

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\U121220\  
 Data File : VU041579.D  
 Acq On : 12 Dec 2020 19:47  
 Operator : SY/MD  
 Sample : VSTDCCC005  
 Misc : 25.0mL/MSVOA U/WATER  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00512

Quant Time: Dec 13 11:21:40 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMUTR121220WMA.M  
 Quant Title : TRACE VOA SOM01.0  
 QLast Update : Sun Dec 13 11:18:43 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Difluorobenzene     | 6.26  | 114  | 164118   | 5.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 9.42  | 117  | 154942   | 5.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.81 | 152  | 87075    | 5.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |        |       |          |          |      |         |
|--------------------------------|--------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.60   | 65    | 60970    | 4.75     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 40 - 130 | Recovery | =    | 95.00%  |
| 7) Chloroethane-d5             | 1.92   | 69    | 49114    | 4.95     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 130 | Recovery | =    | 99.00%  |
| 11) 1,1-Dichloroethene-d2      | 2.58   | 63    | 113885   | 4.82     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 125 | Recovery | =    | 96.40%  |
| 20) 2-Butanone-d5              | 4.66   | 46    | 192587   | 52.25    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 40 - 130 | Recovery | =    | 104.50% |
| 24) Chloroform-d               | 5.08   | 84    | 105589   | 4.80     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 96.00%  |
| 26) 1,2-Dichloroethane-d4      | 5.72   | 65    | 57068    | 4.58     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 91.60%  |
| 32) Benzene-d6                 | 5.74   | 84    | 217586   | 4.90     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 98.00%  |
| 36) 1,2-Dichloropropane-d6     | 6.70   | 67    | 66113    | 4.75     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 140 | Recovery | =    | 95.00%  |
| 41) Toluene-d8                 | 7.91   | 98    | 201796   | 5.04     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 100.80% |
| 43) trans-1,3-Dichloropropene- | 8.19   | 79    | 30370    | 4.86     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 55 - 130 | Recovery | =    | 97.20%  |
| 46) 2-Hexanone-d5              | 8.64   | 63    | 175559   | 51.34    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 45 - 130 | Recovery | =    | 102.68% |
| 57) 1,1,2,2-Tetrachloroethane- | 10.75  | 84    | 61959    | 4.90     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 120 | Recovery | =    | 98.00%  |
| 64) 1,2-Dichlorobenzene-d4     | 12.19  | 152   | 76592    | 4.95     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 80 - 120 | Recovery | =    | 99.00%  |

## Target Compounds

|                                |      |     |        |        | Ovalue   |
|--------------------------------|------|-----|--------|--------|----------|
| 2) Dichlorodifluoromethane     | 1.39 | 85  | 69587  | 5.005  | ug/L 100 |
| 3) Chloromethane               | 1.53 | 50  | 65813  | 4.872  | ug/L 99  |
| 5) Vinyl chloride              | 1.61 | 62  | 72619  | 4.869  | ug/L 98  |
| 6) Bromomethane                | 1.87 | 94  | 46473  | 4.983  | ug/L 99  |
| 8) Chloroethane                | 1.94 | 64  | 43359  | 4.280  | ug/L 100 |
| 9) Trichlorofluoromethane      | 2.15 | 101 | 93508  | 4.953  | ug/L 97  |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.59 | 101 | 55147  | 4.884  | ug/L 99  |
| 12) 1,1-Dichloroethene         | 2.59 | 96  | 55038  | 4.944  | ug/L 94  |
| 13) Acetone                    | 2.66 | 43  | 112819 | 48.124 | ug/L 97  |
| 14) Carbon disulfide           | 2.81 | 76  | 190014 | 4.939  | ug/L 100 |
| 15) Methyl Acetate             | 2.97 | 43  | 30275  | 4.967  | ug/L 98  |
| 16) Methylene chloride         | 3.06 | 84  | 62011  | 4.664  | ug/L 97  |
| 17) Methyl tert-butyl Ether    | 3.38 | 73  | 153384 | 5.163  | ug/L 99  |
| 18) trans-1,2-Dichloroethene   | 3.37 | 96  | 58260  | 5.059  | ug/L 100 |
| 19) 1,1-Dichloroethane         | 3.89 | 63  | 106240 | 4.936  | ug/L 98  |
| 21) 2-Butanone                 | 4.74 | 43  | 212543 | 55.661 | ug/L 98  |
| 22) cis-1,2-Dichloroethene     | 4.69 | 96  | 61534  | 4.835  | ug/L 99  |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU121220\  
 Data File : VU041579.D  
 Acq On : 12 Dec 2020 19:47  
 Operator : SY/MD  
 Sample : VSTDCCC005  
 Misc : 25.0mL/MSVOA U/WATER  
 ALS Vial : 9 Sample Multiplier: 1

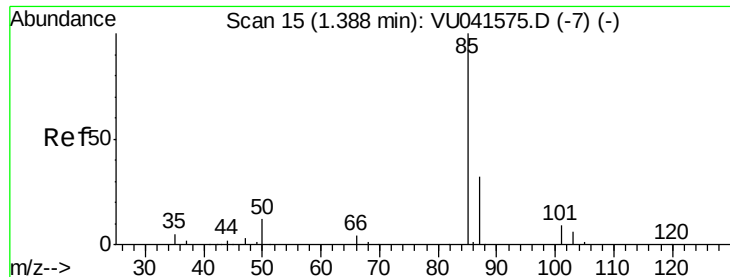
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00512

Quant Time: Dec 13 11:21:40 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMUTR121220WMA.M  
 Quant Title : TRACE VOA SOM01.0  
 QLast Update : Sun Dec 13 11:18:43 2020  
 Response via : Initial Calibration

| Internal Standards              | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|---------------------------------|-------|------|----------|--------|-------|----------|
| 23) Bromochloromethane          | 5.00  | 128  | 29651    | 5.072  | ug/L  | 95       |
| 25) Chloroform                  | 5.11  | 83   | 105865   | 4.884  | ug/L  | 98       |
| 27) 1,2-Dichloroethane          | 5.81  | 62   | 72748    | 4.956  | ug/L  | 98       |
| 29) 1,1,1-Trichloroethane       | 5.33  | 97   | 88789    | 4.990  | ug/L  | 100      |
| 30) Cyclohexane                 | 5.40  | 56   | 101708   | 5.100  | ug/L  | 99       |
| 31) Carbon tetrachloride        | 5.54  | 117  | 77643    | 5.046  | ug/L  | 97       |
| 33) Benzene                     | 5.79  | 78   | 247438   | 4.993  | ug/L  | 100      |
| 34) Trichloroethene             | 6.55  | 95   | 62790    | 5.043  | ug/L  | 99       |
| 35) Methylcyclohexane           | 6.77  | 83   | 103371   | 5.136  | ug/L  | 99       |
| 37) 1,2-Dichloropropane         | 6.80  | 63   | 64873    | 5.118  | ug/L  | 99       |
| 38) Bromodichloromethane        | 7.11  | 83   | 79871    | 5.065  | ug/L  | 99       |
| 39) cis-1,3-Dichloropropene     | 7.61  | 75   | 95291    | 5.074  | ug/L  | 99       |
| 40) 4-Methyl-2-pentanone        | 7.80  | 43   | 474627   | 52.625 | ug/L  | 100      |
| 42) Toluene                     | 7.98  | 91   | 261862   | 5.119  | ug/L  | 98       |
| 44) trans-1,3-Dichloropropene   | 8.21  | 75   | 86741    | 5.165  | ug/L  | 95       |
| 45) 1,1,2-Trichloroethane       | 8.40  | 97   | 49855    | 5.319  | ug/L  | 98       |
| 47) Tetrachloroethene           | 8.56  | 164  | 45470    | 5.216  | ug/L  | 97       |
| 48) 2-Hexanone                  | 8.69  | 43   | 353446   | 53.848 | ug/L  | 100      |
| 49) Dibromochloromethane        | 8.82  | 129  | 54086    | 5.023  | ug/L  | 98       |
| 50) 1,2-Dibromoethane           | 8.93  | 107  | 47591    | 5.133  | ug/L  | 100      |
| 51) Chlorobenzene               | 9.45  | 112  | 168629   | 5.303  | ug/L  | 96       |
| 52) Ethylbenzene                | 9.57  | 91   | 279526   | 5.131  | ug/L  | 98       |
| 53) m,p-Xylene                  | 9.69  | 106  | 110267   | 5.427  | ug/L  | 98       |
| 54) o-Xylene                    | 10.10 | 106  | 105736   | 5.313  | ug/L  | 94       |
| 55) Styrene                     | 10.11 | 104  | 182894   | 5.320  | ug/L  | 99       |
| 56) Isopropylbenzene            | 10.48 | 105  | 279775   | 5.282  | ug/L  | 98       |
| 58) 1,1,1,2,2-Tetrachloroethane | 10.78 | 83   | 67395    | 5.167  | ug/L  | 98       |
| 59) 1,2,3-Trichloropropane      | 10.82 | 75   | 47966    | 5.039  | ug/L  | 98       |
| 61) Bromoform                   | 10.29 | 173  | 34817    | 5.289  | ug/L  | 96       |
| 62) 1,3-Dichlorobenzene         | 11.74 | 146  | 136391   | 5.122  | ug/L  | 98       |
| 63) 1,4-Dichlorobenzene         | 11.83 | 146  | 138042   | 5.155  | ug/L  | 98       |
| 65) 1,2-Dichlorobenzene         | 12.21 | 146  | 134499   | 5.158  | ug/L  | 98       |
| 66) 1,2-Dibromo-3-chloropropan  | 12.99 | 75   | 12000    | 4.907  | ug/L  | 85       |
| 67) 1,3,5-Trichlorobenzene      | 13.21 | 180  | 107834   | 5.334  | ug/L  | 100      |
| 68) 1,2,4-trichlorobenzene      | 13.83 | 180  | 89840    | 5.296  | ug/L  | 99       |
| 69) Naphthalene                 | 14.07 | 128  | 184111   | 5.243  | ug/L  | 99       |
| 70) 1,2,3-Trichlorobenzene      | 14.32 | 180  | 81373    | 5.033  | ug/L  | 98       |

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





#2

Dichlorodifluoromethane

Concen: 5.005 ug/L

RT: 1.39 min Scan# 15

Delta R.T. -0.00 min

Lab File: VU041579.D

Acq: 12 Dec 2020 19:47

Instrument :

MSVOA\_U

ClientSampleId :

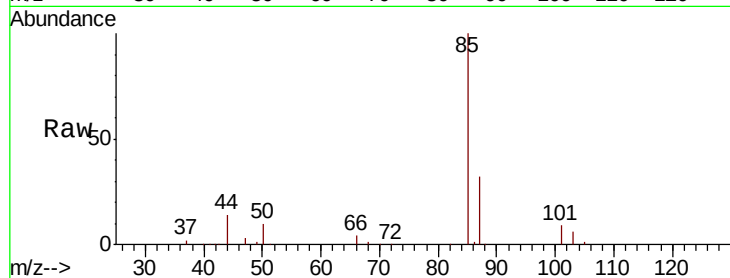
VSTD00512

Tot Ion: 85 Resp: 69587

Ion Ratio Lower Upper

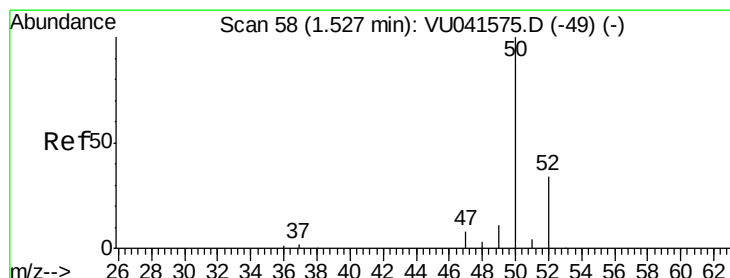
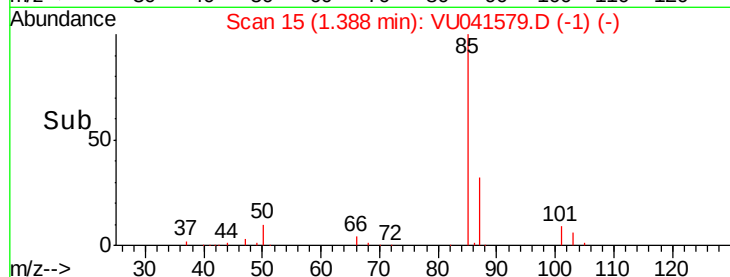
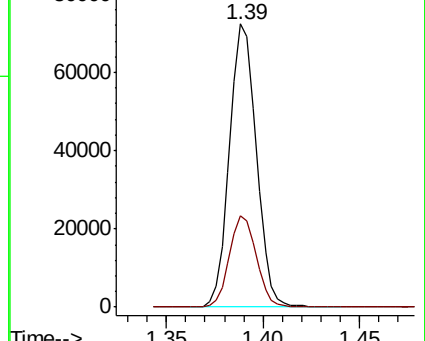
85 100

87 32.2 25.8 38.6



Abundance Ion 85.00 (84.70 to 85.70): VU041579.D (-7) (-)

Ion 87.00 (86.70 to 87.70): VU041579.D (-7) (-)



#3

Chloromethane

Concen: 4.872 ug/L

RT: 1.53 min Scan# 58

Delta R.T. -0.00 min

Lab File: VU041579.D

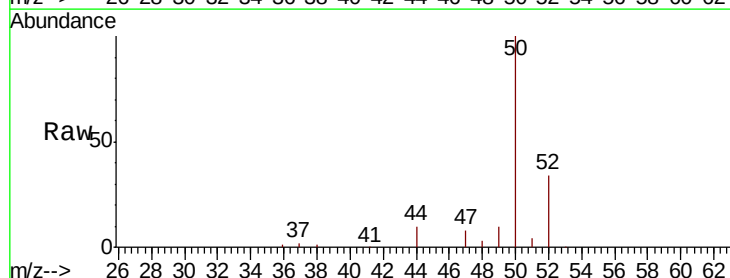
Acq: 12 Dec 2020 19:47

Tgt Ion: 50 Resp: 65813

Ion Ratio Lower Upper

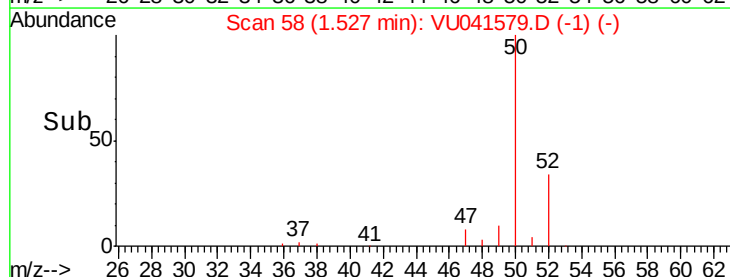
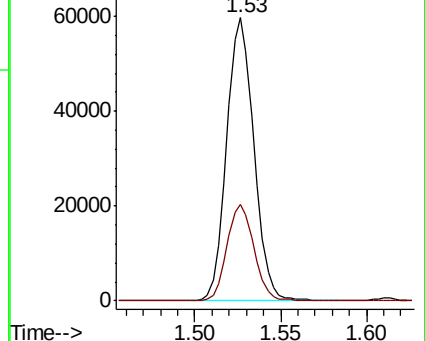
50 100

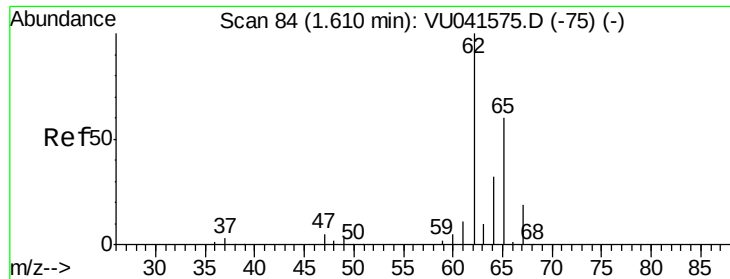
52 34.0 24.1 44.8



Abundance Ion 50.05 (49.75 to 50.75): VU041579.D (-49) (-)

Ion 52.05 (51.75 to 52.75): VU041579.D (-49) (-)





#5

Vinyl chloride

Concen: 4.869 ug/L

RT: 1.61 min Scan# 84

Delta R.T. -0.00 min

Lab File: VU041579.D

Acq: 12 Dec 2020 19:47

Instrument :

MSVOA\_U

ClientSampleId :

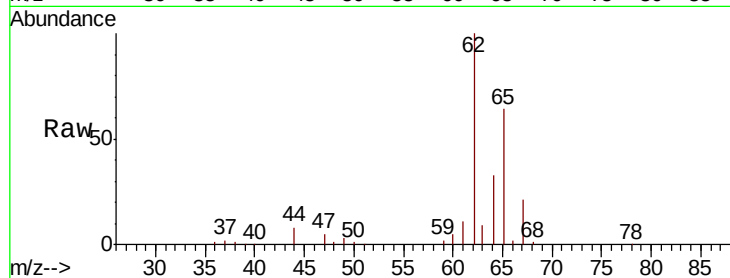
VSTD00512

Tot Ion: 62 Resp: 72619

Ion Ratio Lower Upper

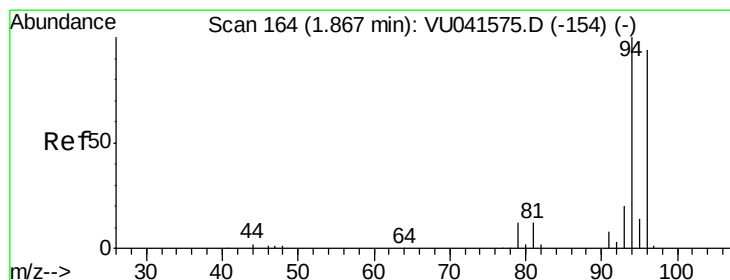
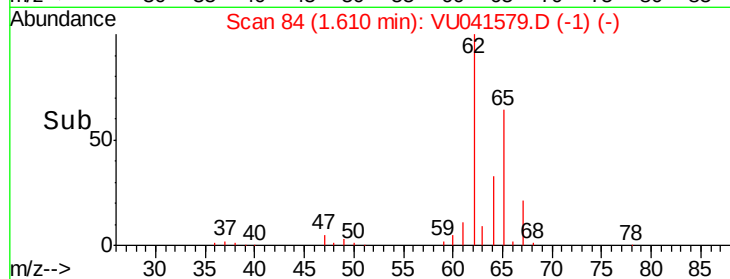
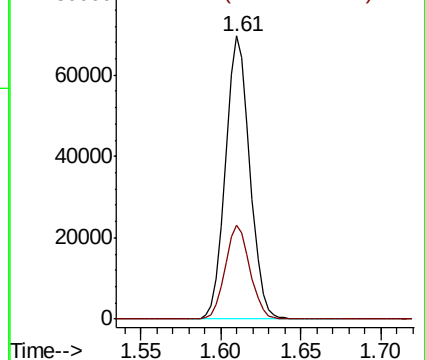
62 100

64 33.1 22.5 41.7



Abundance Ion 62.00 (61.70 to 62.70): VU0

Ion 64.10 (63.80 to 64.80): VU0



#6

Bromomethane

Concen: 4.983 ug/L

RT: 1.87 min Scan# 164

Delta R.T. -0.00 min

Lab File: VU041579.D

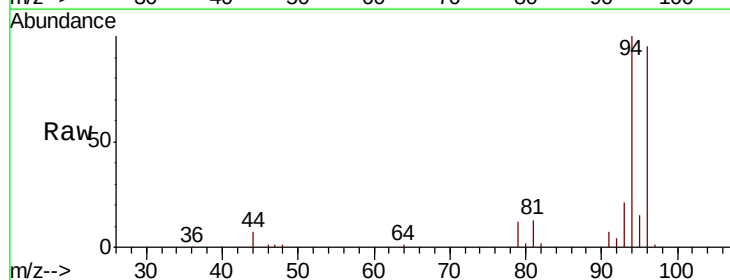
Acq: 12 Dec 2020 19:47

Tgt Ion: 94 Resp: 46473

Ion Ratio Lower Upper

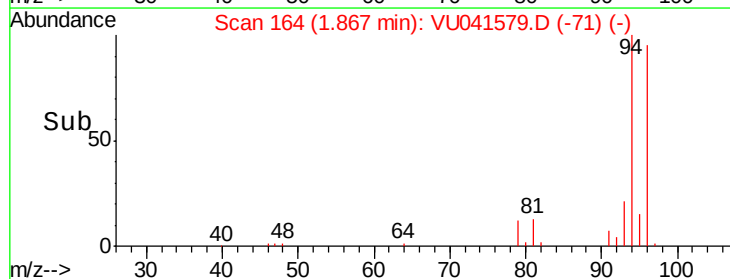
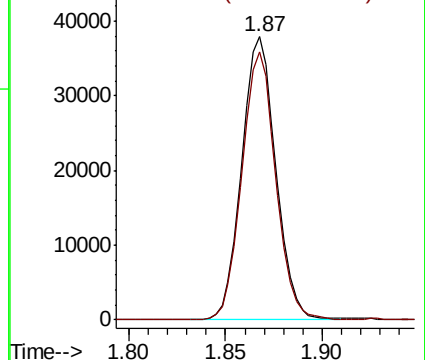
94 100

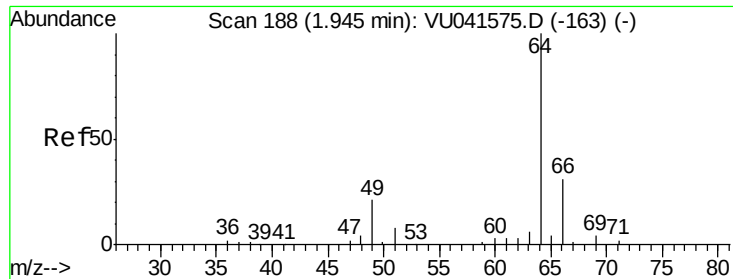
96 94.5 65.7 121.9



Abundance Ion 94.00 (93.70 to 94.70): VU0

Ion 96.00 (95.70 to 96.70): VU0





#8

Chloroethane

Concen: 4.280 ug/L

RT: 1.94 min Scan# 188

Delta R.T. -0.00 min

Lab File: VU041579.D

Acq: 12 Dec 2020 19:47

Instrument :

MSVOA\_U

ClientSampleId :

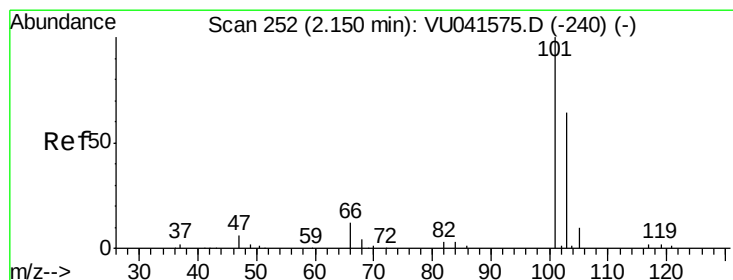
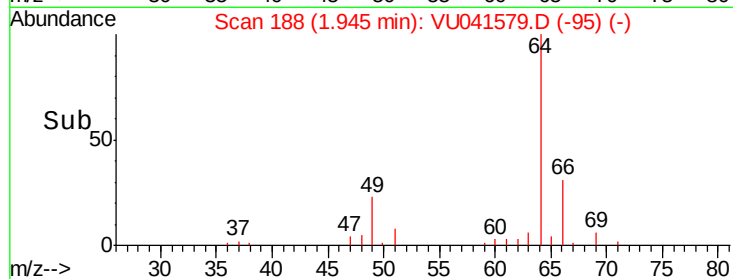
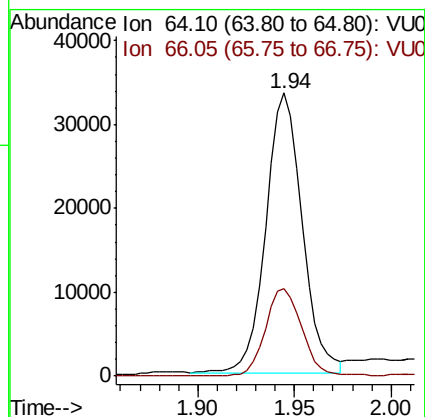
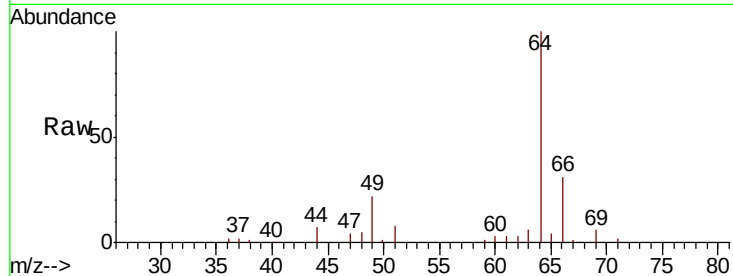
VSTD00512

Tot Ion: 64 Resp: 43359

Ion Ratio Lower Upper

64 100

66 30.9 21.6 40.0



#9

Trichlorofluoromethane

Concen: 4.953 ug/L

RT: 2.15 min Scan# 252

Delta R.T. -0.00 min

Lab File: VU041579.D

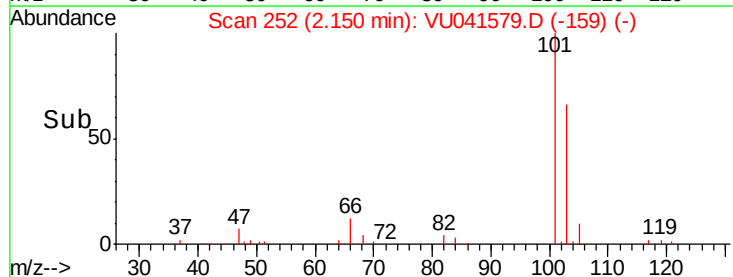
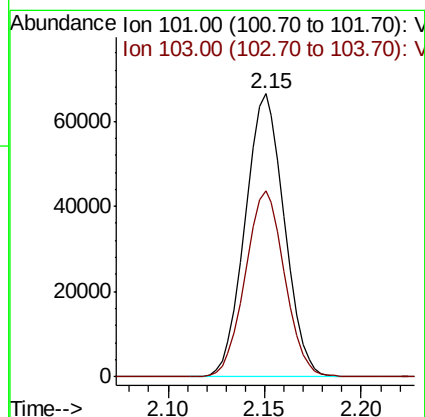
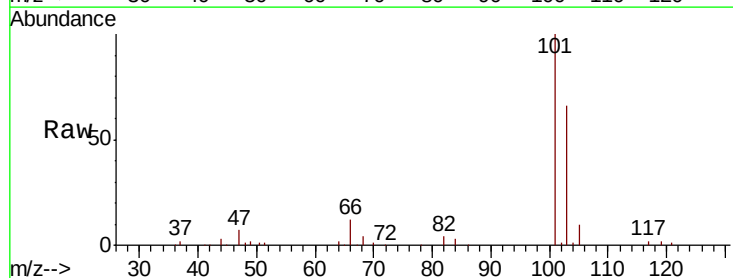
Acq: 12 Dec 2020 19:47

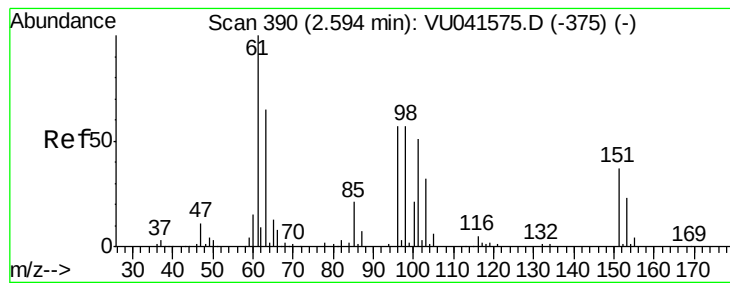
Tgt Ion: 101 Resp: 93508

Ion Ratio Lower Upper

101 100

103 66.3 51.1 76.7





#10

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

Concen: 4.884 ug/L

RT: 2.59 min Scan# 390

Delta R.T. -0.00 min

Lab File: VU041579.D

Acq: 12 Dec 2020 19:47

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00512

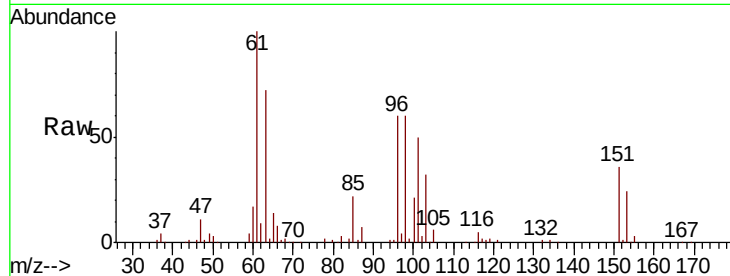
Tot Ion:101 Resp: 55147

Ion Ratio Lower Upper

101 100

85 42.2 33.6 50.4

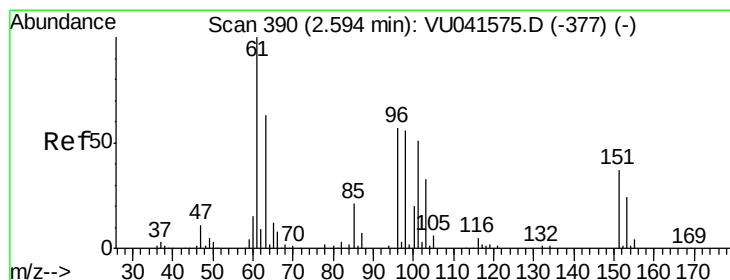
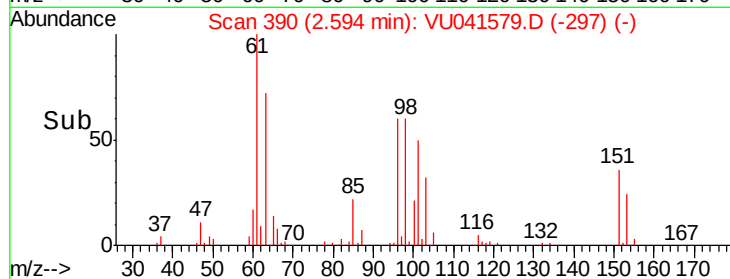
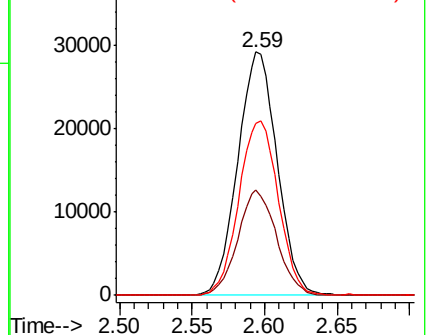
151 71.6 56.2 84.4



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 85.00 (84.70 to 85.70): VU0

Ion 151.00 (150.70 to 151.70): V



#12

1,1-Dichloroethene

Concen: 4.944 ug/L

RT: 2.59 min Scan# 390

Delta R.T. -0.00 min

Lab File: VU041579.D

Acq: 12 Dec 2020 19:47

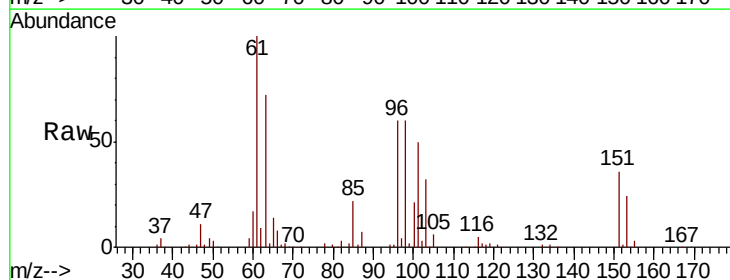
Tgt Ion: 96 Resp: 55038

Ion Ratio Lower Upper

96 100

61 167.8 123.8 230.0

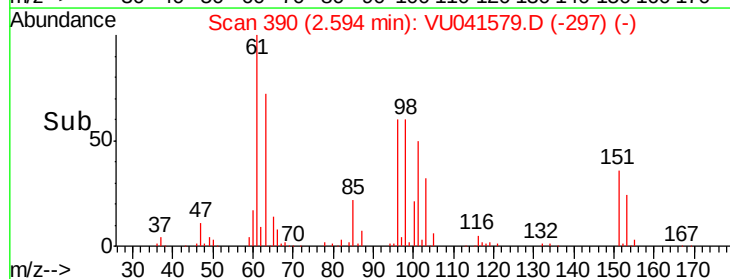
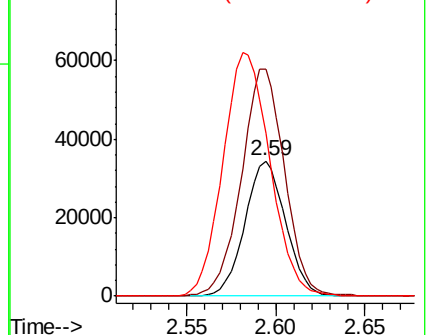
63 120.0 81.0 150.4

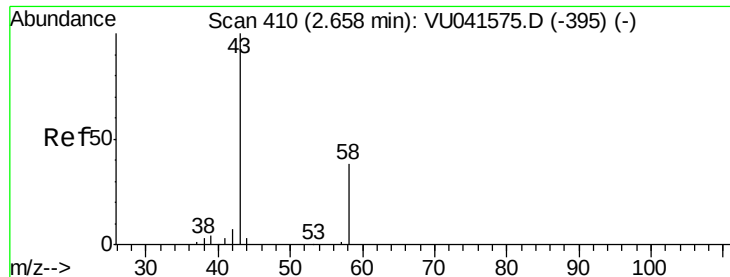


Abundance Ion 96.00 (95.70 to 96.70): VU0

Ion 61.05 (60.75 to 61.75): VU0

Ion 63.00 (62.70 to 63.70): VU0





#13

Acetone

Concen: 48.124 ug/L

RT: 2.66 min Scan# 412

Delta R.T. 0.01 min

Lab File: VU041579.D

Acq: 12 Dec 2020 19:47

Instrument :

MSVOA\_U

ClientSampleId :

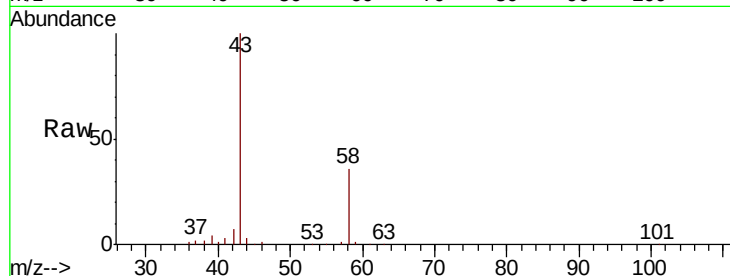
VSTD00512

Tot Ion: 43 Resp: 112819

Ion Ratio Lower Upper

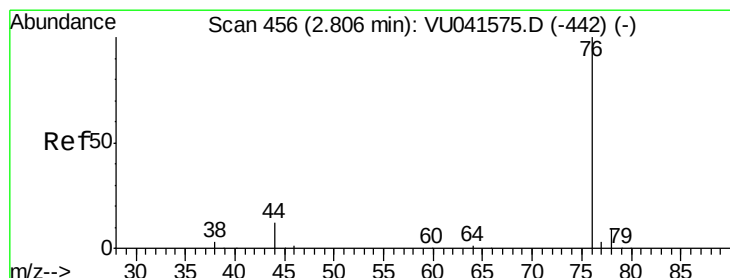
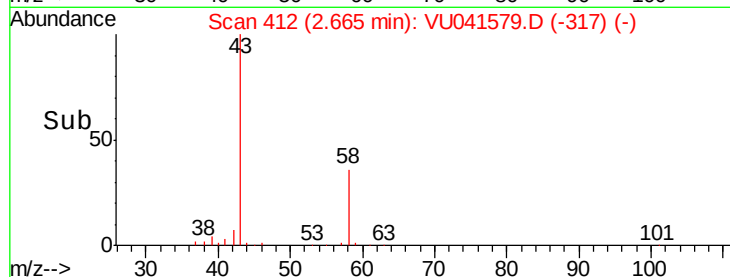
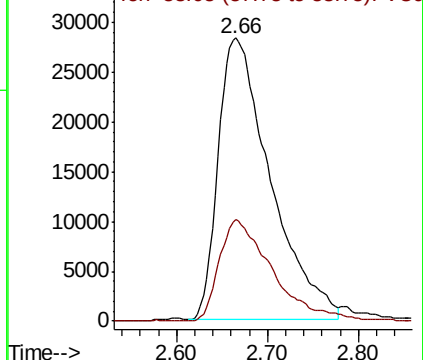
43 100

58 34.8 0.0 73.2



Abundance Ion 43.05 (42.75 to 43.75): VU041579.D (-317) (-)

Ion 58.05 (57.75 to 58.75): VU041579.D (-317) (-)



#14

Carbon disulfide

Concen: 4.939 ug/L

RT: 2.81 min Scan# 456

Delta R.T. -0.00 min

Lab File: VU041579.D

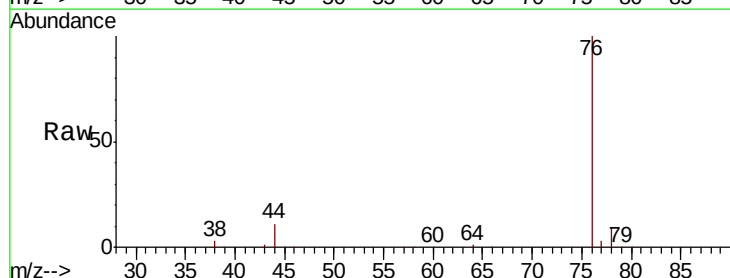
Acq: 12 Dec 2020 19:47

Tgt Ion: 76 Resp: 190014

Ion Ratio Lower Upper

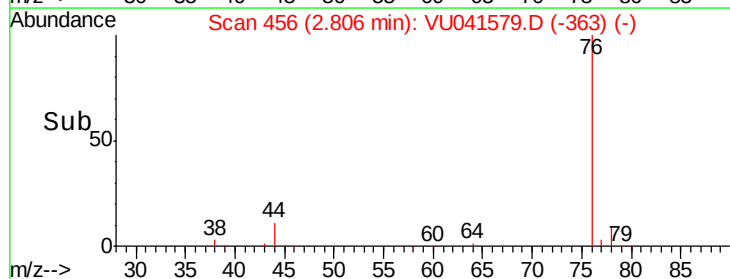
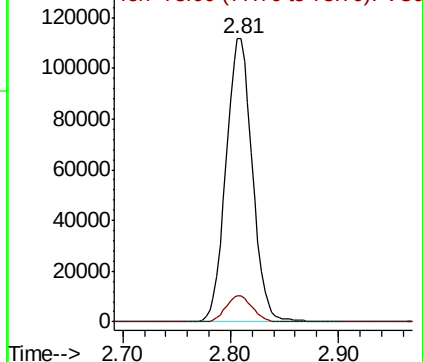
76 100

78 9.4 7.4 11.2

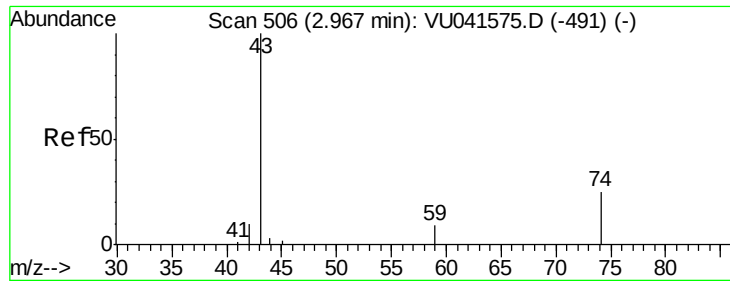


Abundance Ion 76.05 (75.75 to 76.75): VU041579.D (-363) (-)

Ion 78.00 (77.70 to 78.70): VU041579.D (-363) (-)



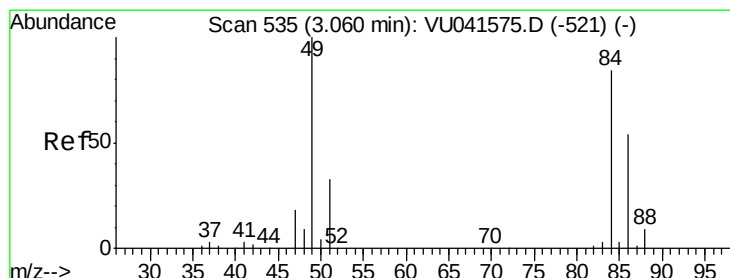
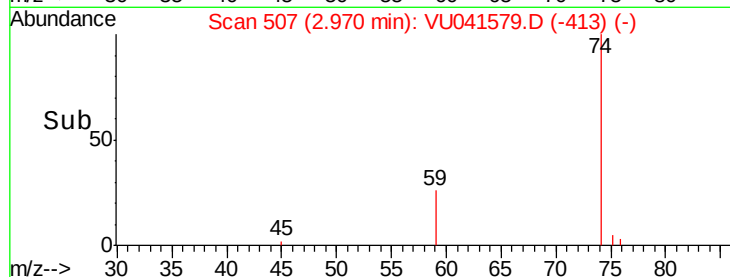
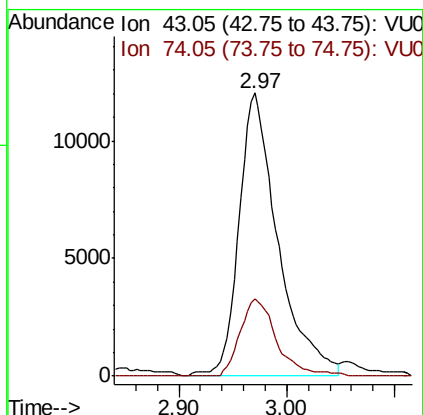
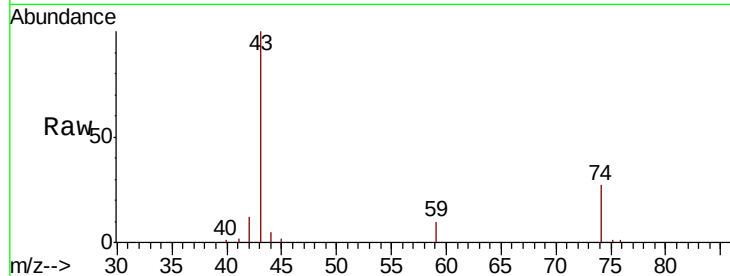




#15  
Methyl Acetate  
Concen: 4.967 ug/L  
RT: 2.97 min Scan# 507  
Delta R.T. 0.00 min  
Lab File: VU041579.D  
Acq: 12 Dec 2020 19:47

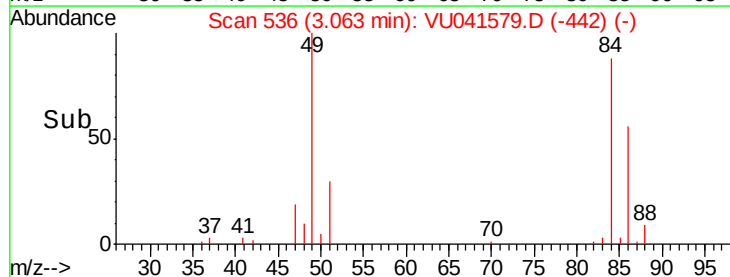
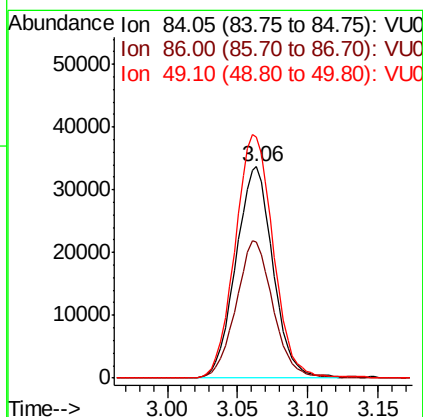
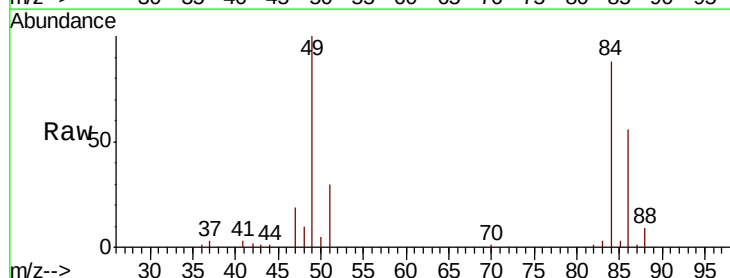
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00512

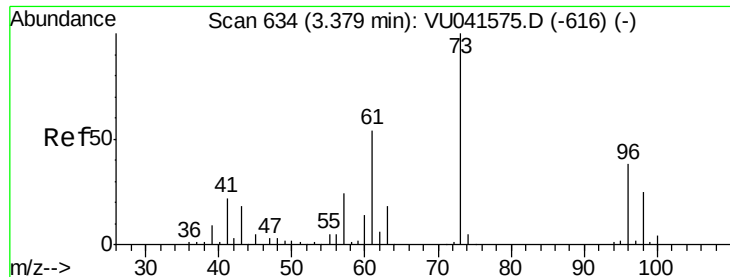
Tot Ion: 43 Resp: 30275  
Ion Ratio Lower Upper  
43 100  
74 24.9 19.2 28.8



#16  
Methylene chloride  
Concen: 4.664 ug/L  
RT: 3.06 min Scan# 536  
Delta R.T. 0.00 min  
Lab File: VU041579.D  
Acq: 12 Dec 2020 19:47

Tgt Ion: 84 Resp: 62011  
Ion Ratio Lower Upper  
84 100  
86 64.2 45.1 83.7  
49 114.0 83.1 154.3

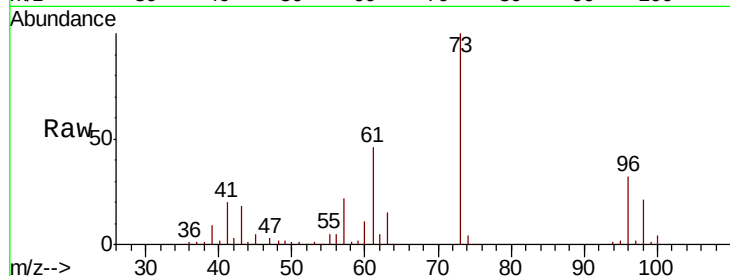




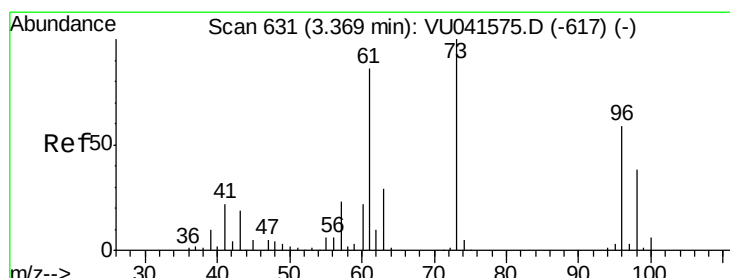
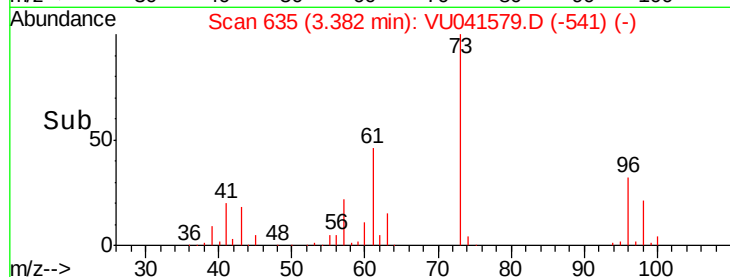
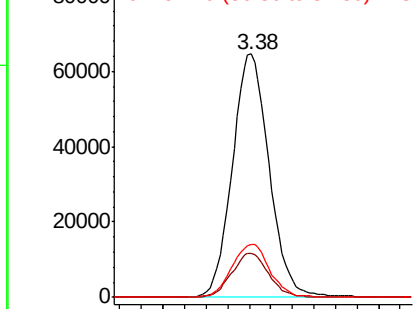
#17  
Methyl tert-butyl Ether  
Concen: 5.163 ug/L  
RT: 3.38 min Scan# 635  
Delta R.T. 0.00 min  
Lab File: VU041579.D  
Acq: 12 Dec 2020 19:47

Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00512

Tot Ion: 73 Resp: 153384  
Ion Ratio Lower Upper  
73 100  
43 18.1 14.7 22.1  
57 22.4 18.2 27.4

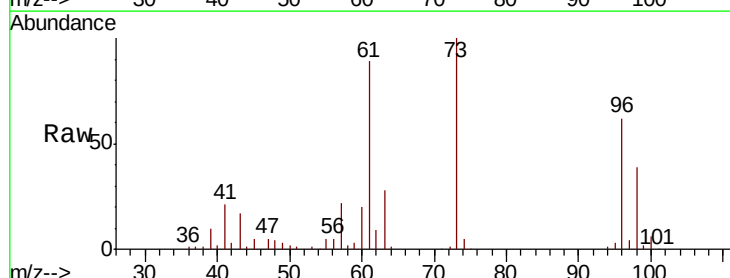


Abundance Ion 73.10 (72.80 to 73.80): VU0  
Ion 43.05 (42.75 to 43.75): VU0  
Ion 57.10 (56.80 to 57.80): VU0

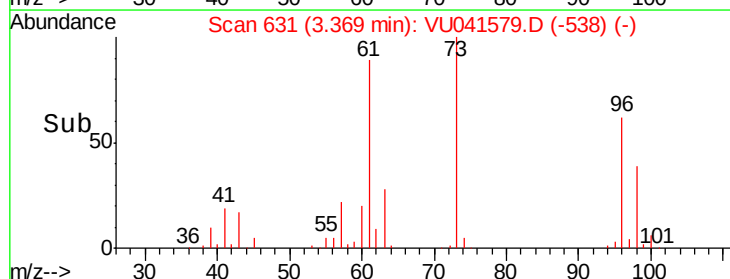
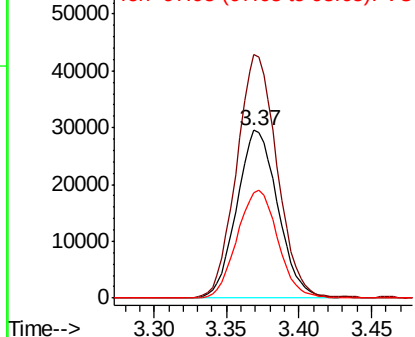


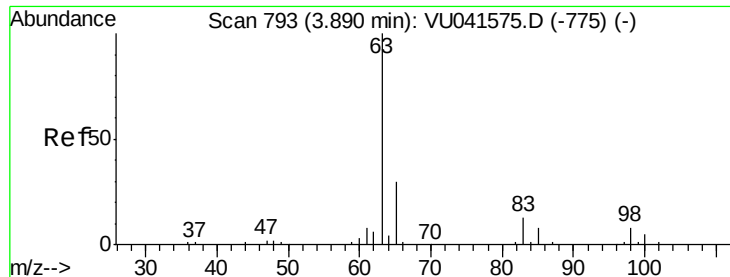
#18  
trans-1,2-Dichloroethene  
Concen: 5.059 ug/L  
RT: 3.37 min Scan# 631  
Delta R.T. -0.00 min  
Lab File: VU041579.D  
Acq: 12 Dec 2020 19:47

Tgt Ion: 96 Resp: 58260  
Ion Ratio Lower Upper  
96 100  
61 145.1 101.8 189.0  
98 62.8 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

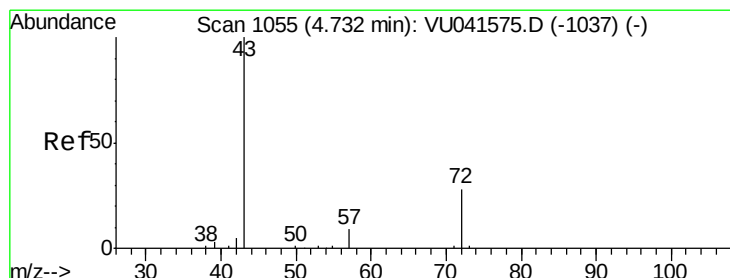
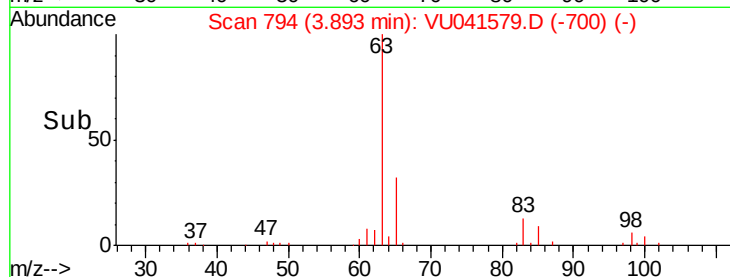
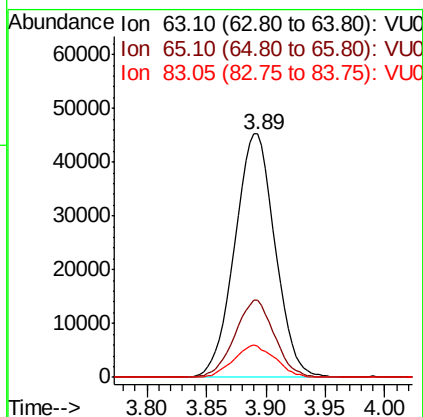
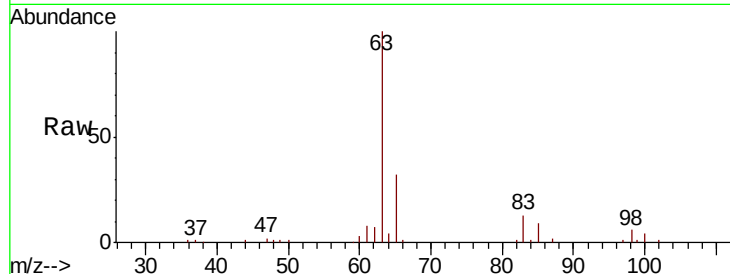




#19  
 1,1-Dichloroethane  
 Concen: 4.936 ug/L  
 RT: 3.89 min Scan# 794  
 Delta R.T. 0.00 min  
 Lab File: VU041579.D  
 Acq: 12 Dec 2020 19:47

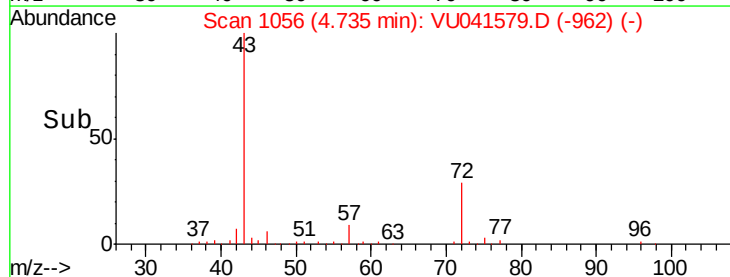
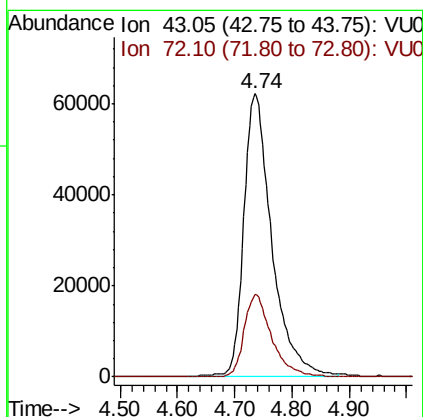
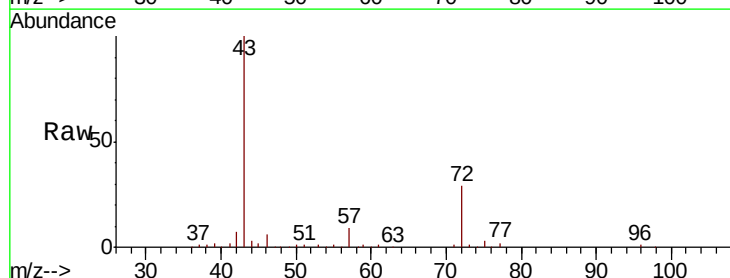
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00512

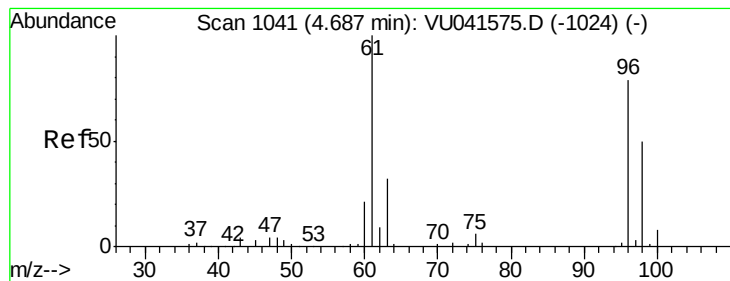
Tot Ion: 63 Resp: 106240  
 Ion Ratio Lower Upper  
 63 100  
 65 31.7 21.3 39.6  
 83 12.8 9.3 17.3



#21  
 2-Butanone  
 Concen: 55.661 ug/L  
 RT: 4.74 min Scan# 1056  
 Delta R.T. 0.00 min  
 Lab File: VU041579.D  
 Acq: 12 Dec 2020 19:47

Tgt Ion: 43 Resp: 212543  
 Ion Ratio Lower Upper  
 43 100  
 72 28.4 14.6 44.0





#22

cis-1,2-Dichloroethene

Concen: 4.835 ug/L

RT: 4.69 min Scan# 1041

Delta R.T. -0.00 min

Lab File: VU041579.D

Acq: 12 Dec 2020 19:47

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00512

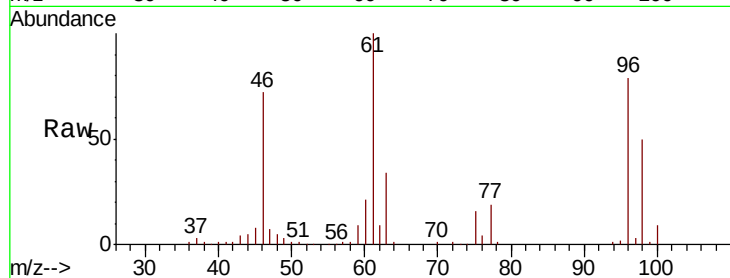
Tot Ion: 96 Resp: 61534

Ion Ratio Lower Upper

96 100

61 126.2 88.8 165.0

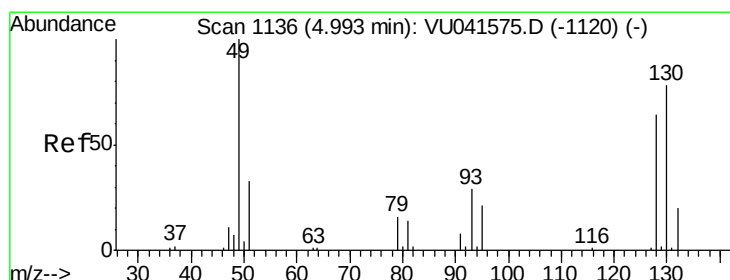
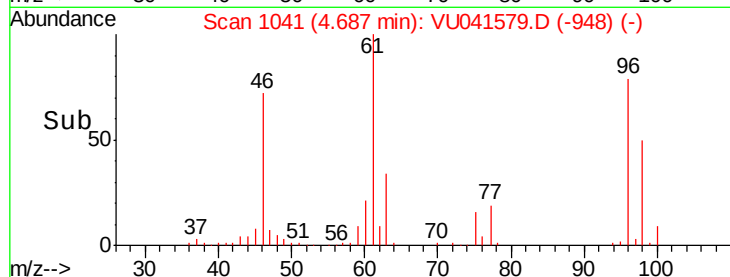
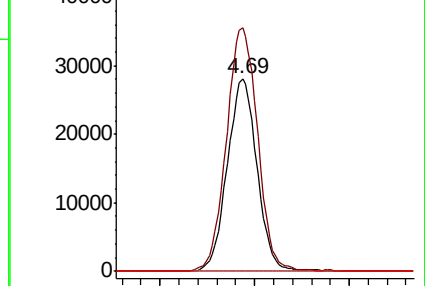
68 0.0 0.0 0.0



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: 5.072 ug/L

RT: 5.00 min Scan# 1137

Delta R.T. 0.00 min

Lab File: VU041579.D

Acq: 12 Dec 2020 19:47

Tgt Ion: 128 Resp: 29651

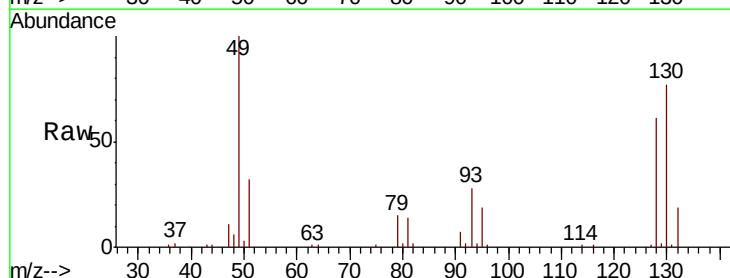
Ion Ratio Lower Upper

128 100

49 164.5 109.3 203.1

130 126.8 84.8 157.6

51 53.0 40.6 61.0

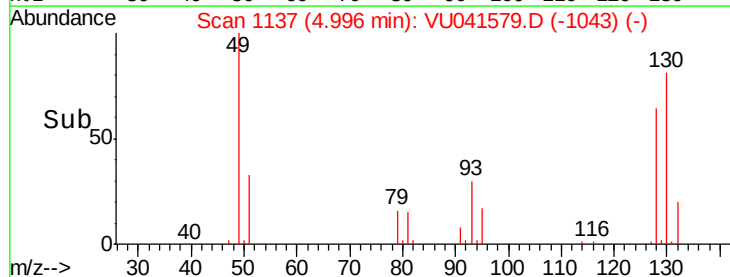
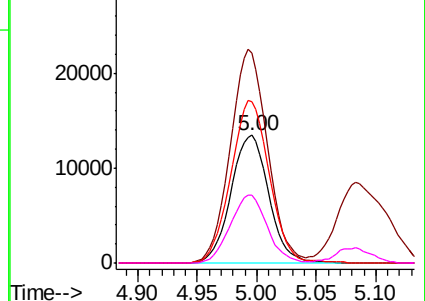


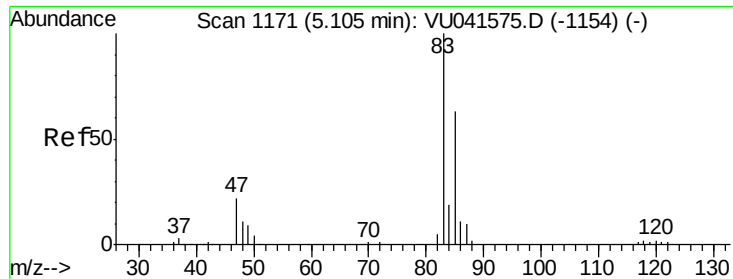
Abundance Ion 127.90 (127.60 to 128.60): V

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

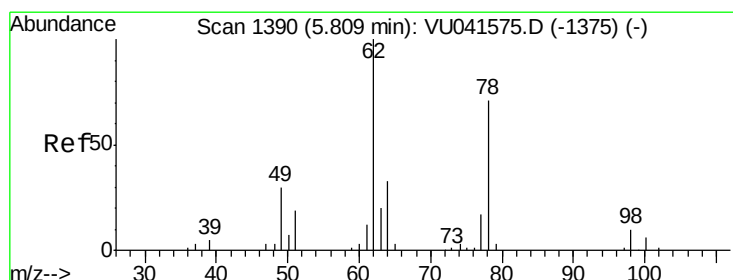
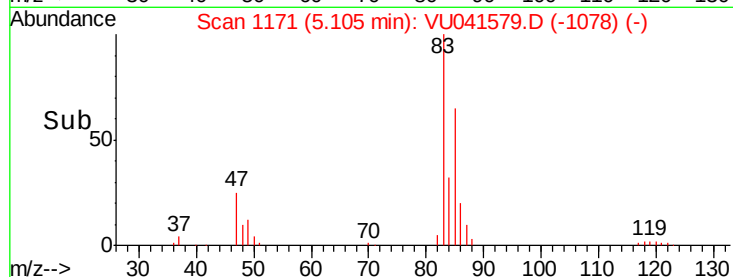
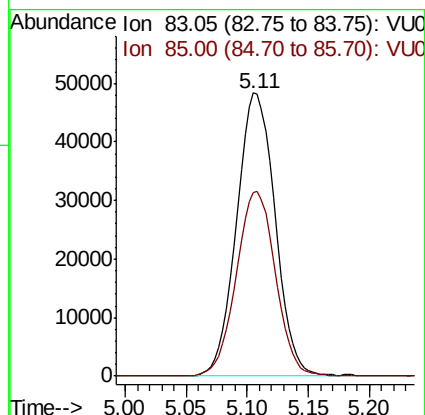
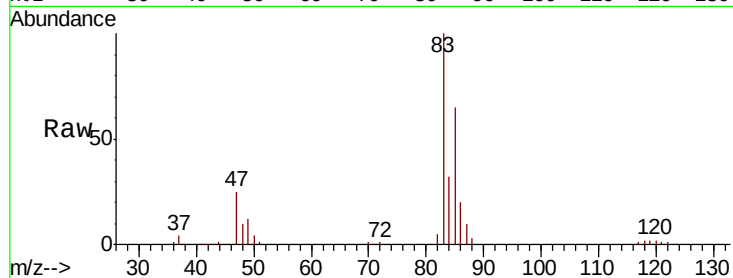




#25  
Chloroform  
Concen: 4.884 ug/L  
RT: 5.11 min Scan# 1171  
Delta R.T. -0.00 min  
Lab File: VU041579.D  
Acq: 12 Dec 2020 19:47

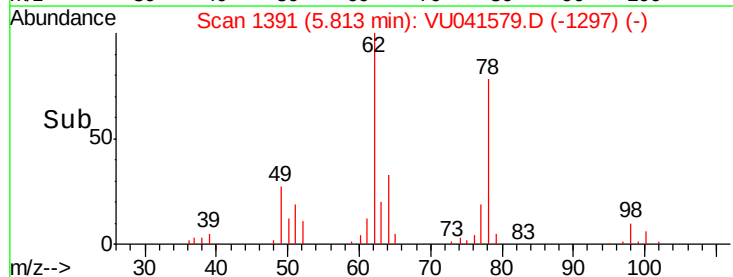
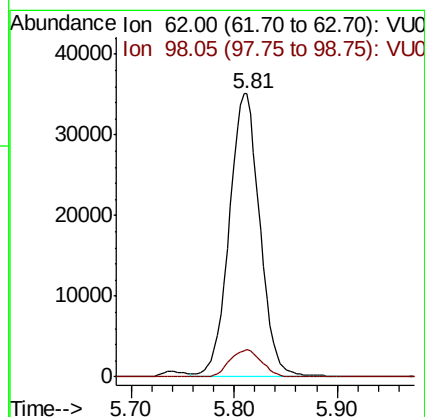
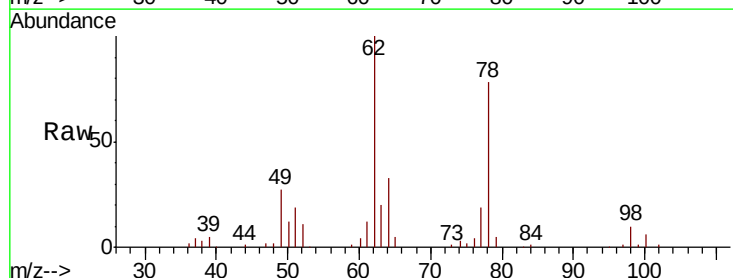
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00512

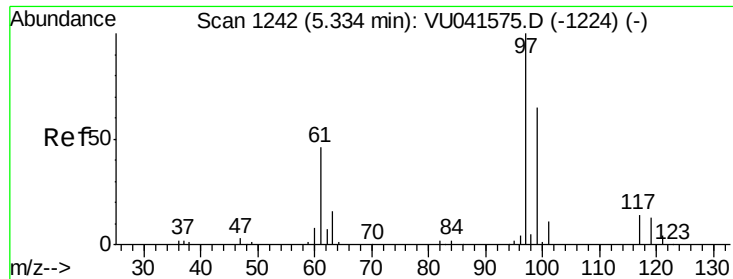
Tot Ion: 83 Resp: 105865  
Ion Ratio Lower Upper  
83 100  
85 65.0 44.2 82.0



#27  
1,2-Dichloroethane  
Concen: 4.956 ug/L  
RT: 5.81 min Scan# 1391  
Delta R.T. 0.00 min  
Lab File: VU041579.D  
Acq: 12 Dec 2020 19:47

Tgt Ion: 62 Resp: 72748  
Ion Ratio Lower Upper  
62 100  
98 9.5 8.2 12.2

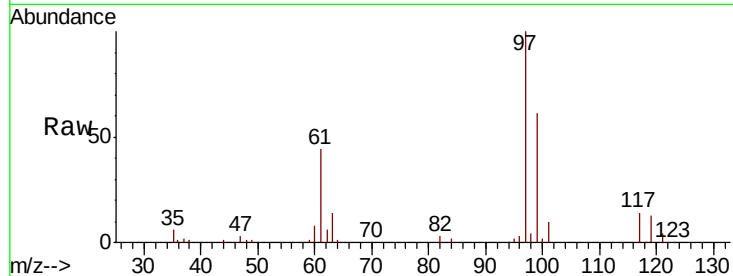




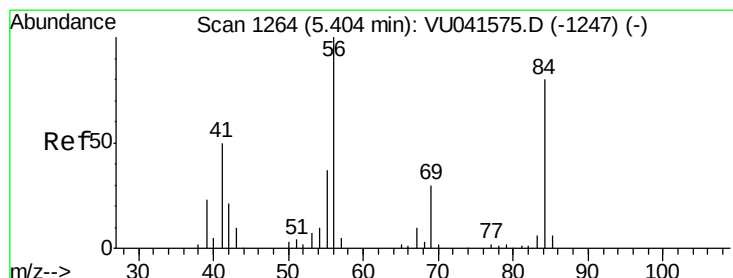
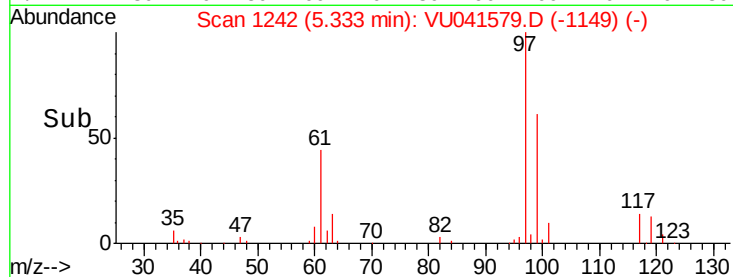
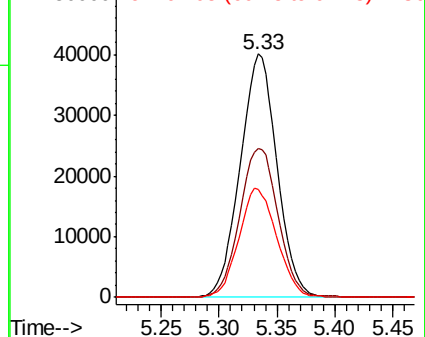
#29  
1,1,1-Trichloroethane  
Concen: 4.990 ug/L  
RT: 5.33 min Scan# 1242  
Delta R.T. -0.00 min  
Lab File: VU041579.D  
Acq: 12 Dec 2020 19:47

Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00512

Tot Ion: 97 Resp: 88789  
Ion Ratio Lower Upper  
97 100  
99 63.8 51.3 76.9  
61 45.9 36.5 54.7

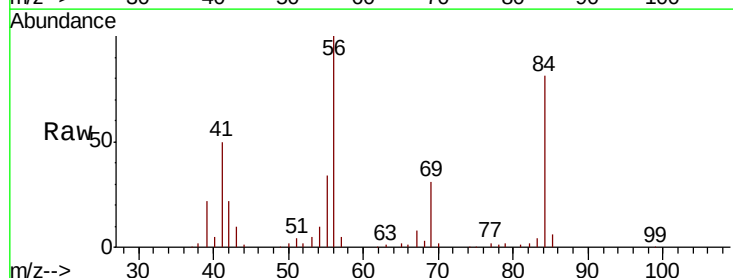


Abundance Ion 96.95 (96.65 to 97.65): VU0  
Ion 99.05 (98.75 to 99.75): VU0  
Ion 61.05 (60.75 to 61.75): VU0

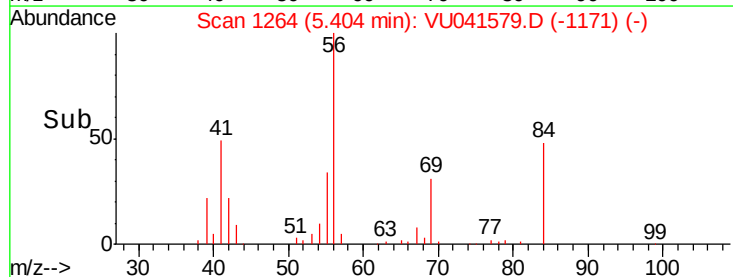
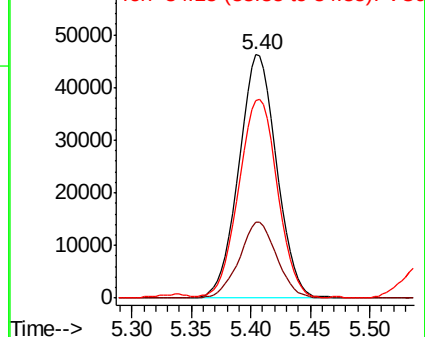


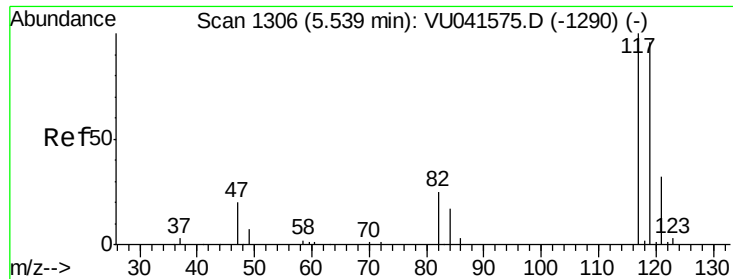
#30  
Cyclohexane  
Concen: 5.100 ug/L  
RT: 5.40 min Scan# 1264  
Delta R.T. -0.00 min  
Lab File: VU041579.D  
Acq: 12 Dec 2020 19:47

Tgt Ion: 56 Resp: 101708  
Ion Ratio Lower Upper  
56 100  
69 30.8 23.8 35.8  
84 83.6 66.2 99.4



Abundance Ion 56.10 (55.80 to 56.80): VU0  
Ion 69.15 (68.85 to 69.85): VU0  
Ion 84.15 (83.85 to 84.85): VU0





#31

Carbon tetrachloride

Concen: 5.046 ug/L

RT: 5.54 min Scan# 1307

Delta R.T. 0.00 min

Lab File: VU041579.D

Acq: 12 Dec 2020 19:47

Instrument :

MSVOA\_U

ClientSampleId :

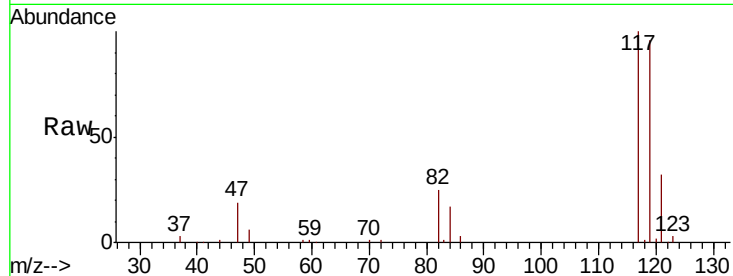
VSTD00512

Tot Ion:117 Resp: 77643

Ion Ratio Lower Upper

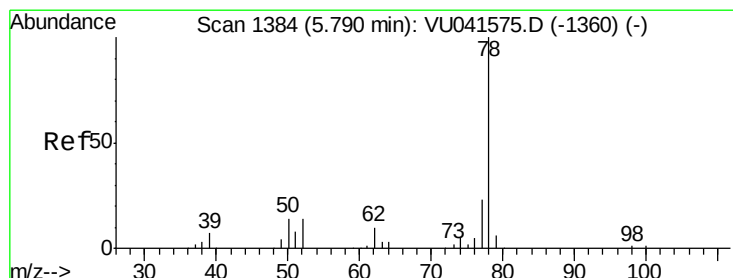
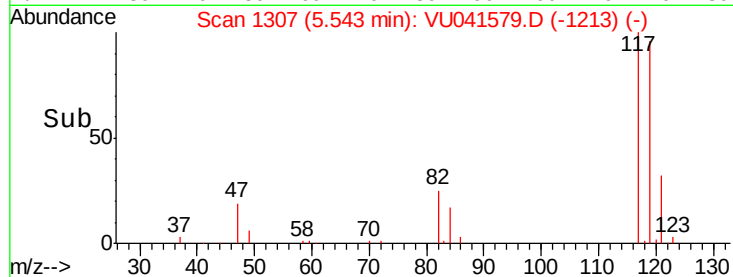
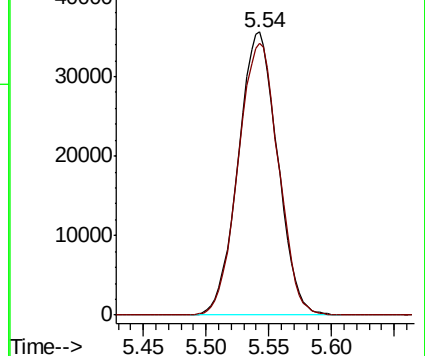
117 100

119 98.1 76.2 114.2



Abundance Ion 116.90 (116.60 to 117.60): V

Ion 118.90 (118.60 to 119.60): V



#33

Benzene

Concen: 4.993 ug/L

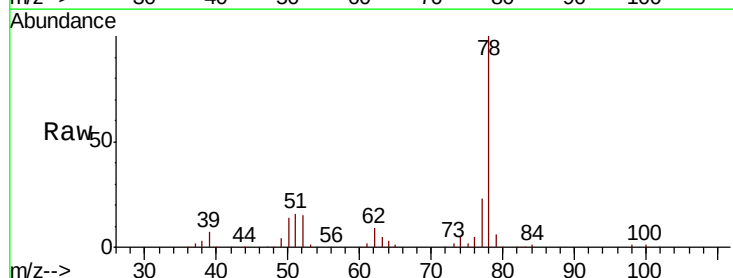
RT: 5.79 min Scan# 1384

Delta R.T. -0.00 min

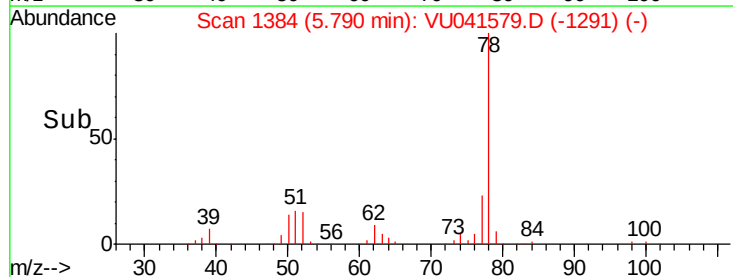
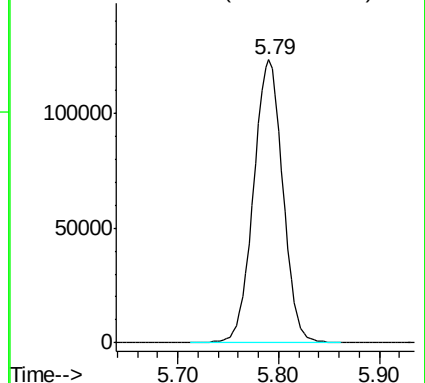
Lab File: VU041579.D

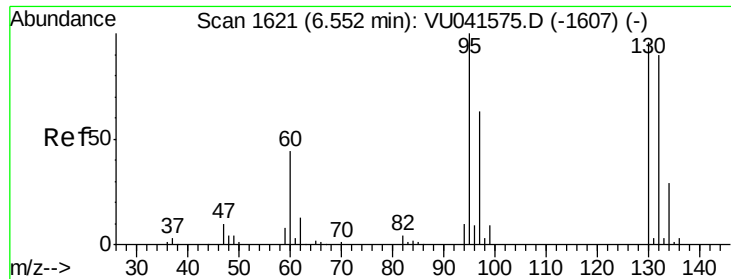
Acq: 12 Dec 2020 19:47

Tgt Ion: 78 Resp: 247438



Abundance Ion 78.10 (77.80 to 78.80): VU0

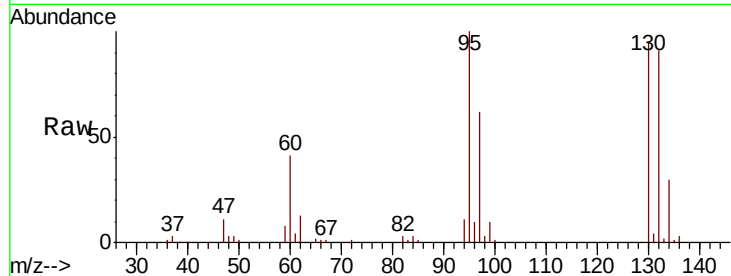




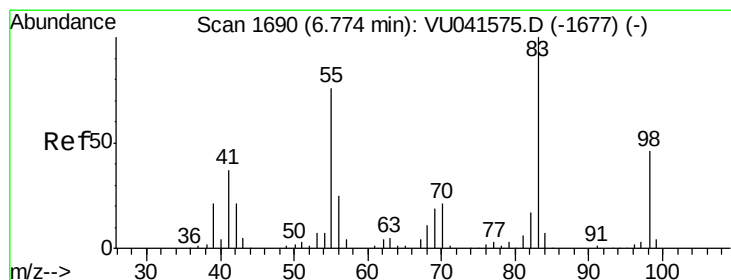
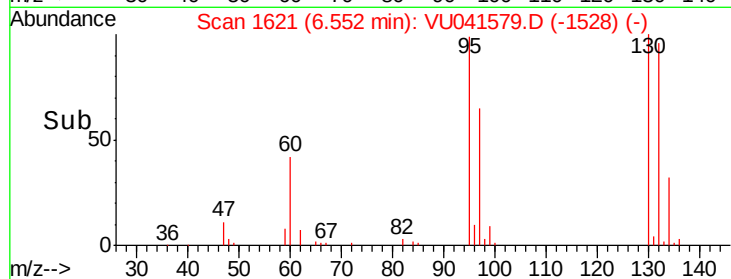
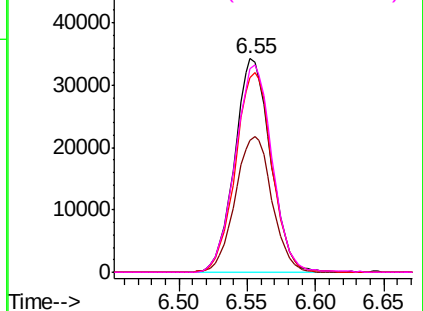
#34  
 Trichloroethene  
 Concen: 5.043 ug/L  
 RT: 6.55 min Scan# 1621  
 Delta R.T. -0.00 min  
 Lab File: VU041579.D  
 Acq: 12 Dec 2020 19:47

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00512

Tot Ion: 95 Resp: 62790  
 Ion Ratio Lower Upper  
 95 100  
 97 62.0 43.9 81.5  
 132 91.0 63.1 117.3  
 130 95.0 67.4 125.2

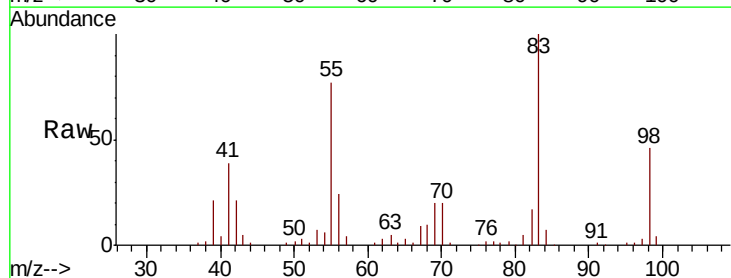


Abundance Ion 95.00 (94.70 to 95.70): VU0  
 Ion 96.95 (96.65 to 97.65): VU0  
 Ion 131.95 (131.65 to 132.65): V  
 Ion 129.95 (129.65 to 130.65): V

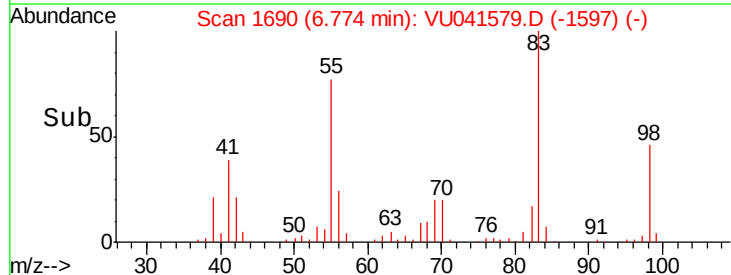
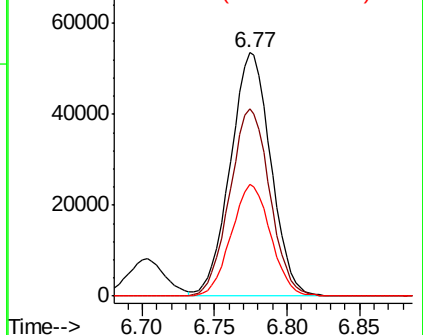


#35  
 Methylcyclohexane  
 Concen: 5.136 ug/L  
 RT: 6.77 min Scan# 1690  
 Delta R.T. -0.00 min  
 Lab File: VU041579.D  
 Acq: 12 Dec 2020 19:47

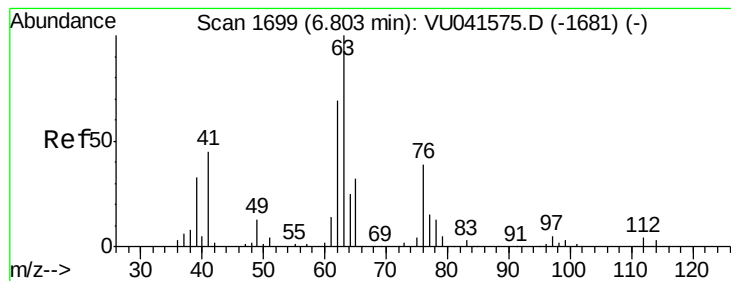
Tgt Ion: 83 Resp: 103371  
 Ion Ratio Lower Upper  
 83 100  
 55 76.6 61.2 91.8  
 98 44.8 36.6 54.8



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: 5.118 ug/L

RT: 6.80 min Scan# 1699

Delta R.T. -0.00 min

Lab File: VU041579.D

Acq: 12 Dec 2020 19:47

Instrument :

MSVOA\_U

ClientSampleId :

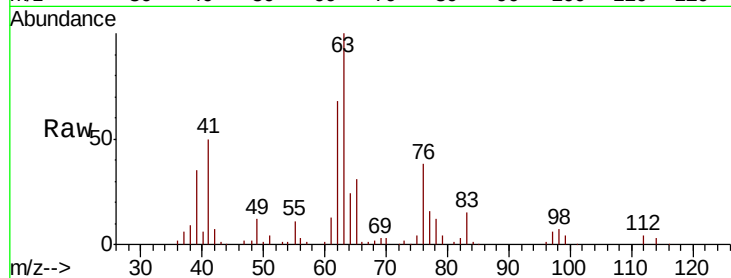
VSTD00512

Tot Ion: 63 Resp: 64873

Ion Ratio Lower Upper

63 100

112 3.6 3.1 4.7



Abundance Ion 63.10 (62.80 to 63.80): VU041579.D (-1681) (-)

Ion 112.10 (111.80 to 112.80): VU041579.D (-1681) (-)

6.80

30000

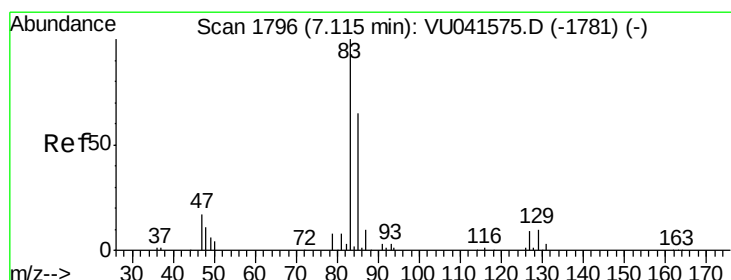
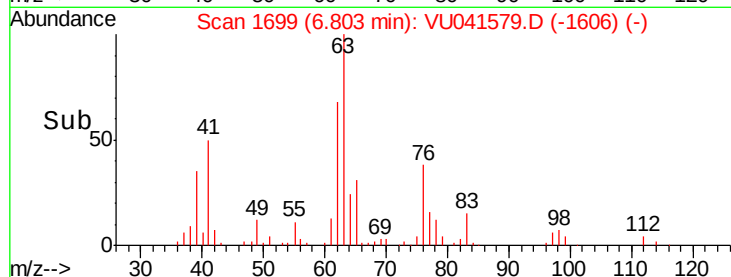
20000

10000

0

6.70 6.75 6.80 6.85 6.90

Time-->



#38

Bromodichloromethane

Concen: 5.065 ug/L

RT: 7.11 min Scan# 1796

Delta R.T. -0.00 min

Lab File: VU041579.D

Acq: 12 Dec 2020 19:47

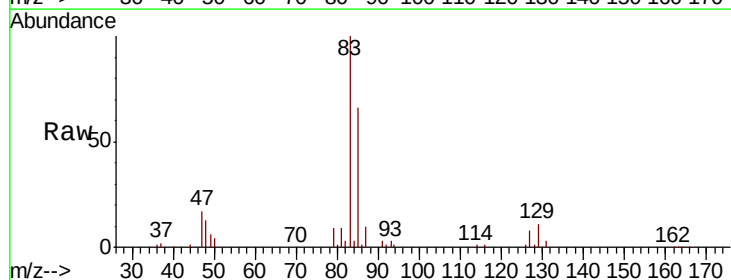
Tgt Ion: 83 Resp: 79871

Ion Ratio Lower Upper

83 100

85 65.7 45.5 84.5

127 8.1 7.0 10.6



Abundance Ion 82.95 (82.65 to 83.65): VU041579.D (-1781) (-)

Ion 85.00 (84.70 to 85.70): VU041579.D (-1781) (-)

Ion 126.90 (126.60 to 127.60): VU041579.D (-1781) (-)

7.11

60000

50000

40000

30000

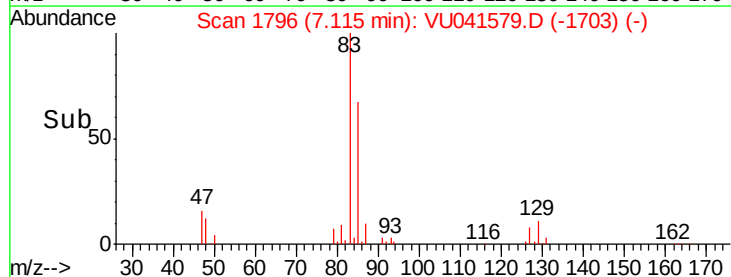
20000

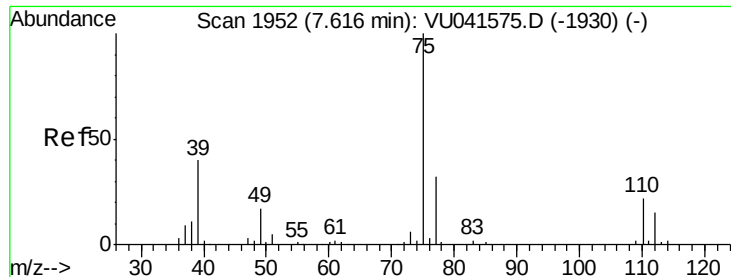
10000

0

7.05 7.10 7.15 7.20

Time-->



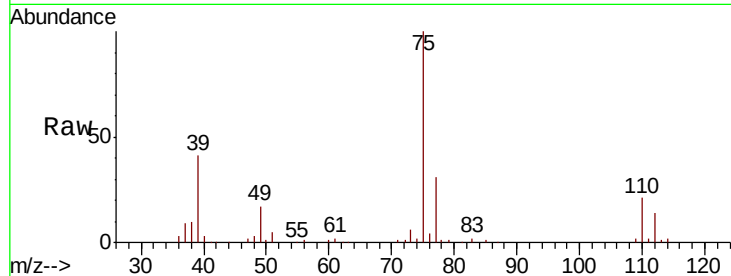


#39

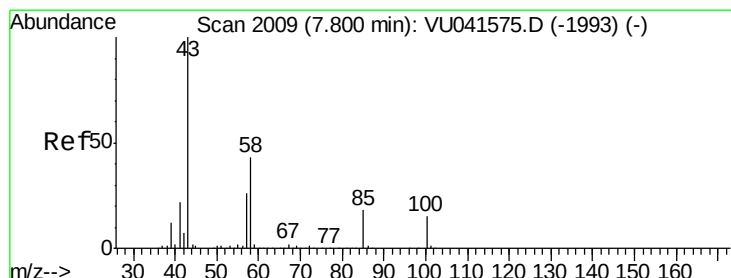
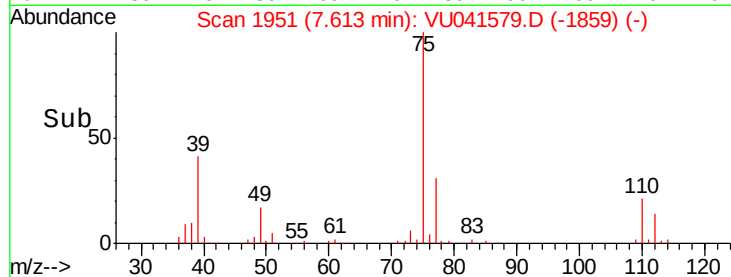
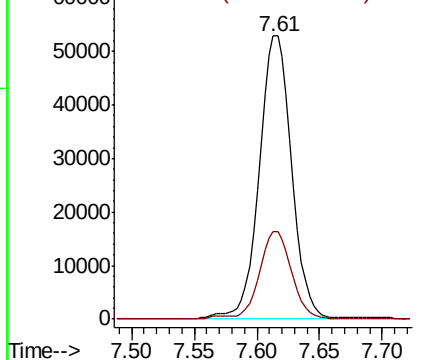
cis-1,3-Dichloropropene  
 Concen: 5.074 ug/L  
 RT: 7.61 min Scan# 1951  
 Delta R.T. -0.00 min  
 Lab File: VU041579.D  
 Acq: 12 Dec 2020 19:47

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00512

Tot Ion: 75 Resp: 95291  
 Ion Ratio Lower Upper  
 75 100  
 77 31.0 22.3 41.3



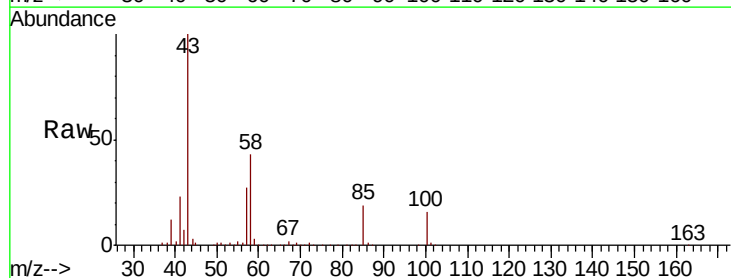
Abundance Ion 75.05 (74.75 to 75.75): VU041579.D (-1859) (-)  
 Ion 77.05 (76.75 to 77.75): VU041579.D (-1859) (-)



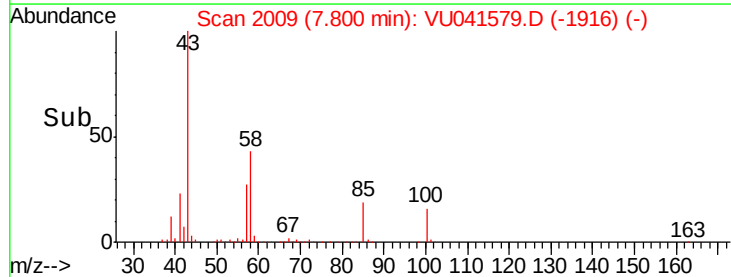
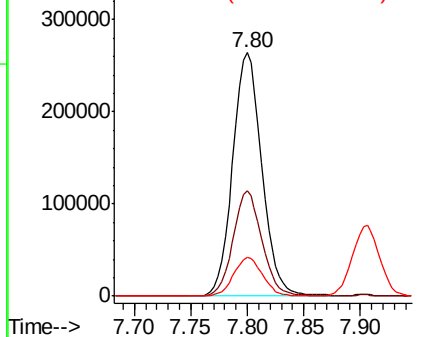
#40

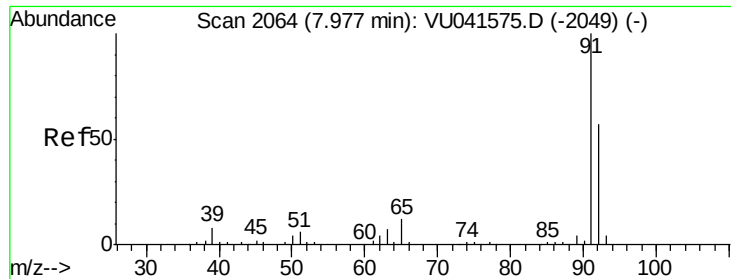
4-Methyl-2-pentanone  
 Concen: 52.625 ug/L  
 RT: 7.80 min Scan# 2009  
 Delta R.T. -0.00 min  
 Lab File: VU041579.D  
 Acq: 12 Dec 2020 19:47

Tgt Ion: 43 Resp: 474627  
 Ion Ratio Lower Upper  
 43 100  
 58 42.7 34.2 51.2  
 100 15.7 12.3 18.5



Abundance Ion 43.05 (42.75 to 43.75): VU041579.D (-1916) (-)  
 Ion 58.05 (57.75 to 58.75): VU041579.D (-1916) (-)  
 Ion 100.15 (99.85 to 100.85): VU041579.D (-1916) (-)





#42

Toluene

Concen: 5.119 ug/L

RT: 7.98 min Scan# 2064

Delta R.T. -0.00 min

Lab File: VU041579.D

Acq: 12 Dec 2020 19:47

Instrument :

MSVOA\_U

ClientSampleId :

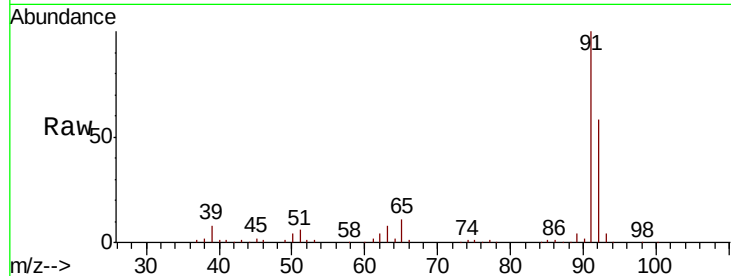
VSTD00512

Tot Ion: 91 Resp: 261862

Ion Ratio Lower Upper

91 100

92 58.3 40.0 74.2



Abundance Ion 91.15 (90.85 to 91.85): VU041575.D (-2049) (-)

Ion 92.15 (91.85 to 92.85): VU041575.D (-2049) (-)

7.98

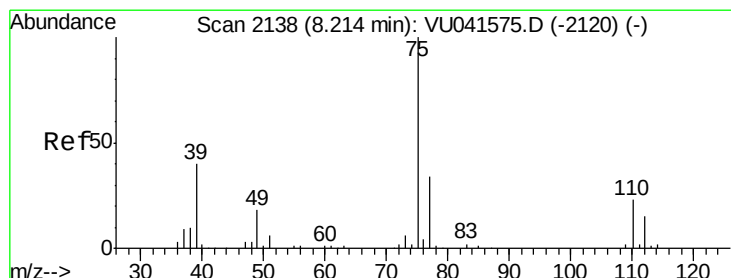
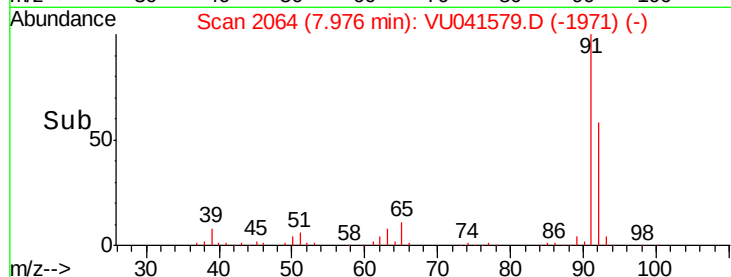
150000

100000

50000

0

Time-->



#44

trans-1,3-Dichloropropene

Concen: 5.165 ug/L

RT: 8.21 min Scan# 2138

Delta R.T. -0.00 min

Lab File: VU041579.D

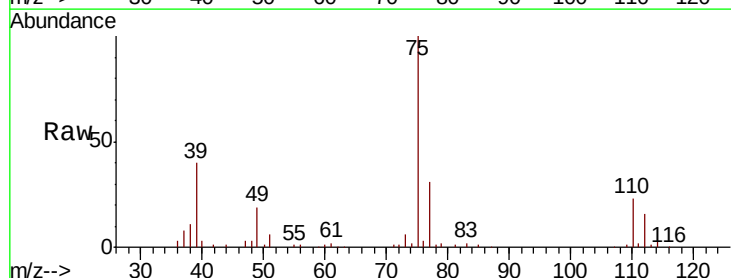
Acq: 12 Dec 2020 19:47

Tgt Ion: 75 Resp: 86741

Ion Ratio Lower Upper

75 100

77 31.4 23.8 44.2



Abundance Ion 75.05 (74.75 to 75.75): VU041575.D (-2120) (-)

Ion 77.05 (76.75 to 77.75): VU041575.D (-2120) (-)

8.21

60000

50000

40000

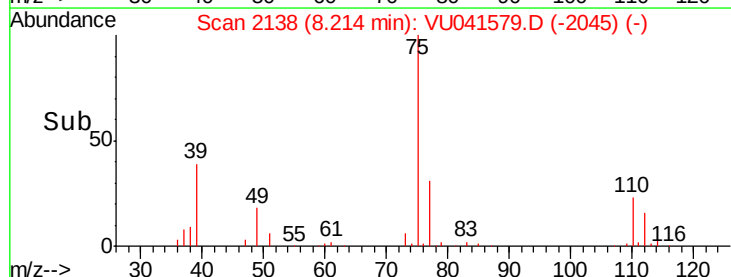
30000

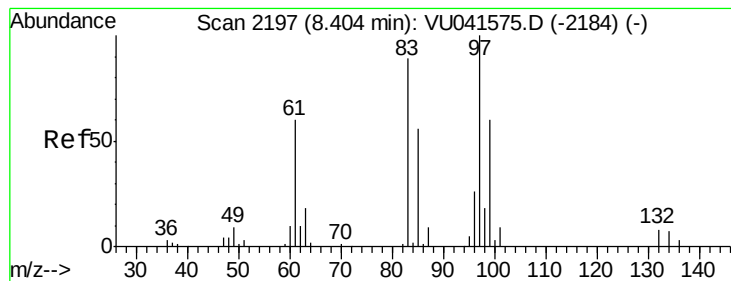
20000

10000

0

Time-->





#45

1,1,2-Trichloroethane

Concen: 5.319 ug/L

RT: 8.40 min Scan# 2197

Delta R.T. -0.00 min

Lab File: VU041579.D

Acq: 12 Dec 2020 19:47

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00512

Tot Ion: 97 Resp: 49855

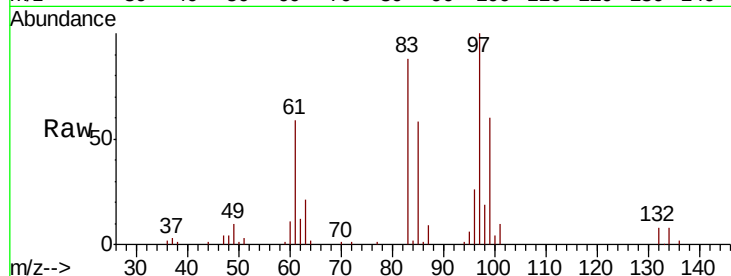
Ion Ratio Lower Upper

97 100

99 60.5 42.1 78.3

83 87.9 62.6 116.2

85 58.2 39.1 72.7

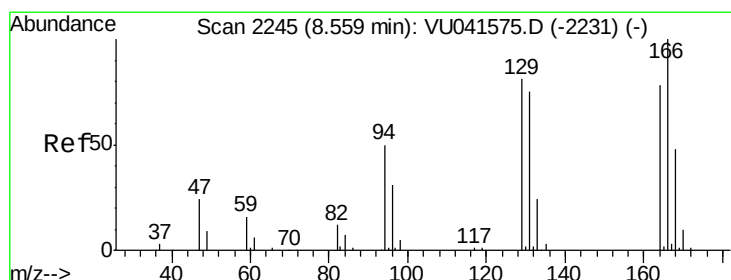
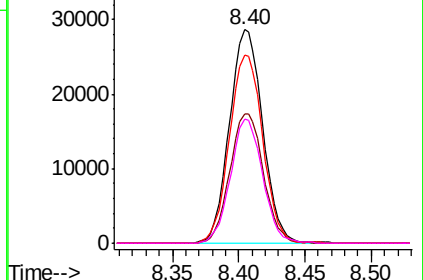
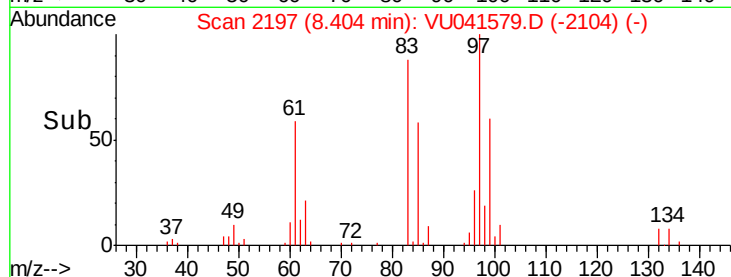


Abundance Ion 96.95 (96.65 to 97.65): VU0

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: 5.216 ug/L

RT: 8.56 min Scan# 2245

Delta R.T. -0.00 min

Lab File: VU041579.D

Acq: 12 Dec 2020 19:47

Tgt Ion: 164 Resp: 45470

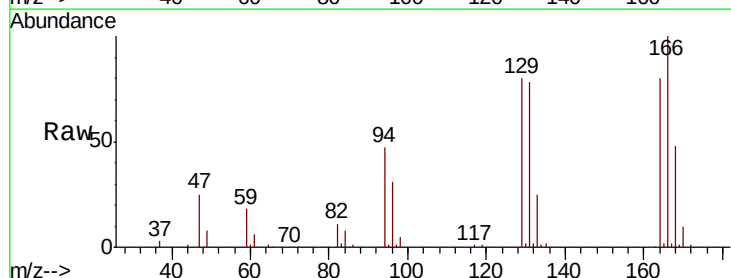
Ion Ratio Lower Upper

164 100

129 99.6 72.2 134.0

131 97.8 66.9 124.3

166 125.1 89.6 166.4

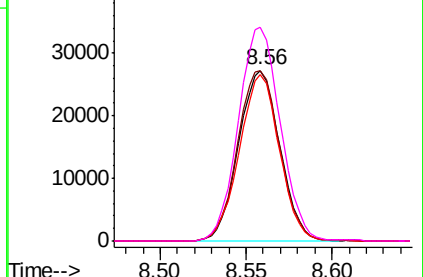
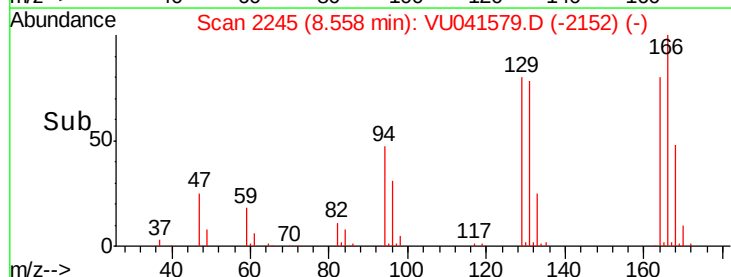


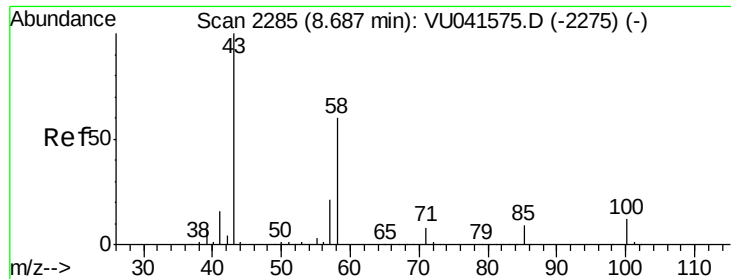
Abundance Ion 163.90 (163.60 to 164.60): V

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

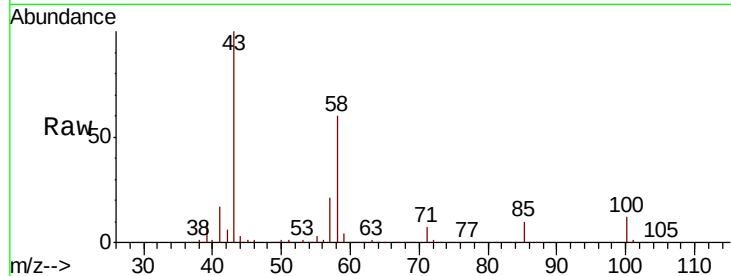




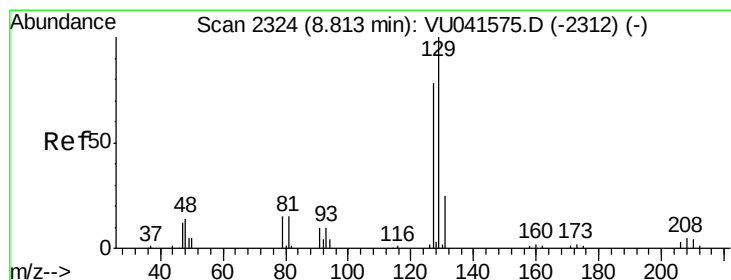
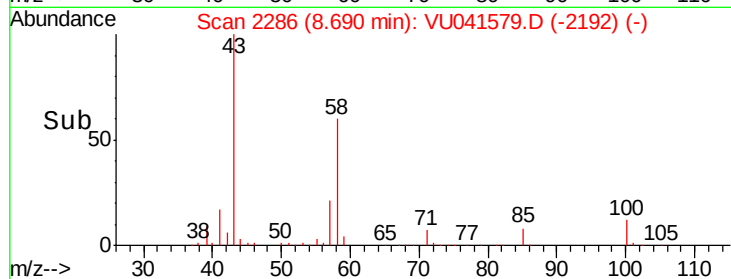
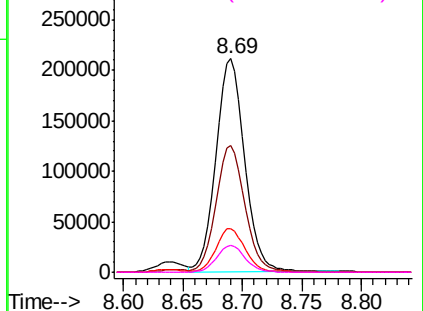
#48  
2-Hexanone  
Concen: 53.848 ug/L  
RT: 8.69 min Scan# 2286  
Delta R.T. 0.00 min  
Lab File: VU041579.D  
Acq: 12 Dec 2020 19:47

Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00512

Tot Ion: 43 Resp: 353446  
Ion Ratio Lower Upper  
43 100  
58 60.0 47.9 71.9  
57 20.7 16.5 24.7  
100 12.6 9.4 14.2

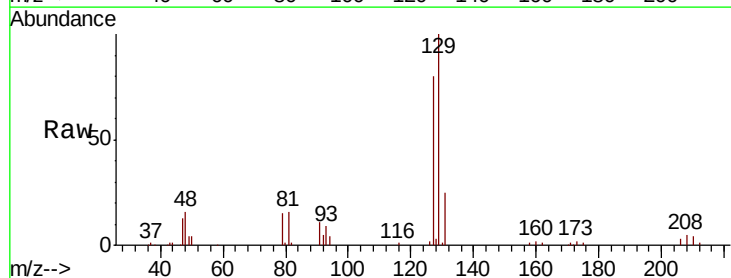


Abundance Ion 43.05 (42.75 to 43.75): VU0  
Ion 58.05 (57.75 to 58.75): VU0  
Ion 57.20 (56.90 to 57.90): VU0  
Ion 100.15 (99.85 to 100.85): VU0

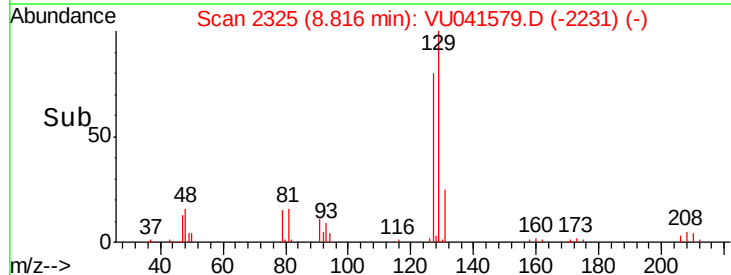
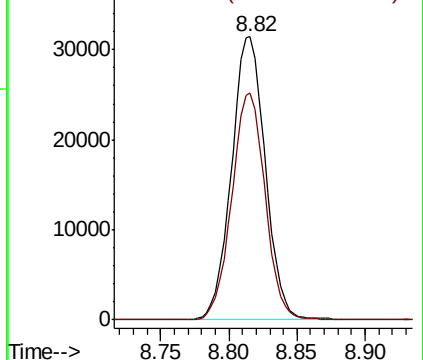


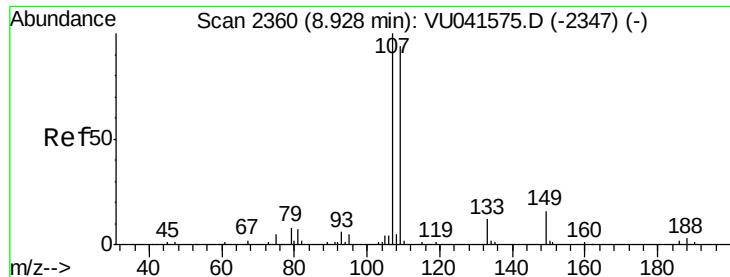
#49  
Dibromochloromethane  
Concen: 5.023 ug/L  
RT: 8.82 min Scan# 2325  
Delta R.T. 0.00 min  
Lab File: VU041579.D  
Acq: 12 Dec 2020 19:47

Tgt Ion: 129 Resp: 54086  
Ion Ratio Lower Upper  
129 100  
127 80.4 54.7 101.7



Abundance Ion 128.95 (128.65 to 129.65): V  
Ion 126.90 (126.60 to 127.60): V

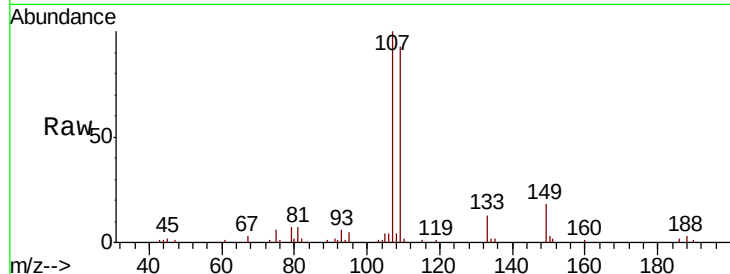




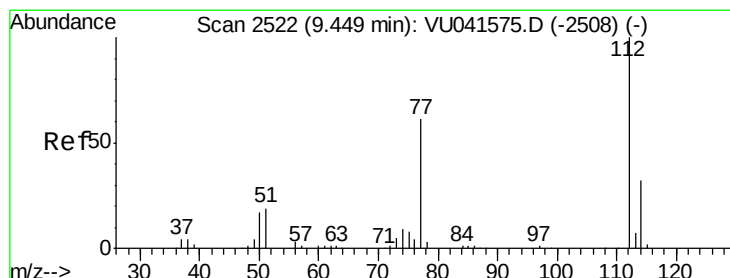
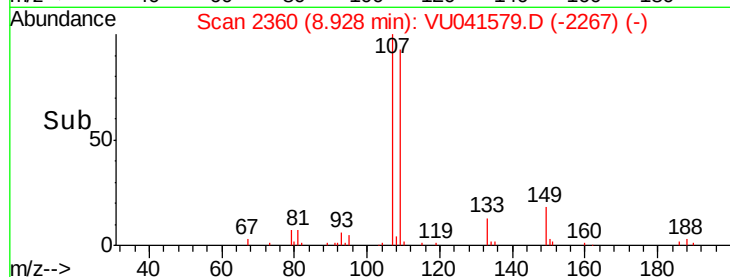
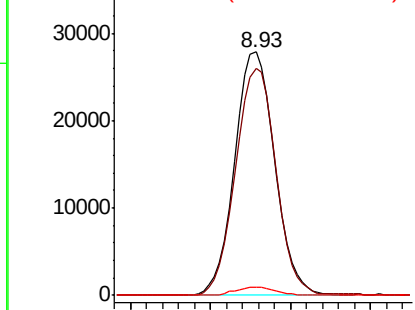
#50  
 1,2-Dibromoethane  
 Concen: 5.133 ug/L  
 RT: 8.93 min Scan# 2360  
 Delta R.T. -0.00 min  
 Lab File: VU041579.D  
 Acq: 12 Dec 2020 19:47

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00512

Tot Ion:107 Resp: 47591  
 Ion Ratio Lower Upper  
 107 100  
 109 93.4 65.6 121.8  
 188 3.5 2.6 4.0

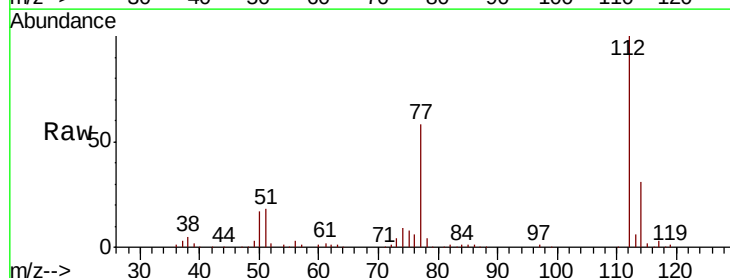


Abundance Ion 106.95 (106.65 to 107.65): V  
 Ion 109.00 (108.70 to 109.70): V  
 Ion 187.90 (187.60 to 188.60): V

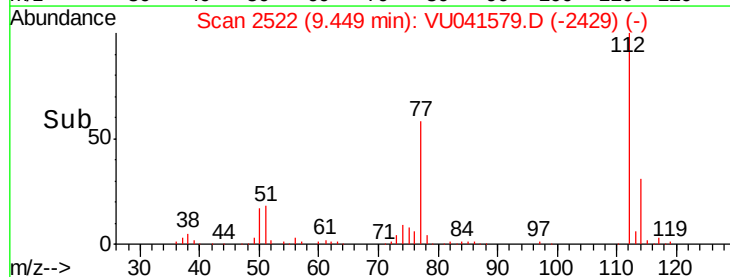
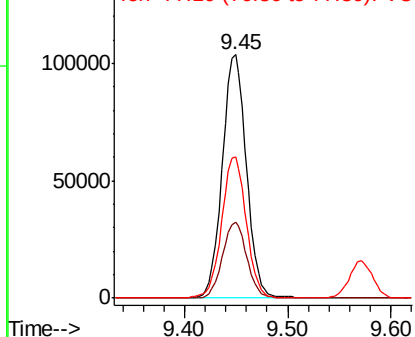


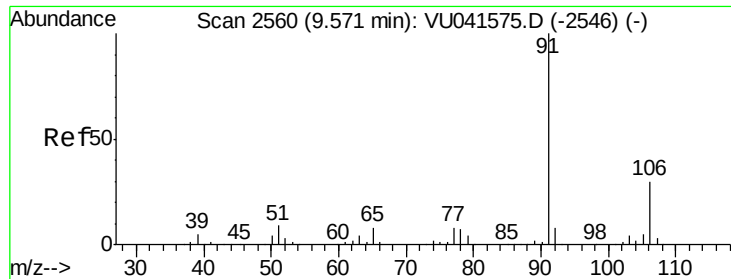
#51  
 Chlorobenzene  
 Concen: 5.303 ug/L  
 RT: 9.45 min Scan# 2522  
 Delta R.T. -0.00 min  
 Lab File: VU041579.D  
 Acq: 12 Dec 2020 19:47

Tgt Ion:112 Resp: 168629  
 Ion Ratio Lower Upper  
 112 100  
 114 31.3 22.7 42.3  
 77 57.8 49.1 73.7



Abundance Ion 112.10 (111.80 to 112.80): V  
 Ion 114.05 (113.75 to 114.75): V  
 Ion 77.10 (76.80 to 77.80): VU

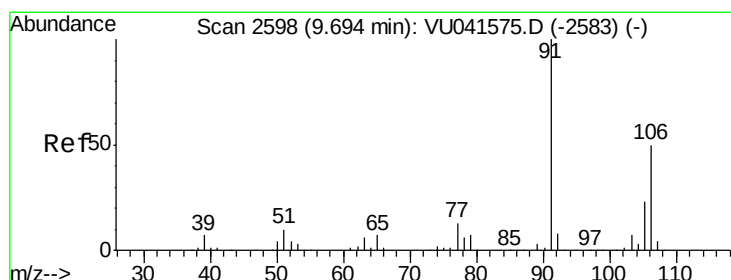
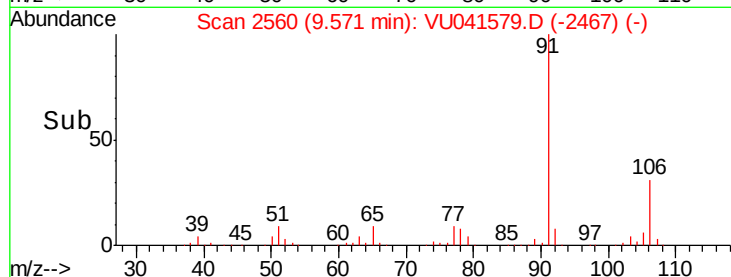
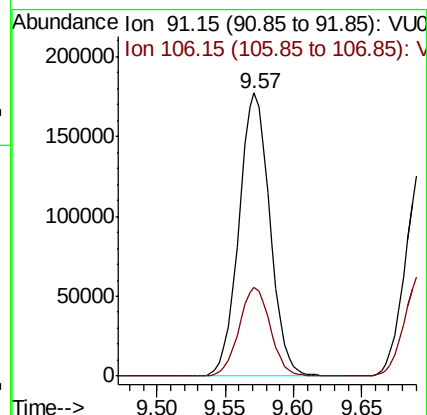
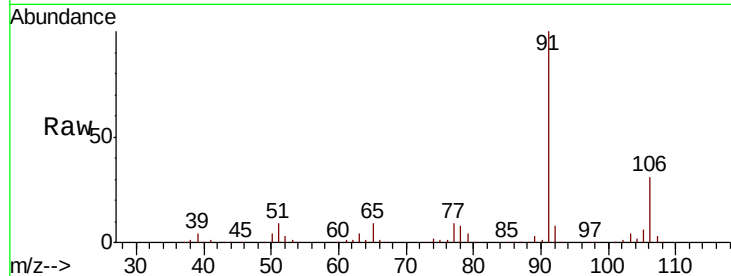




#52  
Ethylbenzene  
Concen: 5.131 ug/L  
RT: 9.57 min Scan# 2560  
Delta R.T. -0.00 min  
Lab File: VU041579.D  
Acq: 12 Dec 2020 19:47

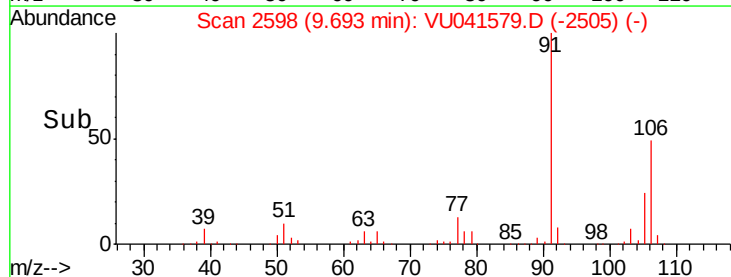
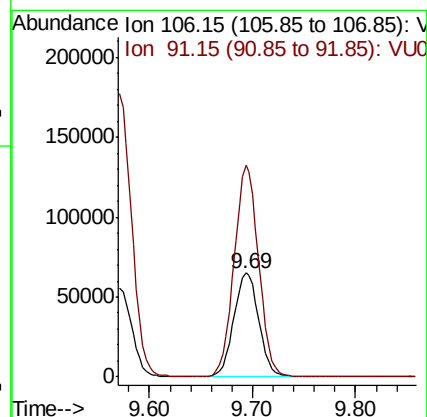
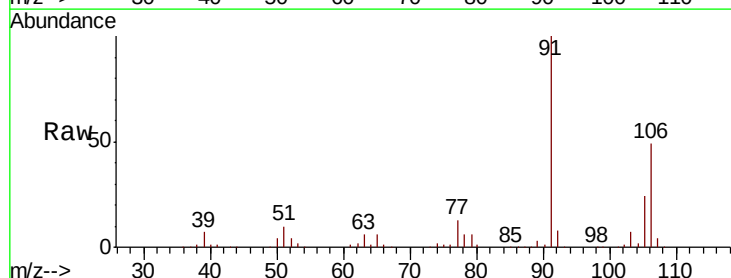
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00512

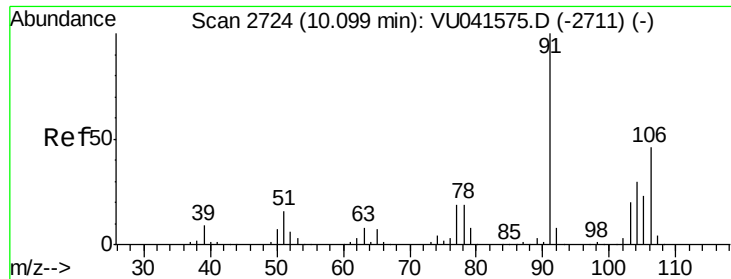
Tot Ion: 91 Resp: 279526  
Ion Ratio Lower Upper  
91 100  
106 31.2 21.1 39.3



#53  
m,p-Xylene  
Concen: 5.427 ug/L  
RT: 9.69 min Scan# 2598  
Delta R.T. -0.00 min  
Lab File: VU041579.D  
Acq: 12 Dec 2020 19:47

Tgt Ion: 106 Resp: 110267  
Ion Ratio Lower Upper  
106 100  
91 204.3 140.4 260.8

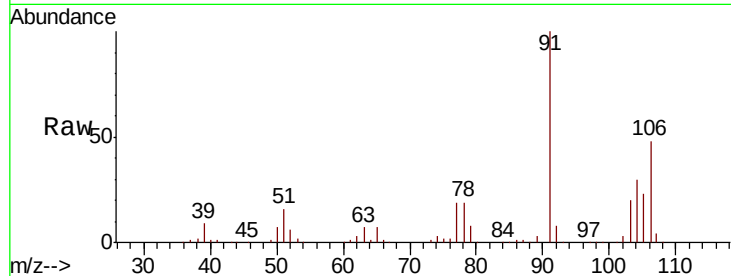




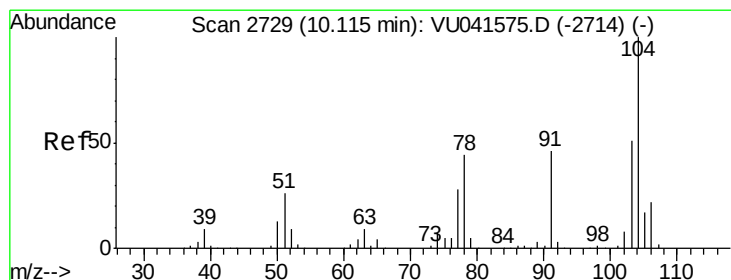
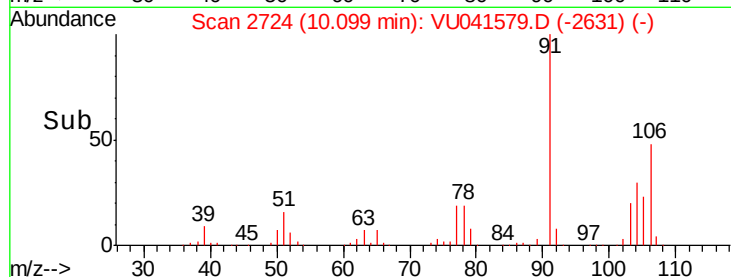
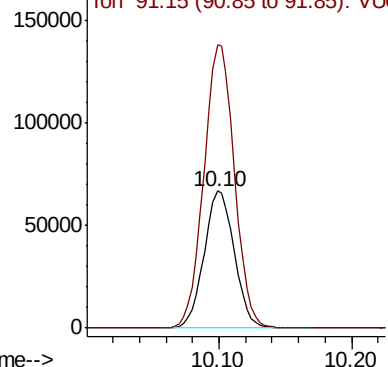
#54  
o-Xylene  
Concen: 5.313 ug/L  
RT: 10.10 min Scan# 2724  
Delta R.T. -0.00 min  
Lab File: VU041579.D  
Acq: 12 Dec 2020 19:47

Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00512

Tot Ion:106 Resp: 105736  
Ion Ratio Lower Upper  
106 100  
91 206.7 151.3 281.1

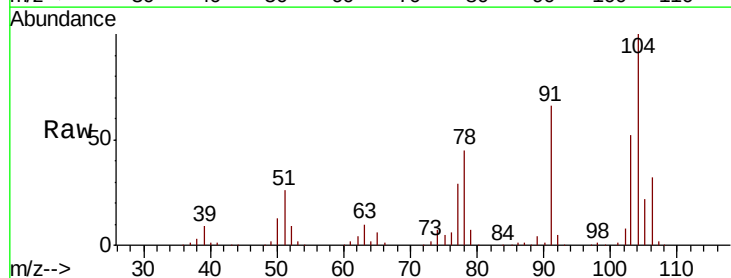


Abundance Ion 106.15 (105.85 to 106.85): V  
Ion 91.15 (90.85 to 91.85): VU0

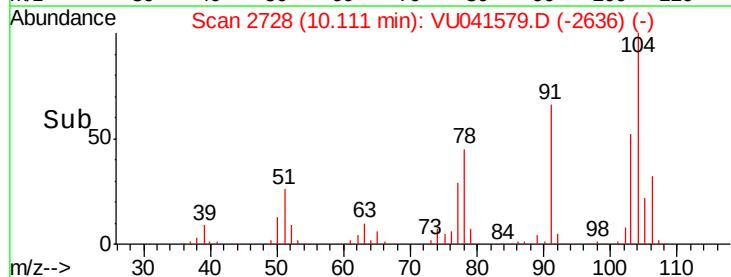
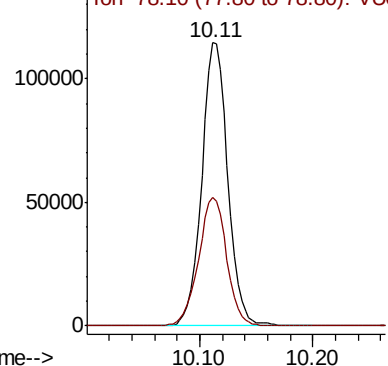


#55  
Styrene  
Concen: 5.320 ug/L  
RT: 10.11 min Scan# 2728  
Delta R.T. -0.00 min  
Lab File: VU041579.D  
Acq: 12 Dec 2020 19:47

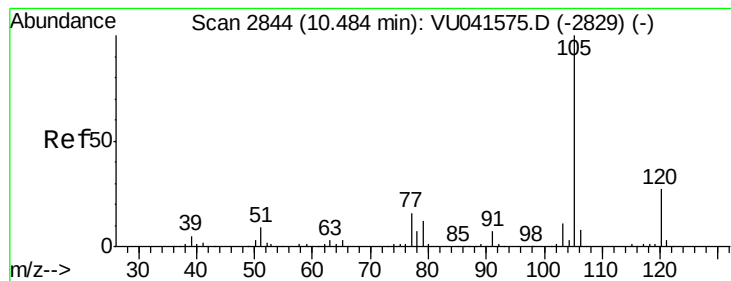
Tgt Ion:104 Resp: 182894  
Ion Ratio Lower Upper  
104 100  
78 45.4 31.1 57.9



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







#56

Isopropylbenzene

Concen: 5.282 ug/L

RT: 10.48 min Scan# 2844

Delta R.T. -0.00 min

Lab File: VU041579.D

Acq: 12 Dec 2020 19:47

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00512

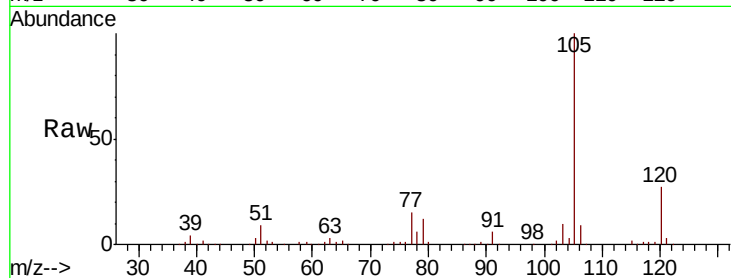
Tot Ion:105 Resp: 279775

Ion Ratio Lower Upper

105 100

120 26.5 20.5 30.7

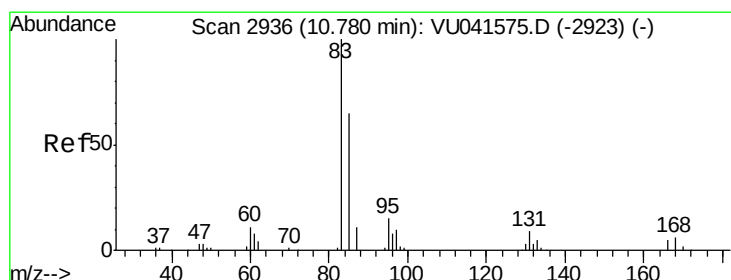
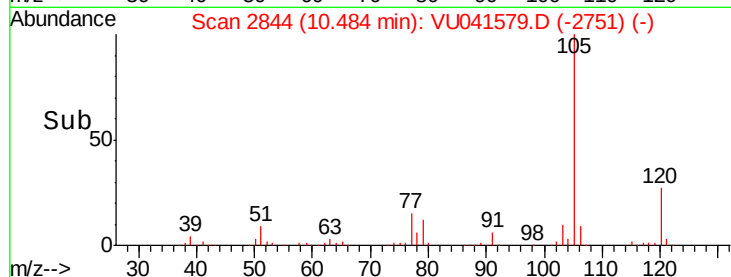
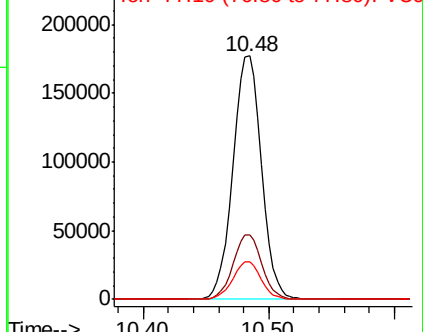
77 15.3 12.7 19.1



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: 5.167 ug/L

RT: 10.78 min Scan# 2936

Delta R.T. -0.00 min

Lab File: VU041579.D

Acq: 12 Dec 2020 19:47

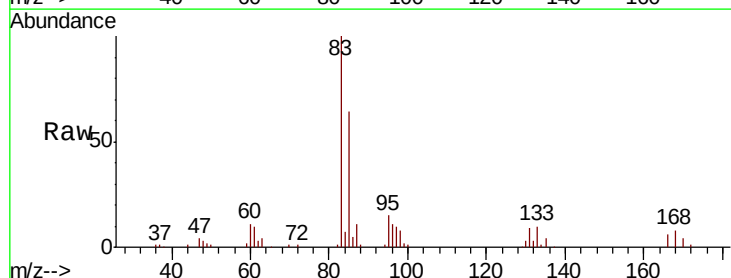
Tgt Ion: 83 Resp: 67395

Ion Ratio Lower Upper

83 100

85 64.1 46.1 85.7

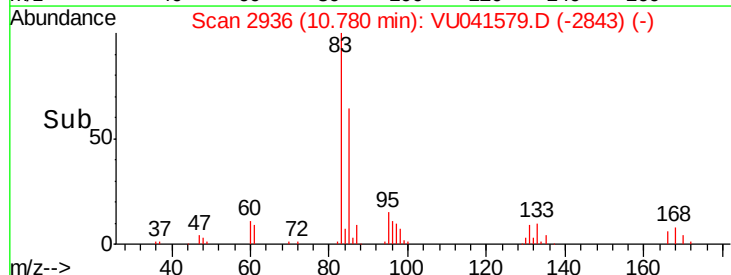
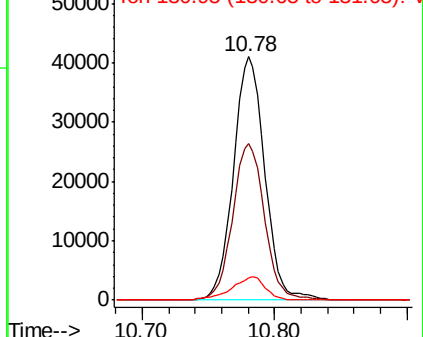
131 9.1 7.8 11.6

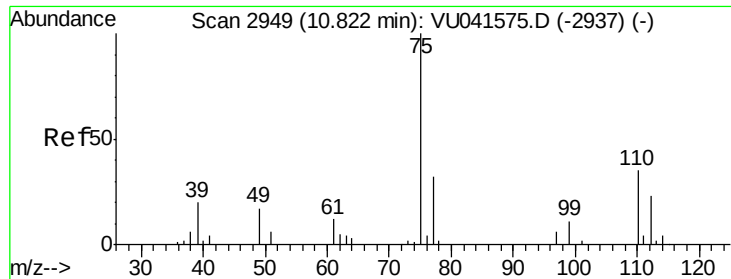


Abundance Ion 82.95 (82.65 to 83.65): VU0

Ion 85.00 (84.70 to 85.70): VU0

Ion 130.95 (130.65 to 131.65): V





#59

1,2,3-Trichloropropane

Concen: 5.039 ug/L

RT: 10.82 min Scan# 2949

Delta R.T. -0.00 min

Lab File: VU041579.D

Acq: 12 Dec 2020 19:47

Instrument :

MSVOA\_U

ClientSampleId :

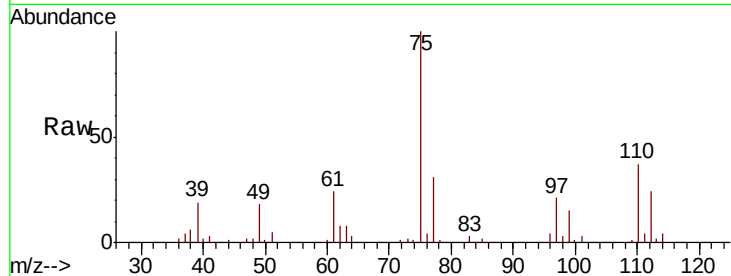
VSTD00512

Tot Ion: 75 Resp: 47966

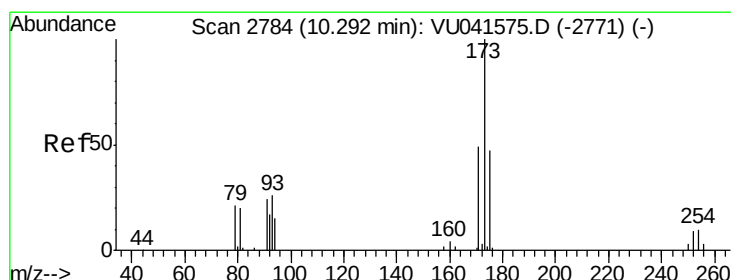
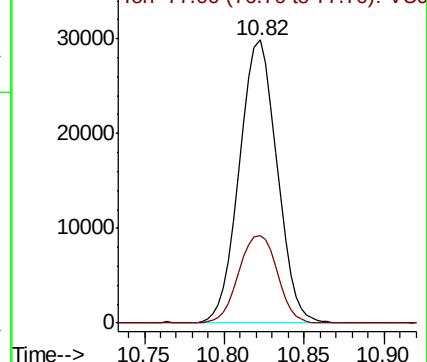
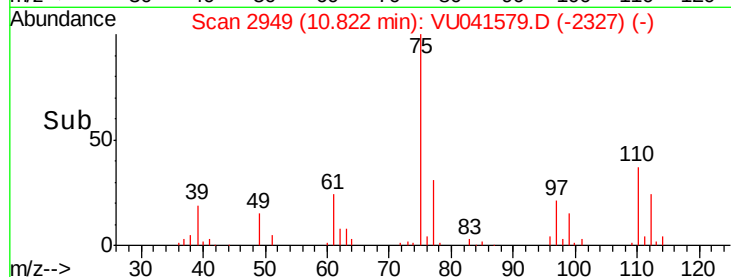
Ion Ratio Lower Upper

75 100

77 31.6 26.2 39.2



Abundance Ion 75.00 (74.70 to 75.70): VU041575.D (-2937) (-)



#61

Bromoform

Concen: 5.289 ug/L

RT: 10.29 min Scan# 2784

Delta R.T. -0.00 min

Lab File: VU041579.D

Acq: 12 Dec 2020 19:47

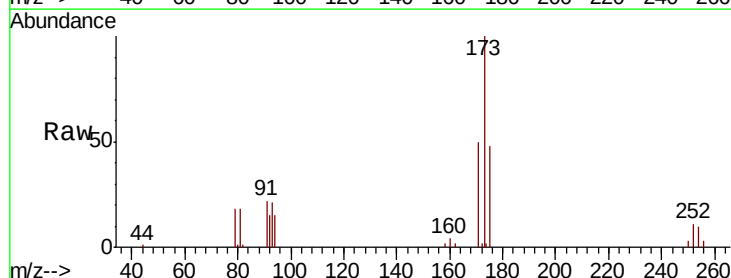
Tgt Ion: 173 Resp: 34817

Ion Ratio Lower Upper

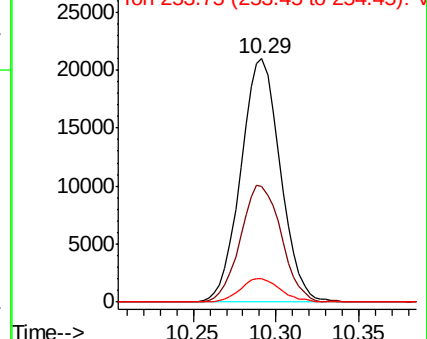
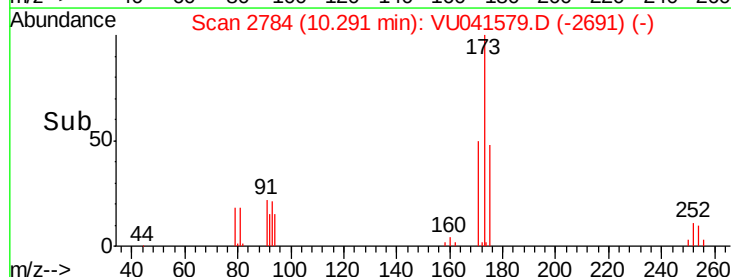
173 100

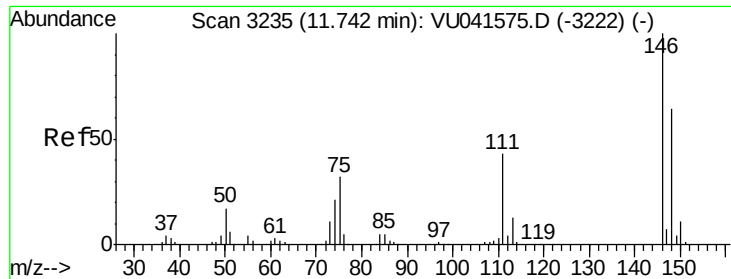
175 49.5 37.3 55.9

254 9.8 7.4 11.2



Abundance Ion 172.90 (172.60 to 173.60): VU041575.D (-2771) (-)





#62

1,3-Dichlorobenzene

Concen: 5.122 ug/L

RT: 11.74 min Scan# 3235

Delta R.T. -0.00 min

Lab File: VU041579.D

Acq: 12 Dec 2020 19:47

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00512

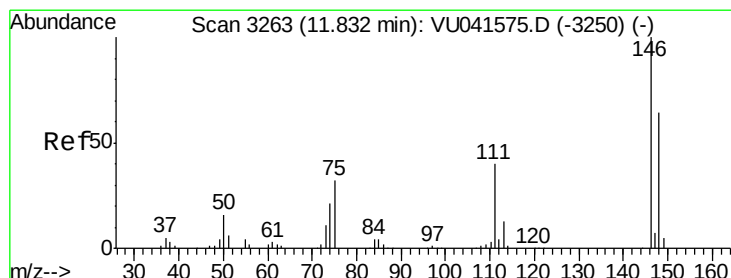
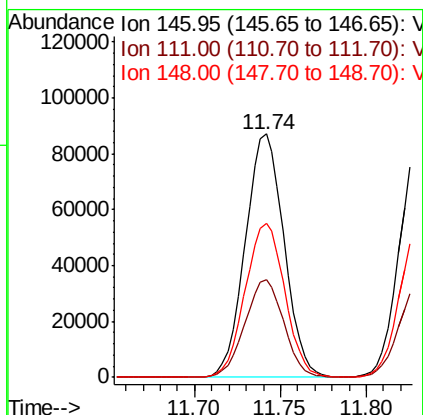
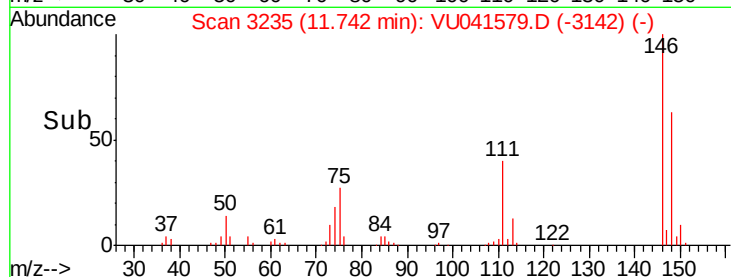
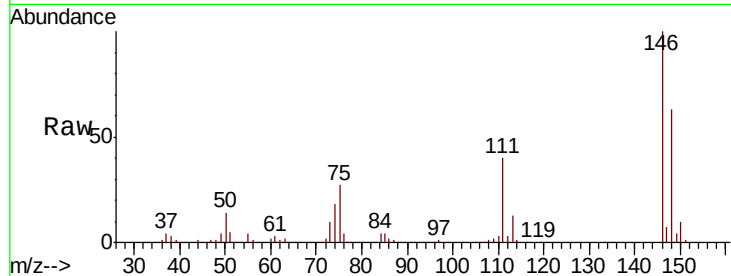
Tot Ion:146 Resp: 136391

Ion Ratio Lower Upper

146 100

111 40.1 30.0 55.8

148 63.2 44.9 83.3



#63

1,4-Dichlorobenzene

Concen: 5.155 ug/L

RT: 11.83 min Scan# 3263

Delta R.T. -0.00 min

Lab File: VU041579.D

Acq: 12 Dec 2020 19:47

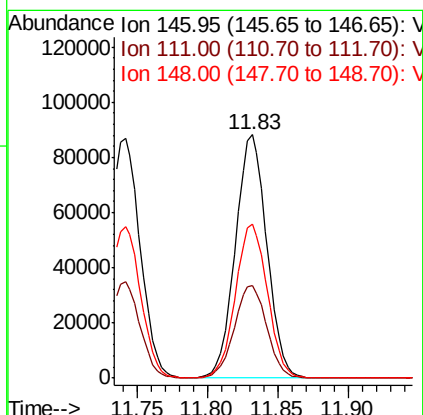
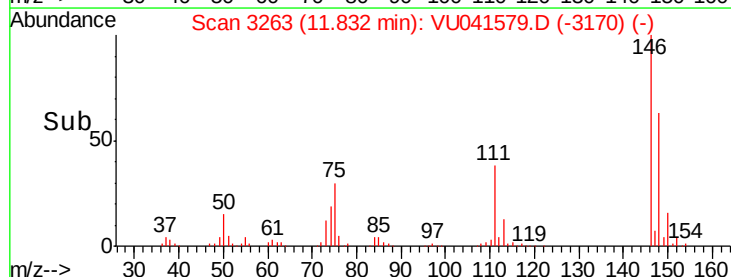
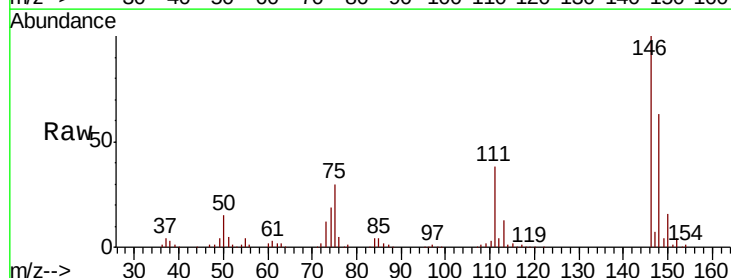
Tgt Ion:146 Resp: 138042

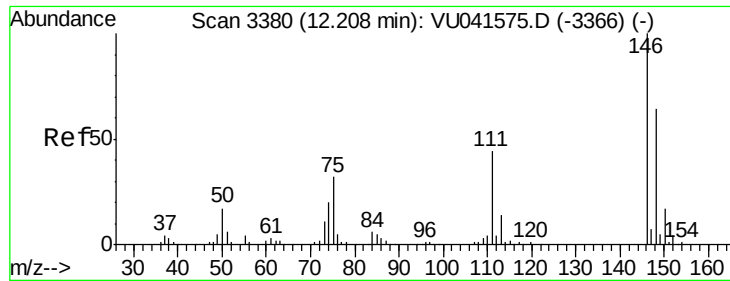
Ion Ratio Lower Upper

146 100

111 37.8 27.9 51.9

148 63.0 45.0 83.6

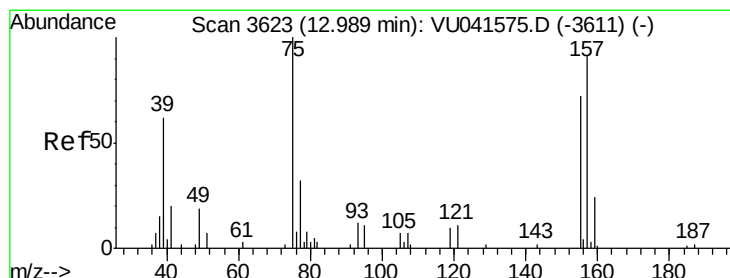
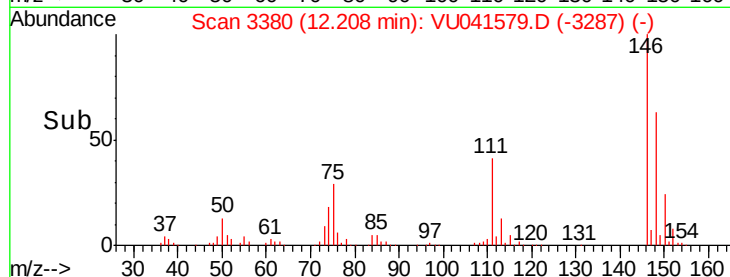
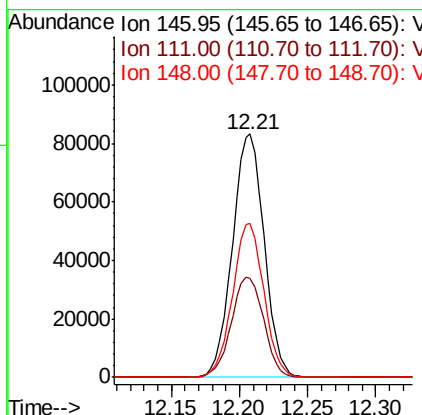
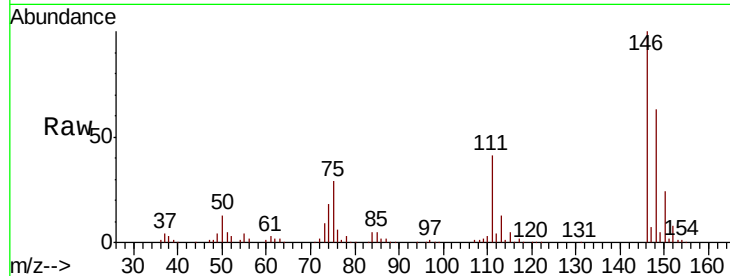




#65  
 1,2-Dichlorobenzene  
 Concen: 5.158 ug/L  
 RT: 12.21 min Scan# 3380  
 Delta R.T. -0.00 min  
 Lab File: VU041579.D  
 Acq: 12 Dec 2020 19:47

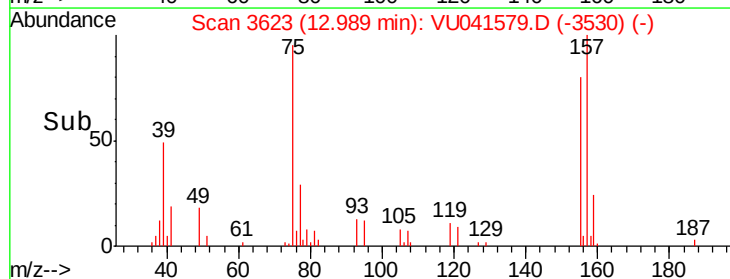
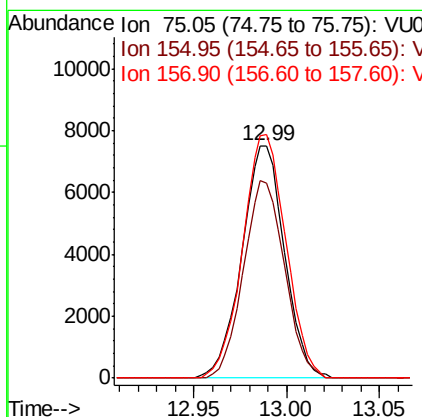
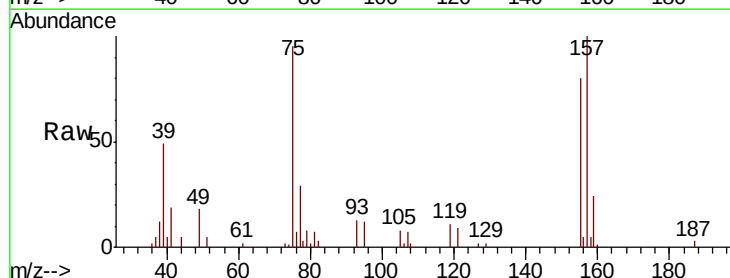
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00512

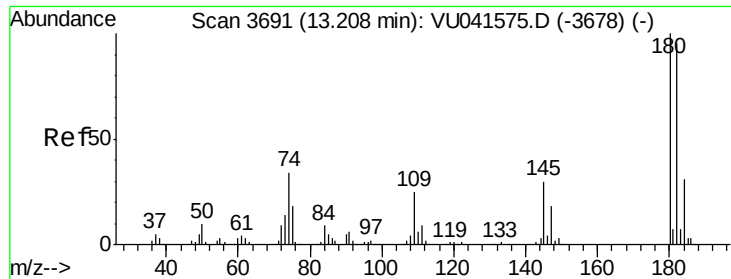
Tot Ion:146 Resp: 134499  
 Ion Ratio Lower Upper  
 146 100  
 111 40.8 35.0 52.6  
 148 63.0 51.0 76.6



#66  
 1,2-Dibromo-3-chloropropane  
 Concen: 4.907 ug/L  
 RT: 12.99 min Scan# 3623  
 Delta R.T. -0.00 min  
 Lab File: VU041579.D  
 Acq: 12 Dec 2020 19:47

Tgt Ion: 75 Resp: 12000  
 Ion Ratio Lower Upper  
 75 100  
 155 84.0 57.4 86.0  
 157 104.8 72.4 108.6

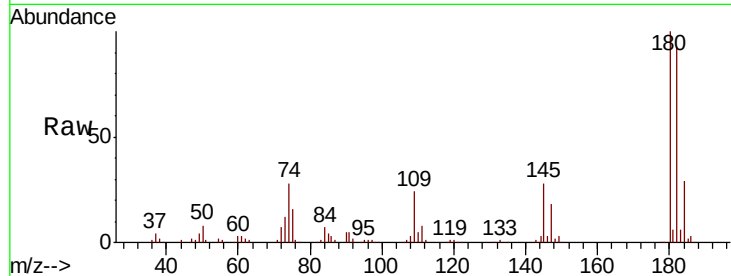




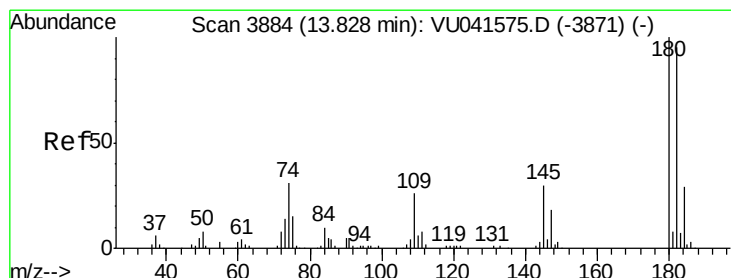
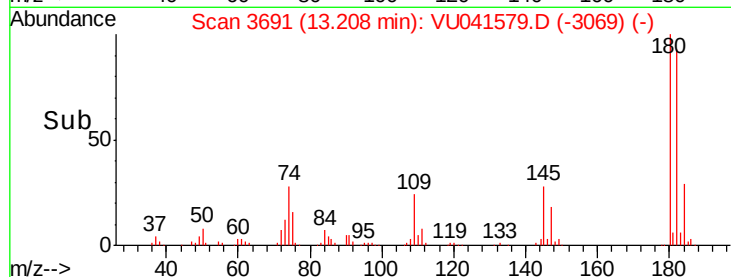
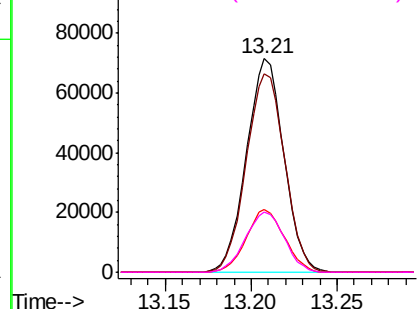
#67  
 1,3,5-Trichlorobenzene  
 Concen: 5.334 ug/L  
 RT: 13.21 min Scan# 3691  
 Delta R.T. -0.00 min  
 Lab File: VU041579.D  
 Acq: 12 Dec 2020 19:47

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00512

Tot Ion:180 Resp: 107834  
 Ion Ratio Lower Upper  
 180 100  
 182 95.3 76.3 114.5  
 184 29.9 24.1 36.1  
 145 29.3 24.1 36.1

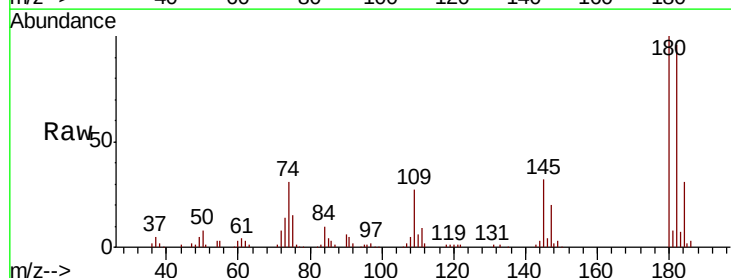


Abundance Ion 180.00 (179.70 to 180.70): V  
 Ion 182.00 (181.70 to 182.70): V  
 Ion 184.00 (183.70 to 184.70): V  
 Ion 145.00 (144.70 to 145.70): V

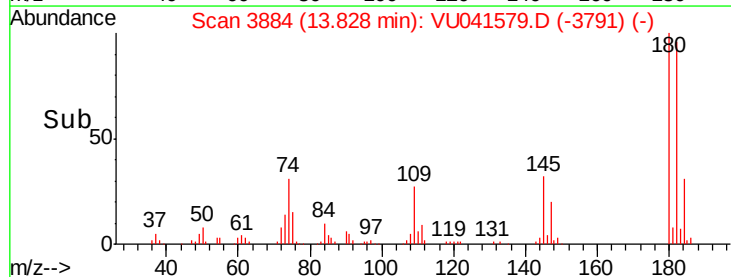
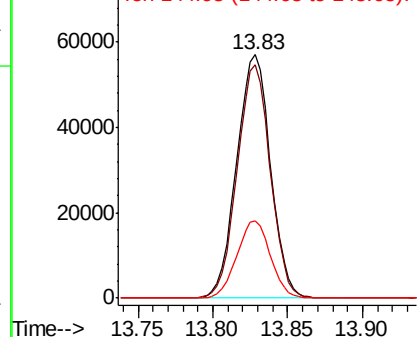


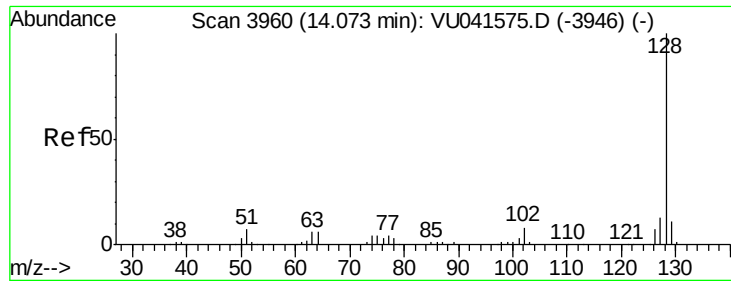
#68  
 1,2,4-trichlorobenzene  
 Concen: 5.296 ug/L  
 RT: 13.83 min Scan# 3884  
 Delta R.T. -0.00 min  
 Lab File: VU041579.D  
 Acq: 12 Dec 2020 19:47

Tgt Ion:180 Resp: 89840  
 Ion Ratio Lower Upper  
 180 100  
 182 94.0 75.4 113.0  
 145 31.5 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: 5.243 ug/L

RT: 14.07 min Scan# 3960

Delta R.T. -0.00 min

Lab File: VU041579.D

Acq: 12 Dec 2020 19:47

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00512

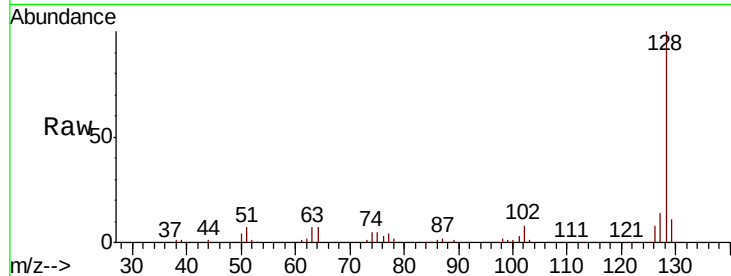
Tot Ion:128 Resp: 184111

Ion Ratio Lower Upper

128 100

129 10.8 8.7 13.1

127 13.5 10.2 15.4

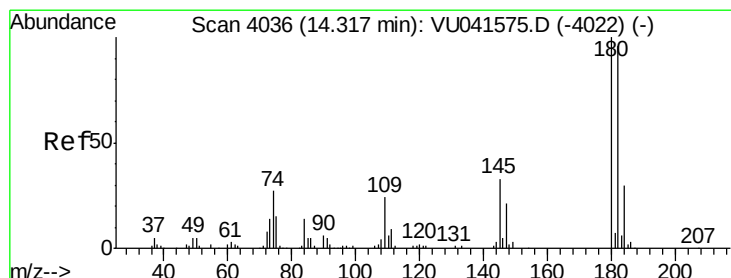
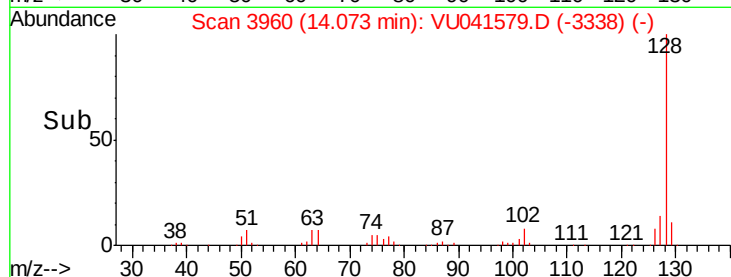
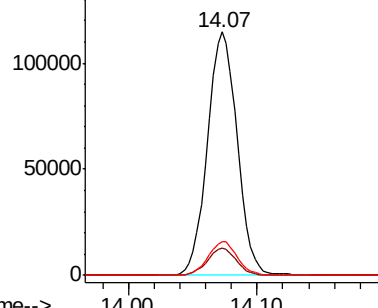


Abundance

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: 5.033 ug/L

RT: 14.32 min Scan# 4036

Delta R.T. -0.00 min

Lab File: VU041579.D

Acq: 12 Dec 2020 19:47

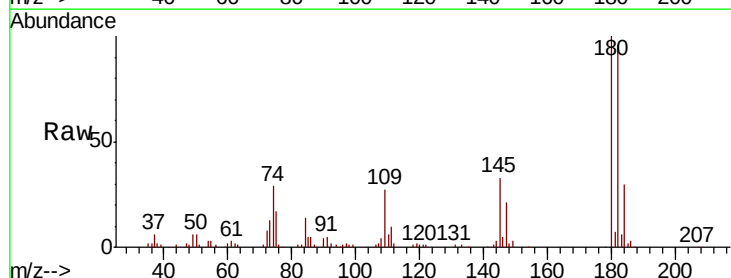
Tgt Ion:180 Resp: 81373

Ion Ratio Lower Upper

180 100

182 94.0 77.0 115.4

145 32.0 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

