

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_W\DATA\VW082319\  
 Data File : VW012137.D  
 Acq On : 23 Aug 2019 17:15  
 Operator : SY/VA  
 Sample : K4496-04  
 Misc : 6.60G/5ML/MSVOA\_W/SOIL  
 ALS Vial : 16 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 S600-M-1.0-1.5-082219-FD

Quant Time: Aug 26 07:29:02 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W082319S.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Aug 26 07:18:31 2019  
 Response via : Initial Calibration

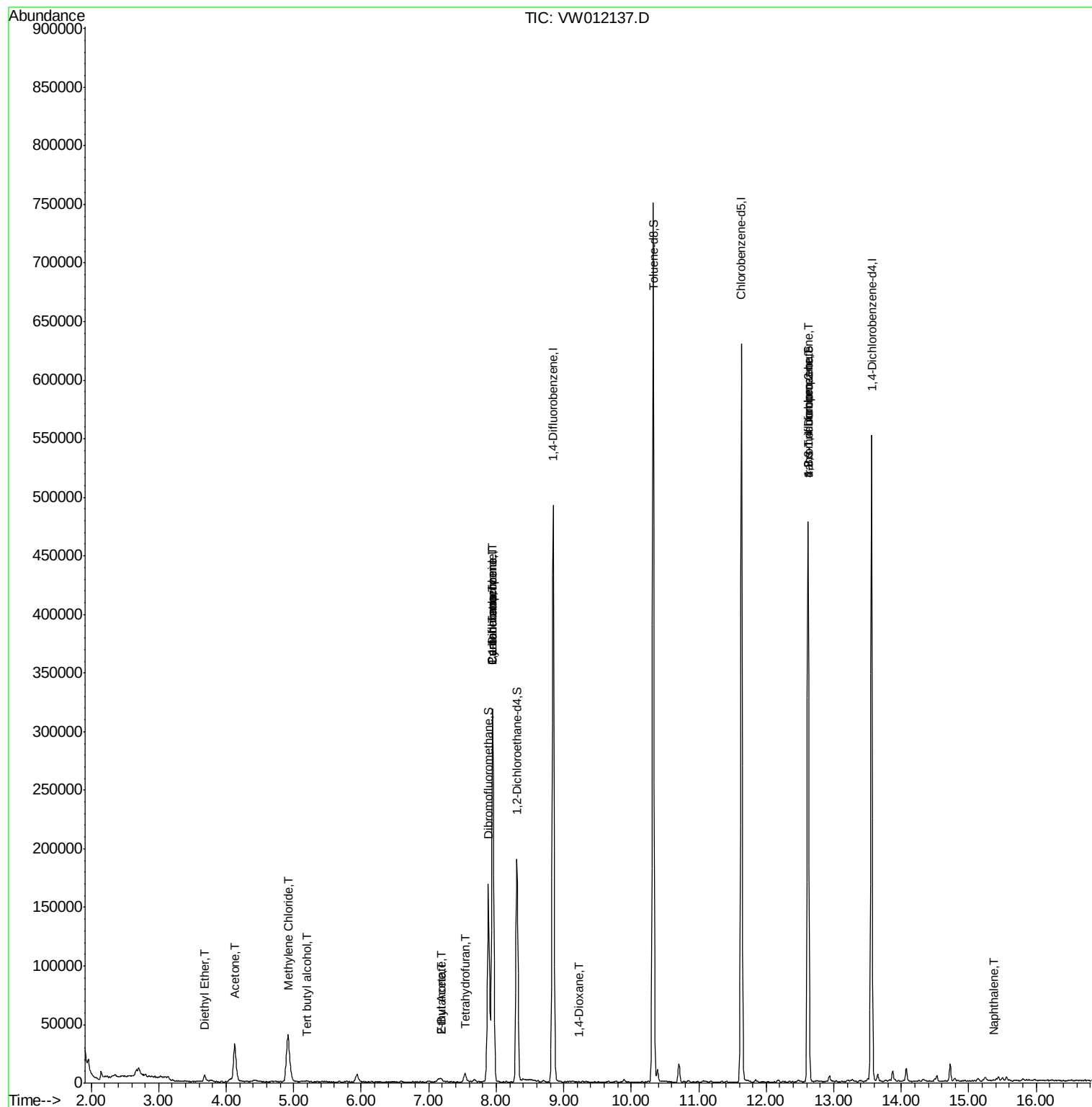
| Internal Standards             | R.T.  | QIon | Response | Conc    | Units   | Dev(Min) |
|--------------------------------|-------|------|----------|---------|---------|----------|
| 1) Pentafluorobenzene          | 7.95  | 168  | 234968   | 50.00   | ug/l    | 0.00     |
| 34) 1,4-Difluorobenzene        | 8.84  | 114  | 385065   | 50.00   | ug/l    | 0.00     |
| 63) Chlorobenzene-d5           | 11.63 | 117  | 323662   | 50.00   | ug/l    | 0.00     |
| 72) 1,4-Dichlorobenzene-d4     | 13.56 | 152  | 135078   | 50.00   | ug/l    | 0.00     |
| System Monitoring Compounds    |       |      |          |         |         |          |
| 33) 1,2-Dichloroethane-d4      | 8.31  | 65   | 147229   | 52.71   | ug/l    | 0.00     |
| Spiked Amount 50.000           |       |      | Recovery | =       | 105.42% |          |
| 35) Dibromofluoromethane       | 7.88  | 113  | 118101   | 51.38   | ug/l    | 0.00     |
| Spiked Amount 50.000           |       |      | Recovery | =       | 102.76% |          |
| 50) Toluene-d8                 | 10.32 | 98   | 474744   | 50.94   | ug/l    | 0.00     |
| Spiked Amount 50.000           |       |      | Recovery | =       | 101.88% |          |
| 62) 4-Bromofluorobenzene       | 12.62 | 95   | 152682   | 46.48   | ug/l    | 0.00     |
| Spiked Amount 50.000           |       |      | Recovery | =       | 92.96%  |          |
| Target Compounds               |       |      |          |         |         |          |
| 8) Diethyl Ether               | 3.68  | 74   | 2907     | 2.223   | ug/l    | 89       |
| 11) Tert butyl alcohol         | 5.19  | 59   | 1648     | 9.804   | ug/l #  | 82       |
| 16) Acetone                    | 4.12  | 43   | 59933    | 83.940  | ug/l    | 99       |
| 20) Methylene Chloride         | 4.92  | 84   | 30348    | 11.243  | ug/l    | 96       |
| 25) 2-Butanone                 | 7.19  | 43   | 3411     | 3.516   | ug/l #  | 89       |
| 29) Tetrahydrofuran            | 7.54  | 42   | 6060     | 10.410  | ug/l    | 95       |
| 31) Cyclohexane                | 7.95  | 56   | 6017     | 1.196   | ug/l #  | 1        |
| 36) 1,1-Dichloropropene        | 7.95  | 75   | 20106    | 5.053   | ug/l #  | 52       |
| 37) Ethyl Acetate              | 7.19  | 43   | 3411     | 1.564   | ug/l #  | 74       |
| 38) Carbon Tetrachloride       | 7.95  | 117  | 23068    | 6.698   | ug/l #  | 16       |
| 49) 1,4-Dioxane                | 9.21  | 88   | 44       | 2.209   | ug/l #  | 1        |
| 76) 1,2,3-Trichloropropane     | 12.62 | 75   | 82917    | 63.028  | ug/l #  | 100      |
| 81) trans-1,4-Dichloro-2-buten | 12.62 | 75   | 82917    | 138.191 | ug/l #  | 6        |
| 95) Naphthalene                | 15.36 | 128  | 977      | 4.496   | ug/l #  | 92       |

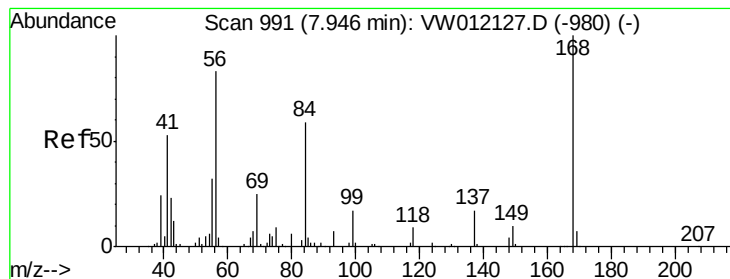
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA\_W\DATA\VW082319\  
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S600-M-1.0-1.5-082219-FD

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Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_W\METHOD\82W082319S.M  
Quant Title : SW846 8260  
QLast Update : Mon Aug 26 07:18:31 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.95 min Scan# 992

Delta R.T. 0.01 min

Lab File: VW012137.D

Acq: 23 Aug 2019 17:15

Instrument :

MSVOA\_W

ClientSampleId :

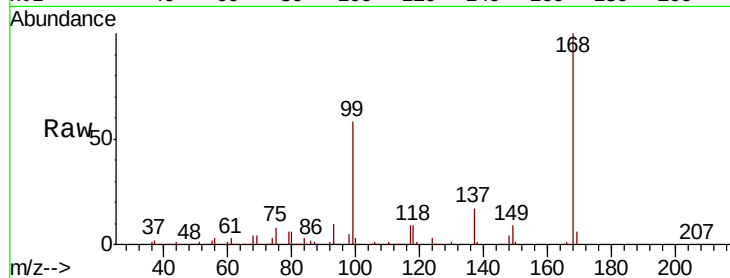
S600-M-1.0-1.5-082219-FD

Tgt Ion:168 Resp: 234968

Ion Ratio Lower Upper

168 100

99 58.2 49.2 73.8



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VW

7.95

120000

100000

80000

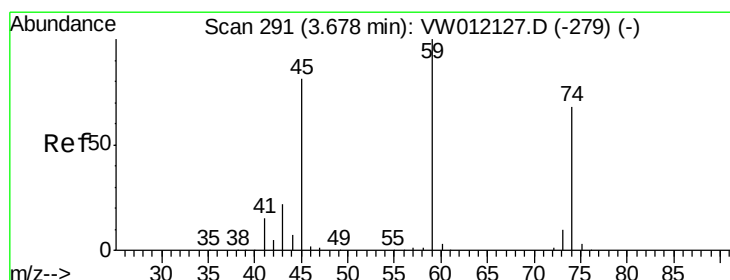
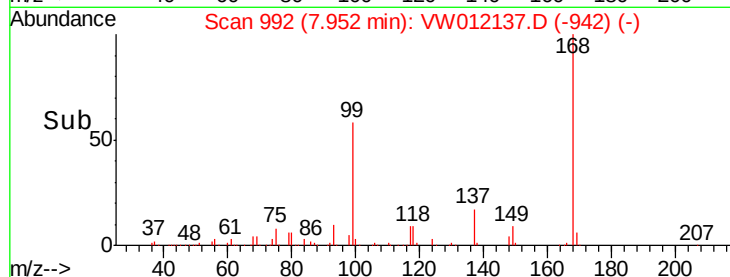
60000

40000

20000

0

Time--> 7.80 7.90 8.00 8.10



#8

Diethyl Ether

Concen: 2.223 ug/l

RT: 3.68 min Scan# 292

Delta R.T. 0.01 min

Lab File: VW012137.D

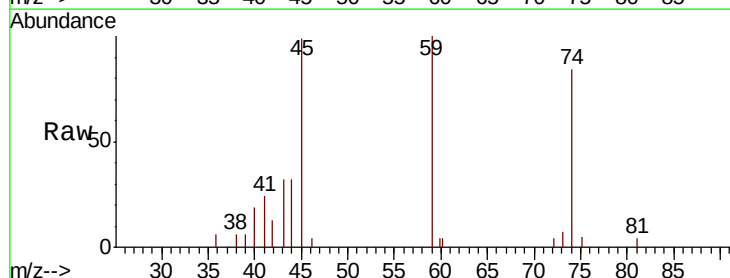
Acq: 23 Aug 2019 17:15

Tgt Ion: 74 Resp: 2907

Ion Ratio Lower Upper

74 100

45 130.5 59.2 177.6



Abundance Ion 74.00 (73.70 to 74.70): VW

Ion 45.00 (44.70 to 45.70): VW

3.68

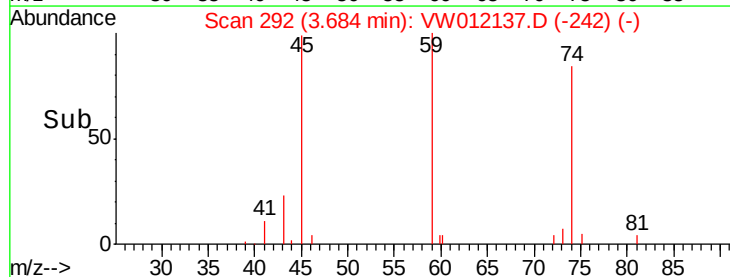
1500

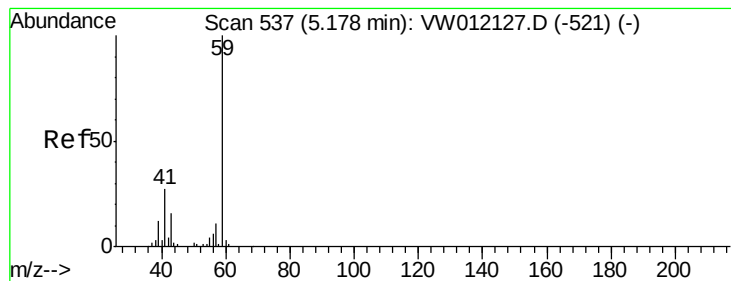
1000

500

0

Time--> 3.60 3.65 3.70 3.75





#11

Tert butyl alcohol

Concen: 9.804 ug/l

RT: 5.19 min Scan# 539

Delta R.T. 0.01 min

Lab File: VW012137.D

Acq: 23 Aug 2019 17:15

Instrument :

MSVOA\_W

ClientSampleId :

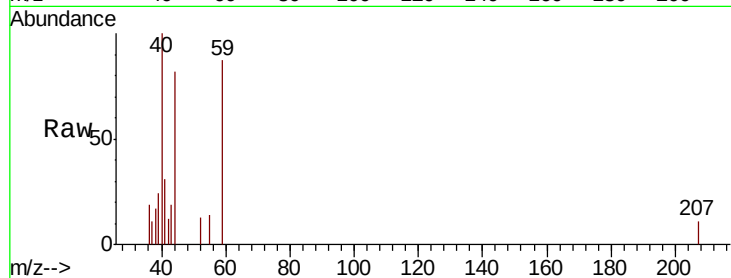
S600-M-1.0-1.5-082219-FD

Tgt Ion: 59 Resp: 1648

Ion Ratio Lower Upper

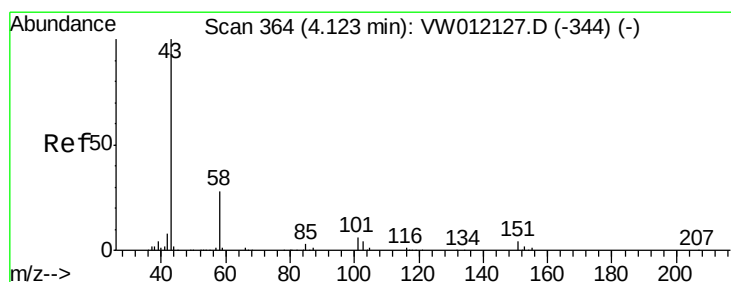
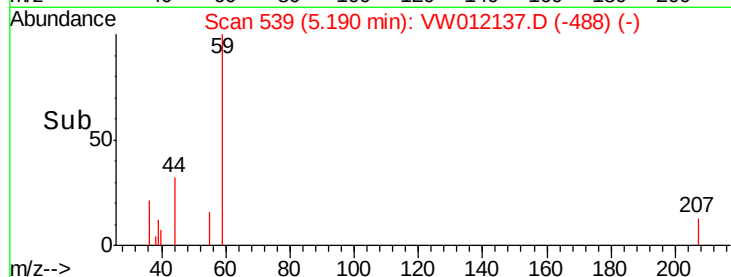
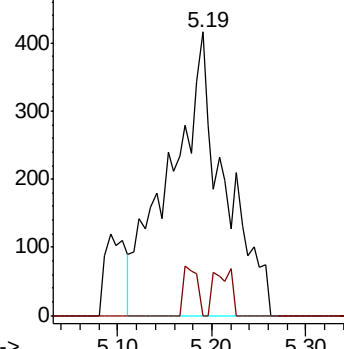
59 100

57 4.4 9.0 13.4#



Abundance Ion 59.00 (58.70 to 59.70): VW

Ion 57.00 (56.70 to 57.70): VW



#16

Acetone

Concen: 83.940 ug/l

RT: 4.12 min Scan# 364

Delta R.T. 0.00 min

Lab File: VW012137.D

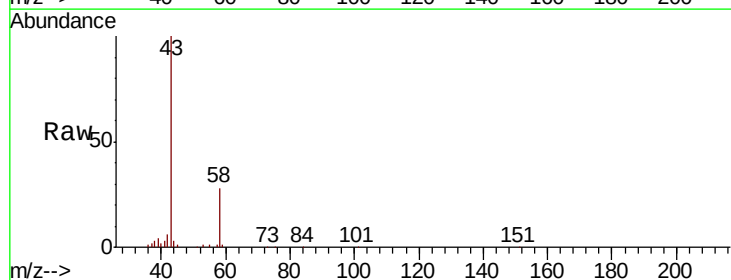
Acq: 23 Aug 2019 17:15

Tgt Ion: 43 Resp: 59933

Ion Ratio Lower Upper

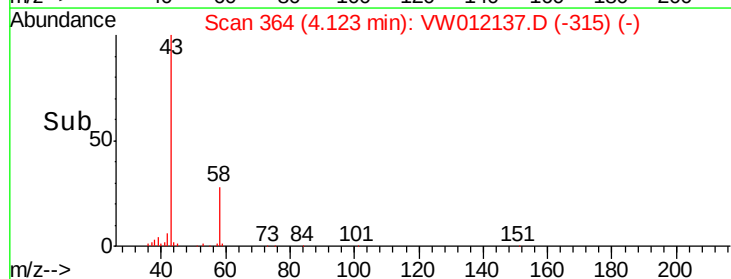
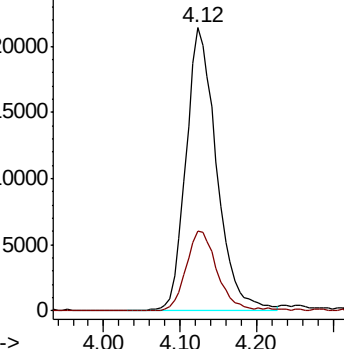
43 100

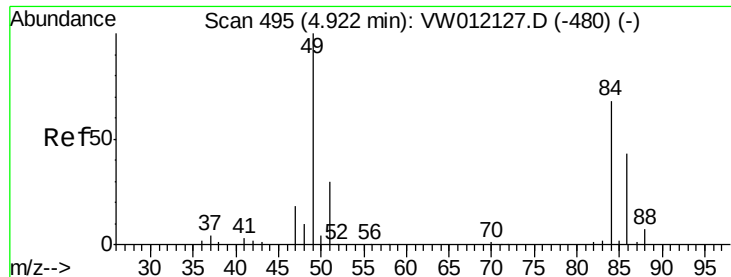
58 28.4 22.4 33.6



Abundance Ion 43.00 (42.70 to 43.70): VW

Ion 58.00 (57.70 to 58.70): VW

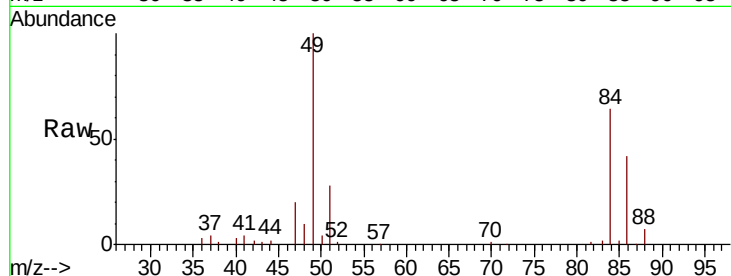




#20  
Methylene Chloride  
Concen: 11.243 ug/l  
RT: 4.92 min Scan# 494  
Delta R.T. -0.01 min  
Lab File: VW012137.D  
Acq: 23 Aug 2019 17:15

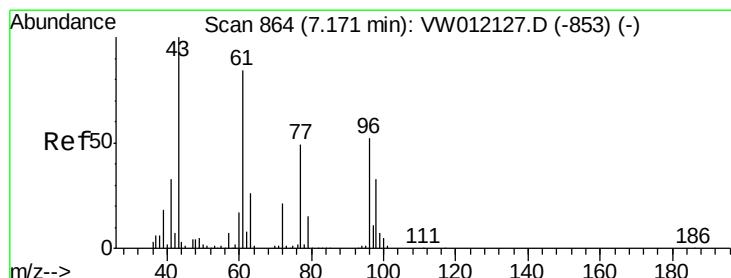
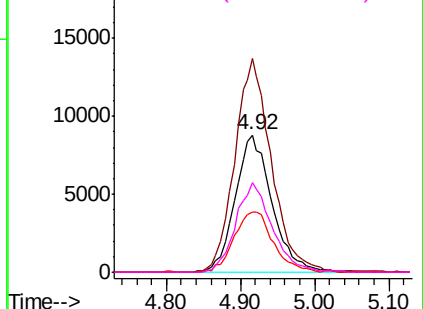
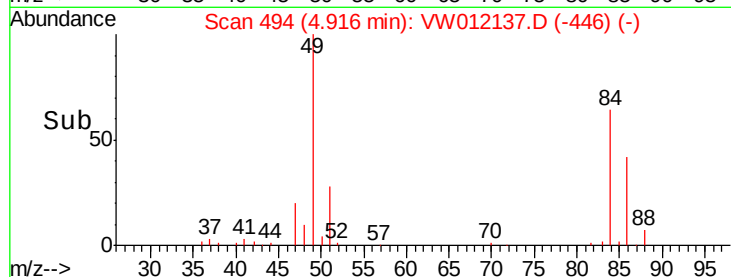
Instrument :  
MSVOA\_W  
ClientSampleId :  
S600-M-1.0-1.5-082219-FD

Tgt Ion: 84 Resp: 30348  
Ion Ratio Lower Upper  
84 100  
49 155.7 117.8 176.8  
51 44.3 35.6 53.4  
86 65.5 51.2 76.8



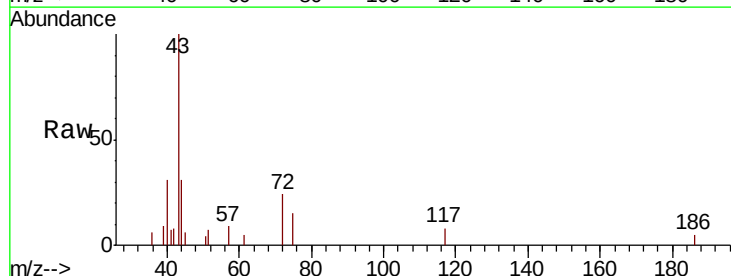
Abundance

Ion 83.90 (83.60 to 84.60): VW  
Ion 48.90 (48.60 to 49.60): VW  
Ion 50.90 (50.60 to 51.60): VW  
Ion 85.90 (85.60 to 86.60): VW



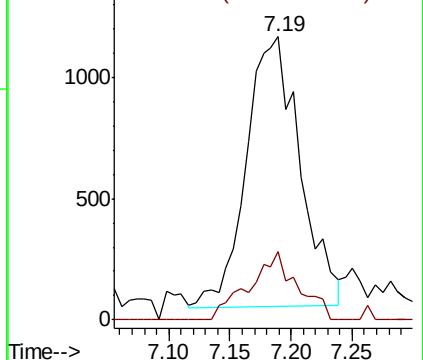
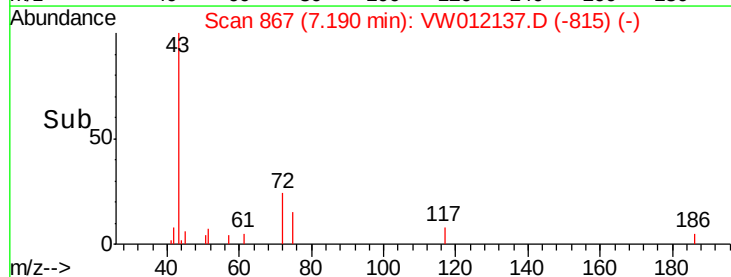
#25  
2-Butanone  
Concen: 3.516 ug/l  
RT: 7.19 min Scan# 867  
Delta R.T. 0.02 min  
Lab File: VW012137.D  
Acq: 23 Aug 2019 17:15

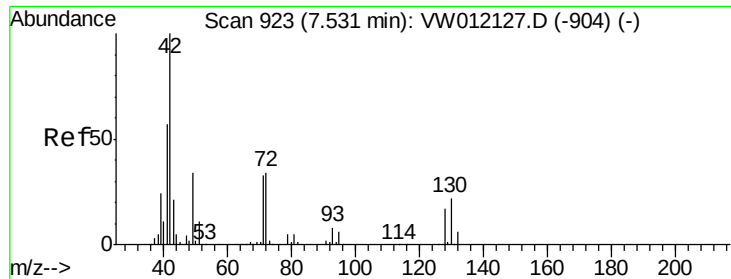
Tgt Ion: 43 Resp: 3411  
Ion Ratio Lower Upper  
43 100  
72 25.6 16.6 24.8#



Abundance

Ion 43.00 (42.70 to 43.70): VW  
Ion 72.00 (71.70 to 72.70): VW

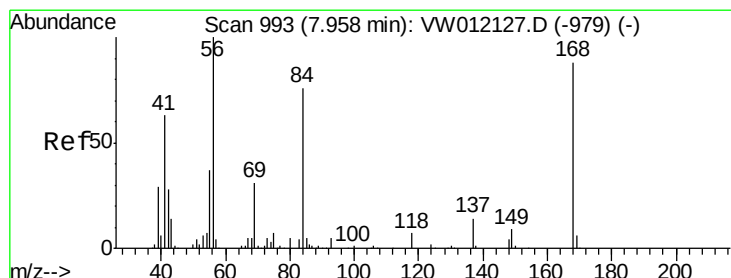
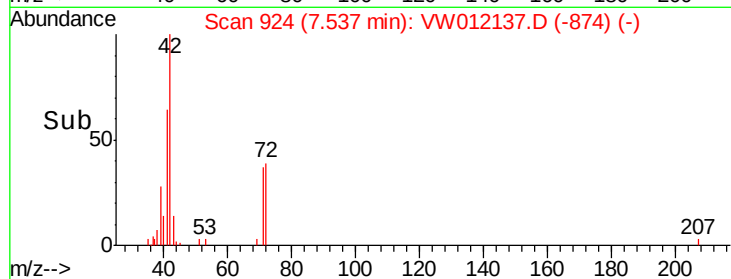
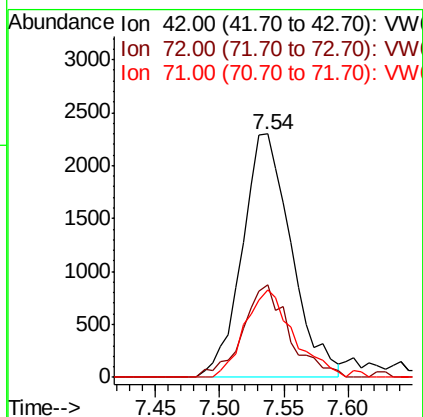
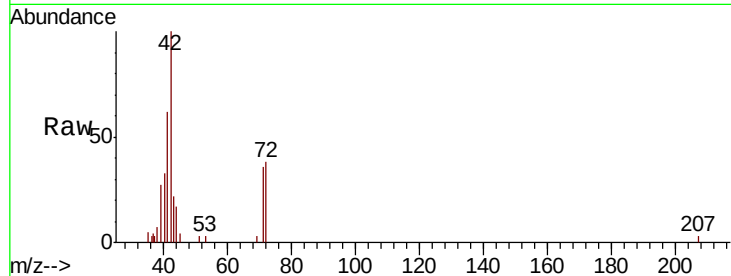




#29  
Tetrahydrofuran  
Concen: 10.410 ug/l  
RT: 7.54 min Scan# 924  
Delta R.T. 0.01 min  
Lab File: VW012137.D  
Acq: 23 Aug 2019 17:15

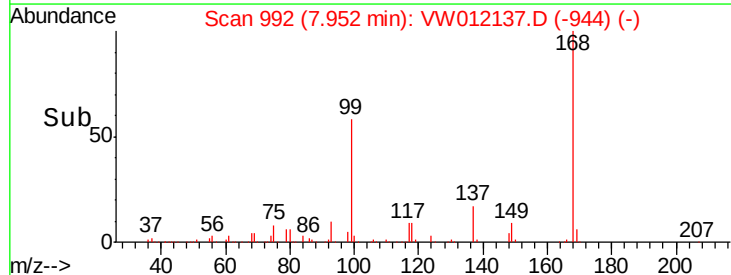
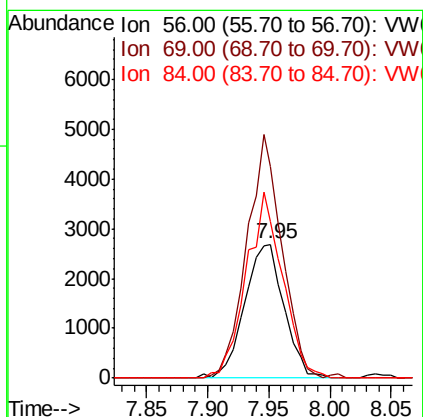
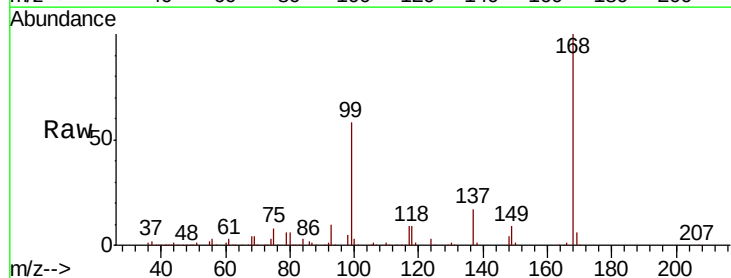
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S600-M-1.0-1.5-082219-FD

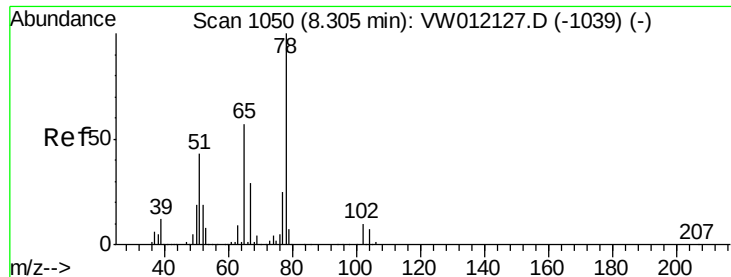
Tgt Ion: 42 Resp: 6060  
Ion Ratio Lower Upper  
42 100  
72 36.1 27.3 40.9  
71 35.4 25.5 38.3



#31  
Cyclohexane  
Concen: 1.196 ug/l  
RT: 7.95 min Scan# 992  
Delta R.T. -0.01 min  
Lab File: VW012137.D  
Acq: 23 Aug 2019 17:15

Tgt Ion: 56 Resp: 6017  
Ion Ratio Lower Upper  
56 100  
69 158.3 24.9 37.3#  
84 117.5 60.6 90.8#





#33

1,2-Dichloroethane-d4

Concen: 52.710 ug/l

RT: 8.31 min Scan# 1050

Delta R.T. 0.00 min

Lab File: VW012137.D

Acq: 23 Aug 2019 17:15

Instrument :

MSVOA\_W

ClientSampleId :

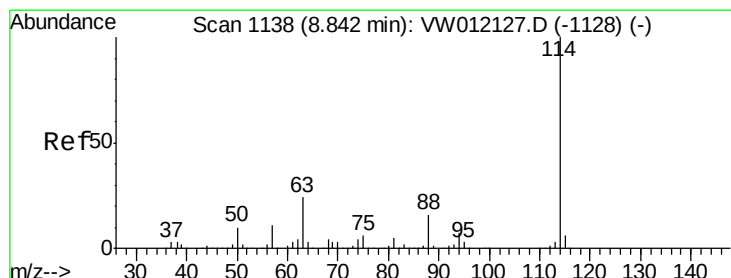
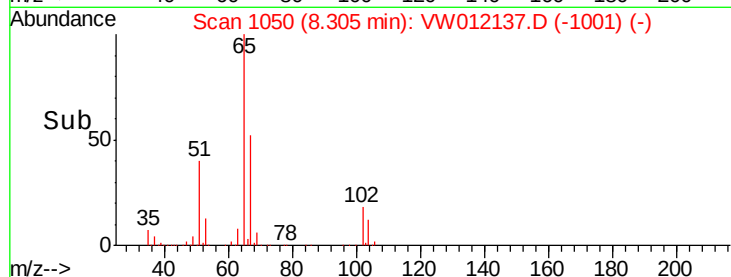
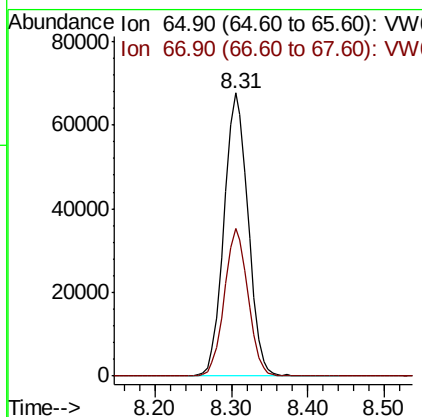
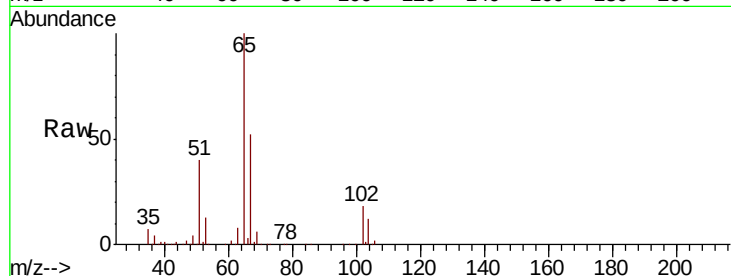
S600-M-1.0-1.5-082219-FD

Tgt Ion: 65 Resp: 147229

Ion Ratio Lower Upper

65 100

67 51.0 0.0 102.6



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.84 min Scan# 1138

Delta R.T. -0.00 min

Lab File: VW012137.D

Acq: 23 Aug 2019 17:15

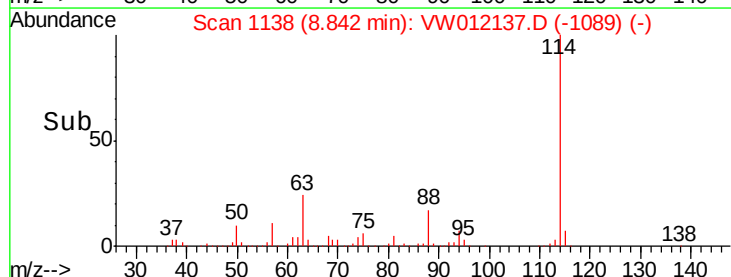
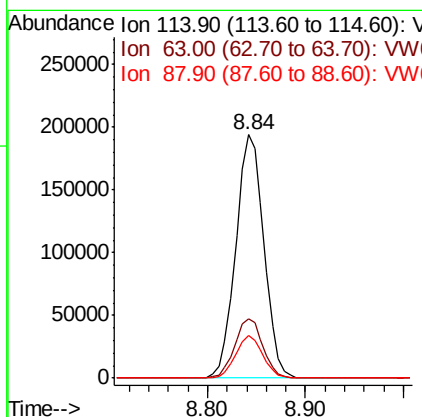
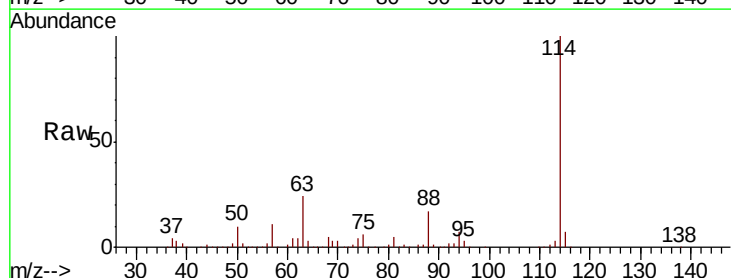
Tgt Ion: 114 Resp: 385065

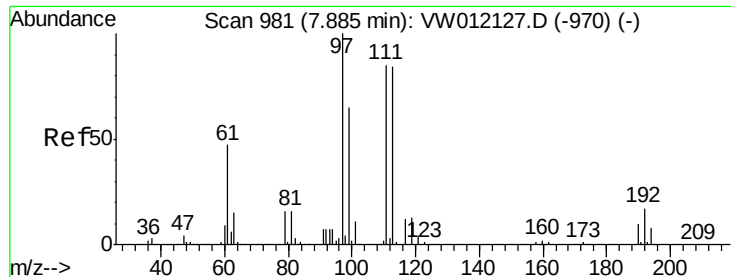
Ion Ratio Lower Upper

114 100

63 24.2 0.0 48.6

88 17.3 0.0 32.2

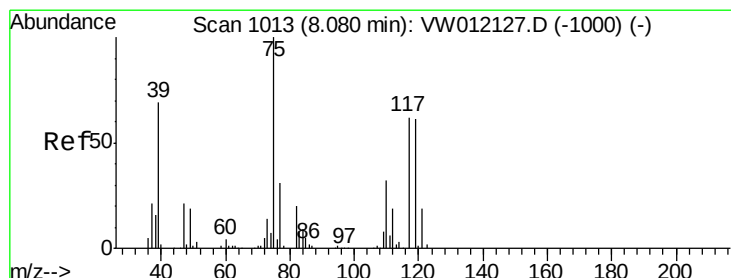
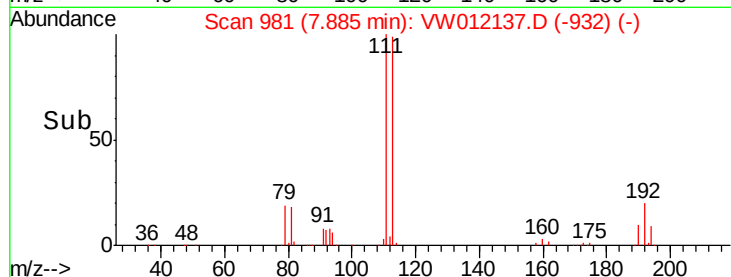
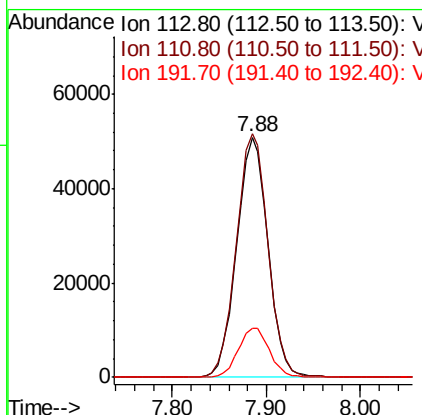
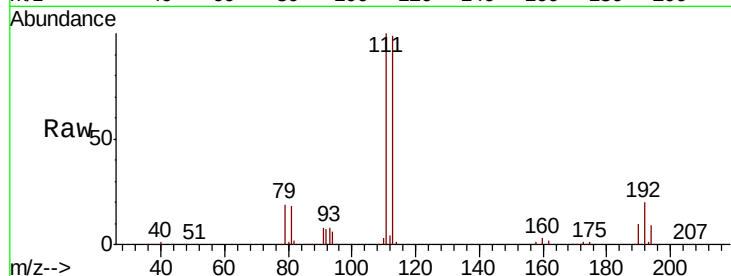




#35  
 Dibromofluoromethane  
 Concen: 51.383 ug/l  
 RT: 7.88 min Scan# 981  
 Delta R.T. 0.00 min  
 Lab File: VW012137.D  
 Acq: 23 Aug 2019 17:15

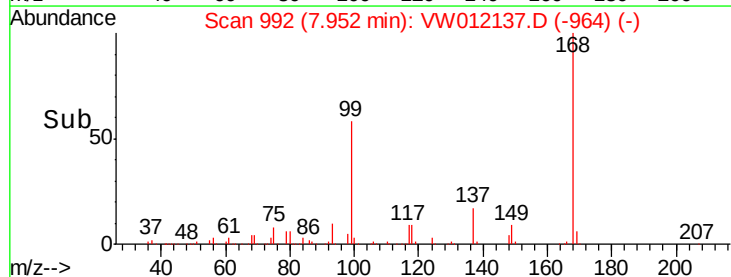
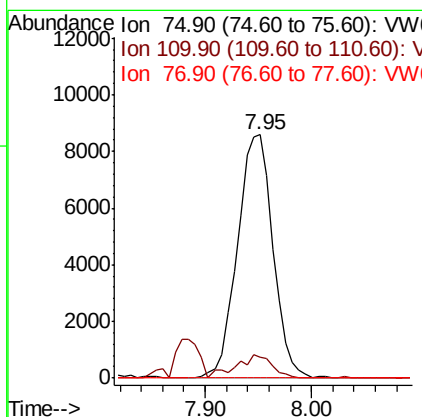
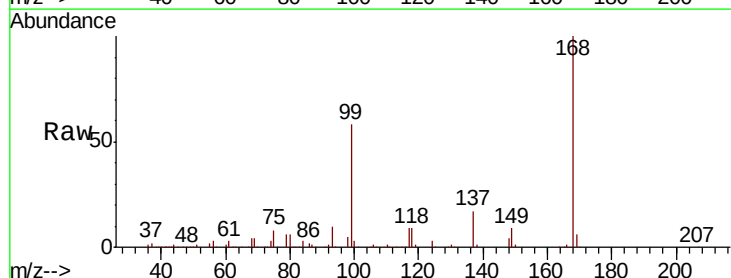
Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 S600-M-1.0-1.5-082219-FD

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 113     | 100   |       |       |
| 111     | 102.7 | 82.7  | 124.1 |
| 192     | 20.4  | 16.2  | 24.2  |

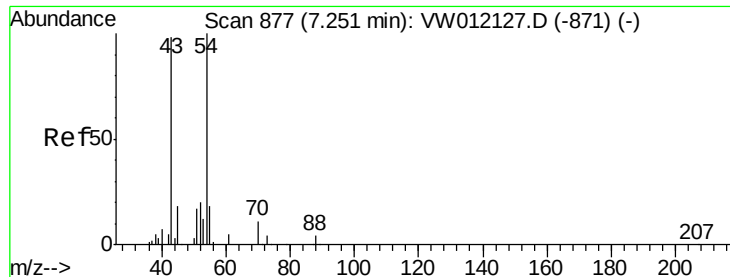


#36  
 1,1-Dichloropropene  
 Concen: 5.053 ug/l  
 RT: 7.95 min Scan# 992  
 Delta R.T. -0.13 min  
 Lab File: VW012137.D  
 Acq: 23 Aug 2019 17:15

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 110     | 8.7   | 15.6  | 46.8# |
| 77      | 0.0   | 24.6  | 36.8# |



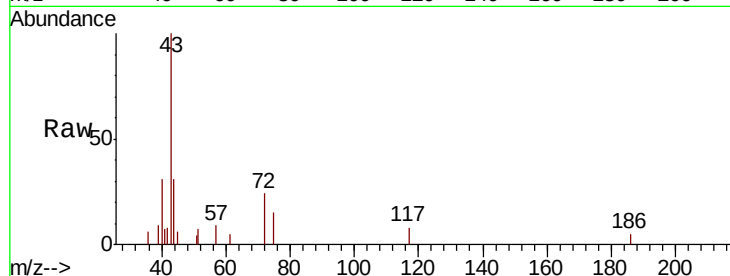




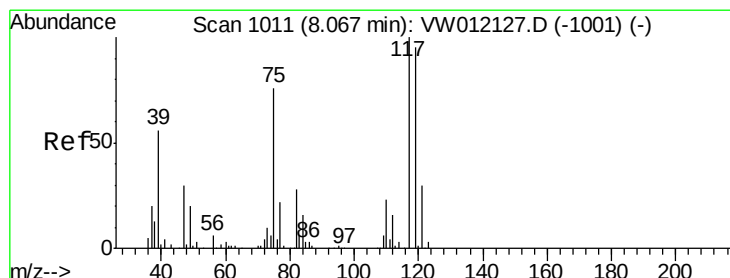
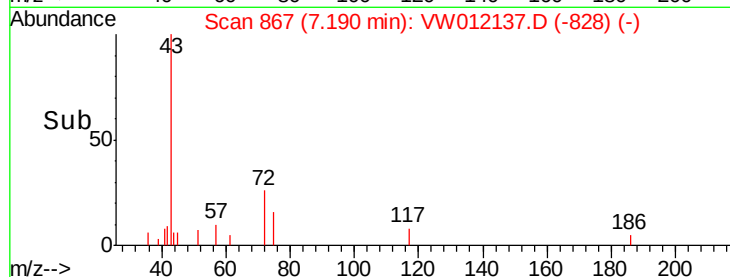
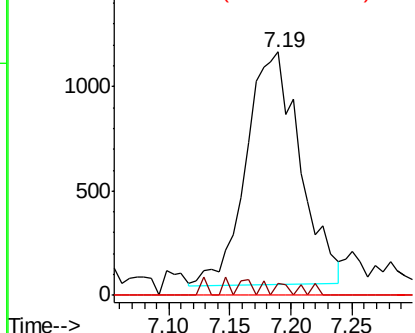
#37  
Ethyl Acetate  
Concen: 1.564 ug/l  
RT: 7.19 min Scan# 867  
Delta R.T. -0.06 min  
Lab File: VW012137.D  
Acq: 23 Aug 2019 17:15

Instrument :  
MSVOA\_W  
ClientSampleId :  
S600-M-1.0-1.5-082219-FD

Tgt Ion: 43 Resp: 3411  
Ion Ratio Lower Upper  
43 100  
61 1.2 9.2 13.8#  
70 0.0 6.9 10.3#

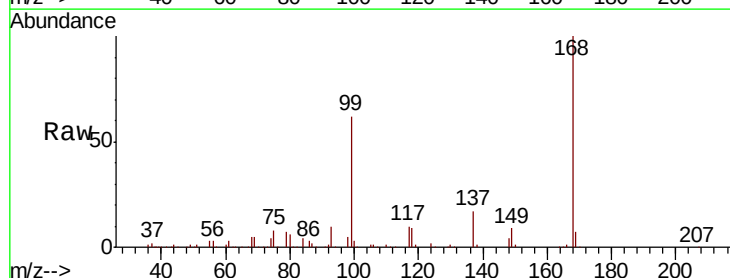


Abundance Ion 43.00 (42.70 to 43.70): VW  
Ion 60.90 (60.60 to 61.60): VW  
Ion 70.00 (69.70 to 70.70): VW

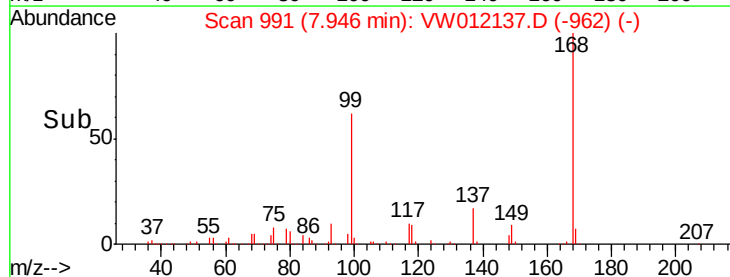
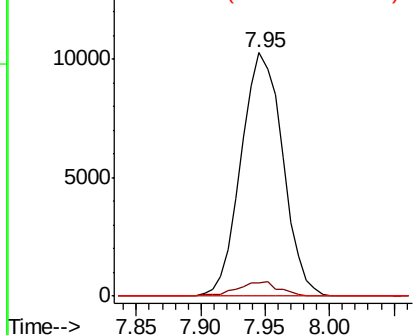


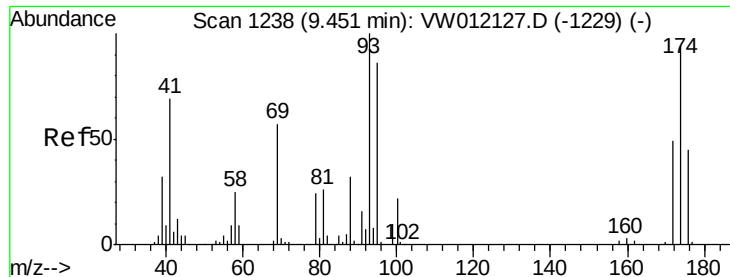
#38  
Carbon Tetrachloride  
Concen: 6.698 ug/l  
RT: 7.95 min Scan# 991  
Delta R.T. -0.12 min  
Lab File: VW012137.D  
Acq: 23 Aug 2019 17:15

Tgt Ion: 117 Resp: 23068  
Ion Ratio Lower Upper  
117 100  
119 5.2 76.2 114.2#  
121 0.0 23.8 35.8#



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: 2.209 ug/l

RT: 9.21 min Scan# 1199

Delta R.T. -0.24 min

Lab File: VW012137.D

Acq: 23 Aug 2019 17:15

Instrument :

MSVOA\_W

ClientSampleId :

S600-M-1.0-1.5-082219-FD

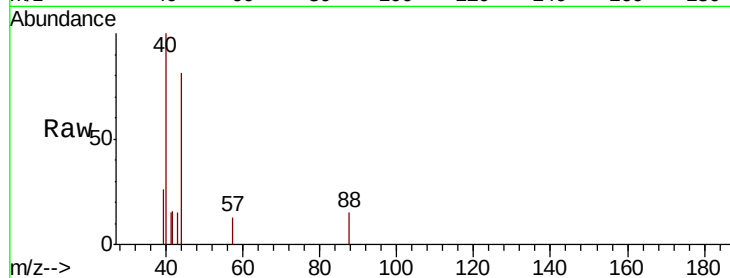
Tgt Ion: 88 Resp: 44

Ion Ratio Lower Upper

88 100

43 325.0 32.9 49.3#

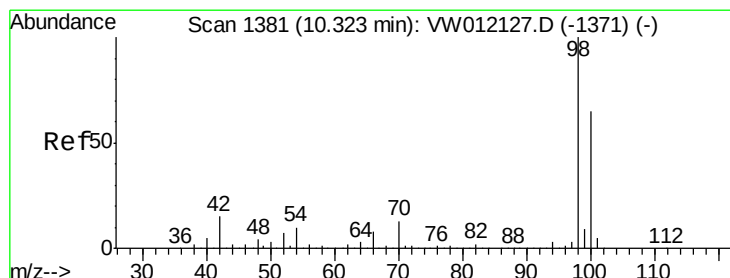
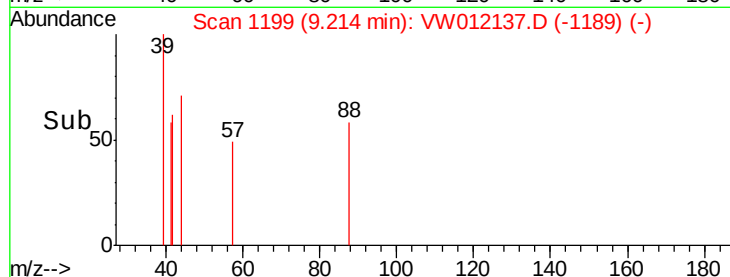
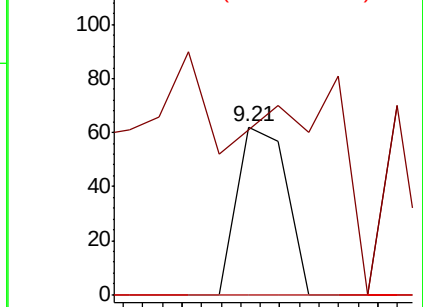
58 0.0 71.0 106.4#



Abundance Ion 88.00 (87.70 to 88.70): VW

Ion 43.00 (42.70 to 43.70): VW

Ion 58.00 (57.70 to 58.70): VW



#50

Toluene-d8

Concen: 50.940 ug/l

RT: 10.32 min Scan# 1381

Delta R.T. 0.00 min

Lab File: VW012137.D

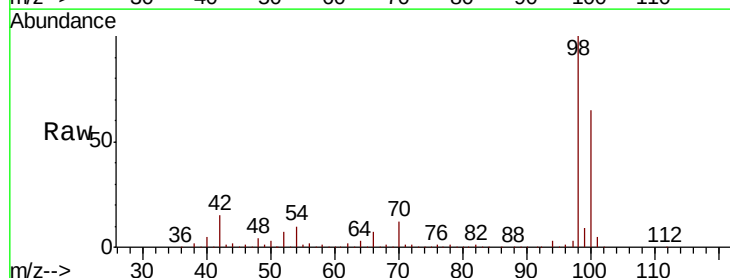
Acq: 23 Aug 2019 17:15

Tgt Ion: 98 Resp: 474744

Ion Ratio Lower Upper

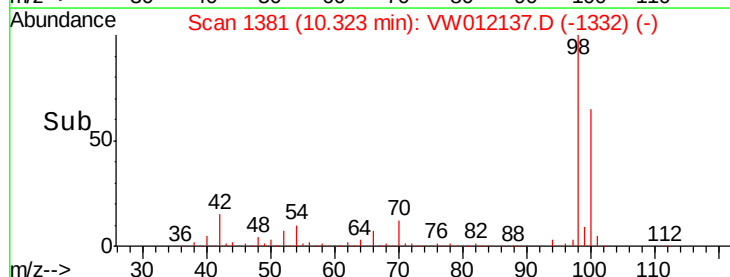
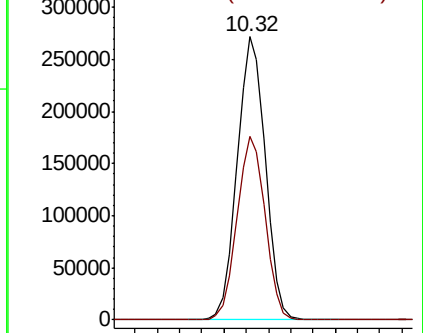
98 100

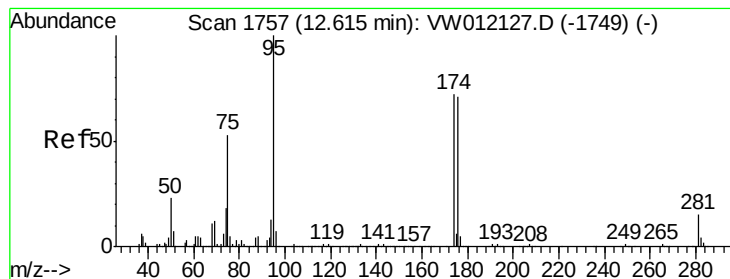
100 64.6 52.4 78.6



Abundance Ion 98.00 (97.70 to 98.70): VW

Ion 100.00 (99.70 to 100.70): VW





#62

4-Bromofluorobenzene

Concen: 46.476 ug/l

RT: 12.62 min Scan# 1758

Delta R.T. 0.01 min

Lab File: VW012137.D

Acq: 23 Aug 2019 17:15

Instrument :

MSVOA\_W

ClientSampleId :

S600-M-1.0-1.5-082219-FD

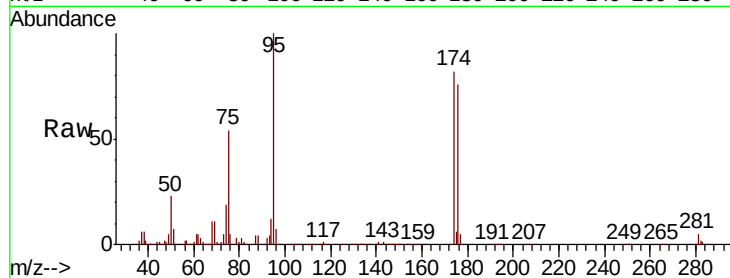
Tgt Ion: 95 Resp: 152682

Ion Ratio Lower Upper

95 100

174 77.1 0.0 150.8

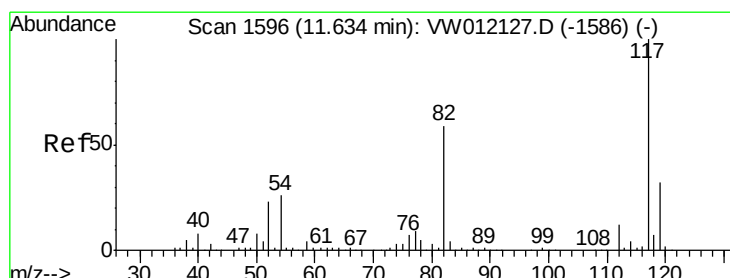
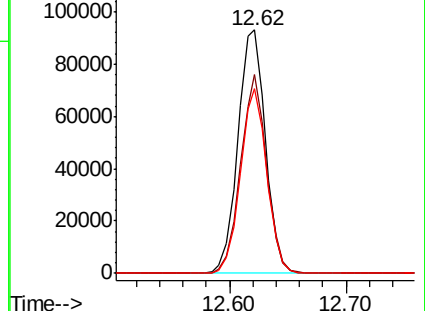
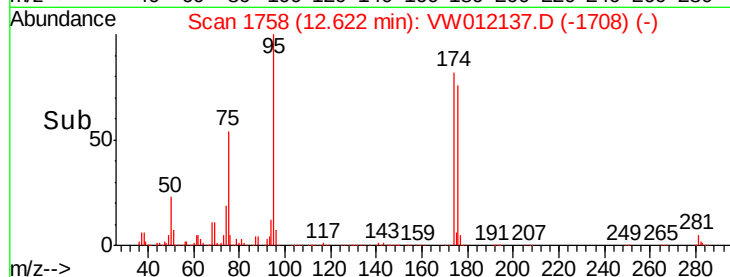
176 72.8 0.0 148.6



Abundance Ion 94.90 (94.60 to 95.60): VW

Ion 173.80 (173.50 to 174.50): VW

Ion 175.80 (175.50 to 176.50): VW



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.63 min Scan# 1596

Delta R.T. -0.00 min

Lab File: VW012137.D

Acq: 23 Aug 2019 17:15

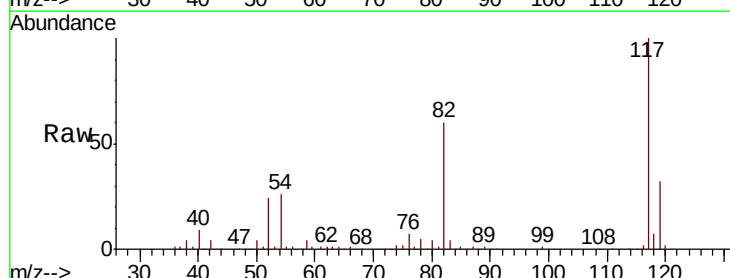
Tgt Ion: 117 Resp: 323662

Ion Ratio Lower Upper

117 100

82 59.7 47.4 71.2

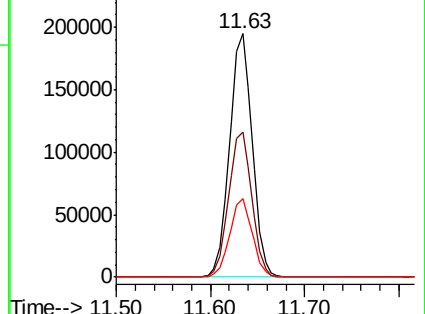
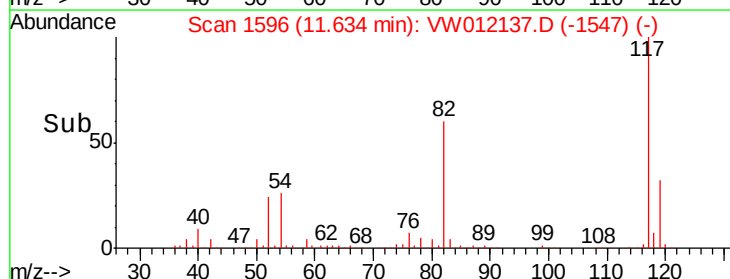
119 32.3 25.4 38.2

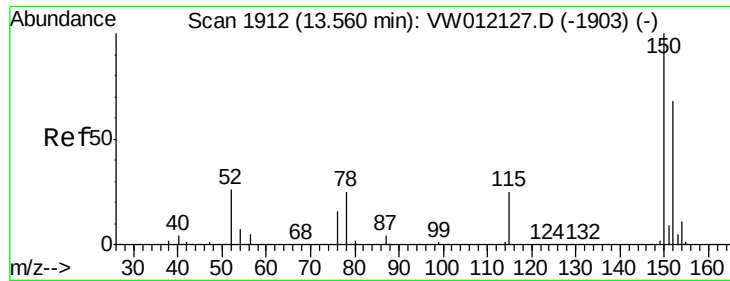


Abundance Ion 116.90 (116.60 to 117.60): VW

Ion 82.00 (81.70 to 82.70): VW

Ion 118.90 (118.60 to 119.60): VW





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.56 min Scan# 1912

Delta R.T. -0.00 min

Lab File: VW012137.D

Acq: 23 Aug 2019 17:15

Instrument :

MSVOA\_W

ClientSampleId :

S600-M-1.0-1.5-082219-FD

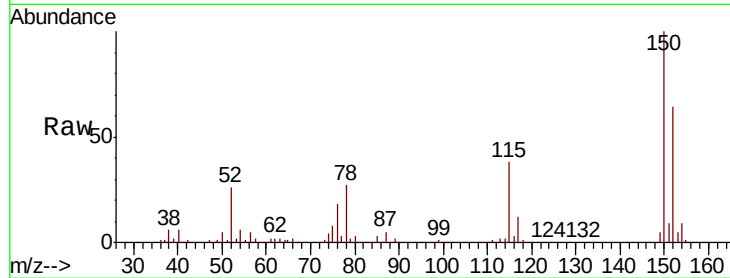
Tgt Ion:152 Resp: 135078

Ion Ratio Lower Upper

152 100

115 59.7 30.1 90.3

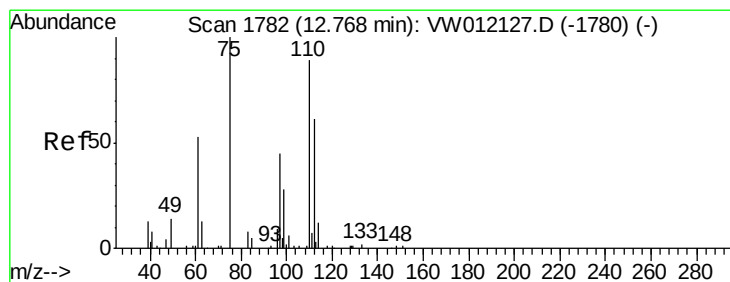
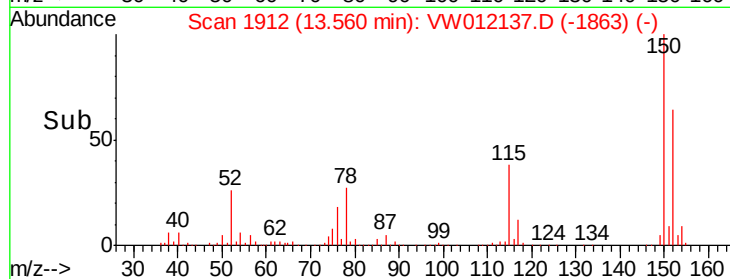
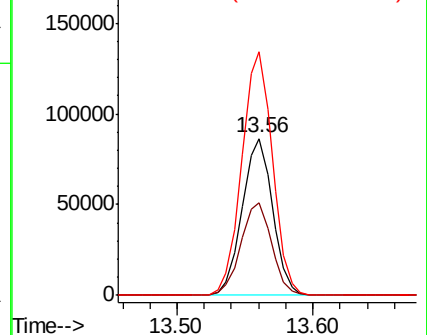
150 156.4 0.0 345.8



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: 63.028 ug/l

RT: 12.62 min Scan# 1757

Delta R.T. -0.15 min

Lab File: VW012137.D

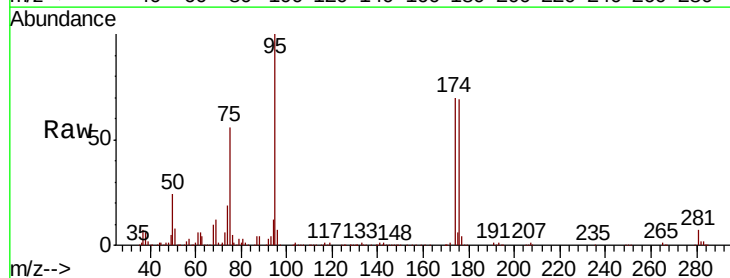
Acq: 23 Aug 2019 17:15

Tgt Ion: 75 Resp: 82917

Ion Ratio Lower Upper

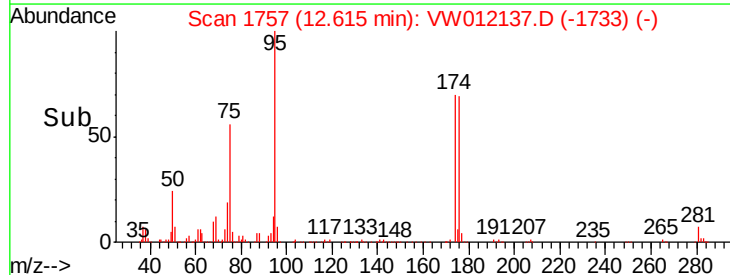
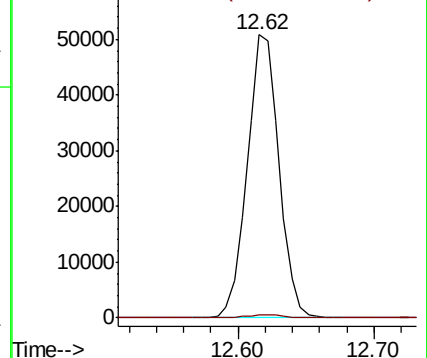
75 100

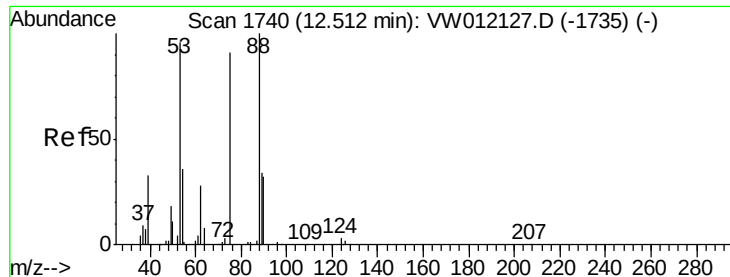
77 1.2 0.0 0.0#



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: 138.191 ug/l

RT: 12.62 min Scan# 1757

Delta R.T. 0.10 min

Lab File: VW012137.D

Acq: 23 Aug 2019 17:15

Instrument :

MSVOA\_W

ClientSampleId :

S600-M-1.0-1.5-082219-FD

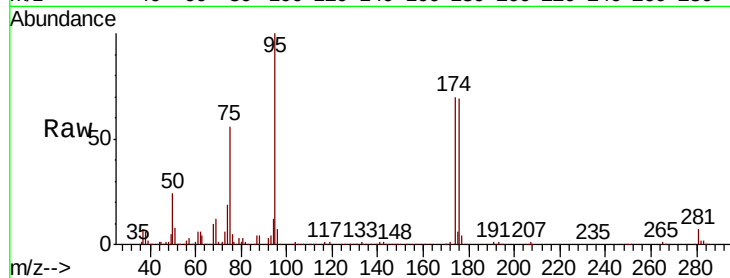
Tgt Ion: 75 Resp: 82917

Ion Ratio Lower Upper

75 100

53 0.2 89.4 134.0#

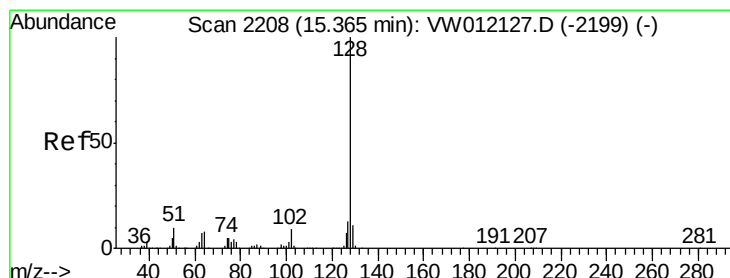
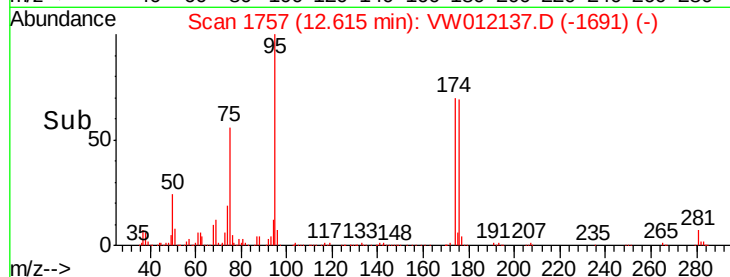
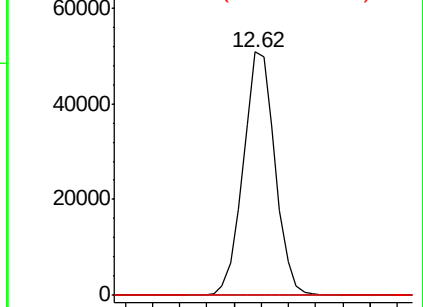
89 0.0 34.5 51.7#



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



#95

Naphthalene

Concen: 4.496 ug/l

RT: 15.36 min Scan# 2208

Delta R.T. 0.00 min

Lab File: VW012137.D

Acq: 23 Aug 2019 17:15

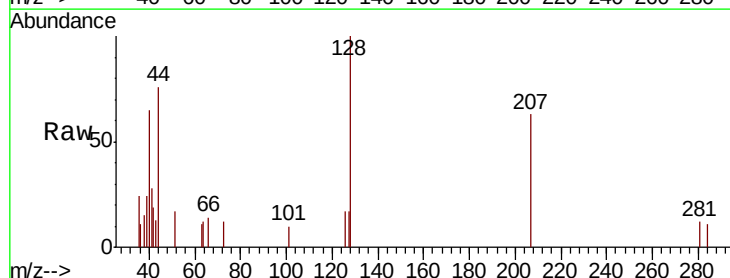
Tgt Ion: 128 Resp: 977

Ion Ratio Lower Upper

128 100

127 16.5 10.7 16.1#

129 7.5 8.7 13.1#



Abundance Ion 128.00 (127.70 to 128.70): V

Ion 127.00 (126.70 to 127.70): V

Ion 129.00 (128.70 to 129.70): V

