

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX061518\  
 Data File : VX002630.D  
 Acq On : 16 Jun 2018 07:12  
 Operator : JC/MD  
 Sample : J3449-05  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 41 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :

Quant Time: Jun 18 06:07:12 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X061518W.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Jun 16 01:37:33 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.67  | 168  | 214398   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.87  | 114  | 307076   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.12 | 117  | 289797   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.09 | 152  | 166283   | 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   | 145566   | 44.68 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 89.36% |          |
| 35) Dibromofluoromethane    | 5.51  | 113  | 111485   | 45.49 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 90.98% |          |
| 50) Toluene-d8              | 8.72  | 98   | 442572   | 47.56 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 95.12% |          |
| 62) 4-Bromofluorobenzene    | 11.14 | 95   | 157365   | 44.63 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 89.26% |          |

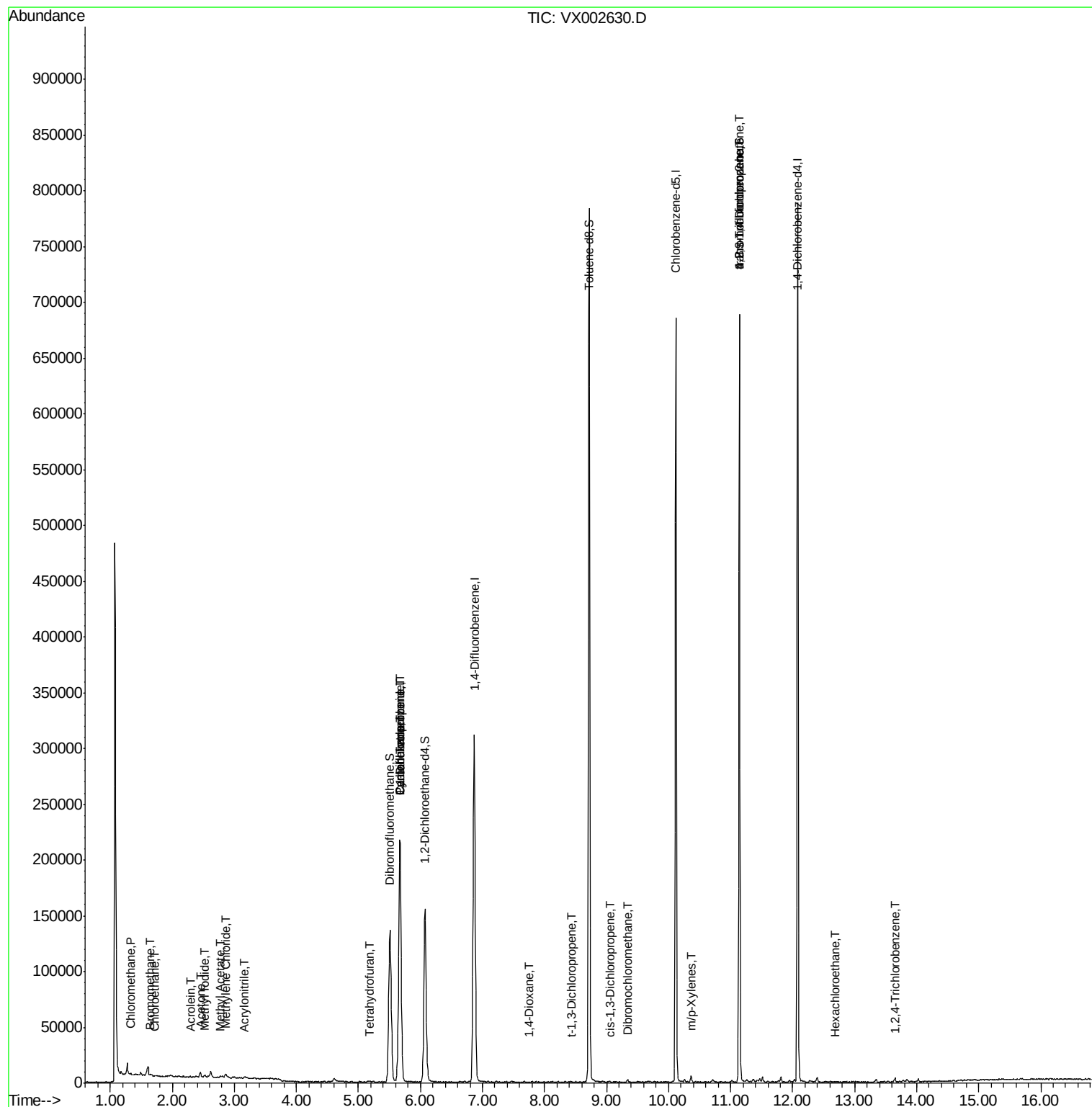
| Target Compounds               | R.T.  | QIon | Response | Conc  | Units  | Qvalue |
|--------------------------------|-------|------|----------|-------|--------|--------|
| 3) Chloromethane               | 1.33  | 50   | 630      | 0.23  | ug/l # | 61     |
| 5) Bromomethane                | 1.65  | 94   | 750      | 0.44  | ug/l # | 59     |
| 6) Chloroethane                | 1.73  | 64   | 487      | 0.26  | ug/l   | 94     |
| 10) Methyl Iodide              | 2.53  | 142  | 1888     | 5.67  | ug/l   | 92     |
| 13) Acrolein                   | 2.30  | 56   | 143      | 7.30  | ug/l # | 14     |
| 15) Acrylonitrile              | 3.15  | 53   | 514      | 0.35  | ug/l # | 78     |
| 16) Acetone                    | 2.45  | 43   | 4407     | 3.07  | ug/l   | 100    |
| 18) Methyl Acetate             | 2.78  | 43   | 1845     | 0.48  | ug/l # | 73     |
| 20) Methylene Chloride         | 2.86  | 84   | 1442     | 0.49  | ug/l   | 87     |
| 29) Tetrahydrofuran            | 5.17  | 42   | 737      | 0.60  | ug/l # | 80     |
| 31) Cyclohexane                | 5.67  | 56   | 4842     | 1.26  | ug/l # | 22     |
| 36) 1,1-Dichloropropene        | 5.67  | 75   | 15184    | 4.66  | ug/l # | 51     |
| 38) Carbon Tetrachloride       | 5.67  | 117  | 20701    | 6.37  | ug/l # | 15     |
| 49) 1,4-Dioxane                | 7.75  | 88   | 20       | 0.34  | ug/l # | 22     |
| 53) t-1,3-Dichloropropene      | 8.43  | 75   | 150      | 2.43  | ug/l # | 43     |
| 54) cis-1,3-Dichloropropene    | 9.06  | 75   | 262      | 3.28  | ug/l # | 73     |
| 60) Dibromochloromethane       | 9.33  | 129  | 307      | 3.86  | ug/l # | 11     |
| 68) m/p-Xylenes                | 10.37 | 106  | 1329     | 0.29  | ug/l   | 85     |
| 76) 1,2,3-Trichloropropane     | 11.14 | 75   | 83860    | 26.73 | ug/l # | 33     |
| 81) trans-1,4-Dichloro-2-buten | 11.14 | 75   | 83860    | 82.55 | ug/l # | 7      |
| 90) Hexachloroethane           | 12.68 | 117  | 21       | 2.64  | ug/l # | 1      |
| 93) 1,2,4-Trichlorobenzene     | 13.65 | 180  | 894      | 0.22  | ug/l   | 92     |

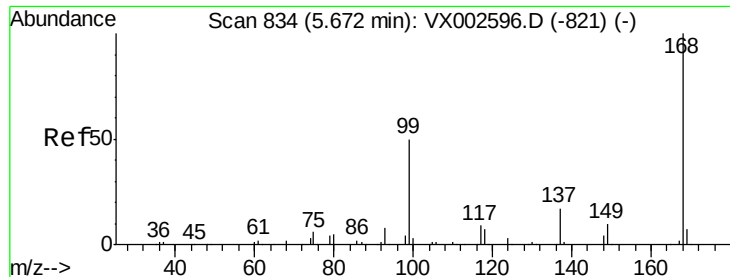
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Time: Jun 18 06:07:12 2018  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X061518W.M  
Quant Title : SW846 8260  
QLast Update : Sat Jun 16 01:37:33 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: VX002630.D

Acq: 16 Jun 2018 07:12

Instrument :

MSVOA\_X

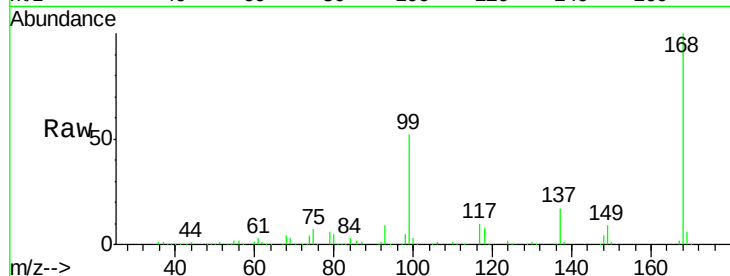
ClientSampleId :

Tot Ion:168 Resp: 214398

Ion Ratio Lower Upper

168 100

99 51.6 39.3 58.9



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

5.67

80000

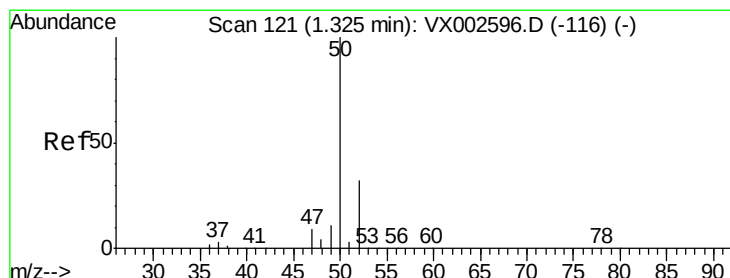
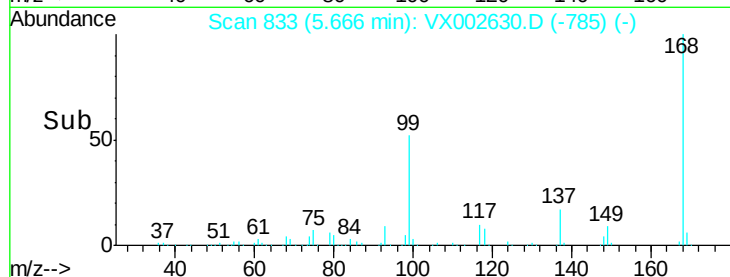
60000

40000

20000

0

Time--> 5.50 5.60 5.70 5.80



#3

Chloromethane

Concen: 0.23 ug/l

RT: 1.33 min Scan# 122

Delta R.T. 0.01 min

Lab File: VX002630.D

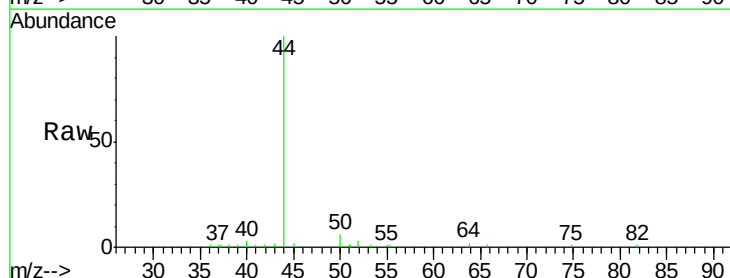
Acq: 16 Jun 2018 07:12

Tgt Ion: 50 Resp: 630

Ion Ratio Lower Upper

50 100

52 54.0 25.7 38.5#



Abundance Ion 49.90 (49.60 to 50.60): VX0

Ion 51.90 (51.60 to 52.60): VX0

1.33

400

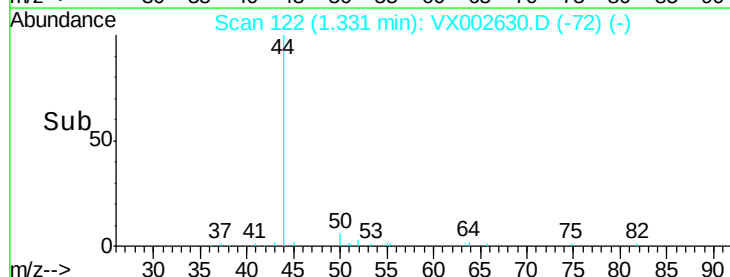
300

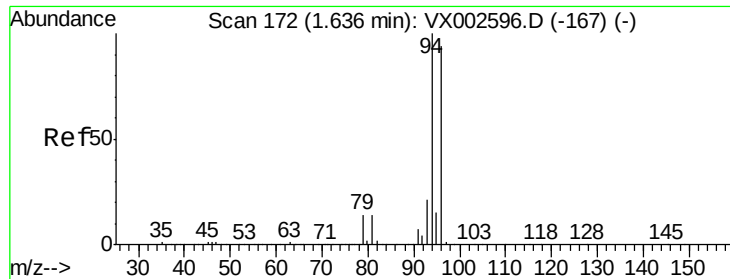
200

100

0

Time--> 1.30 1.35





#5

Bromomethane

Concen: 0.44 ug/l

RT: 1.65 min Scan# 174

Delta R.T. 0.01 min

Lab File: VX002630.D

Acq: 16 Jun 2018 07:12

Instrument :

MSVOA\_X

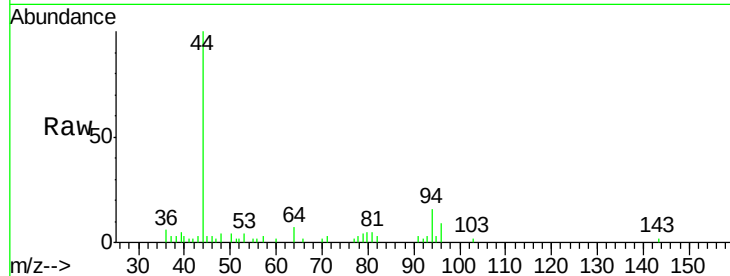
ClientSampleId :

Tot Ion: 94 Resp: 750

Ion Ratio Lower Upper

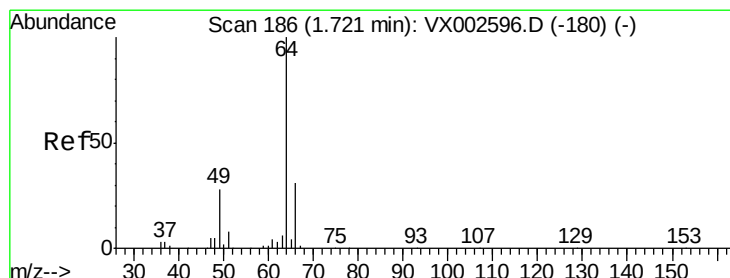
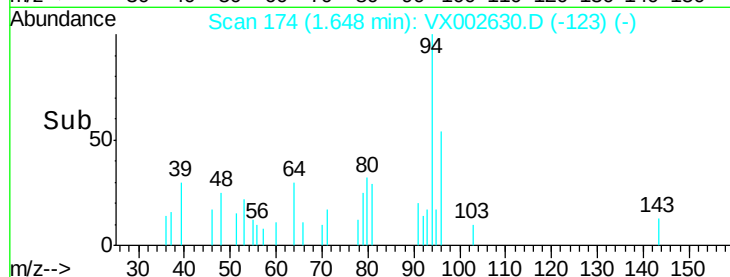
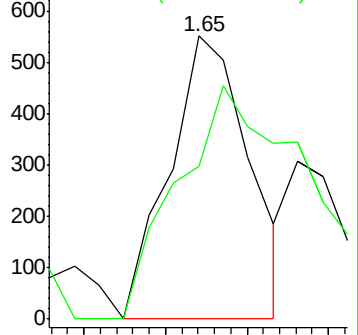
94 100

96 54.1 74.9 112.3#



Abundance Ion 93.90 (93.60 to 94.60): VX0

Ion 95.90 (95.60 to 96.60): VX0



#6

Chloroethane

Concen: 0.26 ug/l

RT: 1.73 min Scan# 187

Delta R.T. 0.01 min

Lab File: VX002630.D

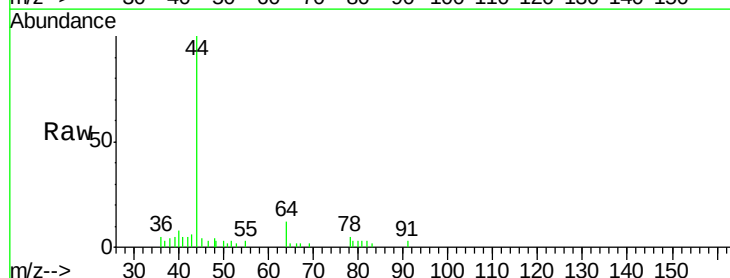
Acq: 16 Jun 2018 07:12

Tgt Ion: 64 Resp: 487

Ion Ratio Lower Upper

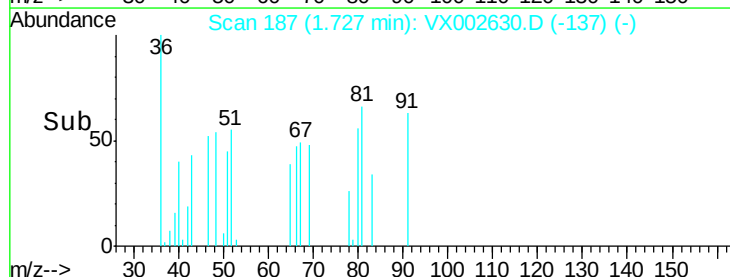
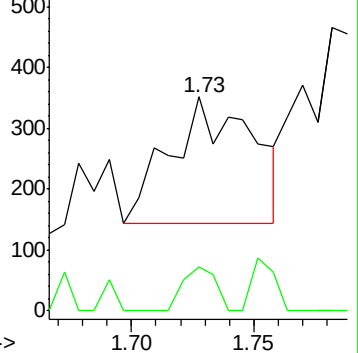
64 100

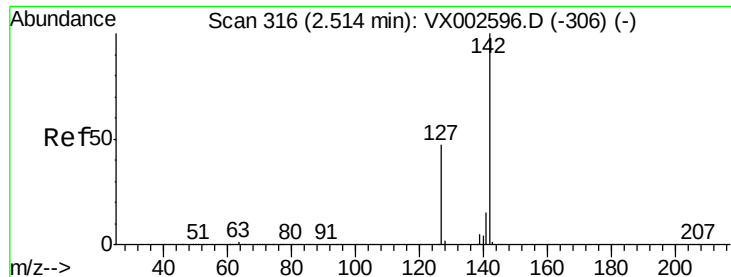
66 35.1 25.5 38.3



Abundance Ion 63.90 (63.60 to 64.60): VX0

Ion 65.90 (65.60 to 66.60): VX0

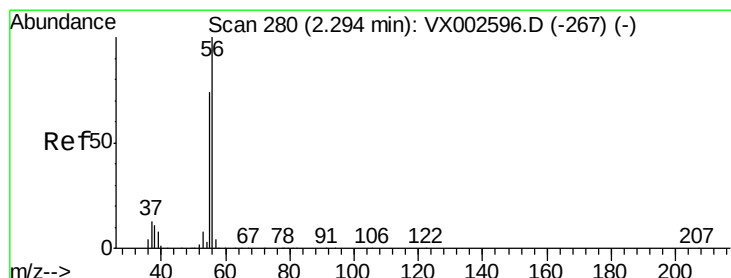
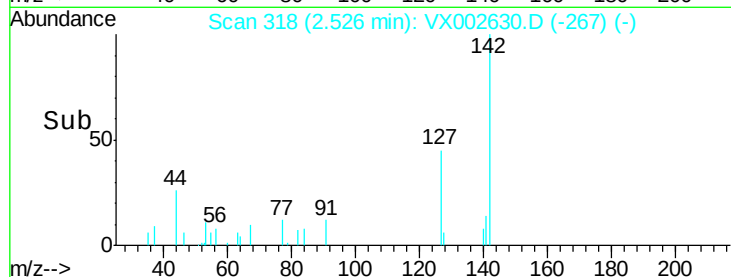
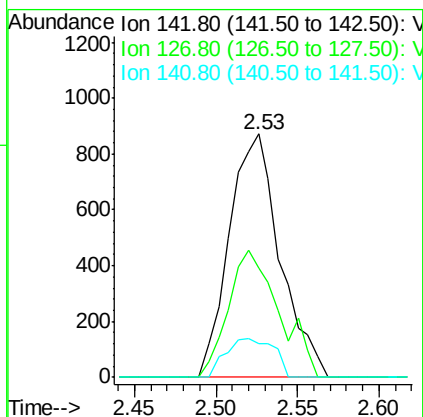
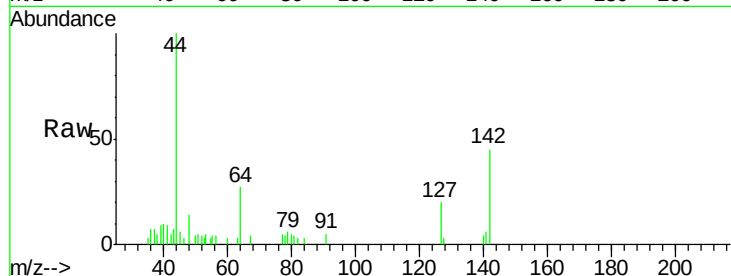




#10  
Methvl Iodide  
Concen: 5.67 ug/l  
RT: 2.53 min Scan# 318  
Delta R.T. 0.01 min  
Lab File: VX002630.D  
Acq: 16 Jun 2018 07:12

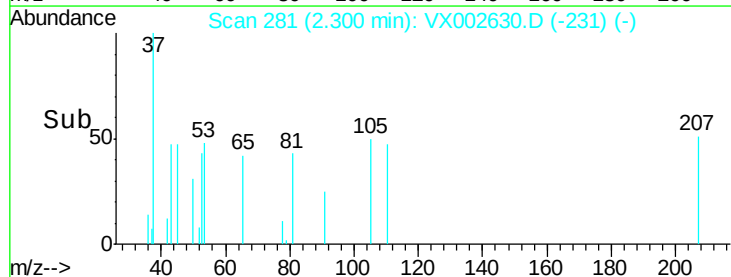
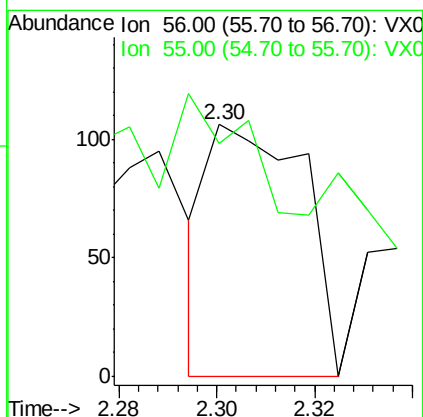
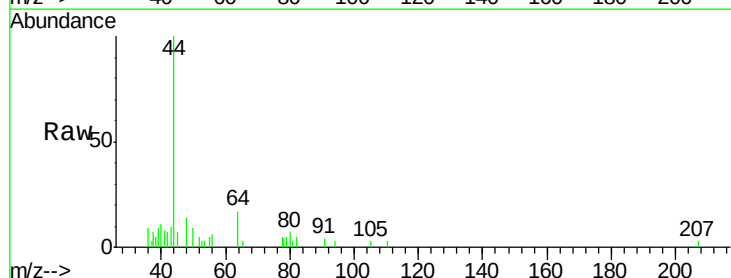
Instrument :  
MSVOA\_X  
ClientSampled :

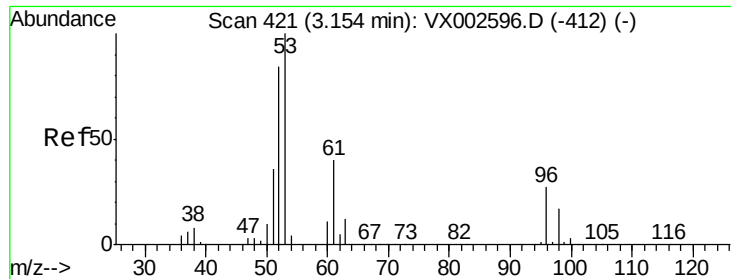
Tot Ion:142 Resp: 1888  
Ion Ratio Lower Upper  
142 100  
127 52.4 36.6 55.0  
141 15.1 11.3 16.9



#13  
Acrolein  
Concen: 7.30 ug/l  
RT: 2.30 min Scan# 281  
Delta R.T. 0.01 min  
Lab File: VX002630.D  
Acq: 16 Jun 2018 07:12

Tgt Ion: 56 Resp: 143  
Ion Ratio Lower Upper  
56 100  
55 0.0 57.0 85.4#





#15

Acrylonitrile

Concen: 0.35 ug/l

RT: 3.15 min Scan# 421

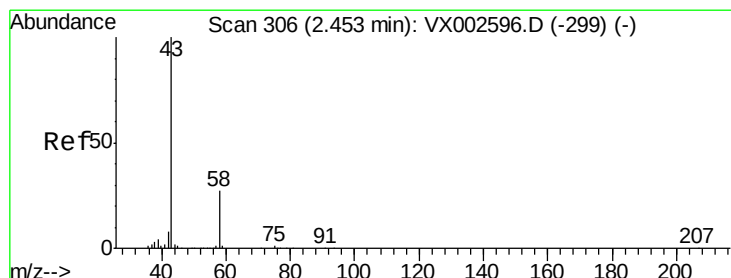
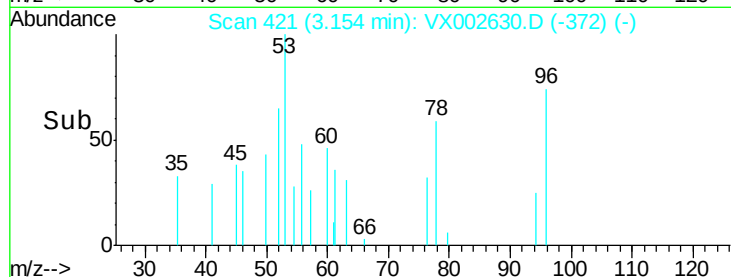
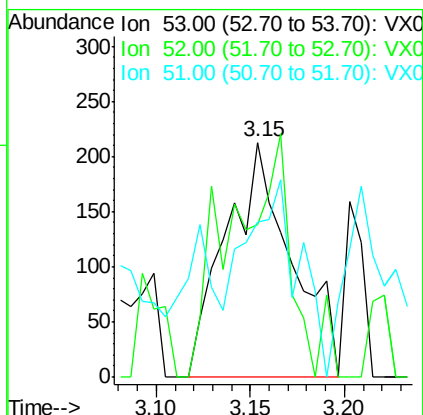
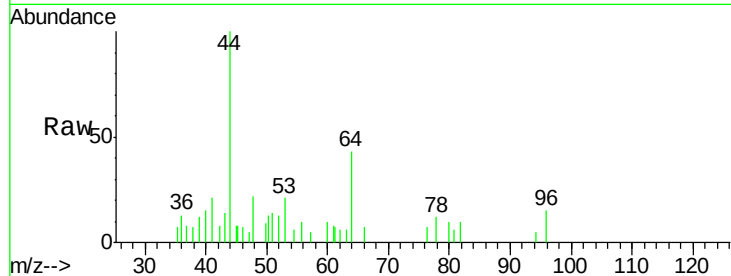
Delta R.T. 0.00 min

Lab File: VX002630.D

Acq: 16 Jun 2018 07:12

Instrument :  
MSVOA\_X  
ClientSampled :

Tot Ion: 53 Resp: 514  
Ion Ratio Lower Upper  
53 100  
52 90.3 66.7 100.1  
51 69.3 29.9 44.9#



#16

Acetone

Concen: 3.07 ug/l

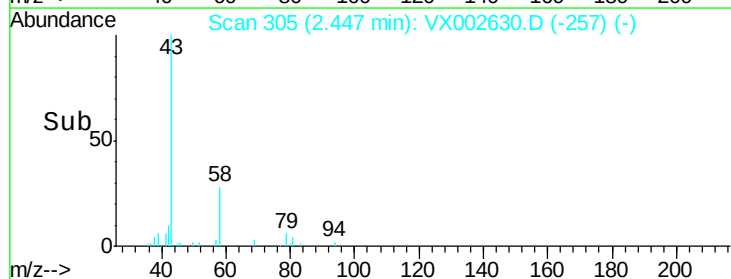
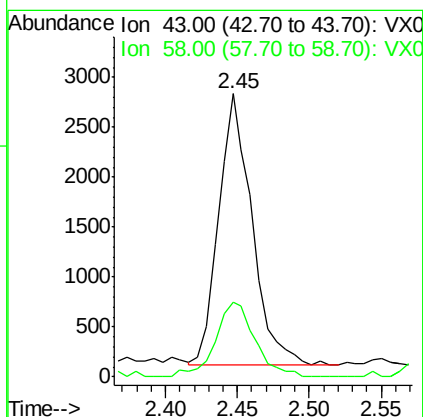
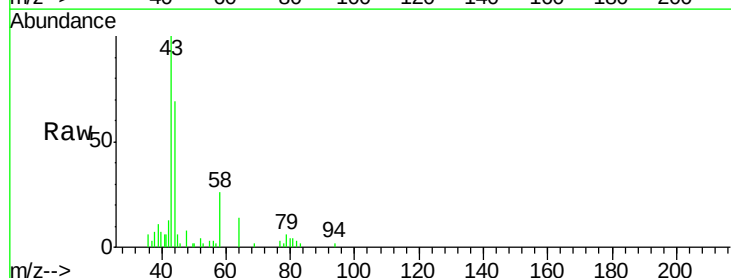
RT: 2.45 min Scan# 305

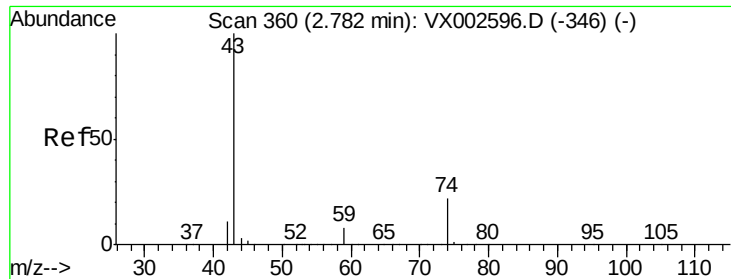
Delta R.T. -0.01 min

Lab File: VX002630.D

Acq: 16 Jun 2018 07:12

Tgt Ion: 43 Resp: 4407  
Ion Ratio Lower Upper  
43 100  
58 27.4 22.1 33.1

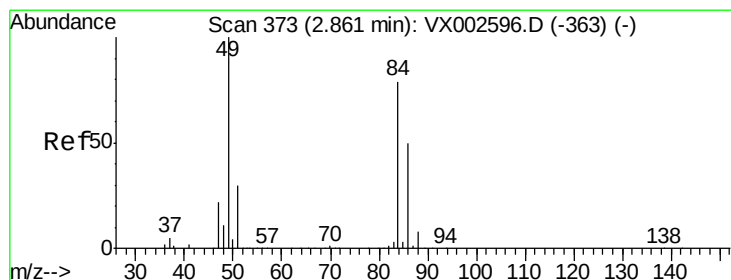
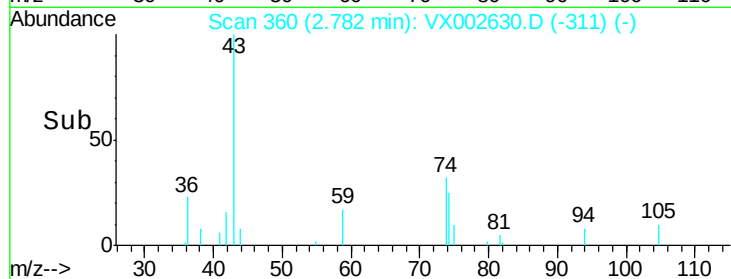
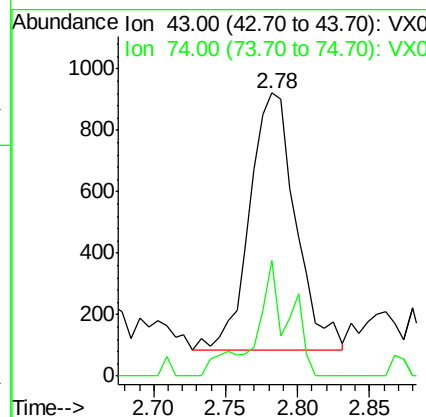
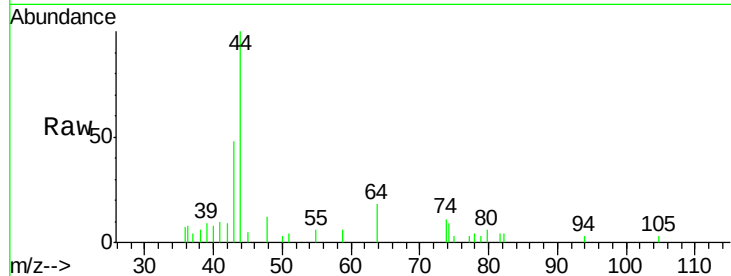




#18  
Methyl Acetate  
Concen: 0.48 ug/l  
RT: 2.78 min Scan# 360  
Delta R.T. 0.00 min  
Lab File: VX002630.D  
Acq: 16 Jun 2018 07:12

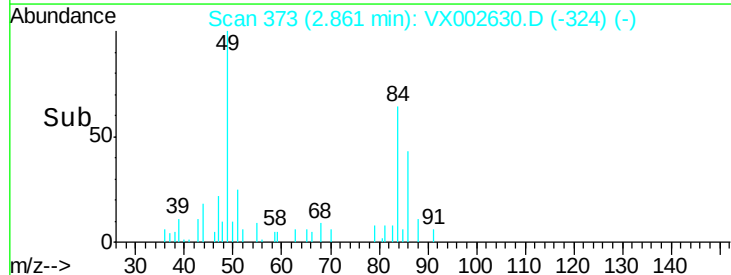
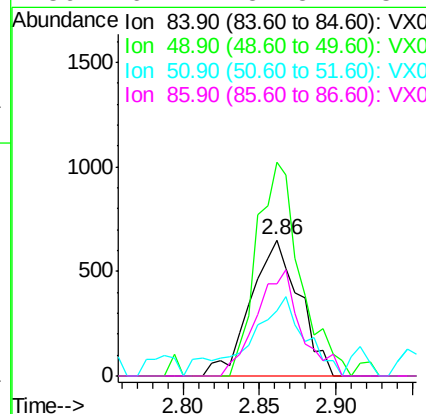
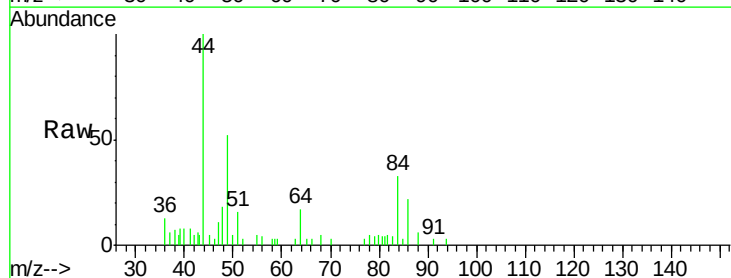
Instrument :  
MSVOA\_X  
ClientSampled :

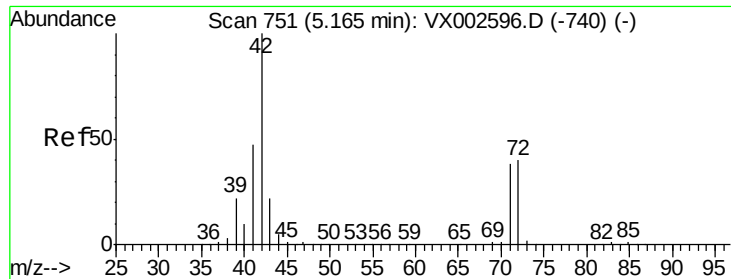
Tot Ion: 43 Resp: 1845  
Ion Ratio Lower Upper  
43 100  
74 33.4 16.7 25.1#



#20  
Methylene Chloride  
Concen: 0.49 ug/l  
RT: 2.86 min Scan# 373  
Delta R.T. 0.00 min  
Lab File: VX002630.D  
Acq: 16 Jun 2018 07:12

Tgt Ion: 84 Resp: 1442  
Ion Ratio Lower Upper  
84 100  
49 157.2 107.8 161.6  
51 48.2 32.8 49.2  
86 67.7 52.5 78.7

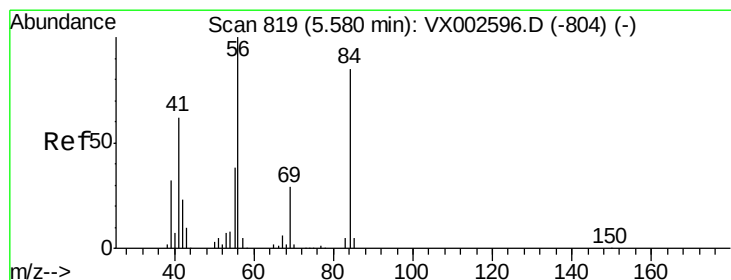
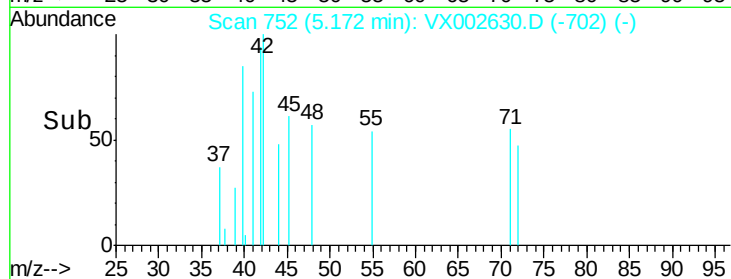
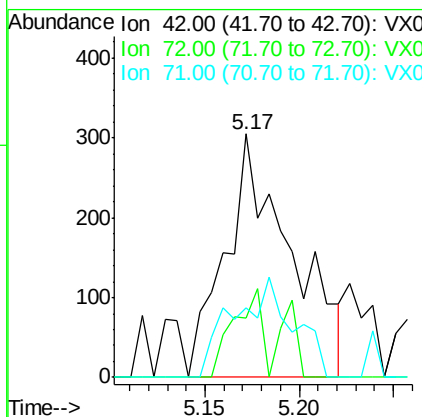
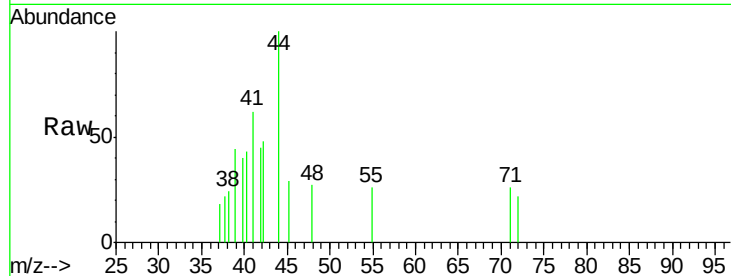




#29  
Tetrahydrofuran  
Concen: 0.60 ug/l  
RT: 5.17 min Scan# 752  
Delta R.T. 0.01 min  
Lab File: VX002630.D  
Acq: 16 Jun 2018 07:12

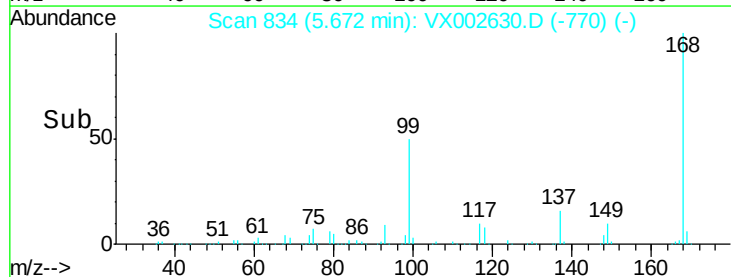
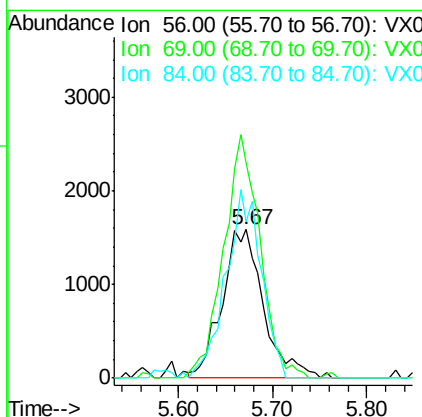
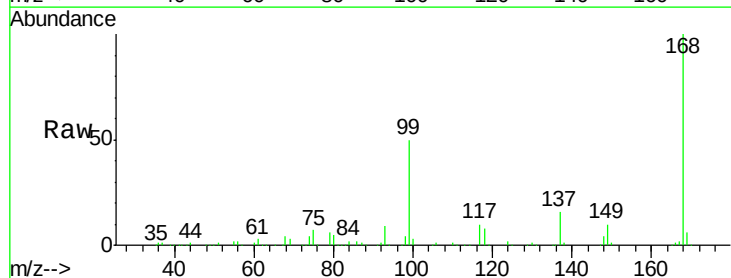
Instrument :  
MSVOA\_X  
ClientSampleId :

Tot Ion: 42 Resp: 737  
Ion Ratio Lower Upper  
42 100  
72 15.7 32.0 48.0#  
71 37.6 30.1 45.1

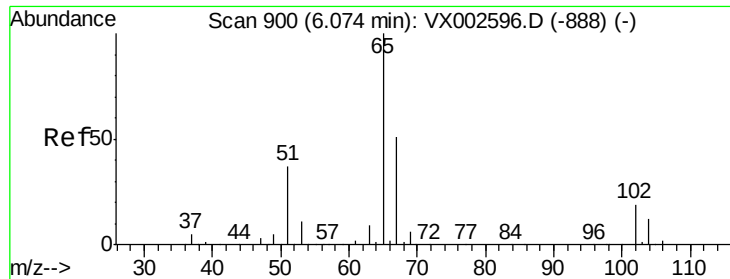


#31  
Cyclohexane  
Concen: 1.26 ug/l  
RT: 5.67 min Scan# 834  
Delta R.T. 0.09 min  
Lab File: VX002630.D  
Acq: 16 Jun 2018 07:12

Tgt Ion: 56 Resp: 4842  
Ion Ratio Lower Upper  
56 100  
69 145.1 23.7 35.5#  
84 104.9 64.1 96.1#



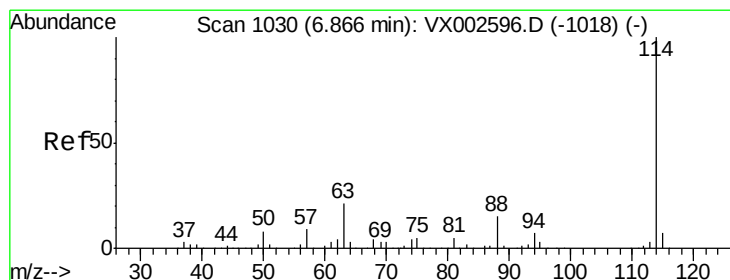
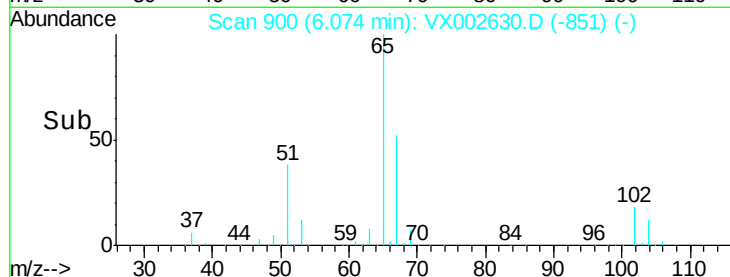
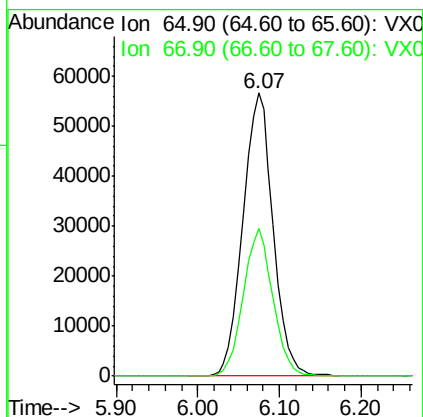
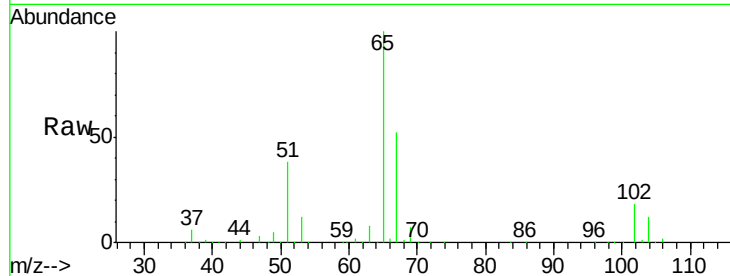




#33  
 1,2-Dichloroethane-d4  
 Concen: 44.68 ug/l  
 RT: 6.07 min Scan# 900  
 Delta R.T. 0.00 min  
 Lab File: VX002630.D  
 Acq: 16 Jun 2018 07:12

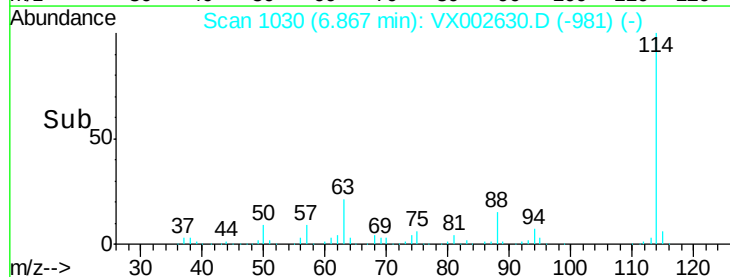
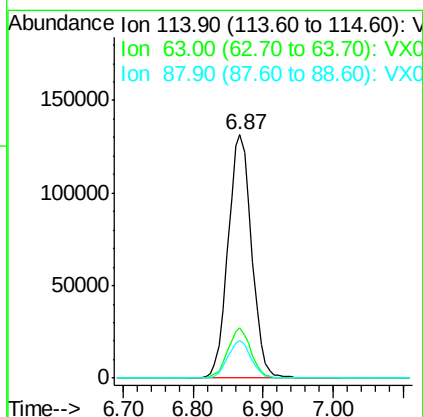
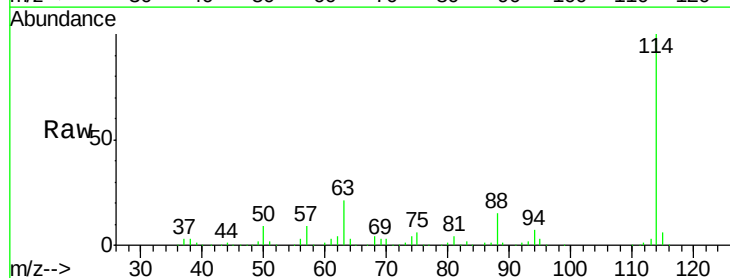
Instrument :  
 MSVOA\_X  
 ClientSampleId :

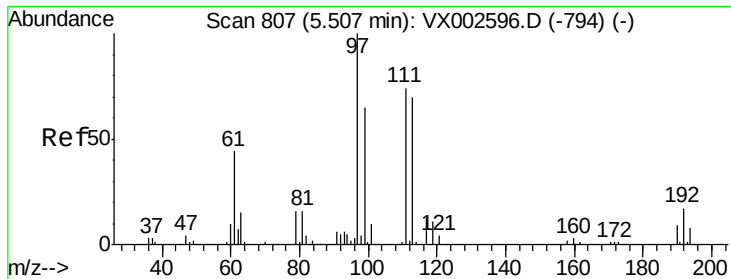
Tot Ion: 65 Resp: 145566  
 Ion Ratio Lower Upper  
 65 100  
 67 51.2 0.0 102.6



#34  
 1,4-Difluorobenzene  
 Concen: 50.00 ug/l  
 RT: 6.87 min Scan# 1030  
 Delta R.T. 0.00 min  
 Lab File: VX002630.D  
 Acq: 16 Jun 2018 07:12

Tgt Ion: 114 Resp: 307076  
 Ion Ratio Lower Upper  
 114 100  
 63 20.6 0.0 41.4  
 88 15.2 0.0 30.0

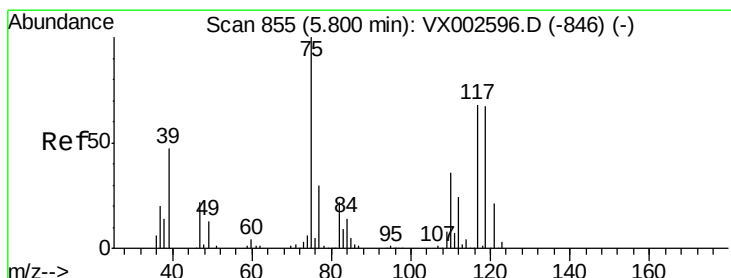
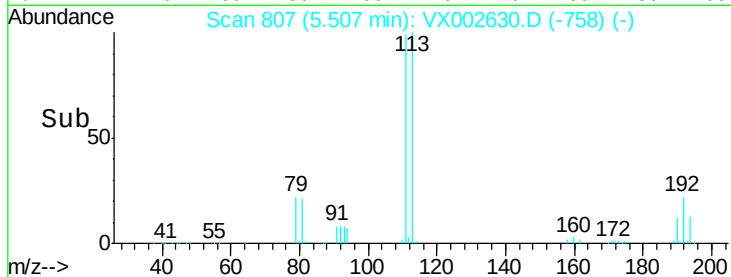
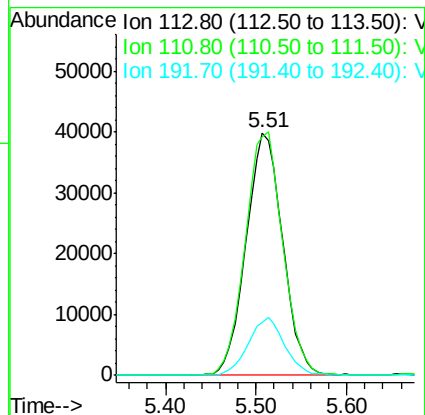
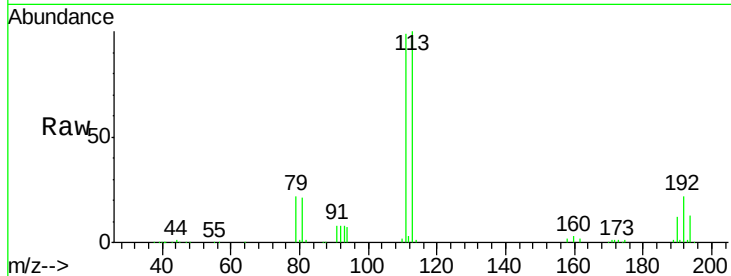




#35  
 Dibromofluoromethane  
 Concen: 45.49 ug/l  
 RT: 5.51 min Scan# 807  
 Delta R.T. 0.00 min  
 Lab File: VX002630.D  
 Acq: 16 Jun 2018 07:12

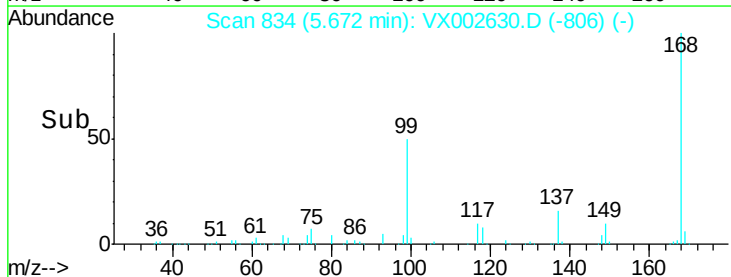
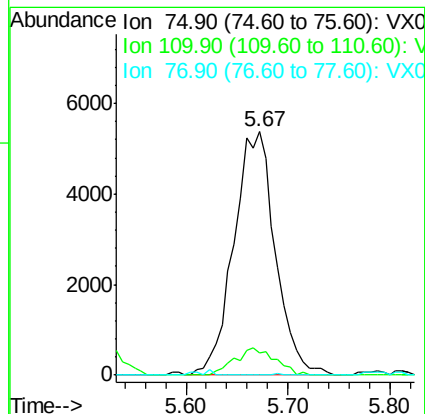
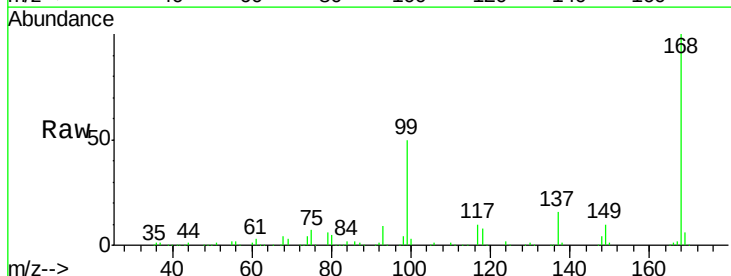
Instrument :  
 MSVOA\_X  
 ClientSampled :

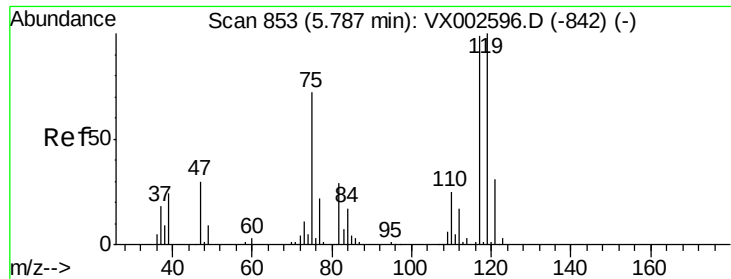
Tot Ion:113 Resp: 111485  
 Ion Ratio Lower Upper  
 113 100  
 111 102.6 81.4 122.0  
 192 23.5 19.1 28.7



#36  
 1,1-Dichloropropene  
 Concen: 4.66 ug/l  
 RT: 5.67 min Scan# 834  
 Delta R.T. -0.13 min  
 Lab File: VX002630.D  
 Acq: 16 Jun 2018 07:12

Tgt Ion: 75 Resp: 15184  
 Ion Ratio Lower Upper  
 75 100  
 110 10.9 18.1 54.4#  
 77 0.0 24.3 36.5#





#38

Carbon Tetrachloride

Concen: 6.37 ug/l

RT: 5.67 min Scan# 833

Delta R.T. -0.12 min

Lab File: VX002630.D

Acq: 16 Jun 2018 07:12

Instrument :

MSVOA\_X

ClientSampleId :

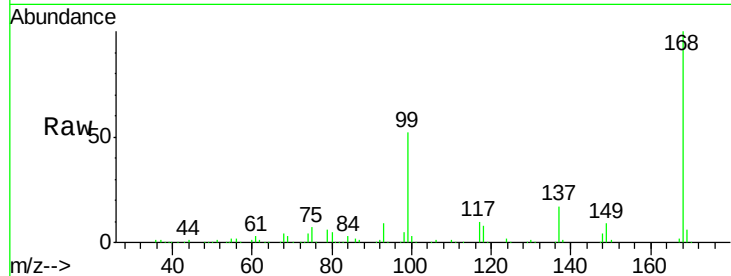
Tot Ion:117 Resp: 20701

Ion Ratio Lower Upper

117 100

119 4.3 77.4 116.0#

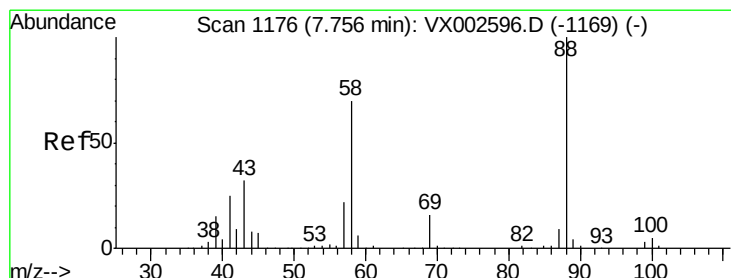
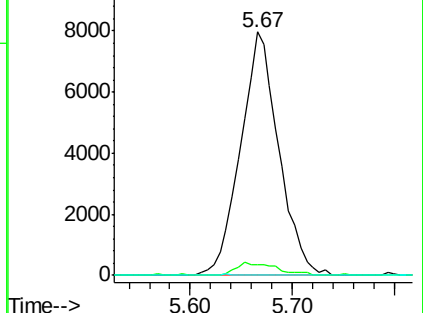
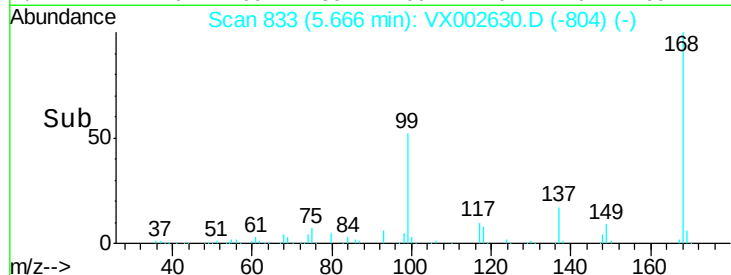
121 0.0 24.4 36.6#



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: 0.34 ug/l

RT: 7.75 min Scan# 1175

Delta R.T. -0.01 min

Lab File: VX002630.D

Acq: 16 Jun 2018 07:12

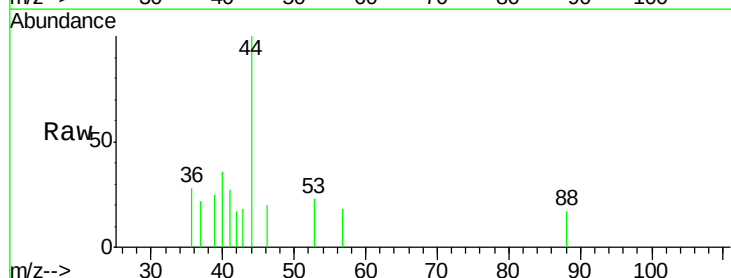
Tgt Ion: 88 Resp: 20

Ion Ratio Lower Upper

88 100

43 0.0 29.8 44.6#

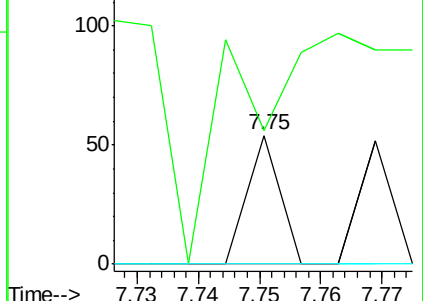
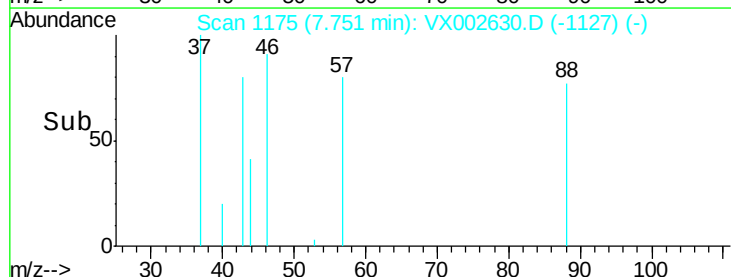
58 0.0 57.1 85.7#

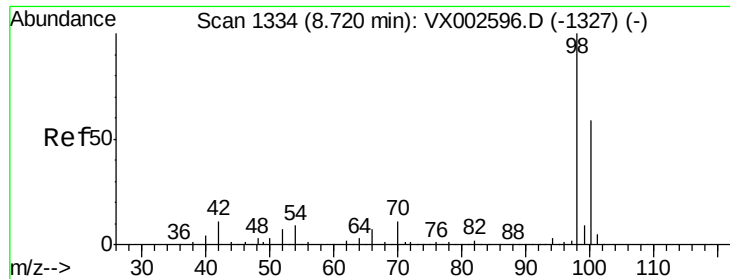


Abundance Ion 88.00 (87.70 to 88.70): VX0

Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0

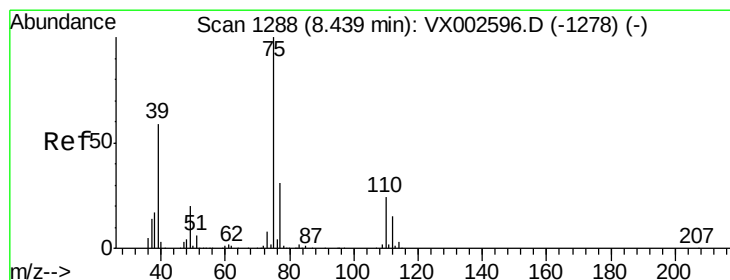
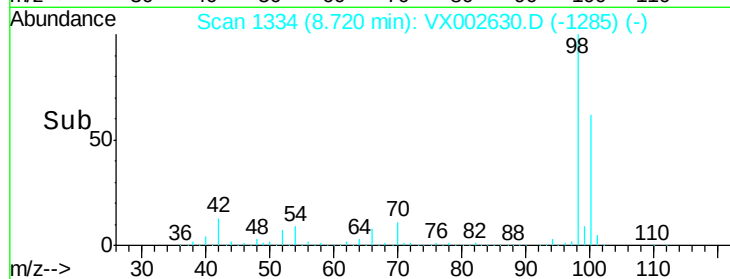
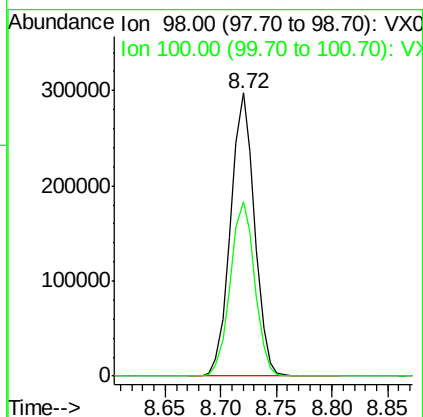
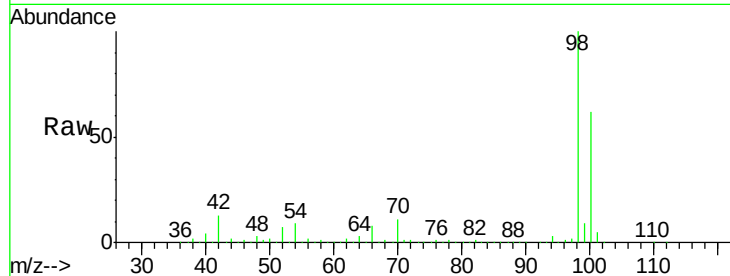




#50  
Toluene-d8  
Concen: 47.56 ug/l  
RT: 8.72 min Scan# 1334  
Delta R.T. 0.00 min  
Lab File: VX002630.D  
Acq: 16 Jun 2018 07:12

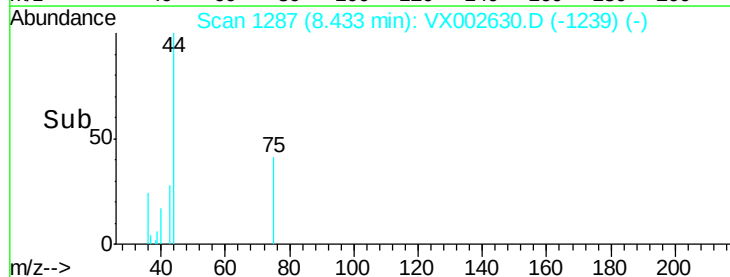
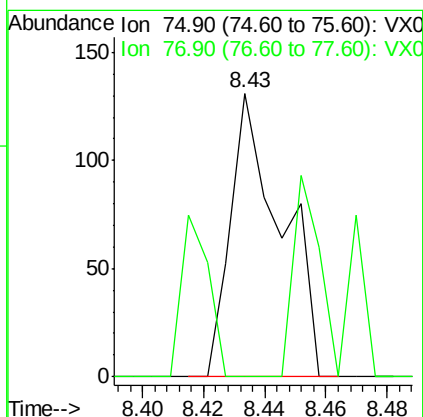
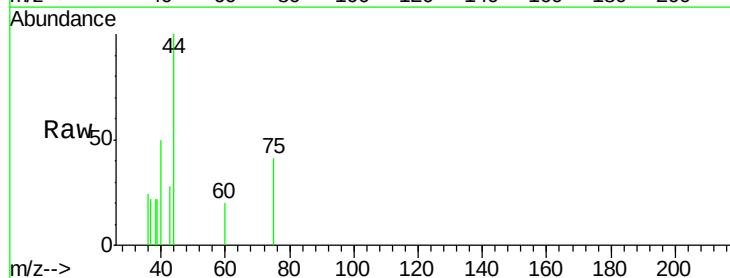
Instrument :  
MSVOA\_X  
ClientSampled :

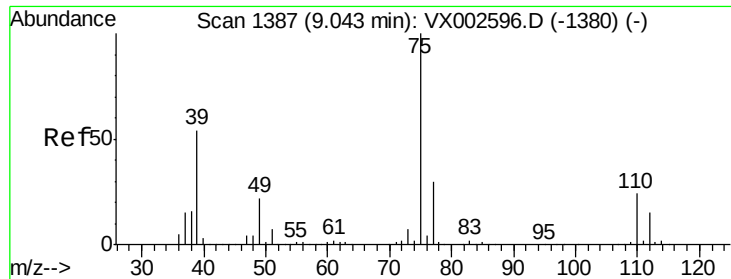
Tot Ion: 98 Resp: 442572  
Ion Ratio Lower Upper  
98 100  
100 63.0 50.9 76.3



#53  
t-1,3-Dichloropropene  
Concen: 2.43 ug/l  
RT: 8.43 min Scan# 1287  
Delta R.T. -0.01 min  
Lab File: VX002630.D  
Acq: 16 Jun 2018 07:12

Tgt Ion: 75 Resp: 150  
Ion Ratio Lower Upper  
75 100  
77 0.0 25.4 38.2#



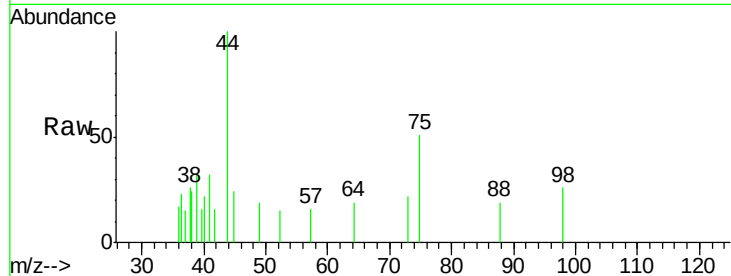


#54

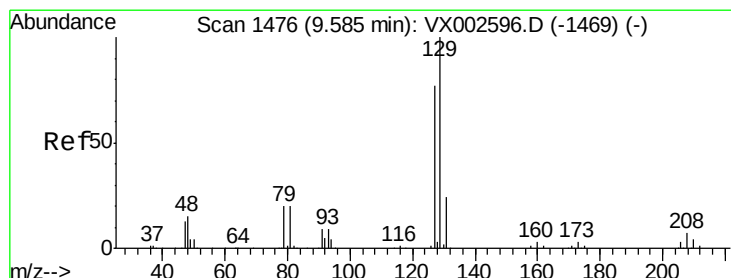
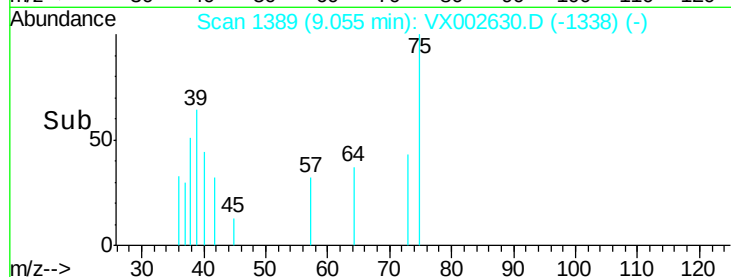
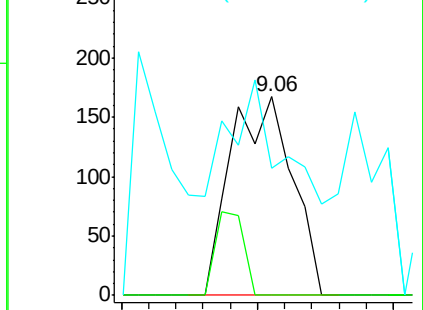
cis-1,3-Dichloropropene  
Concen: 3.28 ug/l  
RT: 9.06 min Scan# 1389  
Delta R.T. 0.01 min  
Lab File: VX002630.D  
Acq: 16 Jun 2018 07:12

Instrument :  
MSVOA\_X  
ClientSampled :

Tot Ion: 75 Resp: 262  
Ion Ratio Lower Upper  
75 100  
77 0.0 24.8 37.2#  
39 45.5 42.4 63.6



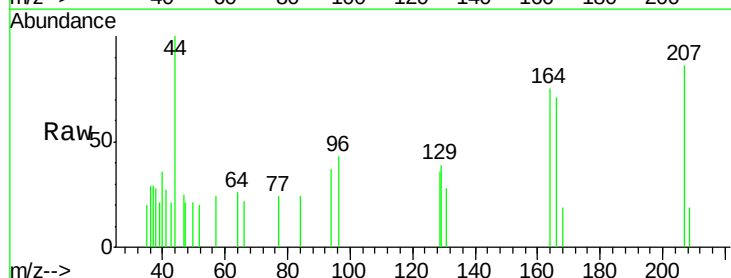
Abundance Ion 74.90 (74.60 to 75.60): VX0  
Ion 76.90 (76.60 to 77.60): VX0  
Ion 39.00 (38.70 to 39.70): VX0



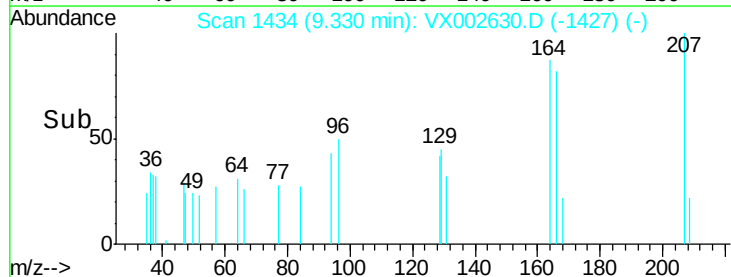
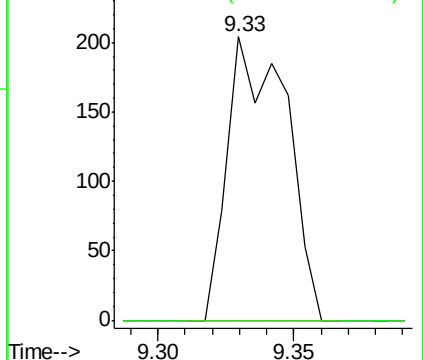
#60

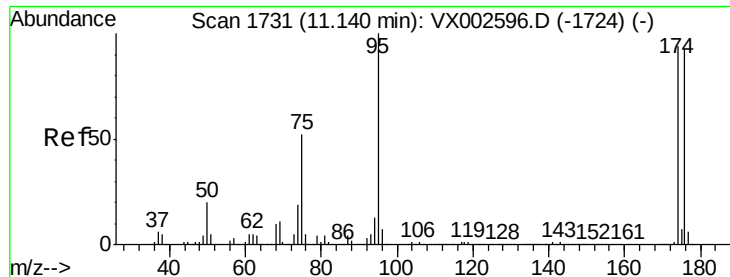
Dibromochloromethane  
Concen: 3.86 ug/l  
RT: 9.33 min Scan# 1434  
Delta R.T. -0.26 min  
Lab File: VX002630.D  
Acq: 16 Jun 2018 07:12

Tgt Ion: 129 Resp: 307  
Ion Ratio Lower Upper  
129 100  
127 0.0 38.5 115.3#



Abundance Ion 128.80 (128.50 to 129.50): V  
Ion 126.80 (126.50 to 127.50): V

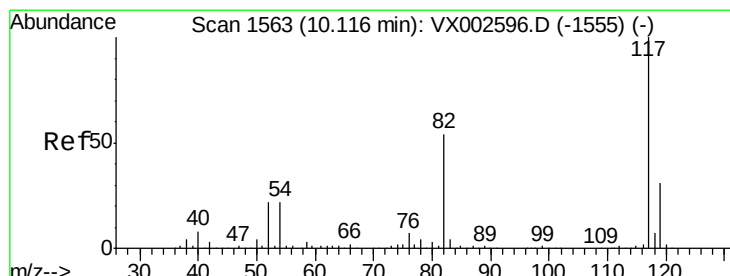
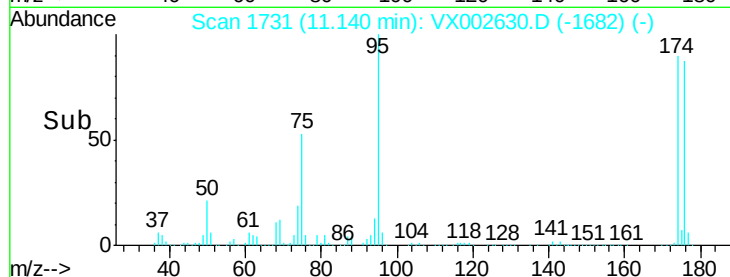
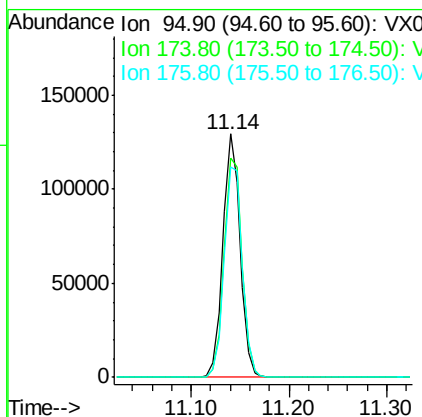
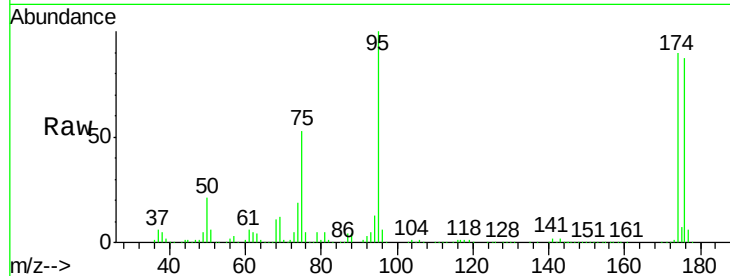




#62  
4-Bromofluorobenzene  
Concen: 44.63 ug/l  
RT: 11.14 min Scan# 1731  
Delta R.T. 0.00 min  
Lab File: VX002630.D  
Acq: 16 Jun 2018 07:12

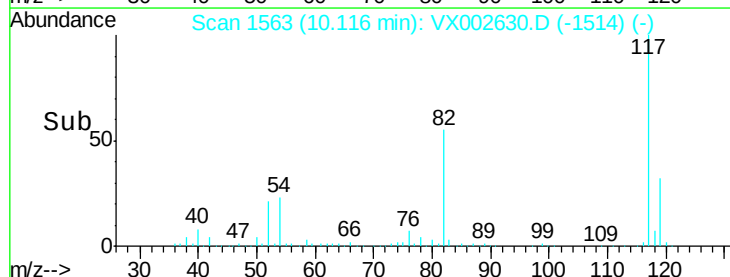
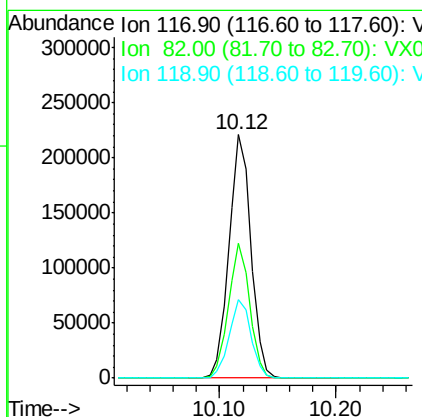
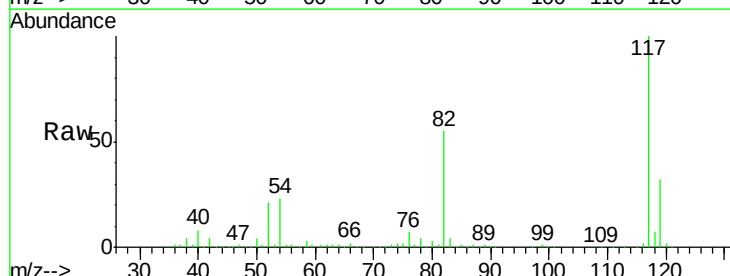
Instrument :  
MSVOA\_X  
ClientSampleId :

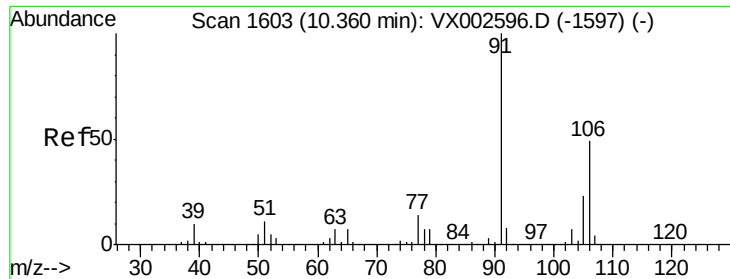
Tot Ion: 95 Resp: 157365  
Ion Ratio Lower Upper  
95 100  
174 95.1 0.0 187.4  
176 91.9 0.0 181.0



#63  
Chlorobenzene-d5  
Concen: 50.00 ug/l  
RT: 10.12 min Scan# 1563  
Delta R.T. 0.00 min  
Lab File: VX002630.D  
Acq: 16 Jun 2018 07:12

Tgt Ion: 117 Resp: 289797  
Ion Ratio Lower Upper  
117 100  
82 55.2 45.0 67.4  
119 32.2 25.8 38.6

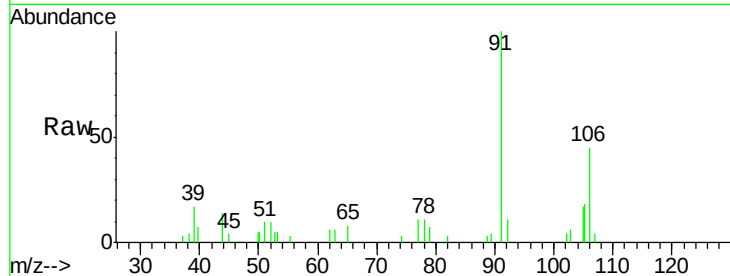




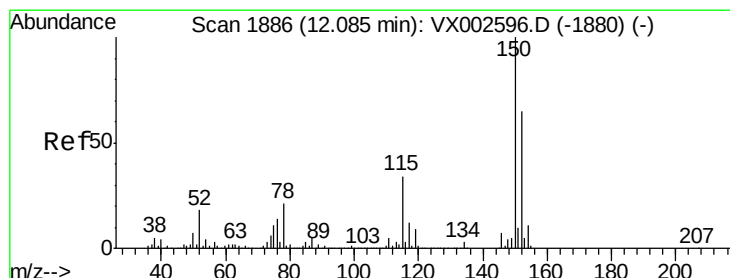
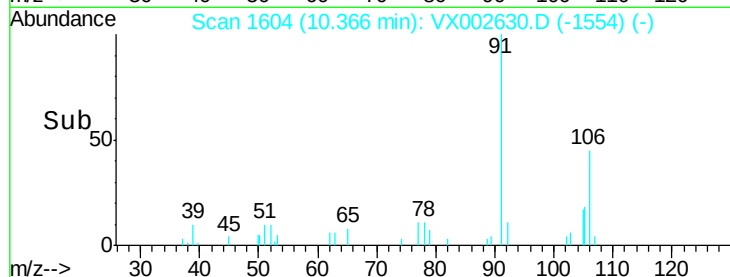
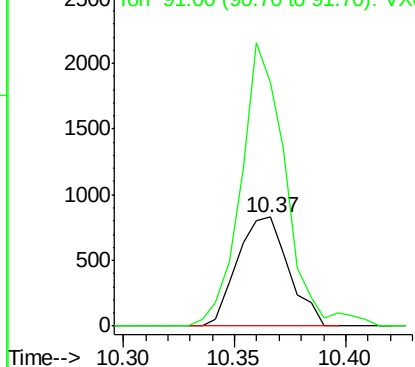
#68  
m/p-Xvlenes  
Concen: 0.29 ug/l  
RT: 10.37 min Scan# 1604  
Delta R.T. 0.01 min  
Lab File: VX002630.D  
Acq: 16 Jun 2018 07:12

Instrument :  
MSVOA\_X  
ClientSampled :

Tot Ion:106 Resp: 1329  
Ion Ratio Lower Upper  
106 100  
91 227.3 163.4 245.2

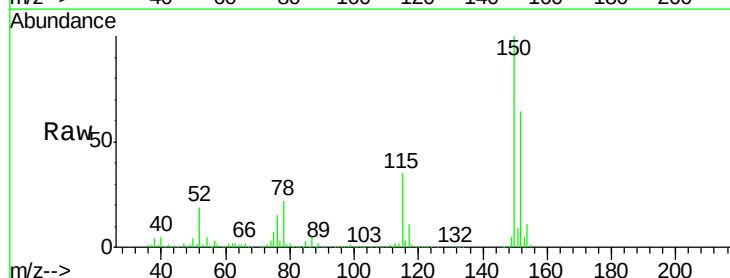


Abundance Ion 106.00 (105.70 to 106.70): V  
Ion 91.00 (90.70 to 91.70): VX0

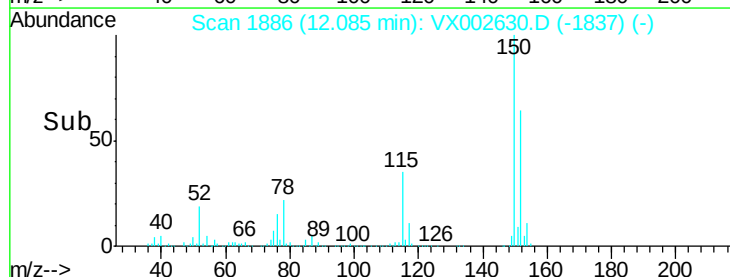
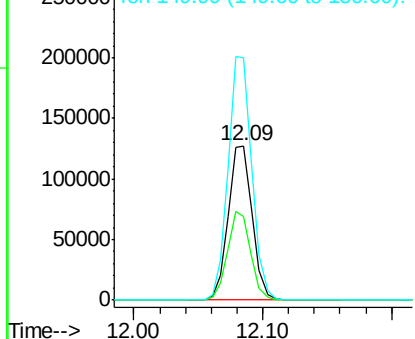


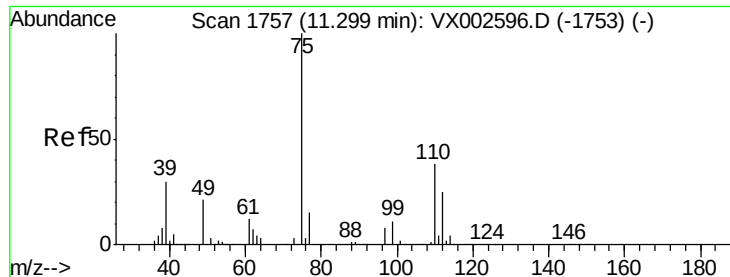
#72  
1,4-Dichlorobenzene-d4  
Concen: 50.00 ug/l  
RT: 12.09 min Scan# 1886  
Delta R.T. 0.00 min  
Lab File: VX002630.D  
Acq: 16 Jun 2018 07:12

Tgt Ion:152 Resp: 166283  
Ion Ratio Lower Upper  
152 100  
115 55.6 40.1 120.2  
150 157.0 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: 26.73 ug/l

RT: 11.14 min Scan# 1731

Delta R.T. -0.16 min

Lab File: VX002630.D

Acq: 16 Jun 2018 07:12

Instrument :

MSVOA\_X

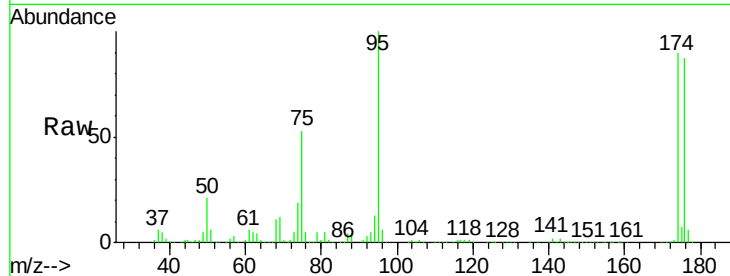
ClientSampleId :

Tot Ion: 75 Resp: 83860

Ion Ratio Lower Upper

75 100

77 1.2 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

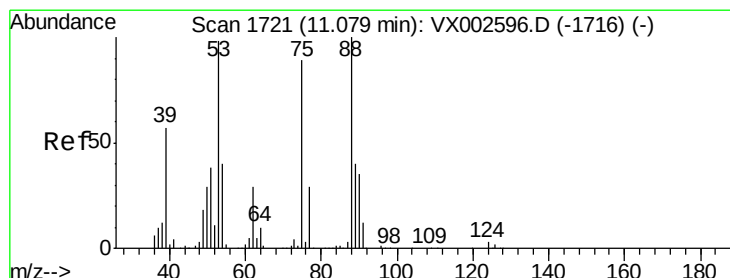
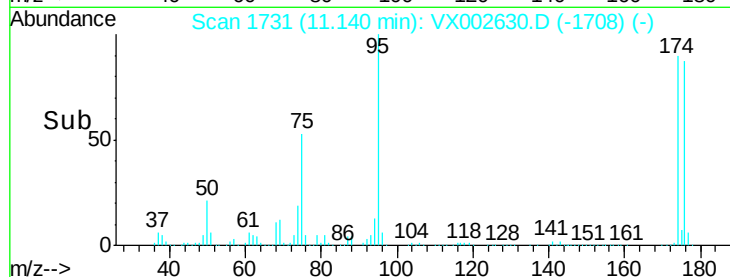
60000

40000

20000

0

Time-->



#81

trans-1,4-Dichloro-2-butene

Concen: 82.55 ug/l

RT: 11.14 min Scan# 1731

Delta R.T. 0.06 min

Lab File: VX002630.D

Acq: 16 Jun 2018 07:12

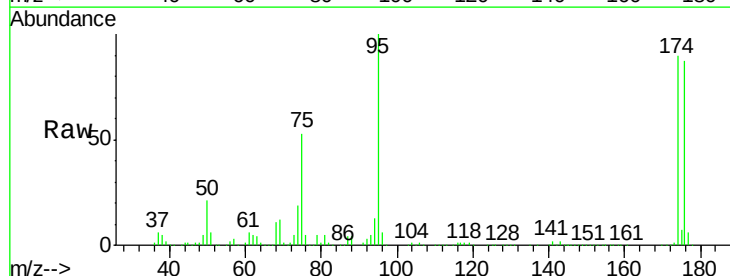
Tgt Ion: 75 Resp: 83860

Ion Ratio Lower Upper

75 100

53 0.1 86.8 130.2#

89 0.0 38.2 57.2#



Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 53.00 (52.70 to 53.70): VX0

Ion 88.90 (88.60 to 89.60): VX0

11.14

80000

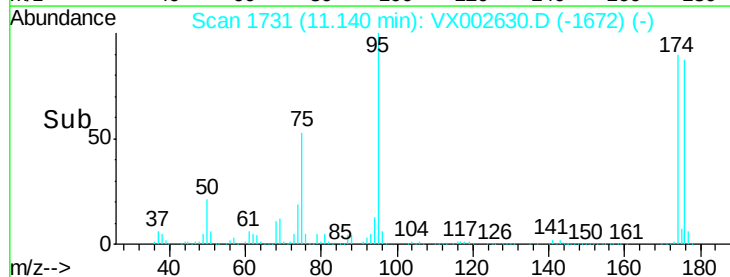
60000

40000

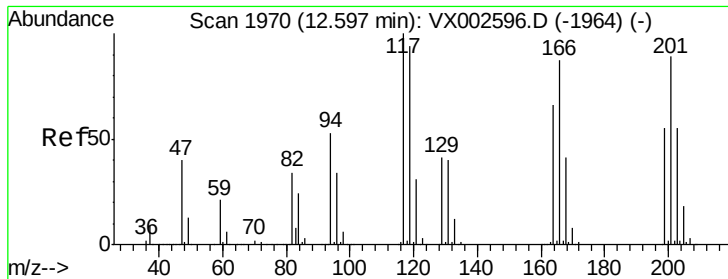
20000

0

Time-->







#90

Hexachloroethane

Concen: 2.64 ug/l

RT: 12.68 min Scan# 1984

Delta R.T. 0.09 min

Lab File: VX002630.D

Acq: 16 Jun 2018 07:12

Instrument :

MSVOA\_X

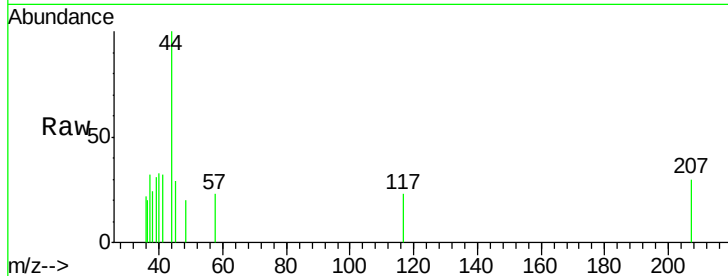
ClientSampleId :

Tot Ion:117 Resp: 21

Ion Ratio Lower Upper

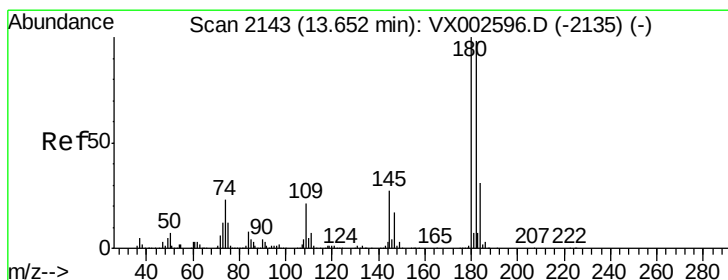
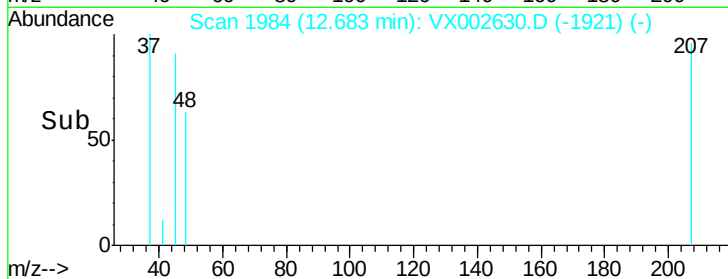
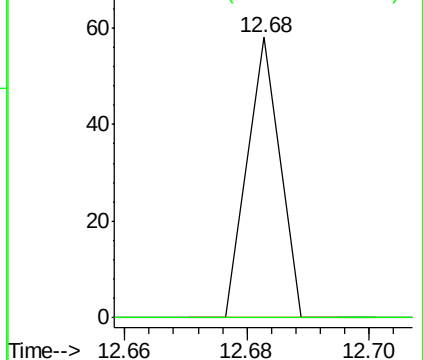
117 100

201 0.0 49.0 147.0#



Abundance Ion 116.80 (116.50 to 117.50): V

Ion 200.70 (200.40 to 201.40): V



#93

1,2,4-Trichlorobenzene

Concen: 0.22 ug/l

RT: 13.65 min Scan# 2143

Delta R.T. 0.00 min

Lab File: VX002630.D

Acq: 16 Jun 2018 07:12

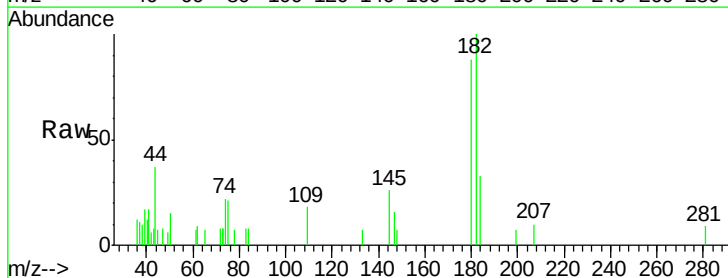
Tgt Ion:180 Resp: 894

Ion Ratio Lower Upper

180 100

182 105.0 47.7 143.1

145 27.9 14.1 42.4



Abundance Ion 179.80 (179.50 to 180.50): V

Ion 181.80 (181.50 to 182.50): V

Ion 144.80 (144.50 to 145.50): V

