

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_W\DATA\VW090519\  
 Data File : VW012650.D  
 Acq On : 05 Sep 2019 19:19  
 Operator : SY/VA  
 Sample : K4601-02  
 Misc : 5.71G/5ML/MSVOA\_W/SOIL  
 ALS Vial : 21 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 T12-E1-(0)

Quant Time: Sep 06 07:54:49 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  | 244663   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.84  | 114  | 392827   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.63 | 117  | 314318   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.56 | 152  | 109608   | 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   | 155163   | 53.35 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 106.70% |          |
| 35) Dibromofluoromethane    | 7.88  | 113  | 120934   | 51.58 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 103.16% |          |
| 50) Toluene-d8              | 10.32 | 98   | 472989   | 49.75 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 99.50%  |          |
| 62) 4-Bromofluorobenzene    | 12.62 | 95   | 139489   | 41.62 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 83.24%  |          |

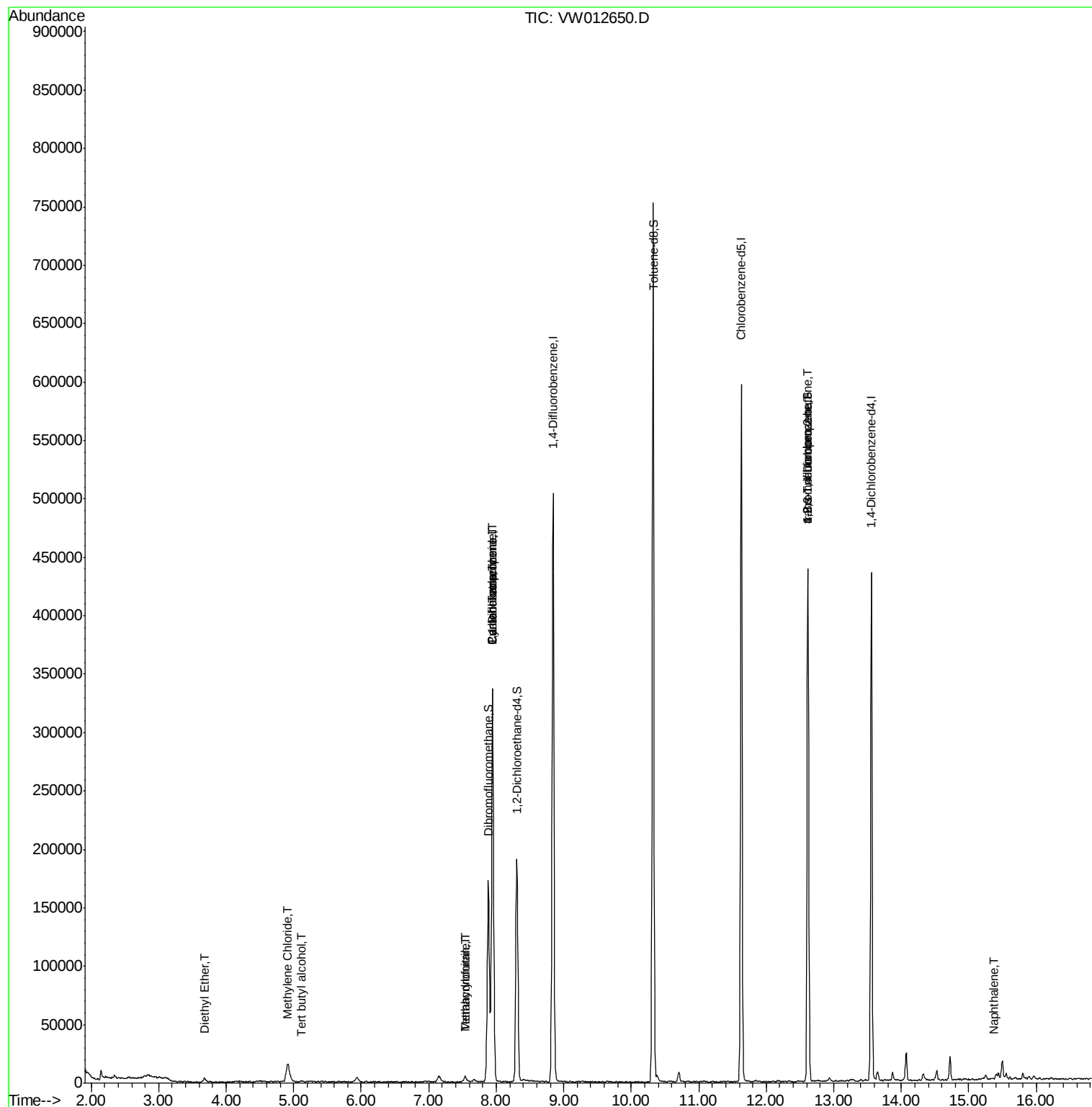
| Target Compounds               | R.T.  | QIon | Response | Conc    | Units  | Qvalue |
|--------------------------------|-------|------|----------|---------|--------|--------|
| 8) Diethyl Ether               | 3.68  | 74   | 1686     | 1.238   | ug/l   | 88     |
| 11) Tert butyl alcohol         | 5.12  | 59   | 530      | 3.028   | ug/l # | 93     |
| 20) Methylene Chloride         | 4.90  | 84   | 11847    | 4.215   | ug/l   | 89     |
| 29) Tetrahydrofuran            | 7.54  | 42   | 4178     | 6.893   | ug/l   | 93     |
| 31) Cyclohexane                | 7.95  | 56   | 5406     | 1.032   | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 7.94  | 75   | 19811    | 4.880   | ug/l # | 53     |
| 38) Carbon Tetrachloride       | 7.95  | 117  | 24718    | 7.035   | ug/l # | 17     |
| 41) Methacrylonitrile          | 7.54  | 41   | 2593     | 1.983   | ug/l # | 58     |
| 76) 1,2,3-Trichloropropane     | 12.62 | 75   | 75596    | 70.816  | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.62 | 75   | 75596    | 155.266 | ug/l # | 6      |
| 95) Naphthalene                | 15.37 | 128  | 408      | 4.411   | ug/l # | 69     |

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

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA\_W\DATA\VW090519\  
Data File : VW012650.D  
Acq On : 05 Sep 2019 19:19  
Operator : SY/VA  
Sample : K4601-02  
Misc : 5.71G/5ML/MSVOA\_W/SOIL  
ALS Vial : 21 Sample Multiplier: 1

Instrument :  
MSVOA\_W  
ClientSampleId :  
T12-E1-(0)

Quant Time: Sep 06 07:54:49 2019  
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# 991

Delta R.T. -0.00 min

Lab File: VW012650.D

Acq: 05 Sep 2019 19:19

Instrument :

MSVOA\_W

ClientSampleId :

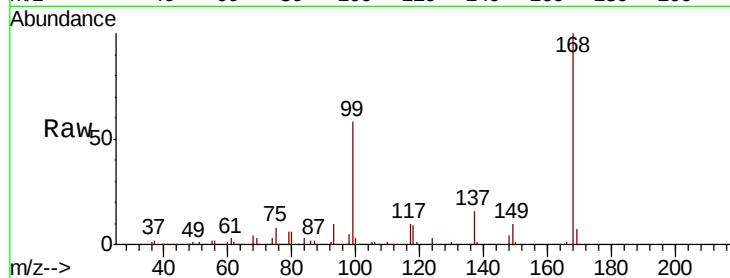
T12-E1-(0)

Tgt Ion:168 Resp: 244663

Ion Ratio Lower Upper

168 100

99 57.9 49.2 73.8



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VW

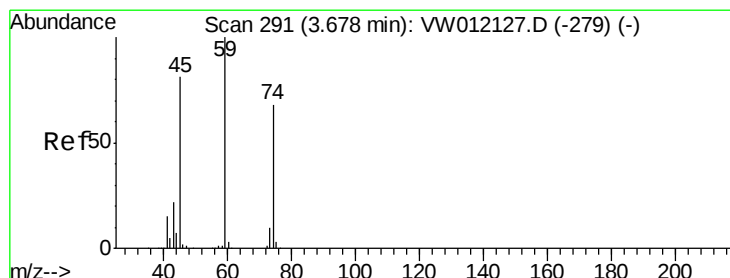
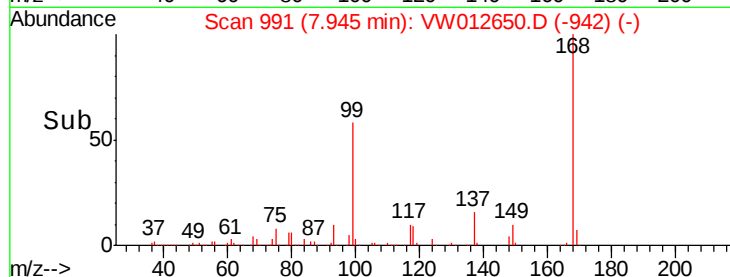
7.95

100000

50000

0

Time-->



#8

Diethyl Ether

Concen: 1.238 ug/l

RT: 3.68 min Scan# 291

Delta R.T. -0.00 min

Lab File: VW012650.D

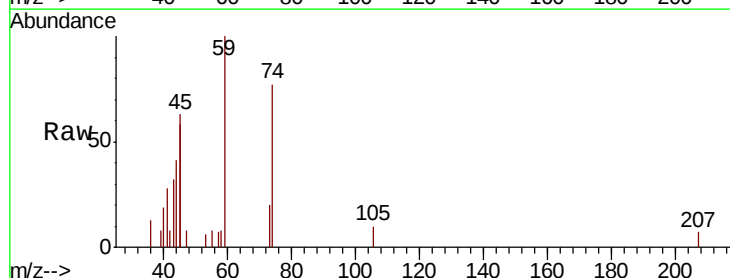
Acq: 05 Sep 2019 19:19

Tgt Ion: 74 Resp: 1686

Ion Ratio Lower Upper

74 100

45 131.9 59.2 177.6



Abundance Ion 74.00 (73.70 to 74.70): VW

Ion 45.00 (44.70 to 45.70): VW

1200

1000

800

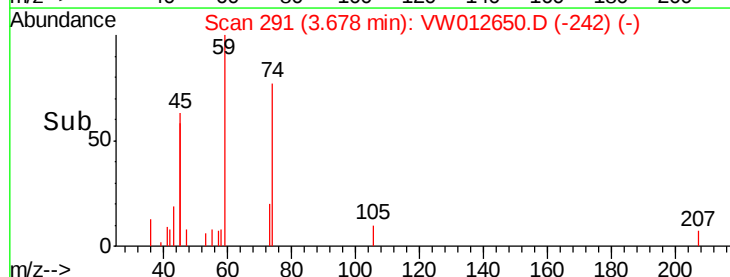
600

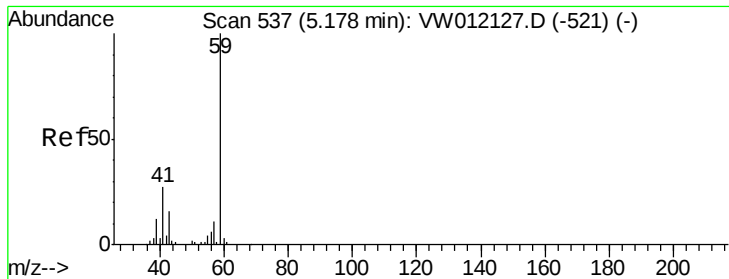
400

200

0

Time-->



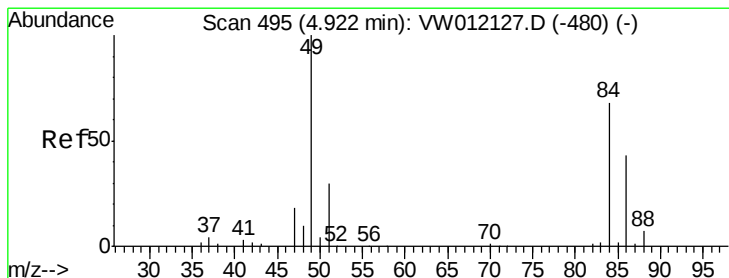
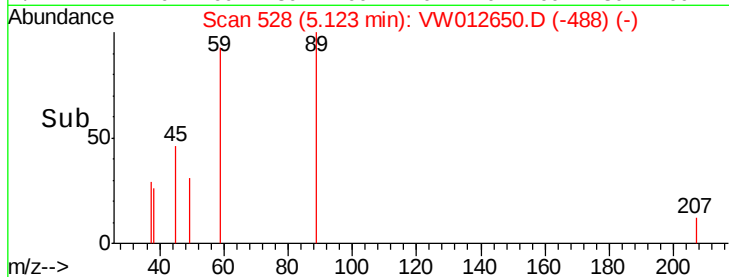
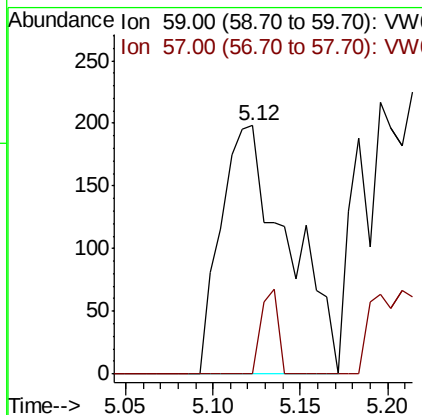
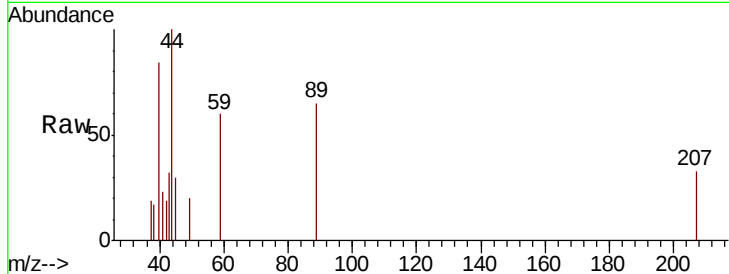


#11

Tert butyl alcohol  
 Concen: 3.028 ug/l  
 RT: 5.12 min Scan# 528  
 Delta R.T. -0.05 min  
 Lab File: VW012650.D  
 Acq: 05 Sep 2019 19:19

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 T12-E1-(0)

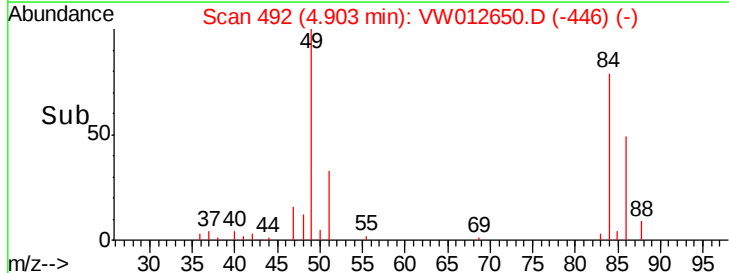
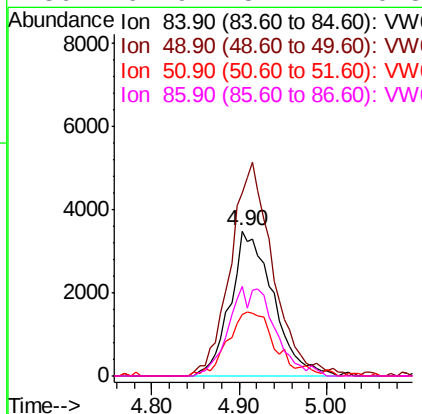
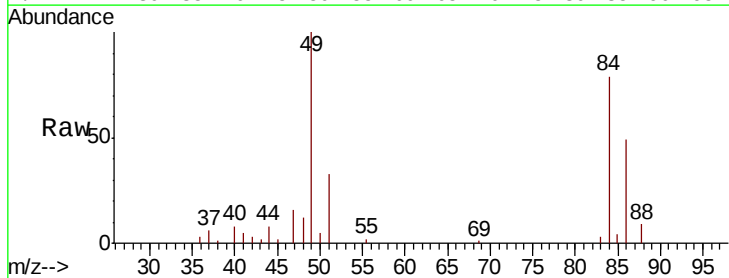
Tgt Ion: 59 Resp: 530  
 Ion Ratio Lower Upper  
 59 100  
 57 8.7 9.0 13.4#

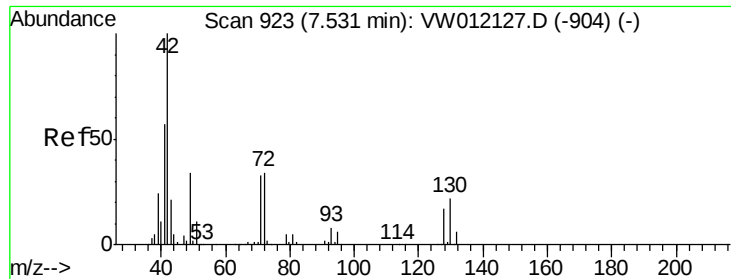


#20

Methylene Chloride  
 Concen: 4.215 ug/l  
 RT: 4.90 min Scan# 492  
 Delta R.T. -0.02 min  
 Lab File: VW012650.D  
 Acq: 05 Sep 2019 19:19

Tgt Ion: 84 Resp: 11847  
 Ion Ratio Lower Upper  
 84 100  
 49 126.4 117.8 176.8  
 51 42.1 35.6 53.4  
 86 61.9 51.2 76.8

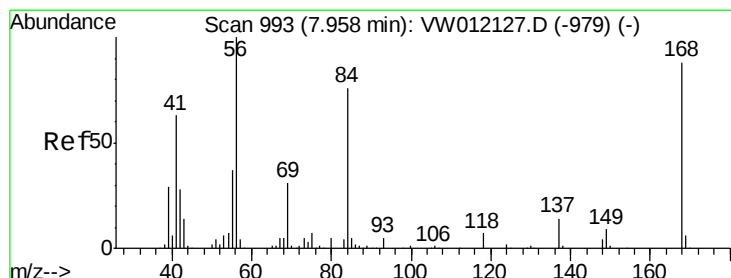
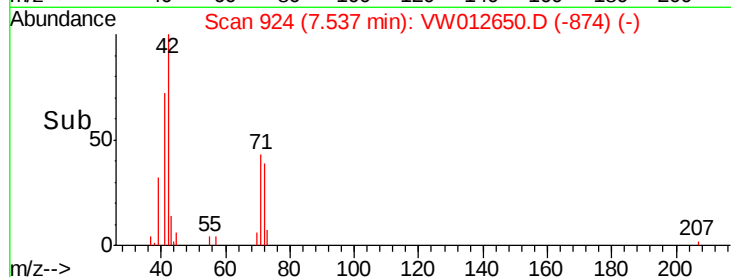
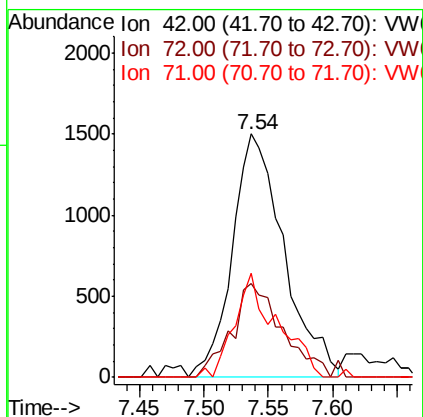
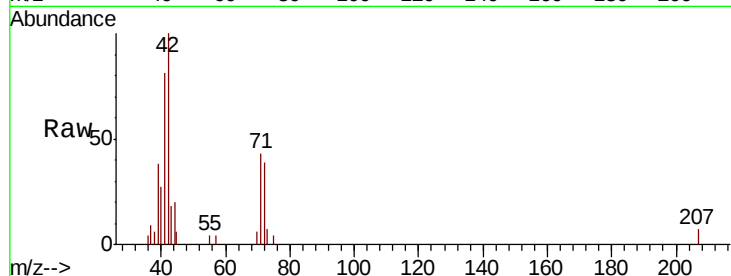




#29  
Tetrahydrofuran  
Concen: 6.893 ug/l  
RT: 7.54 min Scan# 924  
Delta R.T. 0.01 min  
Lab File: VW012650.D  
Acq: 05 Sep 2019 19:19

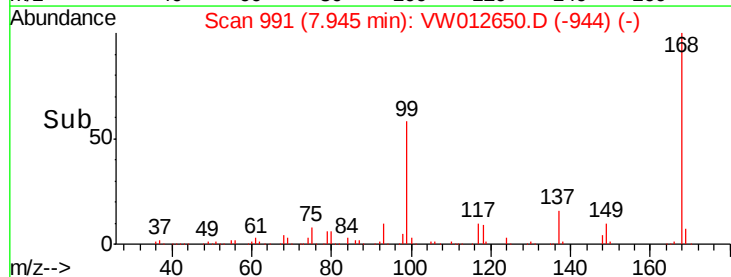
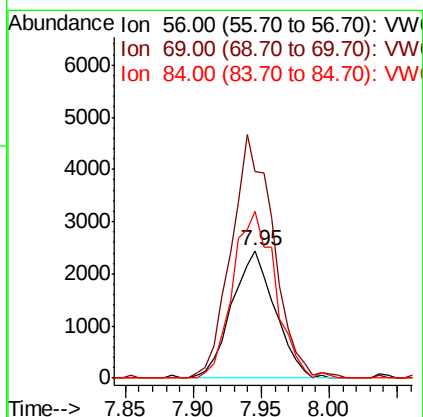
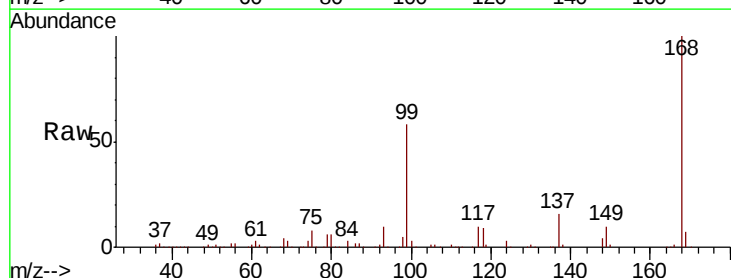
Instrument :  
MSVOA\_W  
ClientSampleId :  
T12-E1-(0)

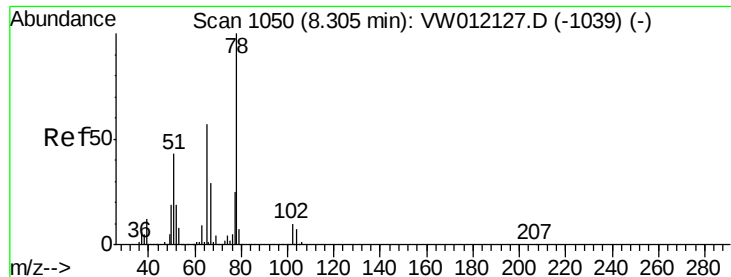
Tgt Ion: 42 Resp: 4178  
Ion Ratio Lower Upper  
42 100  
72 37.9 27.3 40.9  
71 35.5 25.5 38.3



#31  
Cyclohexane  
Concen: 1.032 ug/l  
RT: 7.95 min Scan# 991  
Delta R.T. -0.01 min  
Lab File: VW012650.D  
Acq: 05 Sep 2019 19:19

Tgt Ion: 56 Resp: 5406  
Ion Ratio Lower Upper  
56 100  
69 162.0 24.9 37.3#  
84 131.2 60.6 90.8#

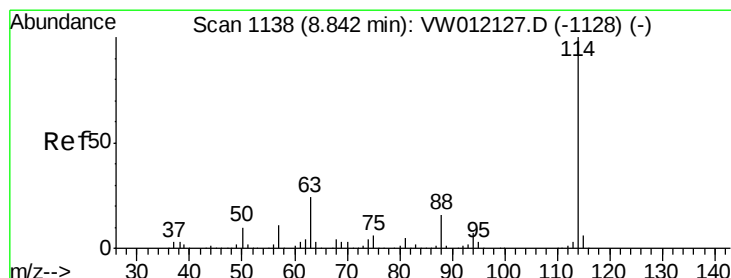
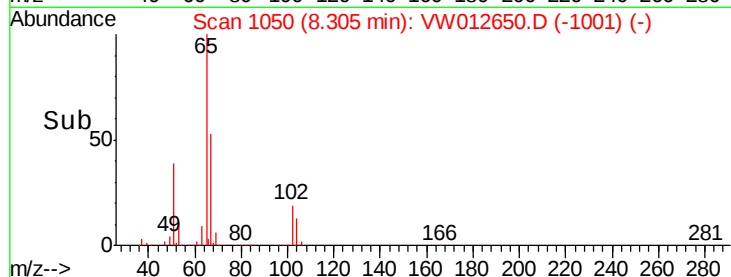
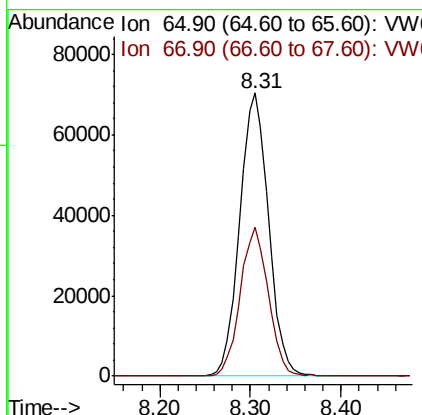
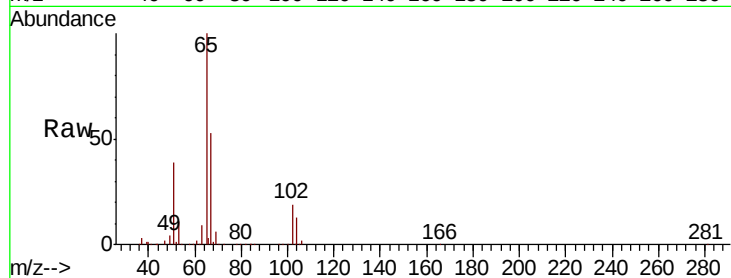




#33  
 1,2-Dichloroethane-d4  
 Concen: 53.349 ug/l  
 RT: 8.31 min Scan# 1050  
 Delta R.T. -0.00 min  
 Lab File: VW012650.D  
 Acq: 05 Sep 2019 19:19

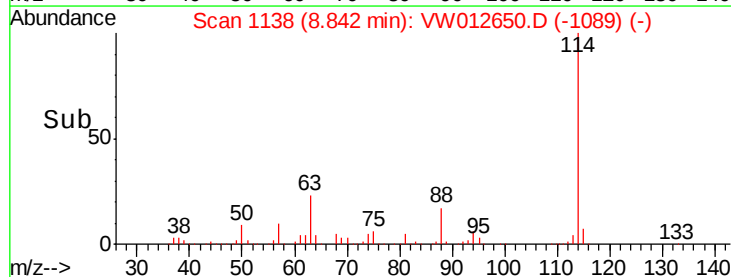
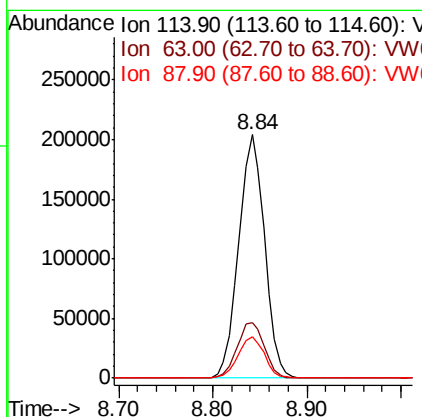
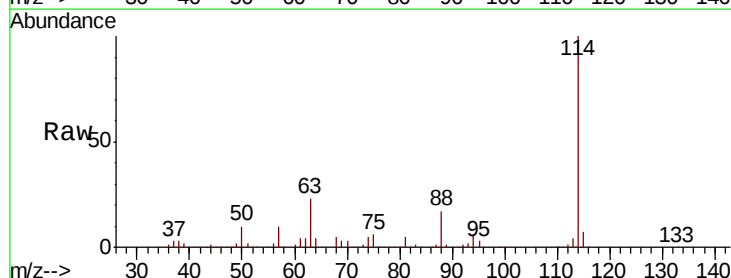
Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 T12-E1-(0)

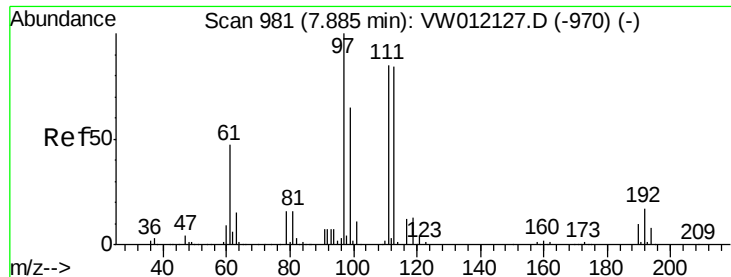
Tgt Ion: 65 Resp: 155163  
 Ion Ratio Lower Upper  
 65 100  
 67 51.3 0.0 102.6



#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.84 min Scan# 1138  
 Delta R.T. -0.00 min  
 Lab File: VW012650.D  
 Acq: 05 Sep 2019 19:19

Tgt Ion: 114 Resp: 392827  
 Ion Ratio Lower Upper  
 114 100  
 63 22.7 0.0 48.6  
 88 16.8 0.0 32.2





#35

Dibromofluoromethane

Concen: 51.575 ug/l

RT: 7.88 min Scan# 981

Delta R.T. -0.00 min

Lab File: VW012650.D

Acq: 05 Sep 2019 19:19

Instrument :  
MSVOA\_W  
ClientSampleId :  
T12-E1-(0)

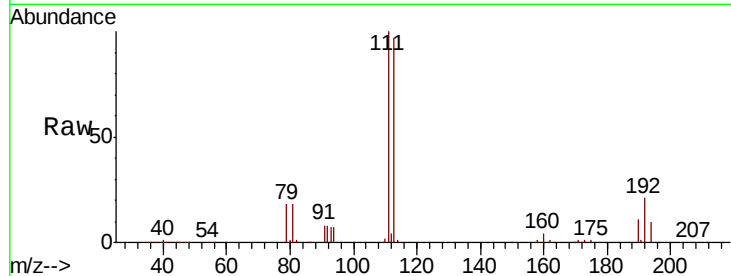
Tgt Ion:113 Resp: 120934

Ion Ratio Lower Upper

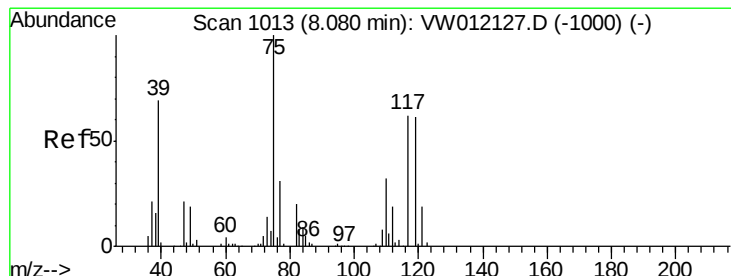
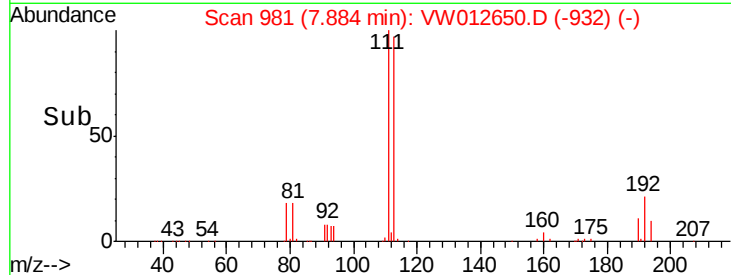
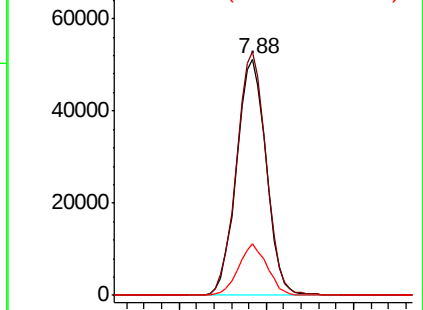
113 100

111 103.0 82.7 124.1

192 21.0 16.2 24.2



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: 4.880 ug/l

RT: 7.94 min Scan# 990

Delta R.T. -0.14 min

Lab File: VW012650.D

Acq: 05 Sep 2019 19:19

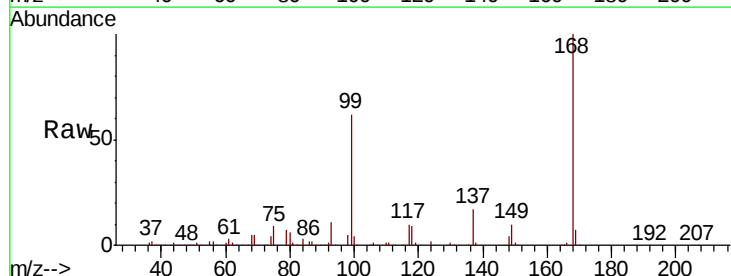
Tgt Ion: 75 Resp: 19811

Ion Ratio Lower Upper

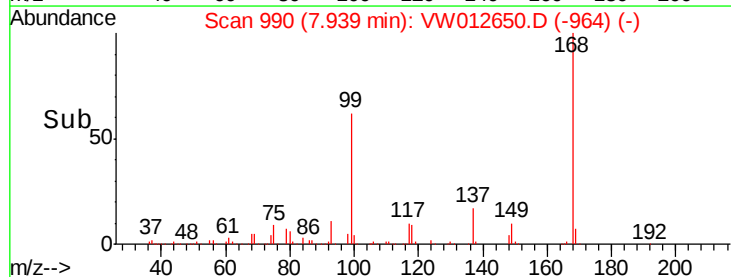
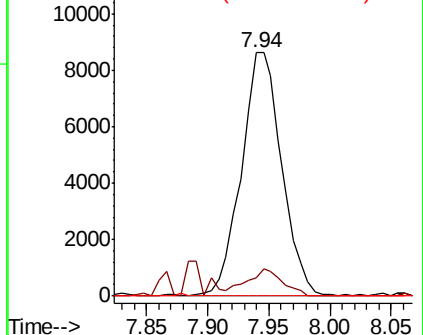
75 100

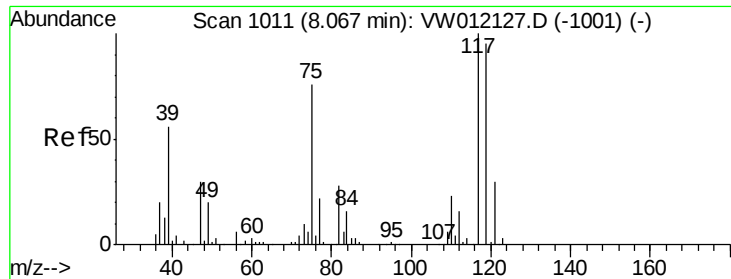
110 9.8 15.6 46.8#

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

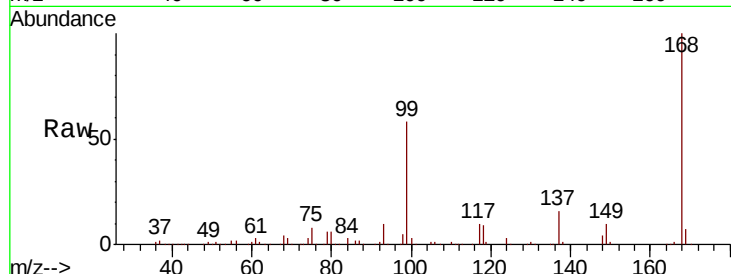




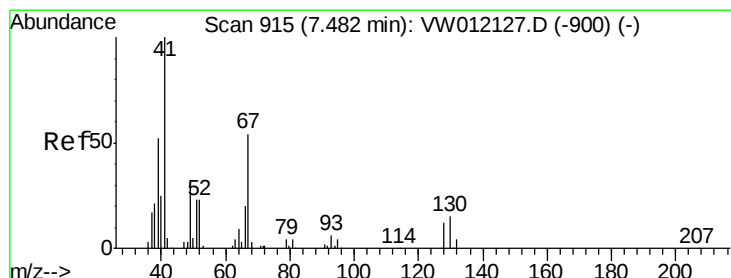
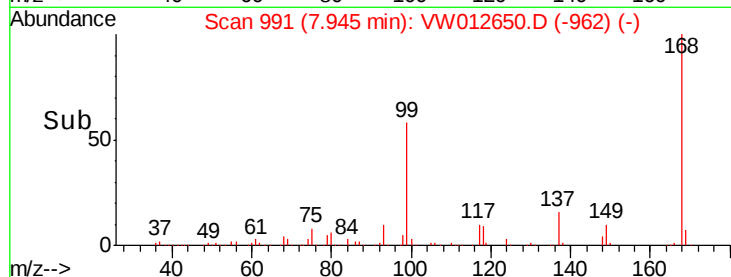
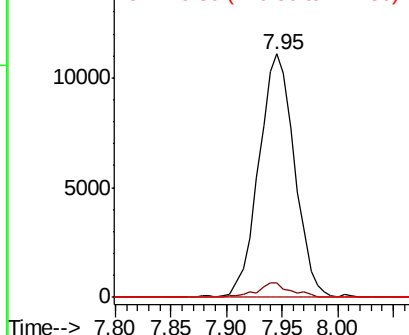
#38  
Carbon Tetrachloride  
Concen: 7.035 ug/l  
RT: 7.95 min Scan# 991  
Delta R.T. -0.12 min  
Lab File: VW012650.D  
Acq: 05 Sep 2019 19:19

Instrument :  
MSVOA\_W  
ClientSampleId :  
T12-E1-(0)

Tgt Ion: 117 Resp: 24718  
Ion Ratio Lower Upper  
117 100  
119 5.8 76.2 114.2#  
121 0.0 23.8 35.8#

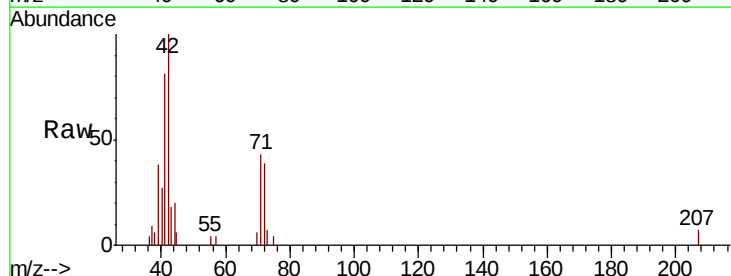


Abundance Ion 116.80 (116.50 to 117.50): V  
Ion 118.80 (118.50 to 119.50): V  
Ion 120.80 (120.50 to 121.50): V

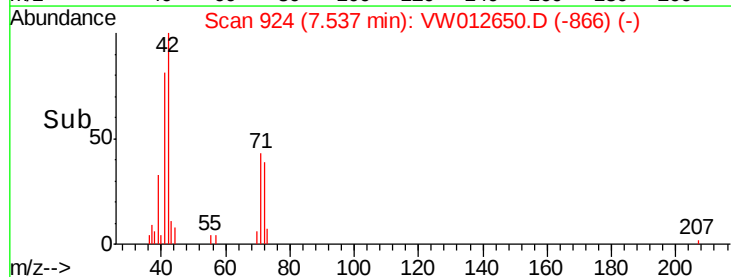
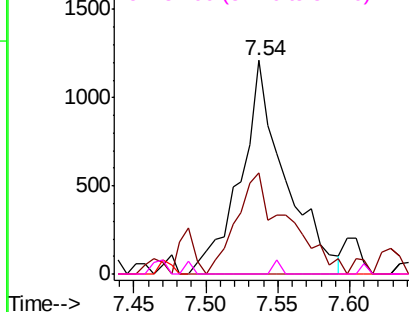


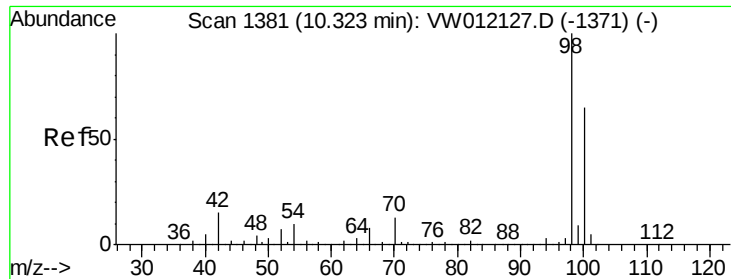
#41  
Methacrylonitrile  
Concen: 1.983 ug/l  
RT: 7.54 min Scan# 924  
Delta R.T. 0.05 min  
Lab File: VW012650.D  
Acq: 05 Sep 2019 19:19

Tgt Ion: 41 Resp: 2593  
Ion Ratio Lower Upper  
41 100  
39 54.9 45.8 68.8  
67 0.0 46.2 69.4#  
52 1.2 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: 49.749 ug/l

RT: 10.32 min Scan# 1381

Delta R.T. -0.00 min

Lab File: VW012650.D

Acq: 05 Sep 2019 19:19

Instrument :

MSVOA\_W

ClientSampleId :

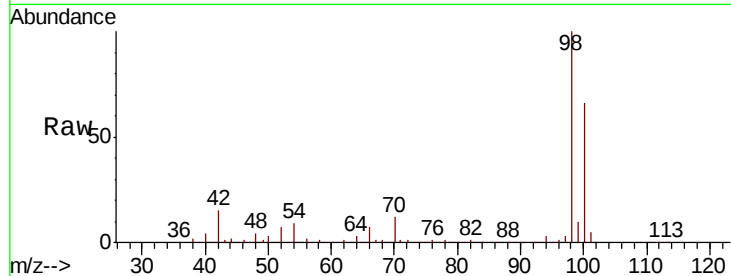
T12-E1-(0)

Tgt Ion: 98 Resp: 472989

Ion Ratio Lower Upper

98 100

100 65.0 52.4 78.6



Abundance Ion 98.00 (97.70 to 98.70): VW

Ion 100.00 (99.70 to 100.70): VW

10.32

250000

200000

150000

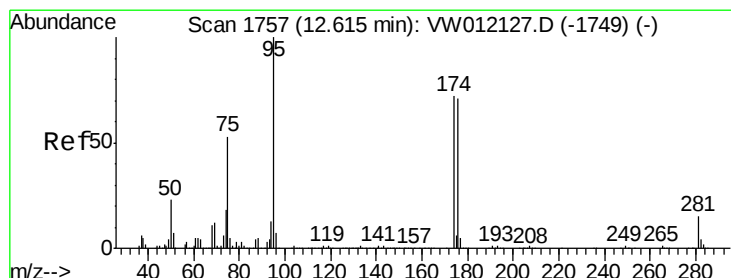
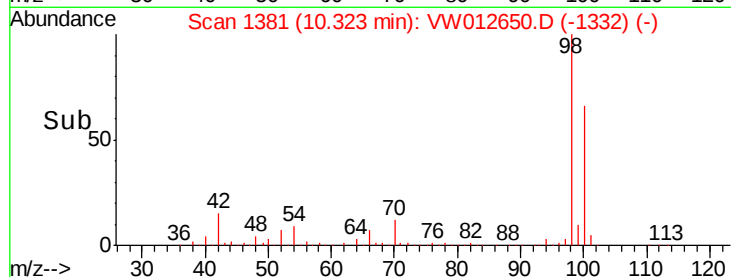
100000

50000

0

Time-->

10.20 10.30 10.40 10.50



#62

4-Bromofluorobenzene

Concen: 41.621 ug/l

RT: 12.62 min Scan# 1757

Delta R.T. -0.00 min

Lab File: VW012650.D

Acq: 05 Sep 2019 19:19

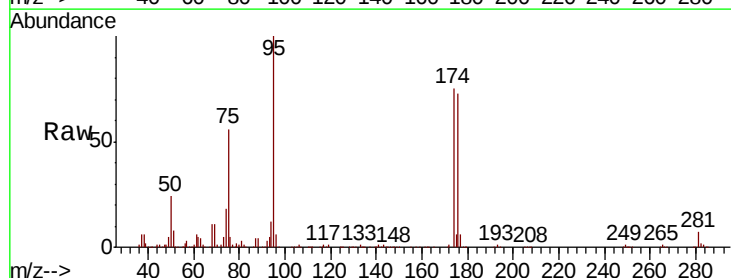
Tgt Ion: 95 Resp: 139489

Ion Ratio Lower Upper

95 100

174 78.5 0.0 150.8

176 75.2 0.0 148.6



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

12.62

100000

80000

60000

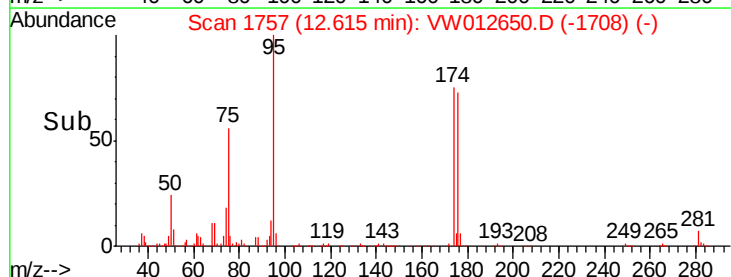
40000

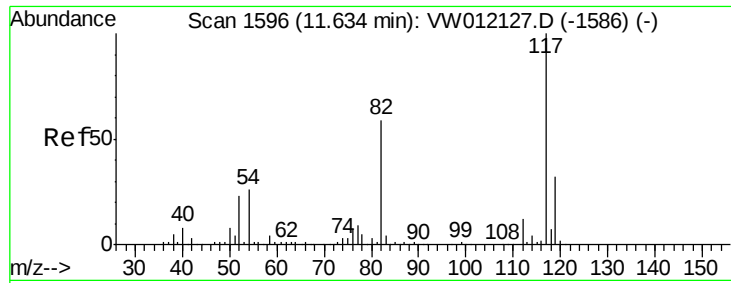
20000

0

Time-->

12.50 12.60 12.70

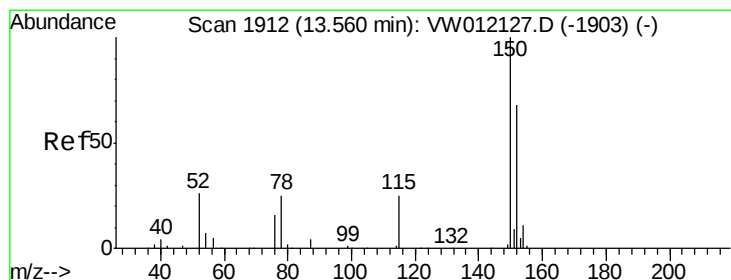
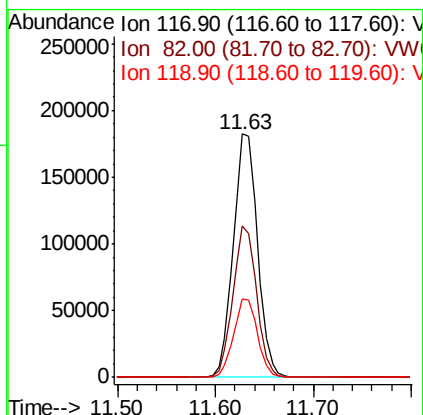
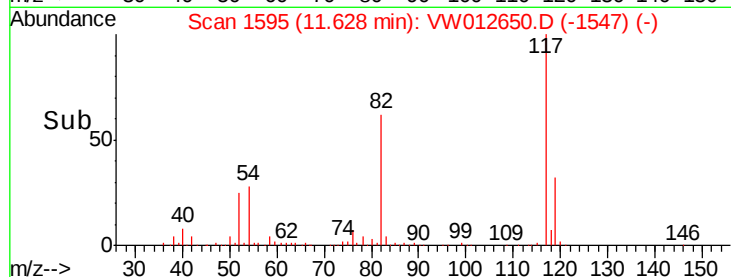
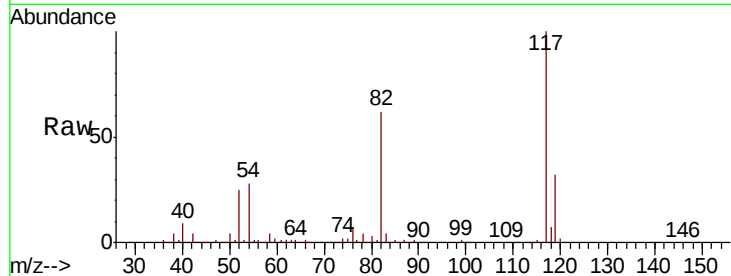




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.63 min Scan# 1595  
Delta R.T. -0.01 min  
Lab File: VW012650.D  
Acq: 05 Sep 2019 19:19

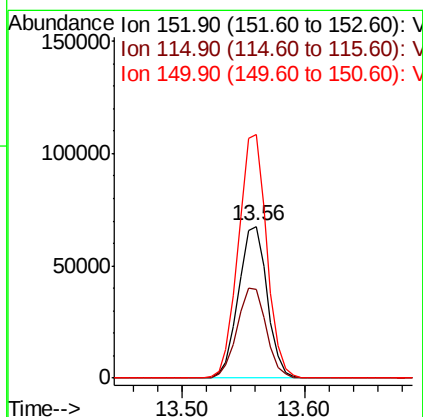
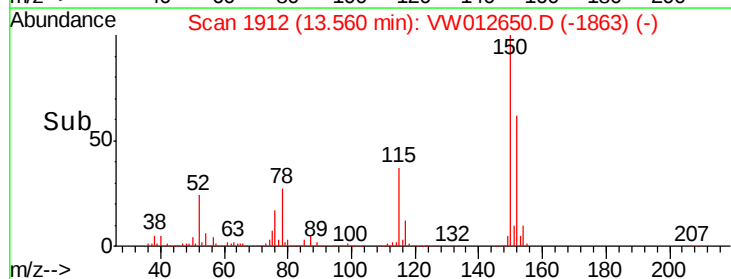
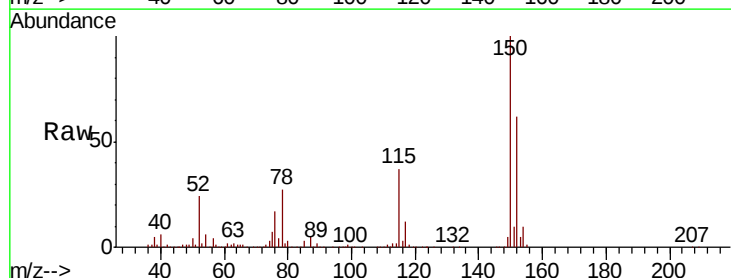
Instrument :  
MSVOA\_W  
ClientSampleId :  
T12-E1-(0)

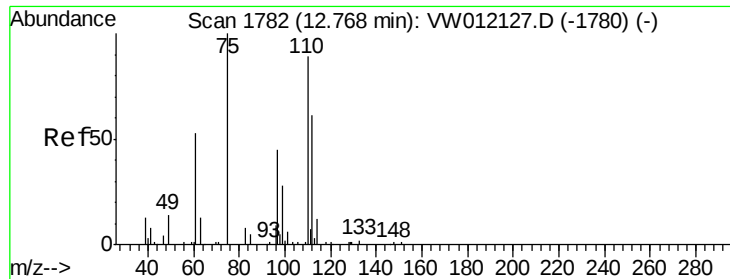
Tgt Ion:117 Resp: 314318  
Ion Ratio Lower Upper  
117 100  
82 62.4 47.4 71.2  
119 32.2 25.4 38.2



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 13.56 min Scan# 1912  
Delta R.T. -0.00 min  
Lab File: VW012650.D  
Acq: 05 Sep 2019 19:19

Tgt Ion:152 Resp: 109608  
Ion Ratio Lower Upper  
152 100  
115 60.3 30.1 90.3  
150 158.6 0.0 345.8





#76

1,2,3-Trichloropropane

Concen: 70.816 ug/l

RT: 12.62 min Scan# 1757

Delta R.T. -0.15 min

Lab File: VW012650.D

Acq: 05 Sep 2019 19:19

Instrument :

MSVOA\_W

ClientSampled :

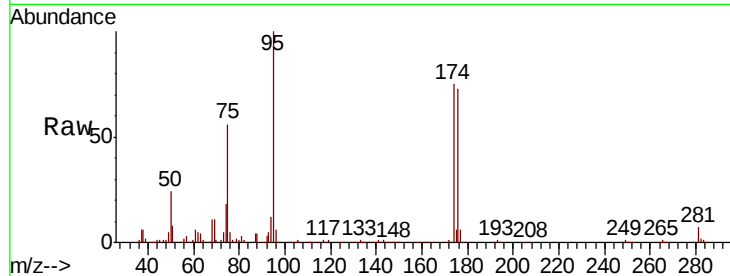
T12-E1-(0)

Tgt Ion: 75 Resp: 75596

Ion Ratio Lower Upper

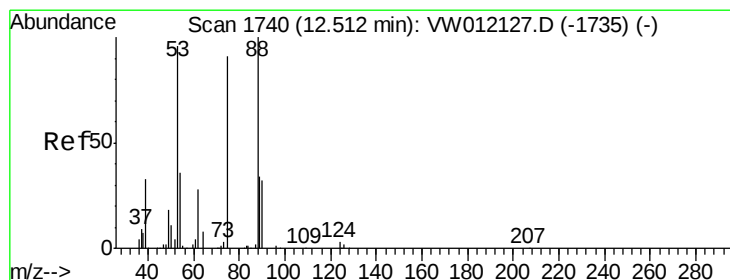
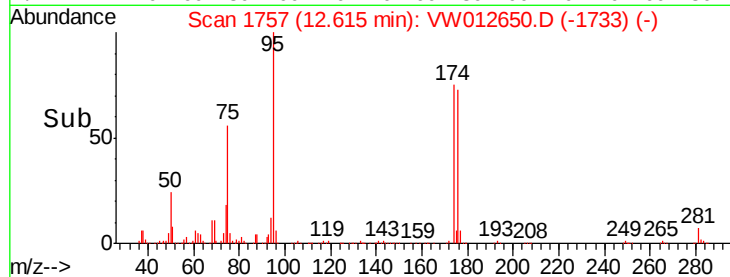
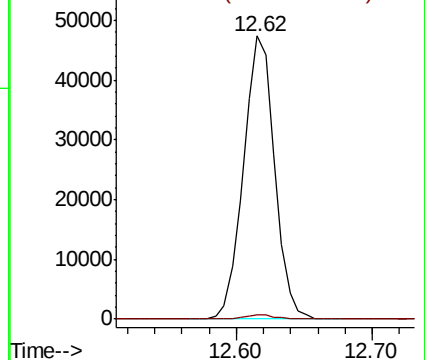
75 100

77 1.5 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: 155.266 ug/l

RT: 12.62 min Scan# 1757

Delta R.T. 0.10 min

Lab File: VW012650.D

Acq: 05 Sep 2019 19:19

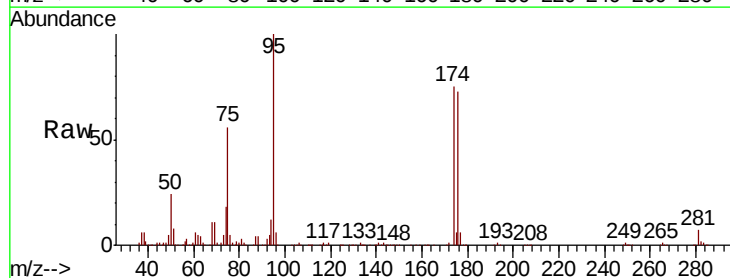
Tgt Ion: 75 Resp: 75596

Ion Ratio Lower Upper

75 100

53 0.0 89.4 134.0#

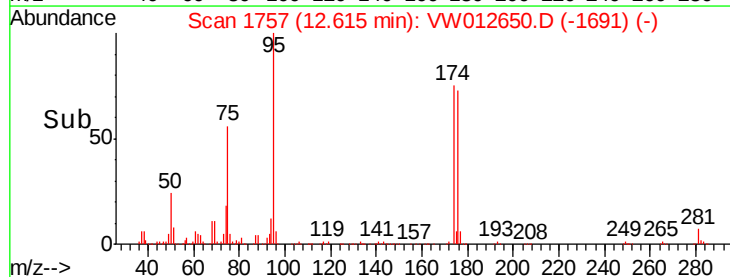
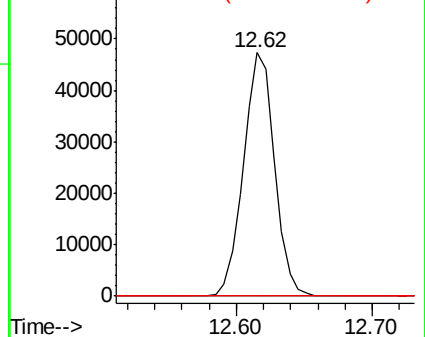
89 0.0 34.5 51.7#

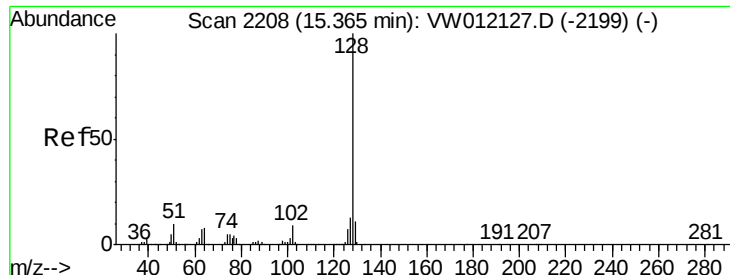


Abundance Ion 74.90 (74.60 to 75.60): VW

Ion 53.00 (52.70 to 53.70): VW

Ion 88.90 (88.60 to 89.60): VW





#95  
Naphthalene  
Concen: 4.411 ug/l  
RT: 15.37 min Scan# 2209  
Delta R.T. 0.01 min  
Lab File: VW012650.D  
Acq: 05 Sep 2019 19:19

Instrument :  
MSVOA\_W  
ClientSampleId :  
T12-E1-(0)

Tgt Ion:128 Resp: 408  
Ion Ratio Lower Upper  
128 100  
127 0.0 10.7 16.1#  
129 0.0 8.7 13.1#

