

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU070318\  
 Data File : VU025185.D  
 Acq On : 03 Jul 2018 12:49  
 Operator : MD/SY  
 Sample : J3809-10  
 Misc : 5.0mL/MSVOA U/WATER  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 MW-13-062818

Quant Time: Jul 04 04:57:15 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\82U061318W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jun 13 13:55:26 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 4.99  | 168  | 270422   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 5.89  | 114  | 398416   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 9.09  | 117  | 363272   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 11.49 | 152  | 198245   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|-----------------------------|-------|------|----------|-------|--------|----------|
| 33) 1,2-Dichloroethane-d4   | 5.31  | 65   | 184450   | 41.78 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 83.56% |          |
| 35) Dibromofluoromethane    | 4.89  | 113  | 144712   | 43.77 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 87.54% |          |
| 50) Toluene-d8              | 7.57  | 98   | 576861   | 47.83 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 95.66% |          |
| 62) 4-Bromofluorobenzene    | 10.31 | 95   | 210021   | 43.86 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 87.72% |          |

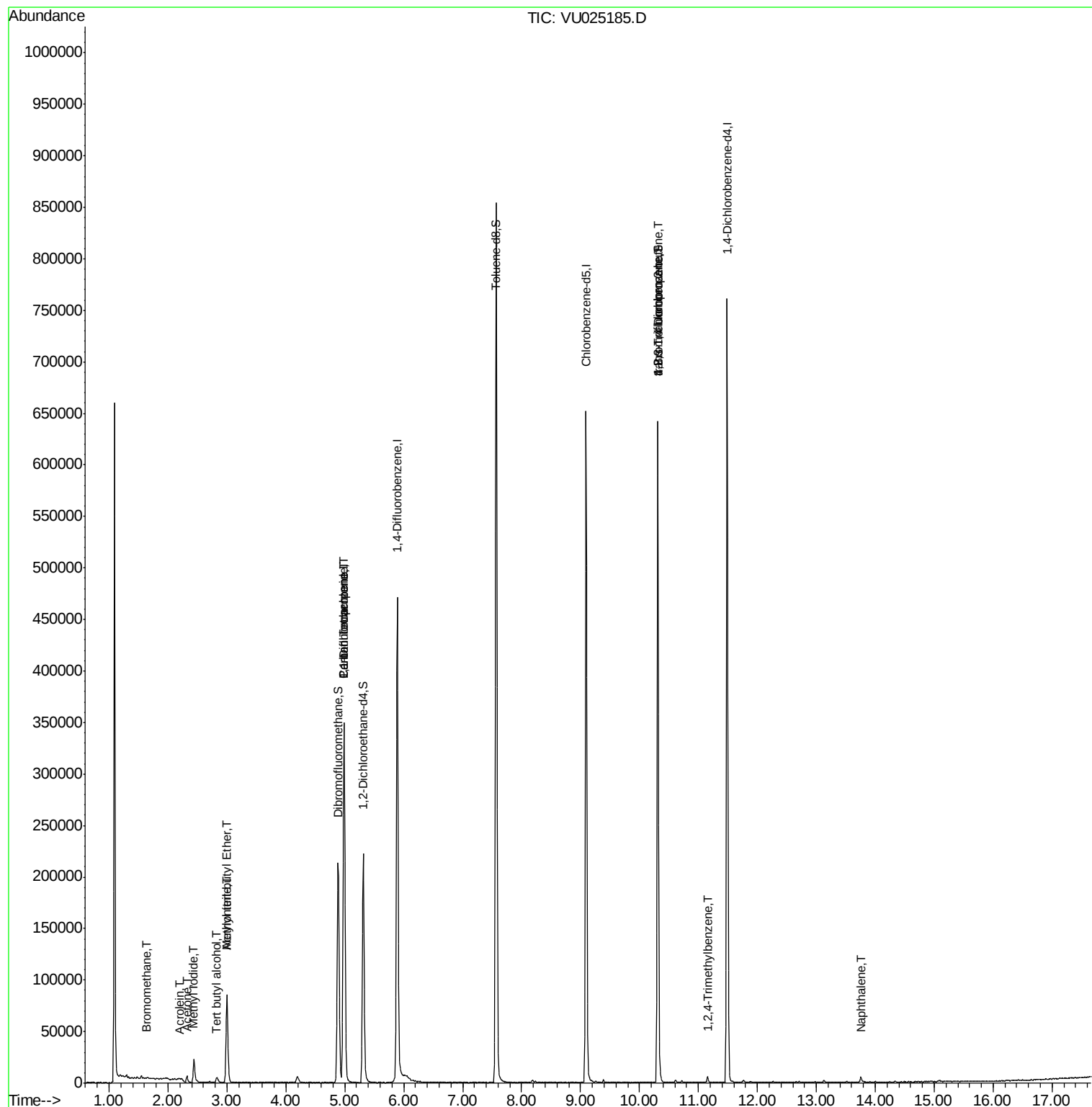
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 5) Bromomethane                | 1.64  | 94   | 461      | 0.267     | ug/l   | 97     |
| 6) Chloroethane                | 1.70  | 64   | 19       | Below Cal | #      | 43     |
| 10) Methyl Iodide              | 2.42  | 142  | 224      | 5.359     | ug/l # | 40     |
| 11) Tert butyl alcohol         | 2.83  | 59   | 5861     | 5.459     | ug/l # | 72     |
| 13) Acrolein                   | 2.20  | 56   | 305      | 0.541     | ug/l # | 13     |
| 15) Acrylonitrile              | 3.00  | 53   | 847      | 0.405     | ug/l # | 20     |
| 16) Acetone                    | 2.32  | 43   | 6516     | 2.747     | ug/l   | 96     |
| 19) Methyl tert-butyl Ether    | 3.00  | 73   | 91642    | 7.918     | ug/l   | 97     |
| 31) Cyclohexane                | 4.99  | 56   | 5189     | Below Cal | #      | 1      |
| 36) 1,1-Dichloropropene        | 4.99  | 75   | 20496    | 4.378     | ug/l # | 51     |
| 38) Carbon Tetrachloride       | 4.99  | 117  | 26910    | 5.227     | ug/l # | 16     |
| 76) 1,2,3-Trichloropropane     | 10.31 | 75   | 109106   | 24.998    | ug/l # | 35     |
| 81) trans-1,4-Dichloro-2-buten | 10.31 | 75   | 109106   | 57.855    | ug/l # | 100    |
| 84) 1,2,4-Trimethylbenzene     | 11.16 | 105  | 3508     | 0.261     | ug/l   | 91     |
| 95) Naphthalene                | 13.76 | 128  | 5443     | 1.048     | ug/l # | 92     |

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

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Quant Title : SW846 8260  
QLast Update : Wed Jun 13 13:55:26 2018  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 4.99 min Scan# 1368

Delta R.T. 0.00 min

Lab File: VU025185.D

Acq: 03 Jul 2018 12:49

Instrument :

MSVOA\_U

ClientSampleId :

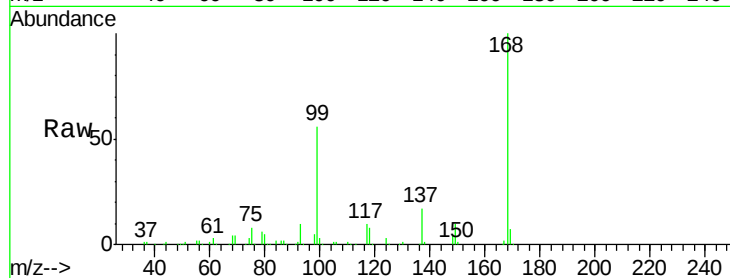
MW-13-062818

Tot Ion:168 Resp: 270422

Ion Ratio Lower Upper

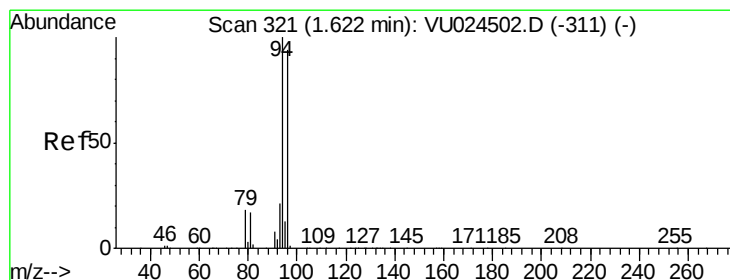
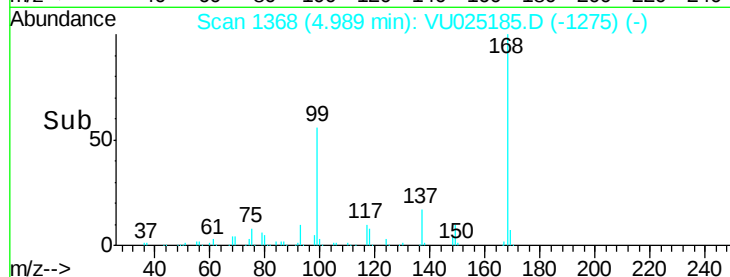
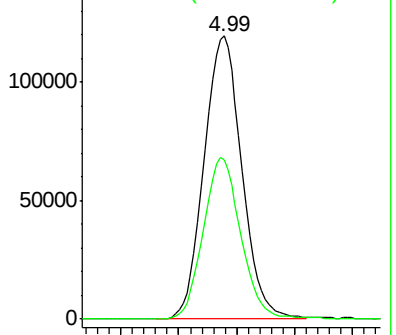
168 100

99 56.3 43.2 64.8



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VU0



#5

Bromomethane

Concen: 0.267 ug/l

RT: 1.64 min Scan# 327

Delta R.T. 0.02 min

Lab File: VU025185.D

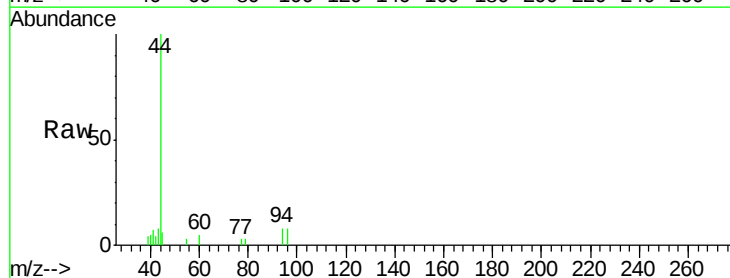
Acq: 03 Jul 2018 12:49

Tgt Ion: 94 Resp: 461

Ion Ratio Lower Upper

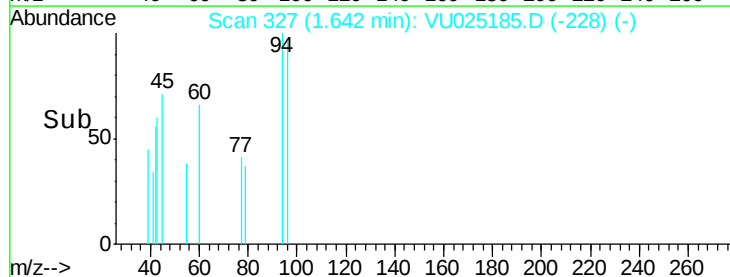
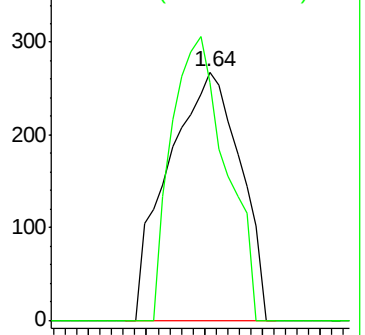
94 100

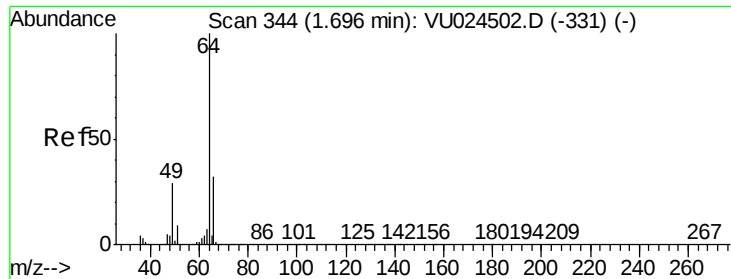
96 95.9 74.5 111.7



Abundance Ion 93.90 (93.60 to 94.60): VU0

Ion 95.90 (95.60 to 96.60): VU0





#6

Chloroethane

Concen: Below Cal

RT: 1.70 min Scan# 346

Delta R.T. 0.01 min

Lab File: VU025185.D

Acq: 03 Jul 2018 12:49

Instrument :

MSVOA\_U

ClientSampleId :

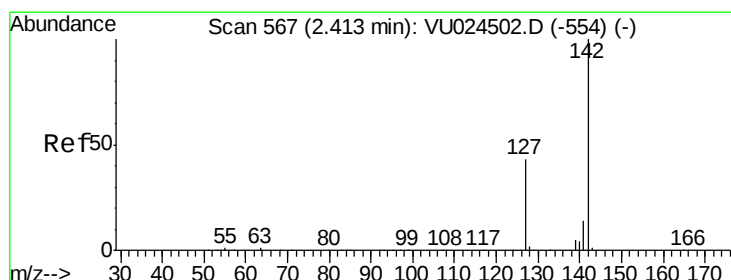
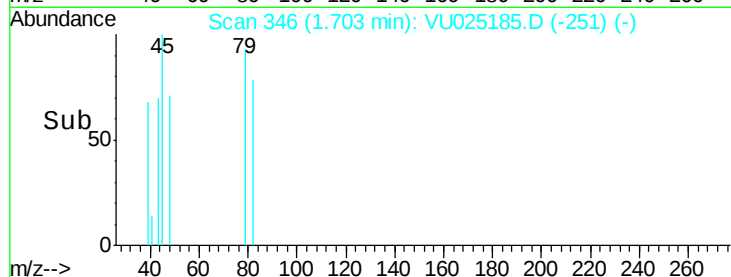
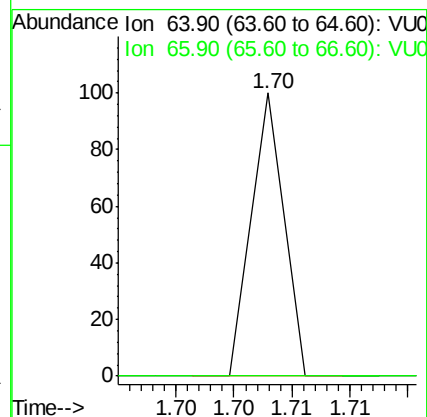
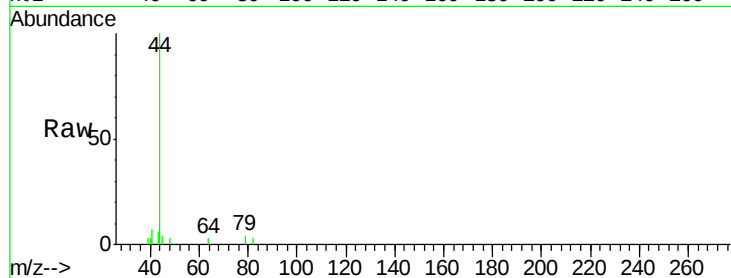
MW-13-062818

Tot Ion: 64 Resp: 19

Ion Ratio Lower Upper

64 100

66 0.0 25.5 38.3#



#10

Methyl Iodide

Concen: 5.359 ug/l

RT: 2.42 min Scan# 568

Delta R.T. 0.00 min

Lab File: VU025185.D

Acq: 03 Jul 2018 12:49

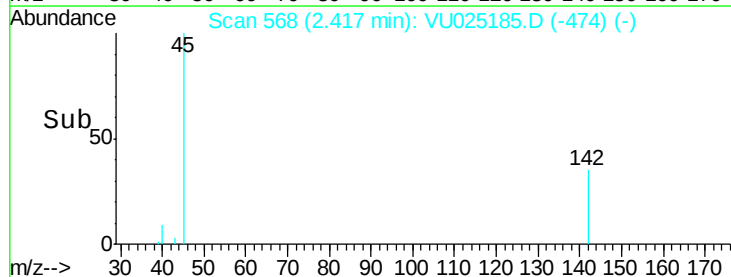
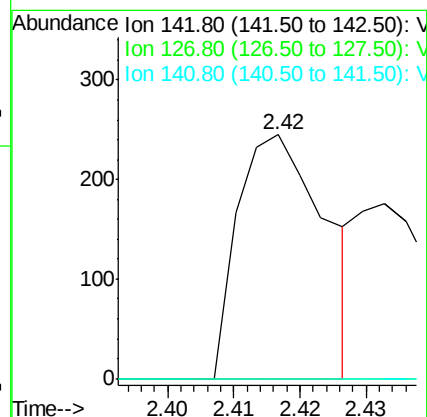
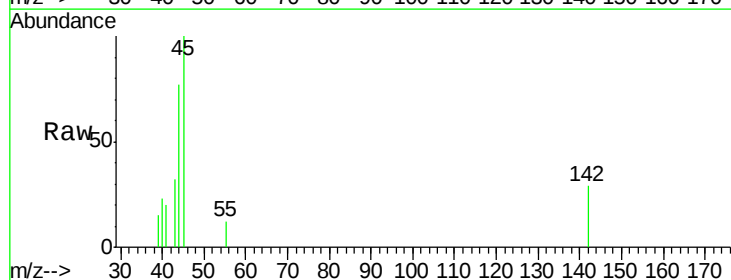
Tgt Ion: 142 Resp: 224

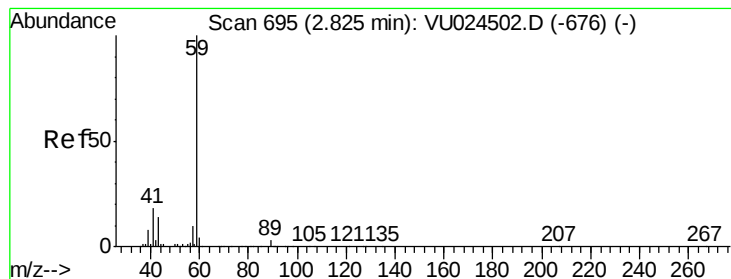
Ion Ratio Lower Upper

142 100

127 0.0 35.6 53.4#

141 0.0 11.7 17.5#



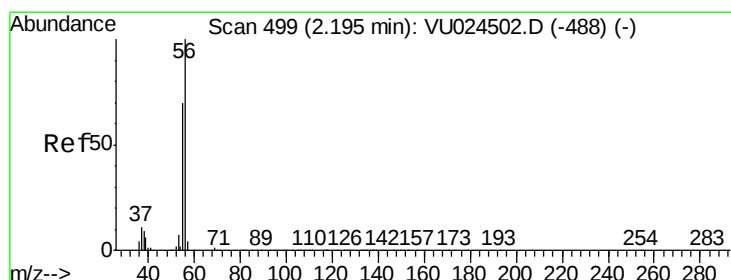
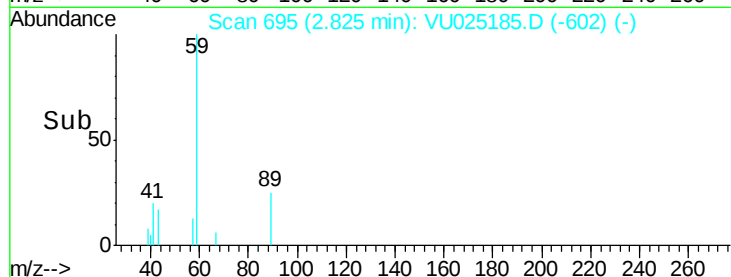
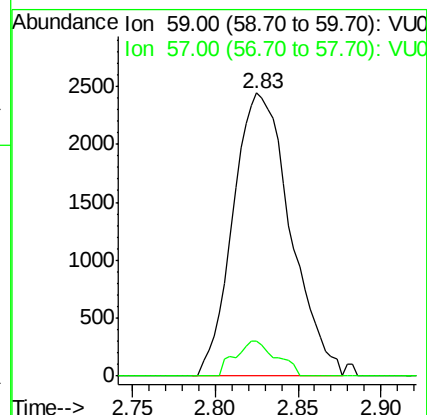
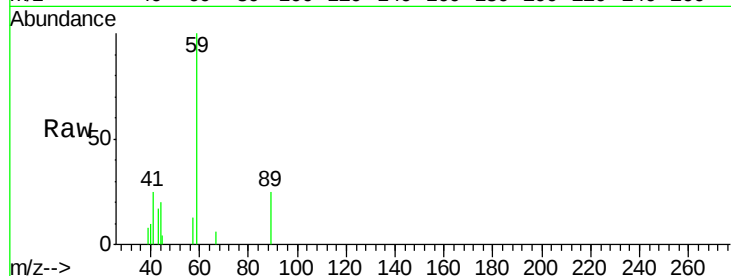


#11

Tert butyl alcohol  
 Concen: 5.459 ug/l  
 RT: 2.83 min Scan# 695  
 Delta R.T. 0.00 min  
 Lab File: VU025185.D  
 Acq: 03 Jul 2018 12:49

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 MW-13-062818

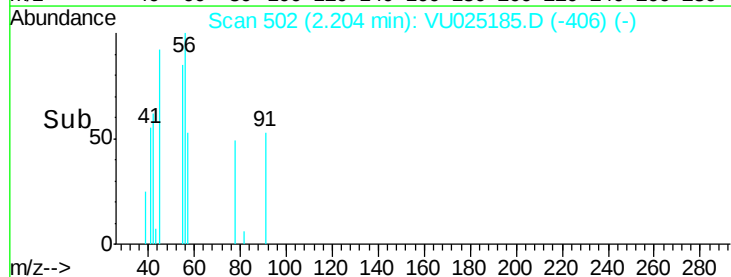
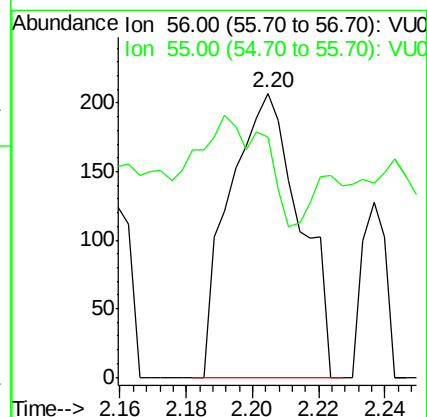
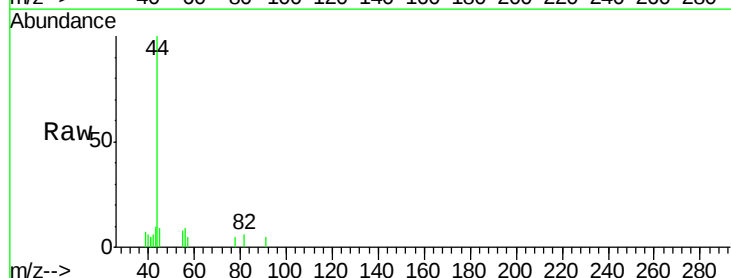
Tot Ion: 59 Resp: 5861  
 Ion Ratio Lower Upper  
 59 100  
 57 0.0 8.5 12.7#

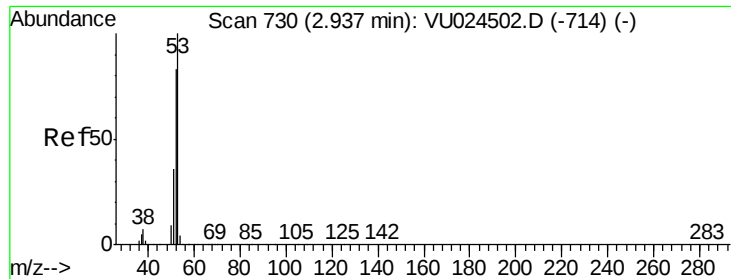


#13

Acrolein  
 Concen: 0.541 ug/l  
 RT: 2.20 min Scan# 502  
 Delta R.T. 0.01 min  
 Lab File: VU025185.D  
 Acq: 03 Jul 2018 12:49

Tgt Ion: 56 Resp: 305  
 Ion Ratio Lower Upper  
 56 100  
 55 0.0 58.4 87.6#





#15

Acrylonitrile

Concen: 0.405 ug/l

RT: 3.00 min Scan# 748

Delta R.T. 0.06 min

Lab File: VU025185.D

Acq: 03 Jul 2018 12:49

Instrument :

MSVOA\_U

ClientSampleId :

MW-13-062818

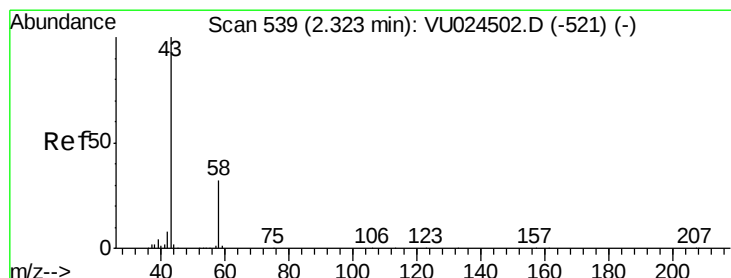
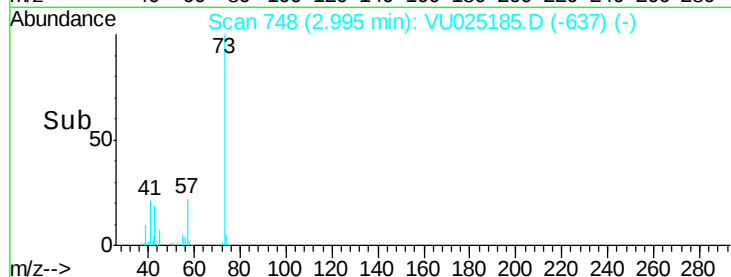
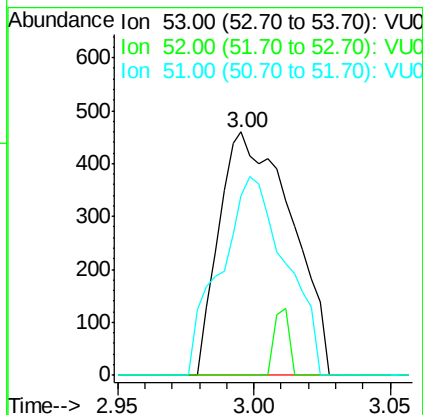
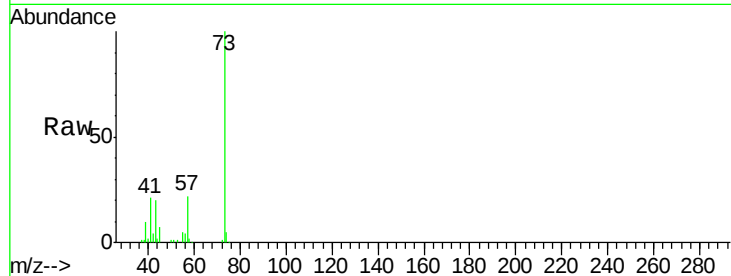
Tot Ion: 53 Resp: 847

Ion Ratio Lower Upper

53 100

52 5.5 67.1 100.7#

51 73.8 28.4 42.6#



#16

Acetone

Concen: 2.747 ug/l

RT: 2.32 min Scan# 539

Delta R.T. 0.00 min

Lab File: VU025185.D

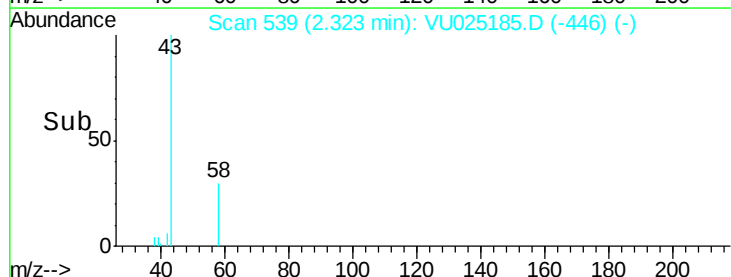
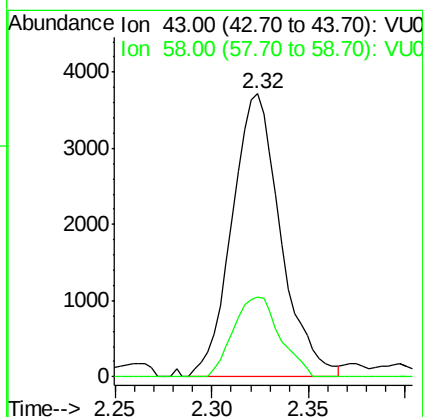
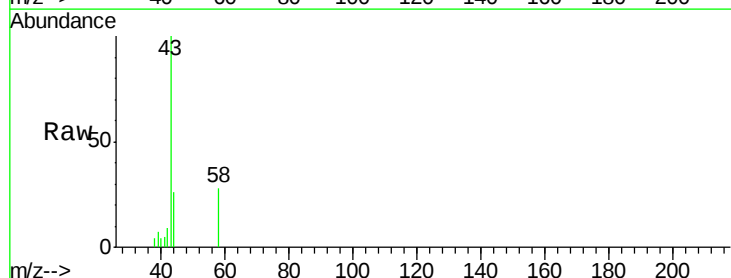
Acq: 03 Jul 2018 12:49

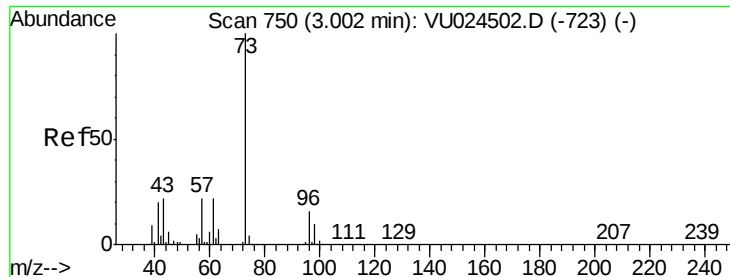
Tgt Ion: 43 Resp: 6516

Ion Ratio Lower Upper

43 100

58 28.2 24.4 36.6

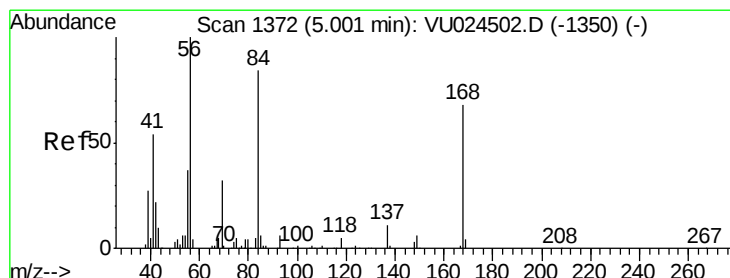
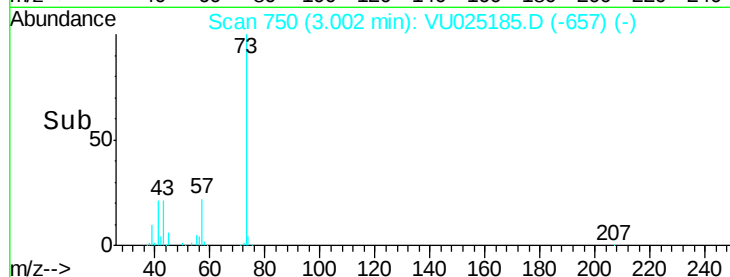
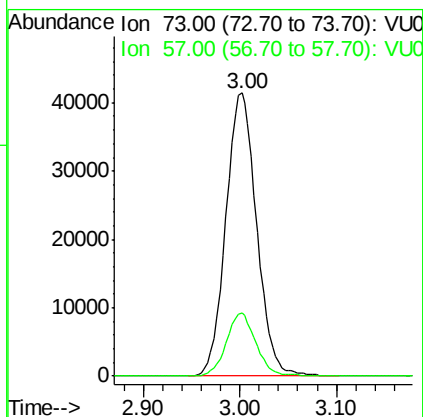
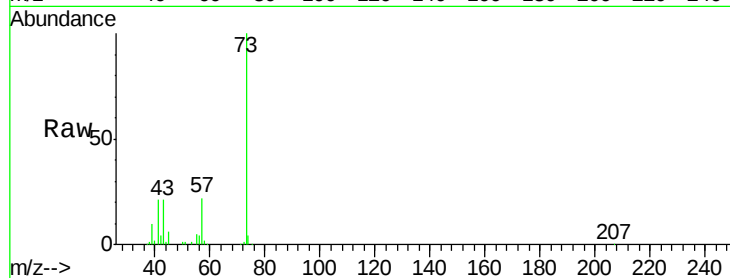




#19  
Methvl tert-butvl Ether  
Concen: 7.918 ug/l  
RT: 3.00 min Scan# 750  
Delta R.T. 0.00 min  
Lab File: VU025185.D  
Acq: 03 Jul 2018 12:49

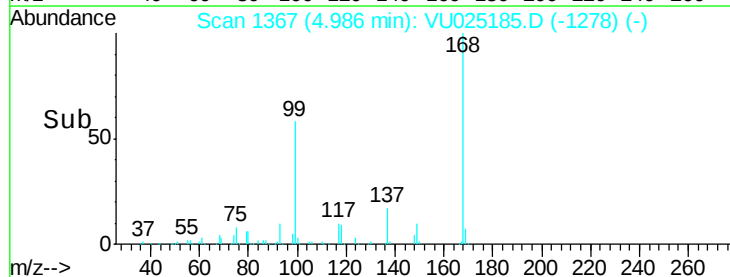
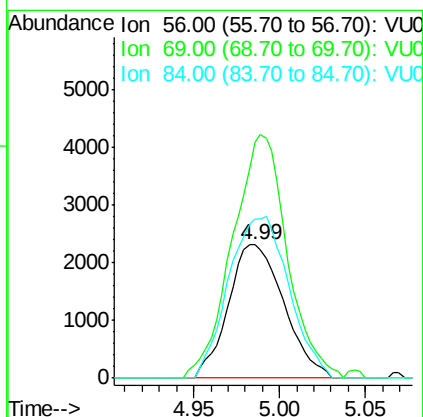
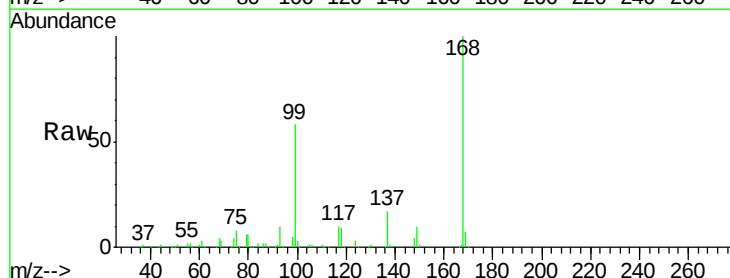
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MSVOA\_U  
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Tot Ion: 73 Resp: 91642  
Ion Ratio Lower Upper  
73 100  
57 22.2 18.8 28.2



#31  
Cyclohexane  
Concen: Below Cal  
RT: 4.99 min Scan# 1367  
Delta R.T. -0.02 min  
Lab File: VU025185.D  
Acq: 03 Jul 2018 12:49

Tgt Ion: 56 Resp: 5189  
Ion Ratio Lower Upper  
56 100  
69 172.1 24.8 37.2#  
84 119.2 65.2 97.8#

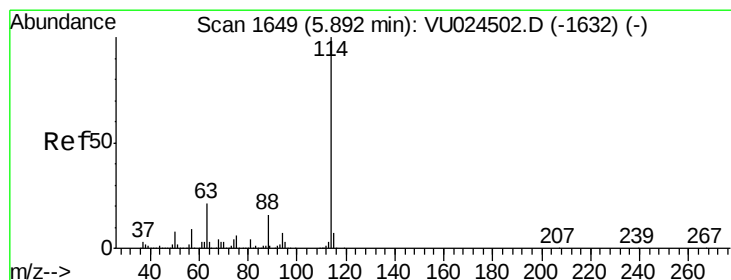
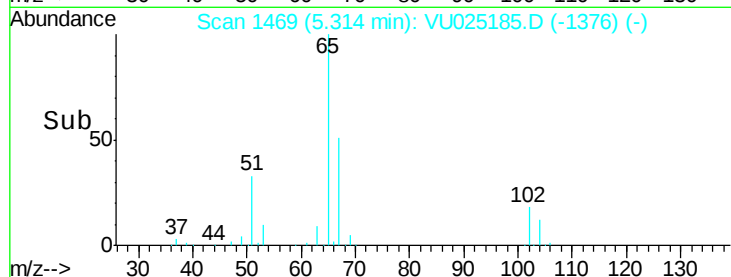
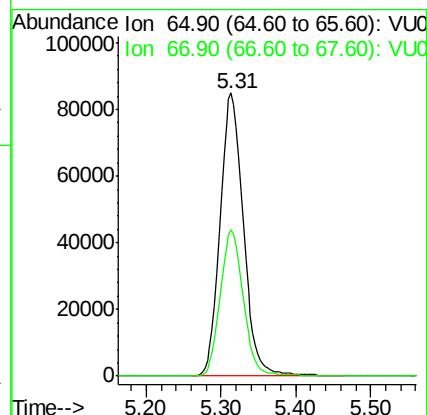
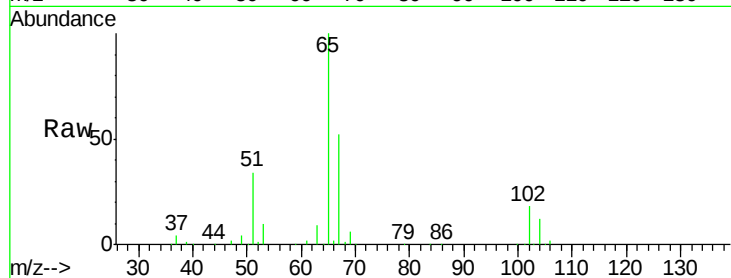




#33  
 1,2-Dichloroethane-d4  
 Concen: 41.781 ug/l  
 RT: 5.31 min Scan# 1469  
 Delta R.T. 0.00 min  
 Lab File: VU025185.D  
 Acq: 03 Jul 2018 12:49

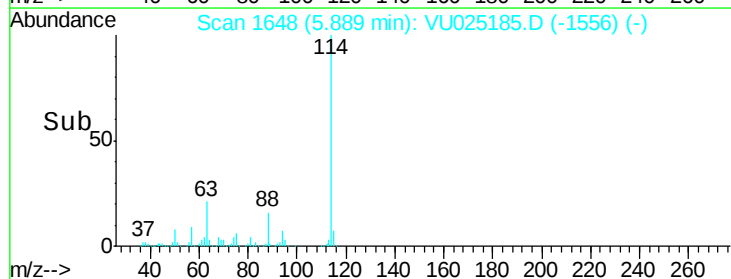
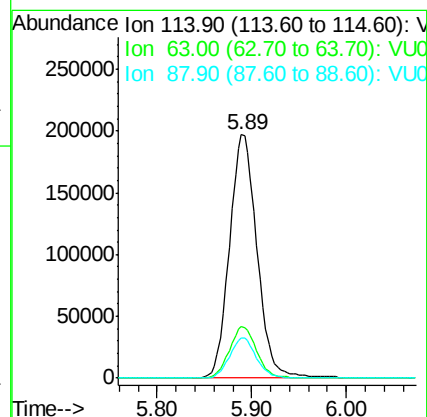
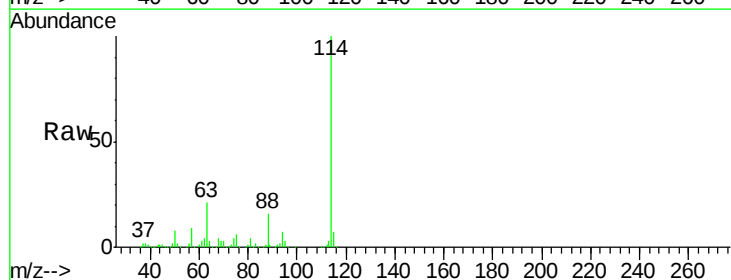
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 MW-13-062818

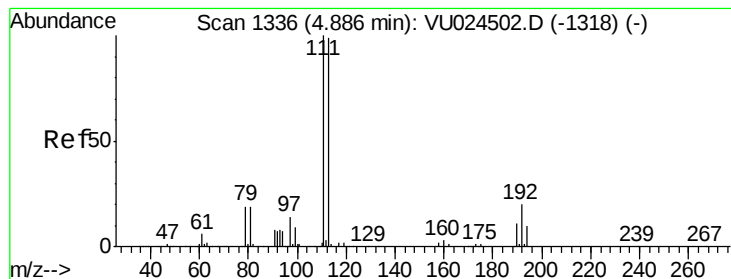
Tot Ion: 65 Resp: 184450  
 Ion Ratio Lower Upper  
 65 100  
 67 50.6 0.0 107.0



#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 5.89 min Scan# 1648  
 Delta R.T. -0.00 min  
 Lab File: VU025185.D  
 Acq: 03 Jul 2018 12:49

Tgt Ion: 114 Resp: 398416  
 Ion Ratio Lower Upper  
 114 100  
 63 21.1 0.0 45.4  
 88 16.4 0.0 31.0





#35

Dibromofluoromethane

Concen: 43.765 ug/l

RT: 4.89 min Scan# 1336

Delta R.T. 0.00 min

Lab File: VU025185.D

Acq: 03 Jul 2018 12:49

Instrument :

MSVOA\_U

ClientSampleId :

MW-13-062818

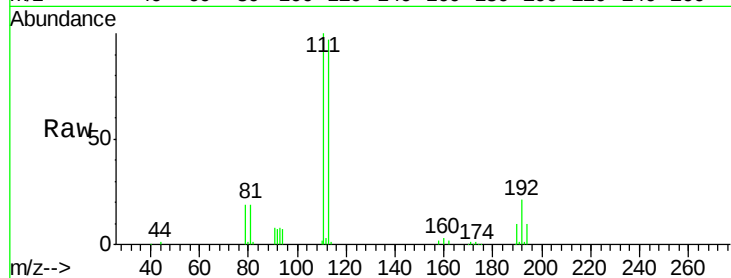
Tot Ion:113 Resp: 144712

Ion Ratio Lower Upper

113 100

111 103.7 82.2 123.4

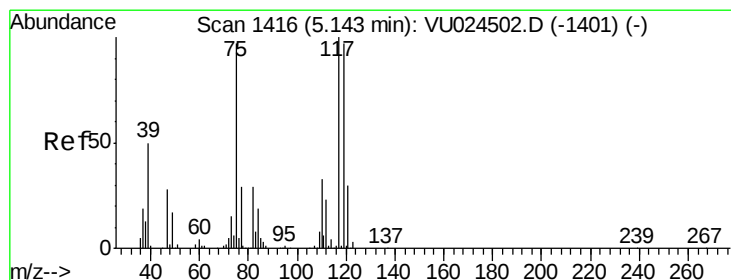
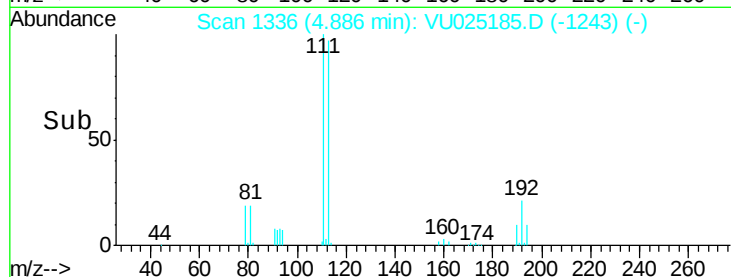
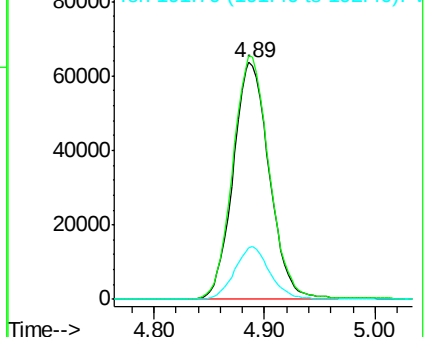
192 21.5 16.2 24.4



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: 4.378 ug/l

RT: 4.99 min Scan# 1367

Delta R.T. -0.16 min

Lab File: VU025185.D

Acq: 03 Jul 2018 12:49

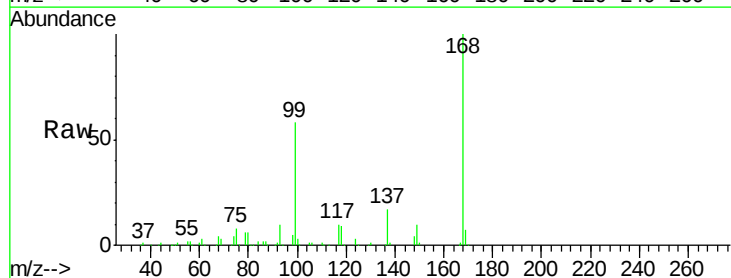
Tgt Ion: 75 Resp: 20496

Ion Ratio Lower Upper

75 100

110 9.4 17.0 50.9#

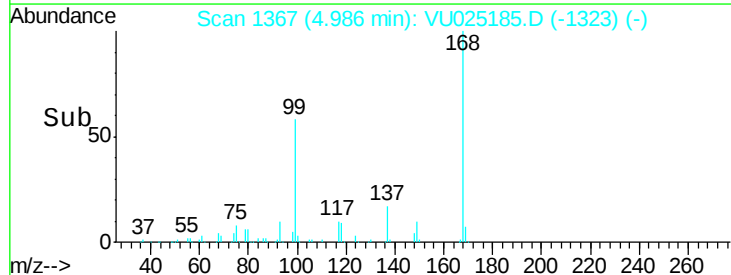
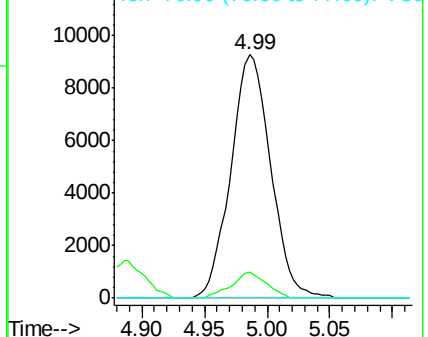
77 0.0 24.2 36.4#

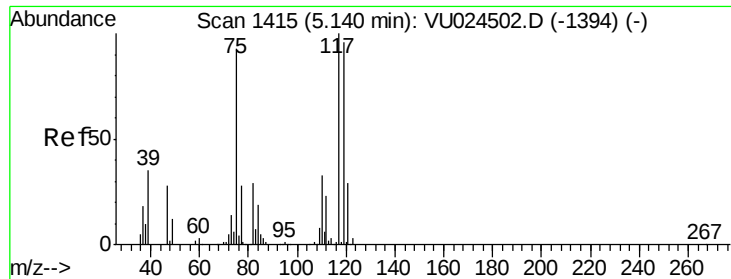


Abundance Ion 74.90 (74.60 to 75.60): VU0

Ion 109.90 (109.60 to 110.60): V

Ion 76.90 (76.60 to 77.60): VU0





#38

Carbon Tetrachloride

Concen: 5.227 ug/l

RT: 4.99 min Scan# 1368

Delta R.T. -0.15 min

Lab File: VU025185.D

Acq: 03 Jul 2018 12:49

Instrument :

MSVOA\_U

ClientSampleId :

MW-13-062818

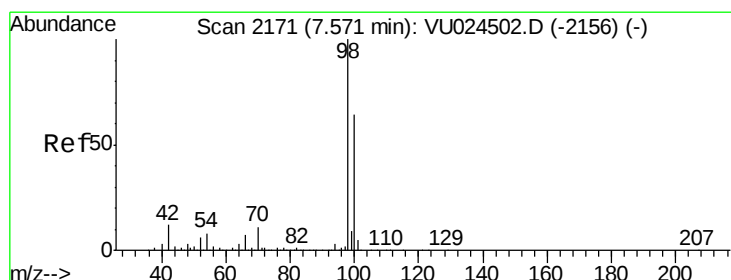
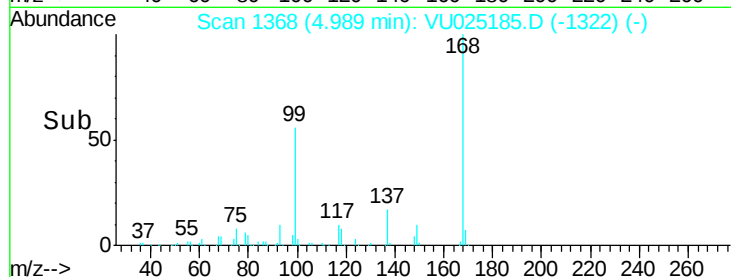
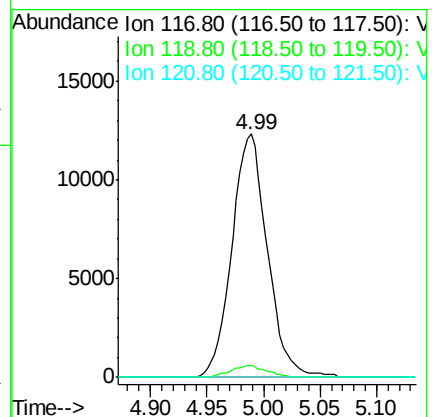
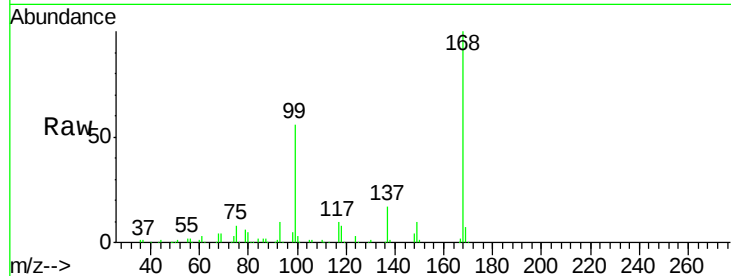
Tot Ion:117 Resp: 26910

Ion Ratio Lower Upper

117 100

119 4.7 76.1 114.1#

121 0.0 23.7 35.5#



#50

Toluene-d8

Concen: 47.829 ug/l

RT: 7.57 min Scan# 2170

Delta R.T. -0.00 min

Lab File: VU025185.D

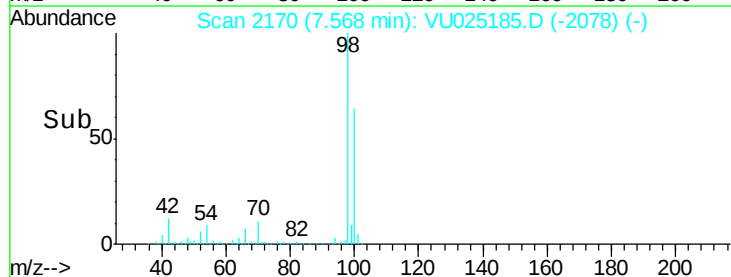
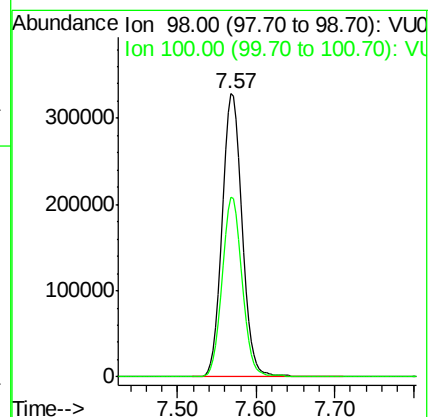
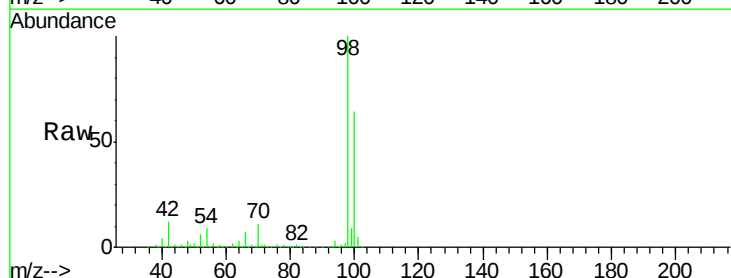
Acq: 03 Jul 2018 12:49

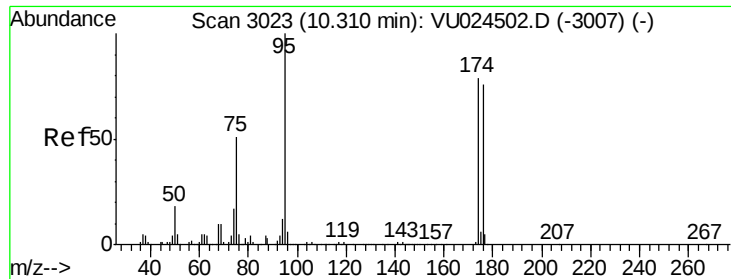
Tgt Ion: 98 Resp: 576861

Ion Ratio Lower Upper

98 100

100 63.3 51.1 76.7





#62

4-Bromofluorobenzene

Concen: 43.858 ug/l

RT: 10.31 min Scan# 3023

Delta R.T. 0.00 min

Lab File: VU025185.D

Acq: 03 Jul 2018 12:49

Instrument :

MSVOA\_U

ClientSampleId :

MW-13-062818

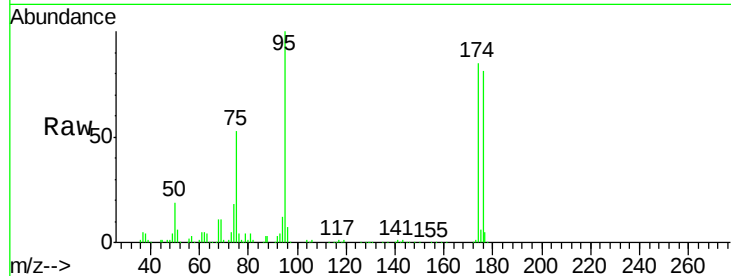
Tot Ion: 95 Resp: 210021

Ion Ratio Lower Upper

95 100

174 84.2 0.0 165.8

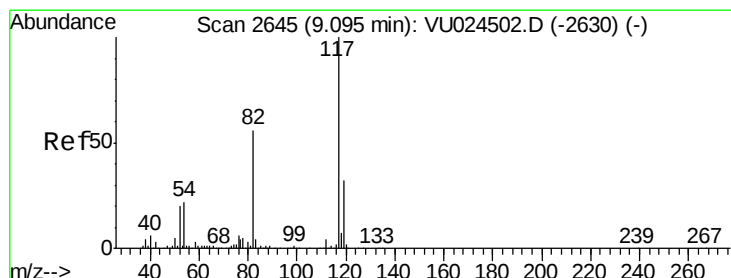
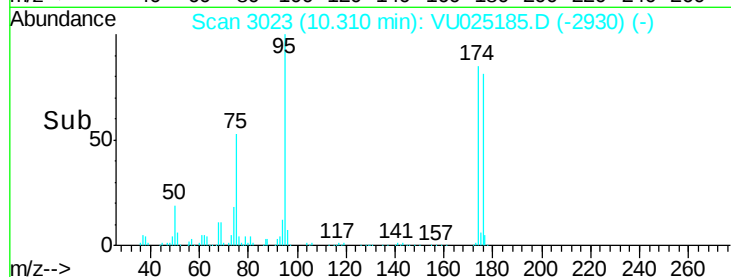
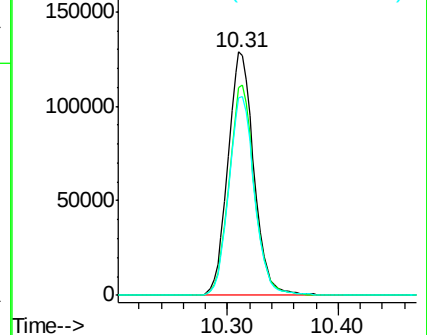
176 81.2 0.0 159.4



Abundance Ion 94.90 (94.60 to 95.60): VU024502.D (-3007) (-)

Ion 173.80 (173.50 to 174.50): VU024502.D (-3007) (-)

Ion 175.80 (175.50 to 176.50): VU024502.D (-3007) (-)



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 9.09 min Scan# 2645

Delta R.T. 0.00 min

Lab File: VU025185.D

Acq: 03 Jul 2018 12:49

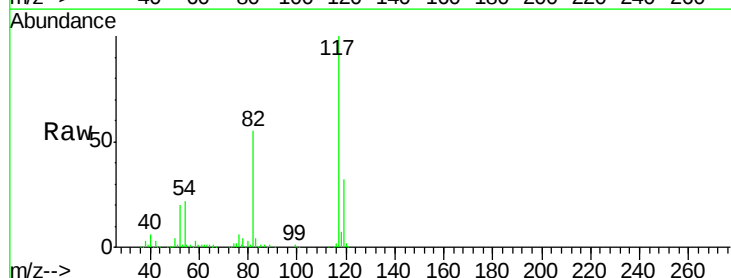
Tgt Ion: 117 Resp: 363272

Ion Ratio Lower Upper

117 100

82 55.5 44.3 66.5

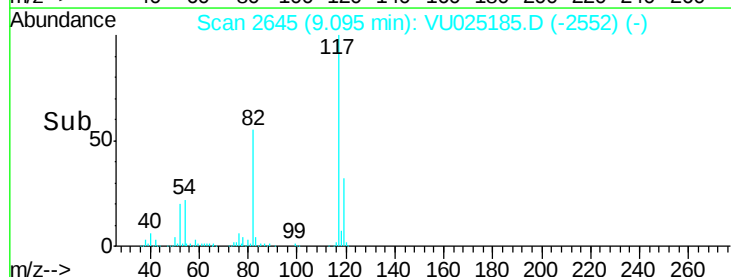
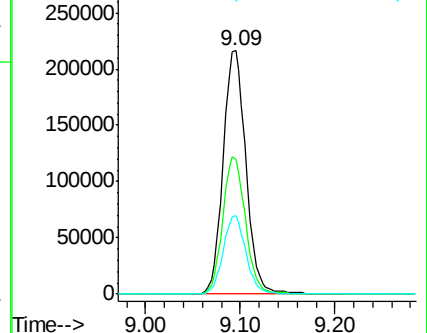
119 32.1 25.4 38.2

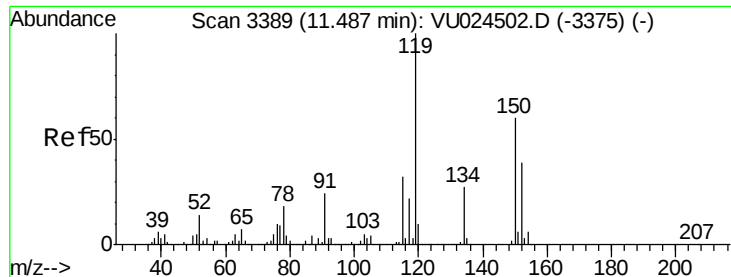


Abundance Ion 116.90 (116.60 to 117.60): VU024502.D (-2630) (-)

Ion 82.00 (81.70 to 82.70): VU024502.D (-2630) (-)

Ion 118.90 (118.60 to 119.60): VU024502.D (-2630) (-)





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 11.49 min Scan# 3389

Delta R.T. 0.00 min

Lab File: VU025185.D

Acq: 03 Jul 2018 12:49

Instrument :

MSVOA\_U

ClientSampleId :

MW-13-062818

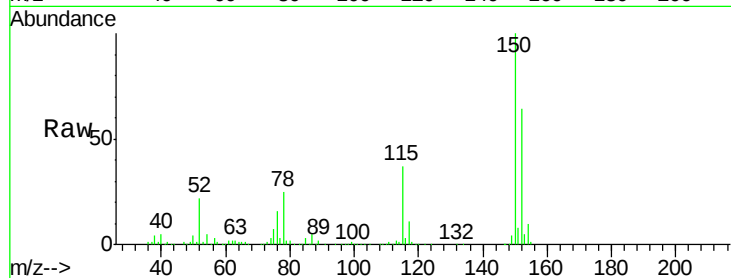
Tot Ion:152 Resp: 198245

Ion Ratio Lower Upper

152 100

115 58.1 43.0 129.0

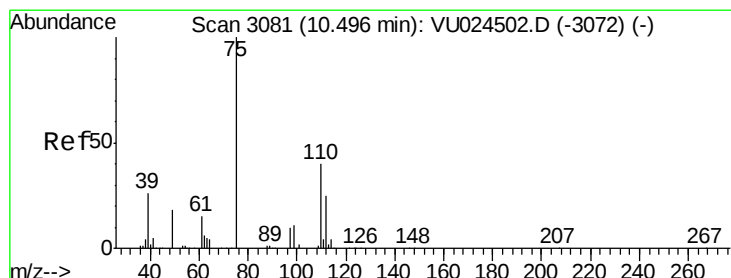
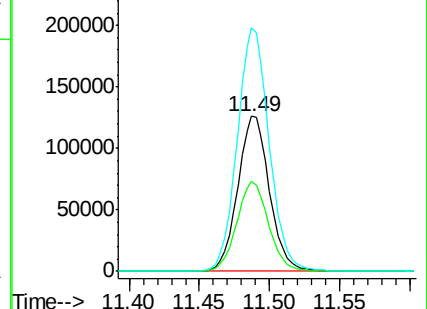
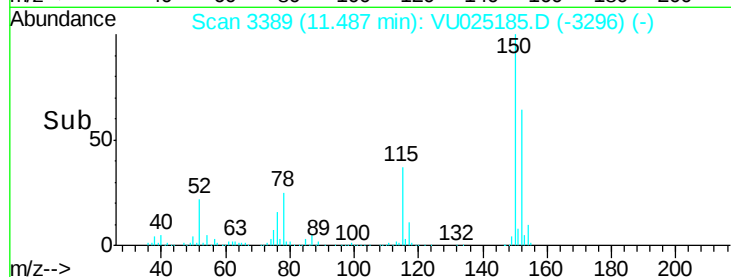
150 158.4 0.0 354.0



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



#76

1,2,3-Trichloropropane

Concen: 24.998 ug/l

RT: 10.31 min Scan# 3023

Delta R.T. -0.19 min

Lab File: VU025185.D

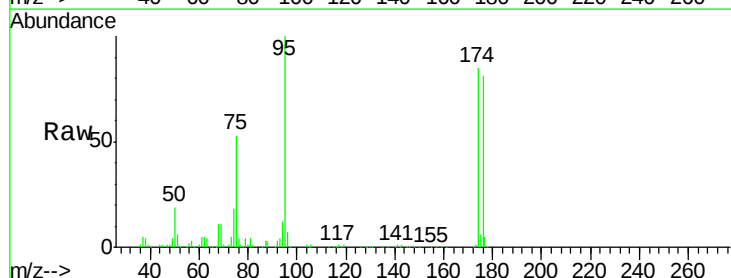
Acq: 03 Jul 2018 12:49

Tgt Ion: 75 Resp: 109106

Ion Ratio Lower Upper

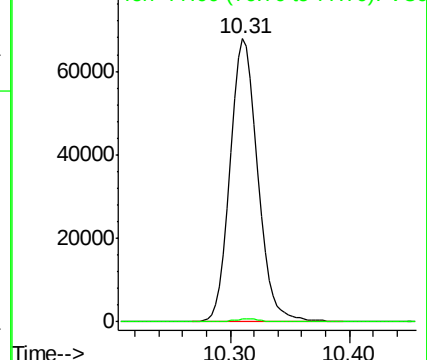
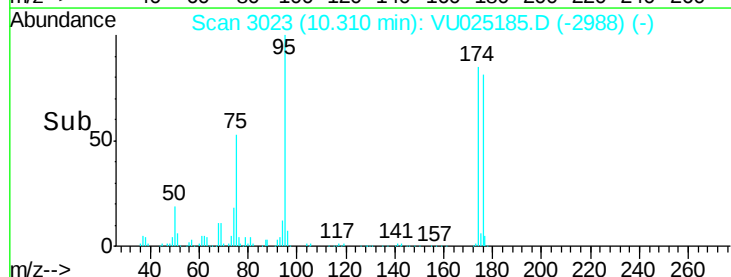
75 100

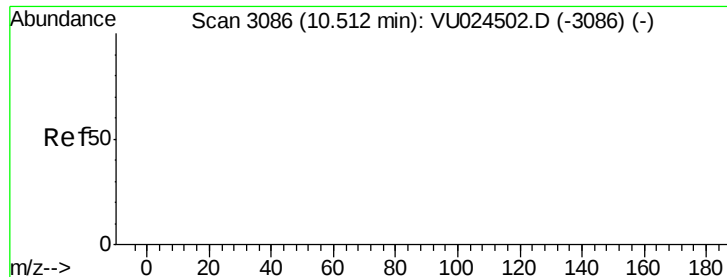
77 1.0 20.9 62.7#



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: 57.855 ug/l

RT: 10.31 min Scan# 3023

Delta R.T. -0.20 min

Lab File: VU025185.D

Acq: 03 Jul 2018 12:49

Instrument :

MSVOA\_U

ClientSampleId :

MW-13-062818

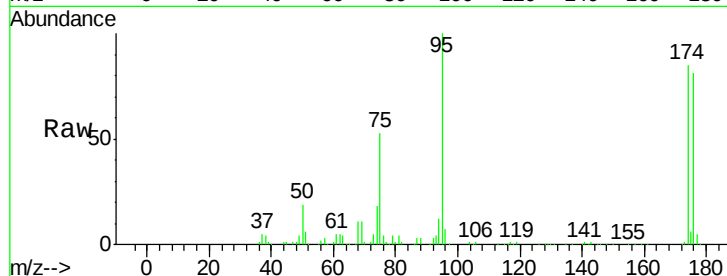
Tot Ion: 75 Resp: 109106

Ion Ratio Lower Upper

75 100

53 0.0 0.0 0.0

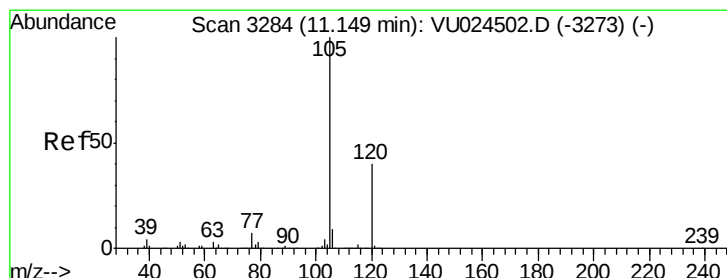
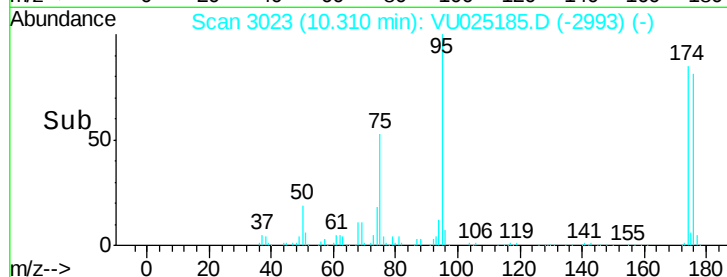
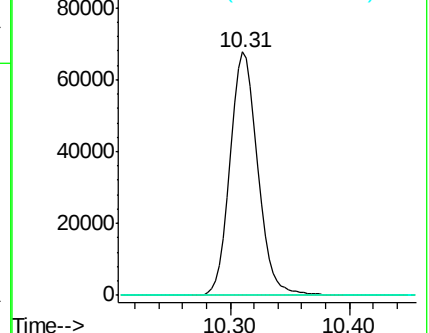
89 0.0 0.0 0.0



Abundance Ion 74.90 (74.60 to 75.60): VU024502.D (-3086) (-)

Ion 53.00 (52.70 to 53.70): VU024502.D (-3086) (-)

Ion 88.90 (88.60 to 89.60): VU024502.D (-3086) (-)



#84

1,2,4-Trimethylbenzene

Concen: 0.261 ug/l

RT: 11.16 min Scan# 3286

Delta R.T. 0.01 min

Lab File: VU025185.D

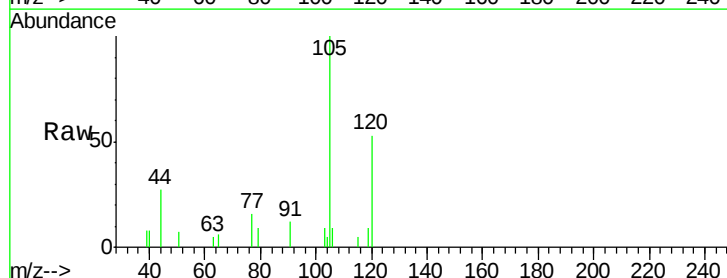
Acq: 03 Jul 2018 12:49

Tgt Ion: 105 Resp: 3508

Ion Ratio Lower Upper

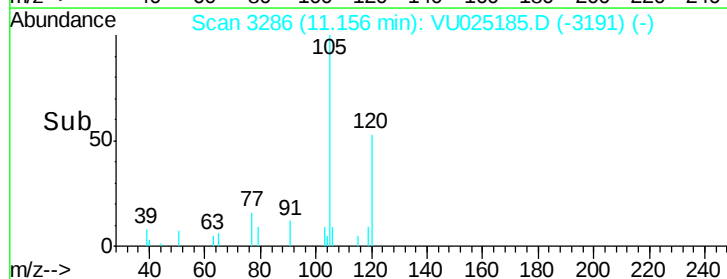
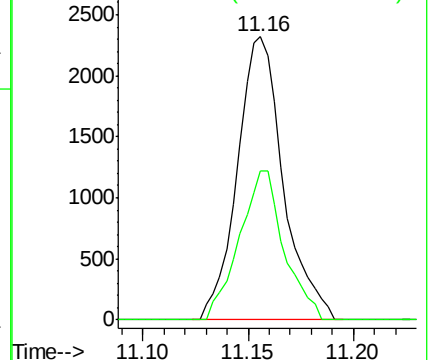
105 100

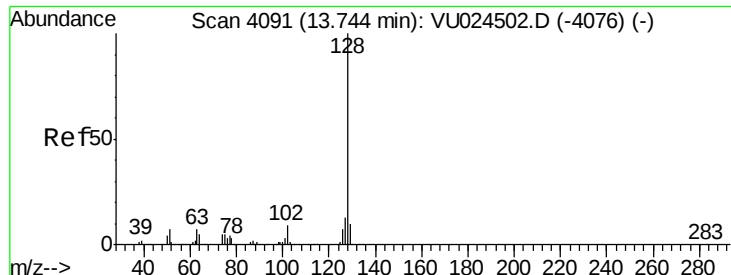
120 50.9 22.6 67.8



Abundance Ion 105.00 (104.70 to 105.70): VU024502.D (-3273) (-)

Ion 120.00 (119.70 to 120.70): VU024502.D (-3273) (-)





#95  
Naphthalene  
Concen: 1.048 ug/l  
RT: 13.76 min Scan# 4095  
Delta R.T. 0.01 min  
Lab File: VU025185.D  
Acq: 03 Jul 2018 12:49

Instrument :  
MSVOA\_U  
ClientSampleId :  
MW-13-062818

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 128     | 100   |       |       |
| 127     | 9.4   | 10.6  | 16.0# |
| 129     | 8.6   | 8.6   | 12.8  |

