

Data File : VU036681.D  
Acq On : 06 Feb 2020 12:16  
Operator : JC/MD  
Sample : VSTD05033  
Misc : 5.0mL/MSVOA\_U/WATER  
ALS Vial : 4 Sample Multiplier: 1

Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD050103

Quant Time: Feb 07 04:32:22 2020  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SFAMULM020620W.M  
Quant Title : VOC Analysis  
QLast Update : Fri Feb 07 04:29:27 2020  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 6.29  | 114  | 276395   | 50.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 9.45  | 117  | 263385   | 50.00 | ug/L  | 0.00     |
| 58) 1,4-Dichlorobenzene-d4 | 11.83 | 152  | 120417   | 50.00 | ug/L  | 0.00     |

#### System Monitoring Compounds

|                                |       |     |        |        |      |      |
|--------------------------------|-------|-----|--------|--------|------|------|
| 4) Vinyl Chloride-d3           | 1.61  | 65  | 92669  | 37.42  | ug/L | 0.00 |
| 7) Chloroethane-d5             | 1.93  | 69  | 85471  | 36.55  | ug/L | 0.00 |
| 11) 1,1-Dichloroethene-d2      | 2.59  | 63  | 174899 | 42.22  | ug/L | 0.00 |
| 21) 2-Butanone-d5              | 4.68  | 46  | 138520 | 95.88  | ug/L | 0.00 |
| 24) Chloroform-d               | 5.11  | 84  | 164966 | 41.83  | ug/L | 0.00 |
| 26) 1,2-Dichloroethane-d4      | 5.75  | 65  | 114646 | 46.10  | ug/L | 0.00 |
| 32) Benzene-d6                 | 5.77  | 84  | 348759 | 47.06  | ug/L | 0.00 |
| 36) 1,2-Dichloropropane-d6     | 6.73  | 67  | 116015 | 47.95  | ug/L | 0.00 |
| 41) Toluene-d8                 | 7.93  | 98  | 317575 | 46.24  | ug/L | 0.00 |
| 43) trans-1,3-Dichloropropene- | 8.21  | 79  | 55657  | 48.35  | ug/L | 0.00 |
| 47) 2-Hexanone-d5              | 8.67  | 63  | 136222 | 130.83 | ug/L | 0.00 |
| 56) 1,1,2,2-Tetrachloroethane- | 10.78 | 84  | 171231 | 49.26  | ug/L | 0.00 |
| 66) 1,2-Dichlorobenzene-d4     | 12.21 | 152 | 108122 | 45.29  | ug/L | 0.00 |

#### Target Compounds

|                                |      |     |        |         |      | Qvalue |
|--------------------------------|------|-----|--------|---------|------|--------|
| 2) Dichlorodifluoromethane     | 1.39 | 85  | 95400  | 36.807  | ug/L | 100    |
| 3) Chloromethane               | 1.54 | 50  | 112191 | 40.724  | ug/L | 100    |
| 5) Vinyl chloride              | 1.62 | 62  | 122911 | 41.331  | ug/L | 100    |
| 6) Bromomethane                | 1.87 | 94  | 74389  | 36.049  | ug/L | 100    |
| 8) Chloroethane                | 1.95 | 64  | 77200  | 36.002  | ug/L | 100    |
| 9) Trichlorofluoromethane      | 2.16 | 101 | 145420 | 38.416  | ug/L | 100    |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.61 | 101 | 86590  | 45.549  | ug/L | 100    |
| 12) 1,1-Dichloroethene         | 2.61 | 96  | 86840  | 46.034  | ug/L | 100    |
| 13) Acetone                    | 2.66 | 43  | 163313 | 116.693 | ug/L | 100    |
| 14) Carbon disulfide           | 2.82 | 76  | 253354 | 43.002  | ug/L | 100    |
| 15) Methyl Acetate             | 2.99 | 43  | 126189 | 55.046  | ug/L | 100    |
| 16) Methylene chloride         | 3.08 | 84  | 103599 | 47.805  | ug/L | 100    |
| 17) trans-1,2-Dichloroethene   | 3.39 | 96  | 90225  | 46.005  | ug/L | 100    |
| 18) Methyl tert-butyl Ether    | 3.41 | 73  | 313463 | 52.221  | ug/L | 100    |
| 19) 1,1-Dichloroethane         | 3.92 | 63  | 180374 | 47.494  | ug/L | 100    |
| 20) cis-1,2-Dichloroethene     | 4.71 | 96  | 104271 | 47.985  | ug/L | 100    |
| 22) 2-Butanone                 | 4.75 | 43  | 201435 | 119.222 | ug/L | 100    |
| 23) Bromochloromethane         | 5.02 | 128 | 48311  | 43.966  | ug/L | 100    |
| 25) Chloroform                 | 5.13 | 83  | 180055 | 45.887  | ug/L | 100    |
| 27) 1,2-Dichloroethane         | 5.84 | 62  | 147707 | 48.149  | ug/L | 100    |
| 29) Cyclohexane                | 5.43 | 56  | 168958 | 56.772  | ug/L | 100    |
| 30) 1,1,1-Trichloroethane      | 5.36 | 97  | 141744 | 44.710  | ug/L | 100    |
| 31) Carbon tetrachloride       | 5.57 | 117 | 114664 | 41.382  | ug/L | 100    |
| 33) Benzene                    | 5.82 | 78  | 403352 | 50.158  | ug/L | 100    |
| 34) Trichloroethene            | 6.58 | 95  | 98345  | 46.571  | ug/L | 100    |
| 35) Methylcyclohexane          | 6.80 | 83  | 171611 | 54.415  | ug/L | 100    |
| 37) 1,2-Dichloropropane        | 6.83 | 63  | 108415 | 49.423  | ug/L | 100    |
| 38) Bromodichloromethane       | 7.14 | 83  | 131646 | 46.933  | ug/L | 100    |
| 39) cis-1,3-Dichloropropene    | 7.64 | 75  | 172995 | 52.916  | ug/L | 100    |
| 40) 4-Methyl-2-pentanone       | 7.83 | 43  | 350082 | 121.796 | ug/L | 100    |

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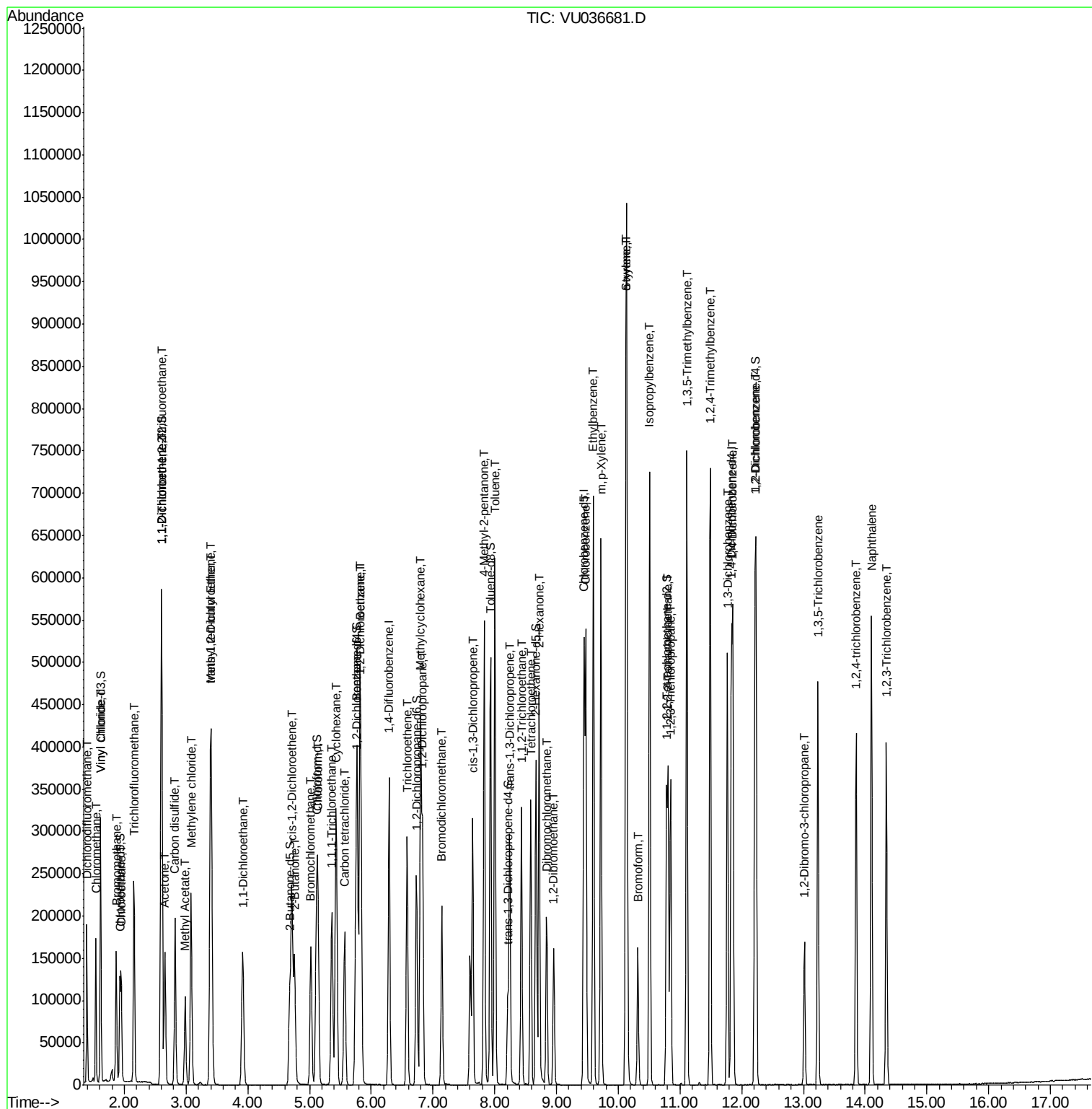
| Internal Standards             | R.T.  | QIon | Response | Conc    | Units | Dev(Min) |
|--------------------------------|-------|------|----------|---------|-------|----------|
| 42) Toluene                    | 8.00  | 91   | 431500   | 50.847  | ug/L  | 100      |
| 44) trans-1,3-Dichloropropene  | 8.24  | 75   | 152967   | 51.560  | ug/L  | 100      |
| 45) 1,1,2-Trichloroethane      | 8.43  | 97   | 99539    | 48.240  | ug/L  | 100      |
| 46) Tetrachloroethene          | 8.58  | 164  | 68341    | 42.403  | ug/L  | 100      |
| 48) 2-Hexanone                 | 8.72  | 43   | 282606   | 127.677 | ug/L  | 100      |
| 49) Dibromochloromethane       | 8.84  | 129  | 98226    | 43.710  | ug/L  | 100      |
| 50) 1,2-Dibromoethane          | 8.95  | 107  | 104348   | 48.481  | ug/L  | 100      |
| 51) Chlorobenzene              | 9.47  | 112  | 256585   | 46.918  | ug/L  | 100      |
| 52) Ethylbenzene               | 9.60  | 91   | 473717   | 52.623  | ug/L  | 100      |
| 53) m,p-Xylene                 | 9.72  | 106  | 177522   | 53.104  | ug/L  | 100      |
| 54) o-xylene                   | 10.13 | 106  | 171975   | 52.245  | ug/L  | 100      |
| 55) Styrene                    | 10.14 | 104  | 292493   | 52.618  | ug/L  | 100      |
| 57) 1,1,2,2-Tetrachloroethane  | 10.81 | 83   | 179222   | 51.171  | ug/L  | 100      |
| 59) Bromoform                  | 10.32 | 173  | 68434    | 45.286  | ug/L  | 100      |
| 60) 1,2,3-Trichloropropane     | 10.85 | 75   | 142388   | 56.518  | ug/L  | 100      |
| 61) Isopropylbenzene           | 10.51 | 105  | 455319   | 58.886  | ug/L  | 100      |
| 62) 1,3,5-Trimethylbenzene     | 11.11 | 105  | 391928   | 62.078  | ug/L  | 100      |
| 63) 1,2,4-Trimethylbenzene     | 11.49 | 105  | 391920   | 62.683  | ug/L  | 100      |
| 64) 1,3-Dichlorobenzene        | 11.77 | 146  | 188632   | 50.442  | ug/L  | 100      |
| 65) 1,4-Dichlorobenzene        | 11.86 | 146  | 189568   | 49.592  | ug/L  | 100      |
| 67) 1,2-Dichlorobenzene        | 12.23 | 146  | 190071   | 49.972  | ug/L  | 100      |
| 68) 1,2-Dibromo-3-chloropropan | 13.01 | 75   | 41352    | 58.328  | ug/L  | 100      |
| 69) 1,3,5-Trichlorobenzene     | 13.23 | 180  | 130673   | 47.010  | ug/L  | 100      |
| 70) 1,2,4-trichlorobenzene     | 13.85 | 180  | 110435   | 48.123  | ug/L  | 100      |
| 71) Naphthalene                | 14.10 | 128  | 410277   | 58.000  | ug/L  | 100      |
| 72) 1,2,3-Trichlorobenzene     | 14.34 | 180  | 109200   | 46.056  | ug/L  | 100      |

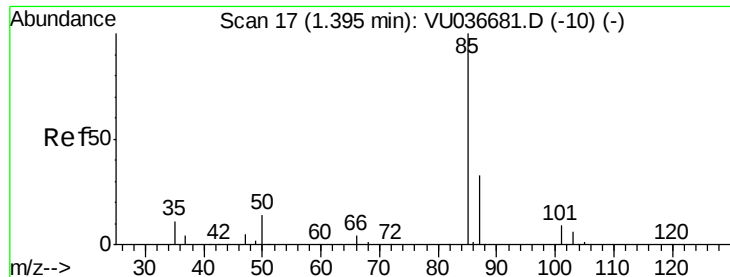
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#2

Dichlorodifluoromethane

Concen: 36.807 ug/L

RT: 1.39 min Scan# 17

Delta R.T. 0.00 min

Lab File: VU036681.D

Acq: 06 Feb 2020 12:16

Instrument :

MSVOA\_U

ClientSampleId :

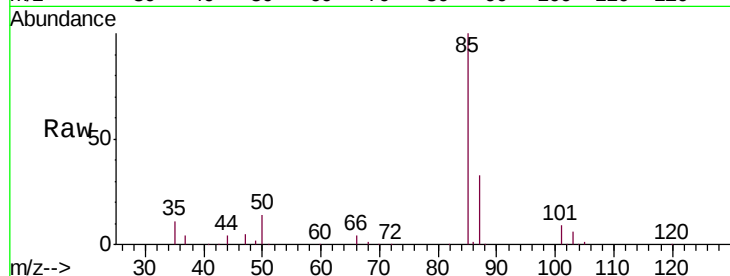
VSTD050103

Tgt Ion: 85 Resp: 95400

Ion Ratio Lower Upper

85 100

87 32.4 25.9 38.9



Abundance Ion 85.00 (84.70 to 85.70): VU036681.D (-10) (-)

Ion 87.00 (86.70 to 87.70): VU036681.D (-10) (-)

1.39

100000

80000

60000

40000

20000

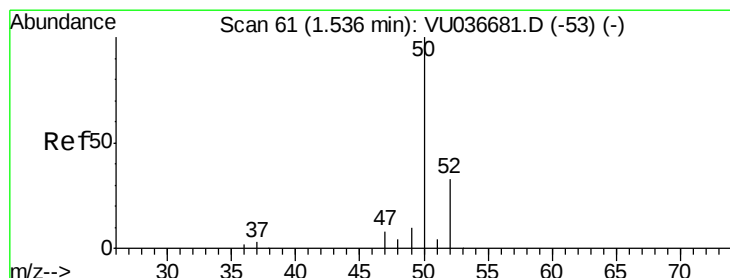
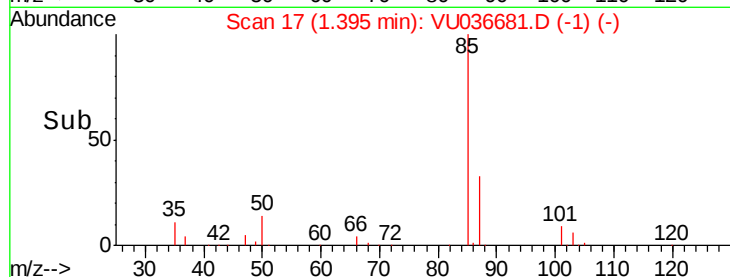
0

1.35

1.40

1.45

Time-->



#3

Chloromethane

Concen: 40.724 ug/L

RT: 1.54 min Scan# 61

Delta R.T. 0.00 min

Lab File: VU036681.D

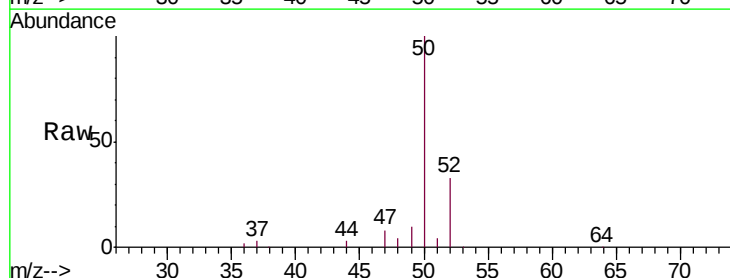
Acq: 06 Feb 2020 12:16

Tgt Ion: 50 Resp: 112191

Ion Ratio Lower Upper

50 100

52 32.7 22.9 42.5



Abundance Ion 50.00 (49.70 to 50.70): VU036681.D (-53) (-)

Ion 52.00 (51.70 to 52.70): VU036681.D (-53) (-)

1.54

120000

100000

80000

60000

40000

20000

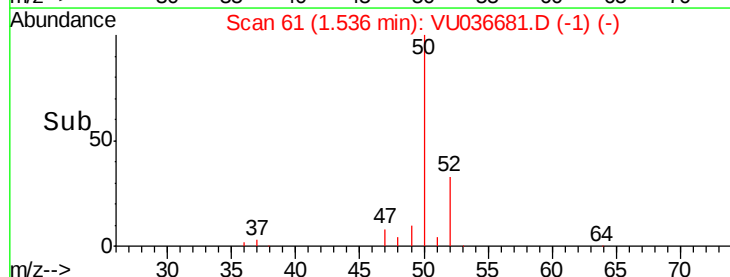
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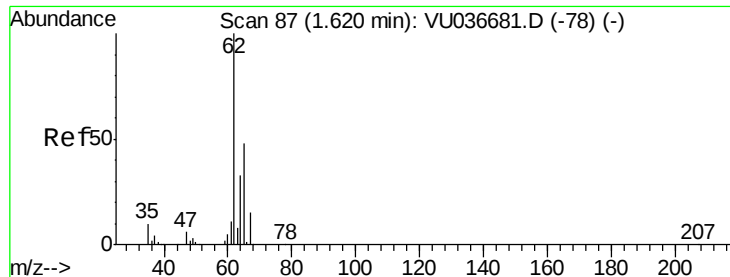
1.50

1.55

1.60

Time-->





#5

Vinyl chloride

Concen: 41.331 ug/L

RT: 1.62 min Scan# 87

Delta R.T. 0.00 min

Lab File: VU036681.D

Acq: 06 Feb 2020 12:16

Instrument :

MSVOA\_U

ClientSampleId :

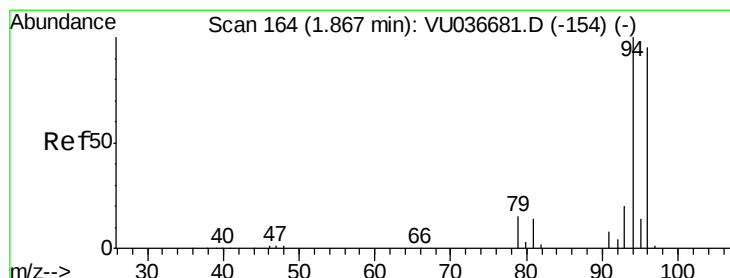
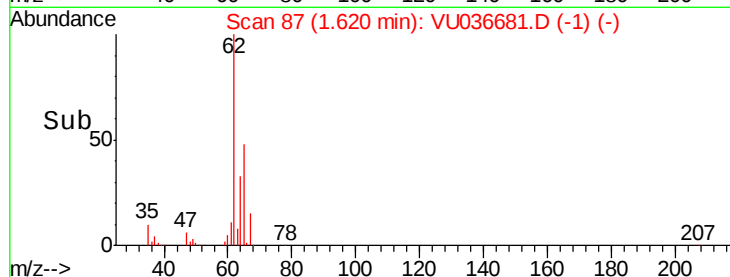
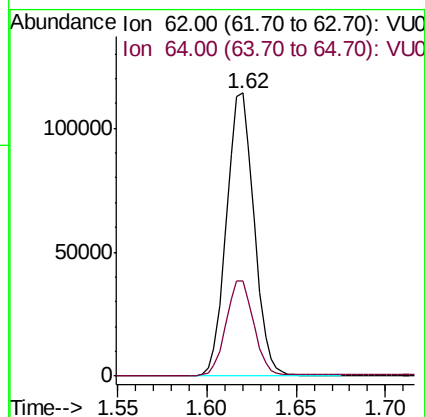
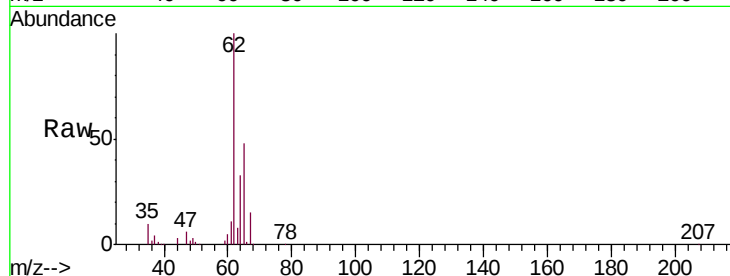
VSTD050103

Tgt Ion: 62 Resp: 122911

Ion Ratio Lower Upper

62 100

64 33.5 23.4 43.6



#6

Bromomethane

Concen: 36.049 ug/L

RT: 1.87 min Scan# 164

Delta R.T. 0.00 min

Lab File: VU036681.D

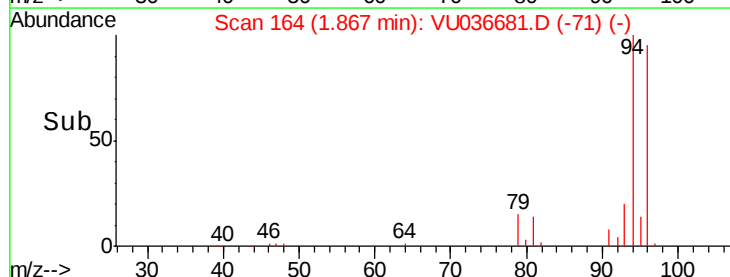
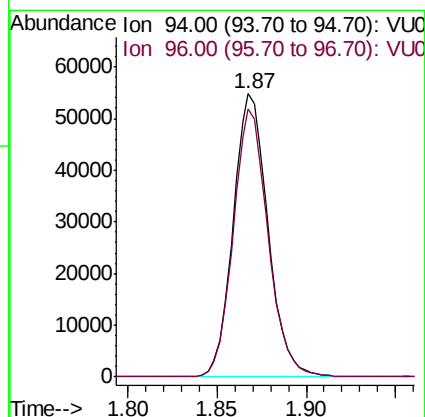
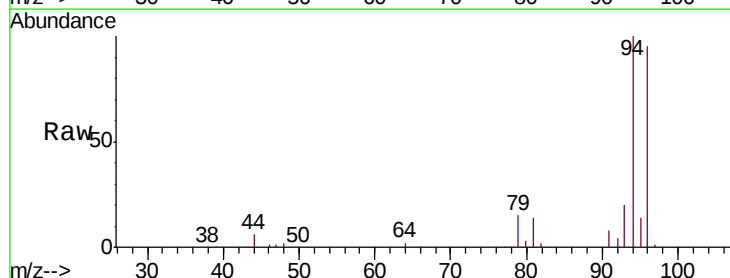
Acq: 06 Feb 2020 12:16

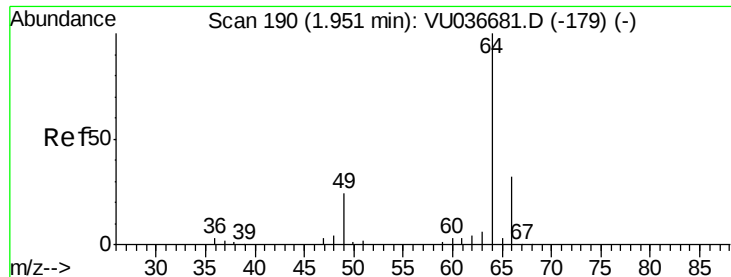
Tgt Ion: 94 Resp: 74389

Ion Ratio Lower Upper

94 100

96 94.7 66.3 123.1

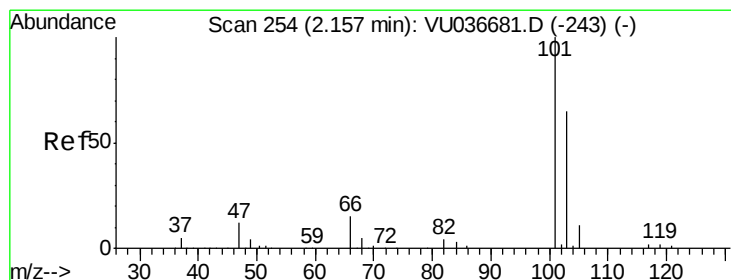
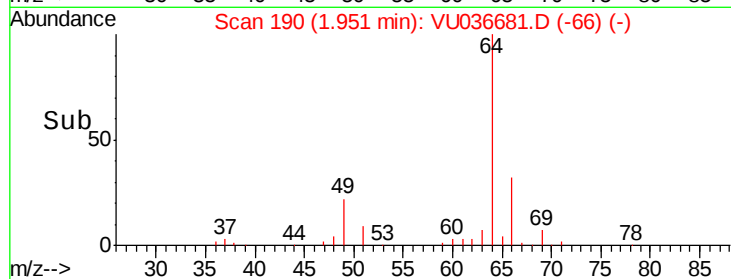
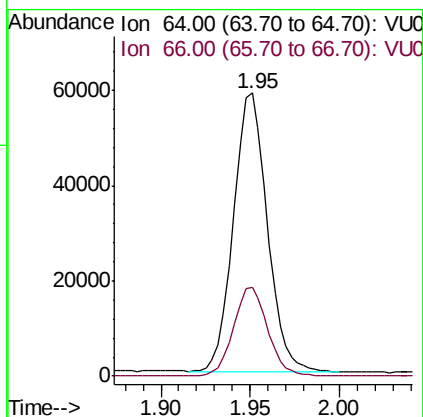
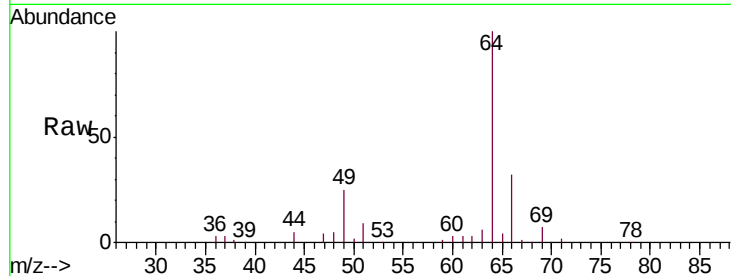




#8  
Chloroethane  
Concen: 36.002 ug/L  
RT: 1.95 min Scan# 190  
Delta R.T. 0.00 min  
Lab File: VU036681.D  
Acq: 06 Feb 2020 12:16

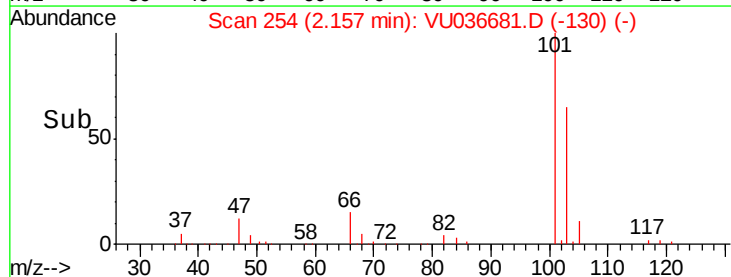
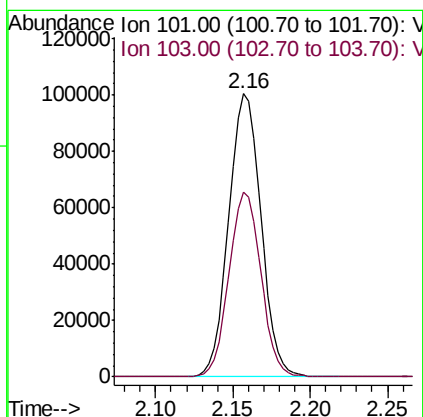
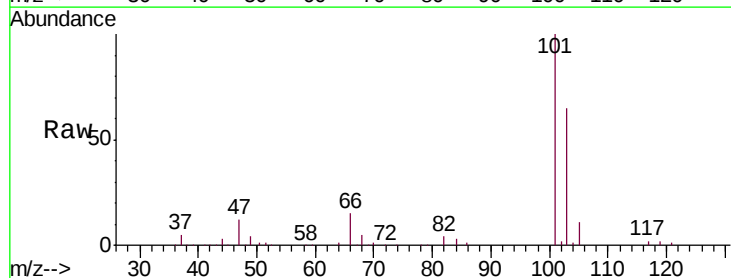
Instrument :  
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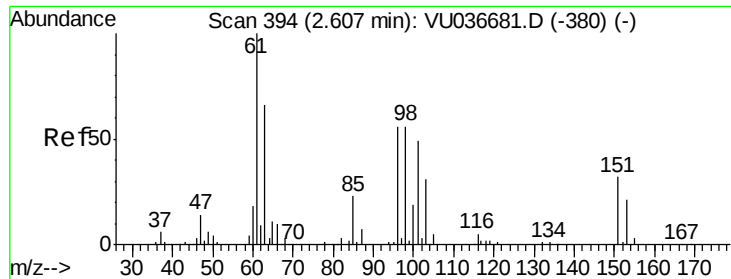
Tgt Ion: 64 Resp: 77200  
Ion Ratio Lower Upper  
64 100  
66 31.6 22.1 41.1



#9  
Trichlorofluoromethane  
Concen: 38.416 ug/L  
RT: 2.16 min Scan# 254  
Delta R.T. 0.00 min  
Lab File: VU036681.D  
Acq: 06 Feb 2020 12:16

Tgt Ion: 101 Resp: 145420  
Ion Ratio Lower Upper  
101 100  
103 64.5 51.6 77.4





#10

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

Concen: 45.549 ug/L

RT: 2.61 min Scan# 394

Delta R.T. 0.00 min

Lab File: VU036681.D

Acq: 06 Feb 2020 12:16

Instrument :

MSVOA\_U

ClientSampleId :

VSTD050103

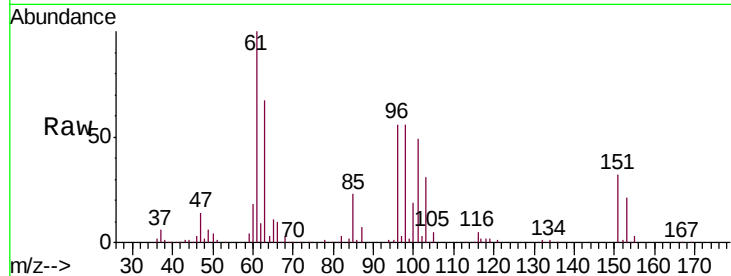
Tgt Ion:101 Resp: 86590

Ion Ratio Lower Upper

101 100

85 45.6 36.5 54.7

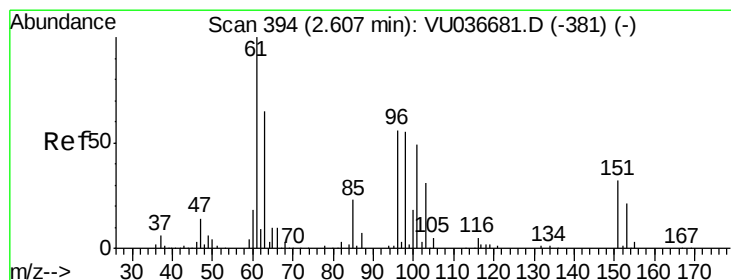
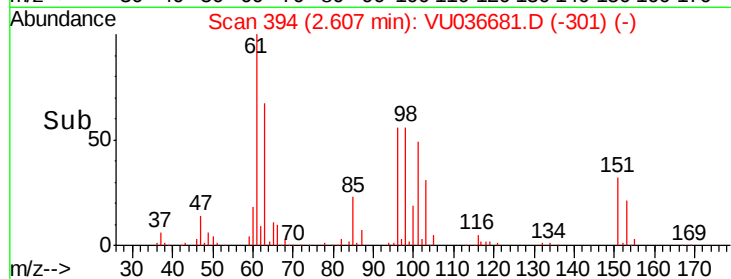
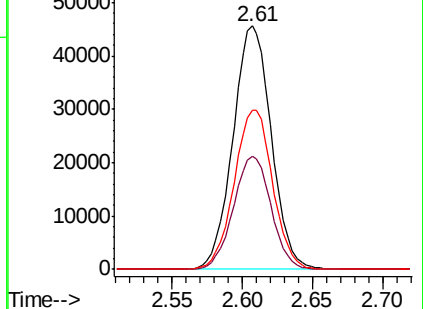
151 65.7 52.6 78.8



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: 46.034 ug/L

RT: 2.61 min Scan# 394

Delta R.T. 0.00 min

Lab File: VU036681.D

Acq: 06 Feb 2020 12:16

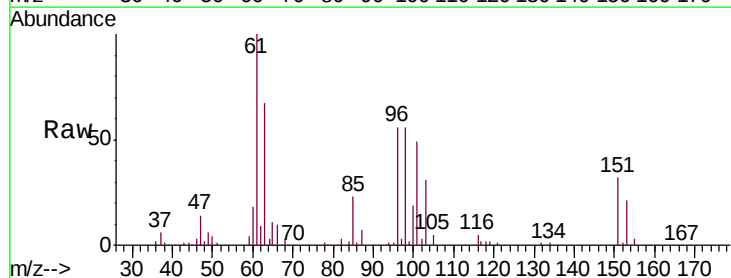
Tgt Ion: 96 Resp: 86840

Ion Ratio Lower Upper

96 100

61 177.7 124.4 231.0

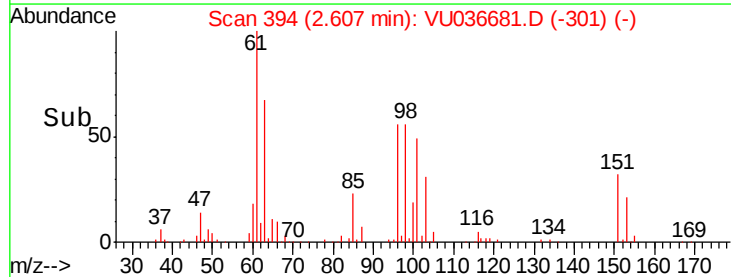
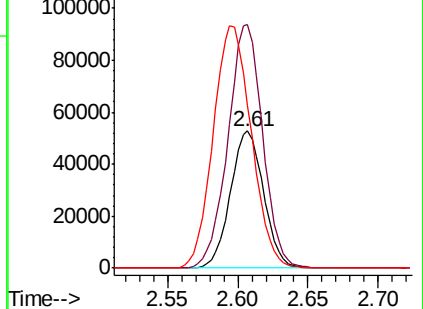
63 119.2 83.4 155.0

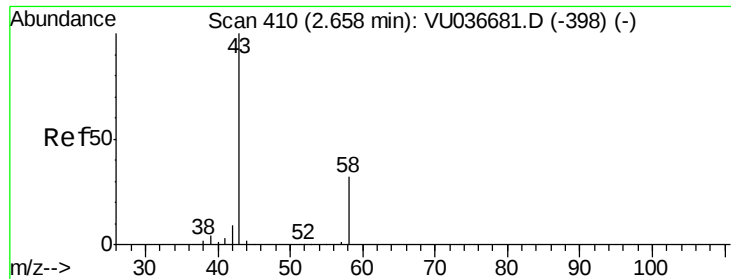


Abundance Ion 96.00 (95.70 to 96.70): VU0

Ion 61.00 (60.70 to 61.70): VU0

Ion 63.00 (62.70 to 63.70): VU0





#13

Acetone

Concen: 116.693 ug/L

RT: 2.66 min Scan# 410

Delta R.T. 0.00 min

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ClientSampleId :

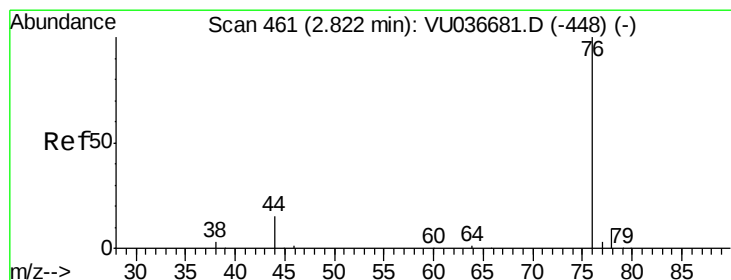
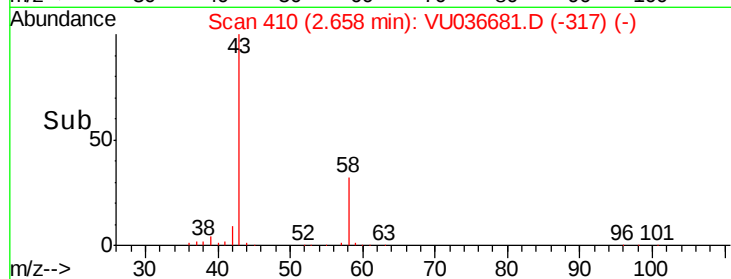
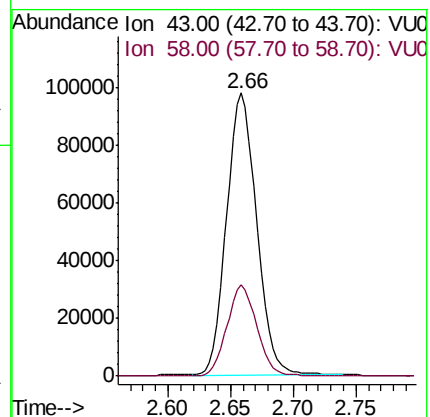
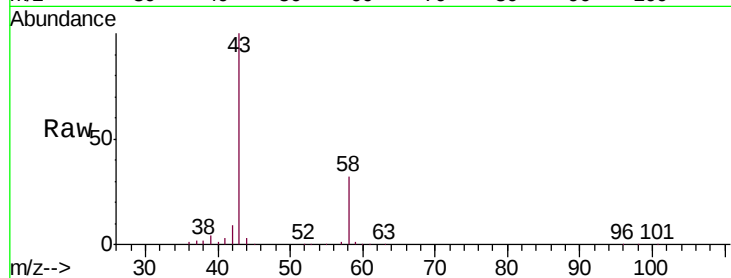
VSTD050103

Tgt Ion: 43 Resp: 163313

Ion Ratio Lower Upper

43 100

58 32.0 0.0 64.0



#14

Carbon disulfide

Concen: 43.002 ug/L

RT: 2.82 min Scan# 461

Delta R.T. 0.00 min

Lab File: VU036681.D

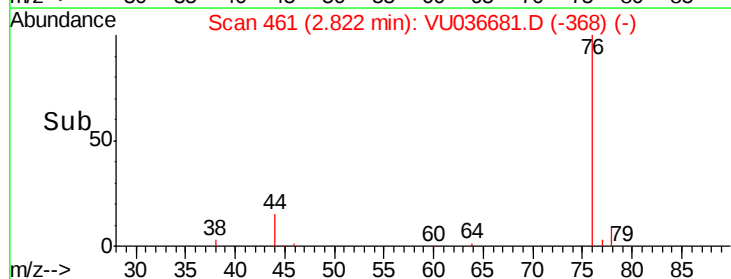
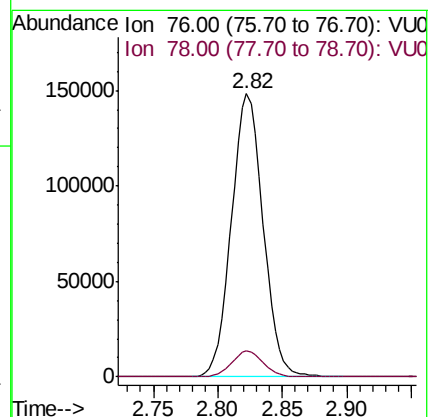
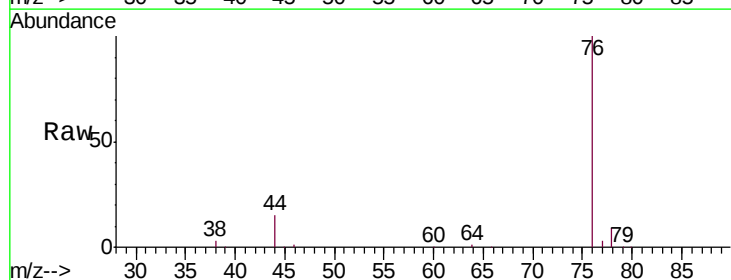
Acq: 06 Feb 2020 12:16

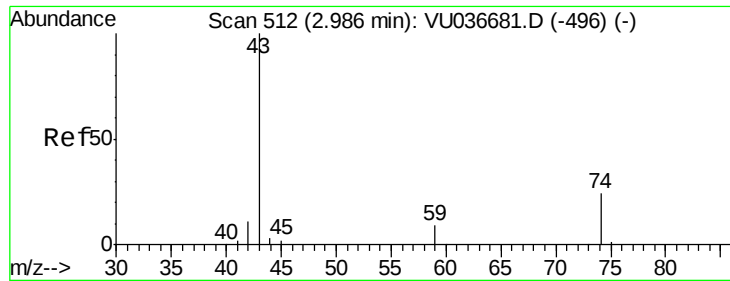
Tgt Ion: 76 Resp: 253354

Ion Ratio Lower Upper

76 100

78 9.1 7.3 10.9

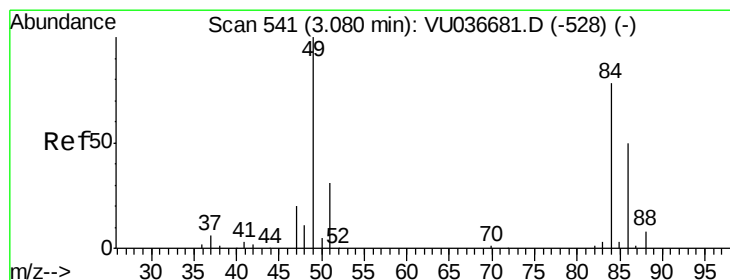
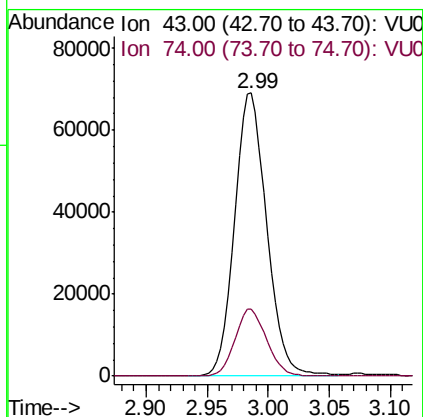
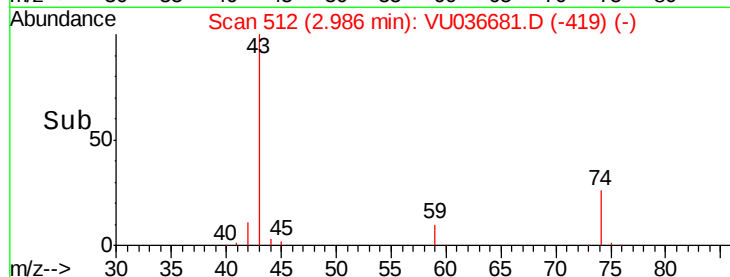
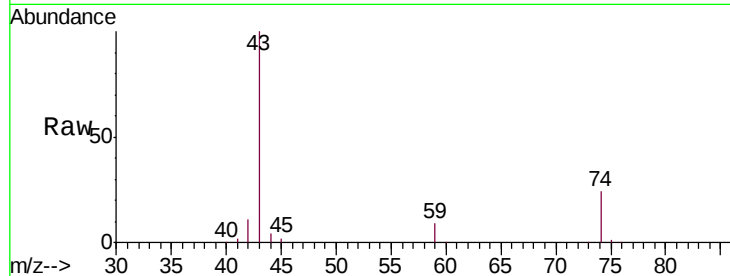




#15  
Methyl Acetate  
Concen: 55.046 ug/L  
RT: 2.99 min Scan# 512  
Delta R.T. 0.00 min  
Lab File: VU036681.D  
Acq: 06 Feb 2020 12:16

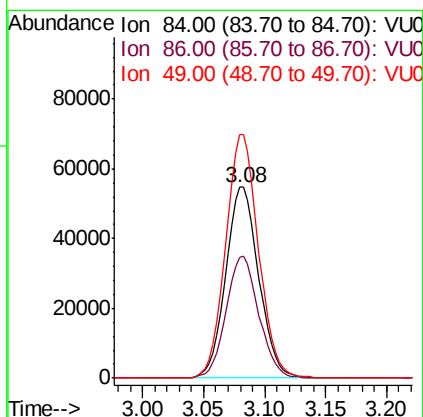
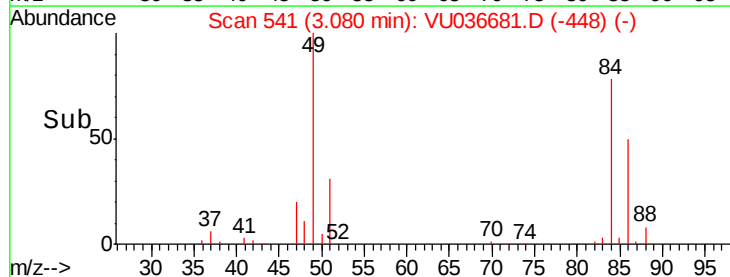
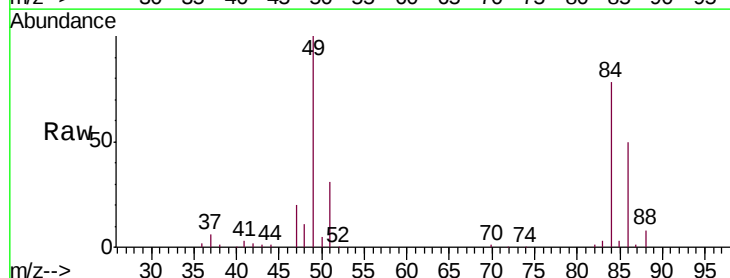
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD050103

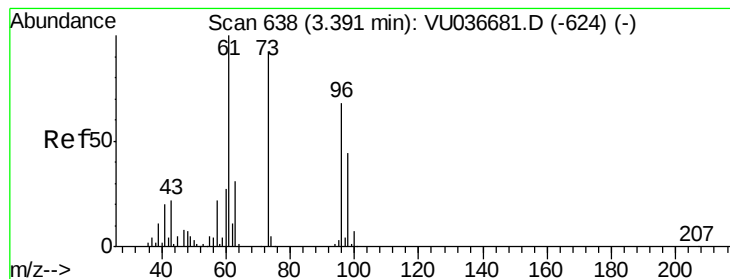
Tgt Ion: 43 Resp: 126189  
Ion Ratio Lower Upper  
43 100  
74 23.4 18.7 28.1



#16  
Methylene chloride  
Concen: 47.805 ug/L  
RT: 3.08 min Scan# 541  
Delta R.T. 0.00 min  
Lab File: VU036681.D  
Acq: 06 Feb 2020 12:16

Tgt Ion: 84 Resp: 103599  
Ion Ratio Lower Upper  
84 100  
86 63.5 44.4 82.5  
49 127.5 89.2 165.8





#17

trans-1,2-Dichloroethene

Concen: 46.005 ug/L

RT: 3.39 min Scan# 638

Delta R.T. 0.00 min

Lab File: VU036681.D

Acq: 06 Feb 2020 12:16

Instrument :

MSVOA\_U

ClientSampleId :

VSTD050103

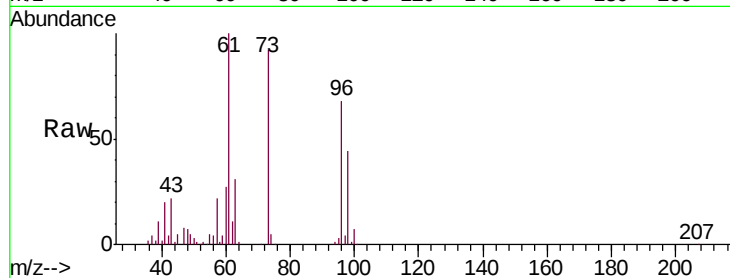
Tgt Ion: 96 Resp: 90225

Ion Ratio Lower Upper

96 100

61 147.7 103.4 192.0

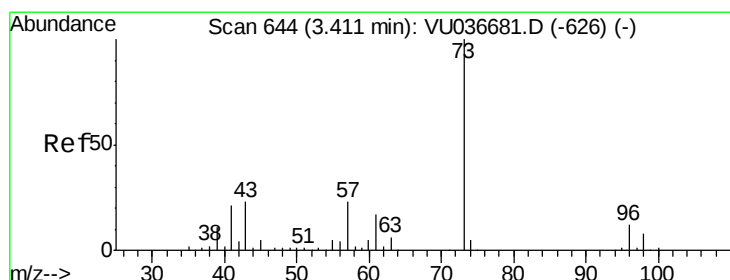
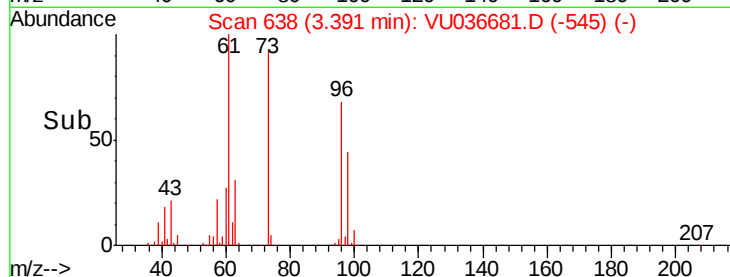
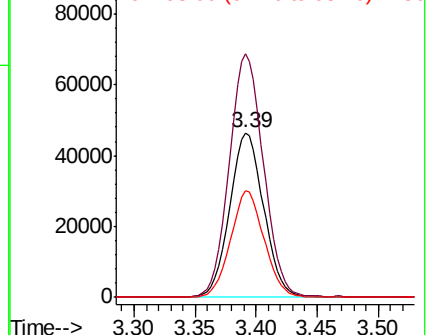
98 64.8 45.4 84.2



Abundance Ion 96.00 (95.70 to 96.70): VU036681.D (-624) (-)

Ion 61.00 (60.70 to 61.70): VU036681.D (-624) (-)

Ion 98.00 (97.70 to 98.70): VU036681.D (-624) (-)



#18

Methyl tert-butyl Ether

Concen: 52.221 ug/L

RT: 3.41 min Scan# 644

Delta R.T. 0.00 min

Lab File: VU036681.D

Acq: 06 Feb 2020 12:16

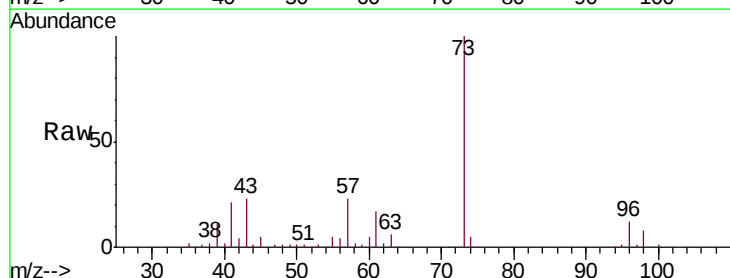
Tgt Ion: 73 Resp: 313463

Ion Ratio Lower Upper

73 100

43 23.3 18.6 28.0

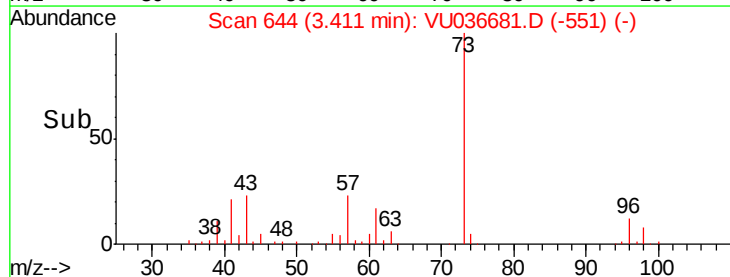
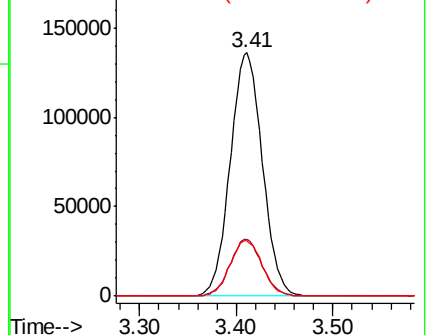
57 22.9 18.3 27.5

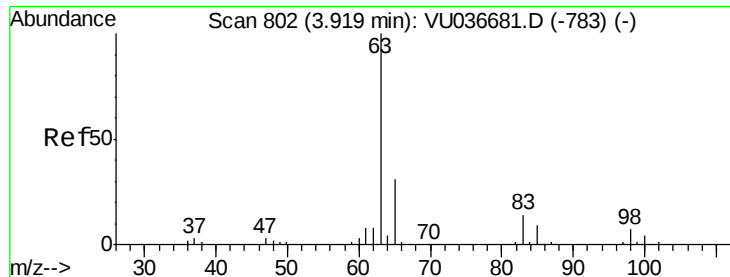


Abundance Ion 73.00 (72.70 to 73.70): VU036681.D (-626) (-)

Ion 43.00 (42.70 to 43.70): VU036681.D (-626) (-)

Ion 57.00 (56.70 to 57.70): VU036681.D (-626) (-)

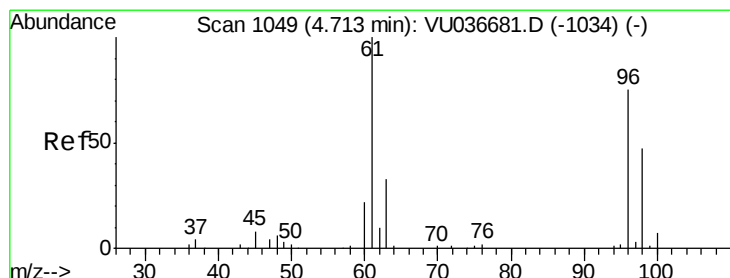
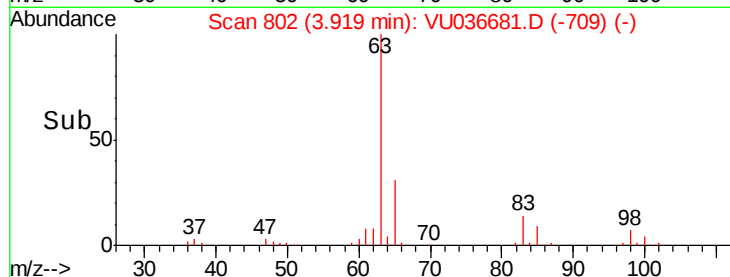
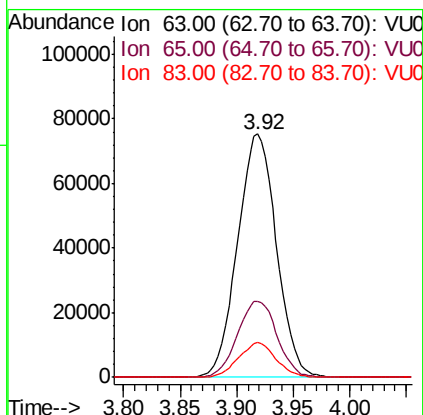
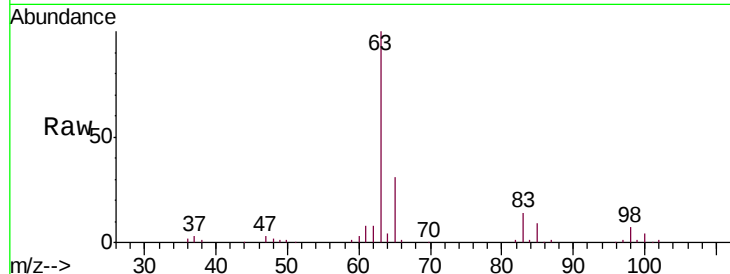




#19  
 1,1-Dichloroethane  
 Concen: 47.494 ug/L  
 RT: 3.92 min Scan# 802  
 Delta R.T. 0.00 min  
 Lab File: VU036681.D  
 Acq: 06 Feb 2020 12:16

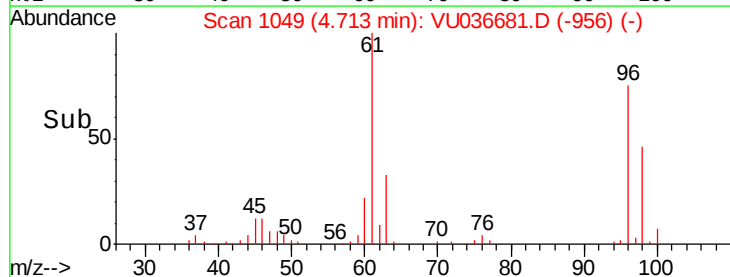
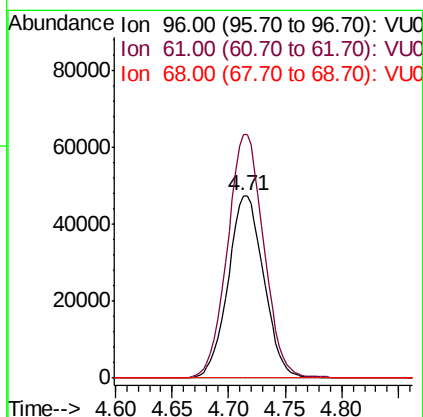
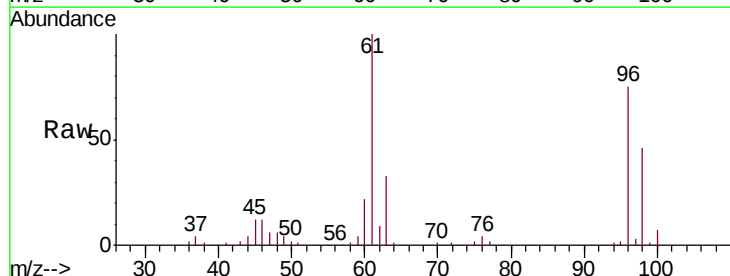
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD050103

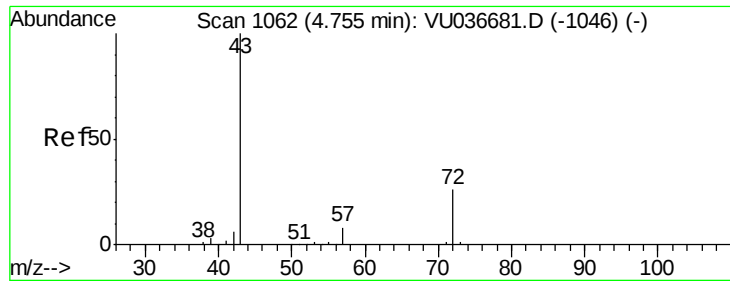
Tgt Ion: 63 Resp: 180374  
 Ion Ratio Lower Upper  
 63 100  
 65 31.4 22.0 40.8  
 83 14.4 10.1 18.7



#20  
 cis-1,2-Dichloroethene  
 Concen: 47.985 ug/L  
 RT: 4.71 min Scan# 1049  
 Delta R.T. 0.00 min  
 Lab File: VU036681.D  
 Acq: 06 Feb 2020 12:16

Tgt Ion: 96 Resp: 104271  
 Ion Ratio Lower Upper  
 96 100  
 61 133.3 93.3 173.3  
 68 0.0 0.0 0.0





#22

2-Butanone

Concen: 119.222 ug/L

RT: 4.75 min Scan# 1062

Delta R.T. 0.00 min

Lab File: VU036681.D

Acq: 06 Feb 2020 12:16

Instrument :

MSVOA\_U

ClientSampleId :

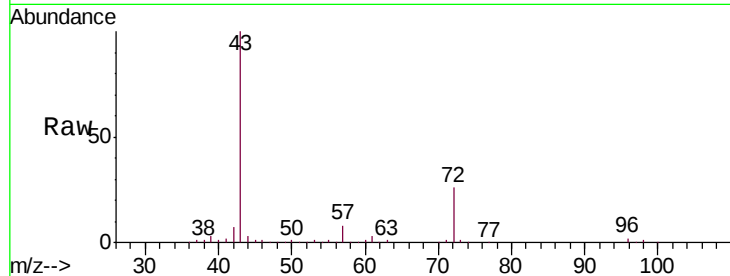
VSTD050103

Tgt Ion: 43 Resp: 201435

Ion Ratio Lower Upper

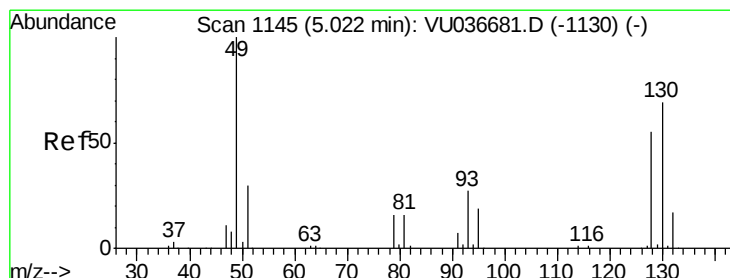
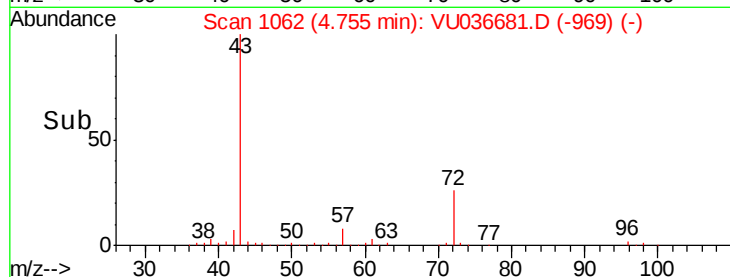
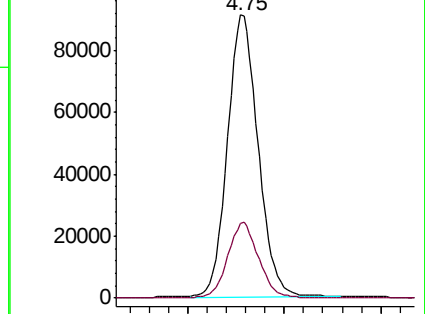
43 100

72 27.1 13.6 40.7



Abundance Ion 43.00 (42.70 to 43.70): VU036681.D (-1046) (-)

Ion 72.00 (71.70 to 72.70): VU036681.D (-1046) (-)



#23

Bromochloromethane

Concen: 43.966 ug/L

RT: 5.02 min Scan# 1145

Delta R.T. 0.00 min

Lab File: VU036681.D

Acq: 06 Feb 2020 12:16

Tgt Ion: 128 Resp: 48311

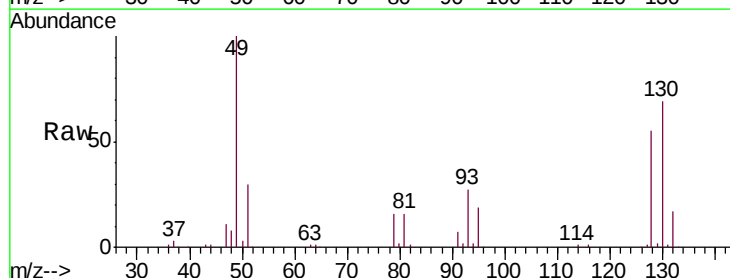
Ion Ratio Lower Upper

128 100

49 181.9 127.3 236.5

130 126.4 88.5 164.3

51 55.5 44.4 66.6

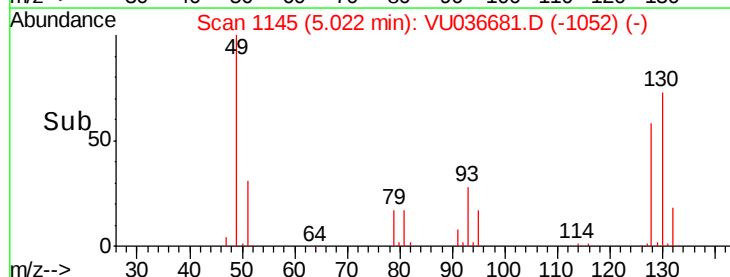
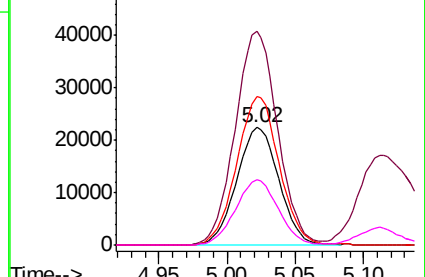


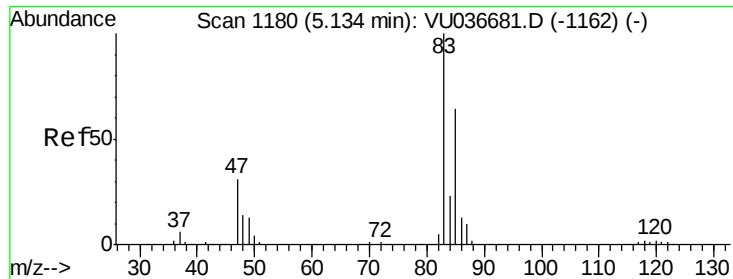
Abundance Ion 128.00 (127.70 to 128.70): VU036681.D (-1130) (-)

Ion 49.00 (48.70 to 49.70): VU036681.D (-1130) (-)

Ion 130.00 (129.70 to 130.70): VU036681.D (-1130) (-)

Ion 51.00 (50.70 to 51.70): VU036681.D (-1130) (-)

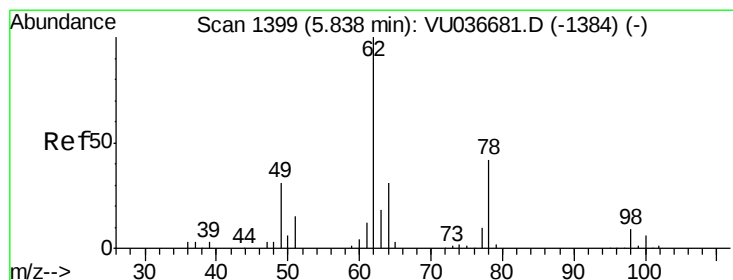
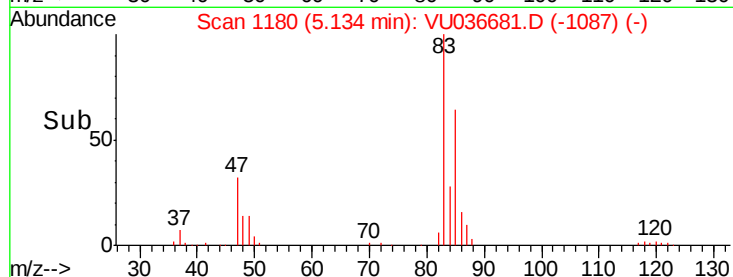
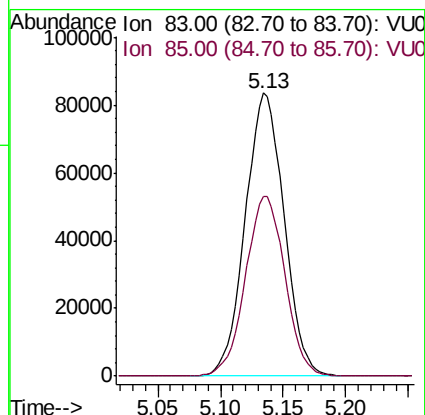
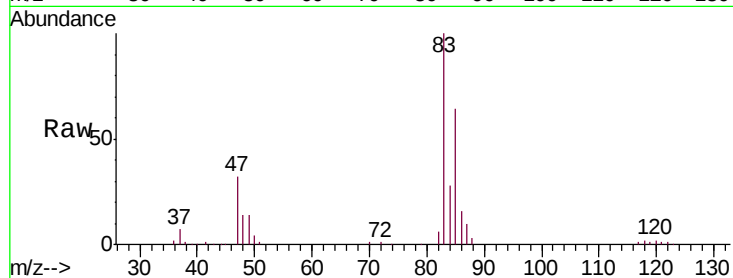




#25  
Chloroform  
Concen: 45.887 ug/L  
RT: 5.13 min Scan# 1180  
Delta R.T. 0.00 min  
Lab File: VU036681.D  
Acq: 06 Feb 2020 12:16

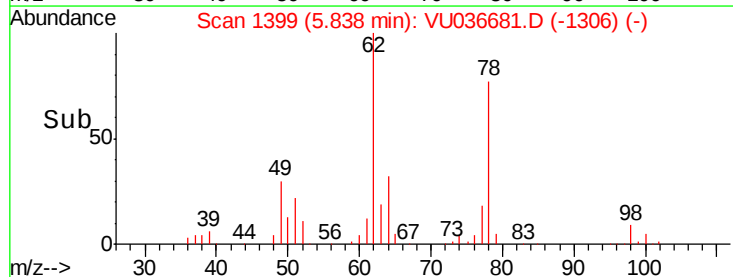
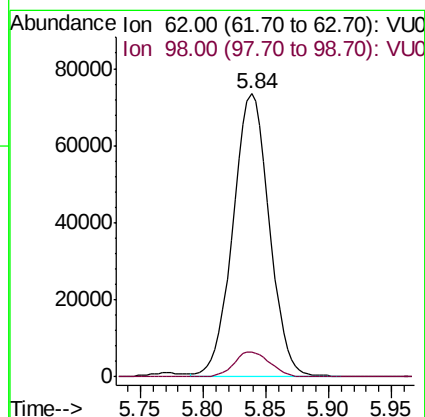
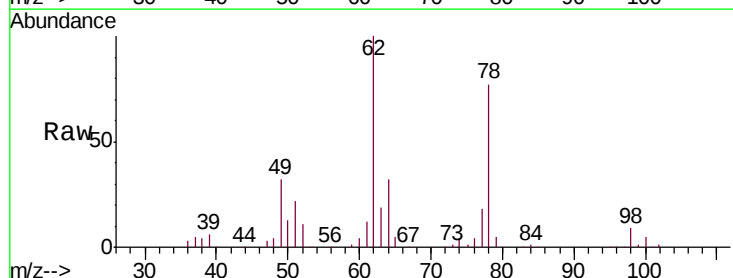
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD050103

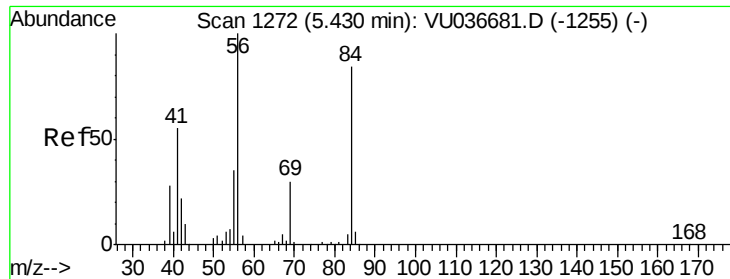
Tgt Ion: 83 Resp: 180055  
Ion Ratio Lower Upper  
83 100  
85 63.7 44.6 82.8



#27  
1,2-Dichloroethane  
Concen: 48.149 ug/L  
RT: 5.84 min Scan# 1399  
Delta R.T. 0.00 min  
Lab File: VU036681.D  
Acq: 06 Feb 2020 12:16

Tgt Ion: 62 Resp: 147707  
Ion Ratio Lower Upper  
62 100  
98 8.7 7.0 10.4

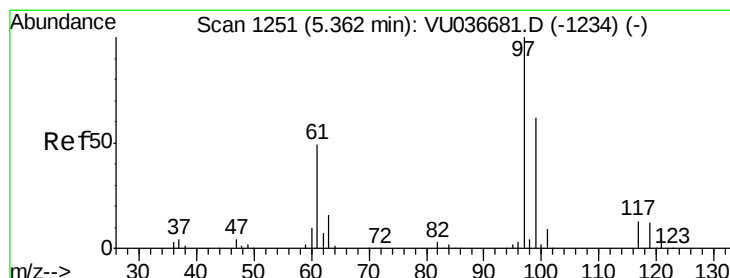
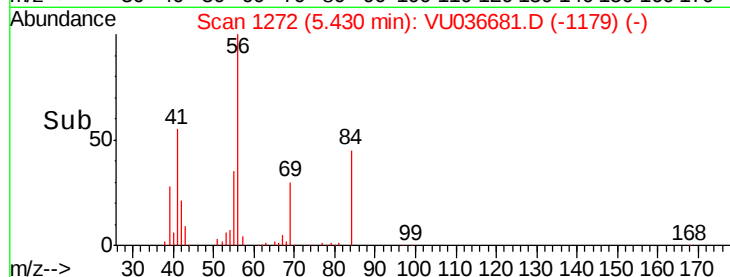
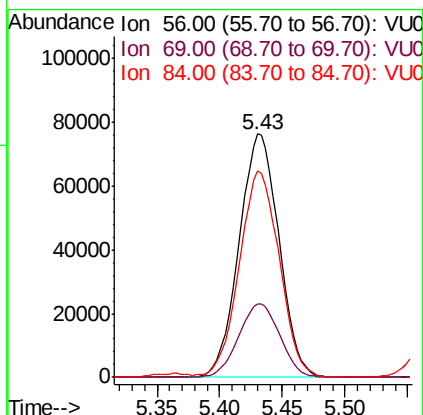
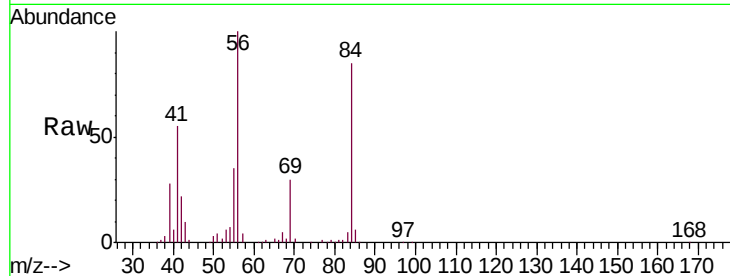




#29  
Cyclohexane  
Concen: 56.772 ug/L  
RT: 5.43 min Scan# 1272  
Delta R.T. 0.00 min  
Lab File: VU036681.D  
Acq: 06 Feb 2020 12:16

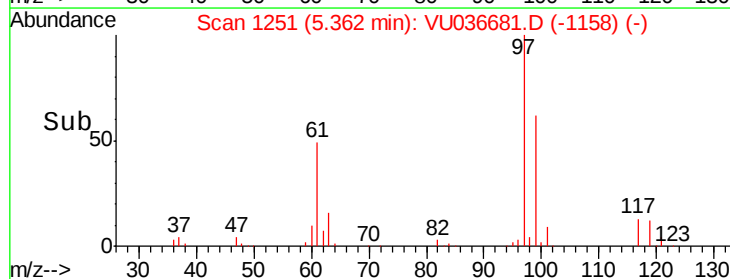
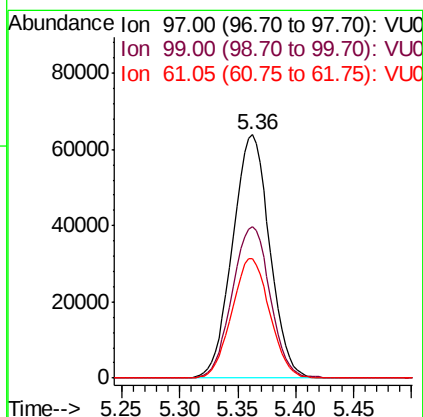
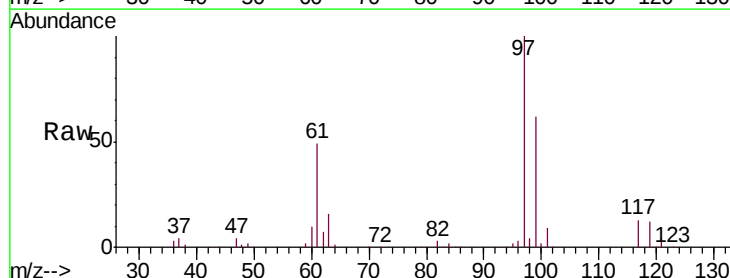
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD050103

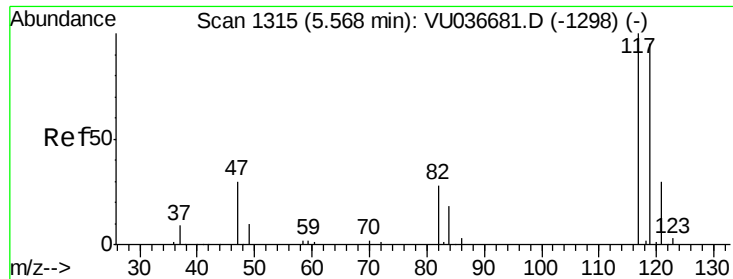
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 56      | 100   |       |       |
| 69      | 31.2  | 25.0  | 37.4  |
| 84      | 85.2  | 68.2  | 102.2 |



#30  
1,1,1-Trichloroethane  
Concen: 44.710 ug/L  
RT: 5.36 min Scan# 1251  
Delta R.T. 0.00 min  
Lab File: VU036681.D  
Acq: 06 Feb 2020 12:16

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 97      | 100   |       |       |
| 99      | 63.6  | 50.9  | 76.3  |
| 61      | 50.2  | 40.2  | 60.2  |





#31

Carbon tetrachloride

Concen: 41.382 ug/L

RT: 5.57 min Scan# 1315

Delta R.T. 0.00 min

Lab File: VU036681.D

Acq: 06 Feb 2020 12:16

Instrument :

MSVOA\_U

ClientSampleId :

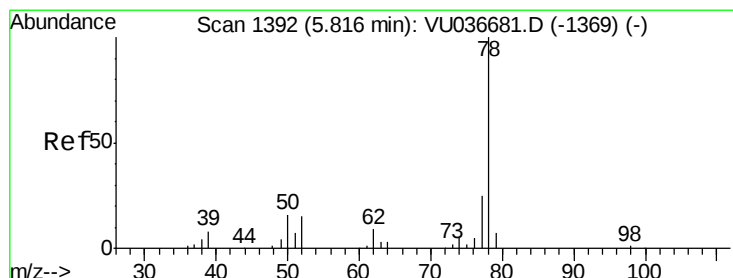
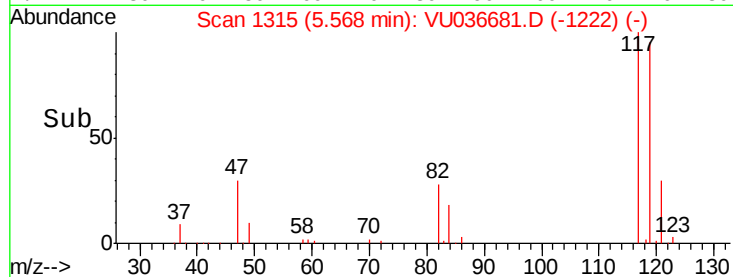
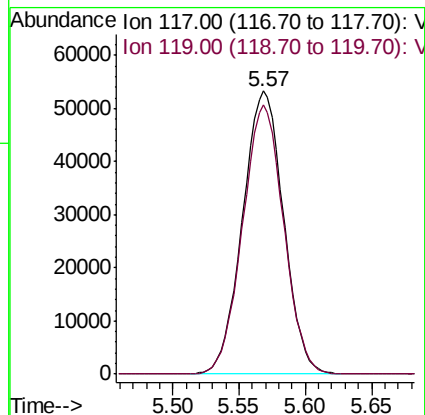
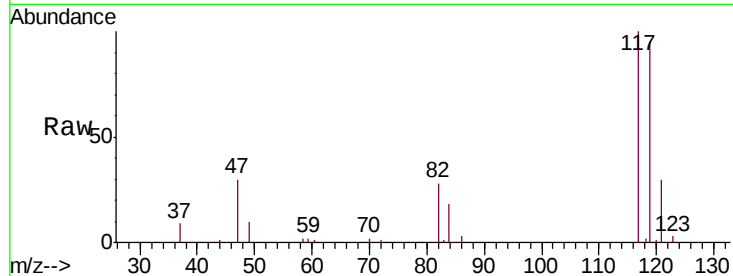
VSTD050103

Tgt Ion:117 Resp: 114664

Ion Ratio Lower Upper

117 100

119 95.3 76.2 114.4



#33

Benzene

Concen: 50.158 ug/L

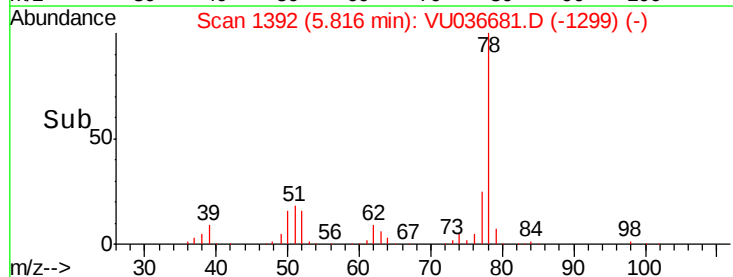
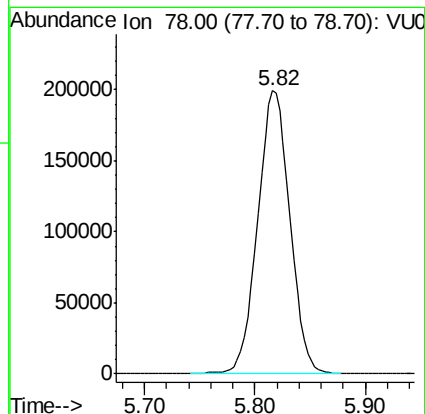
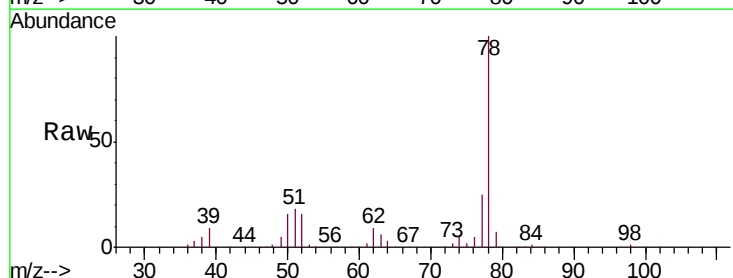
RT: 5.82 min Scan# 1392

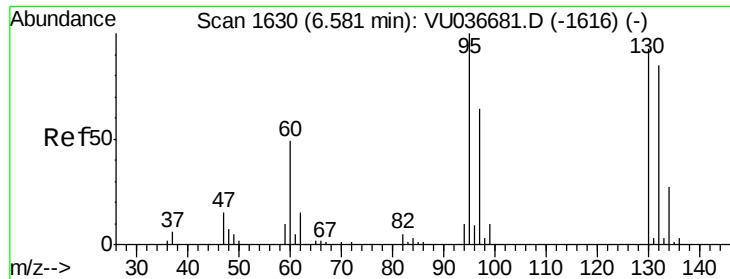
Delta R.T. 0.00 min

Lab File: VU036681.D

Acq: 06 Feb 2020 12:16

Tgt Ion: 78 Resp: 403352





#34

Trichloroethene

Concen: 46.571 ug/L

RT: 6.58 min Scan# 1630

Delta R.T. 0.00 min

Lab File: VU036681.D

Acq: 06 Feb 2020 12:16

Instrument :

MSVOA\_U

ClientSampleId :

VSTD050103

Tgt Ion: 95 Resp: 98345

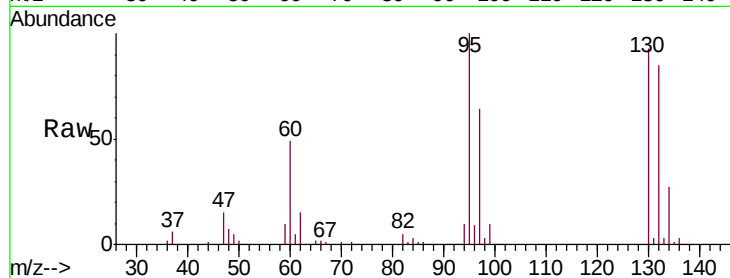
Ion Ratio Lower Upper

95 100

97 63.6 44.5 82.7

132 85.2 59.6 110.8

130 92.9 65.0 120.8

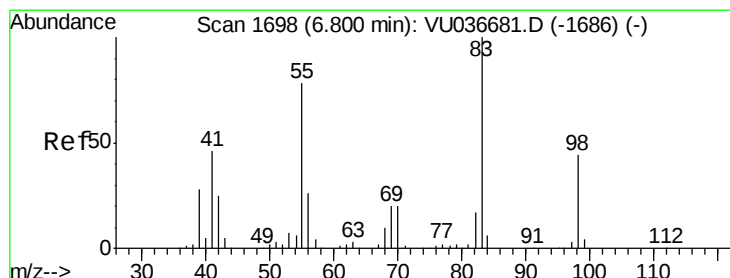
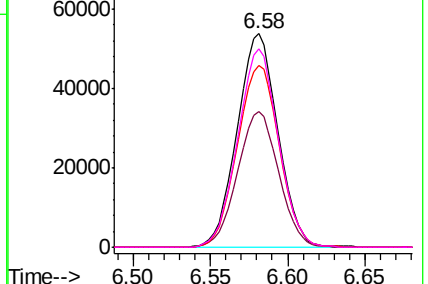
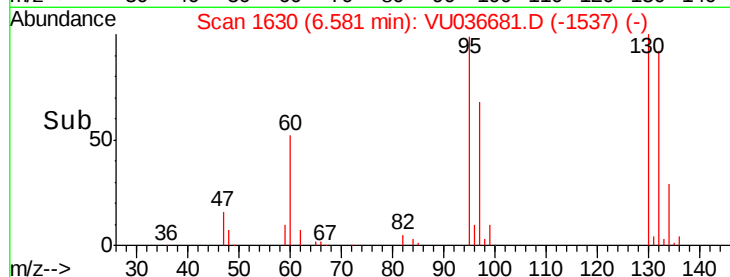


Abundance Ion 95.00 (94.70 to 95.70): VU0

Ion 97.00 (96.70 to 97.70): VU0

Ion 132.00 (131.70 to 132.70): V

Ion 130.00 (129.70 to 130.70): V



#35

Methylcyclohexane

Concen: 54.415 ug/L

RT: 6.80 min Scan# 1698

Delta R.T. 0.00 min

Lab File: VU036681.D

Acq: 06 Feb 2020 12:16

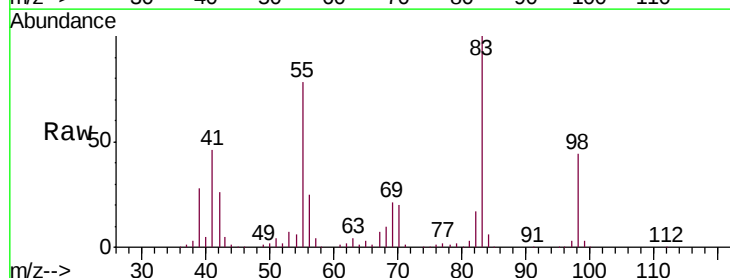
Tgt Ion: 83 Resp: 171611

Ion Ratio Lower Upper

83 100

55 76.5 61.2 91.8

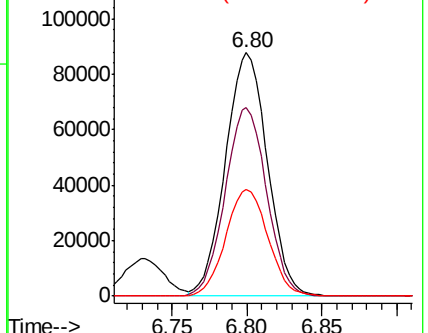
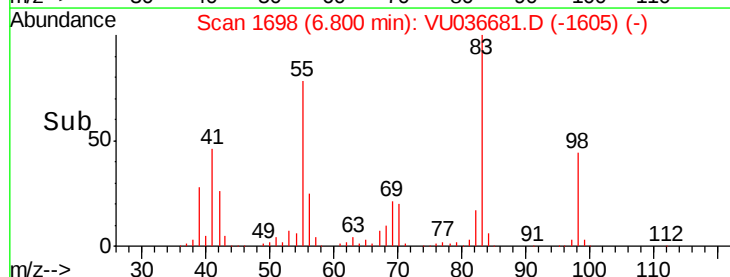
98 44.2 35.4 53.0

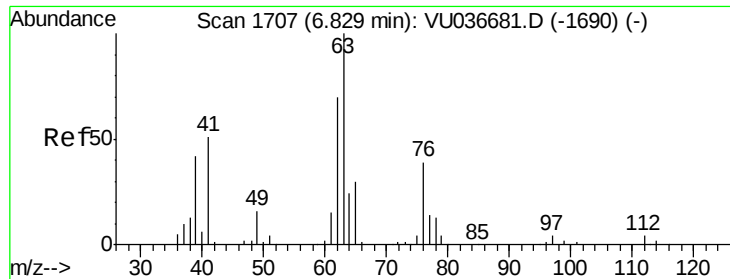


Abundance Ion 83.00 (82.70 to 83.70): VU0

Ion 55.00 (54.70 to 55.70): VU0

Ion 98.00 (97.70 to 98.70): VU0

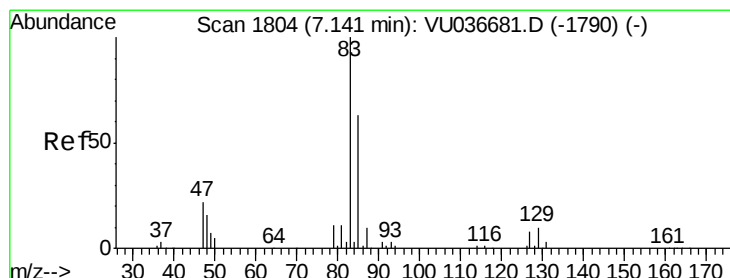
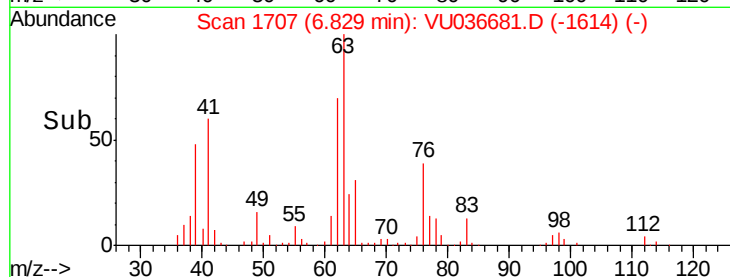
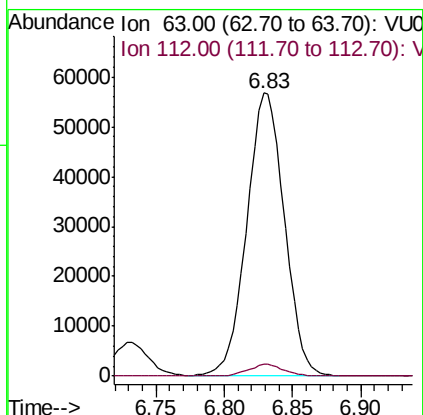
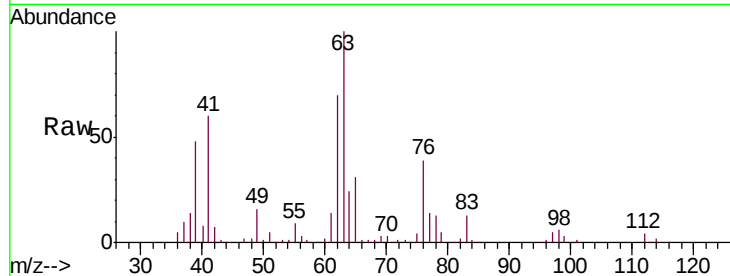




#37  
 1,2-Dichloropropane  
 Concen: 49.423 ug/L  
 RT: 6.83 min Scan# 1707  
 Delta R.T. 0.00 min  
 Lab File: VU036681.D  
 Acq: 06 Feb 2020 12:16

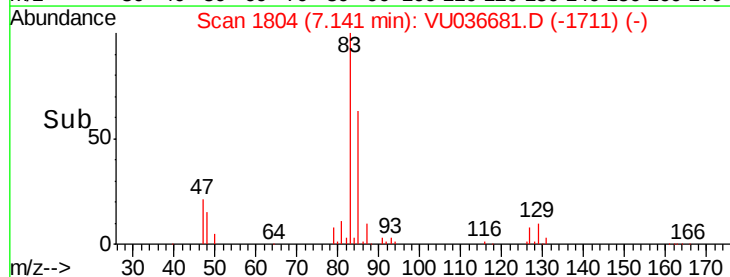
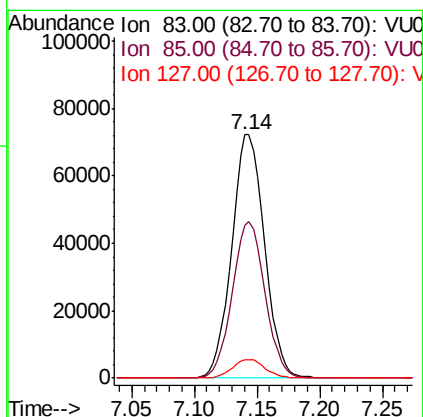
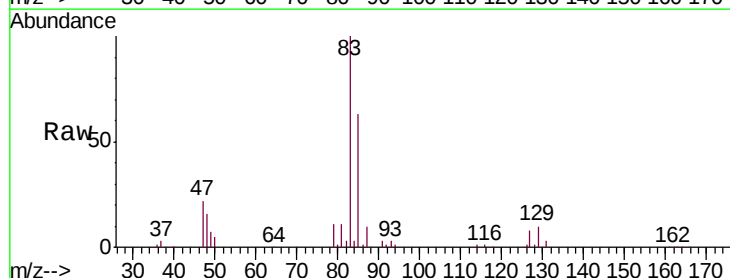
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD050103

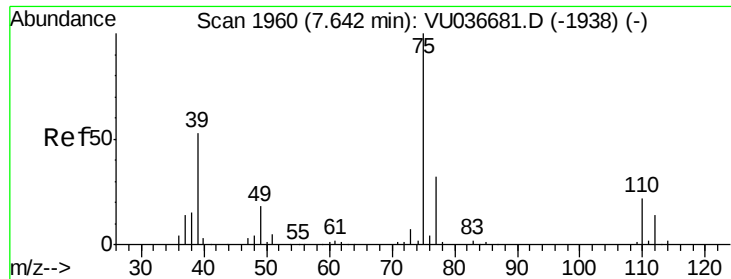
Tgt Ion: 63 Resp: 108415  
 Ion Ratio Lower Upper  
 63 100  
 112 3.9 3.1 4.7



#38  
 Bromodichloromethane  
 Concen: 46.933 ug/L  
 RT: 7.14 min Scan# 1804  
 Delta R.T. 0.00 min  
 Lab File: VU036681.D  
 Acq: 06 Feb 2020 12:16

Tgt Ion: 83 Resp: 131646  
 Ion Ratio Lower Upper  
 83 100  
 85 62.7 43.9 81.5  
 127 7.5 6.0 9.0

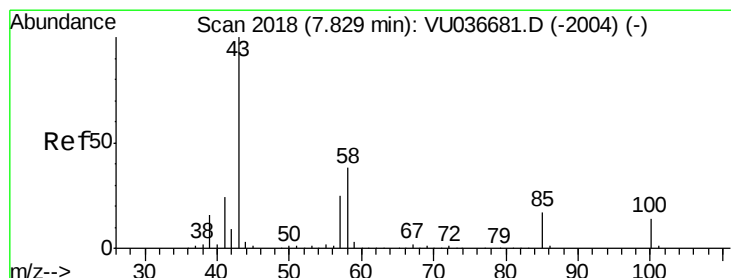
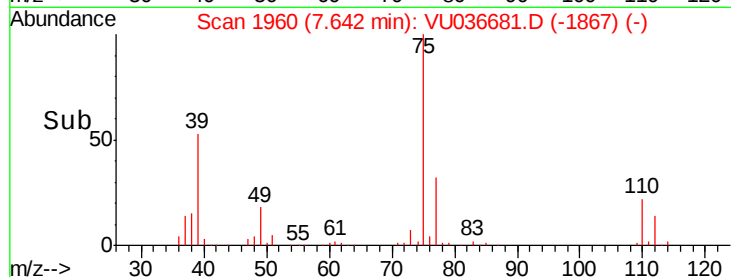
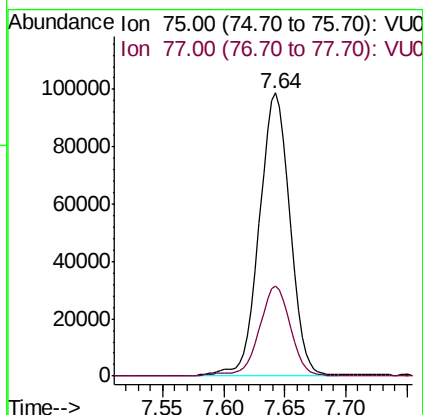
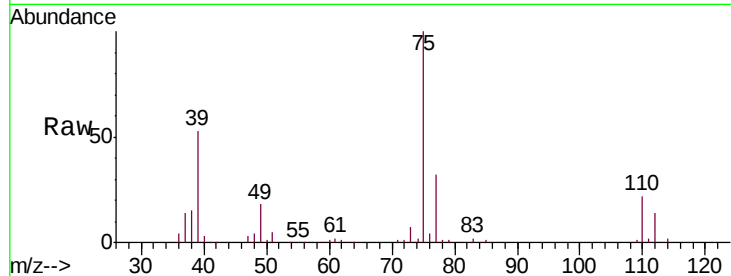




#39  
 cis-1,3-Dichloropropene  
 Concen: 52.916 ug/L  
 RT: 7.64 min Scan# 1960  
 Delta R.T. 0.00 min  
 Lab File: VU036681.D  
 Acq: 06 Feb 2020 12:16

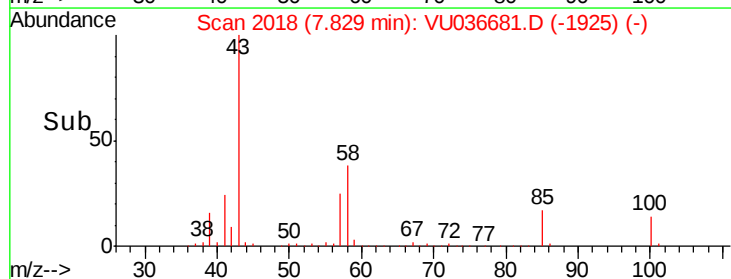
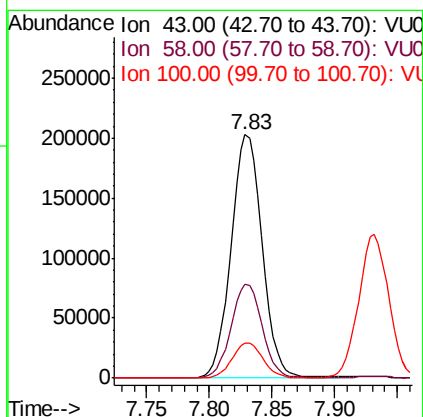
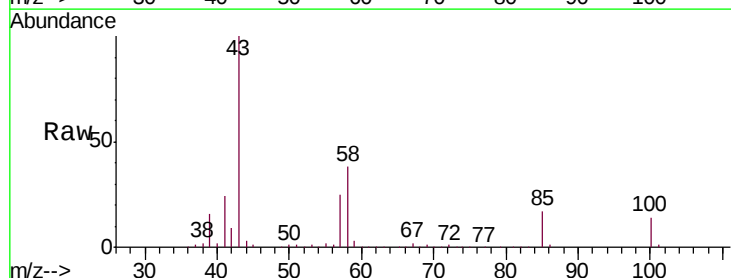
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD050103

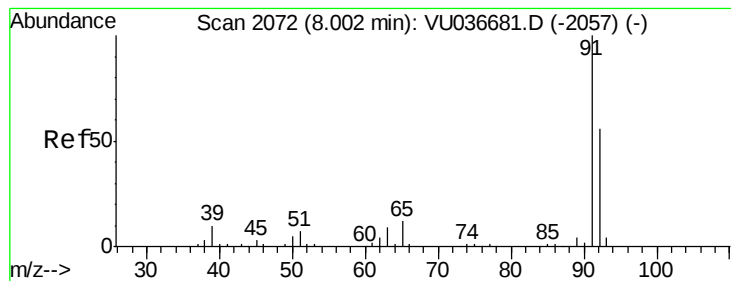
Tgt Ion: 75 Resp: 172995  
 Ion Ratio Lower Upper  
 75 100  
 77 31.9 22.3 41.5



#40  
 4-Methyl-2-pentanone  
 Concen: 121.796 ug/L  
 RT: 7.83 min Scan# 1818  
 Delta R.T. 0.00 min  
 Lab File: VU036681.D  
 Acq: 06 Feb 2020 12:16

Tgt Ion: 43 Resp: 350082  
 Ion Ratio Lower Upper  
 43 100  
 58 38.8 31.0 46.6  
 100 14.3 11.4 17.2





#42

Toluene

Concen: 50.847 ug/L

RT: 8.00 min Scan# 2072

Delta R.T. 0.00 min

Lab File: VU036681.D

Acq: 06 Feb 2020 12:16

Instrument :

MSVOA\_U

ClientSampleId :

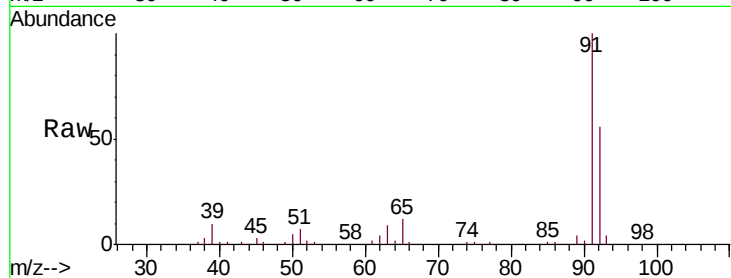
VSTD050103

Tgt Ion: 91 Resp: 431500

Ion Ratio Lower Upper

91 100

92 56.4 39.5 73.3



Abundance Ion 91.00 (90.70 to 91.70): VU036681.D (-2057) (-)

Ion 92.00 (91.70 to 92.70): VU036681.D (-2057) (-)

8.00

250000

200000

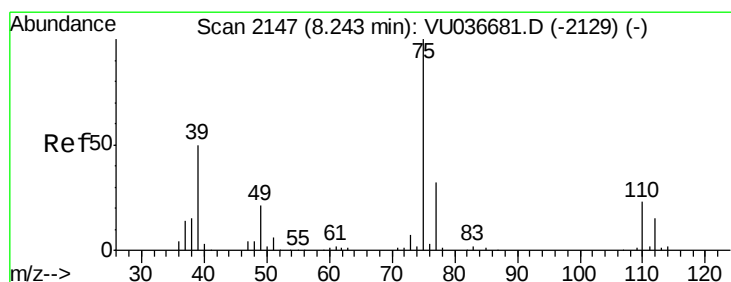
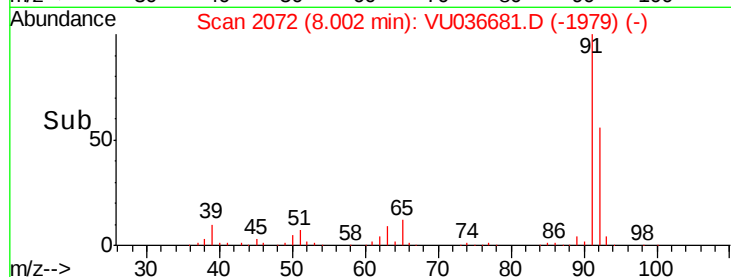
150000

100000

50000

0

Time-->



#44

trans-1,3-Dichloropropene

Concen: 51.560 ug/L

RT: 8.24 min Scan# 2147

Delta R.T. 0.00 min

Lab File: VU036681.D

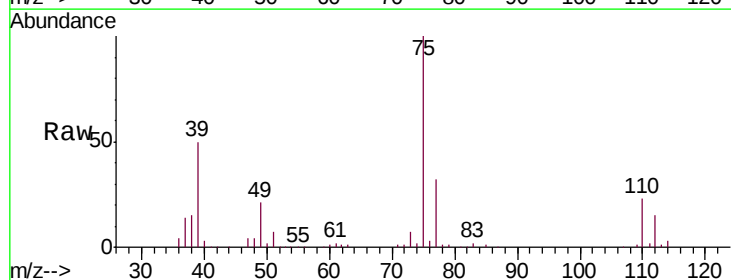
Acq: 06 Feb 2020 12:16

Tgt Ion: 75 Resp: 152967

Ion Ratio Lower Upper

75 100

77 32.3 22.6 42.0



Abundance Ion 75.00 (74.70 to 75.70): VU036681.D (-2129) (-)

Ion 77.00 (76.70 to 77.70): VU036681.D (-2129) (-)

8.24

100000

80000

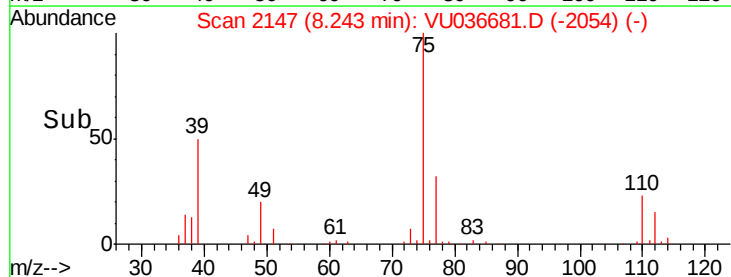
60000

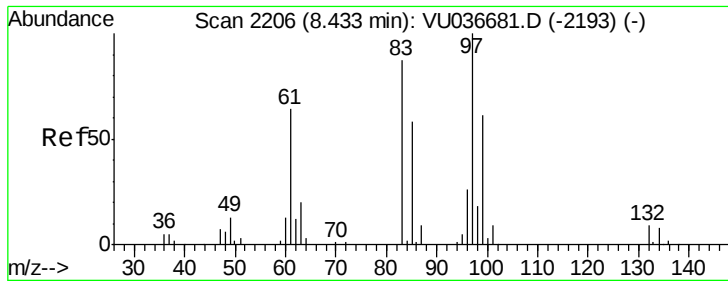
40000

20000

0

Time-->

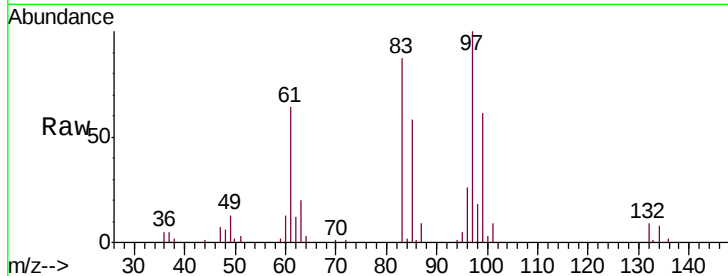




#45  
 1,1,2-Trichloroethane  
 Concen: 48.240 ug/L  
 RT: 8.43 min Scan# 2206  
 Delta R.T. 0.00 min  
 Lab File: VU036681.D  
 Acq: 06 Feb 2020 12:16

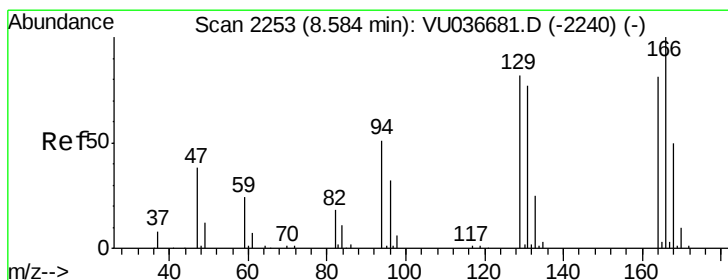
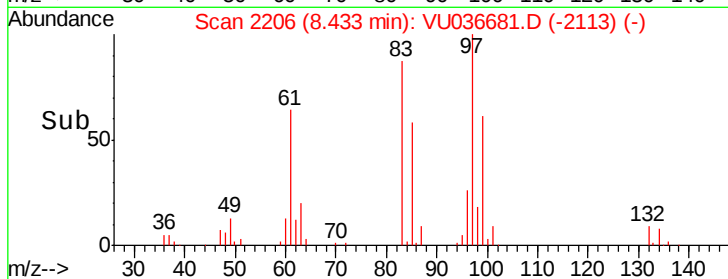
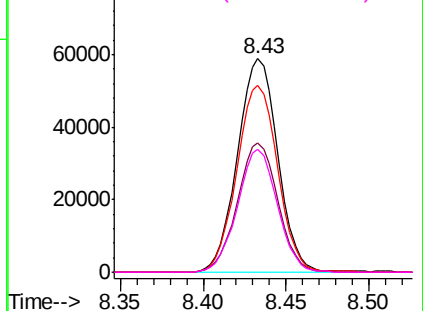
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD050103

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 97    | Resp: | 99539 |
| Ion      | Ratio | Lower | Upper |
| 97       | 100   |       |       |
| 99       | 60.8  | 42.6  | 79.0  |
| 83       | 87.3  | 61.1  | 113.5 |
| 85       | 57.7  | 40.4  | 75.0  |



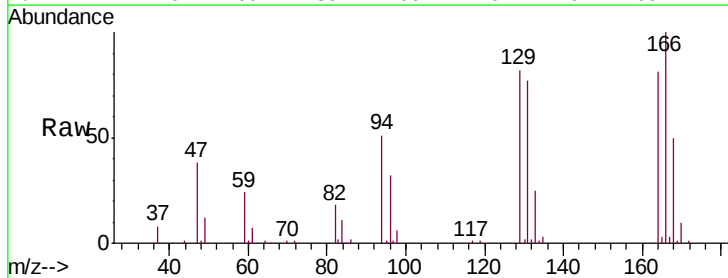
Abundance

Ion 97.00 (96.70 to 97.70): VU036681.D (-2193) (-)



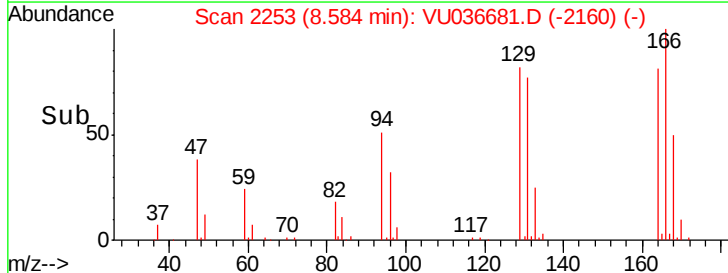
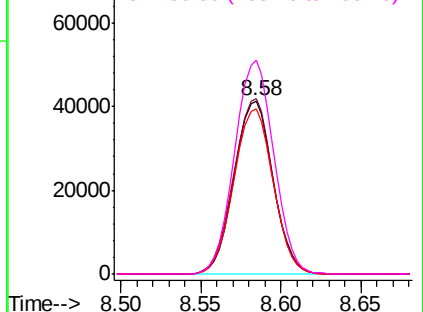
#46  
 Tetrachloroethene  
 Concen: 42.403 ug/L  
 RT: 8.58 min Scan# 2253  
 Delta R.T. 0.00 min  
 Lab File: VU036681.D  
 Acq: 06 Feb 2020 12:16

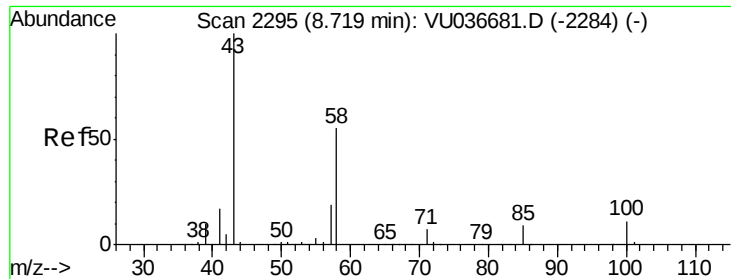
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 164   | Resp: | 68341 |
| Ion      | Ratio | Lower | Upper |
| 164      | 100   |       |       |
| 129      | 101.5 | 71.0  | 131.9 |
| 131      | 95.1  | 66.6  | 123.6 |
| 166      | 123.4 | 86.4  | 160.4 |



Abundance

Ion 164.00 (163.70 to 164.70): VU036681.D (-2240) (-)

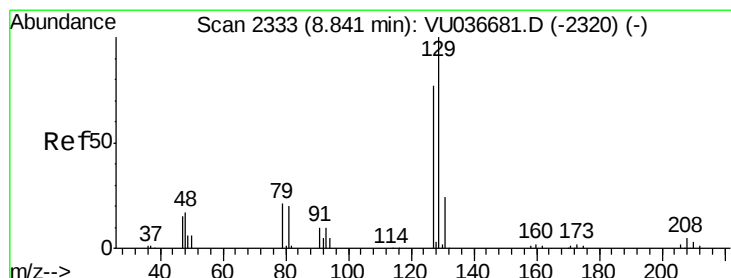
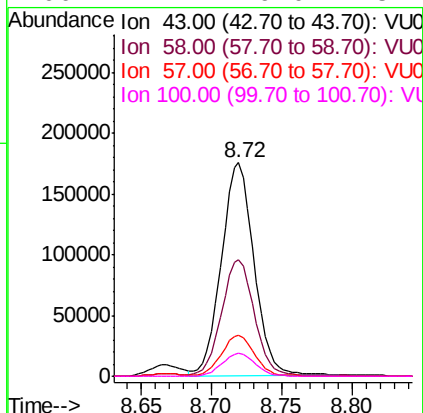
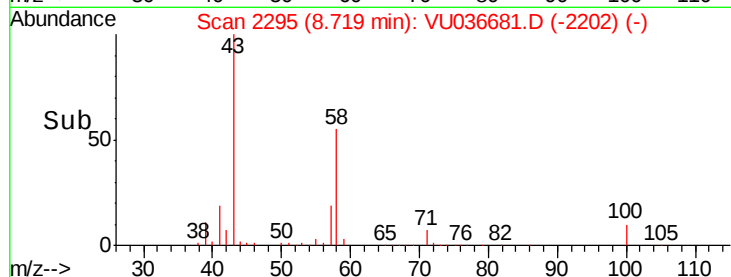
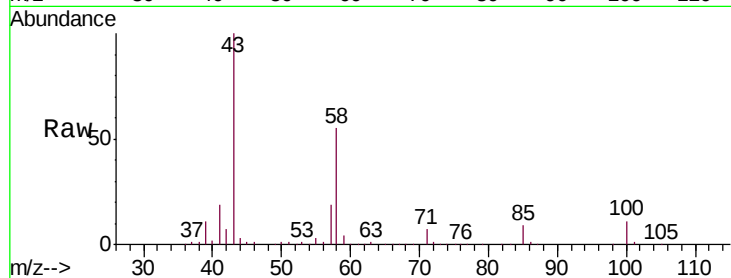




#48  
2-Hexanone  
Concen: 127.677 ug/L  
RT: 8.72 min Scan# 2295  
Delta R.T. 0.00 min  
Lab File: VU036681.D  
Acq: 06 Feb 2020 12:16

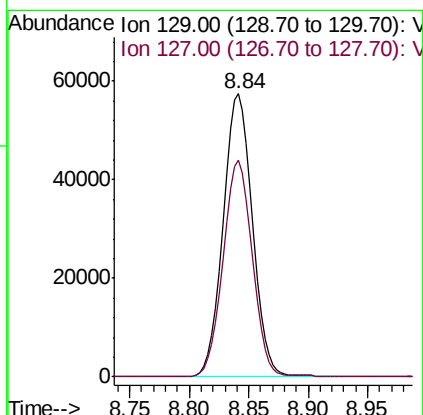
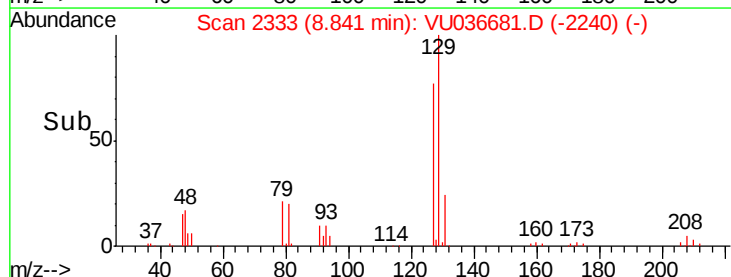
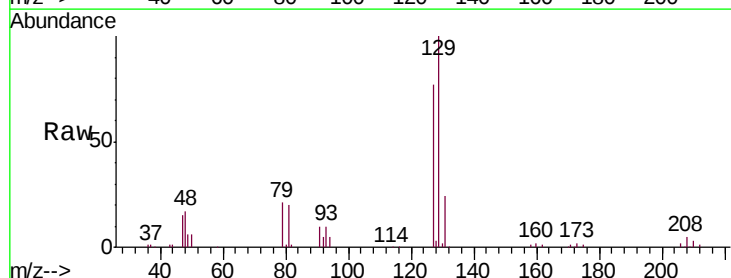
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD050103

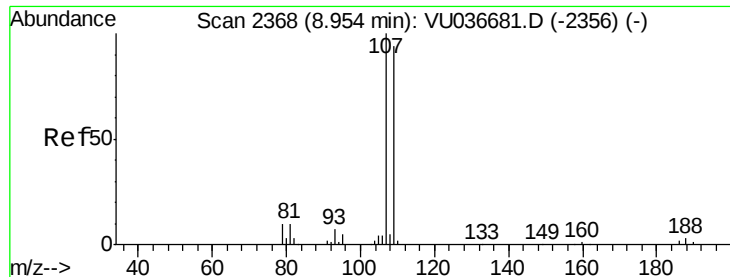
Tgt Ion: 43 Resp: 282606  
Ion Ratio Lower Upper  
43 100  
58 54.5 43.6 65.4  
57 19.4 15.5 23.3  
100 11.2 9.0 13.4



#49  
Dibromochloromethane  
Concen: 43.710 ug/L  
RT: 8.84 min Scan# 2333  
Delta R.T. 0.00 min  
Lab File: VU036681.D  
Acq: 06 Feb 2020 12:16

Tgt Ion: 129 Resp: 98226  
Ion Ratio Lower Upper  
129 100  
127 76.6 53.6 99.6

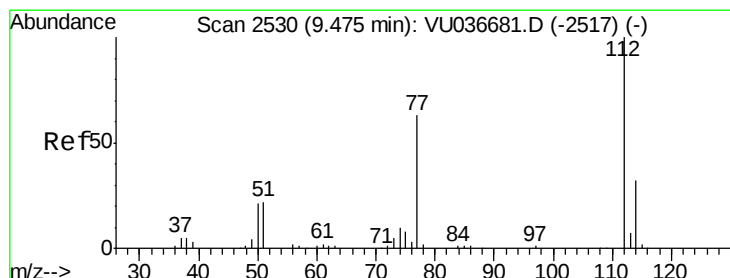
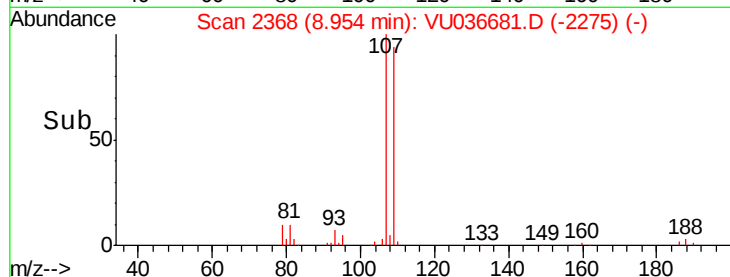
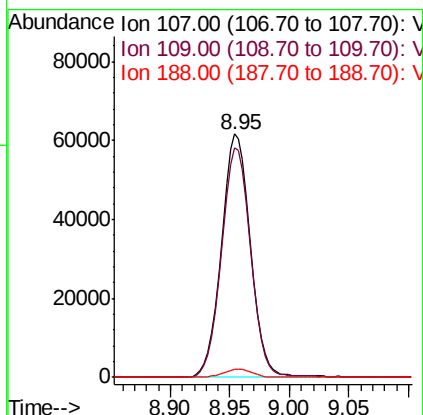
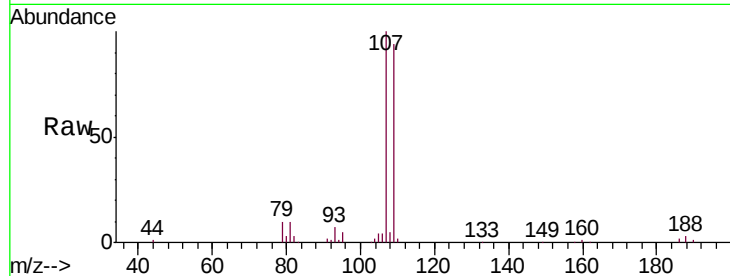




#50  
1,2-Dibromoethane  
Concen: 48.481 ug/L  
RT: 8.95 min Scan# 2368  
Delta R.T. 0.00 min  
Lab File: VU036681.D  
Acq: 06 Feb 2020 12:16

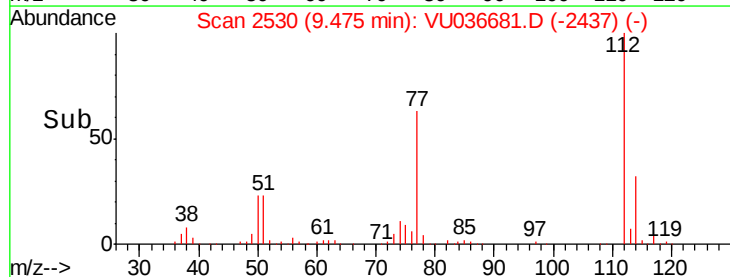
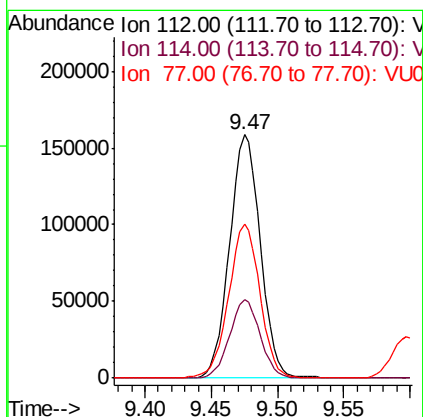
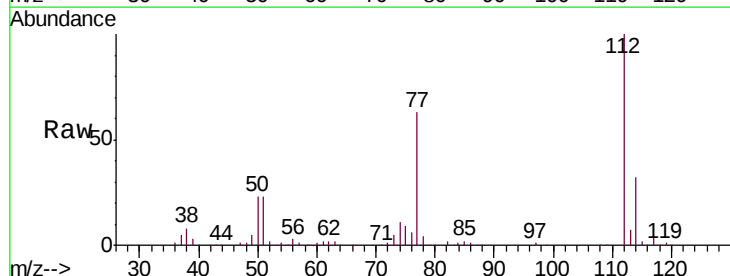
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD050103

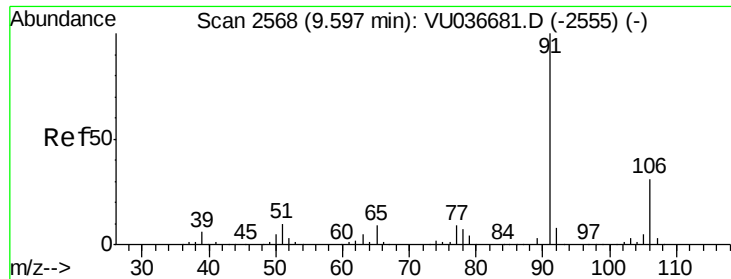
Tgt Ion:107 Resp: 104348  
Ion Ratio Lower Upper  
107 100  
109 94.0 65.8 122.2  
188 3.1 2.5 3.7



#51  
Chlorobenzene  
Concen: 46.918 ug/L  
RT: 9.47 min Scan# 2530  
Delta R.T. 0.00 min  
Lab File: VU036681.D  
Acq: 06 Feb 2020 12:16

Tgt Ion:112 Resp: 256585  
Ion Ratio Lower Upper  
112 100  
114 32.4 22.7 42.1  
77 63.2 50.6 75.8





#52

Ethylbenzene

Concen: 52.623 ug/L

RT: 9.60 min Scan# 2568

Delta R.T. 0.00 min

Lab File: VU036681.D

Acq: 06 Feb 2020 12:16

Instrument :

MSVOA\_U

ClientSampleId :

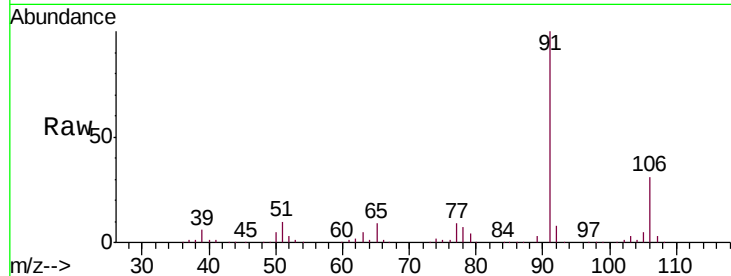
VSTD050103

Tgt Ion: 91 Resp: 473717

Ion Ratio Lower Upper

91 100

106 30.5 21.3 39.6



Abundance Ion 91.00 (90.70 to 91.70): VU036681.D (-2555) (-)

Ion 106.00 (105.70 to 106.70): VU036681.D (-2555) (-)

300000

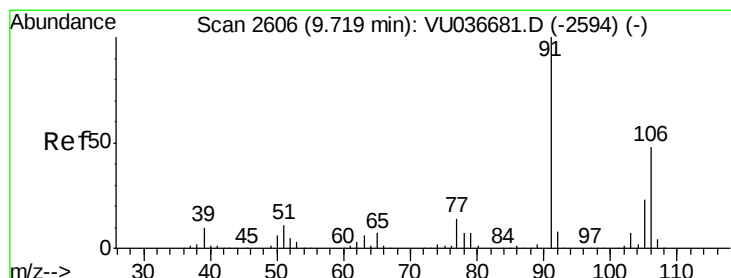
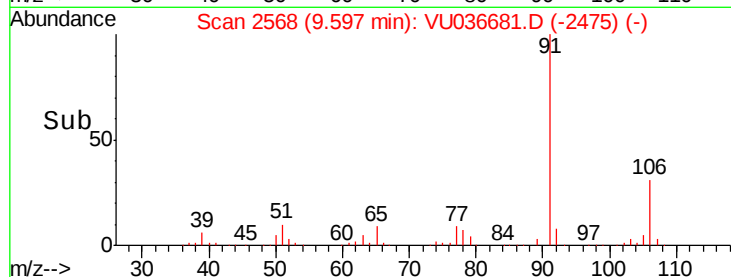
200000

100000

0

9.50 9.55 9.60 9.65 9.70

Time-->



#53

m,p-Xylene

Concen: 53.104 ug/L

RT: 9.72 min Scan# 2606

Delta R.T. 0.00 min

Lab File: VU036681.D

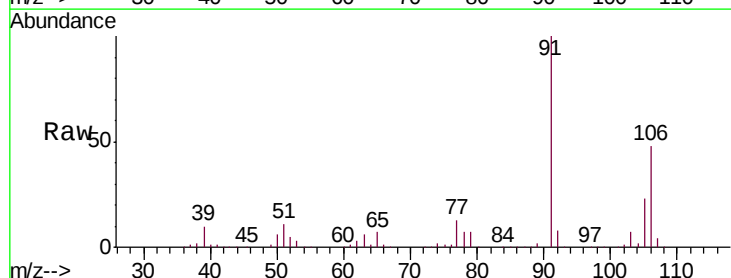
Acq: 06 Feb 2020 12:16

Tgt Ion: 106 Resp: 177522

Ion Ratio Lower Upper

106 100

91 208.4 145.9 270.9



Abundance Ion 106.00 (105.70 to 106.70): VU036681.D (-2594) (-)

Ion 91.00 (90.70 to 91.70): VU036681.D (-2594) (-)

250000

200000

150000

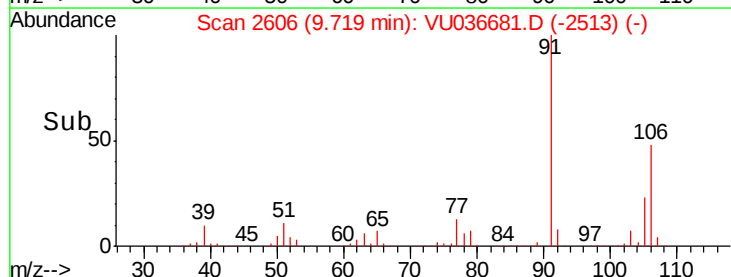
100000

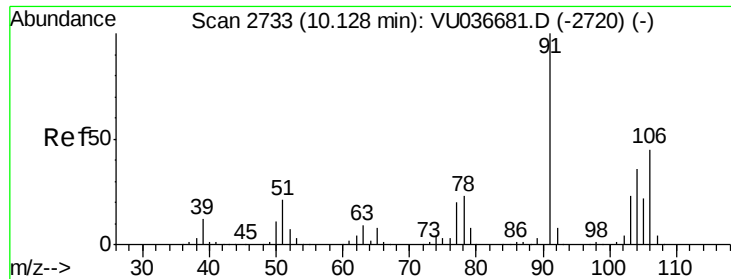
50000

0

9.65 9.70 9.75 9.80

Time-->





#54

o-xylene

Concen: 52.245 ug/L

RT: 10.13 min Scan# 2733

Delta R.T. 0.00 min

Lab File: VU036681.D

Acq: 06 Feb 2020 12:16

Instrument :

MSVOA\_U

ClientSampleId :

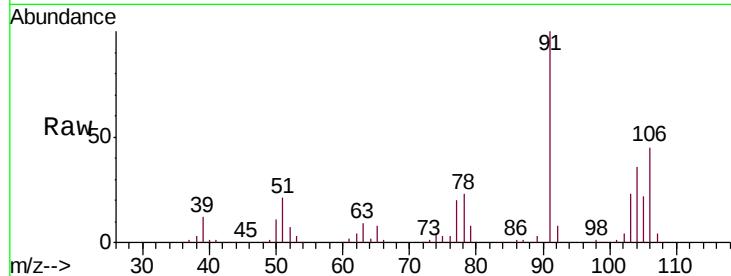
VSTD050103

Tgt Ion:106 Resp: 171975

Ion Ratio Lower Upper

106 100

91 222.8 156.0 289.6



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VU0

250000

200000

150000

100000

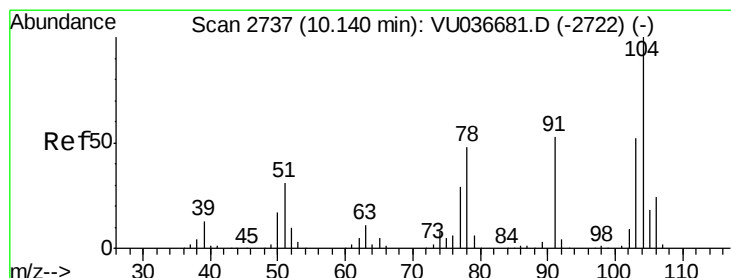
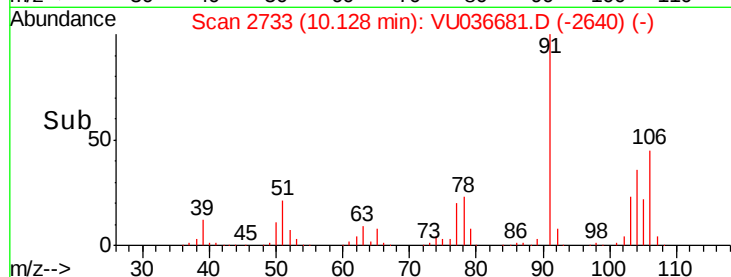
50000

0

10.13

10.10 10.15 10.20

Time-->



#55

Styrene

Concen: 52.618 ug/L

RT: 10.14 min Scan# 2737

Delta R.T. 0.00 min

Lab File: VU036681.D

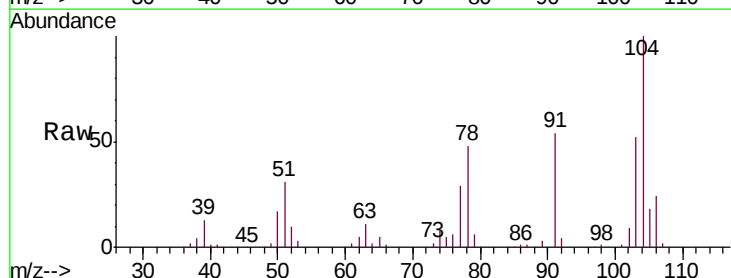
Acq: 06 Feb 2020 12:16

Tgt Ion:104 Resp: 292493

Ion Ratio Lower Upper

104 100

78 48.2 33.7 62.7



Abundance Ion 104.00 (103.70 to 104.70): V

Ion 78.00 (77.70 to 78.70): VU0

200000

150000

100000

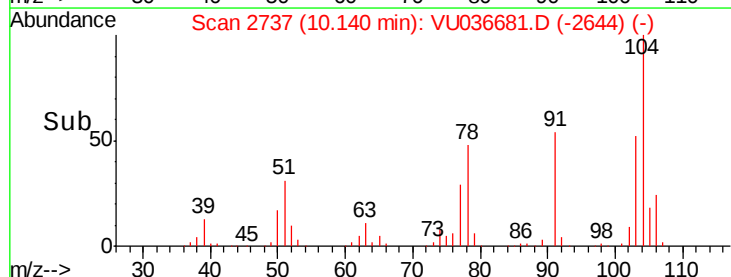
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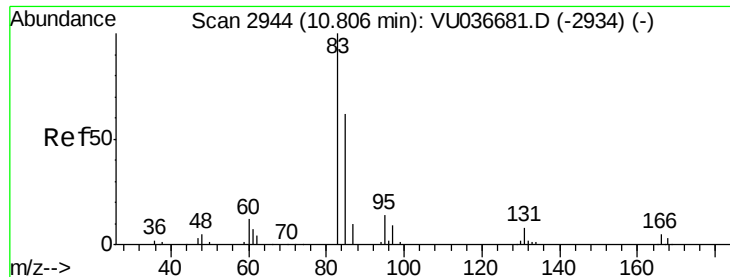
0

10.14

10.10 10.20

Time-->

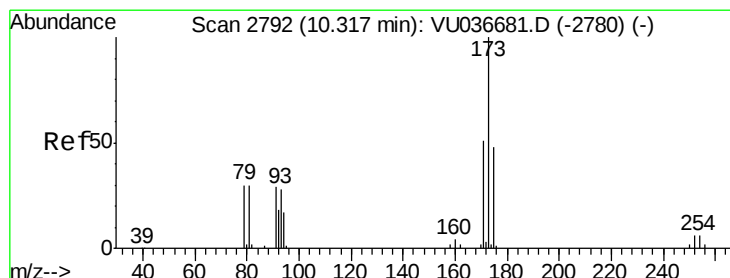
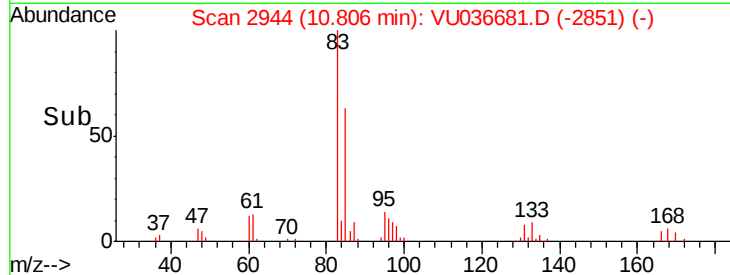
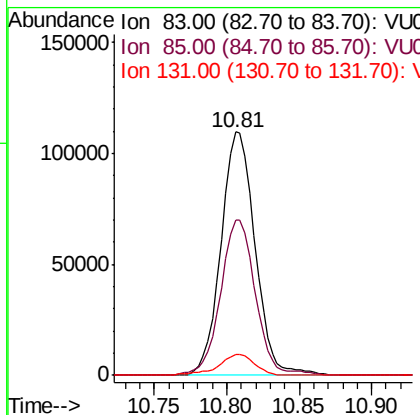
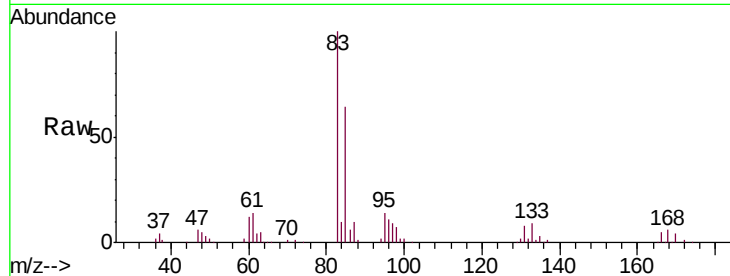




#57  
 1,1,2,2-Tetrachloroethane  
 Concen: 51.171 ug/L  
 RT: 10.81 min Scan# 2944  
 Delta R.T. 0.00 min  
 Lab File: VU036681.D  
 Acq: 06 Feb 2020 12:16

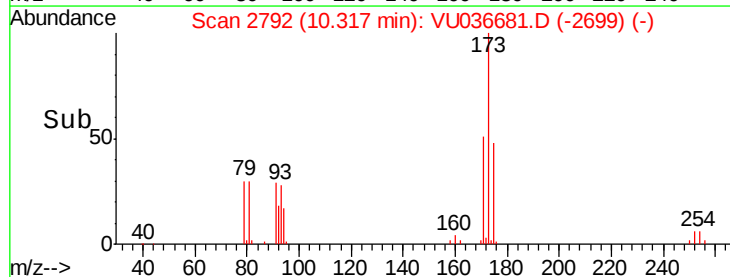
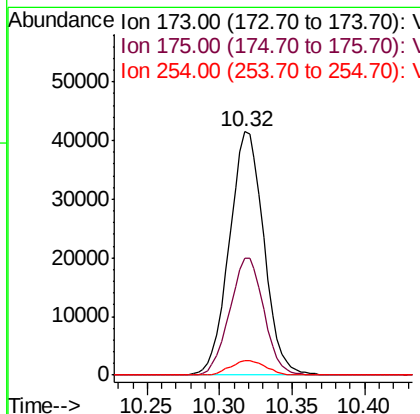
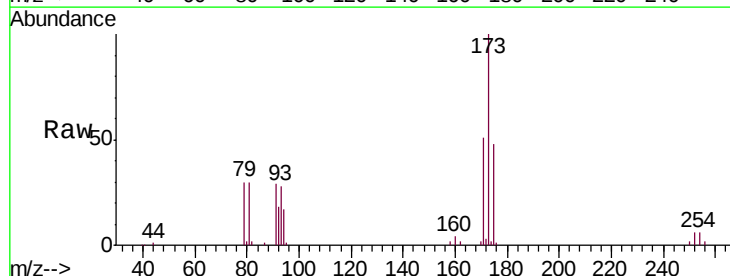
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD050103

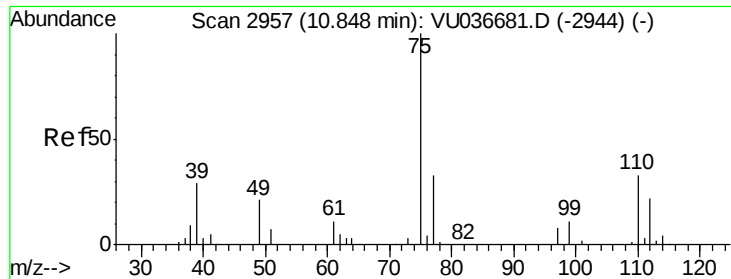
Tgt Ion: 83 Resp: 179222  
 Ion Ratio Lower Upper  
 83 100  
 85 63.8 44.7 82.9  
 131 8.5 6.8 10.2



#59  
 Bromoform  
 Concen: 45.286 ug/L  
 RT: 10.32 min Scan# 2792  
 Delta R.T. 0.00 min  
 Lab File: VU036681.D  
 Acq: 06 Feb 2020 12:16

Tgt Ion: 173 Resp: 68434  
 Ion Ratio Lower Upper  
 173 100  
 175 47.8 38.2 57.4  
 254 6.0 4.8 7.2

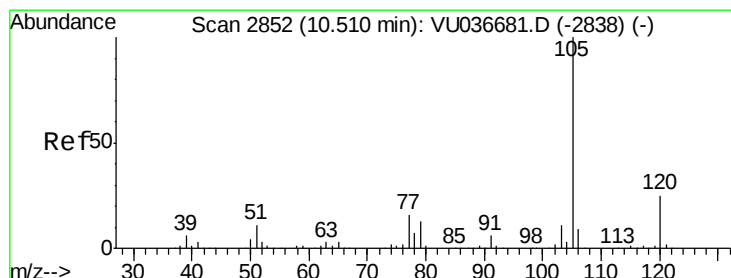
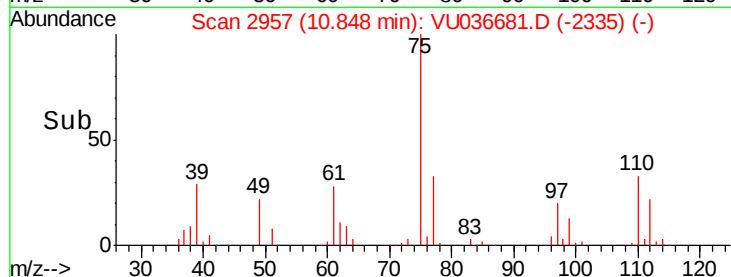
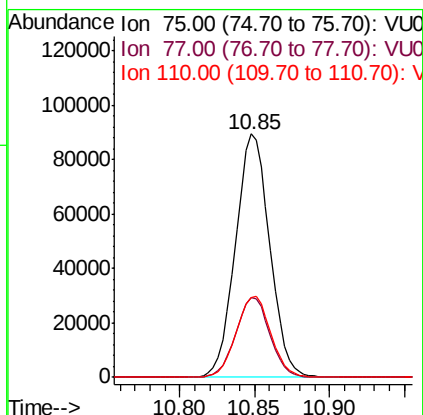
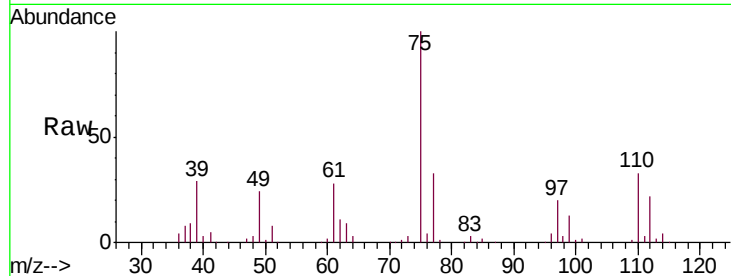




#60  
1,2,3-Trichloropropane  
Concen: 56.518 ug/L  
RT: 10.85 min Scan# 2957  
Delta R.T. 0.00 min  
Lab File: VU036681.D  
Acq: 06 Feb 2020 12:16

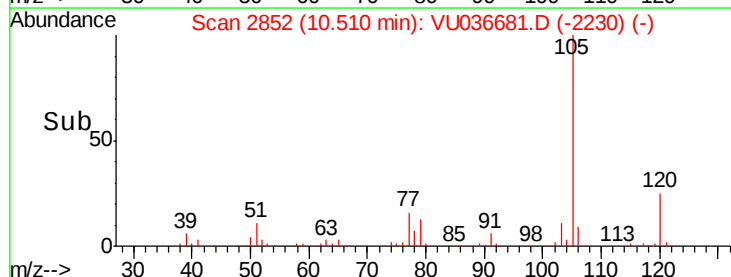
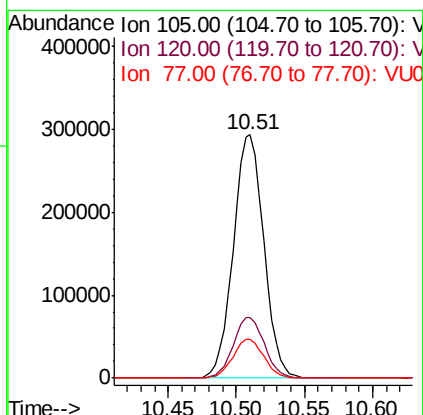
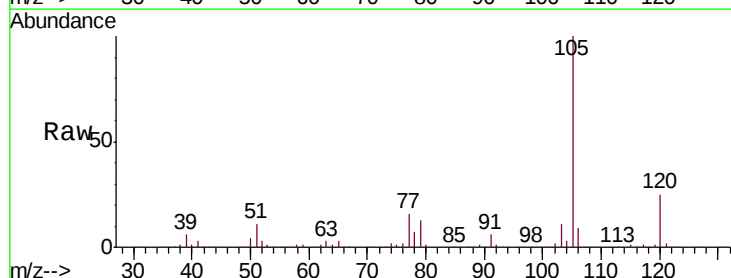
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD050103

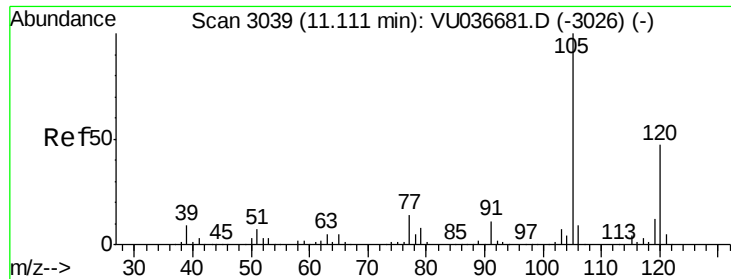
Tgt Ion: 75 Resp: 142388  
Ion Ratio Lower Upper  
75 100  
77 32.6 26.1 39.1  
110 33.6 26.9 40.3



#61  
Isopropylbenzene  
Concen: 58.886 ug/L  
RT: 10.51 min Scan# 2852  
Delta R.T. 0.00 min  
Lab File: VU036681.D  
Acq: 06 Feb 2020 12:16

Tgt Ion: 105 Resp: 455319  
Ion Ratio Lower Upper  
105 100  
120 25.3 20.2 30.4  
77 16.3 13.0 19.6

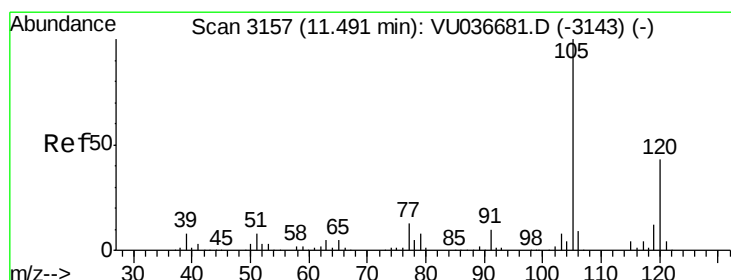
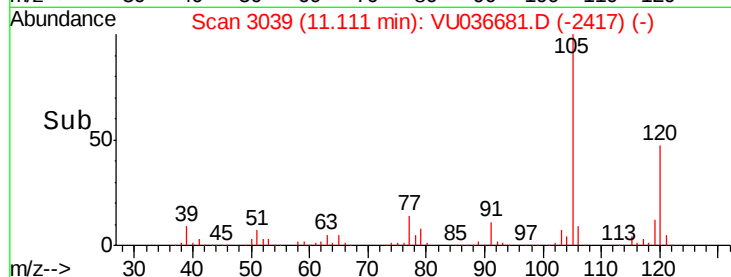
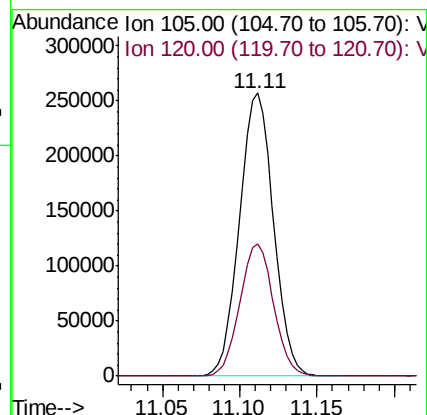
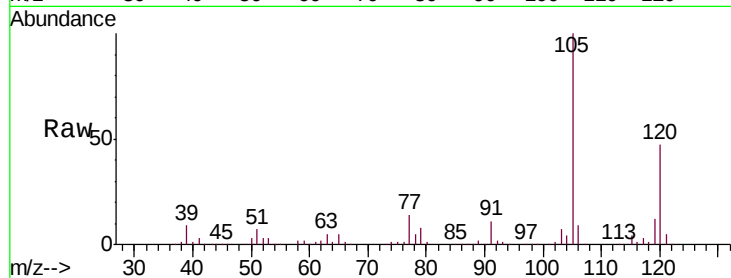




#62  
 1,3,5-Trimethylbenzene  
 Concen: 62.078 ug/L  
 RT: 11.11 min Scan# 3039  
 Delta R.T. 0.00 min  
 Lab File: VU036681.D  
 Acq: 06 Feb 2020 12:16

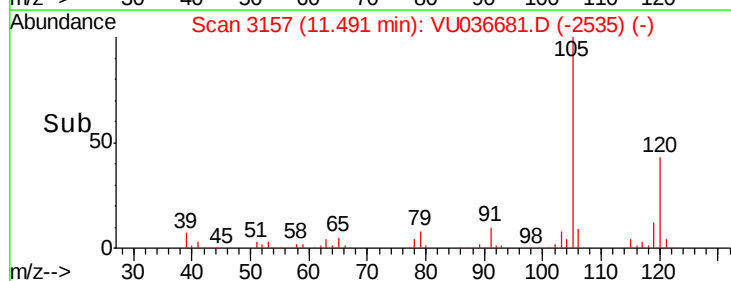
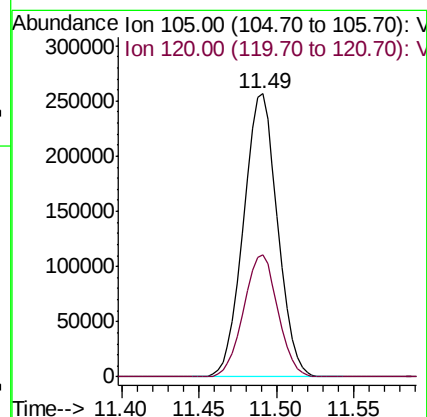
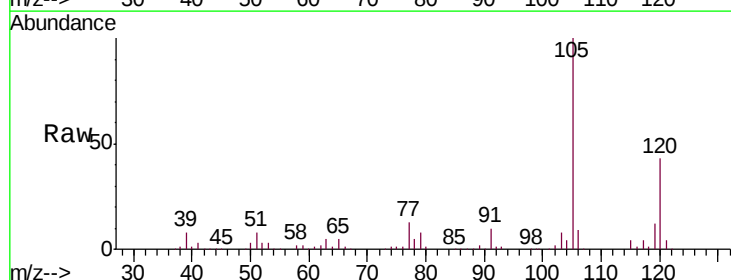
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD050103

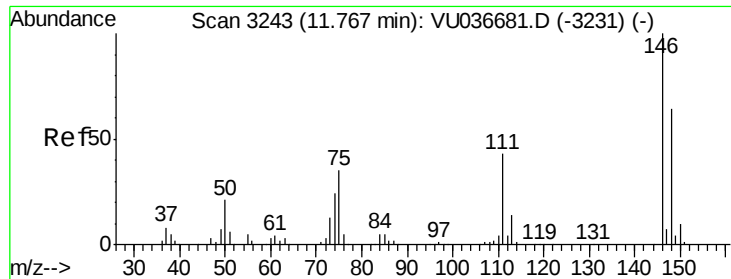
Tgt Ion:105 Resp: 391928  
 Ion Ratio Lower Upper  
 105 100  
 120 46.4 37.1 55.7



#63  
 1,2,4-Trimethylbenzene  
 Concen: 62.683 ug/L  
 RT: 11.49 min Scan# 3157  
 Delta R.T. 0.00 min  
 Lab File: VU036681.D  
 Acq: 06 Feb 2020 12:16

Tgt Ion:105 Resp: 391920  
 Ion Ratio Lower Upper  
 105 100  
 120 43.4 34.7 52.1

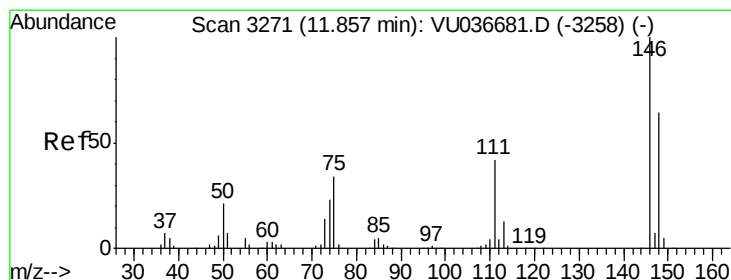
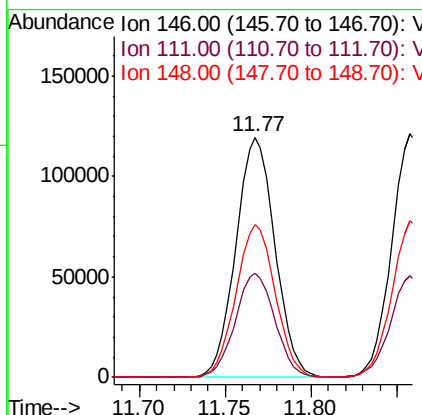
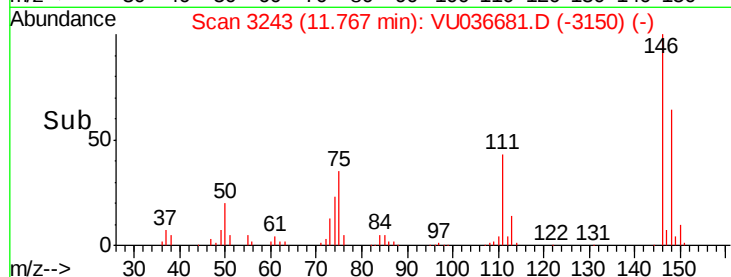
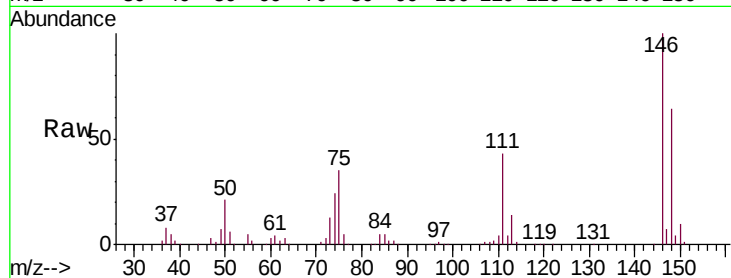




#64  
 1,3-Dichlorobenzene  
 Concen: 50.442 ug/L  
 RT: 11.77 min Scan# 3243  
 Delta R.T. 0.00 min  
 Lab File: VU036681.D  
 Acq: 06 Feb 2020 12:16

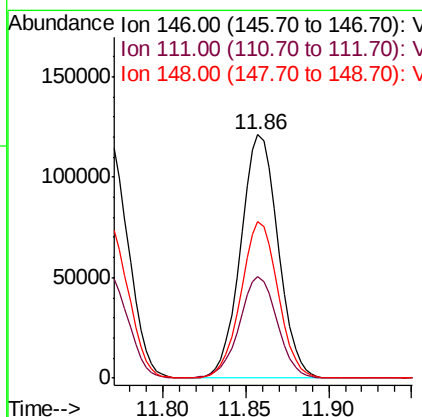
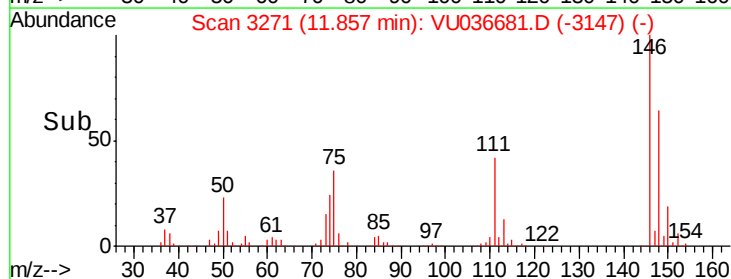
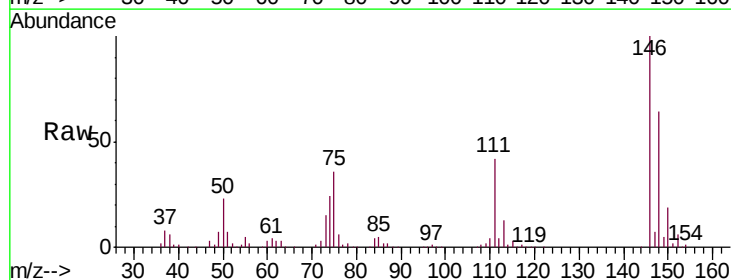
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD050103

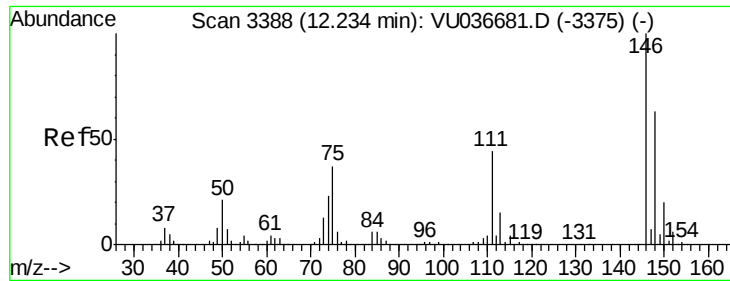
Tgt Ion:146 Resp: 188632  
 Ion Ratio Lower Upper  
 146 100  
 111 43.4 30.4 56.4  
 148 63.6 44.5 82.7



#65  
 1,4-Dichlorobenzene  
 Concen: 49.592 ug/L  
 RT: 11.86 min Scan# 3271  
 Delta R.T. 0.00 min  
 Lab File: VU036681.D  
 Acq: 06 Feb 2020 12:16

Tgt Ion:146 Resp: 189568  
 Ion Ratio Lower Upper  
 146 100  
 111 41.8 29.3 54.3  
 148 64.0 44.8 83.2

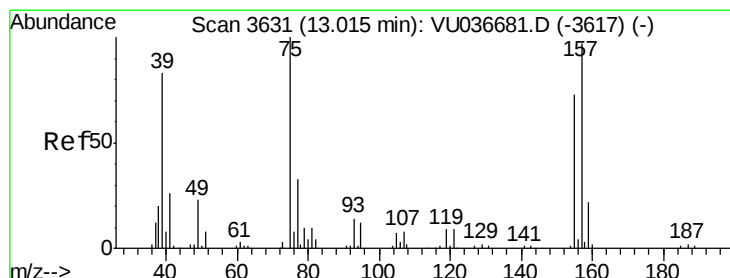
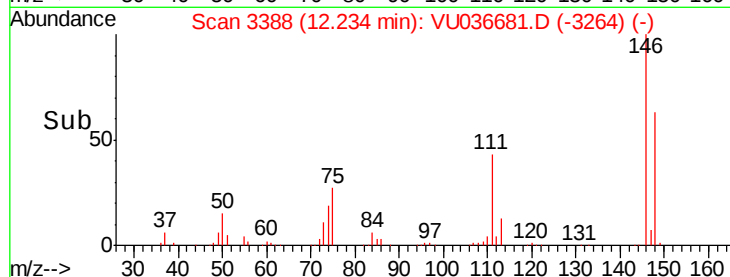
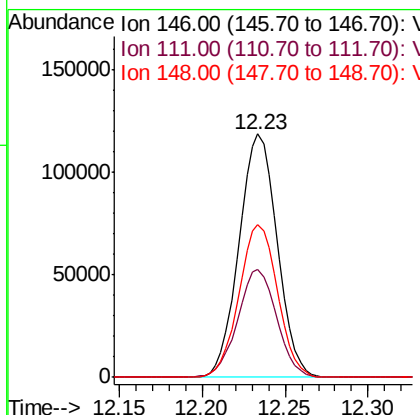
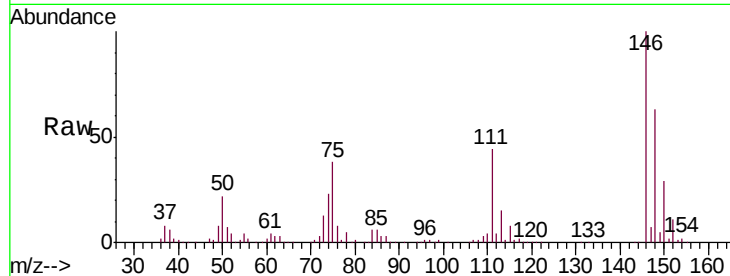




#67  
 1,2-Dichlorobenzene  
 Concen: 49.972 ug/L  
 RT: 12.23 min Scan# 3388  
 Delta R.T. 0.00 min  
 Lab File: VU036681.D  
 Acq: 06 Feb 2020 12:16

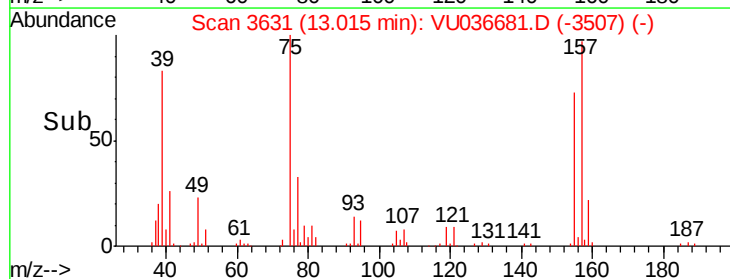
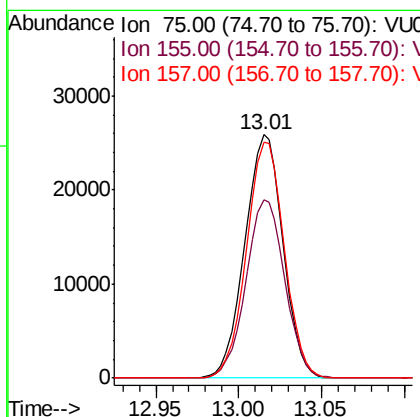
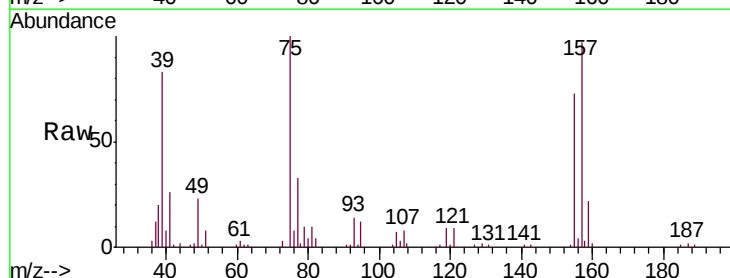
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD050103

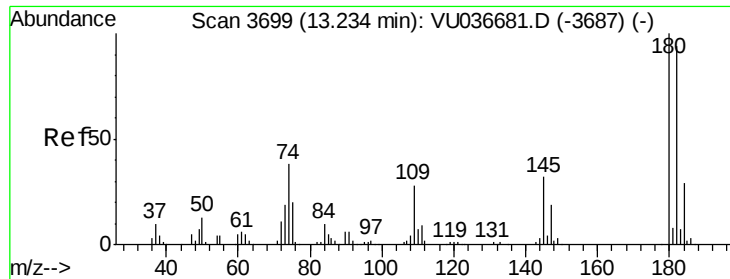
Tgt Ion: 146 Resp: 190071  
 Ion Ratio Lower Upper  
 146 100  
 111 44.2 35.4 53.0  
 148 63.0 50.4 75.6



#68  
 1,2-Dibromo-3-chloropropane  
 Concen: 58.328 ug/L  
 RT: 13.01 min Scan# 3631  
 Delta R.T. 0.00 min  
 Lab File: VU036681.D  
 Acq: 06 Feb 2020 12:16

Tgt Ion: 75 Resp: 41352  
 Ion Ratio Lower Upper  
 75 100  
 155 73.4 58.7 88.1  
 157 97.2 77.8 116.6





#69

1,3,5-Trichlorobenzene

Concen: 47.010 ug/L

RT: 13.23 min Scan# 3699

Delta R.T. 0.00 min

Lab File: VU036681.D

Acq: 06 Feb 2020 12:16

Instrument :

MSVOA\_U

ClientSampleId :

VSTD050103

Tgt Ion:180 Resp: 130673

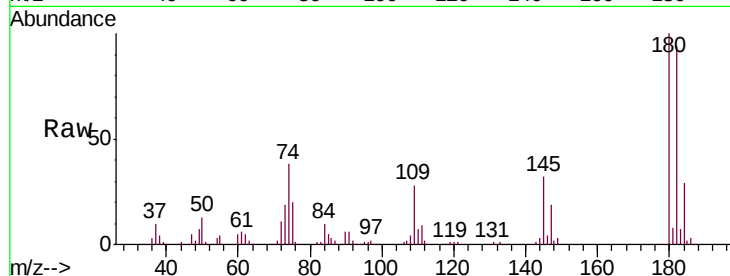
Ion Ratio Lower Upper

180 100

182 95.3 76.2 114.4

184 29.7 23.8 35.6

145 31.3 25.0 37.6

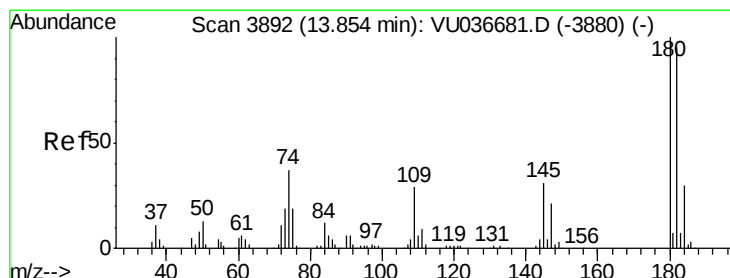
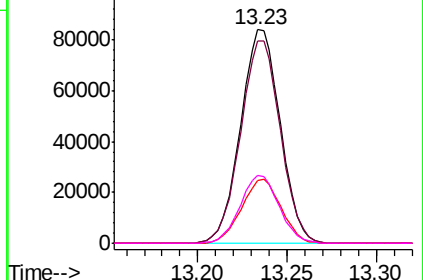
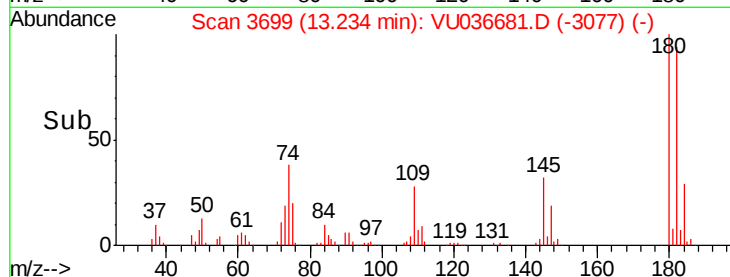


Abundance Ion 180.00 (179.70 to 180.70): V

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



#70

1,2,4-trichlorobenzene

Concen: 48.123 ug/L

RT: 13.85 min Scan# 3892

Delta R.T. 0.00 min

Lab File: VU036681.D

Acq: 06 Feb 2020 12:16

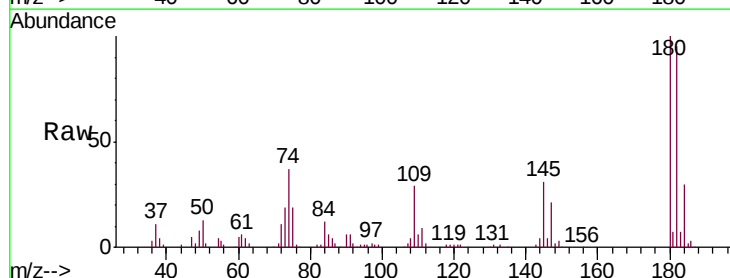
Tgt Ion:180 Resp: 110435

Ion Ratio Lower Upper

180 100

182 95.1 76.1 114.1

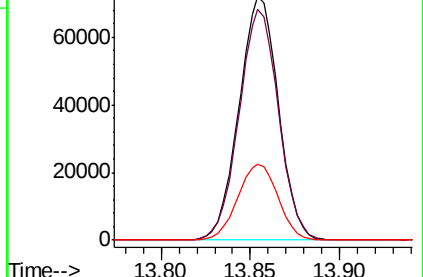
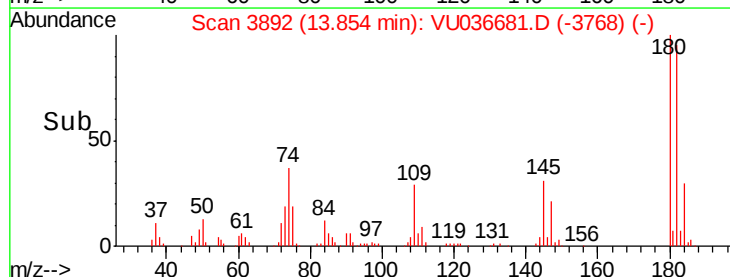
145 32.1 25.7 38.5

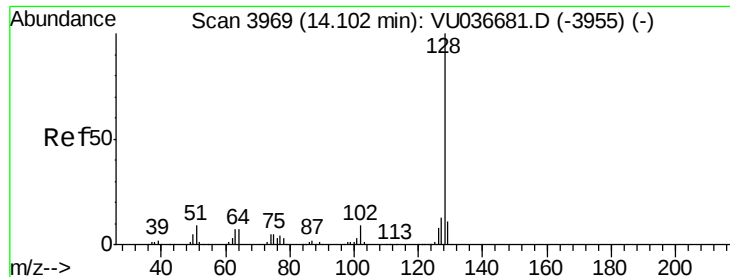


Abundance Ion 180.00 (179.70 to 180.70): V

Ion 182.00 (181.70 to 182.70): V

Ion 145.00 (144.70 to 145.70): V

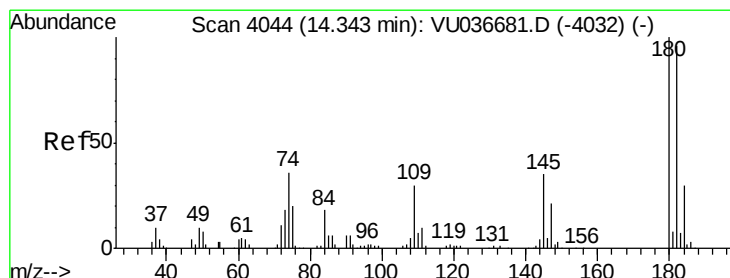
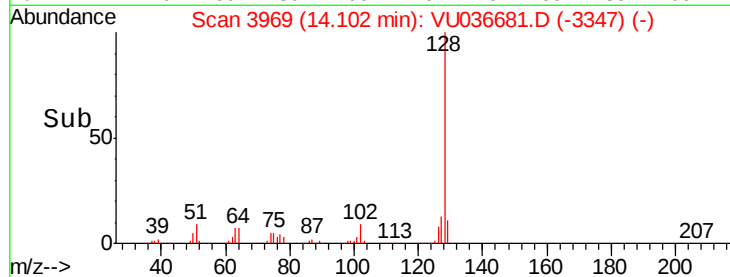
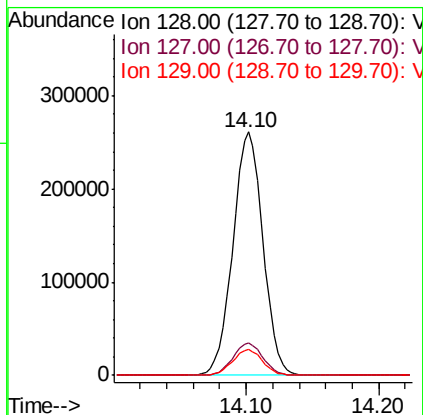
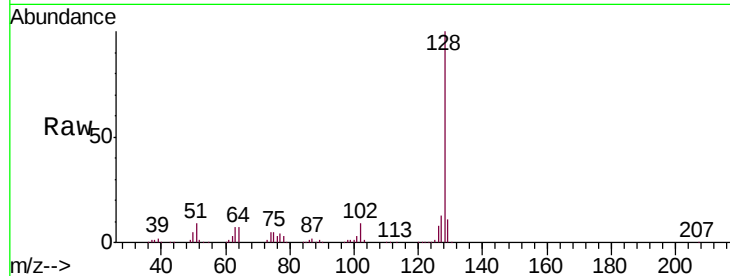




#71  
Naphthalene  
Concen: 58.000 ug/L  
RT: 14.10 min Scan# 3969  
Delta R.T. 0.00 min  
Lab File: VU036681.D  
Acq: 06 Feb 2020 12:16

Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD050103

Tgt Ion:128 Resp: 410277  
Ion Ratio Lower Upper  
128 100  
127 13.3 10.6 16.0  
129 10.6 8.5 12.7



#72  
1,2,3-Trichlorobenzene  
Concen: 46.056 ug/L  
RT: 14.34 min Scan# 4044  
Delta R.T. 0.00 min  
Lab File: VU036681.D  
Acq: 06 Feb 2020 12:16

Tgt Ion:180 Resp: 109200  
Ion Ratio Lower Upper  
180 100  
182 96.0 76.8 115.2  
145 34.4 27.5 41.3

