

Data File : VU027056.D  
Acq On : 23 Sep 2018 07:40  
Operator : MD/SY  
Sample : J4963-10  
Misc : 5.0mL/MSVOA\_U/WATER  
ALS Vial : 98 Sample Multiplier: 1

Instrument :  
MSVOA\_U  
ClientSampleId :  
SA-DUP05-20180914

Quant Time: Sep 24 05:49:02 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  | 93669    | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 5.89  | 114  | 157690   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 9.09  | 117  | 152611   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 11.48 | 152  | 69764    | 50.00 | ug/l  | 0.00     |

System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 5.31   | 65  | 97412    | 51.67 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 103.34% |      |
| 35) Dibromofluoromethane  | 4.89   | 113 | 68481    | 50.10 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 100.20% |      |
| 50) Toluene-d8            | 7.57   | 98  | 256338   | 49.21 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 98.42%  |      |
| 62) 4-Bromofluorobenzene  | 10.31  | 95  | 82849    | 46.35 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 92.70%  |      |

Target Compounds

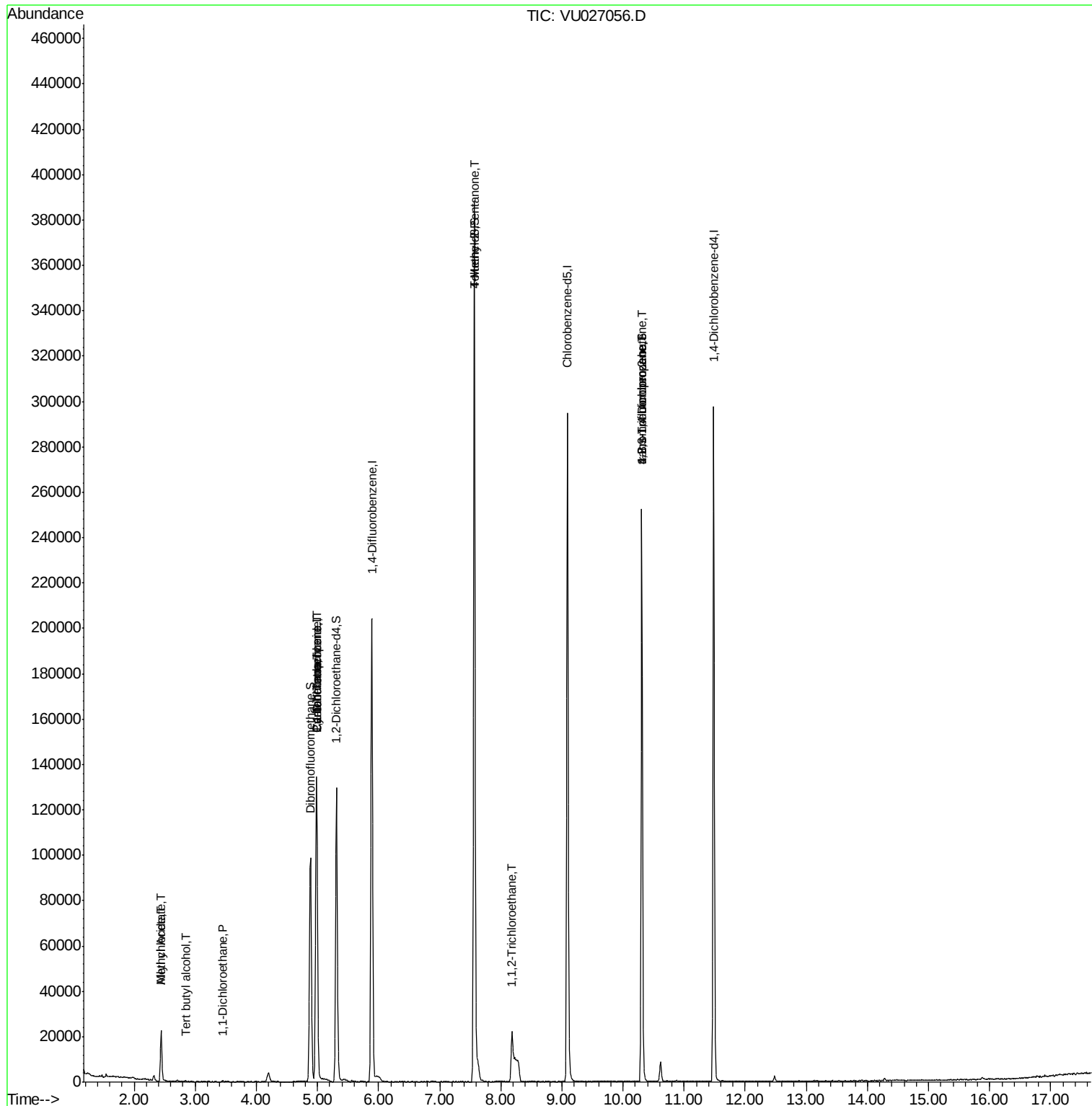
|                                |       |     |       |           |        | Qvalue |
|--------------------------------|-------|-----|-------|-----------|--------|--------|
| 11) Tert butyl alcohol         | 2.84  | 59  | 137   | 0.317     | ug/l # | 72     |
| 14) Allyl chloride             | 2.44  | 41  | 2357  | 0.898     | ug/l # | 68     |
| 16) Acetone                    | 2.32  | 43  | 2980  | Below Cal |        | 94     |
| 18) Methyl Acetate             | 2.44  | 43  | 5954  | 2.219     | ug/l # | 55     |
| 24) 1,1-Dichloroethane         | 3.45  | 63  | 660   | 0.214     | ug/l # | 84     |
| 31) Cyclohexane                | 4.99  | 56  | 2613  | 0.359     | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 4.99  | 75  | 8843  | 4.202     | ug/l # | 50     |
| 38) Carbon Tetrachloride       | 4.99  | 117 | 9946  | 4.966     | ug/l # | 17     |
| 51) 4-Methyl-2-Pentanone       | 7.57  | 43  | 1193  | 0.427     | ug/l # | 1      |
| 55) 1,1,2-Trichloroethane      | 8.18  | 97  | 429   | 0.276     | ug/l # | 13     |
| 76) 1,2,3-Trichloropropane     | 10.31 | 75  | 44584 | 21.036    | ug/l # | 35     |
| 81) trans-1,4-Dichloro-2-buten | 10.31 | 75  | 44584 | 67.319    | ug/l # | 100    |

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

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#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 4.99 min Scan# 1186

Delta R.T. 0.00 min

Lab File: VU027056.D

Acq: 23 Sep 2018 07:40

Instrument :

MSVOA\_U

ClientSampleId :

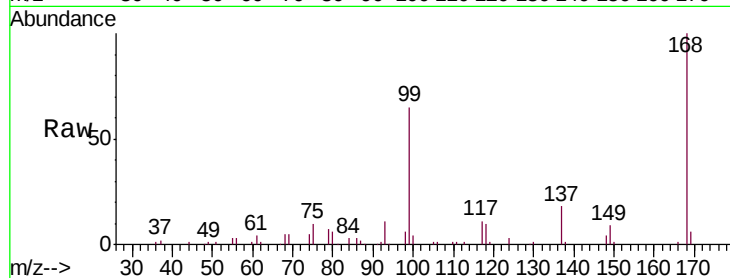
SA-DUP05-20180914

Tgt Ion:168 Resp: 93669

Ion Ratio Lower Upper

168 100

99 65.0 48.1 72.1



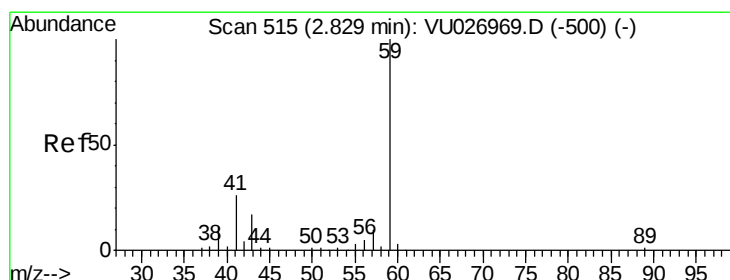
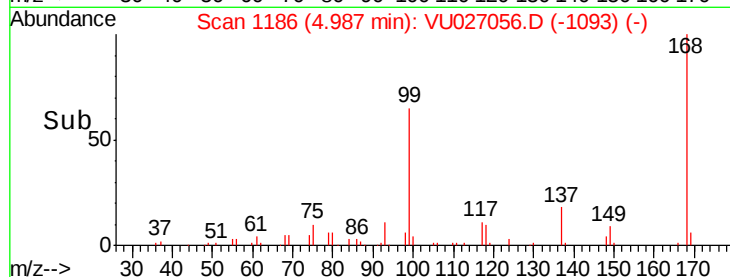
Abundance Ion 167.90 (167.60 to 168.60): VU026969.D (-1169) (-)

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

4.99

4.90 4.95 5.00 5.05

Time-->



#11

Tert butyl alcohol

Concen: 0.317 ug/l

RT: 2.84 min Scan# 519

Delta R.T. 0.01 min

Lab File: VU027056.D

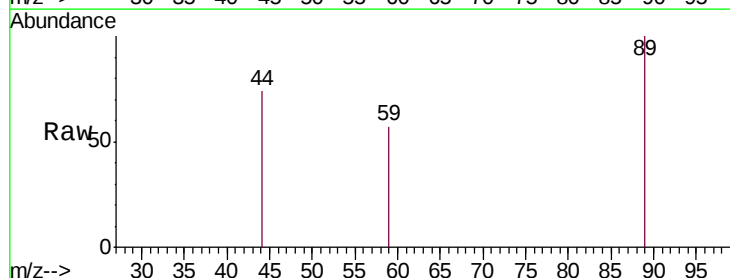
Acq: 23 Sep 2018 07:40

Tgt Ion: 59 Resp: 137

Ion Ratio Lower Upper

59 100

57 0.0 8.5 12.7#



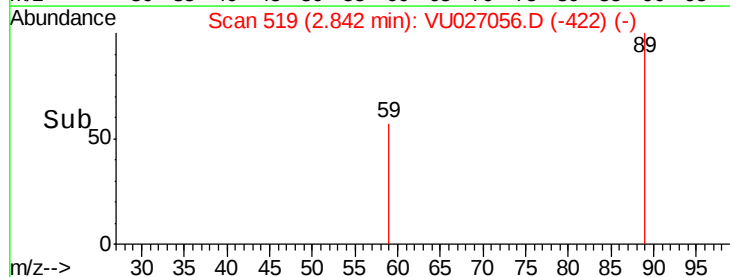
Abundance Ion 59.00 (58.70 to 59.70): VU026969.D (-500) (-)

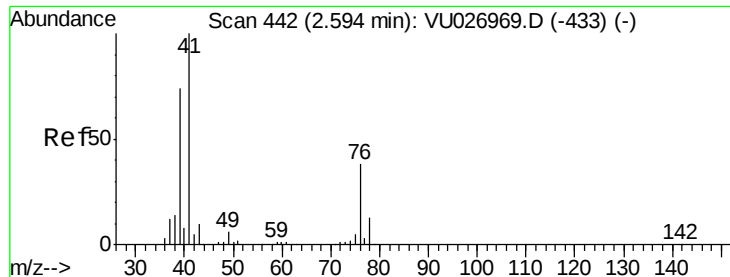
Ion 57.00 (56.70 to 57.70): VU026969.D (-500) (-)

2.84

2.82 2.83 2.84 2.85 2.86

Time-->

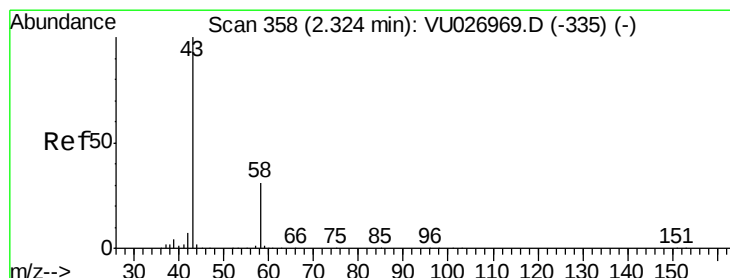
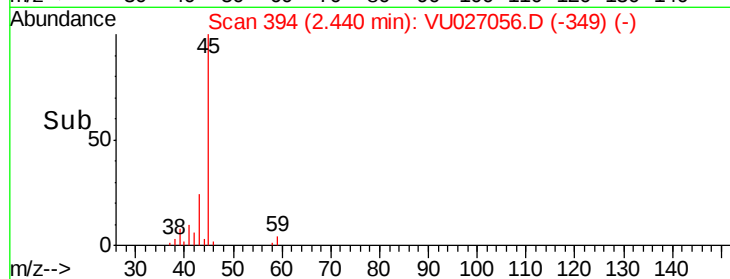
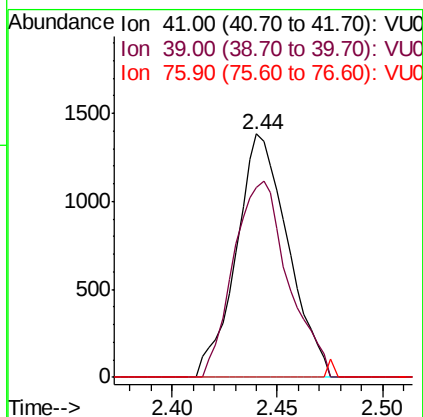
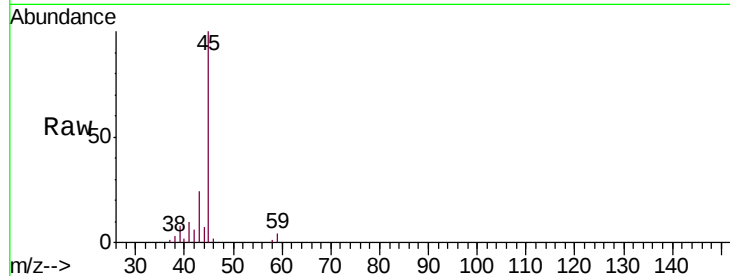




#14  
 Allyl chloride  
 Concen: 0.898 ug/l  
 RT: 2.44 min Scan# 394  
 Delta R.T. -0.15 min  
 Lab File: VU027056.D  
 Acq: 23 Sep 2018 07:40

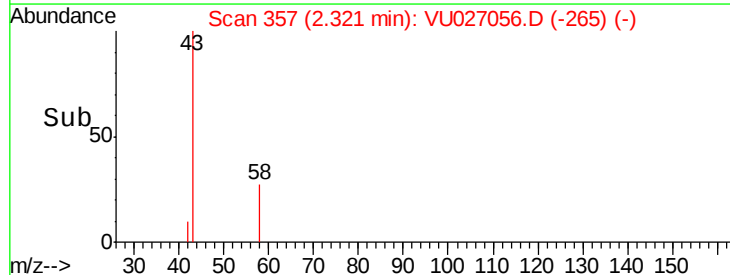
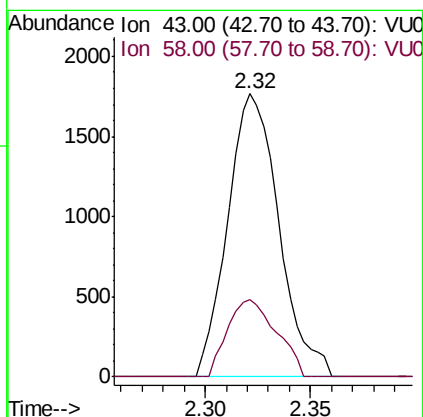
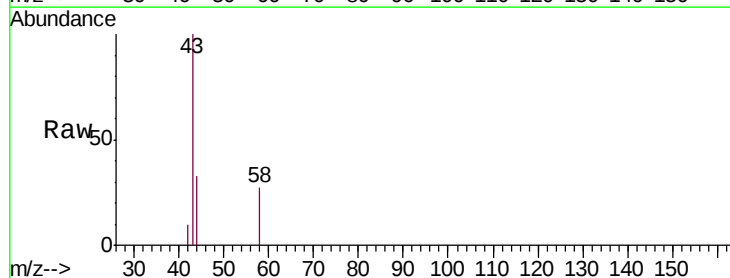
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 SA-DUP05-20180914

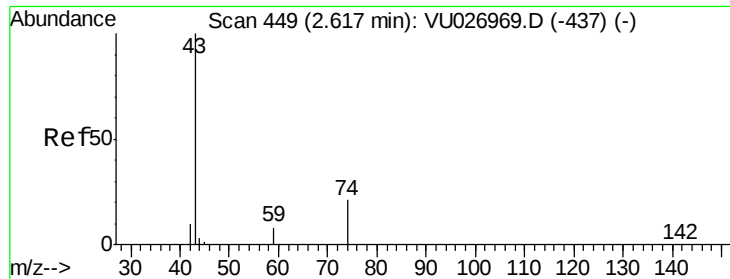
Tgt Ion: 41 Resp: 2357  
 Ion Ratio Lower Upper  
 41 100  
 39 85.0 55.7 83.5#  
 76 0.0 26.5 39.7#



#16  
 Acetone  
 Concen: Below Cal  
 RT: 2.32 min Scan# 357  
 Delta R.T. -0.00 min  
 Lab File: VU027056.D  
 Acq: 23 Sep 2018 07:40

Tgt Ion: 43 Resp: 2980  
 Ion Ratio Lower Upper  
 43 100  
 58 27.2 24.6 36.8





#18

Methyl Acetate

Concen: 2.219 ug/l

RT: 2.44 min Scan# 394

Delta R.T. -0.18 min

Lab File: VU027056.D

Acq: 23 Sep 2018 07:40

Instrument :

MSVOA\_U

ClientSampleId :

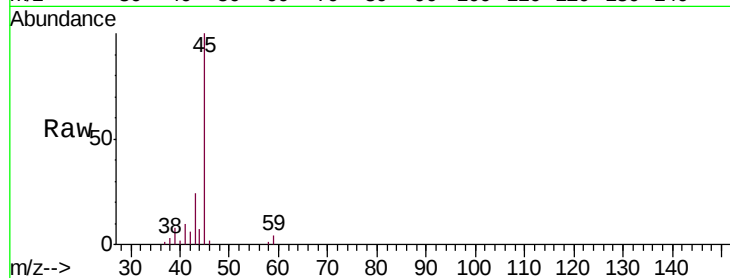
SA-DUP05-20180914

Tgt Ion: 43 Resp: 5954

Ion Ratio Lower Upper

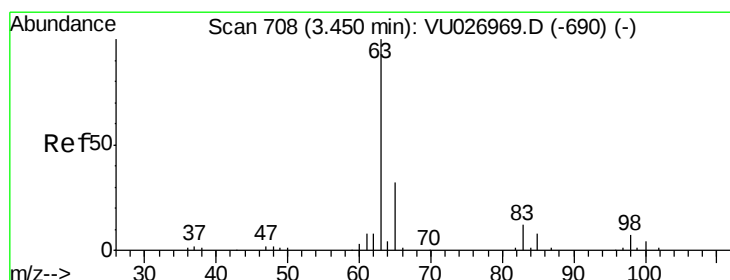
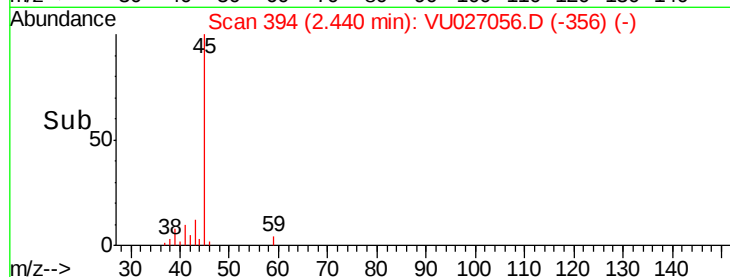
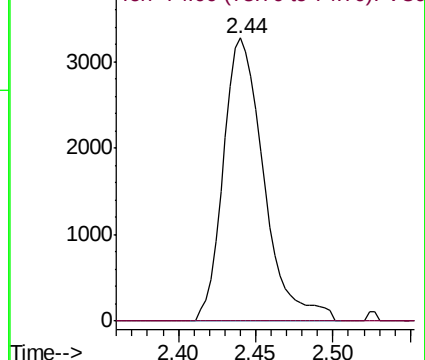
43 100

74 0.0 16.6 25.0#



Abundance Ion 43.00 (42.70 to 43.70): VU0

Ion 74.00 (73.70 to 74.70): VU0



#24

1,1-Dichloroethane

Concen: 0.214 ug/l

RT: 3.45 min Scan# 707

Delta R.T. -0.00 min

Lab File: VU027056.D

Acq: 23 Sep 2018 07:40

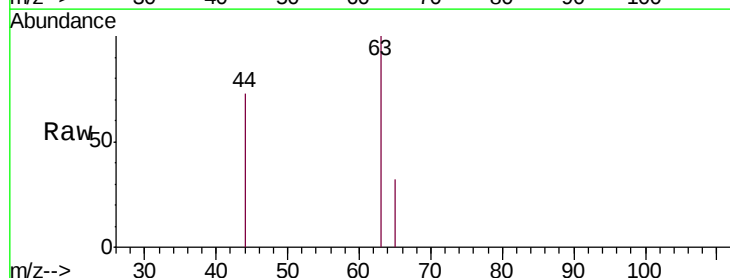
Tgt Ion: 63 Resp: 660

Ion Ratio Lower Upper

63 100

98 0.0 3.3 9.8#

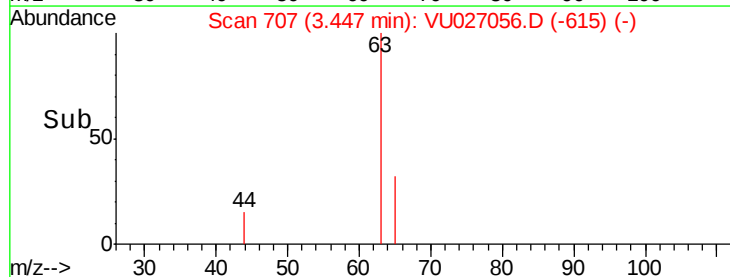
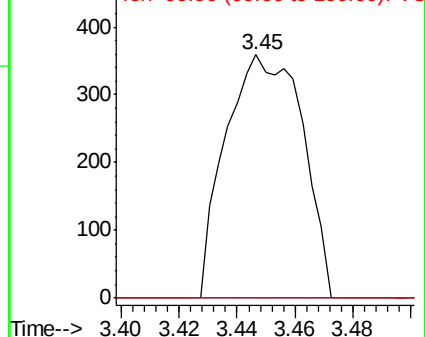
100 0.0 2.0 5.8#

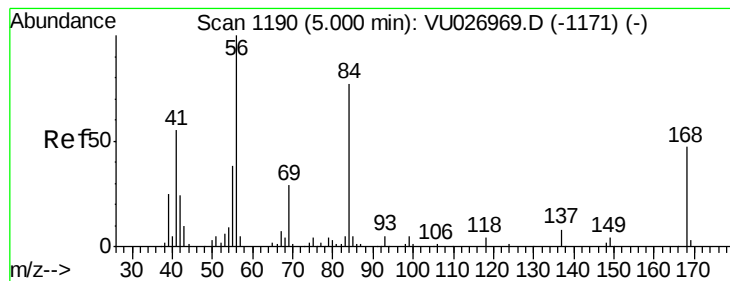


Abundance Ion 62.90 (62.60 to 63.60): VU0

Ion 97.90 (97.60 to 98.60): VU0

Ion 99.90 (99.60 to 100.60): VU0





#31

Cyclohexane

Concen: 0.359 ug/l

RT: 4.99 min Scan# 1186

Delta R.T. -0.01 min

Lab File: VU027056.D

Acq: 23 Sep 2018 07:40

Instrument :

MSVOA\_U

ClientSampleId :

SA-DUP05-20180914

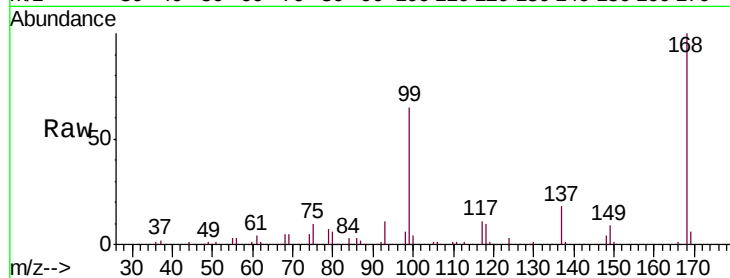
Tgt Ion: 56 Resp: 2613

Ion Ratio Lower Upper

56 100

69 171.8 23.0 34.4#

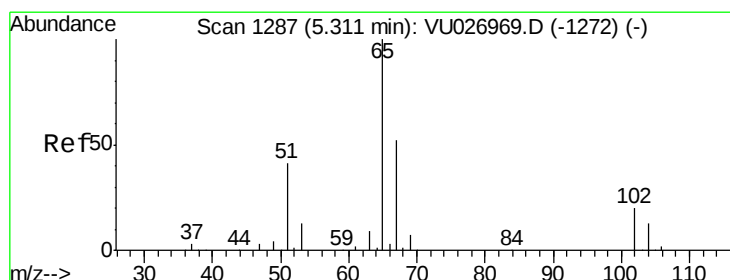
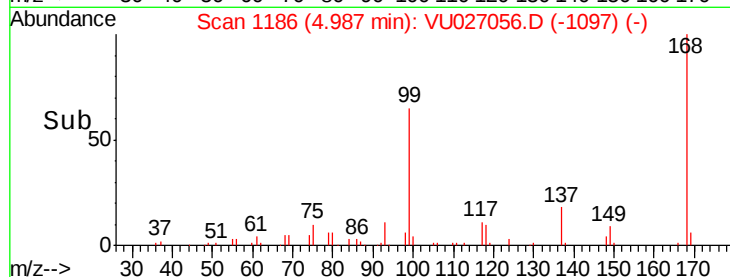
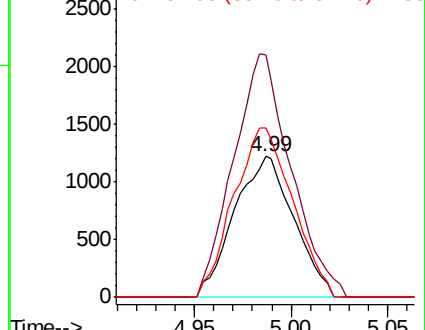
84 120.4 61.4 92.2#



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: 51.671 ug/l

RT: 5.31 min Scan# 1287

Delta R.T. 0.00 min

Lab File: VU027056.D

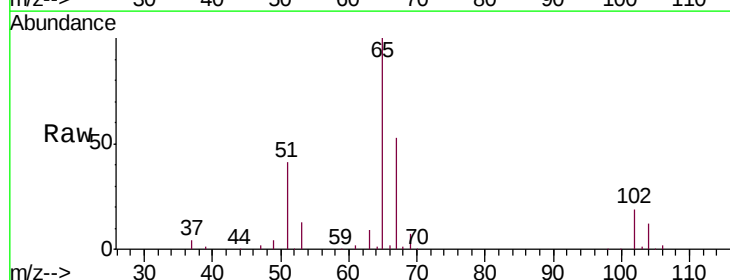
Acq: 23 Sep 2018 07:40

Tgt Ion: 65 Resp: 97412

Ion Ratio Lower Upper

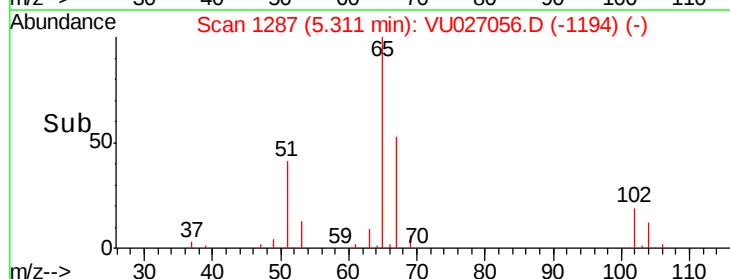
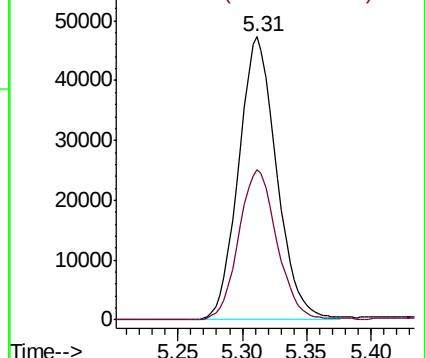
65 100

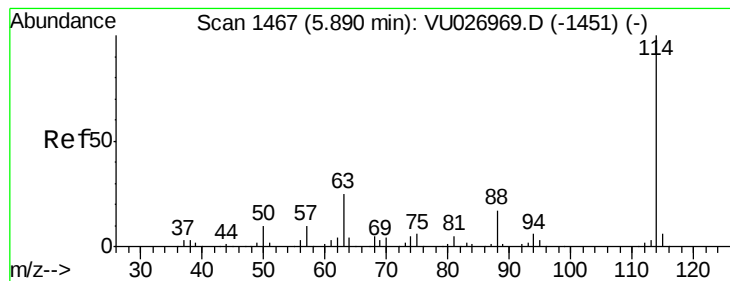
67 53.7 0.0 105.6



Abundance Ion 64.90 (64.60 to 65.60): VU026969.D (-1272) (-)

Ion 66.90 (66.60 to 67.60): VU026969.D (-1272) (-)





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 5.89 min Scan# 1467

Delta R.T. 0.00 min

Lab File: VU027056.D

Acq: 23 Sep 2018 07:40

Instrument :

MSVOA\_U

ClientSampleId :

SA-DUP05-20180914

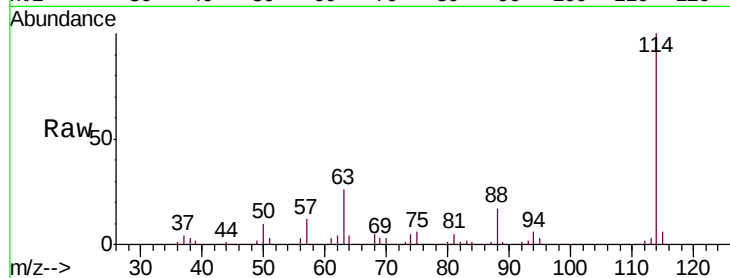
Tgt Ion:114 Resp: 157690

Ion Ratio Lower Upper

114 100

63 25.9 0.0 49.2

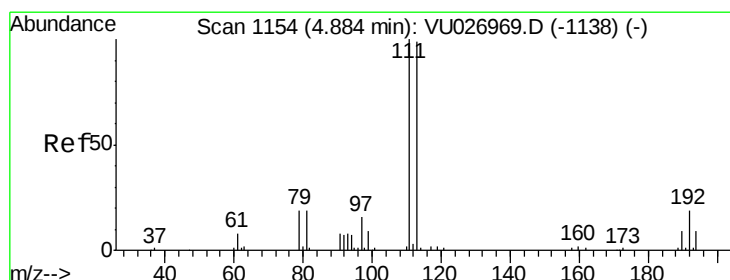
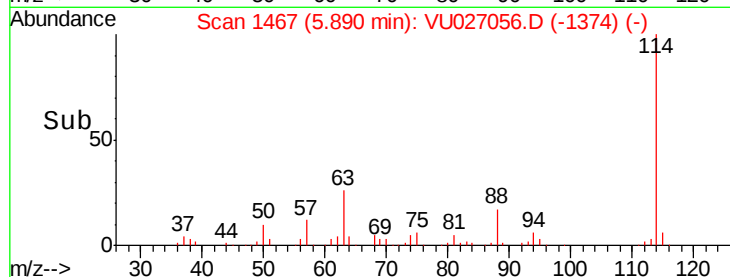
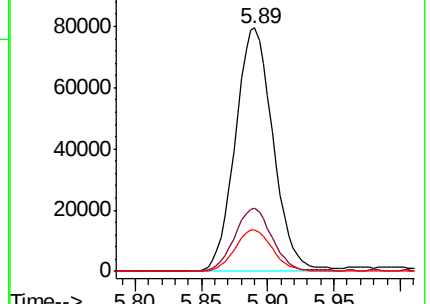
88 16.9 0.0 33.8



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: 50.101 ug/l

RT: 4.89 min Scan# 1155

Delta R.T. 0.00 min

Lab File: VU027056.D

Acq: 23 Sep 2018 07:40

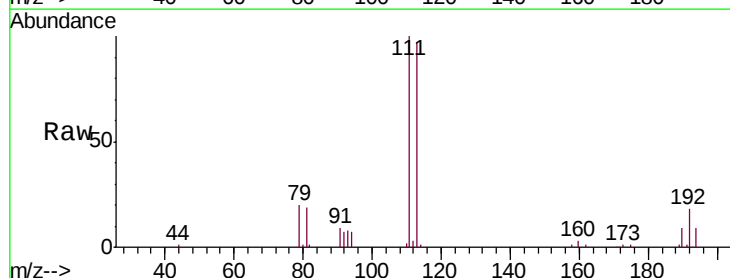
Tgt Ion:113 Resp: 68481

Ion Ratio Lower Upper

113 100

111 101.9 82.2 123.4

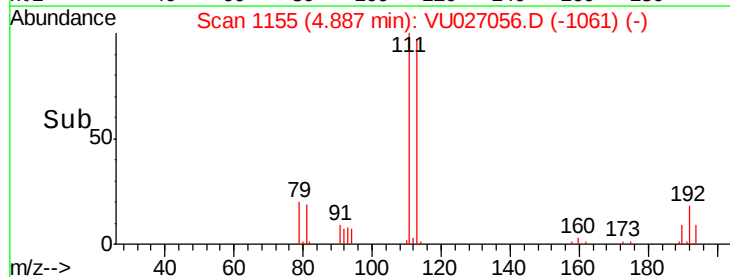
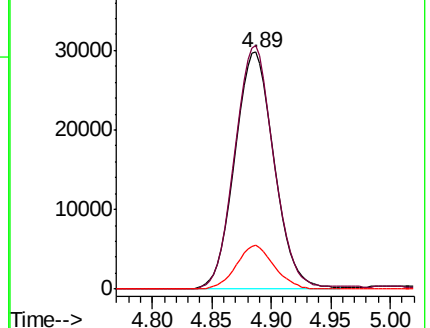
192 17.7 15.2 22.8

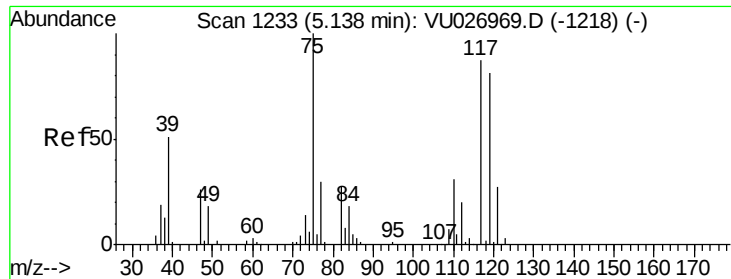


Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V

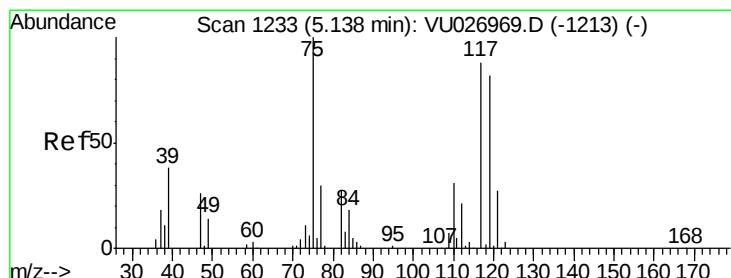
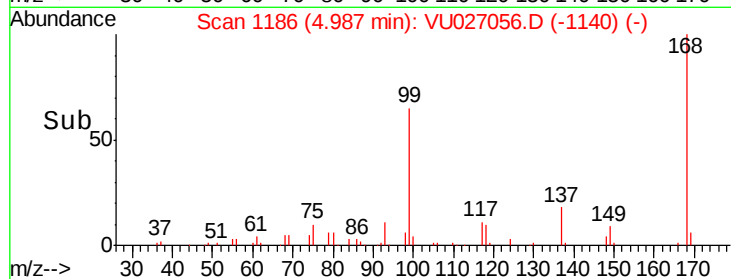
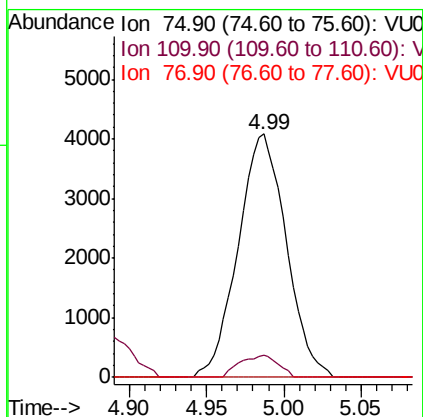
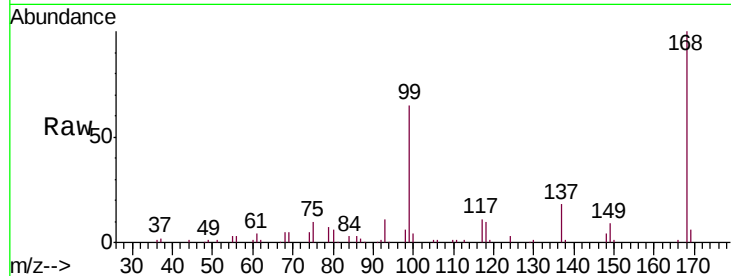




#36  
 1,1-Dichloropropene  
 Concen: 4.202 ug/l  
 RT: 4.99 min Scan# 1186  
 Delta R.T. -0.15 min  
 Lab File: VU027056.D  
 Acq: 23 Sep 2018 07:40

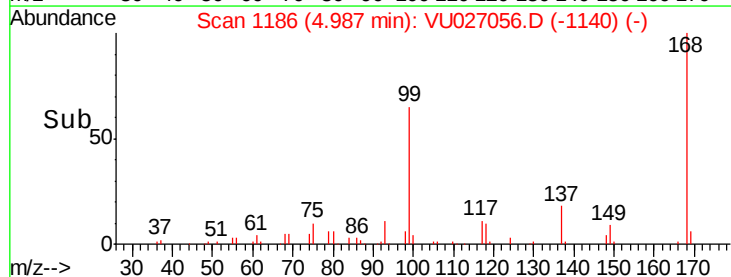
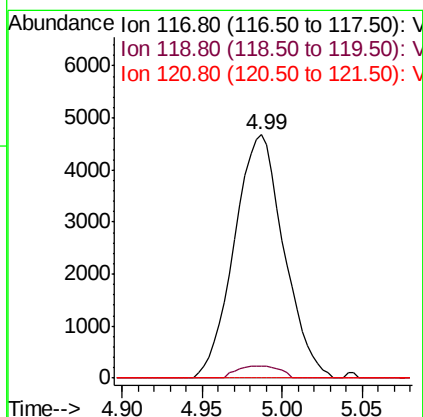
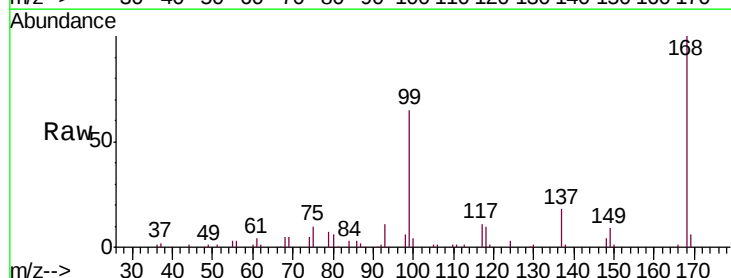
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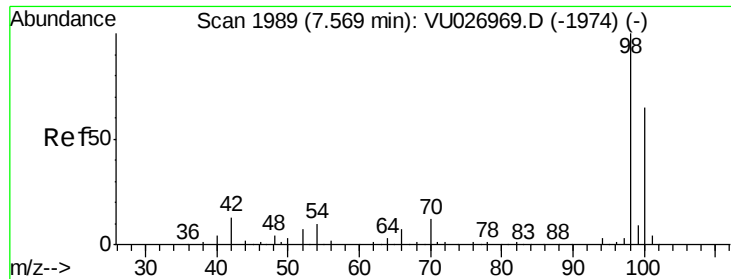
Tgt Ion: 75 Resp: 8843  
 Ion Ratio Lower Upper  
 75 100  
 110 7.2 16.1 48.2#  
 77 0.0 24.6 36.8#



#38  
 Carbon Tetrachloride  
 Concen: 4.966 ug/l  
 RT: 4.99 min Scan# 1186  
 Delta R.T. -0.15 min  
 Lab File: VU027056.D  
 Acq: 23 Sep 2018 07:40

Tgt Ion: 117 Resp: 9946  
 Ion Ratio Lower Upper  
 117 100  
 119 5.0 74.4 111.6#  
 121 0.0 24.2 36.4#

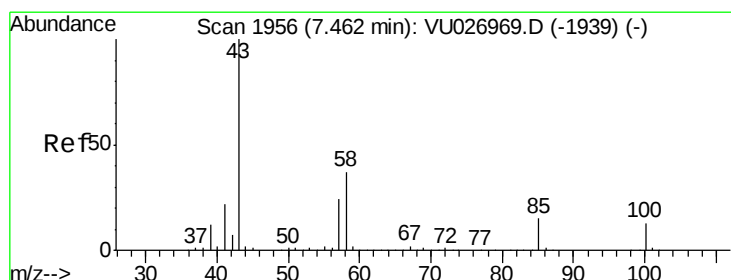
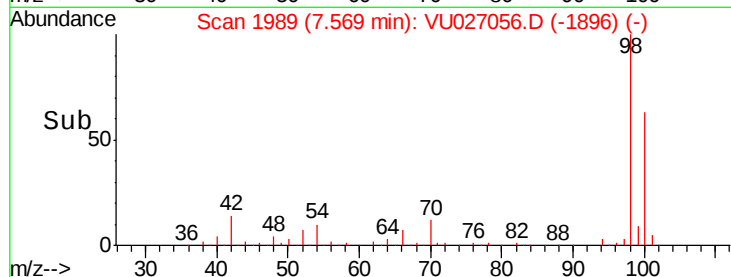
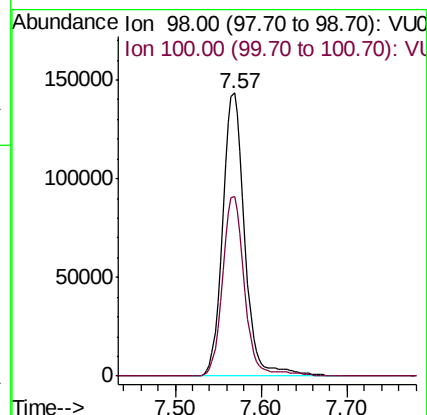
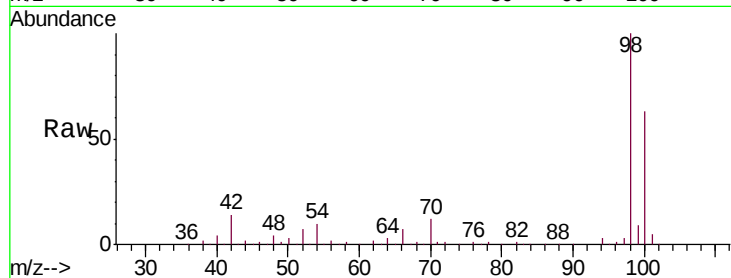




#50  
Toluene-d8  
Concen: 49.209 ug/l  
RT: 7.57 min Scan# 1989  
Delta R.T. 0.00 min  
Lab File: VU027056.D  
Acq: 23 Sep 2018 07:40

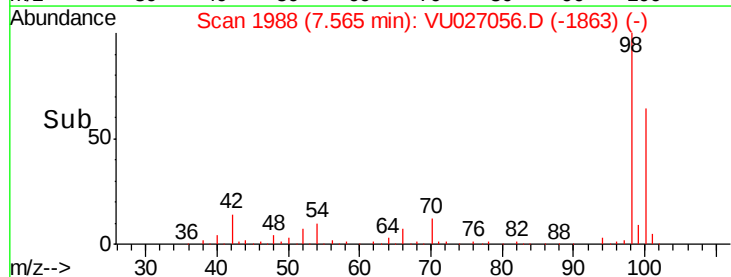
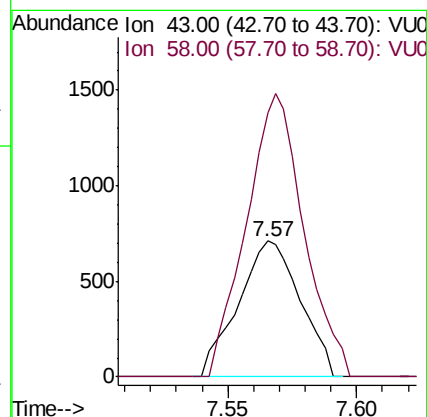
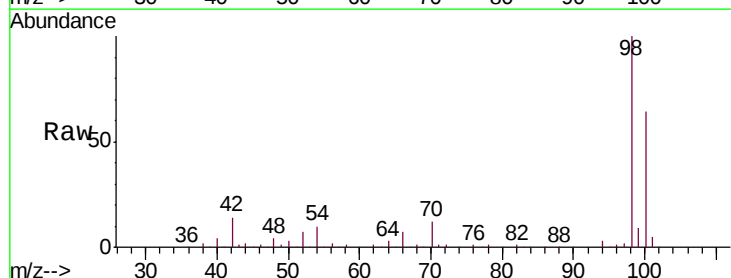
Instrument :  
MSVOA\_U  
ClientSampleId :  
SA-DUP05-20180914

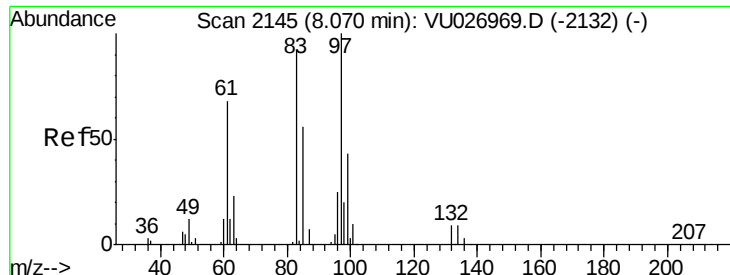
Tgt Ion: 98 Resp: 256338  
Ion Ratio Lower Upper  
98 100  
100 63.5 52.1 78.1



#51  
4-Methyl-2-Pentanone  
Concen: 0.427 ug/l  
RT: 7.57 min Scan# 1988  
Delta R.T. 0.10 min  
Lab File: VU027056.D  
Acq: 23 Sep 2018 07:40

Tgt Ion: 43 Resp: 1193  
Ion Ratio Lower Upper  
43 100  
58 193.5 29.8 44.6#

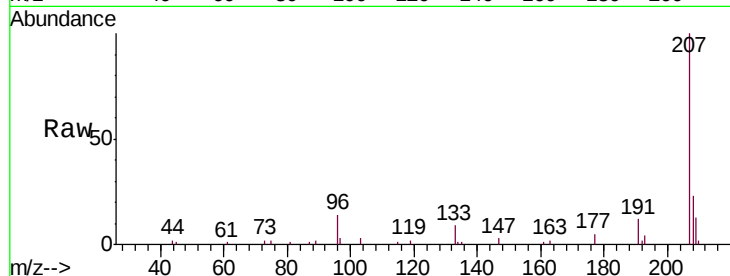




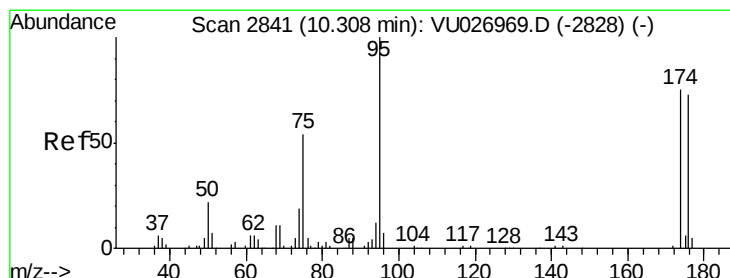
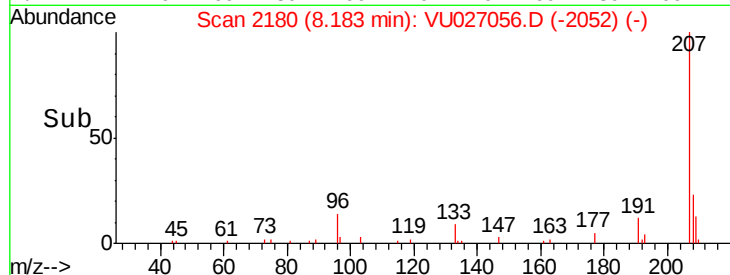
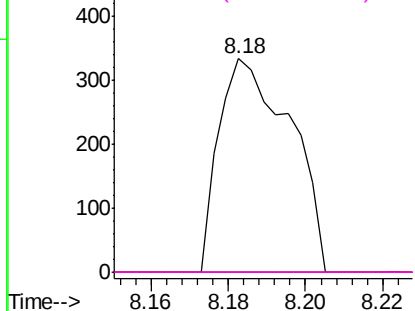
#55  
 1,1,2-Trichloroethane  
 Concen: 0.276 ug/l  
 RT: 8.18 min Scan# 2180  
 Delta R.T. 0.11 min  
 Lab File: VU027056.D  
 Acq: 23 Sep 2018 07:40

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 SA-DUP05-20180914

Tgt Ion: 97 Resp: 429  
 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#

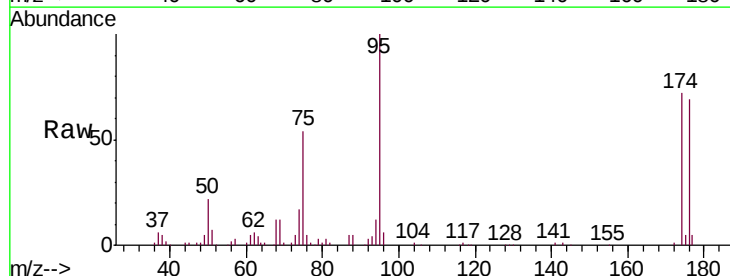


Abundance Ion 96.90 (96.60 to 97.60): VU0  
 Ion 82.90 (82.60 to 83.60): VU0  
 Ion 84.90 (84.60 to 85.60): VU0  
 Ion 98.90 (98.60 to 99.60): VU0

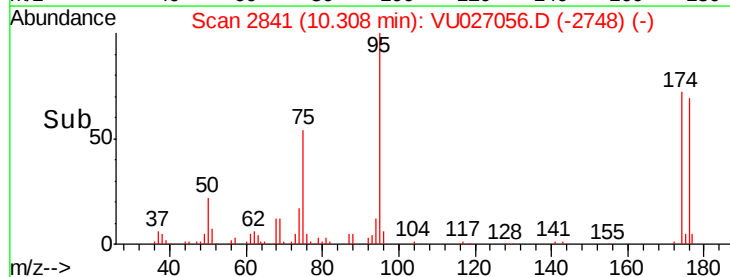
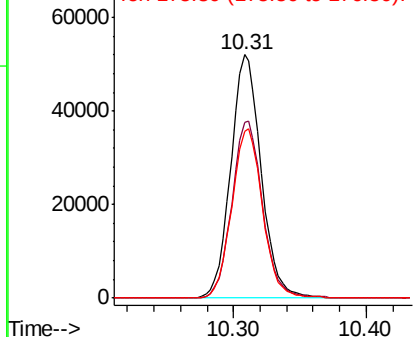


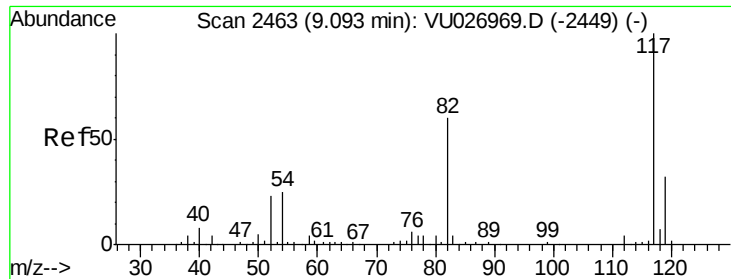
#62  
 4-Bromofluorobenzene  
 Concen: 46.351 ug/l  
 RT: 10.31 min Scan# 2841  
 Delta R.T. 0.00 min  
 Lab File: VU027056.D  
 Acq: 23 Sep 2018 07:40

Tgt Ion: 95 Resp: 82849  
 Ion Ratio Lower Upper  
 95 100  
 174 73.6 0.0 150.2  
 176 70.2 0.0 145.2



Abundance Ion 94.90 (94.60 to 95.60): VU0  
 Ion 173.80 (173.50 to 174.50): V  
 Ion 175.80 (175.50 to 176.50): V

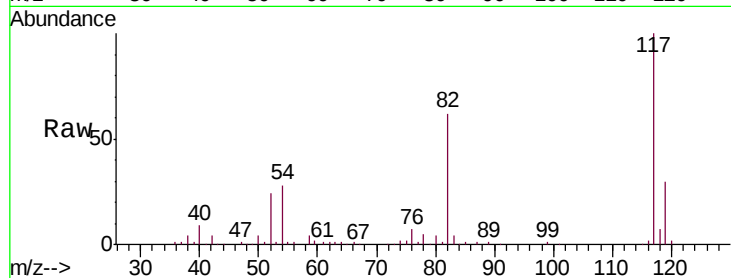




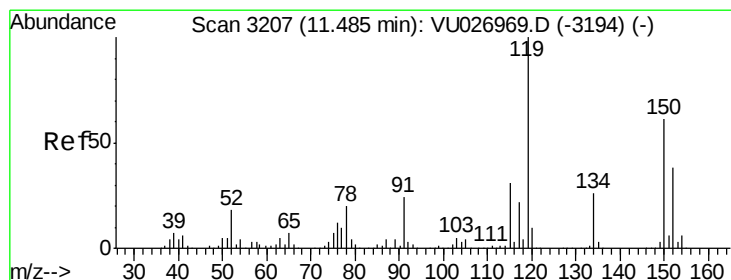
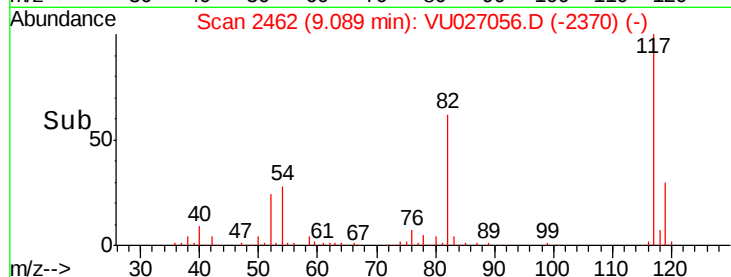
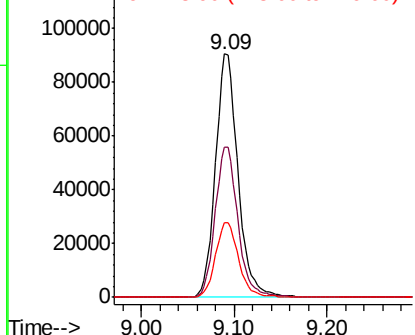
#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 9.09 min Scan# 2462  
Delta R.T. -0.00 min  
Lab File: VU027056.D  
Acq: 23 Sep 2018 07:40

Instrument :  
MSVOA\_U  
ClientSampleId :  
SA-DUP05-20180914

Tgt Ion:117 Resp: 152611  
Ion Ratio Lower Upper  
117 100  
82 61.7 48.0 72.0  
119 30.4 25.8 38.8

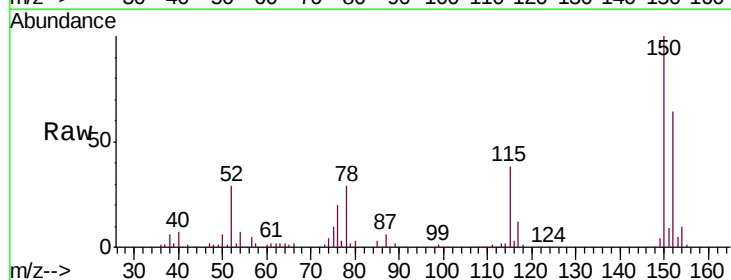


Abundance Ion 116.90 (116.60 to 117.60): V  
Ion 82.00 (81.70 to 82.70): VU026969.D (-2449) (-)  
Ion 118.90 (118.60 to 119.60): V

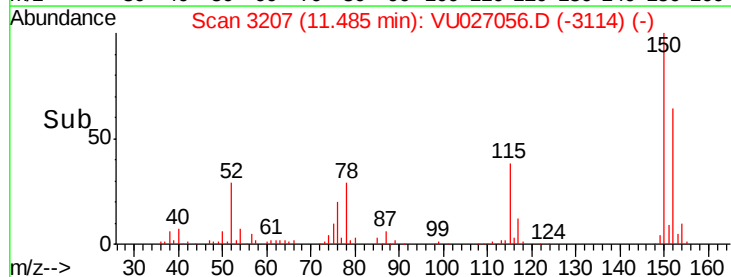
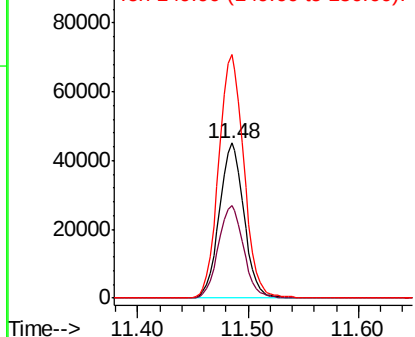


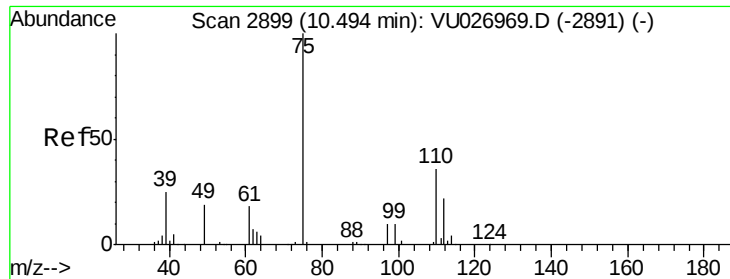
#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 11.48 min Scan# 3207  
Delta R.T. 0.00 min  
Lab File: VU027056.D  
Acq: 23 Sep 2018 07:40

Tgt Ion:152 Resp: 69764  
Ion Ratio Lower Upper  
152 100  
115 61.2 44.9 134.5  
150 160.3 0.0 355.8



Abundance Ion 151.90 (151.60 to 152.60): V  
Ion 114.90 (114.60 to 115.60): VU026969.D (-3194) (-)  
Ion 149.90 (149.60 to 150.60): V





#76

1,2,3-Trichloropropane

Concen: 21.036 ug/l

RT: 10.31 min Scan# 2841

Delta R.T. -0.19 min

Lab File: VU027056.D

Acq: 23 Sep 2018 07:40

Instrument :

MSVOA\_U

ClientSampleId :

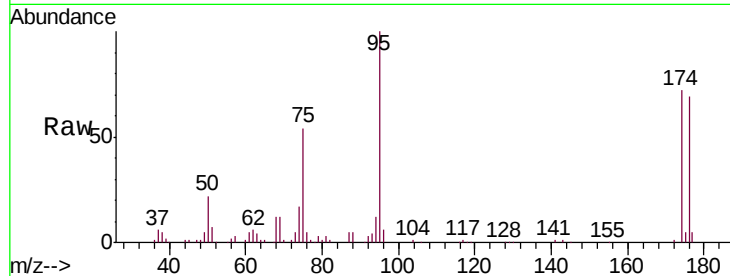
SA-DUP05-20180914

Tgt Ion: 75 Resp: 44584

Ion Ratio Lower Upper

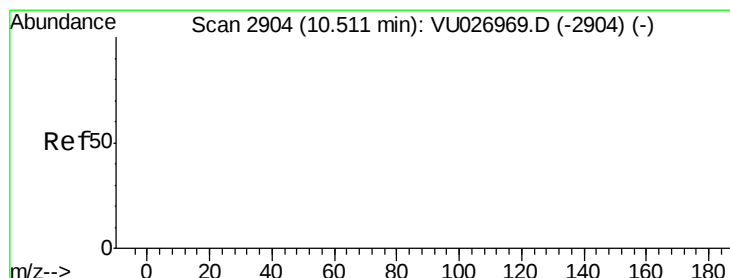
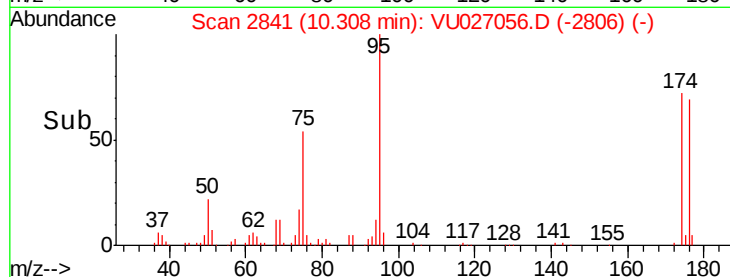
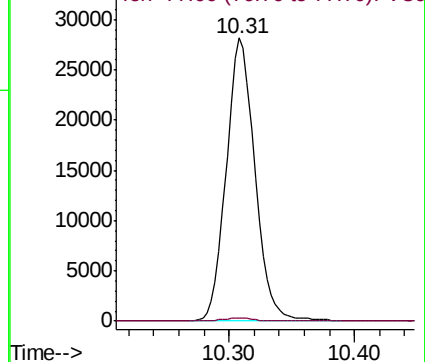
75 100

77 1.0 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: 67.319 ug/l

RT: 10.31 min Scan# 2841

Delta R.T. -0.21 min

Lab File: VU027056.D

Acq: 23 Sep 2018 07:40

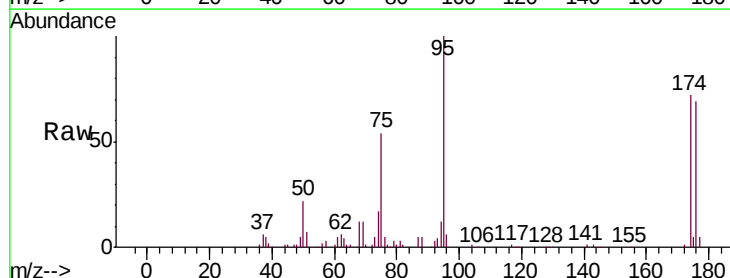
Tgt Ion: 75 Resp: 44584

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

