

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_V\DATA\VV081619\  
 Data File : VV012262.D  
 Acq On : 16 Aug 2019 09:17  
 Operator : SY/MD  
 Sample : VSTDCCC005  
 Misc : 25mL/MSVOA\_V/WATER  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD00543

Quant Time: Aug 16 23:35:19 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVTR081319WMA.M  
 Quant Title : TRACE VOA SOM01.0  
 QLast Update : Fri Aug 16 11:51:58 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.66  | 114  | 215486   | 5.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 8.89  | 117  | 216489   | 5.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.29 | 152  | 111342   | 5.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |        |       |          |          |      |         |
|--------------------------------|--------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.32   | 65    | 73789    | 5.56     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 40 - 130 | Recovery | =    | 111.20% |
| 7) Chloroethane-d5             | 1.58   | 69    | 54455    | 5.37     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 130 | Recovery | =    | 107.40% |
| 11) 1,1-Dichloroethene-d2      | 2.13   | 63    | 126761   | 5.83     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 125 | Recovery | =    | 116.60% |
| 20) 2-Butanone-d5              | 3.97   | 46    | 151291   | 52.76    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 40 - 130 | Recovery | =    | 105.52% |
| 24) Chloroform-d               | 4.40   | 84    | 138268   | 5.26     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 105.20% |
| 26) 1,2-Dichloroethane-d4      | 5.08   | 65    | 64116    | 5.15     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 103.00% |
| 32) Benzene-d6                 | 5.09   | 84    | 275768   | 5.03     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 100.60% |
| 36) 1,2-Dichloropropane-d6     | 6.12   | 67    | 78063    | 4.84     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 140 | Recovery | =    | 96.80%  |
| 41) Toluene-d8                 | 7.36   | 98    | 255725   | 5.11     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 102.20% |
| 43) trans-1,3-Dichloropropene- | 7.66   | 79    | 30864    | 5.00     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 55 - 130 | Recovery | =    | 100.00% |
| 46) 2-Hexanone-d5              | 8.14   | 63    | 104562   | 52.76    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 45 - 130 | Recovery | =    | 105.52% |
| 57) 1,1,2,2-Tetrachloroethane- | 10.26  | 84    | 55598    | 4.94     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 120 | Recovery | =    | 98.80%  |
| 64) 1,2-Dichlorobenzene-d4     | 11.67  | 152   | 93387    | 4.96     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 80 - 120 | Recovery | =    | 99.20%  |

## Target Compounds

|                                |      |     |        |        | Qvalue   |
|--------------------------------|------|-----|--------|--------|----------|
| 2) Dichlorodifluoromethane     | 1.14 | 85  | 109587 | 5.299  | ug/L 100 |
| 3) Chloromethane               | 1.25 | 50  | 95247  | 5.085  | ug/L 98  |
| 5) Vinyl chloride              | 1.32 | 62  | 102988 | 5.351  | ug/L 97  |
| 6) Bromomethane                | 1.53 | 94  | 45510  | 4.184  | ug/L 99  |
| 8) Chloroethane                | 1.60 | 64  | 59068  | 5.321  | ug/L 100 |
| 9) Trichlorofluoromethane      | 1.77 | 101 | 137748 | 5.690  | ug/L 100 |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.14 | 101 | 73223  | 5.982  | ug/L 99  |
| 12) 1,1-Dichloroethene         | 2.14 | 96  | 66880  | 5.900  | ug/L 97  |
| 13) Acetone                    | 2.24 | 43  | 101490 | 56.798 | ug/L 66  |
| 14) Carbon disulfide           | 2.31 | 76  | 191399 | 5.765  | ug/L 99  |
| 15) Methyl Acetate             | 2.47 | 43  | 23095  | 5.120  | ug/L 94  |
| 16) Methylene chloride         | 2.53 | 84  | 68370  | 5.593  | ug/L 98  |
| 17) Methyl tert-butyl Ether    | 2.81 | 73  | 178485 | 5.716  | ug/L 100 |
| 18) trans-1,2-Dichloroethene   | 2.78 | 96  | 84984  | 5.619  | ug/L 95  |
| 19) 1,1-Dichloroethane         | 3.23 | 63  | 158954 | 5.740  | ug/L 99  |
| 21) 2-Butanone                 | 4.05 | 43  | 199399 | 54.576 | ug/L 99  |
| 22) cis-1,2-Dichloroethene     | 3.96 | 96  | 86997  | 5.209  | ug/L 99  |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_V\DATA\VV081619\  
 Data File : VV012262.D  
 Acq On : 16 Aug 2019 09:17  
 Operator : SY/MD  
 Sample : VSTDCCC005  
 Misc : 25mL/MSVOA\_V/WATER  
 ALS Vial : 2 Sample Multiplier: 1

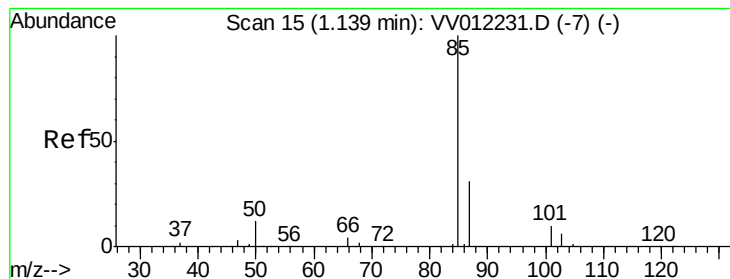
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD00543

Quant Time: Aug 16 23:35:19 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVTR081319WMA.M  
 Quant Title : TRACE VOA SOM01.0  
 QLast Update : Fri Aug 16 11:51:58 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|--------------------------------|-------|------|----------|--------|-------|----------|
| 23) Bromochloromethane         | 4.29  | 128  | 39619    | 5.565  | ug/L  | 97       |
| 25) Chloroform                 | 4.42  | 83   | 164304   | 5.225  | ug/L  | 98       |
| 27) 1,2-Dichloroethane         | 5.18  | 62   | 96032    | 5.560  | ug/L  | 98       |
| 29) 1,1,1-Trichloroethane      | 4.65  | 97   | 142461   | 5.380  | ug/L  | 99       |
| 30) Cyclohexane                | 4.72  | 56   | 133890   | 5.077  | ug/L  | 99       |
| 31) Carbon tetrachloride       | 4.87  | 117  | 129381   | 5.401  | ug/L  | 98       |
| 33) Benzene                    | 5.14  | 78   | 348590   | 5.338  | ug/L  | 100      |
| 34) Trichloroethene            | 5.96  | 95   | 91455    | 5.170  | ug/L  | 97       |
| 35) Methylcyclohexane          | 6.17  | 83   | 143164   | 5.209  | ug/L  | 99       |
| 37) 1,2-Dichloropropane        | 6.22  | 63   | 85610    | 5.254  | ug/L  | 99       |
| 38) Bromodichloromethane       | 6.55  | 83   | 111436   | 5.309  | ug/L  | 99       |
| 39) cis-1,3-Dichloropropene    | 7.07  | 75   | 114276   | 5.093  | ug/L  | 99       |
| 40) 4-Methyl-2-pentanone       | 7.28  | 43   | 490042   | 54.706 | ug/L  | 99       |
| 42) Toluene                    | 7.43  | 91   | 377401   | 5.432  | ug/L  | 99       |
| 44) trans-1,3-Dichloropropene  | 7.69  | 75   | 93231    | 5.280  | ug/L  | 100      |
| 45) 1,1,2-Trichloroethane      | 7.88  | 97   | 57705    | 5.310  | ug/L  | 98       |
| 47) Tetrachloroethene          | 8.02  | 164  | 77119    | 5.289  | ug/L  | 97       |
| 48) 2-Hexanone                 | 8.19  | 43   | 351562   | 55.683 | ug/L  | 97       |
| 49) Dibromochloromethane       | 8.29  | 129  | 74351    | 5.511  | ug/L  | 94       |
| 50) 1,2-Dibromoethane          | 8.40  | 107  | 55758    | 5.311  | ug/L  | 95       |
| 51) Chlorobenzene              | 8.92  | 112  | 237251   | 5.274  | ug/L  | 98       |
| 52) Ethylbenzene               | 9.05  | 91   | 397341   | 5.367  | ug/L  | 100      |
| 53) m,p-xylene                 | 9.18  | 106  | 155882   | 5.483  | ug/L  | 99       |
| 54) o-xylene                   | 9.59  | 106  | 148038   | 5.502  | ug/L  | 95       |
| 55) Styrene                    | 9.60  | 104  | 252195   | 5.609  | ug/L  | 98       |
| 56) Isopropylbenzene           | 9.97  | 105  | 390441   | 5.426  | ug/L  | 99       |
| 58) 1,1,2,2-Tetrachloroethane  | 10.29 | 83   | 65831    | 5.221  | ug/L  | 99       |
| 59) 1,2,3-Trichloropropane     | 10.32 | 75   | 49718    | 5.378  | ug/L  | 99       |
| 61) Bromoform                  | 9.78  | 173  | 37674    | 5.249  | ug/L  | 99       |
| 62) 1,3-Dichlorobenzene        | 11.23 | 146  | 197447   | 5.328  | ug/L  | 99       |
| 63) 1,4-Dichlorobenzene        | 11.32 | 146  | 192413   | 5.209  | ug/L  | 98       |
| 65) 1,2-Dichlorobenzene        | 11.69 | 146  | 177616   | 5.223  | ug/L  | 99       |
| 66) 1,2-Dibromo-3-chloropropan | 12.48 | 75   | 9517     | 4.396  | ug/L  | 93       |
| 67) 1,3,5-Trichlorobenzene     | 12.69 | 180  | 139843   | 4.997  | ug/L  | 99       |
| 68) 1,2,4-trichlorobenzene     | 13.31 | 180  | 103249   | 4.963  | ug/L  | 99       |
| 69) Naphthalene                | 13.55 | 128  | 144071   | 4.791  | ug/L  | 99       |
| 70) 1,2,3-Trichlorobenzene     | 13.79 | 180  | 101251   | 5.154  | ug/L  | 99       |

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





#2

Dichlorodifluoromethane

Concen: 5.299 ug/L

RT: 1.14 min Scan# 15

Delta R.T. 0.00 min

Lab File: VV012262.D

Acq: 16 Aug 2019 09:17

Instrument :

MSVOA\_V

ClientSampleId :

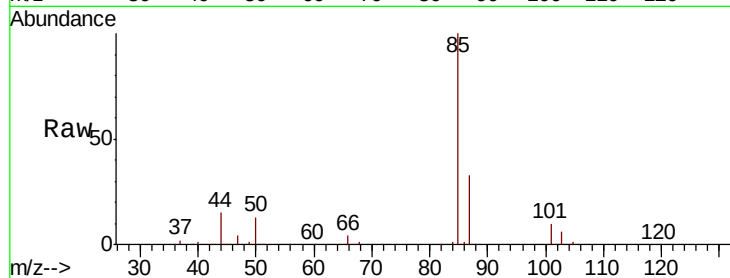
VSTD00543

Tgt Ion: 85 Resp: 109587

Ion Ratio Lower Upper

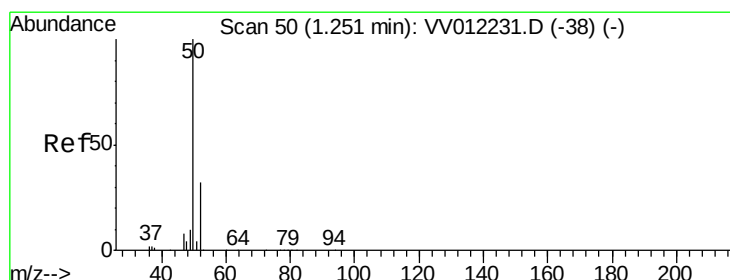
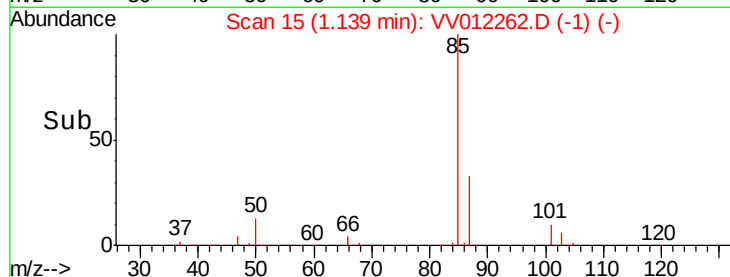
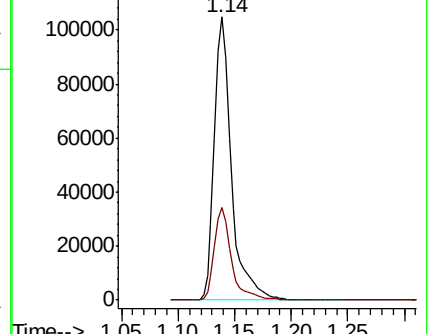
85 100

87 32.4 25.7 38.5



Abundance Ion 85.00 (84.70 to 85.70): VV0

Ion 87.00 (86.70 to 87.70): VV0



#3

Chloromethane

Concen: 5.085 ug/L

RT: 1.25 min Scan# 50

Delta R.T. 0.00 min

Lab File: VV012262.D

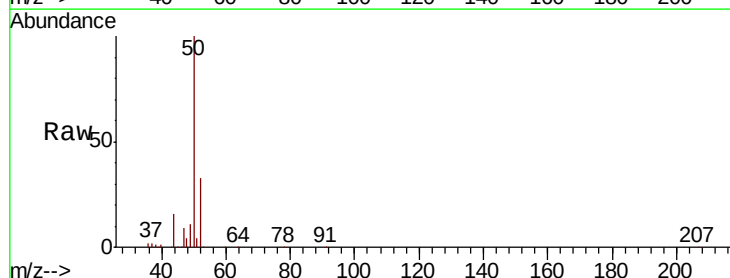
Acq: 16 Aug 2019 09:17

Tgt Ion: 50 Resp: 95247

Ion Ratio Lower Upper

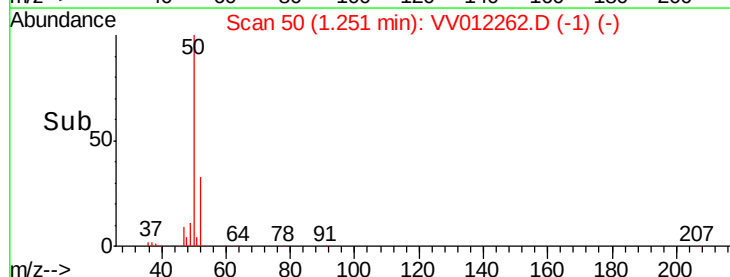
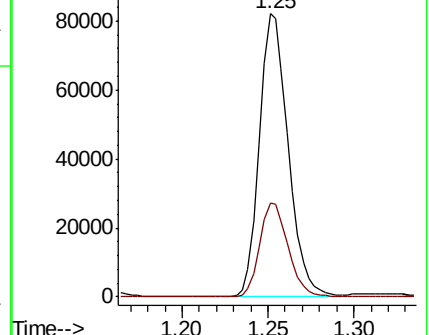
50 100

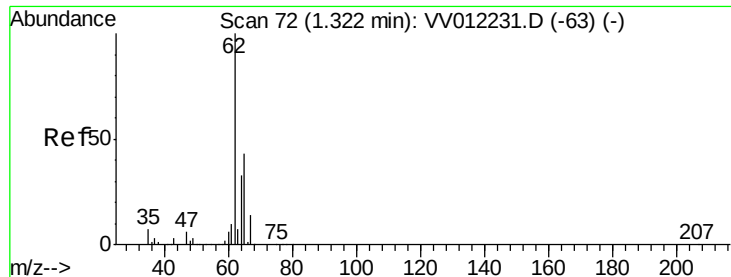
52 33.3 22.6 42.0



Abundance Ion 50.05 (49.75 to 50.75): VV0

Ion 52.05 (51.75 to 52.75): VV0





#5

Vinyl chloride

Concen: 5.351 ug/L

RT: 1.32 min Scan# 72

Delta R.T. 0.00 min

Lab File: VV012262.D

Acq: 16 Aug 2019 09:17

Instrument :

MSVOA\_V

ClientSampleId :

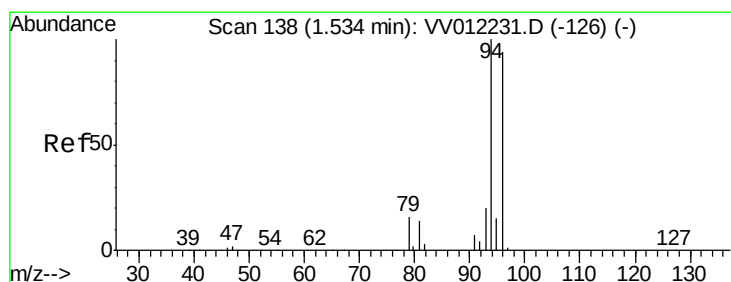
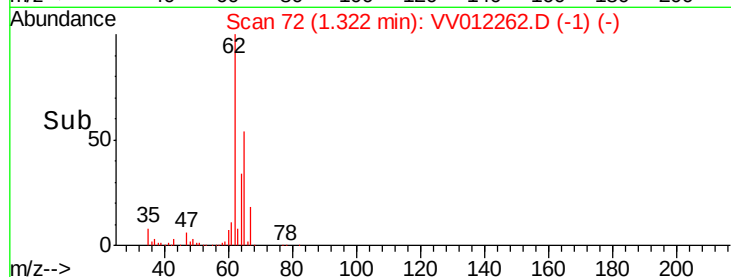
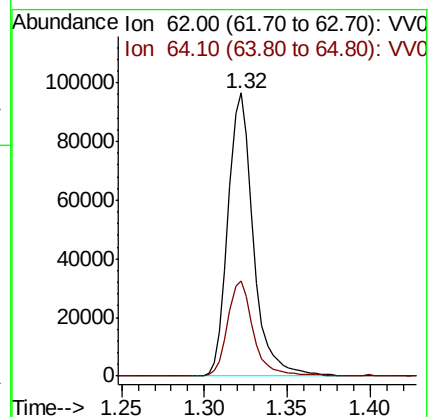
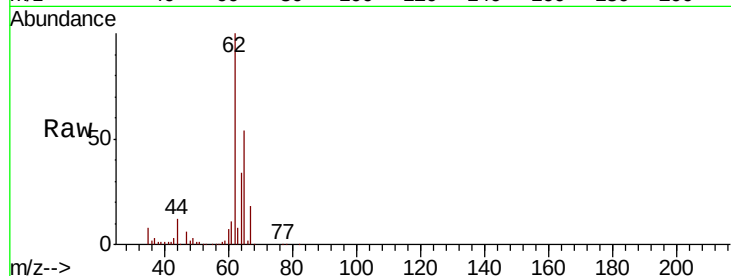
VSTD00543

Tgt Ion: 62 Resp: 102988

Ion Ratio Lower Upper

62 100

64 33.8 22.7 42.1



#6

Bromomethane

Concen: 4.184 ug/L

RT: 1.53 min Scan# 138

Delta R.T. 0.00 min

Lab File: VV012262.D

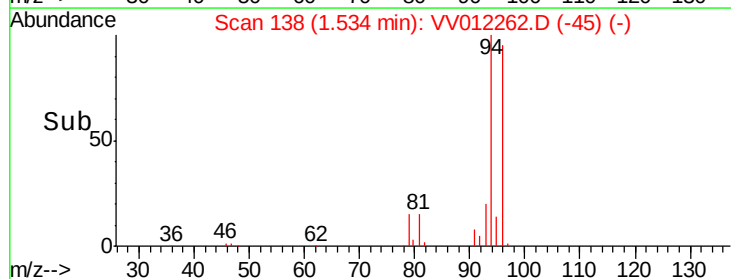
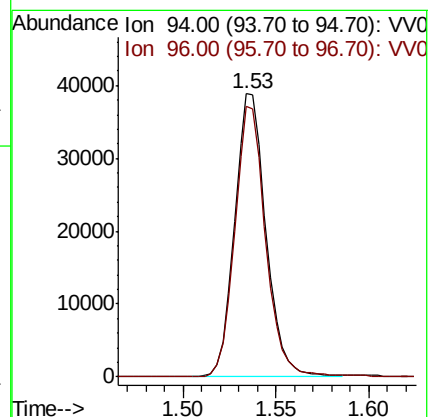
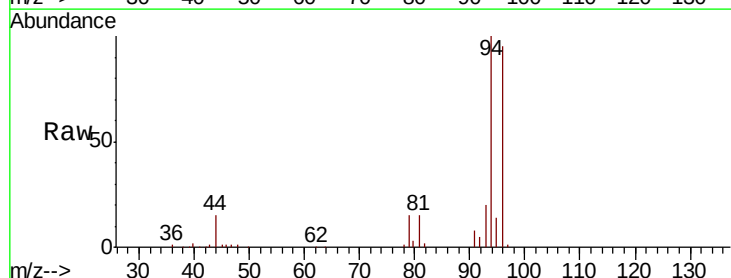
Acq: 16 Aug 2019 09:17

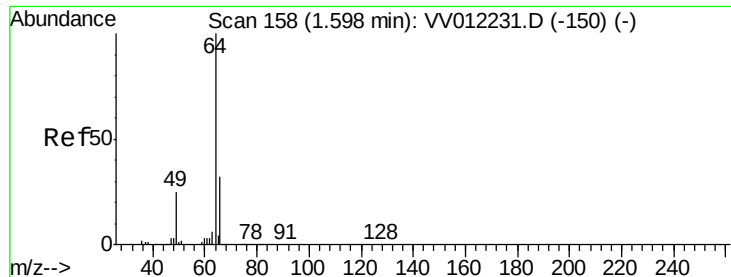
Tgt Ion: 94 Resp: 45510

Ion Ratio Lower Upper

94 100

96 95.4 67.3 125.1





#8

Chloroethane

Concen: 5.321 ug/L

RT: 1.60 min Scan# 158

Delta R.T. 0.00 min

Lab File: VV012262.D

Acq: 16 Aug 2019 09:17

Instrument :

MSVOA\_V

ClientSampleId :

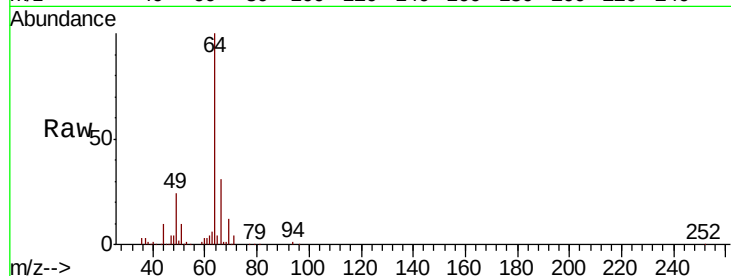
VSTD00543

Tgt Ion: 64 Resp: 59068

Ion Ratio Lower Upper

64 100

66 31.2 21.8 40.4

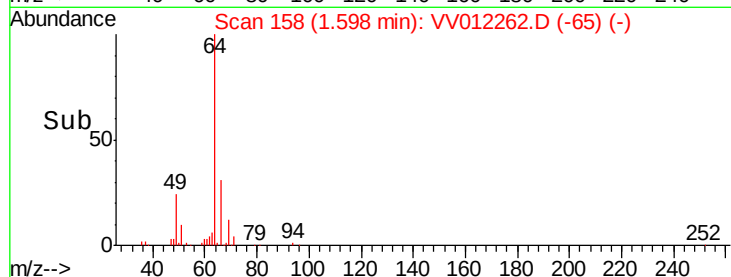


Abundance Ion 64.10 (63.80 to 64.80): VV012231.D (-150) (-)

Ion 66.05 (65.75 to 66.75): VV012231.D (-150) (-)

1.60

Time-->

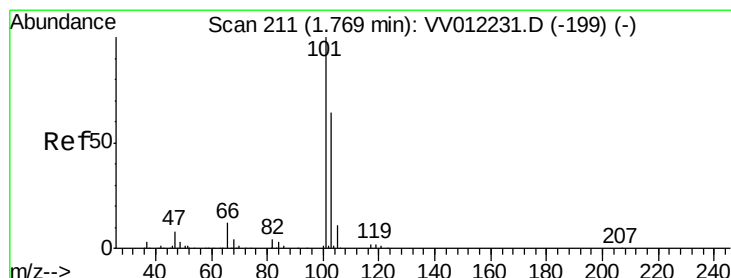


Abundance Ion 64.10 (63.80 to 64.80): VV012262.D (-65) (-)

Ion 66.05 (65.75 to 66.75): VV012262.D (-65) (-)

1.60

Time-->



#9

Trichlorofluoromethane

Concen: 5.690 ug/L

RT: 1.77 min Scan# 211

Delta R.T. 0.00 min

Lab File: VV012262.D

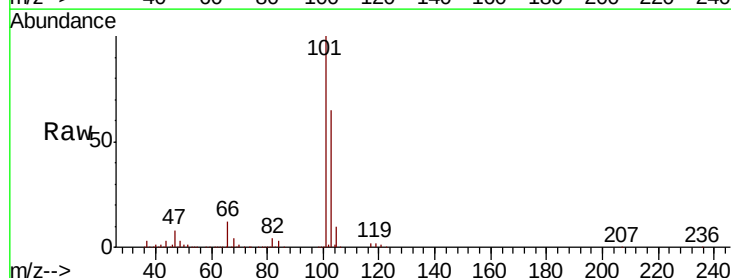
Acq: 16 Aug 2019 09:17

Tgt Ion: 101 Resp: 137748

Ion Ratio Lower Upper

101 100

103 64.7 52.0 78.0

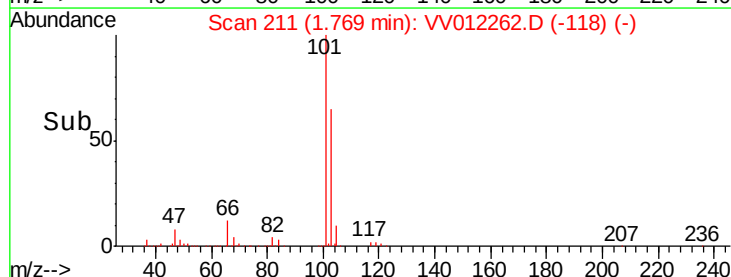


Abundance Ion 101.00 (100.70 to 101.70): VV012231.D (-199) (-)

Ion 103.00 (102.70 to 103.70): VV012231.D (-199) (-)

1.77

Time-->

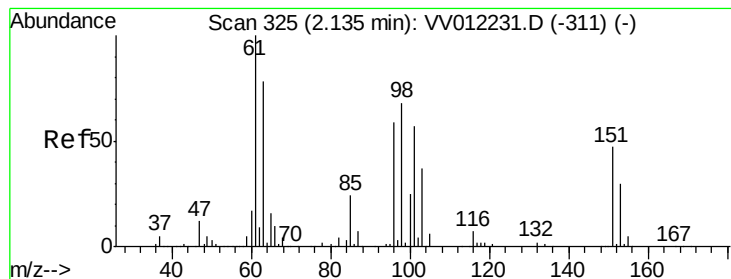


Abundance Ion 101.00 (100.70 to 101.70): VV012262.D (-118) (-)

Ion 103.00 (102.70 to 103.70): VV012262.D (-118) (-)

1.77

Time-->



#10

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

Concen: 5.982 ug/L

RT: 2.14 min Scan# 325

Delta R.T. 0.00 min

Lab File: VV012262.D

Acq: 16 Aug 2019 09:17

Instrument :

MSVOA\_V

ClientSampleId :

VSTD00543

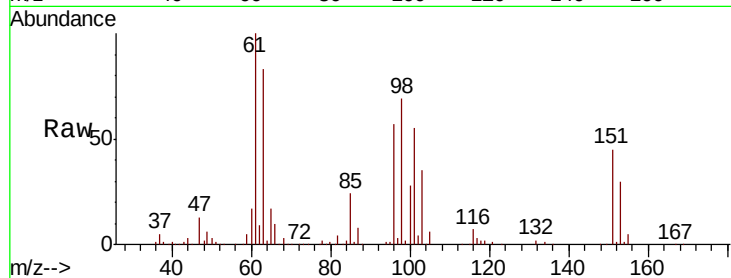
Tgt Ion: 101 Resp: 73223

Ion Ratio Lower Upper

101 100

85 42.0 33.7 50.5

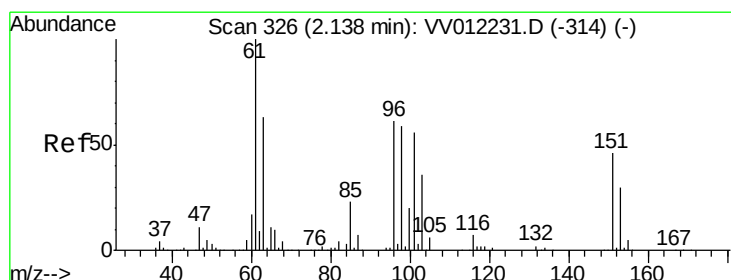
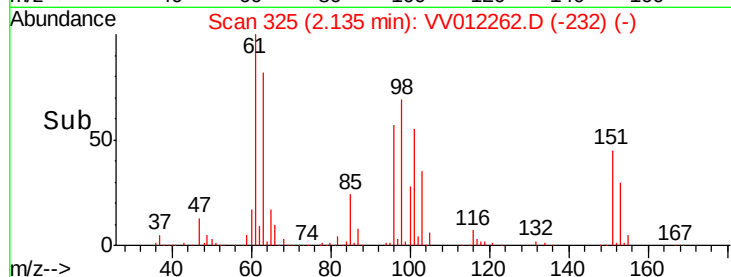
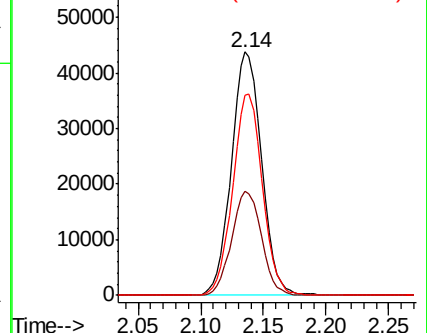
151 81.0 66.3 99.5



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 85.00 (84.70 to 85.70): VV0

Ion 151.00 (150.70 to 151.70): V



#12

1,1-Dichloroethene

Concen: 5.900 ug/L

RT: 2.14 min Scan# 326

Delta R.T. 0.00 min

Lab File: VV012262.D

Acq: 16 Aug 2019 09:17

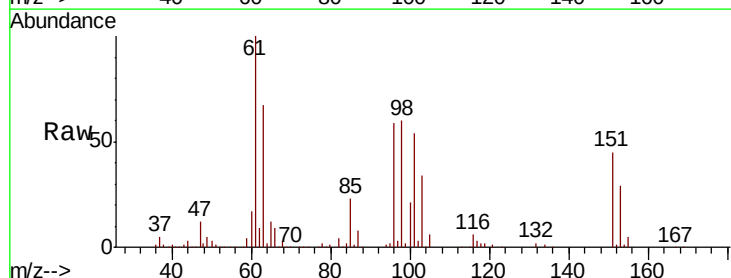
Tgt Ion: 96 Resp: 66880

Ion Ratio Lower Upper

96 100

61 168.5 119.3 221.5

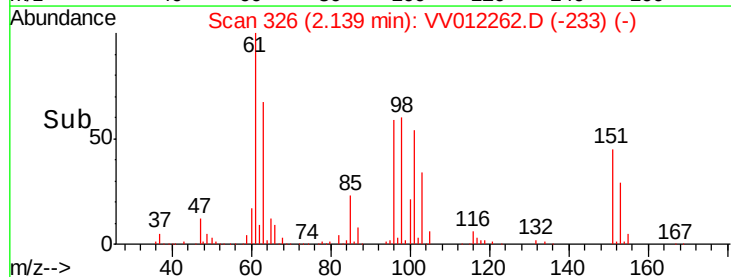
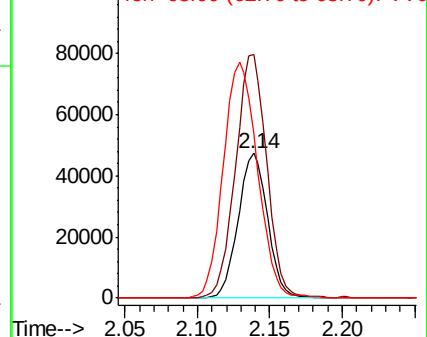
63 113.4 74.9 139.1

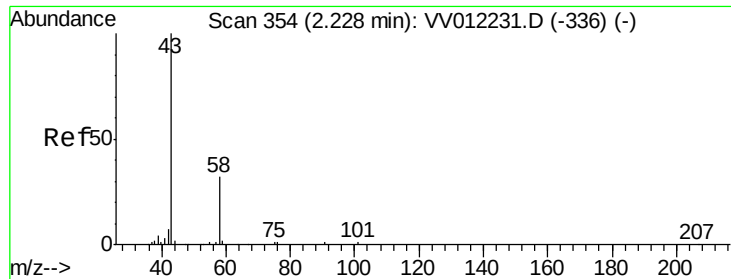


Abundance Ion 96.00 (95.70 to 96.70): VV0

Ion 61.05 (60.75 to 61.75): VV0

Ion 63.00 (62.70 to 63.70): VV0





#13

Acetone

Concen: 56.798 ug/L

RT: 2.24 min Scan# 358

Delta R.T. 0.01 min

Lab File: VV012262.D

Acq: 16 Aug 2019 09:17

Instrument :

MSVOA\_V

ClientSampleId :

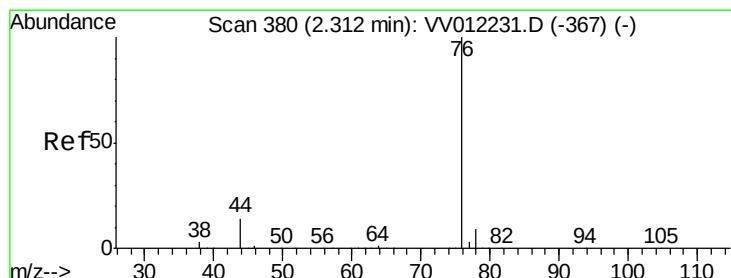
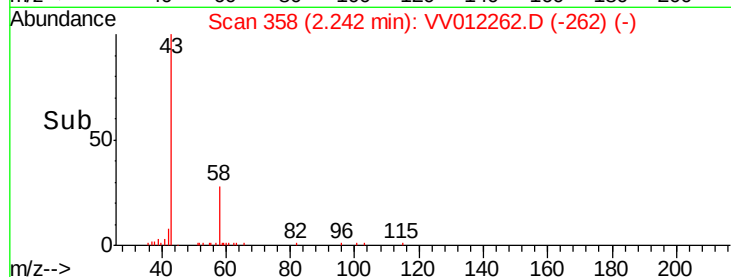
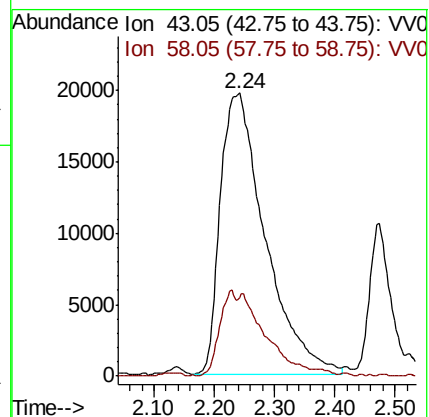
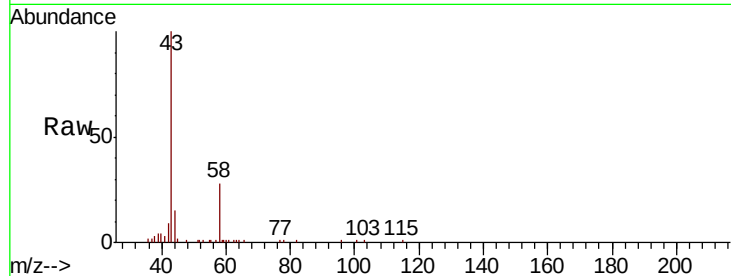
VSTD00543

Tgt Ion: 43 Resp: 101490

Ion Ratio Lower Upper

43 100

58 11.6 0.0 59.4



#14

Carbon disulfide

Concen: 5.765 ug/L

RT: 2.31 min Scan# 380

Delta R.T. 0.00 min

Lab File: VV012262.D

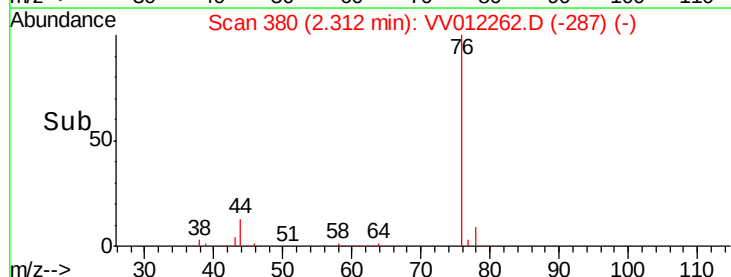
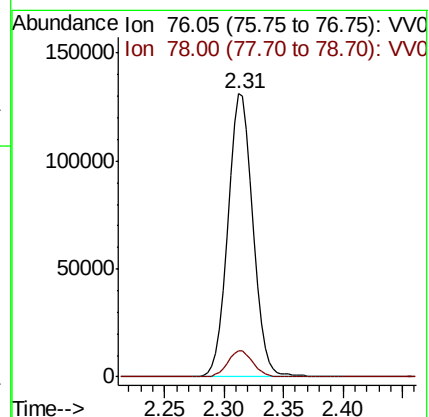
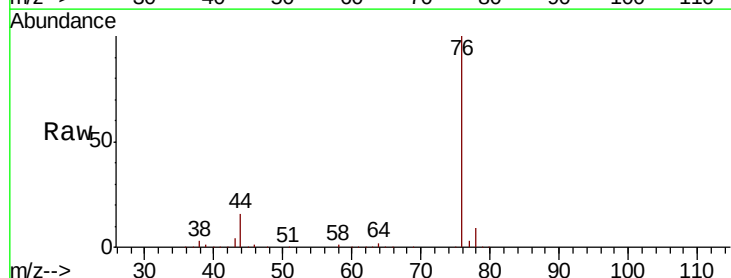
Acq: 16 Aug 2019 09:17

Tgt Ion: 76 Resp: 191399

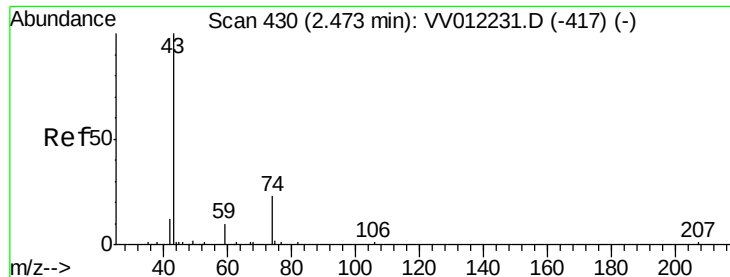
Ion Ratio Lower Upper

76 100

78 9.4 7.2 10.8







#15

Methyl Acetate

Concen: 5.120 ug/L

RT: 2.47 min Scan# 430

Delta R.T. 0.00 min

Lab File: VV012262.D

Acq: 16 Aug 2019 09:17

Instrument :

MSVOA\_V

ClientSampleId :

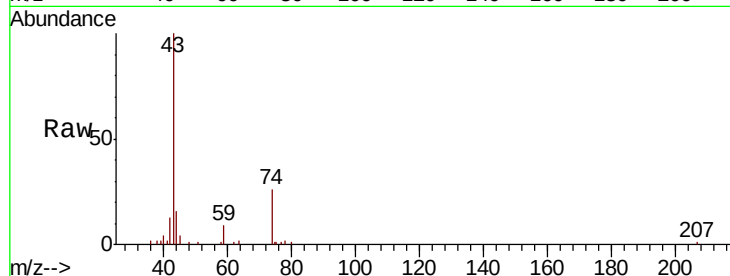
VSTD00543

Tgt Ion: 43 Resp: 23095

Ion Ratio Lower Upper

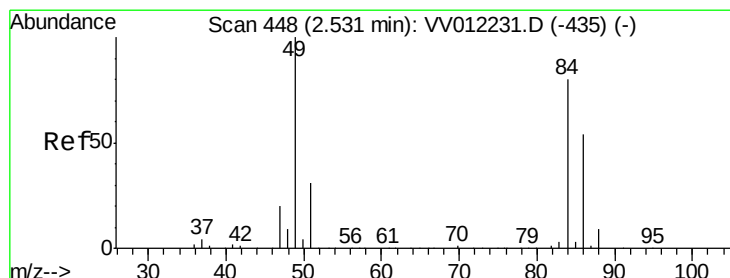
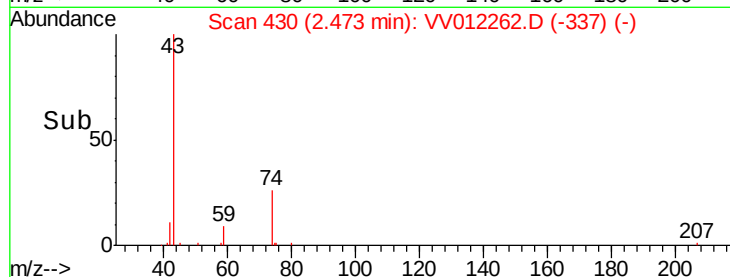
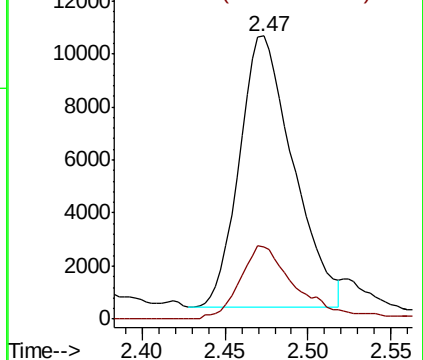
43 100

74 28.5 20.3 30.5



Abundance Ion 43.05 (42.75 to 43.75): VV0

Ion 74.05 (73.75 to 74.75): VV0



#16

Methylene chloride

Concen: 5.593 ug/L

RT: 2.53 min Scan# 448

Delta R.T. 0.00 min

Lab File: VV012262.D

Acq: 16 Aug 2019 09:17

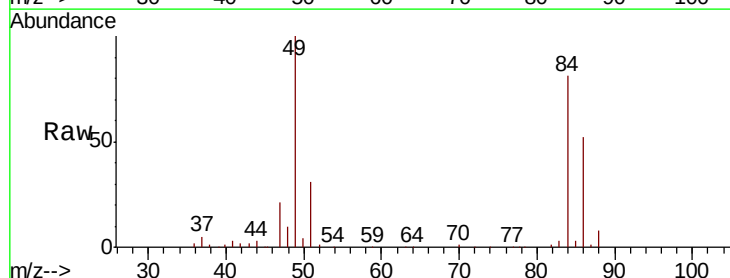
Tgt Ion: 84 Resp: 68370

Ion Ratio Lower Upper

84 100

86 64.0 44.4 82.5

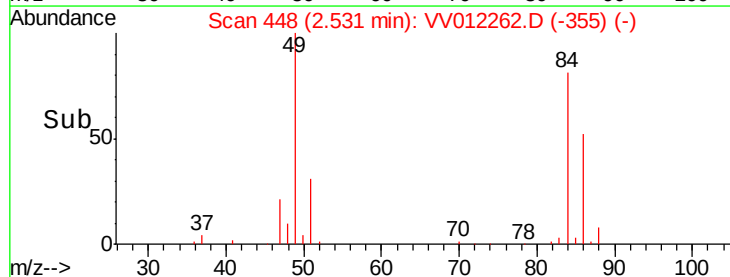
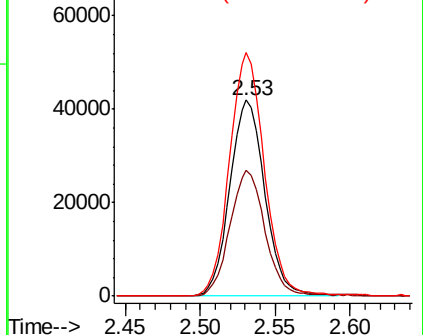
49 124.2 85.1 158.1

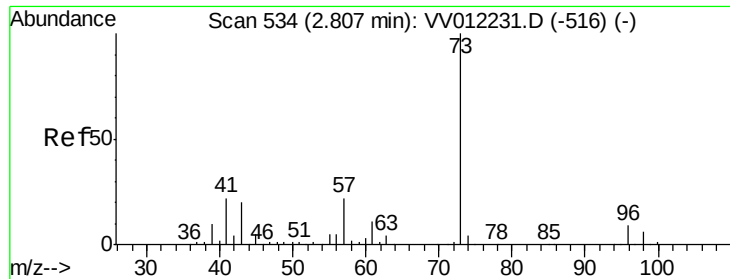


Abundance Ion 84.05 (83.75 to 84.75): VV0

Ion 86.00 (85.70 to 86.70): VV0

Ion 49.10 (48.80 to 49.80): VV0

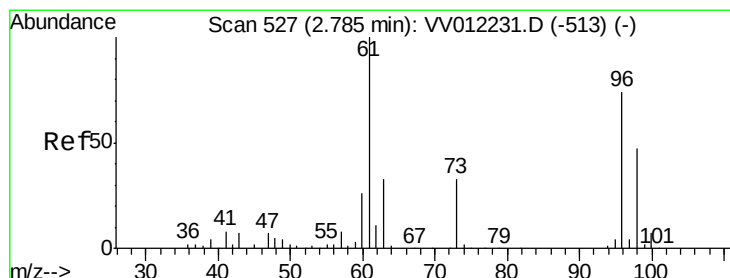
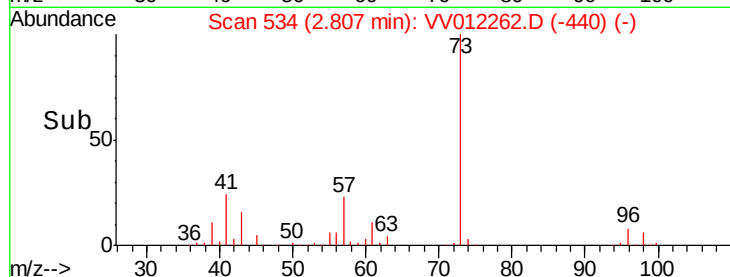
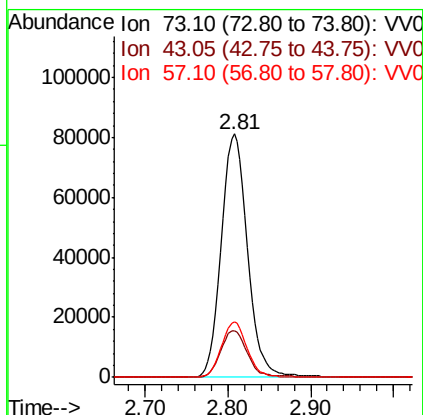
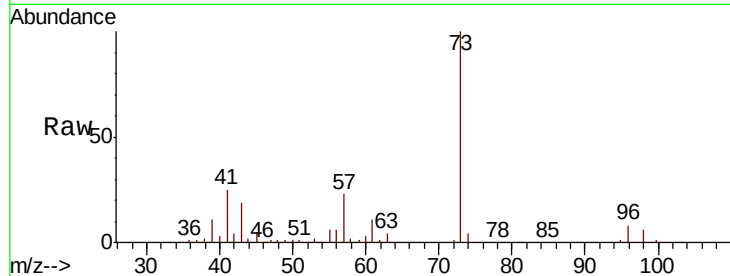




#17  
Methyl tert-butyl Ether  
Concen: 5.716 ug/L  
RT: 2.81 min Scan# 534  
Delta R.T. 0.00 min  
Lab File: VV012262.D  
Acq: 16 Aug 2019 09:17

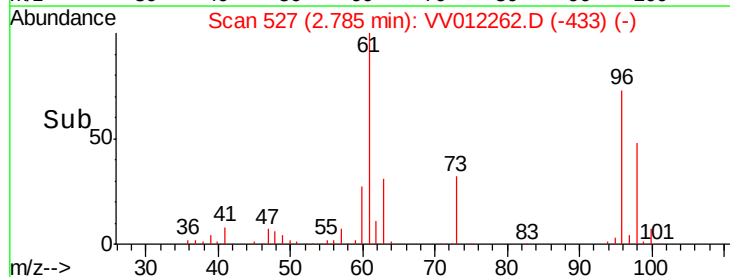
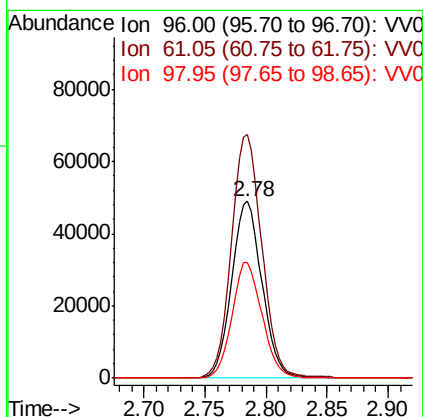
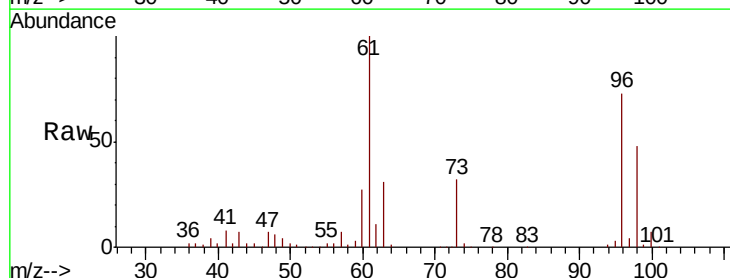
Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD00543

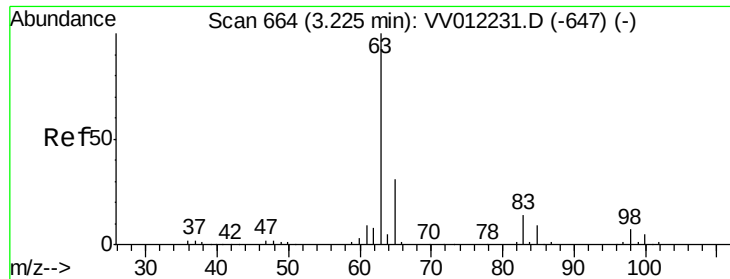
Tgt Ion: 73 Resp: 178485  
Ion Ratio Lower Upper  
73 100  
43 19.0 15.4 23.0  
57 22.2 17.8 26.6



#18  
trans-1,2-Dichloroethene  
Concen: 5.619 ug/L  
RT: 2.78 min Scan# 527  
Delta R.T. 0.00 min  
Lab File: VV012262.D  
Acq: 16 Aug 2019 09:17

Tgt Ion: 96 Resp: 84984  
Ion Ratio Lower Upper  
96 100  
61 137.6 90.8 168.6  
98 65.5 44.4 82.4

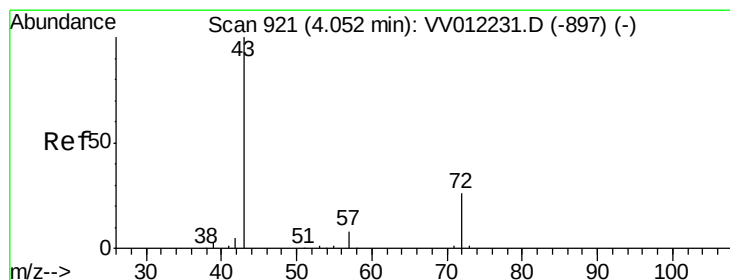
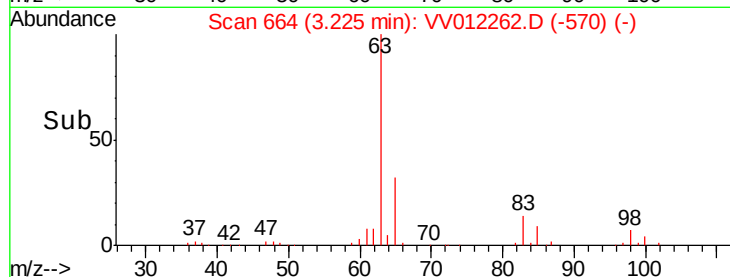
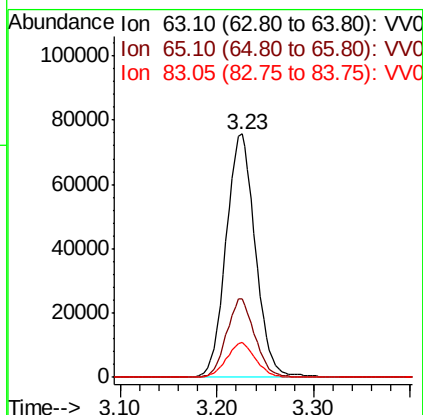
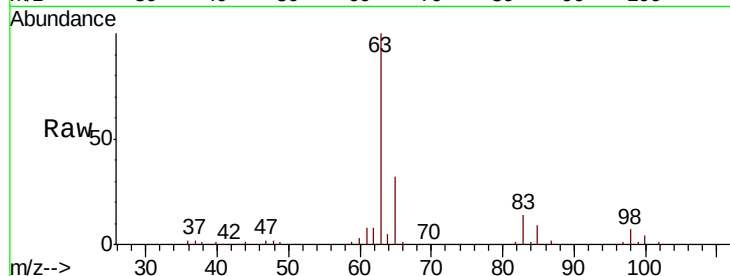




#19  
 1,1-Dichloroethane  
 Concen: 5.740 ug/L  
 RT: 3.23 min Scan# 664  
 Delta R.T. 0.00 min  
 Lab File: VV012262.D  
 Acq: 16 Aug 2019 09:17

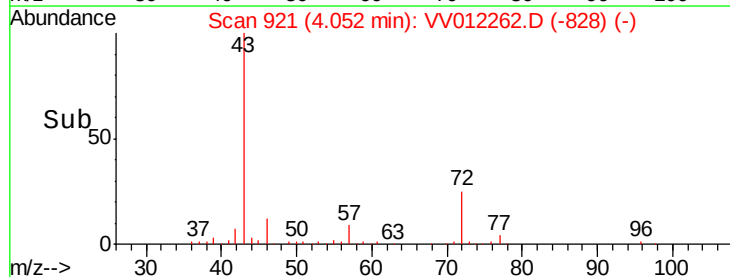
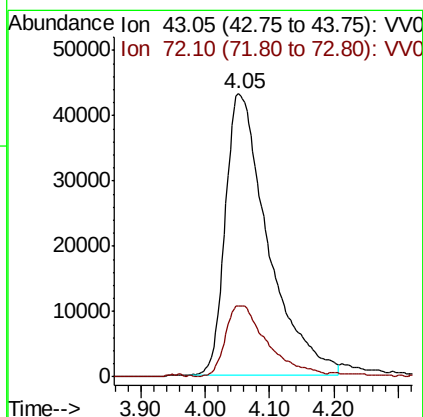
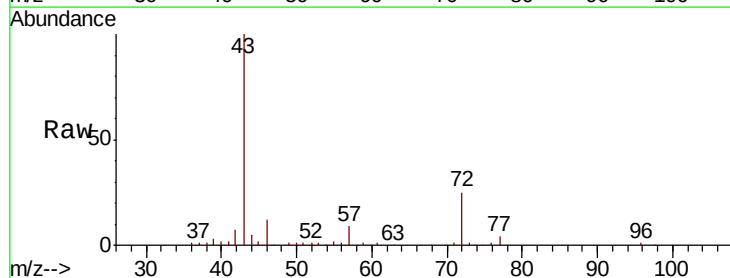
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD00543

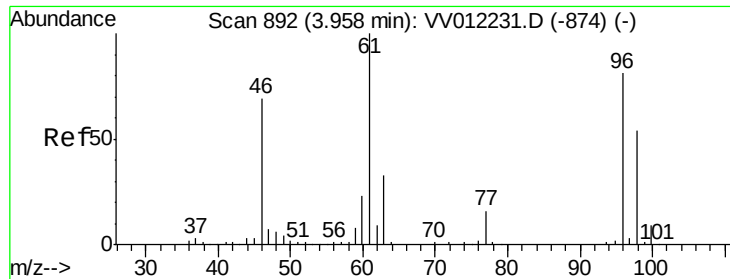
Tgt Ion: 63 Resp: 158954  
 Ion Ratio Lower Upper  
 63 100  
 65 32.0 21.7 40.3  
 83 14.3 10.1 18.9



#21  
 2-Butanone  
 Concen: 54.576 ug/L  
 RT: 4.05 min Scan# 921  
 Delta R.T. 0.00 min  
 Lab File: VV012262.D  
 Acq: 16 Aug 2019 09:17

Tgt Ion: 43 Resp: 199399  
 Ion Ratio Lower Upper  
 43 100  
 72 25.1 12.9 38.7



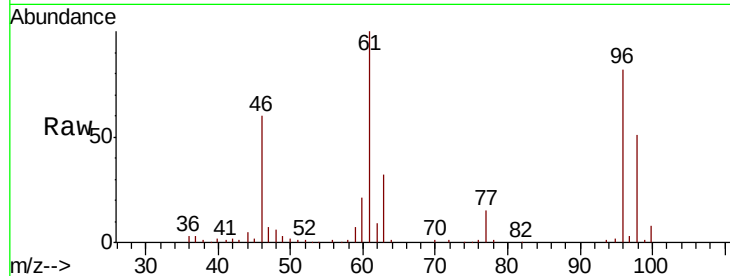


#22

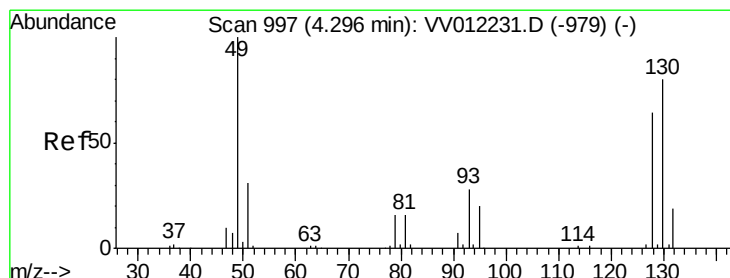
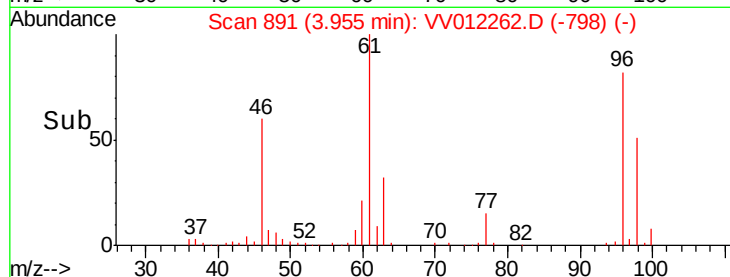
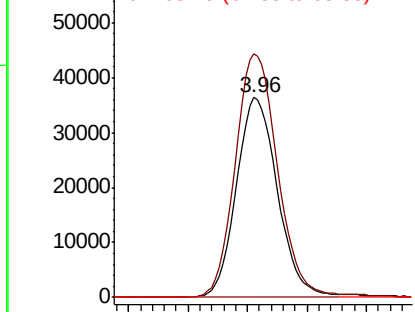
cis-1,2-Dichloroethene  
Concen: 5.209 ug/L  
RT: 3.96 min Scan# 891  
Delta R.T. 0.00 min  
Lab File: VV012262.D  
Acq: 16 Aug 2019 09:17

Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD00543

Tgt Ion: 96 Resp: 86997  
Ion Ratio Lower Upper  
96 100  
61 121.8 86.0 159.6  
68 0.0 0.0 0.0



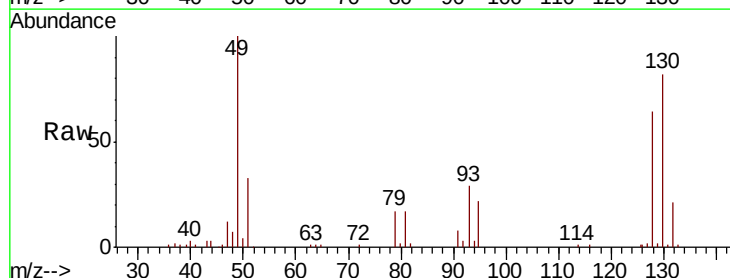
Abundance Ion 96.00 (95.70 to 96.70): VV0  
Ion 61.05 (60.75 to 61.75): VV0  
Ion 68.15 (67.85 to 68.85): VV0



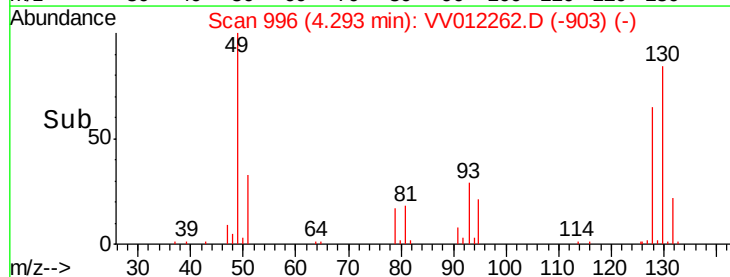
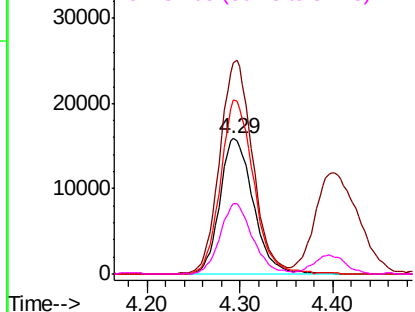
#23

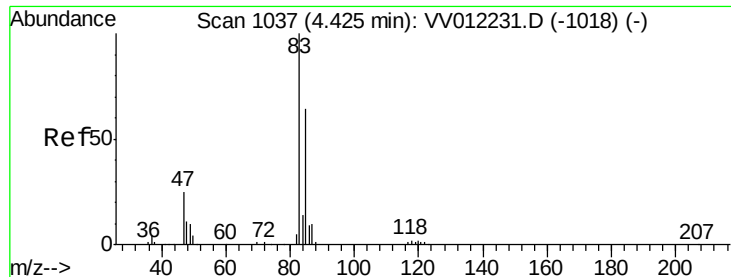
Bromochloromethane  
Concen: 5.565 ug/L  
RT: 4.29 min Scan# 996  
Delta R.T. 0.00 min  
Lab File: VV012262.D  
Acq: 16 Aug 2019 09:17

Tgt Ion: 128 Resp: 39619  
Ion Ratio Lower Upper  
128 100  
49 155.3 111.5 207.1  
130 128.0 87.4 162.4  
51 52.0 38.2 57.2



Abundance Ion 127.90 (127.60 to 128.60): V  
Ion 49.10 (48.80 to 49.80): VV0  
Ion 129.95 (129.65 to 130.65): V  
Ion 51.05 (50.75 to 51.75): VV0

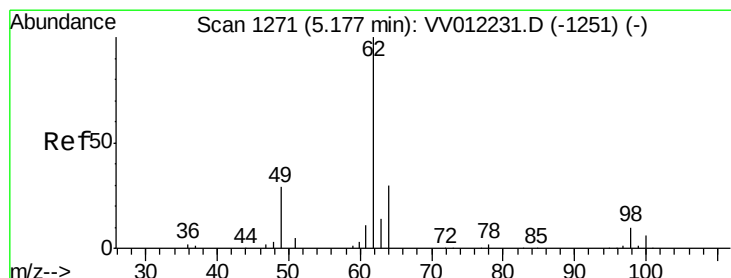
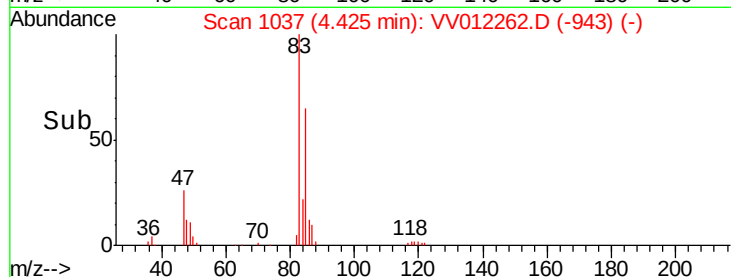
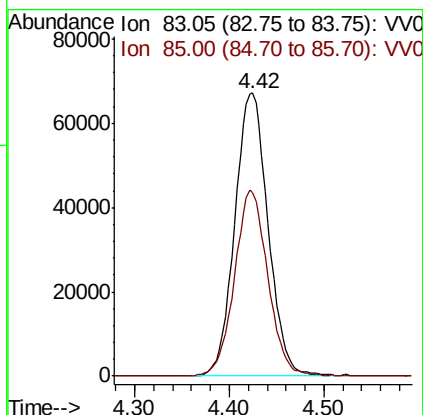
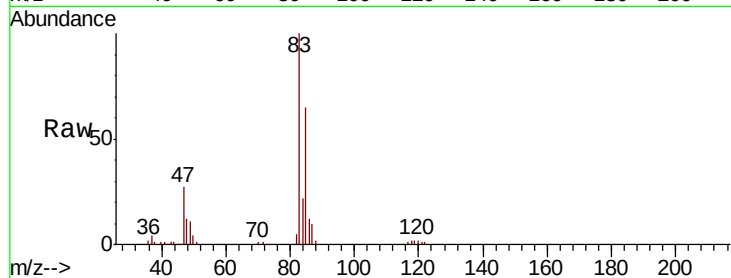




#25  
Chloroform  
Concen: 5.225 ug/L  
RT: 4.42 min Scan# 1037  
Delta R.T. 0.00 min  
Lab File: VV012262.D  
Acq: 16 Aug 2019 09:17

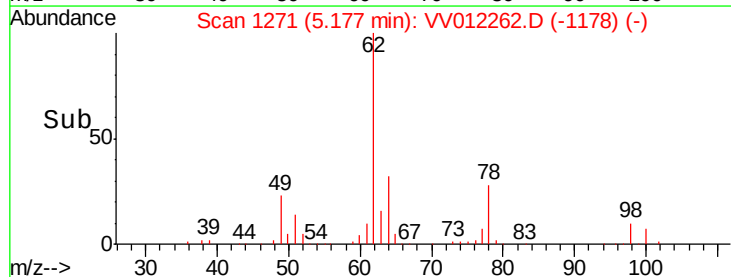
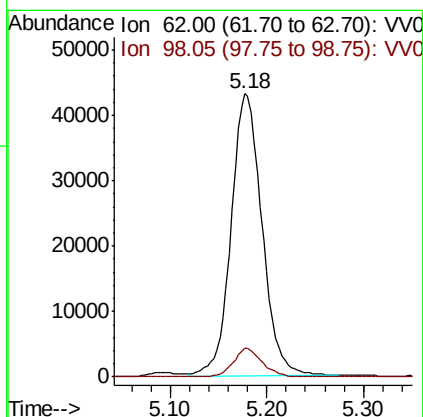
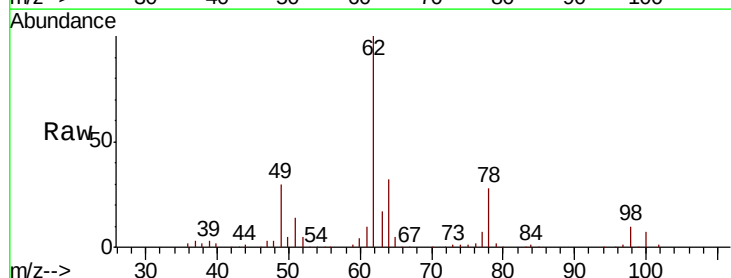
Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD00543

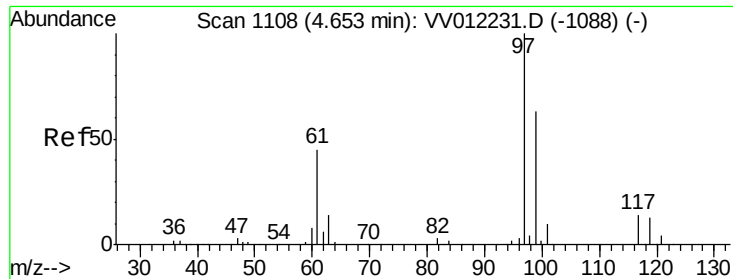
Tgt Ion: 83 Resp: 164304  
Ion Ratio Lower Upper  
83 100  
85 64.8 44.3 82.3



#27  
1,2-Dichloroethane  
Concen: 5.560 ug/L  
RT: 5.18 min Scan# 1271  
Delta R.T. 0.00 min  
Lab File: VV012262.D  
Acq: 16 Aug 2019 09:17

Tgt Ion: 62 Resp: 96032  
Ion Ratio Lower Upper  
62 100  
98 10.1 7.5 11.3

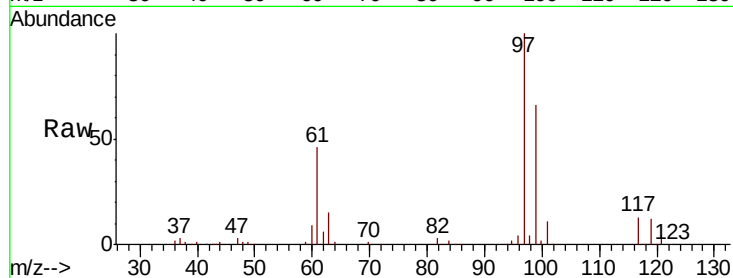




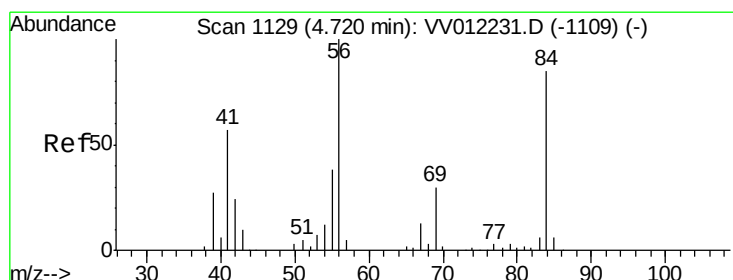
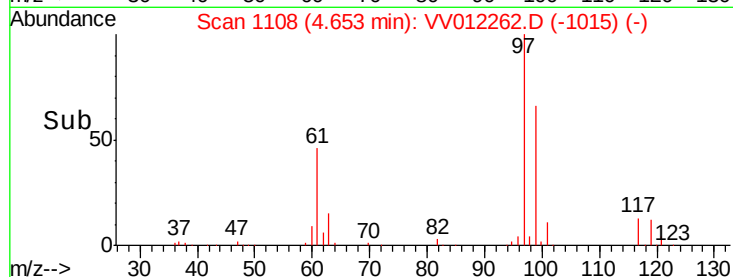
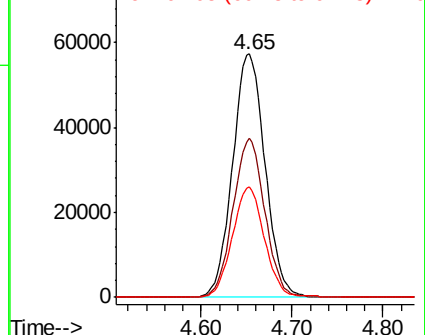
#29  
 1,1,1-Trichloroethane  
 Concen: 5.380 ug/L  
 RT: 4.65 min Scan# 1108  
 Delta R.T. 0.00 min  
 Lab File: VV012262.D  
 Acq: 16 Aug 2019 09:17

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD00543

Tgt Ion: 97 Resp: 142461  
 Ion Ratio Lower Upper  
 97 100  
 99 63.7 52.1 78.1  
 61 44.7 35.4 53.0

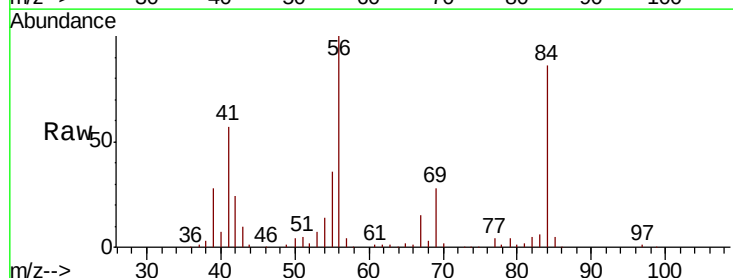


Abundance Ion 96.95 (96.65 to 97.65): VV0  
 Ion 99.05 (98.75 to 99.75): VV0  
 Ion 61.05 (60.75 to 61.75): VV0

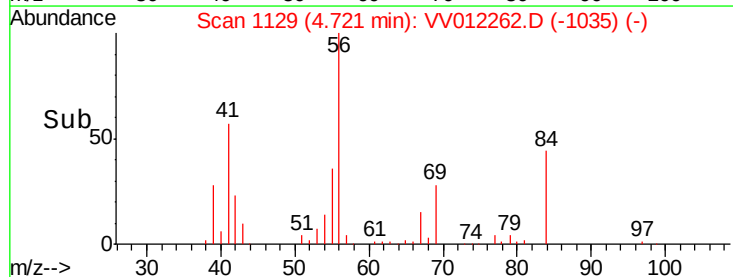
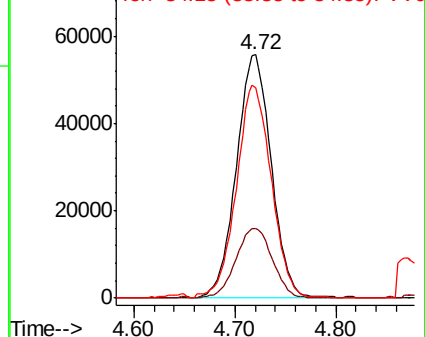


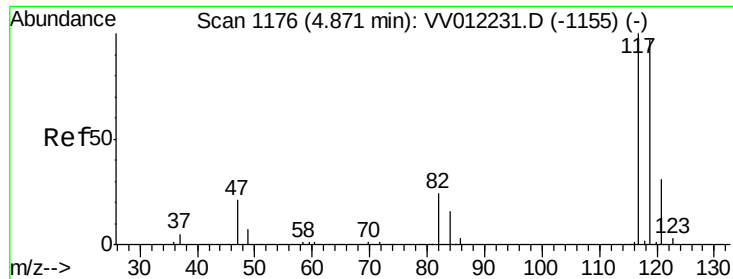
#30  
 Cyclohexane  
 Concen: 5.077 ug/L  
 RT: 4.72 min Scan# 1129  
 Delta R.T. 0.00 min  
 Lab File: VV012262.D  
 Acq: 16 Aug 2019 09:17

Tgt Ion: 56 Resp: 133890  
 Ion Ratio Lower Upper  
 56 100  
 69 29.9 24.6 36.8  
 84 87.8 71.0 106.6



Abundance Ion 56.10 (55.80 to 56.80): VV0  
 Ion 69.15 (68.85 to 69.85): VV0  
 Ion 84.15 (83.85 to 84.85): VV0





#31

Carbon tetrachloride

Concen: 5.401 ug/L

RT: 4.87 min Scan# 1176

Delta R.T. 0.00 min

Lab File: VV012262.D

Acq: 16 Aug 2019 09:17

Instrument :

MSVOA\_V

ClientSampleId :

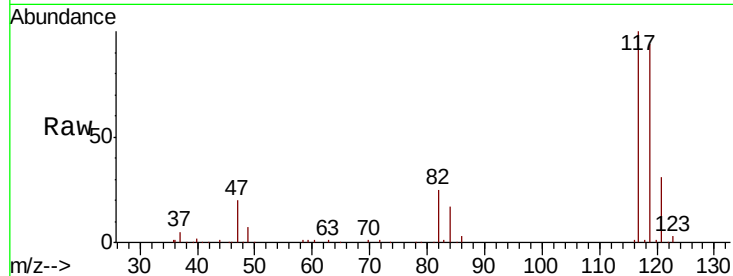
VSTD00543

Tgt Ion:117 Resp: 129381

Ion Ratio Lower Upper

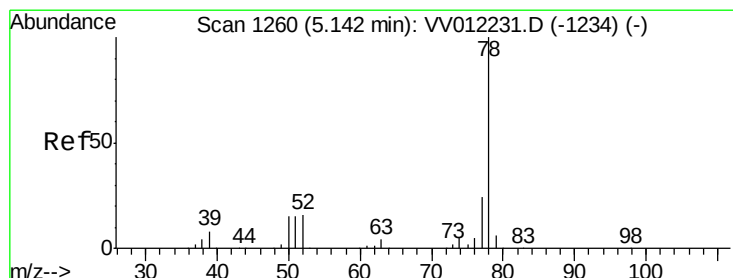
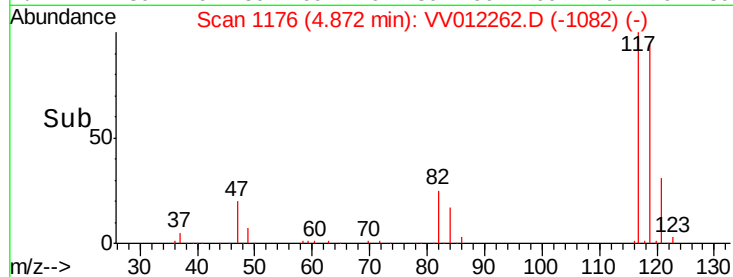
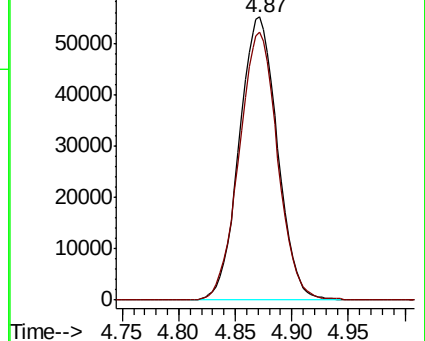
117 100

119 95.2 77.9 116.9



Abundance Ion 116.90 (116.60 to 117.60): V

Ion 118.90 (118.60 to 119.60): V



#33

Benzene

Concen: 5.338 ug/L

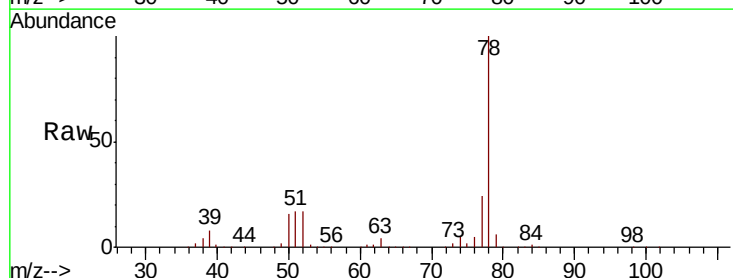
RT: 5.14 min Scan# 1260

Delta R.T. 0.00 min

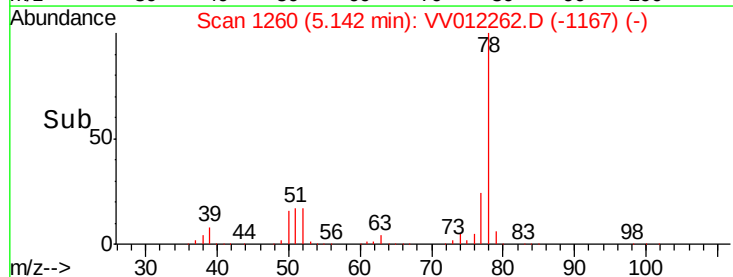
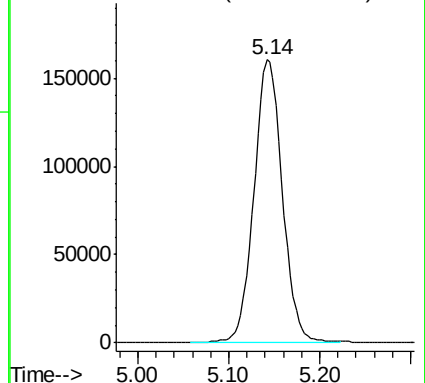
Lab File: VV012262.D

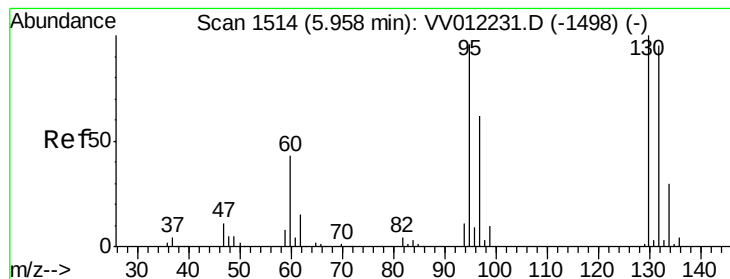
Acq: 16 Aug 2019 09:17

Tgt Ion: 78 Resp: 348590



Abundance Ion 78.10 (77.80 to 78.80): VV0





#34

Trichloroethene

Concen: 5.170 ug/L

RT: 5.96 min Scan# 1513

Delta R.T. 0.00 min

Lab File: VV012262.D

Acq: 16 Aug 2019 09:17

Instrument :

MSVOA\_V

ClientSampleId :

VSTD00543

Tgt Ion: 95 Resp: 91455

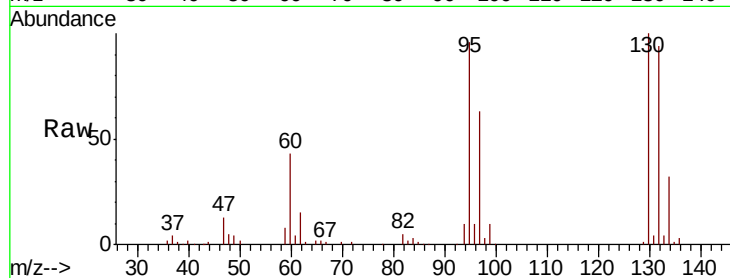
Ion Ratio Lower Upper

95 100

97 65.6 43.3 80.3

132 97.7 67.5 125.3

130 103.8 74.9 139.1

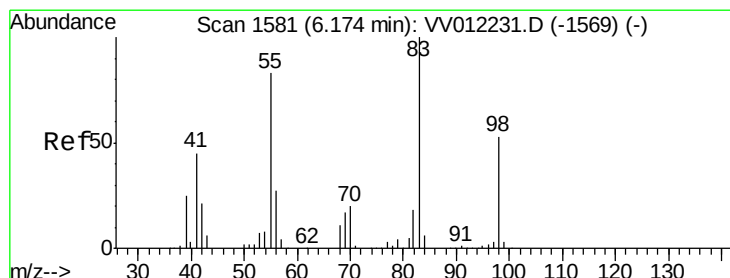
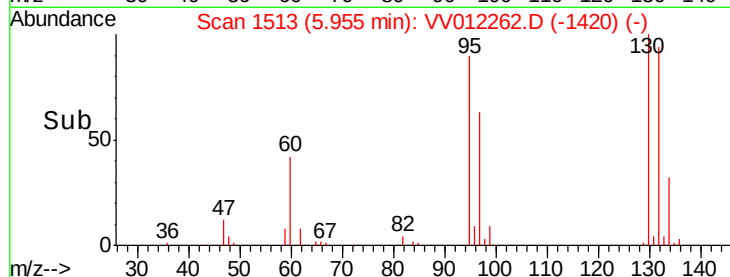
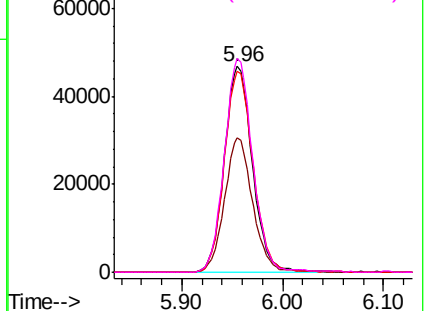


Abundance Ion 95.00 (94.70 to 95.70): VV0

Ion 96.95 (96.65 to 97.65): VV0

Ion 131.95 (131.65 to 132.65): VV0

Ion 129.95 (129.65 to 130.65): VV0



#35

Methylcyclohexane

Concen: 5.209 ug/L

RT: 6.17 min Scan# 1580

Delta R.T. 0.00 min

Lab File: VV012262.D

Acq: 16 Aug 2019 09:17

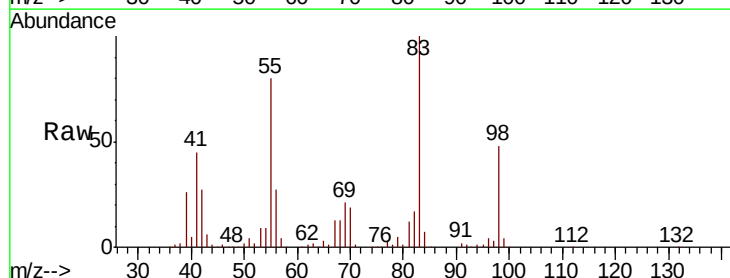
Tgt Ion: 83 Resp: 143164

Ion Ratio Lower Upper

83 100

55 78.6 62.2 93.2

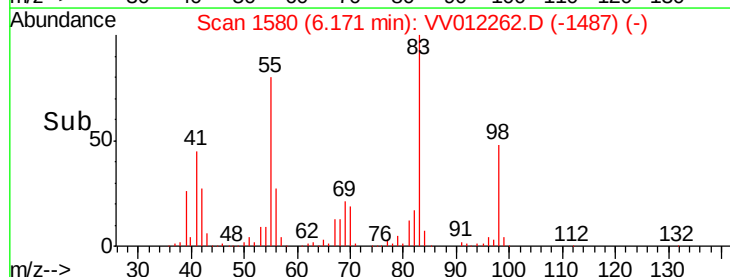
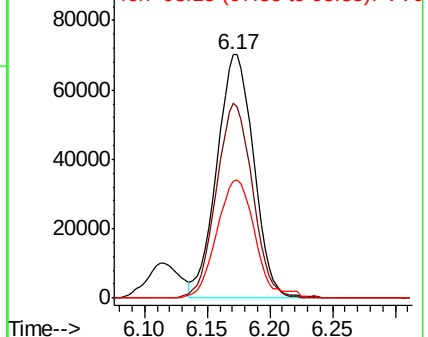
98 50.3 39.2 58.8



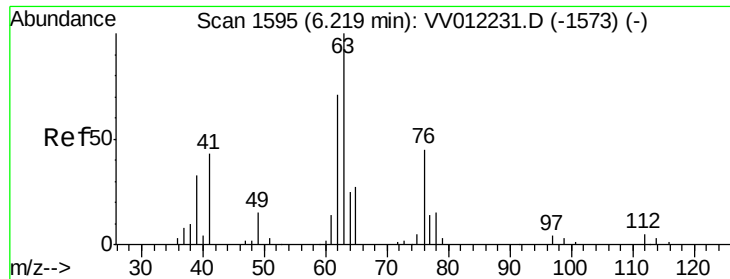
Abundance Ion 83.15 (82.85 to 83.85): VV0

Ion 55.10 (54.80 to 55.80): VV0

Ion 98.15 (97.85 to 98.85): VV0



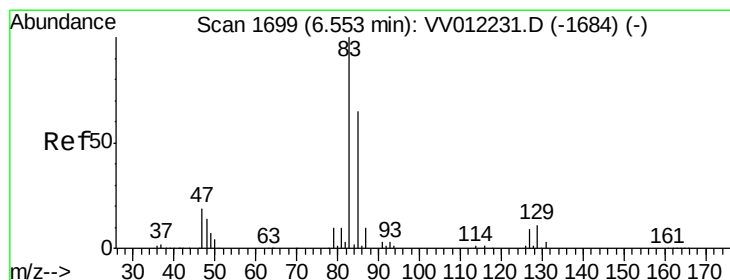
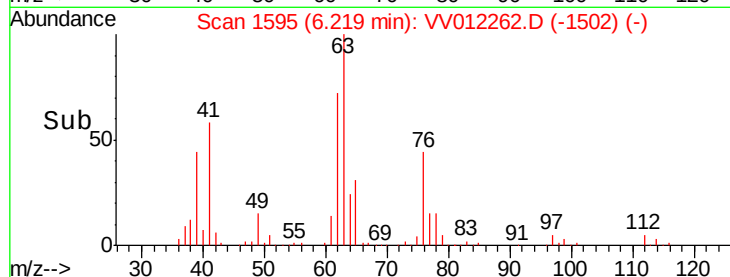
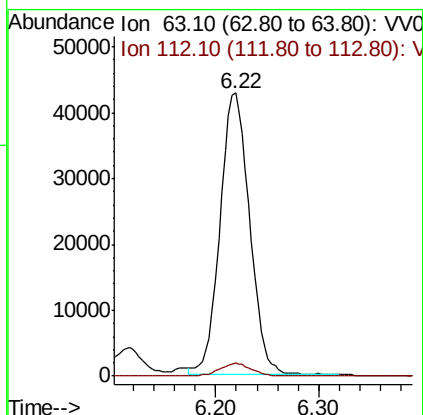
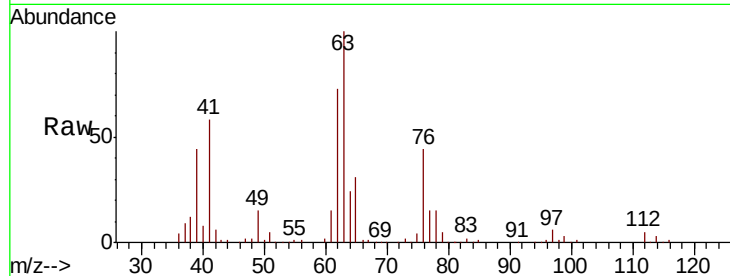




#37  
 1,2-Dichloropropane  
 Concen: 5.254 ug/L  
 RT: 6.22 min Scan# 1595  
 Delta R.T. 0.00 min  
 Lab File: VV012262.D  
 Acq: 16 Aug 2019 09:17

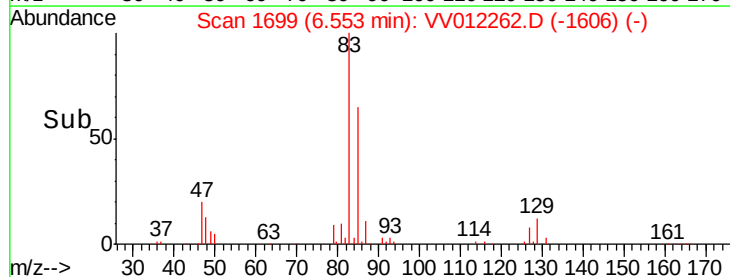
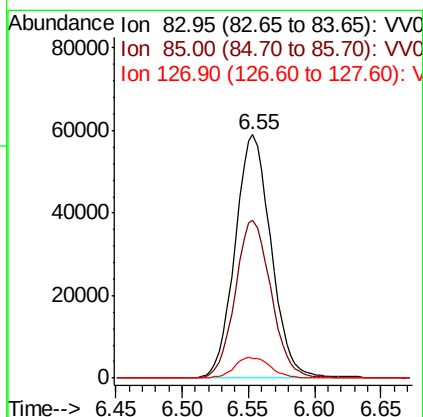
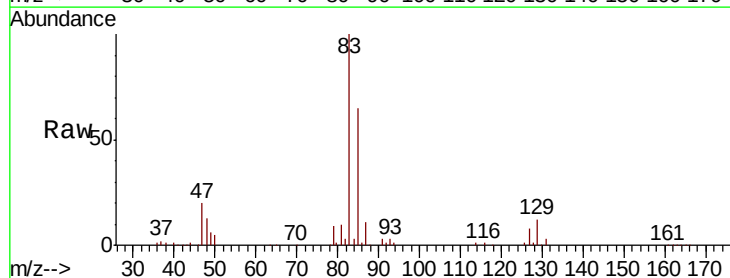
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD00543

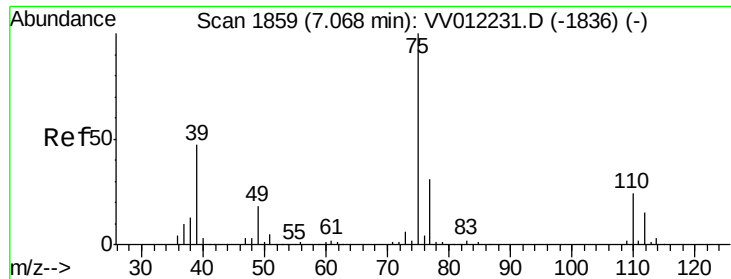
Tgt Ion: 63 Resp: 85610  
 Ion Ratio Lower Upper  
 63 100  
 112 5.0 3.8 5.8



#38  
 Bromodichloromethane  
 Concen: 5.309 ug/L  
 RT: 6.55 min Scan# 1699  
 Delta R.T. 0.00 min  
 Lab File: VV012262.D  
 Acq: 16 Aug 2019 09:17

Tgt Ion: 83 Resp: 111436  
 Ion Ratio Lower Upper  
 83 100  
 85 64.9 45.9 85.3  
 127 8.3 7.4 11.2

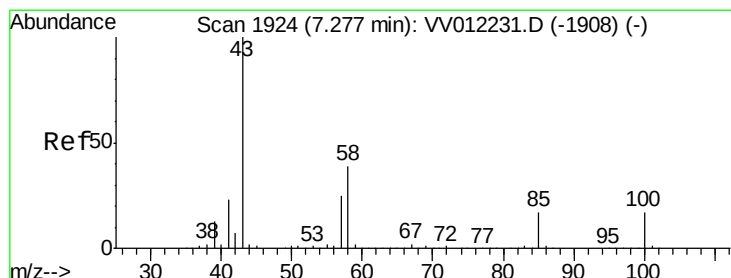
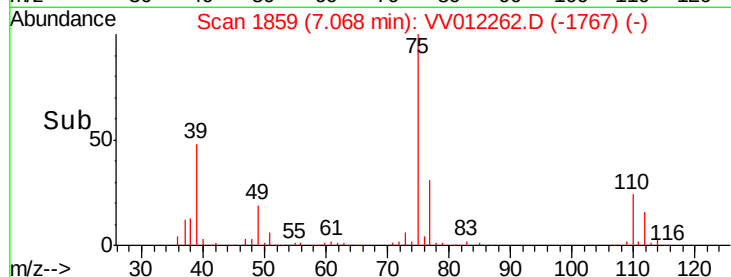
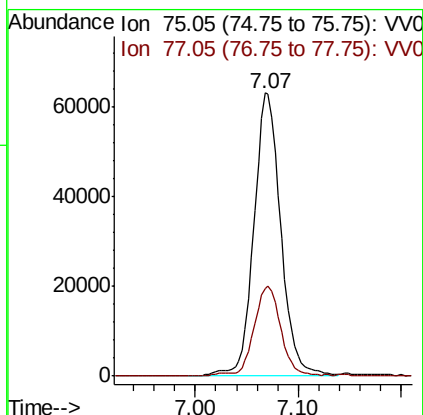
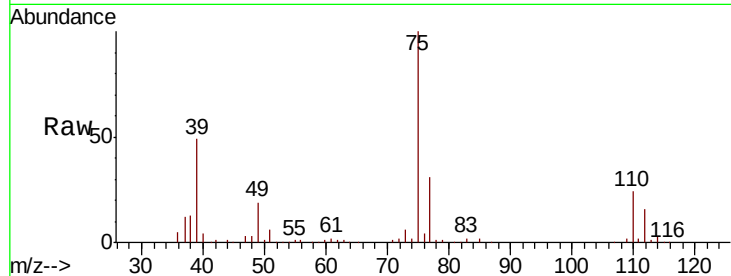




#39  
 cis-1,3-Dichloropropene  
 Concen: 5.093 ug/L  
 RT: 7.07 min Scan# 1859  
 Delta R.T. -0.00 min  
 Lab File: VV012262.D  
 Acq: 16 Aug 2019 09:17

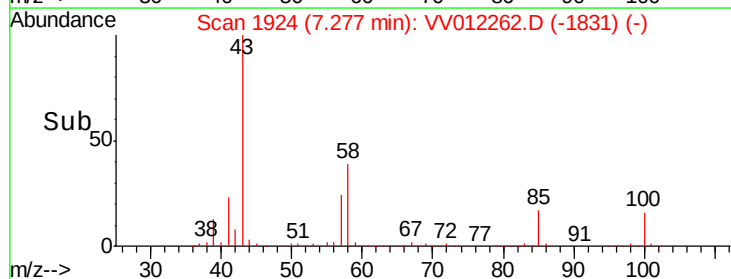
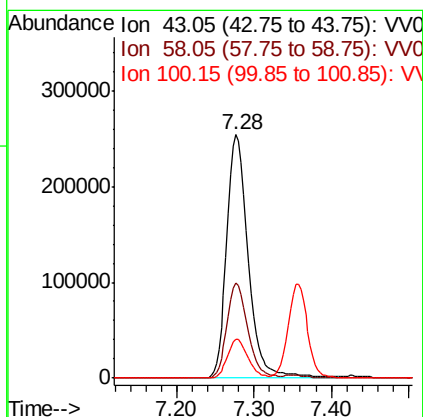
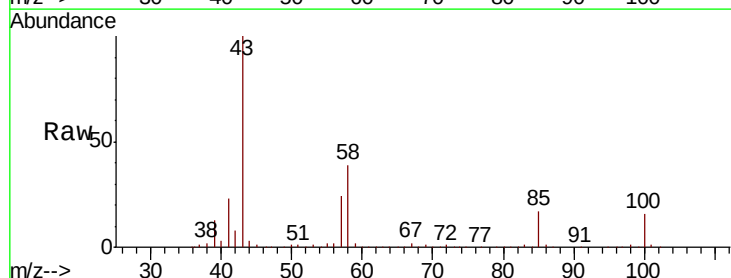
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD00543

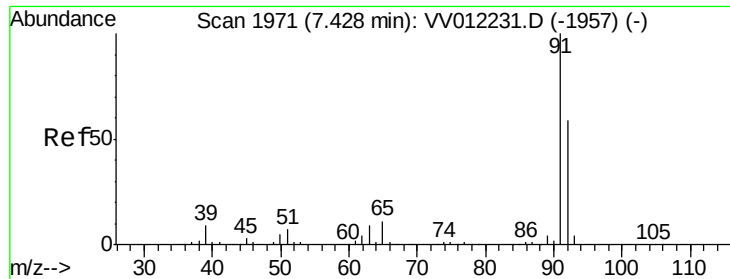
Tgt Ion: 75 Resp: 114276  
 Ion Ratio Lower Upper  
 75 100  
 77 31.0 22.2 41.2



#40  
 4-Methyl-2-pentanone  
 Concen: 54.706 ug/L  
 RT: 7.28 min Scan# 1924  
 Delta R.T. 0.00 min  
 Lab File: VV012262.D  
 Acq: 16 Aug 2019 09:17

Tgt Ion: 43 Resp: 490042  
 Ion Ratio Lower Upper  
 43 100  
 58 37.6 30.7 46.1  
 100 15.1 12.5 18.7





#42

Toluene

Concen: 5.432 ug/L

RT: 7.43 min Scan# 1971

Delta R.T. 0.00 min

Lab File: VV012262.D

Acq: 16 Aug 2019 09:17

Instrument :

MSVOA\_V

ClientSampleId :

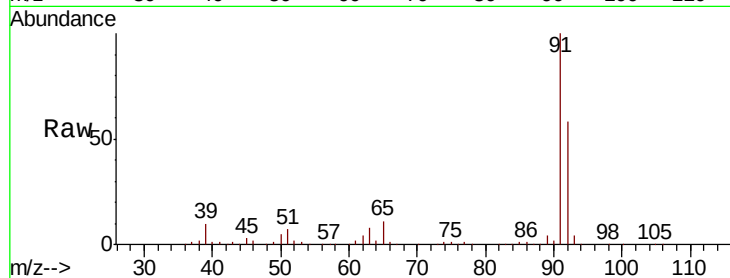
VSTD00543

Tgt Ion: 91 Resp: 377401

Ion Ratio Lower Upper

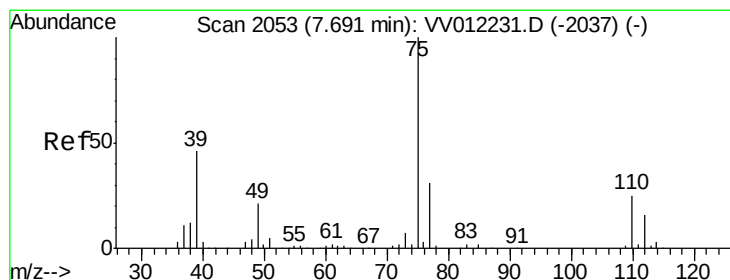
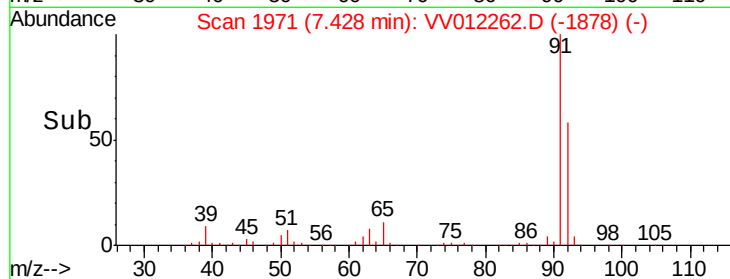
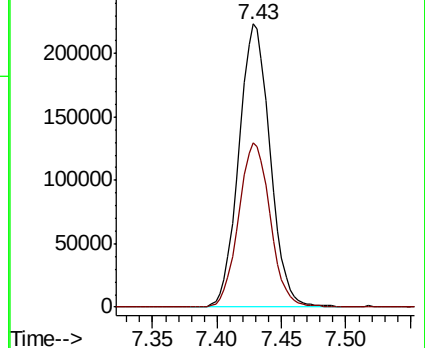
91 100

92 57.9 39.8 73.8



Abundance Ion 91.15 (90.85 to 91.85): VV0

Ion 92.15 (91.85 to 92.85): VV0



#44

trans-1,3-Dichloropropene

Concen: 5.280 ug/L

RT: 7.69 min Scan# 2053

Delta R.T. 0.00 min

Lab File: VV012262.D

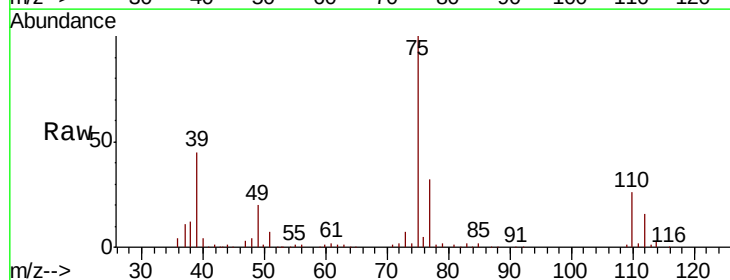
Acq: 16 Aug 2019 09:17

Tgt Ion: 75 Resp: 93231

Ion Ratio Lower Upper

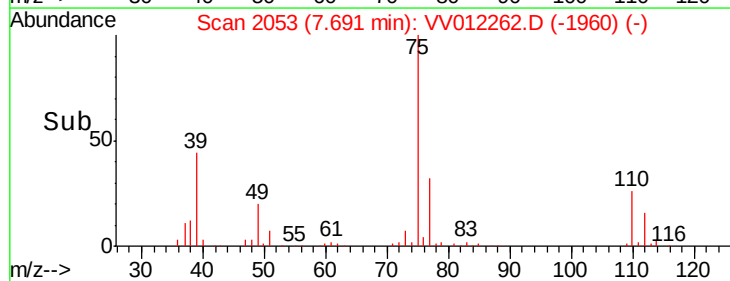
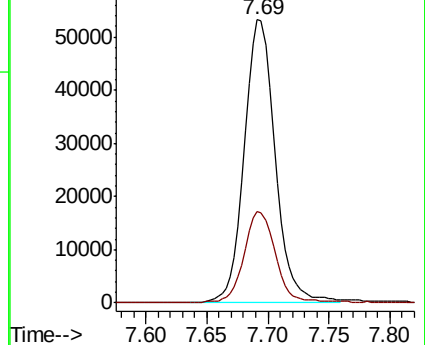
75 100

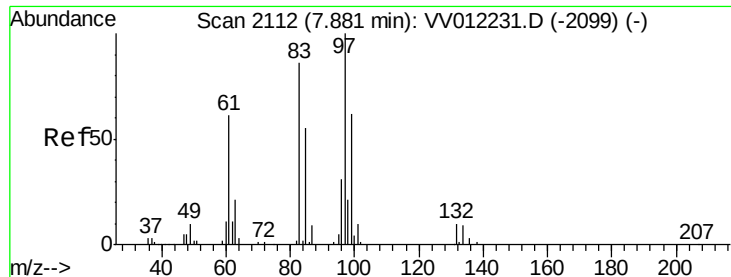
77 32.2 22.5 41.7



Abundance Ion 75.05 (74.75 to 75.75): VV0

Ion 77.05 (76.75 to 77.75): VV0

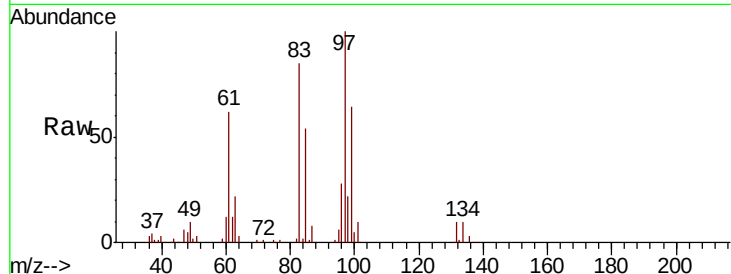




#45  
 1,1,2-Trichloroethane  
 Concen: 5.310 ug/L  
 RT: 7.88 min Scan# 2112  
 Delta R.T. 0.00 min  
 Lab File: VV012262.D  
 Acq: 16 Aug 2019 09:17

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD00543

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 97    | Resp: | 57705 |
| Ion      | Ratio | Lower | Upper |
| 97       | 100   |       |       |
| 99       | 63.7  | 45.4  | 84.2  |
| 83       | 85.0  | 60.1  | 111.5 |
| 85       | 53.8  | 39.8  | 73.8  |



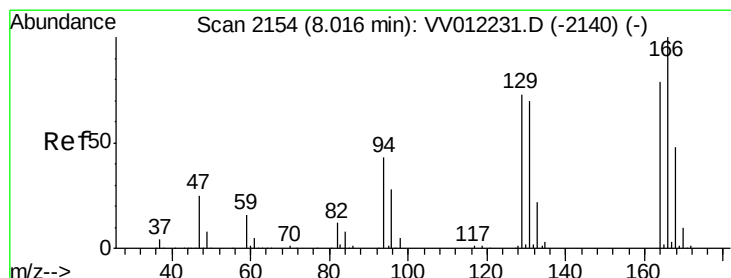
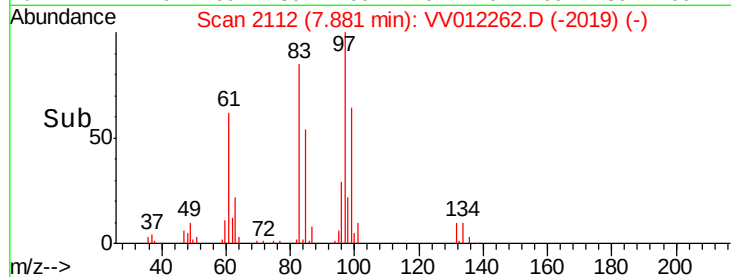
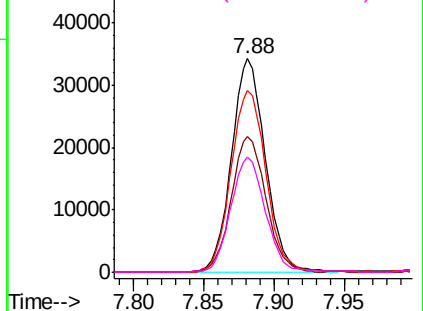
Abundance

Ion 96.95 (96.65 to 97.65): VV0

Ion 99.05 (98.75 to 99.75): VV0

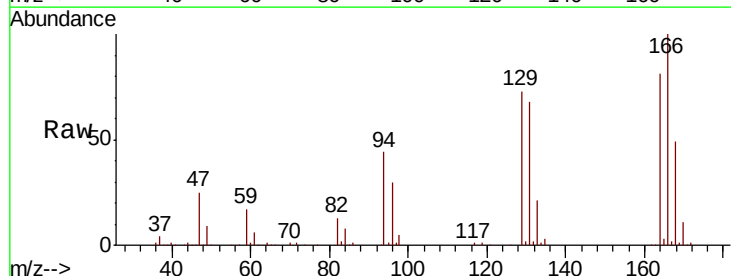
Ion 82.95 (82.65 to 83.65): VV0

Ion 85.00 (84.70 to 85.70): VV0



#47  
 Tetrachloroethene  
 Concen: 5.289 ug/L  
 RT: 8.02 min Scan# 2154  
 Delta R.T. 0.00 min  
 Lab File: VV012262.D  
 Acq: 16 Aug 2019 09:17

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 164   | Resp: | 77119 |
| Ion      | Ratio | Lower | Upper |
| 164      | 100   |       |       |
| 129      | 90.7  | 65.8  | 122.2 |
| 131      | 84.7  | 61.9  | 114.9 |
| 166      | 123.8 | 88.3  | 164.1 |



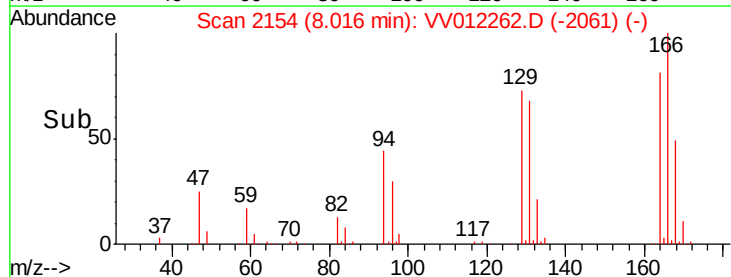
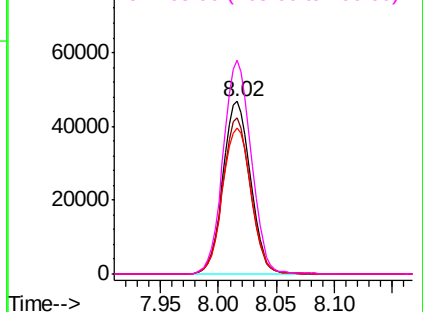
Abundance

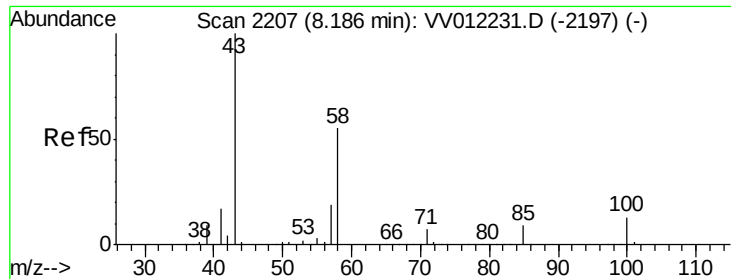
Ion 163.90 (163.60 to 164.60): V

Ion 128.95 (128.65 to 129.65): V

Ion 130.95 (130.65 to 131.65): V

Ion 165.90 (165.60 to 166.60): V

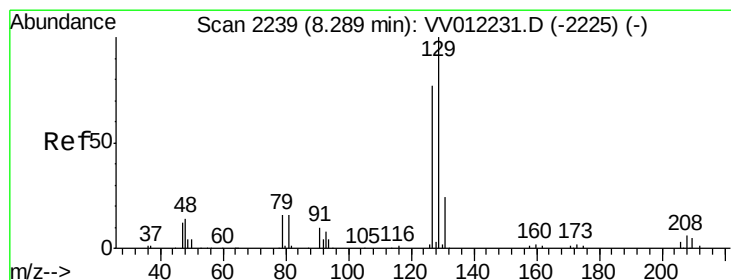
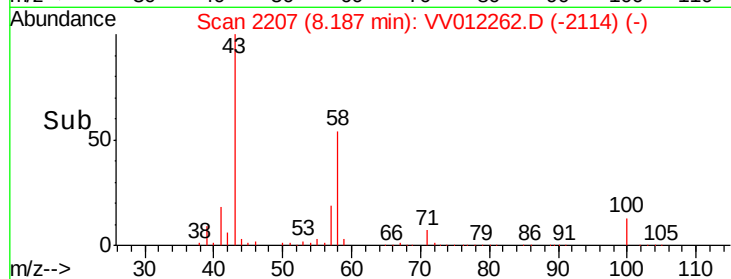
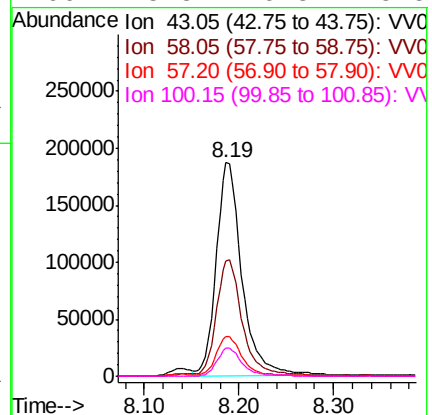
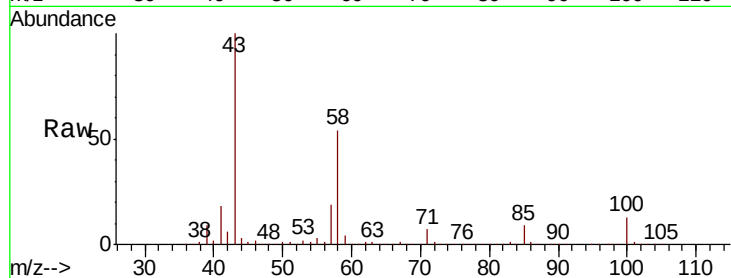




#48  
2-Hexanone  
Concen: 55.683 ug/L  
RT: 8.19 min Scan# 2207  
Delta R.T. 0.00 min  
Lab File: VV012262.D  
Acq: 16 Aug 2019 09:17

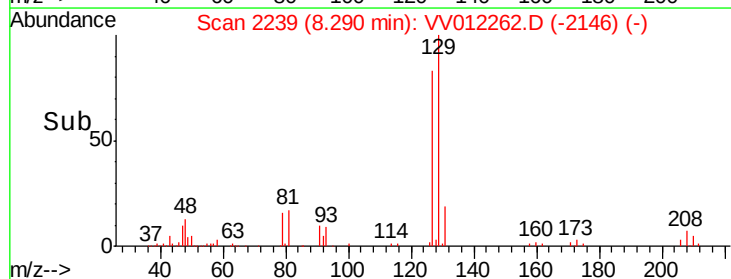
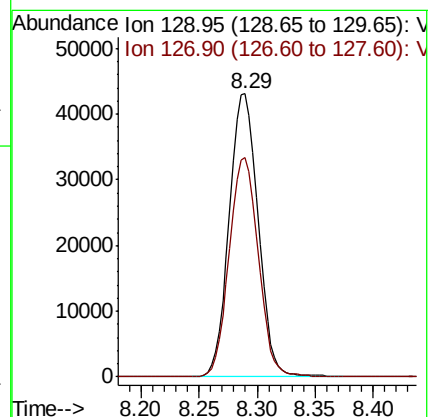
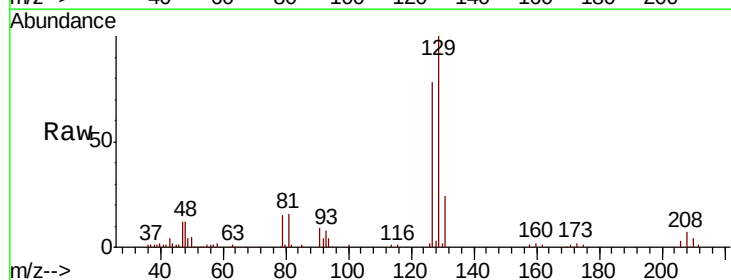
Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD00543

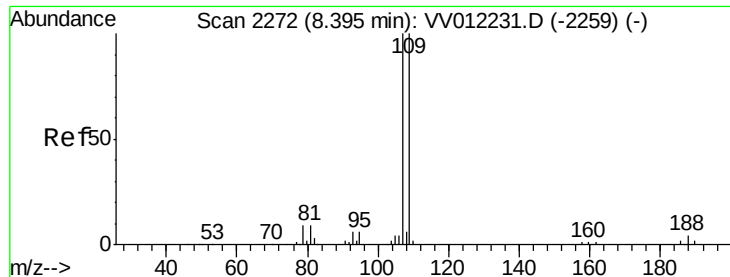
|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 43    | Resp: | 351562 |
| Ion      | Ratio | Lower | Upper  |
| 43       | 100   |       |        |
| 58       | 57.0  | 43.0  | 64.4   |
| 57       | 19.0  | 14.9  | 22.3   |
| 100      | 13.3  | 10.3  | 15.5   |



#49  
Dibromochloromethane  
Concen: 5.511 ug/L  
RT: 8.29 min Scan# 2239  
Delta R.T. 0.00 min  
Lab File: VV012262.D  
Acq: 16 Aug 2019 09:17

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 129   | Resp: | 74351 |
| Ion      | Ratio | Lower | Upper |
| 129      | 100   |       |       |
| 127      | 77.7  | 51.0  | 94.8  |

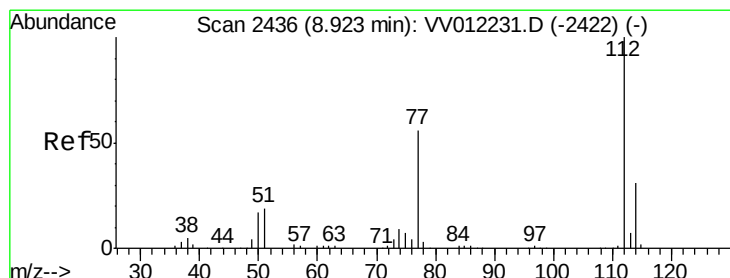
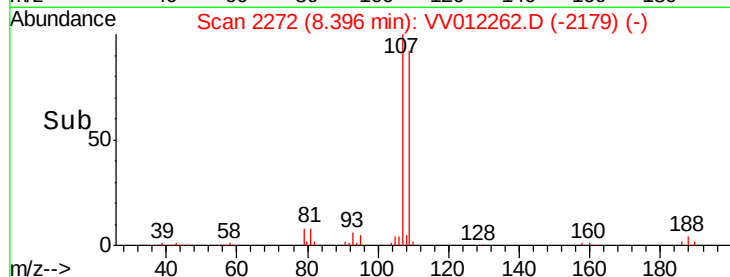
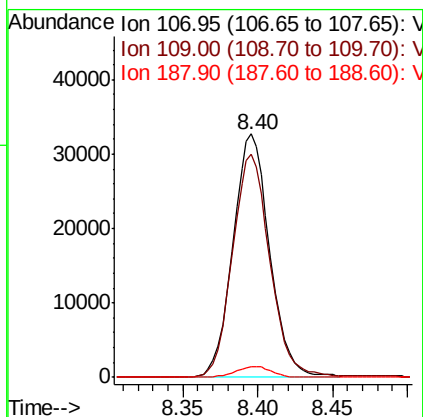
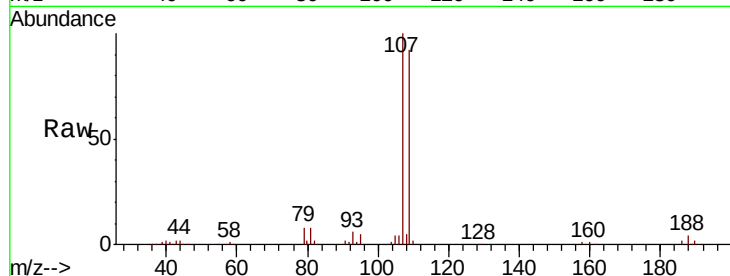




#50  
1,2-Dibromoethane  
Concen: 5.311 ug/L  
RT: 8.40 min Scan# 2272  
Delta R.T. 0.00 min  
Lab File: VV012262.D  
Acq: 16 Aug 2019 09:17

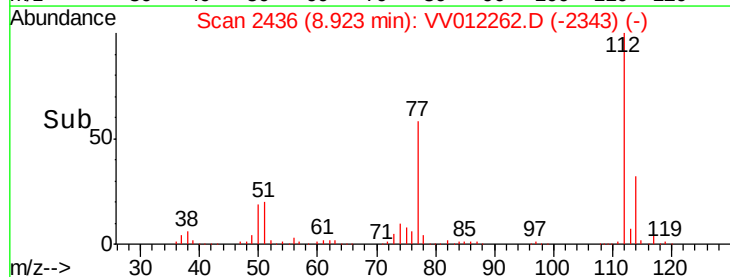
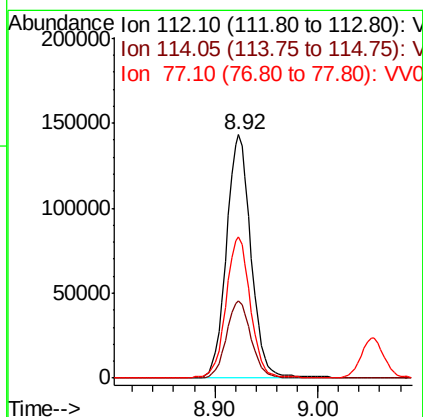
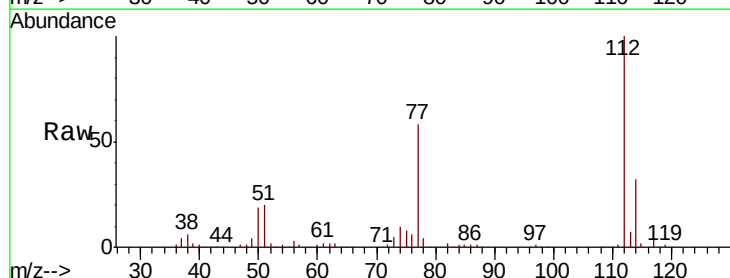
Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD00543

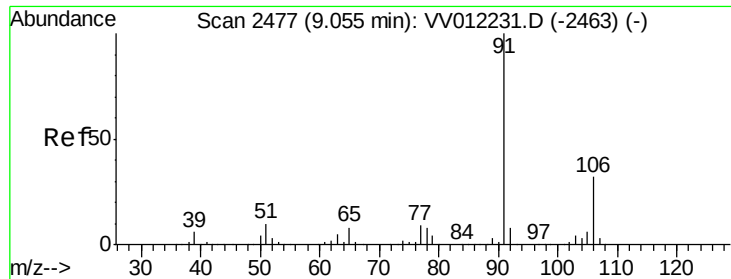
Tgt Ion:107 Resp: 55758  
Ion Ratio Lower Upper  
107 100  
109 91.5 67.3 125.1  
188 4.3 3.4 5.0



#51  
Chlorobenzene  
Concen: 5.274 ug/L  
RT: 8.92 min Scan# 2436  
Delta R.T. 0.00 min  
Lab File: VV012262.D  
Acq: 16 Aug 2019 09:17

Tgt Ion:112 Resp: 237251  
Ion Ratio Lower Upper  
112 100  
114 31.9 22.8 42.4  
77 58.2 45.4 68.2

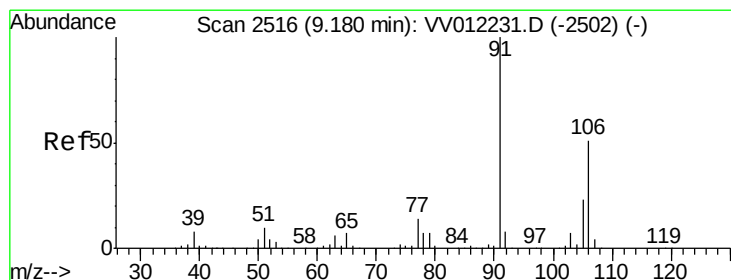
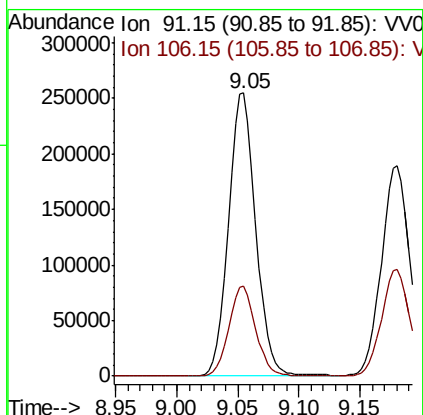
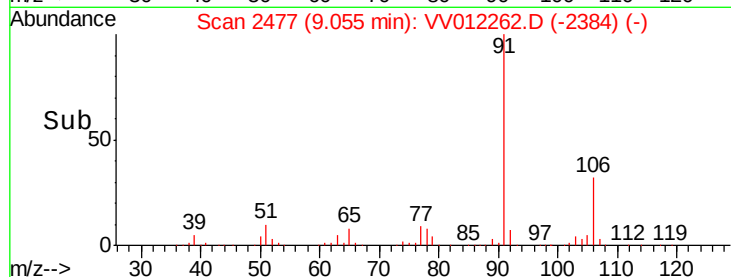
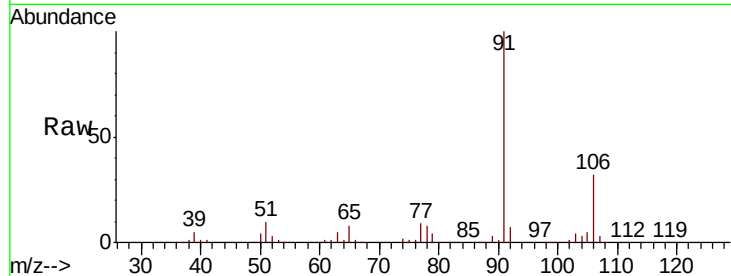




#52  
Ethylbenzene  
Concen: 5.367 ug/L  
RT: 9.05 min Scan# 2477  
Delta R.T. 0.00 min  
Lab File: VV012262.D  
Acq: 16 Aug 2019 09:17

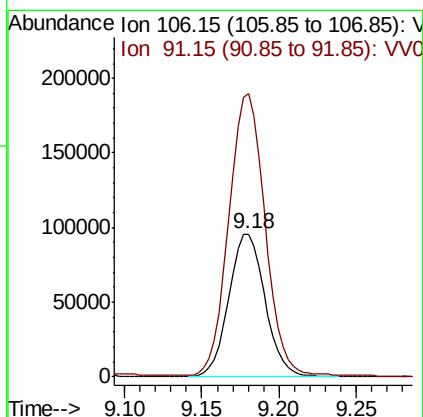
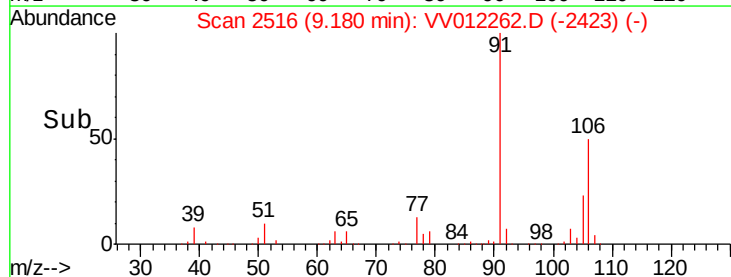
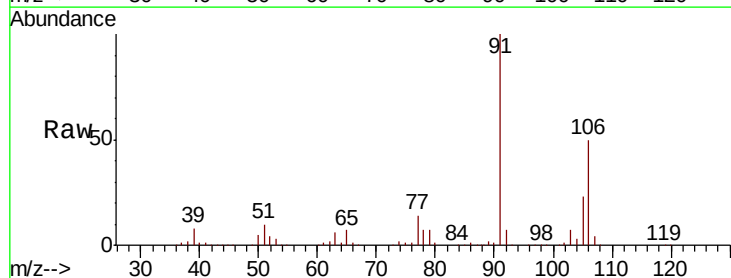
Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD00543

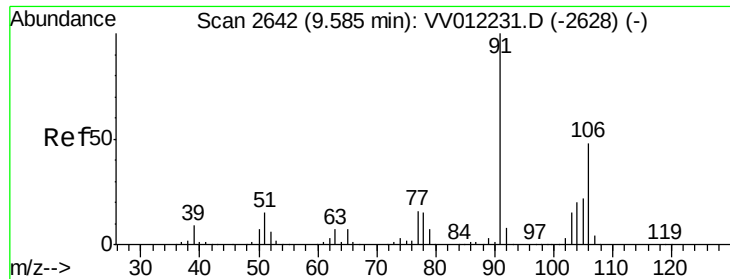
Tgt Ion: 91 Resp: 397341  
Ion Ratio Lower Upper  
91 100  
106 31.8 22.3 41.3



#53  
m,p-xylene  
Concen: 5.483 ug/L  
RT: 9.18 min Scan# 2516  
Delta R.T. 0.00 min  
Lab File: VV012262.D  
Acq: 16 Aug 2019 09:17

Tgt Ion: 106 Resp: 155882  
Ion Ratio Lower Upper  
106 100  
91 198.5 137.5 255.3

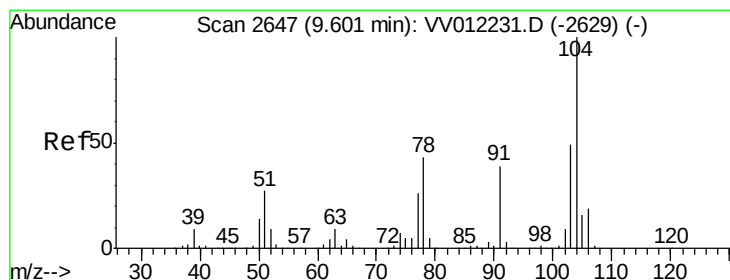
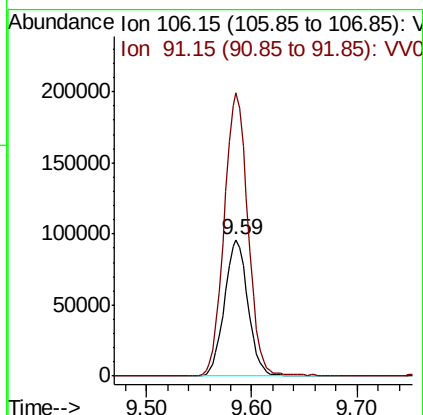
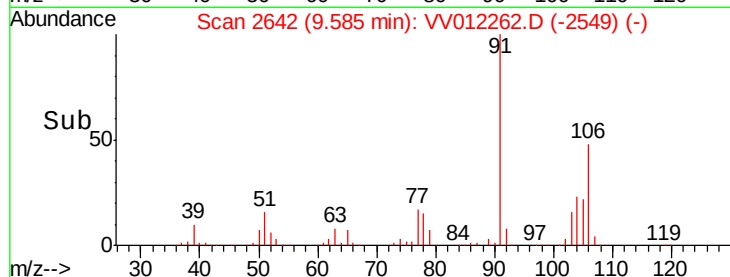
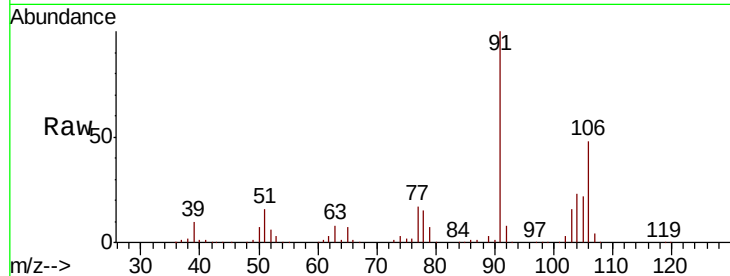




#54  
o-xylene  
Concen: 5.502 ug/L  
RT: 9.59 min Scan# 2642  
Delta R.T. 0.00 min  
Lab File: VV012262.D  
Acq: 16 Aug 2019 09:17

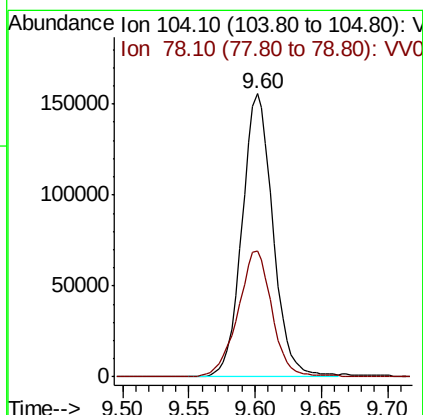
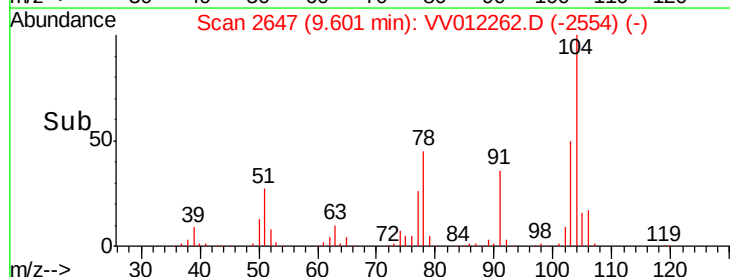
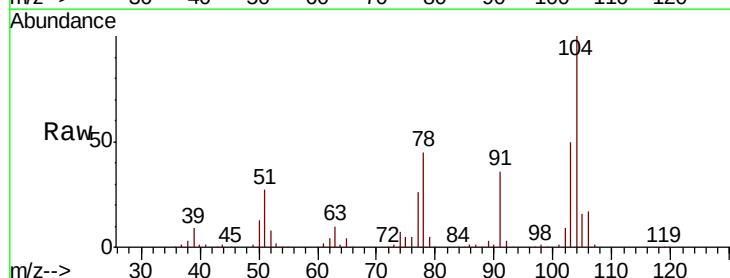
Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD00543

Tgt Ion:106 Resp: 148038  
Ion Ratio Lower Upper  
106 100  
91 207.7 151.1 280.7

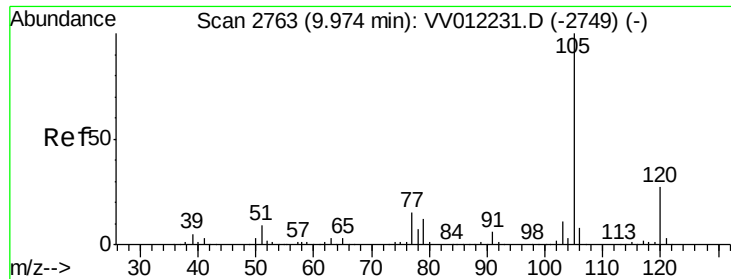


#55  
Styrene  
Concen: 5.609 ug/L  
RT: 9.60 min Scan# 2647  
Delta R.T. 0.00 min  
Lab File: VV012262.D  
Acq: 16 Aug 2019 09:17

Tgt Ion:104 Resp: 252195  
Ion Ratio Lower Upper  
104 100  
78 44.6 30.3 56.3







#56

Isopropylbenzene

Concen: 5.426 ug/L

RT: 9.97 min Scan# 2763

Delta R.T. 0.00 min

Lab File: VV012262.D

Acq: 16 Aug 2019 09:17

Instrument :

MSVOA\_V

ClientSampleId :

VSTD00543

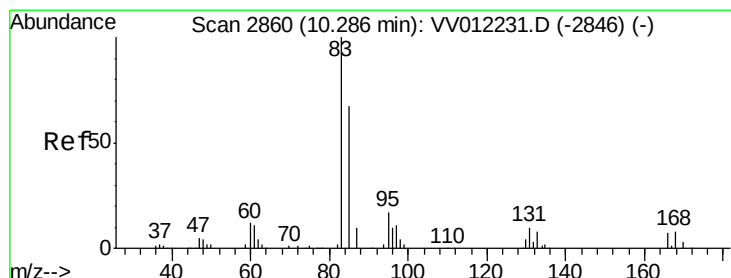
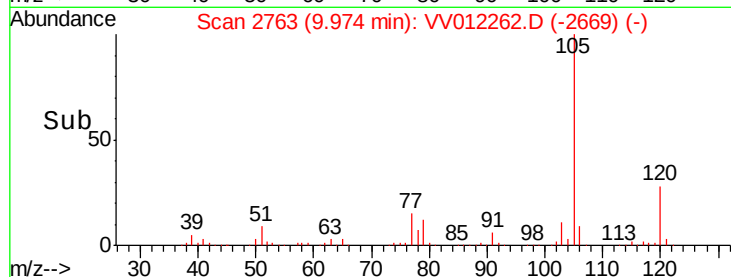
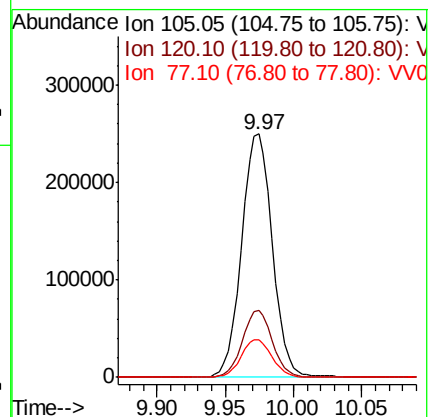
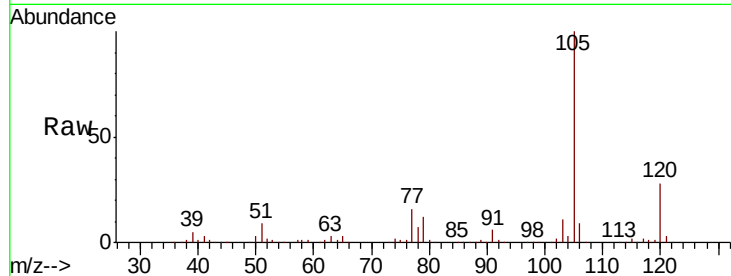
Tgt Ion: 105 Resp: 390441

Ion Ratio Lower Upper

105 100

120 26.9 22.0 33.0

77 15.6 12.5 18.7



#58

1,1,2,2-Tetrachloroethane

Concen: 5.221 ug/L

RT: 10.29 min Scan# 2860

Delta R.T. 0.00 min

Lab File: VV012262.D

Acq: 16 Aug 2019 09:17

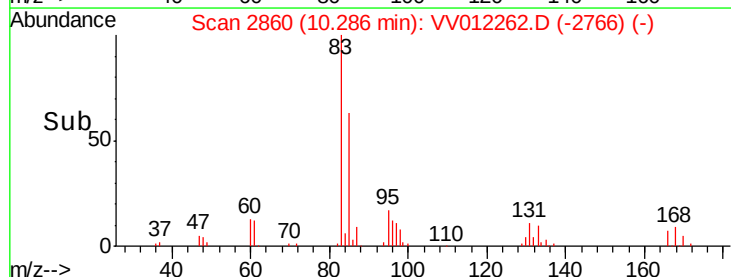
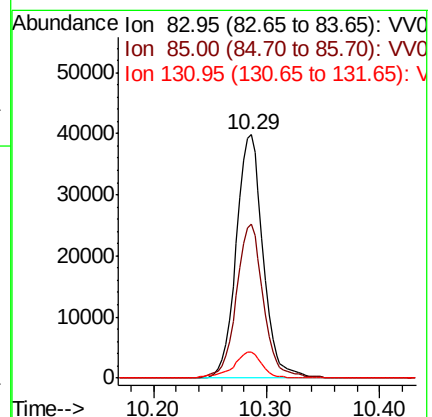
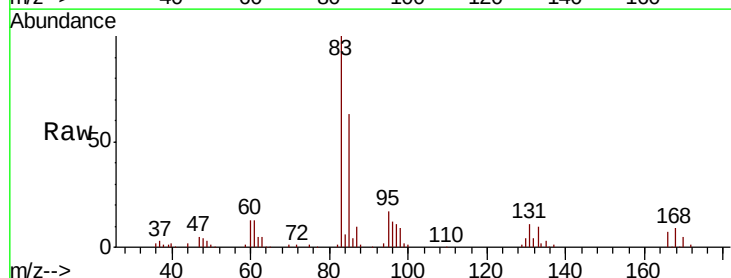
Tgt Ion: 83 Resp: 65831

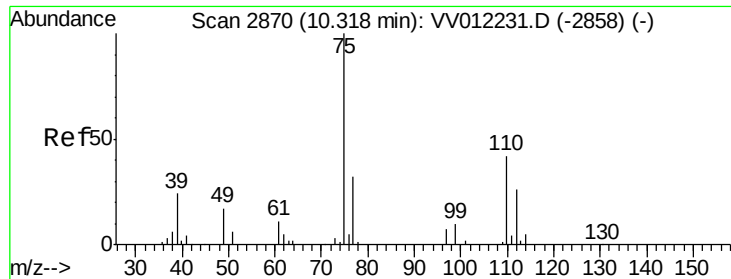
Ion Ratio Lower Upper

83 100

85 63.3 45.0 83.6

131 10.8 8.3 12.5

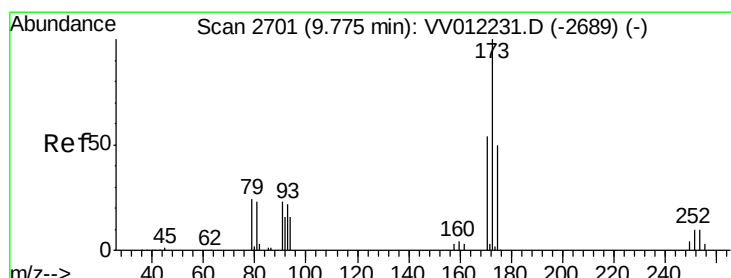
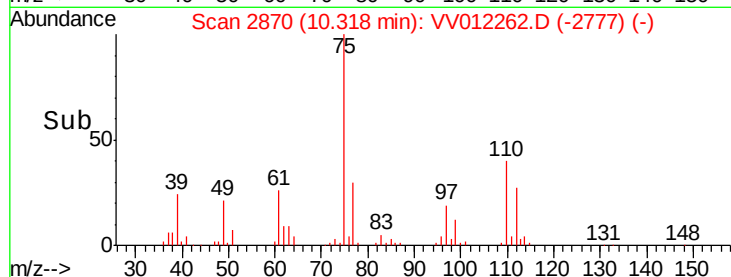
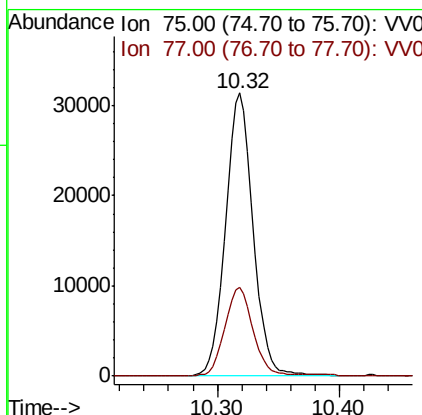
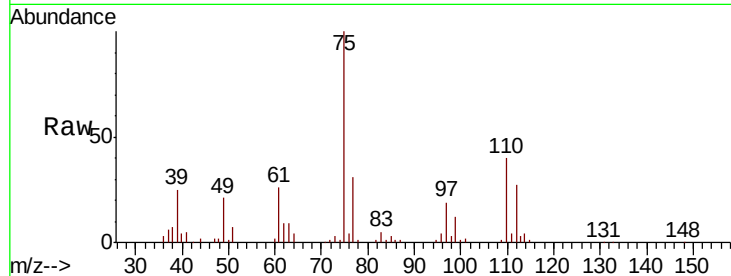




#59  
 1,2,3-Trichloropropane  
 Concen: 5.378 ug/L  
 RT: 10.32 min Scan# 2870  
 Delta R.T. 0.00 min  
 Lab File: VV012262.D  
 Acq: 16 Aug 2019 09:17

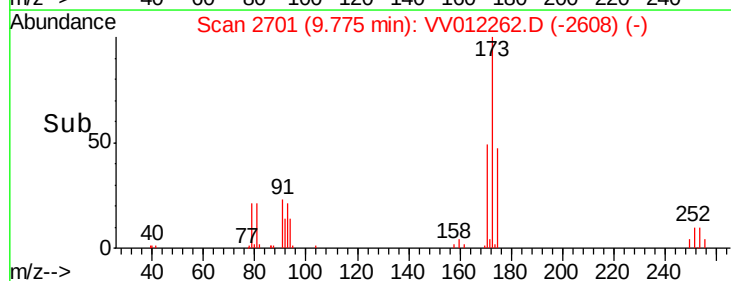
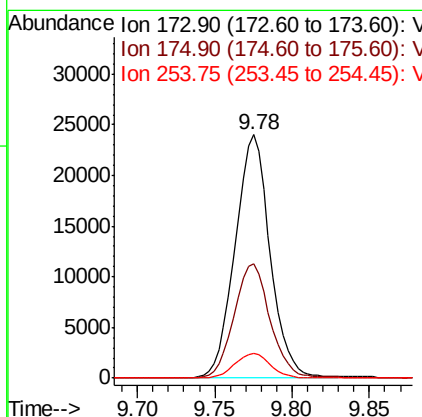
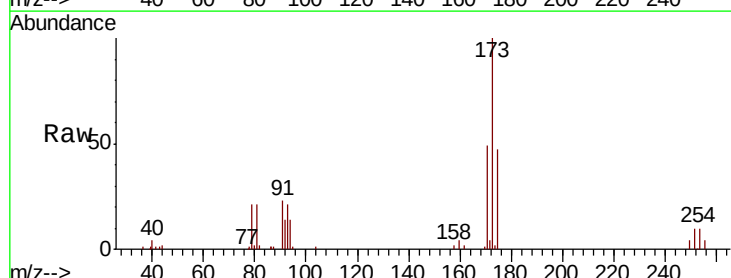
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD00543

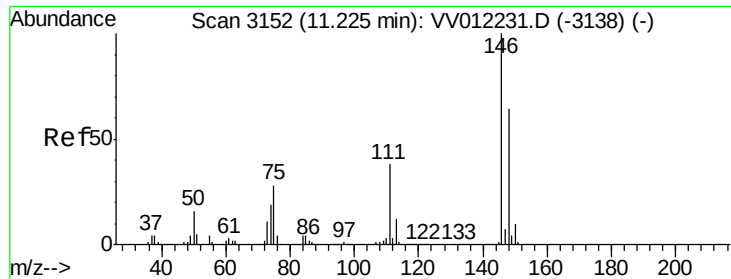
Tgt Ion: 75 Resp: 49718  
 Ion Ratio Lower Upper  
 75 100  
 77 32.0 25.0 37.6



#61  
 Bromoform  
 Concen: 5.249 ug/L  
 RT: 9.78 min Scan# 2701  
 Delta R.T. 0.00 min  
 Lab File: VV012262.D  
 Acq: 16 Aug 2019 09:17

Tgt Ion: 173 Resp: 37674  
 Ion Ratio Lower Upper  
 173 100  
 175 48.3 38.8 58.2  
 254 10.2 7.6 11.4





#62

1,3-Dichlorobenzene

Concen: 5.328 ug/L

RT: 11.23 min Scan# 3152

Delta R.T. 0.00 min

Lab File: VV012262.D

Acq: 16 Aug 2019 09:17

Instrument :

MSVOA\_V

ClientSampleId :

VSTD00543

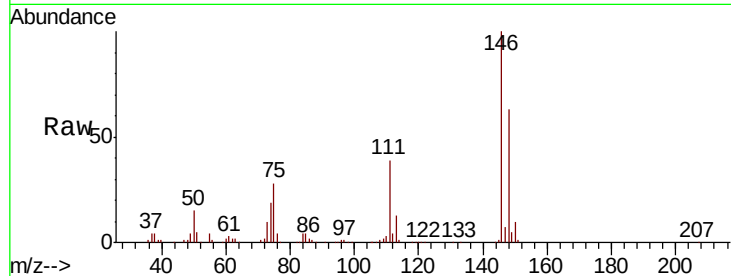
Tgt Ion:146 Resp: 197447

Ion Ratio Lower Upper

146 100

111 38.7 26.9 50.1

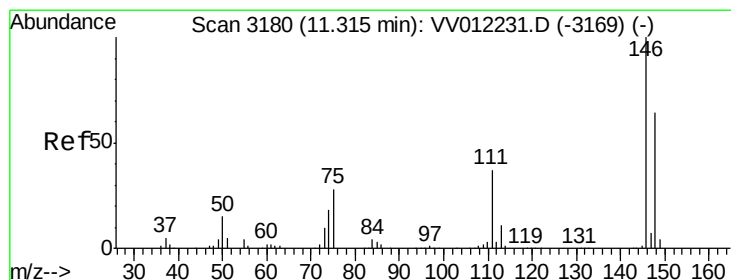
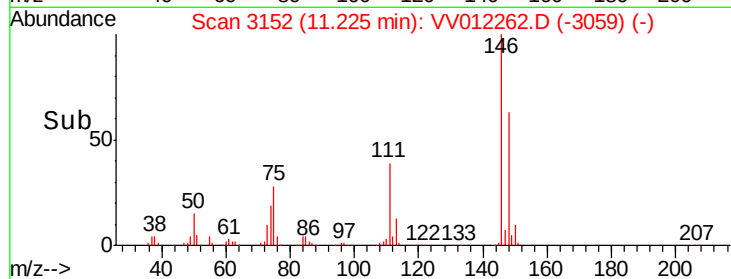
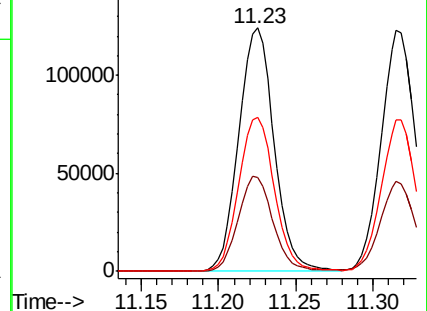
148 63.1 45.0 83.6



Abundance Ion 145.95 (145.65 to 146.65): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V



#63

1,4-Dichlorobenzene

Concen: 5.209 ug/L

RT: 11.32 min Scan# 3180

Delta R.T. 0.00 min

Lab File: VV012262.D

Acq: 16 Aug 2019 09:17

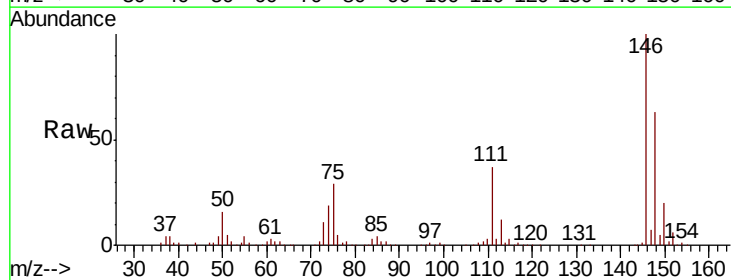
Tgt Ion:146 Resp: 192413

Ion Ratio Lower Upper

146 100

111 37.1 27.0 50.2

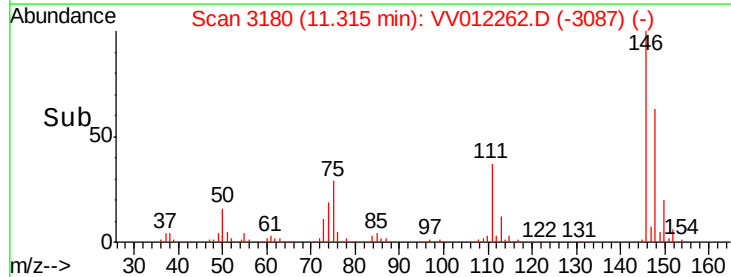
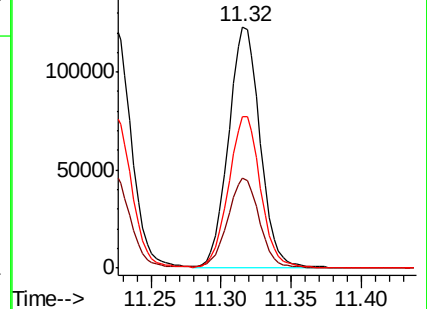
148 62.6 44.5 82.7

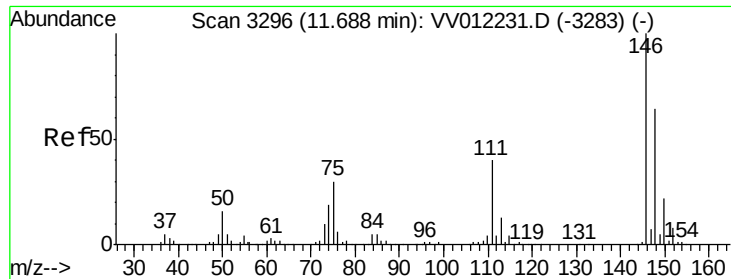


Abundance Ion 145.95 (145.65 to 146.65): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V





#65

1,2-Dichlorobenzene

Concen: 5.223 ug/L

RT: 11.69 min Scan# 3296

Delta R.T. 0.00 min

Lab File: VV012262.D

Acq: 16 Aug 2019 09:17

Instrument :

MSVOA\_V

ClientSampleId :

VSTD00543

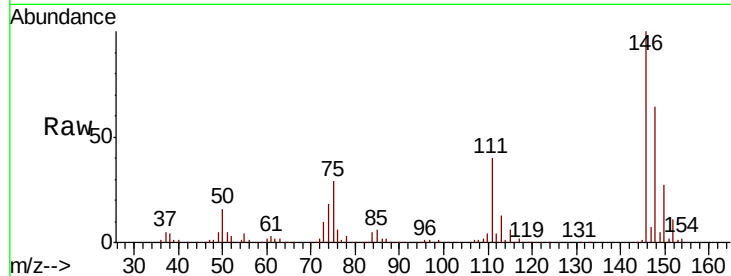
Tgt Ion:146 Resp: 177616

Ion Ratio Lower Upper

146 100

111 40.4 33.0 49.4

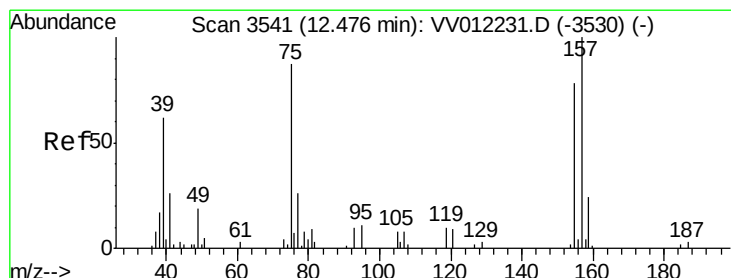
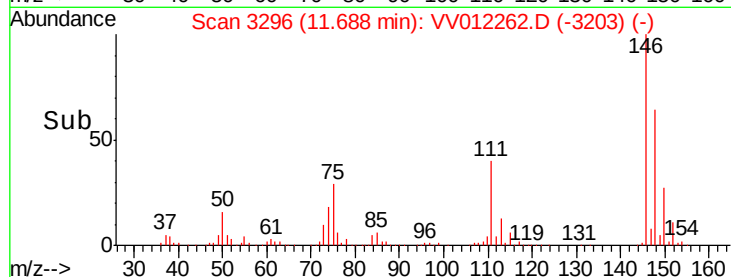
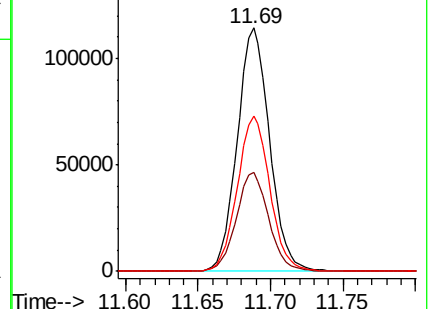
148 63.6 51.1 76.7



Abundance Ion 145.95 (145.65 to 146.65): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V



#66

1,2-Dibromo-3-chloropropane

Concen: 4.396 ug/L

RT: 12.48 min Scan# 3541

Delta R.T. 0.00 min

Lab File: VV012262.D

Acq: 16 Aug 2019 09:17

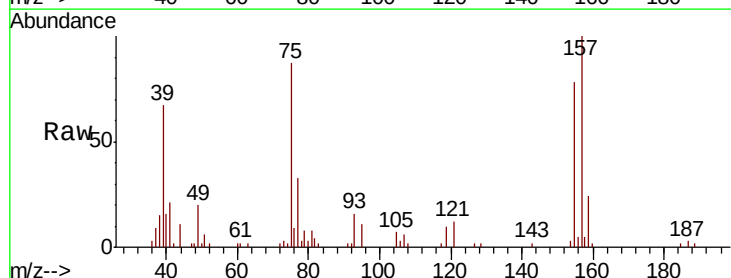
Tgt Ion: 75 Resp: 9517

Ion Ratio Lower Upper

75 100

155 90.0 70.8 106.2

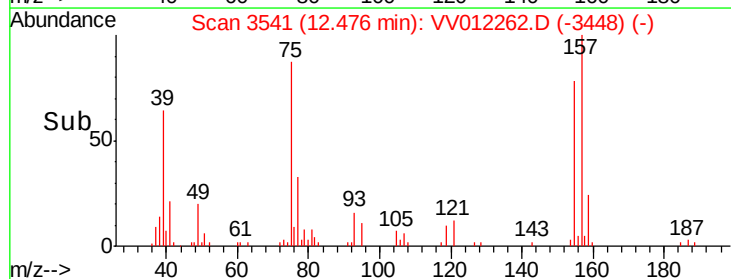
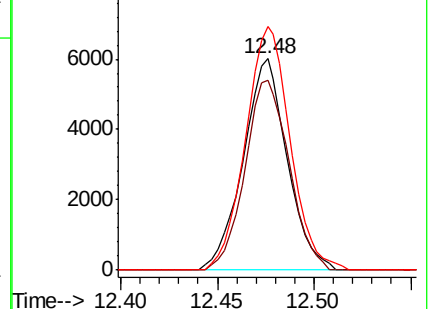
157 115.3 83.5 125.3

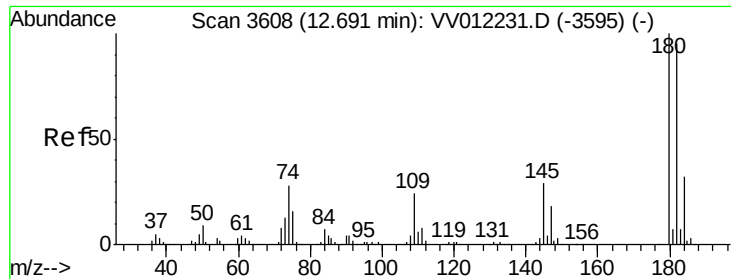


Abundance Ion 75.05 (74.75 to 75.75): VV0

Ion 154.95 (154.65 to 155.65): V

Ion 156.90 (156.60 to 157.60): V

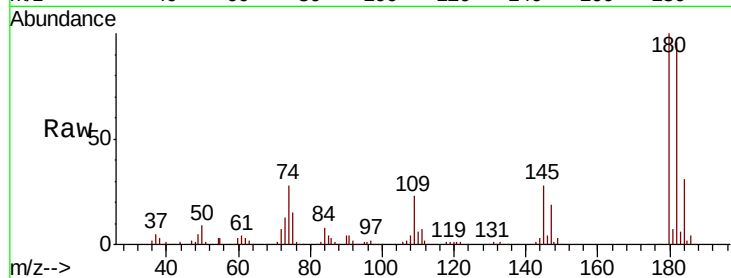




#67  
 1,3,5-Trichlorobenzene  
 Concen: 4.997 ug/L  
 RT: 12.69 min Scan# 3608  
 Delta R.T. 0.00 min  
 Lab File: VV012262.D  
 Acq: 16 Aug 2019 09:17

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD00543

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 96.0  | 76.3  | 114.5 |
| 184     | 30.5  | 24.6  | 36.8  |
| 145     | 28.8  | 23.2  | 34.8  |



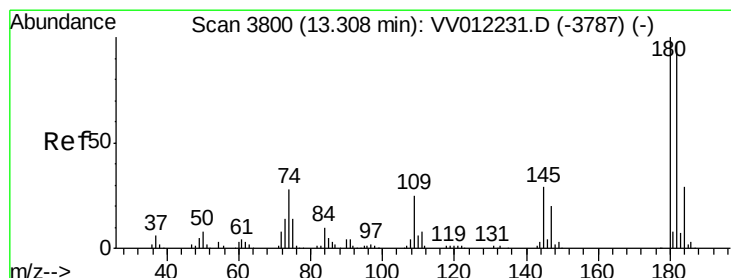
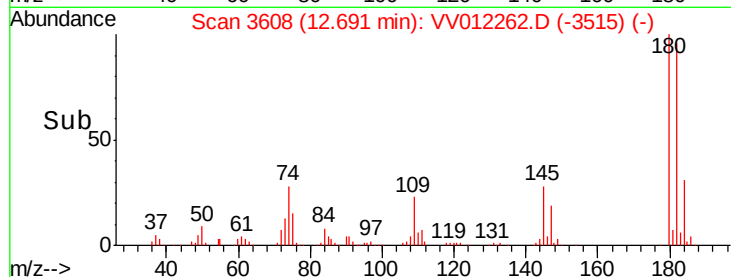
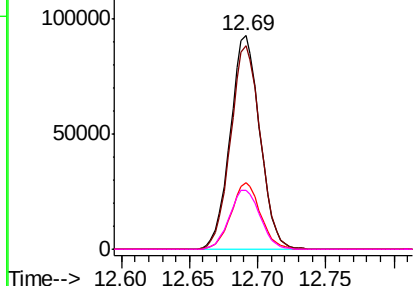
Abundance

Ion 180.00 (179.70 to 180.70): V

Ion 182.00 (181.70 to 182.70): V

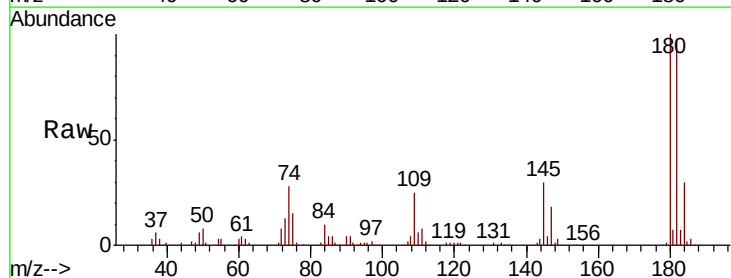
Ion 184.00 (183.70 to 184.70): V

Ion 145.00 (144.70 to 145.70): V



#68  
 1,2,4-trichlorobenzene  
 Concen: 4.963 ug/L  
 RT: 13.31 min Scan# 3800  
 Delta R.T. 0.00 min  
 Lab File: VV012262.D  
 Acq: 16 Aug 2019 09:17

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 95.9  | 77.2  | 115.8 |
| 145     | 30.1  | 23.9  | 35.9  |

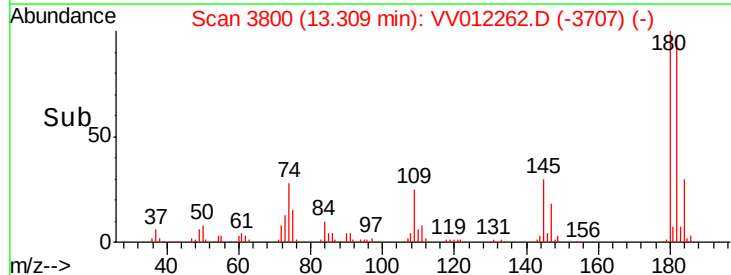
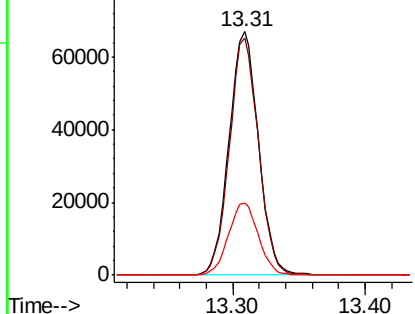


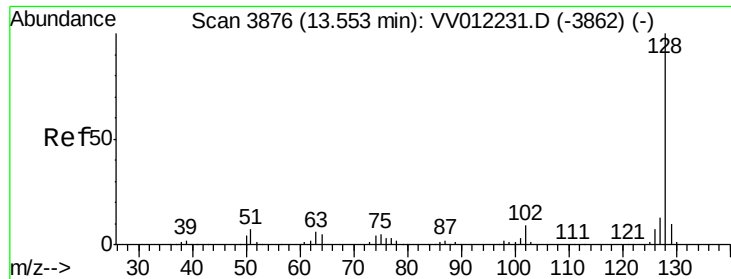
Abundance

Ion 179.90 (179.60 to 180.60): V

Ion 182.00 (181.70 to 182.70): V

Ion 144.95 (144.65 to 145.65): V





#69

Naphthalene

Concen: 4.791 ug/L

RT: 13.55 min Scan# 3875

Delta R.T. 0.00 min

Lab File: VV012262.D

Acq: 16 Aug 2019 09:17

Instrument :

MSVOA\_V

ClientSampleId :

VSTD00543

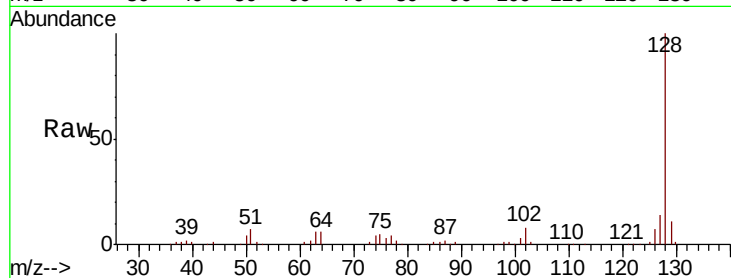
Tgt Ion:128 Resp: 144071

Ion Ratio Lower Upper

128 100

129 10.9 8.6 12.8

127 13.3 10.1 15.1

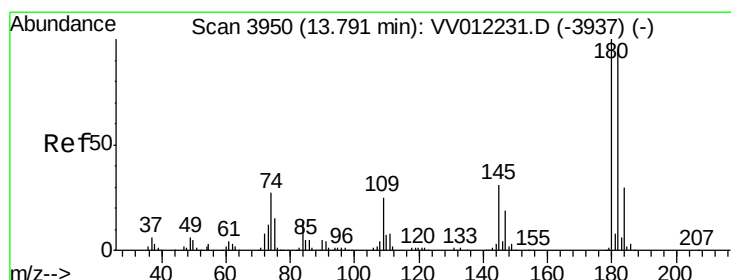
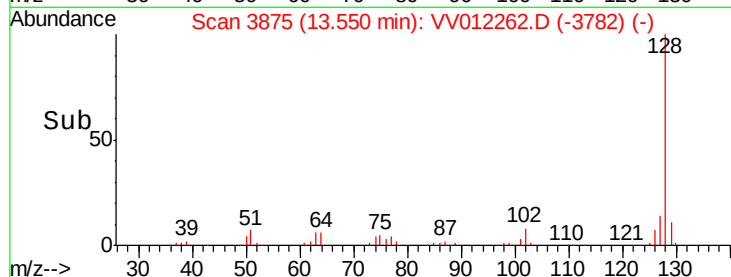
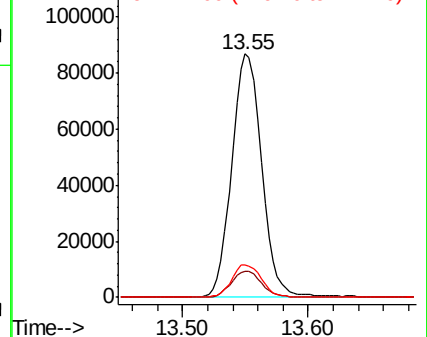


Abundance

Ion 128.00 (127.70 to 128.70): V

Ion 129.00 (128.70 to 129.70): V

Ion 127.00 (126.70 to 127.70): V



#70

1,2,3-Trichlorobenzene

Concen: 5.154 ug/L

RT: 13.79 min Scan# 3950

Delta R.T. 0.00 min

Lab File: VV012262.D

Acq: 16 Aug 2019 09:17

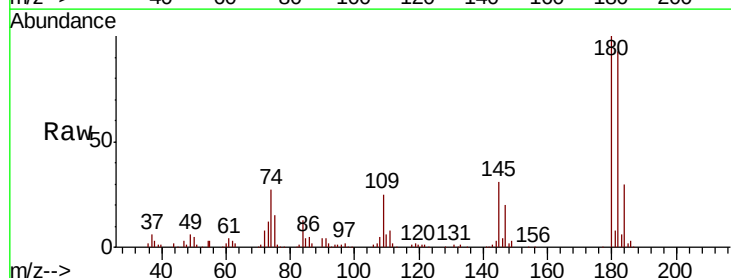
Tgt Ion:180 Resp: 101251

Ion Ratio Lower Upper

180 100

182 92.4 75.0 112.4

145 30.1 24.8 37.2



Abundance

Ion 179.90 (179.60 to 180.60): V

Ion 181.90 (181.60 to 182.60): V

Ion 144.95 (144.65 to 145.65): V

