

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU102120\  
 Data File : VU040909.D  
 Acq On : 22 Oct 2020 16:00  
 Operator : SY/MD  
 Sample : VSTDCCC005EC  
 Misc : 25.0mL/MSVOA U/WATER  
 ALS Vial : 49 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00525

Quant Time: Oct 22 23:26:36 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMUTR102120WMA.M  
 Quant Title : TRACE VOA SOM01.0  
 QLast Update : Thu Oct 22 23:17:57 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Difluorobenzene     | 6.26  | 114  | 229043   | 5.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 9.42  | 117  | 233851   | 5.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.81 | 152  | 121613   | 5.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |        |       |          |          |      |         |
|--------------------------------|--------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.60   | 65    | 62572    | 3.98     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 40 - 130 | Recovery | =    | 79.60%  |
| 7) Chloroethane-d5             | 1.92   | 69    | 60416    | 4.41     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 130 | Recovery | =    | 88.20%  |
| 11) 1,1-Dichloroethene-d2      | 2.58   | 63    | 147250   | 4.41     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 125 | Recovery | =    | 88.20%  |
| 20) 2-Butanone-d5              | 4.66   | 46    | 341058   | 61.17    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 40 - 130 | Recovery | =    | 122.34% |
| 24) Chloroform-d               | 5.09   | 84    | 164098   | 4.76     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 95.20%  |
| 26) 1,2-Dichloroethane-d4      | 5.72   | 65    | 96759    | 5.01     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 100.20% |
| 32) Benzene-d6                 | 5.75   | 84    | 273350   | 4.46     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 89.20%  |
| 36) 1,2-Dichloropropane-d6     | 6.70   | 67    | 96142    | 4.62     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 140 | Recovery | =    | 92.40%  |
| 41) Toluene-d8                 | 7.91   | 98    | 240181   | 4.42     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 88.40%  |
| 43) trans-1,3-Dichloropropene- | 8.19   | 79    | 40755    | 4.89     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 55 - 130 | Recovery | =    | 97.80%  |
| 46) 2-Hexanone-d5              | 8.64   | 63    | 255018   | 60.90    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 45 - 130 | Recovery | =    | 121.80% |
| 57) 1,1,2,2-Tetrachloroethane- | 10.75  | 84    | 100174   | 5.66     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 120 | Recovery | =    | 113.20% |
| 64) 1,2-Dichlorobenzene-d4     | 12.19  | 152   | 96979    | 4.54     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 80 - 120 | Recovery | =    | 90.80%  |

## Target Compounds

|                                |      |     |        |        | Ovalue   |
|--------------------------------|------|-----|--------|--------|----------|
| 2) Dichlorodifluoromethane     | 1.39 | 85  | 118407 | 5.092  | ug/L 99  |
| 3) Chloromethane               | 1.53 | 50  | 121452 | 4.812  | ug/L 96  |
| 5) Vinyl chloride              | 1.61 | 62  | 118680 | 5.057  | ug/L 98  |
| 6) Bromomethane                | 1.87 | 94  | 67299  | 5.691  | ug/L 96  |
| 8) Chloroethane                | 1.94 | 64  | 70890  | 4.672  | ug/L 98  |
| 9) Trichlorofluoromethane      | 2.15 | 101 | 160407 | 5.181  | ug/L 99  |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.59 | 101 | 94632  | 5.259  | ug/L 99  |
| 12) 1,1-Dichloroethene         | 2.59 | 96  | 84282  | 5.024  | ug/L 95  |
| 13) Acetone                    | 2.66 | 43  | 235951 | 60.218 | ug/L 100 |
| 14) Carbon disulfide           | 2.81 | 76  | 302498 | 5.068  | ug/L 100 |
| 15) Methyl Acetate             | 2.97 | 43  | 53855  | 5.435  | ug/L 100 |
| 16) Methylene chloride         | 3.06 | 84  | 123854 | 6.003  | ug/L 96  |
| 17) Methyl tert-butyl Ether    | 3.38 | 73  | 222799 | 5.456  | ug/L 99  |
| 18) trans-1,2-Dichloroethene   | 3.37 | 96  | 89005  | 5.116  | ug/L 95  |
| 19) 1,1-Dichloroethane         | 3.89 | 63  | 184053 | 5.258  | ug/L 99  |
| 21) 2-Butanone                 | 4.73 | 43  | 375969 | 63.663 | ug/L 97  |
| 22) cis-1,2-Dichloroethene     | 4.69 | 96  | 94325  | 4.938  | ug/L 93  |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU102120\  
 Data File : VU040909.D  
 Acq On : 22 Oct 2020 16:00  
 Operator : SY/MD  
 Sample : VSTDCCC005EC  
 Misc : 25.0mL/MSVOA U/WATER  
 ALS Vial : 49 Sample Multiplier: 1

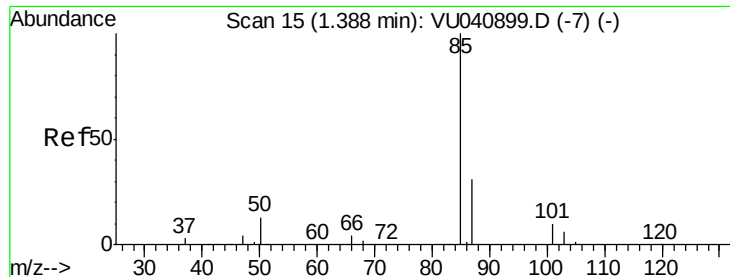
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00525

Quant Time: Oct 22 23:26:36 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMUTR102120WMA.M  
 Quant Title : TRACE VOA SOM01.0  
 QLast Update : Thu Oct 22 23:17:57 2020  
 Response via : Initial Calibration

| Internal Standards              | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|---------------------------------|-------|------|----------|--------|-------|----------|
| 23) Bromochloromethane          | 5.00  | 128  | 47267    | 5.536  | ug/L  | 98       |
| 25) Chloroform                  | 5.11  | 83   | 183599   | 5.140  | ug/L  | 96       |
| 27) 1,2-Dichloroethane          | 5.81  | 62   | 137915   | 5.655  | ug/L  | 100      |
| 29) 1,1,1-Trichloroethane       | 5.33  | 97   | 156299   | 5.141  | ug/L  | 100      |
| 30) Cyclohexane                 | 5.41  | 56   | 151153   | 4.985  | ug/L  | 99       |
| 31) Carbon tetrachloride        | 5.54  | 117  | 135805   | 5.082  | ug/L  | 99       |
| 33) Benzene                     | 5.79  | 78   | 380858   | 5.067  | ug/L  | 100      |
| 34) Trichloroethene             | 6.56  | 95   | 98687    | 5.158  | ug/L  | 95       |
| 35) Methylcyclohexane           | 6.77  | 83   | 142710   | 4.984  | ug/L  | 98       |
| 37) 1,2-Dichloropropane         | 6.80  | 63   | 106283   | 5.236  | ug/L  | 98       |
| 38) Bromodichloromethane        | 7.12  | 83   | 132687   | 5.149  | ug/L  | 98       |
| 39) cis-1,3-Dichloropropene     | 7.62  | 75   | 135576   | 4.995  | ug/L  | 97       |
| 40) 4-Methyl-2-pentanone        | 7.80  | 43   | 857775   | 62.980 | ug/L  | 100      |
| 42) Toluene                     | 7.98  | 91   | 396469   | 5.251  | ug/L  | 99       |
| 44) trans-1,3-Dichloropropene   | 8.22  | 75   | 131974   | 5.370  | ug/L  | 98       |
| 45) 1,1,2-Trichloroethane       | 8.40  | 97   | 76261    | 5.514  | ug/L  | 98       |
| 47) Tetrachloroethene           | 8.56  | 164  | 70208    | 4.931  | ug/L  | 97       |
| 48) 2-Hexanone                  | 8.69  | 43   | 659445   | 66.558 | ug/L  | 99       |
| 49) Dibromochloromethane        | 8.82  | 129  | 87989    | 5.333  | ug/L  | 98       |
| 50) 1,2-Dibromoethane           | 8.93  | 107  | 71530    | 5.537  | ug/L  | 97       |
| 51) Chlorobenzene               | 9.45  | 112  | 243642   | 4.997  | ug/L  | 99       |
| 52) Ethylbenzene                | 9.57  | 91   | 404293   | 4.980  | ug/L  | 100      |
| 53) m,p-Xylene                  | 9.70  | 106  | 153527   | 5.250  | ug/L  | 88       |
| 54) o-Xylene                    | 10.10 | 106  | 140250   | 5.044  | ug/L  | 97       |
| 55) Styrene                     | 10.11 | 104  | 257576   | 5.324  | ug/L  | 100      |
| 56) Isopropylbenzene            | 10.48 | 105  | 382572   | 5.140  | ug/L  | 99       |
| 58) 1,1,1,2,2-Tetrachloroethane | 10.78 | 83   | 104159   | 5.913  | ug/L  | 99       |
| 59) 1,2,3-Trichloropropane      | 10.82 | 75   | 78368    | 5.941  | ug/L  | 95       |
| 61) Bromoform                   | 10.29 | 173  | 49552    | 5.557  | ug/L  | 96       |
| 62) 1,3-Dichlorobenzene         | 11.74 | 146  | 189870   | 4.927  | ug/L  | 98       |
| 63) 1,4-Dichlorobenzene         | 11.83 | 146  | 196438   | 4.960  | ug/L  | 96       |
| 65) 1,2-Dichlorobenzene         | 12.21 | 146  | 183972   | 5.087  | ug/L  | 98       |
| 66) 1,2-Dibromo-3-chloropropan  | 12.99 | 75   | 18342    | 5.451  | ug/L  | 96       |
| 67) 1,3,5-Trichlorobenzene      | 13.21 | 180  | 129676   | 4.585  | ug/L  | 99       |
| 68) 1,2,4-trichlorobenzene      | 13.83 | 180  | 109506   | 4.593  | ug/L  | 99       |
| 69) Naphthalene                 | 14.08 | 128  | 192565   | 4.388  | ug/L  | 99       |
| 70) 1,2,3-Trichlorobenzene      | 14.32 | 180  | 107117   | 4.633  | ug/L  | 97       |

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





#2

Dichlorodifluoromethane

Concen: 5.092 ug/L

RT: 1.39 min Scan# 15

Delta R.T. -0.00 min

Lab File: VU040909.D

Acq: 22 Oct 2020 16:00

Instrument :

MSVOA\_U

ClientSampleId :

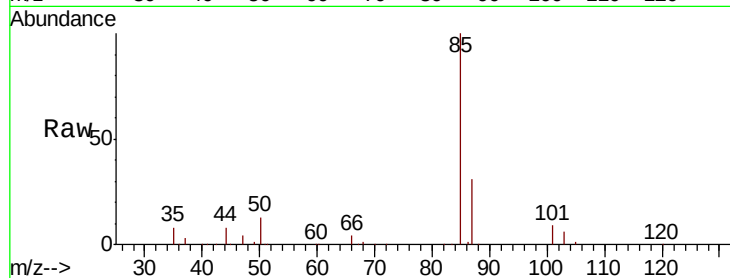
VSTD00525

Tot Ion: 85 Resp: 118407

Ion Ratio Lower Upper

85 100

87 32.0 25.0 37.6



Abundance Ion 85.00 (84.70 to 85.70): VU040909.D (-1) (-)

Ion 87.00 (86.70 to 87.70): VU040909.D (-1) (-)

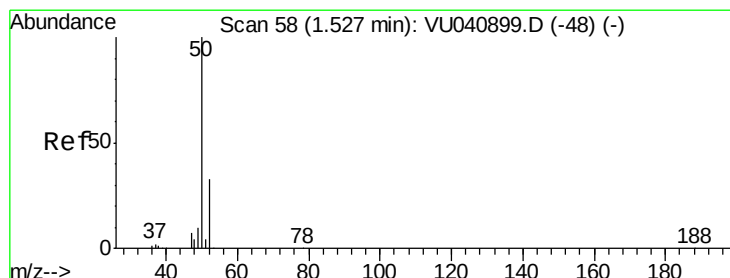
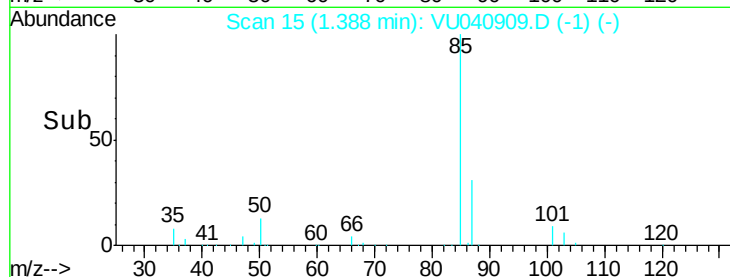
1.39

100000

50000

0

Time-->



#3

Chloromethane

Concen: 4.812 ug/L

RT: 1.53 min Scan# 58

Delta R.T. -0.00 min

Lab File: VU040909.D

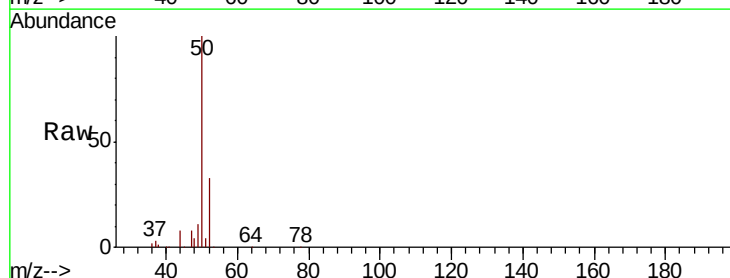
Acq: 22 Oct 2020 16:00

Tgt Ion: 50 Resp: 121452

Ion Ratio Lower Upper

50 100

52 33.4 21.8 40.6



Abundance Ion 50.05 (49.75 to 50.75): VU040909.D (-1) (-)

Ion 52.05 (51.75 to 52.75): VU040909.D (-1) (-)

1.53

120000

100000

80000

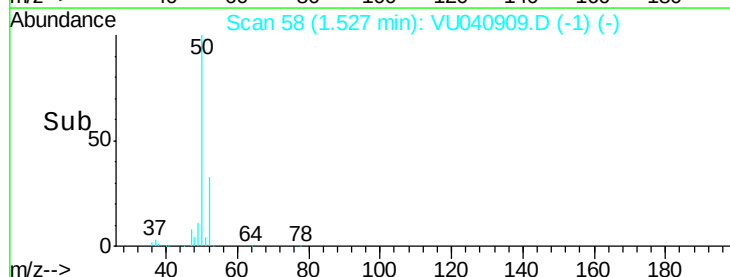
60000

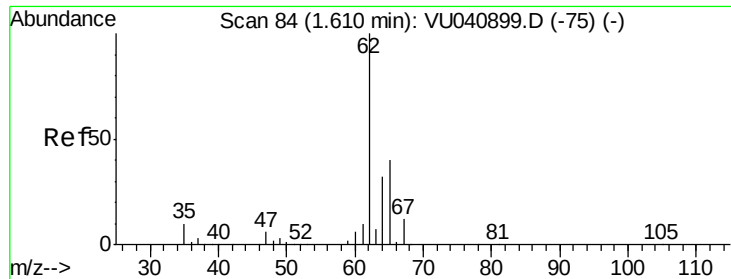
40000

20000

0

Time-->





#5

Vinyl chloride

Concen: 5.057 ug/L

RT: 1.61 min Scan# 84

Delta R.T. -0.00 min

Lab File: VU040909.D

Acq: 22 Oct 2020 16:00

Instrument :

MSVOA\_U

ClientSampleId :

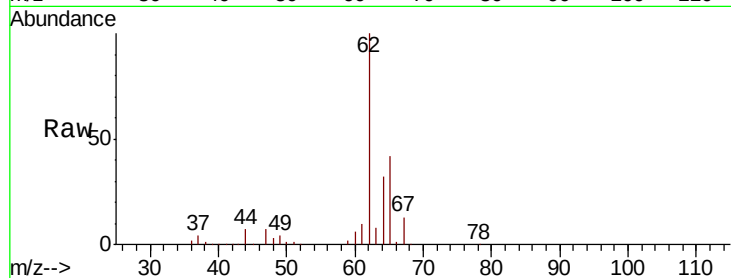
VSTD00525

Tot Ion: 62 Resp: 118680

Ion Ratio Lower Upper

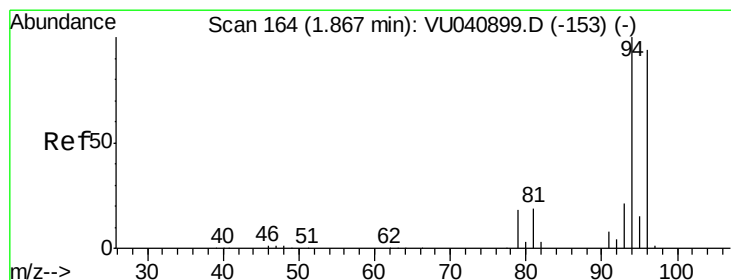
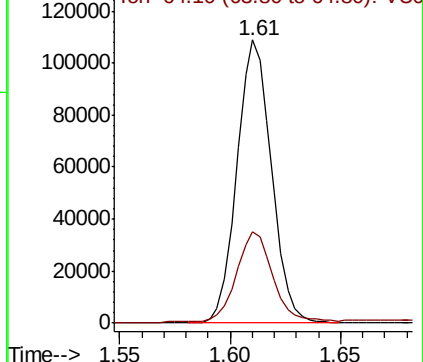
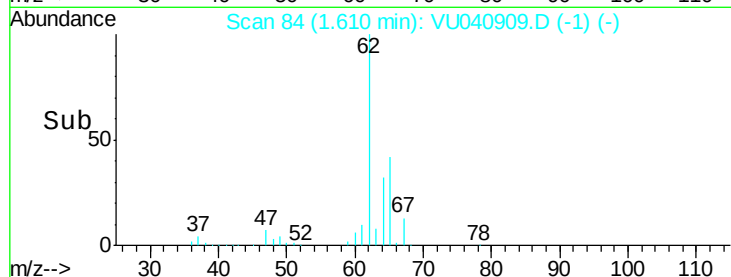
62 100

64 32.2 21.8 40.6



Abundance Ion 62.00 (61.70 to 62.70): VU040909.D (-1) (-)

Ion 64.10 (63.80 to 64.80): VU040909.D (-1) (-)



#6

Bromomethane

Concen: 5.691 ug/L

RT: 1.87 min Scan# 164

Delta R.T. -0.00 min

Lab File: VU040909.D

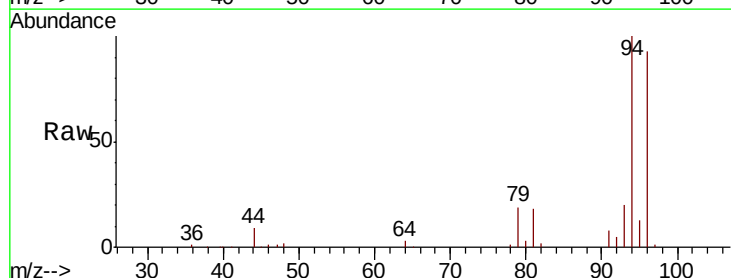
Acq: 22 Oct 2020 16:00

Tgt Ion: 94 Resp: 67299

Ion Ratio Lower Upper

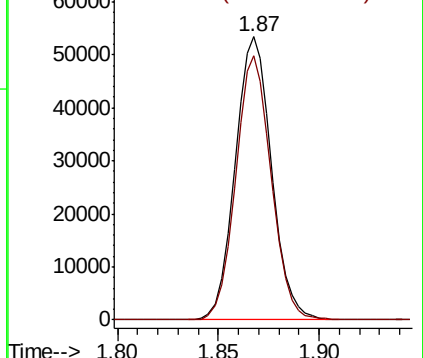
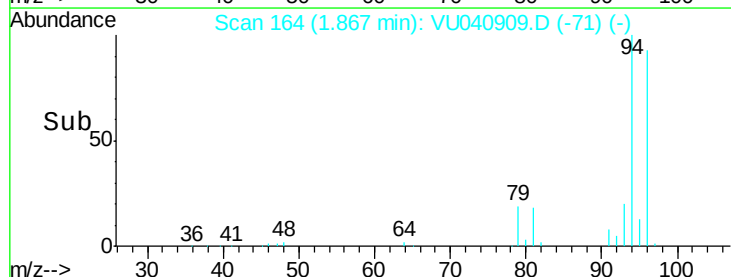
94 100

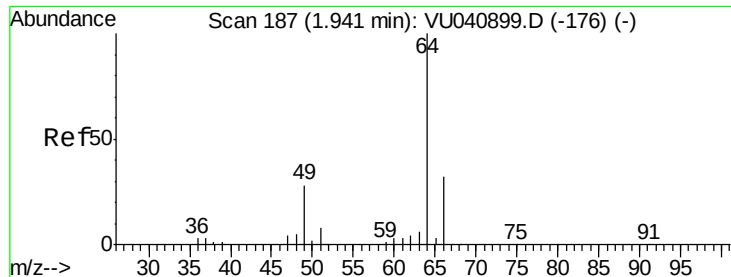
96 93.2 67.8 125.8



Abundance Ion 94.00 (93.70 to 94.70): VU040909.D (-71) (-)

Ion 96.00 (95.70 to 96.70): VU040909.D (-71) (-)

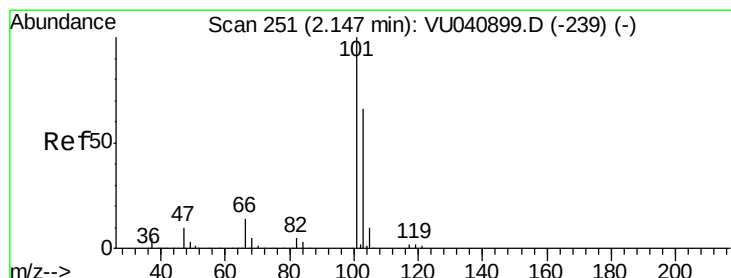
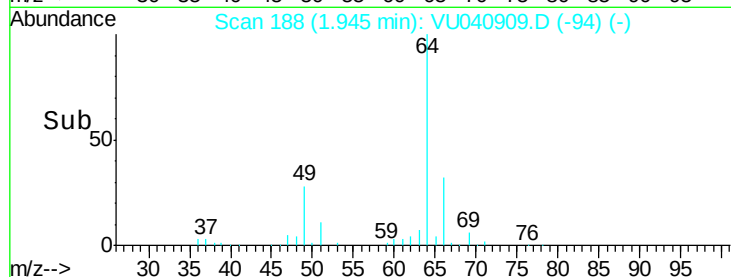
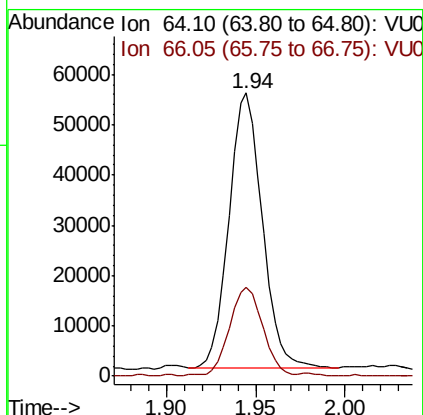
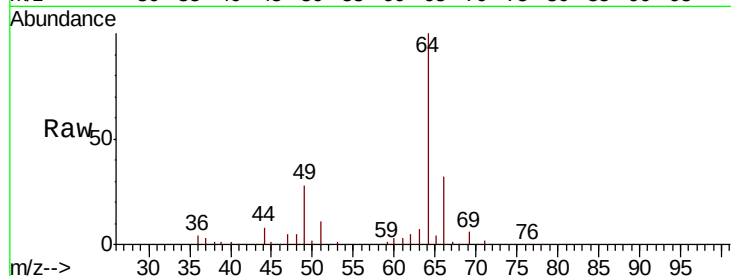




#8  
Chloroethane  
Concen: 4.672 ug/L  
RT: 1.94 min Scan# 188  
Delta R.T. 0.00 min  
Lab File: VU040909.D  
Acq: 22 Oct 2020 16:00

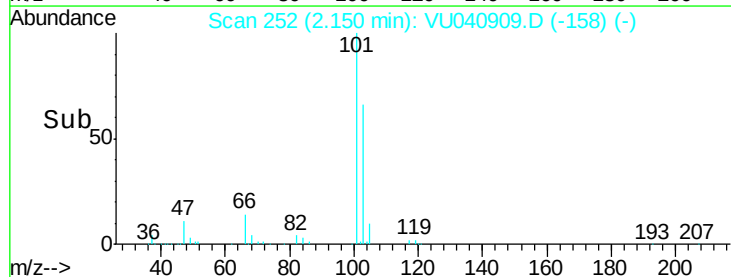
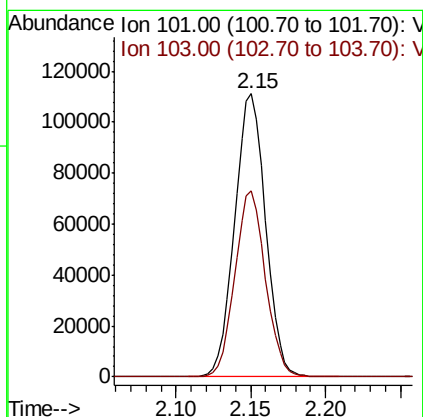
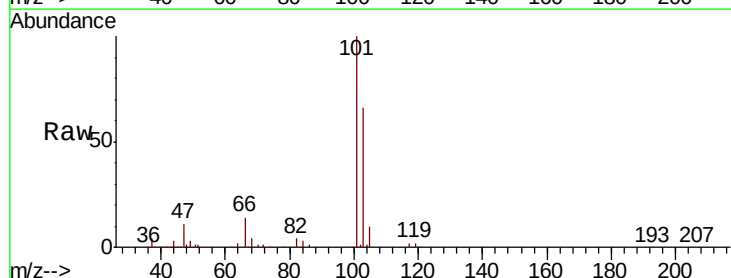
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00525

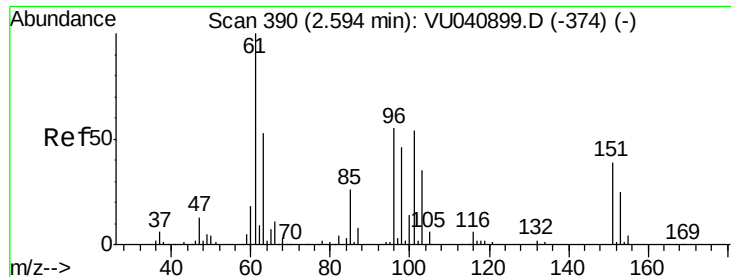
Tot Ion: 64 Resp: 70890  
Ion Ratio Lower Upper  
64 100  
66 31.6 21.2 39.4



#9  
Trichlorofluoromethane  
Concen: 5.181 ug/L  
RT: 2.15 min Scan# 252  
Delta R.T. 0.00 min  
Lab File: VU040909.D  
Acq: 22 Oct 2020 16:00

Tgt Ion:101 Resp: 160407  
Ion Ratio Lower Upper  
101 100  
103 64.8 51.4 77.2





#10

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

Concen: 5.259 ug/L

RT: 2.59 min Scan# 390

Delta R.T. -0.00 min

Lab File: VU040909.D

Acq: 22 Oct 2020 16:00

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00525

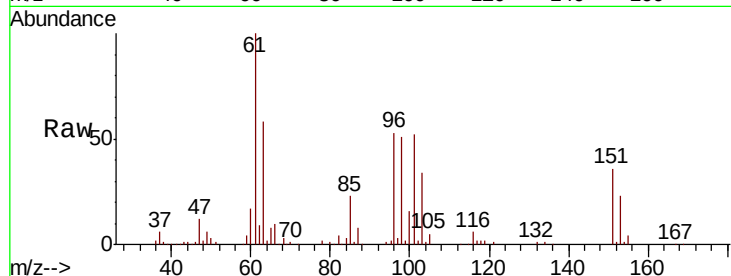
Tot Ion:101 Resp: 94632

Ion Ratio Lower Upper

101 100

85 45.4 36.4 54.6

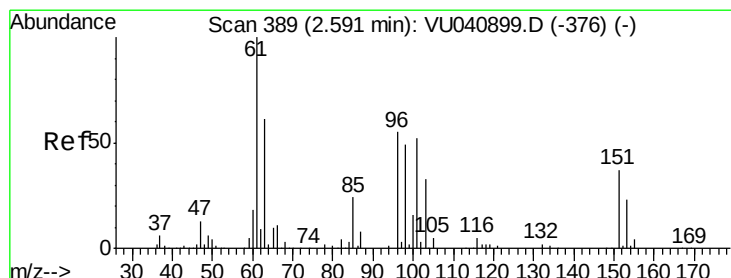
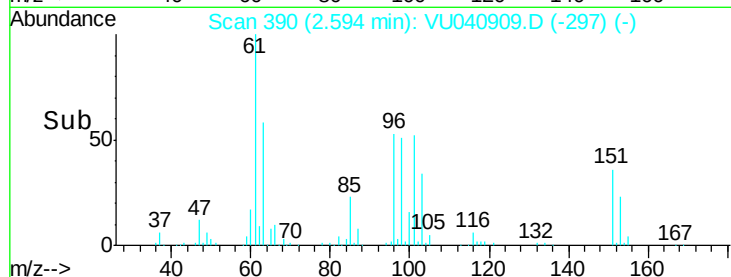
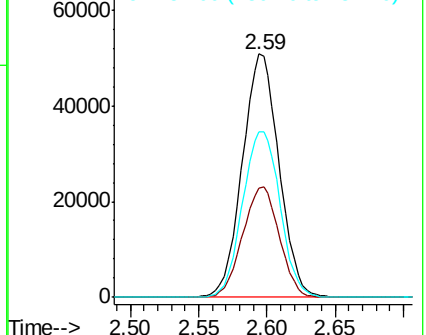
151 69.7 56.3 84.5



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: 5.024 ug/L

RT: 2.59 min Scan# 390

Delta R.T. 0.00 min

Lab File: VU040909.D

Acq: 22 Oct 2020 16:00

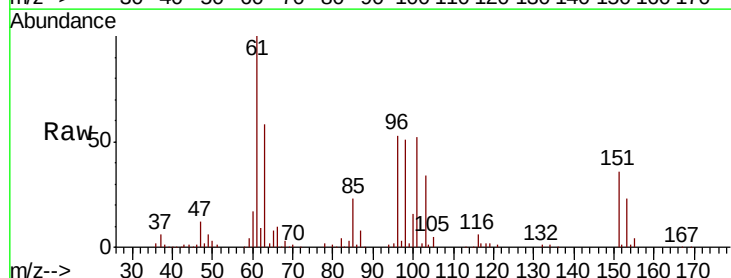
Tgt Ion: 96 Resp: 84282

Ion Ratio Lower Upper

96 100

61 188.3 130.9 243.1

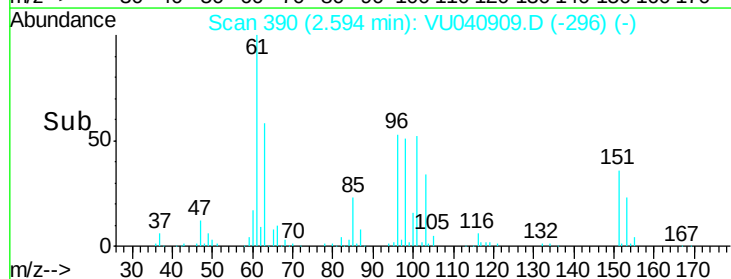
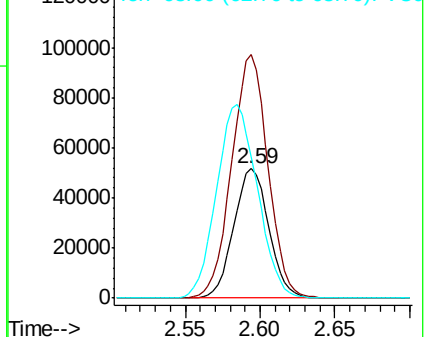
63 109.7 85.4 158.6

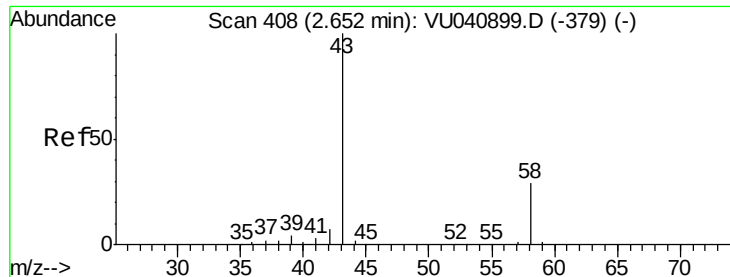


Abundance Ion 96.00 (95.70 to 96.70): VU0

Ion 61.05 (60.75 to 61.75): VU0

Ion 63.00 (62.70 to 63.70): VU0





#13

Acetone

Concen: 60.218 ug/L

RT: 2.66 min Scan# 410

Delta R.T. 0.01 min

Lab File: VU040909.D

Acq: 22 Oct 2020 16:00

Instrument :

MSVOA\_U

ClientSampleId :

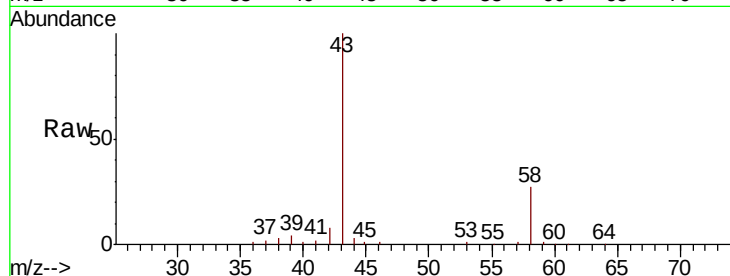
VSTD00525

Tot Ion: 43 Resp: 235951

Ion Ratio Lower Upper

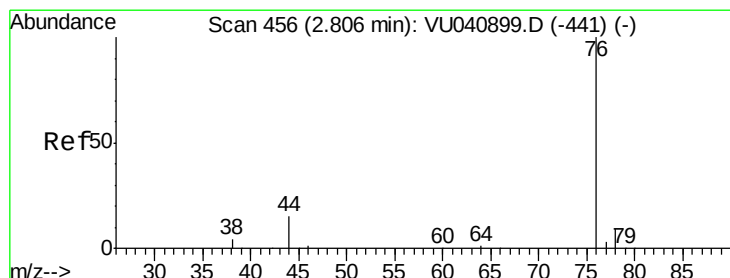
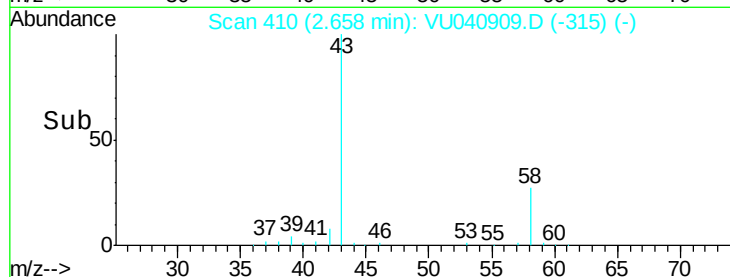
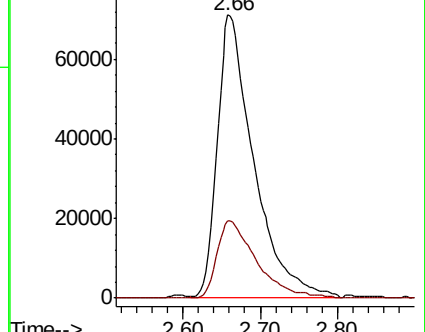
43 100

58 29.5 0.0 58.6



Abundance Ion 43.05 (42.75 to 43.75): VU040909.D (-315) (-)

Ion 58.05 (57.75 to 58.75): VU040909.D (-315) (-)



#14

Carbon disulfide

Concen: 5.068 ug/L

RT: 2.81 min Scan# 456

Delta R.T. -0.00 min

Lab File: VU040909.D

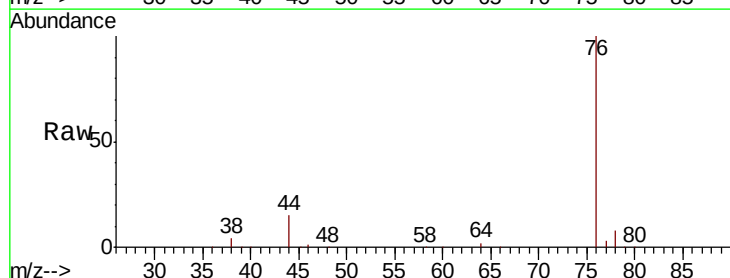
Acq: 22 Oct 2020 16:00

Tgt Ion: 76 Resp: 302498

Ion Ratio Lower Upper

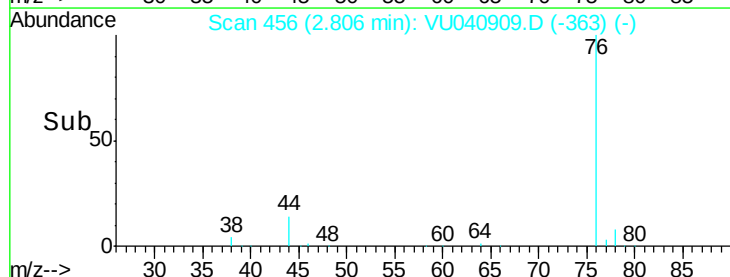
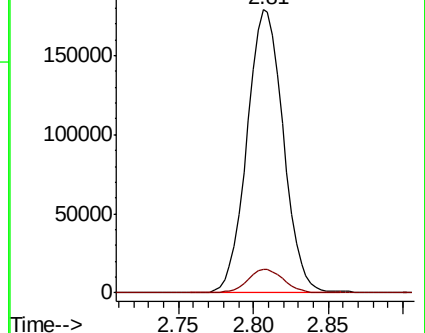
76 100

78 8.3 6.8 10.2

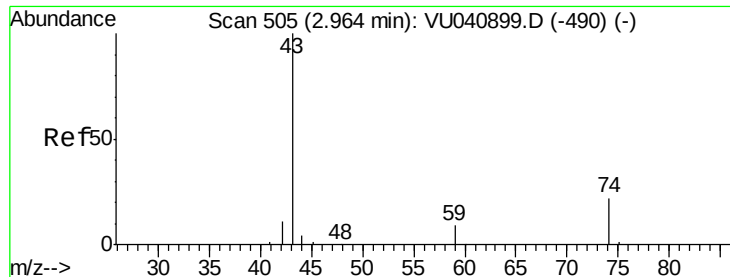


Abundance Ion 76.05 (75.75 to 76.75): VU040909.D (-363) (-)

Ion 78.00 (77.70 to 78.70): VU040909.D (-363) (-)







#15

Methvl Acetate

Concen: 5.435 ug/L

RT: 2.97 min Scan# 507

Delta R.T. 0.01 min

Lab File: VU040909.D

Acq: 22 Oct 2020 16:00

Instrument :

MSVOA\_U

ClientSampled :

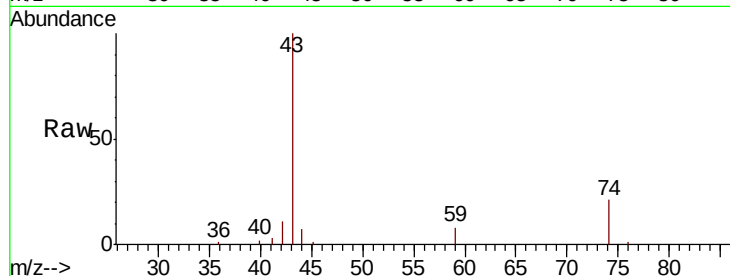
VSTD00525

Tot Ion: 43 Resp: 53855

Ion Ratio Lower Upper

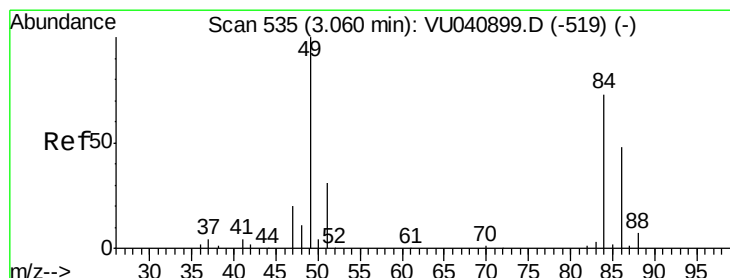
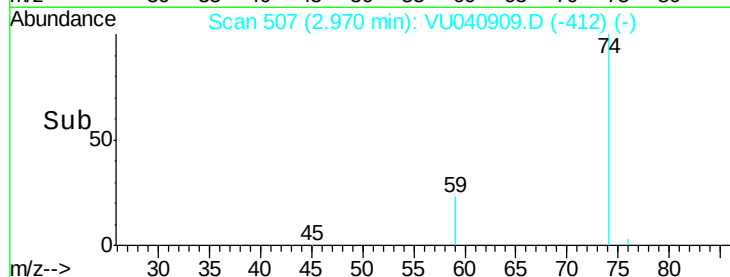
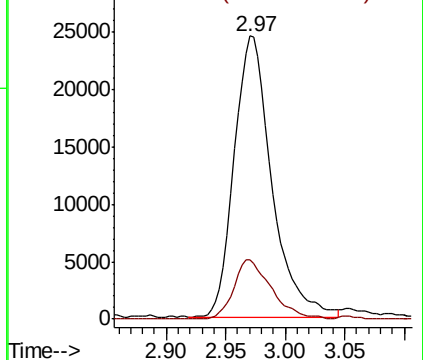
43 100

74 20.7 16.6 25.0



Abundance Ion 43.05 (42.75 to 43.75): VU0

Ion 74.05 (73.75 to 74.75): VU0



#16

Methylene chloride

Concen: 6.003 ug/L

RT: 3.06 min Scan# 535

Delta R.T. -0.00 min

Lab File: VU040909.D

Acq: 22 Oct 2020 16:00

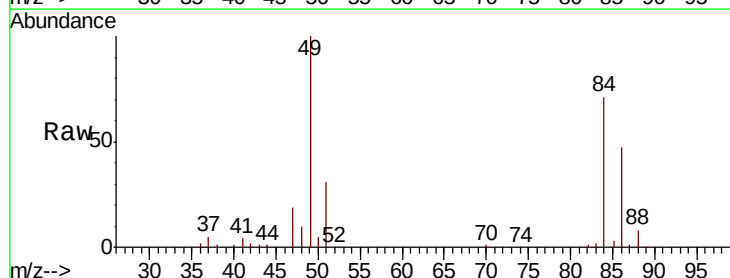
Tgt Ion: 84 Resp: 123854

Ion Ratio Lower Upper

84 100

86 66.7 44.9 83.5

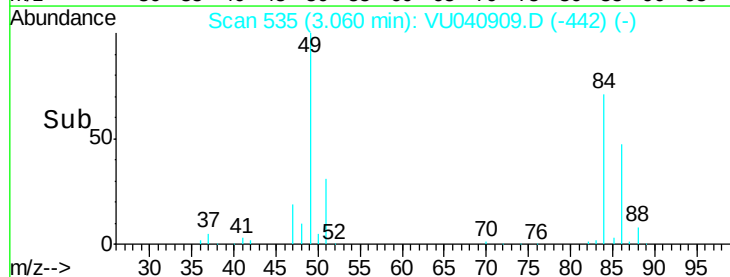
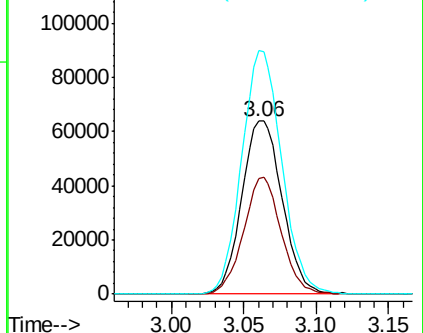
49 140.7 94.7 175.9

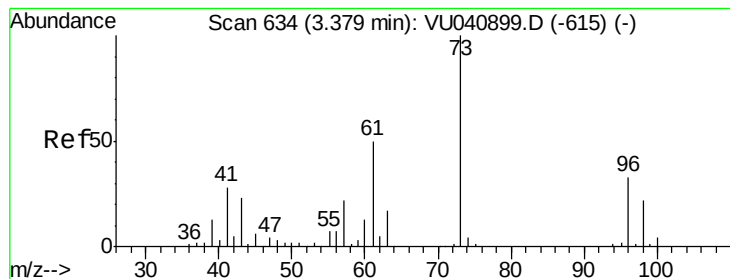


Abundance Ion 84.05 (83.75 to 84.75): VU0

Ion 86.00 (85.70 to 86.70): VU0

Ion 49.10 (48.80 to 49.80): VU0





#17

Methyl tert-butyl Ether

Concen: 5.456 ug/L

RT: 3.38 min Scan# 635

Delta R.T. 0.00 min

Lab File: VU040909.D

Acq: 22 Oct 2020 16:00

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00525

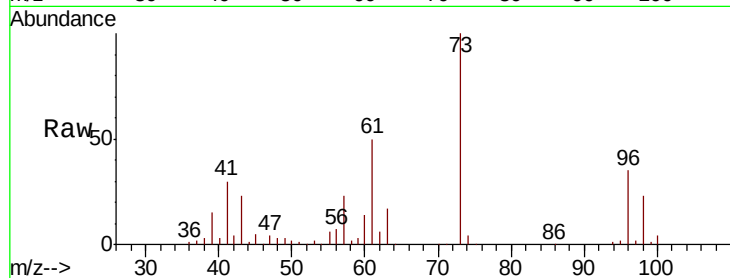
Tot Ion: 73 Resp: 222799

Ion Ratio Lower Upper

73 100

43 24.3 18.6 27.8

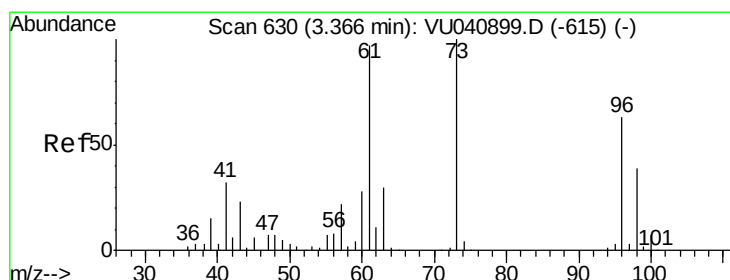
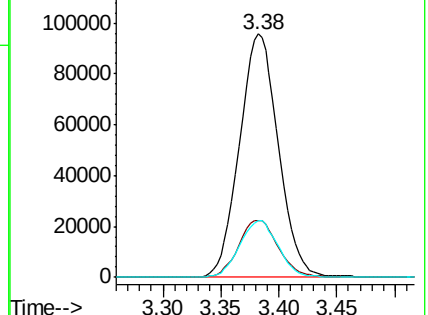
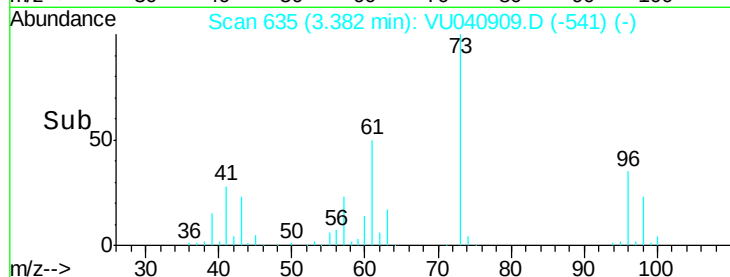
57 23.1 18.5 27.7



Abundance Ion 73.10 (72.80 to 73.80): VU040909.D (-541) (-)

Ion 43.05 (42.75 to 43.75): VU040909.D (-541) (-)

Ion 57.10 (56.80 to 57.80): VU040909.D (-541) (-)



#18

trans-1,2-Dichloroethene

Concen: 5.116 ug/L

RT: 3.37 min Scan# 631

Delta R.T. 0.00 min

Lab File: VU040909.D

Acq: 22 Oct 2020 16:00

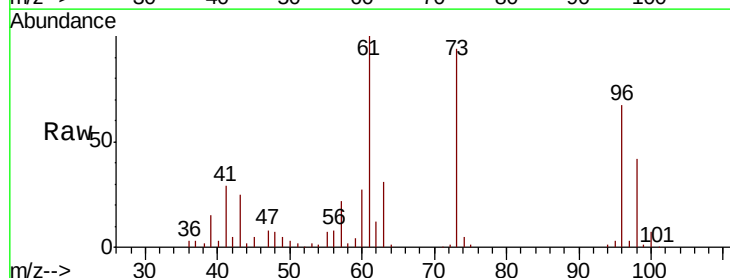
Tgt Ion: 96 Resp: 89005

Ion Ratio Lower Upper

96 100

61 148.3 107.9 200.3

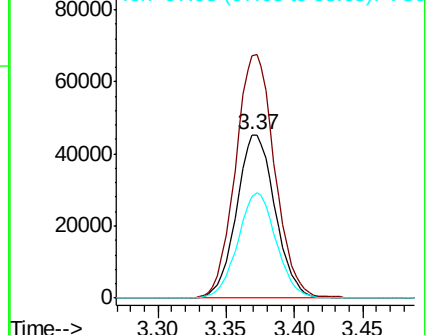
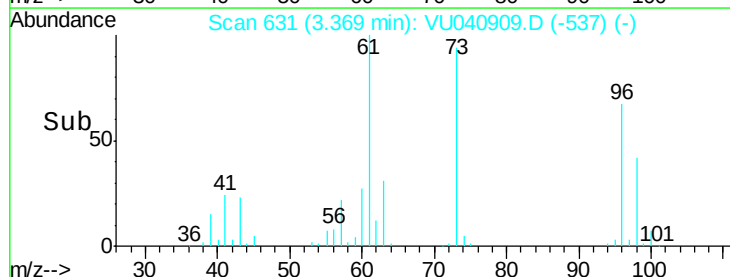
98 62.4 47.5 88.1

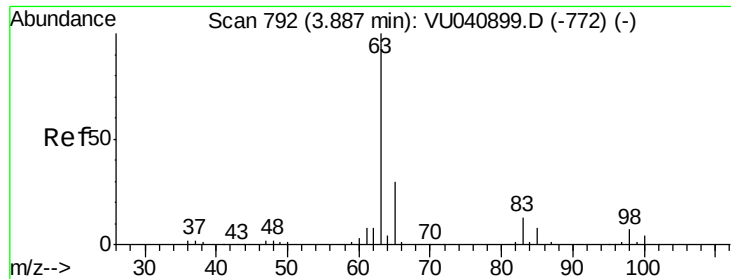


Abundance Ion 96.00 (95.70 to 96.70): VU040909.D (-537) (-)

Ion 61.05 (60.75 to 61.75): VU040909.D (-537) (-)

Ion 97.95 (97.65 to 98.65): VU040909.D (-537) (-)

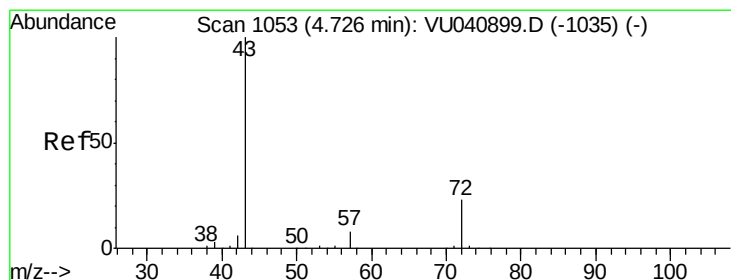
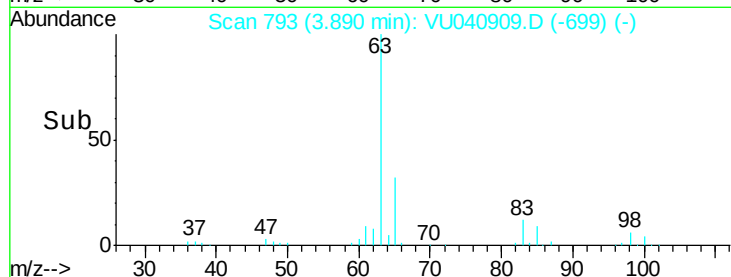
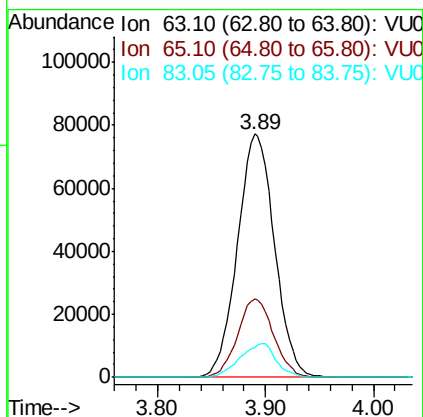
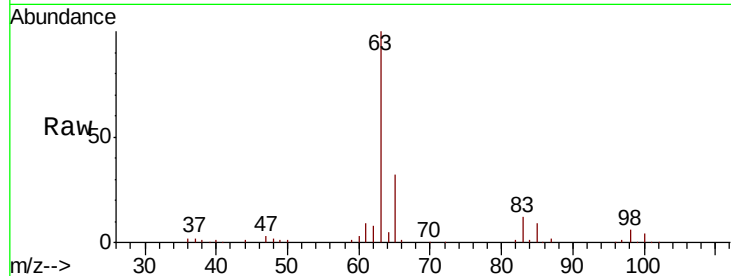




#19  
 1,1-Dichloroethane  
 Concen: 5.258 ug/L  
 RT: 3.89 min Scan# 793  
 Delta R.T. 0.00 min  
 Lab File: VU040909.D  
 Acq: 22 Oct 2020 16:00

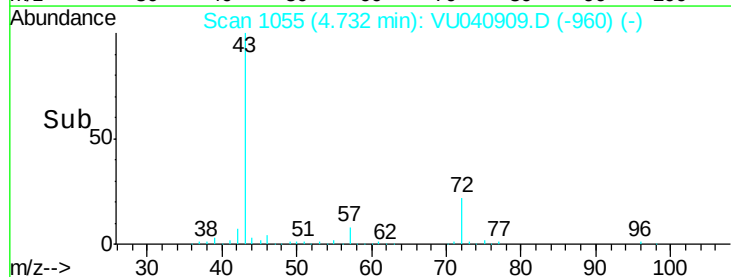
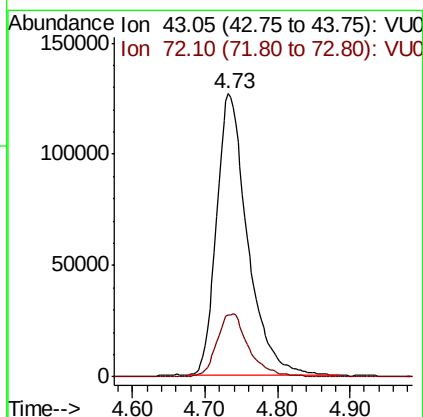
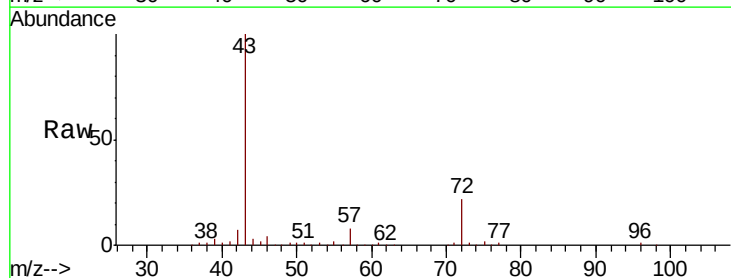
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00525

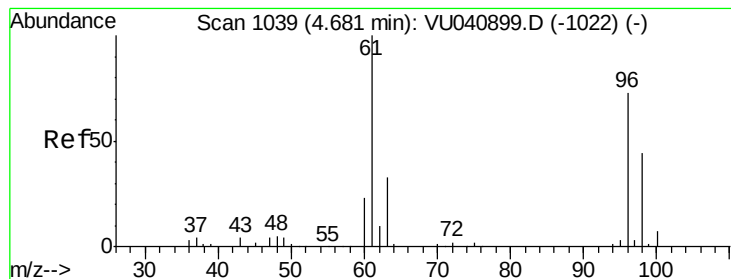
Tot Ion: 63 Resp: 184053  
 Ion Ratio Lower Upper  
 63 100  
 65 32.3 22.6 42.0  
 83 12.5 9.4 17.6



#21  
 2-Butanone  
 Concen: 63.663 ug/L  
 RT: 4.73 min Scan# 1055  
 Delta R.T. 0.01 min  
 Lab File: VU040909.D  
 Acq: 22 Oct 2020 16:00

Tgt Ion: 43 Resp: 375969  
 Ion Ratio Lower Upper  
 43 100  
 72 23.0 12.2 36.4





#22

cis-1,2-Dichloroethene

Concen: 4.938 ug/L

RT: 4.69 min Scan# 1041

Delta R.T. 0.01 min

Lab File: VU040909.D

Acq: 22 Oct 2020 16:00

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00525

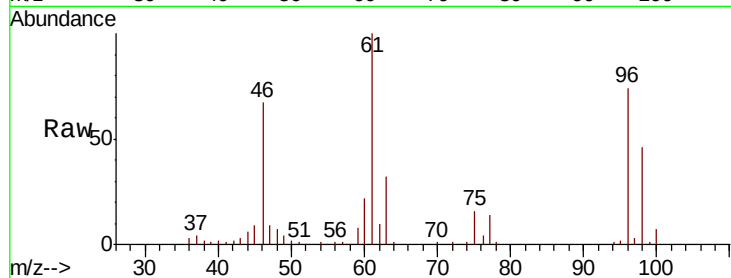
Tot Ion: 96 Resp: 94325

Ion Ratio Lower Upper

96 100

61 134.3 100.0 185.6

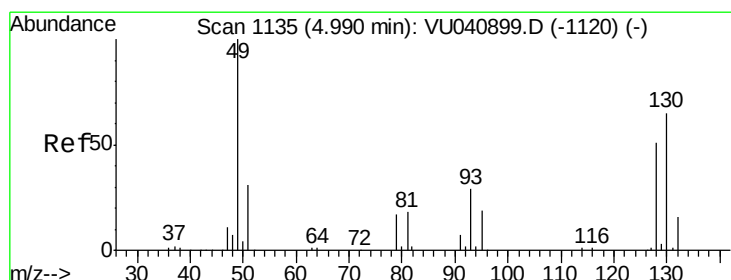
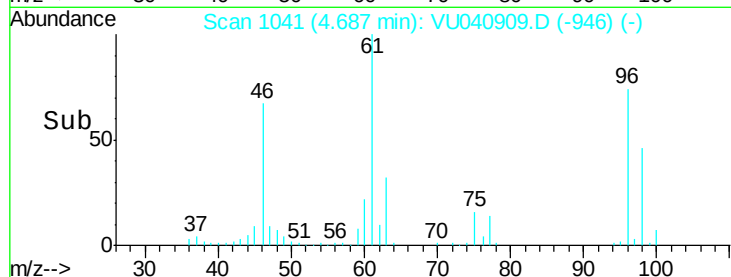
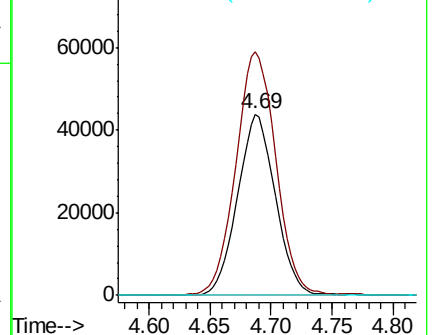
68 0.0 0.0 0.0



Abundance Ion 96.00 (95.70 to 96.70): VU040909.D (-1042) (-)

Ion 61.05 (60.75 to 61.75): VU040909.D (-1042) (-)

Ion 68.15 (67.85 to 68.85): VU040909.D (-1042) (-)



#23

Bromochloromethane

Concen: 5.536 ug/L

RT: 5.00 min Scan# 1137

Delta R.T. 0.01 min

Lab File: VU040909.D

Acq: 22 Oct 2020 16:00

Tgt Ion:128 Resp: 47267

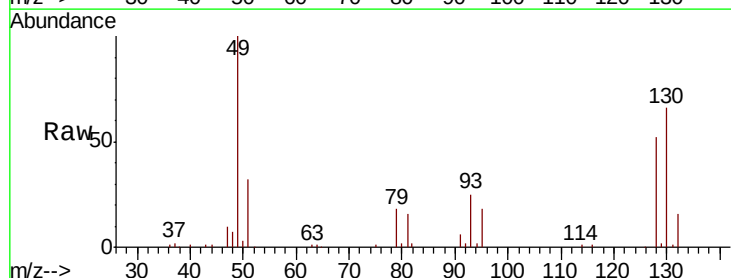
Ion Ratio Lower Upper

128 100

49 191.9 133.2 247.4

130 126.8 86.6 160.8

51 61.5 48.8 73.2

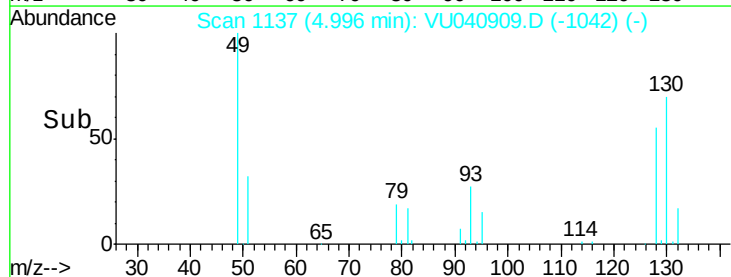
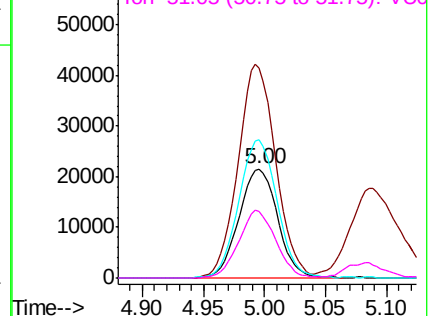


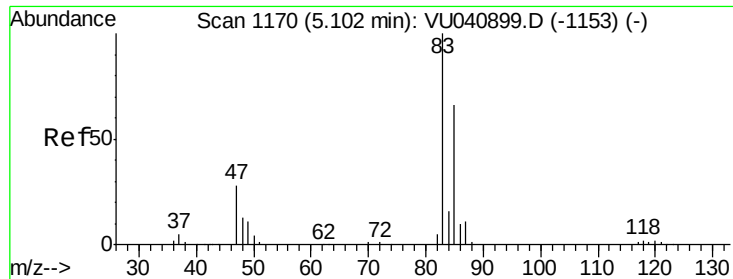
Abundance Ion 127.90 (127.60 to 128.60): VU040909.D (-1042) (-)

Ion 49.10 (48.80 to 49.80): VU040909.D (-1042) (-)

Ion 129.95 (129.65 to 130.65): VU040909.D (-1042) (-)

Ion 51.05 (50.75 to 51.75): VU040909.D (-1042) (-)

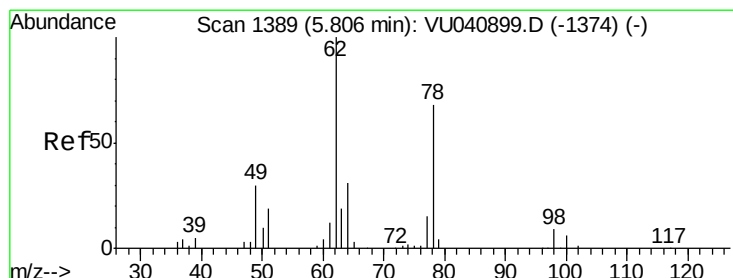
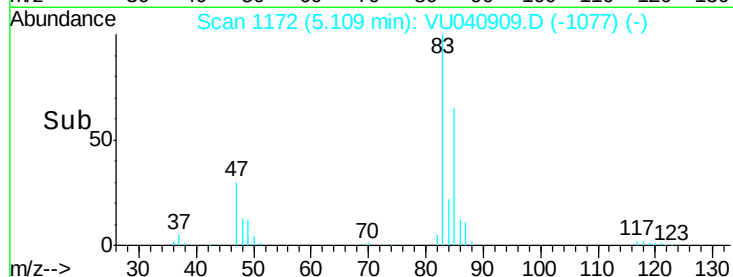
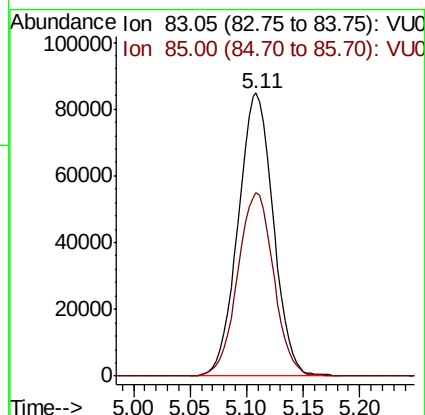
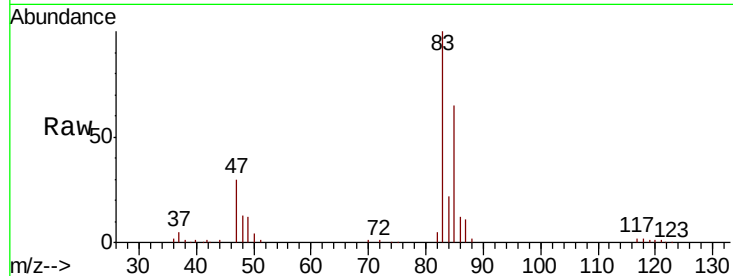




#25  
Chloroform  
Concen: 5.140 ug/L  
RT: 5.11 min Scan# 1172  
Delta R.T. 0.01 min  
Lab File: VU040909.D  
Acq: 22 Oct 2020 16:00

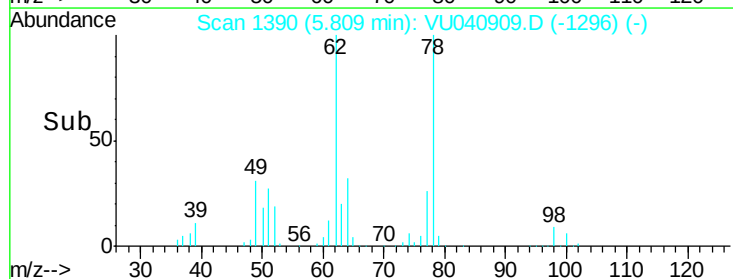
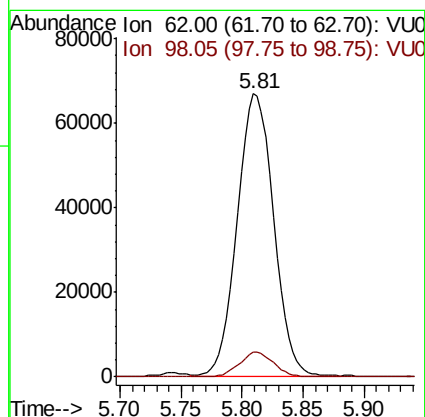
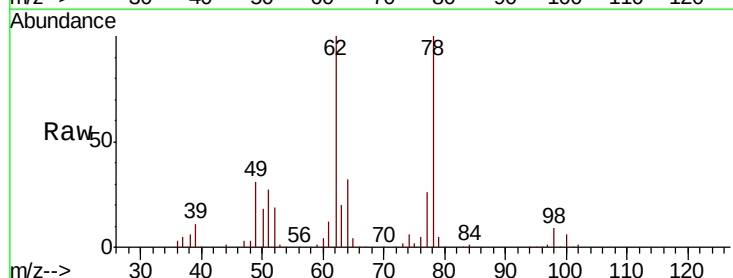
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00525

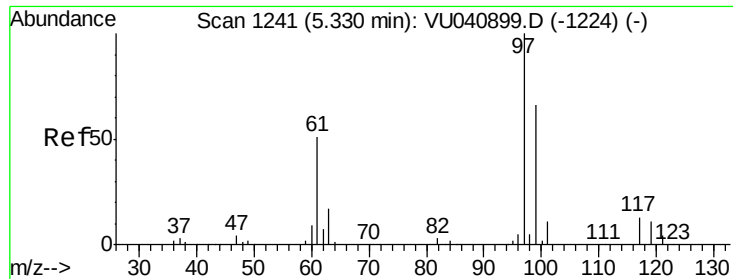
Tot Ion: 83 Resp: 183599  
Ion Ratio Lower Upper  
83 100  
85 65.0 43.4 80.6



#27  
1,2-Dichloroethane  
Concen: 5.655 ug/L  
RT: 5.81 min Scan# 1390  
Delta R.T. 0.00 min  
Lab File: VU040909.D  
Acq: 22 Oct 2020 16:00

Tgt Ion: 62 Resp: 137915  
Ion Ratio Lower Upper  
62 100  
98 8.7 7.0 10.6

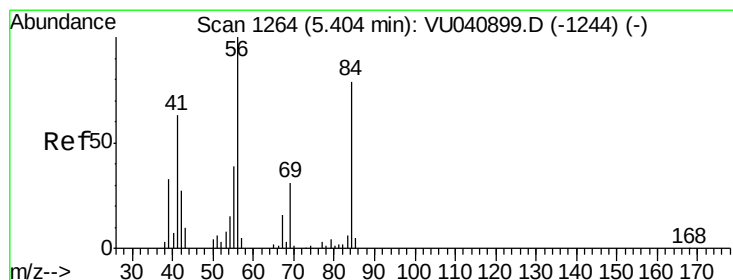
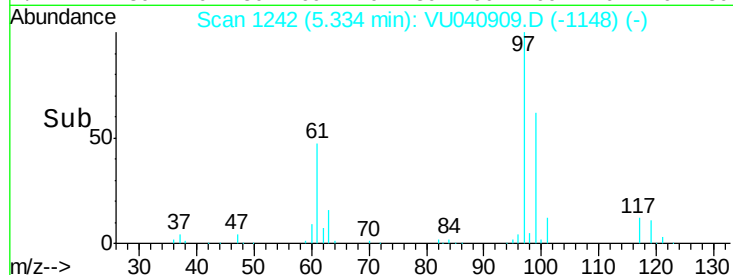
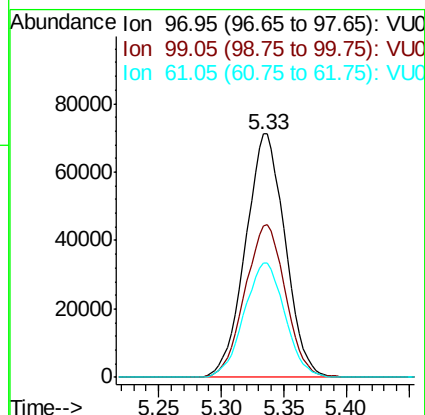
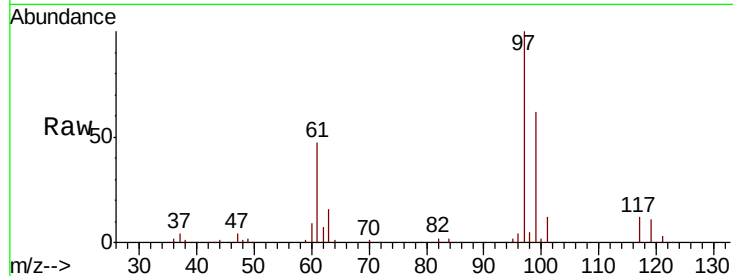




#29  
 1,1,1-Trichloroethane  
 Concen: 5.141 ug/L  
 RT: 5.33 min Scan# 1242  
 Delta R.T. 0.00 min  
 Lab File: VU040909.D  
 Acq: 22 Oct 2020 16:00

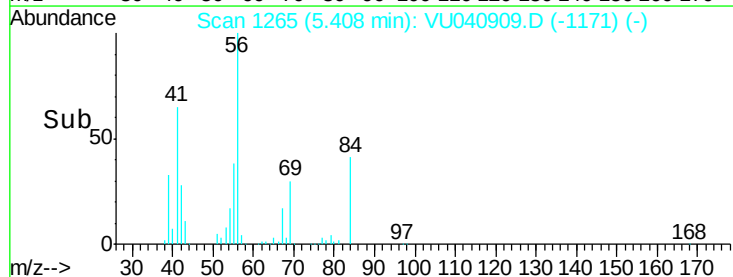
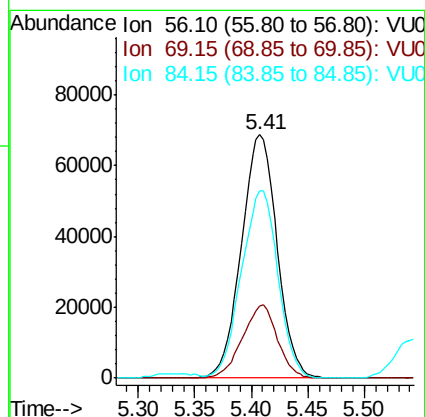
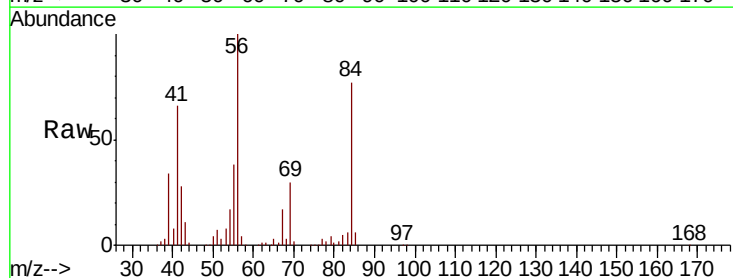
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00525

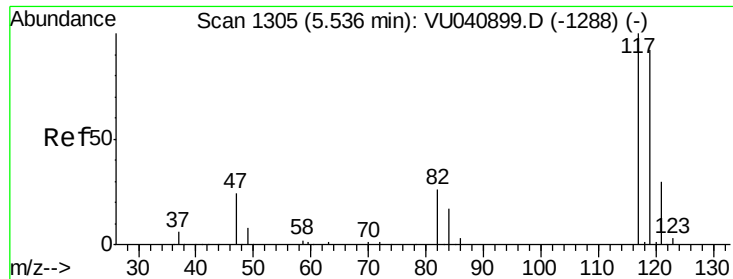
Tot Ion: 97 Resp: 156299  
 Ion Ratio Lower Upper  
 97 100  
 99 64.1 51.2 76.8  
 61 48.3 39.0 58.6



#30  
 Cyclohexane  
 Concen: 4.985 ug/L  
 RT: 5.41 min Scan# 1265  
 Delta R.T. 0.00 min  
 Lab File: VU040909.D  
 Acq: 22 Oct 2020 16:00

Tgt Ion: 56 Resp: 151153  
 Ion Ratio Lower Upper  
 56 100  
 69 29.5 22.6 33.8  
 84 78.7 63.0 94.6





#31

Carbon tetrachloride

Concen: 5.082 ug/L

RT: 5.54 min Scan# 1307

Delta R.T. 0.01 min

Lab File: VU040909.D

Acq: 22 Oct 2020 16:00

Instrument :

MSVOA\_U

ClientSampleId :

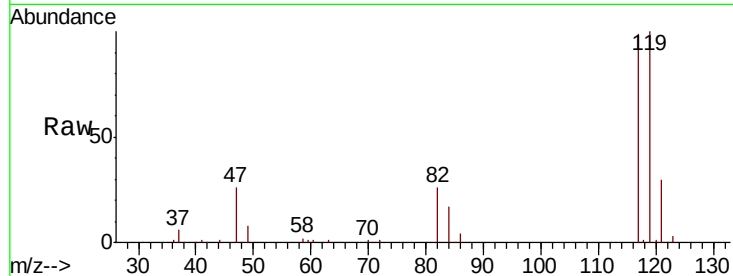
VSTD00525

Tot Ion:117 Resp: 135805

Ion Ratio Lower Upper

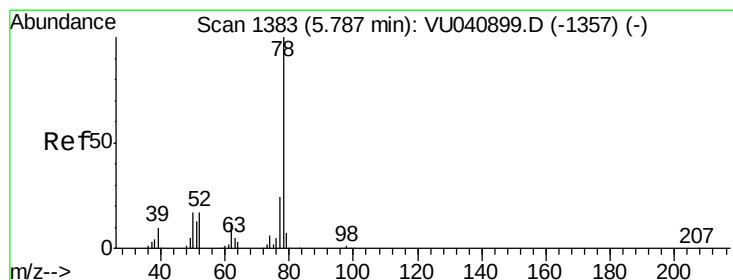
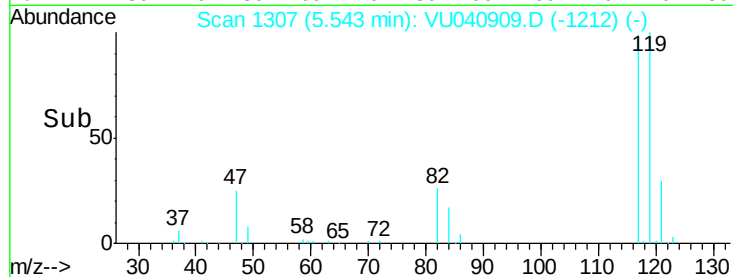
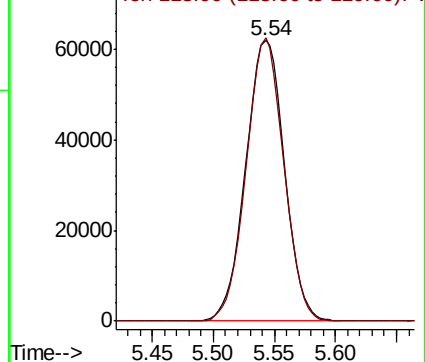
117 100

119 97.5 77.2 115.8



Abundance Ion 116.90 (116.60 to 117.60): V

Ion 118.90 (118.60 to 119.60): V



#33

Benzene

Concen: 5.067 ug/L

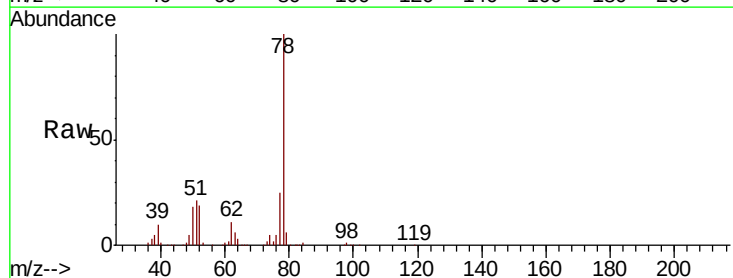
RT: 5.79 min Scan# 1384

Delta R.T. 0.00 min

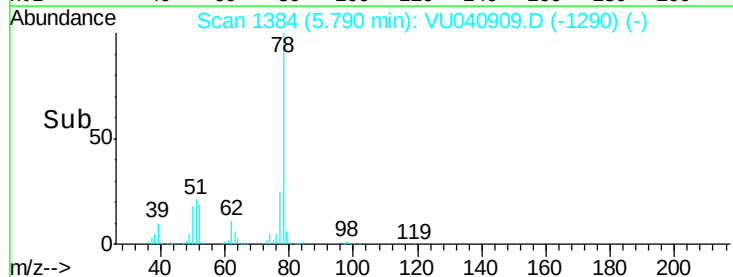
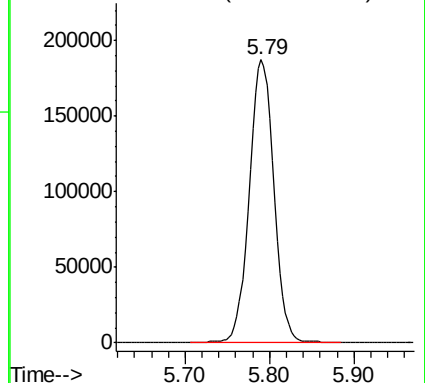
Lab File: VU040909.D

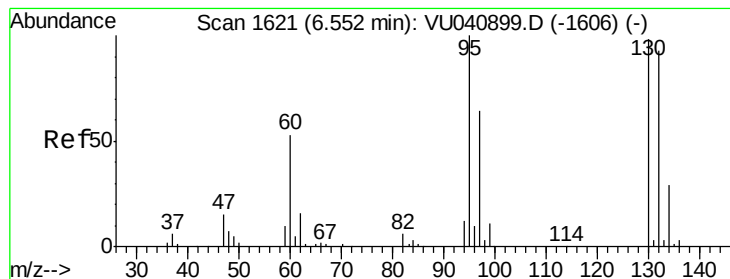
Acq: 22 Oct 2020 16:00

Tgt Ion: 78 Resp: 380858



Abundance Ion 78.10 (77.80 to 78.80): VU0





#34

Trichloroethene

Concen: 5.158 ug/L

RT: 6.56 min Scan# 1622

Delta R.T. 0.00 min

Lab File: VU040909.D

Acq: 22 Oct 2020 16:00

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00525

Tot Ion: 95 Resp: 98687

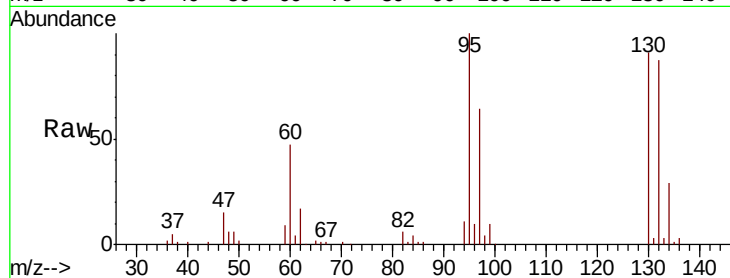
Ion Ratio Lower Upper

95 100

97 63.8 46.0 85.4

132 87.3 63.6 118.2

130 91.1 68.6 127.4

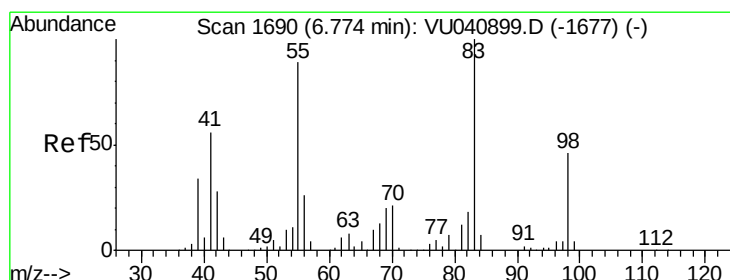
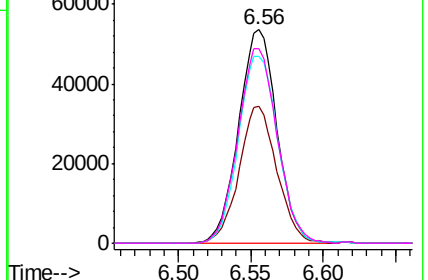
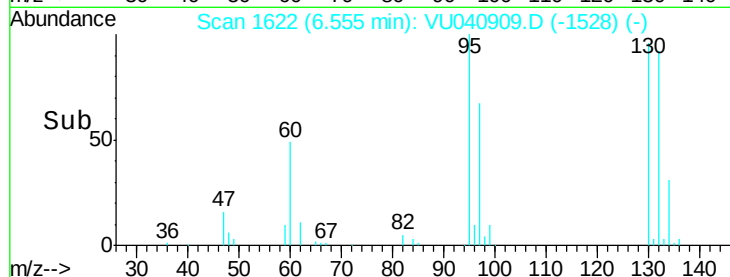


Abundance Ion 95.00 (94.70 to 95.70): VU0

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: 4.984 ug/L

RT: 6.77 min Scan# 1690

Delta R.T. -0.00 min

Lab File: VU040909.D

Acq: 22 Oct 2020 16:00

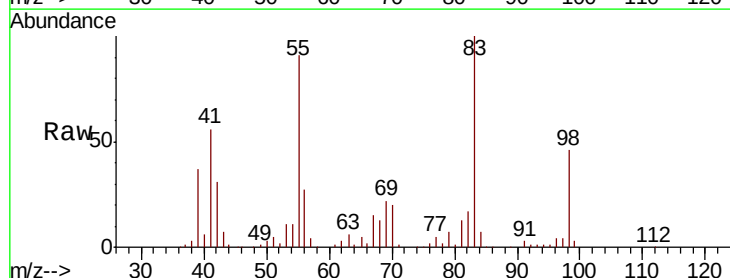
Tgt Ion: 83 Resp: 142710

Ion Ratio Lower Upper

83 100

55 88.7 69.1 103.7

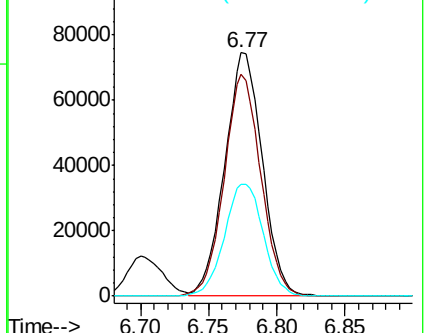
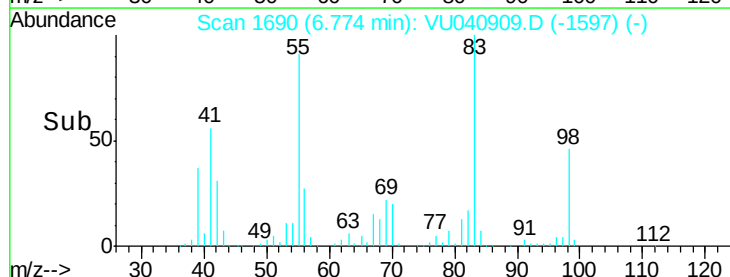
98 47.4 37.8 56.6



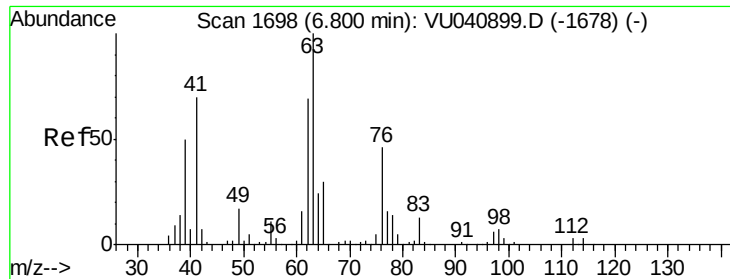
Abundance Ion 83.15 (82.85 to 83.85): VU0

Ion 55.10 (54.80 to 55.80): VU0

Ion 98.15 (97.85 to 98.85): VU0



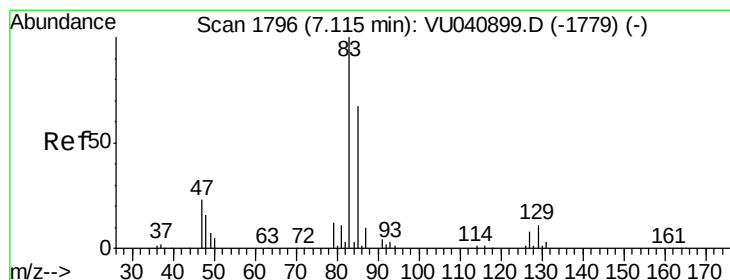
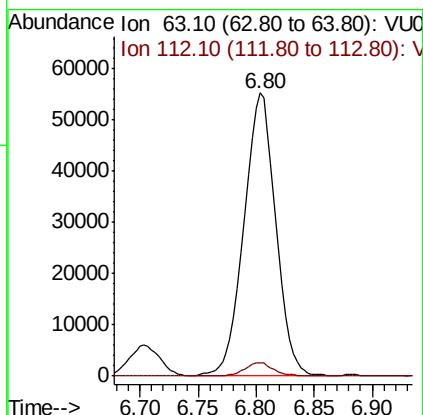
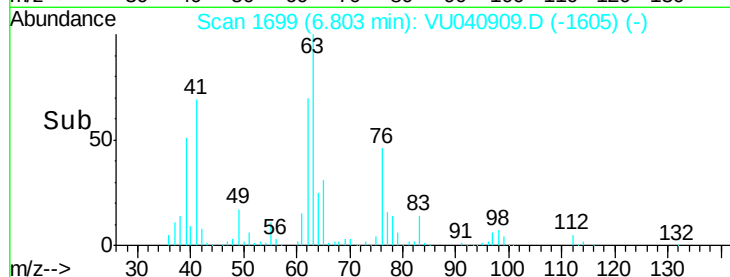
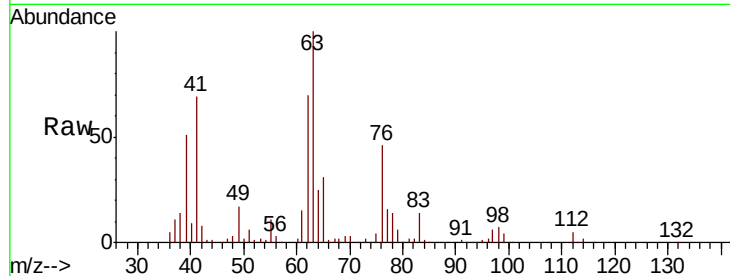




#37  
 1,2-Dichloropropane  
 Concen: 5.236 ug/L  
 RT: 6.80 min Scan# 1699  
 Delta R.T. 0.00 min  
 Lab File: VU040909.D  
 Acq: 22 Oct 2020 16:00

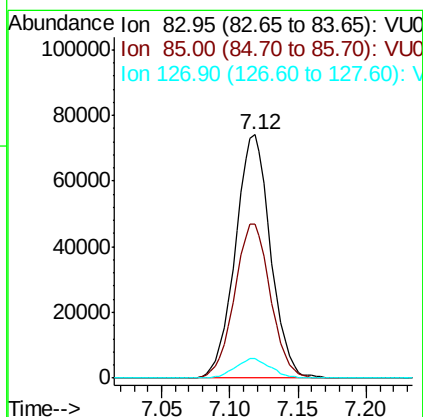
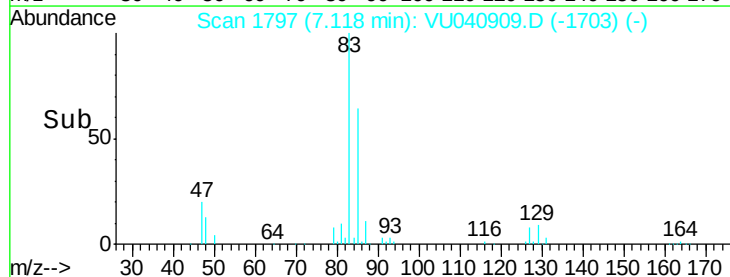
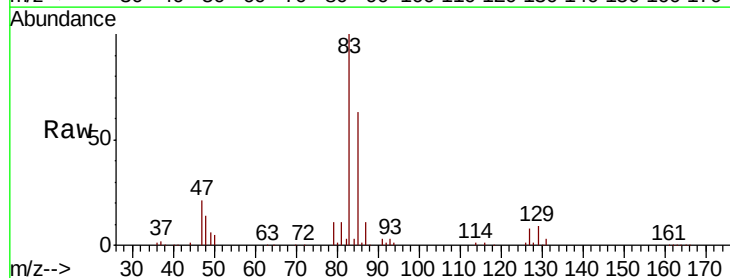
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00525

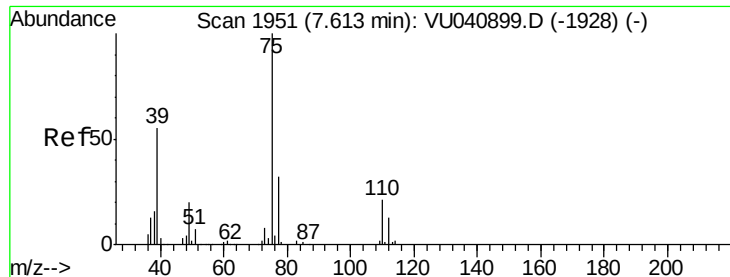
Tot Ion: 63 Resp: 106283  
 Ion Ratio Lower Upper  
 63 100  
 112 4.4 3.0 4.6



#38  
 Bromodichloromethane  
 Concen: 5.149 ug/L  
 RT: 7.12 min Scan# 1797  
 Delta R.T. 0.00 min  
 Lab File: VU040909.D  
 Acq: 22 Oct 2020 16:00

Tgt Ion: 83 Resp: 132687  
 Ion Ratio Lower Upper  
 83 100  
 85 63.5 43.3 80.5  
 127 8.0 6.2 9.4





#39

cis-1,3-Dichloropropene

Concen: 4.995 ug/L

RT: 7.62 min Scan# 1952

Delta R.T. 0.00 min

Lab File: VU040909.D

Acq: 22 Oct 2020 16:00

Instrument :

MSVOA\_U

ClientSampleId :

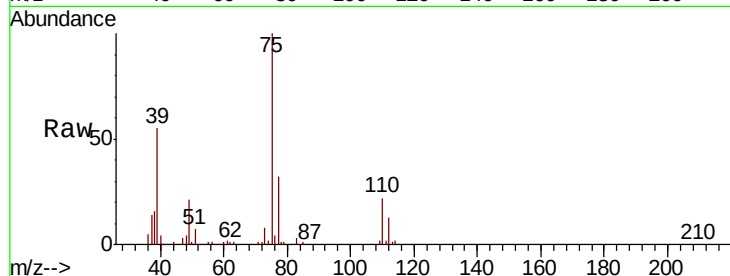
VSTD00525

Tot Ion: 75 Resp: 135576

Ion Ratio Lower Upper

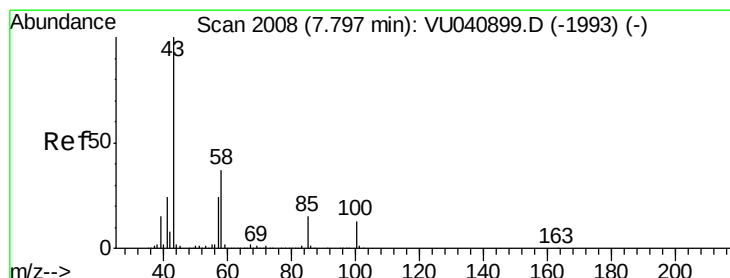
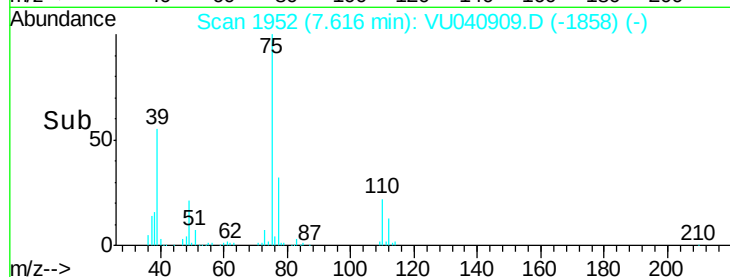
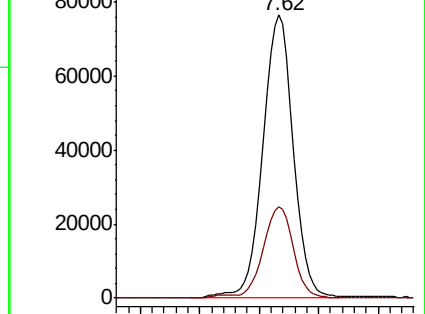
75 100

77 32.4 21.6 40.2



Abundance Ion 75.05 (74.75 to 75.75): VU040899.D (-1928) (-)

Ion 77.05 (76.75 to 77.75): VU040899.D (-1928) (-)



#40

4-Methyl-2-pentanone

Concen: 62.980 ug/L

RT: 7.80 min Scan# 2009

Delta R.T. 0.00 min

Lab File: VU040909.D

Acq: 22 Oct 2020 16:00

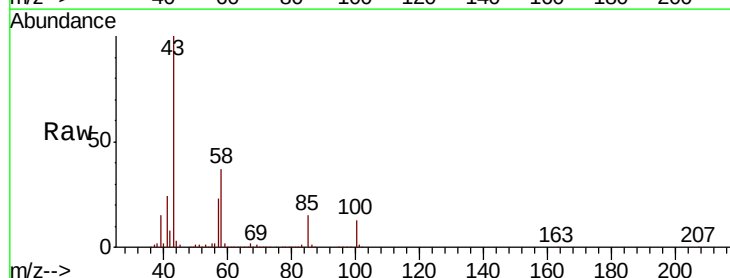
Tgt Ion: 43 Resp: 857775

Ion Ratio Lower Upper

43 100

58 36.7 29.7 44.5

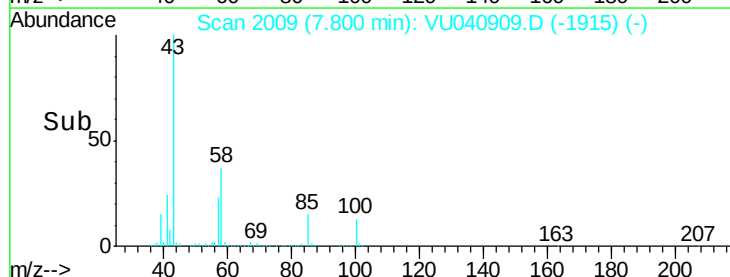
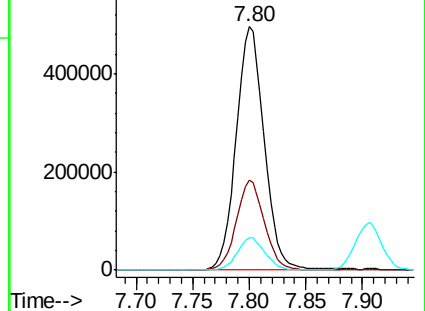
100 13.2 10.6 16.0

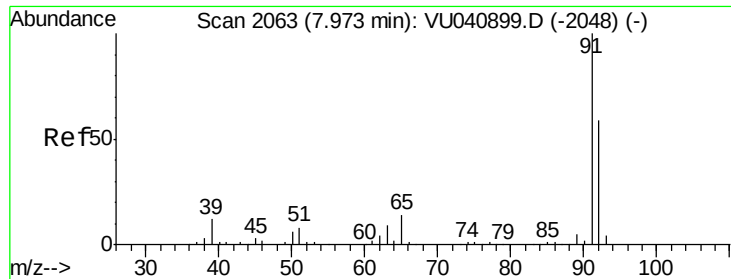


Abundance Ion 43.05 (42.75 to 43.75): VU040899.D (-1993) (-)

Ion 58.05 (57.75 to 58.75): VU040899.D (-1993) (-)

Ion 100.15 (99.85 to 100.85): VU040899.D (-1993) (-)





#42

Toluene

Concen: 5.251 ug/L

RT: 7.98 min Scan# 2064

Delta R.T. 0.00 min

Lab File: VU040909.D

Acq: 22 Oct 2020 16:00

Instrument :

MSVOA\_U

ClientSampleId :

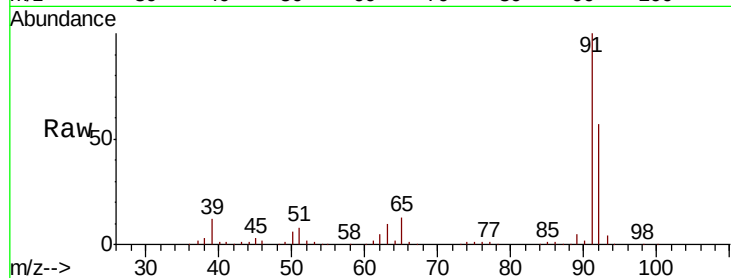
VSTD00525

Tot Ion: 91 Resp: 396469

Ion Ratio Lower Upper

91 100

92 57.0 40.6 75.4



Abundance Ion 91.15 (90.85 to 91.85): VU0

Ion 92.15 (91.85 to 92.85): VU0

7.98

250000

200000

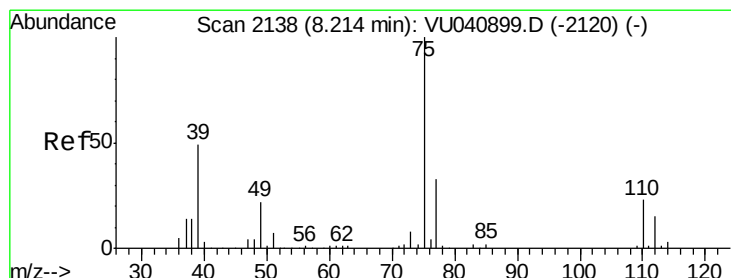
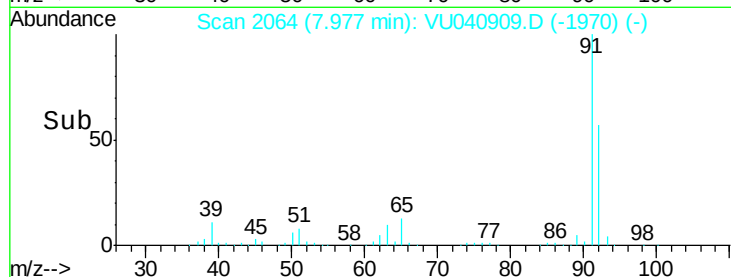
150000

100000

50000

0

Time-->



#44

trans-1,3-Dichloropropene

Concen: 5.370 ug/L

RT: 8.22 min Scan# 2139

Delta R.T. 0.00 min

Lab File: VU040909.D

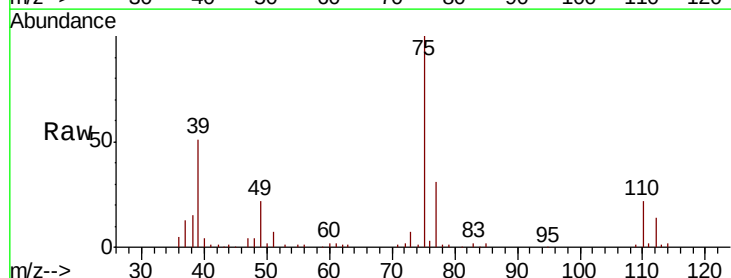
Acq: 22 Oct 2020 16:00

Tgt Ion: 75 Resp: 131974

Ion Ratio Lower Upper

75 100

77 31.1 22.6 42.0



Abundance Ion 75.05 (74.75 to 75.75): VU0

Ion 77.05 (76.75 to 77.75): VU0

8.22

80000

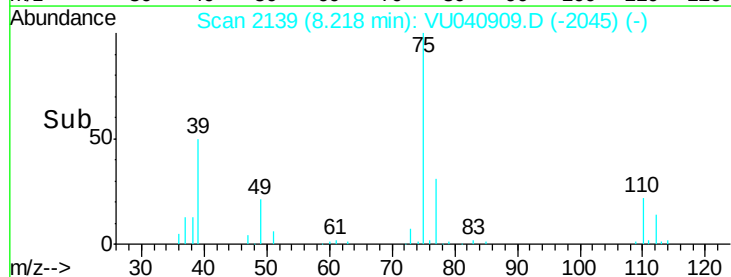
60000

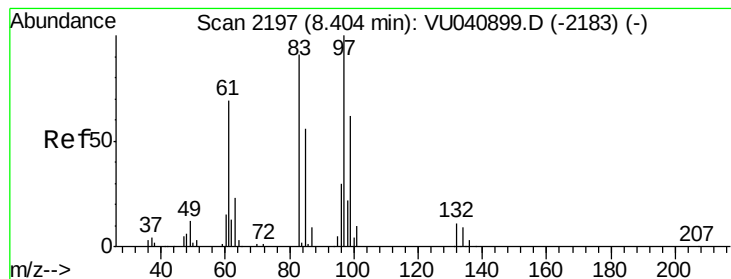
40000

20000

0

Time-->





#45

1,1,2-Trichloroethane

Concen: 5.514 ug/L

RT: 8.40 min Scan# 2197

Delta R.T. -0.00 min

Lab File: VU040909.D

Acq: 22 Oct 2020 16:00

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00525

Tot Ion: 97 Resp: 76261

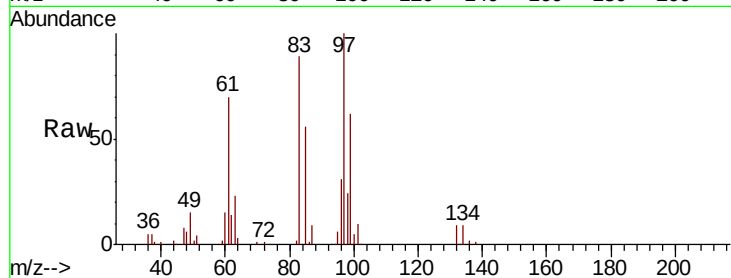
Ion Ratio Lower Upper

97 100

99 61.8 42.1 78.1

83 89.5 62.0 115.2

85 56.0 40.3 74.8

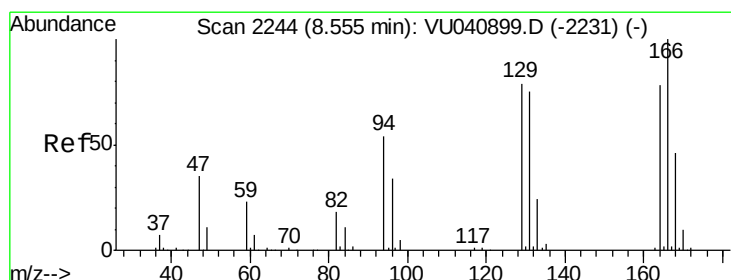
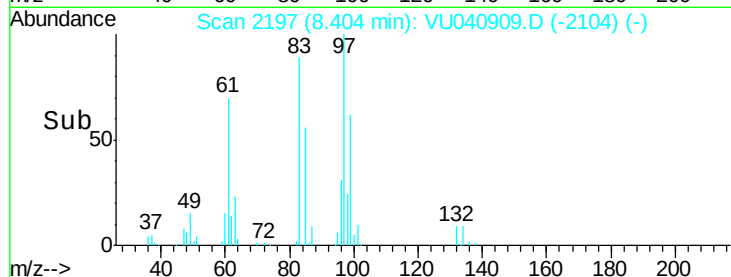
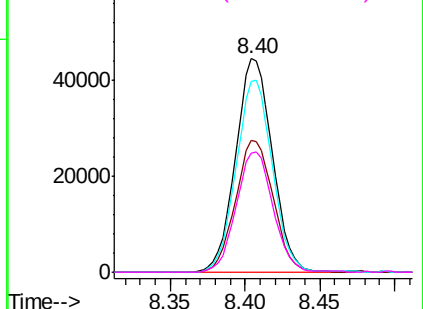


Abundance Ion 96.95 (96.65 to 97.65): VU0

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: 4.931 ug/L

RT: 8.56 min Scan# 2245

Delta R.T. 0.00 min

Lab File: VU040909.D

Acq: 22 Oct 2020 16:00

Tgt Ion: 164 Resp: 70208

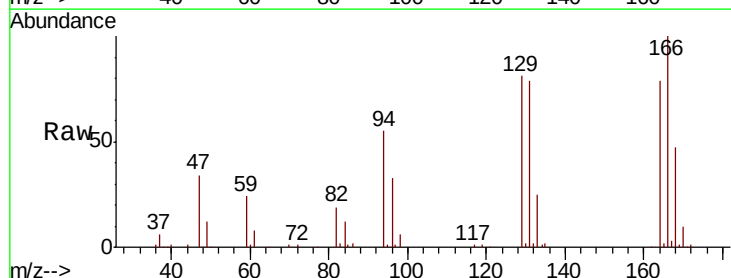
Ion Ratio Lower Upper

164 100

129 102.1 69.7 129.4

131 99.5 65.4 121.4

166 126.7 90.0 167.2

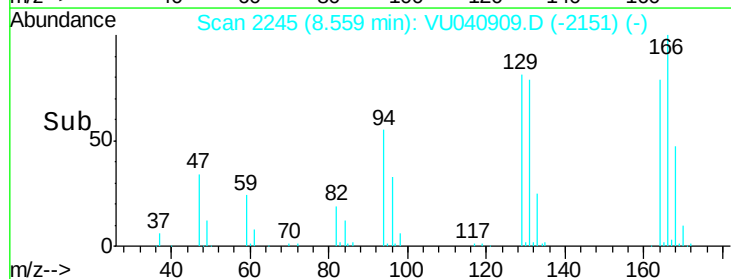
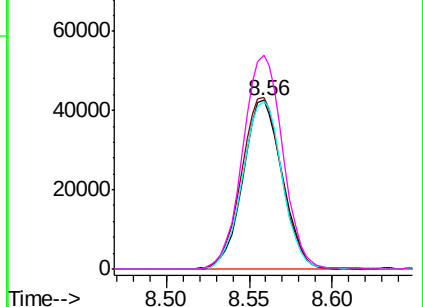


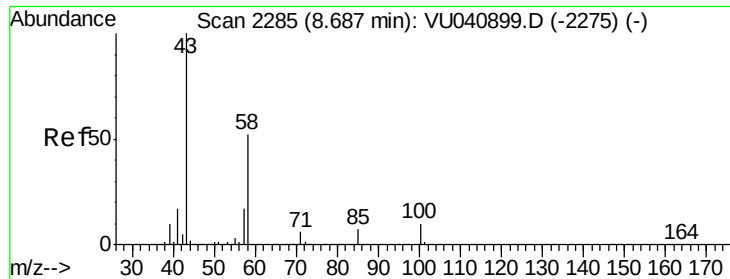
Abundance Ion 163.90 (163.60 to 164.60): V

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

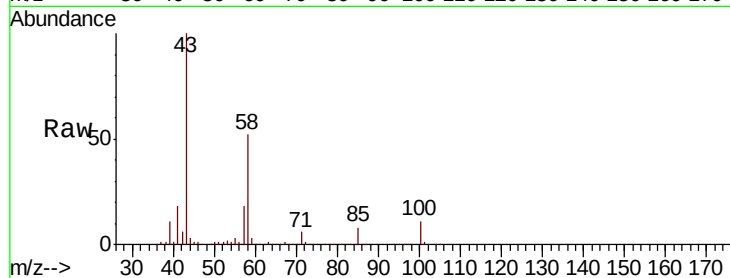




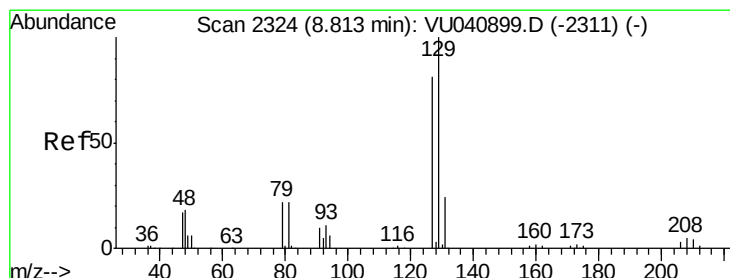
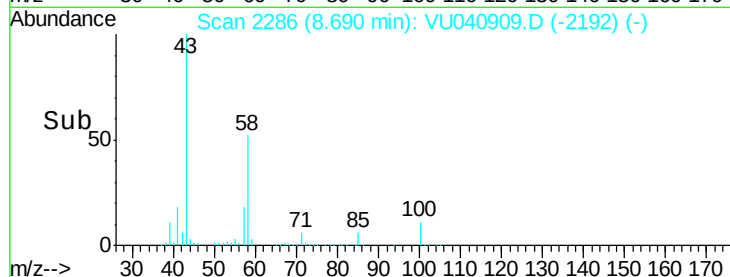
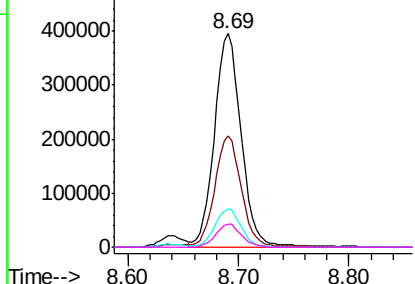
#48  
2-Hexanone  
Concen: 66.558 ug/L  
RT: 8.69 min Scan# 2286  
Delta R.T. 0.00 min  
Lab File: VU040909.D  
Acq: 22 Oct 2020 16:00

Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00525

Tot Ion: 43 Resp: 659445  
Ion Ratio Lower Upper  
43 100  
58 51.9 40.9 61.3  
57 17.4 14.4 21.6  
100 10.5 8.3 12.5

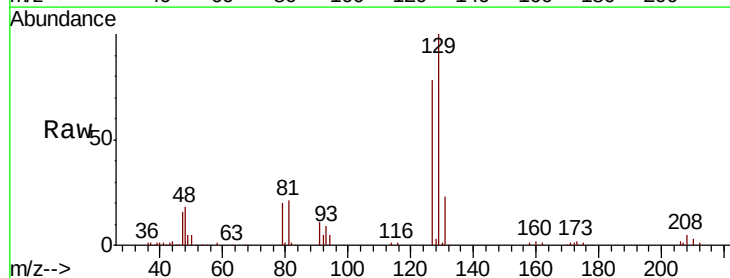


Abundance Ion 43.05 (42.75 to 43.75): VU040899.D (-2275) (-)  
Ion 58.05 (57.75 to 58.75): VU040899.D (-2275) (-)  
Ion 57.20 (56.90 to 57.90): VU040899.D (-2275) (-)  
Ion 100.15 (99.85 to 100.85): VU040899.D (-2275) (-)

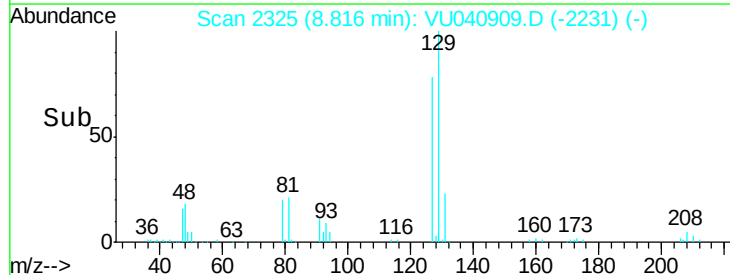
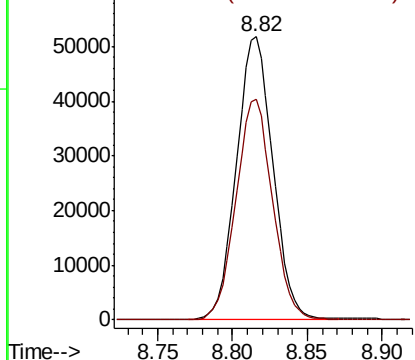


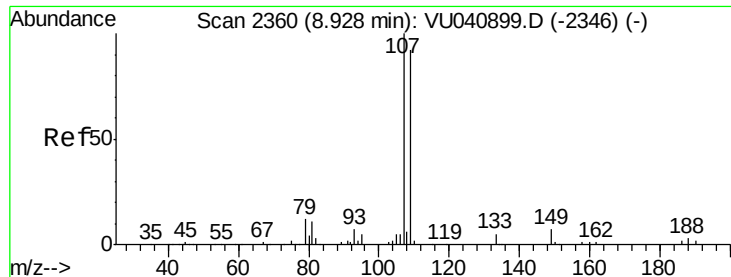
#49  
Dibromochloromethane  
Concen: 5.333 ug/L  
RT: 8.82 min Scan# 2325  
Delta R.T. 0.00 min  
Lab File: VU040909.D  
Acq: 22 Oct 2020 16:00

Tgt Ion: 129 Resp: 87989  
Ion Ratio Lower Upper  
129 100  
127 78.1 55.9 103.9



Abundance Ion 128.95 (128.65 to 129.65): VU040899.D (-2311) (-)  
Ion 126.90 (126.60 to 127.60): VU040899.D (-2311) (-)

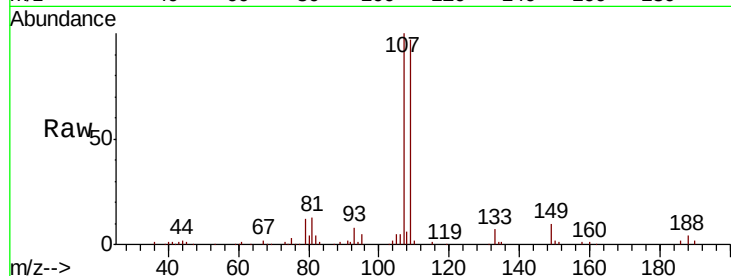




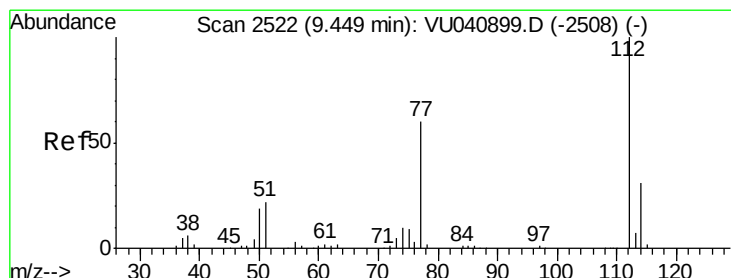
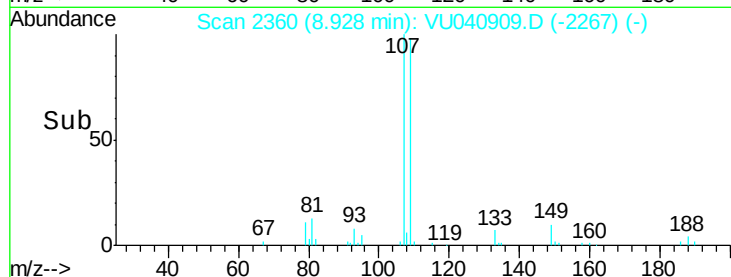
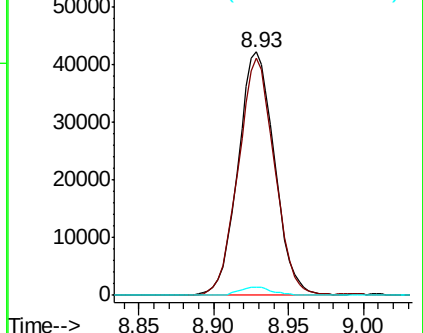
#50  
 1,2-Dibromoethane  
 Concen: 5.537 ug/L  
 RT: 8.93 min Scan# 2360  
 Delta R.T. -0.00 min  
 Lab File: VU040909.D  
 Acq: 22 Oct 2020 16:00

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00525

Tot Ion:107 Resp: 71530  
 Ion Ratio Lower Upper  
 107 100  
 109 97.3 66.2 123.0  
 188 3.6 3.1 4.7

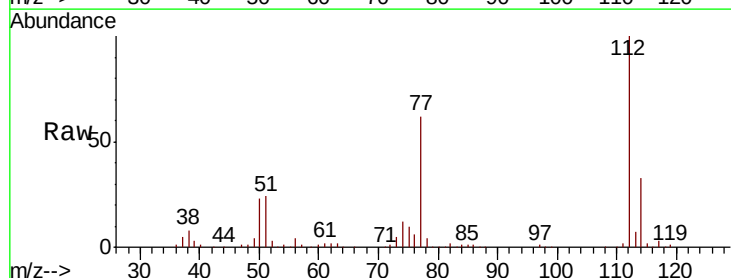


Abundance Ion 106.95 (106.65 to 107.65): V  
 Ion 109.00 (108.70 to 109.70): V  
 Ion 187.90 (187.60 to 188.60): V

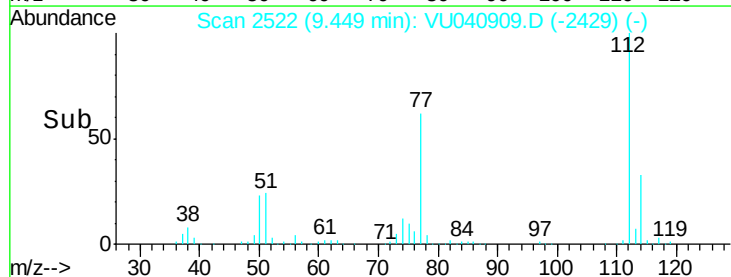
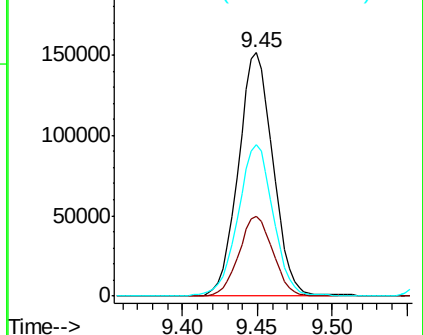


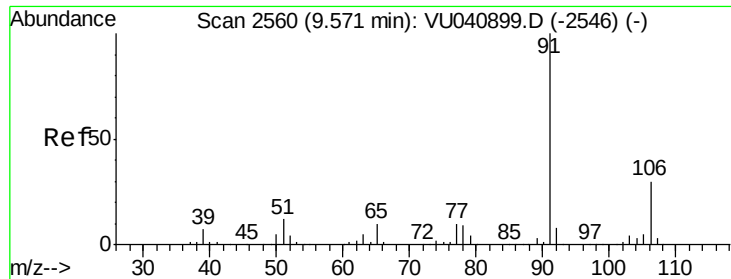
#51  
 Chlorobenzene  
 Concen: 4.997 ug/L  
 RT: 9.45 min Scan# 2522  
 Delta R.T. -0.00 min  
 Lab File: VU040909.D  
 Acq: 22 Oct 2020 16:00

Tgt Ion:112 Resp: 243642  
 Ion Ratio Lower Upper  
 112 100  
 114 33.0 22.3 41.3  
 77 62.3 49.8 74.6



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): V

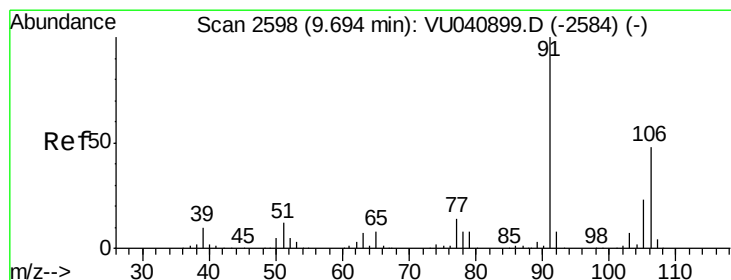
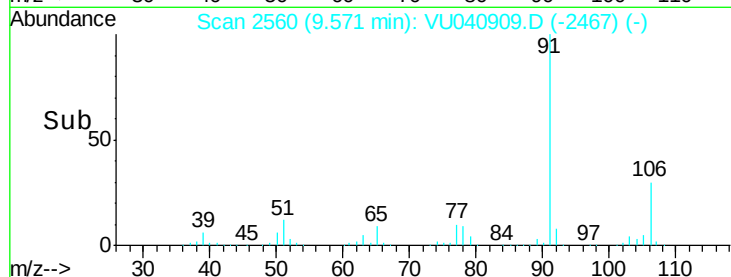
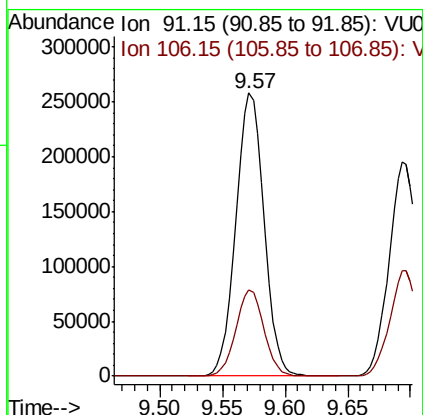
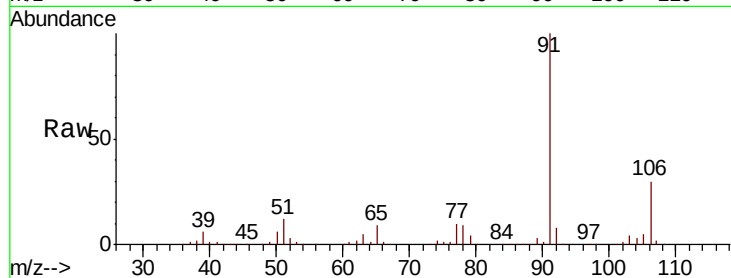




#52  
Ethylbenzene  
Concen: 4.980 ug/L  
RT: 9.57 min Scan# 2560  
Delta R.T. -0.00 min  
Lab File: VU040909.D  
Acq: 22 Oct 2020 16:00

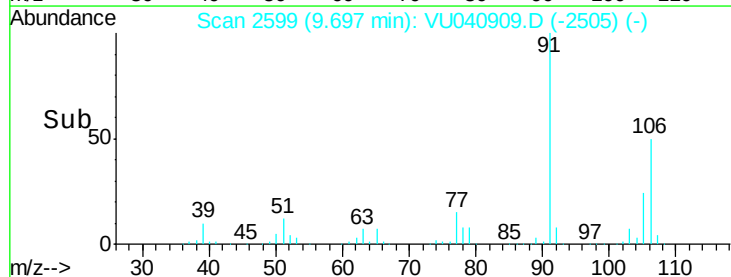
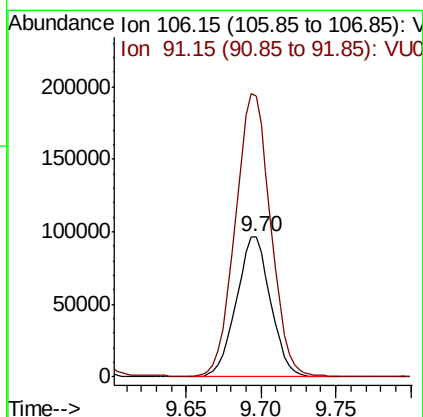
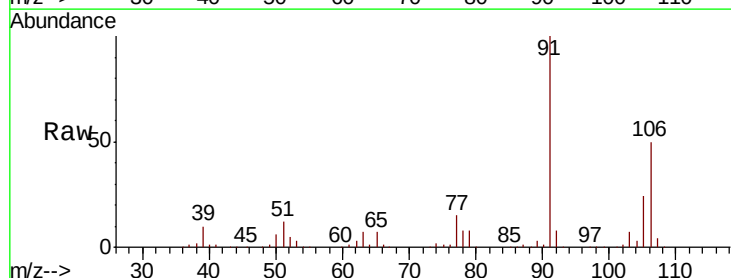
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00525

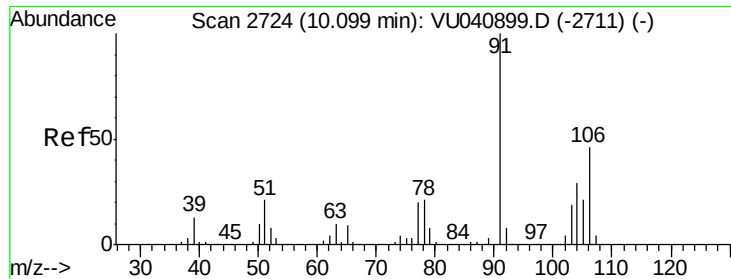
Tot Ion: 91 Resp: 404293  
Ion Ratio Lower Upper  
91 100  
106 30.4 21.2 39.4



#53  
m,p-Xylene  
Concen: 5.250 ug/L  
RT: 9.70 min Scan# 2599  
Delta R.T. 0.00 min  
Lab File: VU040909.D  
Acq: 22 Oct 2020 16:00

Tgt Ion: 106 Resp: 153527  
Ion Ratio Lower Upper  
106 100  
91 200.0 153.3 284.7

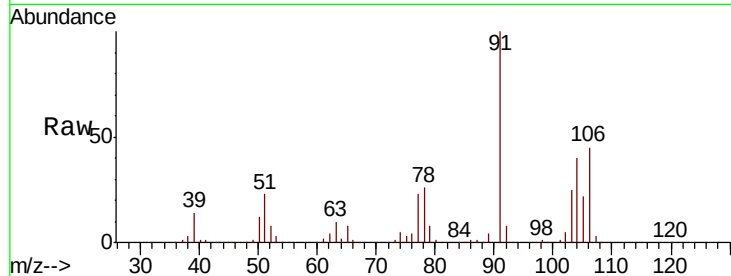




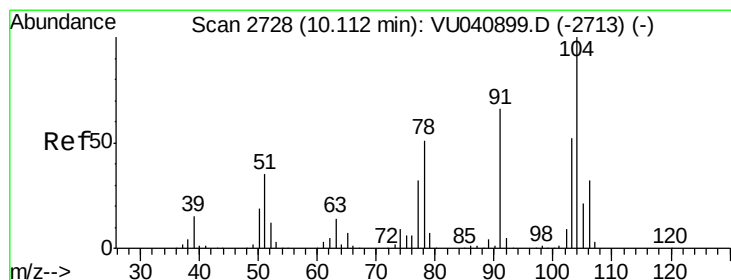
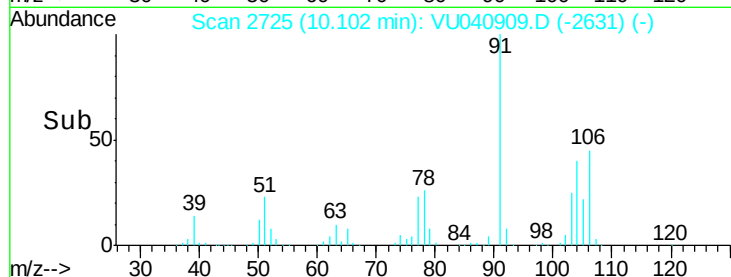
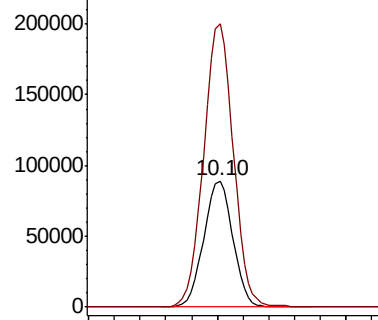
#54  
o-Xylene  
Concen: 5.044 ug/L  
RT: 10.10 min Scan# 2725  
Delta R.T. 0.00 min  
Lab File: VU040909.D  
Acq: 22 Oct 2020 16:00

Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00525

Tot Ion:106 Resp: 140250  
Ion Ratio Lower Upper  
106 100  
91 224.4 153.6 285.2

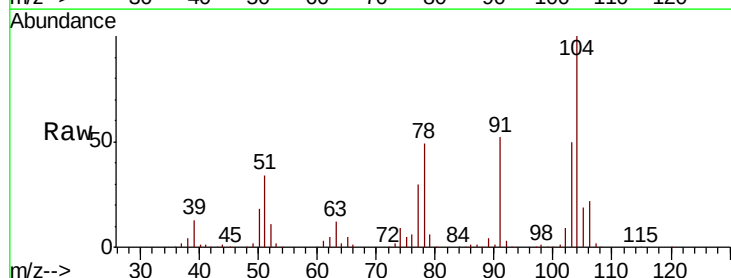


Abundance Ion 106.15 (105.85 to 106.85): V  
Ion 91.15 (90.85 to 91.85): VU0

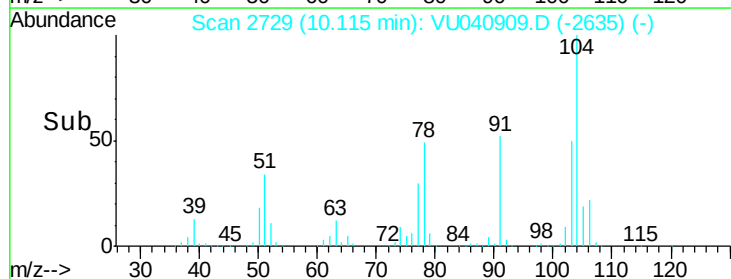
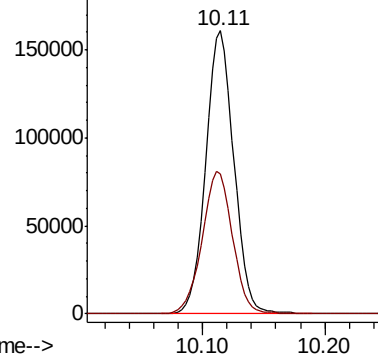


#55  
Styrene  
Concen: 5.324 ug/L  
RT: 10.11 min Scan# 2729  
Delta R.T. 0.00 min  
Lab File: VU040909.D  
Acq: 22 Oct 2020 16:00

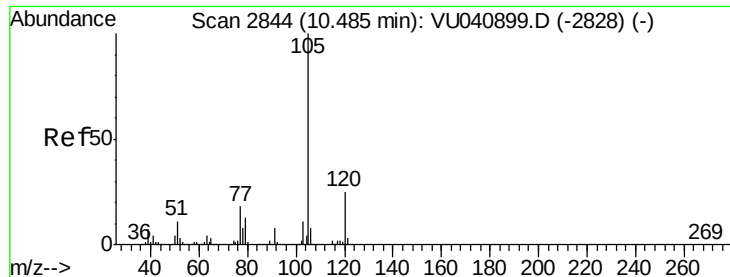
Tgt Ion:104 Resp: 257576  
Ion Ratio Lower Upper  
104 100  
78 49.4 34.6 64.3



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







#56

Isopropylbenzene

Concen: 5.140 ug/L

RT: 10.48 min Scan# 2844

Delta R.T. -0.00 min

Lab File: VU040909.D

Acq: 22 Oct 2020 16:00

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00525

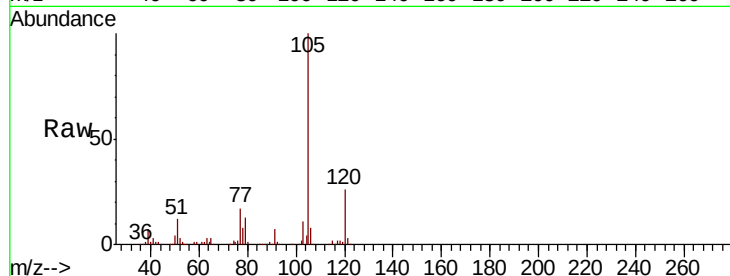
Tot Ion:105 Resp: 382572

Ion Ratio Lower Upper

105 100

120 25.6 20.2 30.4

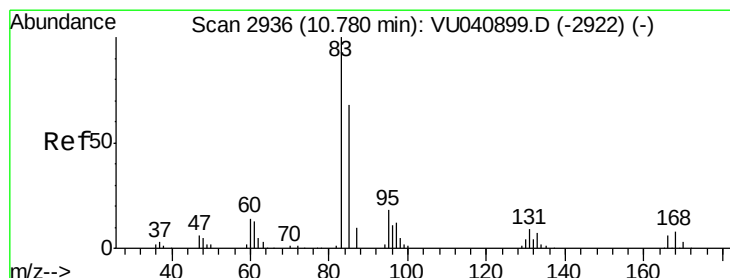
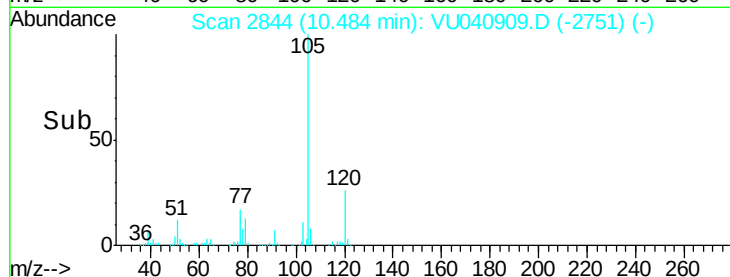
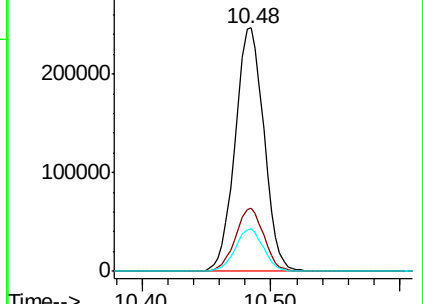
77 17.1 13.6 20.4



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: 5.913 ug/L

RT: 10.78 min Scan# 2936

Delta R.T. -0.00 min

Lab File: VU040909.D

Acq: 22 Oct 2020 16:00

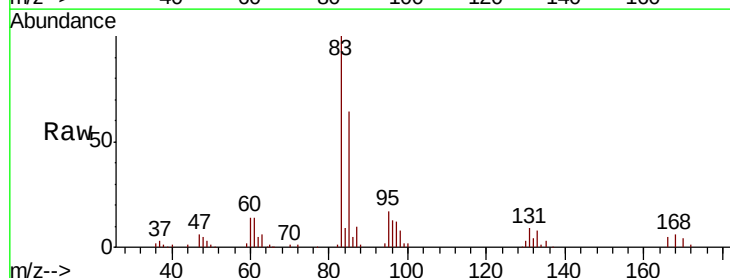
Tgt Ion: 83 Resp: 104159

Ion Ratio Lower Upper

83 100

85 63.9 44.1 81.9

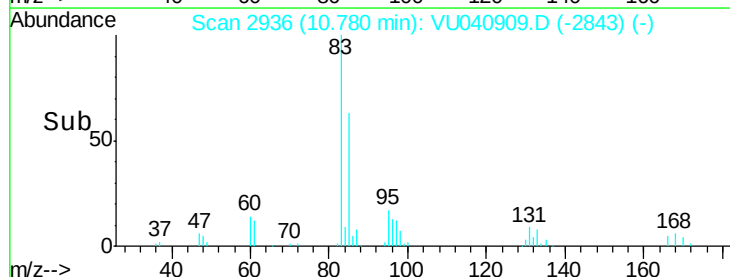
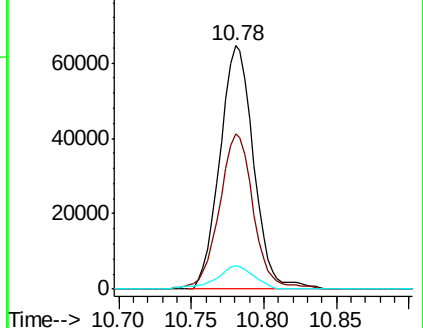
131 9.4 8.1 12.1

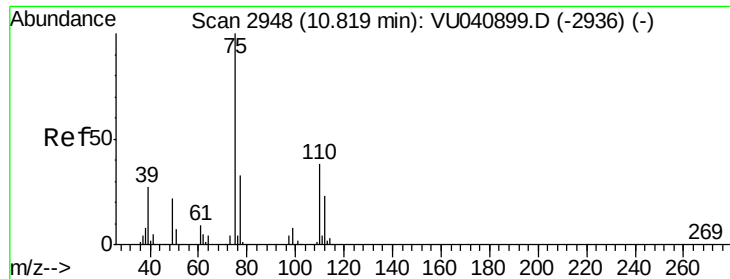


Abundance Ion 82.95 (82.65 to 83.65): VU0

Ion 85.00 (84.70 to 85.70): VU0

Ion 130.95 (130.65 to 131.65): V





#59

1,2,3-Trichloropropane

Concen: 5.941 ug/L

RT: 10.82 min Scan# 2949

Delta R.T. 0.00 min

Lab File: VU040909.D

Acq: 22 Oct 2020 16:00

Instrument :

MSVOA\_U

ClientSampleId :

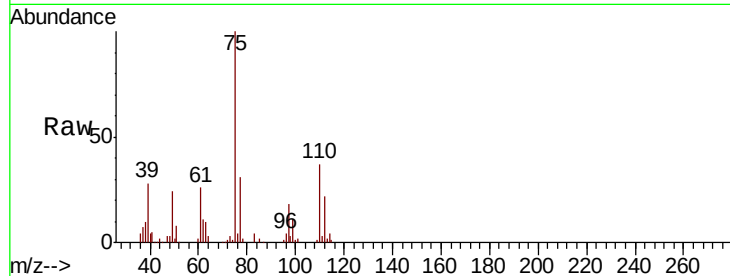
VSTD00525

Tot Ion: 75 Resp: 78368

Ion Ratio Lower Upper

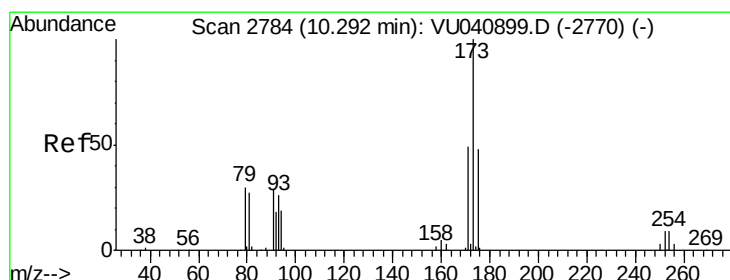
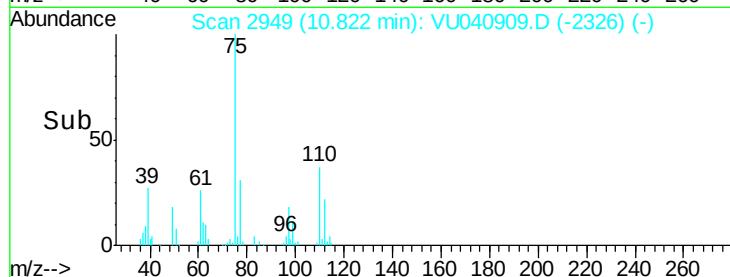
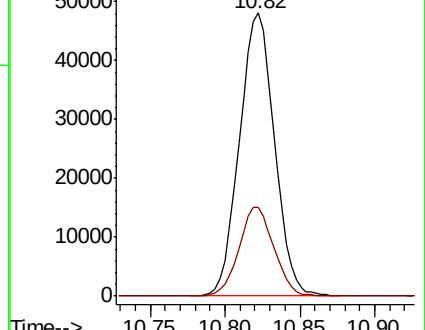
75 100

77 31.4 27.5 41.3



Abundance Ion 75.00 (74.70 to 75.70): VU040899.D (-2936) (-)

Ion 77.00 (76.70 to 77.70): VU040899.D (-2936) (-)



#61

Bromoform

Concen: 5.557 ug/L

RT: 10.29 min Scan# 2784

Delta R.T. -0.00 min

Lab File: VU040909.D

Acq: 22 Oct 2020 16:00

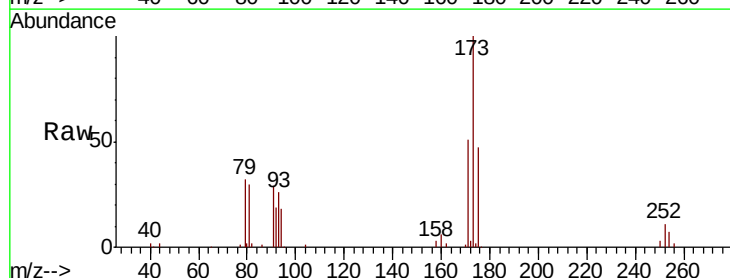
Tgt Ion: 173 Resp: 49552

Ion Ratio Lower Upper

173 100

175 46.2 39.0 58.6

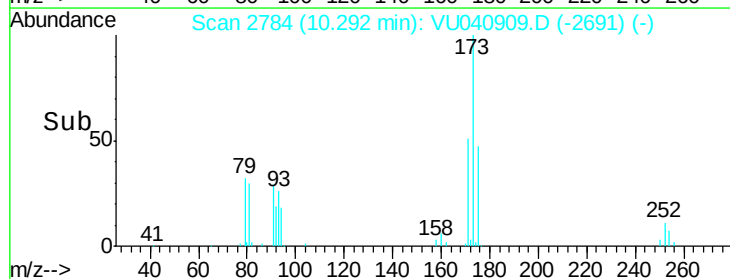
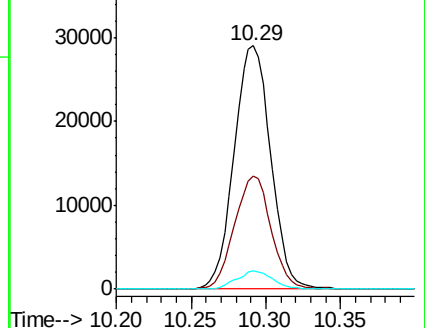
254 7.2 6.9 10.3

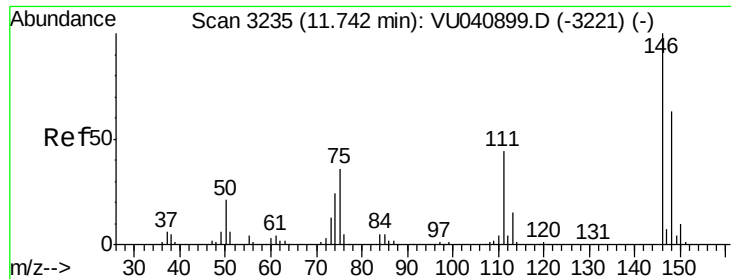


Abundance Ion 172.90 (172.60 to 173.60): VU040899.D (-2770) (-)

Ion 174.90 (174.60 to 175.60): VU040899.D (-2770) (-)

Ion 253.75 (253.45 to 254.45): VU040899.D (-2770) (-)

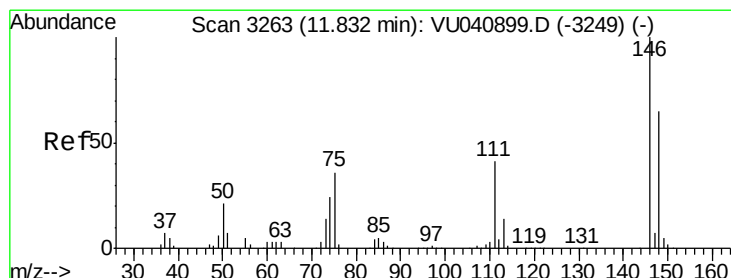
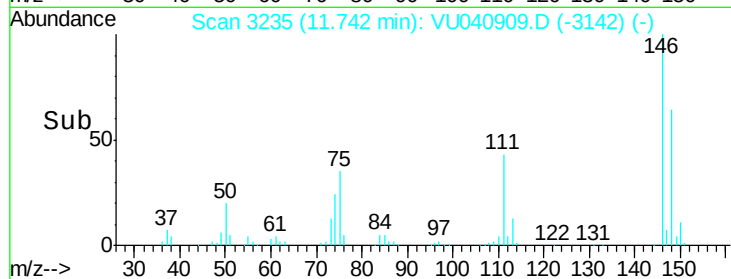
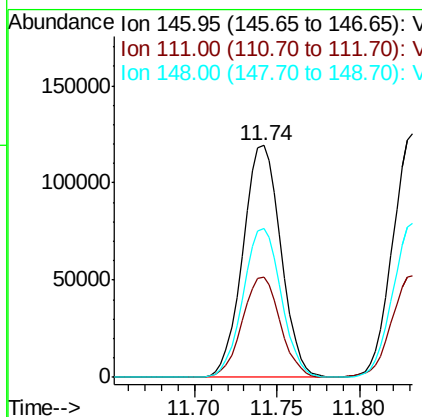
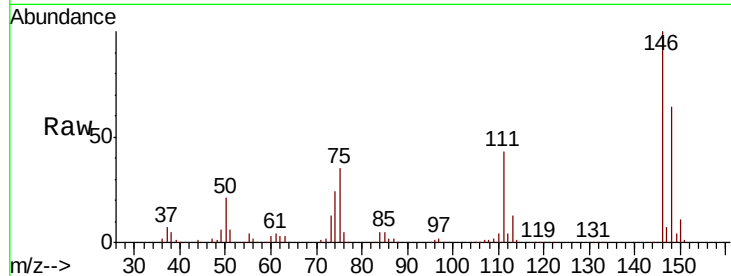




#62  
 1,3-Dichlorobenzene  
 Concen: 4.927 ug/L  
 RT: 11.74 min Scan# 3235  
 Delta R.T. -0.00 min  
 Lab File: VU040909.D  
 Acq: 22 Oct 2020 16:00

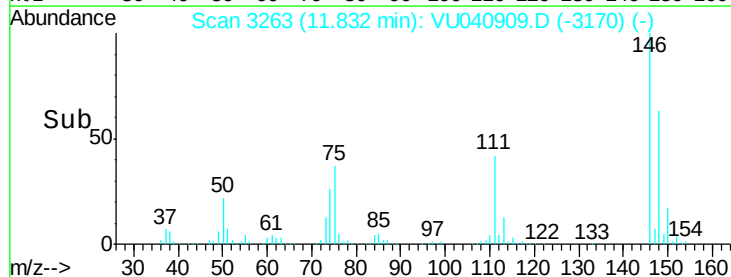
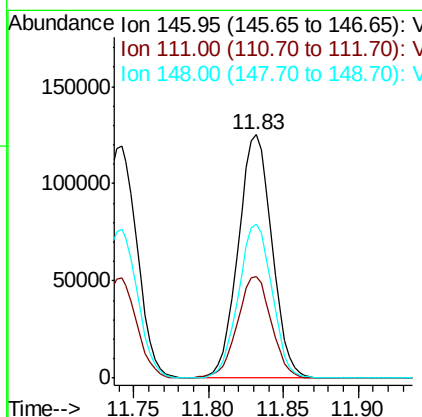
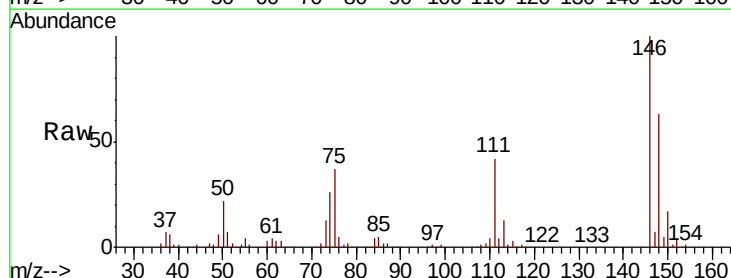
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00525

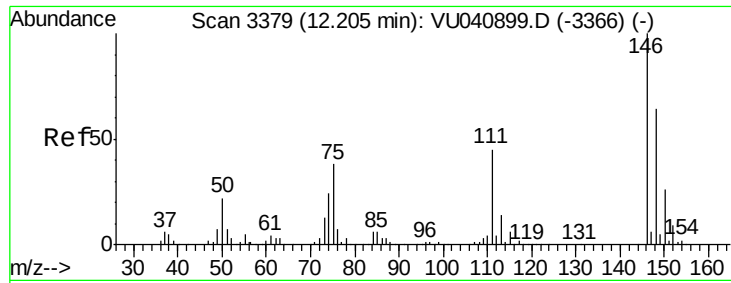
Tot Ion:146 Resp: 189870  
 Ion Ratio Lower Upper  
 146 100  
 111 43.3 30.2 56.2  
 148 64.5 43.7 81.1



#63  
 1,4-Dichlorobenzene  
 Concen: 4.960 ug/L  
 RT: 11.83 min Scan# 3263  
 Delta R.T. -0.00 min  
 Lab File: VU040909.D  
 Acq: 22 Oct 2020 16:00

Tgt Ion:146 Resp: 196438  
 Ion Ratio Lower Upper  
 146 100  
 111 41.9 27.6 51.4  
 148 63.3 42.4 78.8





#65

1,2-Dichlorobenzene

Concen: 5.087 ug/L

RT: 12.21 min Scan# 3380

Delta R.T. 0.00 min

Lab File: VU040909.D

Acq: 22 Oct 2020 16:00

Instrument :

MSVOA\_U

ClientSampled :

VSTD00525

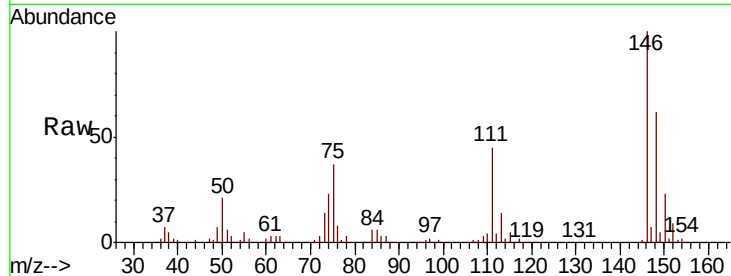
Tot Ion:146 Resp: 183972

Ion Ratio Lower Upper

146 100

111 45.4 35.4 53.2

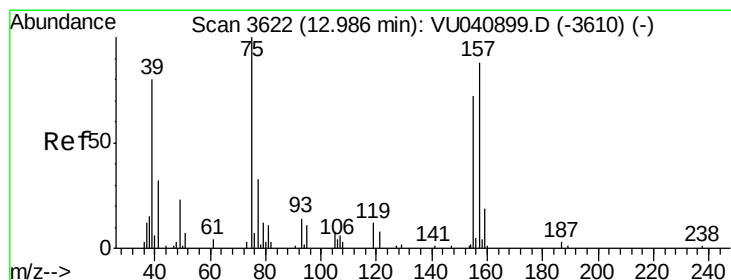
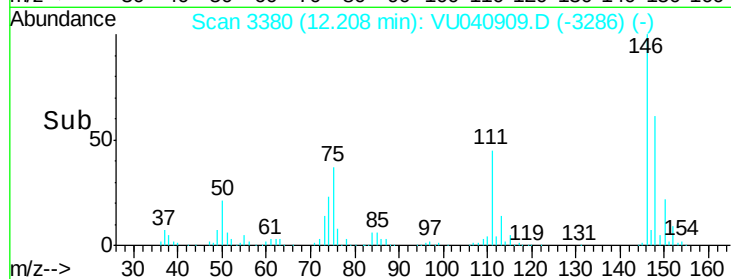
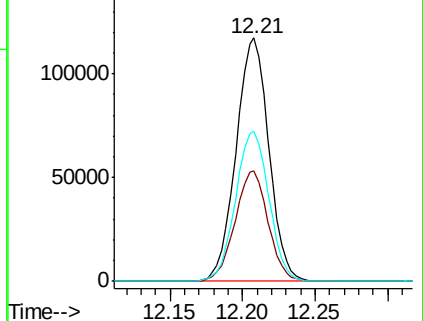
148 61.5 50.7 76.1



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: 5.451 ug/L

RT: 12.99 min Scan# 3622

Delta R.T. -0.00 min

Lab File: VU040909.D

Acq: 22 Oct 2020 16:00

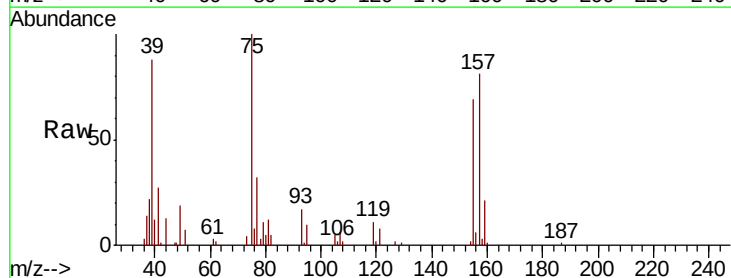
Tgt Ion: 75 Resp: 18342

Ion Ratio Lower Upper

75 100

155 68.6 51.7 77.5

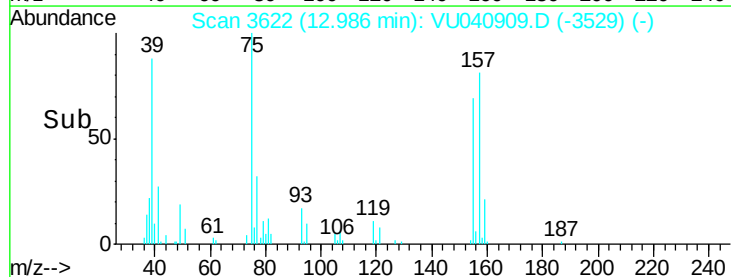
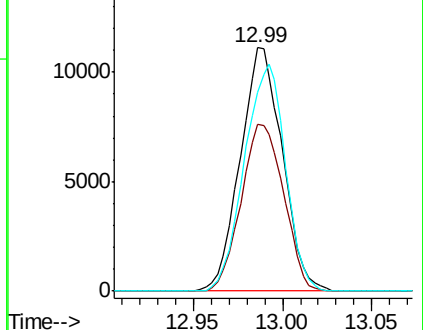
157 81.4 66.9 100.3

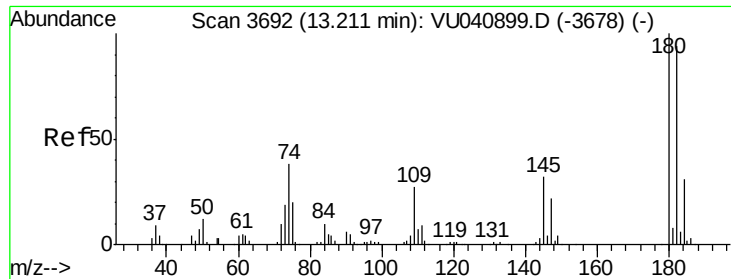


Abundance Ion 75.05 (74.75 to 75.75): VU0

Ion 154.95 (154.65 to 155.65): V

Ion 156.90 (156.60 to 157.60): V

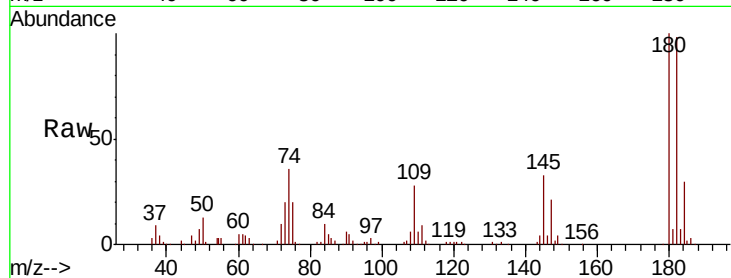




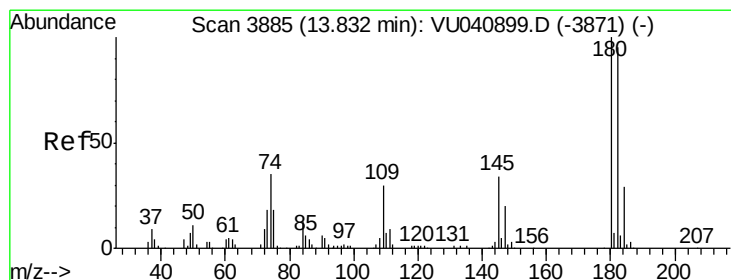
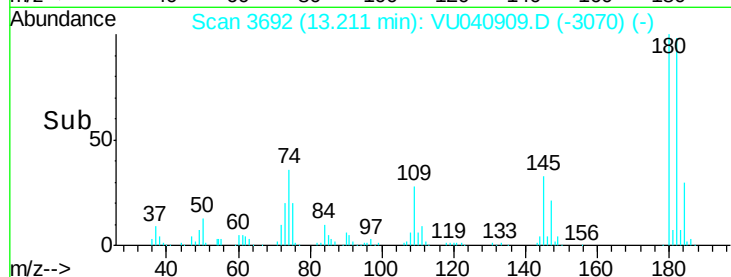
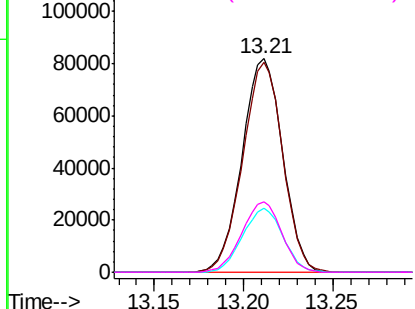
#67  
 1,3,5-Trichlorobenzene  
 Concen: 4.585 ug/L  
 RT: 13.21 min Scan# 3692  
 Delta R.T. -0.00 min  
 Lab File: VU040909.D  
 Acq: 22 Oct 2020 16:00

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00525

|             |       |             |
|-------------|-------|-------------|
| Tot Ion:180 | Resp: | 129676      |
| Ion         | Ratio | Lower Upper |
| 180         | 100   |             |
| 182         | 97.2  | 77.6 116.4  |
| 184         | 29.9  | 24.7 37.1   |
| 145         | 32.5  | 25.9 38.9   |

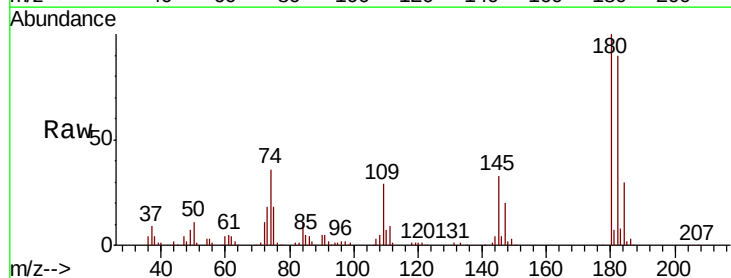


Abundance Ion 180.00 (179.70 to 180.70): V  
 Ion 182.00 (181.70 to 182.70): V  
 Ion 184.00 (183.70 to 184.70): V  
 Ion 145.00 (144.70 to 145.70): V

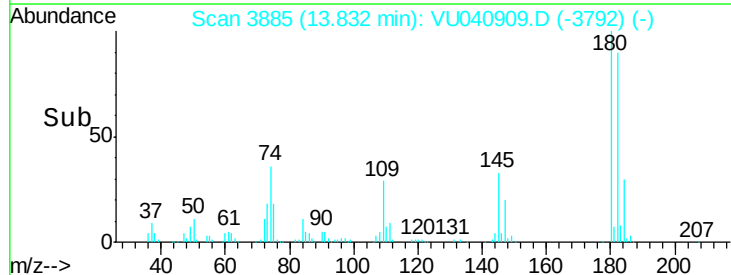
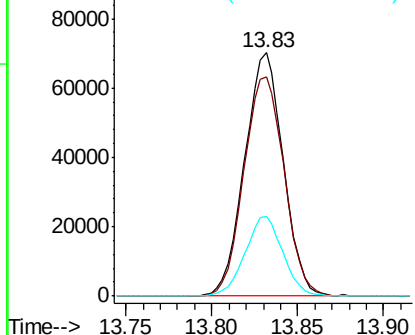


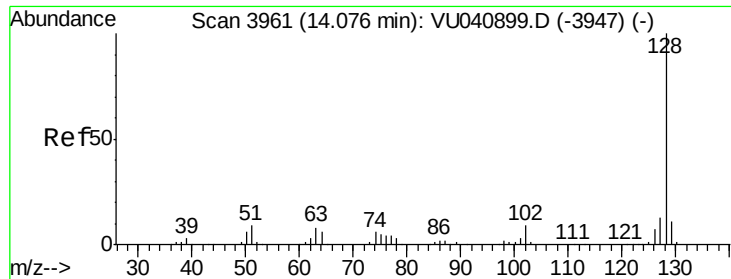
#68  
 1,2,4-trichlorobenzene  
 Concen: 4.593 ug/L  
 RT: 13.83 min Scan# 3885  
 Delta R.T. -0.00 min  
 Lab File: VU040909.D  
 Acq: 22 Oct 2020 16:00

|             |       |             |
|-------------|-------|-------------|
| Tgt Ion:180 | Resp: | 109506      |
| Ion         | Ratio | Lower Upper |
| 180         | 100   |             |
| 182         | 93.9  | 76.4 114.6  |
| 145         | 32.1  | 26.2 39.2   |



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: 4.388 ug/L

RT: 14.08 min Scan# 3961

Delta R.T. -0.00 min

Lab File: VU040909.D

Acq: 22 Oct 2020 16:00

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00525

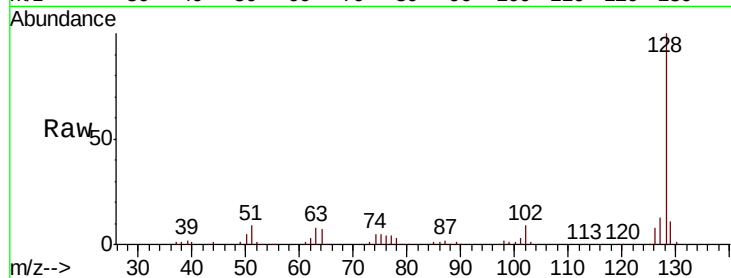
Tot Ion:128 Resp: 192565

Ion Ratio Lower Upper

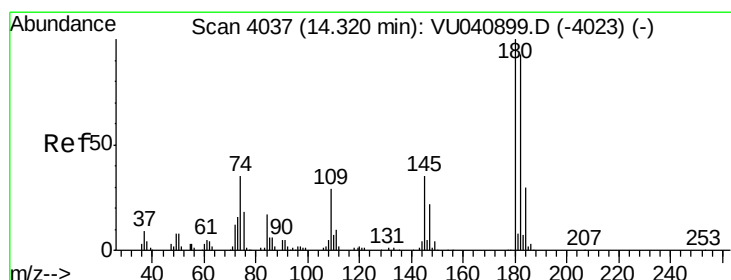
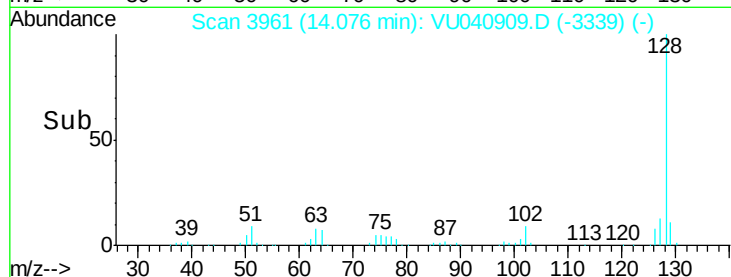
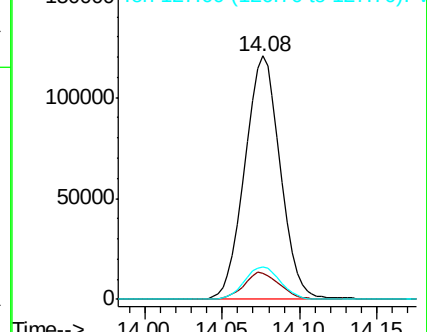
128 100

129 11.0 8.9 13.3

127 13.6 10.3 15.5



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: 4.633 ug/L

RT: 14.32 min Scan# 4036

Delta R.T. -0.00 min

Lab File: VU040909.D

Acq: 22 Oct 2020 16:00

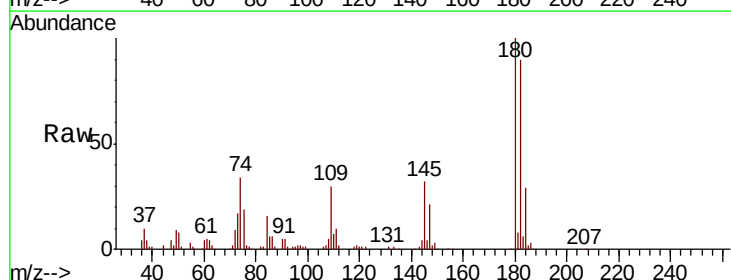
Tgt Ion:180 Resp: 107117

Ion Ratio Lower Upper

180 100

182 92.0 75.8 113.6

145 33.2 28.2 42.2



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

