

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\U101220\  
 Data File : VU040649.D  
 Acq On : 12 Oct 2020 10:22  
 Operator : SY/MD  
 Sample : VSTDCCC005  
 Misc : 25.0mL/MSVOA U/WATER  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00528

Quant Time: Oct 13 04:30:42 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMUTR100820WMA.M  
 Quant Title : TRACE VOA SOM01.0  
 QLast Update : Mon Oct 12 12:05:23 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Difluorobenzene     | 6.26  | 114  | 133604   | 5.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 9.42  | 117  | 135367   | 5.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.81 | 152  | 70336    | 5.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |        |       |          |          |      |         |
|--------------------------------|--------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.61   | 65    | 47679    | 4.31     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 40 - 130 | Recovery | =    | 86.20%  |
| 7) Chloroethane-d5             | 1.92   | 69    | 39726    | 4.65     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 130 | Recovery | =    | 93.00%  |
| 11) 1,1-Dichloroethene-d2      | 2.58   | 63    | 99158    | 4.58     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 125 | Recovery | =    | 91.60%  |
| 20) 2-Butanone-d5              | 4.66   | 46    | 187427   | 52.91    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 40 - 130 | Recovery | =    | 105.82% |
| 24) Chloroform-d               | 5.08   | 84    | 95254    | 4.90     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 98.00%  |
| 26) 1,2-Dichloroethane-d4      | 5.72   | 65    | 58304    | 4.93     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 98.60%  |
| 32) Benzene-d6                 | 5.74   | 84    | 173761   | 4.76     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 95.20%  |
| 36) 1,2-Dichloropropane-d6     | 6.70   | 67    | 58925    | 4.86     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 140 | Recovery | =    | 97.20%  |
| 41) Toluene-d8                 | 7.90   | 98    | 156398   | 4.78     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 95.60%  |
| 43) trans-1,3-Dichloropropene- | 8.18   | 79    | 24864    | 4.84     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 55 - 130 | Recovery | =    | 96.80%  |
| 46) 2-Hexanone-d5              | 8.64   | 63    | 139220   | 52.62    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 45 - 130 | Recovery | =    | 105.24% |
| 57) 1,1,2,2-Tetrachloroethane- | 10.75  | 84    | 54640    | 5.03     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 120 | Recovery | =    | 100.60% |
| 64) 1,2-Dichlorobenzene-d4     | 12.19  | 152   | 59558    | 4.57     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 80 - 120 | Recovery | =    | 91.40%  |

## Target Compounds

|                                |      |     |        |             | Ovalue |
|--------------------------------|------|-----|--------|-------------|--------|
| 2) Dichlorodifluoromethane     | 1.39 | 85  | 60930  | 5.033 ug/L  | 98     |
| 3) Chloromethane               | 1.53 | 50  | 51074  | 4.512 ug/L  | 97     |
| 5) Vinyl chloride              | 1.61 | 62  | 56056  | 4.702 ug/L  | 100    |
| 6) Bromomethane                | 1.87 | 94  | 26923  | 4.159 ug/L  | 97     |
| 8) Chloroethane                | 1.94 | 64  | 36889  | 4.860 ug/L  | 96     |
| 9) Trichlorofluoromethane      | 2.15 | 101 | 82730  | 4.833 ug/L  | 99     |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.59 | 101 | 54049  | 4.863 ug/L  | 98     |
| 12) 1,1-Dichloroethene         | 2.59 | 96  | 46210  | 4.847 ug/L  | 92     |
| 13) Acetone                    | 2.67 | 43  | 138076 | 50.282 ug/L | 100    |
| 14) Carbon disulfide           | 2.81 | 76  | 120098 | 4.501 ug/L  | 98     |
| 15) Methyl Acetate             | 2.97 | 43  | 29427  | 4.693 ug/L  | 96     |
| 16) Methylene chloride         | 3.06 | 84  | 56049  | 4.579 ug/L  | 98     |
| 17) Methyl tert-butyl Ether    | 3.38 | 73  | 133053 | 4.936 ug/L  | 100    |
| 18) trans-1,2-Dichloroethene   | 3.37 | 96  | 48707  | 4.881 ug/L  | 95     |
| 19) 1,1-Dichloroethane         | 3.89 | 63  | 103864 | 5.033 ug/L  | 98     |
| 21) 2-Butanone                 | 4.74 | 43  | 217122 | 50.715 ug/L | 97     |
| 22) cis-1,2-Dichloroethene     | 4.68 | 96  | 54376  | 5.053 ug/L  | 94     |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU101220\  
 Data File : VU040649.D  
 Acq On : 12 Oct 2020 10:22  
 Operator : SY/MD  
 Sample : VSTDCCC005  
 Misc : 25.0mL/MSVOA U/WATER  
 ALS Vial : 2 Sample Multiplier: 1

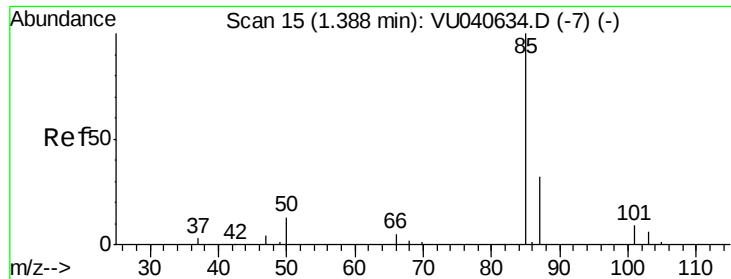
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00528

Quant Time: Oct 13 04:30:42 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMUTR100820WMA.M  
 Quant Title : TRACE VOA SOM01.0  
 QLast Update : Mon Oct 12 12:05:23 2020  
 Response via : Initial Calibration

| Internal Standards              | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|---------------------------------|-------|------|----------|--------|-------|----------|
| 23) Bromochloromethane          | 4.99  | 128  | 26425    | 4.943  | ug/L  | 94       |
| 25) Chloroform                  | 5.10  | 83   | 109854   | 5.214  | ug/L  | 99       |
| 27) 1,2-Dichloroethane          | 5.81  | 62   | 75613    | 5.070  | ug/L  | 99       |
| 29) 1,1,1-Trichloroethane       | 5.33  | 97   | 88508    | 4.866  | ug/L  | 99       |
| 30) Cyclohexane                 | 5.40  | 56   | 79127    | 4.720  | ug/L  | 99       |
| 31) Carbon tetrachloride        | 5.54  | 117  | 77373    | 4.970  | ug/L  | 100      |
| 33) Benzene                     | 5.79  | 78   | 213035   | 4.898  | ug/L  | 100      |
| 34) Trichloroethene             | 6.55  | 95   | 55327    | 4.908  | ug/L  | 93       |
| 35) Methylcyclohexane           | 6.77  | 83   | 76248    | 4.770  | ug/L  | 98       |
| 37) 1,2-Dichloropropane         | 6.80  | 63   | 60631    | 5.004  | ug/L  | 99       |
| 38) Bromodichloromethane        | 7.11  | 83   | 77344    | 4.993  | ug/L  | 99       |
| 39) cis-1,3-Dichloropropene     | 7.61  | 75   | 83333    | 5.033  | ug/L  | 97       |
| 40) 4-Methyl-2-pentanone        | 7.80  | 43   | 484983   | 50.202 | ug/L  | 100      |
| 42) Toluene                     | 7.97  | 91   | 227027   | 5.123  | ug/L  | 99       |
| 44) trans-1,3-Dichloropropene   | 8.21  | 75   | 76896    | 5.045  | ug/L  | 94       |
| 45) 1,1,2-Trichloroethane       | 8.40  | 97   | 44619    | 4.917  | ug/L  | 99       |
| 47) Tetrachloroethene           | 8.56  | 164  | 41185    | 5.121  | ug/L  | 95       |
| 48) 2-Hexanone                  | 8.69  | 43   | 373269   | 51.897 | ug/L  | 98       |
| 49) Dibromochloromethane        | 8.81  | 129  | 53471    | 5.121  | ug/L  | 94       |
| 50) 1,2-Dibromoethane           | 8.93  | 107  | 42058    | 4.886  | ug/L  | 99       |
| 51) Chlorobenzene               | 9.45  | 112  | 144240   | 4.941  | ug/L  | 99       |
| 52) Ethylbenzene                | 9.57  | 91   | 241552   | 5.037  | ug/L  | 98       |
| 53) m,p-Xylene                  | 9.69  | 106  | 90290    | 5.165  | ug/L  | 100      |
| 54) o-Xylene                    | 10.10 | 106  | 84996    | 5.056  | ug/L  | 96       |
| 55) Styrene                     | 10.11 | 104  | 156753   | 5.369  | ug/L  | 100      |
| 56) Isopropylbenzene            | 10.48 | 105  | 234159   | 5.174  | ug/L  | 100      |
| 58) 1,1,1,2,2-Tetrachloroethane | 10.78 | 83   | 58479    | 4.908  | ug/L  | 97       |
| 59) 1,2,3-Trichloropropane      | 10.82 | 75   | 44225    | 4.969  | ug/L  | 98       |
| 61) Bromoform                   | 10.29 | 173  | 29941    | 4.966  | ug/L  | 97       |
| 62) 1,3-Dichlorobenzene         | 11.74 | 146  | 117864   | 5.120  | ug/L  | 99       |
| 63) 1,4-Dichlorobenzene         | 11.83 | 146  | 119536   | 5.036  | ug/L  | 98       |
| 65) 1,2-Dichlorobenzene         | 12.20 | 146  | 112387   | 4.994  | ug/L  | 98       |
| 66) 1,2-Dibromo-3-chloropropan  | 12.99 | 75   | 10133    | 5.142  | ug/L  | 95       |
| 67) 1,3,5-Trichlorobenzene      | 13.21 | 180  | 81568    | 4.994  | ug/L  | 98       |
| 68) 1,2,4-trichlorobenzene      | 13.83 | 180  | 64234    | 5.090  | ug/L  | 98       |
| 69) Naphthalene                 | 14.08 | 128  | 100327   | 4.860  | ug/L  | 99       |
| 70) 1,2,3-Trichlorobenzene      | 14.32 | 180  | 60352    | 5.150  | ug/L  | 99       |

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





#2

Dichlorodifluoromethane

Concen: 5.033 ug/L

RT: 1.39 min Scan# 16

Delta R.T. 0.00 min

Lab File: VU040649.D

Acq: 12 Oct 2020 10:22

Instrument :

MSVOA\_U

ClientSampleId :

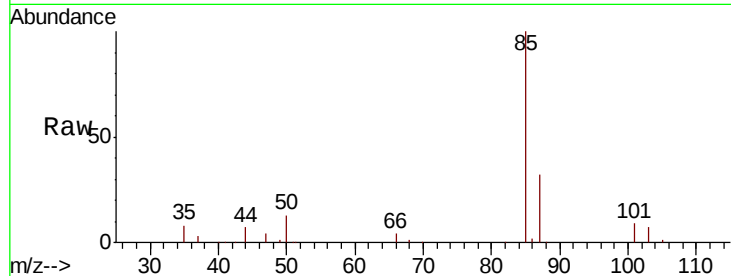
VSTD00528

Tot Ion: 85 Resp: 60930

Ion Ratio Lower Upper

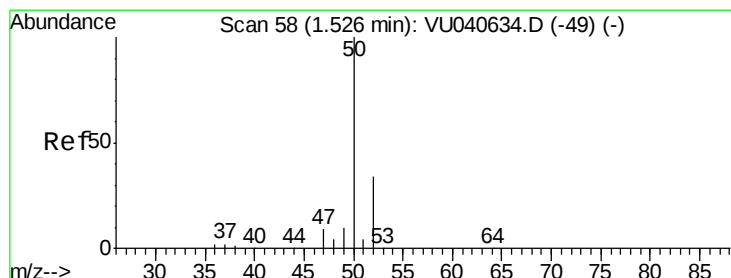
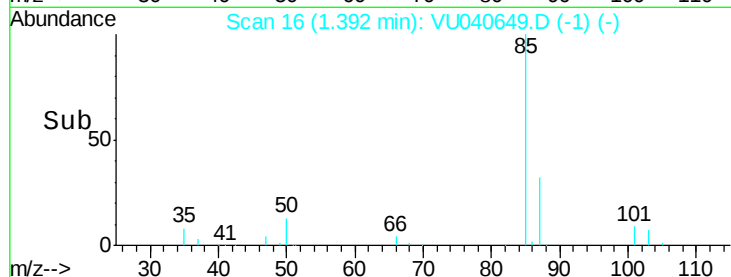
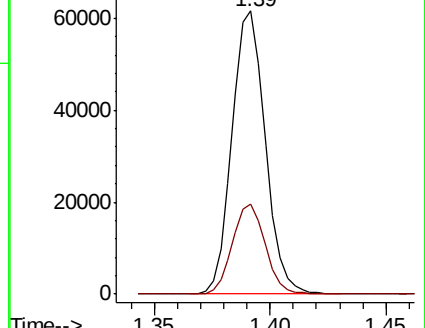
85 100

87 31.5 26.2 39.4



Abundance Ion 85.00 (84.70 to 85.70): VU040634.D (-7) (-)

Ion 87.00 (86.70 to 87.70): VU040634.D (-7) (-)



#3

Chloromethane

Concen: 4.512 ug/L

RT: 1.53 min Scan# 58

Delta R.T. 0.00 min

Lab File: VU040649.D

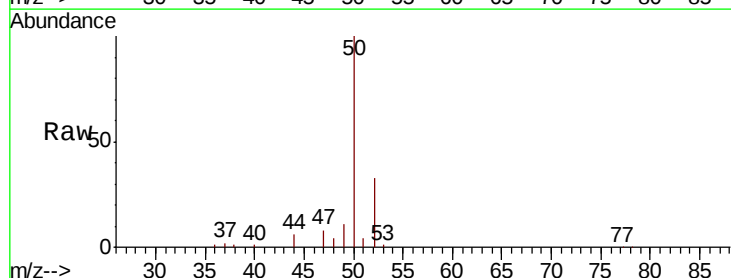
Acq: 12 Oct 2020 10:22

Tgt Ion: 50 Resp: 51074

Ion Ratio Lower Upper

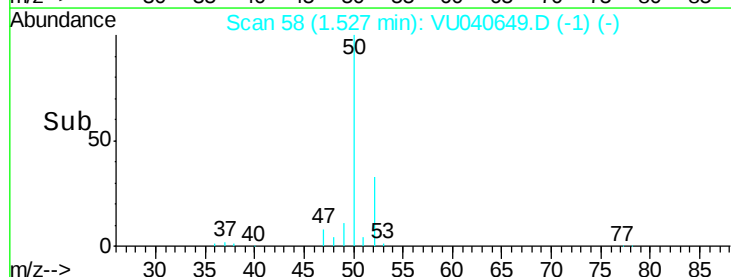
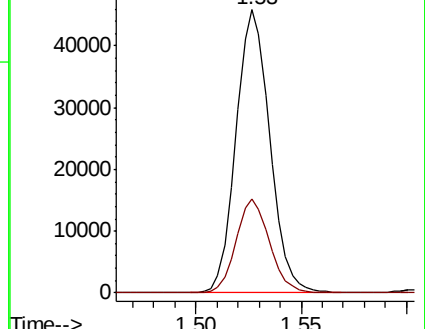
50 100

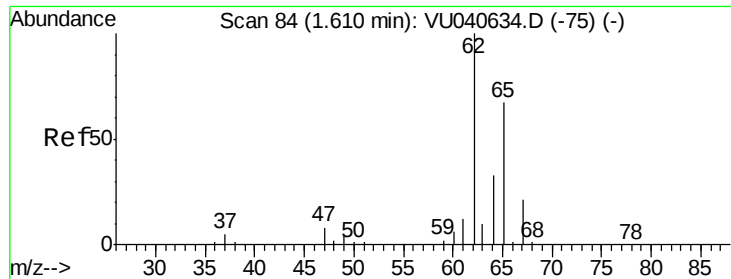
52 33.1 21.9 40.7



Abundance Ion 50.05 (49.75 to 50.75): VU040634.D (-49) (-)

Ion 52.05 (51.75 to 52.75): VU040634.D (-49) (-)





#5

Vinyl chloride

Concen: 4.702 ug/L

RT: 1.61 min Scan# 84

Delta R.T. 0.00 min

Lab File: VU040649.D

Acq: 12 Oct 2020 10:22

Instrument :

MSVOA\_U

ClientSampleId :

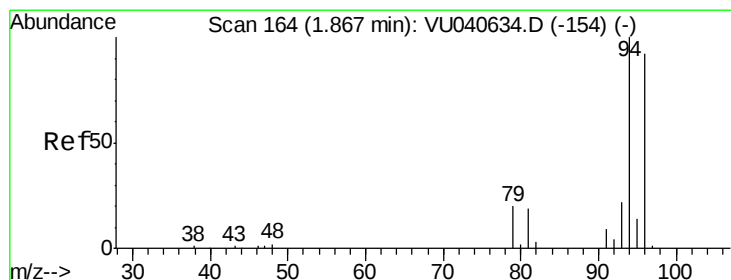
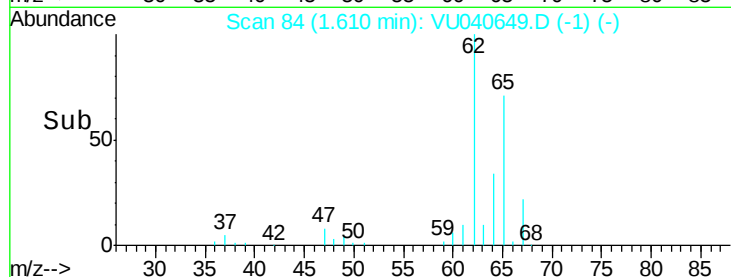
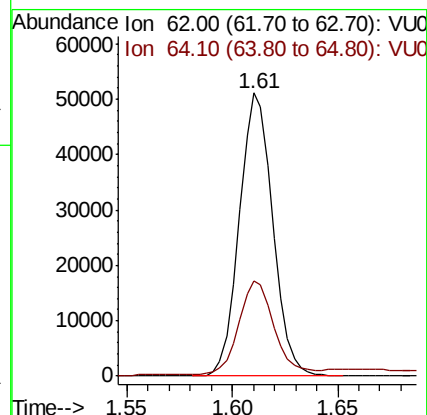
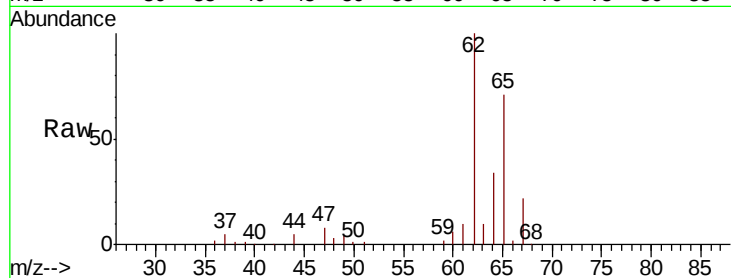
VSTD00528

Tot Ion: 62 Resp: 56056

Ion Ratio Lower Upper

62 100

64 33.9 23.7 44.1



#6

Bromomethane

Concen: 4.159 ug/L

RT: 1.87 min Scan# 164

Delta R.T. 0.00 min

Lab File: VU040649.D

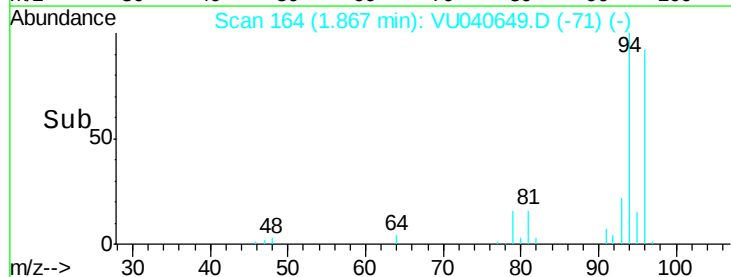
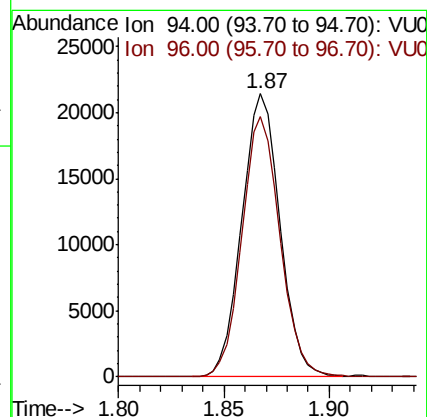
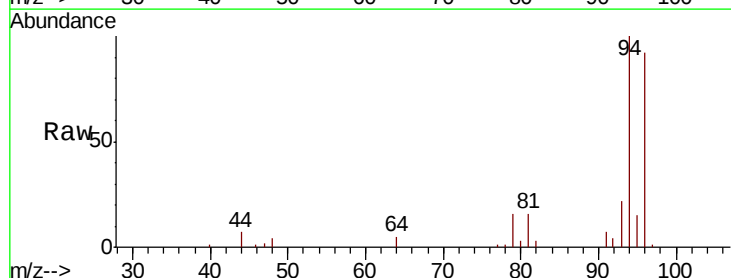
Acq: 12 Oct 2020 10:22

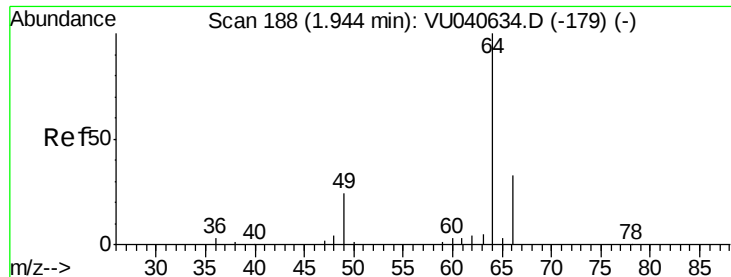
Tgt Ion: 94 Resp: 26923

Ion Ratio Lower Upper

94 100

96 91.8 62.1 115.3





#8

Chloroethane

Concen: 4.860 ug/L

RT: 1.94 min Scan# 188

Delta R.T. 0.00 min

Lab File: VU040649.D

Acq: 12 Oct 2020 10:22

Instrument :

MSVOA\_U

ClientSampleId :

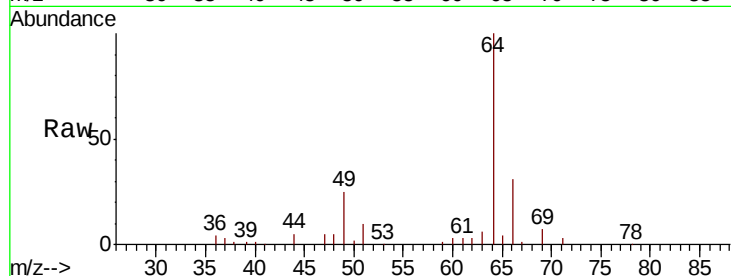
VSTD00528

Tot Ion: 64 Resp: 36889

Ion Ratio Lower Upper

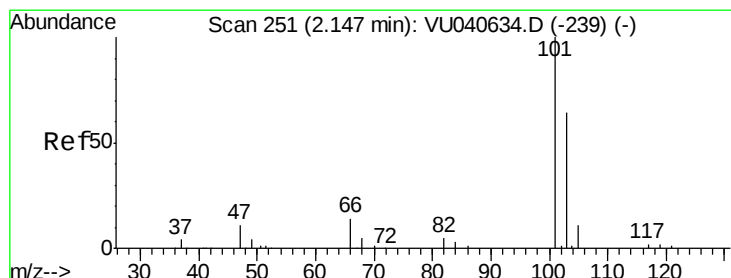
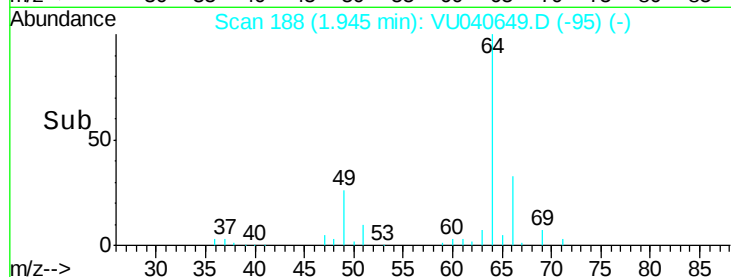
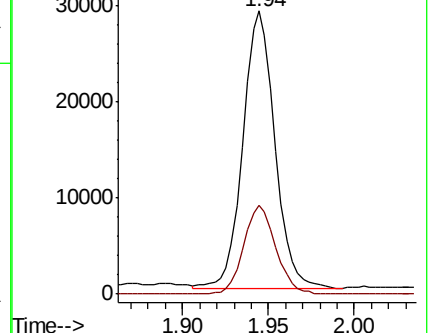
64 100

66 31.3 23.3 43.3



Abundance Ion 64.10 (63.80 to 64.80): VU040634.D (-179) (-)

Ion 66.05 (65.75 to 66.75): VU040634.D (-179) (-)



#9

Trichlorofluoromethane

Concen: 4.833 ug/L

RT: 2.15 min Scan# 252

Delta R.T. 0.00 min

Lab File: VU040649.D

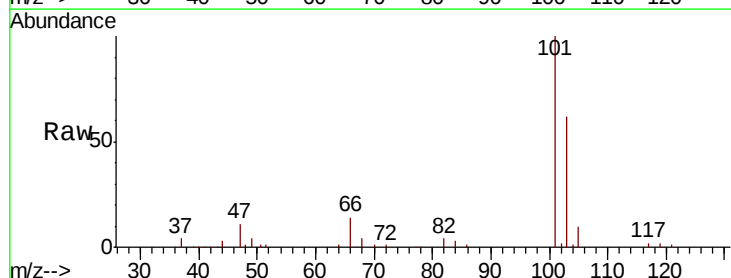
Acq: 12 Oct 2020 10:22

Tgt Ion:101 Resp: 82730

Ion Ratio Lower Upper

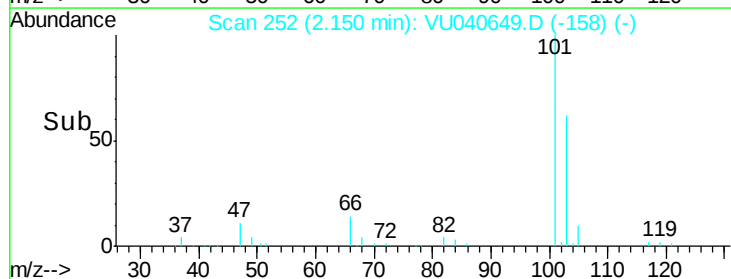
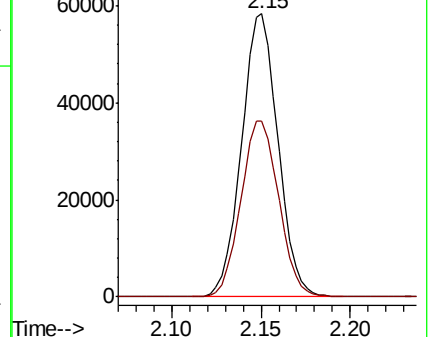
101 100

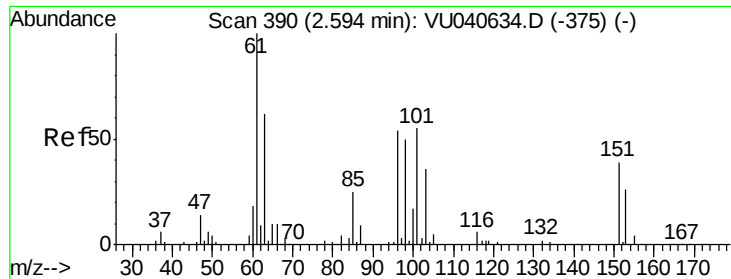
103 64.6 52.2 78.4



Abundance Ion 101.00 (100.70 to 101.70): VU040634.D (-239) (-)

Ion 103.00 (102.70 to 103.70): VU040634.D (-239) (-)





#10

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

Concen: 4.863 ug/L

RT: 2.59 min Scan# 390

Delta R.T. 0.00 min

Lab File: VU040649.D

Acq: 12 Oct 2020 10:22

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00528

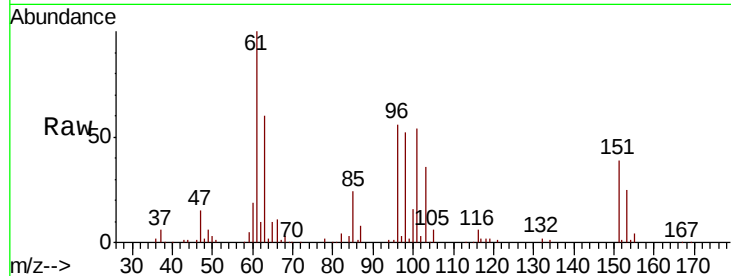
Tot Ion:101 Resp: 54049

Ion Ratio Lower Upper

101 100

85 44.3 36.7 55.1

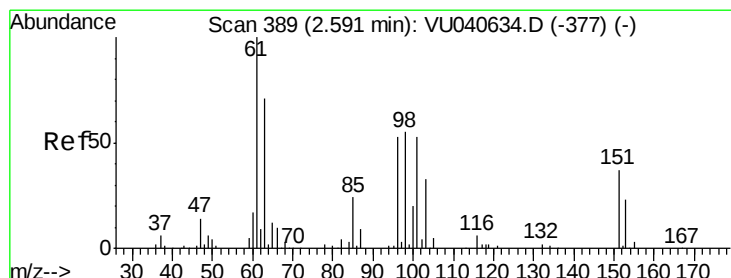
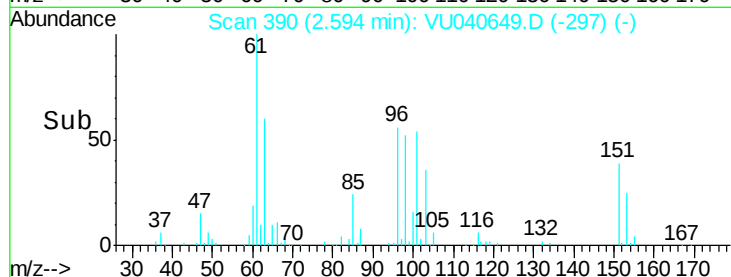
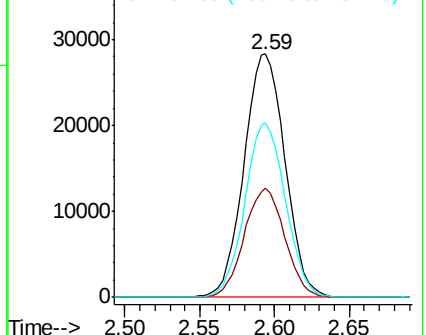
151 71.0 58.0 87.0



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 85.00 (84.70 to 85.70): VU0

Ion 151.00 (150.70 to 151.70): V



#12

1,1-Dichloroethene

Concen: 4.847 ug/L

RT: 2.59 min Scan# 390

Delta R.T. 0.00 min

Lab File: VU040649.D

Acq: 12 Oct 2020 10:22

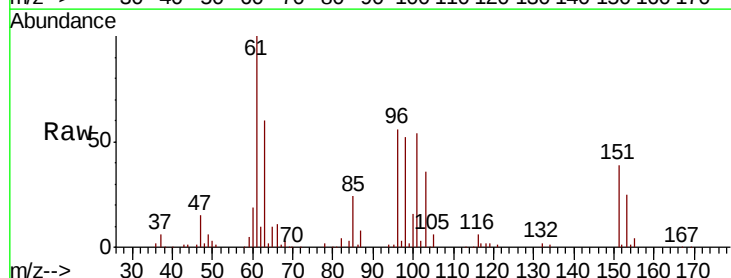
Tgt Ion: 96 Resp: 46210

Ion Ratio Lower Upper

96 100

61 177.8 128.8 239.2

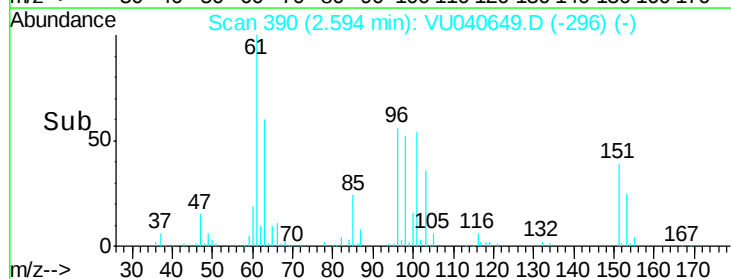
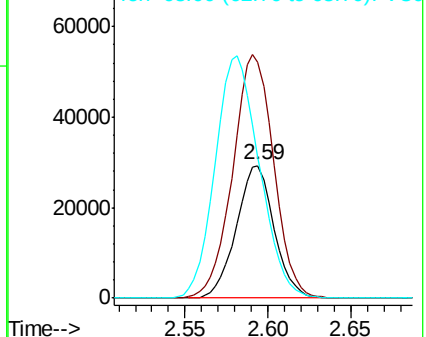
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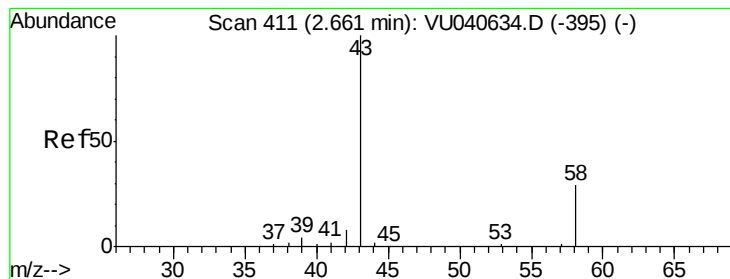


Abundance Ion 96.00 (95.70 to 96.70): VU0

Ion 61.05 (60.75 to 61.75): VU0

Ion 63.00 (62.70 to 63.70): VU0





#13

Acetone

Concen: 50.282 ug/L

RT: 2.67 min Scan# 413

Delta R.T. 0.01 min

Lab File: VU040649.D

Acq: 12 Oct 2020 10:22

Instrument :

MSVOA\_U

ClientSampleId :

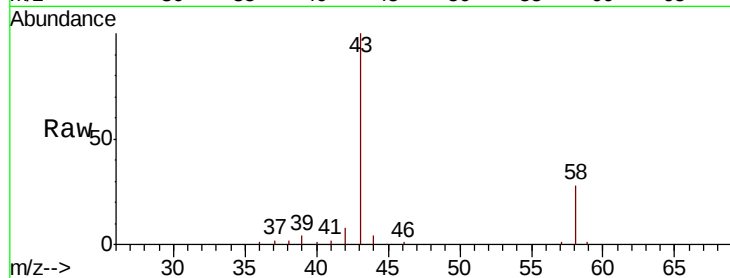
VSTD00528

Tot Ion: 43 Resp: 138076

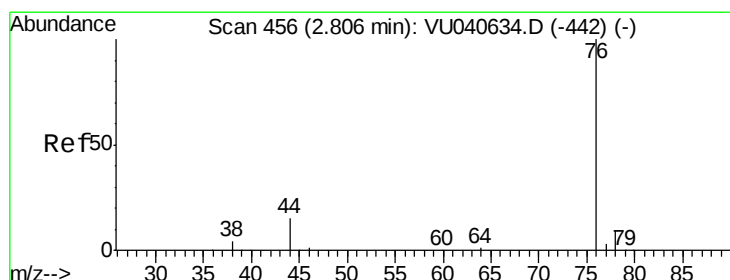
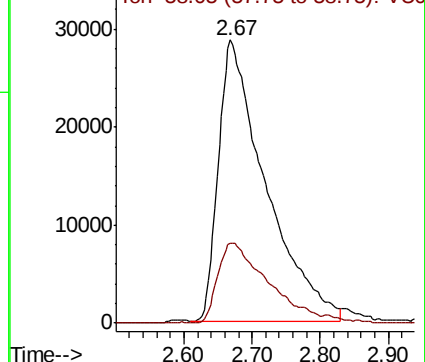
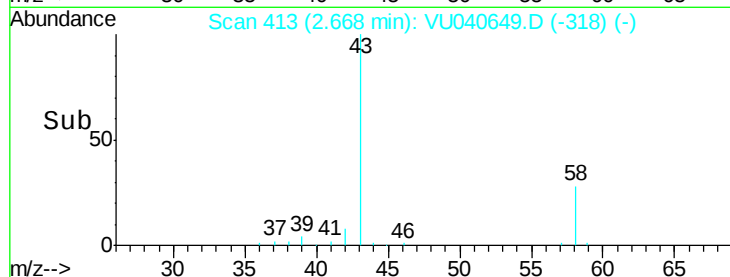
Ion Ratio Lower Upper

43 100

58 30.2 0.0 60.6



Abundance Ion 43.05 (42.75 to 43.75): VU040649.D (-318) (-)



#14

Carbon disulfide

Concen: 4.501 ug/L

RT: 2.81 min Scan# 456

Delta R.T. 0.00 min

Lab File: VU040649.D

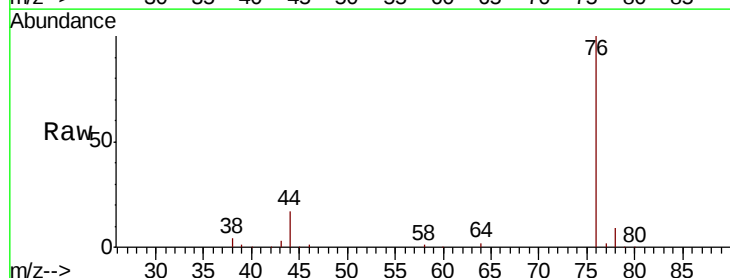
Acq: 12 Oct 2020 10:22

Tgt Ion: 76 Resp: 120098

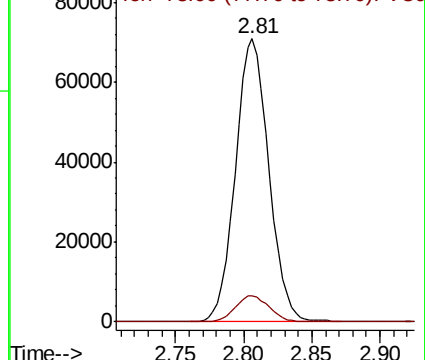
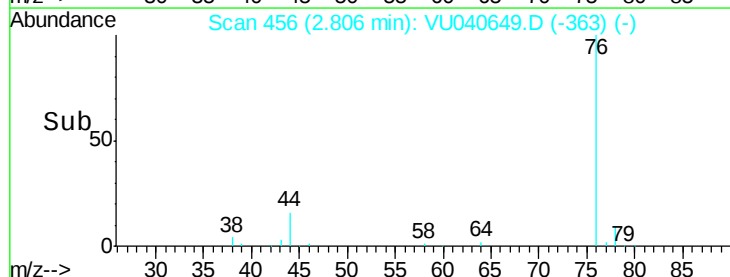
Ion Ratio Lower Upper

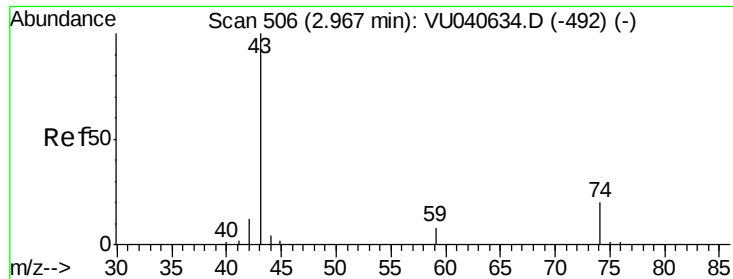
76 100

78 9.3 6.8 10.2



Abundance Ion 76.05 (75.75 to 76.75): VU040649.D (-363) (-)

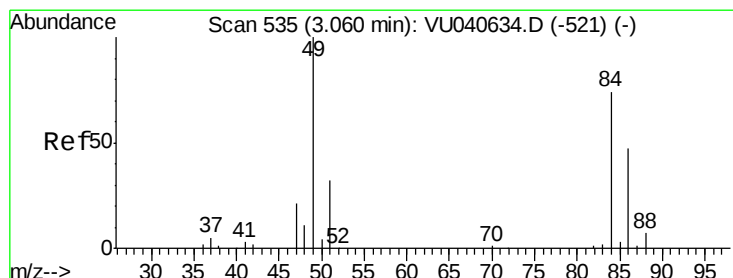
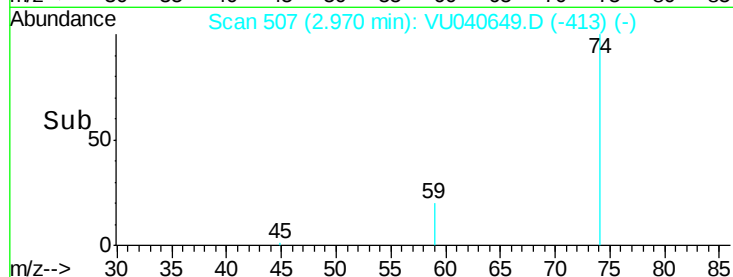
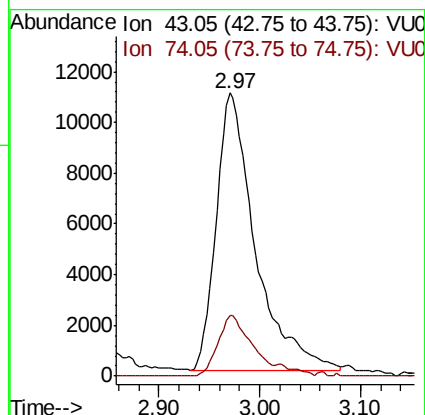
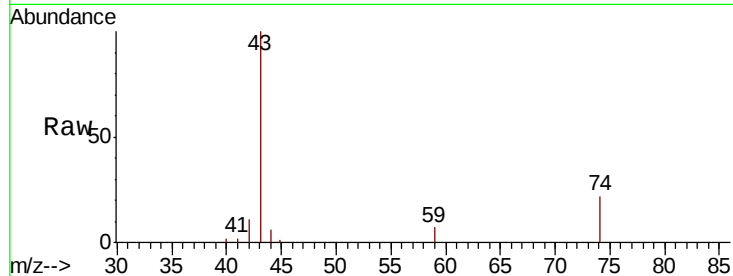




#15  
Methvl Acetate  
Concen: 4.693 ug/L  
RT: 2.97 min Scan# 507  
Delta R.T. 0.00 min  
Lab File: VU040649.D  
Acq: 12 Oct 2020 10:22

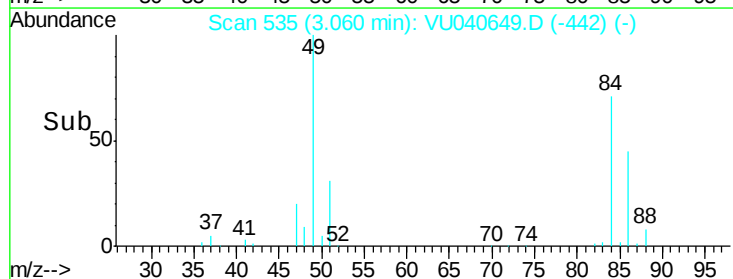
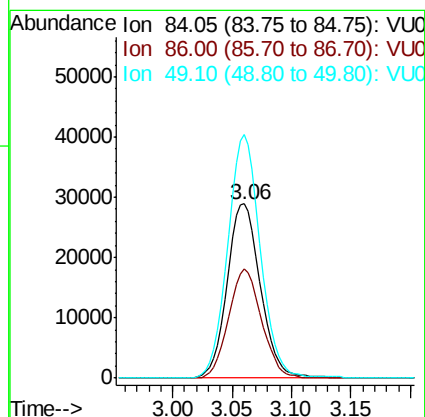
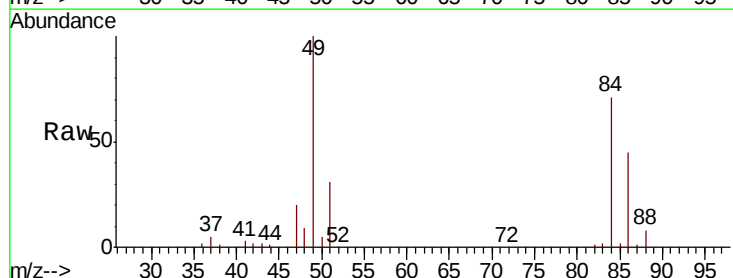
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00528

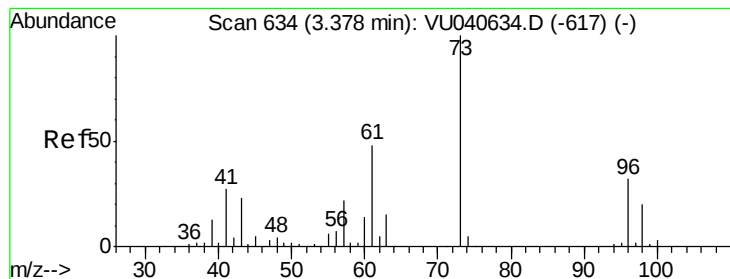
Tot Ion: 43 Resp: 29427  
Ion Ratio Lower Upper  
43 100  
74 18.7 16.5 24.7



#16  
Methylene chloride  
Concen: 4.579 ug/L  
RT: 3.06 min Scan# 535  
Delta R.T. 0.00 min  
Lab File: VU040649.D  
Acq: 12 Oct 2020 10:22

Tgt Ion: 84 Resp: 56049  
Ion Ratio Lower Upper  
84 100  
86 62.7 45.4 84.4  
49 139.9 99.8 185.3



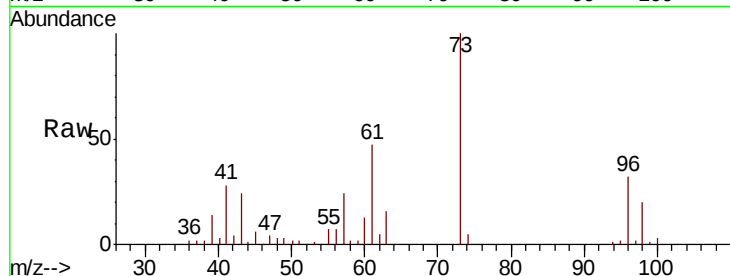


#17

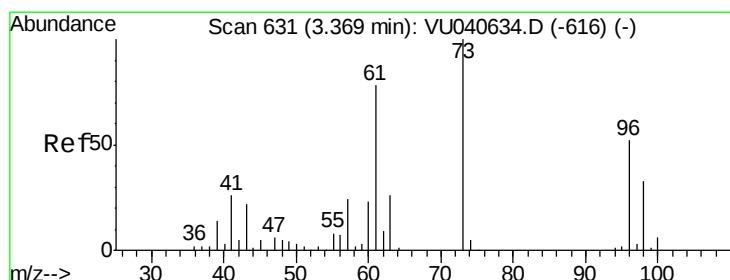
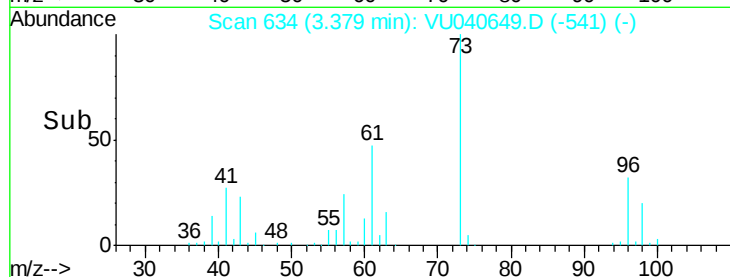
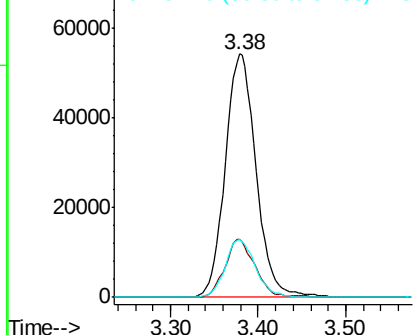
Methvl tert-butvl Ether  
 Concen: 4.936 ug/L  
 RT: 3.38 min Scan# 634  
 Delta R.T. 0.00 min  
 Lab File: VU040649.D  
 Acq: 12 Oct 2020 10:22

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00528

Tot Ion: 73 Resp: 133053  
 Ion Ratio Lower Upper  
 73 100  
 43 22.8 18.2 27.4  
 57 23.4 18.6 28.0



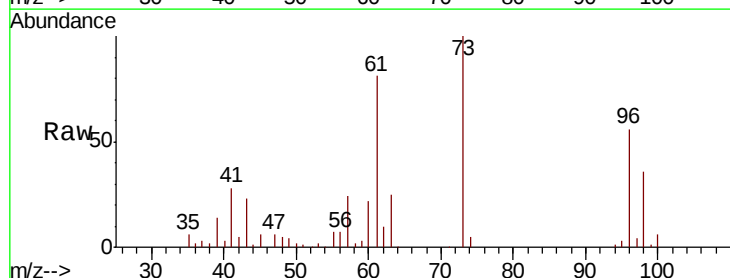
Abundance Ion 73.10 (72.80 to 73.80): VU0  
 Ion 43.05 (42.75 to 43.75): VU0  
 Ion 57.10 (56.80 to 57.80): VU0



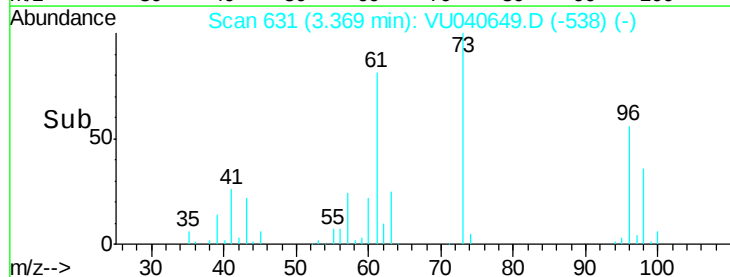
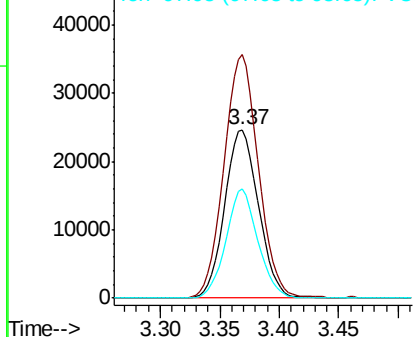
#18

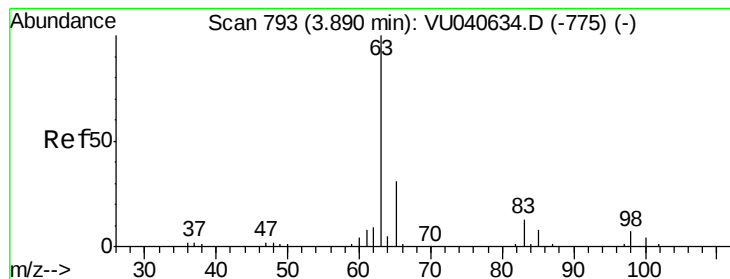
trans-1,2-Dichloroethene  
 Concen: 4.881 ug/L  
 RT: 3.37 min Scan# 631  
 Delta R.T. 0.00 min  
 Lab File: VU040649.D  
 Acq: 12 Oct 2020 10:22

Tgt Ion: 96 Resp: 48707  
 Ion Ratio Lower Upper  
 96 100  
 61 144.6 105.9 196.7  
 98 65.1 43.8 81.3



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





#19

1,1-Dichloroethane

Concen: 5.033 ug/L

RT: 3.89 min Scan# 792

Delta R.T. -0.00 min

Lab File: VU040649.D

Acq: 12 Oct 2020 10:22

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00528

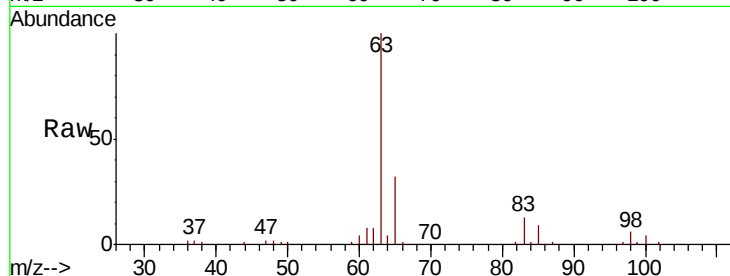
Tot Ion: 63 Resp: 103864

Ion Ratio Lower Upper

63 100

65 32.0 21.9 40.7

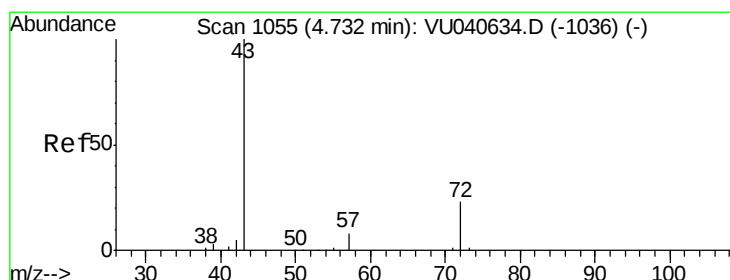
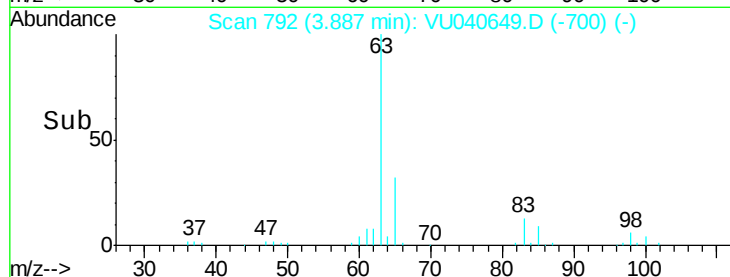
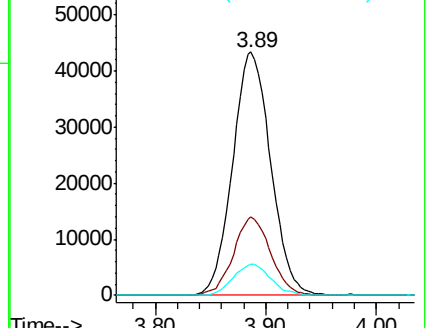
83 12.8 9.6 17.8



Abundance Ion 63.10 (62.80 to 63.80): VU040634.D (-775) (-)

Ion 65.10 (64.80 to 65.80): VU040634.D (-775) (-)

Ion 83.05 (82.75 to 83.75): VU040634.D (-775) (-)



#21

2-Butanone

Concen: 50.715 ug/L

RT: 4.74 min Scan# 1056

Delta R.T. 0.00 min

Lab File: VU040649.D

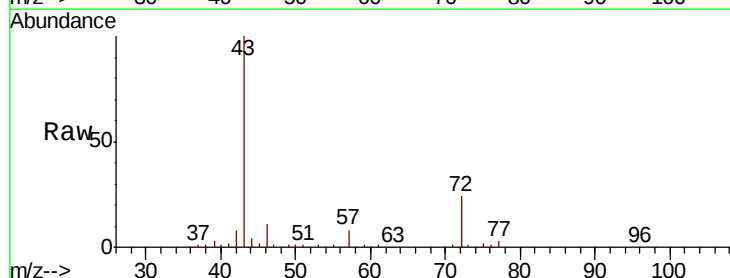
Acq: 12 Oct 2020 10:22

Tgt Ion: 43 Resp: 217122

Ion Ratio Lower Upper

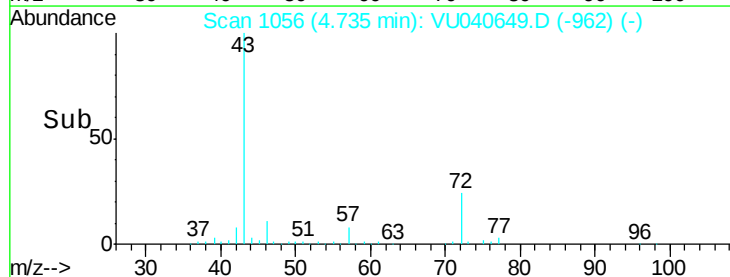
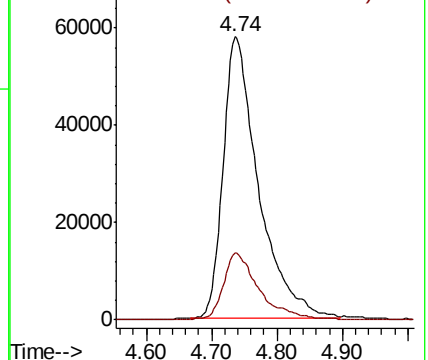
43 100

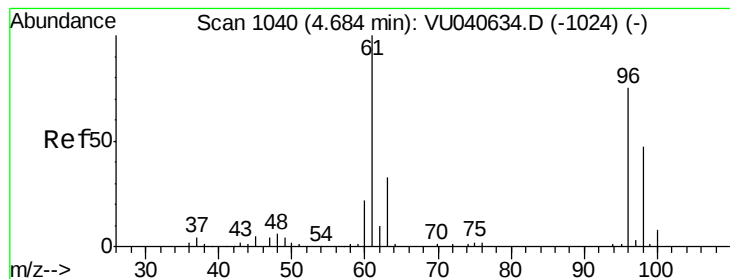
72 24.1 11.4 34.2



Abundance Ion 43.05 (42.75 to 43.75): VU040634.D (-1036) (-)

Ion 72.10 (71.80 to 72.80): VU040634.D (-1036) (-)





#22

cis-1,2-Dichloroethene

Concen: 5.053 ug/L

RT: 4.68 min Scan# 1040

Delta R.T. 0.00 min

Lab File: VU040649.D

Acq: 12 Oct 2020 10:22

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00528

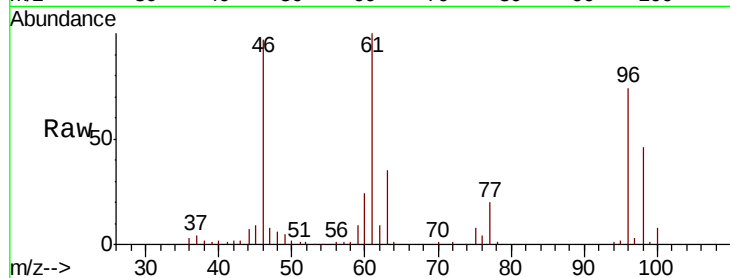
Tot Ion: 96 Resp: 54376

Ion Ratio Lower Upper

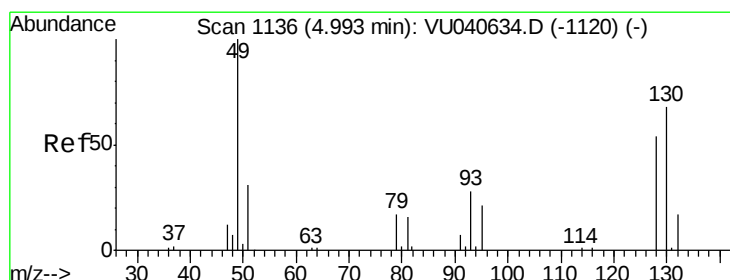
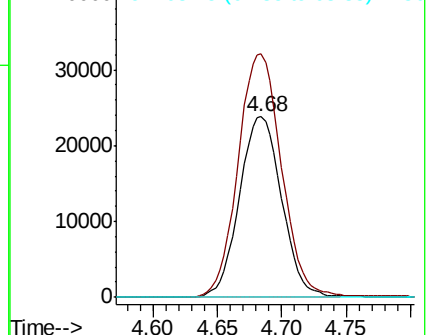
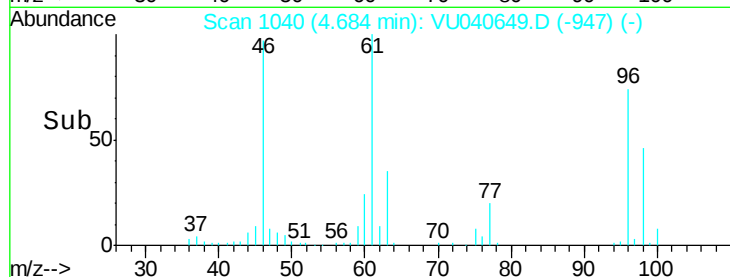
96 100

61 134.7 99.8 185.4

68 0.0 0.0 0.0



Abundance Ion 96.00 (95.70 to 96.70): VU040649.D (-947) (-)



#23

Bromochloromethane

Concen: 4.943 ug/L

RT: 4.99 min Scan# 1135

Delta R.T. -0.00 min

Lab File: VU040649.D

Acq: 12 Oct 2020 10:22

Tgt Ion: 128 Resp: 26425

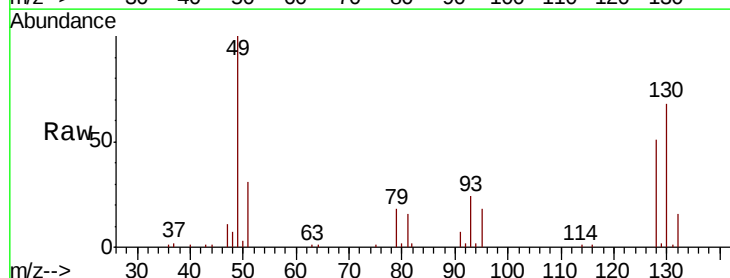
Ion Ratio Lower Upper

128 100

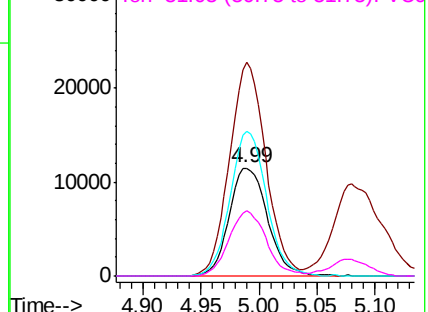
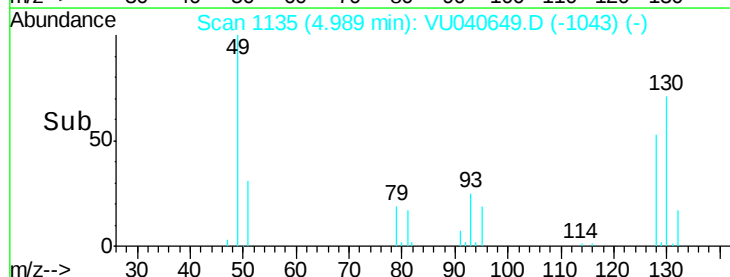
49 197.6 132.2 245.4

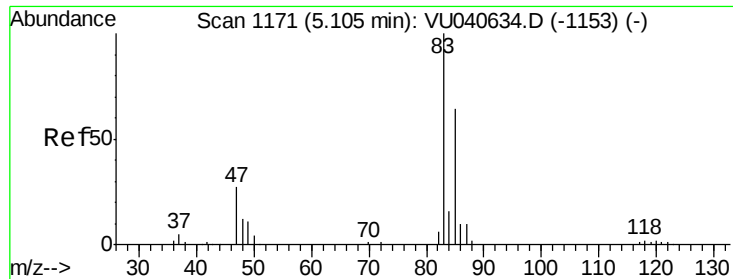
130 133.7 89.2 165.8

51 61.0 45.3 67.9



Abundance Ion 127.90 (127.60 to 128.60): VU040649.D (-1043) (-)

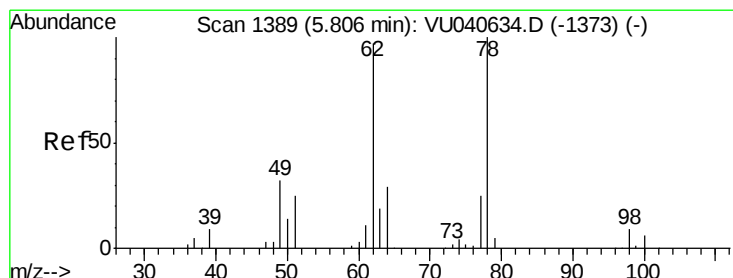
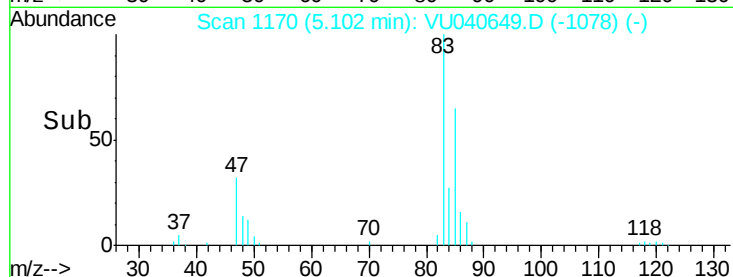
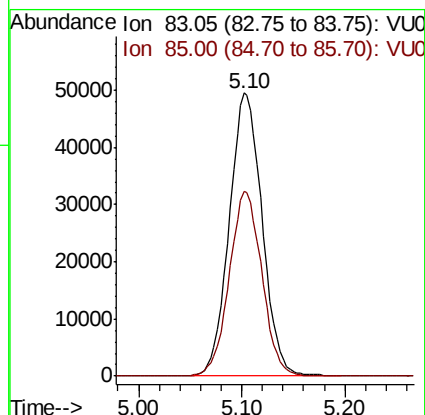
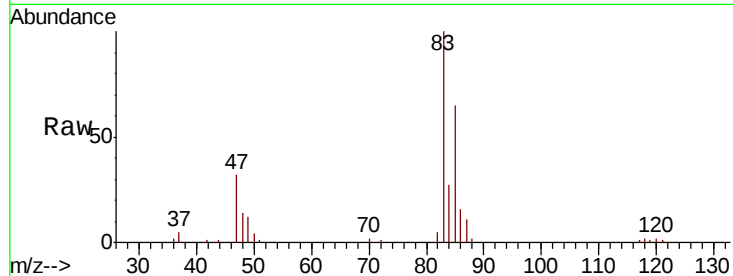




#25  
Chloroform  
Concen: 5.214 ug/L  
RT: 5.10 min Scan# 1170  
Delta R.T. -0.00 min  
Lab File: VU040649.D  
Acq: 12 Oct 2020 10:22

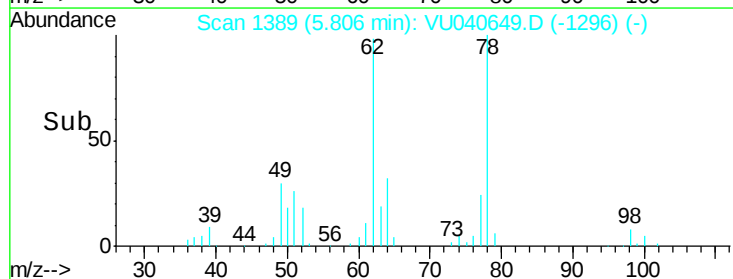
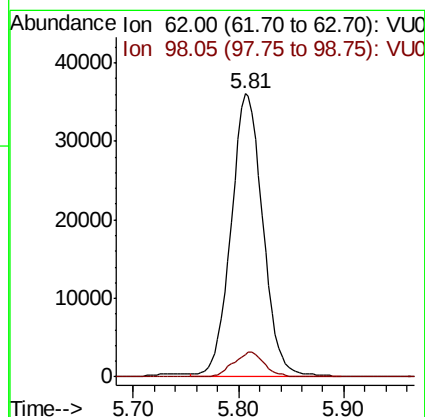
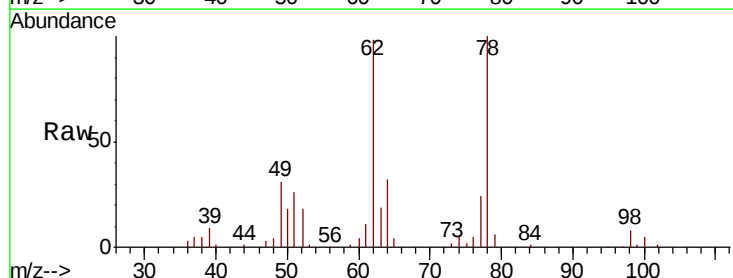
Instrument :  
MSVOA\_U  
ClientSampled :  
VSTD00528

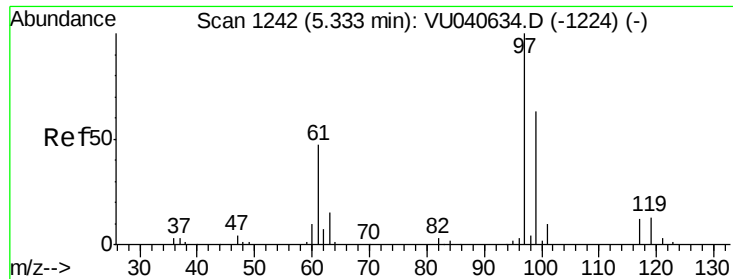
Tot Ion: 83 Resp: 109854  
Ion Ratio Lower Upper  
83 100  
85 65.4 46.5 86.5



#27  
1,2-Dichloroethane  
Concen: 5.070 ug/L  
RT: 5.81 min Scan# 1389  
Delta R.T. 0.00 min  
Lab File: VU040649.D  
Acq: 12 Oct 2020 10:22

Tgt Ion: 62 Resp: 75613  
Ion Ratio Lower Upper  
62 100  
98 8.0 6.6 10.0

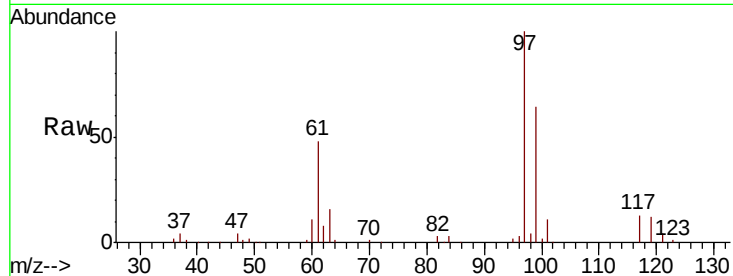




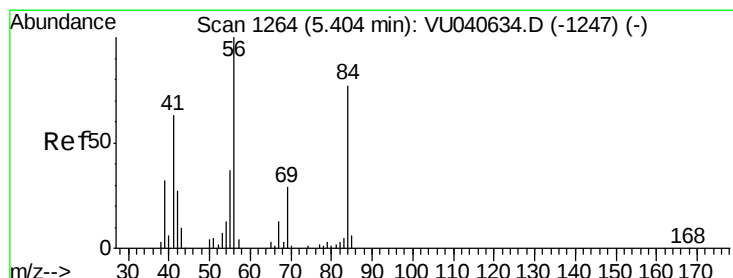
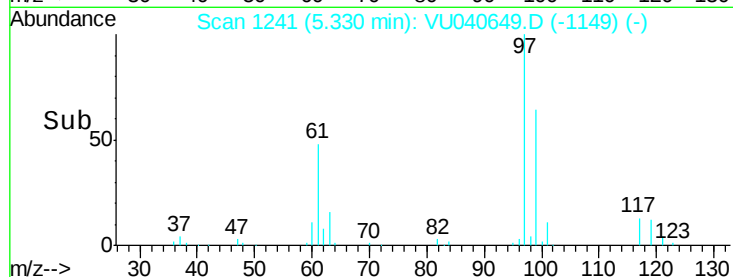
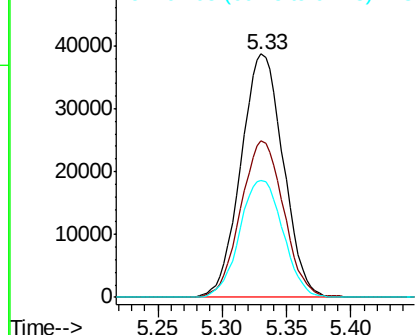
#29  
 1,1,1-Trichloroethane  
 Concen: 4.866 ug/L  
 RT: 5.33 min Scan# 1241  
 Delta R.T. -0.00 min  
 Lab File: VU040649.D  
 Acq: 12 Oct 2020 10:22

Instrument :  
 MSVOA\_U  
 ClientSampleID :  
 VSTD00528

Tot Ion: 97 Resp: 88508  
 Ion Ratio Lower Upper  
 97 100  
 99 65.4 51.3 76.9  
 61 49.2 39.4 59.2

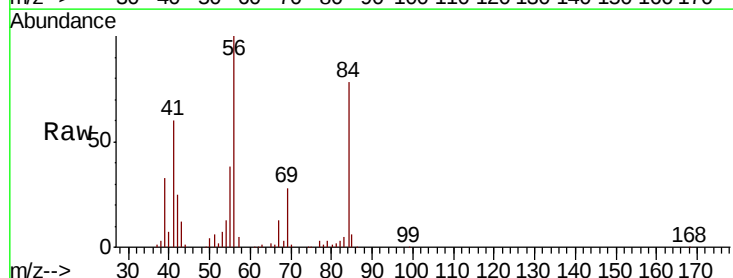


Abundance Ion 96.95 (96.65 to 97.65): VU0  
 Ion 99.05 (98.75 to 99.75): VU0  
 Ion 61.05 (60.75 to 61.75): VU0

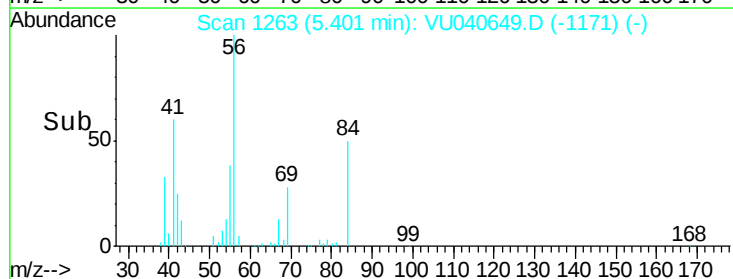
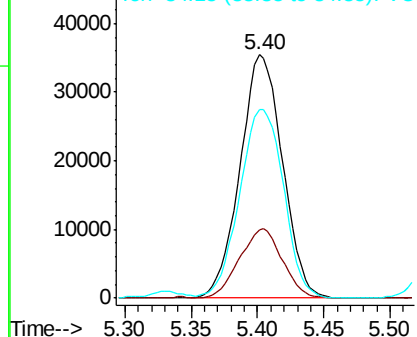


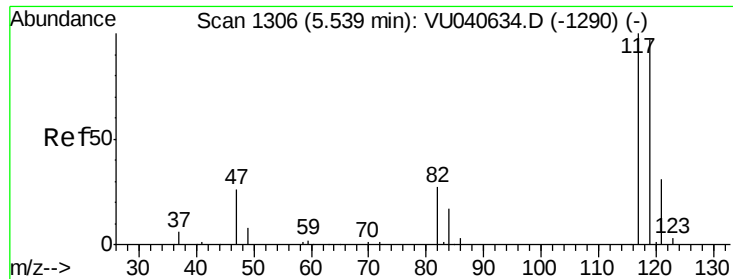
#30  
 Cyclohexane  
 Concen: 4.720 ug/L  
 RT: 5.40 min Scan# 1263  
 Delta R.T. -0.00 min  
 Lab File: VU040649.D  
 Acq: 12 Oct 2020 10:22

Tgt Ion: 56 Resp: 79127  
 Ion Ratio Lower Upper  
 56 100  
 69 28.7 23.8 35.8  
 84 80.3 64.0 96.0



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





#31

Carbon tetrachloride

Concen: 4.970 ug/L

RT: 5.54 min Scan# 1305

Delta R.T. -0.00 min

Lab File: VU040649.D

Acq: 12 Oct 2020 10:22

Instrument :

MSVOA\_U

ClientSampleId :

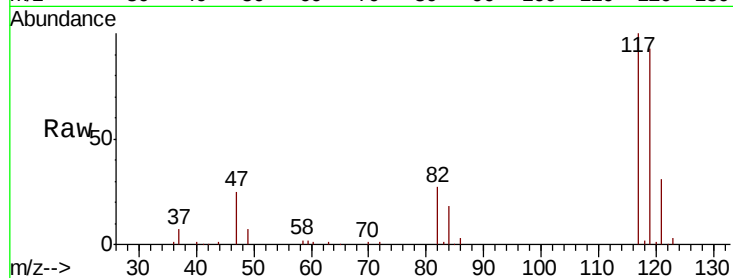
VSTD00528

Tot Ion:117 Resp: 77373

Ion Ratio Lower Upper

117 100

119 95.2 76.2 114.2



Abundance Ion 116.90 (116.60 to 117.60): V

Ion 118.90 (118.60 to 119.60): V

5.54

40000

30000

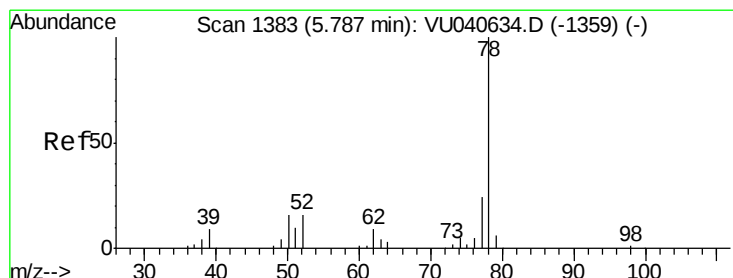
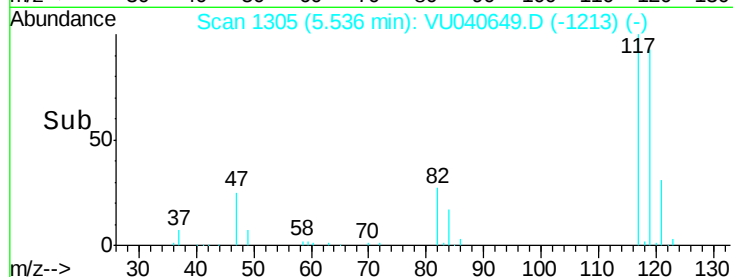
20000

10000

0

Time-->

5.45 5.50 5.55 5.60



#33

Benzene

Concen: 4.898 ug/L

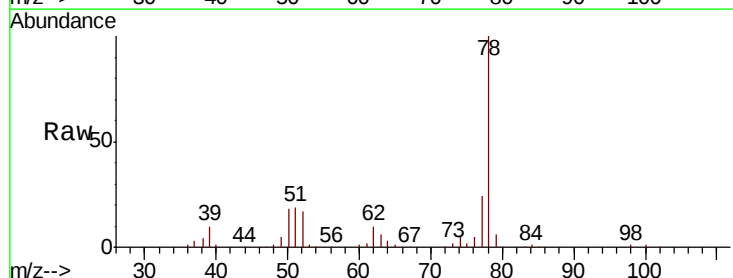
RT: 5.79 min Scan# 1383

Delta R.T. 0.00 min

Lab File: VU040649.D

Acq: 12 Oct 2020 10:22

Tgt Ion: 78 Resp: 213035



Abundance Ion 78.10 (77.80 to 78.80): VU0

120000

100000

80000

60000

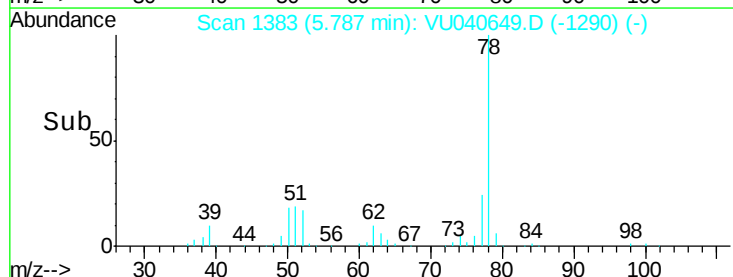
40000

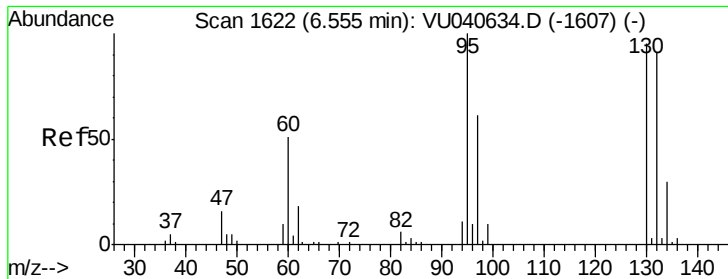
20000

0

Time-->

5.70 5.80

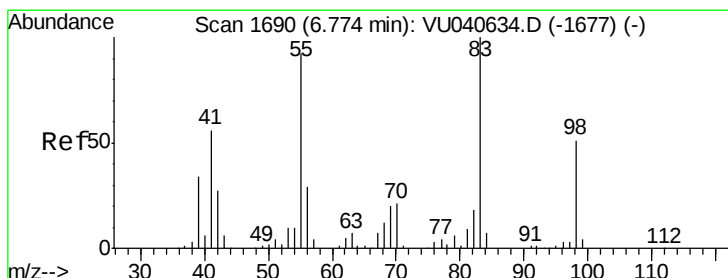
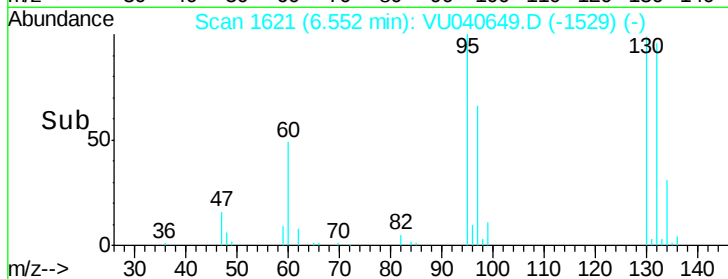
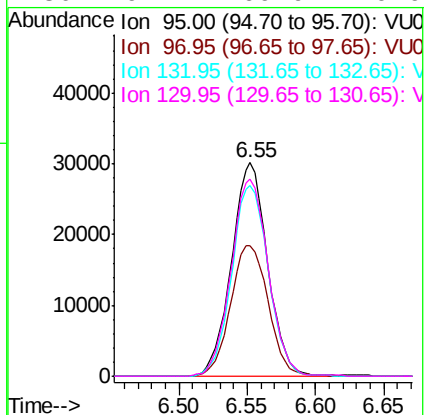
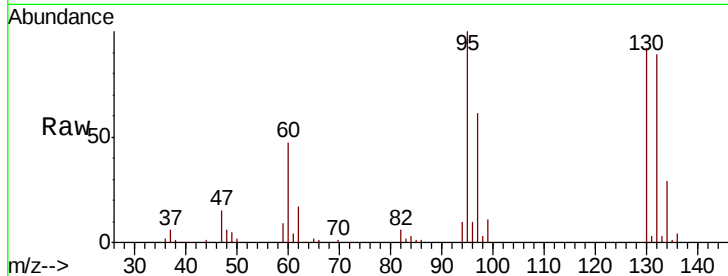




#34  
 Trichloroethene  
 Concen: 4.908 ug/L  
 RT: 6.55 min Scan# 1621  
 Delta R.T. -0.00 min  
 Lab File: VU040649.D  
 Acq: 12 Oct 2020 10:22

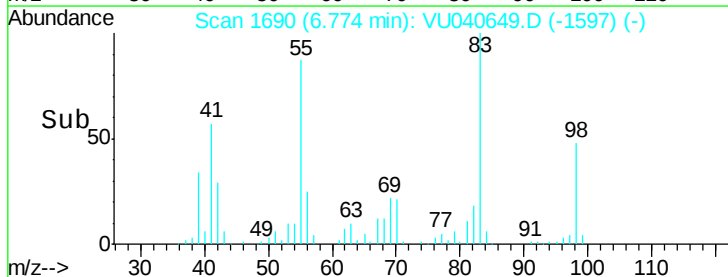
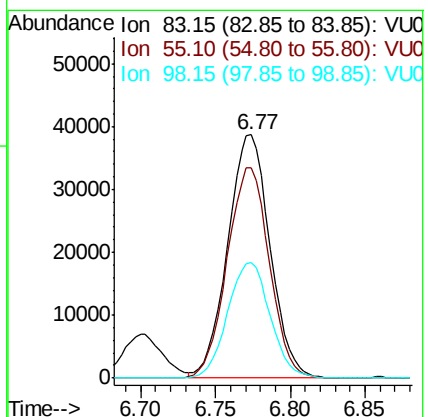
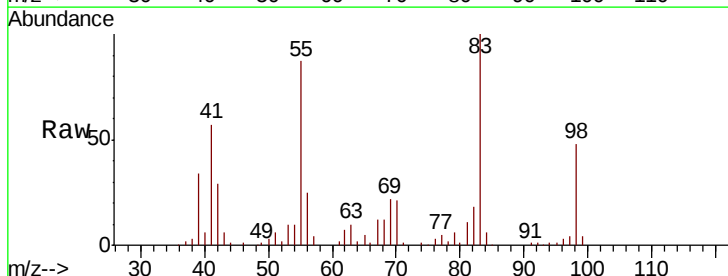
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00528

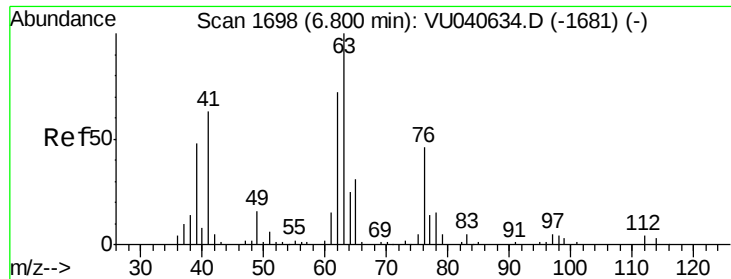
Tot Ion: 95 Resp: 55327  
 Ion Ratio Lower Upper  
 95 100  
 97 61.3 45.5 84.5  
 132 89.0 67.5 125.4  
 130 92.1 69.9 129.9



#35  
 Methylcyclohexane  
 Concen: 4.770 ug/L  
 RT: 6.77 min Scan# 1690  
 Delta R.T. 0.00 min  
 Lab File: VU040649.D  
 Acq: 12 Oct 2020 10:22

Tgt Ion: 83 Resp: 76248  
 Ion Ratio Lower Upper  
 83 100  
 55 86.3 70.7 106.1  
 98 47.6 38.4 57.6

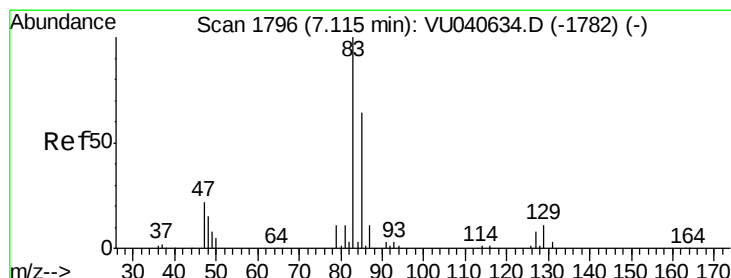
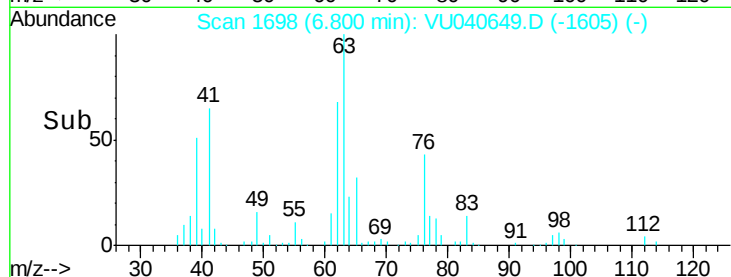
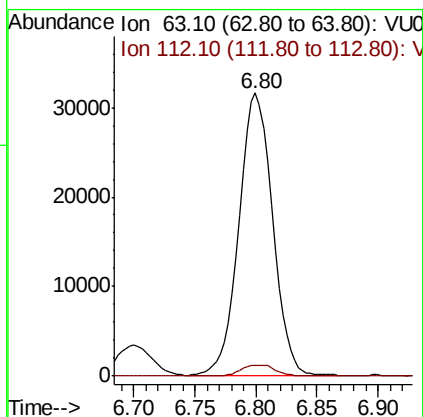
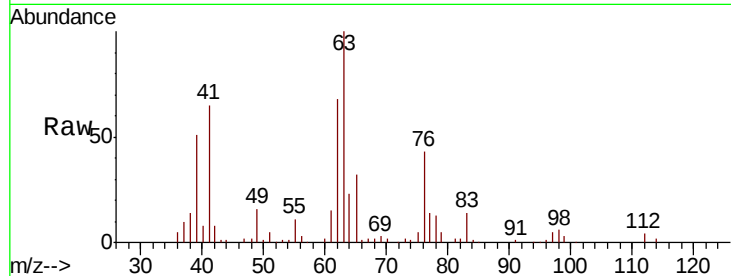




#37  
 1,2-Dichloropropane  
 Concen: 5.004 ug/L  
 RT: 6.80 min Scan# 1698  
 Delta R.T. 0.00 min  
 Lab File: VU040649.D  
 Acq: 12 Oct 2020 10:22

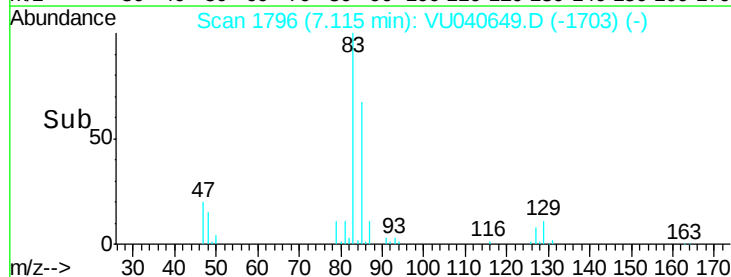
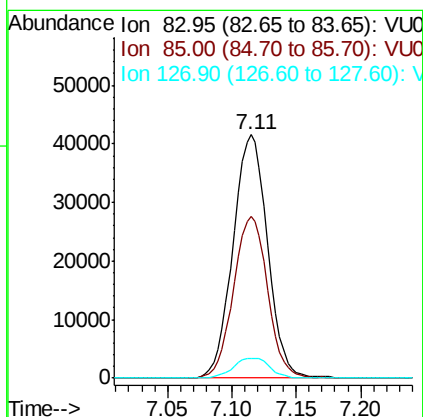
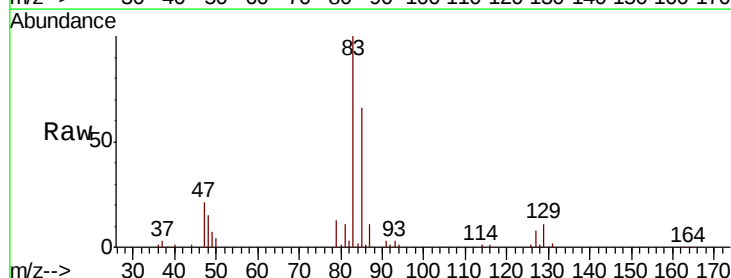
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00528

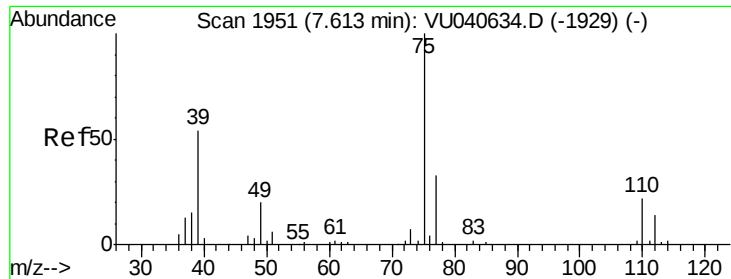
Tot Ion: 63 Resp: 60631  
 Ion Ratio Lower Upper  
 63 100  
 112 3.9 3.5 5.3



#38  
 Bromodichloromethane  
 Concen: 4.993 ug/L  
 RT: 7.11 min Scan# 1796  
 Delta R.T. 0.00 min  
 Lab File: VU040649.D  
 Acq: 12 Oct 2020 10:22

Tgt Ion: 83 Resp: 77344  
 Ion Ratio Lower Upper  
 83 100  
 85 66.3 46.0 85.4  
 127 8.3 6.7 10.1

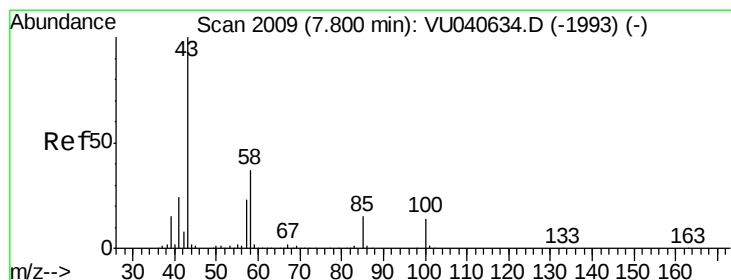
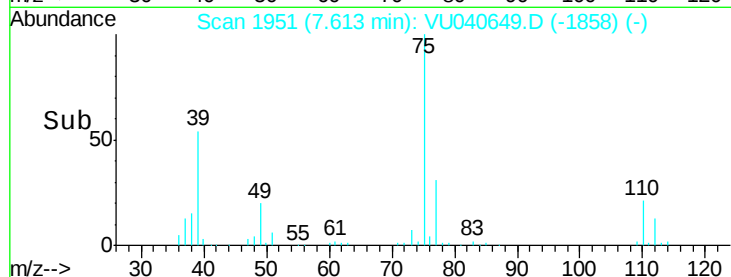
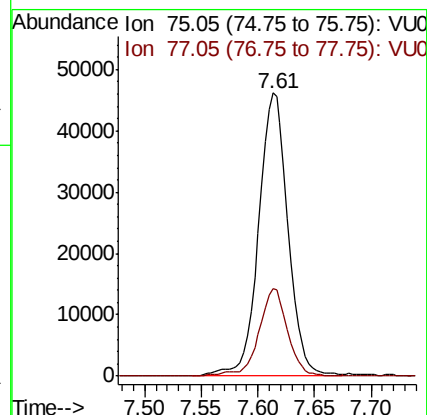
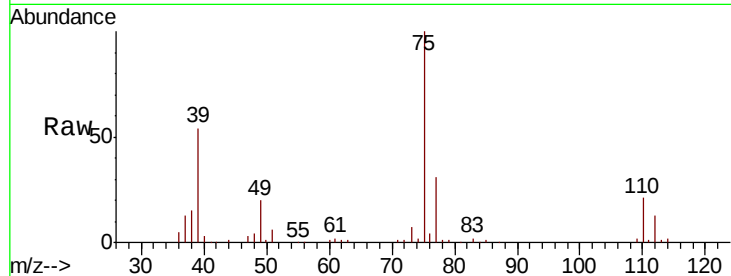




#39  
 cis-1,3-Dichloropropene  
 Concen: 5.033 ug/L  
 RT: 7.61 min Scan# 1951  
 Delta R.T. 0.00 min  
 Lab File: VU040649.D  
 Acq: 12 Oct 2020 10:22

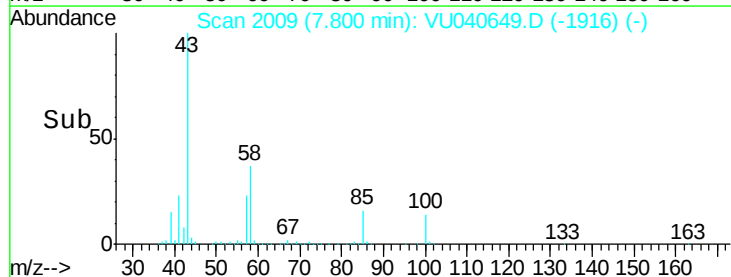
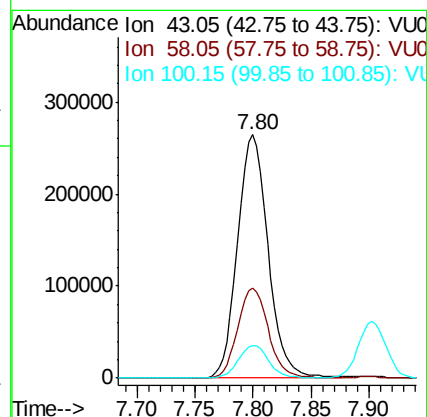
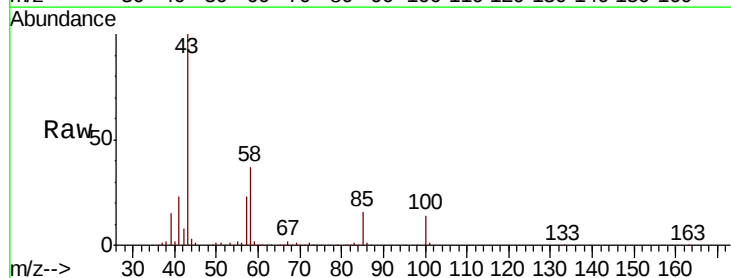
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00528

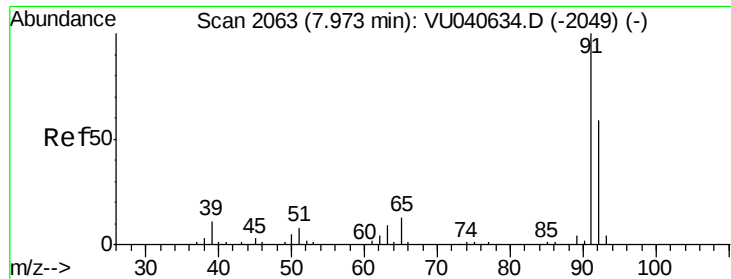
Tot Ion: 75 Resp: 83333  
 Ion Ratio Lower Upper  
 75 100  
 77 31.0 20.5 38.1



#40  
 4-Methyl-2-pentanone  
 Concen: 50.202 ug/L  
 RT: 7.80 min Scan# 2009  
 Delta R.T. 0.00 min  
 Lab File: VU040649.D  
 Acq: 12 Oct 2020 10:22

Tgt Ion: 43 Resp: 484983  
 Ion Ratio Lower Upper  
 43 100  
 58 37.1 29.7 44.5  
 100 13.3 10.7 16.1





#42

Toluene

Concen: 5.123 ug/L

RT: 7.97 min Scan# 2063

Delta R.T. 0.00 min

Lab File: VU040649.D

Acq: 12 Oct 2020 10:22

Instrument :

MSVOA\_U

ClientSampleId :

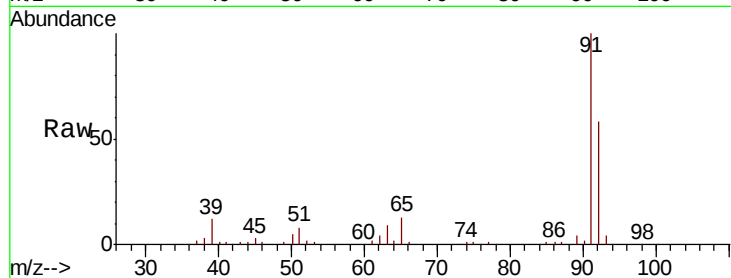
VSTD00528

Tot Ion: 91 Resp: 227027

Ion Ratio Lower Upper

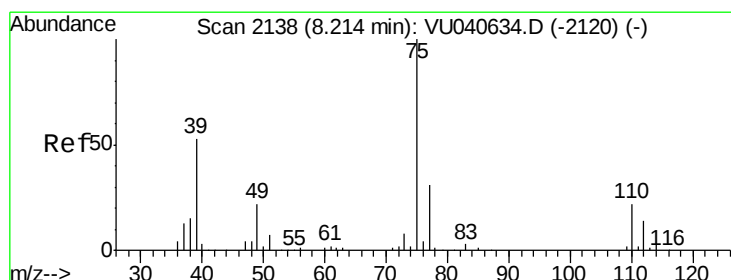
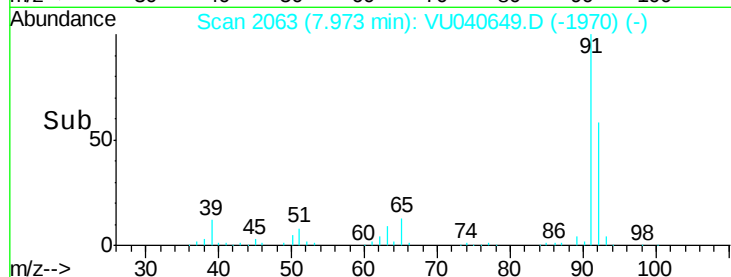
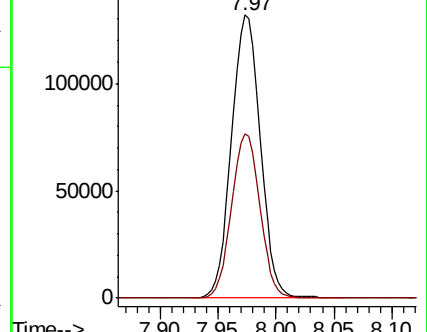
91 100

92 58.3 40.2 74.6



Abundance Ion 91.15 (90.85 to 91.85): VU040649.D (-1970) (-)

Ion 92.15 (91.85 to 92.85): VU040649.D (-1970) (-)



#44

trans-1,3-Dichloropropene

Concen: 5.045 ug/L

RT: 8.21 min Scan# 2138

Delta R.T. 0.00 min

Lab File: VU040649.D

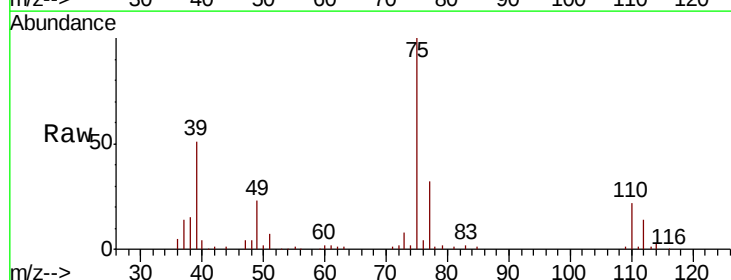
Acq: 12 Oct 2020 10:22

Tgt Ion: 75 Resp: 76896

Ion Ratio Lower Upper

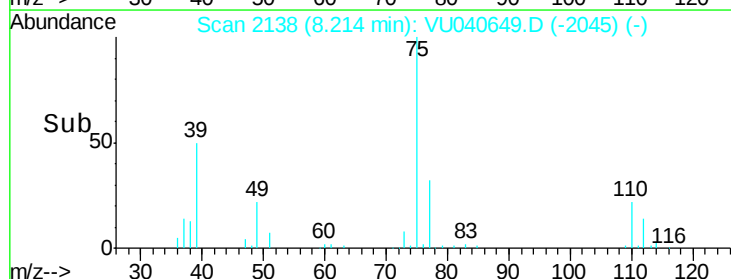
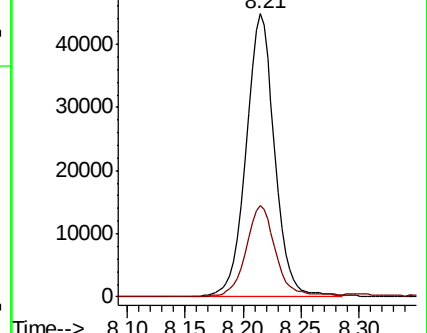
75 100

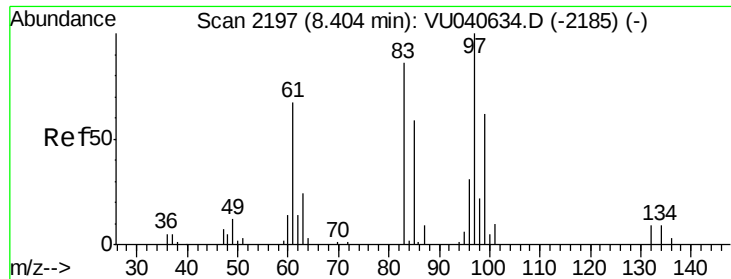
77 32.3 20.4 38.0



Abundance Ion 75.05 (74.75 to 75.75): VU040649.D (-2045) (-)

Ion 77.05 (76.75 to 77.75): VU040649.D (-2045) (-)

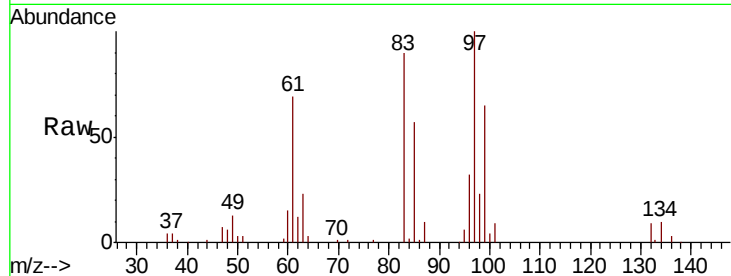




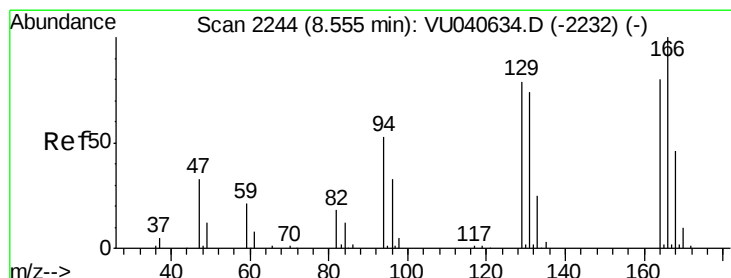
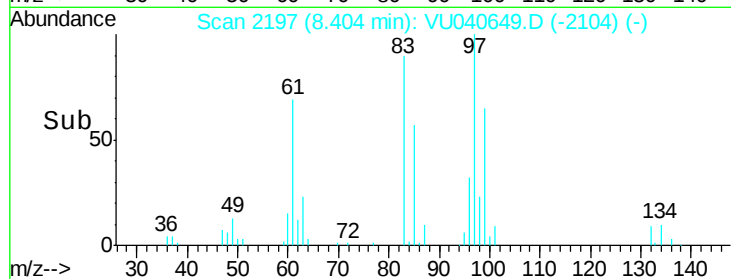
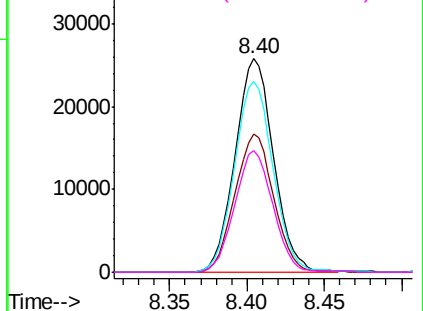
#45  
 1,1,2-Trichloroethane  
 Concen: 4.917 ug/L  
 RT: 8.40 min Scan# 2197  
 Delta R.T. 0.00 min  
 Lab File: VU040649.D  
 Acq: 12 Oct 2020 10:22

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00528

|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 97    | Resp: | 44619 |
| Ion      | Ratio | Lower | Upper |
| 97       | 100   |       |       |
| 99       | 64.7  | 44.0  | 81.6  |
| 83       | 89.5  | 62.9  | 116.9 |
| 85       | 57.2  | 40.3  | 74.8  |

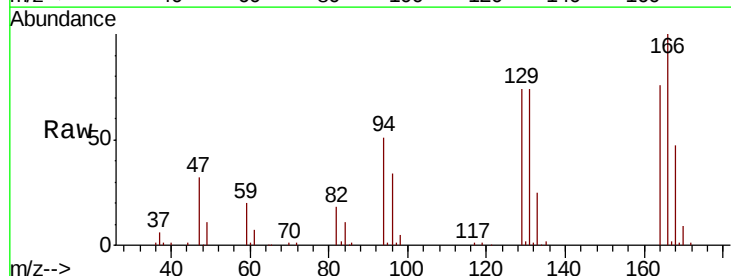


Abundance Ion 96.95 (96.65 to 97.65): VU040649.D (-2104) (-)  
 Ion 99.05 (98.75 to 99.75): VU040649.D (-2104) (-)  
 Ion 82.95 (82.65 to 83.65): VU040649.D (-2104) (-)  
 Ion 85.00 (84.70 to 85.70): VU040649.D (-2104) (-)

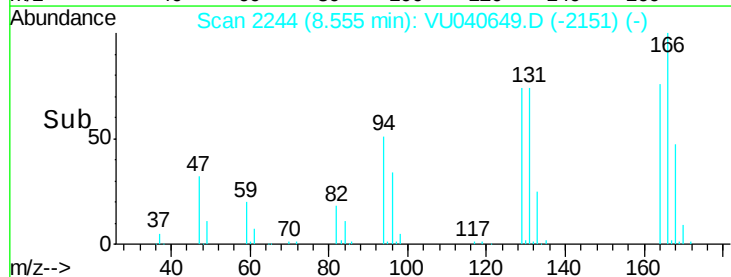
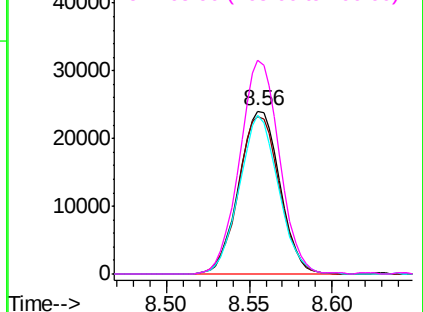


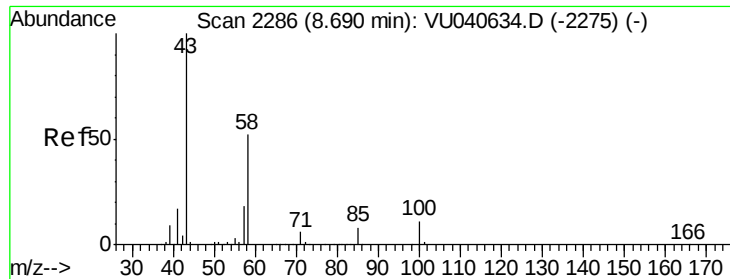
#47  
 Tetrachloroethene  
 Concen: 5.121 ug/L  
 RT: 8.56 min Scan# 2244  
 Delta R.T. 0.00 min  
 Lab File: VU040649.D  
 Acq: 12 Oct 2020 10:22

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 164   | Resp: | 41185 |
| Ion      | Ratio | Lower | Upper |
| 164      | 100   |       |       |
| 129      | 96.6  | 68.8  | 127.8 |
| 131      | 97.3  | 66.7  | 123.9 |
| 166      | 130.9 | 83.9  | 155.7 |



Abundance Ion 163.90 (163.60 to 164.60): VU040649.D (-2151) (-)  
 Ion 128.95 (128.65 to 129.65): VU040649.D (-2151) (-)  
 Ion 130.95 (130.65 to 131.65): VU040649.D (-2151) (-)  
 Ion 165.90 (165.60 to 166.60): VU040649.D (-2151) (-)

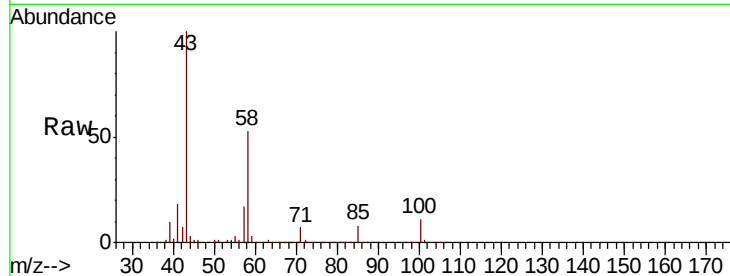




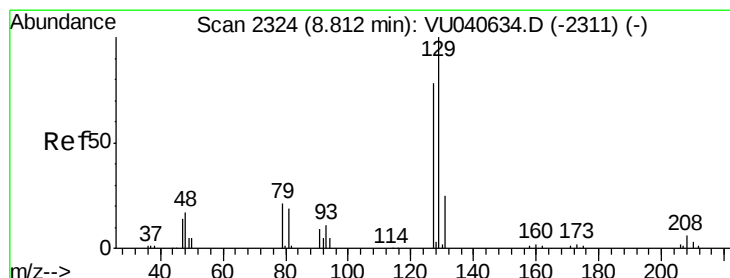
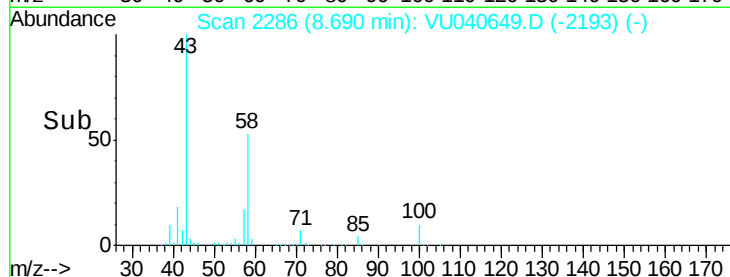
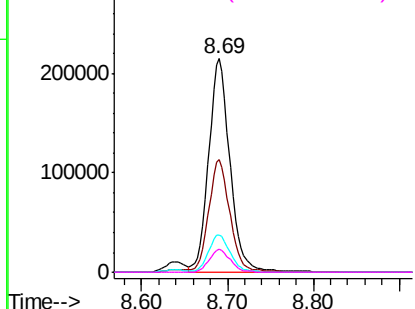
#48  
2-Hexanone  
Concen: 51.897 ug/L  
RT: 8.69 min Scan# 2286  
Delta R.T. 0.00 min  
Lab File: VU040649.D  
Acq: 12 Oct 2020 10:22

Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00528

Tot Ion: 43 Resp: 373269  
Ion Ratio Lower Upper  
43 100  
58 52.9 41.0 61.6  
57 17.6 14.4 21.6  
100 10.6 8.6 13.0

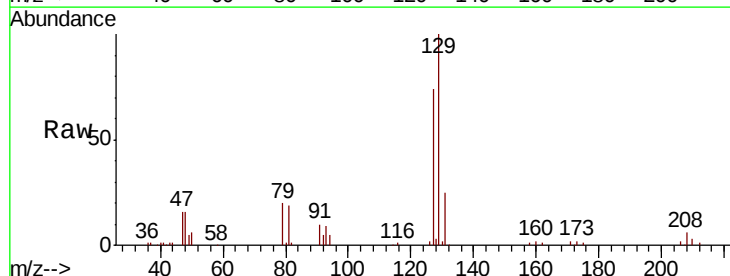


Abundance Ion 43.05 (42.75 to 43.75): VU0  
Ion 58.05 (57.75 to 58.75): VU0  
Ion 57.20 (56.90 to 57.90): VU0  
Ion 100.15 (99.85 to 100.85): VU0

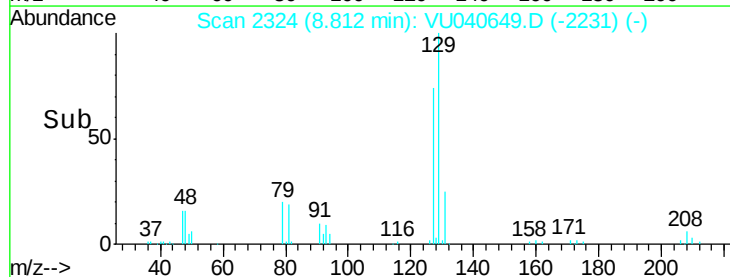
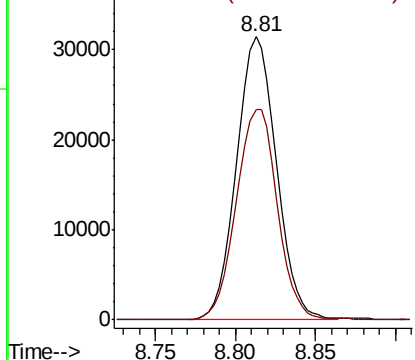


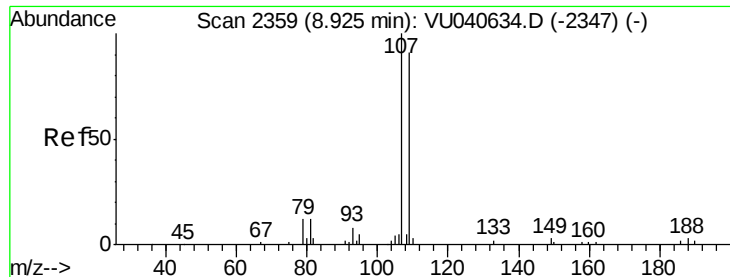
#49  
Dibromochloromethane  
Concen: 5.121 ug/L  
RT: 8.81 min Scan# 2324  
Delta R.T. 0.00 min  
Lab File: VU040649.D  
Acq: 12 Oct 2020 10:22

Tgt Ion: 129 Resp: 53471  
Ion Ratio Lower Upper  
129 100  
127 74.5 55.8 103.6



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

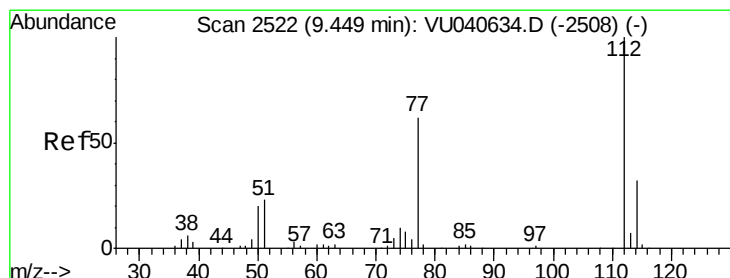
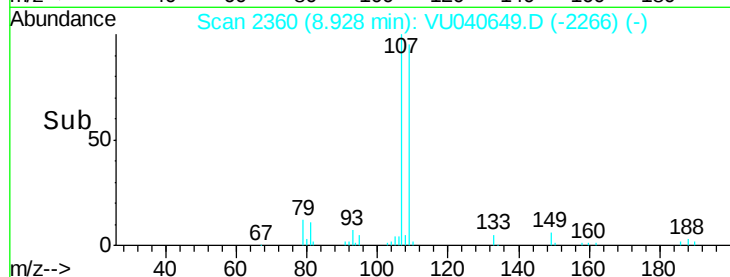
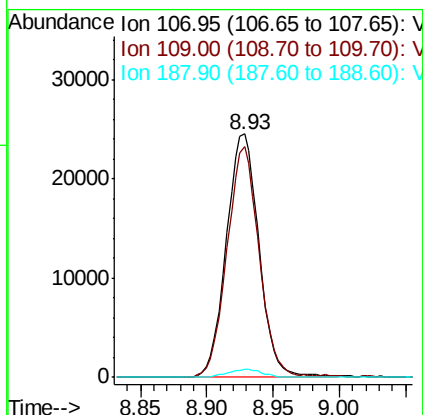
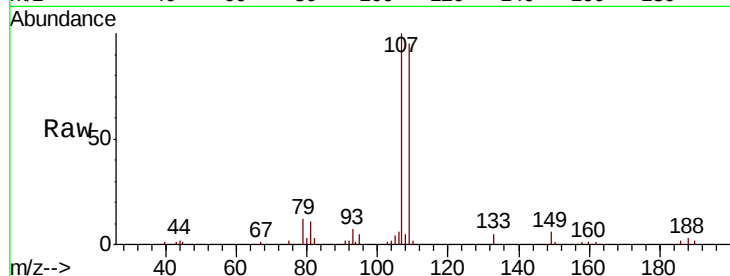




#50  
 1,2-Dibromoethane  
 Concen: 4.886 ug/L  
 RT: 8.93 min Scan# 2360  
 Delta R.T. 0.00 min  
 Lab File: VU040649.D  
 Acq: 12 Oct 2020 10:22

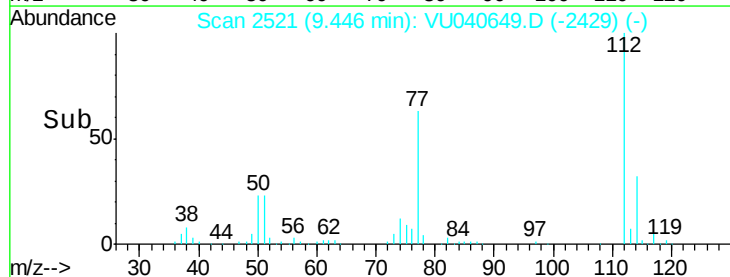
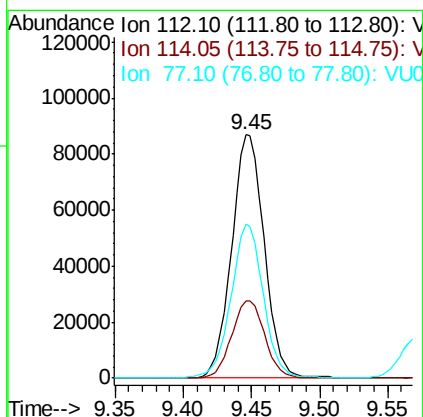
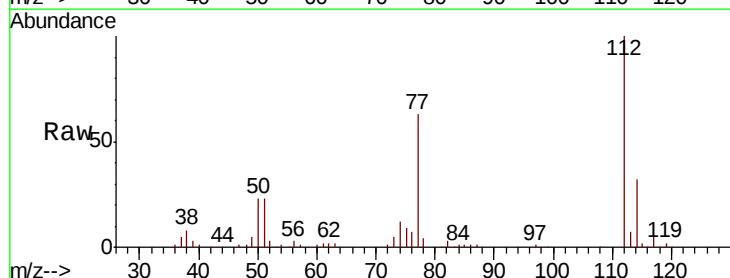
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00528

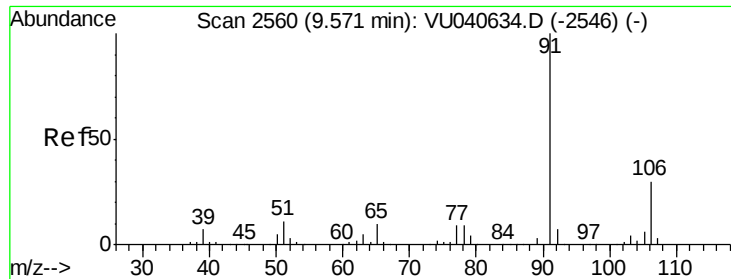
Tot Ion:107 Resp: 42058  
 Ion Ratio Lower Upper  
 107 100  
 109 94.6 65.7 121.9  
 188 3.3 3.0 4.4



#51  
 Chlorobenzene  
 Concen: 4.941 ug/L  
 RT: 9.45 min Scan# 2521  
 Delta R.T. -0.00 min  
 Lab File: VU040649.D  
 Acq: 12 Oct 2020 10:22

Tgt Ion:112 Resp: 144240  
 Ion Ratio Lower Upper  
 112 100  
 114 31.7 23.1 42.9  
 77 63.0 50.3 75.5

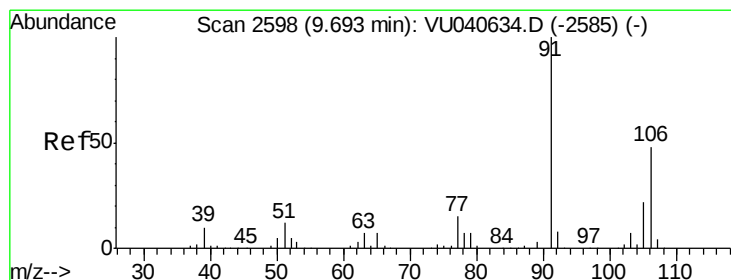
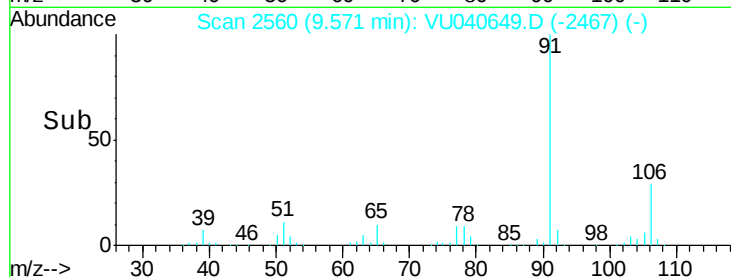
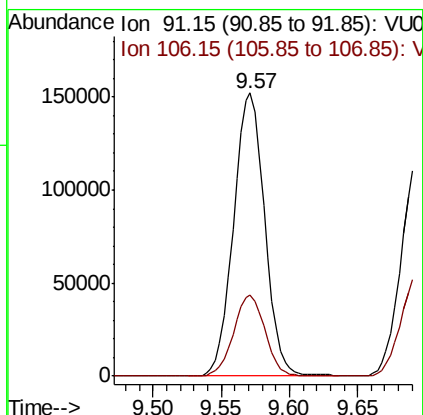
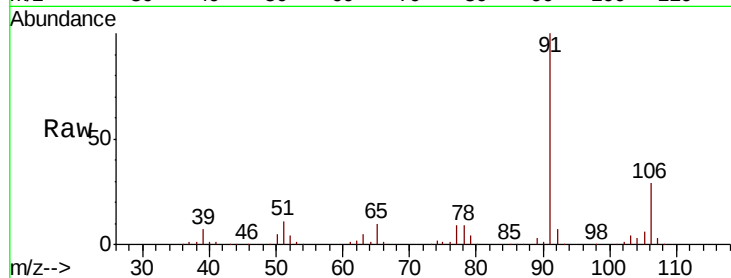




#52  
Ethylbenzene  
Concen: 5.037 ug/L  
RT: 9.57 min Scan# 2560  
Delta R.T. 0.00 min  
Lab File: VU040649.D  
Acq: 12 Oct 2020 10:22

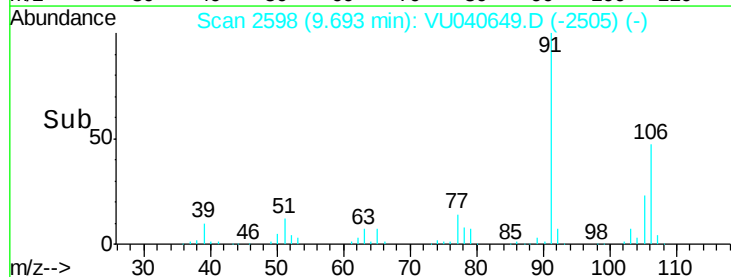
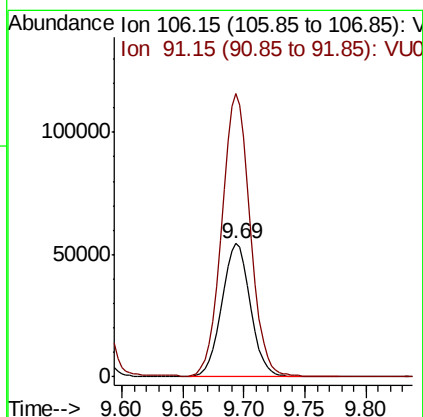
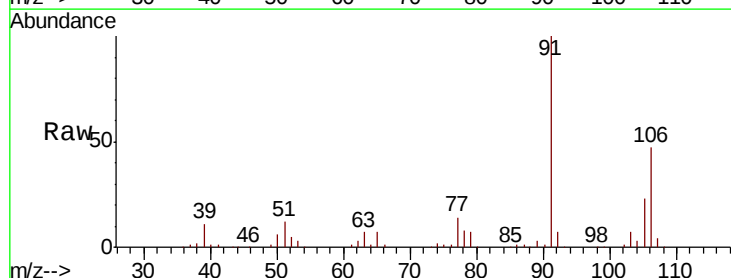
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00528

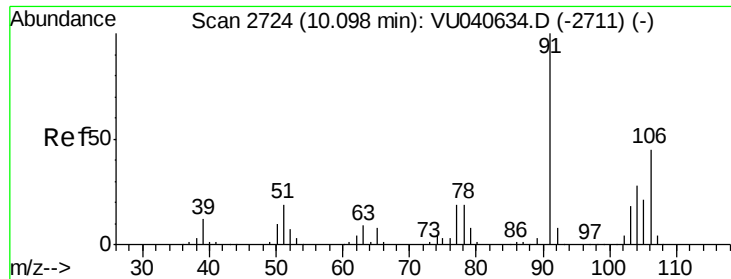
Tot Ion: 91 Resp: 241552  
Ion Ratio Lower Upper  
91 100  
106 28.5 20.7 38.5



#53  
m,p-Xylene  
Concen: 5.165 ug/L  
RT: 9.69 min Scan# 2598  
Delta R.T. 0.00 min  
Lab File: VU040649.D  
Acq: 12 Oct 2020 10:22

Tgt Ion: 106 Resp: 90290  
Ion Ratio Lower Upper  
106 100  
91 212.0 148.5 275.7

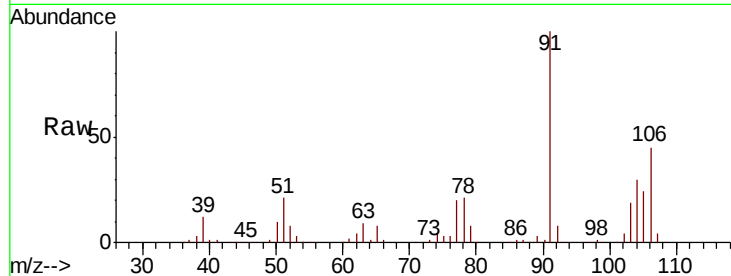




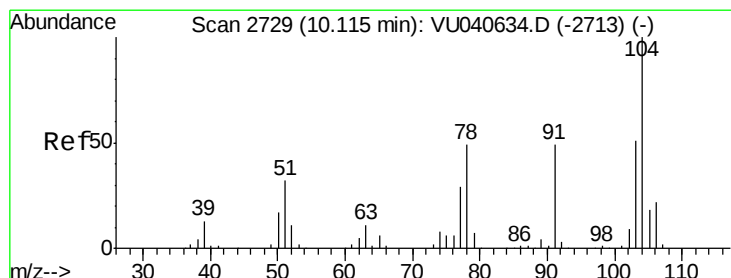
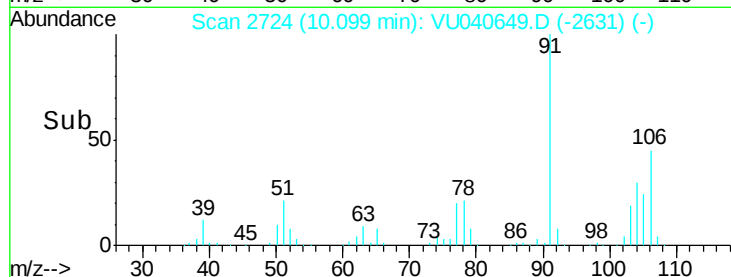
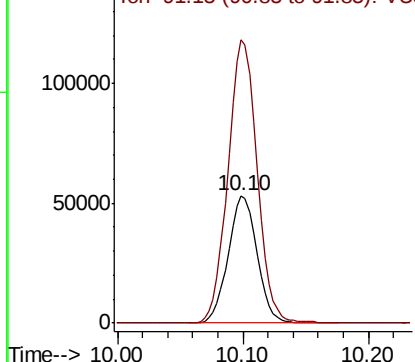
#54  
o-Xylene  
Concen: 5.056 ug/L  
RT: 10.10 min Scan# 2724  
Delta R.T. 0.00 min  
Lab File: VU040649.D  
Acq: 12 Oct 2020 10:22

Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00528

Tot Ion:106 Resp: 84996  
Ion Ratio Lower Upper  
106 100  
91 221.7 160.2 297.4

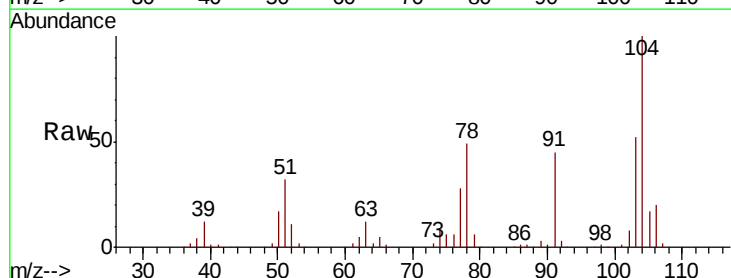


Abundance Ion 106.15 (105.85 to 106.85): V  
Ion 91.15 (90.85 to 91.85): VU0

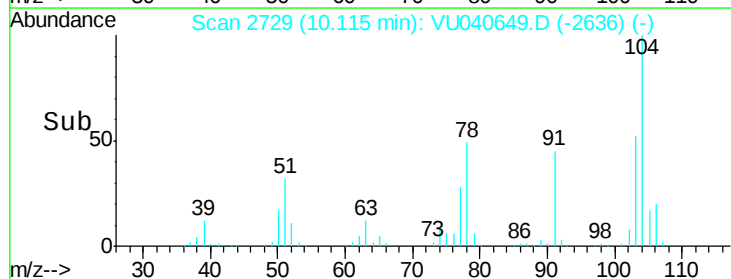
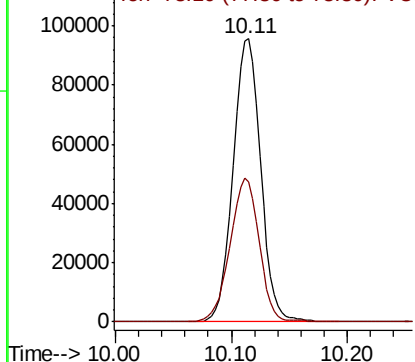


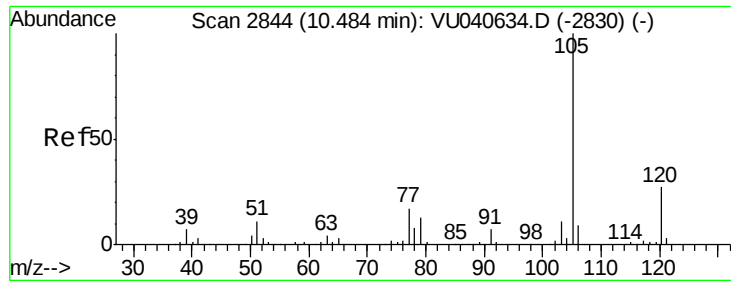
#55  
Styrene  
Concen: 5.369 ug/L  
RT: 10.11 min Scan# 2729  
Delta R.T. 0.00 min  
Lab File: VU040649.D  
Acq: 12 Oct 2020 10:22

Tgt Ion:104 Resp: 156753  
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: 5.174 ug/L

RT: 10.48 min Scan# 2843

Delta R.T. -0.00 min

Lab File: VU040649.D

Acq: 12 Oct 2020 10:22

Instrument :

MSVOA\_U

ClientSampled :

VSTD00528

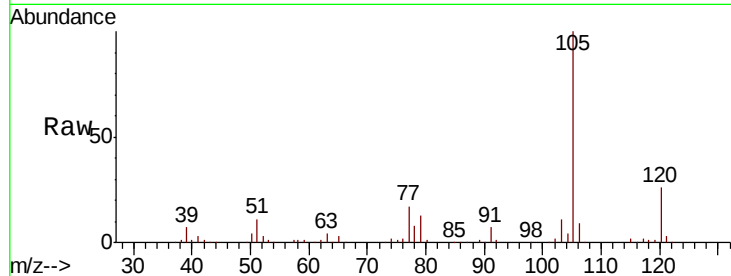
Tot Ion:105 Resp: 234159

Ion Ratio Lower Upper

105 100

120 25.6 20.6 30.8

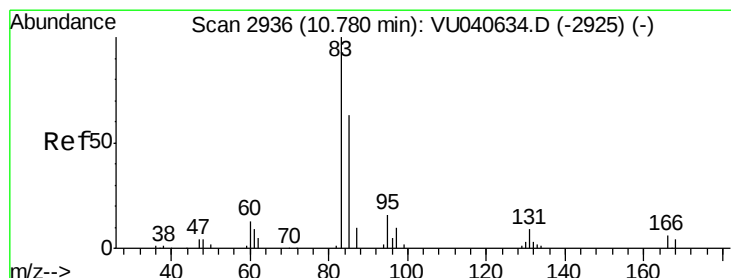
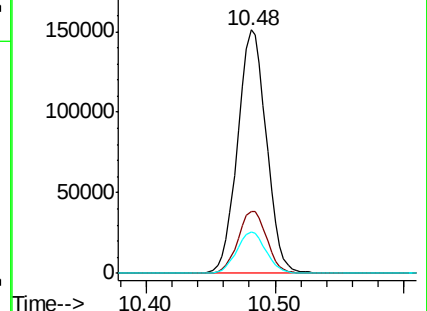
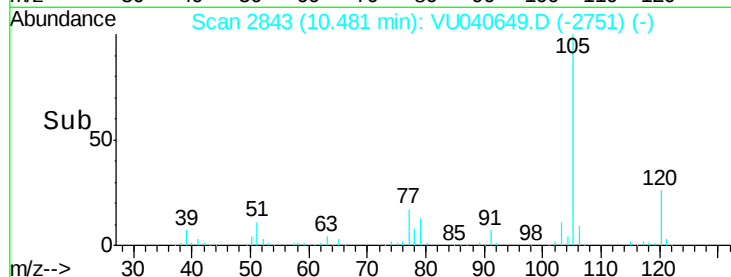
77 17.3 13.8 20.6



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: 4.908 ug/L

RT: 10.78 min Scan# 2936

Delta R.T. 0.00 min

Lab File: VU040649.D

Acq: 12 Oct 2020 10:22

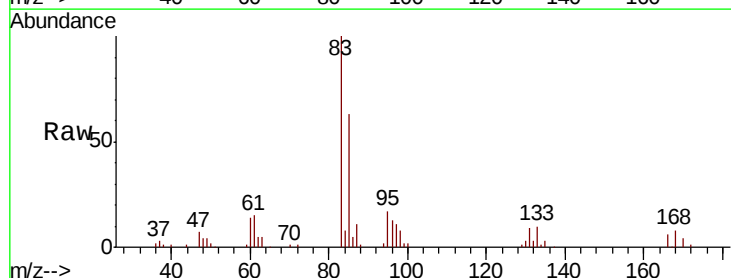
Tgt Ion: 83 Resp: 58479

Ion Ratio Lower Upper

83 100

85 62.7 45.6 84.6

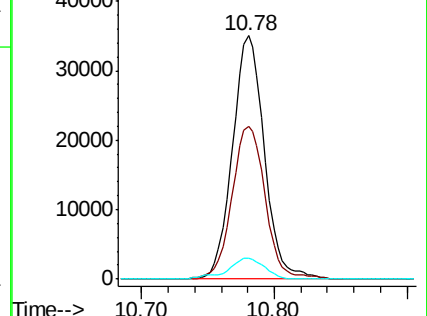
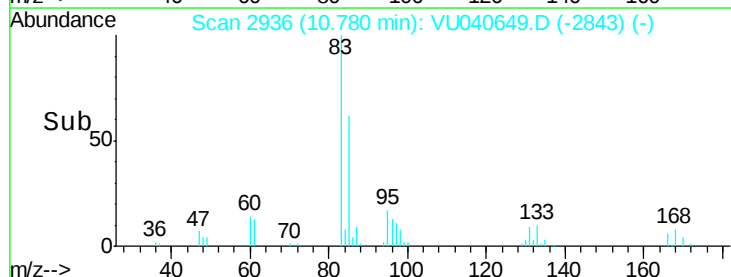
131 8.7 7.1 10.7

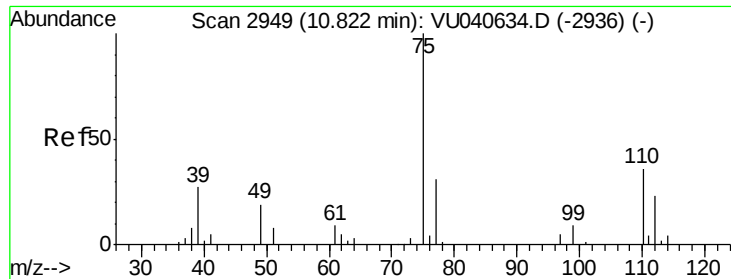


Abundance Ion 82.95 (82.65 to 83.65): VU0

Ion 85.00 (84.70 to 85.70): VU0

Ion 130.95 (130.65 to 131.65): V





#59

1,2,3-Trichloropropane

Concen: 4.969 ug/L

RT: 10.82 min Scan# 2949

Delta R.T. 0.00 min

Lab File: VU040649.D

Acq: 12 Oct 2020 10:22

Instrument :

MSVOA\_U

ClientSampleId :

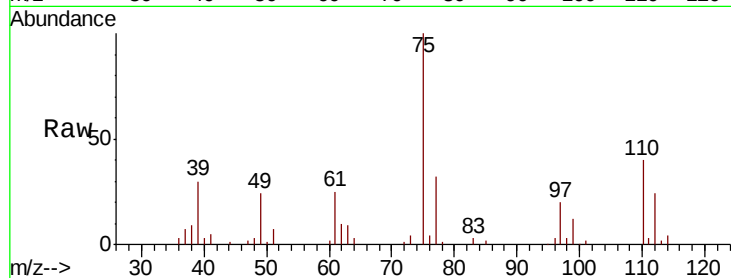
VSTD00528

Tot Ion: 75 Resp: 44225

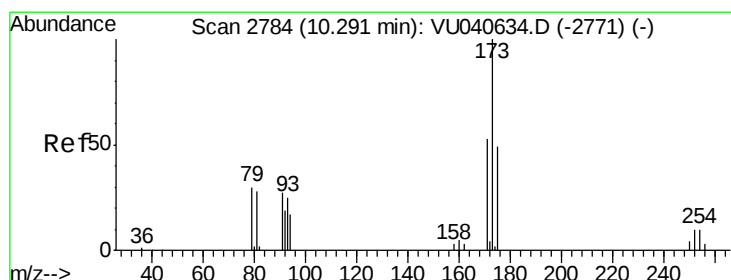
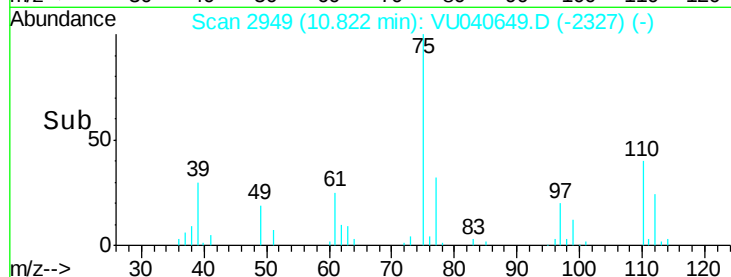
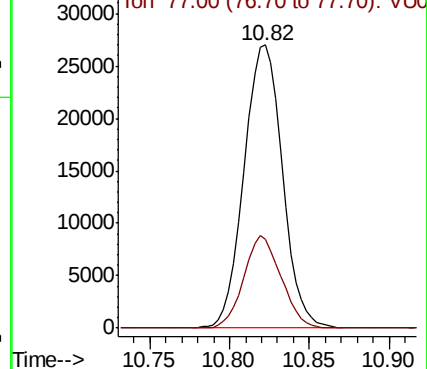
Ion Ratio Lower Upper

75 100

77 31.7 26.4 39.6



Abundance Ion 75.00 (74.70 to 75.70): VU040634.D (-2936) (-)



#61

Bromoform

Concen: 4.966 ug/L

RT: 10.29 min Scan# 2783

Delta R.T. -0.00 min

Lab File: VU040649.D

Acq: 12 Oct 2020 10:22

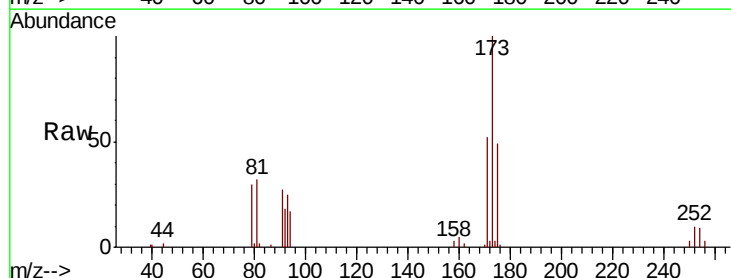
Tgt Ion: 173 Resp: 29941

Ion Ratio Lower Upper

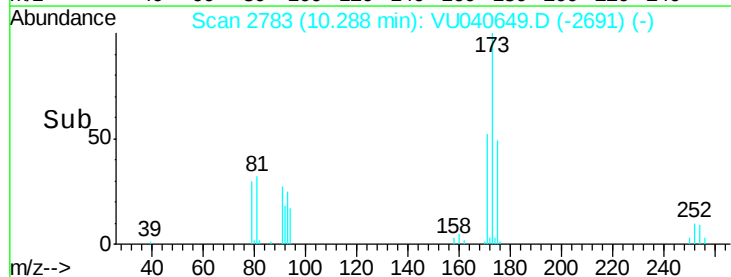
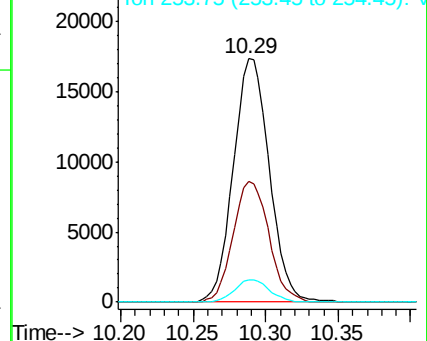
173 100

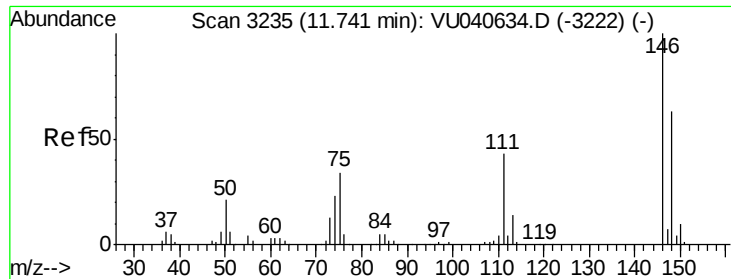
175 49.1 37.4 56.0

254 8.7 7.4 11.2



Abundance Ion 172.90 (172.60 to 173.60): VU040634.D (-2771) (-)





#62

1,3-Dichlorobenzene

Concen: 5.120 ug/L

RT: 11.74 min Scan# 3235

Delta R.T. 0.00 min

Lab File: VU040649.D

Acq: 12 Oct 2020 10:22

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00528

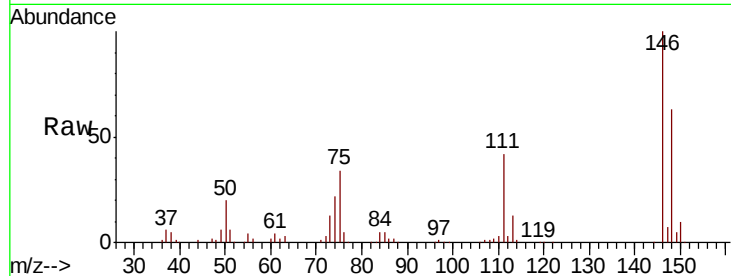
Tot Ion:146 Resp: 117864

Ion Ratio Lower Upper

146 100

111 42.1 28.8 53.6

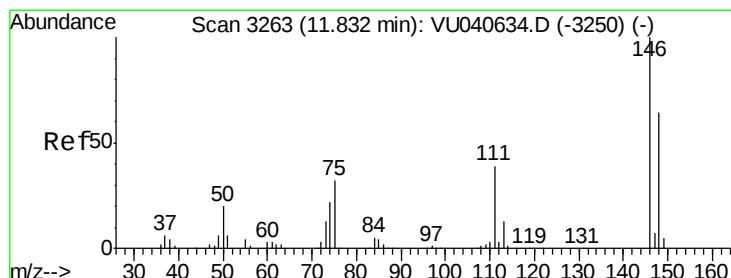
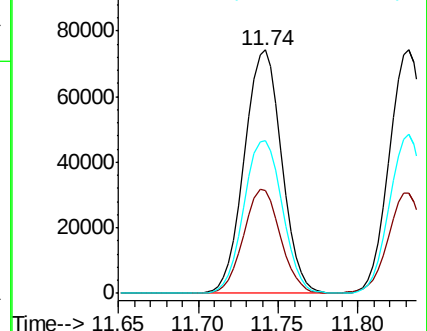
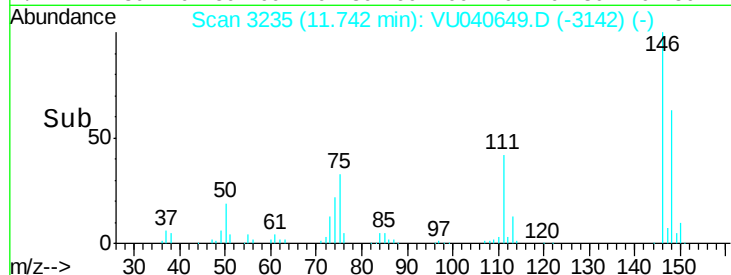
148 62.8 44.4 82.4



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: 5.036 ug/L

RT: 11.83 min Scan# 3263

Delta R.T. 0.00 min

Lab File: VU040649.D

Acq: 12 Oct 2020 10:22

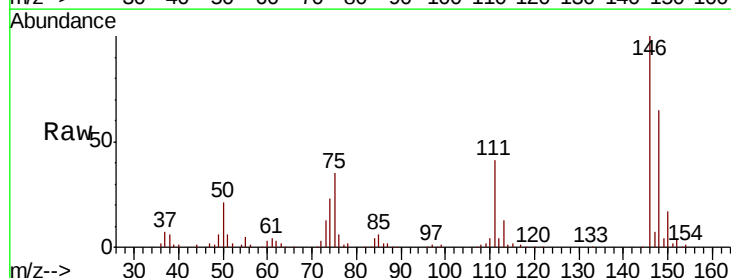
Tgt Ion:146 Resp: 119536

Ion Ratio Lower Upper

146 100

111 41.0 28.4 52.8

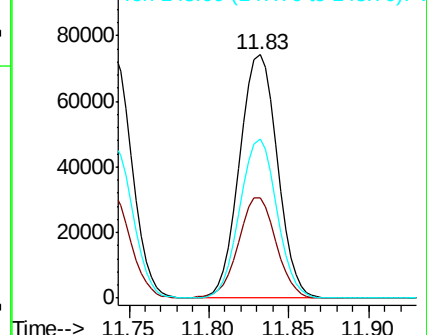
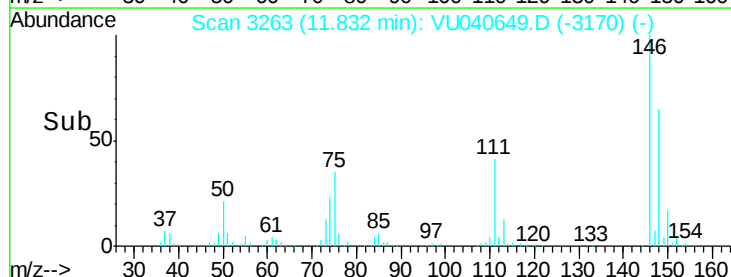
148 65.2 44.0 81.6

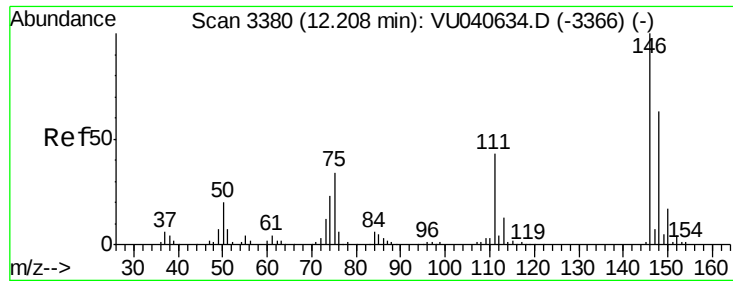


Abundance Ion 145.95 (145.65 to 146.65): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V





#65

1,2-Dichlorobenzene

Concen: 4.994 ug/L

RT: 12.20 min Scan# 3379

Delta R.T. -0.00 min

Lab File: VU040649.D

Acq: 12 Oct 2020 10:22

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00528

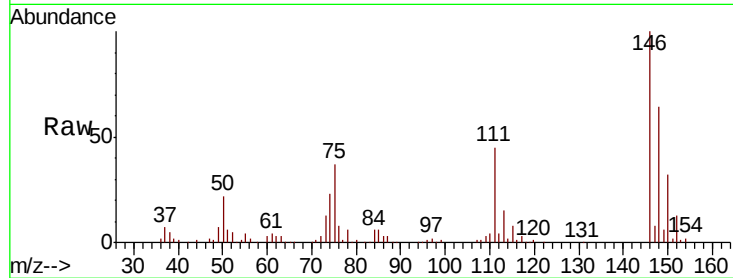
Tot Ion:146 Resp: 112387

Ion Ratio Lower Upper

146 100

111 44.6 34.4 51.6

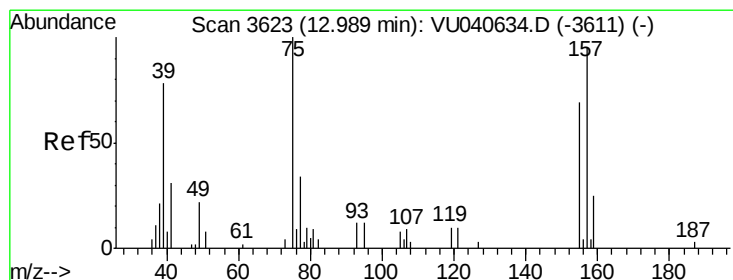
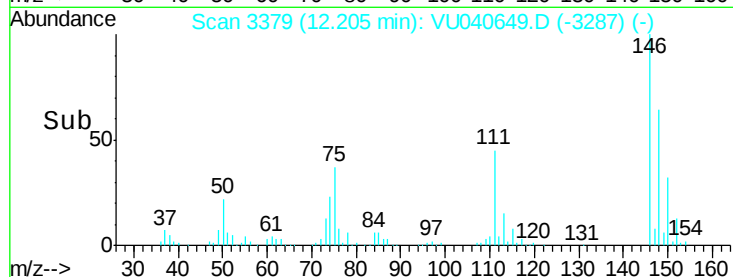
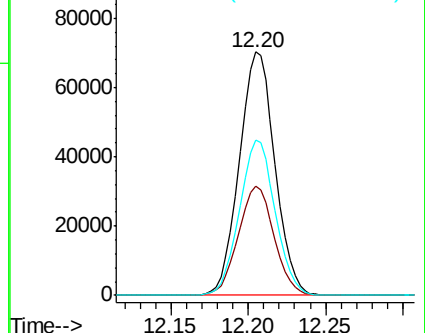
148 63.8 50.0 75.0



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: 5.142 ug/L

RT: 12.99 min Scan# 3623

Delta R.T. 0.00 min

Lab File: VU040649.D

Acq: 12 Oct 2020 10:22

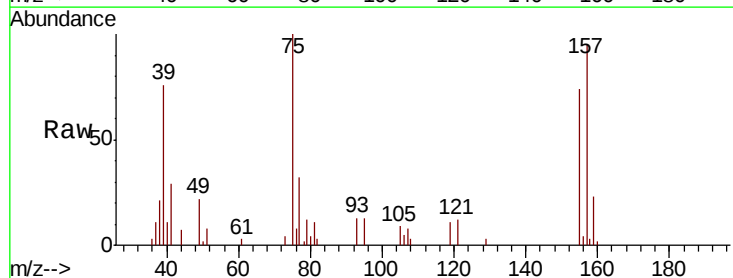
Tgt Ion: 75 Resp: 10133

Ion Ratio Lower Upper

75 100

155 74.0 53.8 80.6

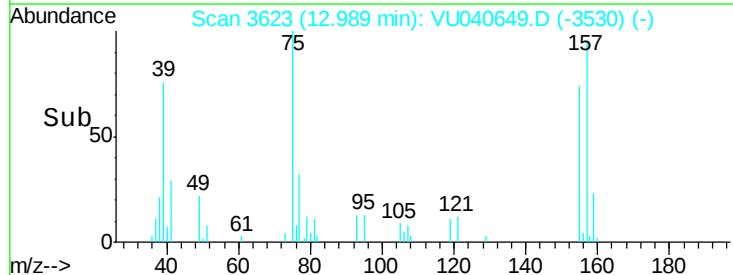
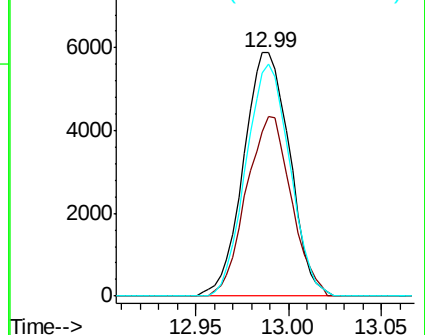
157 95.1 74.6 112.0

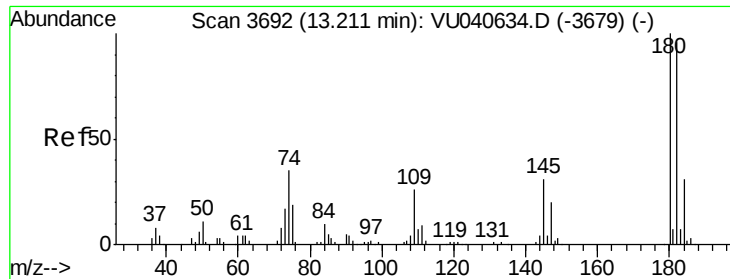


Abundance Ion 75.05 (74.75 to 75.75): VU0

Ion 154.95 (154.65 to 155.65): V

Ion 156.90 (156.60 to 157.60): V

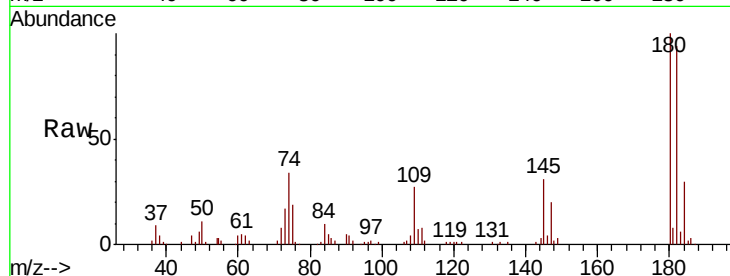




#67  
 1,3,5-Trichlorobenzene  
 Concen: 4.994 ug/L  
 RT: 13.21 min Scan# 3692  
 Delta R.T. 0.00 min  
 Lab File: VU040649.D  
 Acq: 12 Oct 2020 10:22

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00528

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 94.1  | 77.0  | 115.4 |
| 184     | 30.3  | 24.5  | 36.7  |
| 145     | 31.6  | 25.9  | 38.9  |

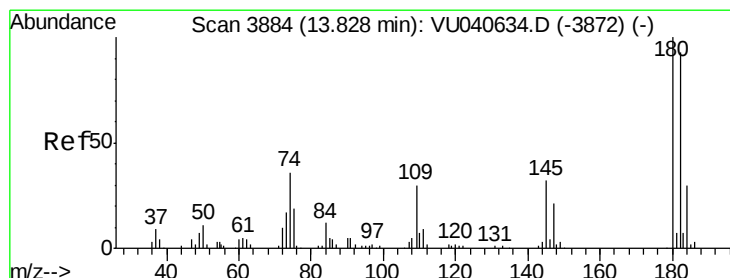
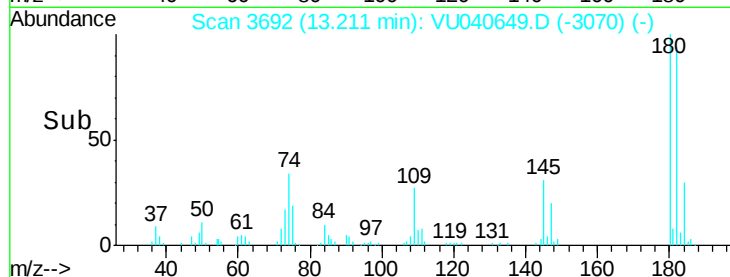
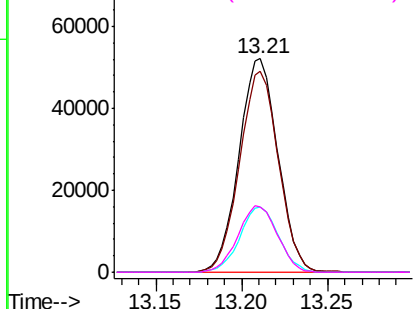


Abundance Ion 180.00 (179.70 to 180.70): V

Ion 182.00 (181.70 to 182.70): V

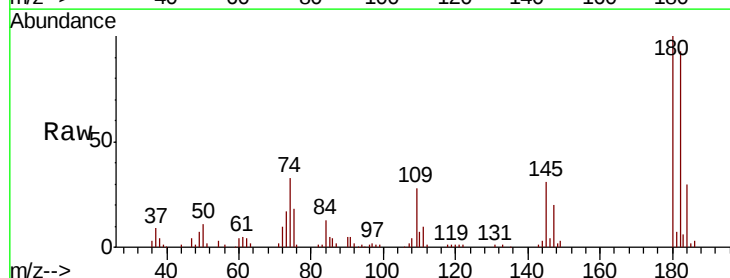
Ion 184.00 (183.70 to 184.70): V

Ion 145.00 (144.70 to 145.70): V



#68  
 1,2,4-trichlorobenzene  
 Concen: 5.090 ug/L  
 RT: 13.83 min Scan# 3885  
 Delta R.T. 0.00 min  
 Lab File: VU040649.D  
 Acq: 12 Oct 2020 10:22

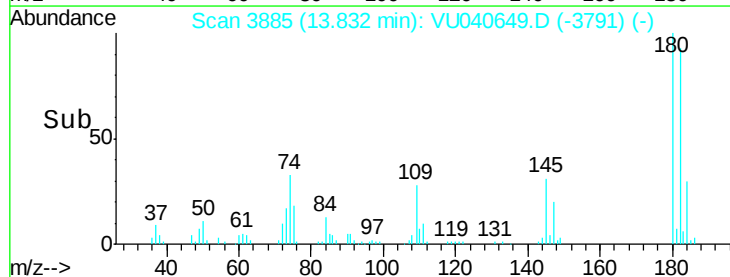
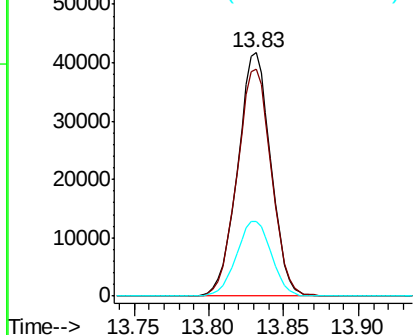
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 96.1  | 78.8  | 118.2 |
| 145     | 32.2  | 26.1  | 39.1  |

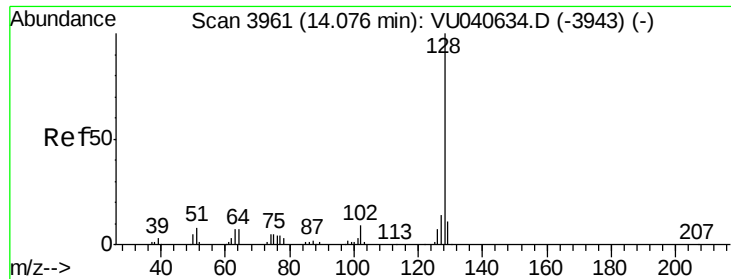


Abundance Ion 179.90 (179.60 to 180.60): V

Ion 182.00 (181.70 to 182.70): V

Ion 144.95 (144.65 to 145.65): V





#69

Naphthalene

Concen: 4.860 ug/L

RT: 14.08 min Scan# 3961

Delta R.T. 0.00 min

Lab File: VU040649.D

Acq: 12 Oct 2020 10:22

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00528

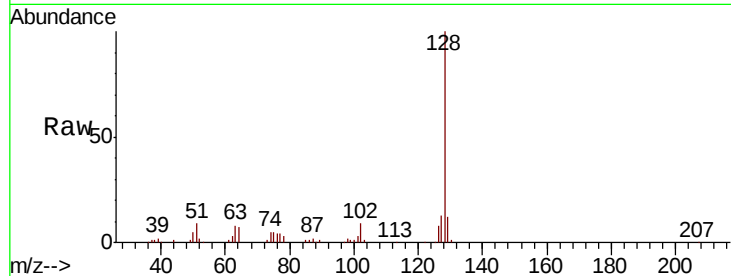
Tot Ion:128 Resp: 100327

Ion Ratio Lower Upper

128 100

129 11.5 9.0 13.4

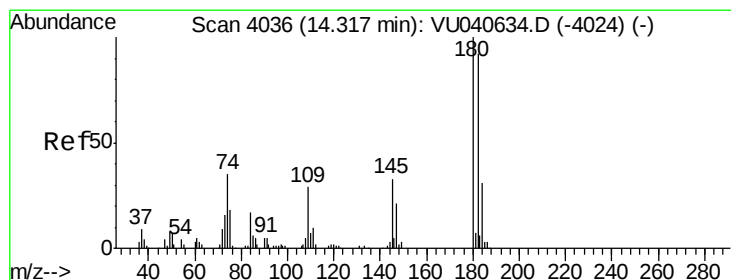
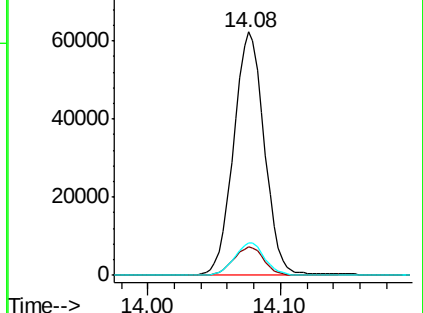
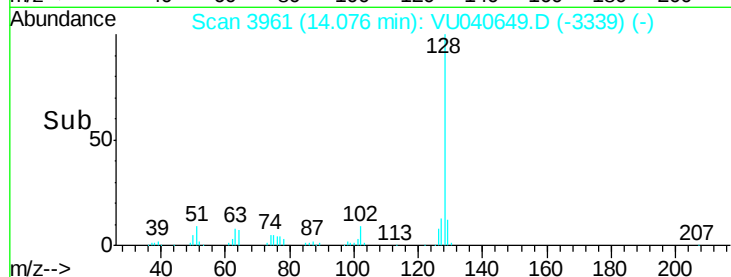
127 13.2 10.2 15.4



Abundance Ion 128.00 (127.70 to 128.70): V

Ion 129.00 (128.70 to 129.70): V

Ion 127.00 (126.70 to 127.70): V



#70

1,2,3-Trichlorobenzene

Concen: 5.150 ug/L

RT: 14.32 min Scan# 4036

Delta R.T. 0.00 min

Lab File: VU040649.D

Acq: 12 Oct 2020 10:22

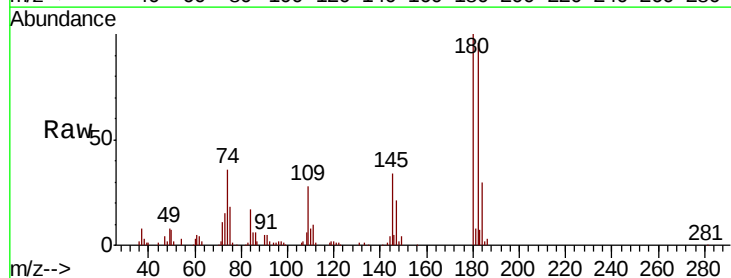
Tgt Ion:180 Resp: 60352

Ion Ratio Lower Upper

180 100

182 94.2 75.8 113.8

145 32.4 27.4 41.2



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

