

Data File : VU027050.D  
Acq On : 23 Sep 2018 05:20  
Operator : MD/SY  
Sample : J4963-04  
Misc : 5.0mL/MSVOA\_U/WATER  
ALS Vial : 92 Sample Multiplier: 1

Instrument :  
MSVOA\_U  
ClientSampleId :  
SA-PZ123I-20180914

Quant Time: Sep 24 05:47:47 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  | 94043    | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 5.89  | 114  | 157843   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 9.09  | 117  | 152160   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 11.48 | 152  | 70372    | 50.00 | ug/l  | 0.00     |

System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 5.31   | 65  | 96407    | 50.93 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 101.86% |      |
| 35) Dibromofluoromethane  | 4.88   | 113 | 66817    | 48.84 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 97.68%  |      |
| 50) Toluene-d8            | 7.57   | 98  | 254842   | 48.87 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 97.74%  |      |
| 62) 4-Bromofluorobenzene  | 10.31  | 95  | 81624    | 45.62 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 91.24%  |      |

Target Compounds

|                                |       |     |       |           |        | Qvalue |
|--------------------------------|-------|-----|-------|-----------|--------|--------|
| 6) Chloroethane                | 1.70  | 64  | 4385  | 3.473     | ug/l   | 91     |
| 12) 1,1-Dichloroethene         | 2.29  | 96  | 4441  | 3.419     | ug/l   | 93     |
| 14) Allyl chloride             | 2.44  | 41  | 2353  | 0.893     | ug/l # | 69     |
| 16) Acetone                    | 2.32  | 43  | 2602  | Below Cal |        | 89     |
| 18) Methyl Acetate             | 2.44  | 43  | 6151  | 2.283     | ug/l # | 55     |
| 24) 1,1-Dichloroethane         | 3.45  | 63  | 85105 | 27.423    | ug/l   | 99     |
| 31) Cyclohexane                | 4.98  | 56  | 2469  | 0.304     | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 4.99  | 75  | 8818  | 4.186     | ug/l # | 50     |
| 38) Carbon Tetrachloride       | 4.99  | 117 | 10172 | 5.074     | ug/l # | 18     |
| 51) 4-Methyl-2-Pentanone       | 7.57  | 43  | 1292  | 0.462     | ug/l # | 1      |
| 76) 1,2,3-Trichloropropane     | 10.31 | 75  | 45123 | 21.106    | ug/l # | 35     |
| 81) trans-1,4-Dichloro-2-buten | 10.31 | 75  | 45123 | 67.544    | ug/l # | 100    |
| 88) 1,4-Dichlorobenzene        | 11.51 | 146 | 937   | 0.353     | ug/l # | 60     |

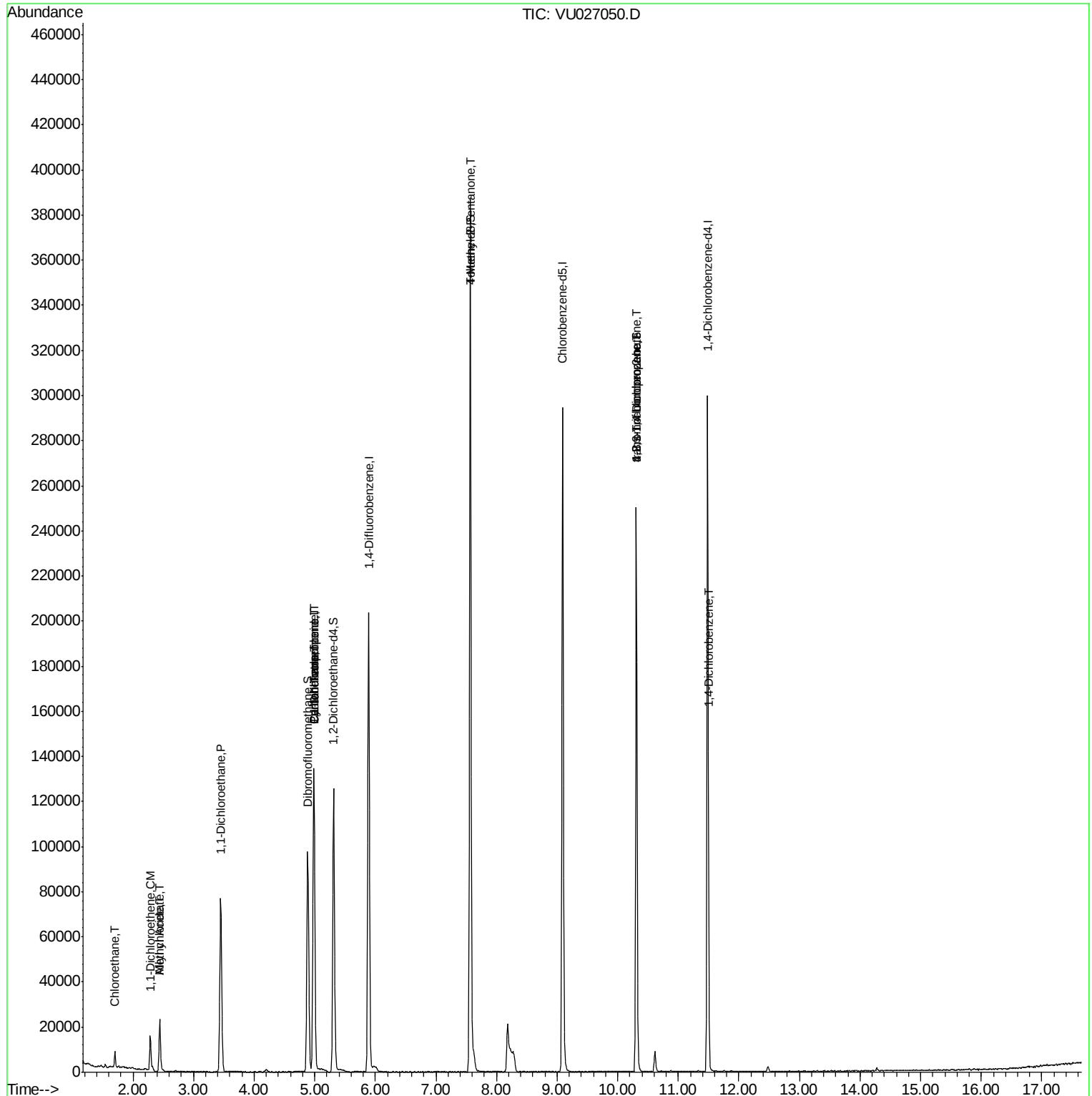
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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```
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ALS Vial    : 92   Sample Multiplier: 1
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**Instrument :**  
MSVOA\_U  
**ClientSampleId :**  
SA-PZ123I-20180914

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Quant Method : Z:\V\OASRV\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: VU027050.D

Acq: 23 Sep 2018 05:20

Instrument :

MSVOA\_U

ClientSampleId :

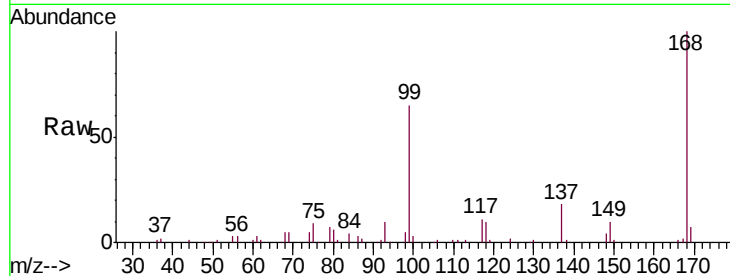
SA-PZ123I-20180914

Tgt Ion:168 Resp: 94043

Ion Ratio Lower Upper

168 100

99 65.2 48.1 72.1



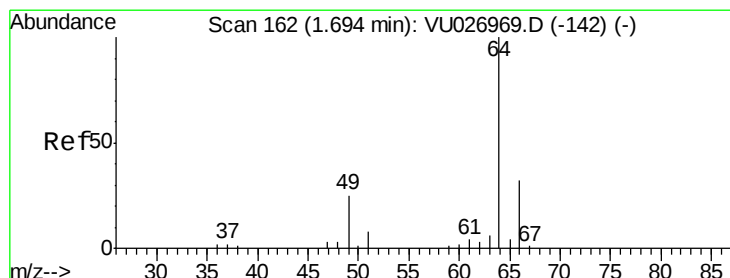
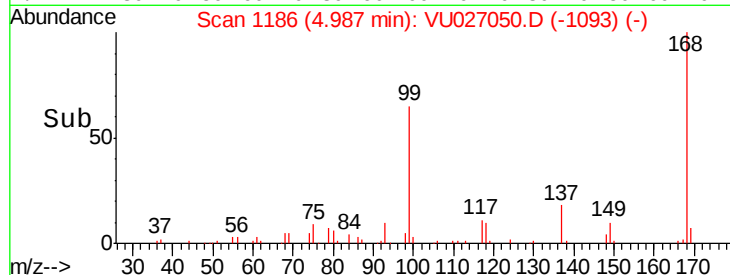
Abundance Ion 167.90 (167.60 to 168.60): VU026969.D (-1169) (-)

Ion 98.90 (98.60 to 99.60): VU026969.D (-1169) (-)

4.99

4.90 4.95 5.00 5.05 5.10

Time-->



#6

Chloroethane

Concen: 3.473 ug/l

RT: 1.70 min Scan# 164

Delta R.T. 0.01 min

Lab File: VU027050.D

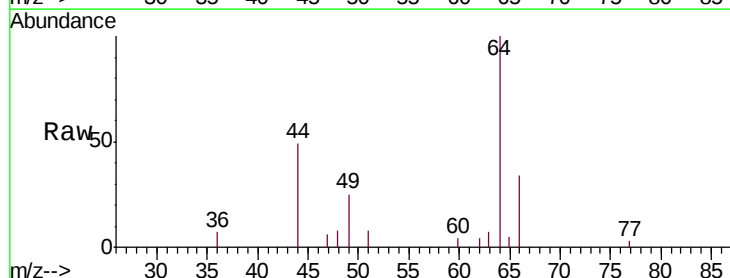
Acq: 23 Sep 2018 05:20

Tgt Ion: 64 Resp: 4385

Ion Ratio Lower Upper

64 100

66 36.6 25.3 37.9



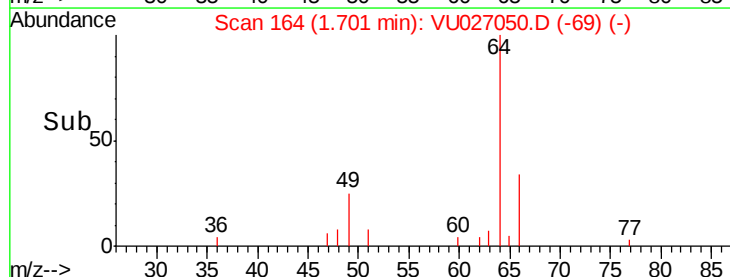
Abundance Ion 63.90 (63.60 to 64.60): VU026969.D (-142) (-)

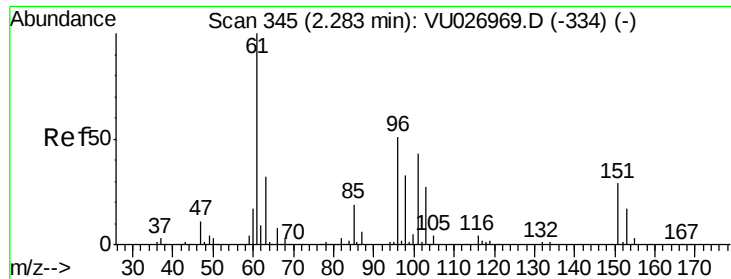
Ion 65.90 (65.60 to 66.60): VU026969.D (-142) (-)

1.70

1.65 1.70 1.75

Time-->

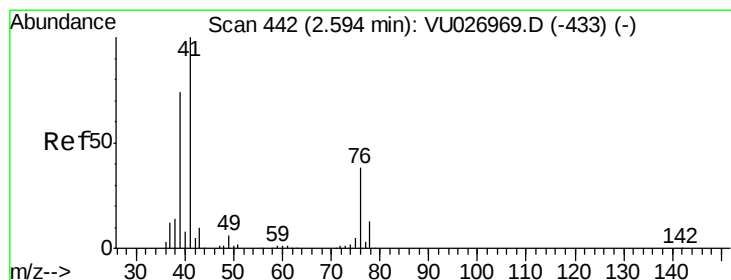
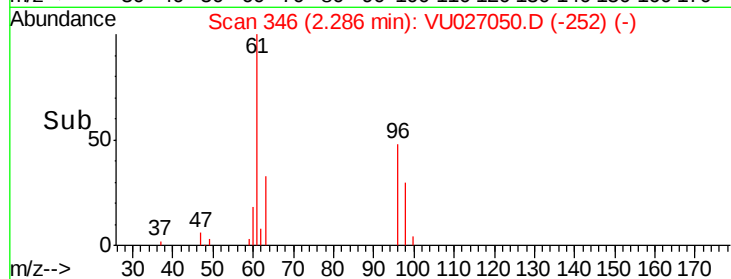
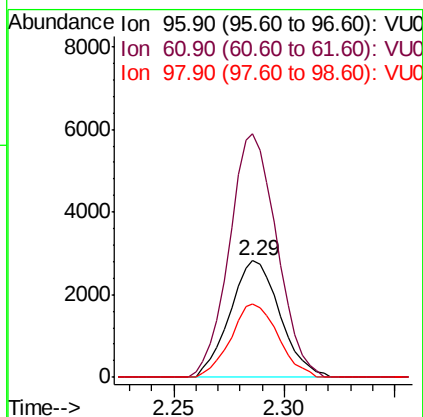
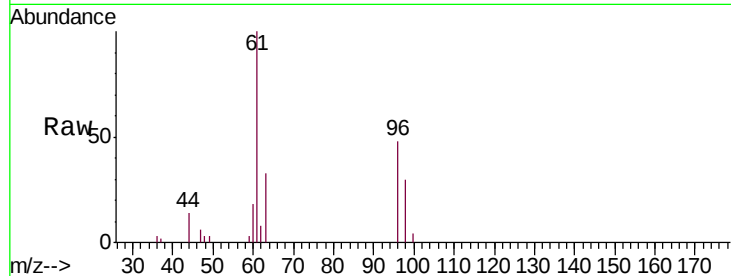




#12  
 1,1-Dichloroethene  
 Concen: 3.419 ug/l  
 RT: 2.29 min Scan# 346  
 Delta R.T. 0.00 min  
 Lab File: VU027050.D  
 Acq: 23 Sep 2018 05:20

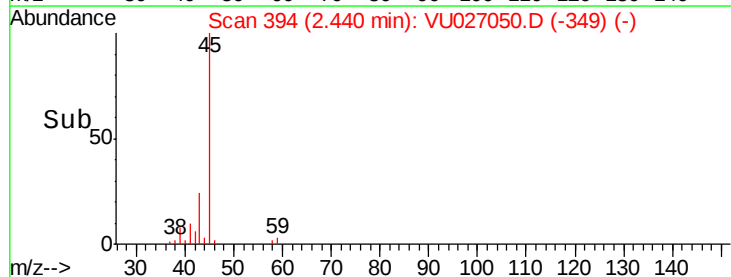
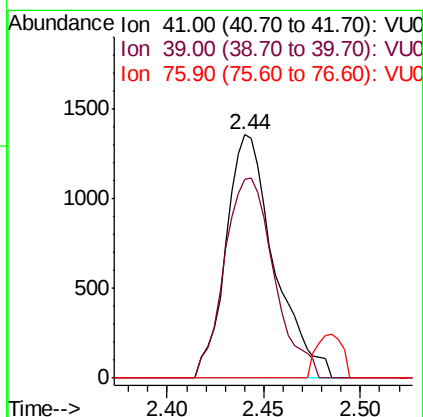
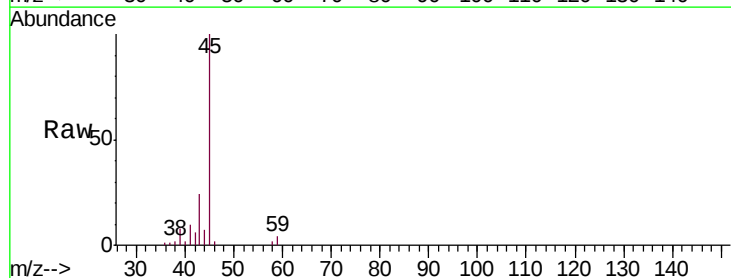
Instrument :  
 MSVOA\_U  
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| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 96      | 100   |       |       |
| 61      | 208.5 | 156.1 | 234.1 |
| 98      | 63.3  | 51.4  | 77.0  |



#14  
 Allyl chloride  
 Concen: 0.893 ug/l  
 RT: 2.44 min Scan# 394  
 Delta R.T. -0.15 min  
 Lab File: VU027050.D  
 Acq: 23 Sep 2018 05:20

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 41      | 100   |       |       |
| 39      | 84.5  | 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: VU027050.D

Acq: 23 Sep 2018 05:20

Instrument :

MSVOA\_U

ClientSampleId :

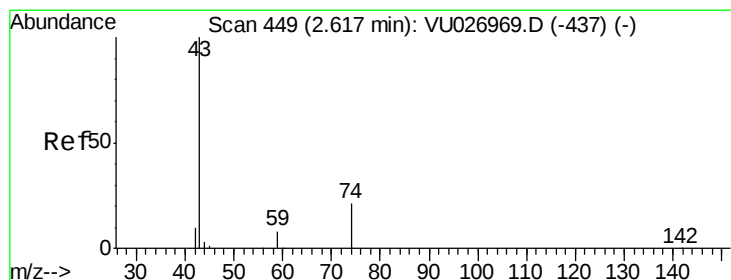
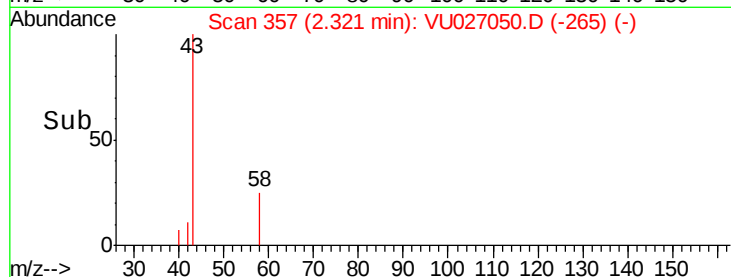
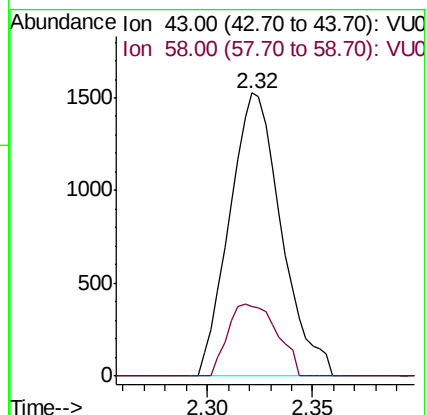
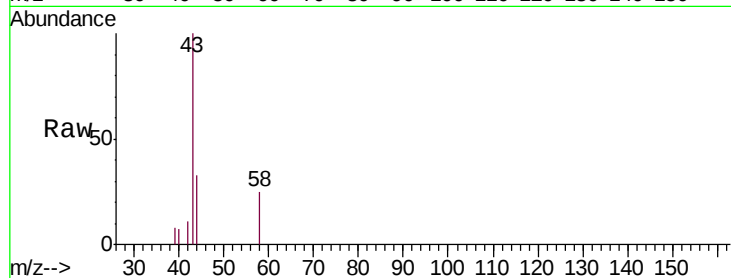
SA-PZ123I-20180914

Tgt Ion: 43 Resp: 2602

Ion Ratio Lower Upper

43 100

58 24.6 24.6 36.8



#18

Methyl Acetate

Concen: 2.283 ug/l

RT: 2.44 min Scan# 394

Delta R.T. -0.18 min

Lab File: VU027050.D

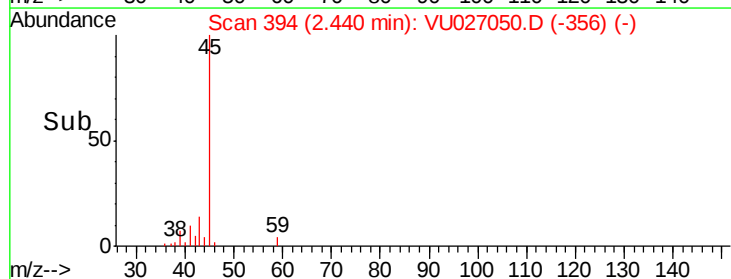
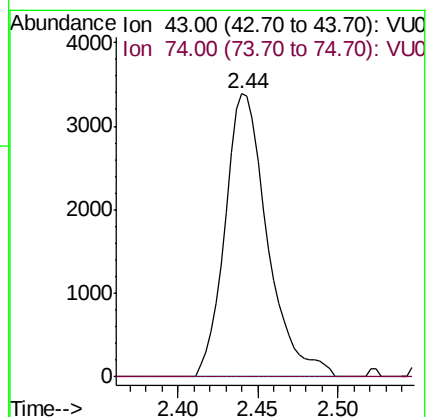
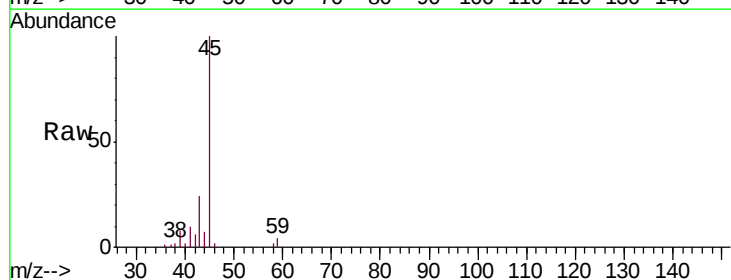
Acq: 23 Sep 2018 05:20

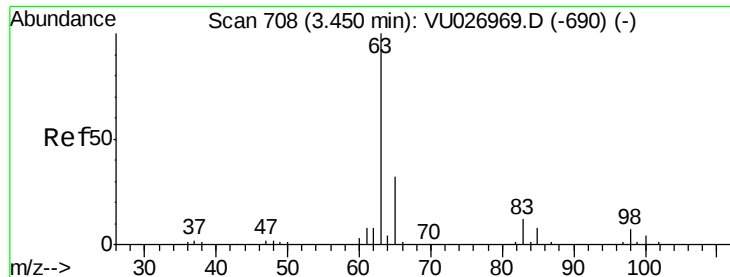
Tgt Ion: 43 Resp: 6151

Ion Ratio Lower Upper

43 100

74 0.0 16.6 25.0#





#24

1,1-Dichloroethane

Concen: 27.423 ug/l

RT: 3.45 min Scan# 708

Delta R.T. -0.00 min

Lab File: VU027050.D

Acq: 23 Sep 2018 05:20

Instrument :

MSVOA\_U

ClientSampleId :

SA-PZ123I-20180914

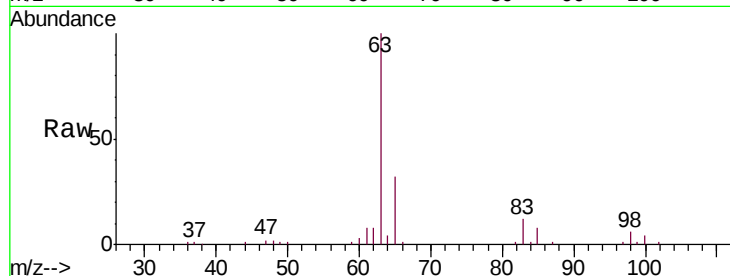
Tgt Ion: 63 Resp: 85105

Ion Ratio Lower Upper

63 100

98 6.3 3.3 9.8

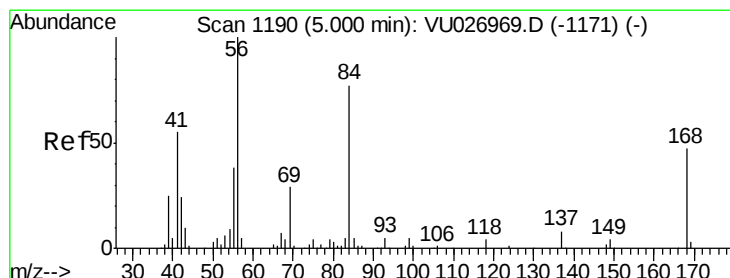
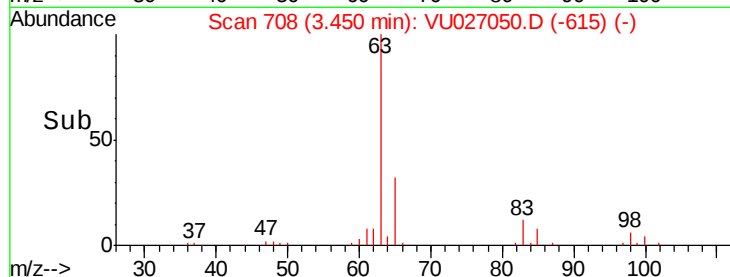
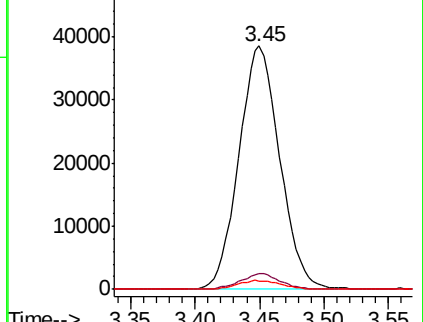
100 3.6 2.0 5.8



Abundance Ion 62.90 (62.60 to 63.60): VU026969.D (-690) (-)

Ion 97.90 (97.60 to 98.60): VU026969.D (-690) (-)

Ion 99.90 (99.60 to 100.60): VU026969.D (-690) (-)



#31

Cyclohexane

Concen: 0.304 ug/l

RT: 4.98 min Scan# 1185

Delta R.T. -0.02 min

Lab File: VU027050.D

Acq: 23 Sep 2018 05:20

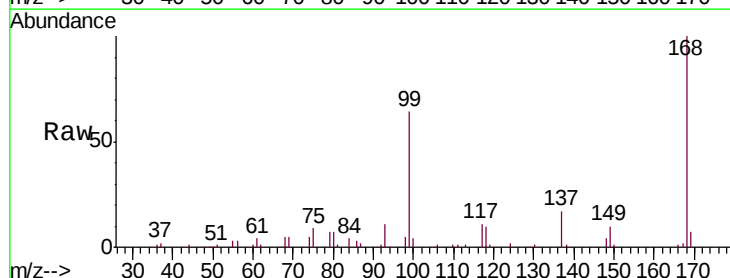
Tgt Ion: 56 Resp: 2469

Ion Ratio Lower Upper

56 100

69 168.4 23.0 34.4#

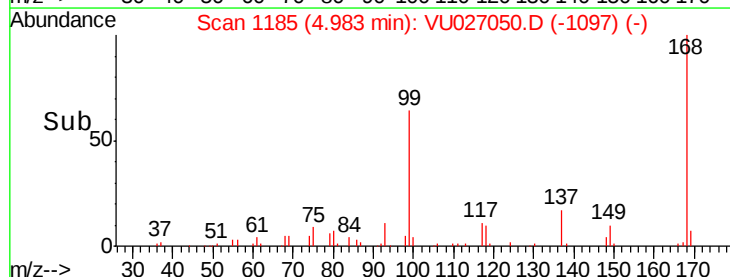
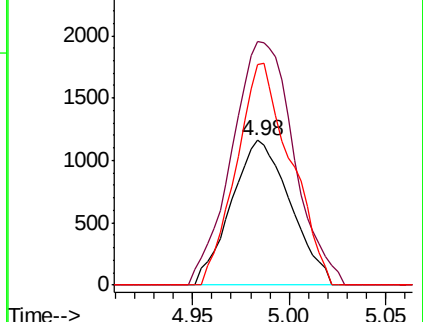
84 152.7 61.4 92.2#

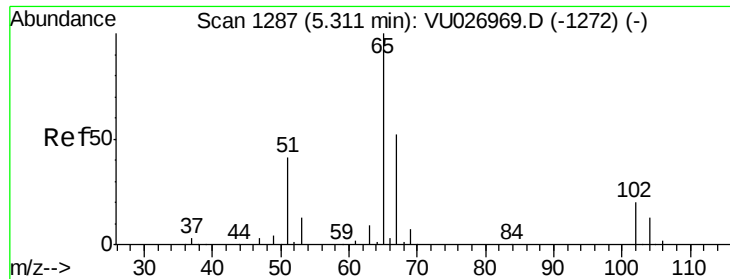


Abundance Ion 56.00 (55.70 to 56.70): VU026969.D (-1171) (-)

Ion 69.00 (68.70 to 69.70): VU026969.D (-1171) (-)

Ion 84.00 (83.70 to 84.70): VU026969.D (-1171) (-)

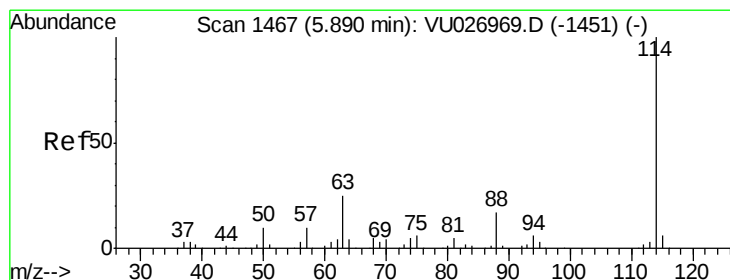
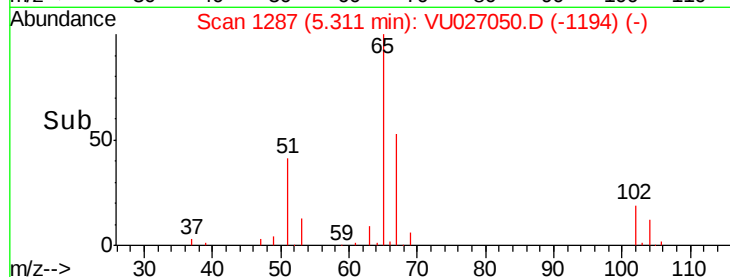
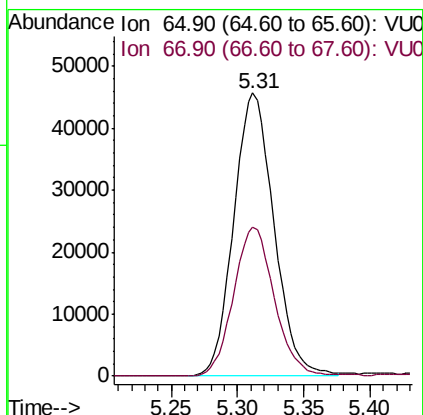
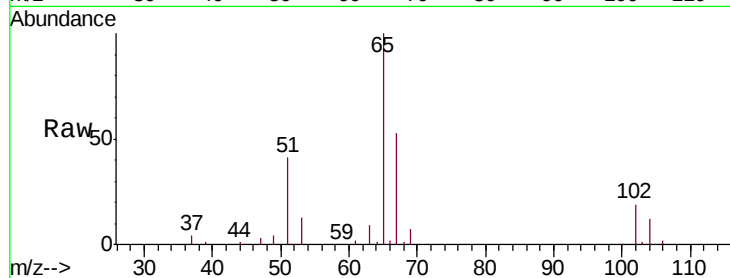




#33  
 1,2-Dichloroethane-d4  
 Concen: 50.934 ug/l  
 RT: 5.31 min Scan# 1287  
 Delta R.T. -0.00 min  
 Lab File: VU027050.D  
 Acq: 23 Sep 2018 05:20

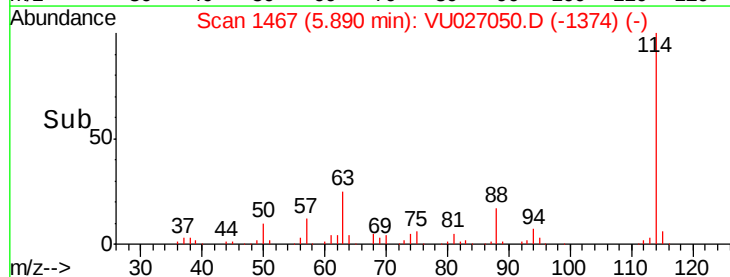
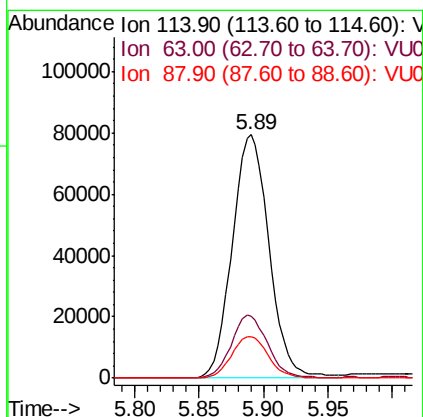
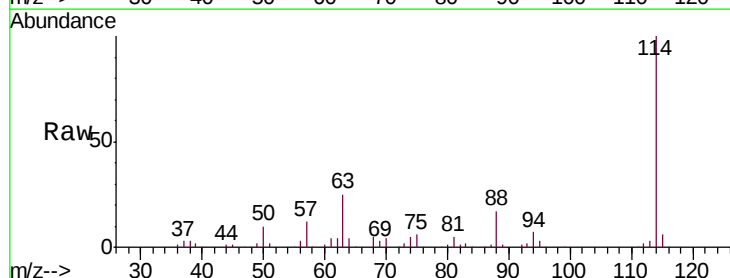
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 SA-PZ123I-20180914

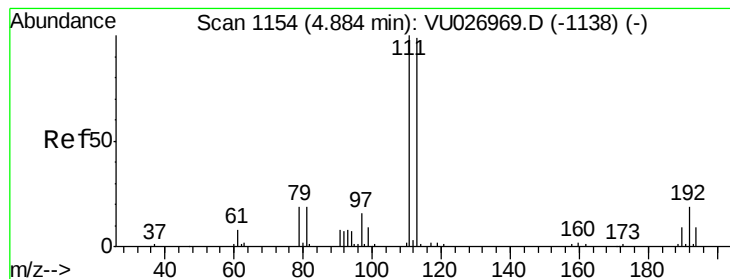
Tgt Ion: 65 Resp: 96407  
 Ion Ratio Lower Upper  
 65 100  
 67 53.3 0.0 105.6



#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 5.89 min Scan# 1467  
 Delta R.T. -0.00 min  
 Lab File: VU027050.D  
 Acq: 23 Sep 2018 05:20

Tgt Ion: 114 Resp: 157843  
 Ion Ratio Lower Upper  
 114 100  
 63 25.4 0.0 49.2  
 88 17.0 0.0 33.8





#35

Dibromofluoromethane

Concen: 48.836 ug/l

RT: 4.88 min Scan# 1154

Delta R.T. -0.00 min

Lab File: VU027050.D

Acq: 23 Sep 2018 05:20

Instrument :

MSVOA\_U

ClientSampleId :

SA-PZ123I-20180914

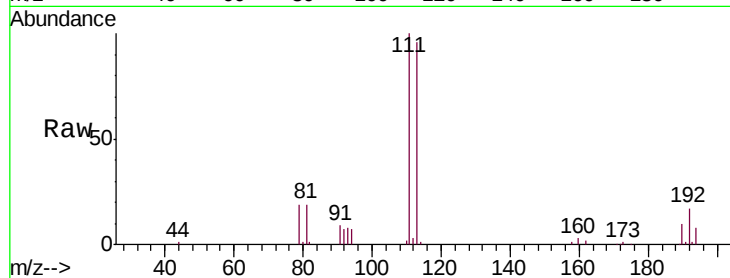
Tgt Ion:113 Resp: 66817

Ion Ratio Lower Upper

113 100

111 103.5 82.2 123.4

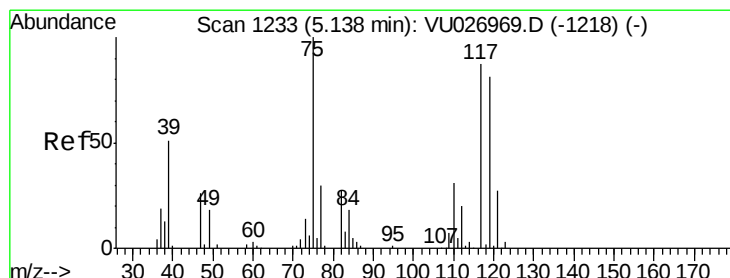
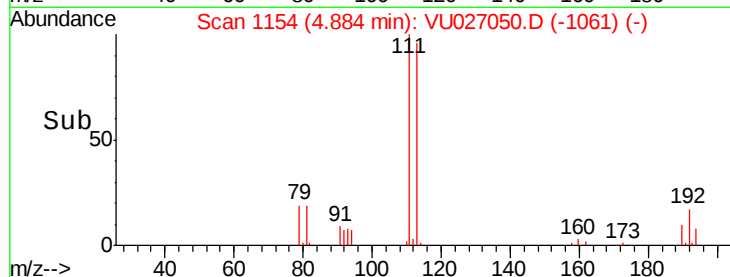
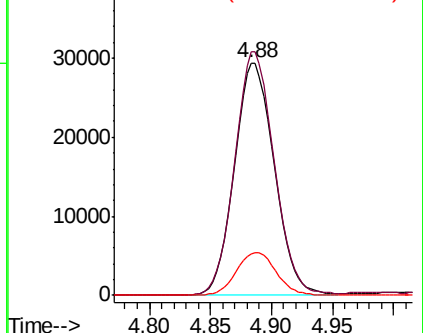
192 18.3 15.2 22.8



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: 4.186 ug/l

RT: 4.99 min Scan# 1186

Delta R.T. -0.15 min

Lab File: VU027050.D

Acq: 23 Sep 2018 05:20

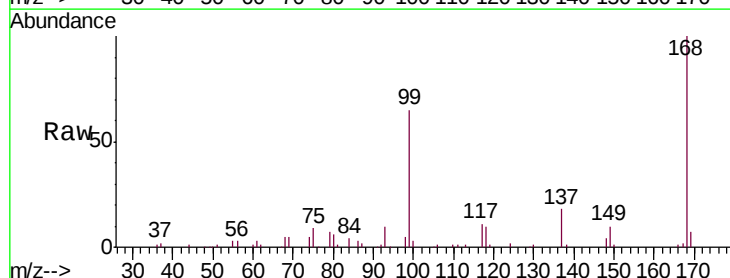
Tgt Ion: 75 Resp: 8818

Ion Ratio Lower Upper

75 100

110 7.2 16.1 48.2#

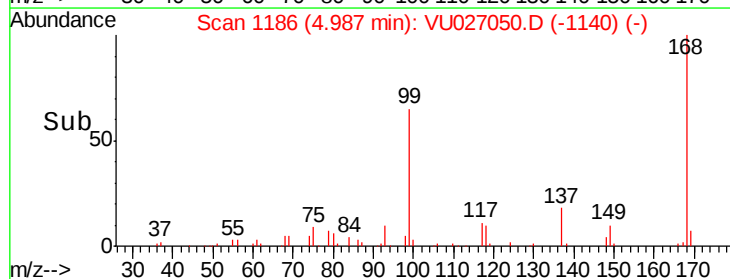
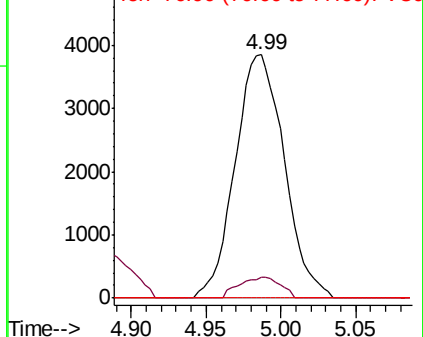
77 0.0 24.6 36.8#

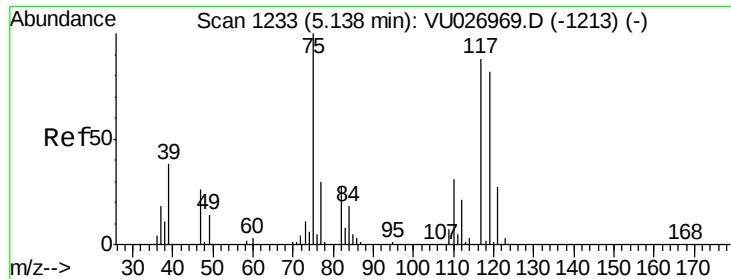


Abundance Ion 74.90 (74.60 to 75.60): VU0

Ion 109.90 (109.60 to 110.60): V

Ion 76.90 (76.60 to 77.60): VU0

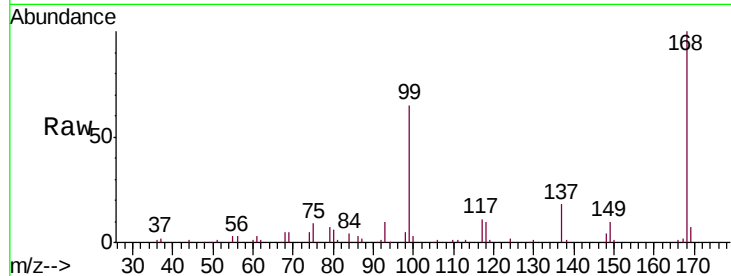




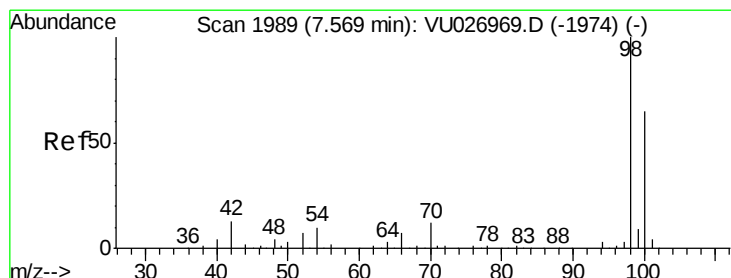
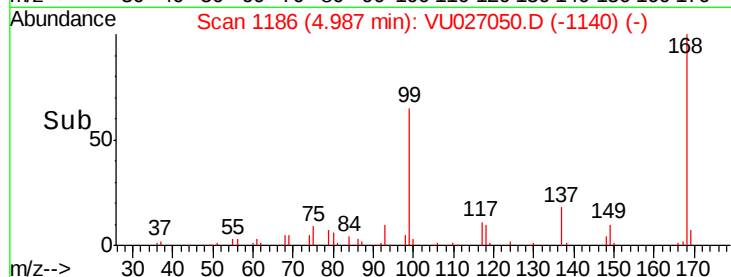
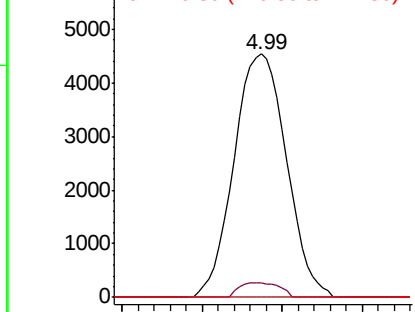
#38  
Carbon Tetrachloride  
Concen: 5.074 ug/l  
RT: 4.99 min Scan# 1186  
Delta R.T. -0.15 min  
Lab File: VU027050.D  
Acq: 23 Sep 2018 05:20

Instrument :  
MSVOA\_U  
ClientSampleId :  
SA-PZ123I-20180914

Tgt Ion: 117 Resp: 10172  
Ion Ratio Lower Upper  
117 100  
119 5.8 74.4 111.6#  
121 0.0 24.2 36.4#

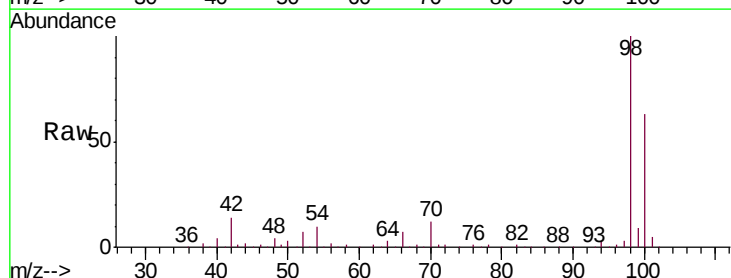


Abundance Ion 116.80 (116.50 to 117.50): V  
Ion 118.80 (118.50 to 119.50): V  
Ion 120.80 (120.50 to 121.50): V

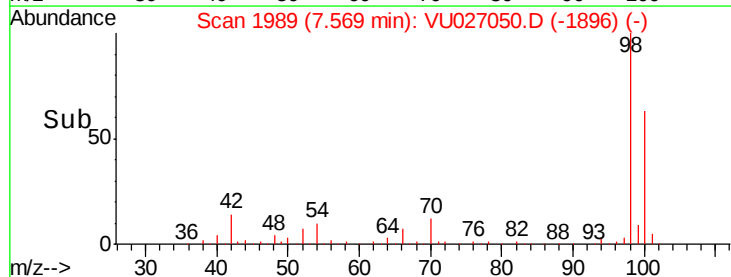
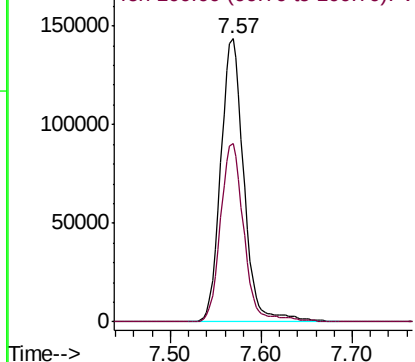


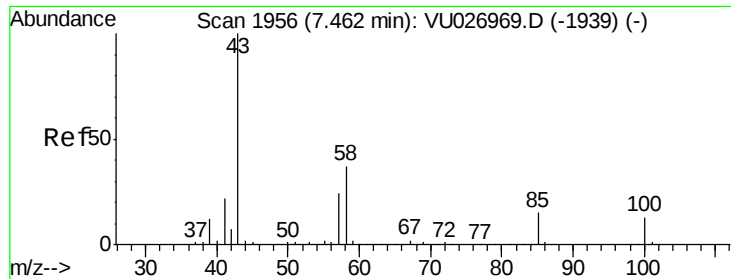
#50  
Toluene-d8  
Concen: 48.874 ug/l  
RT: 7.57 min Scan# 1989  
Delta R.T. -0.00 min  
Lab File: VU027050.D  
Acq: 23 Sep 2018 05:20

Tgt Ion: 98 Resp: 254842  
Ion Ratio Lower Upper  
98 100  
100 63.9 52.1 78.1



Abundance Ion 98.00 (97.70 to 98.70): VU0  
Ion 100.00 (99.70 to 100.70): VU

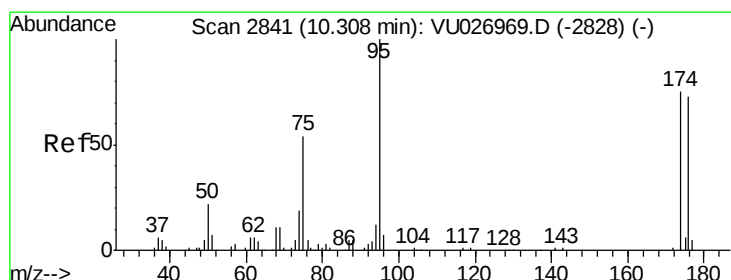
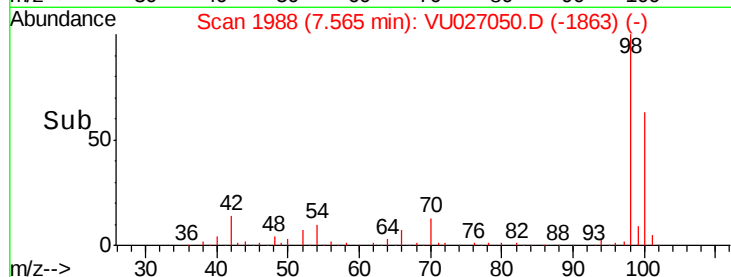
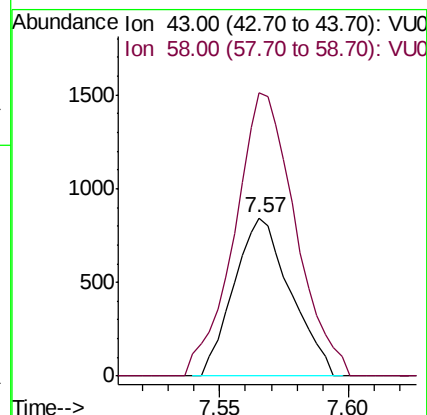
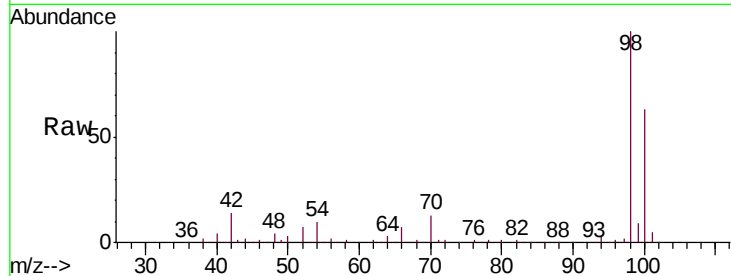




#51  
4-Methyl-2-Pentanone  
Concen: 0.462 ug/l  
RT: 7.57 min Scan# 1988  
Delta R.T. 0.10 min  
Lab File: VU027050.D  
Acq: 23 Sep 2018 05:20

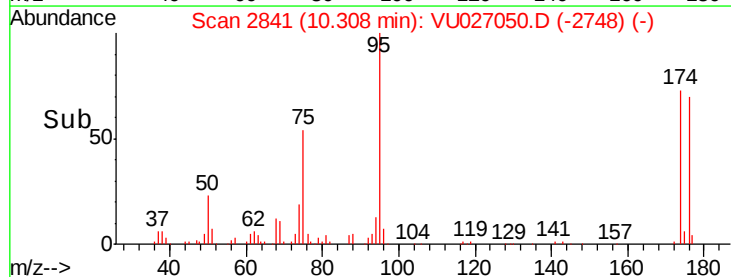
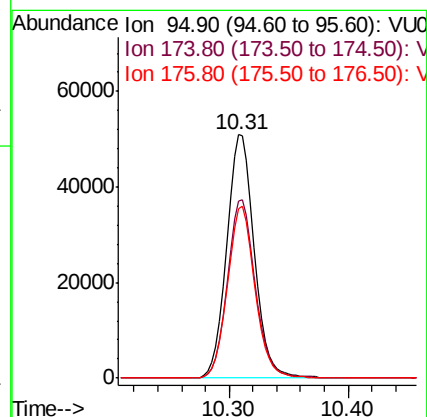
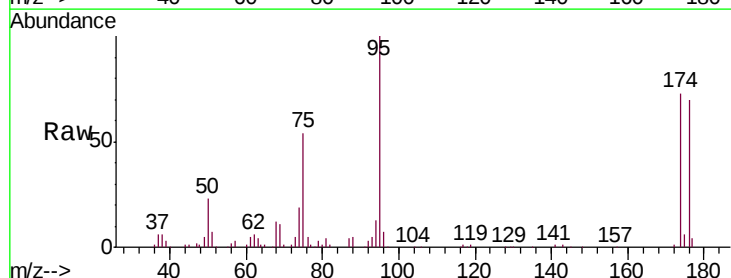
Instrument :  
MSVOA\_U  
ClientSampleId :  
SA-PZ123I-20180914

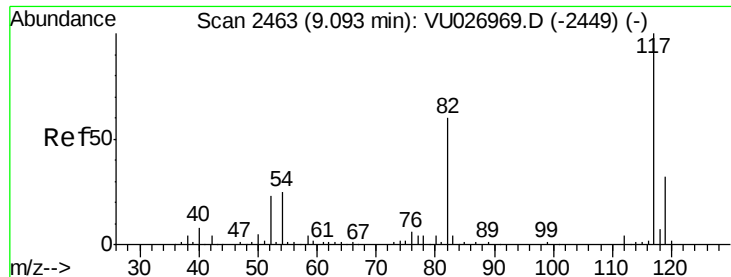
Tgt Ion: 43 Resp: 1292  
Ion Ratio Lower Upper  
43 100  
58 192.7 29.8 44.6#



#62  
4-Bromofluorobenzene  
Concen: 45.621 ug/l  
RT: 10.31 min Scan# 2841  
Delta R.T. -0.00 min  
Lab File: VU027050.D  
Acq: 23 Sep 2018 05:20

Tgt Ion: 95 Resp: 81624  
Ion Ratio Lower Upper  
95 100  
174 74.2 0.0 150.2  
176 70.6 0.0 145.2

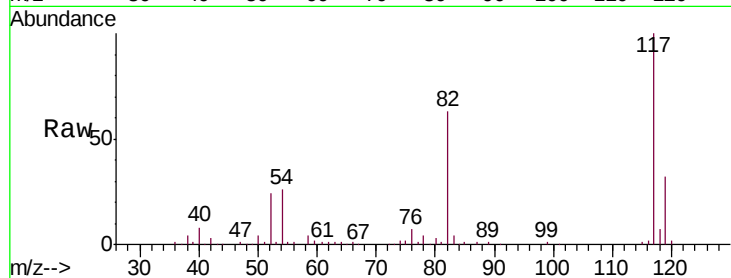




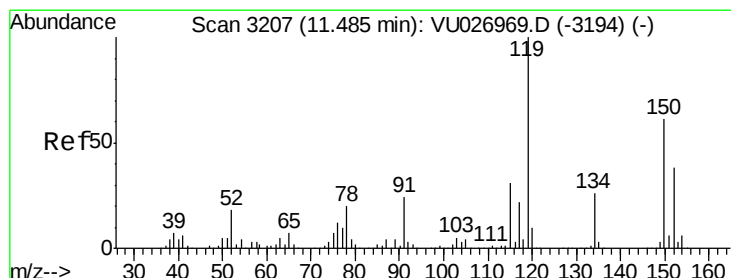
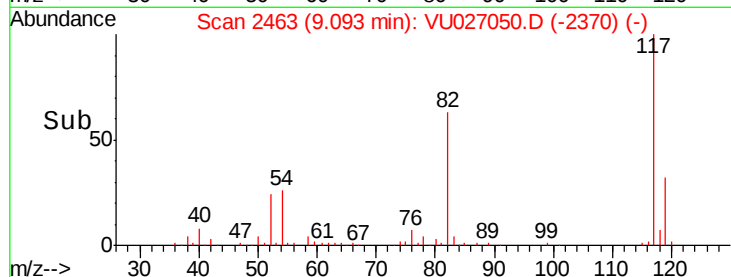
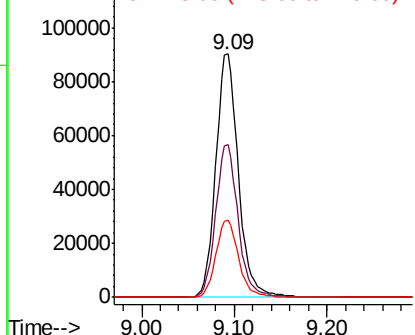
#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 9.09 min Scan# 2463  
Delta R.T. -0.00 min  
Lab File: VU027050.D  
Acq: 23 Sep 2018 05:20

Instrument :  
MSVOA\_U  
ClientSampleId :  
SA-PZ123I-20180914

Tgt Ion:117 Resp: 152160  
Ion Ratio Lower Upper  
117 100  
82 62.6 48.0 72.0  
119 31.7 25.8 38.8

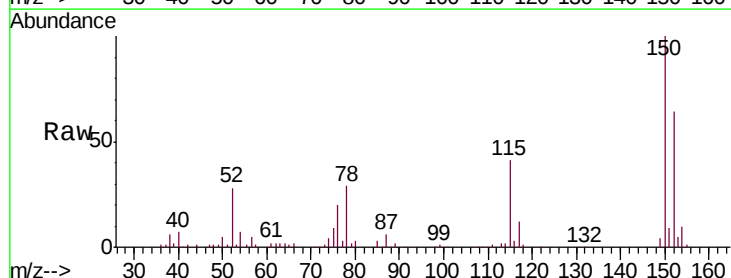


Abundance Ion 116.90 (116.60 to 117.60): V  
Ion 82.00 (81.70 to 82.70): VU0  
Ion 118.90 (118.60 to 119.60): V

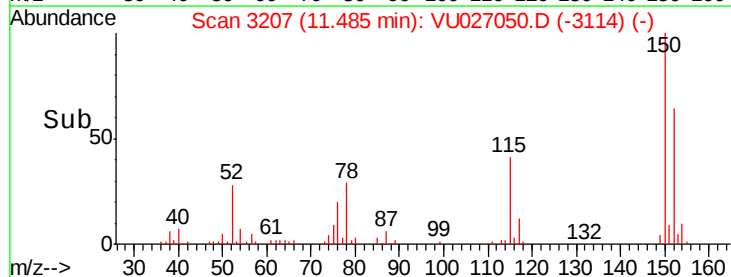
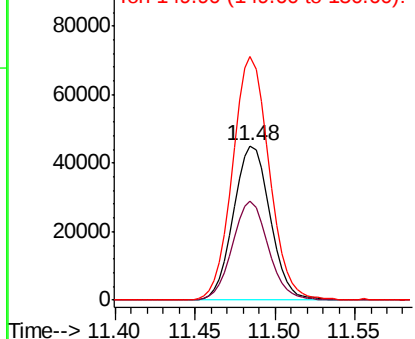


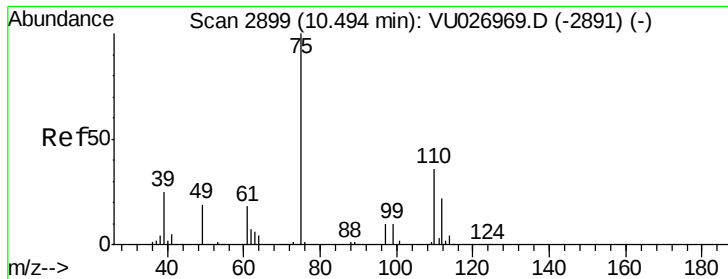
#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 11.48 min Scan# 3207  
Delta R.T. -0.00 min  
Lab File: VU027050.D  
Acq: 23 Sep 2018 05:20

Tgt Ion:152 Resp: 70372  
Ion Ratio Lower Upper  
152 100  
115 62.9 44.9 134.5  
150 157.8 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: 21.106 ug/l

RT: 10.31 min Scan# 2841

Delta R.T. -0.19 min

Lab File: VU027050.D

Acq: 23 Sep 2018 05:20

Instrument :

MSVOA\_U

ClientSampleId :

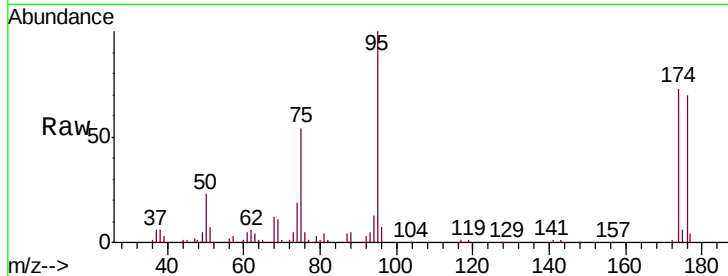
SA-PZ123I-20180914

Tgt Ion: 75 Resp: 45123

Ion Ratio Lower Upper

75 100

77 1.0 20.9 62.8#



Abundance Ion 74.90 (74.60 to 75.60): VU026969.D (-2891) (-)

Ion 77.00 (76.70 to 77.70): VU026969.D (-2891) (-)

10.31

25000

20000

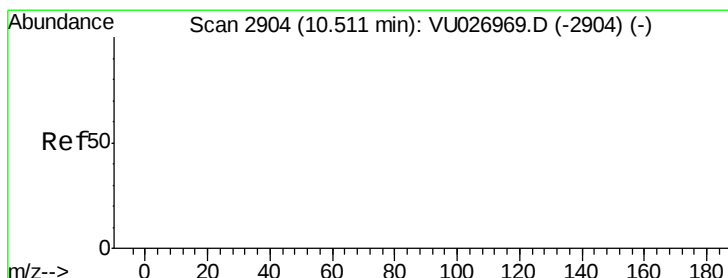
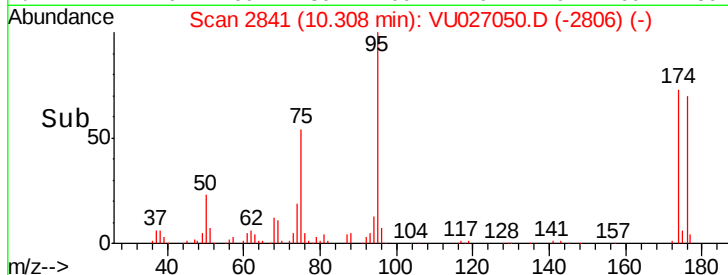
15000

10000

5000

0

Time-->



#81

trans-1,4-Dichloro-2-butene

Concen: 67.544 ug/l

RT: 10.31 min Scan# 2841

Delta R.T. -0.21 min

Lab File: VU027050.D

Acq: 23 Sep 2018 05:20

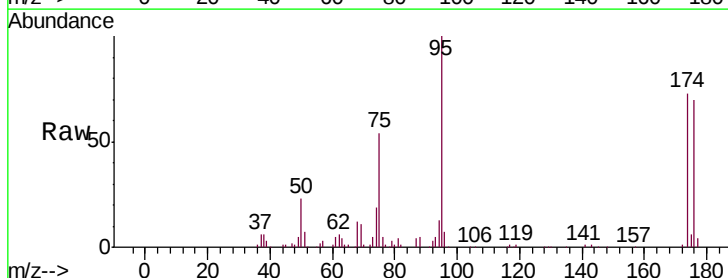
Tgt Ion: 75 Resp: 45123

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): VU026969.D (-2904) (-)

Ion 53.00 (52.70 to 53.70): VU026969.D (-2904) (-)

Ion 88.90 (88.60 to 89.60): VU026969.D (-2904) (-)

10.31

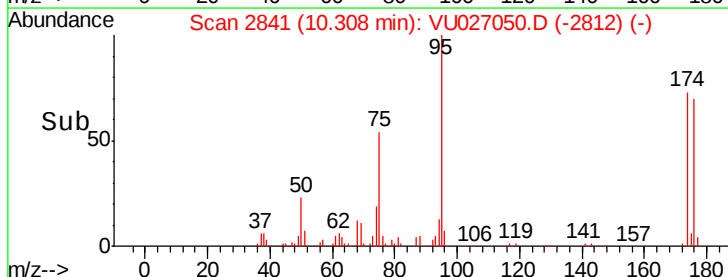
30000

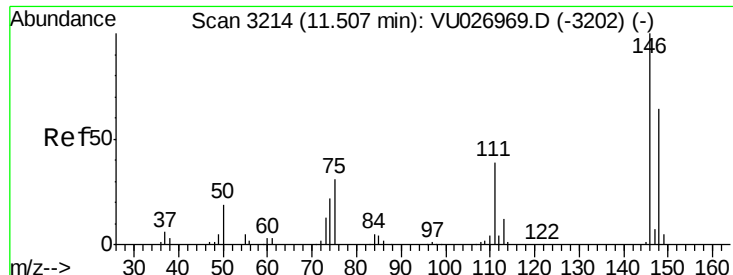
20000

10000

0

Time-->





#88

1,4-Dichlorobenzene

Concen: 0.353 ug/l

RT: 11.51 min Scan# 3214

Delta R.T. -0.00 min

Lab File: VU027050.D

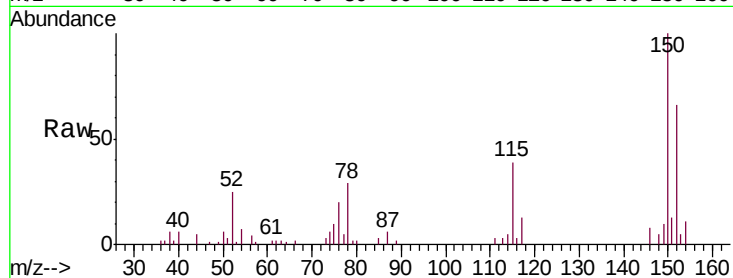
Acq: 23 Sep 2018 05:20

Instrument :

MSVOA\_U

ClientSampleId :

SA-PZ123I-20180914



|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 146   | Resp: | 937   |
| Ion      | Ratio | Lower | Upper |
| 146      | 100   |       |       |
| 111      | 0.0   | 20.3  | 60.9# |
| 148      | 83.2  | 31.9  | 95.9  |

