

Data Path : W:\HPCHEM1\MSVOA\_X\DATA\VX041218\  
 Data File : VX000822.D  
 Acq On : 13 Apr 2018 00:38  
 Operator : JC/MD  
 Sample : J2162-02 5X  
 Misc : 5.0mL/MSVOA\_X/WATER  
 ALS Vial : 32 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 EO-01-041118-A

Quant Time: Apr 13 07:00:32 2018  
 Quant Method : W:\HPCHEM1\MSVOA\_X\METHOD\82X041018W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Apr 10 15:49:28 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.67  | 168  | 280518   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.87  | 114  | 367942   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.12 | 117  | 334357   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.09 | 152  | 214692   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |        |      |
|---------------------------|--------|-----|----------|-------|--------|------|
| 33) 1,2-Dichloroethane-d4 | 6.08   | 65  | 160929   | 45.50 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 91.00% |      |
| 35) Dibromofluoromethane  | 5.51   | 113 | 133874   | 47.23 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 94.46% |      |
| 50) Toluene-d8            | 8.72   | 98  | 509285   | 48.25 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 96.50% |      |
| 62) 4-Bromofluorobenzene  | 11.15  | 95  | 196023   | 44.89 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 89.78% |      |

## Target Compounds

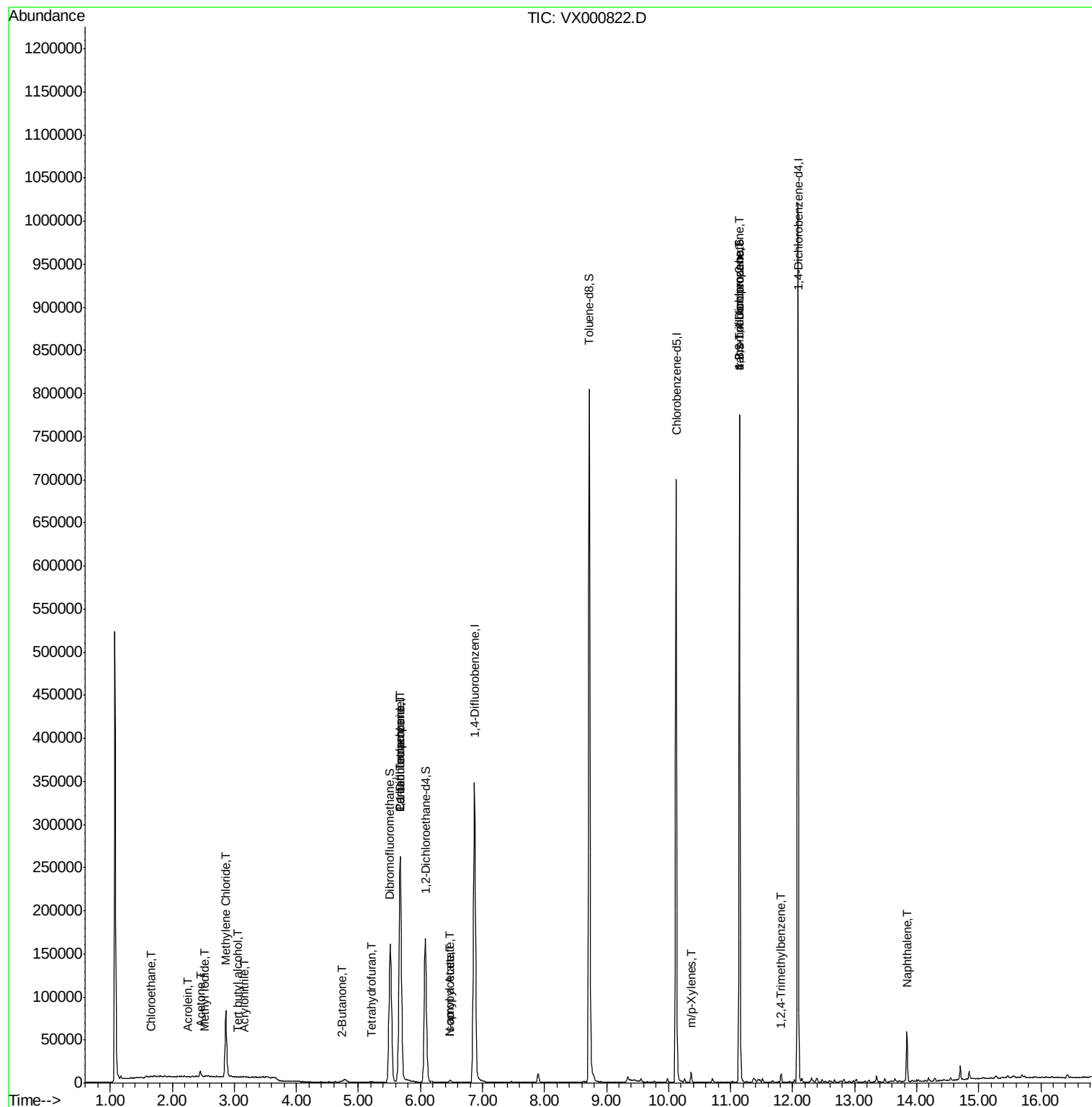
|                                |       |     |       |           |        | Qvalue |
|--------------------------------|-------|-----|-------|-----------|--------|--------|
| 5) Bromomethane                | 1.66  | 94  | 364   | Below Cal | #      | 67     |
| 6) Chloroethane                | 1.65  | 64  | 2442  | 1.32      | ug/l # | 64     |
| 10) Methyl Iodide              | 2.53  | 142 | 287   | 8.34      | ug/l # | 64     |
| 11) Tert butyl alcohol         | 3.06  | 59  | 132   | 0.21      | ug/l # | 1      |
| 13) Acrolein                   | 2.25  | 56  | 239   | 0.78      | ug/l # | 72     |
| 15) Acrylonitrile              | 3.15  | 53  | 615   | 0.46      | ug/l # | 35     |
| 16) Acetone                    | 2.45  | 43  | 7069  | 5.80      | ug/l   | 95     |
| 20) Methylene Chloride         | 2.86  | 84  | 36992 | 13.04     | ug/l   | 92     |
| 25) 2-Butanone                 | 4.73  | 43  | 1129  | 0.56      | ug/l # | 89     |
| 29) Tetrahydrofuran            | 5.20  | 42  | 600   | 0.47      | ug/l # | 43     |
| 36) 1,1-Dichloropropene        | 5.67  | 75  | 17172 | 4.24      | ug/l # | 49     |
| 38) Carbon Tetrachloride       | 5.67  | 117 | 23813 | 5.25      | ug/l # | 15     |
| 43) Isopropyl Acetate          | 6.48  | 43  | 2608  | 0.38      | ug/l   | 96     |
| 68) m/p-Xylenes                | 10.37 | 106 | 2900  | 0.52      | ug/l   | 96     |
| 74) N-amyl acetate             | 6.48  | 43  | 2608  | 0.43      | ug/l # | 95     |
| 76) 1,2,3-Trichloropropane     | 11.14 | 75  | 94760 | 25.59     | ug/l # | 36     |
| 81) trans-1,4-Dichloro-2-buten | 11.14 | 75  | 94760 | 70.40     | ug/l # | 11     |
| 84) 1,2,4-Trimethylbenzene     | 11.81 | 105 | 4446  | 0.37      | ug/l   | 100    |
| 95) Naphthalene                | 13.84 | 128 | 35015 | 2.24      | ug/l   | 99     |

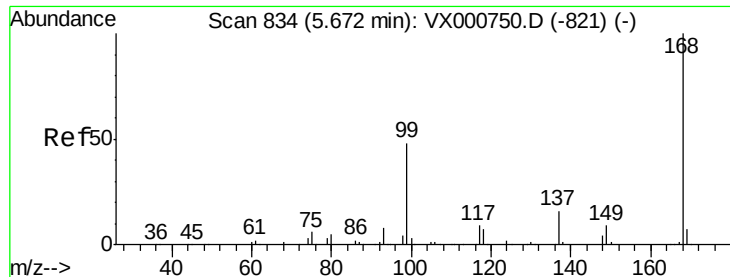
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : W:\HPCHEM1\MSVOA\_X\DATA\VX041218\  
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EO-01-041118-A

Quant Time: Apr 13 07:00:32 2018  
Quant Method : W:\HPCHEM1\MSVOA\_X\METHOD\82X041018W.M  
Quant Title : SW846 8260  
QLast Update : Tue Apr 10 15:49:28 2018  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.00 ug/l

RT: 5.67 min Scan# 834

Delta R.T. -0.00 min

Lab File: VX000822.D

Acq: 13 Apr 2018 00:38

Instrument :

MSVOA\_X

ClientSampleId :

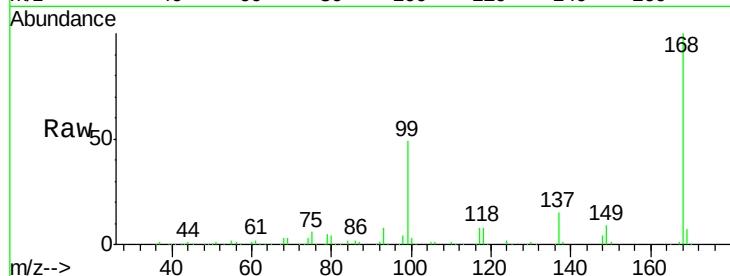
EO-01-041118-A

Tgt Ion:168 Resp: 280518

Ion Ratio Lower Upper

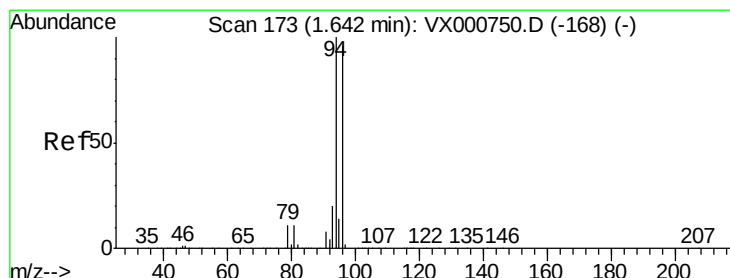
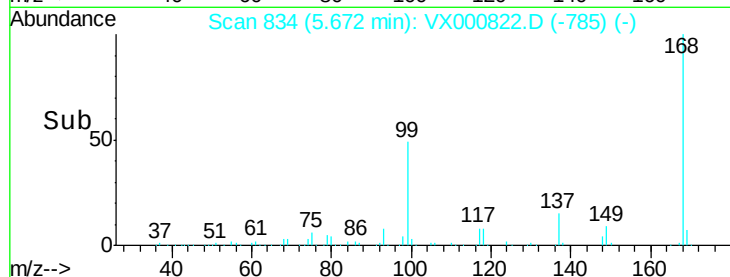
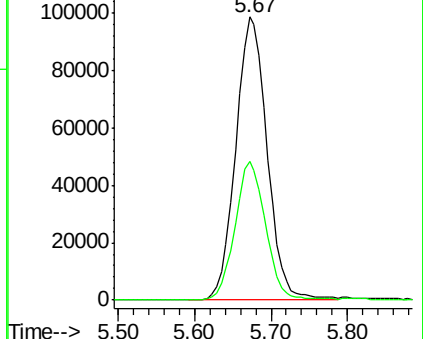
168 100

99 49.2 38.3 57.5



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0



#5

Bromomethane

Concen: Below Cal

RT: 1.66 min Scan# 176

Delta R.T. 0.02 min

Lab File: VX000822.D

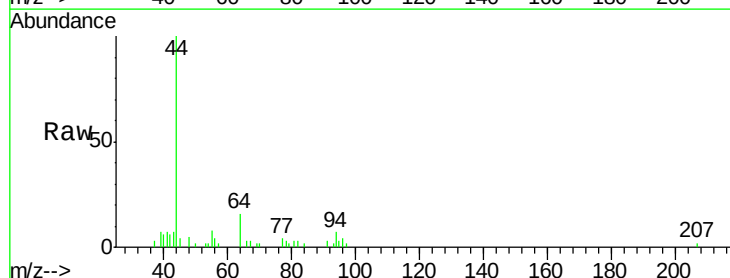
Acq: 13 Apr 2018 00:38

Tgt Ion: 94 Resp: 364

Ion Ratio Lower Upper

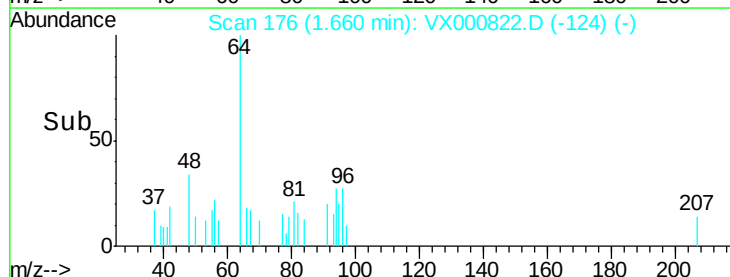
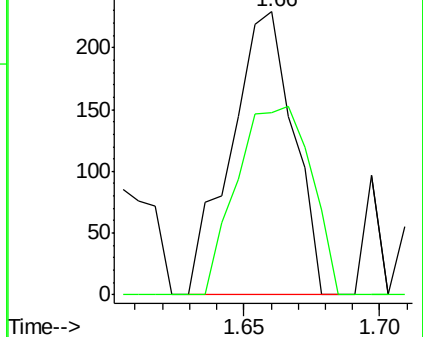
94 100

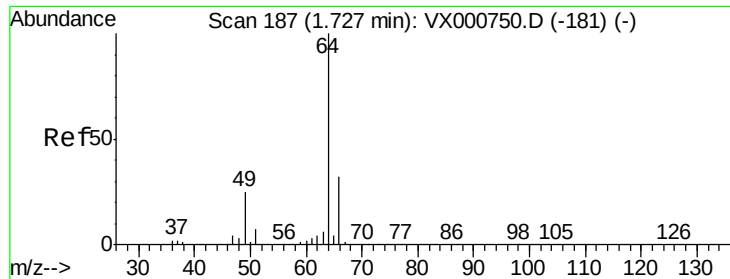
96 64.2 77.0 115.6#



Abundance Ion 93.90 (93.60 to 94.60): VX0

Ion 95.90 (95.60 to 96.60): VX0





#6

Chloroethane

Concen: 1.32 ug/l

RT: 1.65 min Scan# 174

Delta R.T. -0.08 min

Lab File: VX000822.D

Acq: 13 Apr 2018 00:38

Instrument :

MSVOA\_X

ClientSampleId :

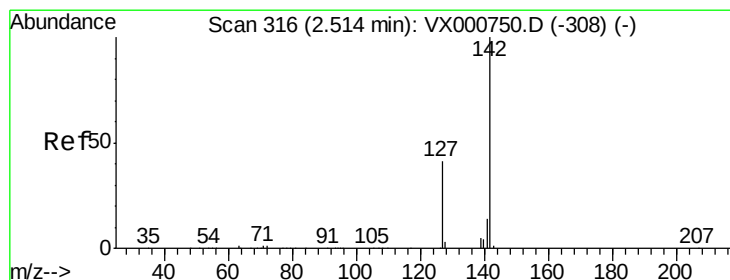
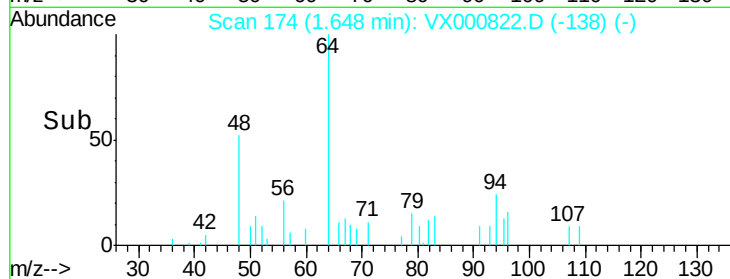
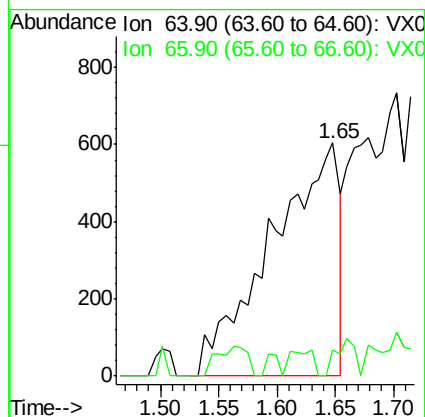
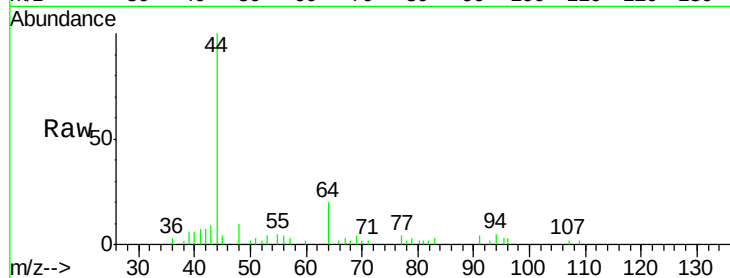
EO-01-041118-A

Tgt Ion: 64 Resp: 2442

Ion Ratio Lower Upper

64 100

66 11.4 25.3 37.9#



#10

Methyl Iodide

Concen: 8.34 ug/l

RT: 2.53 min Scan# 318

Delta R.T. 0.01 min

Lab File: VX000822.D

Acq: 13 Apr 2018 00:38

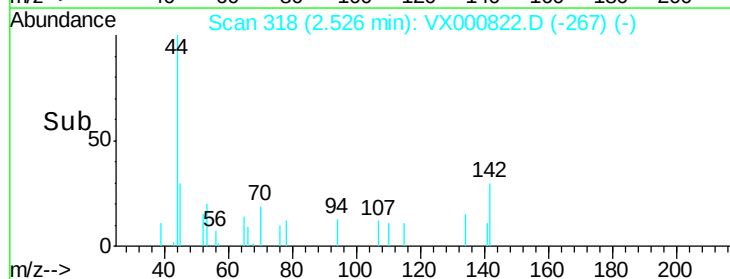
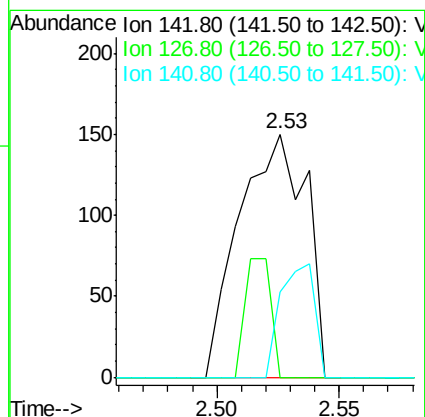
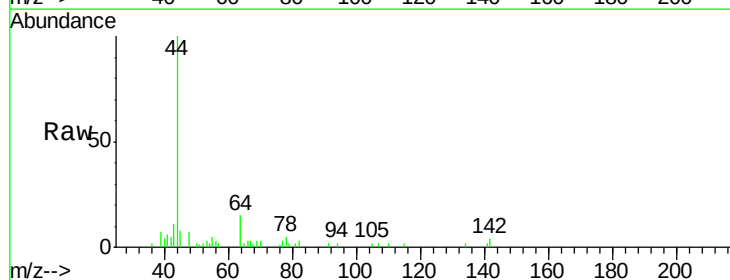
Tgt Ion: 142 Resp: 287

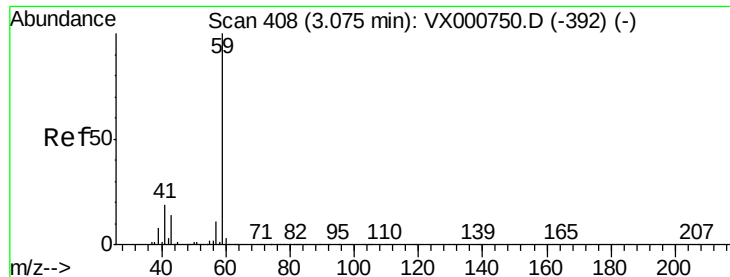
Ion Ratio Lower Upper

142 100

127 18.5 32.6 49.0#

141 0.0 11.5 17.3#





#11

Tert butyl alcohol

Concen: 0.21 ug/l

RT: 3.06 min Scan# 405

Delta R.T. -0.02 min

Lab File: VX000822.D

Acq: 13 Apr 2018 00:38

Instrument :

MSVOA\_X

ClientSampleId :

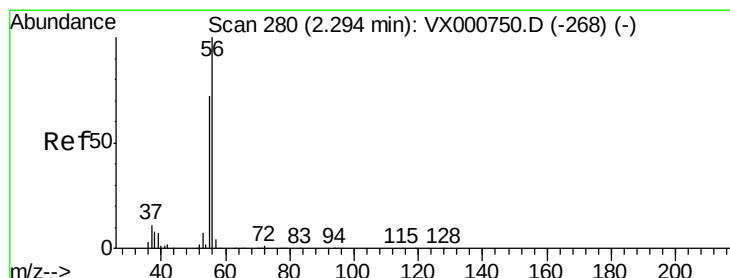
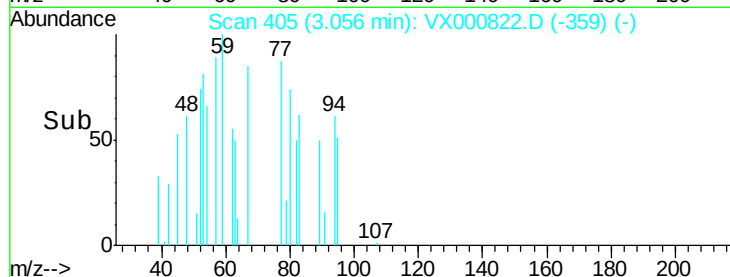
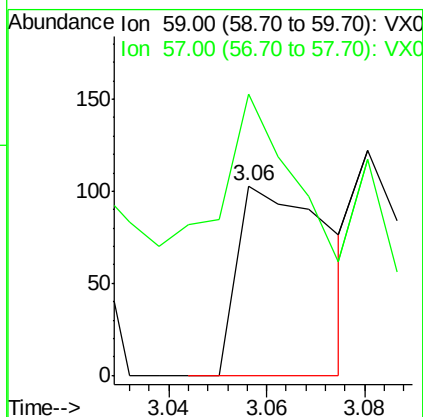
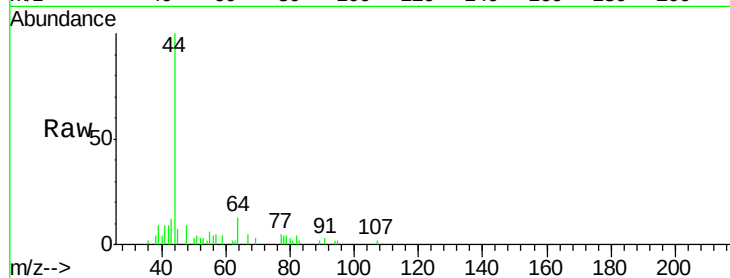
EO-01-041118-A

Tgt Ion: 59 Resp: 132

Ion Ratio Lower Upper

59 100

57 89.4 8.4 12.6#



#13

Acrolein

Concen: 0.78 ug/l

RT: 2.25 min Scan# 273

Delta R.T. -0.04 min

Lab File: VX000822.D

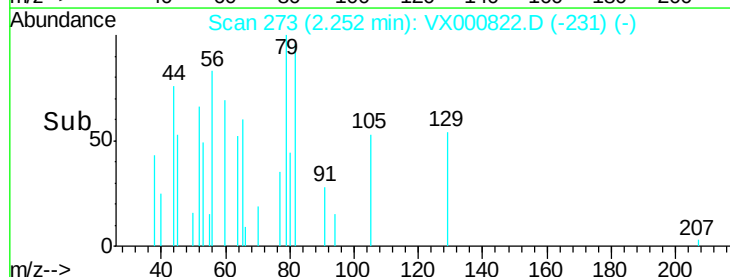
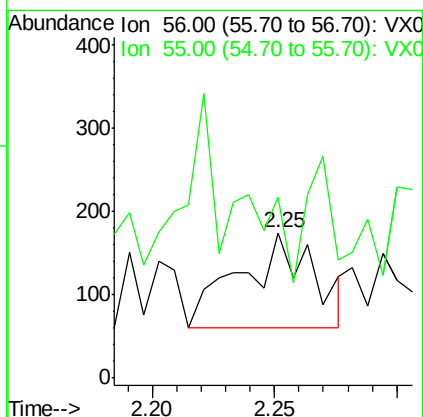
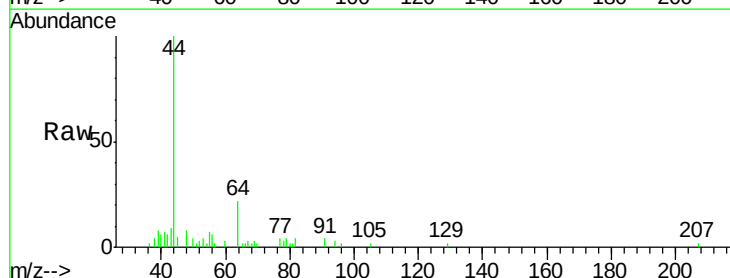
Acq: 13 Apr 2018 00:38

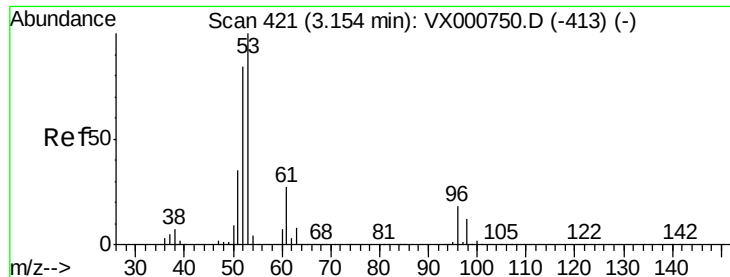
Tgt Ion: 56 Resp: 239

Ion Ratio Lower Upper

56 100

55 49.8 58.7 88.1#





#15

Acrylonitrile

Concen: 0.46 ug/l

RT: 3.15 min Scan# 421

Delta R.T. -0.00 min

Lab File: VX000822.D

Acq: 13 Apr 2018 00:38

Instrument :

MSVOA\_X

ClientSampleId :

EO-01-041118-A

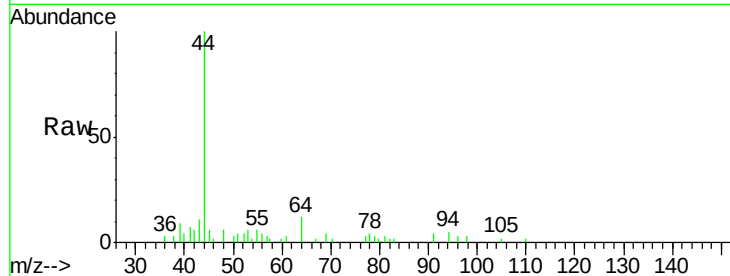
Tgt Ion: 53 Resp: 615

Ion Ratio Lower Upper

53 100

52 0.0 66.5 99.7#

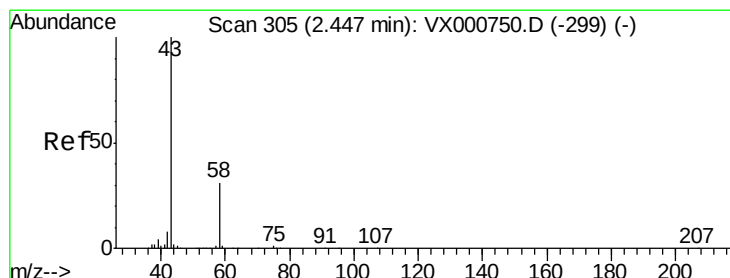
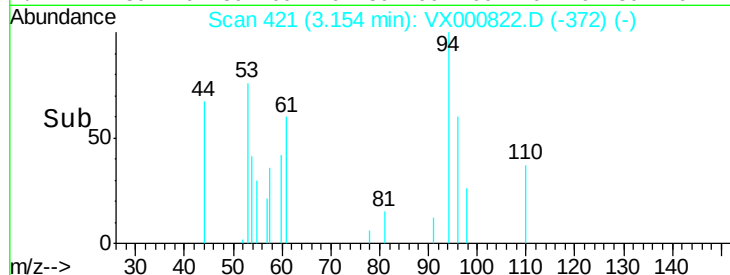
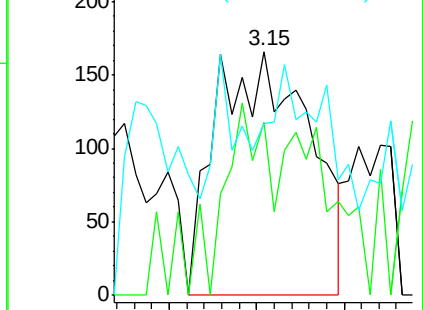
51 38.0 28.8 43.2



Abundance Ion 53.00 (52.70 to 53.70): VX0

Ion 52.00 (51.70 to 52.70): VX0

Ion 51.00 (50.70 to 51.70): VX0



#16

Acetone

Concen: 5.80 ug/l

RT: 2.45 min Scan# 306

Delta R.T. 0.01 min

Lab File: VX000822.D

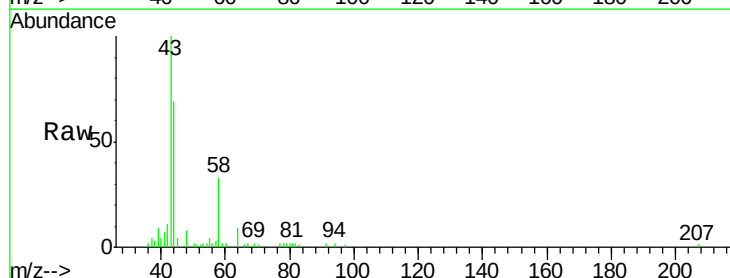
Acq: 13 Apr 2018 00:38

Tgt Ion: 43 Resp: 7069

Ion Ratio Lower Upper

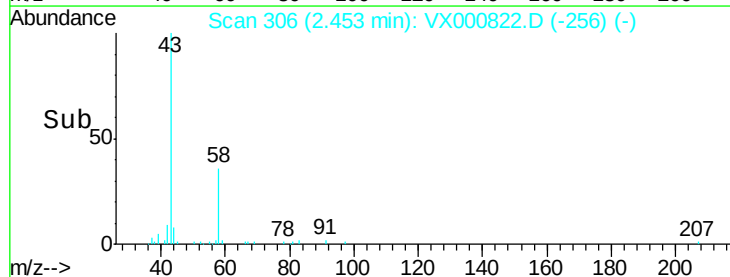
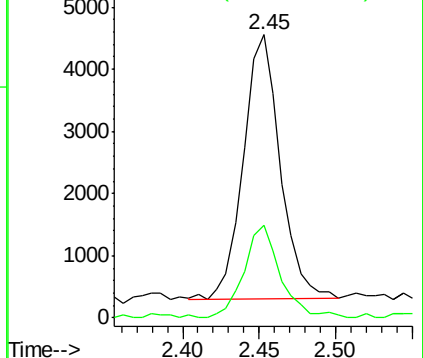
43 100

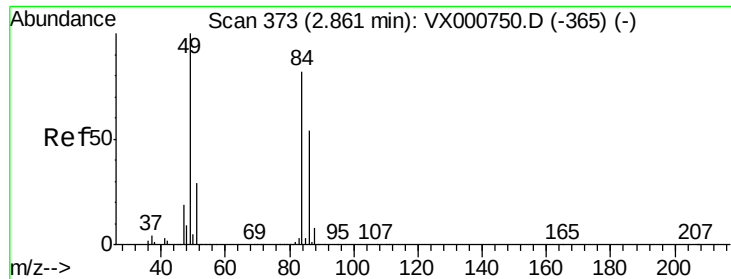
58 33.8 24.6 37.0



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0





#20

Methylene Chloride

Concen: 13.04 ug/l

RT: 2.86 min Scan# 373

Delta R.T. -0.00 min

Lab File: VX000822.D

Acq: 13 Apr 2018 00:38

Instrument :

MSVOA\_X

ClientSampleId :

EO-01-041118-A

Tgt Ion: 84 Resp: 36992

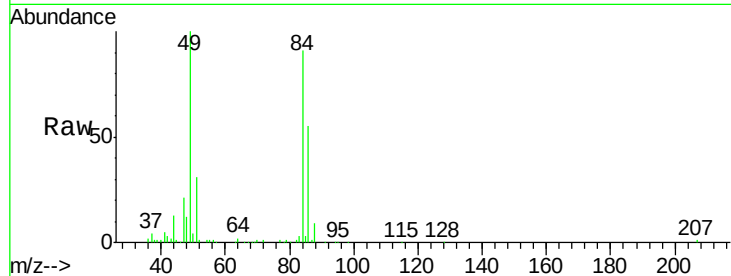
Ion Ratio Lower Upper

84 100

49 110.5 98.1 147.1

51 33.5 28.9 43.3

86 60.8 52.7 79.1

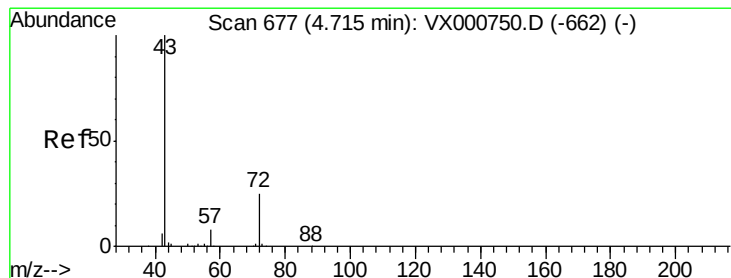
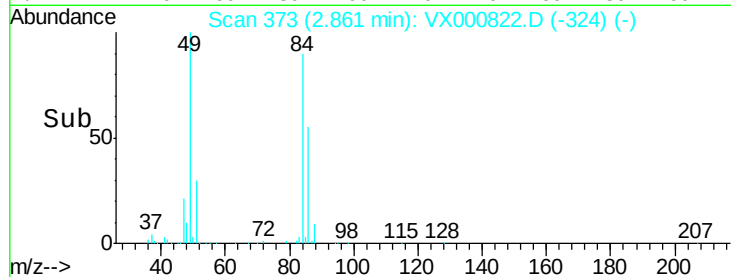
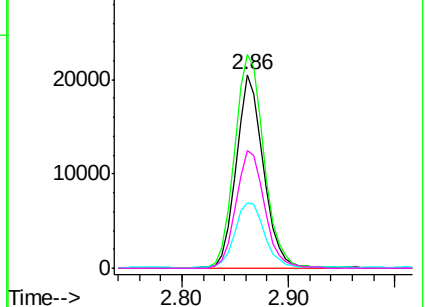


Abundance Ion 83.90 (83.60 to 84.60): VX0

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: 0.56 ug/l

RT: 4.73 min Scan# 679

Delta R.T. 0.01 min

Lab File: VX000822.D

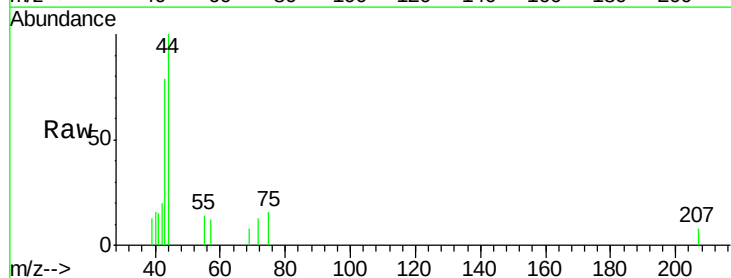
Acq: 13 Apr 2018 00:38

Tgt Ion: 43 Resp: 1129

Ion Ratio Lower Upper

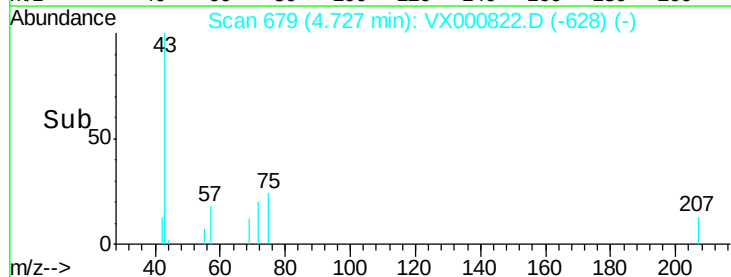
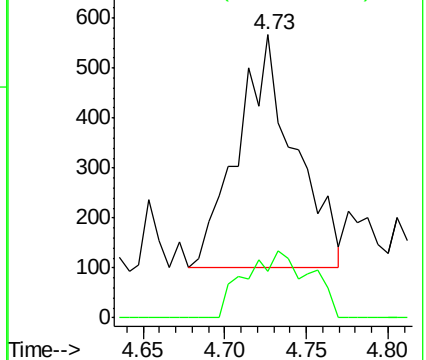
43 100

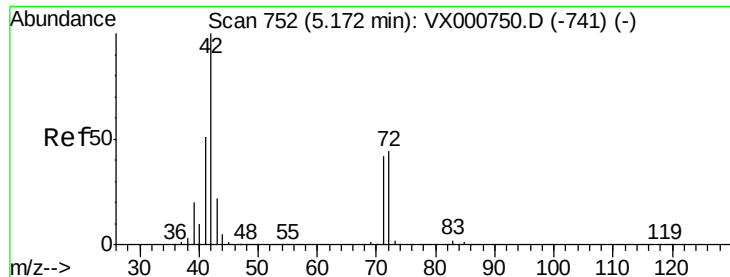
72 20.0 20.3 30.5#



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 72.00 (71.70 to 72.70): VX0

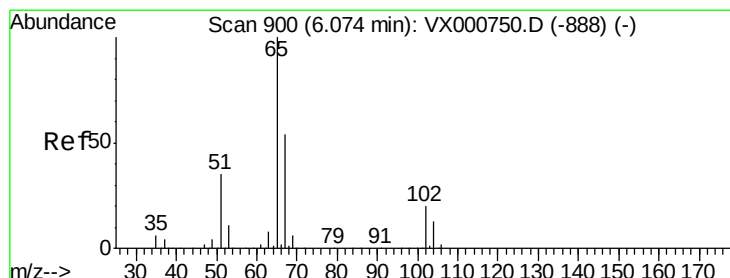
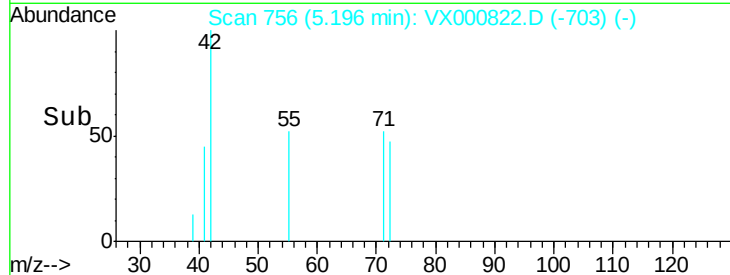
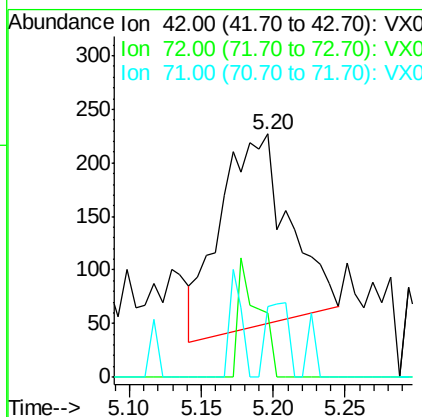
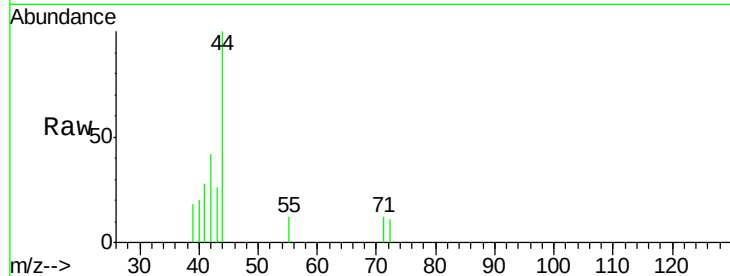




#29  
 Tetrahydrofuran  
 Concen: 0.47 ug/l  
 RT: 5.20 min Scan# 756  
 Delta R.T. 0.02 min  
 Lab File: VX000822.D  
 Acq: 13 Apr 2018 00:38

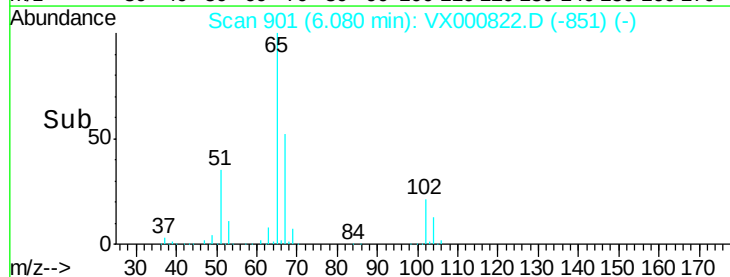
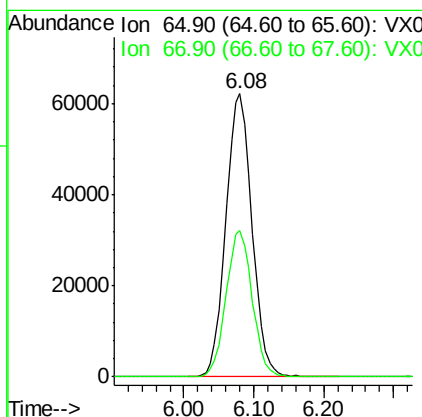
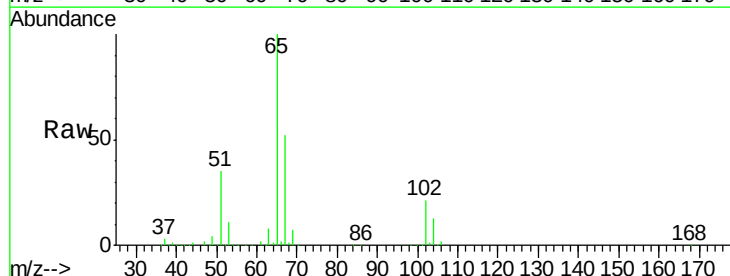
Instrument :  
 MSVOA\_X  
 ClientSampled :  
 EO-01-041118-A

Tgt Ion: 42 Resp: 600  
 Ion Ratio Lower Upper  
 42 100  
 72 0.0 35.1 52.7#  
 71 12.5 32.8 49.2#

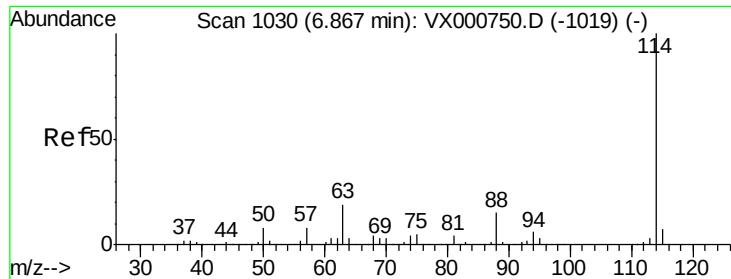


#33  
 1,2-Dichloroethane-d4  
 Concen: 45.50 ug/l  
 RT: 6.08 min Scan# 901  
 Delta R.T. 0.01 min  
 Lab File: VX000822.D  
 Acq: 13 Apr 2018 00:38

Tgt Ion: 65 Resp: 160929  
 Ion Ratio Lower Upper  
 65 100  
 67 51.7 0.0 103.8



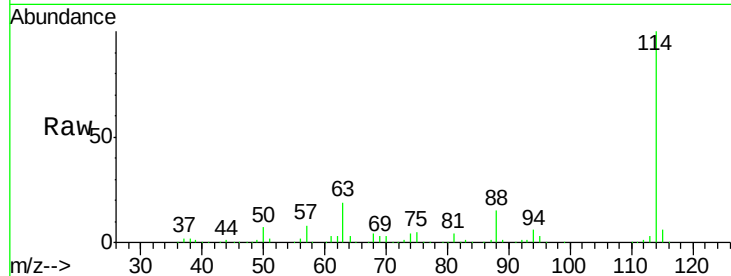




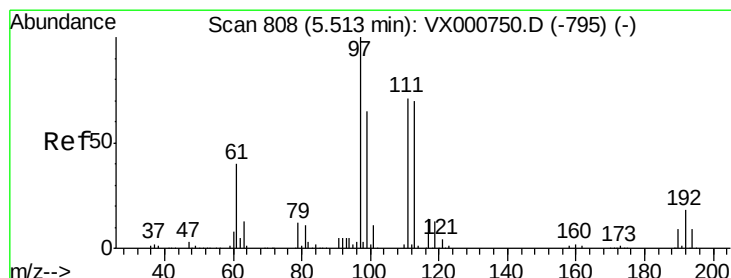
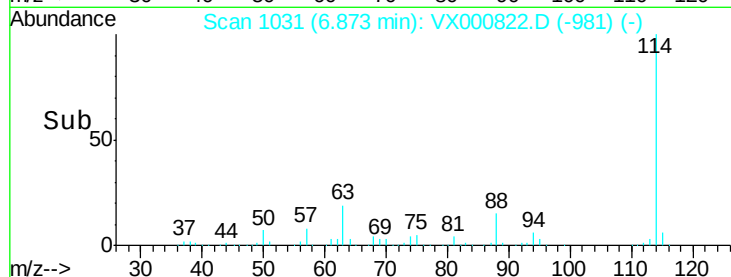
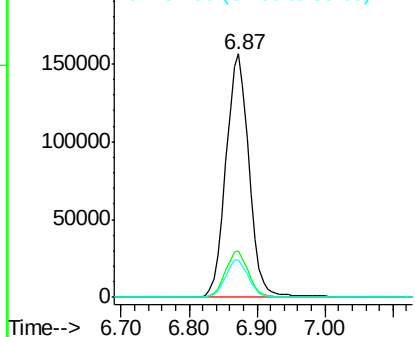
#34  
 1,4-Difluorobenzene  
 Concen: 50.00 ug/l  
 RT: 6.87 min Scan# 1031  
 Delta R.T. 0.01 min  
 Lab File: VX000822.D  
 Acq: 13 Apr 2018 00:38

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 EO-01-041118-A

Tgt Ion:114 Resp: 367942  
 Ion Ratio Lower Upper  
 114 100  
 63 19.3 0.0 38.4  
 88 15.4 0.0 31.0

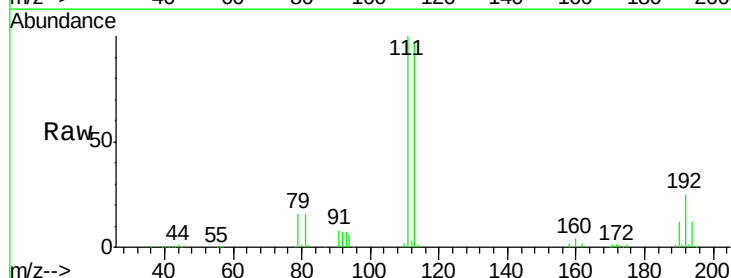


Abundance Ion 113.90 (113.60 to 114.60): V  
 Ion 63.00 (62.70 to 63.70): VX  
 Ion 87.90 (87.60 to 88.60): VX

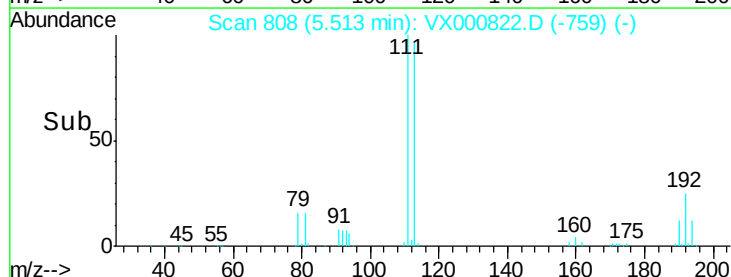
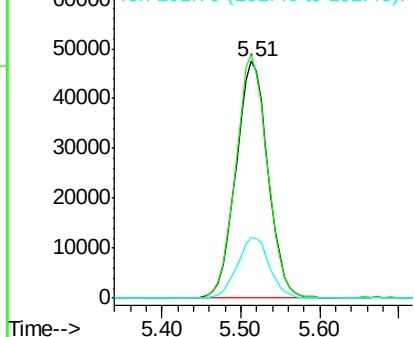


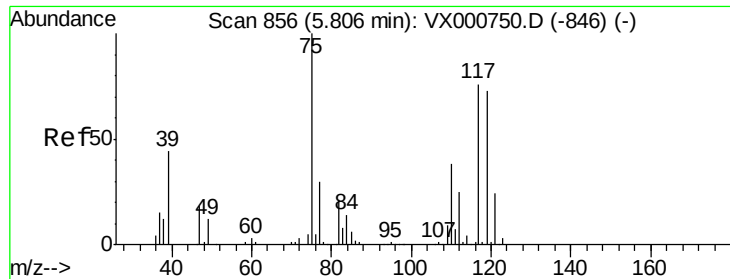
#35  
 Dibromofluoromethane  
 Concen: 47.23 ug/l  
 RT: 5.51 min Scan# 808  
 Delta R.T. -0.00 min  
 Lab File: VX000822.D  
 Acq: 13 Apr 2018 00:38

Tgt Ion:113 Resp: 133874  
 Ion Ratio Lower Upper  
 113 100  
 111 101.3 81.5 122.3  
 192 25.6 20.4 30.6



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

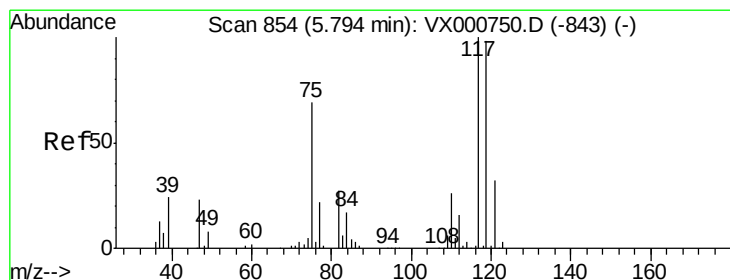
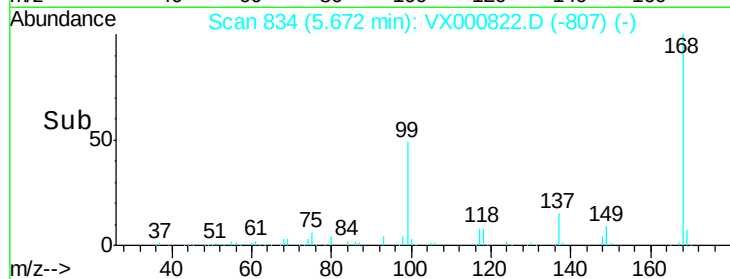
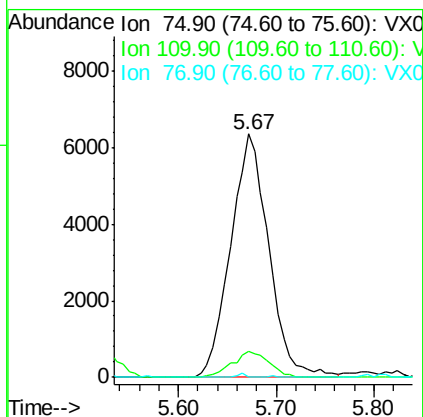
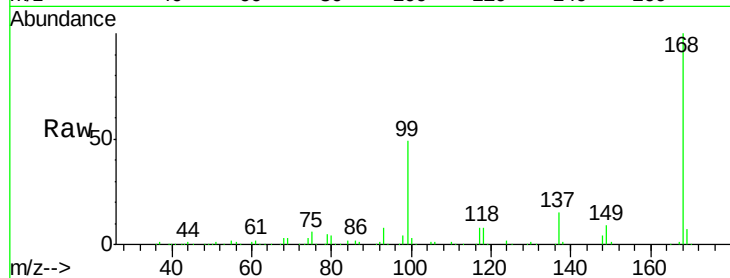




#36  
 1,1-Dichloropropene  
 Concen: 4.24 ug/l  
 RT: 5.67 min Scan# 834  
 Delta R.T. -0.13 min  
 Lab File: VX000822.D  
 Acq: 13 Apr 2018 00:38

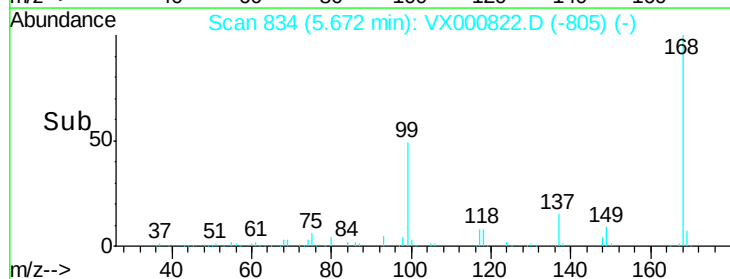
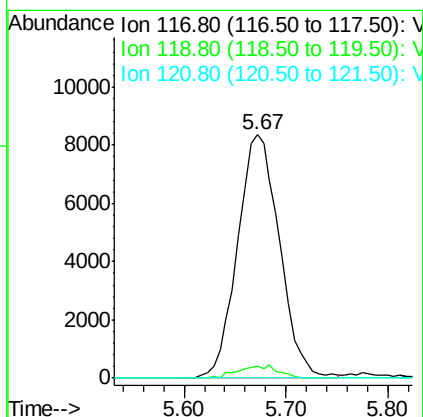
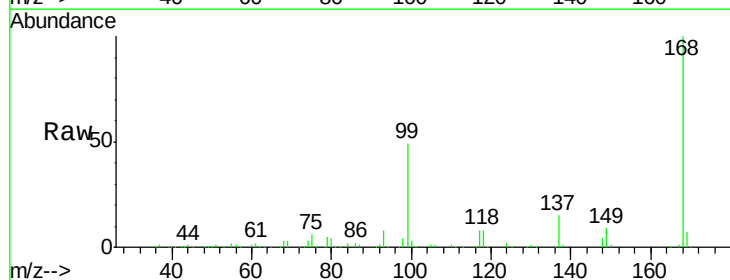
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 EO-01-041118-A

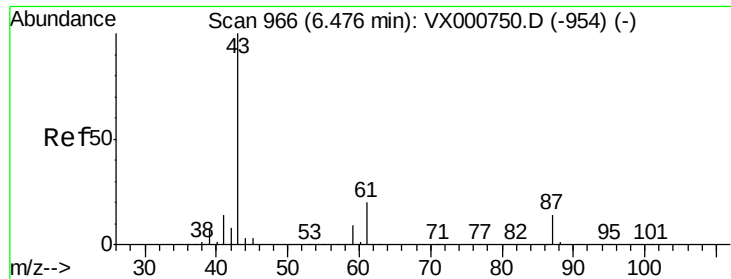
Tgt Ion: 75 Resp: 17172  
 Ion Ratio Lower Upper  
 75 100  
 110 10.4 19.2 57.6#  
 77 0.3 25.4 38.2#



#38  
 Carbon Tetrachloride  
 Concen: 5.25 ug/l  
 RT: 5.67 min Scan# 834  
 Delta R.T. -0.12 min  
 Lab File: VX000822.D  
 Acq: 13 Apr 2018 00:38

Tgt Ion: 117 Resp: 23813  
 Ion Ratio Lower Upper  
 117 100  
 119 4.6 78.4 117.6#  
 121 0.0 25.4 38.0#





#43

Isopropyl Acetate

Concen: 0.38 ug/l

RT: 6.48 min Scan# 967

Delta R.T. 0.01 min

Lab File: VX000822.D

Acq: 13 Apr 2018 00:38

Instrument :

MSVOA\_X

ClientSampleId :

EO-01-041118-A

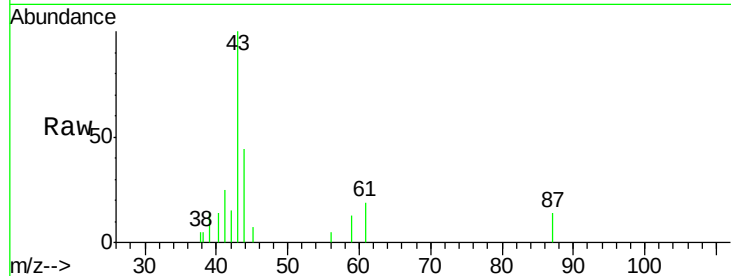
Tgt Ion: 43 Resp: 2608

Ion Ratio Lower Upper

43 100

61 17.3 15.6 23.4

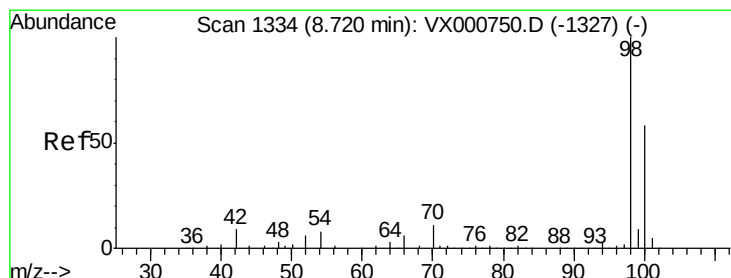
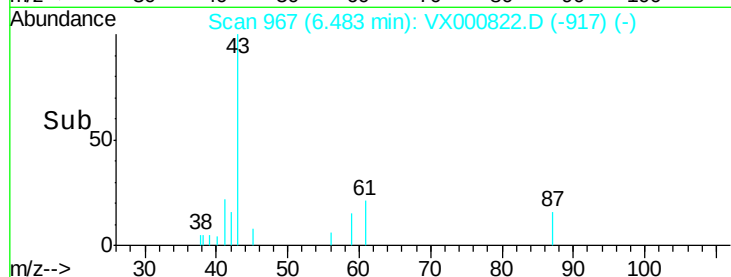
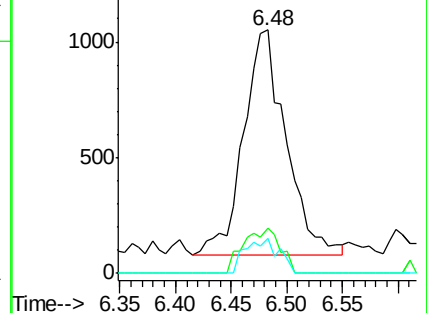
87 11.8 10.7 16.1



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 61.00 (60.70 to 61.70): VX0

Ion 87.00 (86.70 to 87.70): VX0



#50

Toluene-d8

Concen: 48.25 ug/l

RT: 8.72 min Scan# 1334

Delta R.T. -0.00 min

Lab File: VX000822.D

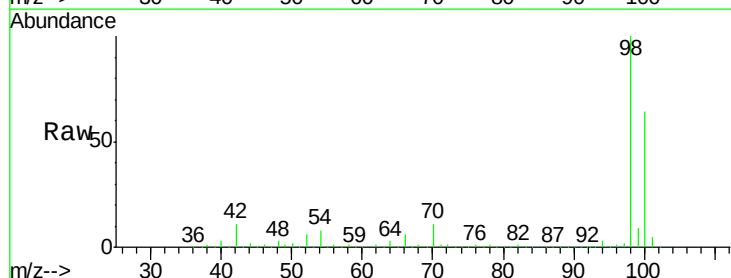
Acq: 13 Apr 2018 00:38

Tgt Ion: 98 Resp: 509285

Ion Ratio Lower Upper

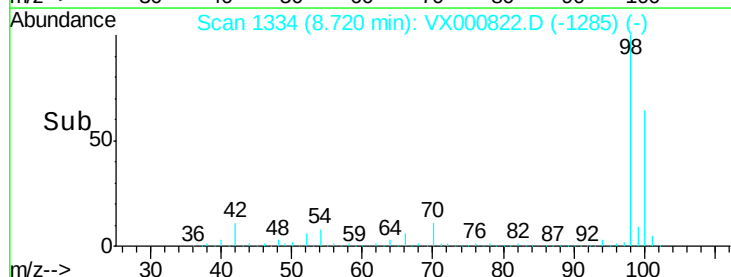
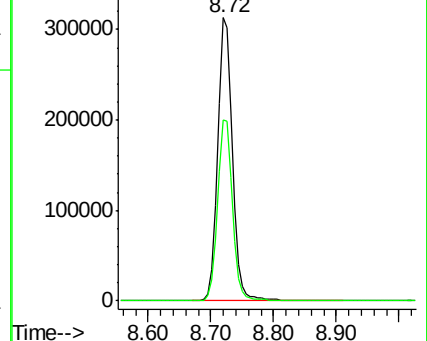
98 100

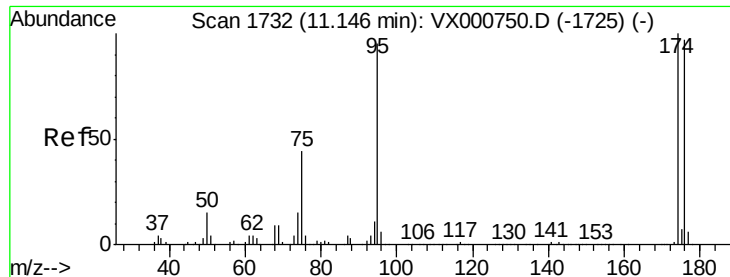
100 64.6 52.6 79.0



Abundance Ion 98.00 (97.70 to 98.70): VX0

Ion 100.00 (99.70 to 100.70): VX0

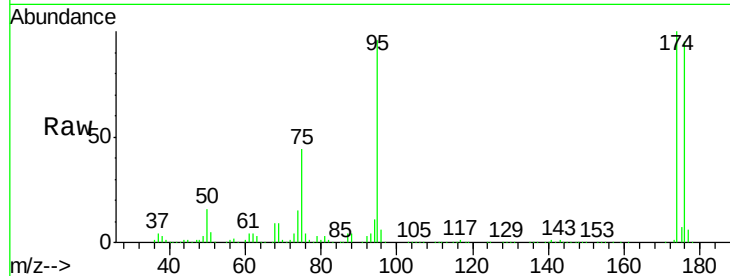




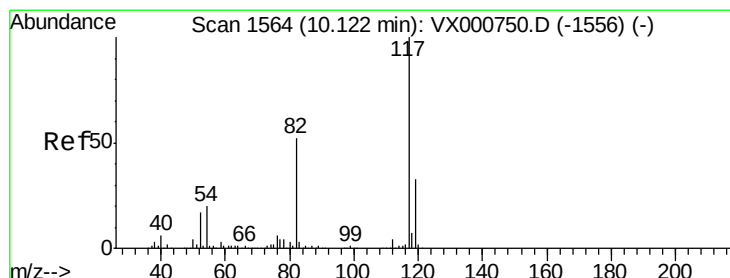
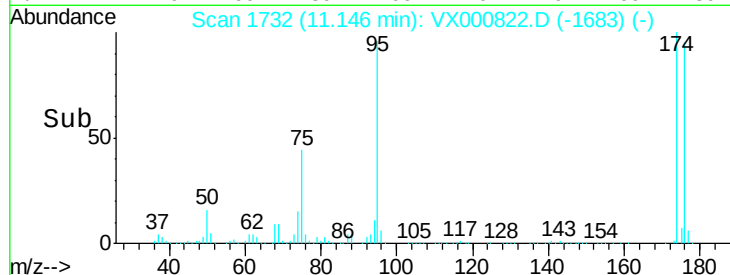
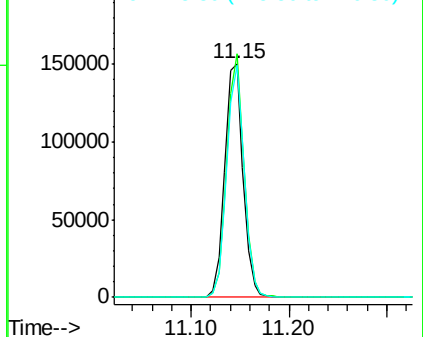
#62  
 4-Bromofluorobenzene  
 Concen: 44.89 ug/l  
 RT: 11.15 min Scan# 1732  
 Delta R.T. -0.00 min  
 Lab File: VX000822.D  
 Acq: 13 Apr 2018 00:38

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 EO-01-041118-A

Tgt Ion: 95 Resp: 196023  
 Ion Ratio Lower Upper  
 95 100  
 174 98.3 0.0 198.4  
 176 95.0 0.0 194.4

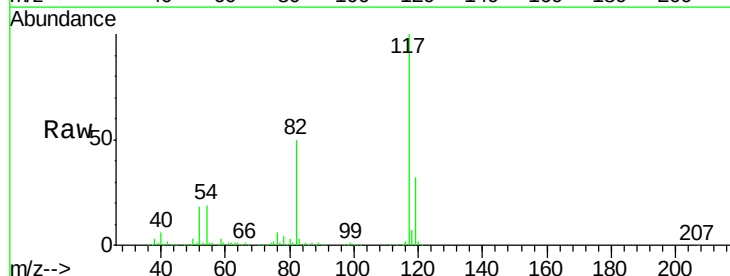


Abundance Ion 94.90 (94.60 to 95.60): VX0  
 Ion 173.80 (173.50 to 174.50): V  
 Ion 175.80 (175.50 to 176.50): V

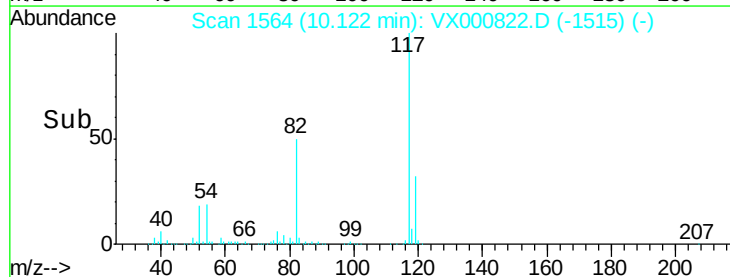
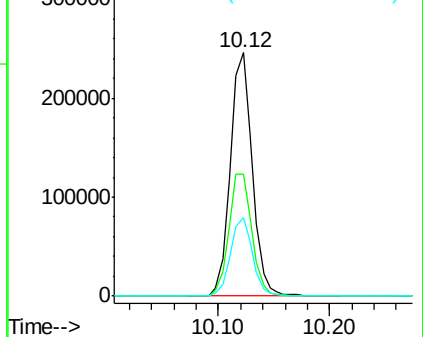


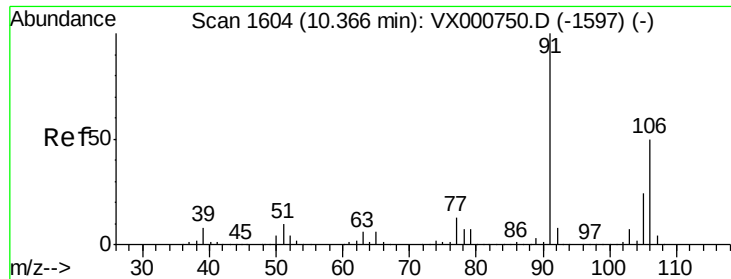
#63  
 Chlorobenzene-d5  
 Concen: 50.00 ug/l  
 RT: 10.12 min Scan# 1564  
 Delta R.T. -0.00 min  
 Lab File: VX000822.D  
 Acq: 13 Apr 2018 00:38

Tgt Ion: 117 Resp: 334357  
 Ion Ratio Lower Upper  
 117 100  
 82 50.4 41.9 62.9  
 119 32.1 26.0 39.0



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





#68

m/p-Xylenes

Concen: 0.52 ug/l

RT: 10.37 min Scan# 1604

Delta R.T. -0.00 min

Lab File: VX000822.D

Acq: 13 Apr 2018 00:38

Instrument :

MSVOA\_X

ClientSampleId :

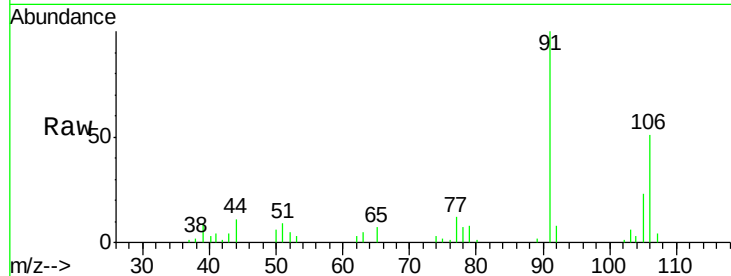
EO-01-041118-A

Tgt Ion:106 Resp: 2900

Ion Ratio Lower Upper

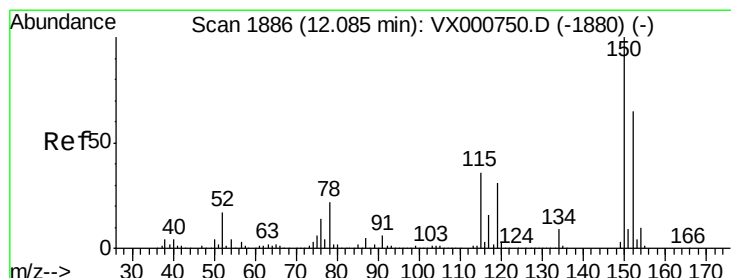
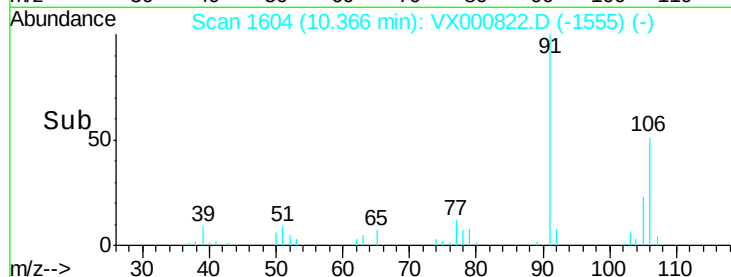
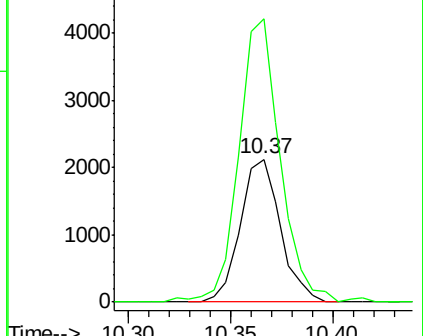
106 100

91 205.2 159.3 238.9



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VX0



#72

1,4-Dichlorobenzene-d4

Concen: 50.00 ug/l

RT: 12.09 min Scan# 1886

Delta R.T. -0.00 min

Lab File: VX000822.D

Acq: 13 Apr 2018 00:38

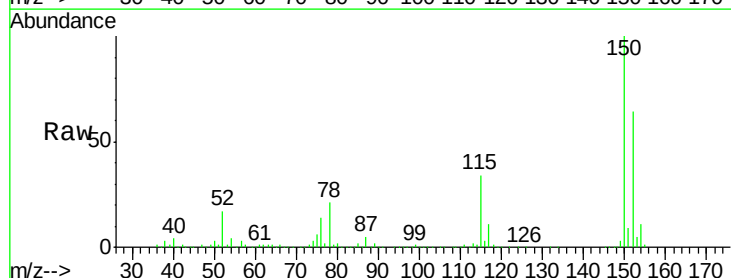
Tgt Ion:152 Resp: 214692

Ion Ratio Lower Upper

152 100

115 53.6 37.9 113.7

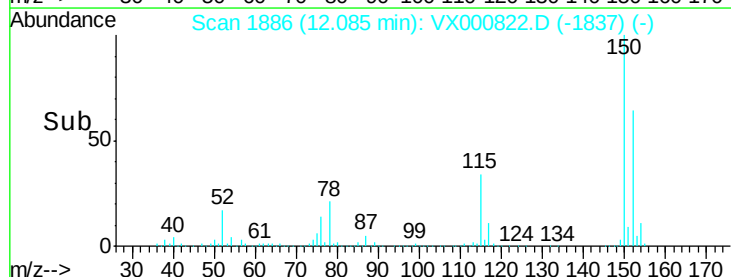
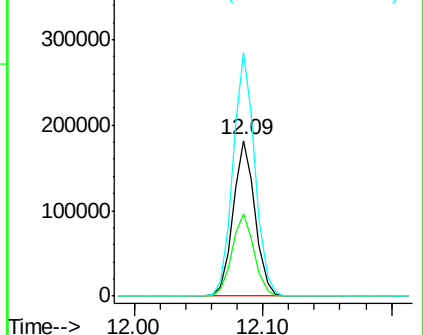
150 156.9 0.0 348.0

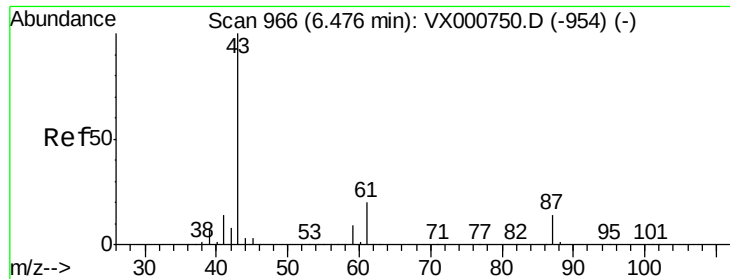


Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V





#74

N-ethyl acetate

Concen: 0.43 ug/l

RT: 6.48 min Scan# 967

Delta R.T. 0.01 min

Lab File: VX000822.D

Acq: 13 Apr 2018 00:38

Instrument :

MSVOA\_X

ClientSampleId :

EO-01-041118-A

Tgt Ion: 43 Resp: 2608

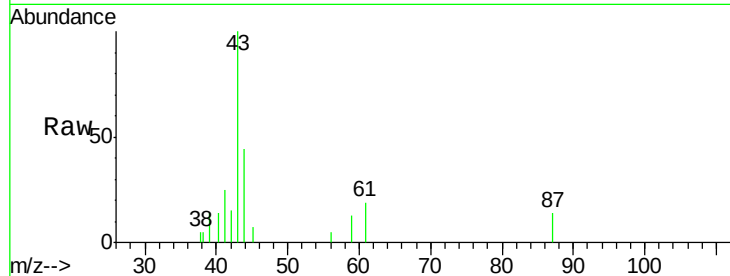
Ion Ratio Lower Upper

43 100

70 0.0 0.0 0.0

55 1.6 0.0 0.0#

61 17.3 15.6 23.4

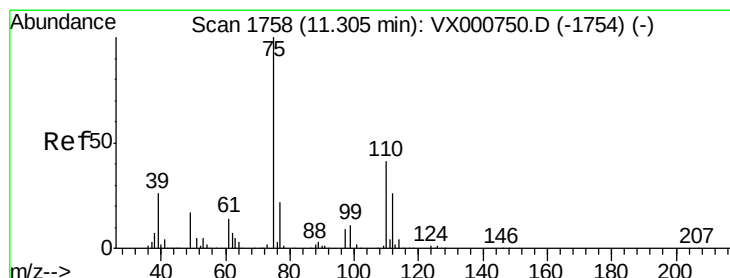
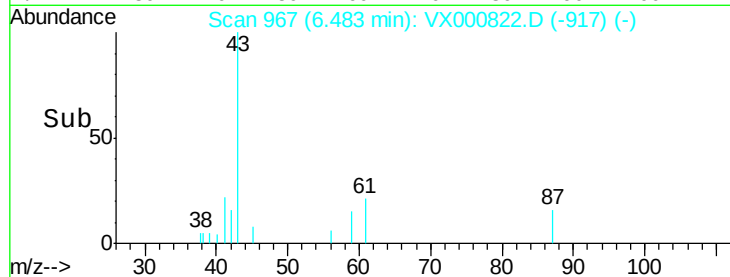
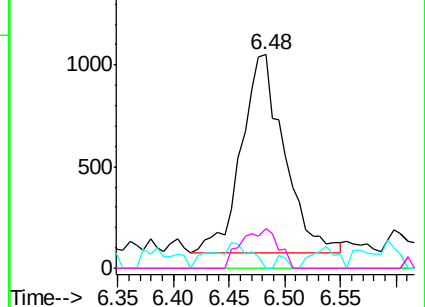


Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 70.00 (69.70 to 70.70): VX0

Ion 55.00 (54.70 to 55.70): VX0

Ion 61.00 (60.70 to 61.70): VX0



#76

1,2,3-Trichloropropane

Concen: 25.59 ug/l

RT: 11.14 min Scan# 1731

Delta R.T. -0.16 min

Lab File: VX000822.D

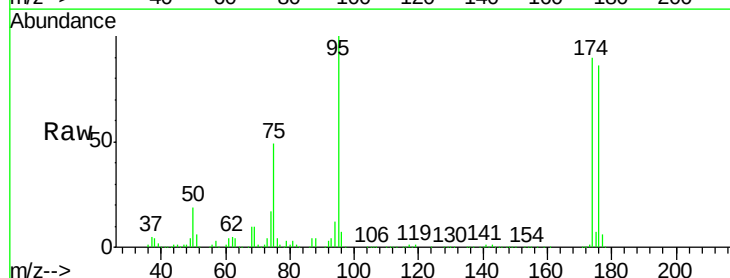
Acq: 13 Apr 2018 00:38

Tgt Ion: 75 Resp: 94760

Ion Ratio Lower Upper

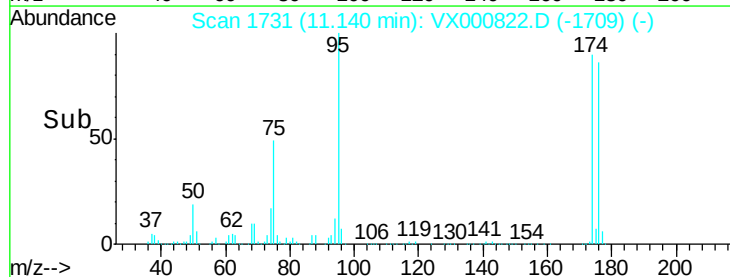
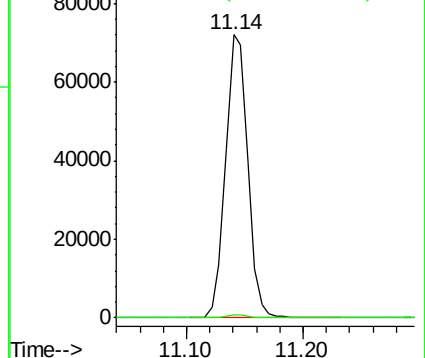
75 100

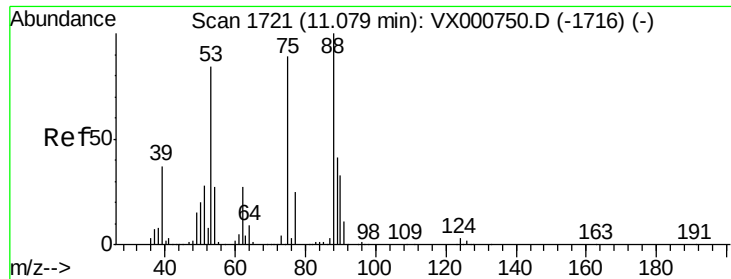
77 1.1 20.5 61.5#



Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 77.00 (76.70 to 77.70): VX0

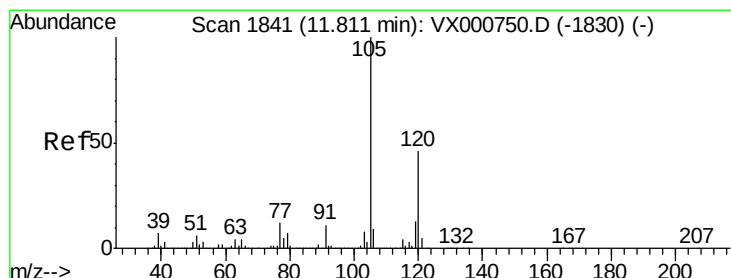
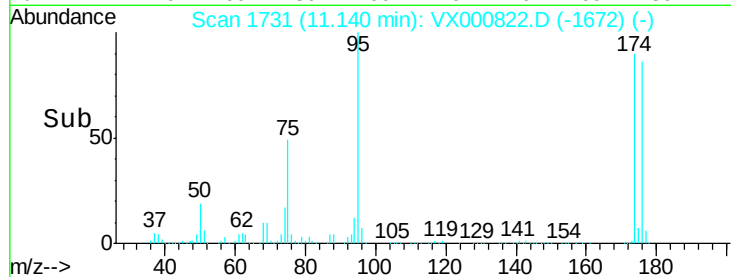
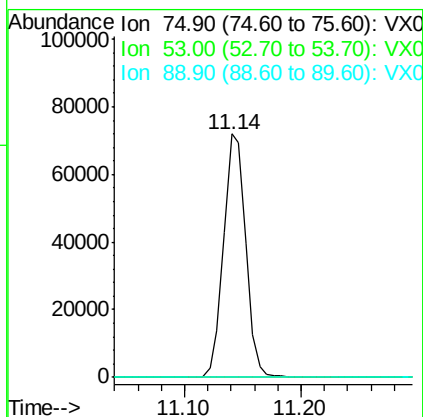
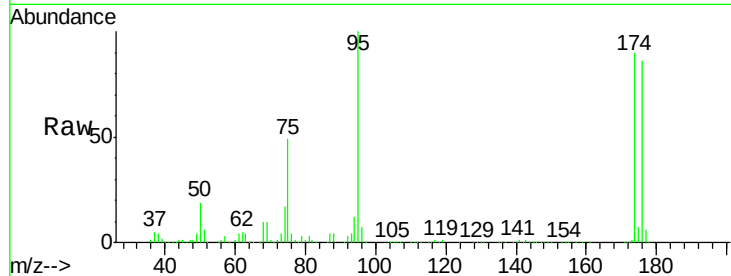




#81  
 trans-1,4-Dichloro-2-butene  
 Concen: 70.40 ug/l  
 RT: 11.14 min Scan# 1731  
 Delta R.T. 0.06 min  
 Lab File: VX000822.D  
 Acq: 13 Apr 2018 00:38

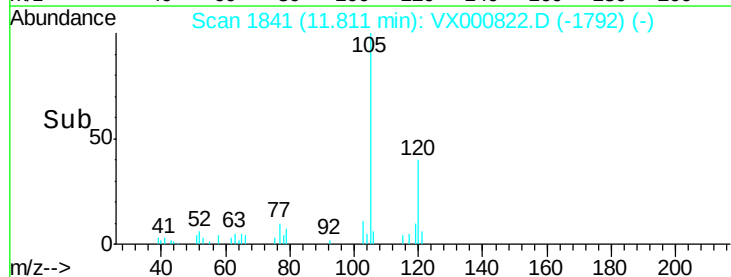
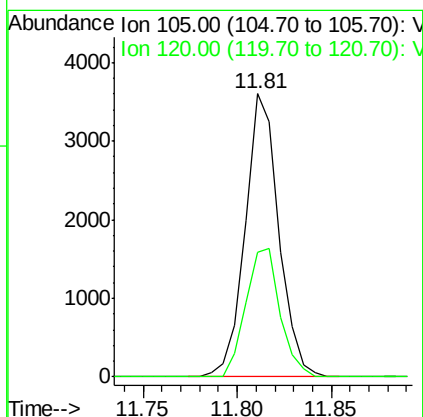
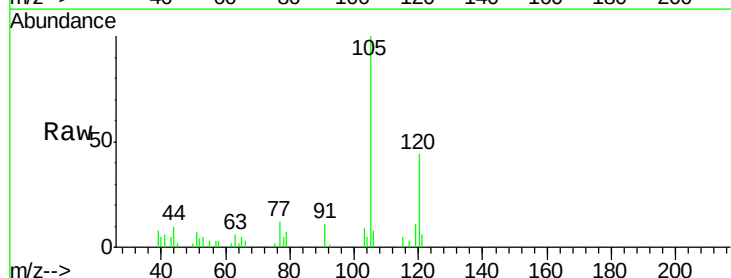
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 EO-01-041118-A

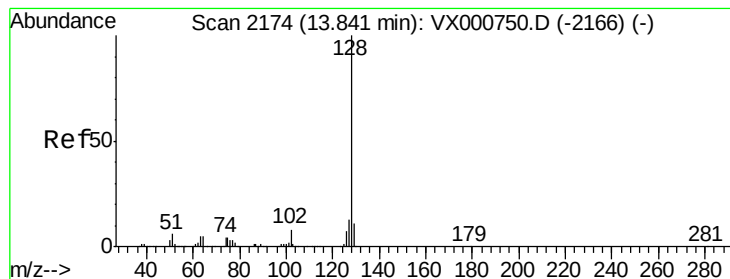
Tgt Ion: 75 Resp: 94760  
 Ion Ratio Lower Upper  
 75 100  
 53 0.0 75.4 113.0#  
 89 0.0 40.9 61.3#



#84  
 1,2,4-Trimethylbenzene  
 Concen: 0.37 ug/l  
 RT: 11.81 min Scan# 1841  
 Delta R.T. -0.00 min  
 Lab File: VX000822.D  
 Acq: 13 Apr 2018 00:38

Tgt Ion: 105 Resp: 4446  
 Ion Ratio Lower Upper  
 105 100  
 120 46.2 23.1 69.3





#95

Naphthalene

Concen: 2.24 ug/l

RT: 13.84 min Scan# 2174

Delta R.T. -0.00 min

Lab File: VX000822.D

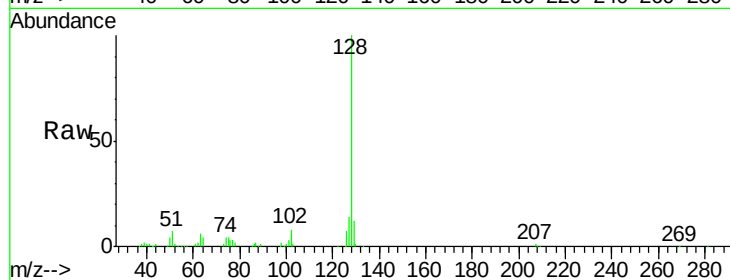
Acq: 13 Apr 2018 00:38

Instrument :

MSVOA\_X

ClientSampleId :

EO-01-041118-A



Tgt Ion:128 Resp: 35015

Ion Ratio Lower Upper

128 100

127 13.1 10.4 15.6

129 11.3 8.7 13.1

