

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX061518\  
 Data File : VX002612.D  
 Acq On : 15 Jun 2018 22:22  
 Operator : JC/MD  
 Sample : J3516-03  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 21 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :

Quant Time: Jun 15 23:53:42 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  | 209744   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.87  | 114  | 303465   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.12 | 117  | 280336   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 155943   | 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   | 147365   | 46.23 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 92.46% |          |
| 35) Dibromofluoromethane    | 5.51  | 113  | 110150   | 45.48 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 90.96% |          |
| 50) Toluene-d8              | 8.72  | 98   | 432146   | 46.99 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 93.98% |          |
| 62) 4-Bromofluorobenzene    | 11.14 | 95   | 148658   | 42.66 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 85.32% |          |

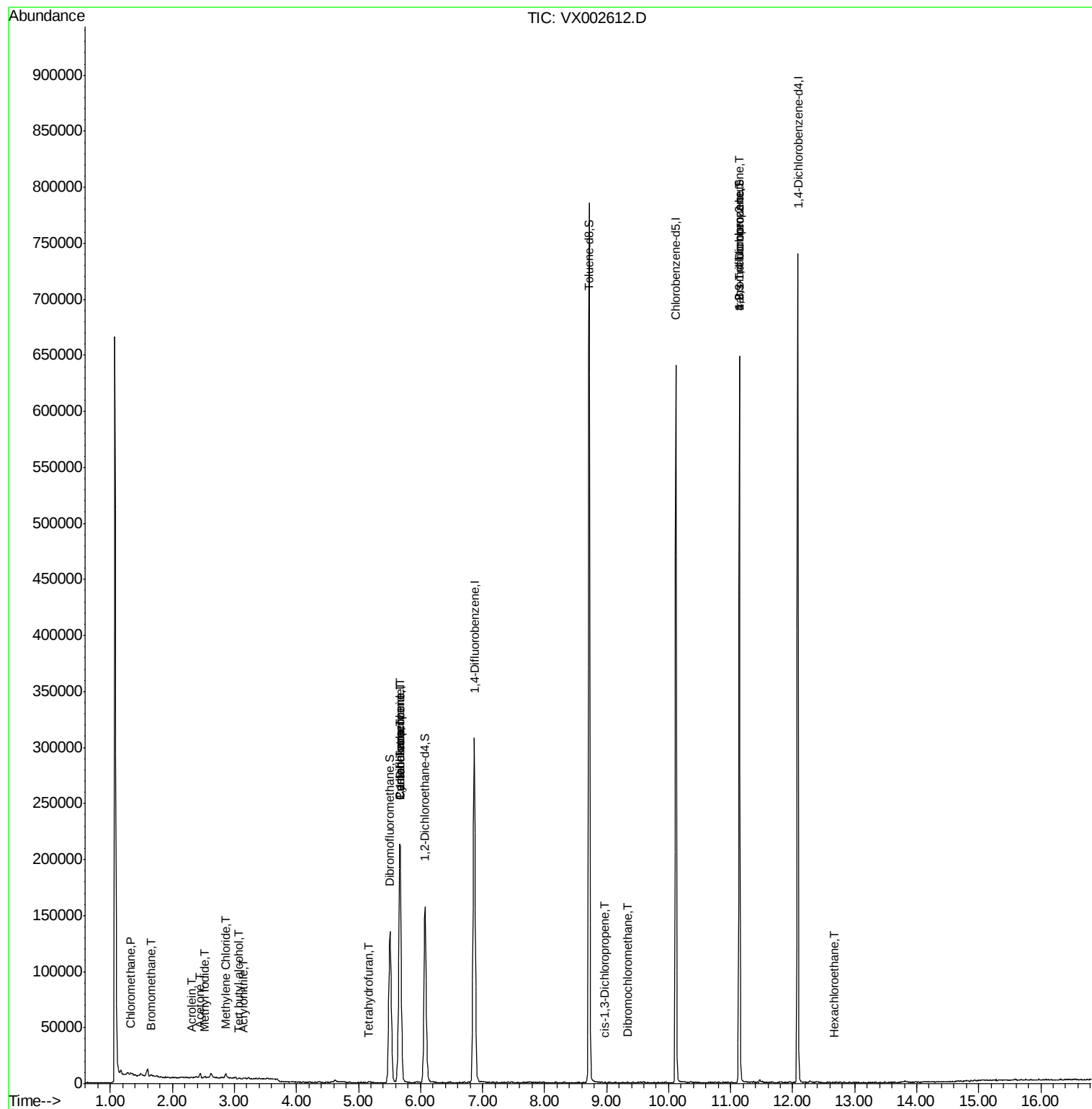
| Target Compounds               | R.T.  | QIon | Response | Conc  | Units  | Qvalue |
|--------------------------------|-------|------|----------|-------|--------|--------|
| 3) Chloromethane               | 1.32  | 50   | 947      | 0.36  | ug/l # | 86     |
| 5) Bromomethane                | 1.67  | 94   | 1064     | 0.64  | ug/l   | 86     |
| 10) Methyl Iodide              | 2.52  | 142  | 1204     | 5.50  | ug/l   | 98     |
| 11) Tert butyl alcohol         | 3.07  | 59   | 347      | 0.53  | ug/l # | 37     |
| 13) Acrolein                   | 2.30  | 56   | 214      | 7.54  | ug/l   | 96     |
| 15) Acrylonitrile              | 3.15  | 53   | 332      | 0.23  | ug/l # | 64     |
| 16) Acetone                    | 2.45  | 43   | 4392     | 3.12  | ug/l   | 95     |
| 20) Methylene Chloride         | 2.86  | 84   | 1348     | 0.47  | ug/l # | 79     |
| 29) Tetrahydrofuran            | 5.17  | 42   | 286      | 0.24  | ug/l # | 87     |
| 31) Cyclohexane                | 5.67  | 56   | 4491     | 1.19  | ug/l # | 4      |
| 36) 1,1-Dichloropropene        | 5.67  | 75   | 14966    | 4.64  | ug/l # | 51     |
| 38) Carbon Tetrachloride       | 5.67  | 117  | 19921    | 6.21  | ug/l # | 16     |
| 54) cis-1,3-Dichloropropene    | 8.98  | 75   | 25       | 3.22  | ug/l # | 62     |
| 60) Dibromochloromethane       | 9.34  | 129  | 25       | 3.77  | ug/l # | 11     |
| 76) 1,2,3-Trichloropropane     | 11.14 | 75   | 80366    | 27.31 | ug/l # | 33     |
| 81) trans-1,4-Dichloro-2-buten | 11.14 | 75   | 80366    | 84.26 | ug/l # | 6      |
| 90) Hexachloroethane           | 12.68 | 117  | 25       | 2.64  | ug/l # | 1      |

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

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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# 834

Delta R.T. -0.00 min

Lab File: VX002612.D

Acq: 15 Jun 2018 22:22

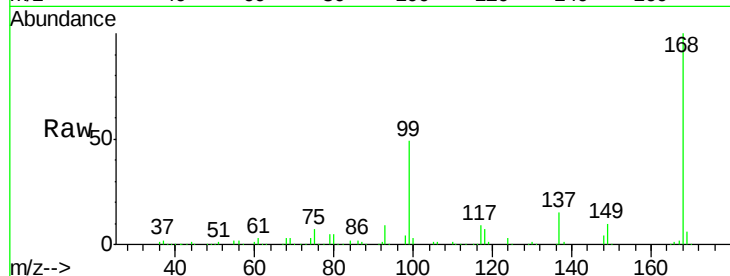
Instrument :  
MSVOA\_X  
ClientSampleId :

Tot Ion:168 Resp: 209744

Ion Ratio Lower Upper

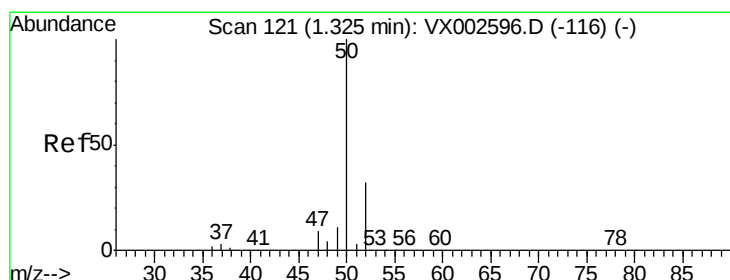
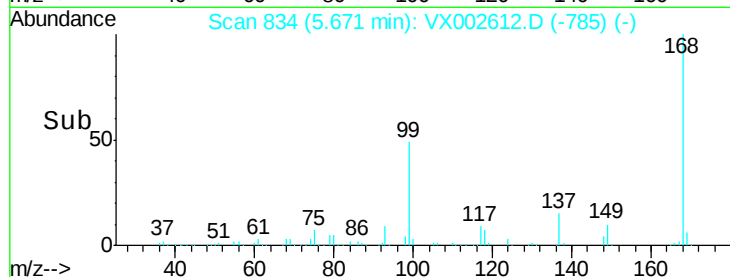
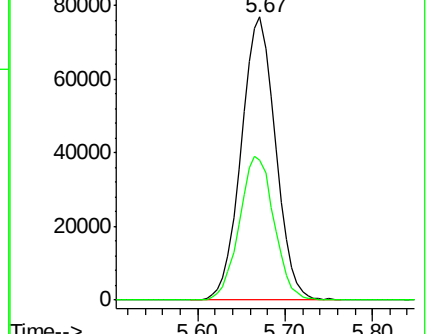
168 100

99 49.5 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: 0.36 ug/l

RT: 1.32 min Scan# 121

Delta R.T. -0.00 min

Lab File: VX002612.D

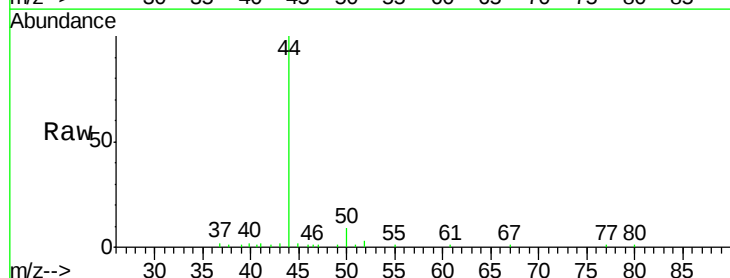
Acq: 15 Jun 2018 22:22

Tgt Ion: 50 Resp: 947

Ion Ratio Lower Upper

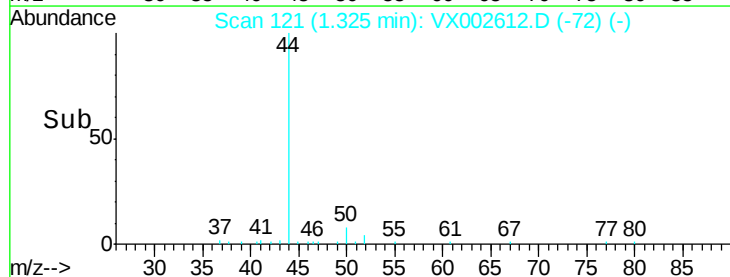
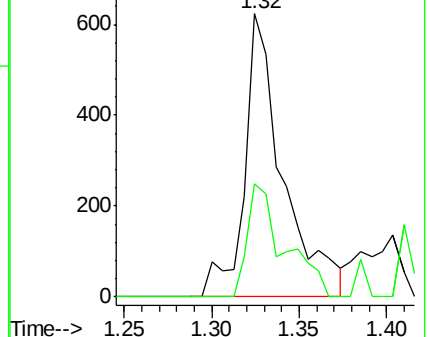
50 100

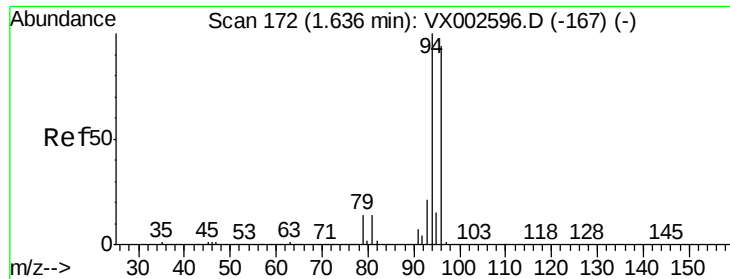
52 40.1 25.7 38.5#



Abundance Ion 49.90 (49.60 to 50.60): VX0

Ion 51.90 (51.60 to 52.60): VX0





#5

Bromomethane

Concen: 0.64 ug/l

RT: 1.67 min Scan# 177

Delta R.T. 0.03 min

Lab File: VX002612.D

Acq: 15 Jun 2018 22:22

Instrument :

MSVOA\_X

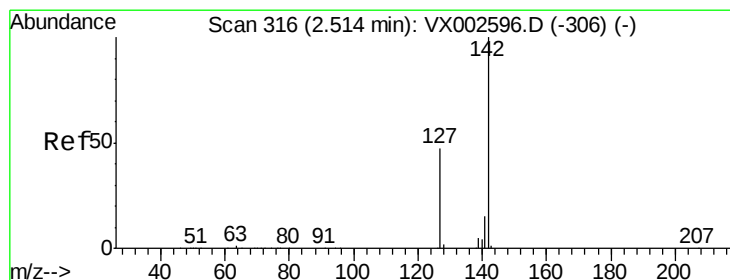
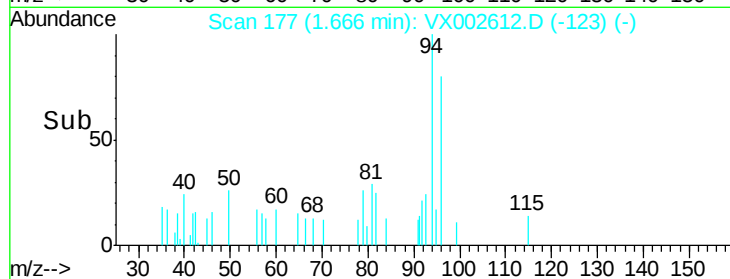
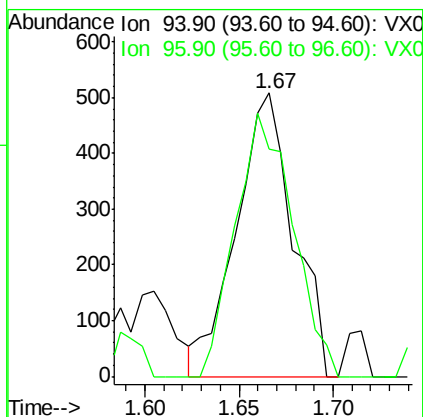
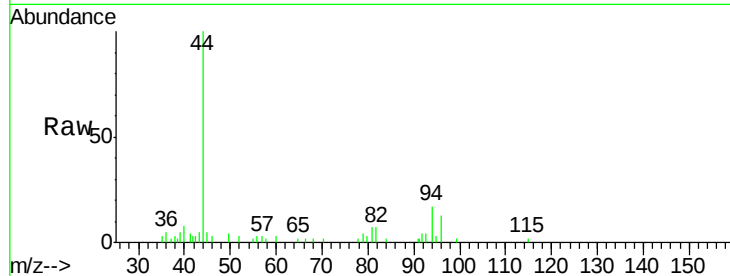
ClientSampleId :

Tot Ion: 94 Resp: 1064

Ion Ratio Lower Upper

94 100

96 80.1 74.9 112.3



#10

Methyl Iodide

Concen: 5.50 ug/l

RT: 2.52 min Scan# 317

Delta R.T. 0.01 min

Lab File: VX002612.D

Acq: 15 Jun 2018 22:22

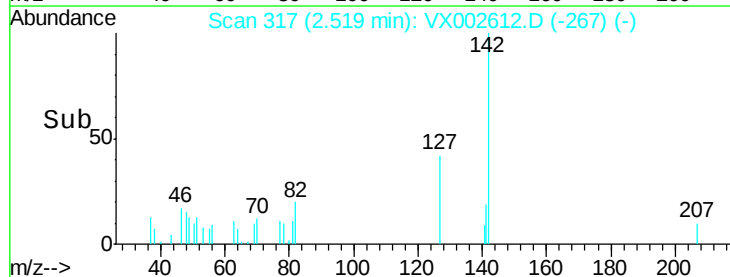
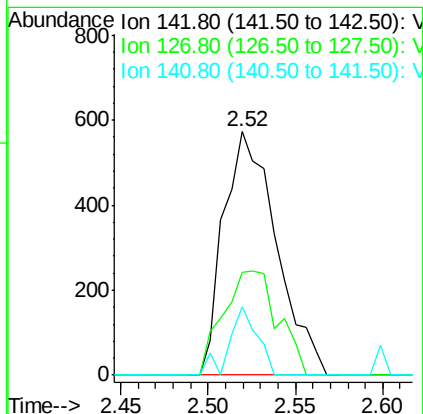
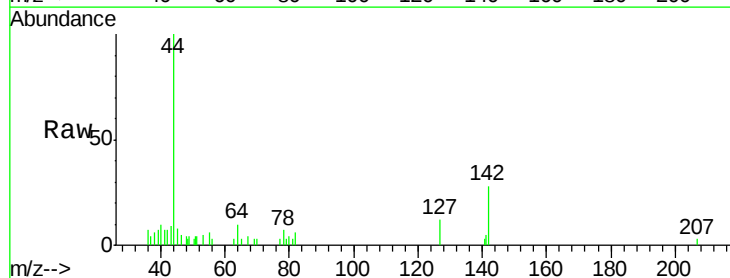
Tgt Ion:142 Resp: 1204

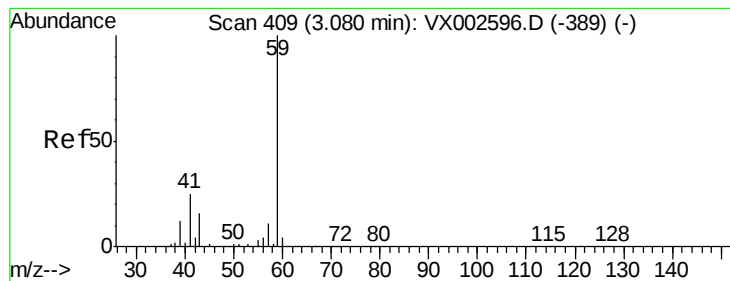
Ion Ratio Lower Upper

142 100

127 44.3 36.6 55.0

141 15.0 11.3 16.9





#11

Tert butyl alcohol

Concen: 0.53 ug/l

RT: 3.07 min Scan# 408

Delta R.T. -0.01 min

Lab File: VX002612.D

Acq: 15 Jun 2018 22:22

Instrument :

MSVOA\_X

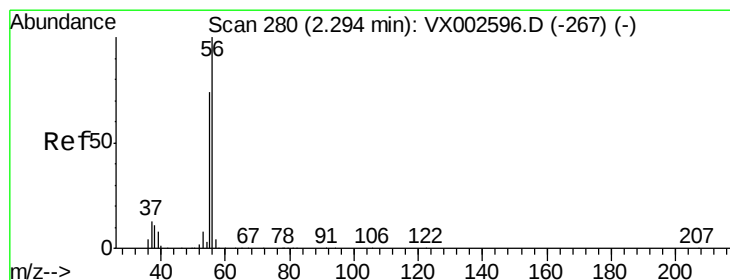
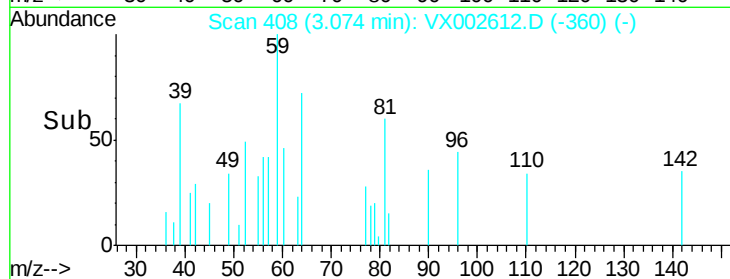
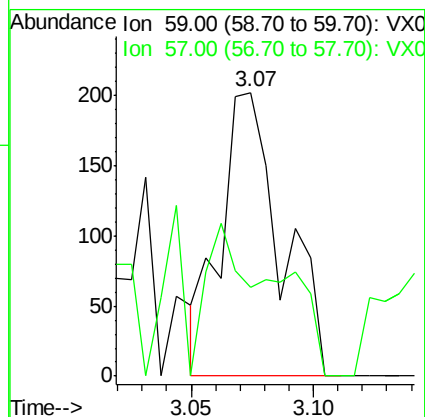
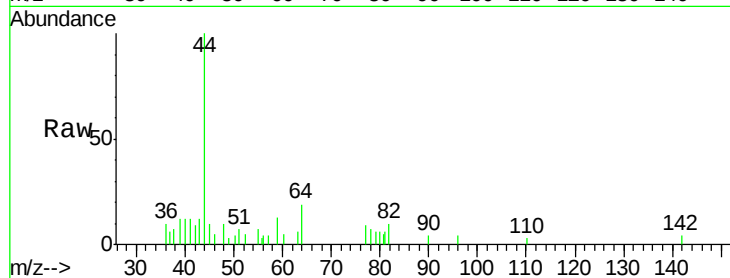
ClientSampled :

Tot Ion: 59 Resp: 347

Ion Ratio Lower Upper

59 100

57 33.7 8.2 12.2#



#13

Acrolein

Concen: 7.54 ug/l

RT: 2.30 min Scan# 281

Delta R.T. 0.01 min

Lab File: VX002612.D

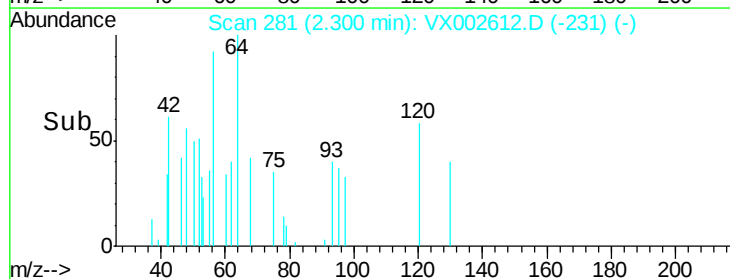
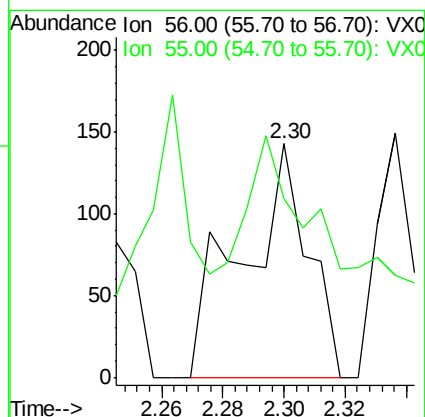
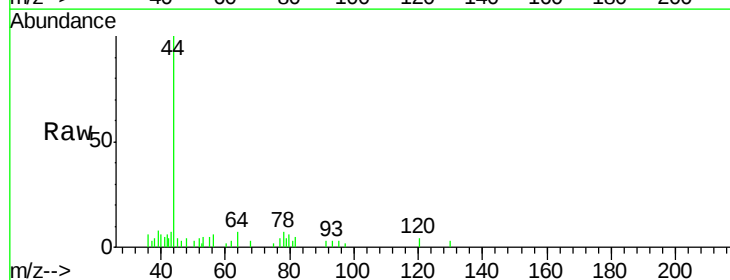
Acq: 15 Jun 2018 22:22

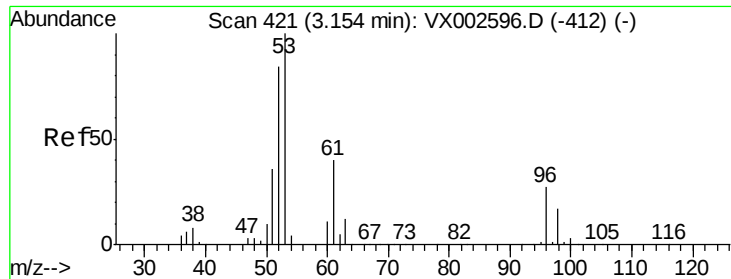
Tgt Ion: 56 Resp: 214

Ion Ratio Lower Upper

56 100

55 74.8 57.0 85.4





#15

Acrylonitrile

Concen: 0.23 ug/l

RT: 3.15 min Scan# 421

Delta R.T. -0.00 min

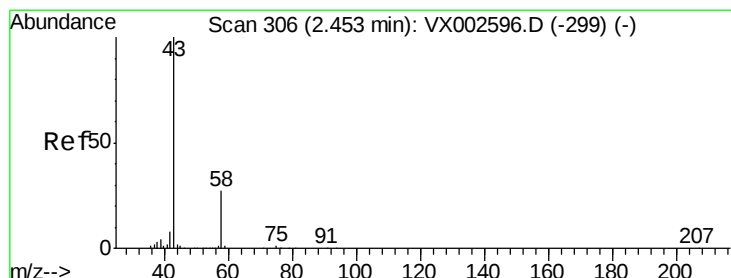
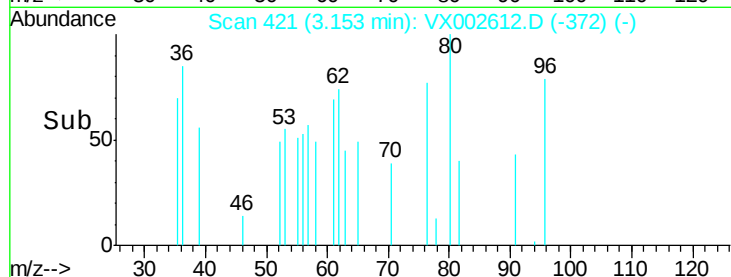
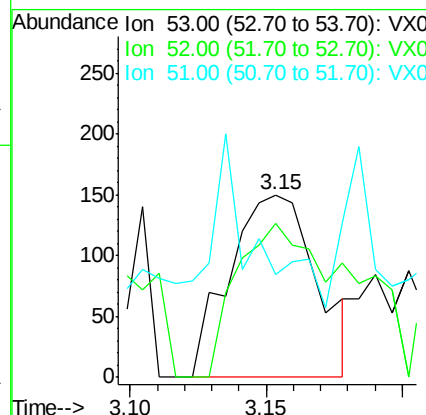
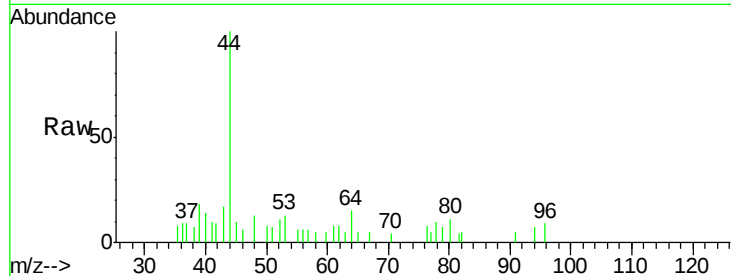
Lab File: VX002612.D

Acq: 15 Jun 2018 22:22

Instrument :  
MSVOA\_X  
ClientSampled :

Tot Ion: 53 Resp: 332

| Ion | Ratio | Lower | Upper  |
|-----|-------|-------|--------|
| 53  | 100   |       |        |
| 52  | 112.7 | 66.7  | 100.1# |
| 51  | 64.5  | 29.9  | 44.9#  |



#16

Acetone

Concen: 3.12 ug/l

RT: 2.45 min Scan# 306

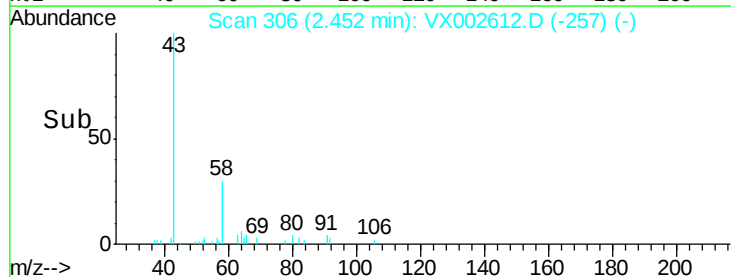
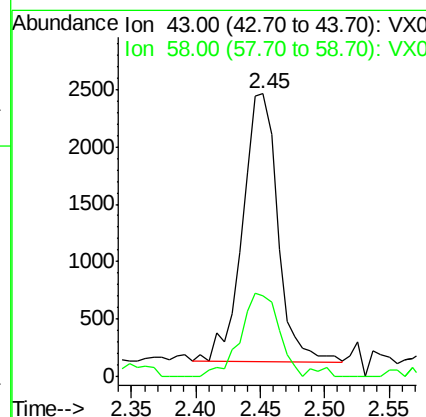
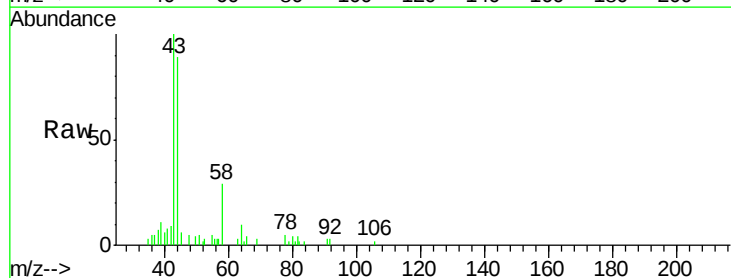
Delta R.T. -0.00 min

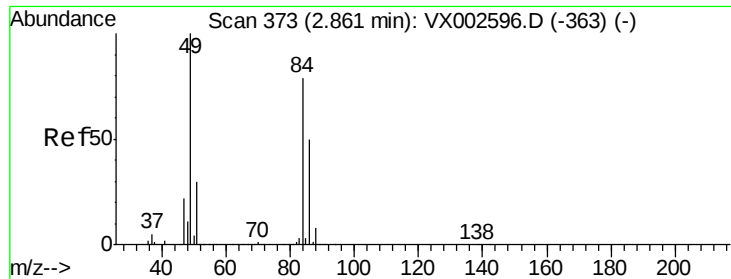
Lab File: VX002612.D

Acq: 15 Jun 2018 22:22

Tgt Ion: 43 Resp: 4392

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 43  | 100   |       |       |
| 58  | 30.3  | 22.1  | 33.1  |

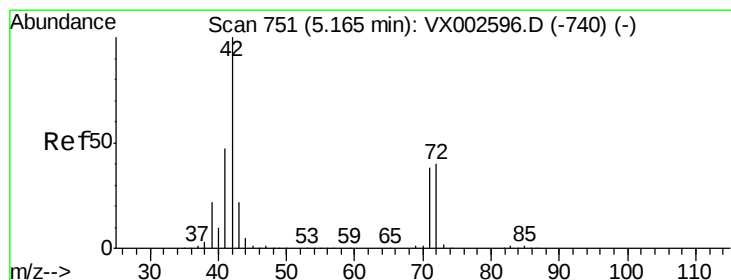
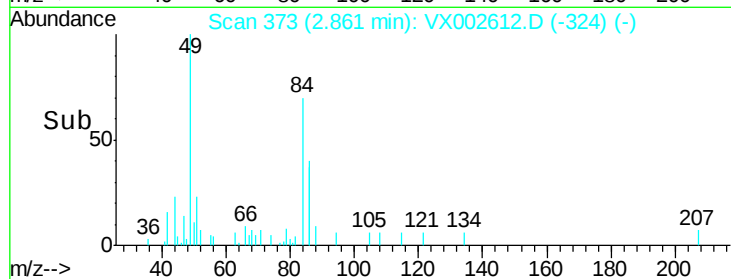
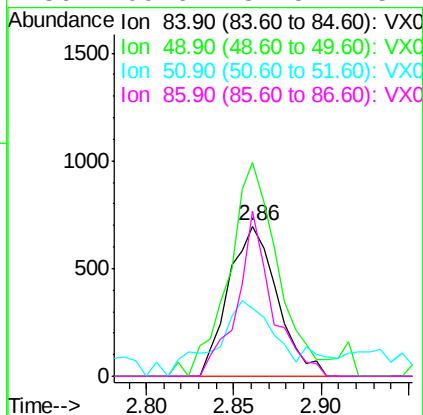
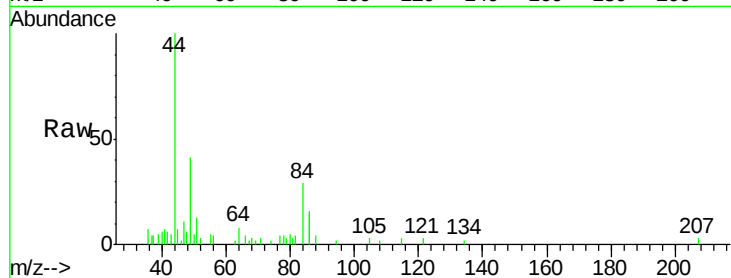




#20  
Methylene Chloride  
Concen: 0.47 ug/l  
RT: 2.86 min Scan# 373  
Delta R.T. -0.00 min  
Lab File: VX002612.D  
Acq: 15 Jun 2018 22:22

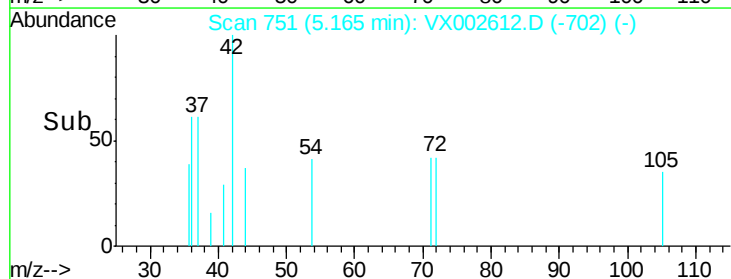
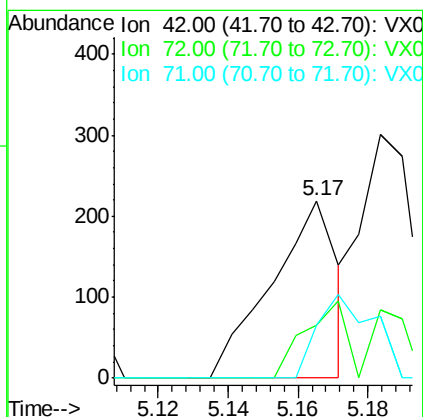
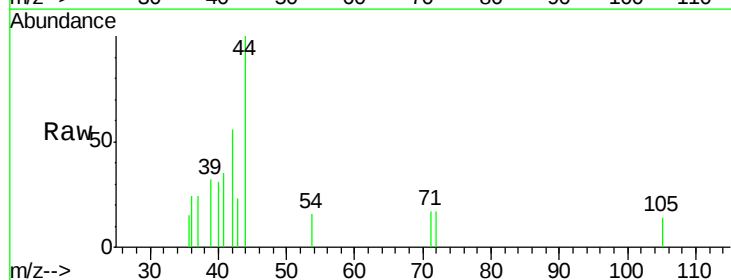
Instrument :  
MSVOA\_X  
ClientSampled :

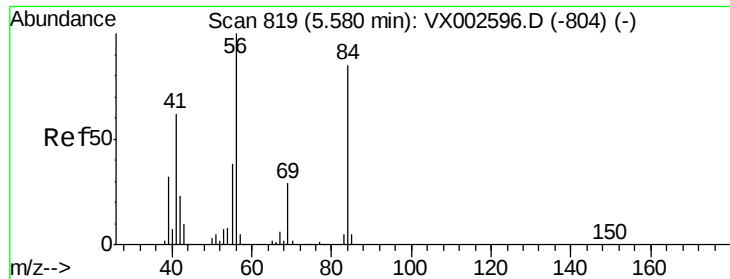
Tot Ion: 84 Resp: 1348  
Ion Ratio Lower Upper  
84 100  
49 142.1 107.8 161.6  
51 33.4 32.8 49.2  
86 109.6 52.5 78.7#



#29  
Tetrahydrofuran  
Concen: 0.24 ug/l  
RT: 5.17 min Scan# 751  
Delta R.T. -0.00 min  
Lab File: VX002612.D  
Acq: 15 Jun 2018 22:22

Tgt Ion: 42 Resp: 286  
Ion Ratio Lower Upper  
42 100  
72 27.3 32.0 48.0#  
71 40.2 30.1 45.1





#31

Cyclohexane

Concen: 1.19 ug/l

RT: 5.67 min Scan# 834

Delta R.T. 0.09 min

Lab File: VX002612.D

Acq: 15 Jun 2018 22:22

Instrument :  
MSVOA\_X  
ClientSampled :

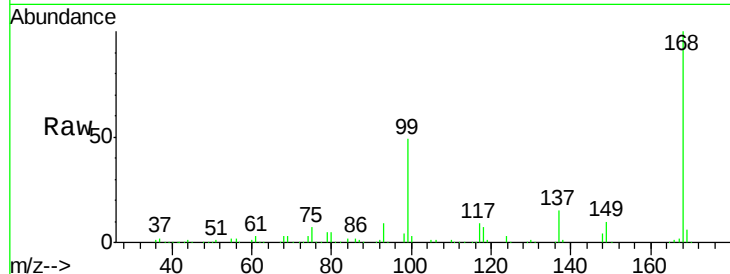
Tot Ion: 56 Resp: 4491

Ion Ratio Lower Upper

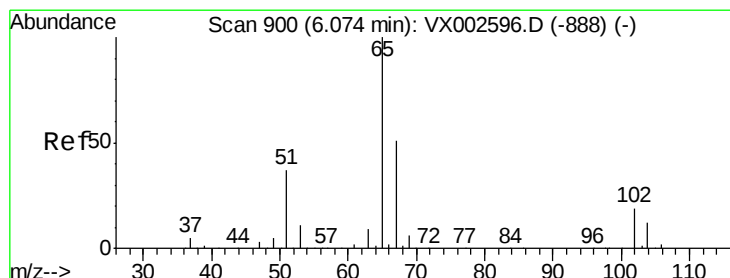
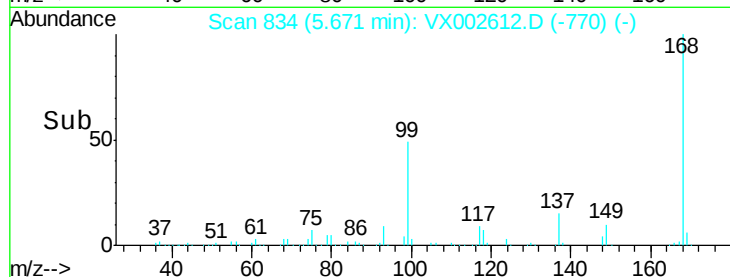
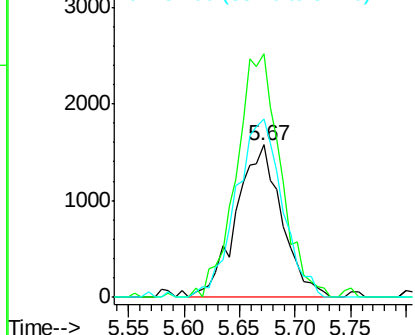
56 100

69 159.5 23.7 35.5#

84 117.0 64.1 96.1#



Abundance Ion 56.00 (55.70 to 56.70): VX0  
Ion 69.00 (68.70 to 69.70): VX0  
Ion 84.00 (83.70 to 84.70): VX0



#33

1,2-Dichloroethane-d4

Concen: 46.23 ug/l

RT: 6.07 min Scan# 900

Delta R.T. 0.00 min

Lab File: VX002612.D

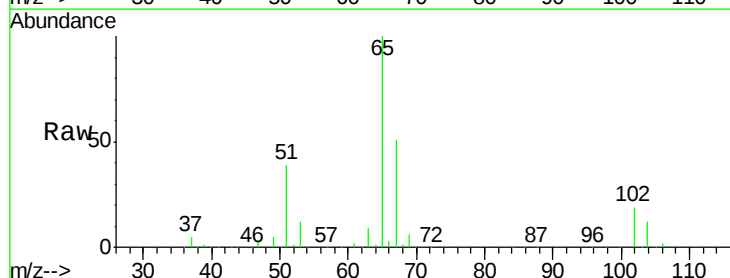
Acq: 15 Jun 2018 22:22

Tgt Ion: 65 Resp: 147365

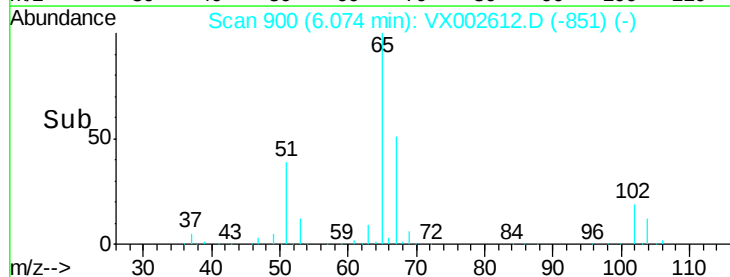
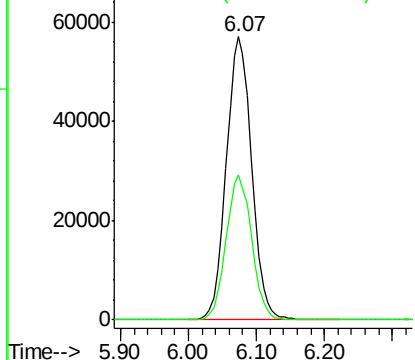
Ion Ratio Lower Upper

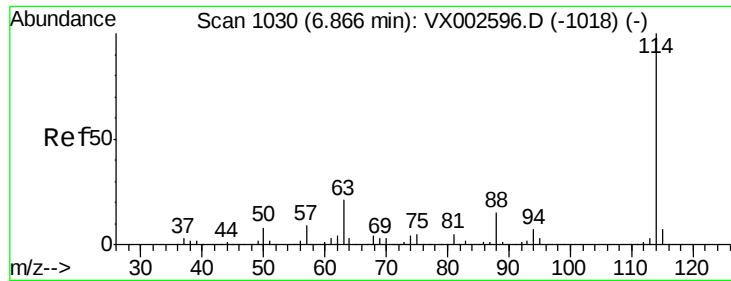
65 100

67 51.4 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: VX002612.D

Acq: 15 Jun 2018 22:22

Instrument :

MSVOA\_X

ClientSampleId :

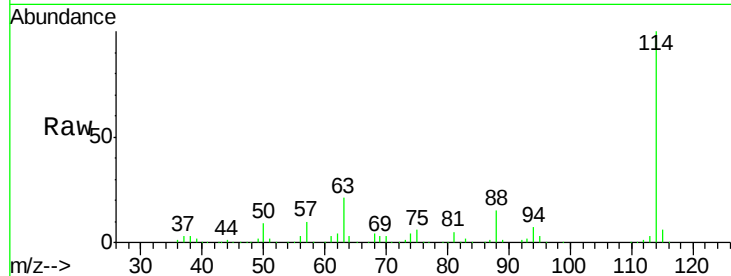
Tot Ion:114 Resp: 303465

Ion Ratio Lower Upper

114 100

63 21.1 0.0 41.4

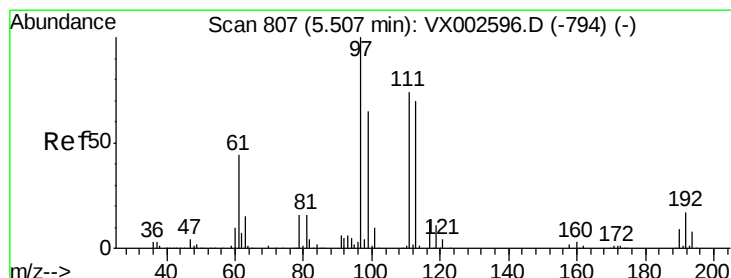
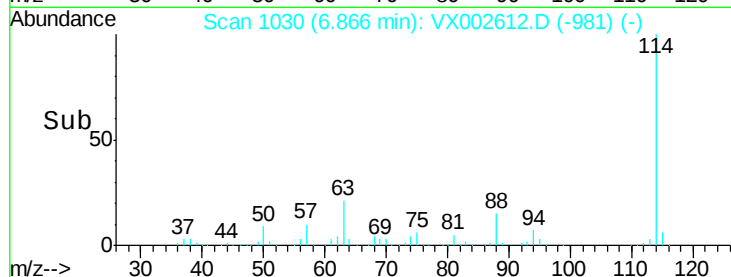
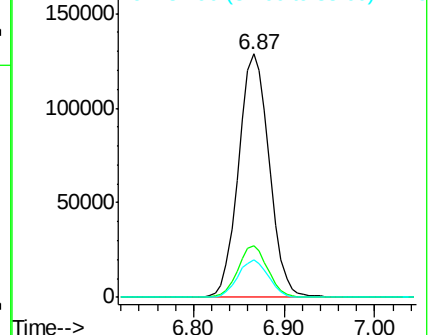
88 15.3 0.0 30.0



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: 45.48 ug/l

RT: 5.51 min Scan# 807

Delta R.T. -0.00 min

Lab File: VX002612.D

Acq: 15 Jun 2018 22:22

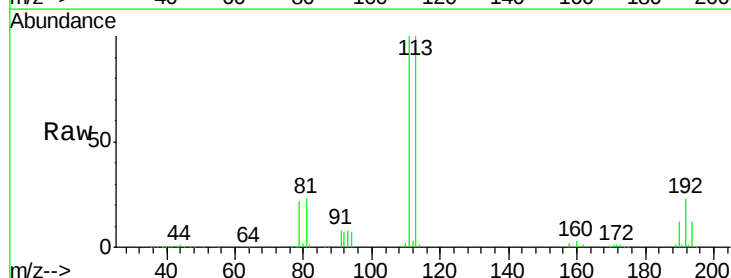
Tgt Ion:113 Resp: 110150

Ion Ratio Lower Upper

113 100

111 103.0 81.4 122.0

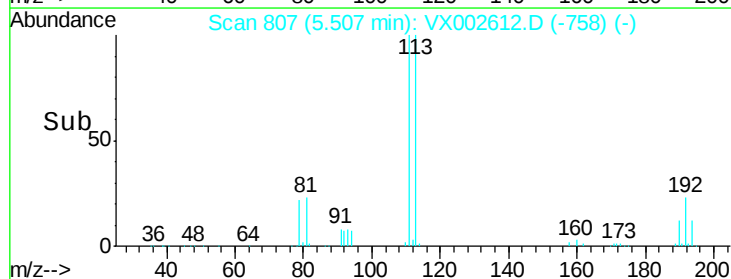
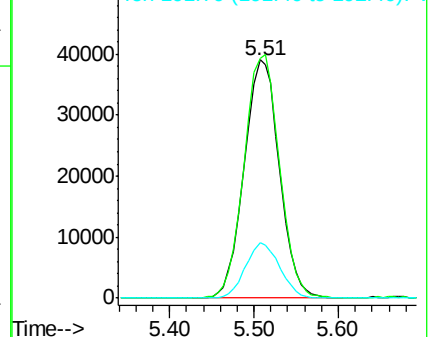
192 22.8 19.1 28.7

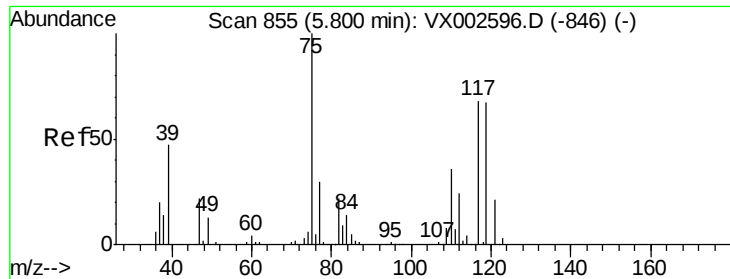


Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V

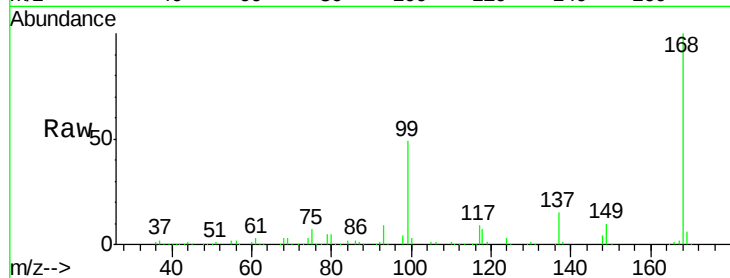




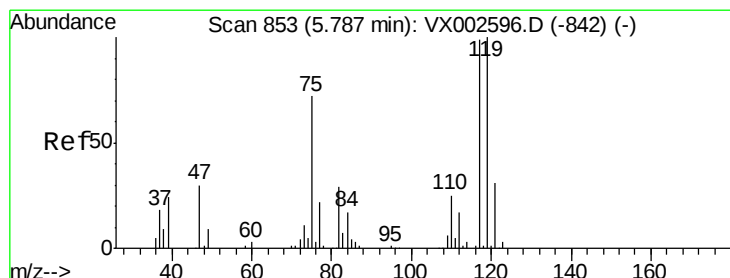
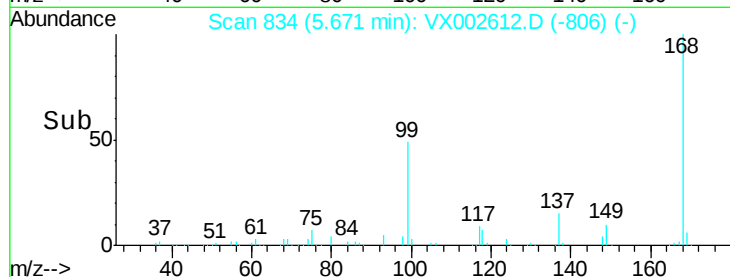
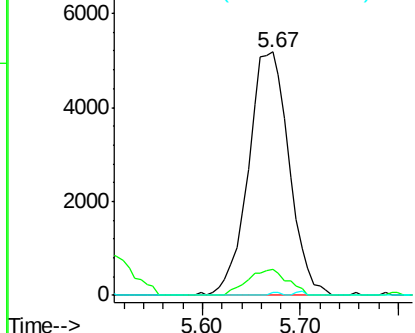
#36  
 1,1-Dichloropropene  
 Concen: 4.64 ug/l  
 RT: 5.67 min Scan# 834  
 Delta R.T. -0.13 min  
 Lab File: VX002612.D  
 Acq: 15 Jun 2018 22:22

Instrument :  
 MSVOA\_X  
 ClientSampleId :

Tot Ion: 75 Resp: 14966  
 Ion Ratio Lower Upper  
 75 100  
 110 10.4 18.1 54.4#  
 77 0.3 24.3 36.5#

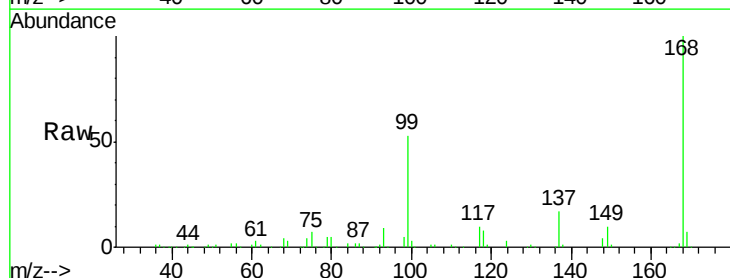


Abundance Ion 74.90 (74.60 to 75.60): VX0  
 Ion 109.90 (109.60 to 110.60): V  
 Ion 76.90 (76.60 to 77.60): VX0

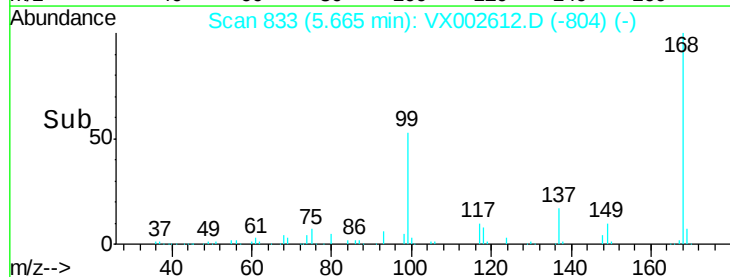
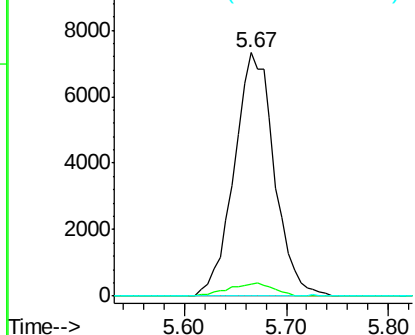


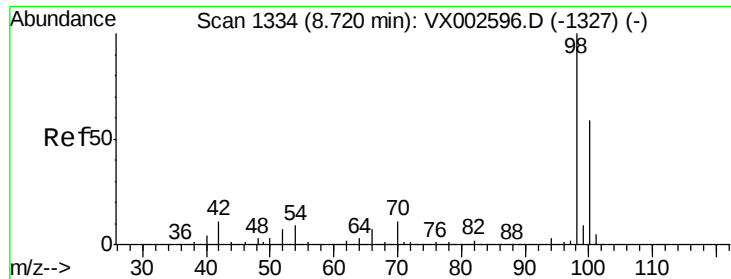
#38  
 Carbon Tetrachloride  
 Concen: 6.21 ug/l  
 RT: 5.67 min Scan# 833  
 Delta R.T. -0.12 min  
 Lab File: VX002612.D  
 Acq: 15 Jun 2018 22:22

Tgt Ion: 117 Resp: 19921  
 Ion Ratio Lower Upper  
 117 100  
 119 5.1 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

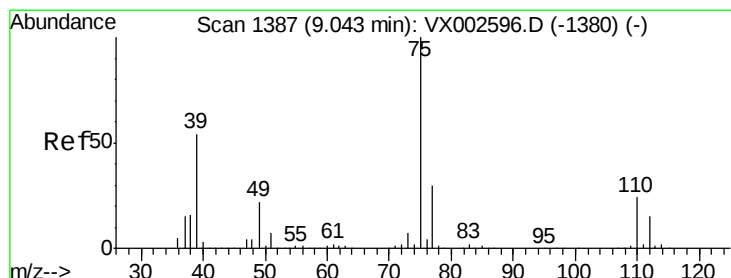
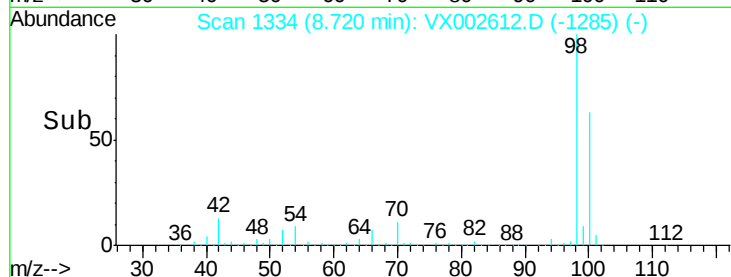
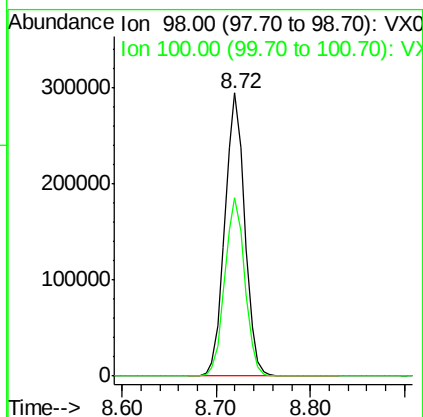
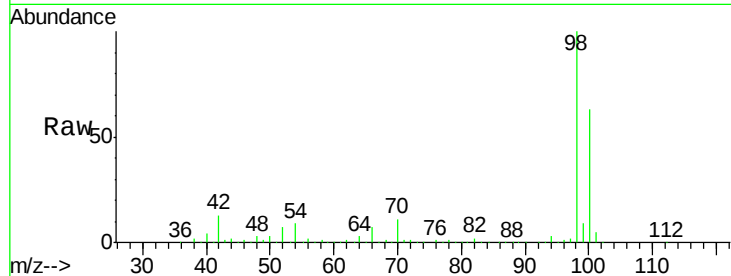




#50  
Toluene-d8  
Concen: 46.99 ug/l  
RT: 8.72 min Scan# 1334  
Delta R.T. 0.00 min  
Lab File: VX002612.D  
Acq: 15 Jun 2018 22:22

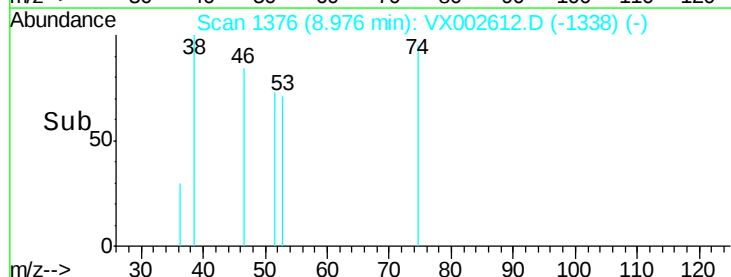
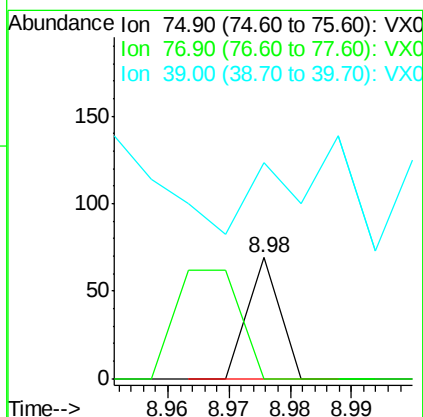
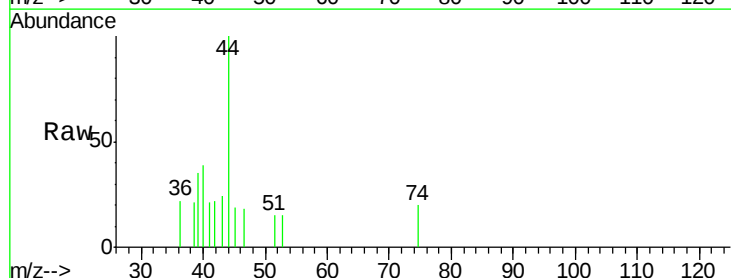
Instrument :  
MSVOA\_X  
ClientSampleId :

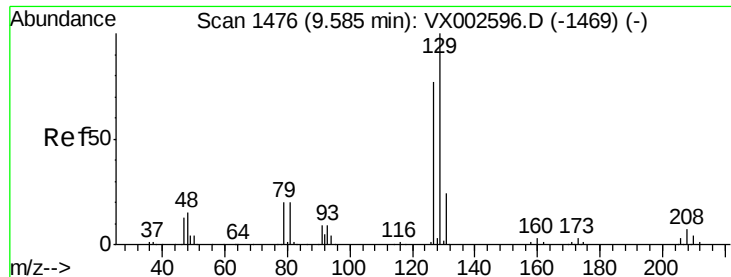
Tot Ion: 98 Resp: 432146  
Ion Ratio Lower Upper  
98 100  
100 63.4 50.9 76.3



#54  
cis-1,3-Dichloropropene  
Concen: 3.22 ug/l  
RT: 8.98 min Scan# 1376  
Delta R.T. -0.07 min  
Lab File: VX002612.D  
Acq: 15 Jun 2018 22:22

Tgt Ion: 75 Resp: 25  
Ion Ratio Lower Upper  
75 100  
77 0.0 24.8 37.2#  
39 33.3 42.4 63.6#





#60

Dibromochloromethane

Concen: 3.77 ug/l

RT: 9.34 min Scan# 1435

Delta R.T. -0.25 min

Lab File: VX002612.D

Acq: 15 Jun 2018 22:22

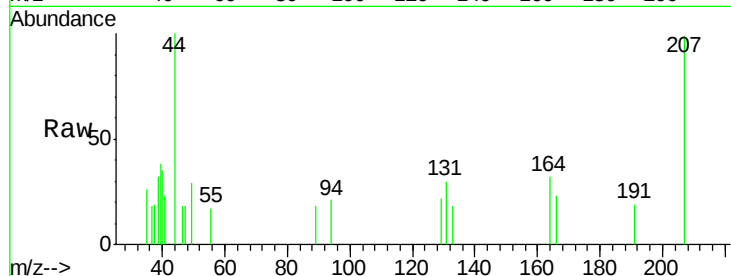
Instrument :  
MSVOA\_X  
ClientSampleId :

Tot Ion:129 Resp: 25

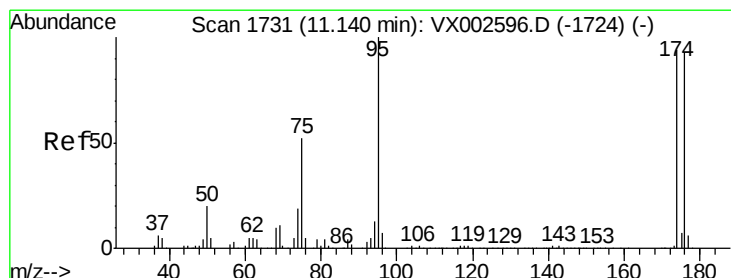
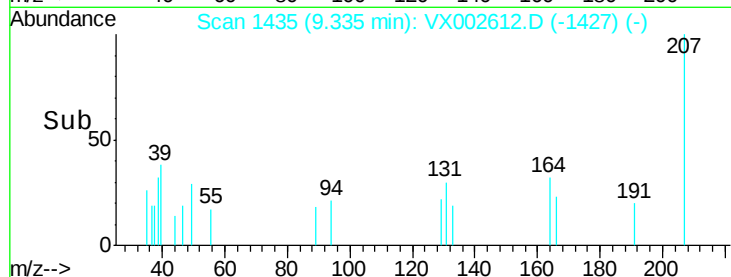
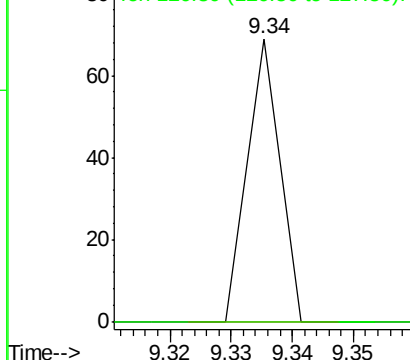
Ion Ratio Lower Upper

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: 42.66 ug/l

RT: 11.14 min Scan# 1731

Delta R.T. -0.00 min

Lab File: VX002612.D

Acq: 15 Jun 2018 22:22

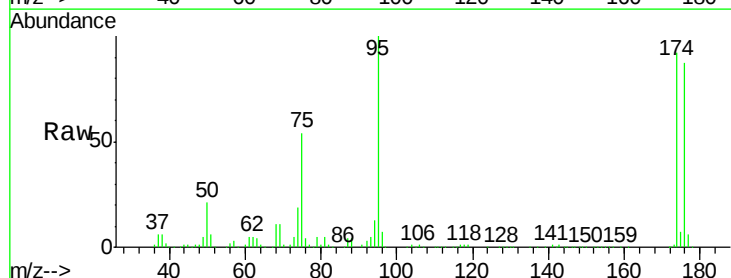
Tgt Ion: 95 Resp: 148658

Ion Ratio Lower Upper

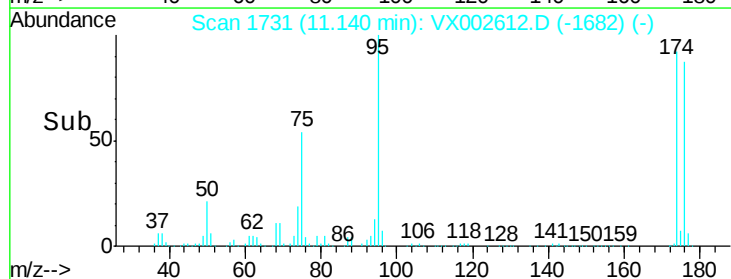
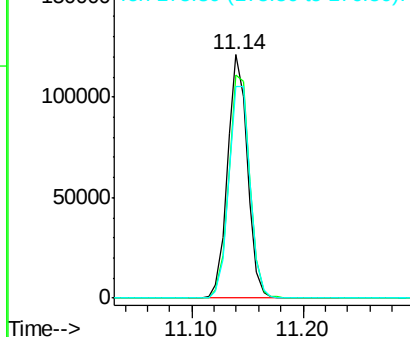
95 100

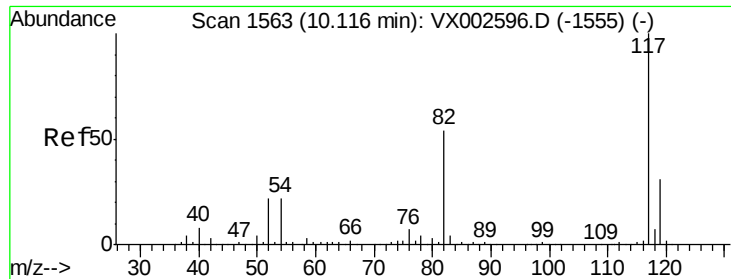
174 96.3 0.0 187.4

176 93.6 0.0 181.0



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

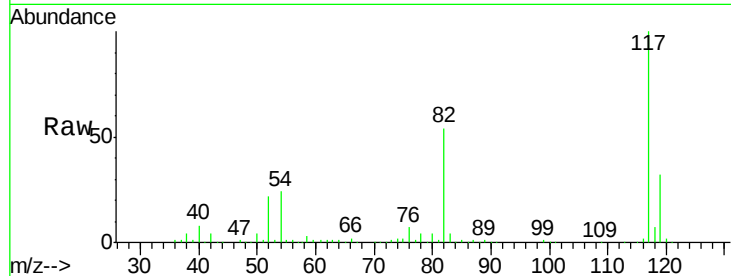




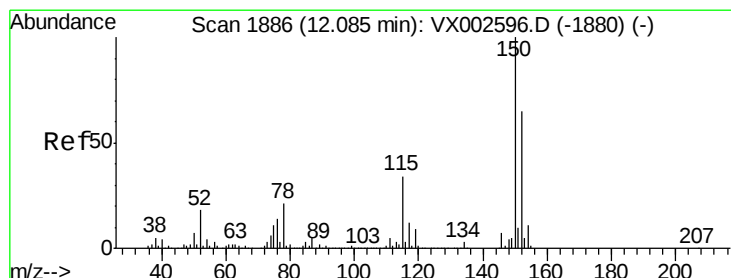
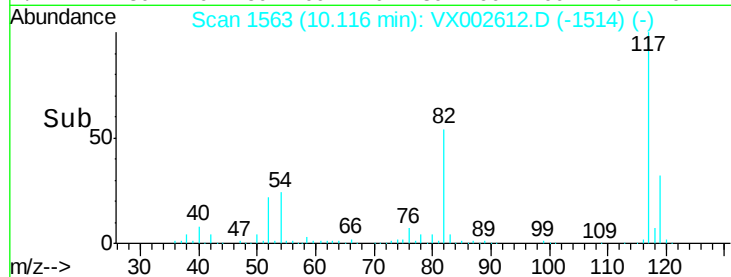
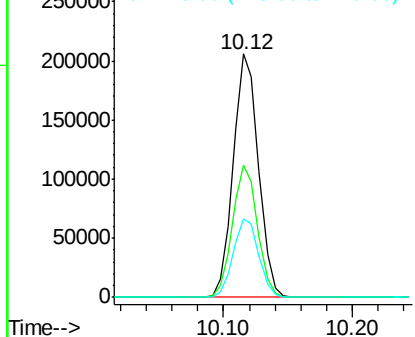
#63  
Chlorobenzene-d5  
Concen: 50.00 ug/l  
RT: 10.12 min Scan# 1563  
Delta R.T. -0.00 min  
Lab File: VX002612.D  
Acq: 15 Jun 2018 22:22

Instrument :  
MSVOA\_X  
ClientSampled :

Tot Ion:117 Resp: 280336  
Ion Ratio Lower Upper  
117 100  
82 54.1 45.0 67.4  
119 32.1 25.8 38.6

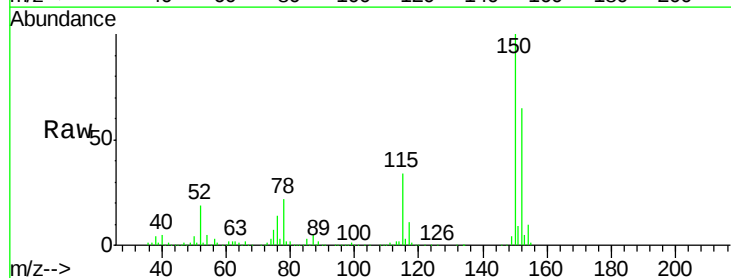


Abundance Ion 116.90 (116.60 to 117.60): V  
Ion 82.00 (81.70 to 82.70): VX0  
Ion 118.90 (118.60 to 119.60): V

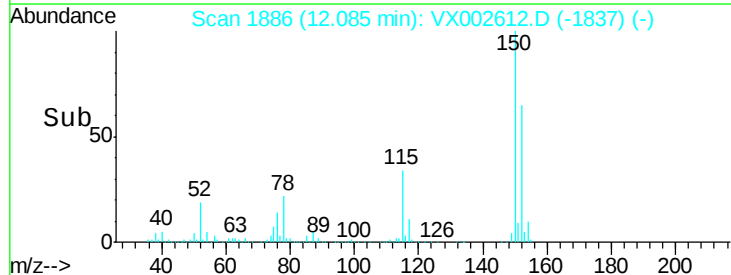
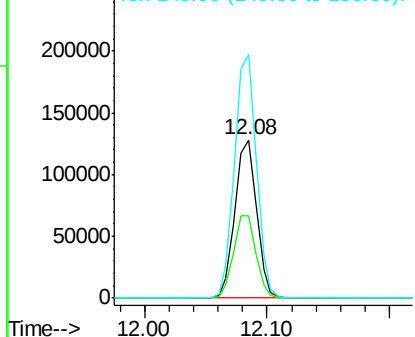


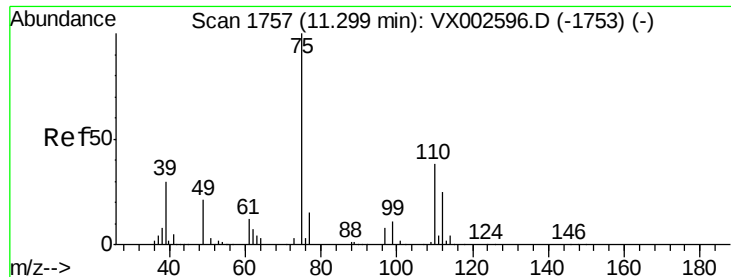
#72  
1,4-Dichlorobenzene-d4  
Concen: 50.00 ug/l  
RT: 12.08 min Scan# 1886  
Delta R.T. -0.00 min  
Lab File: VX002612.D  
Acq: 15 Jun 2018 22:22

Tgt Ion:152 Resp: 155943  
Ion Ratio Lower Upper  
152 100  
115 54.0 40.1 120.2  
150 155.9 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: 27.31 ug/l

RT: 11.14 min Scan# 1731

Delta R.T. -0.16 min

Lab File: VX002612.D

Acq: 15 Jun 2018 22:22

Instrument :

MSVOA\_X

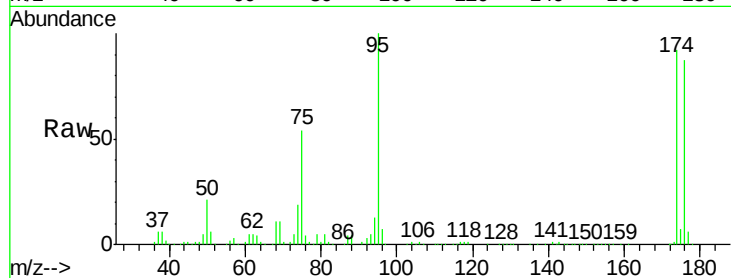
ClientSampleId :

Tot Ion: 75 Resp: 80366

Ion Ratio Lower Upper

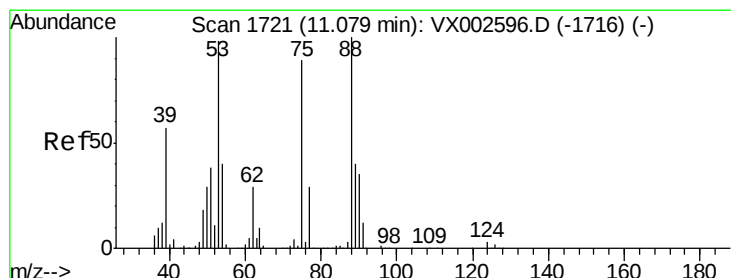
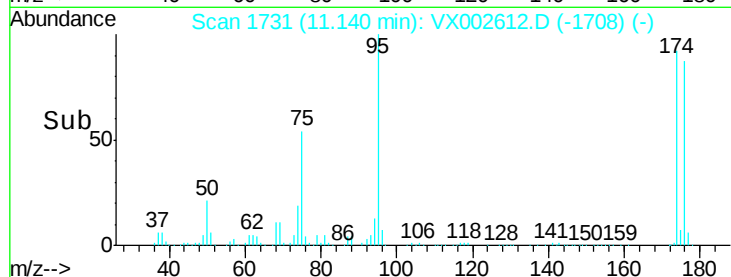
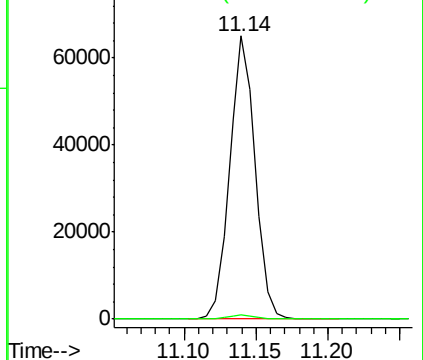
75 100

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



#81

trans-1,4-Dichloro-2-butene

Concen: 84.26 ug/l

RT: 11.14 min Scan# 1731

Delta R.T. 0.06 min

Lab File: VX002612.D

Acq: 15 Jun 2018 22:22

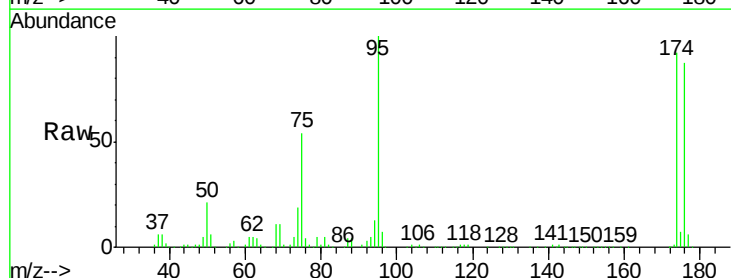
Tgt Ion: 75 Resp: 80366

Ion Ratio Lower Upper

75 100

53 0.0 86.8 130.2#

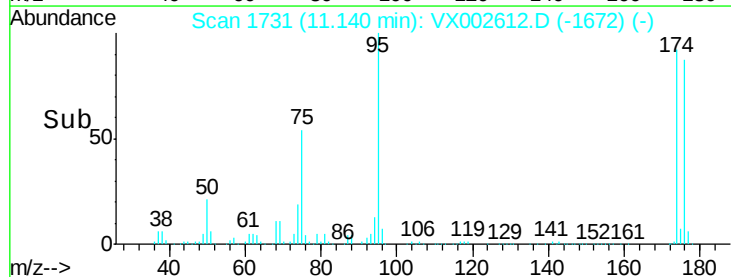
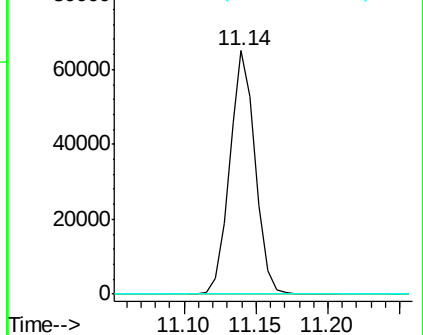
89 0.0 38.2 57.2#

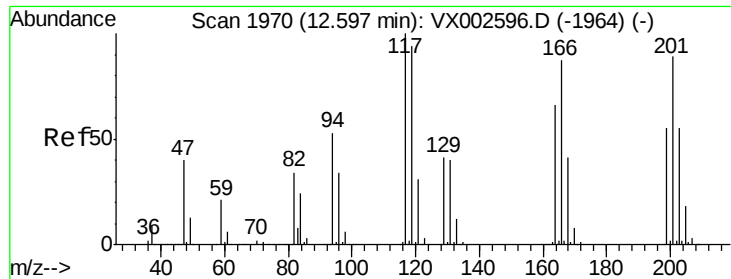


Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 53.00 (52.70 to 53.70): VX0

Ion 88.90 (88.60 to 89.60): VX0





#90

Hexachloroethane

Concen: 2.64 ug/l

RT: 12.68 min Scan# 1983

Delta R.T. 0.08 min

Lab File: VX002612.D

Acq: 15 Jun 2018 22:22

Instrument :

MSVOA\_X

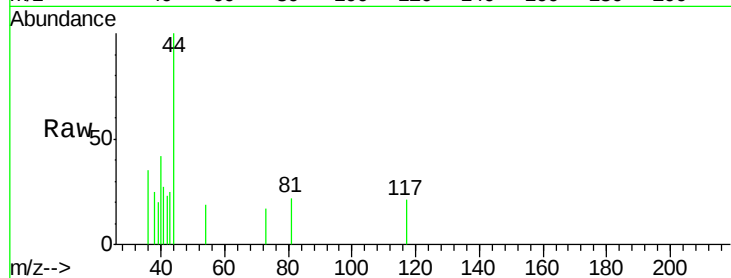
ClientSampleId :

Tot Ion:117 Resp: 25

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

