

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX072018\  
 Data File : VX003540.D  
 Acq On : 21 Jul 2018 05:47  
 Operator : JC/SP  
 Sample : J4014-07  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 47 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 RE104D3-071318

Quant Time: Jul 21 06:18:06 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X071918W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Jul 19 17:09:44 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.67  | 168  | 320741   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.87  | 114  | 434217   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.12 | 117  | 413536   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 229454   | 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   | 185004   | 48.73 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 97.46%  |          |
| 35) Dibromofluoromethane    | 5.51  | 113  | 186067   | 56.26 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 112.52% |          |
| 50) Toluene-d8              | 8.72  | 98   | 619012   | 49.80 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 99.60%  |          |
| 62) 4-Bromofluorobenzene    | 11.14 | 95   | 213004   | 46.95 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 93.90%  |          |

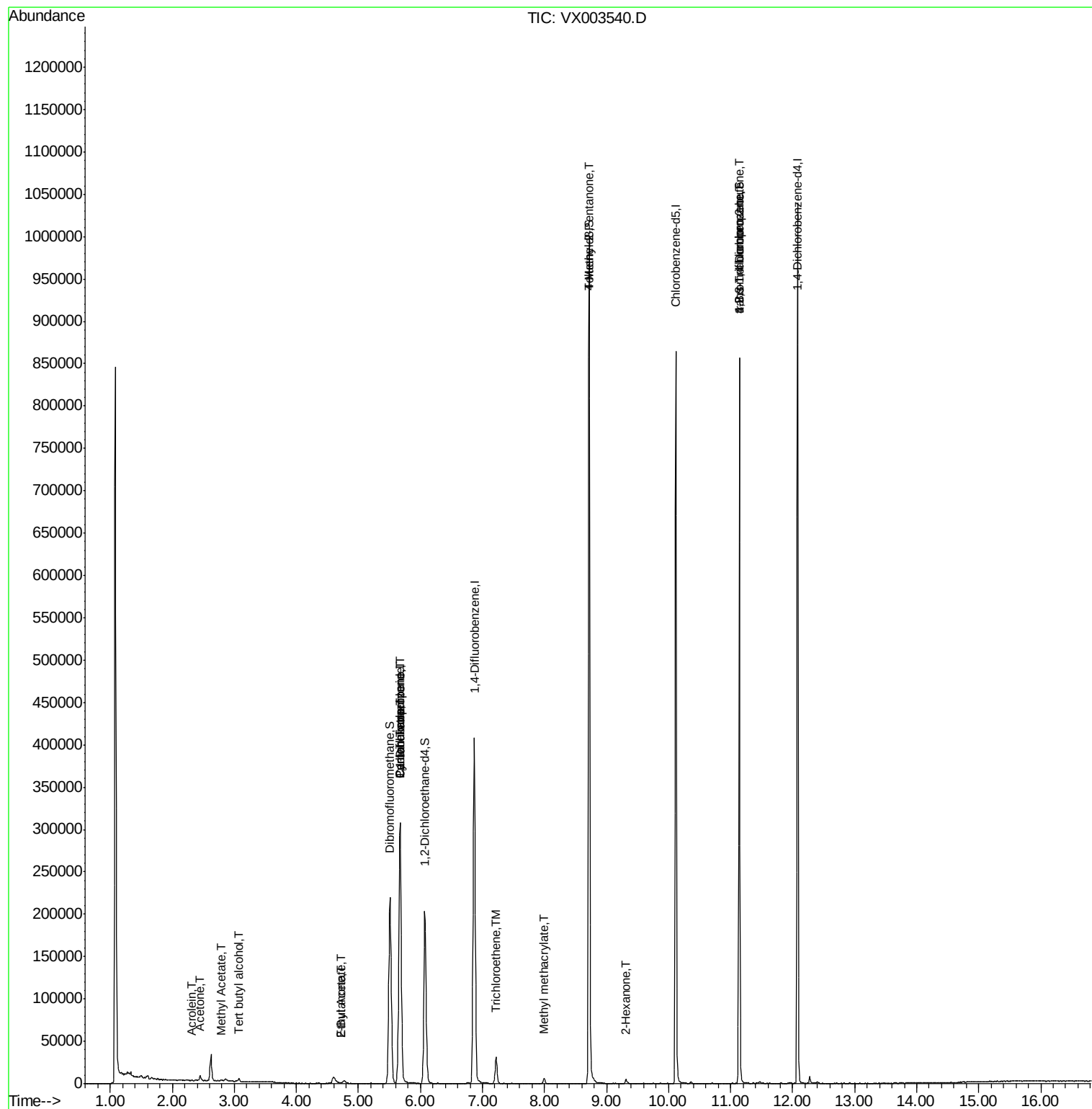
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 3) Chloromethane               | 1.33  | 50   | 2111     | Below Cal |        | 99     |
| 5) Bromomethane                | 1.67  | 94   | 863      | Below Cal |        | 85     |
| 11) Tert butyl alcohol         | 3.07  | 59   | 4391     | 5.84      | ug/l # | 94     |
| 13) Acrolein                   | 2.31  | 56   | 82       | 0.24      | ug/l   | 86     |
| 16) Acetone                    | 2.45  | 43   | 6672     | 4.65      | ug/l # | 77     |
| 18) Methyl Acetate             | 2.78  | 43   | 1198     | 0.26      | ug/l # | 90     |
| 20) Methylene Chloride         | 2.87  | 84   | 1027     | Below Cal | #      | 68     |
| 25) 2-Butanone                 | 4.72  | 43   | 1049     | 0.44      | ug/l # | 90     |
| 31) Cyclohexane                | 5.67  | 56   | 4738     | 0.83      | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 5.67  | 75   | 19470    | 4.15      | ug/l # | 50     |
| 37) Ethyl Acetate              | 4.72  | 43   | 1049     | 0.24      | ug/l # | 70     |
| 38) Carbon Tetrachloride       | 5.67  | 117  | 27508    | 5.98      | ug/l # | 15     |
| 44) Trichloroethene            | 7.22  | 130  | 13252    | 3.14      | ug/l   | 96     |
| 48) Methyl methacrylate        | 7.99  | 41   | 2607     | 0.73      | ug/l # | 34     |
| 51) 4-Methyl-2-Pentanone       | 8.72  | 43   | 2419     | 0.54      | ug/l # | 1      |
| 59) 2-Hexanone                 | 9.31  | 43   | 3187     | 0.96      | ug/l   | 81     |
| 76) 1,2,3-Trichloropropane     | 11.14 | 75   | 97684    | 23.70     | ug/l # | 33     |
| 81) trans-1,4-Dichloro-2-buten | 11.14 | 75   | 97684    | 66.49     | ug/l # | 7      |

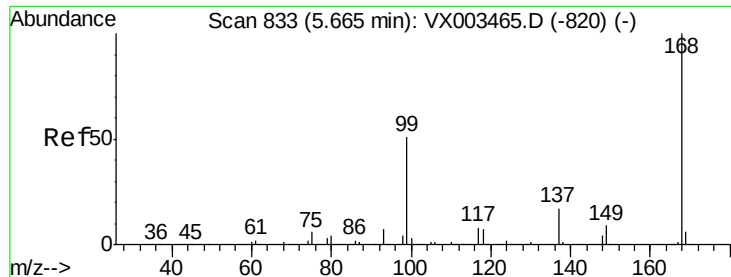
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA X\DATA\VX072018\  
Data File : VX003540.D  
Acq On : 21 Jul 2018 05:47  
Operator : JC/SP  
Sample : J4014-07  
Misc : 5.0mL/MSVOA X/WATER  
ALS Vial : 47 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :  
RE104D3-071318

Quant Time: Jul 21 06:18:06 2018  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X071918W.M  
Quant Title : SW846 8260  
QLast Update : Thu Jul 19 17:09:44 2018  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.00 ug/l

RT: 5.67 min Scan# 834

Delta R.T. 0.01 min

Lab File: VX003540.D

Acq: 21 Jul 2018 05:47

Instrument :

MSVOA\_X

ClientSampleId :

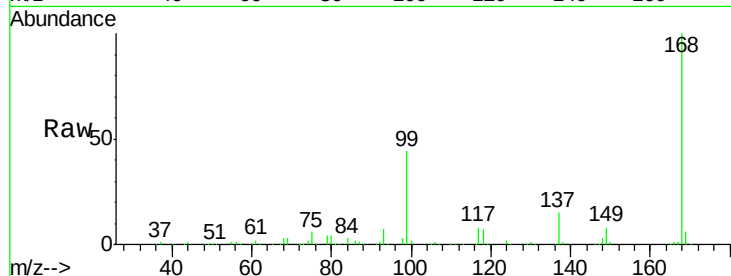
RE104D3-071318

Tot Ion:168 Resp: 320741

Ion Ratio Lower Upper

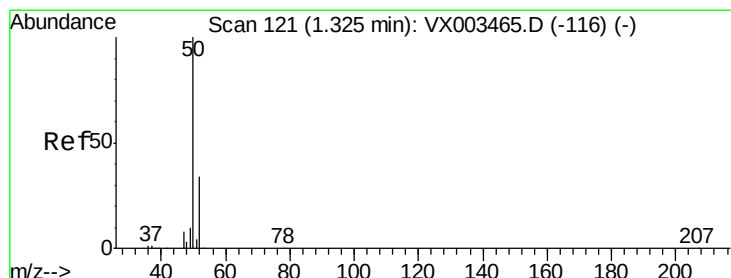
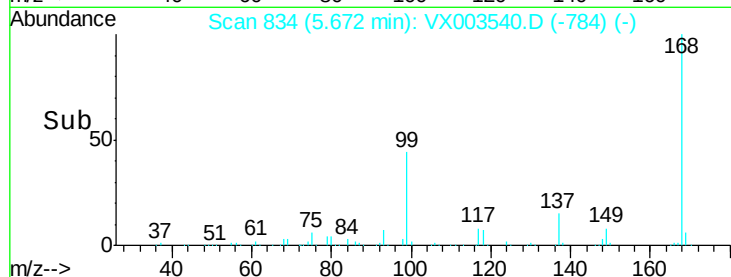
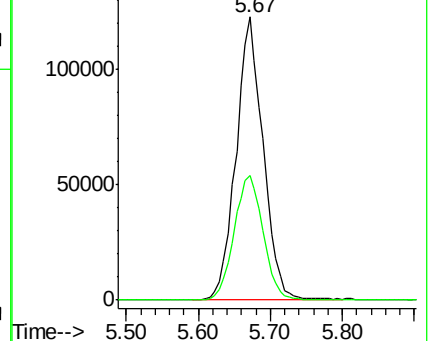
168 100

99 44.1 39.3 58.9



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0



#3

Chloromethane

Concen: Below Cal

RT: 1.33 min Scan# 122

Delta R.T. 0.01 min

Lab File: VX003540.D

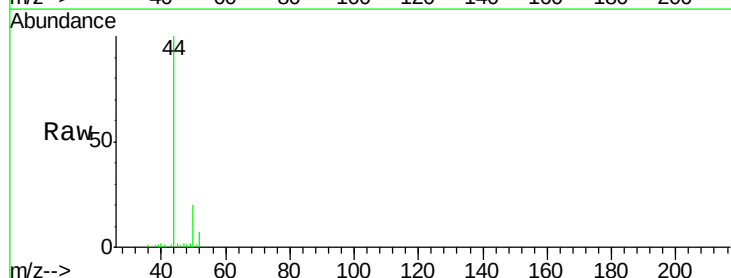
Acq: 21 Jul 2018 05:47

Tgt Ion: 50 Resp: 2111

Ion Ratio Lower Upper

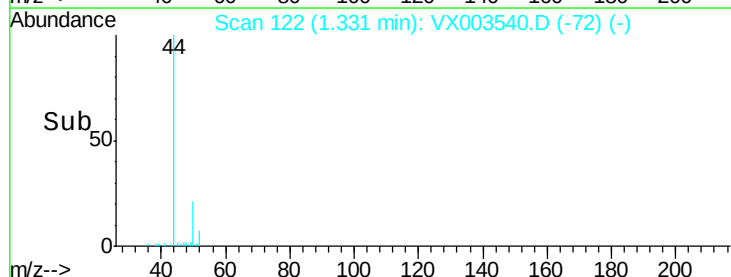
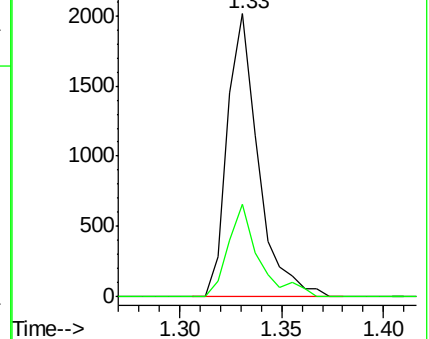
50 100

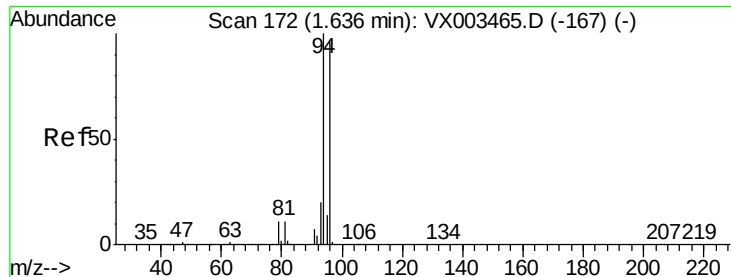
52 32.7 25.7 38.5



Abundance Ion 49.90 (49.60 to 50.60): VX0

Ion 51.90 (51.60 to 52.60): VX0





#5

Bromomethane

Concen: Below Cal

RT: 1.67 min Scan# 178

Delta R.T. 0.04 min

Lab File: VX003540.D

Acq: 21 Jul 2018 05:47

Instrument :

MSVOA\_X

ClientSampleId :

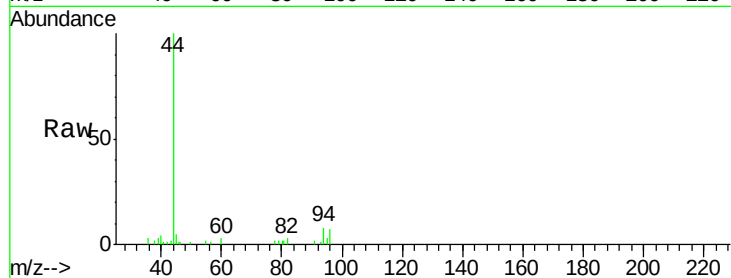
RE104D3-071318

Tot Ion: 94 Resp: 863

Ion Ratio Lower Upper

94 100

96 78.8 74.9 112.3



Abundance Ion 93.90 (93.60 to 94.60): VX0

Ion 95.90 (95.60 to 96.60): VX0

1.67

300

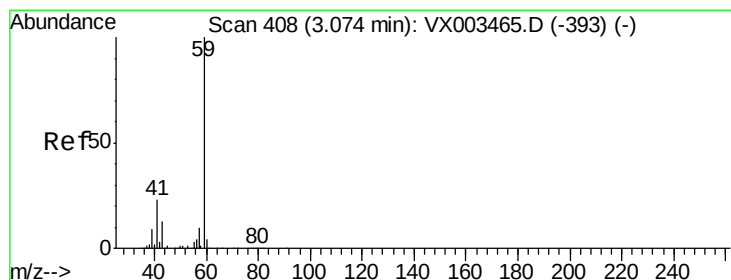
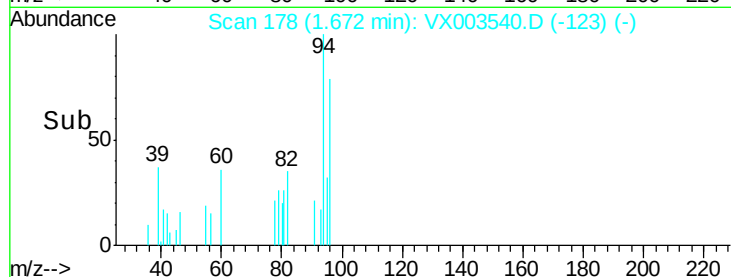
200

100

0

1.60 1.65 1.70

Time-->



#11

Tert butyl alcohol

Concen: 5.84 ug/l

RT: 3.07 min Scan# 408

Delta R.T. -0.00 min

Lab File: VX003540.D

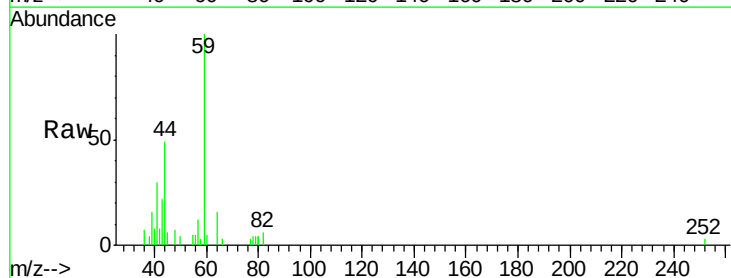
Acq: 21 Jul 2018 05:47

Tgt Ion: 59 Resp: 4391

Ion Ratio Lower Upper

59 100

57 12.3 8.2 12.2#



Abundance Ion 59.00 (58.70 to 59.70): VX0

Ion 57.00 (56.70 to 57.70): VX0

3.07

2000

1500

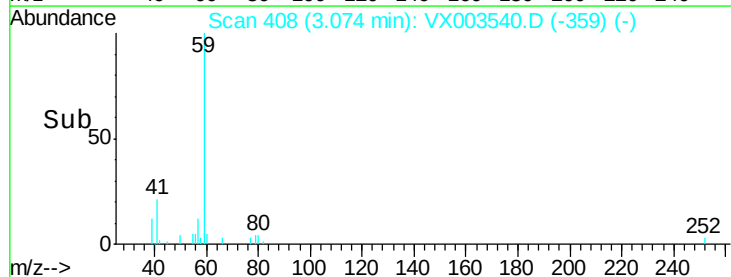
1000

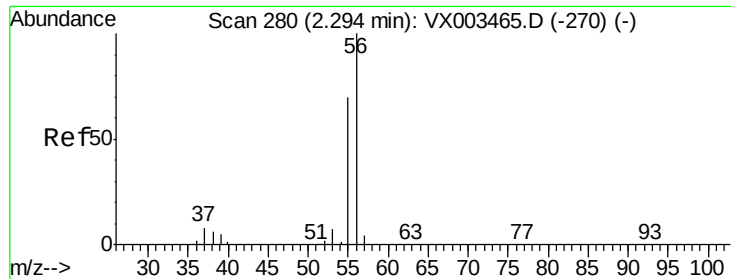
500

0

2.95 3.00 3.05 3.10 3.15

Time-->





#13

Acrolein

Concen: 0.24 ug/l

RT: 2.31 min Scan# 283

Delta R.T. 0.02 min

Lab File: VX003540.D

Acq: 21 Jul 2018 05:47

Instrument :

MSVOA\_X

ClientSampleId :

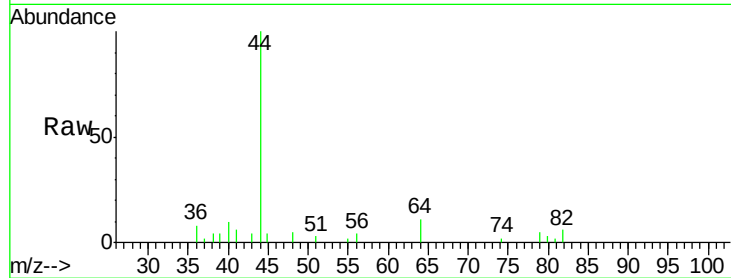
RE104D3-071318

Tot Ion: 56 Resp: 82

Ion Ratio Lower Upper

56 100

55 82.9 57.0 85.4

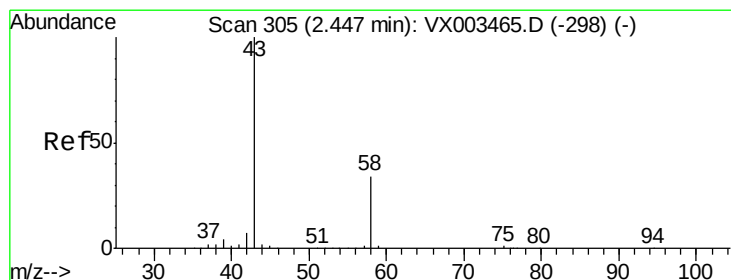
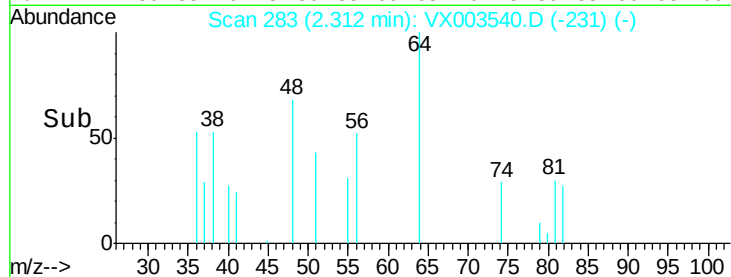


Abundance Ion 56.00 (55.70 to 56.70): VX0

Ion 55.00 (54.70 to 55.70): VX0

2.31

Time-->



#16

Acetone

Concen: 4.65 ug/l

RT: 2.45 min Scan# 305

Delta R.T. -0.00 min

Lab File: VX003540.D

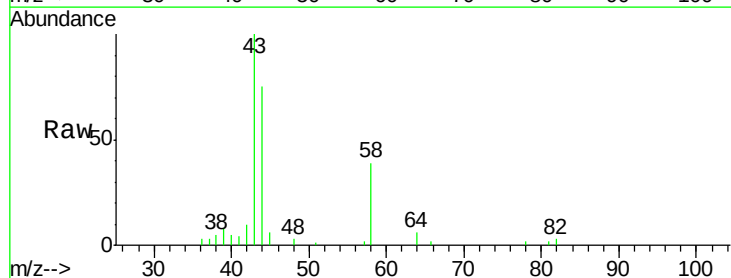
Acq: 21 Jul 2018 05:47

Tgt Ion: 43 Resp: 6672

Ion Ratio Lower Upper

43 100

58 39.5 22.1 33.1#

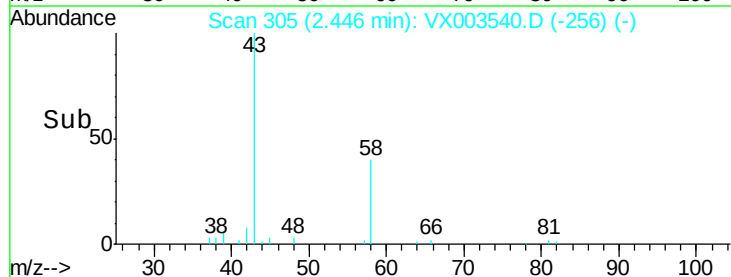


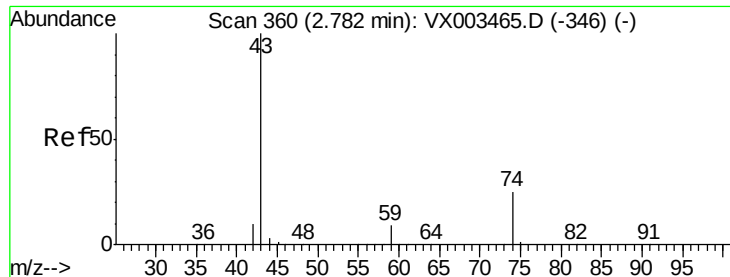
Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0

2.45

Time-->

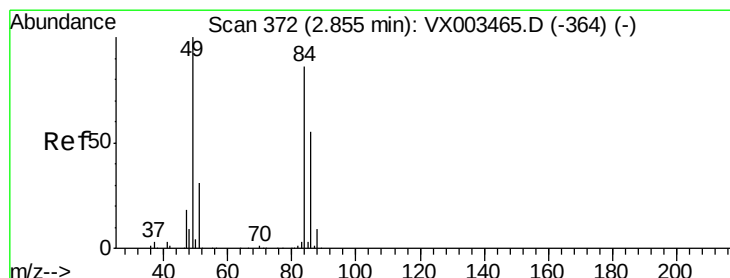
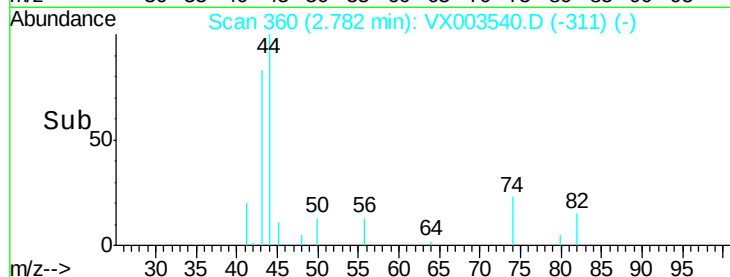
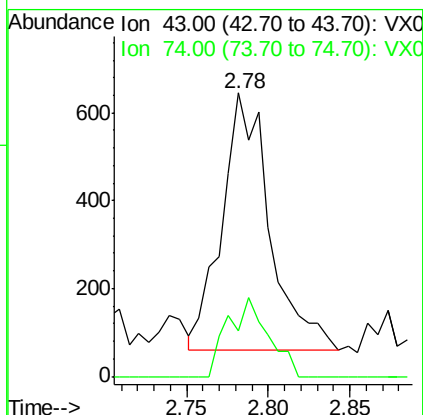
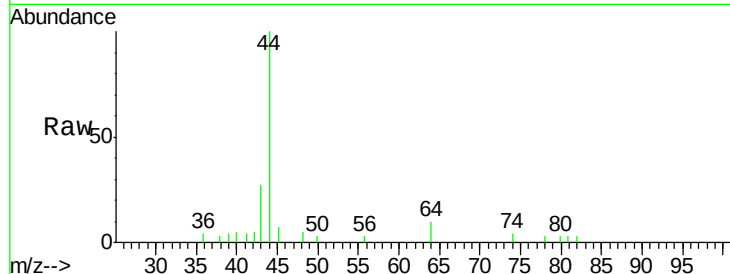




#18  
Methyl Acetate  
Concen: 0.26 ug/l  
RT: 2.78 min Scan# 360  
Delta R.T. -0.00 min  
Lab File: VX003540.D  
Acq: 21 Jul 2018 05:47

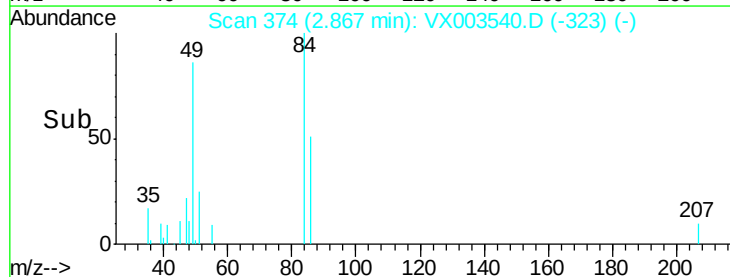
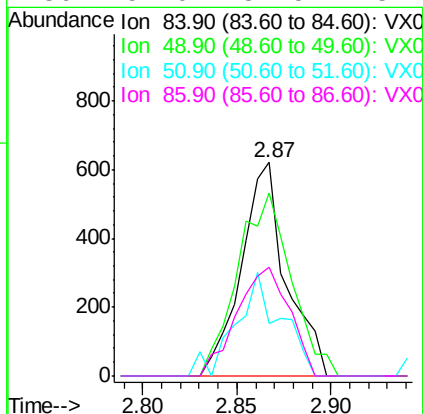
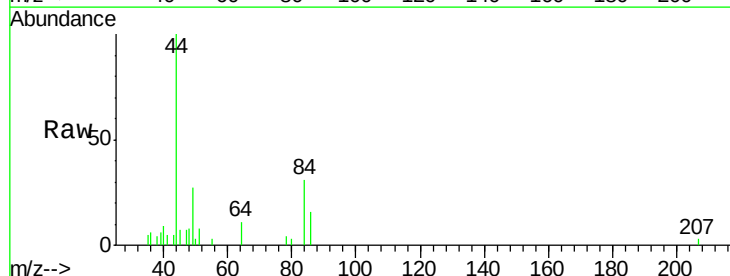
Instrument :  
MSVOA\_X  
ClientSampleId :  
RE104D3-071318

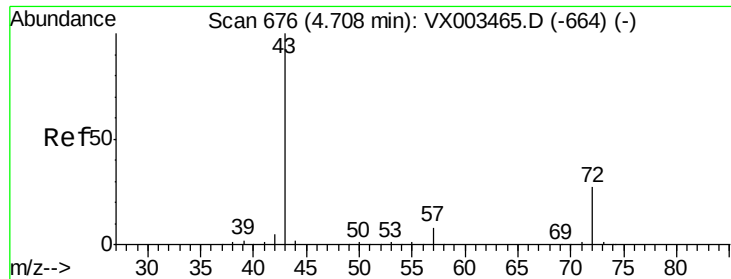
Tot Ion: 43 Resp: 1198  
Ion Ratio Lower Upper  
43 100  
74 25.8 16.7 25.1#



#20  
Methylene Chloride  
Concen: Below Cal  
RT: 2.87 min Scan# 374  
Delta R.T. 0.01 min  
Lab File: VX003540.D  
Acq: 21 Jul 2018 05:47

Tgt Ion: 84 Resp: 1027  
Ion Ratio Lower Upper  
84 100  
49 86.0 107.8 161.6#  
51 24.8 32.8 49.2#  
86 51.0 52.5 78.7#





#25

2-Butanone

Concen: 0.44 ug/l

RT: 4.72 min Scan# 678

Delta R.T. 0.01 min

Lab File: VX003540.D

Acq: 21 Jul 2018 05:47

Instrument :

MSVOA\_X

ClientSampleId :

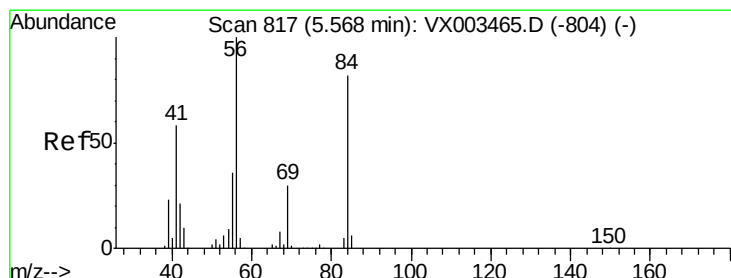
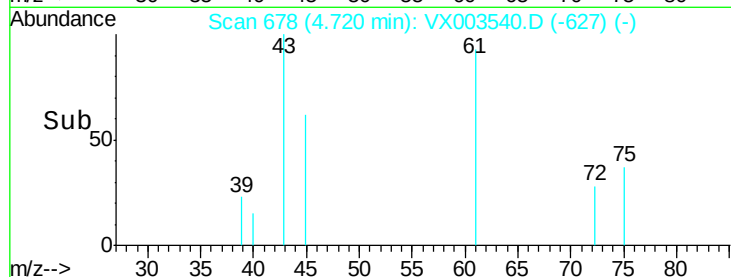
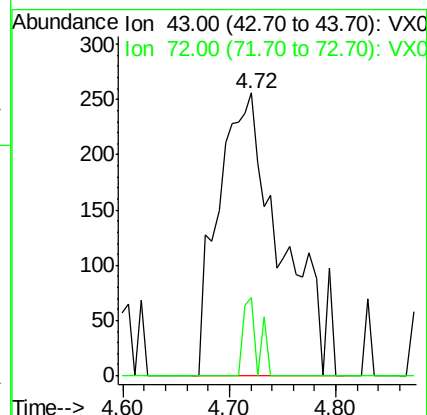
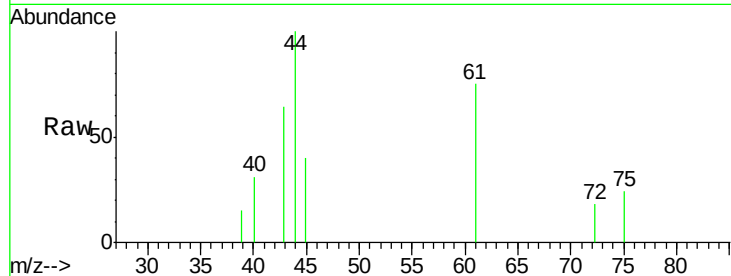
RE104D3-071318

Tot Ion: 43 Resp: 1049

Ion Ratio Lower Upper

43 100

72 27.7 18.5 27.7#



#31

Cyclohexane

Concen: 0.83 ug/l

RT: 5.67 min Scan# 833

Delta R.T. 0.10 min

Lab File: VX003540.D

Acq: 21 Jul 2018 05:47

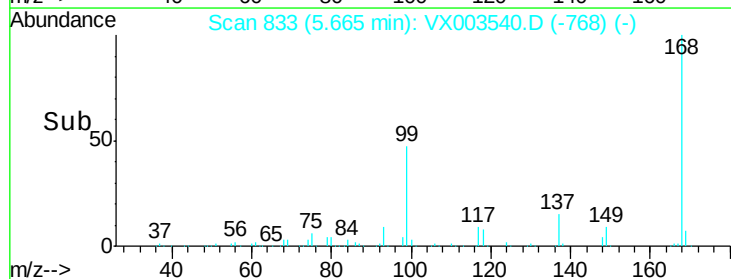
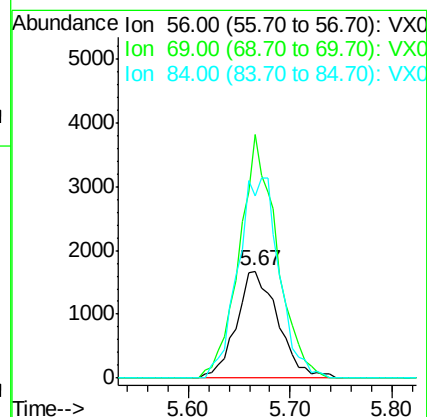
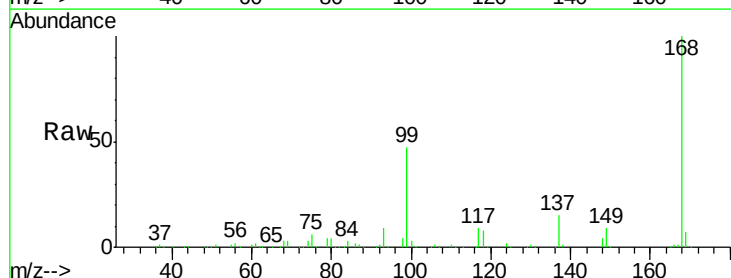
Tgt Ion: 56 Resp: 4738

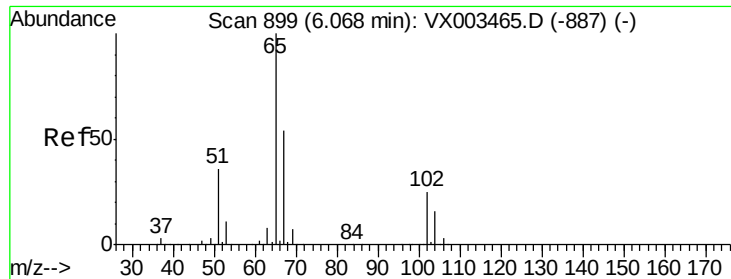
Ion Ratio Lower Upper

56 100

69 227.6 23.7 35.5#

84 170.7 64.1 96.1#

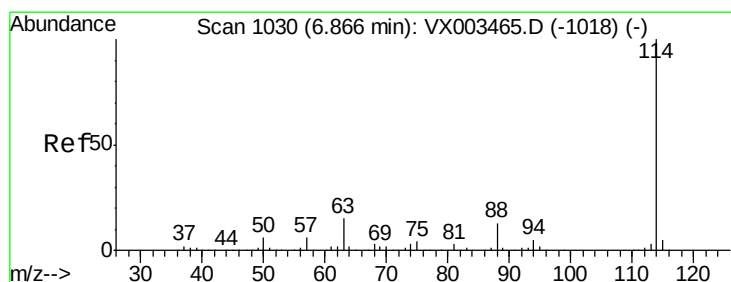
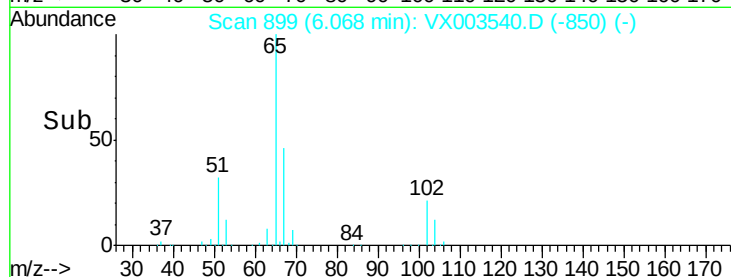
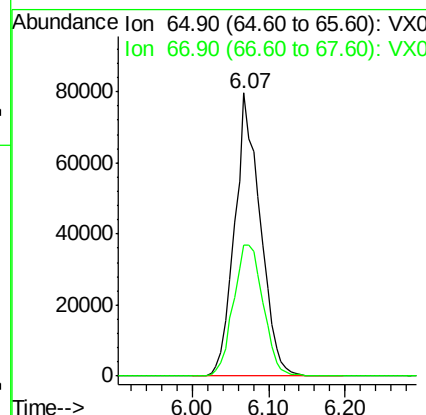
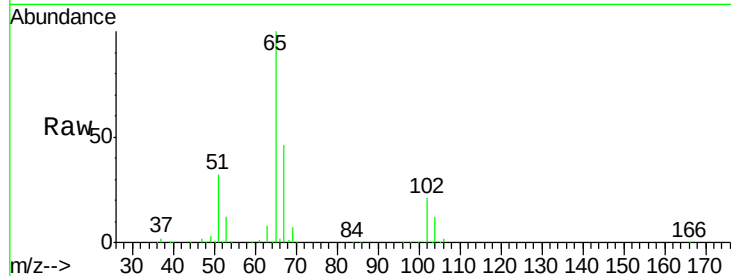




#33  
 1,2-Dichloroethane-d4  
 Concen: 48.73 ug/l  
 RT: 6.07 min Scan# 899  
 Delta R.T. 0.00 min  
 Lab File: VX003540.D  
 Acq: 21 Jul 2018 05:47

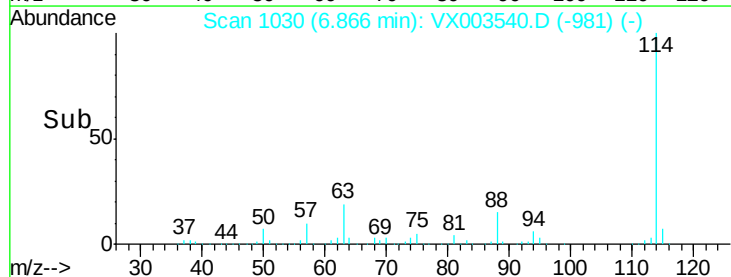
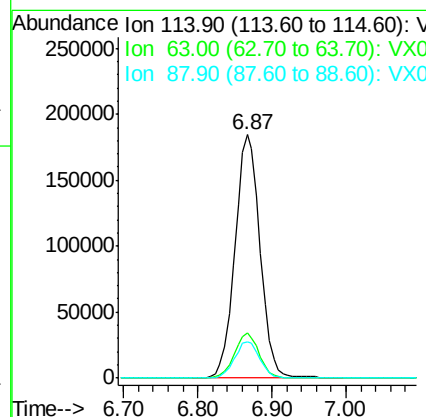
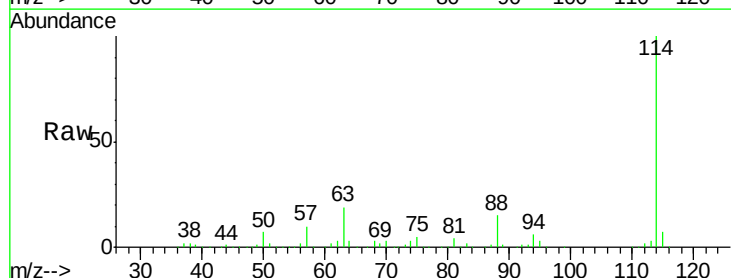
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 RE104D3-071318

Tot Ion: 65 Resp: 185004  
 Ion Ratio Lower Upper  
 65 100  
 67 54.0 0.0 102.6

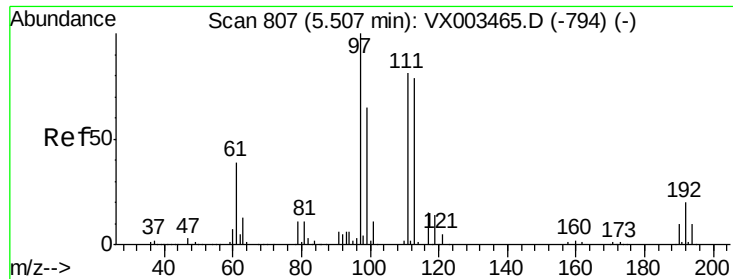


#34  
 1,4-Difluorobenzene  
 Concen: 50.00 ug/l  
 RT: 6.87 min Scan# 1030  
 Delta R.T. -0.00 min  
 Lab File: VX003540.D  
 Acq: 21 Jul 2018 05:47

Tgt Ion: 114 Resp: 434217  
 Ion Ratio Lower Upper  
 114 100  
 63 18.5 0.0 41.4  
 88 14.8 0.0 30.0







#35

Dibromofluoromethane

Concen: 56.26 ug/l

RT: 5.51 min Scan# 807

Delta R.T. -0.00 min

Lab File: VX003540.D

Acq: 21 Jul 2018 05:47

Instrument :

MSVOA\_X

ClientSampleId :

RE104D3-071318

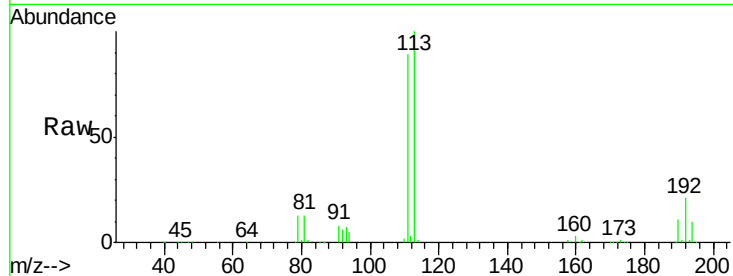
Tot Ion:113 Resp: 186067

Ion Ratio Lower Upper

113 100

111 101.5 81.4 122.0

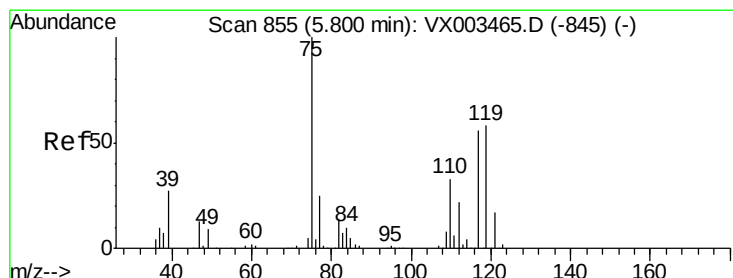
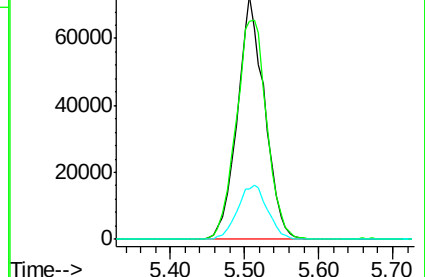
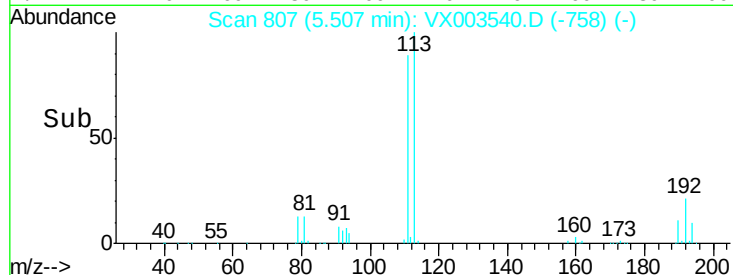
192 24.8 19.1 28.7



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: 4.15 ug/l

RT: 5.67 min Scan# 834

Delta R.T. -0.13 min

Lab File: VX003540.D

Acq: 21 Jul 2018 05:47

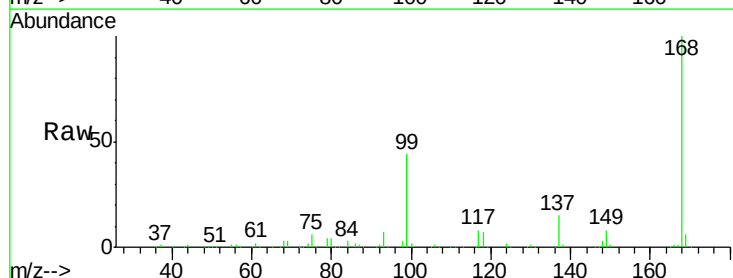
Tgt Ion: 75 Resp: 19470

Ion Ratio Lower Upper

75 100

110 9.8 18.1 54.4#

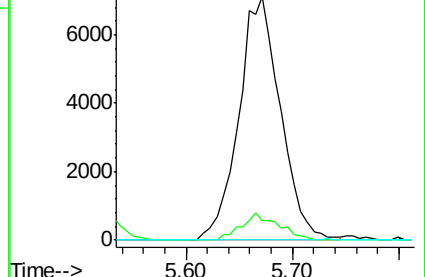
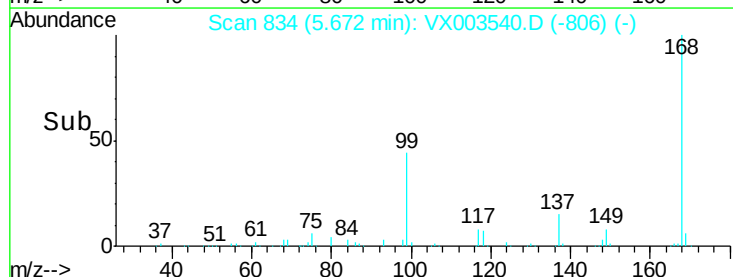
77 0.0 24.3 36.5#

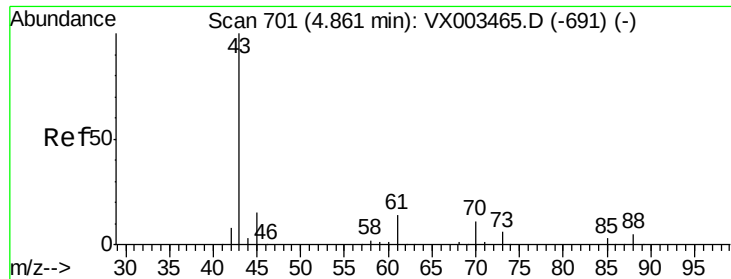


Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 109.90 (109.60 to 110.60): V

Ion 76.90 (76.60 to 77.60): VX0

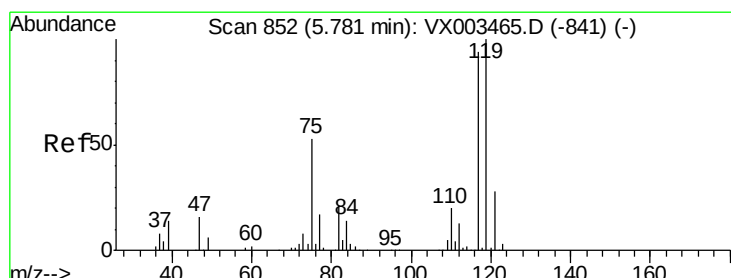
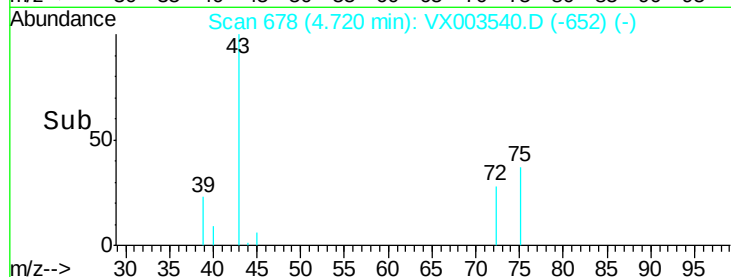
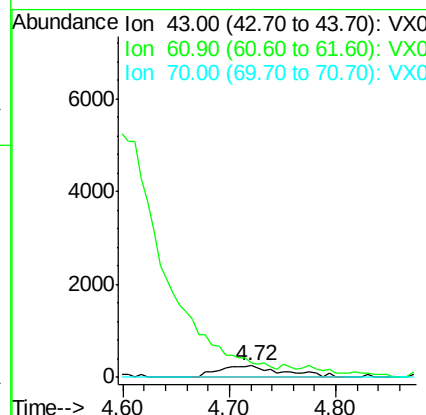
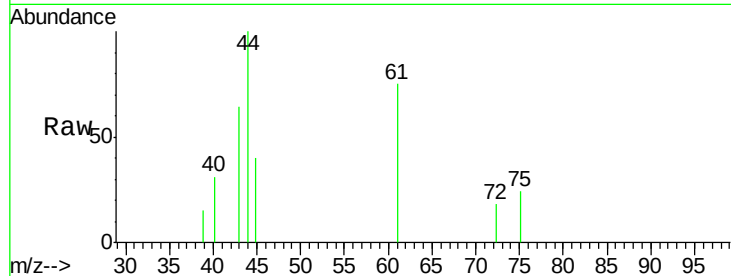




#37  
Ethyl Acetate  
Concen: 0.24 ug/l  
RT: 4.72 min Scan# 678  
Delta R.T. -0.14 min  
Lab File: VX003540.D  
Acq: 21 Jul 2018 05:47

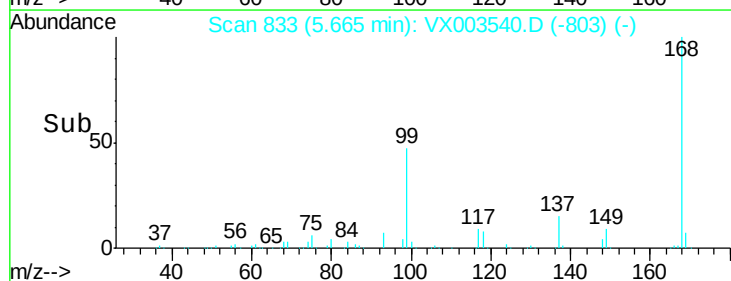
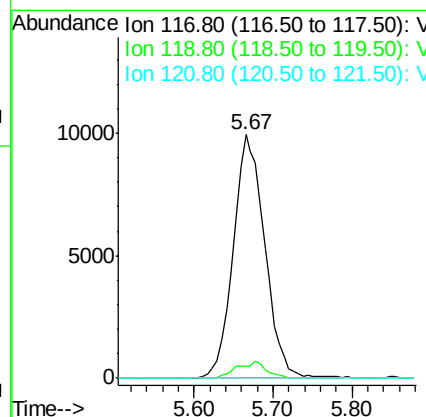
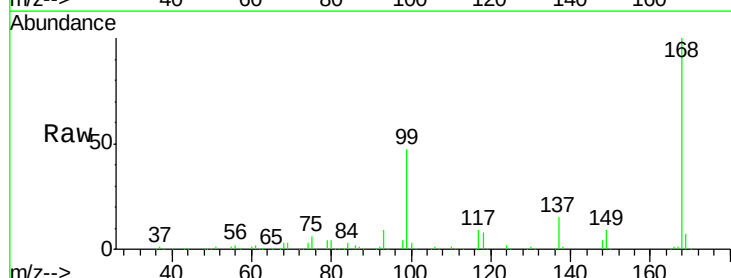
Instrument :  
MSVOA\_X  
ClientSampleId :  
RE104D3-071318

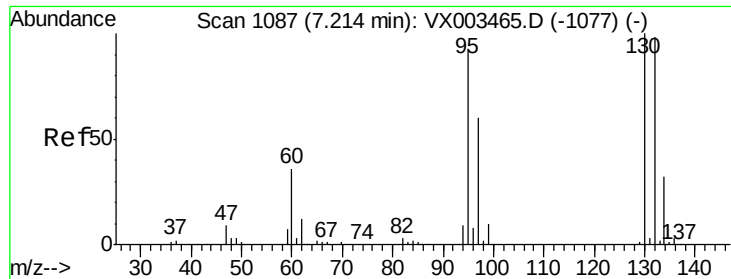
Tot Ion: 43 Resp: 1049  
Ion Ratio Lower Upper  
43 100  
61 0.0 10.4 15.6#  
70 0.0 7.6 11.4#



#38  
Carbon Tetrachloride  
Concen: 5.98 ug/l  
RT: 5.67 min Scan# 833  
Delta R.T. -0.12 min  
Lab File: VX003540.D  
Acq: 21 Jul 2018 05:47

Tgt Ion: 117 Resp: 27508  
Ion Ratio Lower Upper  
117 100  
119 4.8 77.4 116.0#  
121 0.0 24.4 36.6#





#44

Trichloroethene

Concen: 3.14 ug/l

RT: 7.22 min Scan# 1088

Delta R.T. 0.01 min

Lab File: VX003540.D

Acq: 21 Jul 2018 05:47

Instrument :

MSVOA\_X

ClientSampleId :

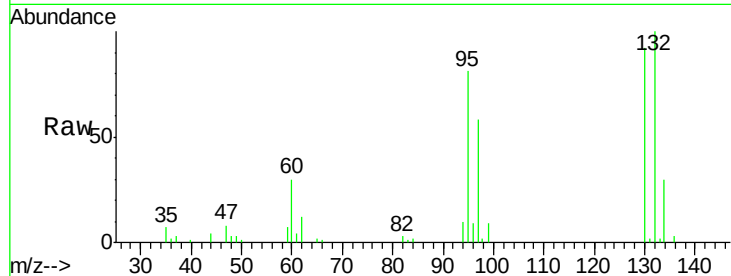
RE104D3-071318

Tot Ion:130 Resp: 13252

Ion Ratio Lower Upper

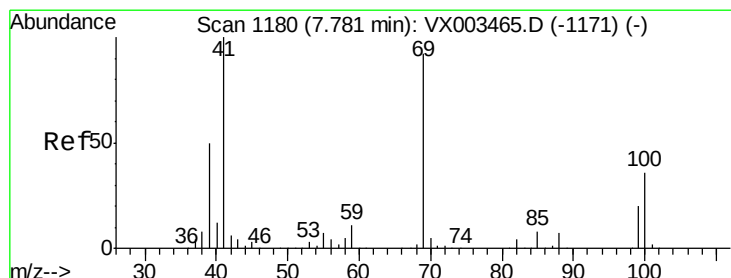
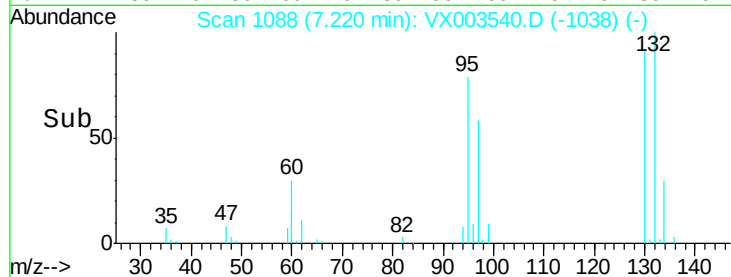
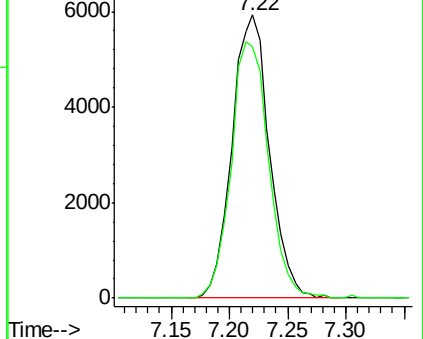
130 100

95 88.7 0.0 185.4



Abundance Ion 129.80 (129.50 to 130.50): V

Ion 94.90 (94.60 to 95.60): VX0



#48

Methyl methacrylate

Concen: 0.73 ug/l

RT: 7.99 min Scan# 1214

Delta R.T. 0.21 min

Lab File: VX003540.D

Acq: 21 Jul 2018 05:47

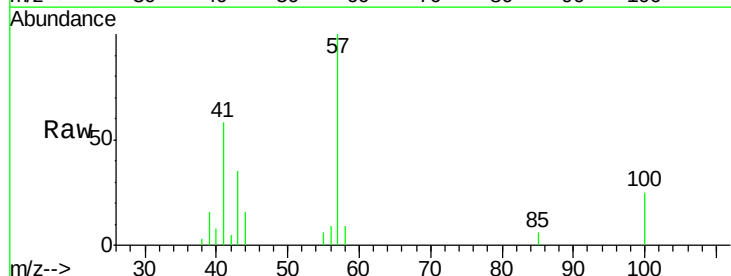
Tgt Ion: 41 Resp: 2607

Ion Ratio Lower Upper

41 100

69 0.9 59.1 88.7#

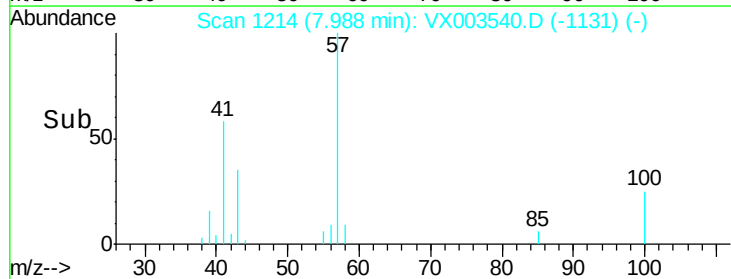
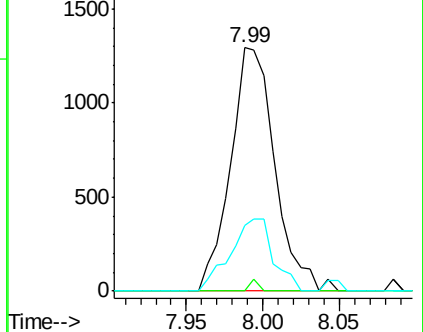
39 28.8 48.9 73.3#

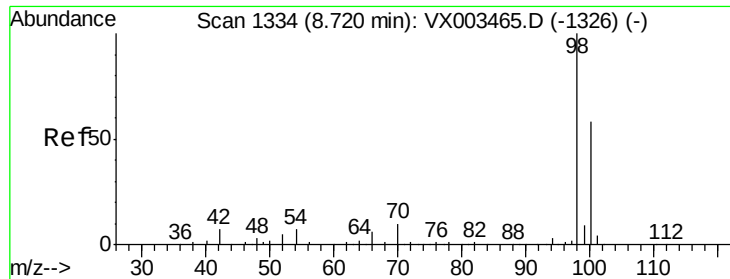


Abundance Ion 41.00 (40.70 to 41.70): VX0

Ion 69.00 (68.70 to 69.70): VX0

Ion 39.00 (38.70 to 39.70): VX0

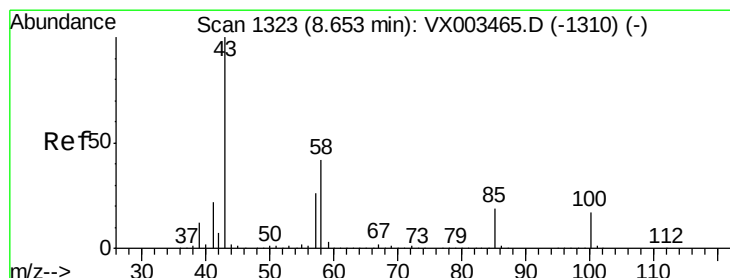
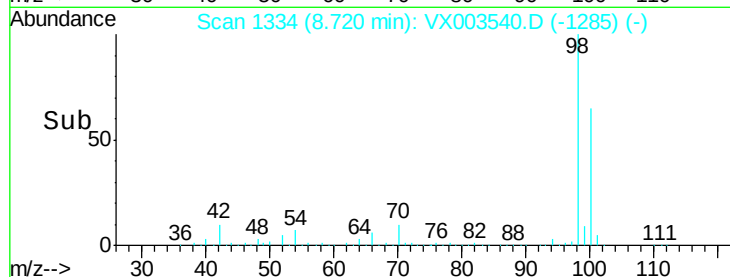
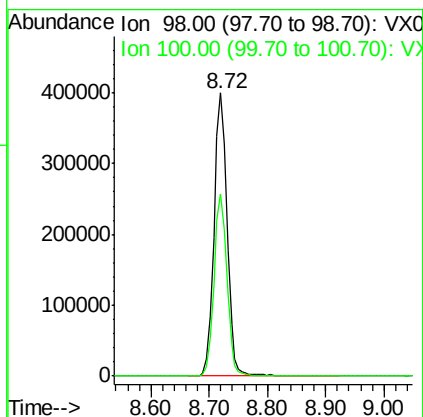
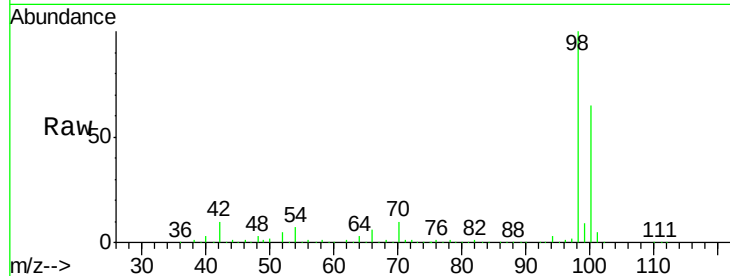




#50  
Toluene-d8  
Concen: 49.80 ug/l  
RT: 8.72 min Scan# 1334  
Delta R.T. 0.00 min  
Lab File: VX003540.D  
Acq: 21 Jul 2018 05:47

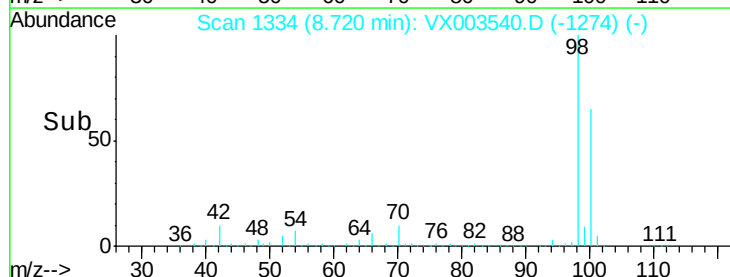
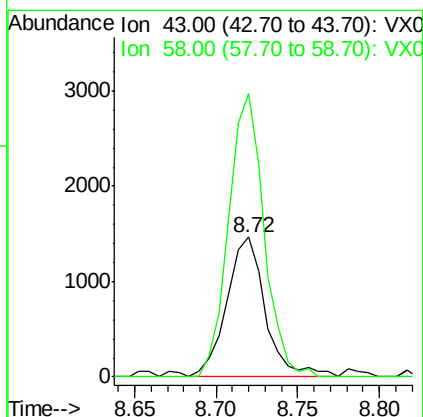
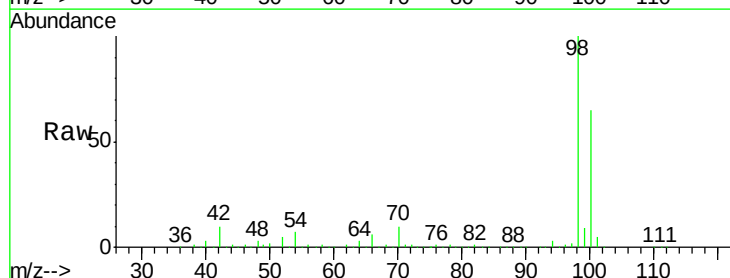
Instrument :  
MSVOA\_X  
ClientSampleId :  
RE104D3-071318

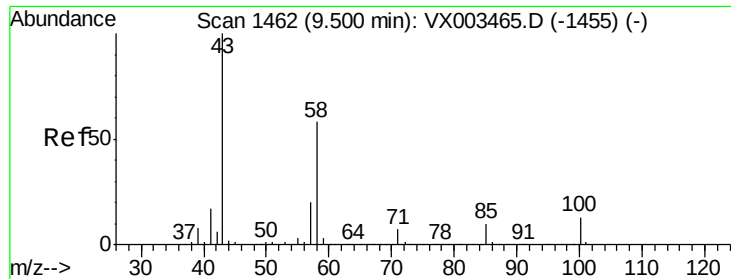
Tot Ion: 98 Resp: 619012  
Ion Ratio Lower Upper  
98 100  
100 64.1 50.9 76.3



#51  
4-Methyl-2-Pentanone  
Concen: 0.54 ug/l  
RT: 8.72 min Scan# 1334  
Delta R.T. 0.07 min  
Lab File: VX003540.D  
Acq: 21 Jul 2018 05:47

Tgt Ion: 43 Resp: 2419  
Ion Ratio Lower Upper  
43 100  
58 185.4 28.6 42.8#

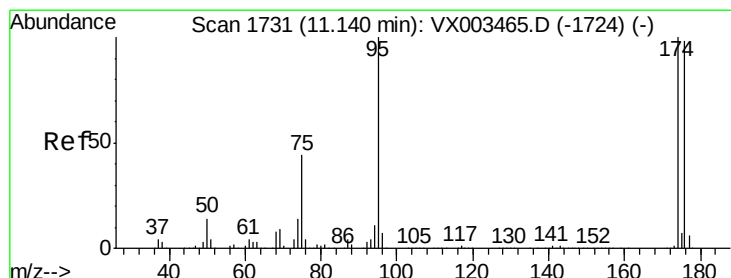
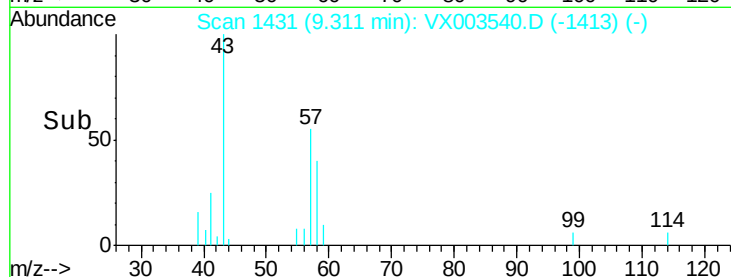
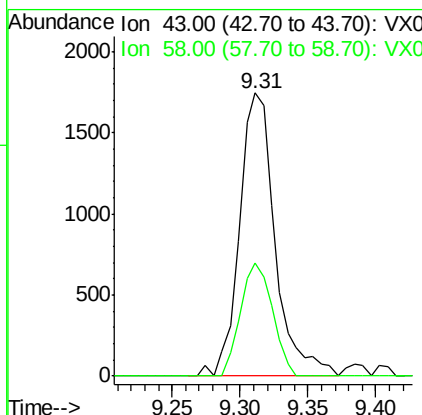
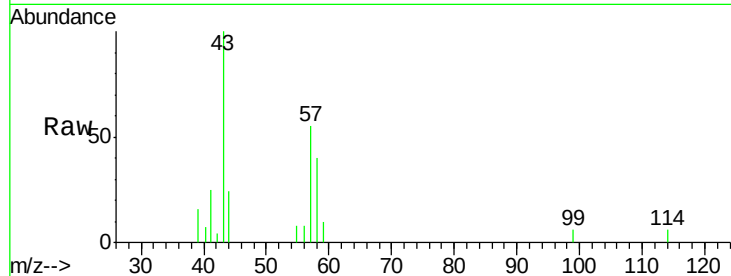




#59  
2-Hexanone  
Concen: 0.96 ug/l  
RT: 9.31 min Scan# 1431  
Delta R.T. -0.19 min  
Lab File: VX003540.D  
Acq: 21 Jul 2018 05:47

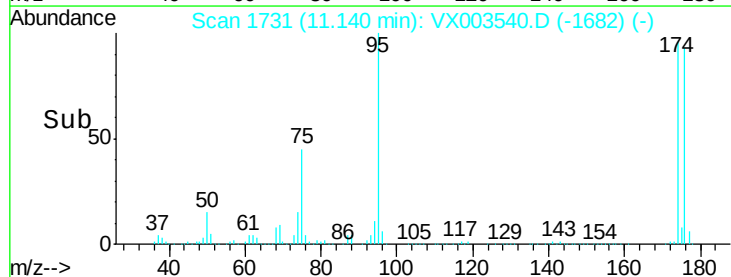
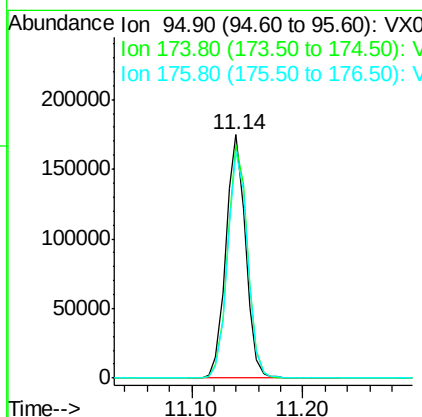
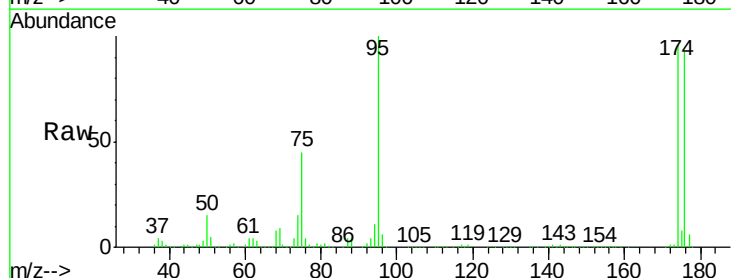
Instrument :  
MSVOA\_X  
ClientSampleId :  
RE104D3-071318

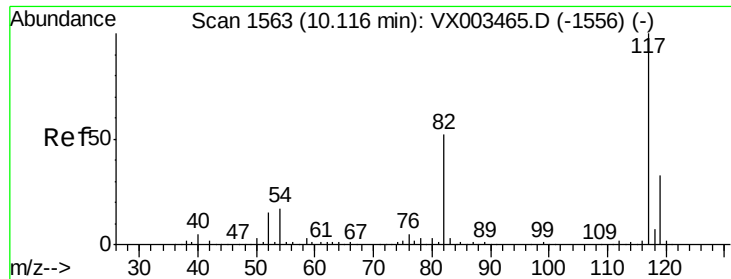
Tot Ion: 43 Resp: 3187  
Ion Ratio Lower Upper  
43 100  
58 35.8 24.6 73.6



#62  
4-Bromofluorobenzene  
Concen: 46.95 ug/l  
RT: 11.14 min Scan# 1731  
Delta R.T. 0.00 min  
Lab File: VX003540.D  
Acq: 21 Jul 2018 05:47

Tgt Ion: 95 Resp: 213004  
Ion Ratio Lower Upper  
95 100  
174 97.5 0.0 187.4  
176 94.3 0.0 181.0

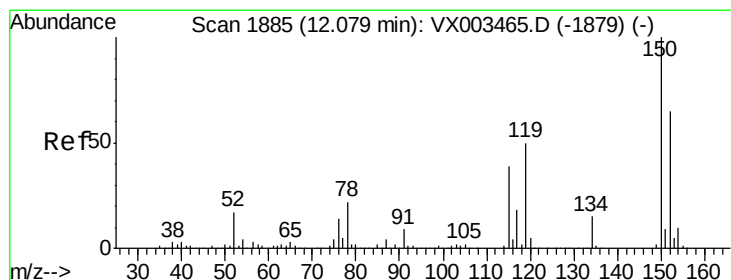
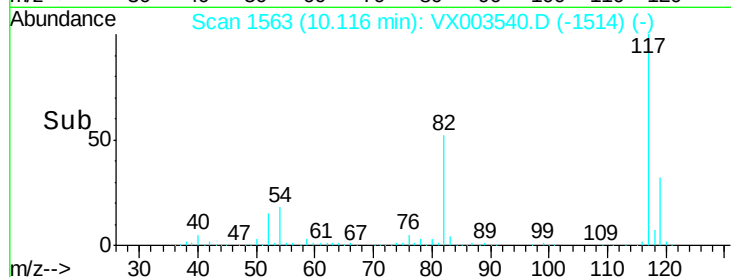
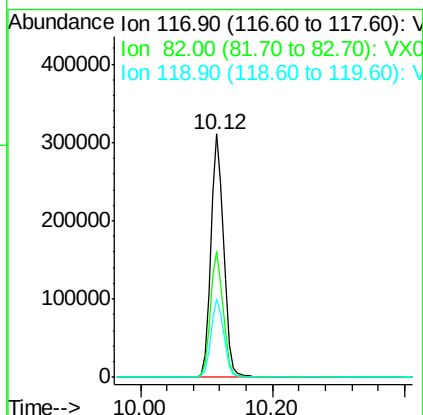
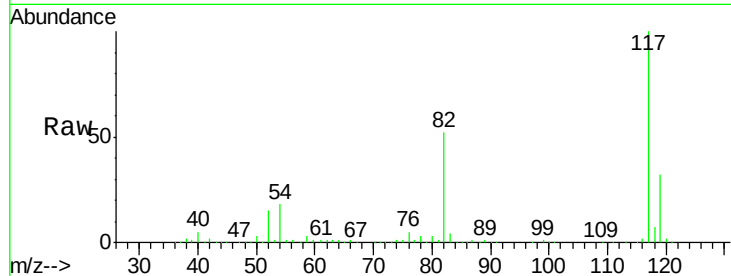




#63  
Chlorobenzene-d5  
Concen: 50.00 ug/l  
RT: 10.12 min Scan# 1563  
Delta R.T. -0.00 min  
Lab File: VX003540.D  
Acq: 21 Jul 2018 05:47

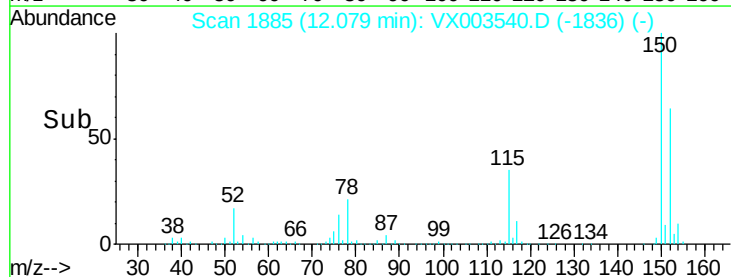
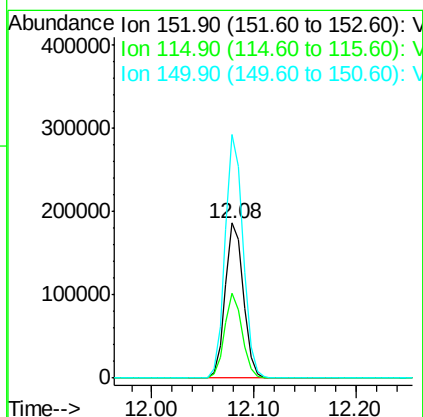
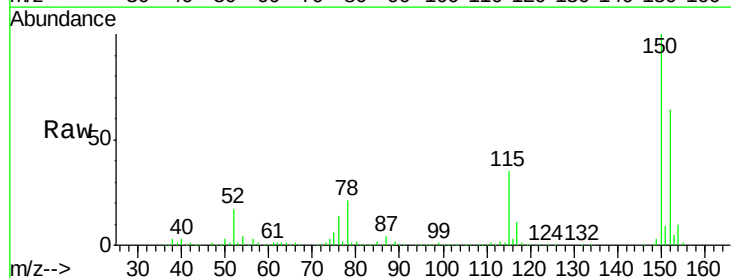
Instrument :  
MSVOA\_X  
ClientSampleId :  
RE104D3-071318

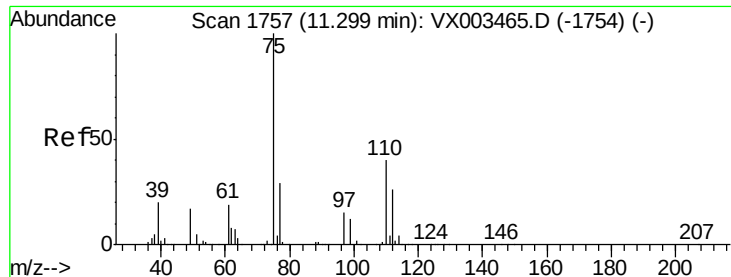
Tot Ion:117 Resp: 413536  
Ion Ratio Lower Upper  
117 100  
82 52.0 45.0 67.4  
119 32.2 25.8 38.6



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.00 ug/l  
RT: 12.08 min Scan# 1885  
Delta R.T. -0.00 min  
Lab File: VX003540.D  
Acq: 21 Jul 2018 05:47

Tgt Ion:152 Resp: 229454  
Ion Ratio Lower Upper  
152 100  
115 53.0 40.1 120.2  
150 155.7 0.0 347.2





#76

1,2,3-Trichloropropane

Concen: 23.70 ug/l

RT: 11.14 min Scan# 1731

Delta R.T. -0.16 min

Lab File: VX003540.D

Acq: 21 Jul 2018 05:47

Instrument :

MSVOA\_X

ClientSampleId :

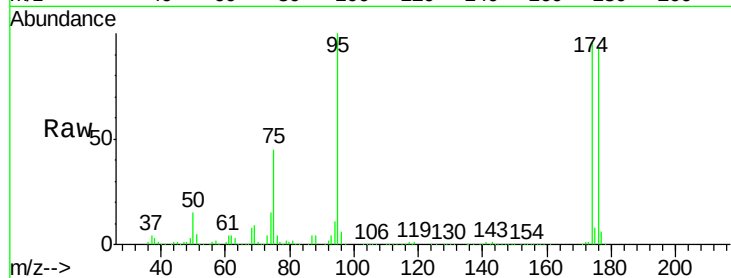
RE104D3-071318

Tot Ion: 75 Resp: 97684

Ion Ratio Lower Upper

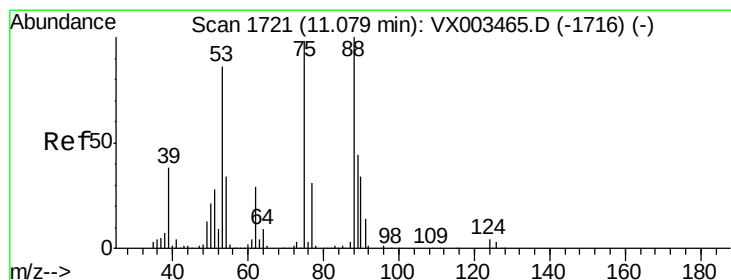
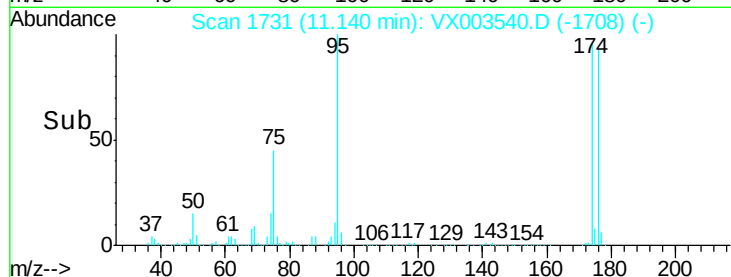
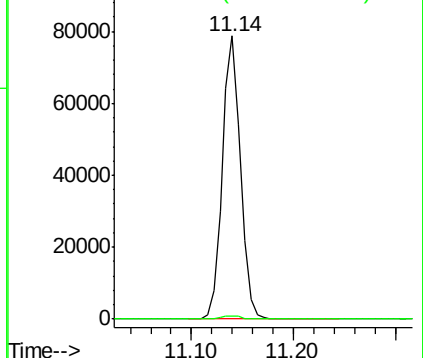
75 100

77 1.3 22.8 68.3#



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: 66.49 ug/l

RT: 11.14 min Scan# 1731

Delta R.T. 0.06 min

Lab File: VX003540.D

Acq: 21 Jul 2018 05:47

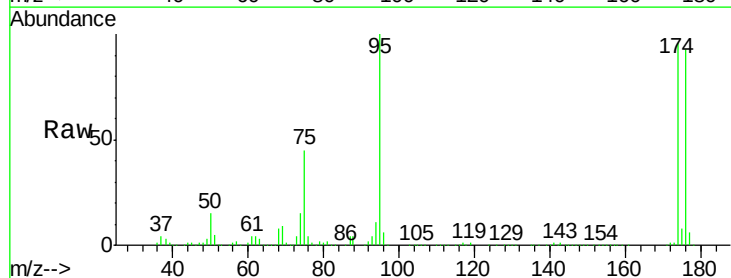
Tgt Ion: 75 Resp: 97684

Ion Ratio Lower Upper

75 100

53 0.1 86.8 130.2#

89 0.0 38.2 57.2#



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

