

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_U\DATA\VU082919\  
 Data File : VU034025.D  
 Acq On : 28 Aug 2019 16:09  
 Operator : JC/SP  
 Sample : K4555-09  
 Misc : 5.0mL/MSVOA\_U/WATER  
 ALS Vial : 15 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 TB-2

Quant Time: Aug 29 04:16:13 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\82U082919W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Aug 29 04:11:12 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 4.96  | 168  | 495133   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 5.87  | 114  | 762398   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 9.07  | 117  | 712763   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 11.47 | 152  | 335967   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|-----------------------------|-------|------|----------|-------|--------|----------|
| 33) 1,2-Dichloroethane-d4   | 5.29  | 65   | 298775   | 47.09 | ug/l   | 0.00     |
| Spiked Amount 50.000        |       |      | Recovery | =     | 94.18% |          |
| 35) Dibromofluoromethane    | 4.86  | 113  | 247164   | 46.74 | ug/l   | 0.00     |
| Spiked Amount 50.000        |       |      | Recovery | =     | 93.48% |          |
| 50) Toluene-d8              | 7.55  | 98   | 948821   | 47.92 | ug/l   | 0.00     |
| Spiked Amount 50.000        |       |      | Recovery | =     | 95.84% |          |
| 62) 4-Bromofluorobenzene    | 10.29 | 95   | 327255   | 42.49 | ug/l   | 0.00     |
| Spiked Amount 50.000        |       |      | Recovery | =     | 84.98% |          |

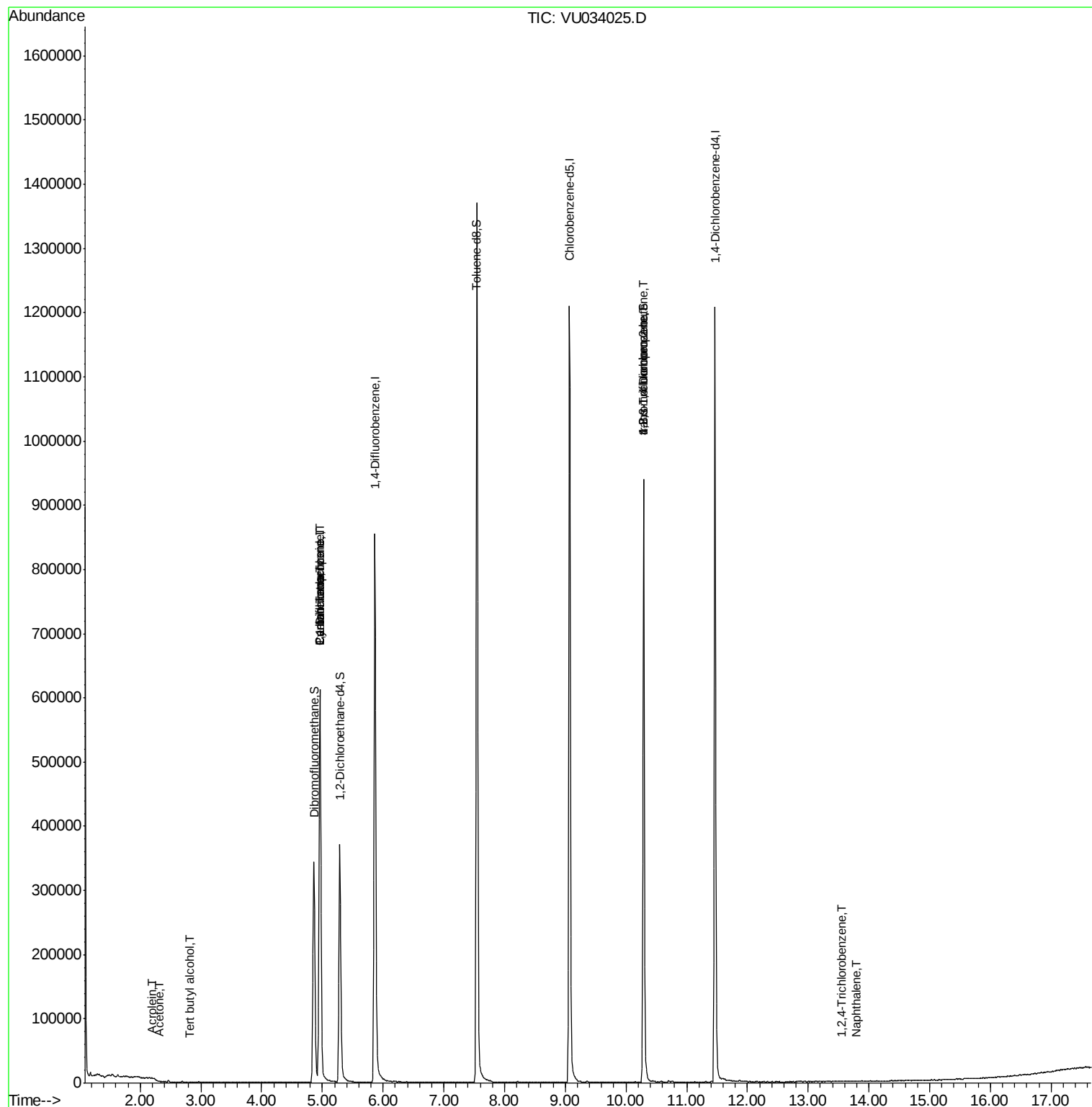
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 3) Chloromethane               | 1.32  | 50   | 1929     | Below Cal |        | 98     |
| 5) Bromomethane                | 1.59  | 94   | 61       | Below Cal | #      | 2      |
| 11) Tert butyl alcohol         | 2.81  | 59   | 372      | 0.254     | ug/l # | 73     |
| 13) Acrolein                   | 2.19  | 56   | 196      | 0.318     | ug/l # | 77     |
| 16) Acetone                    | 2.31  | 43   | 1106     | 0.342     | ug/l # | 81     |
| 31) Cyclohexane                | 4.96  | 56   | 8719     | 0.920     | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 4.96  | 75   | 35651    | 4.944     | ug/l # | 48     |
| 38) Carbon Tetrachloride       | 4.96  | 117  | 45405    | 6.523     | ug/l # | 16     |
| 76) 1,2,3-Trichloropropane     | 10.29 | 75   | 158379   | 20.916    | ug/l # | 38     |
| 81) trans-1,4-Dichloro-2-buten | 10.29 | 75   | 158379   | 70.430    | ug/l # | 100    |
| 93) 1,2,4-Trichlorobenzene     | 13.54 | 180  | 45       | 1.120     | ug/l # | 1      |
| 95) Naphthalene                | 13.79 | 128  | 382      | 1.807     | ug/l # | 70     |

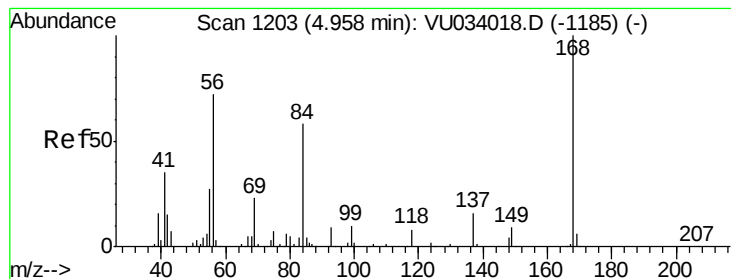
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA\_U\DATA\VU082919\  
Data File : VU034025.D  
Acq On : 28 Aug 2019 16:09  
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Sample : K4555-09  
Misc : 5.0mL/MSVOA\_U/WATER  
ALS Vial : 15 Sample Multiplier: 1

Instrument :  
MSVOA\_U  
ClientSampleId :  
TB-2

Quant Time: Aug 29 04:16:13 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_U\METHOD\82U082919W.M  
Quant Title : SW846 8260  
QLast Update : Thu Aug 29 04:11:12 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 4.96 min Scan# 1204

Delta R.T. 0.00 min

Lab File: VU034025.D

Acq: 28 Aug 2019 16:09

Instrument :

MSVOA\_U

ClientSampleId :

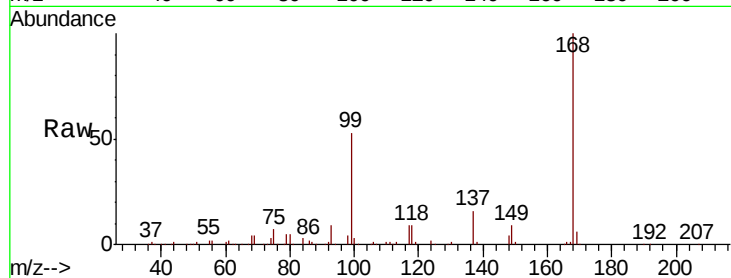
TB-2

Tgt Ion:168 Resp: 495133

Ion Ratio Lower Upper

168 100

99 52.9 42.3 63.5



Abundance Ion 167.90 (167.60 to 168.60): VU034018.D (-1185) (-)

Ion 98.90 (98.60 to 99.60): VU034025.D (-1110) (-)

4.96

250000

200000

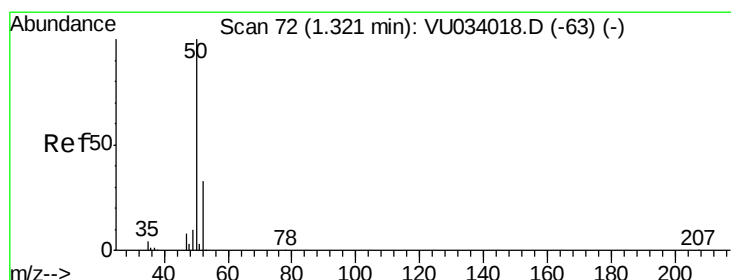
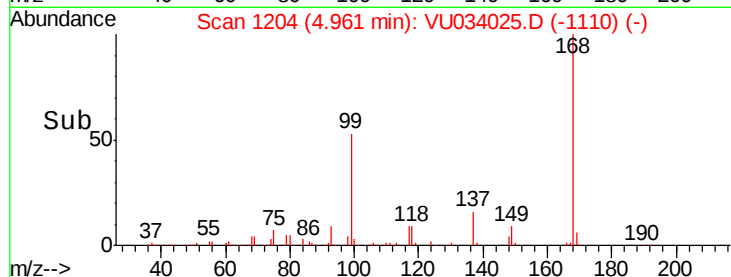
150000

100000

50000

0

Time--> 4.80 4.90 5.00 5.10 5.20



#3

Chloromethane

Concen: Below Cal

RT: 1.32 min Scan# 73

Delta R.T. 0.00 min

Lab File: VU034025.D

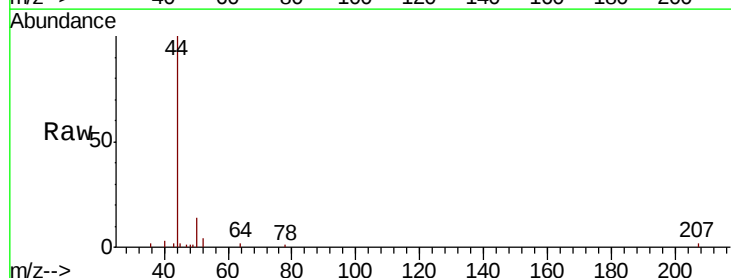
Acq: 28 Aug 2019 16:09

Tgt Ion: 50 Resp: 1929

Ion Ratio Lower Upper

50 100

52 31.6 26.2 39.4



Abundance Ion 49.90 (49.60 to 50.60): VU034018.D (-63) (-)

Ion 51.90 (51.60 to 52.60): VU034025.D (-1) (-)

1.32

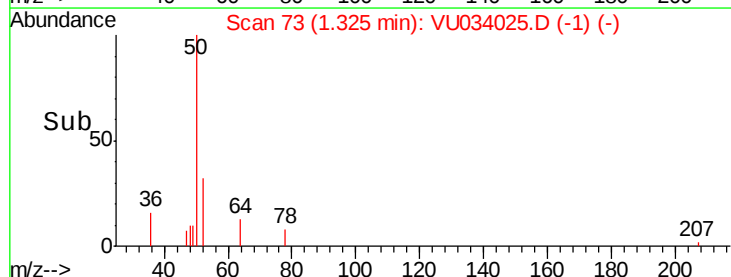
1500

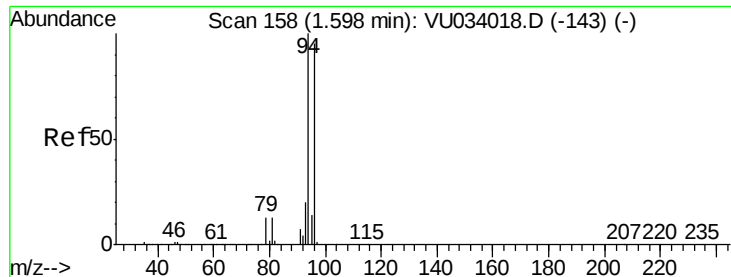
1000

500

0

Time--> 1.30 1.35 1.40





#5

Bromomethane

Concen: Below Cal

RT: 1.59 min Scan# 157

Delta R.T. -0.00 min

Lab File: VU034025.D

Acq: 28 Aug 2019 16:09

Instrument :

MSVOA\_U

ClientSampleId :

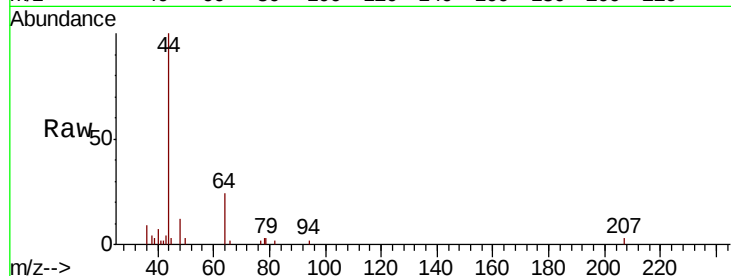
TB-2

Tgt Ion: 94 Resp: 61

Ion Ratio Lower Upper

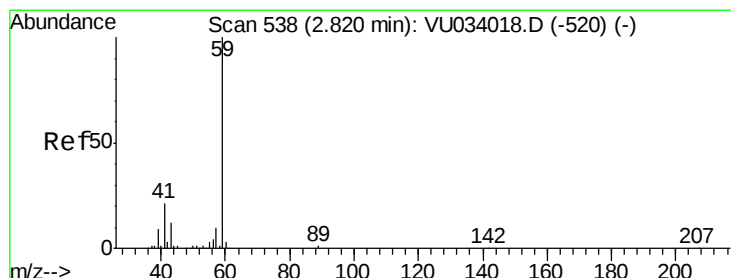
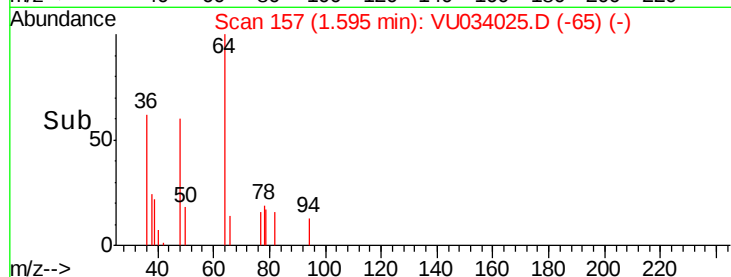
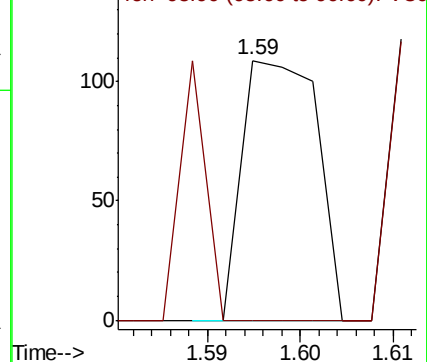
94 100

96 0.0 76.3 114.5#



Abundance Ion 93.90 (93.60 to 94.60): VU034018.D (-143) (-)

Ion 95.90 (95.60 to 96.60): VU034018.D (-143) (-)



#11

Tert butyl alcohol

Concen: 0.254 ug/l

RT: 2.81 min Scan# 535

Delta R.T. -0.01 min

Lab File: VU034025.D

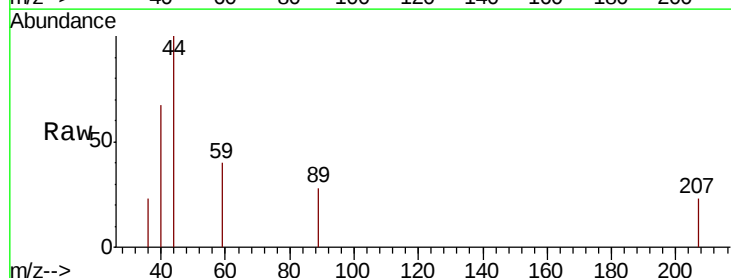
Acq: 28 Aug 2019 16:09

Tgt Ion: 59 Resp: 372

Ion Ratio Lower Upper

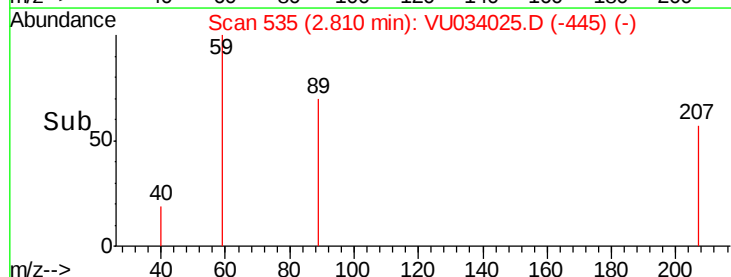
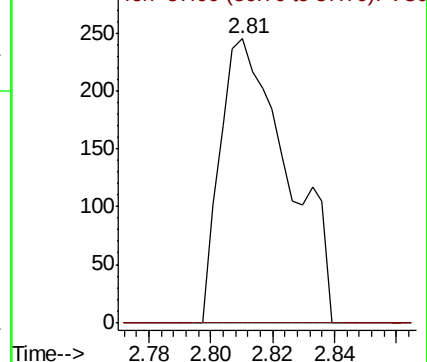
59 100

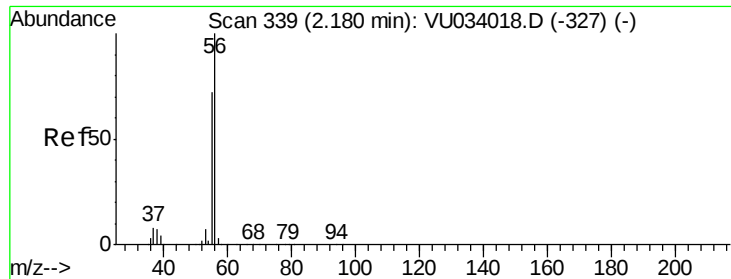
57 0.0 8.0 12.0#



Abundance Ion 59.00 (58.70 to 59.70): VU034018.D (-520) (-)

Ion 57.00 (56.70 to 57.70): VU034018.D (-520) (-)





#13

Acrolein

Concen: 0.318 ug/l

RT: 2.19 min Scan# 342

Delta R.T. 0.01 min

Lab File: VU034025.D

Acq: 28 Aug 2019 16:09

Instrument :

MSVOA\_U

ClientSampleId :

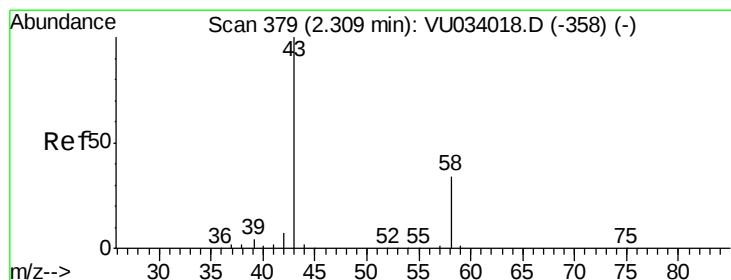
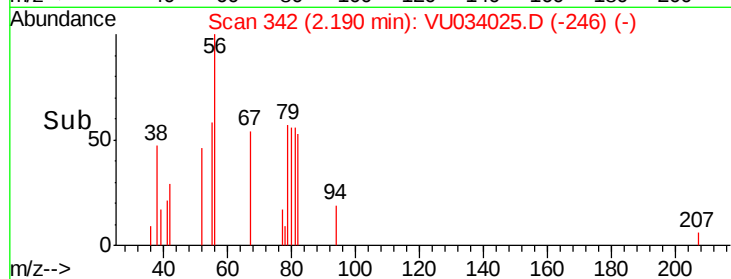
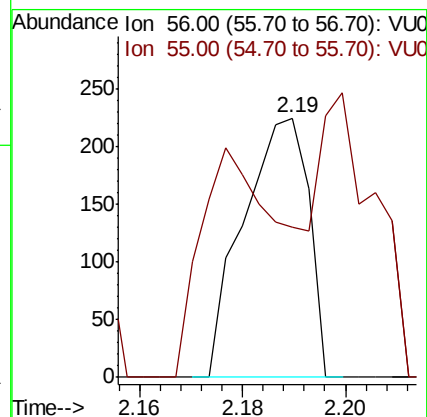
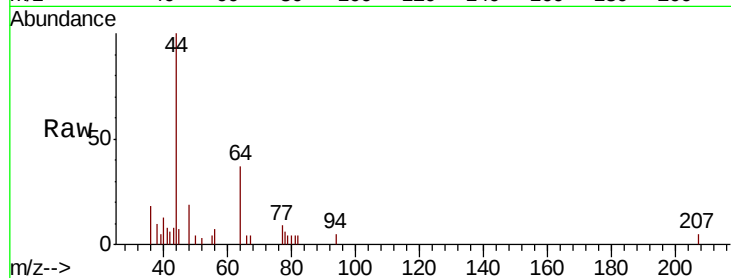
TB-2

Tgt Ion: 56 Resp: 196

Ion Ratio Lower Upper

56 100

55 90.3 57.1 85.7#



#16

Acetone

Concen: 0.342 ug/l

RT: 2.31 min Scan# 379

Delta R.T. 0.00 min

Lab File: VU034025.D

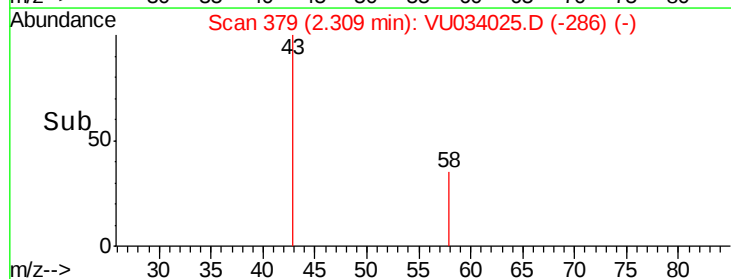
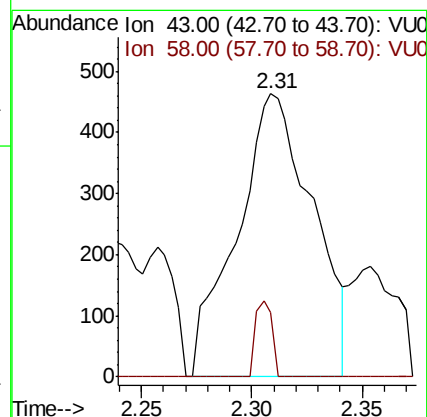
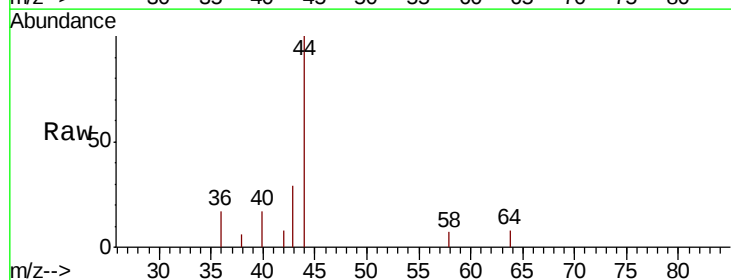
Acq: 28 Aug 2019 16:09

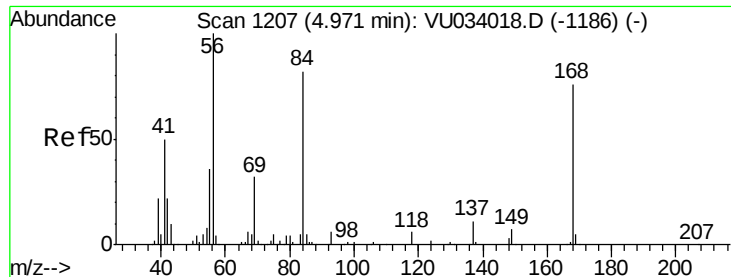
Tgt Ion: 43 Resp: 1106

Ion Ratio Lower Upper

43 100

58 22.7 26.8 40.2#

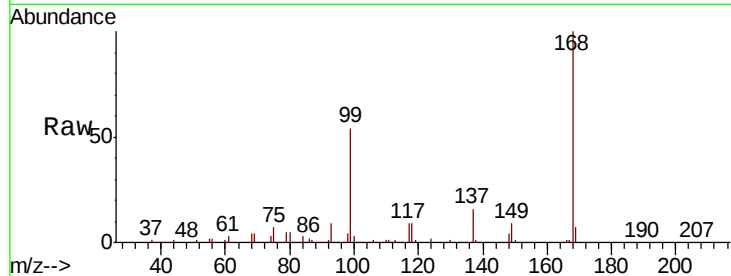




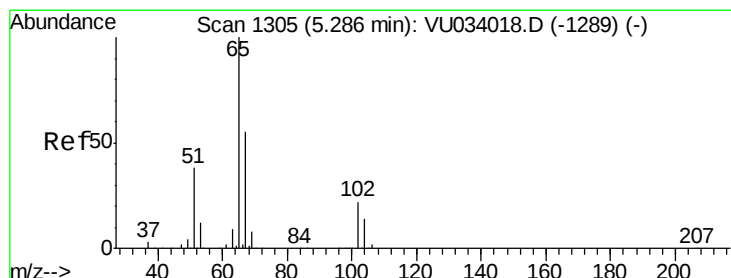
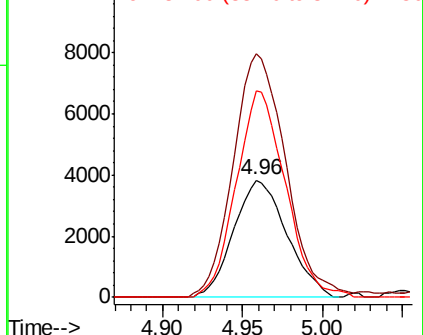
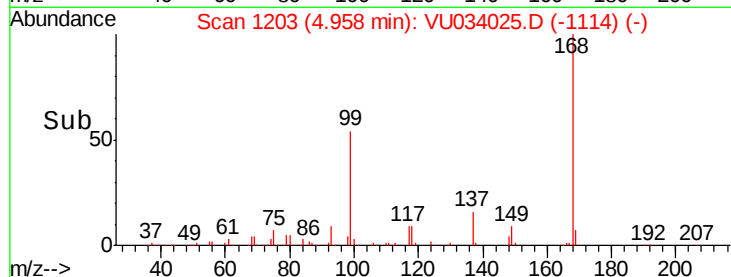
#31  
Cyclohexane  
Concen: 0.920 ug/l  
RT: 4.96 min Scan# 1203  
Delta R.T. -0.01 min  
Lab File: VU034025.D  
Acq: 28 Aug 2019 16:09

Instrument :  
MSVOA\_U  
ClientSampled :  
TB-2

Tgt Ion: 56 Resp: 8719  
Ion Ratio Lower Upper  
56 100  
69 207.6 25.4 38.0#  
84 175.6 65.8 98.8#

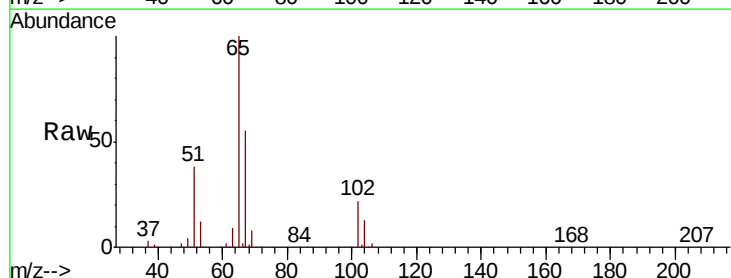


Abundance Ion 56.00 (55.70 to 56.70): VU0  
Ion 69.00 (68.70 to 69.70): VU0  
Ion 84.00 (83.70 to 84.70): VU0

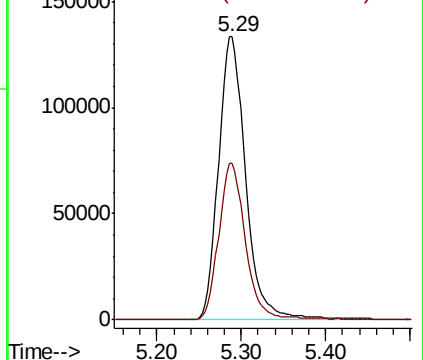
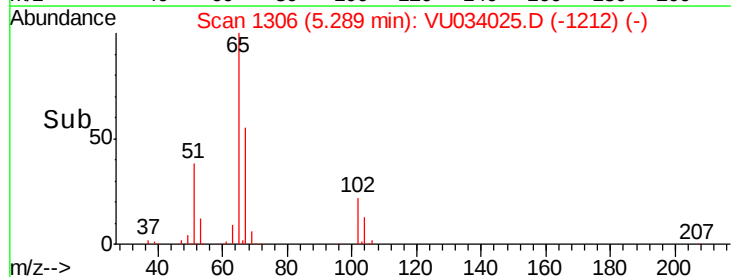


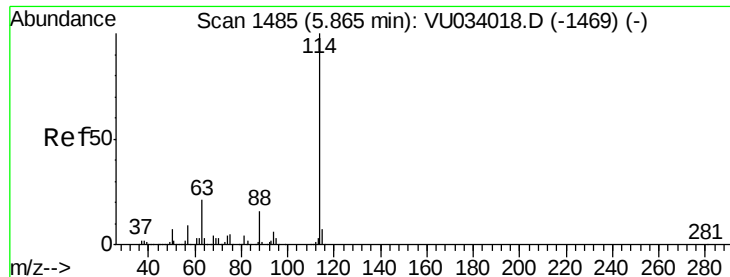
#33  
1,2-Dichloroethane-d4  
Concen: 47.093 ug/l  
RT: 5.29 min Scan# 1306  
Delta R.T. 0.00 min  
Lab File: VU034025.D  
Acq: 28 Aug 2019 16:09

Tgt Ion: 65 Resp: 298775  
Ion Ratio Lower Upper  
65 100  
67 54.4 0.0 110.6



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: 5.87 min Scan# 1486

Delta R.T. 0.00 min

Lab File: VU034025.D

Acq: 28 Aug 2019 16:09

Instrument :

MSVOA\_U

ClientSampleId :

TB-2

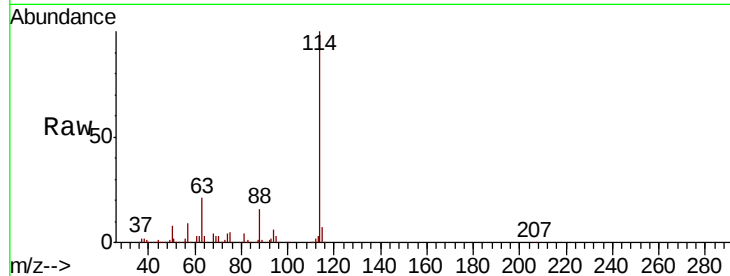
Tgt Ion:114 Resp: 762398

Ion Ratio Lower Upper

114 100

63 20.9 0.0 42.0

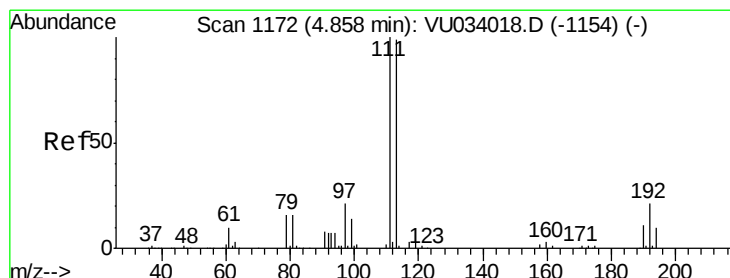
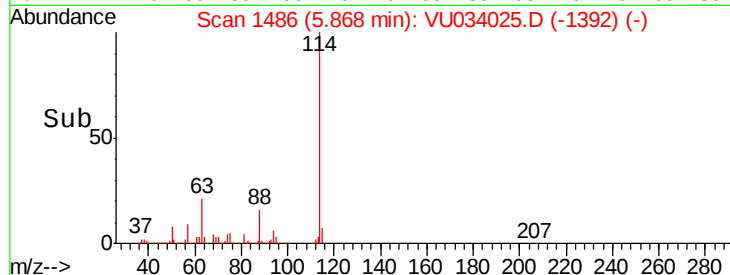
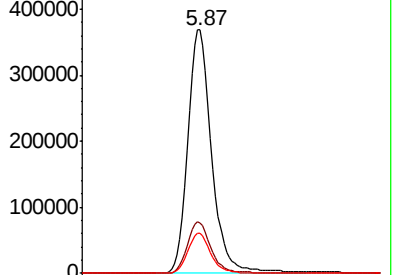
88 16.4 0.0 32.0



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: 46.741 ug/l

RT: 4.86 min Scan# 1173

Delta R.T. 0.00 min

Lab File: VU034025.D

Acq: 28 Aug 2019 16:09

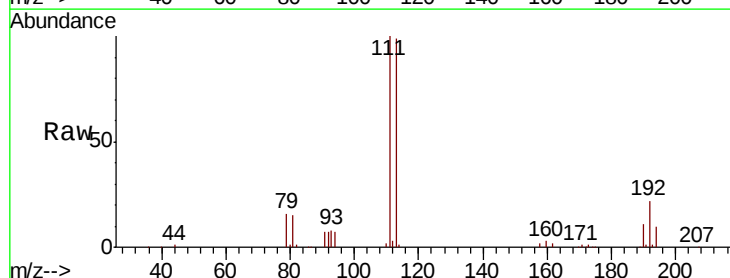
Tgt Ion:113 Resp: 247164

Ion Ratio Lower Upper

113 100

111 101.3 81.7 122.5

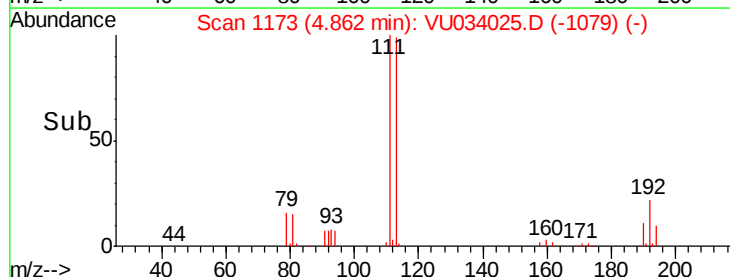
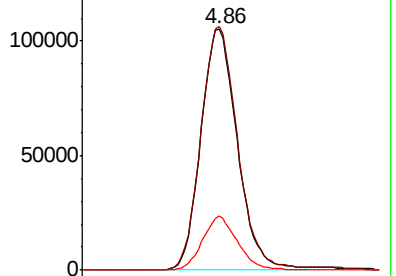
192 21.5 17.1 25.7

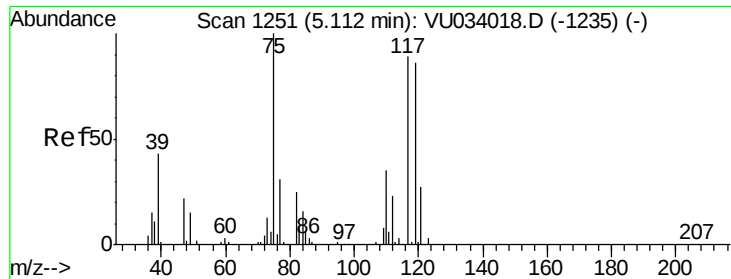


Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V

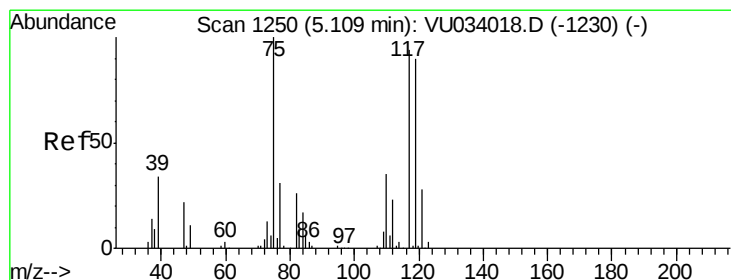
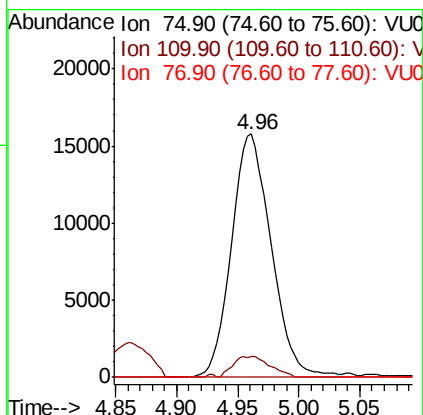
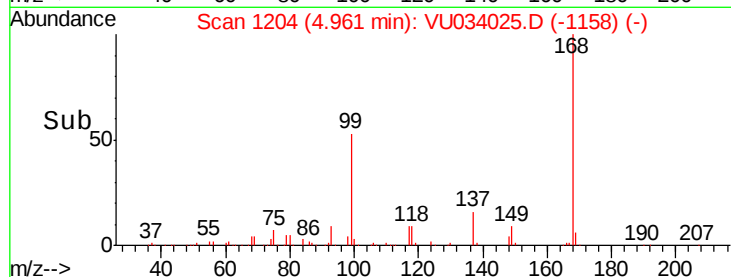
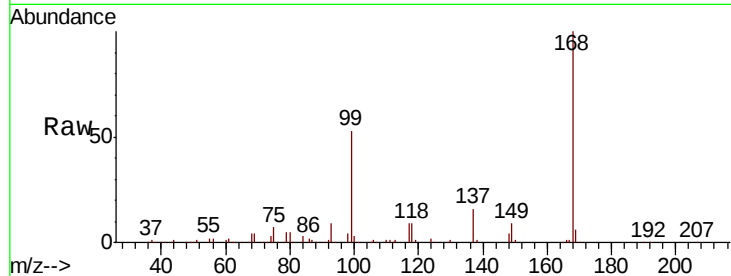




#36  
 1,1-Dichloropropene  
 Concen: 4.944 ug/l  
 RT: 4.96 min Scan# 1204  
 Delta R.T. -0.15 min  
 Lab File: VU034025.D  
 Acq: 28 Aug 2019 16:09

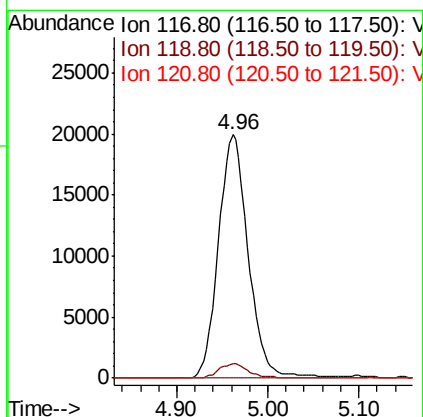
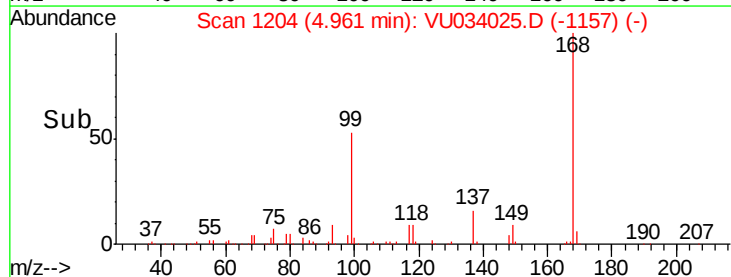
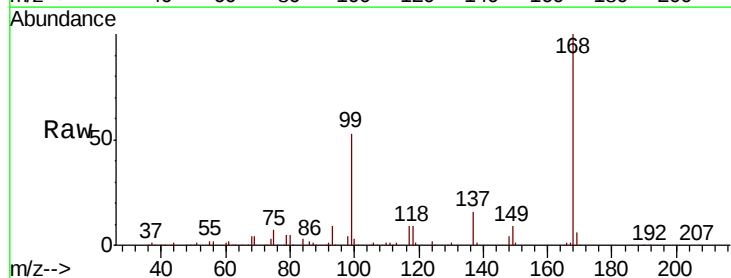
Instrument :  
 MSVOA\_U  
 ClientSampled :  
 TB-2

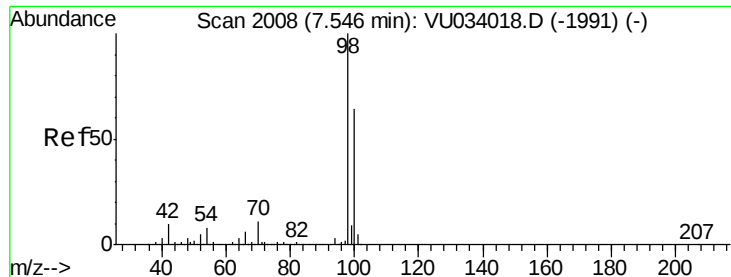
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 110     | 7.9   | 17.8  | 53.5# |
| 77      | 0.0   | 25.0  | 37.4# |



#38  
 Carbon Tetrachloride  
 Concen: 6.523 ug/l  
 RT: 4.96 min Scan# 1204  
 Delta R.T. -0.15 min  
 Lab File: VU034025.D  
 Acq: 28 Aug 2019 16:09

| Tgt Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 117     | 100   |       |        |
| 119     | 5.8   | 77.0  | 115.4# |
| 121     | 0.0   | 23.9  | 35.9#  |

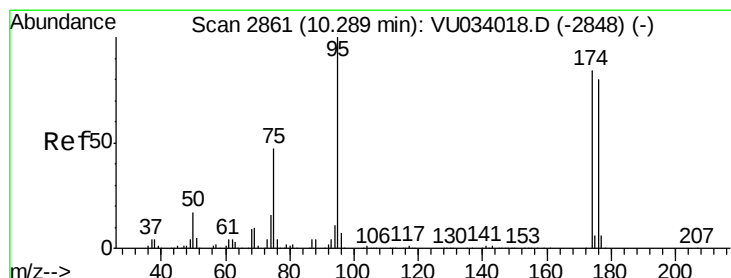
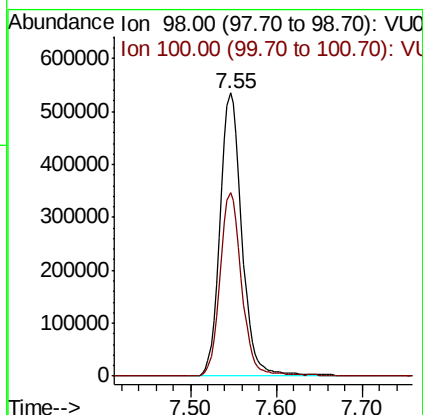
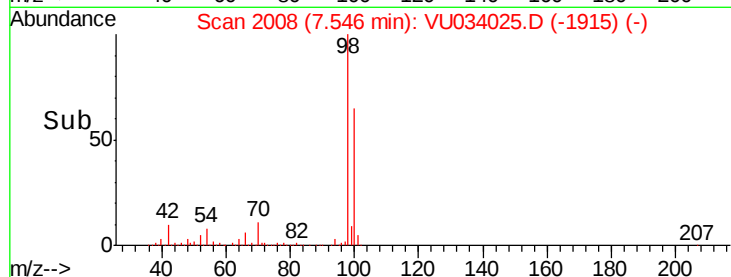
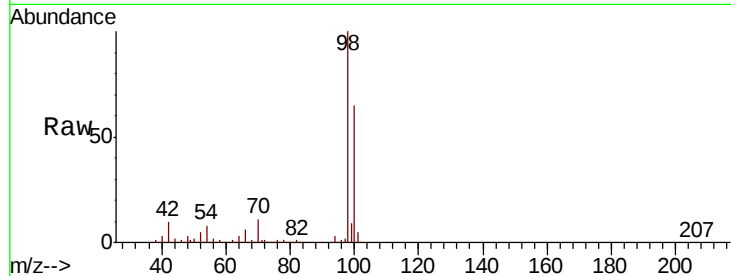




#50  
Toluene-d8  
Concen: 47.920 ug/l  
RT: 7.55 min Scan# 2008  
Delta R.T. 0.00 min  
Lab File: VU034025.D  
Acq: 28 Aug 2019 16:09

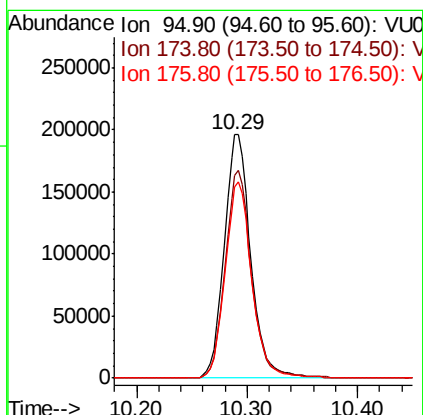
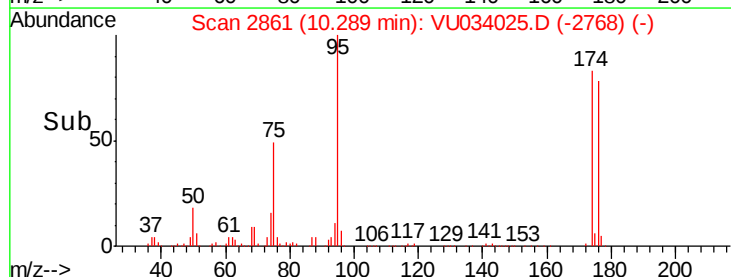
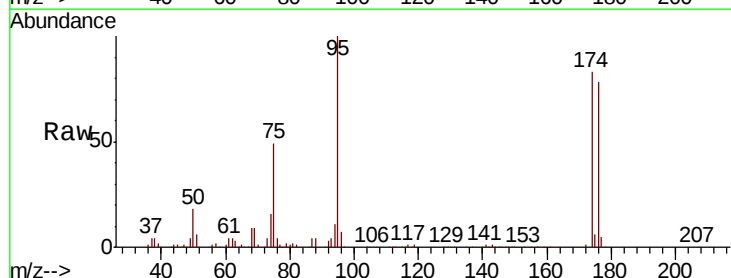
Instrument :  
MSVOA\_U  
ClientSampleId :  
TB-2

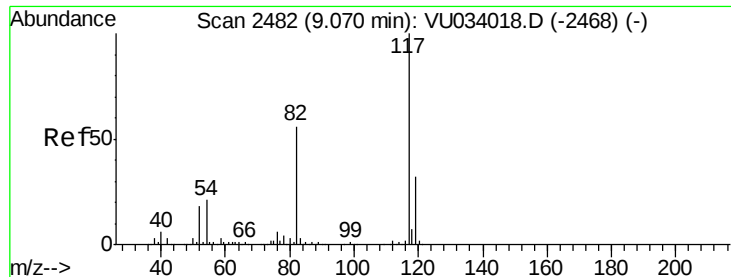
Tgt Ion: 98 Resp: 948821  
Ion Ratio Lower Upper  
98 100  
100 63.8 50.3 75.5



#62  
4-Bromofluorobenzene  
Concen: 42.490 ug/l  
RT: 10.29 min Scan# 2861  
Delta R.T. 0.00 min  
Lab File: VU034025.D  
Acq: 28 Aug 2019 16:09

Tgt Ion: 95 Resp: 327255  
Ion Ratio Lower Upper  
95 100  
174 84.8 0.0 168.8  
176 81.0 0.0 161.8

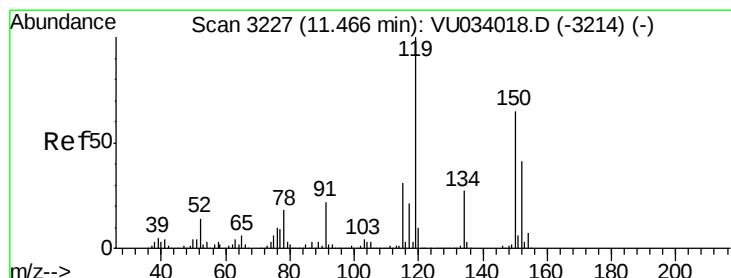
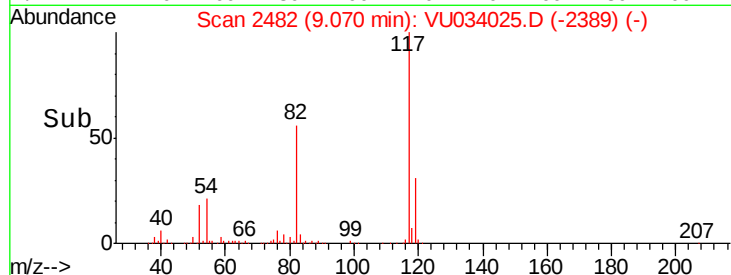
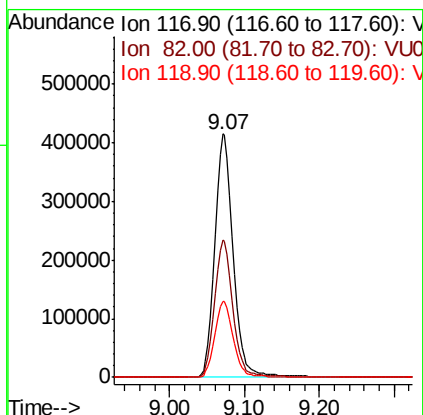
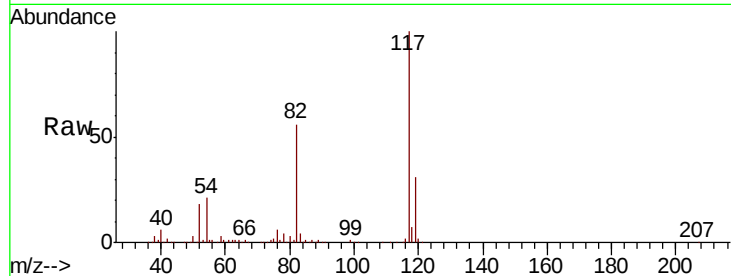




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 9.07 min Scan# 2482  
Delta R.T. 0.00 min  
Lab File: VU034025.D  
Acq: 28 Aug 2019 16:09

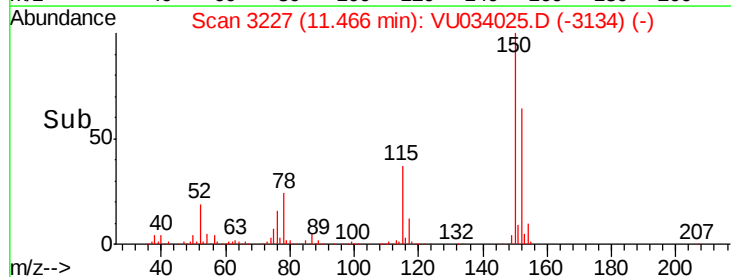
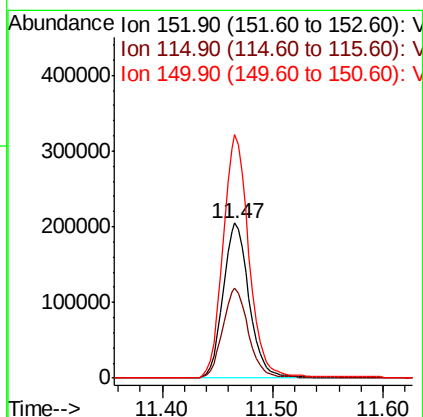
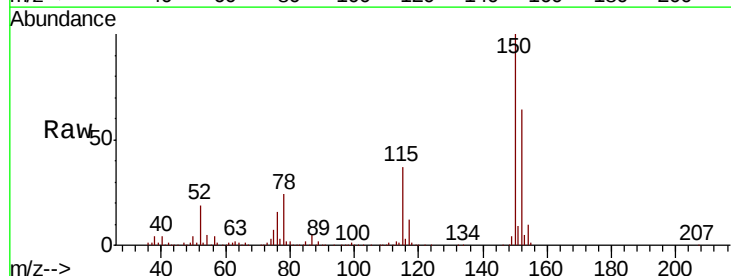
Instrument :  
MSVOA\_U  
ClientSampleId :  
TB-2

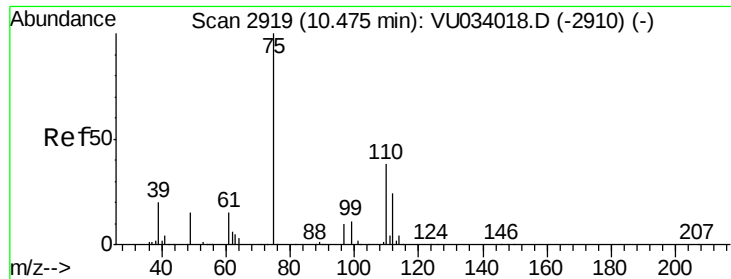
Tgt Ion:117 Resp: 712763  
Ion Ratio Lower Upper  
117 100  
82 56.5 45.1 67.7  
119 31.4 25.4 38.0



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 11.47 min Scan# 3227  
Delta R.T. 0.00 min  
Lab File: VU034025.D  
Acq: 28 Aug 2019 16:09

Tgt Ion:152 Resp: 335967  
Ion Ratio Lower Upper  
152 100  
115 57.4 41.1 123.3  
150 155.9 0.0 348.8





#76

1,2,3-Trichloropropane

Concen: 20.916 ug/l

RT: 10.29 min Scan# 2862

Delta R.T. -0.18 min

Lab File: VU034025.D

Acq: 28 Aug 2019 16:09

Instrument :

MSVOA\_U

ClientSampled :

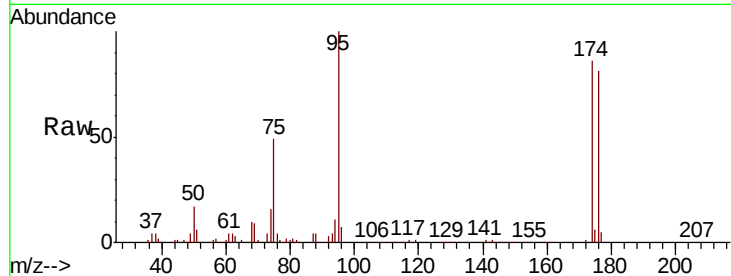
TB-2

Tgt Ion: 75 Resp: 158379

Ion Ratio Lower Upper

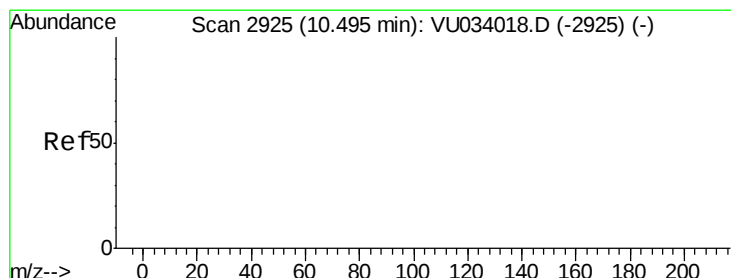
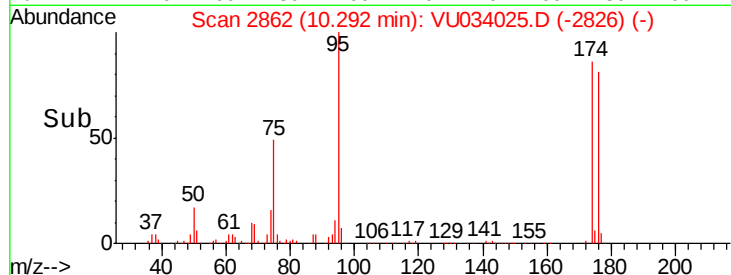
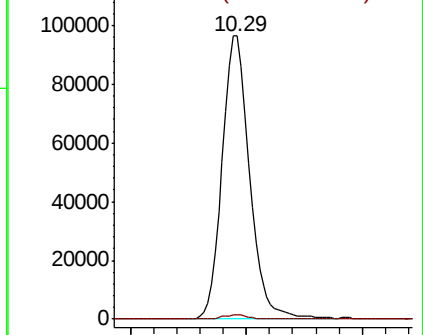
75 100

77 1.4 20.1 60.2#



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: 70.430 ug/l

RT: 10.29 min Scan# 2862

Delta R.T. -0.20 min

Lab File: VU034025.D

Acq: 28 Aug 2019 16:09

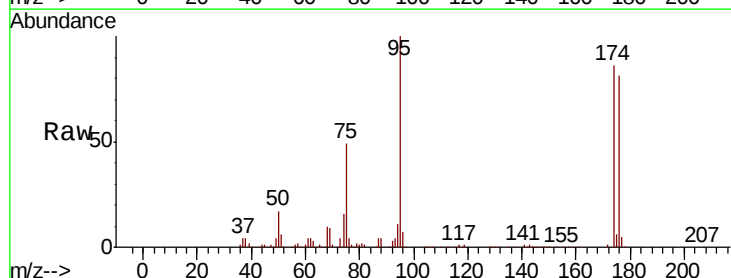
Tgt Ion: 75 Resp: 158379

Ion Ratio Lower Upper

75 100

53 0.1 0.0 0.0#

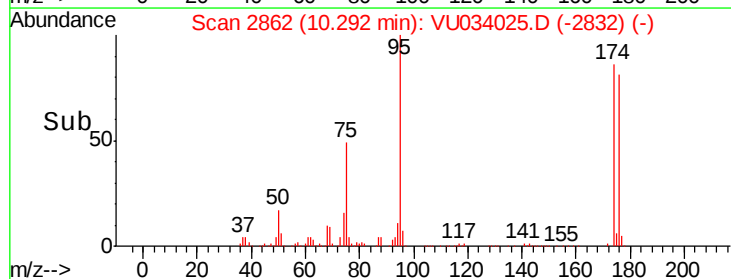
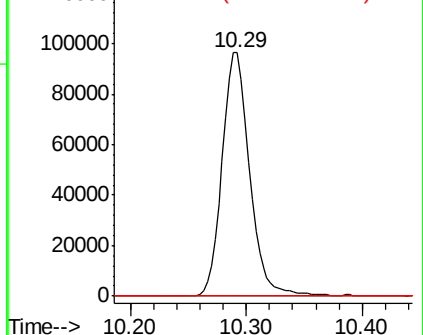
89 0.0 0.0 0.0

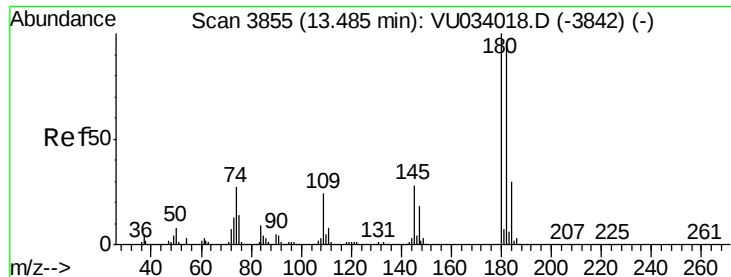


Abundance Ion 74.90 (74.60 to 75.60): VU0

Ion 53.00 (52.70 to 53.70): VU0

Ion 88.90 (88.60 to 89.60): VU0

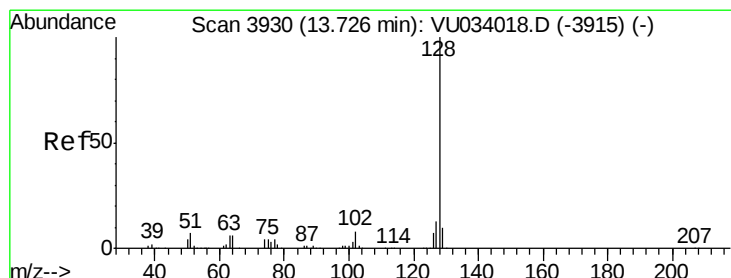
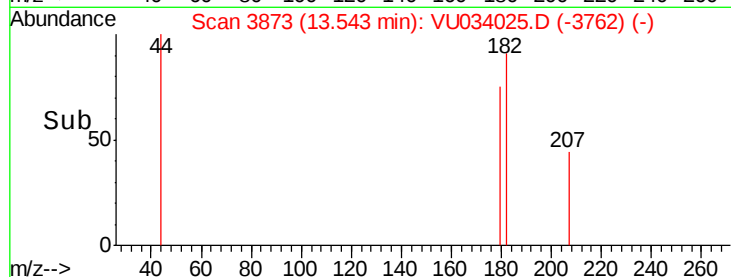
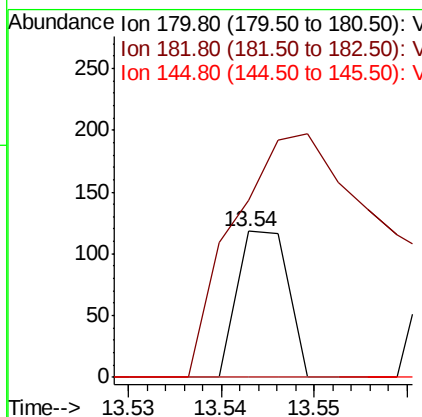
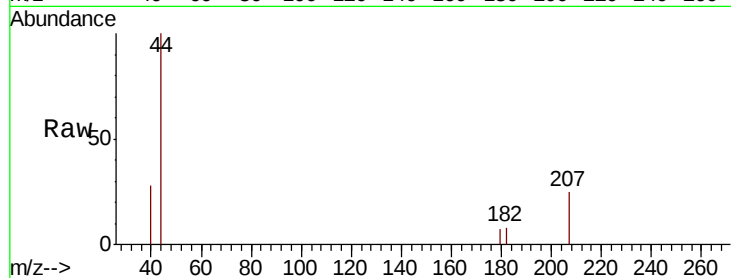




#93  
 1,2,4-Trichlorobenzene  
 Concen: 1.120 ug/l  
 RT: 13.54 min Scan# 3873  
 Delta R.T. 0.06 min  
 Lab File: VU034025.D  
 Acq: 28 Aug 2019 16:09

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 TB-2

Tgt Ion:180 Resp: 45  
 Ion Ratio Lower Upper  
 180 100  
 182 495.6 47.4 142.2#  
 145 0.0 14.1 42.3#



#95  
 Naphthalene  
 Concen: 1.807 ug/l  
 RT: 13.79 min Scan# 3950  
 Delta R.T. 0.06 min  
 Lab File: VU034025.D  
 Acq: 28 Aug 2019 16:09

Tgt Ion:128 Resp: 382  
 Ion Ratio Lower Upper  
 128 100  
 127 0.0 10.2 15.4#  
 129 0.0 8.4 12.6#

