

Data Path : Z:\VOASRV\HPCHEM1\MSVOA V\DATA\VV103020\  
 Data File : VV019175.D  
 Acq On : 30 Oct 2020 09:48  
 Operator : SY/MD  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA V/WATER  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD05081

Quant Time: Oct 31 02:49:21 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM102920WMA.M  
 Quant Title : VOC Analysis  
 QLast Update : Fri Oct 30 05:31:22 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.64  | 114  | 263975   | 50.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 8.87  | 117  | 257272   | 50.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.27 | 152  | 144917   | 50.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |         |       |          |          |      |        |
|--------------------------------|---------|-------|----------|----------|------|--------|
| 4) Vinyl Chloride-d3           | 1.32    | 65    | 77950    | 37.16    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 60 - 135 | Recovery | =    | 74.32% |
| 7) Chloroethane-d5             | 1.58    | 69    | 63120    | 38.73    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 70 - 130 | Recovery | =    | 77.46% |
| 11) 1,1-Dichloroethene-d2      | 2.13    | 63    | 165949   | 41.58    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 83.16% |
| 21) 2-Butanone-d5              | 3.91    | 46    | 101060   | 78.65    | ug/L | 0.00   |
| Spiked Amount                  | 100.000 | Range | 40 - 130 | Recovery | =    | 78.65% |
| 24) Chloroform-d               | 4.37    | 84    | 165064   | 42.30    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 84.60% |
| 26) 1,2-Dichloroethane-d4      | 5.05    | 65    | 112351   | 41.32    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 82.64% |
| 32) Benzene-d6                 | 5.07    | 84    | 304940   | 41.78    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 83.56% |
| 36) 1,2-Dichloropropane-d6     | 6.09    | 67    | 91900    | 42.23    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 70 - 120 | Recovery | =    | 84.46% |
| 41) Toluene-d8                 | 7.33    | 98    | 296843   | 42.34    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 84.68% |
| 43) trans-1,3-Dichloropropene- | 7.64    | 79    | 52753    | 41.89    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 83.78% |
| 47) 2-Hexanone-d5              | 8.10    | 63    | 73970    | 78.49    | ug/L | 0.00   |
| Spiked Amount                  | 100.000 | Range | 45 - 130 | Recovery | =    | 78.49% |
| 57) 1,1,2,2-Tetrachloroethane- | 10.23   | 84    | 121582   | 41.44    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 65 - 120 | Recovery | =    | 82.88% |
| 64) 1,2-Dichlorobenzene-d4     | 11.65   | 152   | 124167   | 40.78    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 81.56% |

## Target Compounds

| Target Compounds               | R.T. | QIon | Response | Conc    | Units | Ovalue |
|--------------------------------|------|------|----------|---------|-------|--------|
| 2) Dichlorodifluoromethane     | 1.14 | 85   | 109127   | 47.081  | ug/L  | 99     |
| 3) Chloromethane               | 1.25 | 50   | 96154    | 45.682  | ug/L  | 99     |
| 5) Vinyl chloride              | 1.32 | 62   | 99849    | 46.334  | ug/L  | 100    |
| 6) Bromomethane                | 1.53 | 94   | 65416    | 45.318  | ug/L  | 97     |
| 8) Chloroethane                | 1.60 | 64   | 62993    | 47.012  | ug/L  | 100    |
| 9) Trichlorofluoromethane      | 1.77 | 101  | 169464   | 47.182  | ug/L  | 99     |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.13 | 101  | 82404    | 47.674  | ug/L  | 99     |
| 12) 1,1-Dichloroethene         | 2.13 | 96   | 77278    | 45.651  | ug/L  | 97     |
| 13) Acetone                    | 2.19 | 43   | 131932   | 110.527 | ug/L  | 99     |
| 14) Carbon disulfide           | 2.31 | 76   | 245743   | 45.671  | ug/L  | 99     |
| 15) Methyl Acetate             | 2.45 | 43   | 83986    | 43.660  | ug/L  | 99     |
| 16) Methylene chloride         | 2.52 | 84   | 86974    | 45.247  | ug/L  | 97     |
| 17) trans-1,2-Dichloroethene   | 2.78 | 96   | 85013    | 46.757  | ug/L  | 100    |
| 18) Methyl tert-butyl Ether    | 2.78 | 73   | 271786   | 44.642  | ug/L  | 99     |
| 19) 1,1-Dichloroethane         | 3.21 | 63   | 156642   | 46.243  | ug/L  | 99     |
| 20) cis-1,2-Dichloroethene     | 3.94 | 96   | 89079    | 44.641  | ug/L  | 95     |
| 22) 2-Butanone                 | 3.99 | 43   | 130976   | 100.738 | ug/L  | 100    |

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 Data File : VV019175.D  
 Acq On : 30 Oct 2020 09:48  
 Operator : SY/MD  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA V/WATER  
 ALS Vial : 1 Sample Multiplier: 1

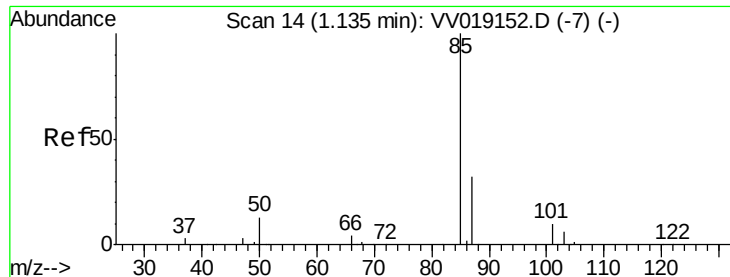
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD05081

Quant Time: Oct 31 02:49:21 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVLM102920WMA.M  
 Quant Title : VOC Analysis  
 QLast Update : Fri Oct 30 05:31:22 2020  
 Response via : Initial Calibration

| Internal Standards              | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|---------------------------------|-------|------|----------|--------|-------|----------|
| 23) Bromochloromethane          | 4.27  | 128  | 47768    | 44.611 | ug/L  | 98       |
| 25) Chloroform                  | 4.40  | 83   | 167537   | 45.769 | ug/L  | 99       |
| 27) 1,2-Dichloroethane          | 5.15  | 62   | 142539   | 45.739 | ug/L  | 99       |
| 29) Cyclohexane                 | 4.70  | 56   | 136421   | 47.498 | ug/L  | 99       |
| 30) 1,1,1-Trichloroethane       | 4.63  | 97   | 159512   | 45.753 | ug/L  | 99       |
| 31) Carbon tetrachloride        | 4.85  | 117  | 143356   | 46.371 | ug/L  | 99       |
| 33) Benzene                     | 5.12  | 78   | 344695   | 46.469 | ug/L  | 100      |
| 34) Trichloroethene             | 5.94  | 95   | 92405    | 45.473 | ug/L  | 98       |
| 35) Methylcyclohexane           | 6.15  | 83   | 130344   | 47.514 | ug/L  | 98       |
| 37) 1,2-Dichloropropane         | 6.20  | 63   | 88053    | 47.799 | ug/L  | 99       |
| 38) Bromodichloromethane        | 6.53  | 83   | 125470   | 45.786 | ug/L  | 98       |
| 39) cis-1,3-Dichloropropene     | 7.04  | 75   | 140976   | 46.332 | ug/L  | 98       |
| 40) 4-Methyl-2-pentanone        | 7.24  | 43   | 228195   | 89.797 | ug/L  | 99       |
| 42) Toluene                     | 7.41  | 91   | 384660   | 47.303 | ug/L  | 98       |
| 44) trans-1,3-Dichloropropene   | 7.67  | 75   | 148268   | 46.843 | ug/L  | 99       |
| 45) 1,1,2-Trichloroethane       | 7.86  | 97   | 83616    | 45.258 | ug/L  | 99       |
| 46) Tetrachloroethene           | 7.99  | 164  | 81220    | 46.807 | ug/L  | 100      |
| 48) 2-Hexanone                  | 8.16  | 43   | 192206   | 95.157 | ug/L  | 100      |
| 49) Dibromochloromethane        | 8.26  | 129  | 102491   | 45.817 | ug/L  | 98       |
| 50) 1,2-Dibromoethane           | 8.37  | 107  | 88627    | 44.962 | ug/L  | 100      |
| 51) Chlorobenzene               | 8.90  | 112  | 244768   | 45.911 | ug/L  | 99       |
| 52) Ethylbenzene                | 9.03  | 91   | 423891   | 47.307 | ug/L  | 100      |
| 53) m,p-Xylene                  | 9.16  | 106  | 161127   | 47.609 | ug/L  | 99       |
| 54) o-xylene                    | 9.56  | 106  | 155167   | 47.753 | ug/L  | 99       |
| 55) Styrene                     | 9.58  | 104  | 276863   | 48.074 | ug/L  | 99       |
| 56) Isopropylbenzene            | 9.95  | 105  | 417259   | 47.783 | ug/L  | 99       |
| 58) 1,1,1,2,2-Tetrachloroethane | 10.26 | 83   | 125321   | 44.547 | ug/L  | 98       |
| 59) 1,2,3-Trichloropropane      | 10.29 | 75   | 105512   | 43.814 | ug/L  | 100      |
| 61) Bromoform                   | 9.75  | 173  | 78050    | 43.661 | ug/L  | 98       |
| 62) 1,3-Dichlorobenzene         | 11.20 | 146  | 208414   | 45.594 | ug/L  | 99       |
| 63) 1,4-Dichlorobenzene         | 11.29 | 146  | 212421   | 44.715 | ug/L  | 98       |
| 65) 1,2-Dichlorobenzene         | 11.67 | 146  | 202896   | 44.807 | ug/L  | 100      |
| 66) 1,2-Dibromo-3-chloropropan  | 12.45 | 75   | 32002    | 41.303 | ug/L  | 96       |
| 67) 1,3,5-Trichlorobenzene      | 12.67 | 180  | 148979   | 44.274 | ug/L  | 99       |
| 68) 1,2,4-trichlorobenzene      | 13.28 | 180  | 138026   | 43.781 | ug/L  | 98       |
| 69) Naphthalene                 | 13.52 | 128  | 393836   | 44.600 | ug/L  | 100      |
| 70) 1,2,3-Trichlorobenzene      | 13.76 | 180  | 138981   | 45.048 | ug/L  | 100      |

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





#2

Dichlorodifluoromethane

Concen: 47.081 ug/L

RT: 1.14 min Scan# 15

Delta R.T. 0.00 min

Lab File: VV019175.D

Acq: 30 Oct 2020 09:48

Instrument :

MSVOA\_V

ClientSampleId :

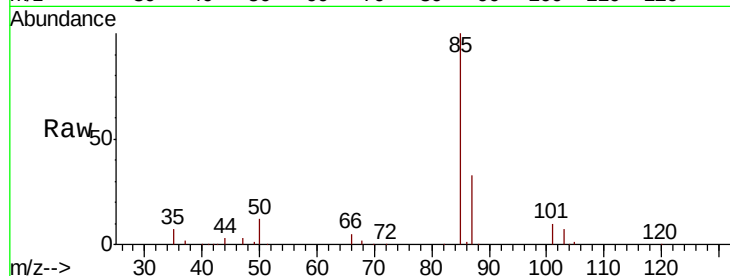
VSTD05081

Tot Ion: 85 Resp: 109127

Ion Ratio Lower Upper

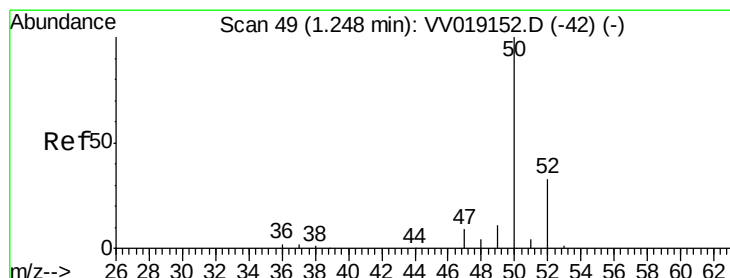
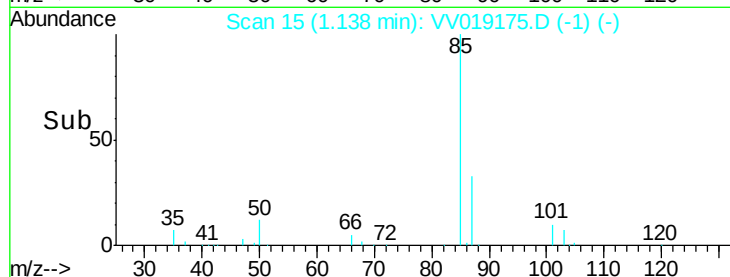
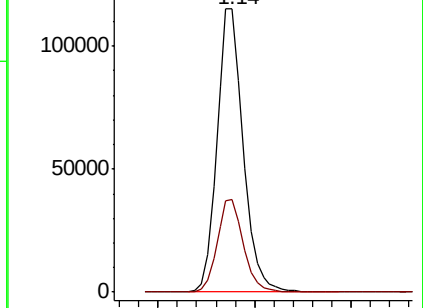
85 100

87 32.4 25.3 37.9



Abundance Ion 85.00 (84.70 to 85.70): VV0

Ion 87.00 (86.70 to 87.70): VV0



#3

Chloromethane

Concen: 45.682 ug/L

RT: 1.25 min Scan# 50

Delta R.T. 0.00 min

Lab File: VV019175.D

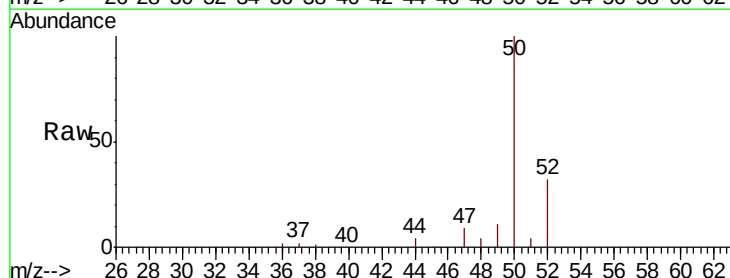
Acq: 30 Oct 2020 09:48

Tgt Ion: 50 Resp: 96154

Ion Ratio Lower Upper

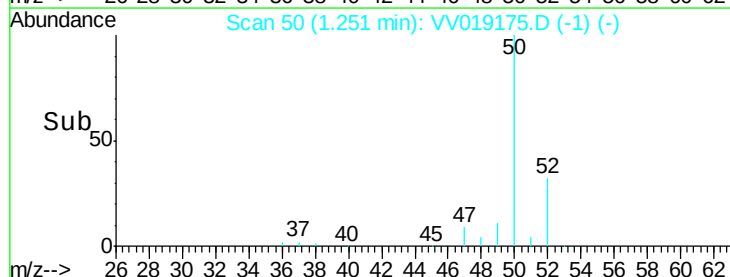
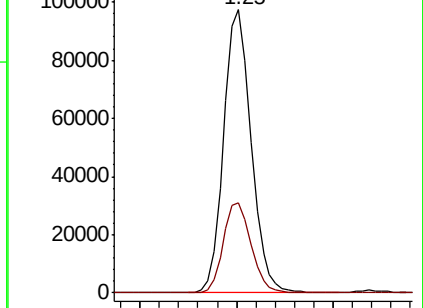
50 100

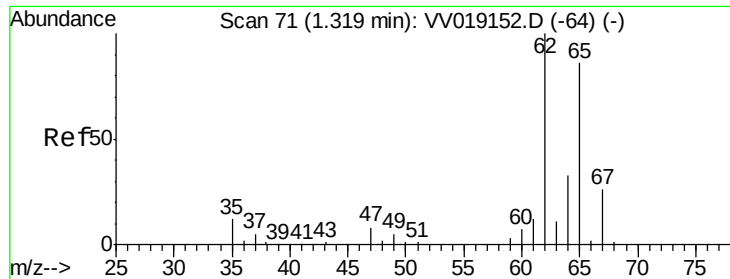
52 32.0 22.1 41.1



Abundance Ion 50.00 (49.70 to 50.70): VV0

Ion 52.00 (51.70 to 52.70): VV0





#5

Vinyl chloride

Concen: 46.334 ug/L

RT: 1.32 min Scan# 72

Delta R.T. 0.00 min

Lab File: VV019175.D

Acq: 30 Oct 2020 09:48

Instrument :

MSVOA\_V

ClientSampleId :

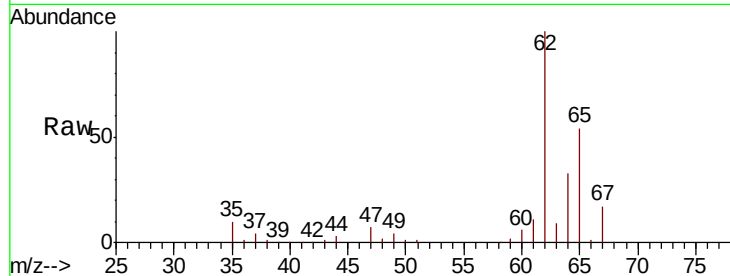
VSTD05081

Tot Ion: 62 Resp: 99849

Ion Ratio Lower Upper

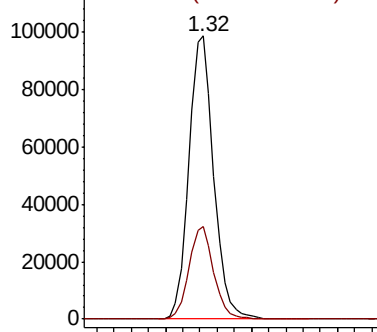
62 100

64 32.6 22.7 42.3

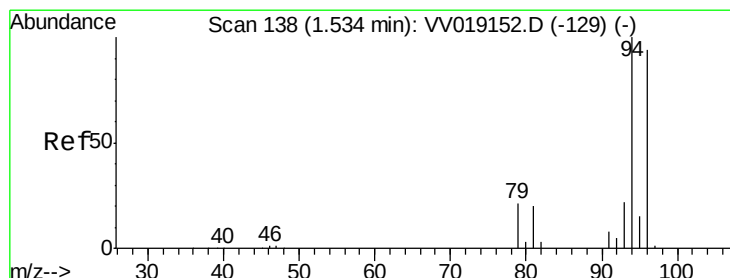
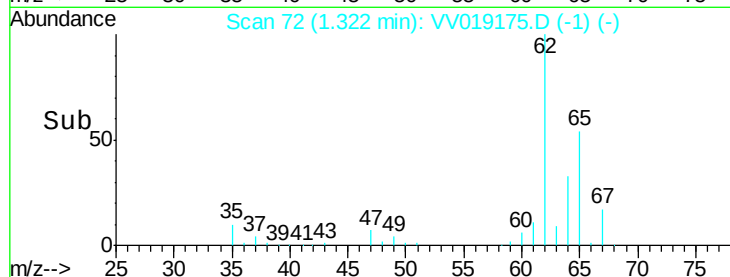


Abundance Ion 62.00 (61.70 to 62.70): VV0

Ion 64.00 (63.70 to 64.70): VV0



Time-->



#6

Bromomethane

Concen: 45.318 ug/L

RT: 1.53 min Scan# 138

Delta R.T. -0.00 min

Lab File: VV019175.D

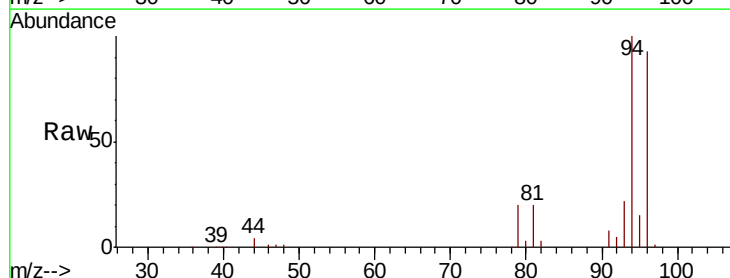
Acq: 30 Oct 2020 09:48

Tgt Ion: 94 Resp: 65416

Ion Ratio Lower Upper

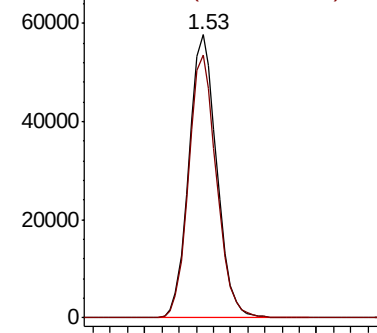
94 100

96 92.8 67.0 124.4

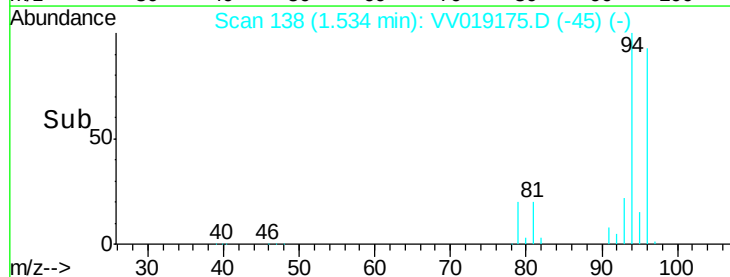


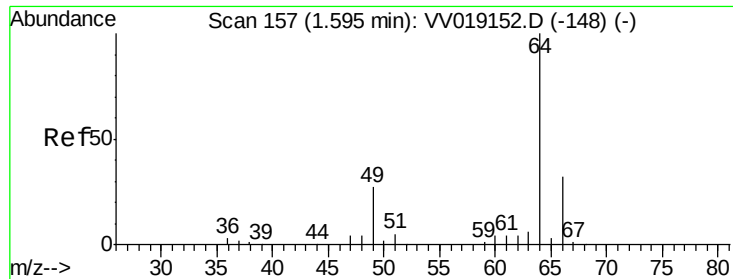
Abundance Ion 94.00 (93.70 to 94.70): VV0

Ion 96.00 (95.70 to 96.70): VV0



Time-->





#8

Chloroethane

Concen: 47.012 ug/L

RT: 1.60 min Scan# 157

Delta R.T. -0.00 min

Lab File: VV019175.D

Acq: 30 Oct 2020 09:48

Instrument :

MSVOA\_V

ClientSampleId :

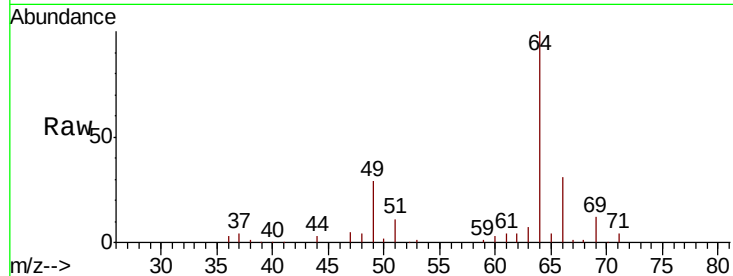
VSTD05081

Tot Ion: 64 Resp: 62993

Ion Ratio Lower Upper

64 100

66 31.4 22.0 40.8



Abundance Ion 64.00 (63.70 to 64.70): VV019175.D (-33) (-)

Ion 66.00 (65.70 to 66.70): VV019175.D (-33) (-)

1.60

60000

50000

40000

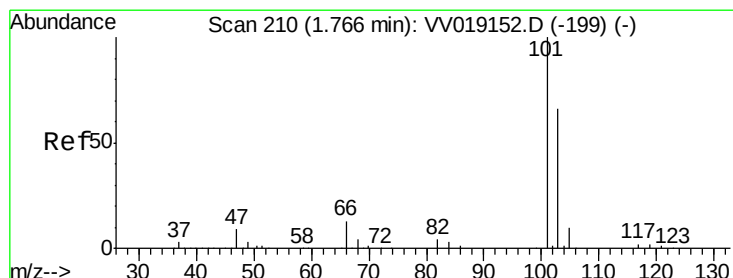
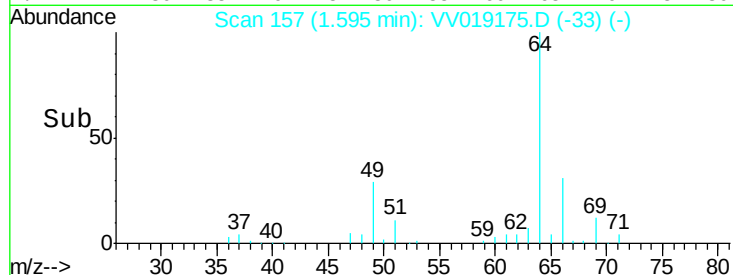
30000

20000

10000

0

Time-->



#9

Trichlorofluoromethane

Concen: 47.182 ug/L

RT: 1.77 min Scan# 210

Delta R.T. -0.00 min

Lab File: VV019175.D

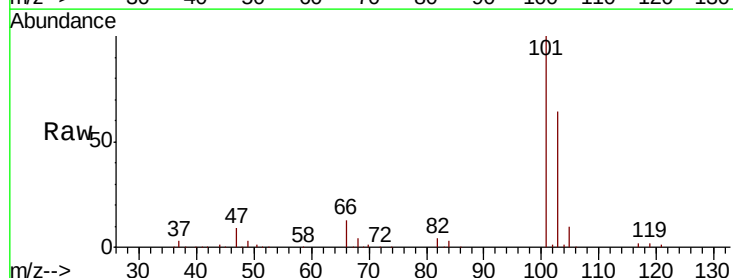
Acq: 30 Oct 2020 09:48

Tgt Ion: 101 Resp: 169464

Ion Ratio Lower Upper

101 100

103 63.9 51.9 77.9



Abundance Ion 101.00 (100.70 to 101.70): VV019175.D (-86) (-)

Ion 103.00 (102.70 to 103.70): VV019175.D (-86) (-)

1.77

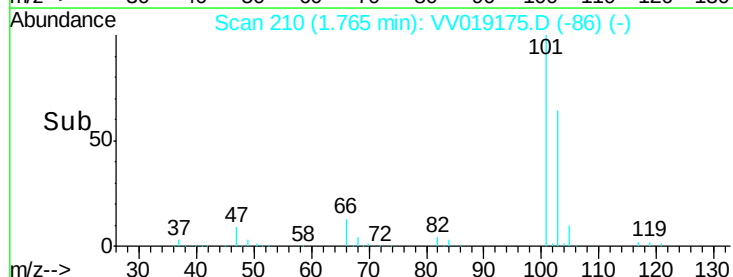
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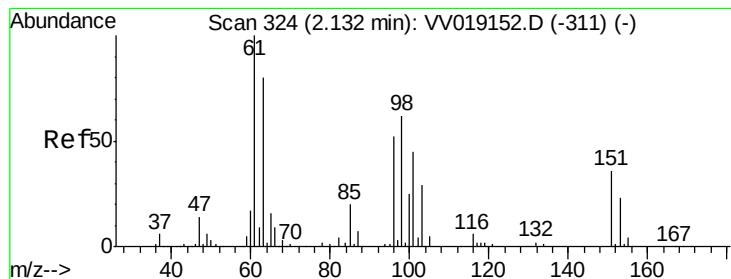
100000

50000

0

Time-->





#10

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

Concen: 47.674 ug/L

RT: 2.13 min Scan# 324

Delta R.T. -0.00 min

Lab File: VV019175.D

Acq: 30 Oct 2020 09:48

Instrument :

MSVOA\_V

ClientSampleId :

VSTD05081

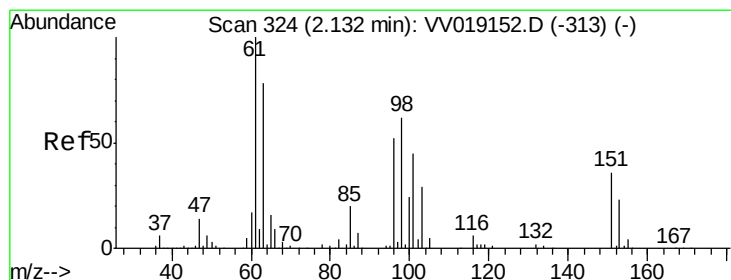
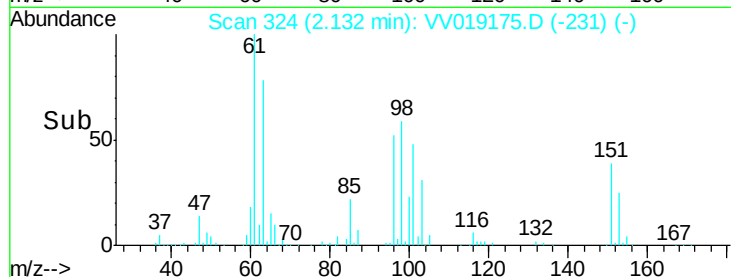
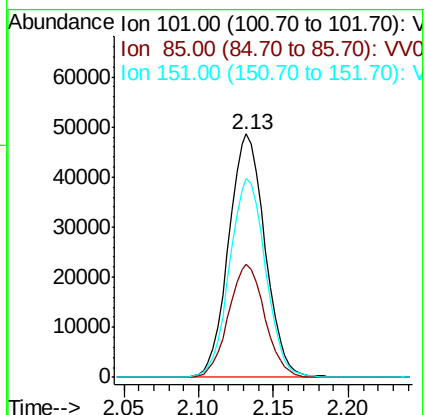
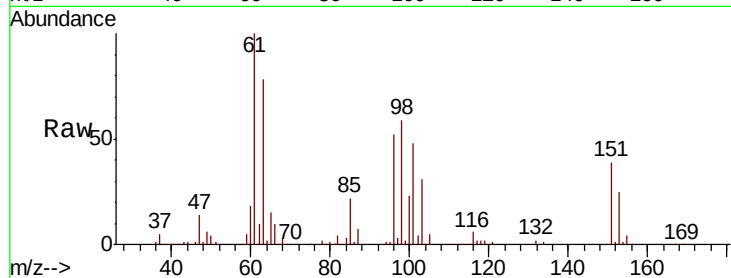
Tot Ion:101 Resp: 82404

Ion Ratio Lower Upper

101 100

85 46.3 36.1 54.1

151 80.8 65.0 97.4



#12

1,1-Dichloroethene

Concen: 45.651 ug/L

RT: 2.13 min Scan# 324

Delta R.T. -0.00 min

Lab File: VV019175.D

Acq: 30 Oct 2020 09:48

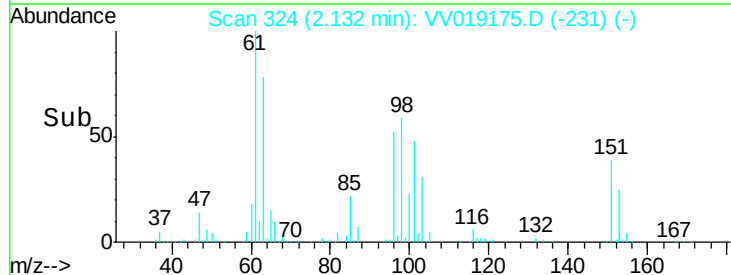
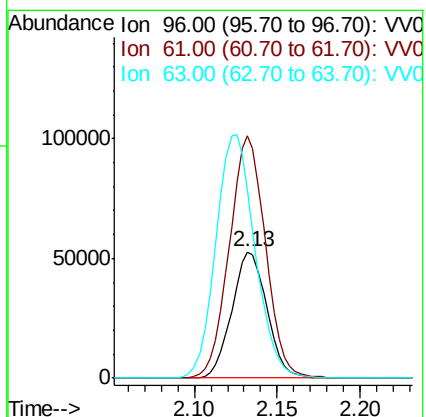
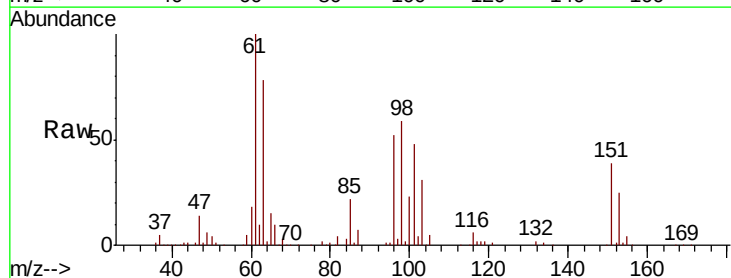
Tgt Ion: 96 Resp: 77278

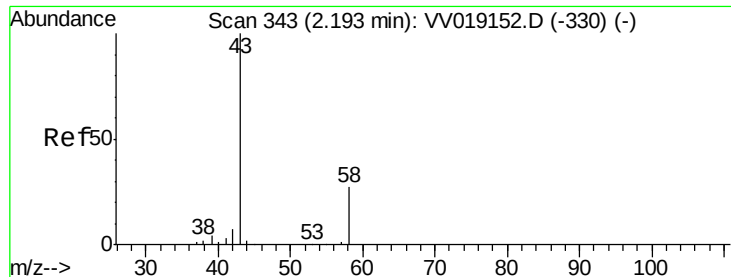
Ion Ratio Lower Upper

96 100

61 192.3 132.6 246.2

63 149.5 108.4 201.4





#13

Acetone

Concen: 110.527 ug/L

RT: 2.19 min Scan# 343

Delta R.T. -0.00 min

Lab File: VV019175.D

Acq: 30 Oct 2020 09:48

Instrument :

MSVOA\_V

ClientSampleId :

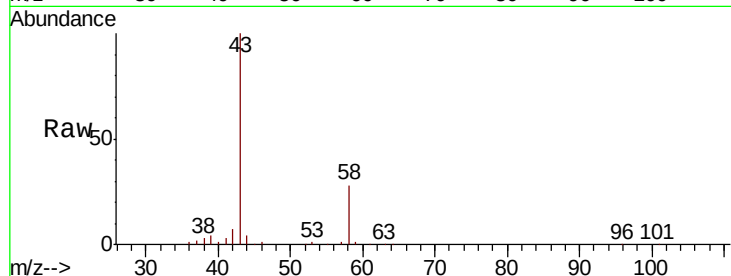
VSTD05081

Tot Ion: 43 Resp: 131932

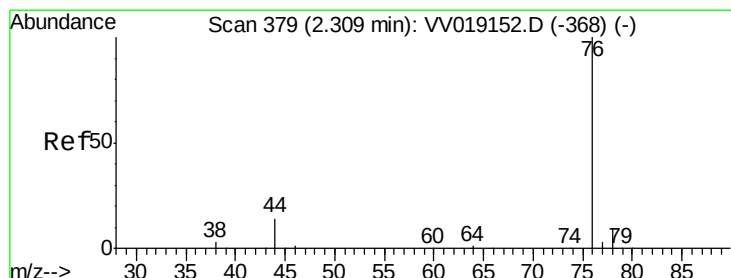
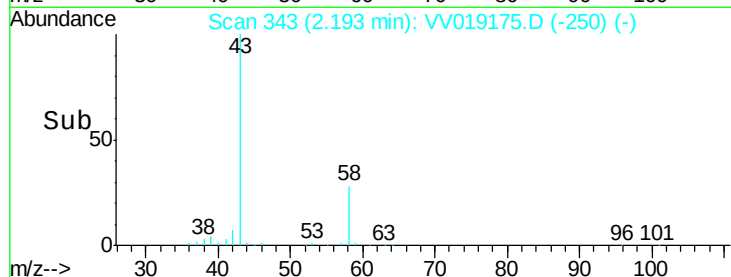
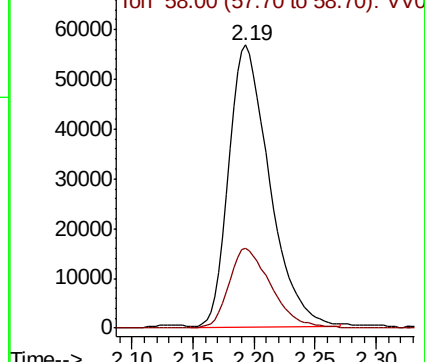
Ion Ratio Lower Upper

43 100

58 29.2 0.0 59.4



Abundance Ion 43.00 (42.70 to 43.70): VV019175.D (-250) (-)



#14

Carbon disulfide

Concen: 45.671 ug/L

RT: 2.31 min Scan# 379

Delta R.T. -0.00 min

Lab File: VV019175.D

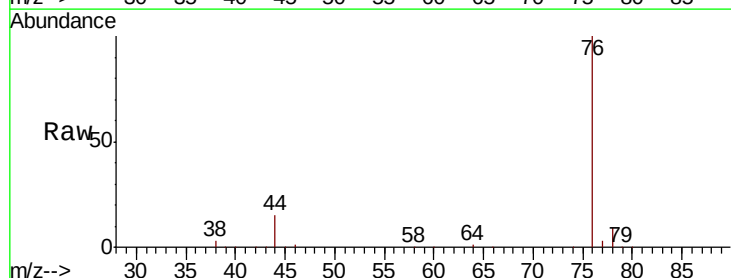
Acq: 30 Oct 2020 09:48

Tgt Ion: 76 Resp: 245743

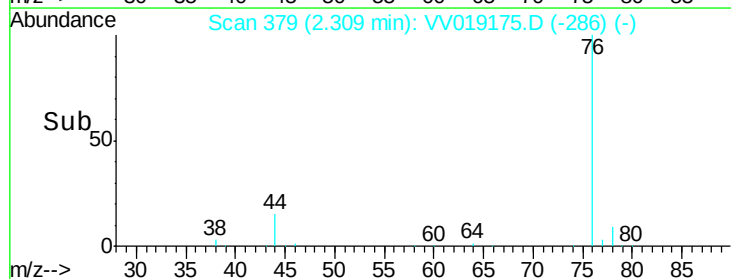
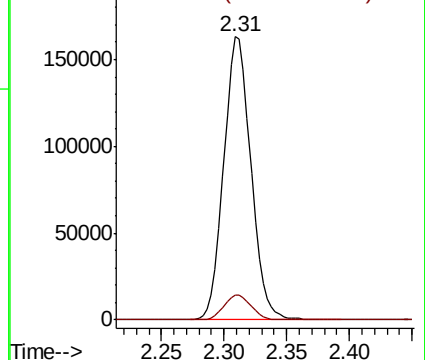
Ion Ratio Lower Upper

76 100

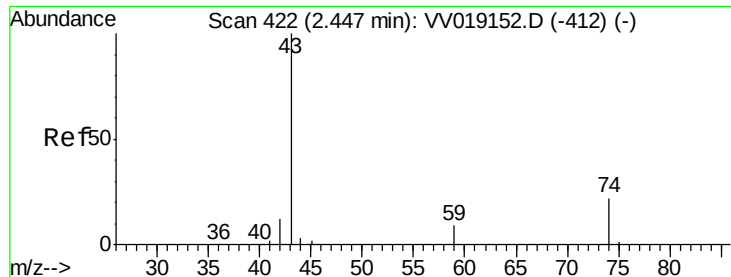
78 8.9 7.4 11.0



Abundance Ion 76.00 (75.70 to 76.70): VV019175.D (-286) (-)







#15

Methyl Acetate

Concen: 43.660 ug/L

RT: 2.45 min Scan# 422

Delta R.T. -0.00 min

Lab File: VV019175.D

Acq: 30 Oct 2020 09:48

Instrument :

MSVOA\_V

ClientSampleId :

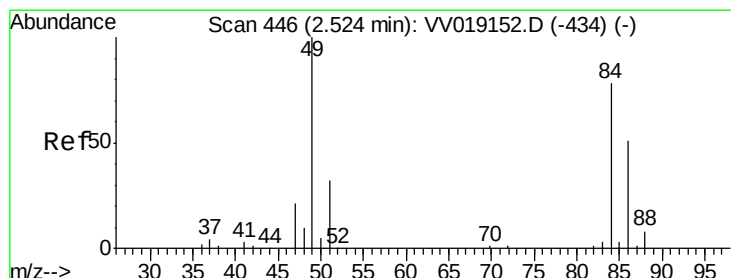
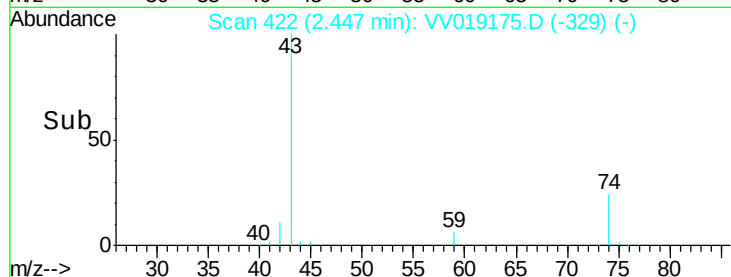
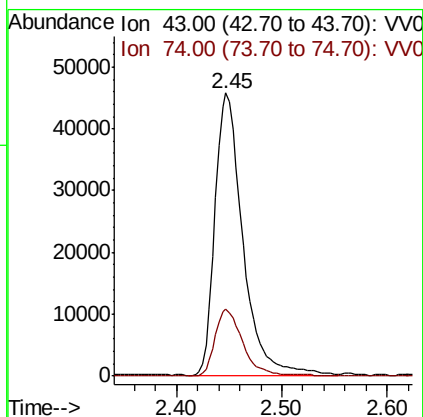
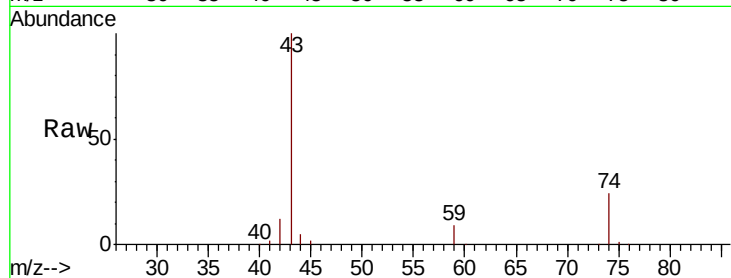
VSTD05081

Tot Ion: 43 Resp: 83986

Ion Ratio Lower Upper

43 100

74 23.5 18.4 27.6



#16

Methylene chloride

Concen: 45.247 ug/L

RT: 2.52 min Scan# 446

Delta R.T. -0.00 min

Lab File: VV019175.D

Acq: 30 Oct 2020 09:48

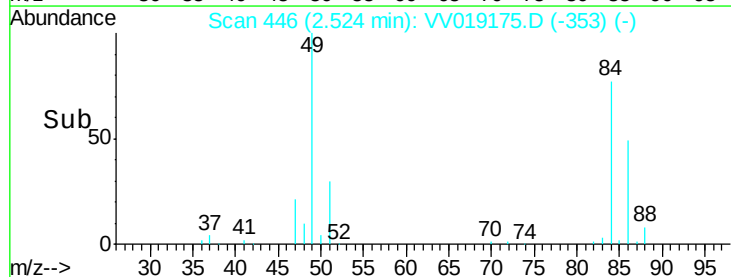
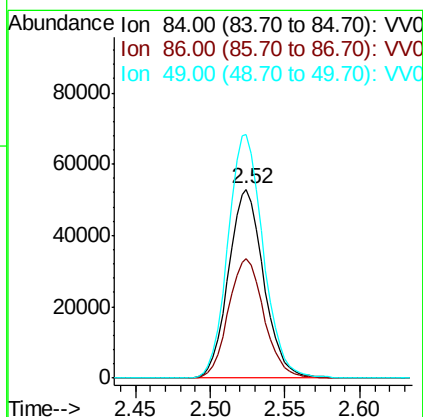
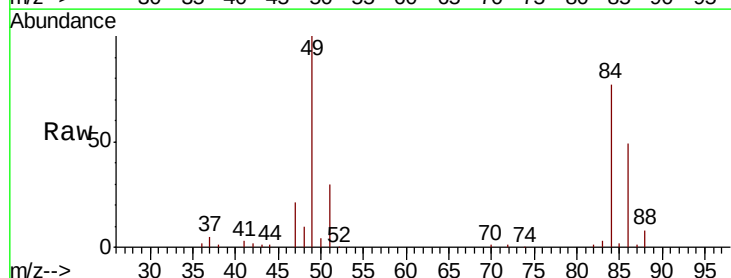
Tgt Ion: 84 Resp: 86974

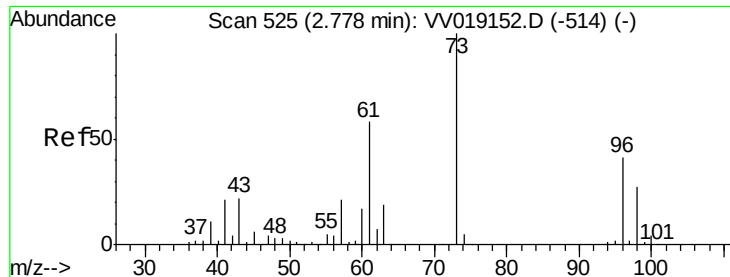
Ion Ratio Lower Upper

84 100

86 63.2 46.0 85.4

49 129.0 87.8 163.2





#17

trans-1,2-Dichloroethene

Concen: 46.757 ug/L

RT: 2.78 min Scan# 525

Delta R.T. -0.00 min

Lab File: VV019175.D

Acq: 30 Oct 2020 09:48

Instrument :

MSVOA\_V

ClientSampleId :

VSTD05081

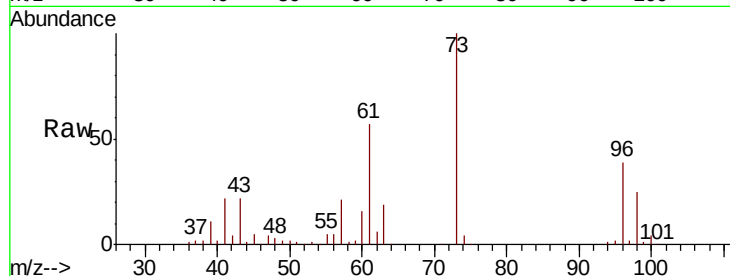
Tot Ion: 96 Resp: 85013

Ion Ratio Lower Upper

96 100

61 146.4 102.4 190.2

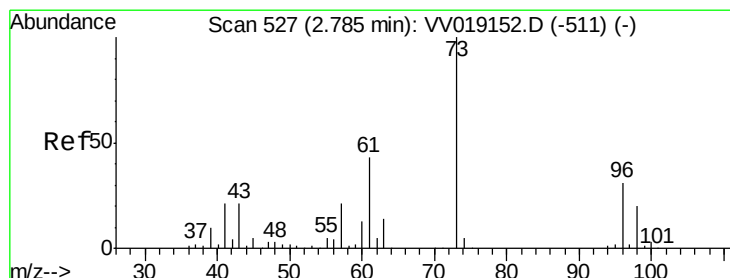
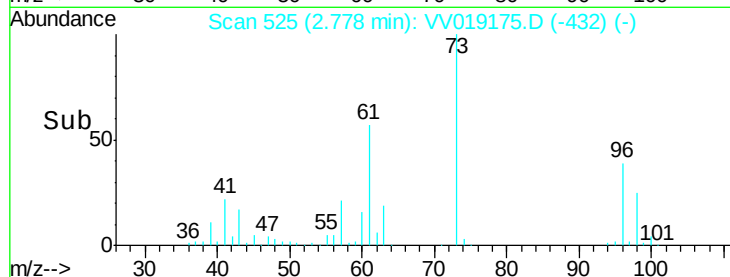
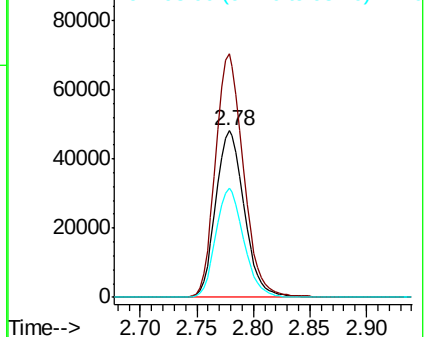
98 65.4 45.9 85.3



Abundance Ion 96.00 (95.70 to 96.70): VV0

Ion 61.00 (60.70 to 61.70): VV0

Ion 98.00 (97.70 to 98.70): VV0



#18

Methyl tert-butyl Ether

Concen: 44.642 ug/L

RT: 2.78 min Scan# 527

Delta R.T. -0.00 min

Lab File: VV019175.D

Acq: 30 Oct 2020 09:48

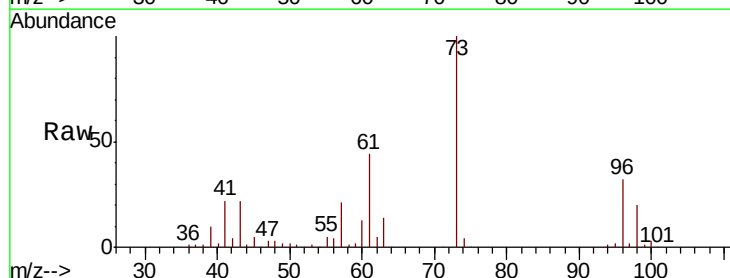
Tgt Ion: 73 Resp: 271786

Ion Ratio Lower Upper

73 100

43 21.9 17.9 26.9

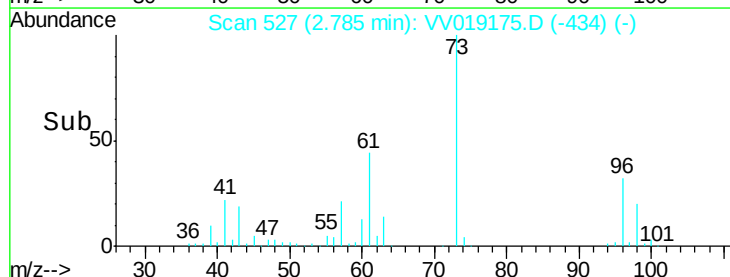
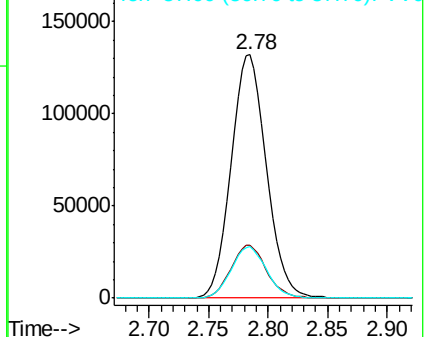
57 21.3 17.1 25.7

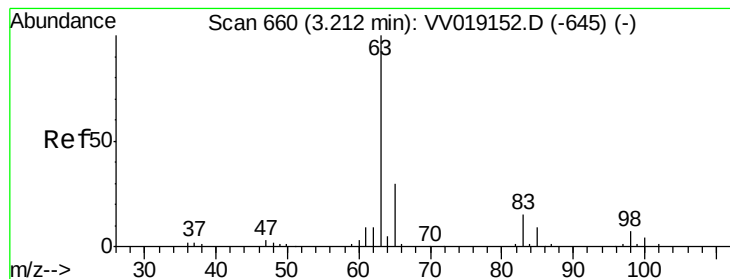


Abundance Ion 73.00 (72.70 to 73.70): VV0

Ion 43.00 (42.70 to 43.70): VV0

Ion 57.00 (56.70 to 57.70): VV0





#19

1,1-Dichloroethane

Concen: 46.243 ug/L

RT: 3.21 min Scan# 659

Delta R.T. -0.00 min

Lab File: VV019175.D

Acq: 30 Oct 2020 09:48

Instrument :

MSVOA\_V

ClientSampleId :

VSTD05081

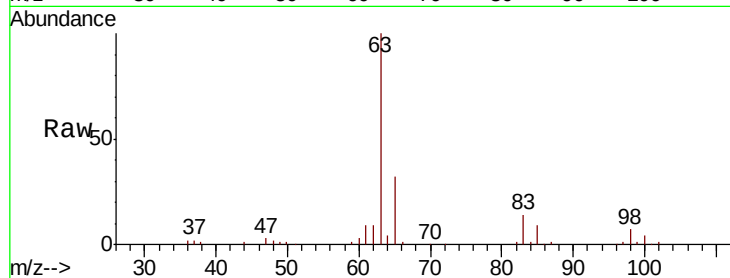
Tot Ion: 63 Resp: 156642

Ion Ratio Lower Upper

63 100

65 32.2 22.0 40.8

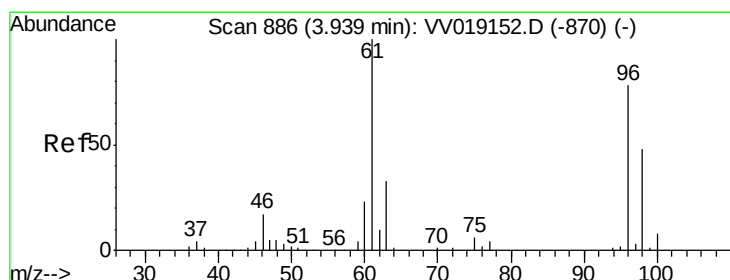
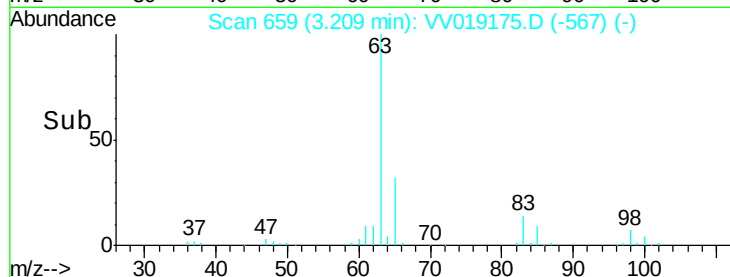
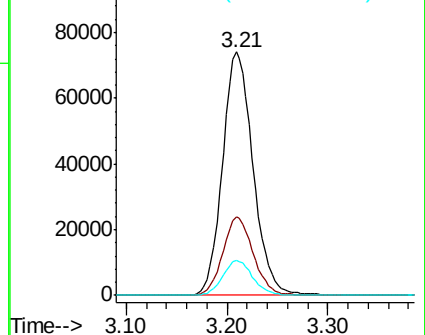
83 14.2 9.6 17.8



Abundance Ion 63.00 (62.70 to 63.70): VV0

Ion 65.00 (64.70 to 65.70): VV0

Ion 83.00 (82.70 to 83.70): VV0



#20

cis-1,2-Dichloroethene

Concen: 44.641 ug/L

RT: 3.94 min Scan# 885

Delta R.T. -0.00 min

Lab File: VV019175.D

Acq: 30 Oct 2020 09:48

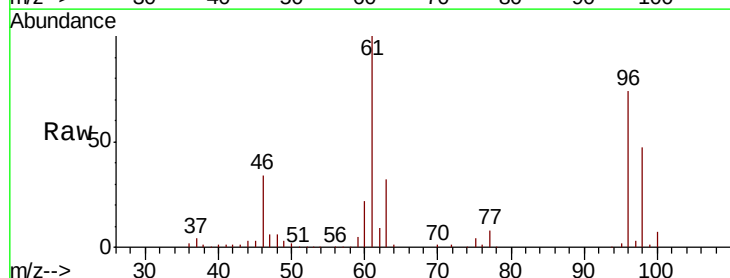
Tgt Ion: 96 Resp: 89079

Ion Ratio Lower Upper

96 100

61 134.9 90.7 168.5

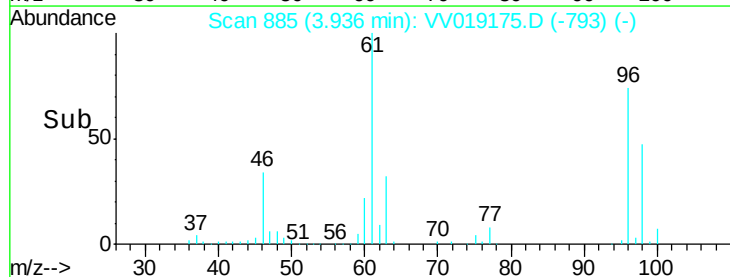
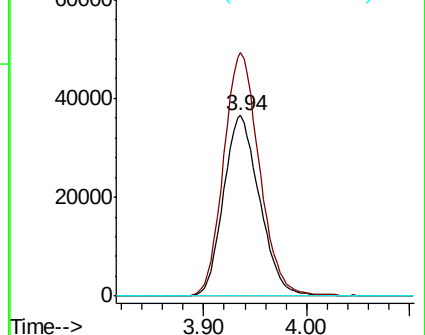
68 0.0 0.0 0.0

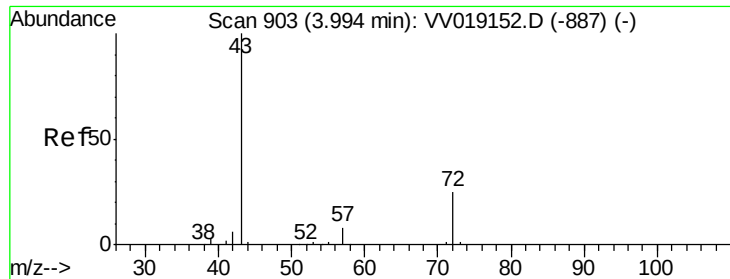


Abundance Ion 96.00 (95.70 to 96.70): VV0

Ion 61.00 (60.70 to 61.70): VV0

Ion 68.00 (67.70 to 68.70): VV0





#22

2-Butanone

Concen: 100.738 ug/L

RT: 3.99 min Scan# 902

Delta R.T. -0.00 min

Lab File: VV019175.D

Acq: 30 Oct 2020 09:48

Instrument :

MSVOA\_V

ClientSampleId :

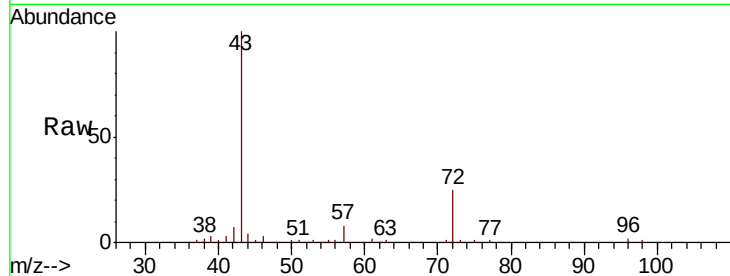
VSTD05081

Tot Ion: 43 Resp: 130976

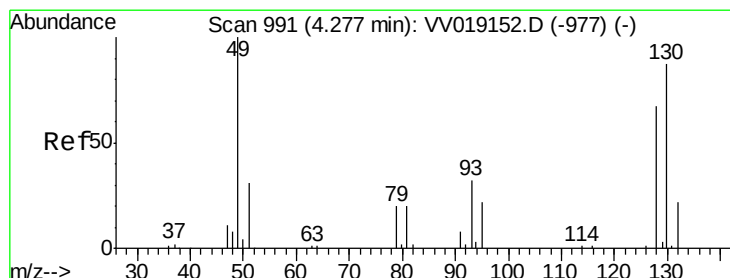
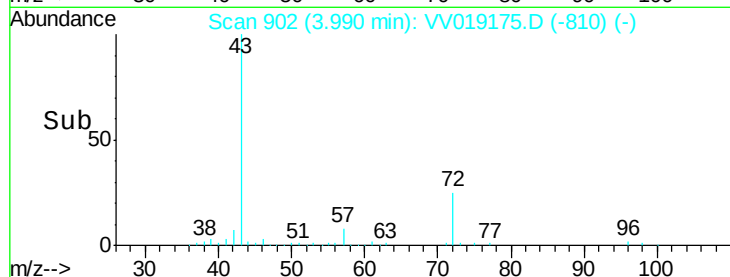
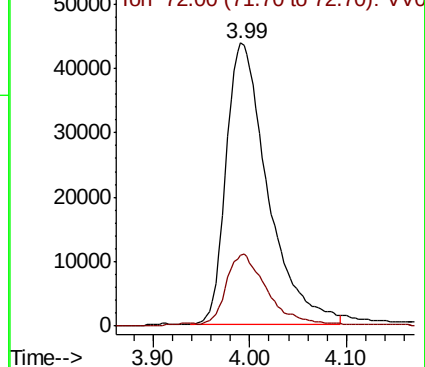
Ion Ratio Lower Upper

43 100

72 23.9 11.9 35.9



Abundance Ion 43.00 (42.70 to 43.70): VV019175.D (-810) (-)



#23

Bromochloromethane

Concen: 44.611 ug/L

RT: 4.27 min Scan# 989

Delta R.T. -0.01 min

Lab File: VV019175.D

Acq: 30 Oct 2020 09:48

Tgt Ion: 128 Resp: 47768

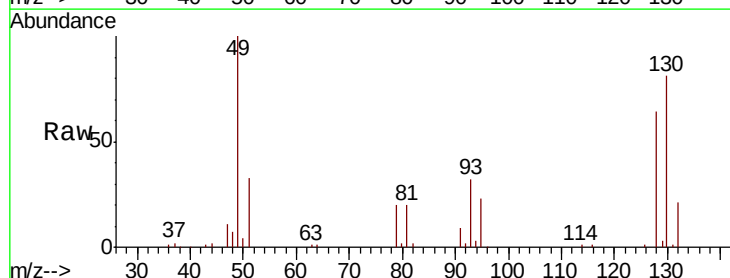
Ion Ratio Lower Upper

128 100

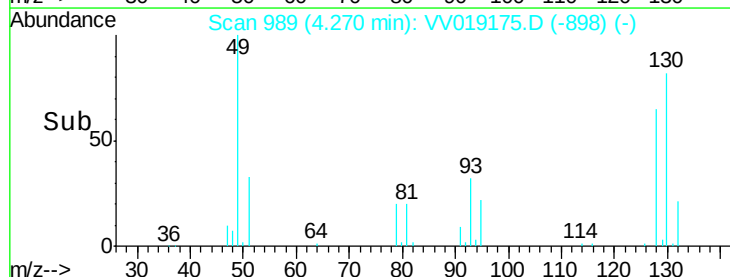
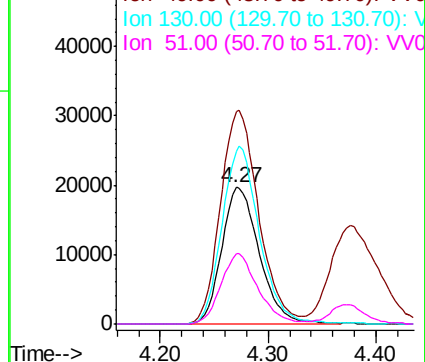
49 155.2 108.5 201.5

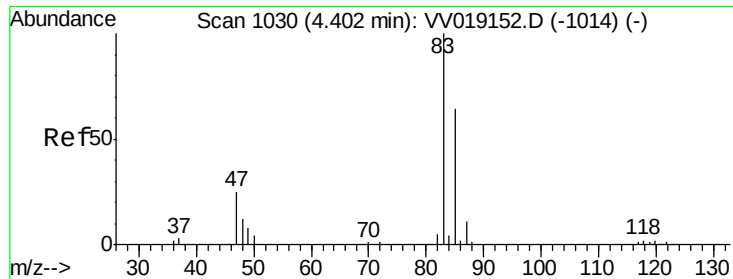
130 125.9 90.4 167.8

51 51.4 36.9 55.3



Abundance Ion 128.00 (127.70 to 128.70): VV019175.D (-898) (-)

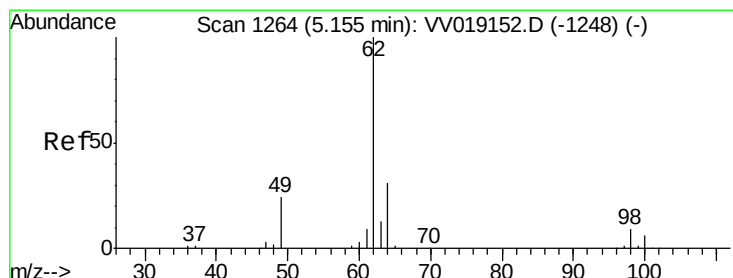
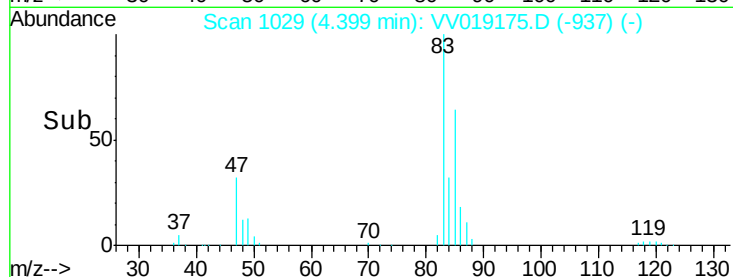
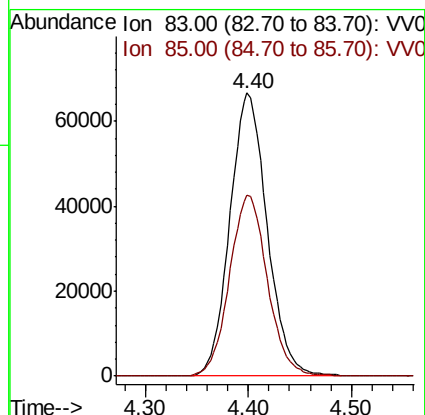
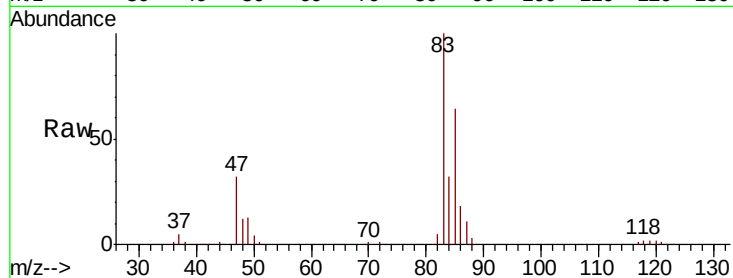




#25  
Chloroform  
Concen: 45.769 ug/L  
RT: 4.40 min Scan# 1029  
Delta R.T. -0.00 min  
Lab File: VV019175.D  
Acq: 30 Oct 2020 09:48

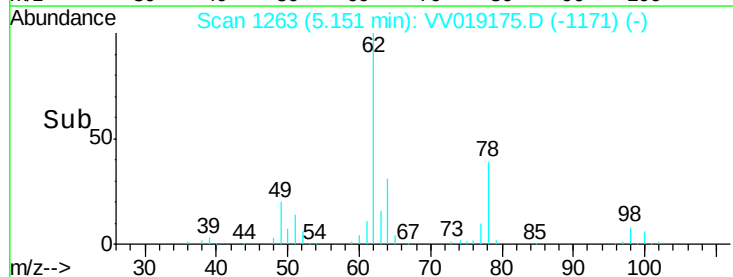
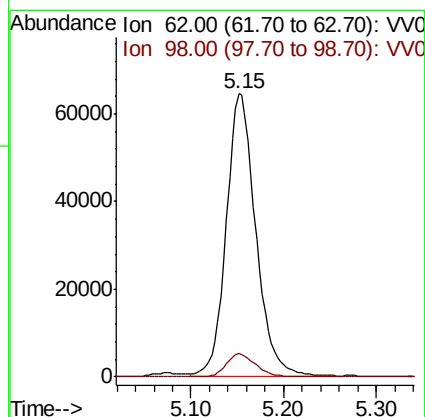
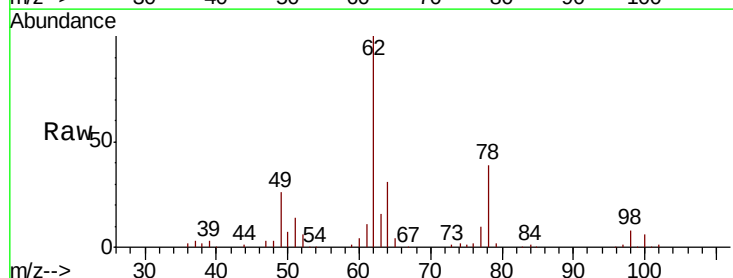
Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD05081

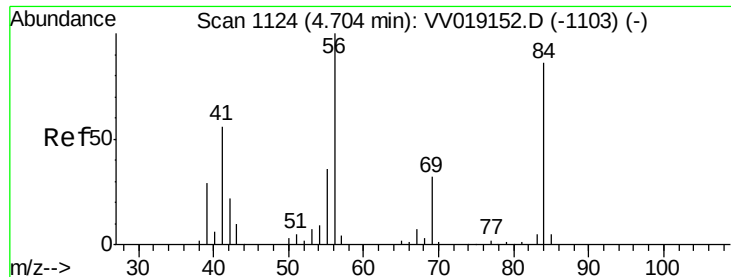
Tot Ion: 83 Resp: 167537  
Ion Ratio Lower Upper  
83 100  
85 63.7 45.1 83.9



#27  
1,2-Dichloroethane  
Concen: 45.739 ug/L  
RT: 5.15 min Scan# 1263  
Delta R.T. -0.00 min  
Lab File: VV019175.D  
Acq: 30 Oct 2020 09:48

Tgt Ion: 62 Resp: 142539  
Ion Ratio Lower Upper  
62 100  
98 8.1 6.8 10.2

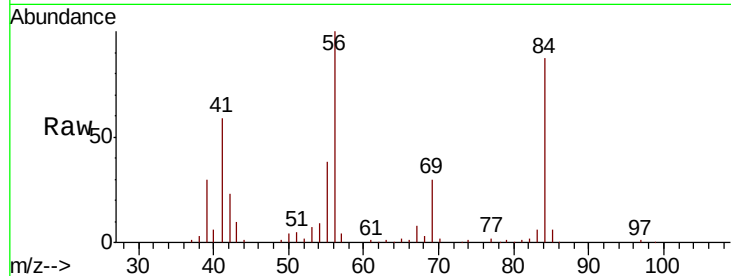




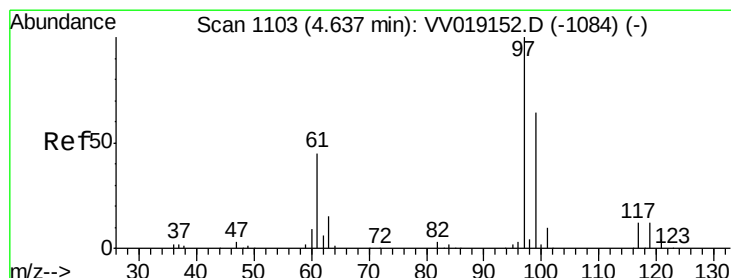
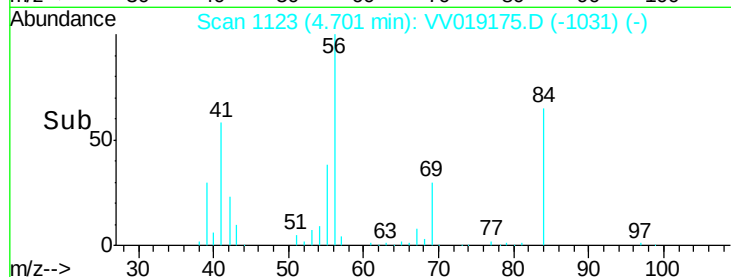
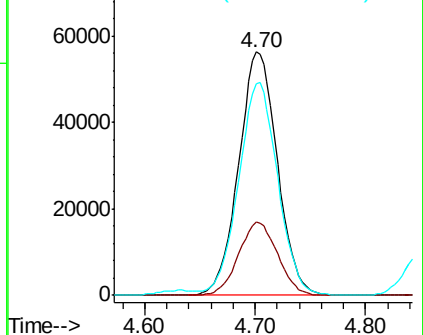
#29  
Cyclohexane  
Concen: 47.498 ug/L  
RT: 4.70 min Scan# 1123  
Delta R.T. -0.00 min  
Lab File: VV019175.D  
Acq: 30 Oct 2020 09:48

Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD05081

Tot Ion: 56 Resp: 136421  
Ion Ratio Lower Upper  
56 100  
69 30.3 25.0 37.4  
84 88.3 71.5 107.3

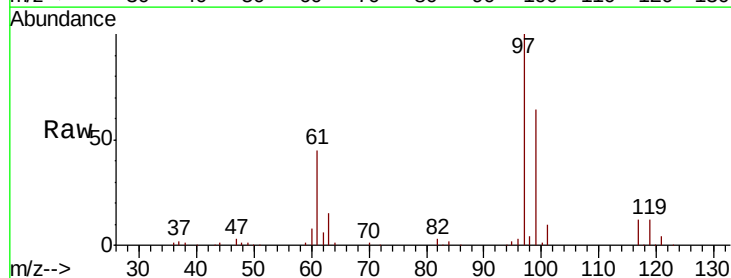


Abundance Ion 56.00 (55.70 to 56.70): VV0  
Ion 69.00 (68.70 to 69.70): VV0  
Ion 84.00 (83.70 to 84.70): VV0

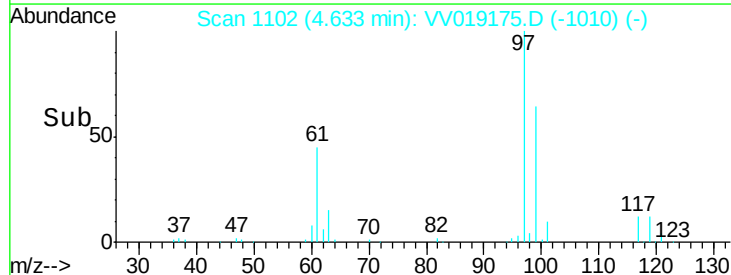
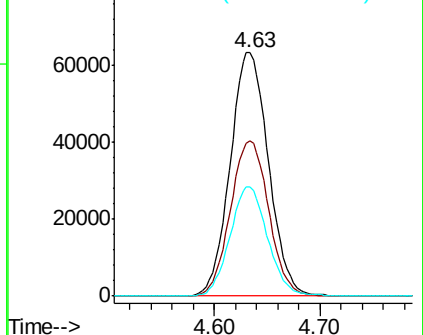


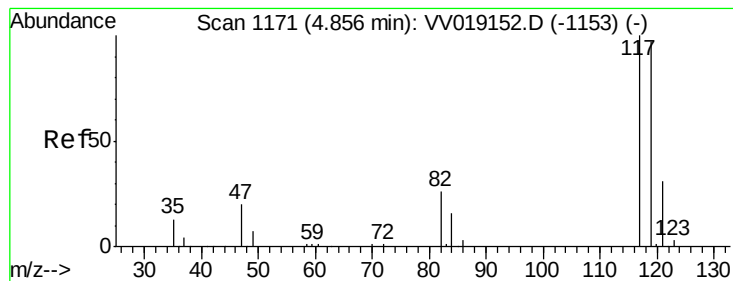
#30  
1,1,1-Trichloroethane  
Concen: 45.753 ug/L  
RT: 4.63 min Scan# 1102  
Delta R.T. -0.00 min  
Lab File: VV019175.D  
Acq: 30 Oct 2020 09:48

Tgt Ion: 97 Resp: 159512  
Ion Ratio Lower Upper  
97 100  
99 63.8 51.3 76.9  
61 44.1 34.6 52.0



Abundance Ion 97.00 (96.70 to 97.70): VV0  
Ion 99.00 (98.70 to 99.70): VV0  
Ion 61.05 (60.75 to 61.75): VV0





#31

Carbon tetrachloride

Concen: 46.371 ug/L

RT: 4.85 min Scan# 1170

Delta R.T. -0.00 min

Lab File: VV019175.D

Acq: 30 Oct 2020 09:48

Instrument :

MSVOA\_V

ClientSampleId :

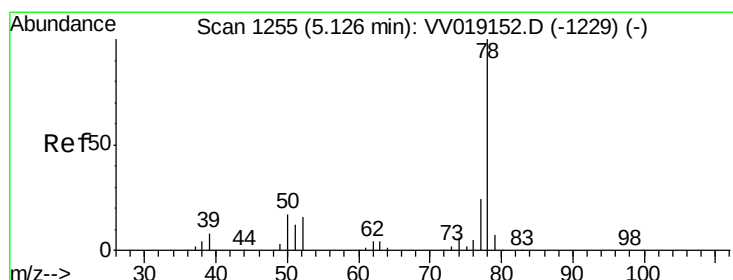
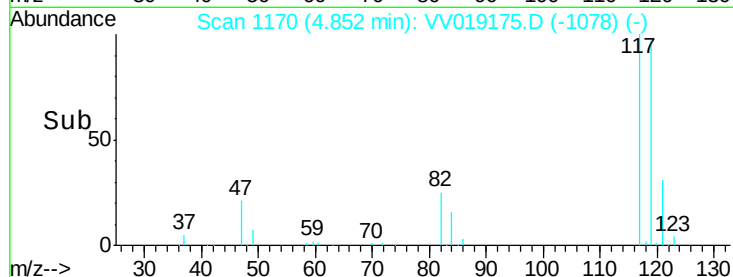
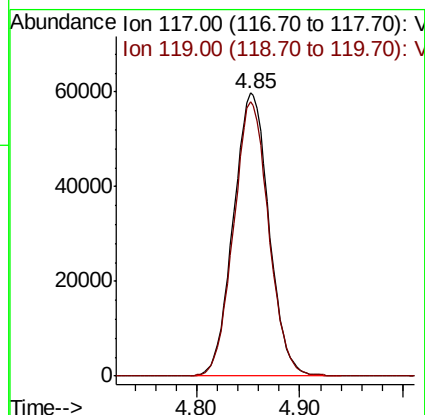
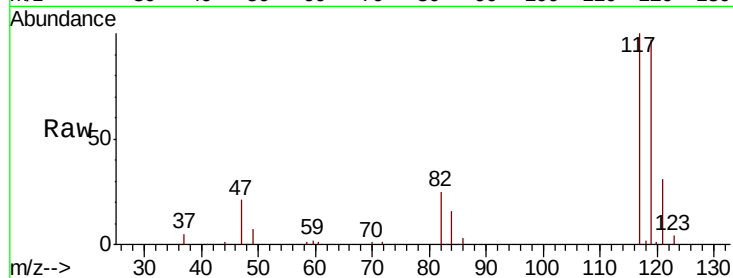
VSTD05081

Tot Ion:117 Resp: 143356

Ion Ratio Lower Upper

117 100

119 95.6 77.2 115.8



#33

Benzene

Concen: 46.469 ug/L

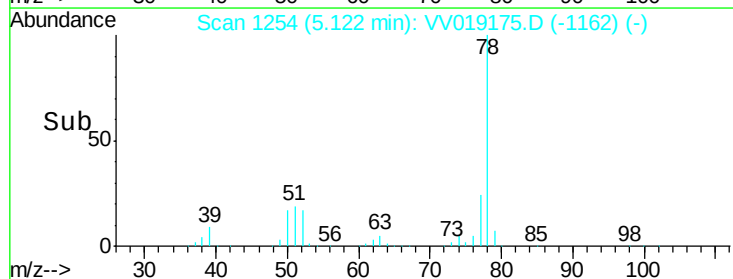
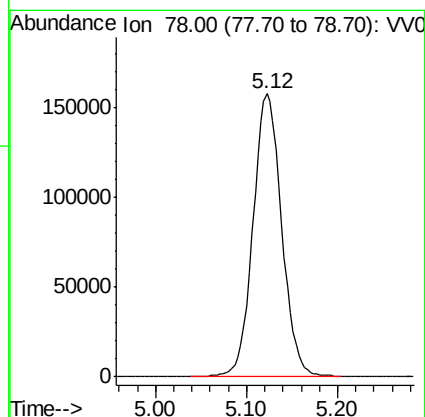
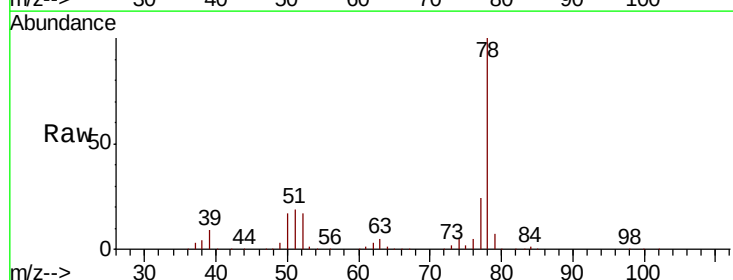
RT: 5.12 min Scan# 1254

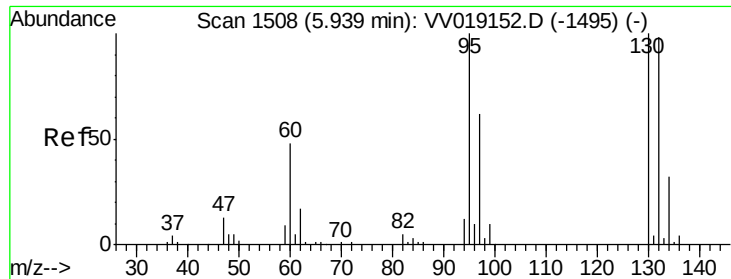
Delta R.T. -0.00 min

Lab File: VV019175.D

Acq: 30 Oct 2020 09:48

Tgt Ion: 78 Resp: 344695

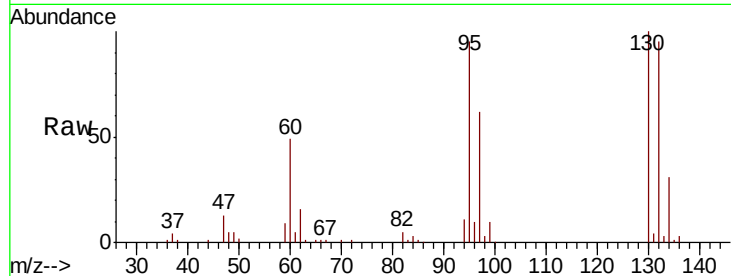




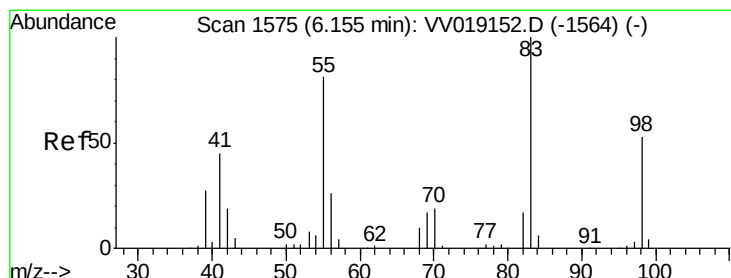
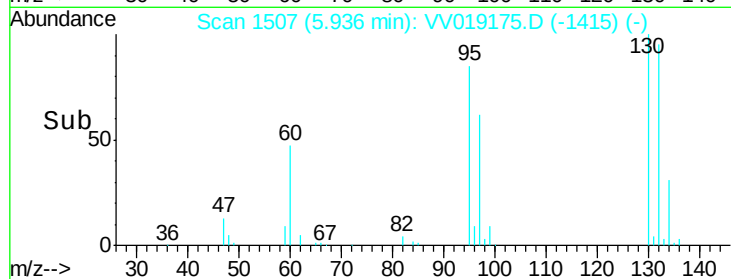
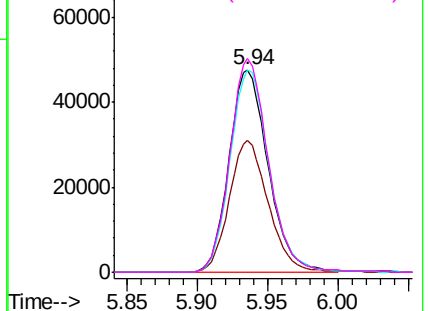
#34  
 Trichloroethene  
 Concen: 45.473 ug/L  
 RT: 5.94 min Scan# 1507  
 Delta R.T. -0.00 min  
 Lab File: VV019175.D  
 Acq: 30 Oct 2020 09:48

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD05081

Tot Ion: 95 Resp: 92405  
 Ion Ratio Lower Upper  
 95 100  
 97 64.9 43.4 80.6  
 132 99.9 69.7 129.4  
 130 105.5 72.4 134.5

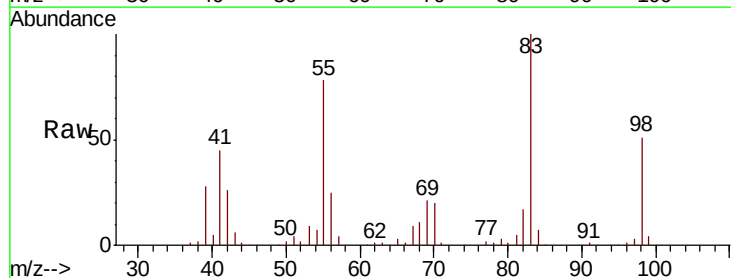


Abundance Ion 95.00 (94.70 to 95.70): VV0  
 Ion 97.00 (96.70 to 97.70): VV0  
 Ion 132.00 (131.70 to 132.70): VV0  
 Ion 130.00 (129.70 to 130.70): VV0

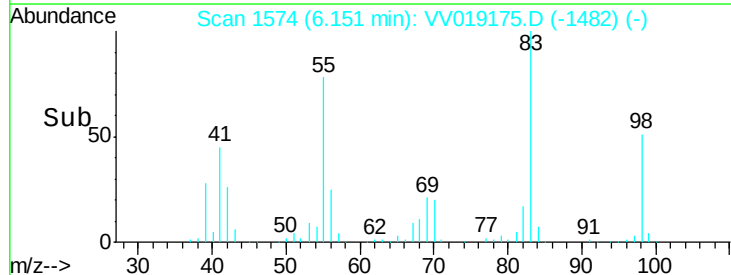
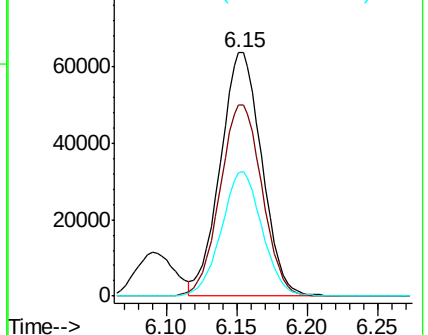


#35  
 Methylcyclohexane  
 Concen: 47.514 ug/L  
 RT: 6.15 min Scan# 1574  
 Delta R.T. -0.00 min  
 Lab File: VV019175.D  
 Acq: 30 Oct 2020 09:48

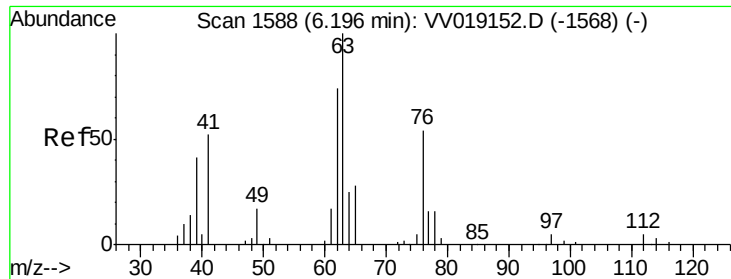
Tgt Ion: 83 Resp: 130344  
 Ion Ratio Lower Upper  
 83 100  
 55 79.6 62.2 93.4  
 98 50.5 39.4 59.2



Abundance Ion 83.00 (82.70 to 83.70): VV0  
 Ion 55.00 (54.70 to 55.70): VV0  
 Ion 98.00 (97.70 to 98.70): VV0



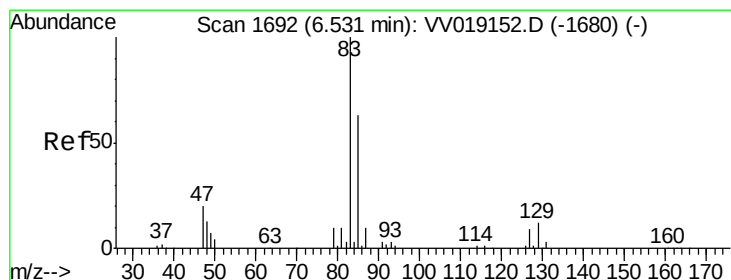
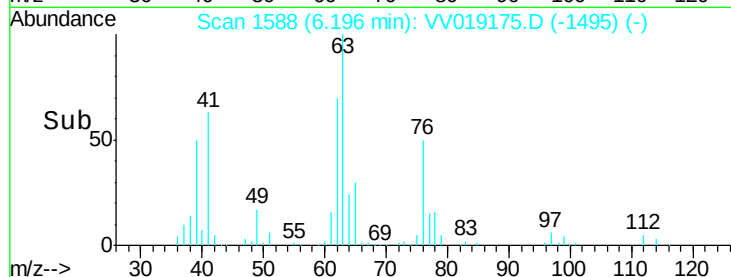
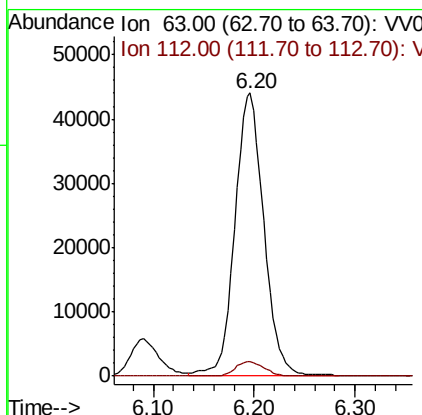
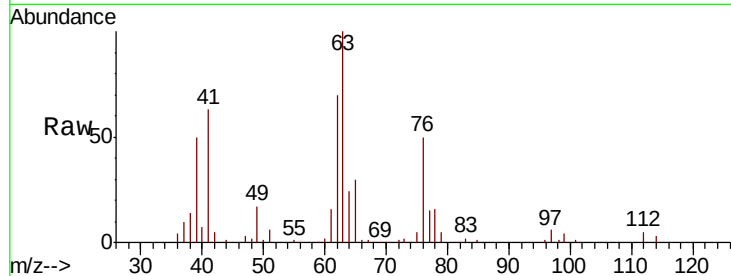




#37  
 1,2-Dichloropropane  
 Concen: 47.799 ug/L  
 RT: 6.20 min Scan# 1588  
 Delta R.T. -0.00 min  
 Lab File: VV019175.D  
 Acq: 30 Oct 2020 09:48

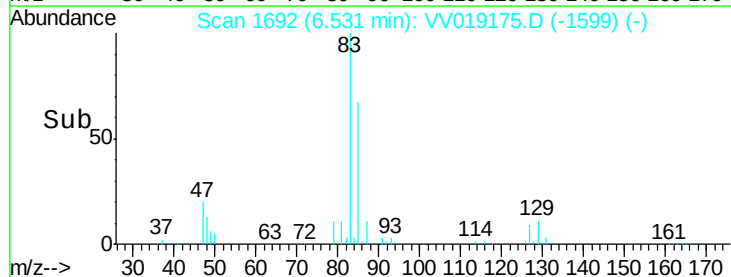
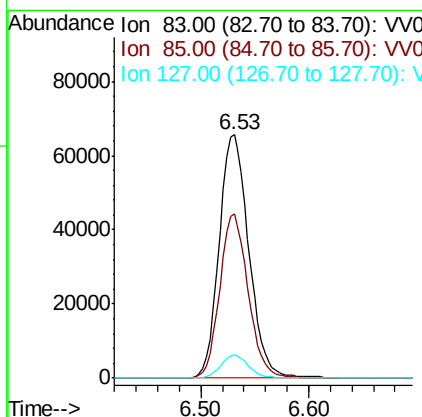
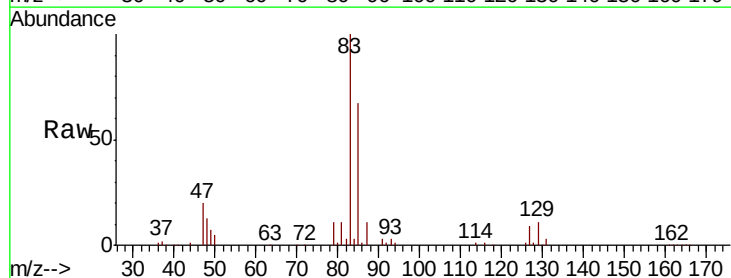
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD05081

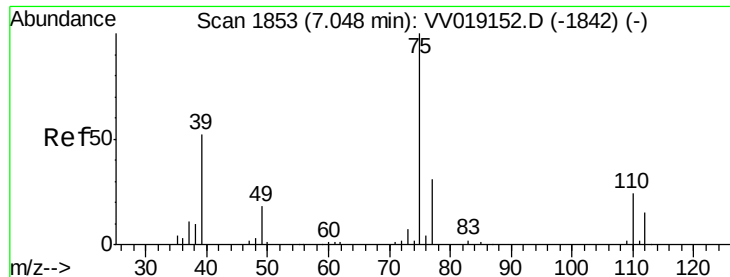
Tot Ion: 63 Resp: 88053  
 Ion Ratio Lower Upper  
 63 100  
 112 5.1 3.8 5.8



#38  
 Bromodichloromethane  
 Concen: 45.786 ug/L  
 RT: 6.53 min Scan# 1692  
 Delta R.T. -0.00 min  
 Lab File: VV019175.D  
 Acq: 30 Oct 2020 09:48

Tgt Ion: 83 Resp: 125470  
 Ion Ratio Lower Upper  
 83 100  
 85 67.4 45.9 85.3  
 127 9.4 6.9 10.3





#39

cis-1,3-Dichloropropene

Concen: 46.332 ug/L

RT: 7.04 min Scan# 1852

Delta R.T. -0.00 min

Lab File: VV019175.D

Acq: 30 Oct 2020 09:48

Instrument :

MSVOA\_V

ClientSampleId :

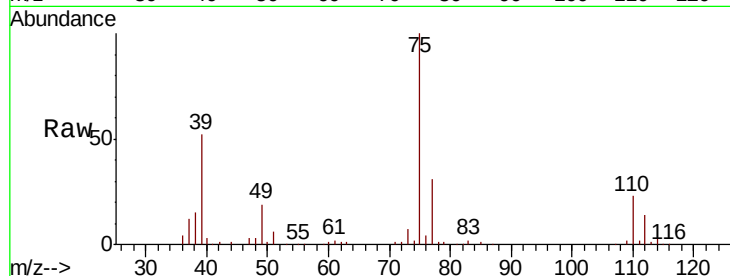
VSTD05081

Tot Ion: 75 Resp: 140976

Ion Ratio Lower Upper

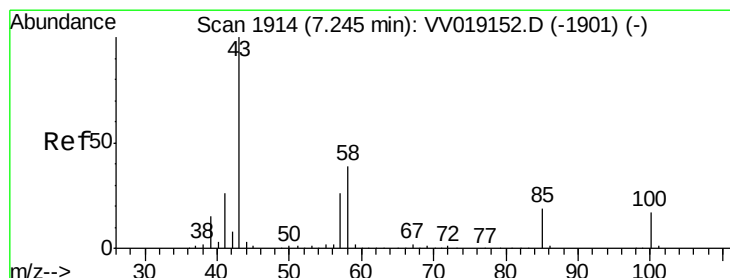
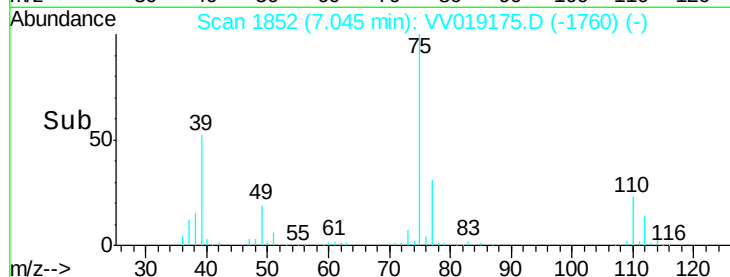
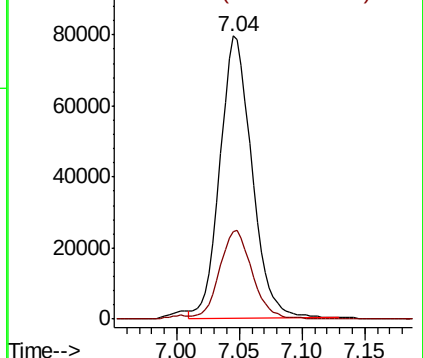
75 100

77 31.0 22.7 42.1



Abundance Ion 75.00 (74.70 to 75.70): VV0

Ion 77.00 (76.70 to 77.70): VV0



#40

4-Methyl-2-pentanone

Concen: 89.797 ug/L

RT: 7.24 min Scan# 1914

Delta R.T. -0.00 min

Lab File: VV019175.D

Acq: 30 Oct 2020 09:48

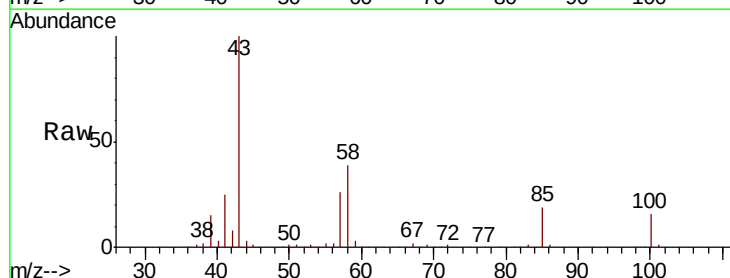
Tgt Ion: 43 Resp: 228195

Ion Ratio Lower Upper

43 100

58 38.8 31.0 46.4

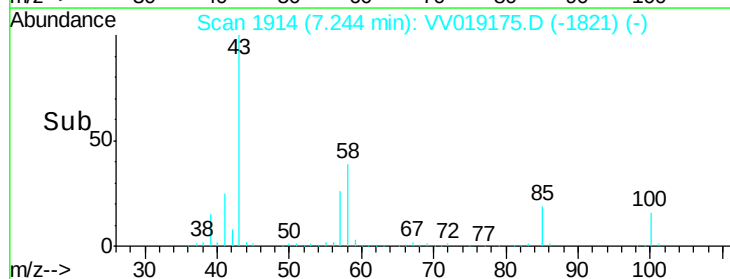
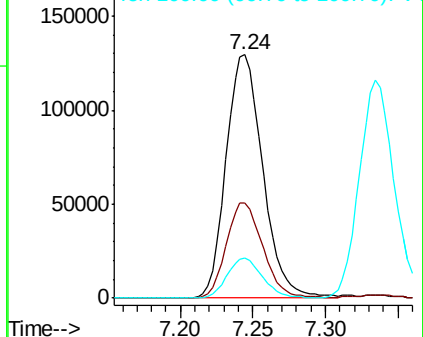
100 15.9 13.2 19.8

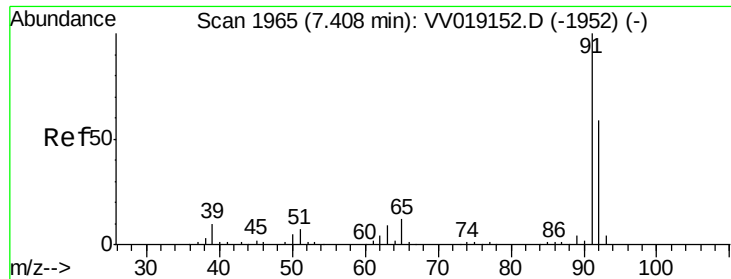


Abundance Ion 43.00 (42.70 to 43.70): VV0

Ion 58.00 (57.70 to 58.70): VV0

Ion 100.00 (99.70 to 100.70): VV0





#42

Toluene

Concen: 47.303 ug/L

RT: 7.41 min Scan# 1965

Delta R.T. -0.00 min

Lab File: VV019175.D

Acq: 30 Oct 2020 09:48

Instrument :

MSVOA\_V

ClientSampleId :

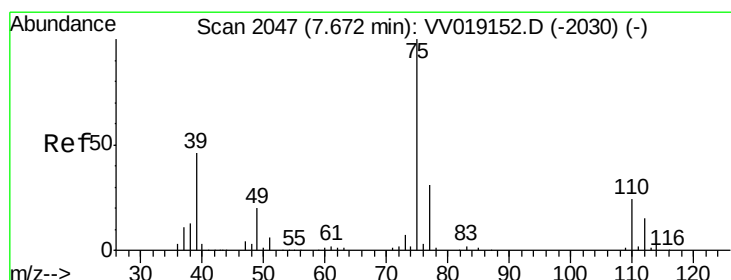
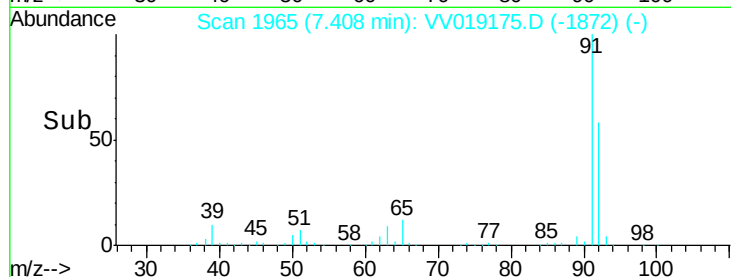
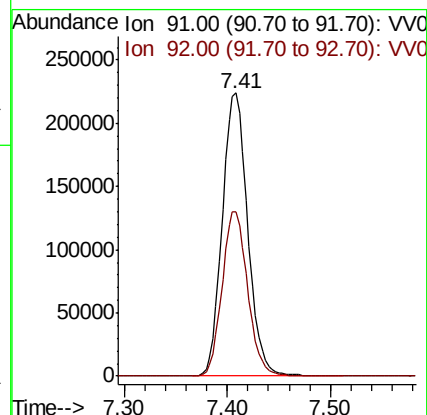
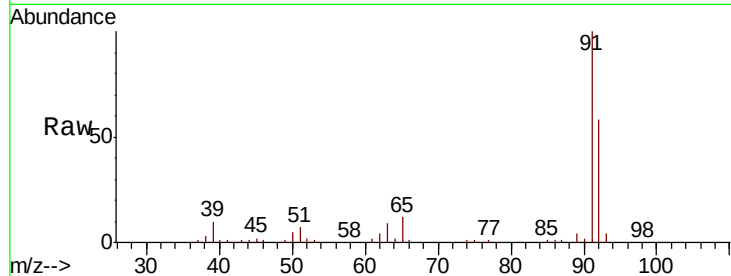
VSTD05081

Tot Ion: 91 Resp: 384660

Ion Ratio Lower Upper

91 100

92 58.1 41.5 77.1



#44

trans-1,3-Dichloropropene

Concen: 46.843 ug/L

RT: 7.67 min Scan# 2046

Delta R.T. -0.00 min

Lab File: VV019175.D

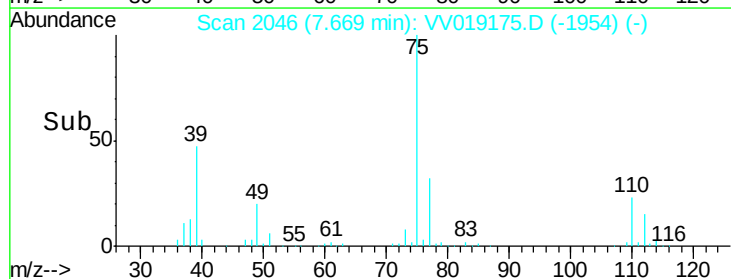
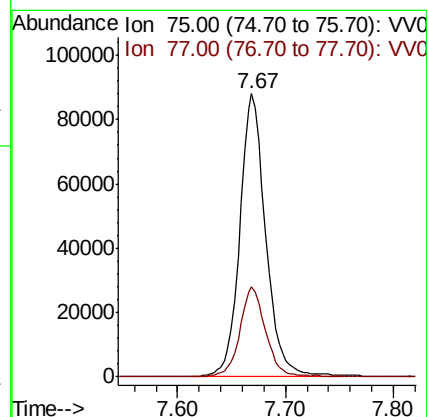
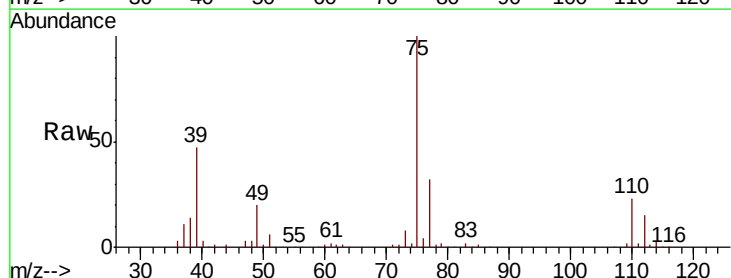
Acq: 30 Oct 2020 09:48

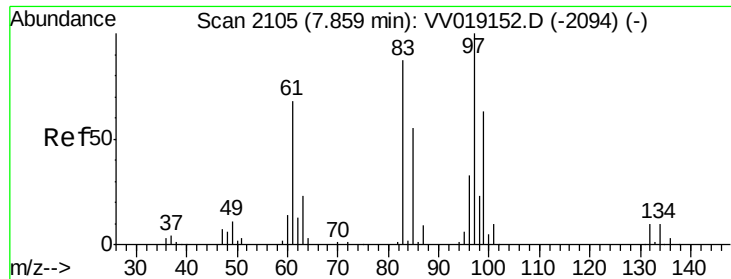
Tgt Ion: 75 Resp: 148268

Ion Ratio Lower Upper

75 100

77 31.7 21.8 40.4

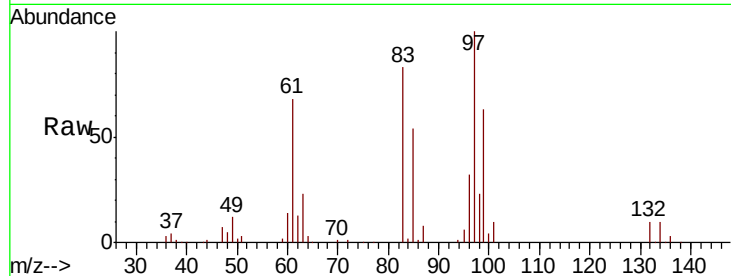




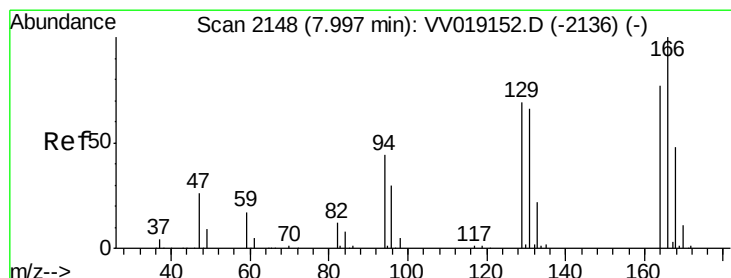
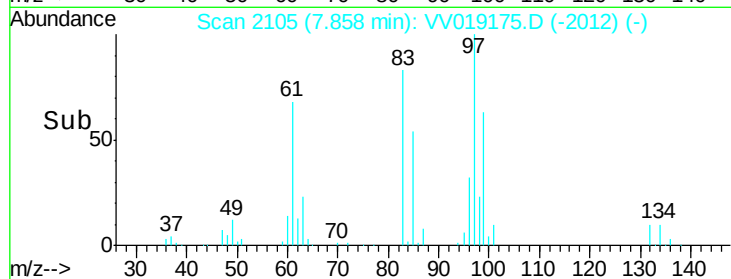
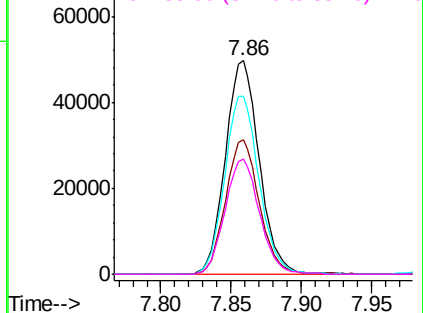
#45  
 1,1,2-Trichloroethane  
 Concen: 45.258 ug/L  
 RT: 7.86 min Scan# 2105  
 Delta R.T. -0.00 min  
 Lab File: VV019175.D  
 Acq: 30 Oct 2020 09:48

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD05081

|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 97    | Resp: | 83616 |
| Ion      | Ratio | Lower | Upper |
| 97       | 100   |       |       |
| 99       | 63.0  | 43.1  | 80.1  |
| 83       | 83.4  | 58.3  | 108.3 |
| 85       | 53.7  | 37.8  | 70.2  |

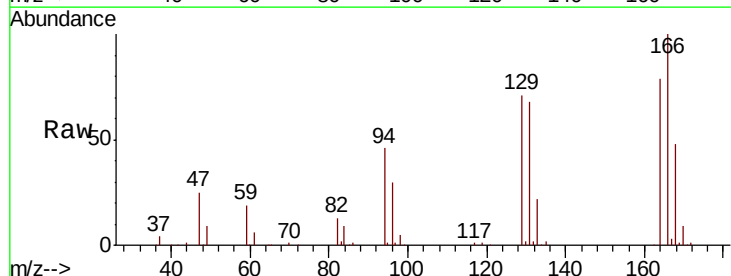


Abundance Ion 97.00 (96.70 to 97.70): VV019175.D (-2012) (-)

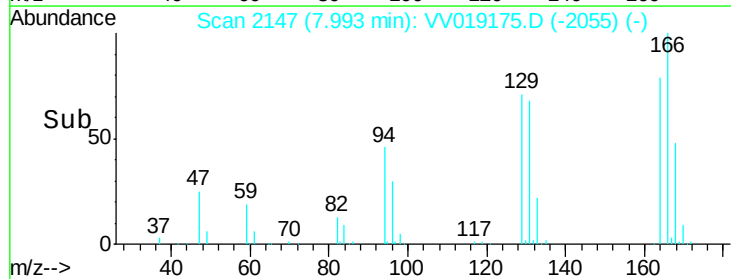
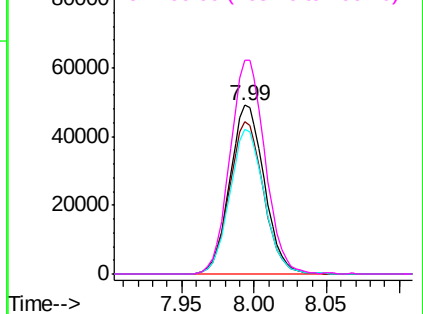


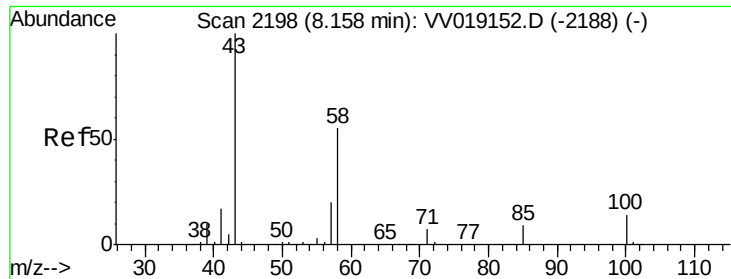
#46  
 Tetrachloroethene  
 Concen: 46.807 ug/L  
 RT: 7.99 min Scan# 2147  
 Delta R.T. -0.00 min  
 Lab File: VV019175.D  
 Acq: 30 Oct 2020 09:48

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 164   | Resp: | 81220 |
| Ion      | Ratio | Lower | Upper |
| 164      | 100   |       |       |
| 129      | 90.1  | 63.2  | 117.4 |
| 131      | 85.7  | 60.3  | 112.1 |
| 166      | 126.6 | 88.3  | 163.9 |



Abundance Ion 164.00 (163.70 to 164.70): VV019175.D (-2055) (-)

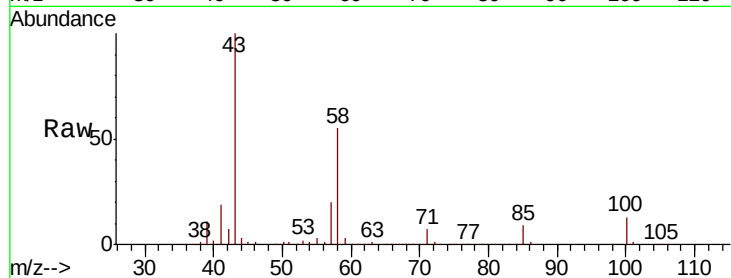




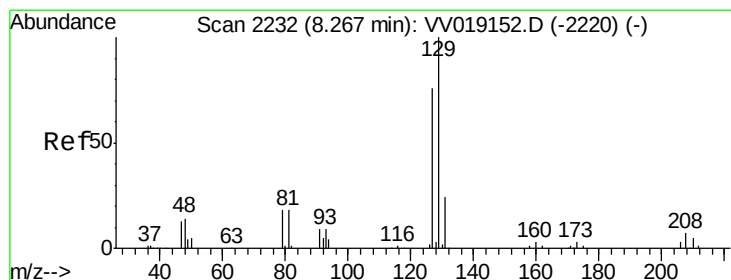
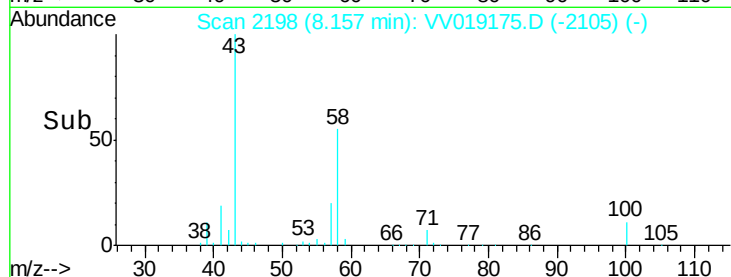
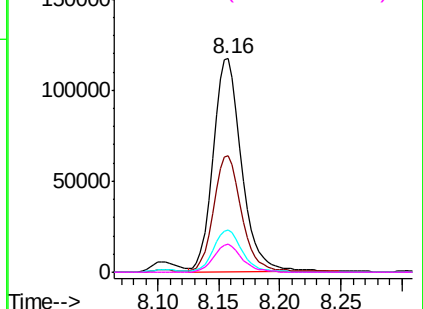
#48  
2-Hexanone  
Concen: 95.157 ug/L  
RT: 8.16 min Scan# 2198  
Delta R.T. -0.00 min  
Lab File: VV019175.D  
Acq: 30 Oct 2020 09:48

Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD05081

Tot Ion: 43 Resp: 192206  
Ion Ratio Lower Upper  
43 100  
58 54.2 43.6 65.4  
57 20.0 16.0 24.0  
100 13.0 10.3 15.5

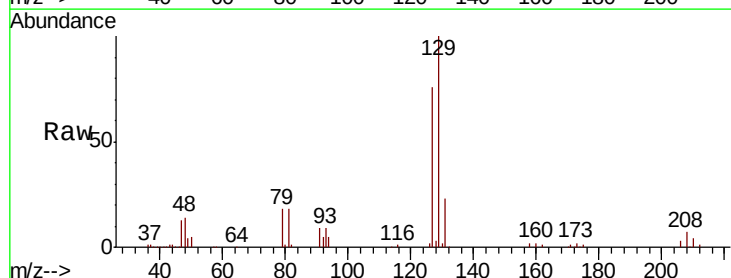


Abundance Ion 43.00 (42.70 to 43.70): VV019175.D (-2105) (-)  
Ion 58.00 (57.70 to 58.70): VV019175.D (-2105) (-)  
Ion 57.00 (56.70 to 57.70): VV019175.D (-2105) (-)  
Ion 100.00 (99.70 to 100.70): VV019175.D (-2105) (-)

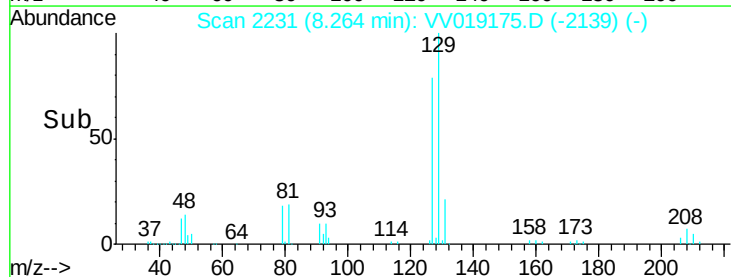
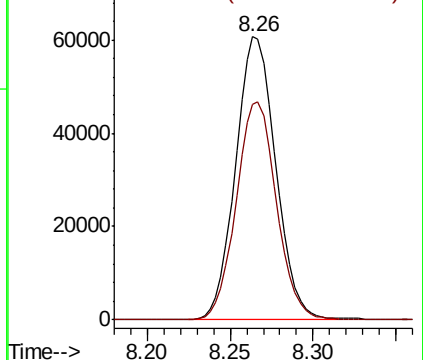


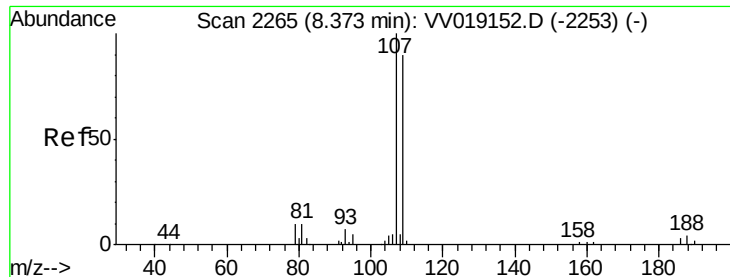
#49  
Dibromochloromethane  
Concen: 45.817 ug/L  
RT: 8.26 min Scan# 2231  
Delta R.T. -0.00 min  
Lab File: VV019175.D  
Acq: 30 Oct 2020 09:48

Tgt Ion: 129 Resp: 102491  
Ion Ratio Lower Upper  
129 100  
127 76.3 54.7 101.5



Abundance Ion 129.00 (128.70 to 129.70): VV019175.D (-2139) (-)  
Ion 127.00 (126.70 to 127.70): VV019175.D (-2139) (-)

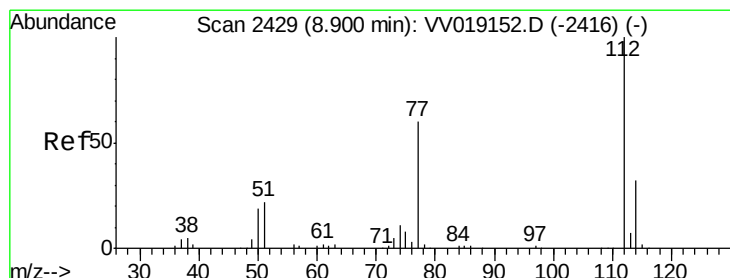
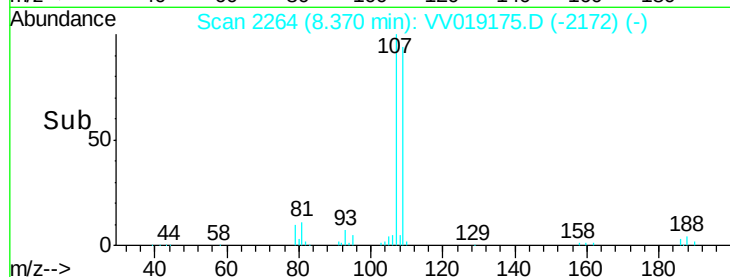
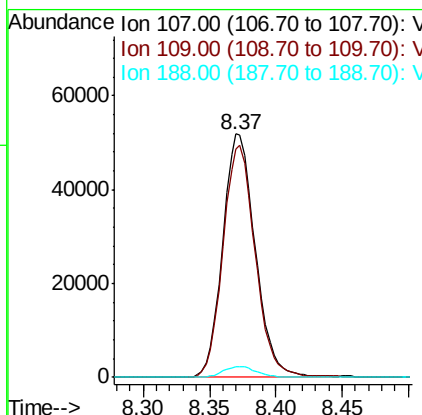
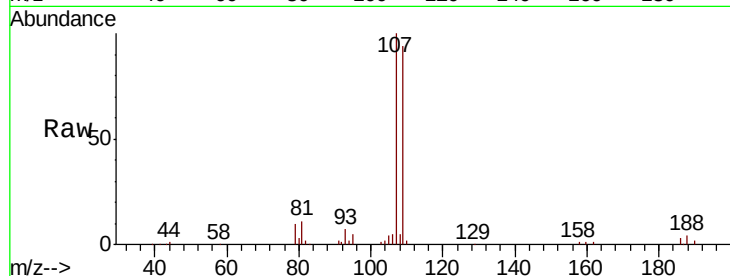




#50  
1,2-Dibromoethane  
Concen: 44.962 ug/L  
RT: 8.37 min Scan# 2264  
Delta R.T. -0.00 min  
Lab File: VV019175.D  
Acq: 30 Oct 2020 09:48

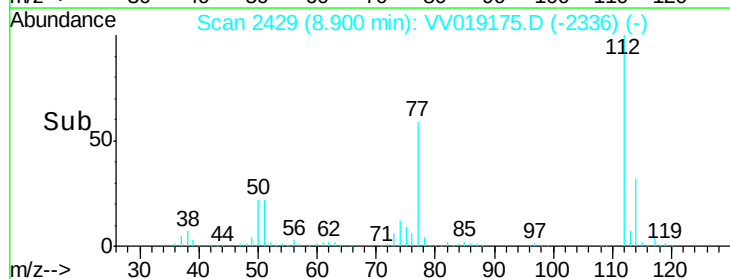
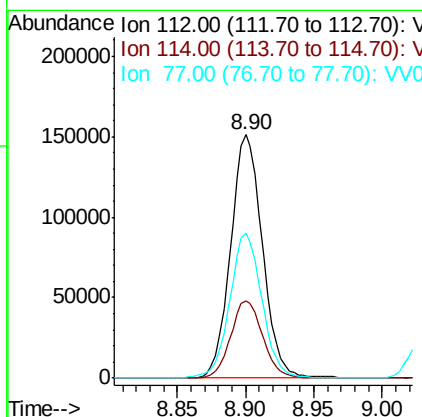
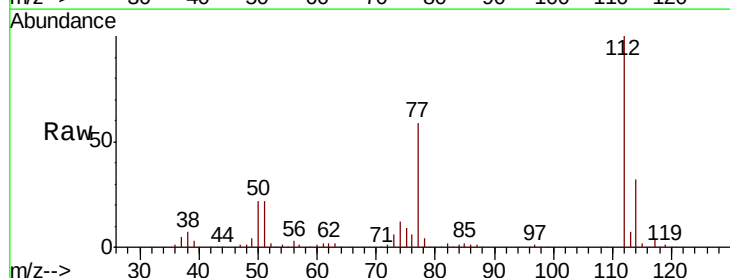
Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD05081

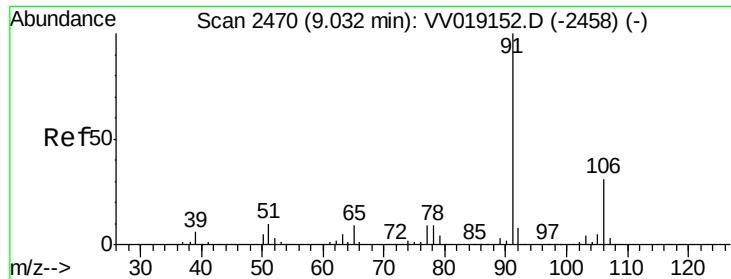
Tot Ion:107 Resp: 88627  
Ion Ratio Lower Upper  
107 100  
109 93.9 65.7 121.9  
188 4.4 3.4 5.2



#51  
Chlorobenzene  
Concen: 45.911 ug/L  
RT: 8.90 min Scan# 2429  
Delta R.T. -0.00 min  
Lab File: VV019175.D  
Acq: 30 Oct 2020 09:48

Tgt Ion:112 Resp: 244768  
Ion Ratio Lower Upper  
112 100  
114 32.0 22.3 41.5  
77 59.3 46.7 70.1





#52

Ethylbenzene

Concen: 47.307 ug/L

RT: 9.03 min Scan# 2470

Delta R.T. -0.00 min

Lab File: VV019175.D

Acq: 30 Oct 2020 09:48

Instrument :

MSVOA\_V

ClientSampleId :

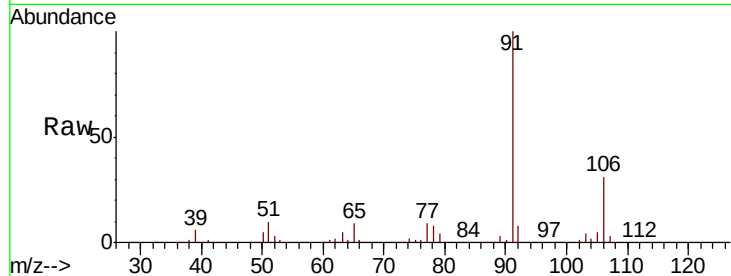
VSTD05081

Tot Ion: 91 Resp: 423891

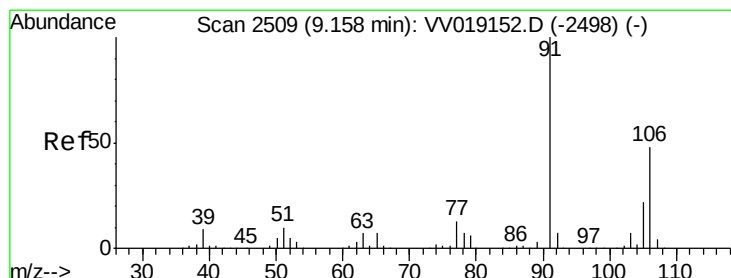
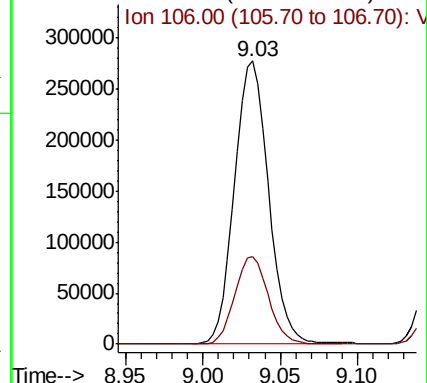
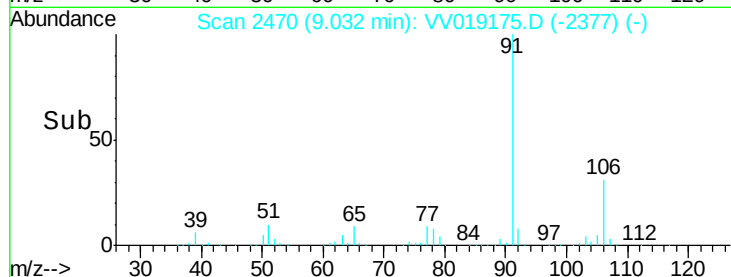
Ion Ratio Lower Upper

91 100

106 31.0 21.6 40.0



Abundance Ion 91.00 (90.70 to 91.70): VV019175.D (-2377) (-)



#53

m,p-Xylene

Concen: 47.609 ug/L

RT: 9.16 min Scan# 2509

Delta R.T. -0.00 min

Lab File: VV019175.D

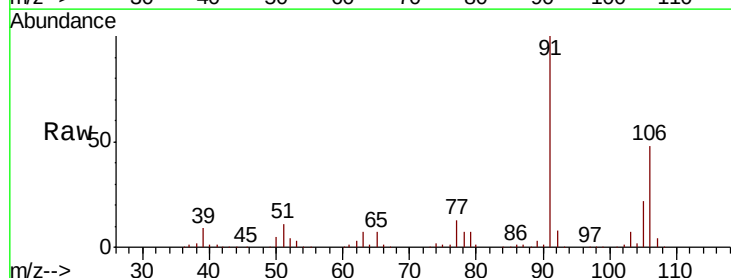
Acq: 30 Oct 2020 09:48

Tgt Ion: 106 Resp: 161127

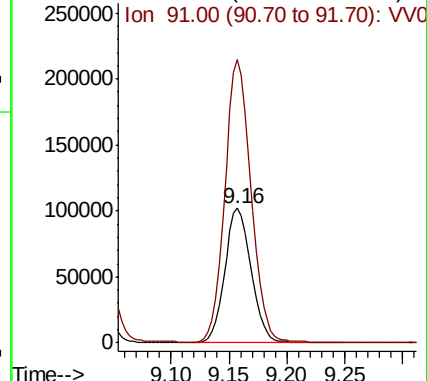
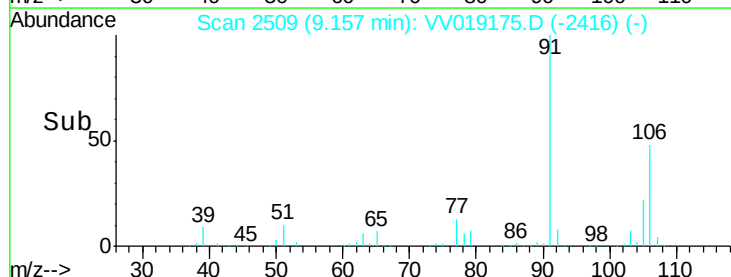
Ion Ratio Lower Upper

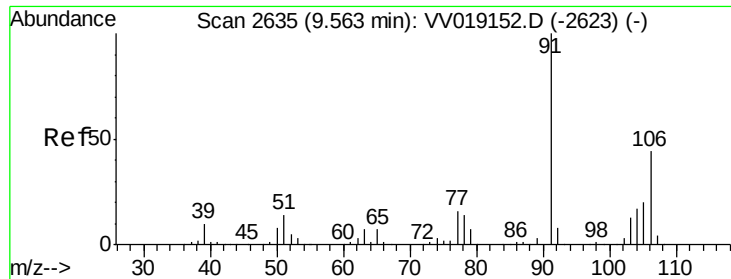
106 100

91 210.0 145.4 270.0



Abundance Ion 106.00 (105.70 to 106.70): VV019175.D (-2416) (-)

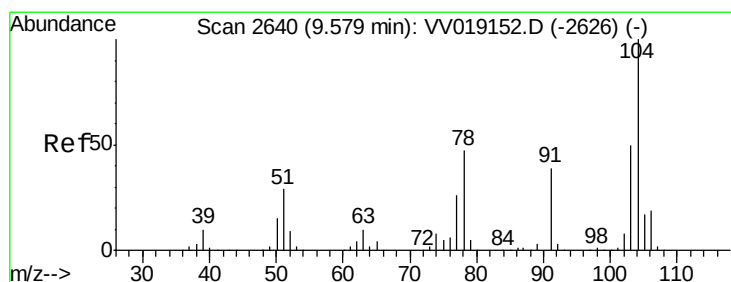
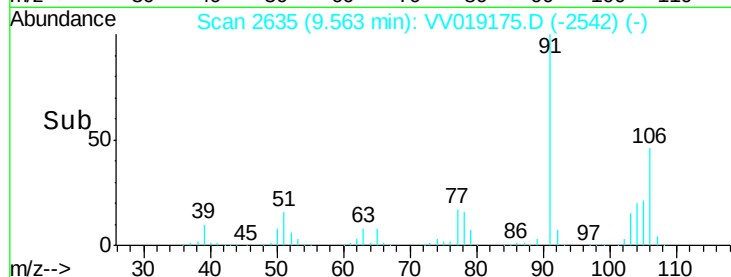
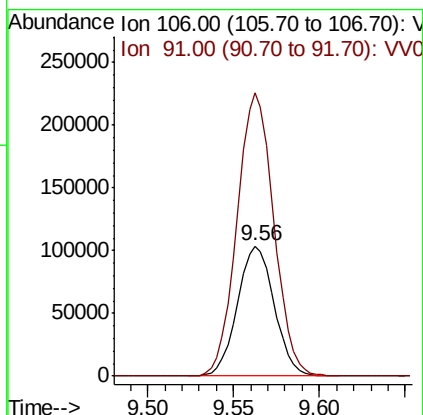
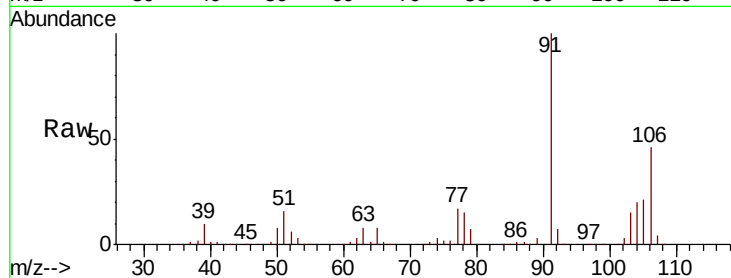




#54  
o-xylene  
Concen: 47.753 ug/L  
RT: 9.56 min Scan# 2635  
Delta R.T. -0.00 min  
Lab File: VV019175.D  
Acq: 30 Oct 2020 09:48

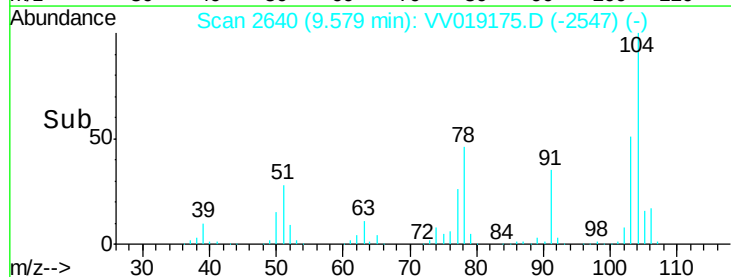
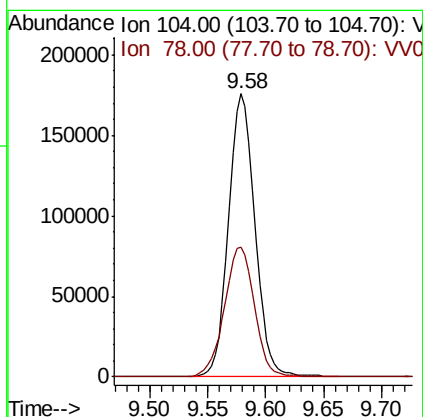
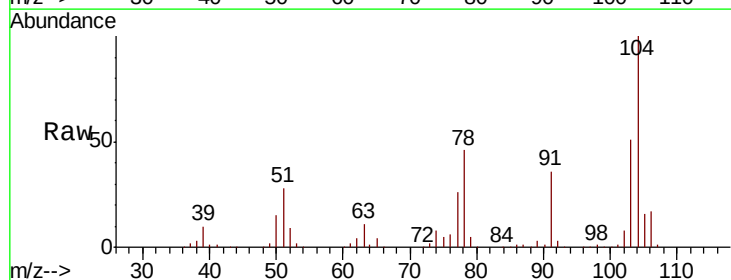
Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD05081

Tot Ion:106 Resp: 155167  
Ion Ratio Lower Upper  
106 100  
91 217.3 153.4 285.0

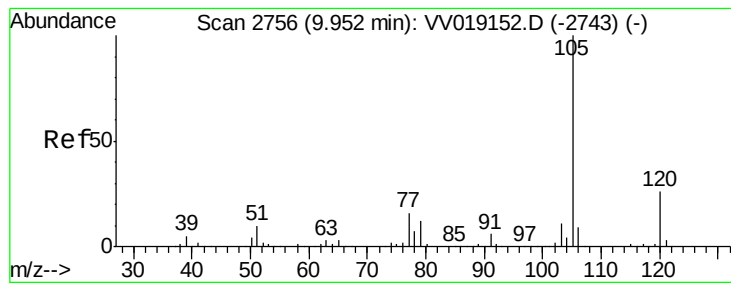


#55  
Styrene  
Concen: 48.074 ug/L  
RT: 9.58 min Scan# 2640  
Delta R.T. -0.00 min  
Lab File: VV019175.D  
Acq: 30 Oct 2020 09:48

Tgt Ion:104 Resp: 276863  
Ion Ratio Lower Upper  
104 100  
78 46.0 32.8 60.8







#56

Isopropylbenzene

Concen: 47.783 ug/L

RT: 9.95 min Scan# 2756

Delta R.T. -0.00 min

Lab File: VV019175.D

Acq: 30 Oct 2020 09:48

Instrument :

MSVOA\_V

ClientSampled :

VSTD05081

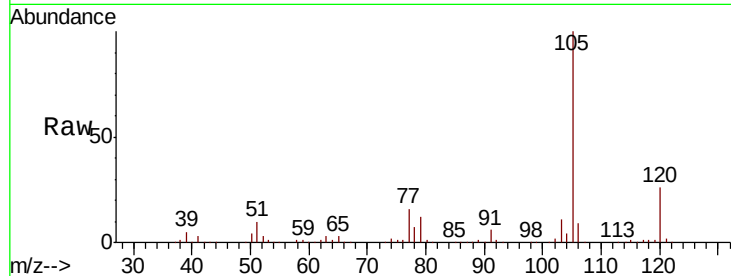
Tot Ion:105 Resp: 417259

Ion Ratio Lower Upper

105 100

120 26.0 21.3 31.9

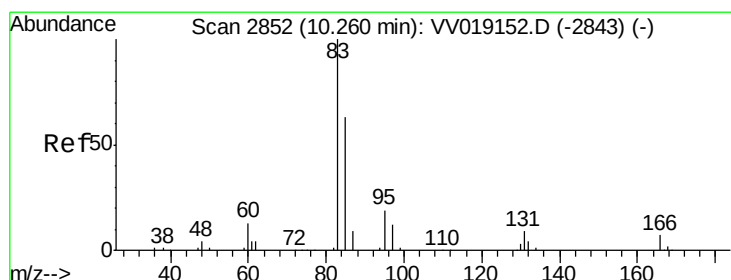
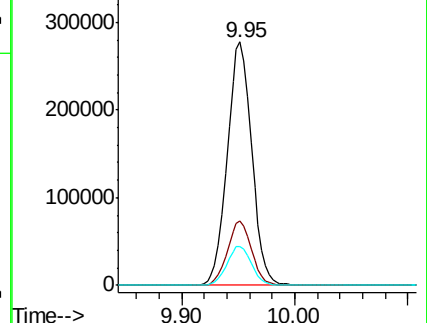
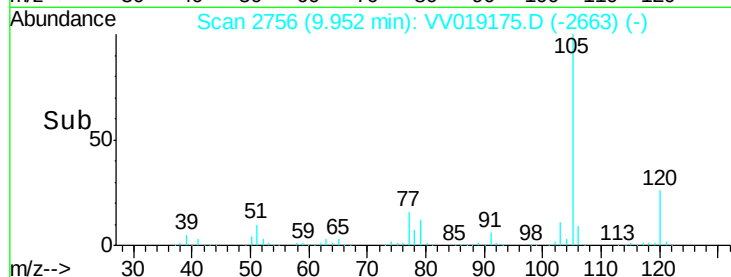
77 16.2 13.0 19.4



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V

Ion 77.00 (76.70 to 77.70): V



#58

1,1,2,2-Tetrachloroethane

Concen: 44.547 ug/L

RT: 10.26 min Scan# 2852

Delta R.T. -0.00 min

Lab File: VV019175.D

Acq: 30 Oct 2020 09:48

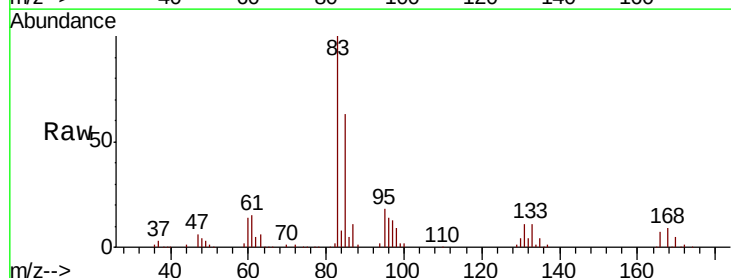
Tgt Ion: 83 Resp: 125321

Ion Ratio Lower Upper

83 100

85 63.2 45.8 85.0

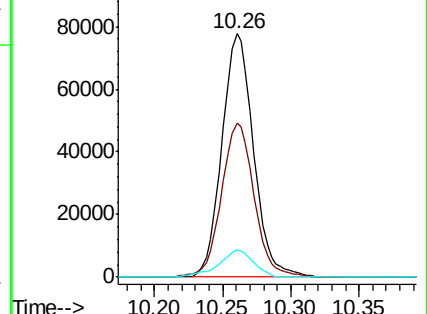
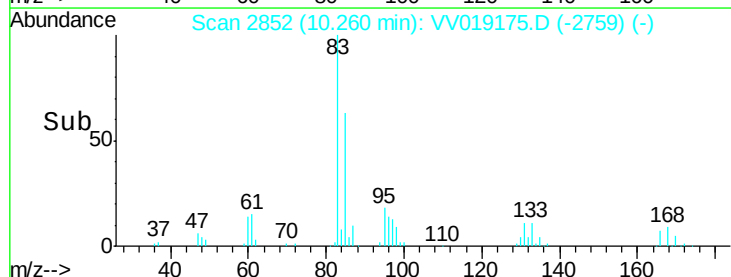
131 11.0 8.9 13.3

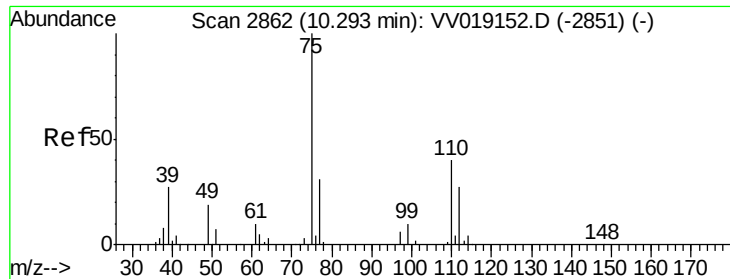


Abundance Ion 83.00 (82.70 to 83.70): VV0

Ion 85.00 (84.70 to 85.70): VV0

Ion 131.00 (130.70 to 131.70): V





#59

1,2,3-Trichloropropane

Concen: 43.814 ug/L

RT: 10.29 min Scan# 2862

Delta R.T. -0.00 min

Lab File: VV019175.D

Acq: 30 Oct 2020 09:48

Instrument :

MSVOA\_V

ClientSampleId :

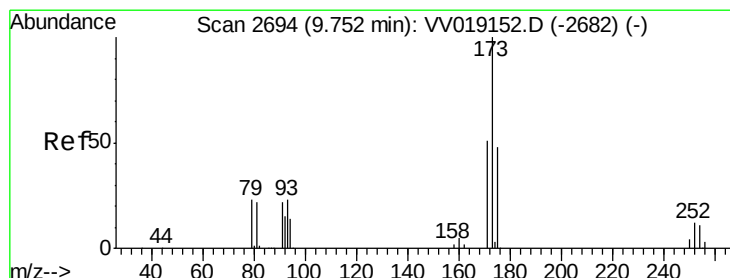
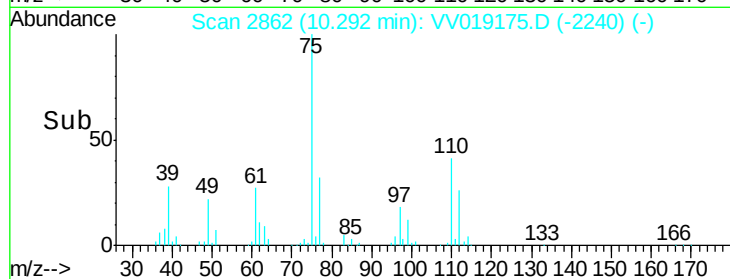
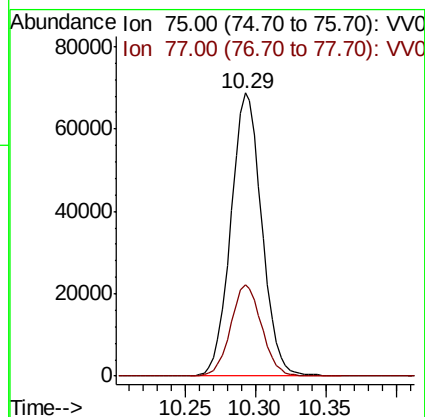
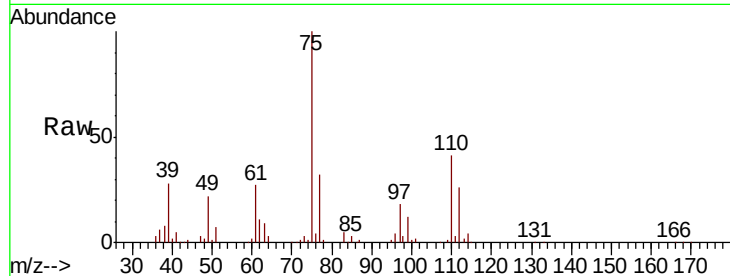
VSTD05081

Tot Ion: 75 Resp: 105512

Ion Ratio Lower Upper

75 100

77 32.5 26.2 39.4



#61

Bromoform

Concen: 43.661 ug/L

RT: 9.75 min Scan# 2694

Delta R.T. -0.00 min

Lab File: VV019175.D

Acq: 30 Oct 2020 09:48

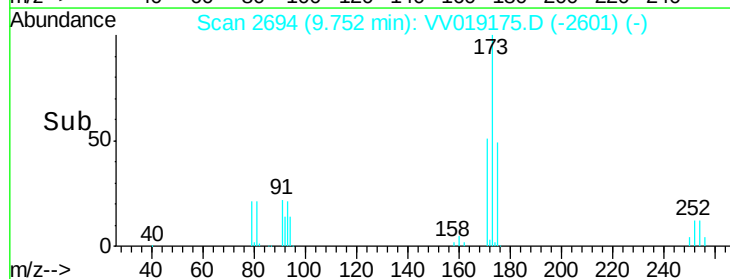
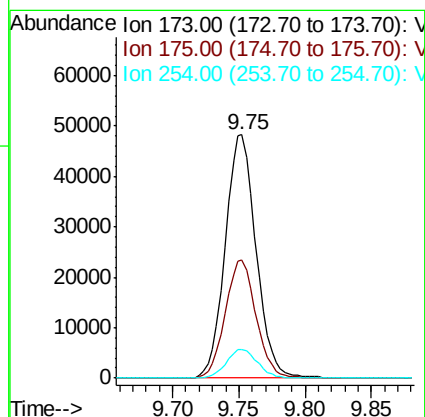
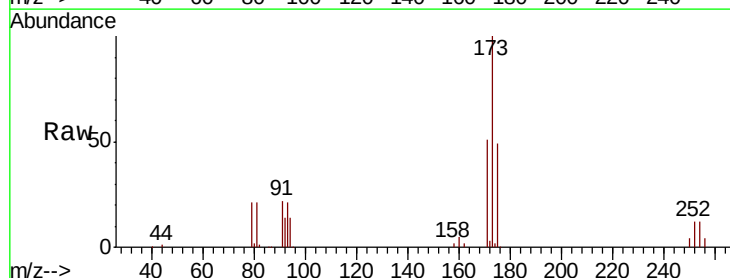
Tgt Ion: 173 Resp: 78050

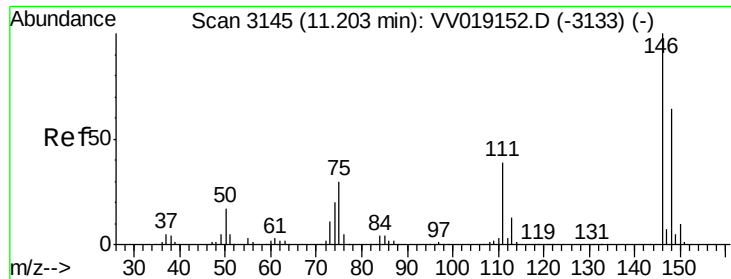
Ion Ratio Lower Upper

173 100

175 48.4 39.8 59.6

254 11.8 9.7 14.5





#62

1,3-Dichlorobenzene

Concen: 45.594 ug/L

RT: 11.20 min Scan# 3145

Delta R.T. -0.00 min

Lab File: VV019175.D

Acq: 30 Oct 2020 09:48

Instrument :

MSVOA\_V

ClientSampleId :

VSTD05081

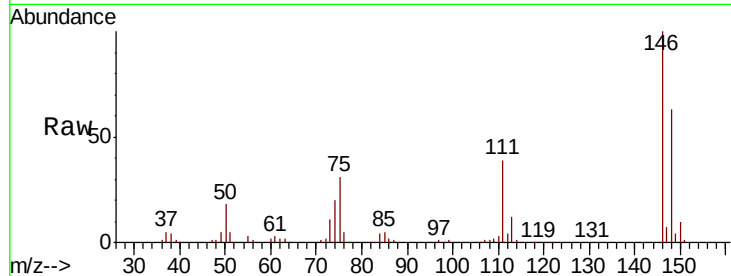
Tot Ion:146 Resp: 208414

Ion Ratio Lower Upper

146 100

111 39.4 27.1 50.3

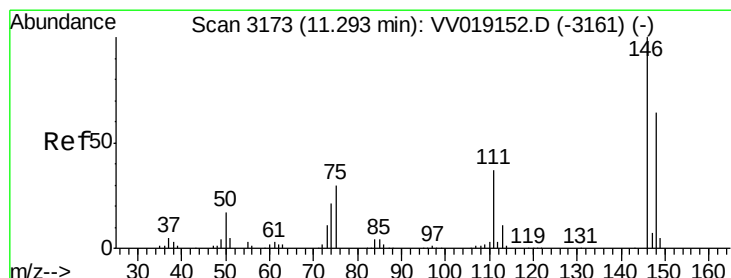
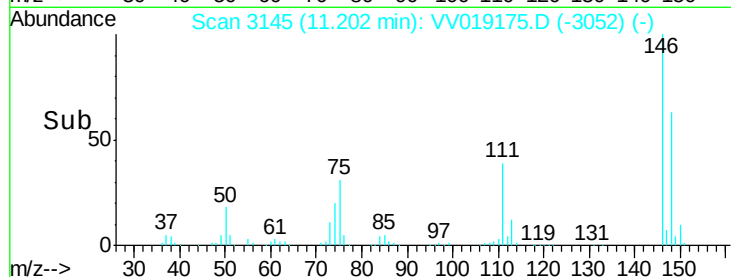
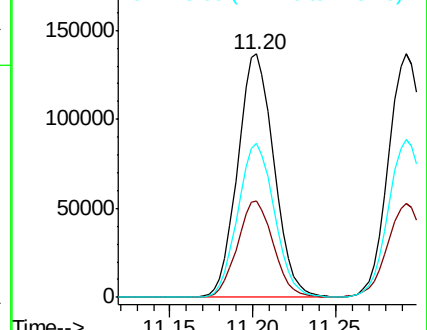
148 63.3 44.7 83.1



Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V



#63

1,4-Dichlorobenzene

Concen: 44.715 ug/L

RT: 11.29 min Scan# 3173

Delta R.T. -0.00 min

Lab File: VV019175.D

Acq: 30 Oct 2020 09:48

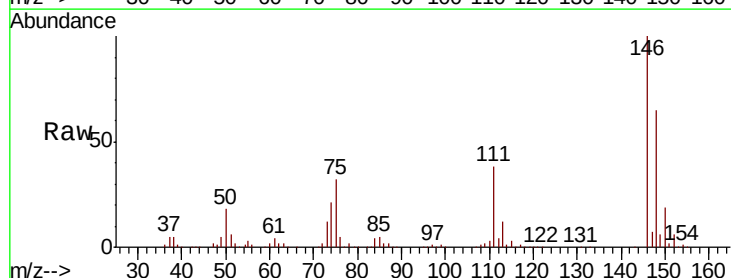
Tgt Ion:146 Resp: 212421

Ion Ratio Lower Upper

146 100

111 38.3 25.8 48.0

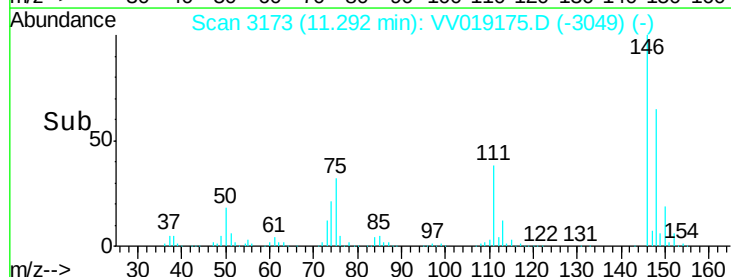
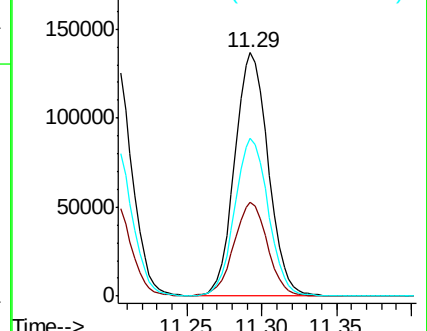
148 64.8 44.0 81.6

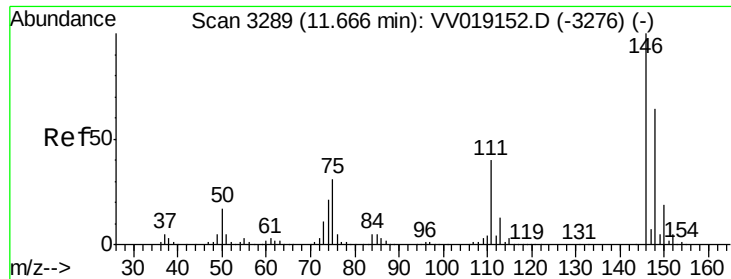


Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V

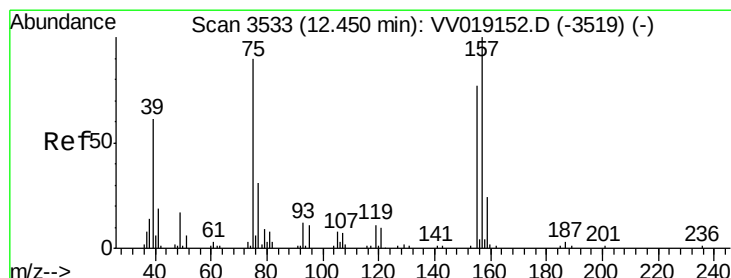
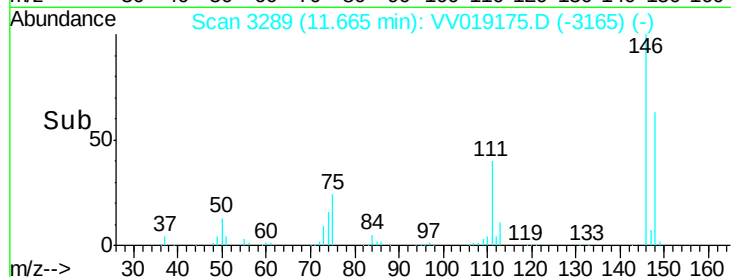
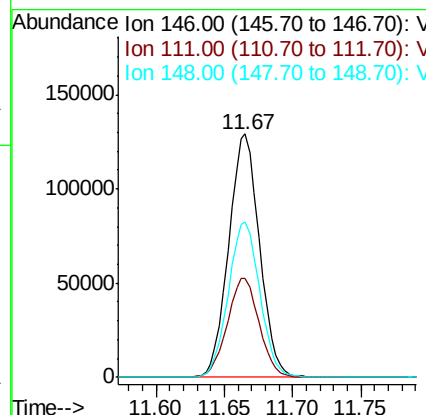
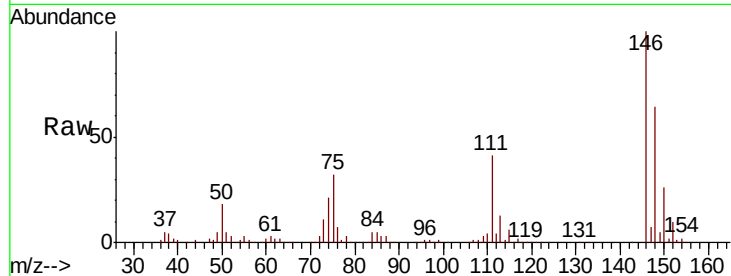




#65  
 1,2-Dichlorobenzene  
 Concen: 44.807 ug/L  
 RT: 11.67 min Scan# 3289  
 Delta R.T. -0.00 min  
 Lab File: VV019175.D  
 Acq: 30 Oct 2020 09:48

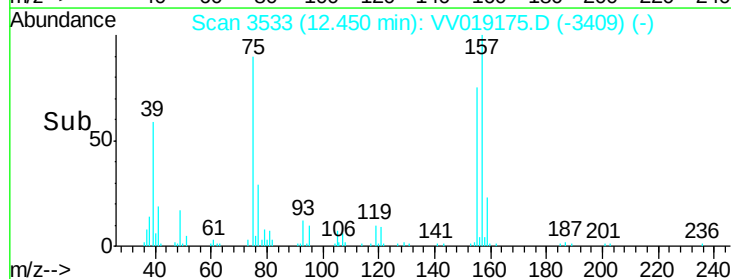
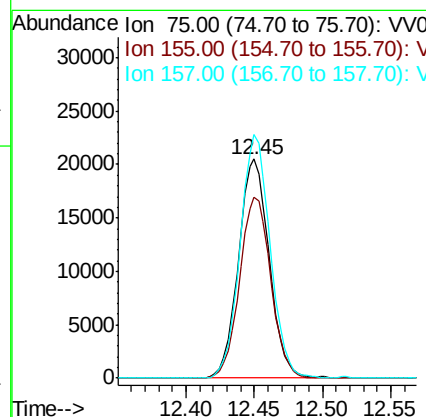
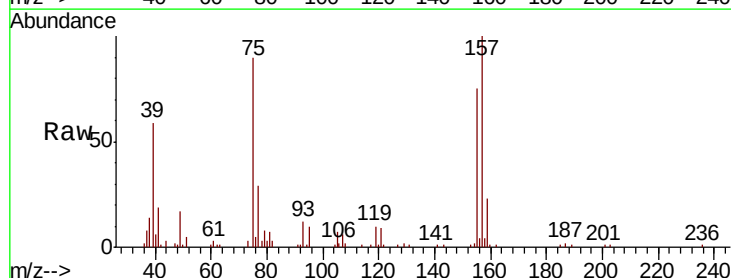
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD05081

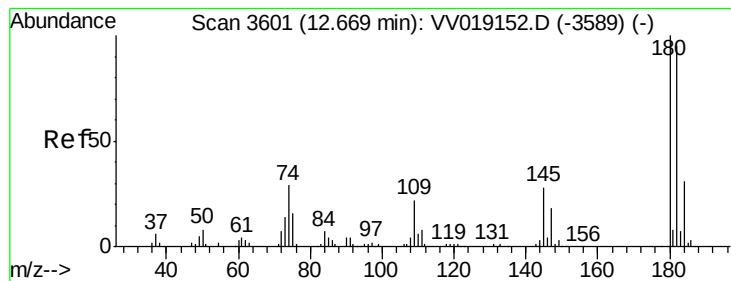
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 146     | 100   |       |       |
| 111     | 40.7  | 32.2  | 48.4  |
| 148     | 63.7  | 50.8  | 76.2  |



#66  
 1,2-Dibromo-3-chloropropane  
 Concen: 41.303 ug/L  
 RT: 12.45 min Scan# 3533  
 Delta R.T. -0.00 min  
 Lab File: VV019175.D  
 Acq: 30 Oct 2020 09:48

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 155     | 82.9  | 71.1  | 106.7 |
| 157     | 111.2 | 90.5  | 135.7 |





#67

1,3,5-Trichlorobenzene

Concen: 44.274 ug/L

RT: 12.67 min Scan# 3600

Delta R.T. -0.00 min

Lab File: VV019175.D

Acq: 30 Oct 2020 09:48

Instrument :

MSVOA\_V

ClientSampleId :

VSTD05081

Tot Ion:180 Resp: 148979

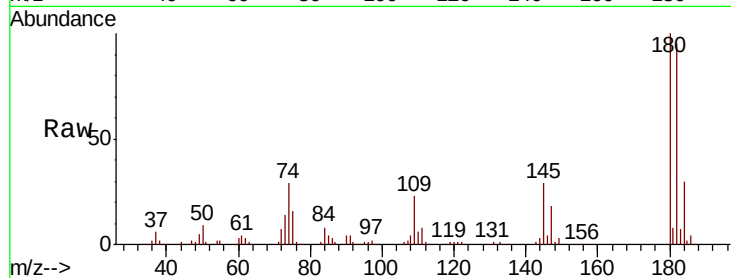
Ion Ratio Lower Upper

180 100

182 97.1 76.1 114.1

184 30.7 24.5 36.7

145 28.7 22.7 34.1

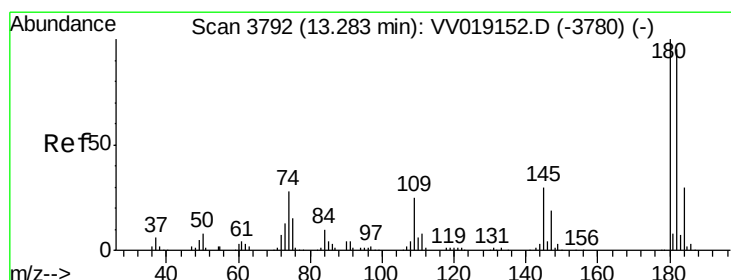
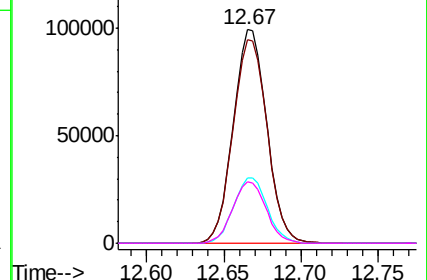
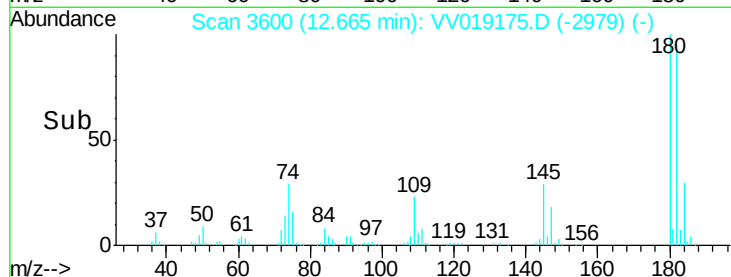


Abundance Ion 180.00 (179.70 to 180.70): V

Ion 182.00 (181.70 to 182.70): V

Ion 184.00 (183.70 to 184.70): V

Ion 145.00 (144.70 to 145.70): V



#68

1,2,4-trichlorobenzene

Concen: 43.781 ug/L

RT: 13.28 min Scan# 3792

Delta R.T. -0.00 min

Lab File: VV019175.D

Acq: 30 Oct 2020 09:48

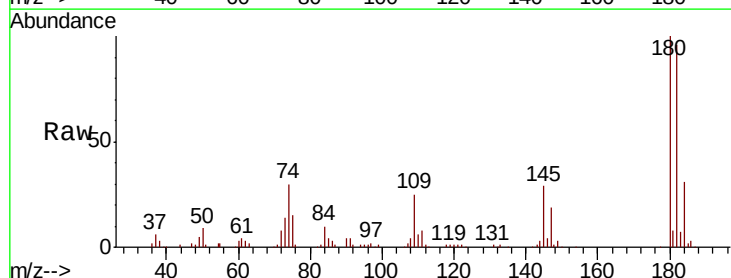
Tgt Ion:180 Resp: 138026

Ion Ratio Lower Upper

180 100

182 97.0 75.8 113.6

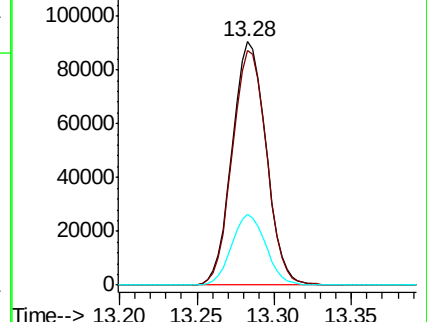
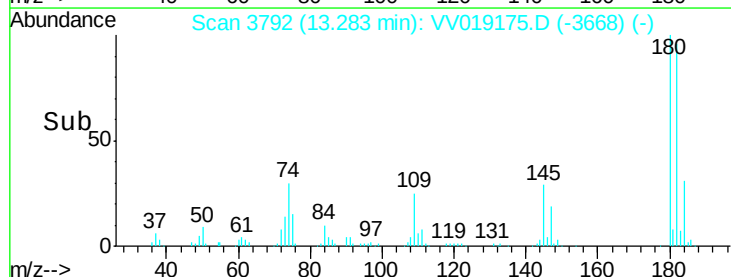
145 28.9 22.6 34.0

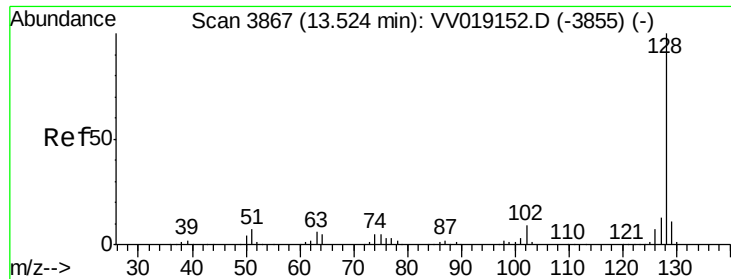


Abundance Ion 180.00 (179.70 to 180.70): V

Ion 182.00 (181.70 to 182.70): V

Ion 145.00 (144.70 to 145.70): V





#69

Naphthalene

Concen: 44.600 ug/L

RT: 13.52 min Scan# 3867

Delta R.T. -0.00 min

Lab File: VV019175.D

Acq: 30 Oct 2020 09:48

Instrument :

MSVOA\_V

ClientSampleId :

VSTD05081

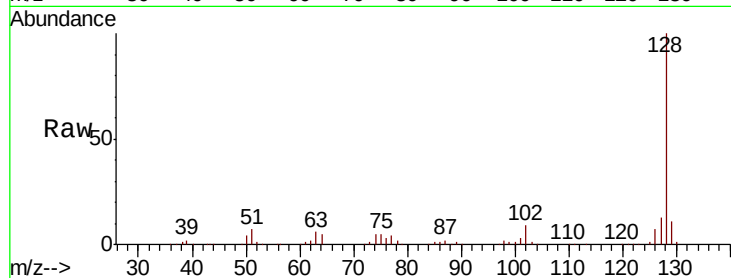
Tot Ion:128 Resp: 393836

Ion Ratio Lower Upper

128 100

127 13.3 10.8 16.2

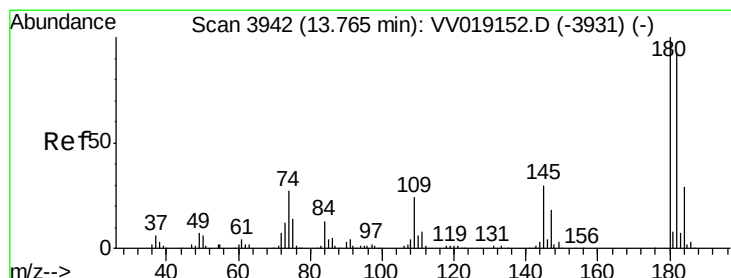
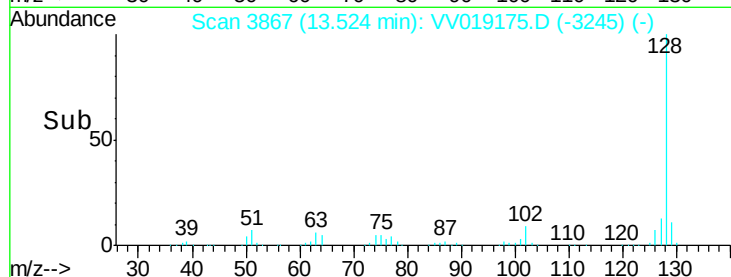
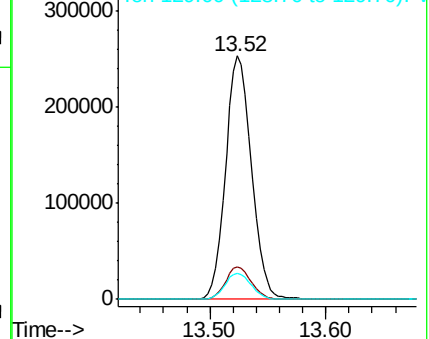
129 10.9 8.6 13.0



Abundance Ion 128.00 (127.70 to 128.70): V

Ion 127.00 (126.70 to 127.70): V

Ion 129.00 (128.70 to 129.70): V



#70

1,2,3-Trichlorobenzene

Concen: 45.048 ug/L

RT: 13.76 min Scan# 3942

Delta R.T. -0.00 min

Lab File: VV019175.D

Acq: 30 Oct 2020 09:48

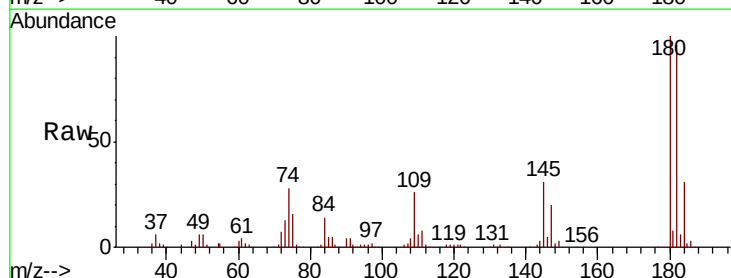
Tgt Ion:180 Resp: 138981

Ion Ratio Lower Upper

180 100

182 95.6 76.2 114.4

145 30.9 25.1 37.7



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

