

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX061518\  
 Data File : VX002607.D  
 Acq On : 15 Jun 2018 20:09  
 Operator : JC/MD  
 Sample : J3544-03  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 16 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 STORAGE BLANK-WATERREF-4

Quant Time: Jun 15 23:52:30 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X061518W.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Jun 15 14:54:36 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.67  | 168  | 217240   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.87  | 114  | 314653   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.12 | 117  | 294126   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 164071   | 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   | 151057   | 45.76 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 91.52% |          |
| 35) Dibromofluoromethane    | 5.51  | 113  | 114045   | 45.41 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 90.82% |          |
| 50) Toluene-d8              | 8.72  | 98   | 450693   | 47.27 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 94.54% |          |
| 62) 4-Bromofluorobenzene    | 11.14 | 95   | 159315   | 44.09 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 88.18% |          |

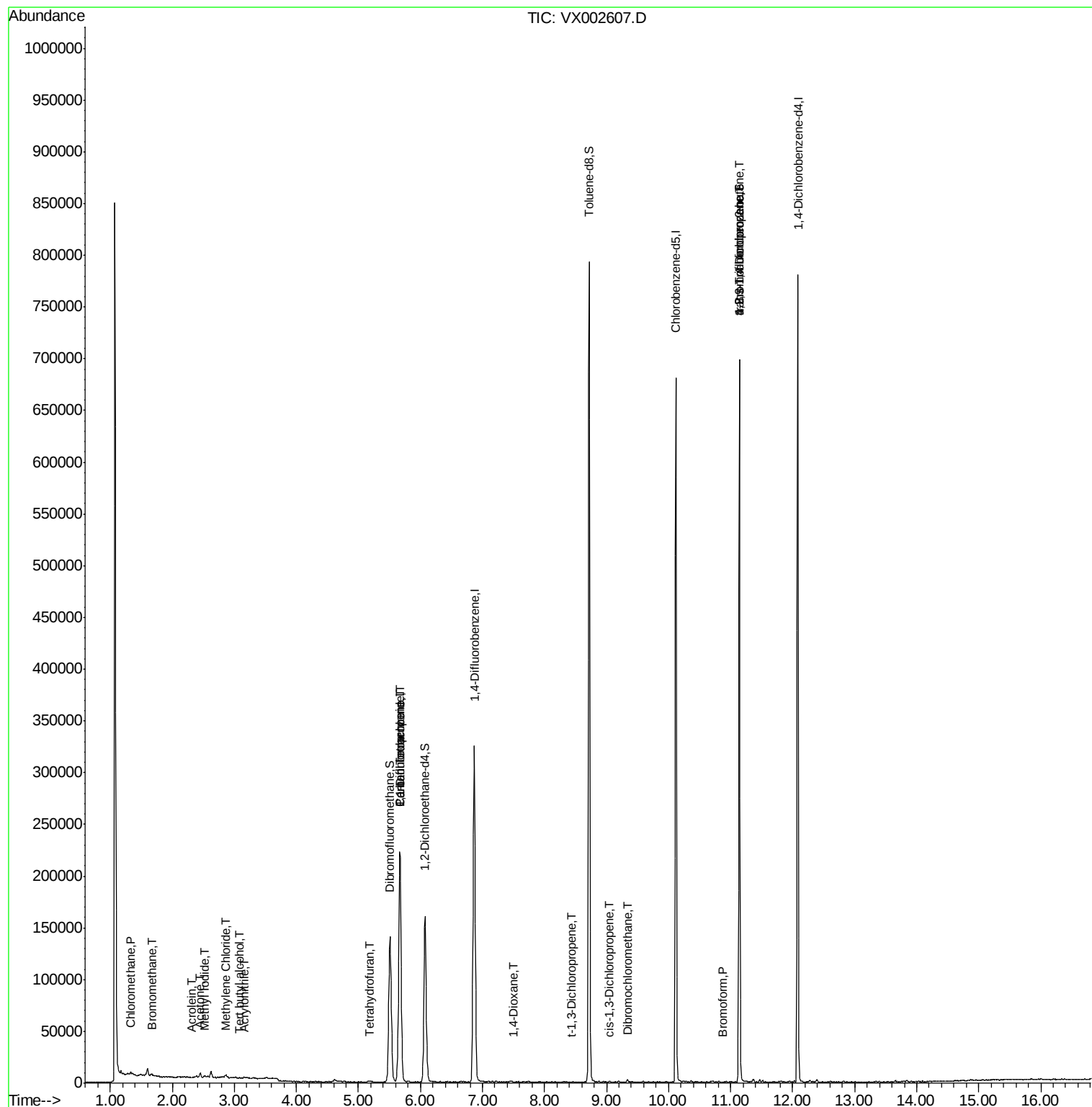
| Target Compounds               | R.T.  | QIon | Response | Conc  | Units  | Qvalue |
|--------------------------------|-------|------|----------|-------|--------|--------|
| 3) Chloromethane               | 1.33  | 50   | 941      | 0.34  | ug/l # | 85     |
| 5) Bromomethane                | 1.67  | 94   | 1608     | 0.94  | ug/l # | 79     |
| 10) Methyl Iodide              | 2.53  | 142  | 2001     | 5.70  | ug/l # | 88     |
| 11) Tert butyl alcohol         | 3.08  | 59   | 429      | 0.63  | ug/l # | 87     |
| 13) Acrolein                   | 2.30  | 56   | 195      | 7.46  | ug/l   | 88     |
| 15) Acrylonitrile              | 3.15  | 53   | 399      | 0.27  | ug/l # | 55     |
| 16) Acetone                    | 2.45  | 43   | 5147     | 3.53  | ug/l   | 98     |
| 20) Methylene Chloride         | 2.86  | 84   | 1251     | 0.42  | ug/l # | 90     |
| 29) Tetrahydrofuran            | 5.18  | 42   | 992      | 0.79  | ug/l # | 78     |
| 36) 1,1-Dichloropropene        | 5.66  | 75   | 16307    | 4.88  | ug/l # | 50     |
| 38) Carbon Tetrachloride       | 5.67  | 117  | 20634    | 6.20  | ug/l # | 15     |
| 49) 1,4-Dioxane                | 7.49  | 88   | 19       | 0.31  | ug/l # | 22     |
| 53) t-1,3-Dichloropropene      | 8.44  | 75   | 109      | 2.42  | ug/l # | 43     |
| 54) cis-1,3-Dichloropropene    | 9.06  | 75   | 148      | 3.25  | ug/l # | 76     |
| 60) Dibromochloromethane       | 9.34  | 129  | 154      | 3.81  | ug/l # | 11     |
| 71) Bromoform                  | 10.87 | 173  | 44       | 4.86  | ug/l # | 28     |
| 76) 1,2,3-Trichloropropane     | 11.14 | 75   | 87014    | 28.11 | ug/l # | 33     |
| 81) trans-1,4-Dichloro-2-buten | 11.14 | 75   | 87014    | 86.59 | ug/l # | 6      |

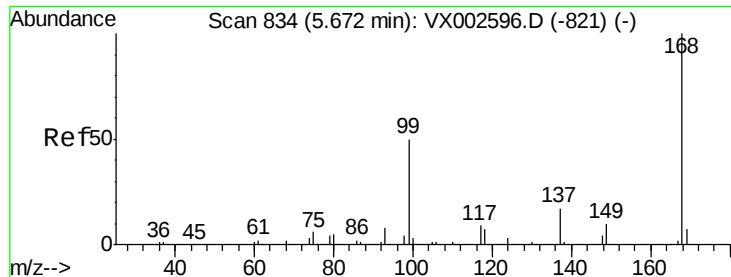
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA X\DATA\VX061518\  
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STORAGEBLANK-WATERREF-4

Quant Time: Jun 15 23:52:30 2018  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X061518W.M  
Quant Title : SW846 8260  
QLast Update : Fri Jun 15 14:54:36 2018  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.00 ug/l

RT: 5.67 min Scan# 833

Delta R.T. -0.01 min

Lab File: VX002607.D

Acq: 15 Jun 2018 20:09

Instrument :

MSVOA\_X

ClientSampleId :

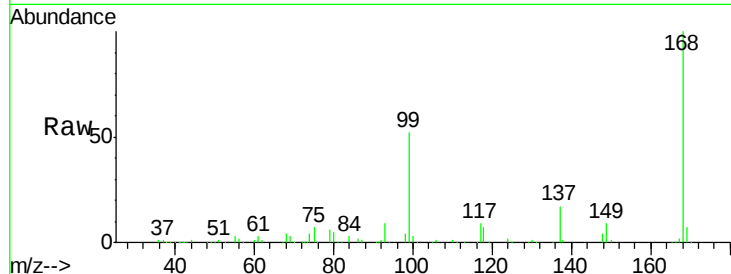
STORAGEBLANK-WATERREF-4

Tot Ion:168 Resp: 217240

Ion Ratio Lower Upper

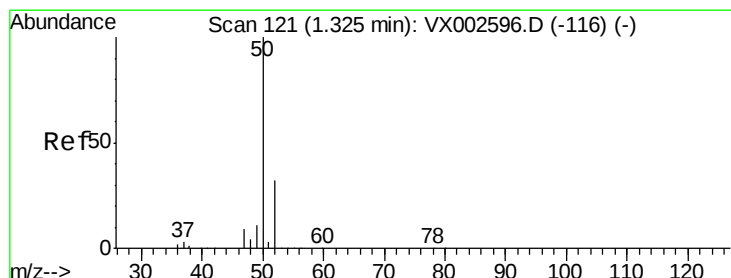
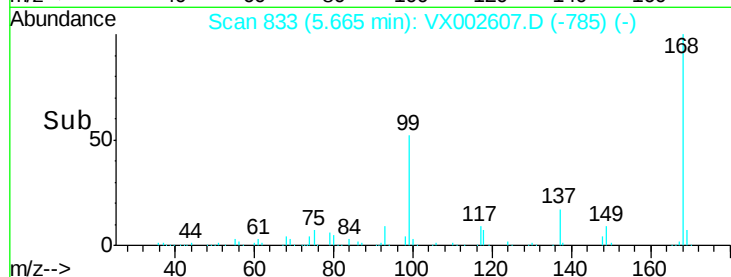
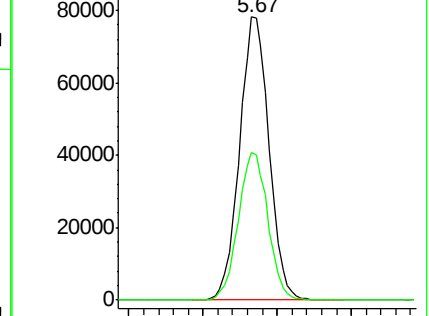
168 100

99 52.2 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: 0.34 ug/l

RT: 1.33 min Scan# 122

Delta R.T. 0.01 min

Lab File: VX002607.D

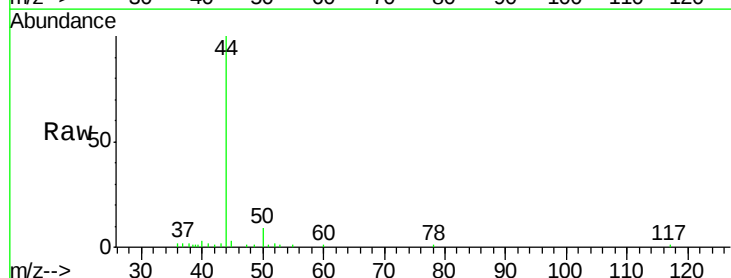
Acq: 15 Jun 2018 20:09

Tgt Ion: 50 Resp: 941

Ion Ratio Lower Upper

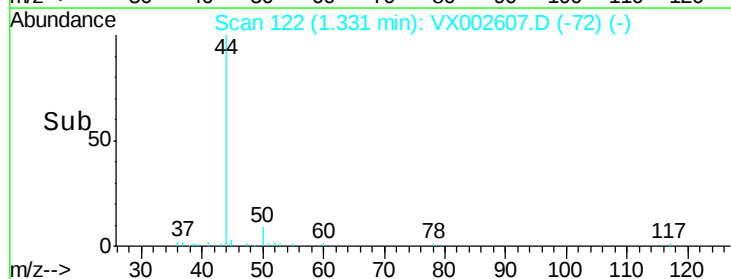
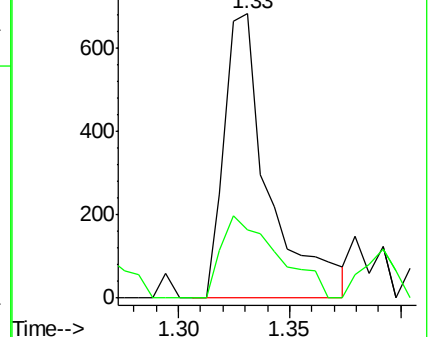
50 100

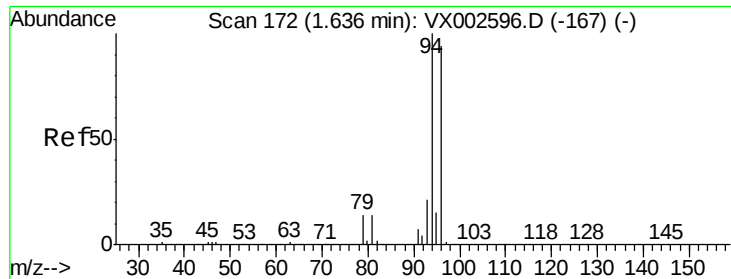
52 23.8 25.7 38.5#



Abundance Ion 49.90 (49.60 to 50.60): VX0

Ion 51.90 (51.60 to 52.60): VX0





#5

Bromomethane

Concen: 0.94 ug/l

RT: 1.67 min Scan# 177

Delta R.T. 0.03 min

Lab File: VX002607.D

Acq: 15 Jun 2018 20:09

Instrument :

MSVOA\_X

ClientSampleId :

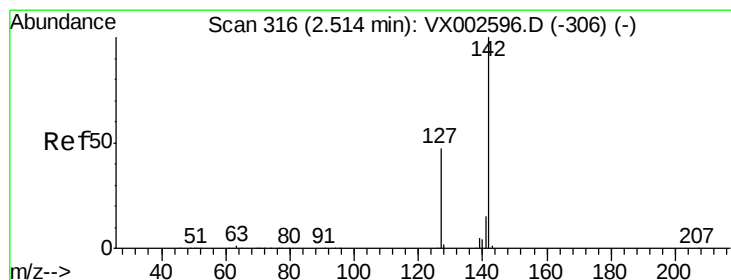
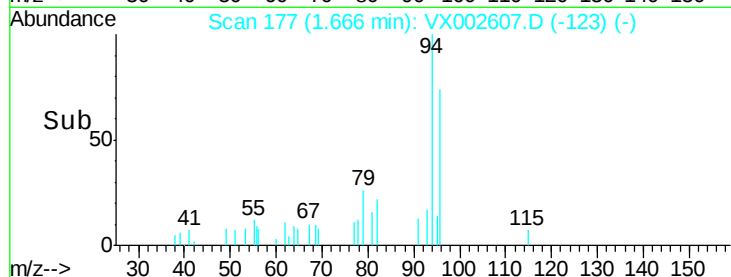
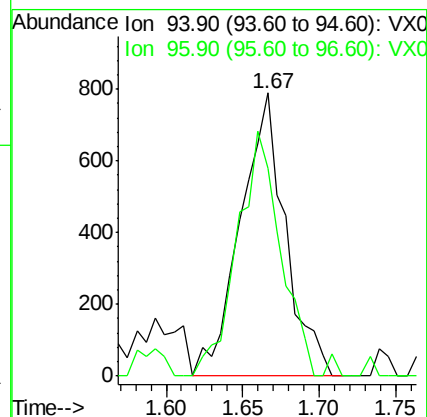
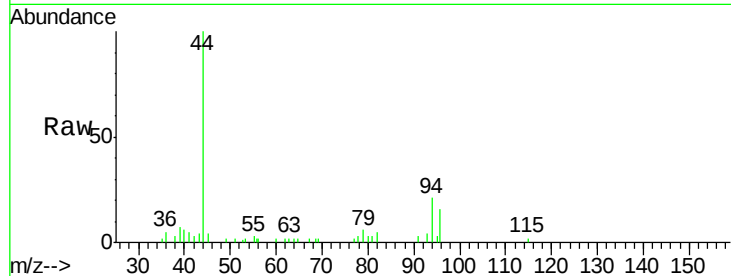
STORAGEBLANK-WATERREF-4

Tot Ion: 94 Resp: 1608

Ion Ratio Lower Upper

94 100

96 73.6 74.9 112.3#



#10

Methyl Iodide

Concen: 5.70 ug/l

RT: 2.53 min Scan# 318

Delta R.T. 0.01 min

Lab File: VX002607.D

Acq: 15 Jun 2018 20:09

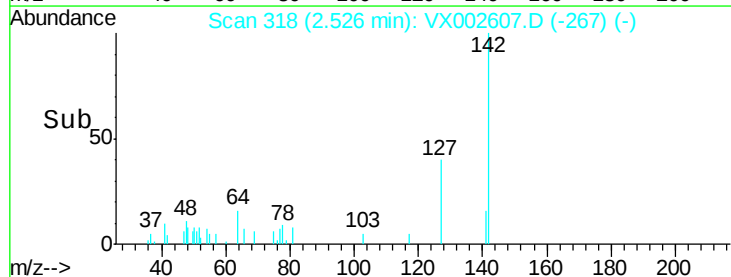
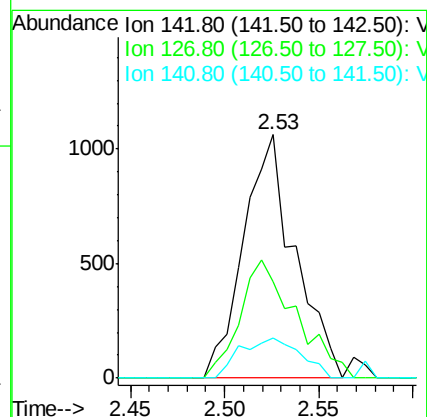
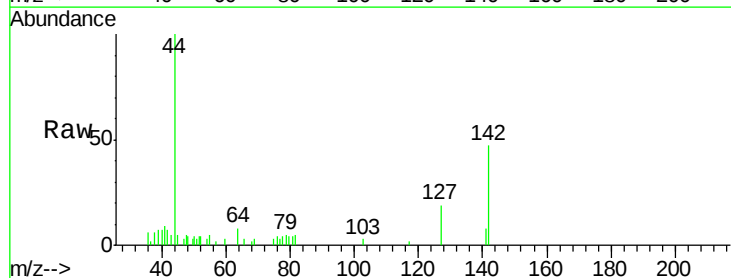
Tgt Ion:142 Resp: 2001

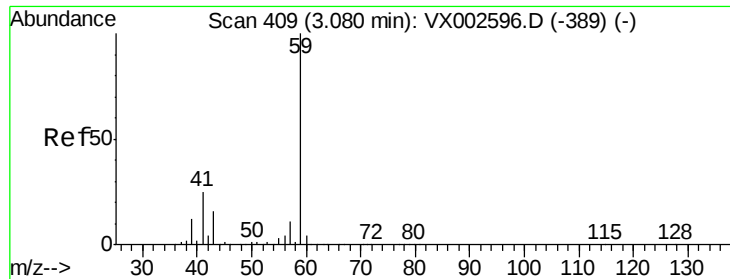
Ion Ratio Lower Upper

142 100

127 53.3 36.6 55.0

141 19.4 11.3 16.9#

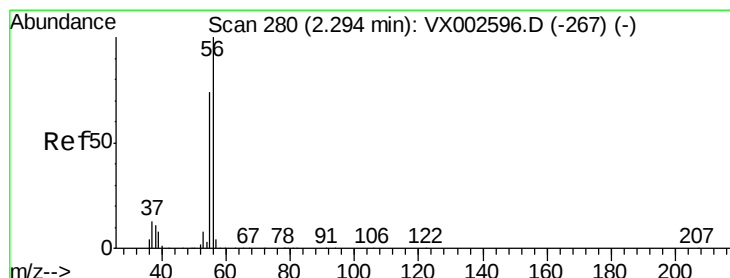
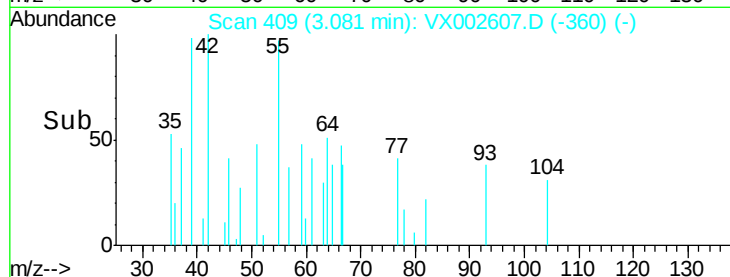
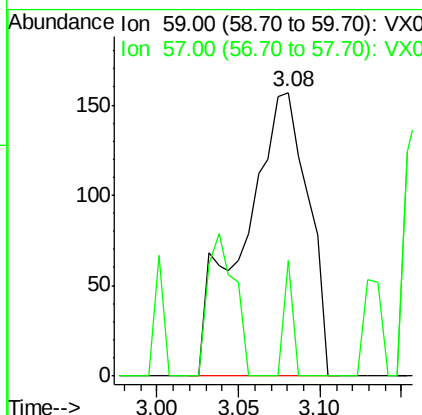
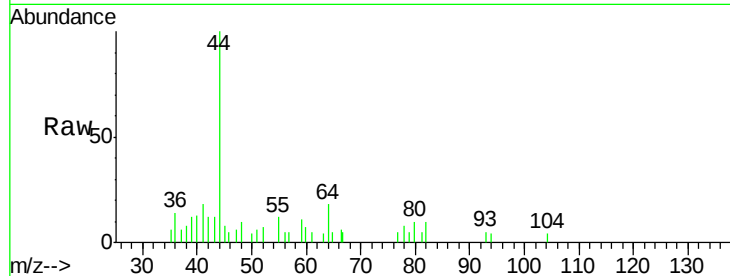




#11  
Tert butyl alcohol  
Concen: 0.63 ug/l  
RT: 3.08 min Scan# 409  
Delta R.T. 0.00 min  
Lab File: VX002607.D  
Acq: 15 Jun 2018 20:09

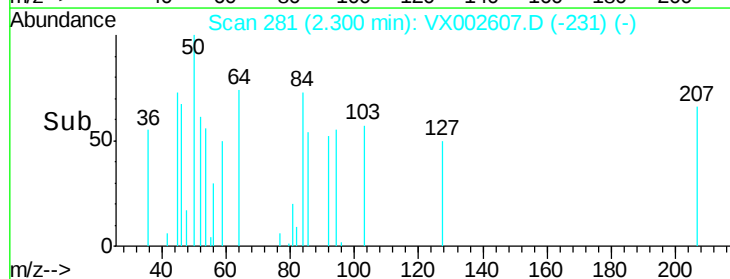
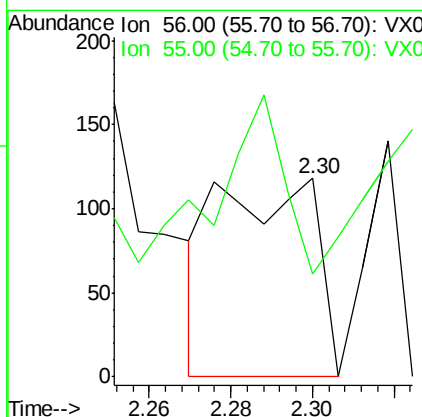
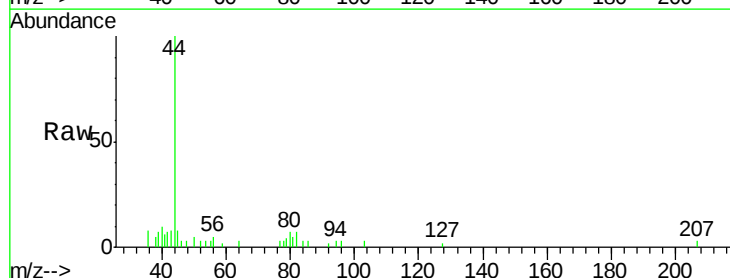
Instrument :  
MSVOA\_X  
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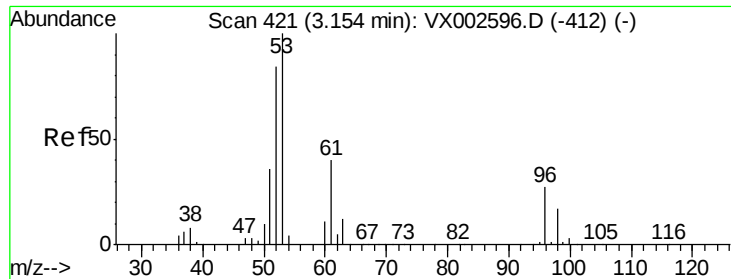
Tot Ion: 59 Resp: 429  
Ion Ratio Lower Upper  
59 100  
57 5.4 8.2 12.2#



#13  
Acrolein  
Concen: 7.46 ug/l  
RT: 2.30 min Scan# 281  
Delta R.T. 0.01 min  
Lab File: VX002607.D  
Acq: 15 Jun 2018 20:09

Tgt Ion: 56 Resp: 195  
Ion Ratio Lower Upper  
56 100  
55 61.5 57.0 85.4

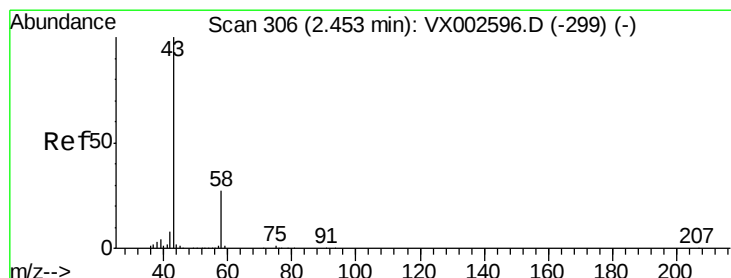
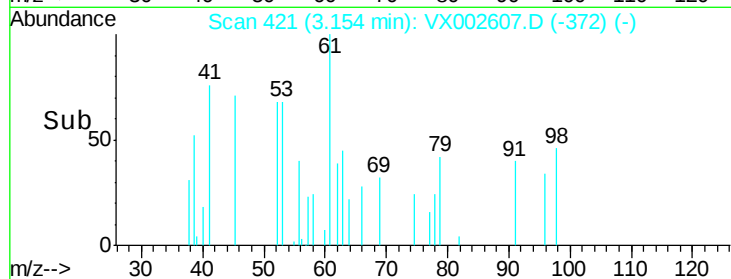
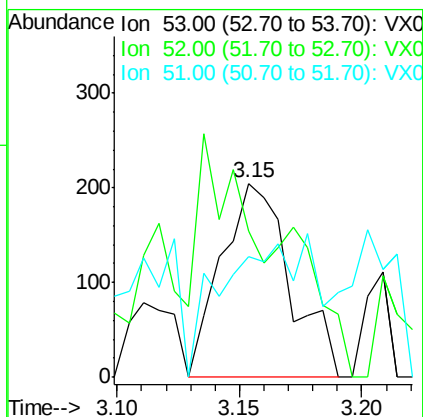
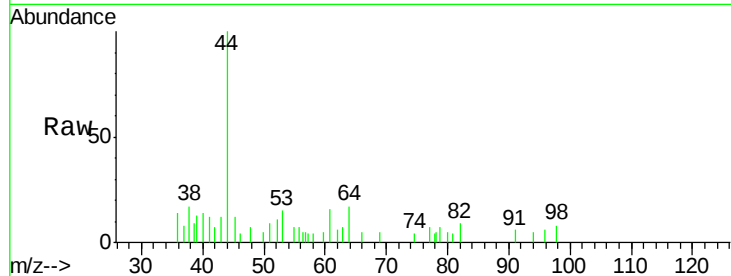




#15  
 Acrylonitrile  
 Concen: 0.27 ug/l  
 RT: 3.15 min Scan# 421  
 Delta R.T. 0.00 min  
 Lab File: VX002607.D  
 Acq: 15 Jun 2018 20:09

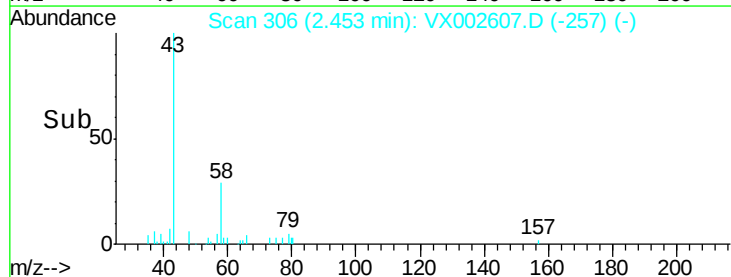
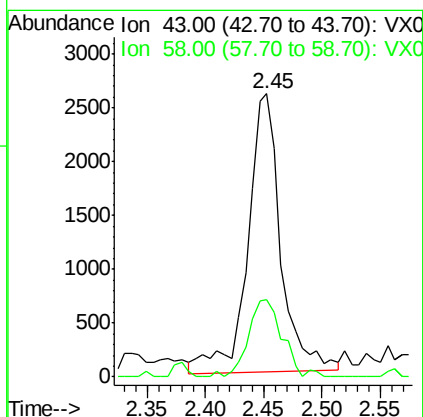
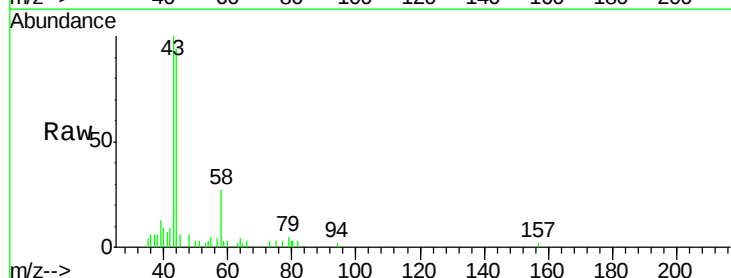
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
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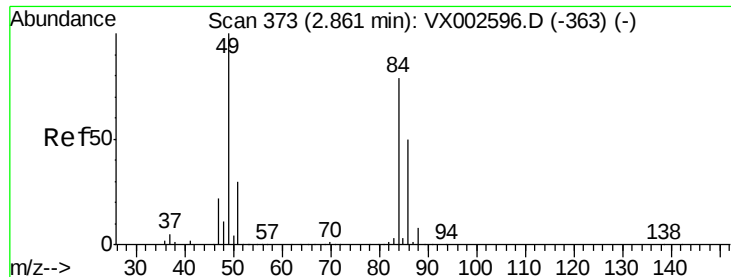
Tot Ion: 53 Resp: 399  
 Ion Ratio Lower Upper  
 53 100  
 52 49.6 66.7 100.1#  
 51 0.0 29.9 44.9#



#16  
 Acetone  
 Concen: 3.53 ug/l  
 RT: 2.45 min Scan# 306  
 Delta R.T. 0.00 min  
 Lab File: VX002607.D  
 Acq: 15 Jun 2018 20:09

Tgt Ion: 43 Resp: 5147  
 Ion Ratio Lower Upper  
 43 100  
 58 28.5 22.1 33.1

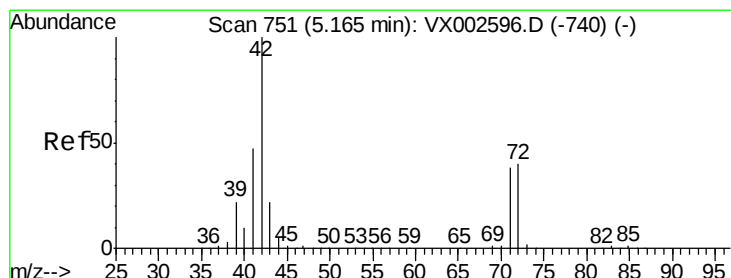
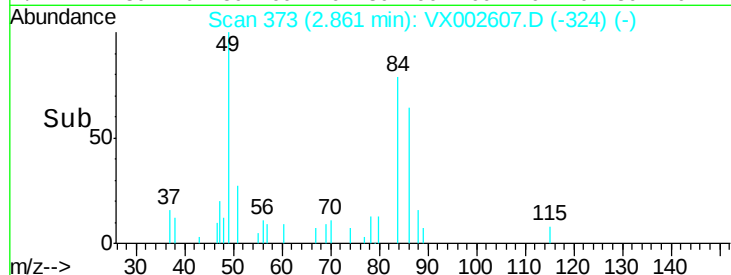
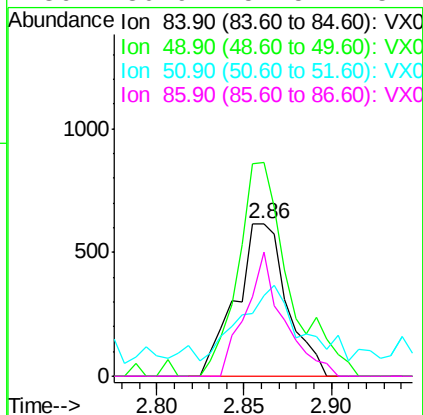
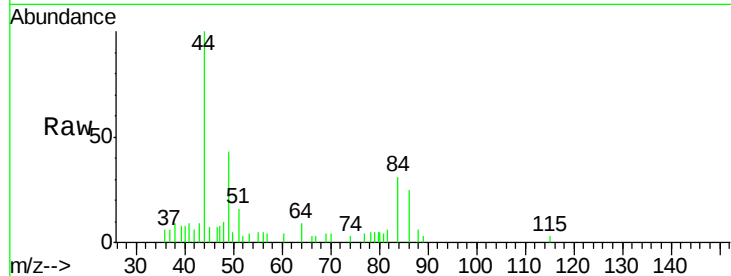




#20  
Methvlene Chloride  
Concen: 0.42 ug/l  
RT: 2.86 min Scan# 373  
Delta R.T. 0.00 min  
Lab File: VX002607.D  
Acq: 15 Jun 2018 20:09

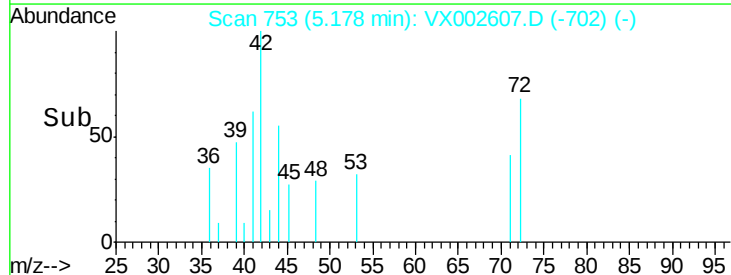
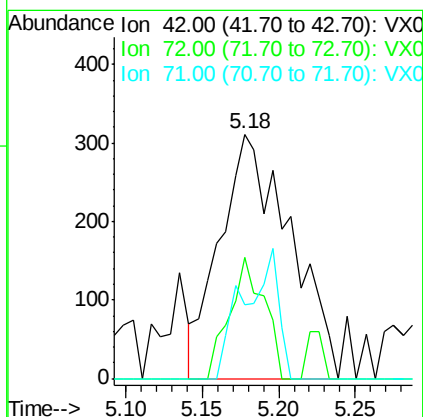
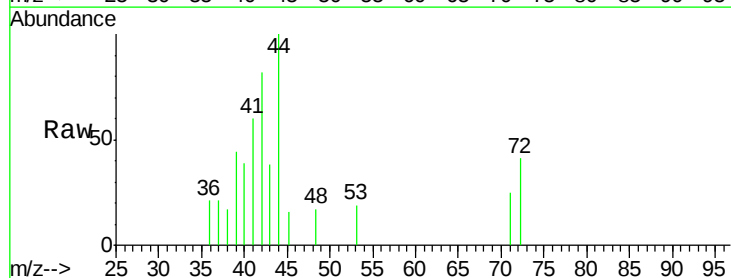
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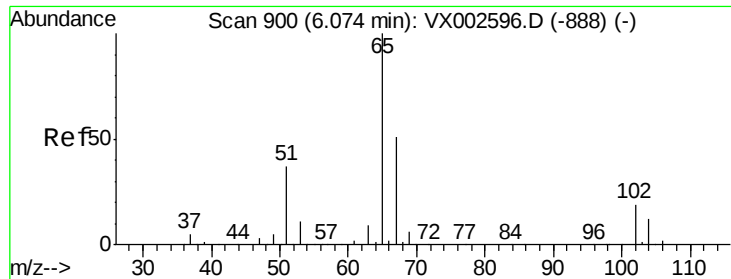
Tot Ion: 84 Resp: 1251  
Ion Ratio Lower Upper  
84 100  
49 139.6 107.8 161.6  
51 32.7 32.8 49.2#  
86 80.9 52.5 78.7#



#29  
Tetrahydrofuran  
Concen: 0.79 ug/l  
RT: 5.18 min Scan# 753  
Delta R.T. 0.01 min  
Lab File: VX002607.D  
Acq: 15 Jun 2018 20:09

Tgt Ion: 42 Resp: 992  
Ion Ratio Lower Upper  
42 100  
72 24.4 32.0 48.0#  
71 26.3 30.1 45.1#





#33

1,2-Dichloroethane-d4

Concen: 45.76 ug/l

RT: 6.07 min Scan# 900

Delta R.T. 0.00 min

Lab File: VX002607.D

Acq: 15 Jun 2018 20:09

Instrument :

MSVOA\_X

ClientSampleId :

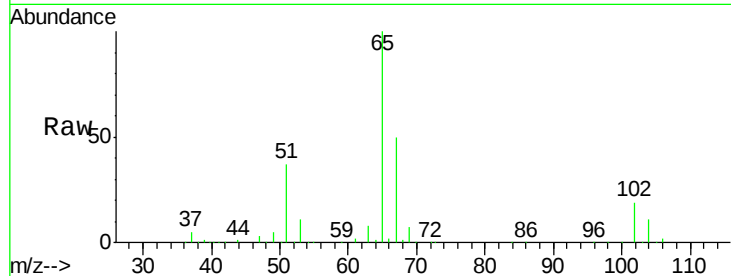
STORAGEBLANK-WATERREF-4

Tot Ion: 65 Resp: 151057

Ion Ratio Lower Upper

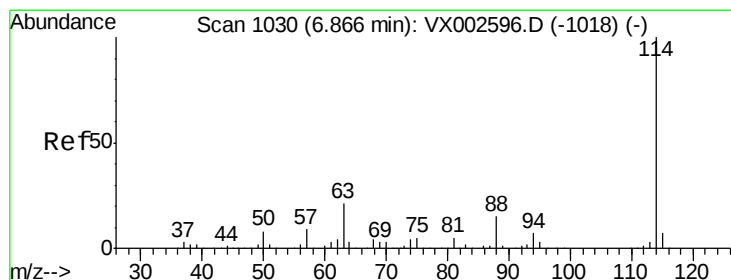
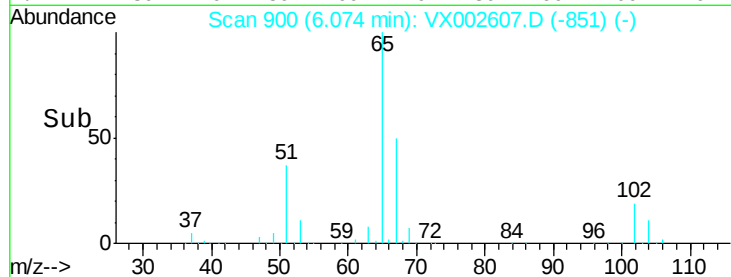
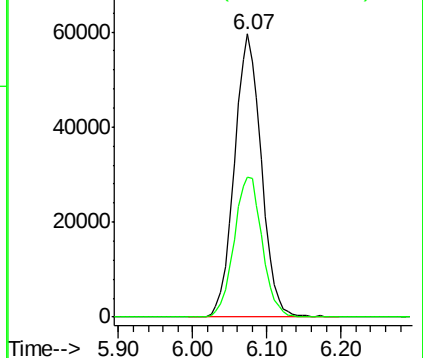
65 100

67 51.7 0.0 102.6



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# 1030

Delta R.T. 0.00 min

Lab File: VX002607.D

Acq: 15 Jun 2018 20:09

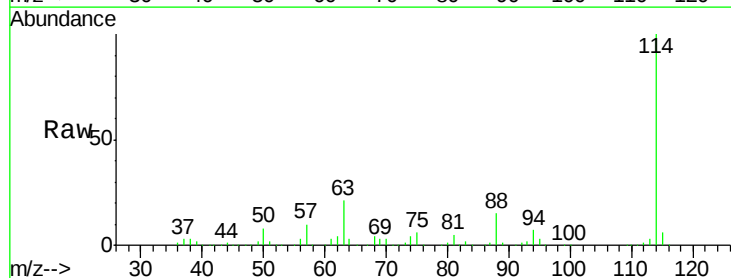
Tgt Ion: 114 Resp: 314653

Ion Ratio Lower Upper

114 100

63 21.2 0.0 41.4

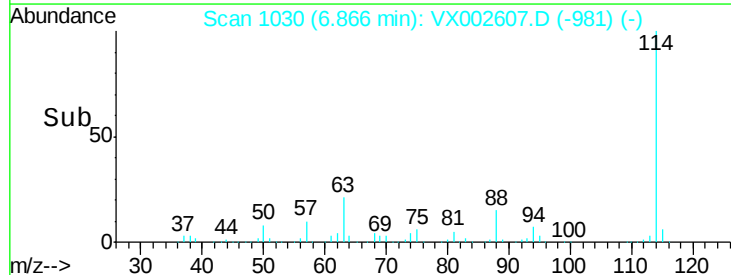
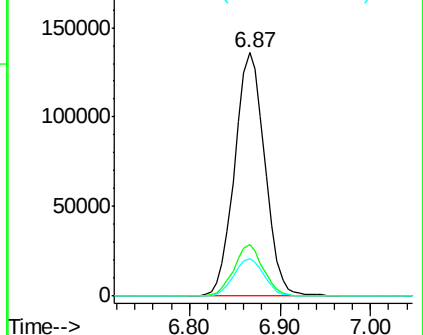
88 15.5 0.0 30.0

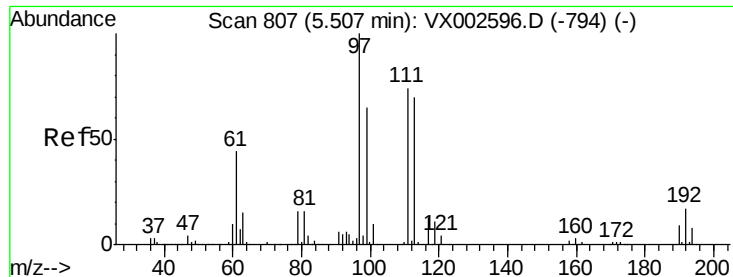


Abundance Ion 113.90 (113.60 to 114.60): V

Ion 63.00 (62.70 to 63.70): VX0

Ion 87.90 (87.60 to 88.60): VX0





#35

Dibromofluoromethane

Concen: 45.41 ug/l

RT: 5.51 min Scan# 807

Delta R.T. 0.00 min

Lab File: VX002607.D

Acq: 15 Jun 2018 20:09

Instrument :

MSVOA\_X

ClientSampleId :

STORAGEBLANK-WATERREF-4

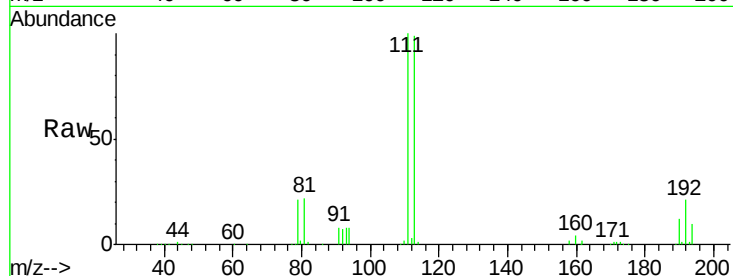
Tot Ion:113 Resp: 114045

Ion Ratio Lower Upper

113 100

111 102.8 81.4 122.0

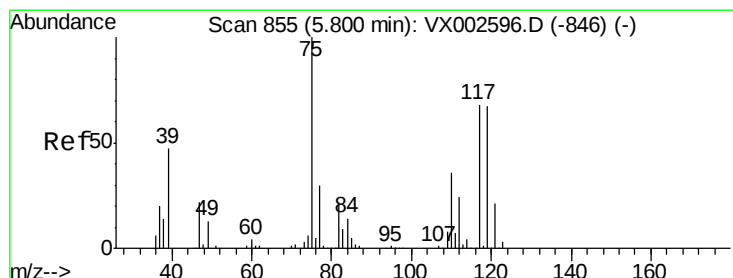
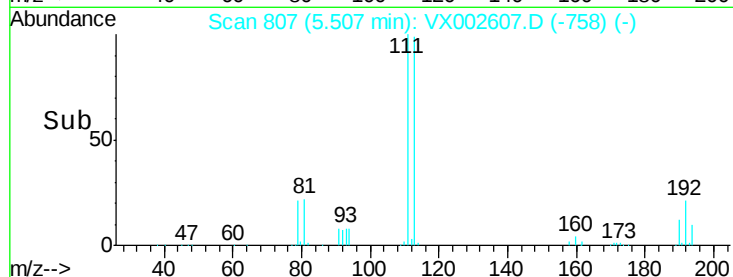
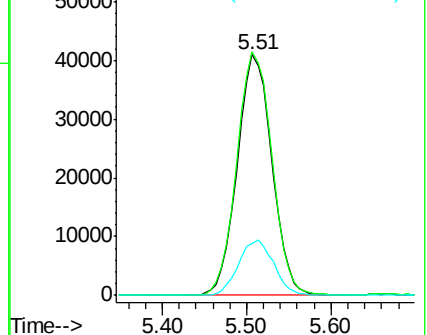
192 23.2 19.1 28.7



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: 4.88 ug/l

RT: 5.66 min Scan# 832

Delta R.T. -0.14 min

Lab File: VX002607.D

Acq: 15 Jun 2018 20:09

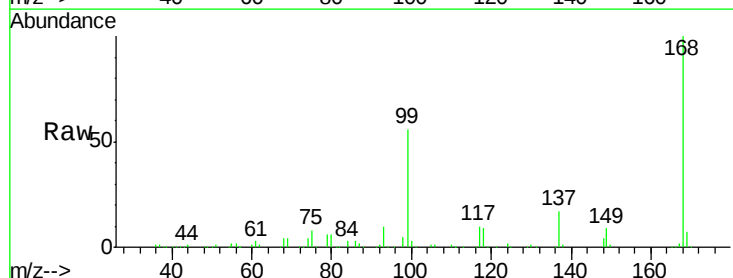
Tgt Ion: 75 Resp: 16307

Ion Ratio Lower Upper

75 100

110 9.3 18.1 54.4#

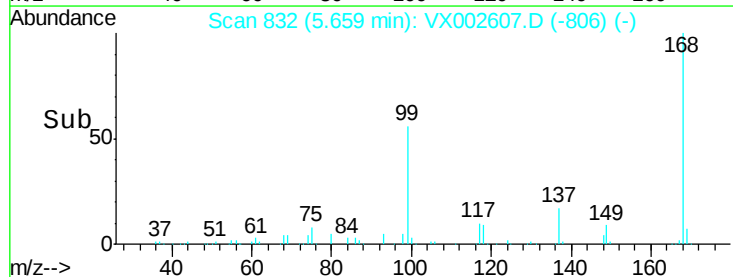
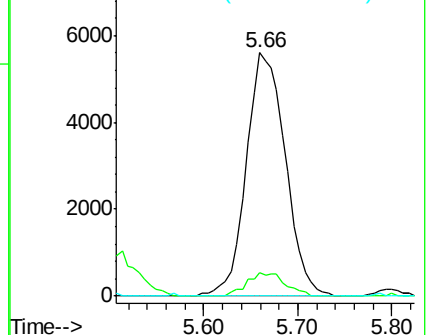
77 0.0 24.3 36.5#

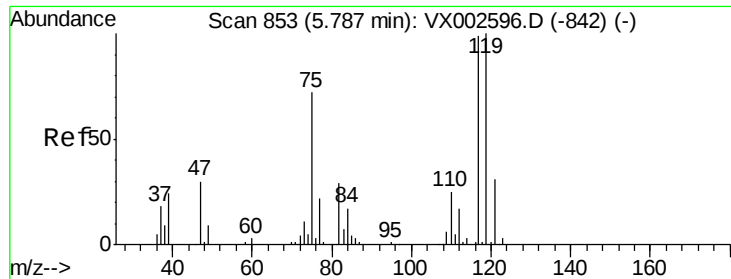


Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 109.90 (109.60 to 110.60): V

Ion 76.90 (76.60 to 77.60): VX0





#38

Carbon Tetrachloride

Concen: 6.20 ug/l

RT: 5.67 min Scan# 833

Delta R.T. -0.12 min

Lab File: VX002607.D

Acq: 15 Jun 2018 20:09

Instrument :

MSVOA\_X

ClientSampleId :

STORAGEBLANK-WATERREF-4

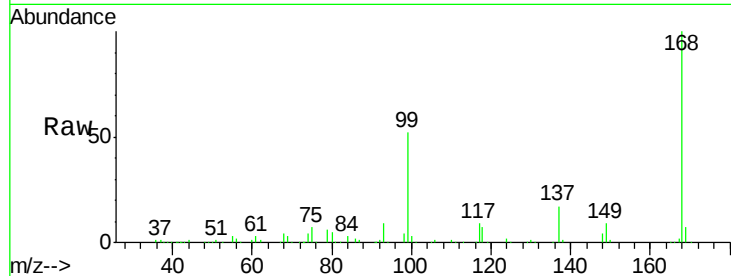
Tot Ion:117 Resp: 20634

Ion Ratio Lower Upper

117 100

119 4.6 77.4 116.0#

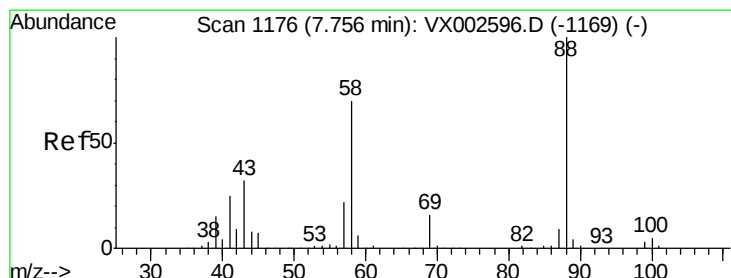
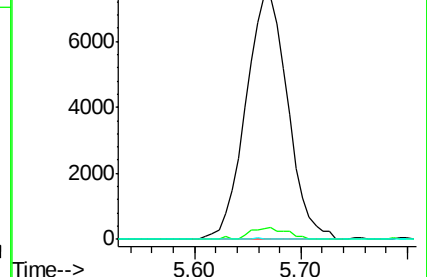
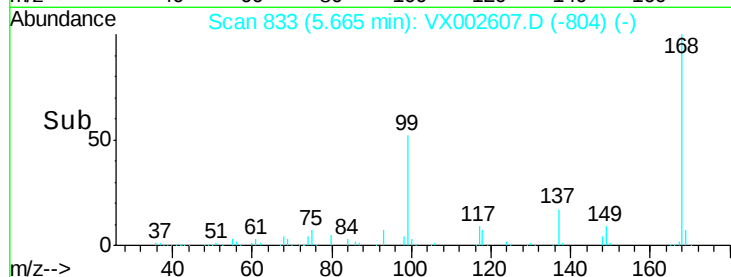
121 0.0 24.4 36.6#



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



#49

1,4-Dioxane

Concen: 0.31 ug/l

RT: 7.49 min Scan# 1133

Delta R.T. -0.26 min

Lab File: VX002607.D

Acq: 15 Jun 2018 20:09

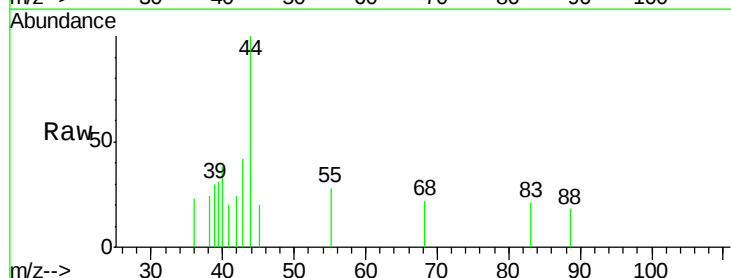
Tgt Ion: 88 Resp: 19

Ion Ratio Lower Upper

88 100

43 0.0 29.8 44.6#

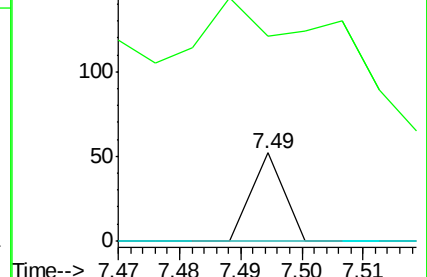
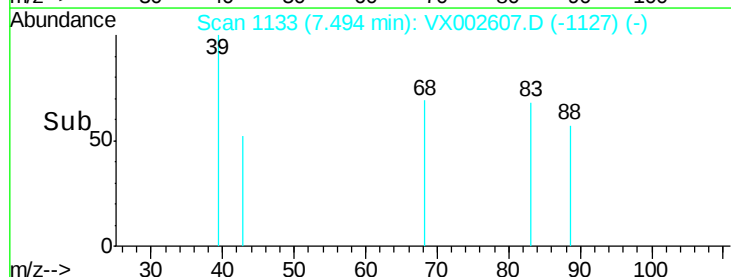
58 0.0 57.1 85.7#

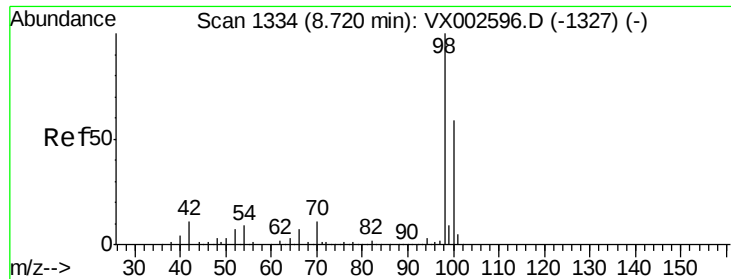


Abundance Ion 88.00 (87.70 to 88.70): VX0

Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0





#50

Toluene-d8

Concen: 47.27 ug/l

RT: 8.72 min Scan# 1334

Delta R.T. 0.00 min

Lab File: VX002607.D

Acq: 15 Jun 2018 20:09

Instrument :

MSVOA\_X

ClientSampleId :

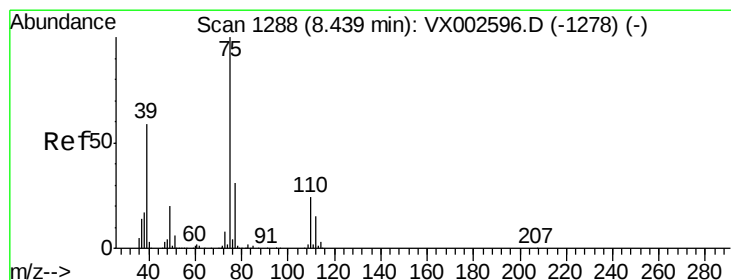
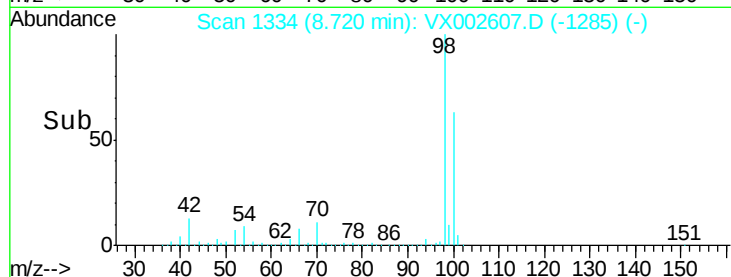
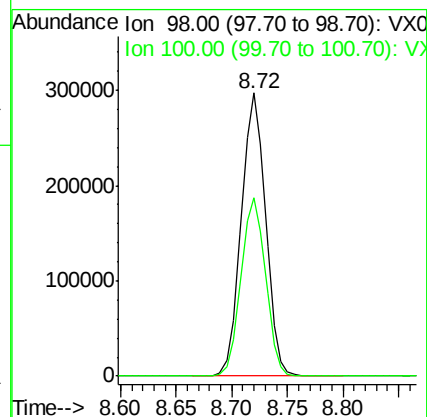
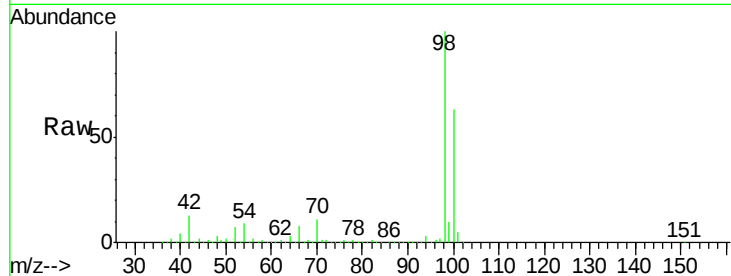
STORAGEBLANK-WATERREF-4

Tot Ion: 98 Resp: 450693

Ion Ratio Lower Upper

98 100

100 63.7 50.9 76.3



#53

t-1,3-Dichloropropene

Concen: 2.42 ug/l

RT: 8.44 min Scan# 1288

Delta R.T. 0.00 min

Lab File: VX002607.D

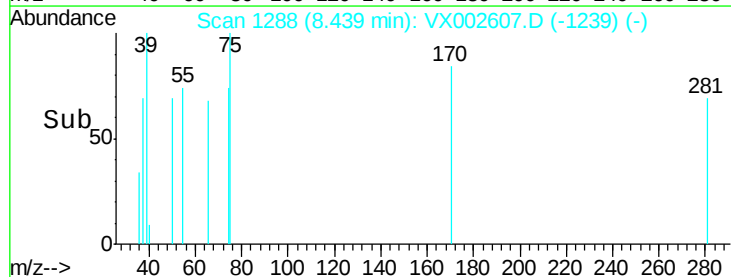
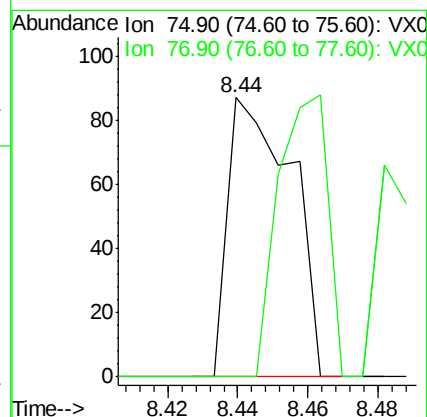
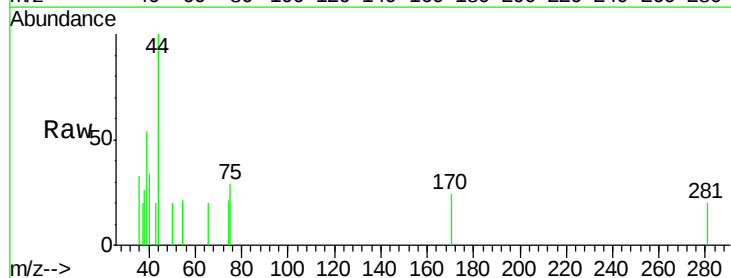
Acq: 15 Jun 2018 20:09

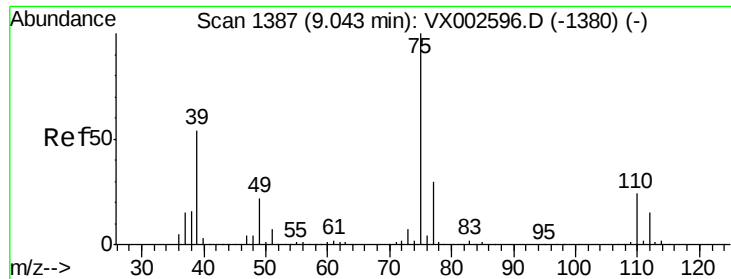
Tgt Ion: 75 Resp: 109

Ion Ratio Lower Upper

75 100

77 0.0 25.4 38.2#



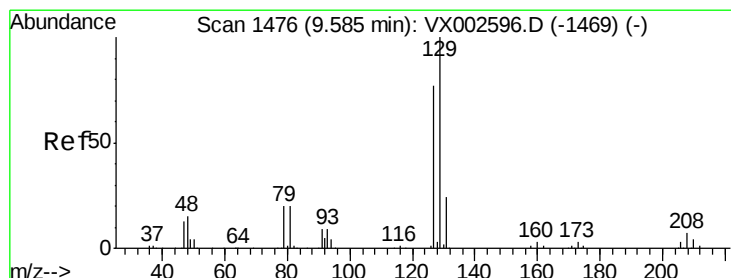
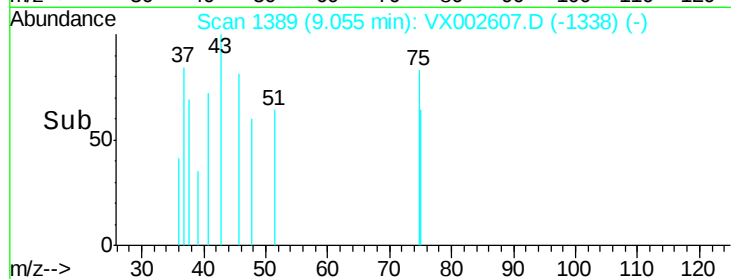
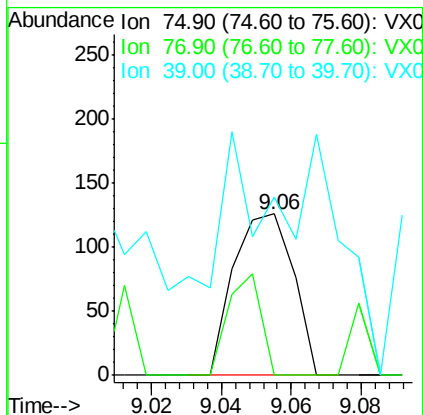
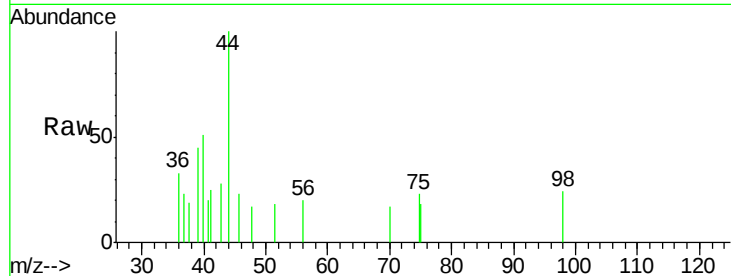


#54

cis-1,3-Dichloropropene  
Concen: 3.25 ug/l  
RT: 9.06 min Scan# 1389  
Delta R.T. 0.01 min  
Lab File: VX002607.D  
Acq: 15 Jun 2018 20:09

Instrument :  
MSVOA\_X  
ClientSampleId :  
STORAGEBLANK-WATERREF-4

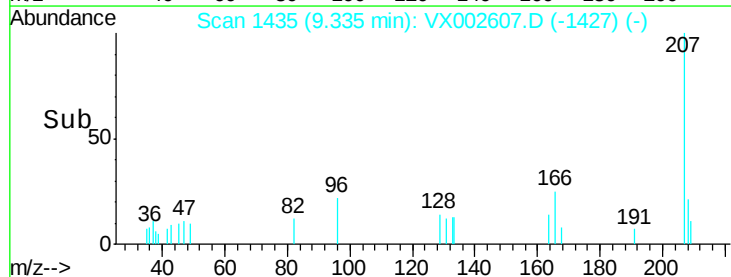
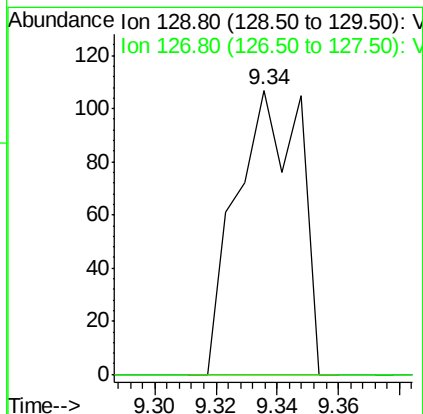
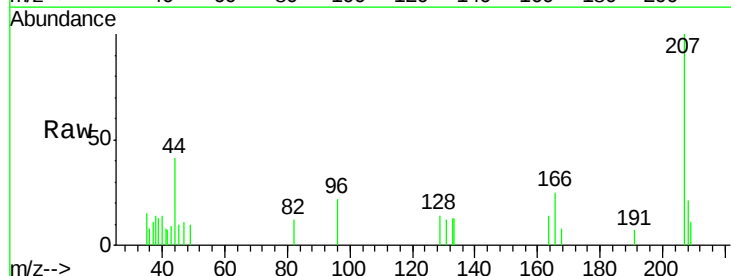
Tot Ion: 75 Resp: 148  
Ion Ratio Lower Upper  
75 100  
77 0.0 24.8 37.2#  
39 49.2 42.4 63.6

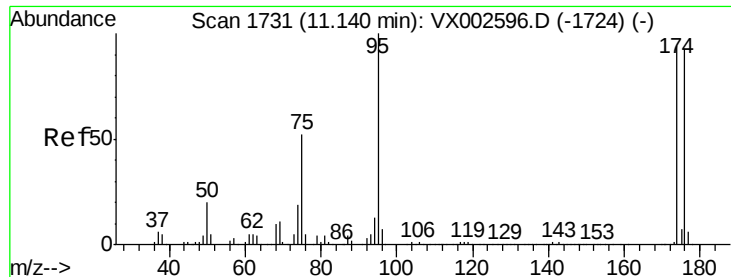


#60

Dibromochloromethane  
Concen: 3.81 ug/l  
RT: 9.34 min Scan# 1435  
Delta R.T. -0.25 min  
Lab File: VX002607.D  
Acq: 15 Jun 2018 20:09

Tgt Ion: 129 Resp: 154  
Ion Ratio Lower Upper  
129 100  
127 0.0 38.5 115.3#

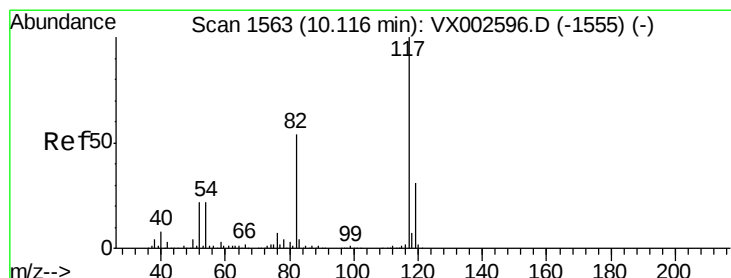
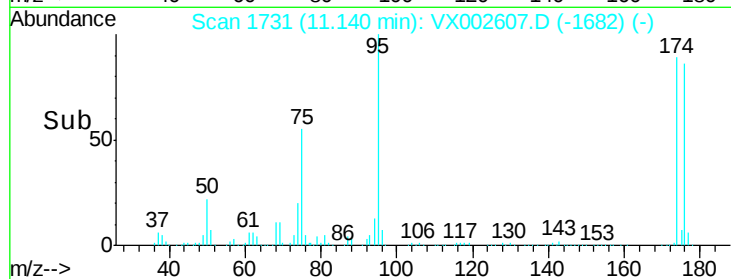
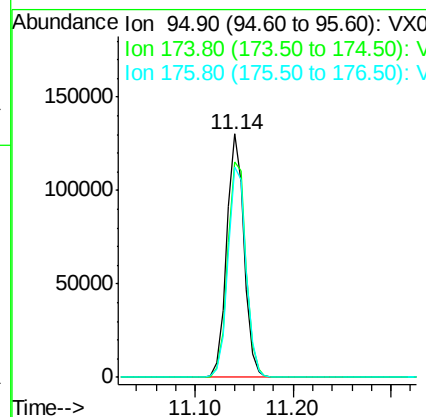
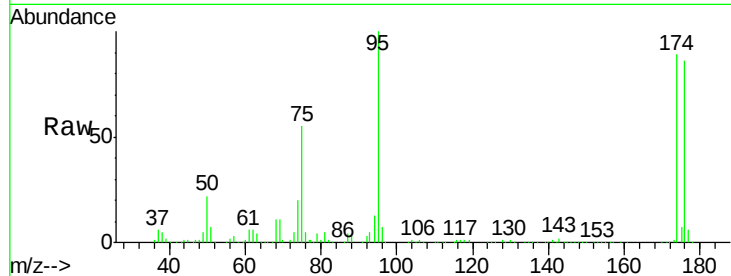




#62  
4-Bromofluorobenzene  
Concen: 44.09 ug/l  
RT: 11.14 min Scan# 1731  
Delta R.T. 0.00 min  
Lab File: VX002607.D  
Acq: 15 Jun 2018 20:09

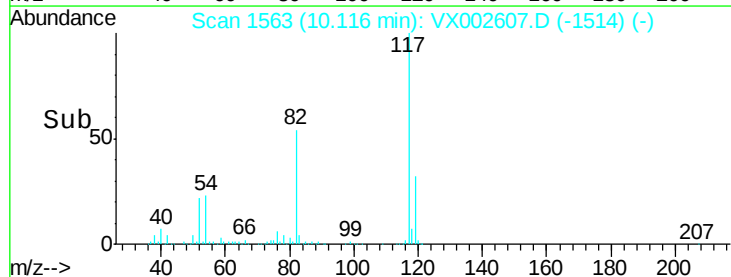
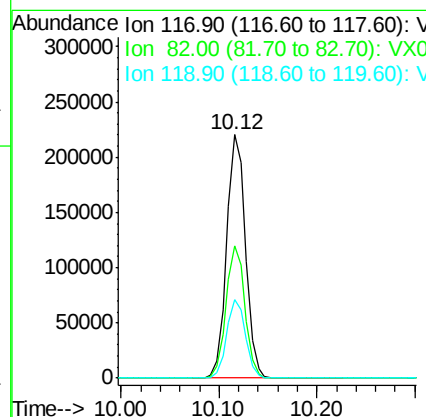
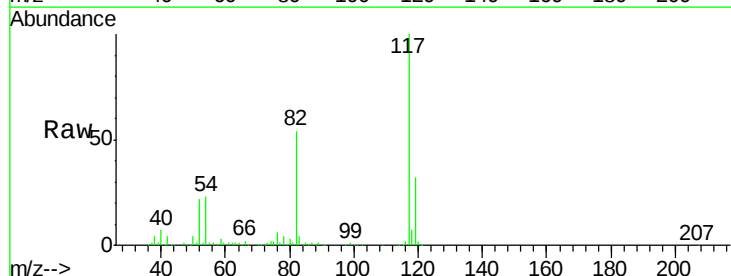
Instrument :  
MSVOA\_X  
ClientSampleId :  
STORAGEBLANK-WATERREF-4

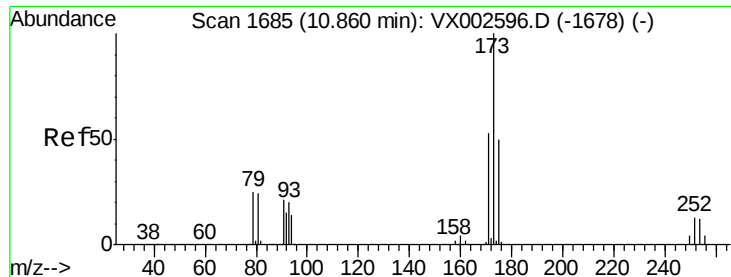
Tot Ion: 95 Resp: 159315  
Ion Ratio Lower Upper  
95 100  
174 94.0 0.0 187.4  
176 90.6 0.0 181.0



#63  
Chlorobenzene-d5  
Concen: 50.00 ug/l  
RT: 10.12 min Scan# 1563  
Delta R.T. 0.00 min  
Lab File: VX002607.D  
Acq: 15 Jun 2018 20:09

Tgt Ion: 117 Resp: 294126  
Ion Ratio Lower Upper  
117 100  
82 54.1 45.0 67.4  
119 32.1 25.8 38.6

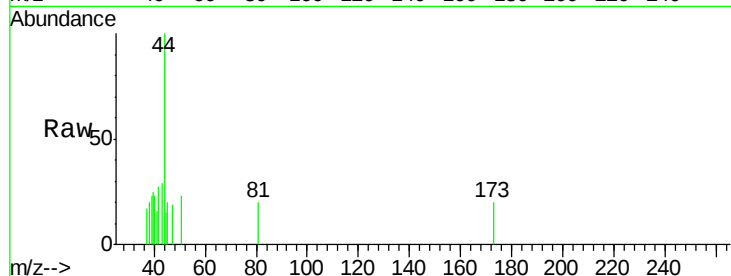




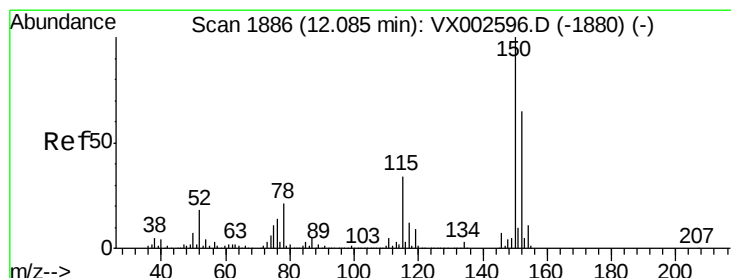
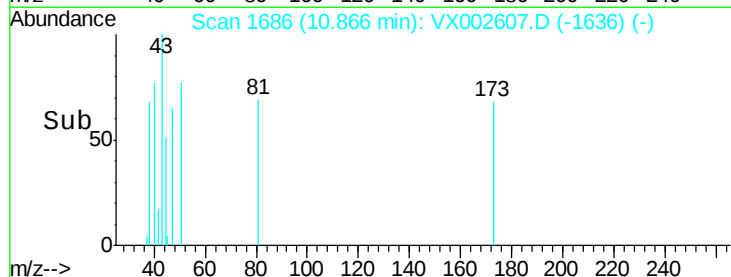
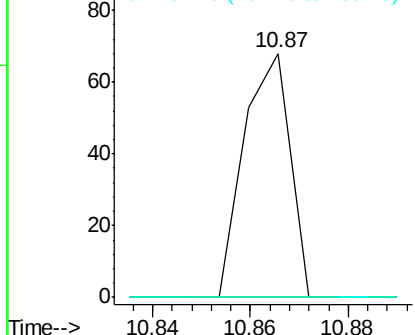
#71  
Bromoform  
Concen: 4.86 ug/l  
RT: 10.87 min Scan# 1686  
Delta R.T. 0.01 min  
Lab File: VX002607.D  
Acq: 15 Jun 2018 20:09

Instrument :  
MSVOA\_X  
ClientSampleId :  
STORAGEBLANK-WATERREF-4

Tot Ion:173 Resp: 44  
Ion Ratio Lower Upper  
173 100  
175 0.0 24.7 74.1#  
254 0.0 0.2 0.2#

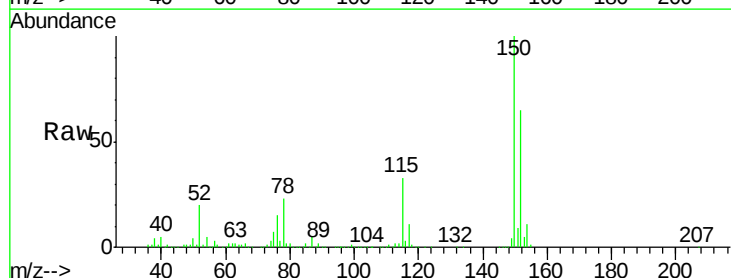


Abundance Ion 172.70 (172.40 to 173.40): V  
Ion 174.70 (174.40 to 175.40): V  
Ion 254.40 (254.10 to 255.10): V

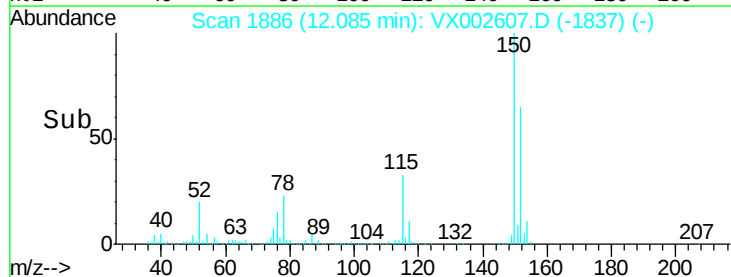
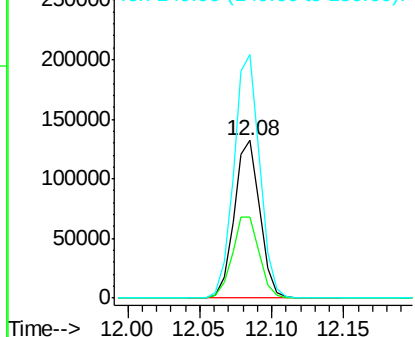


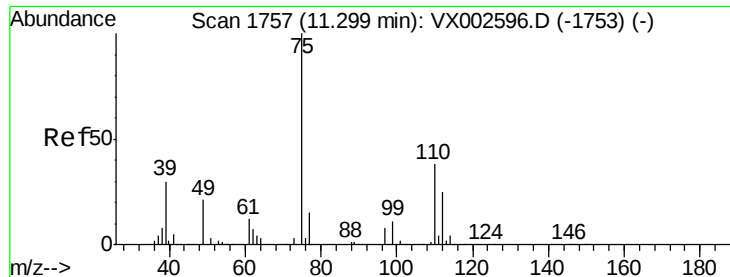
#72  
1,4-Dichlorobenzene-d4  
Concen: 50.00 ug/l  
RT: 12.08 min Scan# 1886  
Delta R.T. 0.00 min  
Lab File: VX002607.D  
Acq: 15 Jun 2018 20:09

Tgt Ion:152 Resp: 164071  
Ion Ratio Lower Upper  
152 100  
115 54.5 40.1 120.2  
150 156.7 0.0 347.2



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: 28.11 ug/l

RT: 11.14 min Scan# 1731

Delta R.T. -0.16 min

Lab File: VX002607.D

Acq: 15 Jun 2018 20:09

Instrument :

MSVOA\_X

ClientSampleId :

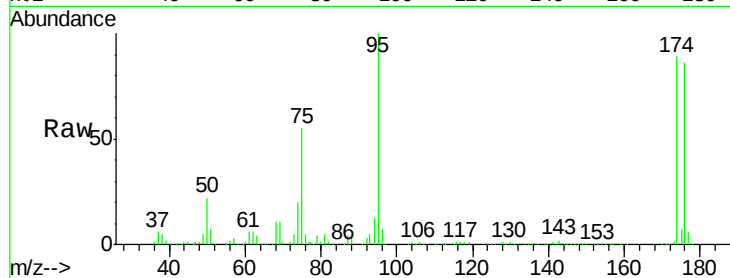
STORAGEBLANK-WATERREF-4

Tot Ion: 75 Resp: 87014

Ion Ratio Lower Upper

75 100

77 1.5 22.8 68.3#



Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 77.00 (76.70 to 77.70): VX0

11.14

80000

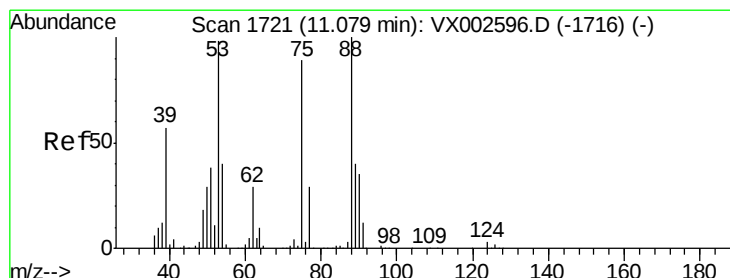
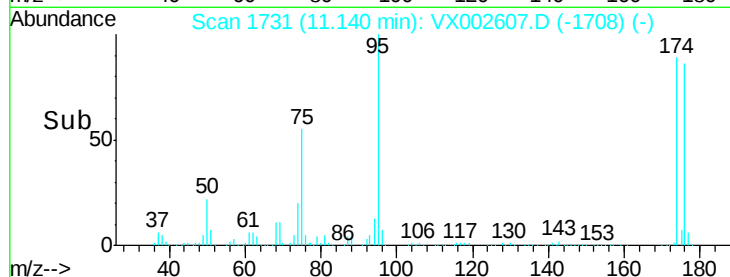
60000

40000

20000

0

Time--> 11.05 11.10 11.15 11.20



#81

trans-1,4-Dichloro-2-butene

Concen: 86.59 ug/l

RT: 11.14 min Scan# 1731

Delta R.T. 0.06 min

Lab File: VX002607.D

Acq: 15 Jun 2018 20:09

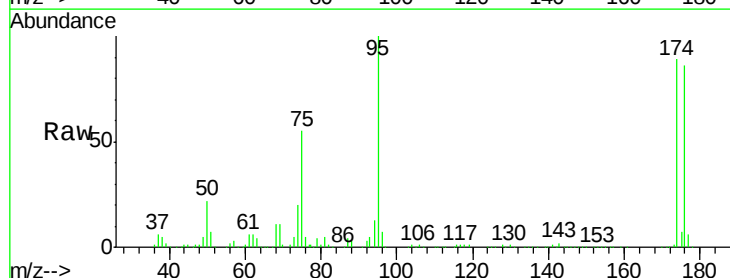
Tgt Ion: 75 Resp: 87014

Ion Ratio Lower Upper

75 100

53 0.0 86.8 130.2#

89 0.1 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

11.14

100000

80000

60000

40000

20000

0

Time--> 11.05 11.10 11.15 11.20

