

Data Path : W:\HPCHEM1\MSVOA\_X\DATA\VX051718\  
 Data File : VX001794.D  
 Acq On : 17 May 2018 16:53  
 Operator : JC/MD  
 Sample : J2853-17  
 Misc : 5.0mL/MSVOA\_X/WATER  
 ALS Vial : 14 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 ST008MW158-180508

Quant Time: May 18 03:58:53 2018  
 Quant Method : W:\HPCHEM1\MSVOA\_X\METHOD\82X051518W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue May 15 01:36:22 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.67  | 168  | 282953   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.87  | 114  | 381932   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.12 | 117  | 305898   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 154140   | 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   | 193905   | 51.13 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 102.26% |          |
| 35) Dibromofluoromethane    | 5.51  | 113  | 167169   | 51.87 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 103.74% |          |
| 50) Toluene-d8              | 8.72  | 98   | 588833   | 51.01 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 102.02% |          |
| 62) 4-Bromofluorobenzene    | 11.14 | 95   | 168599   | 40.56 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 81.12%  |          |

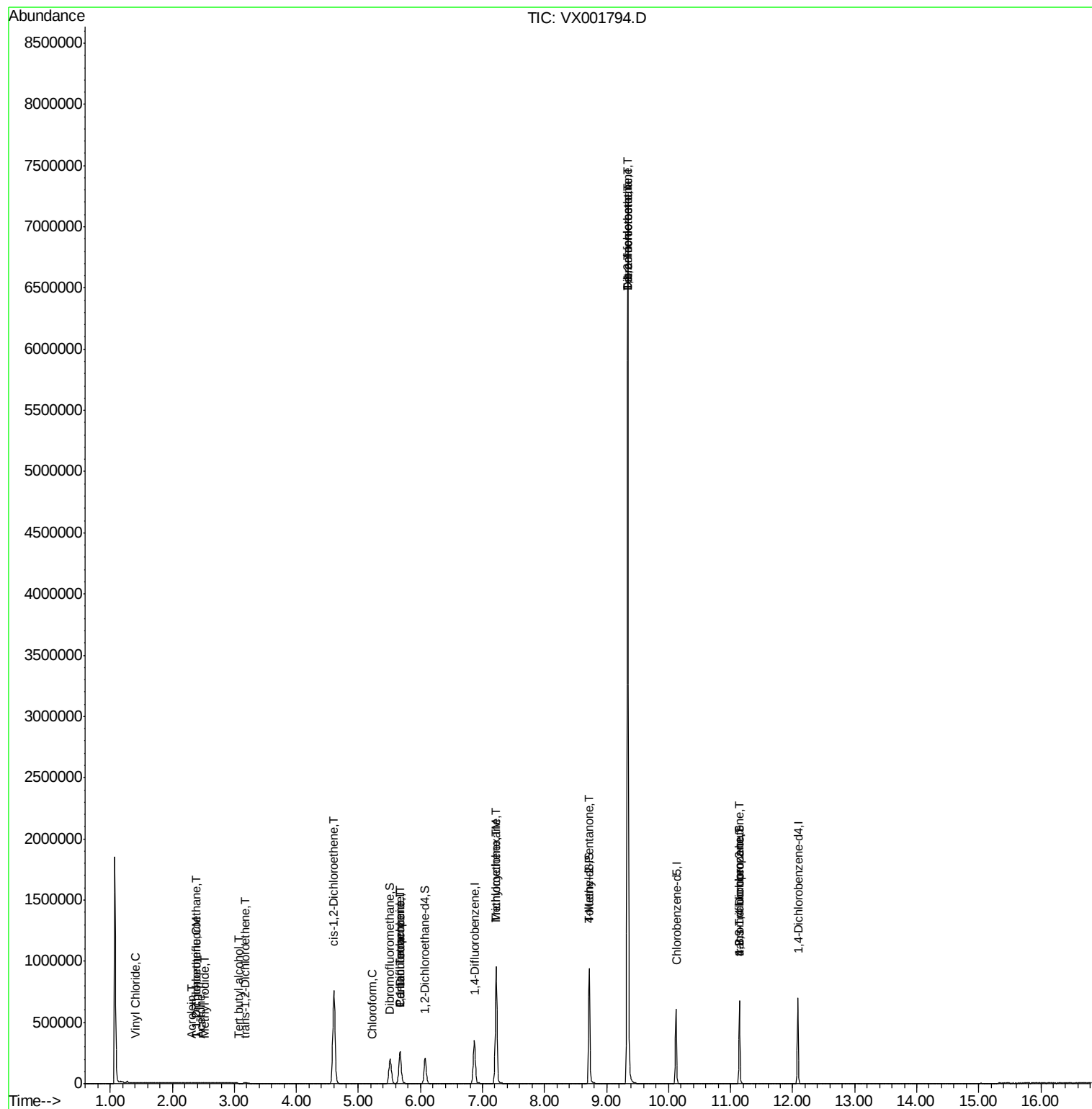
| Target Compounds               | R.T.  | QIon | Response | Conc   | Units | Qvalue |
|--------------------------------|-------|------|----------|--------|-------|--------|
| 4) Vinyl Chloride              | 1.41  | 62   | 1132     | 0.34   | ug/l  | # 71   |
| 5) Bromomethane                | 1.66  | 94   | 1642     | Below  | Cal   | 91     |
| 9) 1,1,2-Trichlorotrifluoroet  | 2.39  | 101  | 699      | 0.24   | ug/l  | 96     |
| 10) Methyl Iodide              | 2.52  | 142  | 1986     | 0.74   | ug/l  | 96     |
| 11) Tert butyl alcohol         | 3.07  | 59   | 156      | 0.23   | ug/l  | # 72   |
| 12) 1,1-Dichloroethene         | 2.38  | 96   | 1003     | 0.36   | ug/l  | # 75   |
| 13) Acrolein                   | 2.31  | 56   | 133      | 0.28   | ug/l  | # 26   |
| 16) Acetone                    | 2.45  | 43   | 1121     | 0.75   | ug/l  | 93     |
| 21) trans-1,2-Dichloroethene   | 3.17  | 96   | 2232     | 0.72   | ug/l  | 92     |
| 27) cis-1,2-Dichloroethene     | 4.60  | 96   | 501470   | 143.04 | ug/l  | 89     |
| 30) Chloroform                 | 5.23  | 83   | 1321     | 0.23   | ug/l  | # 82   |
| 36) 1,1-Dichloropropene        | 5.67  | 75   | 16175    | 3.68   | ug/l  | # 49   |
| 38) Carbon Tetrachloride       | 5.67  | 117  | 23100    | 5.02   | ug/l  | # 15   |
| 39) Methylcyclohexane          | 7.22  | 83   | 4321     | 0.84   | ug/l  | # 1    |
| 44) Trichloroethene            | 7.22  | 130  | 394298   | 98.07  | ug/l  | 100    |
| 51) 4-Methyl-2-Pentanone       | 8.72  | 43   | 2653     | 0.58   | ug/l  | # 1    |
| 55) 1,1,2-Trichloroethane      | 9.34  | 97   | 10349    | 3.25   | ug/l  | # 1    |
| 60) Dibromochloromethane       | 9.34  | 129  | 1323410  | 406.18 | ug/l  | # 11   |
| 64) Tetrachloroethene          | 9.34  | 164  | 1604950  | 403.04 | ug/l  | 98     |
| 76) 1,2,3-Trichloropropane     | 11.14 | 75   | 79566    | 27.15  | ug/l  | # 39   |
| 81) trans-1,4-Dichloro-2-buten | 11.14 | 75   | 79566    | 78.85  | ug/l  | # 10   |

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

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Quant Title : SW846 8260  
QLast Update : Tue May 15 01:36:22 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: VX001794.D

Acq: 17 May 2018 16:53

Instrument :

MSVOA\_X

ClientSampleId :

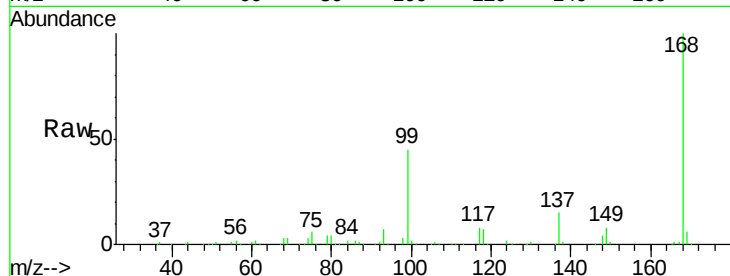
ST008MW158-180508

Tgt Ion:168 Resp: 282953

Ion Ratio Lower Upper

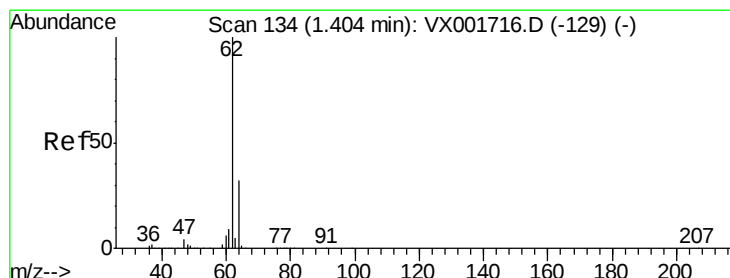
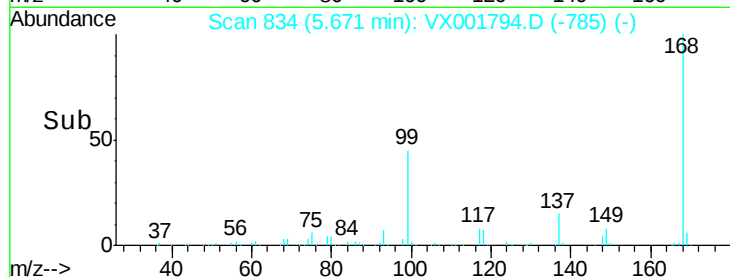
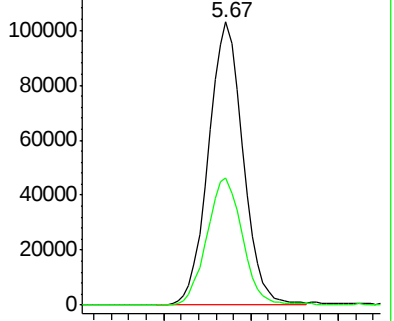
168 100

99 45.0 35.0 52.4



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0



#4

Vinyl Chloride

Concen: 0.34 ug/l

RT: 1.41 min Scan# 135

Delta R.T. 0.01 min

Lab File: VX001794.D

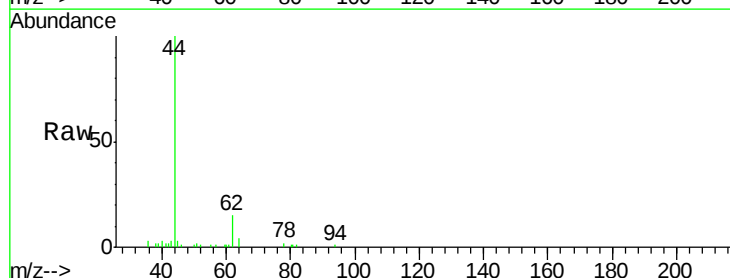
Acq: 17 May 2018 16:53

Tgt Ion: 62 Resp: 1132

Ion Ratio Lower Upper

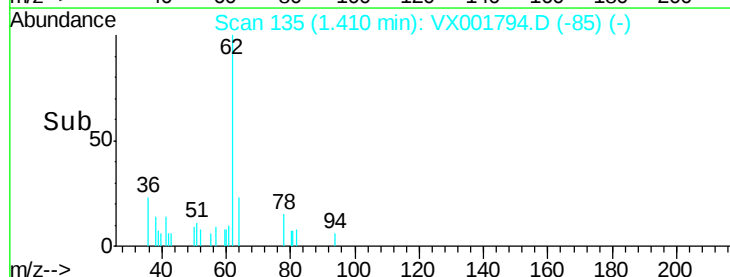
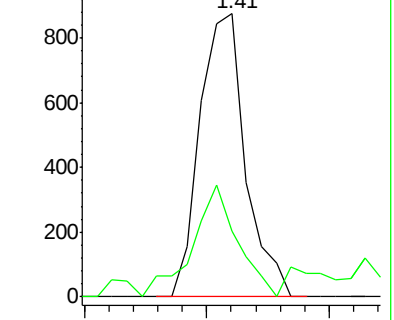
62 100

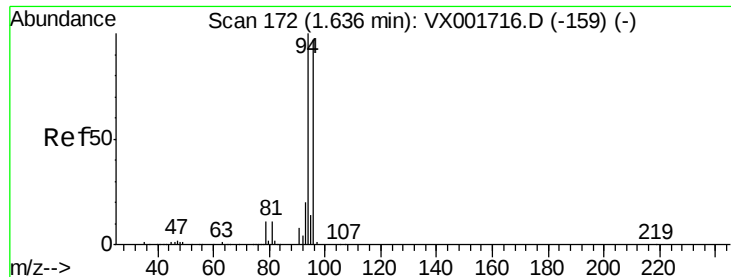
64 15.9 25.6 38.4#



Abundance Ion 61.90 (61.60 to 62.60): VX0

Ion 63.90 (63.60 to 64.60): VX0





#5

Bromomethane

Concen: Below Cal

RT: 1.66 min Scan# 176

Delta R.T. 0.02 min

Lab File: VX001794.D

Acq: 17 May 2018 16:53

Instrument :

MSVOA\_X

ClientSampleId :

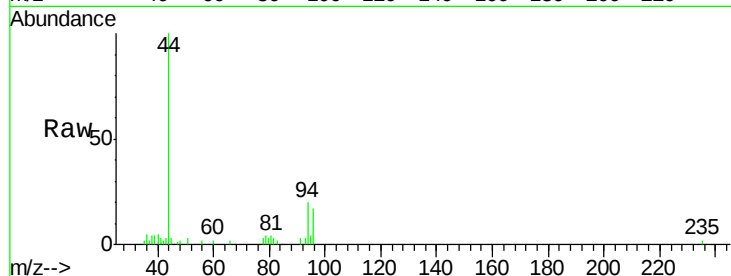
ST008MW158-180508

Tgt Ion: 94 Resp: 1642

Ion Ratio Lower Upper

94 100

96 88.2 77.4 116.0



Abundance Ion 93.90 (93.60 to 94.60): VX0

Ion 95.90 (95.60 to 96.60): VX0

1.66

800

600

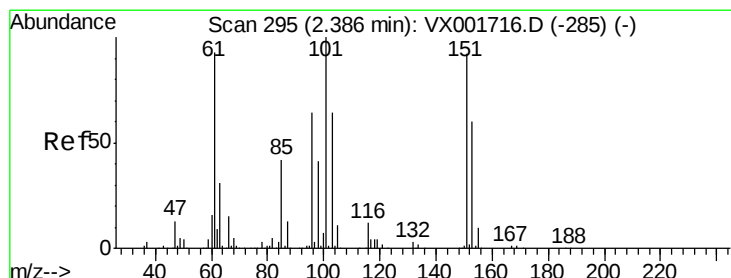
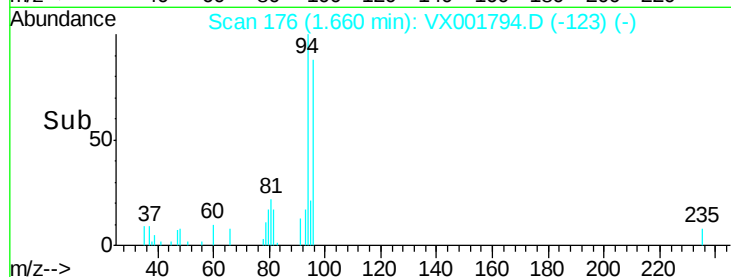
400

200

0

1.60 1.65 1.70 1.75

Time-->



#9

1,1,2-Trichlorotrifluoroethane

Concen: 0.24 ug/l

RT: 2.39 min Scan# 295

Delta R.T. -0.00 min

Lab File: VX001794.D

Acq: 17 May 2018 16:53

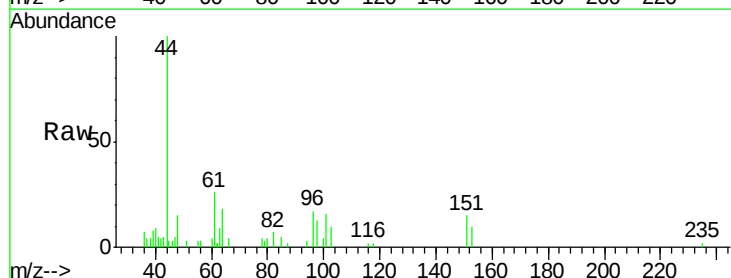
Tgt Ion: 101 Resp: 699

Ion Ratio Lower Upper

101 100

85 37.2 33.7 50.5

151 88.8 73.0 109.6



Abundance Ion 100.90 (100.60 to 101.60): V

Ion 84.90 (84.60 to 85.60): VX0

Ion 150.80 (150.50 to 151.50): V

500

400

300

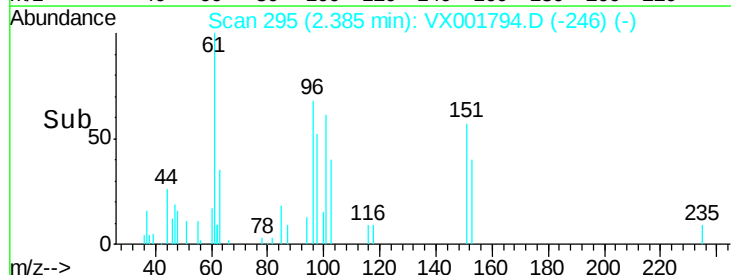
200

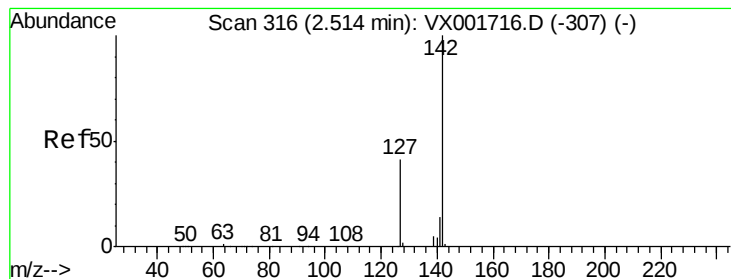
100

0

2.35 2.40 2.45

Time-->





#10

Methyl Iodide

Concen: 0.74 ug/l

RT: 2.52 min Scan# 317

Delta R.T. 0.01 min

Lab File: VX001794.D

Acq: 17 May 2018 16:53

Instrument :

MSVOA\_X

ClientSampleId :

ST008MW158-180508

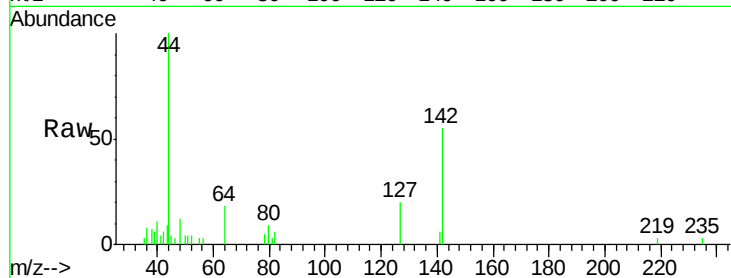
Tgt Ion: 142 Resp: 1986

Ion Ratio Lower Upper

142 100

127 38.9 32.5 48.7

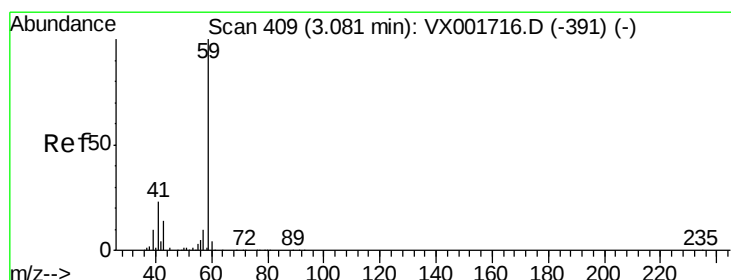
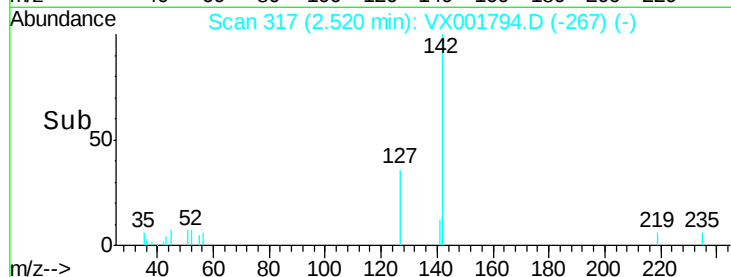
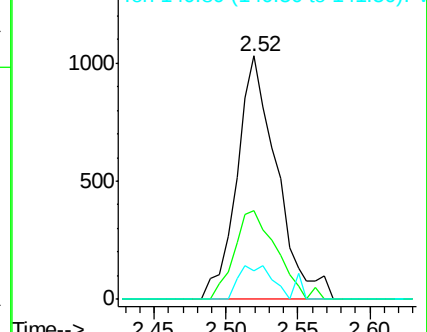
141 11.7 11.4 17.0



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: 0.23 ug/l

RT: 3.07 min Scan# 407

Delta R.T. -0.01 min

Lab File: VX001794.D

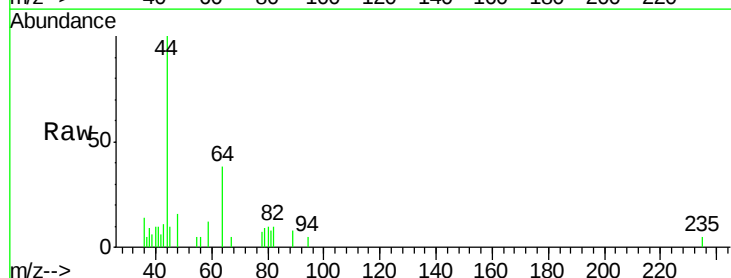
Acq: 17 May 2018 16:53

Tgt Ion: 59 Resp: 156

Ion Ratio Lower Upper

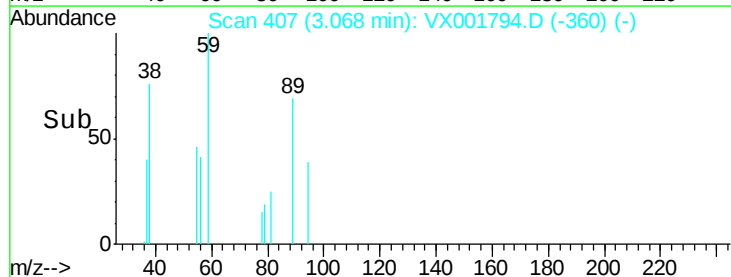
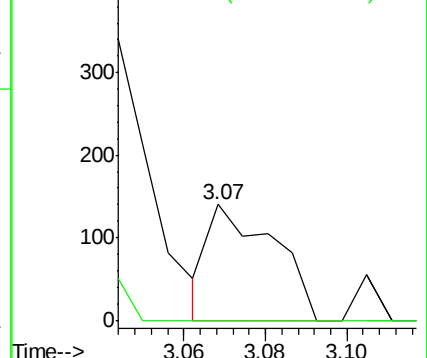
59 100

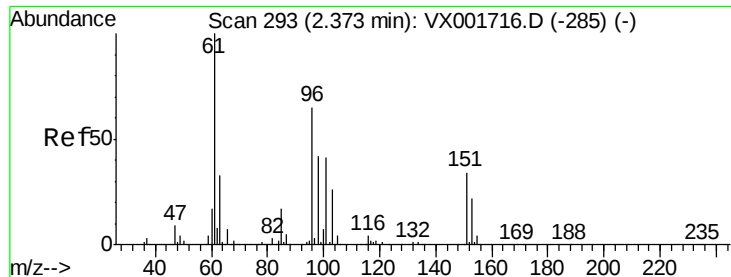
57 0.0 8.5 12.7#



Abundance Ion 59.00 (58.70 to 59.70): VX0

Ion 57.00 (56.70 to 57.70): VX0





#12

1,1-Dichloroethene

Concen: 0.36 ug/l

RT: 2.38 min Scan# 294

Delta R.T. 0.01 min

Lab File: VX001794.D

Acq: 17 May 2018 16:53

Instrument :

MSVOA\_X

ClientSampleId :

ST008MW158-180508

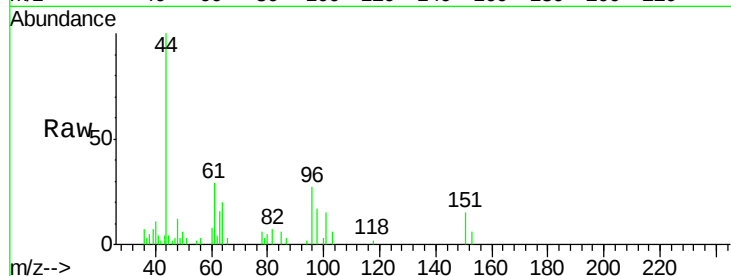
Tgt Ion: 96 Resp: 1003

Ion Ratio Lower Upper

96 100

61 108.2 122.2 183.2#

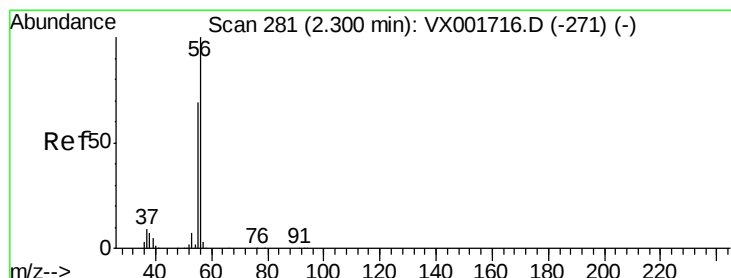
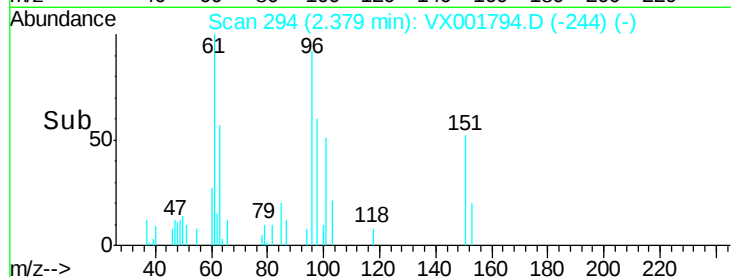
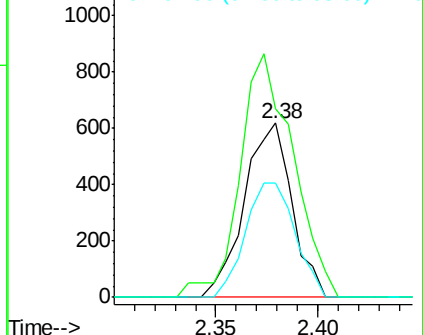
98 65.4 51.4 77.0



Abundance Ion 95.90 (95.60 to 96.60): VX0

Ion 60.90 (60.60 to 61.60): VX0

Ion 97.90 (97.60 to 98.60): VX0



#13

Acrolein

Concen: 0.28 ug/l

RT: 2.31 min Scan# 283

Delta R.T. 0.01 min

Lab File: VX001794.D

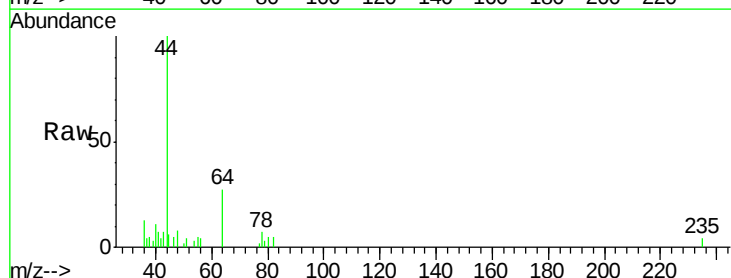
Acq: 17 May 2018 16:53

Tgt Ion: 56 Resp: 133

Ion Ratio Lower Upper

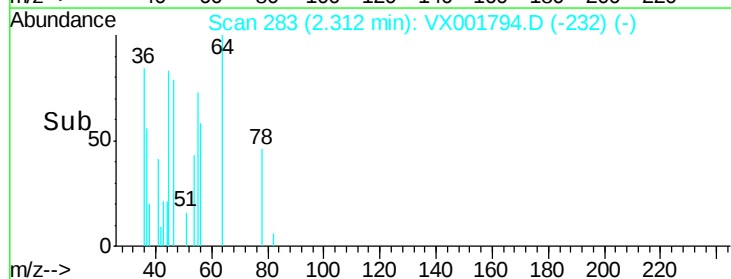
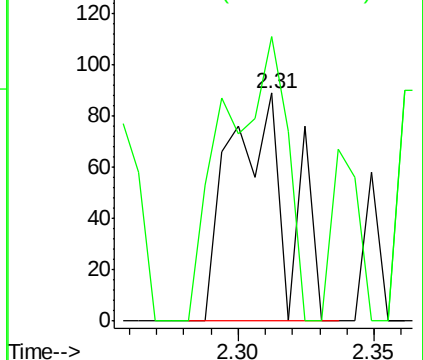
56 100

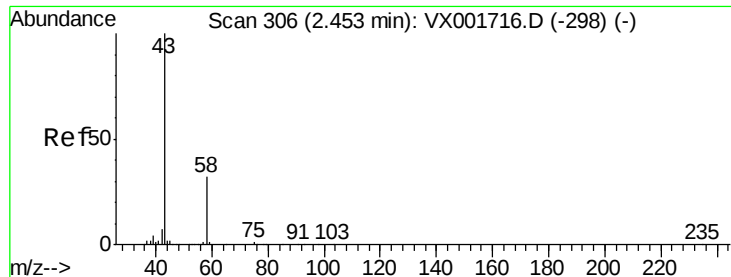
55 130.8 56.2 84.2#



Abundance Ion 56.00 (55.70 to 56.70): VX0

Ion 55.00 (54.70 to 55.70): VX0





#16

Acetone

Concen: 0.75 ug/l

RT: 2.45 min Scan# 305

Delta R.T. -0.01 min

Lab File: VX001794.D

Acq: 17 May 2018 16:53

Instrument :

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ClientSampleId :

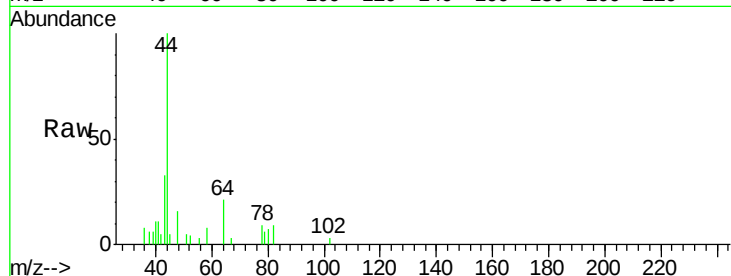
ST008MW158-180508

Tgt Ion: 43 Resp: 1121

Ion Ratio Lower Upper

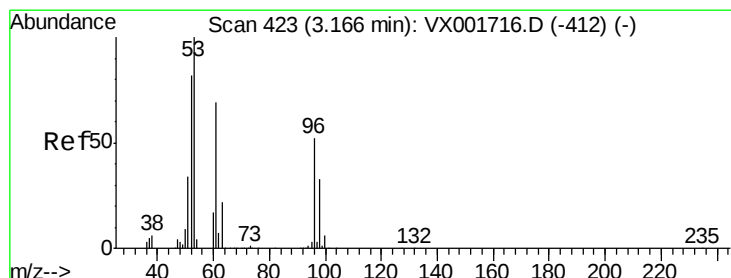
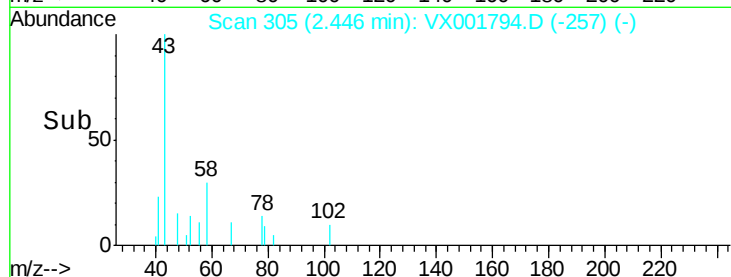
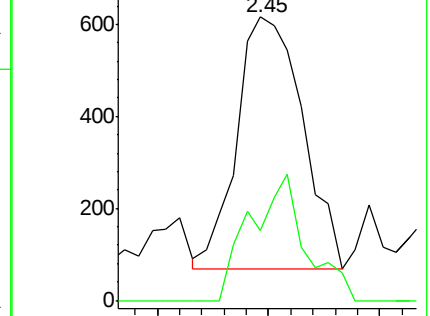
43 100

58 27.8 25.3 37.9



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0



#21

trans-1,2-Dichloroethene

Concen: 0.72 ug/l

RT: 3.17 min Scan# 424

Delta R.T. 0.01 min

Lab File: VX001794.D

Acq: 17 May 2018 16:53

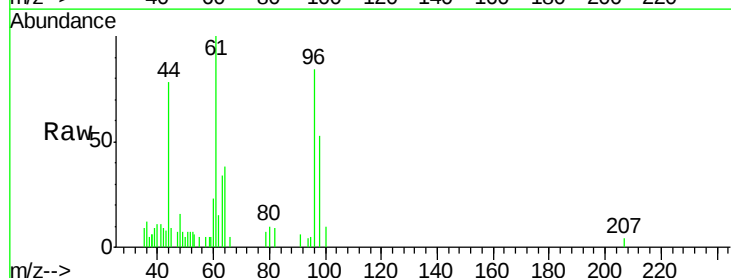
Tgt Ion: 96 Resp: 2232

Ion Ratio Lower Upper

96 100

61 118.8 105.8 158.8

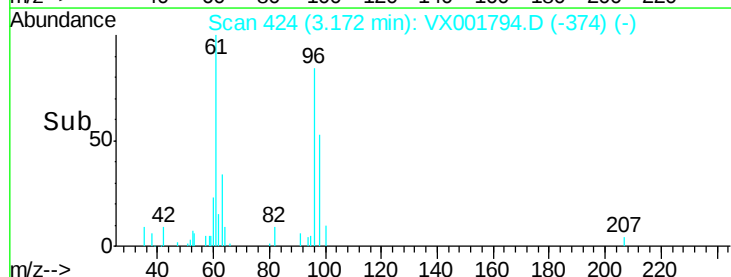
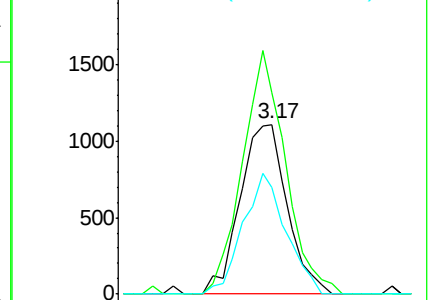
98 63.0 50.2 75.4

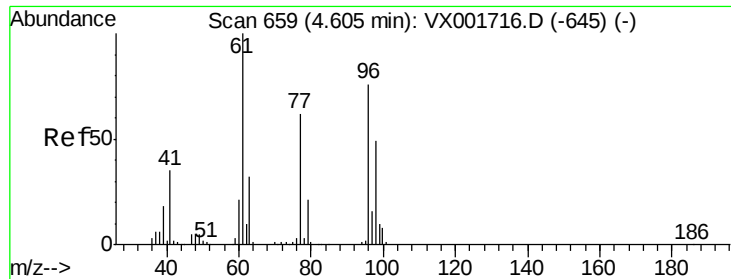


Abundance Ion 95.90 (95.60 to 96.60): VX0

Ion 60.90 (60.60 to 61.60): VX0

Ion 97.90 (97.60 to 98.60): VX0





#27

cis-1,2-Dichloroethene

Concen: 143.04 ug/l

RT: 4.60 min Scan# 659

Delta R.T. -0.00 min

Lab File: VX001794.D

Acq: 17 May 2018 16:53

Instrument :

MSVOA\_X

ClientSampleId :

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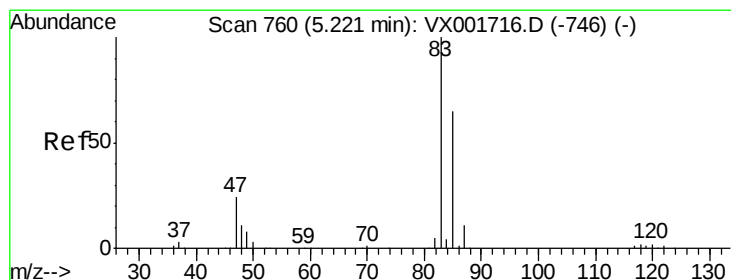
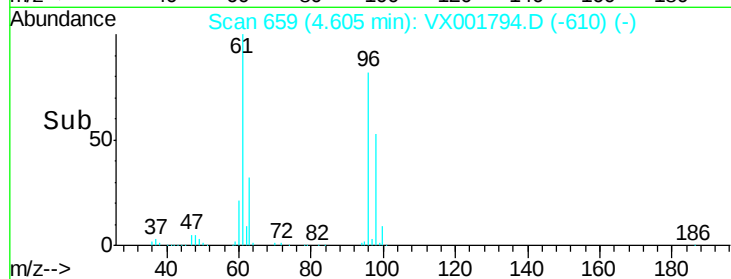
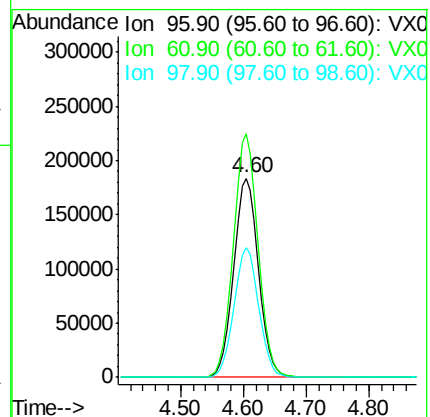
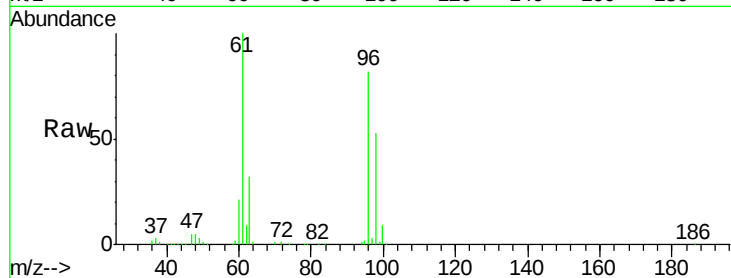
Tgt Ion: 96 Resp: 501470

Ion Ratio Lower Upper

96 100

61 121.8 0.0 280.4

98 65.0 0.0 128.4



#30

Chloroform

Concen: 0.23 ug/l

RT: 5.23 min Scan# 761

Delta R.T. 0.01 min

Lab File: VX001794.D

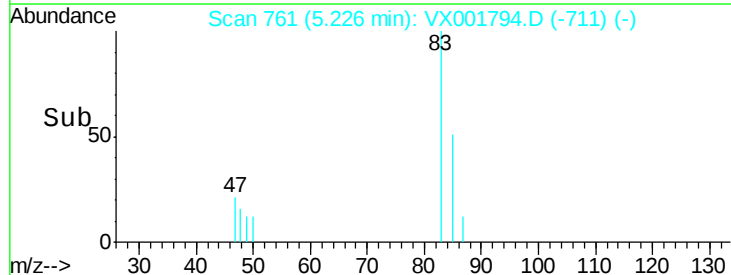
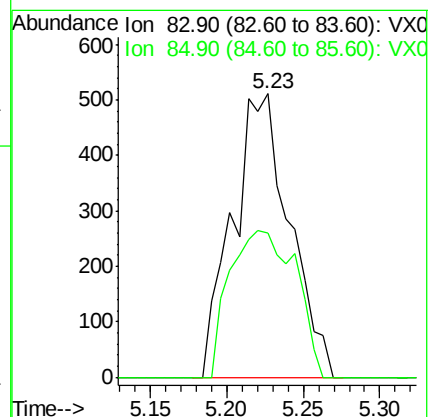
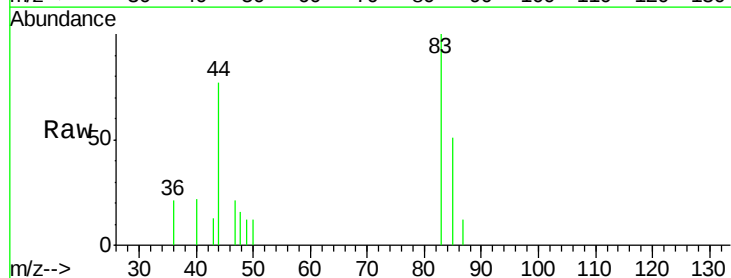
Acq: 17 May 2018 16:53

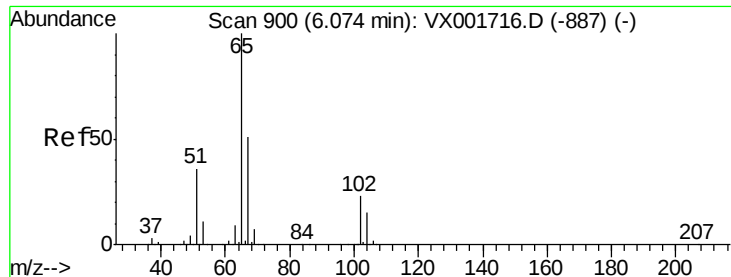
Tgt Ion: 83 Resp: 1321

Ion Ratio Lower Upper

83 100

85 50.9 52.3 78.5#

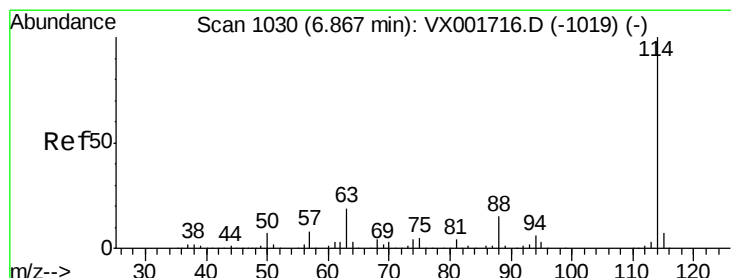
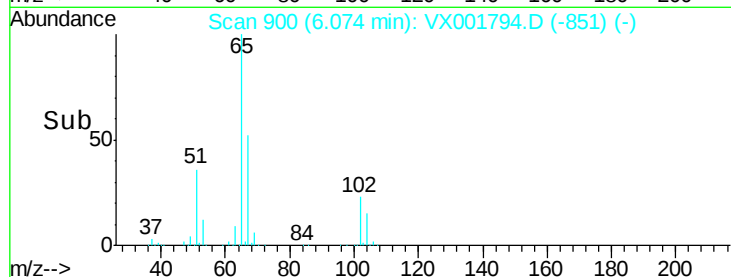
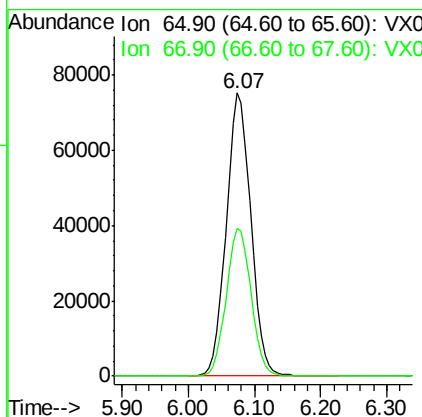
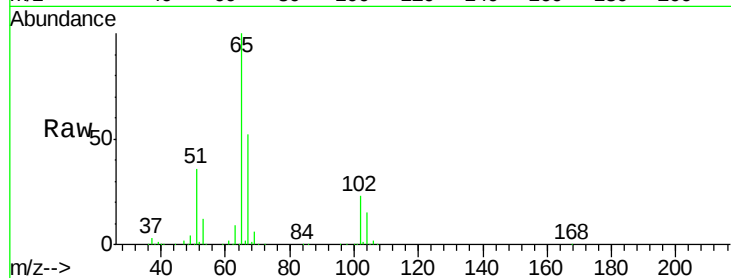




#33  
 1,2-Dichloroethane-d4  
 Concen: 51.13 ug/l  
 RT: 6.07 min Scan# 900  
 Delta R.T. -0.00 min  
 Lab File: VX001794.D  
 Acq: 17 May 2018 16:53

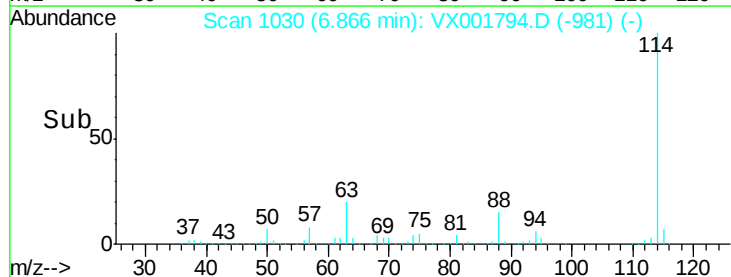
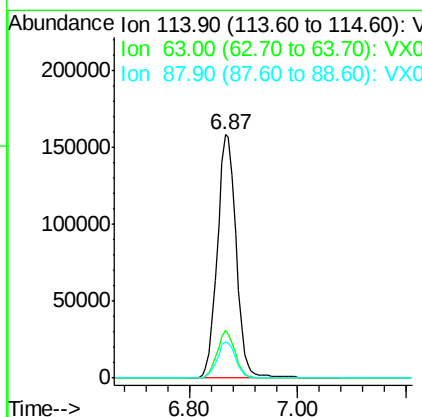
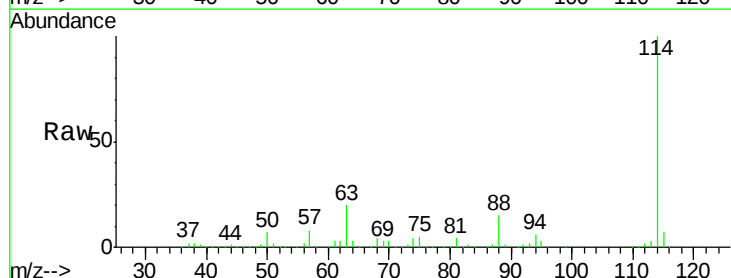
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 ST008MW158-180508

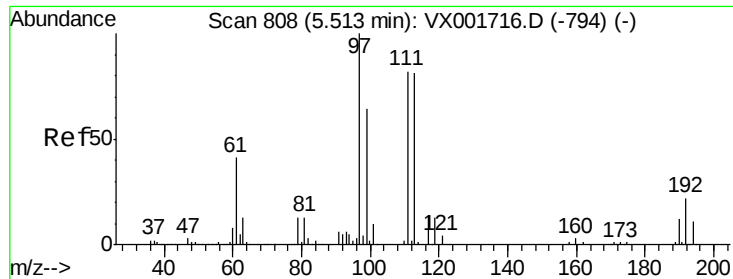
Tgt Ion: 65 Resp: 193905  
 Ion Ratio Lower Upper  
 65 100  
 67 52.8 0.0 102.8



#34  
 1,4-Difluorobenzene  
 Concen: 50.00 ug/l  
 RT: 6.87 min Scan# 1030  
 Delta R.T. -0.00 min  
 Lab File: VX001794.D  
 Acq: 17 May 2018 16:53

Tgt Ion: 114 Resp: 381932  
 Ion Ratio Lower Upper  
 114 100  
 63 19.7 0.0 37.0  
 88 15.0 0.0 29.8

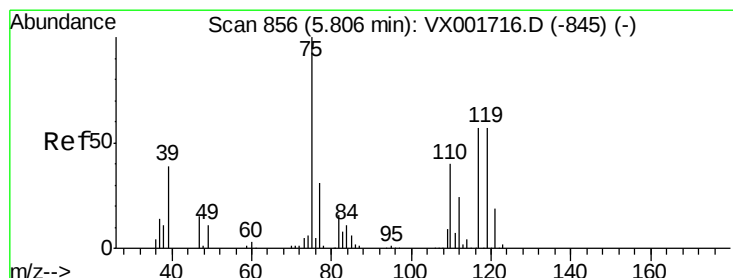
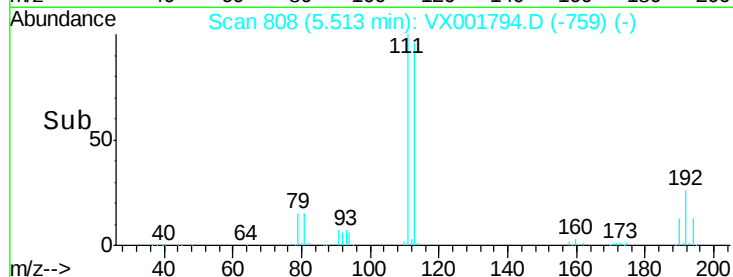
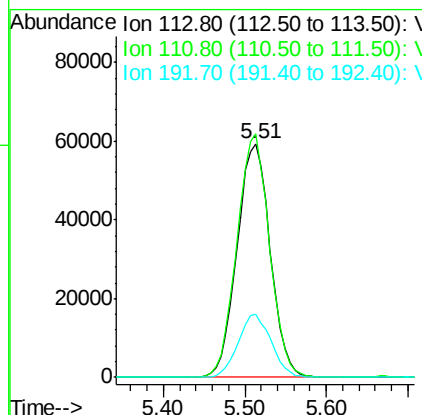
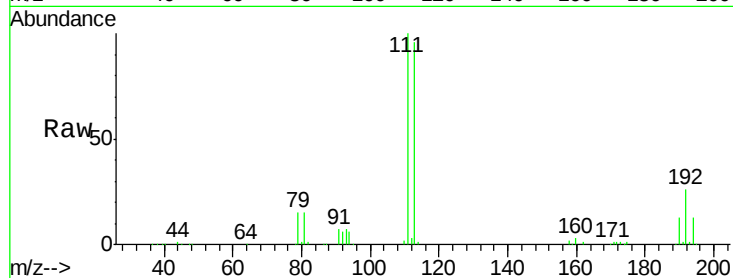




#35  
 Dibromofluoromethane  
 Concen: 51.87 ug/l  
 RT: 5.51 min Scan# 808  
 Delta R.T. -0.00 min  
 Lab File: VX001794.D  
 Acq: 17 May 2018 16:53

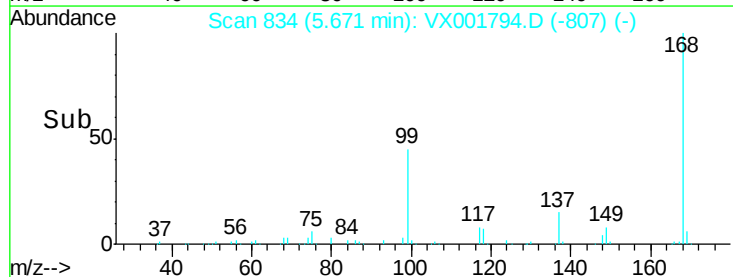
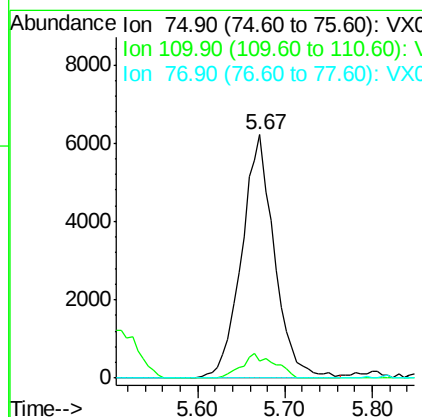
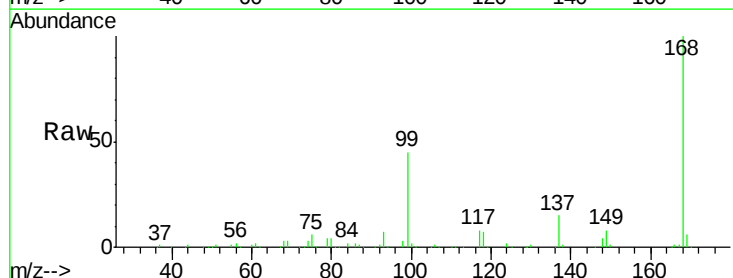
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 ST008MW158-180508

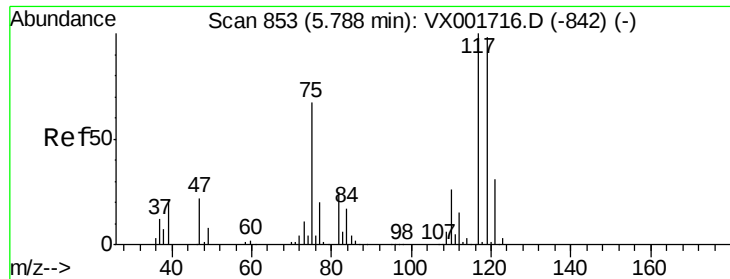
Tgt Ion:113 Resp: 167169  
 Ion Ratio Lower Upper  
 113 100  
 111 102.4 82.0 123.0  
 192 27.0 21.6 32.4



#36  
 1,1-Dichloropropene  
 Concen: 3.68 ug/l  
 RT: 5.67 min Scan# 834  
 Delta R.T. -0.13 min  
 Lab File: VX001794.D  
 Acq: 17 May 2018 16:53

Tgt Ion: 75 Resp: 16175  
 Ion Ratio Lower Upper  
 75 100  
 110 10.0 19.1 57.1#  
 77 0.0 24.6 37.0#





#38

Carbon Tetrachloride

Concen: 5.02 ug/l

RT: 5.67 min Scan# 833

Delta R.T. -0.12 min

Lab File: VX001794.D

Acq: 17 May 2018 16:53

Instrument :

MSVOA\_X

ClientSampleId :

ST008MW158-180508

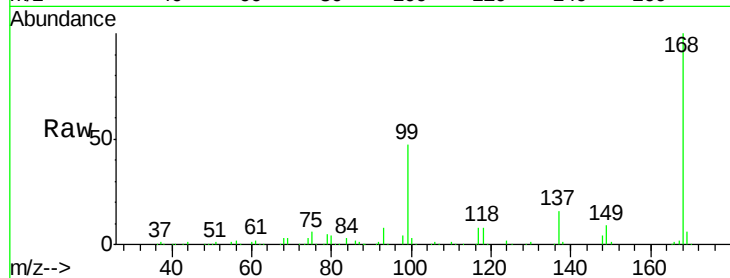
Tgt Ion: 117 Resp: 23100

Ion Ratio Lower Upper

117 100

119 4.7 77.6 116.4#

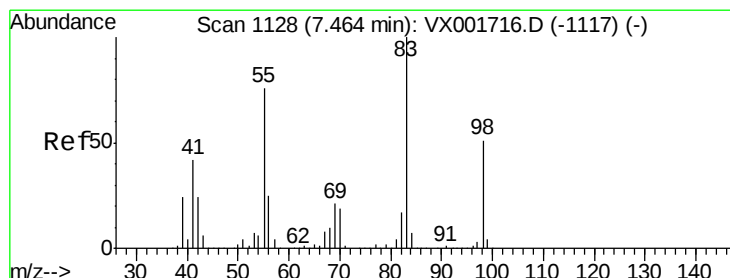
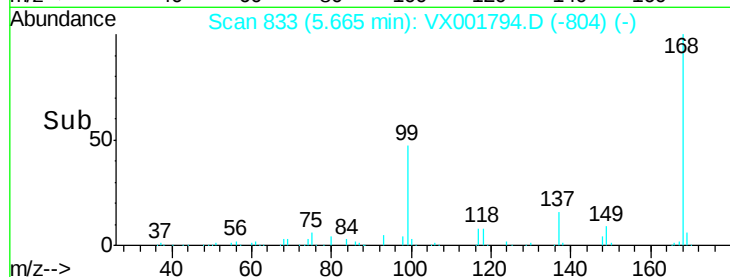
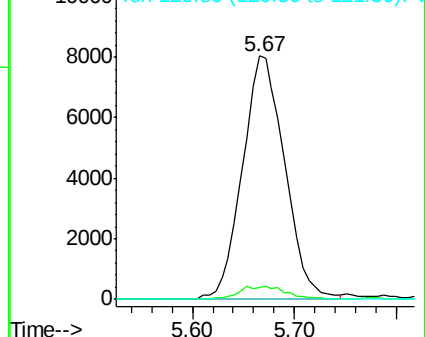
121 0.0 24.6 36.8#



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



#39

Methylcyclohexane

Concen: 0.84 ug/l

RT: 7.22 min Scan# 1088

Delta R.T. -0.24 min

Lab File: VX001794.D

Acq: 17 May 2018 16:53

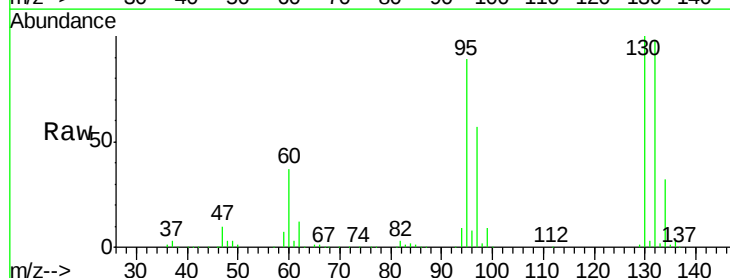
Tgt Ion: 83 Resp: 4321

Ion Ratio Lower Upper

83 100

55 0.0 60.6 90.8#

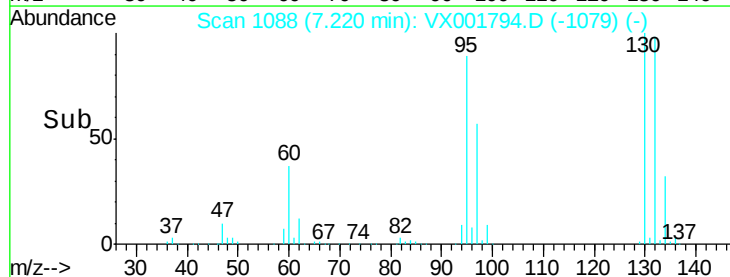
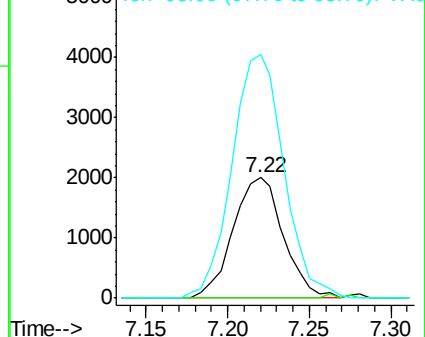
98 199.4 40.4 60.6#

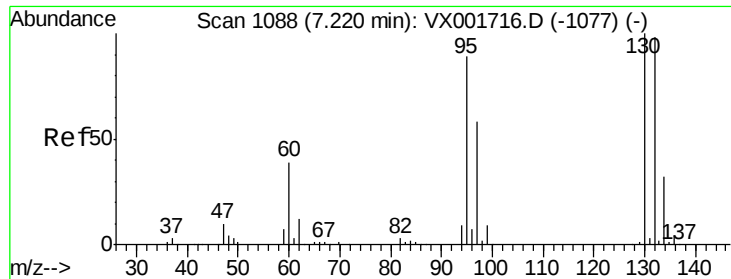


Abundance Ion 83.00 (82.70 to 83.70): VX0

Ion 55.00 (54.70 to 55.70): VX0

Ion 98.00 (97.70 to 98.70): VX0





#44

Trichloroethene

Concen: 98.07 ug/l

RT: 7.22 min Scan# 1088

Delta R.T. -0.00 min

Lab File: VX001794.D

Acq: 17 May 2018 16:53

Instrument :

MSVOA\_X

ClientSampleId :

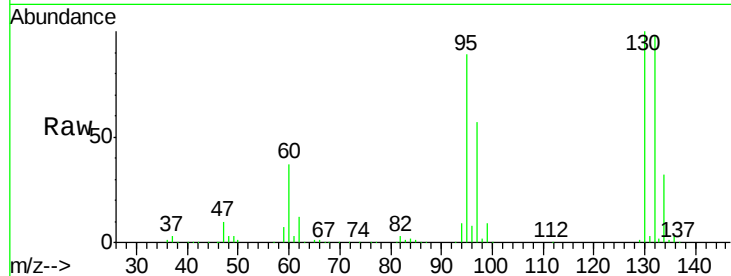
ST008MW158-180508

Tgt Ion:130 Resp: 394298

Ion Ratio Lower Upper

130 100

95 88.7 0.0 177.2



Abundance Ion 129.80 (129.50 to 130.50): V

Ion 94.90 (94.60 to 95.60): VX0

7.22

200000

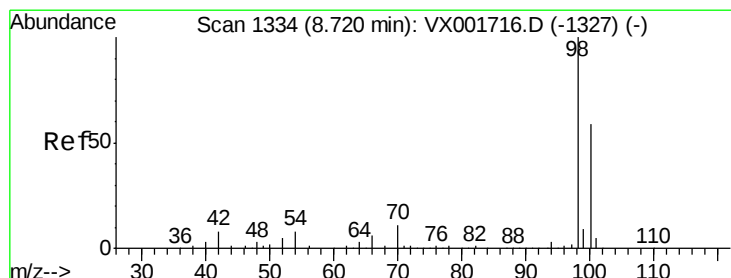
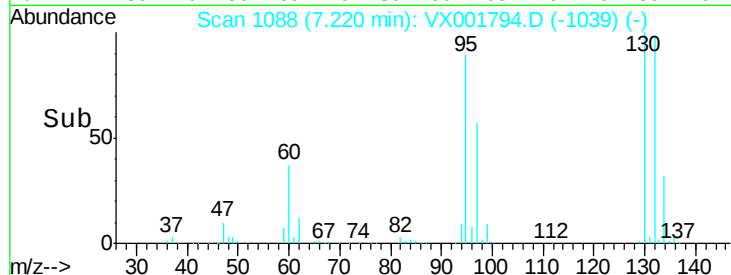
150000

100000

50000

0

Time-->



#50

Toluene-d8

Concen: 51.01 ug/l

RT: 8.72 min Scan# 1334

Delta R.T. -0.00 min

Lab File: VX001794.D

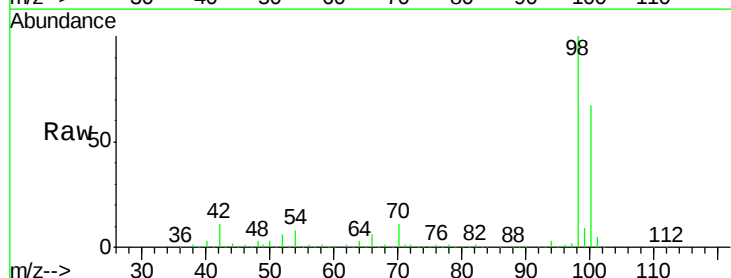
Acq: 17 May 2018 16:53

Tgt Ion: 98 Resp: 588833

Ion Ratio Lower Upper

98 100

100 66.1 54.0 81.0



Abundance Ion 98.00 (97.70 to 98.70): VX0

Ion 100.00 (99.70 to 100.70): VX0

8.72

400000

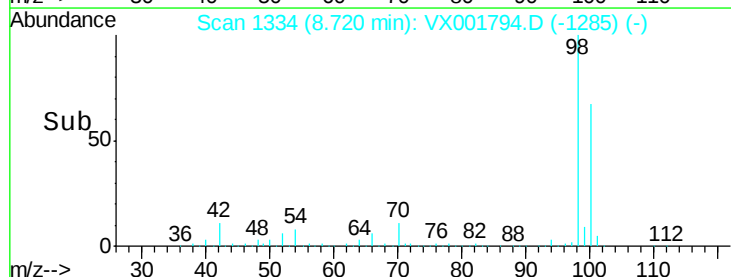
300000

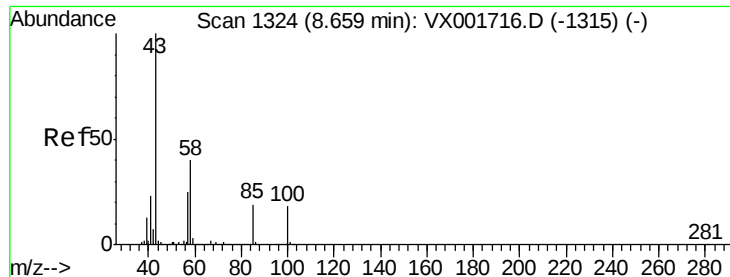
200000

100000

0

Time-->





#51

4-Methyl-2-Pentanone

Concen: 0.58 ug/l

RT: 8.72 min Scan# 1334

Delta R.T. 0.06 min

Lab File: VX001794.D

Acq: 17 May 2018 16:53

Instrument :

MSVOA\_X

ClientSampleId :

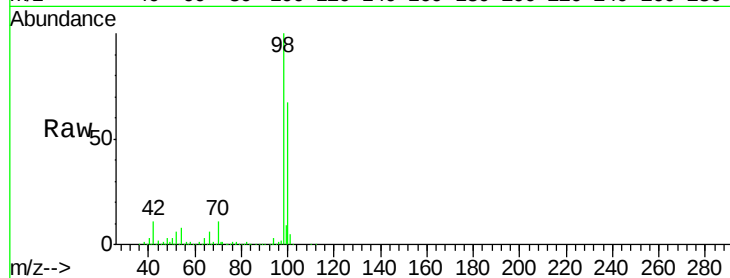
ST008MW158-180508

Tgt Ion: 43 Resp: 2653

Ion Ratio Lower Upper

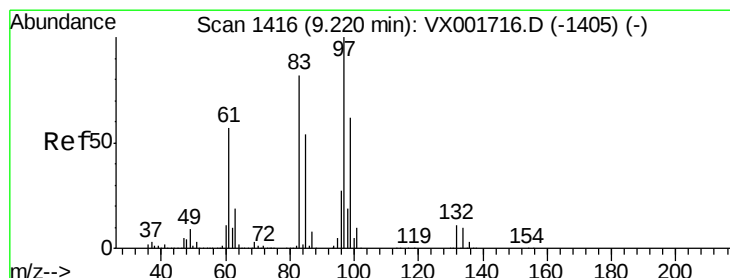
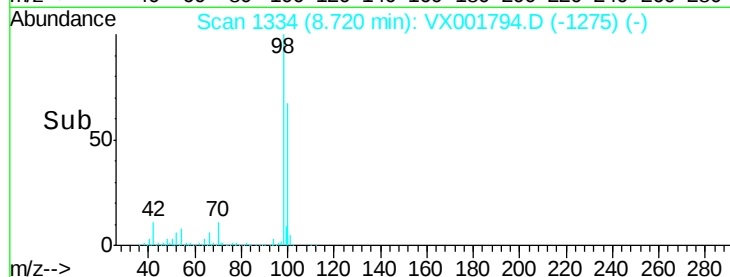
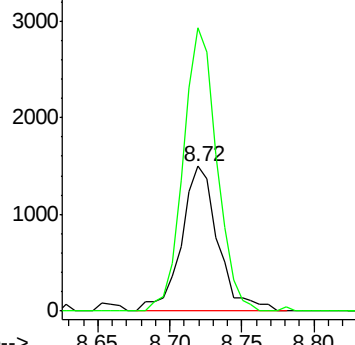
43 100

58 179.1 31.4 47.0#



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0



#55

1,1,2-Trichloroethane

Concen: 3.25 ug/l

RT: 9.34 min Scan# 1436

Delta R.T. 0.12 min

Lab File: VX001794.D

Acq: 17 May 2018 16:53

Tgt Ion: 97 Resp: 10349

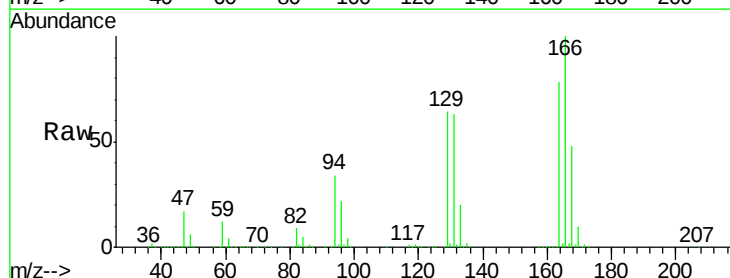
Ion Ratio Lower Upper

97 100

83 294.7 65.8 98.8#

85 38.4 43.4 65.0#

99 15.8 49.8 74.6#

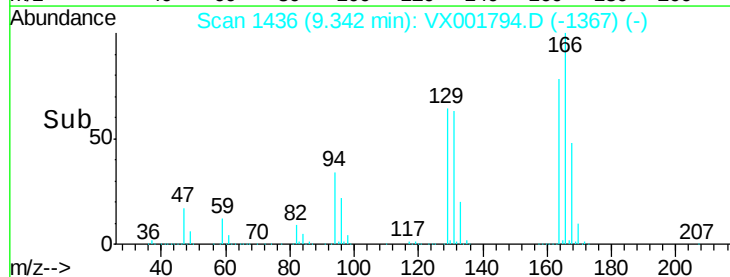
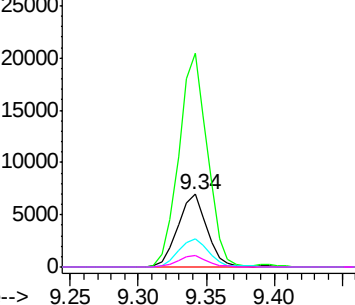


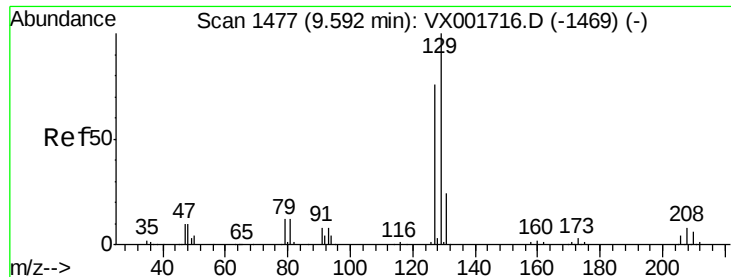
Abundance Ion 96.90 (96.60 to 97.60): VX0

Ion 82.90 (82.60 to 83.60): VX0

Ion 84.90 (84.60 to 85.60): VX0

Ion 98.90 (98.60 to 99.60): VX0





#60

Dibromochloromethane

Concen: 406.18 ug/l

RT: 9.34 min Scan# 1436

Delta R.T. -0.25 min

Lab File: VX001794.D

Acq: 17 May 2018 16:53

Instrument :

MSVOA\_X

ClientSampleId :

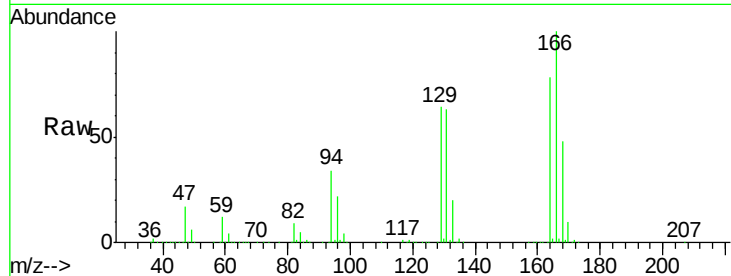
ST008MW158-180508

Tgt Ion:129 Resp: 1323410

Ion Ratio Lower Upper

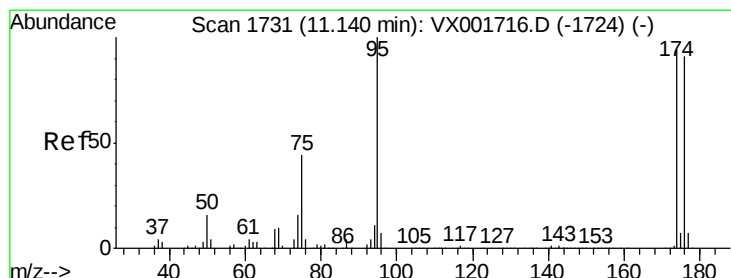
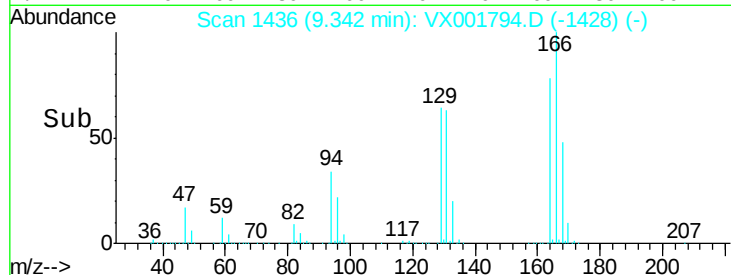
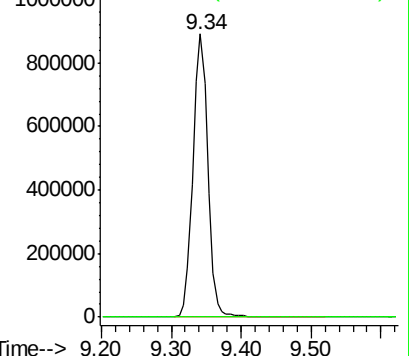
129 100

127 0.0 38.7 116.1#



Abundance Ion 128.80 (128.50 to 129.50): V

Ion 126.80 (126.50 to 127.50): V



#62

4-Bromofluorobenzene

Concen: 40.56 ug/l

RT: 11.14 min Scan# 1731

Delta R.T. -0.00 min

Lab File: VX001794.D

Acq: 17 May 2018 16:53

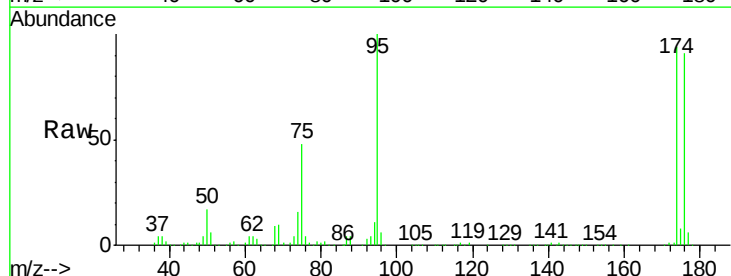
Tgt Ion: 95 Resp: 168599

Ion Ratio Lower Upper

95 100

174 104.1 0.0 201.8

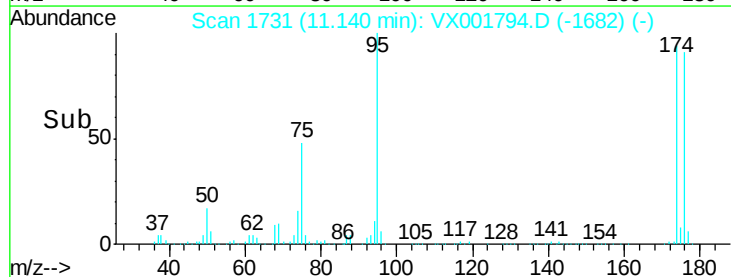
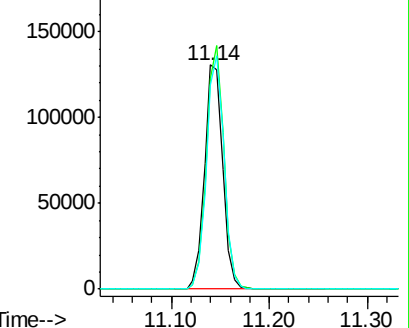
176 100.9 0.0 196.8

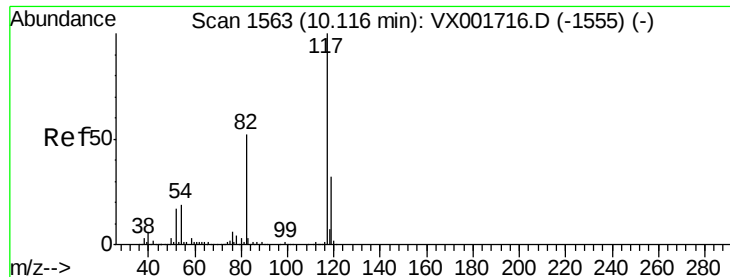


Abundance Ion 94.90 (94.60 to 95.60): VX0

Ion 173.80 (173.50 to 174.50): V

Ion 175.80 (175.50 to 176.50): V

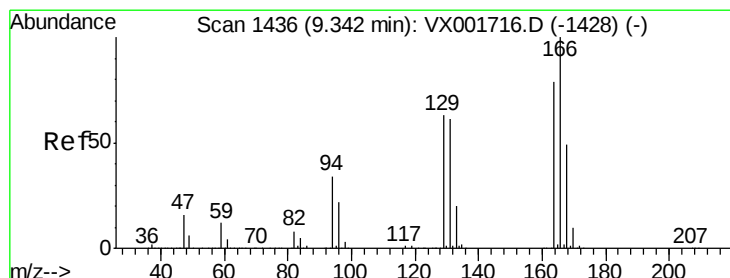
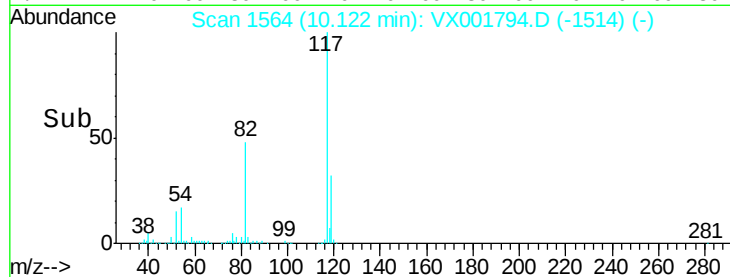
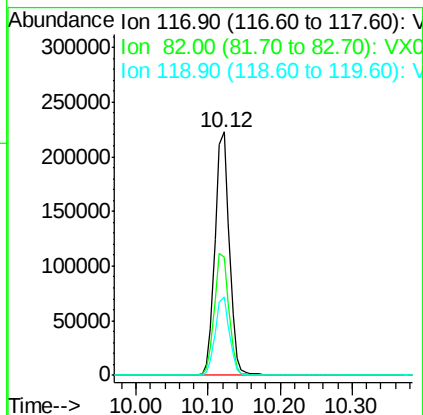
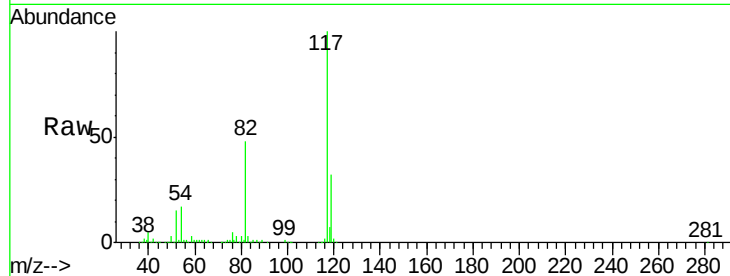




#63  
Chlorobenzene-d5  
Concen: 50.00 ug/l  
RT: 10.12 min Scan# 1564  
Delta R.T. 0.01 min  
Lab File: VX001794.D  
Acq: 17 May 2018 16:53

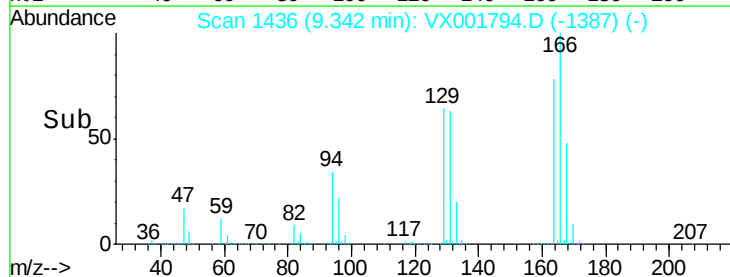
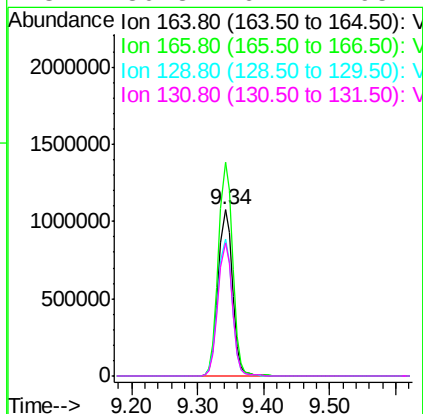
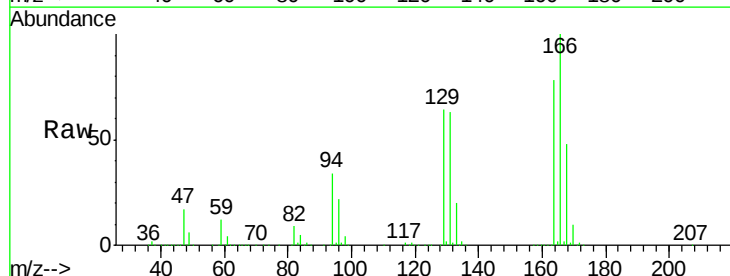
Instrument :  
MSVOA\_X  
ClientSampleId :  
ST008MW158-180508

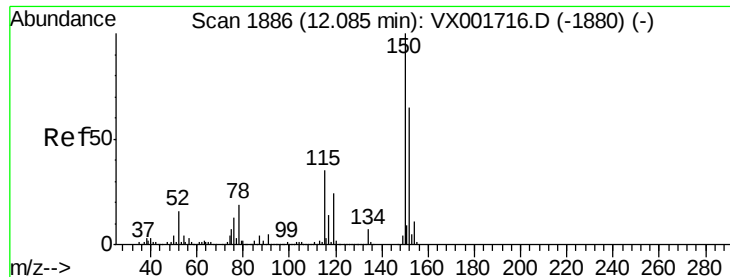
Tgt Ion:117 Resp: 305898  
Ion Ratio Lower Upper  
117 100  
82 48.4 41.4 62.2  
119 32.4 25.6 38.4



#64  
Tetrachloroethene  
Concen: 403.04 ug/l  
RT: 9.34 min Scan# 1436  
Delta R.T. -0.00 min  
Lab File: VX001794.D  
Acq: 17 May 2018 16:53

Tgt Ion:164 Resp: 1604950  
Ion Ratio Lower Upper  
164 100  
166 128.4 101.8 152.8  
129 82.7 63.8 95.6  
131 80.3 62.2 93.2





#72

1,4-Dichlorobenzene-d4

Concen: 50.00 ug/l

RT: 12.08 min Scan# 1886

Delta R.T. -0.00 min

Lab File: VX001794.D

Acq: 17 May 2018 16:53

Instrument :

MSVOA\_X

ClientSampleId :

ST008MW158-180508

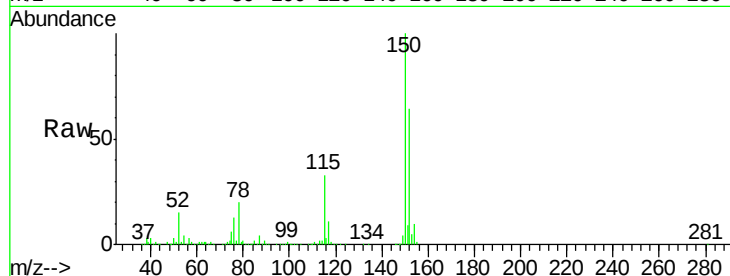
Tgt Ion:152 Resp: 154140

Ion Ratio Lower Upper

152 100

115 51.6 37.4 112.2

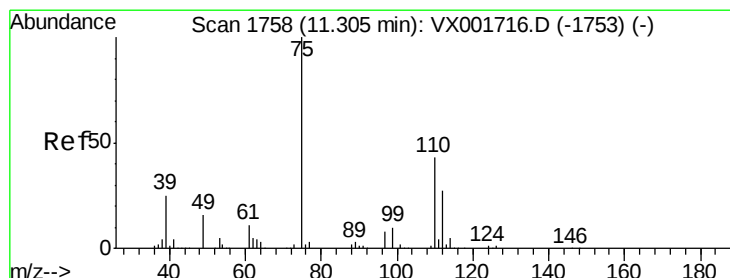
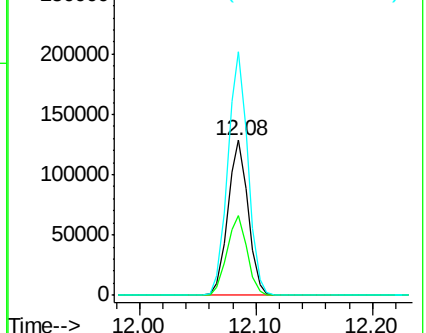
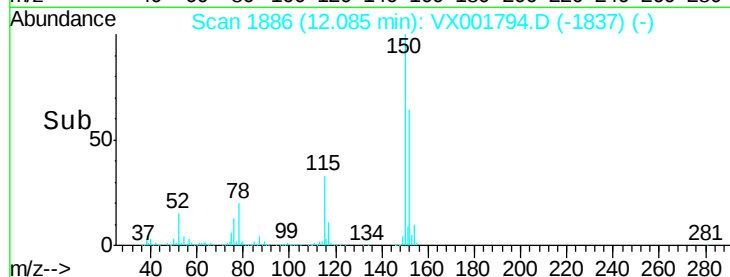
150 156.5 0.0 344.8



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: 27.15 ug/l

RT: 11.14 min Scan# 1731

Delta R.T. -0.16 min

Lab File: VX001794.D

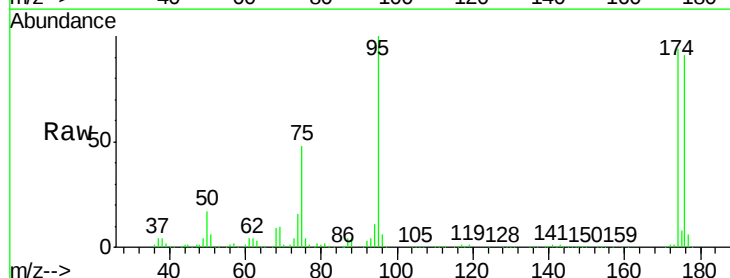
Acq: 17 May 2018 16:53

Tgt Ion: 75 Resp: 79566

Ion Ratio Lower Upper

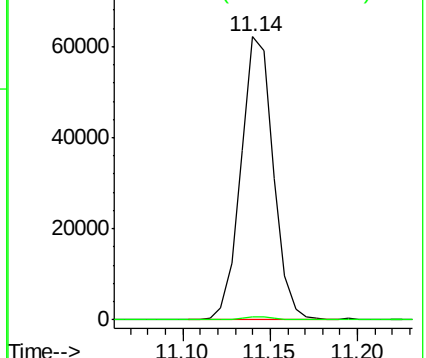
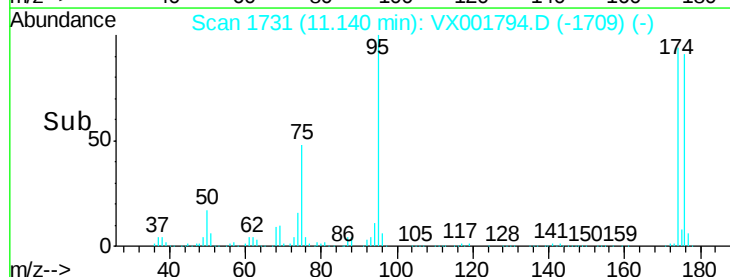
75 100

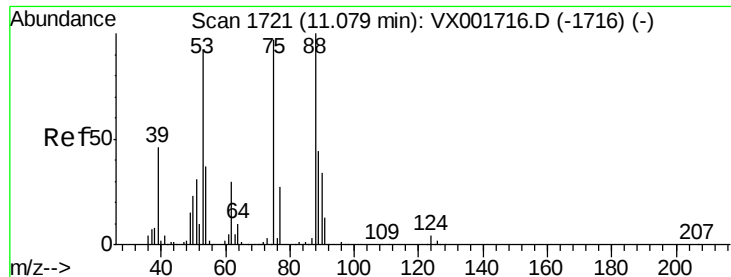
77 1.3 18.9 56.7#



Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 77.00 (76.70 to 77.70): VX0





#81

trans-1,4-Dichloro-2-butene

Concen: 78.85 ug/l

RT: 11.14 min Scan# 1731

Delta R.T. 0.06 min

Lab File: VX001794.D

Acq: 17 May 2018 16:53

Instrument :

MSVOA\_X

ClientSampleId :

ST008MW158-180508

Tgt Ion: 75 Resp: 79566

Ion Ratio Lower Upper

75 100

53 0.1 79.4 119.2#

89 0.0 38.8 58.2#

