

Data File : VW012420.D  
Acq On : 01 Sep 2019 01:02  
Operator : SY/VA  
Sample : K4517-13  
Misc : 5.88G/5ML/MSVOA\_W/SOIL  
ALS Vial : 38 Sample Multiplier: 1

Instrument :  
MSVOA\_W  
ClientSampleId :  
T4-S-C-(0)

Quant Time: Sep 01 03:40:49 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  | 230087   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.84  | 114  | 381742   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.63 | 117  | 318863   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.56 | 152  | 123119   | 50.00 | ug/l  | 0.00     |

#### System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.30   | 65  | 155870   | 56.99 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 113.98% |      |
| 35) Dibromofluoromethane  | 7.88   | 113 | 120443   | 52.86 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 105.72% |      |
| 50) Toluene-d8            | 10.32  | 98  | 473555   | 51.26 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 102.52% |      |
| 62) 4-Bromofluorobenzene  | 12.62  | 95  | 144465   | 44.36 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 88.72%  |      |

#### Target Compounds

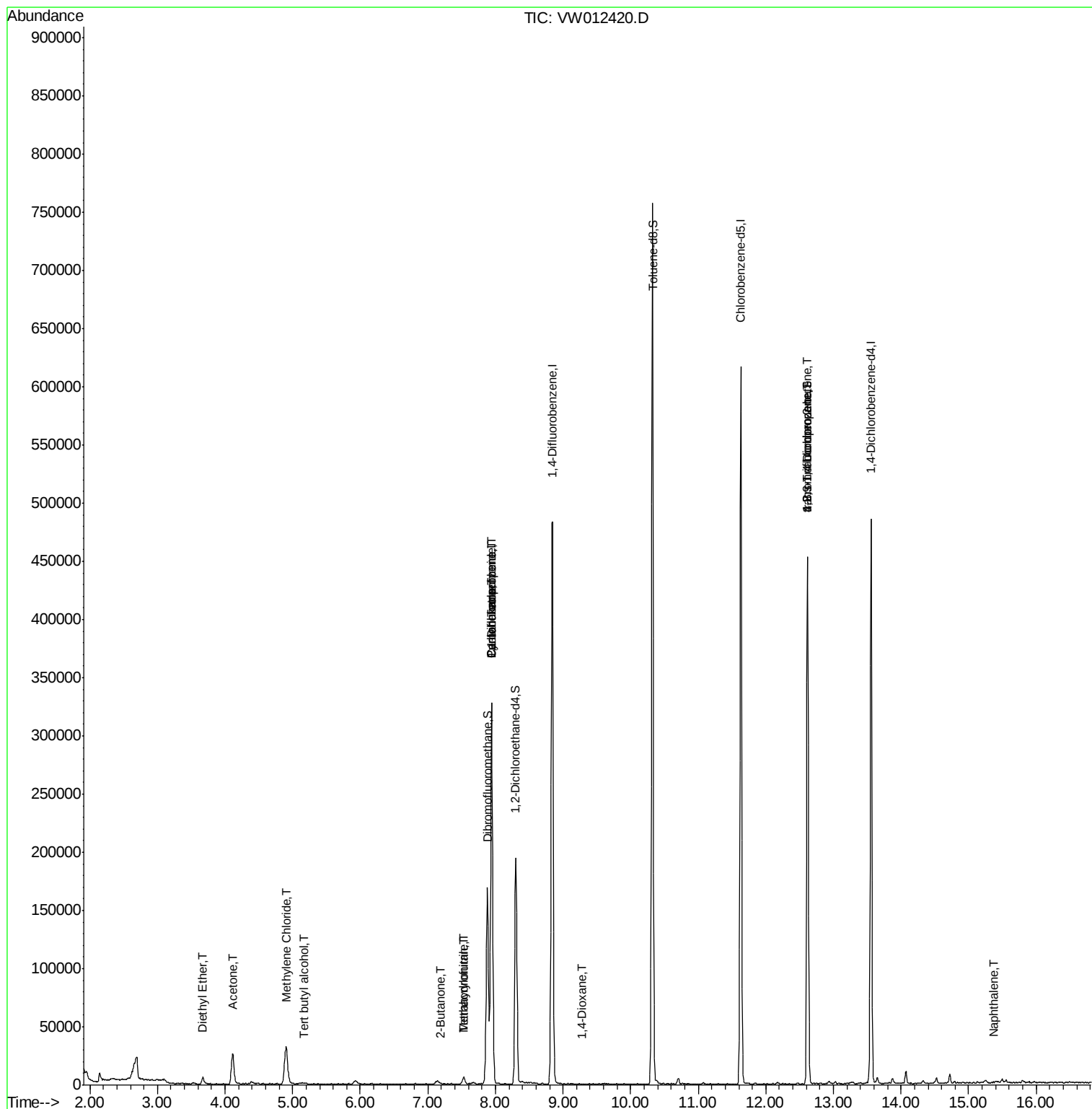
|                                |       |     |       |         |        | Qvalue |
|--------------------------------|-------|-----|-------|---------|--------|--------|
| 8) Diethyl Ether               | 3.67  | 74  | 2589  | 2.022   | ug/l   | 86     |
| 11) Tert butyl alcohol         | 5.16  | 59  | 1321  | 8.025   | ug/l # | 76     |
| 16) Acetone                    | 4.11  | 43  | 46801 | 66.938  | ug/l   | 99     |
| 20) Methylene Chloride         | 4.90  | 84  | 22148 | 8.379   | ug/l   | 92     |
| 25) 2-Butanone                 | 7.18  | 43  | 964   | 1.015   | ug/l   | 95     |
| 29) Tetrahydrofuran            | 7.53  | 42  | 5073  | 8.900   | ug/l   | 94     |
| 31) Cyclohexane                | 7.95  | 56  | 6403  | 1.300   | ug/l # | 2      |
| 36) 1,1-Dichloropropene        | 7.95  | 75  | 20158 | 5.110   | ug/l # | 53     |
| 38) Carbon Tetrachloride       | 7.95  | 117 | 24420 | 7.152   | ug/l # | 16     |
| 41) Methacrylonitrile          | 7.53  | 41  | 3218  | 2.533   | ug/l # | 57     |
| 49) 1,4-Dioxane                | 9.28  | 88  | 22    | 1.114   | ug/l # | 1      |
| 76) 1,2,3-Trichloropropane     | 12.62 | 75  | 79709 | 66.475  | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.62 | 75  | 79709 | 145.748 | ug/l # | 6      |
| 95) Naphthalene                | 15.37 | 128 | 477   | 4.415   | ug/l   | 99     |

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

Data File : VW012420.D  
Acq On : 01 Sep 2019 01:02  
Operator : SY/VA  
Sample : K4517-13  
Misc : 5.88G/5ML/MSVOA\_W/SOIL  
ALS Vial : 38 Sample Multiplier: 1

Instrument :  
MSVOA\_W  
ClientSampleId :  
T4-S-C-(0)

Quant Time: Sep 01 03:40:49 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





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.95 min Scan# 991

Delta R.T. -0.00 min

Lab File: VW012420.D

Acq: 01 Sep 2019 01:02

Instrument :

MSVOA\_W

ClientSampleId :

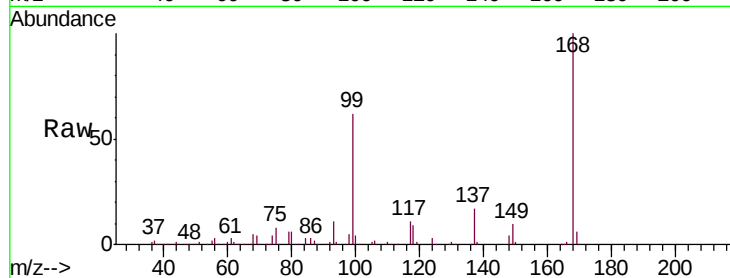
T4-S-C(0)

Tgt Ion:168 Resp: 230087

Ion Ratio Lower Upper

168 100

99 62.4 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

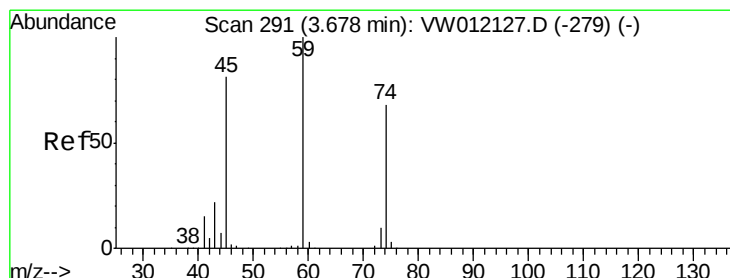
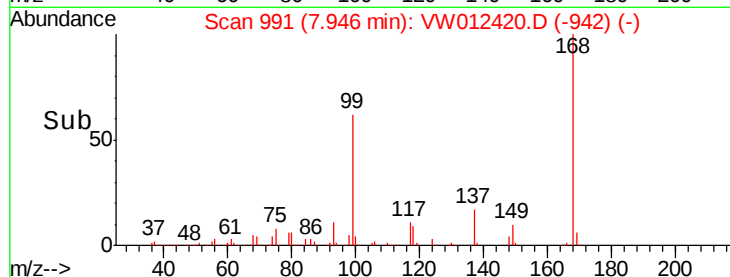
60000

40000

20000

0

Time-->



#8

Diethyl Ether

Concen: 2.022 ug/l

RT: 3.67 min Scan# 290

Delta R.T. -0.01 min

Lab File: VW012420.D

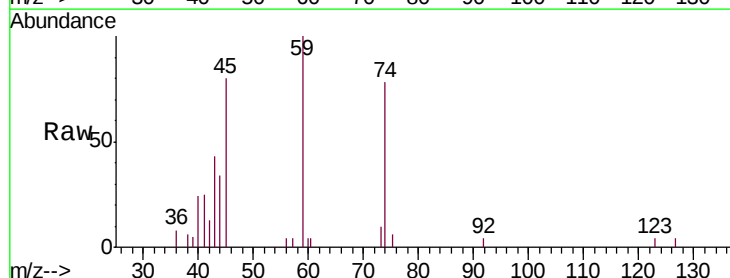
Acq: 01 Sep 2019 01:02

Tgt Ion: 74 Resp: 2589

Ion Ratio Lower Upper

74 100

45 134.0 59.2 177.6



Abundance Ion 74.00 (73.70 to 74.70): VW

Ion 45.00 (44.70 to 45.70): VW

3.67

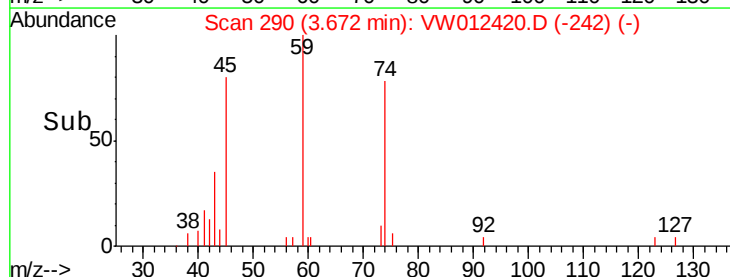
1500

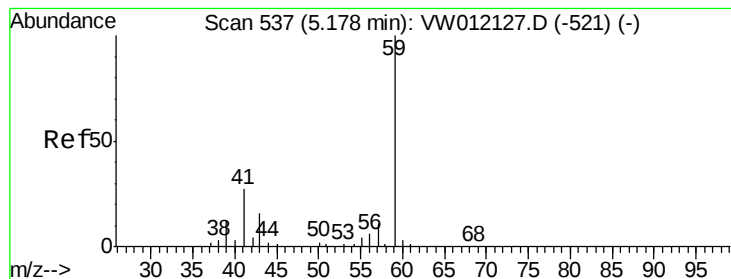
1000

500

0

Time-->





#11

Tert butyl alcohol

Concen: 8.025 ug/l

RT: 5.16 min Scan# 534

Delta R.T. -0.02 min

Lab File: VW012420.D

Acq: 01 Sep 2019 01:02

Instrument :

MSVOA\_W

ClientSampled :

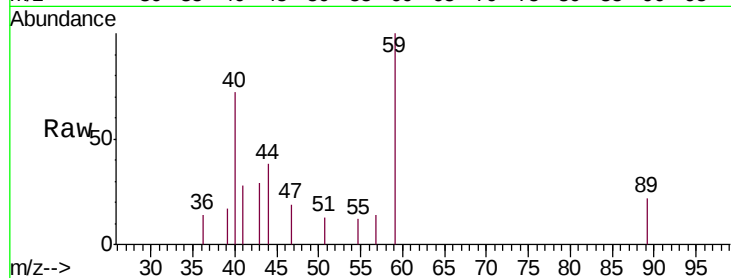
T4-S-C(0)

Tgt Ion: 59 Resp: 1321

Ion Ratio Lower Upper

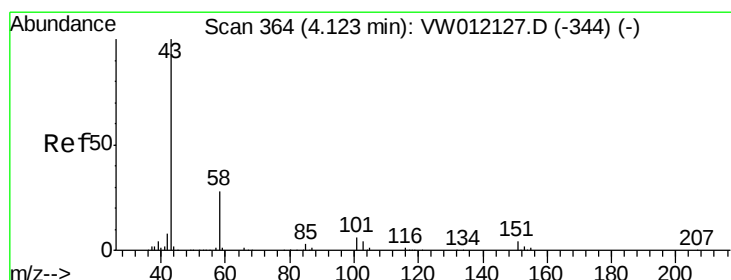
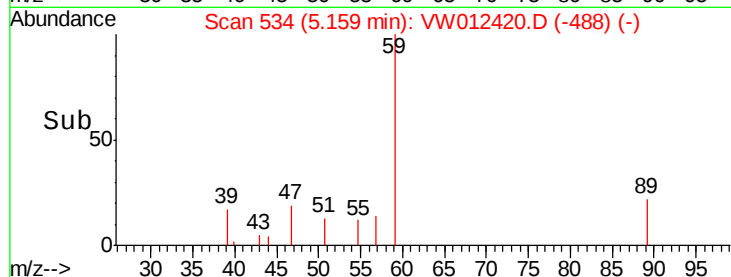
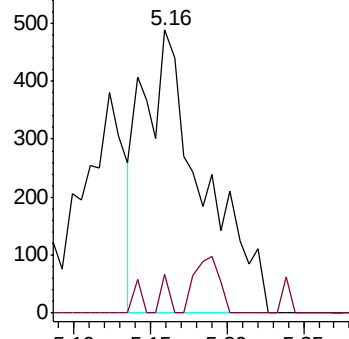
59 100

57 1.9 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: 66.938 ug/l

RT: 4.11 min Scan# 362

Delta R.T. -0.01 min

Lab File: VW012420.D

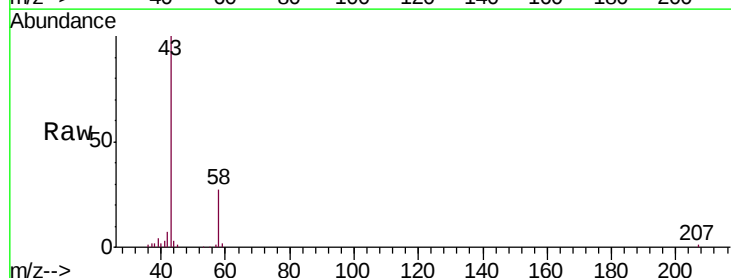
Acq: 01 Sep 2019 01:02

Tgt Ion: 43 Resp: 46801

Ion Ratio Lower Upper

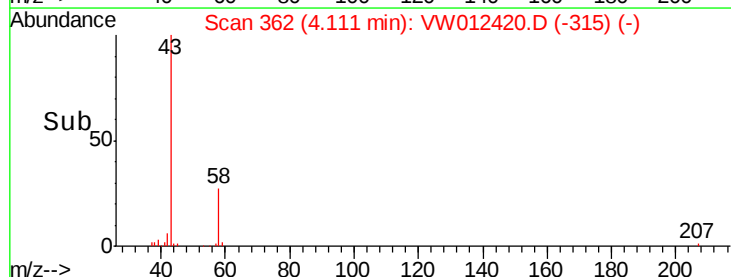
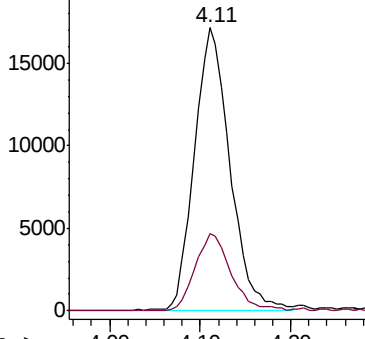
43 100

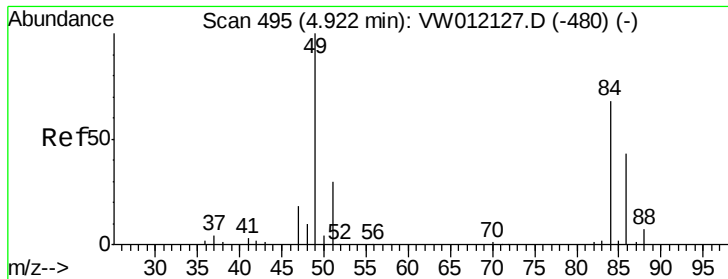
58 27.4 22.4 33.6



Abundance Ion 43.00 (42.70 to 43.70): VW

Ion 58.00 (57.70 to 58.70): VW

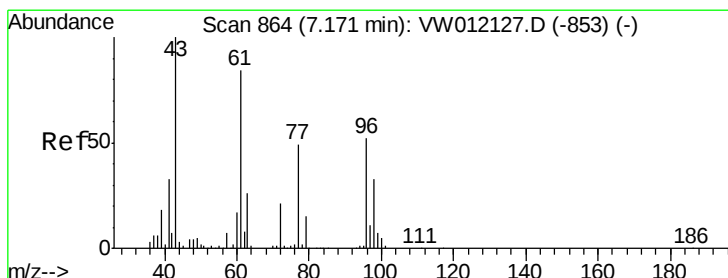
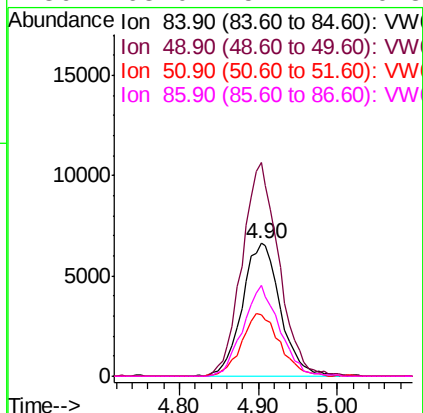
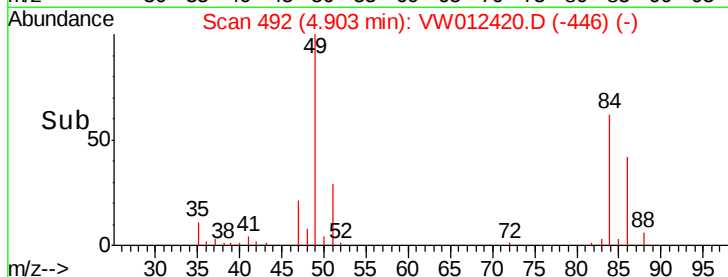
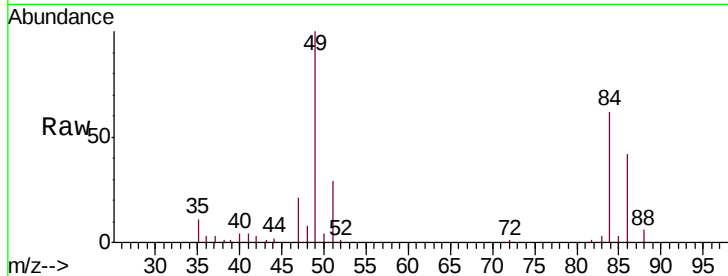




#20  
Methylene Chloride  
Concen: 8.379 ug/l  
RT: 4.90 min Scan# 492  
Delta R.T. -0.02 min  
Lab File: VW012420.D  
Acq: 01 Sep 2019 01:02

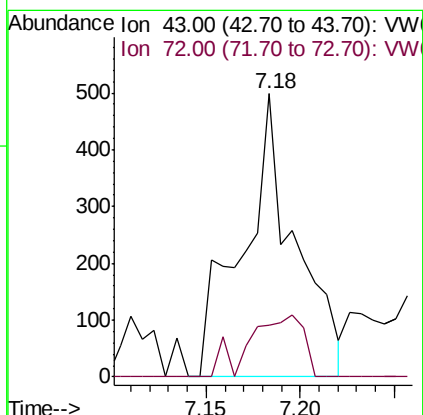
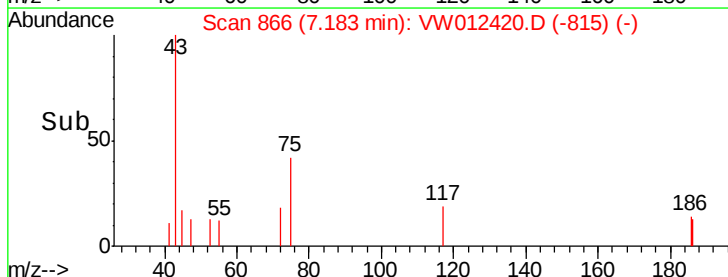
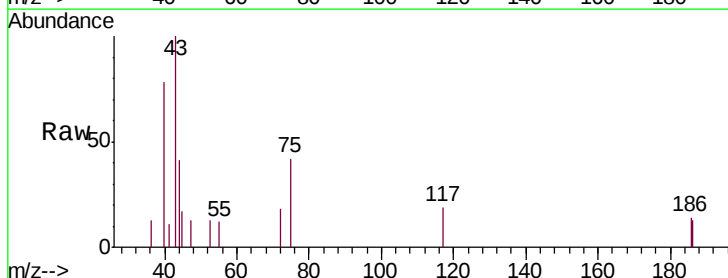
Instrument :  
MSVOA\_W  
ClientSampleId :  
T4-S-C(0)

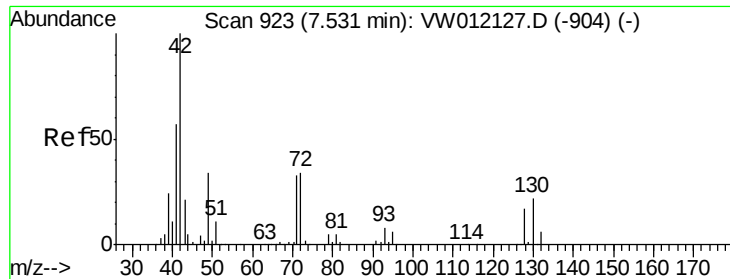
Tgt Ion: 84 Resp: 22148  
Ion Ratio Lower Upper  
84 100  
49 160.7 117.8 176.8  
51 46.0 35.6 53.4  
86 68.0 51.2 76.8



#25  
2-Butanone  
Concen: 1.015 ug/l  
RT: 7.18 min Scan# 866  
Delta R.T. 0.01 min  
Lab File: VW012420.D  
Acq: 01 Sep 2019 01:02

Tgt Ion: 43 Resp: 964  
Ion Ratio Lower Upper  
43 100  
72 18.3 16.6 24.8

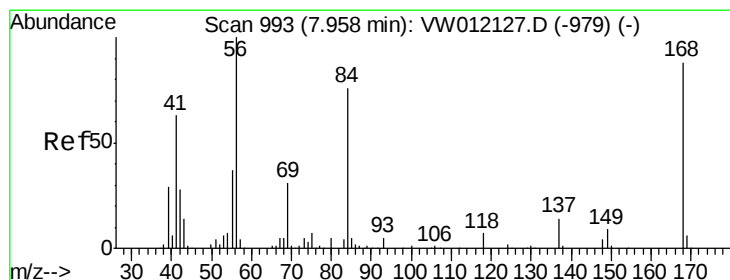
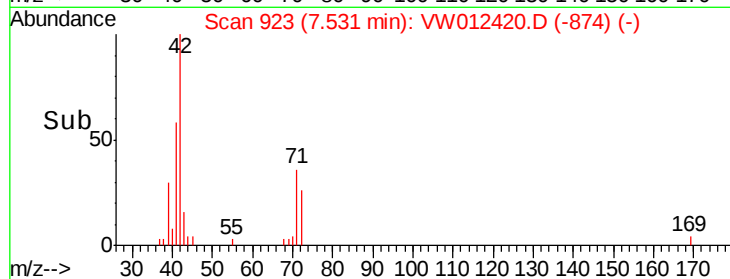
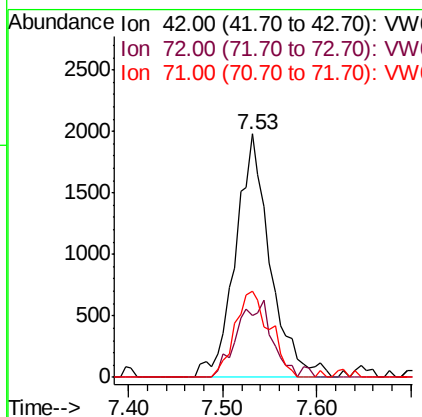
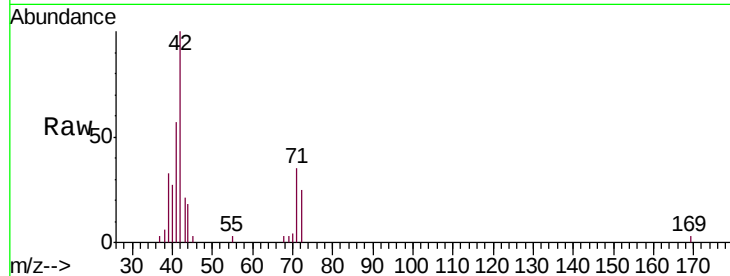




#29  
Tetrahydrofuran  
Concen: 8.900 ug/l  
RT: 7.53 min Scan# 923  
Delta R.T. 0.00 min  
Lab File: VW012420.D  
Acq: 01 Sep 2019 01:02

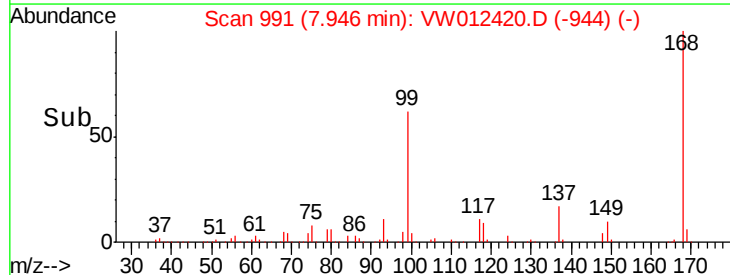
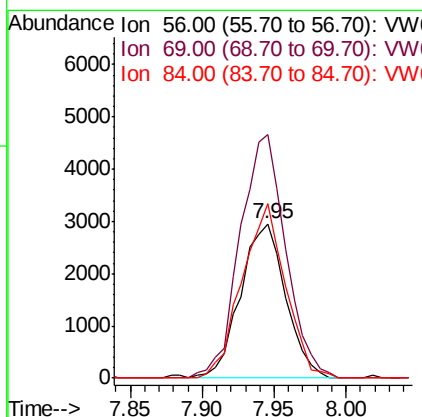
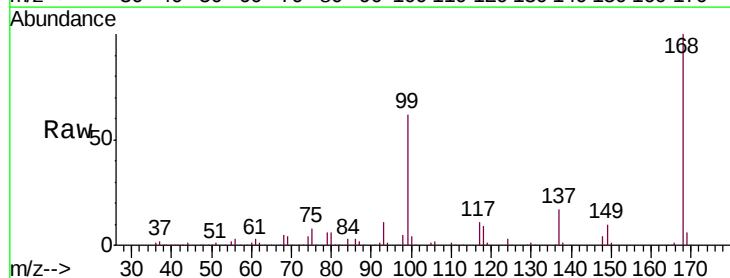
Instrument :  
MSVOA\_W  
ClientSampleId :  
T4-S-C(0)

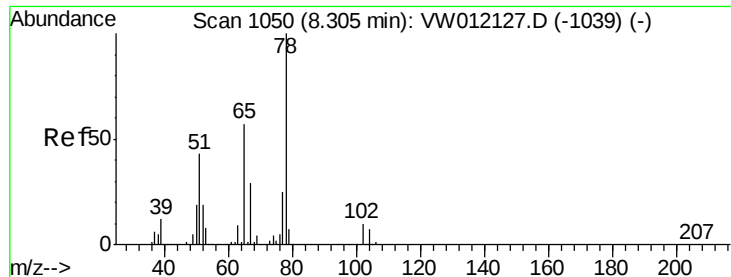
Tgt Ion: 42 Resp: 5073  
Ion Ratio Lower Upper  
42 100  
72 31.3 27.3 40.9  
71 35.6 25.5 38.3



#31  
Cyclohexane  
Concen: 1.300 ug/l  
RT: 7.95 min Scan# 991  
Delta R.T. -0.01 min  
Lab File: VW012420.D  
Acq: 01 Sep 2019 01:02

Tgt Ion: 56 Resp: 6403  
Ion Ratio Lower Upper  
56 100  
69 157.6 24.9 37.3#  
84 112.8 60.6 90.8#

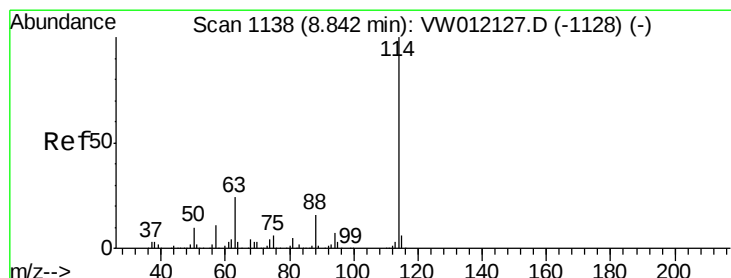
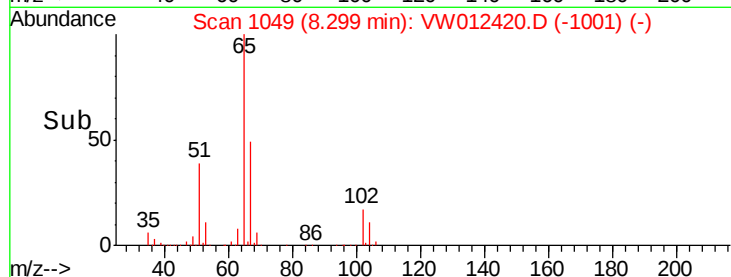
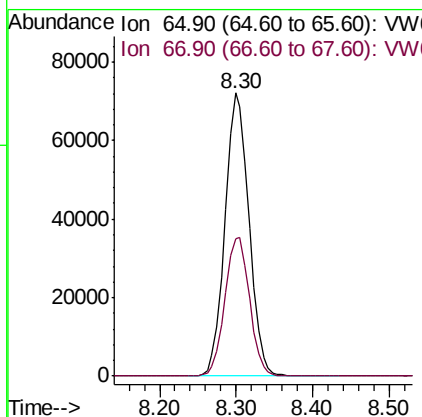
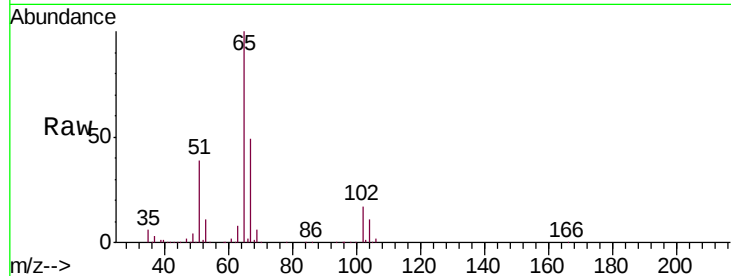




#33  
 1,2-Dichloroethane-d4  
 Concen: 56.987 ug/l  
 RT: 8.30 min Scan# 1049  
 Delta R.T. -0.01 min  
 Lab File: VW012420.D  
 Acq: 01 Sep 2019 01:02

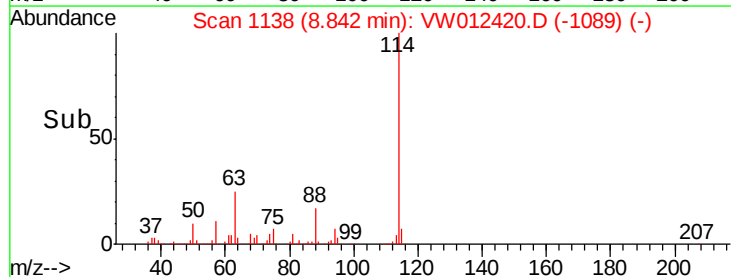
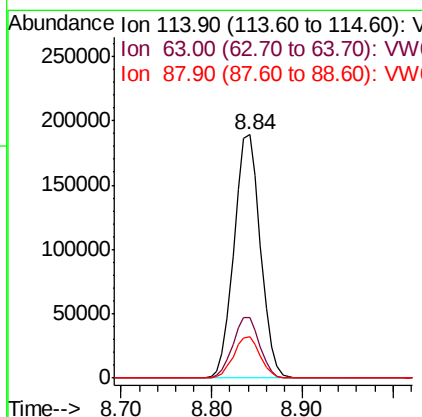
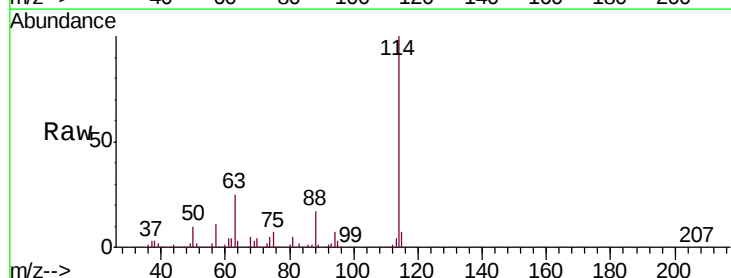
Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 T4-S-C(0)

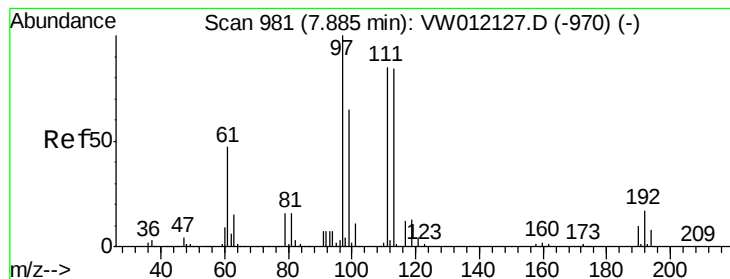
Tgt Ion: 65 Resp: 155870  
 Ion Ratio Lower Upper  
 65 100  
 67 50.4 0.0 102.6



#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.84 min Scan# 1138  
 Delta R.T. -0.00 min  
 Lab File: VW012420.D  
 Acq: 01 Sep 2019 01:02

Tgt Ion: 114 Resp: 381742  
 Ion Ratio Lower Upper  
 114 100  
 63 24.7 0.0 48.6  
 88 17.2 0.0 32.2





#35

Dibromofluoromethane

Concen: 52.858 ug/l

RT: 7.88 min Scan# 980

Delta R.T. -0.01 min

Lab File: VW012420.D

Acq: 01 Sep 2019 01:02

Instrument :

MSVOA\_W

ClientSampleId :

T4-S-C(0)

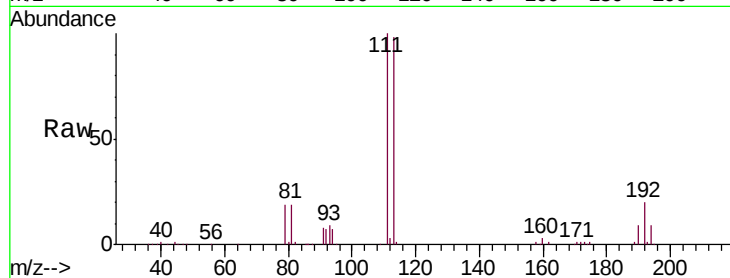
Tgt Ion:113 Resp: 120443

Ion Ratio Lower Upper

113 100

111 102.9 82.7 124.1

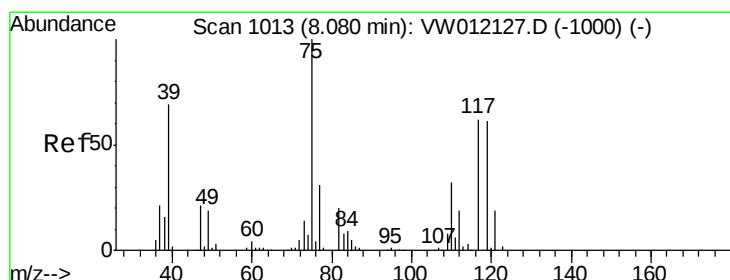
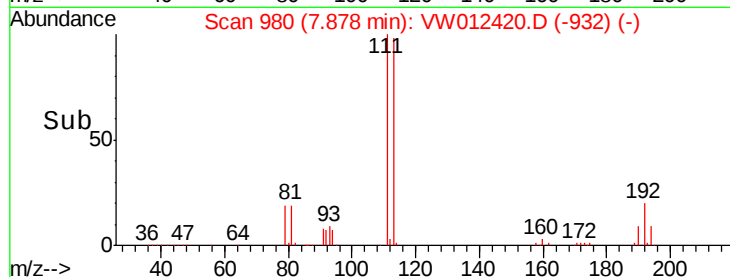
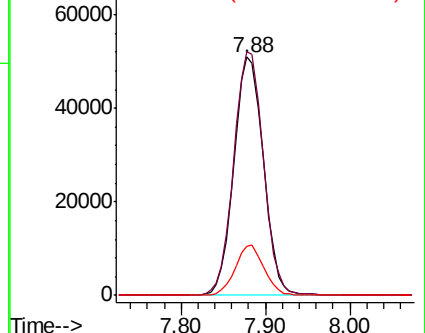
192 20.4 16.2 24.2



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: 5.110 ug/l

RT: 7.95 min Scan# 991

Delta R.T. -0.13 min

Lab File: VW012420.D

Acq: 01 Sep 2019 01:02

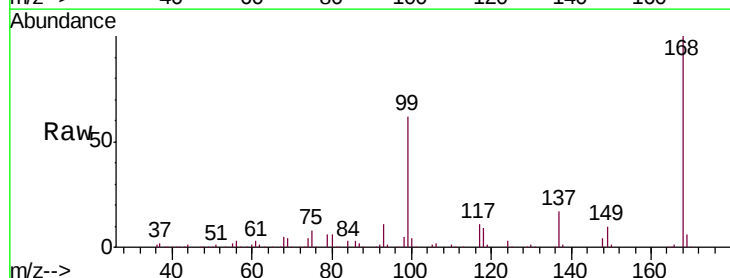
Tgt Ion: 75 Resp: 20158

Ion Ratio Lower Upper

75 100

110 10.4 15.6 46.8#

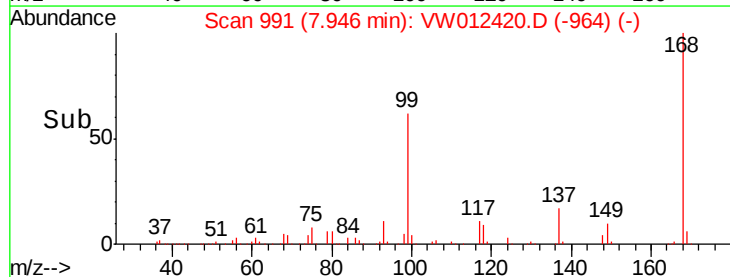
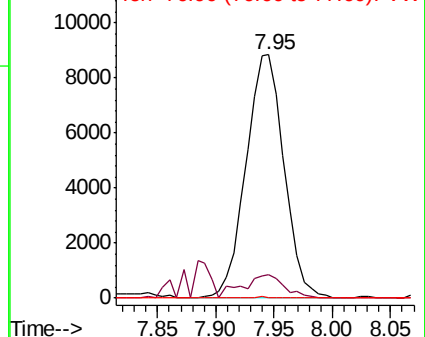
77 0.1 24.6 36.8#

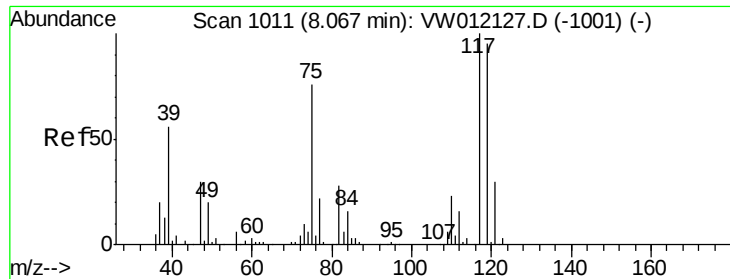


Abundance Ion 74.90 (74.60 to 75.60): VW

Ion 109.90 (109.60 to 110.60): V

Ion 76.90 (76.60 to 77.60): VW

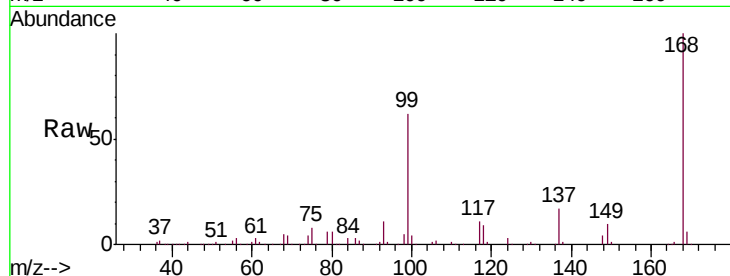




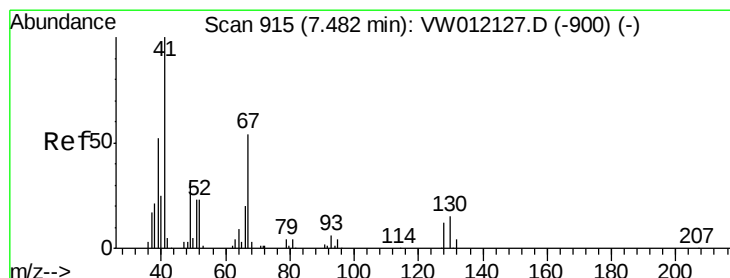
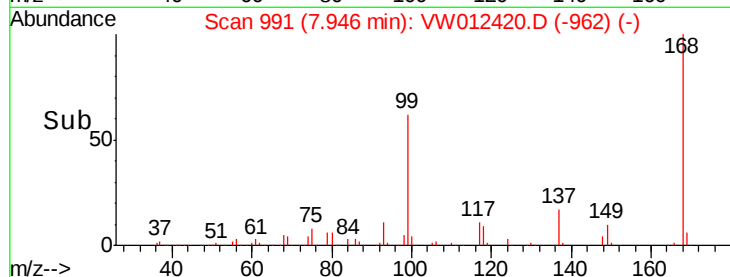
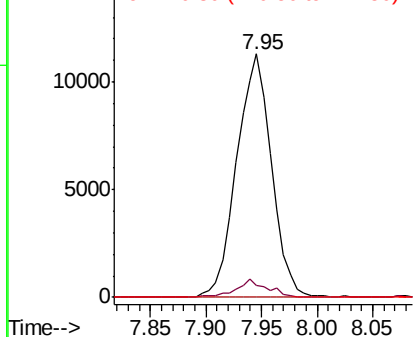
#38  
Carbon Tetrachloride  
Concen: 7.152 ug/l  
RT: 7.95 min Scan# 991  
Delta R.T. -0.12 min  
Lab File: VW012420.D  
Acq: 01 Sep 2019 01:02

Instrument :  
MSVOA\_W  
ClientSampleId :  
T4-S-C(0)

Tgt Ion: 117 Resp: 24420  
Ion Ratio Lower Upper  
117 100  
119 4.8 76.2 114.2#  
121 0.0 23.8 35.8#

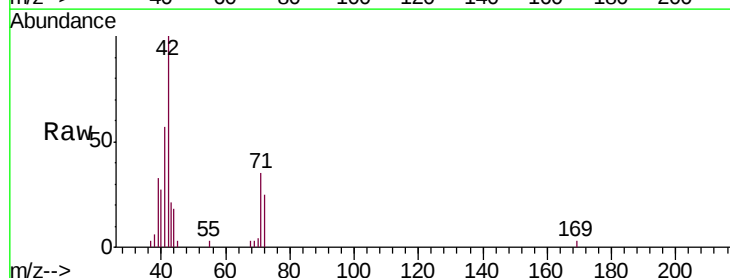


Abundance Ion 116.80 (116.50 to 117.50): V  
Ion 118.80 (118.50 to 119.50): V  
Ion 120.80 (120.50 to 121.50): V

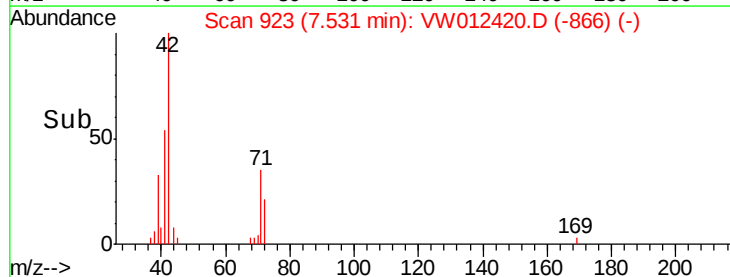
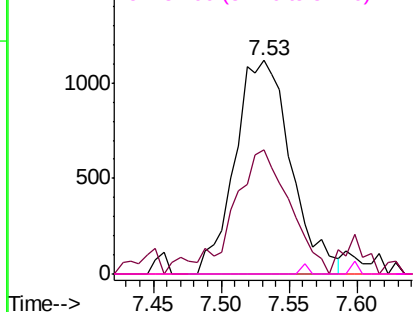


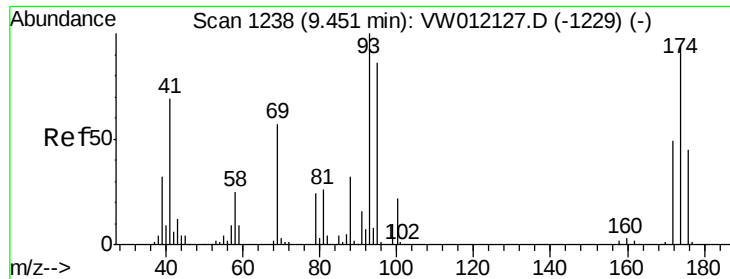
#41  
Methacrylonitrile  
Concen: 2.533 ug/l  
RT: 7.53 min Scan# 923  
Delta R.T. 0.05 min  
Lab File: VW012420.D  
Acq: 01 Sep 2019 01:02

Tgt Ion: 41 Resp: 3218  
Ion Ratio Lower Upper  
41 100  
39 59.6 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

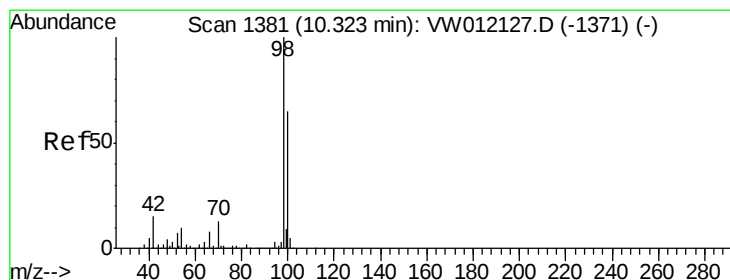
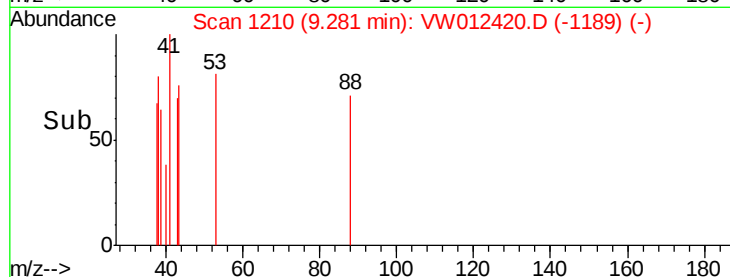
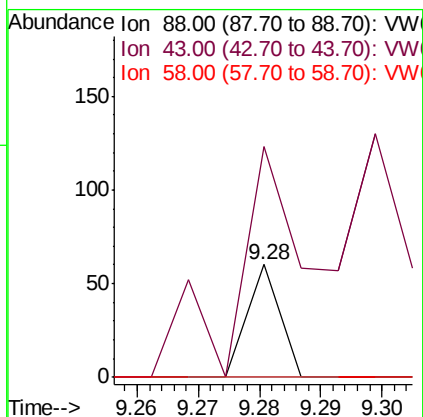
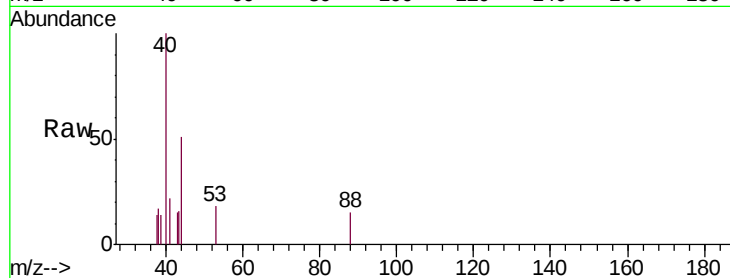




#49  
1,4-Dioxane  
Concen: 1.114 ug/l  
RT: 9.28 min Scan# 1210  
Delta R.T. -0.17 min  
Lab File: VW012420.D  
Acq: 01 Sep 2019 01:02

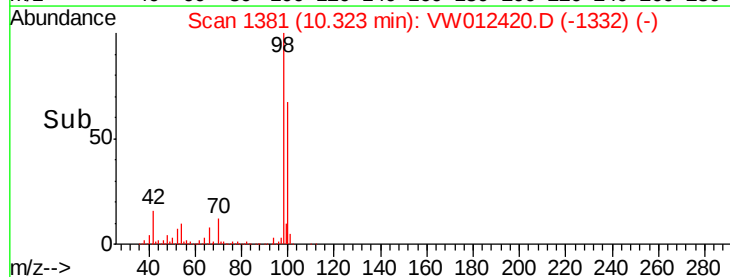
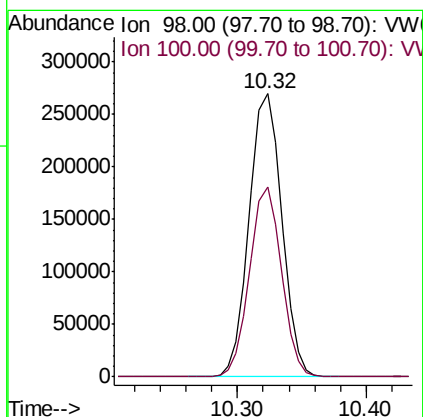
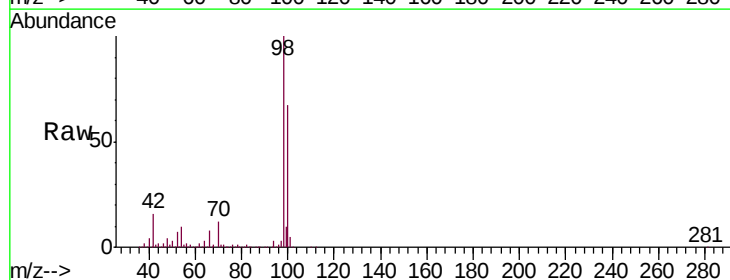
Instrument :  
MSVOA\_W  
ClientSampleId :  
T4-S-C(0)

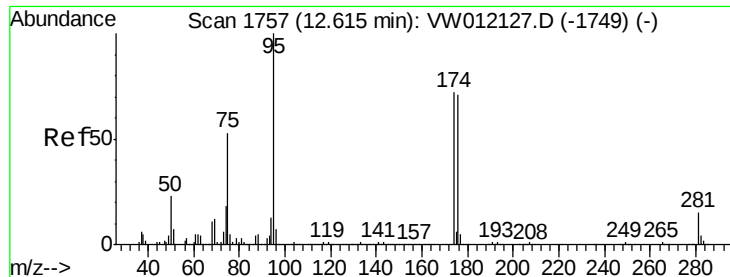
Tgt Ion: 88 Resp: 22  
Ion Ratio Lower Upper  
88 100  
43 481.8 32.9 49.3#  
58 0.0 71.0 106.4#



#50  
Toluene-d8  
Concen: 51.255 ug/l  
RT: 10.32 min Scan# 1381  
Delta R.T. -0.00 min  
Lab File: VW012420.D  
Acq: 01 Sep 2019 01:02

Tgt Ion: 98 Resp: 473555  
Ion Ratio Lower Upper  
98 100  
100 65.4 52.4 78.6





#62

4-Bromofluorobenzene

Concen: 44.358 ug/l

RT: 12.62 min Scan# 1757

Delta R.T. 0.00 min

Lab File: VW012420.D

Acq: 01 Sep 2019 01:02

Instrument :

MSVOA\_W

ClientSampleId :

T4-S-C(0)

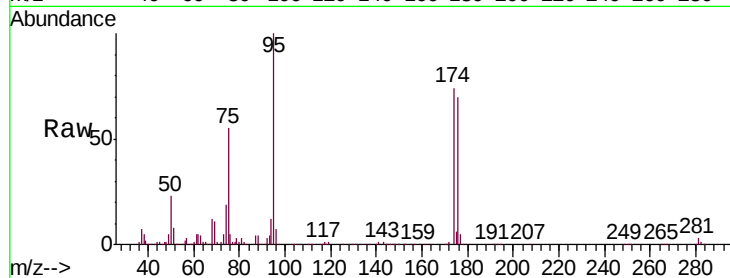
Tgt Ion: 95 Resp: 144465

Ion Ratio Lower Upper

95 100

174 77.8 0.0 150.8

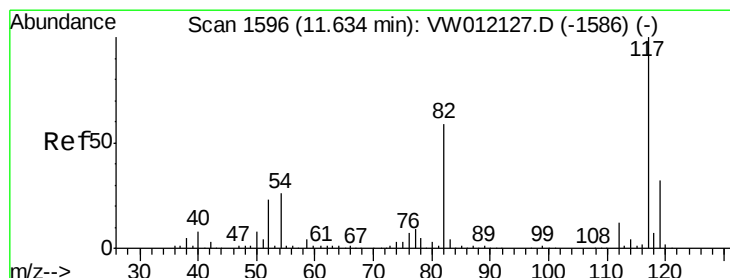
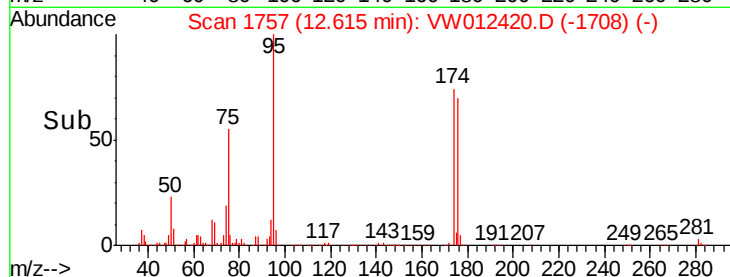
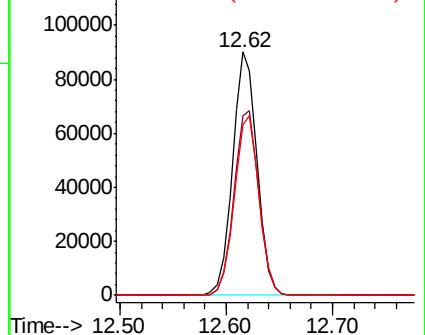
176 74.7 0.0 148.6



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# 1595

Delta R.T. -0.01 min

Lab File: VW012420.D

Acq: 01 Sep 2019 01:02

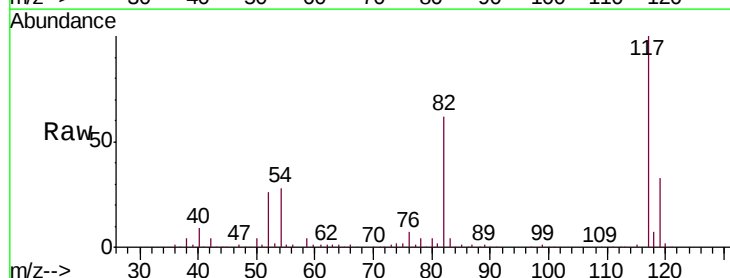
Tgt Ion: 117 Resp: 318863

Ion Ratio Lower Upper

117 100

82 62.5 47.4 71.2

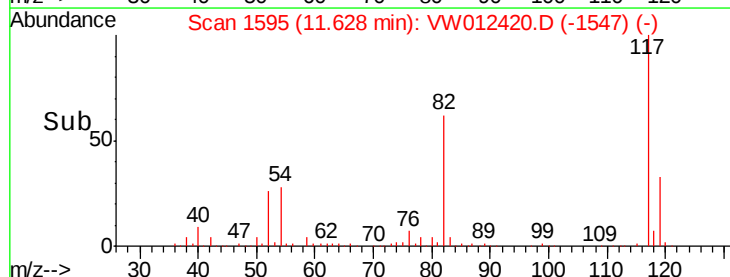
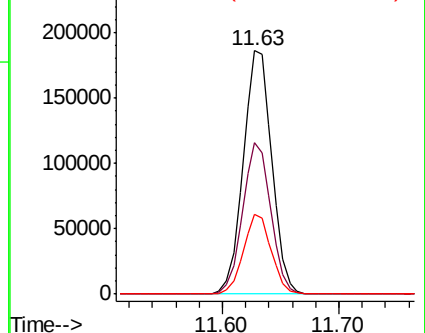
119 32.5 25.4 38.2

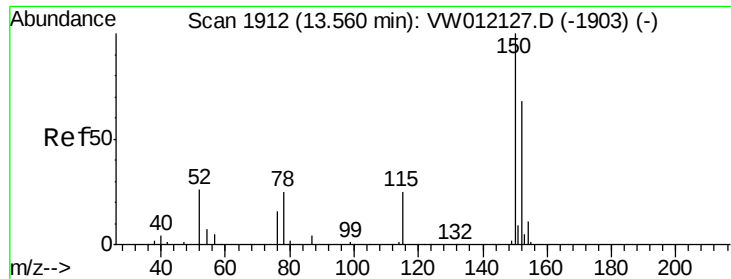


Abundance Ion 116.90 (116.60 to 117.60): VW

Ion 82.00 (81.70 to 82.70): VW

Ion 118.90 (118.60 to 119.60): VW



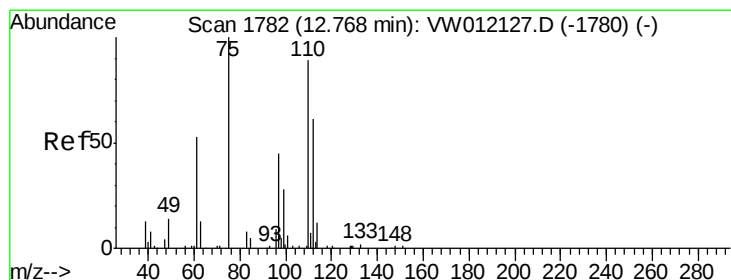
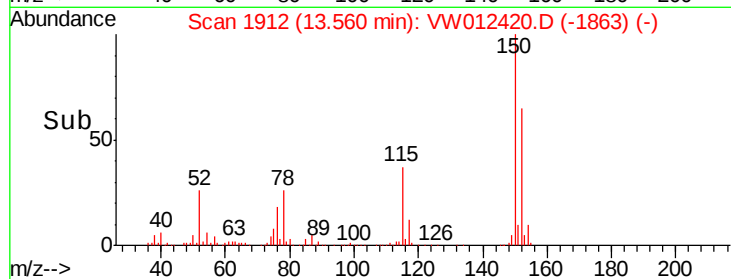
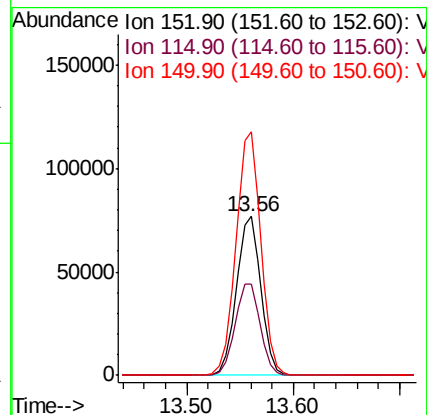
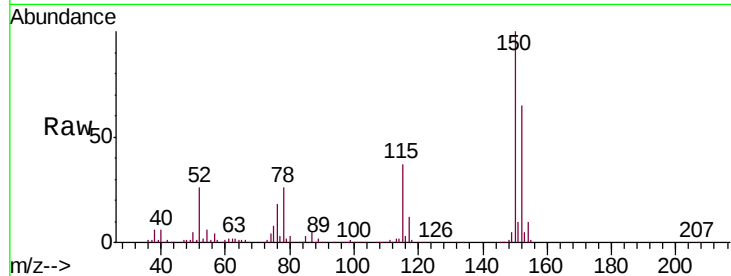


#72

1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 13.56 min Scan# 1912  
Delta R.T. -0.00 min  
Lab File: VW012420.D  
Acq: 01 Sep 2019 01:02

Instrument :  
MSVOA\_W  
ClientSampleId :  
T4-S-C(0)

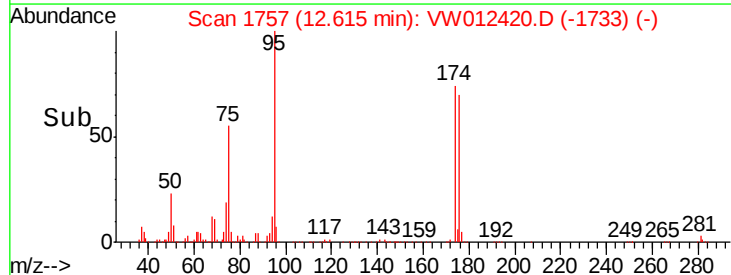
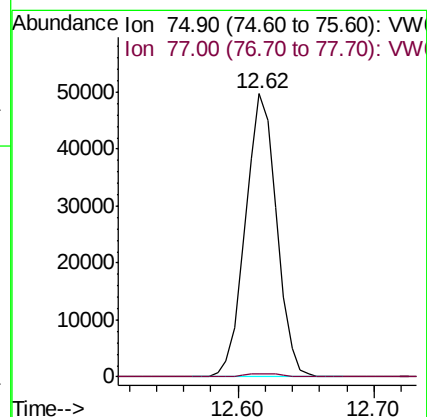
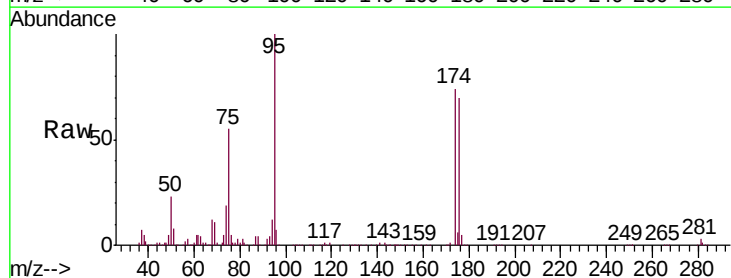
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 115     | 59.4  | 30.1  | 90.3  |
| 150     | 156.2 | 0.0   | 345.8 |

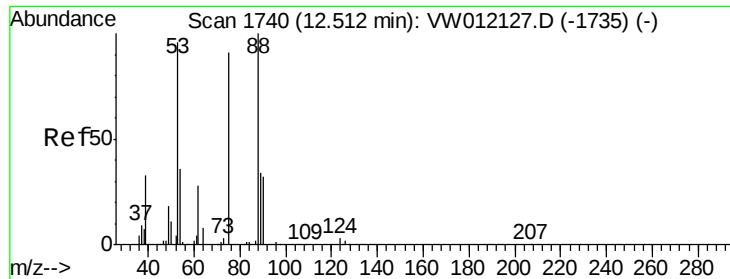


#76

1,2,3-Trichloropropane  
Concen: 66.475 ug/l  
RT: 12.62 min Scan# 1757  
Delta R.T. -0.15 min  
Lab File: VW012420.D  
Acq: 01 Sep 2019 01:02

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 77      | 1.2   | 0.0   | 0.0#  |

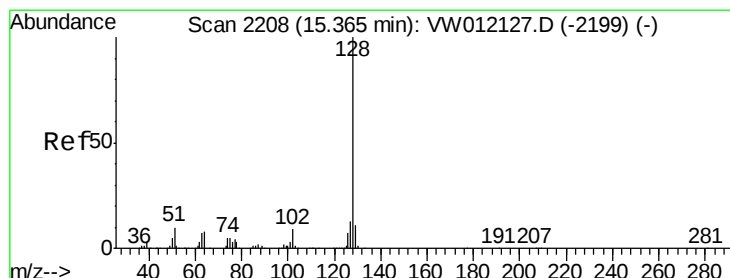
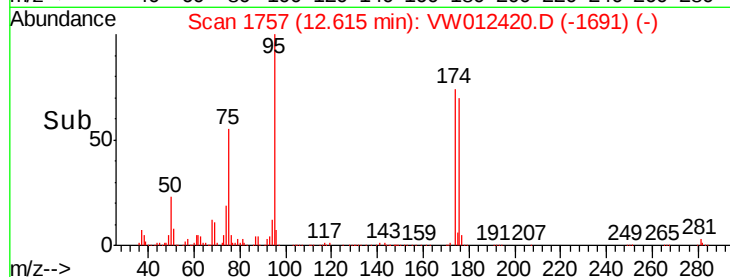
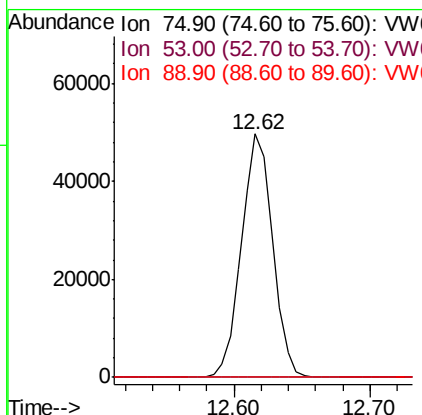
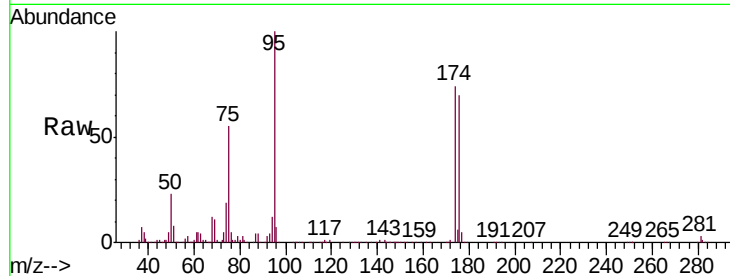




#81  
trans-1,4-Dichloro-2-butene  
Concen: 145.748 ug/l  
RT: 12.62 min Scan# 1757  
Delta R.T. 0.10 min  
Lab File: VW012420.D  
Acq: 01 Sep 2019 01:02

Instrument :  
MSVOA\_W  
ClientSampleId :  
T4-S-C(0)

Tgt Ion: 75 Resp: 79709  
Ion Ratio Lower Upper  
75 100  
53 0.1 89.4 134.0#  
89 0.0 34.5 51.7#



#95  
Naphthalene  
Concen: 4.415 ug/l  
RT: 15.37 min Scan# 2209  
Delta R.T. 0.01 min  
Lab File: VW012420.D  
Acq: 01 Sep 2019 01:02

Tgt Ion: 128 Resp: 477  
Ion Ratio Lower Upper  
128 100  
127 14.0 10.7 16.1  
129 10.5 8.7 13.1

