

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX031919\  
 Data File : VX008192.D  
 Acq On : 19 Mar 2019 15:35  
 Operator : JC/SP  
 Sample : K1860-02  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 15 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :

Quant Time: Mar 20 07:09:59 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X031919W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Mar 20 06:51:58 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.67  | 168  | 348540   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.86  | 114  | 567580   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.11 | 117  | 476117   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 192432   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|-----------------------------|-------|------|----------|-------|--------|----------|
| 33) 1,2-Dichloroethane-d4   | 6.07  | 65   | 243196   | 46.33 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 92.66% |          |
| 35) Dibromofluoromethane    | 5.50  | 113  | 177618   | 46.75 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 93.50% |          |
| 50) Toluene-d8              | 8.71  | 98   | 691489   | 48.00 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 96.00% |          |
| 62) 4-Bromofluorobenzene    | 11.13 | 95   | 224144   | 45.19 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 90.38% |          |

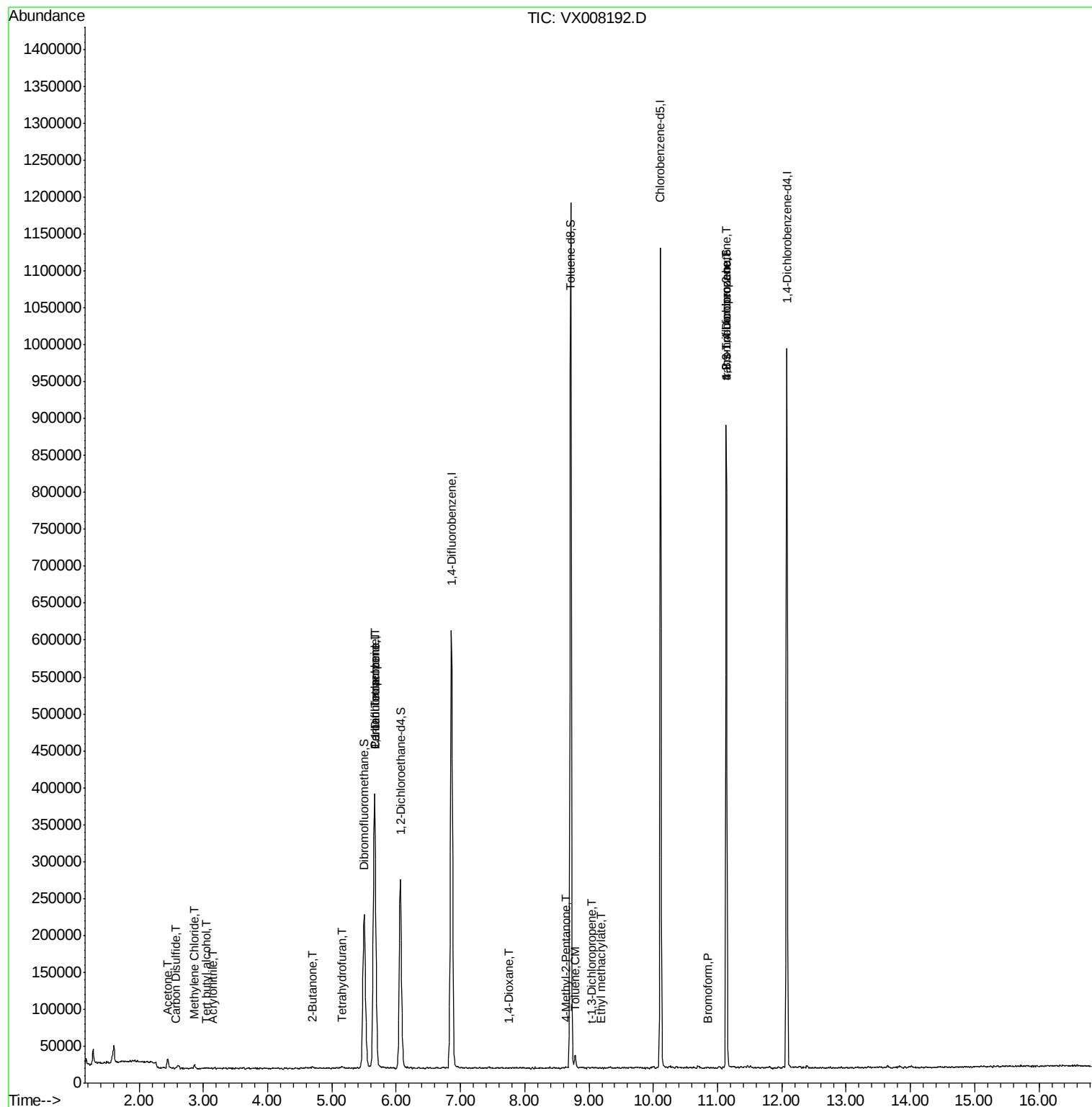
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 11) Tert butyl alcohol         | 3.04  | 59   | 1743     | 1.551     | ug/l # | 50     |
| 13) Acrolein                   | 2.32  | 56   | 588      | Below Cal | #      | 35     |
| 15) Acrylonitrile              | 3.15  | 53   | 700      | 0.236     | ug/l # | 25     |
| 16) Acetone                    | 2.45  | 43   | 15499    | 5.206     | ug/l   | 95     |
| 17) Carbon Disulfide           | 2.57  | 76   | 2415     | 0.848     | ug/l # | 86     |
| 20) Methylene Chloride         | 2.86  | 84   | 2674     | 0.539     | ug/l # | 89     |
| 25) 2-Butanone                 | 4.70  | 43   | 3945     | 0.898     | ug/l # | 76     |
| 29) Tetrahydrofuran            | 5.15  | 42   | 1696     | 0.617     | ug/l # | 75     |
| 36) 1,1-Dichloropropene        | 5.66  | 75   | 28789    | 4.357     | ug/l # | 51     |
| 38) Carbon Tetrachloride       | 5.66  | 117  | 34269    | 5.820     | ug/l # | 16     |
| 49) 1,4-Dioxane                | 7.75  | 88   | 68       | 0.579     | ug/l # | 1      |
| 51) 4-Methyl-2-Pentanone       | 8.64  | 43   | 1710     | 0.211     | ug/l # | 68     |
| 52) Toluene                    | 8.79  | 92   | 5987     | 0.516     | ug/l   | 100    |
| 53) t-1,3-Dichloropropene      | 9.04  | 75   | 326      | 1.462     | ug/l # | 43     |
| 56) Ethyl methacrylate         | 9.18  | 69   | 147      | 0.543     | ug/l # | 49     |
| 71) Bromoform                  | 10.85 | 173  | 63       | 2.220     | ug/l # | 29     |
| 76) 1,2,3-Trichloropropane     | 11.13 | 75   | 117302   | 21.673    | ug/l # | 40     |
| 81) trans-1,4-Dichloro-2-buten | 11.13 | 75   | 117302   | 55.100    | ug/l # | 12     |

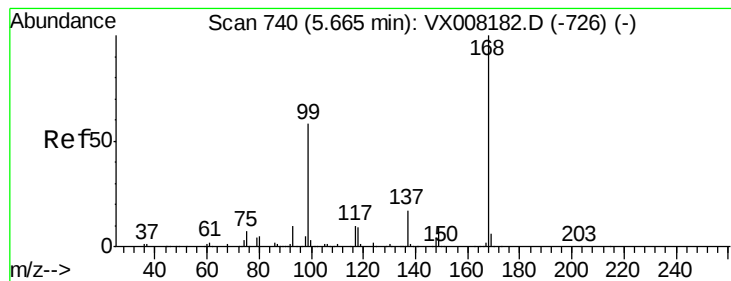
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA X\DATA\VX031919\  
Data File : VX008192.D  
Acq On : 19 Mar 2019 15:35  
Operator : JC/SP  
Sample : K1860-02  
Misc : 5.0mL/MSVOA X/WATER  
ALS Vial : 15 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :

Quant Time: Mar 20 07:09:59 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X031919W.M  
Quant Title : SW846 8260  
QLast Update : Wed Mar 20 06:51:58 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: VX008192.D

Acq: 19 Mar 2019 15:35

Instrument :

MSVOA\_X

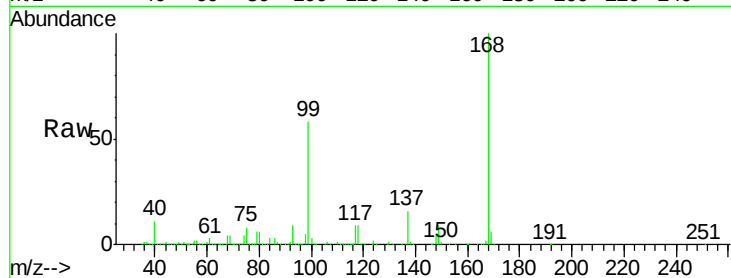
ClientSampleId :

Tot Ion:168 Resp: 348540

Ion Ratio Lower Upper

168 100

99 57.6 37.6 56.4#



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

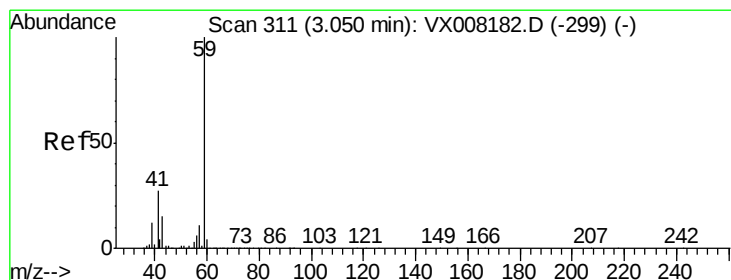
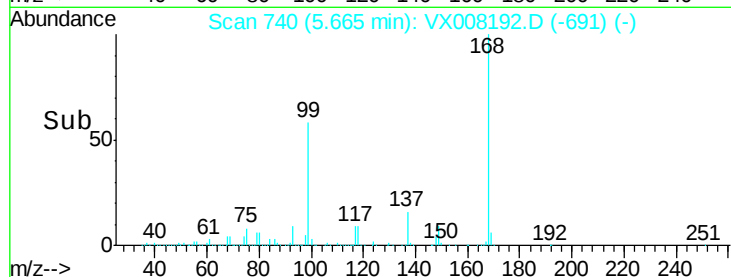
5.67

100000

50000

0

Time-->



#11

Tert butyl alcohol

Concen: 1.551 ug/l

RT: 3.04 min Scan# 310

Delta R.T. -0.01 min

Lab File: VX008192.D

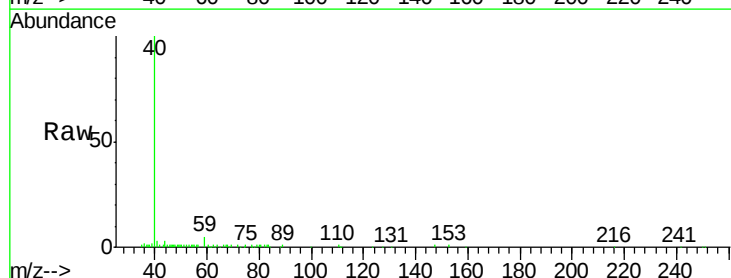
Acq: 19 Mar 2019 15:35

Tgt Ion: 59 Resp: 1743

Ion Ratio Lower Upper

59 100

57 28.7 8.2 12.2#



Abundance Ion 59.00 (58.70 to 59.70): VX0

Ion 57.00 (56.70 to 57.70): VX0

3.04

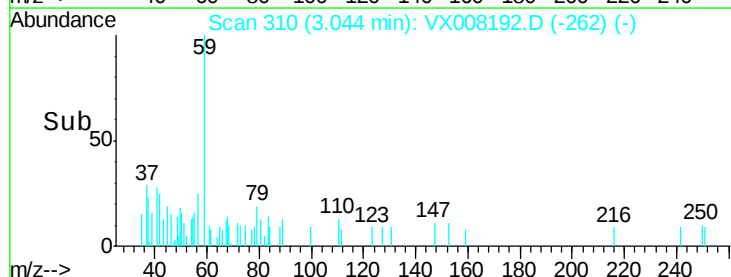
600

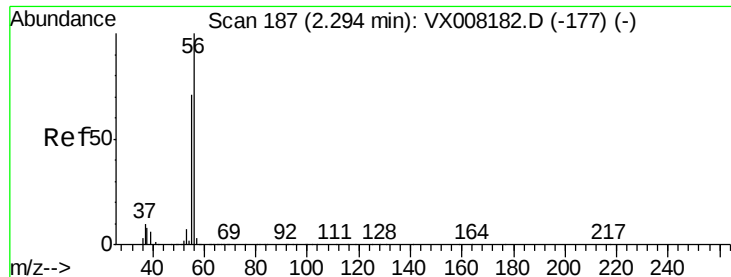
400

200

0

Time-->





#13

Acrolein

Concen: Below Cal

RT: 2.32 min Scan# 191

Delta R.T. 0.03 min

Lab File: VX008192.D

Acq: 19 Mar 2019 15:35

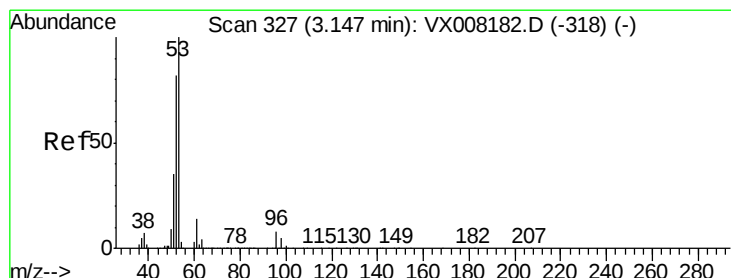
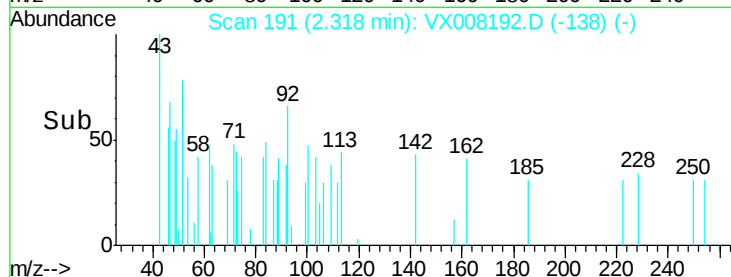
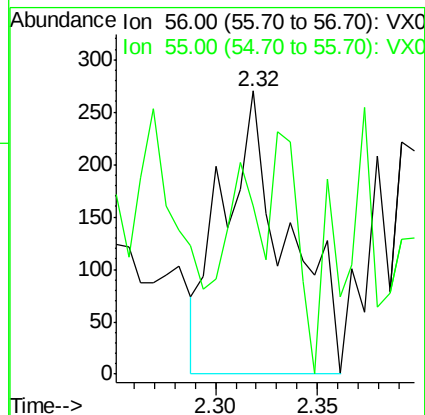
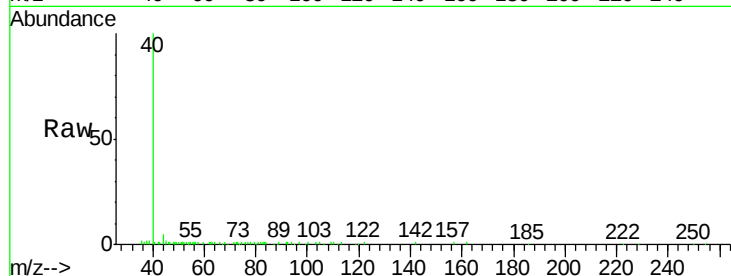
Instrument :  
MSVOA\_X  
ClientSampleId :

Tot Ion: 56 Resp: 588

Ion Ratio Lower Upper

56 100

55 18.4 57.8 86.6#



#15

Acrylonitrile

Concen: 0.236 ug/l

RT: 3.15 min Scan# 327

Delta R.T. 0.00 min

Lab File: VX008192.D

Acq: 19 Mar 2019 15:35

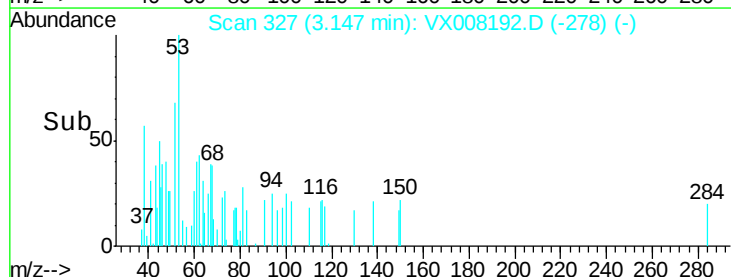
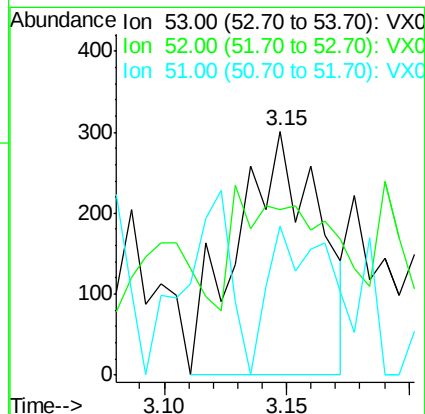
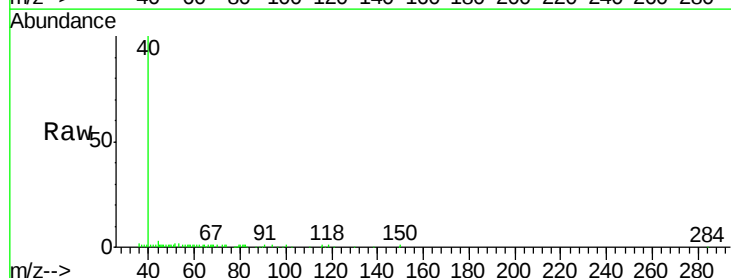
Tgt Ion: 53 Resp: 700

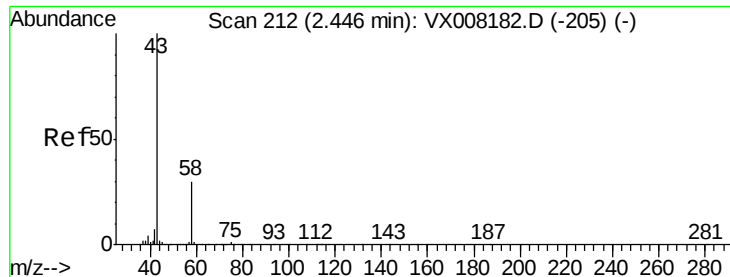
Ion Ratio Lower Upper

53 100

52 0.0 66.0 99.0#

51 55.7 28.0 42.0#





#16

Acetone

Concen: 5.206 ug/l

RT: 2.45 min Scan# 212

Delta R.T. 0.00 min

Lab File: VX008192.D

Acq: 19 Mar 2019 15:35

Instrument :

MSVOA\_X

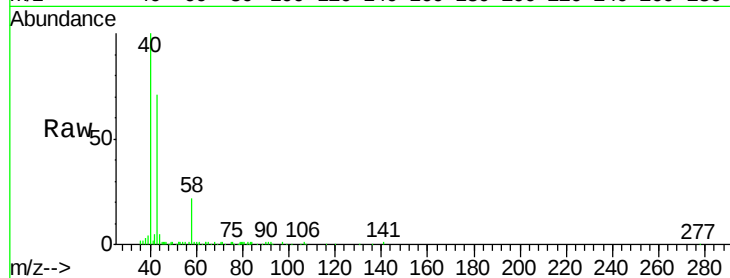
ClientSampleId :

Tot Ion: 43 Resp: 15499

Ion Ratio Lower Upper

43 100

58 29.2 25.5 38.3



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0

2.45

8000

6000

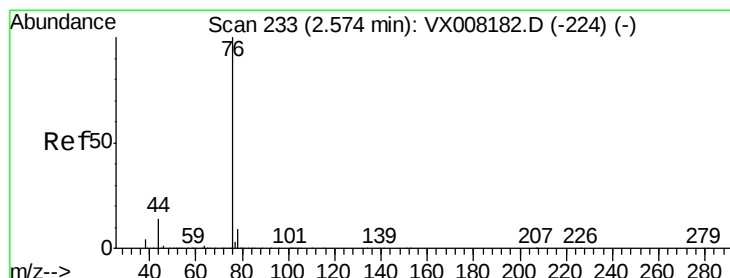
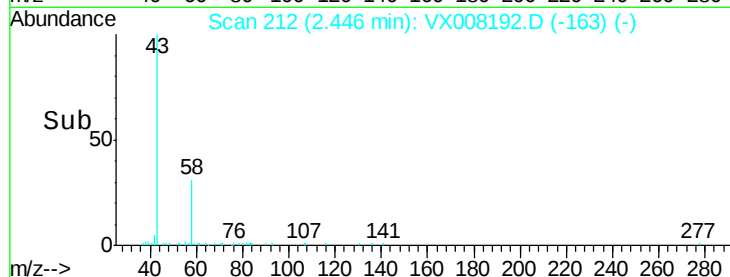
4000

2000

0

Time-->

2.40 2.45 2.50



#17

Carbon Disulfide

Concen: 0.848 ug/l

RT: 2.57 min Scan# 233

Delta R.T. 0.00 min

Lab File: VX008192.D

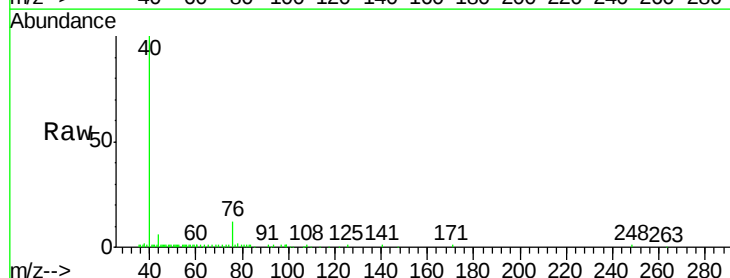
Acq: 19 Mar 2019 15:35

Tgt Ion: 76 Resp: 2415

Ion Ratio Lower Upper

76 100

78 14.0 7.2 10.8#



Abundance Ion 75.90 (75.60 to 76.60): VX0

Ion 77.90 (77.60 to 78.60): VX0

2.57

1500

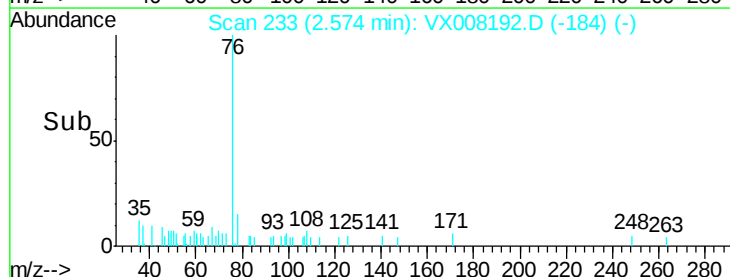
1000

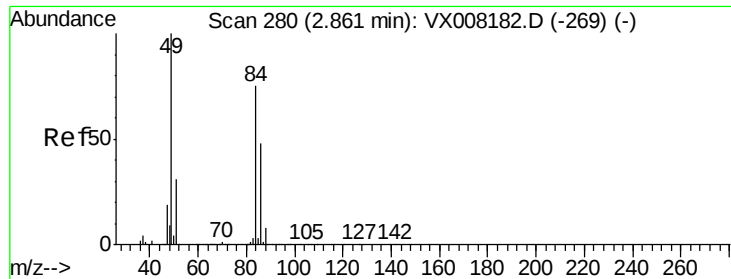
500

0

Time-->

2.55 2.60 2.65

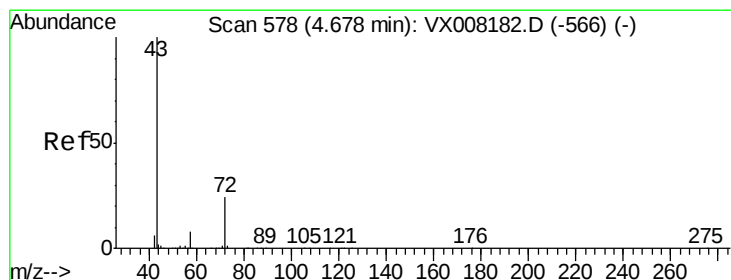
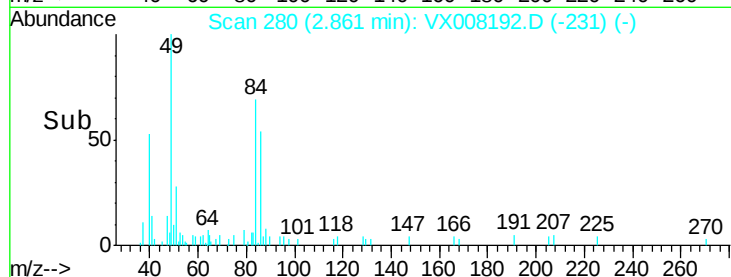
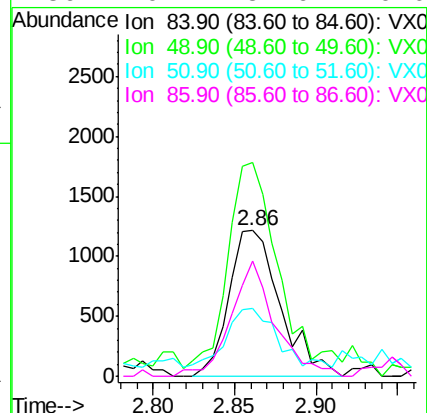
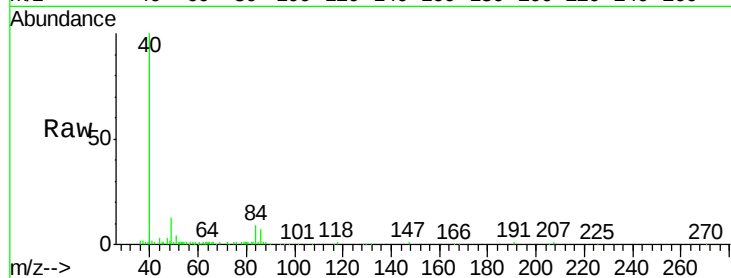




#20  
Methvlene Chloride  
Concen: 0.539 ug/l  
RT: 2.86 min Scan# 280  
Delta R.T. 0.00 min  
Lab File: VX008192.D  
Acq: 19 Mar 2019 15:35

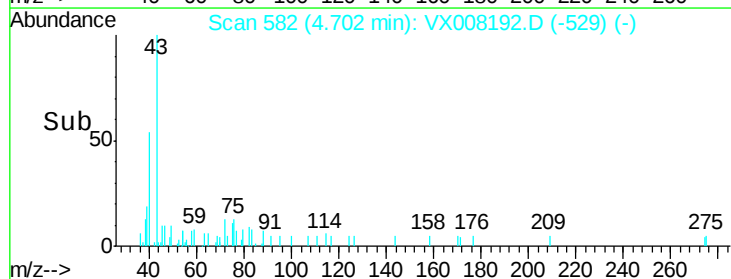
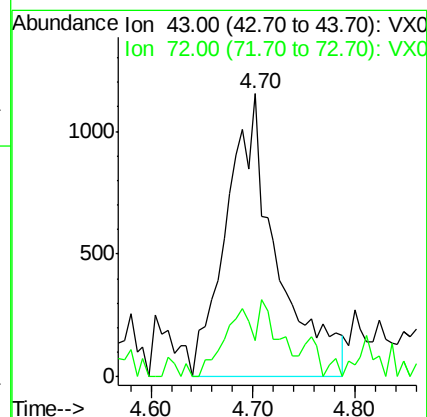
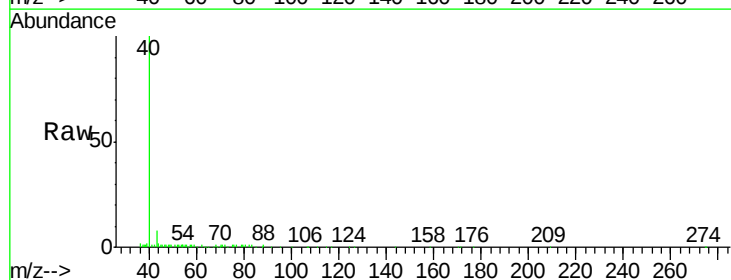
Instrument :  
MSVOA\_X  
ClientSampleId :

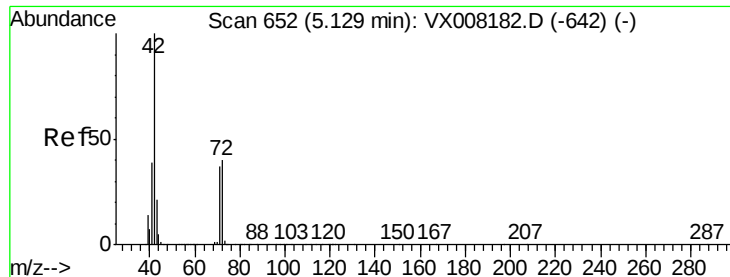
Tot Ion: 84 Resp: 2674  
Ion Ratio Lower Upper  
84 100  
49 136.6 99.3 148.9  
51 38.0 31.3 46.9  
86 79.1 52.6 79.0#



#25  
2-Butanone  
Concen: 0.898 ug/l  
RT: 4.70 min Scan# 582  
Delta R.T. 0.02 min  
Lab File: VX008192.D  
Acq: 19 Mar 2019 15:35

Tgt Ion: 43 Resp: 3945  
Ion Ratio Lower Upper  
43 100  
72 12.9 19.9 29.9#





#29

Tetrahydrofuran

Concen: 0.617 ug/l

RT: 5.15 min Scan# 656

Delta R.T. 0.02 min

Lab File: VX008192.D

Acq: 19 Mar 2019 15:35

Instrument :

MSVOA\_X

ClientSampleId :

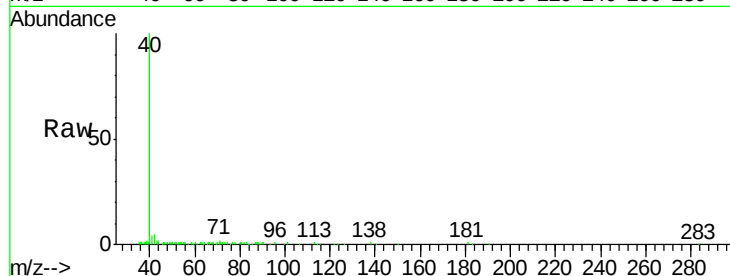
Tot Ion: 42 Resp: 1696

Ion Ratio Lower Upper

42 100

72 64.3 33.8 50.6#

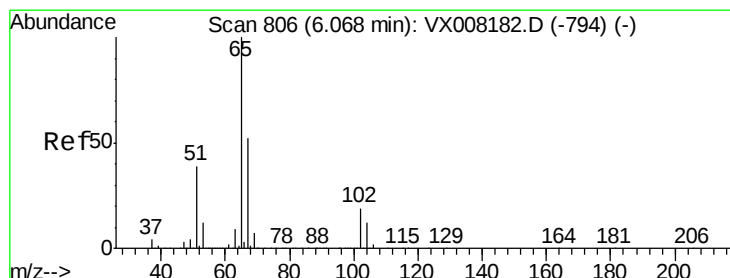
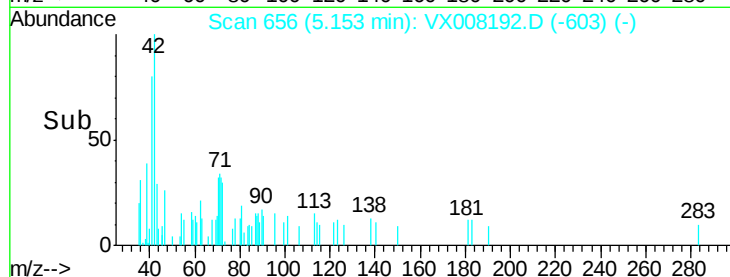
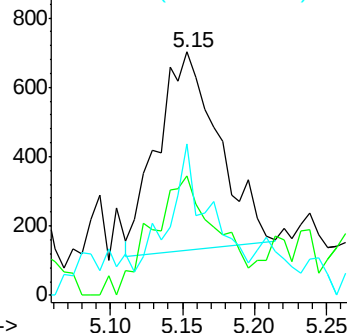
71 48.8 31.5 47.3#



Abundance Ion 42.00 (41.70 to 42.70): VX0

Ion 72.00 (71.70 to 72.70): VX0

Ion 71.00 (70.70 to 71.70): VX0



#33

1,2-Dichloroethane-d4

Concen: 46.329 ug/l

RT: 6.07 min Scan# 806

Delta R.T. 0.00 min

Lab File: VX008192.D

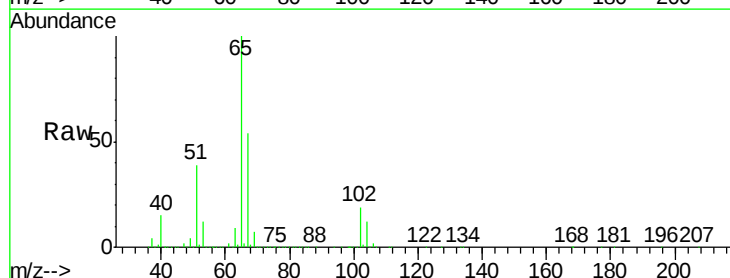
Acq: 19 Mar 2019 15:35

Tgt Ion: 65 Resp: 243196

Ion Ratio Lower Upper

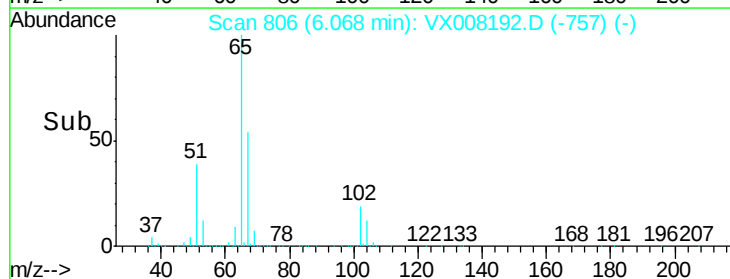
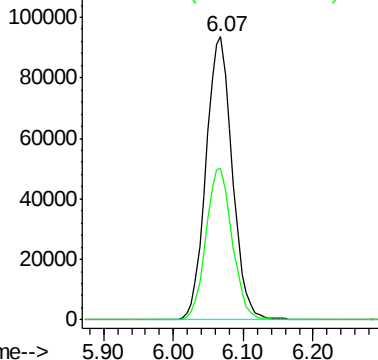
65 100

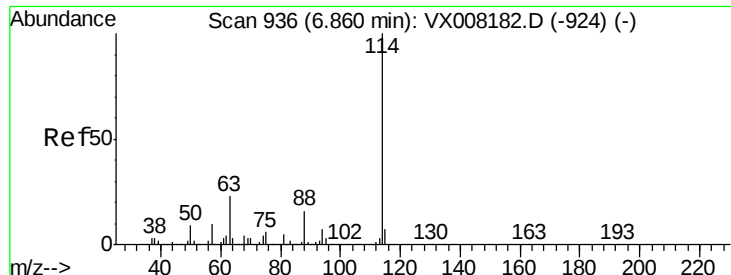
67 53.7 0.0 110.0



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: VX008192.D

Acq: 19 Mar 2019 15:35

Instrument :

MSVOA\_X

ClientSampleId :

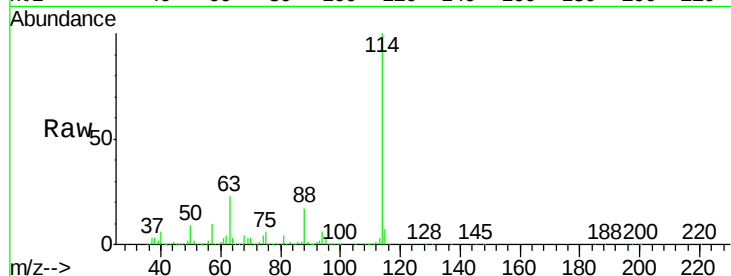
Tot Ion:114 Resp: 567580

Ion Ratio Lower Upper

114 100

63 23.1 0.0 39.8

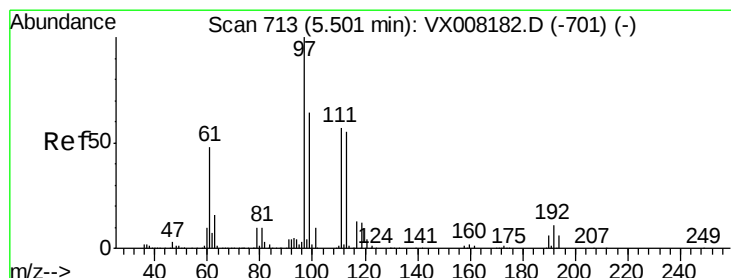
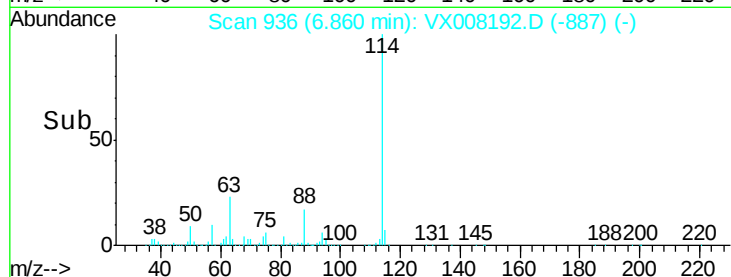
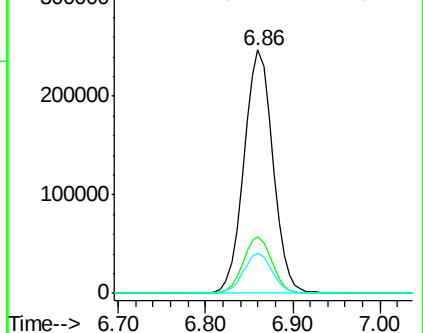
88 16.6 0.0 31.4



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: 46.747 ug/l

RT: 5.50 min Scan# 713

Delta R.T. 0.00 min

Lab File: VX008192.D

Acq: 19 Mar 2019 15:35

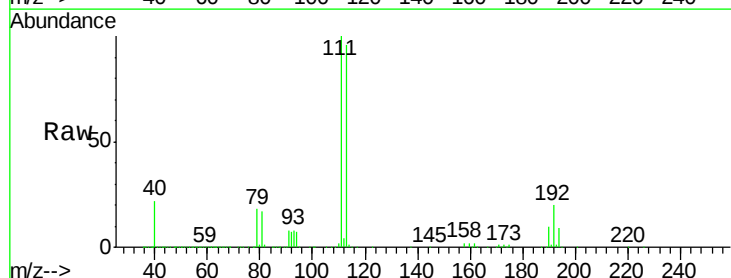
Tgt Ion:113 Resp: 177618

Ion Ratio Lower Upper

113 100

111 103.0 81.4 122.0

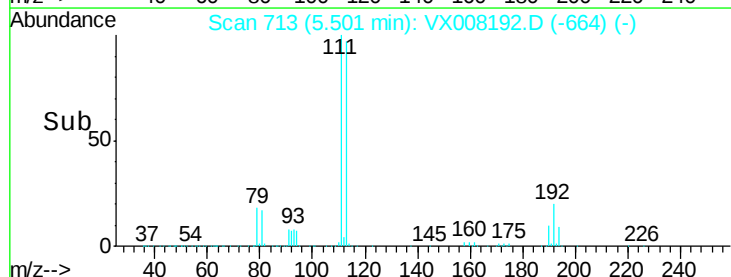
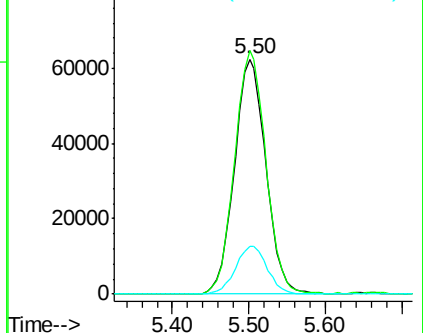
192 20.5 19.4 29.0

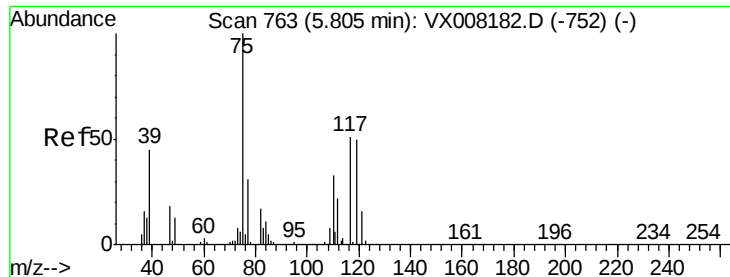


Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V

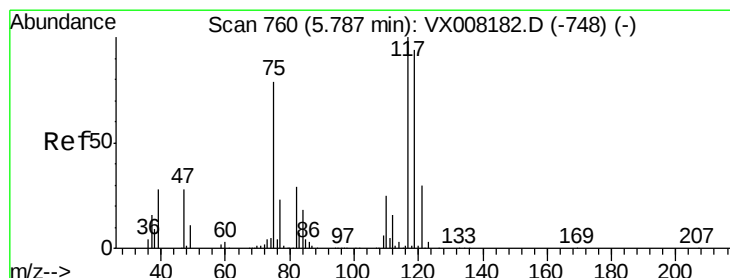
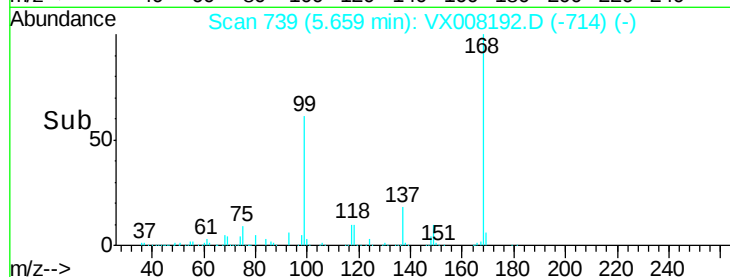
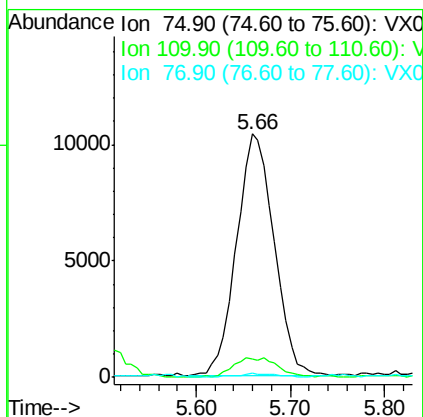
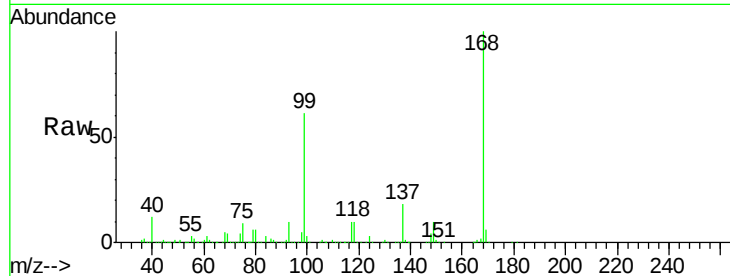




#36  
 1,1-Dichloropropene  
 Concen: 4.357 ug/l  
 RT: 5.66 min Scan# 739  
 Delta R.T. -0.15 min  
 Lab File: VX008192.D  
 Acq: 19 Mar 2019 15:35

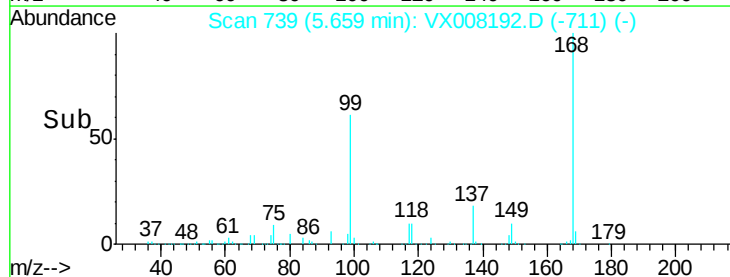
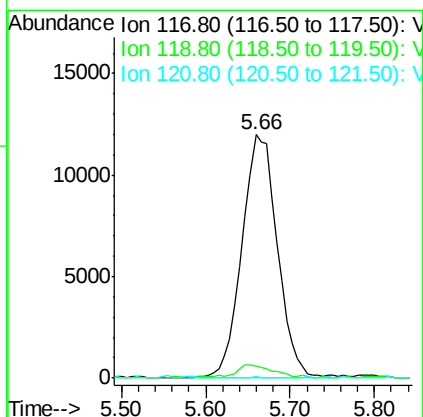
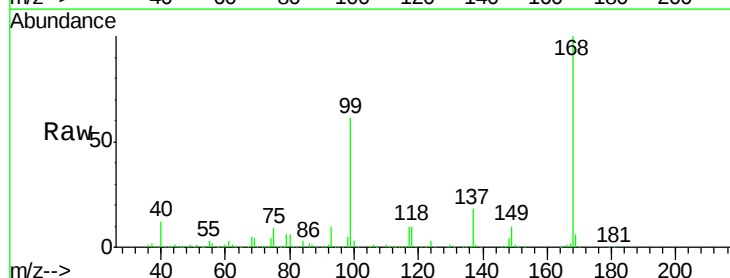
Instrument :  
 MSVOA\_X  
 ClientSampled :

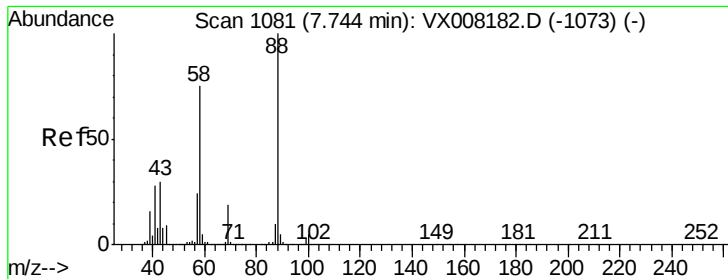
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 110     | 9.6   | 18.4  | 55.0# |
| 77      | 1.7   | 25.0  | 37.4# |



#38  
 Carbon Tetrachloride  
 Concen: 5.820 ug/l  
 RT: 5.66 min Scan# 739  
 Delta R.T. -0.13 min  
 Lab File: VX008192.D  
 Acq: 19 Mar 2019 15:35

| Tgt Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 117     | 100   |       |        |
| 119     | 4.8   | 76.2  | 114.2# |
| 121     | 0.9   | 24.6  | 36.8#  |





#49

1,4-Dioxane

Concen: 0.579 ug/l

RT: 7.75 min Scan# 1082

Delta R.T. 0.01 min

Lab File: VX008192.D

Acq: 19 Mar 2019 15:35

Instrument :  
MSVOA\_X  
ClientSampled :

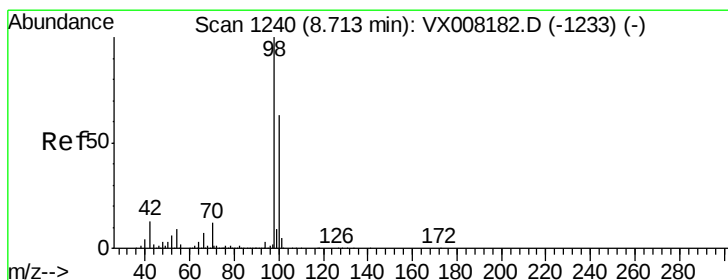
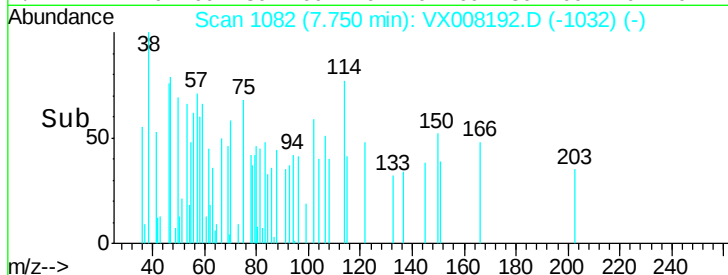
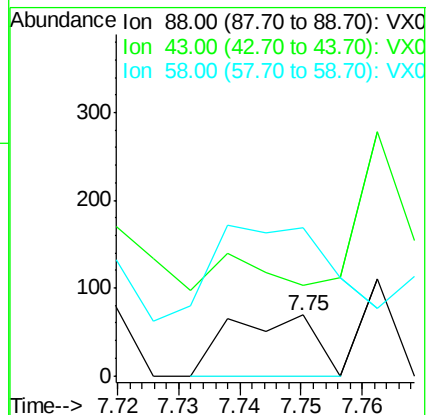
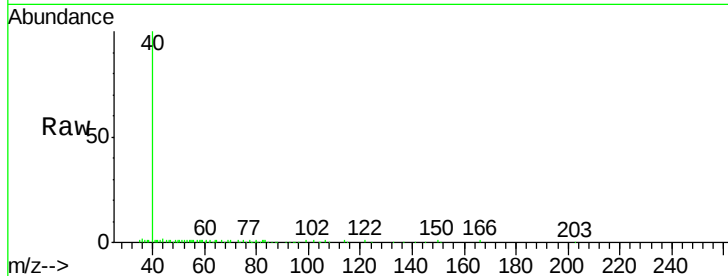
Tot Ion: 88 Resp: 68

Ion Ratio Lower Upper

88 100

43 0.0 25.1 37.7#

58 214.7 57.8 86.6#



#50

Toluene-d8

Concen: 48.002 ug/l

RT: 8.71 min Scan# 1240

Delta R.T. 0.00 min

Lab File: VX008192.D

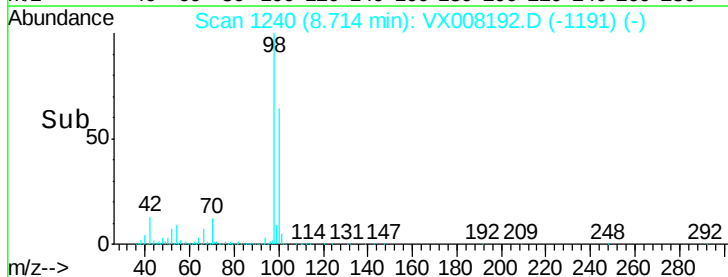
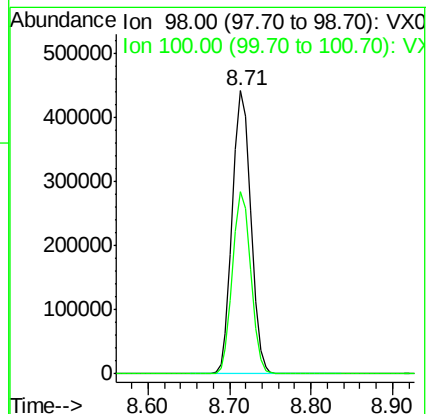
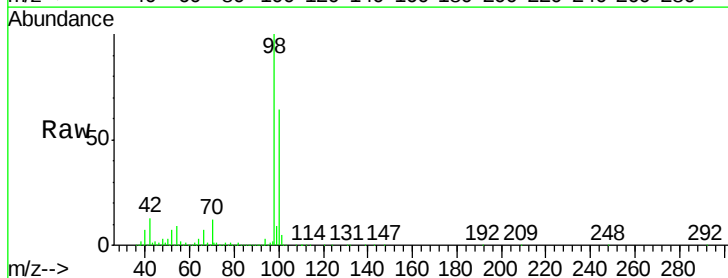
Acq: 19 Mar 2019 15:35

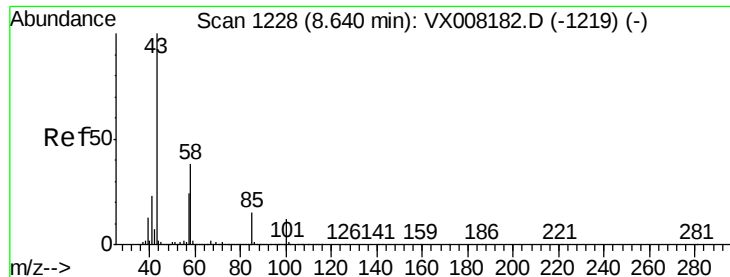
Tgt Ion: 98 Resp: 691489

Ion Ratio Lower Upper

98 100

100 63.4 51.7 77.5

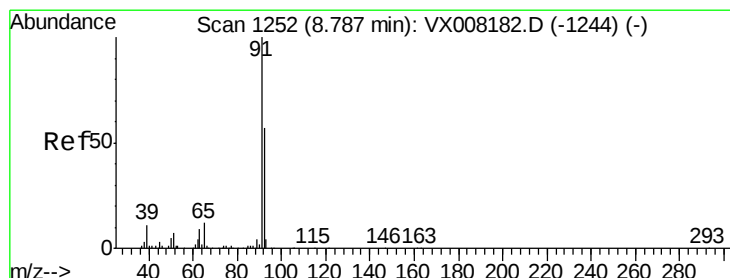
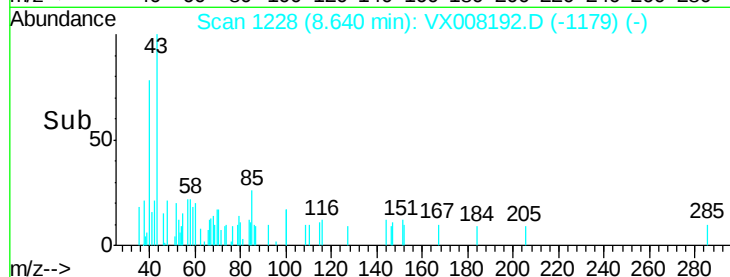
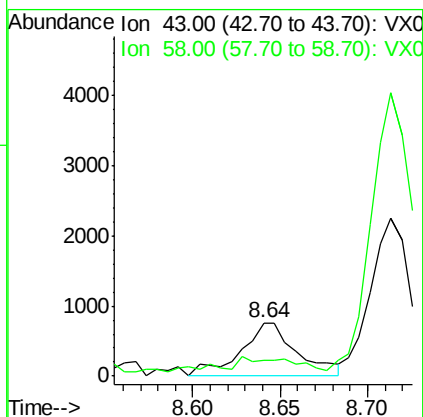
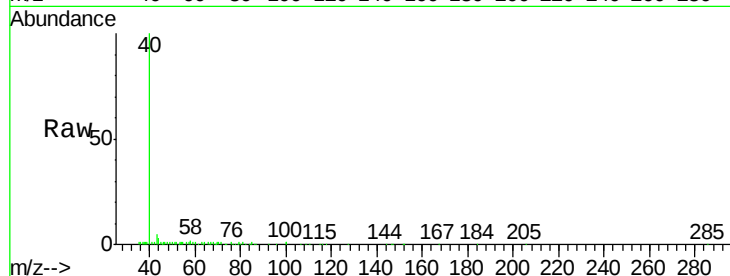




#51  
4-Methyl-2-Pentanone  
Concen: 0.211 ug/l  
RT: 8.64 min Scan# 1228  
Delta R.T. 0.00 min  
Lab File: VX008192.D  
Acq: 19 Mar 2019 15:35

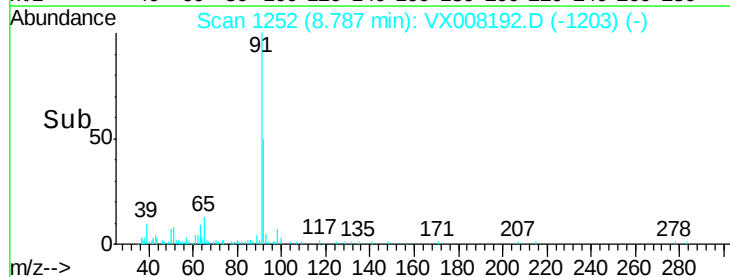
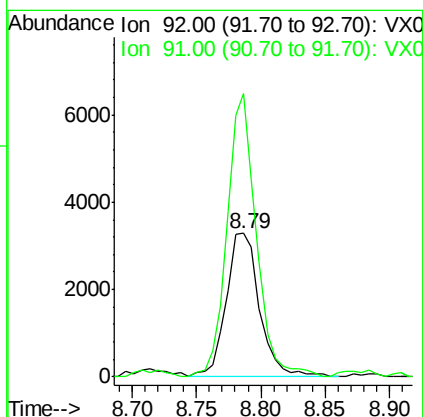
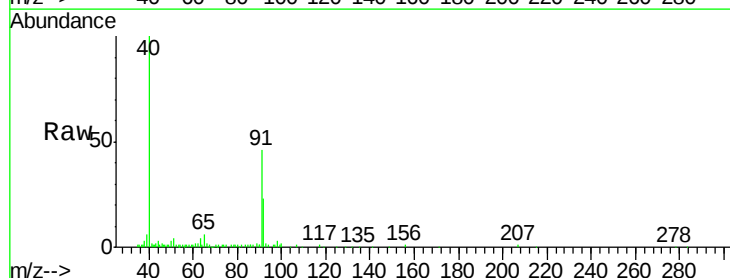
Instrument :  
MSVOA\_X  
ClientSampled :

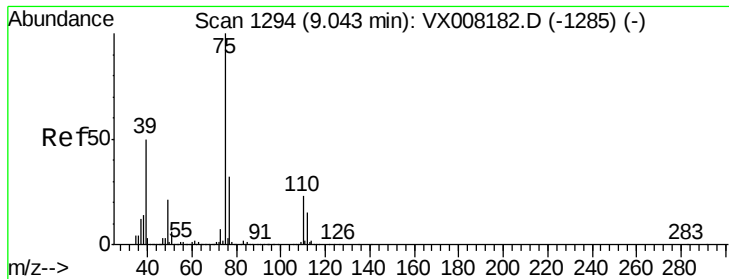
Tot Ion: 43 Resp: 1710  
Ion Ratio Lower Upper  
43 100  
58 19.2 31.3 46.9#



#52  
Toluene  
Concen: 0.516 ug/l  
RT: 8.79 min Scan# 1252  
Delta R.T. 0.00 min  
Lab File: VX008192.D  
Acq: 19 Mar 2019 15:35

Tgt Ion: 92 Resp: 5987  
Ion Ratio Lower Upper  
92 100  
91 172.1 137.4 206.0

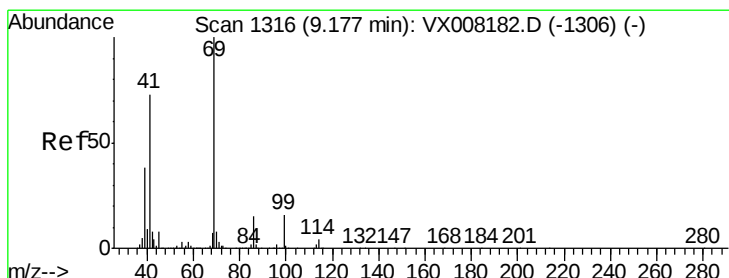
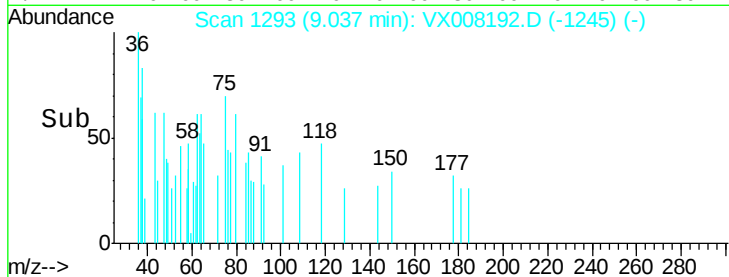
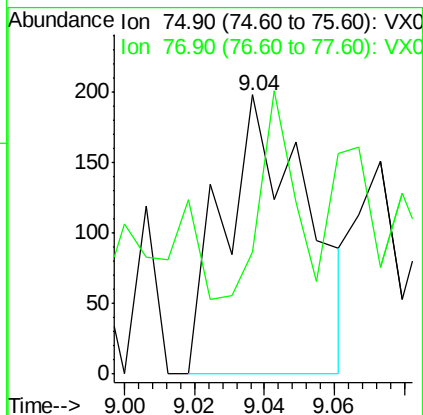
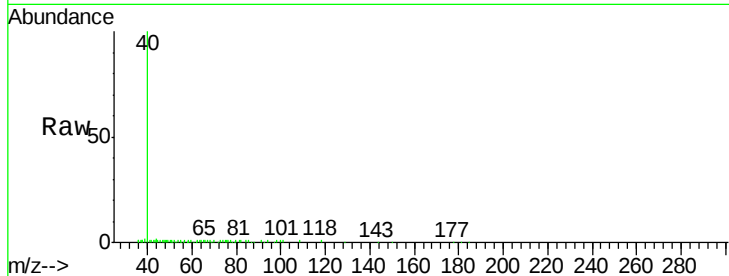




#53  
t-1,3-Dichloropropene  
Concen: 1.462 ug/l  
RT: 9.04 min Scan# 1293  
Delta R.T. -0.01 min  
Lab File: VX008192.D  
Acq: 19 Mar 2019 15:35

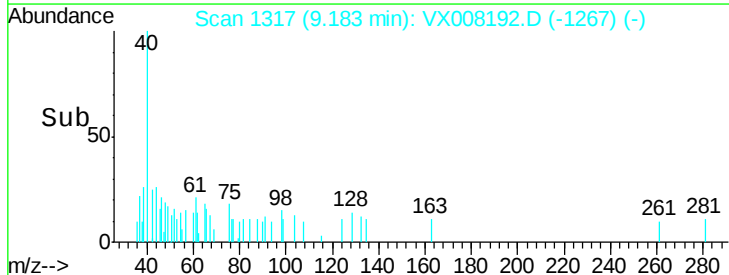
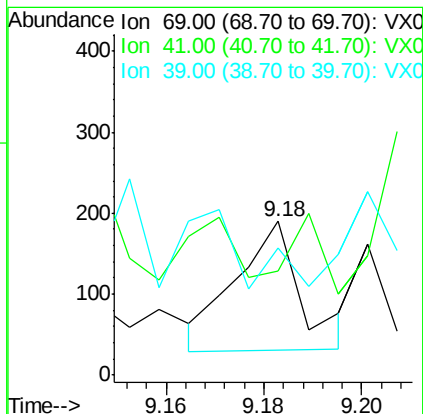
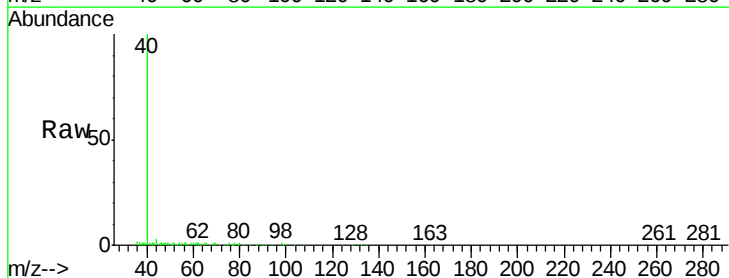
Instrument :  
MSVOA\_X  
ClientSampled :

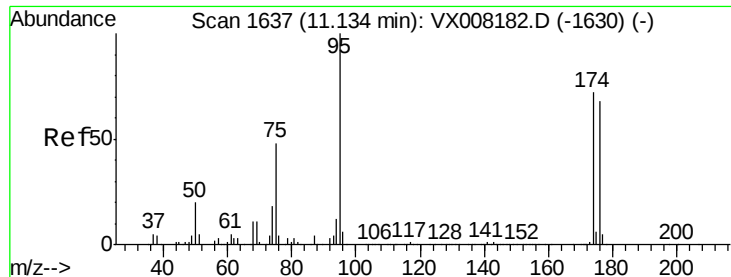
Tot Ion: 75 Resp: 326  
Ion Ratio Lower Upper  
75 100  
77 0.0 25.4 38.0#



#56  
Ethyl methacrylate  
Concen: 0.543 ug/l  
RT: 9.18 min Scan# 1317  
Delta R.T. 0.01 min  
Lab File: VX008192.D  
Acq: 19 Mar 2019 15:35

Tgt Ion: 69 Resp: 147  
Ion Ratio Lower Upper  
69 100  
41 28.6 54.2 81.4#  
39 0.0 25.0 37.4#





#62

4-Bromofluorobenzene

Concen: 45.189 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. 0.00 min

Lab File: VX008192.D

Acq: 19 Mar 2019 15:35

Instrument :

MSVOA\_X

ClientSampled :

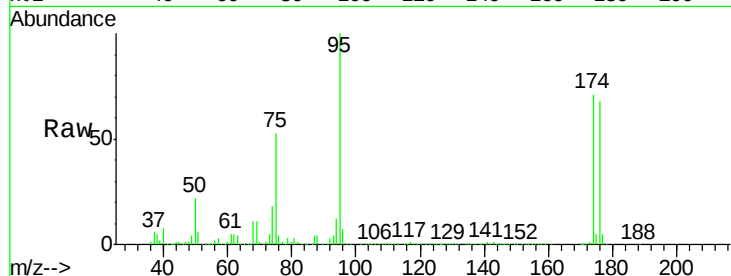
Tot Ion: 95 Resp: 224144

Ion Ratio Lower Upper

95 100

174 76.8 0.0 182.8

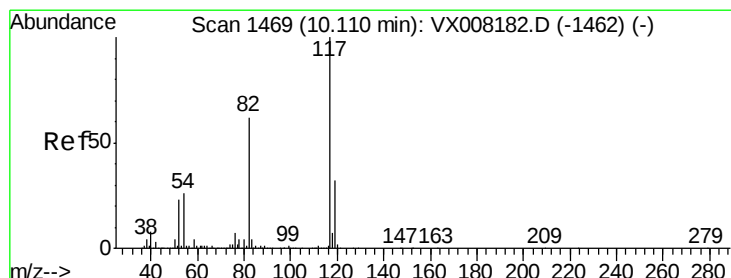
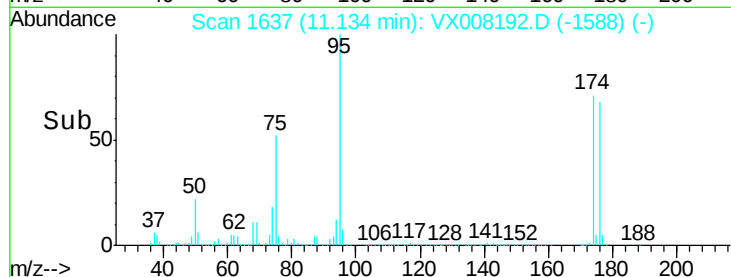
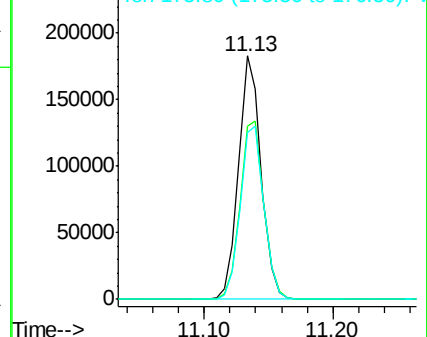
176 74.2 0.0 178.0



Abundance Ion 94.90 (94.60 to 95.60): VX008182.D (-1630) (-)

Ion 173.80 (173.50 to 174.50): VX008182.D (-1630) (-)

Ion 175.80 (175.50 to 176.50): VX008182.D (-1630) (-)



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 10.11 min Scan# 1469

Delta R.T. 0.00 min

Lab File: VX008192.D

Acq: 19 Mar 2019 15:35

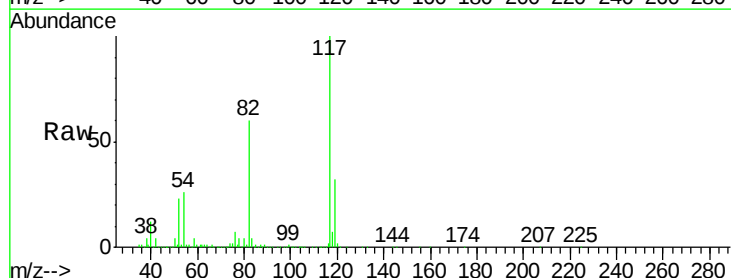
Tgt Ion: 117 Resp: 476117

Ion Ratio Lower Upper

117 100

82 60.4 44.3 66.5

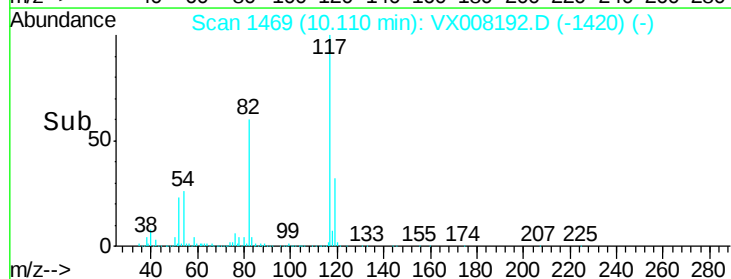
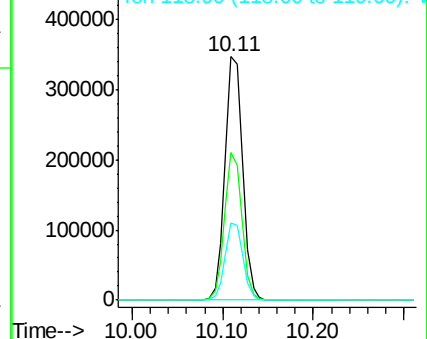
119 31.6 25.3 37.9

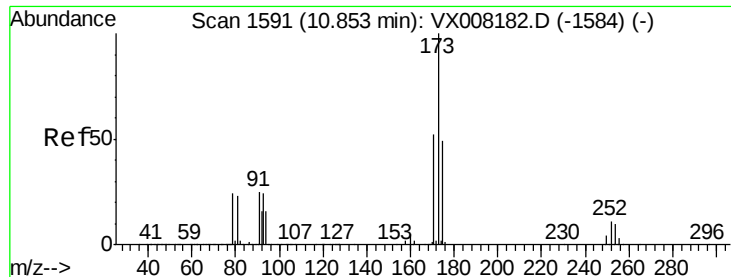


Abundance Ion 116.90 (116.60 to 117.60): VX008182.D (-1462) (-)

Ion 82.00 (81.70 to 82.70): VX008182.D (-1462) (-)

Ion 118.90 (118.60 to 119.60): VX008182.D (-1462) (-)





#71

Bromoform

Concen: 2.220 ug/l

RT: 10.85 min Scan# 1591

Delta R.T. 0.00 min

Lab File: VX008192.D

Acq: 19 Mar 2019 15:35

Instrument :

MSVOA\_X

ClientSampleId :

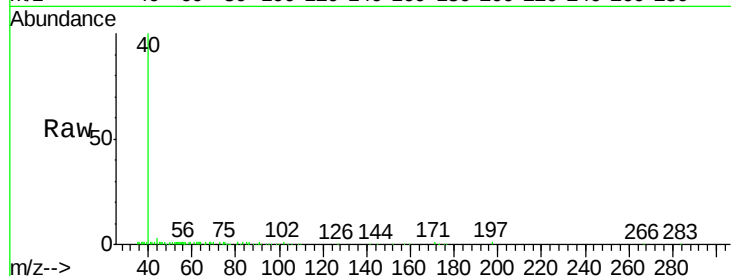
Tot Ion:173 Resp: 63

Ion Ratio Lower Upper

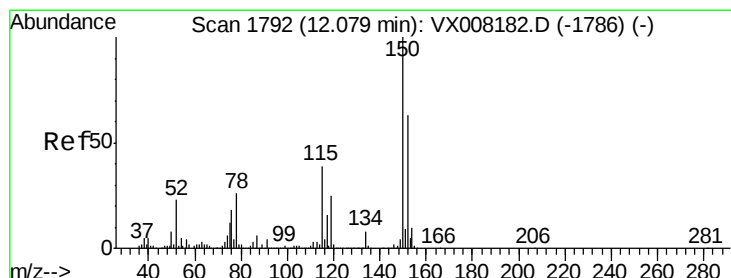
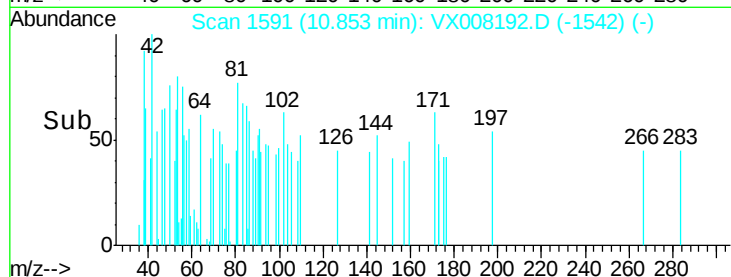
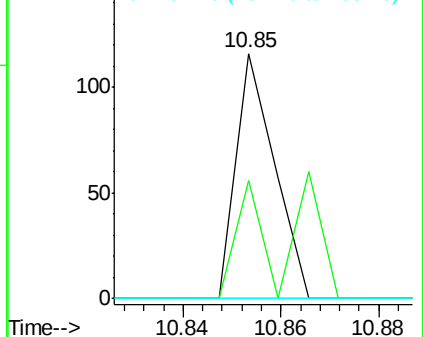
173 100

175 0.0 24.3 72.9#

254 0.0 0.1 0.1#



Abundance Ion 172.70 (172.40 to 173.40): V  
Ion 174.70 (174.40 to 175.40): V  
Ion 254.40 (254.10 to 255.10): V



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 12.08 min Scan# 1792

Delta R.T. 0.00 min

Lab File: VX008192.D

Acq: 19 Mar 2019 15:35

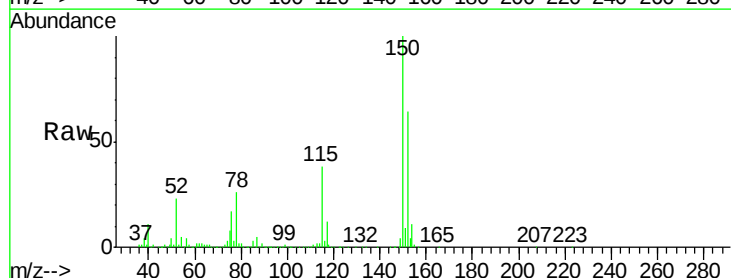
Tgt Ion:152 Resp: 192432

Ion Ratio Lower Upper

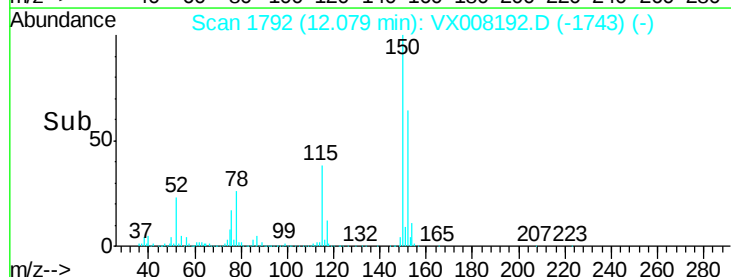
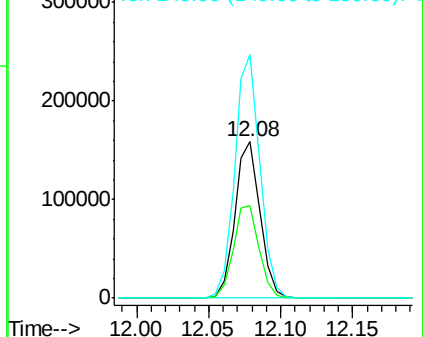
152 100

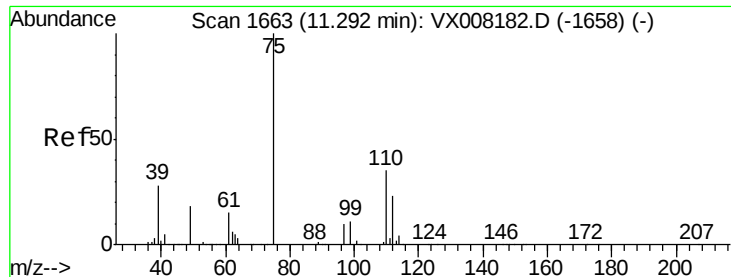
115 61.3 38.6 115.7

150 156.2 0.0 348.4



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: 21.673 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. -0.16 min

Lab File: VX008192.D

Acq: 19 Mar 2019 15:35

Instrument :

MSVOA\_X

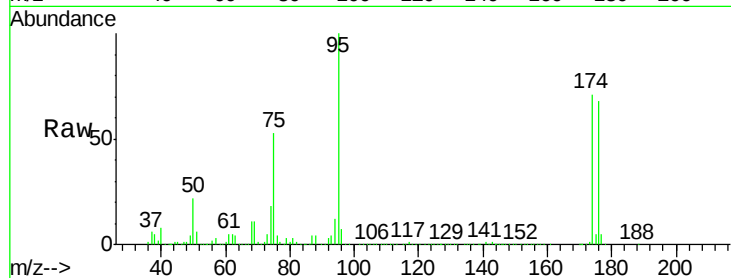
ClientSampled :

Tot Ion: 75 Resp: 117302

Ion Ratio Lower Upper

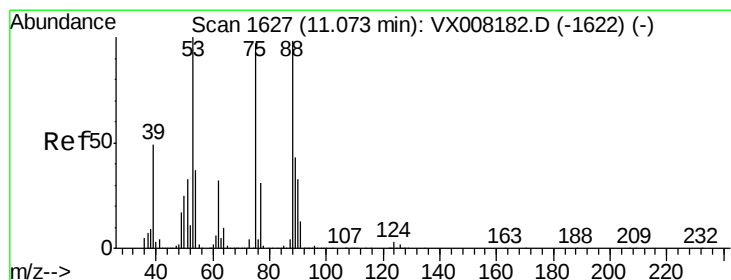
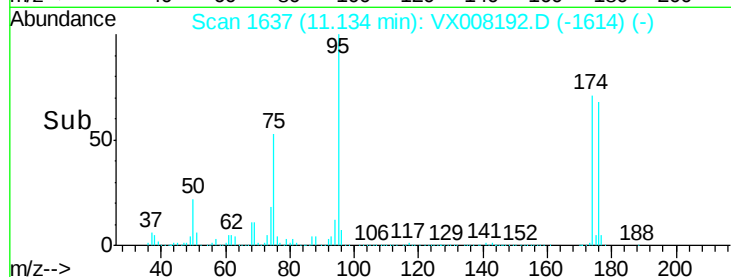
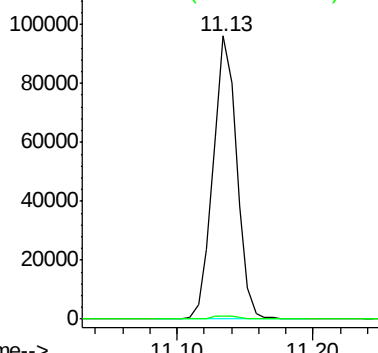
75 100

77 1.5 18.9 56.7#



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: 55.100 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. 0.06 min

Lab File: VX008192.D

Acq: 19 Mar 2019 15:35

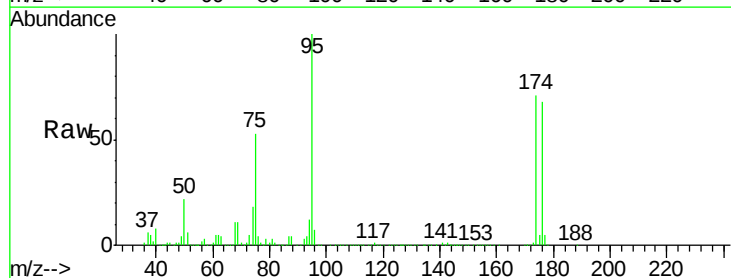
Tgt Ion: 75 Resp: 117302

Ion Ratio Lower Upper

75 100

53 0.3 76.1 114.1#

89 0.0 36.3 54.5#



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

