

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_W\DATA\VW082319\  
 Data File : VW012148.D  
 Acq On : 23 Aug 2019 21:59  
 Operator : SY/VA  
 Sample : K4474-11  
 Misc : 5.95G/5ML/MSVOA\_W/SOIL  
 ALS Vial : 27 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 T1-2-K1-(2.5)

Quant Time: Aug 26 07:31:05 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

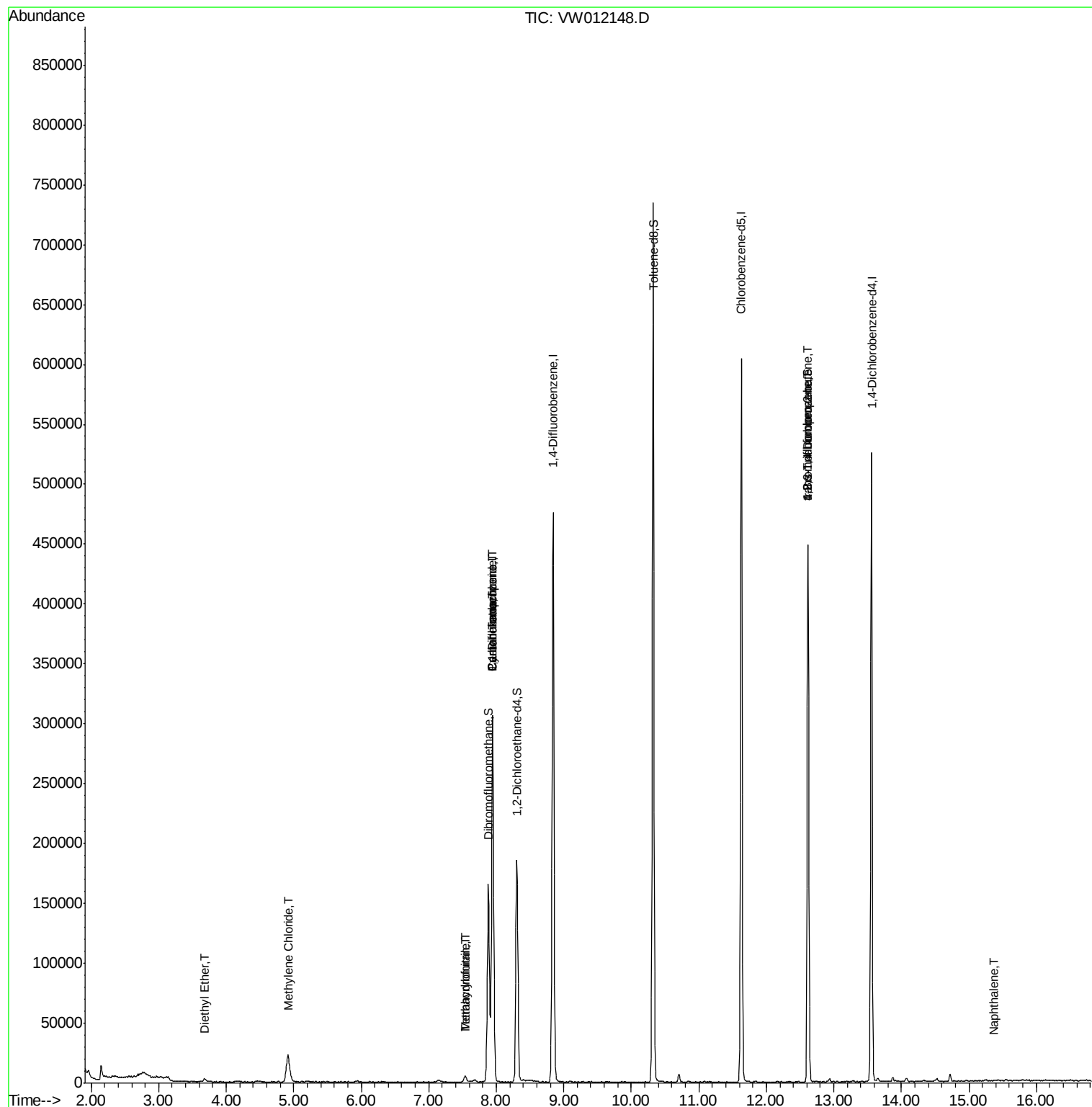
| Internal Standards             | R.T.  | QIon | Response | Conc    | Units   | Dev(Min) |
|--------------------------------|-------|------|----------|---------|---------|----------|
| 1) Pentafluorobenzene          | 7.95  | 168  | 219636   | 50.00   | ug/l    | 0.00     |
| 34) 1,4-Difluorobenzene        | 8.84  | 114  | 370815   | 50.00   | ug/l    | 0.00     |
| 63) Chlorobenzene-d5           | 11.63 | 117  | 312871   | 50.00   | ug/l    | 0.00     |
| 72) 1,4-Dichlorobenzene-d4     | 13.56 | 152  | 127693   | 50.00   | ug/l    | 0.00     |
| System Monitoring Compounds    |       |      |          |         |         |          |
| 33) 1,2-Dichloroethane-d4      | 8.31  | 65   | 144940   | 55.51   | ug/l    | 0.00     |
| Spiked Amount 50.000           |       |      | Recovery | =       | 111.02% |          |
| 35) Dibromofluoromethane       | 7.88  | 113  | 115927   | 52.37   | ug/l    | 0.00     |
| Spiked Amount 50.000           |       |      | Recovery | =       | 104.74% |          |
| 50) Toluene-d8                 | 10.32 | 98   | 454112   | 50.60   | ug/l    | 0.00     |
| Spiked Amount 50.000           |       |      | Recovery | =       | 101.20% |          |
| 62) 4-Bromofluorobenzene       | 12.62 | 95   | 145801   | 46.09   | ug/l    | 0.00     |
| Spiked Amount 50.000           |       |      | Recovery | =       | 92.18%  |          |
| Target Compounds               |       |      |          |         |         |          |
| 8) Diethyl Ether               | 3.68  | 74   | 1308     | 1.070   | ug/l    | 71       |
| 20) Methylene Chloride         | 4.92  | 84   | 17150    | 6.797   | ug/l    | 98       |
| 29) Tetrahydrofuran            | 7.54  | 42   | 5011     | 9.209   | ug/l    | 100      |
| 31) Cyclohexane                | 7.95  | 56   | 5683     | 1.208   | ug/l #  | 1        |
| 36) 1,1-Dichloropropene        | 7.95  | 75   | 19044    | 4.970   | ug/l #  | 52       |
| 38) Carbon Tetrachloride       | 7.95  | 117  | 22637    | 6.825   | ug/l #  | 16       |
| 41) Methacrylonitrile          | 7.54  | 41   | 3053     | 2.474   | ug/l #  | 47       |
| 76) 1,2,3-Trichloropropane     | 12.62 | 75   | 78681    | 63.267  | ug/l #  | 100      |
| 81) trans-1,4-Dichloro-2-buten | 12.62 | 75   | 78681    | 138.715 | ug/l #  | 6        |
| 95) Naphthalene                | 15.37 | 128  | 47       | 4.330   | ug/l #  | 69       |

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

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Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.95 min Scan# 991

Delta R.T. -0.00 min

Lab File: VW012148.D

Acq: 23 Aug 2019 21:59

Instrument :

MSVOA\_W

ClientSampleId :

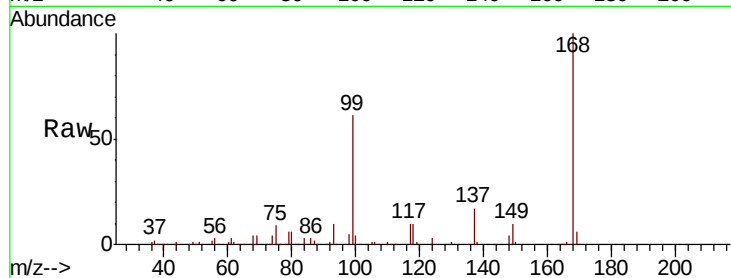
T1-2-K1-(2.5)

Tgt Ion:168 Resp: 219636

Ion Ratio Lower Upper

168 100

99 60.8 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

100000

80000

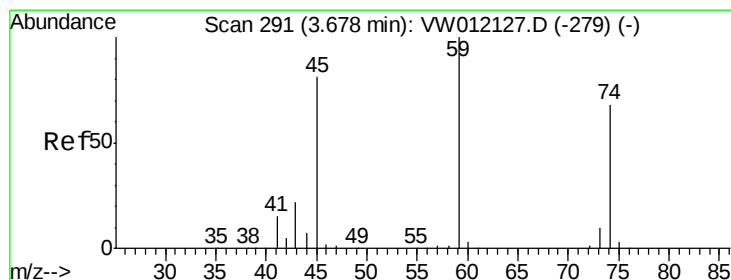
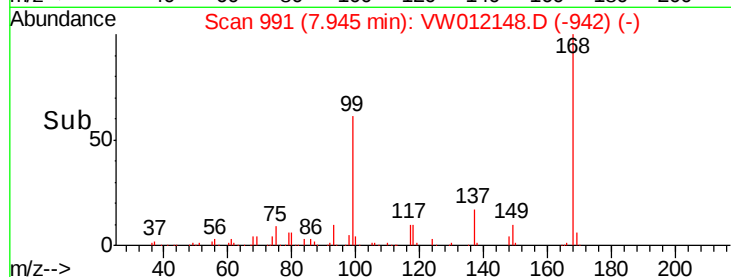
60000

40000

20000

0

Time--> 7.80 7.90 8.00 8.10



#8

Diethyl Ether

Concen: 1.070 ug/l

RT: 3.68 min Scan# 291

Delta R.T. -0.00 min

Lab File: VW012148.D

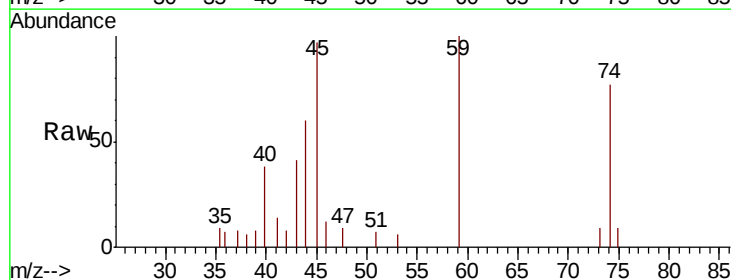
Acq: 23 Aug 2019 21:59

Tgt Ion: 74 Resp: 1308

Ion Ratio Lower Upper

74 100

45 150.2 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

800

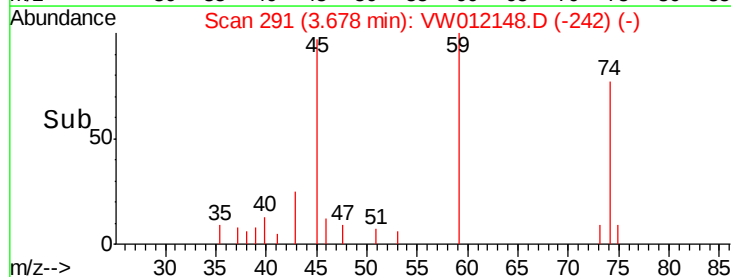
600

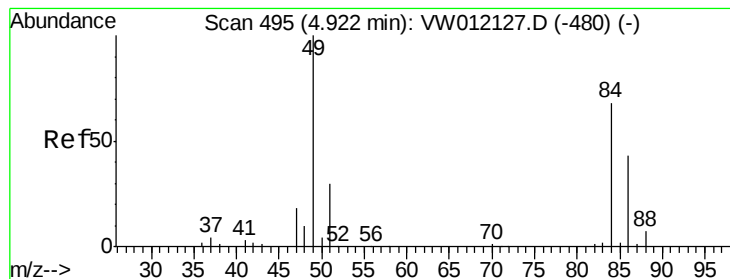
400

200

0

Time--> 3.60 3.65 3.70 3.75





#20

Methylene Chloride

Concen: 6.797 ug/l

RT: 4.92 min Scan# 495

Delta R.T. -0.00 min

Lab File: VW012148.D

Acq: 23 Aug 2019 21:59

Instrument :

MSVOA\_W

ClientSampleId :

T1-2-K1-(2.5)

Tgt Ion: 84 Resp: 17150

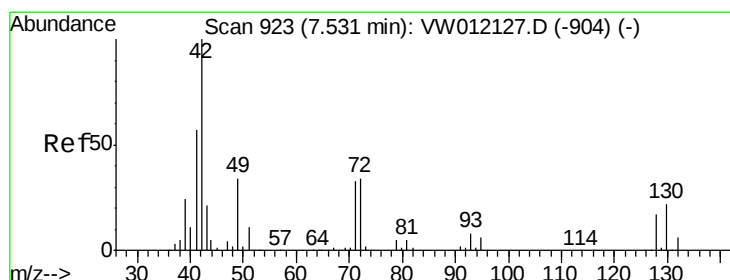
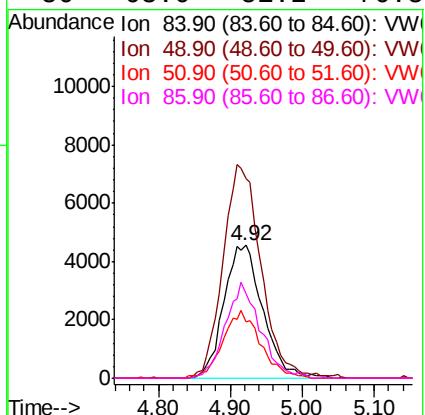
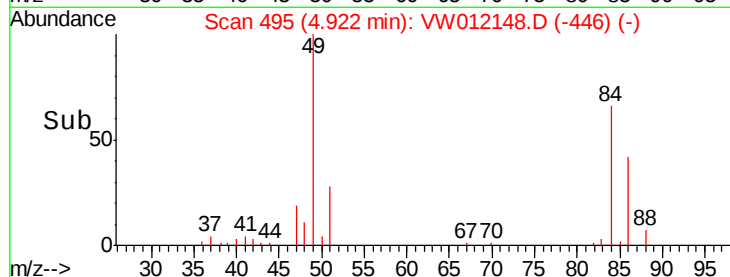
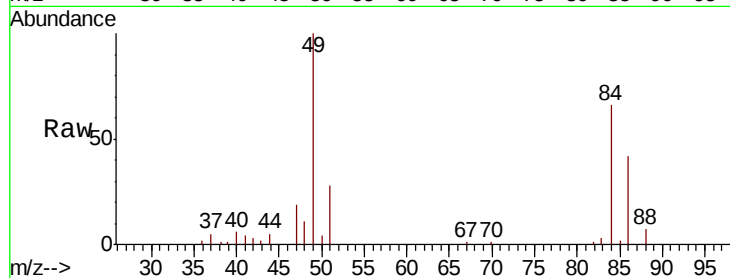
Ion Ratio Lower Upper

84 100

49 150.5 117.8 176.8

51 42.5 35.6 53.4

86 63.0 51.2 76.8



#29

Tetrahydrofuran

Concen: 9.209 ug/l

RT: 7.54 min Scan# 924

Delta R.T. 0.01 min

Lab File: VW012148.D

Acq: 23 Aug 2019 21:59

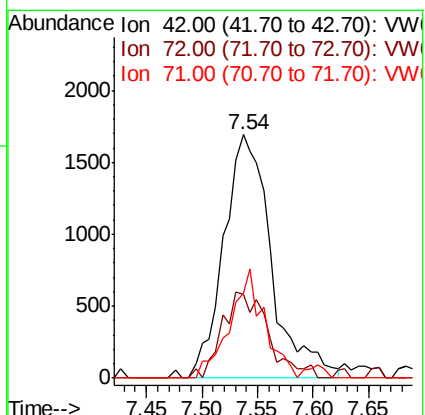
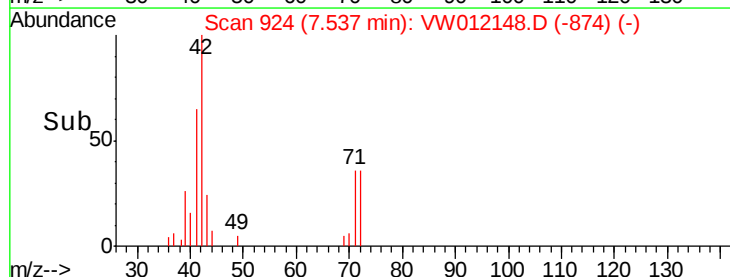
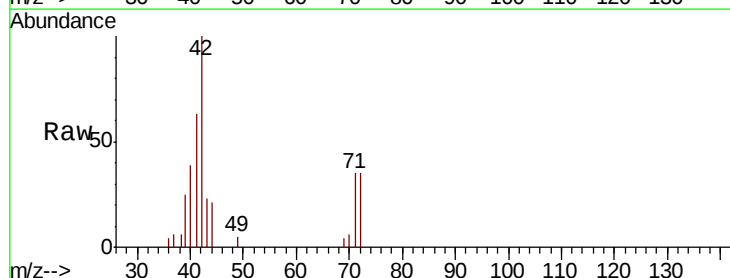
Tgt Ion: 42 Resp: 5011

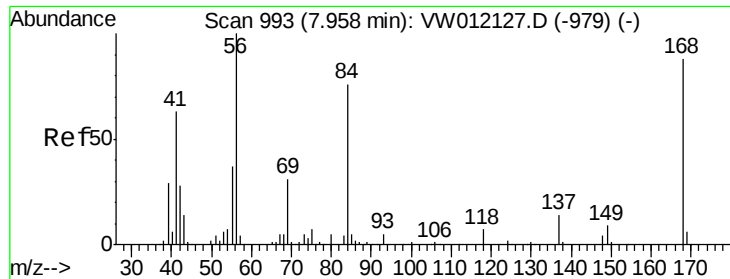
Ion Ratio Lower Upper

42 100

72 34.2 27.3 40.9

71 32.4 25.5 38.3

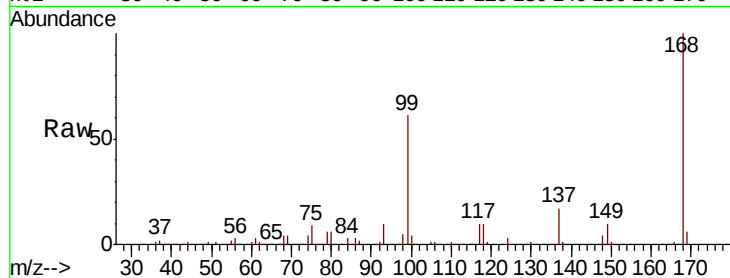




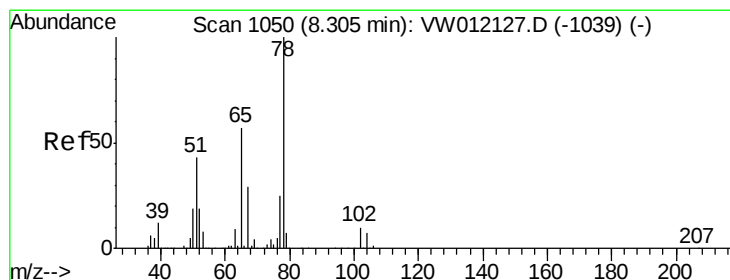
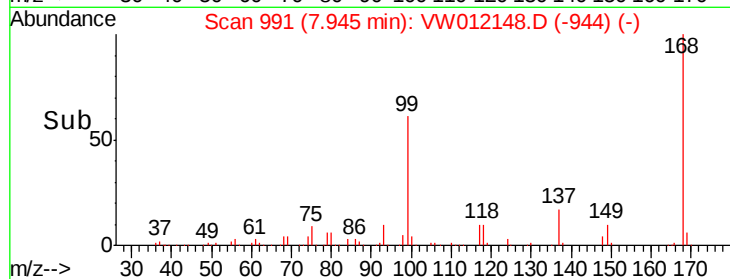
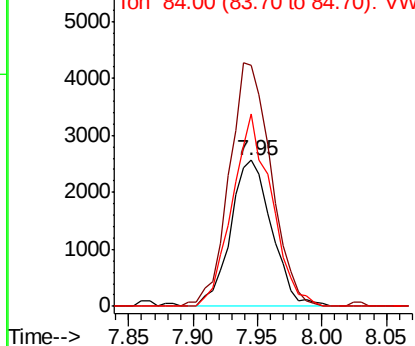
#31  
Cyclohexane  
Concen: 1.208 ug/l  
RT: 7.95 min Scan# 991  
Delta R.T. -0.01 min  
Lab File: VW012148.D  
Acq: 23 Aug 2019 21:59

Instrument :  
MSVOA\_W  
ClientSampleId :  
T1-2-K1-(2.5)

Tgt Ion: 56 Resp: 5683  
Ion Ratio Lower Upper  
56 100  
69 165.0 24.9 37.3#  
84 131.8 60.6 90.8#

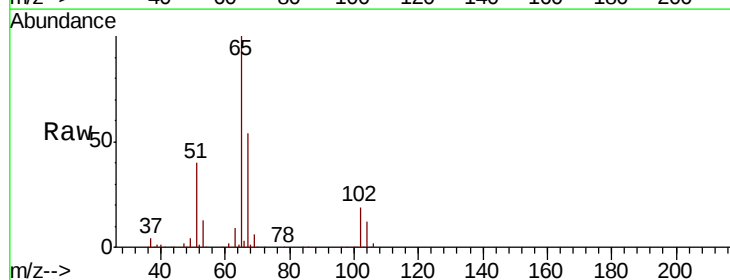


Abundance Ion 56.00 (55.70 to 56.70): VW  
Ion 69.00 (68.70 to 69.70): VW  
Ion 84.00 (83.70 to 84.70): VW

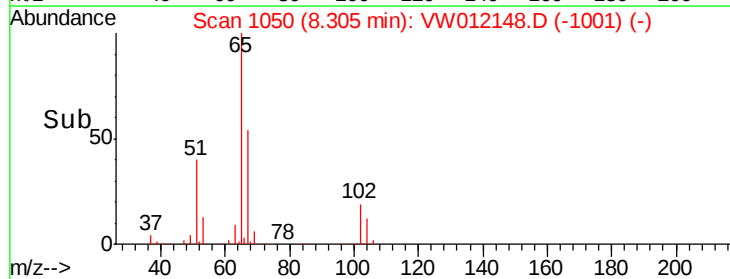
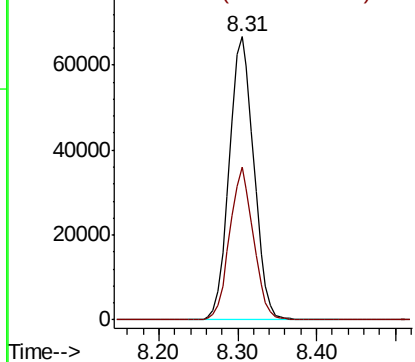


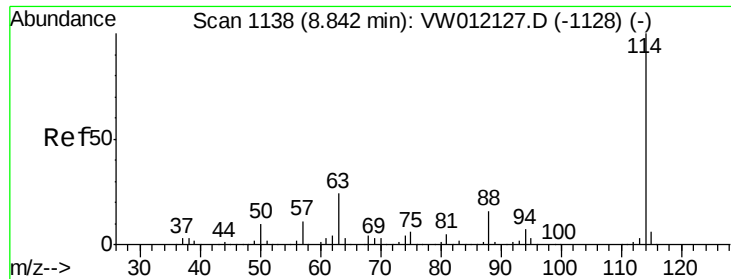
#33  
1,2-Dichloroethane-d4  
Concen: 55.513 ug/l  
RT: 8.31 min Scan# 1050  
Delta R.T. -0.00 min  
Lab File: VW012148.D  
Acq: 23 Aug 2019 21:59

Tgt Ion: 65 Resp: 144940  
Ion Ratio Lower Upper  
65 100  
67 52.0 0.0 102.6



Abundance Ion 64.90 (64.60 to 65.60): VW  
Ion 66.90 (66.60 to 67.60): VW

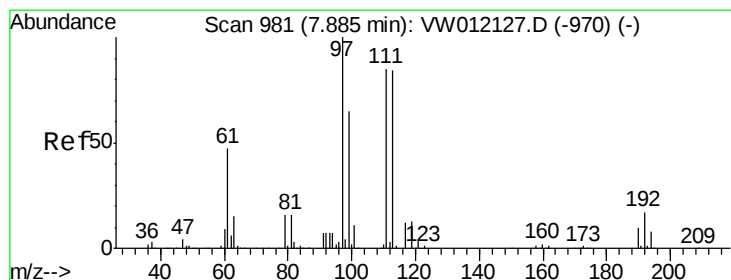
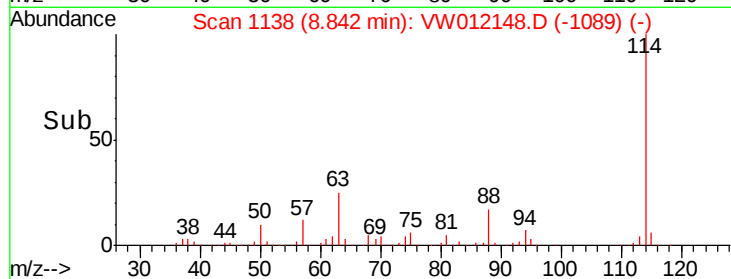
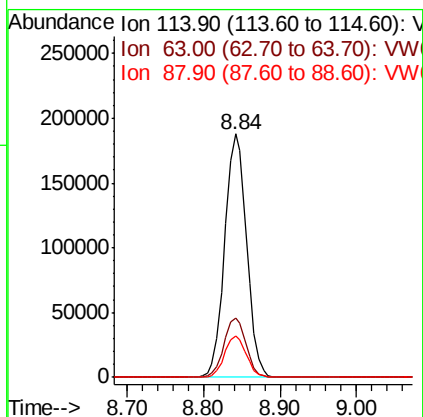
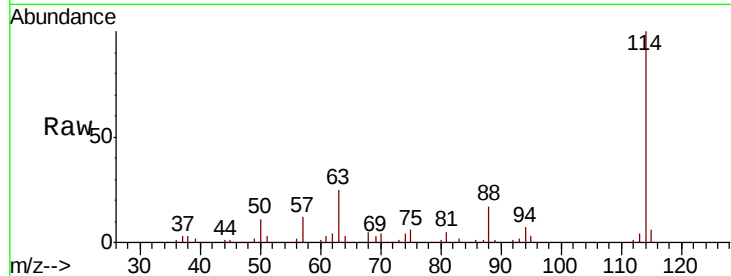




#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.84 min Scan# 1138  
 Delta R.T. -0.00 min  
 Lab File: VW012148.D  
 Acq: 23 Aug 2019 21:59

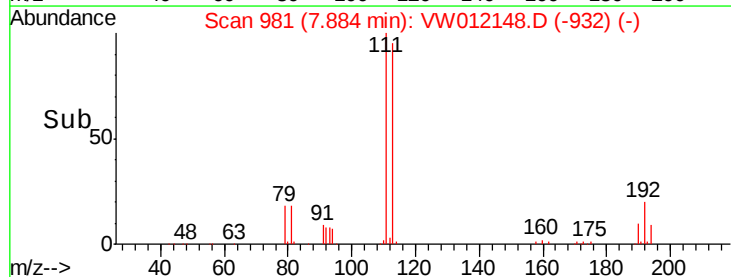
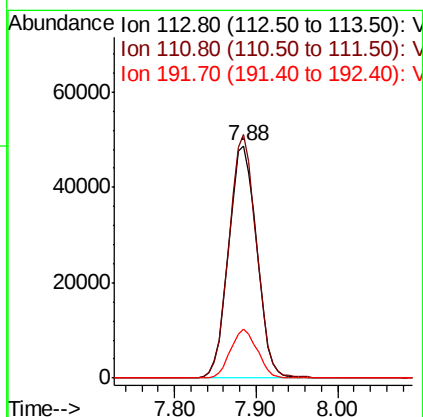
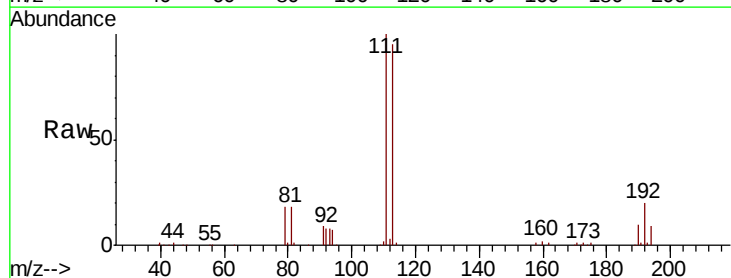
Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 T1-2-K1-(2.5)

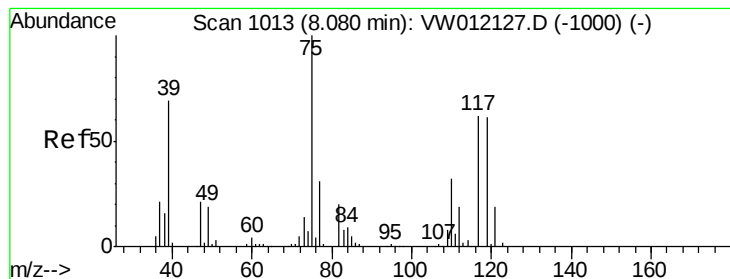
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 114     | 100   |       |       |
| 63      | 24.6  | 0.0   | 48.6  |
| 88      | 17.1  | 0.0   | 32.2  |



#35  
 Dibromofluoromethane  
 Concen: 52.375 ug/l  
 RT: 7.88 min Scan# 981  
 Delta R.T. -0.00 min  
 Lab File: VW012148.D  
 Acq: 23 Aug 2019 21:59

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 113     | 100   |       |       |
| 111     | 102.0 | 82.7  | 124.1 |
| 192     | 20.1  | 16.2  | 24.2  |





#36

1,1-Dichloropropene

Concen: 4.970 ug/l

RT: 7.95 min Scan# 991

Delta R.T. -0.13 min

Lab File: VW012148.D

Acq: 23 Aug 2019 21:59

Instrument :

MSVOA\_W

ClientSampleId :

T1-2-K1-(2.5)

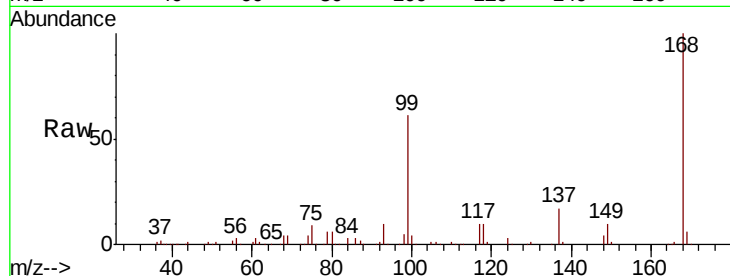
Tgt Ion: 75 Resp: 19044

Ion Ratio Lower Upper

75 100

110 9.2 15.6 46.8#

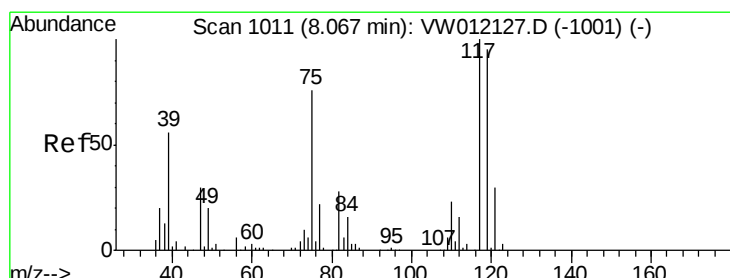
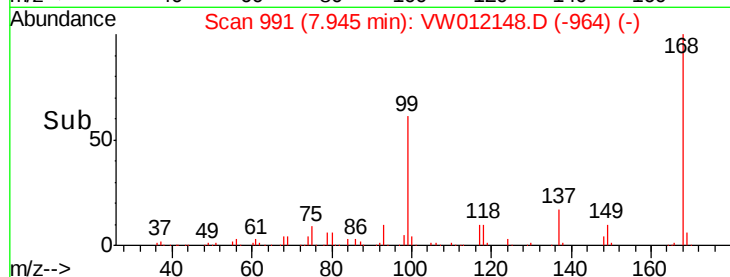
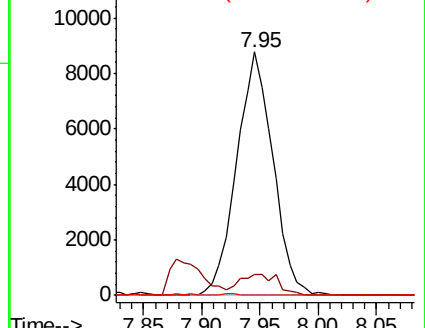
77 0.0 24.6 36.8#



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: 6.825 ug/l

RT: 7.95 min Scan# 991

Delta R.T. -0.12 min

Lab File: VW012148.D

Acq: 23 Aug 2019 21:59

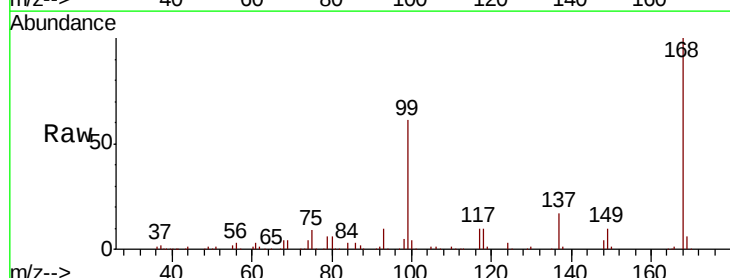
Tgt Ion: 117 Resp: 22637

Ion Ratio Lower Upper

117 100

119 5.0 76.2 114.2#

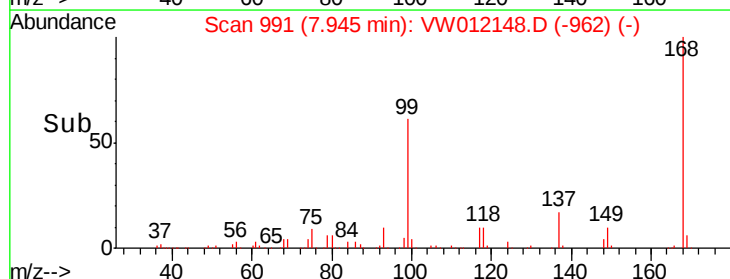
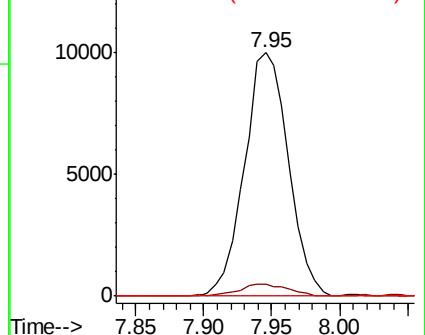
121 0.0 23.8 35.8#

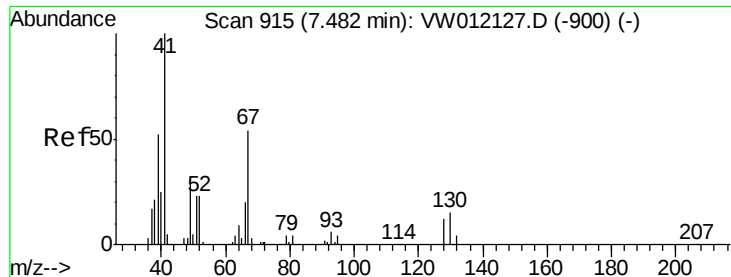


Abundance Ion 116.80 (116.50 to 117.50): V

Ion 118.80 (118.50 to 119.50): V

Ion 120.80 (120.50 to 121.50): V





#41

Methacrylonitrile

Concen: 2.474 ug/l

RT: 7.54 min Scan# 924

Delta R.T. 0.05 min

Lab File: VW012148.D

Acq: 23 Aug 2019 21:59

Instrument :

MSVOA\_W

ClientSampleId :

T1-2-K1-(2.5)

Tgt Ion: 41 Resp: 3053

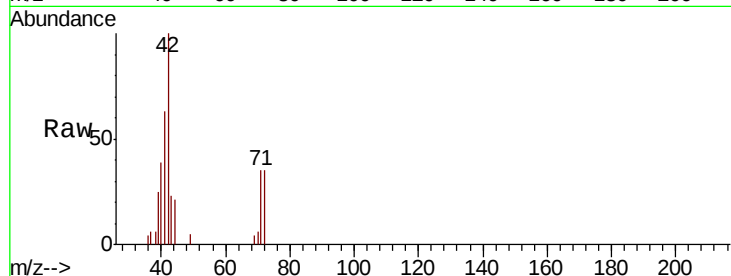
Ion Ratio Lower Upper

41 100

39 35.7 45.8 68.8#

67 0.0 46.2 69.4#

52 0.0 21.0 31.6#

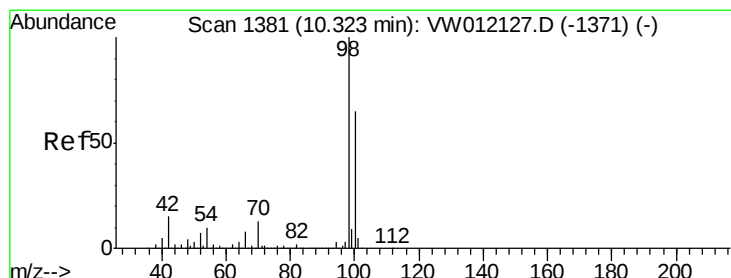
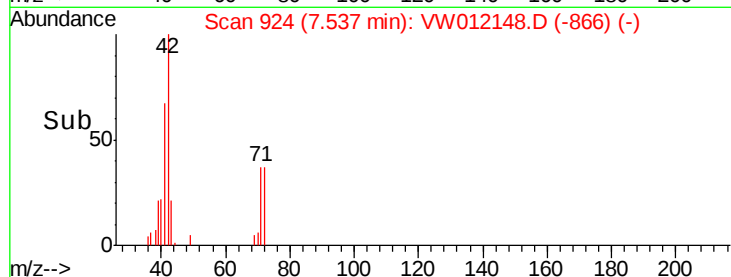
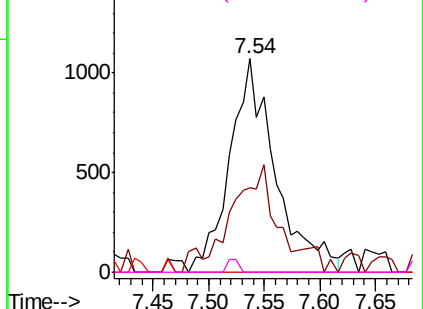


Abundance Ion 41.00 (40.70 to 41.70): VW

Ion 39.00 (38.70 to 39.70): VW

Ion 67.00 (66.70 to 67.70): VW

Ion 52.00 (51.70 to 52.70): VW



#50

Toluene-d8

Concen: 50.599 ug/l

RT: 10.32 min Scan# 1381

Delta R.T. -0.00 min

Lab File: VW012148.D

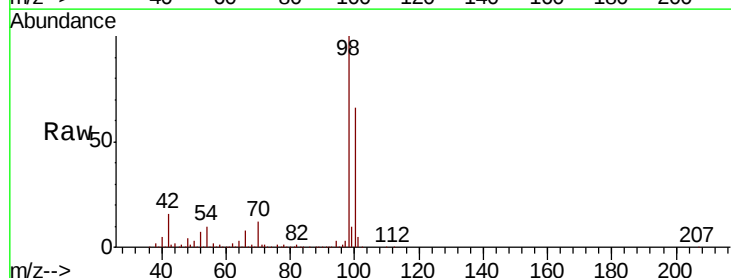
Acq: 23 Aug 2019 21:59

Tgt Ion: 98 Resp: 454112

Ion Ratio Lower Upper

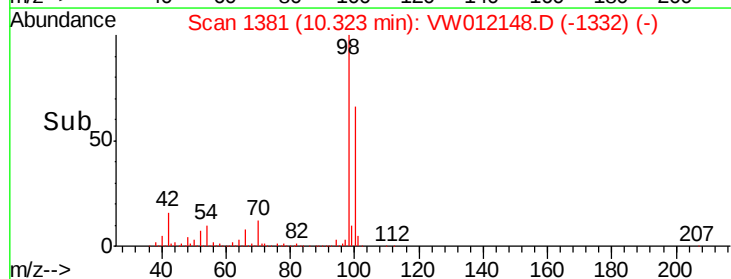
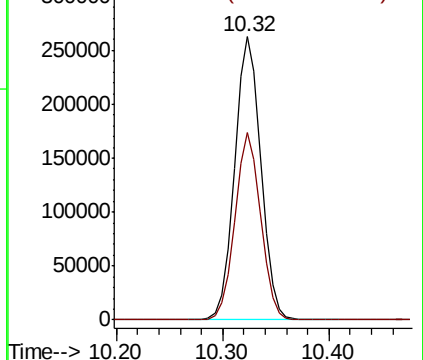
98 100

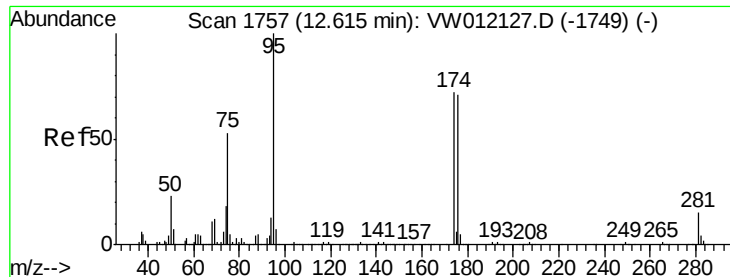
100 64.8 52.4 78.6



Abundance Ion 98.00 (97.70 to 98.70): VW

Ion 100.00 (99.70 to 100.70): VW





#62

4-Bromofluorobenzene

Concen: 46.087 ug/l

RT: 12.62 min Scan# 1757

Delta R.T. -0.00 min

Lab File: VW012148.D

Acq: 23 Aug 2019 21:59

Instrument :

MSVOA\_W

ClientSampleId :

T1-2-K1-(2.5)

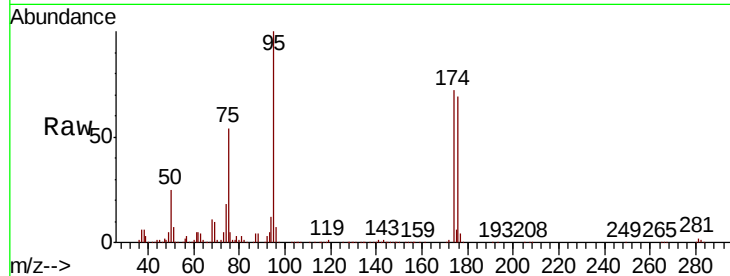
Tgt Ion: 95 Resp: 145801

Ion Ratio Lower Upper

95 100

174 77.1 0.0 150.8

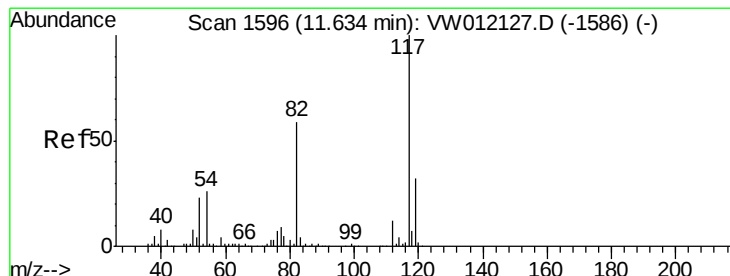
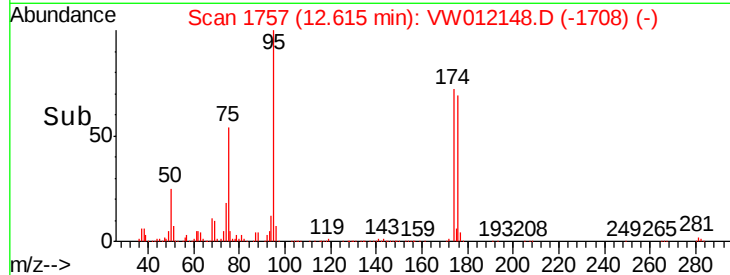
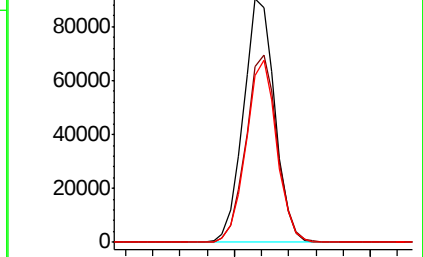
176 73.3 0.0 148.6



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: VW012148.D

Acq: 23 Aug 2019 21:59

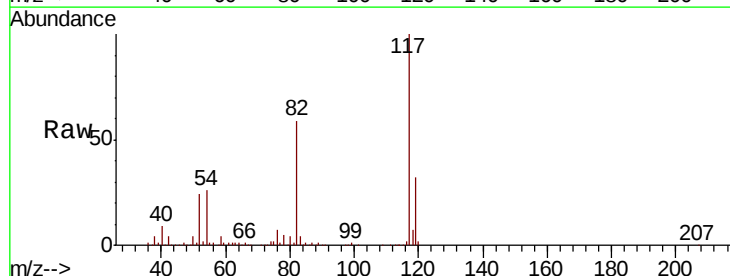
Tgt Ion: 117 Resp: 312871

Ion Ratio Lower Upper

117 100

82 59.4 47.4 71.2

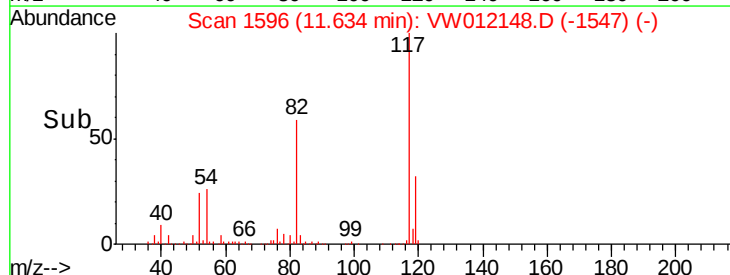
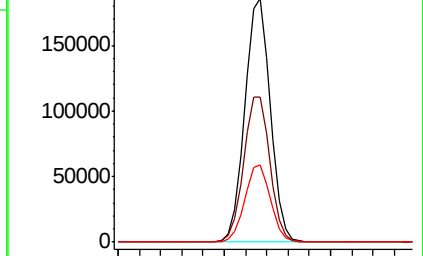
119 31.9 25.4 38.2

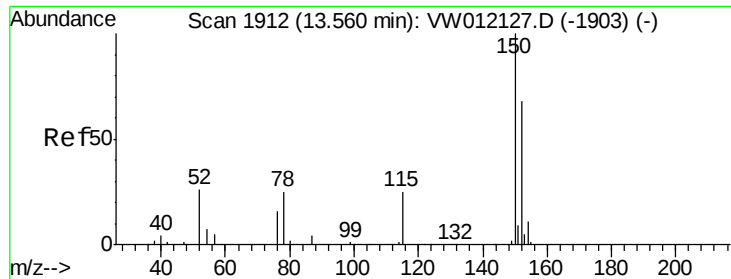


Abundance Ion 116.90 (116.60 to 117.60): VW

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: VW012148.D

Acq: 23 Aug 2019 21:59

Instrument :

MSVOA\_W

ClientSampleId :

T1-2-K1-(2.5)

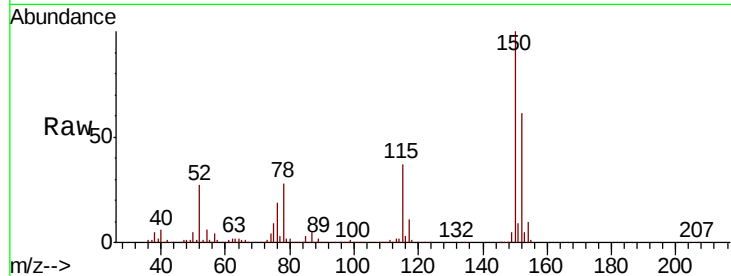
Tgt Ion:152 Resp: 127693

Ion Ratio Lower Upper

152 100

115 62.1 30.1 90.3

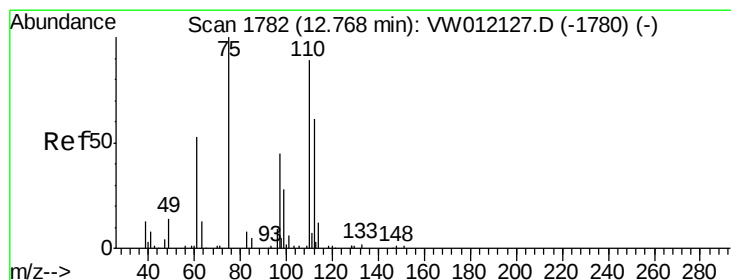
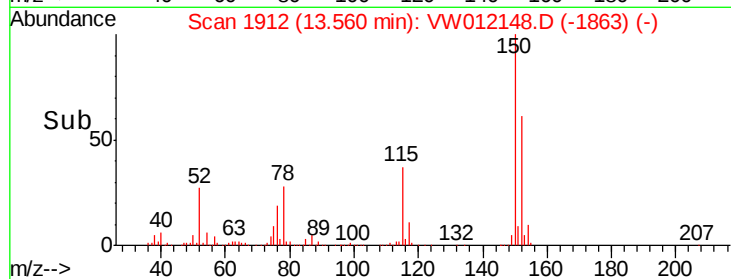
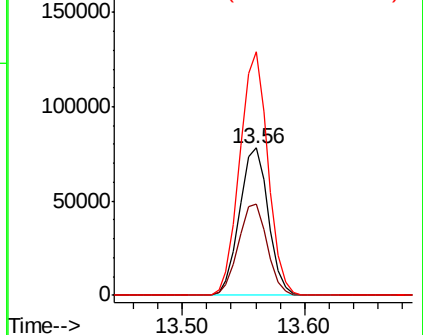
150 161.1 0.0 345.8



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: 63.267 ug/l

RT: 12.62 min Scan# 1757

Delta R.T. -0.15 min

Lab File: VW012148.D

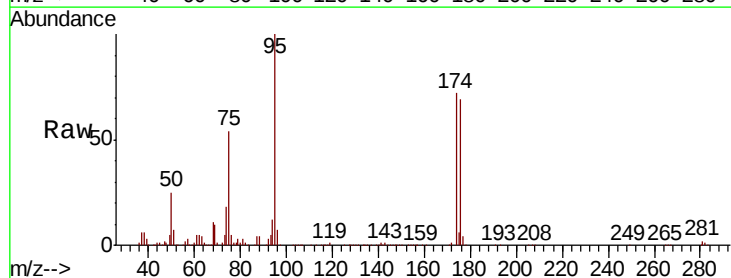
Acq: 23 Aug 2019 21:59

Tgt Ion: 75 Resp: 78681

Ion Ratio Lower Upper

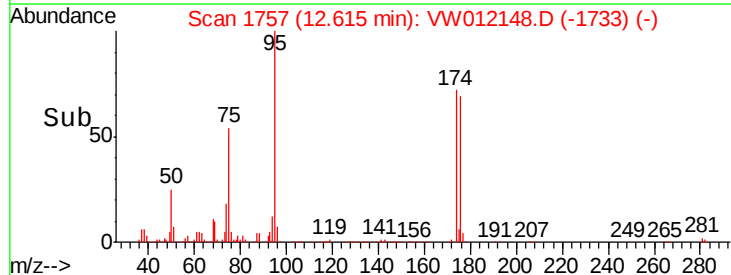
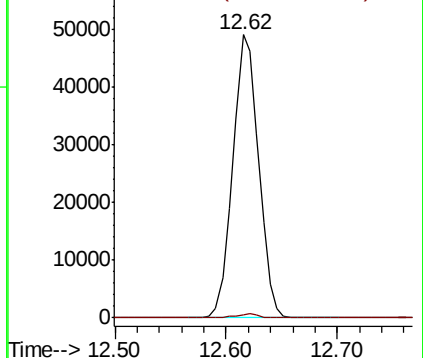
75 100

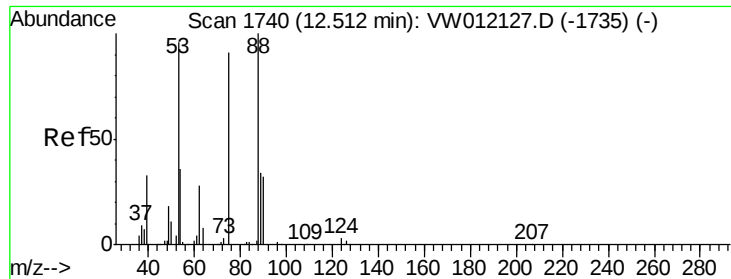
77 1.3 0.0 0.0#



Abundance Ion 74.90 (74.60 to 75.60): VW

Ion 77.00 (76.70 to 77.70): VW

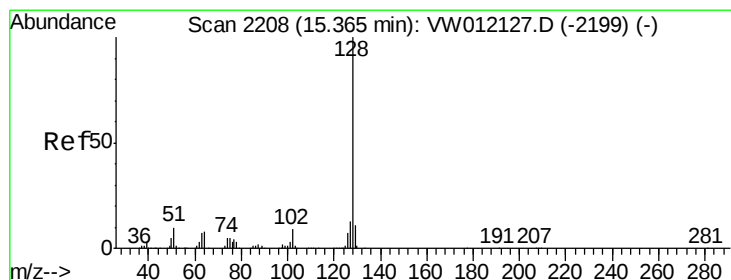
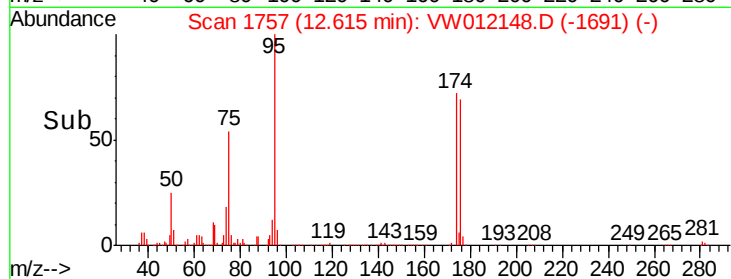
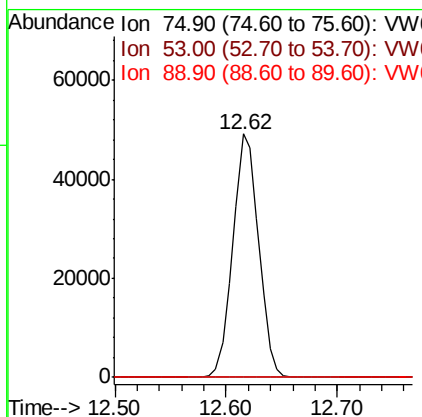
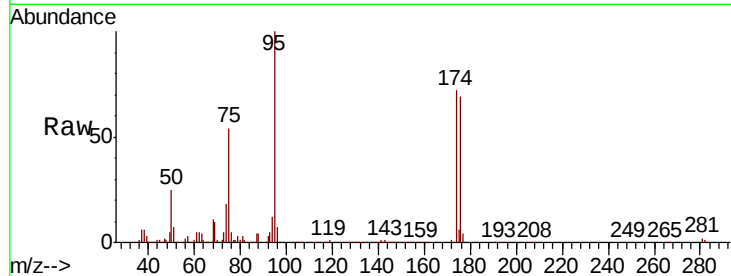




#81  
trans-1,4-Dichloro-2-butene  
Concen: 138.715 ug/l  
RT: 12.62 min Scan# 1757  
Delta R.T. 0.10 min  
Lab File: VW012148.D  
Acq: 23 Aug 2019 21:59

Instrument :  
MSVOA\_W  
ClientSampleId :  
T1-2-K1-(2.5)

Tgt Ion: 75 Resp: 78681  
Ion Ratio Lower Upper  
75 100  
53 0.2 89.4 134.0#  
89 0.0 34.5 51.7#



#95  
Naphthalene  
Concen: 4.330 ug/l  
RT: 15.37 min Scan# 2209  
Delta R.T. 0.01 min  
Lab File: VW012148.D  
Acq: 23 Aug 2019 21:59

Tgt Ion: 128 Resp: 47  
Ion Ratio Lower Upper  
128 100  
127 0.0 10.7 16.1#  
129 0.0 8.7 13.1#

