

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX071018\  
 Data File : VX003290.D  
 Acq On : 10 Jul 2018 17:55  
 Operator : JC/MD  
 Sample : PB110944ZHE#04  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 13 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 PB110944ZHE#04

Quant Time: Jul 11 00:54:14 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X070918W.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Jul 09 15:24:16 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.67  | 168  | 254158   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.87  | 114  | 354936   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.12 | 117  | 336753   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.09 | 152  | 190787   | 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   | 161807   | 40.45 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 80.90% |          |
| 35) Dibromofluoromethane    | 5.51  | 113  | 137242   | 35.99 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 71.98% |          |
| 50) Toluene-d8              | 8.72  | 98   | 500765   | 36.97 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 73.94% |          |
| 62) 4-Bromofluorobenzene    | 11.14 | 95   | 171883   | 34.34 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 68.68% |          |

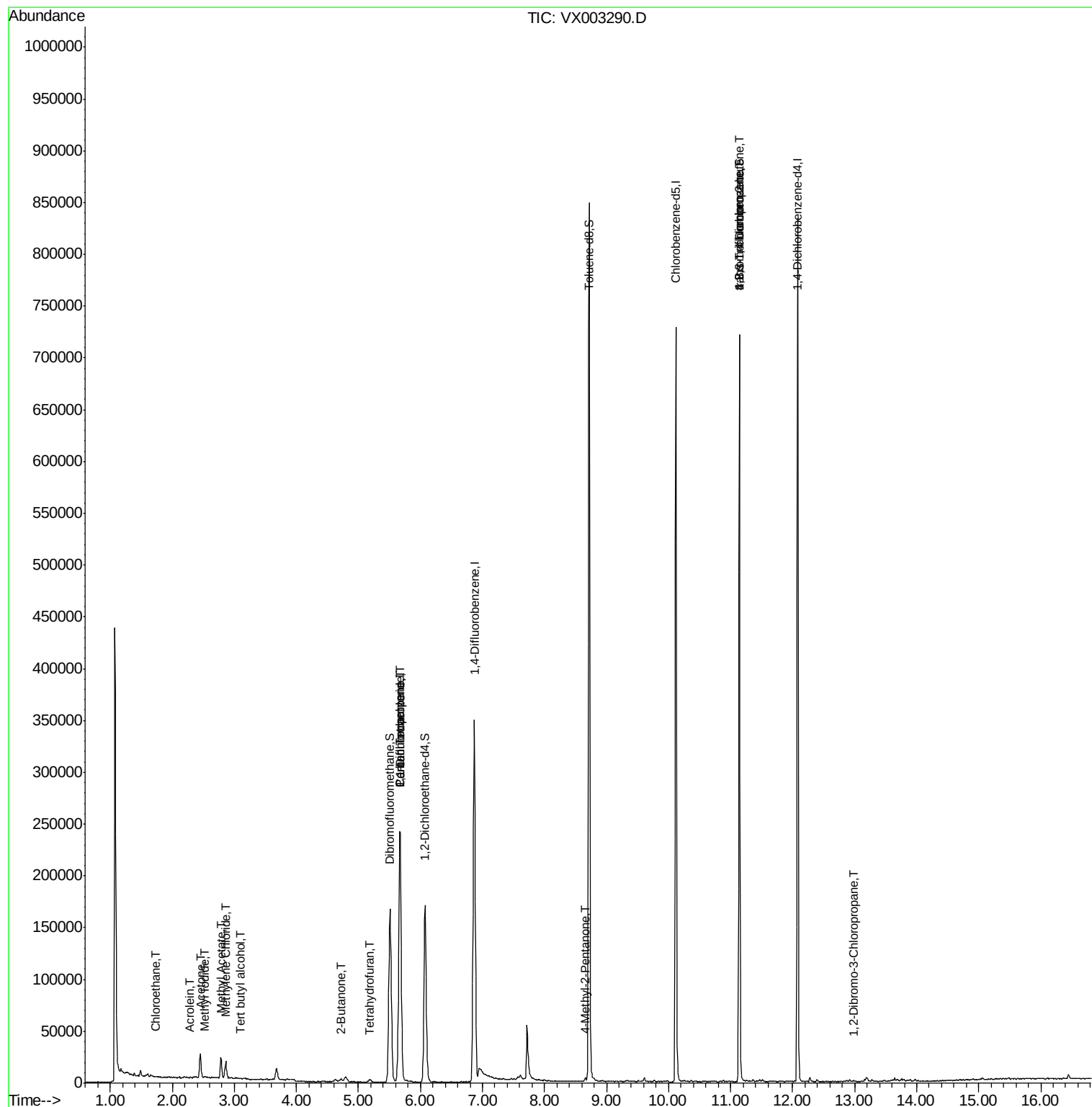
| Target Compounds               | R.T.  | QIon | Response | Conc       | Units | Qvalue |
|--------------------------------|-------|------|----------|------------|-------|--------|
| 5) Bromomethane                | 1.65  | 94   | 1447     | Below Cal  |       | 99     |
| 6) Chloroethane                | 1.73  | 64   | 535      | 0.27 ug/l  | #     | 43     |
| 10) Methyl Iodide              | 2.52  | 142  | 1772     | 6.10 ug/l  | #     | 95     |
| 11) Tert butyl alcohol         | 3.09  | 59   | 688      | 0.95 ug/l  | #     | 64     |
| 13) Acrolein                   | 2.29  | 56   | 290      | 0.50 ug/l  | #     | 14     |
| 16) Acetone                    | 2.45  | 43   | 26813    | 18.88 ug/l |       | 91     |
| 18) Methyl Acetate             | 2.78  | 43   | 23013    | 5.74 ug/l  |       | 91     |
| 20) Methylene Chloride         | 2.86  | 84   | 7700     | 1.97 ug/l  |       | 95     |
| 25) 2-Butanone                 | 4.72  | 43   | 4889     | 1.95 ug/l  | #     | 80     |
| 29) Tetrahydrofuran            | 5.18  | 42   | 2167     | 1.33 ug/l  |       | 97     |
| 36) 1,1-Dichloropropene        | 5.67  | 75   | 16156    | 3.22 ug/l  | #     | 51     |
| 38) Carbon Tetrachloride       | 5.67  | 117  | 22049    | 4.01 ug/l  | #     | 16     |
| 51) 4-Methyl-2-Pentanone       | 8.65  | 43   | 1912     | 0.36 ug/l  |       | 94     |
| 76) 1,2,3-Trichloropropane     | 11.14 | 75   | 84295    | 20.44 ug/l | #     | 33     |
| 81) trans-1,4-Dichloro-2-buten | 11.14 | 75   | 84295    | 66.82 ug/l | #     | 7      |
| 92) 1,2-Dibromo-3-Chloropropan | 12.99 | 75   | 226      | 0.23 ug/l  | #     | 1      |

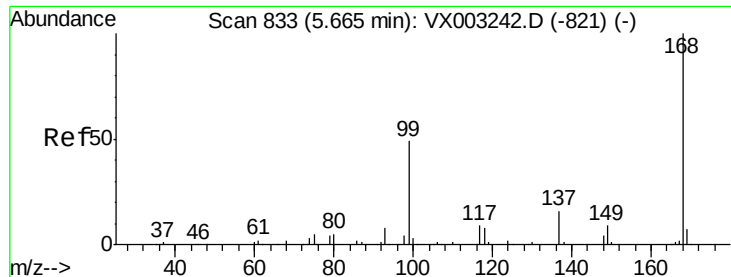
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA X\DATA\VX071018\  
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MSVOA\_X  
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PB110944ZHE#04

Quant Time: Jul 11 00:54:14 2018  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X070918W.M  
Quant Title : SW846 8260  
QLast Update : Mon Jul 09 15:24:16 2018  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.00 ug/l

RT: 5.67 min Scan# 834

Delta R.T. 0.01 min

Lab File: VX003290.D

Acq: 10 Jul 2018 17:55

Instrument :

MSVOA\_X

ClientSampleId :

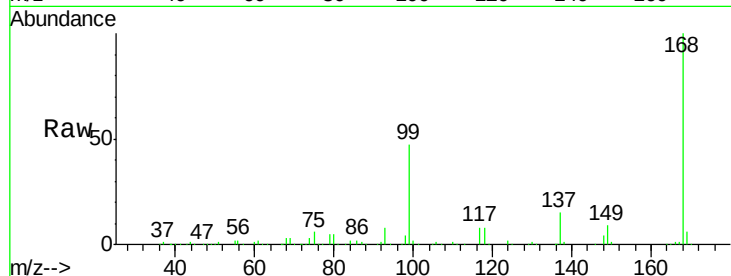
PB110944ZHE#04

Tot Ion:168 Resp: 254158

Ion Ratio Lower Upper

168 100

99 46.9 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

100000

80000

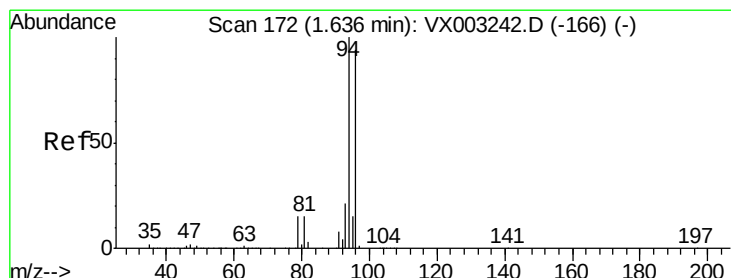
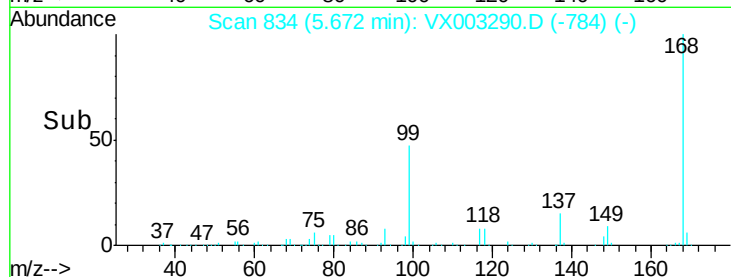
60000

40000

20000

0

Time--> 5.50 5.60 5.70 5.80



#5

Bromomethane

Concen: Below Cal

RT: 1.65 min Scan# 174

Delta R.T. 0.01 min

Lab File: VX003290.D

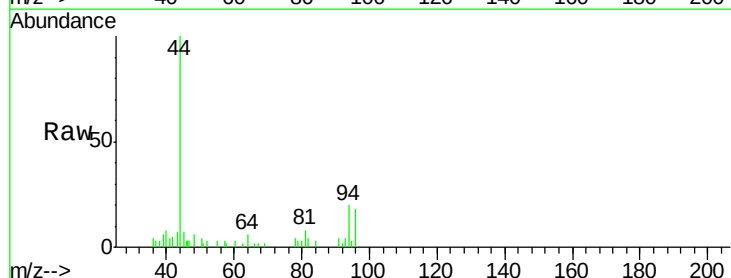
Acq: 10 Jul 2018 17:55

Tgt Ion: 94 Resp: 1447

Ion Ratio Lower Upper

94 100

96 92.4 74.9 112.3



Abundance Ion 93.90 (93.60 to 94.60): VX0

Ion 95.90 (95.60 to 96.60): VX0

1.65

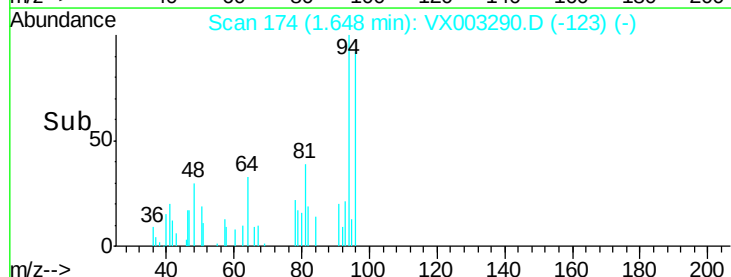
600

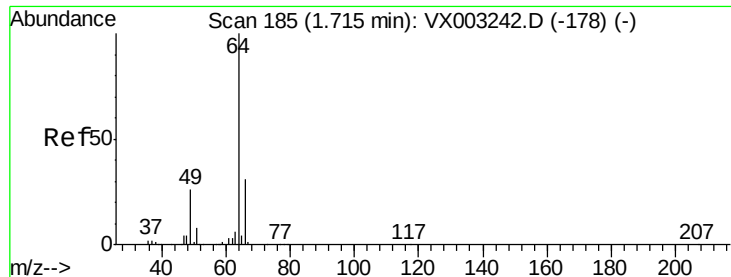
400

200

0

Time--> 1.60 1.65 1.70





#6

Chloroethane

Concen: 0.27 ug/l

RT: 1.73 min Scan# 188

Delta R.T. 0.02 min

Lab File: VX003290.D

Acq: 10 Jul 2018 17:55

Instrument :

MSVOA\_X

ClientSampleId :

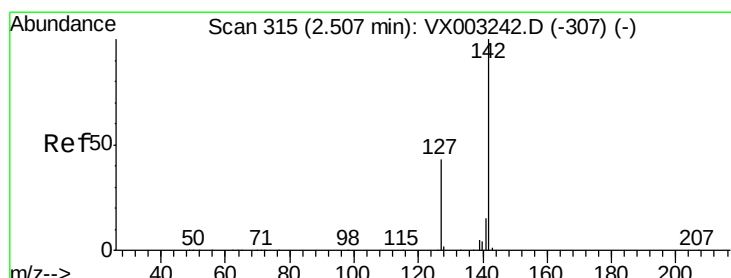
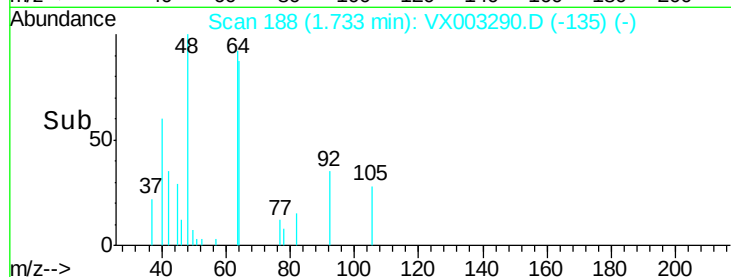
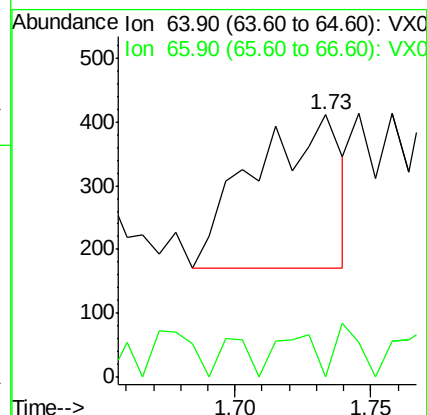
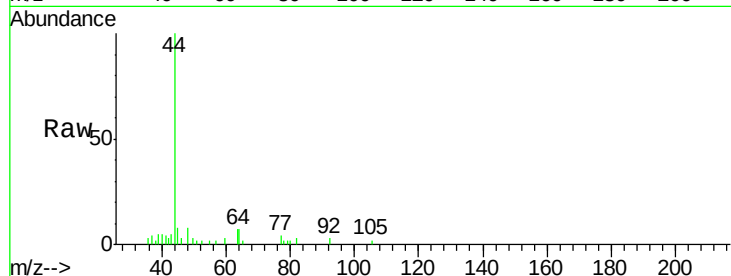
PB110944ZHE#04

Tot Ion: 64 Resp: 535

Ion Ratio Lower Upper

64 100

66 0.0 25.5 38.3#



#10

Methyl Iodide

Concen: 6.10 ug/l

RT: 2.52 min Scan# 317

Delta R.T. 0.01 min

Lab File: VX003290.D

Acq: 10 Jul 2018 17:55

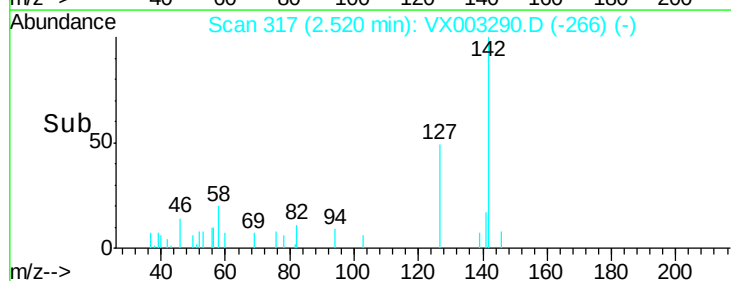
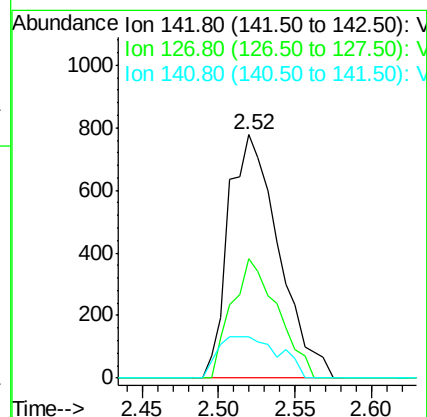
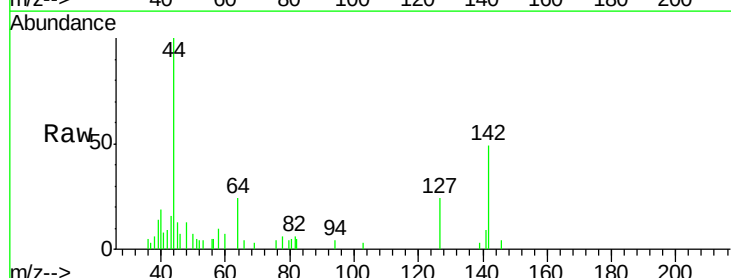
Tgt Ion: 142 Resp: 1772

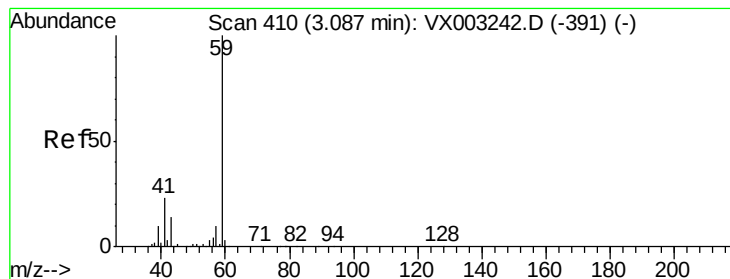
Ion Ratio Lower Upper

142 100

127 45.0 36.6 55.0

141 20.7 11.3 16.9#



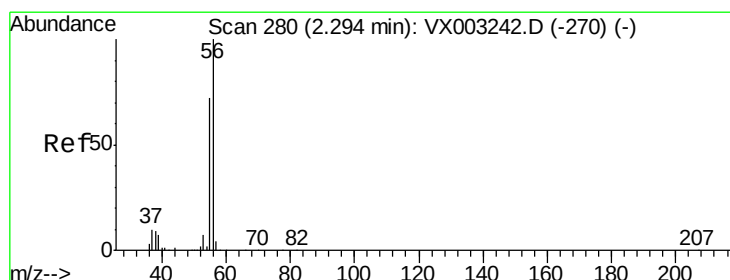
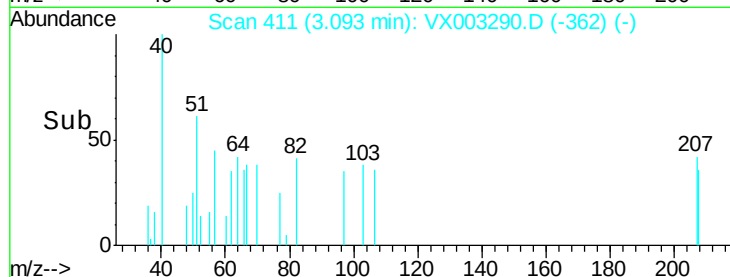
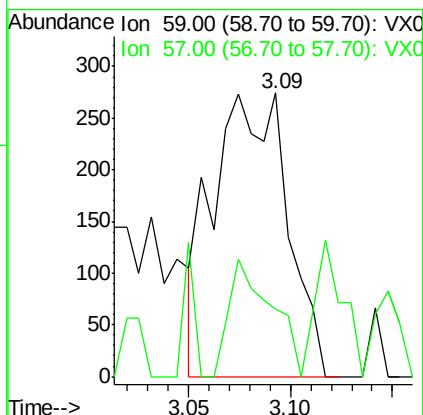
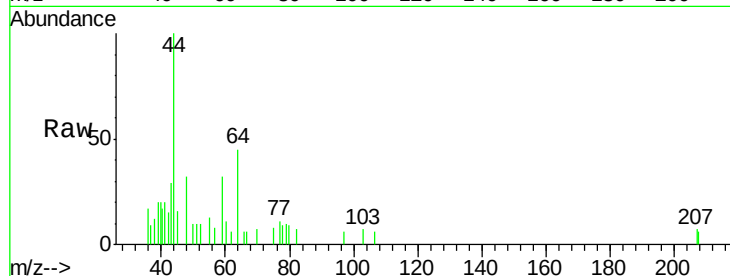


#11

Tert butyl alcohol  
 Concen: 0.95 ug/l  
 RT: 3.09 min Scan# 411  
 Delta R.T. 0.00 min  
 Lab File: VX003290.D  
 Acq: 10 Jul 2018 17:55

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 PB110944ZHE#04

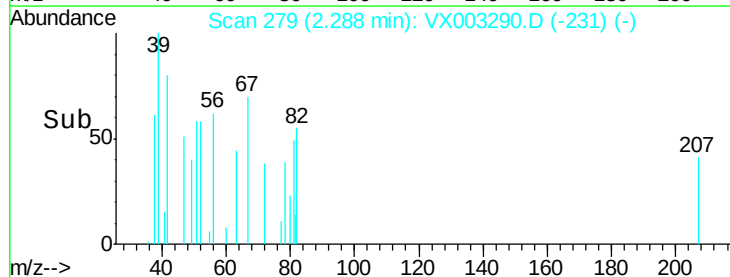
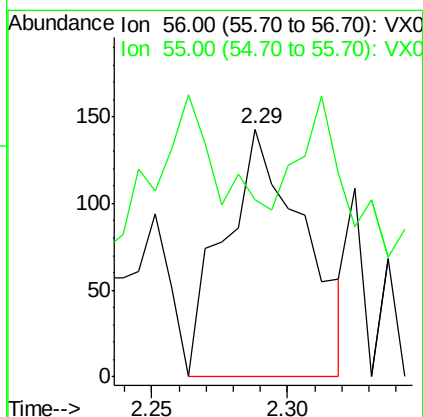
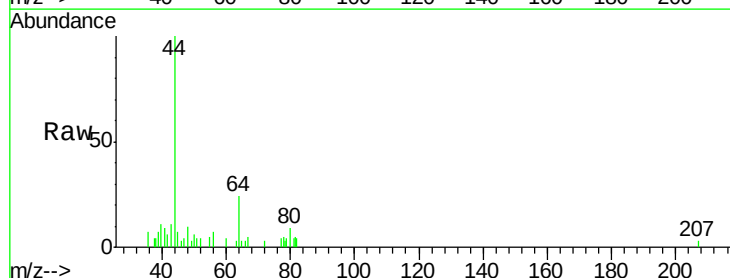
Tot Ion: 59 Resp: 688  
 Ion Ratio Lower Upper  
 59 100  
 57 23.7 8.2 12.2#

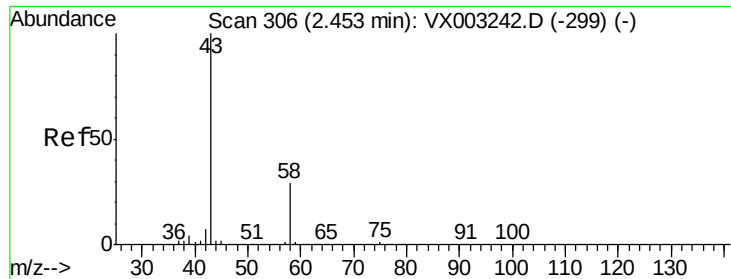


#13

Acrolein  
 Concen: 0.50 ug/l  
 RT: 2.29 min Scan# 279  
 Delta R.T. -0.01 min  
 Lab File: VX003290.D  
 Acq: 10 Jul 2018 17:55

Tgt Ion: 56 Resp: 290  
 Ion Ratio Lower Upper  
 56 100  
 55 0.0 57.0 85.4#





#16

Acetone

Concen: 18.88 ug/l

RT: 2.45 min Scan# 306

Delta R.T. 0.00 min

Lab File: VX003290.D

Acq: 10 Jul 2018 17:55

Instrument :

MSVOA\_X

ClientSampleId :

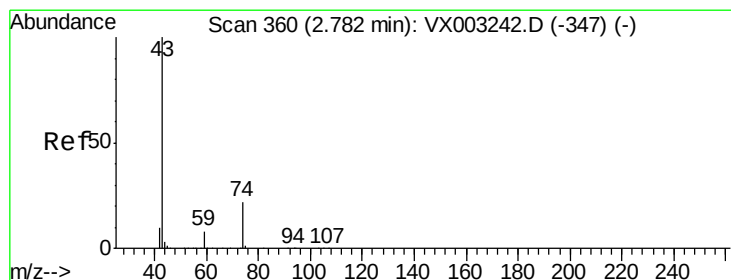
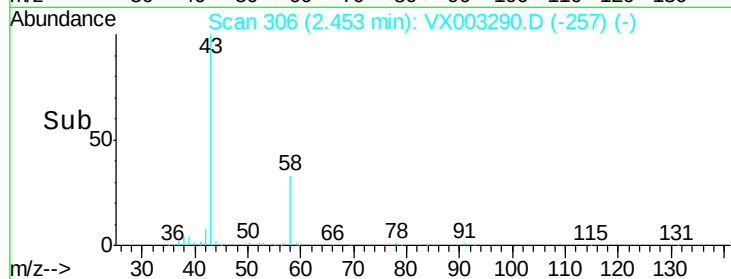
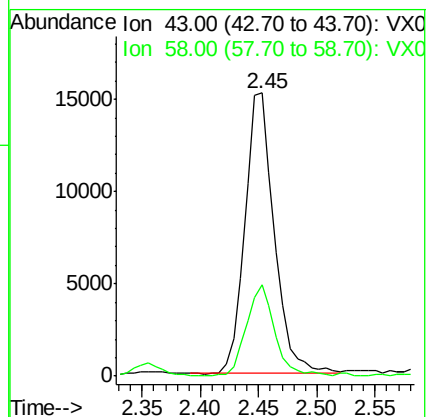
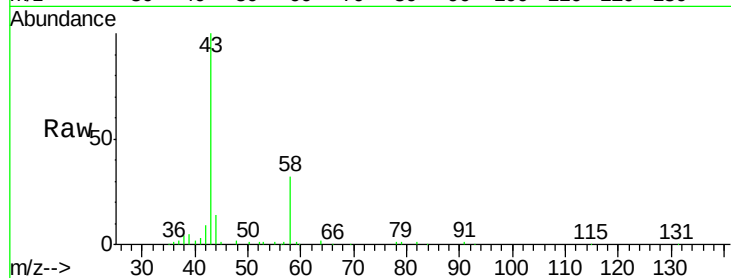
PB110944ZHE#04

Tot Ion: 43 Resp: 26813

Ion Ratio Lower Upper

43 100

58 32.5 22.1 33.1



#18

Methyl Acetate

Concen: 5.74 ug/l

RT: 2.78 min Scan# 360

Delta R.T. 0.00 min

Lab File: VX003290.D

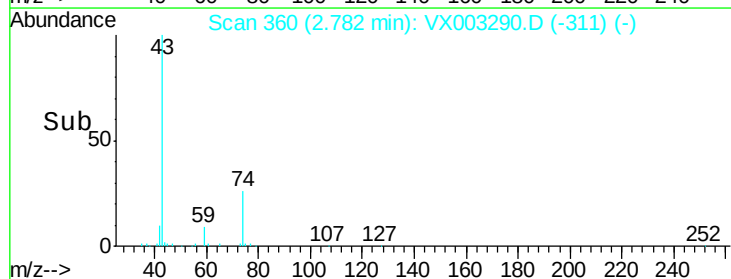
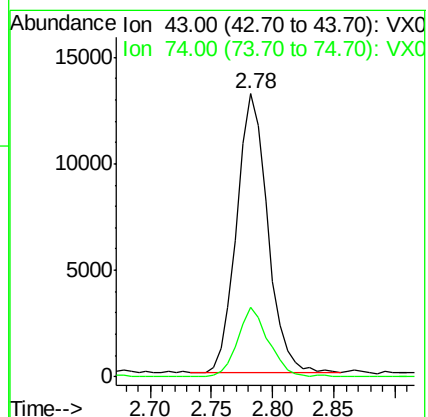
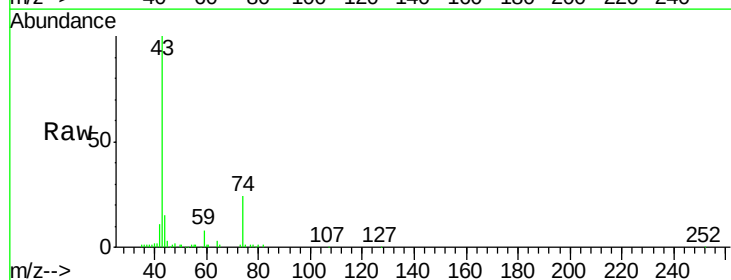
Acq: 10 Jul 2018 17:55

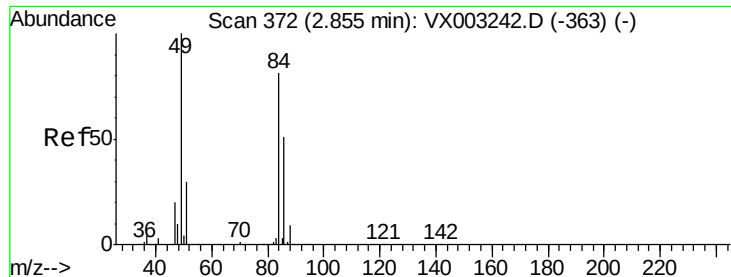
Tgt Ion: 43 Resp: 23013

Ion Ratio Lower Upper

43 100

74 25.1 16.7 25.1

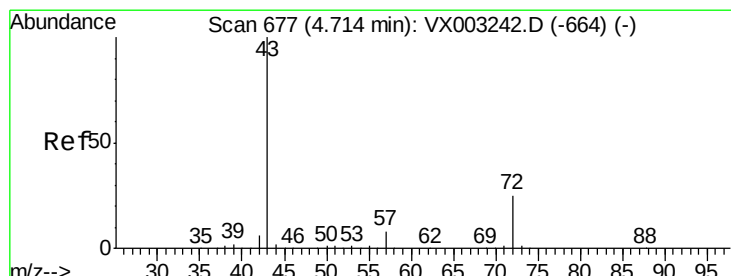
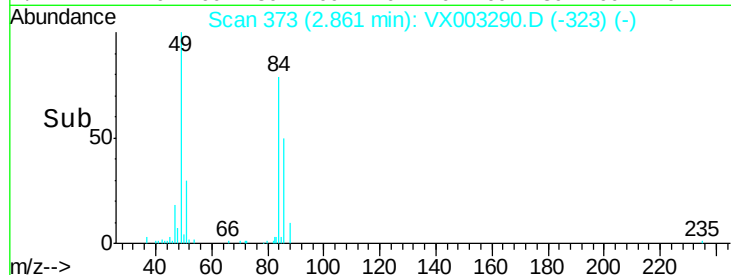
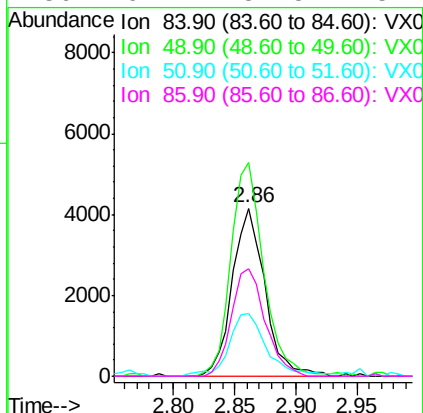
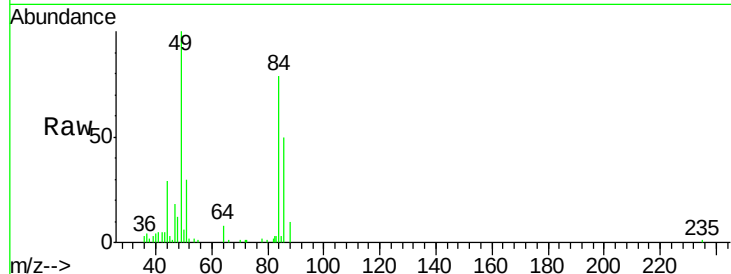




#20  
Methylene Chloride  
Concen: 1.97 ug/l  
RT: 2.86 min Scan# 373  
Delta R.T. 0.01 min  
Lab File: VX003290.D  
Acq: 10 Jul 2018 17:55

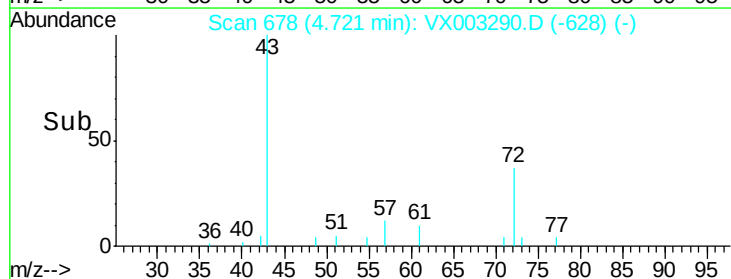
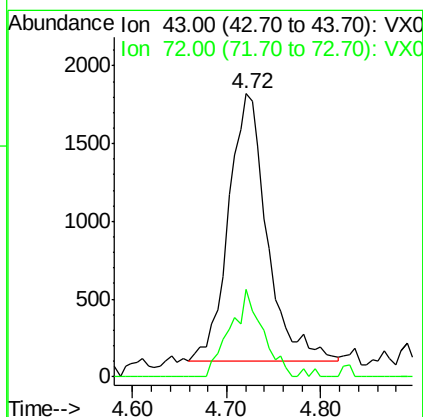
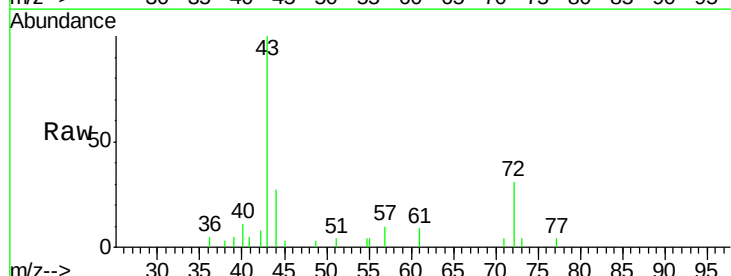
Instrument :  
MSVOA\_X  
ClientSampleId :  
PB110944ZHE#04

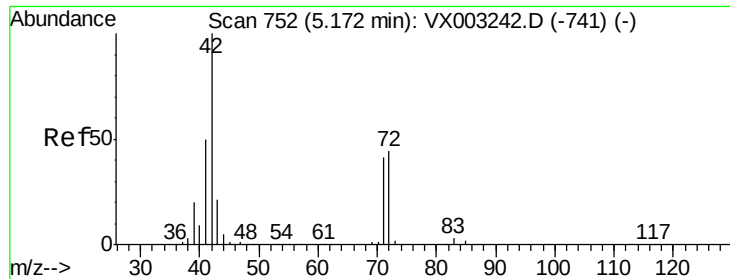
|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 84    | Resp: | 7700  |
| Ion      | Ratio | Lower | Upper |
| 84       | 100   |       |       |
| 49       | 127.1 | 107.8 | 161.6 |
| 51       | 36.3  | 32.8  | 49.2  |
| 86       | 64.2  | 52.5  | 78.7  |



#25  
2-Butanone  
Concen: 1.95 ug/l  
RT: 4.72 min Scan# 678  
Delta R.T. 0.01 min  
Lab File: VX003290.D  
Acq: 10 Jul 2018 17:55

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 4889  |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 72       | 32.9  | 18.5  | 27.7# |





#29

Tetrahydrofuran

Concen: 1.33 ug/l

RT: 5.18 min Scan# 753

Delta R.T. 0.01 min

Lab File: VX003290.D

Acq: 10 Jul 2018 17:55

Instrument :

MSVOA\_X

ClientSampleId :

PB110944ZHE#04

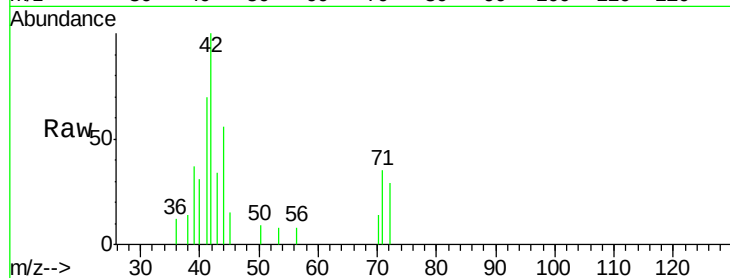
Tot Ion: 42 Resp: 2167

Ion Ratio Lower Upper

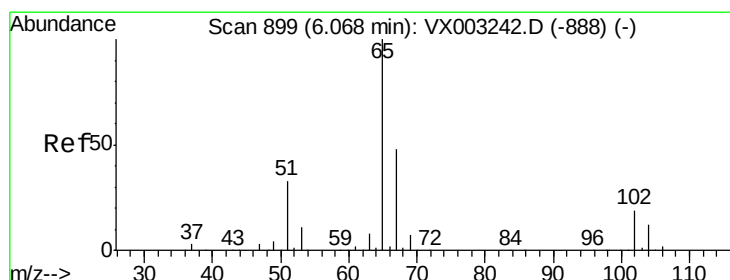
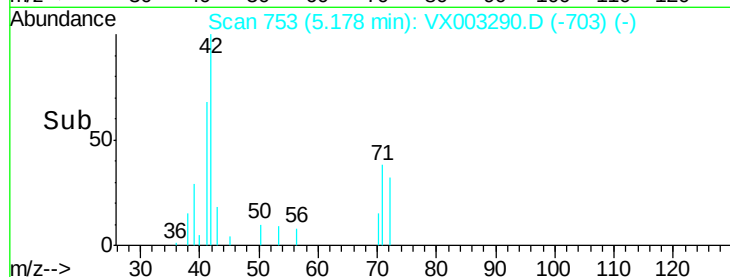
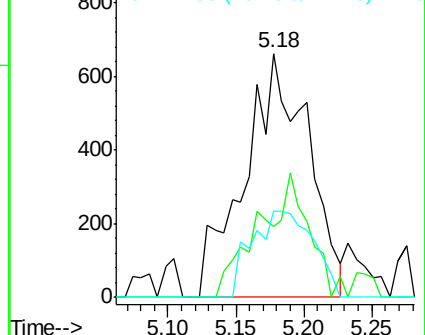
42 100

72 40.2 32.0 48.0

71 34.1 30.1 45.1



Abundance Ion 42.00 (41.70 to 42.70): VX0  
Ion 72.00 (71.70 to 72.70): VX0  
Ion 71.00 (70.70 to 71.70): VX0



#33

1,2-Dichloroethane-d4

Concen: 40.45 ug/l

RT: 6.07 min Scan# 900

Delta R.T. 0.00 min

Lab File: VX003290.D

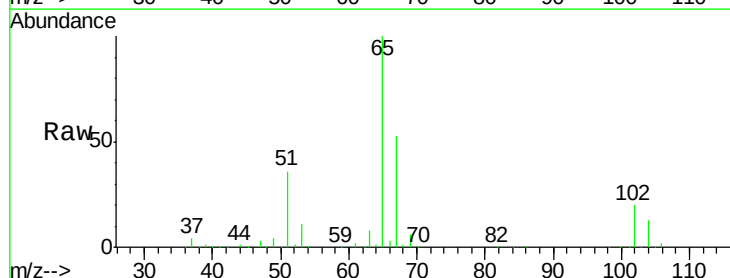
Acq: 10 Jul 2018 17:55

Tgt Ion: 65 Resp: 161807

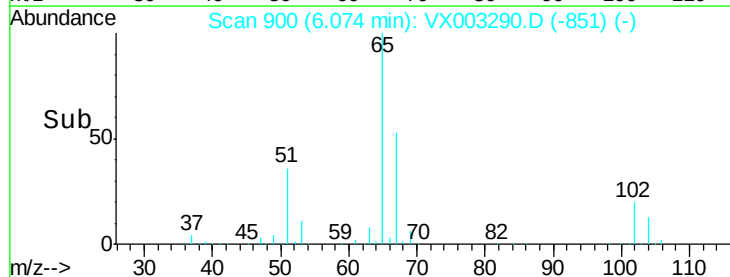
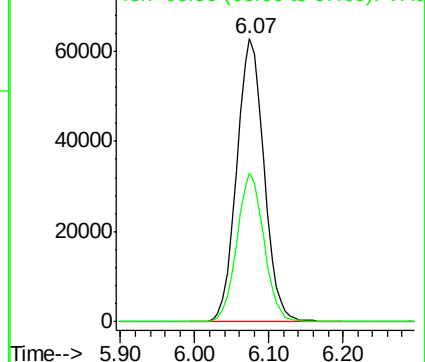
Ion Ratio Lower Upper

65 100

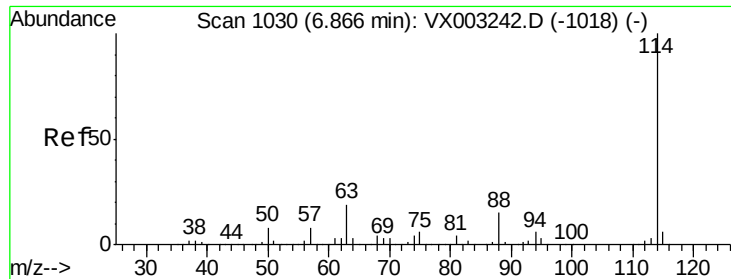
67 52.3 0.0 102.6



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: VX003290.D

Acq: 10 Jul 2018 17:55

Instrument :

MSVOA\_X

ClientSampleId :

PB110944ZHE#04

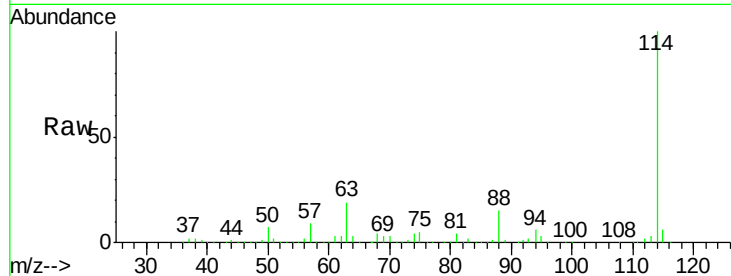
Tot Ion:114 Resp: 354936

Ion Ratio Lower Upper

114 100

63 19.2 0.0 41.4

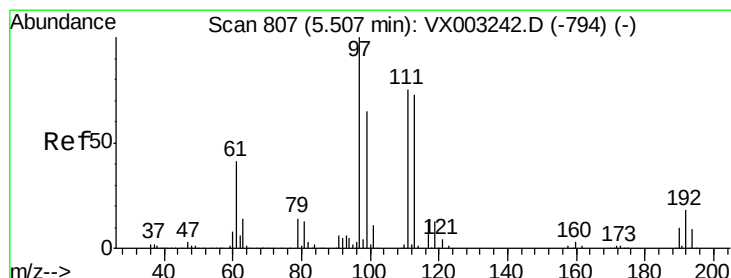
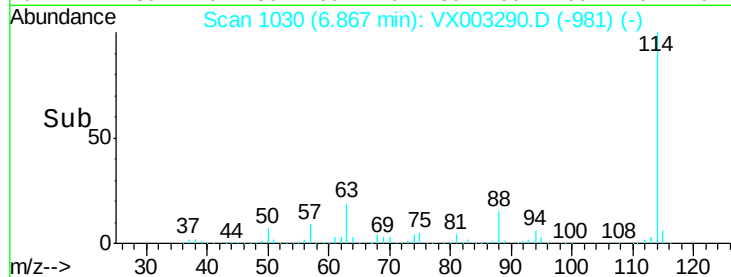
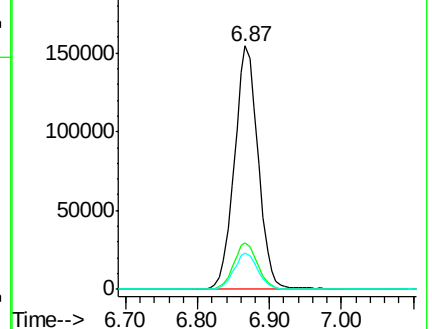
88 15.1 0.0 30.0



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: 35.99 ug/l

RT: 5.51 min Scan# 808

Delta R.T. 0.01 min

Lab File: VX003290.D

Acq: 10 Jul 2018 17:55

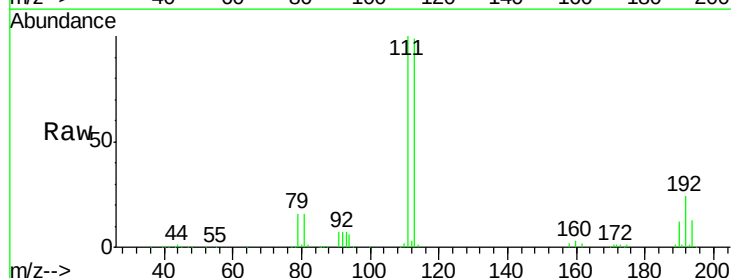
Tgt Ion:113 Resp: 137242

Ion Ratio Lower Upper

113 100

111 103.0 81.4 122.0

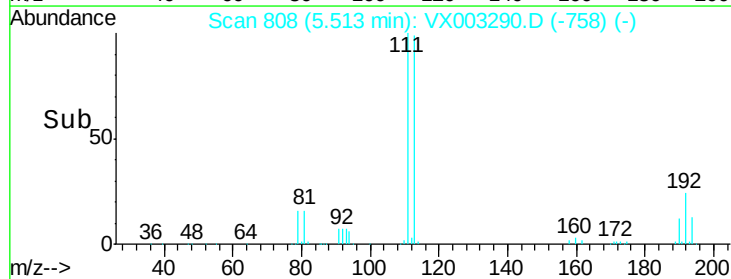
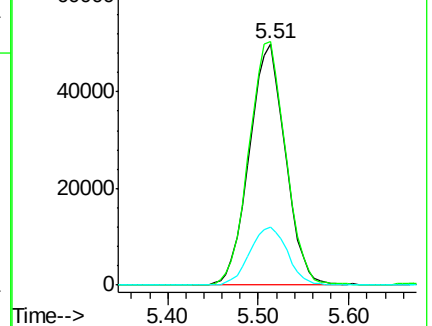
192 25.1 19.1 28.7

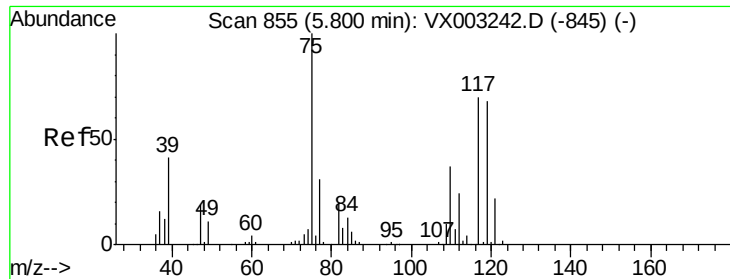


Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V

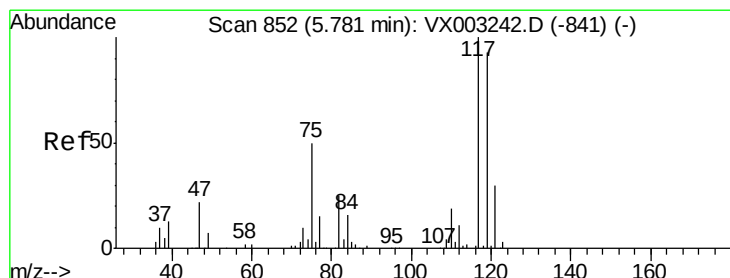
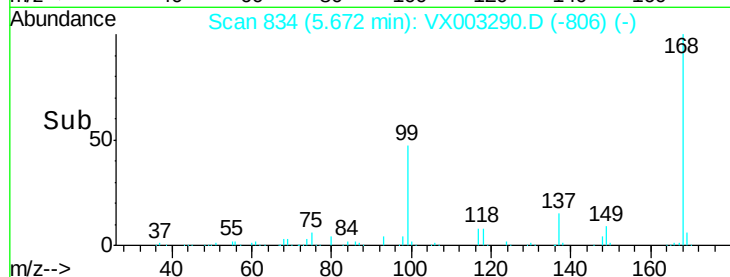
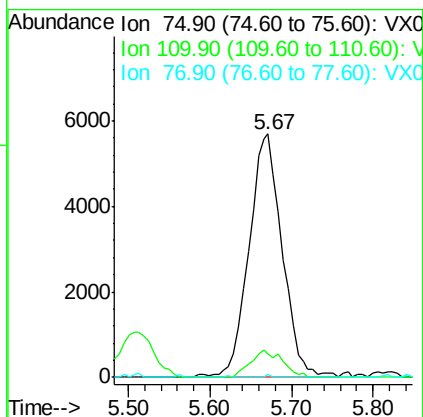
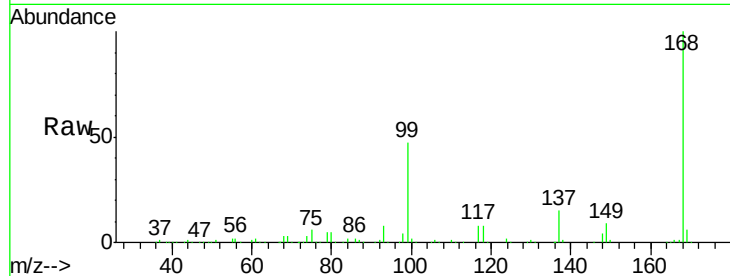




#36  
 1,1-Dichloropropene  
 Concen: 3.22 ug/l  
 RT: 5.67 min Scan# 834  
 Delta R.T. -0.13 min  
 Lab File: VX003290.D  
 Acq: 10 Jul 2018 17:55

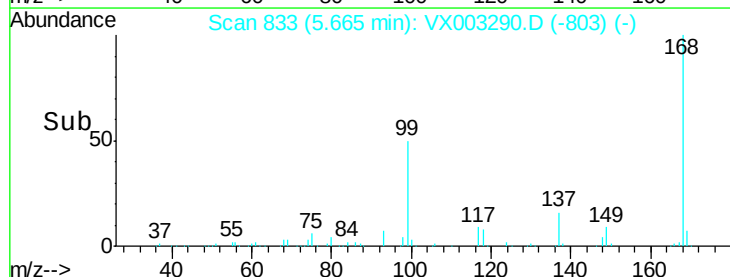
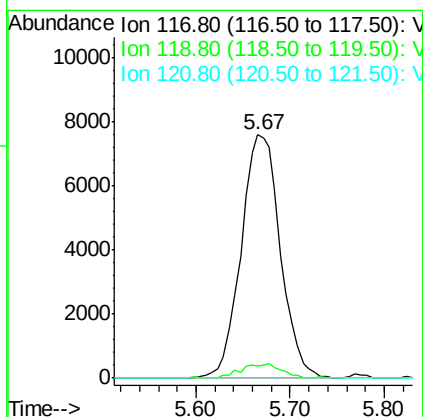
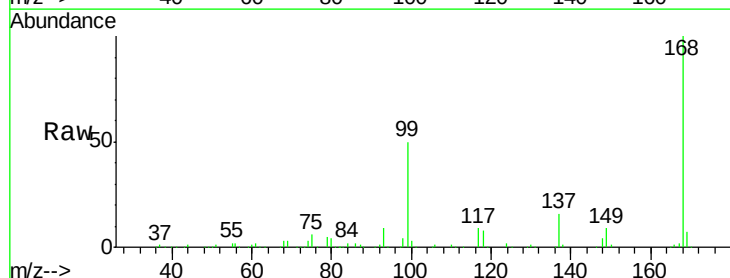
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 PB110944ZHE#04

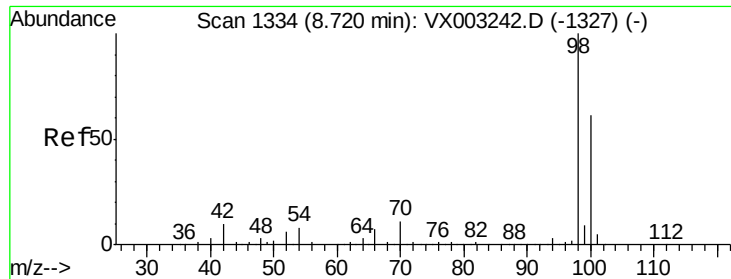
Tot Ion: 75 Resp: 16156  
 Ion Ratio Lower Upper  
 75 100  
 110 10.6 18.1 54.4#  
 77 0.1 24.3 36.5#



#38  
 Carbon Tetrachloride  
 Concen: 4.01 ug/l  
 RT: 5.67 min Scan# 833  
 Delta R.T. -0.12 min  
 Lab File: VX003290.D  
 Acq: 10 Jul 2018 17:55

Tgt Ion: 117 Resp: 22049  
 Ion Ratio Lower Upper  
 117 100  
 119 5.0 77.4 116.0#  
 121 0.0 24.4 36.6#

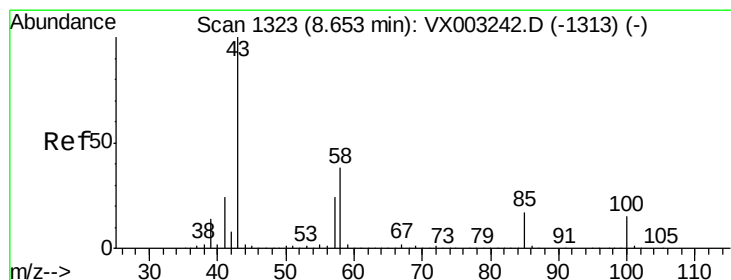
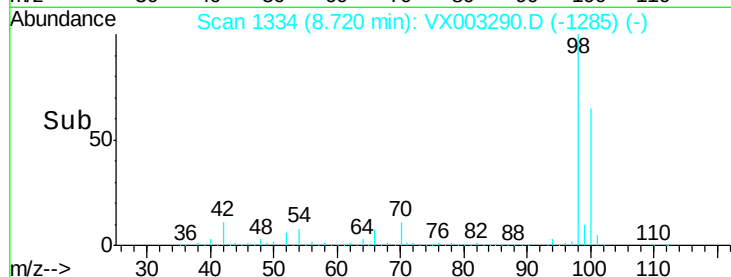
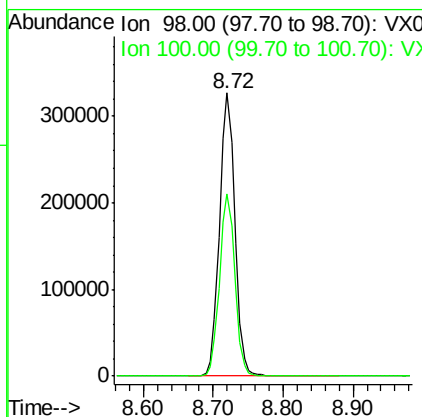
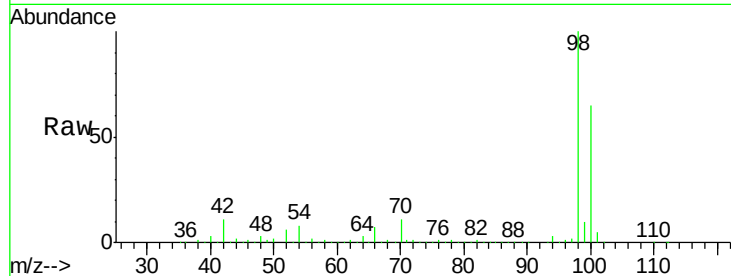




#50  
Toluene-d8  
Concen: 36.97 ug/l  
RT: 8.72 min Scan# 1334  
Delta R.T. 0.00 min  
Lab File: VX003290.D  
Acq: 10 Jul 2018 17:55

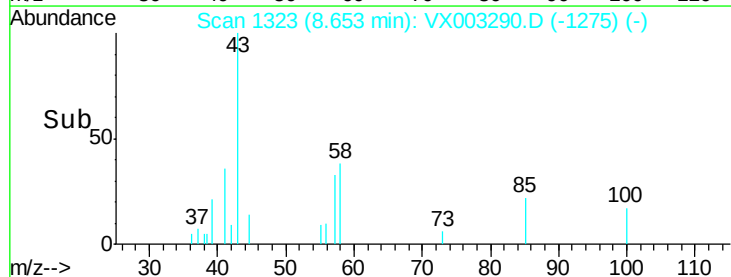
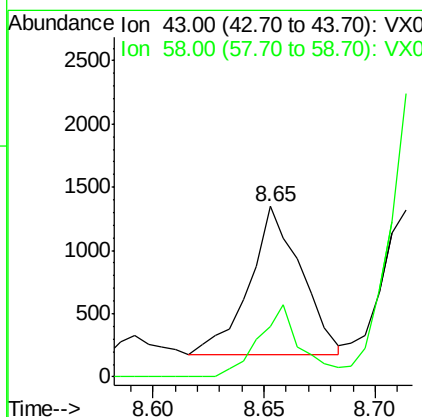
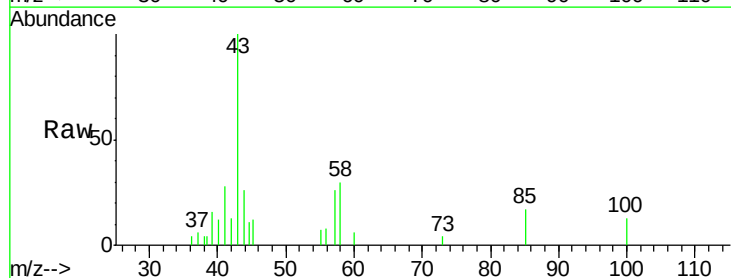
Instrument :  
MSVOA\_X  
ClientSampleId :  
PB110944ZHE#04

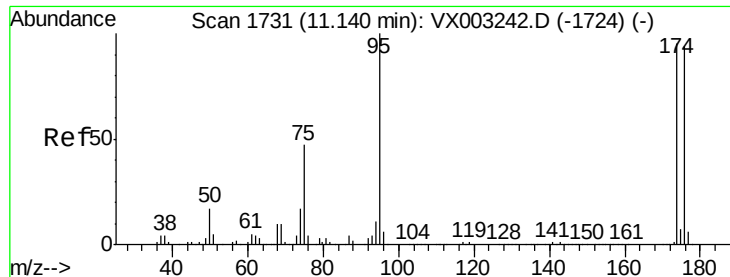
Tot Ion: 98 Resp: 500765  
Ion Ratio Lower Upper  
98 100  
100 64.4 50.9 76.3



#51  
4-Methyl-2-Pentanone  
Concen: 0.36 ug/l  
RT: 8.65 min Scan# 1323  
Delta R.T. -0.01 min  
Lab File: VX003290.D  
Acq: 10 Jul 2018 17:55

Tgt Ion: 43 Resp: 1912  
Ion Ratio Lower Upper  
43 100  
58 39.3 28.6 42.8

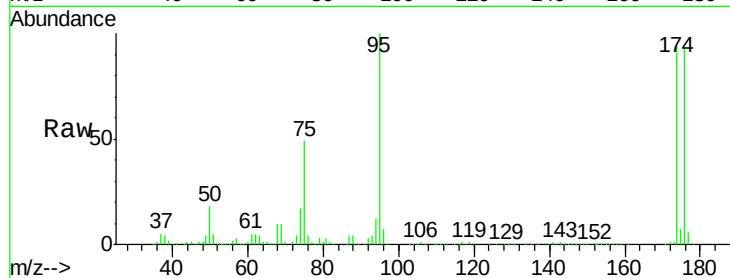




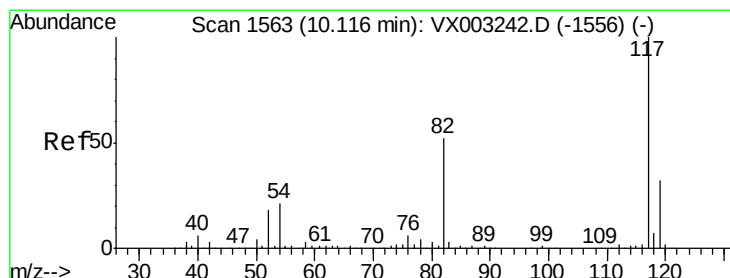
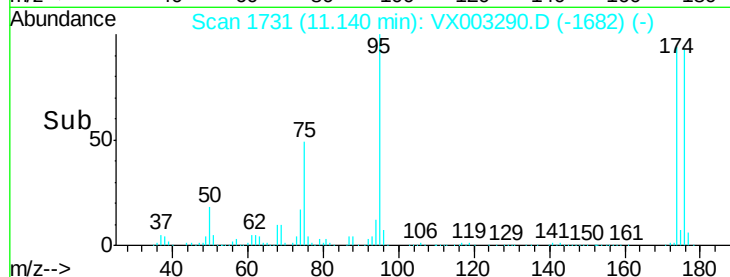
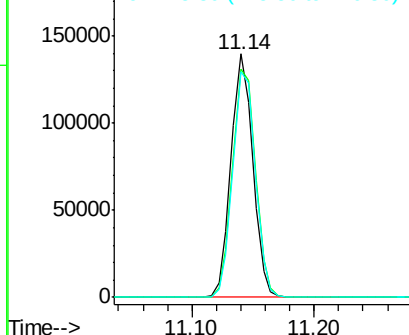
#62  
4-Bromofluorobenzene  
Concen: 34.34 ug/l  
RT: 11.14 min Scan# 1731  
Delta R.T. 0.00 min  
Lab File: VX003290.D  
Acq: 10 Jul 2018 17:55

Instrument :  
MSVOA\_X  
ClientSampleId :  
PB110944ZHE#04

Tot Ion: 95 Resp: 171883  
Ion Ratio Lower Upper  
95 100  
174 99.4 0.0 187.4  
176 96.4 0.0 181.0

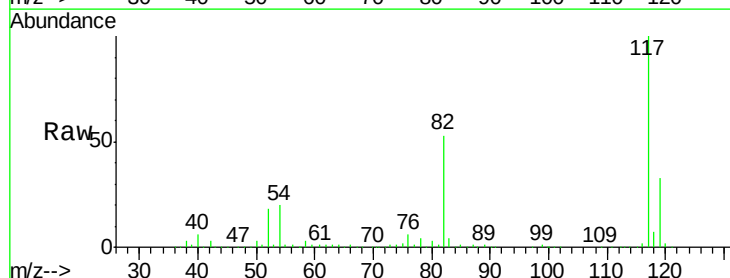


Abundance Ion 94.90 (94.60 to 95.60): VX0  
Ion 173.80 (173.50 to 174.50): V  
Ion 175.80 (175.50 to 176.50): V

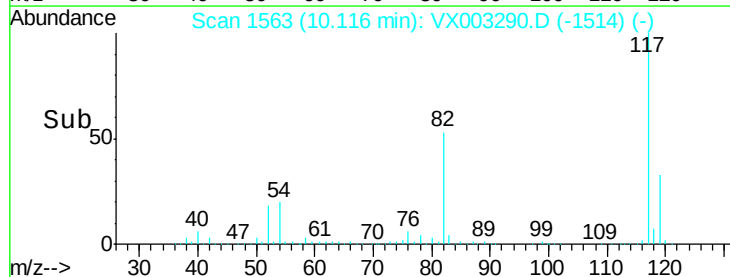
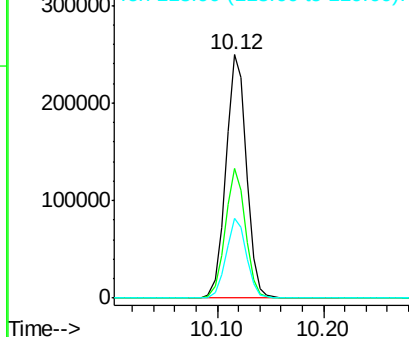


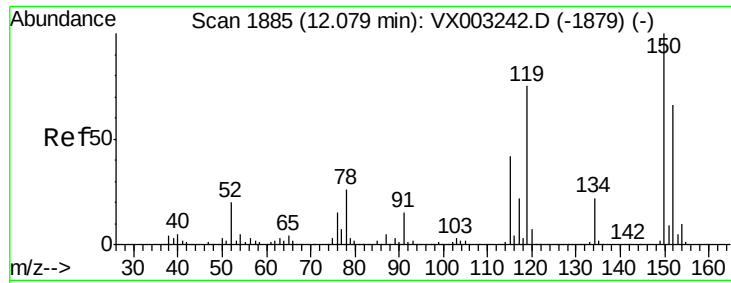
#63  
Chlorobenzene-d5  
Concen: 50.00 ug/l  
RT: 10.12 min Scan# 1563  
Delta R.T. 0.00 min  
Lab File: VX003290.D  
Acq: 10 Jul 2018 17:55

Tgt Ion: 117 Resp: 336753  
Ion Ratio Lower Upper  
117 100  
82 53.0 45.0 67.4  
119 32.6 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: 12.09 min Scan# 1886

Delta R.T. 0.01 min

Lab File: VX003290.D

Acq: 10 Jul 2018 17:55

Instrument :

MSVOA\_X

ClientSampleId :

PB110944ZHE#04

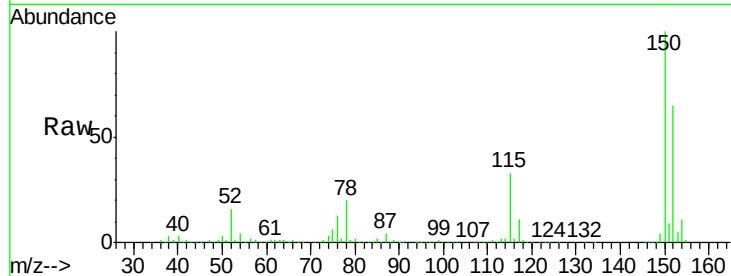
Tot Ion:152 Resp: 190787

Ion Ratio Lower Upper

152 100

115 53.1 40.1 120.2

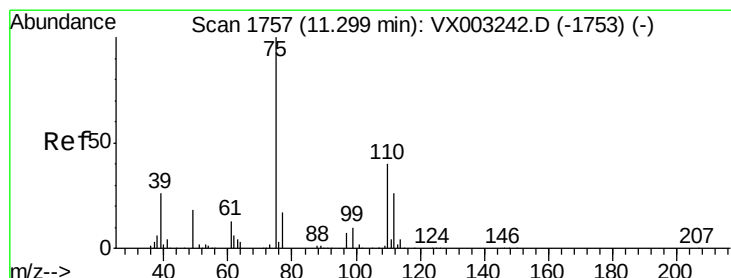
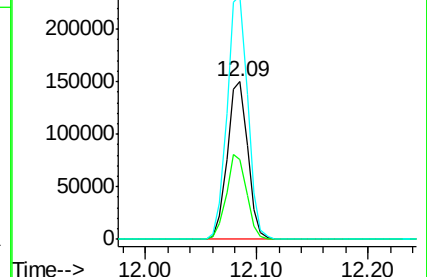
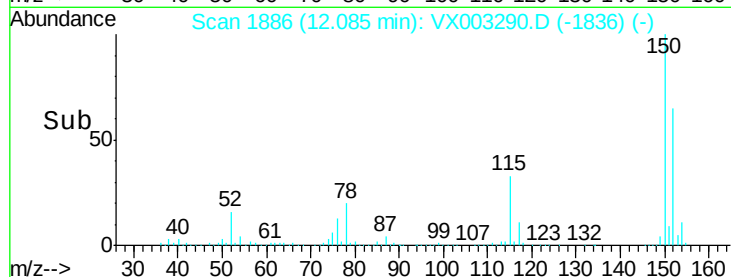
150 156.4 0.0 347.2



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: 20.44 ug/l

RT: 11.14 min Scan# 1731

Delta R.T. -0.16 min

Lab File: VX003290.D

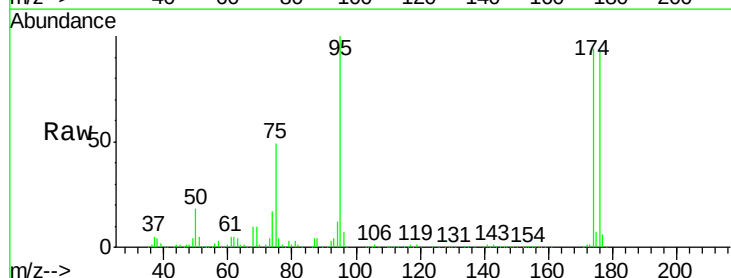
Acq: 10 Jul 2018 17:55

Tgt Ion: 75 Resp: 84295

Ion Ratio Lower Upper

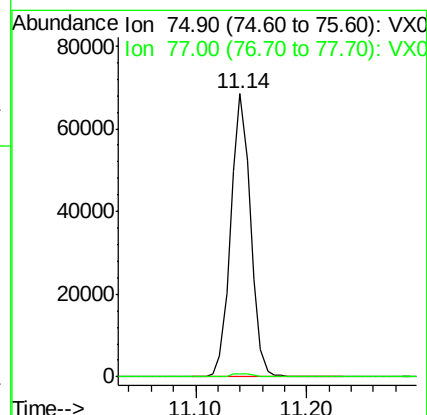
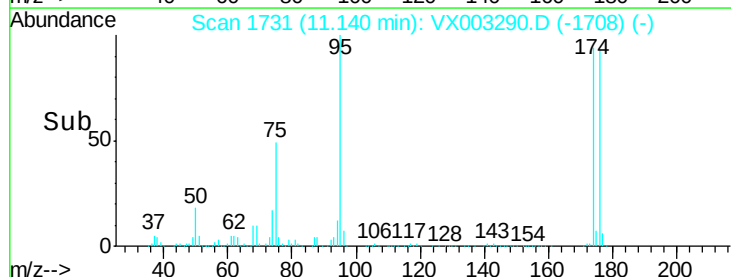
75 100

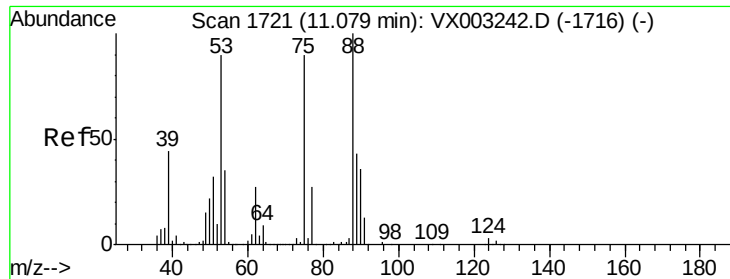
77 1.4 22.8 68.3#



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: 66.82 ug/l

RT: 11.14 min Scan# 1731

Delta R.T. 0.06 min

Lab File: VX003290.D

Acq: 10 Jul 2018 17:55

Instrument :

MSVOA\_X

ClientSampleId :

PB110944ZHE#04

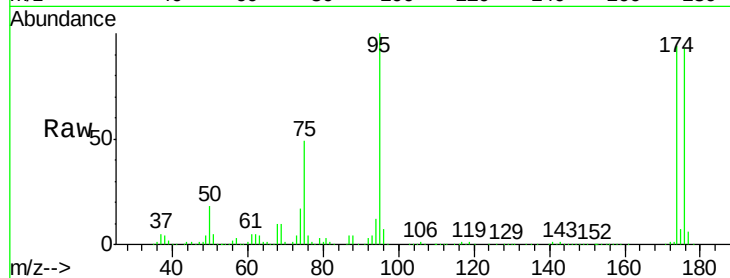
Tot Ion: 75 Resp: 84295

Ion Ratio Lower Upper

75 100

53 0.3 86.8 130.2#

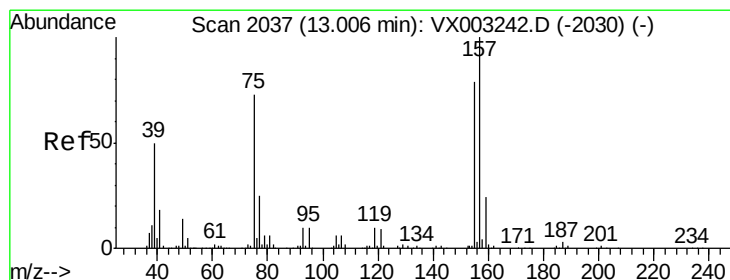
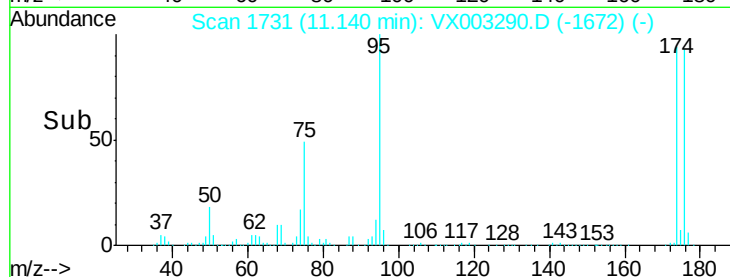
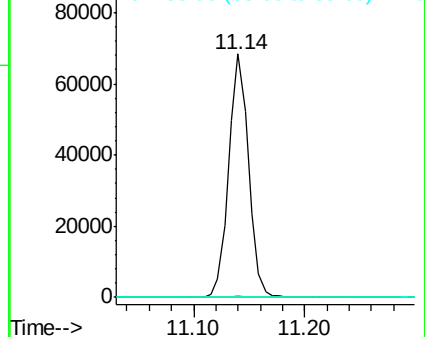
89 0.1 38.2 57.2#



Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 53.00 (52.70 to 53.70): VX0

Ion 88.90 (88.60 to 89.60): VX0



#92

1,2-Dibromo-3-Chloropropane

Concen: 0.23 ug/l

RT: 12.99 min Scan# 2034

Delta R.T. -0.02 min

Lab File: VX003290.D

Acq: 10 Jul 2018 17:55

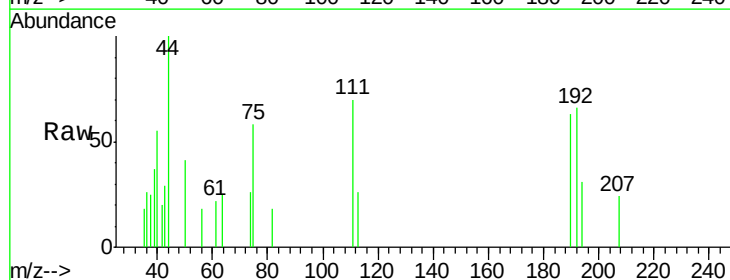
Tgt Ion: 75 Resp: 226

Ion Ratio Lower Upper

75 100

155 0.0 45.8 137.4#

157 0.0 60.1 180.3#



Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 154.80 (154.50 to 155.50): V

Ion 156.80 (156.50 to 157.50): V

