

Data File : VU034230.D  
Acq On : 03 Sep 2019 16:34  
Operator : JC/SP  
Sample : K4546-23  
Misc : 5.0mL/MSVOA\_U/WATER  
ALS Vial : 20 Sample Multiplier: 1

Instrument :  
MSVOA\_U  
ClientSampleId :  
T3-S-C2-(0)

Quant Time: Sep 04 04:25:26 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  | 424888   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 5.87  | 114  | 686893   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 9.07  | 117  | 687171   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 11.46 | 152  | 336201   | 50.00 | ug/l  | 0.00     |

|                             |        |     |          |       |         |      |
|-----------------------------|--------|-----|----------|-------|---------|------|
| System Monitoring Compounds |        |     |          |       |         |      |
| 33) 1,2-Dichloroethane-d4   | 5.29   | 65  | 267039   | 49.05 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 98.10%  |      |
| 35) Dibromofluoromethane    | 4.86   | 113 | 223635   | 46.94 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 93.88%  |      |
| 50) Toluene-d8              | 7.55   | 98  | 894300   | 50.13 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 100.26% |      |
| 62) 4-Bromofluorobenzene    | 10.29  | 95  | 313399   | 45.16 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 90.32%  |      |

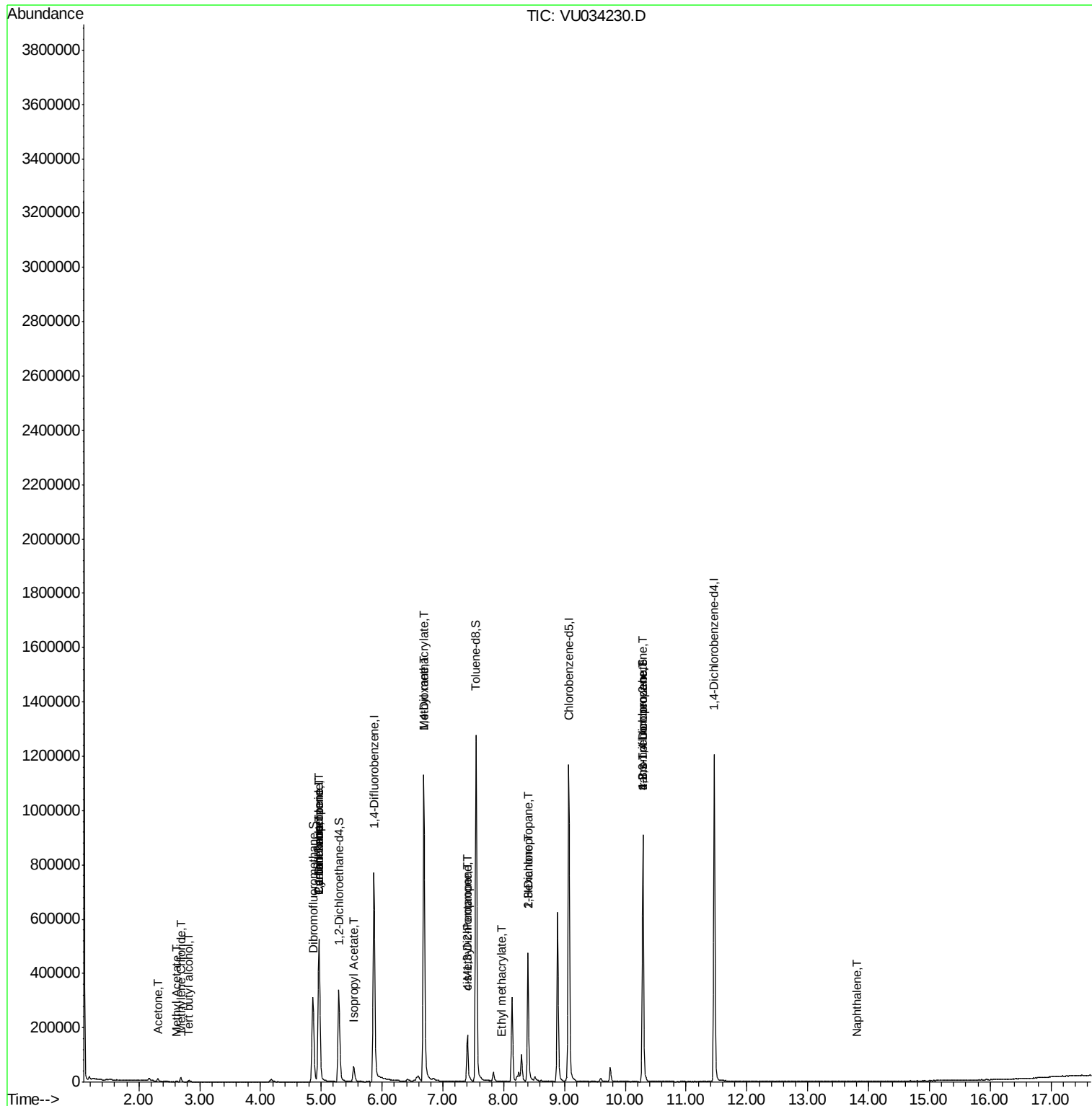
|                                |       |     |        |           |        |     |
|--------------------------------|-------|-----|--------|-----------|--------|-----|
| Target Compounds               |       |     | Qvalue |           |        |     |
| 3) Chloromethane               | 1.33  | 50  | 416    | Below Cal |        | 91  |
| 5) Bromomethane                | 1.64  | 94  | 743    | Below Cal | #      | 71  |
| 11) Tert butyl alcohol         | 2.83  | 59  | 3430   | 2.732     | ug/l # | 73  |
| 16) Acetone                    | 2.31  | 43  | 10345  | 3.724     | ug/l # | 87  |
| 18) Methyl Acetate             | 2.61  | 43  | 2665   | 0.371     | ug/l   | 97  |
| 20) Methylene Chloride         | 2.69  | 84  | 7248   | 1.378     | ug/l   | 87  |
| 31) Cyclohexane                | 4.96  | 56  | 7441   | 0.915     | ug/l # | 1   |
| 36) 1,1-Dichloropropene        | 4.96  | 75  | 30187  | 4.646     | ug/l # | 48  |
| 38) Carbon Tetrachloride       | 4.96  | 117 | 38767  | 6.182     | ug/l # | 17  |
| 43) Isopropyl Acetate          | 5.53  | 43  | 69334  | 6.264     | ug/l   | 99  |
| 48) Methyl methacrylate        | 6.68  | 41  | 101394 | 18.983    | ug/l # | 39  |
| 49) 1,4-Dioxane                | 6.69  | 88  | 116    | 0.867     | ug/l # | 1   |
| 51) 4-Methyl-2-Pentanone       | 7.40  | 43  | 60534  | 7.919     | ug/l # | 48  |
| 54) cis-1,3-Dichloropropene    | 7.40  | 75  | 32460  | 3.926     | ug/l # | 64  |
| 56) Ethyl methacrylate         | 7.97  | 69  | 266    | 1.002     | ug/l # | 27  |
| 57) 1,3-Dichloropropane        | 8.40  | 76  | 4651   | 0.535     | ug/l # | 42  |
| 59) 2-Hexanone                 | 8.40  | 43  | 65199  | 11.298    | ug/l # | 54  |
| 76) 1,2,3-Trichloropropane     | 10.29 | 75  | 146582 | 19.345    | ug/l # | 37  |
| 81) trans-1,4-Dichloro-2-buten | 10.29 | 75  | 146582 | 65.138    | ug/l # | 100 |
| 95) Naphthalene                | 13.81 | 128 | 164    | 1.797     | ug/l # | 70  |

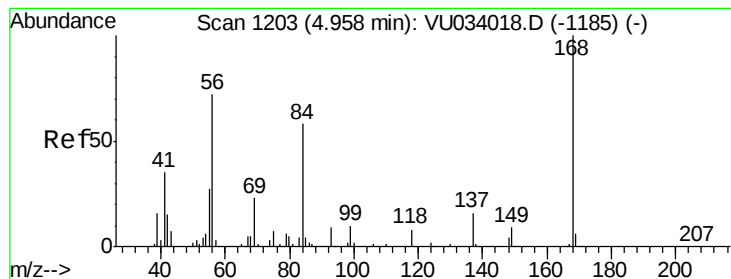
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 4.96 min Scan# 1204

Delta R.T. 0.00 min

Lab File: VU034230.D

Acq: 03 Sep 2019 16:34

Instrument :

MSVOA\_U

ClientSampleId :

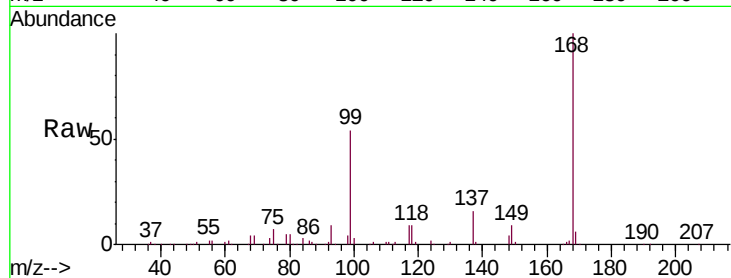
T3-S-C2-(0)

Tgt Ion:168 Resp: 424888

Ion Ratio Lower Upper

168 100

99 53.6 42.3 63.5



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

Ion 98.90 (98.60 to 99.60): VU034018.D (-1185) (-)

4.96

200000

150000

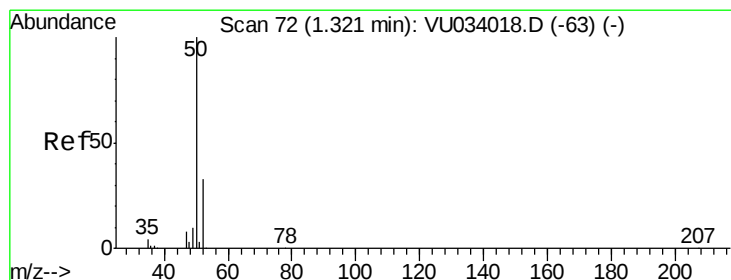
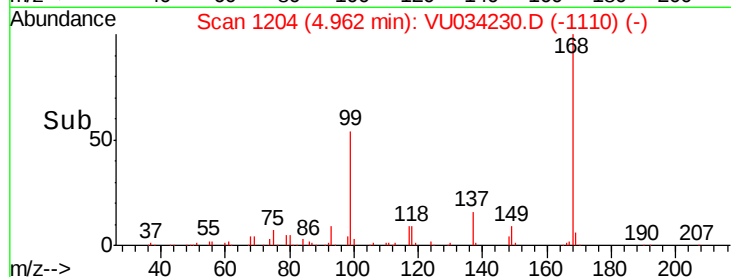
100000

50000

0

4.90 5.00 5.10

Time-->



#3

Chloromethane

Concen: Below Cal

RT: 1.33 min Scan# 74

Delta R.T. 0.01 min

Lab File: VU034230.D

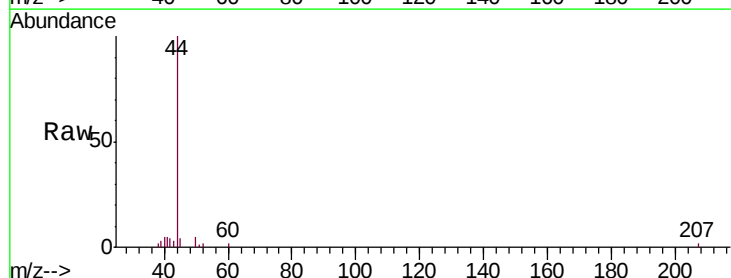
Acq: 03 Sep 2019 16:34

Tgt Ion: 50 Resp: 416

Ion Ratio Lower Upper

50 100

52 37.6 26.2 39.4



Abundance Ion 49.90 (49.60 to 50.60): VU034230.D (-1) (-)

Ion 51.90 (51.60 to 52.60): VU034230.D (-1) (-)

1.33

400

300

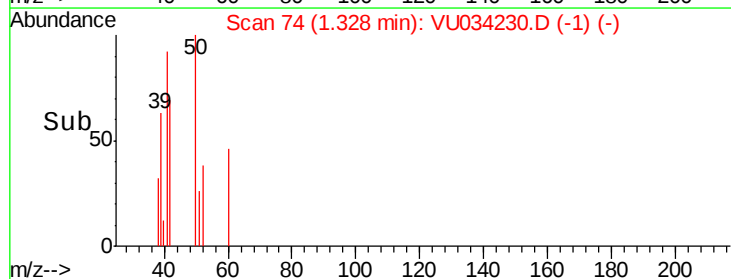
200

100

0

1.30 1.32 1.34 1.36

Time-->





#5

Bromomethane

Concen: Below Cal

RT: 1.64 min Scan# 170

Delta R.T. 0.04 min

Lab File: VU034230.D

Acq: 03 Sep 2019 16:34

Instrument :

MSVOA\_U

ClientSampleId :

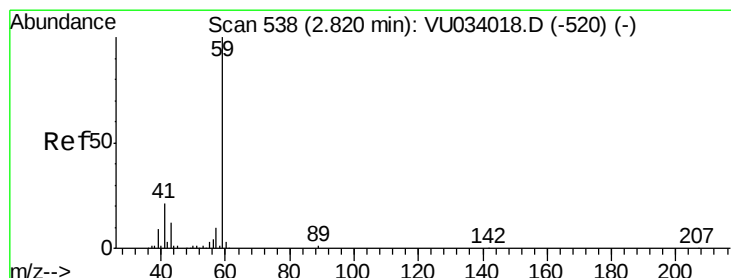
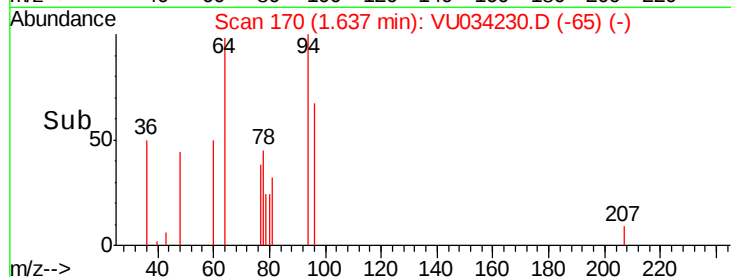
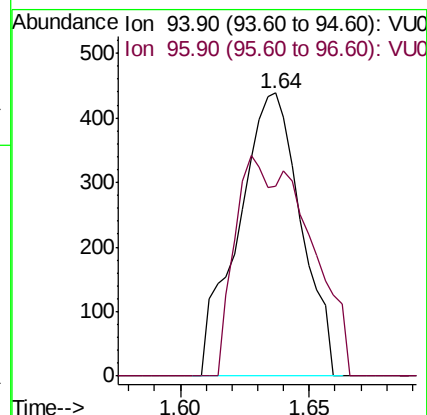
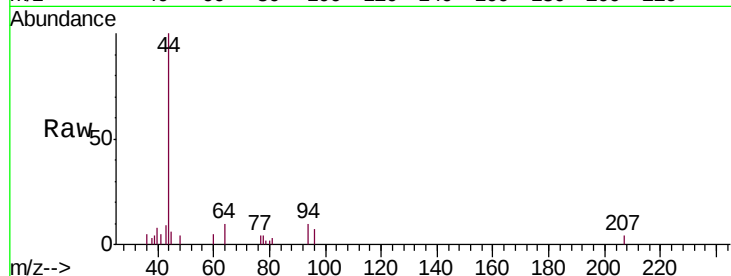
T3-S-C2-(0)

Tgt Ion: 94 Resp: 743

Ion Ratio Lower Upper

94 100

96 67.1 76.3 114.5#



#11

Tert butyl alcohol

Concen: 2.732 ug/l

RT: 2.83 min Scan# 540

Delta R.T. 0.01 min

Lab File: VU034230.D

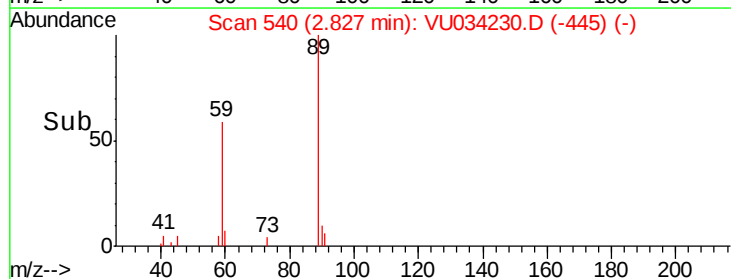
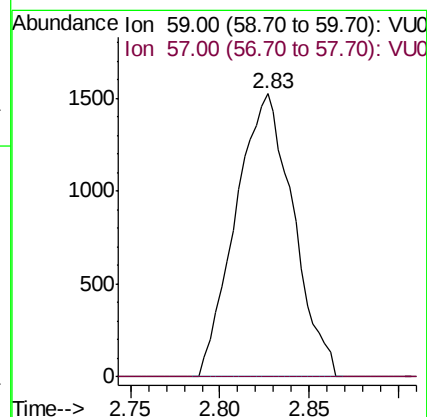
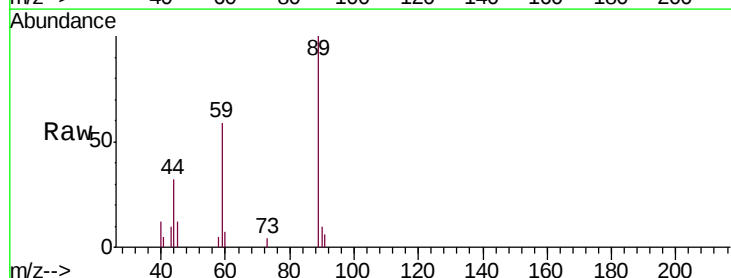
Acq: 03 Sep 2019 16:34

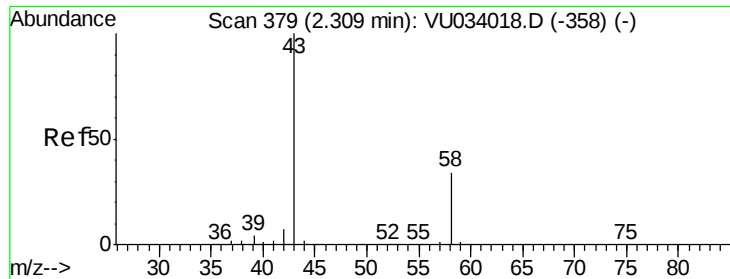
Tgt Ion: 59 Resp: 3430

Ion Ratio Lower Upper

59 100

57 0.0 8.0 12.0#





#16

Acetone

Concen: 3.724 ug/l

RT: 2.31 min Scan# 380

Delta R.T. 0.00 min

Lab File: VU034230.D

Acq: 03 Sep 2019 16:34

Instrument :

MSVOA\_U

ClientSampleId :

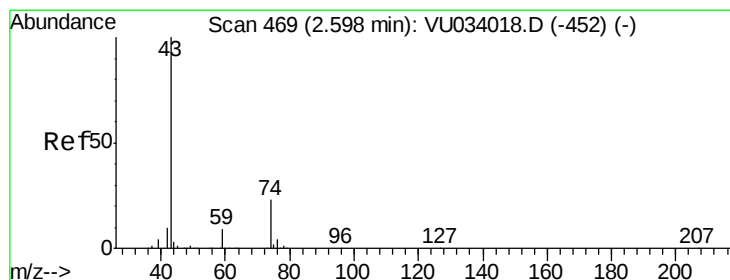
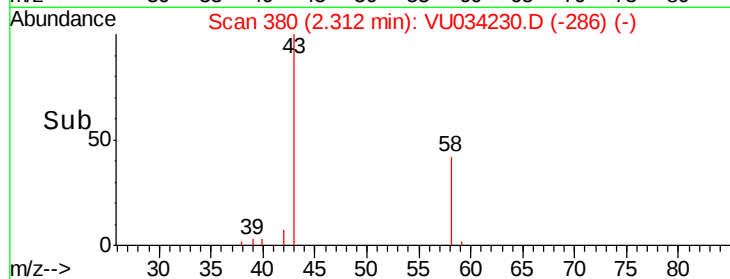
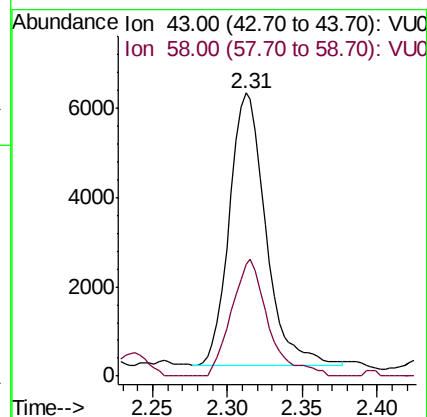
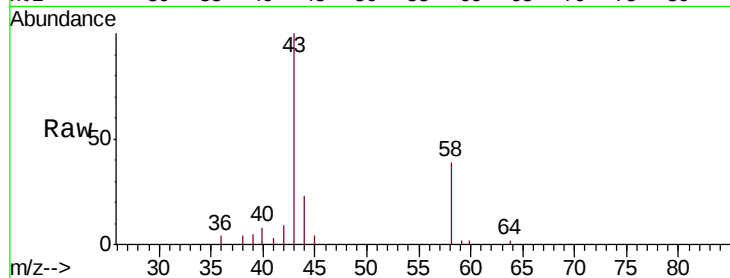
T3-S-C2-(0)

Tgt Ion: 43 Resp: 10345

Ion Ratio Lower Upper

43 100

58 41.0 26.8 40.2#



#18

Methyl Acetate

Concen: 0.371 ug/l

RT: 2.61 min Scan# 474

Delta R.T. 0.02 min

Lab File: VU034230.D

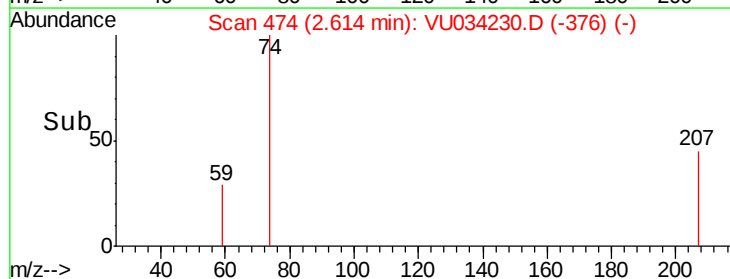
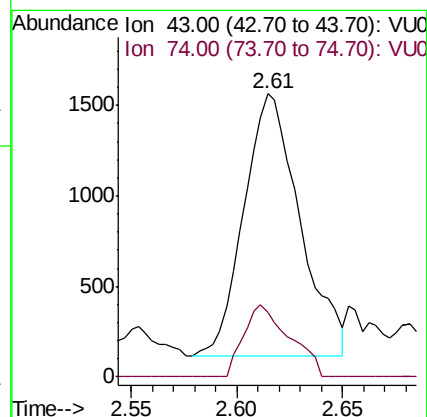
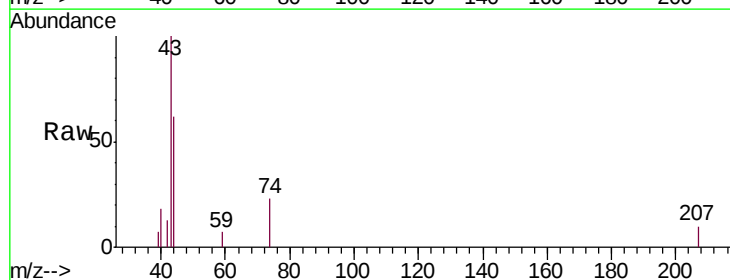
Acq: 03 Sep 2019 16:34

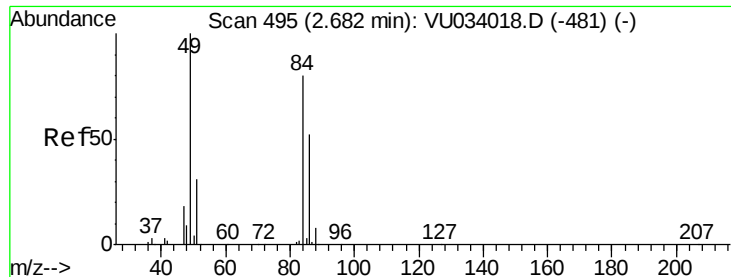
Tgt Ion: 43 Resp: 2665

Ion Ratio Lower Upper

43 100

74 22.5 19.2 28.8

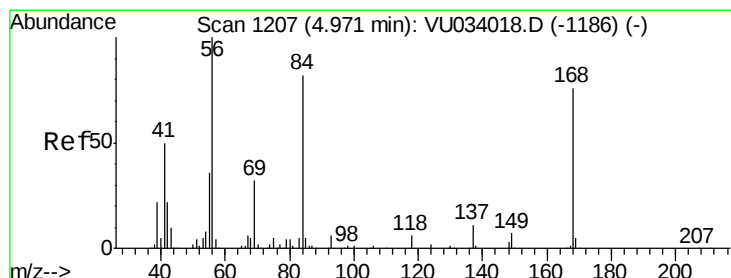
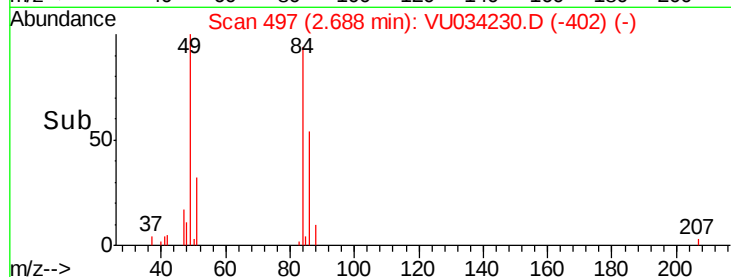
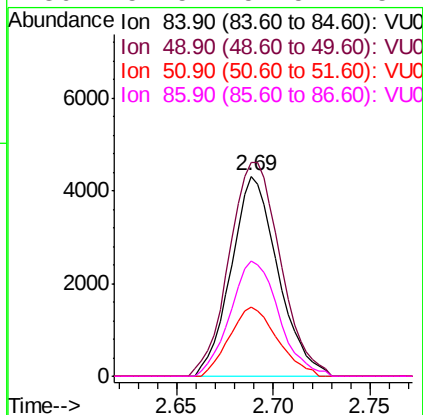
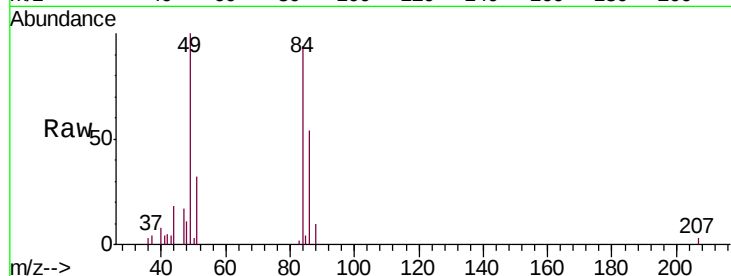




#20  
Methylene Chloride  
Concen: 1.378 ug/l  
RT: 2.69 min Scan# 497  
Delta R.T. 0.01 min  
Lab File: VU034230.D  
Acq: 03 Sep 2019 16:34

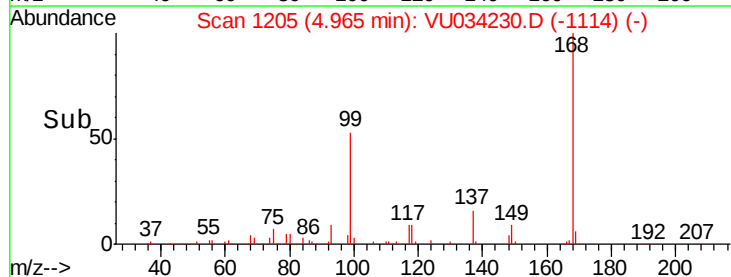
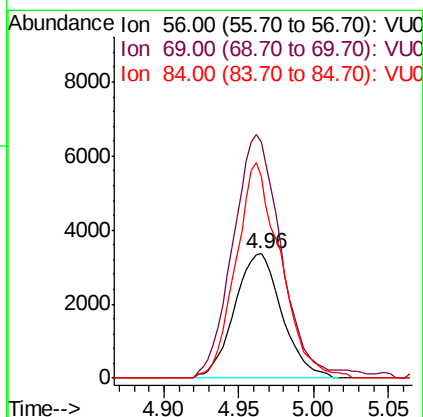
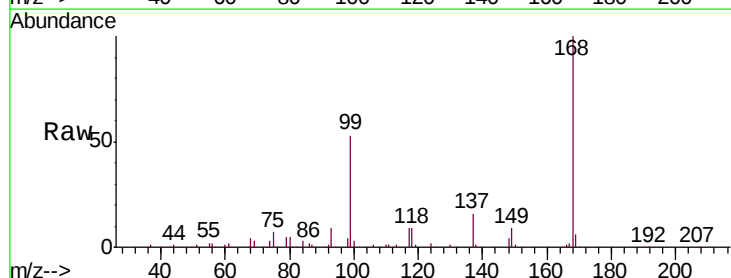
Instrument :  
MSVOA\_U  
ClientSampleId :  
T3-S-C2-(0)

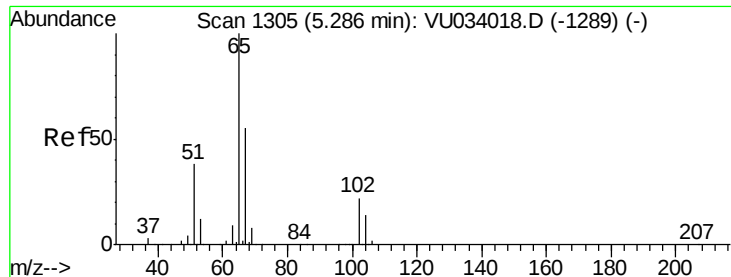
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 84    | Resp: | 7248  |
| Ion      | Ratio | Lower | Upper |
| 84       | 100   |       |       |
| 49       | 106.8 | 100.2 | 150.4 |
| 51       | 34.4  | 30.8  | 46.2  |
| 86       | 57.5  | 52.5  | 78.7  |



#31  
Cyclohexane  
Concen: 0.915 ug/l  
RT: 4.96 min Scan# 1205  
Delta R.T. -0.01 min  
Lab File: VU034230.D  
Acq: 03 Sep 2019 16:34

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 56    | Resp: | 7441  |
| Ion      | Ratio | Lower | Upper |
| 56       | 100   |       |       |
| 69       | 190.1 | 25.4  | 38.0# |
| 84       | 161.8 | 65.8  | 98.8# |

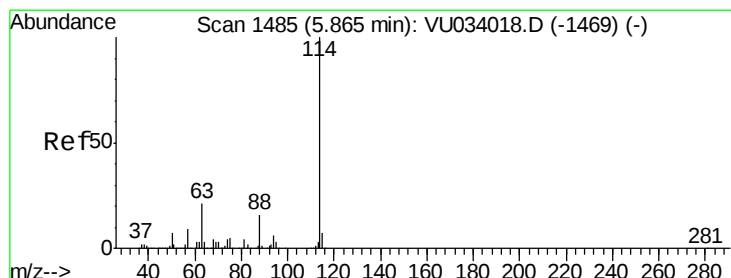
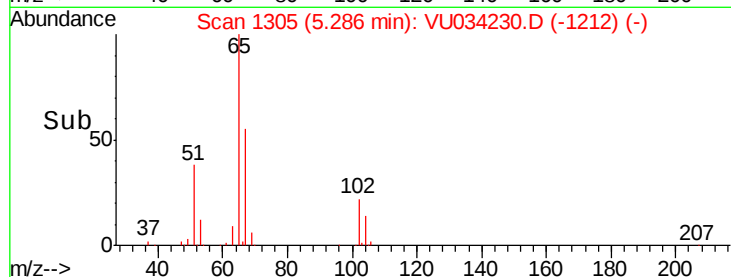
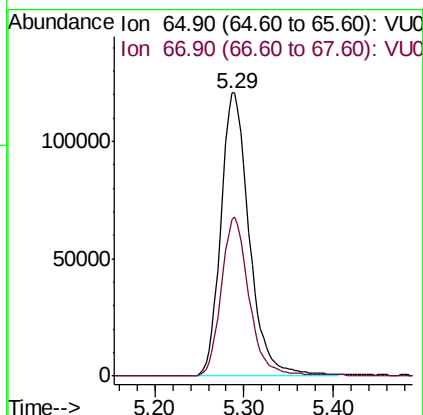
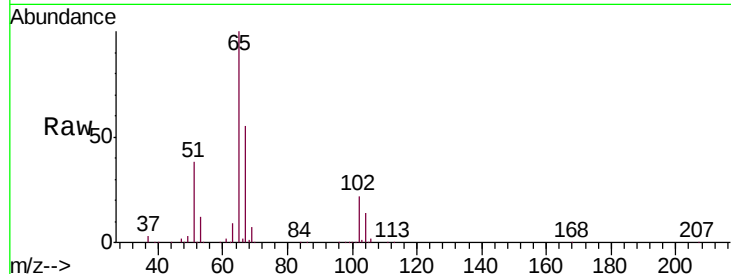




#33  
 1,2-Dichloroethane-d4  
 Concen: 49.050 ug/l  
 RT: 5.29 min Scan# 1305  
 Delta R.T. 0.00 min  
 Lab File: VU034230.D  
 Acq: 03 Sep 2019 16:34

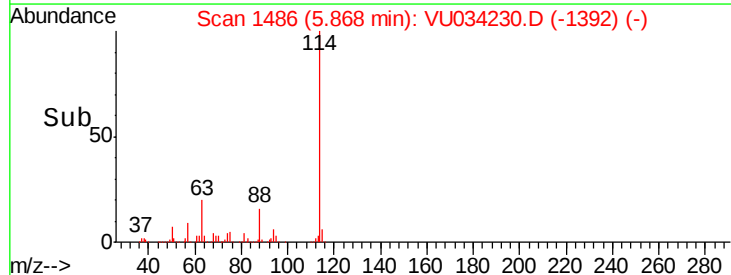
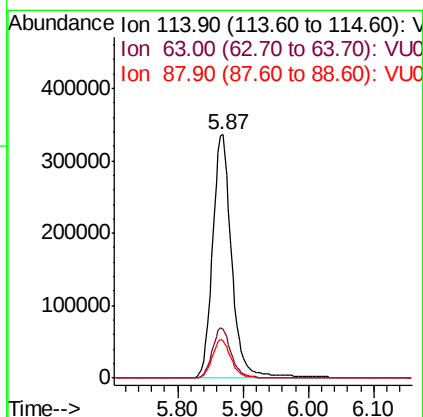
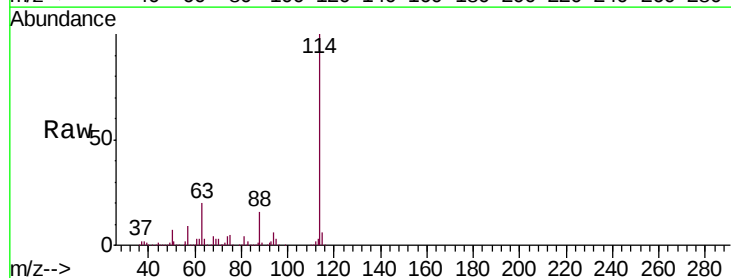
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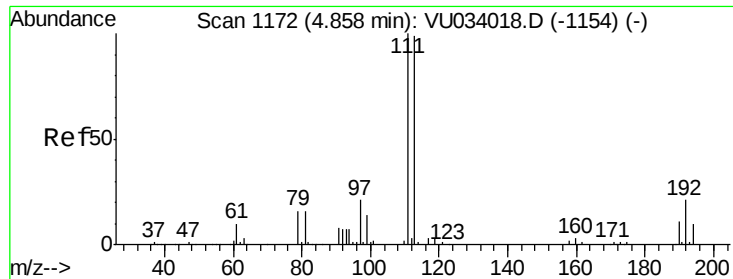
Tgt Ion: 65 Resp: 267039  
 Ion Ratio Lower Upper  
 65 100  
 67 55.0 0.0 110.6



#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 5.87 min Scan# 1486  
 Delta R.T. 0.00 min  
 Lab File: VU034230.D  
 Acq: 03 Sep 2019 16:34

Tgt Ion: 114 Resp: 686893  
 Ion Ratio Lower Upper  
 114 100  
 63 20.4 0.0 42.0  
 88 15.7 0.0 32.0

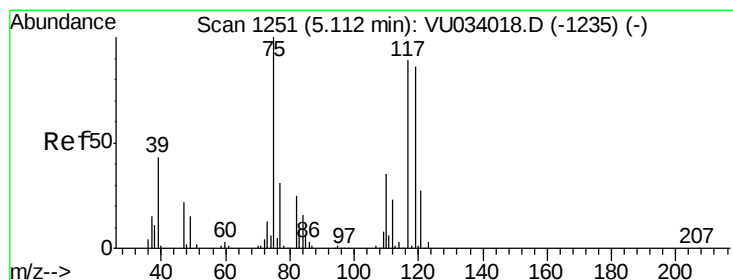
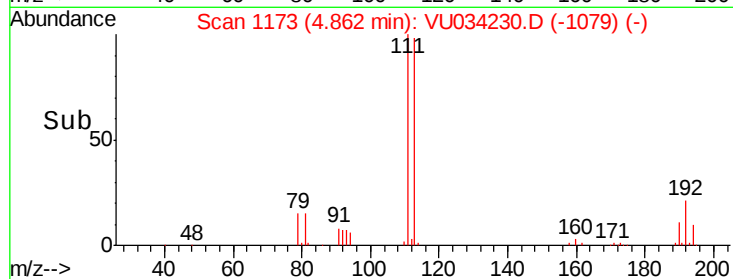
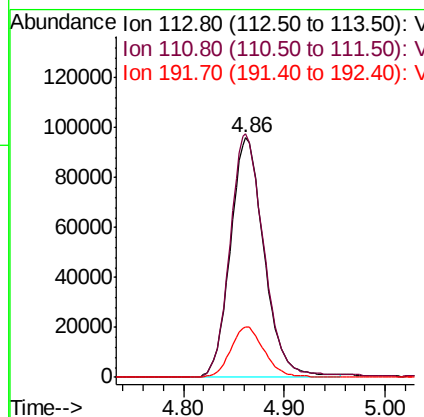
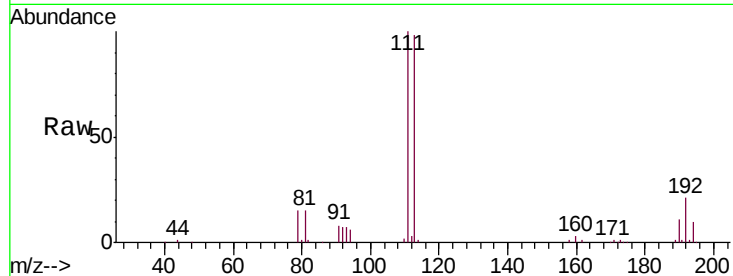




#35  
 Dibromofluoromethane  
 Concen: 46.940 ug/l  
 RT: 4.86 min Scan# 1173  
 Delta R.T. 0.00 min  
 Lab File: VU034230.D  
 Acq: 03 Sep 2019 16:34

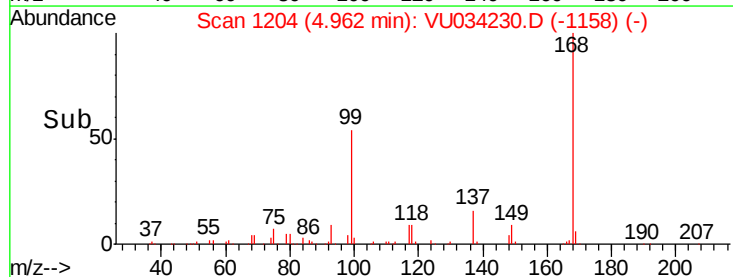
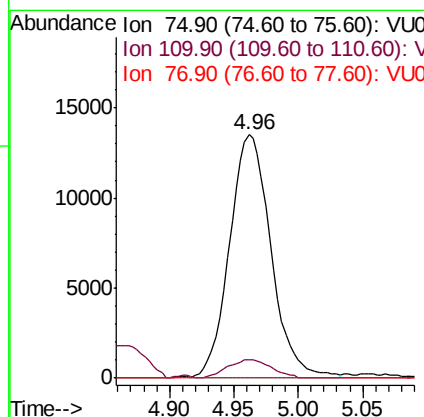
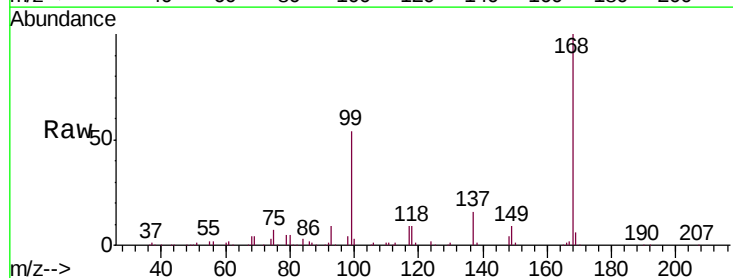
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 T3-S-C2-(0)

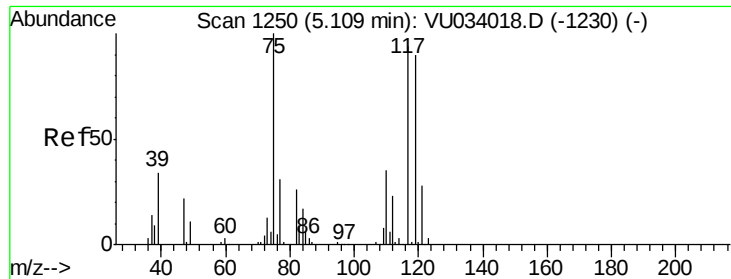
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 113     | 100   |       |       |
| 111     | 102.1 | 81.7  | 122.5 |
| 192     | 21.1  | 17.1  | 25.7  |



#36  
 1,1-Dichloropropene  
 Concen: 4.646 ug/l  
 RT: 4.96 min Scan# 1204  
 Delta R.T. -0.15 min  
 Lab File: VU034230.D  
 Acq: 03 Sep 2019 16:34

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 110     | 8.0   | 17.8  | 53.5# |
| 77      | 0.0   | 25.0  | 37.4# |





#38

Carbon Tetrachloride

Concen: 6.182 ug/l

RT: 4.96 min Scan# 1205

Delta R.T. -0.14 min

Lab File: VU034230.D

Acq: 03 Sep 2019 16:34

Instrument :

MSVOA\_U

ClientSampleId :

T3-S-C2-(0)

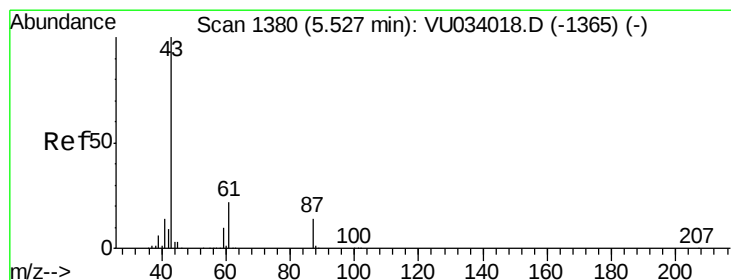
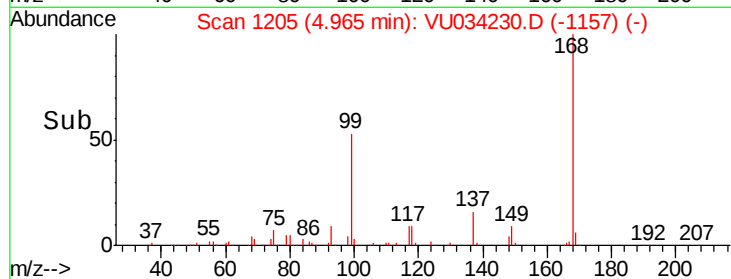
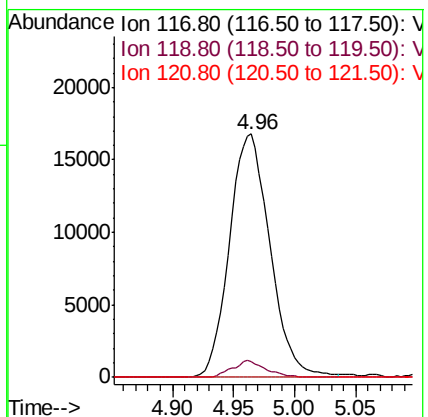
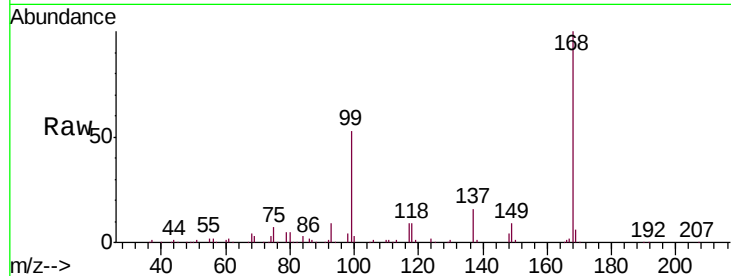
Tgt Ion:117 Resp: 38767

Ion Ratio Lower Upper

117 100

119 6.5 77.0 115.4#

121 0.0 23.9 35.9#



#43

Isopropyl Acetate

Concen: 6.264 ug/l

RT: 5.53 min Scan# 1381

Delta R.T. 0.00 min

Lab File: VU034230.D

Acq: 03 Sep 2019 16:34

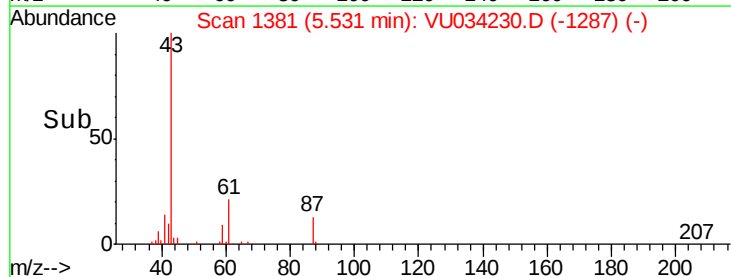
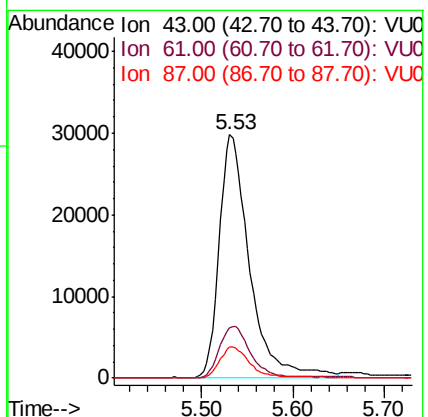
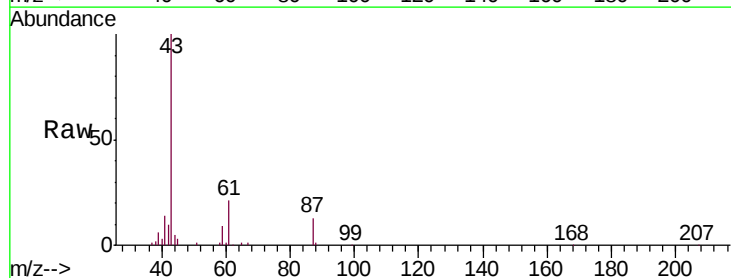
Tgt Ion: 43 Resp: 69334

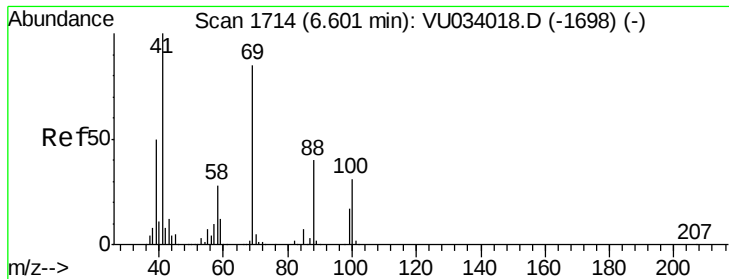
Ion Ratio Lower Upper

43 100

61 21.4 17.2 25.8

87 12.4 10.8 16.2

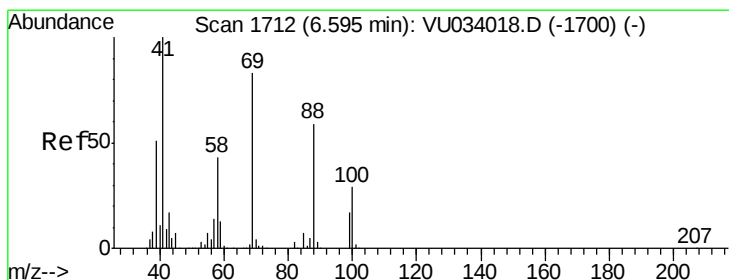
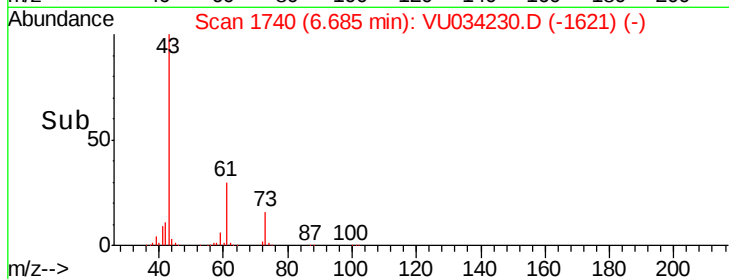
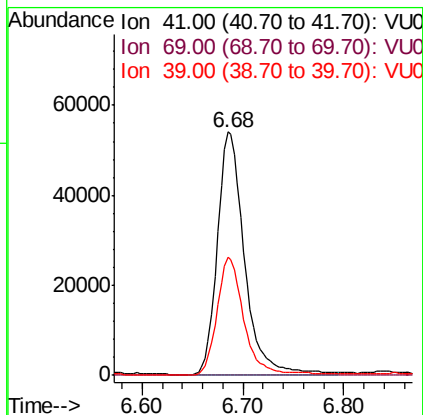
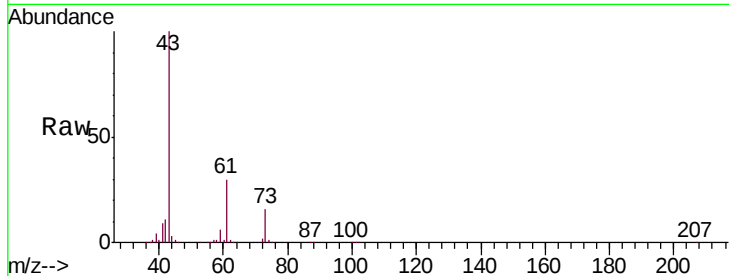




#48  
Methyl methacrylate  
Concen: 18.983 ug/l  
RT: 6.68 min Scan# 1740  
Delta R.T. 0.08 min  
Lab File: VU034230.D  
Acq: 03 Sep 2019 16:34

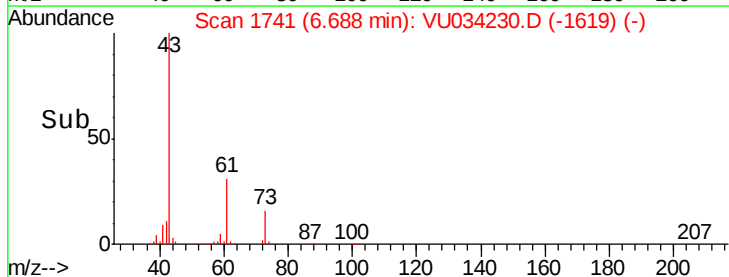
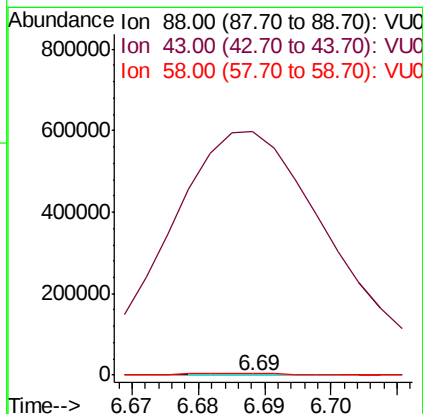
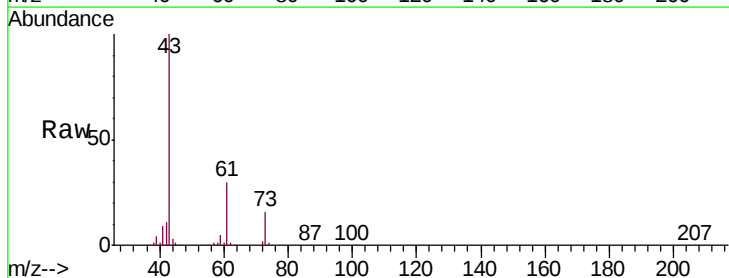
Instrument :  
MSVOA\_U  
ClientSampleId :  
T3-S-C2-(0)

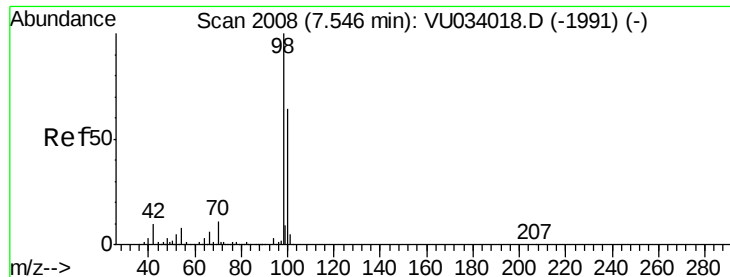
Tgt Ion: 41 Resp: 101394  
Ion Ratio Lower Upper  
41 100  
69 0.0 69.5 104.3#  
39 47.4 40.3 60.5



#49  
1,4-Dioxane  
Concen: 0.867 ug/l  
RT: 6.69 min Scan# 1741  
Delta R.T. 0.09 min  
Lab File: VU034230.D  
Acq: 03 Sep 2019 16:34

Tgt Ion: 88 Resp: 116  
Ion Ratio Lower Upper  
88 100  
43 962176.7 24.8 37.2#  
58 5500.0 59.3 88.9#





#50

Toluene-d8

Concen: 50.132 ug/l

RT: 7.55 min Scan# 2008

Delta R.T. 0.00 min

Lab File: VU034230.D

Acq: 03 Sep 2019 16:34

Instrument :

MSVOA\_U

ClientSampled :

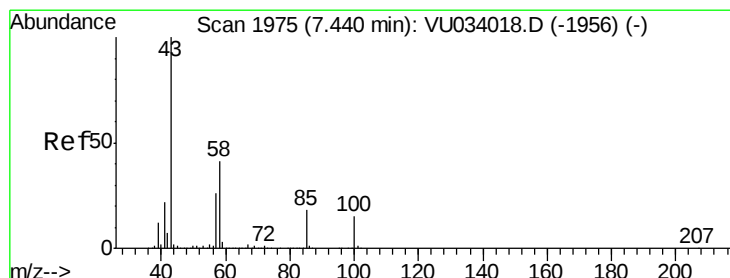
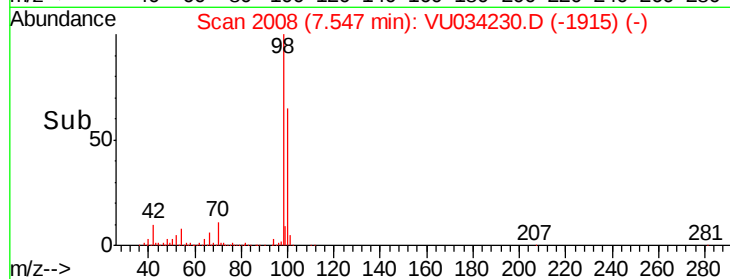
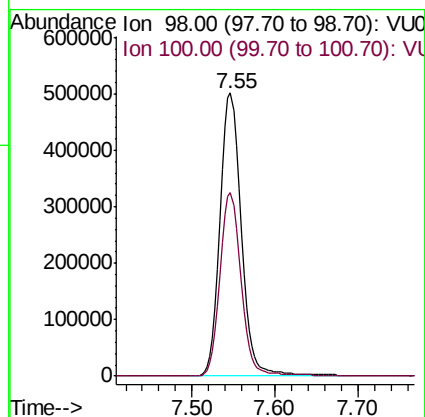
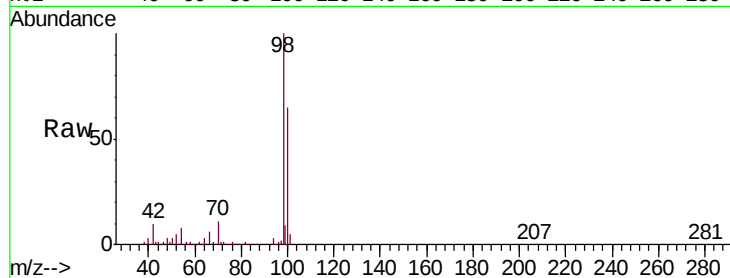
T3-S-C2-(0)

Tgt Ion: 98 Resp: 894300

Ion Ratio Lower Upper

98 100

100 64.3 50.3 75.5



#51

4-Methyl-2-Pentanone

Concen: 7.919 ug/l

RT: 7.40 min Scan# 1963

Delta R.T. -0.04 min

Lab File: VU034230.D

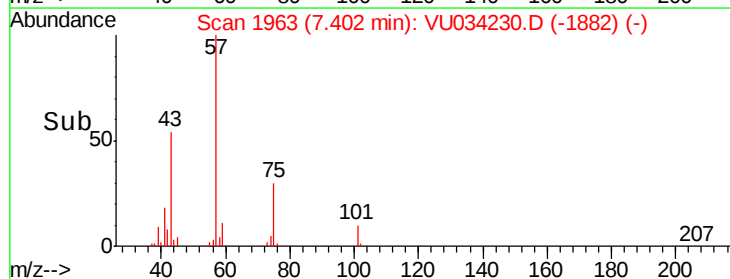
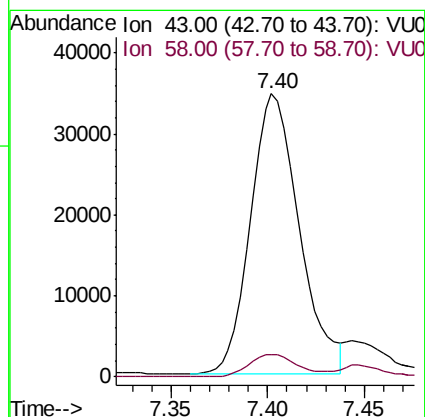
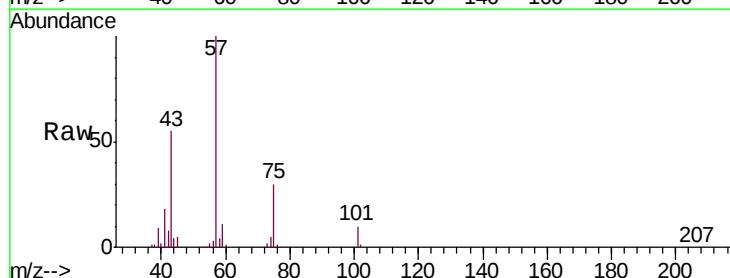
Acq: 03 Sep 2019 16:34

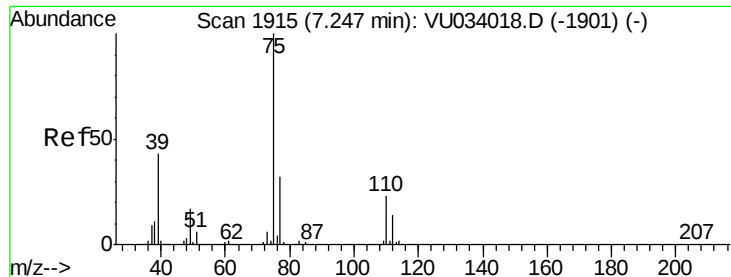
Tgt Ion: 43 Resp: 60534

Ion Ratio Lower Upper

43 100

58 8.1 32.2 48.4#



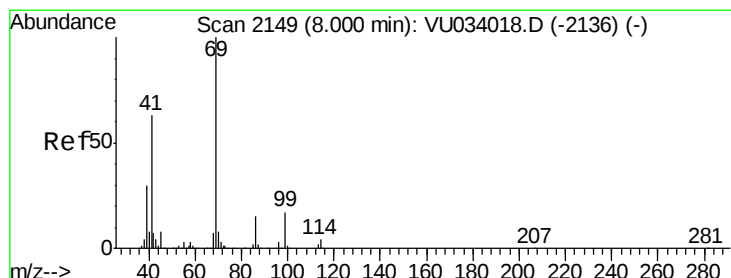
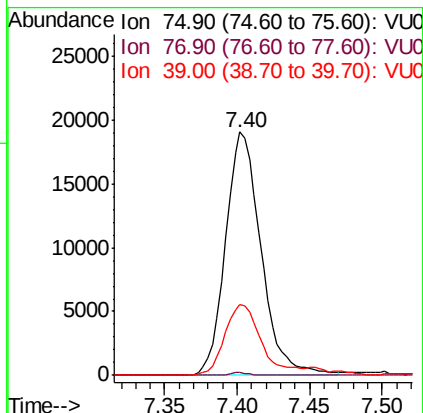
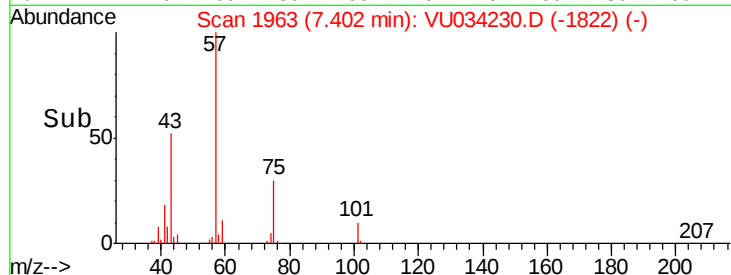
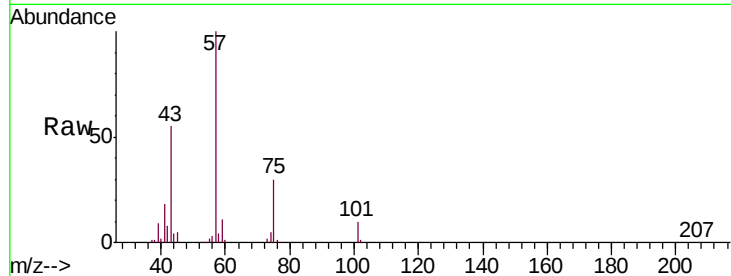


#54

cis-1,3-Dichloropropene  
 Concen: 3.926 ug/l  
 RT: 7.40 min Scan# 1963  
 Delta R.T. 0.15 min  
 Lab File: VU034230.D  
 Acq: 03 Sep 2019 16:34

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 T3-S-C2-(0)

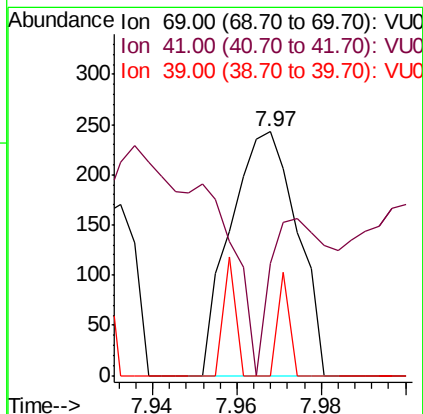
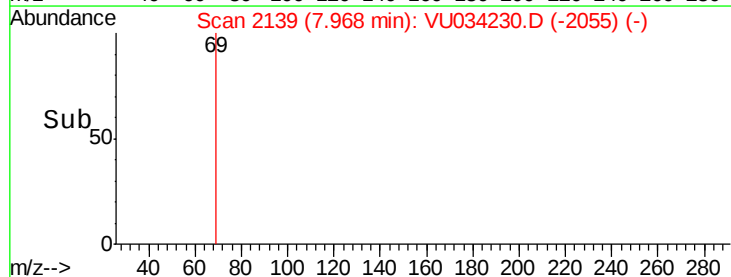
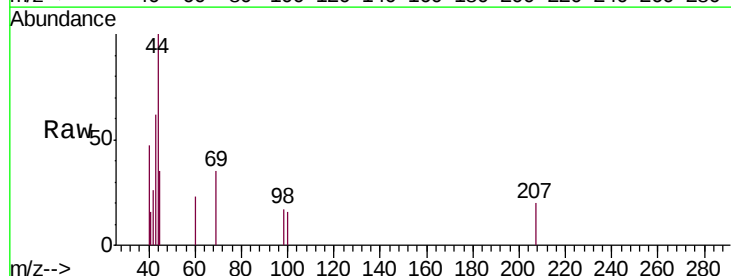
Tgt Ion: 75 Resp: 32460  
 Ion Ratio Lower Upper  
 75 100  
 77 1.0 25.2 37.8#  
 39 28.9 34.6 51.8#

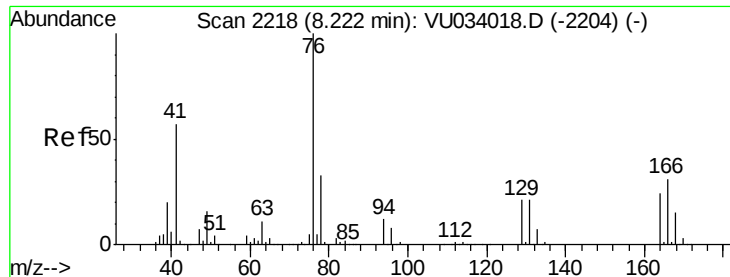


#56

Ethyl methacrylate  
 Concen: 1.002 ug/l  
 RT: 7.97 min Scan# 2139  
 Delta R.T. -0.03 min  
 Lab File: VU034230.D  
 Acq: 03 Sep 2019 16:34

Tgt Ion: 69 Resp: 266  
 Ion Ratio Lower Upper  
 69 100  
 41 0.0 50.7 76.1#  
 39 0.0 24.2 36.2#

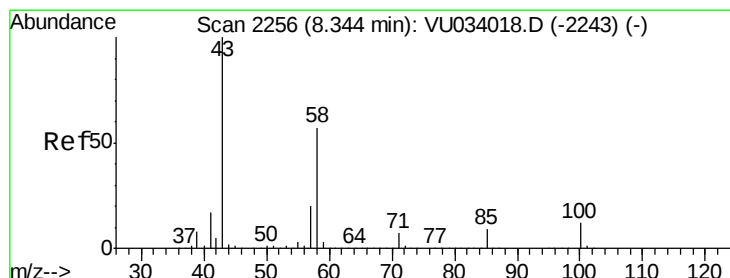
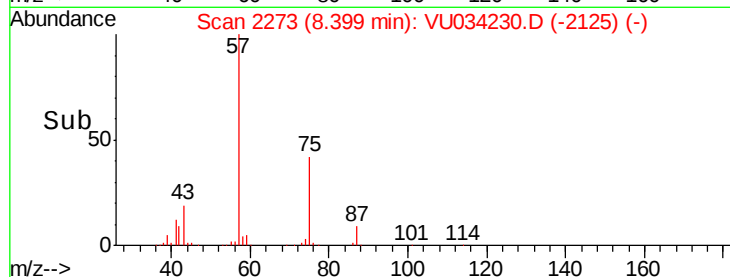
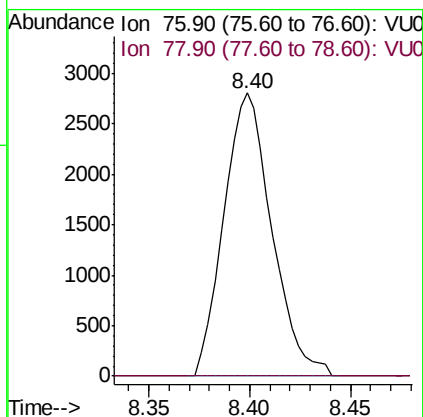
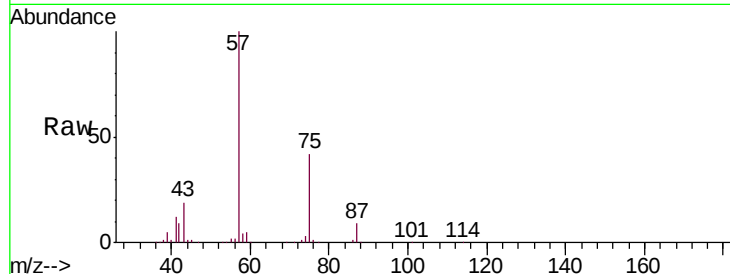




#57  
 1,3-Dichloropropane  
 Concen: 0.535 ug/l  
 RT: 8.40 min Scan# 2273  
 Delta R.T. 0.18 min  
 Lab File: VU034230.D  
 Acq: 03 Sep 2019 16:34

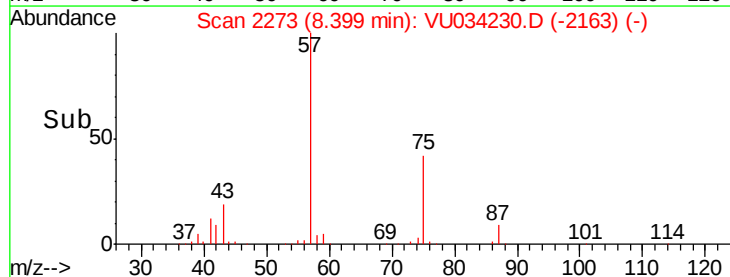
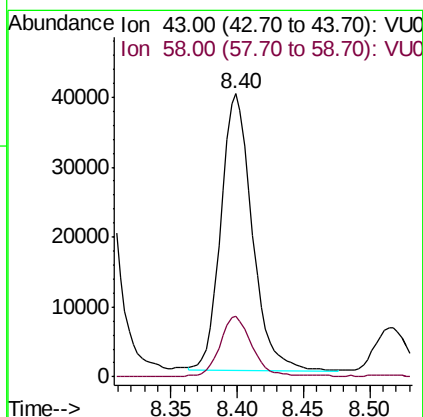
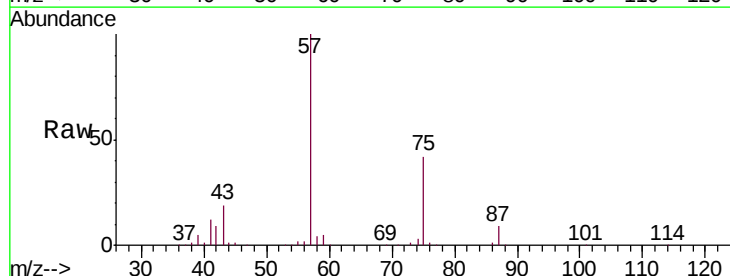
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 T3-S-C2-(0)

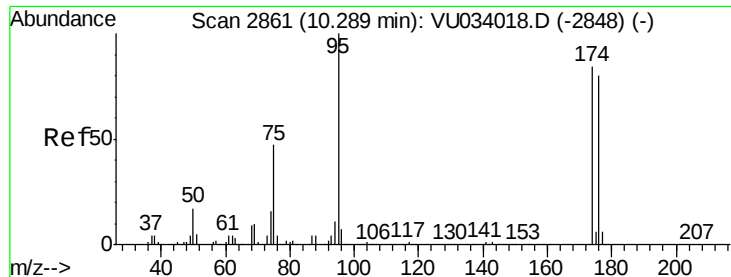
Tgt Ion: 76 Resp: 4651  
 Ion Ratio Lower Upper  
 76 100  
 78 0.0 26.2 39.4#



#59  
 2-Hexanone  
 Concen: 11.298 ug/l  
 RT: 8.40 min Scan# 2273  
 Delta R.T. 0.05 min  
 Lab File: VU034230.D  
 Acq: 03 Sep 2019 16:34

Tgt Ion: 43 Resp: 65199  
 Ion Ratio Lower Upper  
 43 100  
 58 22.8 28.4 85.3#

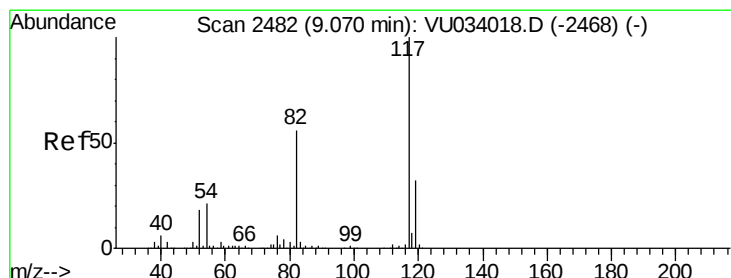
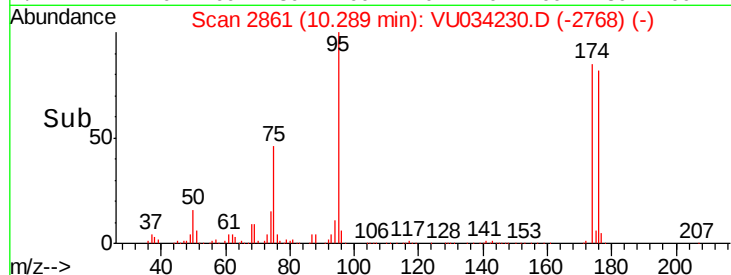
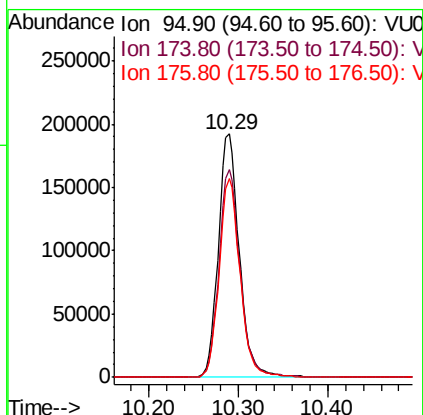
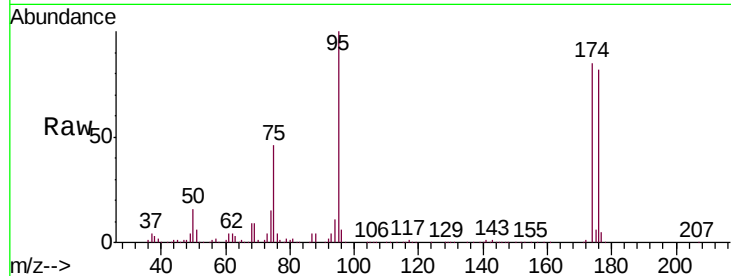




#62  
4-Bromofluorobenzene  
Concen: 45.164 ug/l  
RT: 10.29 min Scan# 2861  
Delta R.T. 0.00 min  
Lab File: VU034230.D  
Acq: 03 Sep 2019 16:34

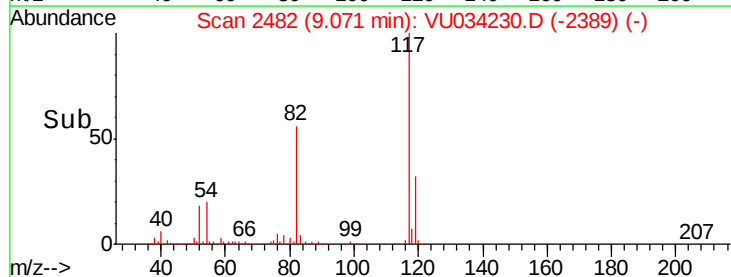
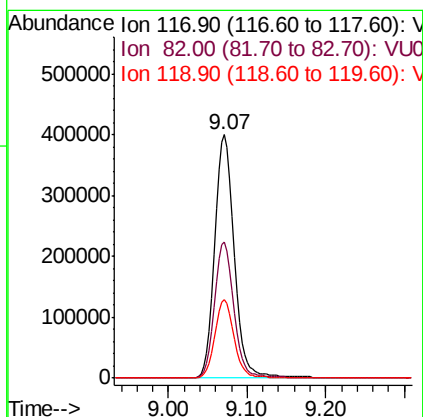
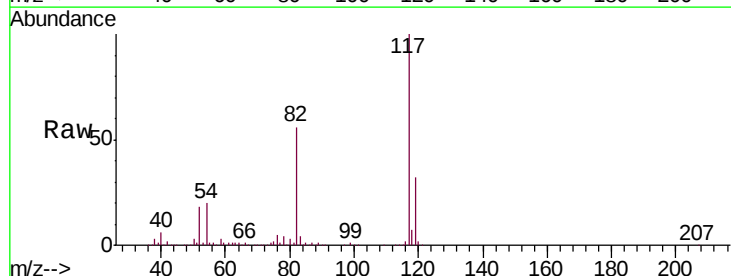
Instrument :  
MSVOA\_U  
ClientSampleId :  
T3-S-C2-(0)

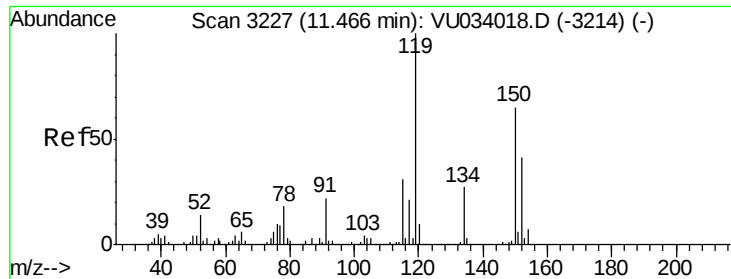
Tgt Ion: 95 Resp: 313399  
Ion Ratio Lower Upper  
95 100  
174 86.2 0.0 168.8  
176 81.3 0.0 161.8



#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 9.07 min Scan# 2482  
Delta R.T. 0.00 min  
Lab File: VU034230.D  
Acq: 03 Sep 2019 16:34

Tgt Ion: 117 Resp: 687171  
Ion Ratio Lower Upper  
117 100  
82 55.8 45.1 67.7  
119 32.1 25.4 38.0



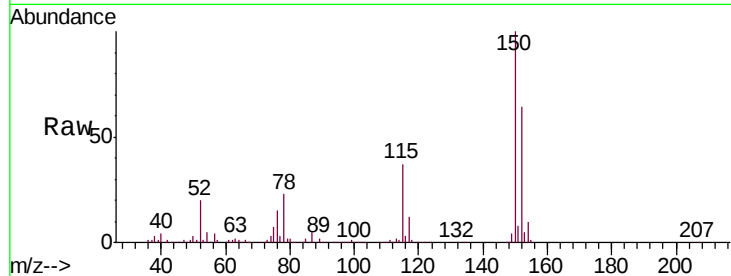


#72

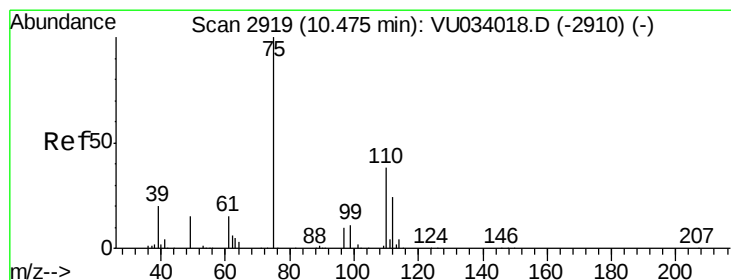
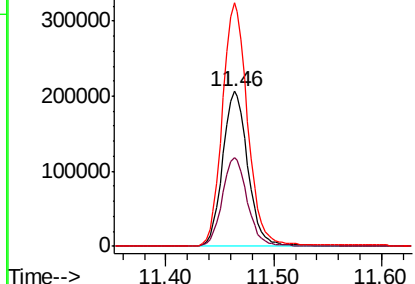
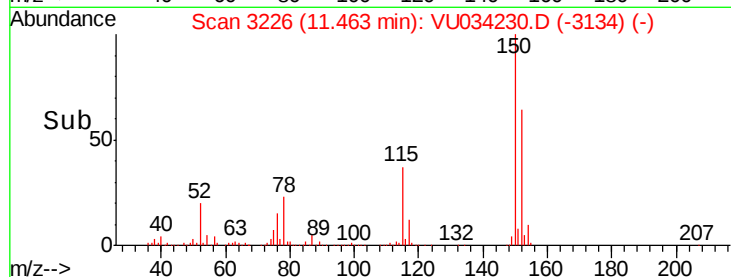
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 11.46 min Scan# 3226  
Delta R.T. -0.00 min  
Lab File: VU034230.D  
Acq: 03 Sep 2019 16:34

Instrument :  
MSVOA\_U  
ClientSampleId :  
T3-S-C2-(0)

Tgt Ion:152 Resp: 336201  
Ion Ratio Lower Upper  
152 100  
115 56.9 41.1 123.3  
150 157.1 0.0 348.8



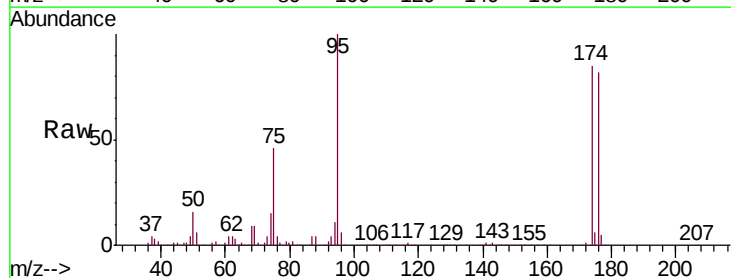
Abundance Ion 151.90 (151.60 to 152.60): V  
Ion 114.90 (114.60 to 115.60): V  
Ion 149.90 (149.60 to 150.60): V



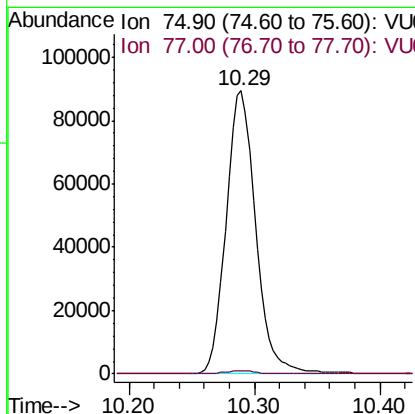
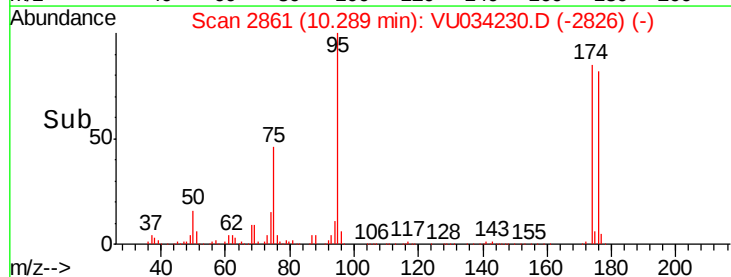
#76

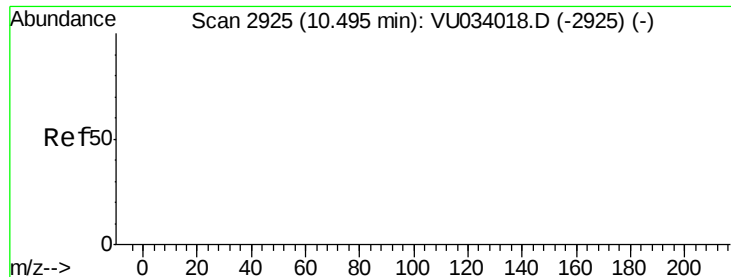
1,2,3-Trichloropropane  
Concen: 19.345 ug/l  
RT: 10.29 min Scan# 2861  
Delta R.T. -0.19 min  
Lab File: VU034230.D  
Acq: 03 Sep 2019 16:34

Tgt Ion: 75 Resp: 146582  
Ion Ratio Lower Upper  
75 100  
77 1.2 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: 65.138 ug/l

RT: 10.29 min Scan# 2861

Delta R.T. -0.21 min

Lab File: VU034230.D

Acq: 03 Sep 2019 16:34

Instrument :

MSVOA\_U

ClientSampleId :

T3-S-C2-(0)

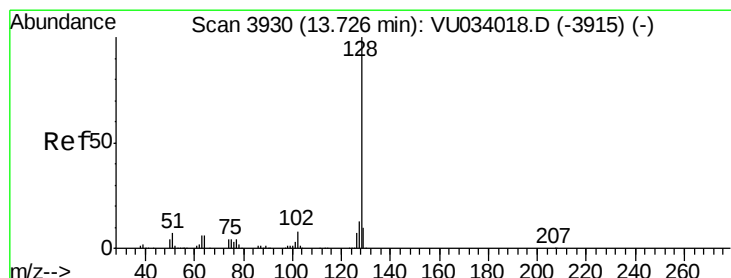
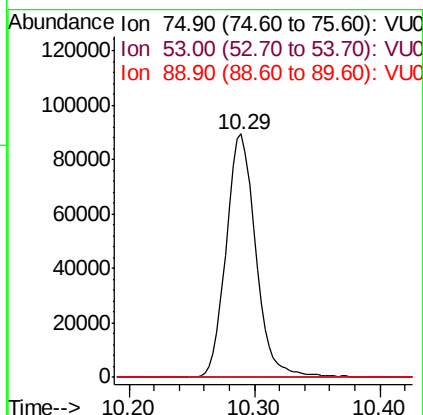
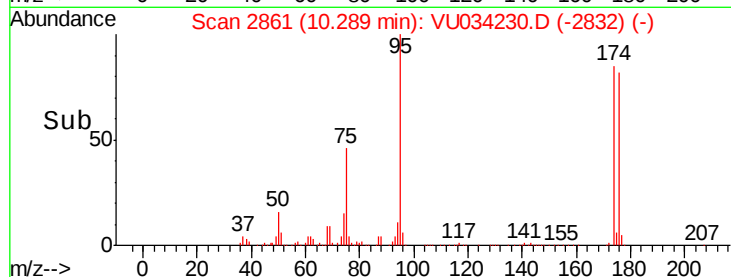
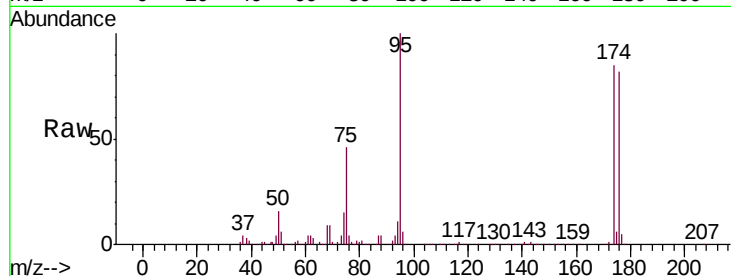
Tgt Ion: 75 Resp: 146582

Ion Ratio Lower Upper

75 100

53 0.1 0.0 0.0#

89 0.0 0.0 0.0



#95

Naphthalene

Concen: 1.797 ug/l

RT: 13.81 min Scan# 3955

Delta R.T. 0.08 min

Lab File: VU034230.D

Acq: 03 Sep 2019 16:34

Tgt Ion: 128 Resp: 164

Ion Ratio Lower Upper

128 100

127 0.0 10.2 15.4#

129 0.0 8.4 12.6#

