

Data Path : W:\HPCHEM1\MSVOA\_X\DATA\VX041118\  
 Data File : VX000789.D  
 Acq On : 11 Apr 2018 19:46  
 Operator : JC/MD  
 Sample : J2303-03 5X  
 Misc : 5.0mL/MSVOA\_X/WATER  
 ALS Vial : 21 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 M11

Quant Time: Apr 12 07:08:26 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  | 312137   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.87  | 114  | 436298   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.12 | 117  | 408415   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 246224   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|-----------------------------|-------|------|----------|-------|--------|----------|
| 33) 1,2-Dichloroethane-d4   | 6.08  | 65   | 159290   | 40.47 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 80.94% |          |
| 35) Dibromofluoromethane    | 5.51  | 113  | 133249   | 39.64 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 79.28% |          |
| 50) Toluene-d8              | 8.72  | 98   | 500312   | 39.97 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 79.94% |          |
| 62) 4-Bromofluorobenzene    | 11.15 | 95   | 204710   | 39.53 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 79.06% |          |

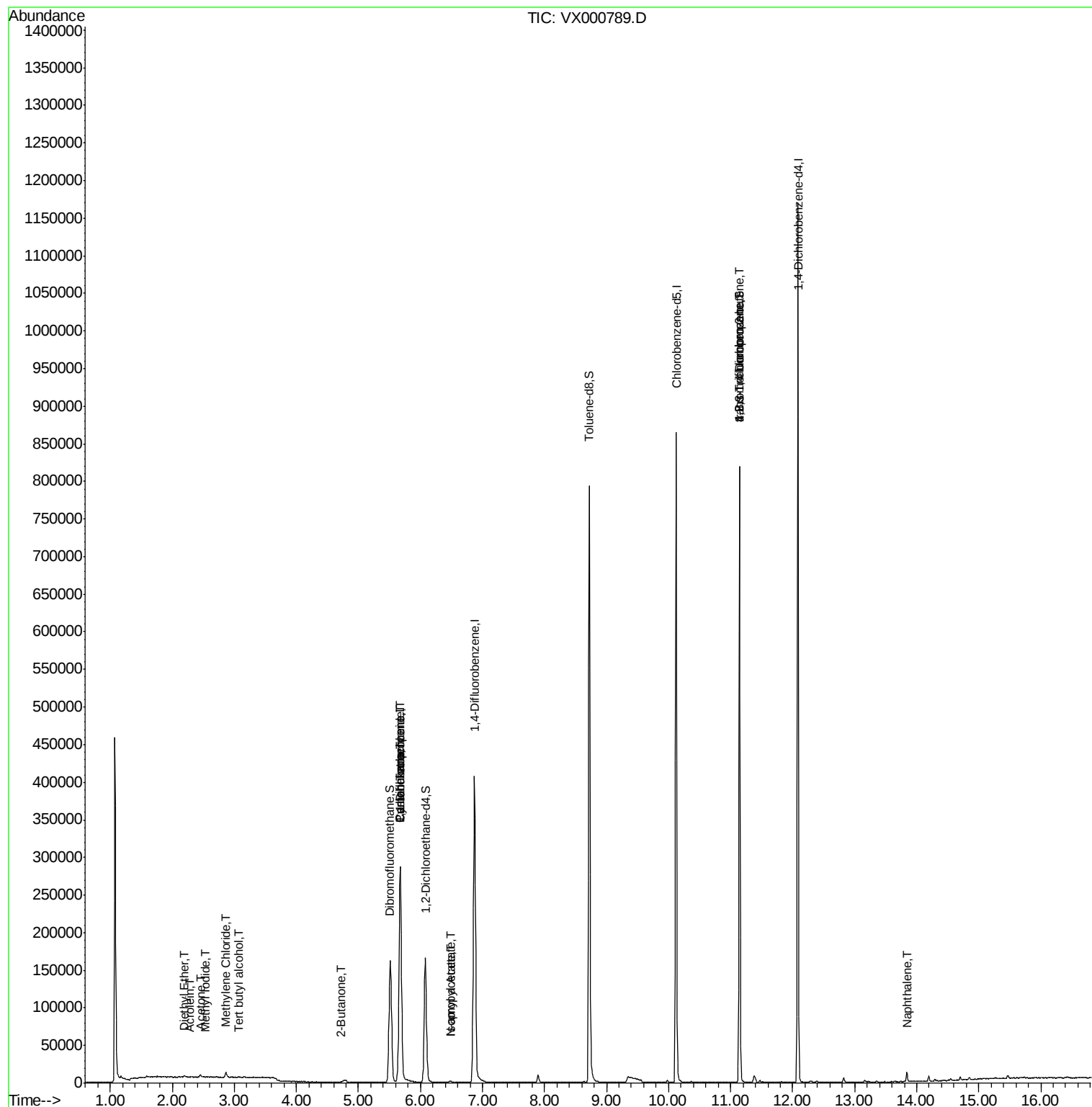
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units | Qvalue |
|--------------------------------|-------|------|----------|-----------|-------|--------|
| 5) Bromomethane                | 1.65  | 94   | 322      | Below Cal | #     | 73     |
| 8) Diethyl Ether               | 2.20  | 74   | 810      | 0.42      | ug/l  | 92     |
| 10) Methyl Iodide              | 2.53  | 142  | 31       | 8.24      | ug/l  | # 18   |
| 11) Tert butyl alcohol         | 3.07  | 59   | 355      | 0.51      | ug/l  | # 83   |
| 13) Acrolein                   | 2.29  | 56   | 143      | 0.42      | ug/l  | 83     |
| 16) Acetone                    | 2.45  | 43   | 3957     | 2.92      | ug/l  | 96     |
| 20) Methylene Chloride         | 2.87  | 84   | 3548     | 1.12      | ug/l  | 90     |
| 25) 2-Butanone                 | 4.72  | 43   | 1286     | 0.57      | ug/l  | 97     |
| 31) Cyclohexane                | 5.67  | 56   | 5137     | 0.99      | ug/l  | # 1    |
| 36) 1,1-Dichloropropene        | 5.68  | 75   | 18370    | 3.82      | ug/l  | # 48   |
| 38) Carbon Tetrachloride       | 5.67  | 117  | 26475    | 4.92      | ug/l  | # 14   |
| 43) Isopropyl Acetate          | 6.48  | 43   | 1788     | 0.22      | ug/l  | 94     |
| 74) N-amyl acetate             | 6.48  | 43   | 1788     | 0.25      | ug/l  | # 92   |
| 76) 1,2,3-Trichloropropane     | 11.15 | 75   | 101275   | 23.85     | ug/l  | # 36   |
| 81) trans-1,4-Dichloro-2-buten | 11.15 | 75   | 101275   | 65.61     | ug/l  | # 11   |
| 95) Naphthalene                | 13.84 | 128  | 7496     | 0.42      | ug/l  | 99     |

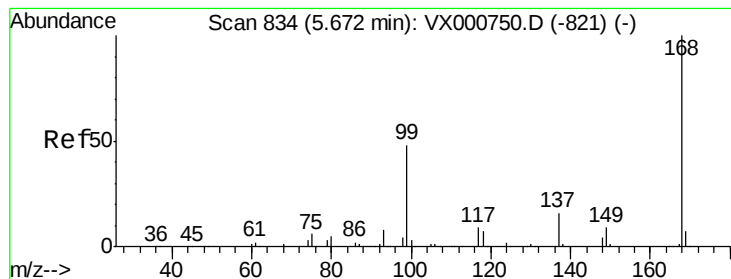
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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MSVOA\_X  
ClientSampleId :  
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Quant Time: Apr 12 07:08:26 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: VX000789.D

Acq: 11 Apr 2018 19:46

Instrument :

MSVOA\_X

ClientSampleId :

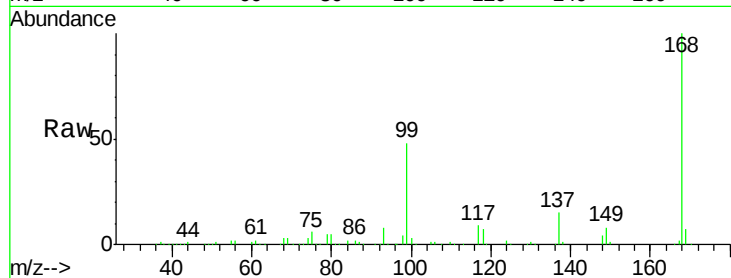
M11

Tgt Ion: 168 Resp: 312137

Ion Ratio Lower Upper

168 100

99 48.3 38.3 57.5



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

5.67

120000

100000

80000

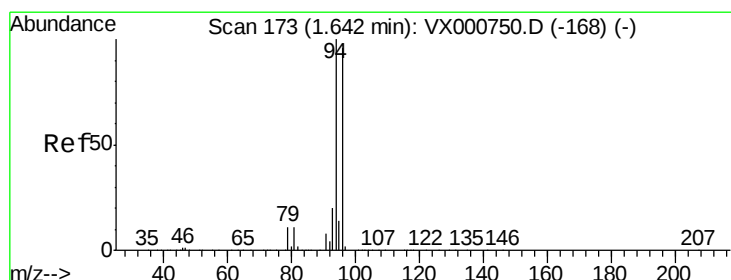
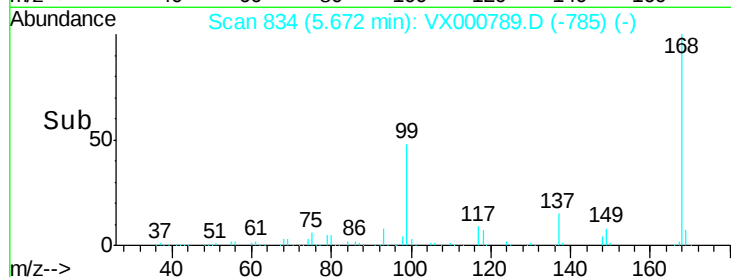
60000

40000

20000

0

Time--> 5.50 5.60 5.70 5.80



#5

Bromomethane

Concen: Below Cal

RT: 1.65 min Scan# 175

Delta R.T. 0.01 min

Lab File: VX000789.D

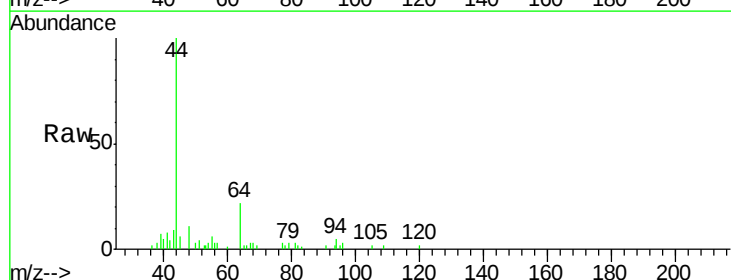
Acq: 11 Apr 2018 19:46

Tgt Ion: 94 Resp: 322

Ion Ratio Lower Upper

94 100

96 69.4 77.0 115.6#



Abundance Ion 93.90 (93.60 to 94.60): VX0

Ion 95.90 (95.60 to 96.60): VX0

200

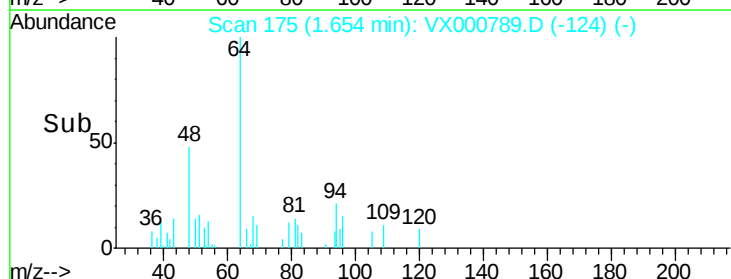
150

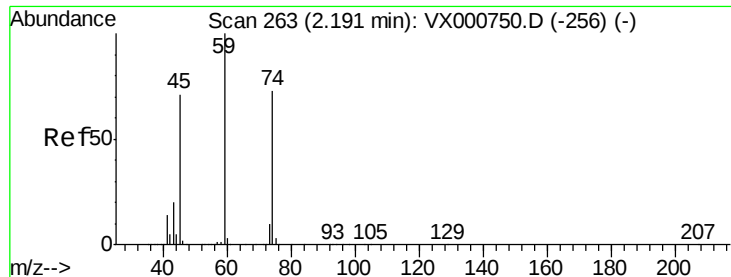
100

50

0

Time--> 1.65 1.70





#8

Diethyl Ether

Concen: 0.42 ug/l

RT: 2.20 min Scan# 264

Delta R.T. 0.01 min

Lab File: VX000789.D

Acq: 11 Apr 2018 19:46

Instrument :

MSVOA\_X

ClientSampleId :

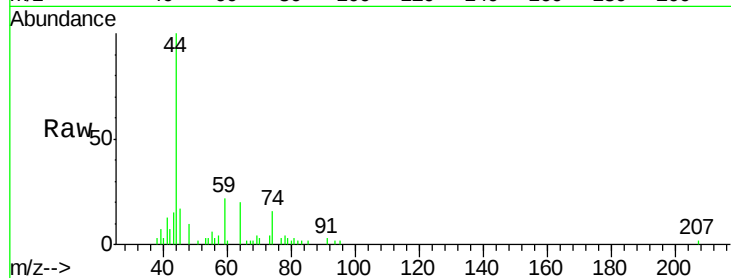
M11

Tgt Ion: 74 Resp: 810

Ion Ratio Lower Upper

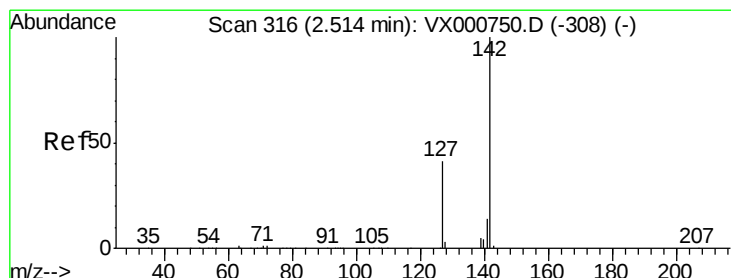
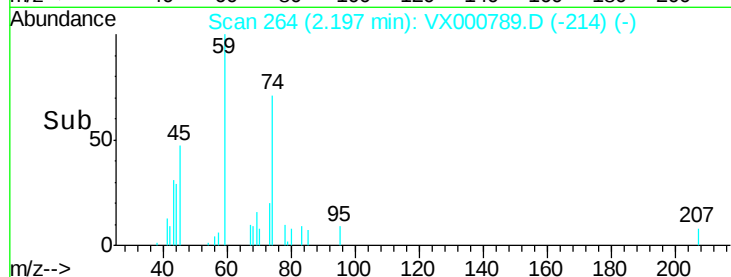
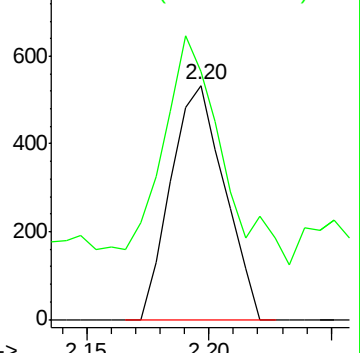
74 100

45 105.6 48.6 145.8



Abundance Ion 74.00 (73.70 to 74.70): VX0

Ion 45.00 (44.70 to 45.70): VX0



#10

Methyl Iodide

Concen: 8.24 ug/l

RT: 2.53 min Scan# 318

Delta R.T. 0.01 min

Lab File: VX000789.D

Acq: 11 Apr 2018 19:46

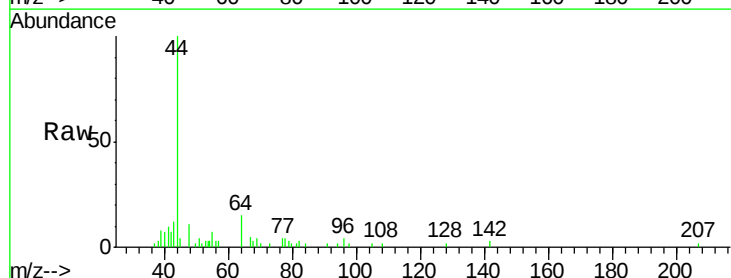
Tgt Ion: 142 Resp: 31

Ion Ratio Lower Upper

142 100

127 0.0 32.6 49.0#

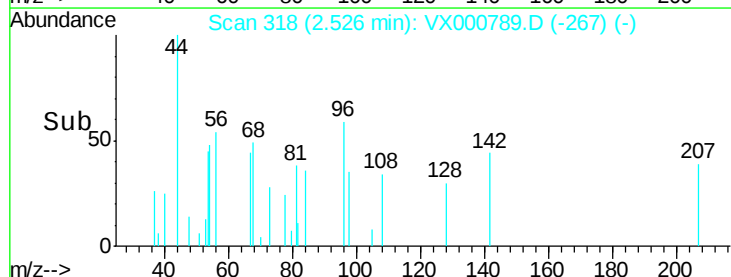
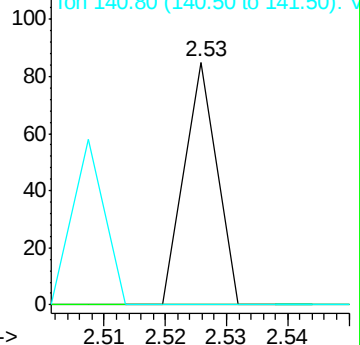
141 67.7 11.5 17.3#

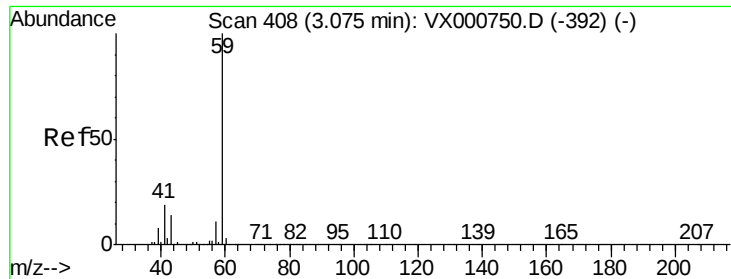


Abundance Ion 141.80 (141.50 to 142.50): V

Ion 126.80 (126.50 to 127.50): V

Ion 140.80 (140.50 to 141.50): V

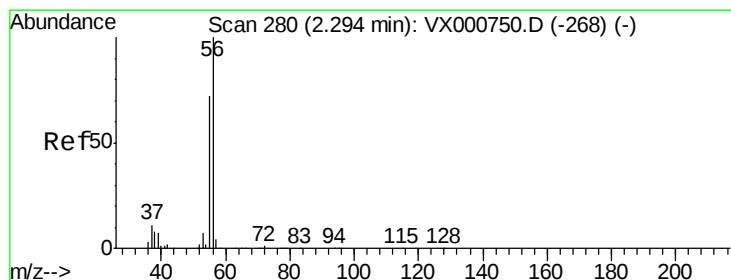
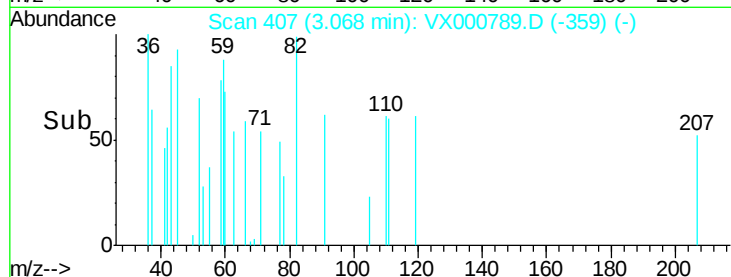
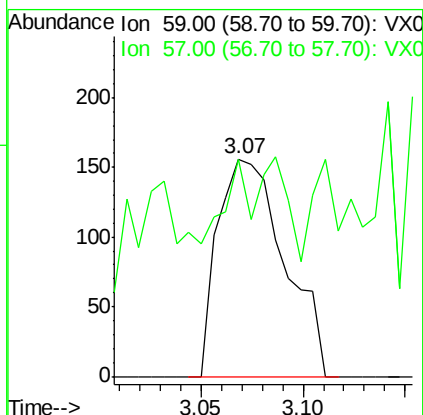
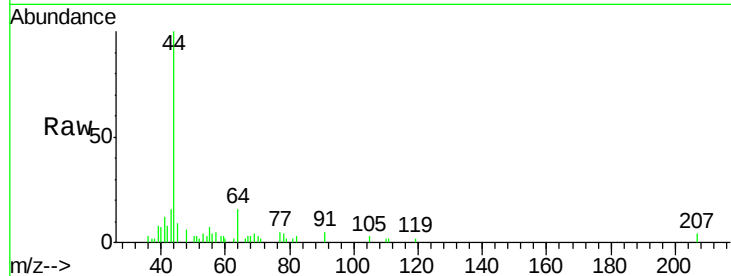




#11  
Tert butyl alcohol  
Concen: 0.51 ug/l  
RT: 3.07 min Scan# 407  
Delta R.T. -0.01 min  
Lab File: VX000789.D  
Acq: 11 Apr 2018 19:46

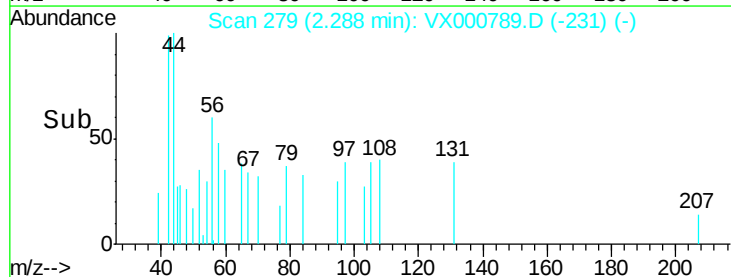
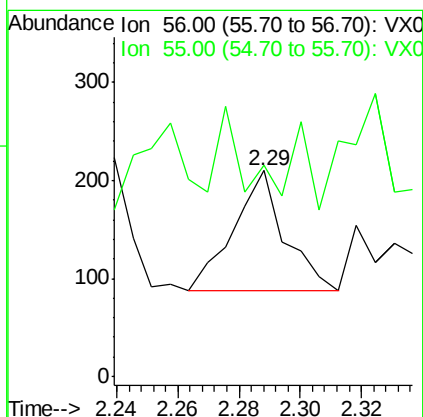
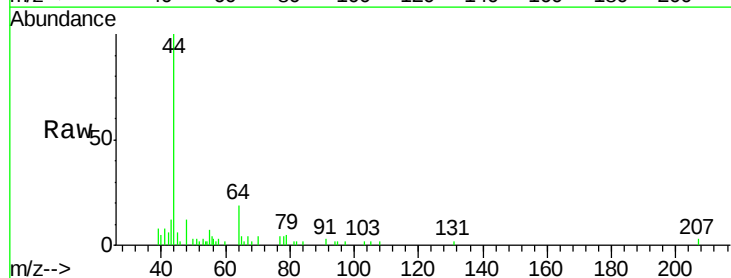
Instrument :  
MSVOA\_X  
ClientSampled :  
M11

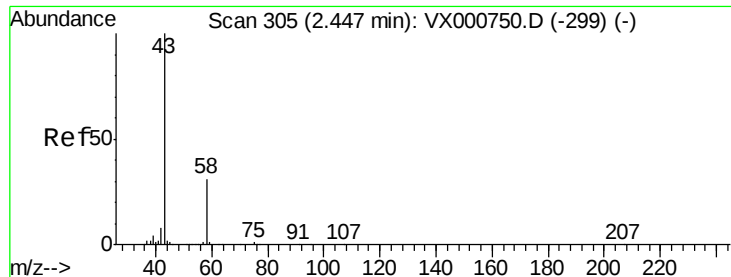
Tgt Ion: 59 Resp: 355  
Ion Ratio Lower Upper  
59 100  
57 16.9 8.4 12.6#



#13  
Acrolein  
Concen: 0.42 ug/l  
RT: 2.29 min Scan# 279  
Delta R.T. -0.01 min  
Lab File: VX000789.D  
Acq: 11 Apr 2018 19:46

Tgt Ion: 56 Resp: 143  
Ion Ratio Lower Upper  
56 100  
55 58.7 58.7 88.1





#16

Acetone

Concen: 2.92 ug/l

RT: 2.45 min Scan# 305

Delta R.T. -0.00 min

Lab File: VX000789.D

Acq: 11 Apr 2018 19:46

Instrument :

MSVOA\_X

ClientSampled :

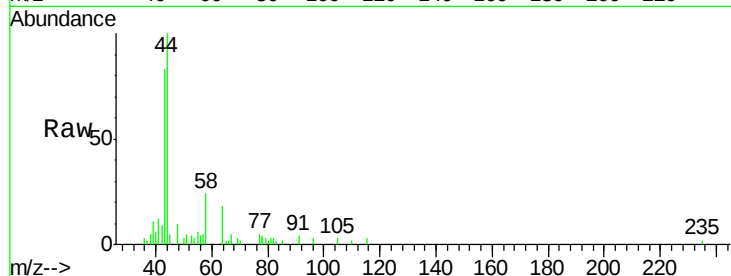
M11

Tgt Ion: 43 Resp: 3957

Ion Ratio Lower Upper

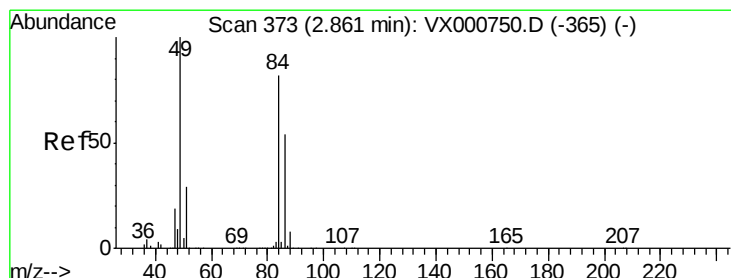
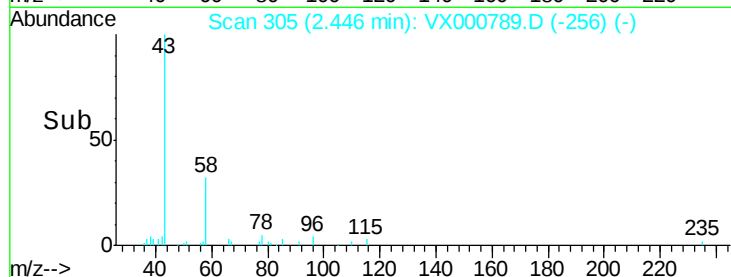
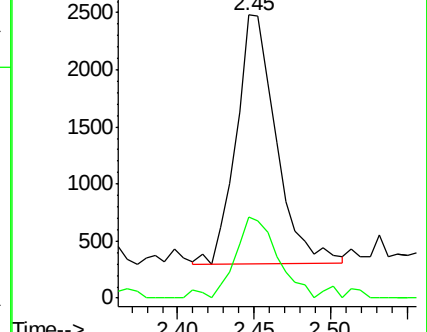
43 100

58 32.9 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: 1.12 ug/l

RT: 2.87 min Scan# 374

Delta R.T. 0.01 min

Lab File: VX000789.D

Acq: 11 Apr 2018 19:46

Tgt Ion: 84 Resp: 3548

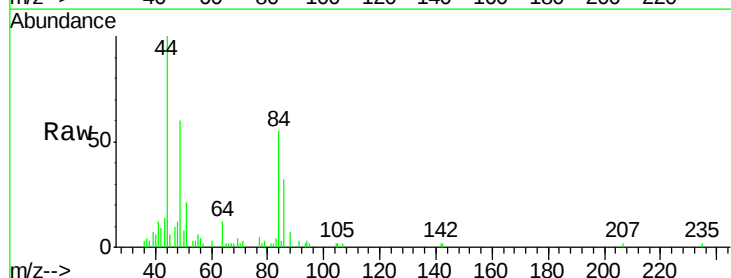
Ion Ratio Lower Upper

84 100

49 108.5 98.1 147.1

51 35.0 28.9 43.3

86 58.7 52.7 79.1

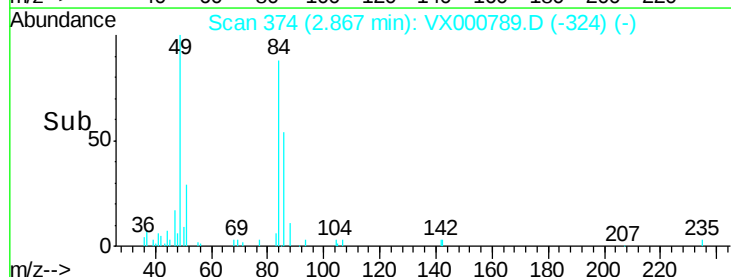
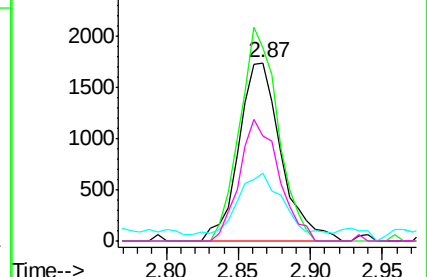


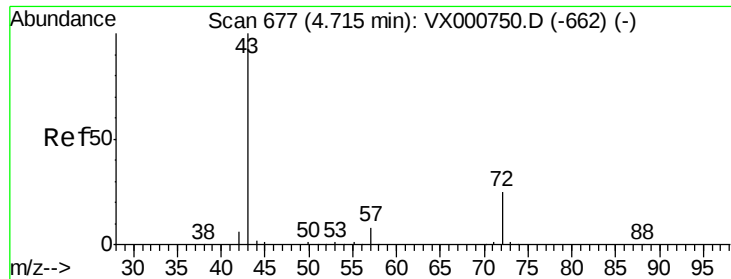
Abundance Ion 83.90 (83.60 to 84.60): VX0

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: 0.57 ug/l

RT: 4.72 min Scan# 678

Delta R.T. 0.01 min

Lab File: VX000789.D

Acq: 11 Apr 2018 19:46

Instrument :

MSVOA\_X

ClientSampled :

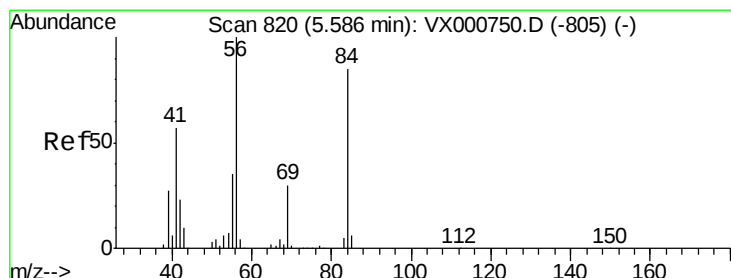
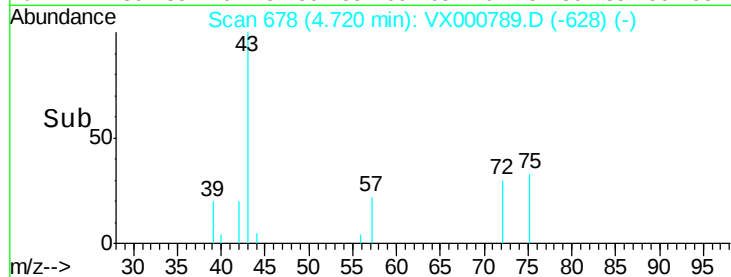
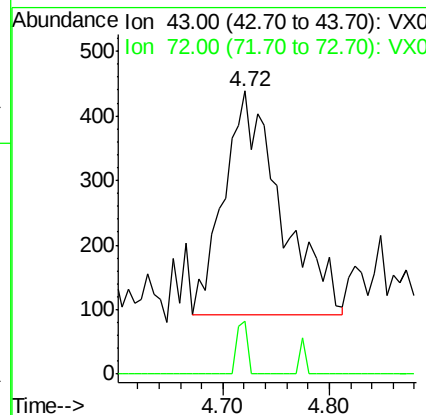
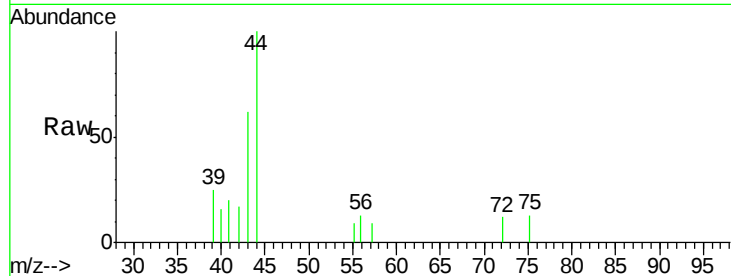
M11

Tgt Ion: 43 Resp: 1286

Ion Ratio Lower Upper

43 100

72 23.8 20.3 30.5



#31

Cyclohexane

Concen: 0.99 ug/l

RT: 5.67 min Scan# 834

Delta R.T. 0.09 min

Lab File: VX000789.D

Acq: 11 Apr 2018 19:46

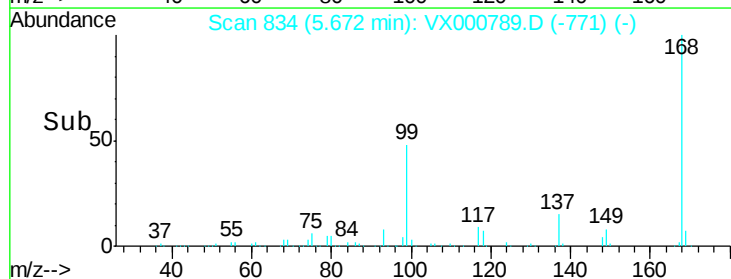
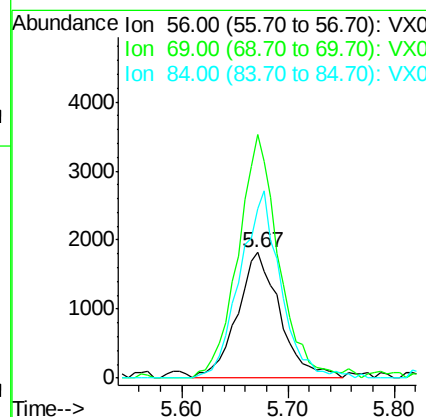
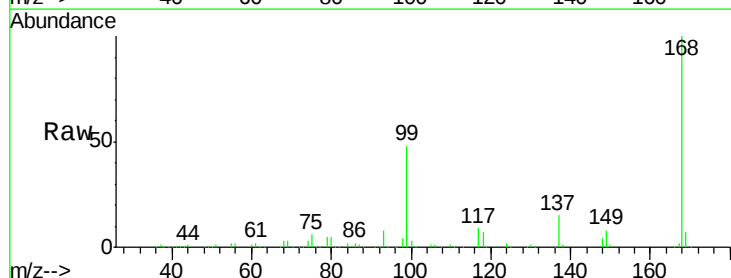
Tgt Ion: 56 Resp: 5137

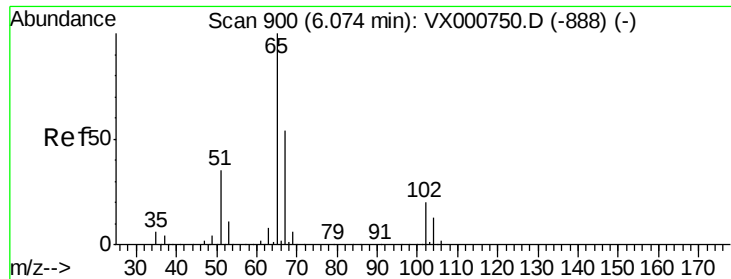
Ion Ratio Lower Upper

56 100

69 193.8 24.2 36.4#

84 134.9 67.6 101.4#





#33

1,2-Dichloroethane-d4

Concen: 40.47 ug/l

RT: 6.08 min Scan# 901

Delta R.T. 0.01 min

Lab File: VX000789.D

Acq: 11 Apr 2018 19:46

Instrument :

MSVOA\_X

ClientSampleId :

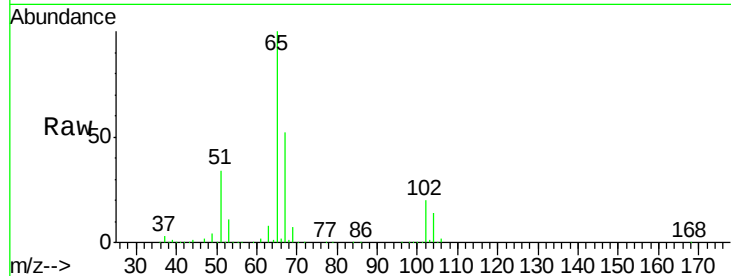
M11

Tgt Ion: 65 Resp: 159290

Ion Ratio Lower Upper

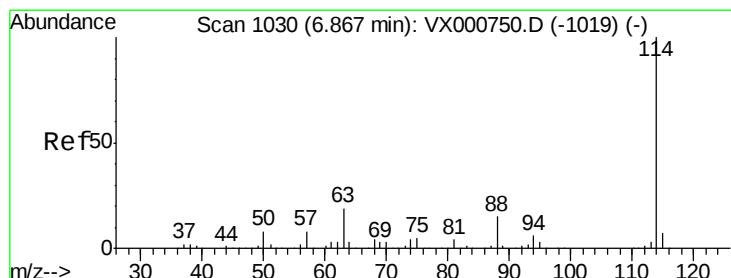
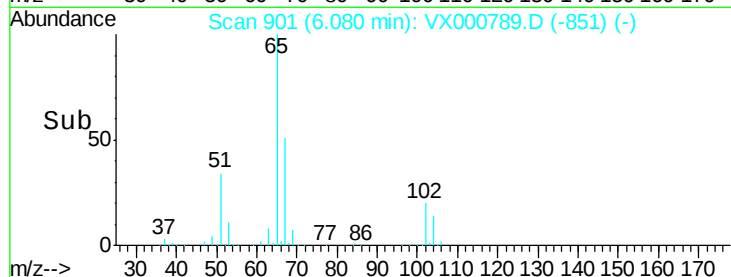
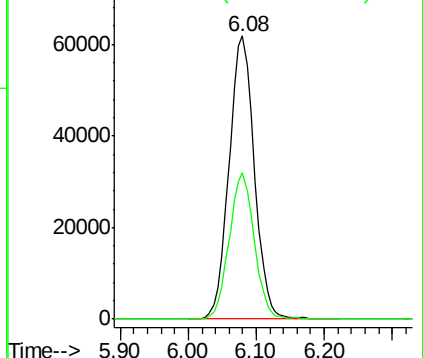
65 100

67 51.2 0.0 103.8



Abundance Ion 64.90 (64.60 to 65.60): VX0

Ion 66.90 (66.60 to 67.60): VX0



#34

1,4-Difluorobenzene

Concen: 50.00 ug/l

RT: 6.87 min Scan# 1031

Delta R.T. 0.01 min

Lab File: VX000789.D

Acq: 11 Apr 2018 19:46

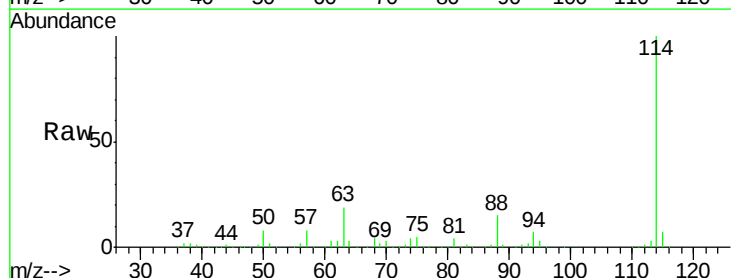
Tgt Ion: 114 Resp: 436298

Ion Ratio Lower Upper

114 100

63 19.1 0.0 38.4

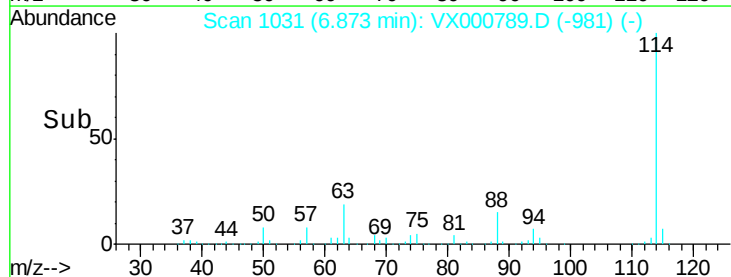
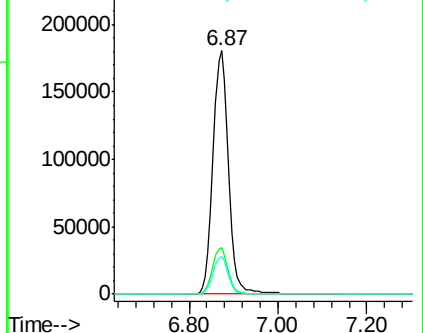
88 15.4 0.0 31.0

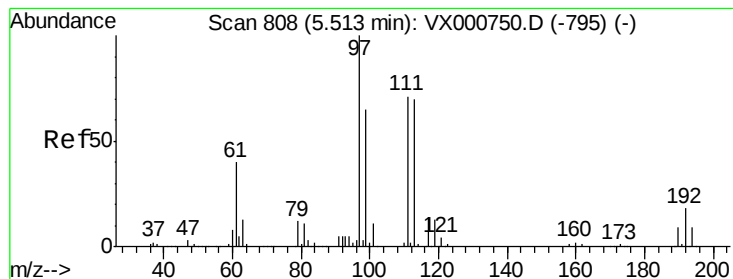


Abundance Ion 113.90 (113.60 to 114.60): V

Ion 63.00 (62.70 to 63.70): VX0

Ion 87.90 (87.60 to 88.60): VX0





#35

Dibromofluoromethane

Concen: 39.64 ug/l

RT: 5.51 min Scan# 808

Delta R.T. -0.00 min

Lab File: VX000789.D

Acq: 11 Apr 2018 19:46

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MSVOA\_X

ClientSampleId :

M11

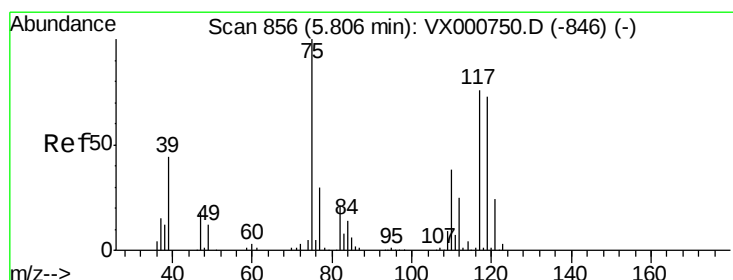
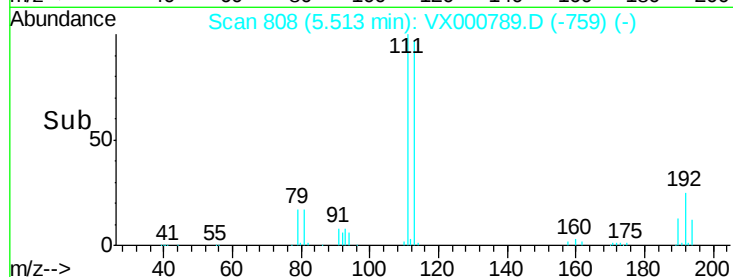
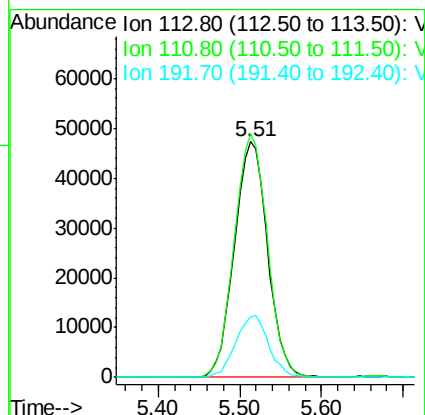
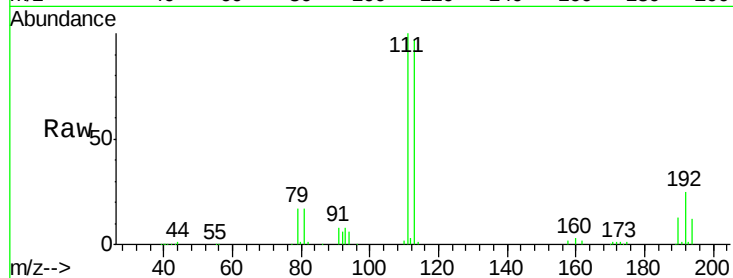
Tgt Ion:113 Resp: 133249

Ion Ratio Lower Upper

113 100

111 103.2 81.5 122.3

192 26.0 20.4 30.6



#36

1,1-Dichloropropene

Concen: 3.82 ug/l

RT: 5.68 min Scan# 835

Delta R.T. -0.13 min

Lab File: VX000789.D

Acq: 11 Apr 2018 19:46

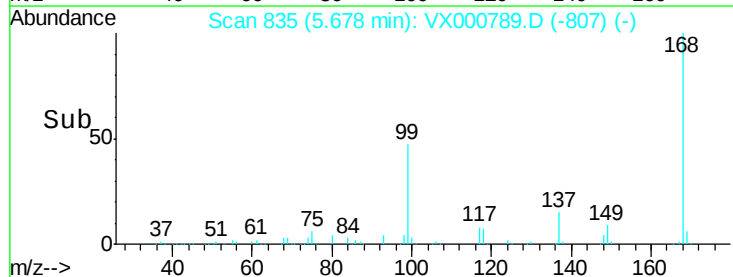
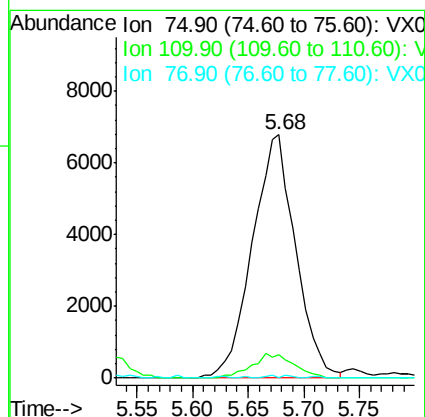
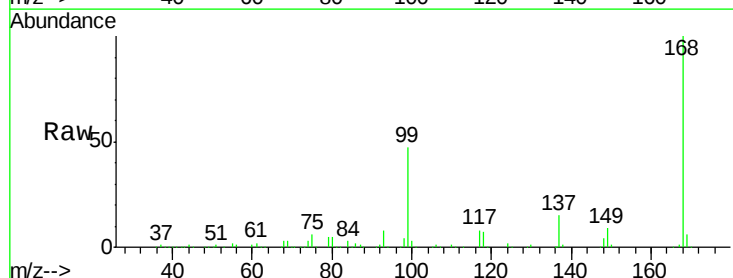
Tgt Ion: 75 Resp: 18370

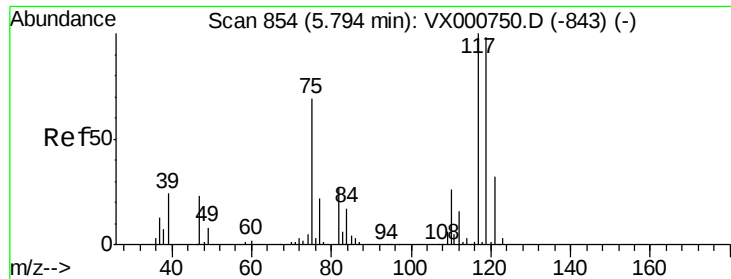
Ion Ratio Lower Upper

75 100

110 9.7 19.2 57.6#

77 0.3 25.4 38.2#

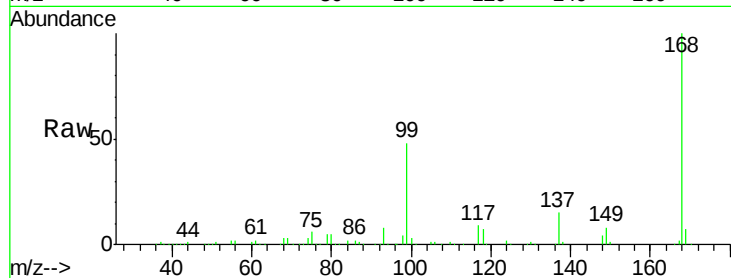




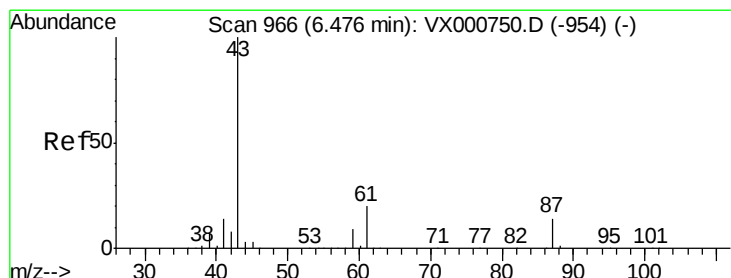
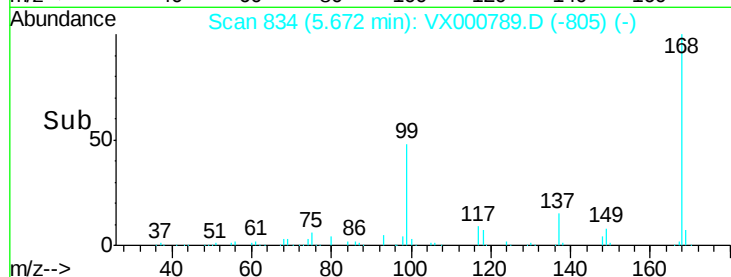
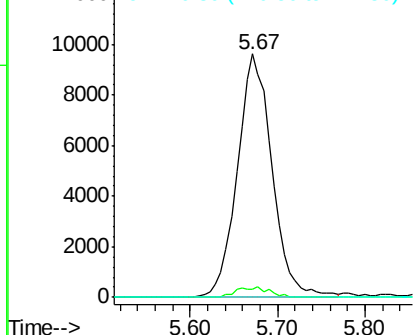
#38  
Carbon Tetrachloride  
Concen: 4.92 ug/l  
RT: 5.67 min Scan# 834  
Delta R.T. -0.12 min  
Lab File: VX000789.D  
Acq: 11 Apr 2018 19:46

Instrument :  
MSVOA\_X  
ClientSampleId :  
M11

Tgt Ion: 117 Resp: 26475  
Ion Ratio Lower Upper  
117 100  
119 3.4 78.4 117.6#  
121 0.0 25.4 38.0#

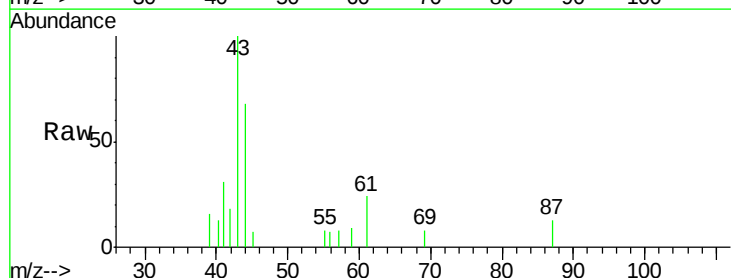


Abundance Ion 116.80 (116.50 to 117.50): V  
Ion 118.80 (118.50 to 119.50): V  
Ion 120.80 (120.50 to 121.50): V

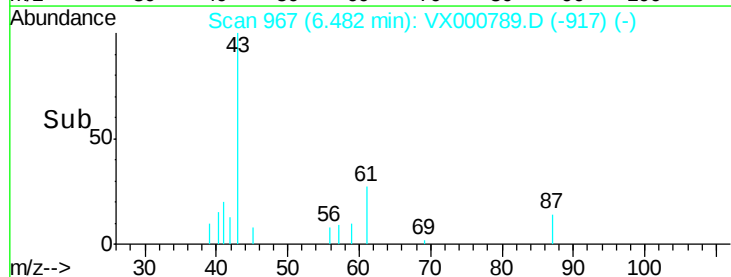
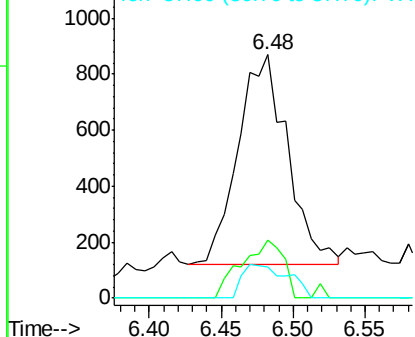


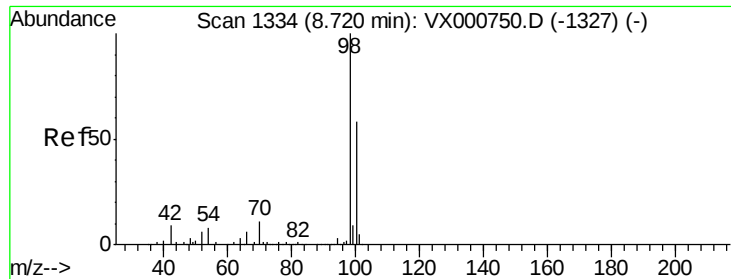
#43  
Isopropyl Acetate  
Concen: 0.22 ug/l  
RT: 6.48 min Scan# 967  
Delta R.T. 0.01 min  
Lab File: VX000789.D  
Acq: 11 Apr 2018 19:46

Tgt Ion: 43 Resp: 1788  
Ion Ratio Lower Upper  
43 100  
61 23.2 15.6 23.4  
87 14.8 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

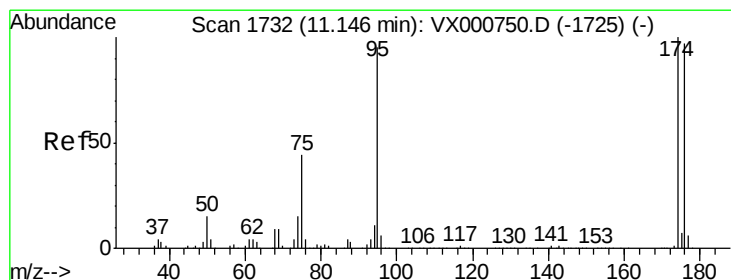
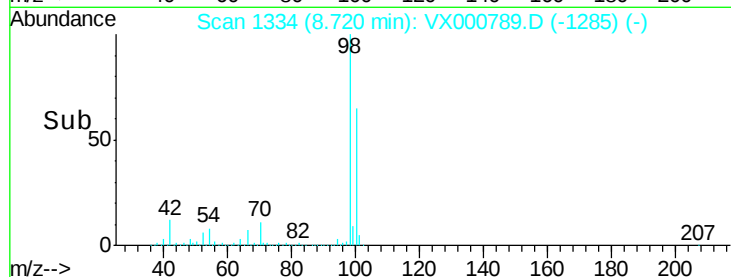
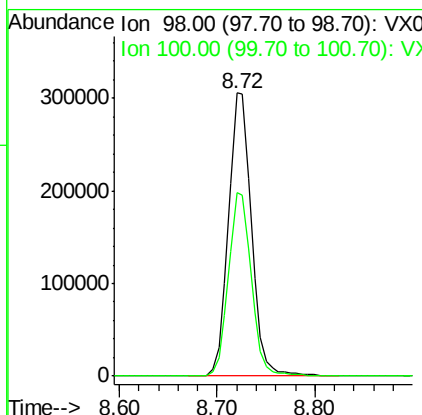
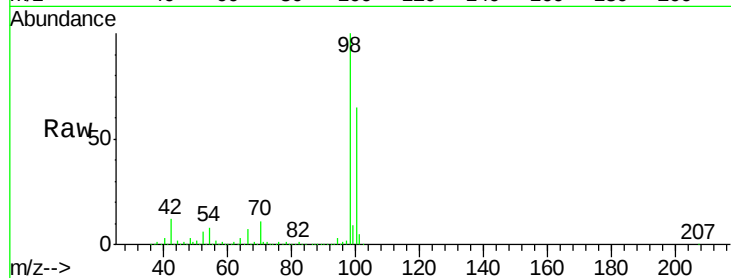




#50  
Toluene-d8  
Concen: 39.97 ug/l  
RT: 8.72 min Scan# 1334  
Delta R.T. -0.00 min  
Lab File: VX000789.D  
Acq: 11 Apr 2018 19:46

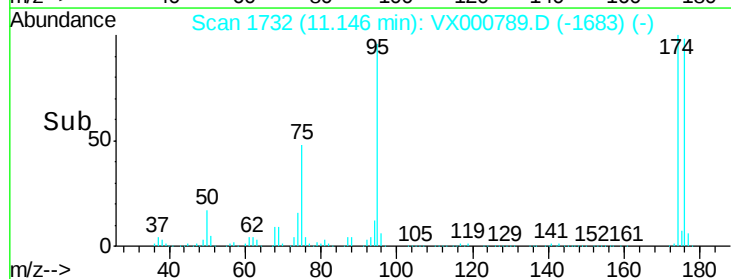
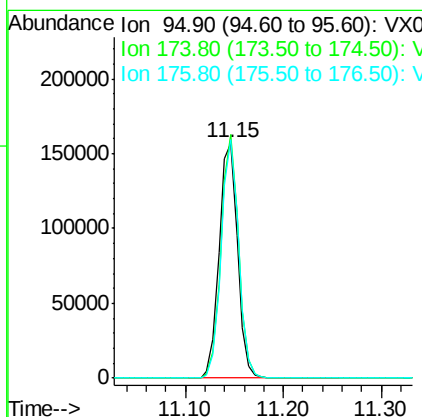
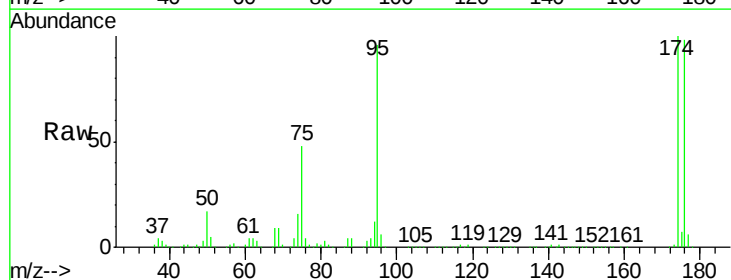
Instrument :  
MSVOA\_X  
ClientSampleId :  
M11

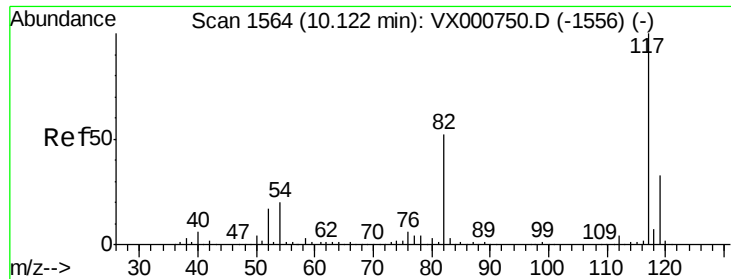
Tgt Ion: 98 Resp: 500312  
Ion Ratio Lower Upper  
98 100  
100 64.5 52.6 79.0



#62  
4-Bromofluorobenzene  
Concen: 39.53 ug/l  
RT: 11.15 min Scan# 1732  
Delta R.T. -0.00 min  
Lab File: VX000789.D  
Acq: 11 Apr 2018 19:46

Tgt Ion: 95 Resp: 204710  
Ion Ratio Lower Upper  
95 100  
174 98.3 0.0 198.4  
176 96.3 0.0 194.4

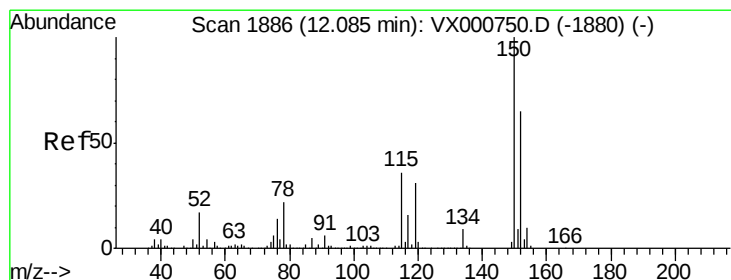
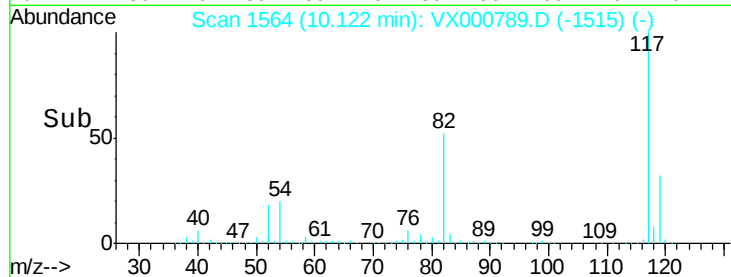
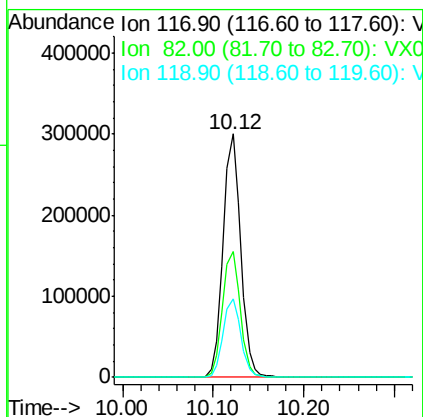
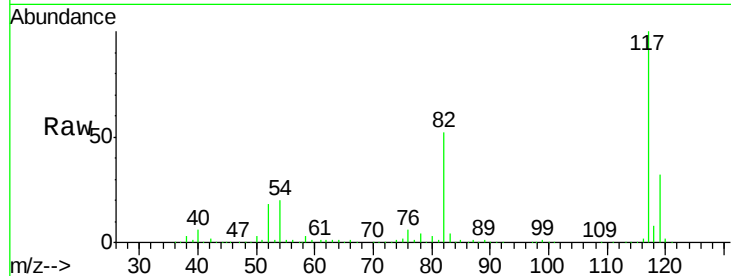




#63  
 Chlorobenzene-d5  
 Concen: 50.00 ug/l  
 RT: 10.12 min Scan# 1564  
 Delta R.T. -0.00 min  
 Lab File: VX000789.D  
 Acq: 11 Apr 2018 19:46

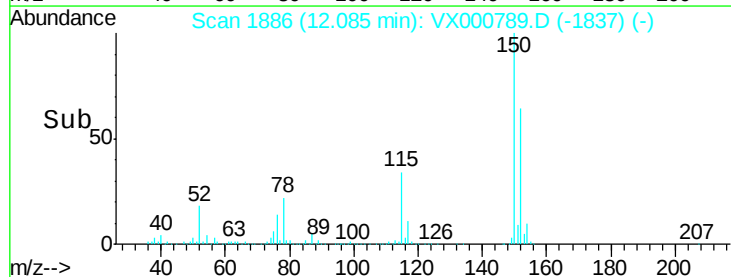
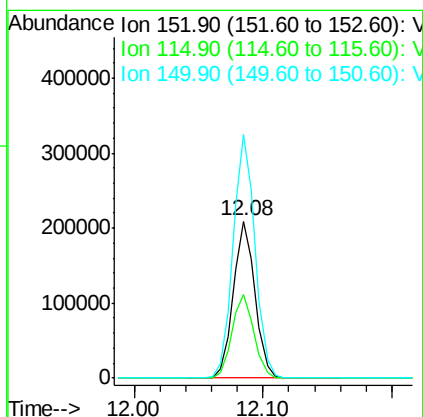
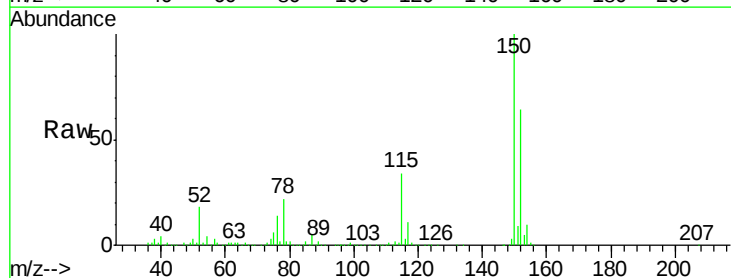
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 M11

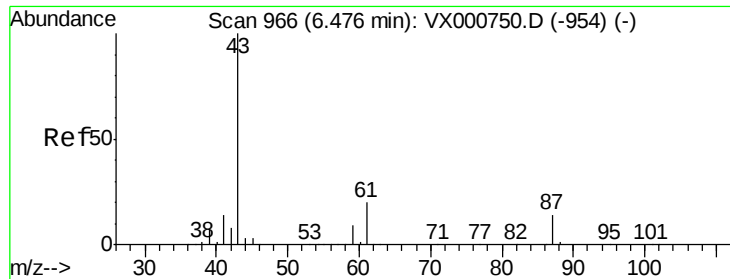
Tgt Ion:117 Resp: 408415  
 Ion Ratio Lower Upper  
 117 100  
 82 51.9 41.9 62.9  
 119 32.4 26.0 39.0



#72  
 1,4-Dichlorobenzene-d4  
 Concen: 50.00 ug/l  
 RT: 12.08 min Scan# 1886  
 Delta R.T. -0.00 min  
 Lab File: VX000789.D  
 Acq: 11 Apr 2018 19:46

Tgt Ion:152 Resp: 246224  
 Ion Ratio Lower Upper  
 152 100  
 115 53.9 37.9 113.7  
 150 156.6 0.0 348.0





#74

N-ethyl acetate

Concen: 0.25 ug/l

RT: 6.48 min Scan# 967

Delta R.T. 0.01 min

Lab File: VX000789.D

Acq: 11 Apr 2018 19:46

Instrument :

MSVOA\_X

ClientSampled :

M11

Tgt Ion: 43 Resp: 1788

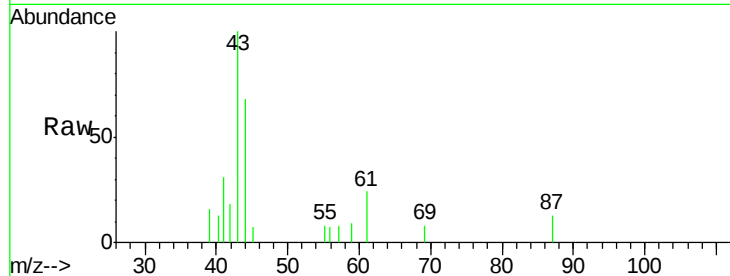
Ion Ratio Lower Upper

43 100

70 0.0 0.0 0.0

55 8.4 0.0 0.0#

61 23.2 15.6 23.4

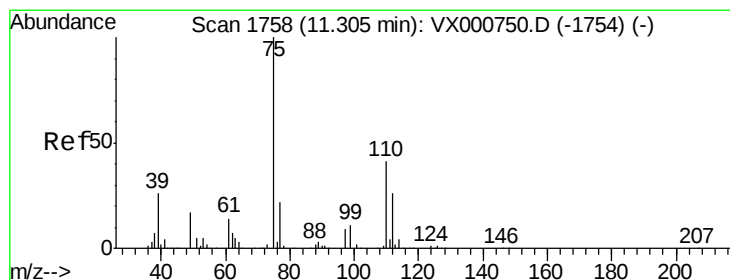
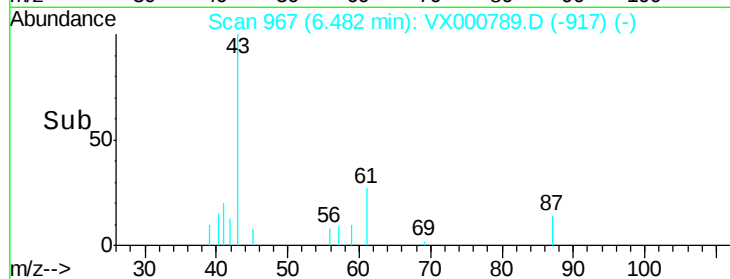
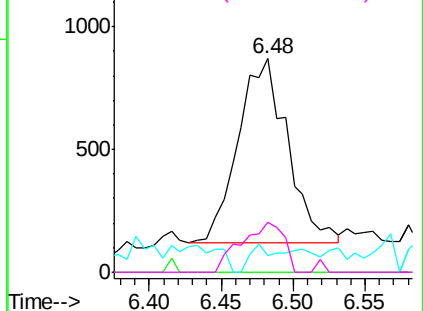


Abundance Ion 43.00 (42.70 to 43.70): VX0

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: 23.85 ug/l

RT: 11.15 min Scan# 1732

Delta R.T. -0.16 min

Lab File: VX000789.D

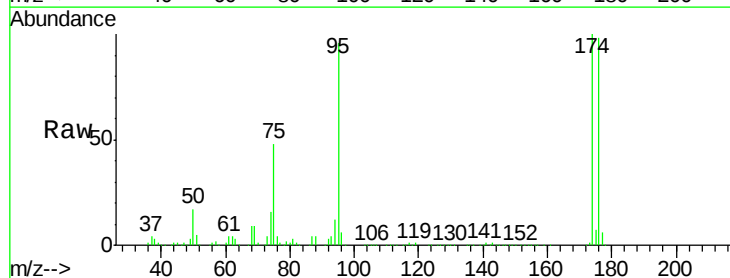
Acq: 11 Apr 2018 19:46

Tgt Ion: 75 Resp: 101275

Ion Ratio Lower Upper

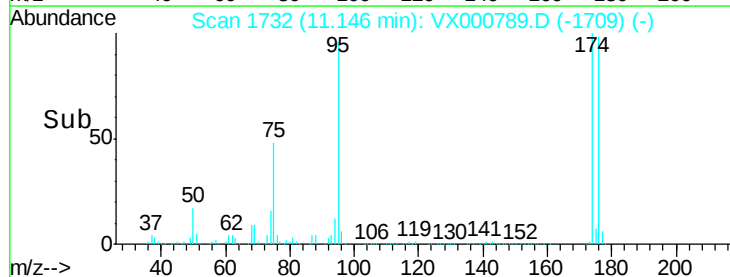
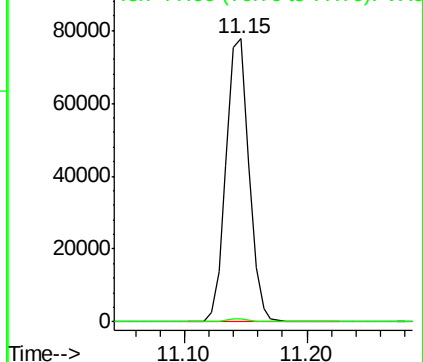
75 100

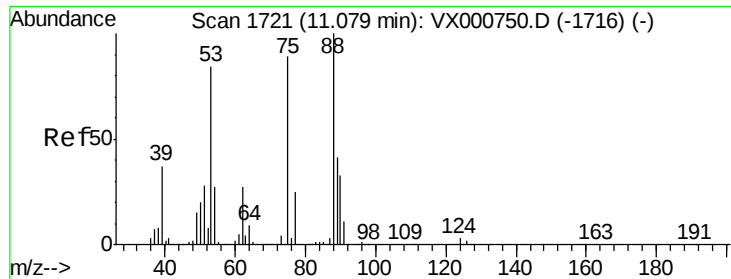
77 1.1 20.5 61.5#



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: 65.61 ug/l

RT: 11.15 min Scan# 1732

Delta R.T. 0.07 min

Lab File: VX000789.D

Acq: 11 Apr 2018 19:46

Instrument :

MSVOA\_X

ClientSampled :

M11

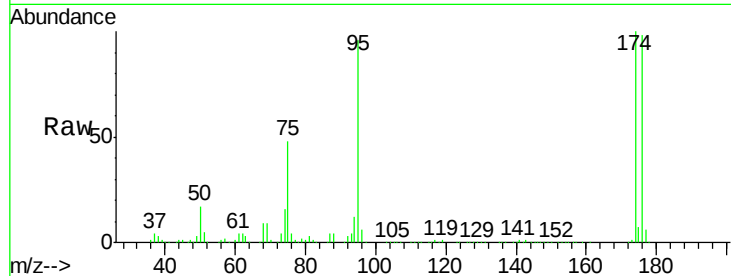
Tgt Ion: 75 Resp: 101275

Ion Ratio Lower Upper

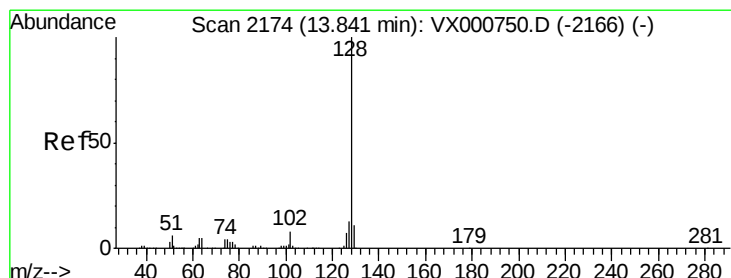
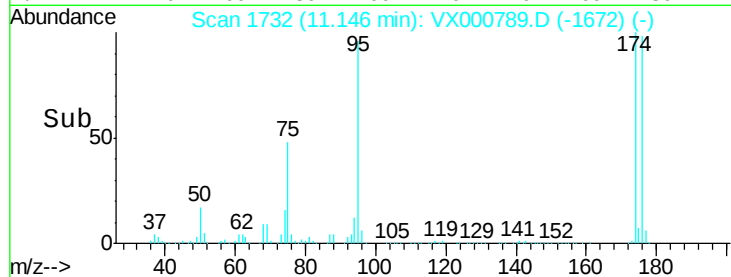
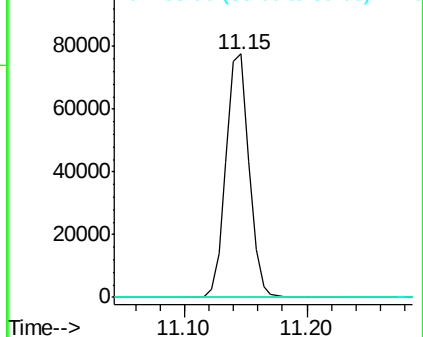
75 100

53 0.0 75.4 113.0#

89 0.0 40.9 61.3#



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



#95

Naphthalene

Concen: 0.42 ug/l

RT: 13.84 min Scan# 2174

Delta R.T. -0.00 min

Lab File: VX000789.D

Acq: 11 Apr 2018 19:46

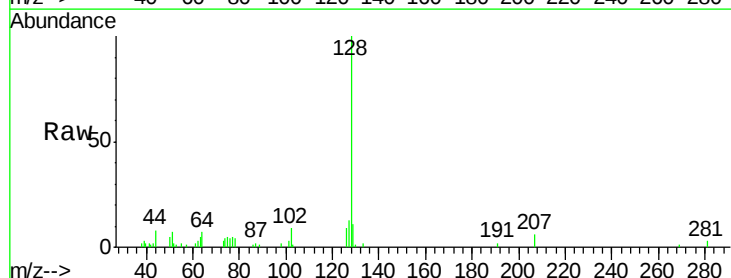
Tgt Ion: 128 Resp: 7496

Ion Ratio Lower Upper

128 100

127 13.6 10.4 15.6

129 11.4 8.7 13.1



Abundance Ion 128.00 (127.70 to 128.70): V  
Ion 127.00 (126.70 to 127.70): V  
Ion 129.00 (128.70 to 129.70): V

