

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX061818\  
 Data File : VX002706.D  
 Acq On : 19 Jun 2018 04:07  
 Operator : JC/MD  
 Sample : J3536-06  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 33 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :

Quant Time: Jun 19 05:13:29 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  | 219002   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.87  | 114  | 310399   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.12 | 117  | 292000   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.09 | 152  | 166094   | 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   | 162102   | 48.71 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 97.42%  |          |
| 35) Dibromofluoromethane    | 5.51  | 113  | 128711   | 51.96 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 103.92% |          |
| 50) Toluene-d8              | 8.72  | 98   | 484750   | 51.54 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 103.08% |          |
| 62) 4-Bromofluorobenzene    | 11.14 | 95   | 166941   | 46.84 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 93.68%  |          |

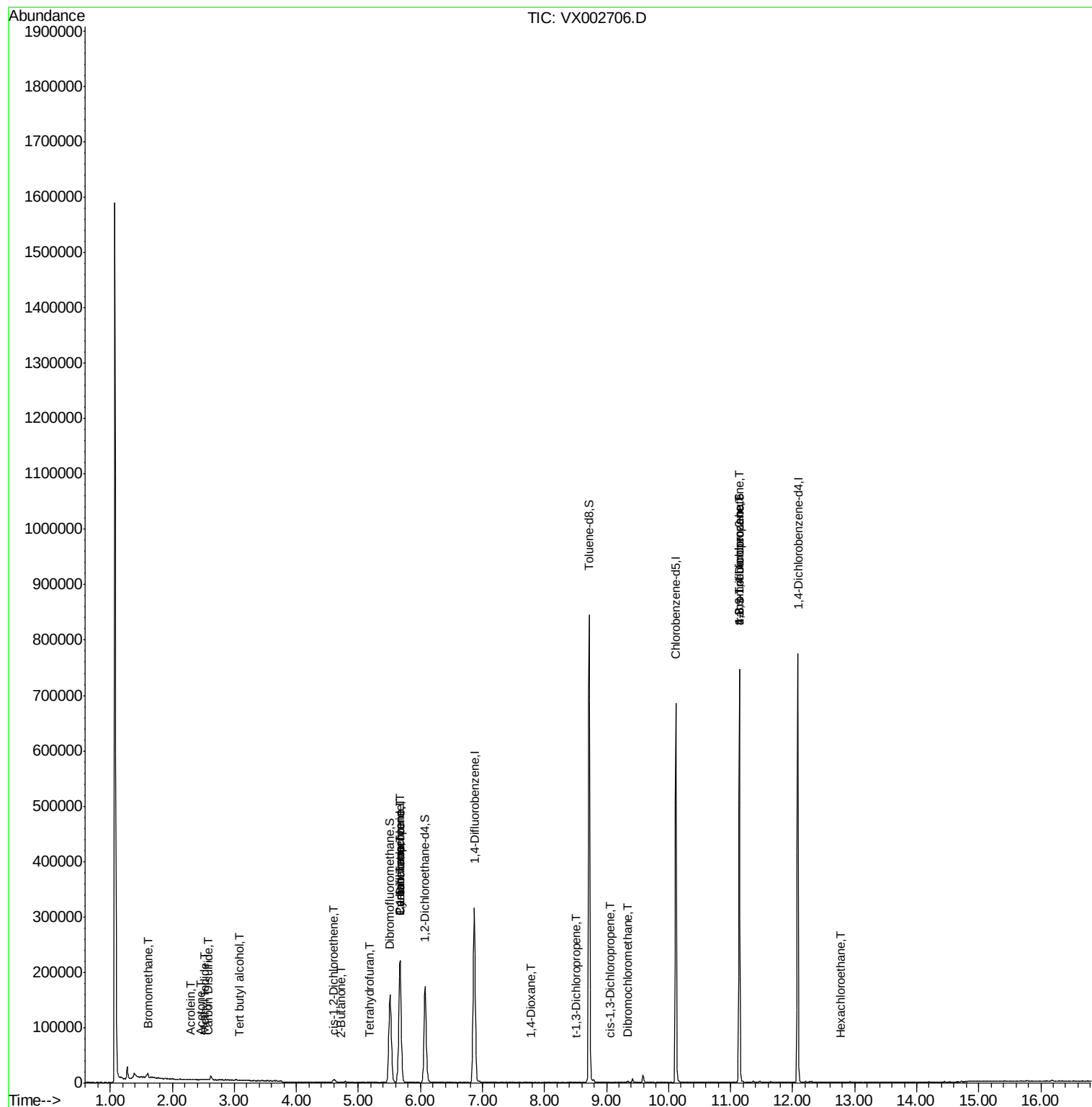
| Target Compounds               | R.T.  | QIon | Response | Conc  | Units  | Qvalue |
|--------------------------------|-------|------|----------|-------|--------|--------|
| 5) Bromomethane                | 1.61  | 94   | 358      | 0.21  | ug/l # | 39     |
| 10) Methyl Iodide              | 2.52  | 142  | 717      | 5.36  | ug/l # | 88     |
| 11) Tert butyl alcohol         | 3.07  | 59   | 335      | 0.49  | ug/l # | 46     |
| 13) Acrolein                   | 2.31  | 56   | 205      | 7.48  | ug/l # | 14     |
| 16) Acetone                    | 2.45  | 43   | 1048     | 0.71  | ug/l   | 97     |
| 17) Carbon Disulfide           | 2.57  | 76   | 1188     | 0.20  | ug/l # | 71     |
| 25) 2-Butanone                 | 4.71  | 43   | 414      | 0.21  | ug/l # | 52     |
| 27) cis-1,2-Dichloroethene     | 4.60  | 96   | 2428     | 0.90  | ug/l   | 32     |
| 29) Tetrahydrofuran            | 5.18  | 42   | 1058     | 0.84  | ug/l # | 66     |
| 31) Cyclohexane                | 5.67  | 56   | 4620     | 1.18  | ug/l # | 23     |
| 36) 1,1-Dichloropropene        | 5.67  | 75   | 14748    | 4.47  | ug/l # | 51     |
| 38) Carbon Tetrachloride       | 5.67  | 117  | 19966    | 6.08  | ug/l # | 15     |
| 49) 1,4-Dioxane                | 7.78  | 88   | 24       | 0.40  | ug/l # | 1      |
| 53) t-1,3-Dichloropropene      | 8.52  | 75   | 20       | 2.40  | ug/l # | 43     |
| 54) cis-1,3-Dichloropropene    | 9.06  | 75   | 71       | 3.23  | ug/l # | 5      |
| 60) Dibromochloromethane       | 9.35  | 129  | 22       | 3.77  | ug/l # | 11     |
| 76) 1,2,3-Trichloropropane     | 11.14 | 75   | 90193    | 28.78 | ug/l # | 33     |
| 81) trans-1,4-Dichloro-2-buten | 11.14 | 75   | 90193    | 88.56 | ug/l # | 7      |
| 90) Hexachloroethane           | 12.76 | 117  | 19       | 2.64  | ug/l # | 1      |

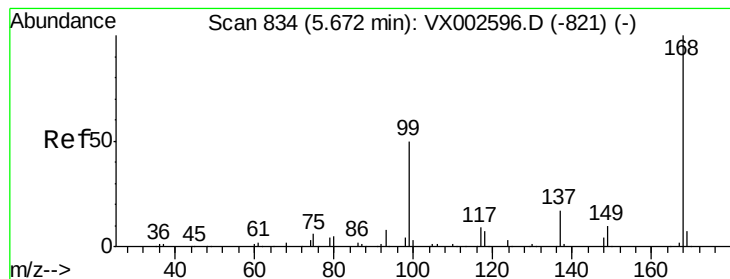
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA X\DATA\VX061818\  
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Sample : J3536-06  
Misc : 5.0mL/MSVOA X/WATER  
ALS Vial : 33 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :

Quant Time: Jun 19 05:13:29 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# 834

Delta R.T. 0.00 min

Lab File: VX002706.D

Acq: 19 Jun 2018 04:07

Instrument :

MSVOA\_X

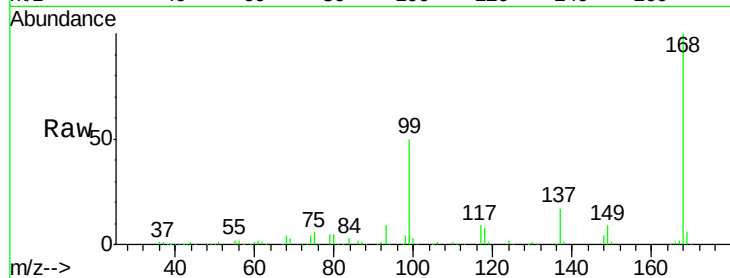
ClientSampleId :

Tot Ion:168 Resp: 219002

Ion Ratio Lower Upper

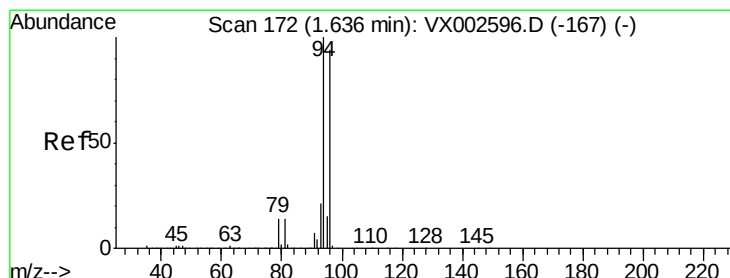
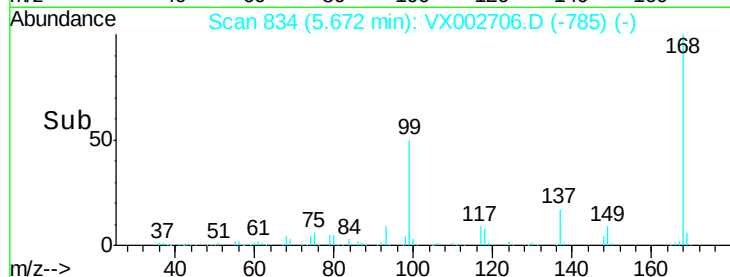
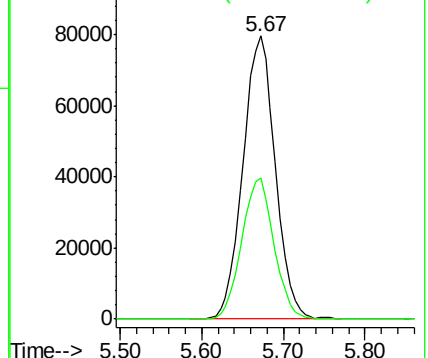
168 100

99 50.0 39.3 58.9



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0



#5

Bromomethane

Concen: 0.21 ug/l

RT: 1.61 min Scan# 168

Delta R.T. -0.02 min

Lab File: VX002706.D

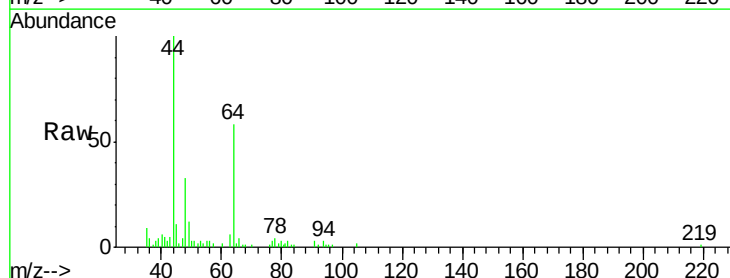
Acq: 19 Jun 2018 04:07

Tgt Ion: 94 Resp: 358

Ion Ratio Lower Upper

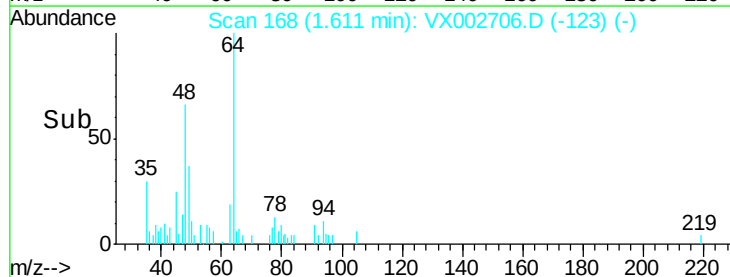
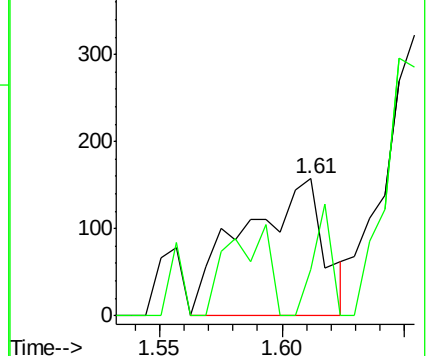
94 100

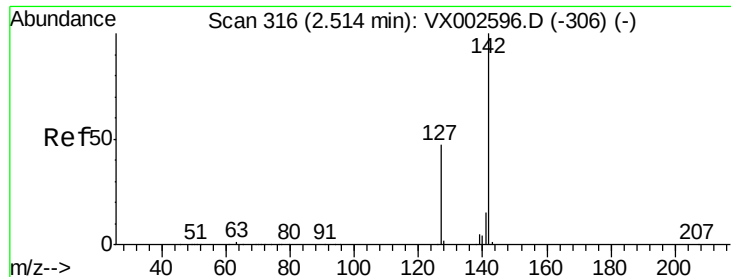
96 34.4 74.9 112.3#



Abundance Ion 93.90 (93.60 to 94.60): VX0

Ion 95.90 (95.60 to 96.60): VX0

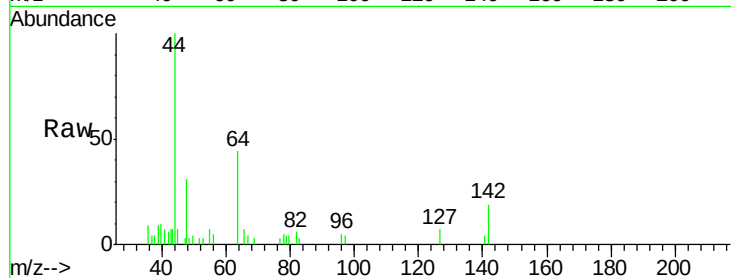




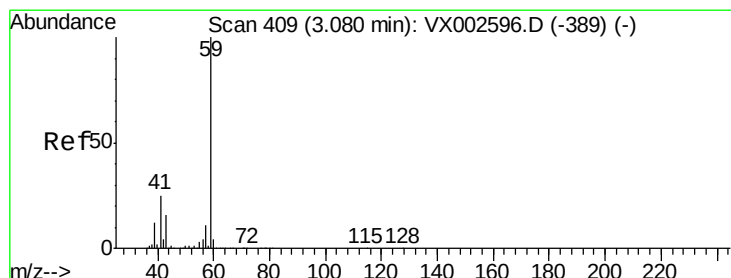
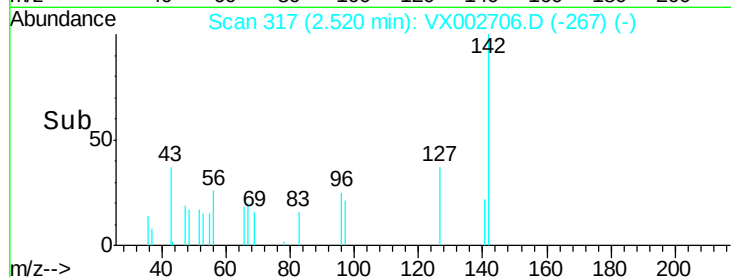
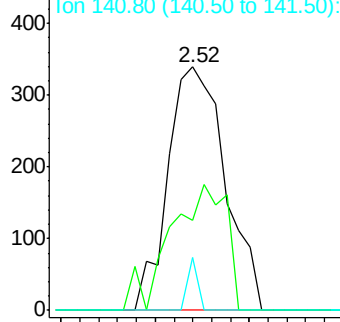
#10  
Methyl Iodide  
Concen: 5.36 ug/l  
RT: 2.52 min Scan# 317  
Delta R.T. 0.01 min  
Lab File: VX002706.D  
Acq: 19 Jun 2018 04:07

Instrument :  
MSVOA\_X  
ClientSampleId :

Tot Ion:142 Resp: 717  
Ion Ratio Lower Upper  
142 100  
127 50.8 36.6 55.0  
141 3.8 11.3 16.9#

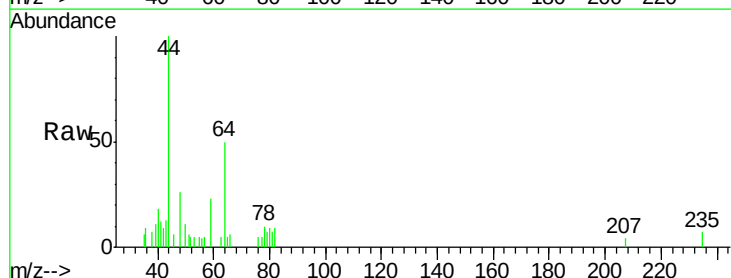


Abundance Ion 141.80 (141.50 to 142.50): V  
Ion 126.80 (126.50 to 127.50): V  
Ion 140.80 (140.50 to 141.50): V

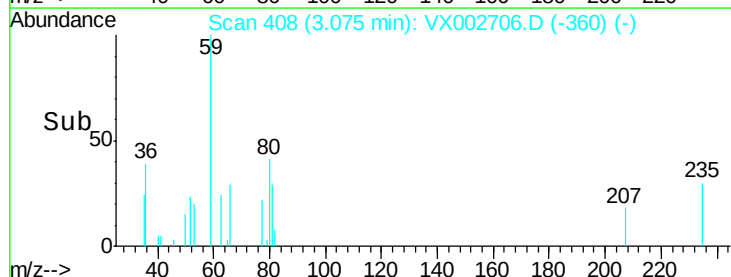
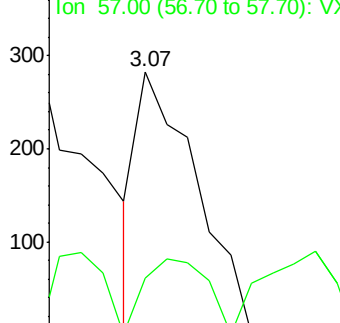


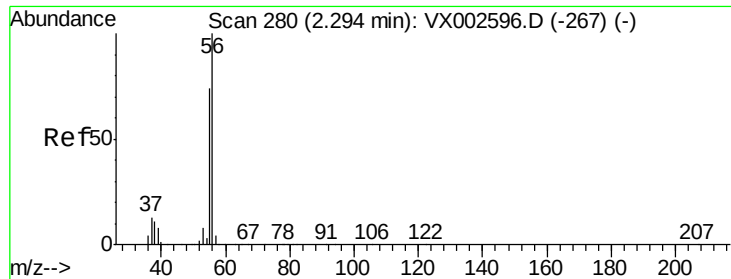
#11  
Tert butyl alcohol  
Concen: 0.49 ug/l  
RT: 3.07 min Scan# 408  
Delta R.T. -0.01 min  
Lab File: VX002706.D  
Acq: 19 Jun 2018 04:07

Tgt Ion: 59 Resp: 335  
Ion Ratio Lower Upper  
59 100  
57 30.4 8.2 12.2#



Abundance Ion 59.00 (58.70 to 59.70): VX0  
Ion 57.00 (56.70 to 57.70): VX0





#13

Acrolein

Concen: 7.48 ug/l

RT: 2.31 min Scan# 282

Delta R.T. 0.01 min

Lab File: VX002706.D

Acq: 19 Jun 2018 04:07

Instrument :

MSVOA\_X

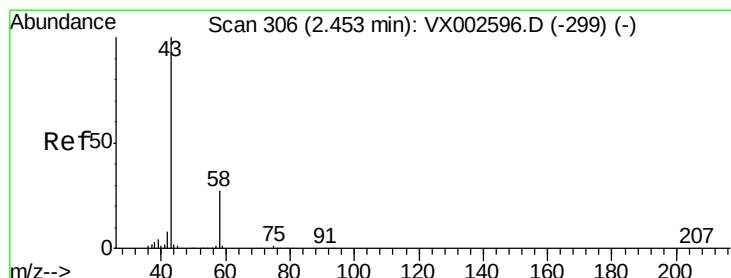
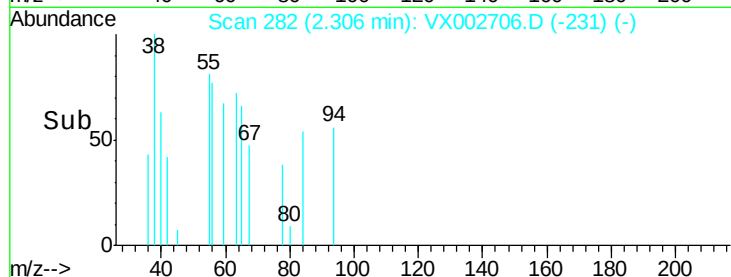
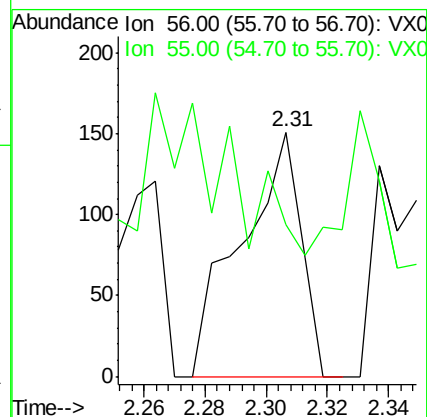
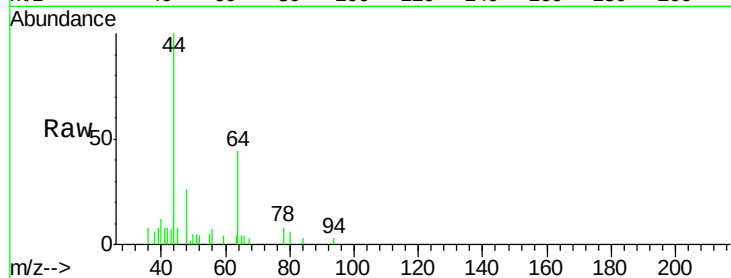
ClientSampleId :

Tot Ion: 56 Resp: 205

Ion Ratio Lower Upper

56 100

55 0.0 57.0 85.4#



#16

Acetone

Concen: 0.71 ug/l

RT: 2.45 min Scan# 306

Delta R.T. 0.00 min

Lab File: VX002706.D

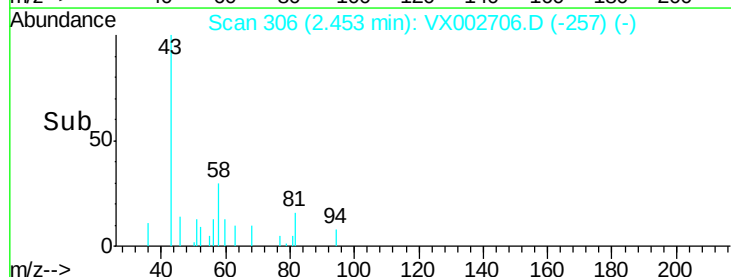
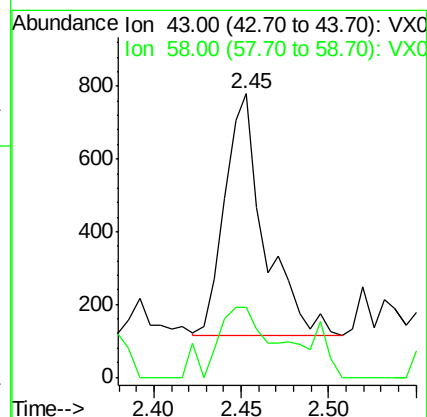
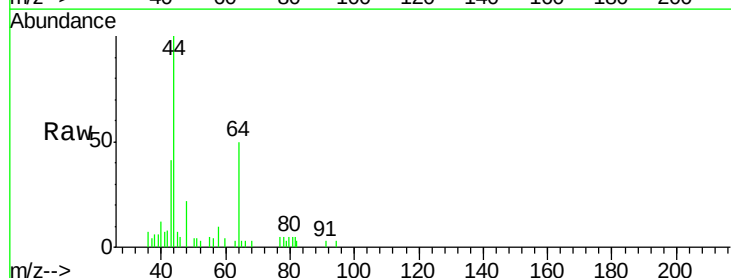
Acq: 19 Jun 2018 04:07

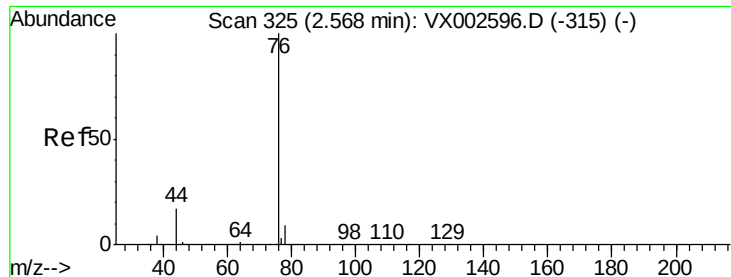
Tgt Ion: 43 Resp: 1048

Ion Ratio Lower Upper

43 100

58 29.0 22.1 33.1





#17

Carbon Disulfide

Concen: 0.20 ug/l

RT: 2.57 min Scan# 325

Delta R.T. 0.00 min

Lab File: VX002706.D

Acq: 19 Jun 2018 04:07

Instrument :

MSVOA\_X

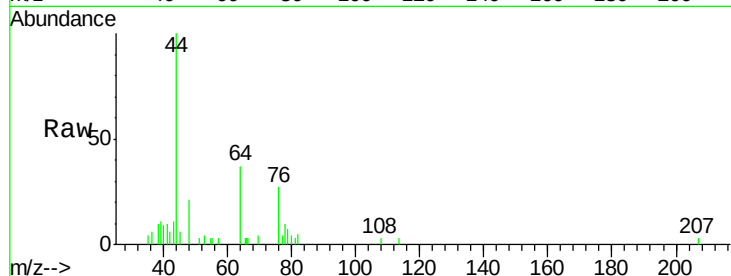
ClientSampled :

Tot Ion: 76 Resp: 1188

Ion Ratio Lower Upper

76 100

78 19.0 6.9 10.3#



Abundance Ion 75.90 (75.60 to 76.60): VX0

Ion 77.90 (77.60 to 78.60): VX0

2.57

600

500

400

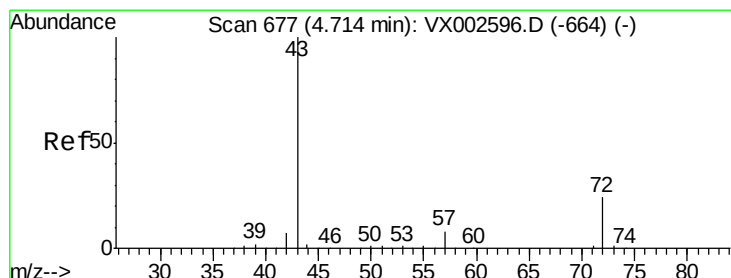
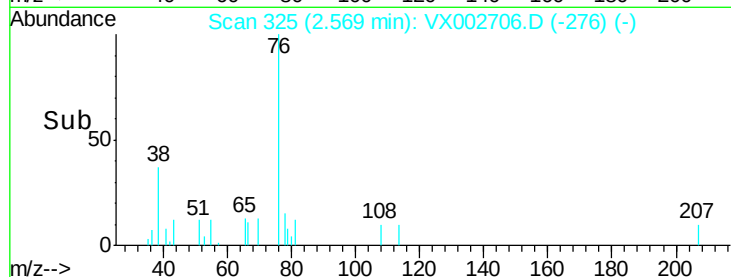
300

200

100

0

Time-->



#25

2-Butanone

Concen: 0.21 ug/l

RT: 4.71 min Scan# 677

Delta R.T. 0.00 min

Lab File: VX002706.D

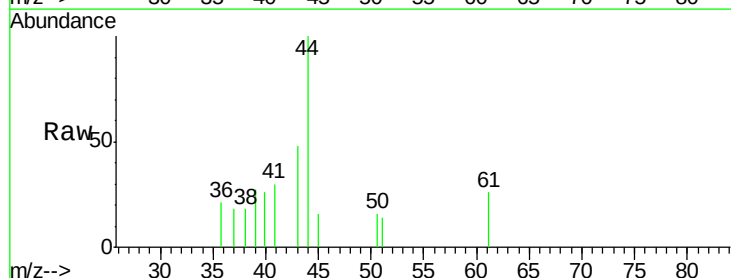
Acq: 19 Jun 2018 04:07

Tgt Ion: 43 Resp: 414

Ion Ratio Lower Upper

43 100

72 0.0 18.5 27.7#



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 72.00 (71.70 to 72.70): VX0

4.71

200

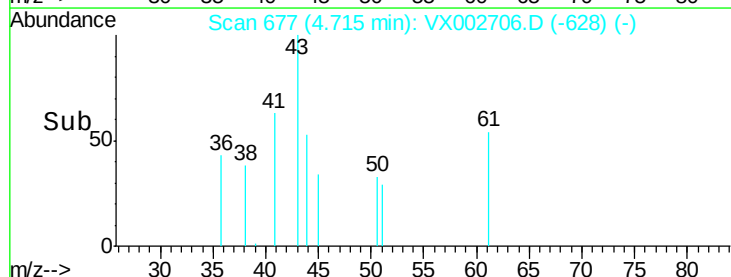
150

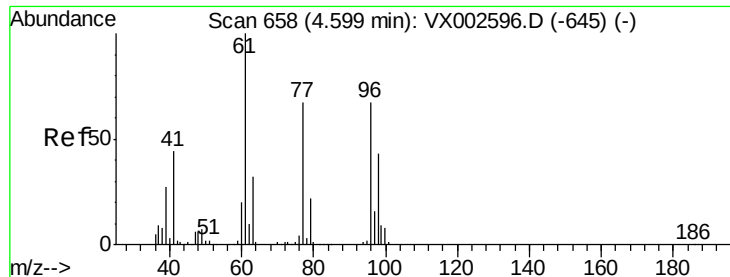
100

50

0

Time-->



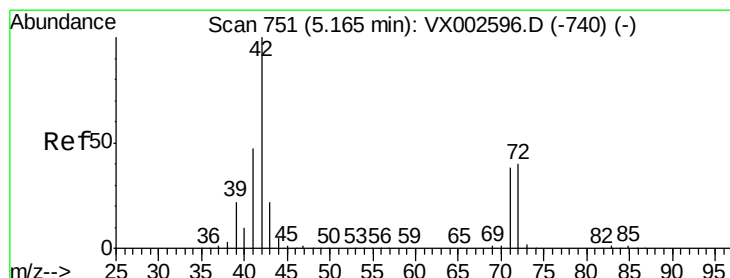
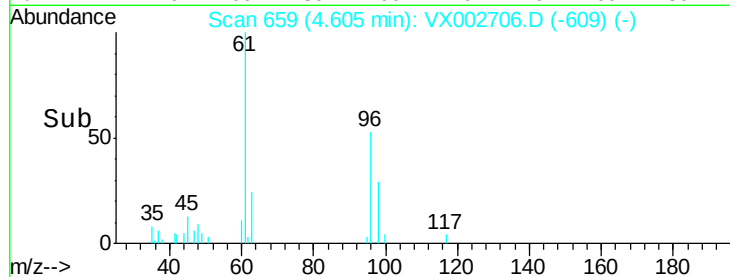
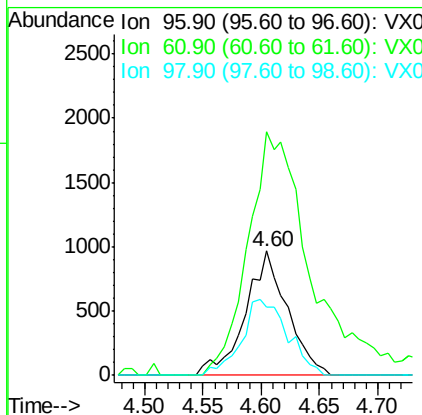
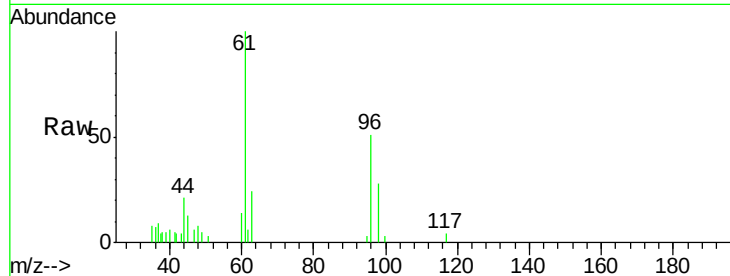


#27

cis-1,2-Dichloroethene  
 Concen: 0.90 ug/l  
 RT: 4.60 min Scan# 659  
 Delta R.T. 0.01 min  
 Lab File: VX002706.D  
 Acq: 19 Jun 2018 04:07

Instrument :  
 MSVOA\_X  
 ClientSampled :

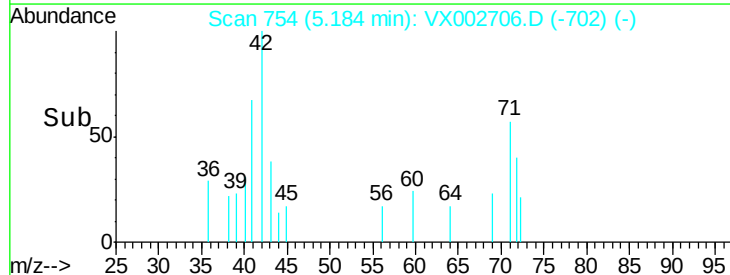
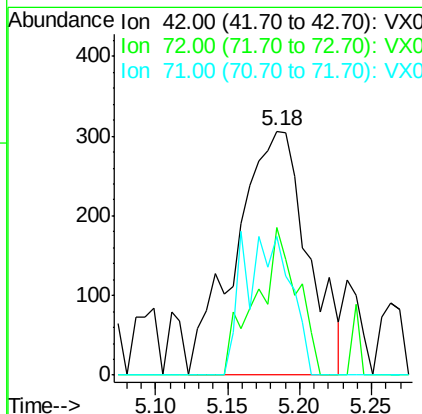
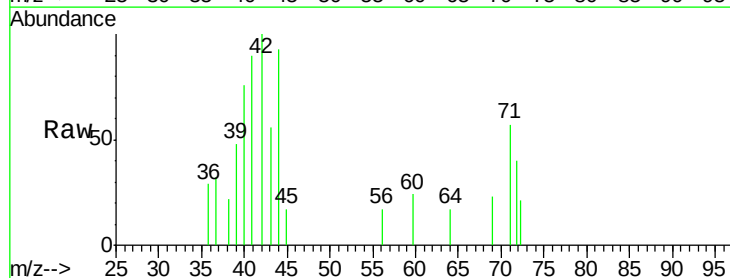
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 96      | 100   |       |       |
| 61      | 291.2 | 0.0   | 330.2 |
| 98      | 66.8  | 0.0   | 130.2 |

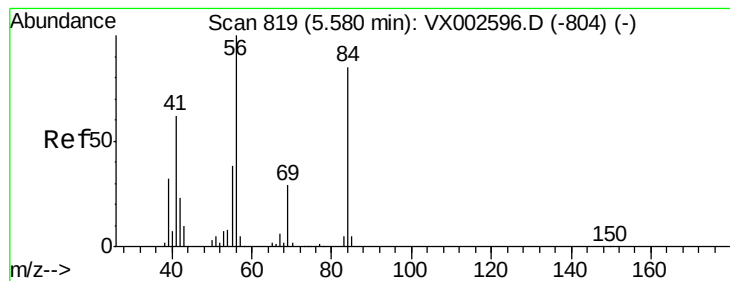


#29

Tetrahydrofuran  
 Concen: 0.84 ug/l  
 RT: 5.18 min Scan# 754  
 Delta R.T. 0.02 min  
 Lab File: VX002706.D  
 Acq: 19 Jun 2018 04:07

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 42      | 100   |       |       |
| 72      | 35.2  | 32.0  | 48.0  |
| 71      | 0.0   | 30.1  | 45.1# |





#31

Cyclohexane

Concen: 1.18 ug/l

RT: 5.67 min Scan# 834

Delta R.T. 0.09 min

Lab File: VX002706.D

Acq: 19 Jun 2018 04:07

Instrument :

MSVOA\_X

ClientSampleId :

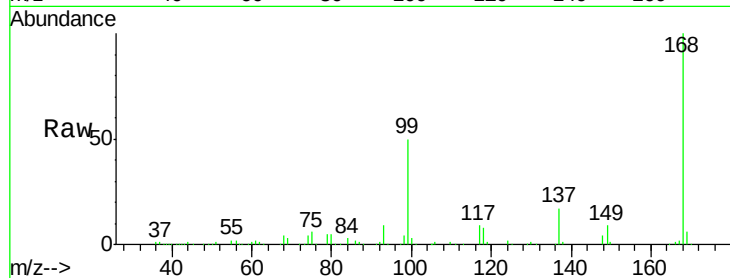
Tot Ion: 56 Resp: 4620

Ion Ratio Lower Upper

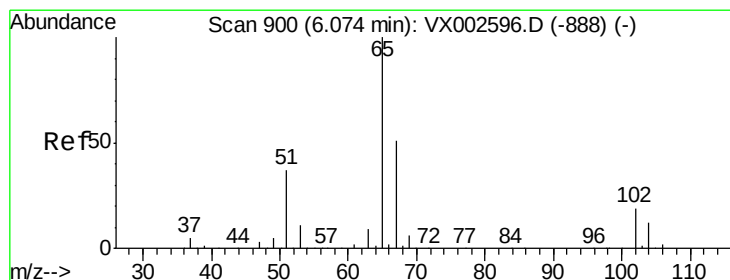
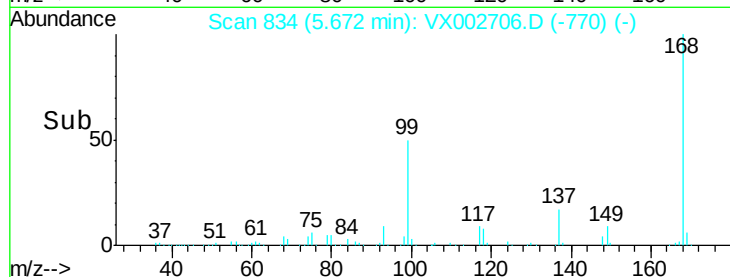
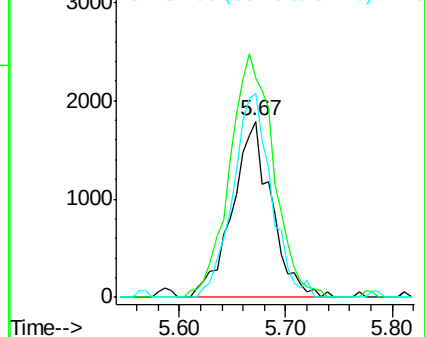
56 100

69 124.8 23.7 35.5#

84 115.9 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: 48.71 ug/l

RT: 6.07 min Scan# 900

Delta R.T. 0.00 min

Lab File: VX002706.D

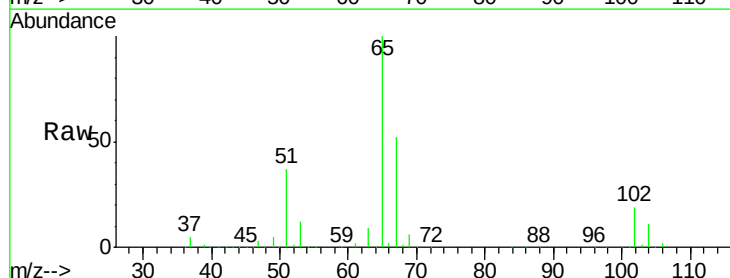
Acq: 19 Jun 2018 04:07

Tgt Ion: 65 Resp: 162102

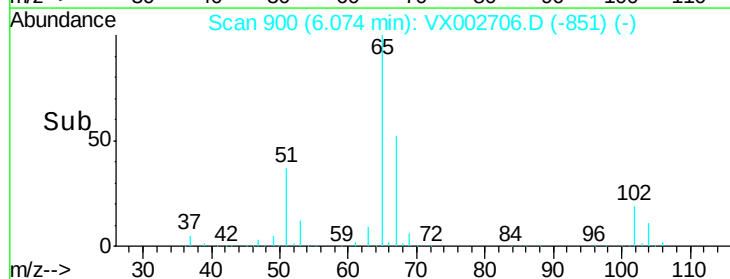
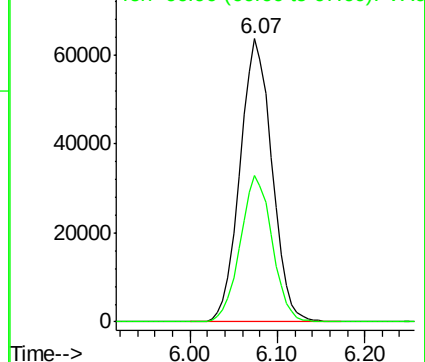
Ion Ratio Lower Upper

65 100

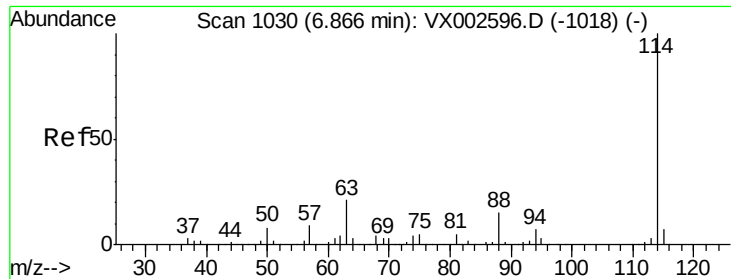
67 51.6 0.0 102.6



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: VX002706.D

Acq: 19 Jun 2018 04:07

Instrument :

MSVOA\_X

ClientSampleId :

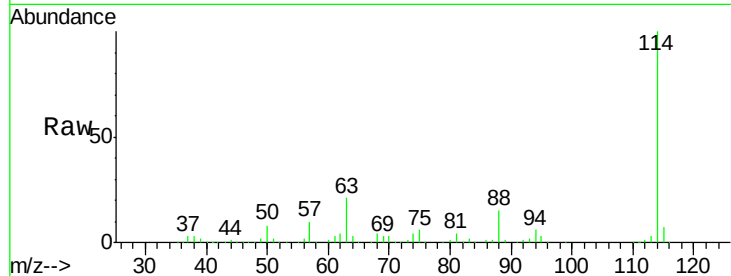
Tot Ion:114 Resp: 310399

Ion Ratio Lower Upper

114 100

63 21.0 0.0 41.4

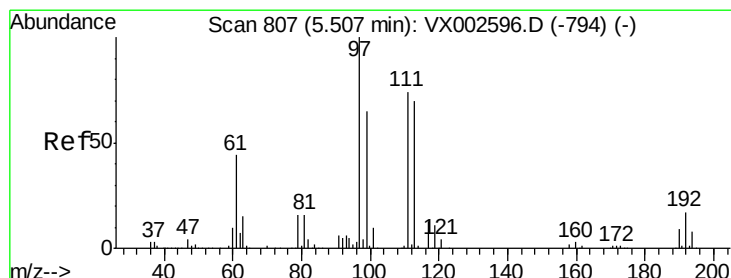
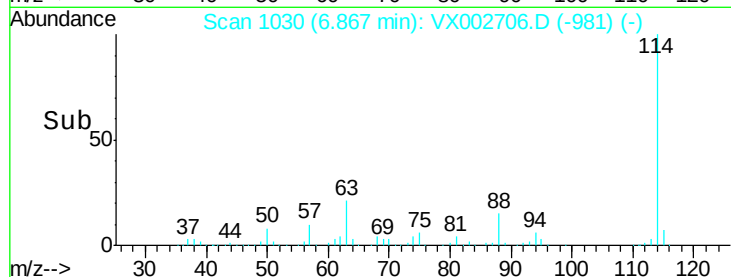
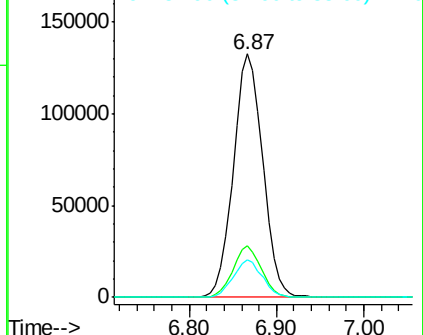
88 15.2 0.0 30.0



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: 51.96 ug/l

RT: 5.51 min Scan# 807

Delta R.T. 0.00 min

Lab File: VX002706.D

Acq: 19 Jun 2018 04:07

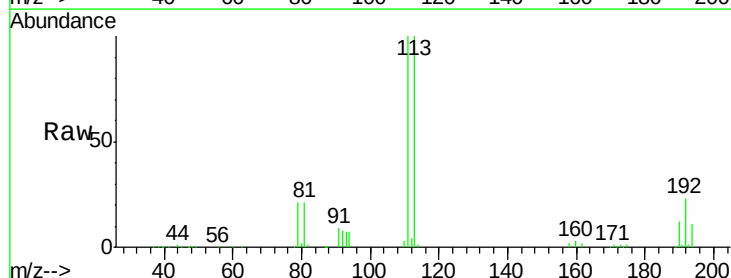
Tgt Ion:113 Resp: 128711

Ion Ratio Lower Upper

113 100

111 102.4 81.4 122.0

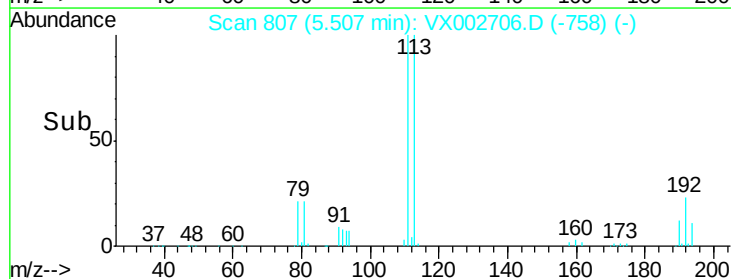
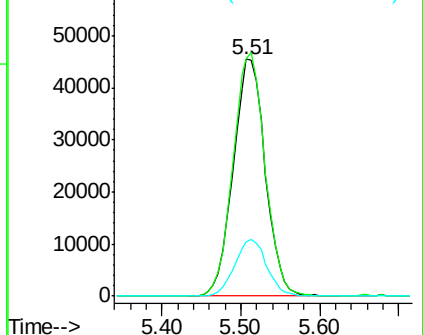
192 24.0 19.1 28.7

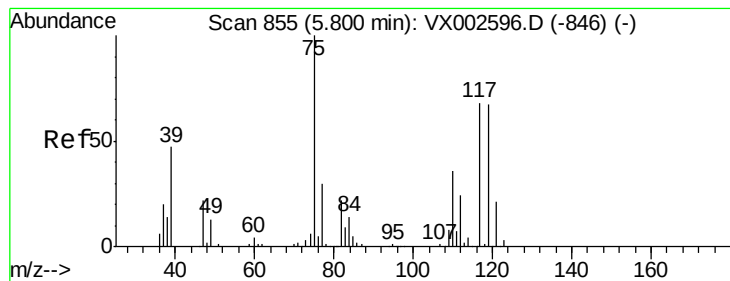


Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V





#36

1,1-Dichloropropene

Concen: 4.47 ug/l

RT: 5.67 min Scan# 833

Delta R.T. -0.13 min

Lab File: VX002706.D

Acq: 19 Jun 2018 04:07

Instrument :

MSVOA\_X

ClientSampleId :

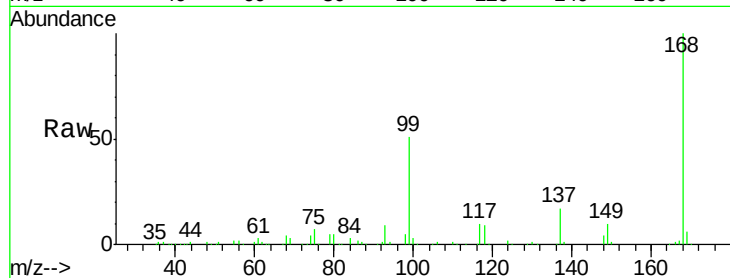
Tot Ion: 75 Resp: 14748

Ion Ratio Lower Upper

75 100

110 10.3 18.1 54.4#

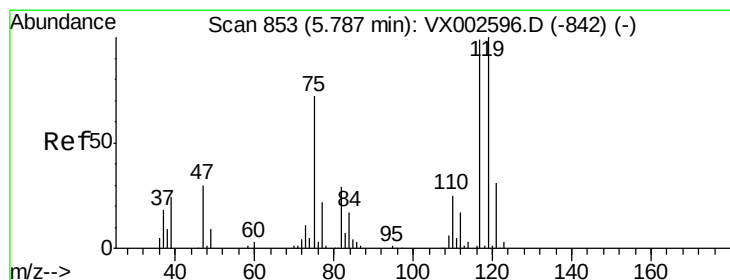
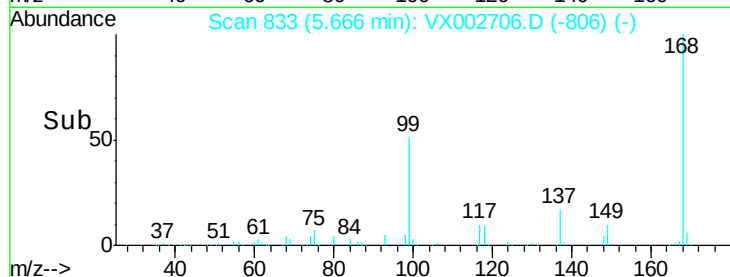
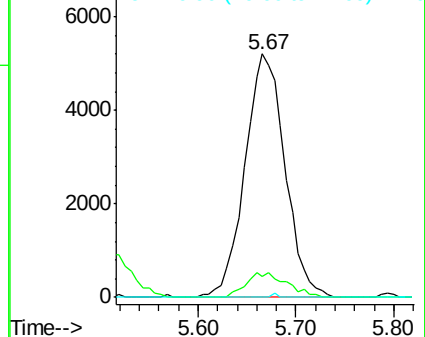
77 0.2 24.3 36.5#



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: 6.08 ug/l

RT: 5.67 min Scan# 833

Delta R.T. -0.12 min

Lab File: VX002706.D

Acq: 19 Jun 2018 04:07

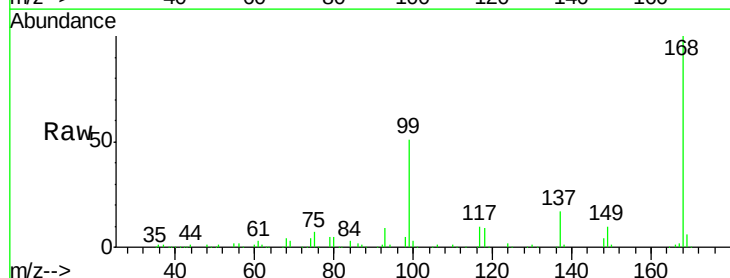
Tgt Ion: 117 Resp: 19966

Ion Ratio Lower Upper

117 100

119 4.0 77.4 116.0#

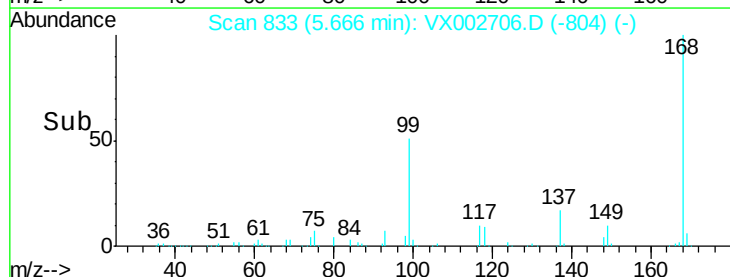
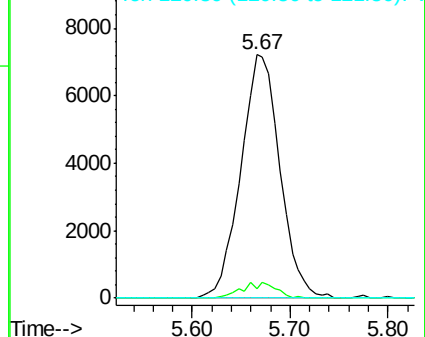
121 0.0 24.4 36.6#

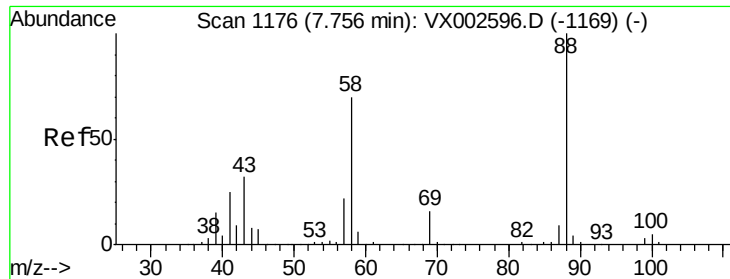


Abundance Ion 116.80 (116.50 to 117.50): V

Ion 118.80 (118.50 to 119.50): V

Ion 120.80 (120.50 to 121.50): V





#49

1,4-Dioxane

Concen: 0.40 ug/l

RT: 7.78 min Scan# 1180

Delta R.T. 0.02 min

Lab File: VX002706.D

Acq: 19 Jun 2018 04:07

Instrument :

MSVOA\_X

ClientSampled :

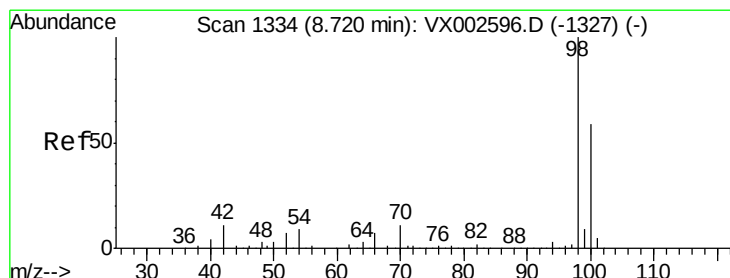
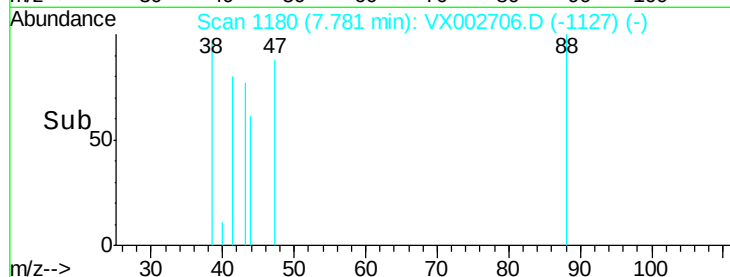
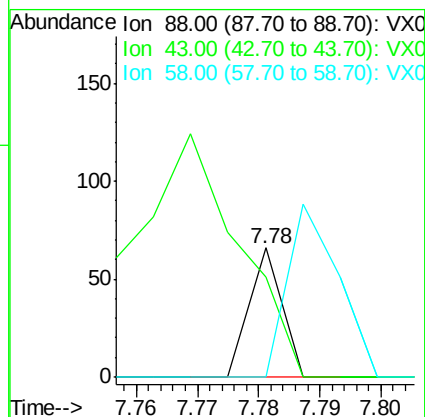
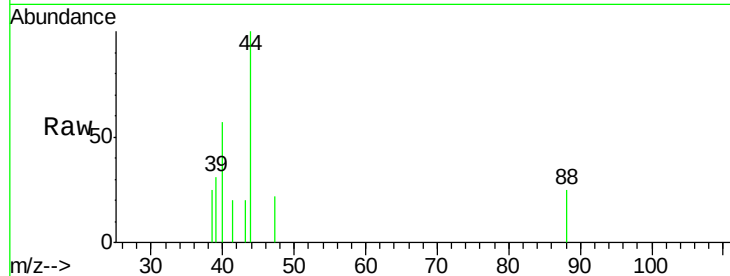
Tot Ion: 88 Resp: 24

Ion Ratio Lower Upper

88 100

43 595.8 29.8 44.6#

58 212.5 57.1 85.7#



#50

Toluene-d8

Concen: 51.54 ug/l

RT: 8.72 min Scan# 1334

Delta R.T. 0.00 min

Lab File: VX002706.D

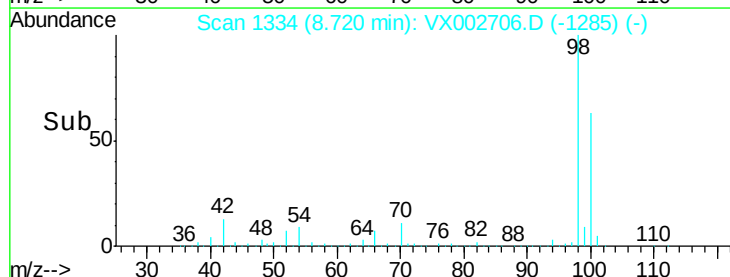
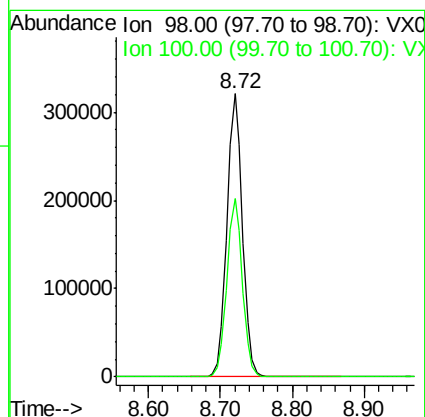
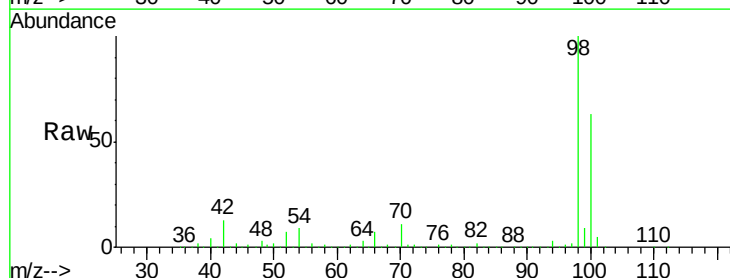
Acq: 19 Jun 2018 04:07

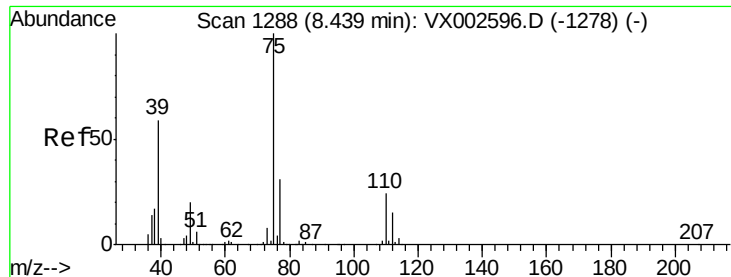
Tgt Ion: 98 Resp: 484750

Ion Ratio Lower Upper

98 100

100 63.2 50.9 76.3

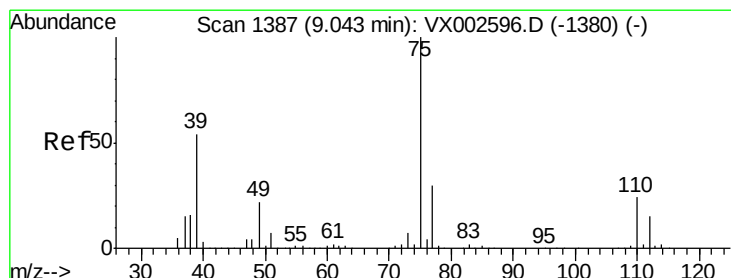
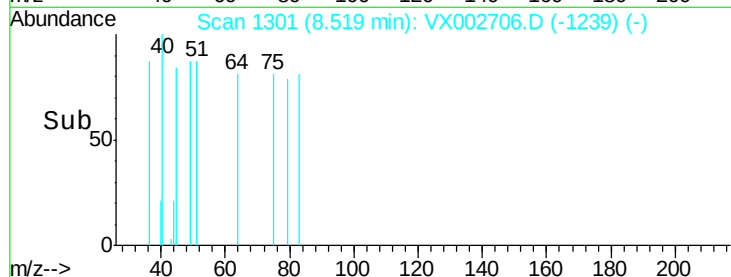
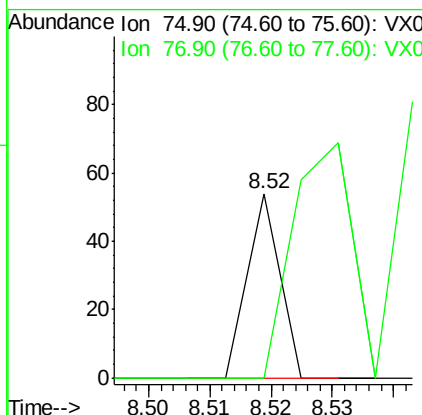
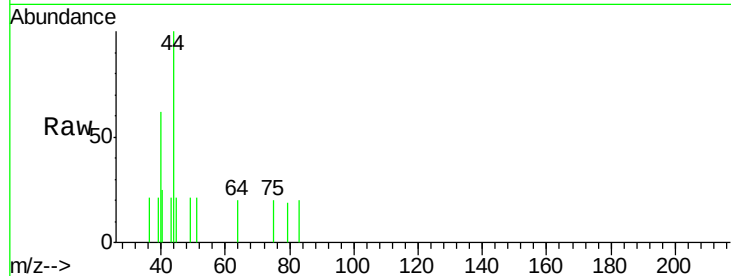




#53  
 t-1,3-Dichloropropene  
 Concen: 2.40 ug/l  
 RT: 8.52 min Scan# 1301  
 Delta R.T. 0.08 min  
 Lab File: VX002706.D  
 Acq: 19 Jun 2018 04:07

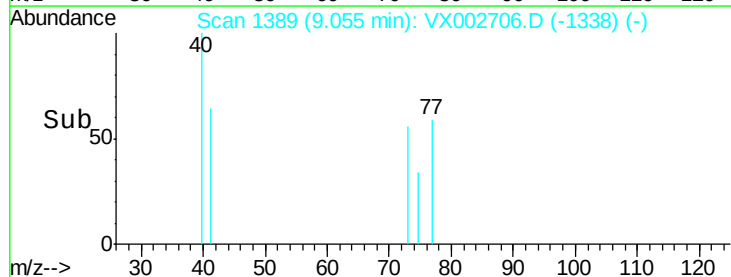
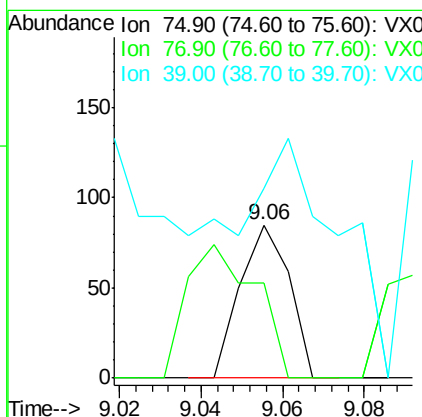
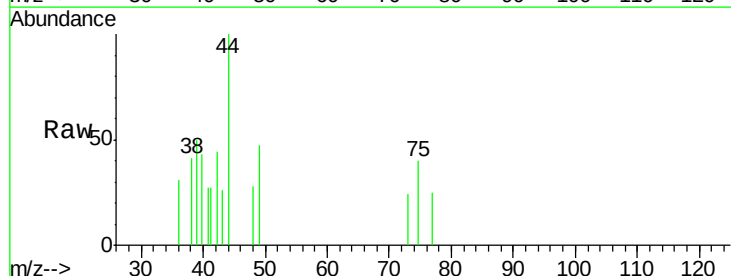
Instrument :  
 MSVOA\_X  
 ClientSampled :

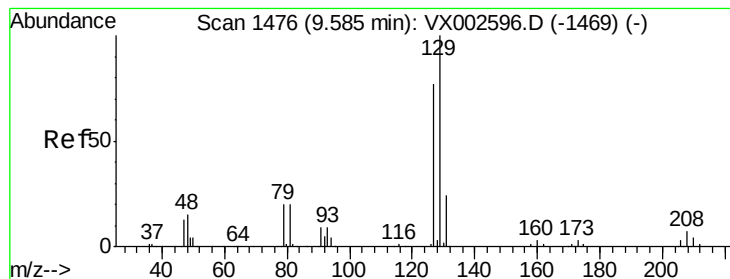
Tot Ion: 75 Resp: 20  
 Ion Ratio Lower Upper  
 75 100  
 77 0.0 25.4 38.2#



#54  
 cis-1,3-Dichloropropene  
 Concen: 3.23 ug/l  
 RT: 9.06 min Scan# 1389  
 Delta R.T. 0.01 min  
 Lab File: VX002706.D  
 Acq: 19 Jun 2018 04:07

Tgt Ion: 75 Resp: 71  
 Ion Ratio Lower Upper  
 75 100  
 77 62.4 24.8 37.2#  
 39 136.5 42.4 63.6#





#60

Dibromochloromethane

Concen: 3.77 ug/l

RT: 9.35 min Scan# 1437

Delta R.T. -0.24 min

Lab File: VX002706.D

Acq: 19 Jun 2018 04:07

Instrument :

MSVOA\_X

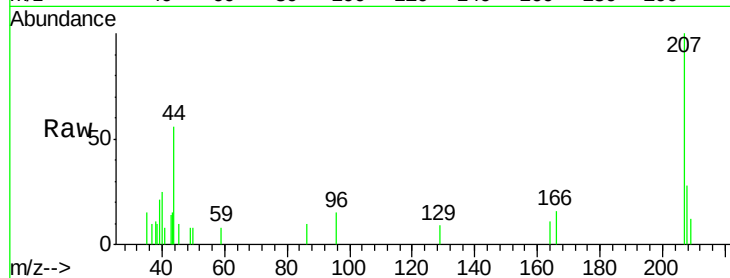
ClientSampleId :

Tot Ion:129 Resp: 22

Ion Ratio Lower Upper

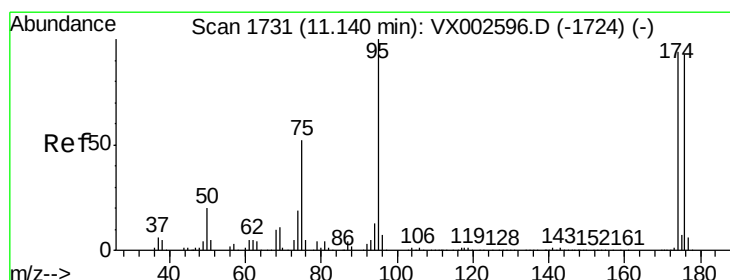
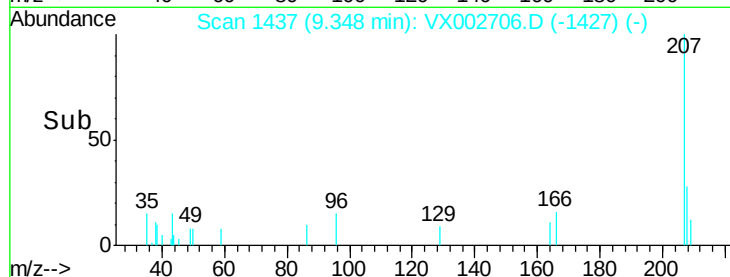
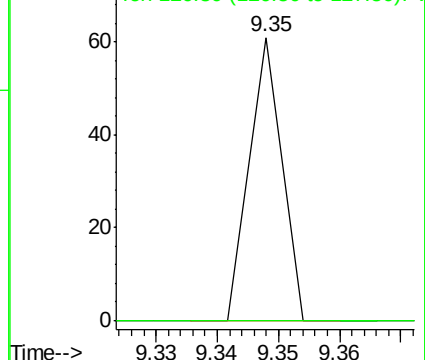
129 100

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: 46.84 ug/l

RT: 11.14 min Scan# 1731

Delta R.T. 0.00 min

Lab File: VX002706.D

Acq: 19 Jun 2018 04:07

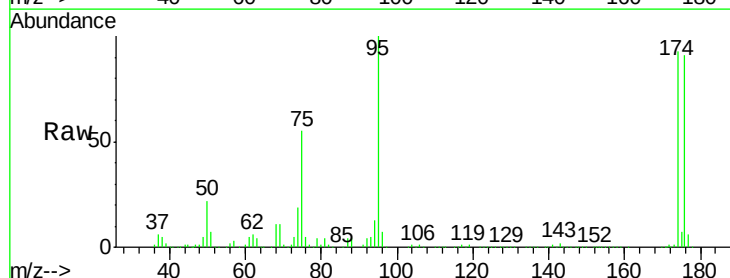
Tgt Ion: 95 Resp: 166941

Ion Ratio Lower Upper

95 100

174 98.8 0.0 187.4

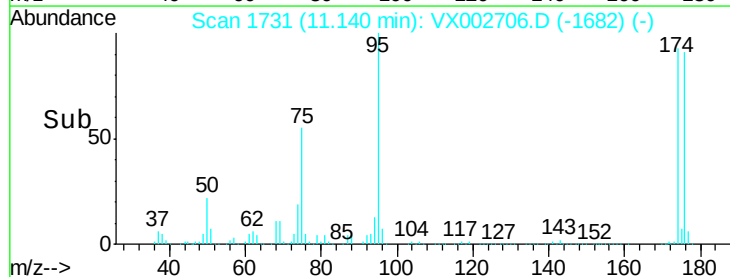
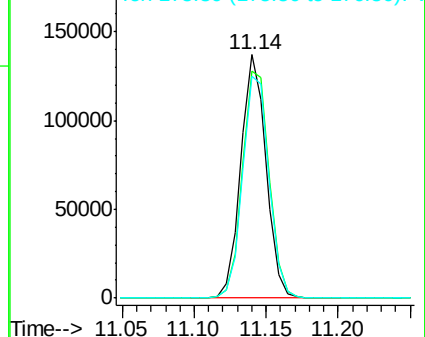
176 95.2 0.0 181.0

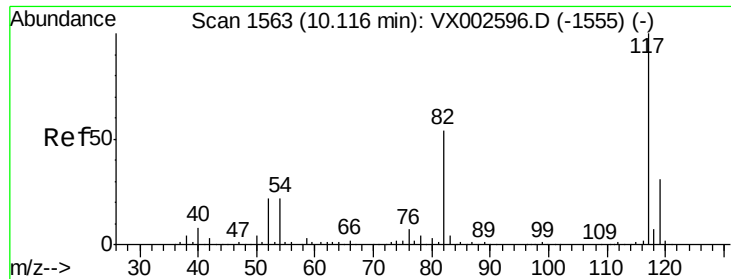


Abundance Ion 94.90 (94.60 to 95.60): VX0

Ion 173.80 (173.50 to 174.50): V

Ion 175.80 (175.50 to 176.50): V

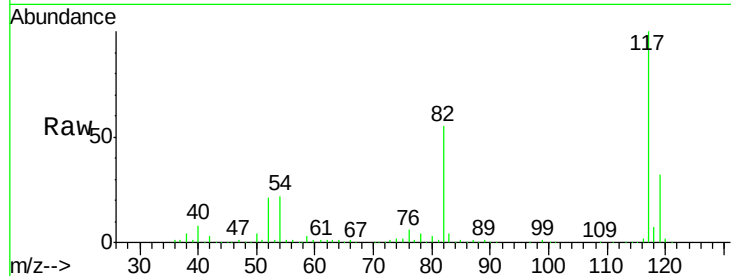




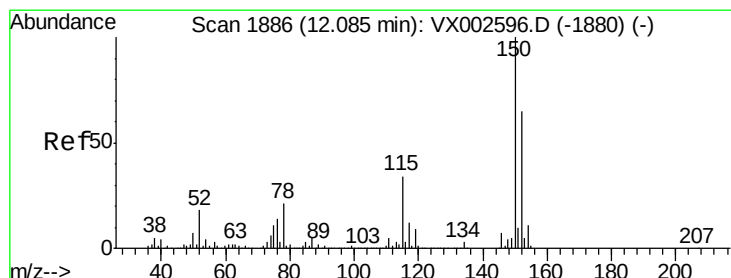
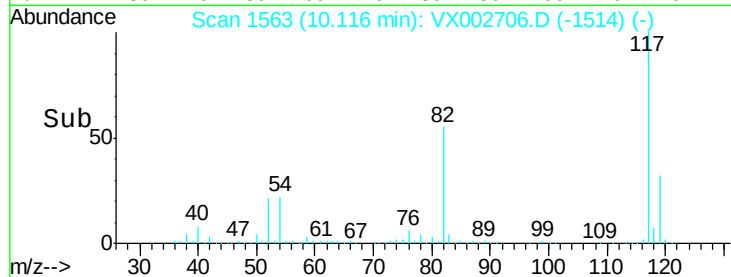
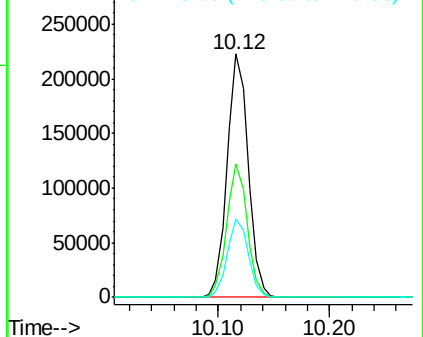
#63  
Chlorobenzene-d5  
Concen: 50.00 ug/l  
RT: 10.12 min Scan# 1563  
Delta R.T. 0.00 min  
Lab File: VX002706.D  
Acq: 19 Jun 2018 04:07

Instrument :  
MSVOA\_X  
ClientSampled :

Tot Ion:117 Resp: 292000  
Ion Ratio Lower Upper  
117 100  
82 54.7 45.0 67.4  
119 32.3 25.8 38.6

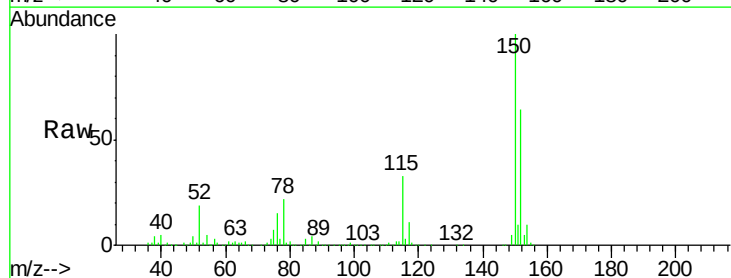


Abundance Ion 116.90 (116.60 to 117.60): V  
Ion 82.00 (81.70 to 82.70): V  
Ion 118.90 (118.60 to 119.60): V

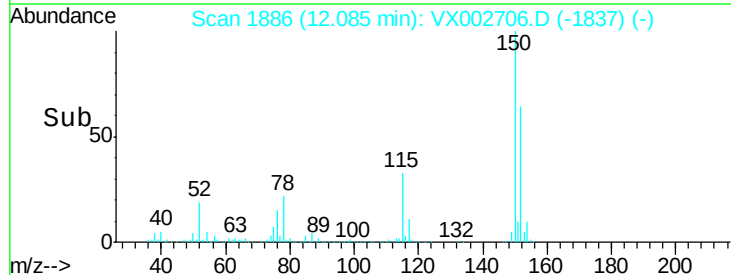
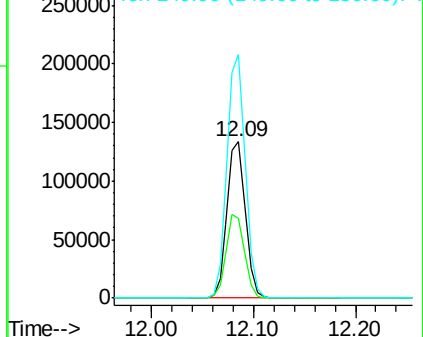


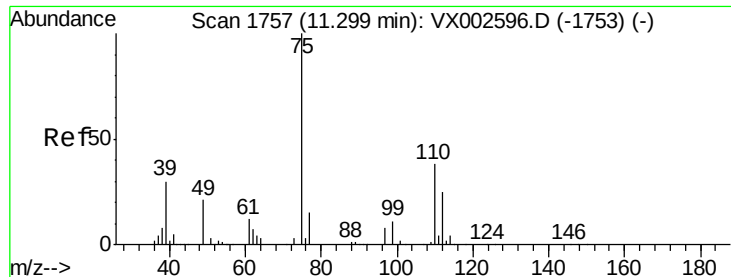
#72  
1,4-Dichlorobenzene-d4  
Concen: 50.00 ug/l  
RT: 12.09 min Scan# 1886  
Delta R.T. 0.00 min  
Lab File: VX002706.D  
Acq: 19 Jun 2018 04:07

Tgt Ion:152 Resp: 166094  
Ion Ratio Lower Upper  
152 100  
115 53.8 40.1 120.2  
150 155.1 0.0 347.2



Abundance Ion 151.90 (151.60 to 152.60): V  
Ion 114.90 (114.60 to 115.60): V  
Ion 149.90 (149.60 to 150.60): V





#76

1,2,3-Trichloropropane

Concen: 28.78 ug/l

RT: 11.14 min Scan# 1731

Delta R.T. -0.16 min

Lab File: VX002706.D

Acq: 19 Jun 2018 04:07

Instrument :

MSVOA\_X

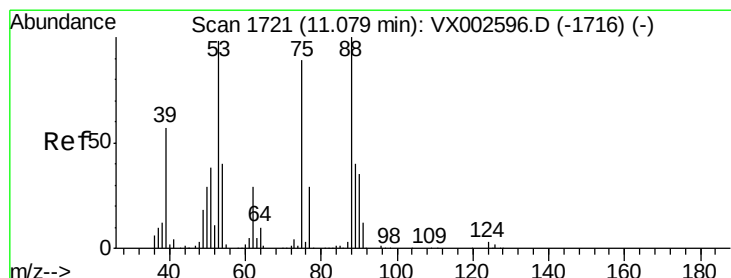
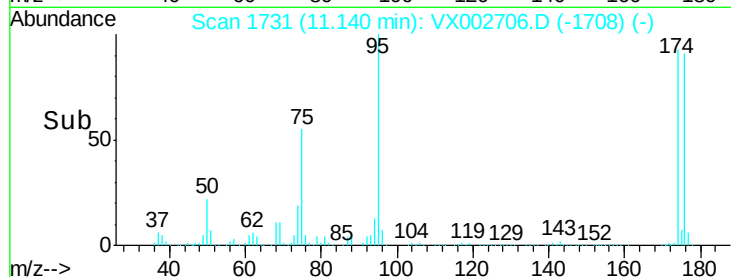
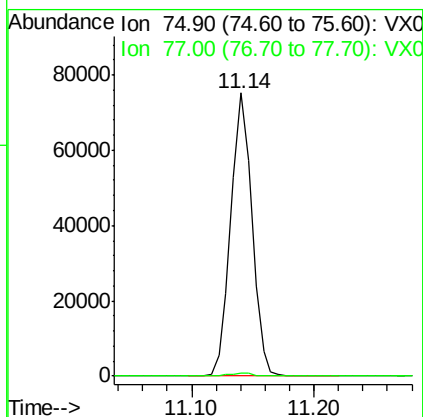
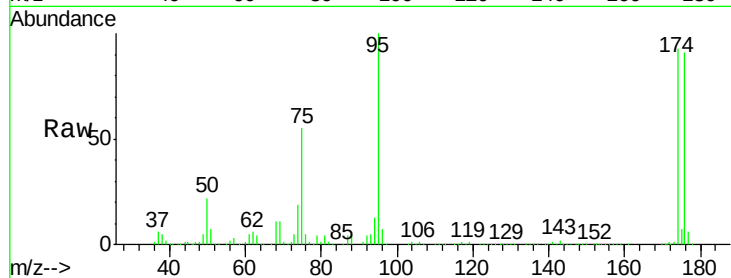
ClientSampleId :

Tot Ion: 75 Resp: 90193

Ion Ratio Lower Upper

75 100

77 1.3 22.8 68.3#



#81

trans-1,4-Dichloro-2-butene

Concen: 88.56 ug/l

RT: 11.14 min Scan# 1731

Delta R.T. 0.06 min

Lab File: VX002706.D

Acq: 19 Jun 2018 04:07

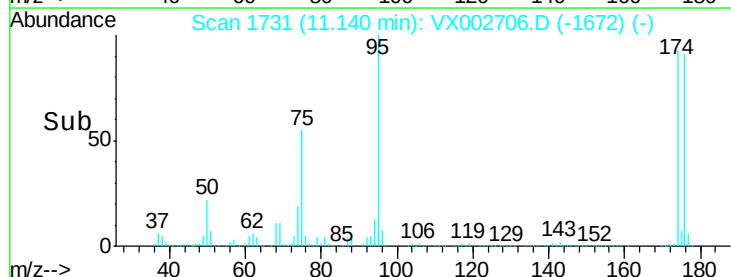
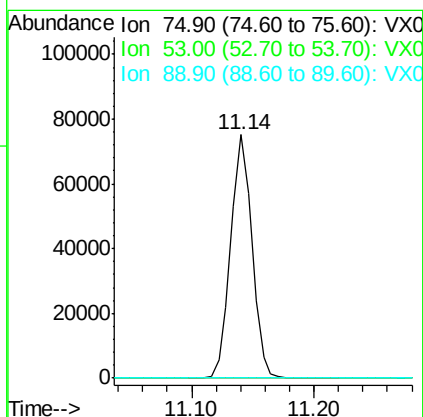
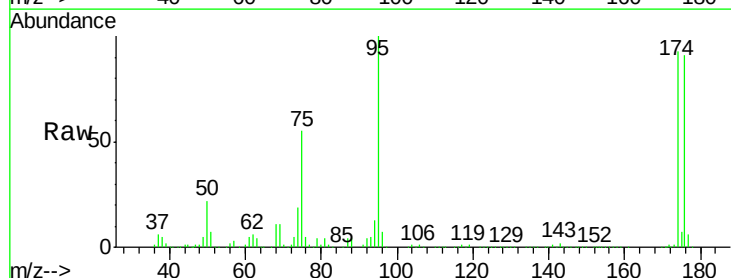
Tgt Ion: 75 Resp: 90193

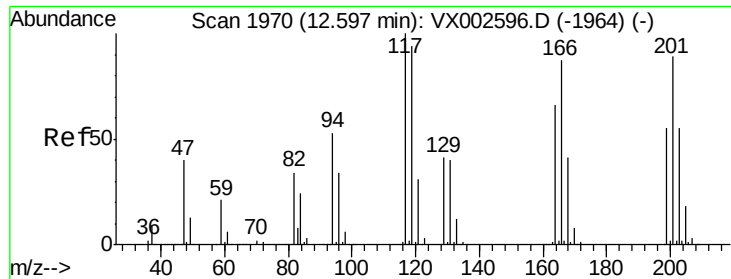
Ion Ratio Lower Upper

75 100

53 0.1 86.8 130.2#

89 0.0 38.2 57.2#





#90

Hexachloroethane

Concen: 2.64 ug/l

RT: 12.76 min Scan# 1997

Delta R.T. 0.16 min

Lab File: VX002706.D

Acq: 19 Jun 2018 04:07

Instrument :

MSVOA\_X

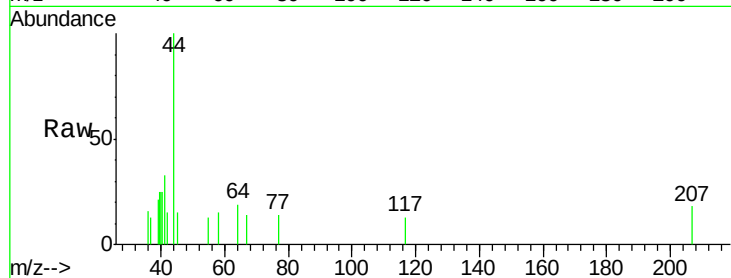
ClientSampleId :

Tot Ion:117 Resp: 19

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

