

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW072719\  
 Data File : VW011539.D  
 Acq On : 27 Jul 2019 01:19  
 Operator : SY/VA  
 Sample : K3990-05  
 Misc : 4.87G/5.0ML/MSVOA W/SOIL  
 ALS Vial : 33 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 TP-4-A

Quant Time: Jul 27 05:36:12 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  | 280788   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.84  | 114  | 463891   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.63 | 117  | 387673   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.56 | 152  | 148124   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 8.30  | 65   | 177892   | 55.17 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 110.34% |          |
| 35) Dibromofluoromethane    | 7.88  | 113  | 142172   | 54.63 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 109.26% |          |
| 50) Toluene-d8              | 10.32 | 98   | 578819   | 54.32 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 108.64% |          |
| 62) 4-Bromofluorobenzene    | 12.62 | 95   | 179325   | 47.20 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 94.40%  |          |

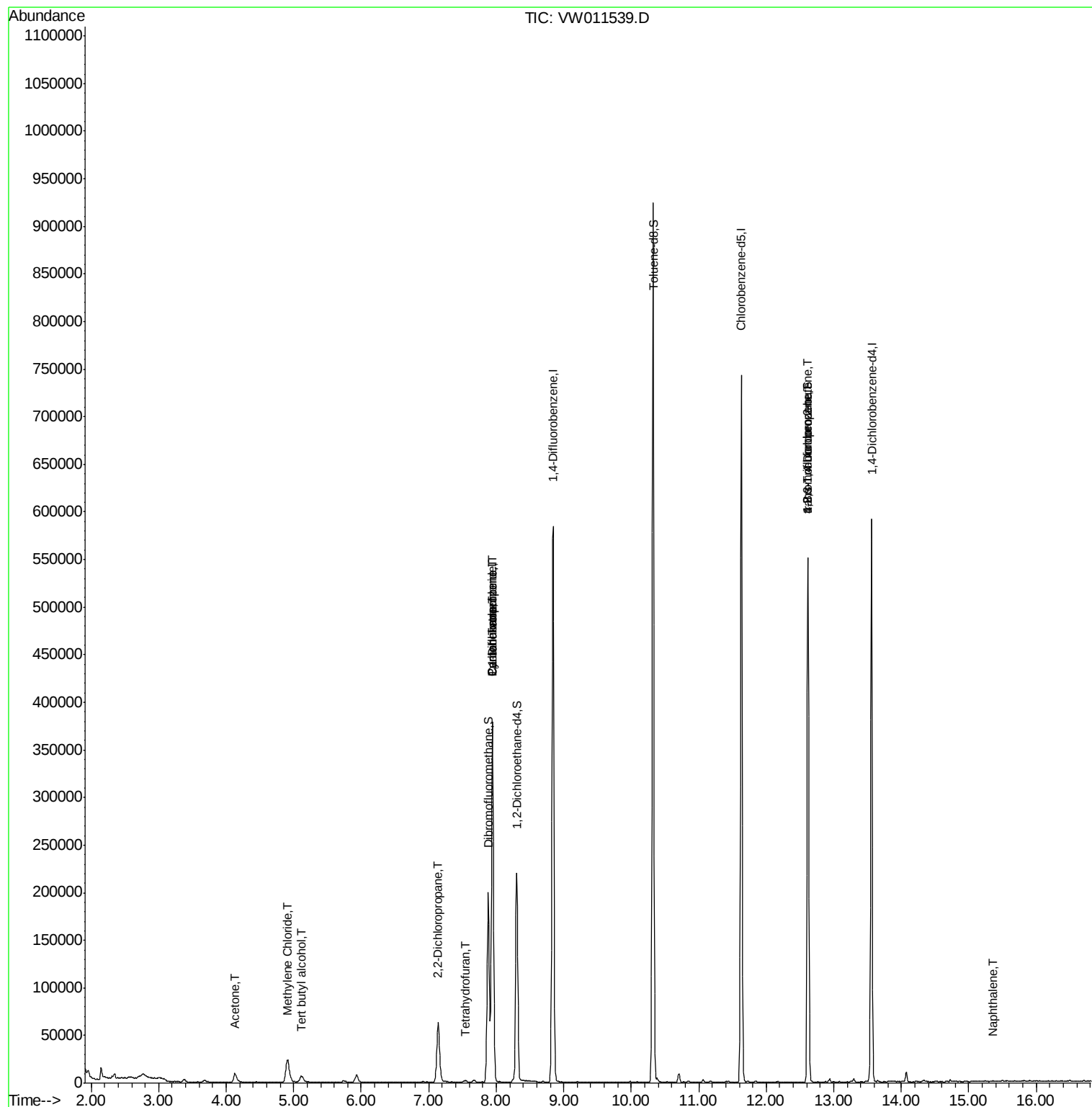
| Target Compounds               | R.T.  | QIon | Response | Conc    | Units  | Qvalue |
|--------------------------------|-------|------|----------|---------|--------|--------|
| 11) Tert butyl alcohol         | 5.12  | 59   | 6519     | 10.300  | ug/l # | 72     |
| 16) Acetone                    | 4.13  | 43   | 19090    | 18.613  | ug/l   | 98     |
| 20) Methylene Chloride         | 4.90  | 84   | 18046    | 5.102   | ug/l   | 95     |
| 26) 2,2-Dichloropropane        | 7.14  | 77   | 4546     | 1.177   | ug/l # | 54     |
| 29) Tetrahydrofuran            | 7.55  | 42   | 1766     | 2.302   | ug/l # | 81     |
| 31) Cyclohexane                | 7.94  | 56   | 6928     | 1.149   | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 7.95  | 75   | 24893    | 5.161   | ug/l # | 52     |
| 38) Carbon Tetrachloride       | 7.95  | 117  | 28280    | 6.849   | ug/l # | 17     |
| 76) 1,2,3-Trichloropropane     | 12.62 | 75   | 95868    | 61.167  | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.62 | 75   | 95868    | 140.968 | ug/l # | 6      |
| 95) Naphthalene                | 15.36 | 128  | 454      | 2.140   | ug/l # | 75     |

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

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TP-4-A

Quant Time: Jul 27 05:36:12 2019  
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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: VW011539.D

Acq: 27 Jul 2019 01:19

Instrument :

MSVOA\_W

ClientSampled :

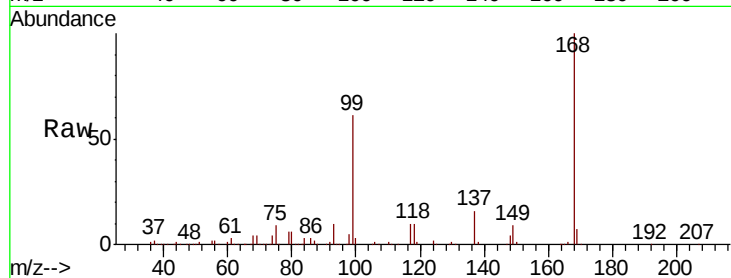
TP-4-A

Tot Ion:168 Resp: 280788

Ion Ratio Lower Upper

168 100

99 60.8 48.2 72.4



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VW

7.95

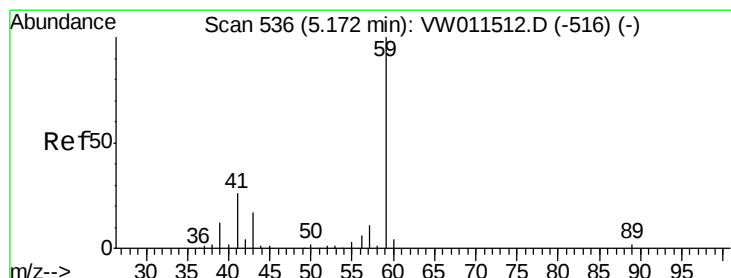
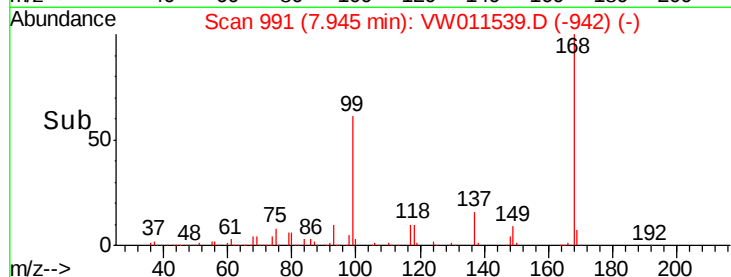
150000

100000

50000

0

Time--> 7.80 7.90 8.00



#11

Tert butyl alcohol

Concen: 10.300 ug/l

RT: 5.12 min Scan# 527

Delta R.T. -0.05 min

Lab File: VW011539.D

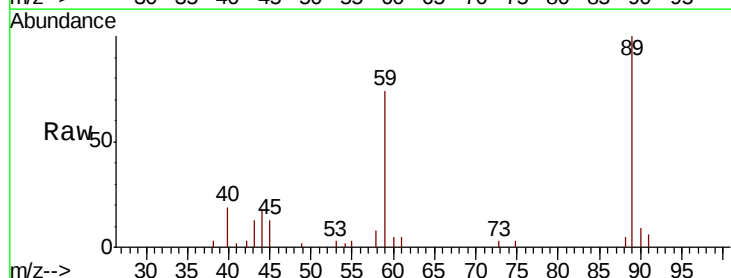
Acq: 27 Jul 2019 01:19

Tgt Ion: 59 Resp: 6519

Ion Ratio Lower Upper

59 100

57 0.0 8.5 12.7#



Abundance Ion 59.00 (58.70 to 59.70): VW

Ion 57.00 (56.70 to 57.70): VW

5.12

2000

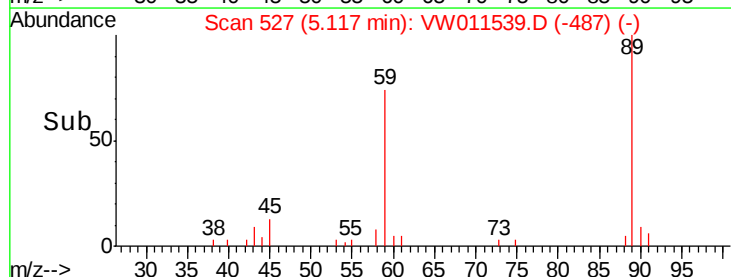
1500

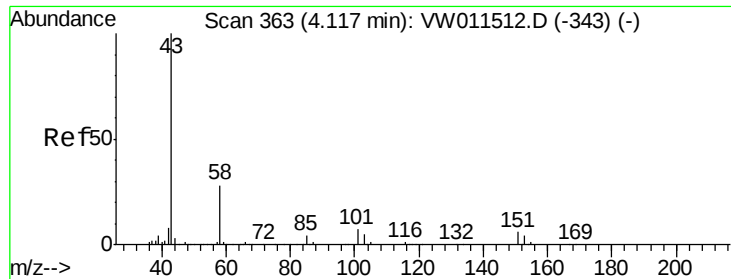
1000

500

0

Time--> 5.00 5.10 5.20

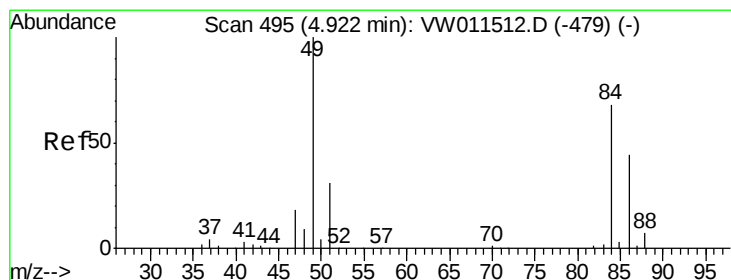
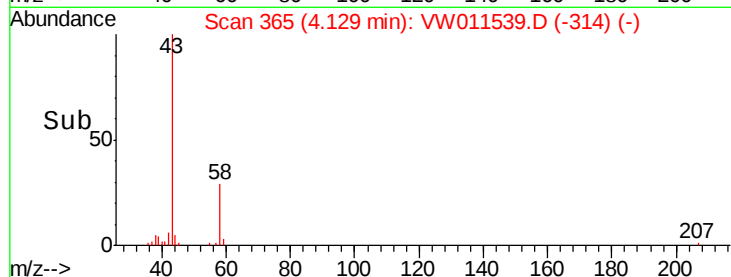
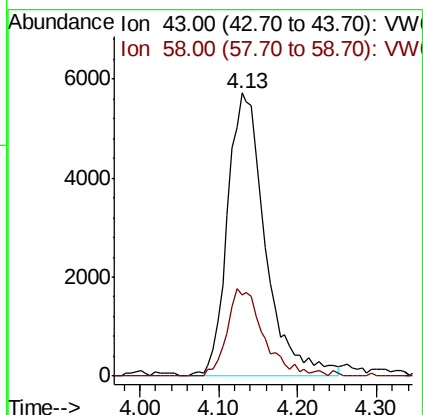
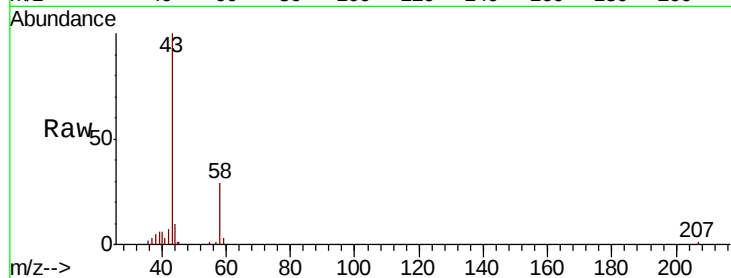




#16  
Acetone  
Concen: 18.613 ug/l  
RT: 4.13 min Scan# 365  
Delta R.T. 0.01 min  
Lab File: VW011539.D  
Acq: 27 Jul 2019 01:19

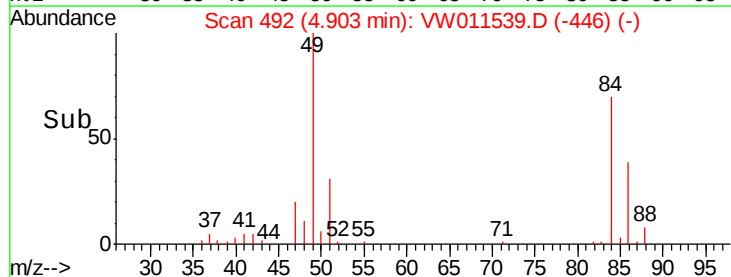
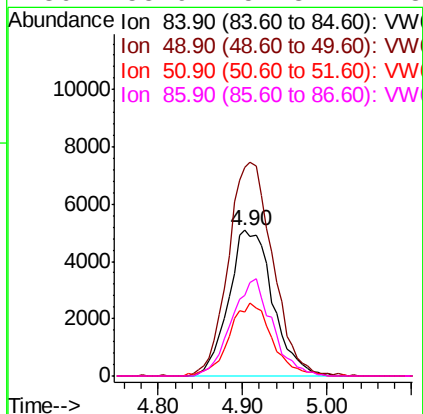
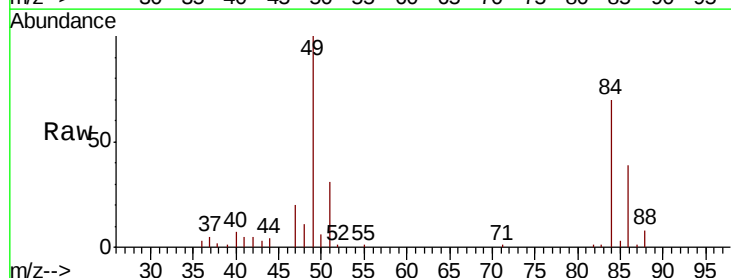
Instrument :  
MSVOA\_W  
ClientSampleId :  
TP-4-A

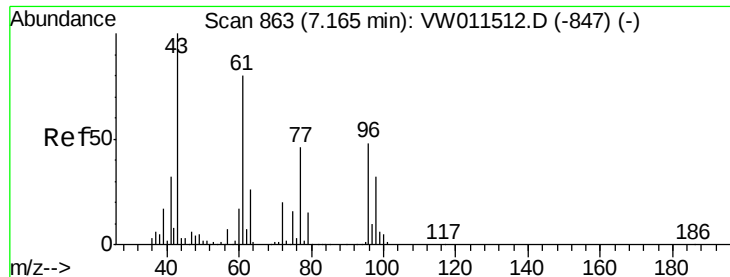
Tot Ion: 43 Resp: 19090  
Ion Ratio Lower Upper  
43 100  
58 28.8 22.3 33.5



#20  
Methylene Chloride  
Concen: 5.102 ug/l  
RT: 4.90 min Scan# 492  
Delta R.T. -0.02 min  
Lab File: VW011539.D  
Acq: 27 Jul 2019 01:19

Tgt Ion: 84 Resp: 18046  
Ion Ratio Lower Upper  
84 100  
49 143.5 117.8 176.6  
51 44.1 37.0 55.4  
86 55.9 51.8 77.8

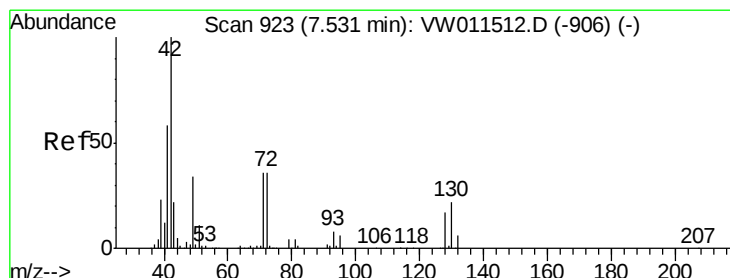
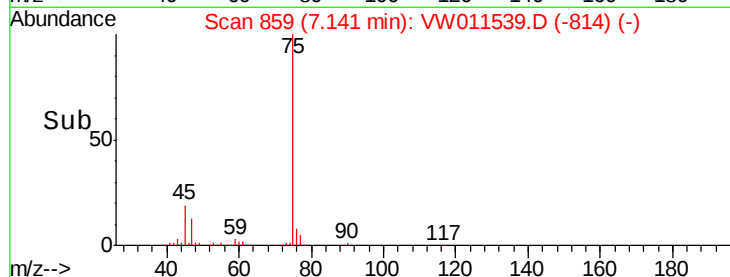
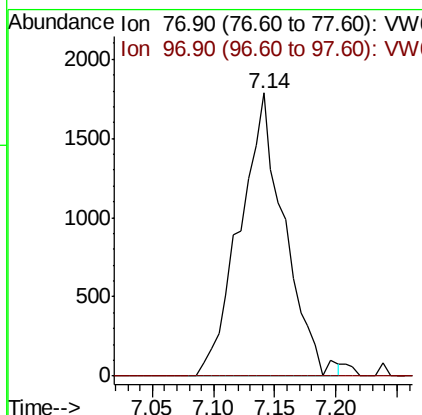
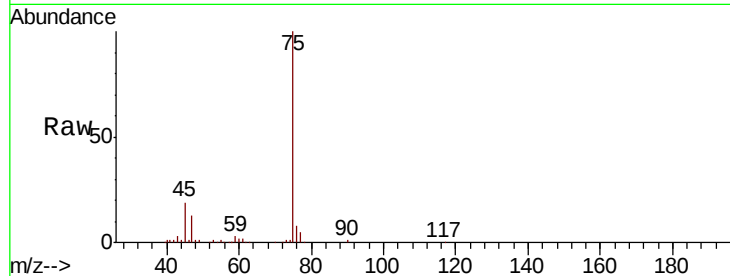




#26  
 2,2-Dichloropropane  
 Concen: 1.177 ug/l  
 RT: 7.14 min Scan# 859  
 Delta R.T. -0.02 min  
 Lab File: VW011539.D  
 Acq: 27 Jul 2019 01:19

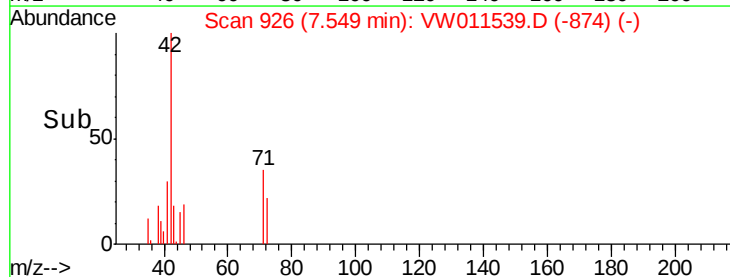
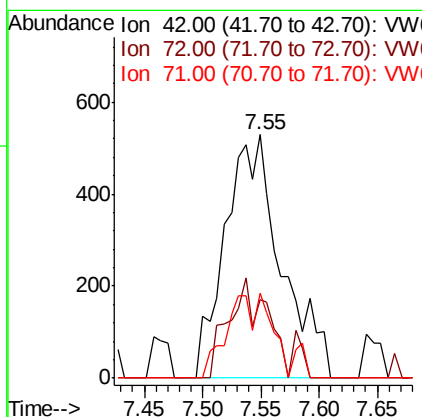
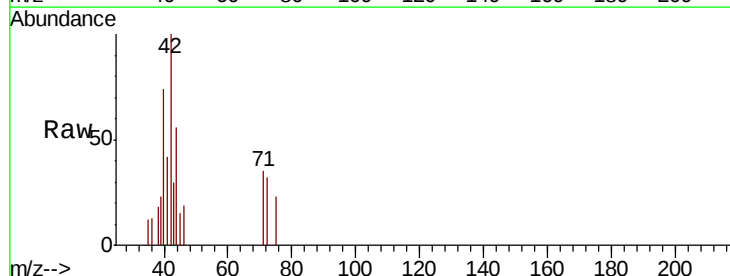
Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 TP-4-A

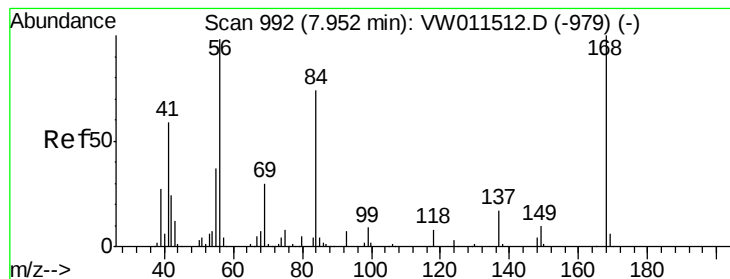
Tot Ion: 77 Resp: 4546  
 Ion Ratio Lower Upper  
 77 100  
 97 0.0 10.8 32.4#



#29  
 Tetrahydrofuran  
 Concen: 2.302 ug/l  
 RT: 7.55 min Scan# 926  
 Delta R.T. 0.02 min  
 Lab File: VW011539.D  
 Acq: 27 Jul 2019 01:19

Tgt Ion: 42 Resp: 1766  
 Ion Ratio Lower Upper  
 42 100  
 72 28.4 27.1 40.7  
 71 16.6 26.2 39.4#





#31

Cyclohexane

Concen: 1.149 ug/l

RT: 7.94 min Scan# 990

Delta R.T. -0.01 min

Lab File: VW011539.D

Acq: 27 Jul 2019 01:19

Instrument :

MSVOA\_W

ClientSampleId :

TP-4-A

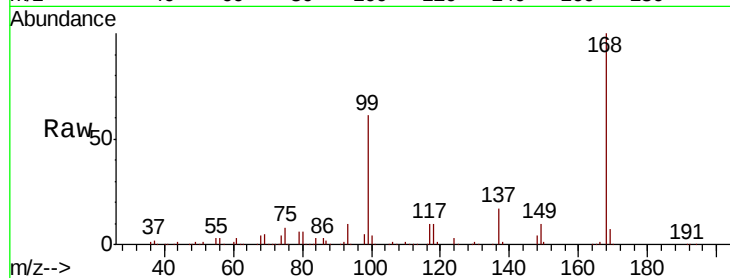
Tot Ion: 56 Resp: 6928

Ion Ratio Lower Upper

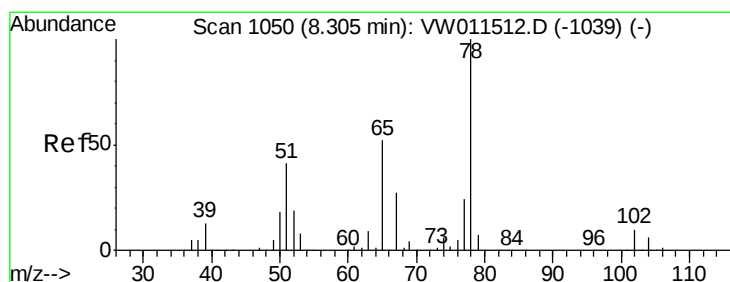
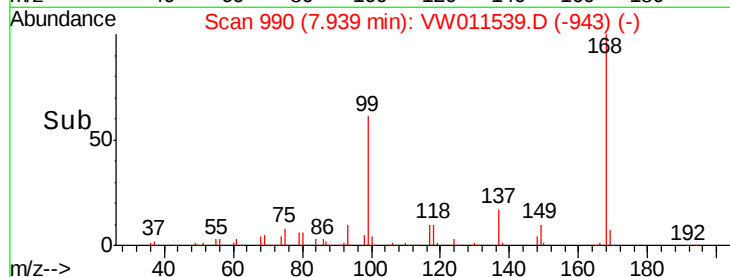
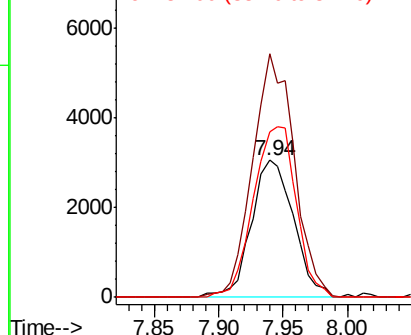
56 100

69 177.3 24.3 36.5#

84 120.6 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: 55.174 ug/l

RT: 8.30 min Scan# 1049

Delta R.T. -0.01 min

Lab File: VW011539.D

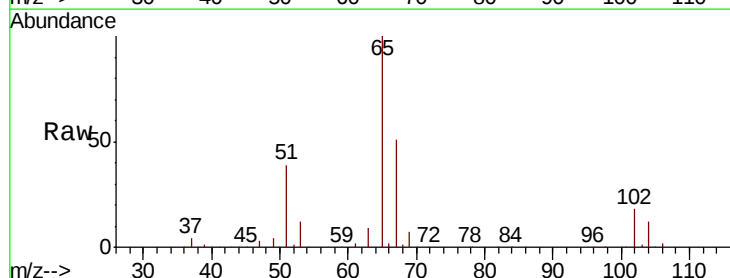
Acq: 27 Jul 2019 01:19

Tgt Ion: 65 Resp: 177892

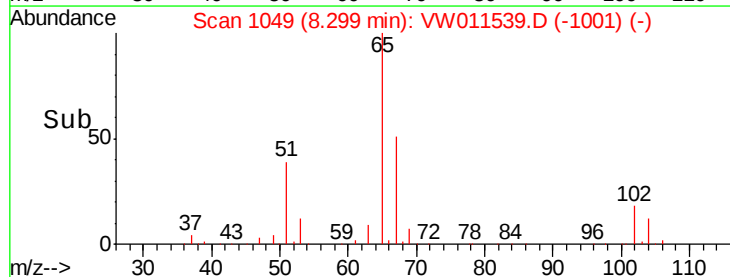
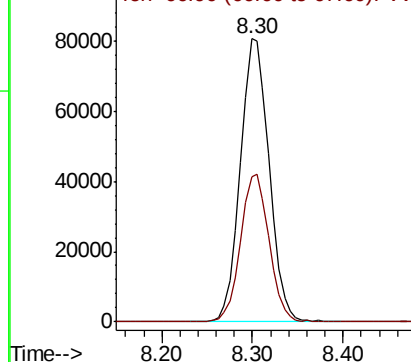
Ion Ratio Lower Upper

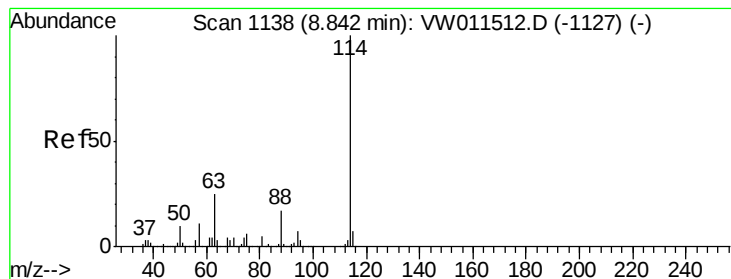
65 100

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: VW011539.D

Acq: 27 Jul 2019 01:19

Instrument :

MSVOA\_W

ClientSampleId :

TP-4-A

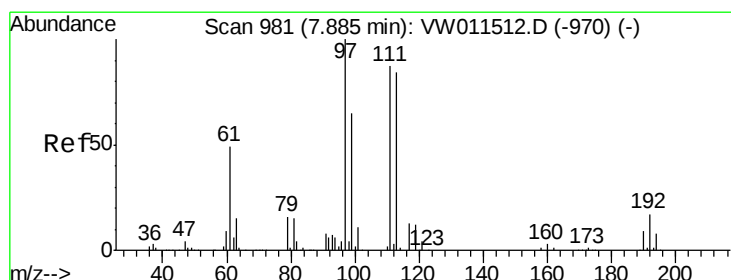
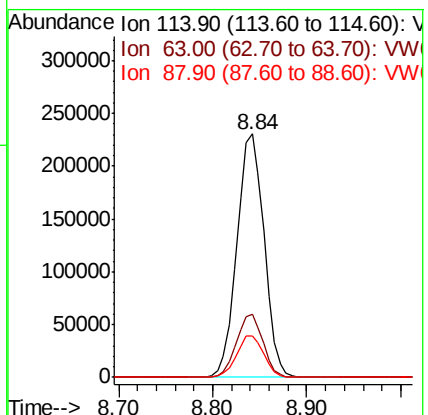
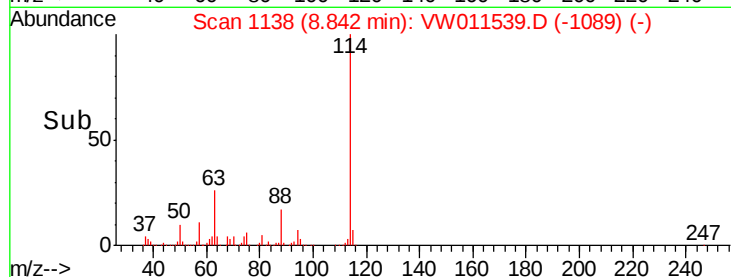
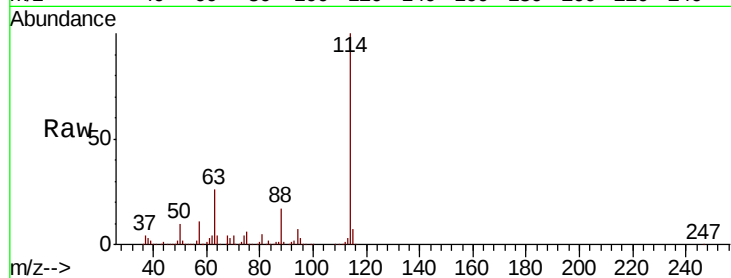
Tot Ion:114 Resp: 463891

Ion Ratio Lower Upper

114 100

63 25.8 0.0 49.2

88 16.9 0.0 33.8



#35

Dibromofluoromethane

Concen: 54.629 ug/l

RT: 7.88 min Scan# 981

Delta R.T. -0.00 min

Lab File: VW011539.D

Acq: 27 Jul 2019 01:19

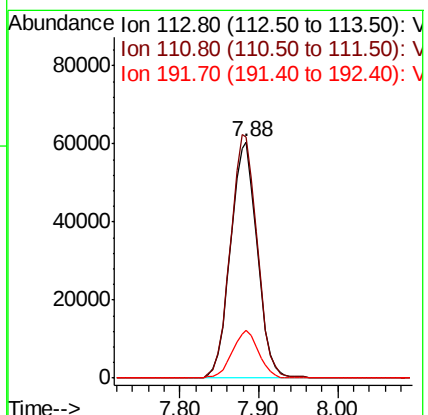
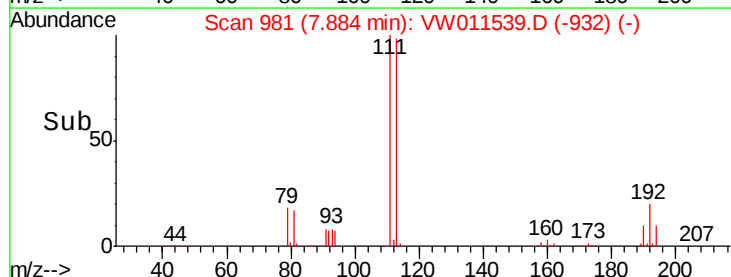
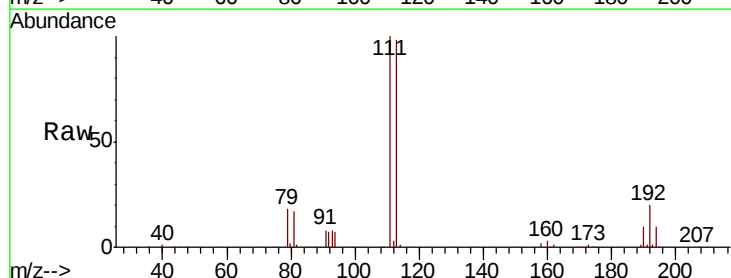
Tgt Ion:113 Resp: 142172

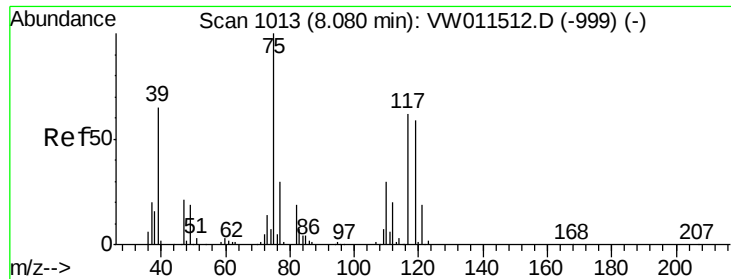
Ion Ratio Lower Upper

113 100

111 103.6 82.7 124.1

192 20.1 16.1 24.1

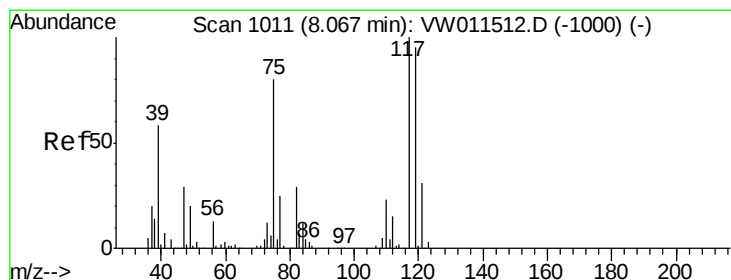
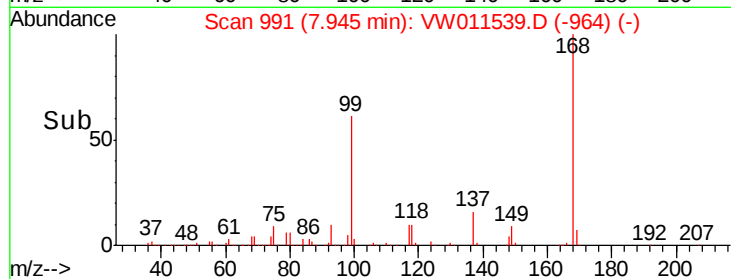
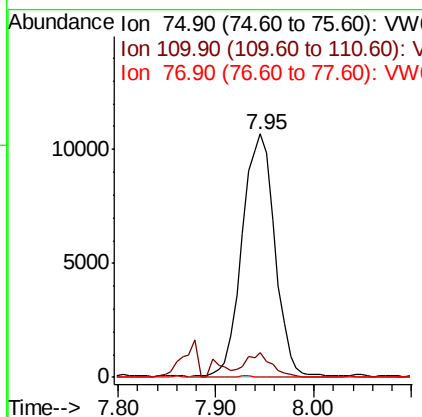
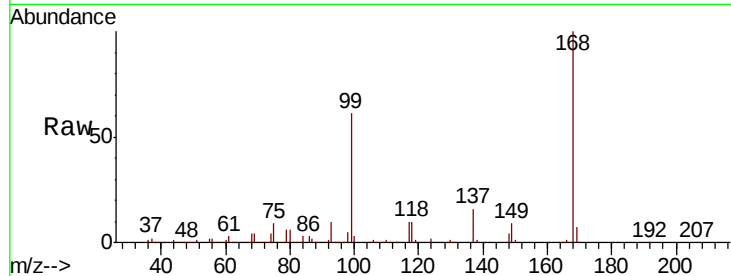




#36  
 1,1-Dichloropropene  
 Concen: 5.161 ug/l  
 RT: 7.95 min Scan# 991  
 Delta R.T. -0.13 min  
 Lab File: VW011539.D  
 Acq: 27 Jul 2019 01:19

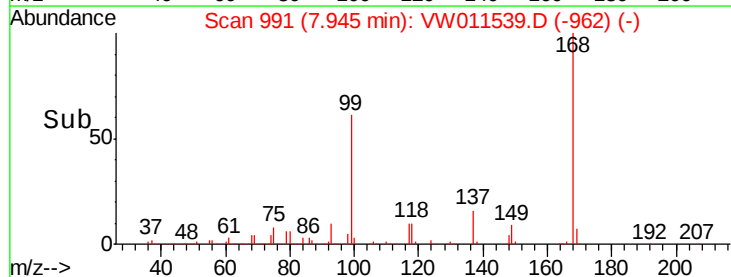
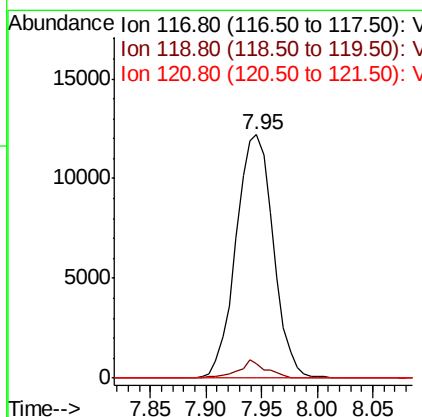
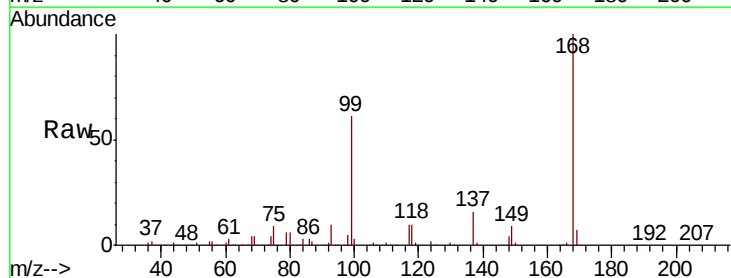
Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 TP-4-A

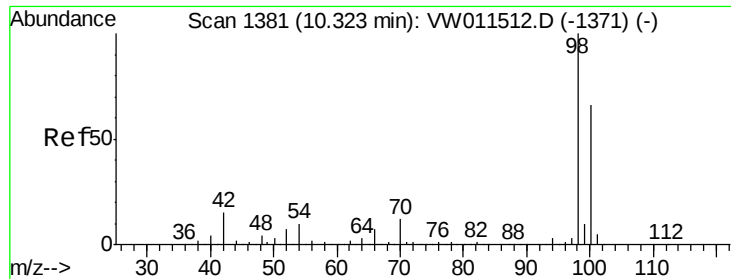
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 110     | 8.3   | 15.6  | 46.8# |
| 77      | 0.2   | 24.3  | 36.5# |



#38  
 Carbon Tetrachloride  
 Concen: 6.849 ug/l  
 RT: 7.95 min Scan# 991  
 Delta R.T. -0.12 min  
 Lab File: VW011539.D  
 Acq: 27 Jul 2019 01:19

| Tgt Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 117     | 100   |       |        |
| 119     | 5.9   | 75.8  | 113.6# |
| 121     | 0.0   | 24.7  | 37.1#  |

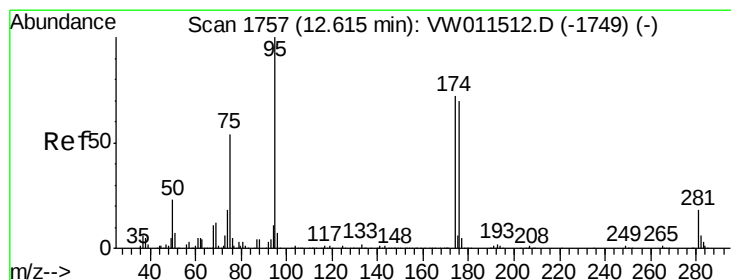
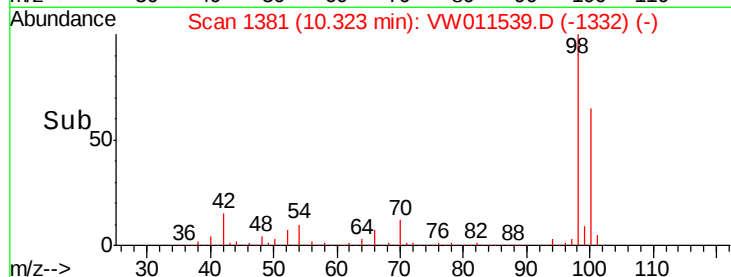
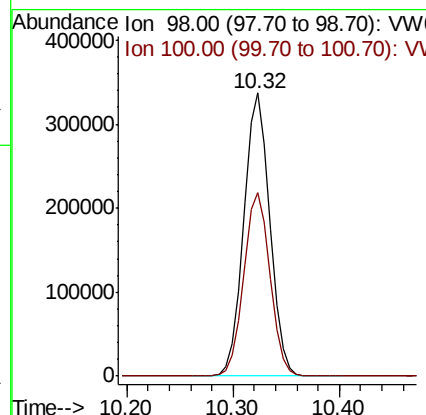
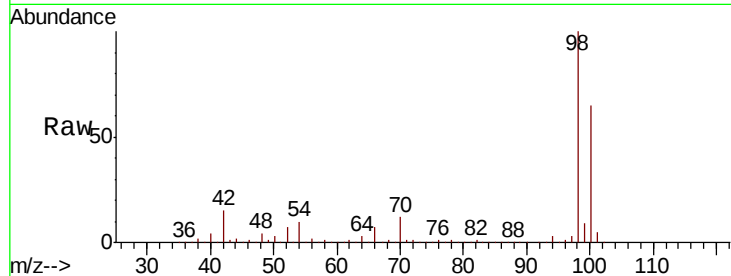




#50  
Toluene-d8  
Concen: 54.321 ug/l  
RT: 10.32 min Scan# 1381  
Delta R.T. -0.00 min  
Lab File: VW011539.D  
Acq: 27 Jul 2019 01:19

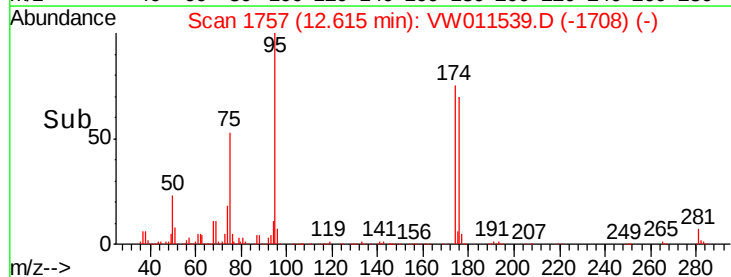
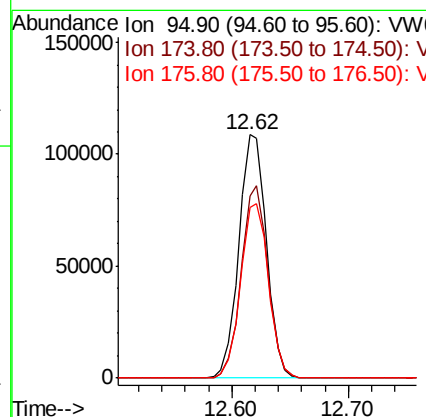
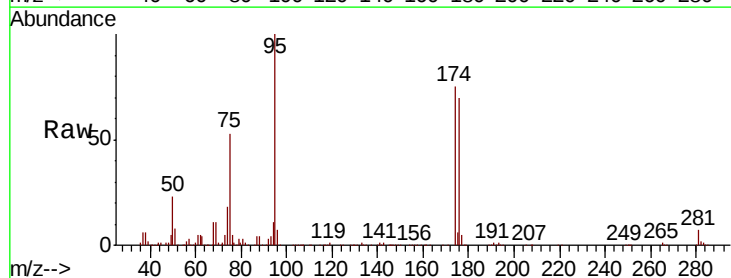
Instrument :  
MSVOA\_W  
ClientSampleId :  
TP-4-A

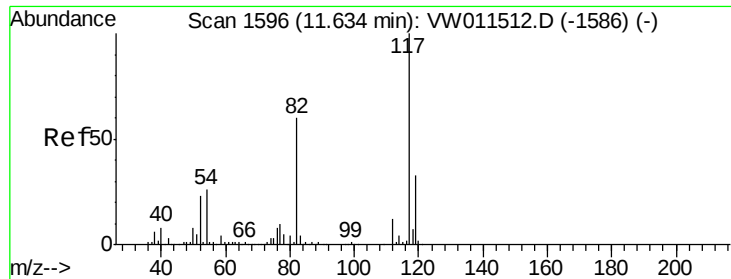
Tot Ion: 98 Resp: 578819  
Ion Ratio Lower Upper  
98 100  
100 65.5 52.7 79.1



#62  
4-Bromofluorobenzene  
Concen: 47.205 ug/l  
RT: 12.62 min Scan# 1757  
Delta R.T. -0.00 min  
Lab File: VW011539.D  
Acq: 27 Jul 2019 01:19

Tgt Ion: 95 Resp: 179325  
Ion Ratio Lower Upper  
95 100  
174 76.7 0.0 150.2  
176 72.5 0.0 144.4

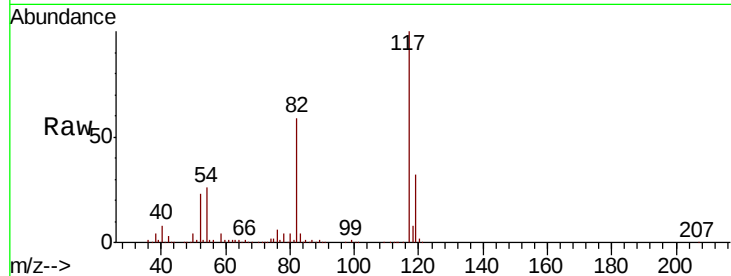




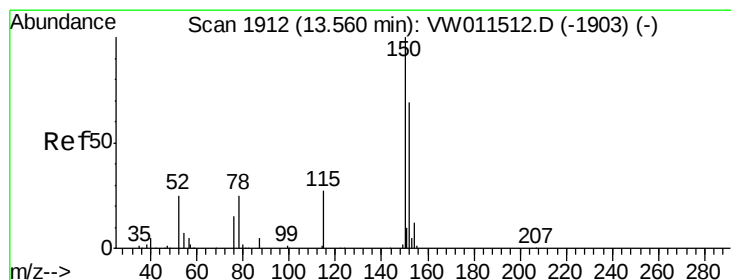
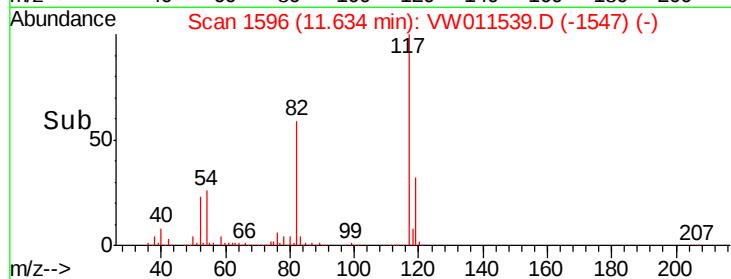
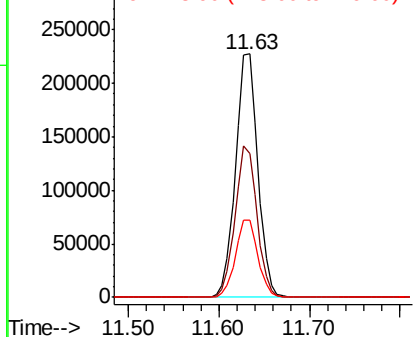
#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.63 min Scan# 1596  
Delta R.T. -0.00 min  
Lab File: VW011539.D  
Acq: 27 Jul 2019 01:19

Instrument :  
MSVOA\_W  
ClientSampleId :  
TP-4-A

Tot Ion:117 Resp: 387673  
Ion Ratio Lower Upper  
117 100  
82 58.9 47.9 71.9  
119 31.6 26.2 39.2

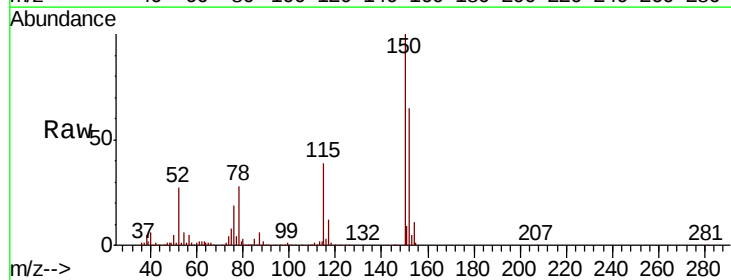


Abundance Ion 116.90 (116.60 to 117.60): V  
Ion 82.00 (81.70 to 82.70): V  
Ion 118.90 (118.60 to 119.60): V

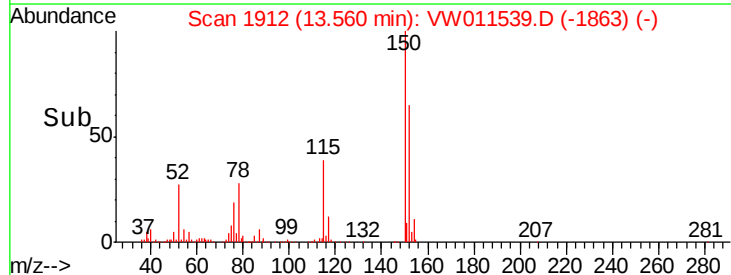
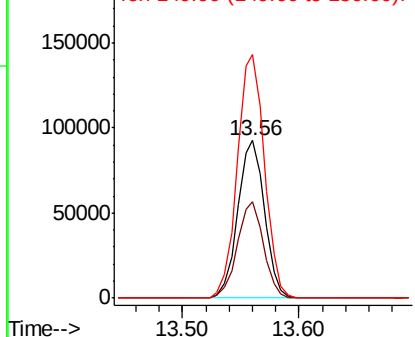


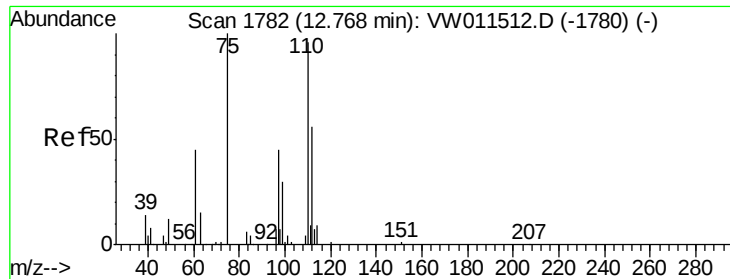
#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 13.56 min Scan# 1912  
Delta R.T. -0.00 min  
Lab File: VW011539.D  
Acq: 27 Jul 2019 01:19

Tgt Ion:152 Resp: 148124  
Ion Ratio Lower Upper  
152 100  
115 60.1 30.5 91.5  
150 157.0 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

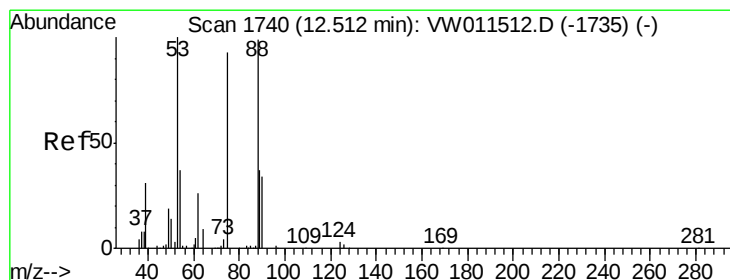
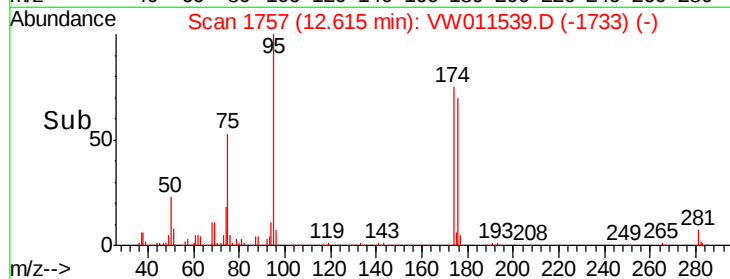
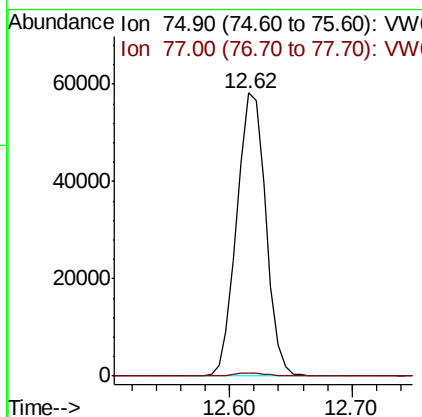
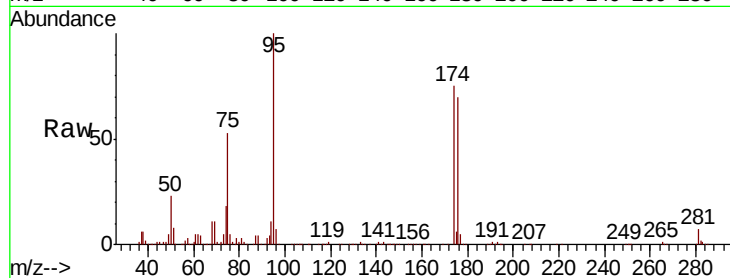




#76  
 1,2,3-Trichloropropane  
 Concen: 61.167 ug/l  
 RT: 12.62 min Scan# 1757  
 Delta R.T. -0.15 min  
 Lab File: VW011539.D  
 Acq: 27 Jul 2019 01:19

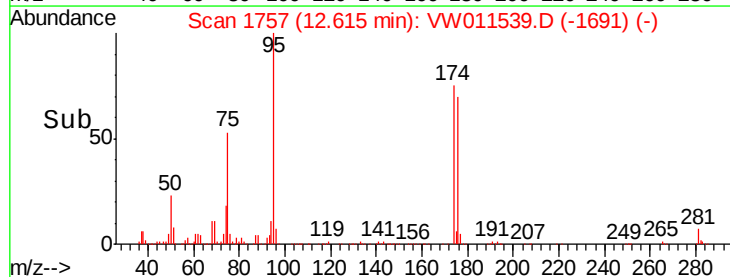
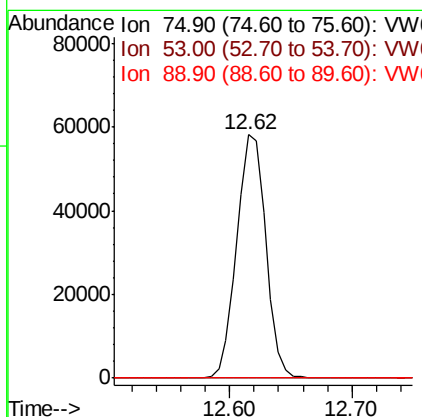
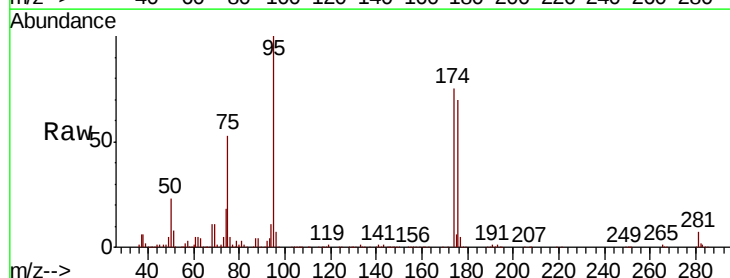
Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 TP-4-A

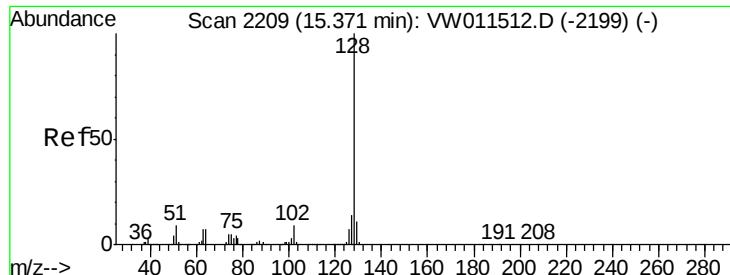
Tot Ion: 75 Resp: 95868  
 Ion Ratio Lower Upper  
 75 100  
 77 1.4 0.0 0.0#



#81  
 trans-1,4-Dichloro-2-butene  
 Concen: 140.968 ug/l  
 RT: 12.62 min Scan# 1757  
 Delta R.T. 0.10 min  
 Lab File: VW011539.D  
 Acq: 27 Jul 2019 01:19

Tgt Ion: 75 Resp: 95868  
 Ion Ratio Lower Upper  
 75 100  
 53 0.1 88.0 132.0#  
 89 0.0 35.3 52.9#





#95

Naphthalene

Concen: 2.140 ug/l

RT: 15.36 min Scan# 2207

Delta R.T. -0.01 min

Lab File: VW011539.D

Acq: 27 Jul 2019 01:19

Instrument :

MSVOA\_W

ClientSampleId :

TP-4-A

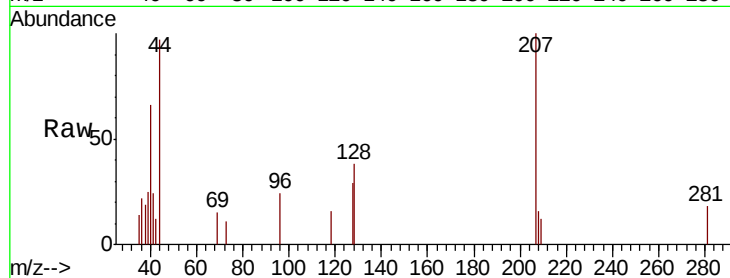
Tot Ion:128 Resp: 454

Ion Ratio Lower Upper

128 100

127 4.2 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

