

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_W\DATA\VW092218\  
 Data File : VW005570.D  
 Acq On : 21 Sep 2018 19:32  
 Operator : VA/AP  
 Sample : J4777-11  
 Misc : 6.12G/5ML/MSVOA\_W/SOIL  
 ALS Vial : 22 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 PL-02-0920-18-A

Quant Time: Sep 21 23:16:44 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W092118S.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Sep 21 09:05:42 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.96  | 168  | 141874   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.85  | 114  | 221490   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.64 | 117  | 199519   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.57 | 152  | 73576    | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 8.31  | 65   | 84471    | 50.54 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 101.08% |          |
| 35) Dibromofluoromethane    | 7.89  | 113  | 67083    | 48.16 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 96.32%  |          |
| 50) Toluene-d8              | 10.33 | 98   | 217772   | 38.40 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 76.80%  |          |
| 62) 4-Bromofluorobenzene    | 12.62 | 95   | 65877    | 31.39 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 62.78%  |          |

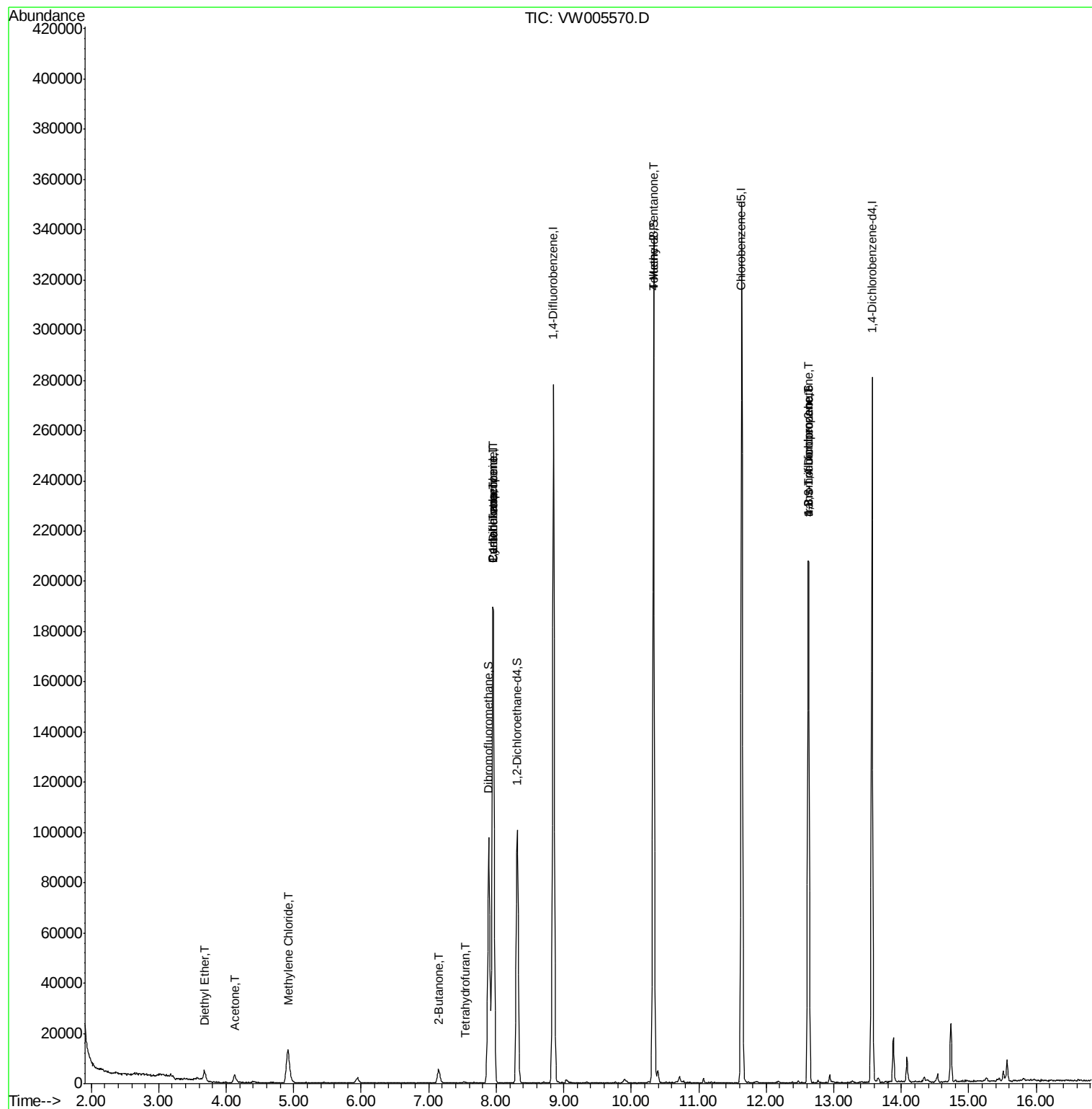
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 8) Diethyl Ether               | 3.68  | 74   | 2017     | 2.896     | ug/l   | 82     |
| 11) Tert butyl alcohol         | 5.20  | 59   | 54       | Below Cal | #      | 72     |
| 16) Acetone                    | 4.12  | 43   | 5442     | 11.717    | ug/l   | 94     |
| 20) Methylene Chloride         | 4.92  | 84   | 10959    | 3.870     | ug/l   | 97     |
| 25) 2-Butanone                 | 7.15  | 43   | 516      | 1.271     | ug/l # | 50     |
| 29) Tetrahydrofuran            | 7.54  | 42   | 265      | 1.045     | ug/l # | 62     |
| 31) Cyclohexane                | 7.95  | 56   | 3261     | 1.258     | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 7.95  | 75   | 11150    | 5.001     | ug/l # | 51     |
| 38) Carbon Tetrachloride       | 7.96  | 117  | 13884    | 5.811     | ug/l # | 16     |
| 51) 4-Methyl-2-Pentanone       | 10.33 | 43   | 1133     | 1.219     | ug/l # | 1      |
| 76) 1,2,3-Trichloropropane     | 12.62 | 75   | 33841    | 53.957    | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.62 | 75   | 33841    | 121.527   | ug/l # | 7      |

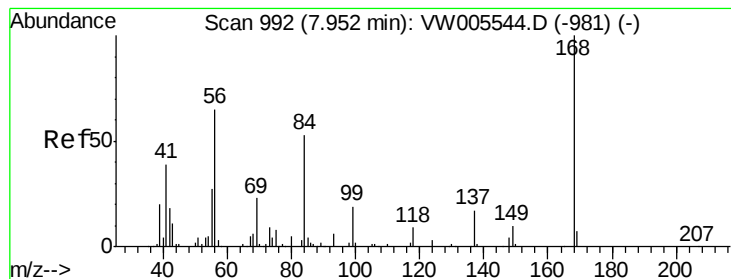
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Title : SW846 8260  
QLast Update : Fri Sep 21 09:05:42 2018  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.96 min Scan# 993

Delta R.T. 0.01 min

Lab File: VW005570.D

Acq: 21 Sep 2018 19:32

Instrument :

MSVOA\_W

ClientSampleId :

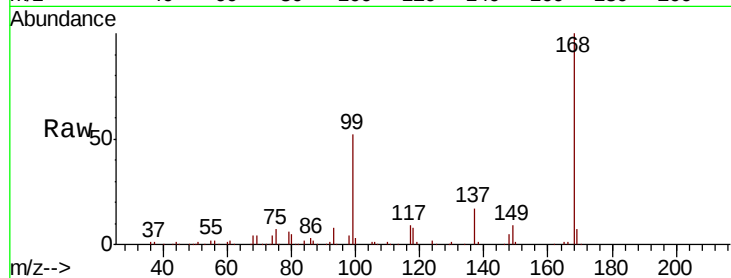
PL-02-0920-18-A

Tgt Ion:168 Resp: 141874

Ion Ratio Lower Upper

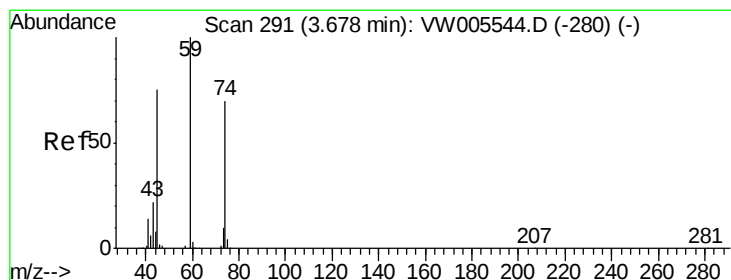
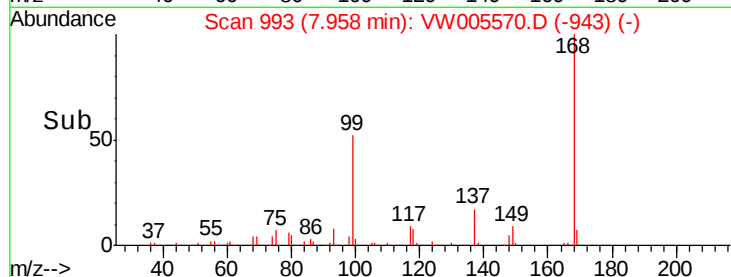
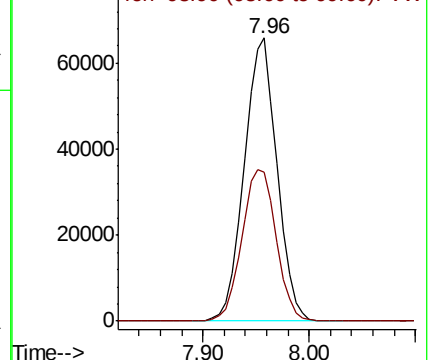
168 100

99 52.4 48.4 72.6



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VW



#8

Diethyl Ether

Concen: 2.896 ug/l

RT: 3.68 min Scan# 291

Delta R.T. -0.00 min

Lab File: VW005570.D

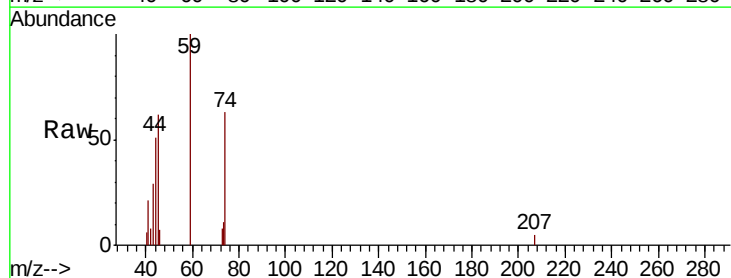
Acq: 21 Sep 2018 19:32

Tgt Ion: 74 Resp: 2017

Ion Ratio Lower Upper

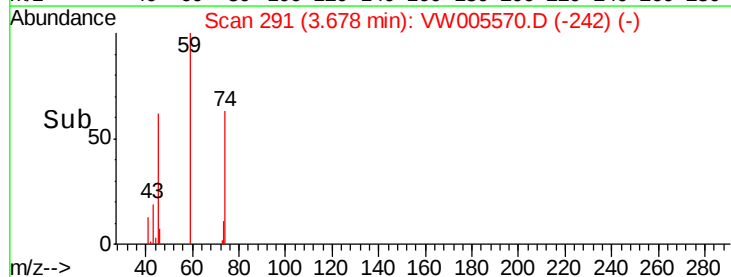
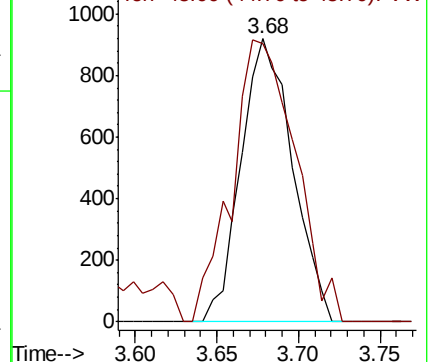
74 100

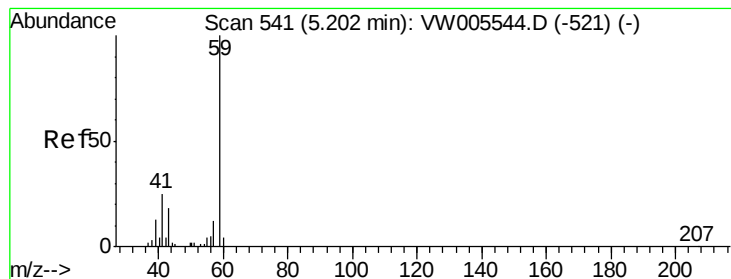
45 121.8 51.7 155.2



Abundance Ion 74.00 (73.70 to 74.70): VW

Ion 45.00 (44.70 to 45.70): VW





#11

Tert butyl alcohol

Concen: Below Cal

RT: 5.20 min Scan# 541

Delta R.T. 0.00 min

Lab File: VW005570.D

Acq: 21 Sep 2018 19:32

Instrument :

MSVOA\_W

ClientSampleId :

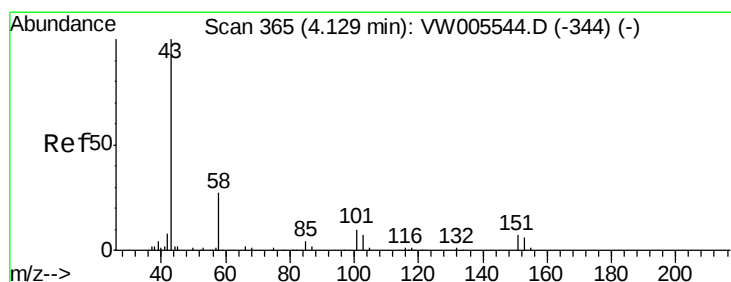
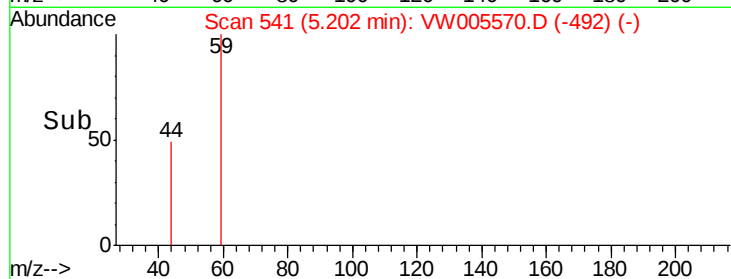
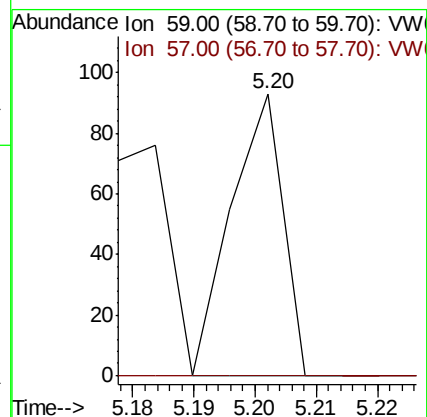
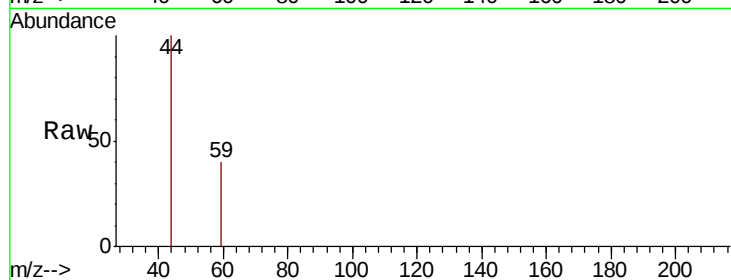
PL-02-0920-18-A

Tgt Ion: 59 Resp: 54

Ion Ratio Lower Upper

59 100

57 0.0 8.3 12.5#



#16

Acetone

Concen: 11.717 ug/l

RT: 4.12 min Scan# 364

Delta R.T. -0.01 min

Lab File: VW005570.D

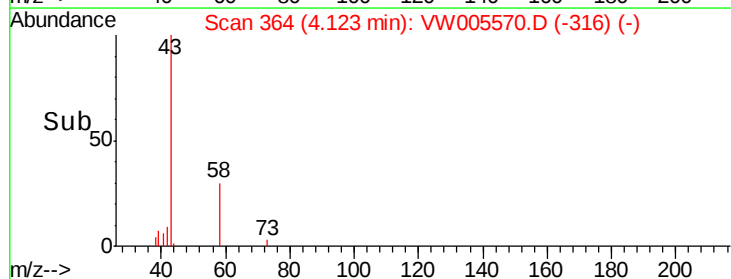
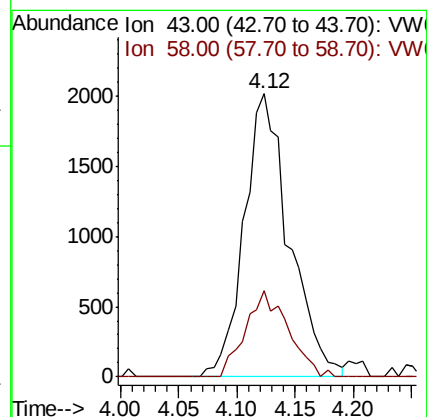
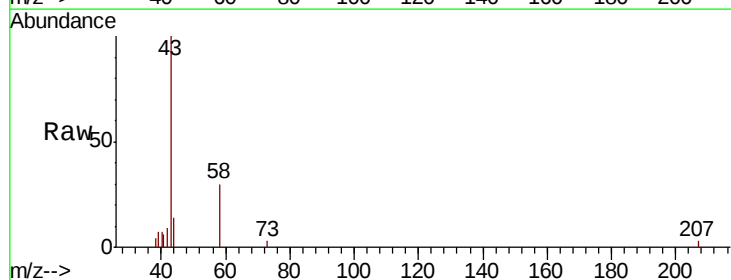
Acq: 21 Sep 2018 19:32

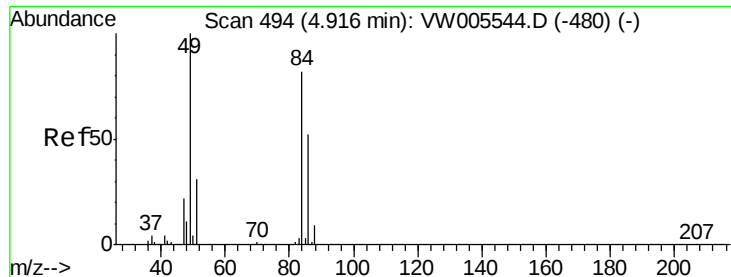
Tgt Ion: 43 Resp: 5442

Ion Ratio Lower Upper

43 100

58 30.4 21.8 32.8

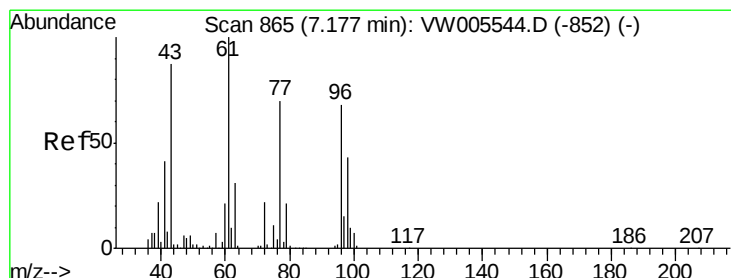
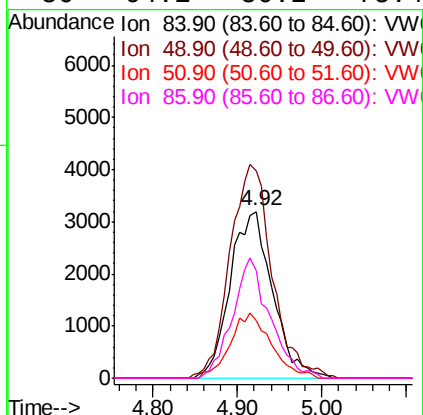
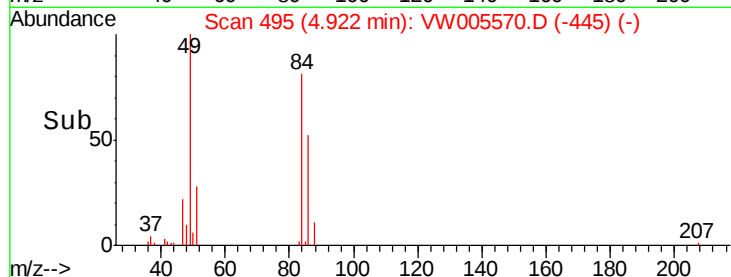
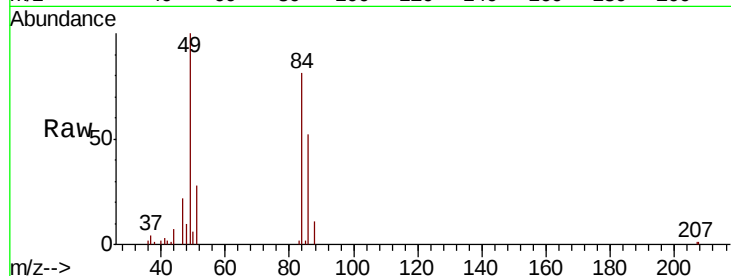




#20  
Methylene Chloride  
Concen: 3.870 ug/l  
RT: 4.92 min Scan# 495  
Delta R.T. 0.01 min  
Lab File: VW005570.D  
Acq: 21 Sep 2018 19:32

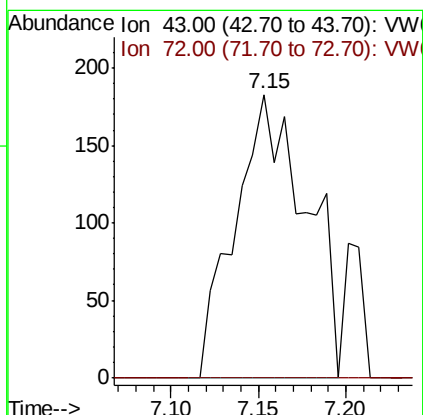
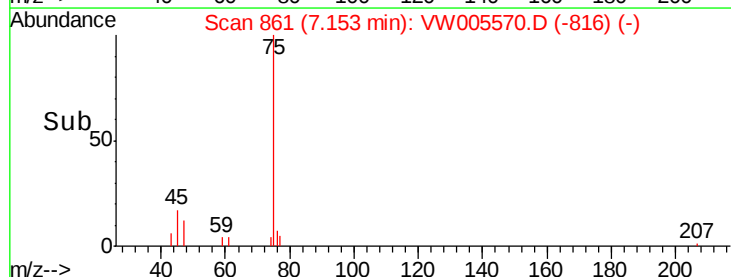
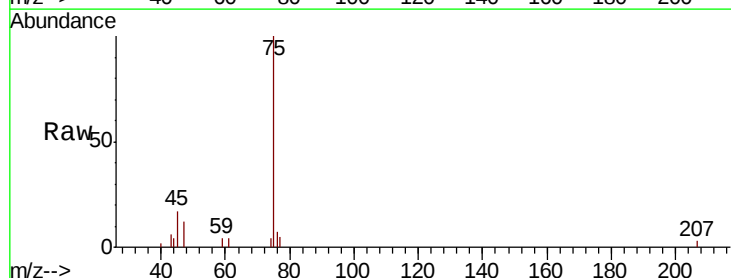
Instrument :  
MSVOA\_W  
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PL-02-0920-18-A

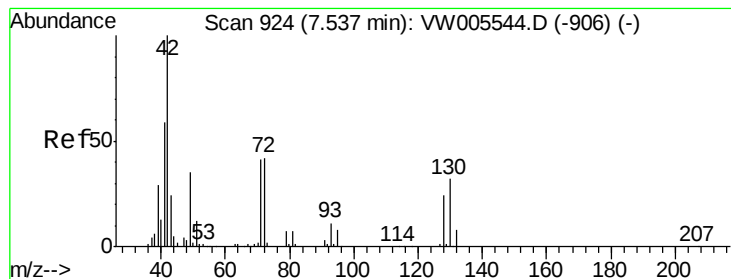
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 84    | Resp: | 10959 |
| Ion      | Ratio | Lower | Upper |
| 84       | 100   |       |       |
| 49       | 123.9 | 97.0  | 145.6 |
| 51       | 34.5  | 30.2  | 45.2  |
| 86       | 64.1  | 50.2  | 75.4  |



#25  
2-Butanone  
Concen: 1.271 ug/l  
RT: 7.15 min Scan# 861  
Delta R.T. -0.02 min  
Lab File: VW005570.D  
Acq: 21 Sep 2018 19:32

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 516   |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 72       | 0.0   | 19.9  | 29.9# |





#29

Tetrahydrofuran

Concen: 1.045 ug/l

RT: 7.54 min Scan# 925

Delta R.T. 0.01 min

Lab File: VW005570.D

Acq: 21 Sep 2018 19:32

Instrument :

MSVOA\_W

ClientSampleId :

PL-02-0920-18-A

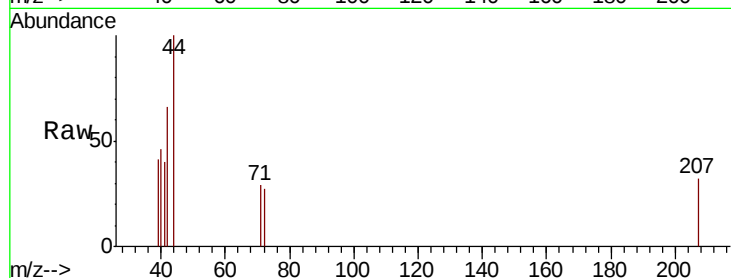
Tgt Ion: 42 Resp: 265

Ion Ratio Lower Upper

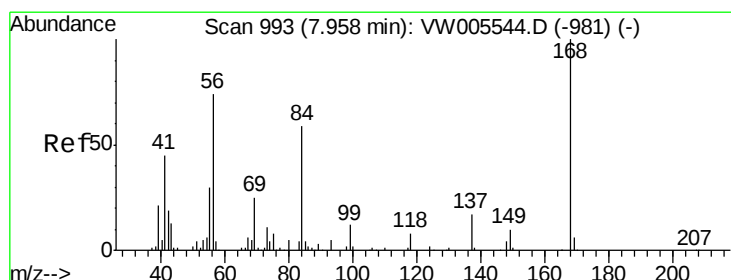
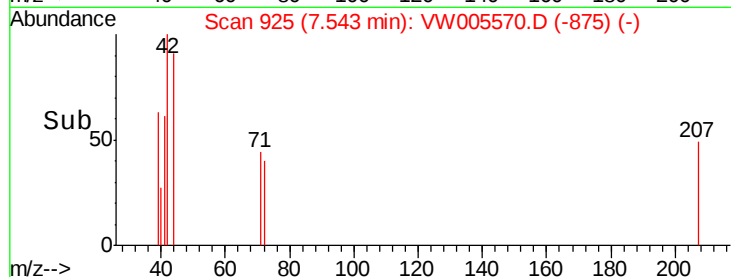
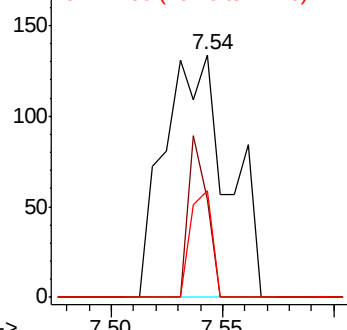
42 100

72 19.6 33.6 50.4#

71 15.1 31.8 47.6#



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



#31

Cyclohexane

Concen: 1.258 ug/l

RT: 7.95 min Scan# 992

Delta R.T. -0.01 min

Lab File: VW005570.D

Acq: 21 Sep 2018 19:32

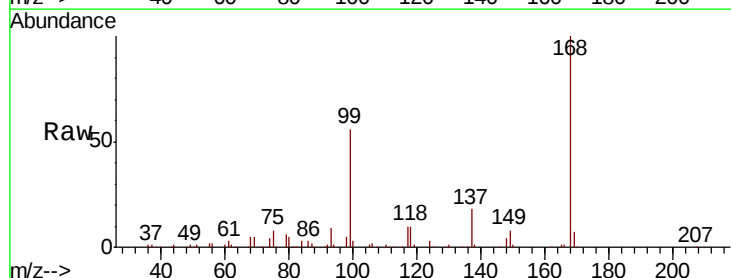
Tgt Ion: 56 Resp: 3261

Ion Ratio Lower Upper

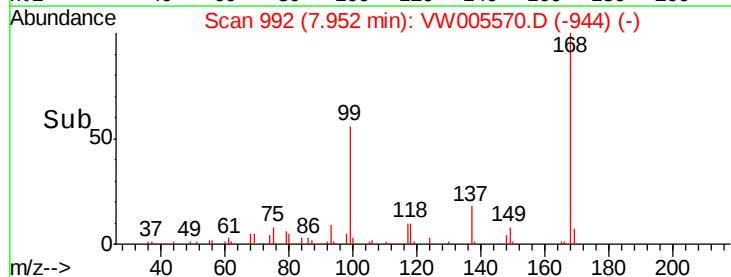
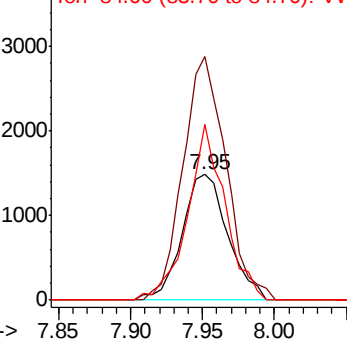
56 100

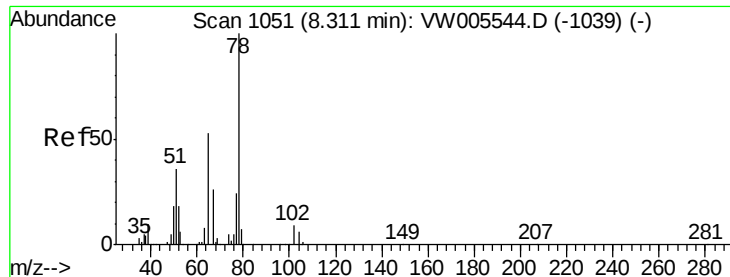
69 193.5 27.0 40.4#

84 139.6 64.2 96.4#



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

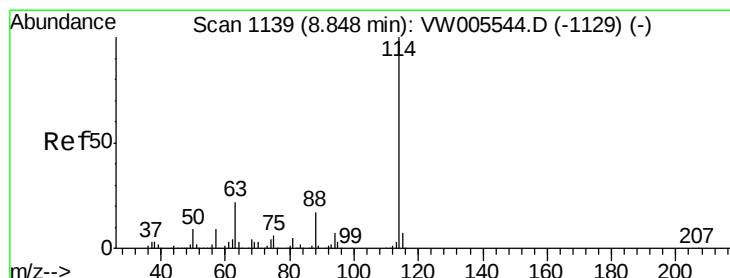
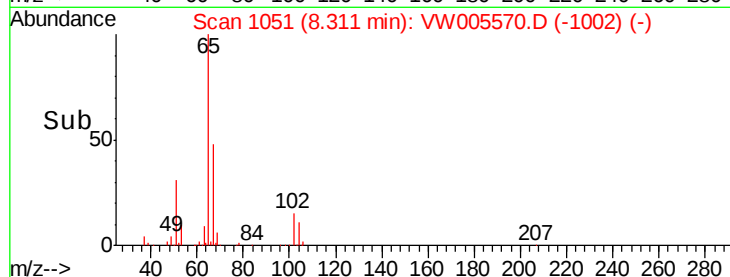
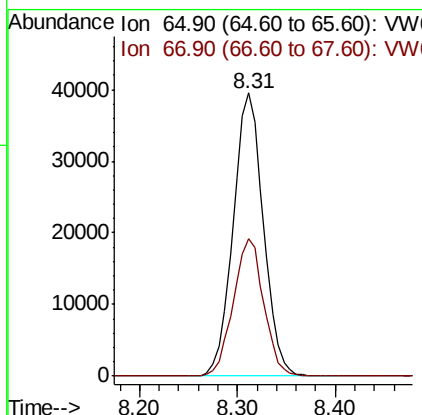
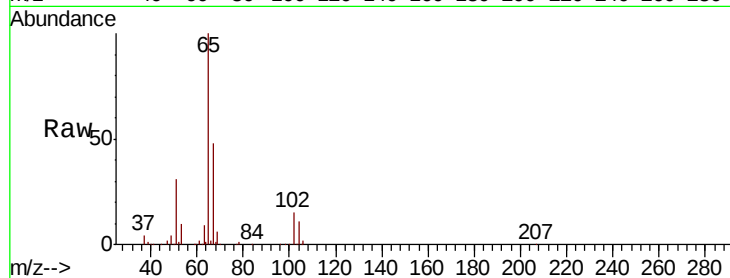




#33  
 1,2-Dichloroethane-d4  
 Concen: 50.540 ug/l  
 RT: 8.31 min Scan# 1051  
 Delta R.T. -0.00 min  
 Lab File: VW005570.D  
 Acq: 21 Sep 2018 19:32

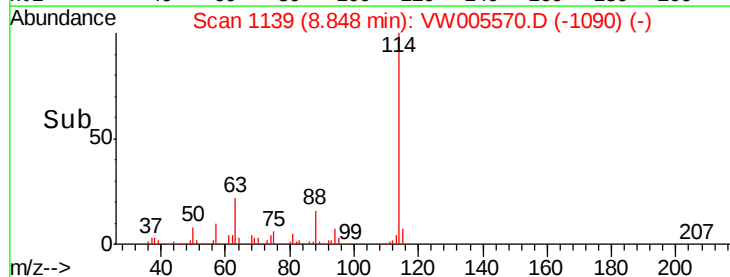
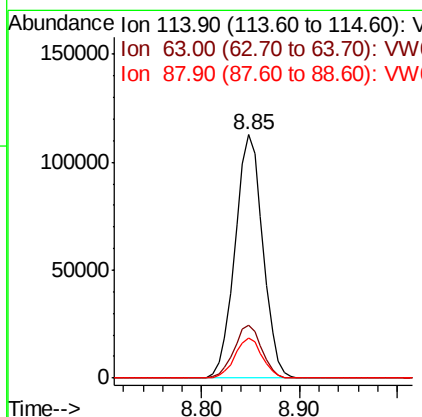
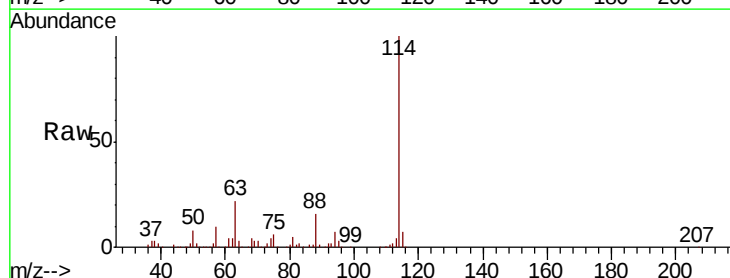
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 MSVOA\_W  
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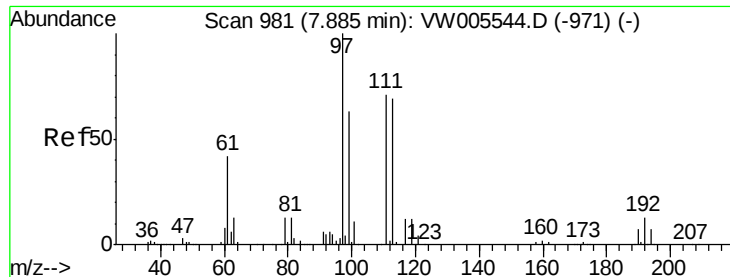
Tgt Ion: 65 Resp: 84471  
 Ion Ratio Lower Upper  
 65 100  
 67 48.8 0.0 100.6



#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.85 min Scan# 1139  
 Delta R.T. -0.00 min  
 Lab File: VW005570.D  
 Acq: 21 Sep 2018 19:32

Tgt Ion: 114 Resp: 221490  
 Ion Ratio Lower Upper  
 114 100  
 63 21.9 0.0 43.0  
 88 16.3 0.0 33.0





#35

Dibromofluoromethane

Concen: 48.162 ug/l

RT: 7.89 min Scan# 982

Delta R.T. 0.01 min

Lab File: VW005570.D

Acq: 21 Sep 2018 19:32

Instrument :

MSVOA\_W

ClientSampleId :

PL-02-0920-18-A

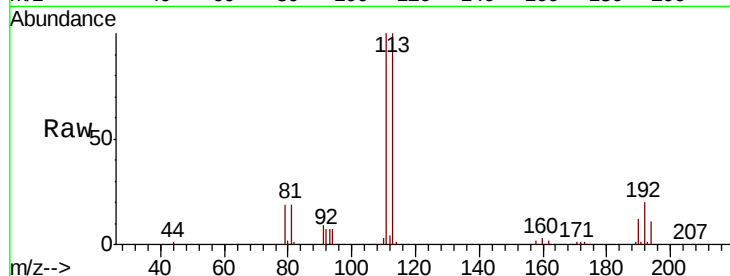
Tgt Ion:113 Resp: 67083

Ion Ratio Lower Upper

113 100

111 103.6 82.6 123.8

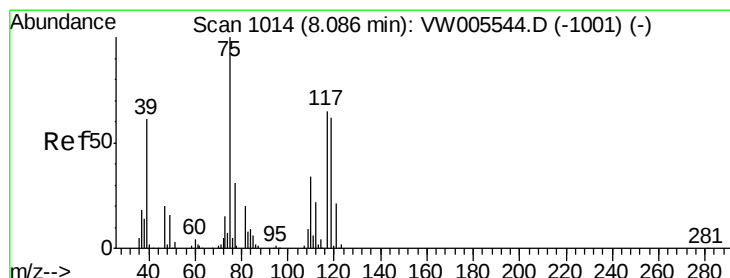
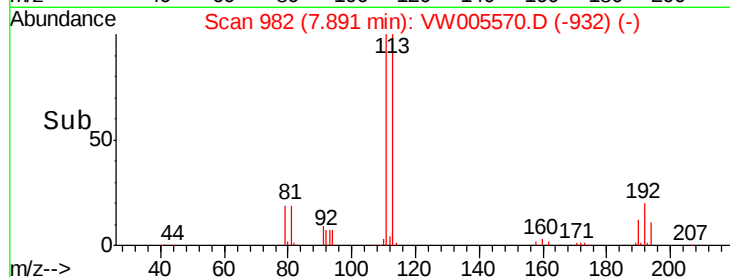
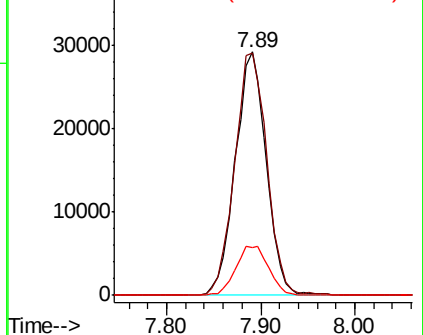
192 21.5 17.0 25.4



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: 5.001 ug/l

RT: 7.95 min Scan# 992

Delta R.T. -0.13 min

Lab File: VW005570.D

Acq: 21 Sep 2018 19:32

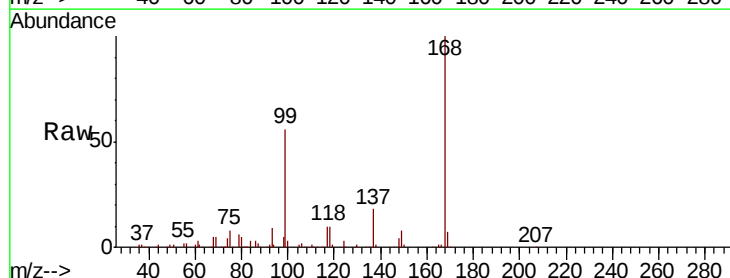
Tgt Ion: 75 Resp: 11150

Ion Ratio Lower Upper

75 100

110 9.7 17.0 50.9#

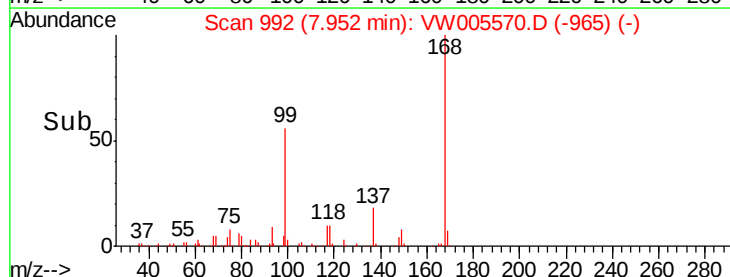
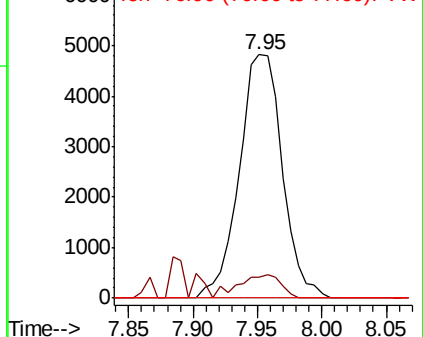
77 0.0 24.8 37.2#

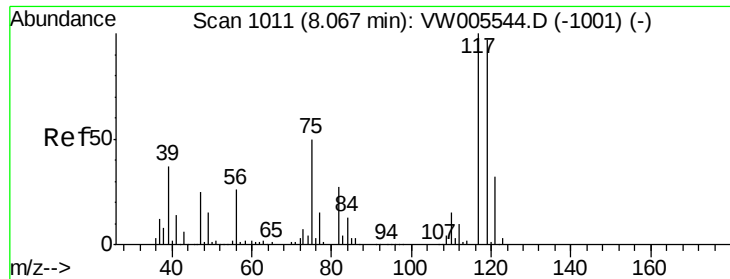


Abundance Ion 74.90 (74.60 to 75.60): VW

Ion 109.90 (109.60 to 110.60): V

Ion 76.90 (76.60 to 77.60): VW

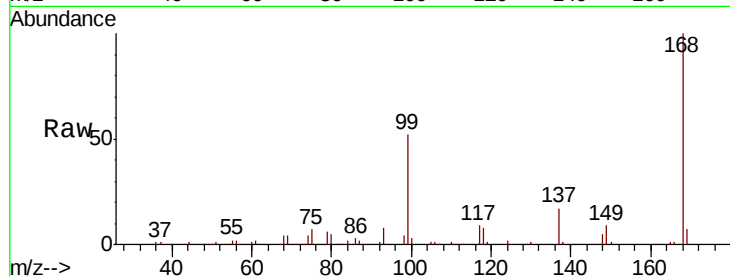




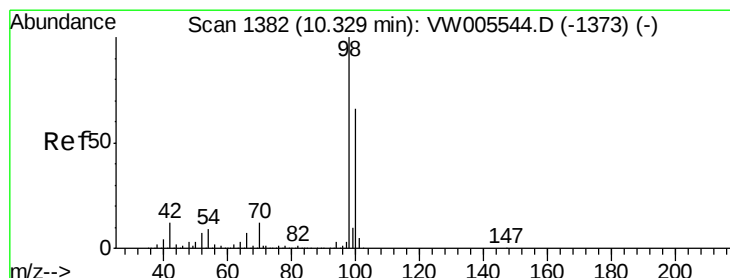
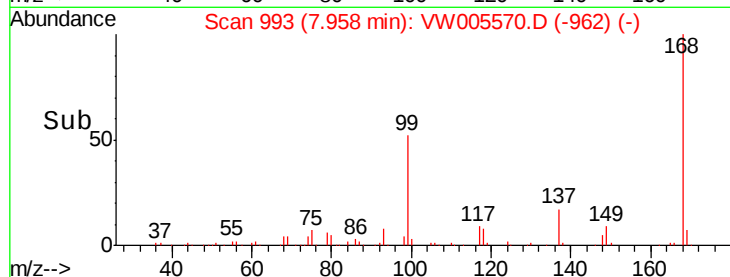
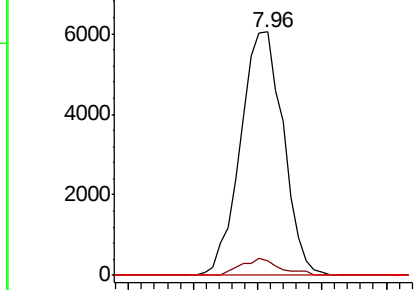
#38  
Carbon Tetrachloride  
Concen: 5.811 ug/l  
RT: 7.96 min Scan# 993  
Delta R.T. -0.11 min  
Lab File: VW005570.D  
Acq: 21 Sep 2018 19:32

Instrument :  
MSVOA\_W  
ClientSampleId :  
PL-02-0920-18-A

Tgt Ion: 117 Resp: 13884  
Ion Ratio Lower Upper  
117 100  
119 5.8 77.6 116.4#  
121 0.0 25.7 38.5#

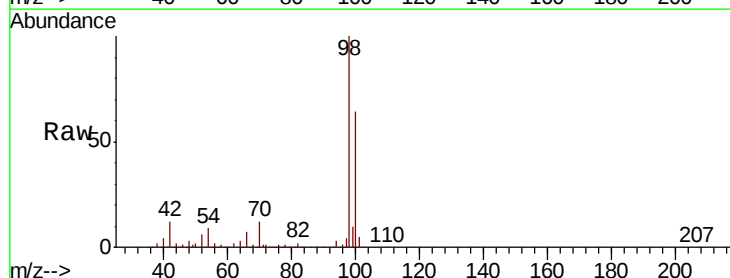


Abundance Ion 116.80 (116.50 to 117.50): V  
Ion 118.80 (118.50 to 119.50): V  
Ion 120.80 (120.50 to 121.50): V

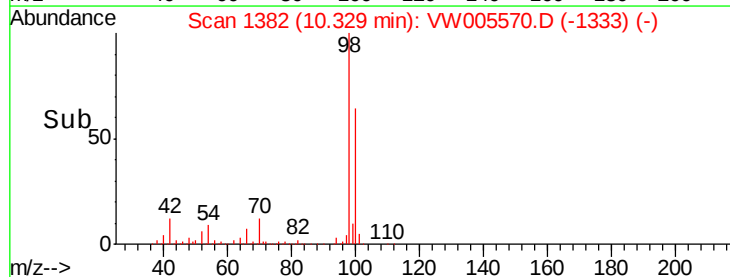
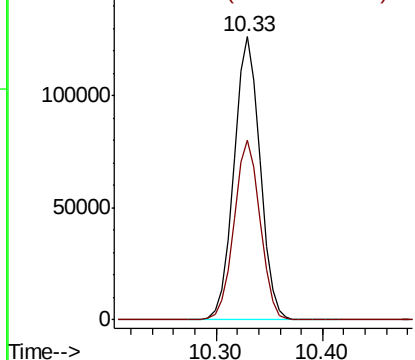


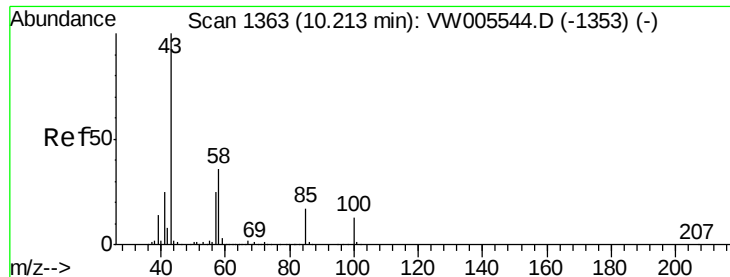
#50  
Toluene-d8  
Concen: 38.398 ug/l  
RT: 10.33 min Scan# 1382  
Delta R.T. -0.00 min  
Lab File: VW005570.D  
Acq: 21 Sep 2018 19:32

Tgt Ion: 98 Resp: 217772  
Ion Ratio Lower Upper  
98 100  
100 63.4 51.6 77.4



Abundance Ion 98.00 (97.70 to 98.70): VW  
Ion 100.00 (99.70 to 100.70): V





#51

4-Methyl-2-Pentanone

Concen: 1.219 ug/l

RT: 10.33 min Scan# 1382

Delta R.T. 0.12 min

Lab File: VW005570.D

Acq: 21 Sep 2018 19:32

Instrument :

MSVOA\_W

ClientSampleId :

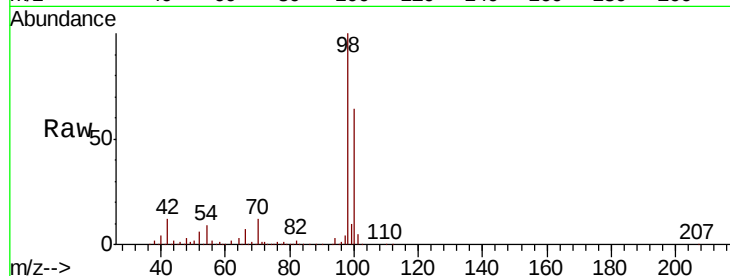
PL-02-0920-18-A

Tgt Ion: 43 Resp: 1133

Ion Ratio Lower Upper

43 100

58 160.8 30.0 45.0#



Abundance Ion 43.00 (42.70 to 43.70): VW

Ion 58.00 (57.70 to 58.70): VW

1200

1000

800

600

400

200

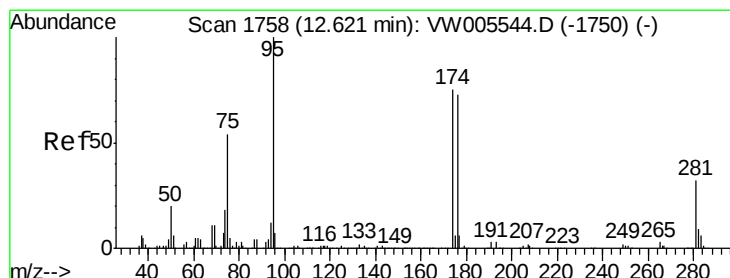
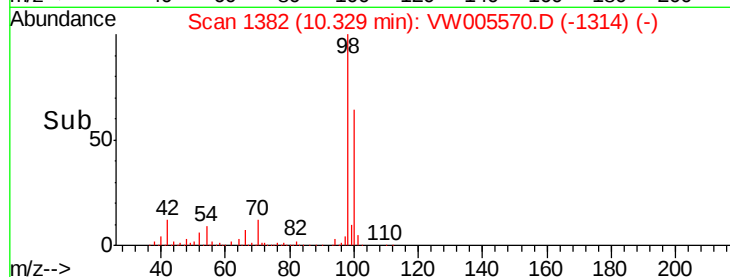
0

10.25

10.30

10.35

Time-->



#62

4-Bromofluorobenzene

Concen: 31.391 ug/l

RT: 12.62 min Scan# 1758

Delta R.T. -0.00 min

Lab File: VW005570.D

Acq: 21 Sep 2018 19:32

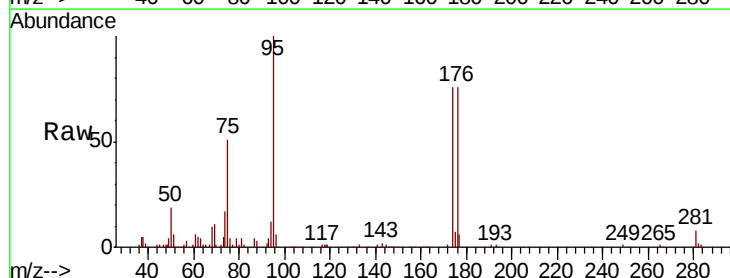
Tgt Ion: 95 Resp: 65877

Ion Ratio Lower Upper

95 100

174 83.5 0.0 163.8

176 81.1 0.0 158.0



Abundance Ion 94.90 (94.60 to 95.60): VW

Ion 173.80 (173.50 to 174.50): V

Ion 175.80 (175.50 to 176.50): V

50000

40000

30000

20000

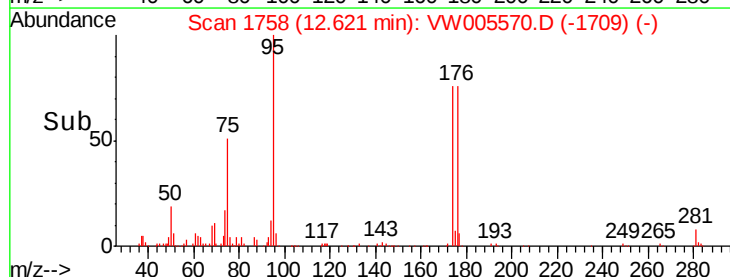
10000

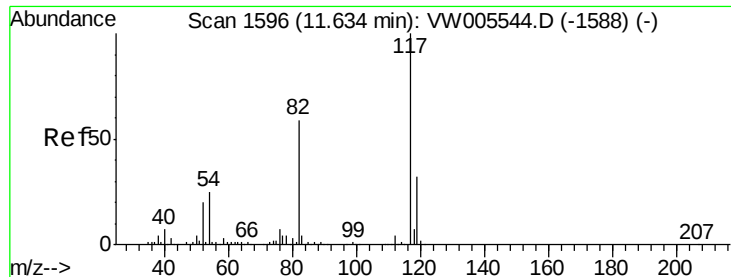
0

12.60

12.70

Time-->

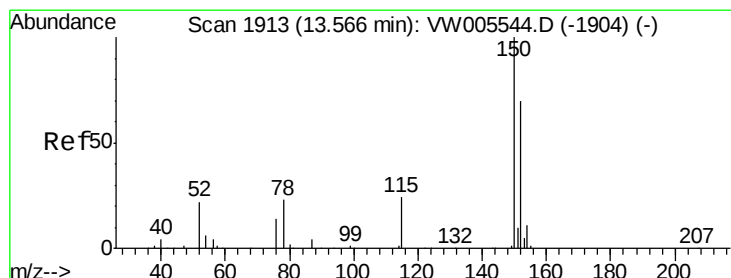
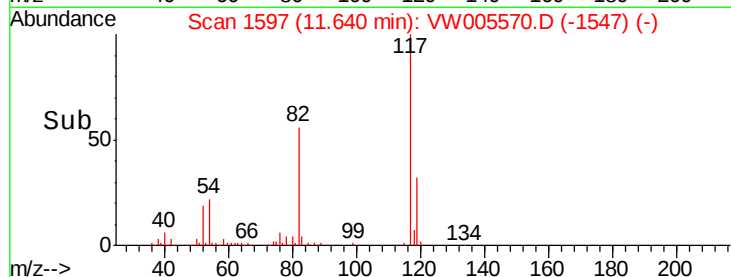
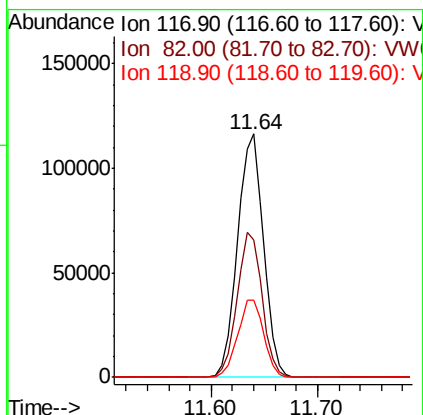
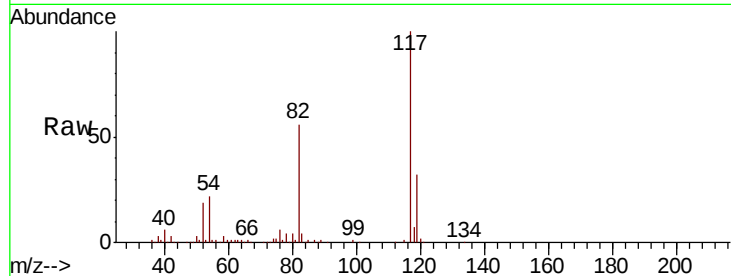




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.64 min Scan# 1597  
Delta R.T. 0.01 min  
Lab File: VW005570.D  
Acq: 21 Sep 2018 19:32

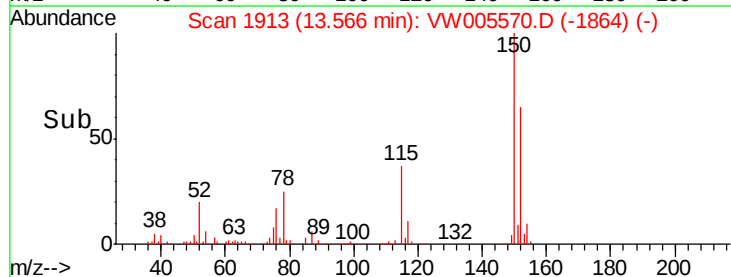
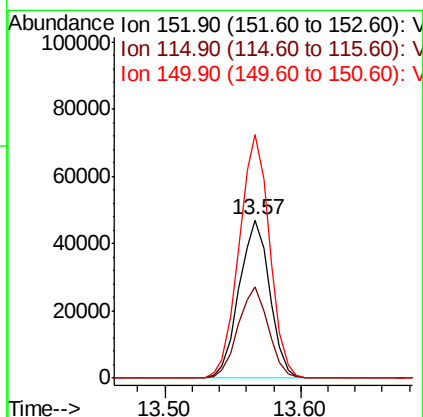
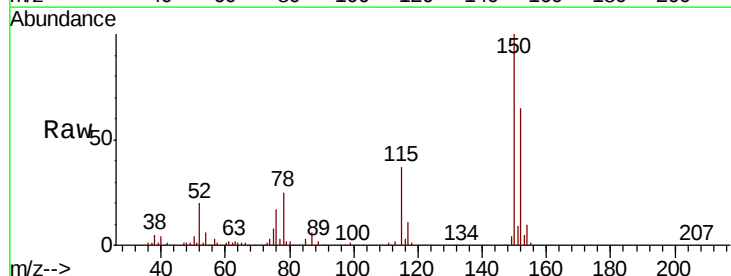
Instrument :  
MSVOA\_W  
ClientSampleId :  
PL-02-0920-18-A

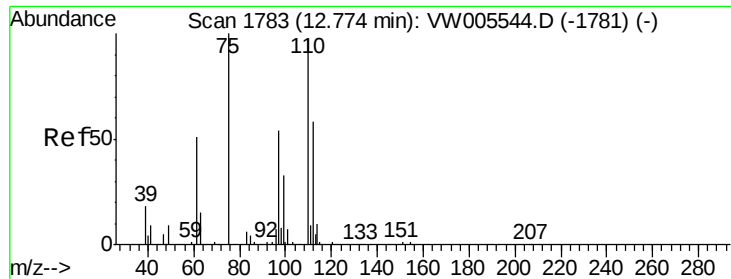
Tgt Ion:117 Resp: 199519  
Ion Ratio Lower Upper  
117 100  
82 56.4 46.9 70.3  
119 31.9 25.7 38.5



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 13.57 min Scan# 1913  
Delta R.T. -0.00 min  
Lab File: VW005570.D  
Acq: 21 Sep 2018 19:32

Tgt Ion:152 Resp: 73576  
Ion Ratio Lower Upper  
152 100  
115 57.3 30.0 90.0  
150 153.7 0.0 348.6





#76

1,2,3-Trichloropropane

Concen: 53.957 ug/l

RT: 12.62 min Scan# 1758

Delta R.T. -0.15 min

Lab File: VW005570.D

Acq: 21 Sep 2018 19:32

Instrument :

MSVOA\_W

ClientSampleId :

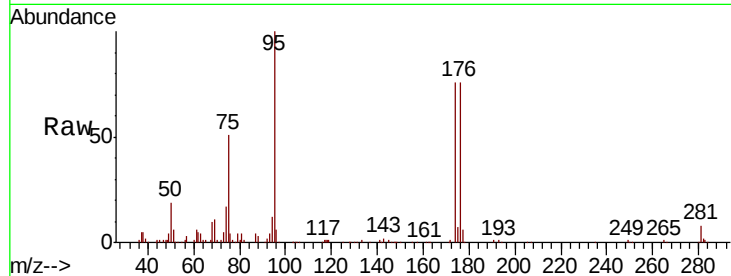
PL-02-0920-18-A

Tgt Ion: 75 Resp: 33841

Ion Ratio Lower Upper

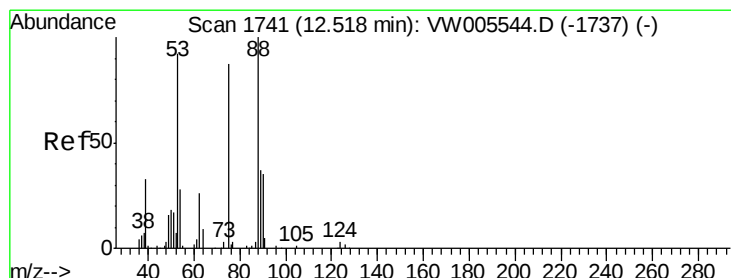
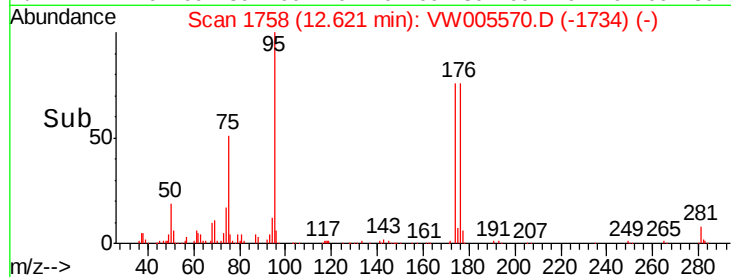
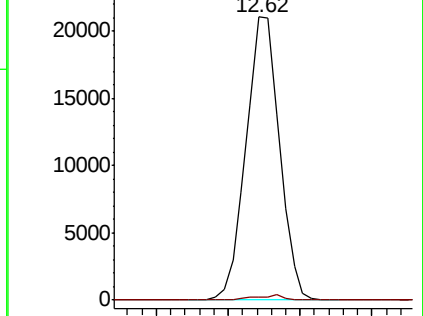
75 100

77 1.6 0.0 0.0#



Abundance Ion 74.90 (74.60 to 75.60): VW

Ion 77.00 (76.70 to 77.70): VW



#81

trans-1,4-Dichloro-2-butene

Concen: 121.527 ug/l

RT: 12.62 min Scan# 1758

Delta R.T. 0.10 min

Lab File: VW005570.D

Acq: 21 Sep 2018 19:32

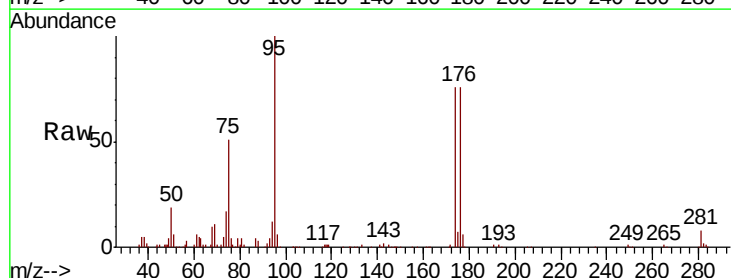
Tgt Ion: 75 Resp: 33841

Ion Ratio Lower Upper

75 100

53 0.3 85.8 128.6#

89 0.0 37.3 55.9#



Abundance Ion 74.90 (74.60 to 75.60): VW

Ion 53.00 (52.70 to 53.70): VW

Ion 88.90 (88.60 to 89.60): VW

