

Data File : VU027058.D  
Acq On : 23 Sep 2018 08:26  
Operator : MD/SY  
Sample : J4996-01  
Misc : 5.0mL/MSVOA\_U/WATER  
ALS Vial : 100 Sample Multiplier: 1

Instrument :  
MSVOA\_U  
ClientSampleId :  
TB-01-180918

Quant Time: Sep 24 05:49:26 2018  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\82U092218W.M  
Quant Title : SW846 8260  
QLast Update : Sat Sep 22 01:31:57 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 4.99  | 168  | 92825    | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 5.89  | 114  | 156424   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 9.09  | 117  | 152217   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 11.48 | 152  | 71548    | 50.00 | ug/l  | 0.00     |

System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 5.31   | 65  | 96629    | 51.72 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 103.44% |      |
| 35) Dibromofluoromethane  | 4.89   | 113 | 66721    | 49.21 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 98.42%  |      |
| 50) Toluene-d8            | 7.57   | 98  | 256378   | 49.62 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 99.24%  |      |
| 62) 4-Bromofluorobenzene  | 10.31  | 95  | 82707    | 46.65 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 93.30%  |      |

Target Compounds

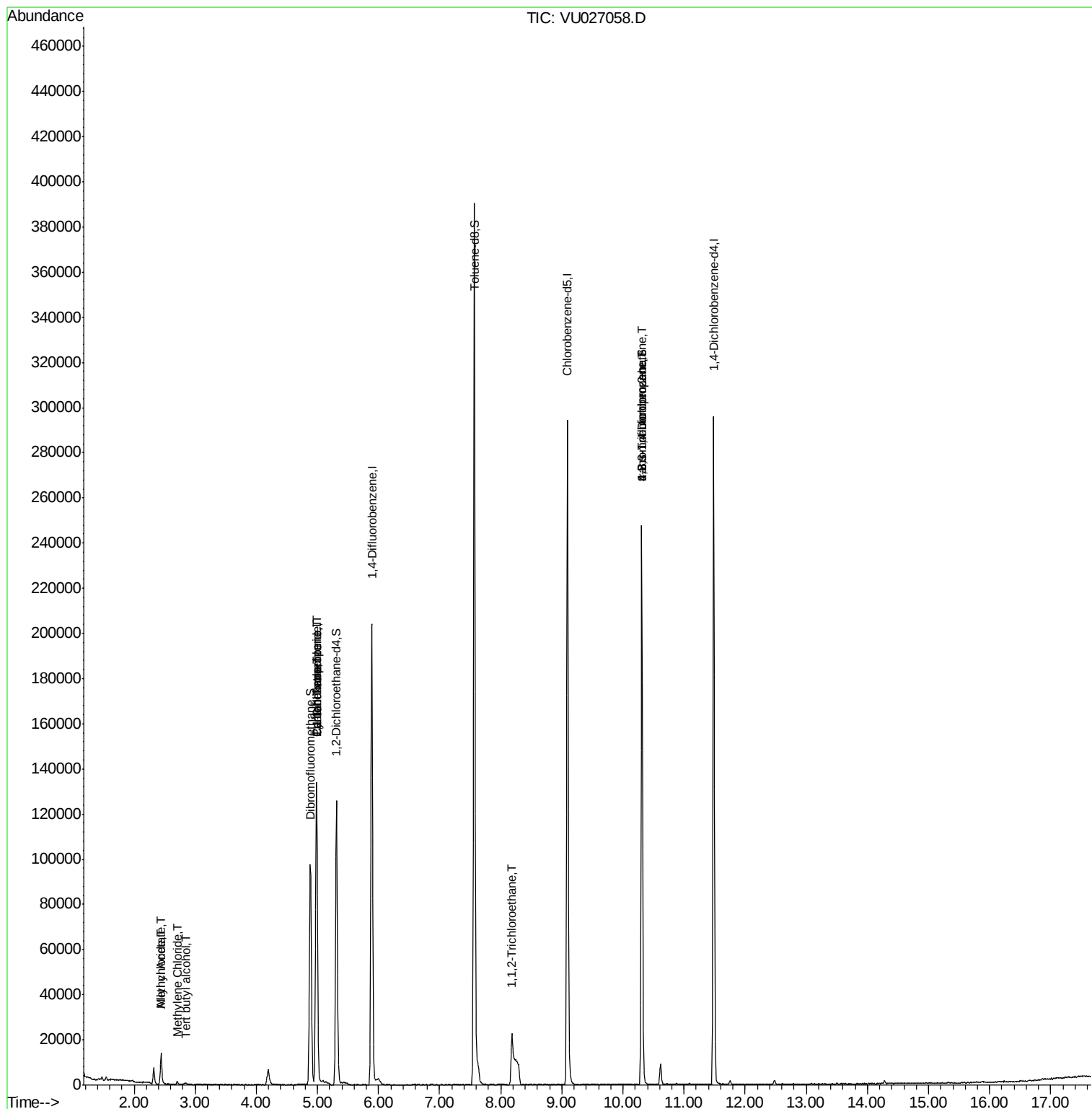
|                                |       |     |       |           |        | Qvalue |
|--------------------------------|-------|-----|-------|-----------|--------|--------|
| 11) Tert butyl alcohol         | 2.84  | 59  | 592   | 1.382     | ug/l # | 72     |
| 14) Allyl chloride             | 2.44  | 41  | 1287  | 0.495     | ug/l # | 59     |
| 16) Acetone                    | 2.32  | 43  | 7218  | Below Cal |        | 98     |
| 18) Methyl Acetate             | 2.44  | 43  | 3891  | 1.463     | ug/l # | 55     |
| 20) Methylene Chloride         | 2.70  | 84  | 483   | 0.289     | ug/l # | 74     |
| 31) Cyclohexane                | 4.99  | 56  | 2542  | 0.342     | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 4.99  | 75  | 8715  | 4.175     | ug/l # | 50     |
| 38) Carbon Tetrachloride       | 4.98  | 117 | 9371  | 4.717     | ug/l # | 18     |
| 55) 1,1,2-Trichloroethane      | 8.18  | 97  | 423   | 0.274     | ug/l # | 13     |
| 76) 1,2,3-Trichloropropane     | 10.31 | 75  | 44658 | 20.546    | ug/l # | 36     |
| 81) trans-1,4-Dichloro-2-buten | 10.31 | 75  | 44658 | 65.749    | ug/l # | 100    |

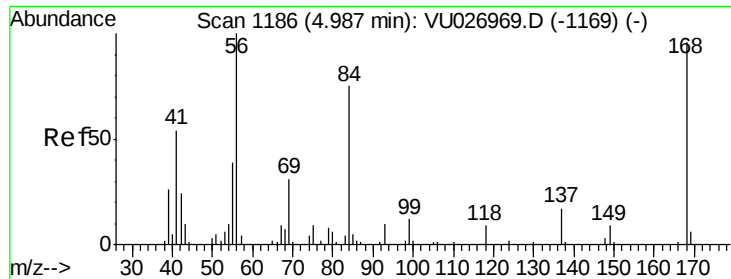
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data File : VU027058.D  
Acq On : 23 Sep 2018 08:26  
Operator : MD/SY  
Sample : J4996-01  
Misc : 5.0mL/MSVOA\_U/WATER  
ALS Vial : 100 Sample Multiplier: 1

Instrument :  
MSVOA\_U  
ClientSampleId :  
TB-01-180918

Quant Time: Sep 24 05:49:26 2018  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\82U092218W.M  
Quant Title : SW846 8260  
QLast Update : Sat Sep 22 01:31:57 2018  
Response via : Initial Calibration

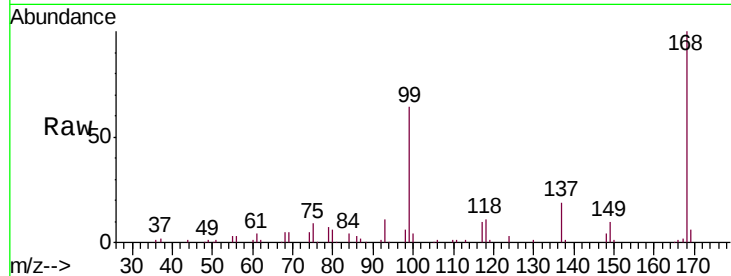




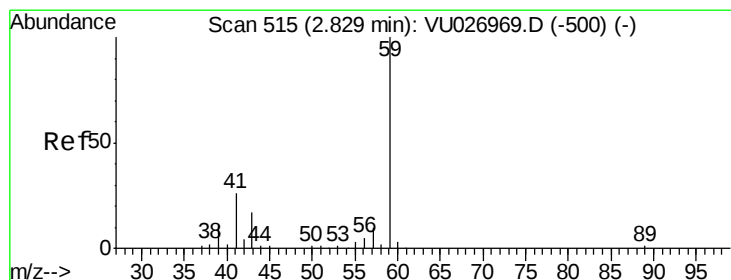
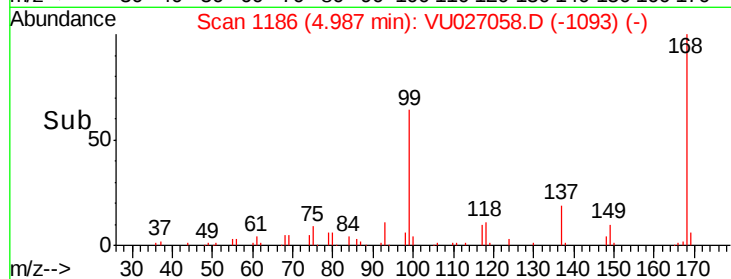
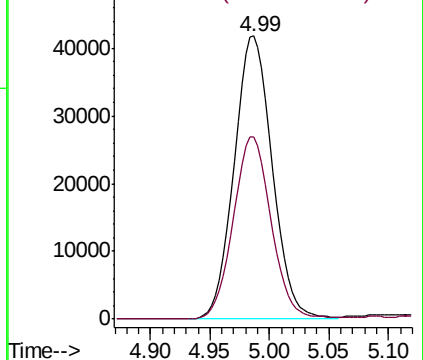
#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 4.99 min Scan# 1186  
Delta R.T. 0.00 min  
Lab File: VU027058.D  
Acq: 23 Sep 2018 08:26

Instrument :  
MSVOA\_U  
ClientSampleId :  
TB-01-180918

Tgt Ion:168 Resp: 92825  
Ion Ratio Lower Upper  
168 100  
99 64.2 48.1 72.1

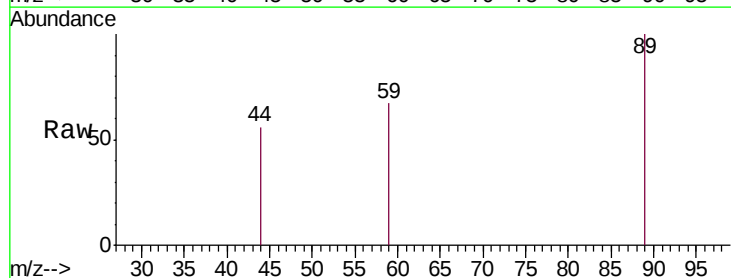


Abundance Ion 167.90 (167.60 to 168.60): VU026969.D (-1169) (-)  
Ion 98.90 (98.60 to 99.60): VU026969.D (-1169) (-)

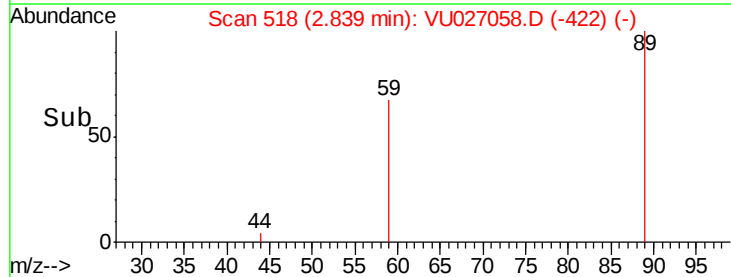
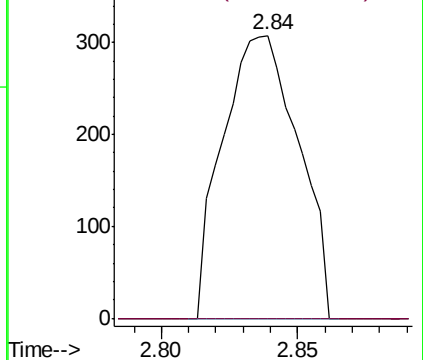


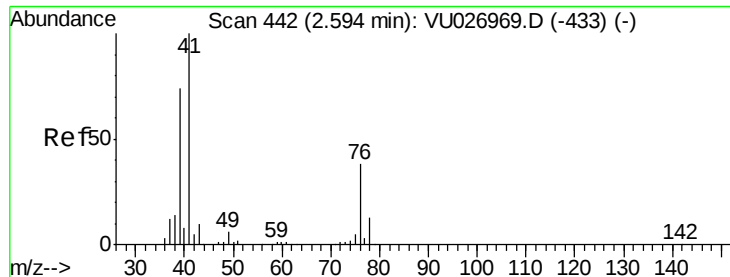
#11  
Tert butyl alcohol  
Concen: 1.382 ug/l  
RT: 2.84 min Scan# 515  
Delta R.T. 0.01 min  
Lab File: VU027058.D  
Acq: 23 Sep 2018 08:26

Tgt Ion: 59 Resp: 592  
Ion Ratio Lower Upper  
59 100  
57 0.0 8.5 12.7#



Abundance Ion 59.00 (58.70 to 59.70): VU026969.D (-500) (-)  
Ion 57.00 (56.70 to 57.70): VU026969.D (-500) (-)

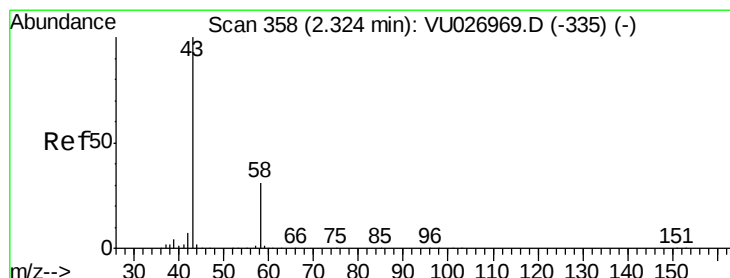
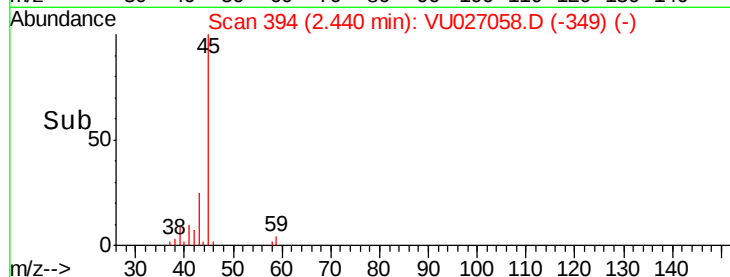
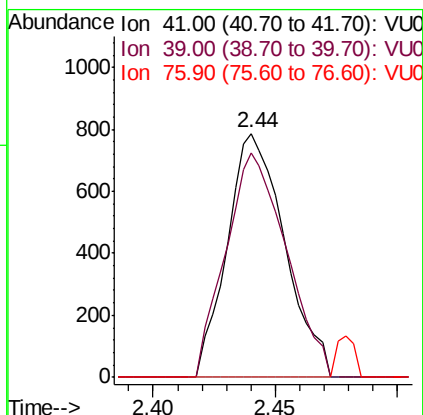
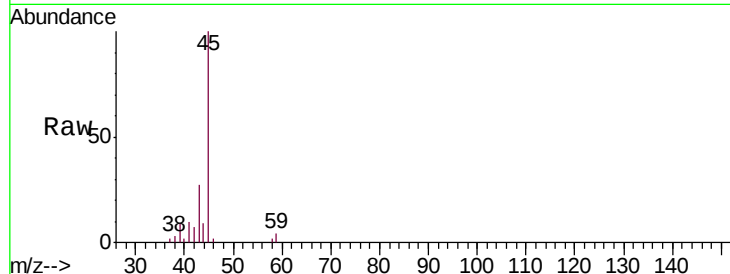




#14  
 Allyl chloride  
 Concen: 0.495 ug/l  
 RT: 2.44 min Scan# 394  
 Delta R.T. -0.15 min  
 Lab File: VU027058.D  
 Acq: 23 Sep 2018 08:26

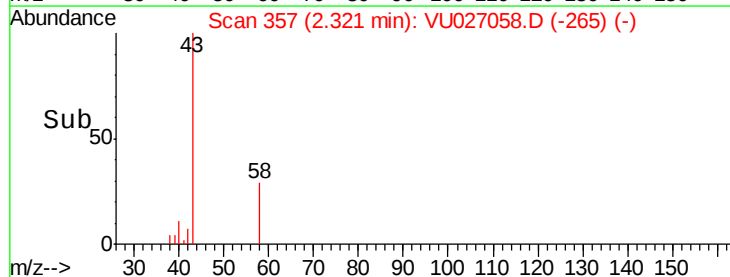
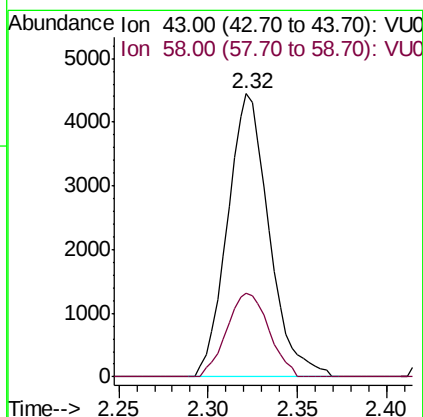
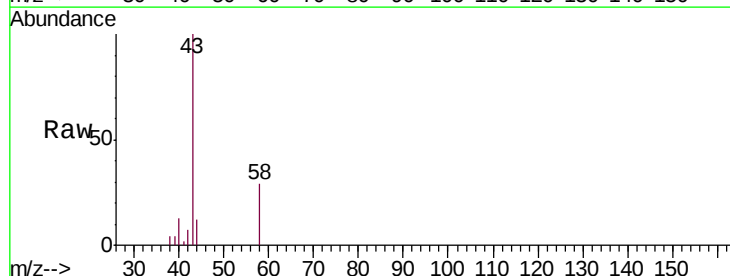
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 TB-01-180918

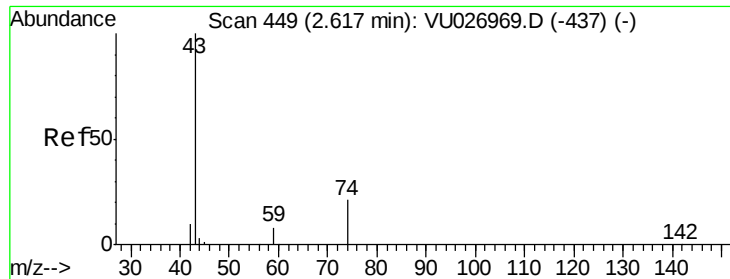
Tgt Ion: 41 Resp: 1287  
 Ion Ratio Lower Upper  
 41 100  
 39 96.7 55.7 83.5#  
 76 0.0 26.5 39.7#



#16  
 Acetone  
 Concen: Below Cal  
 RT: 2.32 min Scan# 357  
 Delta R.T. -0.00 min  
 Lab File: VU027058.D  
 Acq: 23 Sep 2018 08:26

Tgt Ion: 43 Resp: 7218  
 Ion Ratio Lower Upper  
 43 100  
 58 29.5 24.6 36.8

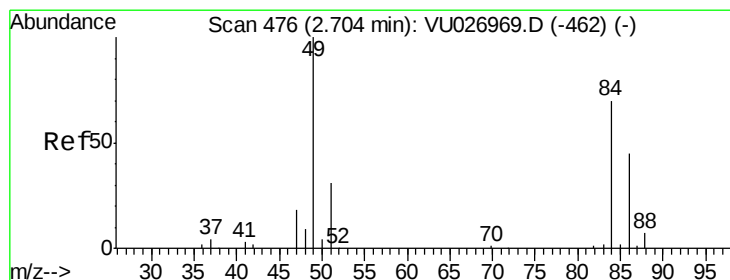
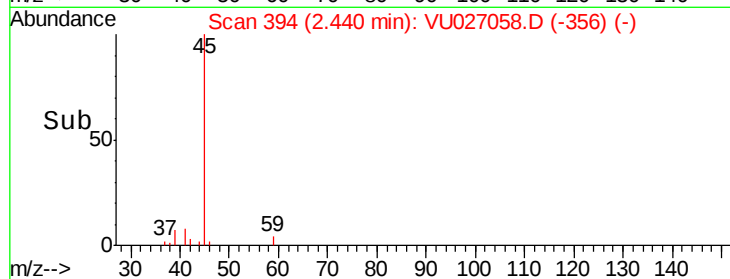
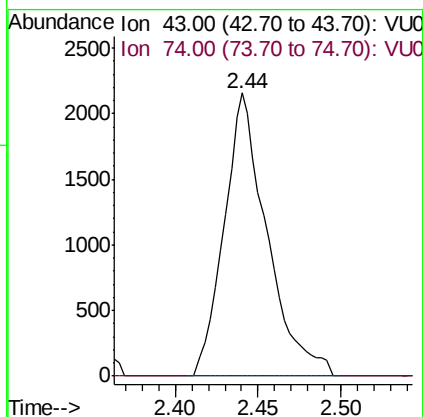
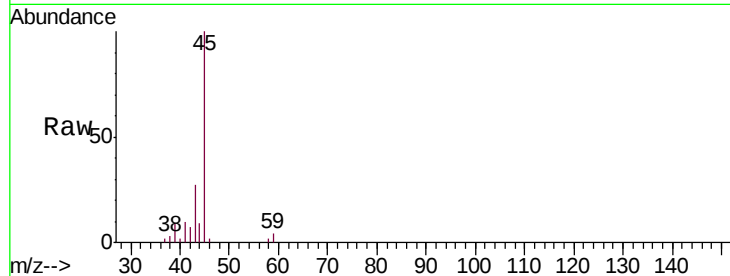




#18  
Methyl Acetate  
Concen: 1.463 ug/l  
RT: 2.44 min Scan# 394  
Delta R.T. -0.18 min  
Lab File: VU027058.D  
Acq: 23 Sep 2018 08:26

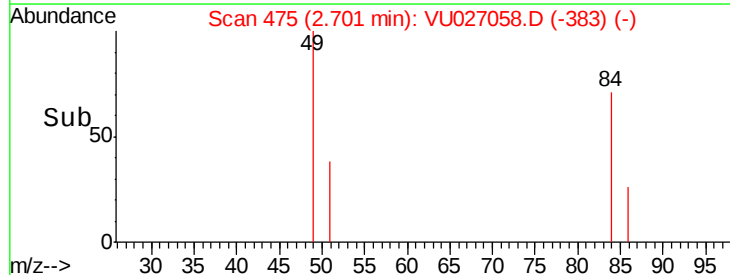
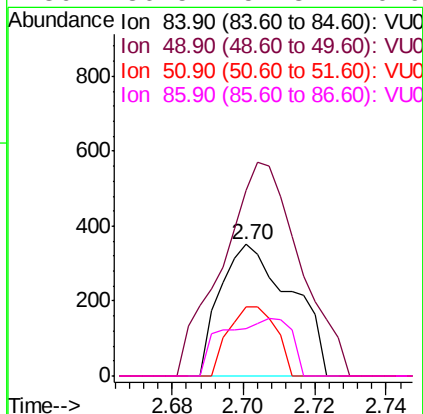
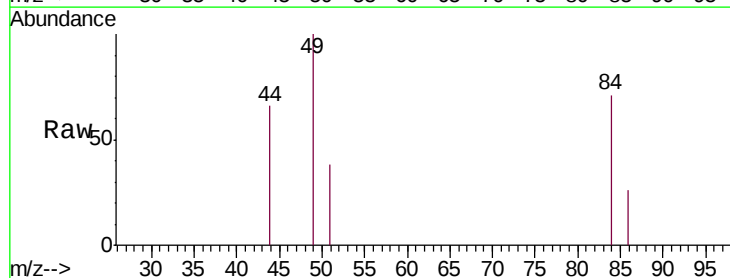
Instrument :  
MSVOA\_U  
ClientSampleId :  
TB-01-180918

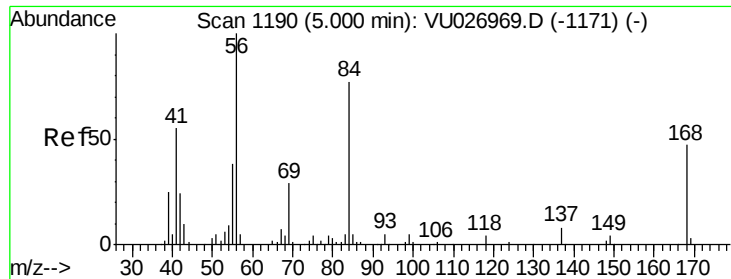
Tgt Ion: 43 Resp: 3891  
Ion Ratio Lower Upper  
43 100  
74 0.0 16.6 25.0#



#20  
Methylene Chloride  
Concen: 0.289 ug/l  
RT: 2.70 min Scan# 475  
Delta R.T. -0.00 min  
Lab File: VU027058.D  
Acq: 23 Sep 2018 08:26

Tgt Ion: 84 Resp: 483  
Ion Ratio Lower Upper  
84 100  
49 112.0 114.9 172.3#  
51 53.0 35.8 53.8  
86 36.5 51.3 76.9#

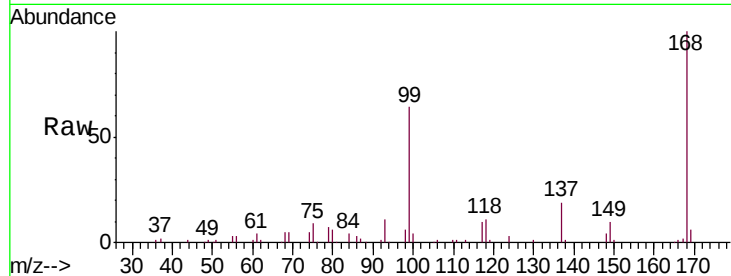




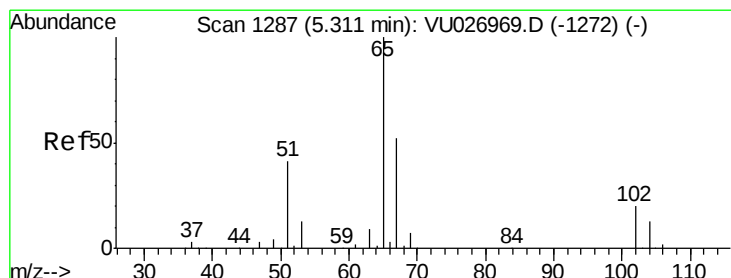
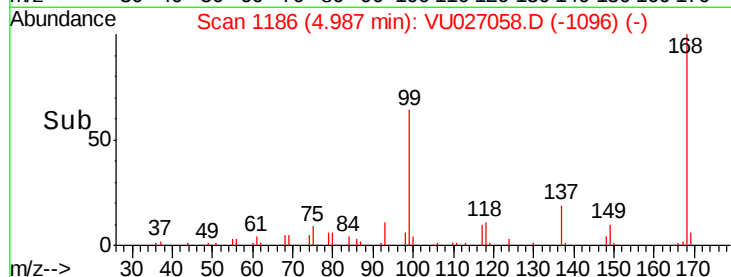
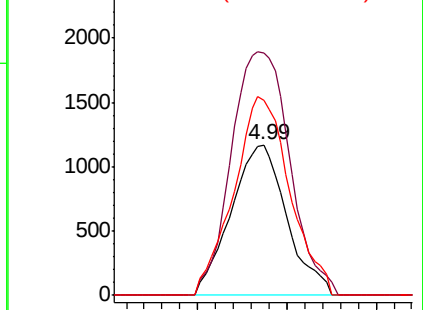
#31  
Cyclohexane  
Concen: 0.342 ug/l  
RT: 4.99 min Scan# 1186  
Delta R.T. -0.01 min  
Lab File: VU027058.D  
Acq: 23 Sep 2018 08:26

Instrument :  
MSVOA\_U  
ClientSampleId :  
TB-01-180918

Tgt Ion: 56 Resp: 2542  
Ion Ratio Lower Upper  
56 100  
69 161.0 23.0 34.4#  
84 129.8 61.4 92.2#

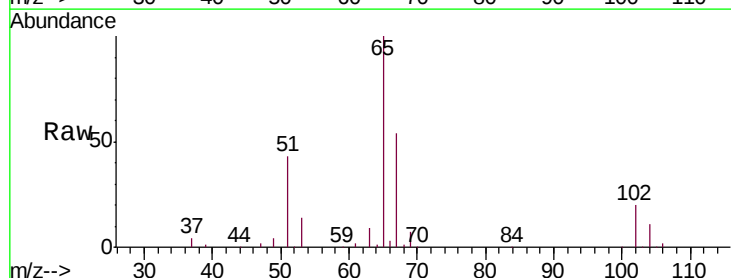


Abundance Ion 56.00 (55.70 to 56.70): VU0  
Ion 69.00 (68.70 to 69.70): VU0  
Ion 84.00 (83.70 to 84.70): VU0

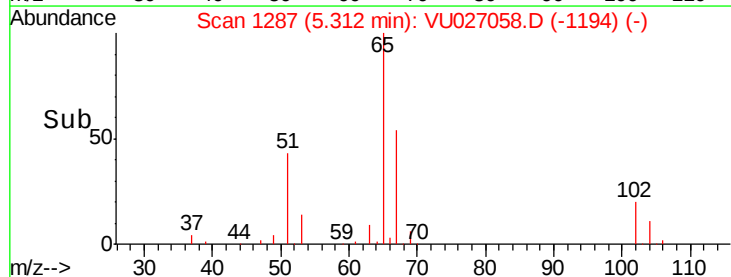
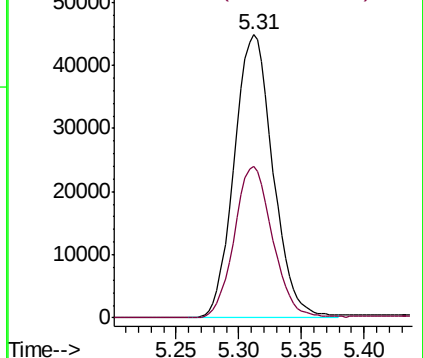


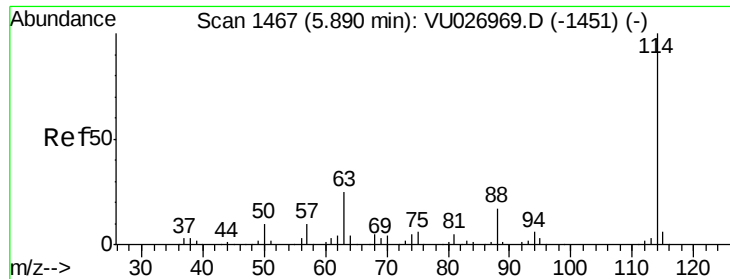
#33  
1,2-Dichloroethane-d4  
Concen: 51.721 ug/l  
RT: 5.31 min Scan# 1287  
Delta R.T. 0.00 min  
Lab File: VU027058.D  
Acq: 23 Sep 2018 08:26

Tgt Ion: 65 Resp: 96629  
Ion Ratio Lower Upper  
65 100  
67 52.9 0.0 105.6



Abundance Ion 64.90 (64.60 to 65.60): VU0  
Ion 66.90 (66.60 to 67.60): VU0

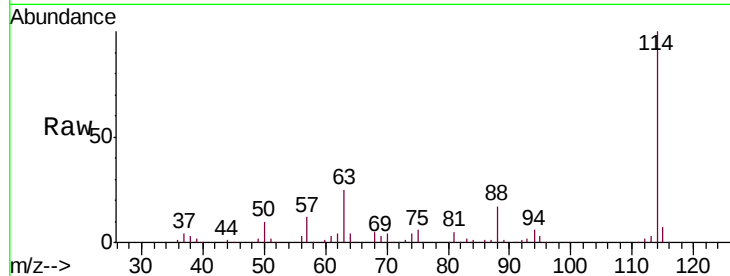




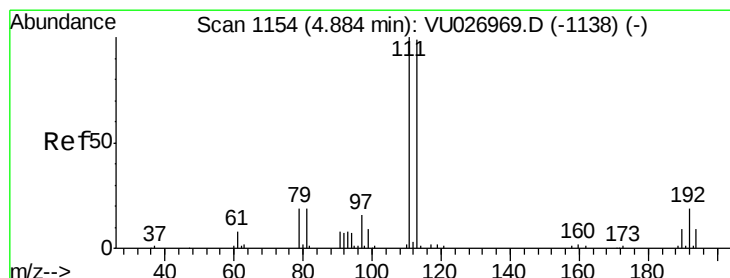
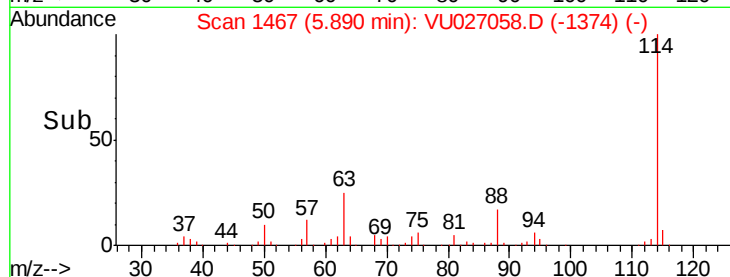
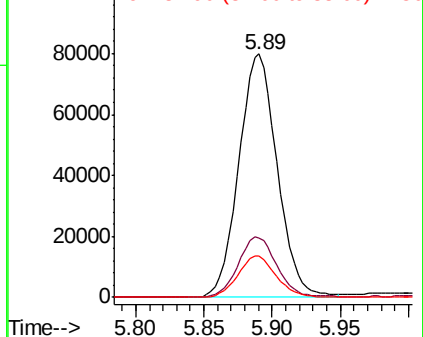
#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 5.89 min Scan# 1467  
 Delta R.T. 0.00 min  
 Lab File: VU027058.D  
 Acq: 23 Sep 2018 08:26

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 TB-01-180918

Tgt Ion:114 Resp: 156424  
 Ion Ratio Lower Upper  
 114 100  
 63 24.6 0.0 49.2  
 88 16.8 0.0 33.8

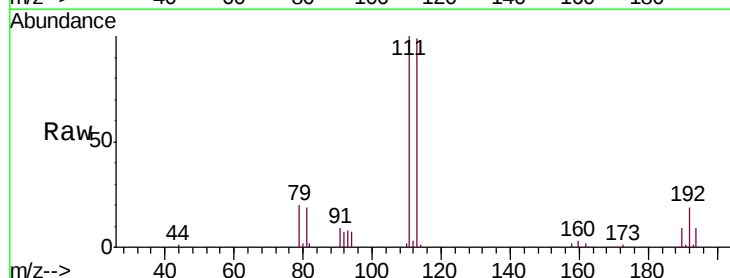


Abundance Ion 113.90 (113.60 to 114.60): V  
 Ion 63.00 (62.70 to 63.70): VU0  
 Ion 87.90 (87.60 to 88.60): VU0

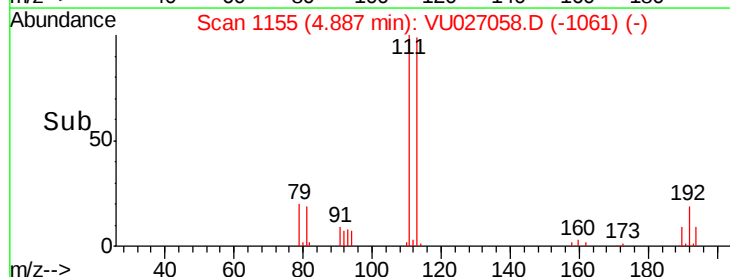
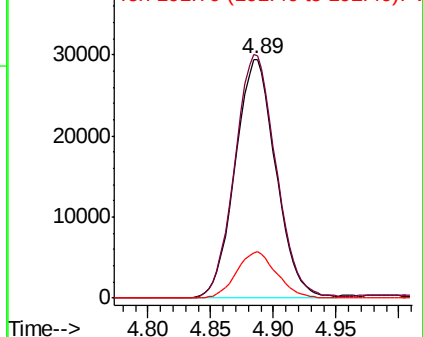


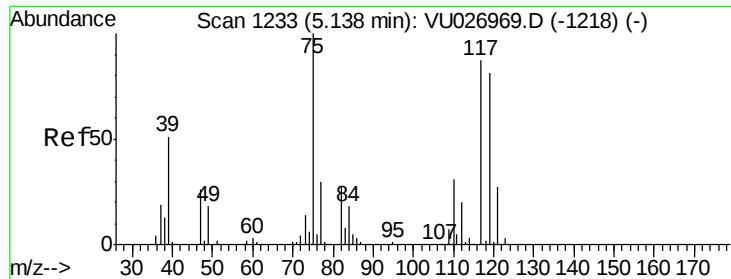
#35  
 Dibromofluoromethane  
 Concen: 49.208 ug/l  
 RT: 4.89 min Scan# 1155  
 Delta R.T. 0.00 min  
 Lab File: VU027058.D  
 Acq: 23 Sep 2018 08:26

Tgt Ion:113 Resp: 66721  
 Ion Ratio Lower Upper  
 113 100  
 111 103.4 82.2 123.4  
 192 19.1 15.2 22.8



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

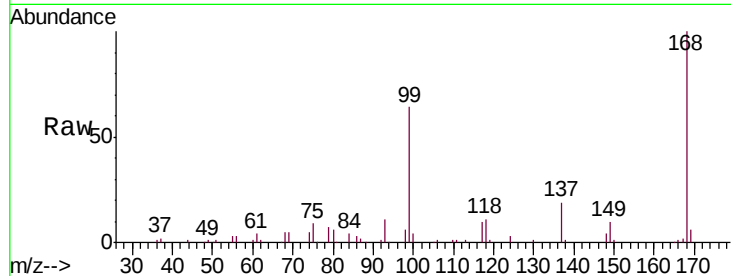




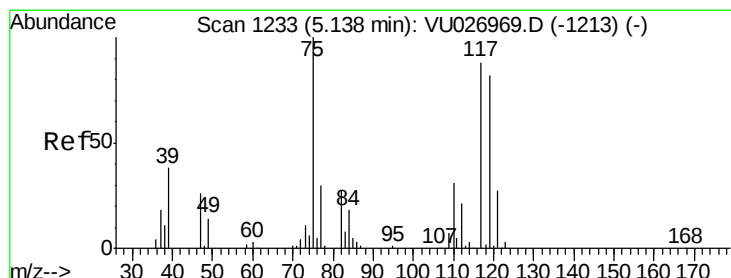
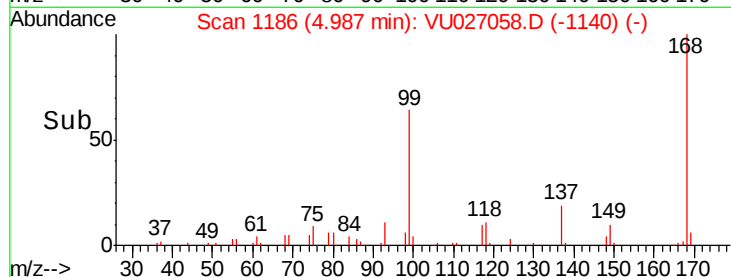
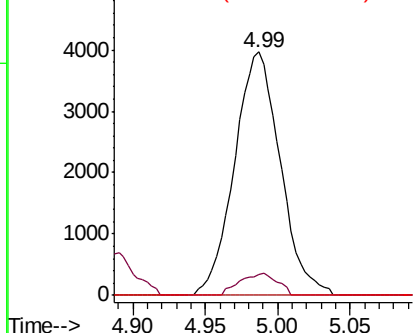
#36  
 1,1-Dichloropropene  
 Concen: 4.175 ug/l  
 RT: 4.99 min Scan# 1186  
 Delta R.T. -0.15 min  
 Lab File: VU027058.D  
 Acq: 23 Sep 2018 08:26

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 TB-01-180918

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 110     | 7.4   | 16.1  | 48.2# |
| 77      | 0.0   | 24.6  | 36.8# |

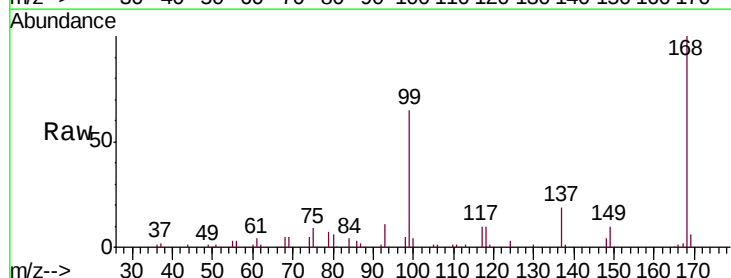


Abundance Ion 74.90 (74.60 to 75.60): VU0  
 Ion 109.90 (109.60 to 110.60): V  
 Ion 76.90 (76.60 to 77.60): VU0

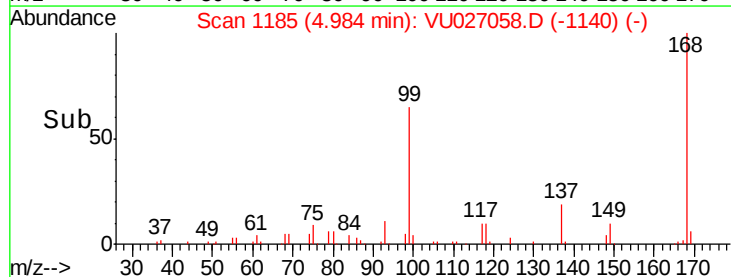
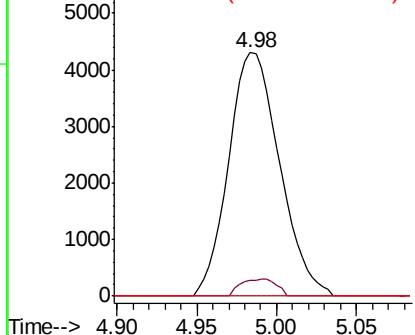


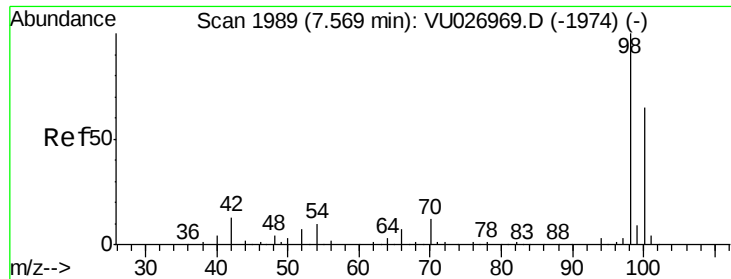
#38  
 Carbon Tetrachloride  
 Concen: 4.717 ug/l  
 RT: 4.98 min Scan# 1185  
 Delta R.T. -0.15 min  
 Lab File: VU027058.D  
 Acq: 23 Sep 2018 08:26

| Tgt Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 117     | 100   |       |        |
| 119     | 6.3   | 74.4  | 111.6# |
| 121     | 0.0   | 24.2  | 36.4#  |



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: 49.615 ug/l

RT: 7.57 min Scan# 1989

Delta R.T. 0.00 min

Lab File: VU027058.D

Acq: 23 Sep 2018 08:26

Instrument :

MSVOA\_U

ClientSampleId :

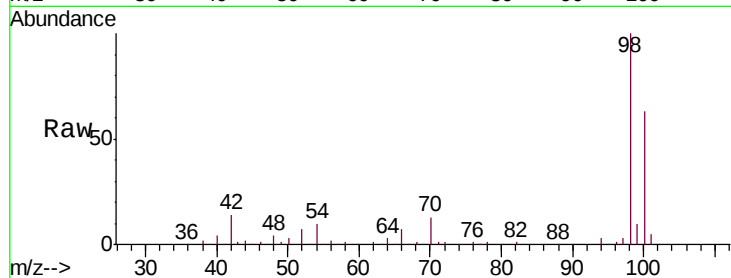
TB-01-180918

Tgt Ion: 98 Resp: 256378

Ion Ratio Lower Upper

98 100

100 63.2 52.1 78.1



Abundance Ion 98.00 (97.70 to 98.70): VU026969.D (-1974) (-)

Ion 100.00 (99.70 to 100.70): VU026969.D (-1974) (-)

7.57

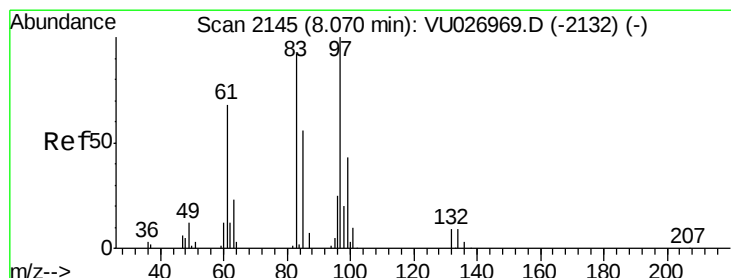
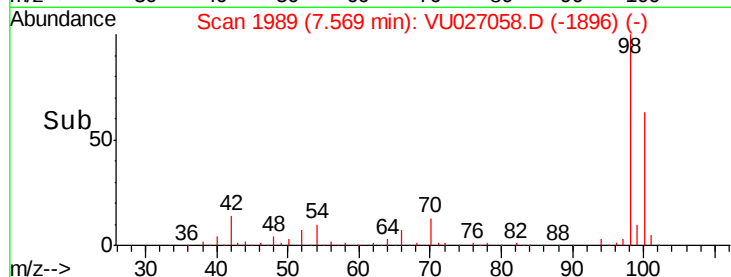
150000

100000

50000

0

Time-->



#55

1,1,2-Trichloroethane

Concen: 0.274 ug/l

RT: 8.18 min Scan# 2180

Delta R.T. 0.11 min

Lab File: VU027058.D

Acq: 23 Sep 2018 08:26

Tgt Ion: 97 Resp: 423

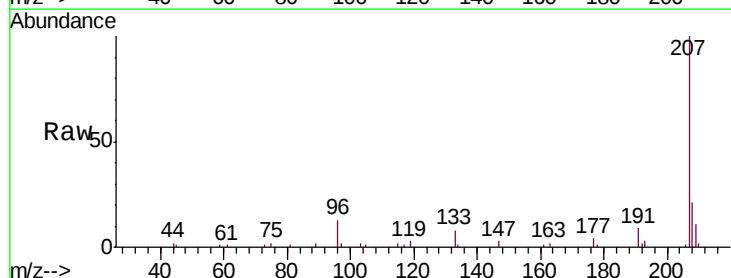
Ion Ratio Lower Upper

97 100

83 0.0 73.1 109.7#

85 0.0 46.7 70.1#

99 0.0 50.0 75.0#



Abundance Ion 96.90 (96.60 to 97.60): VU026969.D (-2132) (-)

Ion 82.90 (82.60 to 83.60): VU026969.D (-2132) (-)

Ion 84.90 (84.60 to 85.60): VU026969.D (-2132) (-)

Ion 98.90 (98.60 to 99.60): VU026969.D (-2132) (-)

8.18

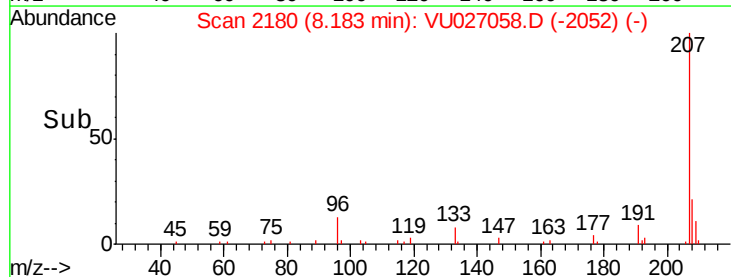
300

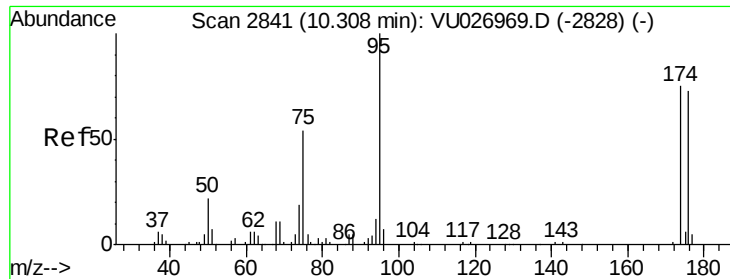
200

100

0

Time-->

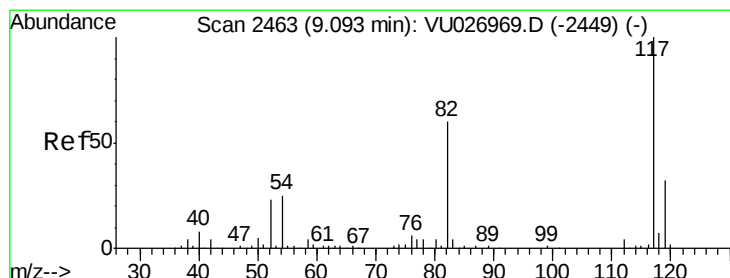
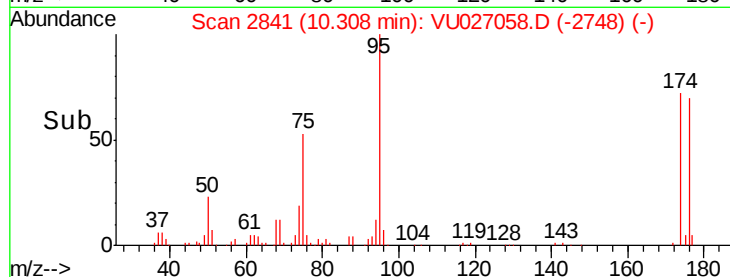
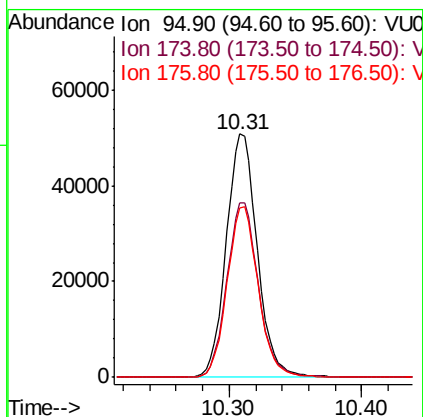
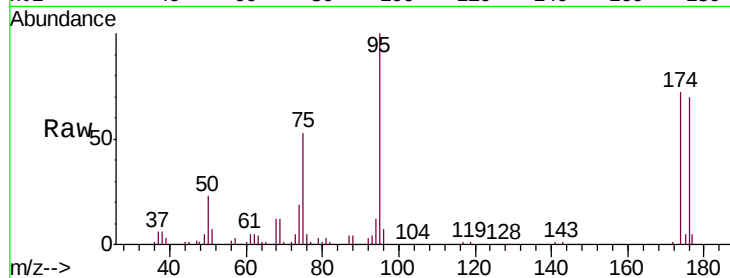




#62  
 4-Bromofluorobenzene  
 Concen: 46.646 ug/l  
 RT: 10.31 min Scan# 2841  
 Delta R.T. 0.00 min  
 Lab File: VU027058.D  
 Acq: 23 Sep 2018 08:26

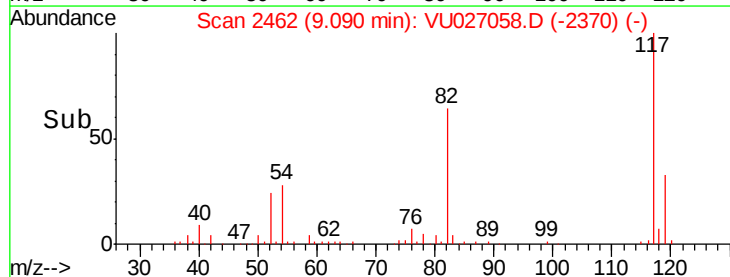
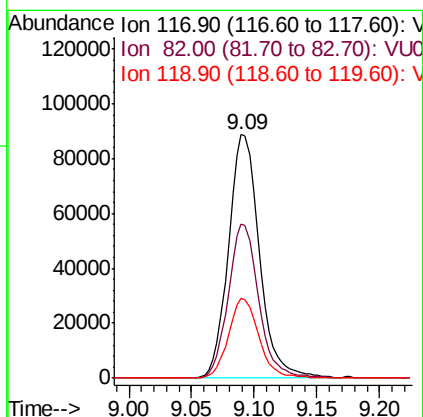
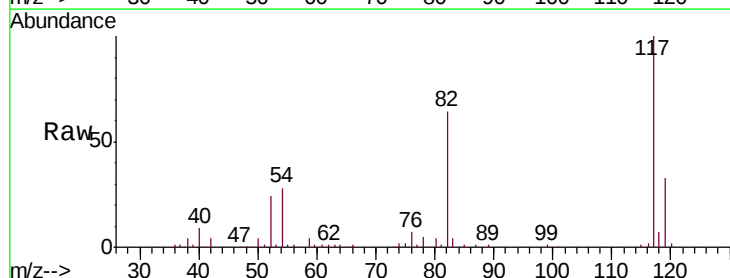
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 TB-01-180918

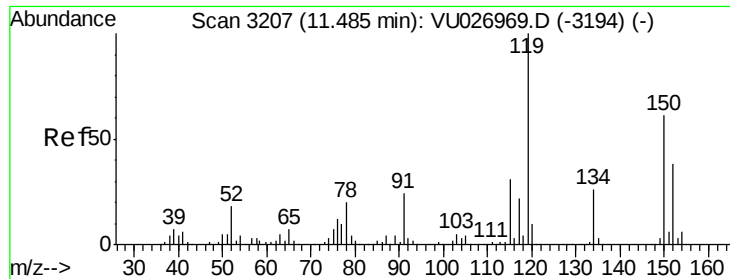
Tgt Ion: 95 Resp: 82707  
 Ion Ratio Lower Upper  
 95 100  
 174 73.1 0.0 150.2  
 176 70.2 0.0 145.2



#63  
 Chlorobenzene-d5  
 Concen: 50.000 ug/l  
 RT: 9.09 min Scan# 2462  
 Delta R.T. -0.00 min  
 Lab File: VU027058.D  
 Acq: 23 Sep 2018 08:26

Tgt Ion: 117 Resp: 152217  
 Ion Ratio Lower Upper  
 117 100  
 82 63.5 48.0 72.0  
 119 32.9 25.8 38.8





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 11.48 min Scan# 3207

Delta R.T. 0.00 min

Lab File: VU027058.D

Acq: 23 Sep 2018 08:26

Instrument :

MSVOA\_U

ClientSampleId :

TB-01-180918

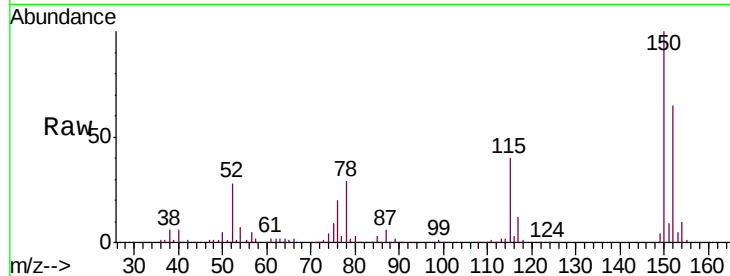
Tgt Ion:152 Resp: 71548

Ion Ratio Lower Upper

152 100

115 60.8 44.9 134.5

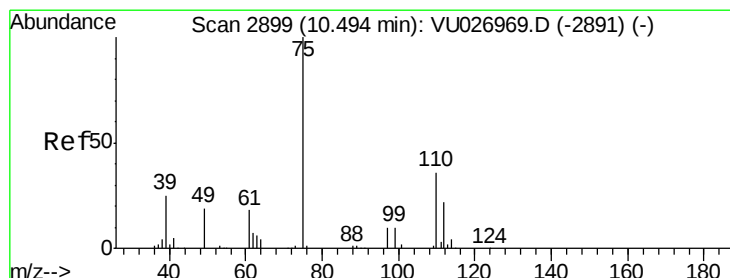
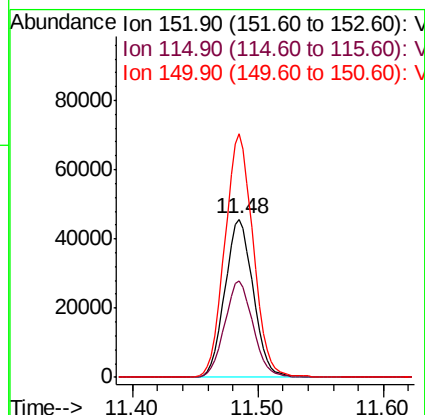
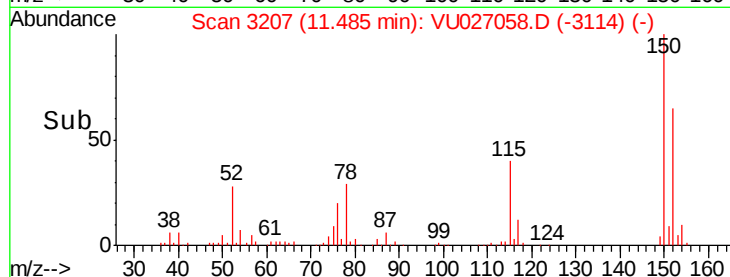
150 154.6 0.0 355.8



Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V



#76

1,2,3-Trichloropropane

Concen: 20.546 ug/l

RT: 10.31 min Scan# 2841

Delta R.T. -0.19 min

Lab File: VU027058.D

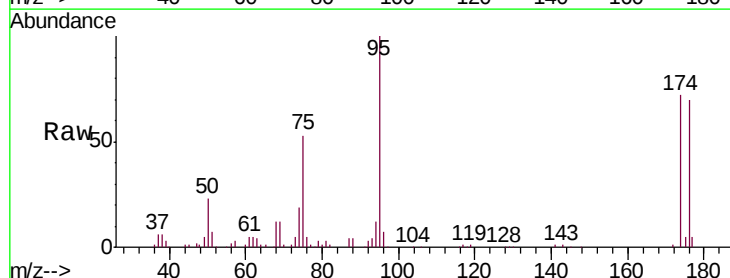
Acq: 23 Sep 2018 08:26

Tgt Ion: 75 Resp: 44658

Ion Ratio Lower Upper

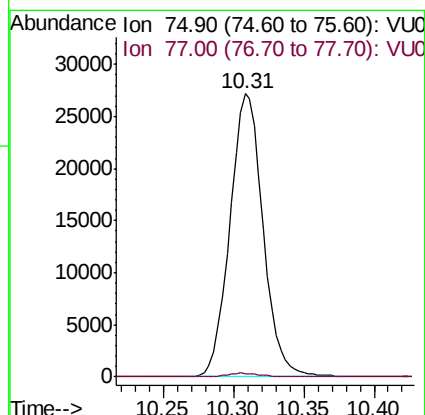
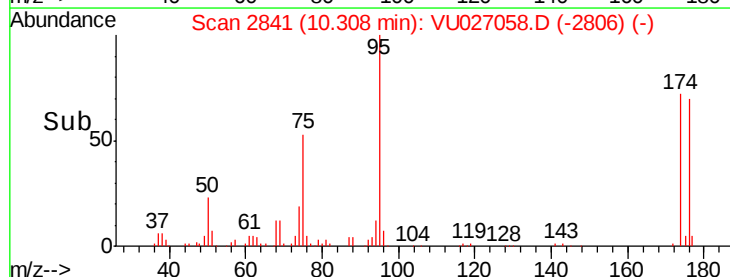
75 100

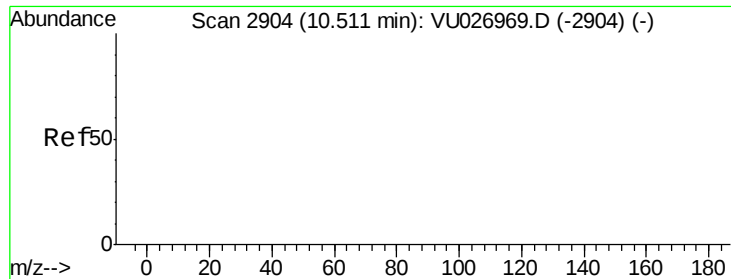
77 1.2 20.9 62.8#



Abundance Ion 74.90 (74.60 to 75.60): VU0

Ion 77.00 (76.70 to 77.70): VU0





#81

trans-1,4-Dichloro-2-butene

Concen: 65.749 ug/l

RT: 10.31 min Scan# 2841

Delta R.T. -0.21 min

Lab File: VU027058.D

Acq: 23 Sep 2018 08:26

Instrument :

MSVOA\_U

ClientSampleId :

TB-01-180918

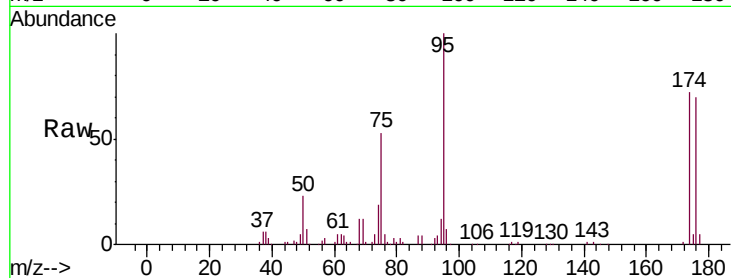
Tgt Ion: 75 Resp: 44658

Ion Ratio Lower Upper

75 100

53 0.0 0.0 0.0

89 0.0 0.0 0.0



Abundance Ion 74.90 (74.60 to 75.60): VU0

Ion 53.00 (52.70 to 53.70): VU0

Ion 88.90 (88.60 to 89.60): VU0

