

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU061418\  
 Data File : VU024538.D  
 Acq On : 14 Jun 2018 14:34  
 Operator : MD/SY  
 Sample : J3476-01  
 Misc : 5.0mL/MSVOA U/WATER  
 ALS Vial : 14 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :

Quant Time: Jun 15 01:35:30 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  | 189611   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 5.89  | 114  | 315264   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 9.09  | 117  | 298601   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 11.49 | 152  | 176504   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|-----------------------------|-------|------|----------|-------|--------|----------|
| 33) 1,2-Dichloroethane-d4   | 5.32  | 65   | 141099   | 45.58 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 91.16% |          |
| 35) Dibromofluoromethane    | 4.89  | 113  | 127418   | 48.70 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 97.40% |          |
| 50) Toluene-d8              | 7.57  | 98   | 461240   | 48.33 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 96.66% |          |
| 62) 4-Bromofluorobenzene    | 10.31 | 95   | 179505   | 47.37 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 94.74% |          |

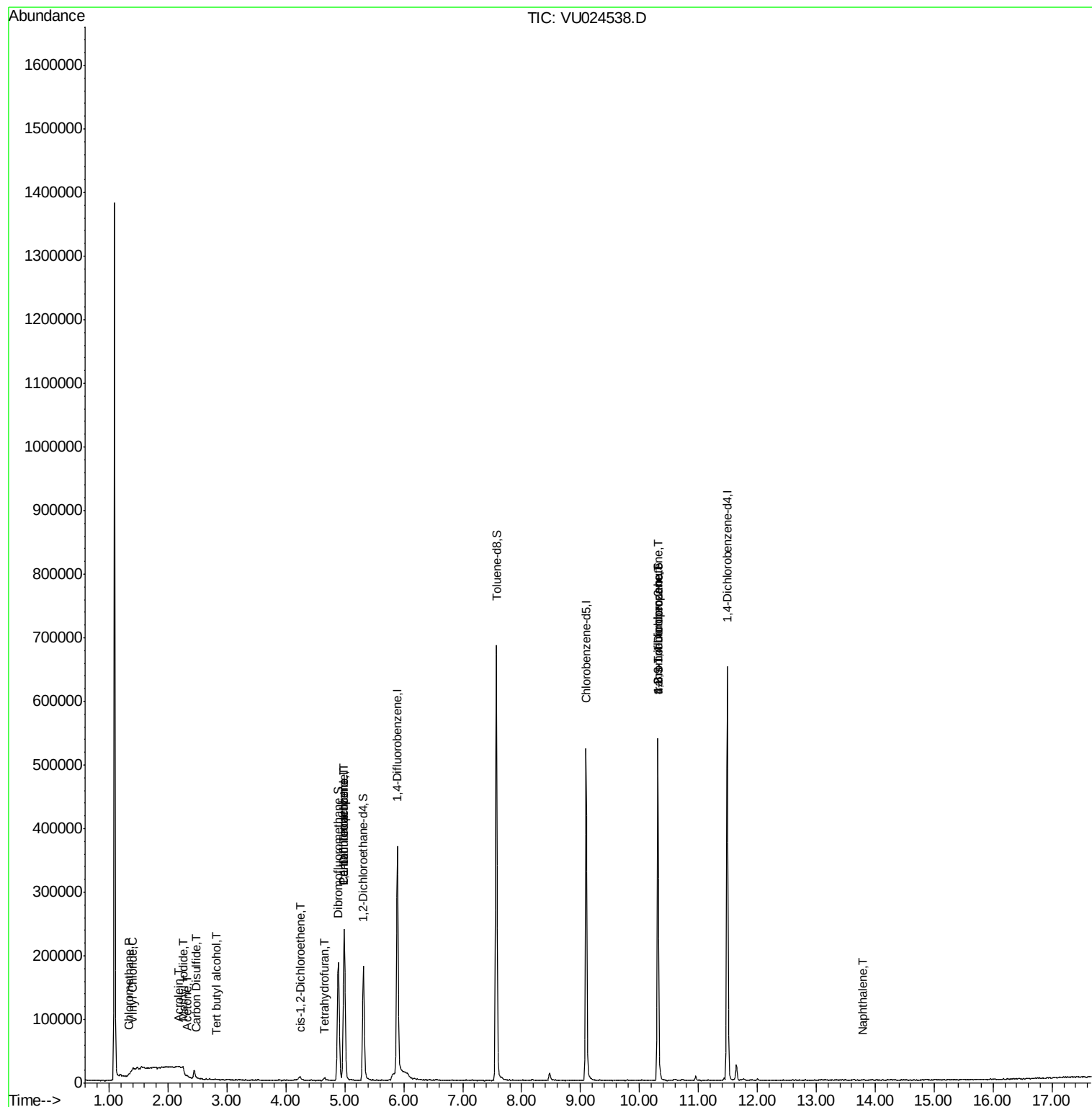
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 3) Chloromethane               | 1.33  | 50   | 563      | 0.232     | ug/l   | 94     |
| 4) Vinyl Chloride              | 1.41  | 62   | 2120     | 0.848     | ug/l # | 63     |
| 6) Chloroethane                | 1.71  | 64   | 289      | Below Cal | #      | 80     |
| 8) Diethyl Ether               | 2.11  | 74   | 44       | Below Cal | #      | 1      |
| 10) Methyl Iodide              | 2.26  | 142  | 21       | 5.298     | ug/l # | 1      |
| 11) Tert butyl alcohol         | 2.82  | 59   | 180      | 0.239     | ug/l # | 72     |
| 13) Acrolein                   | 2.19  | 56   | 111      | 0.281     | ug/l # | 1      |
| 16) Acetone                    | 2.32  | 43   | 2273     | 1.367     | ug/l   | 90     |
| 17) Carbon Disulfide           | 2.48  | 76   | 1446     | 0.209     | ug/l # | 75     |
| 27) cis-1,2-Dichloroethene     | 4.24  | 96   | 4024     | 1.472     | ug/l   | 68     |
| 29) Tetrahydrofuran            | 4.66  | 42   | 3505     | 2.534     | ug/l # | 60     |
| 31) Cyclohexane                | 4.99  | 56   | 4735     | Below Cal | #      | 21     |
| 36) 1,1-Dichloropropene        | 4.99  | 75   | 13519    | 3.649     | ug/l # | 52     |
| 38) Carbon Tetrachloride       | 4.99  | 117  | 17189    | 4.219     | ug/l # | 16     |
| 76) 1,2,3-Trichloropropane     | 10.31 | 75   | 89468    | 23.023    | ug/l # | 36     |
| 81) trans-1,4-Dichloro-2-buten | 10.31 | 75   | 89468    | 53.286    | ug/l # | 100    |
| 95) Naphthalene                | 13.78 | 128  | 274      | 0.700     | ug/l # | 69     |

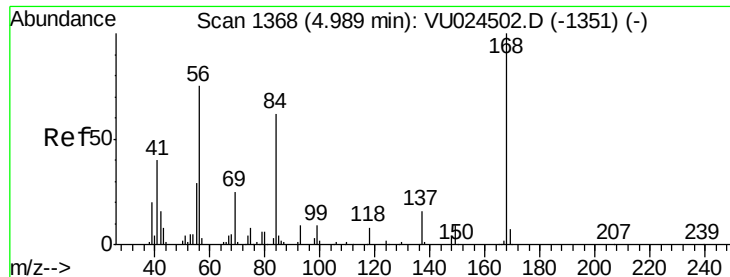
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA U\DATA\VU061418\  
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Instrument :  
MSVOA\_U  
ClientSampleId :

Quant Time: Jun 15 01:35:30 2018  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_U\METHOD\82U061318W.M  
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: VU024538.D

Acq: 14 Jun 2018 14:34

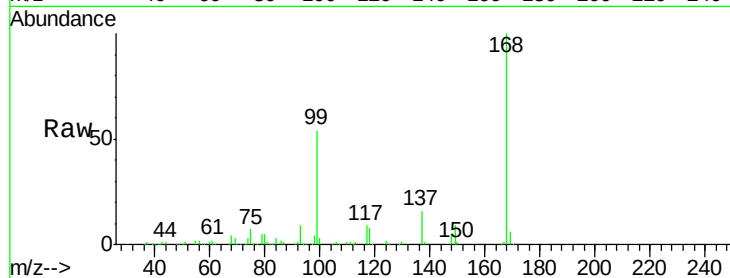
Instrument :  
MSVOA\_U  
ClientSampleId :

Tot Ion:168 Resp: 189611

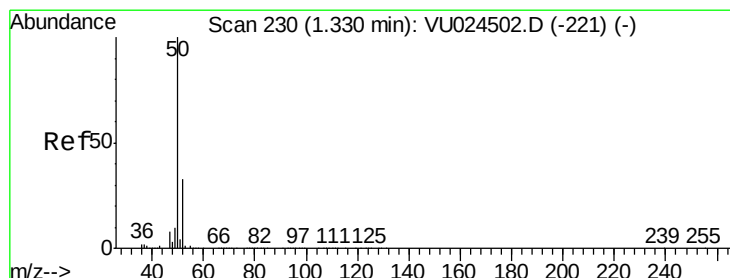
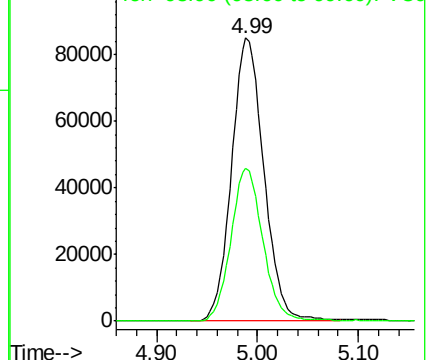
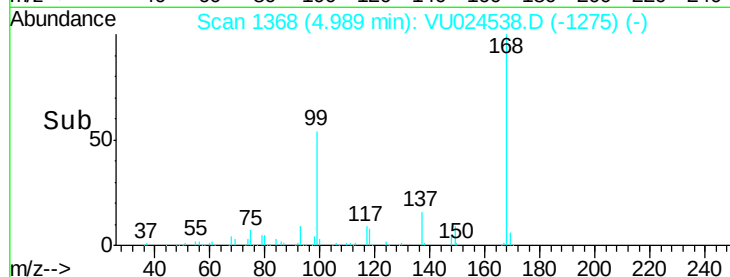
Ion Ratio Lower Upper

168 100

99 54.1 43.2 64.8



Abundance Ion 167.90 (167.60 to 168.60): VU024538.D (-1275) (-)



#3

Chloromethane

Concen: 0.232 ug/l

RT: 1.33 min Scan# 230

Delta R.T. -0.00 min

Lab File: VU024538.D

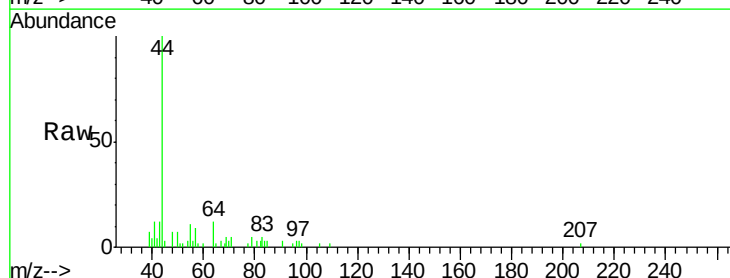
Acq: 14 Jun 2018 14:34

Tgt Ion: 50 Resp: 563

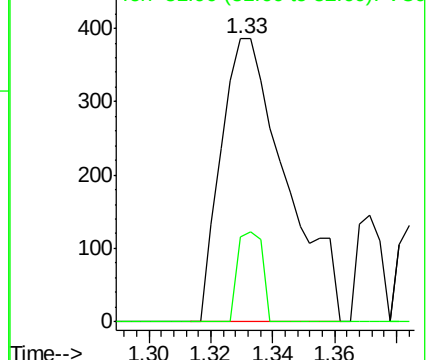
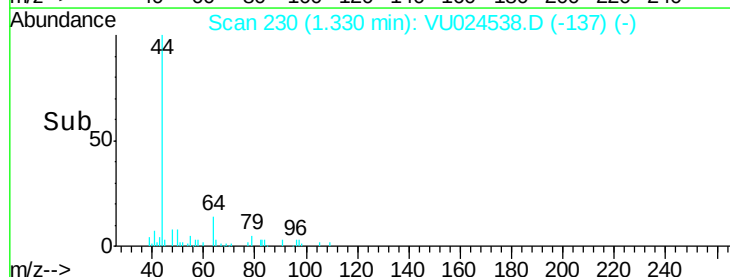
Ion Ratio Lower Upper

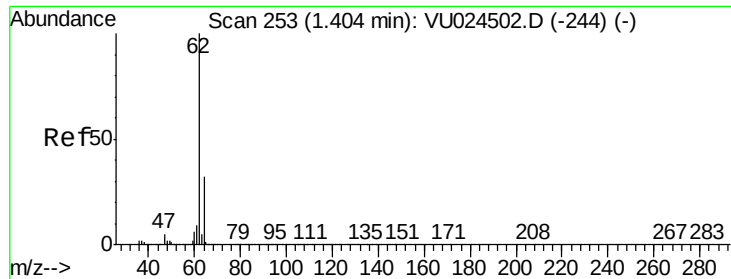
50 100

52 29.8 26.4 39.6



Abundance Ion 49.90 (49.60 to 50.60): VU024538.D (-137) (-)





#4

Vinyl Chloride

Concen: 0.848 ug/l

RT: 1.41 min Scan# 254

Delta R.T. 0.00 min

Lab File: VU024538.D

Acq: 14 Jun 2018 14:34

Instrument :

MSVOA\_U

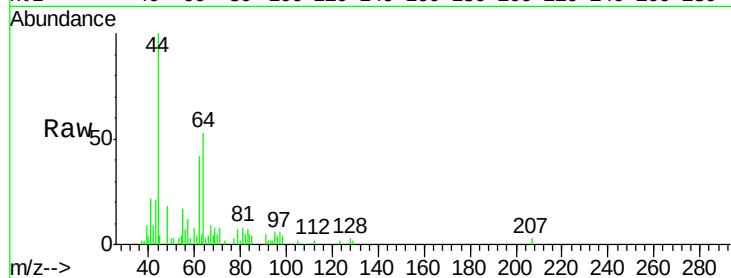
ClientSampled :

Tot Ion: 62 Resp: 2120

Ion Ratio Lower Upper

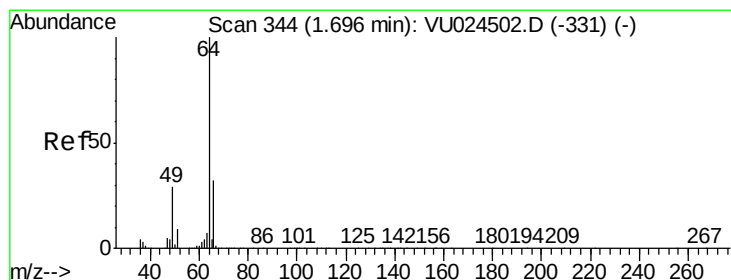
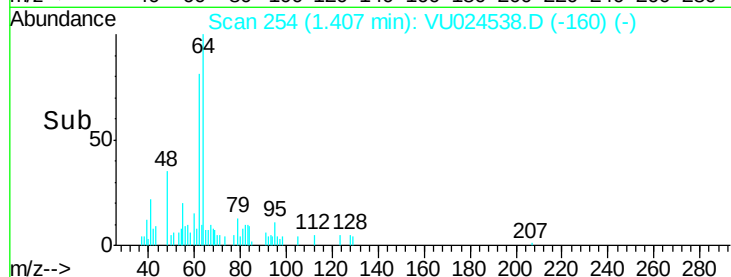
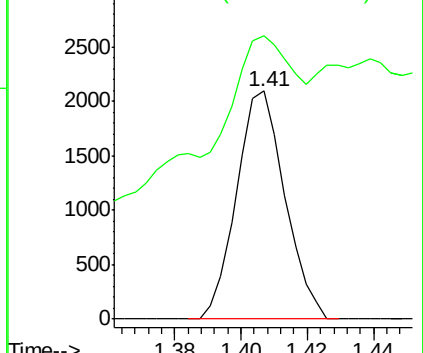
62 100

64 51.5 24.8 37.2#



Abundance Ion 61.90 (61.60 to 62.60): VU0

Ion 63.90 (63.60 to 64.60): VU0



#6

Chloroethane

Concen: Below Cal

RT: 1.71 min Scan# 349

Delta R.T. 0.02 min

Lab File: VU024538.D

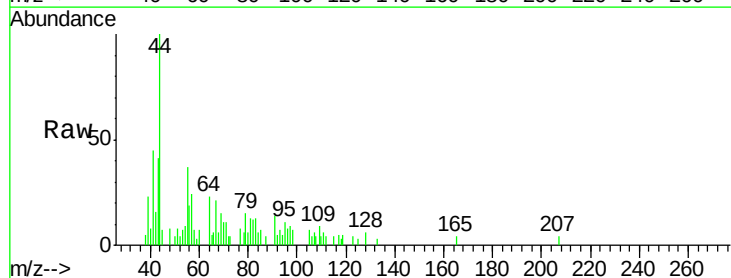
Acq: 14 Jun 2018 14:34

Tgt Ion: 64 Resp: 289

Ion Ratio Lower Upper

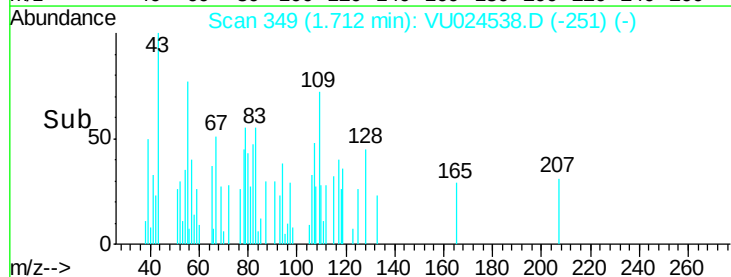
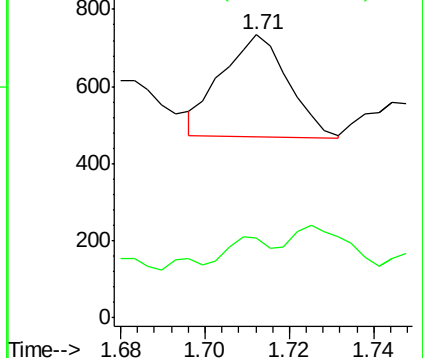
64 100

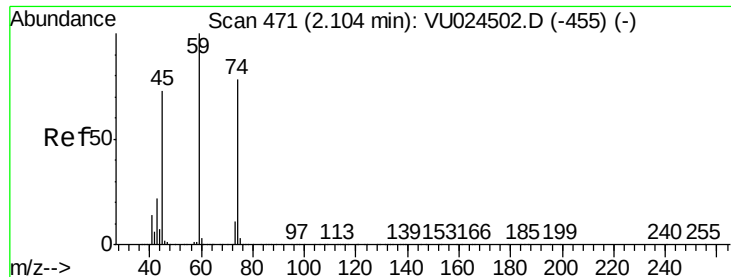
66 20.8 25.5 38.3#



Abundance Ion 63.90 (63.60 to 64.60): VU0

Ion 65.90 (65.60 to 66.60): VU0





#8

Diethyl Ether

Concen: Below Cal

RT: 2.11 min Scan# 473

Delta R.T. 0.01 min

Lab File: VU024538.D

Acq: 14 Jun 2018 14:34

Instrument :

MSVOA\_U

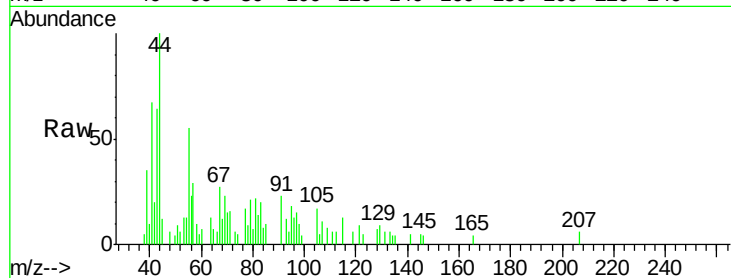
ClientSampled :

Tot Ion: 74 Resp: 44

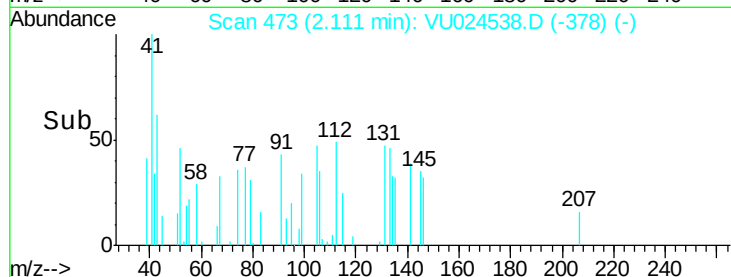
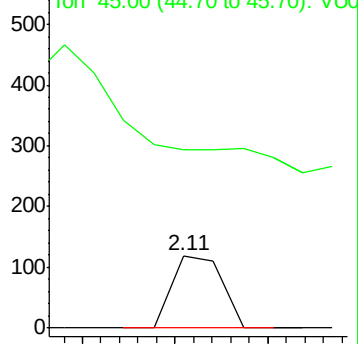
Ion Ratio Lower Upper

74 100

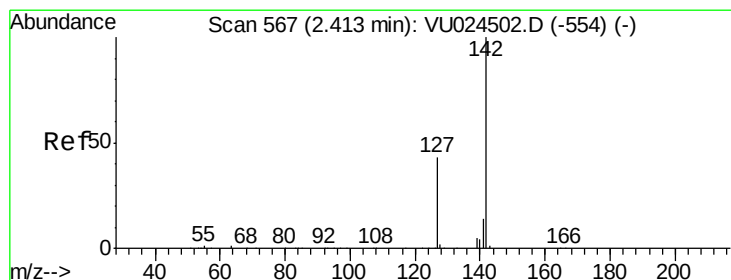
45 0.0 55.0 165.0#



Abundance Ion 74.00 (73.70 to 74.70): VU024538.D (-378) (-)



Time-->



#10

Methyl Iodide

Concen: 5.298 ug/l

RT: 2.26 min Scan# 518

Delta R.T. -0.16 min

Lab File: VU024538.D

Acq: 14 Jun 2018 14:34

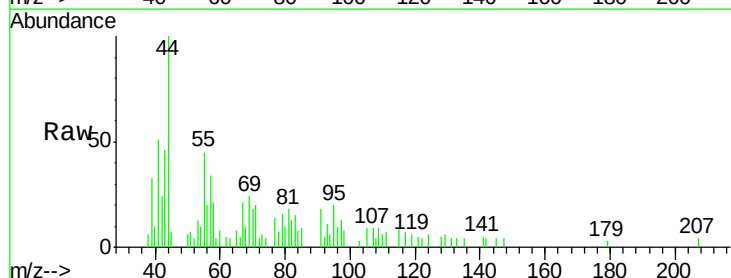
Tgt Ion: 142 Resp: 21

Ion Ratio Lower Upper

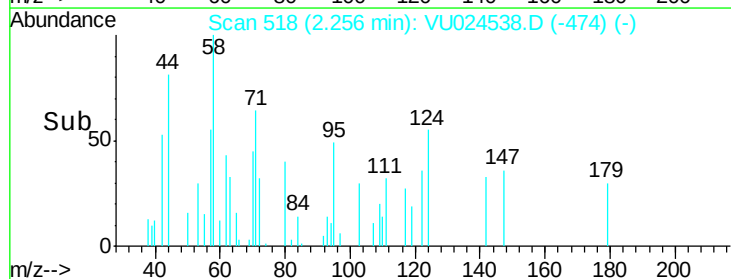
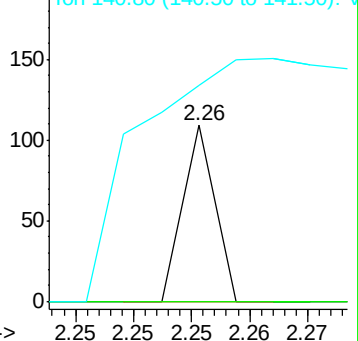
142 100

127 0.0 35.6 53.4#

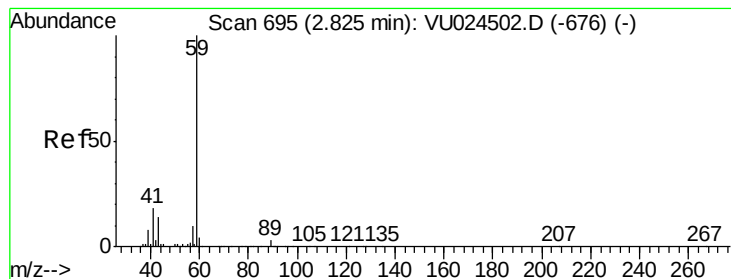
141 1090.5 11.7 17.5#



Abundance Ion 141.80 (141.50 to 142.50): VU024538.D (-474) (-)



Time-->

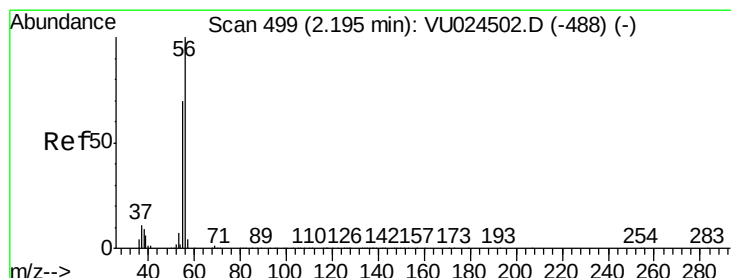
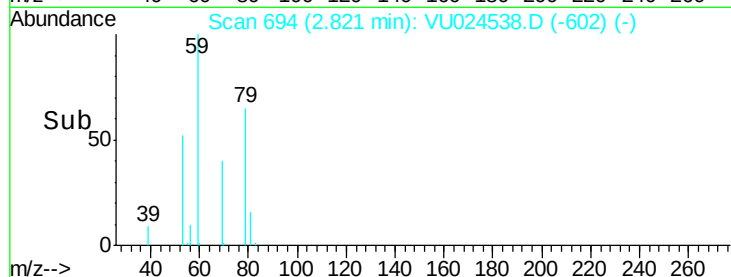
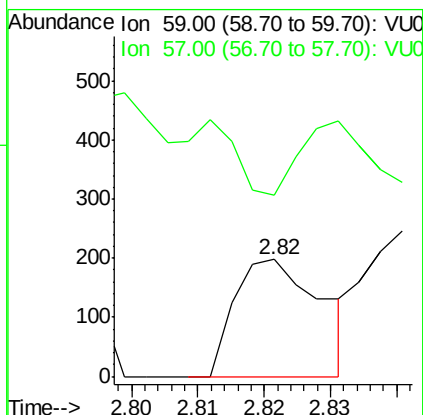
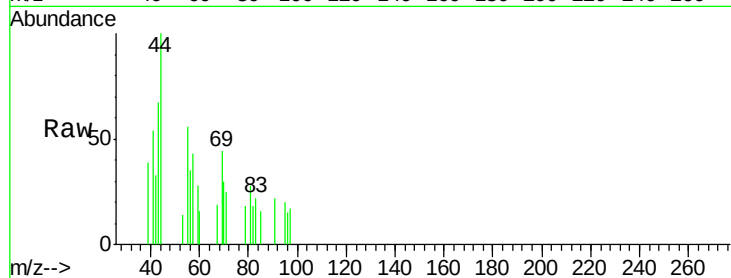


#11

Tert butyl alcohol  
 Concen: 0.239 ug/l  
 RT: 2.82 min Scan# 694  
 Delta R.T. -0.00 min  
 Lab File: VU024538.D  
 Acq: 14 Jun 2018 14:34

Instrument :  
 MSVOA\_U  
 ClientSampleId :

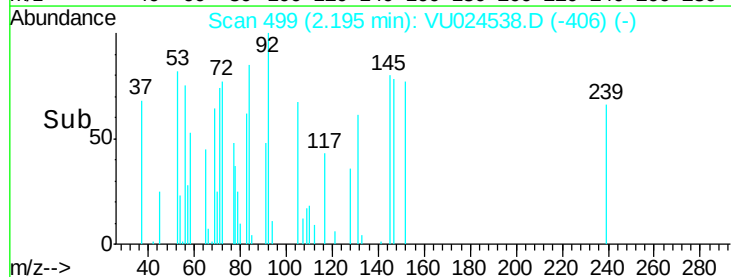
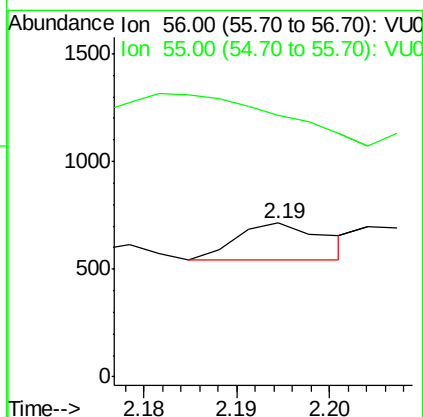
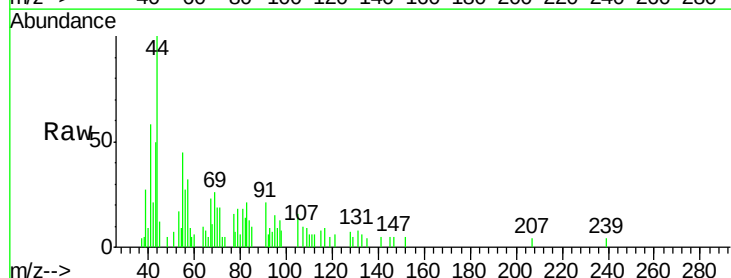
Tot Ion: 59 Resp: 180  
 Ion Ratio Lower Upper  
 59 100  
 57 0.0 8.5 12.7#

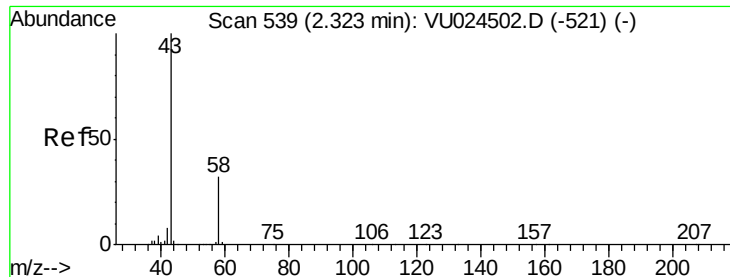


#13

Acrolein  
 Concen: 0.281 ug/l  
 RT: 2.19 min Scan# 499  
 Delta R.T. -0.00 min  
 Lab File: VU024538.D  
 Acq: 14 Jun 2018 14:34

Tgt Ion: 56 Resp: 111  
 Ion Ratio Lower Upper  
 56 100  
 55 243.2 58.4 87.6#





#16

Acetone

Concen: 1.367 ug/l

RT: 2.32 min Scan# 539

Delta R.T. 0.00 min

Lab File: VU024538.D

Acq: 14 Jun 2018 14:34

Instrument :

MSVOA\_U

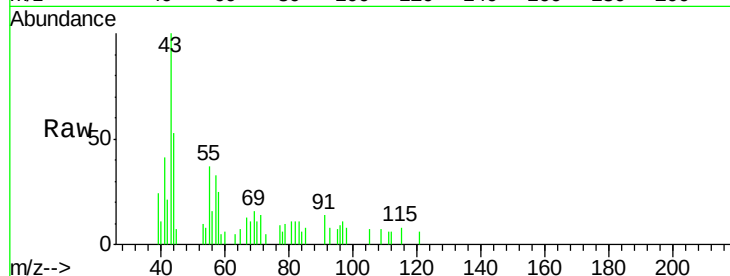
ClientSampleId :

Tot Ion: 43 Resp: 2273

Ion Ratio Lower Upper

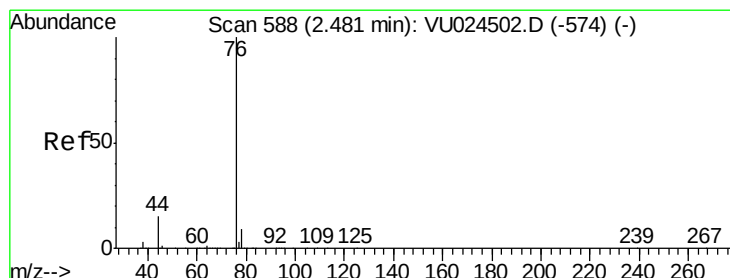
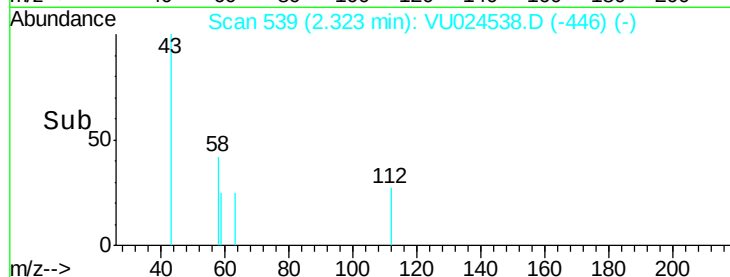
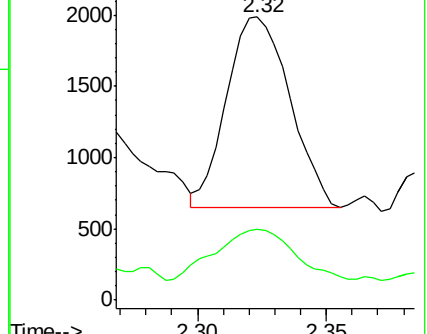
43 100

58 24.8 24.4 36.6



Abundance Ion 43.00 (42.70 to 43.70): VU0

Ion 58.00 (57.70 to 58.70): VU0



#17

Carbon Disulfide

Concen: 0.209 ug/l

RT: 2.48 min Scan# 589

Delta R.T. 0.00 min

Lab File: VU024538.D

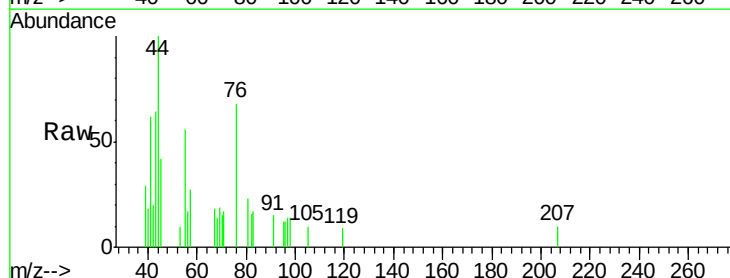
Acq: 14 Jun 2018 14:34

Tgt Ion: 76 Resp: 1446

Ion Ratio Lower Upper

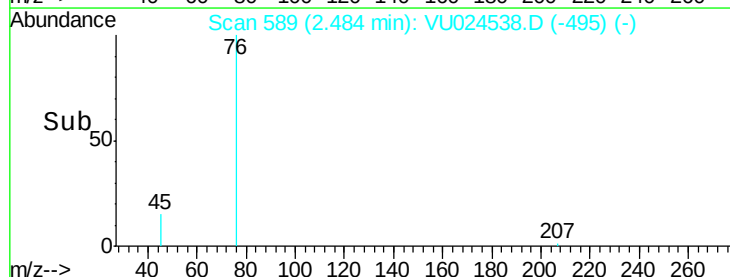
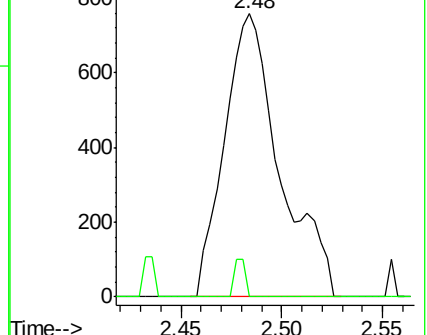
76 100

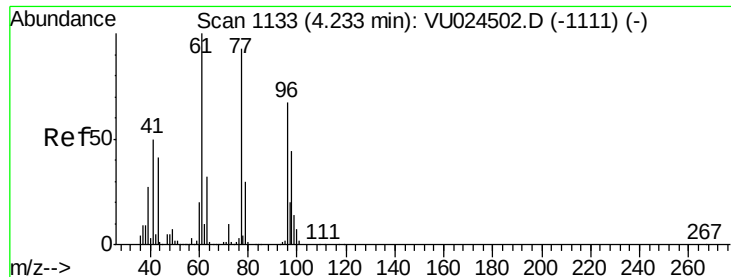
78 0.0 7.1 10.7#



Abundance Ion 75.90 (75.60 to 76.60): VU0

Ion 77.90 (77.60 to 78.60): VU0





#27

cis-1,2-Dichloroethene

Concen: 1.472 ug/l

RT: 4.24 min Scan# 1134

Delta R.T. 0.00 min

Lab File: VU024538.D

Acq: 14 Jun 2018 14:34

Instrument :  
MSVOA\_U  
ClientSampled :

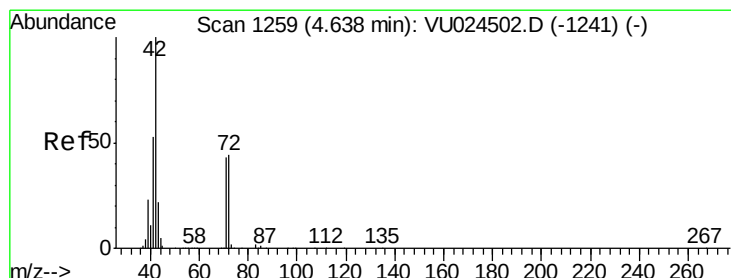
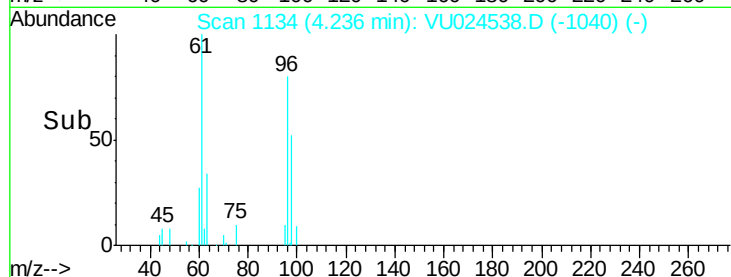
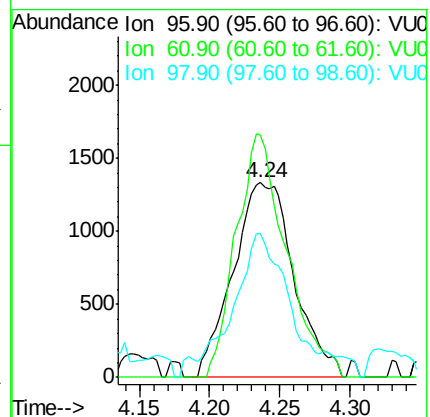
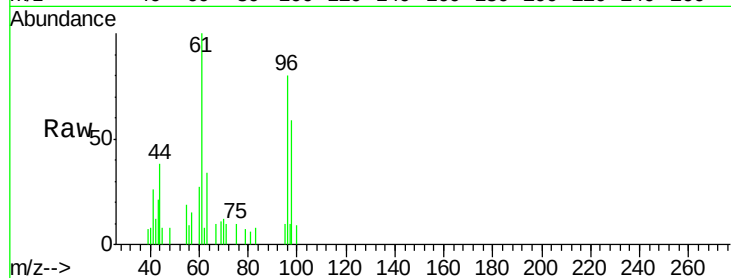
Tot Ion: 96 Resp: 4024

Ion Ratio Lower Upper

96 100

61 103.3 0.0 306.6

98 50.9 0.0 128.8



#29

Tetrahydrofuran

Concen: 2.534 ug/l

RT: 4.66 min Scan# 1266

Delta R.T. 0.02 min

Lab File: VU024538.D

Acq: 14 Jun 2018 14:34

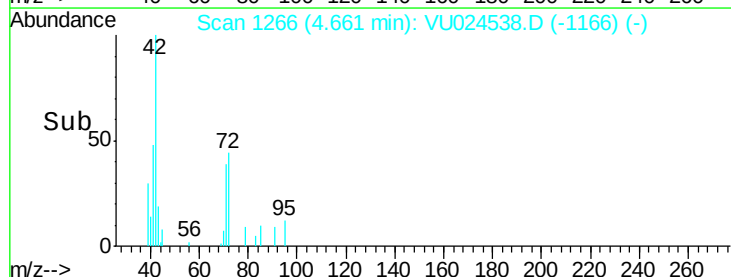
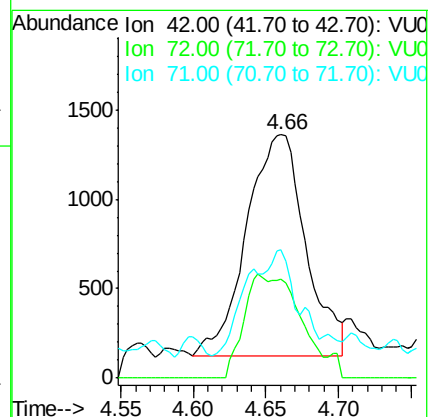
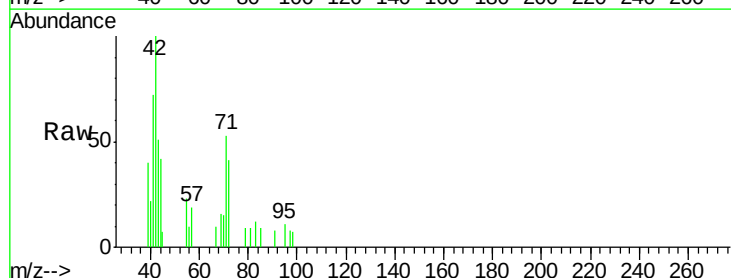
Tgt Ion: 42 Resp: 3505

Ion Ratio Lower Upper

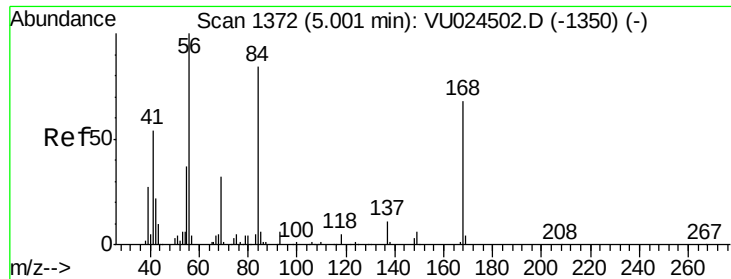
42 100

72 19.2 34.5 51.7#

71 14.1 32.2 48.4#



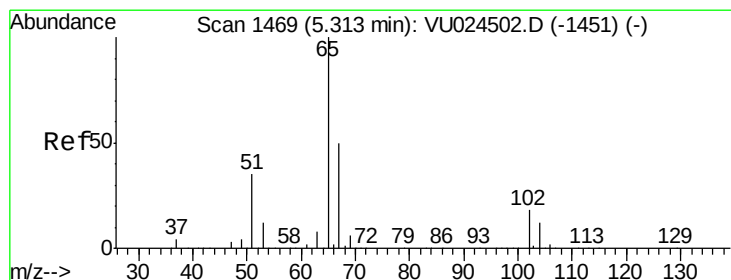
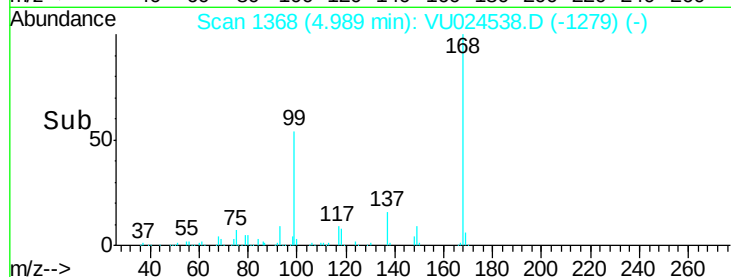
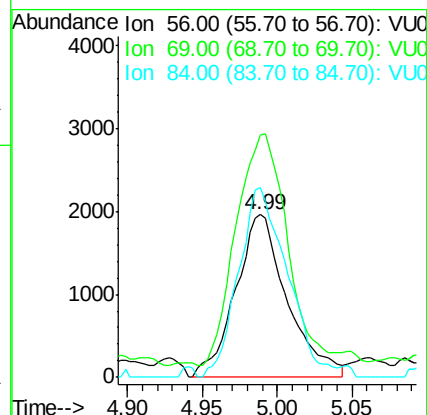
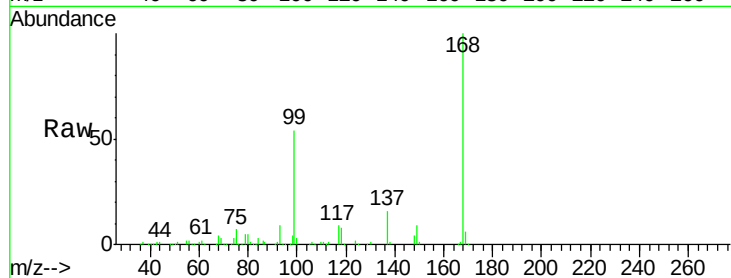




#31  
Cyclohexane  
Concen: Below Cal  
RT: 4.99 min Scan# 1368  
Delta R.T. -0.01 min  
Lab File: VU024538.D  
Acq: 14 Jun 2018 14:34

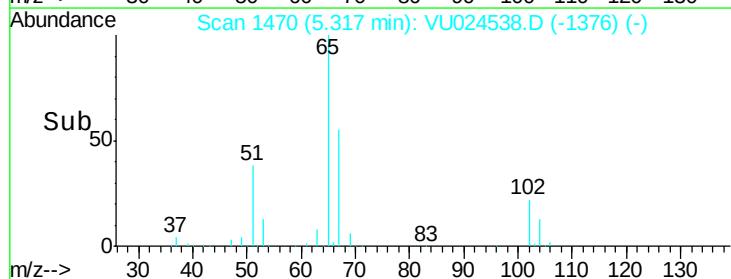
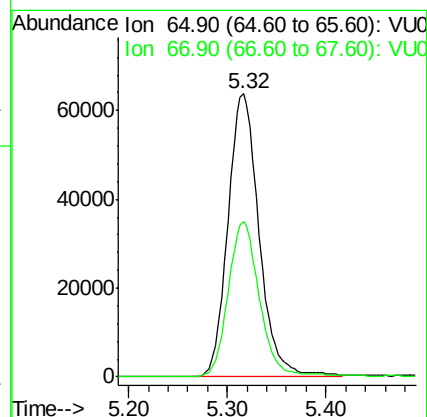
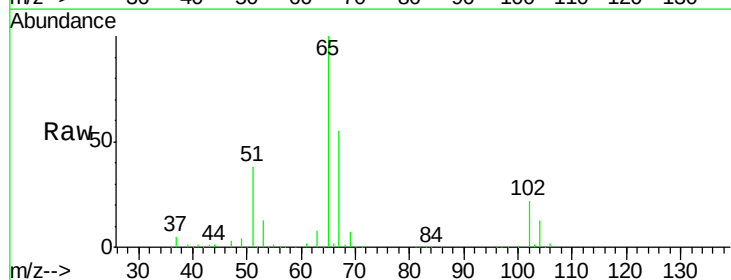
Instrument :  
MSVOA\_U  
ClientSampleId :

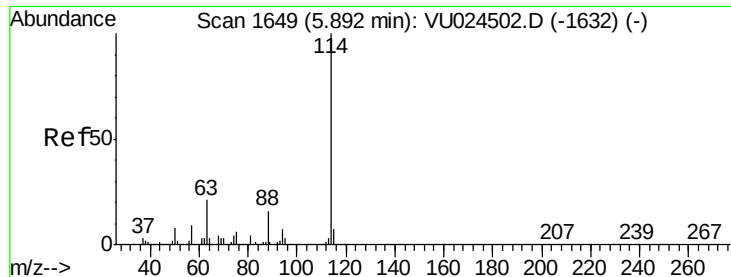
Tot Ion: 56 Resp: 4735  
Ion Ratio Lower Upper  
56 100  
69 140.1 24.8 37.2#  
84 110.9 65.2 97.8#



#33  
1,2-Dichloroethane-d4  
Concen: 45.583 ug/l  
RT: 5.32 min Scan# 1470  
Delta R.T. 0.00 min  
Lab File: VU024538.D  
Acq: 14 Jun 2018 14:34

Tgt Ion: 65 Resp: 141099  
Ion Ratio Lower Upper  
65 100  
67 54.2 0.0 107.0

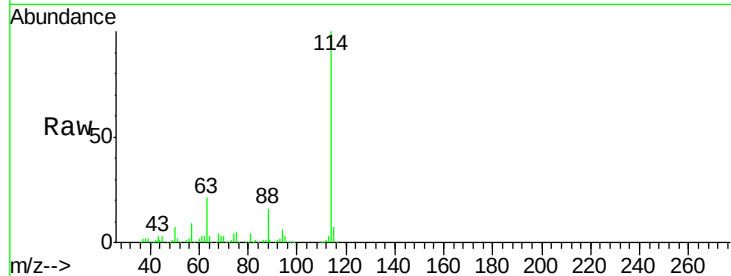




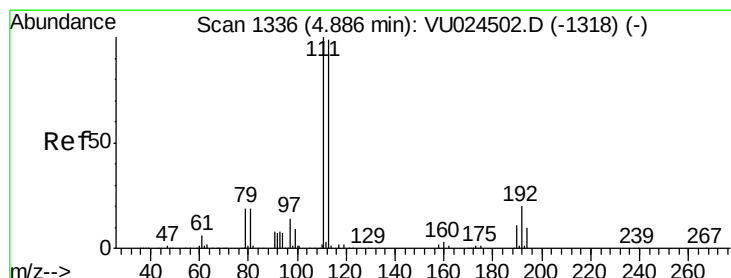
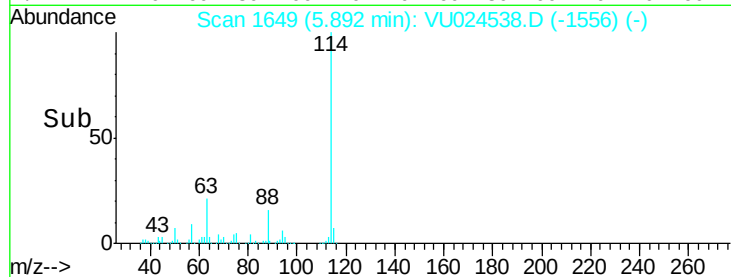
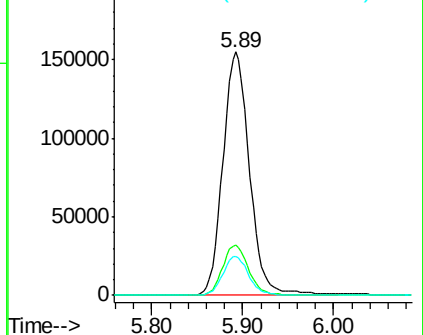
#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 5.89 min Scan# 1649  
 Delta R.T. -0.00 min  
 Lab File: VU024538.D  
 Acq: 14 Jun 2018 14:34

Instrument :  
 MSVOA\_U  
 ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 114     | 100   |       |       |
| 63      | 20.5  | 0.0   | 45.4  |
| 88      | 16.2  | 0.0   | 31.0  |

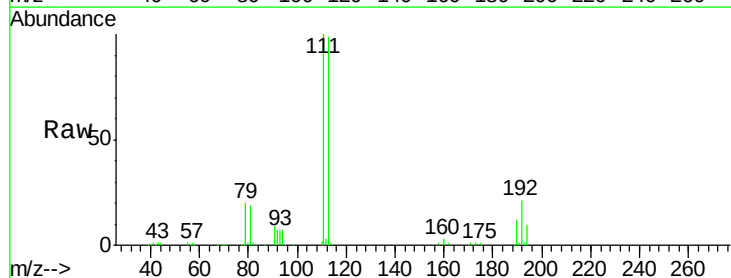


Abundance Ion 113.90 (113.60 to 114.60): V  
 Ion 63.00 (62.70 to 63.70): V  
 Ion 87.90 (87.60 to 88.60): V

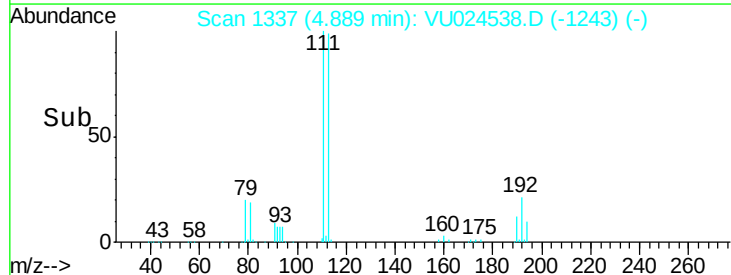
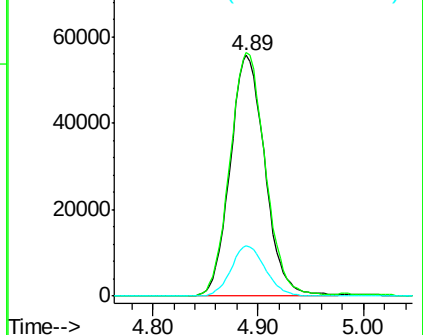


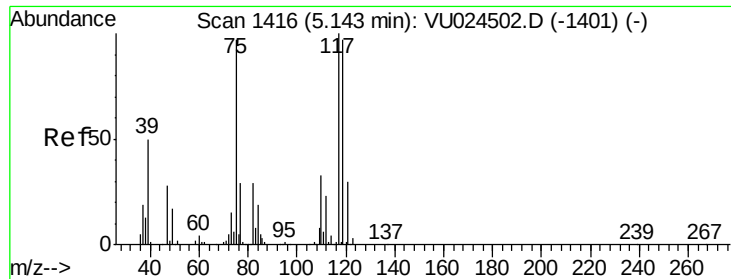
#35  
 Dibromofluoromethane  
 Concen: 48.699 ug/l  
 RT: 4.89 min Scan# 1337  
 Delta R.T. 0.00 min  
 Lab File: VU024538.D  
 Acq: 14 Jun 2018 14:34

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 113     | 100   |       |       |
| 111     | 102.9 | 82.2  | 123.4 |
| 192     | 20.7  | 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

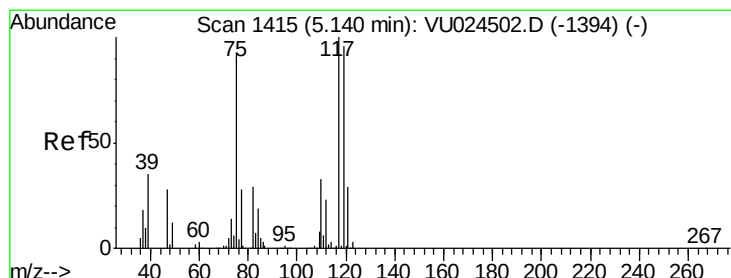
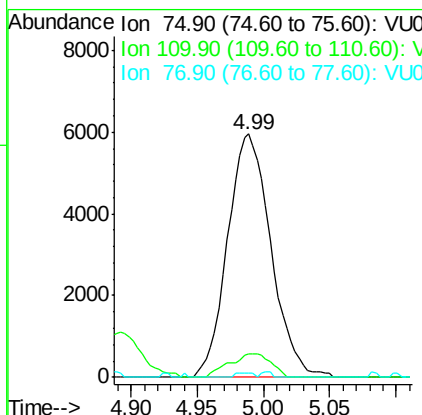
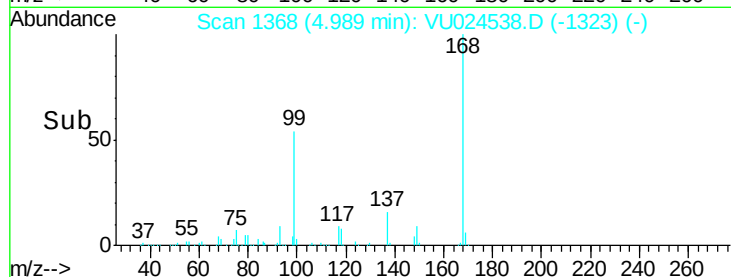
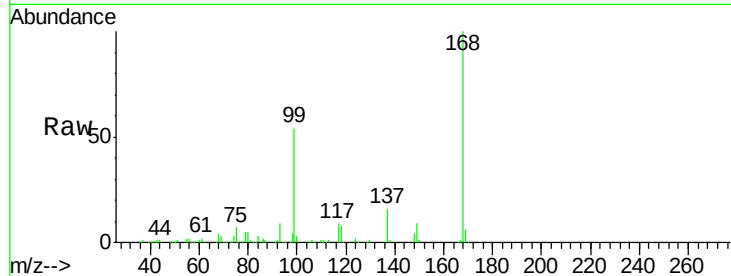




#36  
 1,1-Dichloropropene  
 Concen: 3.649 ug/l  
 RT: 4.99 min Scan# 1368  
 Delta R.T. -0.15 min  
 Lab File: VU024538.D  
 Acq: 14 Jun 2018 14:34

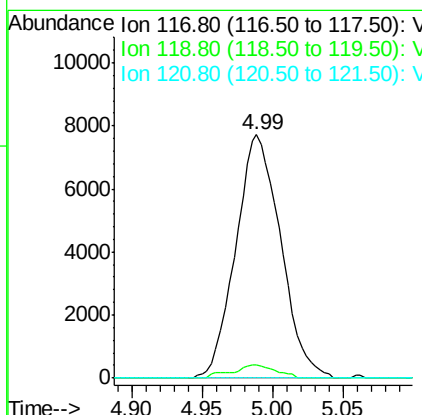
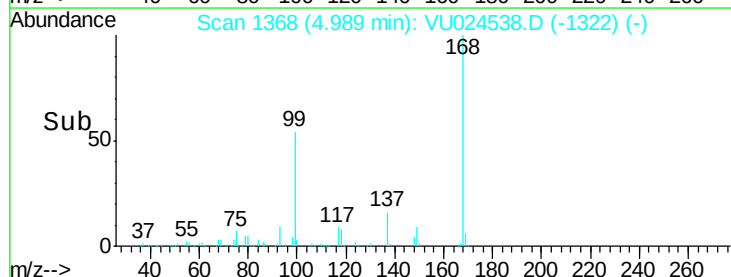
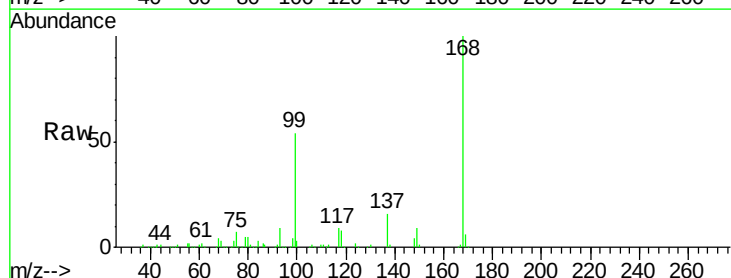
Instrument :  
 MSVOA\_U  
 ClientSampleId :

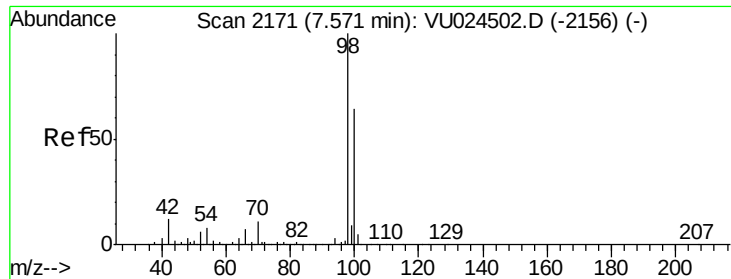
| Tot Ion   | 75    | Resp  | 13519 |
|-----------|-------|-------|-------|
| Ion Ratio | Lower | Upper |       |
| 75        | 100   |       |       |
| 110       | 9.4   | 17.0  | 50.9# |
| 77        | 0.8   | 24.2  | 36.4# |



#38  
 Carbon Tetrachloride  
 Concen: 4.219 ug/l  
 RT: 4.99 min Scan# 1368  
 Delta R.T. -0.15 min  
 Lab File: VU024538.D  
 Acq: 14 Jun 2018 14:34

| Tgt Ion   | 117   | Resp  | 17189  |
|-----------|-------|-------|--------|
| Ion Ratio | Lower | Upper |        |
| 117       | 100   |       |        |
| 119       | 5.2   | 76.1  | 114.1# |
| 121       | 0.0   | 23.7  | 35.5#  |

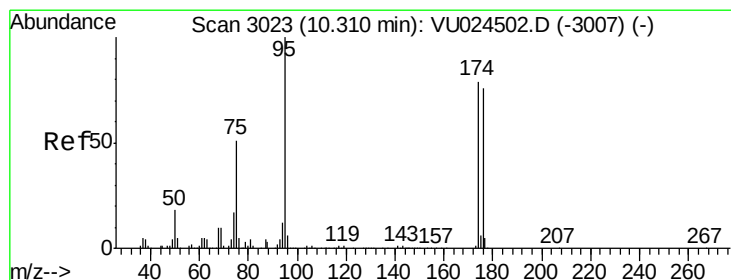
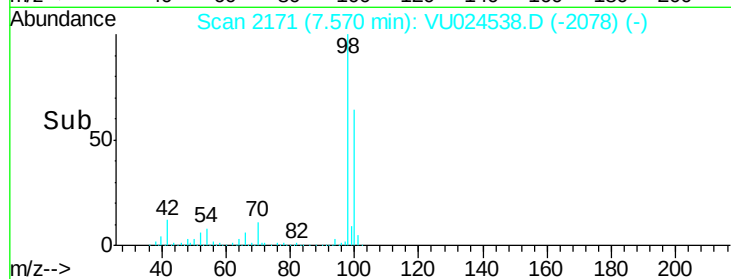
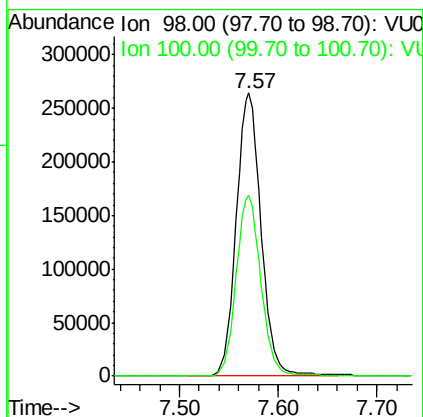
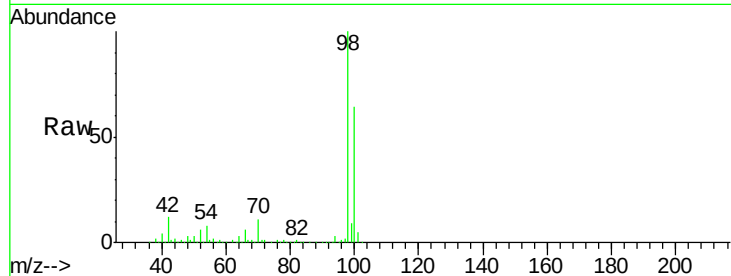




#50  
Toluene-d8  
Concen: 48.329 ug/l  
RT: 7.57 min Scan# 2171  
Delta R.T. -0.00 min  
Lab File: VU024538.D  
Acq: 14 Jun 2018 14:34

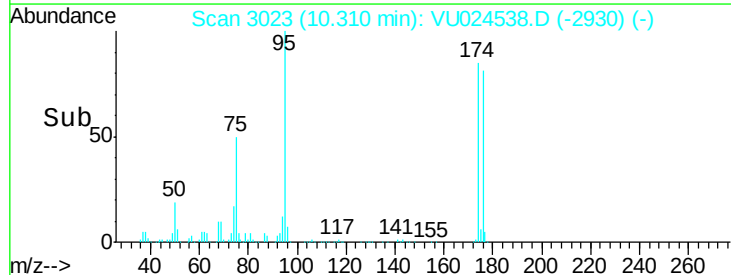
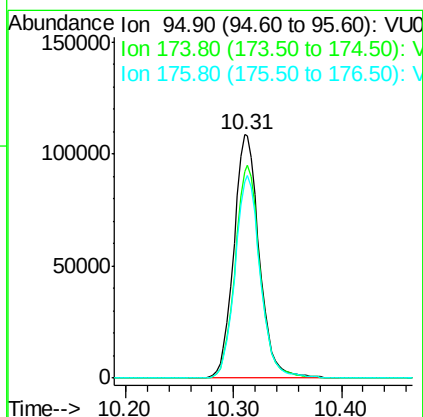
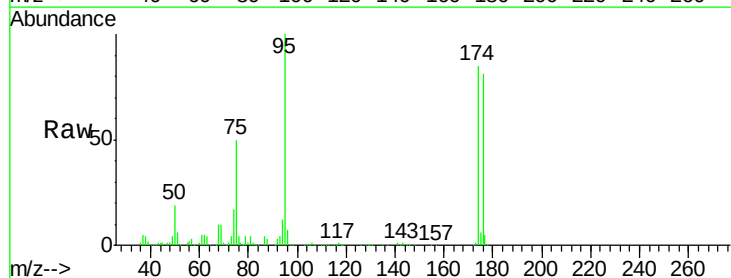
Instrument :  
MSVOA\_U  
ClientSampled :

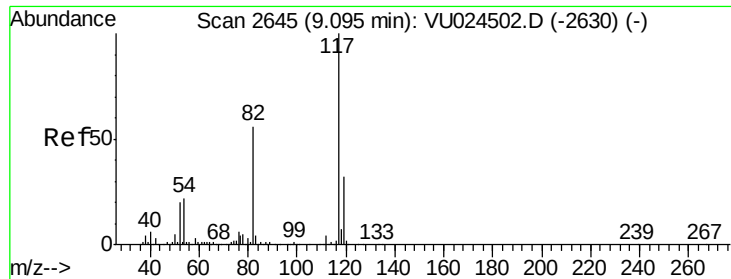
Tot Ion: 98 Resp: 461240  
Ion Ratio Lower Upper  
98 100  
100 63.8 51.1 76.7



#62  
4-Bromofluorobenzene  
Concen: 47.372 ug/l  
RT: 10.31 min Scan# 3023  
Delta R.T. 0.00 min  
Lab File: VU024538.D  
Acq: 14 Jun 2018 14:34

Tgt Ion: 95 Resp: 179505  
Ion Ratio Lower Upper  
95 100  
174 85.8 0.0 165.8  
176 82.2 0.0 159.4

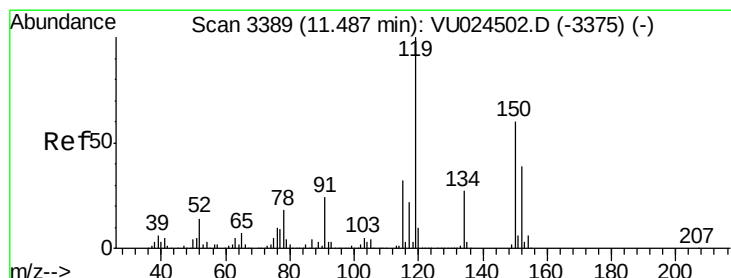
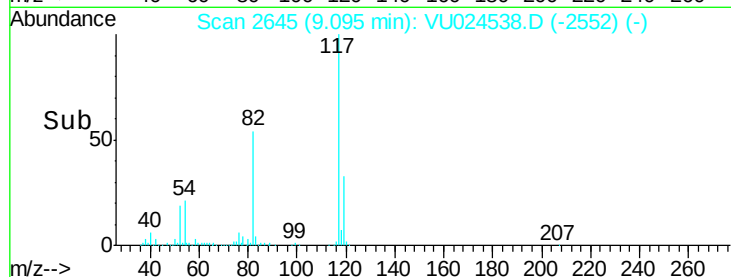
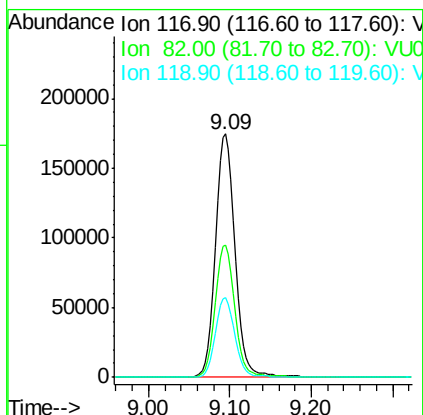
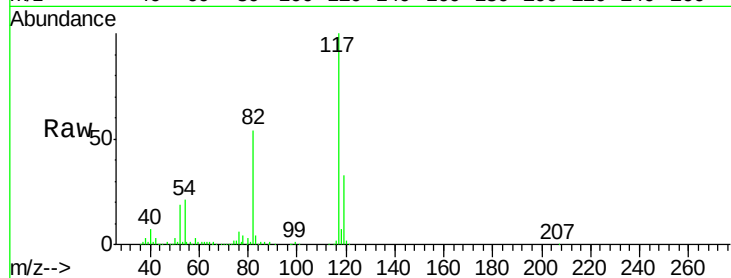




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 9.09 min Scan# 2645  
Delta R.T. 0.00 min  
Lab File: VU024538.D  
Acq: 14 Jun 2018 14:34

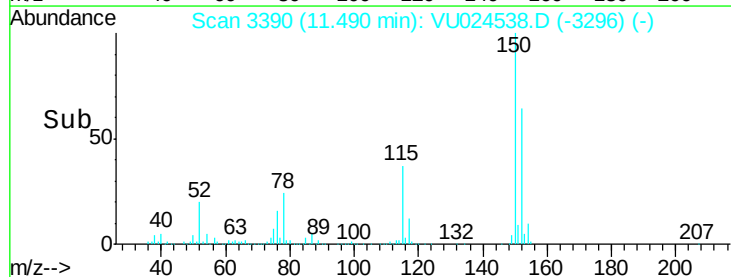
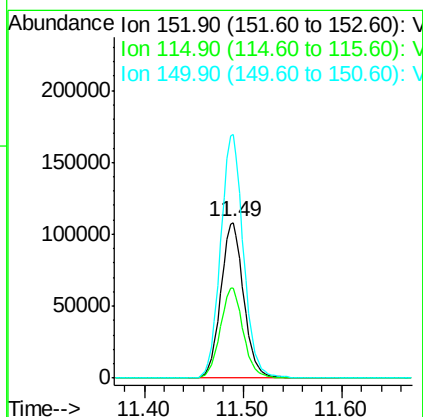
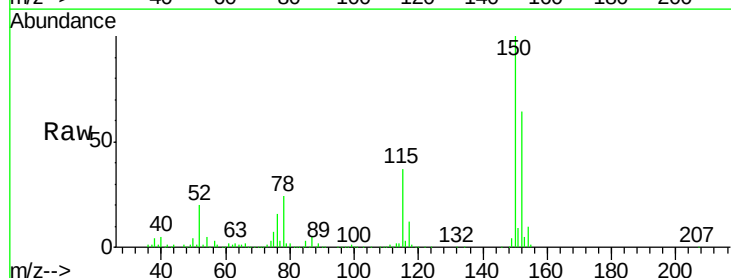
Instrument :  
MSVOA\_U  
ClientSampleId :

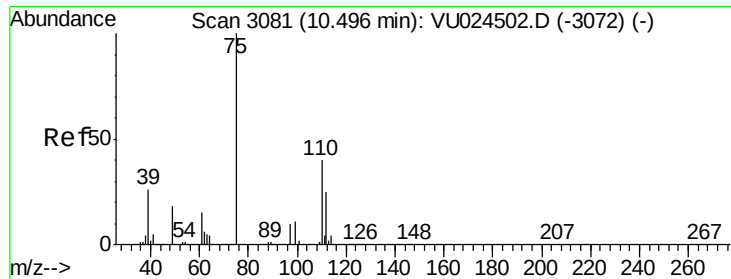
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 117     | 100   |       |       |
| 82      | 54.2  | 44.3  | 66.5  |
| 119     | 32.5  | 25.4  | 38.2  |



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 11.49 min Scan# 3390  
Delta R.T. 0.00 min  
Lab File: VU024538.D  
Acq: 14 Jun 2018 14:34

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 115     | 58.2  | 43.0  | 129.0 |
| 150     | 156.5 | 0.0   | 354.0 |





#76

1,2,3-Trichloropropane

Concen: 23.023 ug/l

RT: 10.31 min Scan# 3024

Delta R.T. -0.18 min

Lab File: VU024538.D

Acq: 14 Jun 2018 14:34

Instrument :

MSVOA\_U

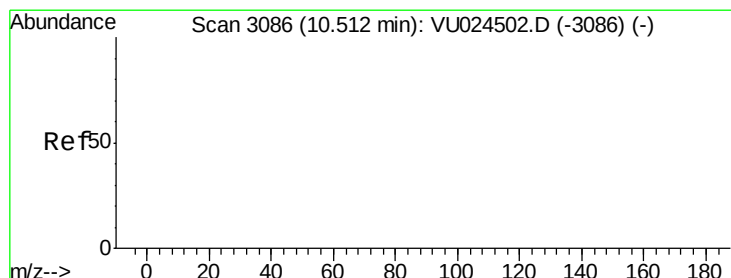
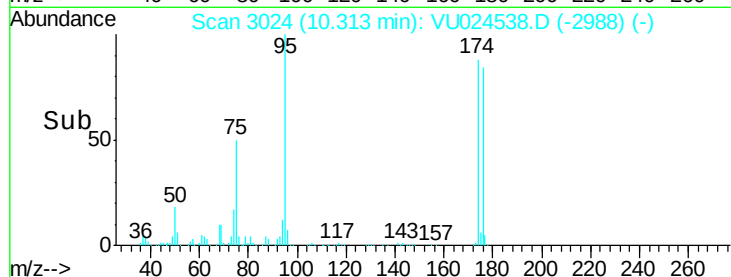
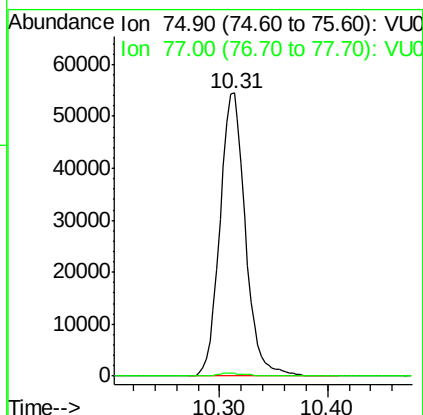
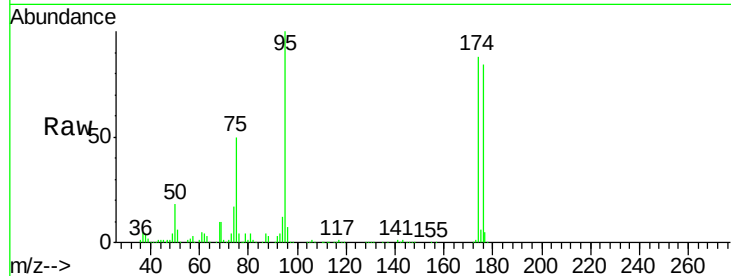
ClientSampleId :

Tot Ion: 75 Resp: 89468

Ion Ratio Lower Upper

75 100

77 1.1 20.9 62.7#



#81

trans-1,4-Dichloro-2-butene

Concen: 53.286 ug/l

RT: 10.31 min Scan# 3024

Delta R.T. -0.20 min

Lab File: VU024538.D

Acq: 14 Jun 2018 14:34

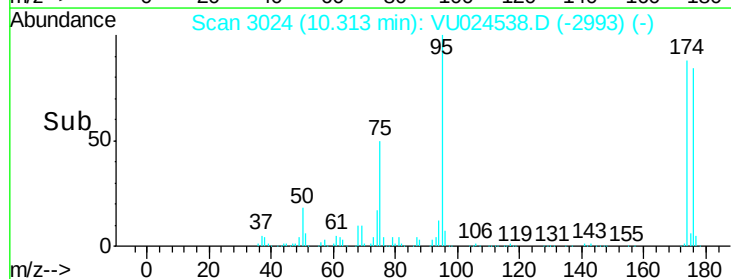
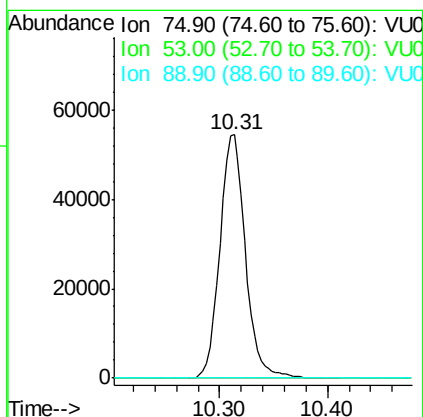
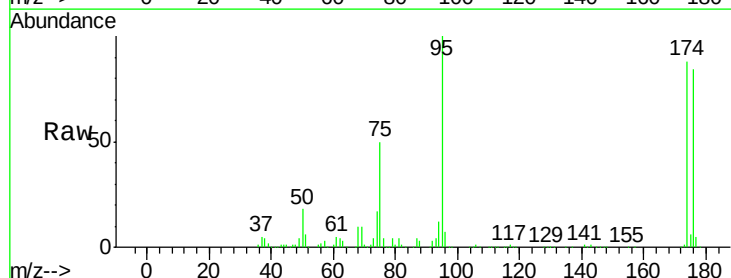
Tgt Ion: 75 Resp: 89468

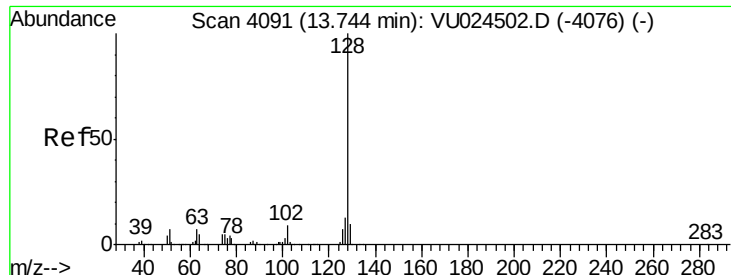
Ion Ratio Lower Upper

75 100

53 0.0 0.0 0.0#

89 0.0 0.0 0.0





#95  
Naphthalene  
Concen: 0.700 ug/l  
RT: 13.78 min Scan# 4103  
Delta R.T. 0.04 min  
Lab File: VU024538.D  
Acq: 14 Jun 2018 14:34

Instrument :  
MSVOA\_U  
ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 128     | 100   |       |       |
| 127     | 0.0   | 10.6  | 16.0# |
| 129     | 0.0   | 8.6   | 12.8# |

