

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\U121520\  
 Data File : VU041653.D  
 Acq On : 15 Dec 2020 22:16  
 Operator : SY/MD  
 Sample : VSTDCCC005EC  
 Misc : 25.0mL/MSVOA U/WATER  
 ALS Vial : 31 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VHBLK01

Quant Time: Dec 16 04:38:21 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMUTR121220WMA.M  
 Quant Title : TRACE VOA SOM01.0  
 QLast Update : Wed Dec 16 04:34:43 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Difluorobenzene     | 6.26  | 114  | 121925   | 5.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 9.42  | 117  | 116557   | 5.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.81 | 152  | 61806    | 5.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |        |       |          |          |      |         |
|--------------------------------|--------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.60   | 65    | 41720    | 4.38     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 40 - 130 | Recovery | =    | 87.60%  |
| 7) Chloroethane-d5             | 1.92   | 69    | 36321    | 4.92     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 130 | Recovery | =    | 98.40%  |
| 11) 1,1-Dichloroethene-d2      | 2.58   | 63    | 84235    | 4.80     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 125 | Recovery | =    | 96.00%  |
| 20) 2-Butanone-d5              | 4.66   | 46    | 142128   | 51.91    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 40 - 130 | Recovery | =    | 103.82% |
| 24) Chloroform-d               | 5.08   | 84    | 80040    | 4.90     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 98.00%  |
| 26) 1,2-Dichloroethane-d4      | 5.72   | 65    | 45463    | 4.91     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 98.20%  |
| 32) Benzene-d6                 | 5.74   | 84    | 154634   | 4.63     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 92.60%  |
| 36) 1,2-Dichloropropane-d6     | 6.70   | 67    | 48180    | 4.60     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 140 | Recovery | =    | 92.00%  |
| 41) Toluene-d8                 | 7.90   | 98    | 145567   | 4.83     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 96.60%  |
| 43) trans-1,3-Dichloropropene- | 8.19   | 79    | 21705    | 4.61     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 55 - 130 | Recovery | =    | 92.20%  |
| 46) 2-Hexanone-d5              | 8.64   | 63    | 125910   | 48.95    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 45 - 130 | Recovery | =    | 97.90%  |
| 57) 1,1,2,2-Tetrachloroethane- | 10.75  | 84    | 47885    | 5.04     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 120 | Recovery | =    | 100.80% |
| 64) 1,2-Dichlorobenzene-d4     | 12.19  | 152   | 55595    | 5.06     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 80 - 120 | Recovery | =    | 101.20% |

## Target Compounds

| Target Compounds               | R.T. | QIon | Response | Conc   | Units | Ovalue |
|--------------------------------|------|------|----------|--------|-------|--------|
| 2) Dichlorodifluoromethane     | 1.39 | 85   | 53122    | 5.143  | ug/L  | 100    |
| 3) Chloromethane               | 1.53 | 50   | 49688    | 4.951  | ug/L  | 99     |
| 5) Vinyl chloride              | 1.61 | 62   | 56092    | 5.062  | ug/L  | 99     |
| 6) Bromomethane                | 1.87 | 94   | 38731    | 5.590  | ug/L  | 100    |
| 8) Chloroethane                | 1.94 | 64   | 34779    | 4.621  | ug/L  | 100    |
| 9) Trichlorofluoromethane      | 2.15 | 101  | 79184    | 5.646  | ug/L  | 97     |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.59 | 101  | 43139    | 5.143  | ug/L  | 97     |
| 12) 1,1-Dichloroethene         | 2.59 | 96   | 42272    | 5.111  | ug/L  | 94     |
| 13) Acetone                    | 2.68 | 43   | 86420    | 49.620 | ug/L  | 68     |
| 14) Carbon disulfide           | 2.81 | 76   | 137365   | 4.806  | ug/L  | 99     |
| 15) Methyl Acetate             | 2.98 | 43   | 19885    | 4.392  | ug/L  | 96     |
| 16) Methylene chloride         | 3.06 | 84   | 51364    | 5.200  | ug/L  | 93     |
| 17) Methyl tert-butyl Ether    | 3.38 | 73   | 111629   | 5.058  | ug/L  | 98     |
| 18) trans-1,2-Dichloroethene   | 3.37 | 96   | 42986    | 5.025  | ug/L  | 92     |
| 19) 1,1-Dichloroethane         | 3.89 | 63   | 78287    | 4.896  | ug/L  | 96     |
| 21) 2-Butanone                 | 4.74 | 43   | 143276   | 50.506 | ug/L  | 98     |
| 22) cis-1,2-Dichloroethene     | 4.68 | 96   | 47726    | 5.047  | ug/L  | 96     |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\U121520\  
 Data File : VU041653.D  
 Acq On : 15 Dec 2020 22:16  
 Operator : SY/MD  
 Sample : VSTDCCC005EC  
 Misc : 25.0mL/MSVOA U/WATER  
 ALS Vial : 31 Sample Multiplier: 1

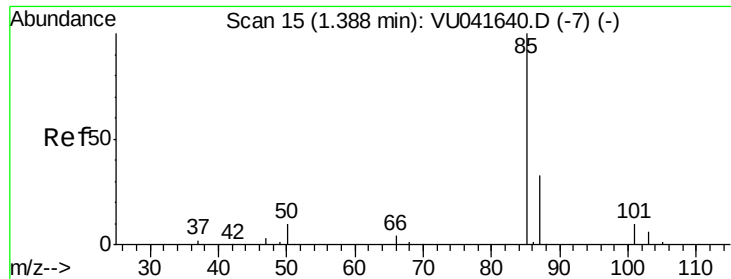
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VHBLK01

Quant Time: Dec 16 04:38:21 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMUTR121220WMA.M  
 Quant Title : TRACE VOA SOM01.0  
 QLast Update : Wed Dec 16 04:34:43 2020  
 Response via : Initial Calibration

| Internal Standards              | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|---------------------------------|-------|------|----------|--------|-------|----------|
| 23) Bromochloromethane          | 4.99  | 128  | 23581    | 5.429  | ug/L  | 91       |
| 25) Chloroform                  | 5.11  | 83   | 83273    | 5.172  | ug/L  | 99       |
| 27) 1,2-Dichloroethane          | 5.81  | 62   | 56994    | 5.227  | ug/L  | 98       |
| 29) 1,1,1-Trichloroethane       | 5.33  | 97   | 71668    | 5.354  | ug/L  | 98       |
| 30) Cyclohexane                 | 5.40  | 56   | 65256    | 4.350  | ug/L  | 92       |
| 31) Carbon tetrachloride        | 5.54  | 117  | 63800    | 5.512  | ug/L  | 100      |
| 33) Benzene                     | 5.79  | 78   | 185512   | 4.977  | ug/L  | 100      |
| 34) Trichloroethene             | 6.55  | 95   | 46754    | 4.991  | ug/L  | 92       |
| 35) Methylcyclohexane           | 6.77  | 83   | 70741    | 4.672  | ug/L  | 99       |
| 37) 1,2-Dichloropropane         | 6.80  | 63   | 46207    | 4.846  | ug/L  | 100      |
| 38) Bromodichloromethane        | 7.11  | 83   | 61448    | 5.180  | ug/L  | 97       |
| 39) cis-1,3-Dichloropropene     | 7.61  | 75   | 67862    | 4.803  | ug/L  | 99       |
| 40) 4-Methyl-2-pentanone        | 7.80  | 43   | 339138   | 49.986 | ug/L  | 97       |
| 42) Toluene                     | 7.97  | 91   | 195280   | 5.074  | ug/L  | 99       |
| 44) trans-1,3-Dichloropropene   | 8.21  | 75   | 64457    | 5.102  | ug/L  | 99       |
| 45) 1,1,2-Trichloroethane       | 8.40  | 97   | 37960    | 5.383  | ug/L  | 96       |
| 47) Tetrachloroethene           | 8.56  | 164  | 34462    | 5.256  | ug/L  | 98       |
| 48) 2-Hexanone                  | 8.69  | 43   | 261129   | 52.885 | ug/L  | 99       |
| 49) Dibromochloromethane        | 8.81  | 129  | 44229    | 5.461  | ug/L  | 96       |
| 50) 1,2-Dibromoethane           | 8.93  | 107  | 36675    | 5.258  | ug/L  | 94       |
| 51) Chlorobenzene               | 9.45  | 112  | 121178   | 5.065  | ug/L  | 97       |
| 52) Ethylbenzene                | 9.57  | 91   | 198655   | 4.847  | ug/L  | 99       |
| 53) m,p-Xylene                  | 9.69  | 106  | 78927    | 5.164  | ug/L  | 95       |
| 54) o-Xylene                    | 10.10 | 106  | 76039    | 5.079  | ug/L  | 93       |
| 55) Styrene                     | 10.11 | 104  | 129591   | 5.011  | ug/L  | 96       |
| 56) Isopropylbenzene            | 10.48 | 105  | 198293   | 4.977  | ug/L  | 99       |
| 58) 1,1,1,2,2-Tetrachloroethane | 10.78 | 83   | 50258    | 5.122  | ug/L  | 98       |
| 59) 1,2,3-Trichloropropane      | 10.82 | 75   | 37291    | 5.208  | ug/L  | 100      |
| 61) Bromoform                   | 10.29 | 173  | 27207    | 5.823  | ug/L  | 98       |
| 62) 1,3-Dichlorobenzene         | 11.74 | 146  | 93304    | 4.936  | ug/L  | 99       |
| 63) 1,4-Dichlorobenzene         | 11.83 | 146  | 93894    | 4.940  | ug/L  | 97       |
| 65) 1,2-Dichlorobenzene         | 12.20 | 146  | 97481    | 5.266  | ug/L  | 97       |
| 66) 1,2-Dibromo-3-chloropropan  | 12.99 | 75   | 9326     | 5.372  | ug/L  | 90       |
| 67) 1,3,5-Trichlorobenzene      | 13.21 | 180  | 69402    | 4.837  | ug/L  | 99       |
| 68) 1,2,4-trichlorobenzene      | 13.83 | 180  | 51780    | 4.300  | ug/L  | 97       |
| 69) Naphthalene                 | 14.07 | 128  | 103174   | 4.139  | ug/L  | 99       |
| 70) 1,2,3-Trichlorobenzene      | 14.32 | 180  | 50888    | 4.434  | ug/L  | 99       |

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





#2

Dichlorodifluoromethane

Concen: 5.143 ug/L

RT: 1.39 min Scan# 15

Delta R.T. 0.00 min

Lab File: VU041653.D

Acq: 15 Dec 2020 22:16

Instrument :

MSVOA\_U

ClientSampleId :

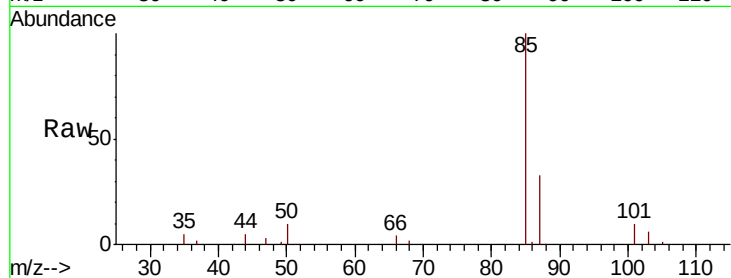
VHBLK01

Tot Ion: 85 Resp: 53122

Ion Ratio Lower Upper

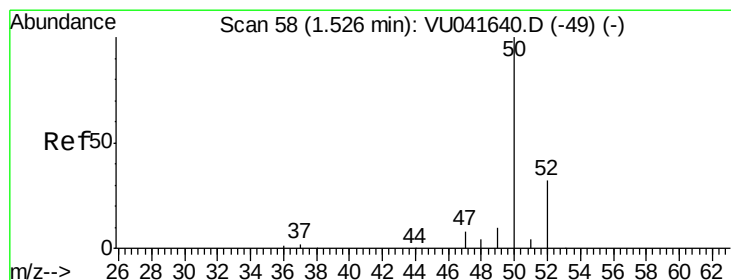
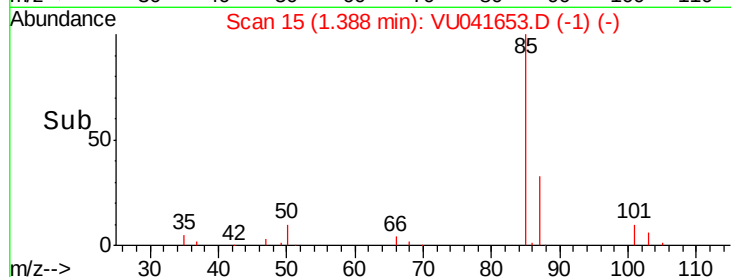
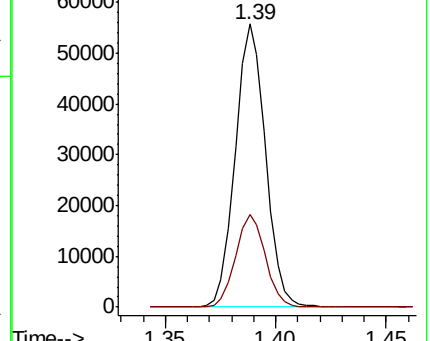
85 100

87 32.2 25.8 38.6



Abundance Ion 85.00 (84.70 to 85.70): VU041640.D (-7) (-)

Ion 87.00 (86.70 to 87.70): VU041640.D (-7) (-)



#3

Chloromethane

Concen: 4.951 ug/L

RT: 1.53 min Scan# 58

Delta R.T. 0.00 min

Lab File: VU041653.D

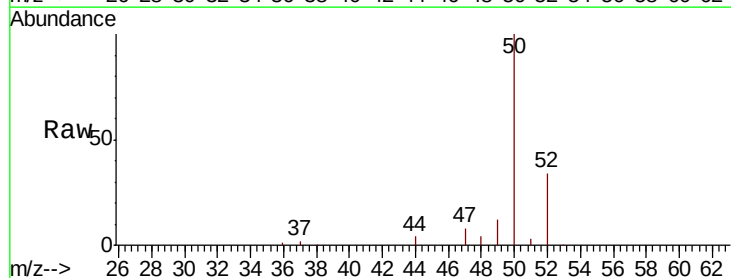
Acq: 15 Dec 2020 22:16

Tgt Ion: 50 Resp: 49688

Ion Ratio Lower Upper

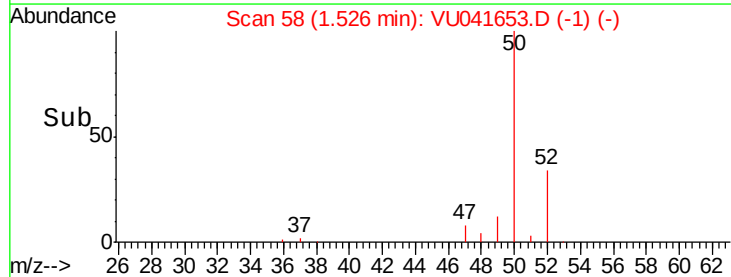
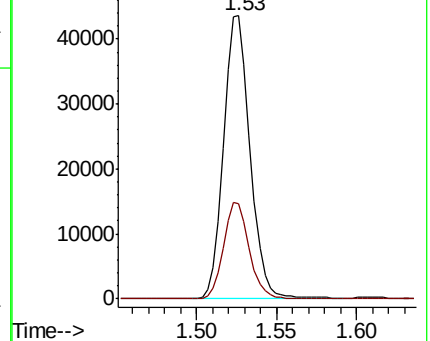
50 100

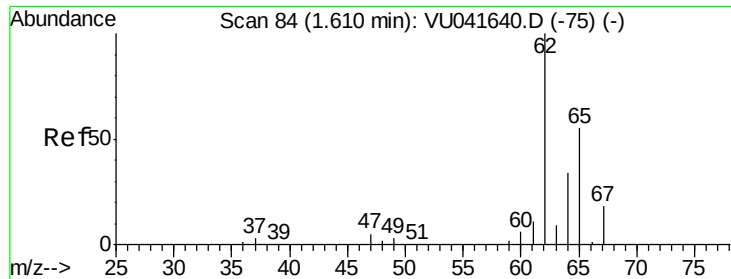
52 33.8 24.1 44.8



Abundance Ion 50.05 (49.75 to 50.75): VU041640.D (-49) (-)

Ion 52.05 (51.75 to 52.75): VU041640.D (-49) (-)





#5

Vinyl chloride

Concen: 5.062 ug/L

RT: 1.61 min Scan# 84

Delta R.T. 0.00 min

Lab File: VU041653.D

Acq: 15 Dec 2020 22:16

Instrument :

MSVOA\_U

ClientSampleId :

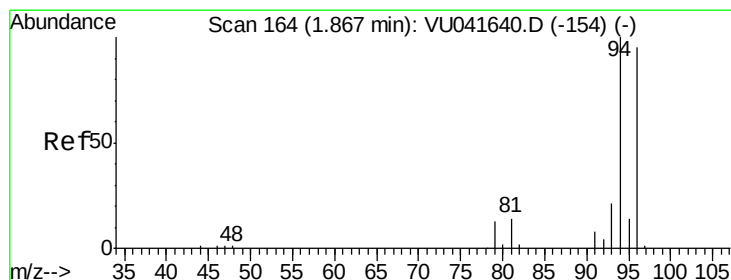
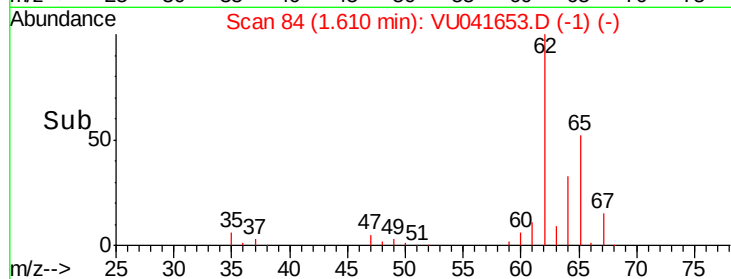
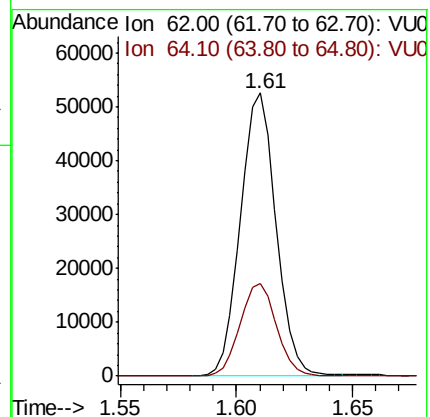
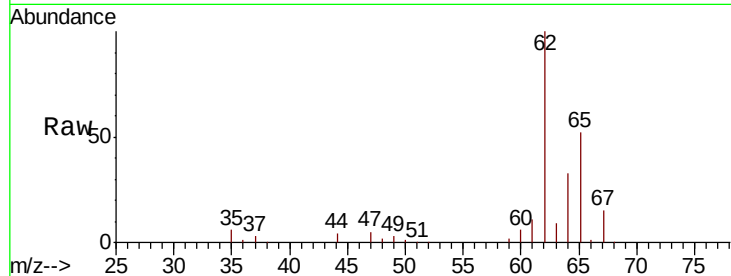
VHBLK01

Tot Ion: 62 Resp: 56092

Ion Ratio Lower Upper

62 100

64 32.7 22.5 41.7



#6

Bromomethane

Concen: 5.590 ug/L

RT: 1.87 min Scan# 164

Delta R.T. 0.00 min

Lab File: VU041653.D

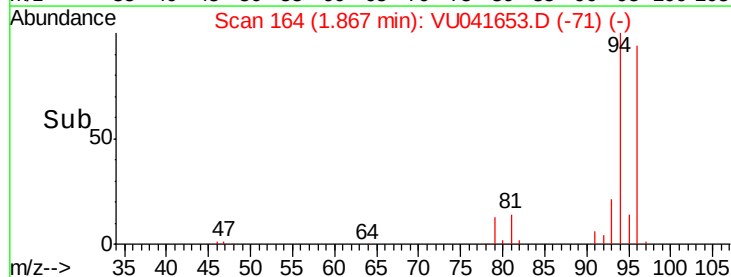
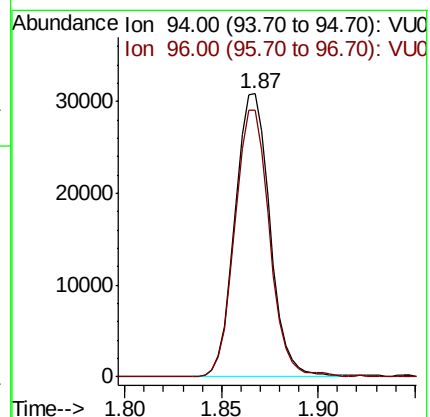
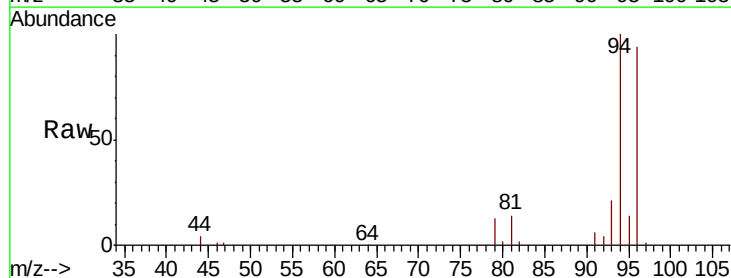
Acq: 15 Dec 2020 22:16

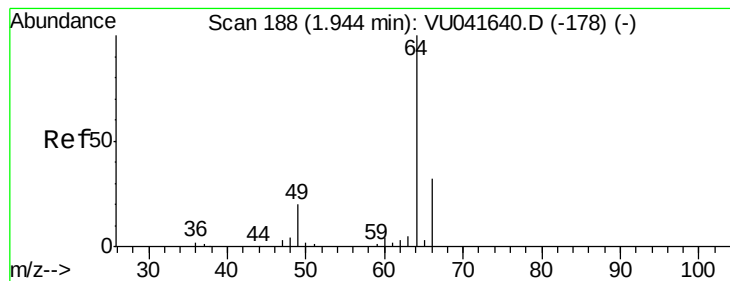
Tgt Ion: 94 Resp: 38731

Ion Ratio Lower Upper

94 100

96 94.1 65.7 121.9





#8

Chloroethane

Concen: 4.621 ug/L

RT: 1.94 min Scan# 187

Delta R.T. -0.00 min

Lab File: VU041653.D

Acq: 15 Dec 2020 22:16

Instrument :

MSVOA\_U

ClientSampleId :

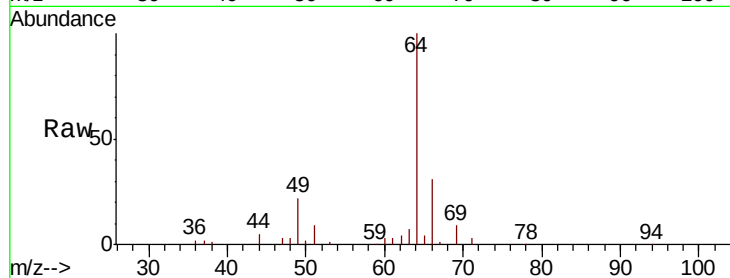
VHBLK01

Tot Ion: 64 Resp: 34779

Ion Ratio Lower Upper

64 100

66 30.7 21.6 40.0



Abundance Ion 64.10 (63.80 to 64.80): VU041640.D (-178) (-)

Ion 66.05 (65.75 to 66.75): VU041640.D (-178) (-)

1.94

25000

20000

15000

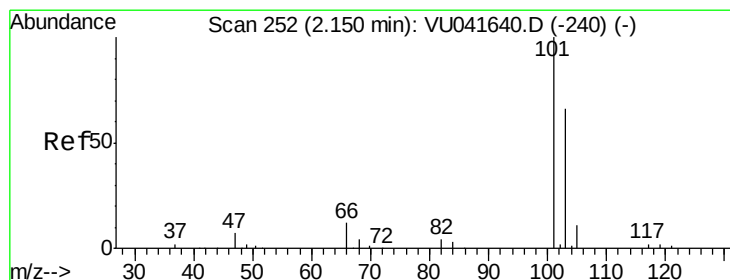
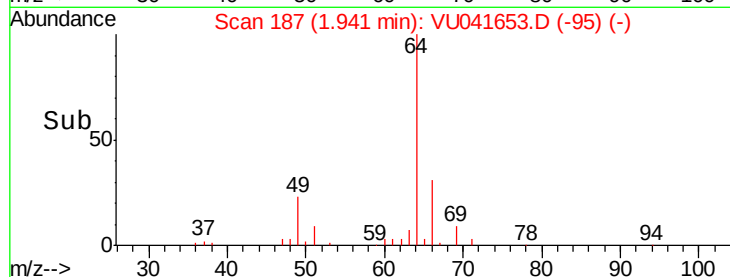
10000

5000

0

Time-->

1.90 1.95 2.00



#9

Trichlorofluoromethane

Concen: 5.646 ug/L

RT: 2.15 min Scan# 252

Delta R.T. 0.00 min

Lab File: VU041653.D

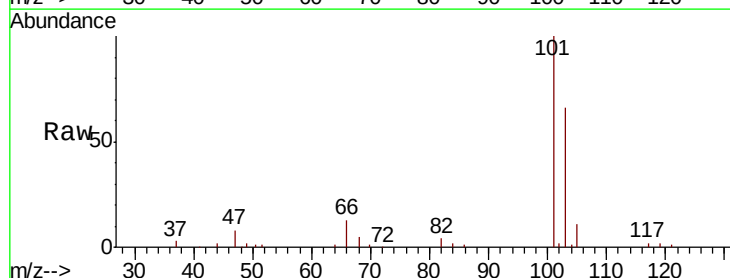
Acq: 15 Dec 2020 22:16

Tgt Ion:101 Resp: 79184

Ion Ratio Lower Upper

101 100

103 66.3 51.1 76.7



Abundance Ion 101.00 (100.70 to 101.70): VU041640.D (-240) (-)

Ion 103.00 (102.70 to 103.70): VU041640.D (-240) (-)

2.15

60000

50000

40000

30000

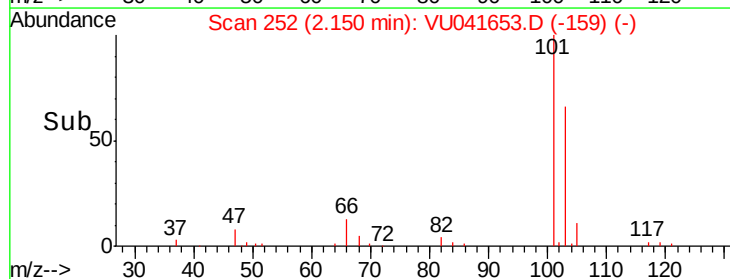
20000

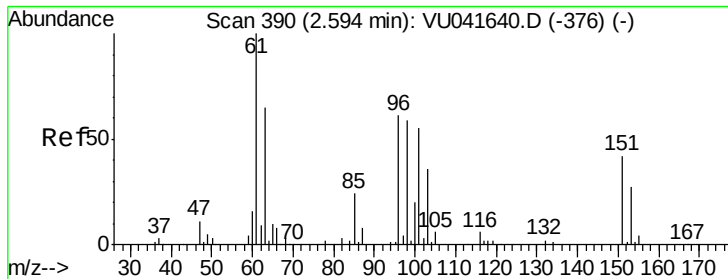
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0

Time-->

2.10 2.15 2.20





#10

1,1,2-Trichloro-1,2,2-trifluoroethane

Concen: 5.143 ug/L

RT: 2.59 min Scan# 389

Delta R.T. -0.00 min

Lab File: VU041653.D

Acq: 15 Dec 2020 22:16

Instrument :

MSVOA\_U

ClientSampleId :

VHBLK01

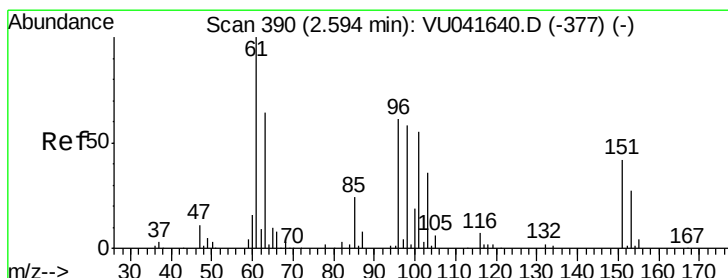
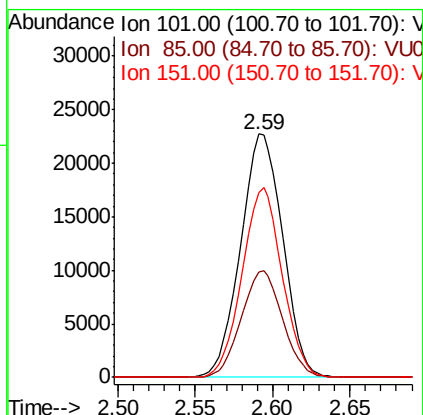
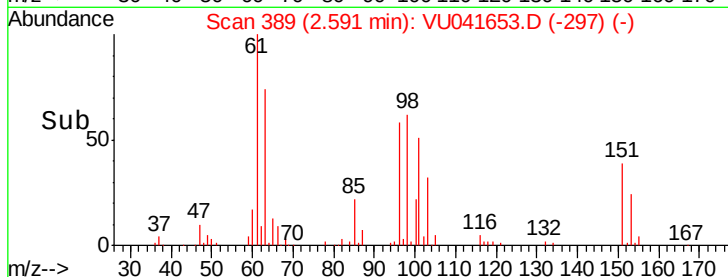
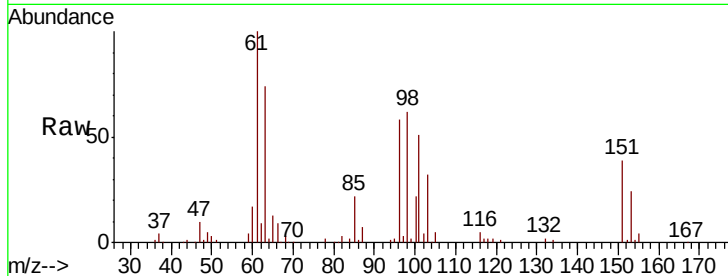
Tot Ion:101 Resp: 43139

Ion Ratio Lower Upper

101 100

85 42.8 33.6 50.4

151 74.2 56.2 84.4



#12

1,1-Dichloroethene

Concen: 5.111 ug/L

RT: 2.59 min Scan# 389

Delta R.T. -0.00 min

Lab File: VU041653.D

Acq: 15 Dec 2020 22:16

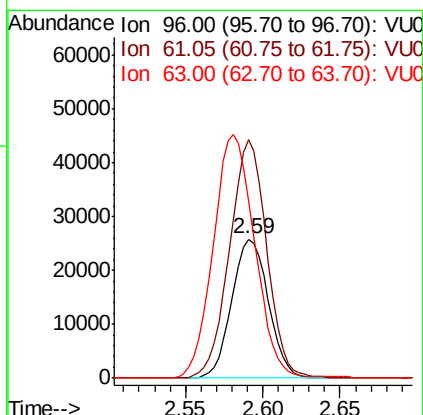
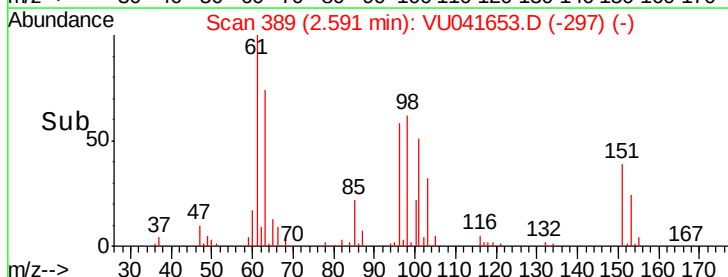
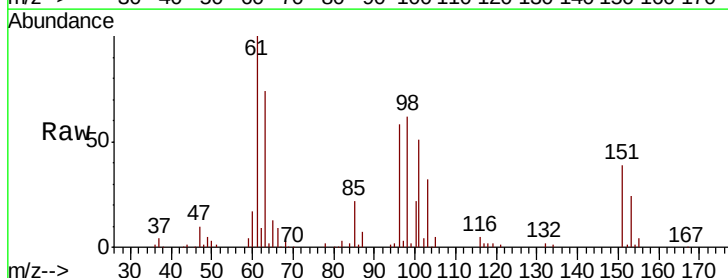
Tgt Ion: 96 Resp: 42272

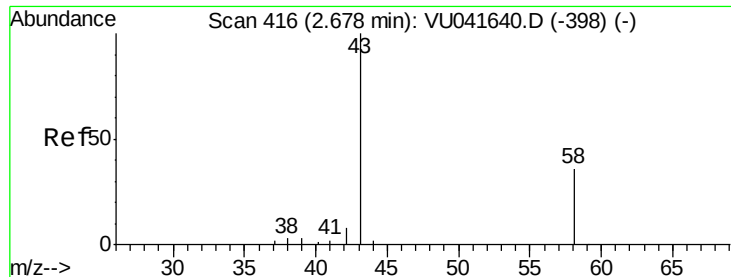
Ion Ratio Lower Upper

96 100

61 171.5 123.8 230.0

63 127.1 81.0 150.4





#13

Acetone

Concen: 49.620 ug/L

RT: 2.68 min Scan# 418

Delta R.T. 0.01 min

Lab File: VU041653.D

Acq: 15 Dec 2020 22:16

Instrument :

MSVOA\_U

ClientSampleId :

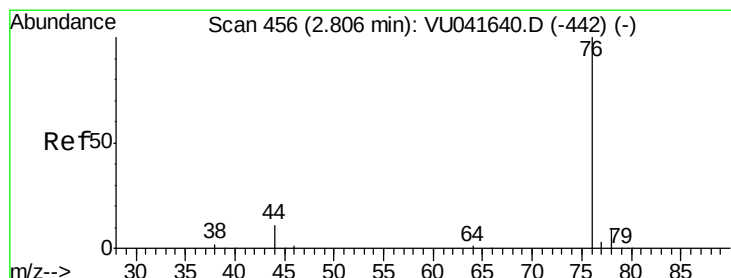
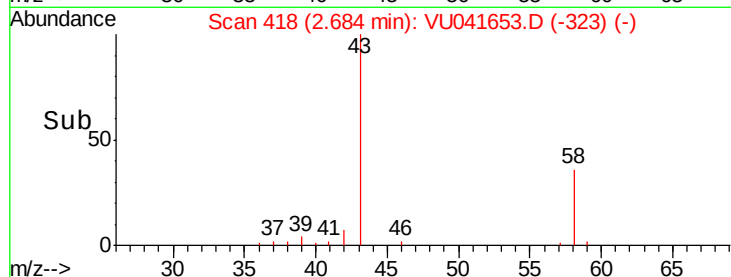
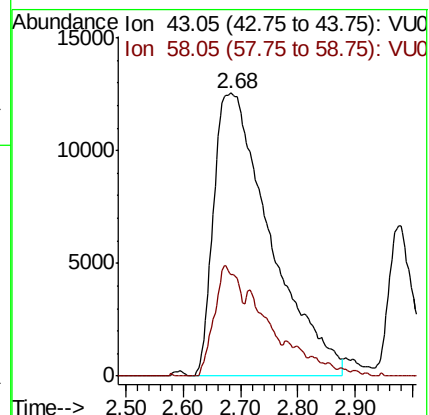
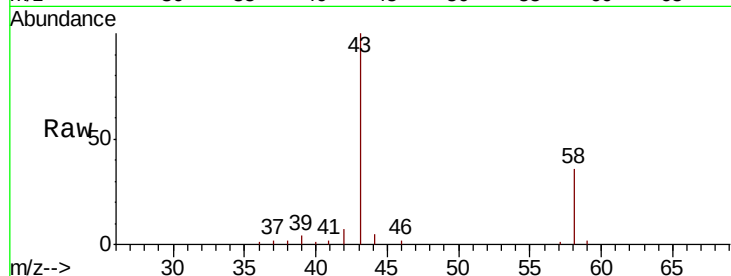
VHBLK01

Tot Ion: 43 Resp: 86420

Ion Ratio Lower Upper

43 100

58 17.8 0.0 73.2



#14

Carbon disulfide

Concen: 4.806 ug/L

RT: 2.81 min Scan# 456

Delta R.T. 0.00 min

Lab File: VU041653.D

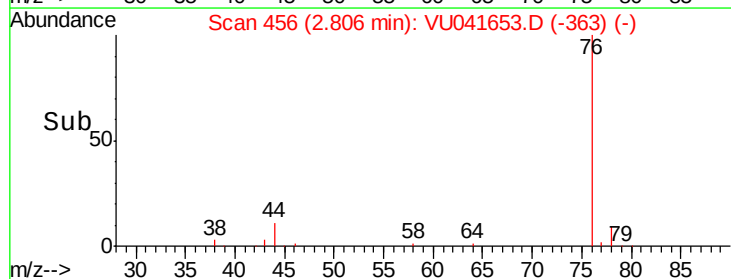
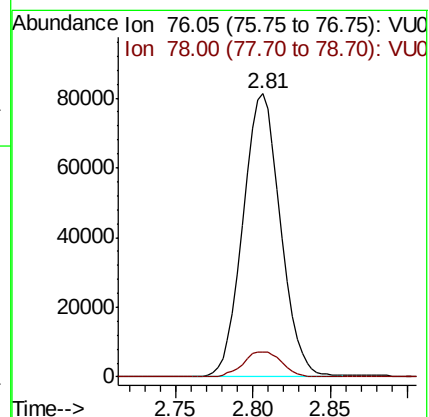
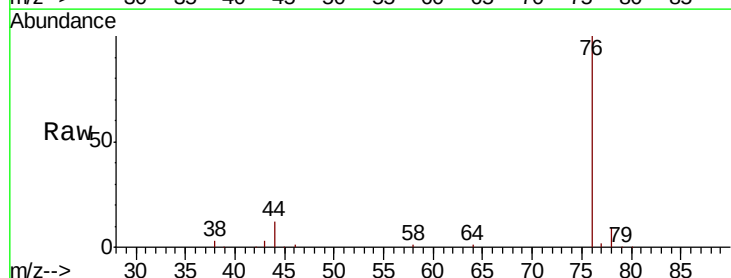
Acq: 15 Dec 2020 22:16

Tgt Ion: 76 Resp: 137365

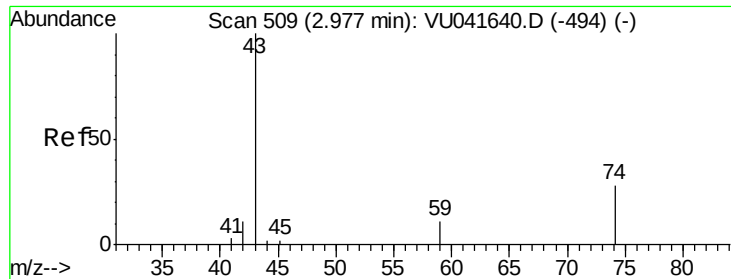
Ion Ratio Lower Upper

76 100

78 8.9 7.4 11.2



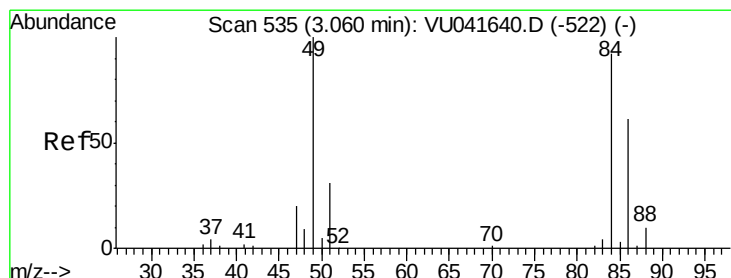
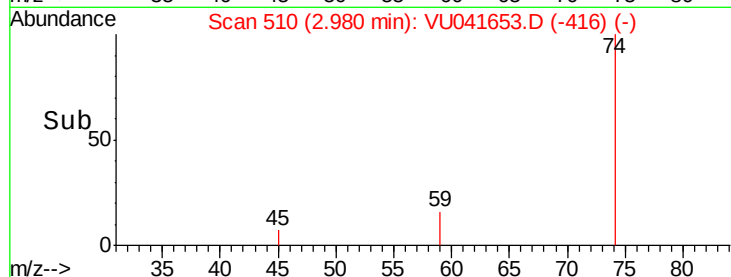
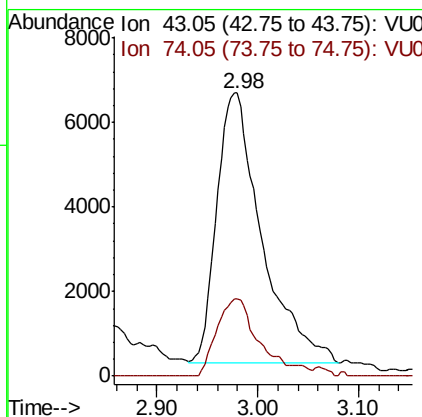
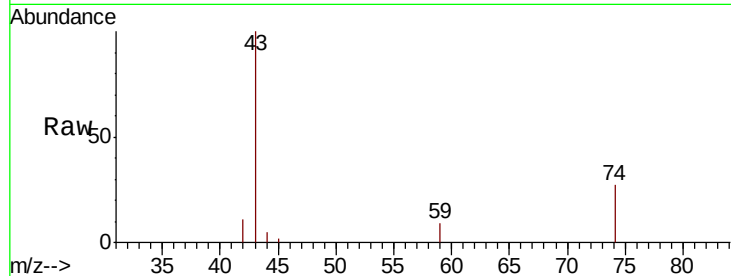




#15  
Methvl Acetate  
Concen: 4.392 ug/L  
RT: 2.98 min Scan# 510  
Delta R.T. 0.00 min  
Lab File: VU041653.D  
Acq: 15 Dec 2020 22:16

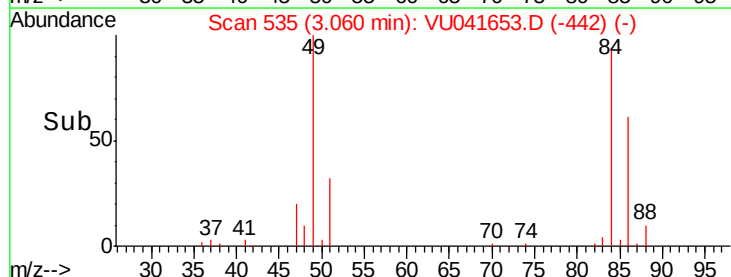
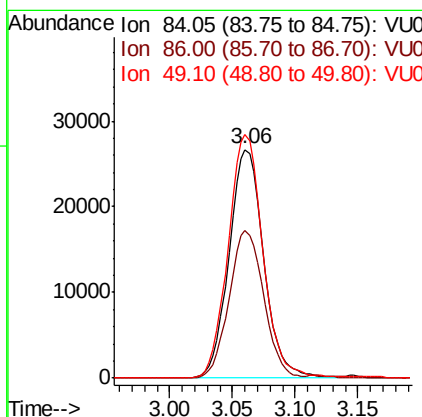
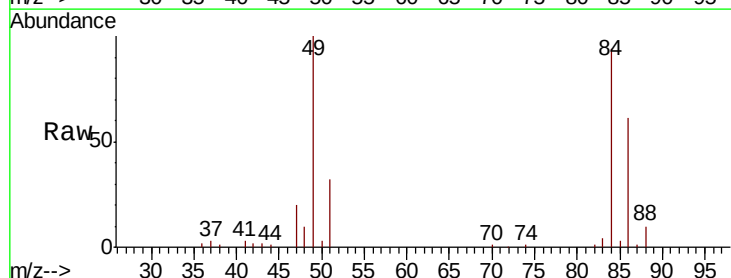
Instrument :  
MSVOA\_U  
ClientSampleId :  
VHBLK01

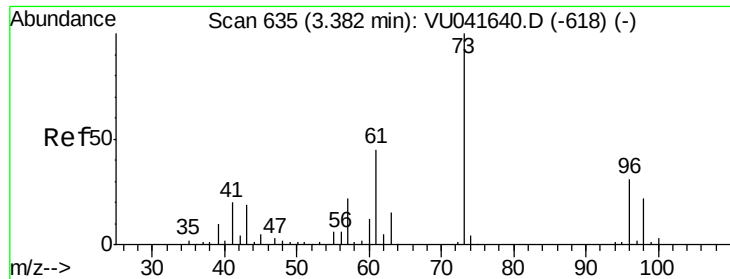
Tot Ion: 43 Resp: 19885  
Ion Ratio Lower Upper  
43 100  
74 25.8 19.2 28.8



#16  
Methylene chloride  
Concen: 5.200 ug/L  
RT: 3.06 min Scan# 535  
Delta R.T. 0.00 min  
Lab File: VU041653.D  
Acq: 15 Dec 2020 22:16

Tgt Ion: 84 Resp: 51364  
Ion Ratio Lower Upper  
84 100  
86 64.4 45.1 83.7  
49 106.4 83.1 154.3

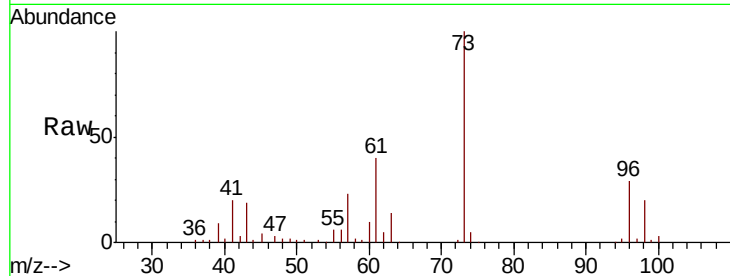




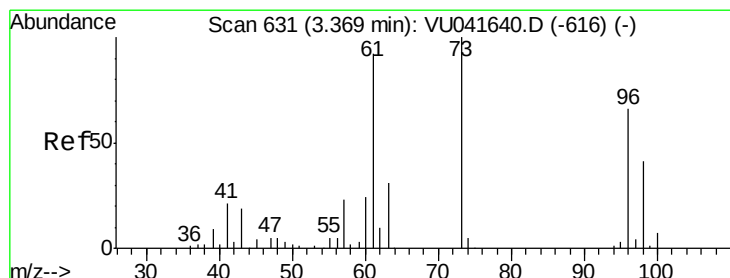
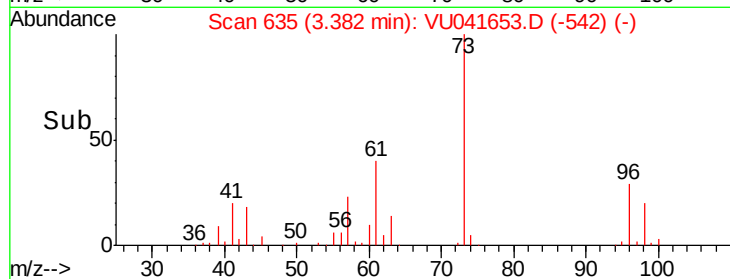
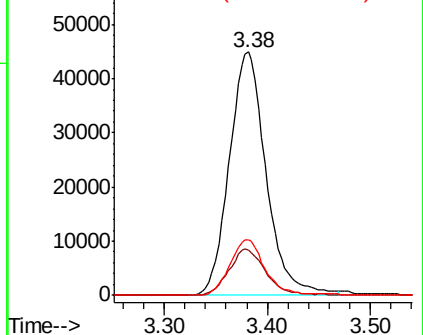
#17  
Methyl tert-butyl Ether  
Concen: 5.058 ug/L  
RT: 3.38 min Scan# 635  
Delta R.T. 0.00 min  
Lab File: VU041653.D  
Acq: 15 Dec 2020 22:16

Instrument :  
MSVOA\_U  
ClientSampleId :  
VHBLK01

Tot Ion: 73 Resp: 111629  
Ion Ratio Lower Upper  
73 100  
43 18.8 14.7 22.1  
57 21.7 18.2 27.4

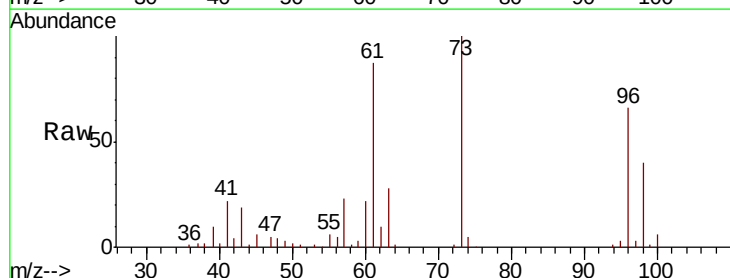


Abundance Ion 73.10 (72.80 to 73.80): VU0  
Ion 43.05 (42.75 to 43.75): VU0  
Ion 57.10 (56.80 to 57.80): VU0

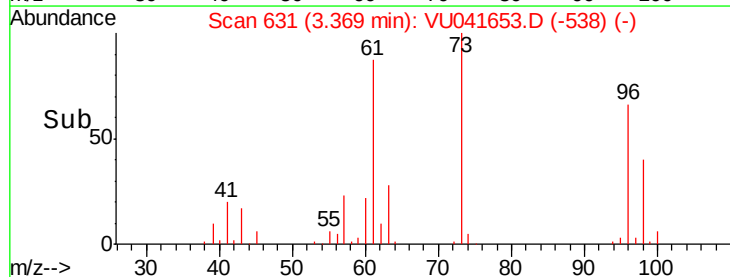
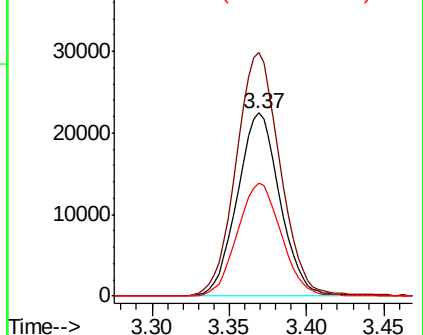


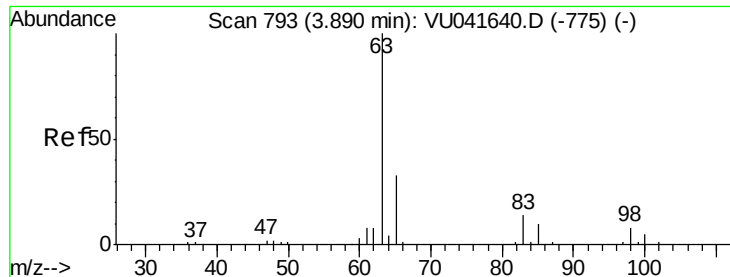
#18  
trans-1,2-Dichloroethene  
Concen: 5.025 ug/L  
RT: 3.37 min Scan# 631  
Delta R.T. 0.00 min  
Lab File: VU041653.D  
Acq: 15 Dec 2020 22:16

Tgt Ion: 96 Resp: 42986  
Ion Ratio Lower Upper  
96 100  
61 133.0 101.8 189.0  
98 61.6 44.4 82.5



Abundance Ion 96.00 (95.70 to 96.70): VU0  
Ion 61.05 (60.75 to 61.75): VU0  
Ion 97.95 (97.65 to 98.65): VU0

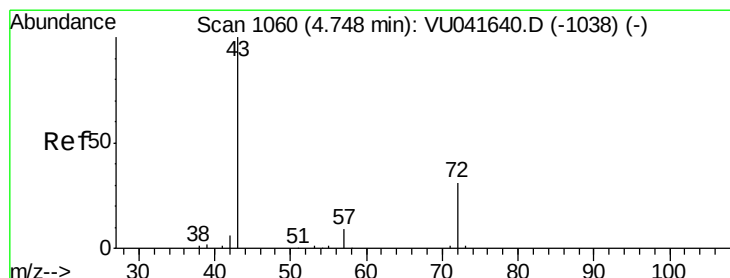
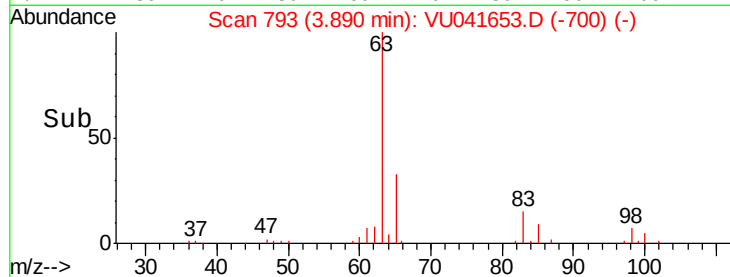
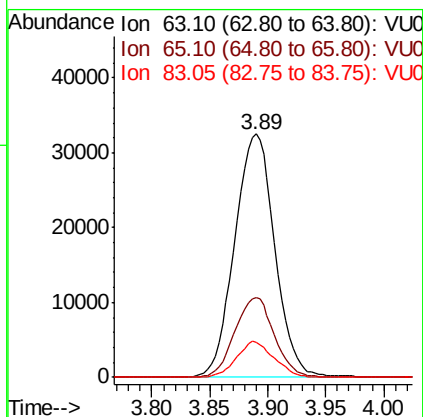
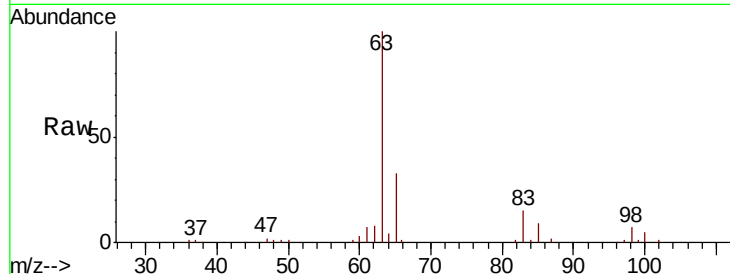




#19  
 1,1-Dichloroethane  
 Concen: 4.896 ug/L  
 RT: 3.89 min Scan# 793  
 Delta R.T. 0.00 min  
 Lab File: VU041653.D  
 Acq: 15 Dec 2020 22:16

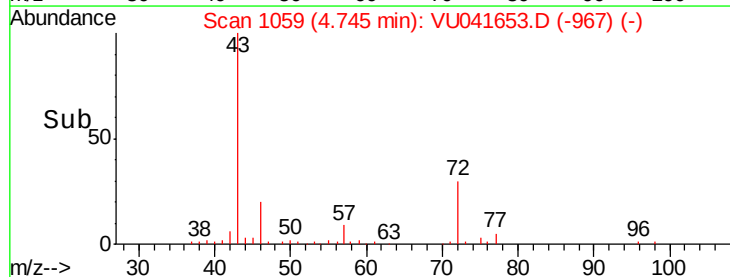
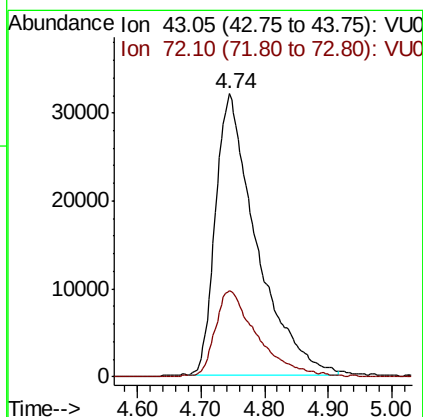
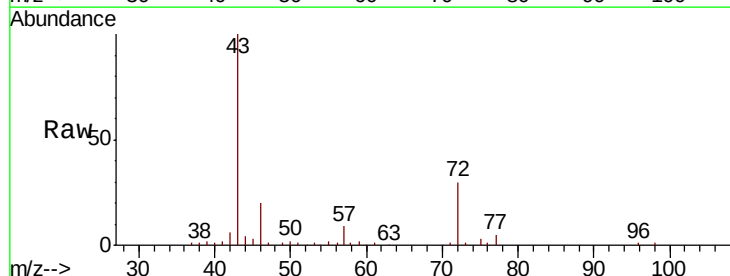
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VHBLK01

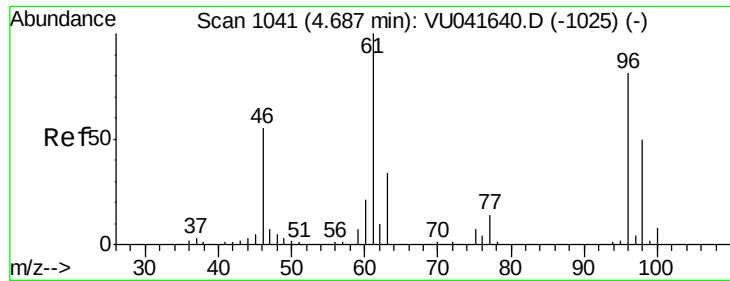
Tot Ion: 63 Resp: 78287  
 Ion Ratio Lower Upper  
 63 100  
 65 32.9 21.3 39.6  
 83 14.6 9.3 17.3



#21  
 2-Butanone  
 Concen: 50.506 ug/L  
 RT: 4.74 min Scan# 1059  
 Delta R.T. -0.00 min  
 Lab File: VU041653.D  
 Acq: 15 Dec 2020 22:16

Tgt Ion: 43 Resp: 143276  
 Ion Ratio Lower Upper  
 43 100  
 72 30.2 14.6 44.0





#22

cis-1,2-Dichloroethene

Concen: 5.047 ug/L

RT: 4.68 min Scan# 1040

Delta R.T. -0.00 min

Lab File: VU041653.D

Acq: 15 Dec 2020 22:16

Instrument :

MSVOA\_U

ClientSampleId :

VHBLK01

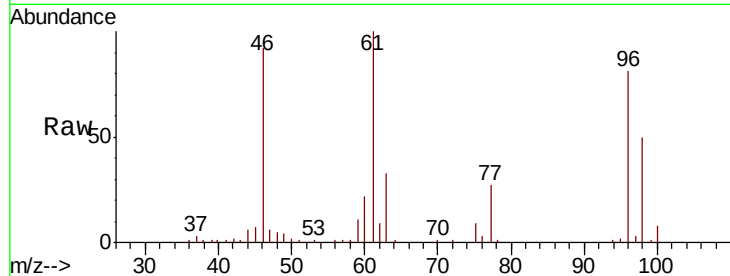
Tot Ion: 96 Resp: 47726

Ion Ratio Lower Upper

96 100

61 122.8 88.8 165.0

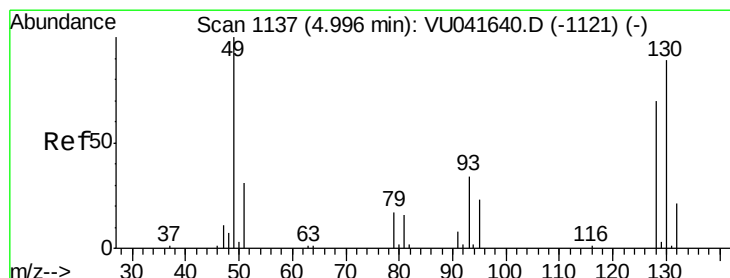
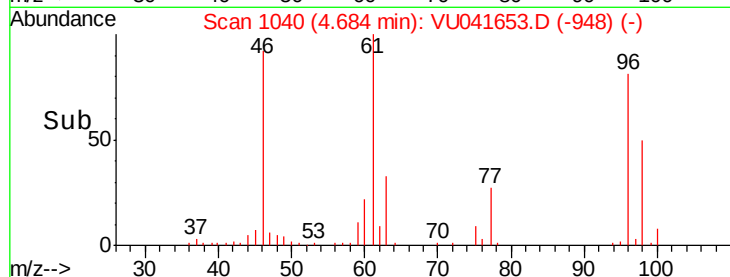
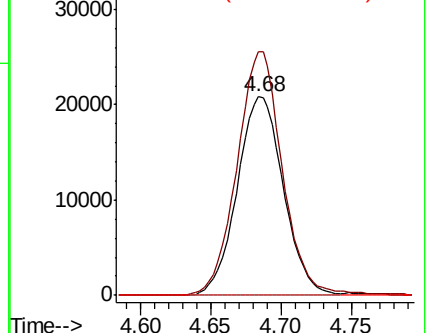
68 0.0 0.0 0.0



Abundance Ion 96.00 (95.70 to 96.70): VU0

Ion 61.05 (60.75 to 61.75): VU0

Ion 68.15 (67.85 to 68.85): VU0



#23

Bromochloromethane

Concen: 5.429 ug/L

RT: 4.99 min Scan# 1136

Delta R.T. -0.00 min

Lab File: VU041653.D

Acq: 15 Dec 2020 22:16

Tgt Ion:128 Resp: 23581

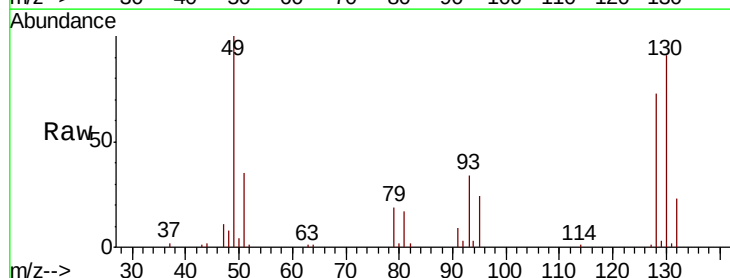
Ion Ratio Lower Upper

128 100

49 136.3 109.3 203.1

130 124.7 84.8 157.6

51 47.1 40.6 61.0

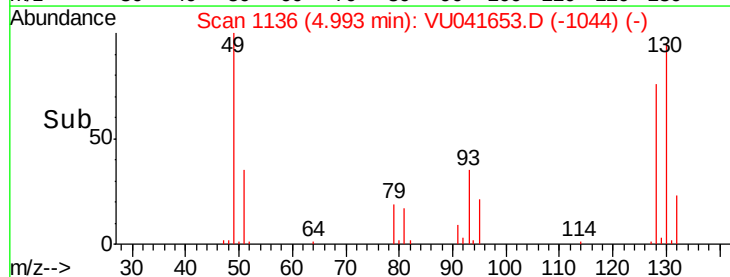
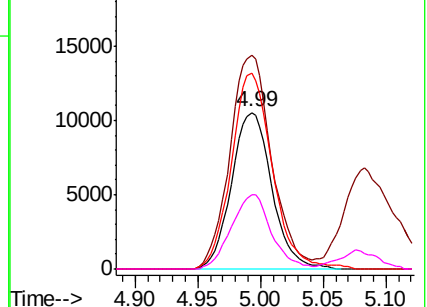


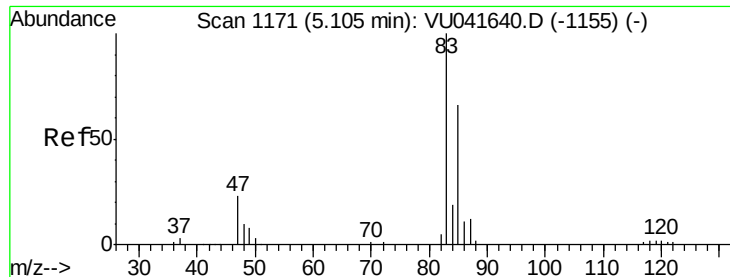
Abundance Ion 127.90 (127.60 to 128.60): V

Ion 49.10 (48.80 to 49.80): VU0

Ion 129.95 (129.65 to 130.65): V

Ion 51.05 (50.75 to 51.75): VU0

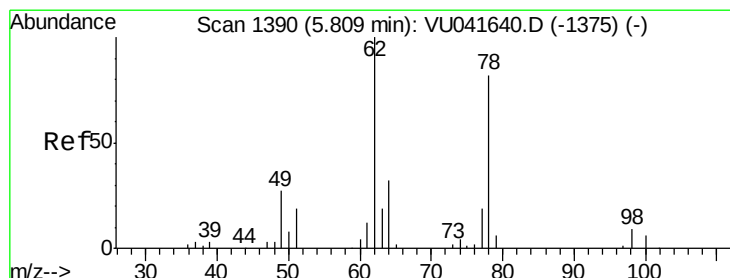
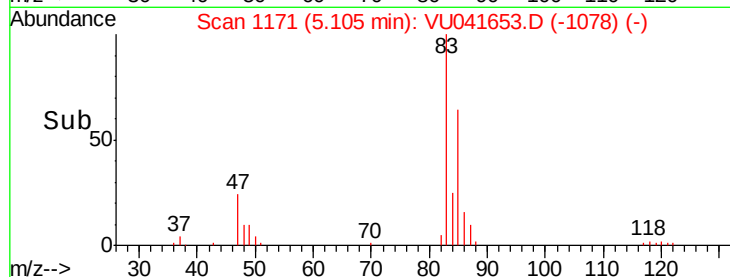
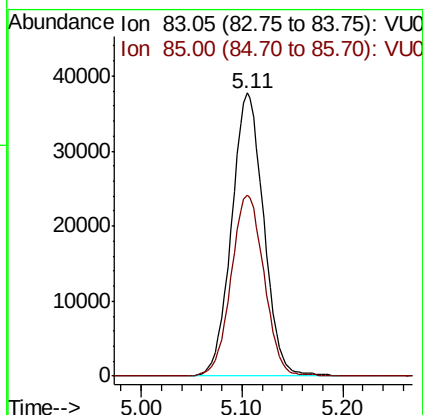
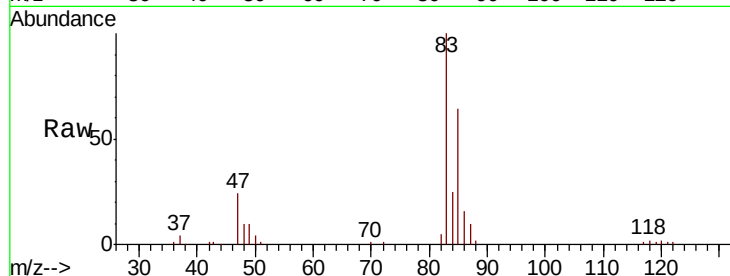




#25  
Chloroform  
Concen: 5.172 ug/L  
RT: 5.11 min Scan# 1171  
Delta R.T. 0.00 min  
Lab File: VU041653.D  
Acq: 15 Dec 2020 22:16

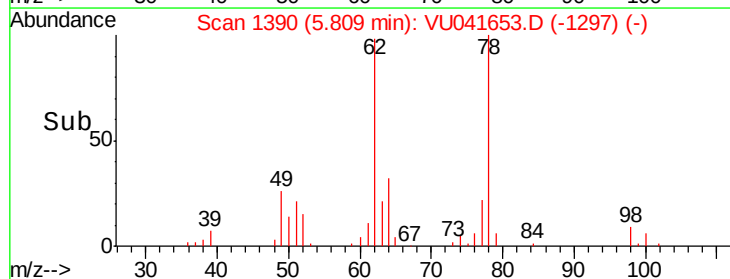
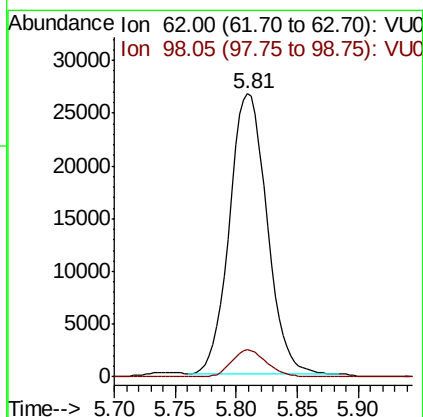
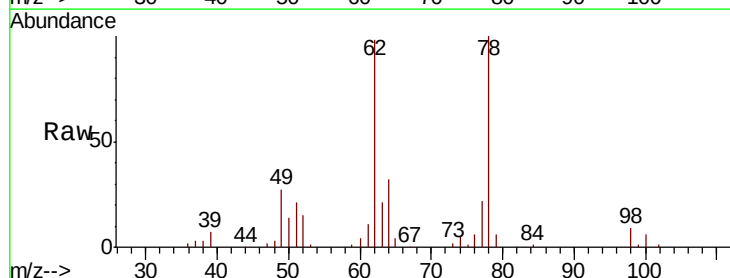
Instrument :  
MSVOA\_U  
ClientSampleId :  
VHBLK01

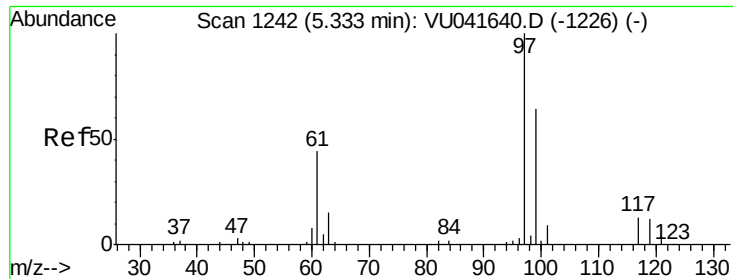
Tot Ion: 83 Resp: 83273  
Ion Ratio Lower Upper  
83 100  
85 64.1 44.2 82.0



#27  
1,2-Dichloroethane  
Concen: 5.227 ug/L  
RT: 5.81 min Scan# 1390  
Delta R.T. 0.00 min  
Lab File: VU041653.D  
Acq: 15 Dec 2020 22:16

Tgt Ion: 62 Resp: 56994  
Ion Ratio Lower Upper  
62 100  
98 9.6 8.2 12.2

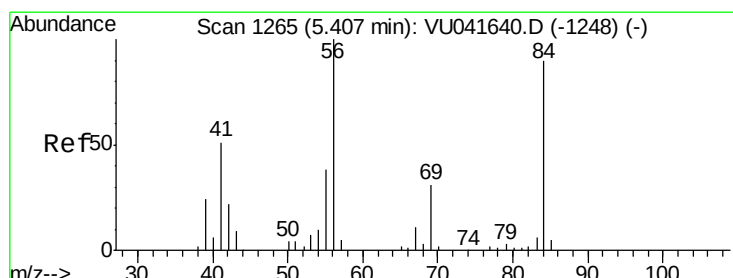
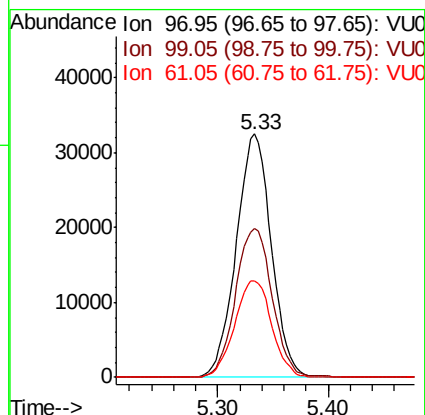
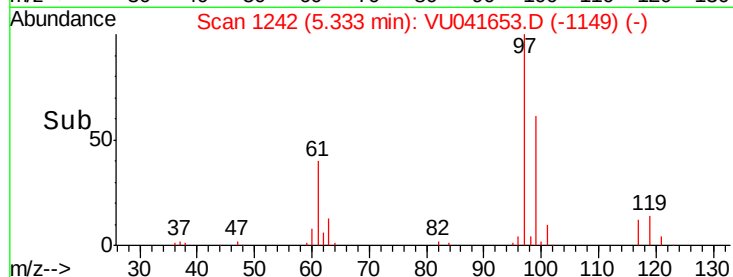
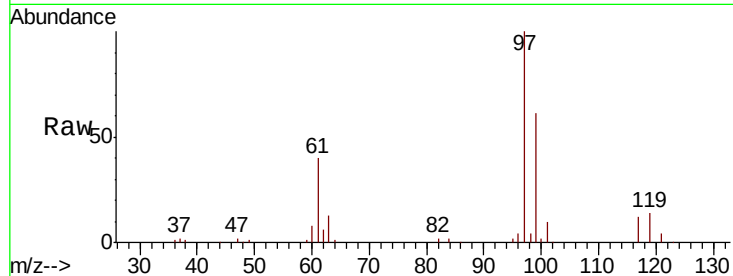




#29  
1,1,1-Trichloroethane  
Concen: 5.354 ug/L  
RT: 5.33 min Scan# 1242  
Delta R.T. 0.00 min  
Lab File: VU041653.D  
Acq: 15 Dec 2020 22:16

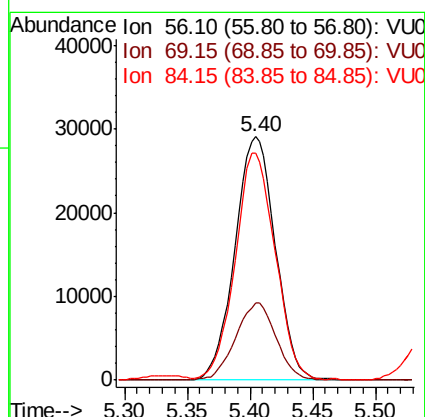
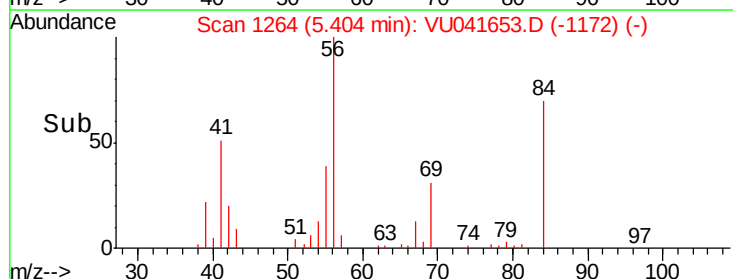
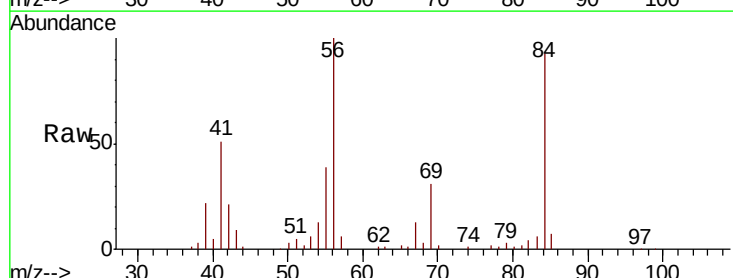
Instrument :  
MSVOA\_U  
ClientSampleId :  
VHBLK01

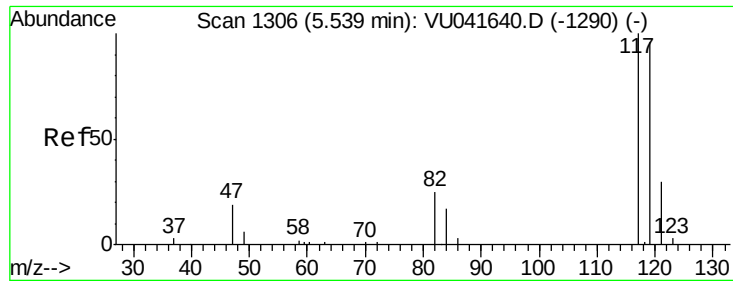
Tot Ion: 97 Resp: 71668  
Ion Ratio Lower Upper  
97 100  
99 64.0 51.3 76.9  
61 41.8 36.5 54.7



#30  
Cyclohexane  
Concen: 4.350 ug/L  
RT: 5.40 min Scan# 1264  
Delta R.T. -0.00 min  
Lab File: VU041653.D  
Acq: 15 Dec 2020 22:16

Tgt Ion: 56 Resp: 65256  
Ion Ratio Lower Upper  
56 100  
69 31.4 23.8 35.8  
84 92.2 66.2 99.4

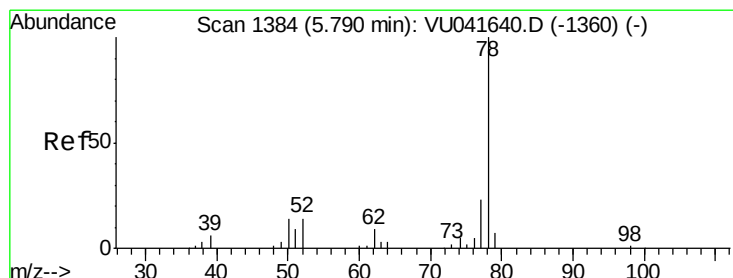
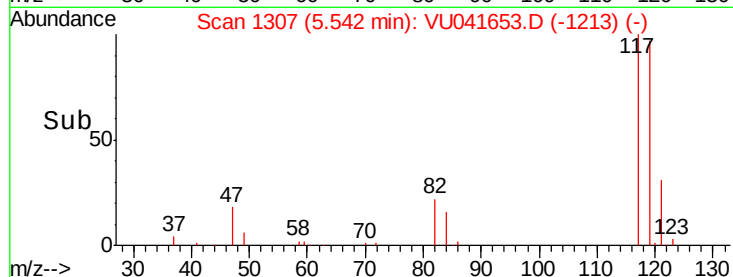
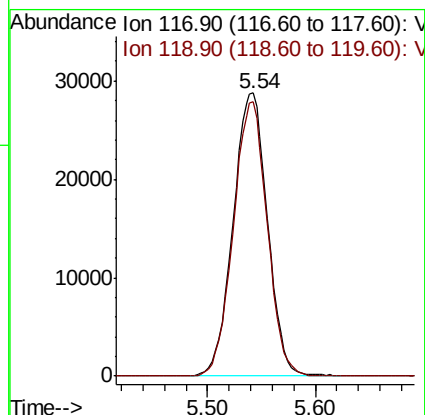
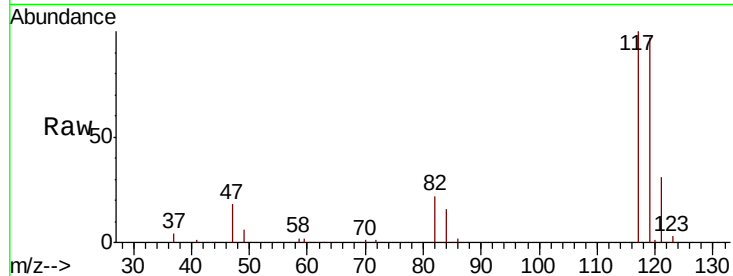




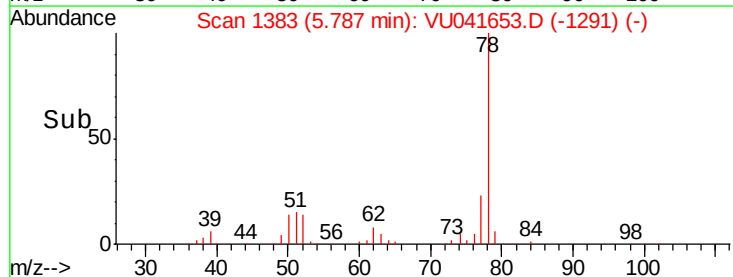
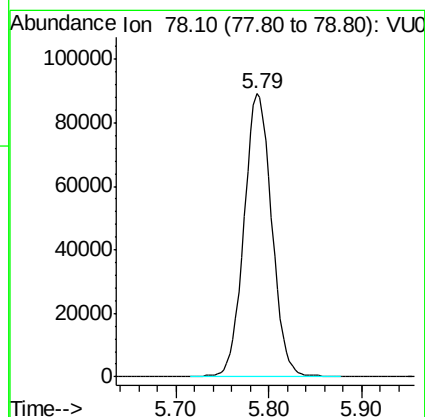
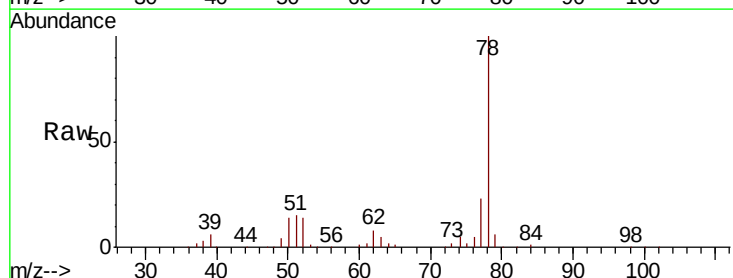
#31  
Carbon tetrachloride  
Concen: 5.512 ug/L  
RT: 5.54 min Scan# 1307  
Delta R.T. 0.00 min  
Lab File: VU041653.D  
Acq: 15 Dec 2020 22:16

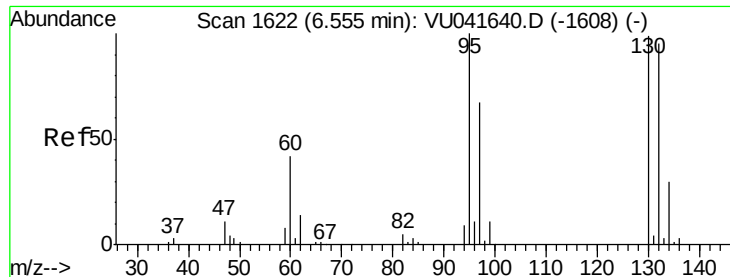
Instrument :  
MSVOA\_U  
ClientSampleId :  
VHBLK01

Tot Ion:117 Resp: 63800  
Ion Ratio Lower Upper  
117 100  
119 95.3 76.2 114.2



#33  
Benzene  
Concen: 4.977 ug/L  
RT: 5.79 min Scan# 1383  
Delta R.T. -0.00 min  
Lab File: VU041653.D  
Acq: 15 Dec 2020 22:16  
Tgt Ion: 78 Resp: 185512

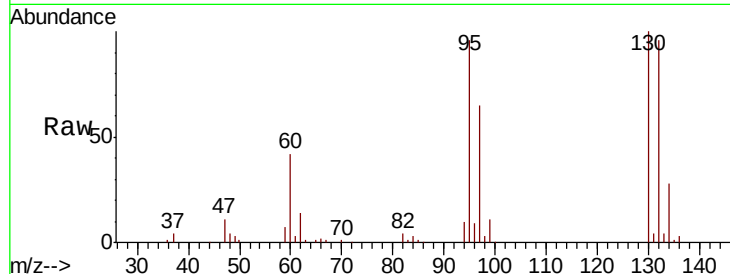




#34  
 Trichloroethene  
 Concen: 4.991 ug/L  
 RT: 6.55 min Scan# 1621  
 Delta R.T. -0.00 min  
 Lab File: VU041653.D  
 Acq: 15 Dec 2020 22:16

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VHBLK01

Tot Ion: 95 Resp: 46754  
 Ion Ratio Lower Upper  
 95 100  
 97 67.1 43.9 81.5  
 132 99.9 63.1 117.3  
 130 103.9 67.4 125.2



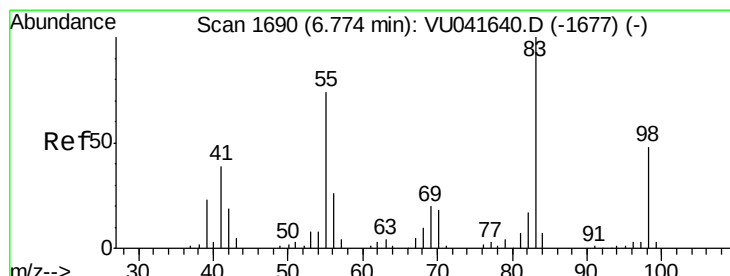
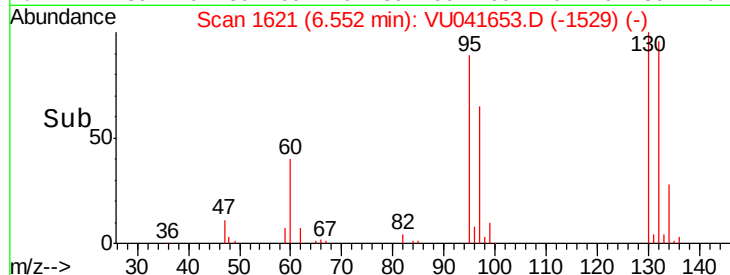
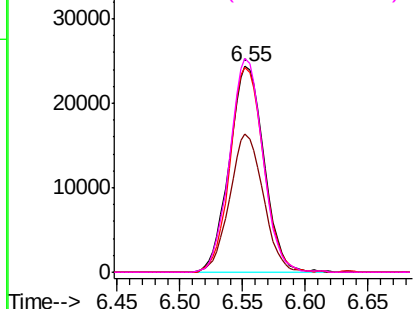
Abundance

Ion 95.00 (94.70 to 95.70): VU0

Ion 96.95 (96.65 to 97.65): VU0

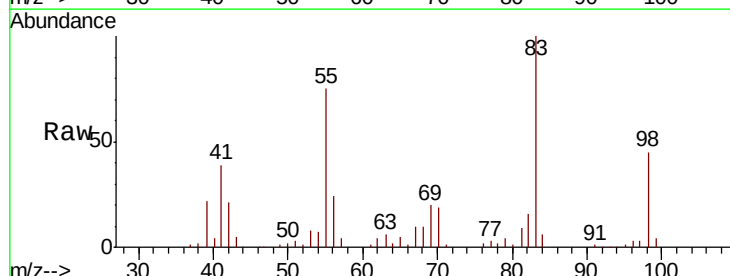
Ion 131.95 (131.65 to 132.65): V

Ion 129.95 (129.65 to 130.65): V



#35  
 Methylcyclohexane  
 Concen: 4.672 ug/L  
 RT: 6.77 min Scan# 1690  
 Delta R.T. 0.00 min  
 Lab File: VU041653.D  
 Acq: 15 Dec 2020 22:16

Tgt Ion: 83 Resp: 70741  
 Ion Ratio Lower Upper  
 83 100  
 55 74.8 61.2 91.8  
 98 45.3 36.6 54.8

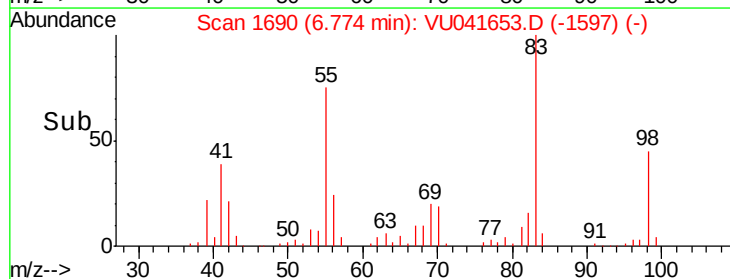
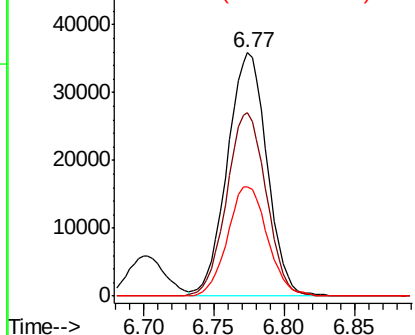


Abundance

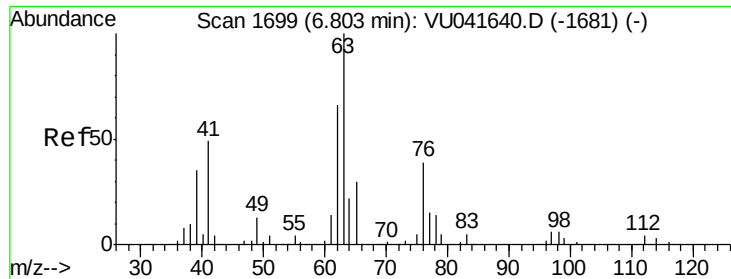
Ion 83.15 (82.85 to 83.85): VU0

Ion 55.10 (54.80 to 55.80): VU0

Ion 98.15 (97.85 to 98.85): VU0



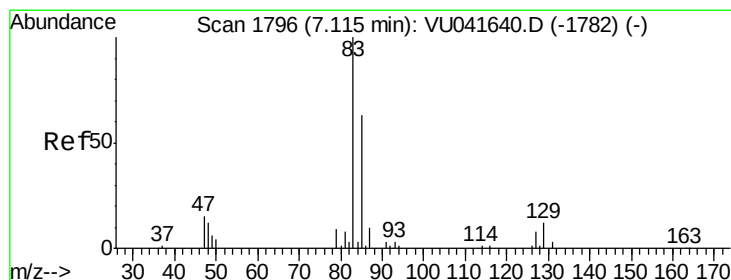
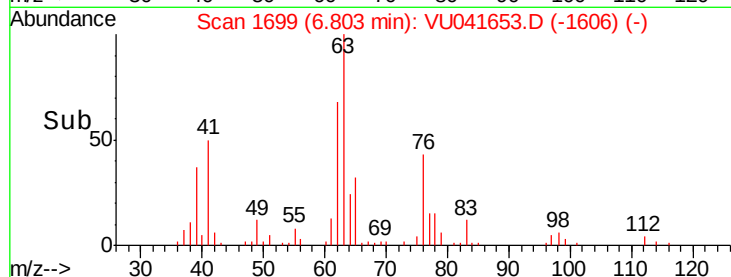
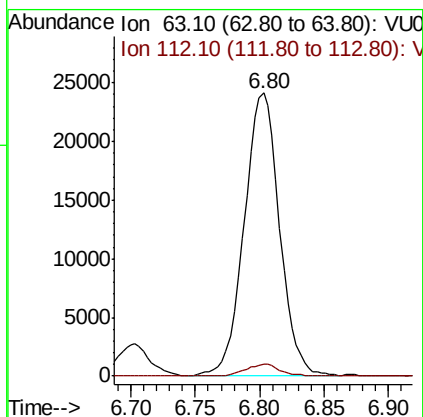
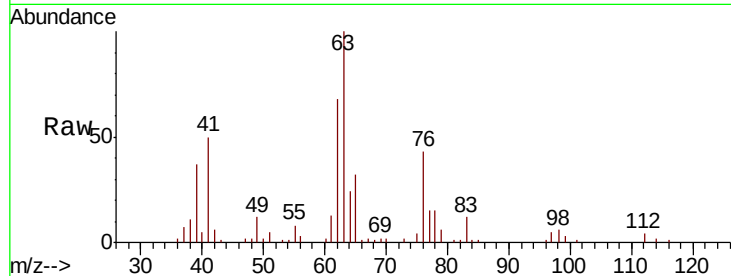




#37  
 1,2-Dichloropropane  
 Concen: 4.846 ug/L  
 RT: 6.80 min Scan# 1699  
 Delta R.T. 0.00 min  
 Lab File: VU041653.D  
 Acq: 15 Dec 2020 22:16

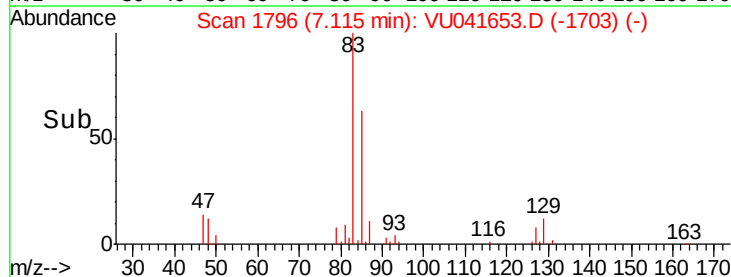
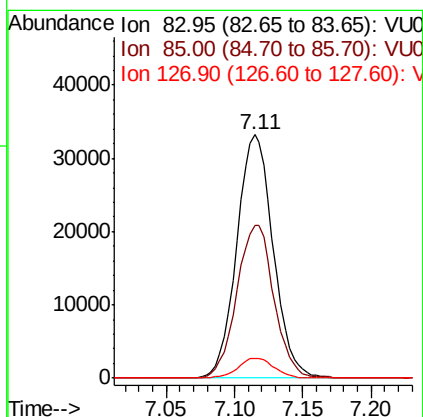
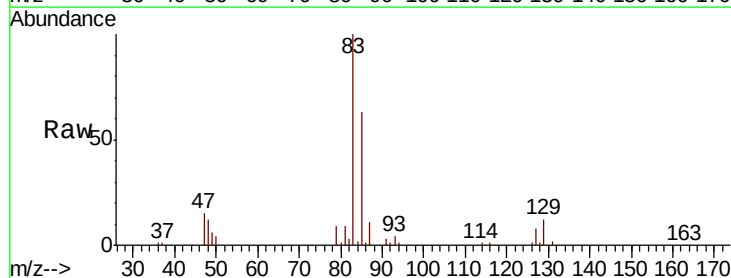
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VHBLK01

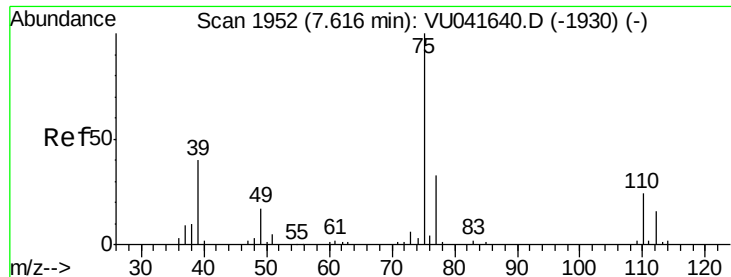
Tot Ion: 63 Resp: 46207  
 Ion Ratio Lower Upper  
 63 100  
 112 4.0 3.1 4.7



#38  
 Bromodichloromethane  
 Concen: 5.180 ug/L  
 RT: 7.11 min Scan# 1796  
 Delta R.T. 0.00 min  
 Lab File: VU041653.D  
 Acq: 15 Dec 2020 22:16

Tgt Ion: 83 Resp: 61448  
 Ion Ratio Lower Upper  
 83 100  
 85 62.6 45.5 84.5  
 127 8.2 7.0 10.6

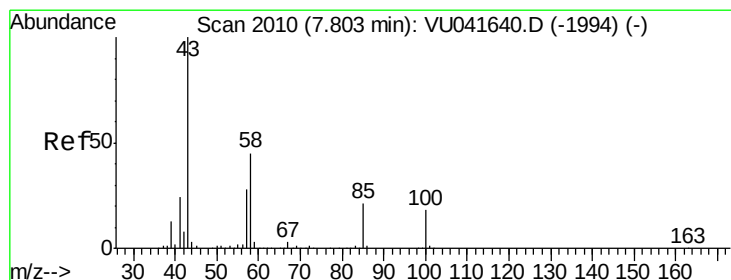
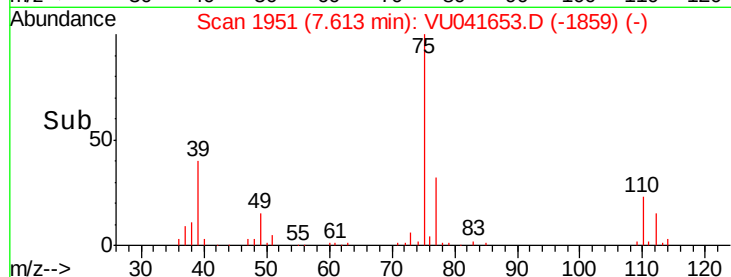
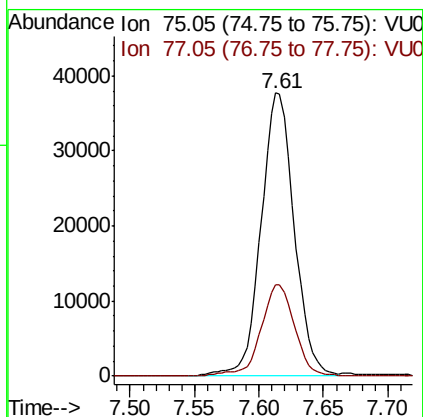
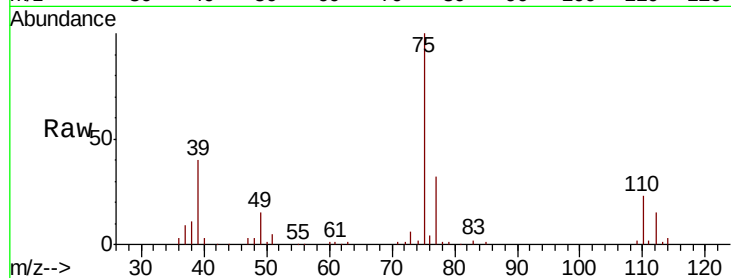




#39  
 cis-1,3-Dichloropropene  
 Concen: 4.803 ug/L  
 RT: 7.61 min Scan# 1951  
 Delta R.T. -0.00 min  
 Lab File: VU041653.D  
 Acq: 15 Dec 2020 22:16

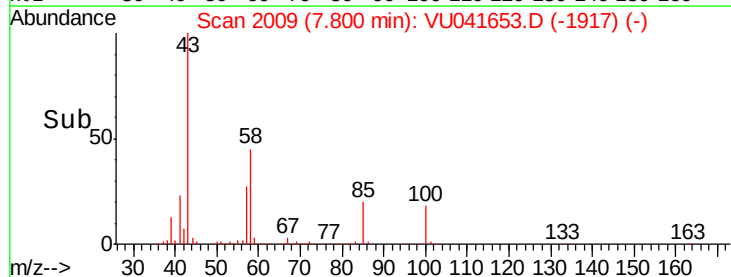
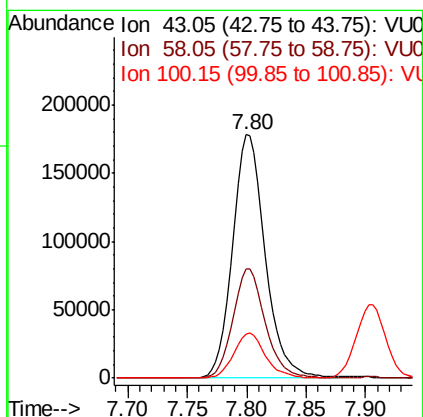
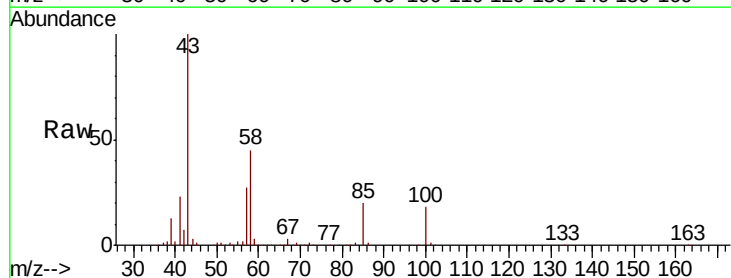
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VHBLK01

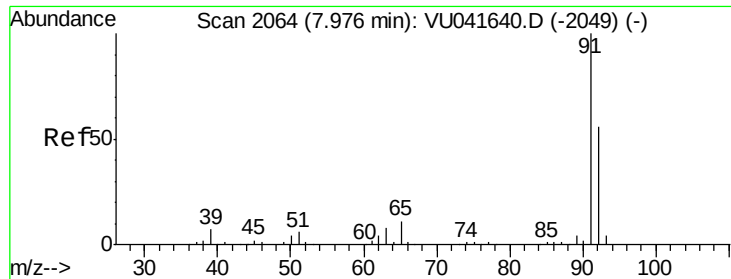
Tot Ion: 75 Resp: 67862  
 Ion Ratio Lower Upper  
 75 100  
 77 32.3 22.3 41.3



#40  
 4-Methyl-2-pentanone  
 Concen: 49.986 ug/L  
 RT: 7.80 min Scan# 2009  
 Delta R.T. -0.00 min  
 Lab File: VU041653.D  
 Acq: 15 Dec 2020 22:16

Tgt Ion: 43 Resp: 339138  
 Ion Ratio Lower Upper  
 43 100  
 58 44.2 34.2 51.2  
 100 18.0 12.3 18.5





#42

Toluene

Concen: 5.074 ug/L

RT: 7.97 min Scan# 2063

Delta R.T. -0.00 min

Lab File: VU041653.D

Acq: 15 Dec 2020 22:16

Instrument :

MSVOA\_U

ClientSampleId :

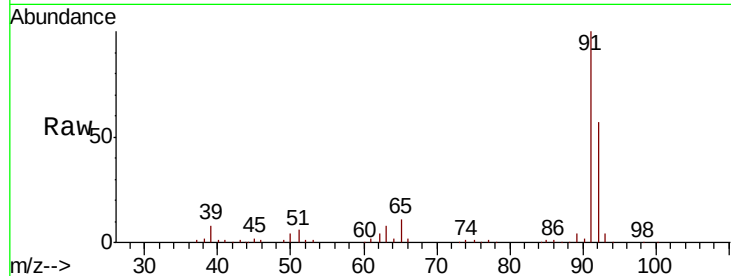
VHBLK01

Tot Ion: 91 Resp: 195280

Ion Ratio Lower Upper

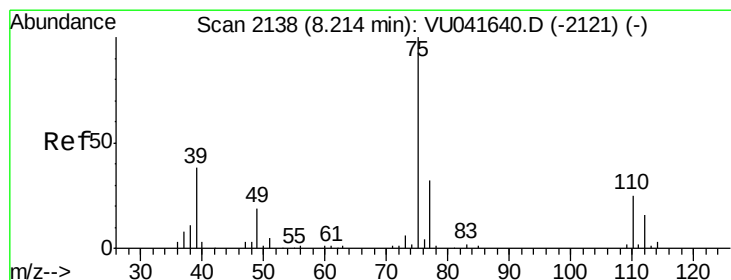
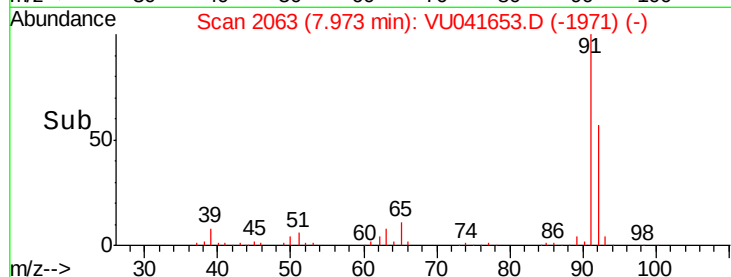
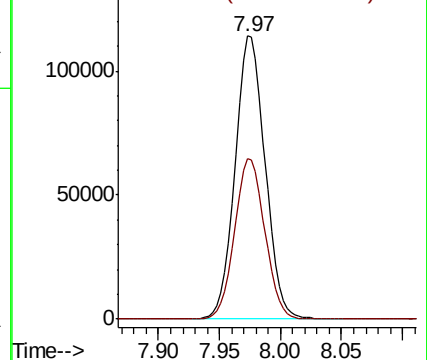
91 100

92 56.6 40.0 74.2



Abundance Ion 91.15 (90.85 to 91.85): VU0

Ion 92.15 (91.85 to 92.85): VU0



#44

trans-1,3-Dichloropropene

Concen: 5.102 ug/L

RT: 8.21 min Scan# 2138

Delta R.T. 0.00 min

Lab File: VU041653.D

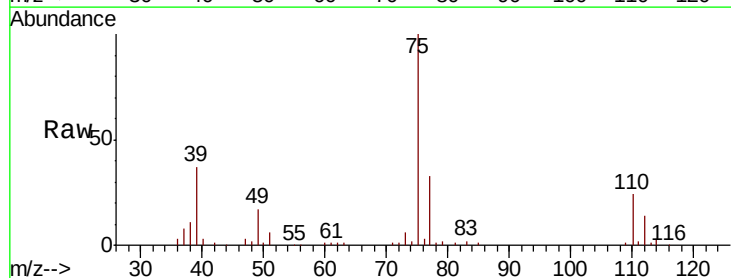
Acq: 15 Dec 2020 22:16

Tgt Ion: 75 Resp: 64457

Ion Ratio Lower Upper

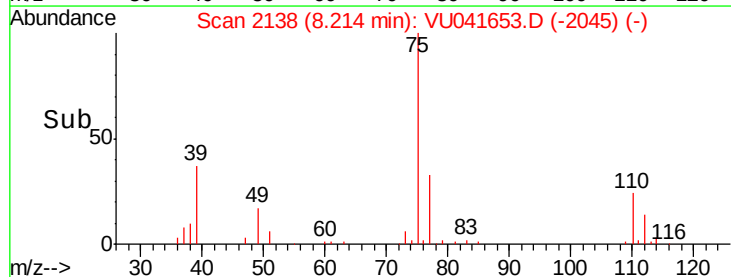
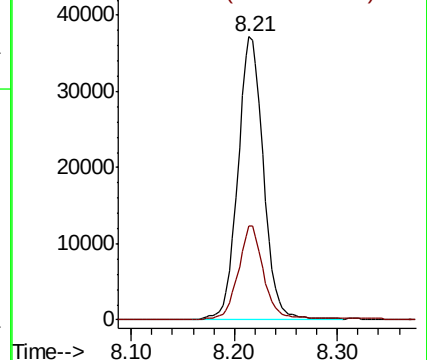
75 100

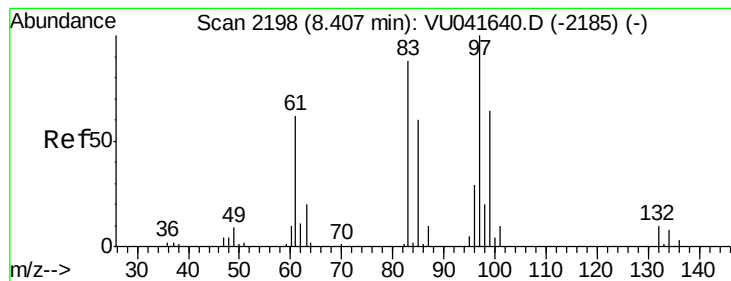
77 33.2 23.8 44.2



Abundance Ion 75.05 (74.75 to 75.75): VU0

Ion 77.05 (76.75 to 77.75): VU0





#45

1,1,2-Trichloroethane

Concen: 5.383 ug/L

RT: 8.40 min Scan# 2197

Delta R.T. -0.00 min

Lab File: VU041653.D

Acq: 15 Dec 2020 22:16

Instrument :

MSVOA\_U

ClientSampleId :

VHBLK01

Tot Ion: 97 Resp: 37960

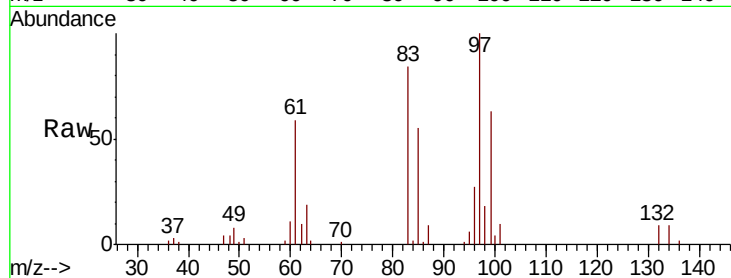
Ion Ratio Lower Upper

97 100

99 62.8 42.1 78.3

83 83.6 62.6 116.2

85 55.4 39.1 72.7

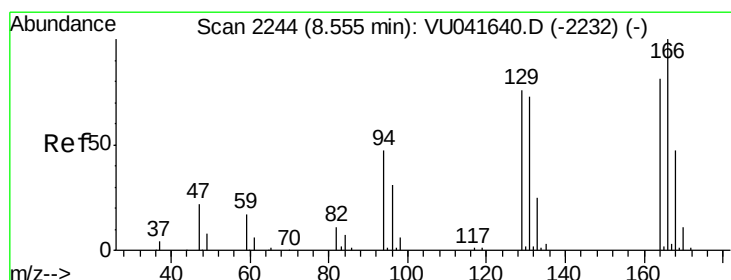
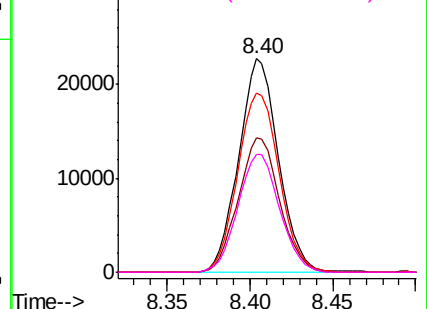
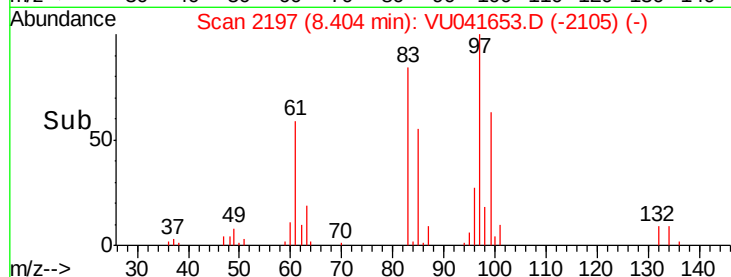


Abundance Ion 96.95 (96.65 to 97.65): VU0

Ion 99.05 (98.75 to 99.75): VU0

Ion 82.95 (82.65 to 83.65): VU0

Ion 85.00 (84.70 to 85.70): VU0



#47

Tetrachloroethene

Concen: 5.256 ug/L

RT: 8.56 min Scan# 2244

Delta R.T. 0.00 min

Lab File: VU041653.D

Acq: 15 Dec 2020 22:16

Tgt Ion:164 Resp: 34462

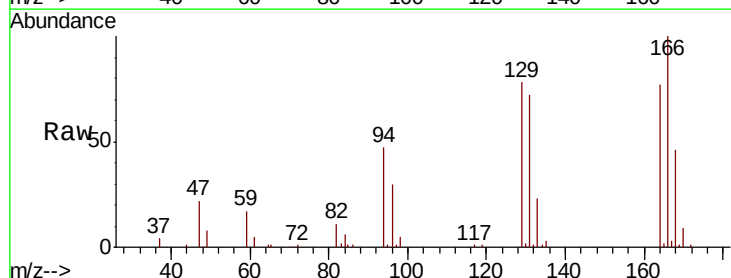
Ion Ratio Lower Upper

164 100

129 101.6 72.2 134.0

131 92.8 66.9 124.3

166 129.7 89.6 166.4

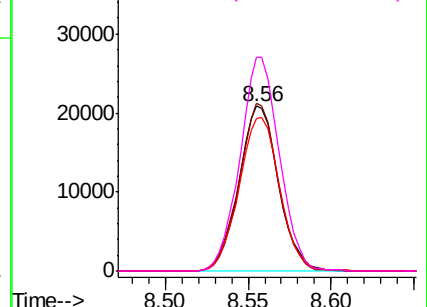
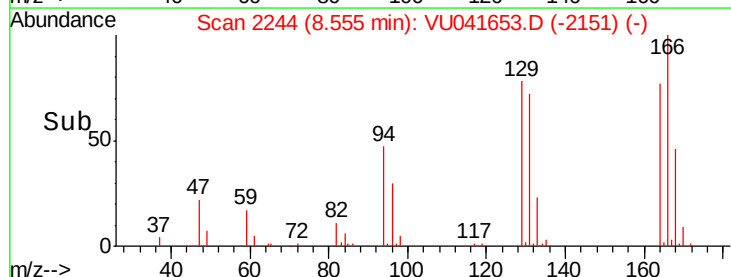


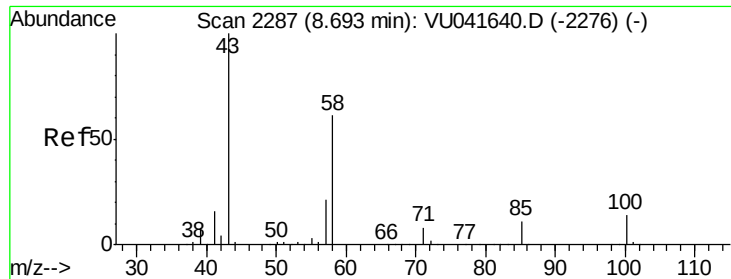
Abundance Ion 163.90 (163.60 to 164.60): V

Ion 128.95 (128.65 to 129.65): V

Ion 130.95 (130.65 to 131.65): V

Ion 165.90 (165.60 to 166.60): V

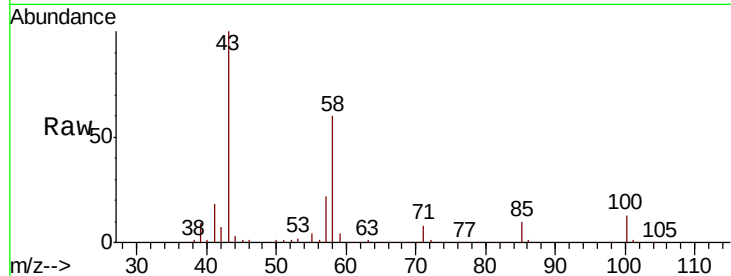




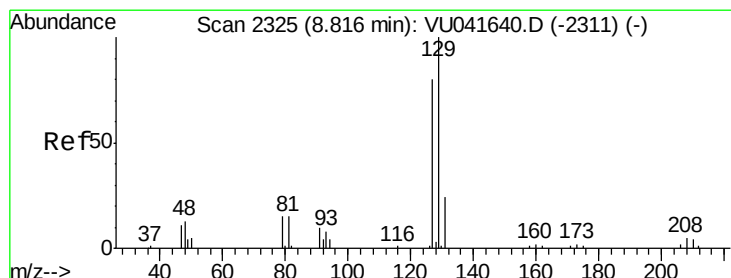
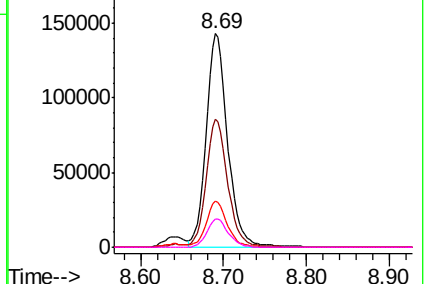
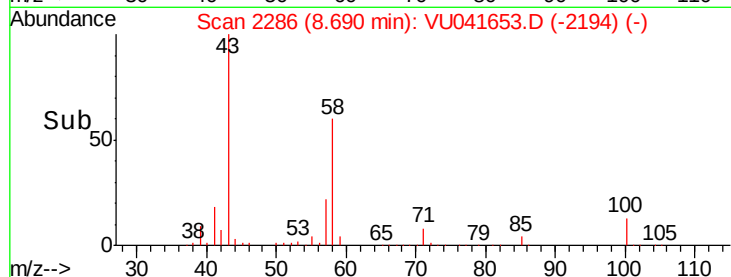
#48  
2-Hexanone  
Concen: 52.885 ug/L  
RT: 8.69 min Scan# 2286  
Delta R.T. -0.00 min  
Lab File: VU041653.D  
Acq: 15 Dec 2020 22:16

Instrument :  
MSVOA\_U  
ClientSampleId :  
VHBLK01

|          |       |       |        |
|----------|-------|-------|--------|
| Tot Ion: | 43    | Resp: | 261129 |
| Ion      | Ratio | Lower | Upper  |
| 43       | 100   |       |        |
| 58       | 59.5  | 47.9  | 71.9   |
| 57       | 20.6  | 16.5  | 24.7   |
| 100      | 13.2  | 9.4   | 14.2   |

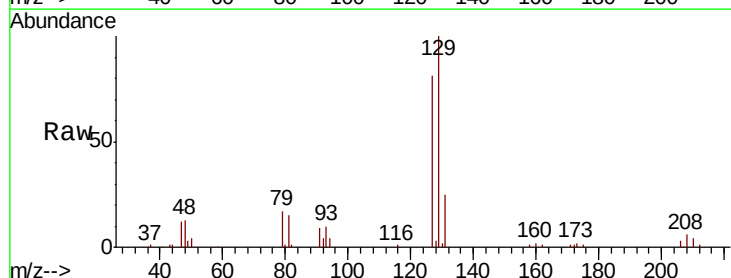


Abundance Ion 43.05 (42.75 to 43.75): VU041653.D (-2194) (-)  
Ion 58.05 (57.75 to 58.75): VU041653.D (-2194) (-)  
Ion 57.20 (56.90 to 57.90): VU041653.D (-2194) (-)  
Ion 100.15 (99.85 to 100.85): VU041653.D (-2194) (-)

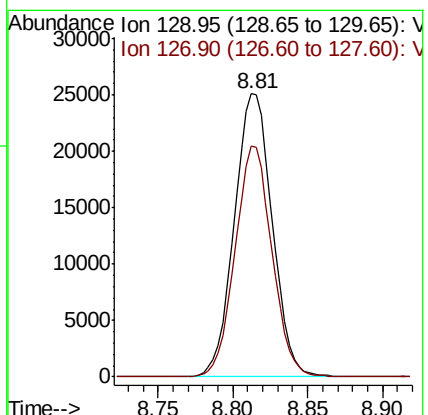
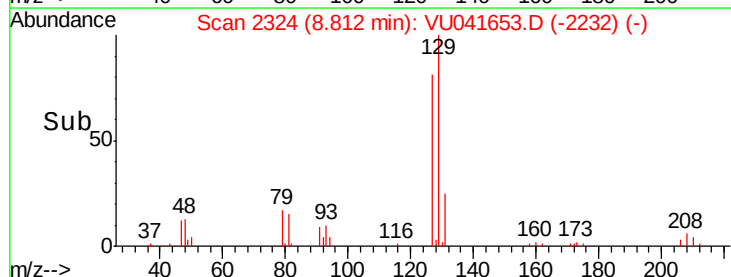


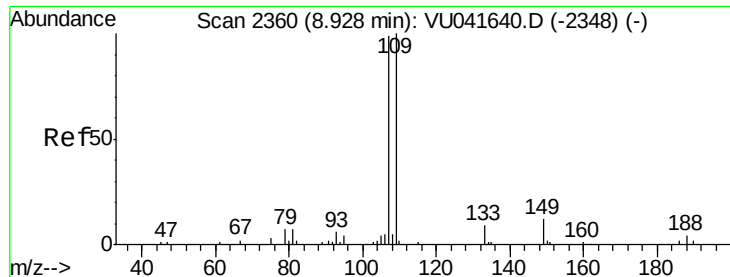
#49  
Dibromochloromethane  
Concen: 5.461 ug/L  
RT: 8.81 min Scan# 2324  
Delta R.T. -0.00 min  
Lab File: VU041653.D  
Acq: 15 Dec 2020 22:16

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 129   | Resp: | 44229 |
| Ion      | Ratio | Lower | Upper |
| 129      | 100   |       |       |
| 127      | 81.4  | 54.7  | 101.7 |



Abundance Ion 128.95 (128.65 to 129.65): VU041653.D (-2232) (-)  
Ion 126.90 (126.60 to 127.60): VU041653.D (-2232) (-)

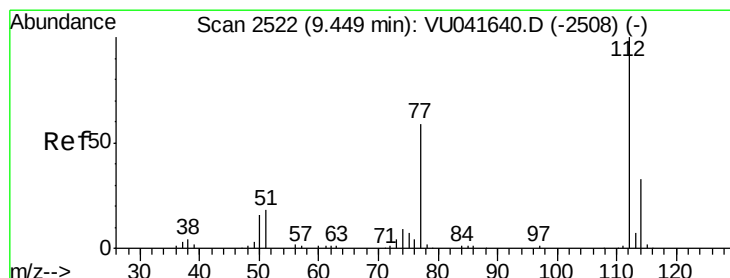
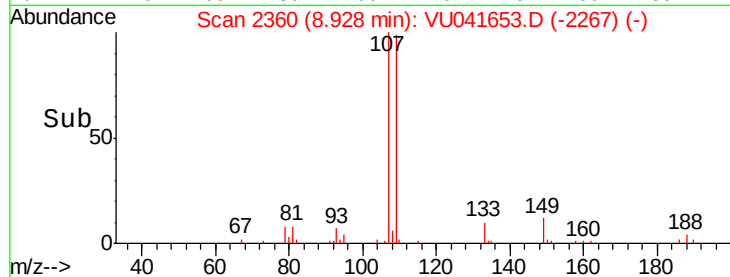
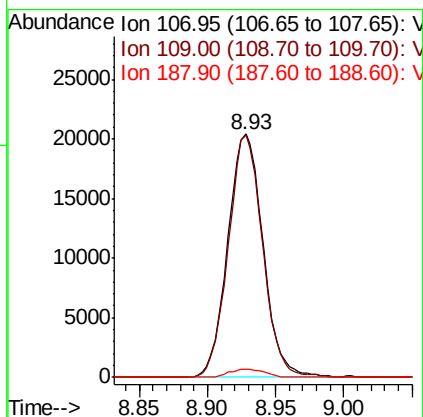
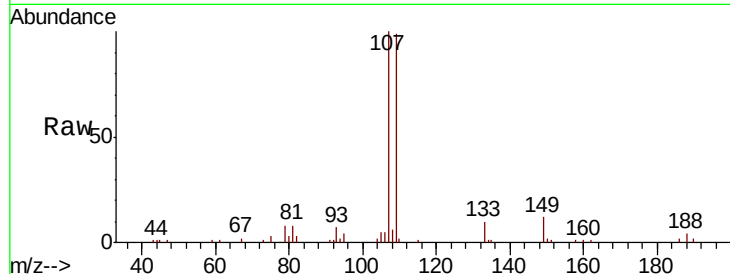




#50  
1,2-Dibromoethane  
Concen: 5.258 ug/L  
RT: 8.93 min Scan# 2360  
Delta R.T. 0.00 min  
Lab File: VU041653.D  
Acq: 15 Dec 2020 22:16

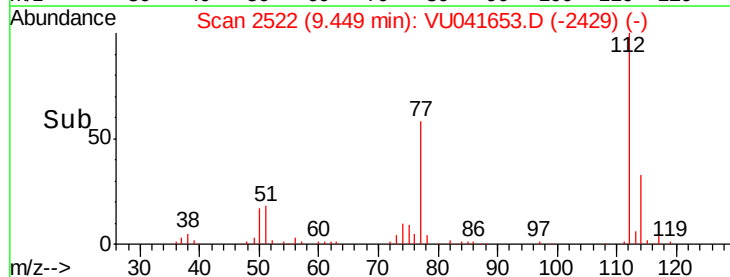
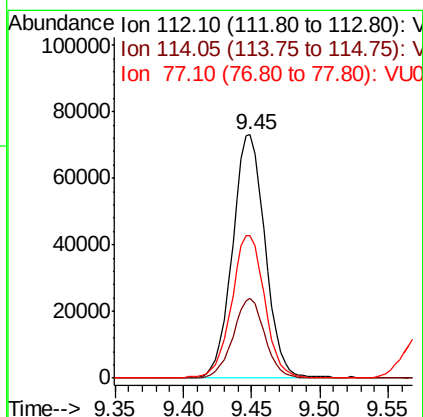
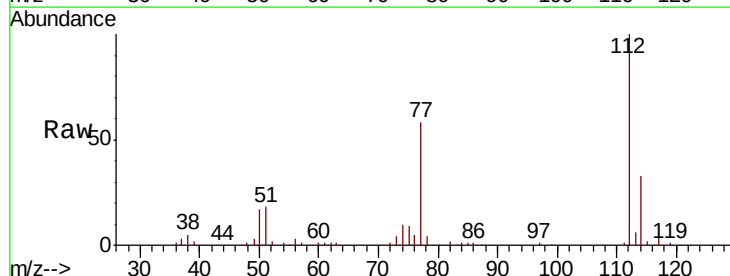
Instrument :  
MSVOA\_U  
ClientSampleId :  
VHBLK01

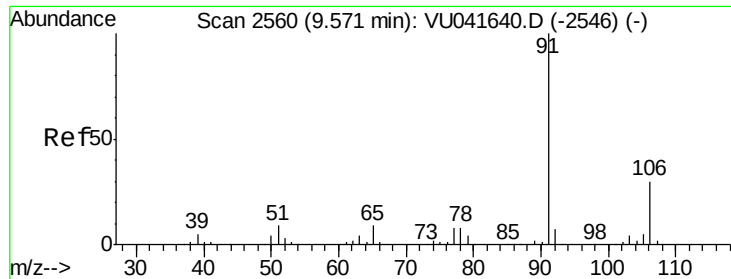
Tot Ion:107 Resp: 36675  
Ion Ratio Lower Upper  
107 100  
109 99.4 65.6 121.8  
188 3.5 2.6 4.0



#51  
Chlorobenzene  
Concen: 5.065 ug/L  
RT: 9.45 min Scan# 2522  
Delta R.T. 0.00 min  
Lab File: VU041653.D  
Acq: 15 Dec 2020 22:16

Tgt Ion:112 Resp: 121178  
Ion Ratio Lower Upper  
112 100  
114 32.9 22.7 42.3  
77 58.5 49.1 73.7





#52

Ethylbenzene

Concen: 4.847 ug/L

RT: 9.57 min Scan# 2560

Delta R.T. 0.00 min

Lab File: VU041653.D

Acq: 15 Dec 2020 22:16

Instrument :

MSVOA\_U

ClientSampleId :

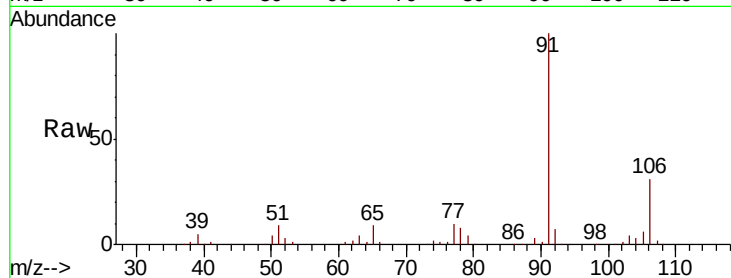
VHBLK01

Tot Ion: 91 Resp: 198655

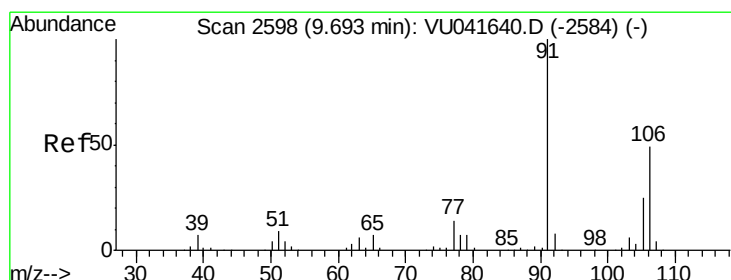
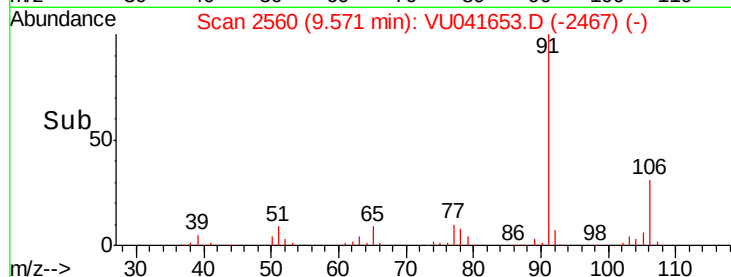
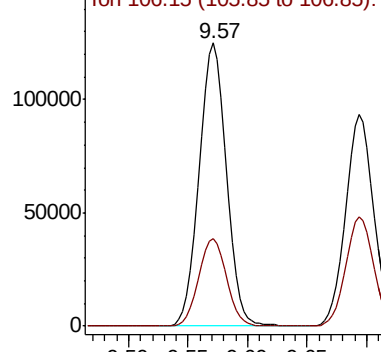
Ion Ratio Lower Upper

91 100

106 30.8 21.1 39.3



Abundance Ion 91.15 (90.85 to 91.85): VU041653.D (-2546) (-)



#53

m,p-Xylene

Concen: 5.164 ug/L

RT: 9.69 min Scan# 2598

Delta R.T. 0.00 min

Lab File: VU041653.D

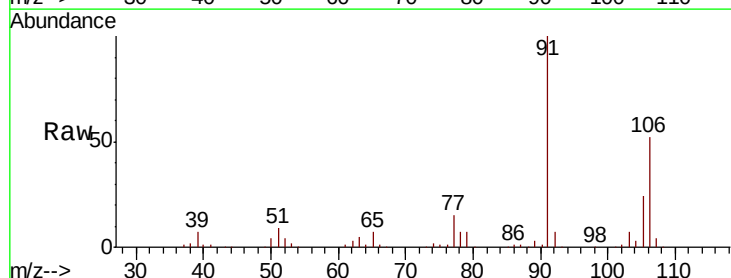
Acq: 15 Dec 2020 22:16

Tgt Ion: 106 Resp: 78927

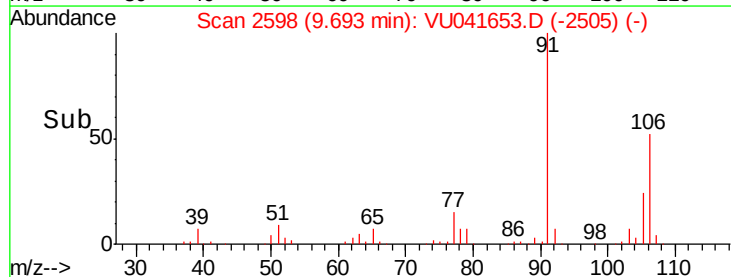
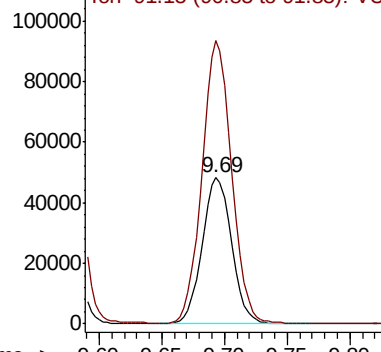
Ion Ratio Lower Upper

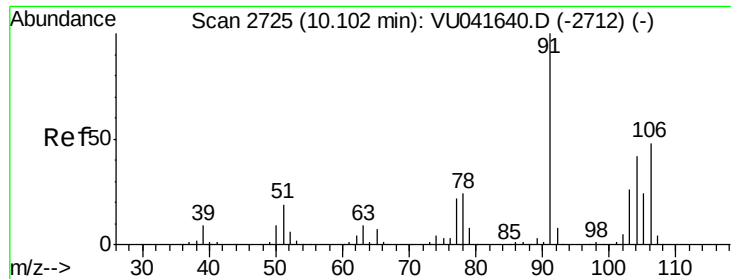
106 100

91 193.8 140.4 260.8



Abundance Ion 106.15 (105.85 to 106.85): VU041653.D (-2584) (-)

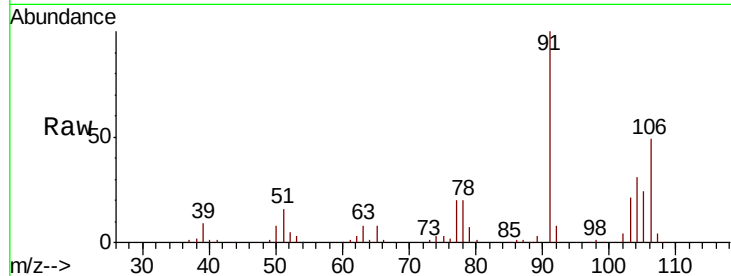




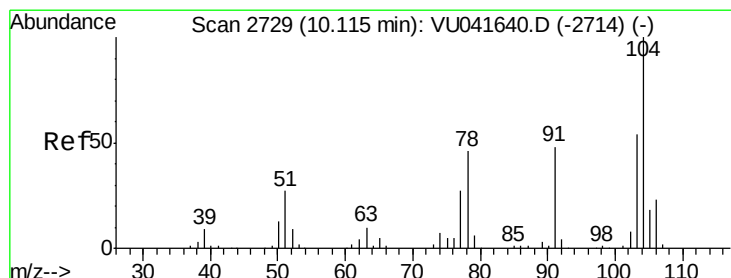
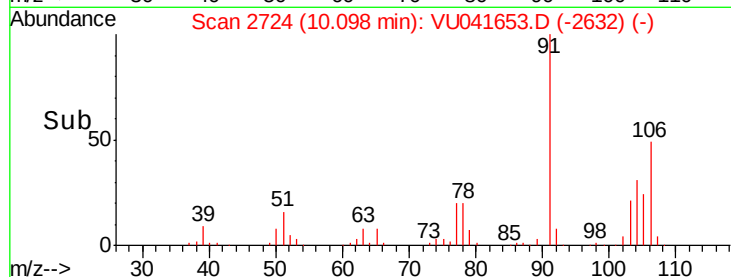
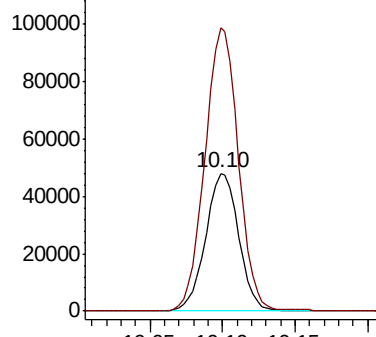
#54  
o-Xylene  
Concen: 5.079 ug/L  
RT: 10.10 min Scan# 2724  
Delta R.T. -0.00 min  
Lab File: VU041653.D  
Acq: 15 Dec 2020 22:16

Instrument :  
MSVOA\_U  
ClientSampleId :  
VHBLK01

Tot Ion:106 Resp: 76039  
Ion Ratio Lower Upper  
106 100  
91 205.6 151.3 281.1

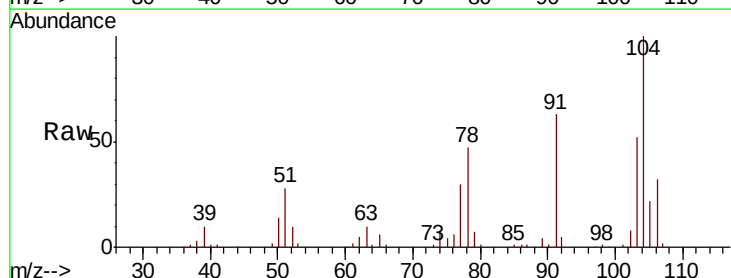


Abundance Ion 106.15 (105.85 to 106.85): V  
Ion 91.15 (90.85 to 91.85): VU0

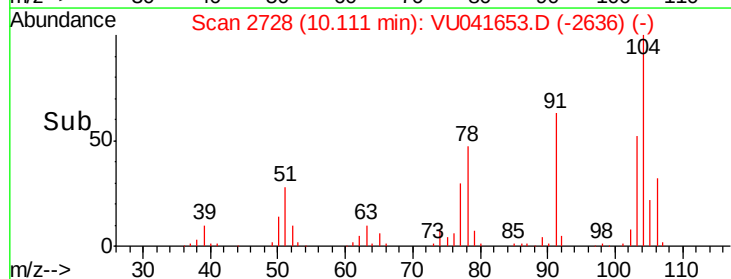
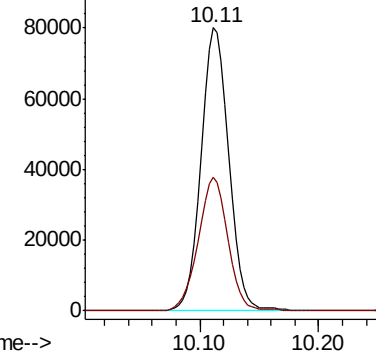


#55  
Styrene  
Concen: 5.011 ug/L  
RT: 10.11 min Scan# 2728  
Delta R.T. -0.00 min  
Lab File: VU041653.D  
Acq: 15 Dec 2020 22:16

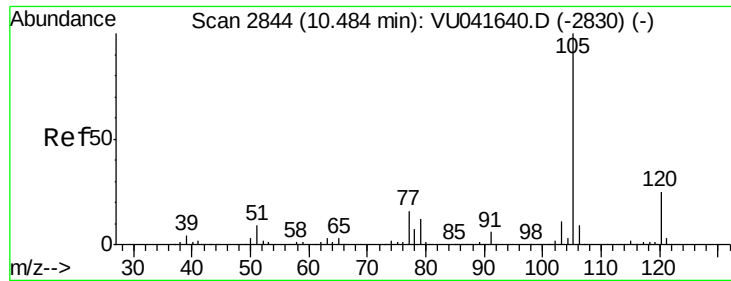
Tgt Ion:104 Resp: 129591  
Ion Ratio Lower Upper  
104 100  
78 47.4 31.1 57.9



Abundance Ion 104.10 (103.80 to 104.80): V  
Ion 78.10 (77.80 to 78.80): VU0







#56

Isopropylbenzene

Concen: 4.977 ug/L

RT: 10.48 min Scan# 2843

Delta R.T. -0.00 min

Lab File: VU041653.D

Acq: 15 Dec 2020 22:16

Instrument :

MSVOA\_U

ClientSampleId :

VHBLK01

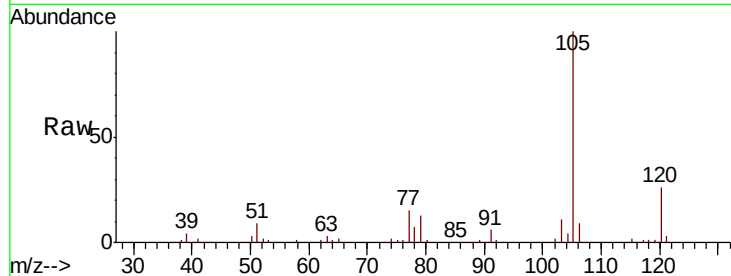
Tot Ion:105 Resp: 198293

Ion Ratio Lower Upper

105 100

120 26.1 20.5 30.7

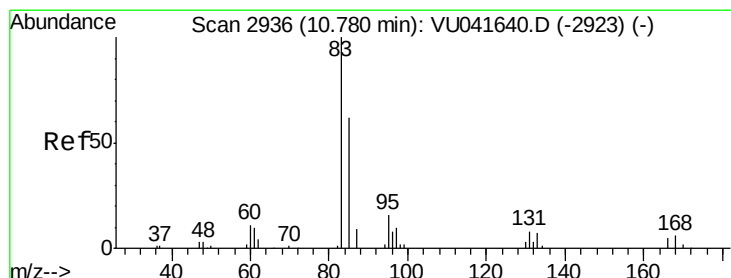
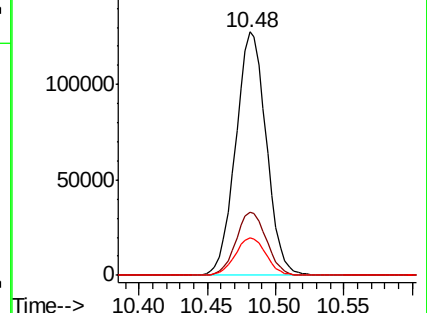
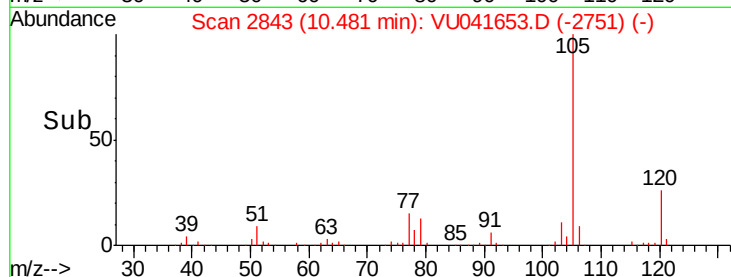
77 15.8 12.7 19.1



Abundance Ion 105.05 (104.75 to 105.75): V

Ion 120.10 (119.80 to 120.80): V

Ion 77.10 (76.80 to 77.80): V



#58

1,1,2,2-Tetrachloroethane

Concen: 5.122 ug/L

RT: 10.78 min Scan# 2936

Delta R.T. 0.00 min

Lab File: VU041653.D

Acq: 15 Dec 2020 22:16

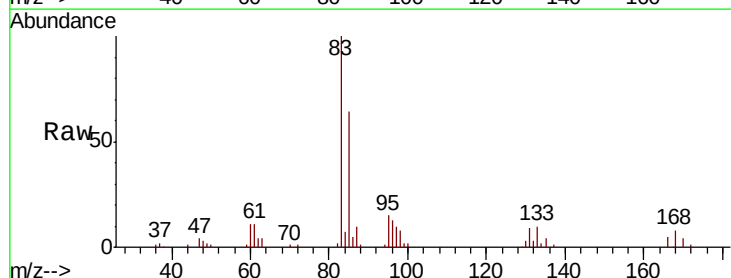
Tgt Ion: 83 Resp: 50258

Ion Ratio Lower Upper

83 100

85 64.4 46.1 85.7

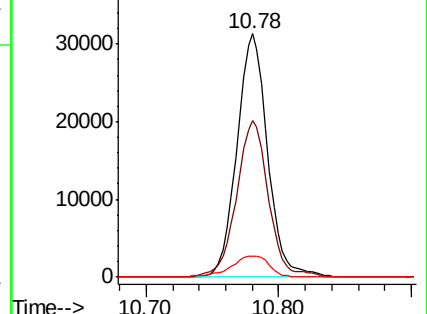
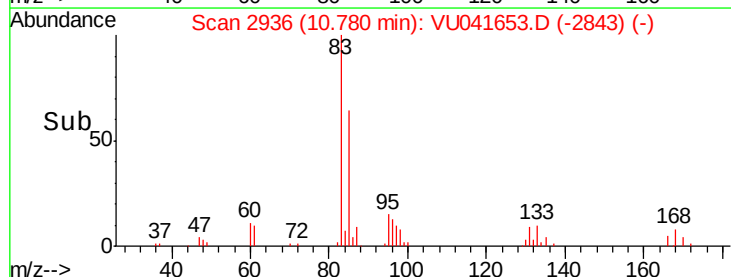
131 8.7 7.8 11.6

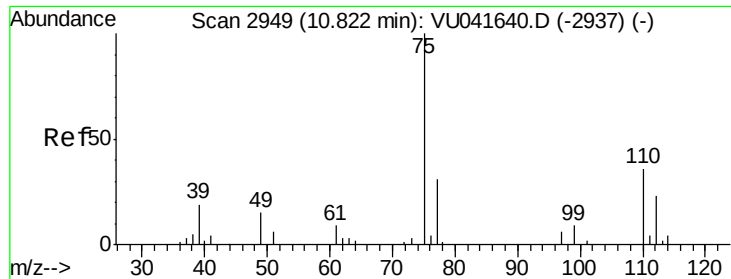


Abundance Ion 82.95 (82.65 to 83.65): V

Ion 85.00 (84.70 to 85.70): V

Ion 130.95 (130.65 to 131.65): V





#59

1,2,3-Trichloropropane

Concen: 5.208 ug/L

RT: 10.82 min Scan# 2948

Delta R.T. -0.00 min

Lab File: VU041653.D

Acq: 15 Dec 2020 22:16

Instrument :

MSVOA\_U

ClientSampleId :

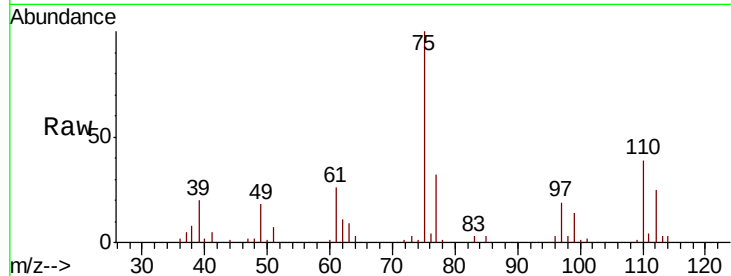
VHBLK01

Tot Ion: 75 Resp: 37291

Ion Ratio Lower Upper

75 100

77 32.9 26.2 39.2



Abundance Ion 75.00 (74.70 to 75.70): VU041640.D (-2937) (-)

Ion 77.00 (76.70 to 77.70): VU041640.D (-2937) (-)

10.82

25000

20000

15000

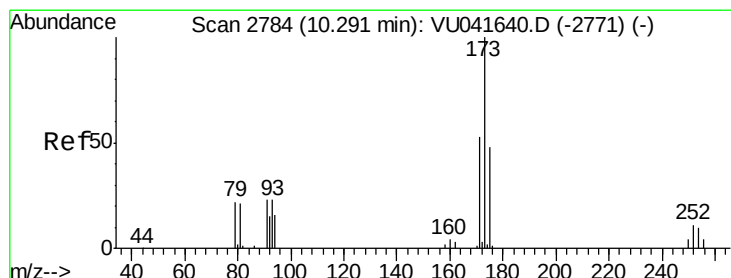
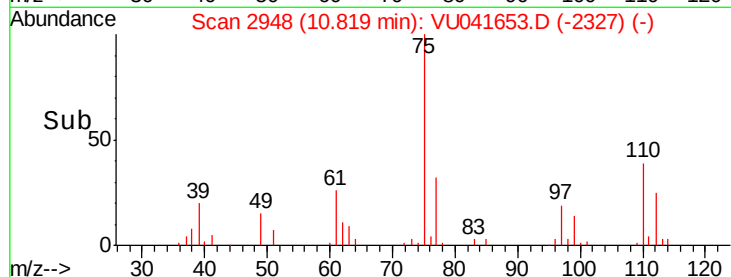
10000

5000

0

Time-->

10.75 10.80 10.85



#61

Bromoform

Concen: 5.823 ug/L

RT: 10.29 min Scan# 2784

Delta R.T. 0.00 min

Lab File: VU041653.D

Acq: 15 Dec 2020 22:16

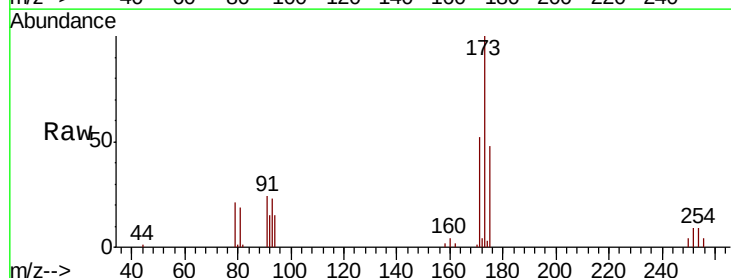
Tgt Ion: 173 Resp: 27207

Ion Ratio Lower Upper

173 100

175 48.3 37.3 55.9

254 9.8 7.4 11.2



Abundance Ion 172.90 (172.60 to 173.60): VU041640.D (-2771) (-)

Ion 174.90 (174.60 to 175.60): VU041640.D (-2771) (-)

Ion 253.75 (253.45 to 254.45): VU041640.D (-2771) (-)

10.29

20000

15000

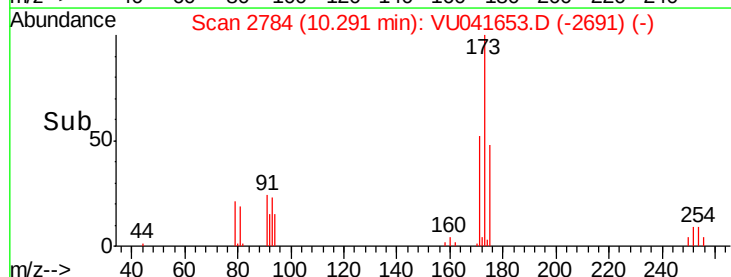
10000

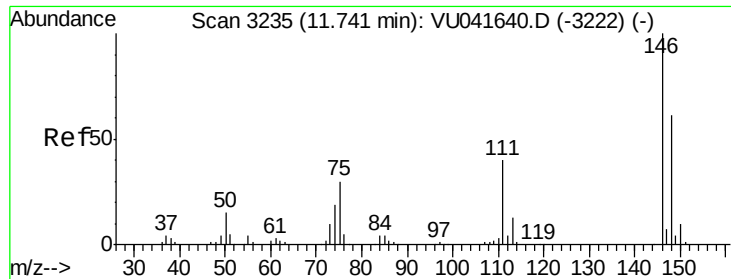
5000

0

Time-->

10.25 10.30 10.35

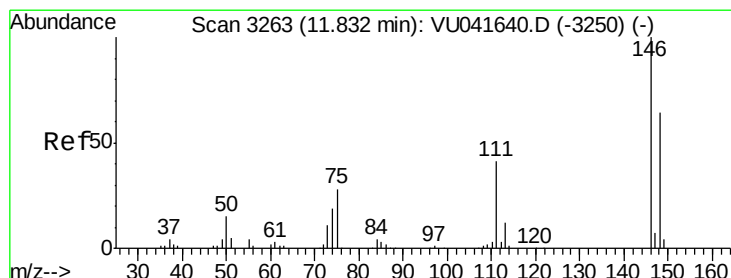
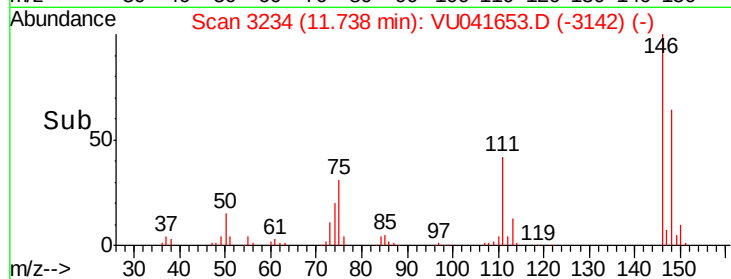
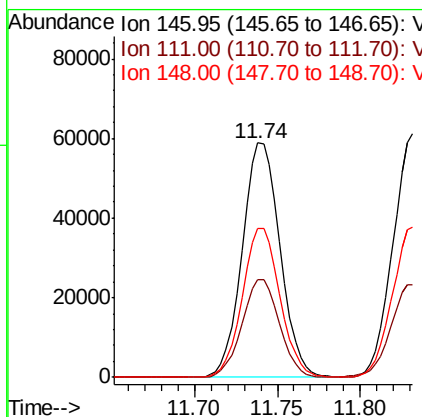
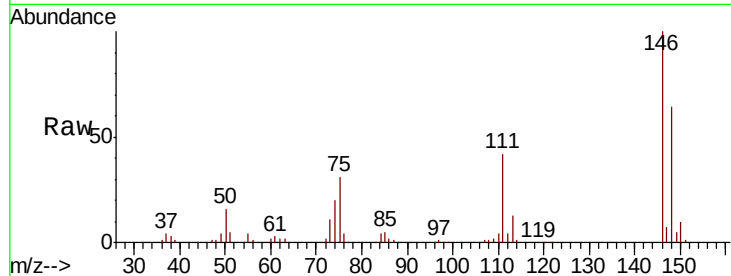




#62  
 1,3-Dichlorobenzene  
 Concen: 4.936 ug/L  
 RT: 11.74 min Scan# 3234  
 Delta R.T. -0.00 min  
 Lab File: VU041653.D  
 Acq: 15 Dec 2020 22:16

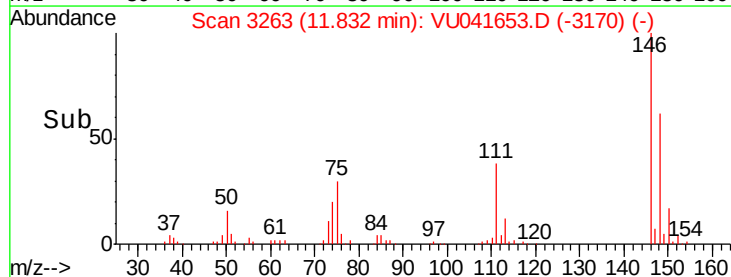
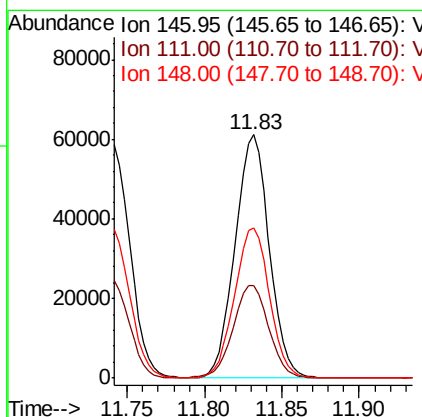
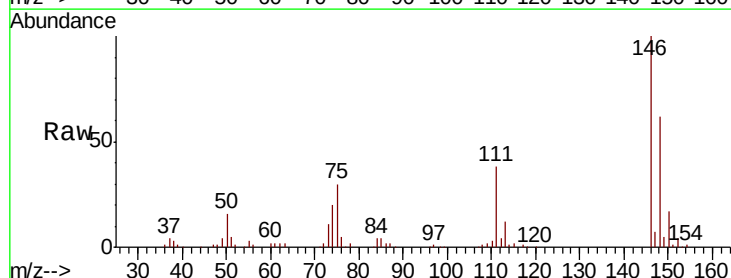
Instrument :  
 MSVOA\_U  
 ClientSampled :  
 VHBLK01

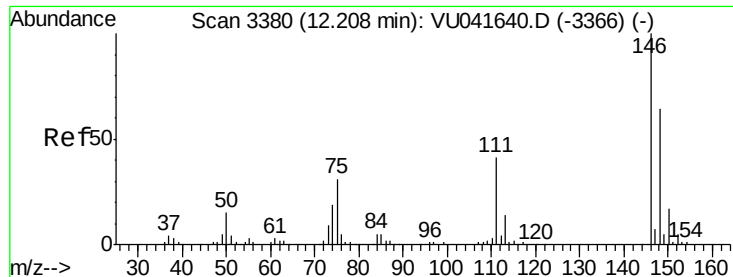
Tot Ion:146 Resp: 93304  
 Ion Ratio Lower Upper  
 146 100  
 111 41.7 30.0 55.8  
 148 63.5 44.9 83.3



#63  
 1,4-Dichlorobenzene  
 Concen: 4.940 ug/L  
 RT: 11.83 min Scan# 3263  
 Delta R.T. 0.00 min  
 Lab File: VU041653.D  
 Acq: 15 Dec 2020 22:16

Tgt Ion:146 Resp: 93894  
 Ion Ratio Lower Upper  
 146 100  
 111 37.9 27.9 51.9  
 148 61.9 45.0 83.6





#65

1,2-Dichlorobenzene

Concen: 5.266 ug/L

RT: 12.20 min Scan# 3379

Delta R.T. -0.00 min

Lab File: VU041653.D

Acq: 15 Dec 2020 22:16

Instrument :

MSVOA\_U

ClientSampleId :

VHBLK01

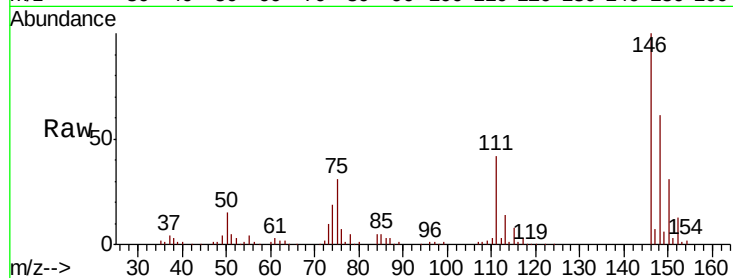
Tot Ion:146 Resp: 97481

Ion Ratio Lower Upper

146 100

111 42.1 35.0 52.6

148 61.1 51.0 76.6

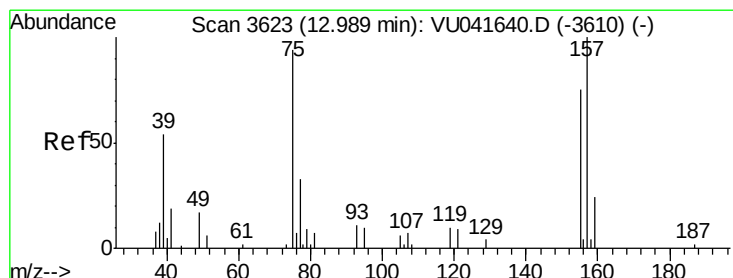
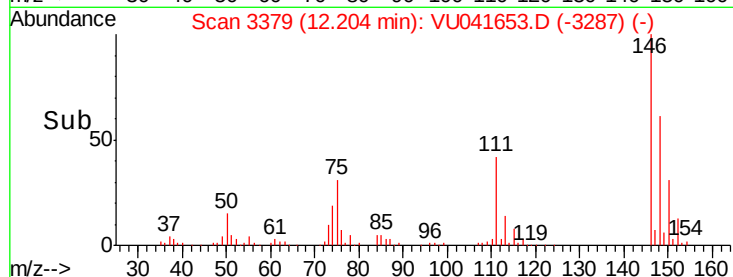
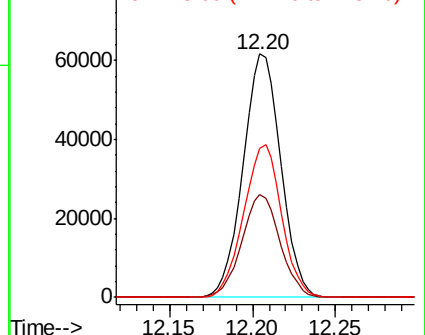


Abundance

Ion 145.95 (145.65 to 146.65): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V



#66

1,2-Dibromo-3-chloropropane

Concen: 5.372 ug/L

RT: 12.99 min Scan# 3622

Delta R.T. -0.00 min

Lab File: VU041653.D

Acq: 15 Dec 2020 22:16

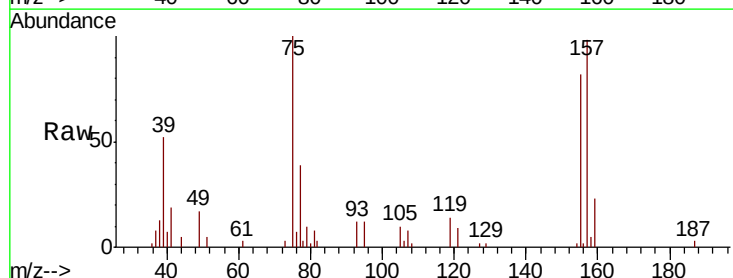
Tgt Ion: 75 Resp: 9326

Ion Ratio Lower Upper

75 100

155 82.0 57.4 86.0

157 97.8 72.4 108.6

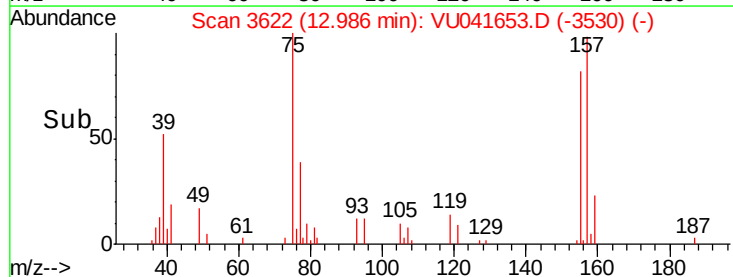
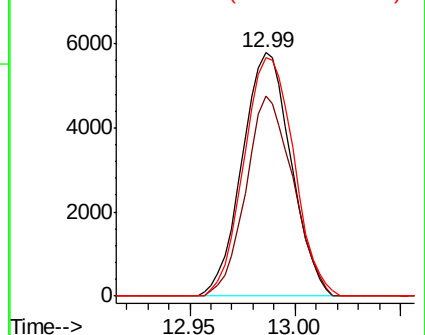


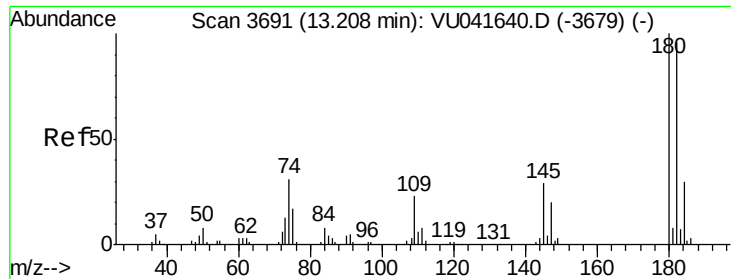
Abundance

Ion 75.05 (74.75 to 75.75): VU0

Ion 154.95 (154.65 to 155.65): V

Ion 156.90 (156.60 to 157.60): V

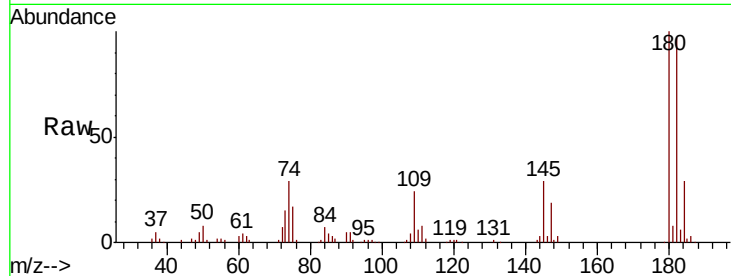




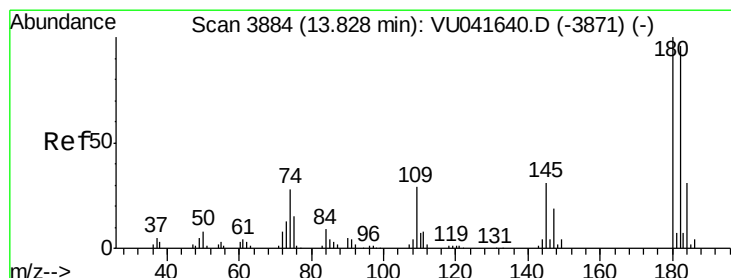
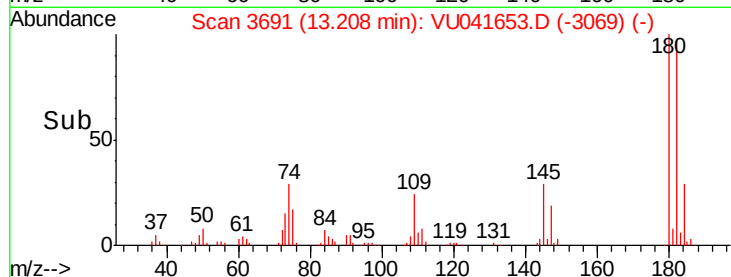
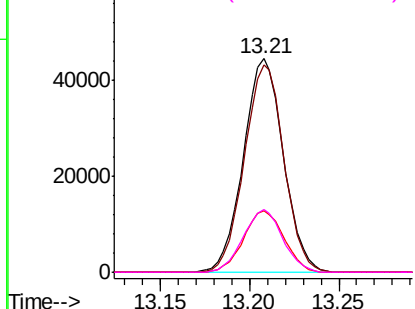
#67  
 1,3,5-Trichlorobenzene  
 Concen: 4.837 ug/L  
 RT: 13.21 min Scan# 3691  
 Delta R.T. 0.00 min  
 Lab File: VU041653.D  
 Acq: 15 Dec 2020 22:16

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VHBLK01

Tot Ion:180 Resp: 69402  
 Ion Ratio Lower Upper  
 180 100  
 182 95.8 76.3 114.5  
 184 29.1 24.1 36.1  
 145 29.2 24.1 36.1

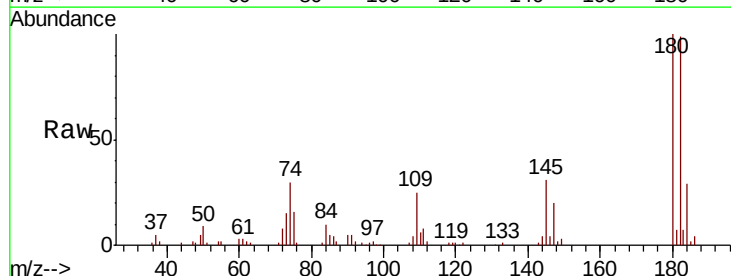


Abundance Ion 180.00 (179.70 to 180.70): V  
 Ion 182.00 (181.70 to 182.70): V  
 Ion 184.00 (183.70 to 184.70): V  
 Ion 145.00 (144.70 to 145.70): V

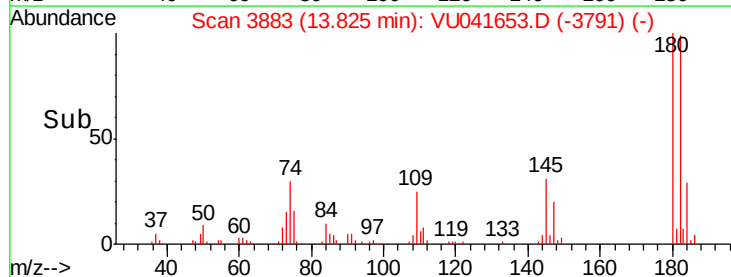
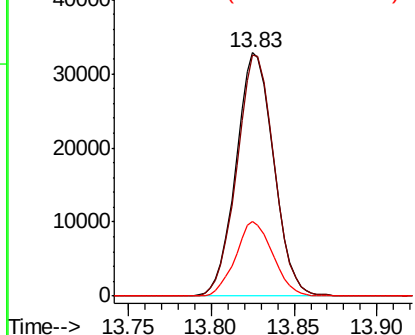


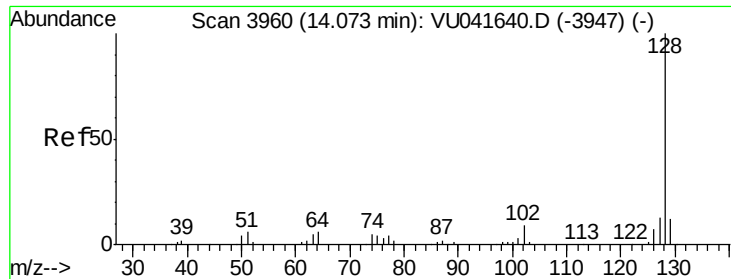
#68  
 1,2,4-trichlorobenzene  
 Concen: 4.300 ug/L  
 RT: 13.83 min Scan# 3883  
 Delta R.T. -0.00 min  
 Lab File: VU041653.D  
 Acq: 15 Dec 2020 22:16

Tgt Ion:180 Resp: 51780  
 Ion Ratio Lower Upper  
 180 100  
 182 98.2 75.4 113.0  
 145 30.4 24.5 36.7



Abundance Ion 179.90 (179.60 to 180.60): V  
 Ion 182.00 (181.70 to 182.70): V  
 Ion 144.95 (144.65 to 145.65): V





#69

Naphthalene

Concen: 4.139 ug/L

RT: 14.07 min Scan# 3960

Delta R.T. 0.00 min

Lab File: VU041653.D

Acq: 15 Dec 2020 22:16

Instrument :

MSVOA\_U

ClientSampleId :

VHBLK01

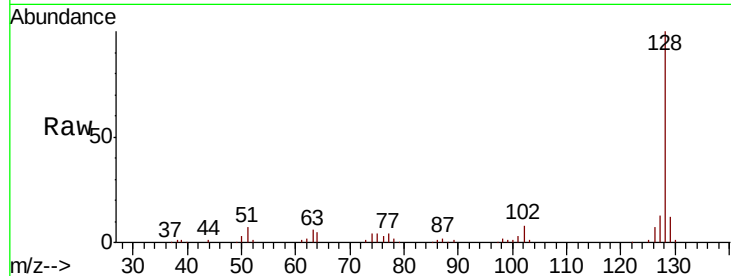
Tot Ion:128 Resp: 103174

Ion Ratio Lower Upper

128 100

129 11.3 8.7 13.1

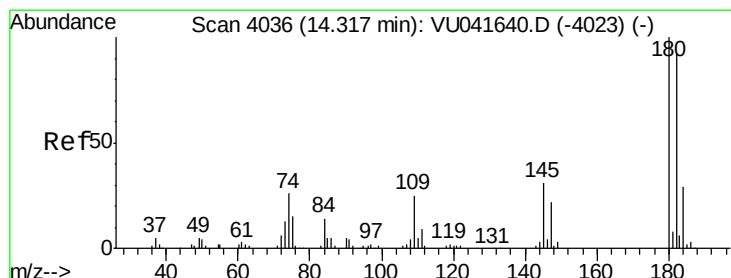
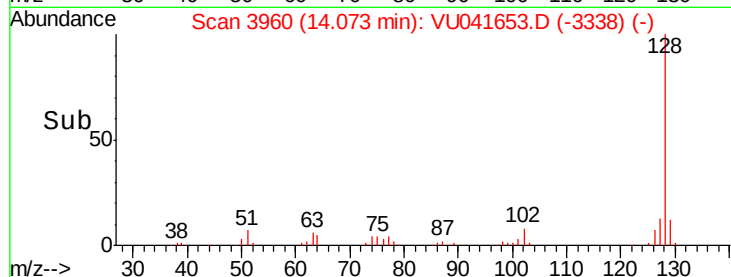
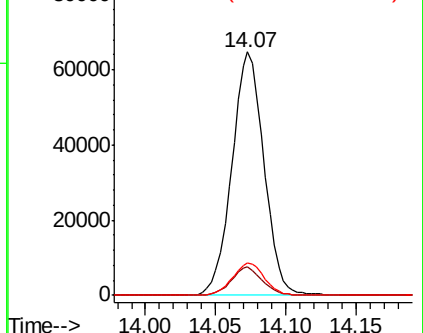
127 13.1 10.2 15.4



Abundance Ion 128.00 (127.70 to 128.70): V

Ion 129.00 (128.70 to 129.70): V

Ion 127.00 (126.70 to 127.70): V



#70

1,2,3-Trichlorobenzene

Concen: 4.434 ug/L

RT: 14.32 min Scan# 4036

Delta R.T. 0.00 min

Lab File: VU041653.D

Acq: 15 Dec 2020 22:16

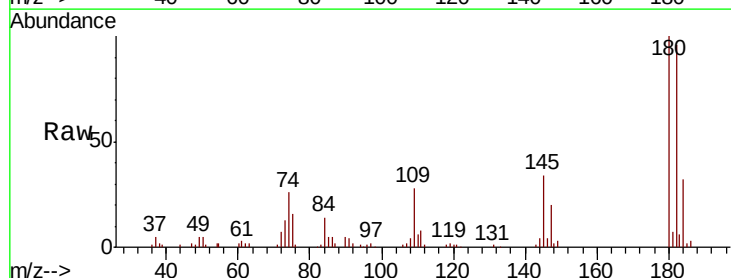
Tgt Ion:180 Resp: 50888

Ion Ratio Lower Upper

180 100

182 97.3 77.0 115.4

145 33.7 26.4 39.6



Abundance Ion 179.90 (179.60 to 180.60): V

Ion 181.90 (181.60 to 182.60): V

Ion 144.95 (144.65 to 145.65): V

