

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\WV120618\  
 Data File : VW007299.D  
 Acq On : 07 Dec 2018 00:15  
 Operator : SY/AP  
 Sample : J6199-03RE  
 Misc : 7.48G/5ML/MSVOA W/SOIL  
 ALS Vial : 20 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :

Quant Time: Dec 07 01:19:17 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W120418S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Dec 05 01:35:23 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.96  | 168  | 7932     | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.85  | 114  | 12369    | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.63 | 117  | 8576     | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.56 | 152  | 3600     | 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   | 3702     | 50.13 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 100.26% |          |
| 35) Dibromofluoromethane    | 7.89  | 113  | 3357     | 47.40 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 94.80%  |          |
| 50) Toluene-d8              | 10.33 | 98   | 8906     | 28.55 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 57.10%  |          |
| 62) 4-Bromofluorobenzene    | 12.62 | 95   | 3702     | 31.44 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 62.88%  |          |

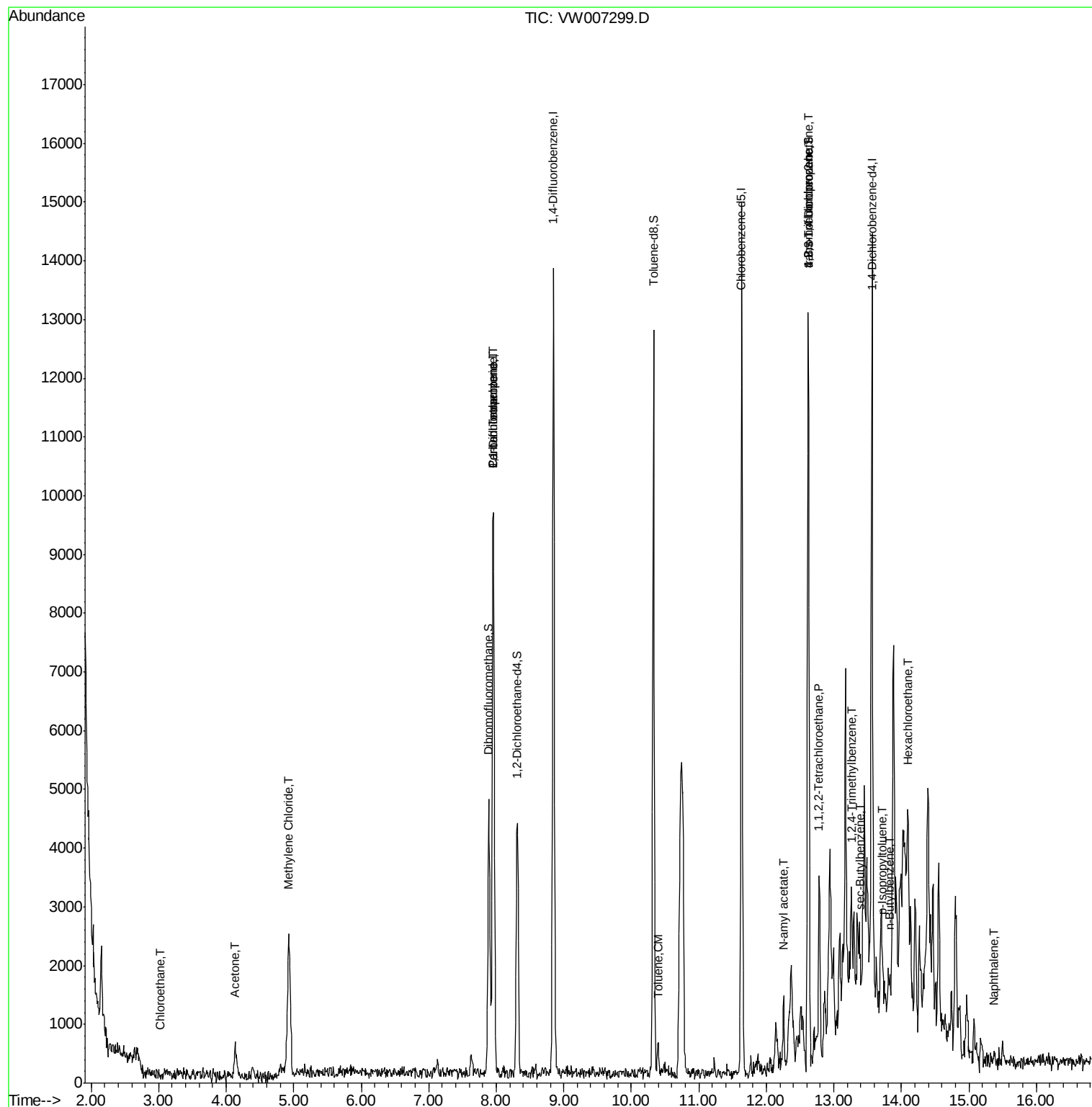
| Target Compounds               | R.T.  | QIon | Response | Conc    | Units  | Qvalue |
|--------------------------------|-------|------|----------|---------|--------|--------|
| 6) Chloroethane                | 3.03  | 64   | 43       | 1.114   | ug/l # | 43     |
| 16) Acetone                    | 4.13  | 43   | 1035     | 59.201  | ug/l # | 89     |
| 20) Methylene Chloride         | 4.93  | 84   | 1988     | 19.387  | ug/l # | 90     |
| 36) 1,1-Dichloropropene        | 7.96  | 75   | 576      | 4.786   | ug/l # | 41     |
| 38) Carbon Tetrachloride       | 7.95  | 117  | 724      | 5.894   | ug/l # | 13     |
| 52) Toluene                    | 10.40 | 92   | 260      | 1.133   | ug/l # | 67     |
| 74) N-amyl acetate             | 12.26 | 43   | 313      | 6.029   | ug/l # | 55     |
| 75) 1,1,2,2-Tetrachloroethane  | 12.77 | 83   | 230      | 6.048   | ug/l # | 25     |
| 76) 1,2,3-Trichloropropane     | 12.62 | 75   | 1873     | 67.193  | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.62 | 75   | 1873     | 144.824 | ug/l # | 13     |
| 84) 1,2,4-Trimethylbenzene     | 13.26 | 105  | 1305     | 5.104   | ug/l   | 97     |
| 85) sec-Butylbenzene           | 13.39 | 105  | 409      | 1.309   | ug/l # | 75     |
| 86) p-Isopropyltoluene         | 13.72 | 119  | 339      | 1.219   | ug/l   | 95     |
| 89) n-Butylbenzene             | 13.83 | 91   | 409      | 1.573   | ug/l # | 43     |
| 90) Hexachloroethane           | 14.10 | 117  | 117      | 2.760   | ug/l # | 14     |
| 95) Naphthalene                | 15.37 | 128  | 458      | 3.283   | ug/l # | 69     |

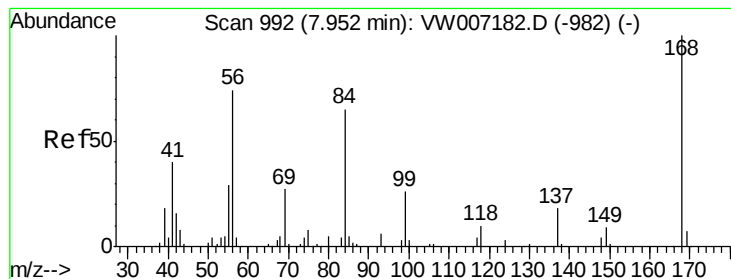
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA W\DATA\VW120618\  
Data File : VW007299.D  
Acq On : 07 Dec 2018 00:15  
Operator : SY/AP  
Sample : J6199-03RE  
Misc : 7.48G/5ML/MSVOA W/SOIL  
ALS Vial : 20 Sample Multiplier: 1

Instrument :  
MSVOA\_W  
ClientSampleId :

Quant Time: Dec 07 01:19:17 2018  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_W\METHOD\82W120418S.M  
Quant Title : SW846 8260  
QLast Update : Wed Dec 05 01:35:23 2018  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.96 min Scan# 993

Delta R.T. 0.01 min

Lab File: VW007299.D

Acq: 07 Dec 2018 00:15

Instrument :

MSVOA\_W

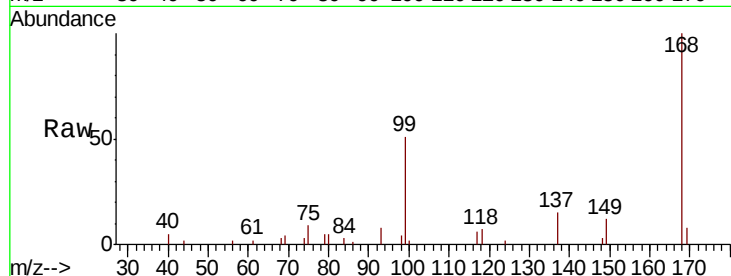
ClientSampled :

Tot Ion:168 Resp: 7932

Ion Ratio Lower Upper

168 100

99 51.0 47.8 71.8



Abundance Ion 167.90 (167.60 to 168.60): VW

Ion 98.90 (98.60 to 99.60): VW

7.96

4000

3000

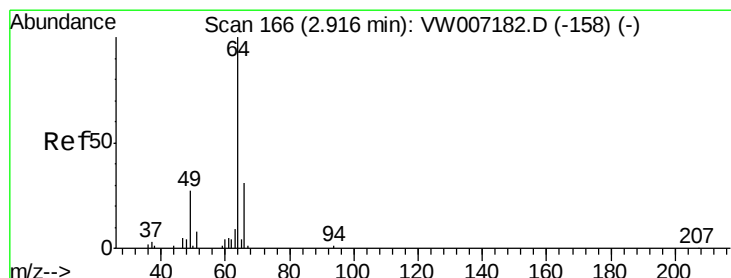
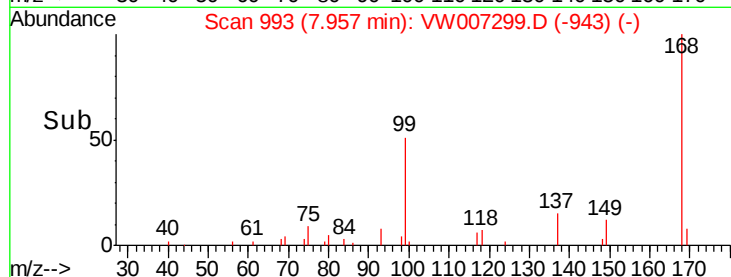
2000

1000

0

Time-->

7.85 7.90 7.95 8.00 8.05



#6

Chloroethane

Concen: 1.114 ug/l

RT: 3.03 min Scan# 184

Delta R.T. 0.11 min

Lab File: VW007299.D

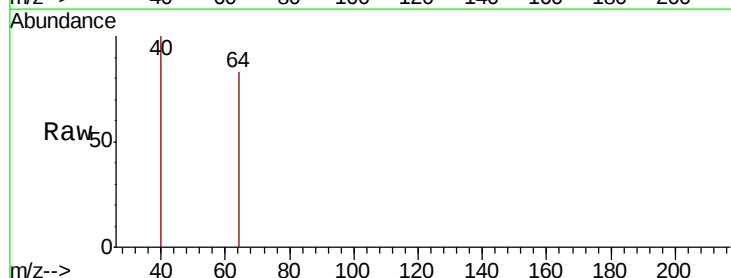
Acq: 07 Dec 2018 00:15

Tgt Ion: 64 Resp: 43

Ion Ratio Lower Upper

64 100

66 0.0 25.0 37.6#



Abundance Ion 63.90 (63.60 to 64.60): VW

Ion 65.90 (65.60 to 66.60): VW

3.03

60

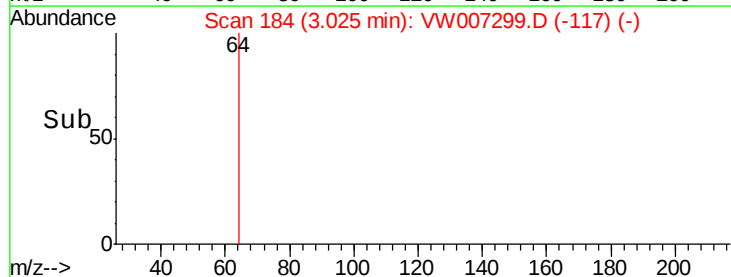
40

20

0

Time-->

3.00 3.02 3.04 3.06





#16

Acetone

Concen: 59.201 ug/l

RT: 4.13 min Scan# 366

Delta R.T. 0.01 min

Lab File: VW007299.D

Acq: 07 Dec 2018 00:15

Instrument :

MSVOA\_W

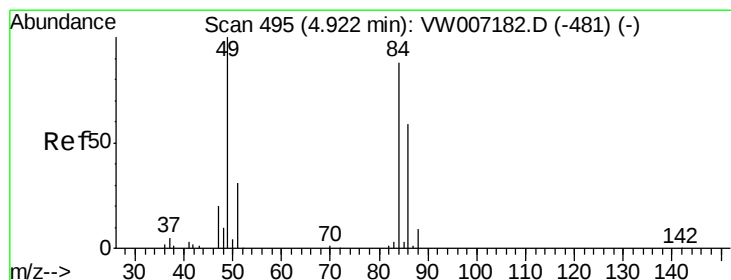
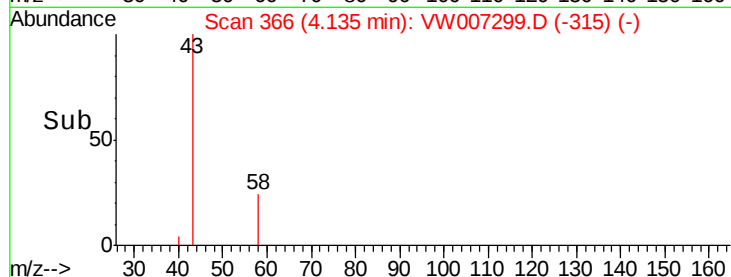
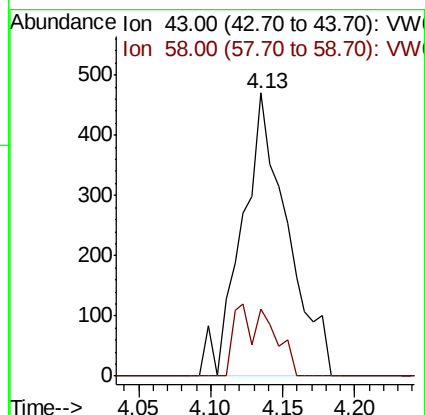
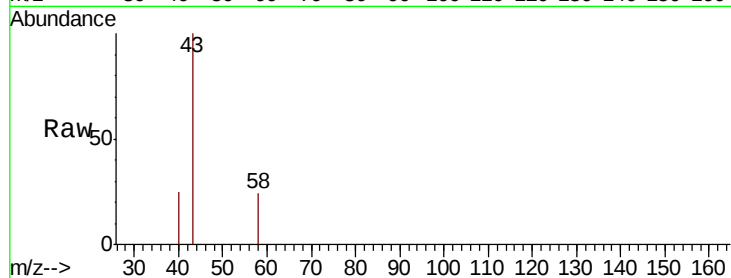
ClientSampled :

Tot Ion: 43 Resp: 1035

Ion Ratio Lower Upper

43 100

58 23.8 23.8 35.8#



#20

Methylene Chloride

Concen: 19.387 ug/l

RT: 4.93 min Scan# 496

Delta R.T. 0.01 min

Lab File: VW007299.D

Acq: 07 Dec 2018 00:15

Tgt Ion: 84 Resp: 1988

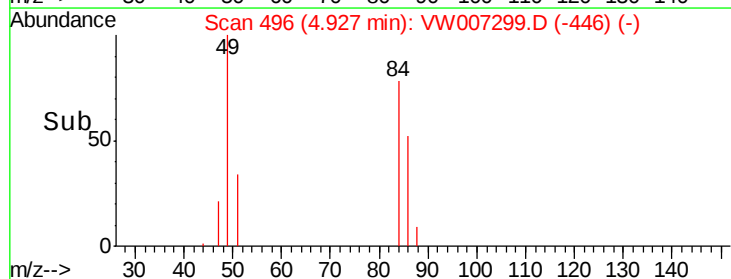
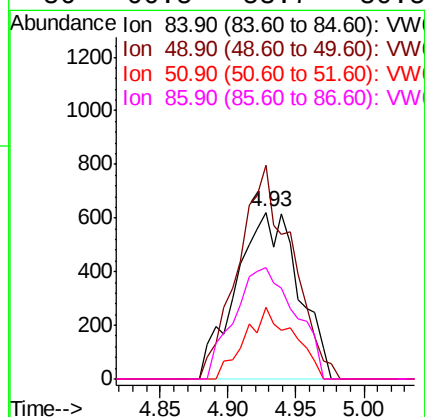
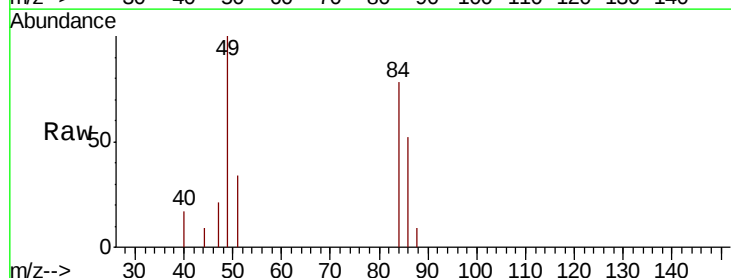
Ion Ratio Lower Upper

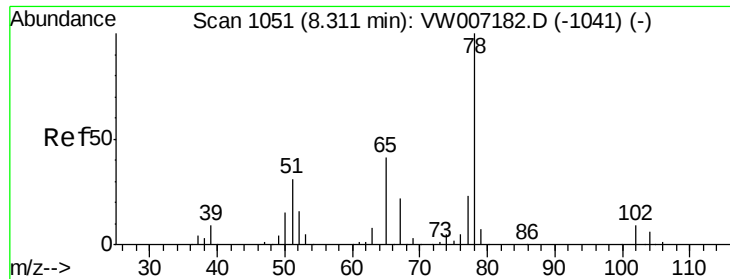
84 100

49 128.2 90.6 135.8

51 43.3 27.6 41.4#

86 66.5 53.7 80.5

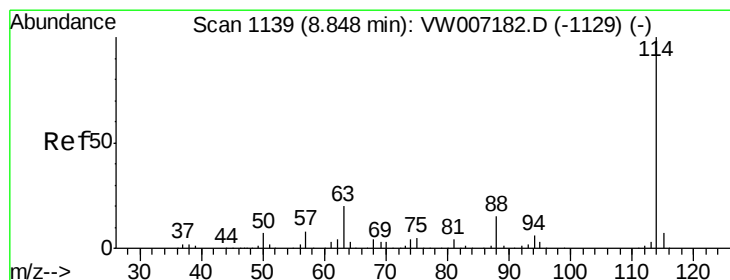
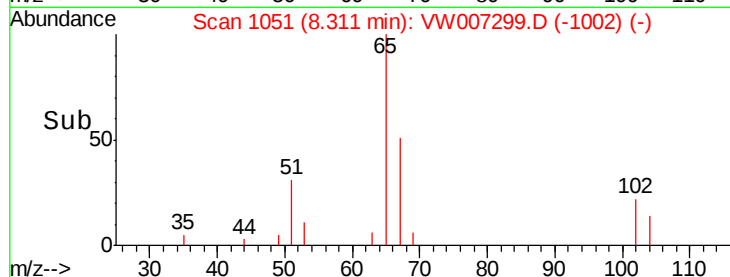
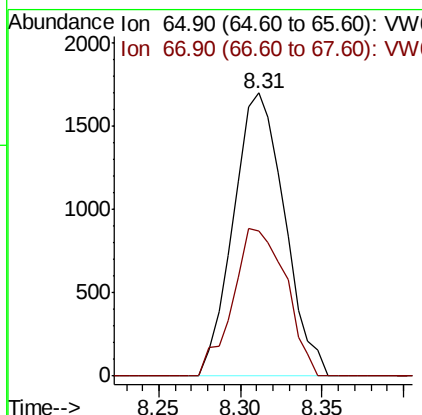
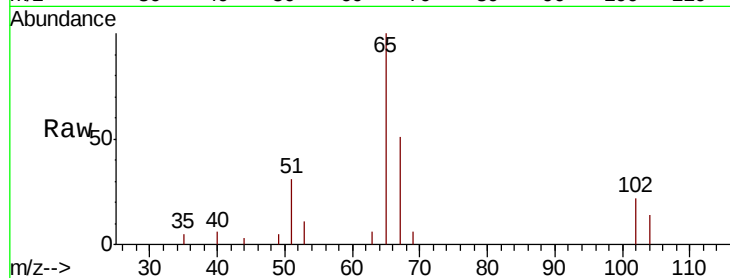




#33  
 1,2-Dichloroethane-d4  
 Concen: 50.129 ug/l  
 RT: 8.31 min Scan# 1051  
 Delta R.T. -0.00 min  
 Lab File: VW007299.D  
 Acq: 07 Dec 2018 00:15

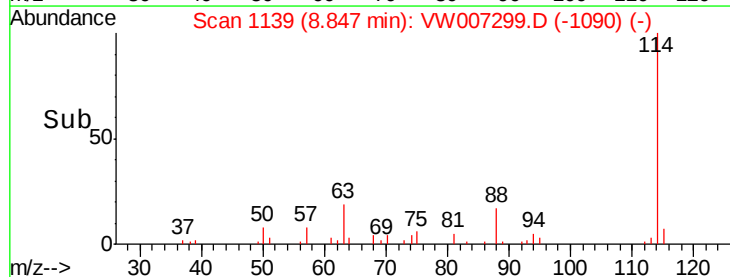
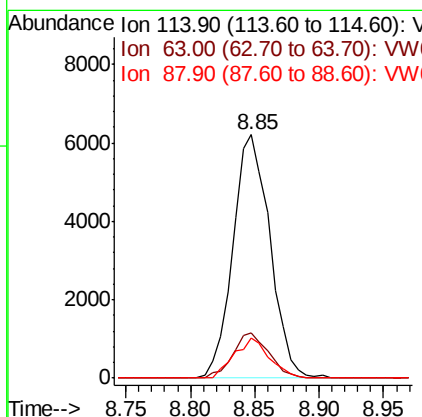
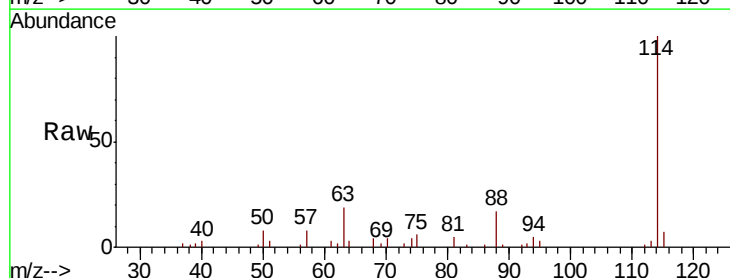
Instrument :  
 MSVOA\_W  
 ClientSampleId :

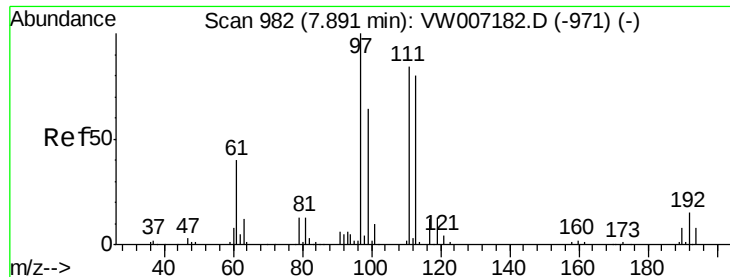
Tot Ion: 65 Resp: 3702  
 Ion Ratio Lower Upper  
 65 100  
 67 53.8 0.0 106.4



#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.85 min Scan# 1139  
 Delta R.T. -0.00 min  
 Lab File: VW007299.D  
 Acq: 07 Dec 2018 00:15

Tgt Ion: 114 Resp: 12369  
 Ion Ratio Lower Upper  
 114 100  
 63 18.6 0.0 40.2  
 88 16.7 0.0 30.0

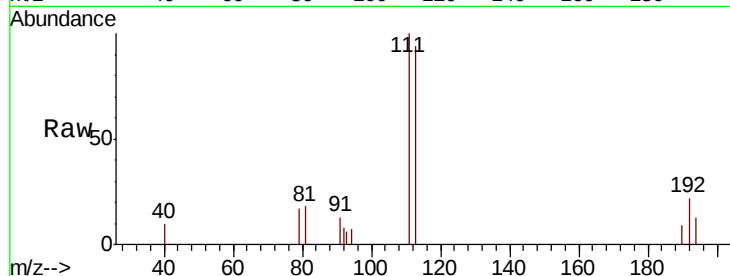




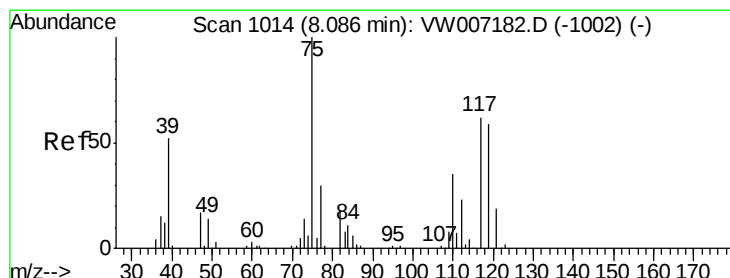
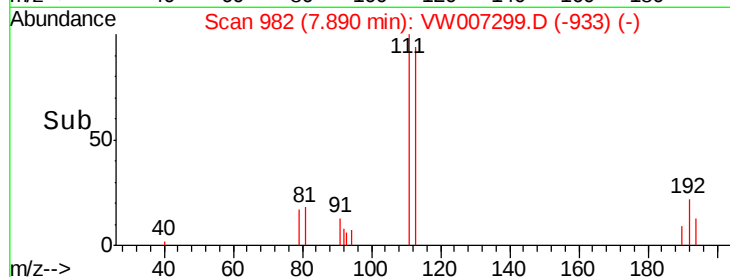
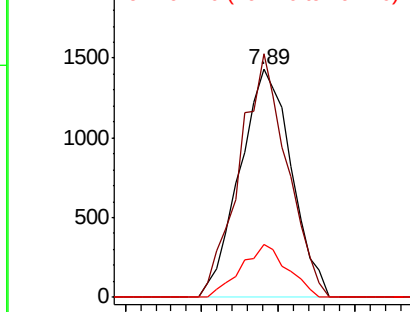
#35  
 Dibromofluoromethane  
 Concen: 47.399 ug/l  
 RT: 7.89 min Scan# 982  
 Delta R.T. -0.00 min  
 Lab File: VW007299.D  
 Acq: 07 Dec 2018 00:15

Instrument :  
 MSVOA\_W  
 ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 113     | 100   |       |       |
| 111     | 98.3  | 82.2  | 123.4 |
| 192     | 20.8  | 14.4  | 21.6  |

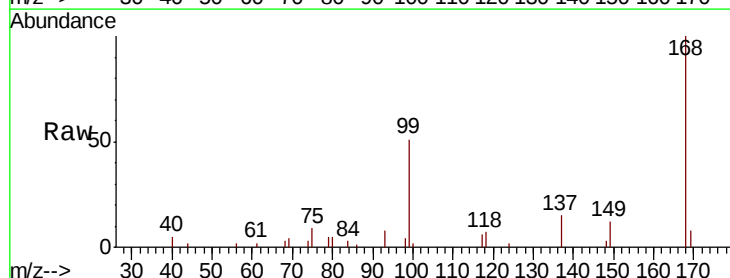


Abundance Ion 112.80 (112.50 to 113.50): V  
 Ion 110.80 (110.50 to 111.50): V  
 Ion 191.70 (191.40 to 192.40): V

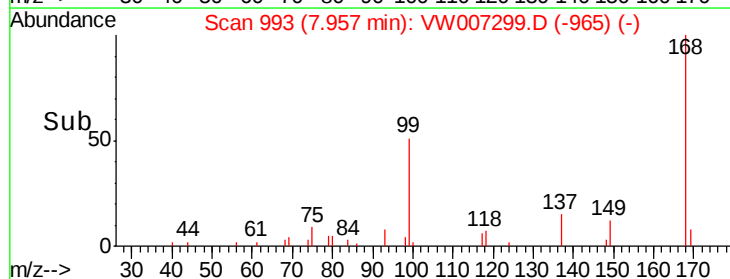
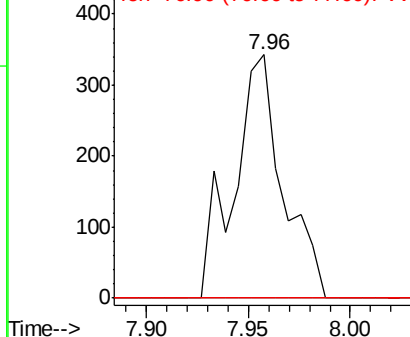


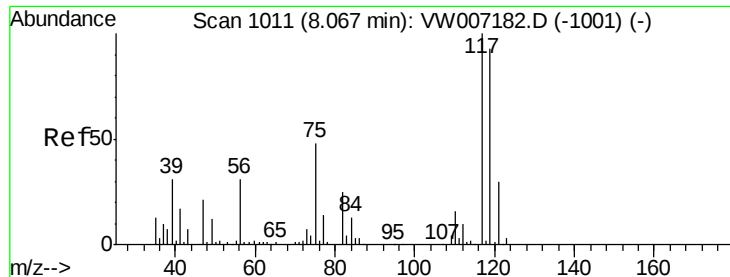
#36  
 1,1-Dichloropropene  
 Concen: 4.786 ug/l  
 RT: 7.96 min Scan# 993  
 Delta R.T. -0.13 min  
 Lab File: VW007299.D  
 Acq: 07 Dec 2018 00:15

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 110     | 0.0   | 18.3  | 54.9# |
| 77      | 0.0   | 24.9  | 37.3# |



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: 5.894 ug/l

RT: 7.95 min Scan# 992

Delta R.T. -0.12 min

Lab File: VW007299.D

Acq: 07 Dec 2018 00:15

Instrument :

MSVOA\_W

ClientSampled :

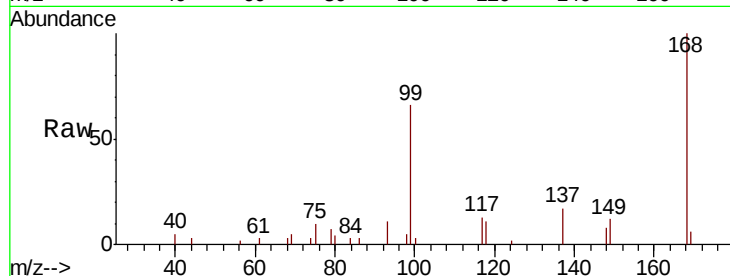
Tot Ion:117 Resp: 724

Ion Ratio Lower Upper

117 100

119 0.0 74.1 111.1#

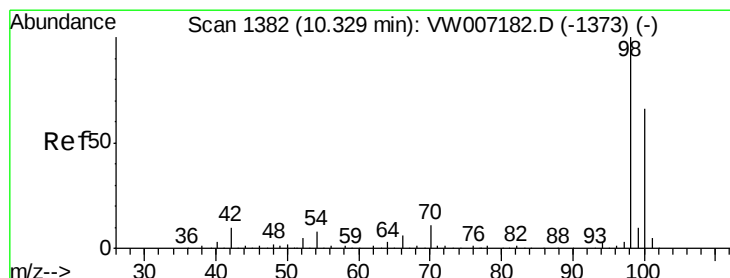
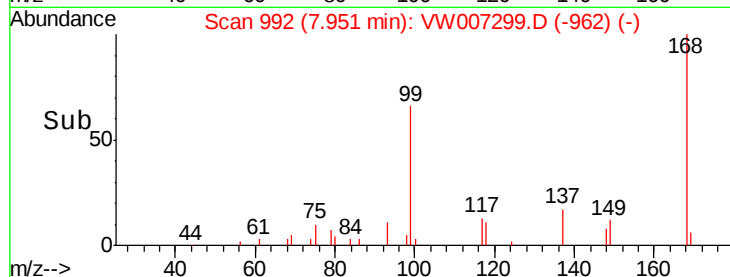
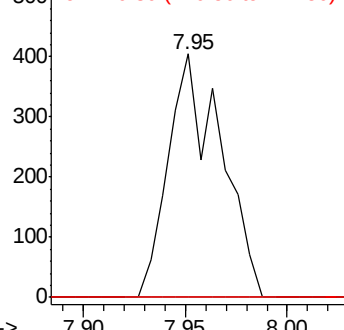
121 0.0 23.9 35.9#



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



#50

Toluene-d8

Concen: 28.547 ug/l

RT: 10.33 min Scan# 1382

Delta R.T. -0.00 min

Lab File: VW007299.D

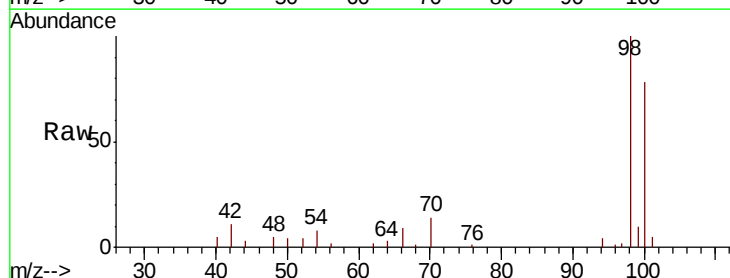
Acq: 07 Dec 2018 00:15

Tgt Ion: 98 Resp: 8906

Ion Ratio Lower Upper

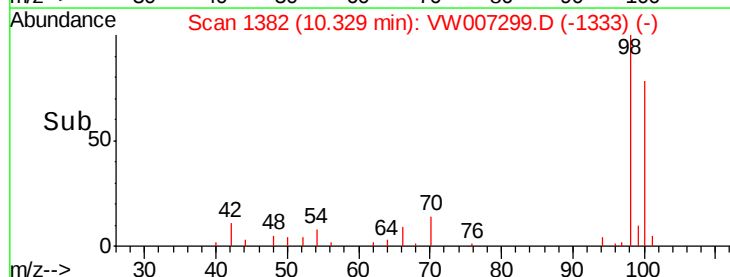
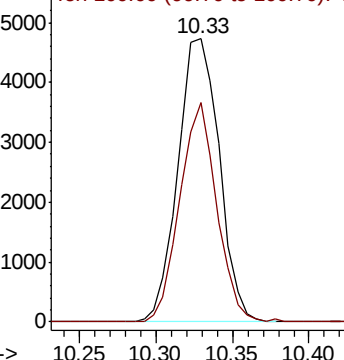
98 100

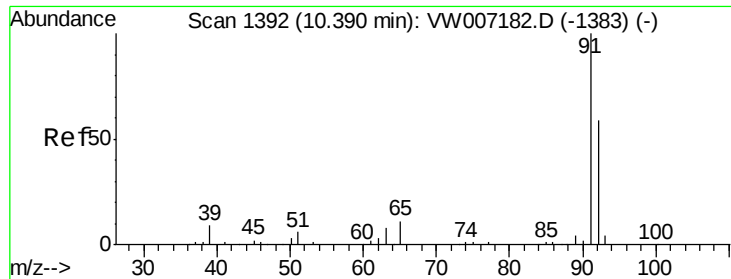
100 69.1 52.7 79.1



Abundance Ion 98.00 (97.70 to 98.70): VW

Ion 100.00 (99.70 to 100.70): VW





#52

Toluene

Concen: 1.133 ug/l

RT: 10.40 min Scan# 1394

Delta R.T. 0.01 min

Lab File: VW007299.D

Acq: 07 Dec 2018 00:15

Instrument :

MSVOA\_W

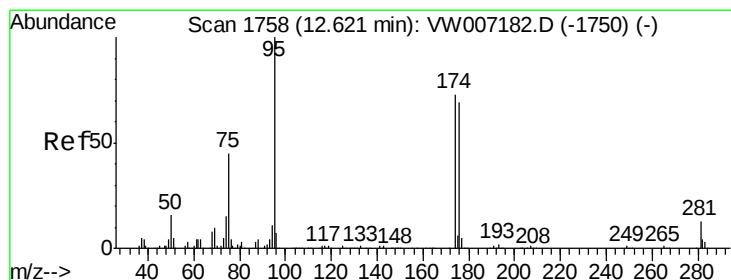
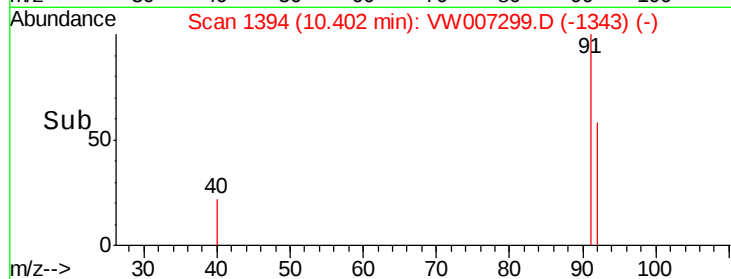
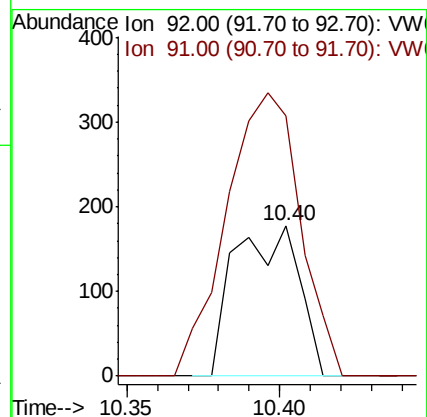
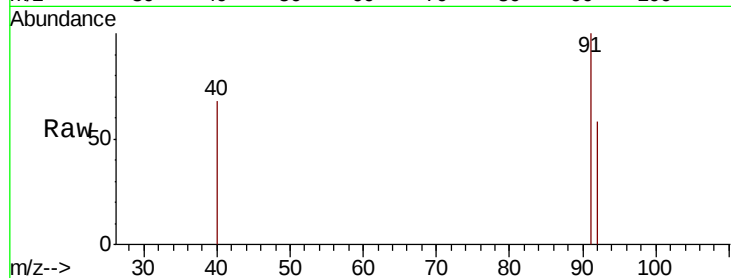
ClientSampled :

Tot Ion: 92 Resp: 260

Ion Ratio Lower Upper

92 100

91 215.4 136.0 204.0#



#62

4-Bromofluorobenzene

Concen: 31.438 ug/l

RT: 12.62 min Scan# 1758

Delta R.T. -0.00 min

Lab File: VW007299.D

Acq: 07 Dec 2018 00:15

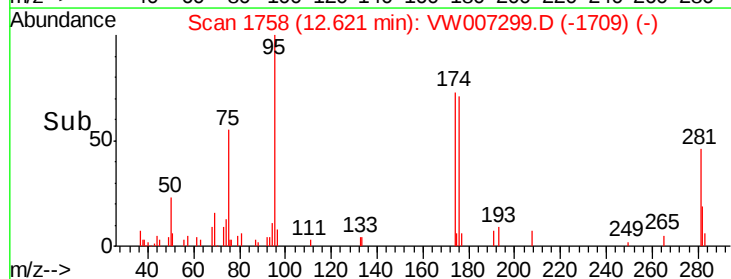
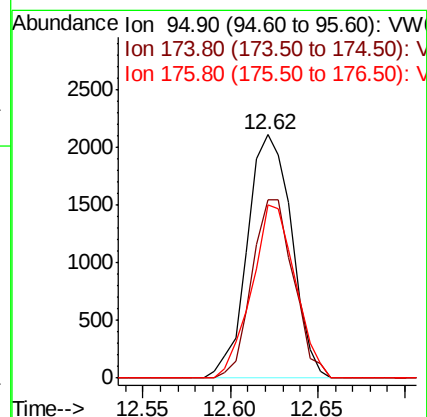
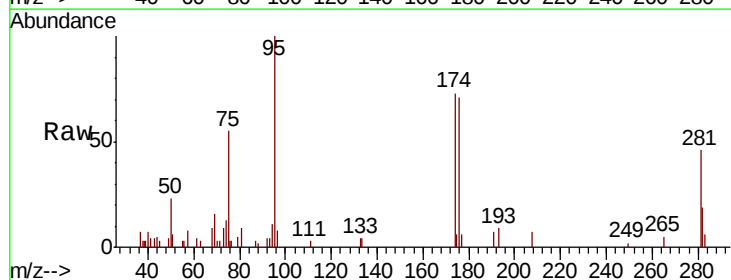
Tgt Ion: 95 Resp: 3702

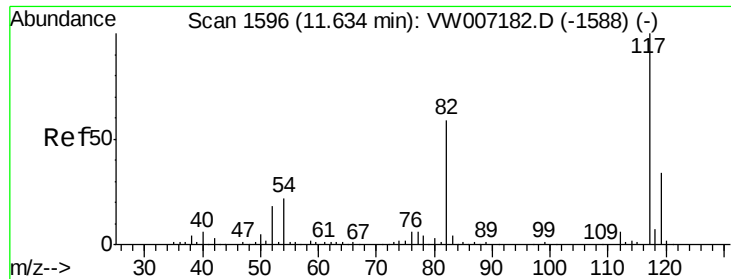
Ion Ratio Lower Upper

95 100

174 69.4 0.0 148.0

176 70.0 0.0 139.4

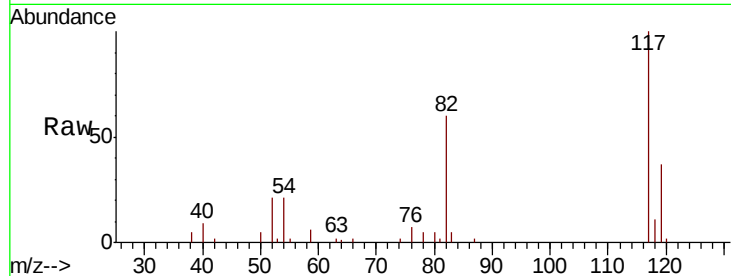




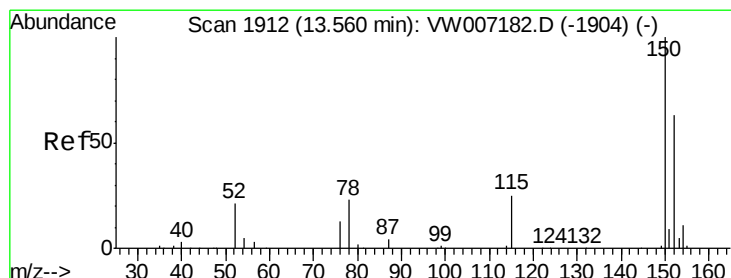
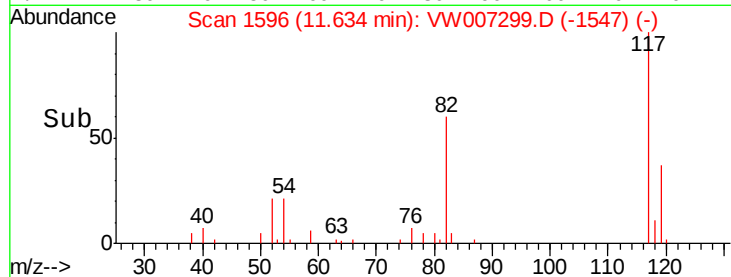
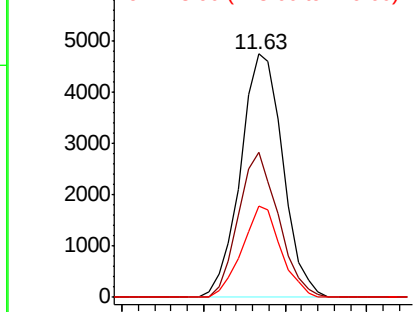
#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.63 min Scan# 1596  
Delta R.T. -0.00 min  
Lab File: VW007299.D  
Acq: 07 Dec 2018 00:15

Instrument :  
MSVOA\_W  
ClientSampleId :

Tot Ion:117 Resp: 8576  
Ion Ratio Lower Upper  
117 100  
82 59.6 47.4 71.2  
119 37.3 26.8 40.2

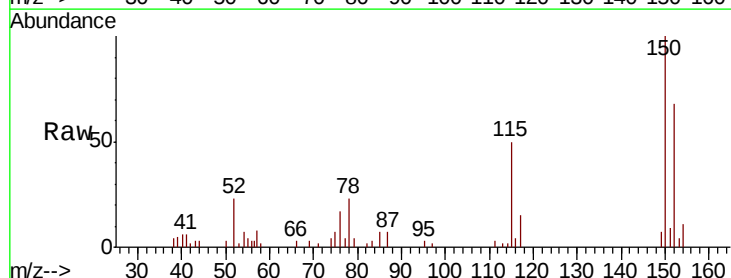


Abundance Ion 116.90 (116.60 to 117.60): V  
Ion 82.00 (81.70 to 82.70): VW  
Ion 118.90 (118.60 to 119.60): V

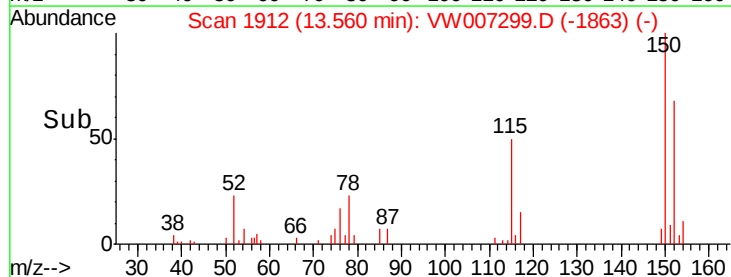
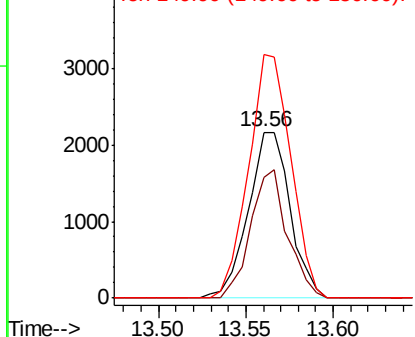


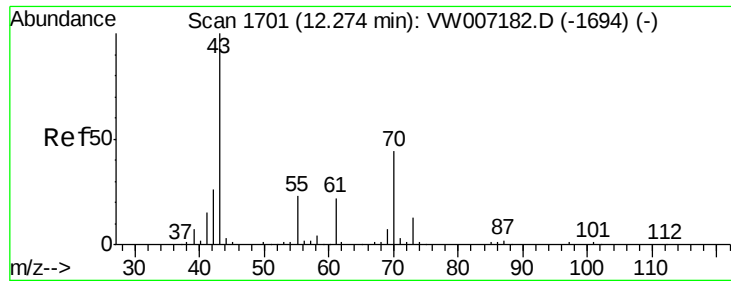
#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 13.56 min Scan# 1912  
Delta R.T. -0.00 min  
Lab File: VW007299.D  
Acq: 07 Dec 2018 00:15

Tgt Ion:152 Resp: 3600  
Ion Ratio Lower Upper  
152 100  
115 68.0 31.3 93.8  
150 148.2 0.0 358.0



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





#74

N-amvl acetate

Concen: 6.029 ug/l

RT: 12.26 min Scan# 1698

Delta R.T. -0.02 min

Lab File: VW007299.D

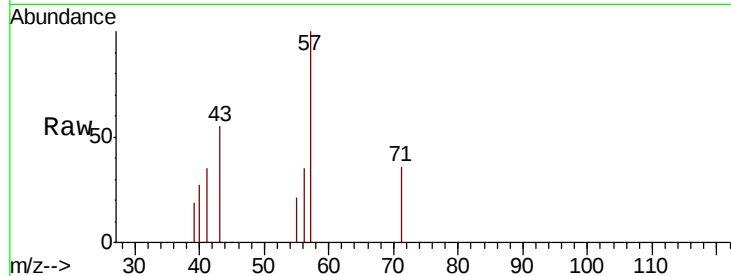
Acq: 07 Dec 2018 00:15

Instrument :

MSVOA\_W

ClientSampleId :

|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 43    | Resp: | 313   |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 70       | 0.0   | 34.0  | 51.0# |
| 55       | 25.2  | 19.0  | 28.6  |
| 61       | 0.0   | 19.7  | 29.5# |

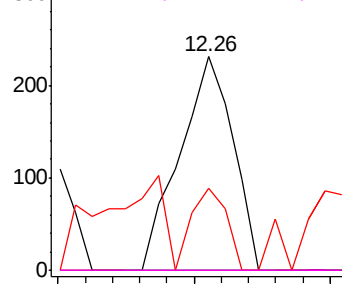


Abundance Ion 43.00 (42.70 to 43.70): VW

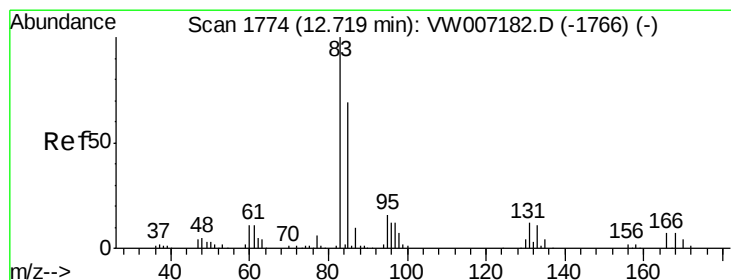
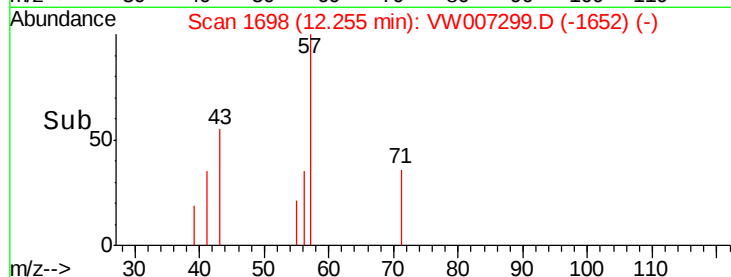
Ion 70.00 (69.70 to 70.70): VW

Ion 55.00 (54.70 to 55.70): VW

Ion 61.00 (60.70 to 61.70): VW



Time--> 12.20 12.25



#75

1,1,2,2-Tetrachloroethane

Concen: 6.048 ug/l

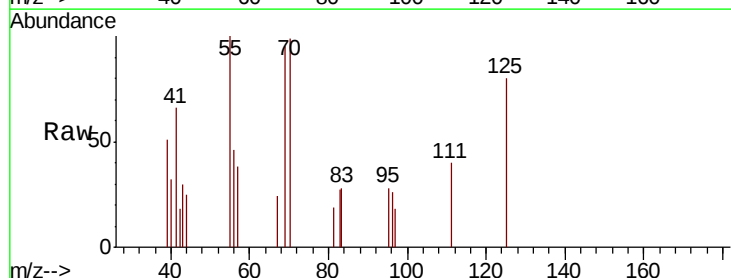
RT: 12.77 min Scan# 1783

Delta R.T. 0.05 min

Lab File: VW007299.D

Acq: 07 Dec 2018 00:15

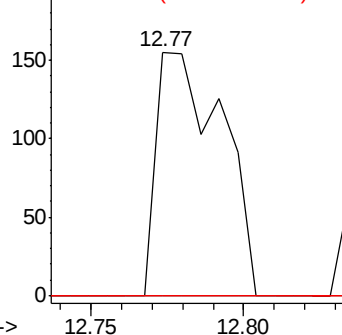
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 83    | Resp: | 230   |
| Ion      | Ratio | Lower | Upper |
| 83       | 100   |       |       |
| 131      | 0.0   | 6.0   | 18.1# |
| 85       | 0.0   | 33.0  | 99.0# |



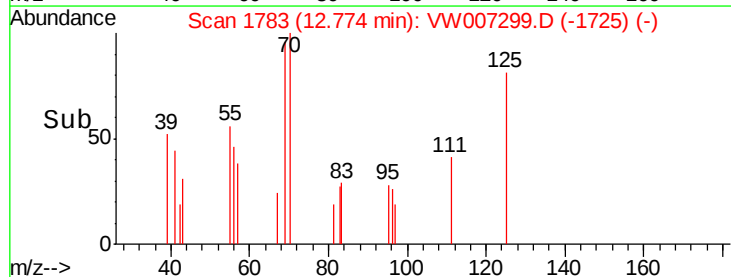
Abundance Ion 82.90 (82.60 to 83.60): VW

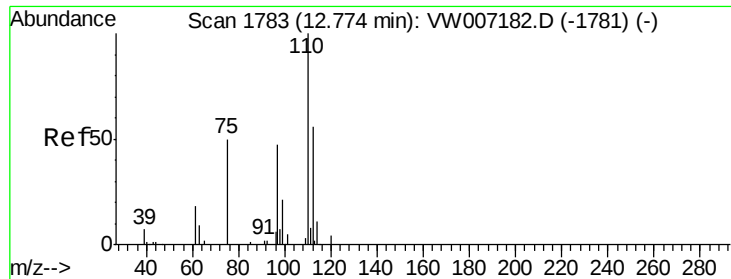
Ion 130.80 (130.50 to 131.50): V

Ion 84.90 (84.60 to 85.60): VW



Time--> 12.75 12.80





#76

1,2,3-Trichloropropane

Concen: 67.193 ug/l

RT: 12.62 min Scan# 1758

Delta R.T. -0.15 min

Lab File: VW007299.D

Acq: 07 Dec 2018 00:15

Instrument :

MSVOA\_W

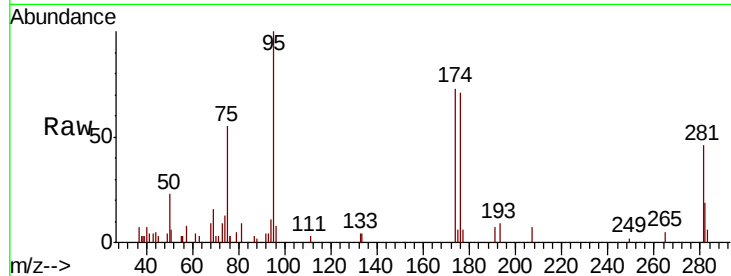
ClientSampleId :

Tot Ion: 75 Resp: 1873

Ion Ratio Lower Upper

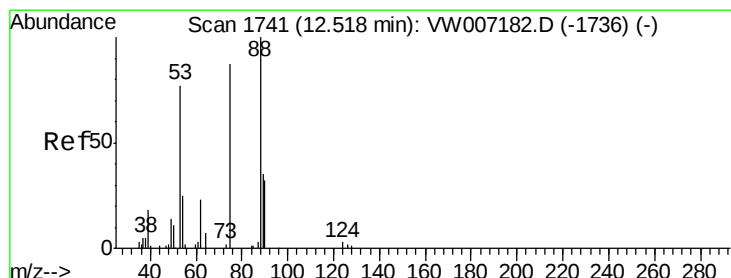
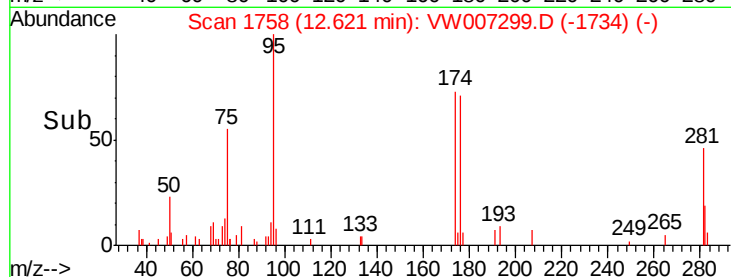
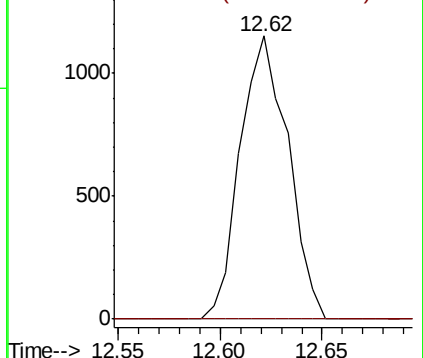
75 100

77 0.0 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: 144.824 ug/l

RT: 12.62 min Scan# 1758

Delta R.T. 0.10 min

Lab File: VW007299.D

Acq: 07 Dec 2018 00:15

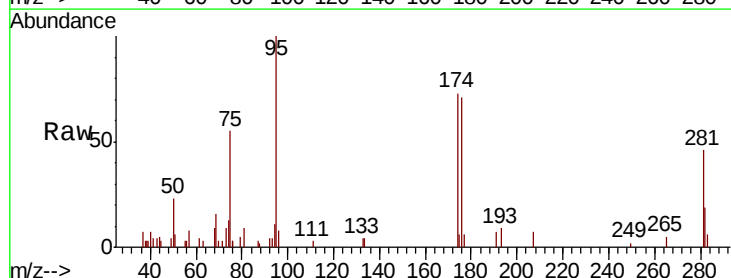
Tgt Ion: 75 Resp: 1873

Ion Ratio Lower Upper

75 100

53 0.0 72.8 109.2#

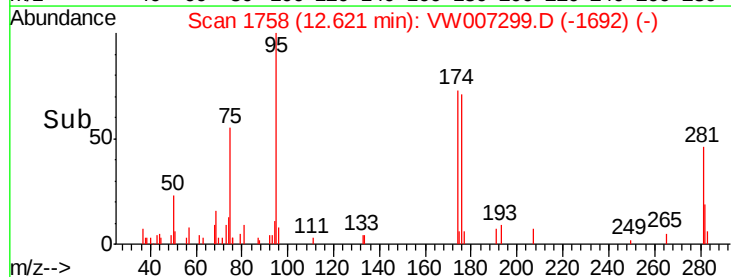
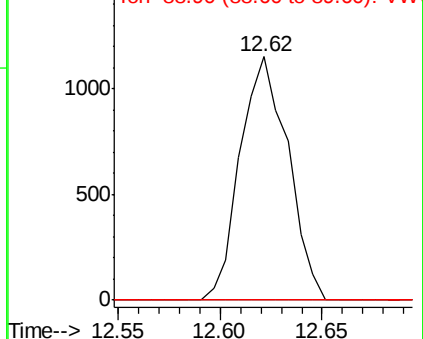
89 0.0 36.4 54.6#

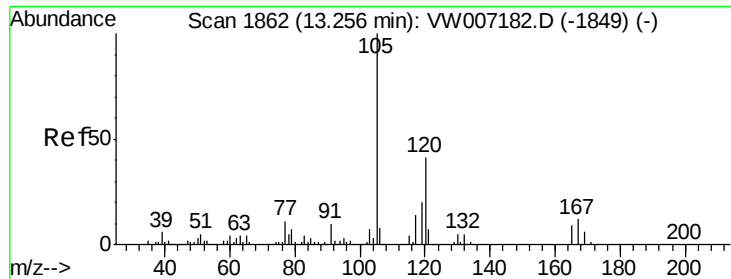


Abundance Ion 74.90 (74.60 to 75.60): VW

Ion 53.00 (52.70 to 53.70): VW

Ion 88.90 (88.60 to 89.60): VW

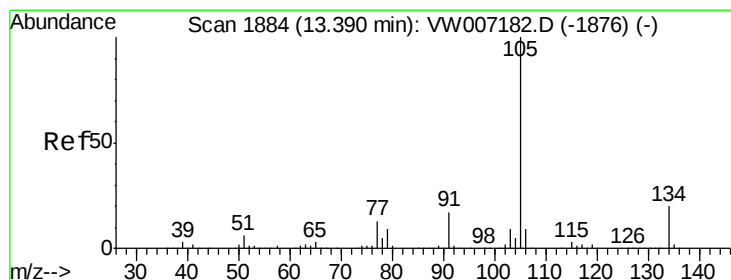
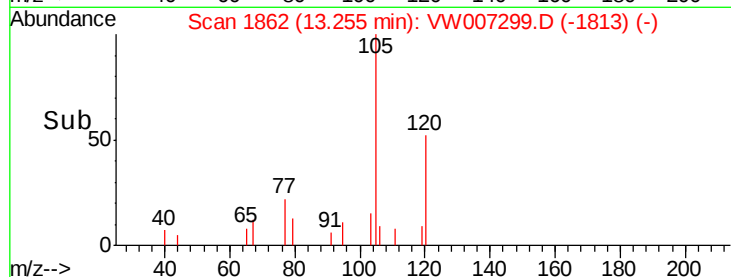
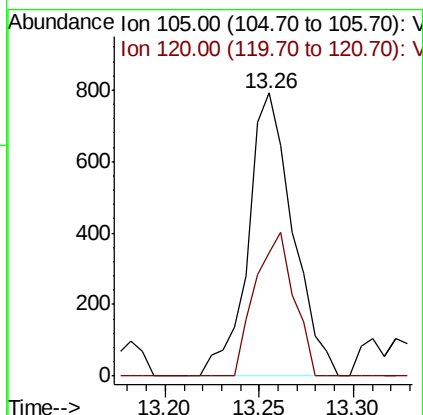
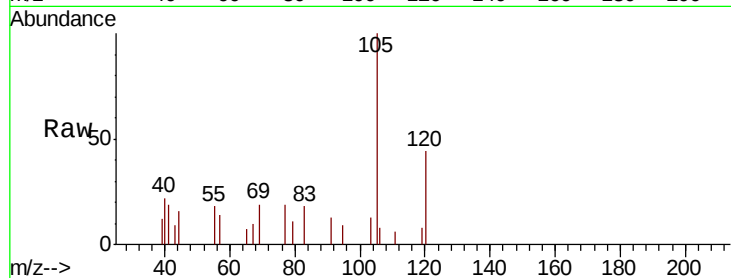




#84  
1,2,4-Trimethylbenzene  
Concen: 5.104 ug/l  
RT: 13.26 min Scan# 1862  
Delta R.T. -0.00 min  
Lab File: VW007299.D  
Acq: 07 Dec 2018 00:15

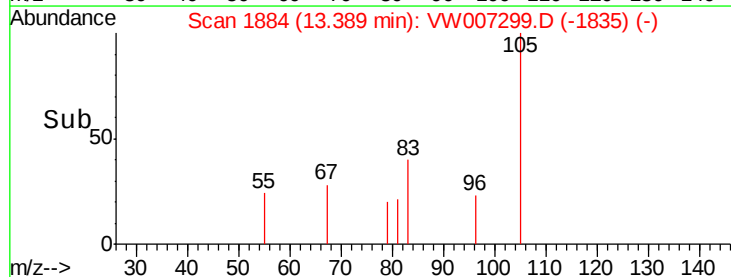
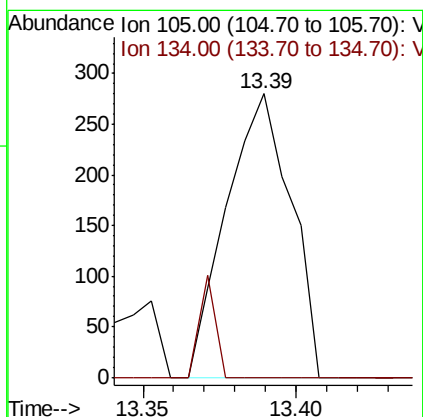
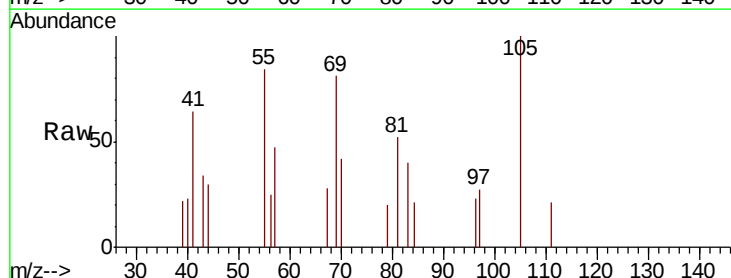
Instrument :  
MSVOA\_W  
ClientSampled :

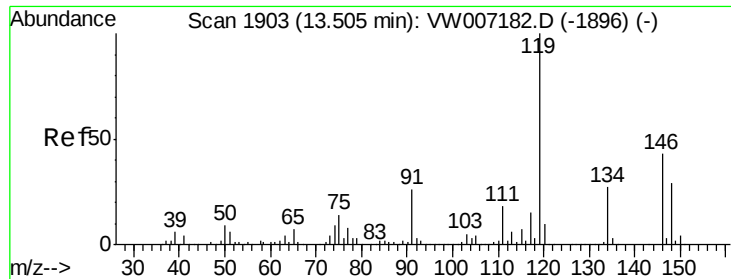
Tot Ion:105 Resp: 1305  
Ion Ratio Lower Upper  
105 100  
120 44.1 21.1 63.3



#85  
sec-Butylbenzene  
Concen: 1.309 ug/l  
RT: 13.39 min Scan# 1884  
Delta R.T. -0.00 min  
Lab File: VW007299.D  
Acq: 07 Dec 2018 00:15

Tgt Ion:105 Resp: 409  
Ion Ratio Lower Upper  
105 100  
134 9.0 10.3 30.8#

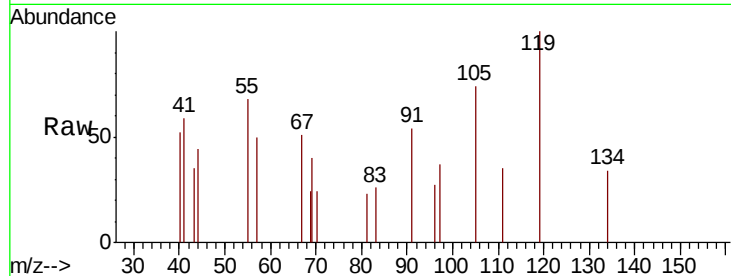




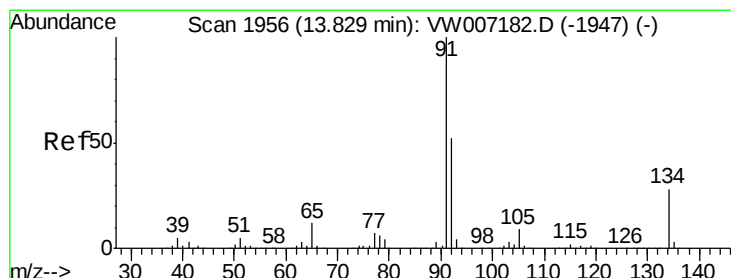
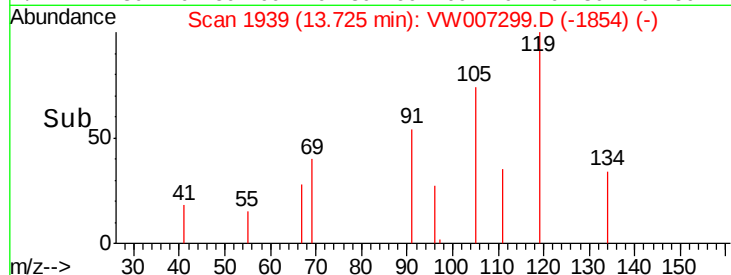
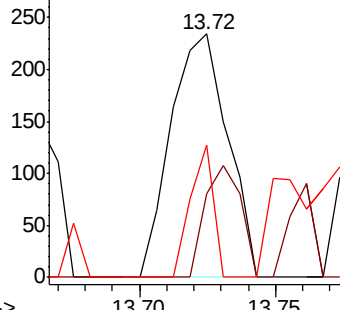
#86  
 p-Isopropyltoluene  
 Concen: 1.219 ug/l  
 RT: 13.72 min Scan# 1939  
 Delta R.T. 0.22 min  
 Lab File: VW007299.D  
 Acq: 07 Dec 2018 00:15

Instrument :  
 MSVOA\_W  
 ClientSampled :

Tot Ion: 119 Resp: 339  
 Ion Ratio Lower Upper  
 119 100  
 134 28.9 13.2 39.6  
 91 21.8 12.4 37.2

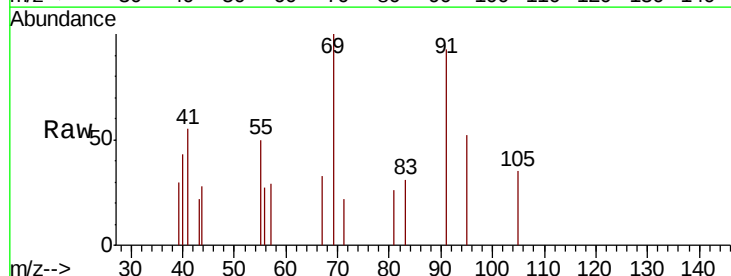


Abundance Ion 119.00 (118.70 to 119.70): V  
 Ion 134.00 (133.70 to 134.70): V  
 Ion 91.00 (90.70 to 91.70): V

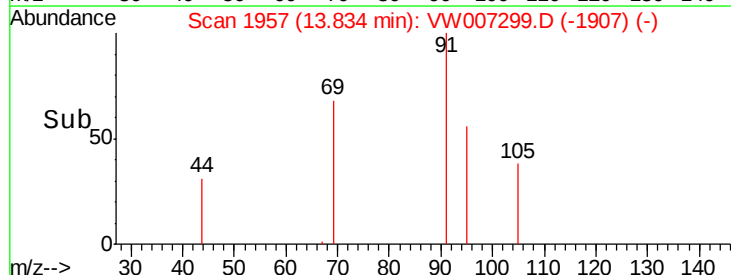
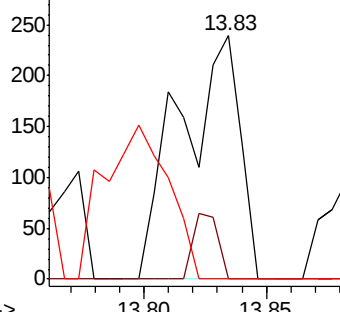


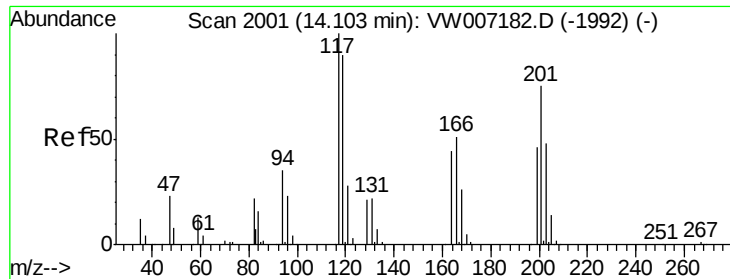
#89  
 n-Butylbenzene  
 Concen: 1.573 ug/l  
 RT: 13.83 min Scan# 1957  
 Delta R.T. 0.01 min  
 Lab File: VW007299.D  
 Acq: 07 Dec 2018 00:15

Tgt Ion: 91 Resp: 409  
 Ion Ratio Lower Upper  
 91 100  
 92 11.2 26.5 79.5#  
 134 0.0 14.1 42.2#



Abundance Ion 91.00 (90.70 to 91.70): V  
 Ion 92.00 (91.70 to 92.70): V  
 Ion 134.00 (133.70 to 134.70): V





#90

Hexachloroethane

Concen: 2.760 ug/l

RT: 14.10 min Scan# 2000

Delta R.T. -0.01 min

Lab File: VW007299.D

Acq: 07 Dec 2018 00:15

Instrument :

MSVOA\_W

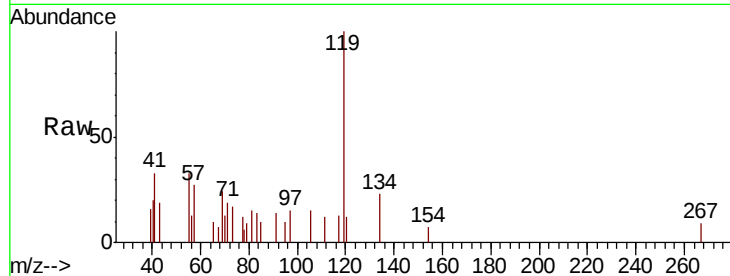
ClientSampled :

Tot Ion:117 Resp: 117

Ion Ratio Lower Upper

117 100

201 0.0 36.0 108.1#



Abundance Ion 116.80 (116.50 to 117.50): V

Ion 200.70 (200.40 to 201.40): V

14.10

100

80

60

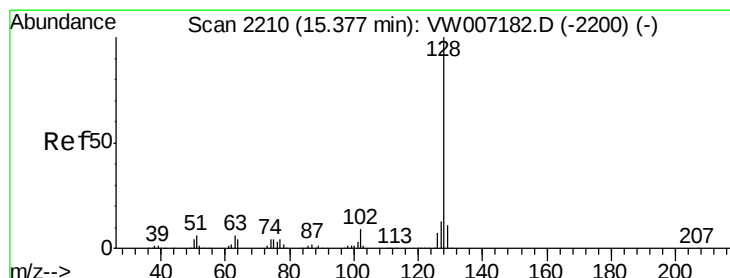
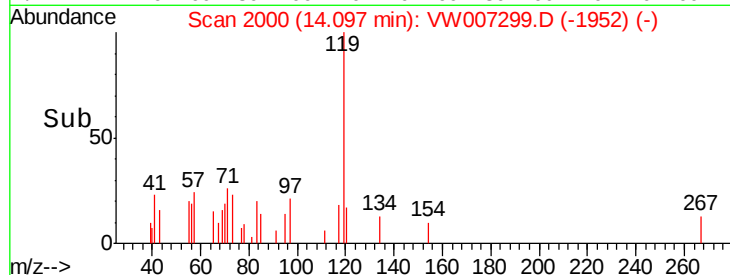
40

20

0

Time-->

14.06 14.08 14.10 14.12



#95

Naphthalene

Concen: 3.283 ug/l

RT: 15.37 min Scan# 2209

Delta R.T. -0.01 min

Lab File: VW007299.D

Acq: 07 Dec 2018 00:15

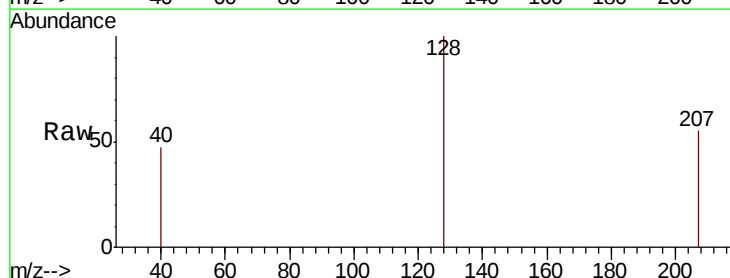
Tgt Ion:128 Resp: 458

Ion Ratio Lower Upper

128 100

127 0.0 10.3 15.5#

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

300

200

100

0

Time-->

15.35 15.37 15.40

