

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\U102720\  
 Data File : VU040989.D  
 Acq On : 27 Oct 2020 17:21  
 Operator : SY/MD  
 Sample : VSTDCCC005EC  
 Misc : 25.0mL/MSVOA U/WATER  
 ALS Vial : 17 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00529

Quant Time: Oct 28 02:27:08 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMUTR102620WMA.M  
 Quant Title : TRACE VOA SOM01.0  
 QLast Update : Wed Oct 28 02:17:39 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Difluorobenzene     | 6.26  | 114  | 56055    | 5.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 9.42  | 117  | 56772    | 5.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.81 | 152  | 28707    | 5.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |        |       |          |          |      |         |
|--------------------------------|--------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.60   | 65    | 22557    | 4.79     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 40 - 130 | Recovery | =    | 95.80%  |
| 7) Chloroethane-d5             | 1.92   | 69    | 18470    | 5.10     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 130 | Recovery | =    | 102.00% |
| 11) 1,1-Dichloroethene-d2      | 2.58   | 63    | 46693    | 5.05     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 125 | Recovery | =    | 101.00% |
| 20) 2-Butanone-d5              | 4.66   | 46    | 84302    | 54.36    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 40 - 130 | Recovery | =    | 108.72% |
| 24) Chloroform-d               | 5.08   | 84    | 43555    | 5.24     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 104.80% |
| 26) 1,2-Dichloroethane-d4      | 5.72   | 65    | 26638    | 5.16     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 103.20% |
| 32) Benzene-d6                 | 5.74   | 84    | 79041    | 5.21     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 104.20% |
| 36) 1,2-Dichloropropane-d6     | 6.70   | 67    | 25795    | 5.22     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 140 | Recovery | =    | 104.40% |
| 41) Toluene-d8                 | 7.91   | 98    | 70659    | 5.14     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 102.80% |
| 43) trans-1,3-Dichloropropene- | 8.19   | 79    | 11077    | 5.17     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 55 - 130 | Recovery | =    | 103.40% |
| 46) 2-Hexanone-d5              | 8.64   | 63    | 62375    | 54.06    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 45 - 130 | Recovery | =    | 108.12% |
| 57) 1,1,2,2-Tetrachloroethane- | 10.75  | 84    | 24672    | 5.37     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 120 | Recovery | =    | 107.40% |
| 64) 1,2-Dichlorobenzene-d4     | 12.19  | 152   | 25656    | 5.09     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 80 - 120 | Recovery | =    | 101.80% |

## Target Compounds

|                                |      |     |       |               | Ovalue |
|--------------------------------|------|-----|-------|---------------|--------|
| 2) Dichlorodifluoromethane     | 1.39 | 85  | 27706 | 5.414 ug/L    | 98     |
| 3) Chloromethane               | 1.53 | 50  | 29167 | 5.466 ug/L    | 99     |
| 5) Vinyl chloride              | 1.61 | 62  | 28762 | 5.464 ug/L    | 100    |
| 6) Bromomethane                | 1.87 | 94  | 13887 | 4.602 ug/L    | 97     |
| 8) Chloroethane                | 1.94 | 64  | 17716 | 5.311 ug/L    | 99     |
| 9) Trichlorofluoromethane      | 2.15 | 101 | 39092 | 5.463 ug/L    | 100    |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.59 | 101 | 23629 | 5.635 ug/L    | 98     |
| 12) 1,1-Dichloroethene         | 2.59 | 96  | 21688 | 5.477 ug/L    | 95     |
| 13) Acetone                    | 2.68 | 43  | 56980 | 53.742 ug/L # | 66     |
| 14) Carbon disulfide           | 2.81 | 76  | 68751 | 5.196 ug/L    | 100    |
| 15) Methyl Acetate             | 2.98 | 43  | 13161 | 5.425 ug/L    | 94     |
| 16) Methylene chloride         | 3.06 | 84  | 26139 | 5.666 ug/L    | 97     |
| 17) Methyl tert-butyl Ether    | 3.38 | 73  | 53744 | 5.274 ug/L    | 99     |
| 18) trans-1,2-Dichloroethene   | 3.37 | 96  | 21772 | 5.411 ug/L    | 97     |
| 19) 1,1-Dichloroethane         | 3.89 | 63  | 43783 | 5.442 ug/L    | 98     |
| 21) 2-Butanone                 | 4.74 | 43  | 90521 | 54.627 ug/L   | 99     |
| 22) cis-1,2-Dichloroethene     | 4.69 | 96  | 22816 | 5.497 ug/L    | 99     |

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 Acq On : 27 Oct 2020 17:21  
 Operator : SY/MD  
 Sample : VSTDCCC005EC  
 Misc : 25.0mL/MSVOA U/WATER  
 ALS Vial : 17 Sample Multiplier: 1

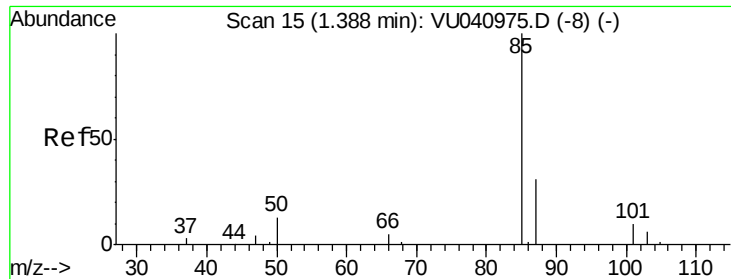
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00529

Quant Time: Oct 28 02:27:08 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMUTR102620WMA.M  
 Quant Title : TRACE VOA SOM01.0  
 QLast Update : Wed Oct 28 02:17:39 2020  
 Response via : Initial Calibration

| Internal Standards              | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|---------------------------------|-------|------|----------|--------|-------|----------|
| 23) Bromochloromethane          | 4.99  | 128  | 10824    | 5.528  | ug/L  | 93       |
| 25) Chloroform                  | 5.11  | 83   | 45169    | 5.599  | ug/L  | 96       |
| 27) 1,2-Dichloroethane          | 5.81  | 62   | 34220    | 5.695  | ug/L  | 98       |
| 29) 1,1,1-Trichloroethane       | 5.33  | 97   | 38086    | 5.485  | ug/L  | 97       |
| 30) Cyclohexane                 | 5.41  | 56   | 35487    | 5.187  | ug/L  | 99       |
| 31) Carbon tetrachloride        | 5.54  | 117  | 32750    | 5.327  | ug/L  | 100      |
| 33) Benzene                     | 5.79  | 78   | 92604    | 5.459  | ug/L  | 100      |
| 34) Trichloroethene             | 6.56  | 95   | 22762    | 5.273  | ug/L  | 99       |
| 35) Methylcyclohexane           | 6.77  | 83   | 33516    | 5.205  | ug/L  | 98       |
| 37) 1,2-Dichloropropane         | 6.80  | 63   | 25649    | 5.588  | ug/L  | 98       |
| 38) Bromodichloromethane        | 7.11  | 83   | 32232    | 5.414  | ug/L  | 99       |
| 39) cis-1,3-Dichloropropene     | 7.62  | 75   | 32691    | 5.173  | ug/L  | 99       |
| 40) 4-Methyl-2-pentanone        | 7.80  | 43   | 203451   | 55.591 | ug/L  | 99       |
| 42) Toluene                     | 7.98  | 91   | 96349    | 5.601  | ug/L  | 99       |
| 44) trans-1,3-Dichloropropene   | 8.22  | 75   | 32199    | 5.444  | ug/L  | 96       |
| 45) 1,1,2-Trichloroethane       | 8.41  | 97   | 18967    | 5.551  | ug/L  | 95       |
| 47) Tetrachloroethene           | 8.56  | 164  | 17330    | 5.459  | ug/L  | 98       |
| 48) 2-Hexanone                  | 8.69  | 43   | 157516   | 57.160 | ug/L  | 99       |
| 49) Dibromochloromethane        | 8.81  | 129  | 21588    | 5.440  | ug/L  | 98       |
| 50) 1,2-Dibromoethane           | 8.93  | 107  | 17330    | 5.323  | ug/L  | 99       |
| 51) Chlorobenzene               | 9.45  | 112  | 59662    | 5.470  | ug/L  | 98       |
| 52) Ethylbenzene                | 9.57  | 91   | 97059    | 5.361  | ug/L  | 100      |
| 53) m,p-Xylene                  | 9.69  | 106  | 37414    | 5.666  | ug/L  | 97       |
| 54) o-Xylene                    | 10.10 | 106  | 34270    | 5.572  | ug/L  | 96       |
| 55) Styrene                     | 10.11 | 104  | 62960    | 5.746  | ug/L  | 97       |
| 56) Isopropylbenzene            | 10.48 | 105  | 91329    | 5.523  | ug/L  | 99       |
| 58) 1,1,1,2,2-Tetrachloroethane | 10.78 | 83   | 24488    | 5.457  | ug/L  | 98       |
| 59) 1,2,3-Trichloropropane      | 10.82 | 75   | 18555    | 5.424  | ug/L  | 100      |
| 61) Bromoform                   | 10.29 | 173  | 11800    | 5.334  | ug/L  | 100      |
| 62) 1,3-Dichlorobenzene         | 11.74 | 146  | 46011    | 5.553  | ug/L  | 95       |
| 63) 1,4-Dichlorobenzene         | 11.83 | 146  | 46864    | 5.461  | ug/L  | 98       |
| 65) 1,2-Dichlorobenzene         | 12.21 | 146  | 44152    | 5.399  | ug/L  | 97       |
| 66) 1,2-Dibromo-3-chloropropan  | 12.99 | 75   | 4043     | 5.045  | ug/L  | 89       |
| 67) 1,3,5-Trichlorobenzene      | 13.21 | 180  | 30218    | 5.214  | ug/L  | 99       |
| 68) 1,2,4-trichlorobenzene      | 13.83 | 180  | 24514    | 5.106  | ug/L  | 96       |
| 69) Naphthalene                 | 14.08 | 128  | 42349    | 4.933  | ug/L  | 99       |
| 70) 1,2,3-Trichlorobenzene      | 14.32 | 180  | 24723    | 5.587  | ug/L  | 96       |

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





#2

Dichlorodifluoromethane

Concen: 5.414 ug/L

RT: 1.39 min Scan# 15

Delta R.T. 0.00 min

Lab File: VU040989.D

Acq: 27 Oct 2020 17:21

Instrument :

MSVOA\_U

ClientSampleId :

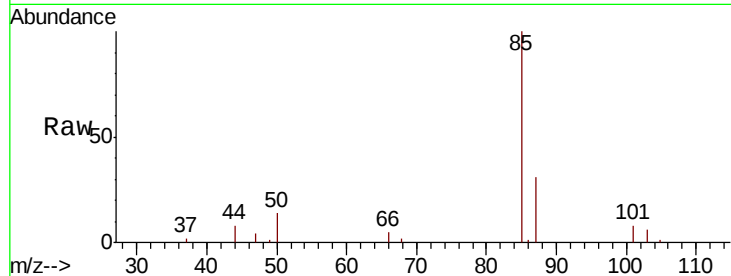
VSTD00529

Tot Ion: 85 Resp: 27706

Ion Ratio Lower Upper

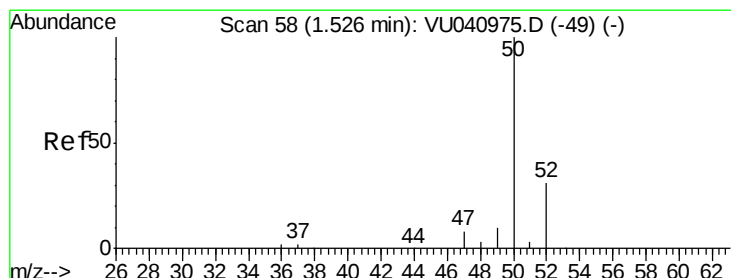
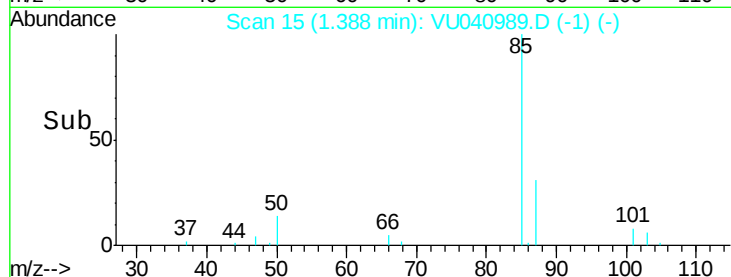
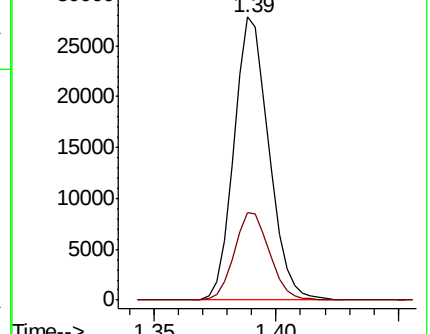
85 100

87 31.1 25.8 38.8



Abundance Ion 85.00 (84.70 to 85.70): VU040975.D (-8) (-)

Ion 87.00 (86.70 to 87.70): VU040975.D (-8) (-)



#3

Chloromethane

Concen: 5.466 ug/L

RT: 1.53 min Scan# 58

Delta R.T. 0.00 min

Lab File: VU040989.D

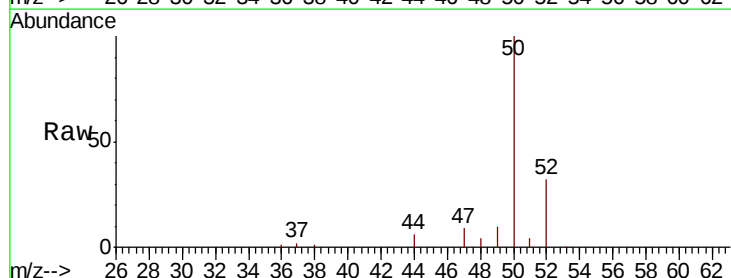
Acq: 27 Oct 2020 17:21

Tgt Ion: 50 Resp: 29167

Ion Ratio Lower Upper

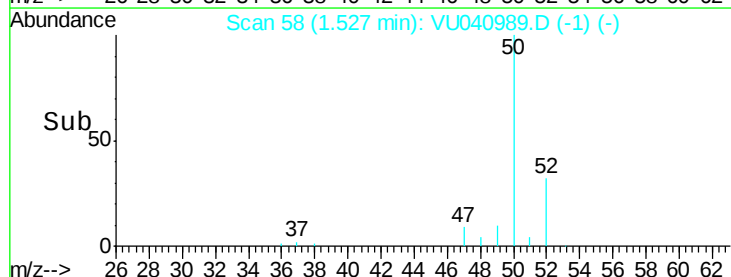
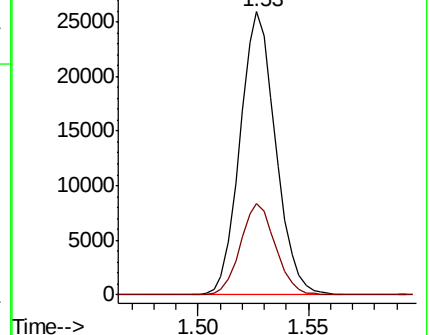
50 100

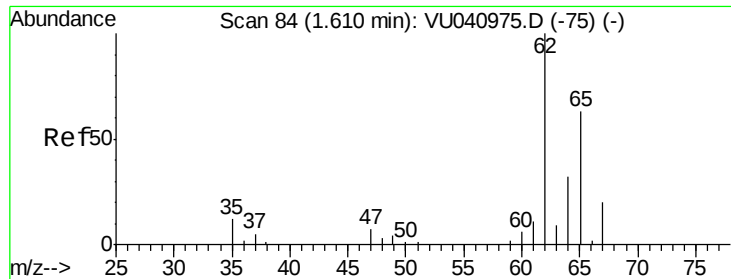
52 32.3 22.4 41.6



Abundance Ion 50.05 (49.75 to 50.75): VU040975.D (-49) (-)

Ion 52.05 (51.75 to 52.75): VU040975.D (-49) (-)





#5

Vinyl chloride

Concen: 5.464 ug/L

RT: 1.61 min Scan# 84

Delta R.T. 0.00 min

Lab File: VU040989.D

Acq: 27 Oct 2020 17:21

Instrument :

MSVOA\_U

ClientSampleId :

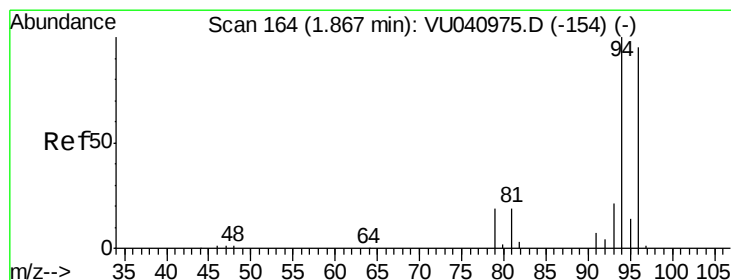
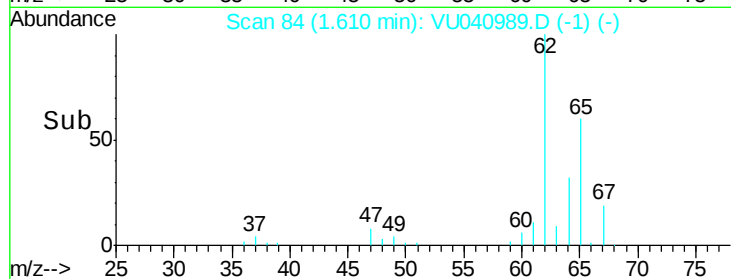
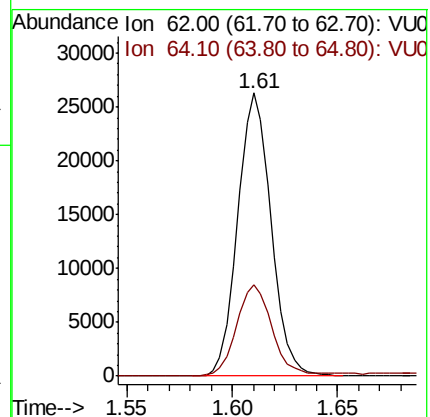
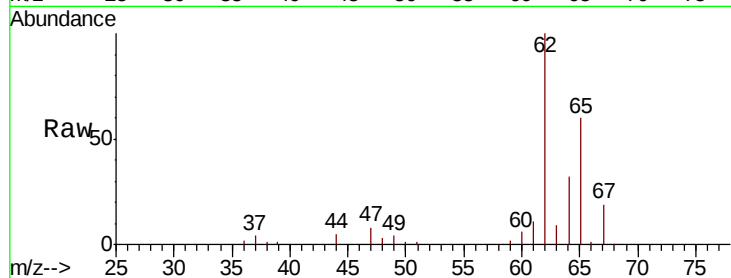
VSTD00529

Tot Ion: 62 Resp: 28762

Ion Ratio Lower Upper

62 100

64 32.4 22.7 42.3



#6

Bromomethane

Concen: 4.602 ug/L

RT: 1.87 min Scan# 164

Delta R.T. 0.00 min

Lab File: VU040989.D

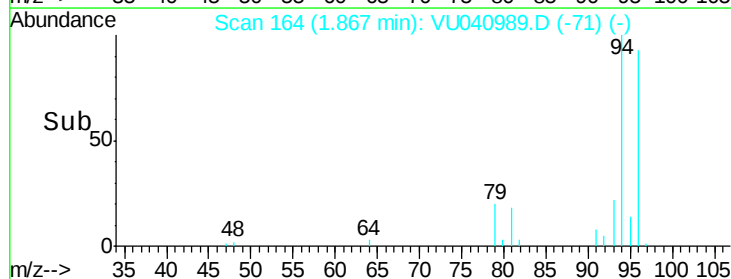
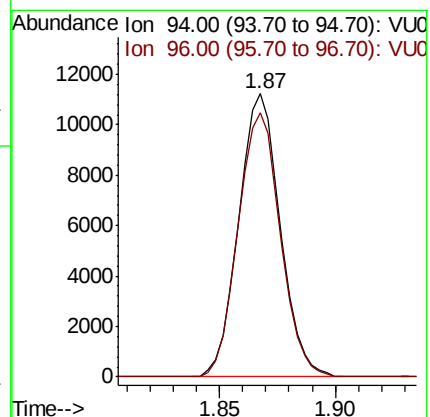
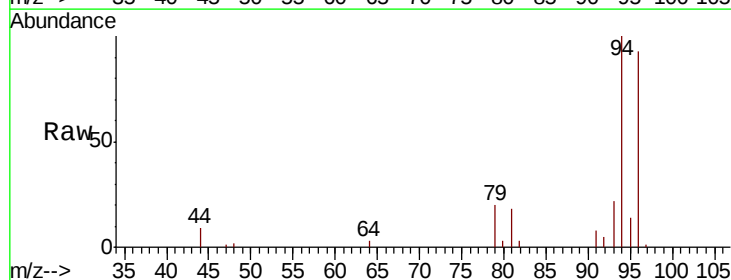
Acq: 27 Oct 2020 17:21

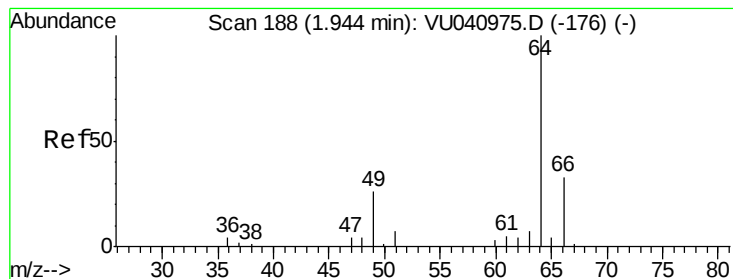
Tgt Ion: 94 Resp: 13887

Ion Ratio Lower Upper

94 100

96 93.4 63.5 117.9





#8

Chloroethane

Concen: 5.311 ug/L

RT: 1.94 min Scan# 188

Delta R.T. 0.00 min

Lab File: VU040989.D

Acq: 27 Oct 2020 17:21

Instrument :

MSVOA\_U

ClientSampleId :

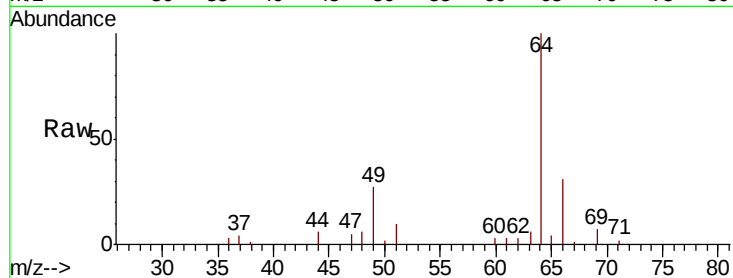
VSTD00529

Tot Ion: 64 Resp: 17716

Ion Ratio Lower Upper

64 100

66 31.1 22.3 41.5



Abundance Ion 64.10 (63.80 to 64.80): VU040989.D (-176) (-)

Ion 66.05 (65.75 to 66.75): VU040989.D (-176) (-)

1.94

15000

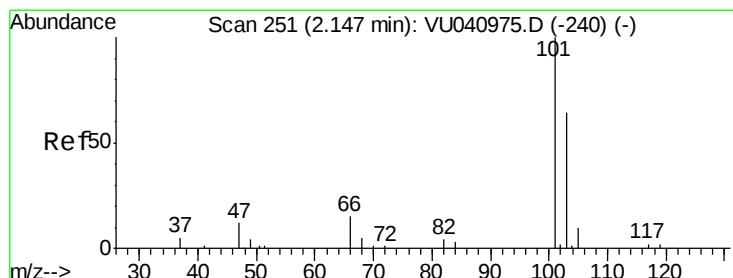
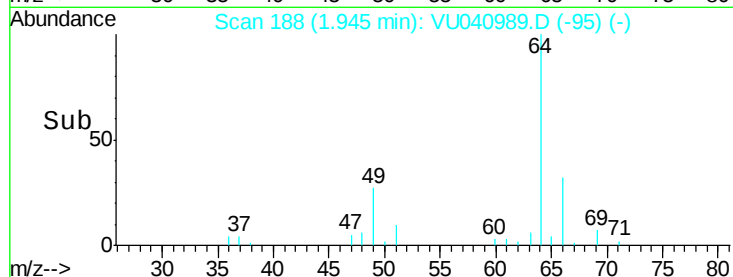
10000

5000

0

Time-->

1.90 1.95 2.00



#9

Trichlorofluoromethane

Concen: 5.463 ug/L

RT: 2.15 min Scan# 252

Delta R.T. 0.00 min

Lab File: VU040989.D

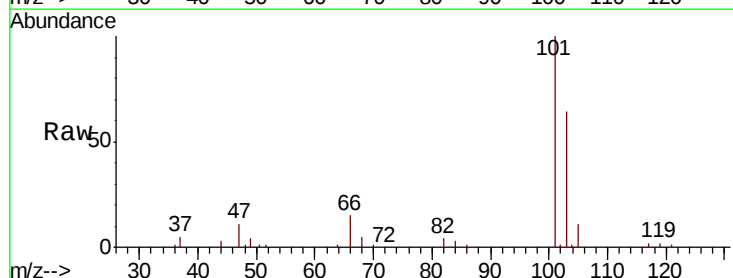
Acq: 27 Oct 2020 17:21

Tgt Ion: 101 Resp: 39092

Ion Ratio Lower Upper

101 100

103 63.6 51.0 76.4



Abundance Ion 101.00 (100.70 to 101.70): VU040989.D (-240) (-)

Ion 103.00 (102.70 to 103.70): VU040989.D (-240) (-)

2.15

30000

25000

20000

15000

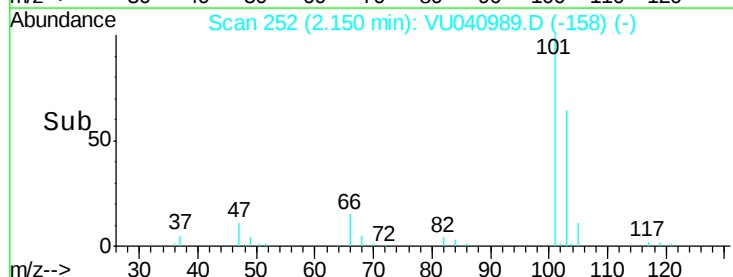
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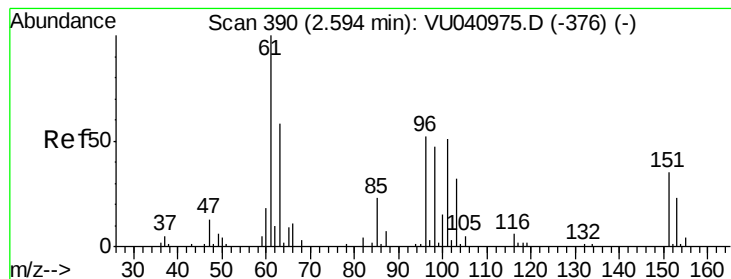
5000

0

Time-->

2.10 2.15 2.20





#10

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

Concen: 5.635 ug/L

RT: 2.59 min Scan# 390

Delta R.T. 0.00 min

Lab File: VU040989.D

Acq: 27 Oct 2020 17:21

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00529

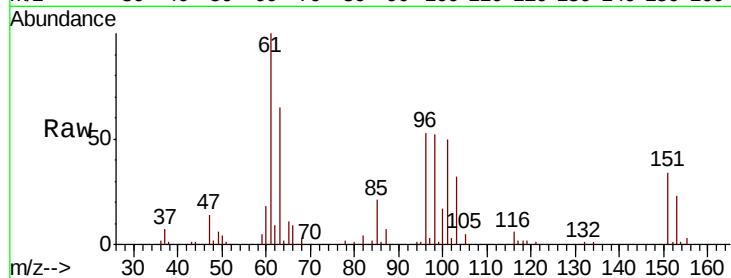
Tot Ion:101 Resp: 23629

Ion Ratio Lower Upper

101 100

85 44.3 35.0 52.4

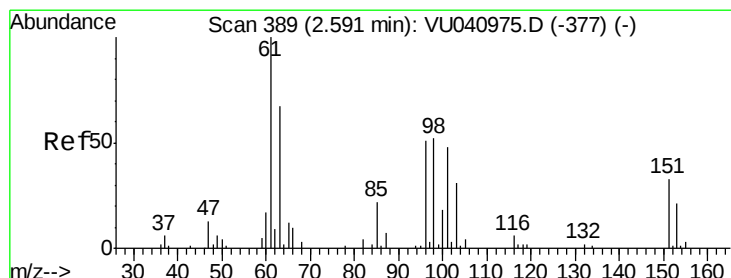
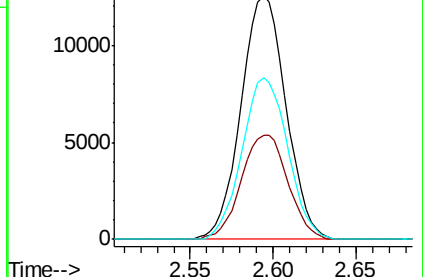
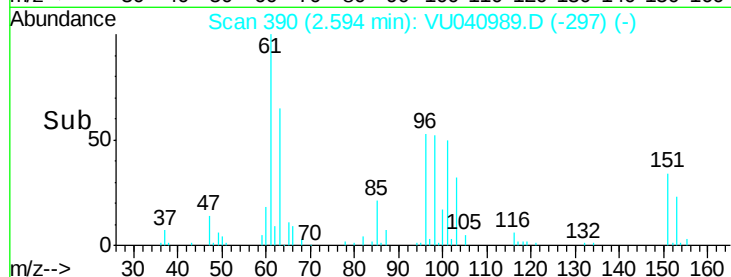
151 67.3 55.3 82.9



Abundance Ion 101.00 (100.70 to 101.70): VU040989.D (-297) (-)

Ion 85.00 (84.70 to 85.70): VU040989.D (-297) (-)

Ion 151.00 (150.70 to 151.70): VU040989.D (-297) (-)



#12

1,1-Dichloroethene

Concen: 5.477 ug/L

RT: 2.59 min Scan# 390

Delta R.T. 0.00 min

Lab File: VU040989.D

Acq: 27 Oct 2020 17:21

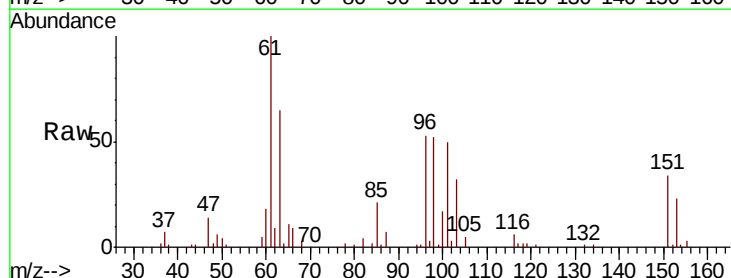
Tgt Ion: 96 Resp: 21688

Ion Ratio Lower Upper

96 100

61 189.7 134.3 249.5

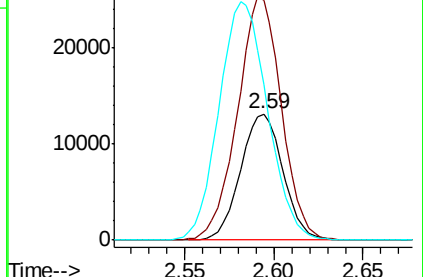
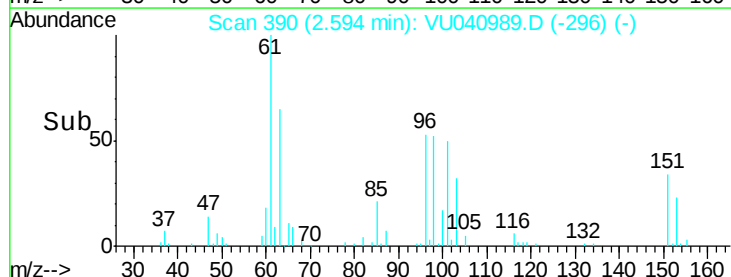
63 122.7 95.0 176.4

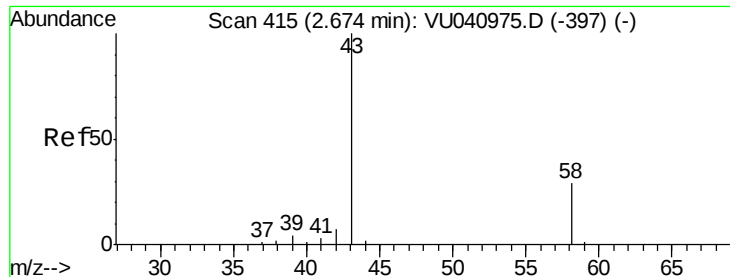


Abundance Ion 96.00 (95.70 to 96.70): VU040989.D (-296) (-)

Ion 61.05 (60.75 to 61.75): VU040989.D (-296) (-)

Ion 63.00 (62.70 to 63.70): VU040989.D (-296) (-)





#13

Acetone

Concen: 53.742 ug/L

RT: 2.68 min Scan# 416

Delta R.T. 0.00 min

Lab File: VU040989.D

Acq: 27 Oct 2020 17:21

Instrument :

MSVOA\_U

ClientSampleId :

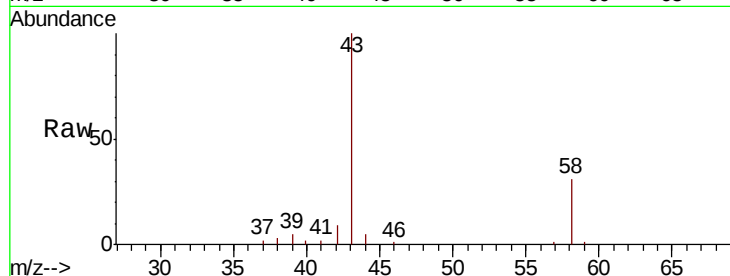
VSTD00529

Tot Ion: 43 Resp: 56980

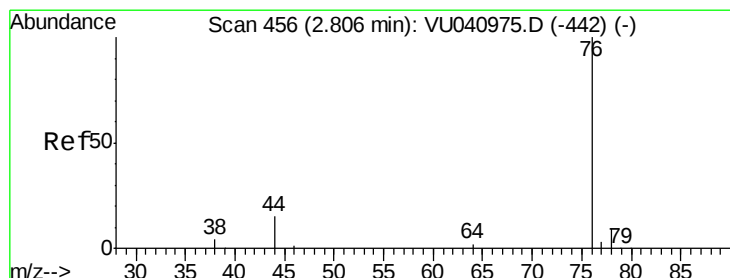
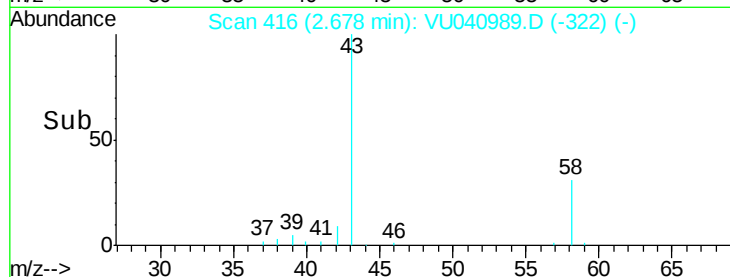
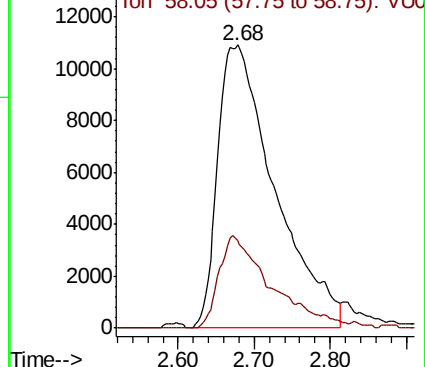
Ion Ratio Lower Upper

43 100

58 26.0 0.0 25.4#



Abundance Ion 43.05 (42.75 to 43.75): VU040989.D (-322) (-)



#14

Carbon disulfide

Concen: 5.196 ug/L

RT: 2.81 min Scan# 456

Delta R.T. 0.00 min

Lab File: VU040989.D

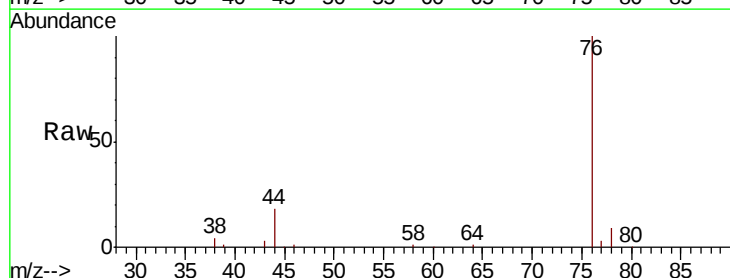
Acq: 27 Oct 2020 17:21

Tgt Ion: 76 Resp: 68751

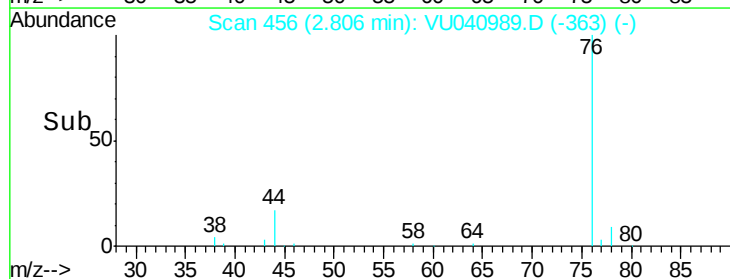
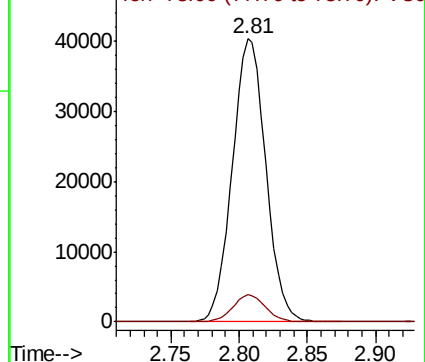
Ion Ratio Lower Upper

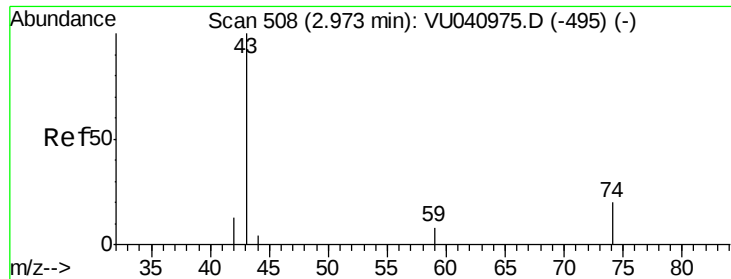
76 100

78 9.5 7.5 11.3



Abundance Ion 76.05 (75.75 to 76.75): VU040989.D (-363) (-)

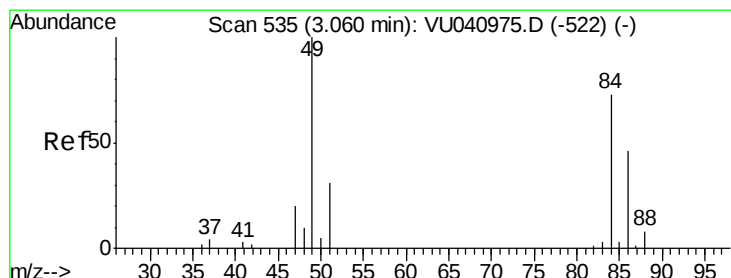
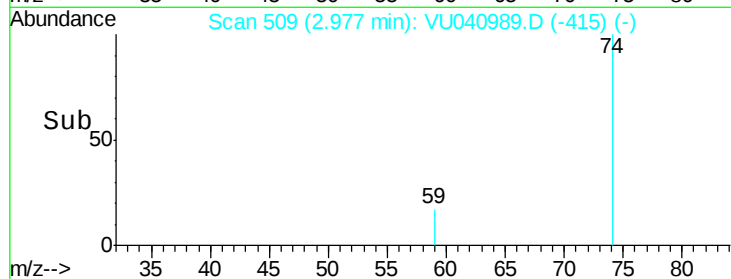
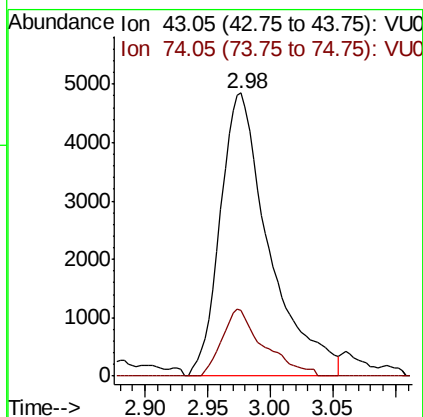
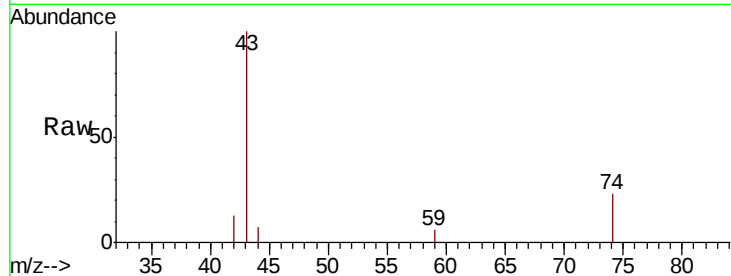




#15  
Methvl Acetate  
Concen: 5.425 ug/L  
RT: 2.98 min Scan# 509  
Delta R.T. 0.00 min  
Lab File: VU040989.D  
Acq: 27 Oct 2020 17:21

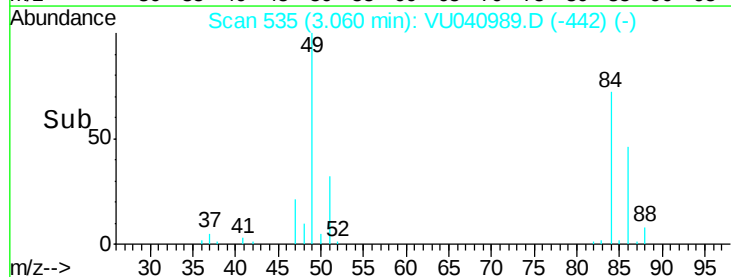
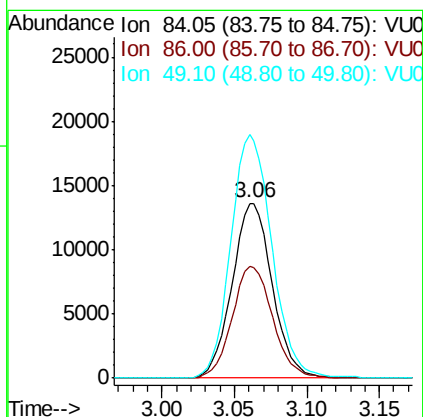
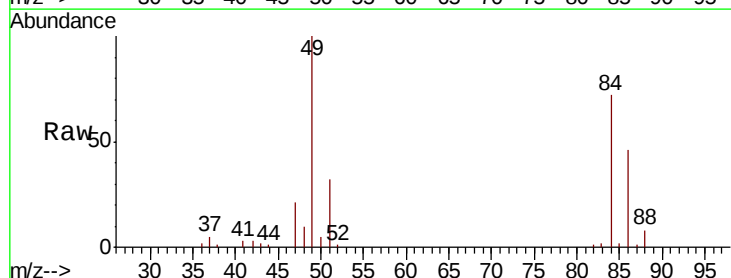
Instrument :  
MSVOA\_U  
ClientSampled :  
VSTD00529

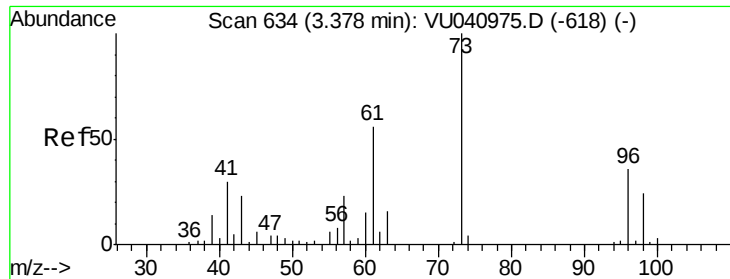
Tot Ion: 43 Resp: 13161  
Ion Ratio Lower Upper  
43 100  
74 20.2 18.3 27.5



#16  
Methylene chloride  
Concen: 5.666 ug/L  
RT: 3.06 min Scan# 535  
Delta R.T. 0.00 min  
Lab File: VU040989.D  
Acq: 27 Oct 2020 17:21

Tgt Ion: 84 Resp: 26139  
Ion Ratio Lower Upper  
84 100  
86 64.0 42.8 79.6  
49 139.3 99.5 184.7

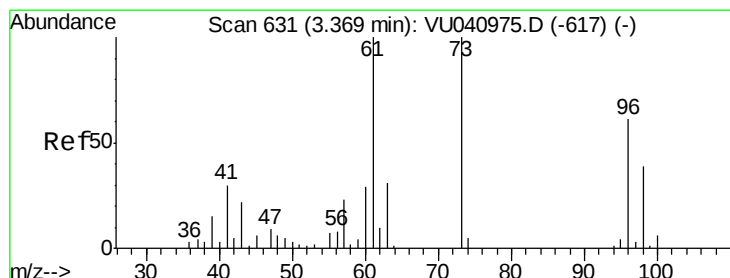
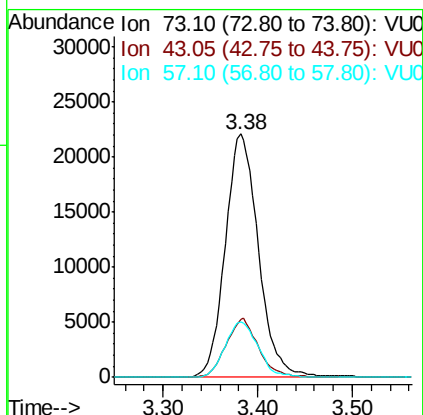
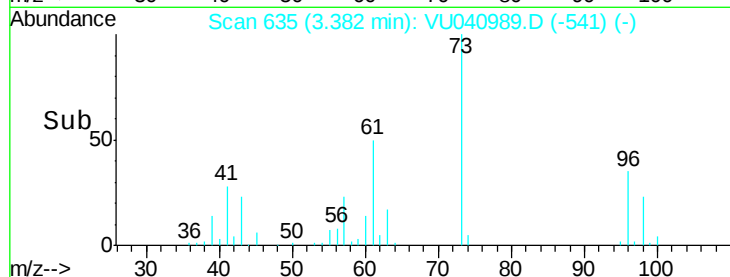
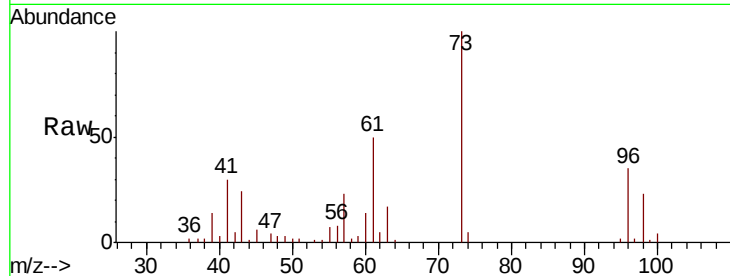




#17  
Methvl tert-butvl Ether  
Concen: 5.274 ug/L  
RT: 3.38 min Scan# 635  
Delta R.T. 0.00 min  
Lab File: VU040989.D  
Acq: 27 Oct 2020 17:21

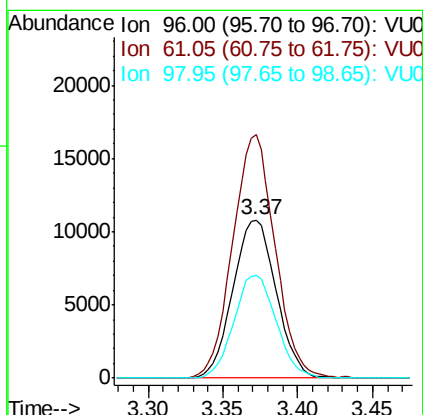
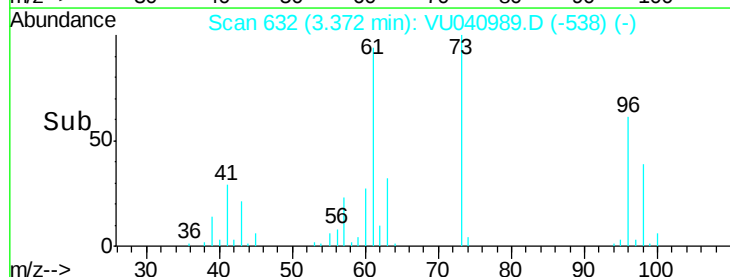
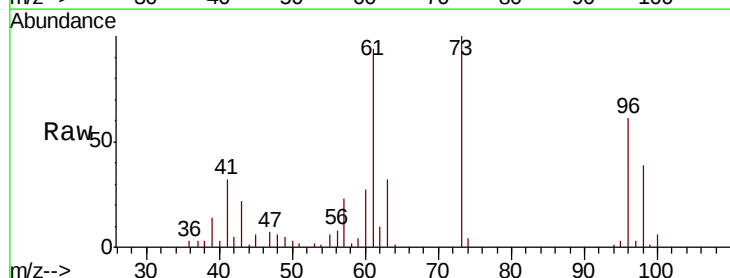
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00529

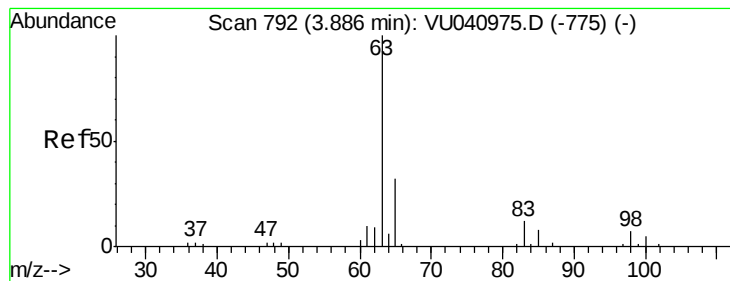
Tot Ion: 73 Resp: 53744  
Ion Ratio Lower Upper  
73 100  
43 23.3 18.5 27.7  
57 22.7 18.4 27.6



#18  
trans-1,2-Dichloroethene  
Concen: 5.411 ug/L  
RT: 3.37 min Scan# 632  
Delta R.T. 0.00 min  
Lab File: VU040989.D  
Acq: 27 Oct 2020 17:21

Tgt Ion: 96 Resp: 21772  
Ion Ratio Lower Upper  
96 100  
61 153.7 110.9 205.9  
98 64.6 45.4 84.2





#19

1,1-Dichloroethane

Concen: 5.442 ug/L

RT: 3.89 min Scan# 793

Delta R.T. 0.00 min

Lab File: VU040989.D

Acq: 27 Oct 2020 17:21

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00529

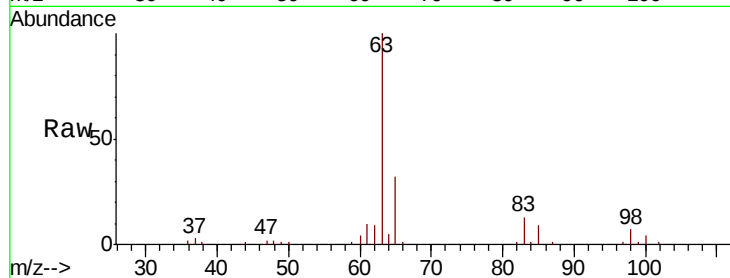
Tot Ion: 63 Resp: 43783

Ion Ratio Lower Upper

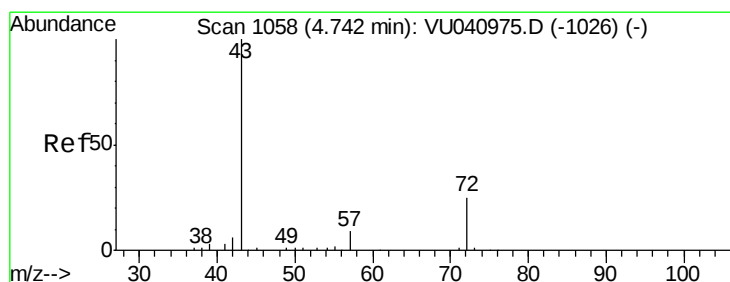
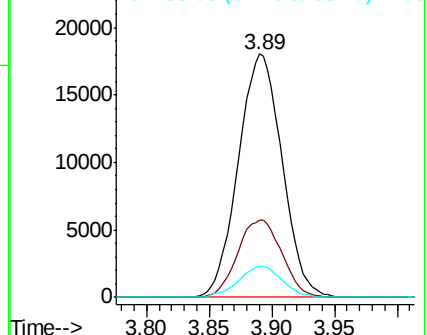
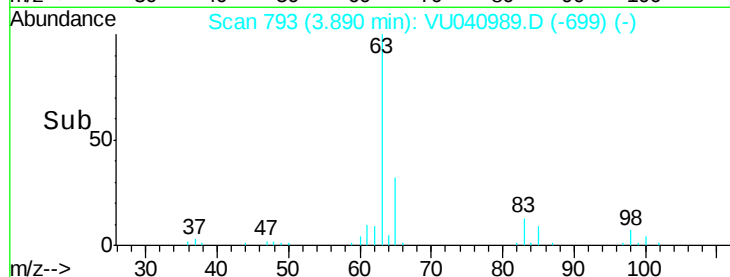
63 100

65 31.5 21.3 39.6

83 12.8 8.8 16.3



Abundance Ion 63.10 (62.80 to 63.80): VU040989.D (-699) (-)



#21

2-Butanone

Concen: 54.627 ug/L

RT: 4.74 min Scan# 1058

Delta R.T. 0.00 min

Lab File: VU040989.D

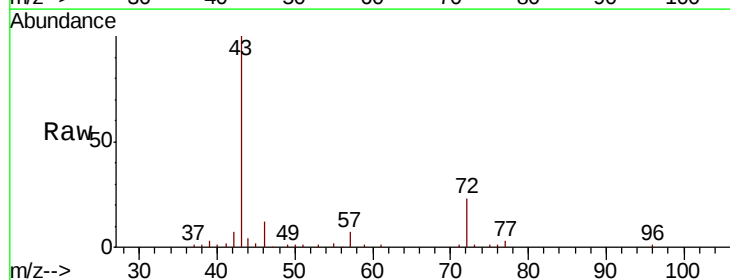
Acq: 27 Oct 2020 17:21

Tgt Ion: 43 Resp: 90521

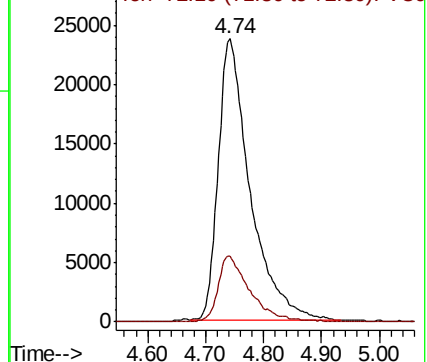
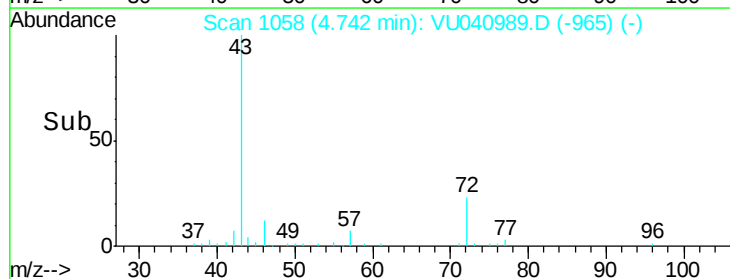
Ion Ratio Lower Upper

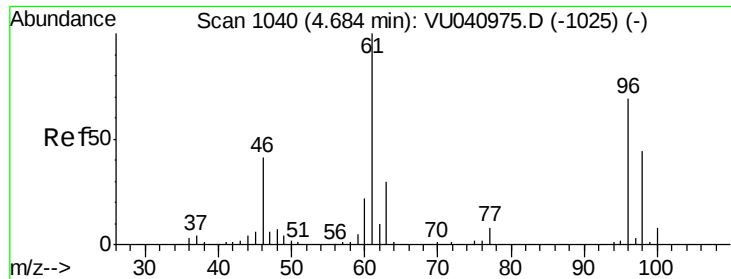
43 100

72 23.2 11.8 35.4



Abundance Ion 43.05 (42.75 to 43.75): VU040989.D (-965) (-)





#22

cis-1,2-Dichloroethene

Concen: 5.497 ug/L

RT: 4.69 min Scan# 1041

Delta R.T. 0.00 min

Lab File: VU040989.D

Acq: 27 Oct 2020 17:21

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00529

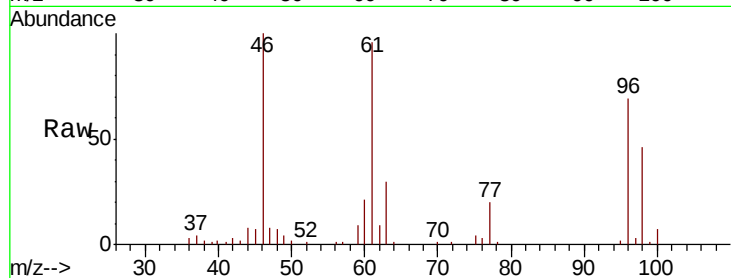
Tot Ion: 96 Resp: 22816

Ion Ratio Lower Upper

96 100

61 139.8 97.2 180.4

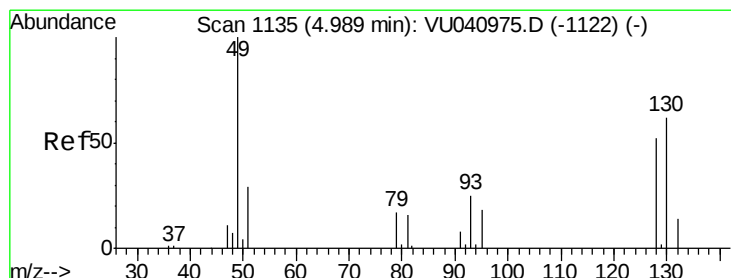
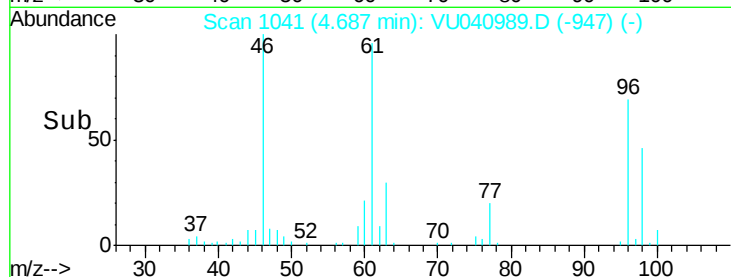
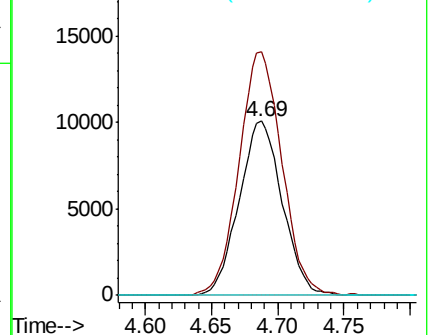
68 0.0 0.0 0.0



Abundance Ion 96.00 (95.70 to 96.70): VU040975.D (-1025) (-)

Ion 61.05 (60.75 to 61.75): VU040975.D (-1025) (-)

Ion 68.15 (67.85 to 68.85): VU040975.D (-1025) (-)



#23

Bromochloromethane

Concen: 5.528 ug/L

RT: 4.99 min Scan# 1136

Delta R.T. 0.00 min

Lab File: VU040989.D

Acq: 27 Oct 2020 17:21

Tgt Ion:128 Resp: 10824

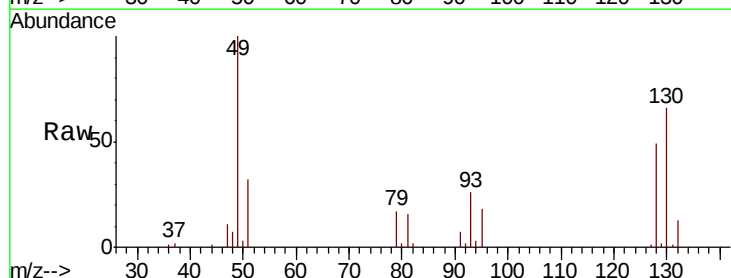
Ion Ratio Lower Upper

128 100

49 205.4 135.0 250.8

130 135.5 89.9 167.0

51 66.5 51.9 77.9

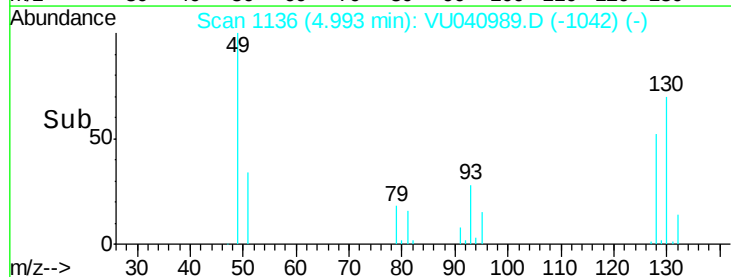
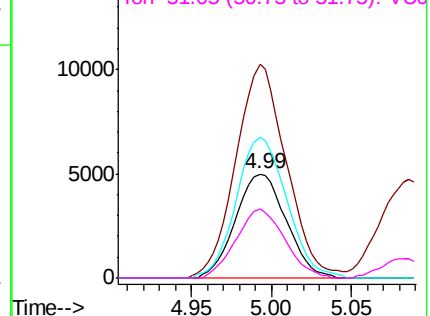


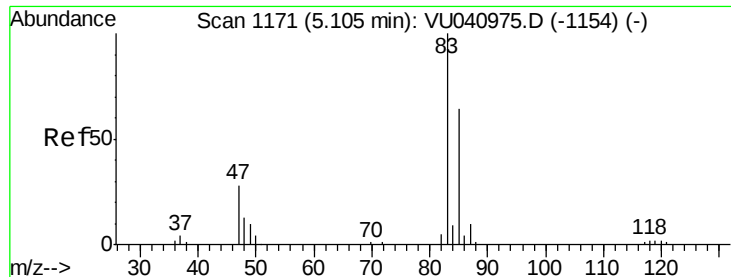
Abundance Ion 127.90 (127.60 to 128.60): VU040975.D (-1122) (-)

Ion 49.10 (48.80 to 49.80): VU040975.D (-1122) (-)

Ion 129.95 (129.65 to 130.65): VU040975.D (-1122) (-)

Ion 51.05 (50.75 to 51.75): VU040975.D (-1122) (-)

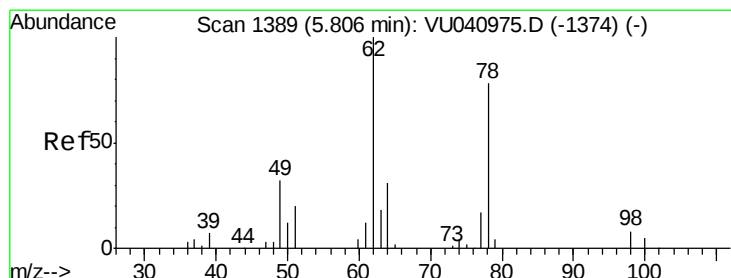
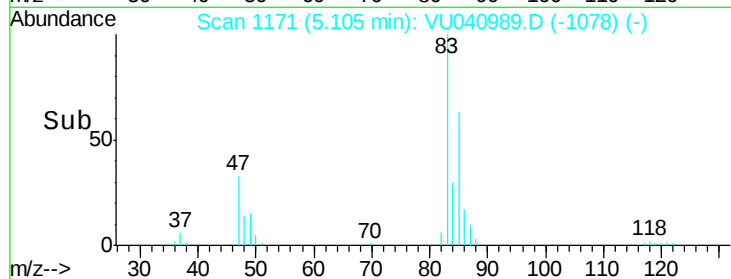
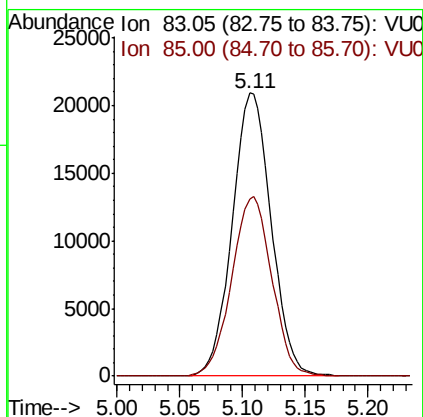
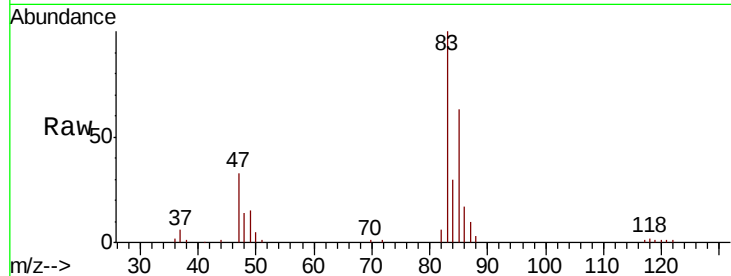




#25  
Chloroform  
Concen: 5.599 ug/L  
RT: 5.11 min Scan# 1171  
Delta R.T. 0.00 min  
Lab File: VU040989.D  
Acq: 27 Oct 2020 17:21

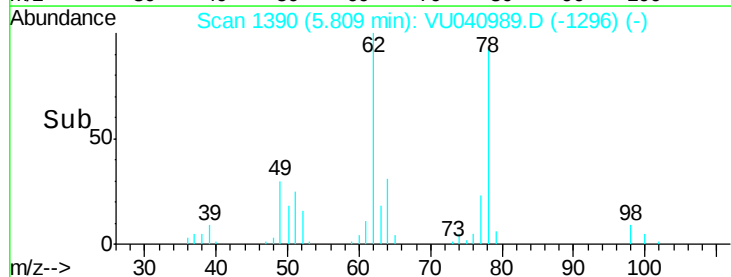
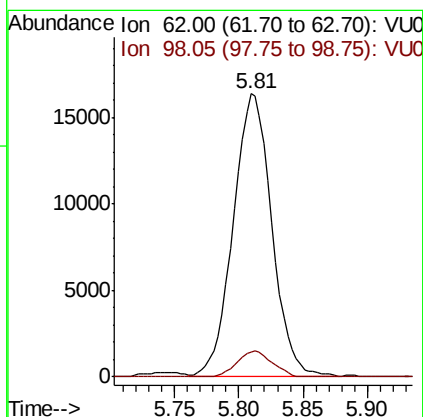
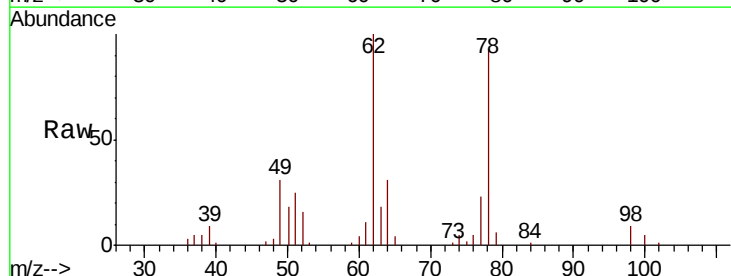
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00529

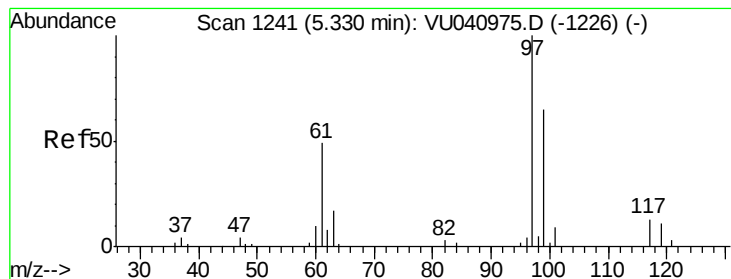
Tot Ion: 83 Resp: 45169  
Ion Ratio Lower Upper  
83 100  
85 62.7 46.1 85.7



#27  
1,2-Dichloroethane  
Concen: 5.695 ug/L  
RT: 5.81 min Scan# 1390  
Delta R.T. 0.00 min  
Lab File: VU040989.D  
Acq: 27 Oct 2020 17:21

Tgt Ion: 62 Resp: 34220  
Ion Ratio Lower Upper  
62 100  
98 8.9 7.6 11.4





#29

1,1,1-Trichloroethane

Concen: 5.485 ug/L

RT: 5.33 min Scan# 1242

Delta R.T. 0.00 min

Lab File: VU040989.D

Acq: 27 Oct 2020 17:21

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00529

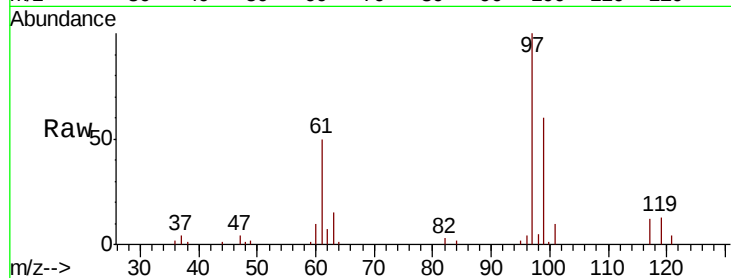
Tot Ion: 97 Resp: 38086

Ion Ratio Lower Upper

97 100

99 62.7 53.4 80.0

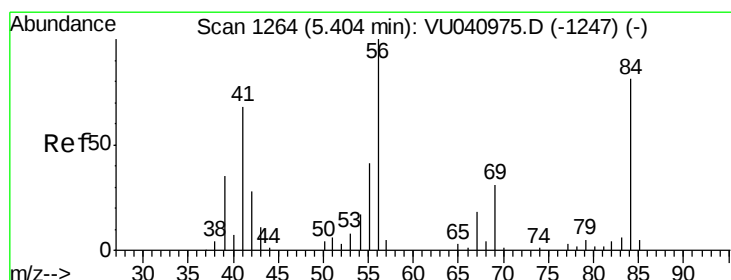
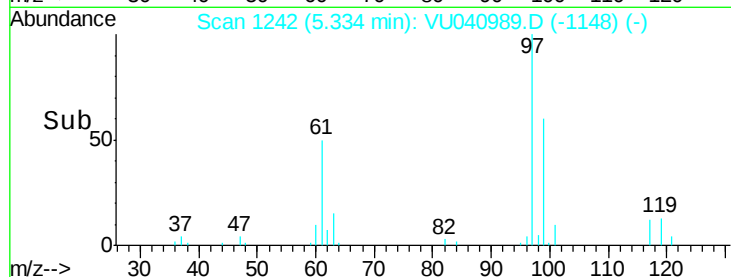
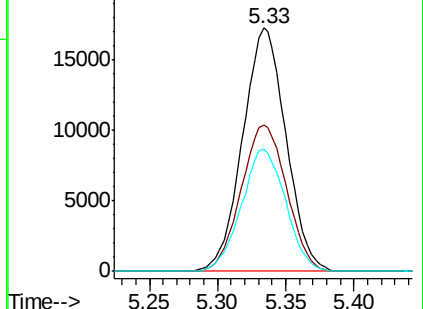
61 51.2 41.6 62.4



Abundance Ion 96.95 (96.65 to 97.65): VU040989.D (-1148) (-)

Ion 99.05 (98.75 to 99.75): VU040989.D (-1148) (-)

Ion 61.05 (60.75 to 61.75): VU040989.D (-1148) (-)



#30

Cyclohexane

Concen: 5.187 ug/L

RT: 5.41 min Scan# 1265

Delta R.T. 0.00 min

Lab File: VU040989.D

Acq: 27 Oct 2020 17:21

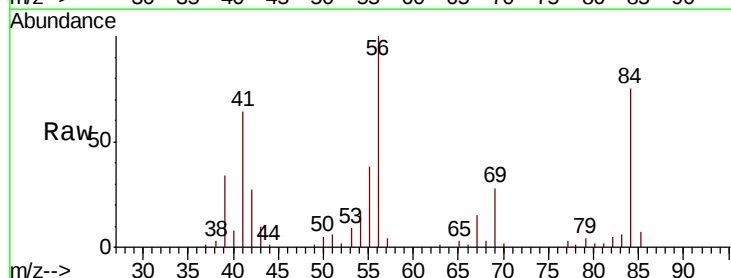
Tgt Ion: 56 Resp: 35487

Ion Ratio Lower Upper

56 100

69 29.2 22.8 34.2

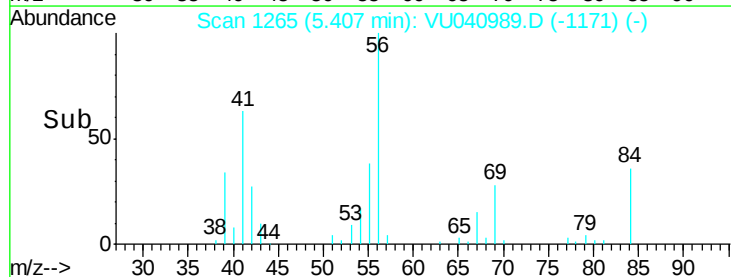
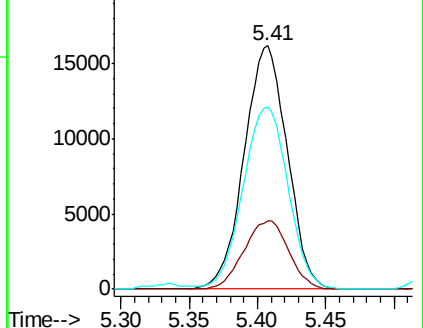
84 78.5 63.6 95.4

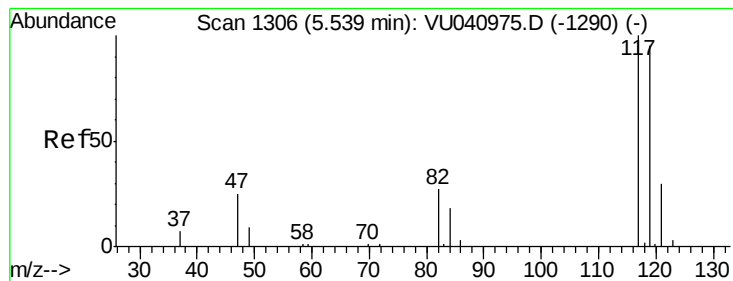


Abundance Ion 56.10 (55.80 to 56.80): VU040989.D (-1171) (-)

Ion 69.15 (68.85 to 69.85): VU040989.D (-1171) (-)

Ion 84.15 (83.85 to 84.85): VU040989.D (-1171) (-)





#31

Carbon tetrachloride

Concen: 5.327 ug/L

RT: 5.54 min Scan# 1307

Delta R.T. 0.00 min

Lab File: VU040989.D

Acq: 27 Oct 2020 17:21

Instrument :

MSVOA\_U

ClientSampleId :

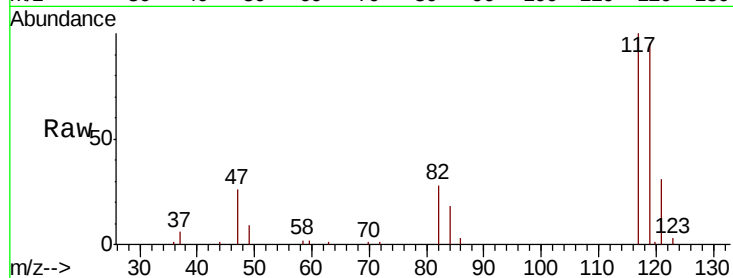
VSTD00529

Tot Ion:117 Resp: 32750

Ion Ratio Lower Upper

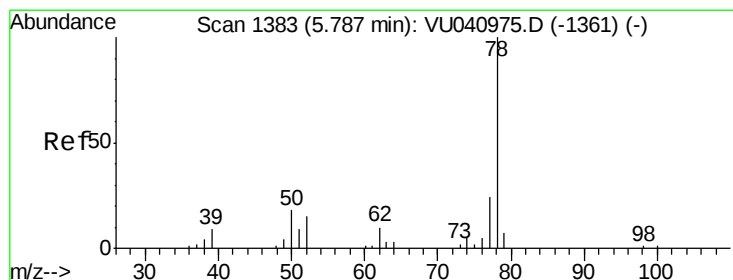
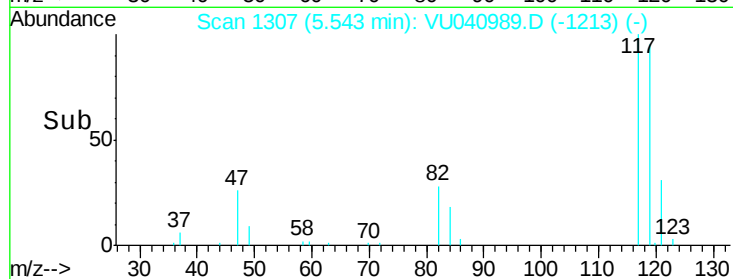
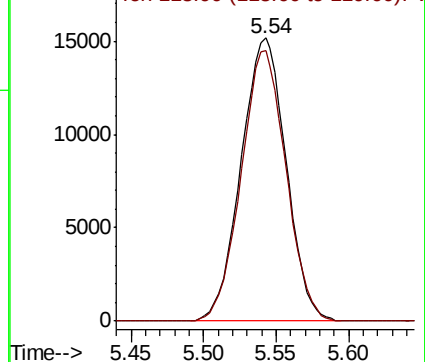
117 100

119 95.1 76.1 114.1



Abundance Ion 116.90 (116.60 to 117.60): V

Ion 118.90 (118.60 to 119.60): V



#33

Benzene

Concen: 5.459 ug/L

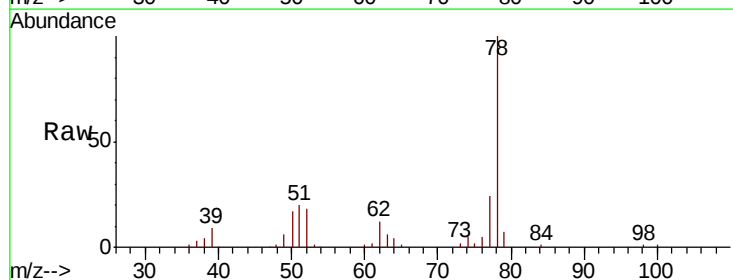
RT: 5.79 min Scan# 1384

Delta R.T. 0.00 min

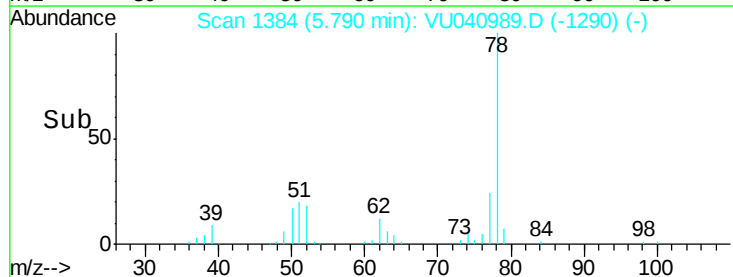
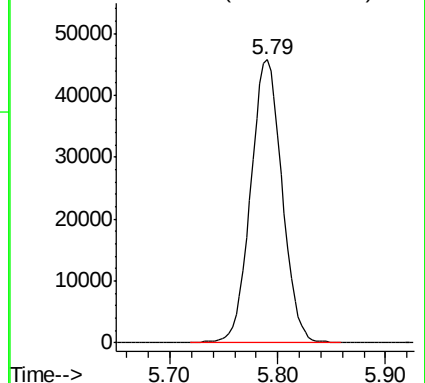
Lab File: VU040989.D

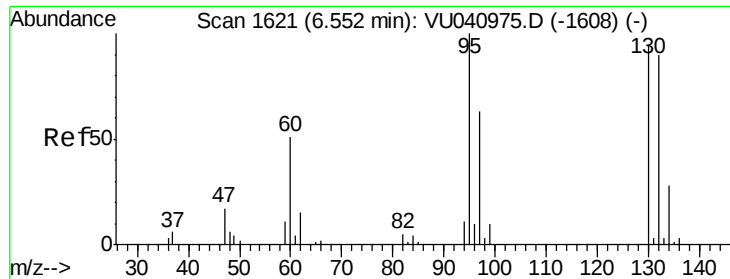
Acq: 27 Oct 2020 17:21

Tgt Ion: 78 Resp: 92604



Abundance Ion 78.10 (77.80 to 78.80): VU0

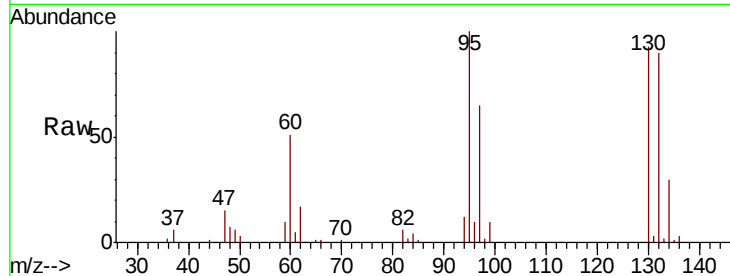




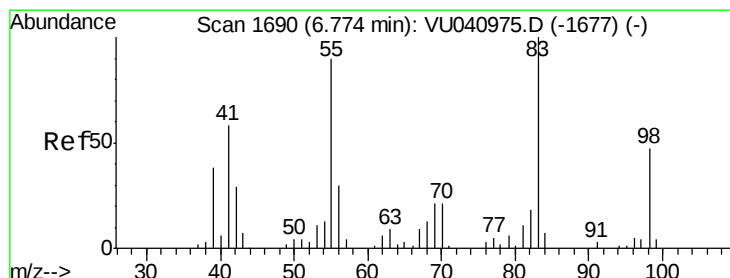
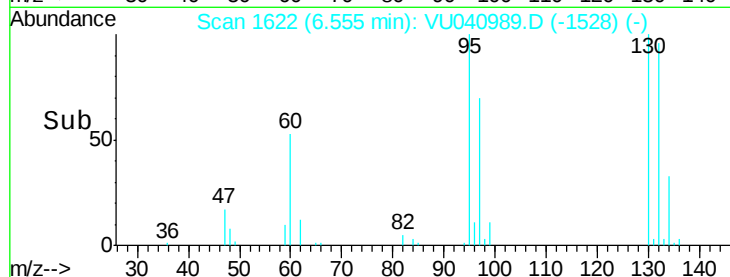
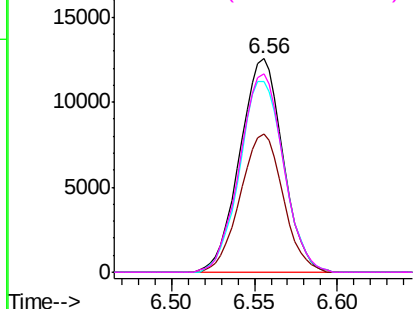
#34  
 Trichloroethene  
 Concen: 5.273 ug/L  
 RT: 6.56 min Scan# 1622  
 Delta R.T. 0.00 min  
 Lab File: VU040989.D  
 Acq: 27 Oct 2020 17:21

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00529

Tot Ion: 95 Resp: 22762  
 Ion Ratio Lower Upper  
 95 100  
 97 65.0 45.6 84.6  
 132 89.5 64.8 120.4  
 130 92.7 64.8 120.4

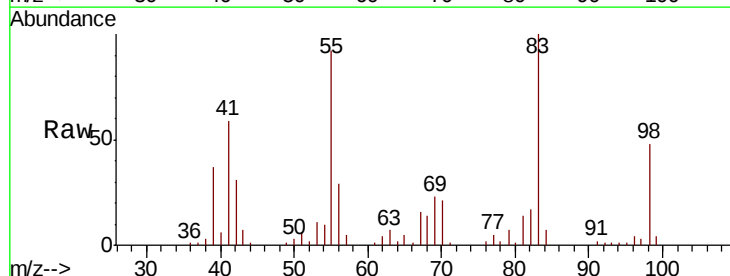


Abundance Ion 95.00 (94.70 to 95.70): VU0  
 Ion 96.95 (96.65 to 97.65): VU0  
 Ion 131.95 (131.65 to 132.65): V  
 Ion 129.95 (129.65 to 130.65): V

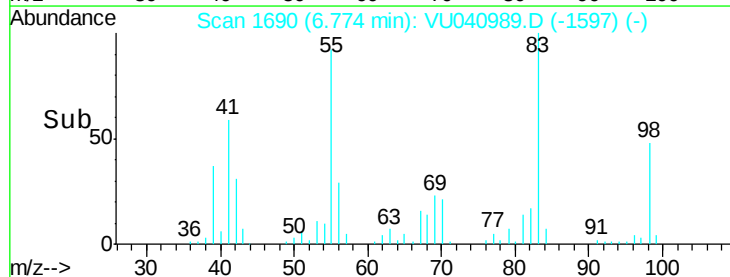
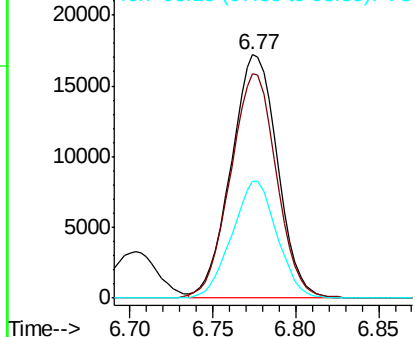


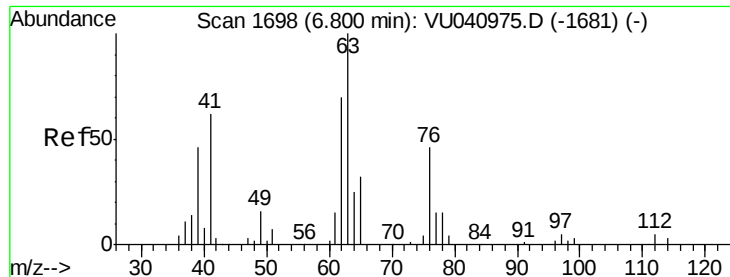
#35  
 Methylcyclohexane  
 Concen: 5.205 ug/L  
 RT: 6.77 min Scan# 1690  
 Delta R.T. 0.00 min  
 Lab File: VU040989.D  
 Acq: 27 Oct 2020 17:21

Tgt Ion: 83 Resp: 33516  
 Ion Ratio Lower Upper  
 83 100  
 55 91.6 72.0 108.0  
 98 46.5 36.6 55.0



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

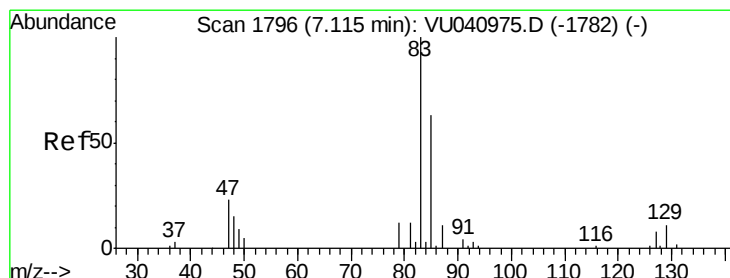
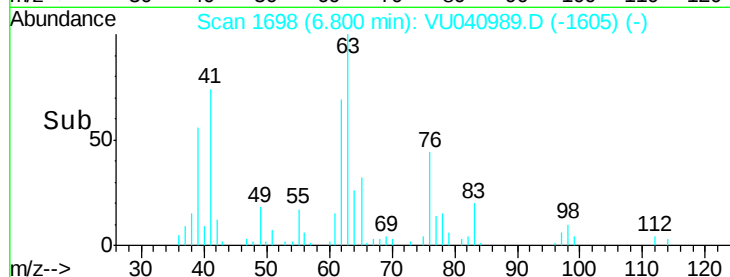
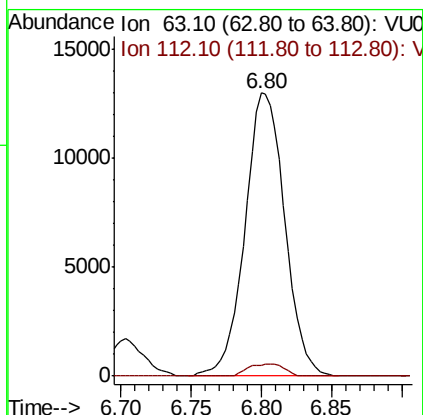
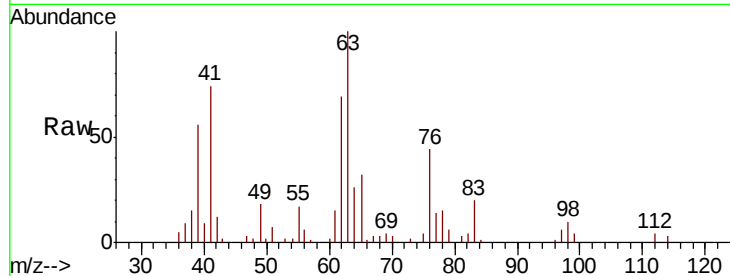




#37  
 1,2-Dichloropropane  
 Concen: 5.588 ug/L  
 RT: 6.80 min Scan# 1698  
 Delta R.T. 0.00 min  
 Lab File: VU040989.D  
 Acq: 27 Oct 2020 17:21

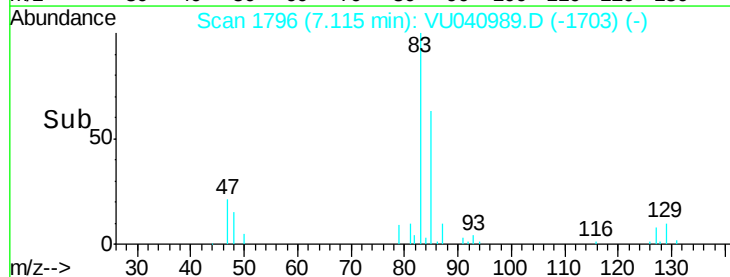
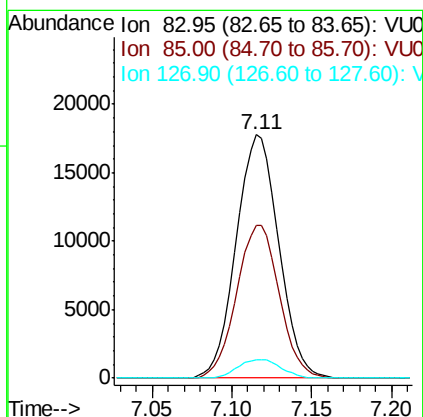
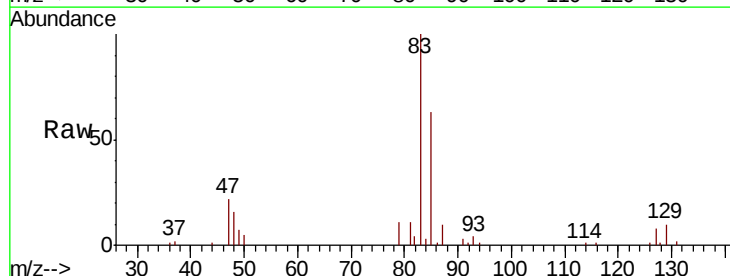
Instrument :  
 MSVOA\_U  
 ClientSampled :  
 VSTD00529

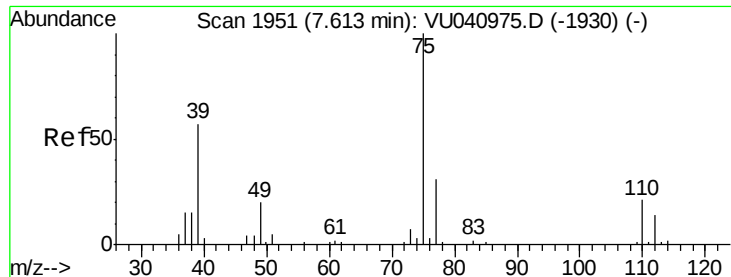
Tot Ion: 63 Resp: 25649  
 Ion Ratio Lower Upper  
 63 100  
 112 3.9 3.6 5.4



#38  
 Bromodichloromethane  
 Concen: 5.414 ug/L  
 RT: 7.11 min Scan# 1796  
 Delta R.T. 0.00 min  
 Lab File: VU040989.D  
 Acq: 27 Oct 2020 17:21

Tgt Ion: 83 Resp: 32232  
 Ion Ratio Lower Upper  
 83 100  
 85 62.6 43.3 80.3  
 127 7.6 5.9 8.9

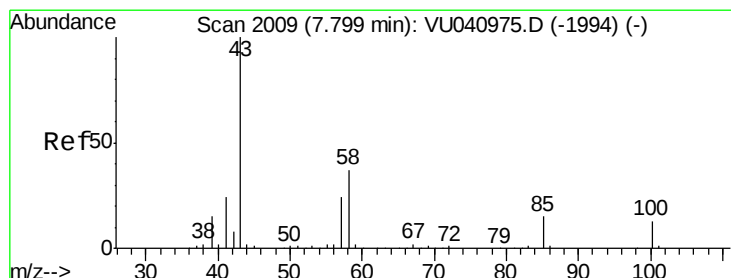
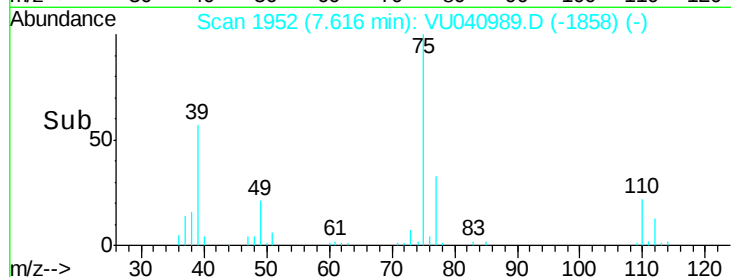
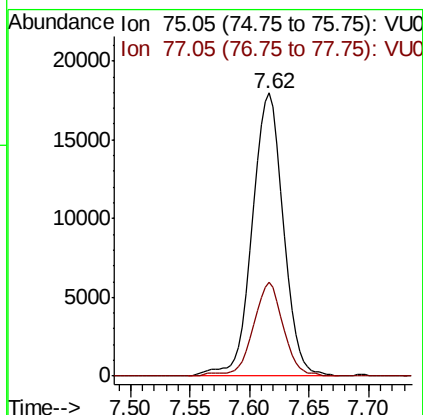
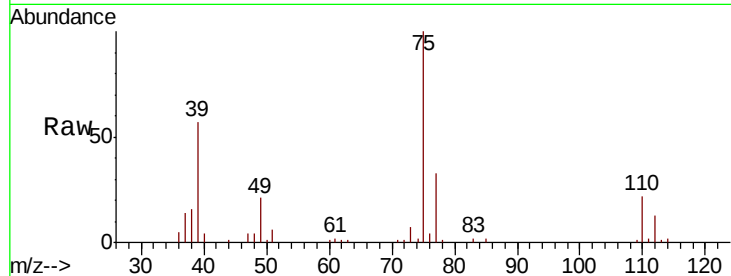




#39  
 cis-1,3-Dichloropropene  
 Concen: 5.173 ug/L  
 RT: 7.62 min Scan# 1952  
 Delta R.T. 0.00 min  
 Lab File: VU040989.D  
 Acq: 27 Oct 2020 17:21

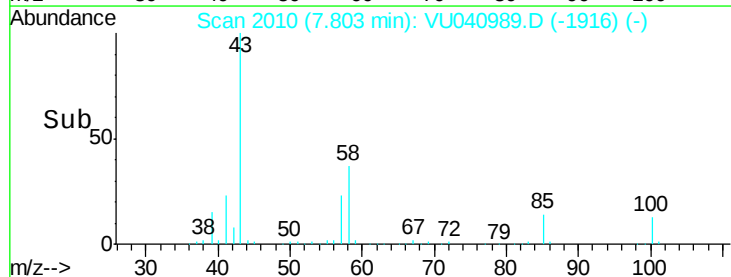
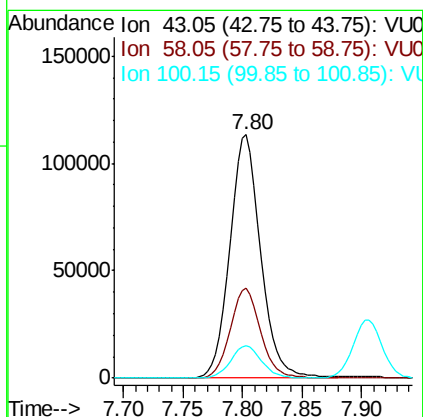
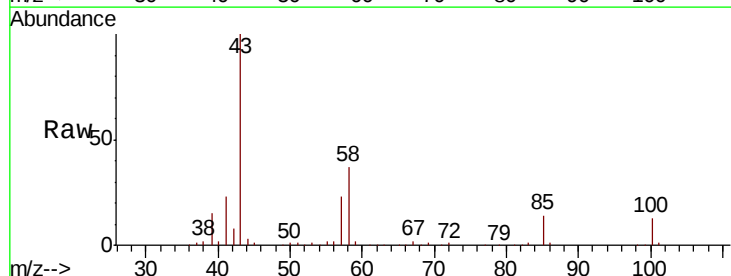
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00529

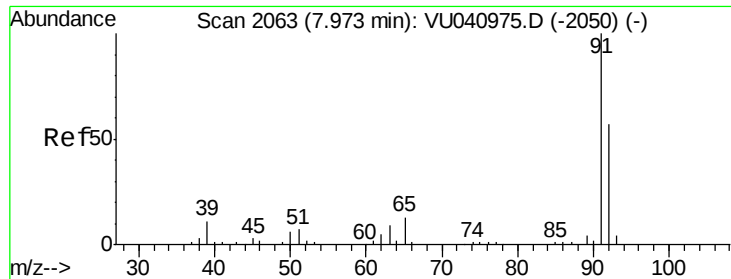
Tot Ion: 75 Resp: 32691  
 Ion Ratio Lower Upper  
 75 100  
 77 33.0 22.7 42.3



#40  
 4-Methyl-2-pentanone  
 Concen: 55.591 ug/L  
 RT: 7.80 min Scan# 2010  
 Delta R.T. 0.00 min  
 Lab File: VU040989.D  
 Acq: 27 Oct 2020 17:21

Tgt Ion: 43 Resp: 203451  
 Ion Ratio Lower Upper  
 43 100  
 58 36.4 29.8 44.6  
 100 13.3 10.5 15.7





#42

Toluene

Concen: 5.601 ug/L

RT: 7.98 min Scan# 2064

Delta R.T. 0.00 min

Lab File: VU040989.D

Acq: 27 Oct 2020 17:21

Instrument :

MSVOA\_U

ClientSampleId :

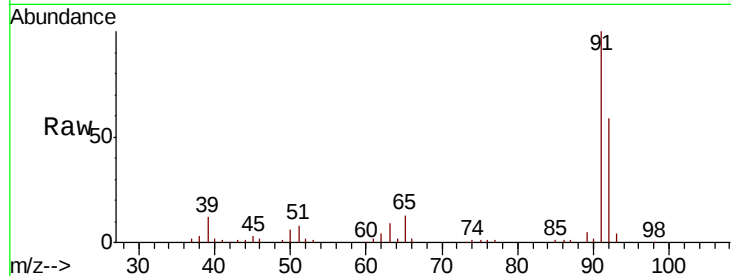
VSTD00529

Tot Ion: 91 Resp: 96349

Ion Ratio Lower Upper

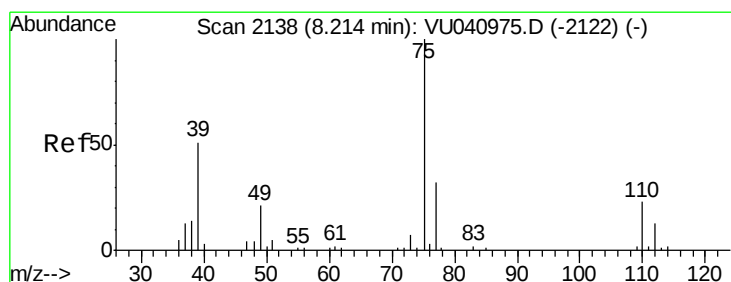
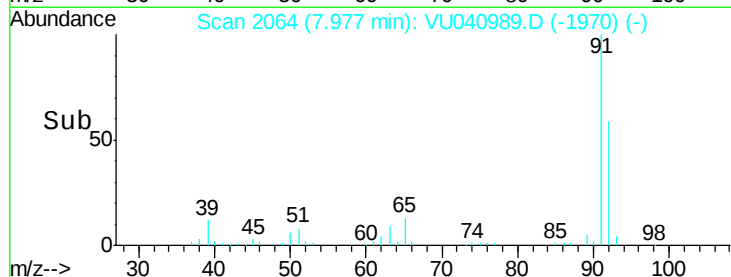
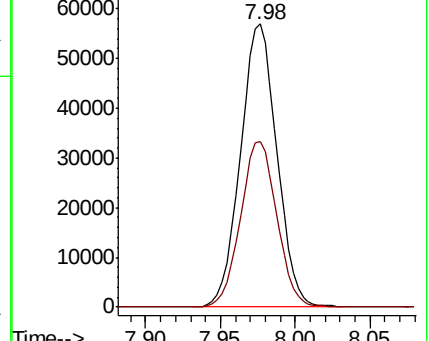
91 100

92 58.6 40.6 75.4



Abundance Ion 91.15 (90.85 to 91.85): VU040975.D (-2050) (-)

Ion 92.15 (91.85 to 92.85): VU040975.D (-2050) (-)



#44

trans-1,3-Dichloropropene

Concen: 5.444 ug/L

RT: 8.22 min Scan# 2139

Delta R.T. 0.00 min

Lab File: VU040989.D

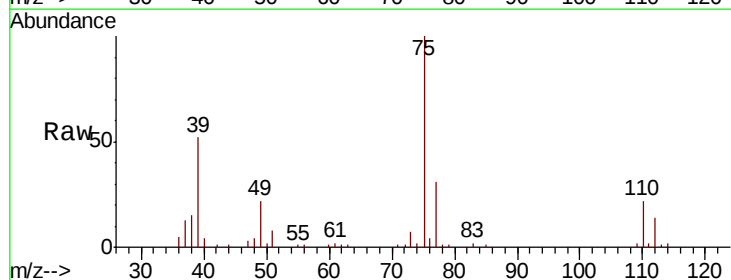
Acq: 27 Oct 2020 17:21

Tgt Ion: 75 Resp: 32199

Ion Ratio Lower Upper

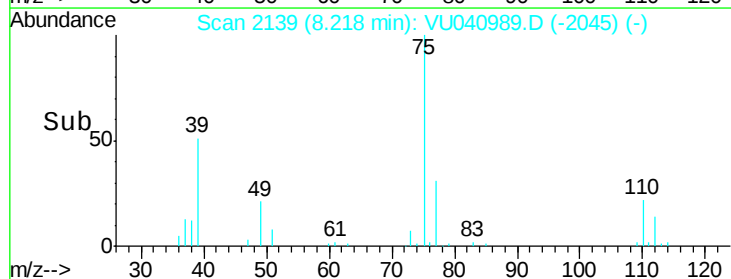
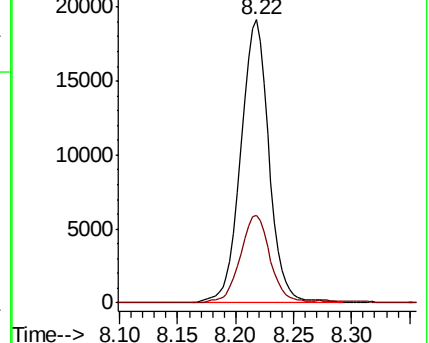
75 100

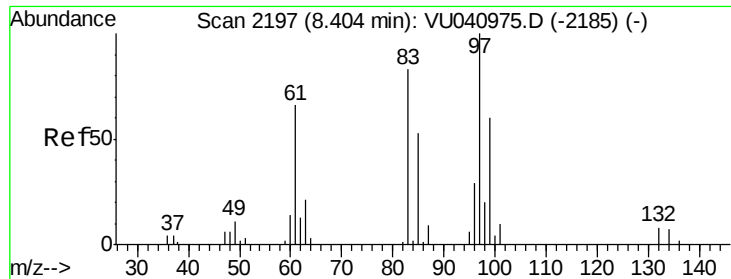
77 31.1 23.3 43.3



Abundance Ion 75.05 (74.75 to 75.75): VU040975.D (-2122) (-)

Ion 77.05 (76.75 to 77.75): VU040975.D (-2122) (-)

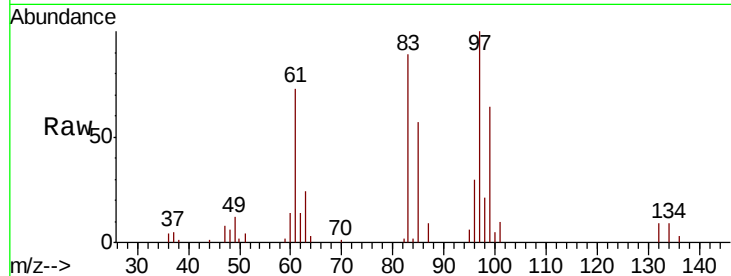




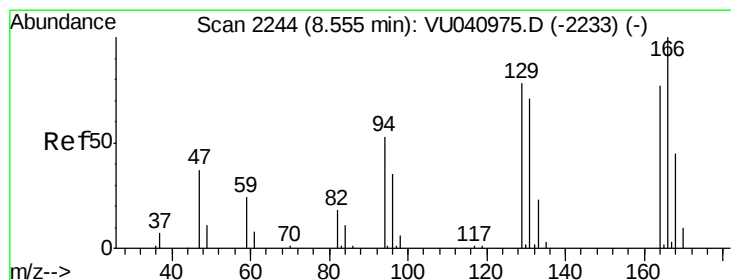
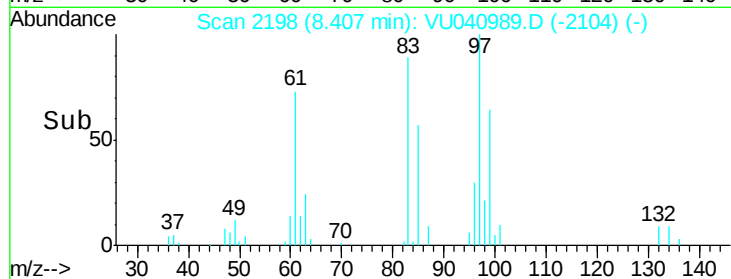
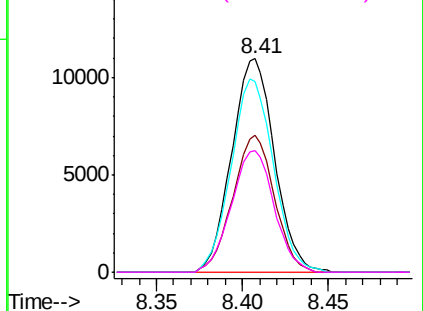
#45  
 1,1,2-Trichloroethane  
 Concen: 5.551 ug/L  
 RT: 8.41 min Scan# 2198  
 Delta R.T. 0.00 min  
 Lab File: VU040989.D  
 Acq: 27 Oct 2020 17:21

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00529

|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 97    | Resp: | 18967 |
| Ion      | Ratio | Lower | Upper |
| 97       | 100   |       |       |
| 99       | 64.3  | 45.8  | 85.2  |
| 83       | 89.5  | 67.9  | 126.1 |
| 85       | 57.1  | 42.8  | 79.6  |

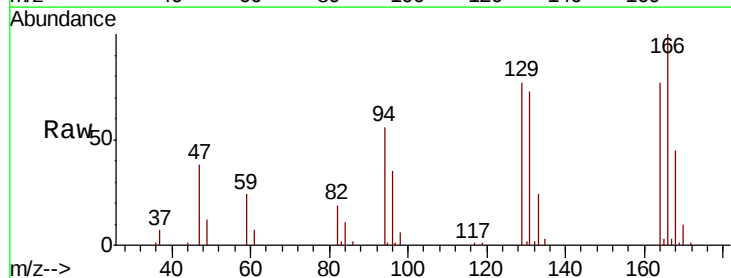


Abundance Ion 96.95 (96.65 to 97.65): VU040989.D (-2197) (-)

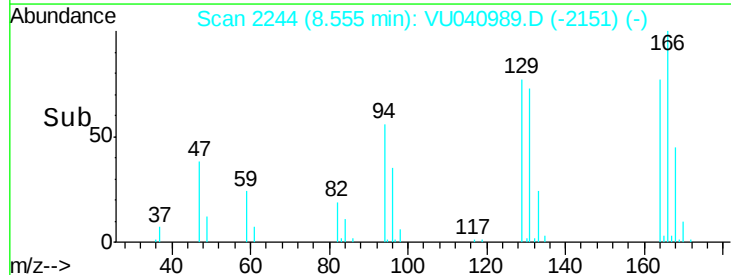
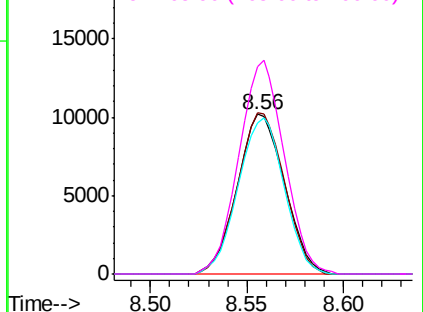


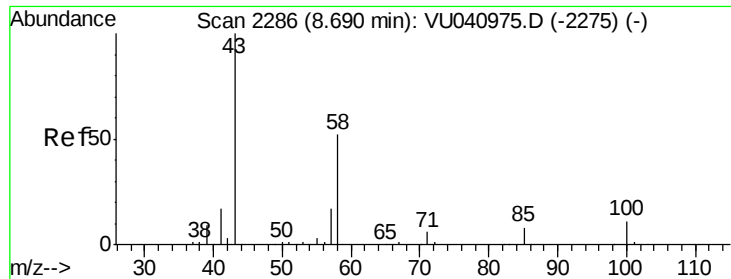
#47  
 Tetrachloroethene  
 Concen: 5.459 ug/L  
 RT: 8.56 min Scan# 2244  
 Delta R.T. 0.00 min  
 Lab File: VU040989.D  
 Acq: 27 Oct 2020 17:21

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 164   | Resp: | 17330 |
| Ion      | Ratio | Lower | Upper |
| 164      | 100   |       |       |
| 129      | 100.8 | 70.3  | 130.7 |
| 131      | 94.8  | 70.8  | 131.4 |
| 166      | 130.1 | 92.0  | 170.8 |



Abundance Ion 163.90 (163.60 to 164.60): VU040989.D (-2244) (-)

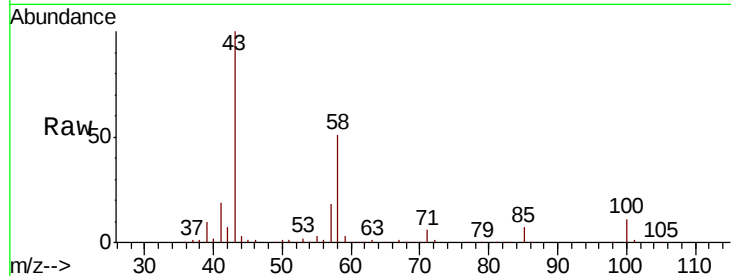




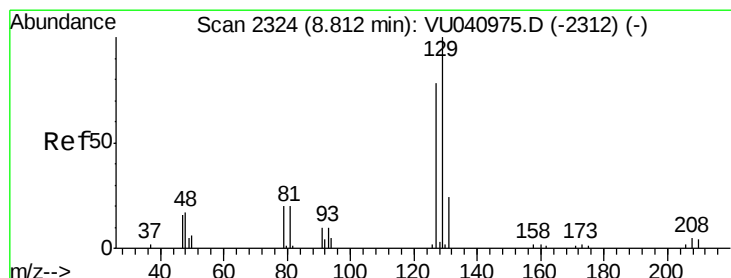
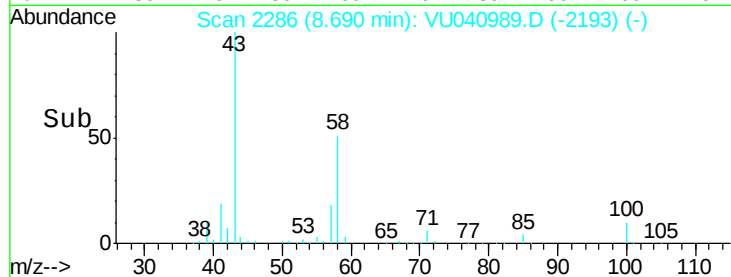
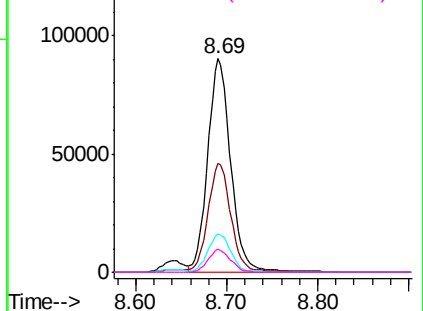
#48  
2-Hexanone  
Concen: 57.160 ug/L  
RT: 8.69 min Scan# 2286  
Delta R.T. 0.00 min  
Lab File: VU040989.D  
Acq: 27 Oct 2020 17:21

Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00529

Tot Ion: 43 Resp: 157516  
Ion Ratio Lower Upper  
43 100  
58 51.2 41.4 62.2  
57 18.3 14.6 21.8  
100 10.5 8.3 12.5

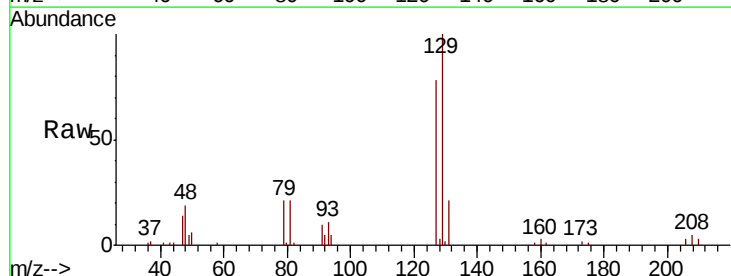


Abundance Ion 43.05 (42.75 to 43.75): VU0  
Ion 58.05 (57.75 to 58.75): VU0  
Ion 57.20 (56.90 to 57.90): VU0  
Ion 100.15 (99.85 to 100.85): VU0

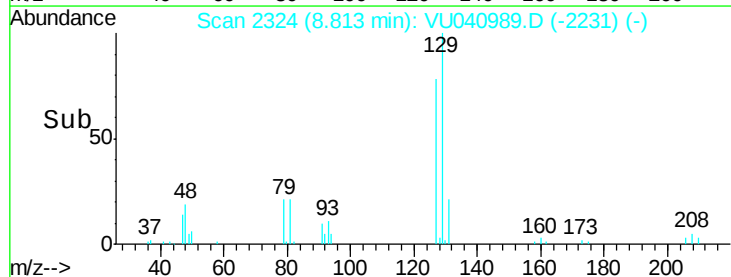
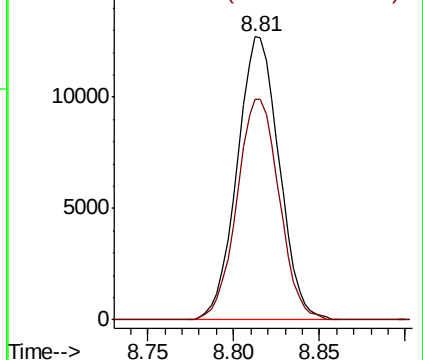


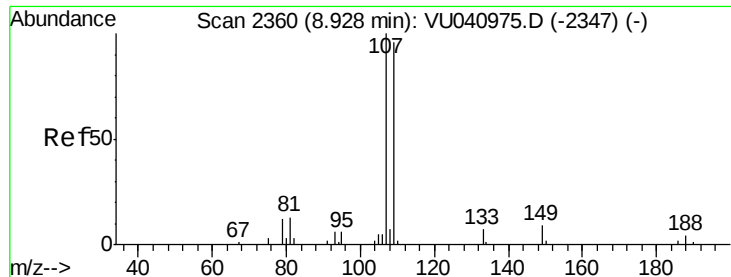
#49  
Dibromochloromethane  
Concen: 5.440 ug/L  
RT: 8.81 min Scan# 2324  
Delta R.T. 0.00 min  
Lab File: VU040989.D  
Acq: 27 Oct 2020 17:21

Tgt Ion: 129 Resp: 21588  
Ion Ratio Lower Upper  
129 100  
127 78.0 53.4 99.2



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

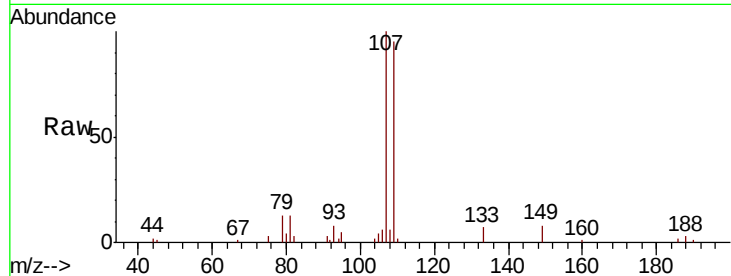




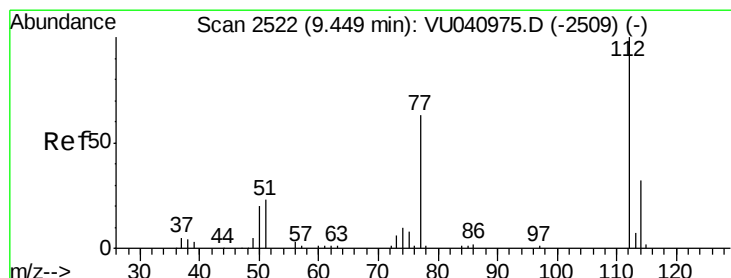
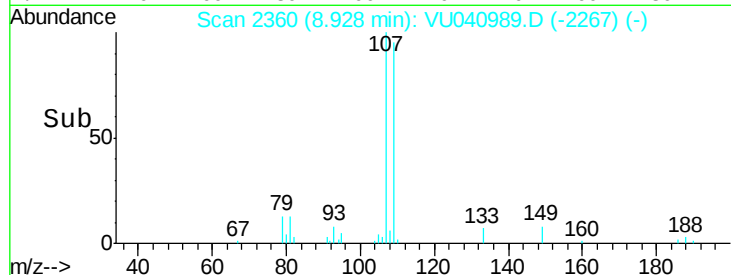
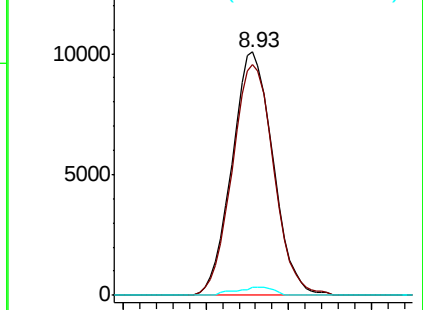
#50  
1,2-Dibromoethane  
Concen: 5.323 ug/L  
RT: 8.93 min Scan# 2360  
Delta R.T. 0.00 min  
Lab File: VU040989.D  
Acq: 27 Oct 2020 17:21

Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00529

Tot Ion:107 Resp: 17330  
Ion Ratio Lower Upper  
107 100  
109 95.0 65.6 121.8  
188 3.1 2.9 4.3

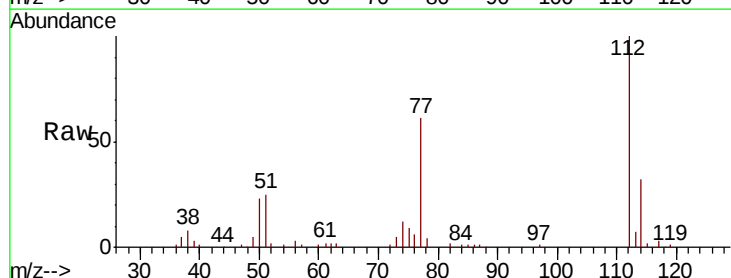


Abundance Ion 106.95 (106.65 to 107.65): V  
Ion 109.00 (108.70 to 109.70): V  
Ion 187.90 (187.60 to 188.60): V

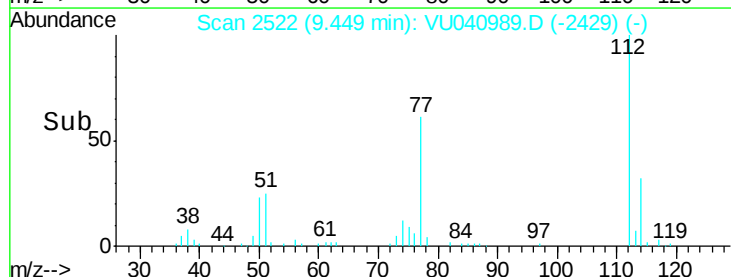
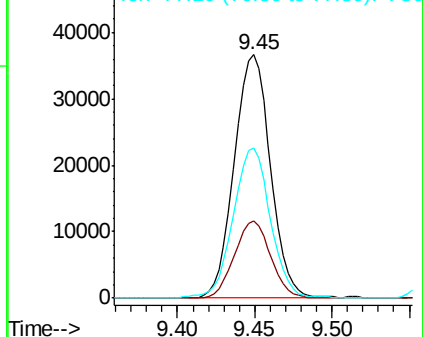


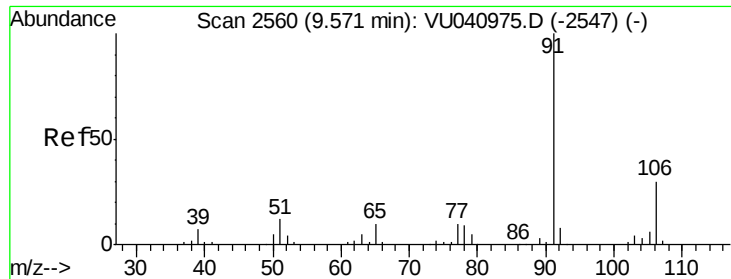
#51  
Chlorobenzene  
Concen: 5.470 ug/L  
RT: 9.45 min Scan# 2522  
Delta R.T. 0.00 min  
Lab File: VU040989.D  
Acq: 27 Oct 2020 17:21

Tgt Ion:112 Resp: 59662  
Ion Ratio Lower Upper  
112 100  
114 31.7 22.4 41.6  
77 61.5 51.2 76.8



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: 5.361 ug/L

RT: 9.57 min Scan# 2560

Delta R.T. 0.00 min

Lab File: VU040989.D

Acq: 27 Oct 2020 17:21

Instrument :

MSVOA\_U

ClientSampleId :

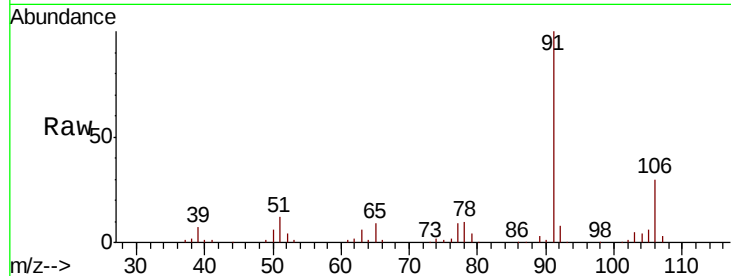
VSTD00529

Tot Ion: 91 Resp: 97059

Ion Ratio Lower Upper

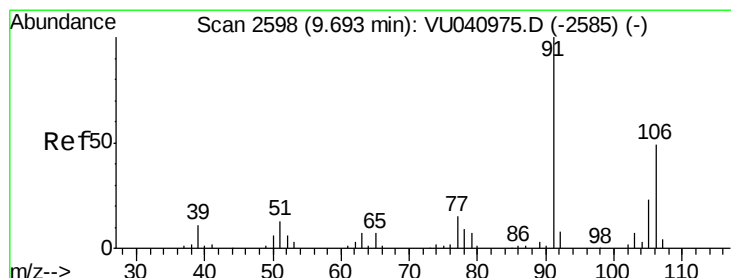
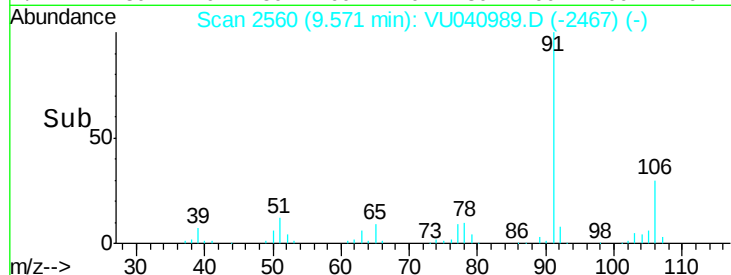
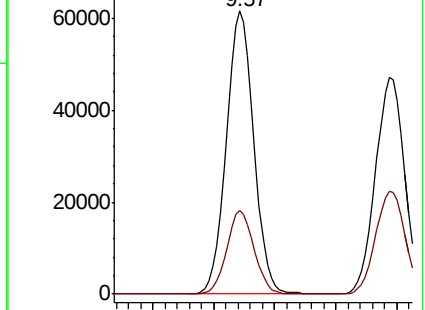
91 100

106 29.8 21.0 39.0



Abundance Ion 91.15 (90.85 to 91.85): VU040989.D (-2467) (-)

Ion 106.15 (105.85 to 106.85): VU040989.D (-2467) (-)



#53

m,p-Xylene

Concen: 5.666 ug/L

RT: 9.69 min Scan# 2598

Delta R.T. 0.00 min

Lab File: VU040989.D

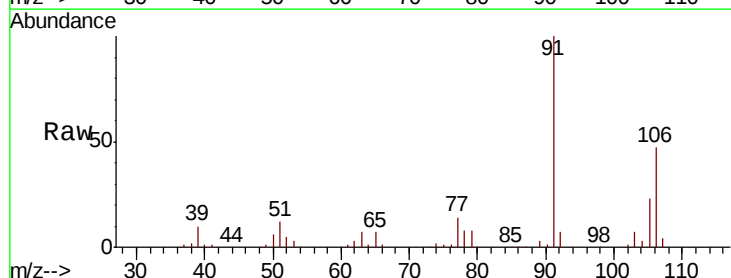
Acq: 27 Oct 2020 17:21

Tgt Ion: 106 Resp: 37414

Ion Ratio Lower Upper

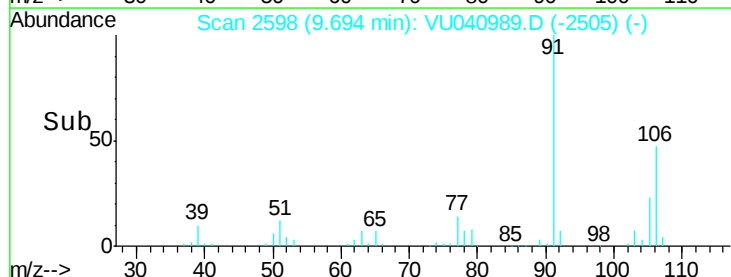
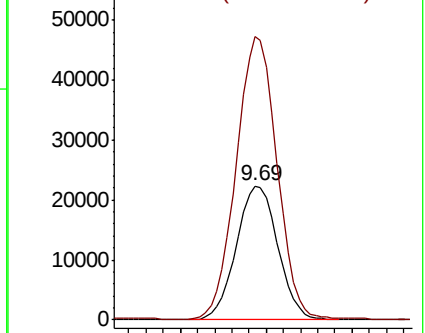
106 100

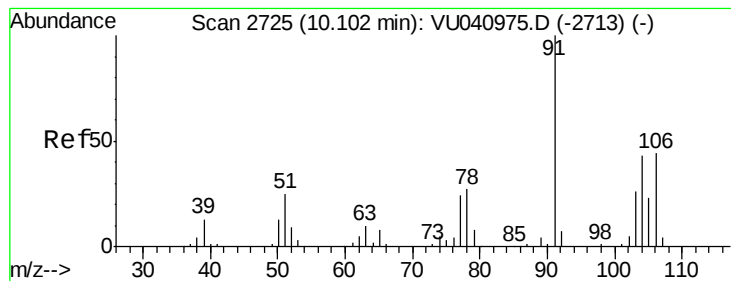
91 211.6 150.9 280.3



Abundance Ion 106.15 (105.85 to 106.85): VU040989.D (-2505) (-)

Ion 91.15 (90.85 to 91.85): VU040989.D (-2505) (-)





#54

o-Xylene

Concen: 5.572 ug/L

RT: 10.10 min Scan# 2725

Delta R.T. 0.00 min

Lab File: VU040989.D

Acq: 27 Oct 2020 17:21

Instrument :

MSVOA\_U

ClientSampleId :

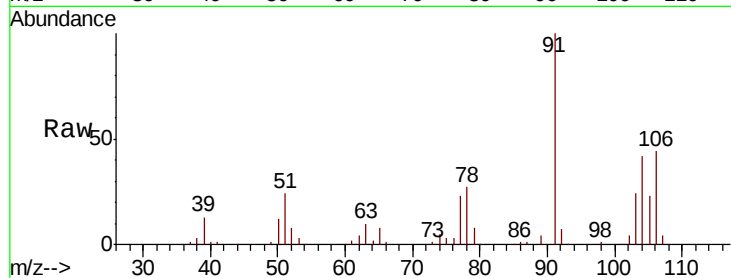
VSTD00529

Tot Ion:106 Resp: 34270

Ion Ratio Lower Upper

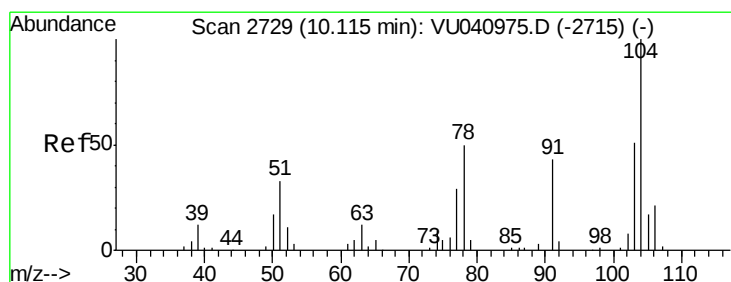
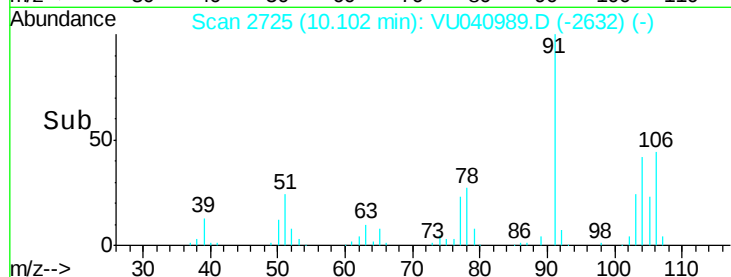
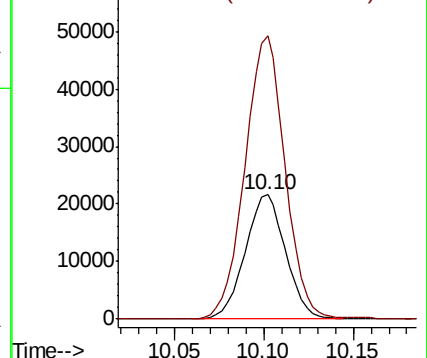
106 100

91 227.4 154.3 286.5



Abundance Ion 106.15 (105.85 to 106.85): V

Ion 91.15 (90.85 to 91.85): VU0



#55

Styrene

Concen: 5.746 ug/L

RT: 10.11 min Scan# 2729

Delta R.T. 0.00 min

Lab File: VU040989.D

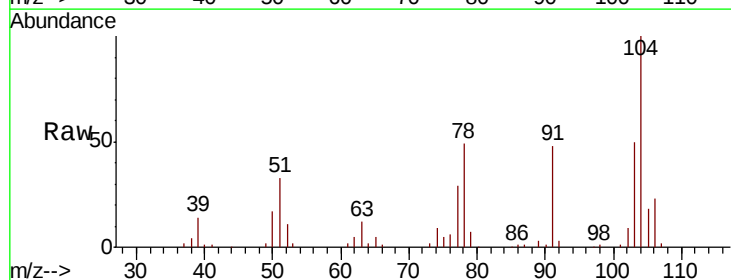
Acq: 27 Oct 2020 17:21

Tgt Ion:104 Resp: 62960

Ion Ratio Lower Upper

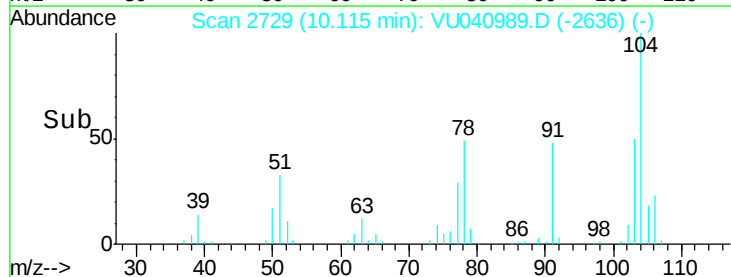
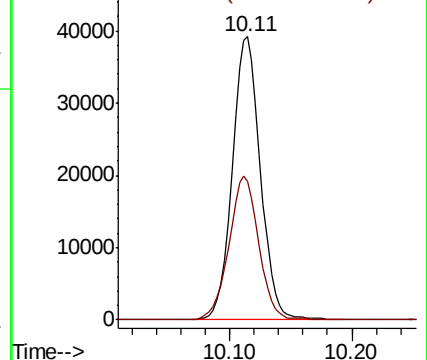
104 100

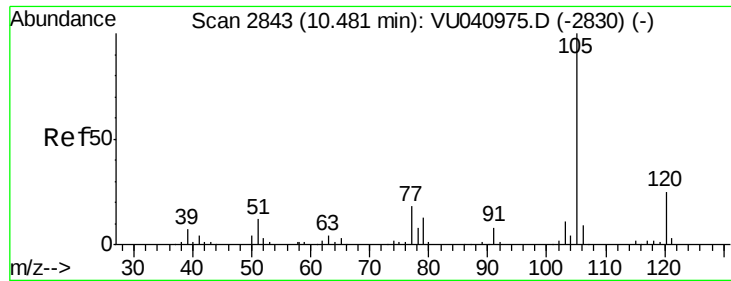
78 48.8 35.5 65.9



Abundance Ion 104.10 (103.80 to 104.80): V

Ion 78.10 (77.80 to 78.80): VU0





#56

Isopropylbenzene

Concen: 5.523 ug/L

RT: 10.48 min Scan# 2844

Delta R.T. 0.00 min

Lab File: VU040989.D

Acq: 27 Oct 2020 17:21

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00529

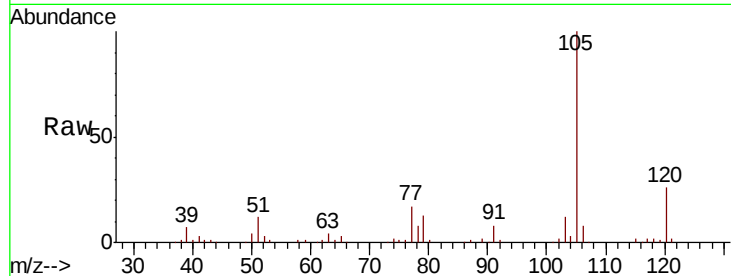
Tot Ion:105 Resp: 91329

Ion Ratio Lower Upper

105 100

120 26.0 20.7 31.1

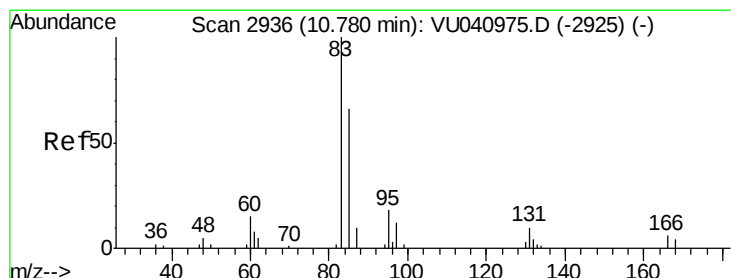
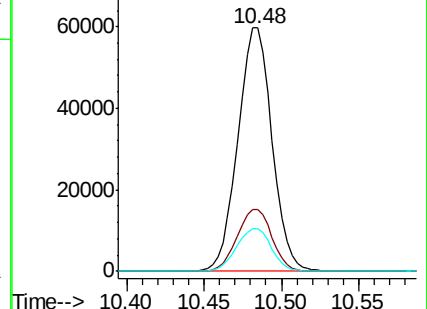
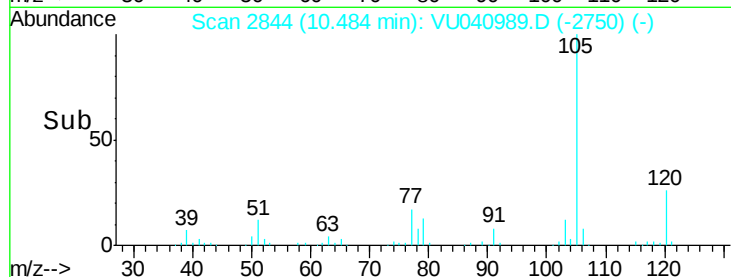
77 18.0 13.8 20.6



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: 5.457 ug/L

RT: 10.78 min Scan# 2936

Delta R.T. 0.00 min

Lab File: VU040989.D

Acq: 27 Oct 2020 17:21

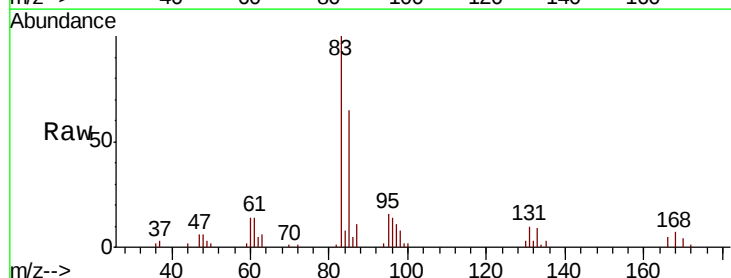
Tgt Ion: 83 Resp: 24488

Ion Ratio Lower Upper

83 100

85 65.2 44.4 82.4

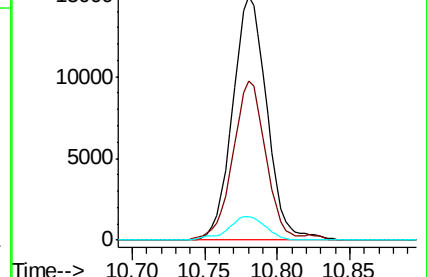
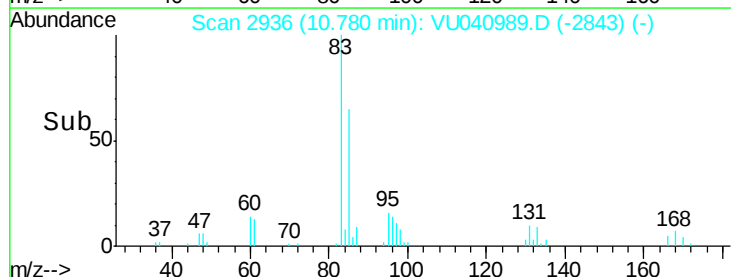
131 9.6 7.7 11.5

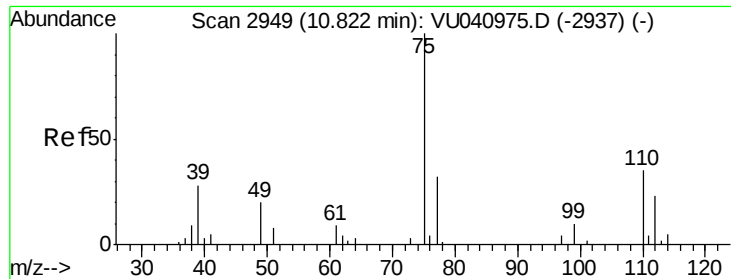


Abundance Ion 82.95 (82.65 to 83.65): V

Ion 85.00 (84.70 to 85.70): V

Ion 130.95 (130.65 to 131.65): V





#59

1,2,3-Trichloropropane

Concen: 5.424 ug/L

RT: 10.82 min Scan# 2949

Delta R.T. 0.00 min

Lab File: VU040989.D

Acq: 27 Oct 2020 17:21

Instrument :

MSVOA\_U

ClientSampleId :

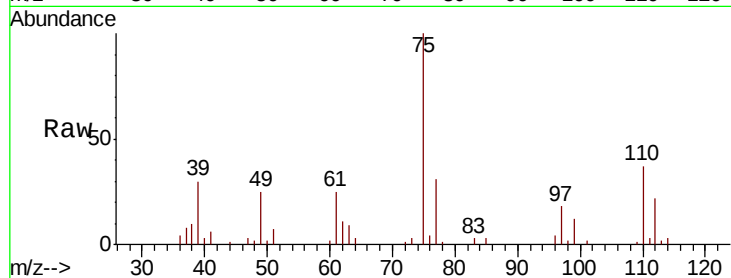
VSTD00529

Tot Ion: 75 Resp: 18555

Ion Ratio Lower Upper

75 100

77 32.3 25.7 38.5



Abundance Ion 75.00 (74.70 to 75.70): VU040989.D (-2937) (-)

Ion 77.00 (76.70 to 77.70): VU040989.D (-2937) (-)

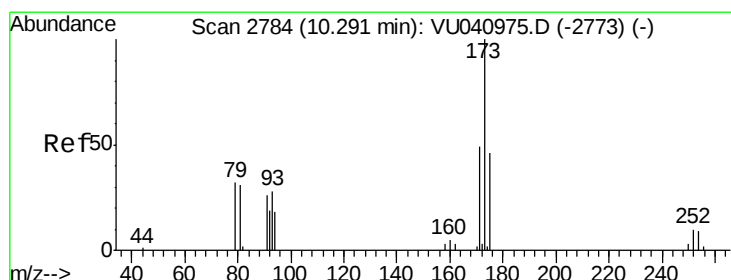
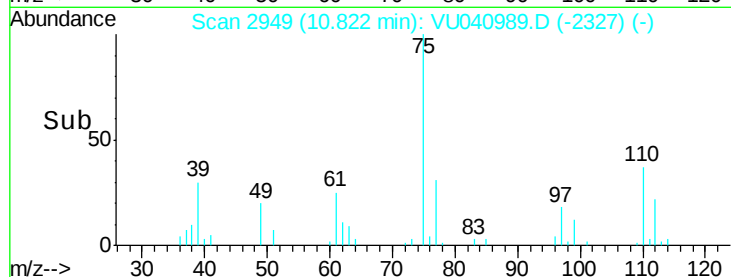
10.82

10000

5000

0

Time-->



#61

Bromoform

Concen: 5.334 ug/L

RT: 10.29 min Scan# 2784

Delta R.T. 0.00 min

Lab File: VU040989.D

Acq: 27 Oct 2020 17:21

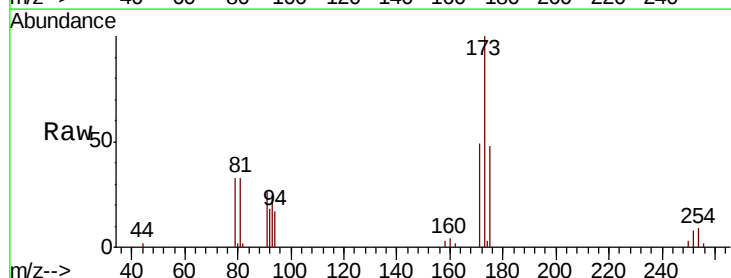
Tgt Ion: 173 Resp: 11800

Ion Ratio Lower Upper

173 100

175 47.1 37.6 56.4

254 8.3 6.6 9.8



Abundance Ion 172.90 (172.60 to 173.60): VU040989.D (-2773) (-)

Ion 174.90 (174.60 to 175.60): VU040989.D (-2773) (-)

Ion 253.75 (253.45 to 254.45): VU040989.D (-2773) (-)

10.29

8000

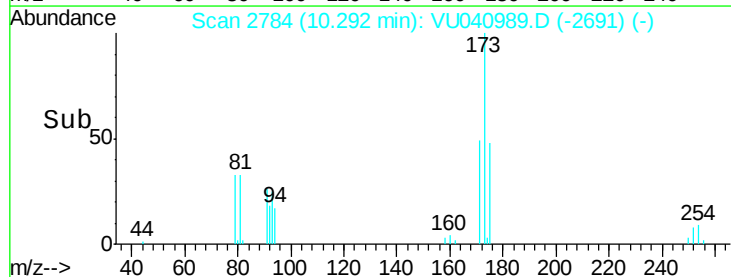
6000

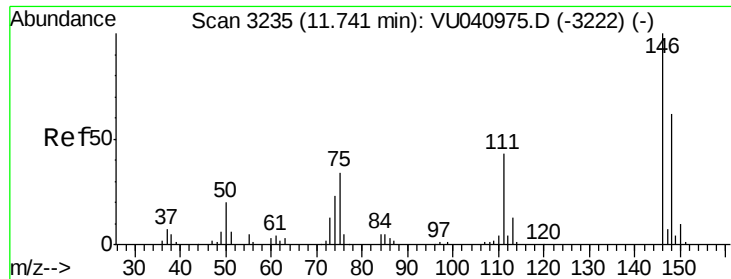
4000

2000

0

Time-->





#62

1,3-Dichlorobenzene

Concen: 5.553 ug/L

RT: 11.74 min Scan# 3235

Delta R.T. 0.00 min

Lab File: VU040989.D

Acq: 27 Oct 2020 17:21

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00529

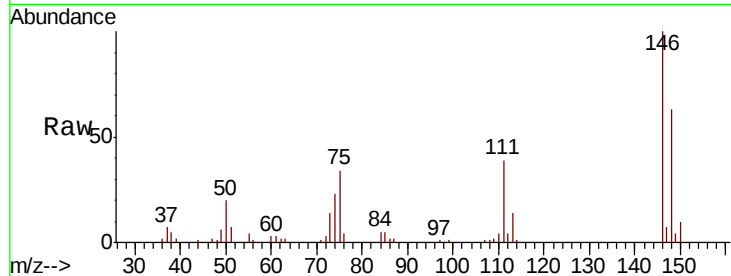
Tot Ion:146 Resp: 46011

Ion Ratio Lower Upper

146 100

111 39.5 30.9 57.3

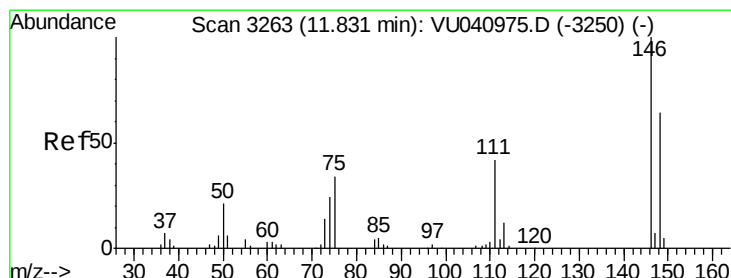
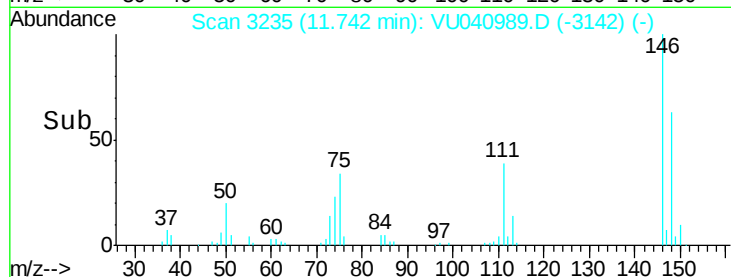
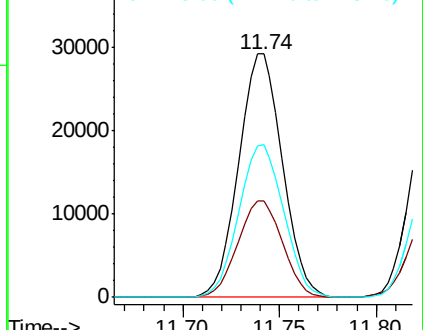
148 62.7 45.8 85.2



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



#63

1,4-Dichlorobenzene

Concen: 5.461 ug/L

RT: 11.83 min Scan# 3263

Delta R.T. 0.00 min

Lab File: VU040989.D

Acq: 27 Oct 2020 17:21

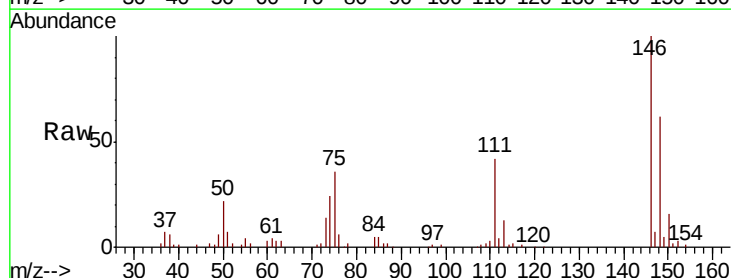
Tgt Ion:146 Resp: 46864

Ion Ratio Lower Upper

146 100

111 41.6 28.3 52.7

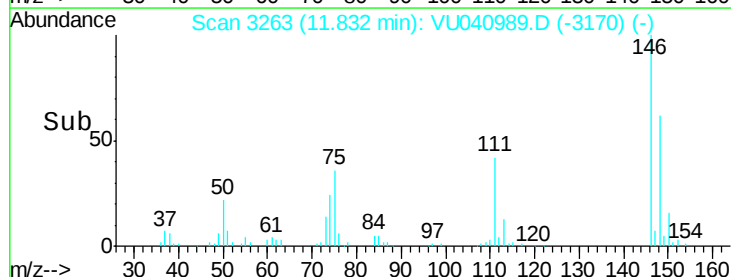
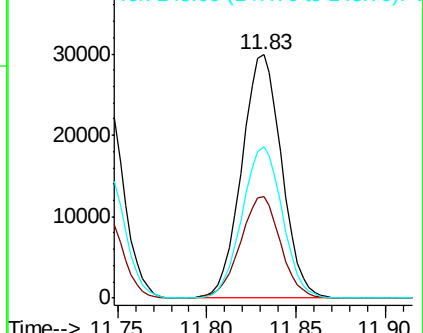
148 62.0 44.2 82.2

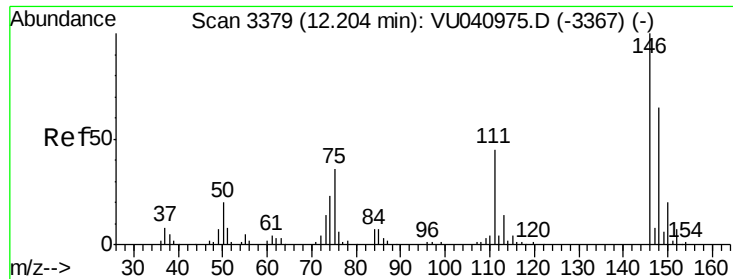


Abundance Ion 145.95 (145.65 to 146.65): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V

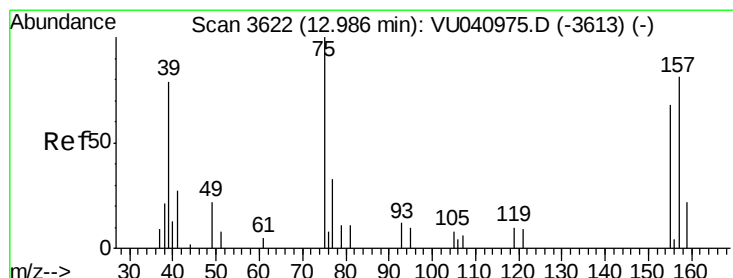
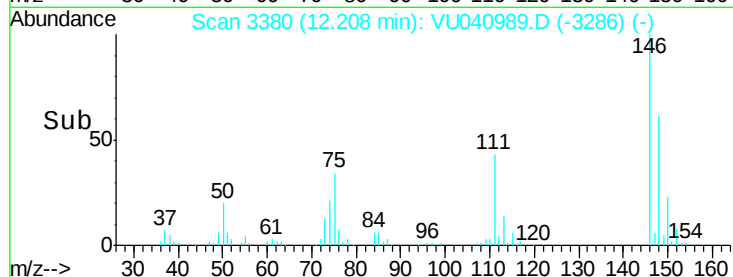
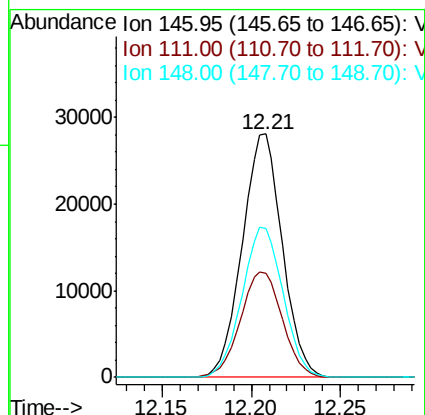
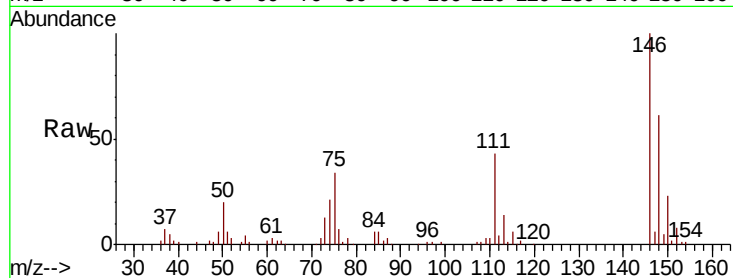




#65  
 1,2-Dichlorobenzene  
 Concen: 5.399 ug/L  
 RT: 12.21 min Scan# 3380  
 Delta R.T. 0.00 min  
 Lab File: VU040989.D  
 Acq: 27 Oct 2020 17:21

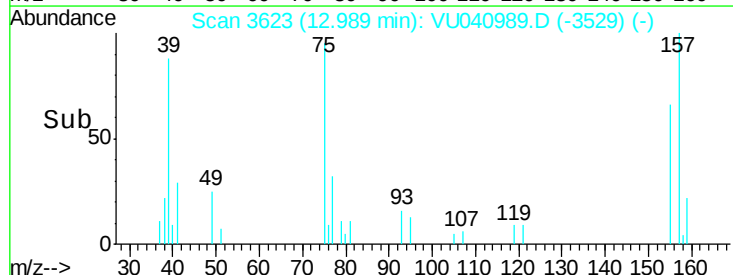
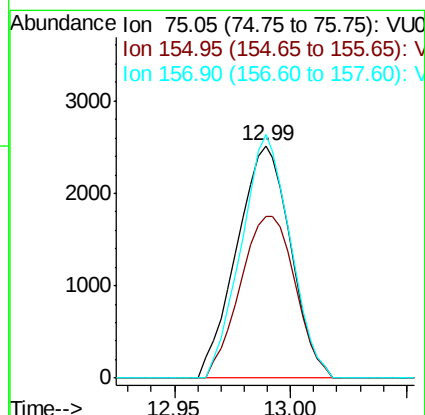
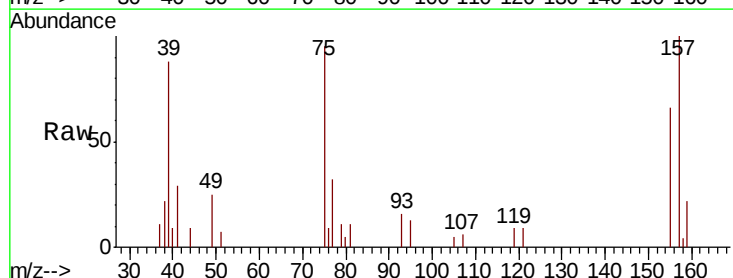
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00529

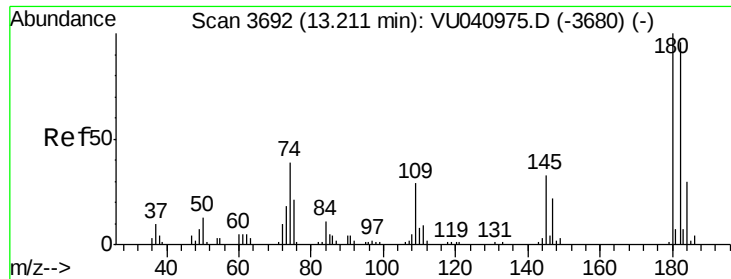
Tot Ion:146 Resp: 44152  
 Ion Ratio Lower Upper  
 146 100  
 111 42.8 35.0 52.6  
 148 61.2 52.0 78.0



#66  
 1,2-Dibromo-3-chloropropane  
 Concen: 5.045 ug/L  
 RT: 12.99 min Scan# 3623  
 Delta R.T. 0.00 min  
 Lab File: VU040989.D  
 Acq: 27 Oct 2020 17:21

Tgt Ion: 75 Resp: 4043  
 Ion Ratio Lower Upper  
 75 100  
 155 69.5 61.4 92.2  
 157 104.9 74.2 111.4

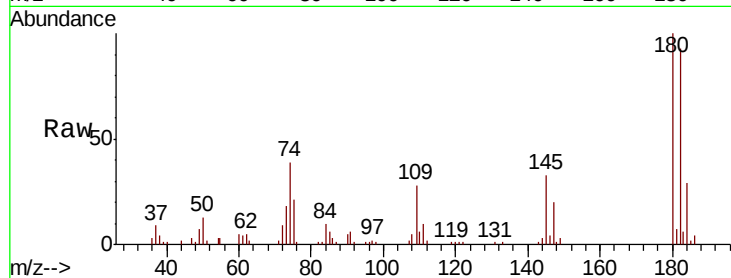




#67  
 1,3,5-Trichlorobenzene  
 Concen: 5.214 ug/L  
 RT: 13.21 min Scan# 3692  
 Delta R.T. 0.00 min  
 Lab File: VU040989.D  
 Acq: 27 Oct 2020 17:21

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00529

|             |       |       |
|-------------|-------|-------|
| Tot Ion:180 | Resp: | 30218 |
| Ion Ratio   | Lower | Upper |
| 180 100     |       |       |
| 182 93.9    | 75.7  | 113.5 |
| 184 29.0    | 23.7  | 35.5  |
| 145 32.5    | 26.1  | 39.1  |

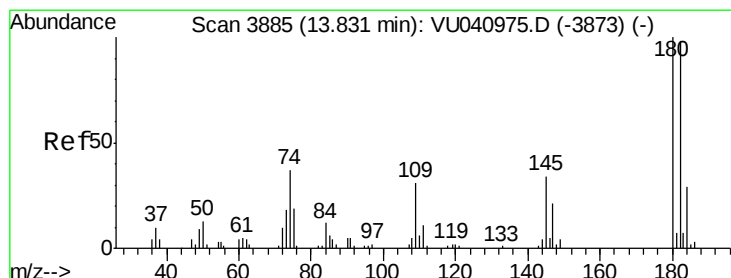
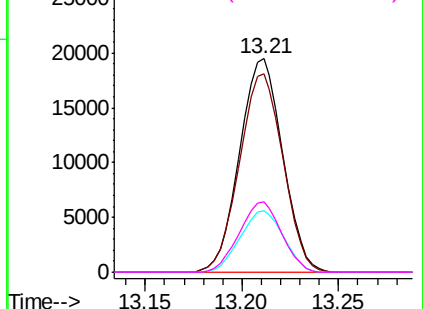
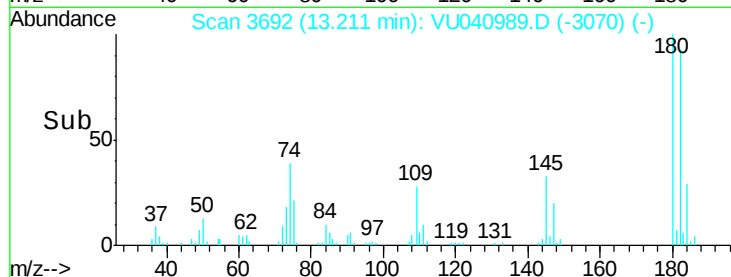


Abundance Ion 180.00 (179.70 to 180.70): V

Ion 182.00 (181.70 to 182.70): V

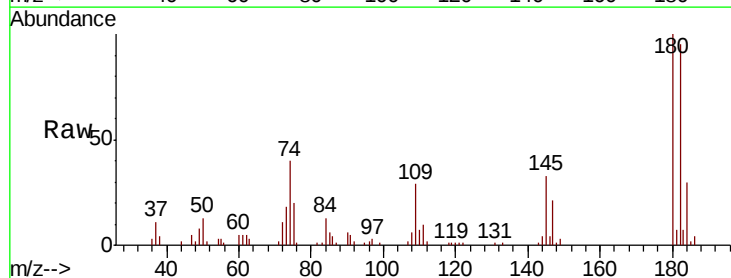
Ion 184.00 (183.70 to 184.70): V

Ion 145.00 (144.70 to 145.70): V



#68  
 1,2,4-trichlorobenzene  
 Concen: 5.106 ug/L  
 RT: 13.83 min Scan# 3884  
 Delta R.T. -0.00 min  
 Lab File: VU040989.D  
 Acq: 27 Oct 2020 17:21

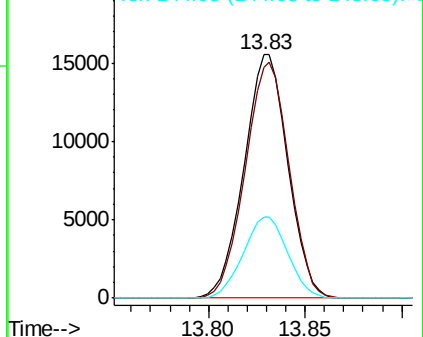
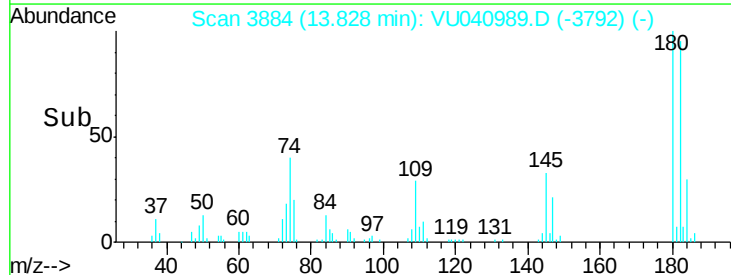
|             |             |
|-------------|-------------|
| Tgt Ion:180 | Resp: 24514 |
| Ion Ratio   | Lower Upper |
| 180 100     |             |
| 182 96.6    | 73.5 110.3  |
| 145 33.7    | 26.6 40.0   |

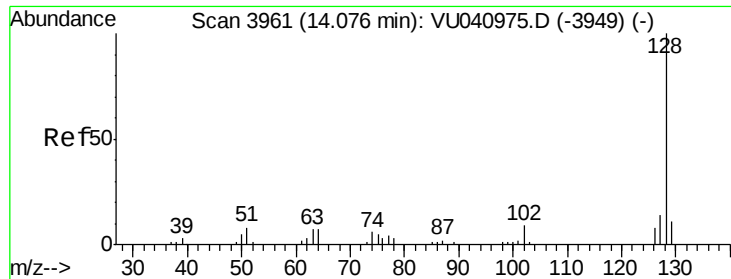


Abundance Ion 179.90 (179.60 to 180.60): V

Ion 182.00 (181.70 to 182.70): V

Ion 144.95 (144.65 to 145.65): V





#69

Naphthalene

Concen: 4.933 ug/L

RT: 14.08 min Scan# 3961

Delta R.T. 0.00 min

Lab File: VU040989.D

Acq: 27 Oct 2020 17:21

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00529

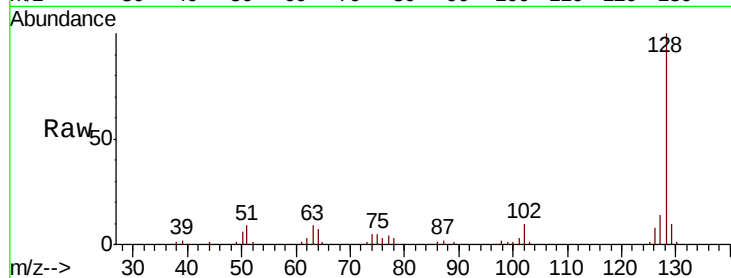
Tot Ion:128 Resp: 42349

Ion Ratio Lower Upper

128 100

129 10.6 8.7 13.1

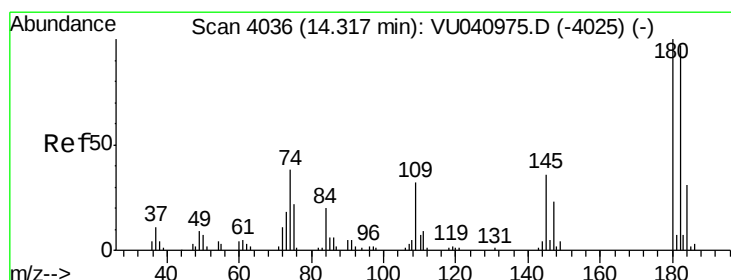
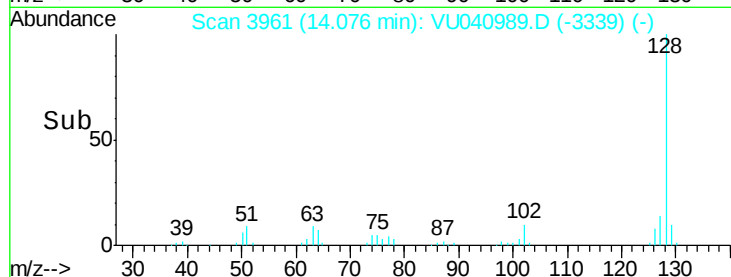
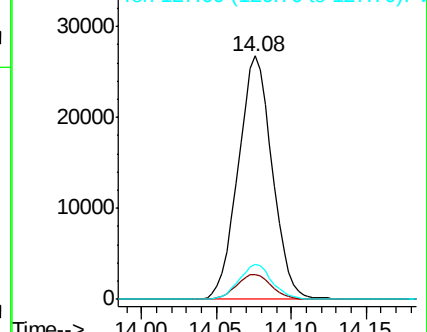
127 13.9 10.8 16.2



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: 5.587 ug/L

RT: 14.32 min Scan# 4036

Delta R.T. 0.00 min

Lab File: VU040989.D

Acq: 27 Oct 2020 17:21

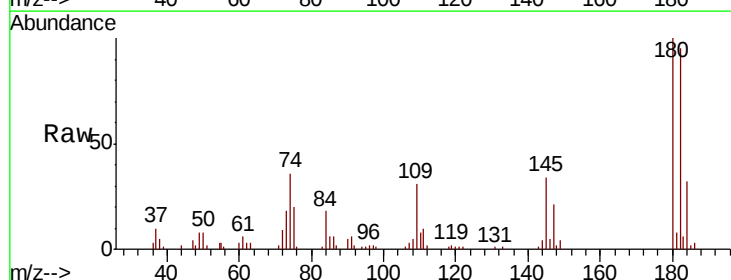
Tgt Ion:180 Resp: 24723

Ion Ratio Lower Upper

180 100

182 93.6 77.7 116.5

145 33.8 29.4 44.0



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

