

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX062718\  
 Data File : VX002968.D  
 Acq On : 28 Jun 2018 06:11  
 Operator : JC/MD  
 Sample : J3718-09  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 44 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 W-30

Quant Time: Jun 28 06:52:56 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X062518W.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Jun 25 14:38:05 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.67  | 168  | 272064   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.87  | 114  | 382627   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.12 | 117  | 356075   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 204641   | 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   | 183928   | 48.91 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 97.82% |          |
| 35) Dibromofluoromethane    | 5.51  | 113  | 149380   | 49.30 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 98.60% |          |
| 50) Toluene-d8              | 8.72  | 98   | 534912   | 48.34 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 96.68% |          |
| 62) 4-Bromofluorobenzene    | 11.14 | 95   | 195170   | 45.74 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 91.48% |          |

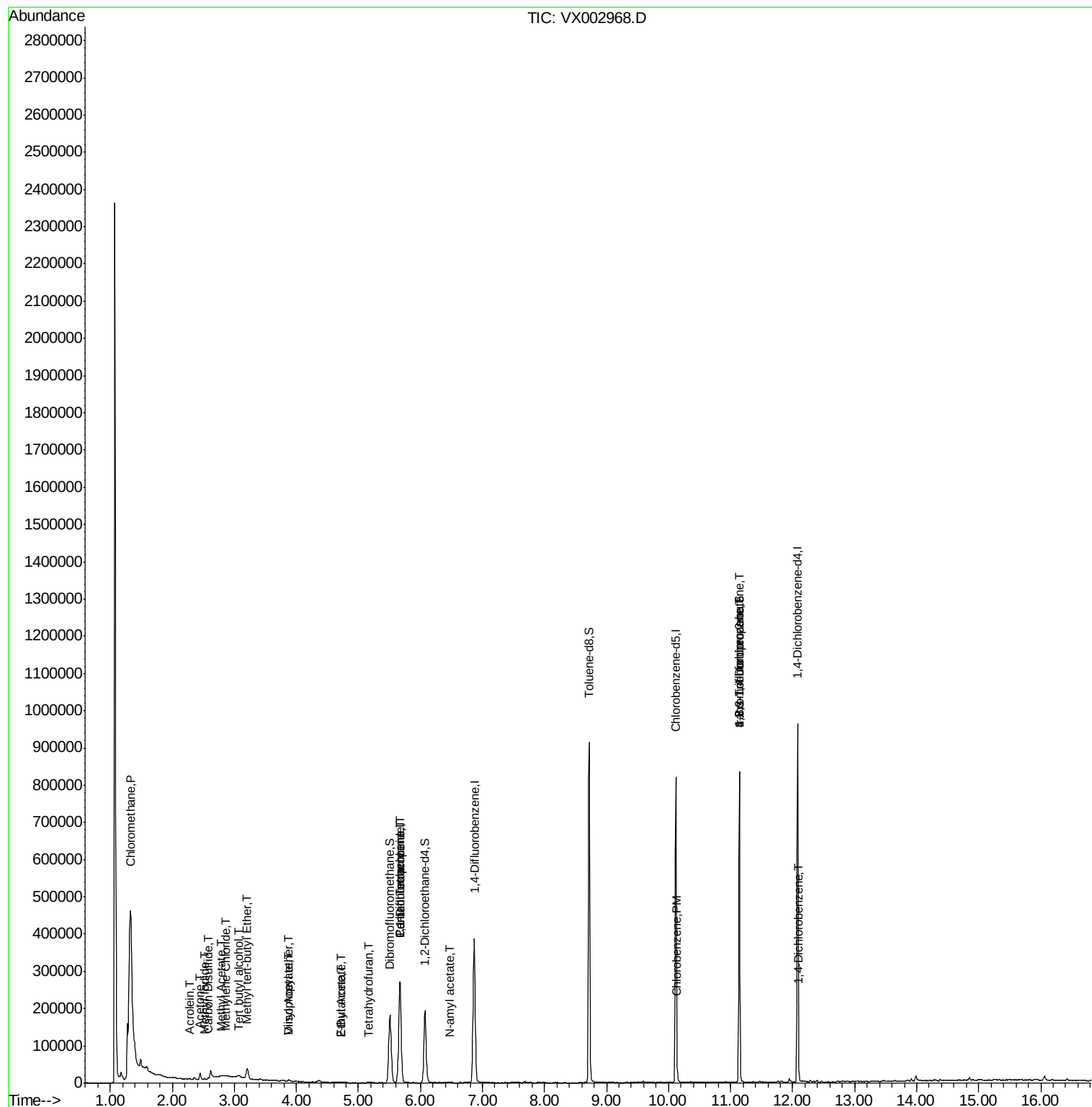
| Target Compounds               | R.T.  | QIon | Response | Conc  | Units | Qvalue |
|--------------------------------|-------|------|----------|-------|-------|--------|
| 3) Chloromethane               | 1.32  | 50   | 26940    | 9.72  | ug/l  | # 48   |
| 5) Bromomethane                | 1.66  | 94   | 1481     | Below | Cal   | 83     |
| 10) Methyl Iodide              | 2.52  | 142  | 2608     | 6.97  | ug/l  | # 95   |
| 11) Tert butyl alcohol         | 3.07  | 59   | 4692     | 6.26  | ug/l  | 96     |
| 13) Acrolein                   | 2.29  | 56   | 254      | 4.83  | ug/l  | # 14   |
| 16) Acetone                    | 2.45  | 43   | 19146    | 12.29 | ug/l  | 99     |
| 17) Carbon Disulfide           | 2.57  | 76   | 7064     | 0.99  | ug/l  | # 94   |
| 18) Methyl Acetate             | 2.78  | 43   | 995      | 0.23  | ug/l  | # 68   |
| 19) Methyl tert-butyl Ether    | 3.21  | 73   | 31229    | 3.24  | ug/l  | 96     |
| 20) Methylene Chloride         | 2.86  | 84   | 773      | 0.26  | ug/l  | # 74   |
| 22) Diisopropyl ether          | 3.87  | 45   | 6036     | 0.60  | ug/l  | 93     |
| 23) Vinyl Acetate              | 3.87  | 43   | 3437     | 0.40  | ug/l  | # 75   |
| 25) 2-Butanone                 | 4.71  | 43   | 3707     | 1.60  | ug/l  | 91     |
| 29) Tetrahydrofuran            | 5.17  | 42   | 3378     | 2.28  | ug/l  | # 40   |
| 36) 1,1-Dichloropropene        | 5.67  | 75   | 18278    | 4.36  | ug/l  | # 51   |
| 37) Ethyl Acetate              | 4.71  | 43   | 3707     | 0.82  | ug/l  | # 70   |
| 38) Carbon Tetrachloride       | 5.67  | 117  | 24981    | 5.43  | ug/l  | # 15   |
| 65) Chlorobenzene              | 10.14 | 112  | 7410     | 0.82  | ug/l  | 94     |
| 74) N-amyl acetate             | 6.48  | 43   | 1384     | 0.21  | ug/l  | # 63   |
| 76) 1,2,3-Trichloropropane     | 11.14 | 75   | 99665    | 26.89 | ug/l  | # 33   |
| 81) trans-1,4-Dichloro-2-buten | 11.14 | 75   | 99665    | 76.13 | ug/l  | # 7    |
| 88) 1,4-Dichlorobenzene        | 12.10 | 146  | 2355     | 0.32  | ug/l  | # 2    |

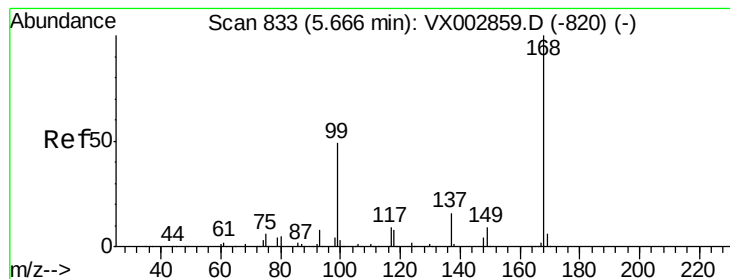
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA X\DATA\VX062718\  
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Instrument :  
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ClientSampleId :  
W-30

Quant Time: Jun 28 06:52:56 2018  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X062518W.M  
Quant Title : SW846 8260  
QLast Update : Mon Jun 25 14:38:05 2018  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.00 ug/l

RT: 5.67 min Scan# 833

Delta R.T. -0.00 min

Lab File: VX002968.D

Acq: 28 Jun 2018 06:11

Instrument :

MSVOA\_X

ClientSampleId :

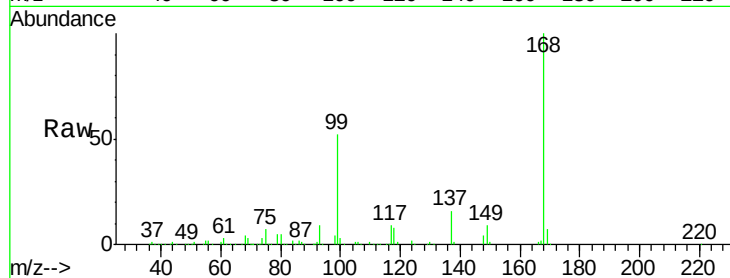
W-30

Tot Ion:168 Resp: 272064

Ion Ratio Lower Upper

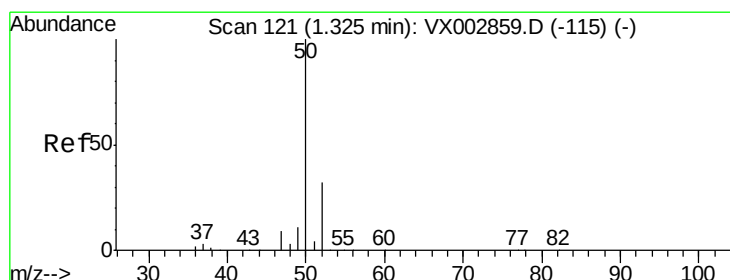
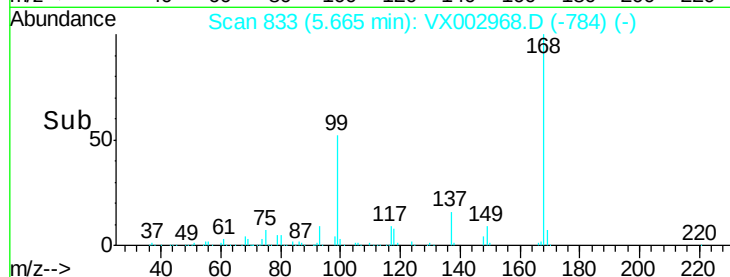
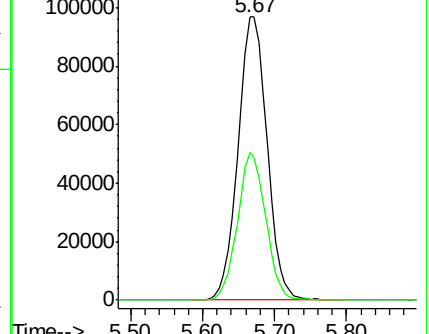
168 100

99 52.4 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: 9.72 ug/l

RT: 1.32 min Scan# 121

Delta R.T. 0.00 min

Lab File: VX002968.D

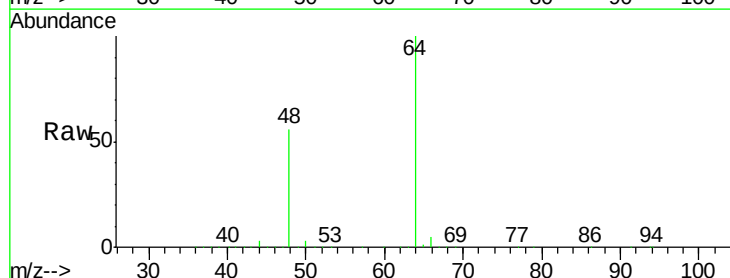
Acq: 28 Jun 2018 06:11

Tgt Ion: 50 Resp: 26940

Ion Ratio Lower Upper

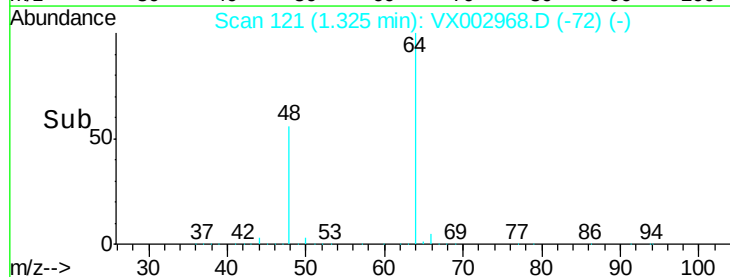
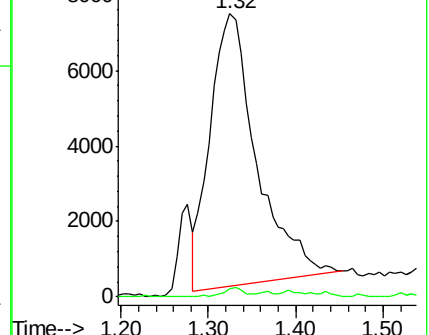
50 100

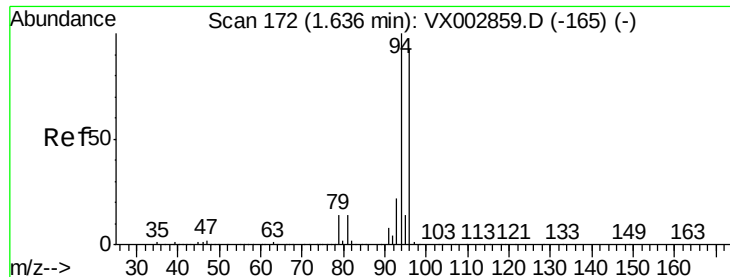
52 3.0 25.7 38.5#



Abundance Ion 49.90 (49.60 to 50.60): VX0

Ion 51.90 (51.60 to 52.60): VX0





#5

Bromomethane

Concen: Below Cal

RT: 1.66 min Scan# 176

Delta R.T. 0.03 min

Lab File: VX002968.D

Acq: 28 Jun 2018 06:11

Instrument :

MSVOA\_X

ClientSampleId :

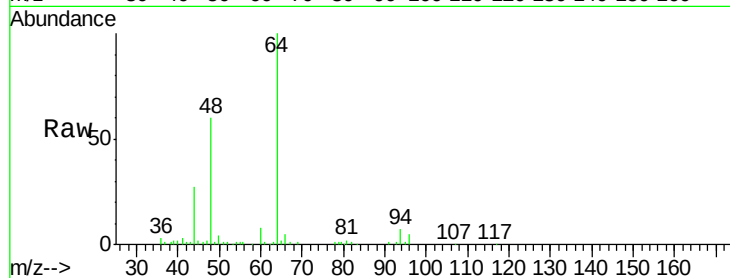
W-30

Tot Ion: 94 Resp: 1481

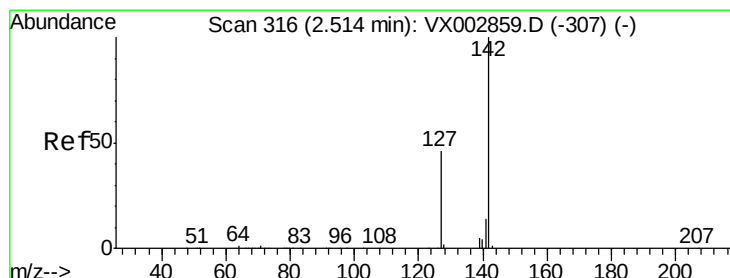
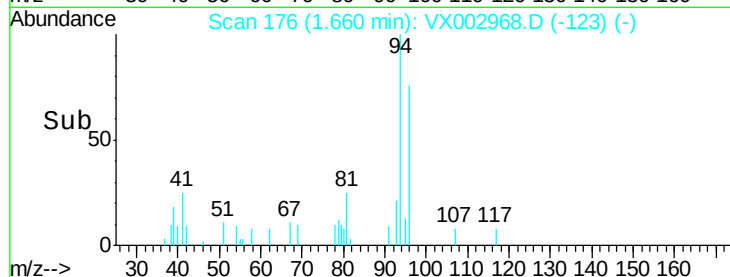
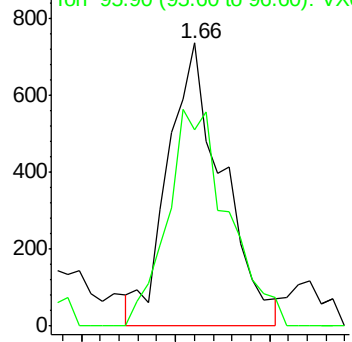
Ion Ratio Lower Upper

94 100

96 76.8 74.9 112.3



Abundance Ion 93.90 (93.60 to 94.60): VX002859.D (-165) (-)



#10

Methyl Iodide

Concen: 6.97 ug/l

RT: 2.52 min Scan# 317

Delta R.T. 0.01 min

Lab File: VX002968.D

Acq: 28 Jun 2018 06:11

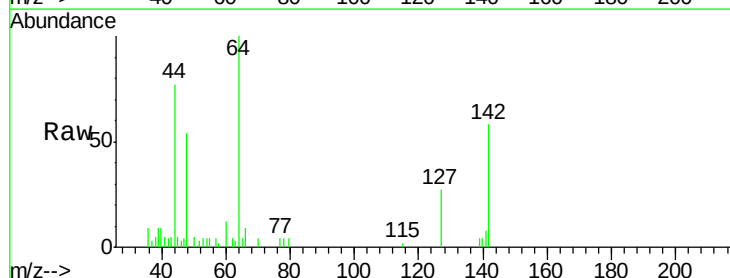
Tgt Ion:142 Resp: 2608

Ion Ratio Lower Upper

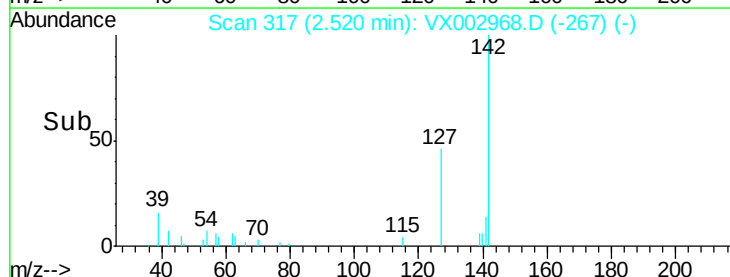
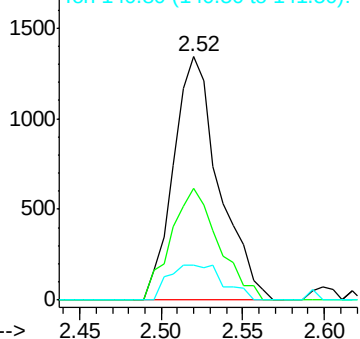
142 100

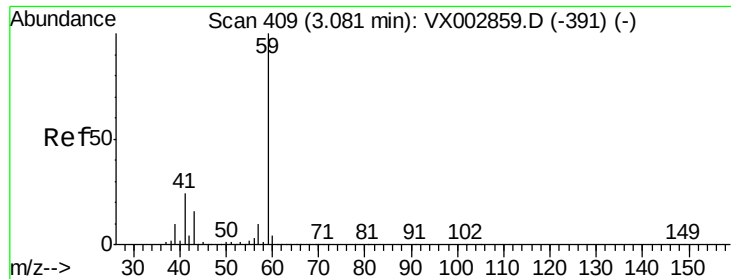
127 48.1 36.6 55.0

141 17.4 11.3 16.9#



Abundance Ion 141.80 (141.50 to 142.50): VX002859.D (-307) (-)

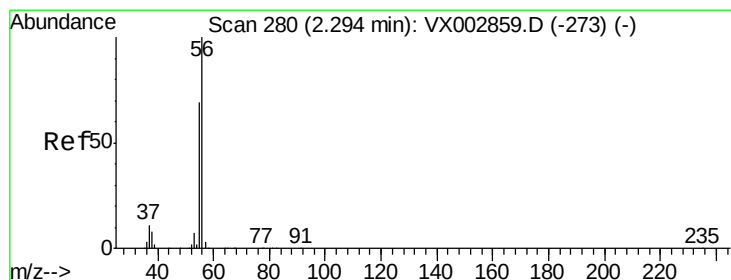
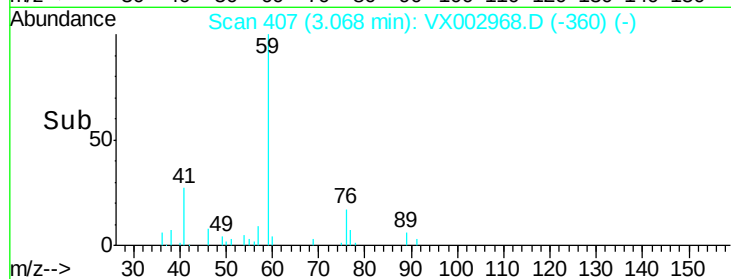
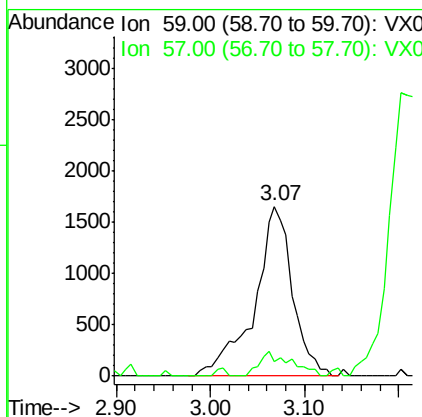
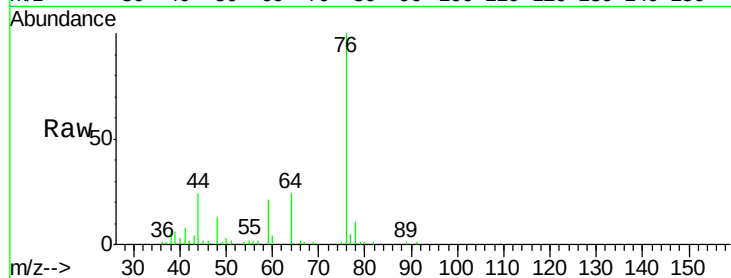




#11  
Tert butyl alcohol  
Concen: 6.26 ug/l  
RT: 3.07 min Scan# 407  
Delta R.T. -0.01 min  
Lab File: VX002968.D  
Acq: 28 Jun 2018 06:11

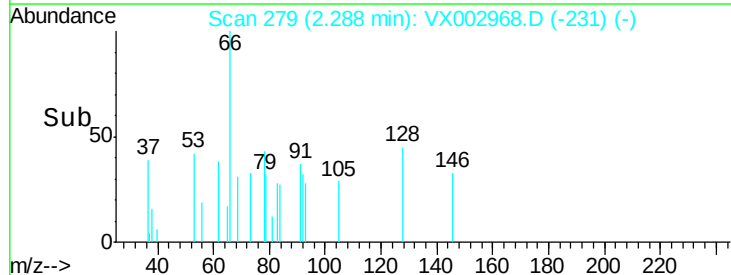
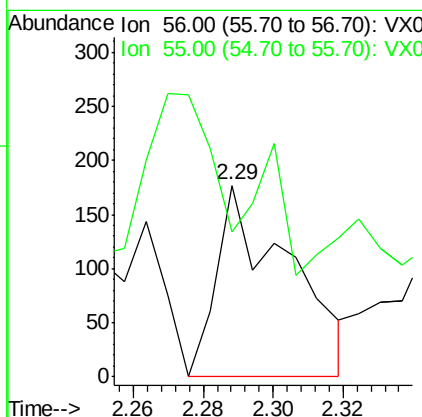
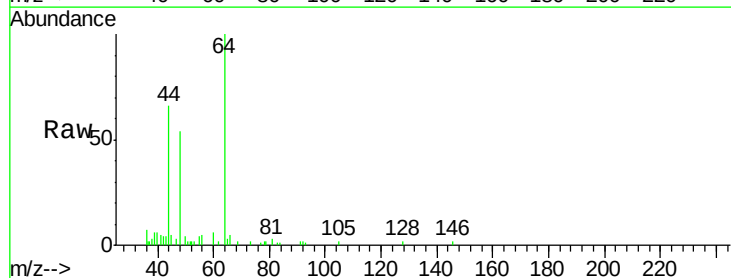
Instrument :  
MSVOA\_X  
ClientSampled :  
W-30

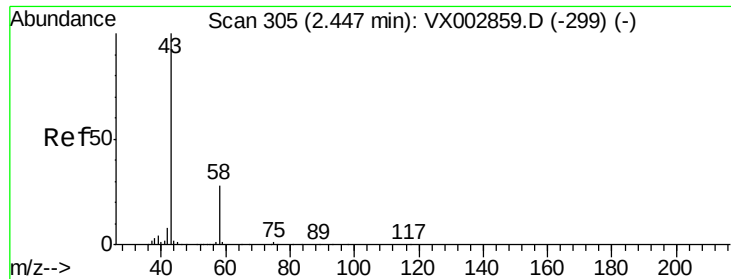
Tot Ion: 59 Resp: 4692  
Ion Ratio Lower Upper  
59 100  
57 11.8 8.2 12.2



#13  
Acrolein  
Concen: 4.83 ug/l  
RT: 2.29 min Scan# 279  
Delta R.T. -0.01 min  
Lab File: VX002968.D  
Acq: 28 Jun 2018 06:11

Tgt Ion: 56 Resp: 254  
Ion Ratio Lower Upper  
56 100  
55 0.0 57.0 85.4#





#16

Acetone

Concen: 12.29 ug/l

RT: 2.45 min Scan# 305

Delta R.T. -0.00 min

Lab File: VX002968.D

Acq: 28 Jun 2018 06:11

Instrument :

MSVOA\_X

ClientSampled :

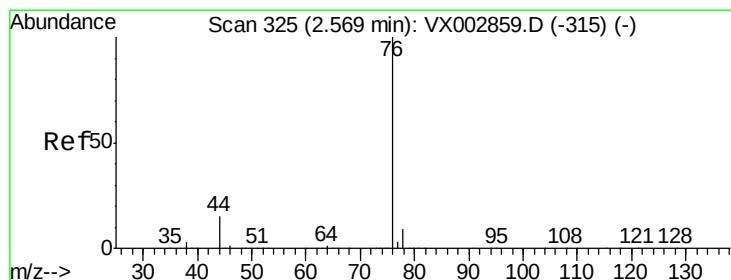
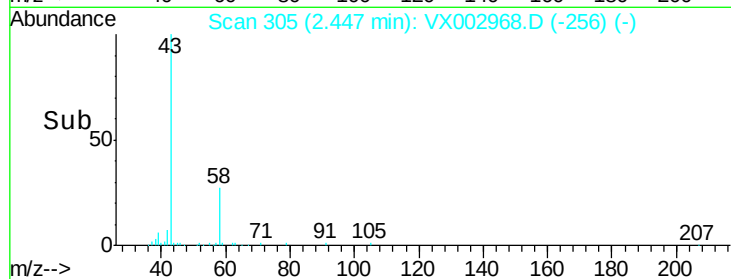
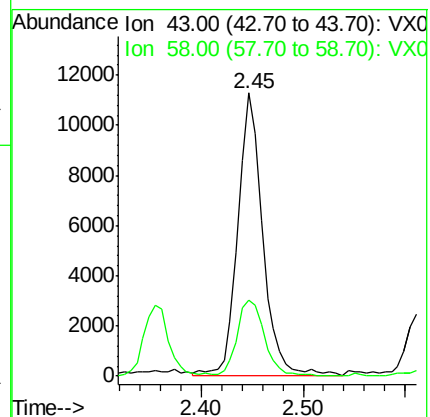
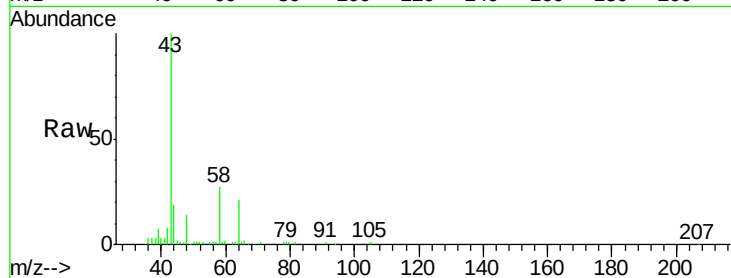
W-30

Tot Ion: 43 Resp: 19146

Ion Ratio Lower Upper

43 100

58 27.1 22.1 33.1



#17

Carbon Disulfide

Concen: 0.99 ug/l

RT: 2.57 min Scan# 326

Delta R.T. 0.01 min

Lab File: VX002968.D

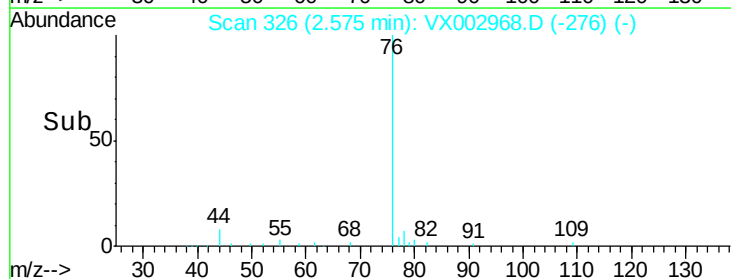
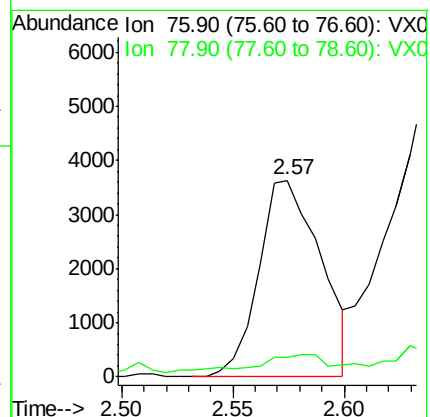
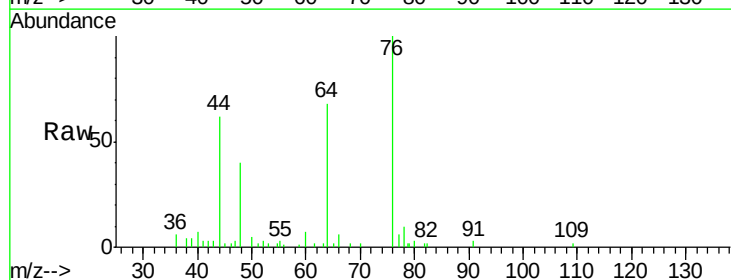
Acq: 28 Jun 2018 06:11

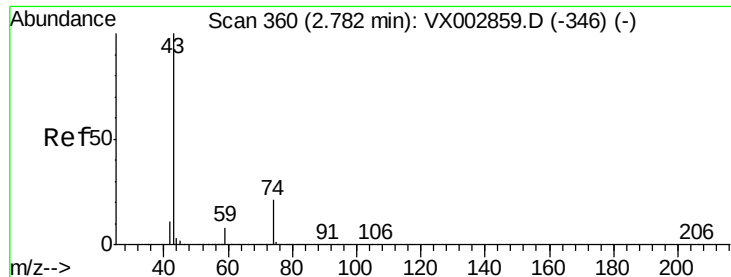
Tgt Ion: 76 Resp: 7064

Ion Ratio Lower Upper

76 100

78 6.5 6.9 10.3#

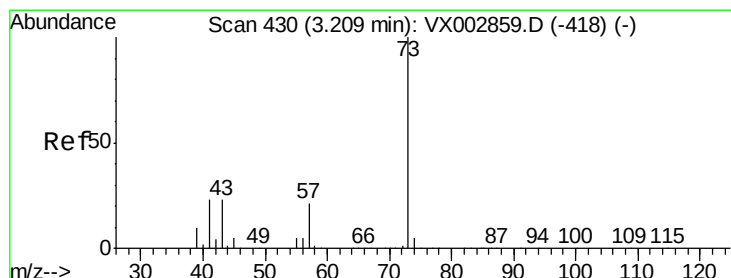
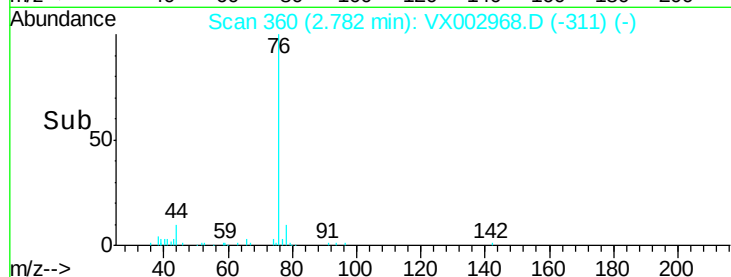
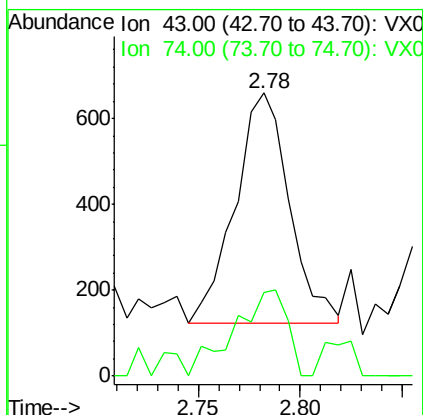
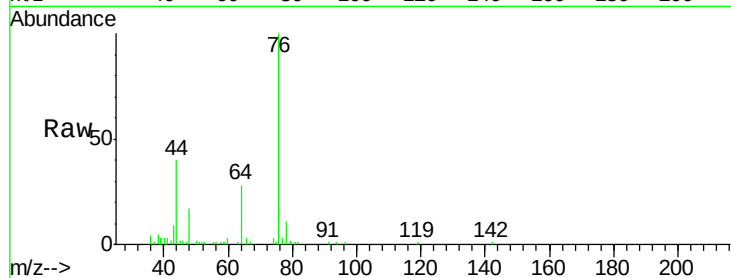




#18  
Methyl Acetate  
Concen: 0.23 ug/l  
RT: 2.78 min Scan# 360  
Delta R.T. -0.00 min  
Lab File: VX002968.D  
Acq: 28 Jun 2018 06:11

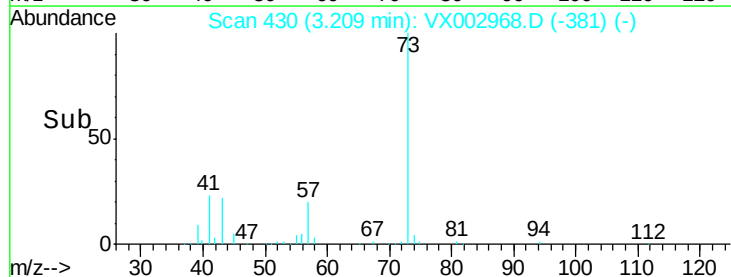
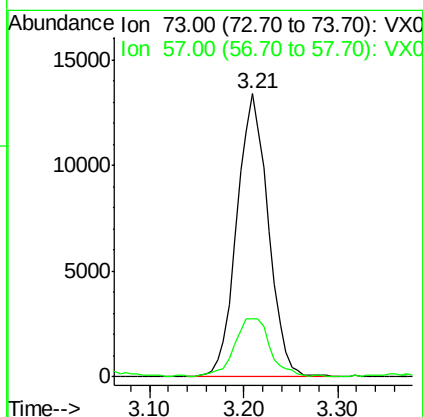
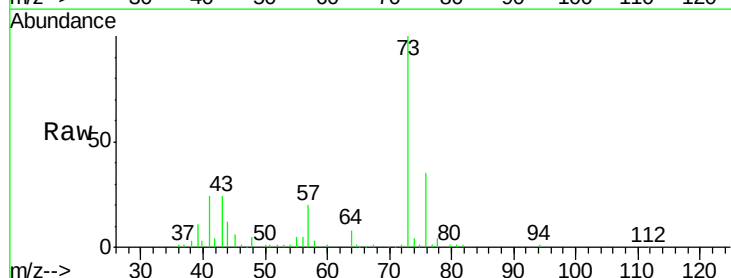
Instrument :  
MSVOA\_X  
ClientSampled :  
W-30

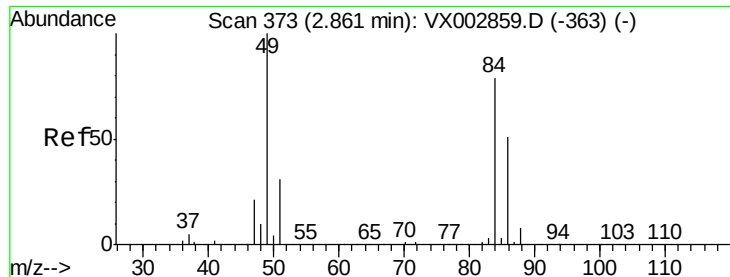
Tot Ion: 43 Resp: 995  
Ion Ratio Lower Upper  
43 100  
74 36.1 16.7 25.1#



#19  
Methyl tert-butyl Ether  
Concen: 3.24 ug/l  
RT: 3.21 min Scan# 430  
Delta R.T. -0.00 min  
Lab File: VX002968.D  
Acq: 28 Jun 2018 06:11

Tgt Ion: 73 Resp: 31229  
Ion Ratio Lower Upper  
73 100  
57 20.4 17.7 26.5



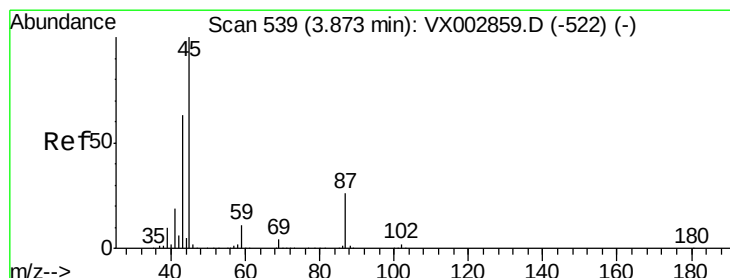
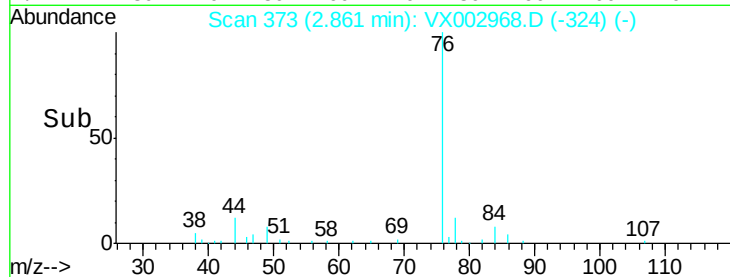
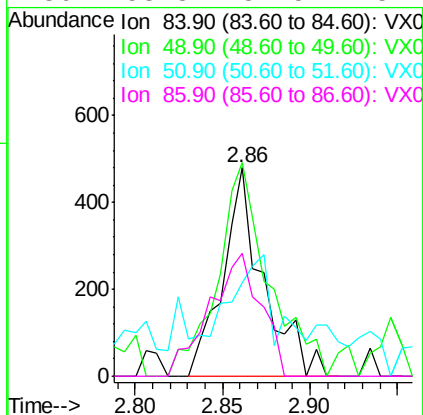
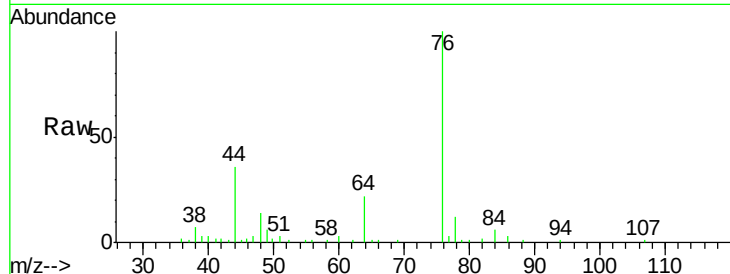


#20  
Methylene Chloride  
Concen: 0.26 ug/l  
RT: 2.86 min Scan# 373  
Delta R.T. -0.00 min  
Lab File: VX002968.D  
Acq: 28 Jun 2018 06:11

Instrument :  
MSVOA\_X  
ClientSampleId :  
W-30

Tot Ion: 84 Resp: 773

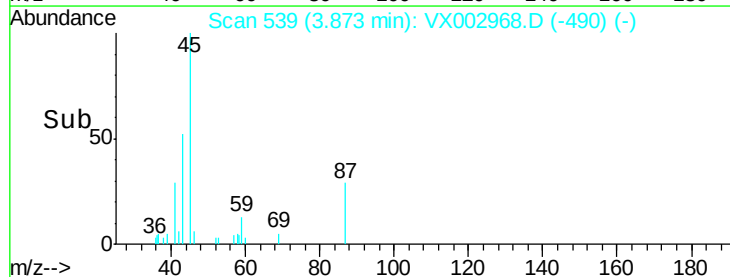
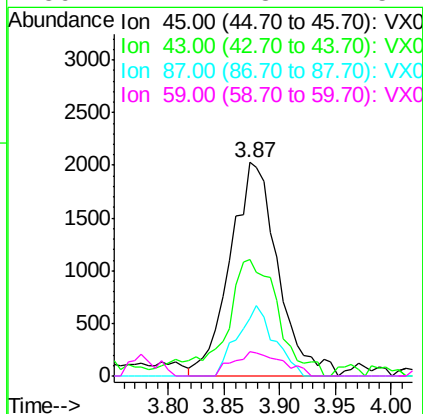
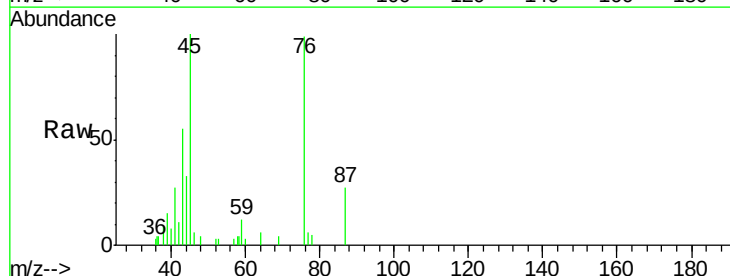
| Ion | Ratio | Lower | Upper  |
|-----|-------|-------|--------|
| 84  | 100   |       |        |
| 49  | 91.3  | 107.8 | 161.6# |
| 51  | 28.5  | 32.8  | 49.2#  |
| 86  | 58.8  | 52.5  | 78.7   |



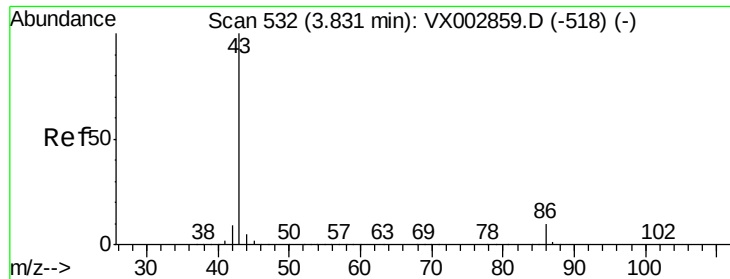
#22  
Diisopropyl ether  
Concen: 0.60 ug/l  
RT: 3.87 min Scan# 539  
Delta R.T. -0.00 min  
Lab File: VX002968.D  
Acq: 28 Jun 2018 06:11

Tgt Ion: 45 Resp: 6036

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 45  | 100   |       |       |
| 43  | 50.9  | 46.8  | 70.2  |
| 87  | 27.0  | 20.2  | 30.4  |
| 59  | 11.7  | 8.7   | 13.1  |







#23

Vinyl Acetate

Concen: 0.40 ug/l

RT: 3.87 min Scan# 539

Delta R.T. 0.04 min

Lab File: VX002968.D

Acq: 28 Jun 2018 06:11

Instrument :

MSVOA\_X

ClientSampled :

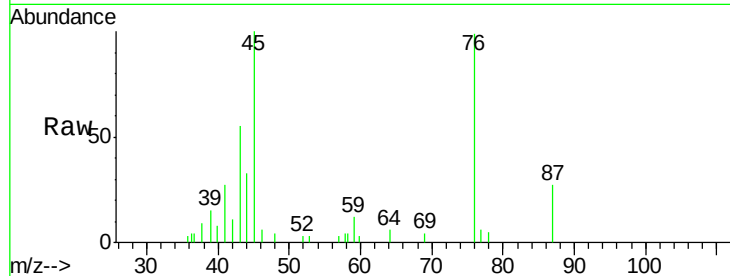
W-30

Tot Ion: 43 Resp: 3437

Ion Ratio Lower Upper

43 100

86 0.0 7.4 11.0#



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 86.00 (85.70 to 86.70): VX0

1200

1000

800

600

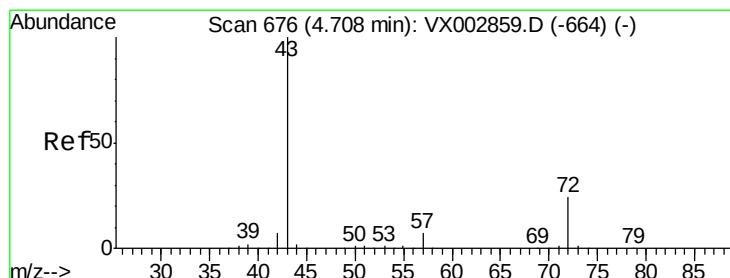
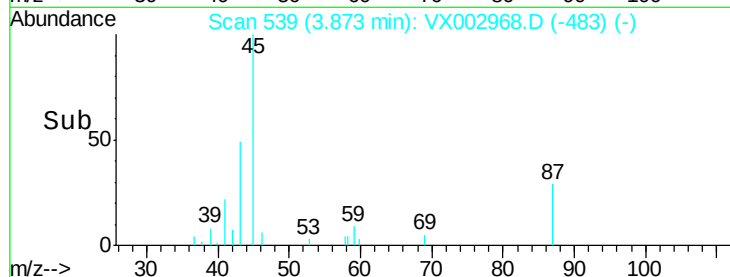
400

200

0

3.80 3.85 3.90 3.95

Time-->



#25

2-Butanone

Concen: 1.60 ug/l

RT: 4.71 min Scan# 677

Delta R.T. 0.01 min

Lab File: VX002968.D

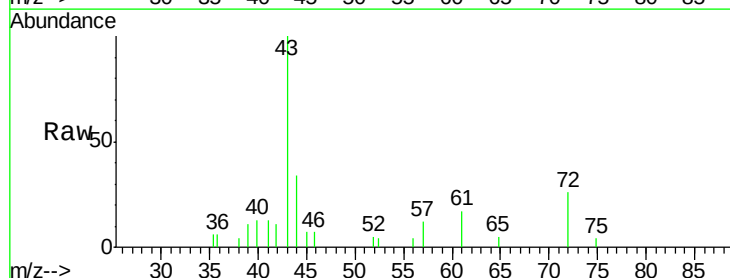
Acq: 28 Jun 2018 06:11

Tgt Ion: 43 Resp: 3707

Ion Ratio Lower Upper

43 100

72 27.3 18.5 27.7



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 72.00 (71.70 to 72.70): VX0

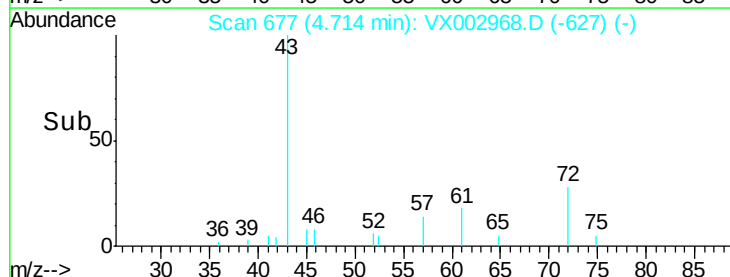
1000

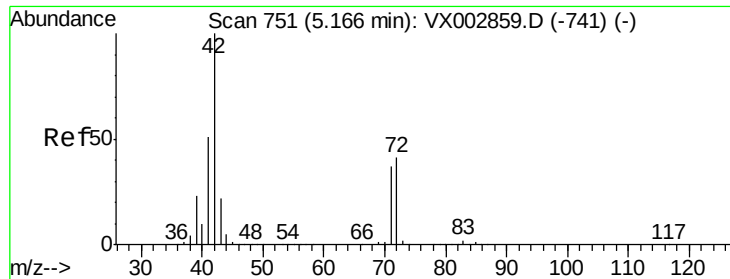
500

0

4.60 4.70 4.80

Time-->

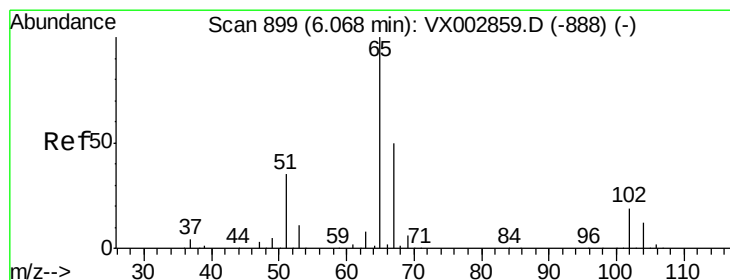
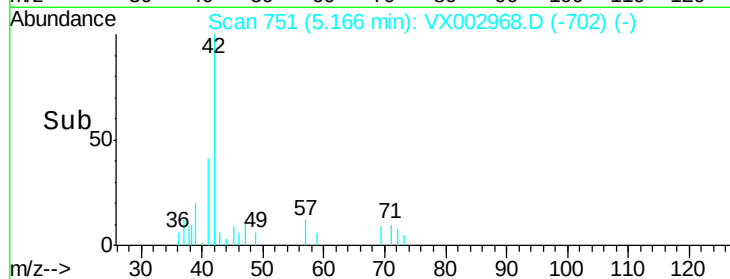
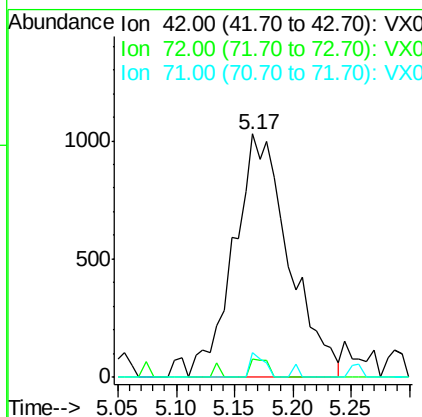
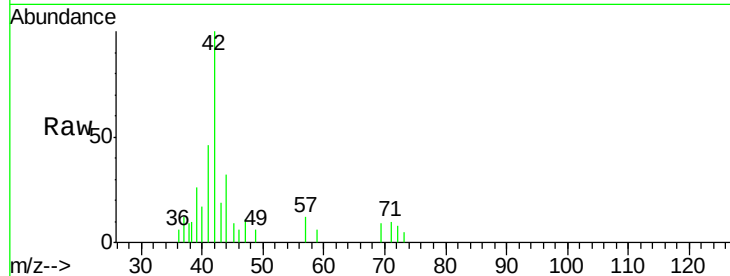




#29  
Tetrahydrofuran  
Concen: 2.28 ug/l  
RT: 5.17 min Scan# 751  
Delta R.T. -0.00 min  
Lab File: VX002968.D  
Acq: 28 Jun 2018 06:11

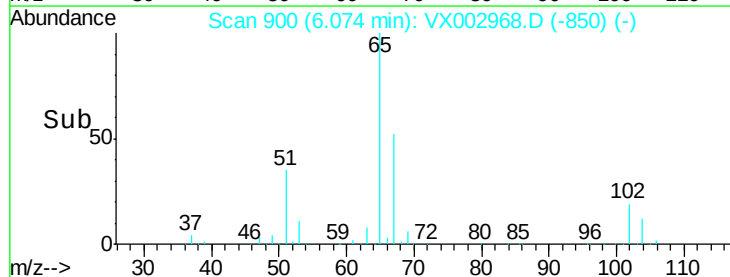
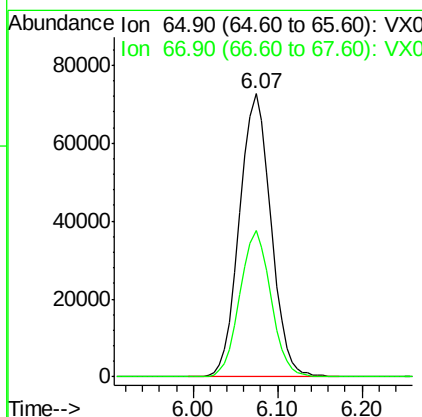
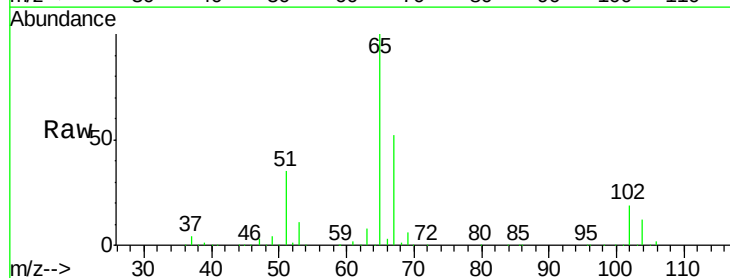
Instrument :  
MSVOA\_X  
ClientSampleId :  
W-30

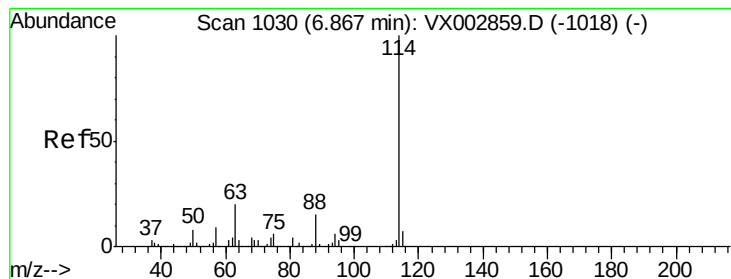
Tot Ion: 42 Resp: 3378  
Ion Ratio Lower Upper  
42 100  
72 2.4 32.0 48.0#  
71 2.6 30.1 45.1#



#33  
1,2-Dichloroethane-d4  
Concen: 48.91 ug/l  
RT: 6.07 min Scan# 900  
Delta R.T. 0.01 min  
Lab File: VX002968.D  
Acq: 28 Jun 2018 06:11

Tgt Ion: 65 Resp: 183928  
Ion Ratio Lower Upper  
65 100  
67 51.1 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: VX002968.D

Acq: 28 Jun 2018 06:11

Instrument :

MSVOA\_X

ClientSampleId :

W-30

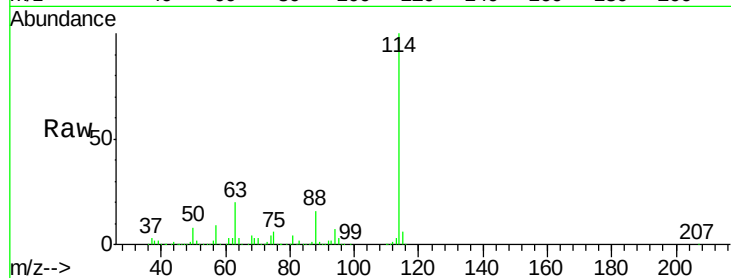
Tot Ion:114 Resp: 382627

Ion Ratio Lower Upper

114 100

63 20.4 0.0 41.4

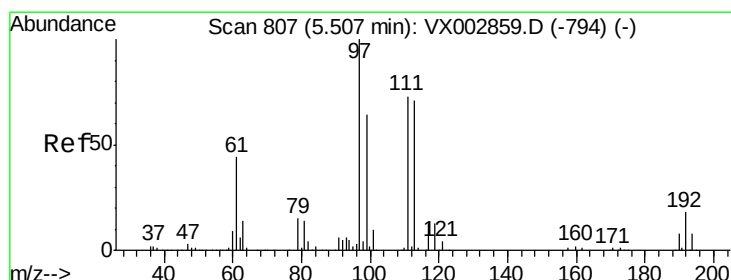
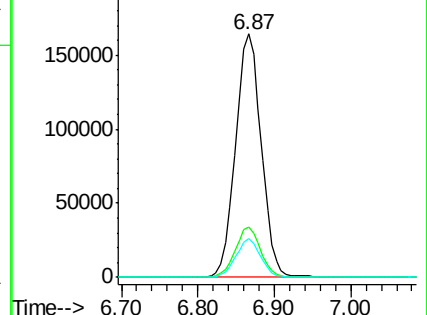
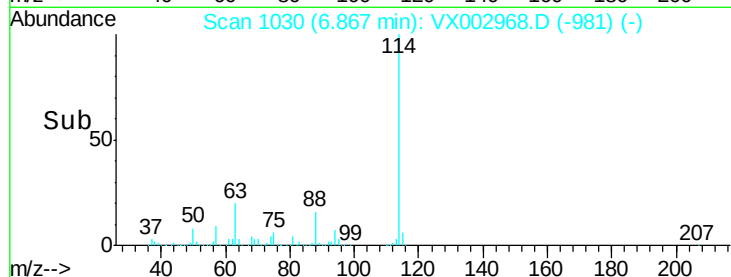
88 15.8 0.0 30.0



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: 49.30 ug/l

RT: 5.51 min Scan# 807

Delta R.T. -0.00 min

Lab File: VX002968.D

Acq: 28 Jun 2018 06:11

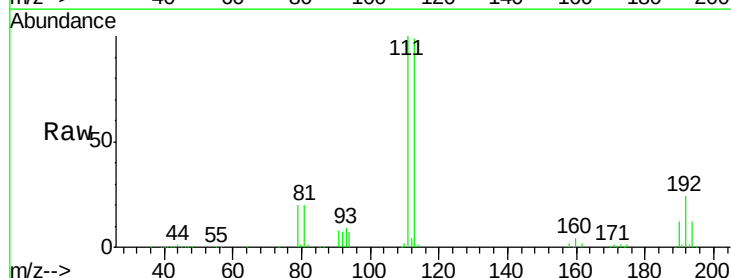
Tgt Ion:113 Resp: 149380

Ion Ratio Lower Upper

113 100

111 102.2 81.4 122.0

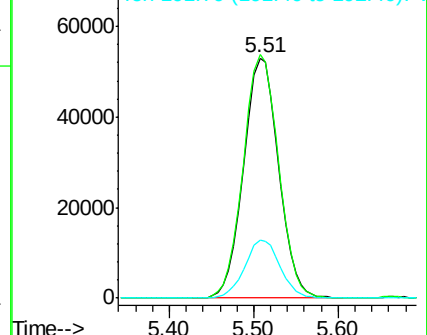
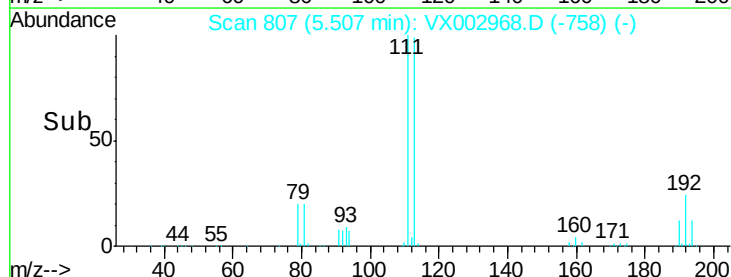
192 24.3 19.1 28.7

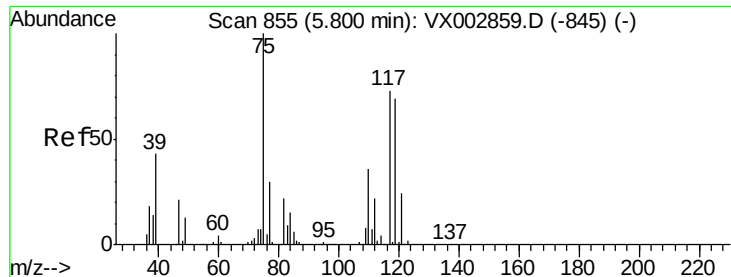


Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V

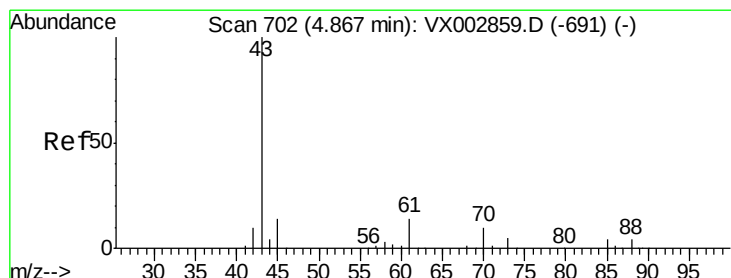
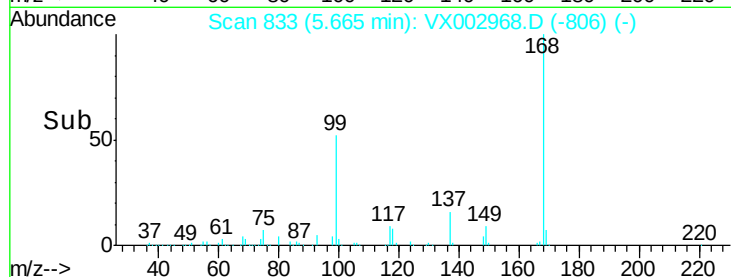
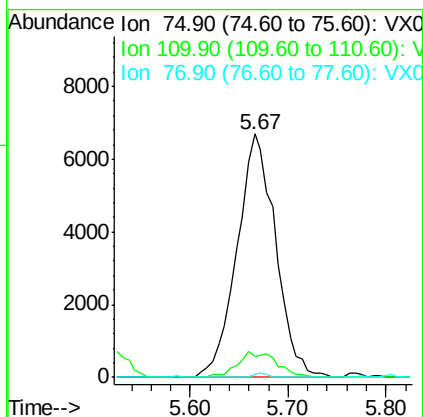
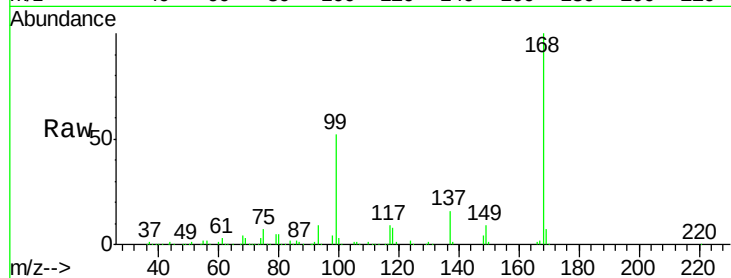




#36  
 1,1-Dichloropropene  
 Concen: 4.36 ug/l  
 RT: 5.67 min Scan# 833  
 Delta R.T. -0.13 min  
 Lab File: VX002968.D  
 Acq: 28 Jun 2018 06:11

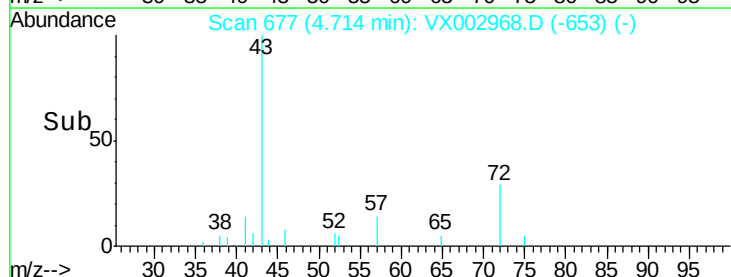
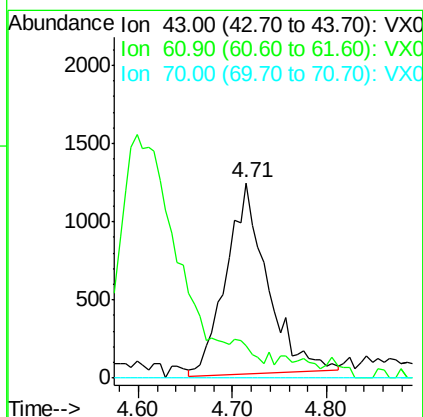
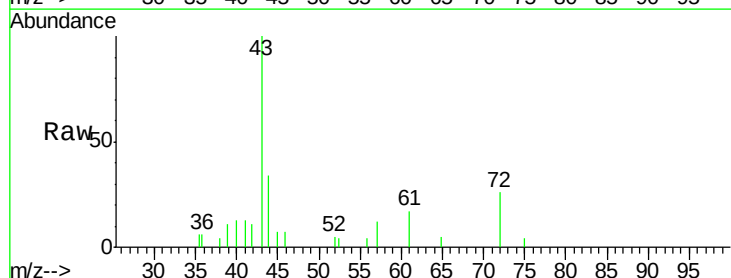
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 W-30

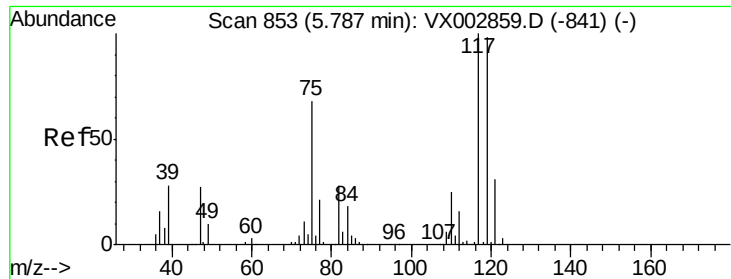
Tot Ion: 75 Resp: 18278  
 Ion Ratio Lower Upper  
 75 100  
 110 10.8 18.1 54.4#  
 77 0.5 24.3 36.5#



#37  
 Ethyl Acetate  
 Concen: 0.82 ug/l  
 RT: 4.71 min Scan# 677  
 Delta R.T. -0.15 min  
 Lab File: VX002968.D  
 Acq: 28 Jun 2018 06:11

Tgt Ion: 43 Resp: 3707  
 Ion Ratio Lower Upper  
 43 100  
 61 0.0 10.4 15.6#  
 70 0.0 7.6 11.4#





#38

Carbon Tetrachloride

Concen: 5.43 ug/l

RT: 5.67 min Scan# 834

Delta R.T. -0.12 min

Lab File: VX002968.D

Acq: 28 Jun 2018 06:11

Instrument :

MSVOA\_X

ClientSampled :

W-30

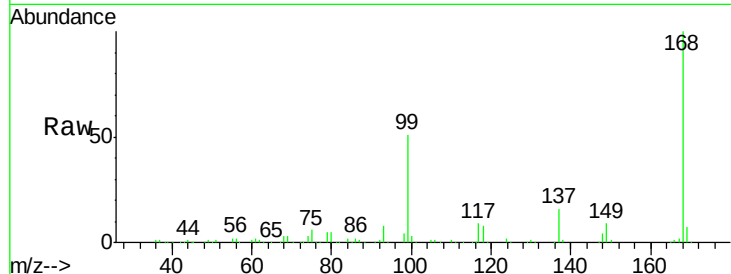
Tot Ion:117 Resp: 24981

Ion Ratio Lower Upper

117 100

119 4.6 77.4 116.0#

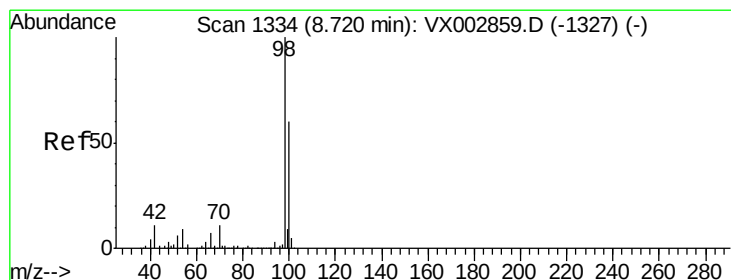
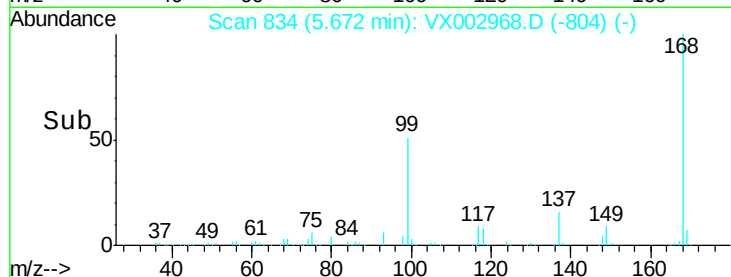
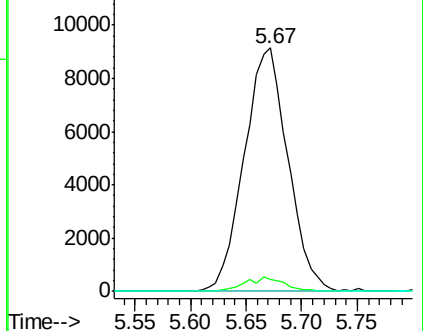
121 0.0 24.4 36.6#



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: 48.34 ug/l

RT: 8.72 min Scan# 1334

Delta R.T. 0.00 min

Lab File: VX002968.D

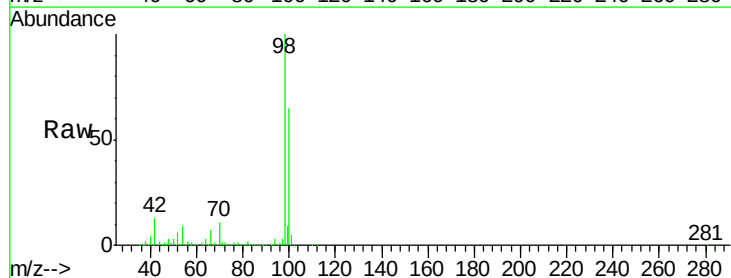
Acq: 28 Jun 2018 06:11

Tgt Ion: 98 Resp: 534912

Ion Ratio Lower Upper

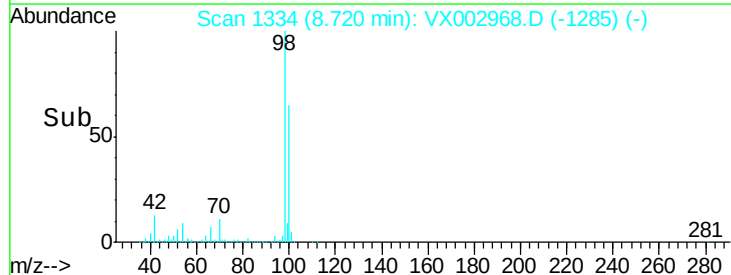
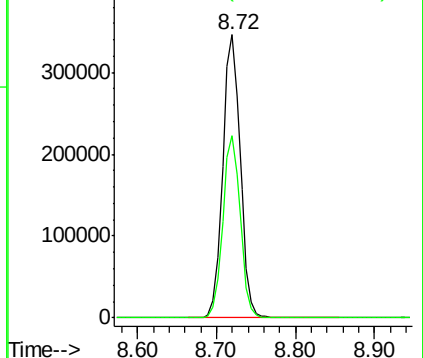
98 100

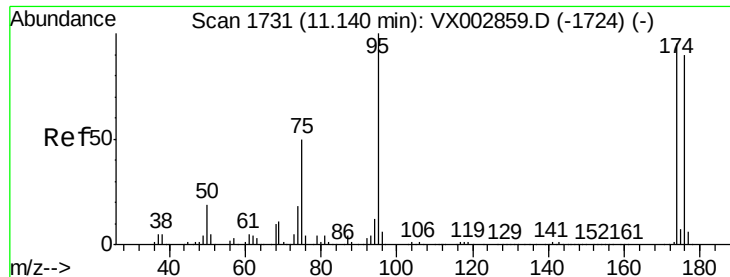
100 63.9 50.9 76.3



Abundance Ion 98.00 (97.70 to 98.70): VX0

Ion 100.00 (99.70 to 100.70): V





#62

4-Bromofluorobenzene

Concen: 45.74 ug/l

RT: 11.14 min Scan# 1731

Delta R.T. 0.00 min

Lab File: VX002968.D

Acq: 28 Jun 2018 06:11

Instrument :

MSVOA\_X

ClientSampleId :

W-30

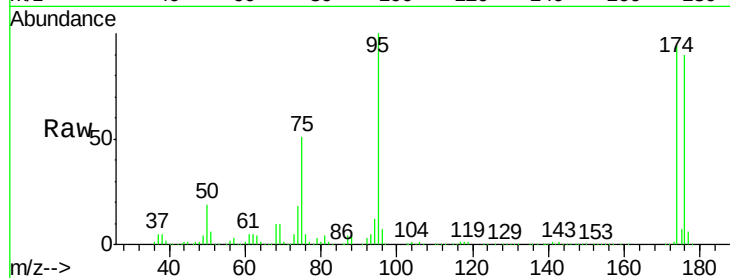
Tot Ion: 95 Resp: 195170

Ion Ratio Lower Upper

95 100

174 95.6 0.0 187.4

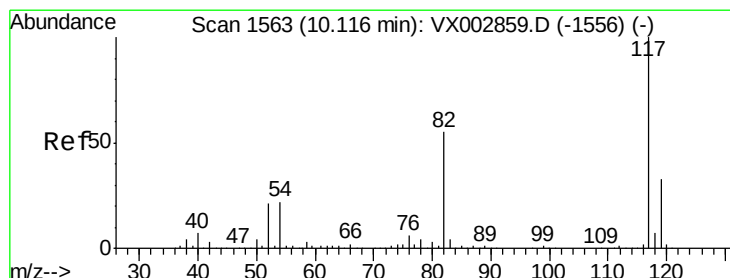
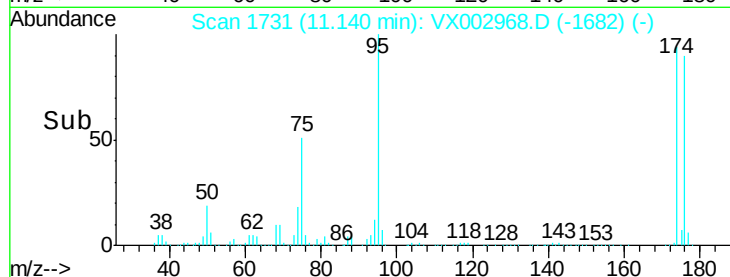
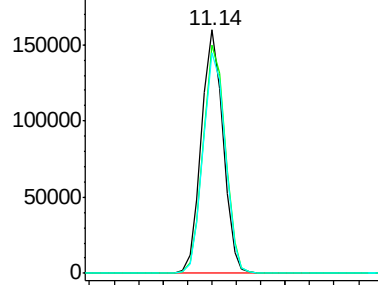
176 92.5 0.0 181.0



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: VX002968.D

Acq: 28 Jun 2018 06:11

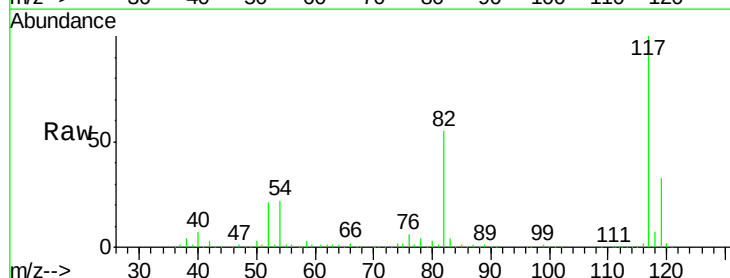
Tgt Ion: 117 Resp: 356075

Ion Ratio Lower Upper

117 100

82 54.6 45.0 67.4

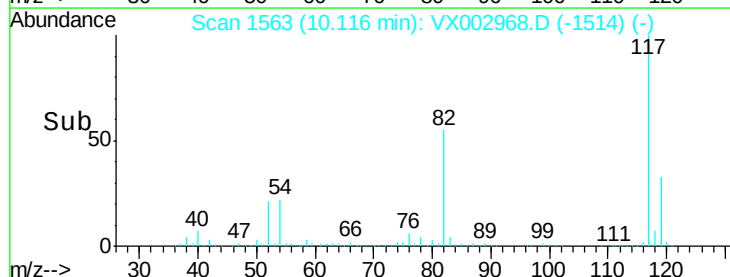
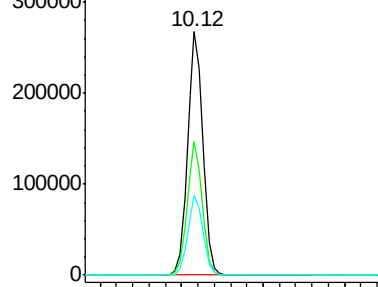
119 32.8 25.8 38.6

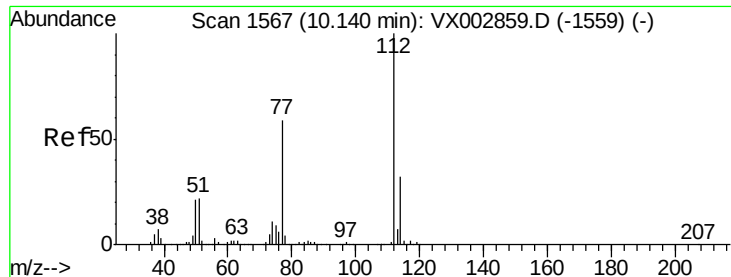


Abundance Ion 116.90 (116.60 to 117.60): V

Ion 82.00 (81.70 to 82.70): VX0

Ion 118.90 (118.60 to 119.60): V

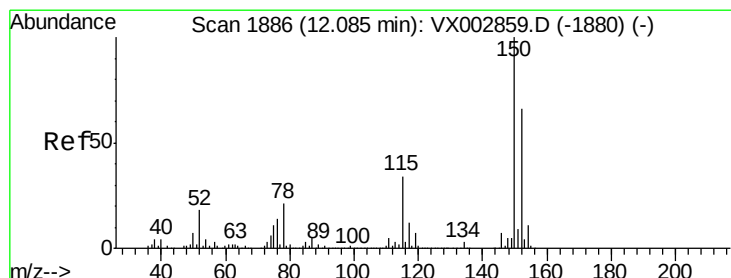
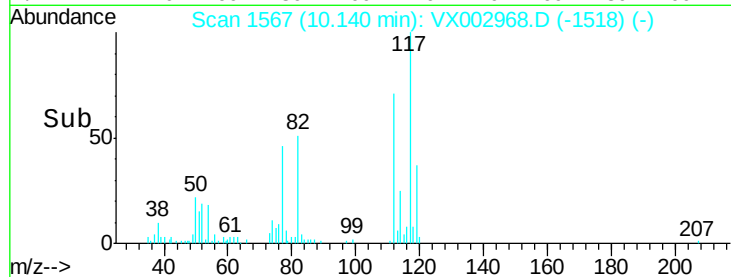
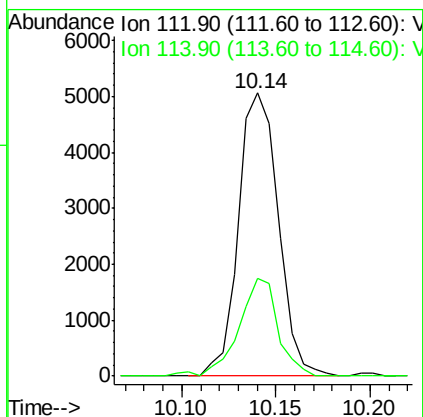
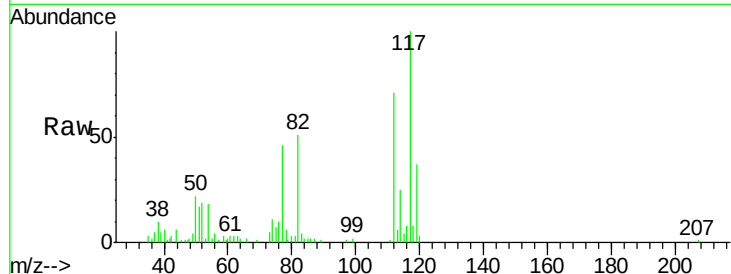




#65  
Chlorobenzene  
Concen: 0.82 ug/l  
RT: 10.14 min Scan# 1567  
Delta R.T. -0.00 min  
Lab File: VX002968.D  
Acq: 28 Jun 2018 06:11

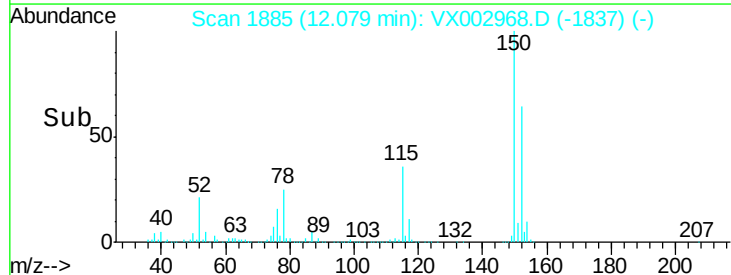
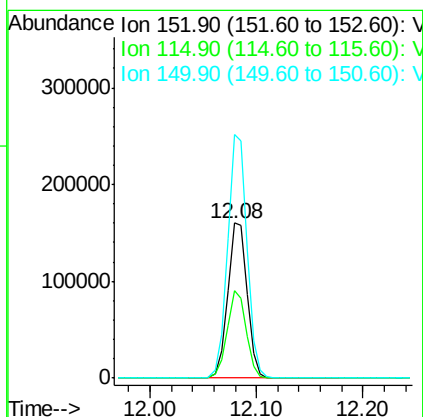
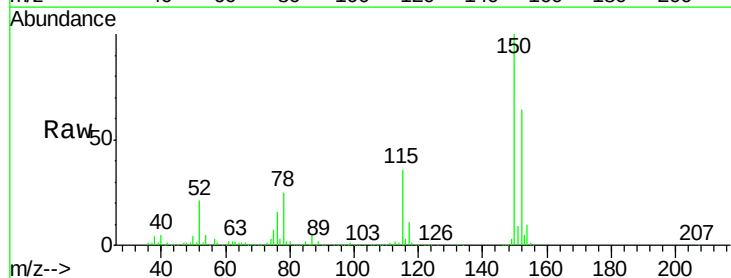
Instrument :  
MSVOA\_X  
ClientSampled :  
W-30

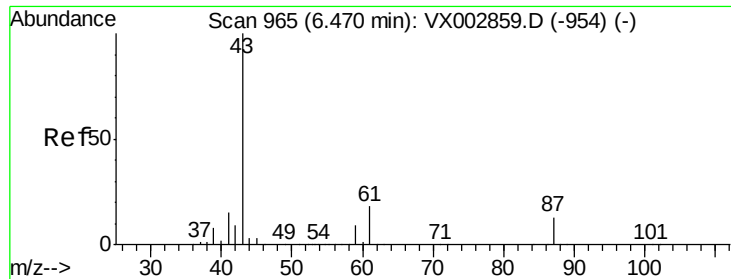
Tot Ion:112 Resp: 7410  
Ion Ratio Lower Upper  
112 100  
114 34.7 25.3 37.9



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.00 ug/l  
RT: 12.08 min Scan# 1885  
Delta R.T. -0.01 min  
Lab File: VX002968.D  
Acq: 28 Jun 2018 06:11

Tgt Ion:152 Resp: 204641  
Ion Ratio Lower Upper  
152 100  
115 54.9 40.1 120.2  
150 156.8 0.0 347.2

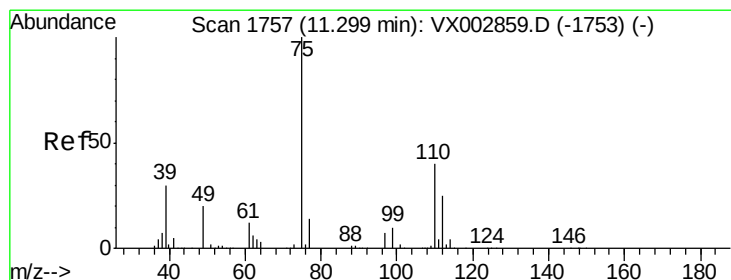
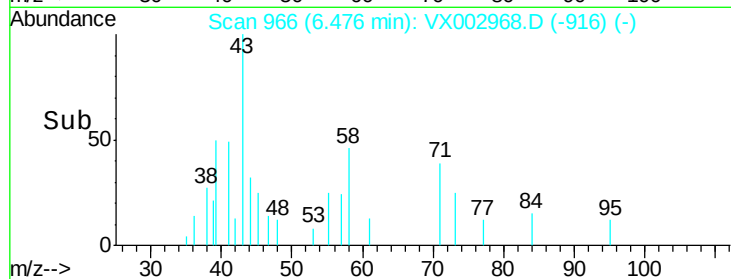
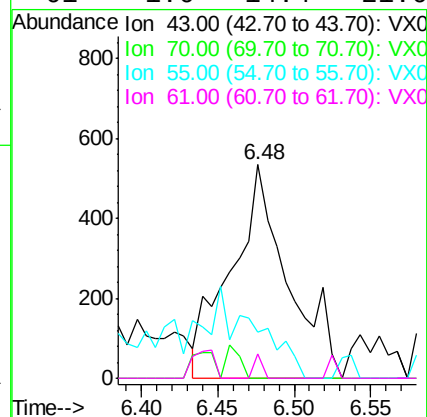
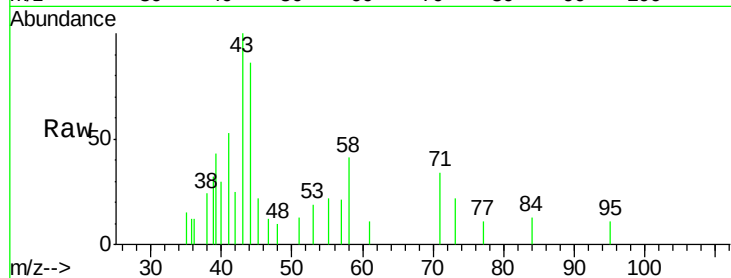




#74  
N-amvl acetate  
Concen: 0.21 ug/l  
RT: 6.48 min Scan# 966  
Delta R.T. 0.01 min  
Lab File: VX002968.D  
Acq: 28 Jun 2018 06:11

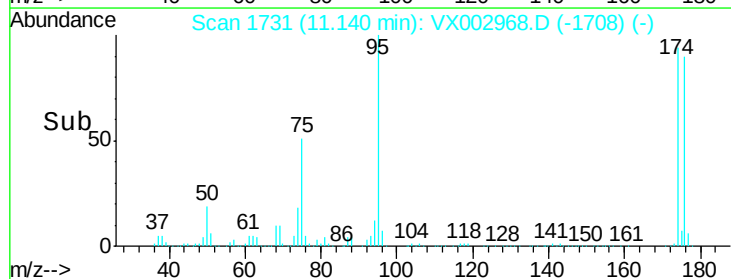
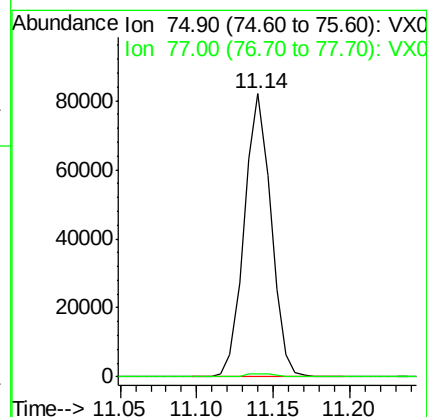
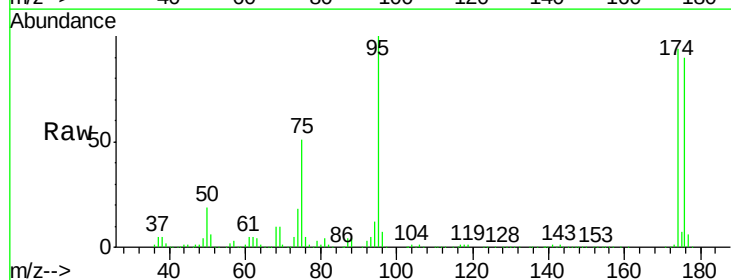
Instrument :  
MSVOA\_X  
ClientSampleId :  
W-30

Tot Ion: 43 Resp: 1384  
Ion Ratio Lower Upper  
43 100  
70 0.0 0.0 0.0  
55 0.0 0.0 0.0  
61 1.6 14.4 21.6#

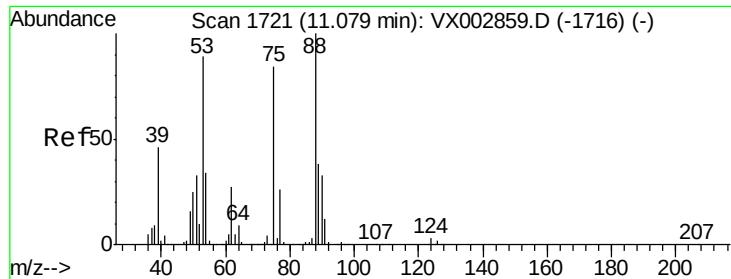


#76  
1,2,3-Trichloropropane  
Concen: 26.89 ug/l  
RT: 11.14 min Scan# 1731  
Delta R.T. -0.16 min  
Lab File: VX002968.D  
Acq: 28 Jun 2018 06:11

Tgt Ion: 75 Resp: 99665  
Ion Ratio Lower Upper  
75 100  
77 1.5 22.8 68.3#



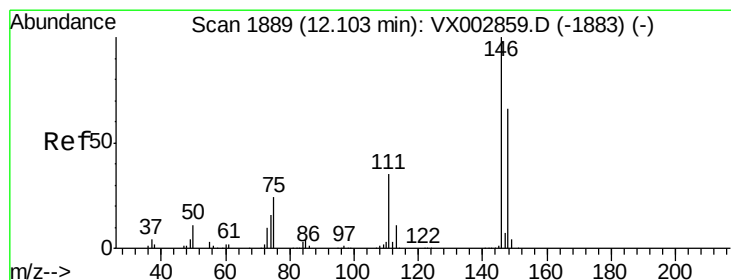
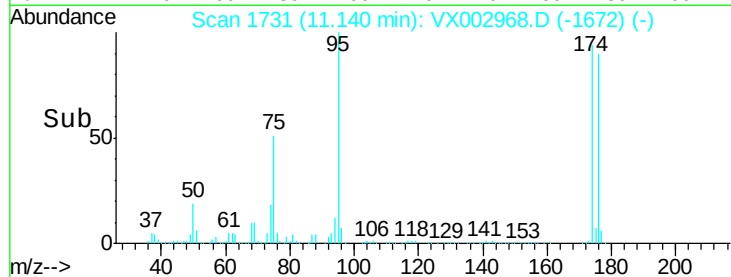
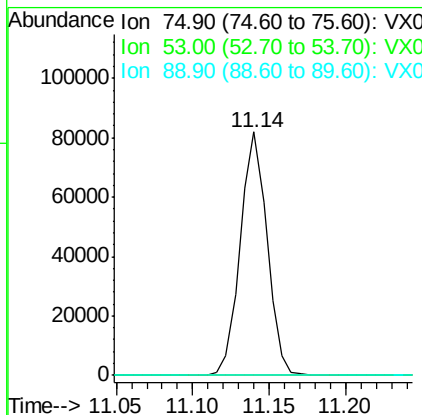
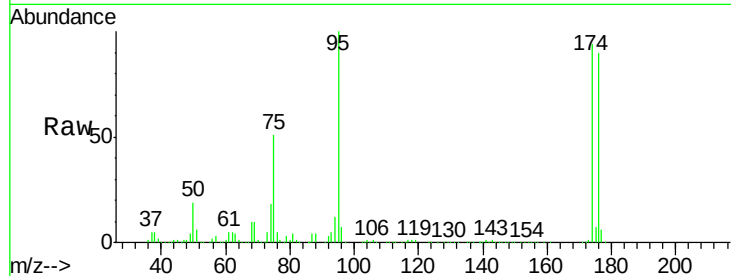




#81  
trans-1,4-Dichloro-2-butene  
Concen: 76.13 ug/l  
RT: 11.14 min Scan# 1731  
Delta R.T. 0.06 min  
Lab File: VX002968.D  
Acq: 28 Jun 2018 06:11

Instrument :  
MSVOA\_X  
ClientSampled :  
W-30

Tot Ion: 75 Resp: 99665  
Ion Ratio Lower Upper  
75 100  
53 0.2 86.8 130.2#  
89 0.0 38.2 57.2#



#88  
1,4-Dichlorobenzene  
Concen: 0.32 ug/l  
RT: 12.10 min Scan# 1889  
Delta R.T. -0.00 min  
Lab File: VX002968.D  
Acq: 28 Jun 2018 06:11

Tgt Ion:146 Resp: 2355  
Ion Ratio Lower Upper  
146 100  
111 153.1 18.7 56.1#  
148 98.7 32.4 97.0#

