

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW072719\  
 Data File : VW011524.D  
 Acq On : 26 Jul 2019 18:50  
 Operator : SY/VA  
 Sample : K3620-13  
 Misc : 6.03G/5.0ML/MSVOA W/SOIL  
 ALS Vial : 18 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 CL-02-072519-B

Quant Time: Jul 27 05:32:38 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  | 218580   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.84  | 114  | 354590   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.63 | 117  | 292050   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.56 | 152  | 115765   | 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   | 141375   | 56.33 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 112.66% |          |
| 35) Dibromofluoromethane    | 7.88  | 113  | 109128   | 54.86 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 109.72% |          |
| 50) Toluene-d8              | 10.32 | 98   | 431134   | 52.93 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 105.86% |          |
| 62) 4-Bromofluorobenzene    | 12.62 | 95   | 136616   | 47.05 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 94.10%  |          |

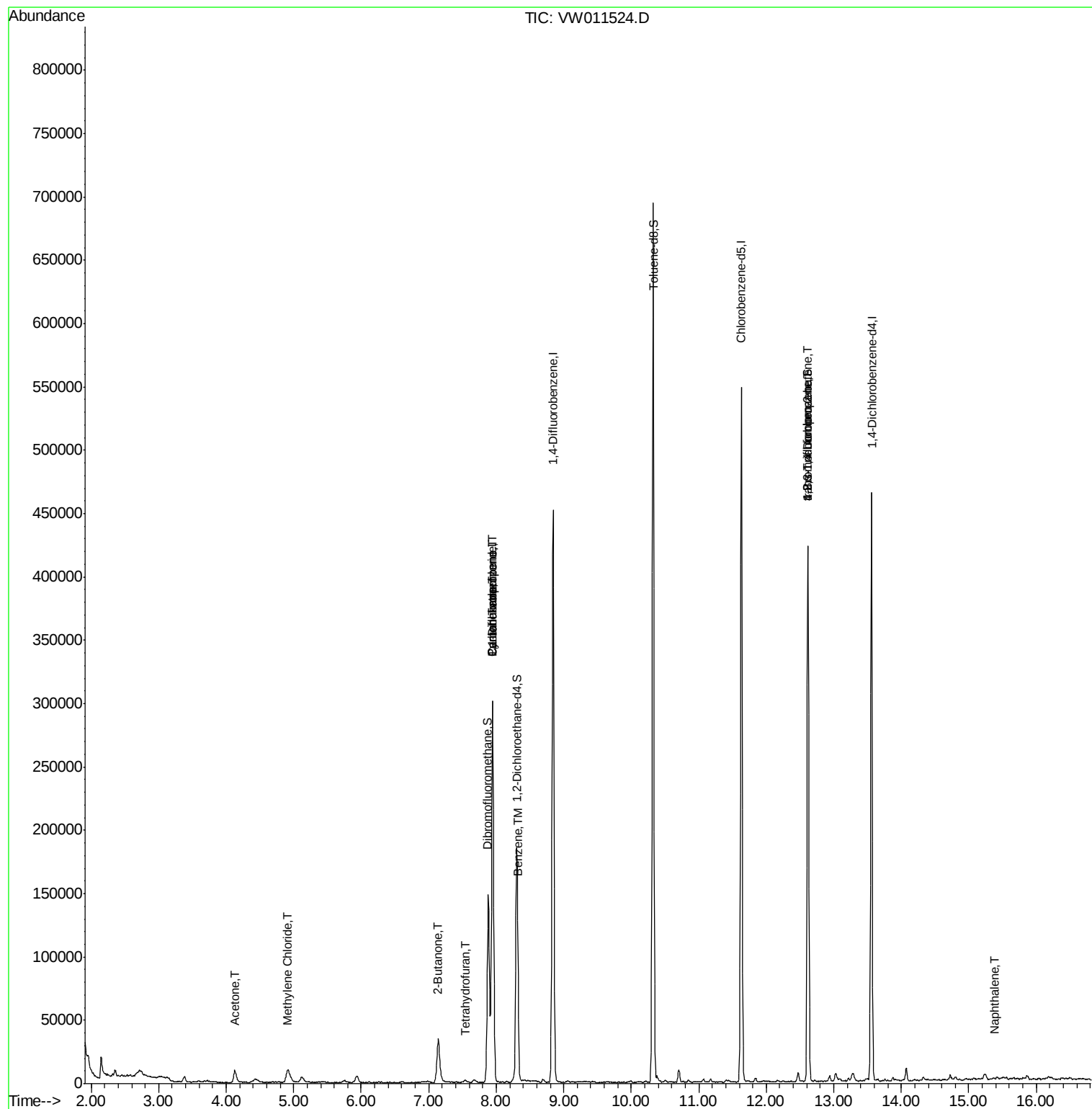
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 11) Tert butyl alcohol         | 5.20  | 59   | 535      | Below Cal | #      | 81     |
| 16) Acetone                    | 4.13  | 43   | 18062    | 22.623    | ug/l   | 99     |
| 20) Methylene Chloride         | 4.91  | 84   | 7571     | 2.750     | ug/l   | 92     |
| 25) 2-Butanone                 | 7.14  | 43   | 1396     | 1.336     | ug/l   | 92     |
| 29) Tetrahydrofuran            | 7.53  | 42   | 1430     | 2.395     | ug/l   | 98     |
| 31) Cyclohexane                | 7.95  | 56   | 5261     | 1.121     | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 7.95  | 75   | 18715    | 5.076     | ug/l # | 51     |
| 38) Carbon Tetrachloride       | 7.95  | 117  | 22069    | 6.992     | ug/l # | 16     |
| 40) Benzene                    | 8.32  | 78   | 10924    | 1.058     | ug/l   | 94     |
| 76) 1,2,3-Trichloropropane     | 12.62 | 75   | 72538    | 59.218    | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.62 | 75   | 72538    | 136.478   | ug/l # | 6      |
| 95) Naphthalene                | 15.38 | 128  | 1121     | 2.301     | ug/l # | 87     |

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

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MSVOA\_W  
ClientSampleId :  
CL-02-072519-B

Quant Time: Jul 27 05:32:38 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# 991

Delta R.T. 0.00 min

Lab File: VW011524.D

Acq: 26 Jul 2019 18:50

Instrument :

MSVOA\_W

ClientSampleId :

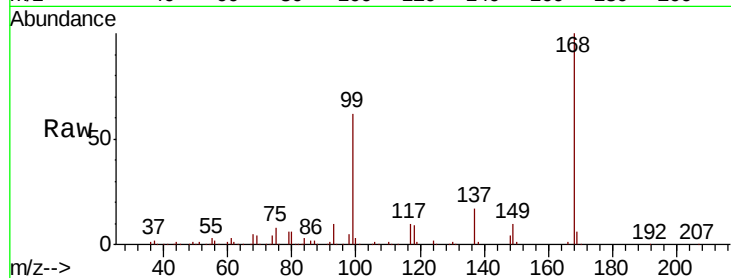
CL-02-072519-B

Tot Ion:168 Resp: 218580

Ion Ratio Lower Upper

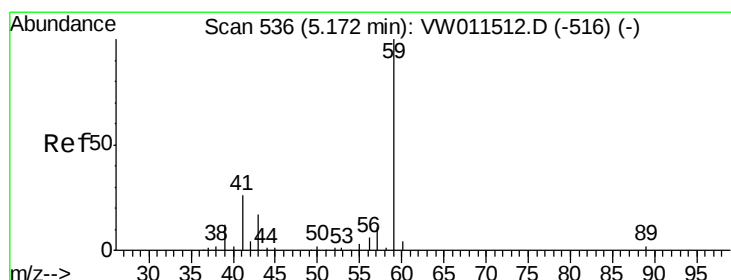
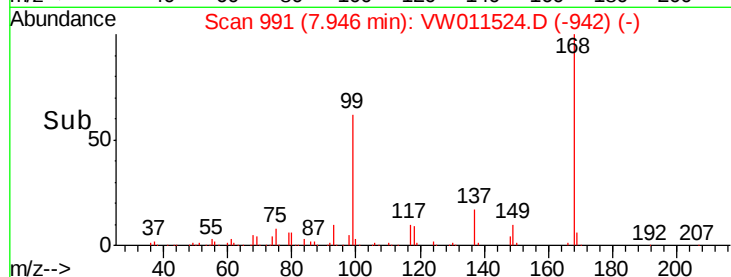
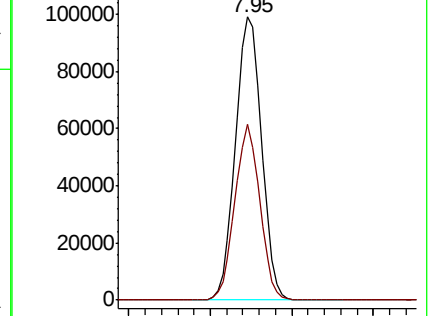
168 100

99 62.0 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: 5.20 min Scan# 540

Delta R.T. 0.03 min

Lab File: VW011524.D

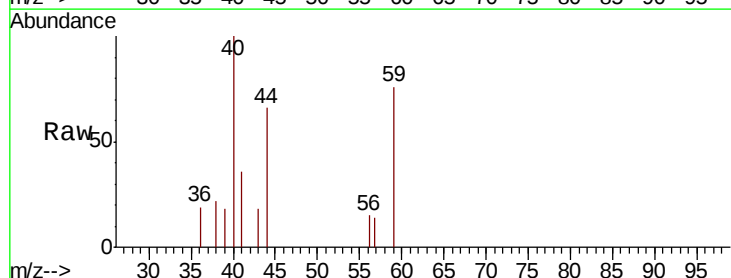
Acq: 26 Jul 2019 18:50

Tgt Ion: 59 Resp: 535

Ion Ratio Lower Upper

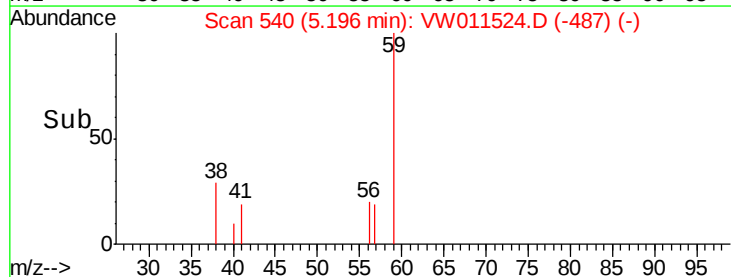
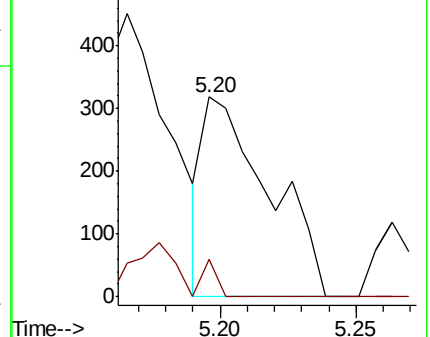
59 100

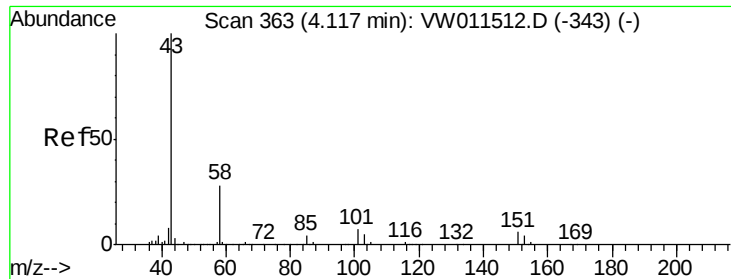
57 17.6 8.5 12.7#



Abundance Ion 59.00 (58.70 to 59.70): VW

Ion 57.00 (56.70 to 57.70): VW

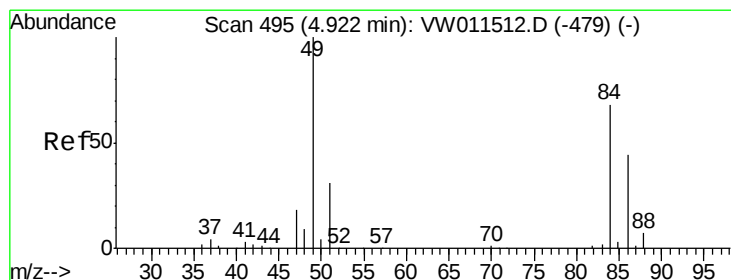
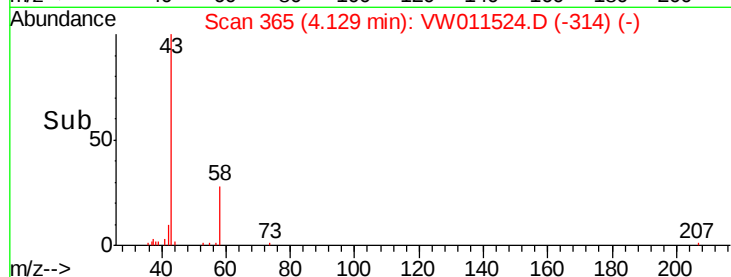
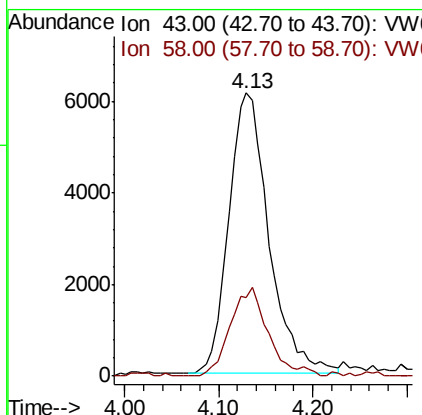
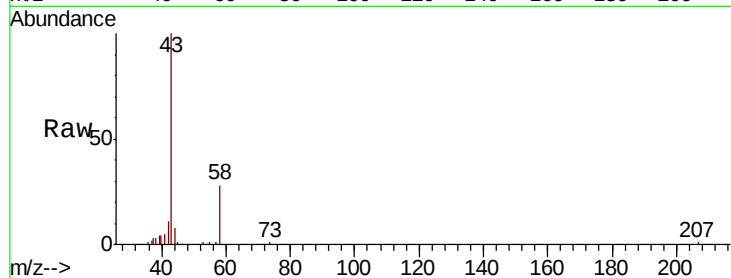




#16  
Acetone  
Concen: 22.623 ug/l  
RT: 4.13 min Scan# 365  
Delta R.T. 0.01 min  
Lab File: VW011524.D  
Acq: 26 Jul 2019 18:50

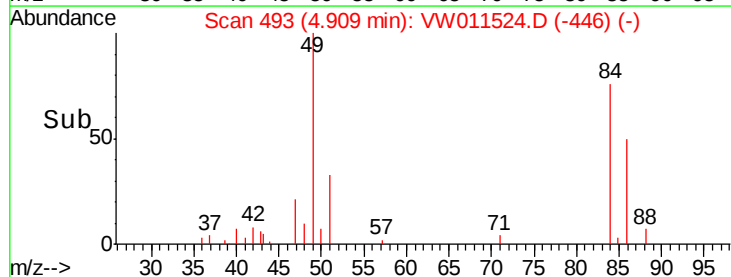
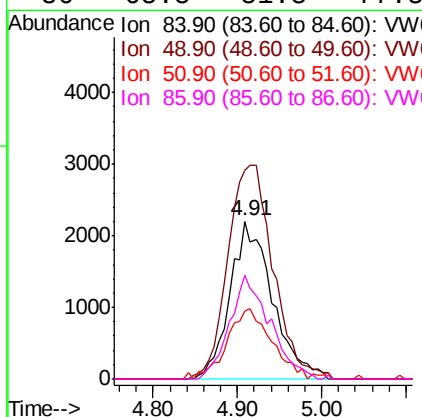
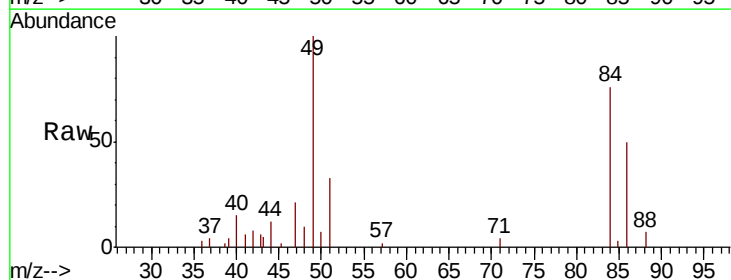
Instrument :  
MSVOA\_W  
ClientSampleId :  
CL-02-072519-B

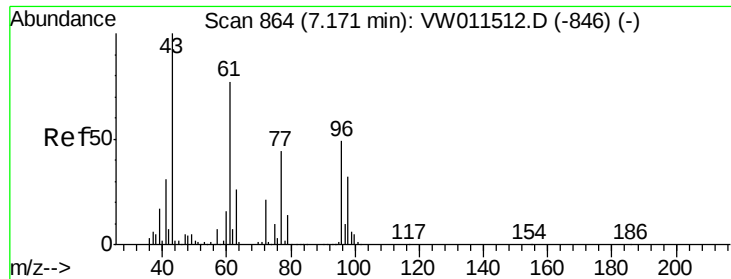
Tot Ion: 43 Resp: 18062  
Ion Ratio Lower Upper  
43 100  
58 28.2 22.3 33.5



#20  
Methylene Chloride  
Concen: 2.750 ug/l  
RT: 4.91 min Scan# 493  
Delta R.T. -0.01 min  
Lab File: VW011524.D  
Acq: 26 Jul 2019 18:50

Tgt Ion: 84 Resp: 7571  
Ion Ratio Lower Upper  
84 100  
49 131.9 117.8 176.6  
51 43.2 37.0 55.4  
86 65.5 51.8 77.8





#25

2-Butanone

Concen: 1.336 ug/l

RT: 7.14 min Scan# 859

Delta R.T. -0.03 min

Lab File: VW011524.D

Acq: 26 Jul 2019 18:50

Instrument :

MSVOA\_W

ClientSampleId :

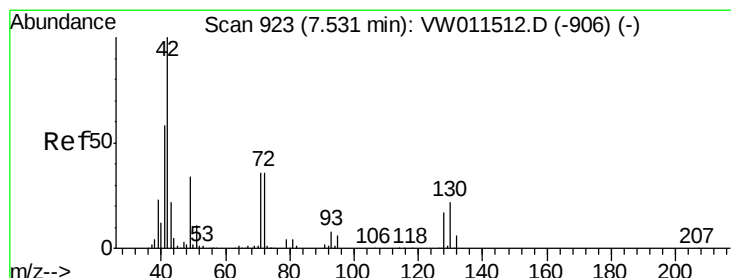
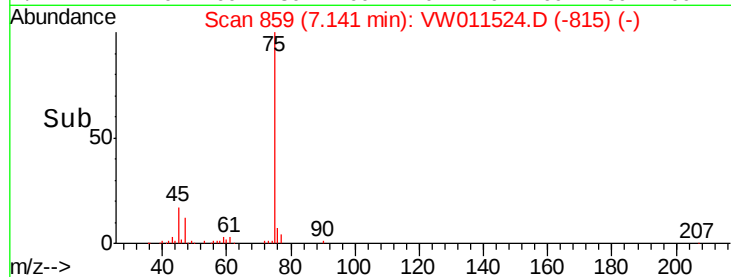
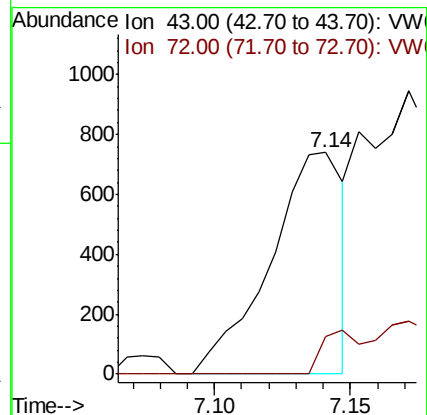
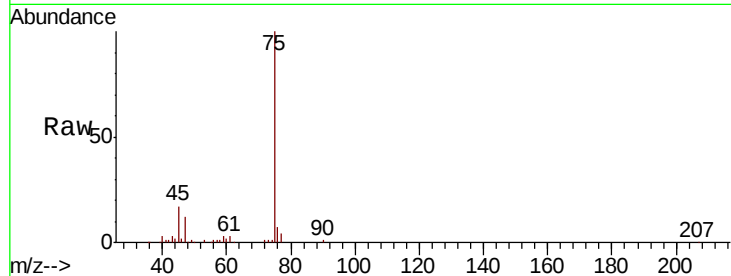
CL-02-072519-B

Tot Ion: 43 Resp: 1396

Ion Ratio Lower Upper

43 100

72 16.9 16.6 24.8



#29

Tetrahydrofuran

Concen: 2.395 ug/l

RT: 7.53 min Scan# 923

Delta R.T. 0.00 min

Lab File: VW011524.D

Acq: 26 Jul 2019 18:50

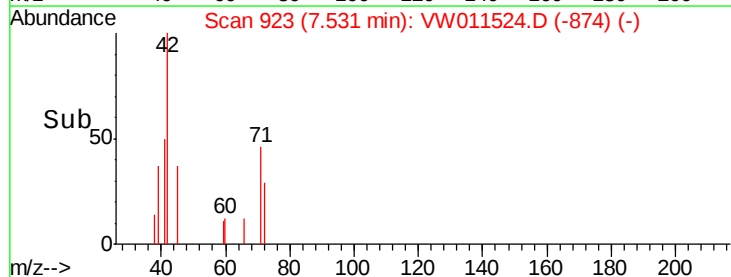
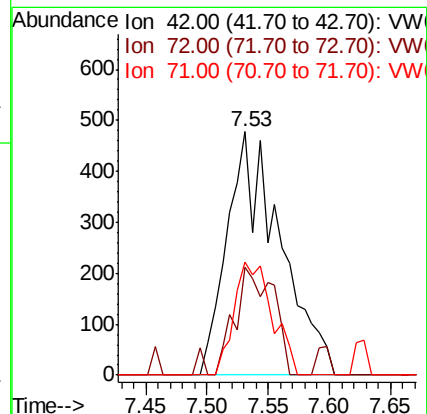
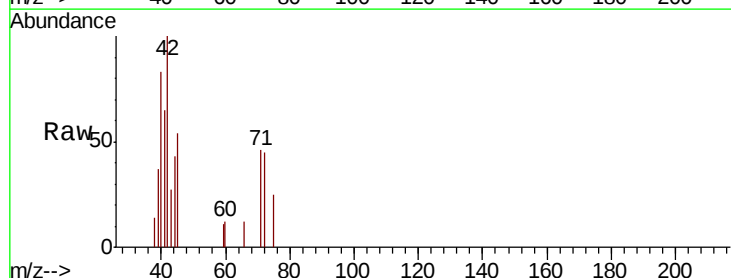
Tgt Ion: 42 Resp: 1430

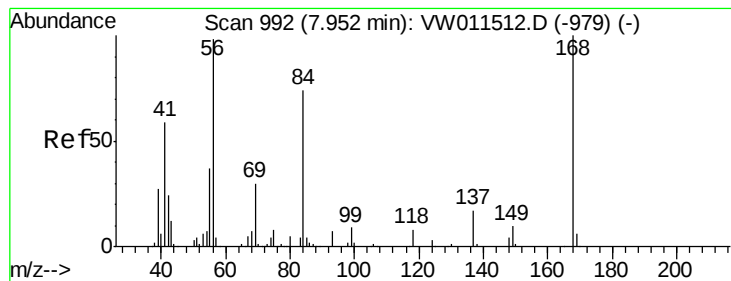
Ion Ratio Lower Upper

42 100

72 32.7 27.1 40.7

71 33.6 26.2 39.4





#31

Cyclohexane

Concen: 1.121 ug/l

RT: 7.95 min Scan# 991

Delta R.T. -0.01 min

Lab File: VW011524.D

Acq: 26 Jul 2019 18:50

Instrument :

MSVOA\_W

ClientSampleId :

CL-02-072519-B

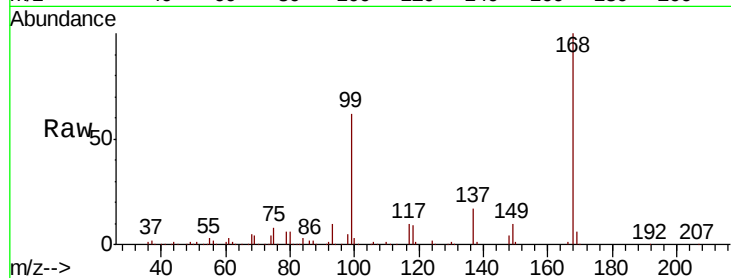
Tot Ion: 56 Resp: 5261

Ion Ratio Lower Upper

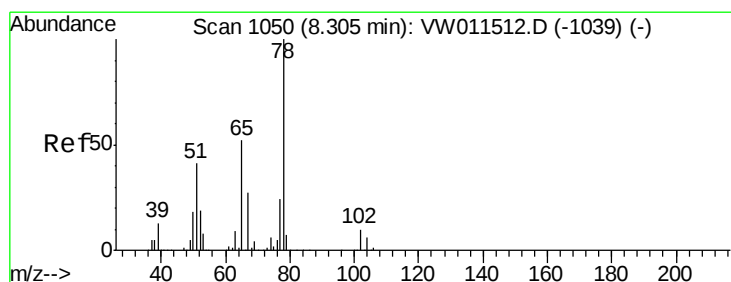
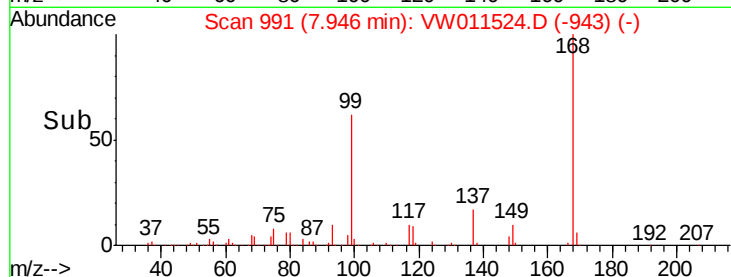
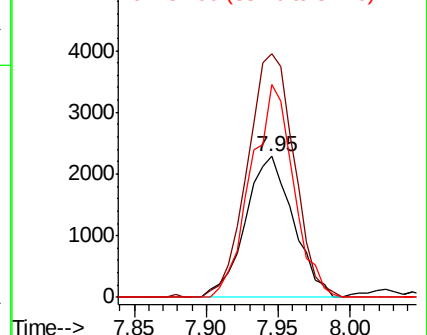
56 100

69 173.1 24.3 36.5#

84 151.8 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: 56.327 ug/l

RT: 8.31 min Scan# 1050

Delta R.T. 0.00 min

Lab File: VW011524.D

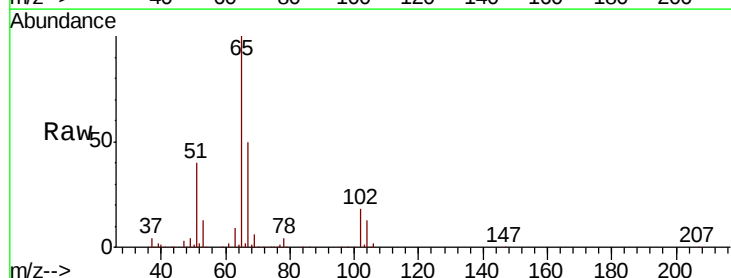
Acq: 26 Jul 2019 18:50

Tgt Ion: 65 Resp: 141375

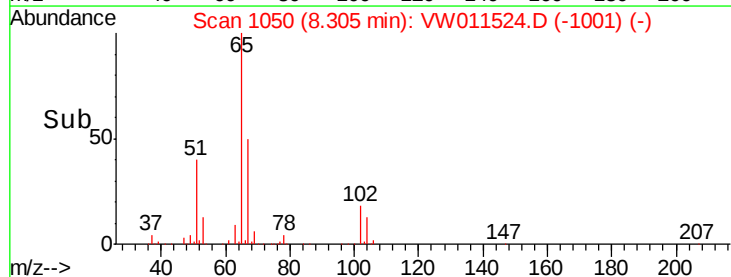
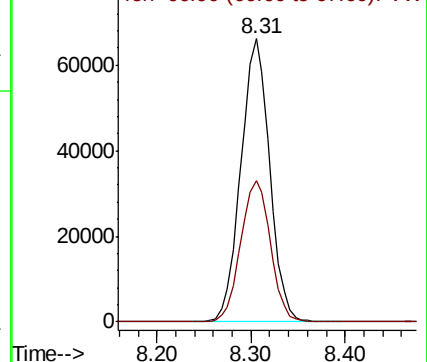
Ion Ratio Lower Upper

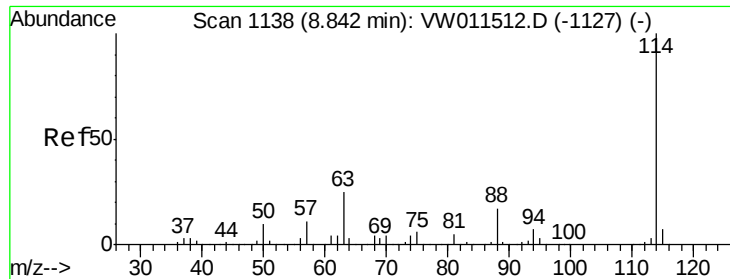
65 100

67 51.6 0.0 105.2



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

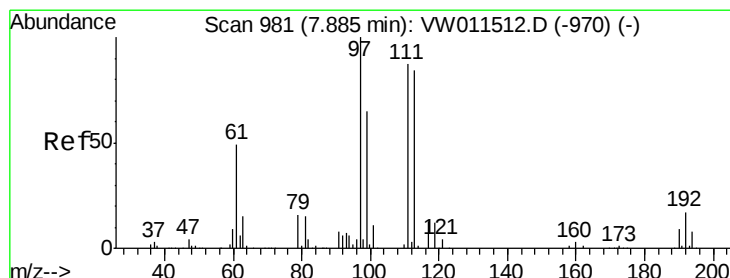
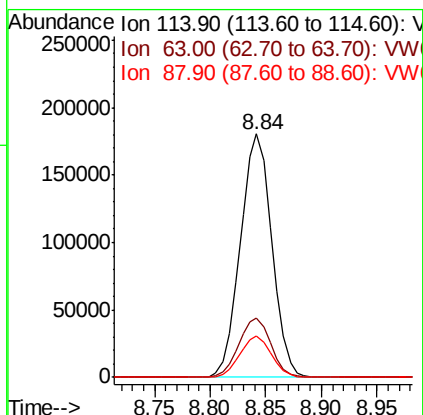
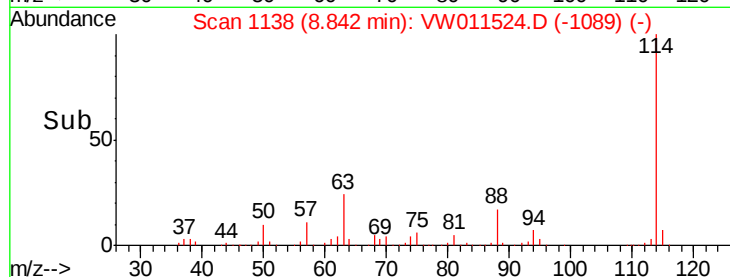
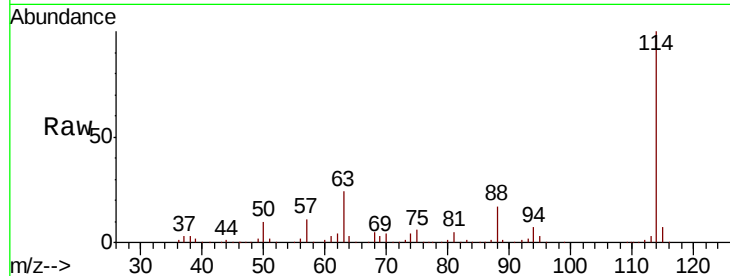




#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.84 min Scan# 1138  
 Delta R.T. 0.00 min  
 Lab File: VW011524.D  
 Acq: 26 Jul 2019 18:50

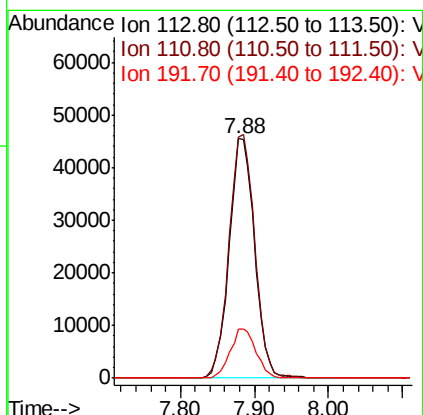
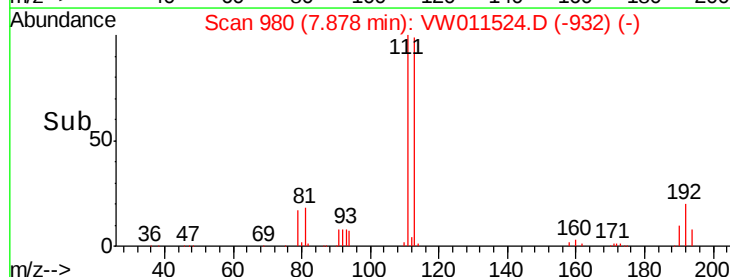
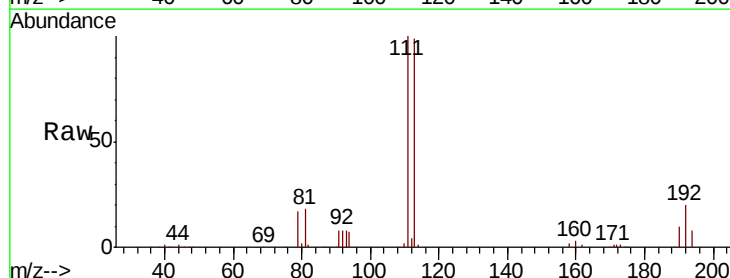
Instrument :  
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 CL-02-072519-B

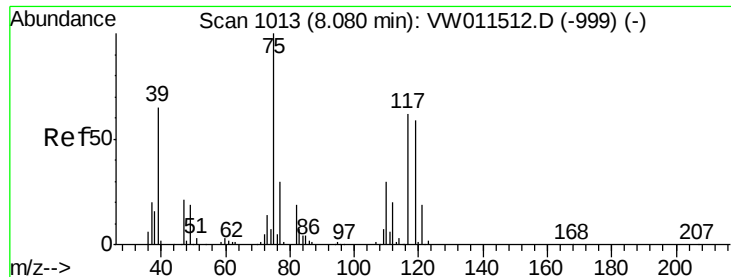
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 114     | 100   |       |       |
| 63      | 24.2  | 0.0   | 49.2  |
| 88      | 16.7  | 0.0   | 33.8  |



#35  
 Dibromofluoromethane  
 Concen: 54.857 ug/l  
 RT: 7.88 min Scan# 980  
 Delta R.T. -0.01 min  
 Lab File: VW011524.D  
 Acq: 26 Jul 2019 18:50

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 113     | 100   |       |       |
| 111     | 102.8 | 82.7  | 124.1 |
| 192     | 20.6  | 16.1  | 24.1  |

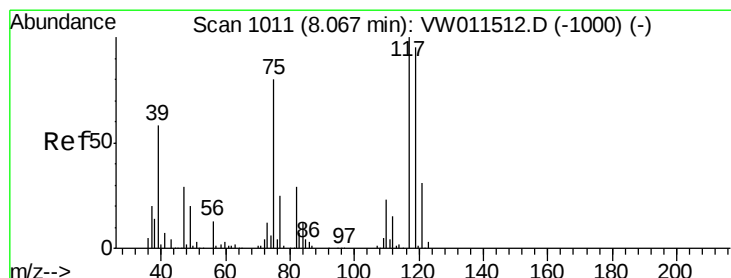
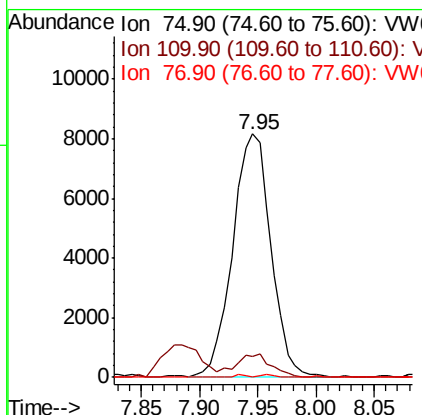
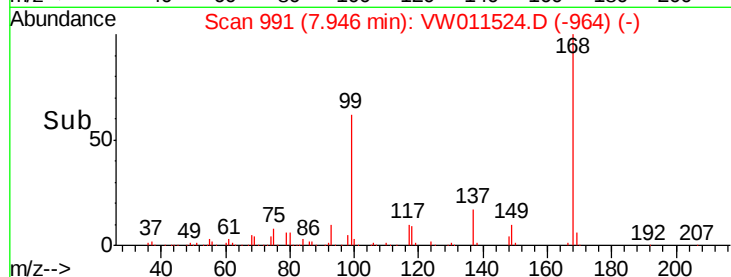
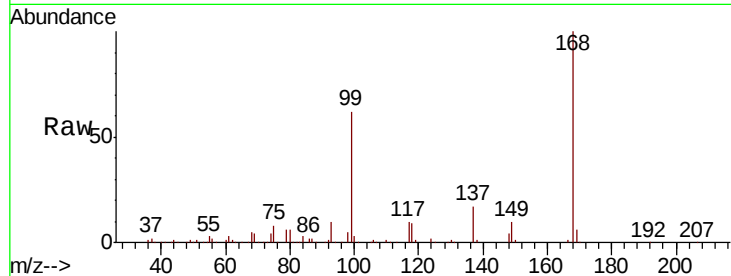




#36  
 1,1-Dichloropropene  
 Concen: 5.076 ug/l  
 RT: 7.95 min Scan# 991  
 Delta R.T. -0.13 min  
 Lab File: VW011524.D  
 Acq: 26 Jul 2019 18:50

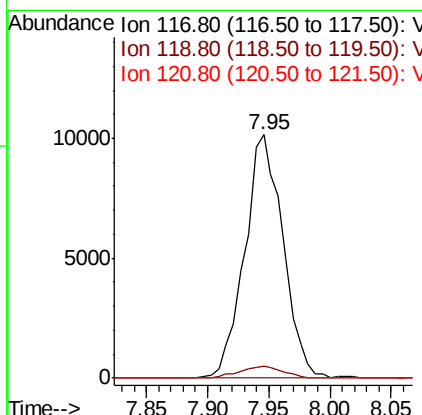
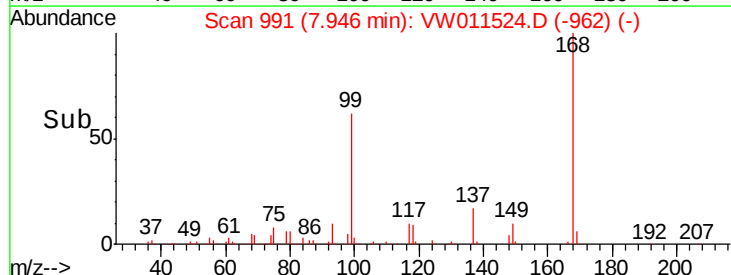
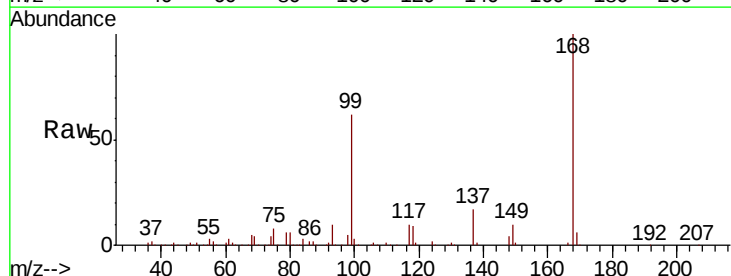
Instrument :  
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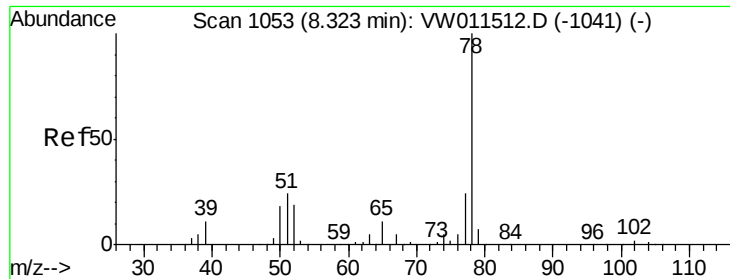
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 110     | 7.7   | 15.6  | 46.8# |
| 77      | 0.5   | 24.3  | 36.5# |



#38  
 Carbon Tetrachloride  
 Concen: 6.992 ug/l  
 RT: 7.95 min Scan# 991  
 Delta R.T. -0.12 min  
 Lab File: VW011524.D  
 Acq: 26 Jul 2019 18:50

| Tgt Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 117     | 100   |       |        |
| 119     | 5.0   | 75.8  | 113.6# |
| 121     | 0.0   | 24.7  | 37.1#  |





#40

Benzene

Concen: 1.058 ug/l

RT: 8.32 min Scan# 1053

Delta R.T. 0.00 min

Lab File: VW011524.D

Acq: 26 Jul 2019 18:50

Instrument :

MSVOA\_W

ClientSampleId :

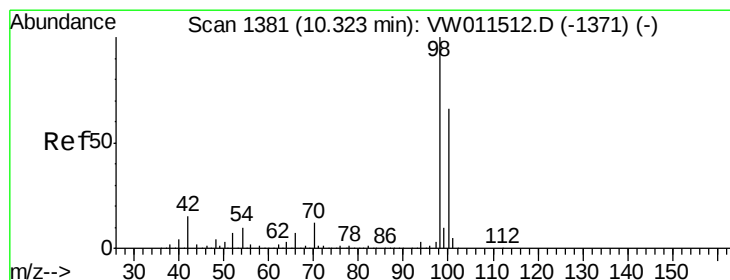
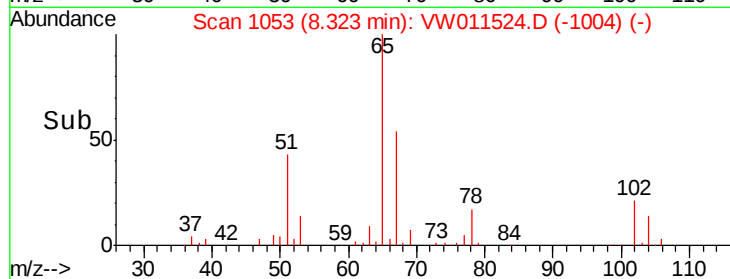
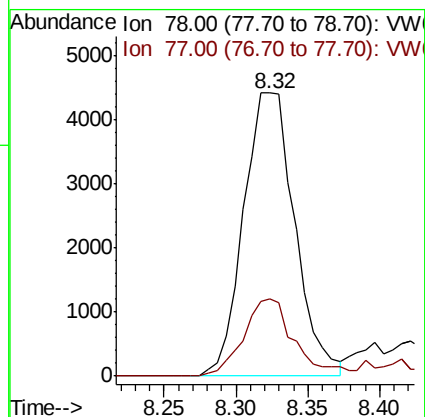
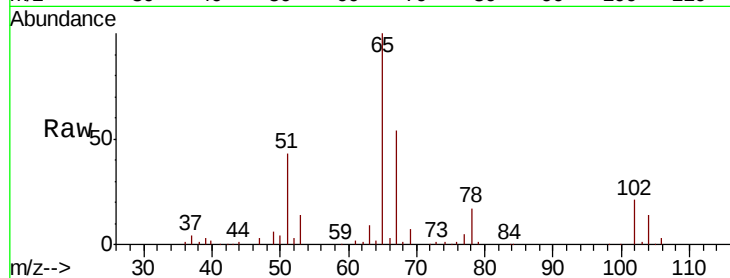
CL-02-072519-B

Tot Ion: 78 Resp: 10924

Ion Ratio Lower Upper

78 100

77 27.2 19.4 29.0



#50

Toluene-d8

Concen: 52.933 ug/l

RT: 10.32 min Scan# 1381

Delta R.T. 0.00 min

Lab File: VW011524.D

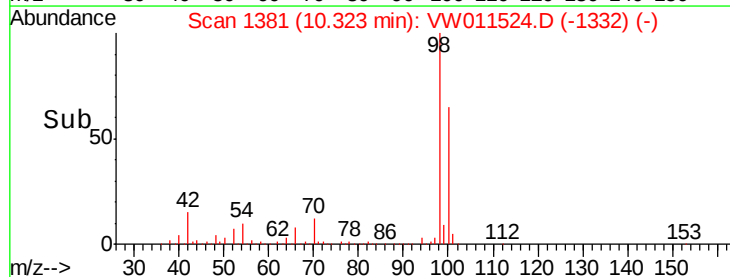
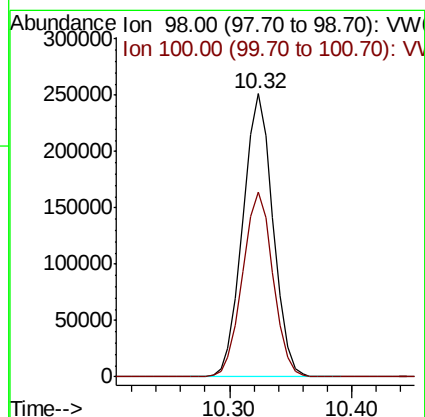
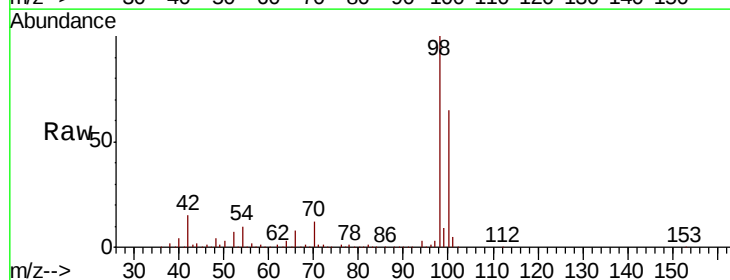
Acq: 26 Jul 2019 18:50

Tgt Ion: 98 Resp: 431134

Ion Ratio Lower Upper

98 100

100 65.8 52.7 79.1





#62

4-Bromofluorobenzene

Concen: 47.047 ug/l

RT: 12.62 min Scan# 1757

Delta R.T. 0.00 min

Lab File: VW011524.D

Acq: 26 Jul 2019 18:50

Instrument :

MSVOA\_W

ClientSampleId :

CL-02-072519-B

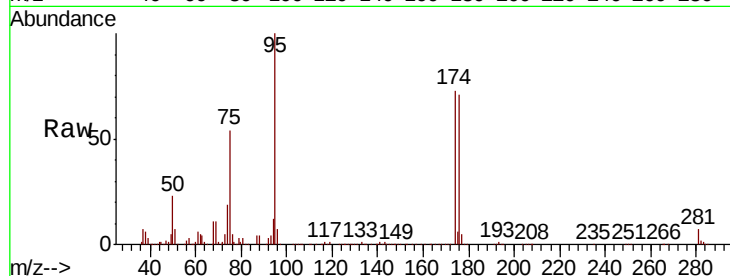
Tot Ion: 95 Resp: 136616

Ion Ratio Lower Upper

95 100

174 76.3 0.0 150.2

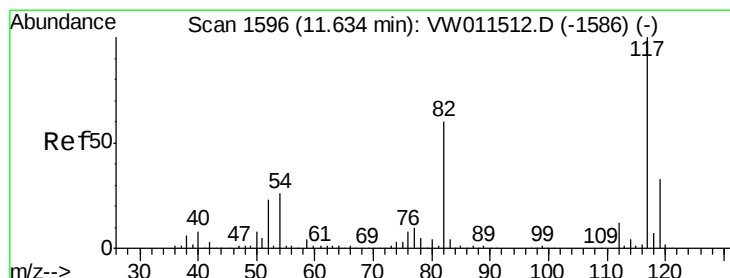
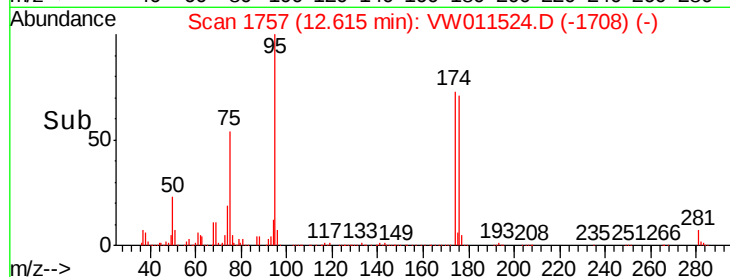
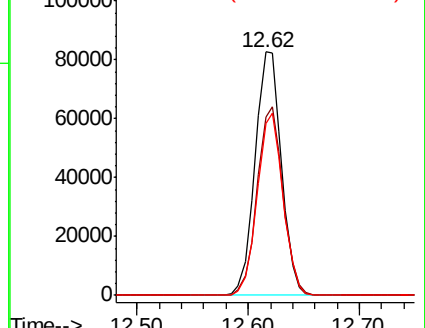
176 73.2 0.0 144.4



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: VW011524.D

Acq: 26 Jul 2019 18:50

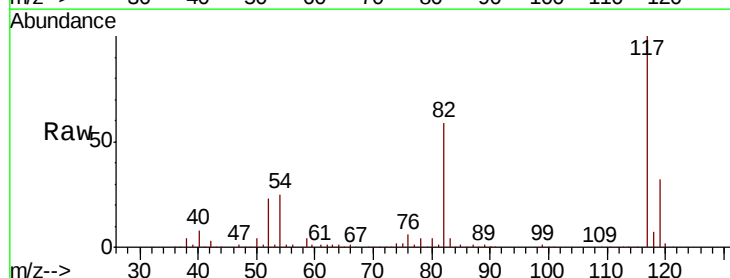
Tgt Ion: 117 Resp: 292050

Ion Ratio Lower Upper

117 100

82 59.0 47.9 71.9

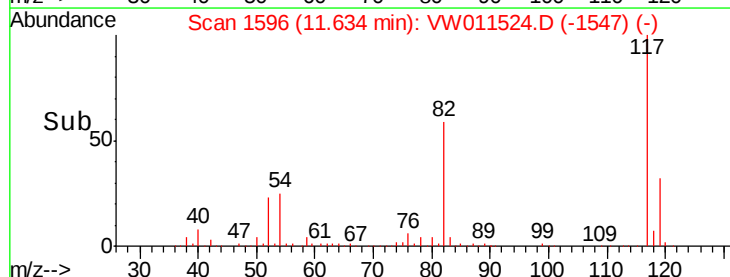
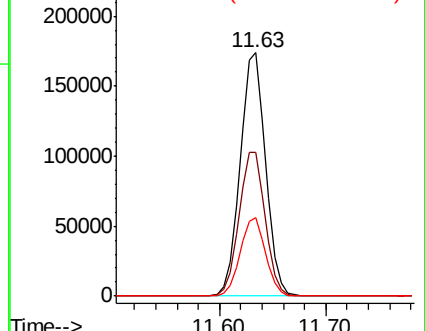
119 32.0 26.2 39.2



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: VW011524.D

Acq: 26 Jul 2019 18:50

Instrument :

MSVOA\_W

ClientSampleId :

CL-02-072519-B

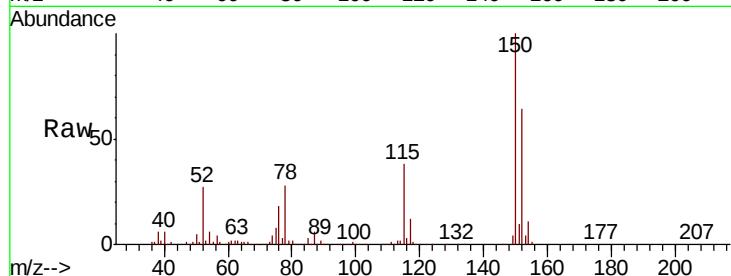
Tot Ion:152 Resp: 115765

Ion Ratio Lower Upper

152 100

115 60.4 30.5 91.5

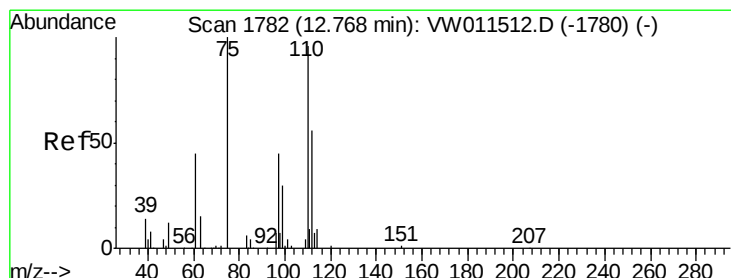
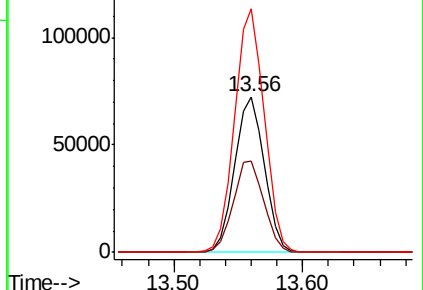
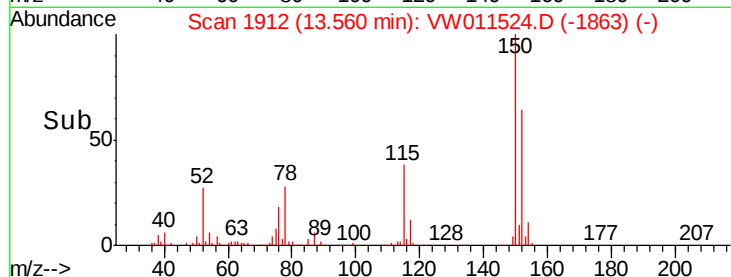
150 156.5 0.0 352.6



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: 59.218 ug/l

RT: 12.62 min Scan# 1757

Delta R.T. -0.15 min

Lab File: VW011524.D

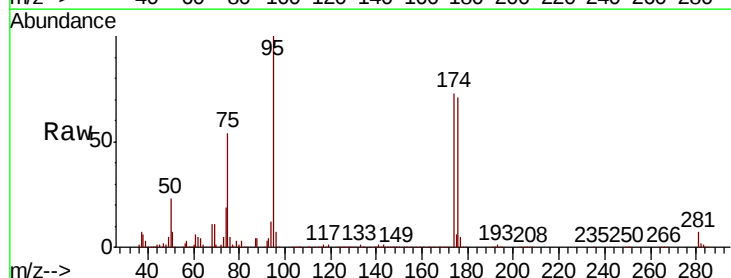
Acq: 26 Jul 2019 18:50

Tgt Ion: 75 Resp: 72538

Ion Ratio Lower Upper

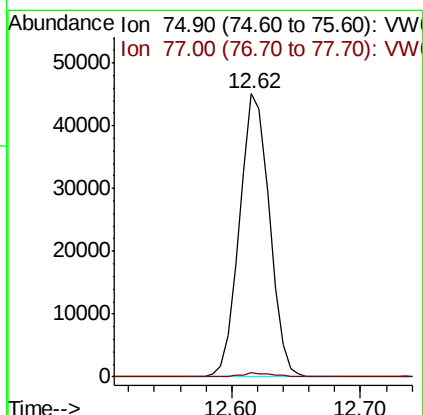
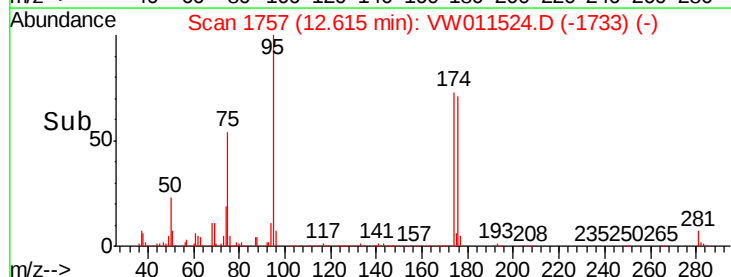
75 100

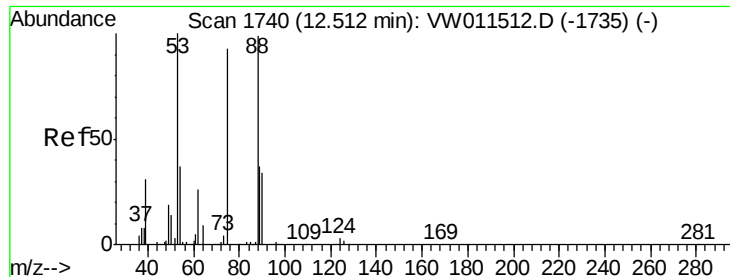
77 1.5 0.0 0.0#



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: 136.478 ug/l

RT: 12.62 min Scan# 1757

Delta R.T. 0.10 min

Lab File: VW011524.D

Acq: 26 Jul 2019 18:50

Instrument :

MSVOA\_W

ClientSampleId :

CL-02-072519-B

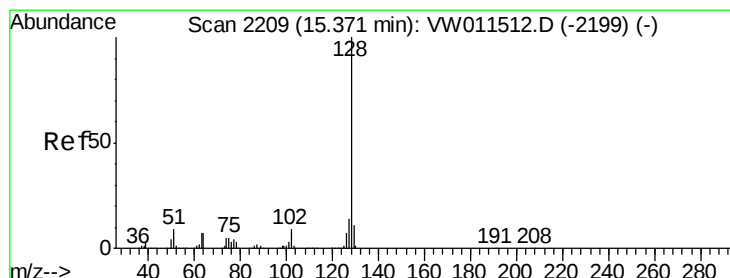
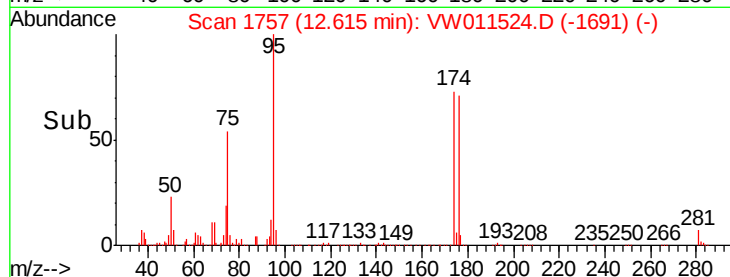
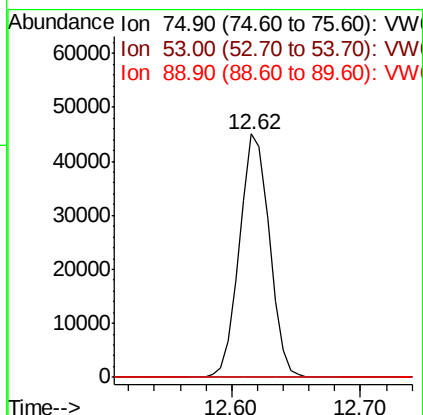
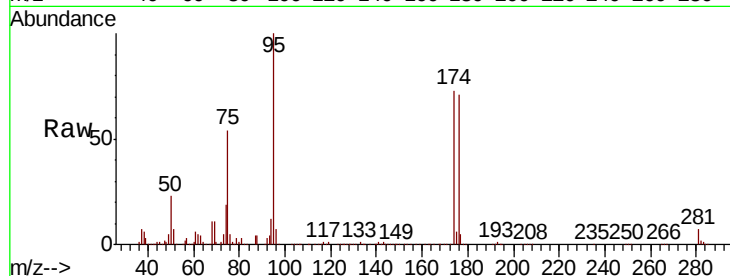
Tot Ion: 75 Resp: 72538

Ion Ratio Lower Upper

75 100

53 0.0 88.0 132.0#

89 0.1 35.3 52.9#



#95

Naphthalene

Concen: 2.301 ug/l

RT: 15.38 min Scan# 2210

Delta R.T. 0.01 min

Lab File: VW011524.D

Acq: 26 Jul 2019 18:50

Tgt Ion: 128 Resp: 1121

Ion Ratio Lower Upper

128 100

127 4.7 10.6 16.0#

129 12.0 8.6 13.0

