

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_U\DATA\VU092018\  
 Data File : VU026908.D  
 Acq On : 19 Sep 2018 19:38  
 Operator : MD/SY  
 Sample : J4934-02  
 Misc : 5.0mL/MSVOA\_U/WATER  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 FT-PZ461I-20180912

Quant Time: Sep 20 05:35:26 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\82U091218W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Sep 12 05:32:45 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 4.99  | 168  | 80305    | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 5.89  | 114  | 135761   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 9.09  | 117  | 133498   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 11.48 | 152  | 72096    | 50.00 | ug/l  | 0.00     |

|                             |        |     |          |       |         |      |
|-----------------------------|--------|-----|----------|-------|---------|------|
| System Monitoring Compounds |        |     |          |       |         |      |
| 33) 1,2-Dichloroethane-d4   | 5.31   | 65  | 68278    | 56.05 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 112.10% |      |
| 35) Dibromofluoromethane    | 4.88   | 113 | 60935    | 55.03 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 110.06% |      |
| 50) Toluene-d8              | 7.57   | 98  | 200106   | 48.86 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 97.72%  |      |
| 62) 4-Bromofluorobenzene    | 10.31  | 95  | 66890    | 45.06 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 90.12%  |      |

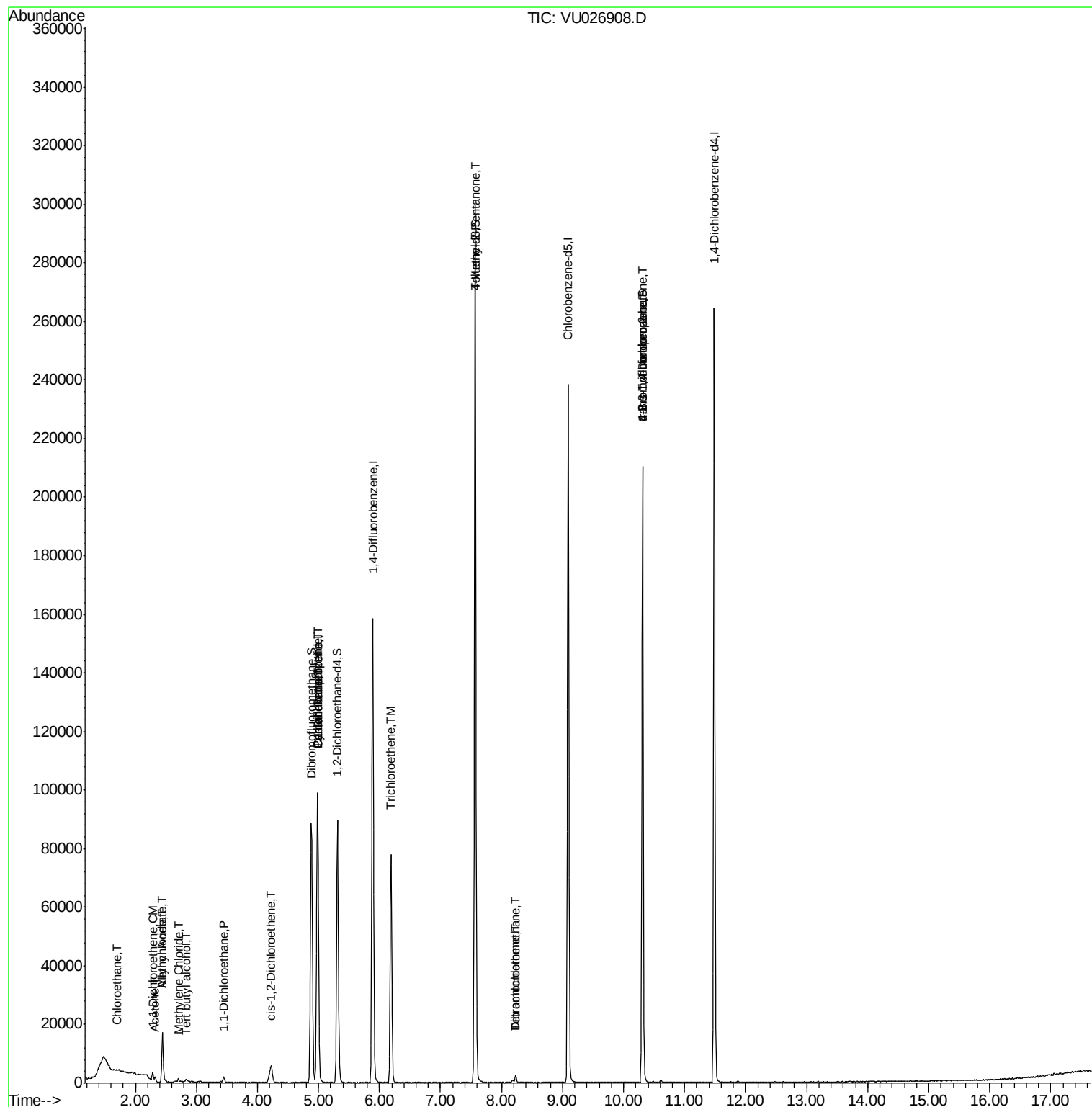
| Target Compounds               |       |     |       |        |        | Qvalue |
|--------------------------------|-------|-----|-------|--------|--------|--------|
| 6) Chloroethane                | 1.70  | 64  | 330   | 0.413  | ug/l # | 44     |
| 11) Tert butyl alcohol         | 2.84  | 59  | 671   | 2.260  | ug/l # | 73     |
| 12) 1,1-Dichloroethene         | 2.28  | 96  | 978   | 1.061  | ug/l   | 84     |
| 14) Allyl chloride             | 2.44  | 41  | 1636  | 0.985  | ug/l # | 66     |
| 16) Acetone                    | 2.32  | 43  | 2134  | 3.094  | ug/l   | 95     |
| 18) Methyl Acetate             | 2.44  | 43  | 4414  | 2.966  | ug/l # | 54     |
| 20) Methylene Chloride         | 2.70  | 84  | 322   | 0.288  | ug/l   | 91     |
| 24) 1,1-Dichloroethane         | 3.45  | 63  | 2447  | 1.252  | ug/l # | 88     |
| 27) cis-1,2-Dichloroethene     | 4.23  | 96  | 3041  | 2.717  | ug/l   | 84     |
| 31) Cyclohexane                | 4.99  | 56  | 1345  | 0.574  | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 4.99  | 75  | 5295  | 3.474  | ug/l # | 48     |
| 38) Carbon Tetrachloride       | 4.99  | 117 | 7298  | 4.532  | ug/l # | 16     |
| 44) Trichloroethene            | 6.19  | 130 | 28816 | 24.596 | ug/l   | 91     |
| 51) 4-Methyl-2-Pentanone       | 7.57  | 43  | 701   | 0.376  | ug/l # | 1      |
| 60) Dibromochloromethane       | 8.23  | 129 | 534   | 0.408  | ug/l # | 11     |
| 64) Tetrachloroethene          | 8.23  | 164 | 651   | 0.613  | ug/l # | 88     |
| 76) 1,2,3-Trichloropropane     | 10.31 | 75  | 32609 | 20.191 | ug/l # | 35     |
| 81) trans-1,4-Dichloro-2-buten | 10.31 | 75  | 32609 | 62.557 | ug/l # | 100    |

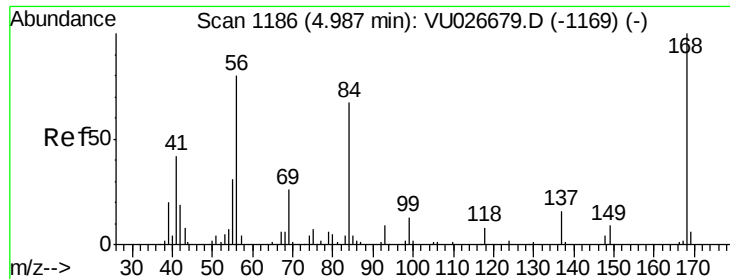
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA\_U\DATA\VU092018\  
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Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_U\METHOD\82U091218W.M  
Quant Title : SW846 8260  
QLast Update : Wed Sep 12 05:32:45 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: VU026908.D

Acq: 19 Sep 2018 19:38

Instrument :

MSVOA\_U

ClientSampleId :

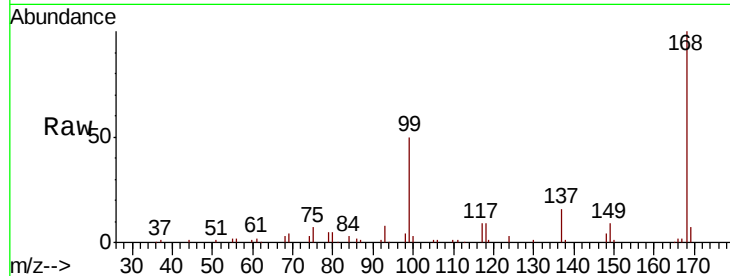
FT-PZ461I-20180912

Tgt Ion:168 Resp: 80305

Ion Ratio Lower Upper

168 100

99 50.3 42.0 63.0



Abundance Ion 167.90 (167.60 to 168.60): VU026679.D (-1169) (-)

Ion 98.90 (98.60 to 99.60): VU026679.D (-1169) (-)

4.99

40000

30000

20000

10000

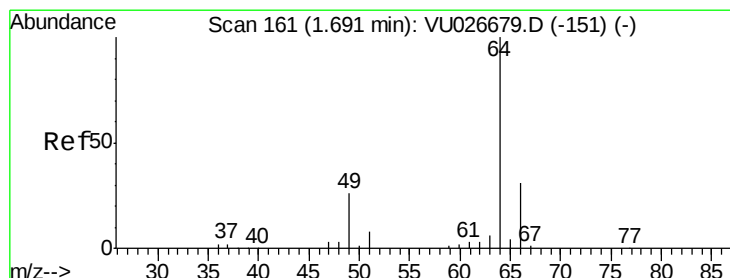
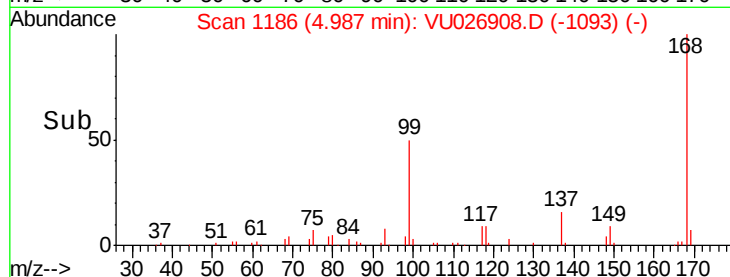
0

4.90

5.00

5.10

Time-->



#6

Chloroethane

Concen: 0.413 ug/l

RT: 1.70 min Scan# 164

Delta R.T. 0.01 min

Lab File: VU026908.D

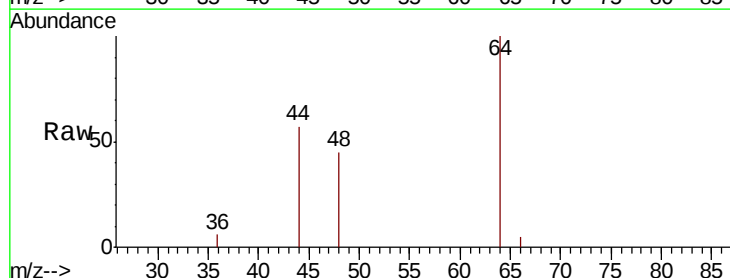
Acq: 19 Sep 2018 19:38

Tgt Ion: 64 Resp: 330

Ion Ratio Lower Upper

64 100

66 0.0 24.7 37.1#



Abundance Ion 63.90 (63.60 to 64.60): VU026679.D (-151) (-)

Ion 65.90 (65.60 to 66.60): VU026679.D (-151) (-)

1.70

2500

2000

1500

1000

500

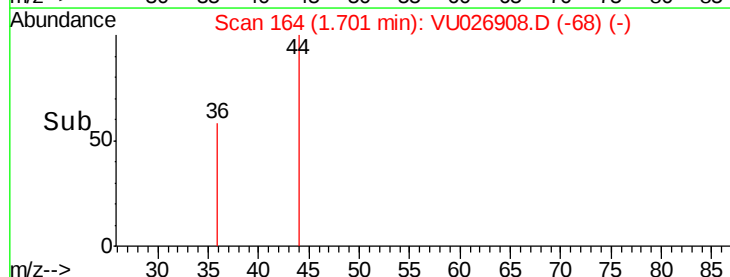
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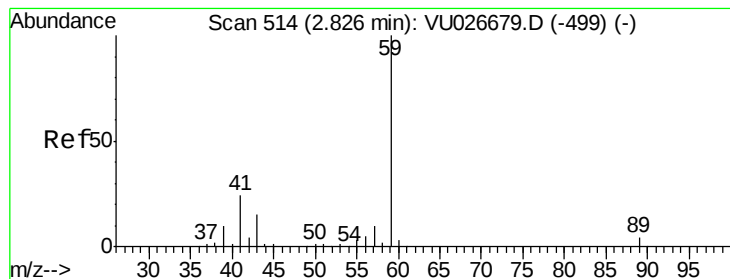
1.68

1.70

1.72

Time-->



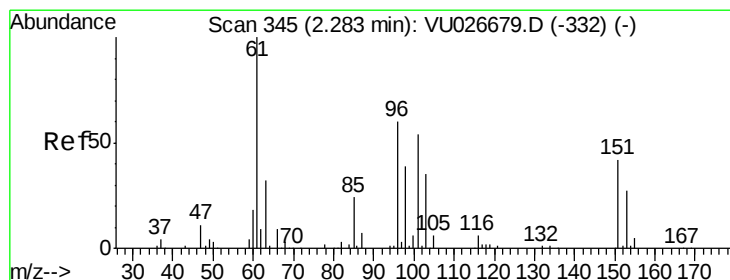
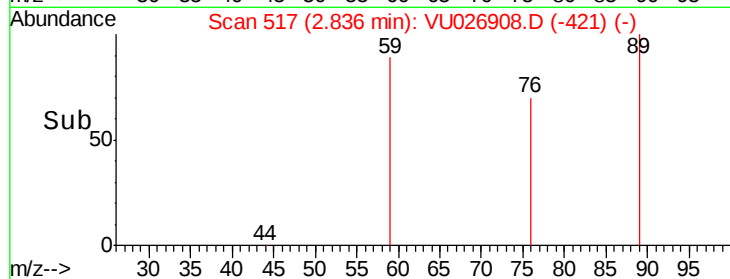
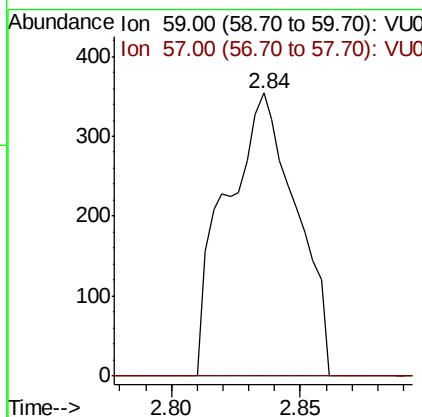
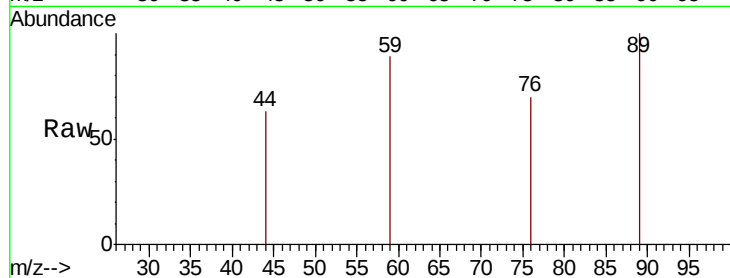


#11

Tert butyl alcohol  
 Concen: 2.260 ug/l  
 RT: 2.84 min Scan# 517  
 Delta R.T. 0.01 min  
 Lab File: VU026908.D  
 Acq: 19 Sep 2018 19:38

Instrument :  
 MSVOA\_U  
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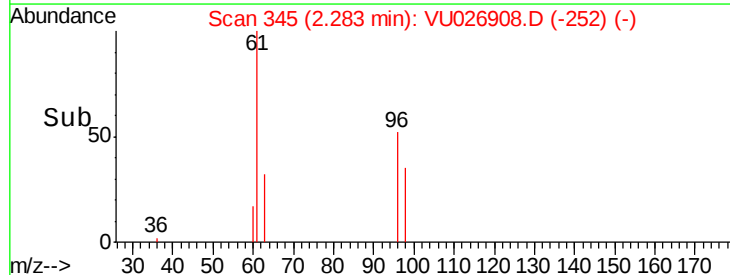
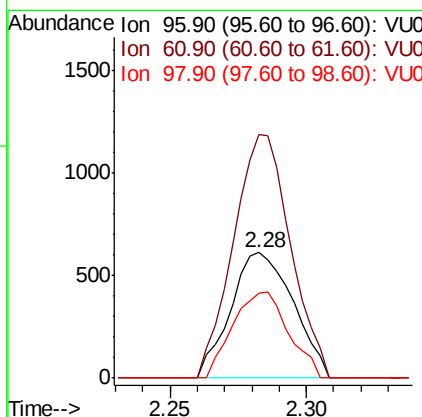
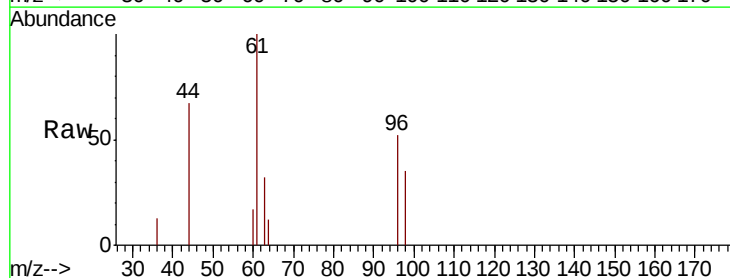
Tgt Ion: 59 Resp: 671  
 Ion Ratio Lower Upper  
 59 100  
 57 0.0 8.0 12.0#

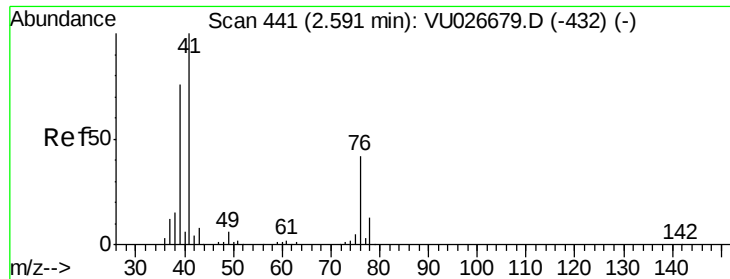


#12

1,1-Dichloroethene  
 Concen: 1.061 ug/l  
 RT: 2.28 min Scan# 345  
 Delta R.T. 0.00 min  
 Lab File: VU026908.D  
 Acq: 19 Sep 2018 19:38

Tgt Ion: 96 Resp: 978  
 Ion Ratio Lower Upper  
 96 100  
 61 193.8 133.0 199.6  
 98 67.4 51.3 76.9

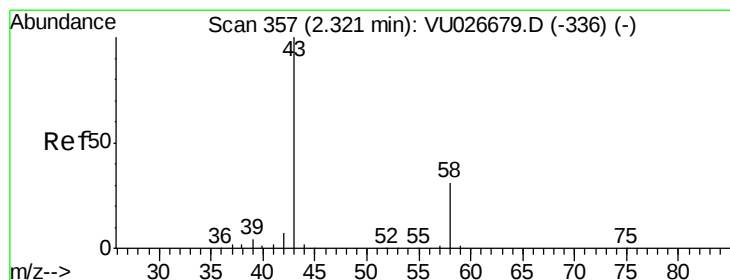
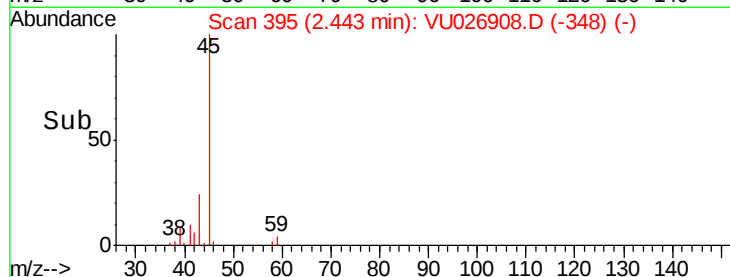
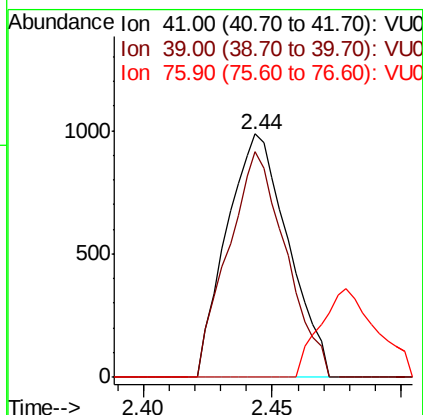
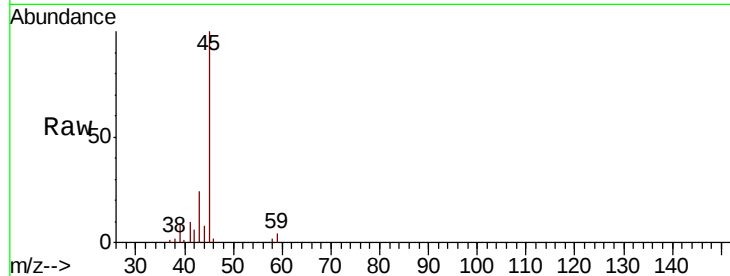




#14  
 Allyl chloride  
 Concen: 0.985 ug/l  
 RT: 2.44 min Scan# 395  
 Delta R.T. -0.15 min  
 Lab File: VU026908.D  
 Acq: 19 Sep 2018 19:38

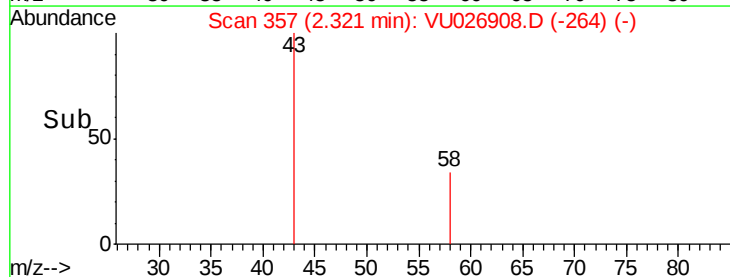
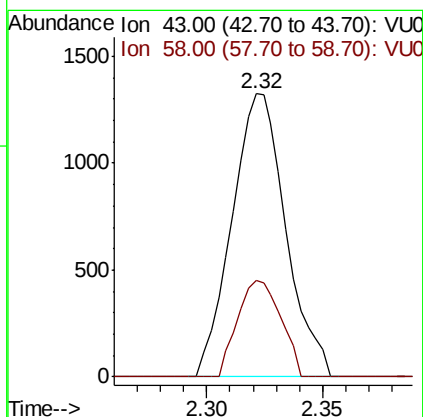
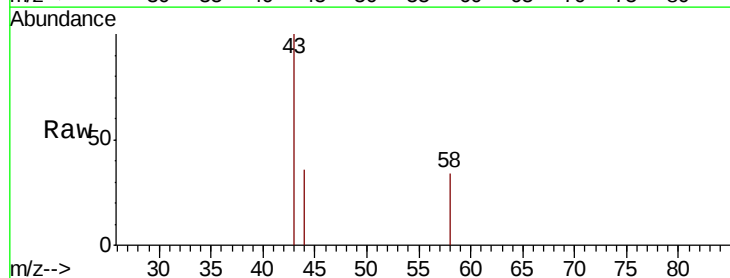
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 FT-PZ461I-20180912

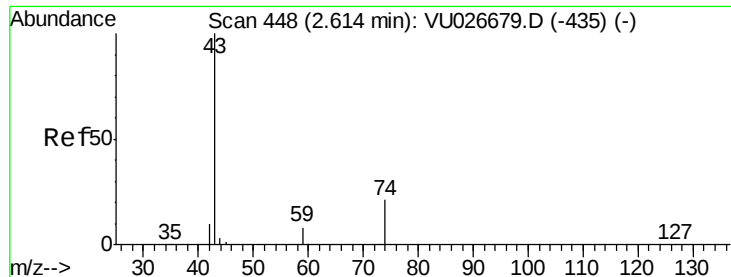
Tgt Ion: 41 Resp: 1636  
 Ion Ratio Lower Upper  
 41 100  
 39 87.3 56.9 85.3#  
 76 0.0 29.7 44.5#



#16  
 Acetone  
 Concen: 3.094 ug/l  
 RT: 2.32 min Scan# 357  
 Delta R.T. 0.00 min  
 Lab File: VU026908.D  
 Acq: 19 Sep 2018 19:38

Tgt Ion: 43 Resp: 2134  
 Ion Ratio Lower Upper  
 43 100  
 58 34.2 25.1 37.7

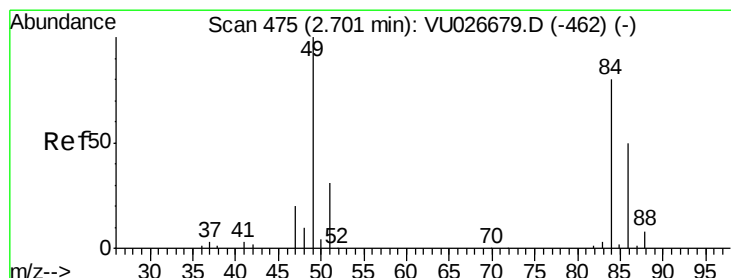
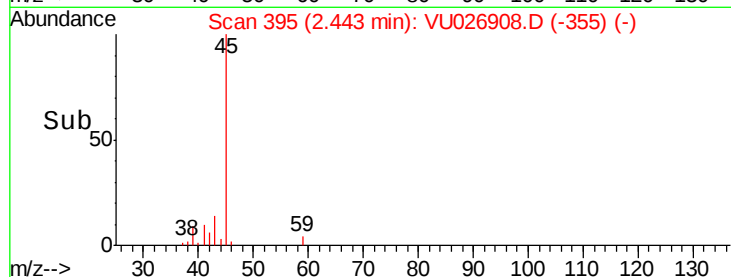
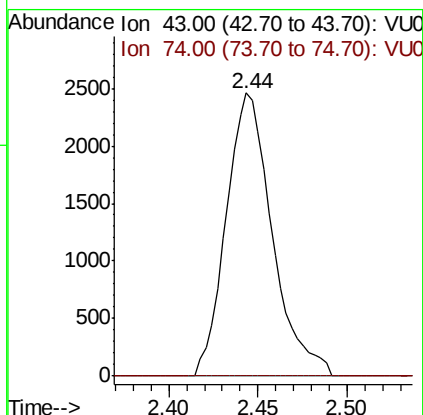
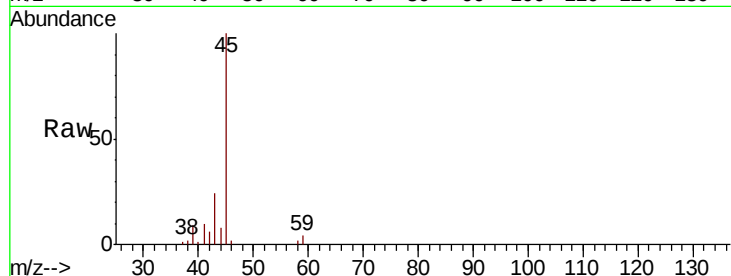




#18  
Methyl Acetate  
Concen: 2.966 ug/l  
RT: 2.44 min Scan# 395  
Delta R.T. -0.17 min  
Lab File: VU026908.D  
Acq: 19 Sep 2018 19:38

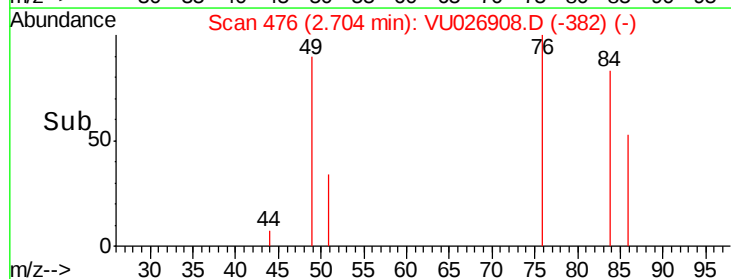
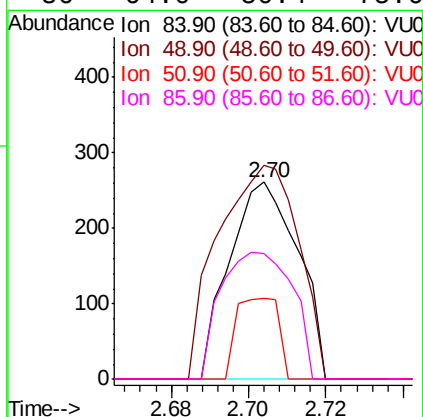
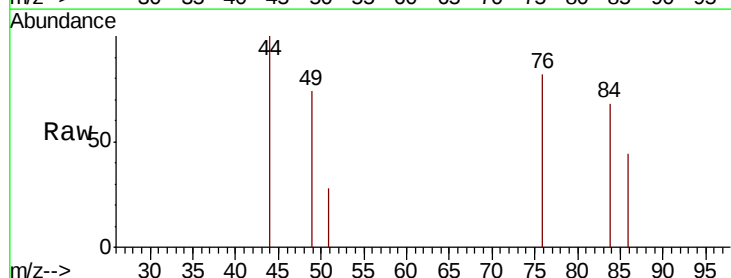
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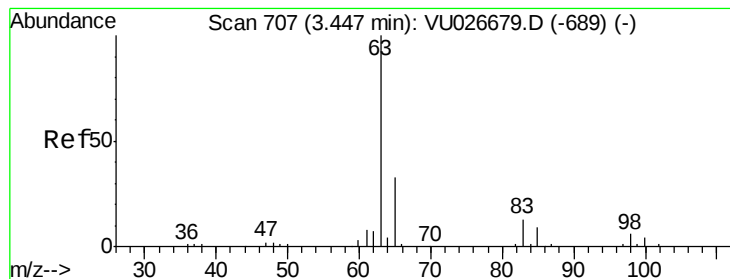
Tgt Ion: 43 Resp: 4414  
Ion Ratio Lower Upper  
43 100  
74 0.0 17.7 26.5#



#20  
Methylene Chloride  
Concen: 0.288 ug/l  
RT: 2.70 min Scan# 476  
Delta R.T. 0.00 min  
Lab File: VU026908.D  
Acq: 19 Sep 2018 19:38

Tgt Ion: 84 Resp: 322  
Ion Ratio Lower Upper  
84 100  
49 108.4 100.6 151.0  
51 41.0 30.9 46.3  
86 64.0 50.4 75.6





#24

1,1-Dichloroethane

Concen: 1.252 ug/l

RT: 3.45 min Scan# 708

Delta R.T. 0.00 min

Lab File: VU026908.D

Acq: 19 Sep 2018 19:38

Instrument :

MSVOA\_U

ClientSampleId :

FT-PZ461I-20180912

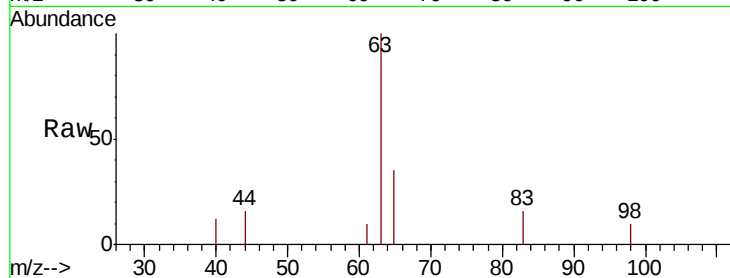
Tgt Ion: 63 Resp: 2447

Ion Ratio Lower Upper

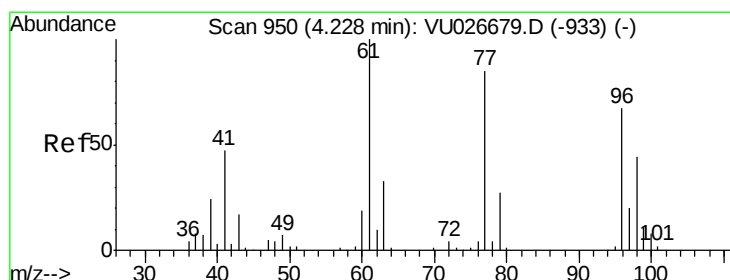
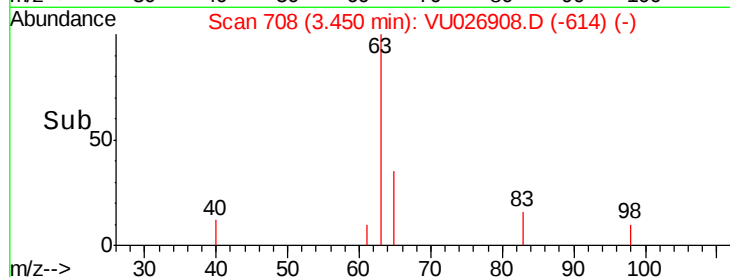
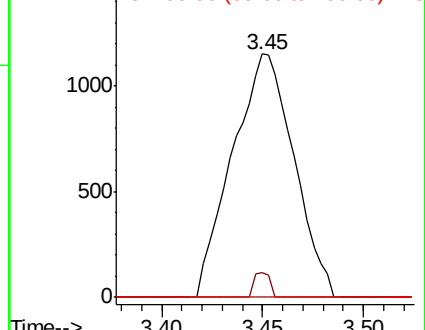
63 100

98 10.2 3.1 9.4#

100 0.0 2.0 6.0#



Abundance Ion 62.90 (62.60 to 63.60): VU0  
Ion 97.90 (97.60 to 98.60): VU0  
Ion 99.90 (99.60 to 100.60): VU0



#27

cis-1,2-Dichloroethene

Concen: 2.717 ug/l

RT: 4.23 min Scan# 951

Delta R.T. 0.00 min

Lab File: VU026908.D

Acq: 19 Sep 2018 19:38

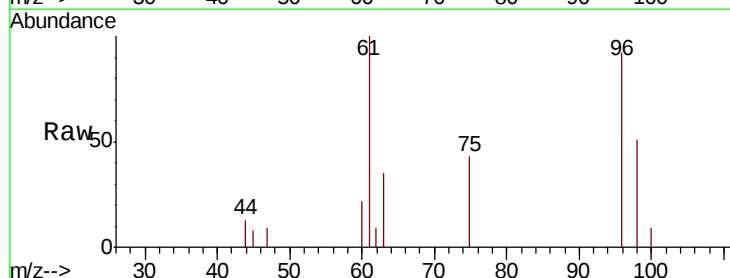
Tgt Ion: 96 Resp: 3041

Ion Ratio Lower Upper

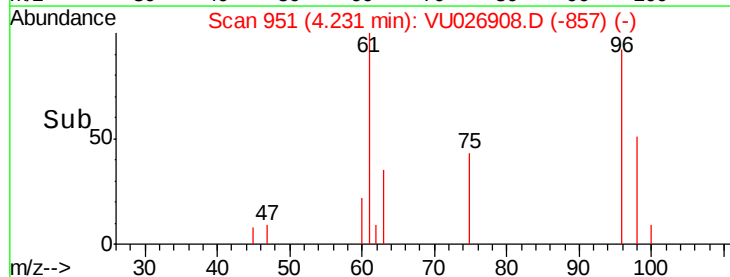
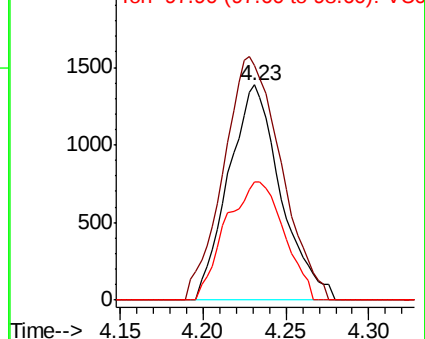
96 100

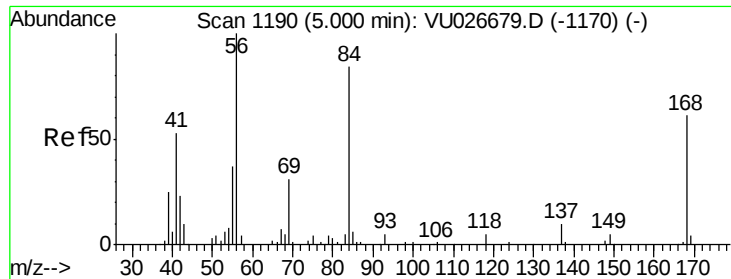
61 124.4 0.0 301.8

98 60.6 0.0 127.2



Abundance Ion 95.90 (95.60 to 96.60): VU0  
Ion 60.90 (60.60 to 61.60): VU0  
Ion 97.90 (97.60 to 98.60): VU0

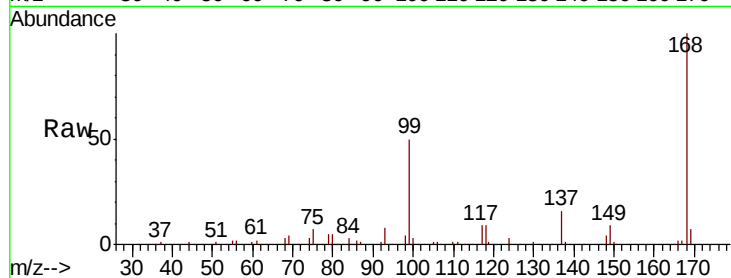




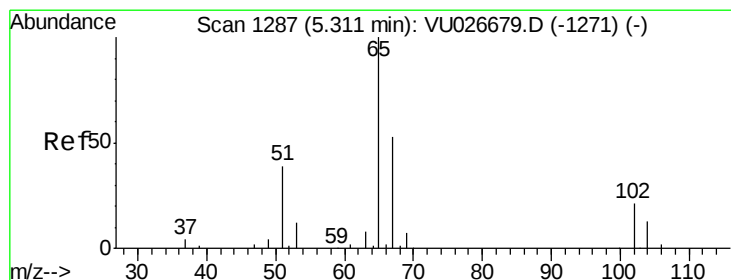
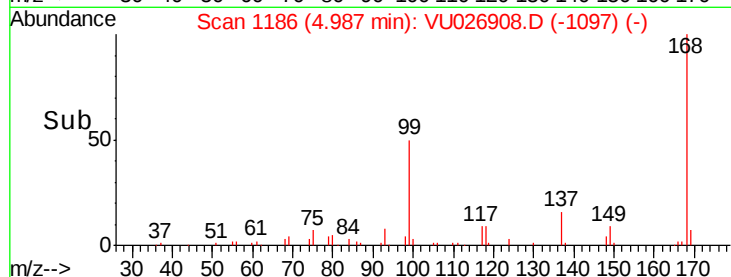
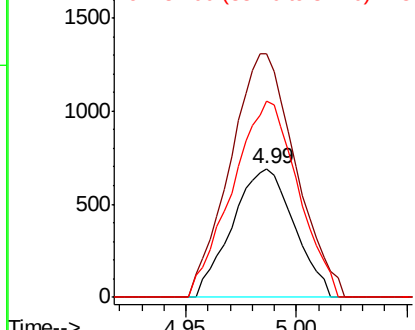
#31  
Cyclohexane  
Concen: 0.574 ug/l  
RT: 4.99 min Scan# 1186  
Delta R.T. -0.01 min  
Lab File: VU026908.D  
Acq: 19 Sep 2018 19:38

Instrument :  
MSVOA\_U  
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FT-PZ461I-20180912

Tgt Ion: 56 Resp: 1345  
Ion Ratio Lower Upper  
56 100  
69 189.1 24.9 37.3#  
84 152.1 66.6 100.0#

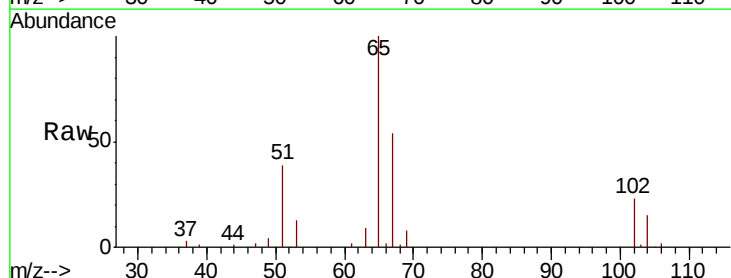


Abundance Ion 56.00 (55.70 to 56.70): VU0  
Ion 69.00 (68.70 to 69.70): VU0  
Ion 84.00 (83.70 to 84.70): VU0

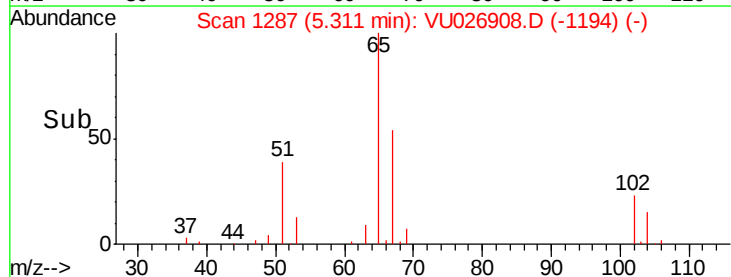
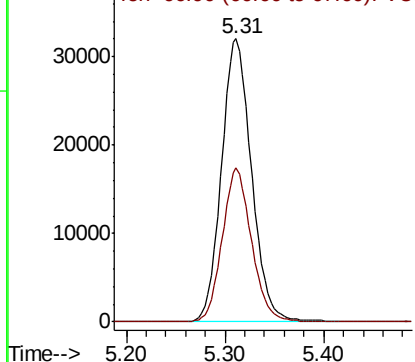


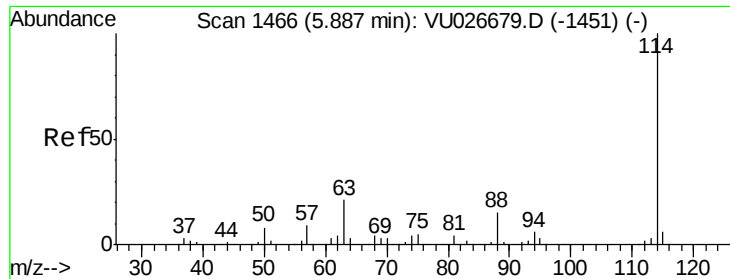
#33  
1,2-Dichloroethane-d4  
Concen: 56.049 ug/l  
RT: 5.31 min Scan# 1287  
Delta R.T. 0.00 min  
Lab File: VU026908.D  
Acq: 19 Sep 2018 19:38

Tgt Ion: 65 Resp: 68278  
Ion Ratio Lower Upper  
65 100  
67 52.9 0.0 106.4



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

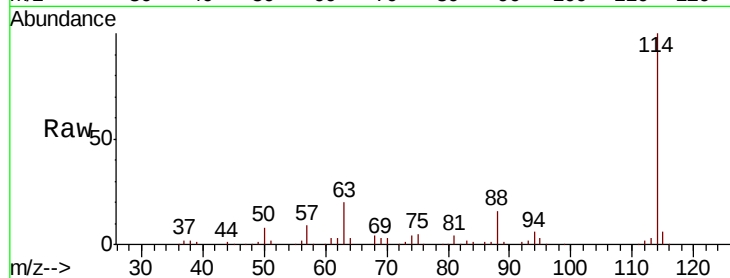




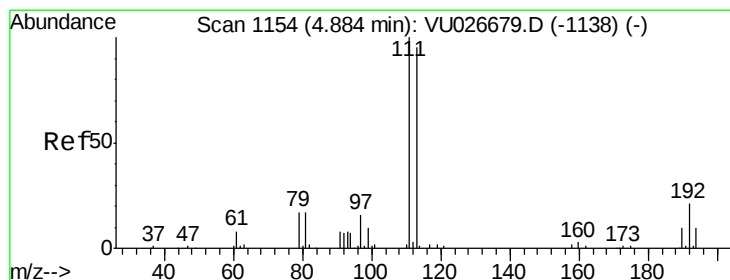
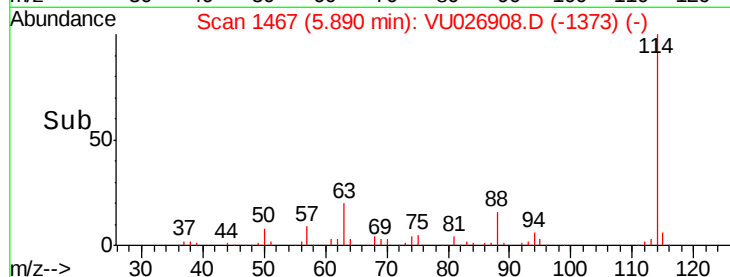
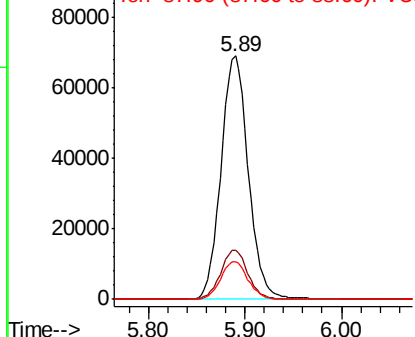
#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 5.89 min Scan# 1467  
 Delta R.T. 0.00 min  
 Lab File: VU026908.D  
 Acq: 19 Sep 2018 19:38

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 FT-PZ461I-20180912

Tgt Ion:114 Resp: 135761  
 Ion Ratio Lower Upper  
 114 100  
 63 20.2 0.0 41.4  
 88 15.5 0.0 30.8

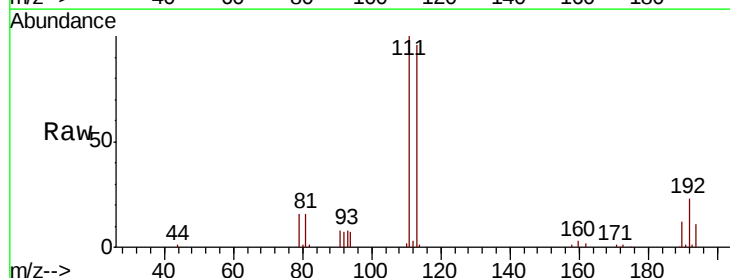


Abundance Ion 113.90 (113.60 to 114.60): V  
 Ion 63.00 (62.70 to 63.70): VU0  
 Ion 87.90 (87.60 to 88.60): VU0

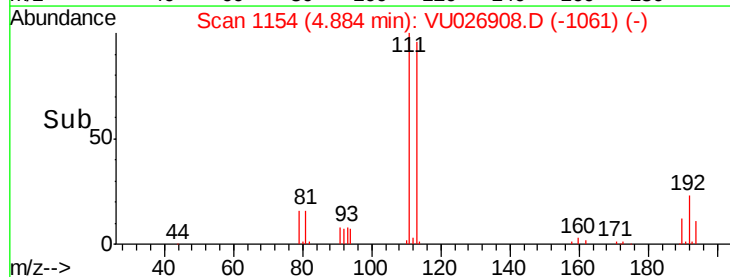
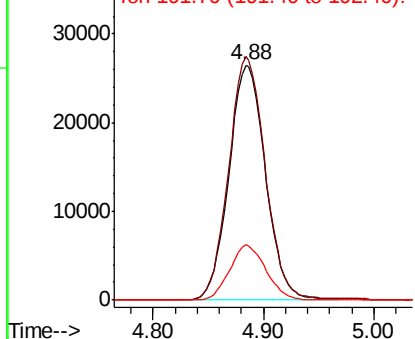


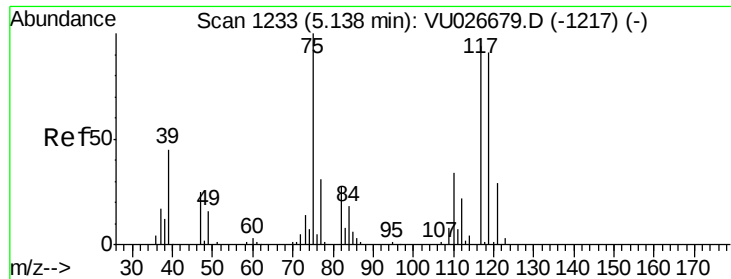
#35  
 Dibromofluoromethane  
 Concen: 55.025 ug/l  
 RT: 4.88 min Scan# 1154  
 Delta R.T. 0.00 min  
 Lab File: VU026908.D  
 Acq: 19 Sep 2018 19:38

Tgt Ion:113 Resp: 60935  
 Ion Ratio Lower Upper  
 113 100  
 111 103.3 83.1 124.7  
 192 23.1 17.4 26.2



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

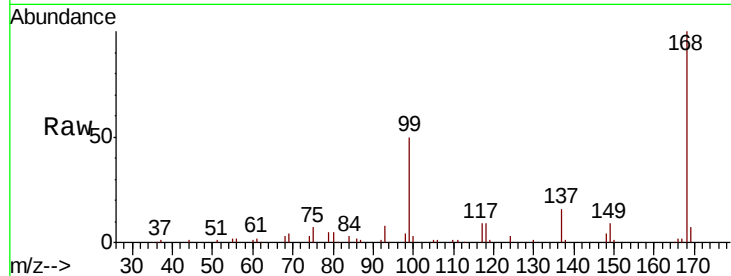




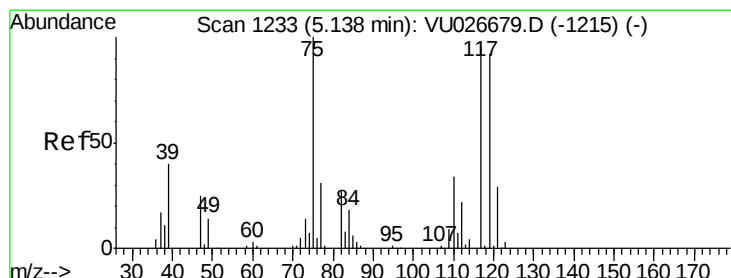
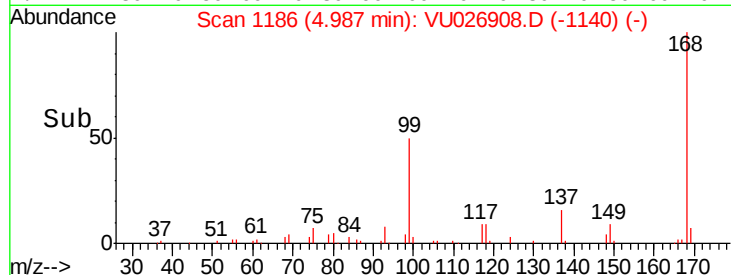
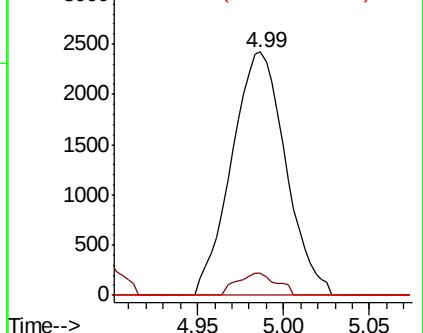
#36  
 1,1-Dichloropropene  
 Concen: 3.474 ug/l  
 RT: 4.99 min Scan# 1186  
 Delta R.T. -0.15 min  
 Lab File: VU026908.D  
 Acq: 19 Sep 2018 19:38

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 FT-PZ461I-20180912

Tgt Ion: 75 Resp: 5295  
 Ion Ratio Lower Upper  
 75 100  
 110 6.7 17.3 51.9#  
 77 0.0 24.9 37.3#

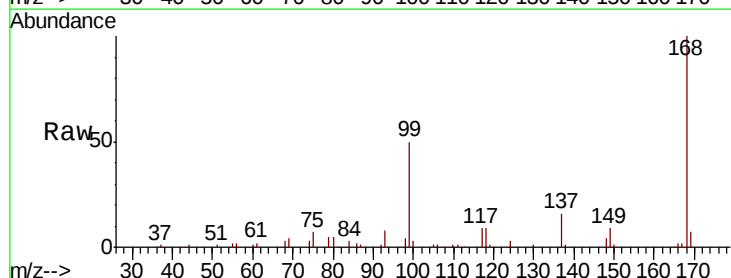


Abundance Ion 74.90 (74.60 to 75.60): VU0  
 Ion 109.90 (109.60 to 110.60): V  
 Ion 76.90 (76.60 to 77.60): VU0

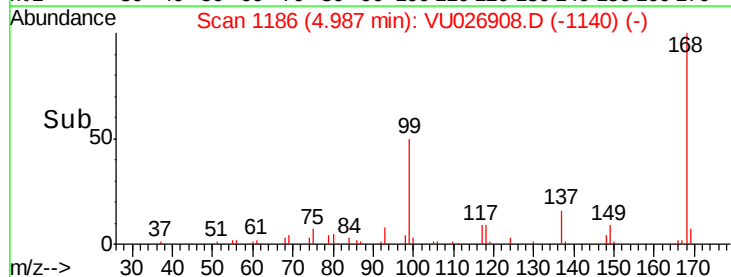
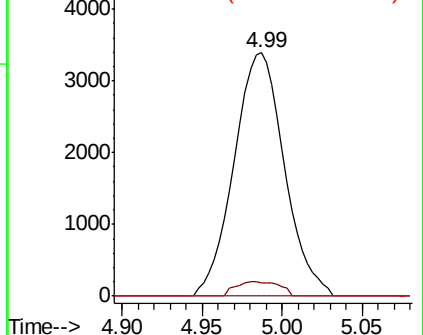


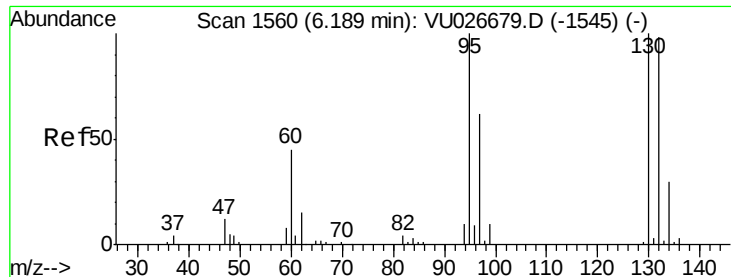
#38  
 Carbon Tetrachloride  
 Concen: 4.532 ug/l  
 RT: 4.99 min Scan# 1186  
 Delta R.T. -0.15 min  
 Lab File: VU026908.D  
 Acq: 19 Sep 2018 19:38

Tgt Ion: 117 Resp: 7298  
 Ion Ratio Lower Upper  
 117 100  
 119 5.6 77.8 116.8#  
 121 0.0 25.0 37.4#



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





#44

Trichloroethene

Concen: 24.596 ug/l

RT: 6.19 min Scan# 1560

Delta R.T. 0.00 min

Lab File: VU026908.D

Acq: 19 Sep 2018 19:38

Instrument :

MSVOA\_U

ClientSampleId :

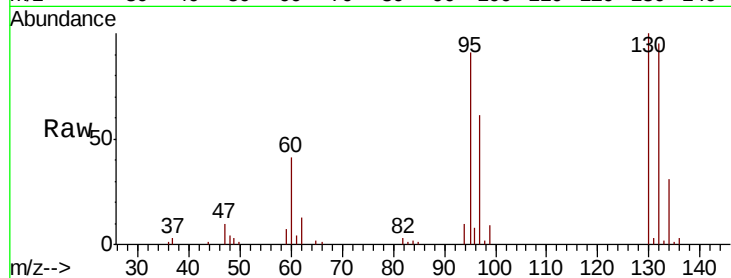
FT-PZ461I-20180912

Tgt Ion:130 Resp: 28816

Ion Ratio Lower Upper

130 100

95 90.9 0.0 199.4



Abundance Ion 129.80 (129.50 to 130.50): VU026679.D (-1545) (-)

Ion 94.90 (94.60 to 95.60): VU026679.D (-1545) (-)

6.19

15000

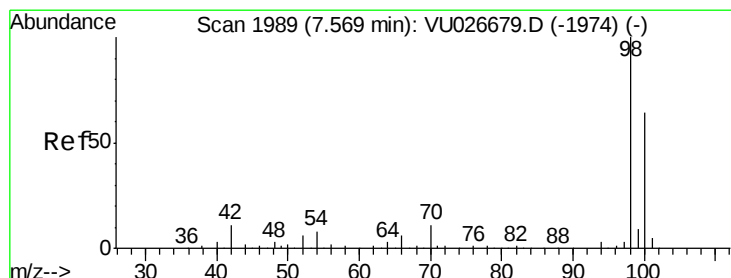
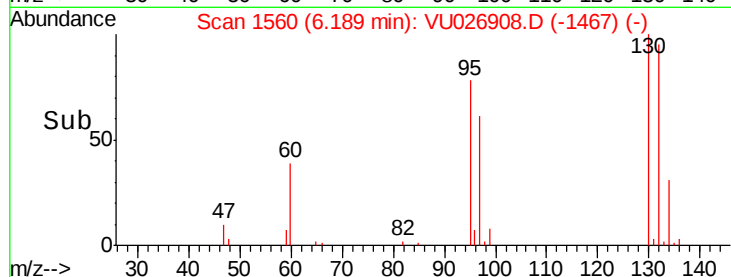
10000

5000

0

Time-->

6.10 6.15 6.20 6.25



#50

Toluene-d8

Concen: 48.856 ug/l

RT: 7.57 min Scan# 1989

Delta R.T. 0.00 min

Lab File: VU026908.D

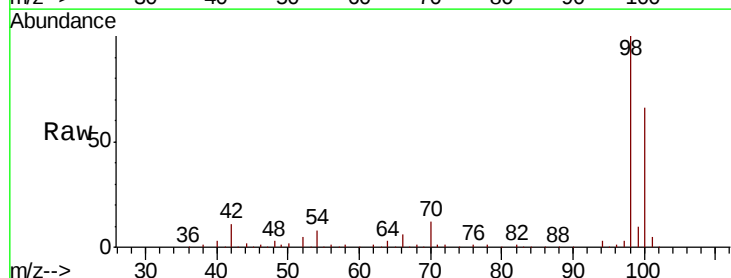
Acq: 19 Sep 2018 19:38

Tgt Ion: 98 Resp: 200106

Ion Ratio Lower Upper

98 100

100 65.7 51.2 76.8



Abundance Ion 98.00 (97.70 to 98.70): VU026679.D (-1974) (-)

Ion 100.00 (99.70 to 100.70): VU026679.D (-1974) (-)

7.57

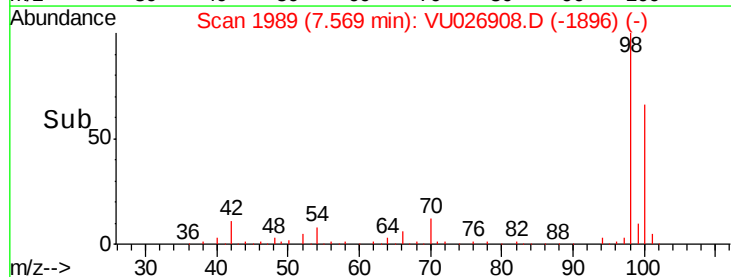
100000

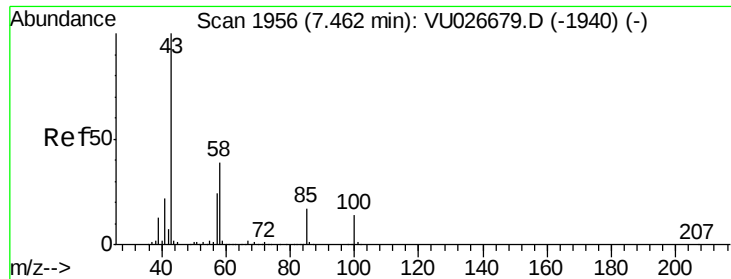
50000

0

Time-->

7.50 7.55 7.60 7.65





#51

4-Methyl-2-Pentanone

Concen: 0.376 ug/l

RT: 7.57 min Scan# 1989

Delta R.T. 0.11 min

Lab File: VU026908.D

Acq: 19 Sep 2018 19:38

Instrument :

MSVOA\_U

ClientSampleId :

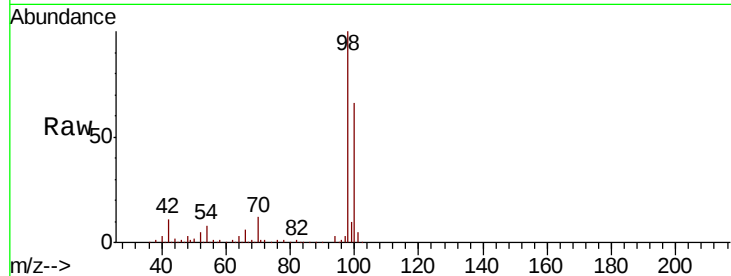
FT-PZ461I-20180912

Tgt Ion: 43 Resp: 701

Ion Ratio Lower Upper

43 100

58 222.7 31.1 46.7#

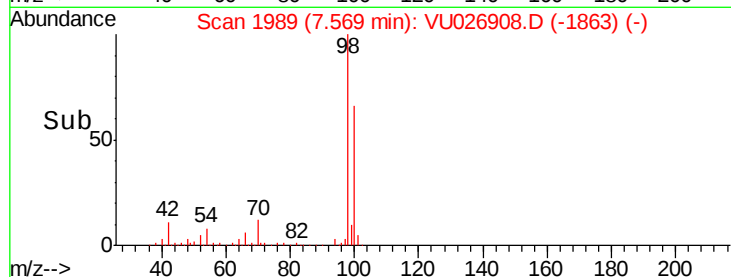


Abundance Ion 43.00 (42.70 to 43.70): VU026679.D (-1940) (-)

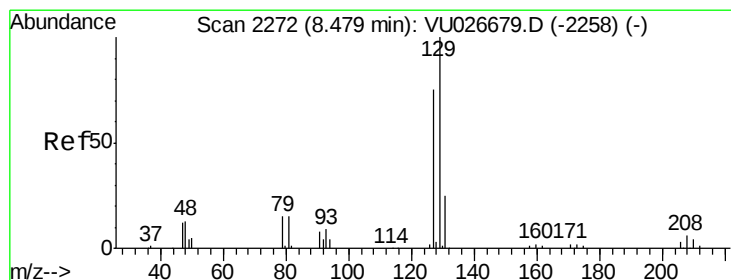
Ion 58.00 (57.70 to 58.70): VU026679.D (-1940) (-)

7.57

7.52 7.54 7.56 7.58 7.60



Time-->



#60

Dibromochloromethane

Concen: 0.408 ug/l

RT: 8.23 min Scan# 2194

Delta R.T. -0.25 min

Lab File: VU026908.D

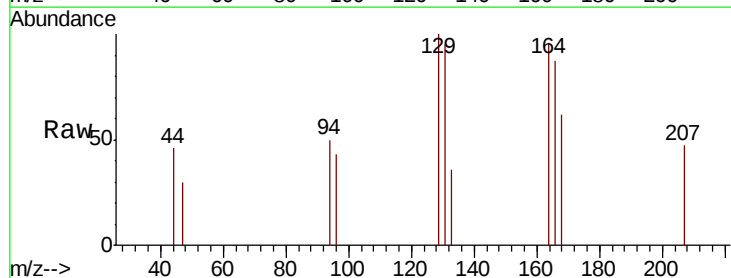
Acq: 19 Sep 2018 19:38

Tgt Ion: 129 Resp: 534

Ion Ratio Lower Upper

129 100

127 0.0 38.3 114.9#

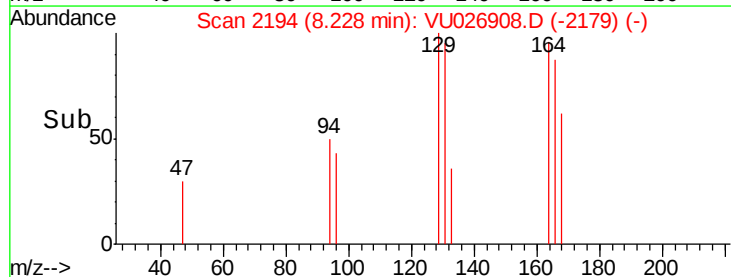


Abundance Ion 128.80 (128.50 to 129.50): VU026679.D (-2258) (-)

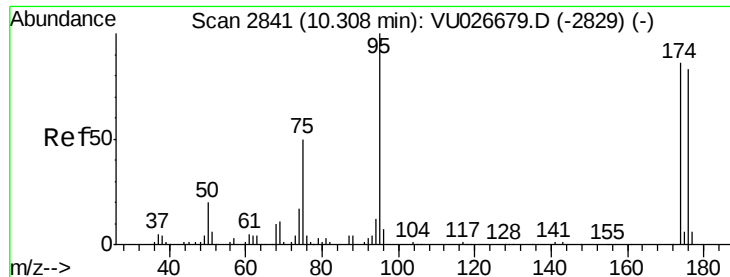
Ion 126.80 (126.50 to 127.50): VU026679.D (-2258) (-)

8.23

8.20 8.22 8.24 8.26



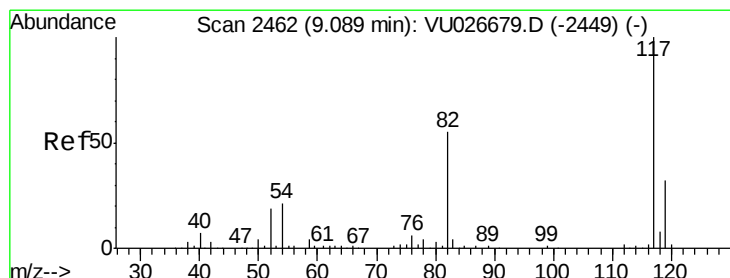
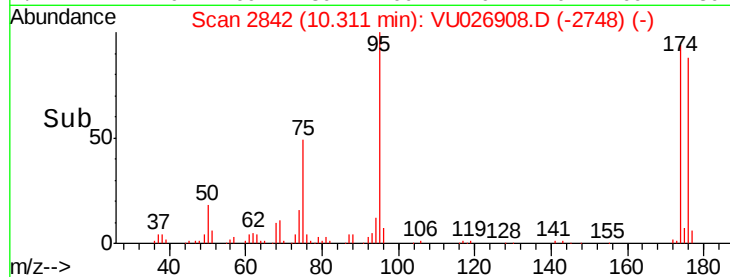
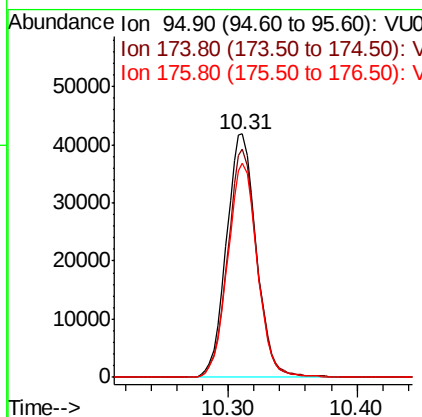
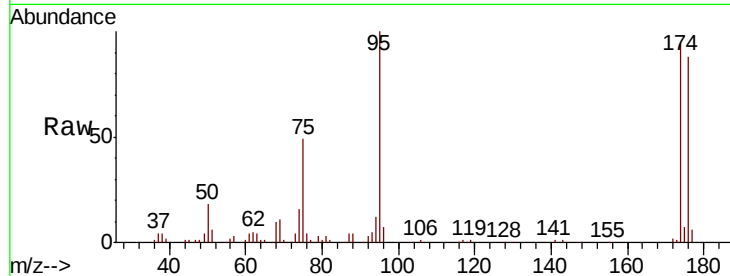
Time-->



#62  
 4-Bromofluorobenzene  
 Concen: 45.061 ug/l  
 RT: 10.31 min Scan# 2842  
 Delta R.T. 0.00 min  
 Lab File: VU026908.D  
 Acq: 19 Sep 2018 19:38

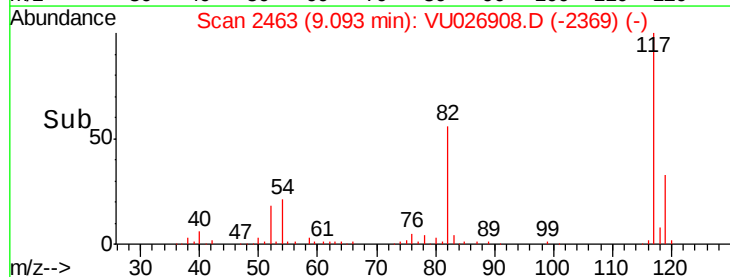
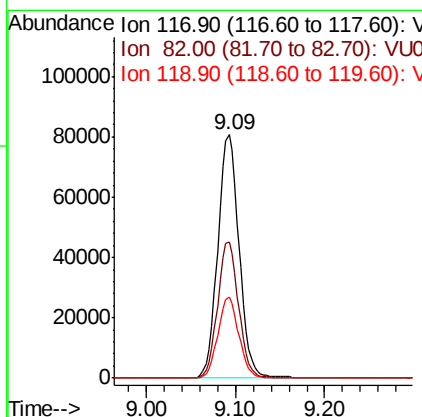
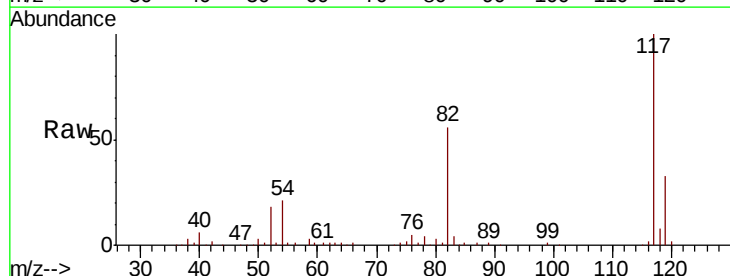
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 FT-PZ461I-20180912

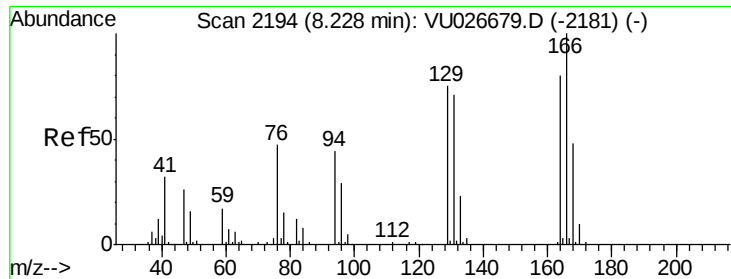
Tgt Ion: 95 Resp: 66890  
 Ion Ratio Lower Upper  
 95 100  
 174 92.5 0.0 172.8  
 176 87.3 0.0 168.6



#63  
 Chlorobenzene-d5  
 Concen: 50.000 ug/l  
 RT: 9.09 min Scan# 2463  
 Delta R.T. 0.00 min  
 Lab File: VU026908.D  
 Acq: 19 Sep 2018 19:38

Tgt Ion: 117 Resp: 133498  
 Ion Ratio Lower Upper  
 117 100  
 82 55.9 44.1 66.1  
 119 33.2 25.7 38.5





#64

Tetrachloroethene

Concen: 0.613 ug/l

RT: 8.23 min Scan# 2195

Delta R.T. 0.00 min

Lab File: VU026908.D

Acq: 19 Sep 2018 19:38

Instrument :

MSVOA\_U

ClientSampleId :

FT-PZ461I-20180912

Tgt Ion:164 Resp: 651

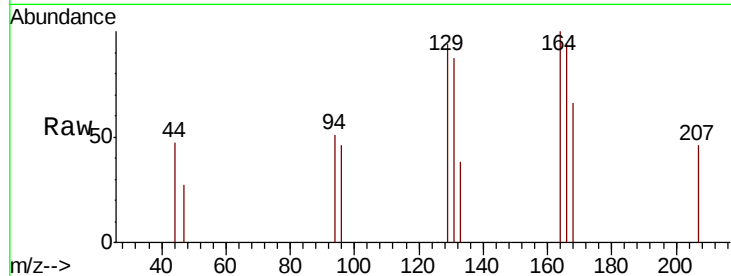
Ion Ratio Lower Upper

164 100

166 94.1 100.5 150.7#

129 93.7 75.3 112.9

131 86.8 71.4 107.2

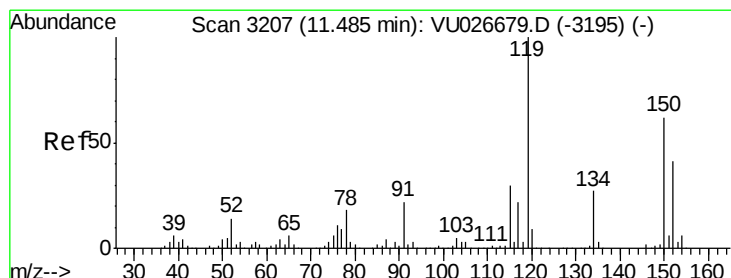
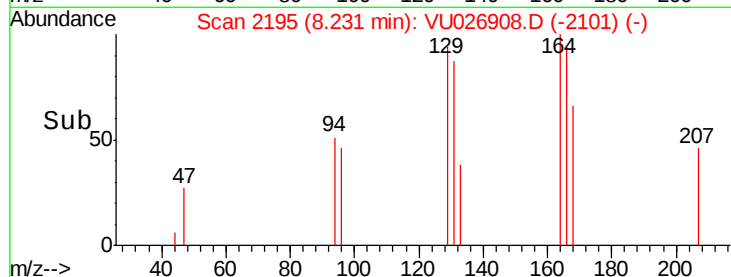
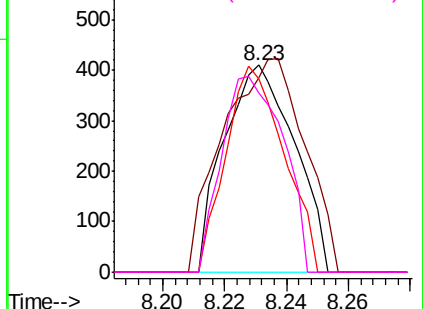


Abundance Ion 163.80 (163.50 to 164.50): V

Ion 165.80 (165.50 to 166.50): V

Ion 128.80 (128.50 to 129.50): V

Ion 130.80 (130.50 to 131.50): V



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 11.48 min Scan# 3207

Delta R.T. 0.00 min

Lab File: VU026908.D

Acq: 19 Sep 2018 19:38

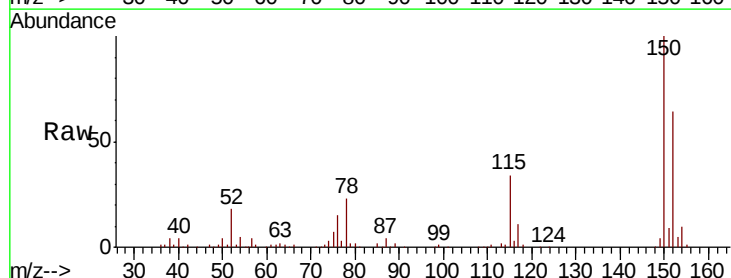
Tgt Ion:152 Resp: 72096

Ion Ratio Lower Upper

152 100

115 54.3 40.4 121.1

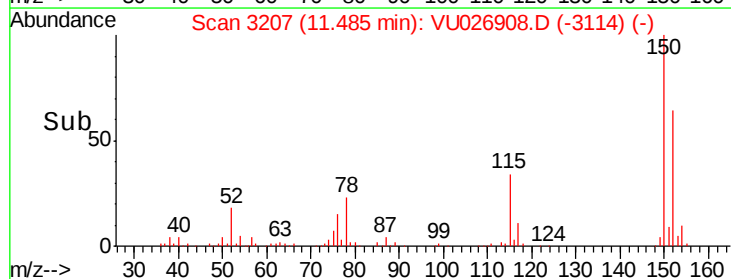
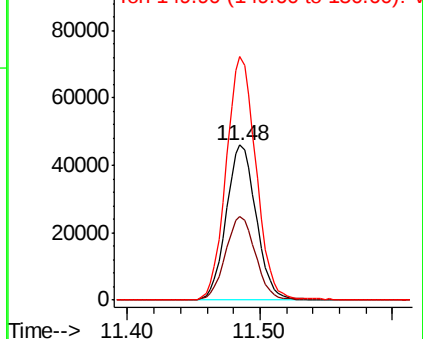
150 157.0 0.0 345.2

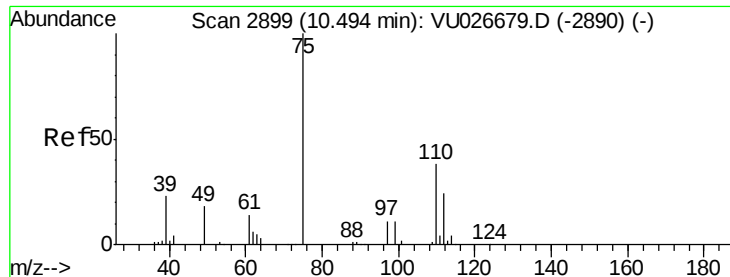


Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V

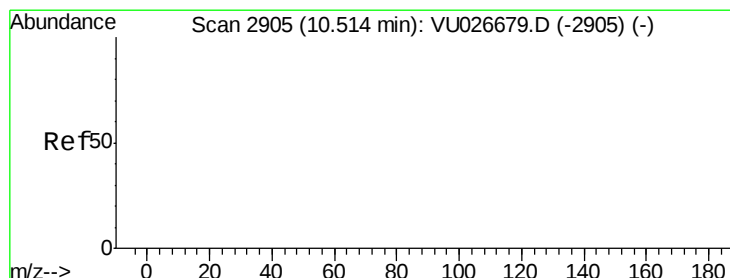
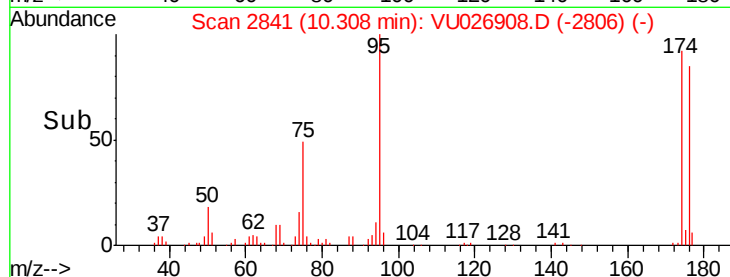
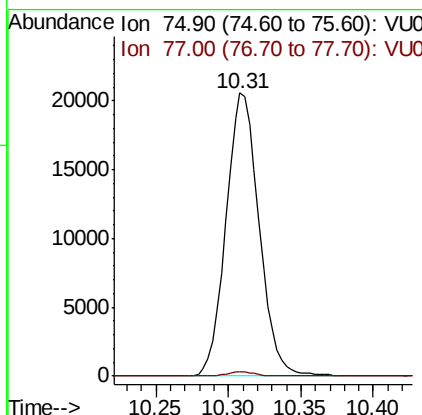
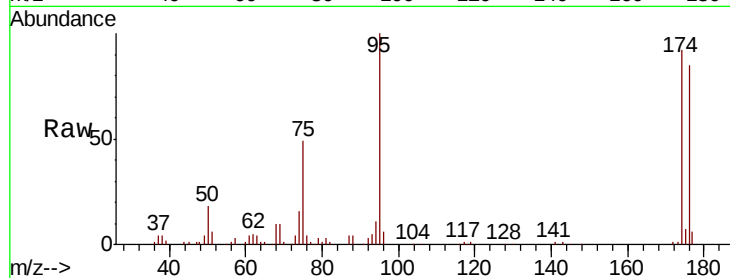




#76  
 1,2,3-Trichloropropane  
 Concen: 20.191 ug/l  
 RT: 10.31 min Scan# 2841  
 Delta R.T. -0.19 min  
 Lab File: VU026908.D  
 Acq: 19 Sep 2018 19:38

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 FT-PZ461I-20180912

Tgt Ion: 75 Resp: 32609  
 Ion Ratio Lower Upper  
 75 100  
 77 1.2 21.1 63.1#



#81  
 trans-1,4-Dichloro-2-butene  
 Concen: 62.557 ug/l  
 RT: 10.31 min Scan# 2841  
 Delta R.T. -0.20 min  
 Lab File: VU026908.D  
 Acq: 19 Sep 2018 19:38

Tgt Ion: 75 Resp: 32609  
 Ion Ratio Lower Upper  
 75 100  
 53 0.0 0.0 0.0  
 89 0.0 0.0 0.0

