

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_W\DATA\VW080819\  
 Data File : VW011749.D  
 Acq On : 07 Aug 2019 14:23  
 Operator : SY/VA  
 Sample : K4178-01RE  
 Misc : 4.90G/5ML/MSVOA\_W/SOIL  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 370-371

Quant Time: Aug 08 08:40:24 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W072719S.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Jul 27 00:23:30 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.95  | 168  | 213531   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.84  | 114  | 356111   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.63 | 117  | 277477   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.56 | 152  | 90723    | 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   | 141269   | 57.62  | ug/l    | 0.00     |
| Spiked Amount               |       |      |          | 50.000 |         |          |
|                             |       |      | Recovery | =      | 115.24% |          |
| 35) Dibromofluoromethane    | 7.88  | 113  | 110613   | 55.37  | ug/l    | 0.00     |
| Spiked Amount               |       |      |          | 50.000 |         |          |
|                             |       |      | Recovery | =      | 110.74% |          |
| 50) Toluene-d8              | 10.32 | 98   | 428481   | 52.38  | ug/l    | 0.00     |
| Spiked Amount               |       |      |          | 50.000 |         |          |
|                             |       |      | Recovery | =      | 104.76% |          |
| 62) 4-Bromofluorobenzene    | 12.62 | 95   | 118746   | 40.72  | ug/l    | 0.00     |
| Spiked Amount               |       |      |          | 50.000 |         |          |
|                             |       |      | Recovery | =      | 81.44%  |          |

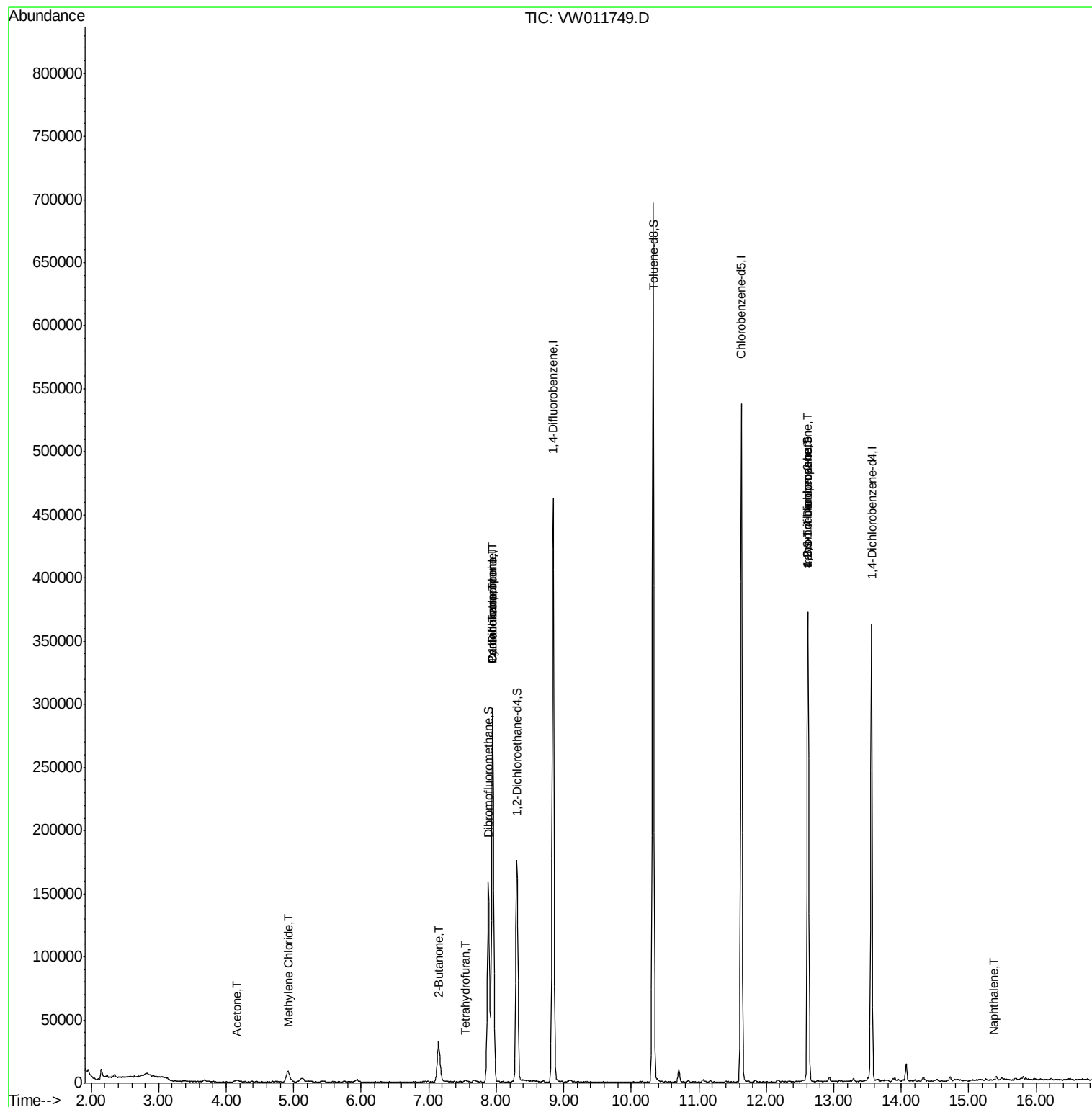
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 11) Tert butyl alcohol         | 5.21  | 59   | 214      | Below Cal | #      | 88     |
| 16) Acetone                    | 4.15  | 43   | 3323     | 4.261     | ug/l # | 80     |
| 20) Methylene Chloride         | 4.91  | 84   | 6294     | 2.340     | ug/l # | 92     |
| 25) 2-Butanone                 | 7.14  | 43   | 2453     | 2.404     | ug/l # | 79     |
| 29) Tetrahydrofuran            | 7.54  | 42   | 1154     | 1.978     | ug/l # | 87     |
| 31) Cyclohexane                | 7.95  | 56   | 5404     | 1.179     | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 7.95  | 75   | 19505    | 5.267     | ug/l # | 51     |
| 38) Carbon Tetrachloride       | 7.95  | 117  | 21720    | 6.852     | ug/l # | 16     |
| 76) 1,2,3-Trichloropropane     | 12.62 | 75   | 65308    | 68.032    | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.62 | 75   | 65308    | 156.791   | ug/l # | 7      |
| 95) Naphthalene                | 15.36 | 128  | 834      | 2.289     | ug/l # | 69     |

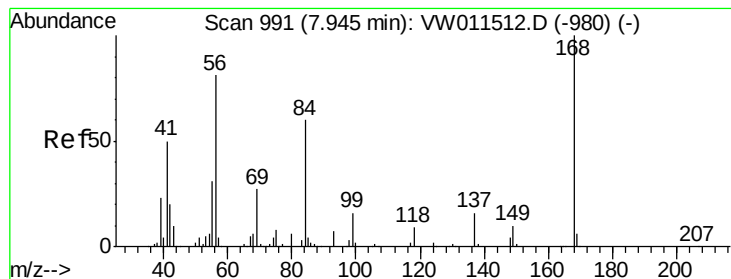
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA\_W\DATA\VW080819\  
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Sample : K4178-01RE  
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ALS Vial : 10 Sample Multiplier: 1

Instrument :  
MSVOA\_W  
ClientSampleId :  
370-371

Quant Time: Aug 08 08:40:24 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_W\METHOD\82W072719S.M  
Quant Title : SW846 8260  
QLast Update : Sat Jul 27 00:23:30 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: VW011749.D

Acq: 07 Aug 2019 14:23

Instrument :

MSVOA\_W

ClientSampleId :

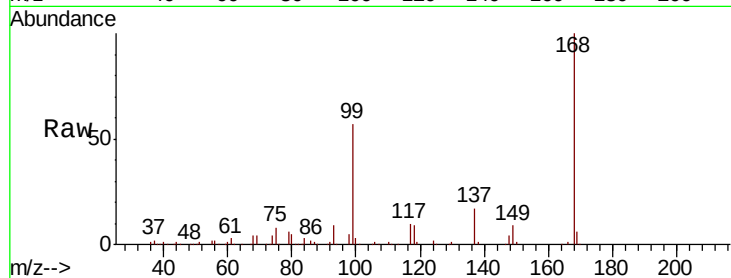
370-371

Tgt Ion:168 Resp: 213531

Ion Ratio Lower Upper

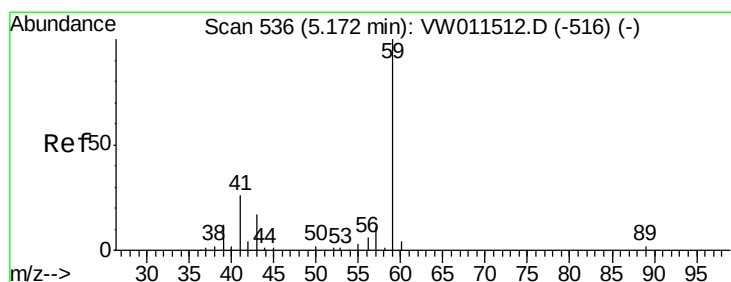
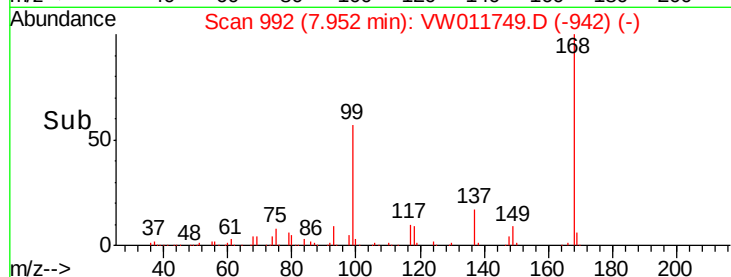
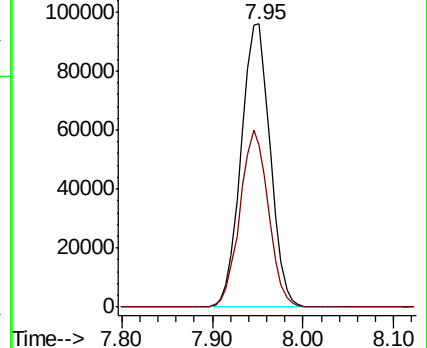
168 100

99 57.0 48.2 72.4



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VW



#11

Tert butyl alcohol

Concen: Below Cal

RT: 5.21 min Scan# 542

Delta R.T. 0.04 min

Lab File: VW011749.D

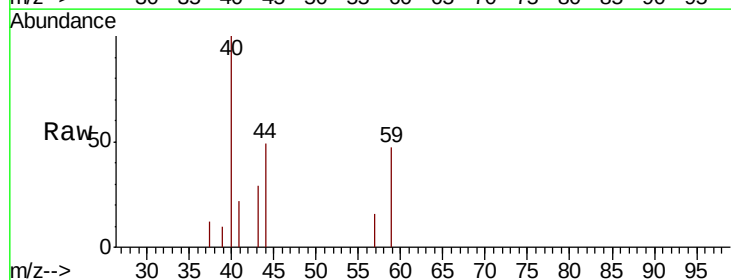
Acq: 07 Aug 2019 14:23

Tgt Ion: 59 Resp: 214

Ion Ratio Lower Upper

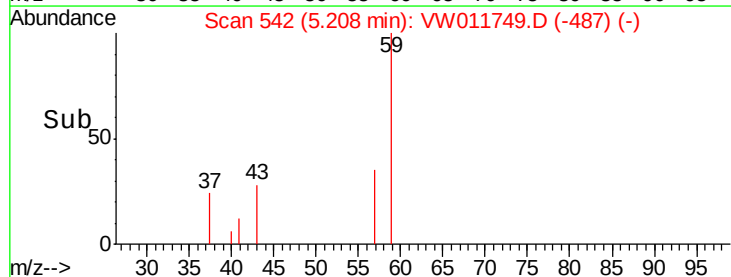
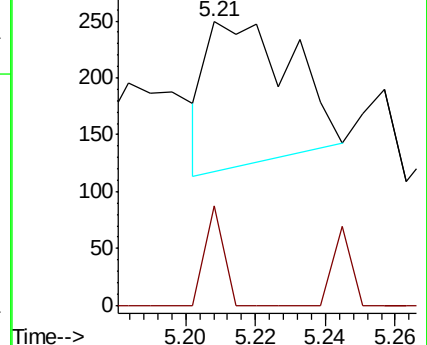
59 100

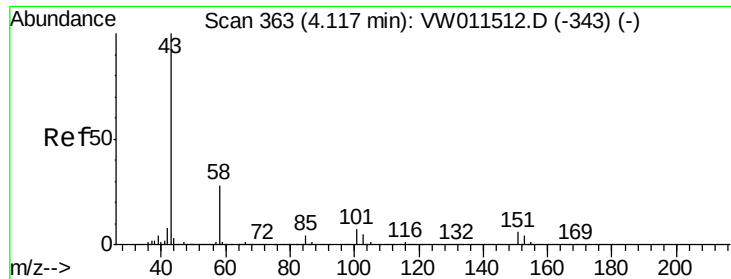
57 15.0 8.5 12.7#



Abundance Ion 59.00 (58.70 to 59.70): VW

Ion 57.00 (56.70 to 57.70): VW





#16

Acetone

Concen: 4.261 ug/l

RT: 4.15 min Scan# 369

Delta R.T. 0.04 min

Lab File: VW011749.D

Acq: 07 Aug 2019 14:23

Instrument :

MSVOA\_W

ClientSampled :

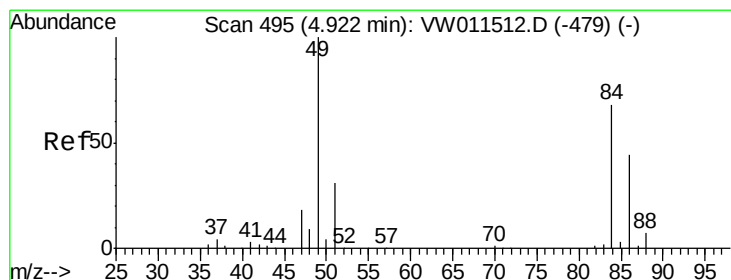
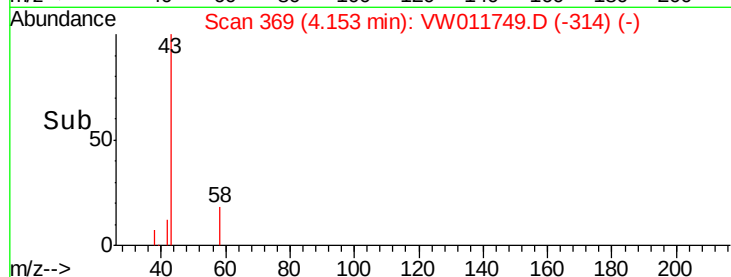
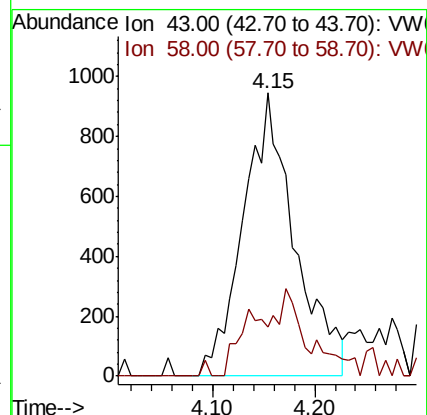
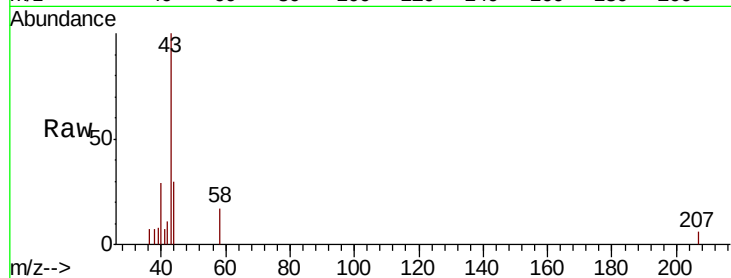
370-371

Tgt Ion: 43 Resp: 3323

Ion Ratio Lower Upper

43 100

58 17.2 22.3 33.5#



#20

Methylene Chloride

Concen: 2.340 ug/l

RT: 4.91 min Scan# 493

Delta R.T. -0.01 min

Lab File: VW011749.D

Acq: 07 Aug 2019 14:23

Tgt Ion: 84 Resp: 6294

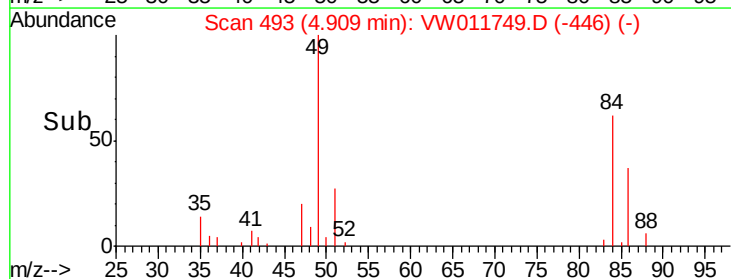
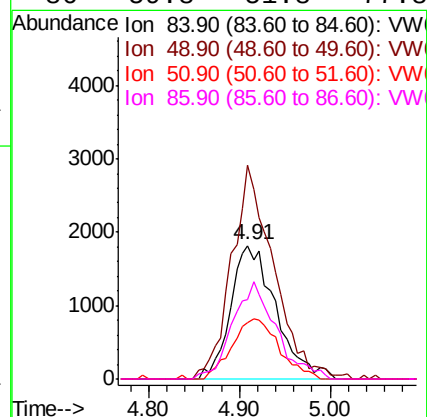
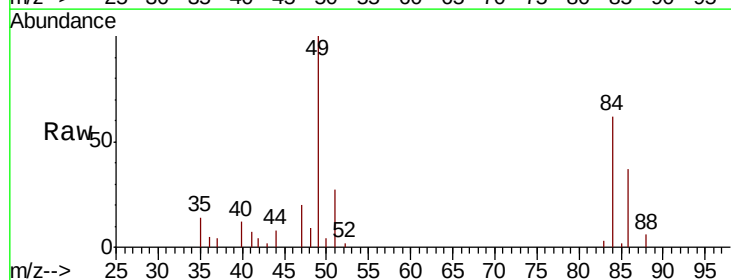
Ion Ratio Lower Upper

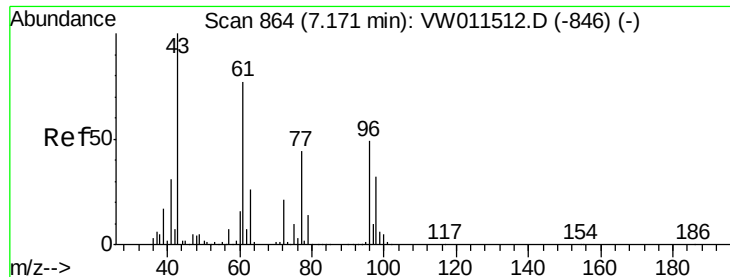
84 100

49 160.1 117.8 176.6

51 42.7 37.0 55.4

86 59.8 51.8 77.8





#25

2-Butanone

Concen: 2.404 ug/l

RT: 7.14 min Scan# 859

Delta R.T. -0.03 min

Lab File: VW011749.D

Acq: 07 Aug 2019 14:23

Instrument :

MSVOA\_W

ClientSampleId :

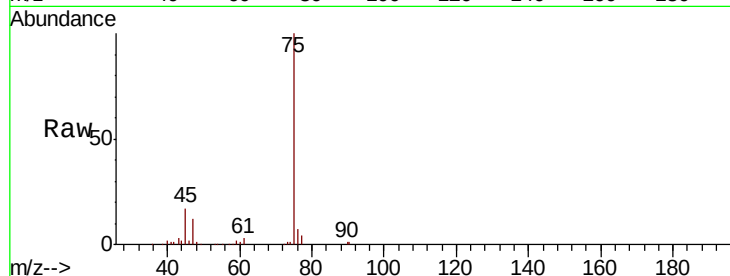
370-371

Tgt Ion: 43 Resp: 2453

Ion Ratio Lower Upper

43 100

72 10.9 16.6 24.8#



Abundance Ion 43.00 (42.70 to 43.70): VW

Ion 72.00 (71.70 to 72.70): VW

7.14

600

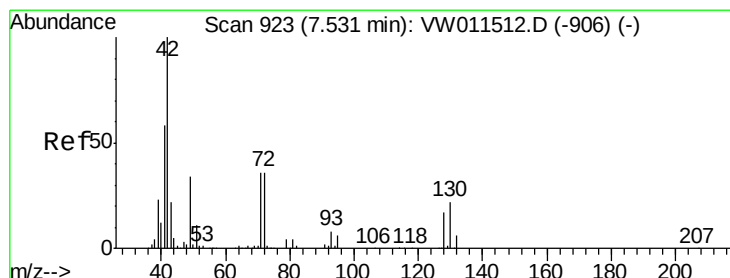
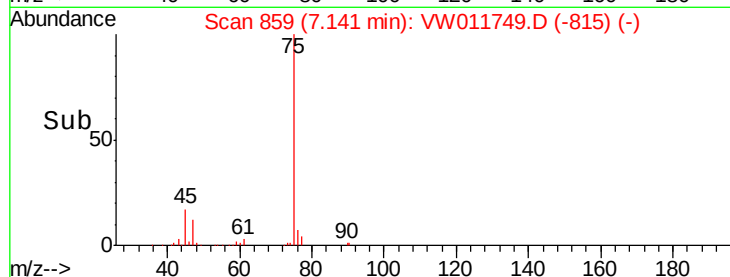
400

200

0

7.10 7.20 7.30

Time-->



#29

Tetrahydrofuran

Concen: 1.978 ug/l

RT: 7.54 min Scan# 925

Delta R.T. 0.01 min

Lab File: VW011749.D

Acq: 07 Aug 2019 14:23

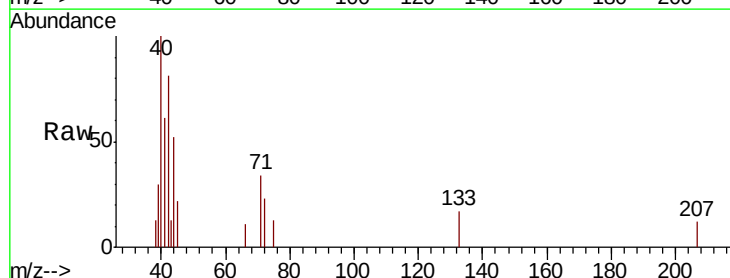
Tgt Ion: 42 Resp: 1154

Ion Ratio Lower Upper

42 100

72 24.4 27.1 40.7#

71 37.9 26.2 39.4



Abundance Ion 42.00 (41.70 to 42.70): VW

Ion 72.00 (71.70 to 72.70): VW

Ion 71.00 (70.70 to 71.70): VW

7.54

500

400

300

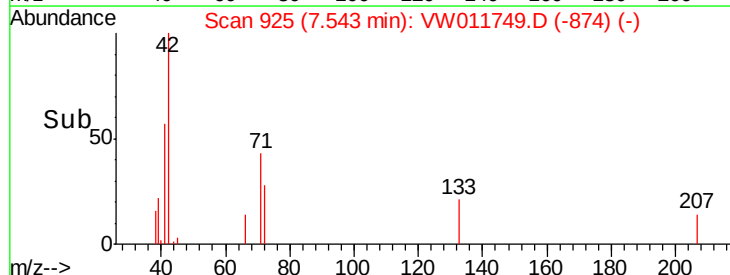
200

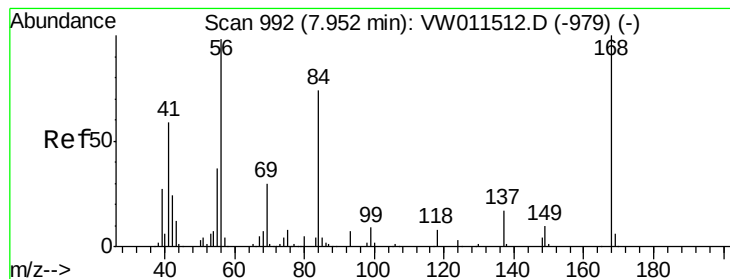
100

0

7.50 7.55 7.60

Time-->





#31

Cyclohexane

Concen: 1.179 ug/l

RT: 7.95 min Scan# 991

Delta R.T. -0.01 min

Lab File: VW011749.D

Acq: 07 Aug 2019 14:23

Instrument :

MSVOA\_W

ClientSampled :

370-371

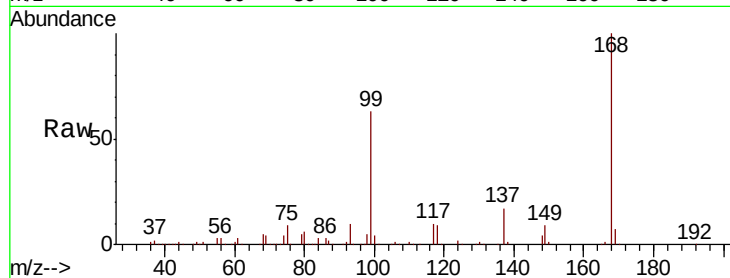
Tgt Ion: 56 Resp: 5404

Ion Ratio Lower Upper

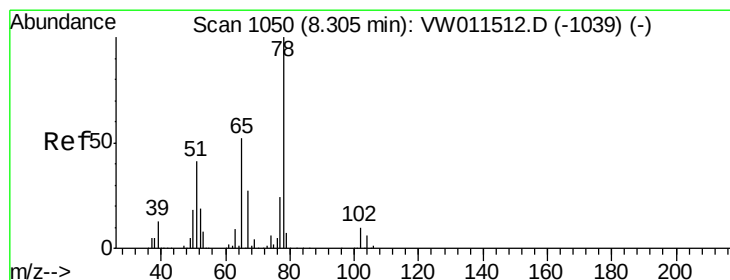
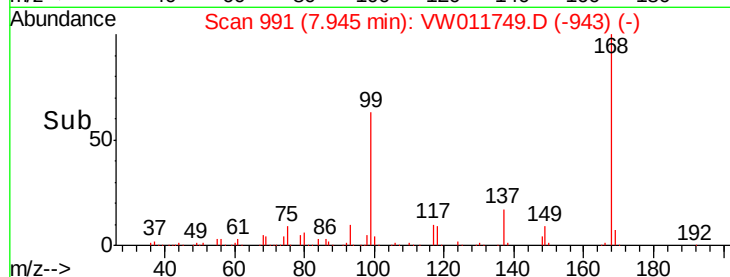
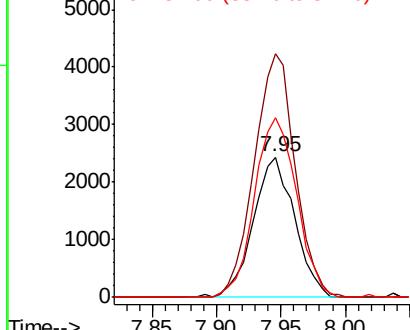
56 100

69 173.6 24.3 36.5#

84 127.7 60.4 90.6#



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: 57.615 ug/l

RT: 8.31 min Scan# 1050

Delta R.T. -0.00 min

Lab File: VW011749.D

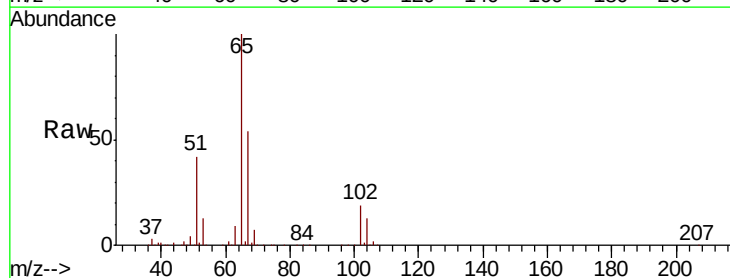
Acq: 07 Aug 2019 14:23

Tgt Ion: 65 Resp: 141269

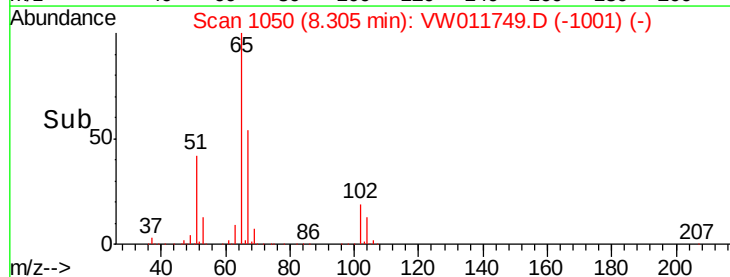
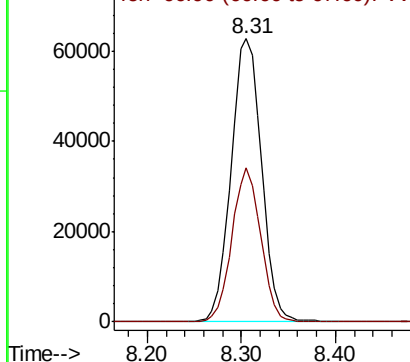
Ion Ratio Lower Upper

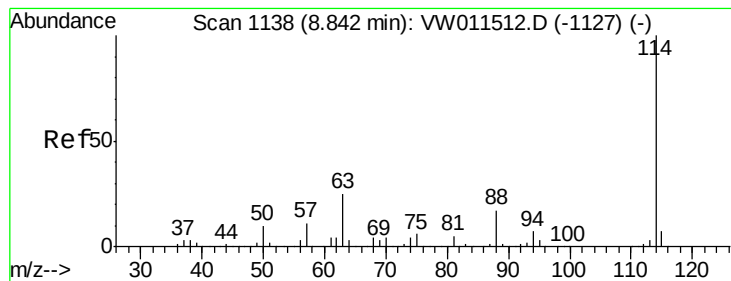
65 100

67 51.4 0.0 105.2



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: VW011749.D

Acq: 07 Aug 2019 14:23

Instrument :

MSVOA\_W

ClientSampled :

370-371

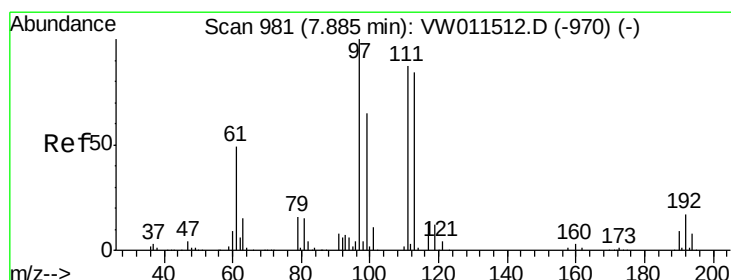
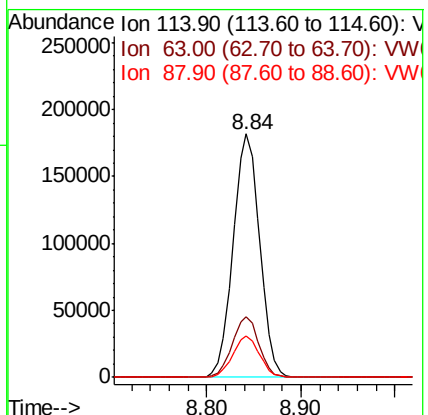
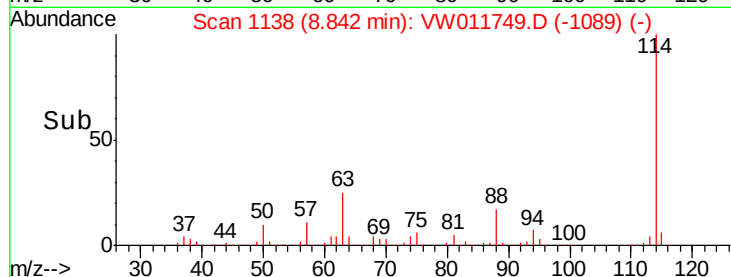
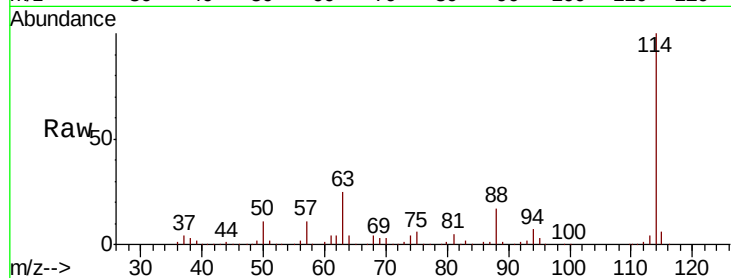
Tgt Ion:114 Resp: 356111

Ion Ratio Lower Upper

114 100

63 25.1 0.0 49.2

88 17.0 0.0 33.8



#35

Dibromofluoromethane

Concen: 55.366 ug/l

RT: 7.88 min Scan# 981

Delta R.T. -0.00 min

Lab File: VW011749.D

Acq: 07 Aug 2019 14:23

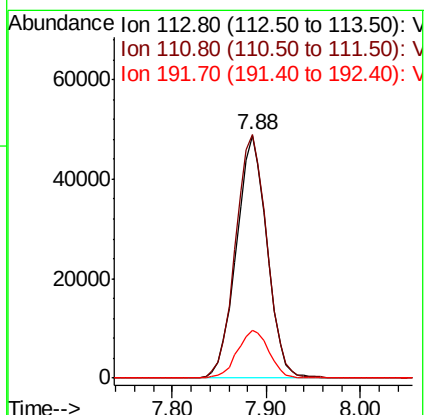
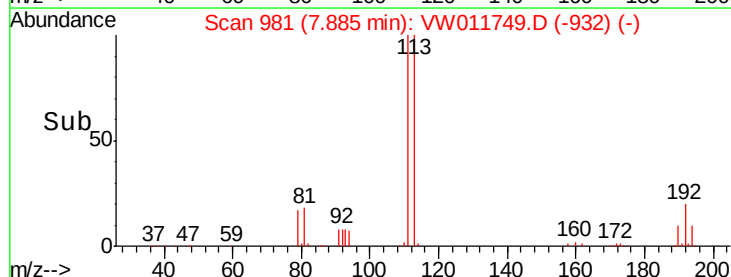
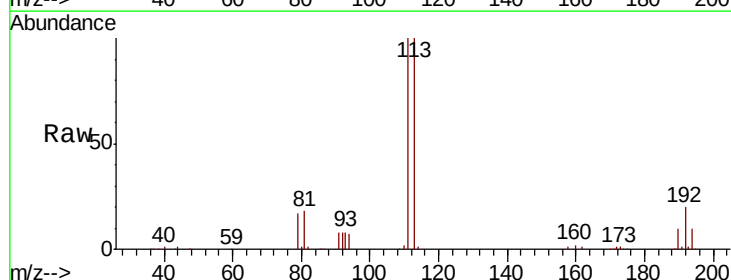
Tgt Ion:113 Resp: 110613

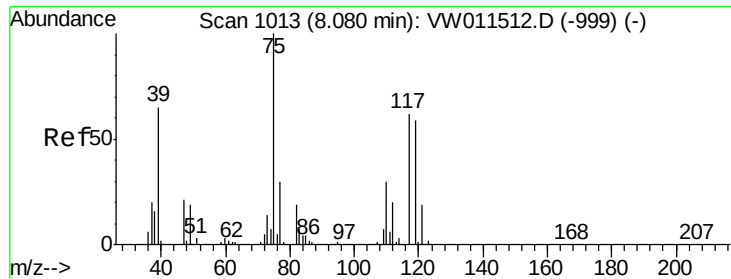
Ion Ratio Lower Upper

113 100

111 103.4 82.7 124.1

192 20.2 16.1 24.1

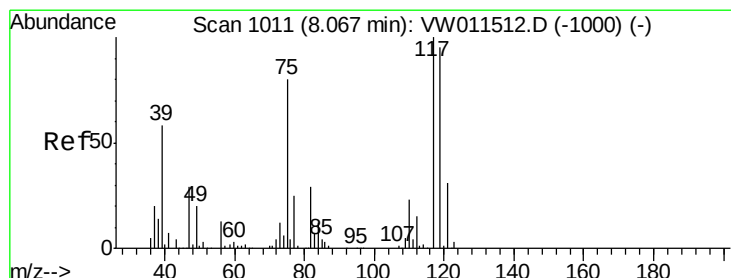
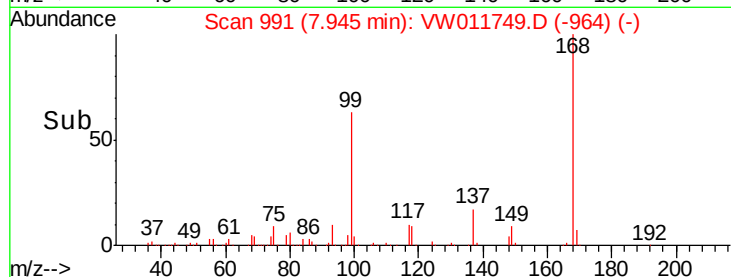
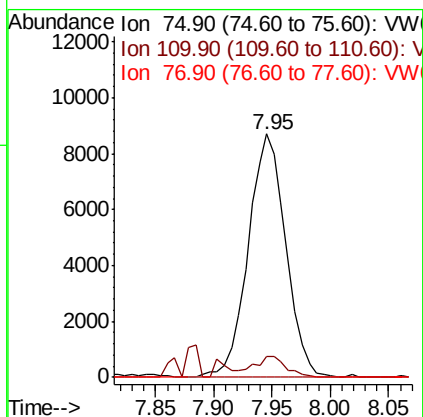
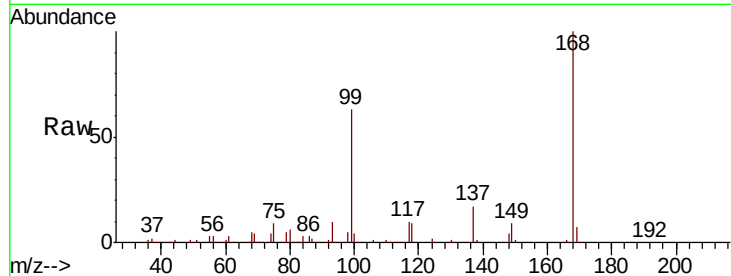




#36  
 1,1-Dichloropropene  
 Concen: 5.267 ug/l  
 RT: 7.95 min Scan# 991  
 Delta R.T. -0.13 min  
 Lab File: VW011749.D  
 Acq: 07 Aug 2019 14:23

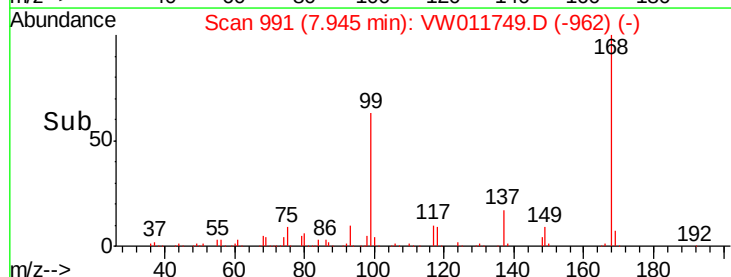
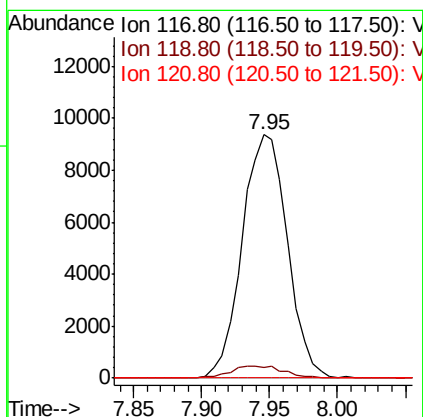
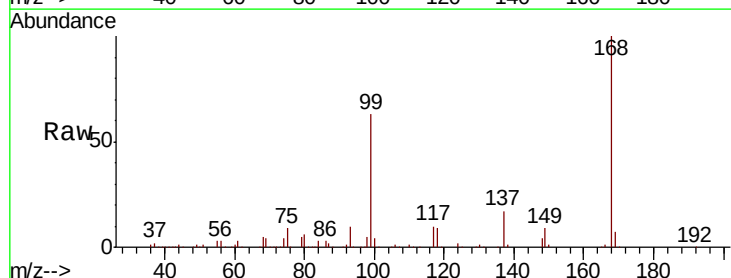
Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 370-371

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 110     | 7.4   | 15.6  | 46.8# |
| 77      | 0.0   | 24.3  | 36.5# |

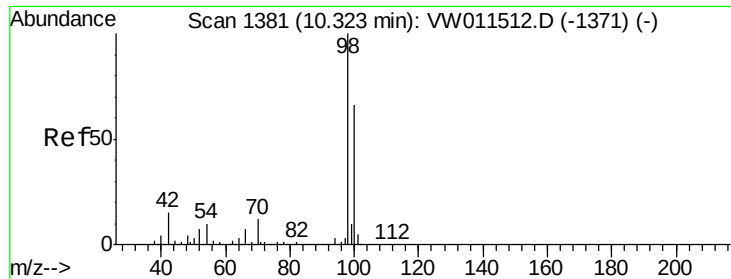


#38  
 Carbon Tetrachloride  
 Concen: 6.852 ug/l  
 RT: 7.95 min Scan# 991  
 Delta R.T. -0.12 min  
 Lab File: VW011749.D  
 Acq: 07 Aug 2019 14:23

| Tgt Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 117     | 100   |       |        |
| 119     | 4.6   | 75.8  | 113.6# |
| 121     | 0.0   | 24.7  | 37.1#  |







#50

Toluene-d8

Concen: 52.383 ug/l

RT: 10.32 min Scan# 1381

Delta R.T. -0.00 min

Lab File: VW011749.D

Acq: 07 Aug 2019 14:23

Instrument :

MSVOA\_W

ClientSampled :

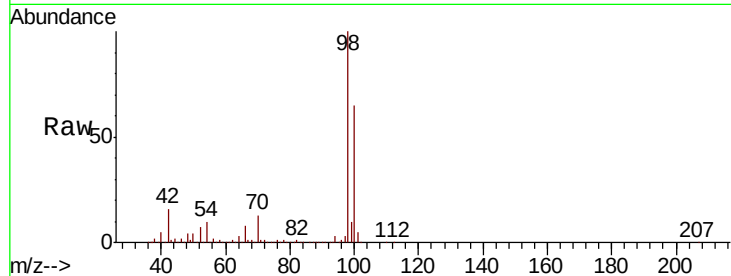
370-371

Tgt Ion: 98 Resp: 428481

Ion Ratio Lower Upper

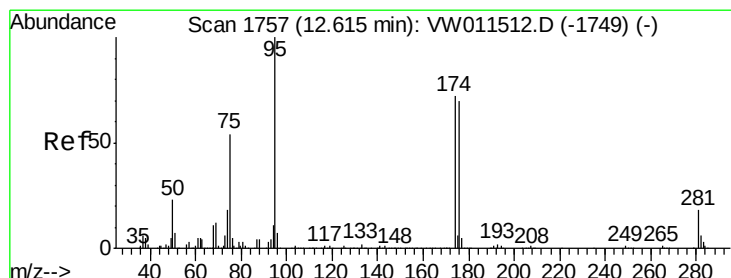
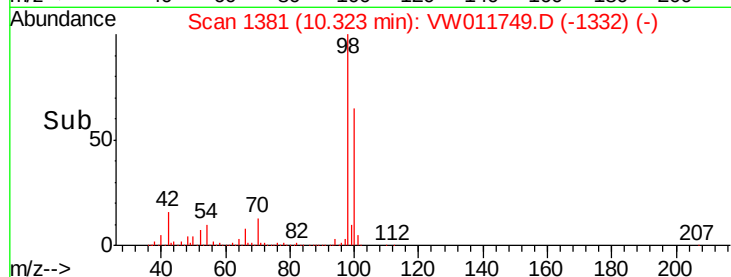
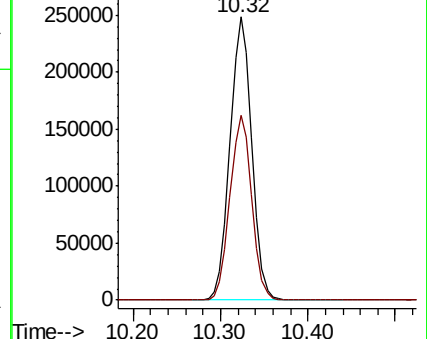
98 100

100 65.2 52.7 79.1



Abundance Ion 98.00 (97.70 to 98.70): VW

Ion 100.00 (99.70 to 100.70): VW



#62

4-Bromofluorobenzene

Concen: 40.719 ug/l

RT: 12.62 min Scan# 1757

Delta R.T. -0.00 min

Lab File: VW011749.D

Acq: 07 Aug 2019 14:23

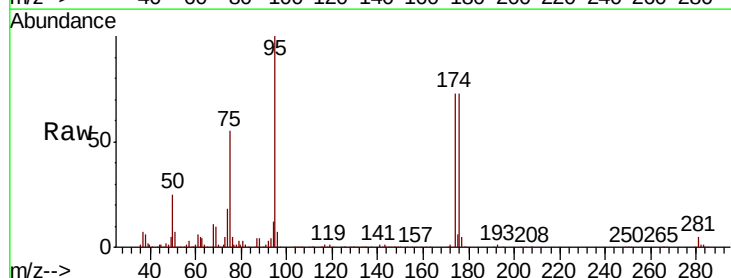
Tgt Ion: 95 Resp: 118746

Ion Ratio Lower Upper

95 100

174 77.4 0.0 150.2

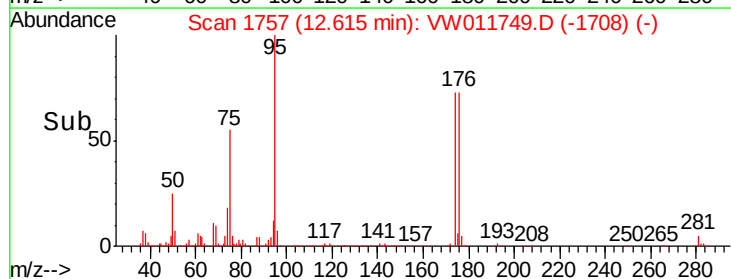
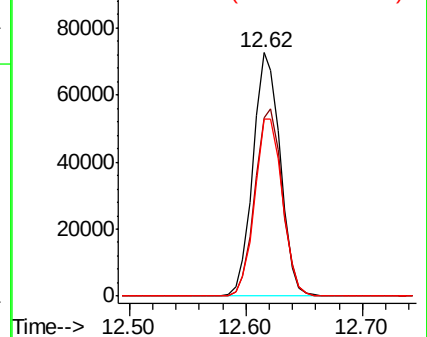
176 74.4 0.0 144.4

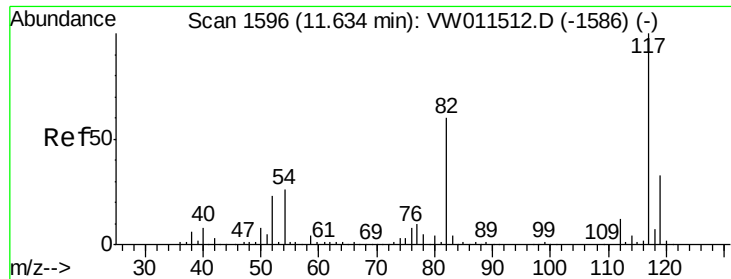


Abundance Ion 94.90 (94.60 to 95.60): VW

Ion 173.80 (173.50 to 174.50): VW

Ion 175.80 (175.50 to 176.50): VW

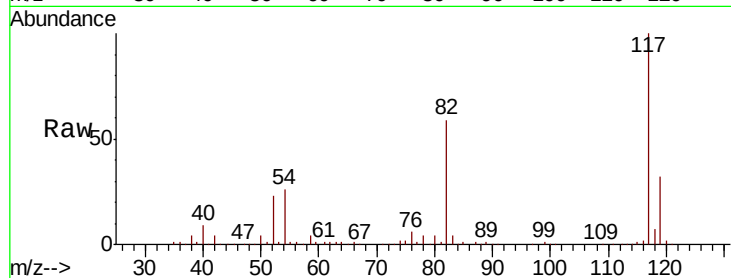




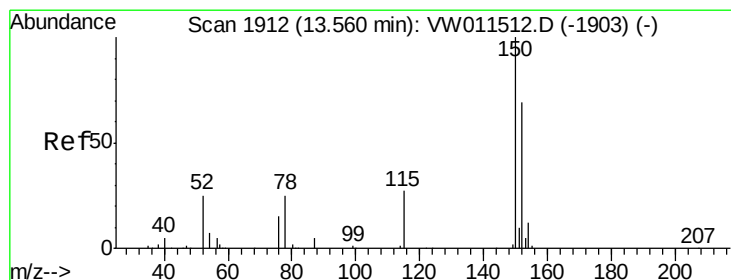
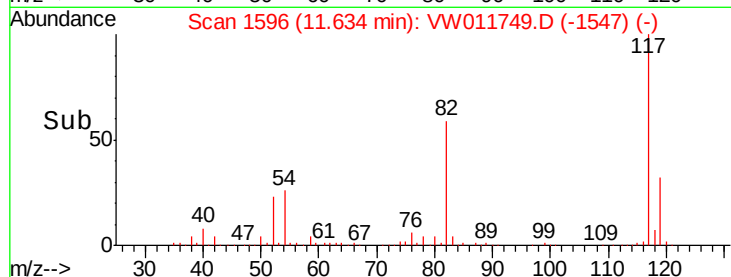
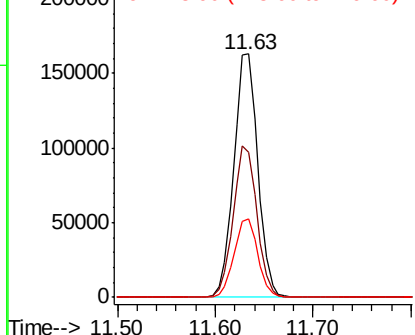
#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.63 min Scan# 1596  
Delta R.T. -0.00 min  
Lab File: VW011749.D  
Acq: 07 Aug 2019 14:23

Instrument :  
MSVOA\_W  
ClientSampled :  
370-371

Tgt Ion:117 Resp: 277477  
Ion Ratio Lower Upper  
117 100  
82 59.4 47.9 71.9  
119 32.2 26.2 39.2

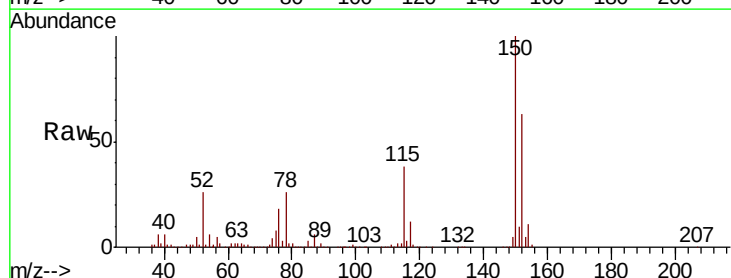


Abundance Ion 116.90 (116.60 to 117.60): V  
Ion 82.00 (81.70 to 82.70): VW  
Ion 118.90 (118.60 to 119.60): V

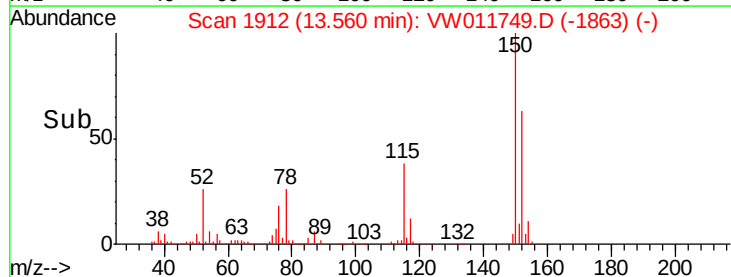
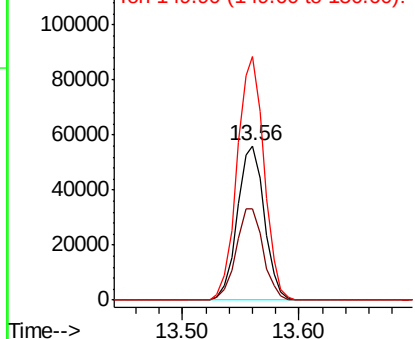


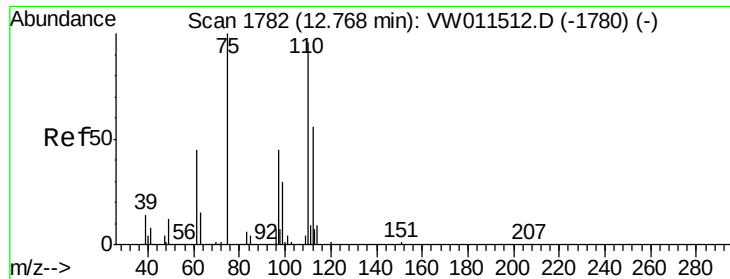
#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 13.56 min Scan# 1912  
Delta R.T. -0.00 min  
Lab File: VW011749.D  
Acq: 07 Aug 2019 14:23

Tgt Ion:152 Resp: 90723  
Ion Ratio Lower Upper  
152 100  
115 59.7 30.5 91.5  
150 157.2 0.0 352.6



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: 68.032 ug/l

RT: 12.62 min Scan# 1757

Delta R.T. -0.15 min

Lab File: VW011749.D

Acq: 07 Aug 2019 14:23

Instrument :

MSVOA\_W

ClientSampleId :

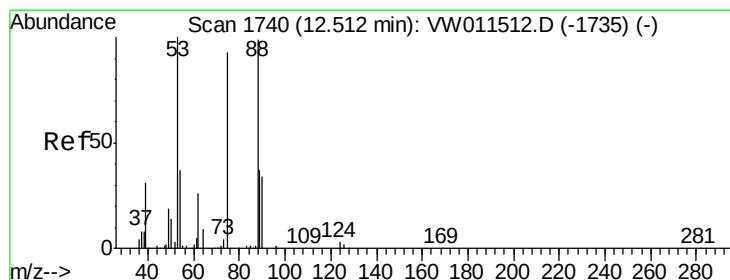
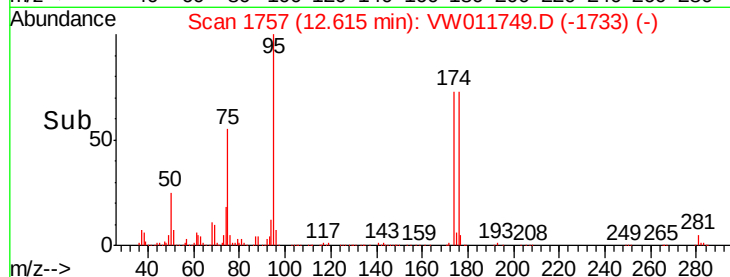
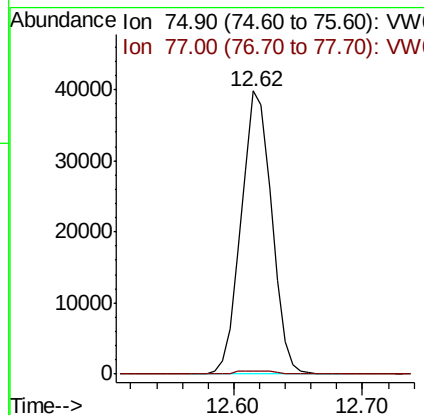
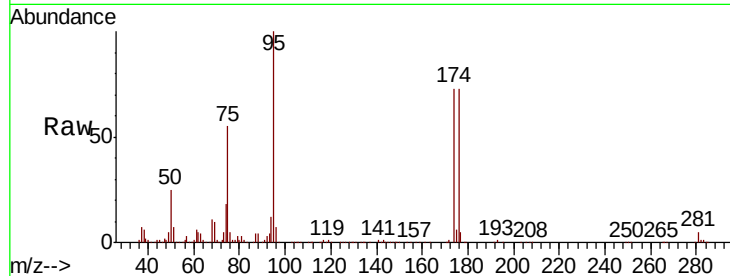
370-371

Tgt Ion: 75 Resp: 65308

Ion Ratio Lower Upper

75 100

77 1.5 0.0 0.0#



#81

trans-1,4-Dichloro-2-butene

Concen: 156.791 ug/l

RT: 12.62 min Scan# 1757

Delta R.T. 0.10 min

Lab File: VW011749.D

Acq: 07 Aug 2019 14:23

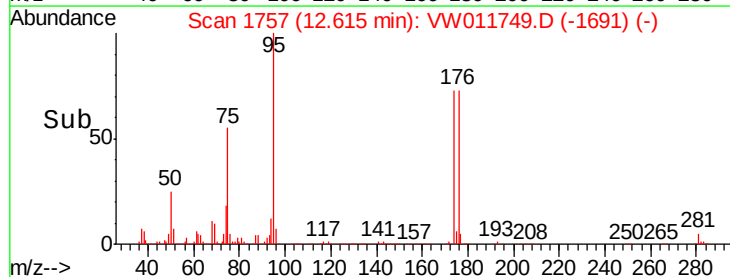
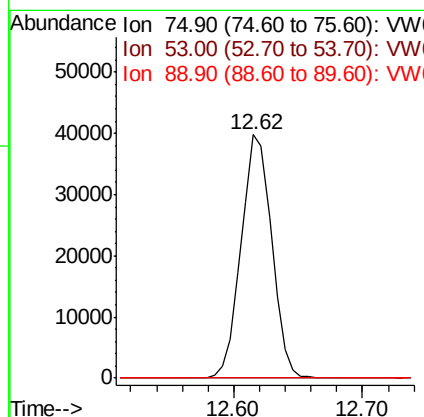
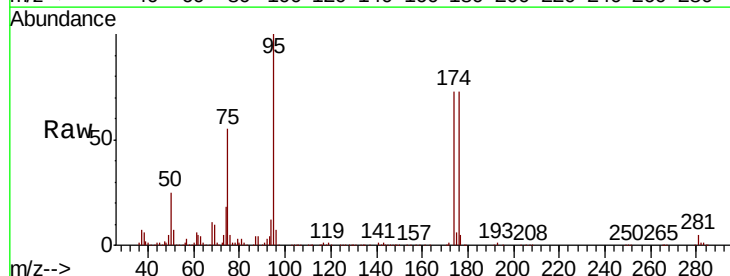
Tgt Ion: 75 Resp: 65308

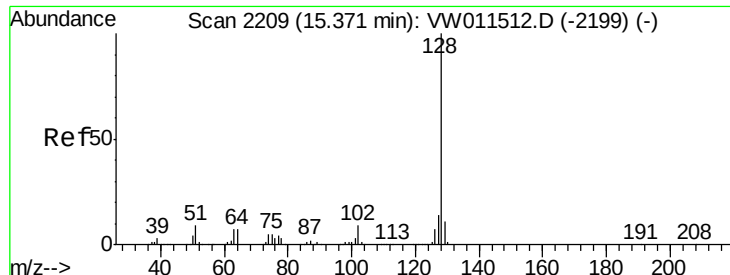
Ion Ratio Lower Upper

75 100

53 0.5 88.0 132.0#

89 0.0 35.3 52.9#





#95

Naphthalene

Concen: 2.289 ug/l

RT: 15.36 min Scan# 2208

Delta R.T. -0.01 min

Lab File: VW011749.D

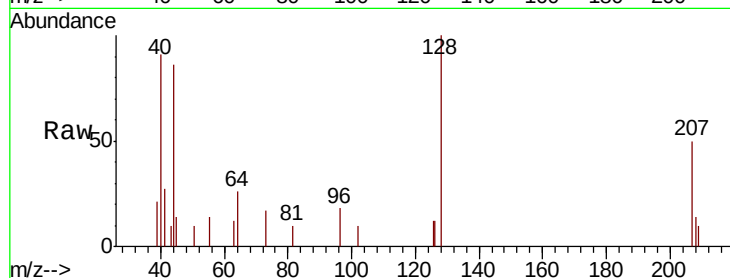
Acq: 07 Aug 2019 14:23

Instrument :

MSVOA\_W

ClientSampleId :

370-371



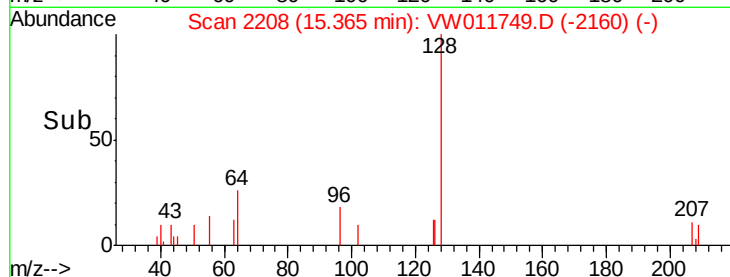
Tgt Ion:128 Resp: 834

Ion Ratio Lower Upper

128 100

127 0.0 10.6 16.0#

129 0.0 8.6 13.0#



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

