

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_V\DATA\VV061618\  
 Data File : VV006331.D  
 Acq On : 16 Jun 2018 19:58  
 Operator : SY/MD  
 Sample : VSTDCCC005EC  
 Misc : 25 mL/MSVOA\_V/WATER  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD00569

Quant Time: Jun 18 01:19:29 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVTR053118WMA.M  
 Quant Title : TRACE VOA SOM01.0  
 QLast Update : Mon Jun 18 01:15:51 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.67  | 114  | 309023   | 5.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 8.90  | 117  | 283579   | 5.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.30 | 152  | 137532   | 5.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |        |       |          |          |      |         |
|--------------------------------|--------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.32   | 65    | 101278   | 6.00     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 40 - 130 | Recovery | =    | 120.00% |
| 7) Chloroethane-d5             | 1.58   | 69    | 77470    | 5.73     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 130 | Recovery | =    | 114.60% |
| 11) 1,1-Dichloroethene-d2      | 2.13   | 63    | 180674   | 5.51     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 125 | Recovery | =    | 110.20% |
| 20) 2-Butanone-d5              | 3.96   | 46    | 191676   | 53.49    | ug/L | -0.01   |
| Spiked Amount                  | 50.000 | Range | 40 - 130 | Recovery | =    | 106.98% |
| 24) Chloroform-d               | 4.41   | 84    | 168461   | 5.16     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 103.20% |
| 26) 1,2-Dichloroethane-d4      | 5.09   | 65    | 81471    | 5.16     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 103.20% |
| 32) Benzene-d6                 | 5.11   | 84    | 360835   | 5.29     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 105.80% |
| 36) 1,2-Dichloropropane-d6     | 6.12   | 67    | 105610   | 5.15     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 140 | Recovery | =    | 103.00% |
| 41) Toluene-d8                 | 7.37   | 98    | 348823   | 5.37     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 107.40% |
| 43) trans-1,3-Dichloropropene- | 7.67   | 79    | 36710    | 4.00     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 55 - 130 | Recovery | =    | 80.00%  |
| 46) 2-Hexanone-d5              | 8.14   | 63    | 172961   | 43.70    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 45 - 130 | Recovery | =    | 87.40%  |
| 57) 1,1,2,2-Tetrachloroethane- | 10.27  | 84    | 70516    | 4.75     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 120 | Recovery | =    | 95.00%  |
| 64) 1,2-Dichlorobenzene-d4     | 11.68  | 152   | 124653   | 5.23     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 80 - 120 | Recovery | =    | 104.60% |

## Target Compounds

|                                |      |     |        |              | Qvalue |
|--------------------------------|------|-----|--------|--------------|--------|
| 2) Dichlorodifluoromethane     | 1.14 | 85  | 95660  | 4.065 ug/L   | 100    |
| 3) Chloromethane               | 1.26 | 50  | 99416  | 5.050 ug/L   | 99     |
| 5) Vinyl chloride              | 1.32 | 62  | 112425 | 4.717 ug/L   | 99     |
| 6) Bromomethane                | 1.54 | 94  | 59617  | 4.709 ug/L   | 97     |
| 8) Chloroethane                | 1.60 | 64  | 68041  | 5.107 ug/L   | 100    |
| 9) Trichlorofluoromethane      | 1.77 | 101 | 153372 | 4.960 ug/L   | 100    |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.14 | 101 | 94356  | 4.945 ug/L   | 99     |
| 12) 1,1-Dichloroethene         | 2.14 | 96  | 88743  | 5.004 ug/L   | 96     |
| 13) Acetone                    | 2.21 | 43  | 120821 | 62.217 ug/L  | 95     |
| 14) Carbon disulfide           | 2.32 | 76  | 201686 | 3.395 ug/L   | 99     |
| 15) Methyl Acetate             | 2.47 | 43  | 33675  | 5.827 ug/L   | 99     |
| 16) Methylene chloride         | 2.54 | 84  | 96690  | 4.939 ug/L   | 98     |
| 17) Methyl tert-butyl Ether    | 2.81 | 73  | 222751 | 5.076 ug/L   | 98     |
| 18) trans-1,2-Dichloroethene   | 2.79 | 96  | 95926  | 4.958 ug/L   | 98     |
| 19) 1,1-Dichloroethane         | 3.23 | 63  | 167931 | 5.161 ug/L   | 100    |
| 21) 2-Butanone                 | 4.04 | 43  | 194789 | 55.136 ug/L  | 94     |
| 22) cis-1,2-Dichloroethene     | 3.97 | 96  | 104219 | 4.978 ug/L # | 99     |

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 Sample : VSTDCCC005EC  
 Misc : 25 mL/MSVOA\_V/WATER  
 ALS Vial : 3 Sample Multiplier: 1

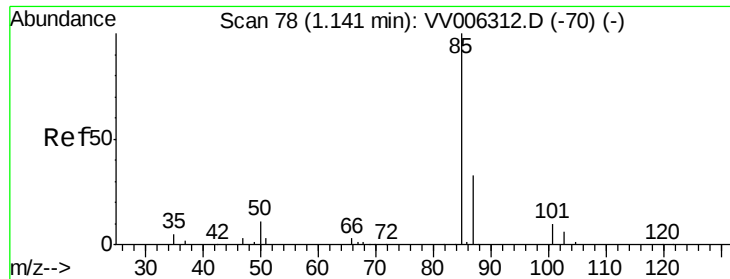
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD00569

Quant Time: Jun 18 01:19:29 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVTR053118WMA.M  
 Quant Title : TRACE VOA SOM01.0  
 QLast Update : Mon Jun 18 01:15:51 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|--------------------------------|-------|------|----------|--------|-------|----------|
| 23) Bromochloromethane         | 4.31  | 128  | 42307    | 5.038  | ug/L  | 97       |
| 25) Chloroform                 | 4.44  | 83   | 172093   | 5.121  | ug/L  | 99       |
| 27) 1,2-Dichloroethane         | 5.19  | 62   | 99674    | 5.166  | ug/L  | 98       |
| 29) 1,1,1-Trichloroethane      | 4.67  | 97   | 142775   | 4.557  | ug/L  | 99       |
| 30) Cyclohexane                | 4.73  | 56   | 139661   | 4.334  | ug/L  | 97       |
| 31) Carbon tetrachloride       | 4.88  | 117  | 117565   | 4.255  | ug/L  | 99       |
| 33) Benzene                    | 5.15  | 78   | 387896   | 4.961  | ug/L  | 100      |
| 34) Trichloroethene            | 5.96  | 95   | 104942   | 4.918  | ug/L  | 96       |
| 35) Methylcyclohexane          | 6.18  | 83   | 158229   | 4.313  | ug/L  | 100      |
| 37) 1,2-Dichloropropane        | 6.23  | 63   | 92655    | 4.947  | ug/L  | 100      |
| 38) Bromodichloromethane       | 6.56  | 83   | 105213   | 4.218  | ug/L  | 99       |
| 39) cis-1,3-Dichloropropene    | 7.08  | 75   | 130695   | 4.281  | ug/L  | 99       |
| 40) 4-Methyl-2-pentanone       | 7.28  | 43   | 478724   | 49.415 | ug/L  | 98       |
| 42) Toluene                    | 7.44  | 91   | 418699   | 4.852  | ug/L  | 100      |
| 44) trans-1,3-Dichloropropene  | 7.70  | 75   | 100560   | 4.061  | ug/L  | 99       |
| 45) 1,1,2-Trichloroethane      | 7.89  | 97   | 67809    | 5.115  | ug/L  | 99       |
| 47) Tetrachloroethene          | 8.02  | 164  | 84465    | 4.945  | ug/L  | 99       |
| 48) 2-Hexanone                 | 8.19  | 43   | 346918   | 50.952 | ug/L  | 99       |
| 49) Dibromochloromethane       | 8.30  | 129  | 68017    | 4.075  | ug/L  | 97       |
| 50) 1,2-Dibromoethane          | 8.40  | 107  | 61447    | 4.975  | ug/L  | 98       |
| 51) Chlorobenzene              | 8.93  | 112  | 278749   | 5.031  | ug/L  | 99       |
| 52) Ethylbenzene               | 9.06  | 91   | 464049   | 4.826  | ug/L  | 100      |
| 53) m,p-xylene                 | 9.19  | 106  | 177941   | 4.744  | ug/L  | 99       |
| 54) o-xylene                   | 9.59  | 106  | 178914   | 4.877  | ug/L  | 98       |
| 55) Styrene                    | 9.61  | 104  | 292915   | 4.855  | ug/L  | 97       |
| 56) Isopropylbenzene           | 9.98  | 105  | 467642   | 4.841  | ug/L  | 100      |
| 58) 1,1,2,2-Tetrachloroethane  | 10.29 | 83   | 69476    | 4.575  | ug/L  | 98       |
| 59) 1,2,3-Trichloropropane     | 10.32 | 75   | 54206    | 5.136  | ug/L  | 99       |
| 61) Bromoform                  | 9.78  | 173  | 32694    | 3.503  | ug/L  | 100      |
| 62) 1,3-Dichlorobenzene        | 11.23 | 146  | 214719   | 4.956  | ug/L  | 99       |
| 63) 1,4-Dichlorobenzene        | 11.32 | 146  | 213215   | 4.975  | ug/L  | 99       |
| 65) 1,2-Dichlorobenzene        | 11.70 | 146  | 203651   | 5.094  | ug/L  | 99       |
| 66) 1,2-Dibromo-3-chloropropan | 12.48 | 75   | 8706     | 3.314  | ug/L  | 94       |
| 67) 1,3,5-Trichlorobenzene     | 12.70 | 180  | 165045   | 4.949  | ug/L  | 99       |
| 68) 1,2,4-trichlorobenzene     | 13.31 | 180  | 127467   | 4.943  | ug/L  | 99       |
| 69) Naphthalene                | 13.56 | 128  | 191514   | 4.414  | ug/L  | 100      |
| 70) 1,2,3-Trichlorobenzene     | 13.80 | 180  | 119305   | 5.036  | ug/L  | 99       |

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





#2

Dichlorodifluoromethane

Concen: 4.065 ug/L

RT: 1.14 min Scan# 77

Delta R.T. -0.00 min

Lab File: VV006331.D

Acq: 16 Jun 2018 19:58

Instrument :

MSVOA\_V

ClientSampleId :

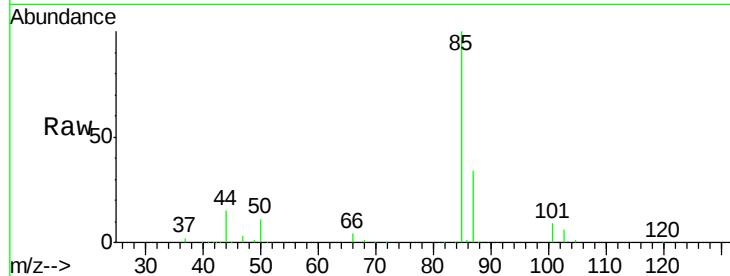
VSTD00569

Tgt Ion: 85 Resp: 95660

Ion Ratio Lower Upper

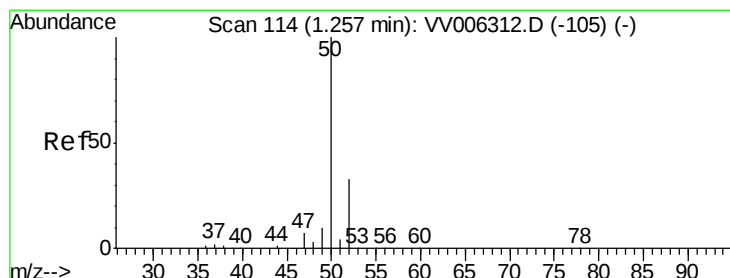
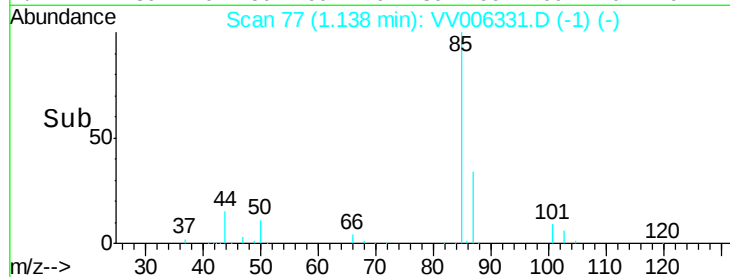
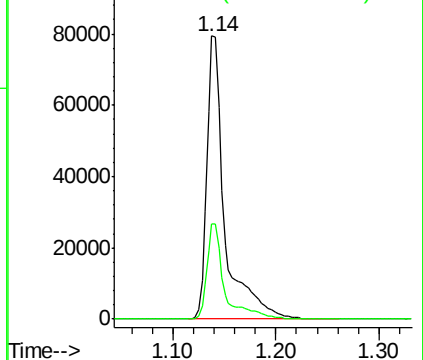
85 100

87 32.8 26.2 39.4



Abundance Ion 85.00 (84.70 to 85.70): VV0

Ion 87.00 (86.70 to 87.70): VV0



#3

Chloromethane

Concen: 5.050 ug/L

RT: 1.26 min Scan# 114

Delta R.T. 0.00 min

Lab File: VV006331.D

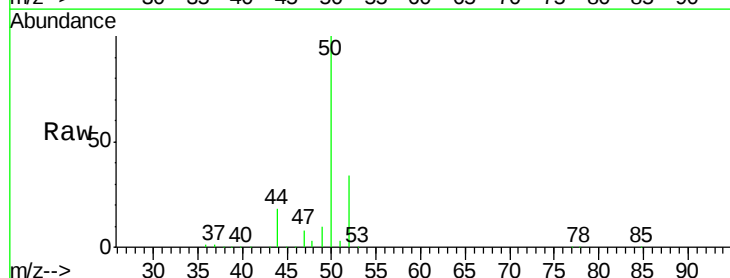
Acq: 16 Jun 2018 19:58

Tgt Ion: 50 Resp: 99416

Ion Ratio Lower Upper

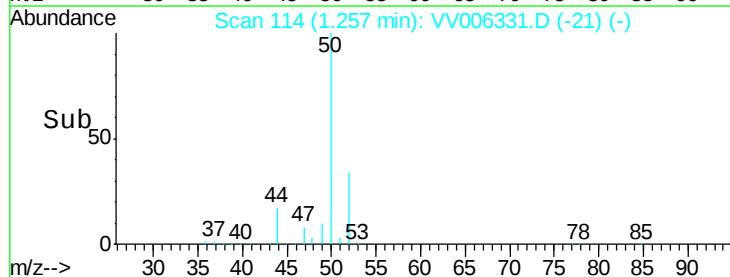
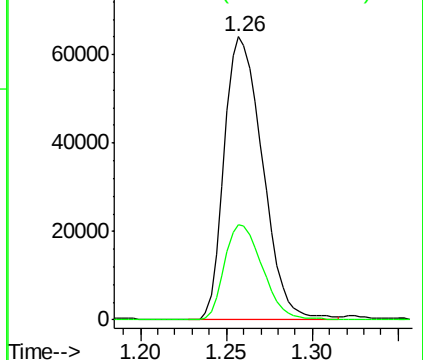
50 100

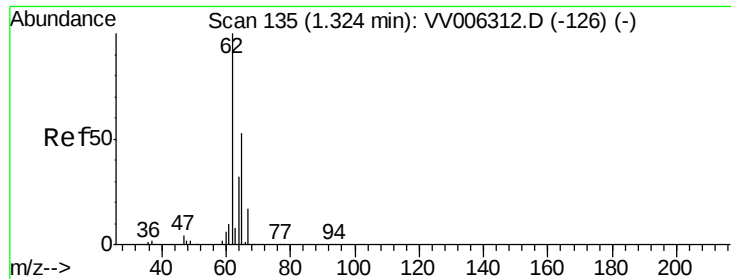
52 33.6 23.0 42.8



Abundance Ion 50.05 (49.75 to 50.75): VV0

Ion 52.05 (51.75 to 52.75): VV0





#5

Vinyl chloride

Concen: 4.717 ug/L

RT: 1.32 min Scan# 135

Delta R.T. 0.00 min

Lab File: VV006331.D

Acq: 16 Jun 2018 19:58

Instrument :

MSVOA\_V

ClientSampleId :

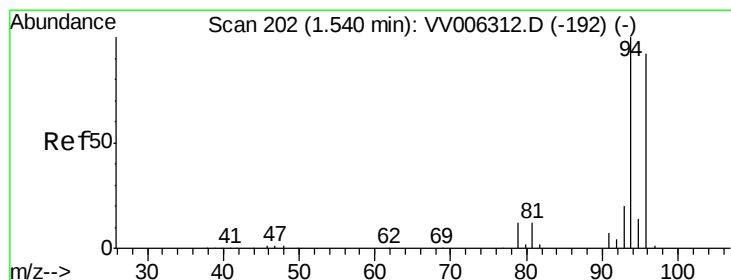
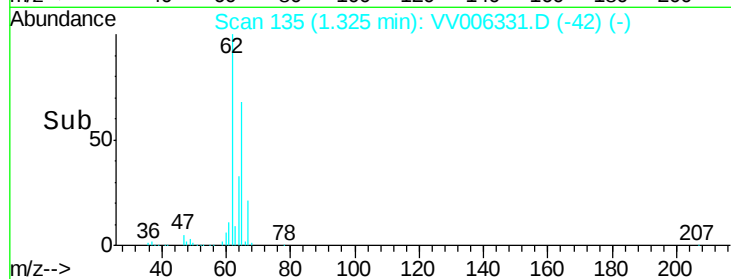
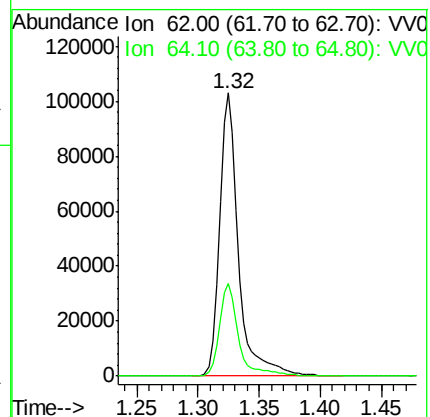
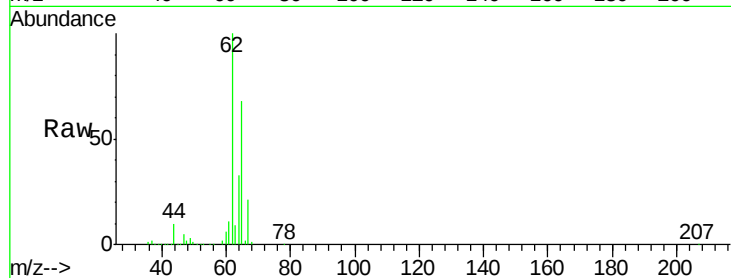
VSTD00569

Tgt Ion: 62 Resp: 112425

Ion Ratio Lower Upper

62 100

64 32.6 23.1 42.9



#6

Bromomethane

Concen: 4.709 ug/L

RT: 1.54 min Scan# 202

Delta R.T. 0.00 min

Lab File: VV006331.D

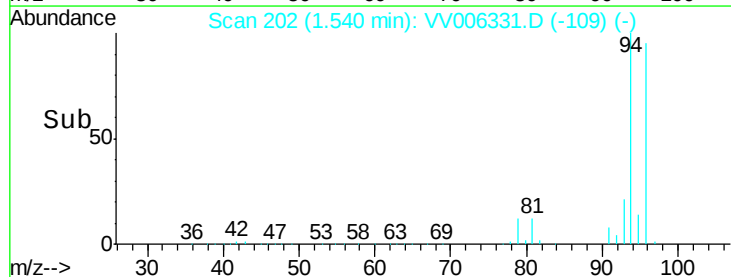
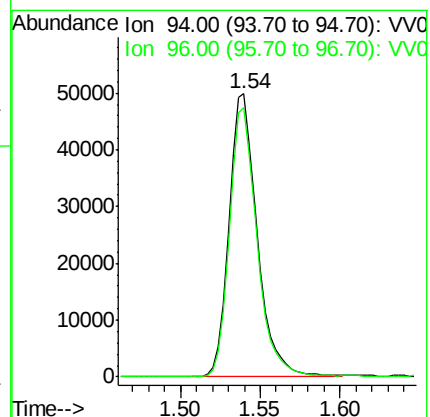
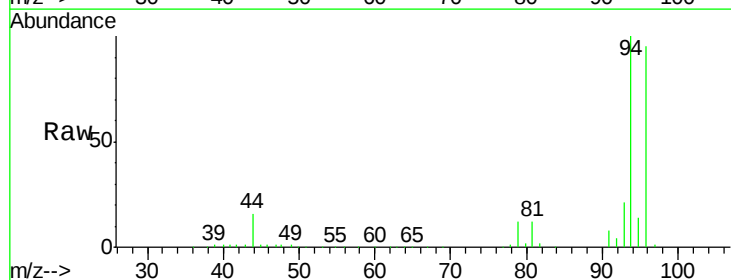
Acq: 16 Jun 2018 19:58

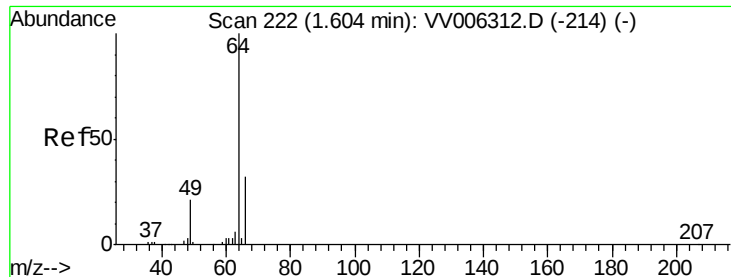
Tgt Ion: 94 Resp: 59617

Ion Ratio Lower Upper

94 100

96 95.2 68.9 127.9





#8

Chloroethane

Concen: 5.107 ug/L

RT: 1.60 min Scan# 221

Delta R.T. -0.00 min

Lab File: VV006331.D

Acq: 16 Jun 2018 19:58

Instrument :

MSVOA\_V

ClientSampleId :

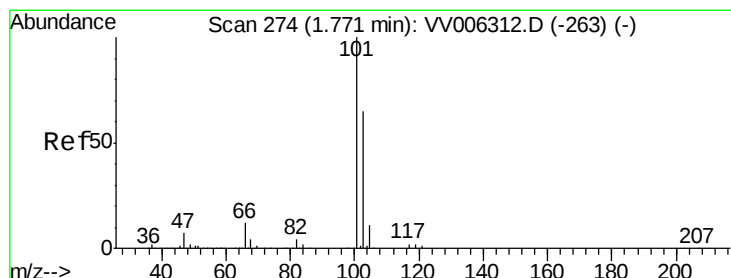
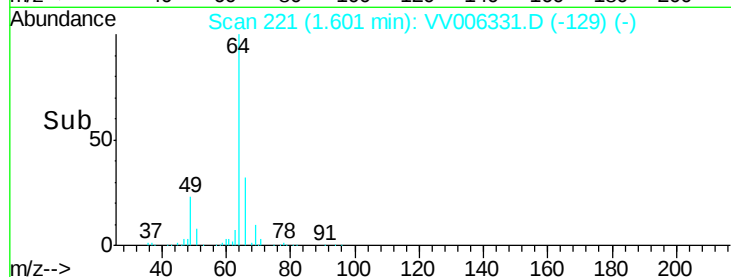
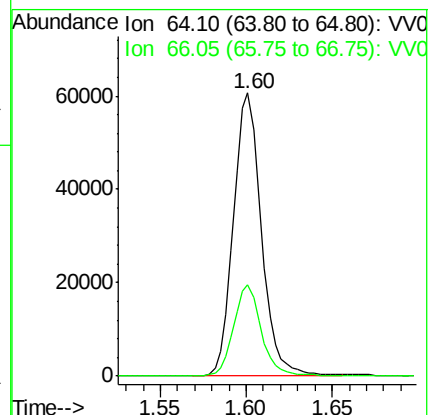
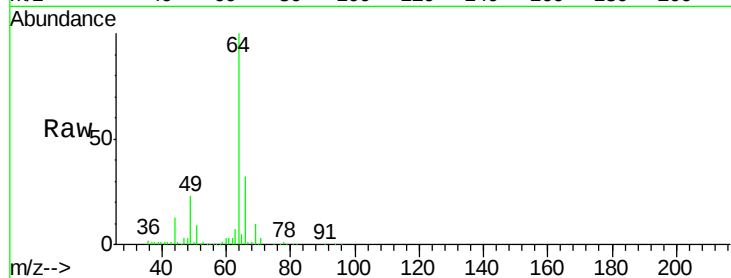
VSTD00569

Tgt Ion: 64 Resp: 68041

Ion Ratio Lower Upper

64 100

66 32.4 22.5 41.7



#9

Trichlorofluoromethane

Concen: 4.960 ug/L

RT: 1.77 min Scan# 274

Delta R.T. 0.00 min

Lab File: VV006331.D

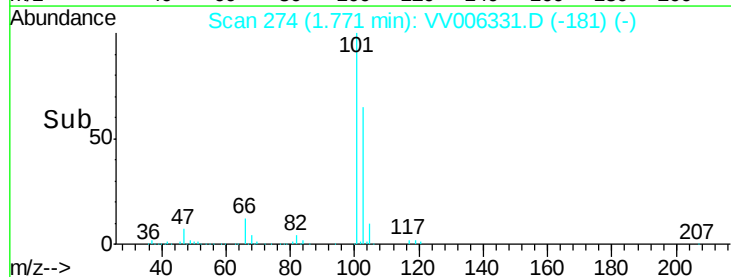
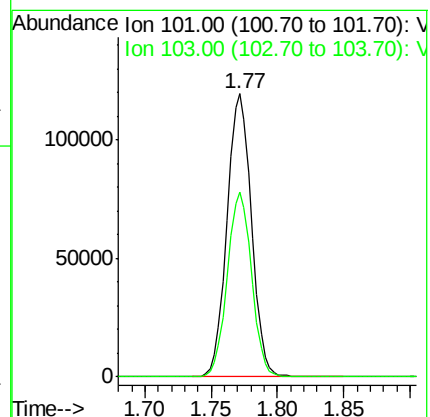
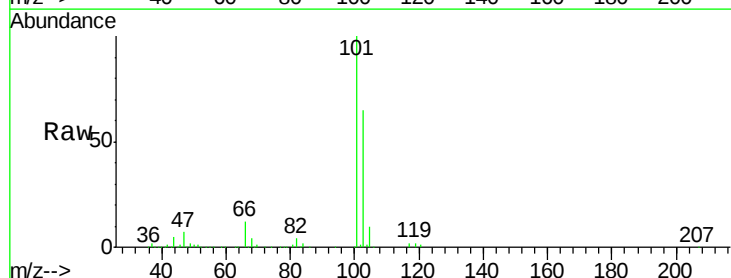
Acq: 16 Jun 2018 19:58

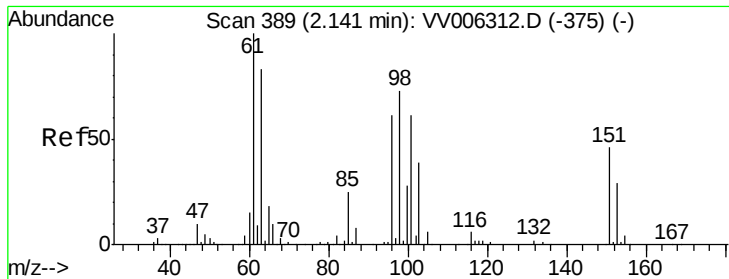
Tgt Ion: 101 Resp: 153372

Ion Ratio Lower Upper

101 100

103 64.8 52.0 78.0





#10

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

Concen: 4.945 ug/L

RT: 2.14 min Scan# 390

Delta R.T. 0.00 min

Lab File: VV006331.D

Acq: 16 Jun 2018 19:58

Instrument :

MSVOA\_V

ClientSampleId :

VSTD00569

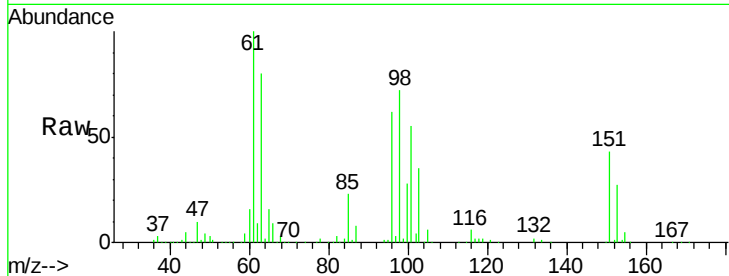
Tgt Ion: 101 Resp: 94356

Ion Ratio Lower Upper

101 100

85 41.7 32.6 49.0

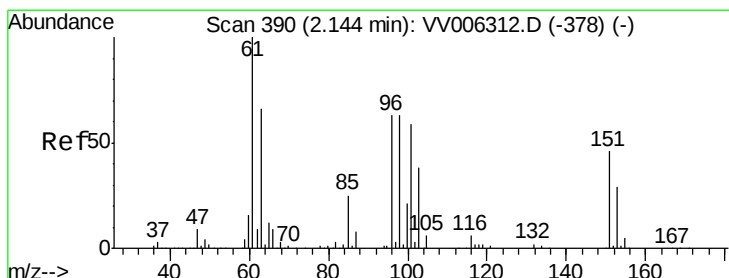
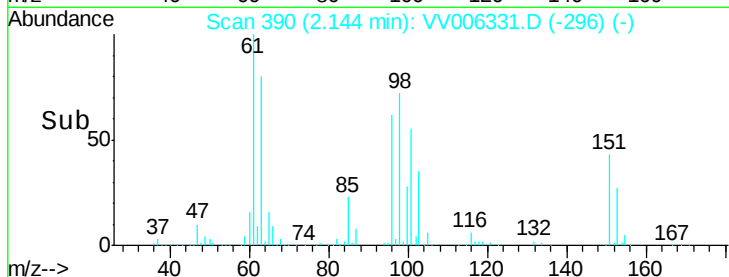
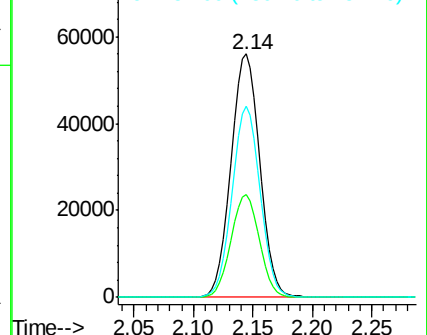
151 76.5 60.9 91.3



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: 5.004 ug/L

RT: 2.14 min Scan# 390

Delta R.T. 0.00 min

Lab File: VV006331.D

Acq: 16 Jun 2018 19:58

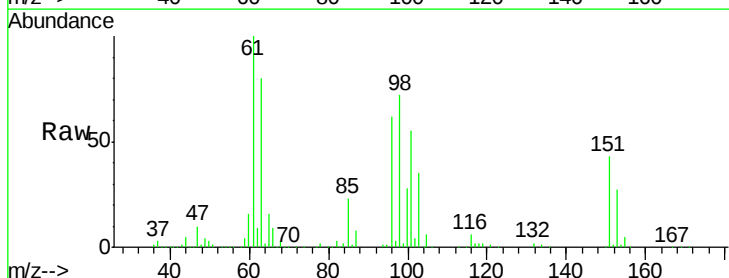
Tgt Ion: 96 Resp: 88743

Ion Ratio Lower Upper

96 100

61 161.3 114.2 212.2

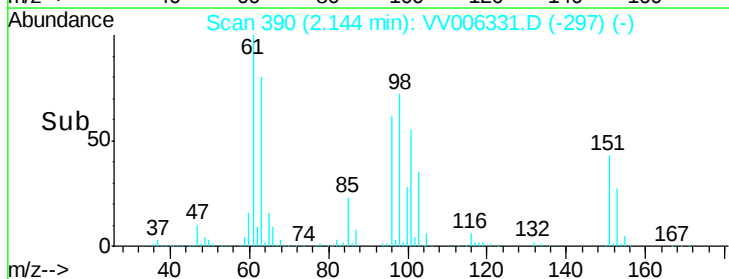
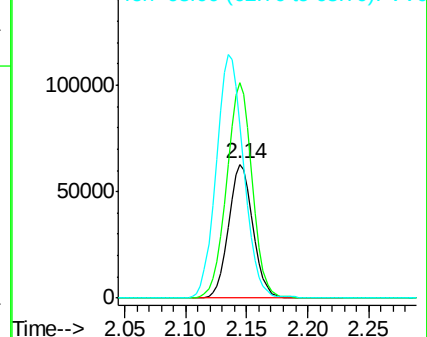
63 129.8 85.0 157.8

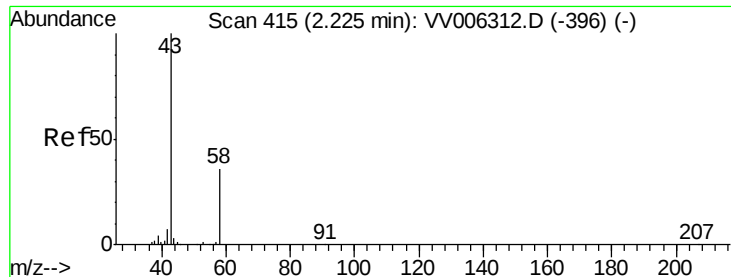


Abundance Ion 96.00 (95.70 to 96.70): VV0

Ion 61.05 (60.75 to 61.75): VV0

Ion 63.00 (62.70 to 63.70): VV0





#13

Acetone

Concen: 62.217 ug/L

RT: 2.21 min Scan# 409

Delta R.T. -0.02 min

Lab File: VV006331.D

Acq: 16 Jun 2018 19:58

Instrument :

MSVOA\_V

ClientSampleId :

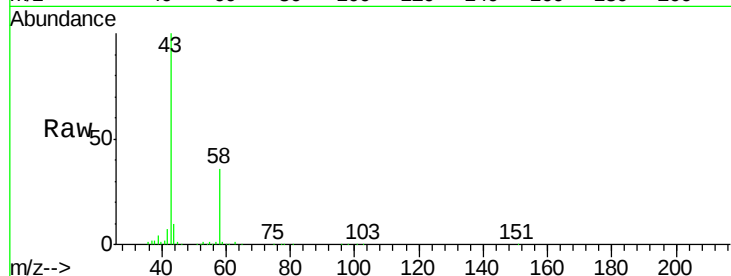
VSTD00569

Tgt Ion: 43 Resp: 120821

Ion Ratio Lower Upper

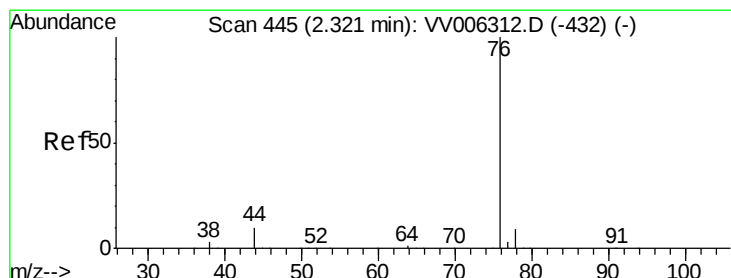
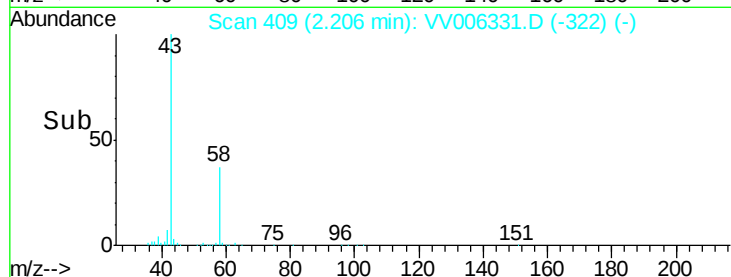
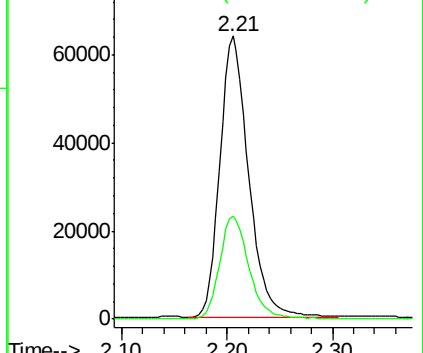
43 100

58 36.6 0.0 67.4



Abundance Ion 43.05 (42.75 to 43.75): VV0

Ion 58.05 (57.75 to 58.75): VV0



#14

Carbon disulfide

Concen: 3.395 ug/L

RT: 2.32 min Scan# 445

Delta R.T. 0.00 min

Lab File: VV006331.D

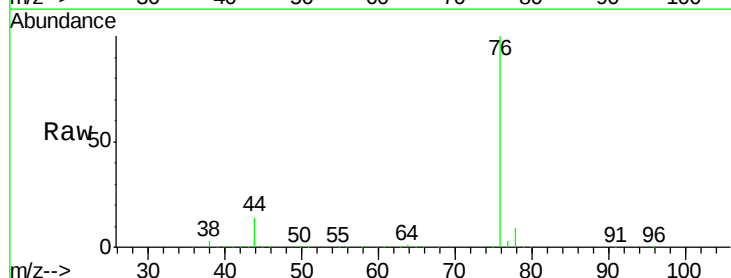
Acq: 16 Jun 2018 19:58

Tgt Ion: 76 Resp: 201686

Ion Ratio Lower Upper

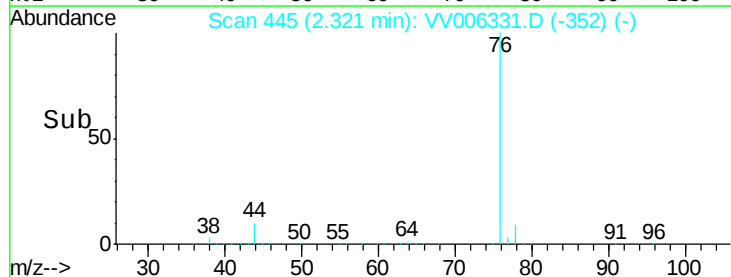
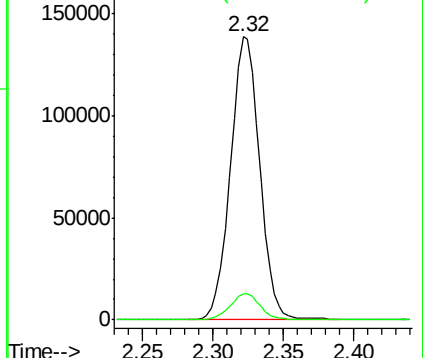
76 100

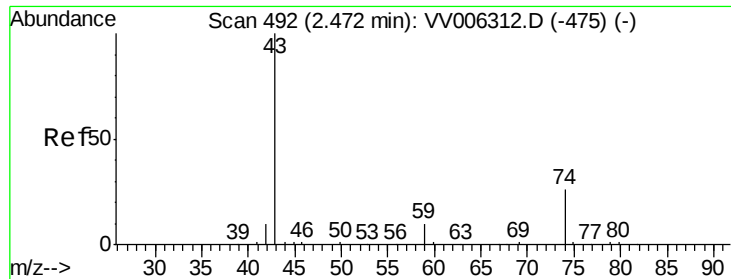
78 9.1 7.5 11.3



Abundance Ion 76.05 (75.75 to 76.75): VV0

Ion 78.00 (77.70 to 78.70): VV0

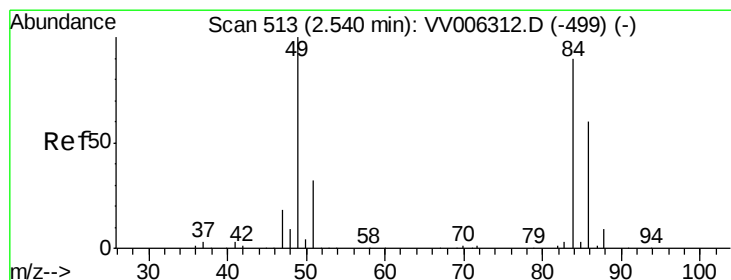
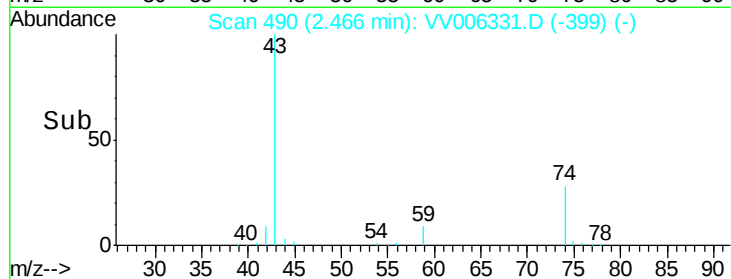
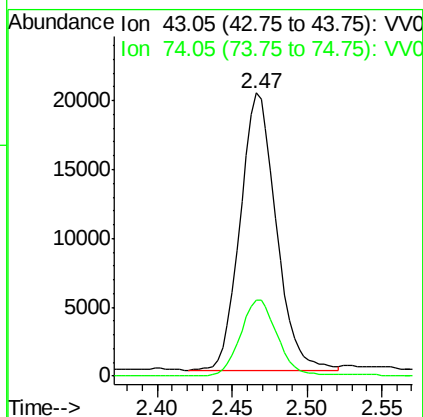
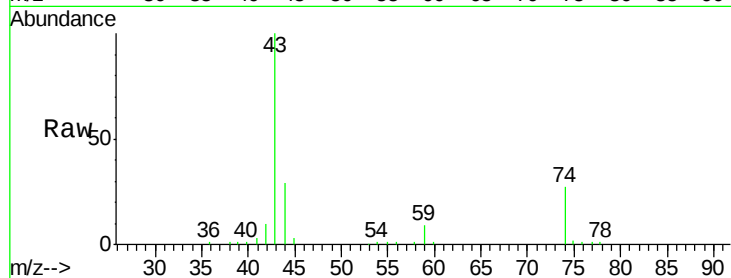




#15  
Methyl Acetate  
Concen: 5.827 ug/L  
RT: 2.47 min Scan# 490  
Delta R.T. -0.01 min  
Lab File: VV006331.D  
Acq: 16 Jun 2018 19:58

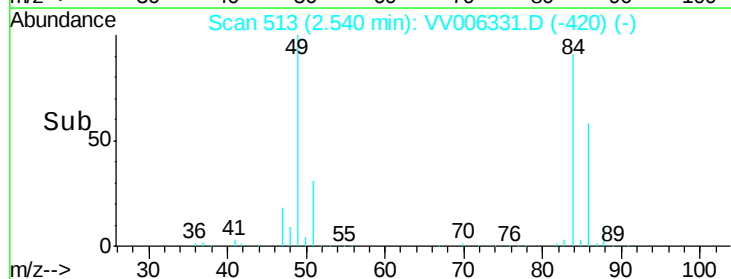
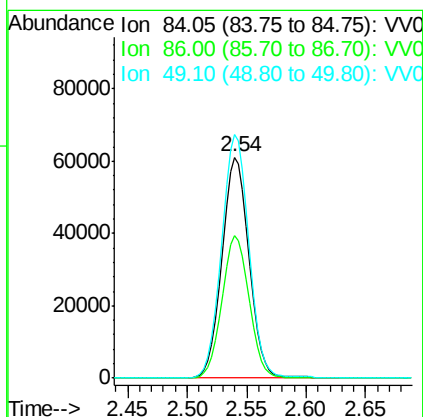
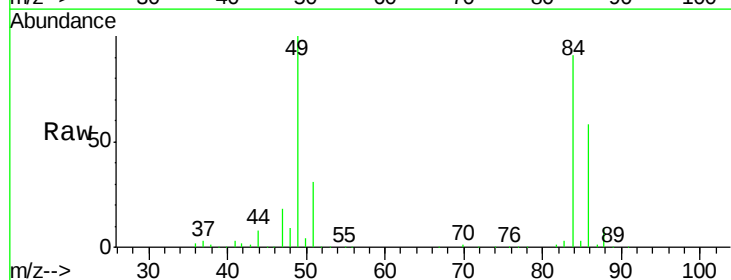
Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD00569

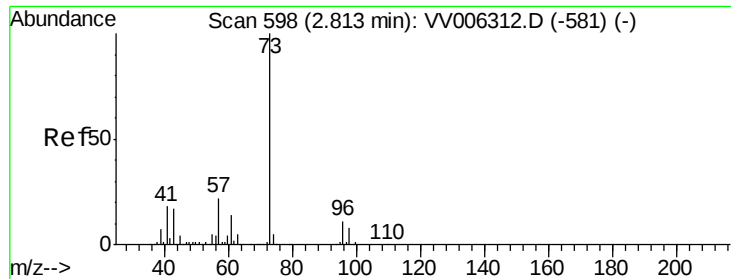
Tgt Ion: 43 Resp: 33675  
Ion Ratio Lower Upper  
43 100  
74 28.5 23.4 35.0



#16  
Methylene chloride  
Concen: 4.939 ug/L  
RT: 2.54 min Scan# 513  
Delta R.T. 0.00 min  
Lab File: VV006331.D  
Acq: 16 Jun 2018 19:58

Tgt Ion: 84 Resp: 96690  
Ion Ratio Lower Upper  
84 100  
86 64.4 44.2 82.0  
49 110.1 78.8 146.4

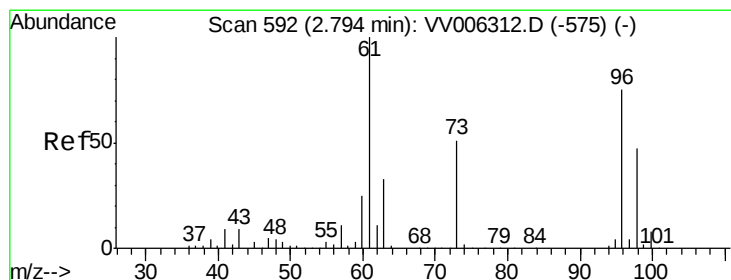
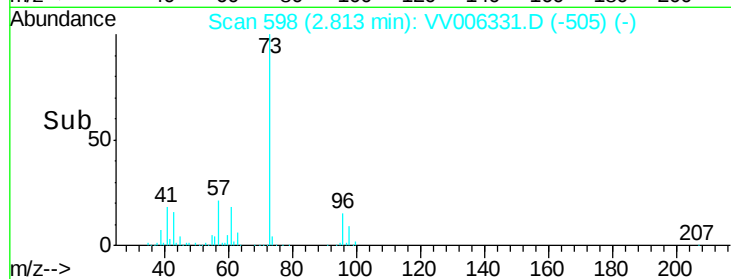
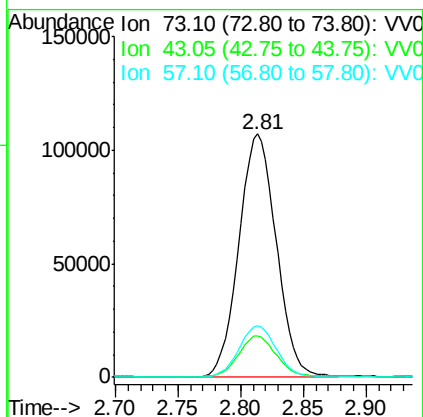
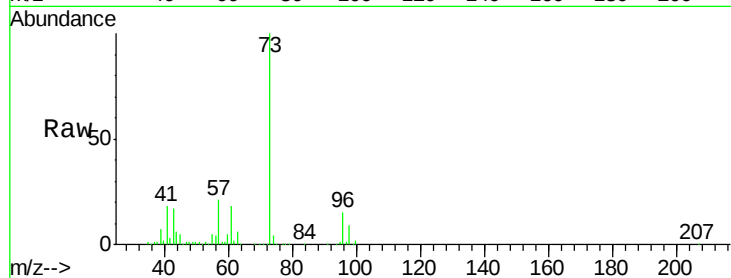




#17  
Methyl tert-butyl Ether  
Concen: 5.076 ug/L  
RT: 2.81 min Scan# 598  
Delta R.T. 0.00 min  
Lab File: VV006331.D  
Acq: 16 Jun 2018 19:58

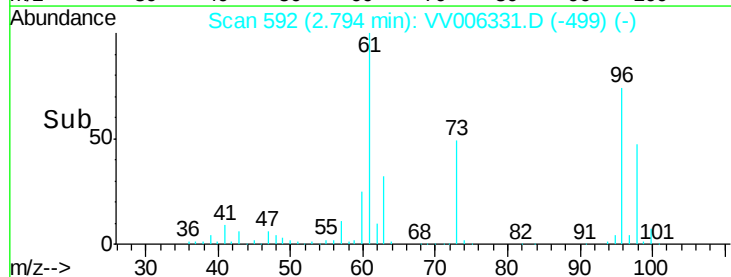
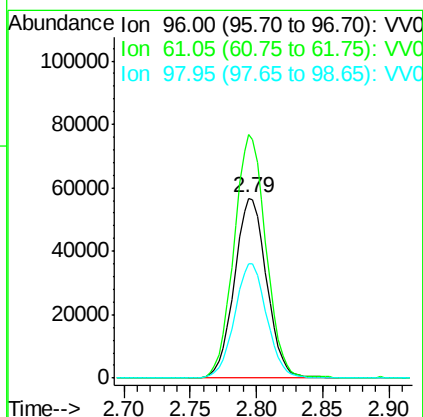
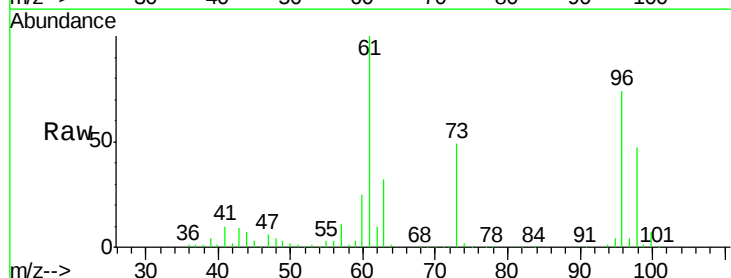
Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD00569

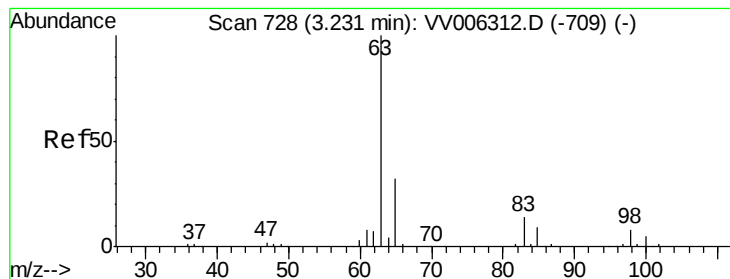
Tgt Ion: 73 Resp: 222751  
Ion Ratio Lower Upper  
73 100  
43 16.6 14.2 21.4  
57 21.5 16.8 25.2



#18  
trans-1,2-Dichloroethene  
Concen: 4.958 ug/L  
RT: 2.79 min Scan# 592  
Delta R.T. 0.00 min  
Lab File: VV006331.D  
Acq: 16 Jun 2018 19:58

Tgt Ion: 96 Resp: 95926  
Ion Ratio Lower Upper  
96 100  
61 135.2 96.3 178.9  
98 63.8 45.4 84.2





#19

1,1-Dichloroethane

Concen: 5.161 ug/L

RT: 3.23 min Scan# 729

Delta R.T. 0.00 min

Lab File: VV006331.D

Acq: 16 Jun 2018 19:58

Instrument :

MSVOA\_V

ClientSampleId :

VSTD00569

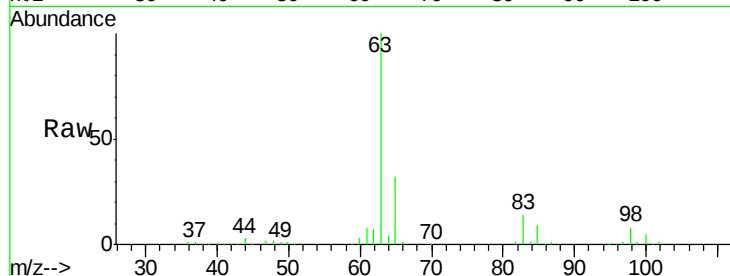
Tgt Ion: 63 Resp: 167931

Ion Ratio Lower Upper

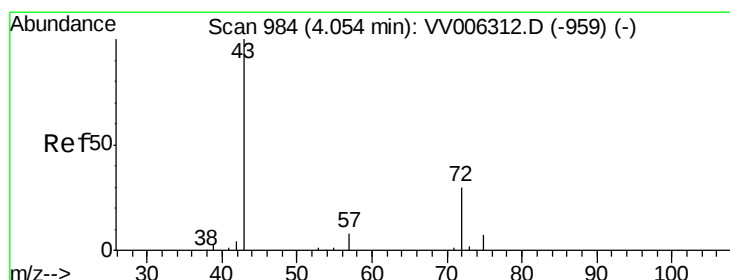
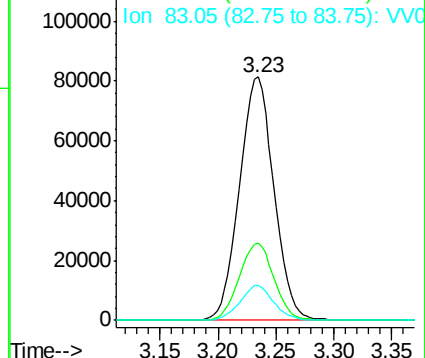
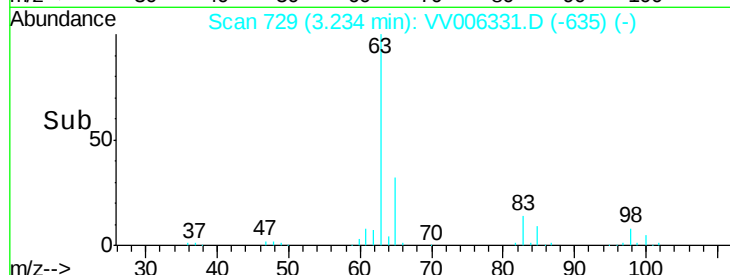
63 100

65 31.6 22.3 41.3

83 14.1 10.0 18.6



Abundance Ion 63.10 (62.80 to 63.80): VV006331.D (-635) (-)



#21

2-Butanone

Concen: 55.136 ug/L

RT: 4.04 min Scan# 980

Delta R.T. -0.01 min

Lab File: VV006331.D

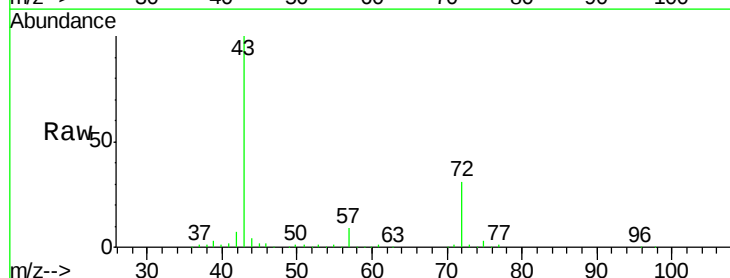
Acq: 16 Jun 2018 19:58

Tgt Ion: 43 Resp: 194789

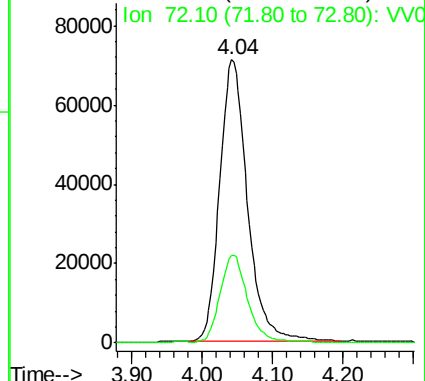
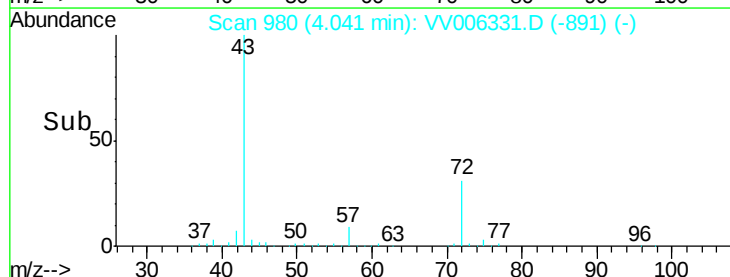
Ion Ratio Lower Upper

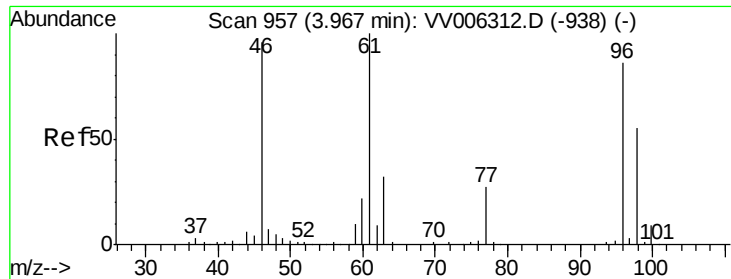
43 100

72 30.5 13.8 41.3



Abundance Ion 43.05 (42.75 to 43.75): VV006331.D (-891) (-)



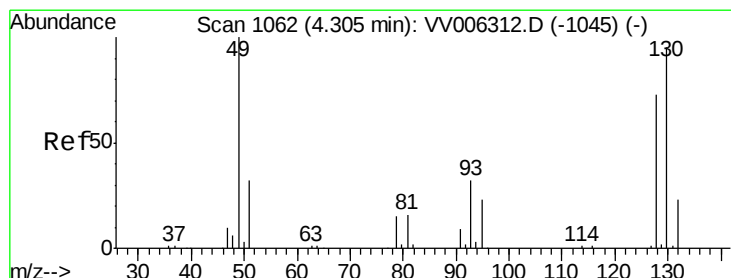
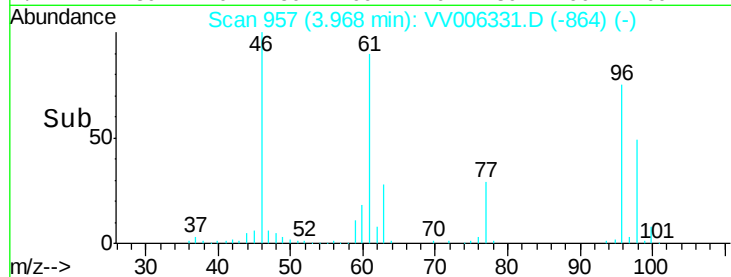
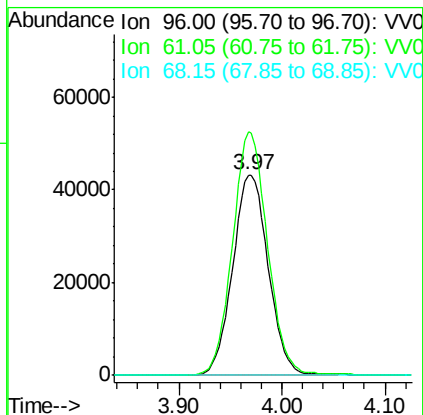
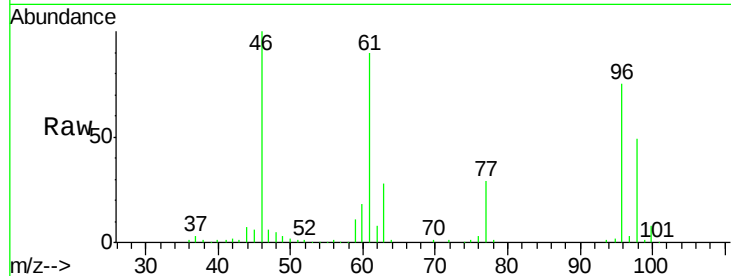


#22

cis-1,2-Dichloroethene  
 Concen: 4.978 ug/L  
 RT: 3.97 min Scan# 957  
 Delta R.T. 0.00 min  
 Lab File: VV006331.D  
 Acq: 16 Jun 2018 19:58

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD00569

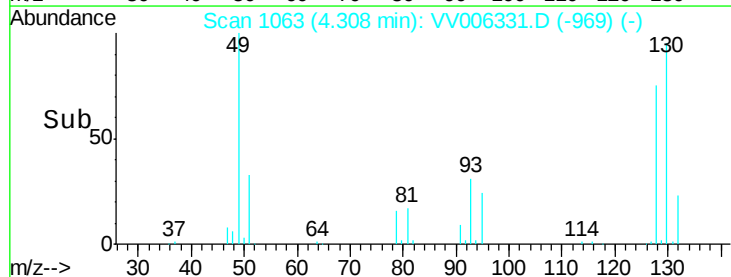
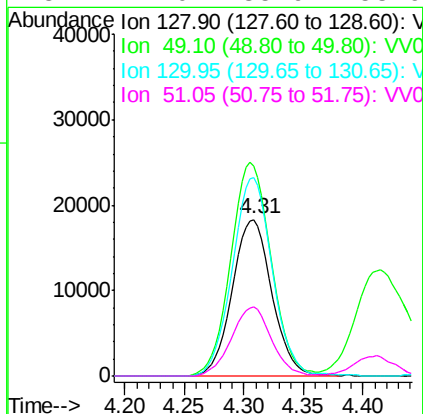
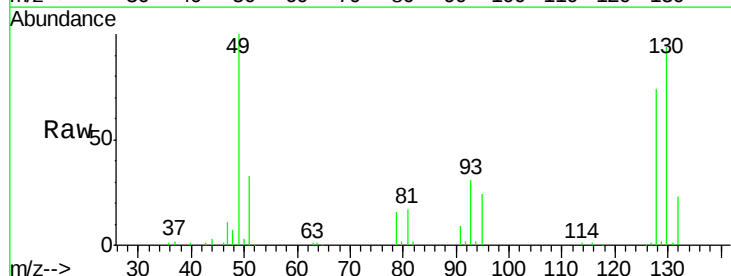
Tgt Ion: 96 Resp: 104219  
 Ion Ratio Lower Upper  
 96 100  
 61 121.3 84.1 156.3  
 68 0.0 0.3 0.5#

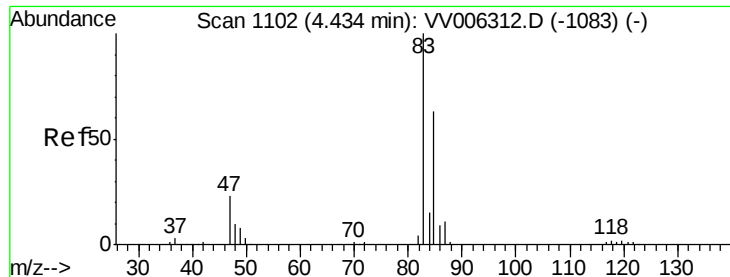


#23

Bromochloromethane  
 Concen: 5.038 ug/L  
 RT: 4.31 min Scan# 1063  
 Delta R.T. 0.00 min  
 Lab File: VV006331.D  
 Acq: 16 Jun 2018 19:58

Tgt Ion: 128 Resp: 42307  
 Ion Ratio Lower Upper  
 128 100  
 49 134.6 97.1 180.3  
 130 126.8 86.6 160.8  
 51 44.0 35.9 53.9

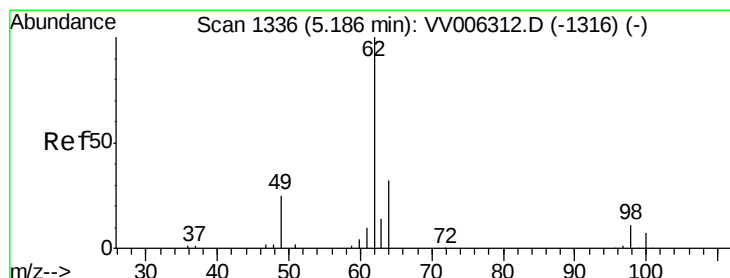
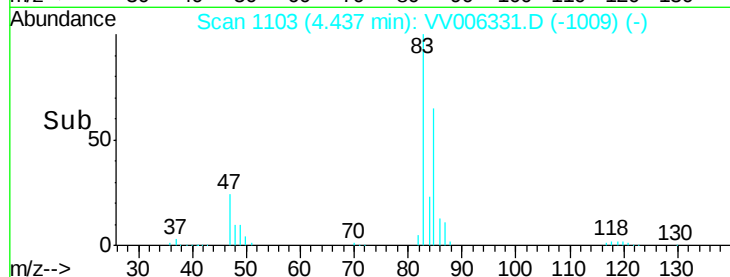
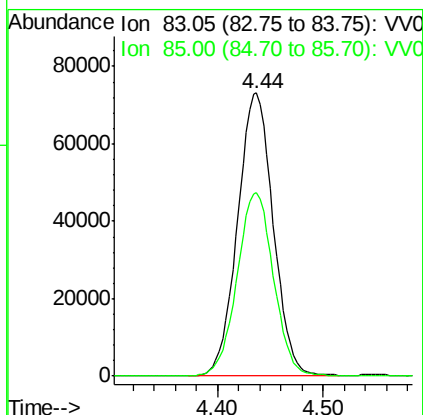
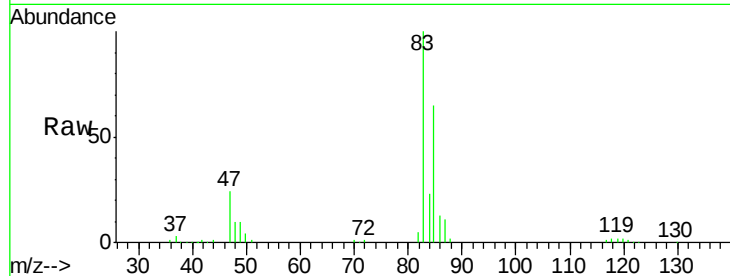




#25  
Chloroform  
Concen: 5.121 ug/L  
RT: 4.44 min Scan# 1103  
Delta R.T. 0.00 min  
Lab File: VV006331.D  
Acq: 16 Jun 2018 19:58

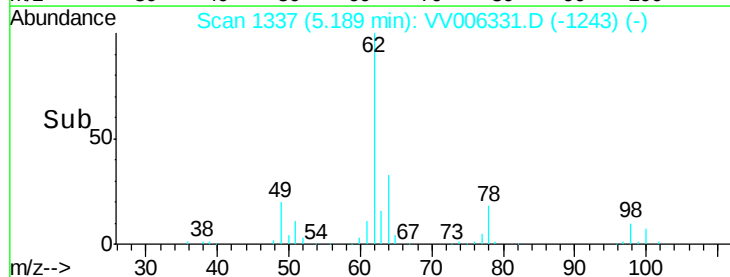
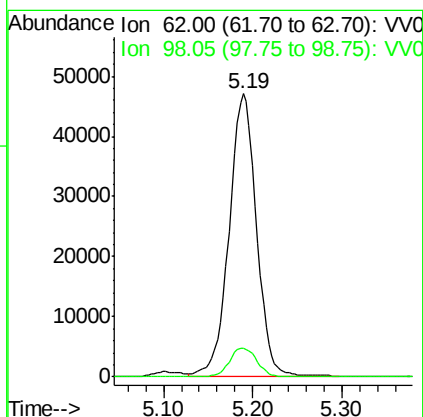
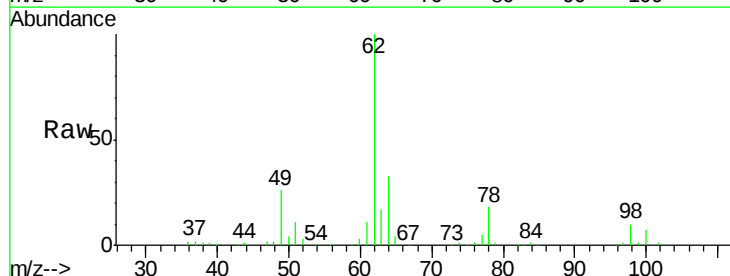
Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD00569

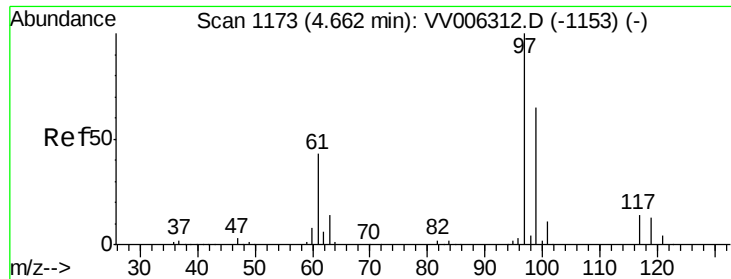
Tgt Ion: 83 Resp: 172093  
Ion Ratio Lower Upper  
83 100  
85 64.9 46.2 85.8



#27  
1,2-Dichloroethane  
Concen: 5.166 ug/L  
RT: 5.19 min Scan# 1337  
Delta R.T. 0.00 min  
Lab File: VV006331.D  
Acq: 16 Jun 2018 19:58

Tgt Ion: 62 Resp: 99674  
Ion Ratio Lower Upper  
62 100  
98 10.1 8.6 12.8

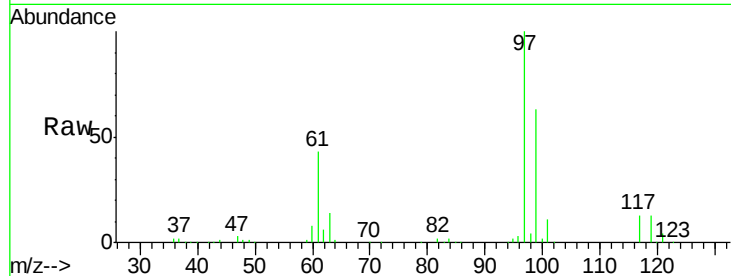




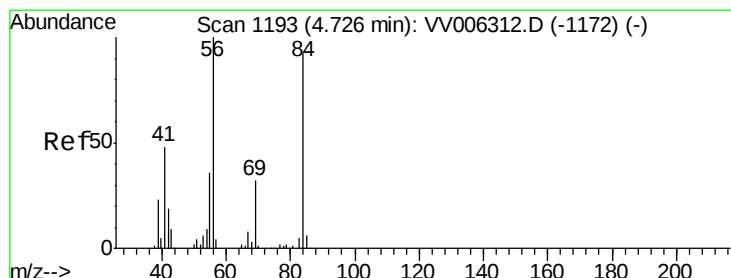
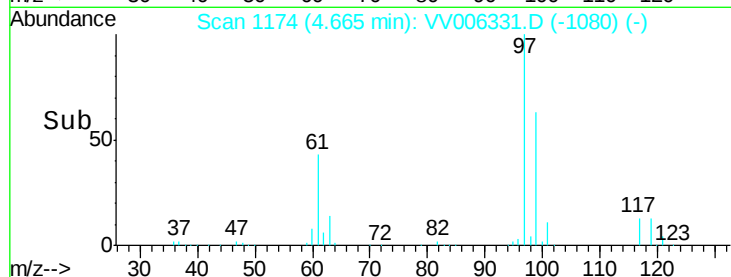
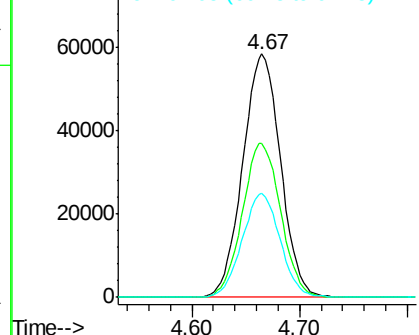
#29  
 1,1,1-Trichloroethane  
 Concen: 4.557 ug/L  
 RT: 4.67 min Scan# 1174  
 Delta R.T. 0.00 min  
 Lab File: VV006331.D  
 Acq: 16 Jun 2018 19:58

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD00569

Tgt Ion: 97 Resp: 142775  
 Ion Ratio Lower Upper  
 97 100  
 99 63.9 51.5 77.3  
 61 42.9 33.7 50.5

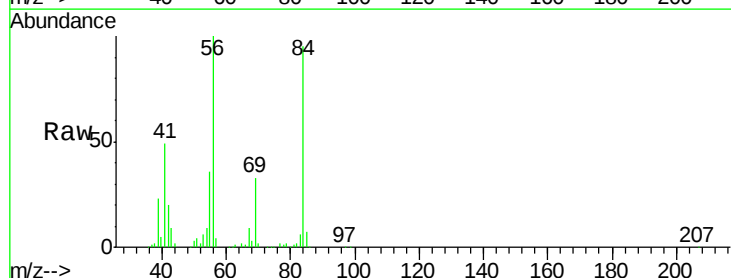


Abundance Ion 96.95 (96.65 to 97.65): VV0  
 Ion 99.05 (98.75 to 99.75): VV0  
 Ion 61.05 (60.75 to 61.75): VV0

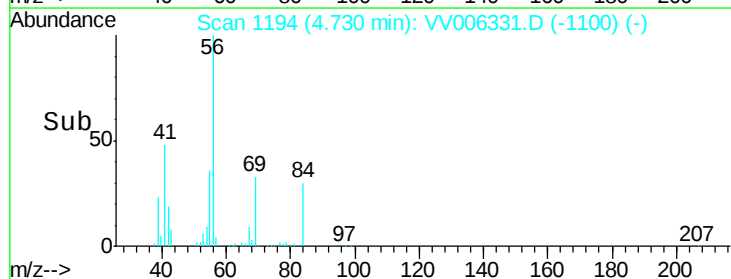
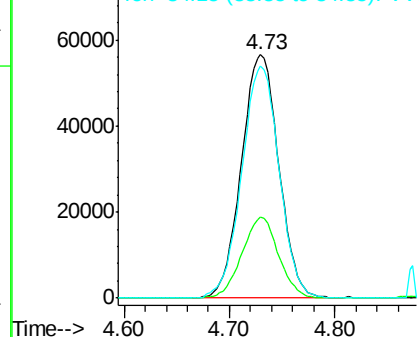


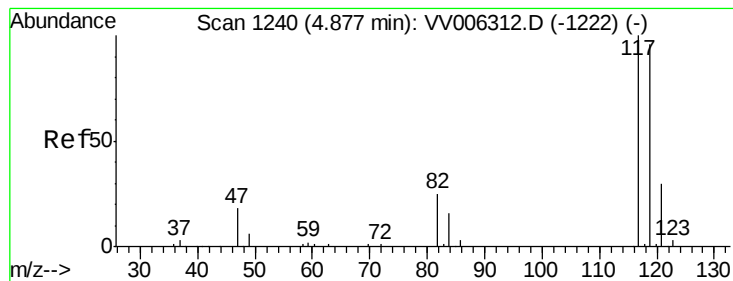
#30  
 Cyclohexane  
 Concen: 4.334 ug/L  
 RT: 4.73 min Scan# 1194  
 Delta R.T. 0.00 min  
 Lab File: VV006331.D  
 Acq: 16 Jun 2018 19:58

Tgt Ion: 56 Resp: 139661  
 Ion Ratio Lower Upper  
 56 100  
 69 32.4 26.4 39.6  
 84 95.3 78.9 118.3



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: 4.255 ug/L

RT: 4.88 min Scan# 1241

Delta R.T. 0.00 min

Lab File: VV006331.D

Acq: 16 Jun 2018 19:58

Instrument :

MSVOA\_V

ClientSampleId :

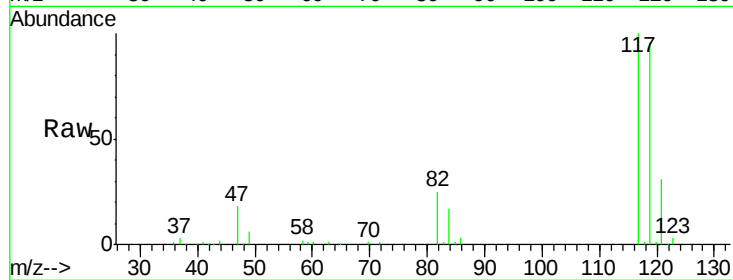
VSTD00569

Tgt Ion:117 Resp: 117565

Ion Ratio Lower Upper

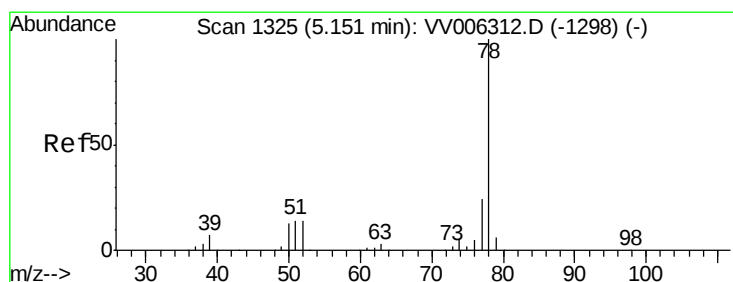
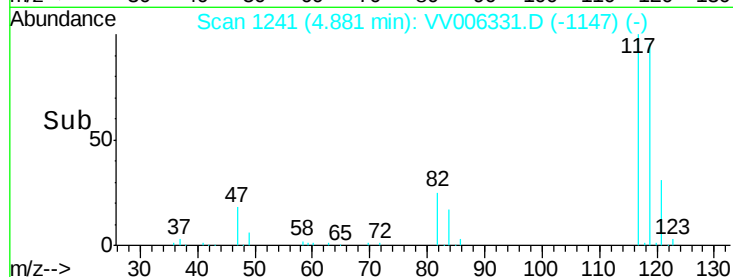
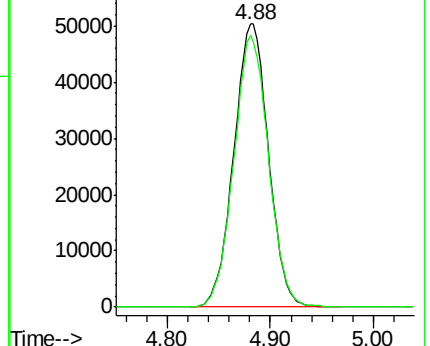
117 100

119 96.2 76.1 114.1



Abundance Ion 116.90 (116.60 to 117.60): V

Ion 118.90 (118.60 to 119.60): V



#33

Benzene

Concen: 4.961 ug/L

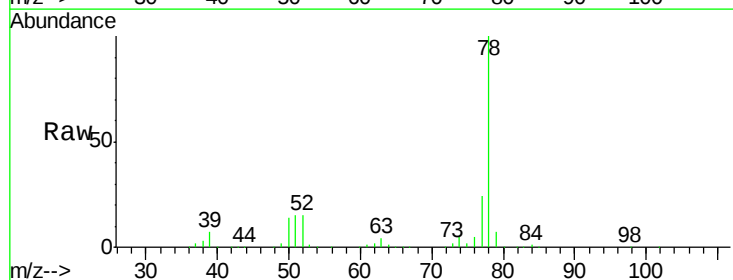
RT: 5.15 min Scan# 1326

Delta R.T. 0.00 min

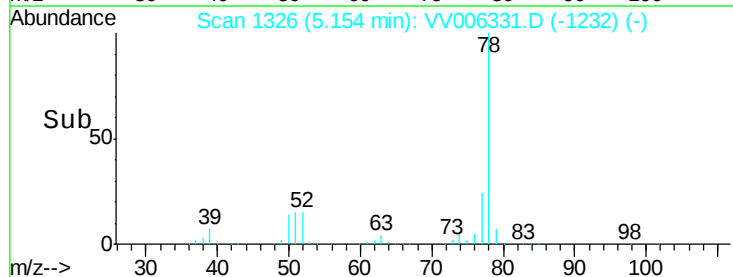
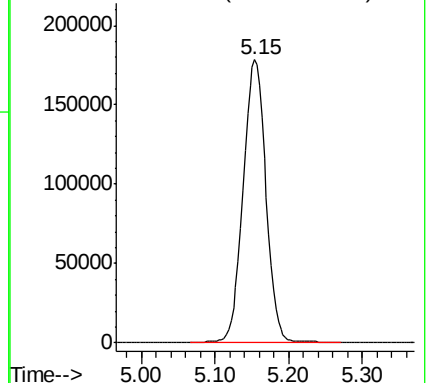
Lab File: VV006331.D

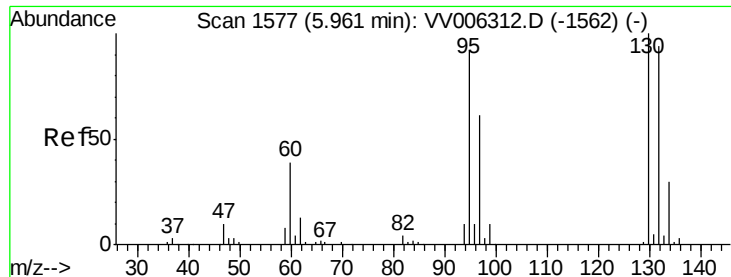
Acq: 16 Jun 2018 19:58

Tgt Ion: 78 Resp: 387896



Abundance Ion 78.10 (77.80 to 78.80): VV0

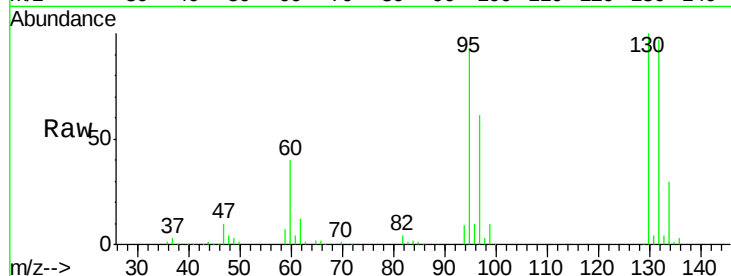




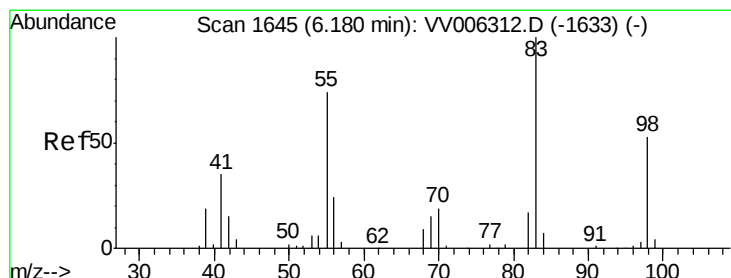
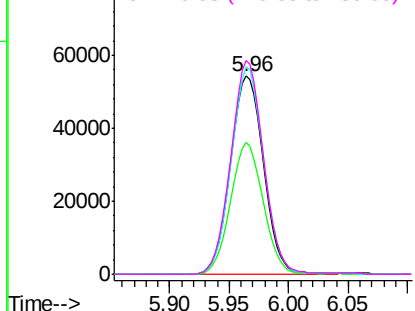
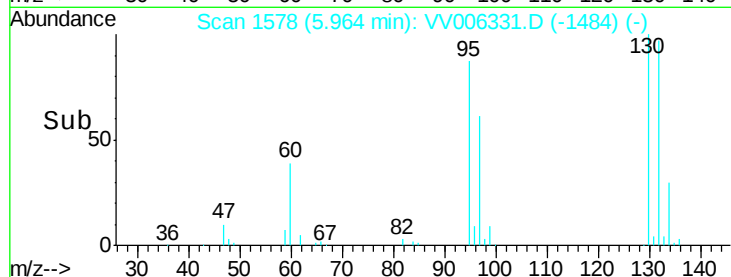
#34  
 Trichloroethene  
 Concen: 4.918 ug/L  
 RT: 5.96 min Scan# 1578  
 Delta R.T. 0.00 min  
 Lab File: VV006331.D  
 Acq: 16 Jun 2018 19:58

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD00569

Tgt Ion: 95 Resp: 104942  
 Ion Ratio Lower Upper  
 95 100  
 97 66.3 45.1 83.9  
 132 104.7 69.0 128.1  
 130 107.8 72.8 135.2

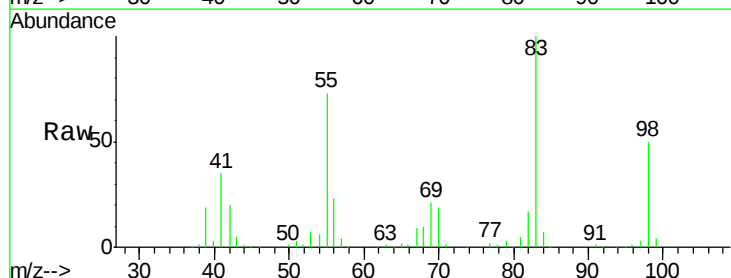


Abundance Ion 95.00 (94.70 to 95.70): VV0  
 Ion 96.95 (96.65 to 97.65): VV0  
 Ion 131.95 (131.65 to 132.65): V  
 Ion 129.95 (129.65 to 130.65): V

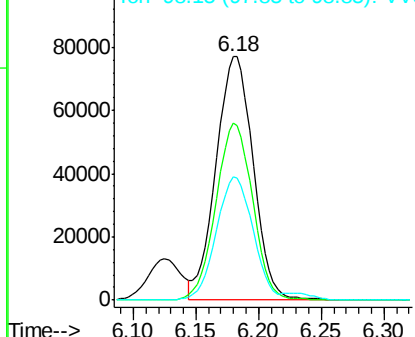
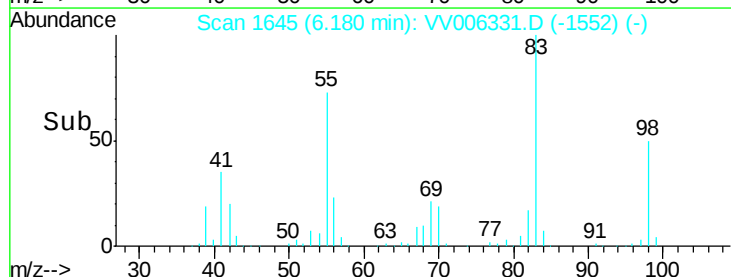


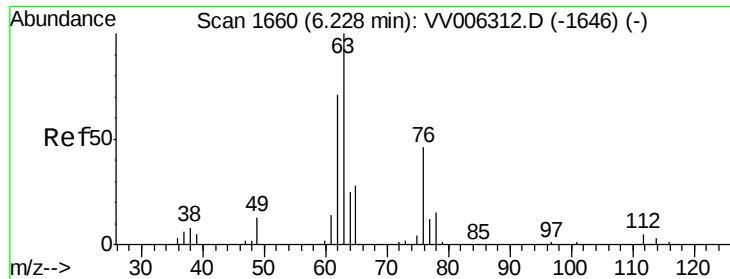
#35  
 Methylcyclohexane  
 Concen: 4.313 ug/L  
 RT: 6.18 min Scan# 1645  
 Delta R.T. 0.00 min  
 Lab File: VV006331.D  
 Acq: 16 Jun 2018 19:58

Tgt Ion: 83 Resp: 158229  
 Ion Ratio Lower Upper  
 83 100  
 55 72.1 57.5 86.3  
 98 50.3 39.8 59.8



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

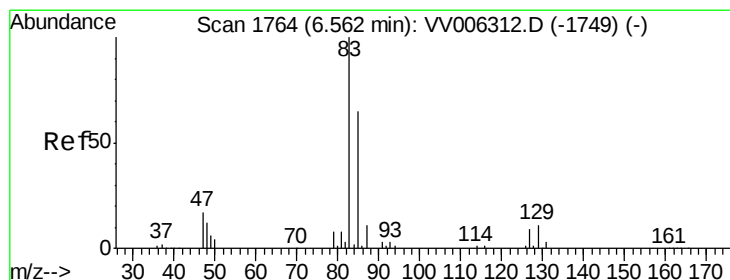
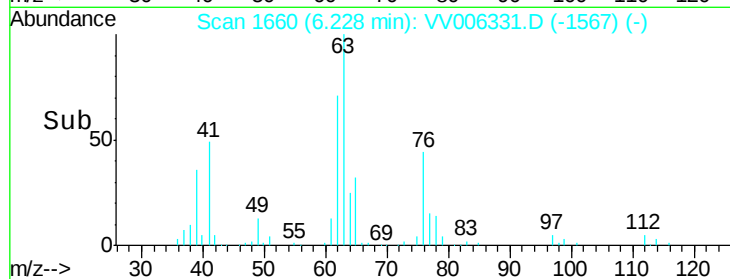
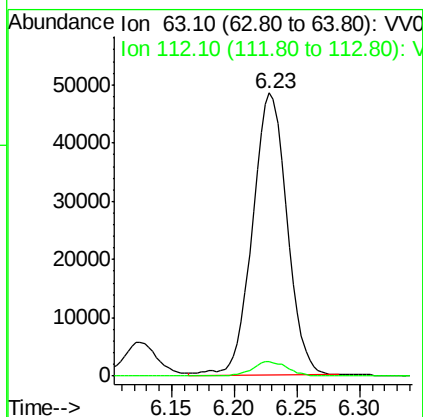
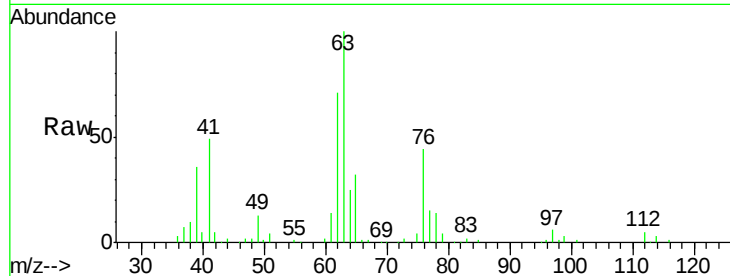




#37  
 1,2-Dichloropropane  
 Concen: 4.947 ug/L  
 RT: 6.23 min Scan# 1660  
 Delta R.T. 0.00 min  
 Lab File: VV006331.D  
 Acq: 16 Jun 2018 19:58

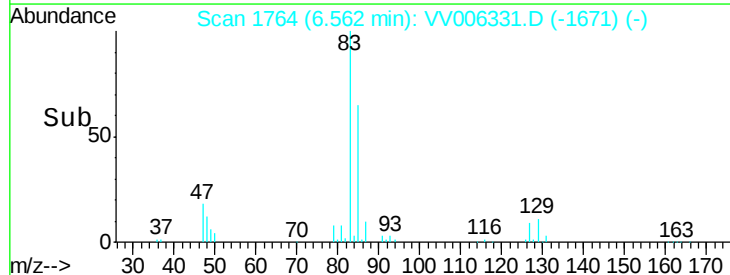
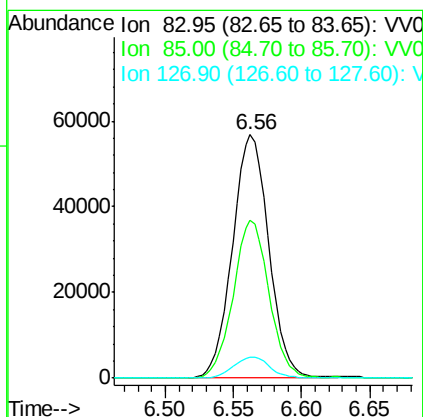
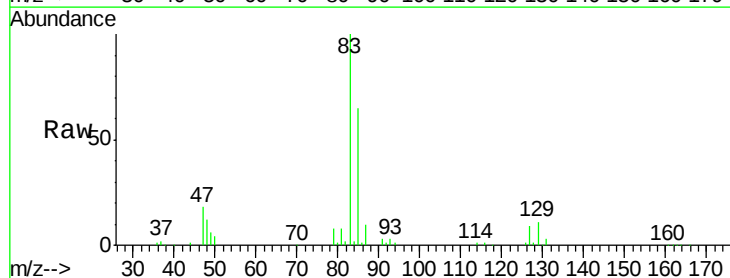
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD00569

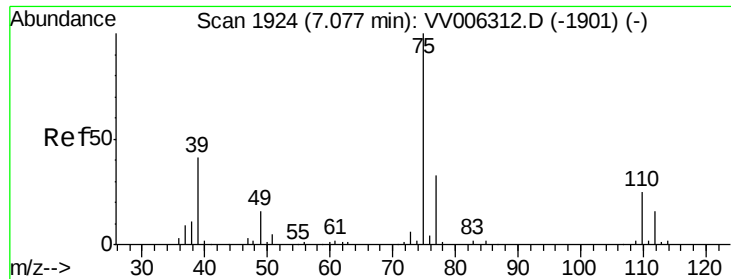
Tgt Ion: 63 Resp: 92655  
 Ion Ratio Lower Upper  
 63 100  
 112 5.3 4.1 6.1



#38  
 Bromodichloromethane  
 Concen: 4.218 ug/L  
 RT: 6.56 min Scan# 1764  
 Delta R.T. 0.00 min  
 Lab File: VV006331.D  
 Acq: 16 Jun 2018 19:58

Tgt Ion: 83 Resp: 105213  
 Ion Ratio Lower Upper  
 83 100  
 85 65.1 44.9 83.5  
 127 8.5 7.0 10.4

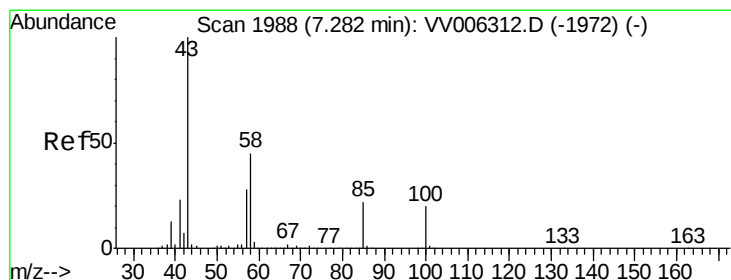
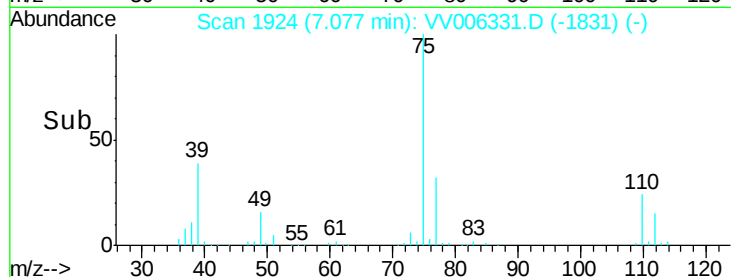
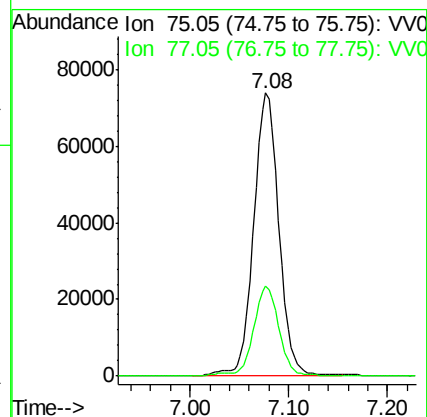
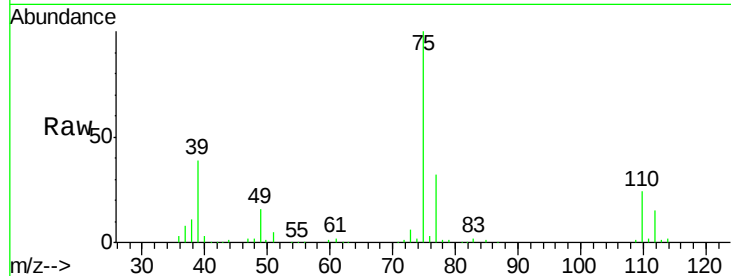




#39  
 cis-1,3-Dichloropropene  
 Concen: 4.281 ug/L  
 RT: 7.08 min Scan# 1924  
 Delta R.T. 0.00 min  
 Lab File: VV006331.D  
 Acq: 16 Jun 2018 19:58

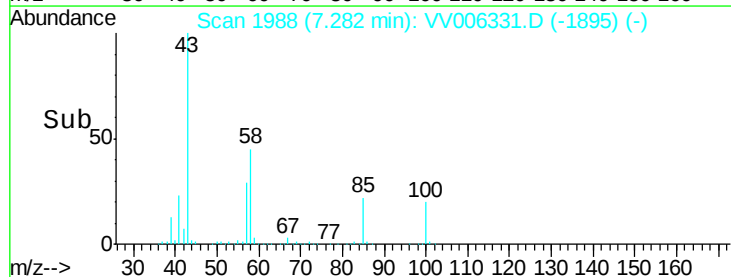
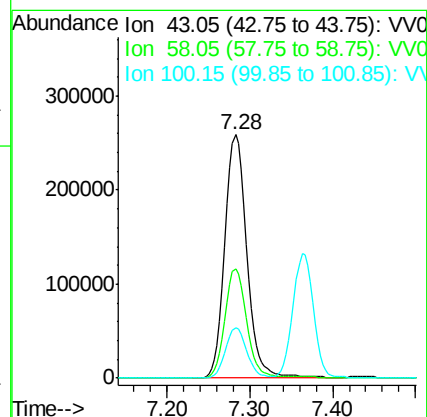
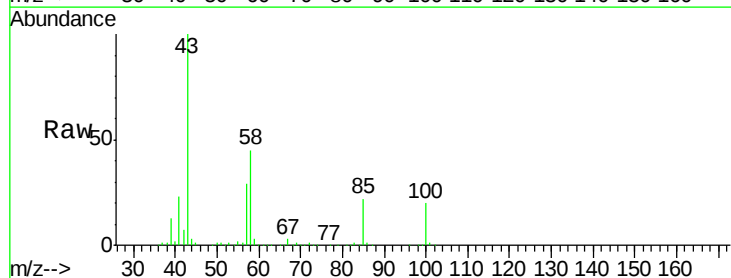
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD00569

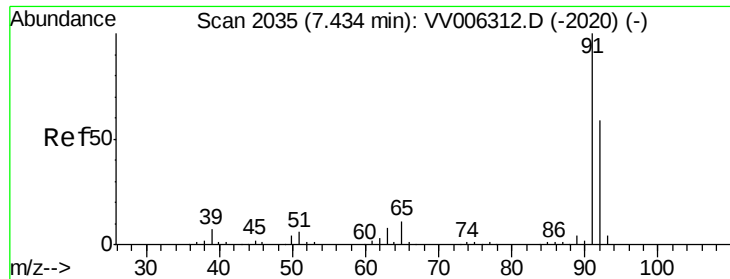
Tgt Ion: 75 Resp: 130695  
 Ion Ratio Lower Upper  
 75 100  
 77 31.6 22.5 41.7



#40  
 4-Methyl-2-pentanone  
 Concen: 49.415 ug/L  
 RT: 7.28 min Scan# 1988  
 Delta R.T. 0.00 min  
 Lab File: VV006331.D  
 Acq: 16 Jun 2018 19:58

Tgt Ion: 43 Resp: 478724  
 Ion Ratio Lower Upper  
 43 100  
 58 43.9 36.0 54.0  
 100 19.8 15.4 23.2





#42

Toluene

Concen: 4.852 ug/L

RT: 7.44 min Scan# 2036

Delta R.T. 0.00 min

Lab File: VV006331.D

Acq: 16 Jun 2018 19:58

Instrument :

MSVOA\_V

ClientSampleId :

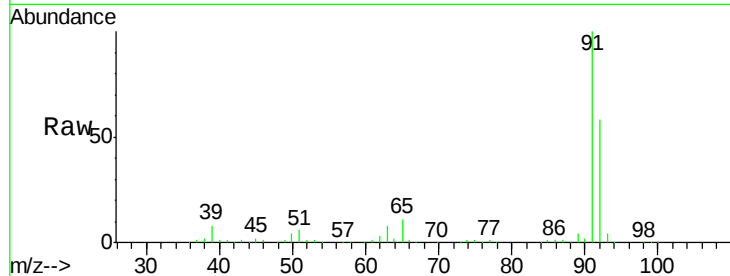
VSTD00569

Tgt Ion: 91 Resp: 418699

Ion Ratio Lower Upper

91 100

92 58.5 41.1 76.3



Abundance Ion 91.15 (90.85 to 91.85): VV0

Ion 92.15 (91.85 to 92.85): VV0

7.44

250000

200000

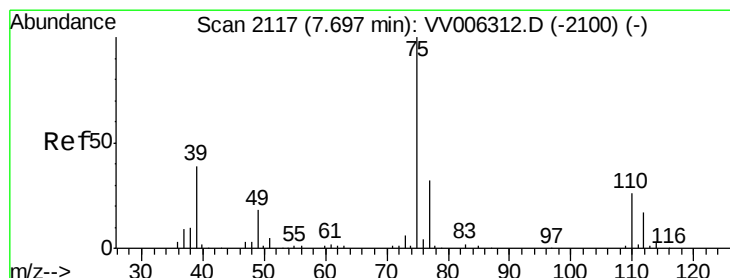
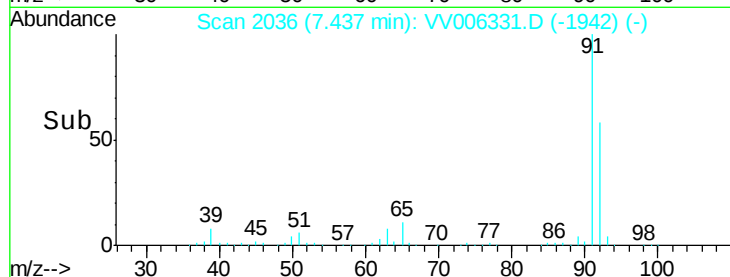
150000

100000

50000

0

Time-->



#44

trans-1,3-Dichloropropene

Concen: 4.061 ug/L

RT: 7.70 min Scan# 2118

Delta R.T. 0.00 min

Lab File: VV006331.D

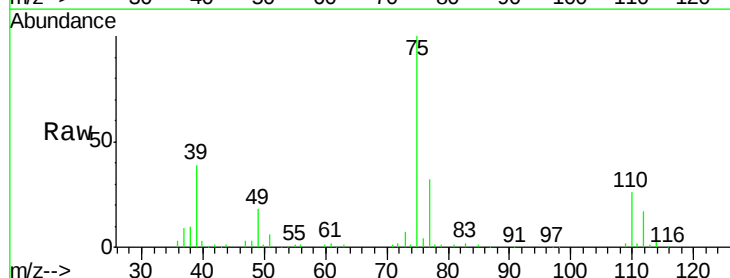
Acq: 16 Jun 2018 19:58

Tgt Ion: 75 Resp: 100560

Ion Ratio Lower Upper

75 100

77 32.2 23.0 42.6



Abundance Ion 75.05 (74.75 to 75.75): VV0

Ion 77.05 (76.75 to 77.75): VV0

7.70

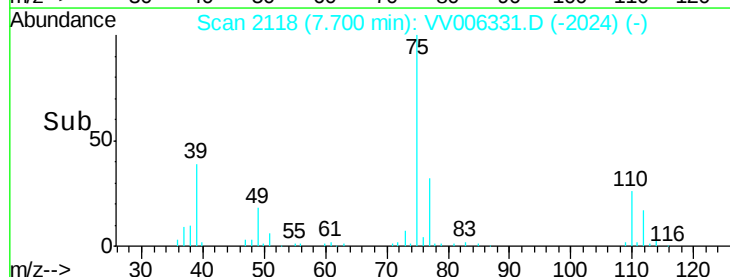
60000

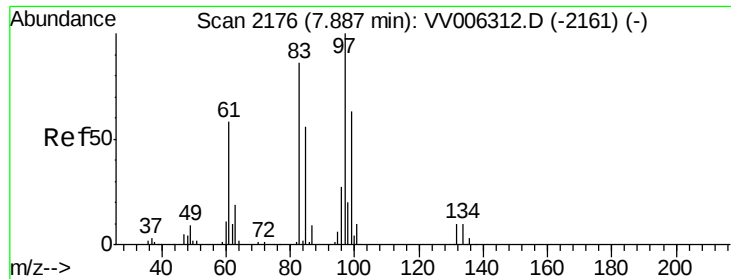
40000

20000

0

Time-->

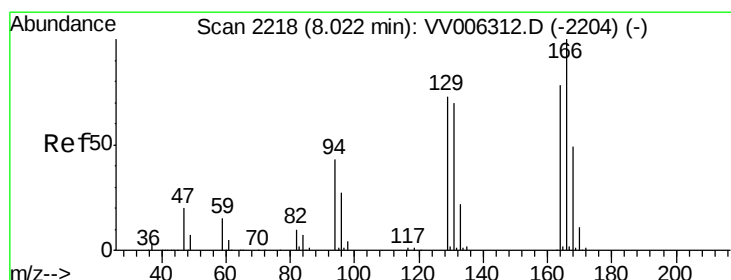
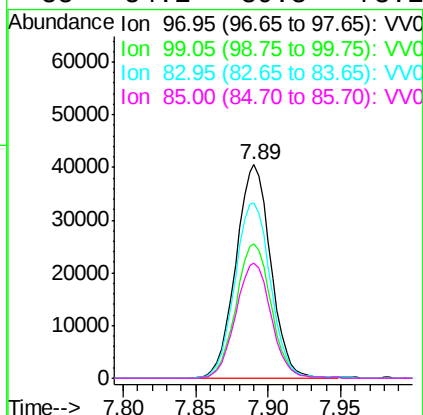
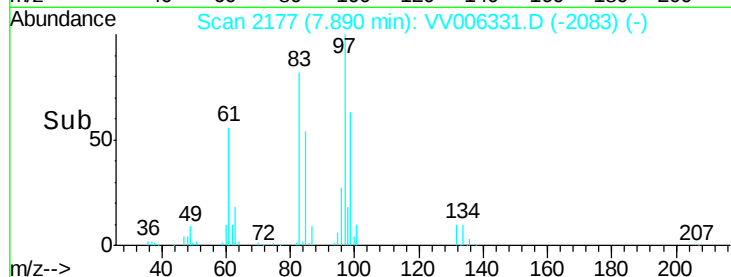
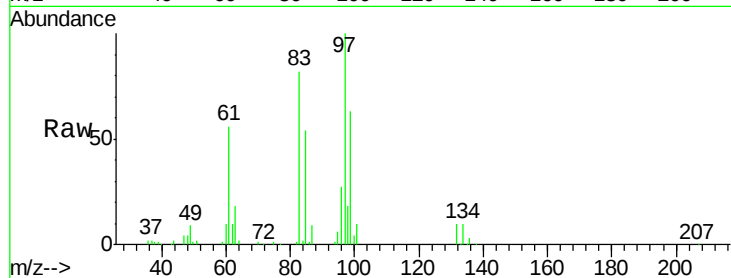




#45  
 1,1,2-Trichloroethane  
 Concen: 5.115 ug/L  
 RT: 7.89 min Scan# 2177  
 Delta R.T. 0.00 min  
 Lab File: VV006331.D  
 Acq: 16 Jun 2018 19:58

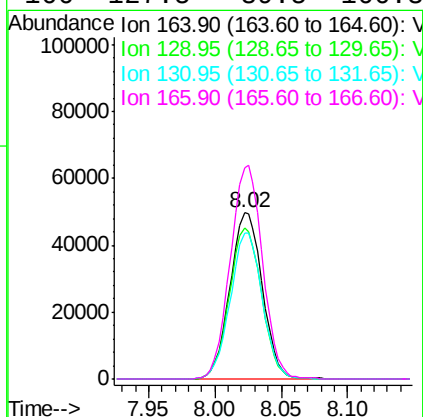
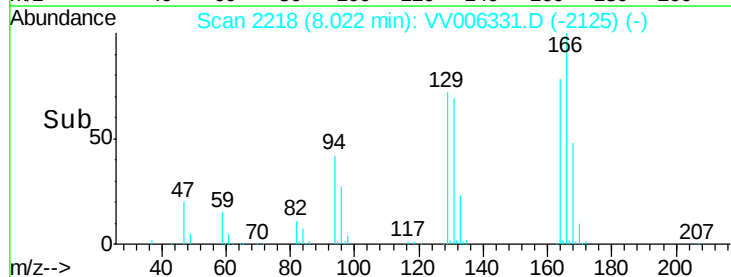
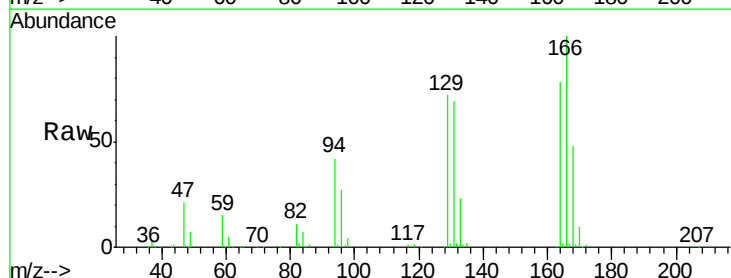
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD00569

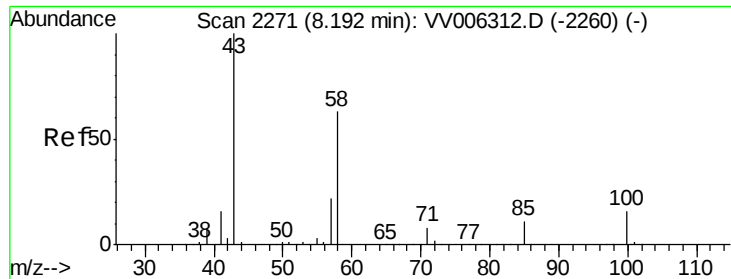
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 97    | Resp: | 67809 |
| Ion      | Ratio | Lower | Upper |
| 97       | 100   |       |       |
| 99       | 63.2  | 43.8  | 81.3  |
| 83       | 82.4  | 58.2  | 108.2 |
| 85       | 54.1  | 39.3  | 73.1  |



#47  
 Tetrachloroethene  
 Concen: 4.945 ug/L  
 RT: 8.02 min Scan# 2218  
 Delta R.T. 0.00 min  
 Lab File: VV006331.D  
 Acq: 16 Jun 2018 19:58

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 164   | Resp: | 84465 |
| Ion      | Ratio | Lower | Upper |
| 164      | 100   |       |       |
| 129      | 91.2  | 62.7  | 116.5 |
| 131      | 87.9  | 61.0  | 113.2 |
| 166      | 127.5 | 89.5  | 166.3 |

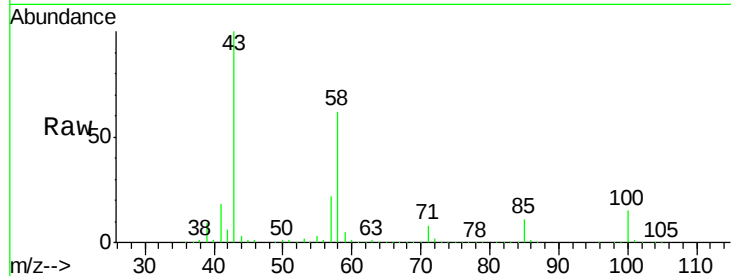




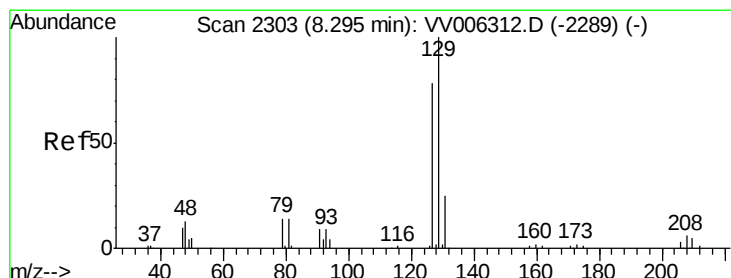
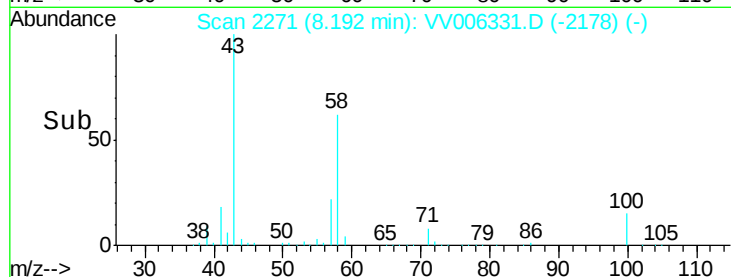
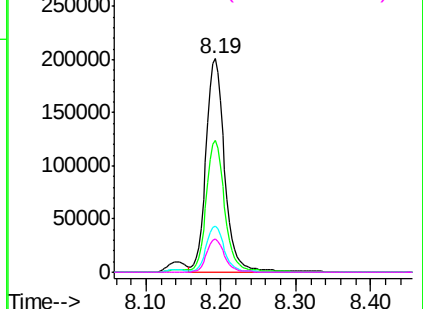
#48  
2-Hexanone  
Concen: 50.952 ug/L  
RT: 8.19 min Scan# 2271  
Delta R.T. 0.00 min  
Lab File: VV006331.D  
Acq: 16 Jun 2018 19:58

Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD00569

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 43    | Resp: | 346918 |
| Ion      | Ratio | Lower | Upper  |
| 43       | 100   |       |        |
| 58       | 60.9  | 48.6  | 72.8   |
| 57       | 21.0  | 17.5  | 26.3   |
| 100      | 15.3  | 12.6  | 18.8   |

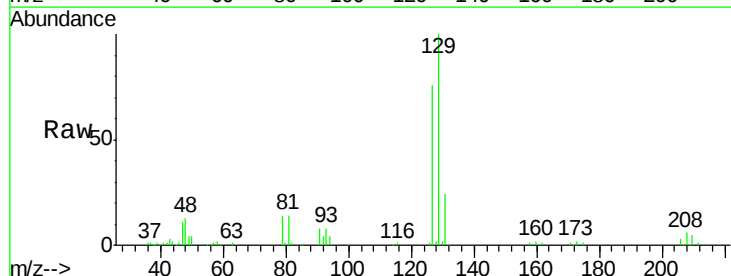


Abundance Ion 43.05 (42.75 to 43.75): VV006331.D (-2178) (-)  
Ion 58.05 (57.75 to 58.75): VV006331.D (-2178) (-)  
Ion 57.20 (56.90 to 57.90): VV006331.D (-2178) (-)  
Ion 100.15 (99.85 to 100.85): VV006331.D (-2178) (-)

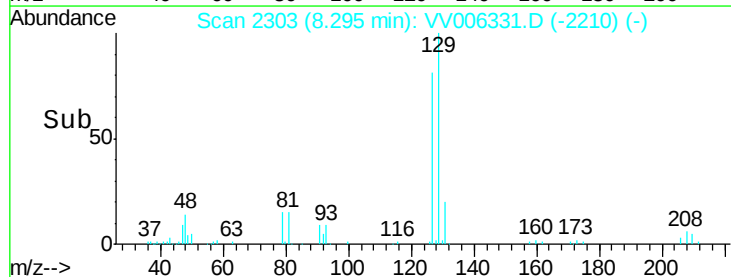
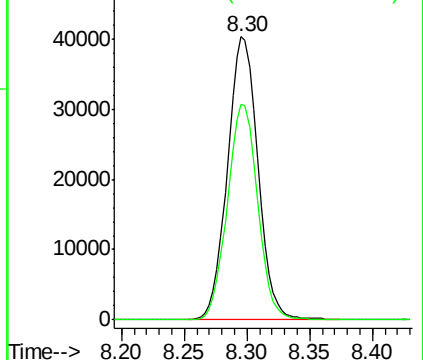


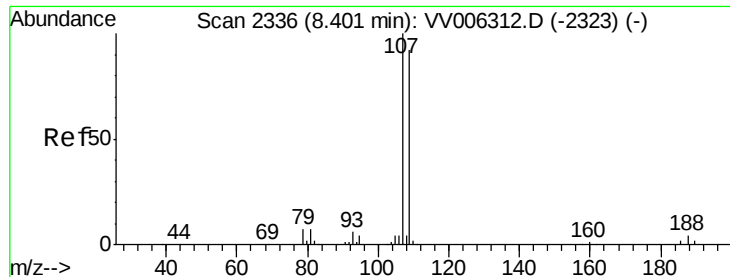
#49  
Dibromochloromethane  
Concen: 4.075 ug/L  
RT: 8.30 min Scan# 2303  
Delta R.T. 0.00 min  
Lab File: VV006331.D  
Acq: 16 Jun 2018 19:58

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 129   | Resp: | 68017 |
| Ion      | Ratio | Lower | Upper |
| 129      | 100   |       |       |
| 127      | 76.0  | 55.2  | 102.4 |



Abundance Ion 128.95 (128.65 to 129.65): VV006331.D (-2210) (-)  
Ion 126.90 (126.60 to 127.60): VV006331.D (-2210) (-)

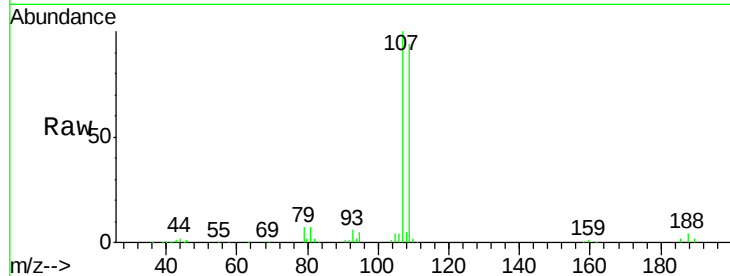




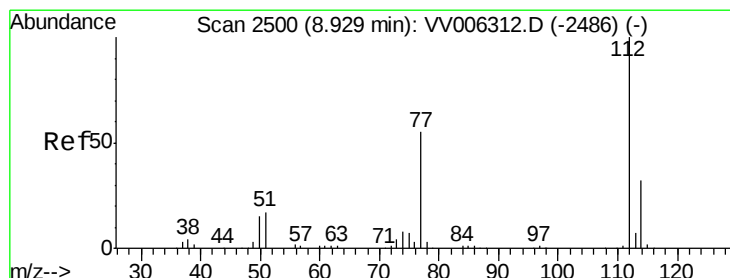
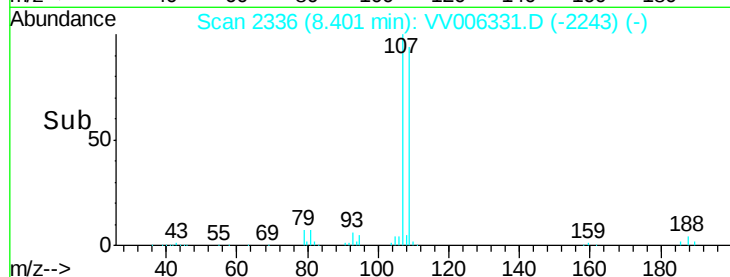
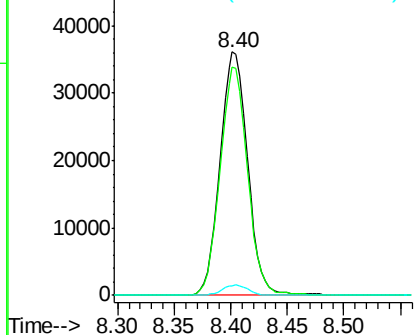
#50  
1,2-Dibromoethane  
Concen: 4.975 ug/L  
RT: 8.40 min Scan# 2336  
Delta R.T. 0.00 min  
Lab File: VV006331.D  
Acq: 16 Jun 2018 19:58

Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD00569

Tgt Ion:107 Resp: 61447  
Ion Ratio Lower Upper  
107 100  
109 93.8 66.8 124.2  
188 4.1 3.4 5.0

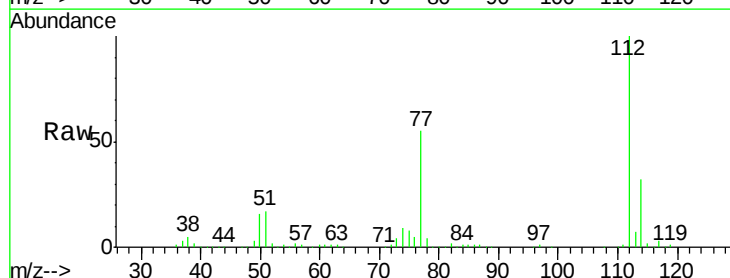


Abundance Ion 106.95 (106.65 to 107.65): V  
Ion 109.00 (108.70 to 109.70): V  
Ion 187.90 (187.60 to 188.60): V

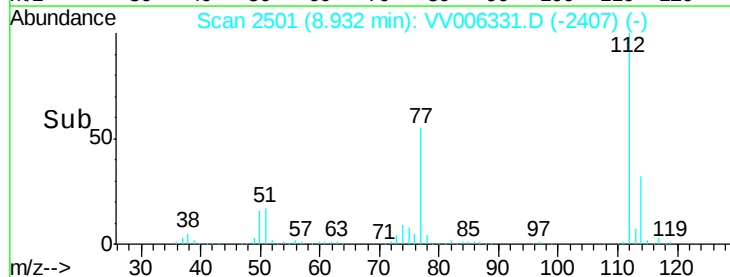
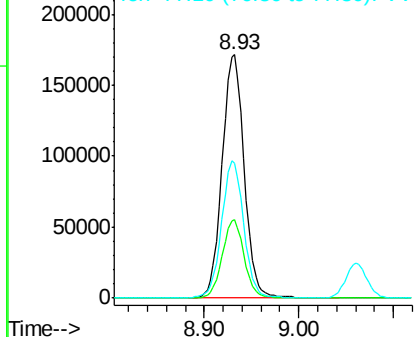


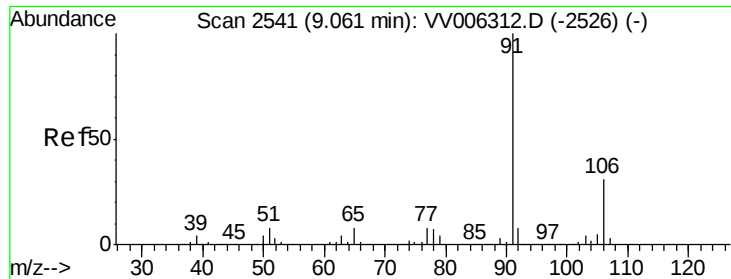
#51  
Chlorobenzene  
Concen: 5.031 ug/L  
RT: 8.93 min Scan# 2501  
Delta R.T. 0.00 min  
Lab File: VV006331.D  
Acq: 16 Jun 2018 19:58

Tgt Ion:112 Resp: 278749  
Ion Ratio Lower Upper  
112 100  
114 32.1 22.2 41.2  
77 55.5 45.2 67.8



Abundance Ion 112.10 (111.80 to 112.80): V  
Ion 114.05 (113.75 to 114.75): V  
Ion 77.10 (76.80 to 77.80): V





#52

Ethylbenzene

Concen: 4.826 ug/L

RT: 9.06 min Scan# 2541

Delta R.T. 0.00 min

Lab File: VV006331.D

Acq: 16 Jun 2018 19:58

Instrument :

MSVOA\_V

ClientSampleId :

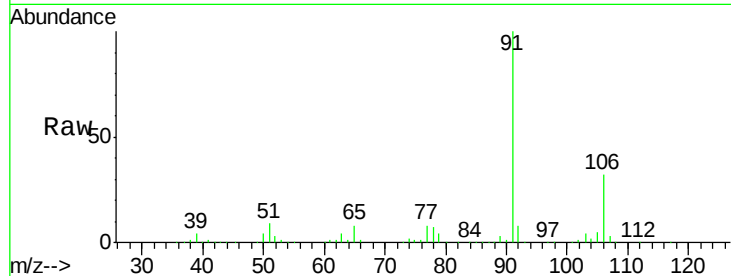
VSTD00569

Tgt Ion: 91 Resp: 464049

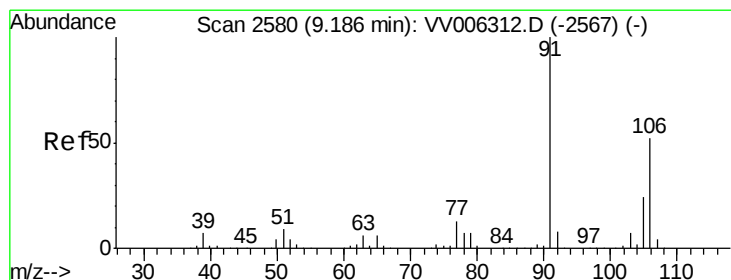
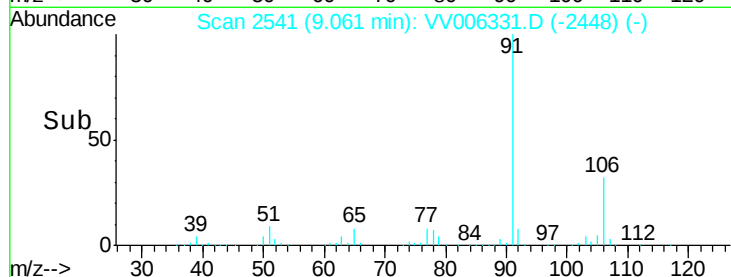
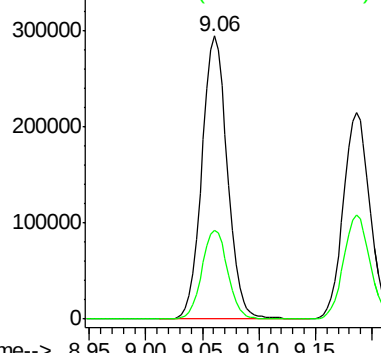
Ion Ratio Lower Upper

91 100

106 31.5 21.9 40.7



Abundance Ion 91.15 (90.85 to 91.85): VV006331.D (-2448) (-)



#53

m,p-xylene

Concen: 4.744 ug/L

RT: 9.19 min Scan# 2580

Delta R.T. 0.00 min

Lab File: VV006331.D

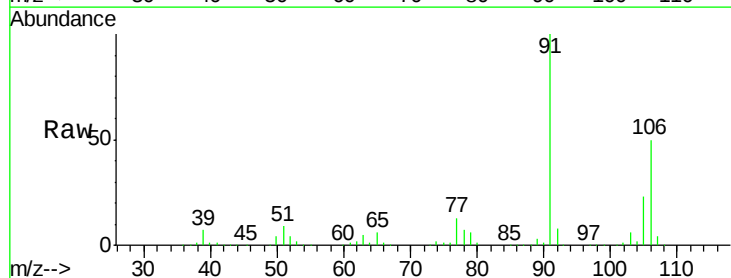
Acq: 16 Jun 2018 19:58

Tgt Ion: 106 Resp: 177941

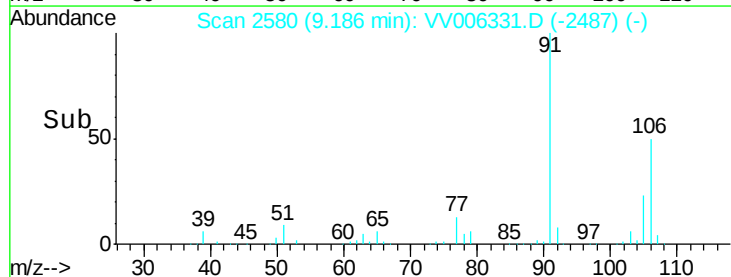
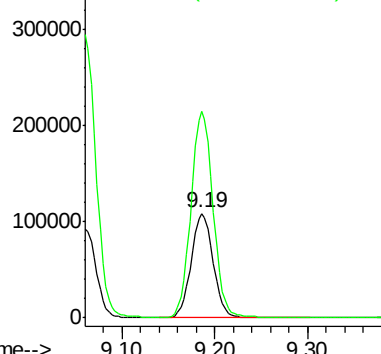
Ion Ratio Lower Upper

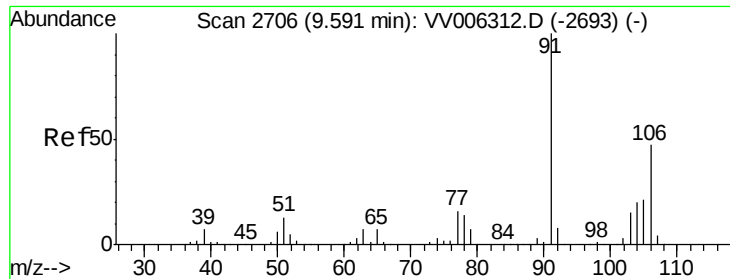
106 100

91 198.4 139.7 259.4



Abundance Ion 106.15 (105.85 to 106.85): VV006331.D (-2487) (-)





#54

o-xylene

Concen: 4.877 ug/L

RT: 9.59 min Scan# 2707

Delta R.T. 0.00 min

Lab File: VV006331.D

Acq: 16 Jun 2018 19:58

Instrument :

MSVOA\_V

ClientSampleId :

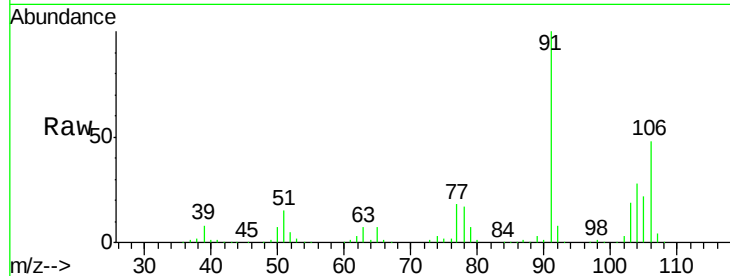
VSTD00569

Tgt Ion:106 Resp: 178914

Ion Ratio Lower Upper

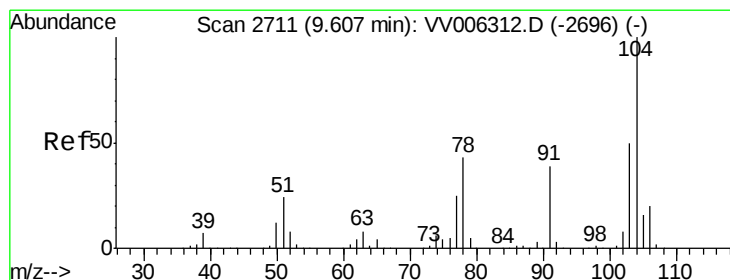
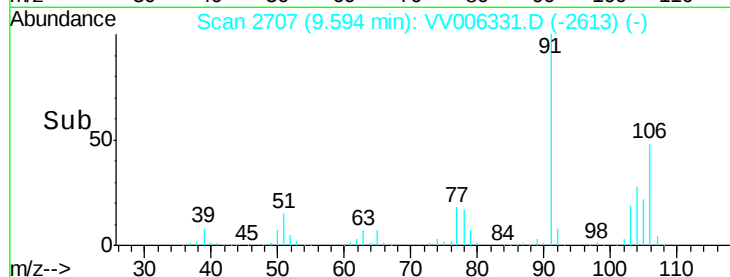
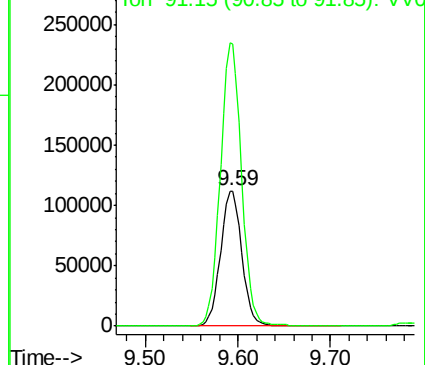
106 100

91 208.2 147.9 274.7



Abundance Ion 106.15 (105.85 to 106.85): V

Ion 91.15 (90.85 to 91.85): VV0



#55

Styrene

Concen: 4.855 ug/L

RT: 9.61 min Scan# 2712

Delta R.T. 0.00 min

Lab File: VV006331.D

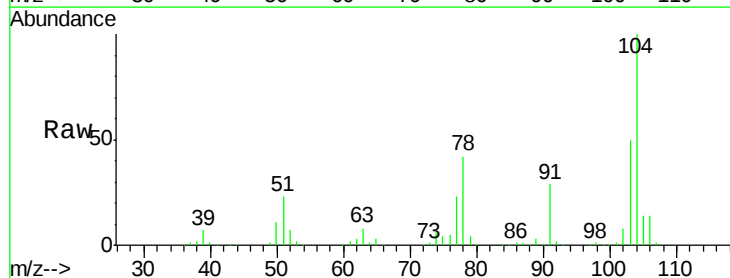
Acq: 16 Jun 2018 19:58

Tgt Ion:104 Resp: 292915

Ion Ratio Lower Upper

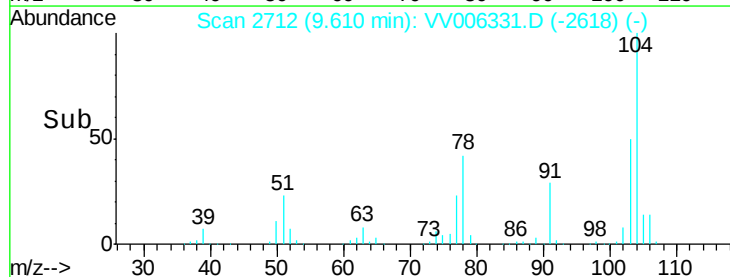
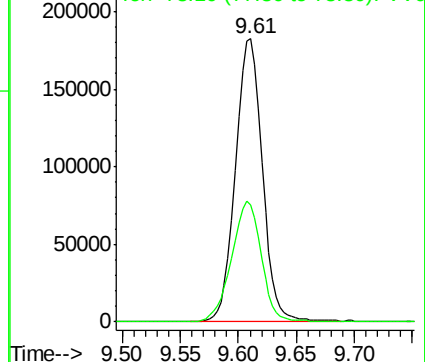
104 100

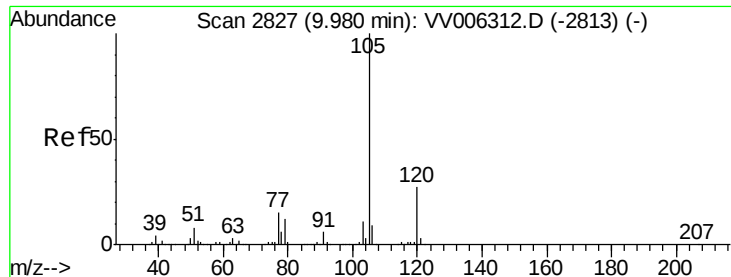
78 41.5 30.6 56.8



Abundance Ion 104.10 (103.80 to 104.80): V

Ion 78.10 (77.80 to 78.80): VV0





#56

Isopropylbenzene

Concen: 4.841 ug/L

RT: 9.98 min Scan# 2827

Delta R.T. 0.00 min

Lab File: VV006331.D

Acq: 16 Jun 2018 19:58

Instrument :

MSVOA\_V

ClientSampleId :

VSTD00569

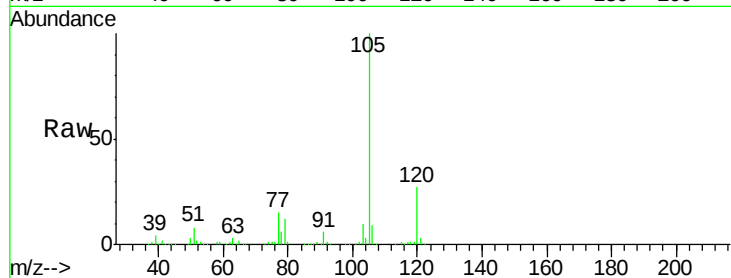
Tgt Ion: 105 Resp: 467642

Ion Ratio Lower Upper

105 100

120 27.0 21.4 32.2

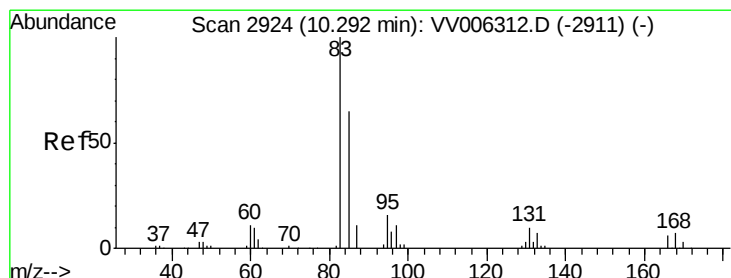
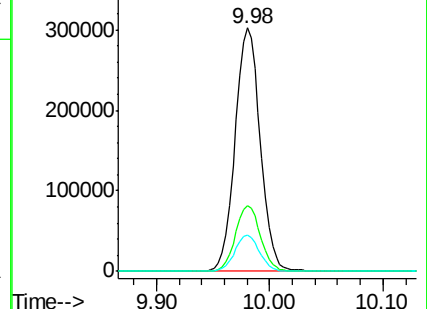
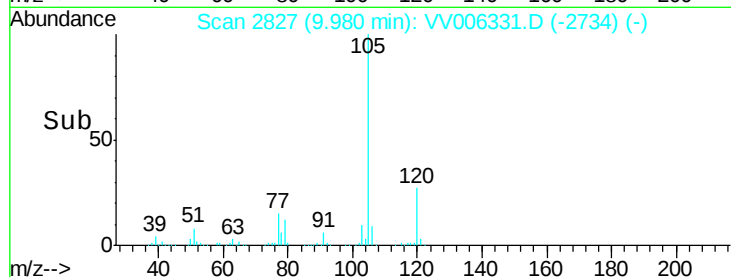
77 14.8 11.9 17.9



Abundance Ion 105.05 (104.75 to 105.75): V

Ion 120.10 (119.80 to 120.80): V

Ion 77.10 (76.80 to 77.80): V



#58

1,1,2,2-Tetrachloroethane

Concen: 4.575 ug/L

RT: 10.29 min Scan# 2924

Delta R.T. 0.00 min

Lab File: VV006331.D

Acq: 16 Jun 2018 19:58

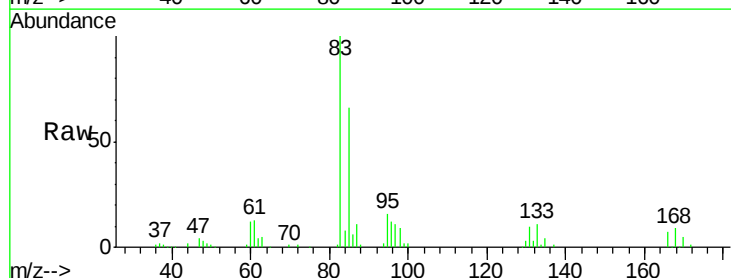
Tgt Ion: 83 Resp: 69476

Ion Ratio Lower Upper

83 100

85 65.9 45.0 83.6

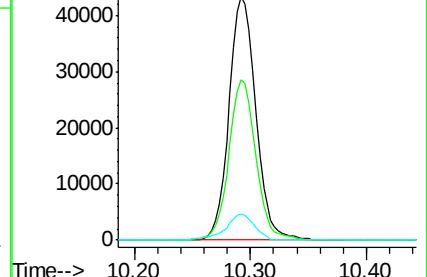
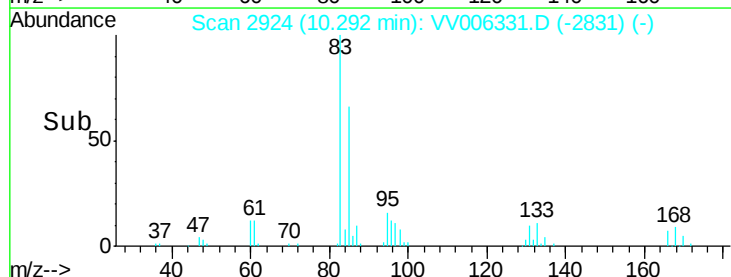
131 10.5 8.3 12.5

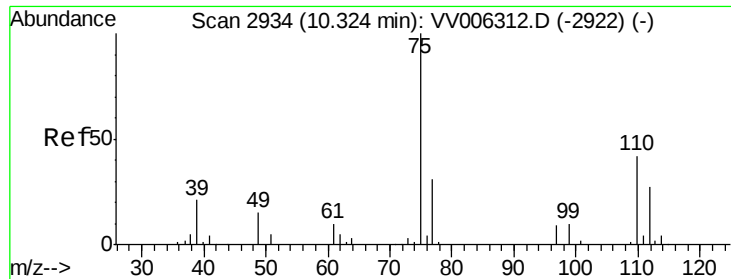


Abundance Ion 82.95 (82.65 to 83.65): VV0

Ion 85.00 (84.70 to 85.70): VV0

Ion 130.95 (130.65 to 131.65): V

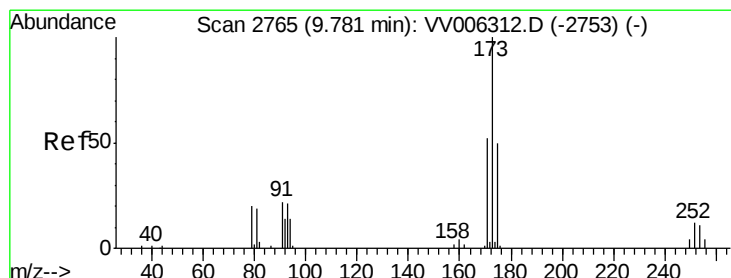
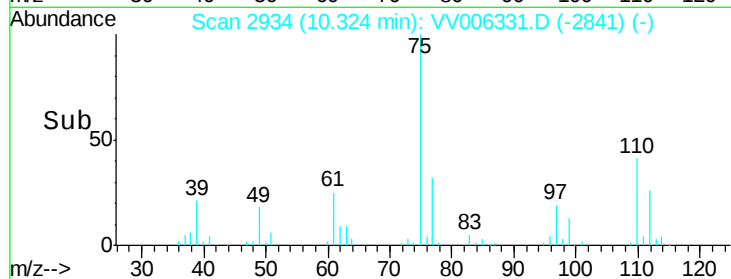
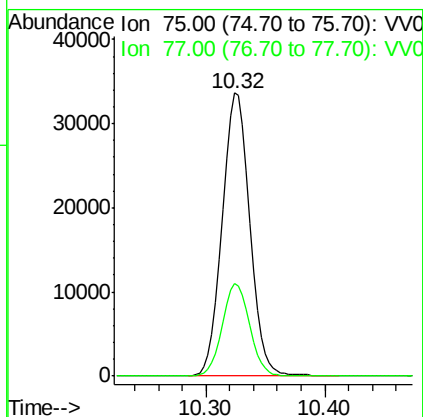
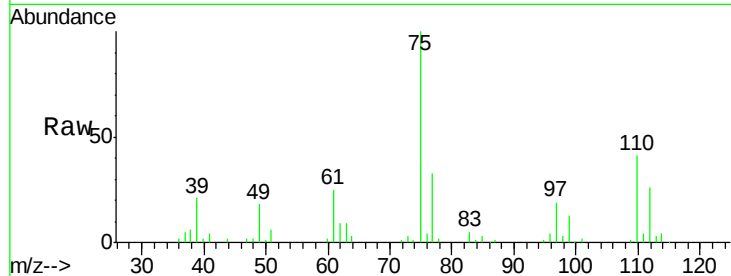




#59  
 1,2,3-Trichloropropane  
 Concen: 5.136 ug/L  
 RT: 10.32 min Scan# 2934  
 Delta R.T. 0.00 min  
 Lab File: VV006331.D  
 Acq: 16 Jun 2018 19:58

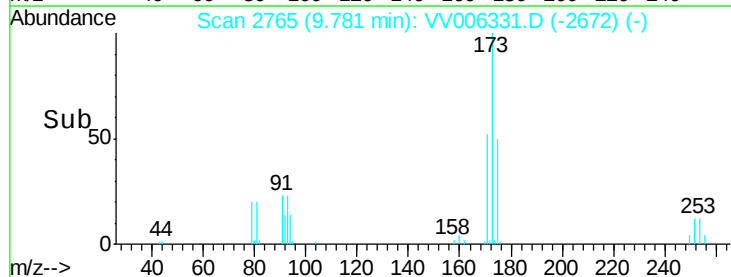
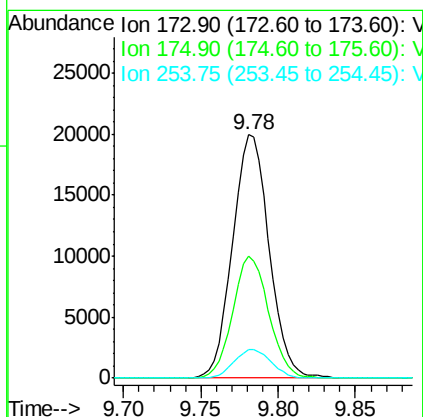
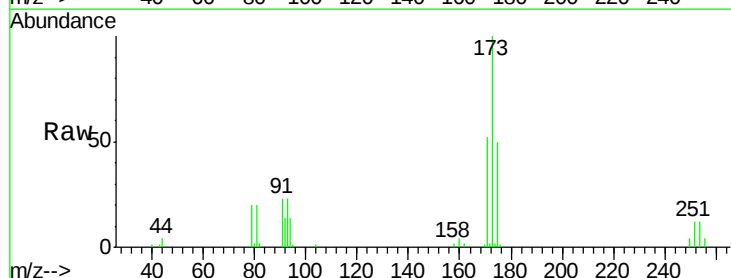
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD00569

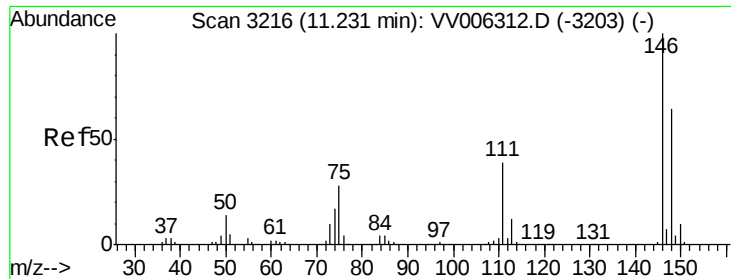
Tgt Ion: 75 Resp: 54206  
 Ion Ratio Lower Upper  
 75 100  
 77 32.4 25.7 38.5



#61  
 Bromoform  
 Concen: 3.503 ug/L  
 RT: 9.78 min Scan# 2765  
 Delta R.T. 0.00 min  
 Lab File: VV006331.D  
 Acq: 16 Jun 2018 19:58

Tgt Ion: 173 Resp: 32694  
 Ion Ratio Lower Upper  
 173 100  
 175 49.2 39.3 58.9  
 254 11.8 9.1 13.7





#62

1,3-Dichlorobenzene

Concen: 4.956 ug/L

RT: 11.23 min Scan# 3216

Delta R.T. 0.00 min

Lab File: VV006331.D

Acq: 16 Jun 2018 19:58

Instrument :

MSVOA\_V

ClientSampleId :

VSTD00569

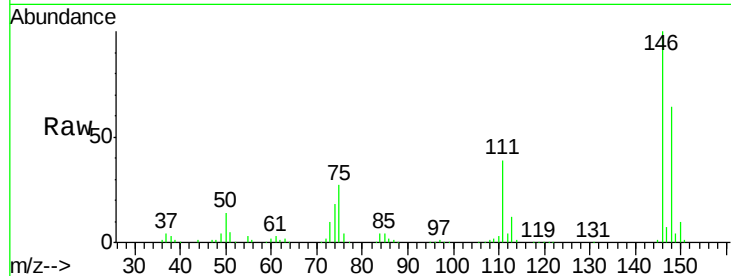
Tgt Ion:146 Resp: 214719

Ion Ratio Lower Upper

146 100

111 38.6 27.6 51.2

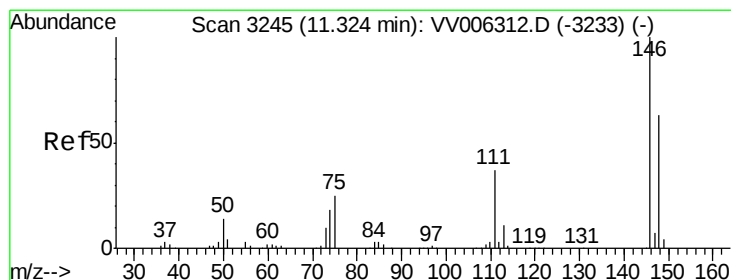
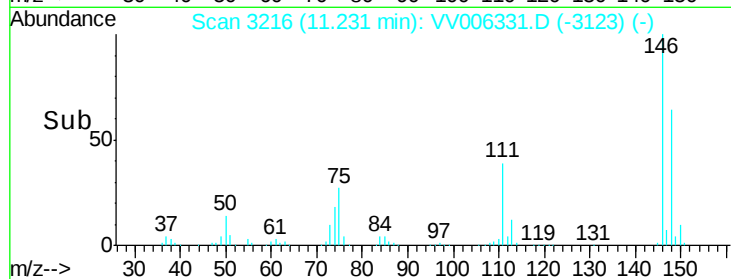
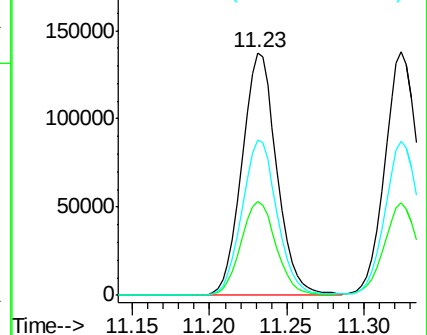
148 64.1 45.1 83.7



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



#63

1,4-Dichlorobenzene

Concen: 4.975 ug/L

RT: 11.32 min Scan# 3245

Delta R.T. 0.00 min

Lab File: VV006331.D

Acq: 16 Jun 2018 19:58

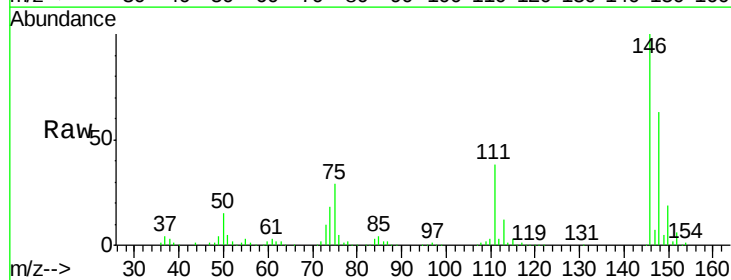
Tgt Ion:146 Resp: 213215

Ion Ratio Lower Upper

146 100

111 37.8 26.9 50.1

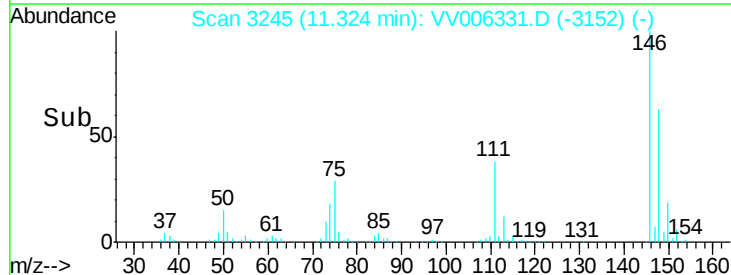
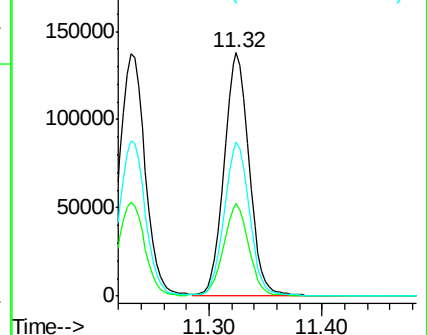
148 63.2 44.8 83.2

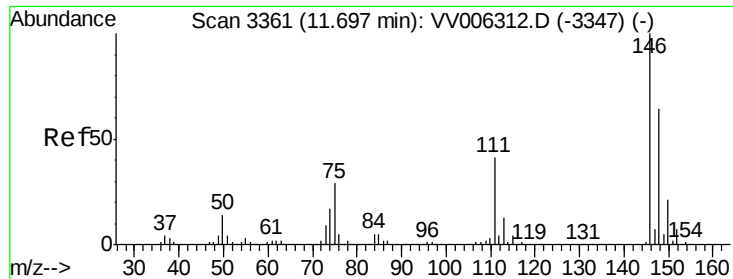


Abundance Ion 145.95 (145.65 to 146.65): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V





#65

1,2-Dichlorobenzene

Concen: 5.094 ug/L

RT: 11.70 min Scan# 3361

Delta R.T. 0.00 min

Lab File: VV006331.D

Acq: 16 Jun 2018 19:58

Instrument :

MSVOA\_V

ClientSampleId :

VSTD00569

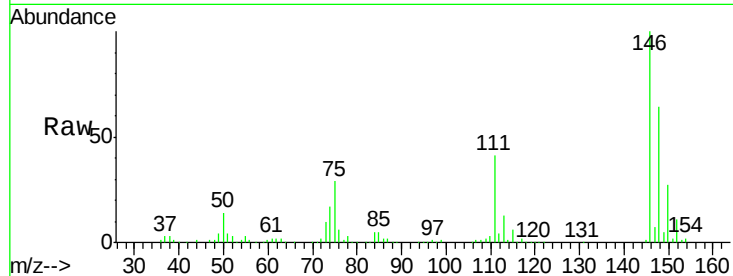
Tgt Ion: 146 Resp: 203651

Ion Ratio Lower Upper

146 100

111 40.7 32.8 49.2

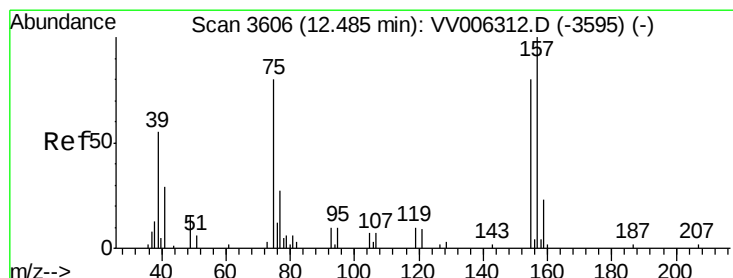
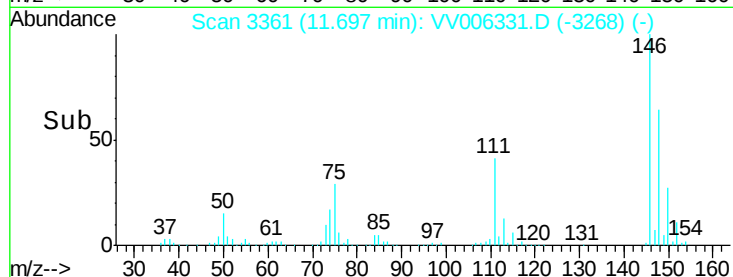
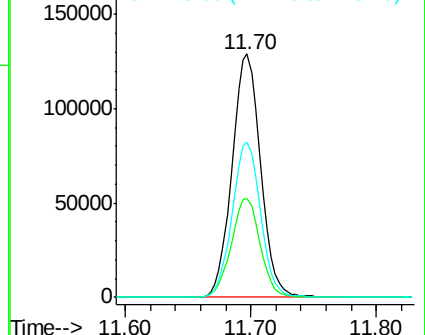
148 63.7 51.4 77.2



Abundance Ion 145.95 (145.65 to 146.65): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V



#66

1,2-Dibromo-3-chloropropane

Concen: 3.314 ug/L

RT: 12.48 min Scan# 3605

Delta R.T. -0.00 min

Lab File: VV006331.D

Acq: 16 Jun 2018 19:58

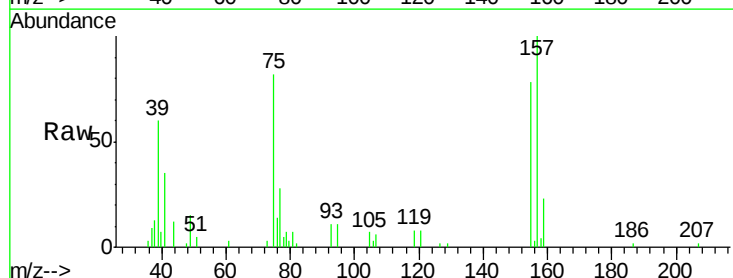
Tgt Ion: 75 Resp: 8706

Ion Ratio Lower Upper

75 100

155 95.2 70.3 105.5

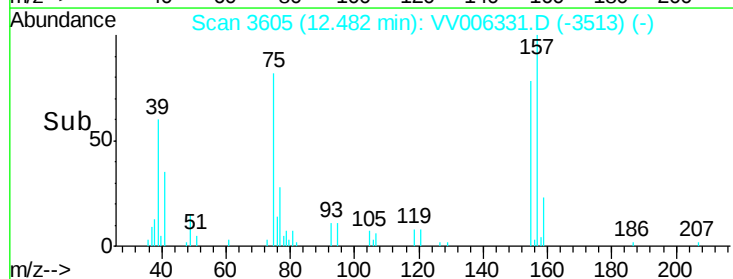
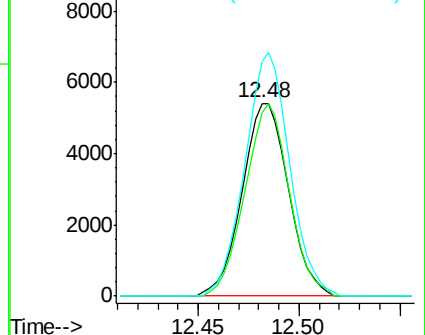
157 121.8 93.8 140.6

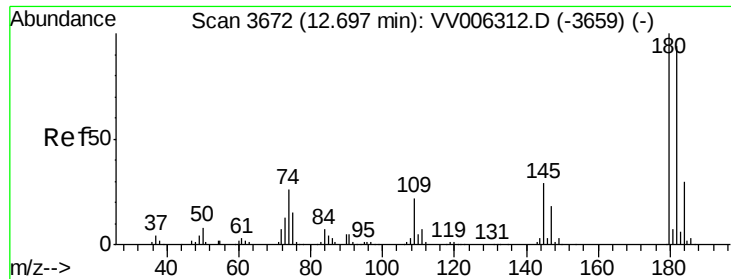


Abundance Ion 75.05 (74.75 to 75.75): VV0

Ion 154.95 (154.65 to 155.65): V

Ion 156.90 (156.60 to 157.60): V

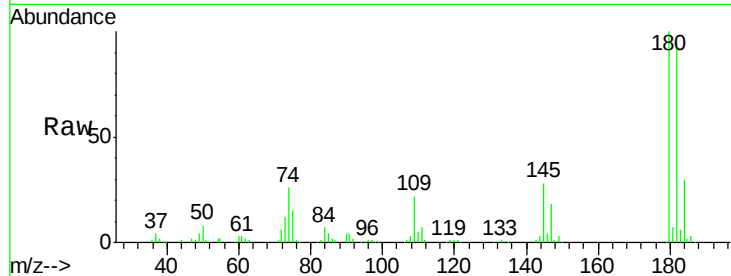




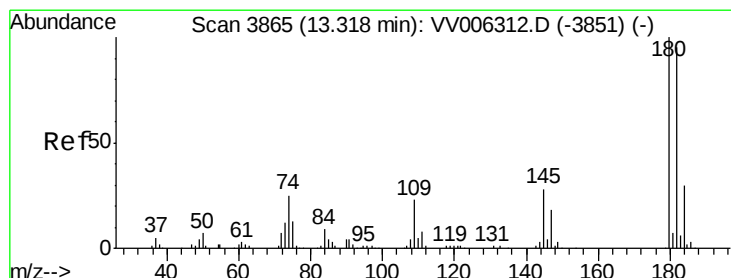
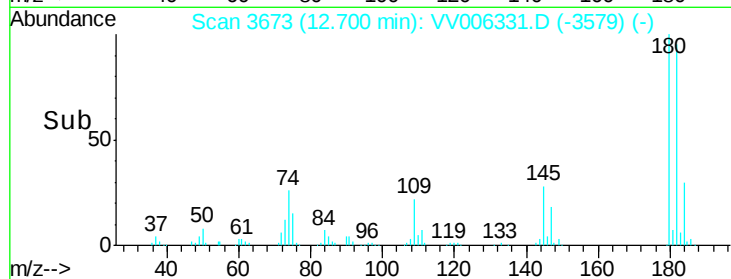
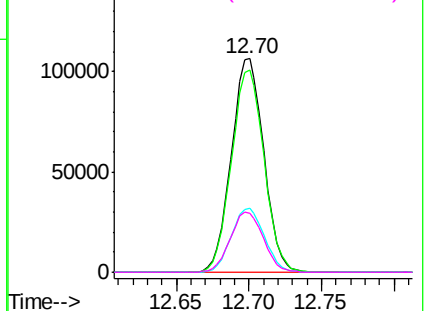
#67  
 1,3,5-Trichlorobenzene  
 Concen: 4.949 ug/L  
 RT: 12.70 min Scan# 3673  
 Delta R.T. 0.00 min  
 Lab File: VV006331.D  
 Acq: 16 Jun 2018 19:58

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD00569

Tgt Ion:180 Resp: 165045  
 Ion Ratio Lower Upper  
 180 100  
 182 95.3 75.4 113.2  
 184 30.6 24.3 36.5  
 145 28.6 23.1 34.7

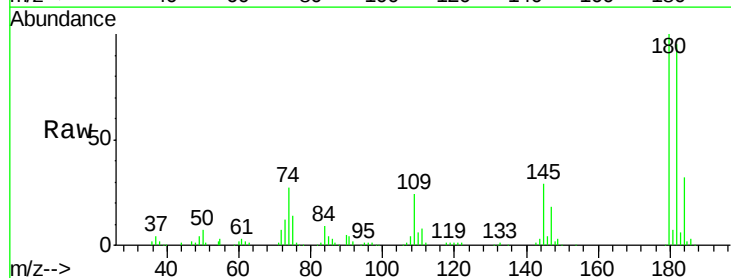


Abundance Ion 180.00 (179.70 to 180.70): V  
 Ion 182.00 (181.70 to 182.70): V  
 Ion 184.00 (183.70 to 184.70): V  
 Ion 145.00 (144.70 to 145.70): V

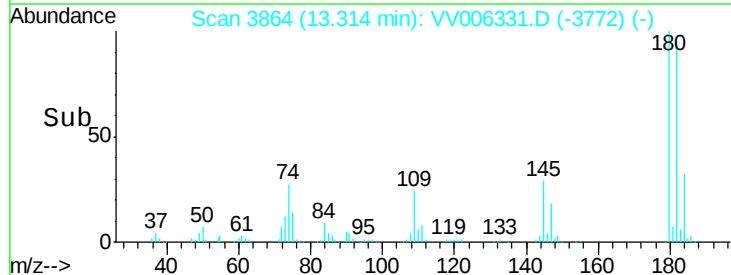
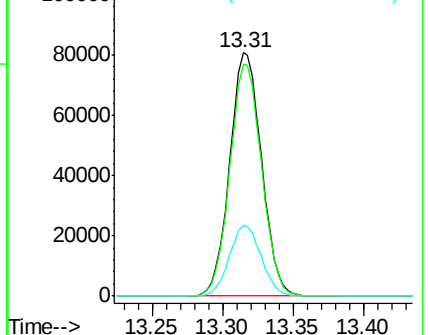


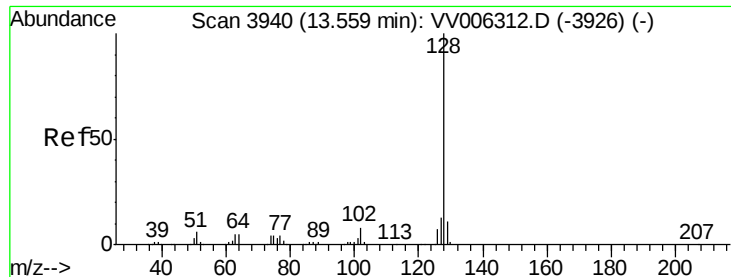
#68  
 1,2,4-trichlorobenzene  
 Concen: 4.943 ug/L  
 RT: 13.31 min Scan# 3864  
 Delta R.T. -0.00 min  
 Lab File: VV006331.D  
 Acq: 16 Jun 2018 19:58

Tgt Ion:180 Resp: 127467  
 Ion Ratio Lower Upper  
 180 100  
 182 95.1 76.7 115.1  
 145 29.2 23.7 35.5



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: 4.414 ug/L

RT: 13.56 min Scan# 3940

Delta R.T. 0.00 min

Lab File: VV006331.D

Acq: 16 Jun 2018 19:58

Instrument :

MSVOA\_V

ClientSampleId :

VSTD00569

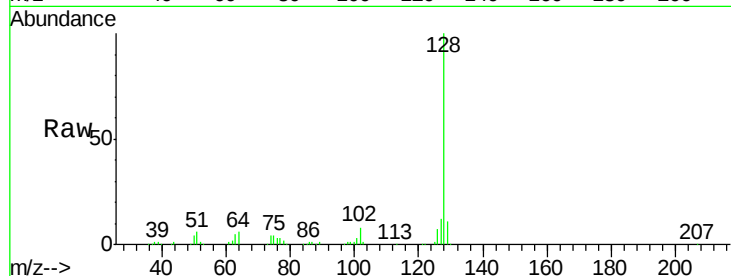
Tgt Ion:128 Resp: 191514

Ion Ratio Lower Upper

128 100

129 10.8 8.7 13.1

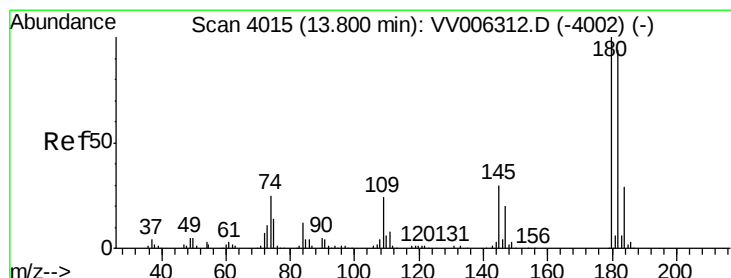
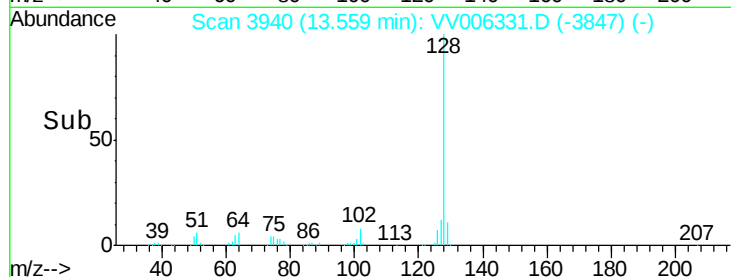
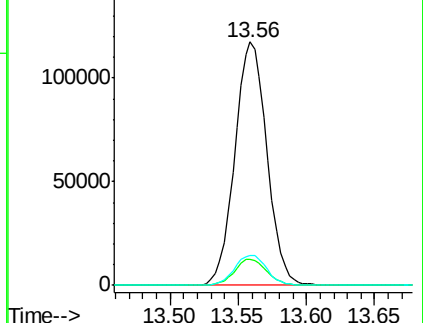
127 12.5 10.1 15.1



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: 5.036 ug/L

RT: 13.80 min Scan# 4015

Delta R.T. 0.00 min

Lab File: VV006331.D

Acq: 16 Jun 2018 19:58

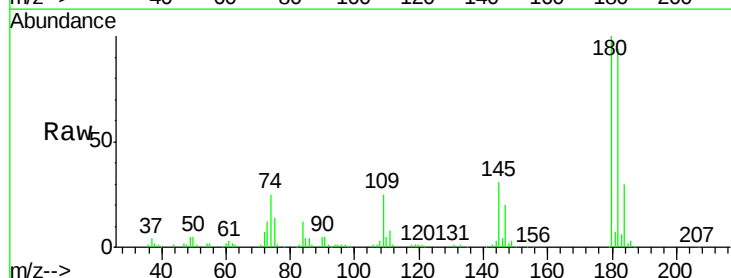
Tgt Ion:180 Resp: 119305

Ion Ratio Lower Upper

180 100

182 94.1 76.2 114.2

145 30.5 25.0 37.4



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

