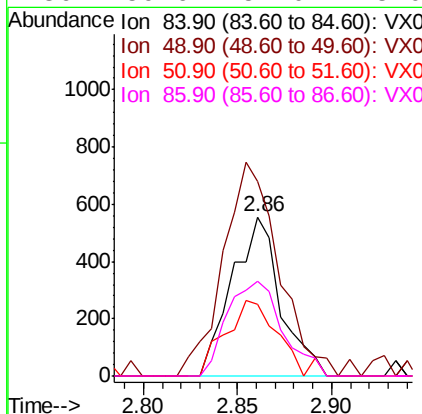
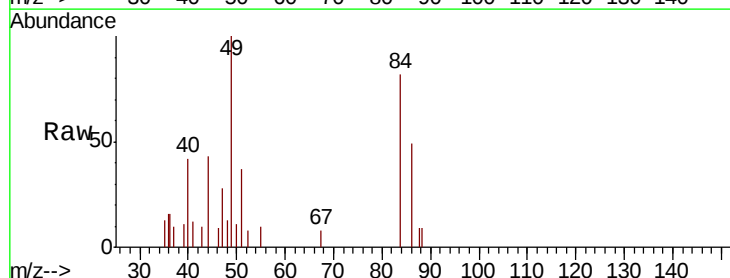
Instrument :  
MSVOA\_X  
ClientSampleId :  
FEQC-FB-051619

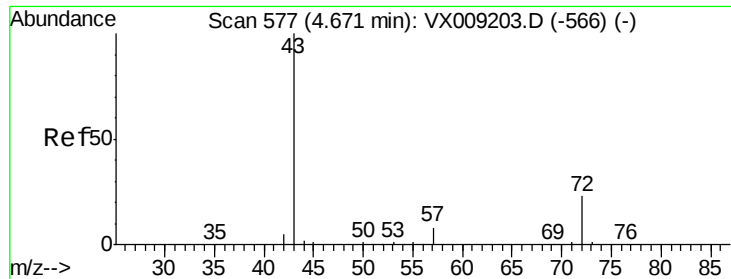
Tot Ion: 43 Resp: 609  
Ion Ratio Lower Upper  
43 100  
74 0.0 16.2 24.4#



#20  
Methylene Chloride  
Concen: 0.492 ug/l  
RT: 2.86 min Scan# 280  
Delta R.T. 0.01 min  
Lab File: VX009719.D  
Acq: 20 May 2019 12:32

Tgt Ion: 84 Resp: 992  
Ion Ratio Lower Upper  
84 100  
49 122.3 109.9 164.9  
51 45.4 32.7 49.1  
86 59.6 52.0 78.0





#25

2-Butanone

Concen: 1.091 ug/l

RT: 4.68 min Scan# 579

Delta R.T. 0.01 min

Lab File: VX009719.D

Acq: 20 May 2019 12:32

Instrument :

MSVOA\_X

ClientSampleId :

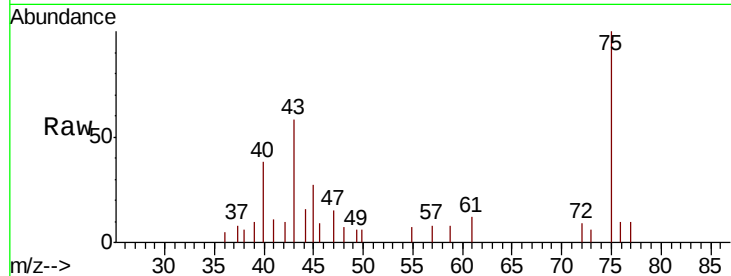
FEQC-FB-051619

Tot Ion: 43 Resp: 2111

Ion Ratio Lower Upper

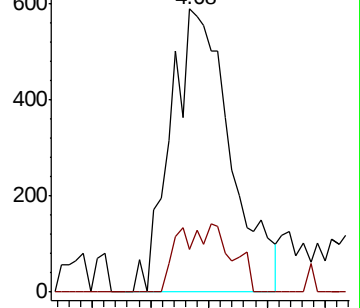
43 100

72 15.3 18.2 27.2#

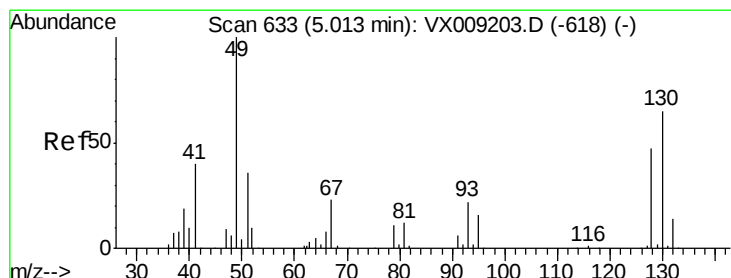
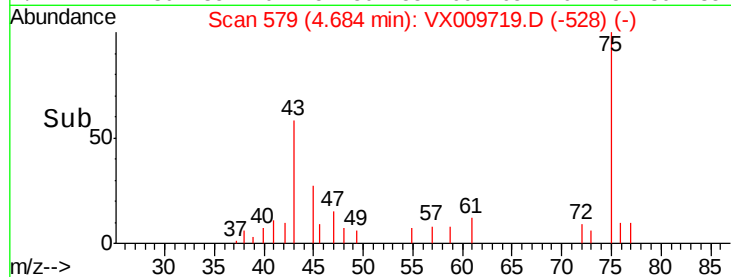


Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 72.00 (71.70 to 72.70): VX0



Time-->



#28

Bromochloromethane

Concen: Below Cal

RT: 5.01 min Scan# 633

Delta R.T. 0.00 min

Lab File: VX009719.D

Acq: 20 May 2019 12:32

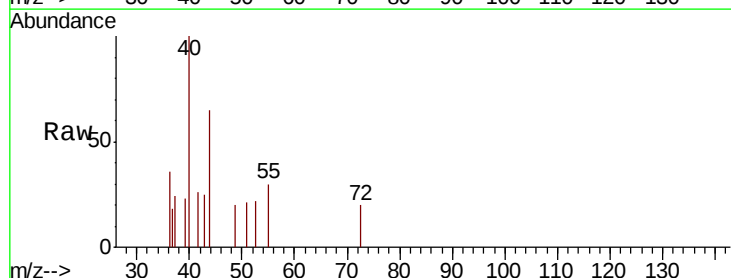
Tgt Ion: 49 Resp: 22

Ion Ratio Lower Upper

49 100

129 0.0 0.0 3.8

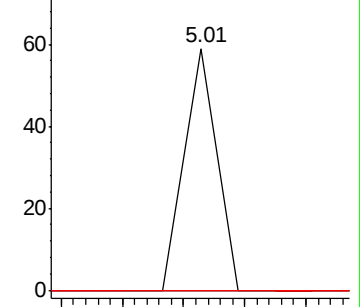
130 0.0 51.2 76.8#



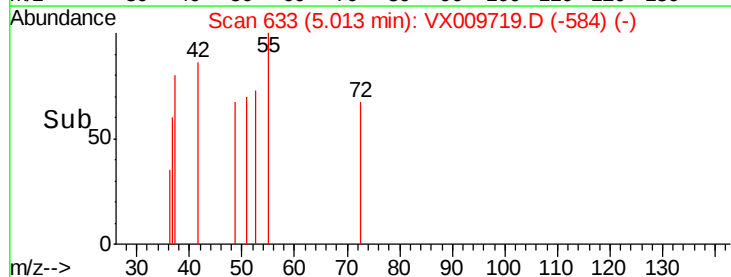
Abundance Ion 48.90 (48.60 to 49.60): VX0

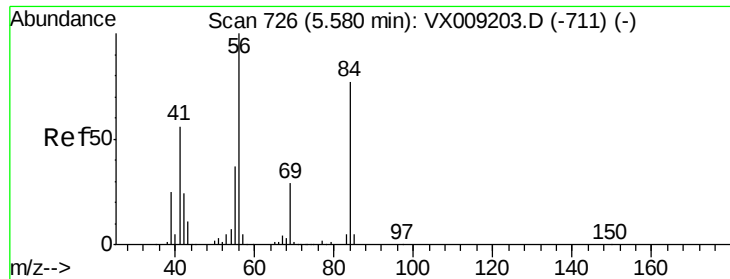
Ion 128.80 (128.50 to 129.50): V

Ion 129.80 (129.50 to 130.50): V



Time-->

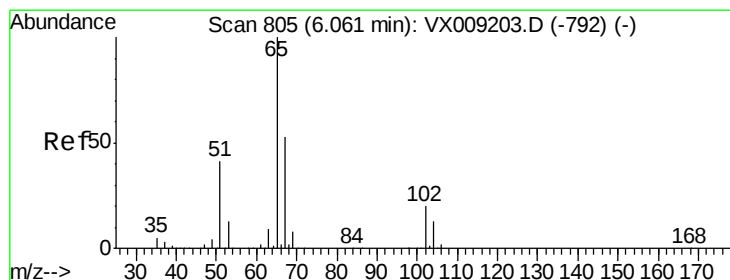
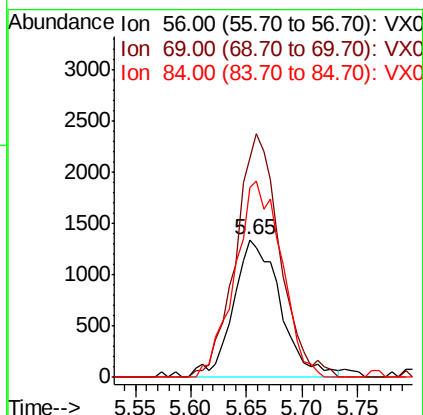
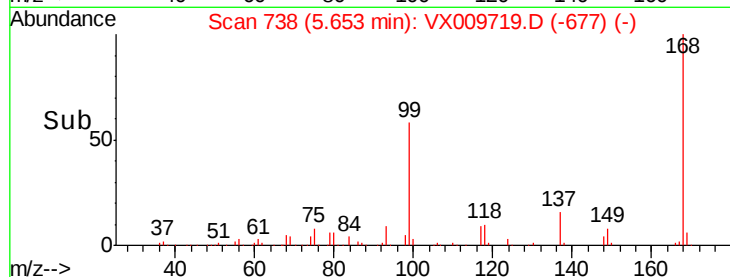
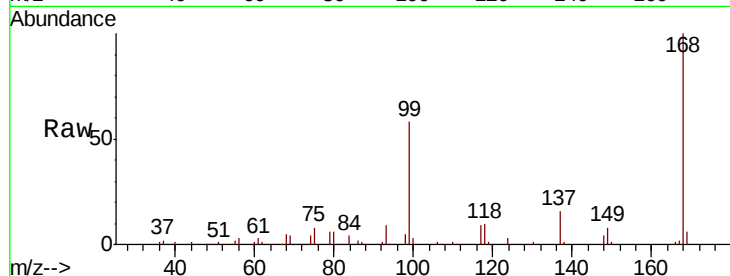




#31  
Cyclohexane  
Concen: 1.157 ug/l  
RT: 5.65 min Scan# 738  
Delta R.T. 0.07 min  
Lab File: VX009719.D  
Acq: 20 May 2019 12:32

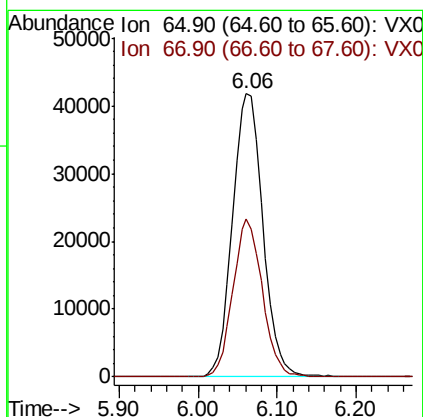
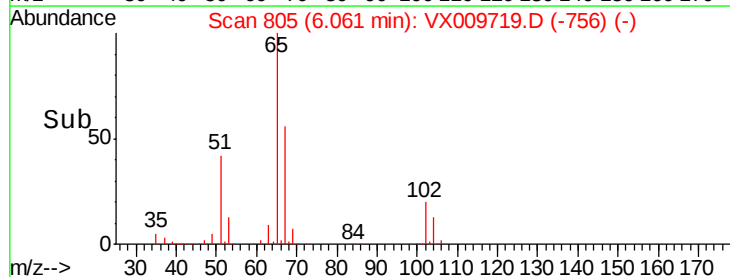
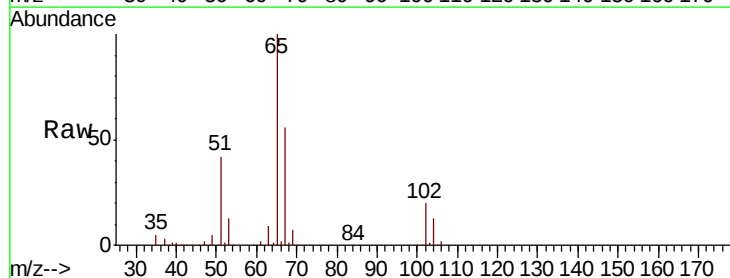
Instrument :  
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FEQC-FB-051619

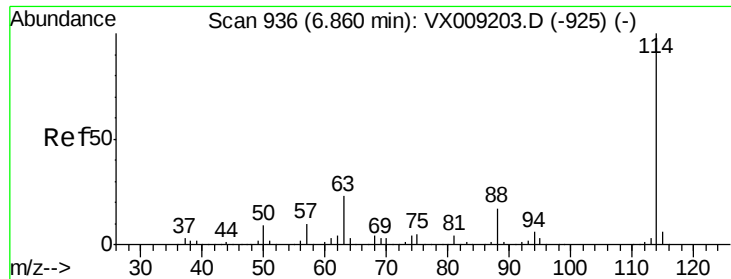
Tot Ion: 56 Resp: 3967  
Ion Ratio Lower Upper  
56 100  
69 159.2 23.4 35.0#  
84 138.2 61.9 92.9#



#33  
1,2-Dichloroethane-d4  
Concen: 48.449 ug/l  
RT: 6.06 min Scan# 805  
Delta R.T. -0.00 min  
Lab File: VX009719.D  
Acq: 20 May 2019 12:32

Tgt Ion: 65 Resp: 112323  
Ion Ratio Lower Upper  
65 100  
67 53.9 0.0 106.6

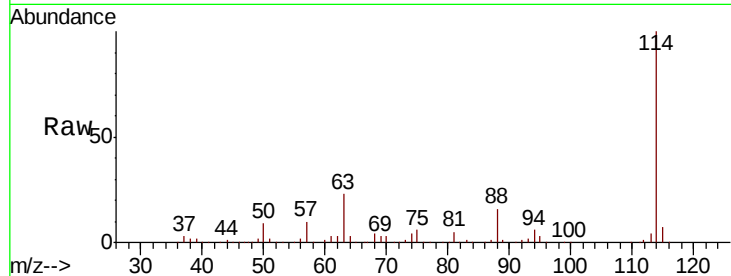




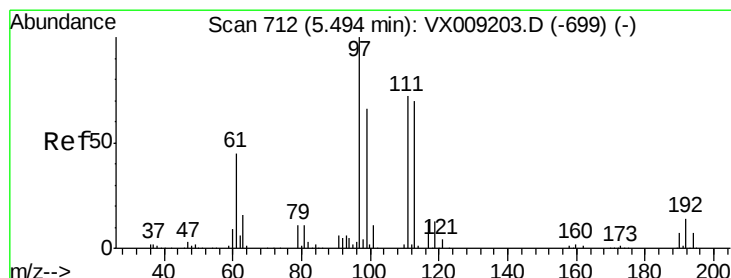
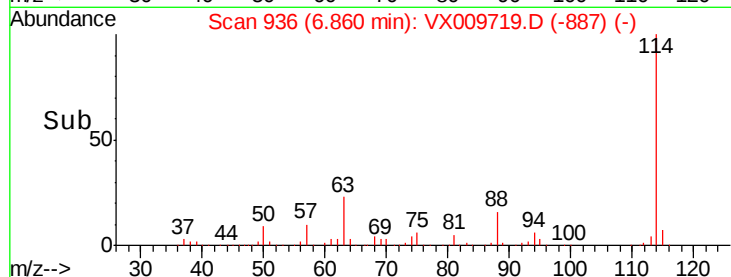
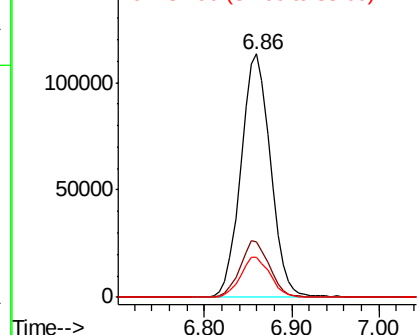
#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 6.86 min Scan# 936  
 Delta R.T. -0.00 min  
 Lab File: VX009719.D  
 Acq: 20 May 2019 12:32

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

Tot Ion:114 Resp: 267084  
 Ion Ratio Lower Upper  
 114 100  
 63 23.0 0.0 45.6  
 88 16.4 0.0 33.2

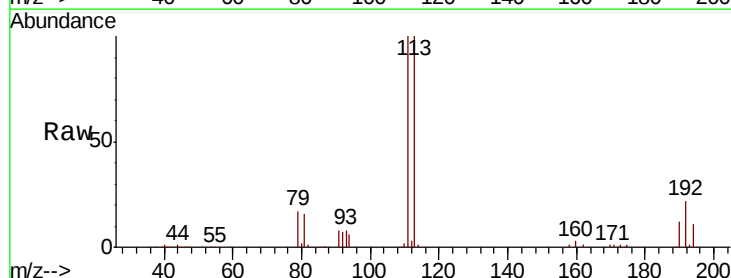


Abundance Ion 113.90 (113.60 to 114.60): V  
 Ion 63.00 (62.70 to 63.70): VX0  
 Ion 87.90 (87.60 to 88.60): VX0

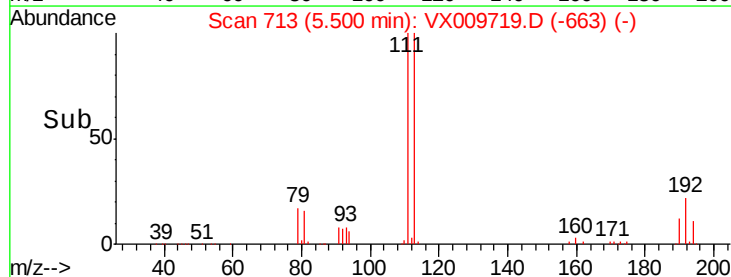
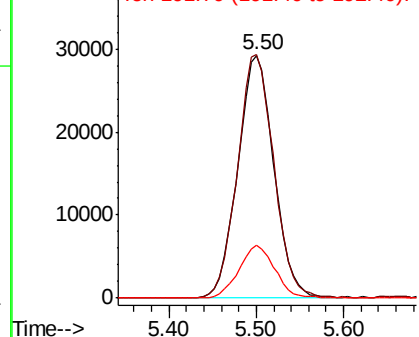


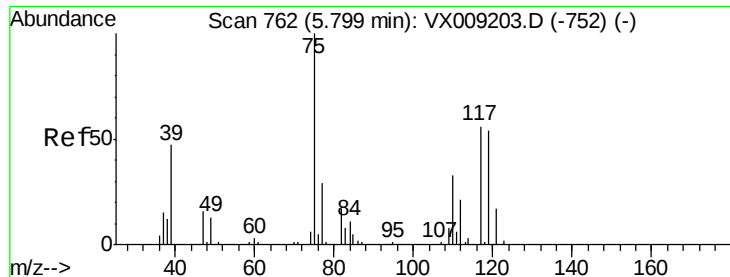
#35  
 Dibromofluoromethane  
 Concen: 49.935 ug/l  
 RT: 5.50 min Scan# 713  
 Delta R.T. 0.01 min  
 Lab File: VX009719.D  
 Acq: 20 May 2019 12:32

Tgt Ion:113 Resp: 83840  
 Ion Ratio Lower Upper  
 113 100  
 111 100.7 82.8 124.2  
 192 21.5 17.0 25.6



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: 5.265 ug/l

RT: 5.66 min Scan# 739

Delta R.T. -0.14 min

Lab File: VX009719.D

Acq: 20 May 2019 12:32

Instrument :

MSVOA\_X

ClientSampleId :

FEQC-FB-051619

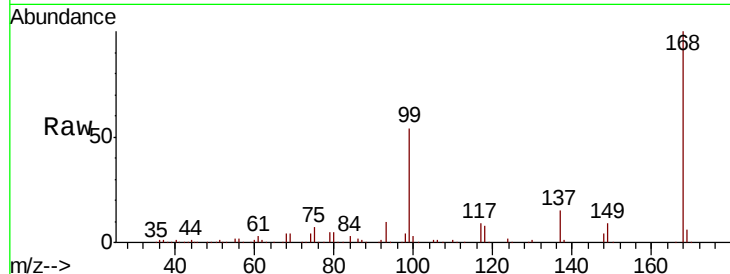
Tot Ion: 75 Resp: 13068

Ion Ratio Lower Upper

75 100

110 9.8 16.9 50.6#

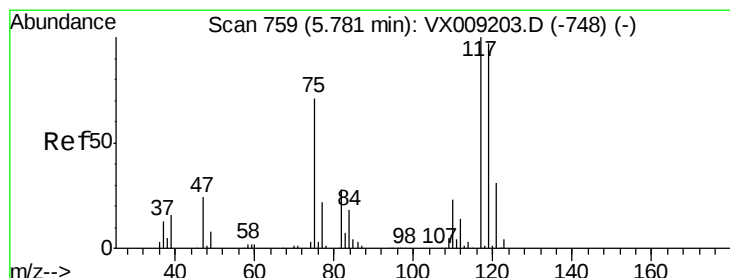
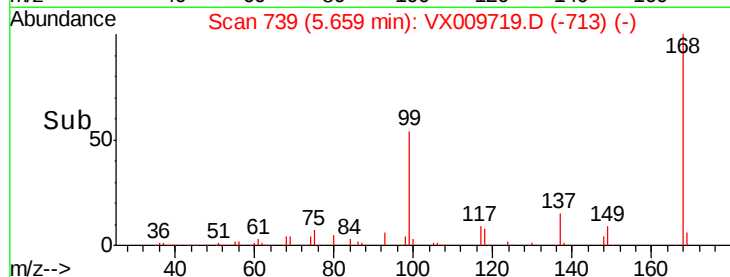
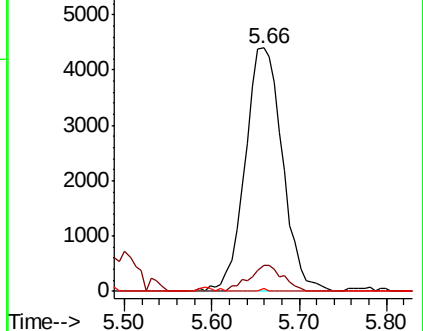
77 0.1 24.8 37.2#



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: 6.980 ug/l

RT: 5.66 min Scan# 739

Delta R.T. -0.12 min

Lab File: VX009719.D

Acq: 20 May 2019 12:32

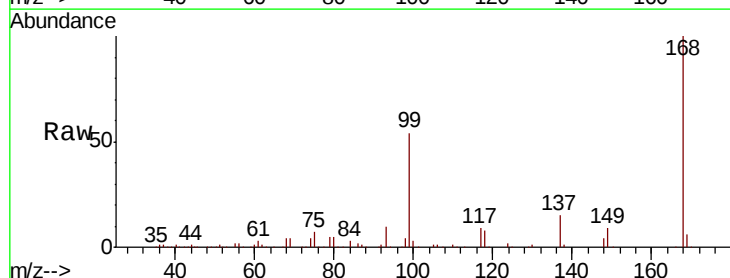
Tgt Ion:117 Resp: 15741

Ion Ratio Lower Upper

117 100

119 4.8 77.5 116.3#

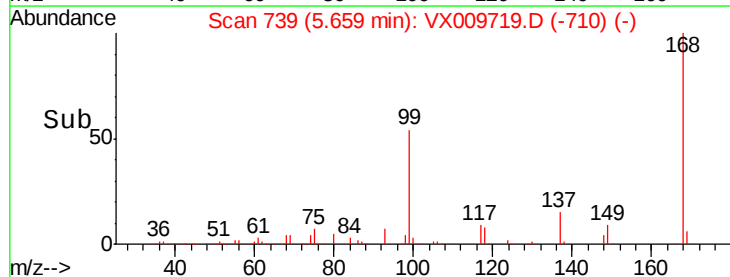
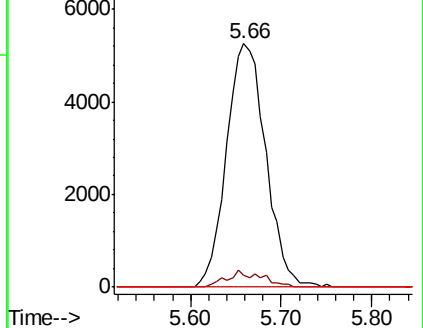
121 0.0 24.7 37.1#

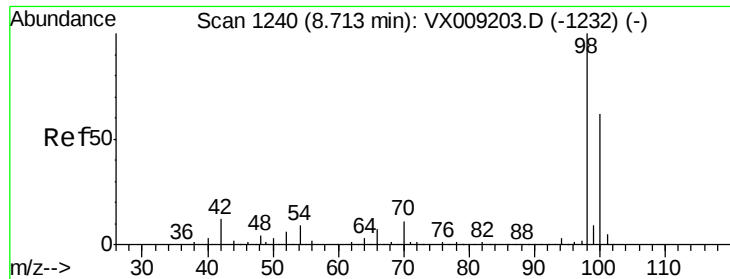


Abundance Ion 116.80 (116.50 to 117.50): V

Ion 118.80 (118.50 to 119.50): V

Ion 120.80 (120.50 to 121.50): V





#50

Toluene-d8

Concen: 50.334 ug/l

RT: 8.71 min Scan# 1240

Delta R.T. -0.00 min

Lab File: VX009719.D

Acq: 20 May 2019 12:32

Instrument :

MSVOA\_X

ClientSampleId :

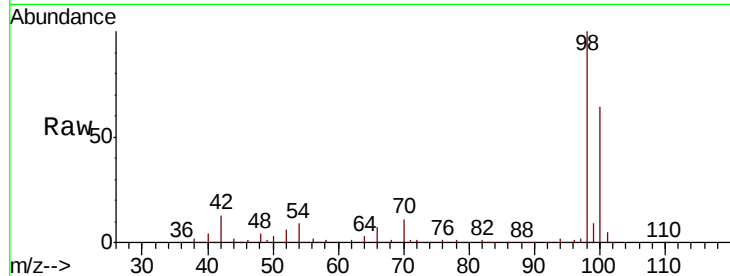
FEQC-FB-051619

Tot Ion: 98 Resp: 341191

Ion Ratio Lower Upper

98 100

100 64.3 51.2 76.8



Abundance Ion 98.00 (97.70 to 98.70): VX0

Ion 100.00 (99.70 to 100.70): VX0

250000

200000

150000

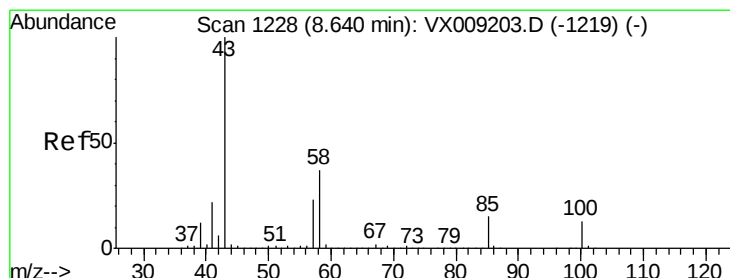
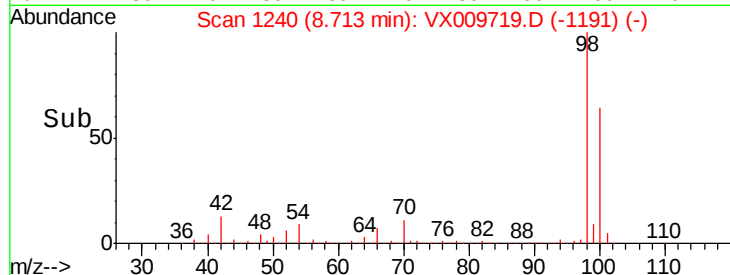
100000

50000

0

8.60 8.65 8.70 8.75 8.80

Time-->



#51

4-Methyl-2-Pentanone

Concen: 0.348 ug/l

RT: 8.64 min Scan# 1228

Delta R.T. -0.00 min

Lab File: VX009719.D

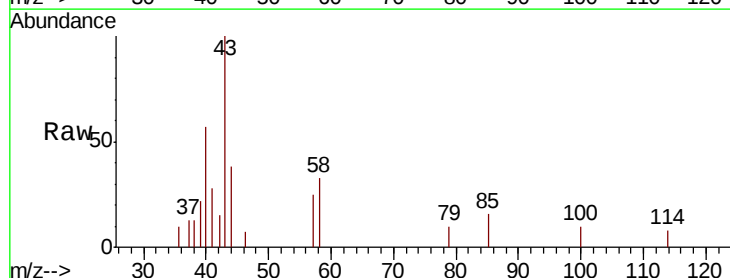
Acq: 20 May 2019 12:32

Tgt Ion: 43 Resp: 1258

Ion Ratio Lower Upper

43 100

58 33.5 29.5 44.3



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0

2000

1500

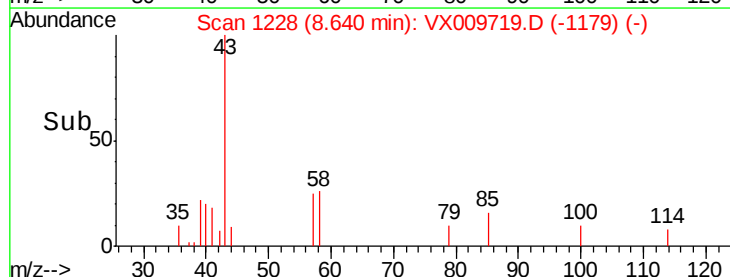
1000

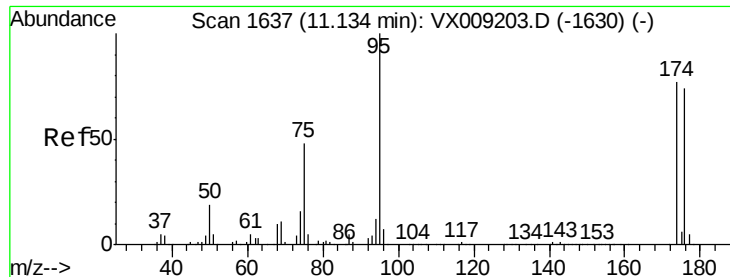
500

0

8.60 8.65 8.70

Time-->





#62

4-Bromofluorobenzene

Concen: 44.049 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. -0.00 min

Lab File: VX009719.D

Acq: 20 May 2019 12:32

Instrument :

MSVOA\_X

ClientSampleId :

FEQC-FB-051619

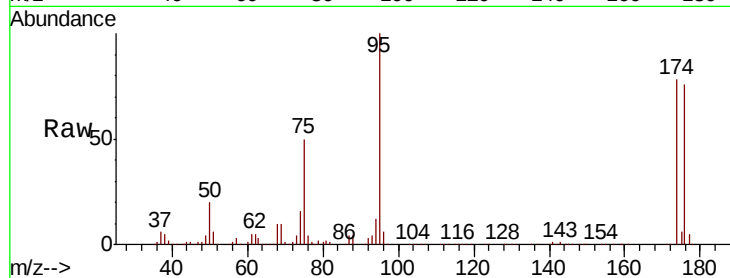
Tot Ion: 95 Resp: 108495

Ion Ratio Lower Upper

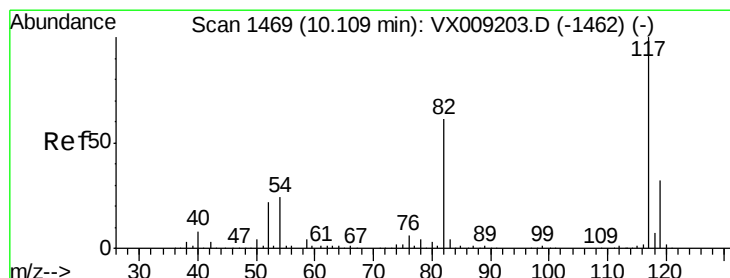
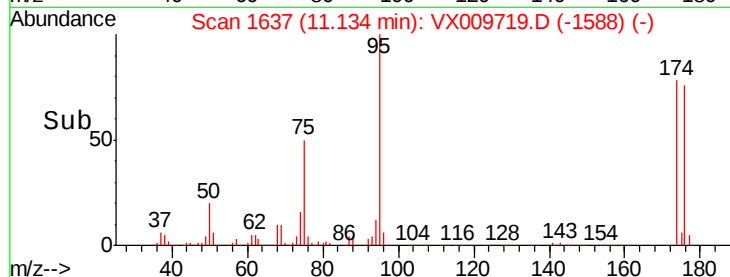
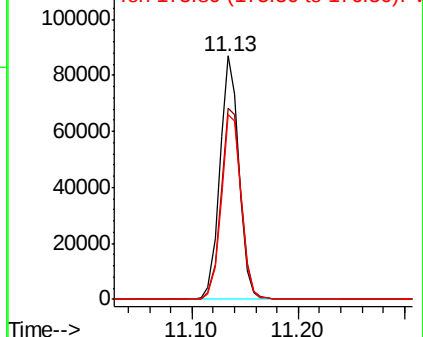
95 100

174 82.5 0.0 161.6

176 79.2 0.0 159.2



Abundance Ion 94.90 (94.60 to 95.60): VX0  
Ion 173.80 (173.50 to 174.50): V  
Ion 175.80 (175.50 to 176.50): V



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 10.11 min Scan# 1469

Delta R.T. -0.00 min

Lab File: VX009719.D

Acq: 20 May 2019 12:32

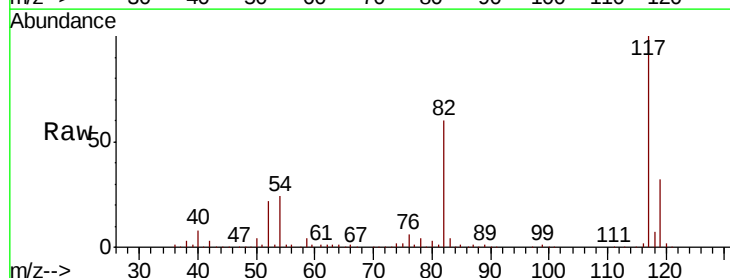
Tgt Ion: 117 Resp: 235793

Ion Ratio Lower Upper

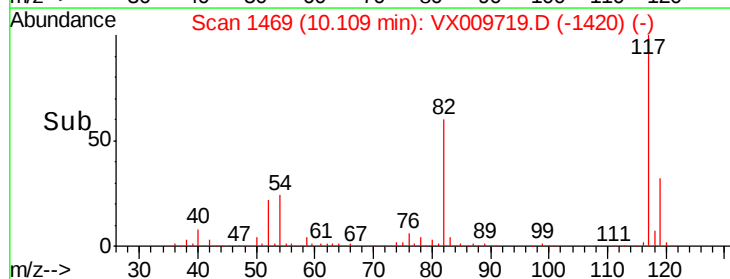
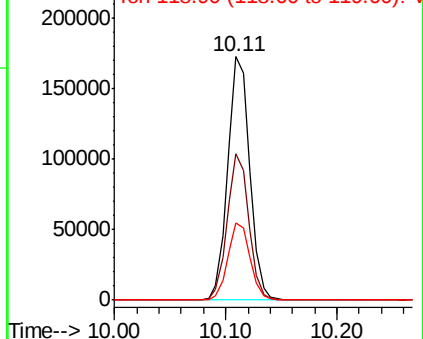
117 100

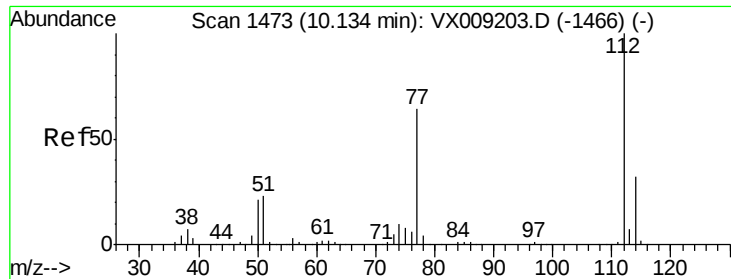
82 60.1 48.8 73.2

119 31.9 25.8 38.6



Abundance Ion 116.90 (116.60 to 117.60): V  
Ion 82.00 (81.70 to 82.70): VX0  
Ion 118.90 (118.60 to 119.60): V

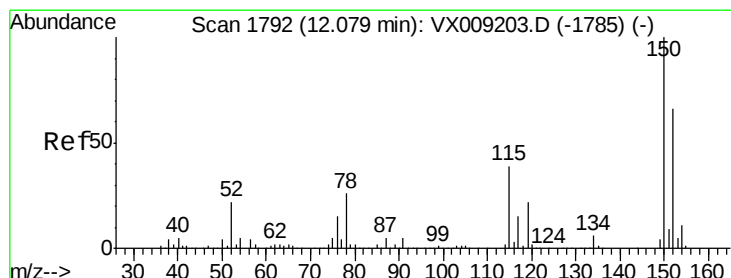
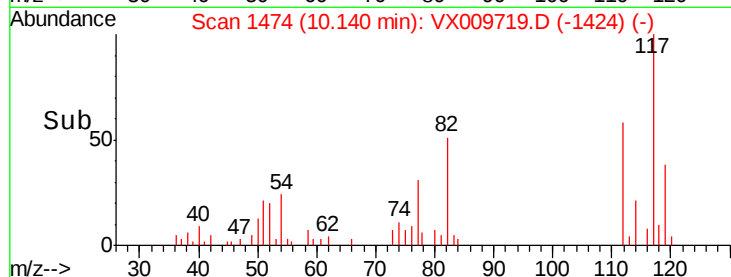
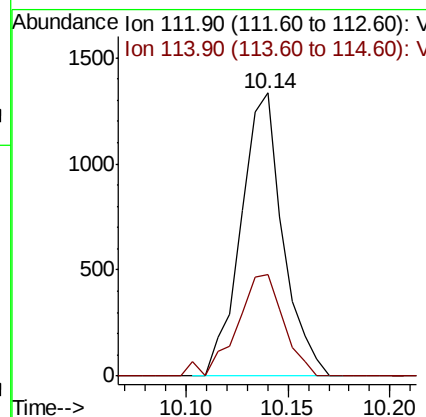
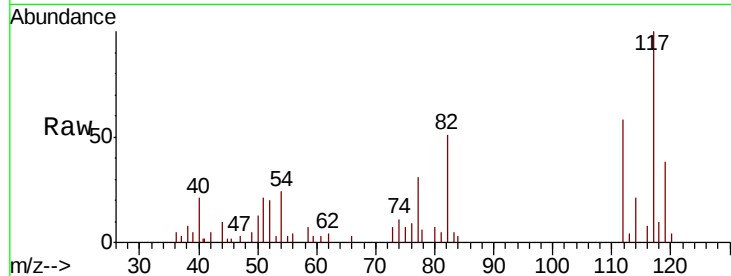




#65  
Chlorobenzene  
Concen: 0.404 ug/l  
RT: 10.14 min Scan# 1474  
Delta R.T. 0.01 min  
Lab File: VX009719.D  
Acq: 20 May 2019 12:32

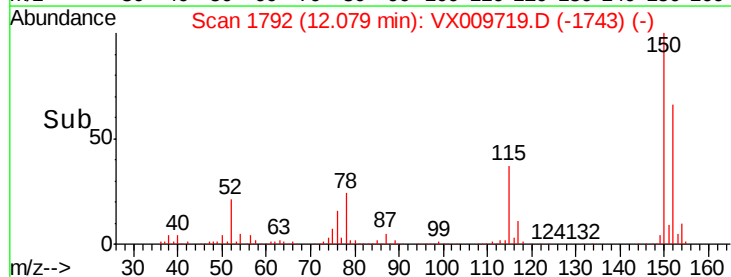
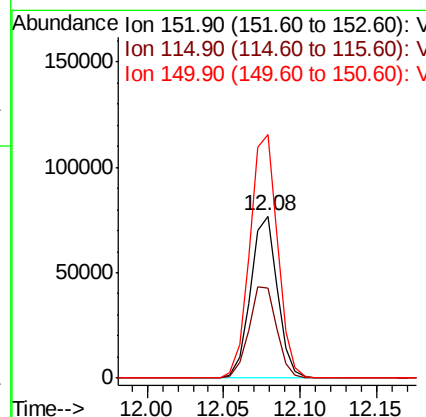
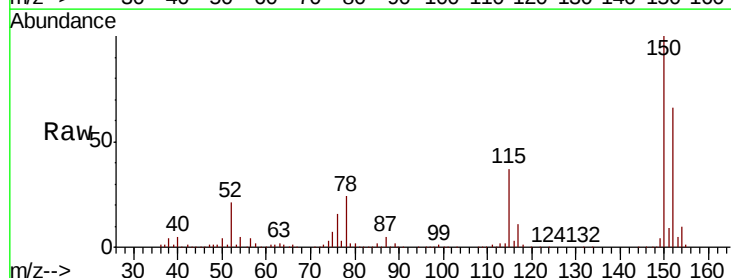
Instrument :  
MSVOA\_X  
ClientSampleId :  
FEQC-FB-051619

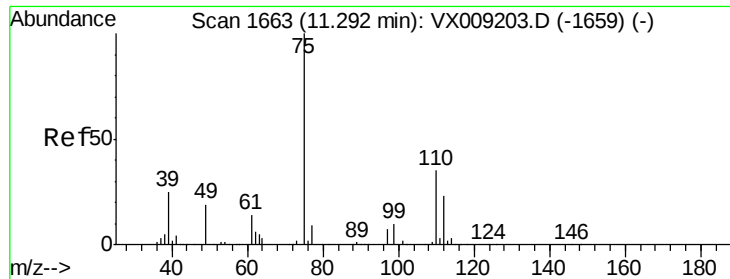
Tot Ion:112 Resp: 1906  
Ion Ratio Lower Upper  
112 100  
114 35.7 25.5 38.3



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 12.08 min Scan# 1792  
Delta R.T. -0.00 min  
Lab File: VX009719.D  
Acq: 20 May 2019 12:32

Tgt Ion:152 Resp: 93625  
Ion Ratio Lower Upper  
152 100  
115 58.8 41.2 123.6  
150 155.8 0.0 346.4

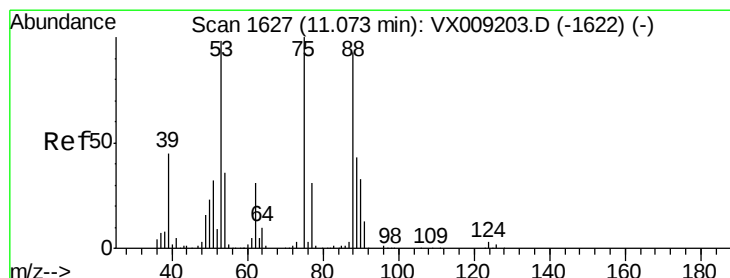
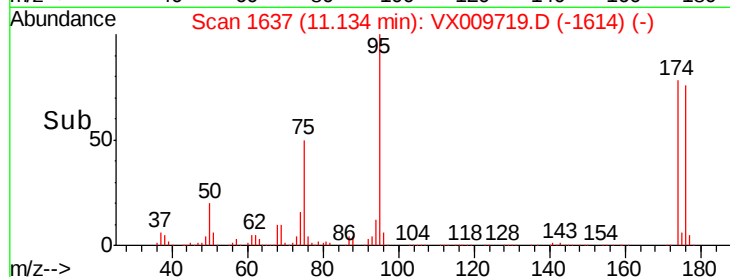
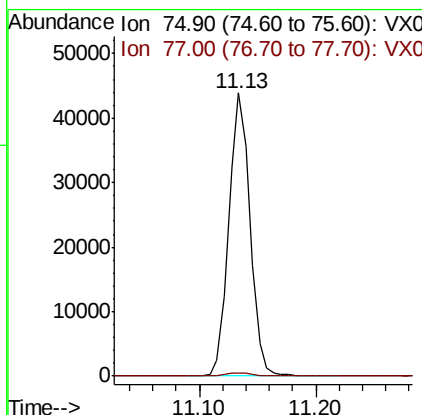
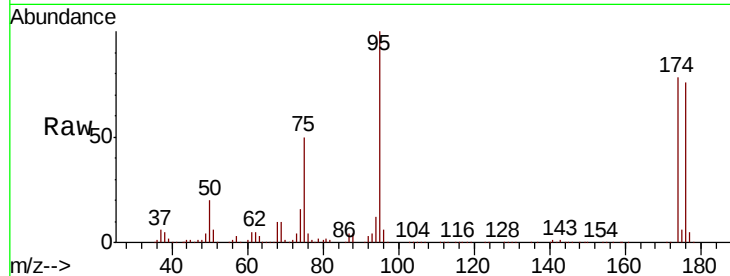




#76  
 1,2,3-Trichloropropane  
 Concen: 25.585 ug/l  
 RT: 11.13 min Scan# 1637  
 Delta R.T. -0.16 min  
 Lab File: VX009719.D  
 Acq: 20 May 2019 12:32

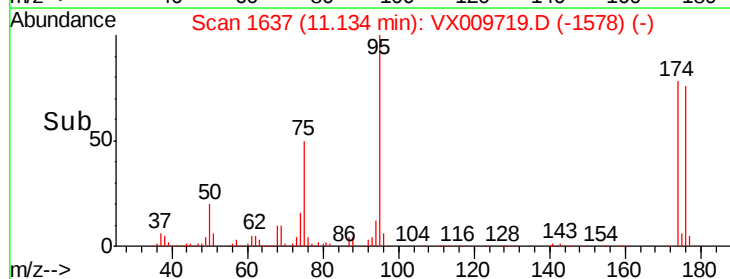
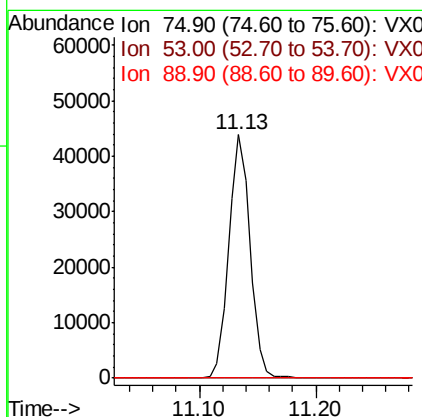
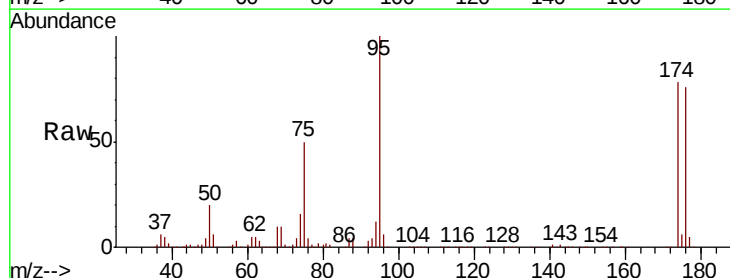
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 FEQC-FB-051619

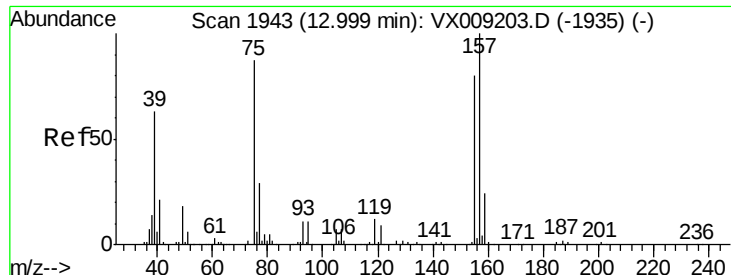
Tot Ion: 75 Resp: 55565  
 Ion Ratio Lower Upper  
 75 100  
 77 1.4 22.1 66.1#



#81  
 trans-1,4-Dichloro-2-butene  
 Concen: 65.463 ug/l  
 RT: 11.13 min Scan# 1637  
 Delta R.T. 0.06 min  
 Lab File: VX009719.D  
 Acq: 20 May 2019 12:32

Tgt Ion: 75 Resp: 55565  
 Ion Ratio Lower Upper  
 75 100  
 53 0.2 79.0 118.6#  
 89 0.0 34.7 52.1#





#92

1,2-Dibromo-3-Chloropropane

Concen: 0.490 ug/l

RT: 12.98 min Scan# 1940

Delta R.T. -0.02 min

Lab File: VX009719.D

Acq: 20 May 2019 12:32

Instrument :

MSVOA\_X

ClientSampleId :

FEQC-FB-051619

Tot Ion: 75 Resp: 279

Ion Ratio Lower Upper

75 100

155 0.0 42.0 126.0#

157 0.0 53.2 159.6#

