

Data File : VW012184.D  
Acq On : 26 Aug 2019 21:15  
Operator : SY/VA  
Sample : K4450-04RE  
Misc : 5.09G/5ML/MSVOA\_W/SOIL  
ALS Vial : 28 Sample Multiplier: 1

Instrument :  
MSVOA\_W  
ClientSampleId :  
WC-(A-C)RE

Quant Time: Aug 27 04:59:44 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  | 169672   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.84  | 114  | 282570   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.63 | 117  | 218316   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.56 | 152  | 71348    | 50.00 | ug/l  | 0.00     |

#### System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.30   | 65  | 112439   | 55.75 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 111.50% |      |
| 35) Dibromofluoromethane  | 7.88   | 113 | 88940    | 52.73 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 105.46% |      |
| 50) Toluene-d8            | 10.32  | 98  | 332506   | 48.62 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 97.24%  |      |
| 62) 4-Bromofluorobenzene  | 12.62  | 95  | 92904    | 38.54 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 77.08%  |      |

#### Target Compounds

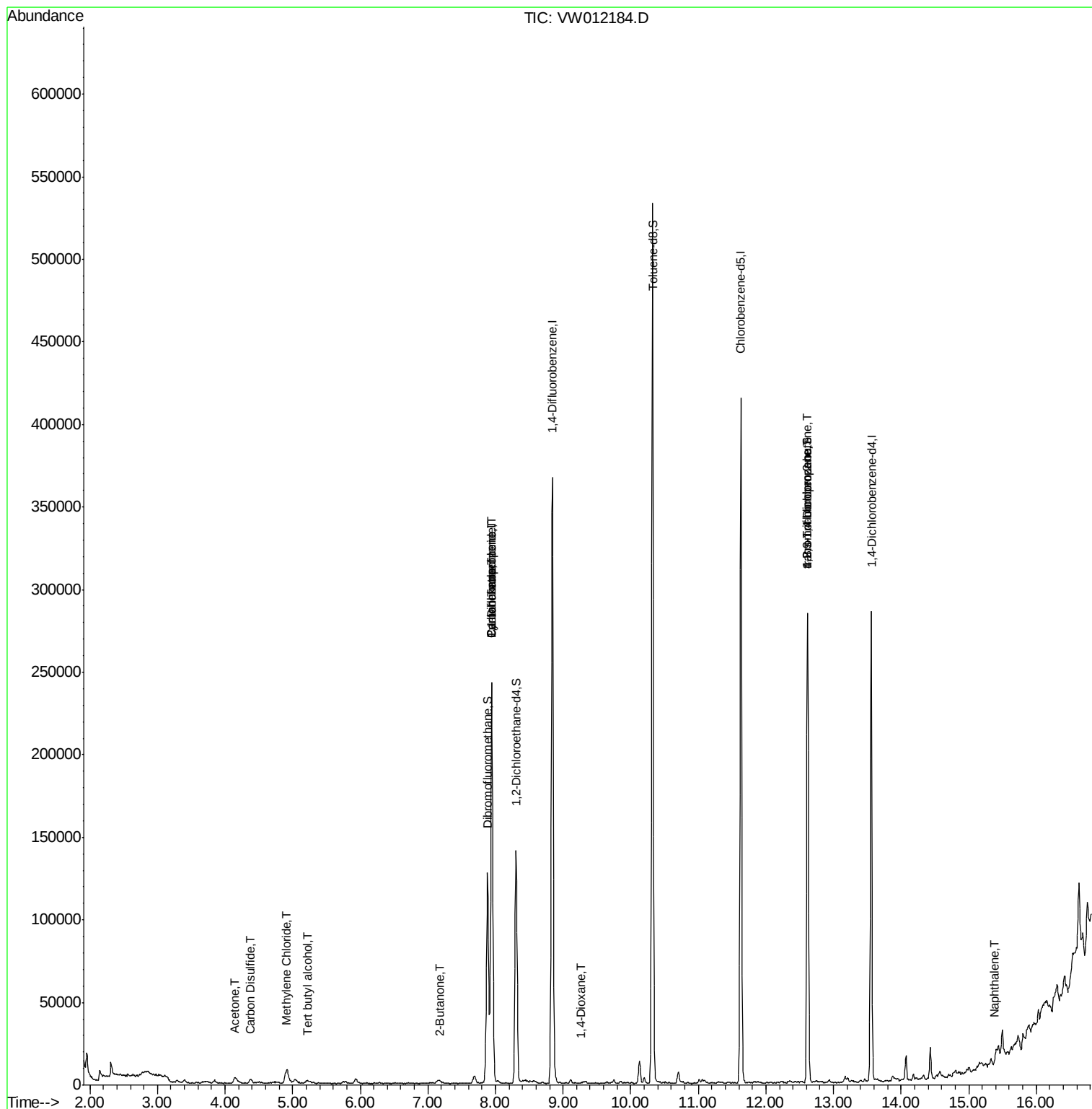
|                                |       |     |       |         |        | Qvalue |
|--------------------------------|-------|-----|-------|---------|--------|--------|
| 11) Tert butyl alcohol         | 5.22  | 59  | 3592  | 29.593  | ug/l # | 92     |
| 16) Acetone                    | 4.14  | 43  | 7096  | 13.763  | ug/l   | 95     |
| 17) Carbon Disulfide           | 4.38  | 76  | 5709  | 1.110   | ug/l   | 96     |
| 20) Methylene Chloride         | 4.92  | 84  | 6423  | 3.295   | ug/l   | 95     |
| 25) 2-Butanone                 | 7.18  | 43  | 1948  | 2.780   | ug/l # | 86     |
| 31) Cyclohexane                | 7.95  | 56  | 4423  | 1.217   | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 7.95  | 75  | 15109 | 5.174   | ug/l # | 52     |
| 38) Carbon Tetrachloride       | 7.95  | 117 | 17461 | 6.909   | ug/l # | 17     |
| 49) 1,4-Dioxane                | 9.26  | 88  | 24    | 1.642   | ug/l # | 75     |
| 76) 1,2,3-Trichloropropane     | 12.62 | 75  | 50429 | 72.572  | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.62 | 75  | 50429 | 159.118 | ug/l # | 6      |
| 95) Naphthalene                | 15.37 | 128 | 379   | 4.450   | ug/l # | 84     |

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

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#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.95 min Scan# 991

Delta R.T. -0.00 min

Lab File: VW012184.D

Acq: 26 Aug 2019 21:15

Instrument :

MSVOA\_W

ClientSampleId :

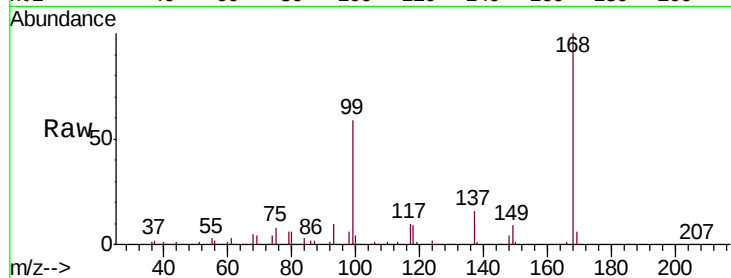
WC-(A-C)RE

Tgt Ion:168 Resp: 169672

Ion Ratio Lower Upper

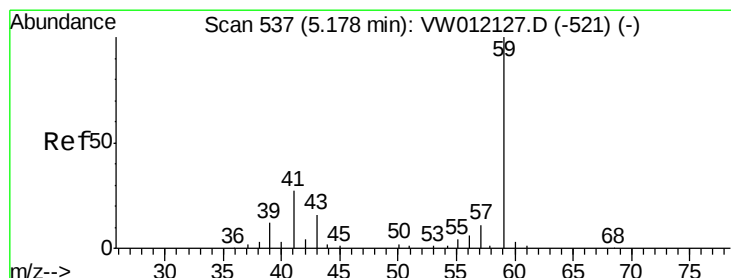
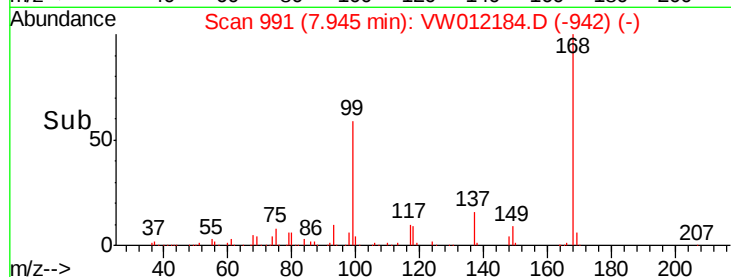
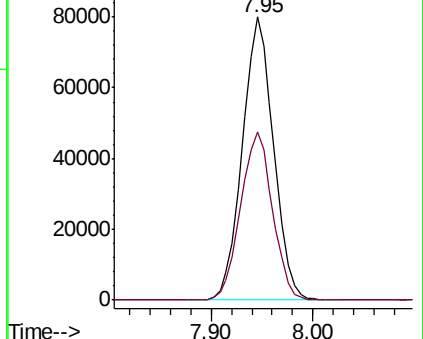
168 100

99 59.3 49.2 73.8



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VW



#11

Tert butyl alcohol

Concen: 29.593 ug/l

RT: 5.22 min Scan# 544

Delta R.T. 0.04 min

Lab File: VW012184.D

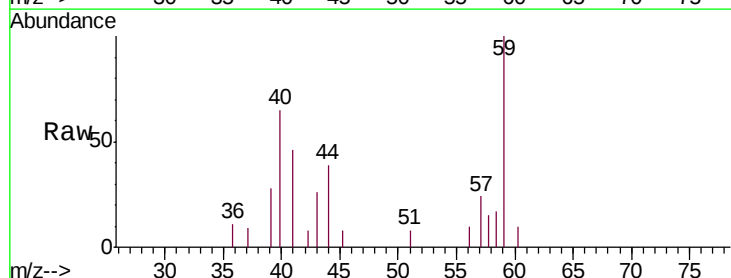
Acq: 26 Aug 2019 21:15

Tgt Ion: 59 Resp: 3592

Ion Ratio Lower Upper

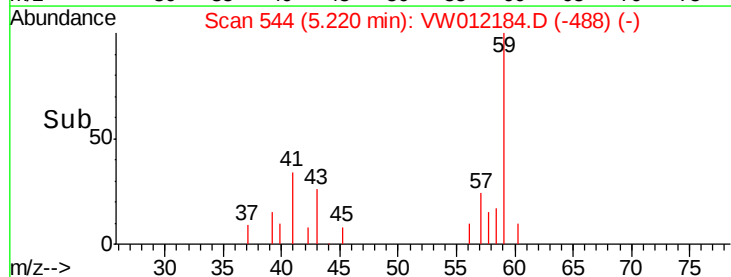
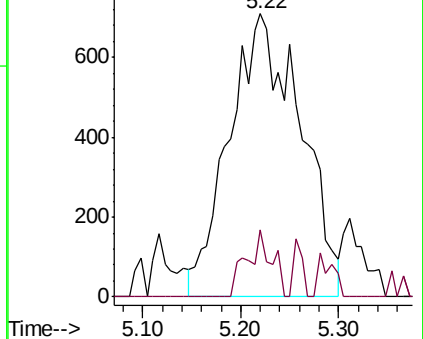
59 100

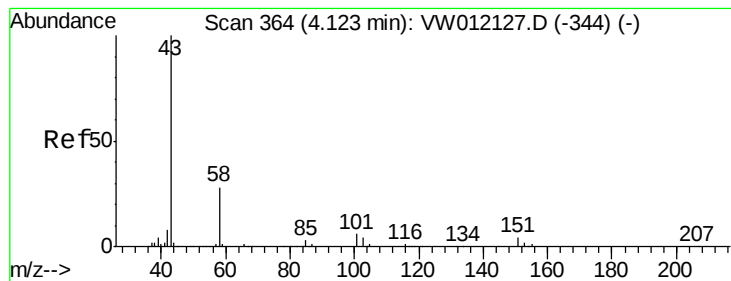
57 8.3 9.0 13.4#



Abundance Ion 59.00 (58.70 to 59.70): VW

Ion 57.00 (56.70 to 57.70): VW





#16

Acetone

Concen: 13.763 ug/l

RT: 4.14 min Scan# 367

Delta R.T. 0.02 min

Lab File: VW012184.D

Acq: 26 Aug 2019 21:15

Instrument :

MSVOA\_W

ClientSampleId :

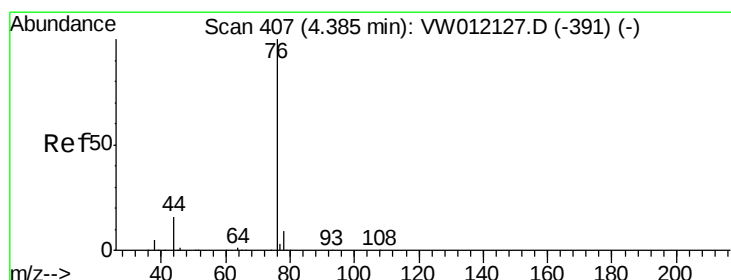
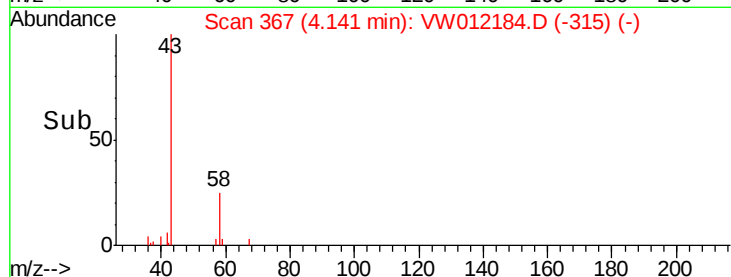
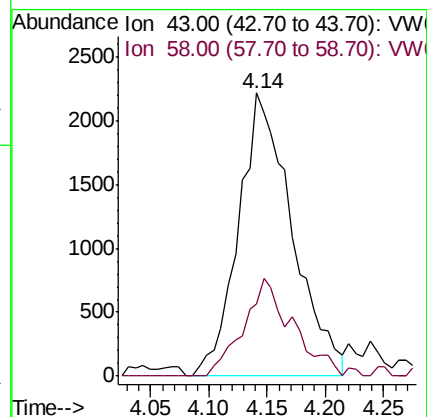
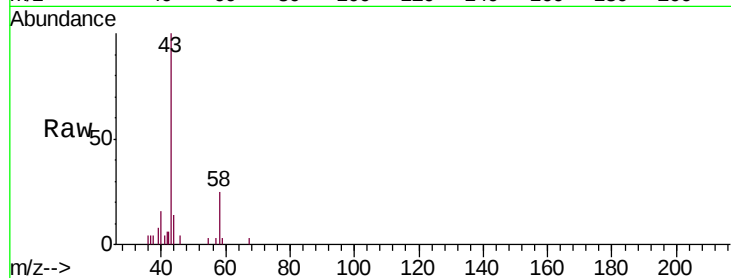
WC-(A-C)RE

Tgt Ion: 43 Resp: 7096

Ion Ratio Lower Upper

43 100

58 25.4 22.4 33.6



#17

Carbon Disulfide

Concen: 1.110 ug/l

RT: 4.38 min Scan# 406

Delta R.T. -0.01 min

Lab File: VW012184.D

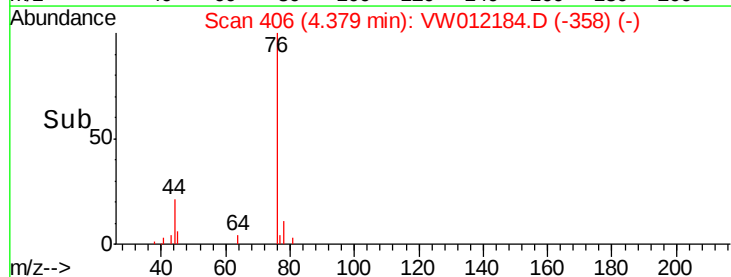
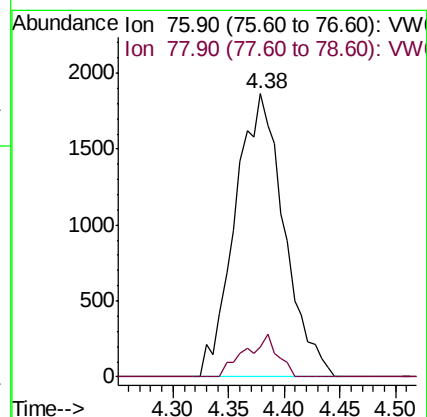
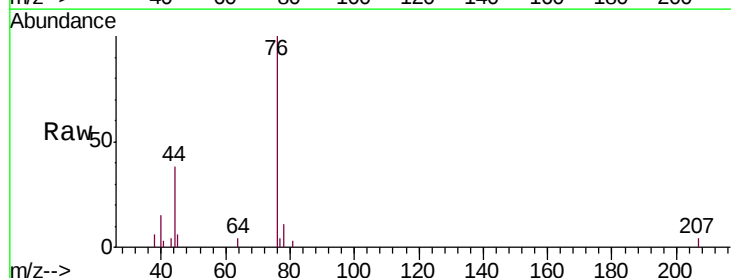
Acq: 26 Aug 2019 21:15

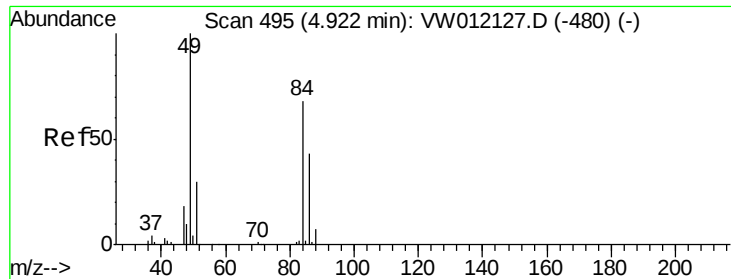
Tgt Ion: 76 Resp: 5709

Ion Ratio Lower Upper

76 100

78 10.6 7.3 10.9

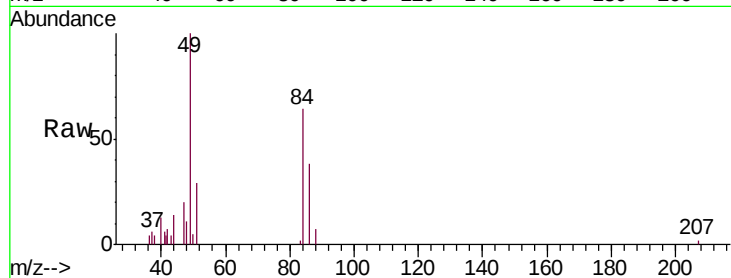




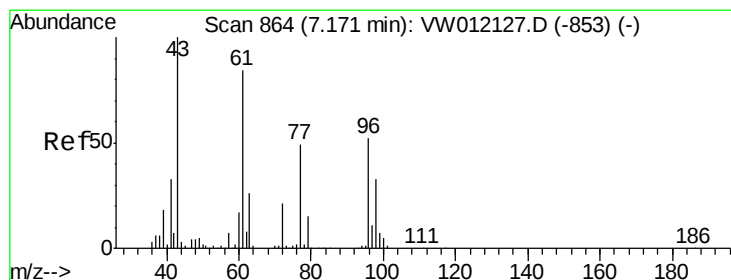
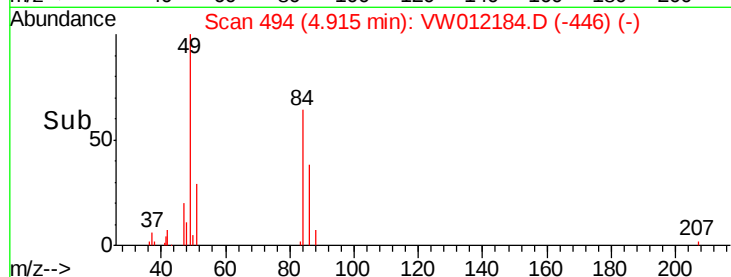
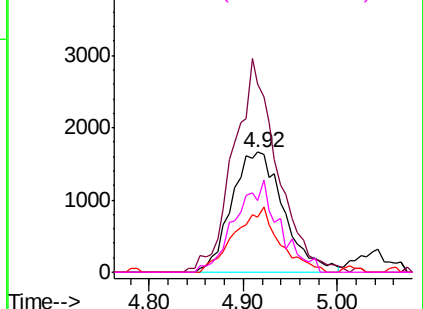
#20  
Methylene Chloride  
Concen: 3.295 ug/l  
RT: 4.92 min Scan# 494  
Delta R.T. -0.01 min  
Lab File: VW012184.D  
Acq: 26 Aug 2019 21:15

Instrument :  
MSVOA\_W  
ClientSampled :  
WC-(A-C)RE

Tgt Ion: 84 Resp: 6423  
Ion Ratio Lower Upper  
84 100  
49 153.2 117.8 176.8  
51 46.1 35.6 53.4  
86 59.4 51.2 76.8

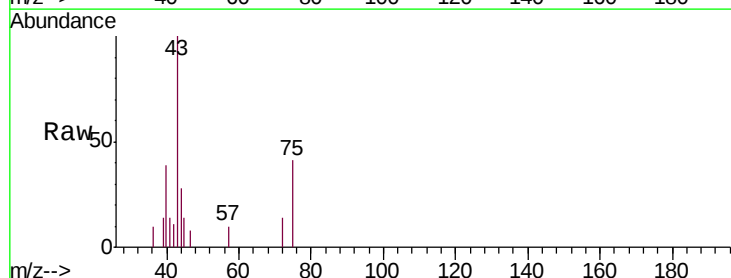


Abundance Ion 83.90 (83.60 to 84.60): VW  
Ion 48.90 (48.60 to 49.60): VW  
Ion 50.90 (50.60 to 51.60): VW  
Ion 85.90 (85.60 to 86.60): VW

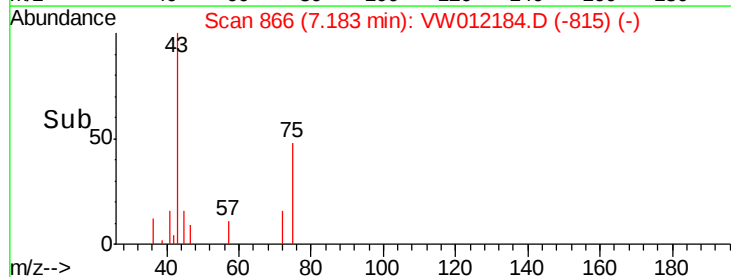
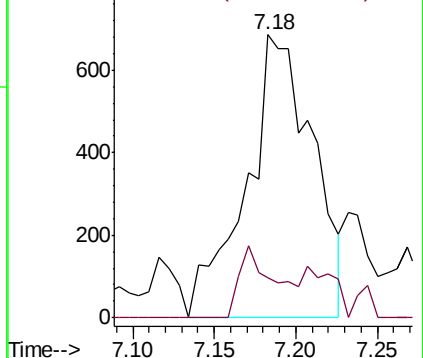


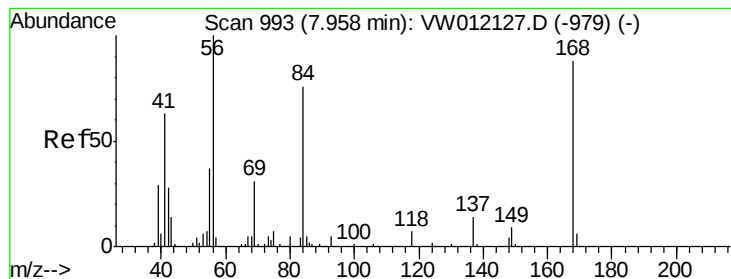
#25  
2-Butanone  
Concen: 2.780 ug/l  
RT: 7.18 min Scan# 866  
Delta R.T. 0.01 min  
Lab File: VW012184.D  
Acq: 26 Aug 2019 21:15

Tgt Ion: 43 Resp: 1948  
Ion Ratio Lower Upper  
43 100  
72 14.0 16.6 24.8#



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





#31

Cyclohexane

Concen: 1.217 ug/l

RT: 7.95 min Scan# 991

Delta R.T. -0.01 min

Lab File: VW012184.D

Acq: 26 Aug 2019 21:15

Instrument :

MSVOA\_W

ClientSampleId :

WC-(A-C)RE

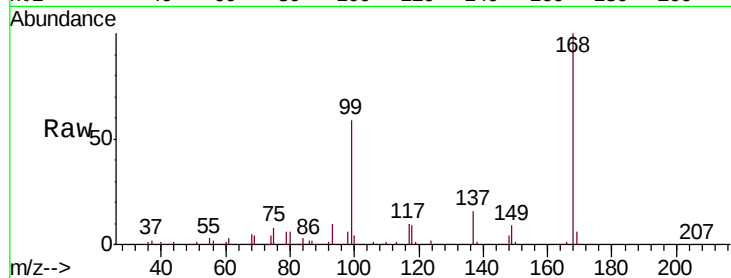
Tgt Ion: 56 Resp: 4423

Ion Ratio Lower Upper

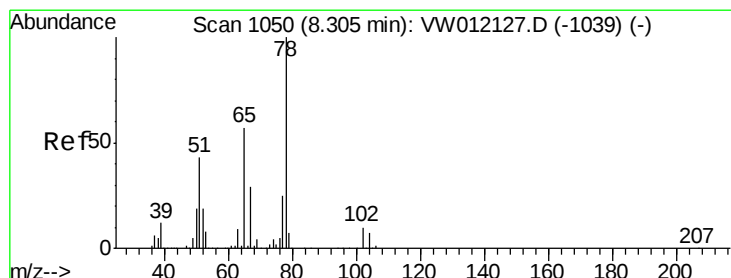
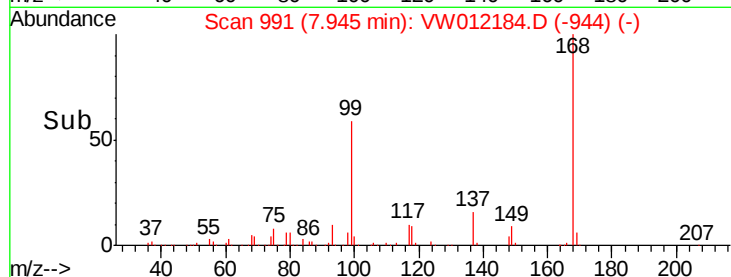
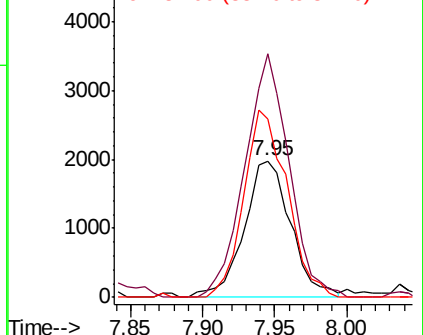
56 100

69 178.4 24.9 37.3#

84 130.3 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: 55.746 ug/l

RT: 8.30 min Scan# 1050

Delta R.T. -0.00 min

Lab File: VW012184.D

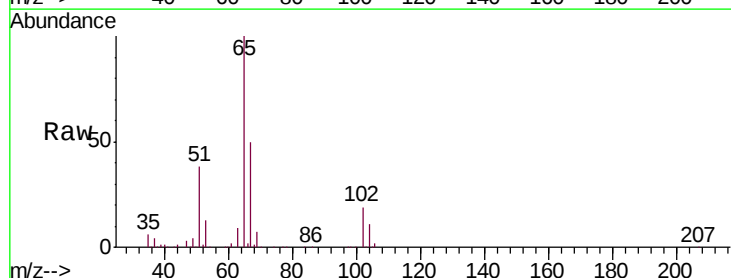
Acq: 26 Aug 2019 21:15

Tgt Ion: 65 Resp: 112439

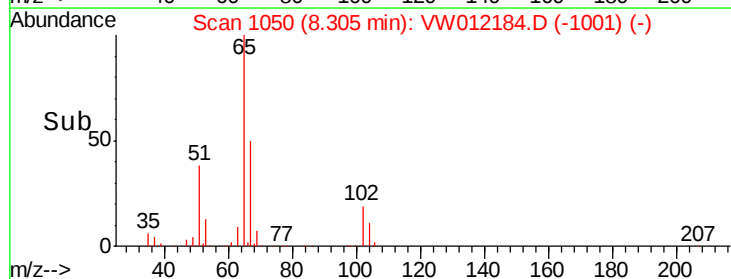
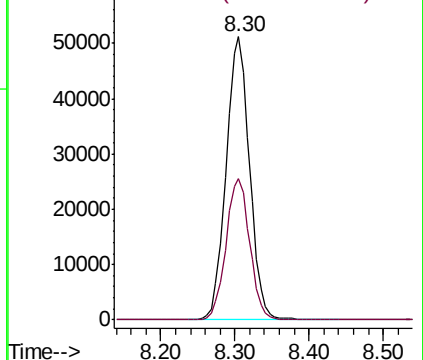
Ion Ratio Lower Upper

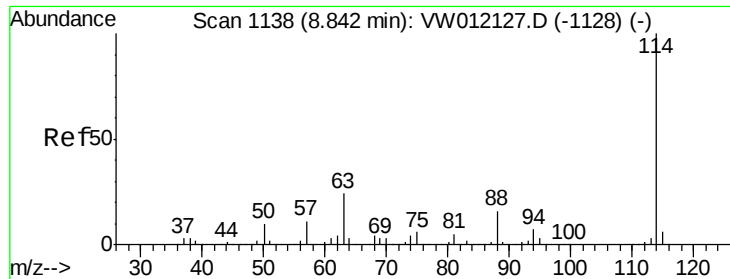
65 100

67 50.6 0.0 102.6



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

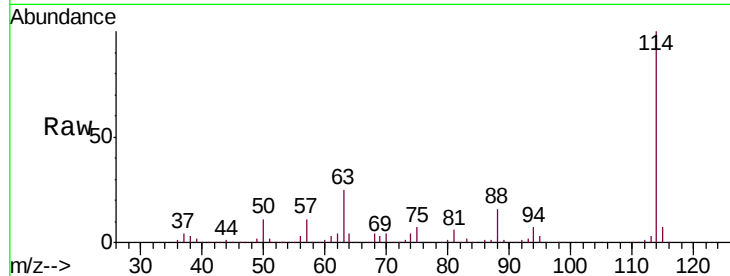




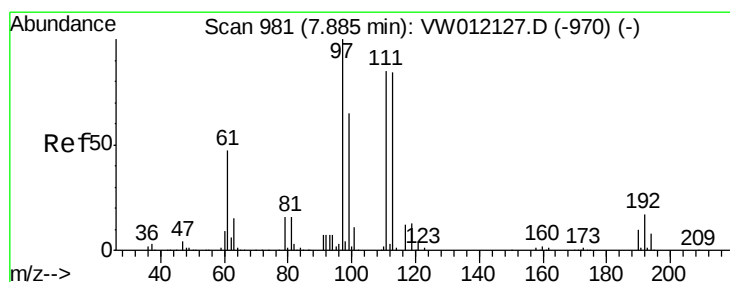
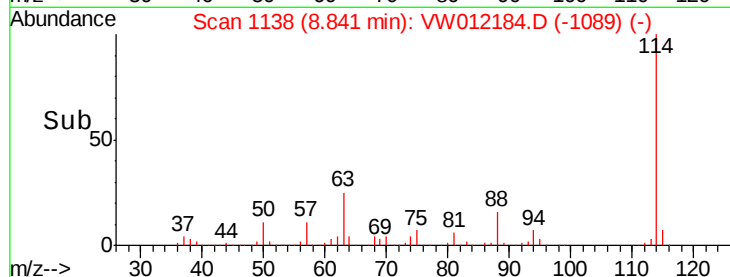
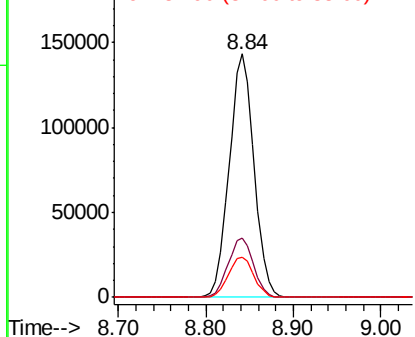
#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.84 min Scan# 1138  
 Delta R.T. -0.00 min  
 Lab File: VW012184.D  
 Acq: 26 Aug 2019 21:15

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 WC-(A-C)RE

Tgt Ion:114 Resp: 282570  
 Ion Ratio Lower Upper  
 114 100  
 63 24.6 0.0 48.6  
 88 16.4 0.0 32.2

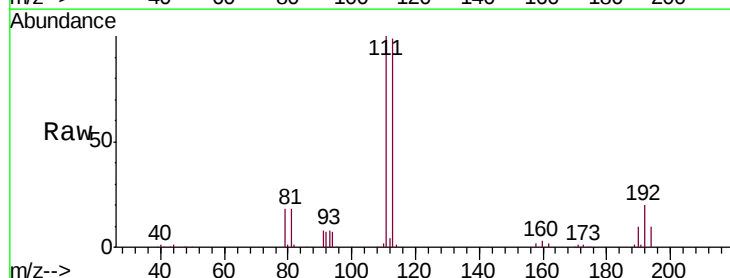


Abundance Ion 113.90 (113.60 to 114.60): V  
 Ion 63.00 (62.70 to 63.70): VW  
 Ion 87.90 (87.60 to 88.60): VW

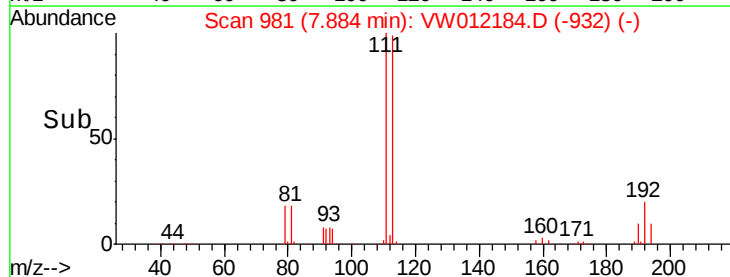
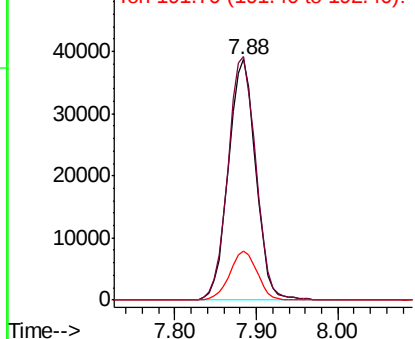


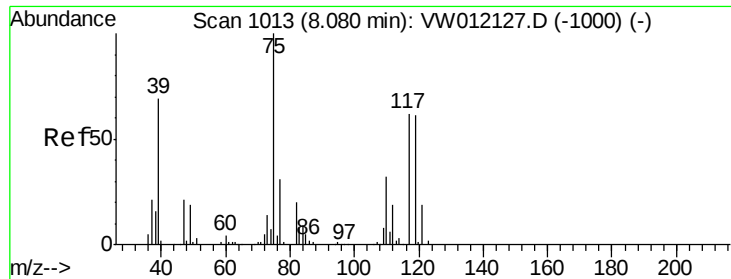
#35  
 Dibromofluoromethane  
 Concen: 52.731 ug/l  
 RT: 7.88 min Scan# 981  
 Delta R.T. -0.00 min  
 Lab File: VW012184.D  
 Acq: 26 Aug 2019 21:15

Tgt Ion:113 Resp: 88940  
 Ion Ratio Lower Upper  
 113 100  
 111 103.5 82.7 124.1  
 192 20.2 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

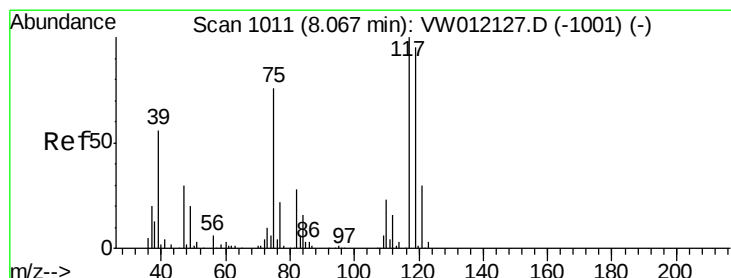
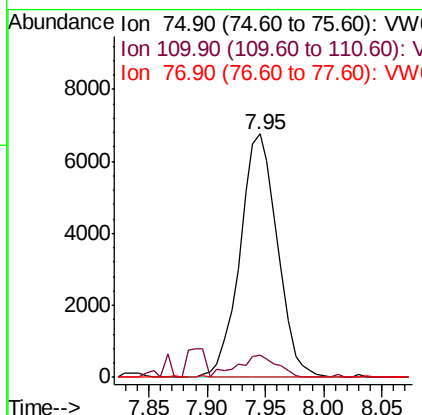
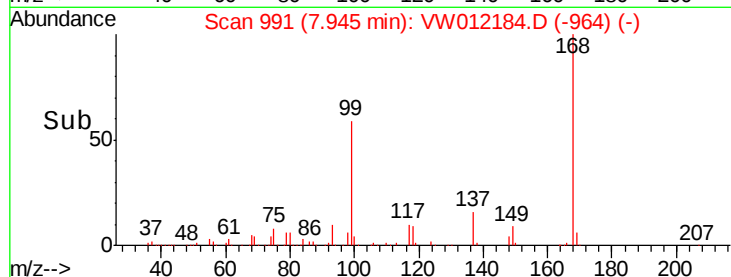
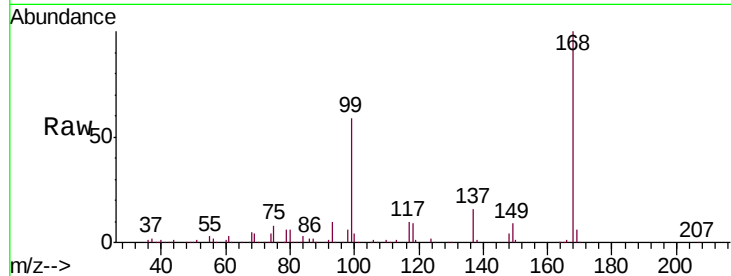




#36  
 1,1-Dichloropropene  
 Concen: 5.174 ug/l  
 RT: 7.95 min Scan# 991  
 Delta R.T. -0.13 min  
 Lab File: VW012184.D  
 Acq: 26 Aug 2019 21:15

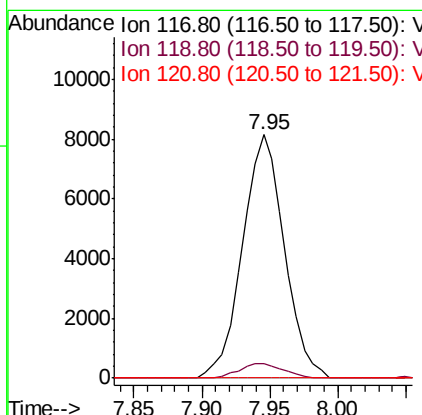
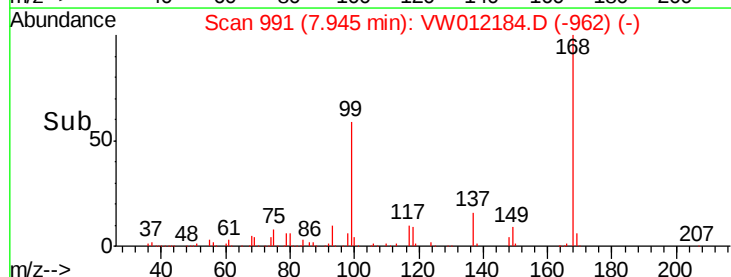
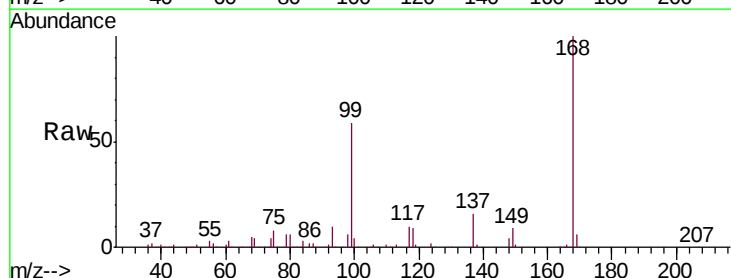
Instrument :  
 MSVOA\_W  
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 WC-(A-C)RE

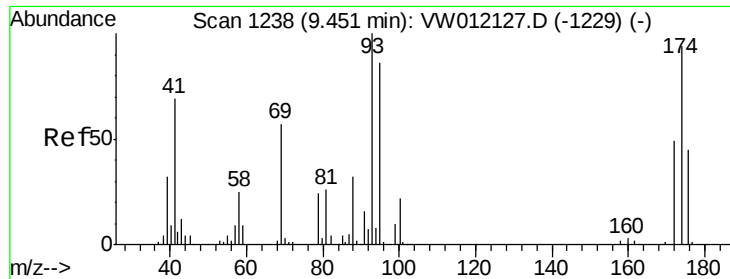
Tgt Ion: 75 Resp: 15109  
 Ion Ratio Lower Upper  
 75 100  
 110 8.8 15.6 46.8#  
 77 0.0 24.6 36.8#



#38  
 Carbon Tetrachloride  
 Concen: 6.909 ug/l  
 RT: 7.95 min Scan# 991  
 Delta R.T. -0.12 min  
 Lab File: VW012184.D  
 Acq: 26 Aug 2019 21:15

Tgt Ion: 117 Resp: 17461  
 Ion Ratio Lower Upper  
 117 100  
 119 6.1 76.2 114.2#  
 121 0.0 23.8 35.8#

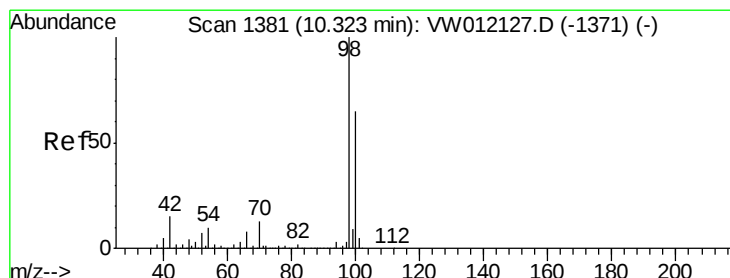
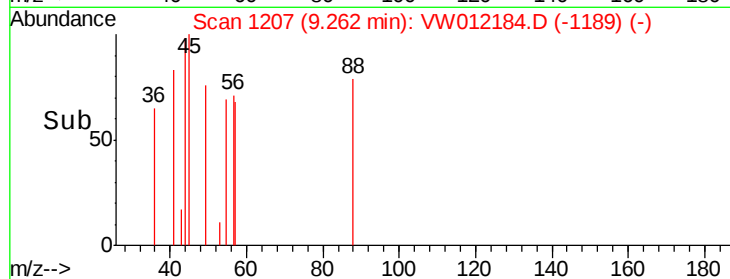
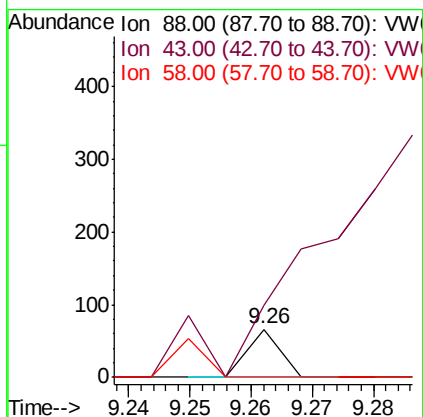
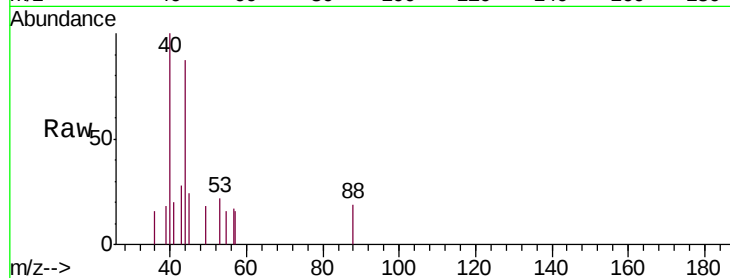




#49  
1,4-Dioxane  
Concen: 1.642 ug/l  
RT: 9.26 min Scan# 1207  
Delta R.T. -0.19 min  
Lab File: VW012184.D  
Acq: 26 Aug 2019 21:15

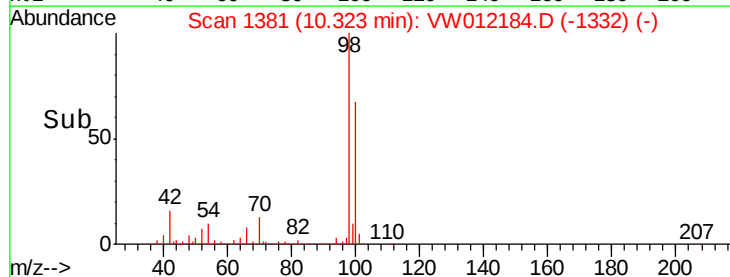
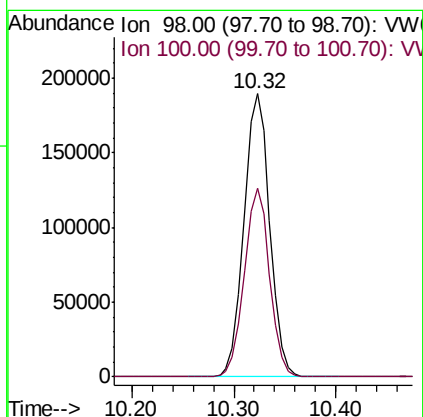
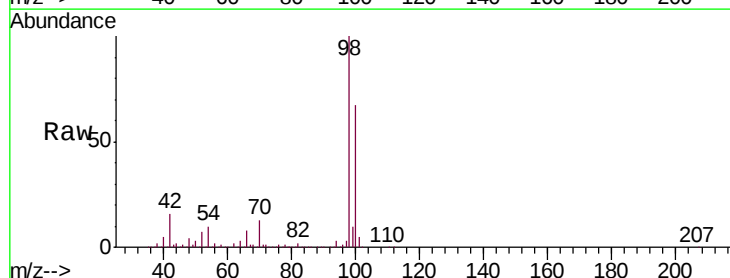
Instrument :  
MSVOA\_W  
ClientSampleId :  
WC-(A-C)RE

Tgt Ion: 88 Resp: 24  
Ion Ratio Lower Upper  
88 100  
43 0.0 32.9 49.3#  
58 83.3 71.0 106.4



#50  
Toluene-d8  
Concen: 48.619 ug/l  
RT: 10.32 min Scan# 1381  
Delta R.T. -0.00 min  
Lab File: VW012184.D  
Acq: 26 Aug 2019 21:15

Tgt Ion: 98 Resp: 332506  
Ion Ratio Lower Upper  
98 100  
100 65.3 52.4 78.6

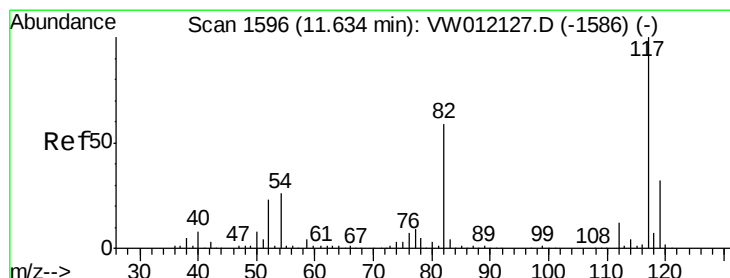
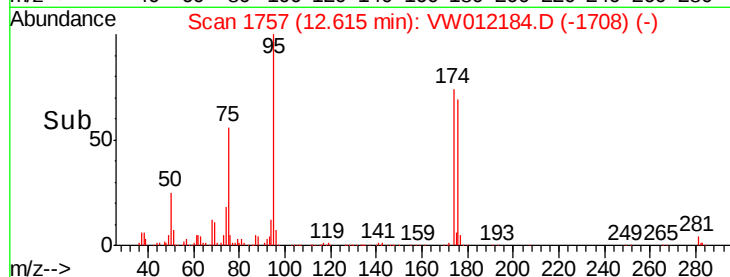
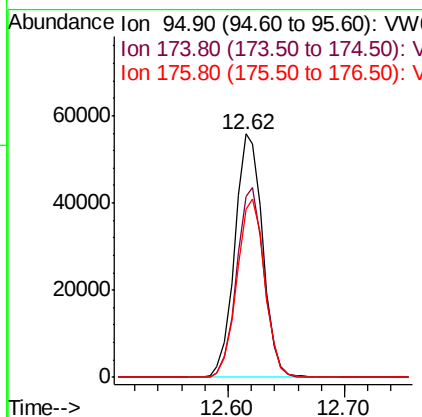
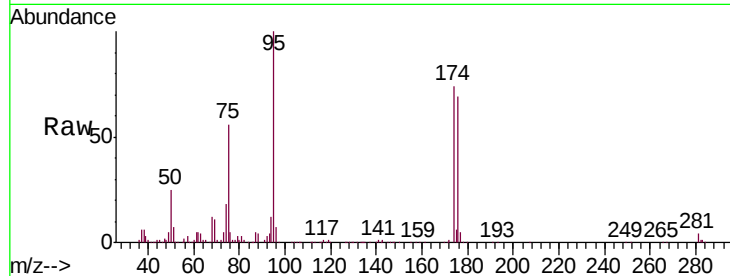




#62  
4-Bromofluorobenzene  
Concen: 38.538 ug/l  
RT: 12.62 min Scan# 1757  
Delta R.T. -0.00 min  
Lab File: VW012184.D  
Acq: 26 Aug 2019 21:15

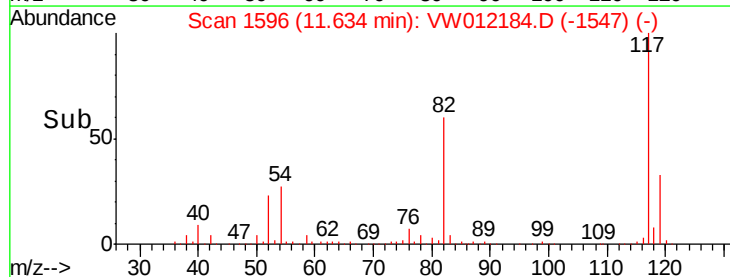
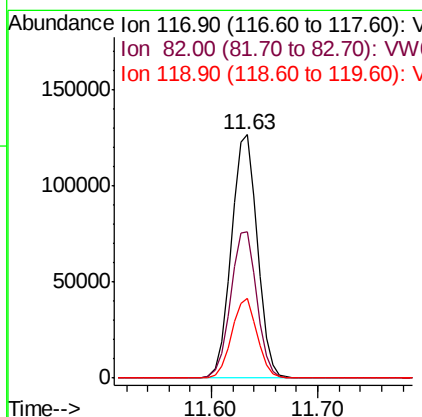
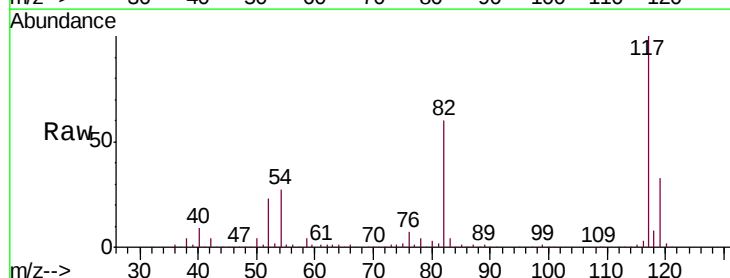
Instrument :  
MSVOA\_W  
ClientSampleId :  
WC-(A-C)RE

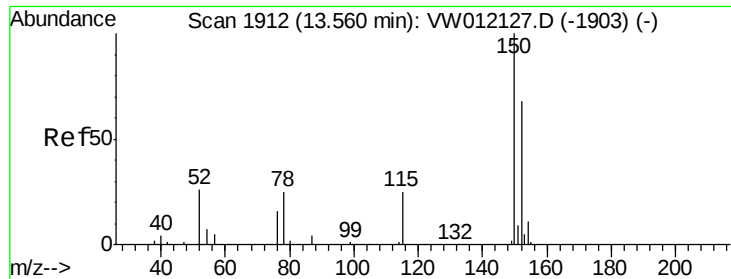
Tgt Ion: 95 Resp: 92904  
Ion Ratio Lower Upper  
95 100  
174 76.8 0.0 150.8  
176 73.2 0.0 148.6



#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.63 min Scan# 1596  
Delta R.T. -0.00 min  
Lab File: VW012184.D  
Acq: 26 Aug 2019 21:15

Tgt Ion: 117 Resp: 218316  
Ion Ratio Lower Upper  
117 100  
82 60.1 47.4 71.2  
119 33.0 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: VW012184.D

Acq: 26 Aug 2019 21:15

Instrument :

MSVOA\_W

ClientSampleId :

WC-(A-C)RE

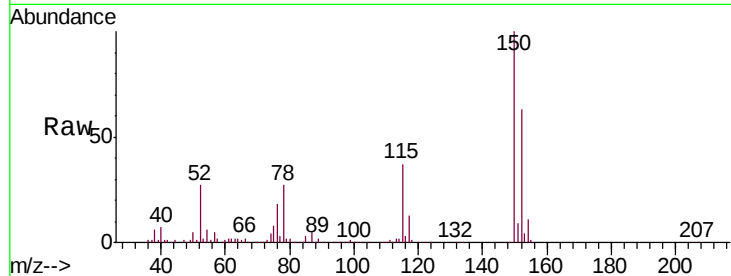
Tgt Ion:152 Resp: 71348

Ion Ratio Lower Upper

152 100

115 60.2 30.1 90.3

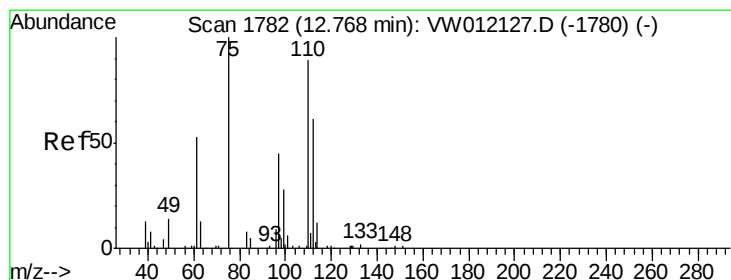
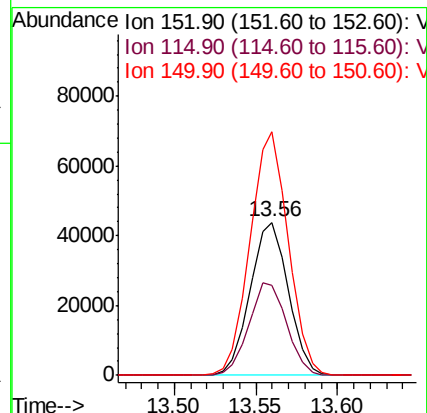
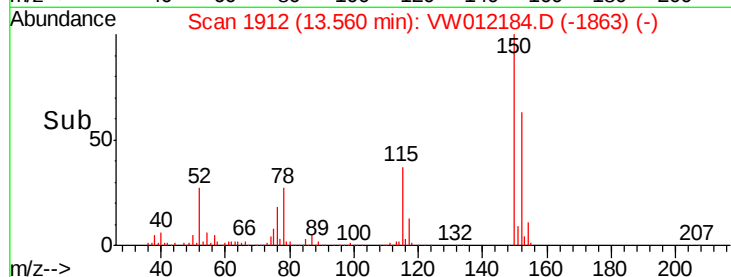
150 159.1 0.0 345.8



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: 72.572 ug/l

RT: 12.62 min Scan# 1757

Delta R.T. -0.15 min

Lab File: VW012184.D

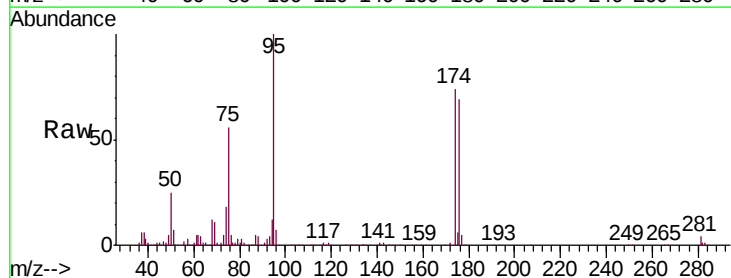
Acq: 26 Aug 2019 21:15

Tgt Ion: 75 Resp: 50429

Ion Ratio Lower Upper

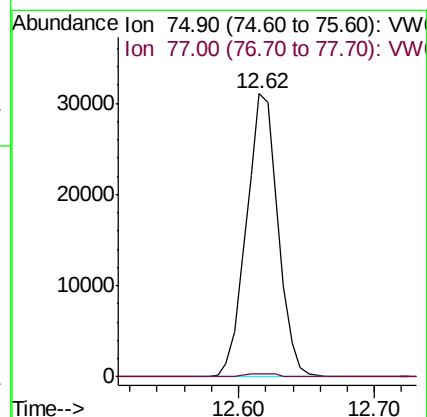
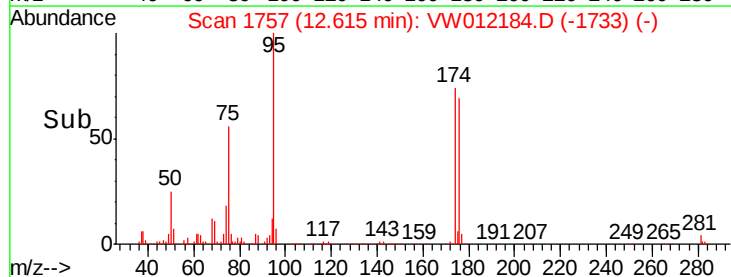
75 100

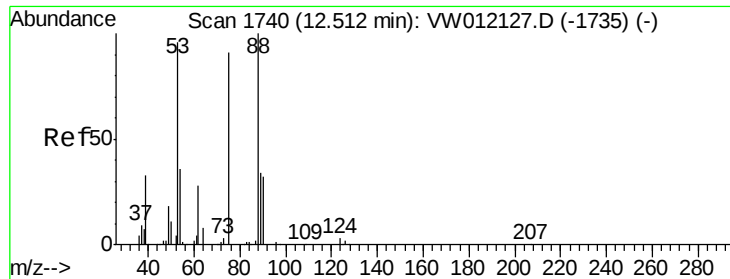
77 1.2 0.0 0.0#



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: 159.118 ug/l

RT: 12.62 min Scan# 1757

Delta R.T. 0.10 min

Lab File: VW012184.D

Acq: 26 Aug 2019 21:15

Instrument :

MSVOA\_W

ClientSampleId :

WC-(A-C)RE

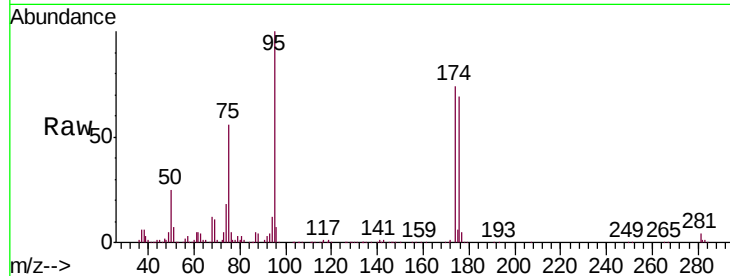
Tgt Ion: 75 Resp: 50429

Ion Ratio Lower Upper

75 100

53 0.0 89.4 134.0#

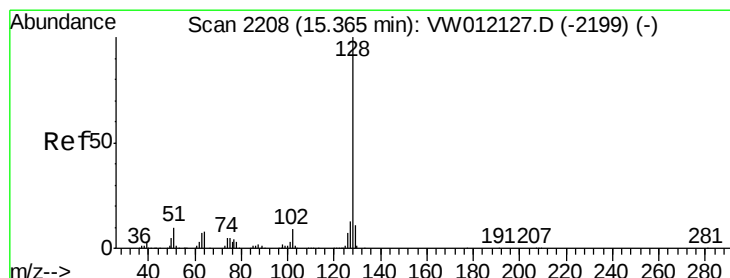
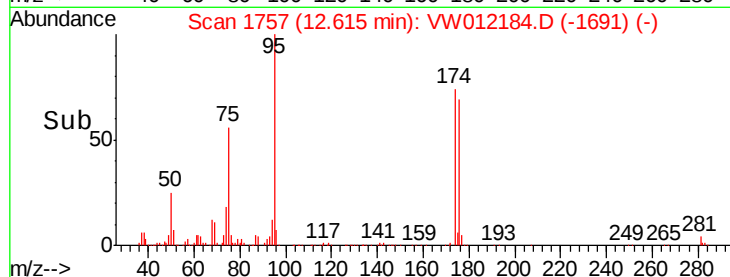
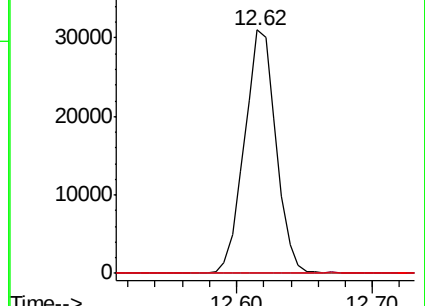
89 0.1 34.5 51.7#



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: 4.450 ug/l

RT: 15.37 min Scan# 2209

Delta R.T. 0.01 min

Lab File: VW012184.D

Acq: 26 Aug 2019 21:15

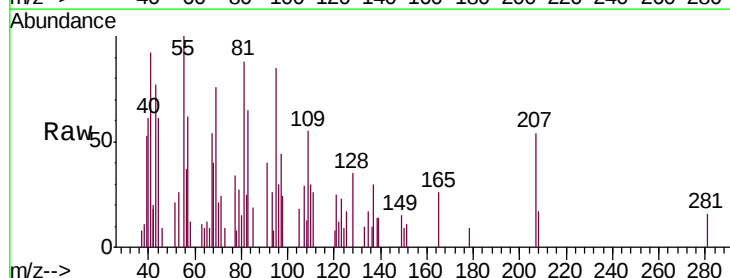
Tgt Ion: 128 Resp: 379

Ion Ratio Lower Upper

128 100

127 5.8 10.7 16.1#

129 5.8 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

