

Data File : VV007043.D  
Acq On : 16 Aug 2018 15:07  
Operator : SY/MD  
Sample : VSTDCCC005EC  
Misc : 25.0 mL/MSVOA\_V/WATER  
ALS Vial : 11 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD00562

Quant Time: Aug 17 01:15:43 2018  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVTR080918WMA.M  
Quant Title : TRACE VOA SOM01.0  
QLast Update : Fri Aug 17 01:13:44 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.67  | 114  | 233030   | 5.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 8.90  | 117  | 227586   | 5.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.30 | 152  | 103971   | 5.00 | ug/L  | 0.00     |

#### System Monitoring Compounds

|                                |        |       |          |          |      |        |
|--------------------------------|--------|-------|----------|----------|------|--------|
| 4) Vinyl Chloride-d3           | 1.32   | 65    | 66336    | 4.41     | ug/L | 0.00   |
| Spiked Amount                  | 5.000  | Range | 40 - 130 | Recovery | =    | 88.20% |
| 7) Chloroethane-d5             | 1.58   | 69    | 54997    | 4.31     | ug/L | 0.00   |
| Spiked Amount                  | 5.000  | Range | 65 - 130 | Recovery | =    | 86.20% |
| 11) 1,1-Dichloroethene-d2      | 2.13   | 63    | 128711   | 4.56     | ug/L | 0.00   |
| Spiked Amount                  | 5.000  | Range | 60 - 125 | Recovery | =    | 91.20% |
| 20) 2-Butanone-d5              | 3.97   | 46    | 143075   | 33.07    | ug/L | 0.00   |
| Spiked Amount                  | 50.000 | Range | 40 - 130 | Recovery | =    | 66.14% |
| 24) Chloroform-d               | 4.41   | 84    | 133728   | 4.38     | ug/L | 0.00   |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 87.60% |
| 26) 1,2-Dichloroethane-d4      | 5.09   | 65    | 64581    | 4.19     | ug/L | 0.00   |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 83.80% |
| 32) Benzene-d6                 | 5.10   | 84    | 256468   | 4.39     | ug/L | 0.00   |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 87.80% |
| 36) 1,2-Dichloropropane-d6     | 6.12   | 67    | 82781    | 4.14     | ug/L | 0.00   |
| Spiked Amount                  | 5.000  | Range | 60 - 140 | Recovery | =    | 82.80% |
| 41) Toluene-d8                 | 7.36   | 98    | 236017   | 4.74     | ug/L | 0.00   |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 94.80% |
| 43) trans-1,3-Dichloropropene- | 7.67   | 79    | 28579    | 4.11     | ug/L | 0.00   |
| Spiked Amount                  | 5.000  | Range | 55 - 130 | Recovery | =    | 82.20% |
| 46) 2-Hexanone-d5              | 8.15   | 63    | 91472    | 32.17    | ug/L | 0.00   |
| Spiked Amount                  | 50.000 | Range | 45 - 130 | Recovery | =    | 64.34% |
| 57) 1,1,2,2-Tetrachloroethane- | 10.27  | 84    | 59882    | 3.84     | ug/L | 0.00   |
| Spiked Amount                  | 5.000  | Range | 65 - 120 | Recovery | =    | 76.80% |
| 64) 1,2-Dichlorobenzene-d4     | 11.68  | 152   | 74071    | 4.10     | ug/L | 0.00   |
| Spiked Amount                  | 5.000  | Range | 80 - 120 | Recovery | =    | 82.00% |

#### Target Compounds

|                                |      |     |        |             | Qvalue |
|--------------------------------|------|-----|--------|-------------|--------|
| 2) Dichlorodifluoromethane     | 1.14 | 85  | 113646 | 5.008 ug/L  | 99     |
| 3) Chloromethane               | 1.25 | 50  | 115006 | 5.266 ug/L  | 96     |
| 5) Vinyl chloride              | 1.32 | 62  | 111698 | 4.949 ug/L  | 95     |
| 6) Bromomethane                | 1.54 | 94  | 31519  | 6.433 ug/L  | 100    |
| 8) Chloroethane                | 1.60 | 64  | 68147  | 4.976 ug/L  | 99     |
| 9) Trichlorofluoromethane      | 1.77 | 101 | 147805 | 5.146 ug/L  | 98     |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.14 | 101 | 89794  | 5.209 ug/L  | 99     |
| 12) 1,1-Dichloroethene         | 2.14 | 96  | 84236  | 5.034 ug/L  | 94     |
| 13) Acetone                    | 2.21 | 43  | 91102  | 40.900 ug/L | 97     |
| 14) Carbon disulfide           | 2.32 | 76  | 250099 | 4.527 ug/L  | 99     |
| 15) Methyl Acetate             | 2.47 | 43  | 27867  | 4.445 ug/L  | 99     |
| 16) Methylene chloride         | 2.54 | 84  | 95813  | 4.749 ug/L  | 99     |
| 17) Methyl tert-butyl Ether    | 2.82 | 73  | 198608 | 4.950 ug/L  | 98     |
| 18) trans-1,2-Dichloroethene   | 2.79 | 96  | 92007  | 5.135 ug/L  | 98     |
| 19) 1,1-Dichloroethane         | 3.23 | 63  | 162086 | 5.011 ug/L  | 98     |
| 21) 2-Butanone                 | 4.05 | 43  | 201068 | 41.576 ug/L | 93     |
| 22) cis-1,2-Dichloroethene     | 3.97 | 96  | 99154  | 4.877 ug/L  | 98     |

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QLast Update : Fri Aug 17 01:13:44 2018  
Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|--------|--------|----------|
| 23) Bromochloromethane         | 4.31  | 128  | 44861    | 5.413  | ug/L   | 91       |
| 25) Chloroform                 | 4.43  | 83   | 184188   | 5.204  | ug/L   | 100      |
| 27) 1,2-Dichloroethane         | 5.19  | 62   | 110304   | 4.997  | ug/L   | 98       |
| 29) 1,1,1-Trichloroethane      | 4.66  | 97   | 156086   | 5.143  | ug/L   | 98       |
| 30) Cyclohexane                | 4.73  | 56   | 139929   | 4.430  | ug/L   | 99       |
| 31) Carbon tetrachloride       | 4.88  | 117  | 131589   | 5.171  | ug/L   | 100      |
| 33) Benzene                    | 5.15  | 78   | 404900   | 5.135  | ug/L   | 100      |
| 34) Trichloroethene            | 5.96  | 95   | 93411    | 4.941  | ug/L   | 94       |
| 35) Methylcyclohexane          | 6.18  | 83   | 139227   | 4.587  | ug/L   | 99       |
| 37) 1,2-Dichloropropane        | 6.23  | 63   | 109415   | 5.070  | ug/L   | 99       |
| 38) Bromodichloromethane       | 6.56  | 83   | 123512   | 5.037  | ug/L   | 98       |
| 39) cis-1,3-Dichloropropene    | 7.08  | 75   | 125218   | 4.803  | ug/L   | 99       |
| 40) 4-Methyl-2-pentanone       | 7.29  | 43   | 545425   | 46.785 | ug/L   | 99       |
| 42) Toluene                    | 7.44  | 91   | 406047   | 5.359  | ug/L   | 99       |
| 44) trans-1,3-Dichloropropene  | 7.70  | 75   | 104128   | 4.866  | ug/L   | 98       |
| 45) 1,1,2-Trichloroethane      | 7.89  | 97   | 70708    | 5.036  | ug/L   | 96       |
| 47) Tetrachloroethene          | 8.02  | 164  | 79177    | 5.165  | ug/L   | 97       |
| 48) 2-Hexanone                 | 8.20  | 43   | 402871   | 48.998 | ug/L   | 97       |
| 49) Dibromochloromethane       | 8.30  | 129  | 77972    | 5.294  | ug/L   | 97       |
| 50) 1,2-Dibromoethane          | 8.40  | 107  | 60540    | 5.105  | ug/L # | 97       |
| 51) Chlorobenzene              | 8.93  | 112  | 246635   | 5.107  | ug/L   | 99       |
| 52) Ethylbenzene               | 9.06  | 91   | 376863   | 4.981  | ug/L   | 99       |
| 53) m,p-xylene                 | 9.19  | 106  | 145175   | 5.148  | ug/L   | 98       |
| 54) o-xylene                   | 9.59  | 106  | 138280   | 5.175  | ug/L   | 97       |
| 55) Styrene                    | 9.61  | 104  | 239056   | 5.307  | ug/L   | 97       |
| 56) Isopropylbenzene           | 9.98  | 105  | 355718   | 5.074  | ug/L   | 99       |
| 58) 1,1,2,2-Tetrachloroethane  | 10.29 | 83   | 86332    | 5.059  | ug/L   | 98       |
| 59) 1,2,3-Trichloropropane     | 10.32 | 75   | 60058    | 4.971  | ug/L   | 98       |
| 61) Bromoform                  | 9.78  | 173  | 41513    | 5.272  | ug/L   | 98       |
| 62) 1,3-Dichlorobenzene        | 11.23 | 146  | 169211   | 5.029  | ug/L   | 98       |
| 63) 1,4-Dichlorobenzene        | 11.32 | 146  | 174134   | 5.050  | ug/L   | 97       |
| 65) 1,2-Dichlorobenzene        | 11.70 | 146  | 172268   | 5.206  | ug/L   | 99       |
| 66) 1,2-Dibromo-3-chloropropan | 12.48 | 75   | 10798    | 4.596  | ug/L   | 93       |
| 67) 1,3,5-Trichlorobenzene     | 12.70 | 180  | 129276   | 5.077  | ug/L   | 98       |
| 68) 1,2,4-trichlorobenzene     | 13.32 | 180  | 88394    | 4.730  | ug/L   | 98       |
| 69) Naphthalene                | 13.56 | 128  | 109595   | 4.084  | ug/L   | 99       |
| 70) 1,2,3-Trichlorobenzene     | 13.80 | 180  | 87083    | 4.834  | ug/L   | 99       |

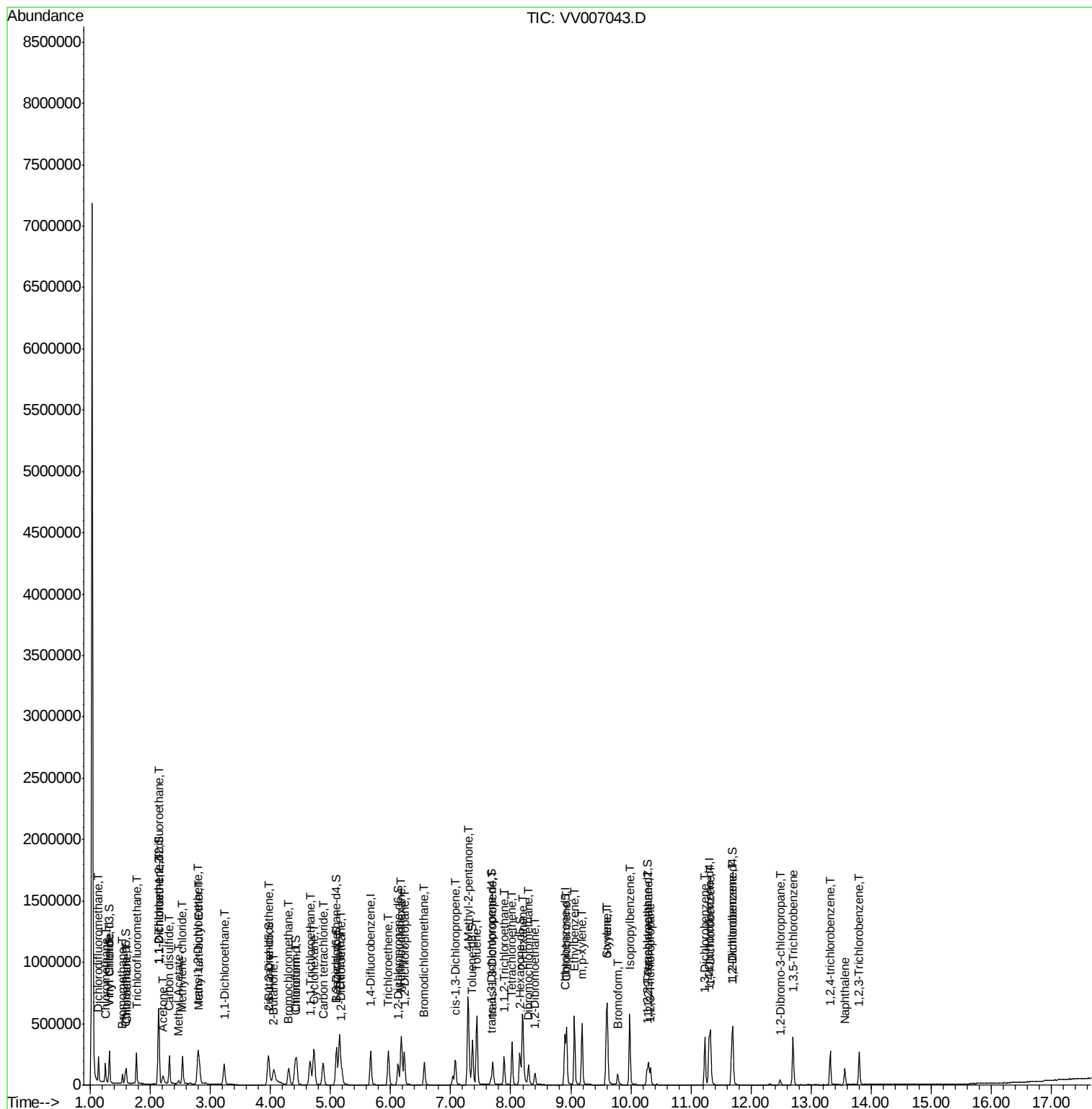
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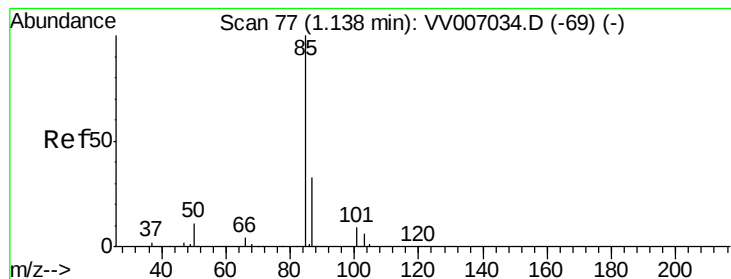
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```
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#2

Dichlorodifluoromethane

Concen: 5.008 ug/L

RT: 1.14 min Scan# 77

Delta R.T. 0.00 min

Lab File: VV007043.D

Acq: 16 Aug 2018 15:07

Instrument :

MSVOA\_V

ClientSampleId :

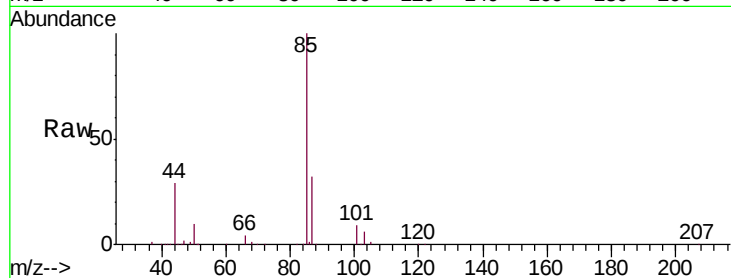
VSTD00562

Tgt Ion: 85 Resp: 113646

Ion Ratio Lower Upper

85 100

87 32.3 25.4 38.2



Abundance Ion 85.00 (84.70 to 85.70): VV007034.D (-69) (-)

Ion 87.00 (86.70 to 87.70): VV007034.D (-69) (-)

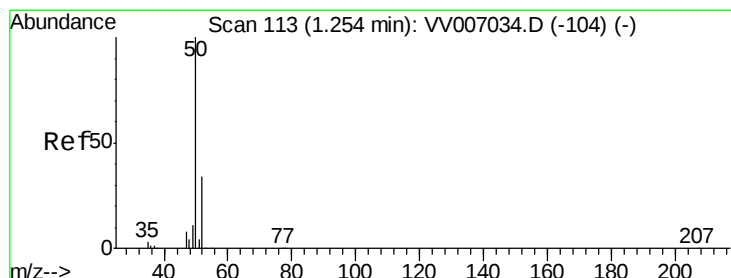
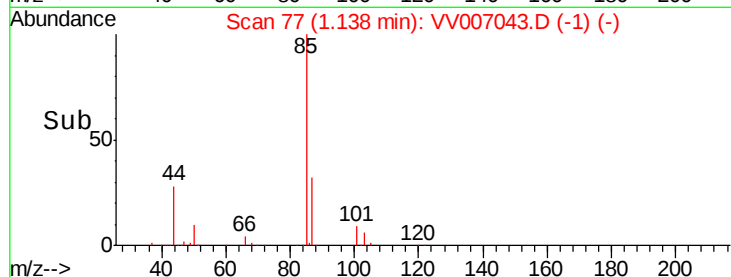
1.14

100000

50000

0

Time-->



#3

Chloromethane

Concen: 5.266 ug/L

RT: 1.25 min Scan# 112

Delta R.T. -0.00 min

Lab File: VV007043.D

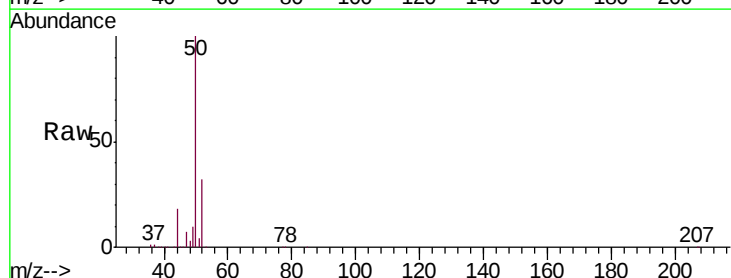
Acq: 16 Aug 2018 15:07

Tgt Ion: 50 Resp: 115006

Ion Ratio Lower Upper

50 100

52 31.7 23.6 43.8



Abundance Ion 50.05 (49.75 to 50.75): VV007034.D (-104) (-)

Ion 52.05 (51.75 to 52.75): VV007034.D (-104) (-)

1.25

120000

100000

80000

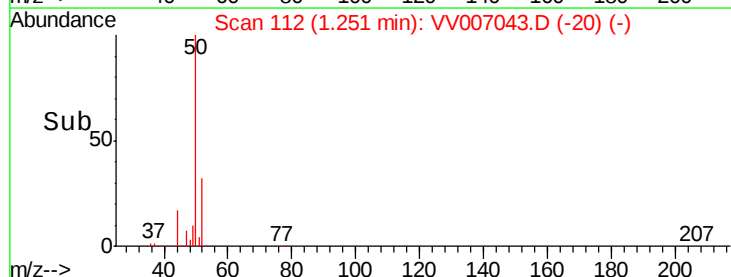
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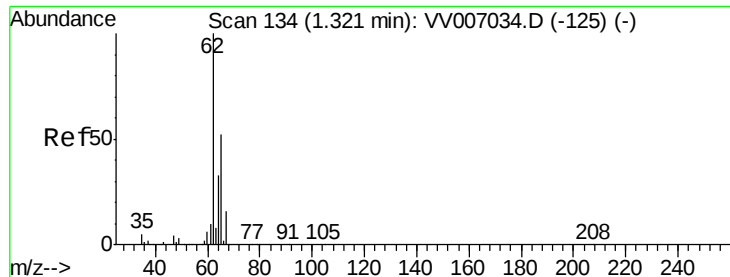
40000

20000

0

Time-->





#5

Vinyl chloride

Concen: 4.949 ug/L

RT: 1.32 min Scan# 134

Delta R.T. 0.00 min

Lab File: VV007043.D

Acq: 16 Aug 2018 15:07

Instrument :

MSVOA\_V

ClientSampleId :

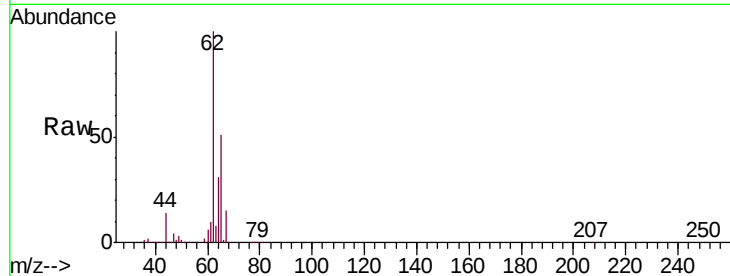
VSTD00562

Tgt Ion: 62 Resp: 111698

Ion Ratio Lower Upper

62 100

64 31.0 23.5 43.7



Abundance Ion 62.00 (61.70 to 62.70): VV007043.D (-125) (-)

Ion 64.10 (63.80 to 64.80): VV007043.D (-125) (-)

1.32

120000

100000

80000

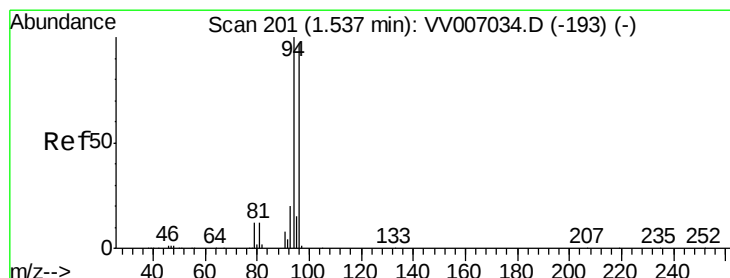
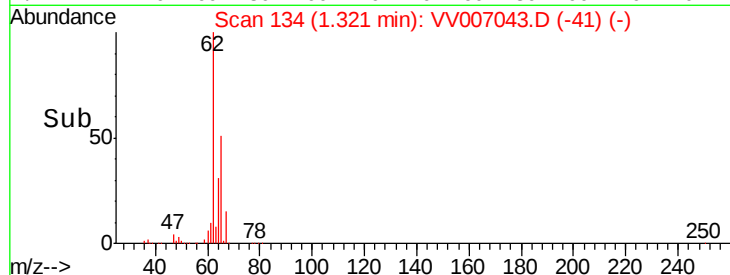
60000

40000

20000

0

Time--> 1.25 1.30 1.35 1.40 1.45



#6

Bromomethane

Concen: 6.433 ug/L

RT: 1.54 min Scan# 201

Delta R.T. 0.00 min

Lab File: VV007043.D

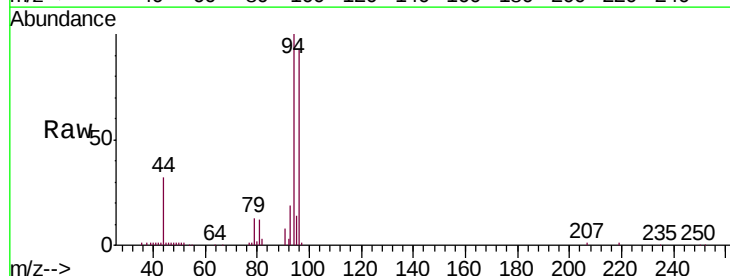
Acq: 16 Aug 2018 15:07

Tgt Ion: 94 Resp: 31519

Ion Ratio Lower Upper

94 100

96 92.7 65.0 120.6



Abundance Ion 94.00 (93.70 to 94.70): VV007043.D (-193) (-)

Ion 96.00 (95.70 to 96.70): VV007043.D (-193) (-)

1.54

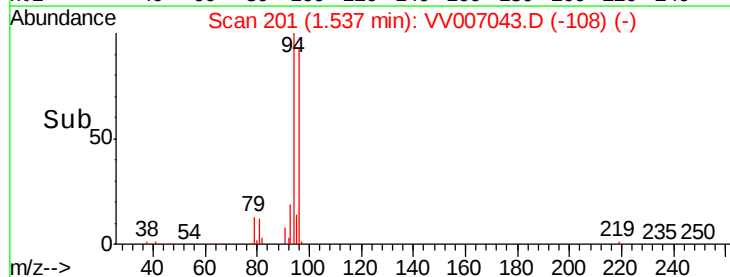
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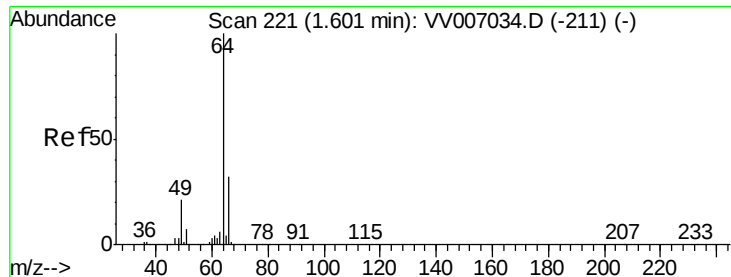
20000

10000

0

Time--> 1.50 1.55 1.60





#8

Chloroethane

Concen: 4.976 ug/L

RT: 1.60 min Scan# 221

Delta R.T. 0.00 min

Lab File: VV007043.D

Acq: 16 Aug 2018 15:07

Instrument :

MSVOA\_V

ClientSampleId :

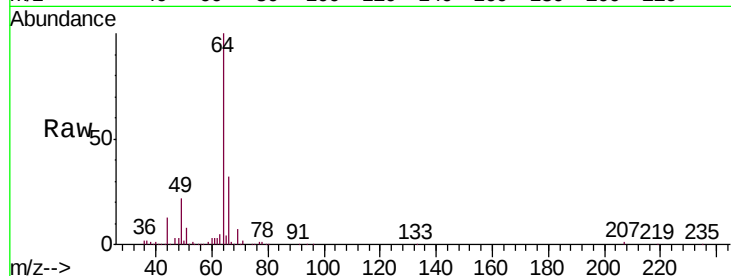
VSTD00562

Tgt Ion: 64 Resp: 68147

Ion Ratio Lower Upper

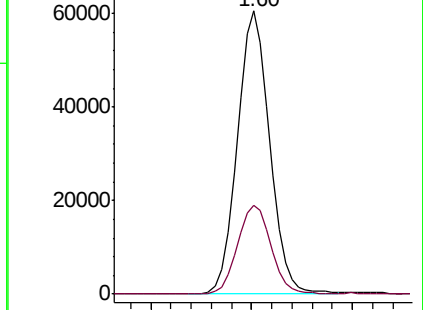
64 100

66 31.6 22.6 42.0

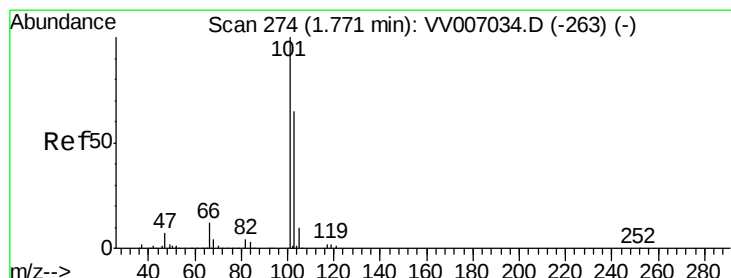
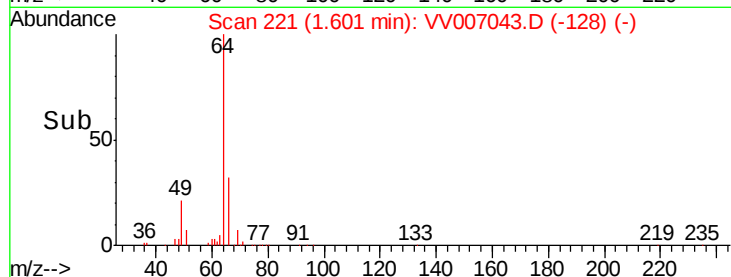


Abundance Ion 64.10 (63.80 to 64.80): VV007034.D (-211) (-)

Ion 66.05 (65.75 to 66.75): VV007034.D (-211) (-)



Time-->



#9

Trichlorofluoromethane

Concen: 5.146 ug/L

RT: 1.77 min Scan# 274

Delta R.T. 0.00 min

Lab File: VV007043.D

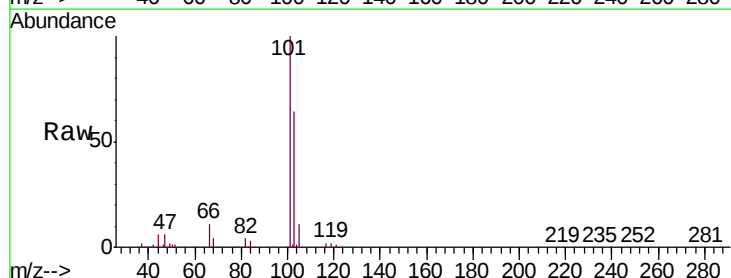
Acq: 16 Aug 2018 15:07

Tgt Ion: 101 Resp: 147805

Ion Ratio Lower Upper

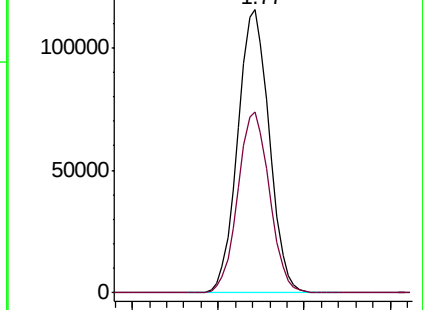
101 100

103 64.1 52.7 79.1

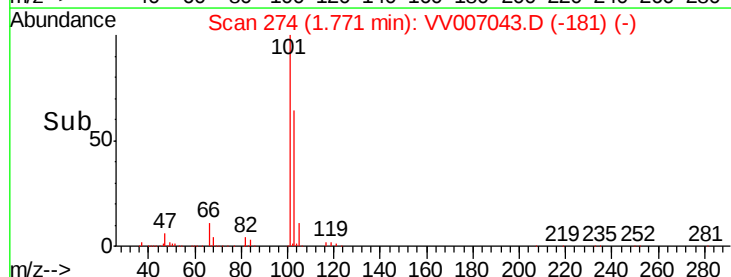


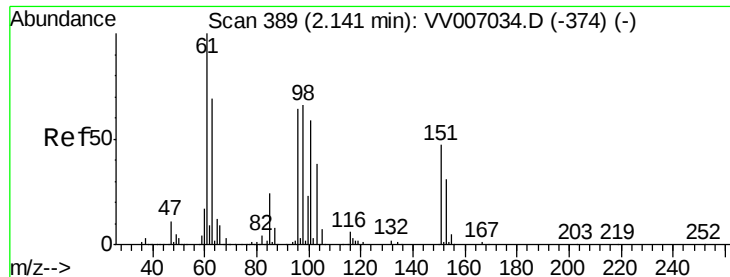
Abundance Ion 101.00 (100.70 to 101.70): VV007034.D (-263) (-)

Ion 103.00 (102.70 to 103.70): VV007034.D (-263) (-)



Time-->





#10

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

Concen: 5.209 ug/L

RT: 2.14 min Scan# 389

Delta R.T. 0.00 min

Lab File: VV007043.D

Acq: 16 Aug 2018 15:07

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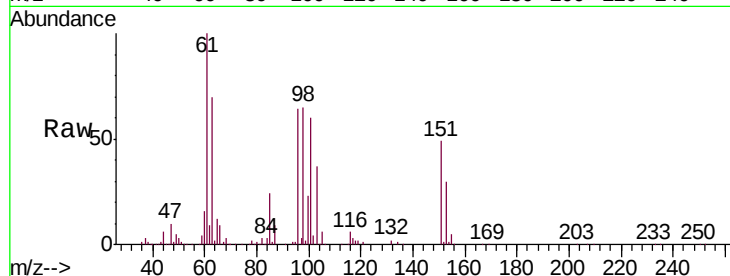
Tgt Ion:101 Resp: 89794

Ion Ratio Lower Upper

101 100

85 40.8 33.9 50.9

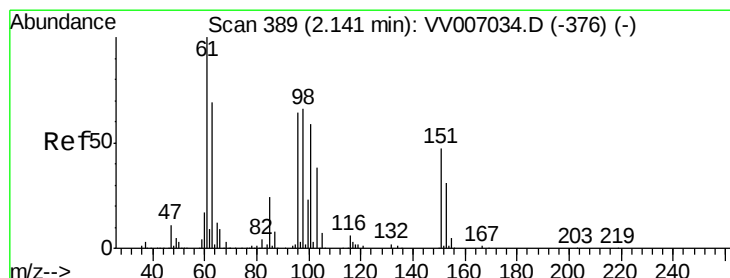
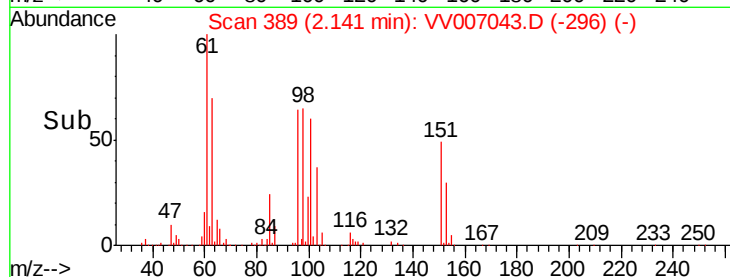
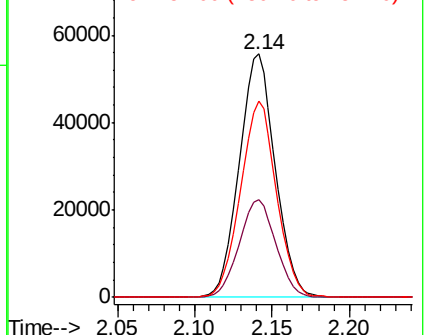
151 80.6 64.1 96.1



Abundance Ion 101.00 (100.70 to 101.70): VV007034.D (-374) (-)

Ion 85.00 (84.70 to 85.70): VV007034.D (-374) (-)

Ion 151.00 (150.70 to 151.70): VV007034.D (-374) (-)



#12

1,1-Dichloroethene

Concen: 5.034 ug/L

RT: 2.14 min Scan# 389

Delta R.T. 0.00 min

Lab File: VV007043.D

Acq: 16 Aug 2018 15:07

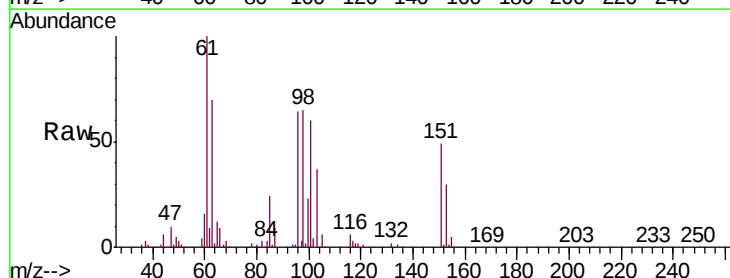
Tgt Ion: 96 Resp: 84236

Ion Ratio Lower Upper

96 100

61 156.1 111.6 207.4

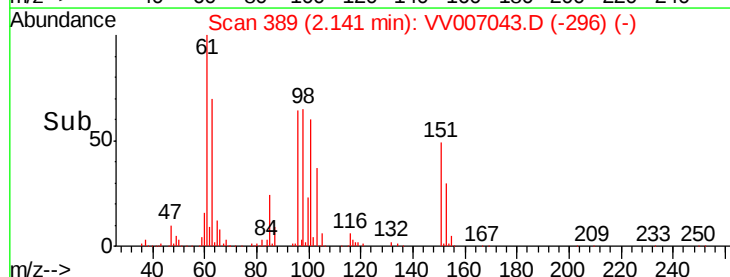
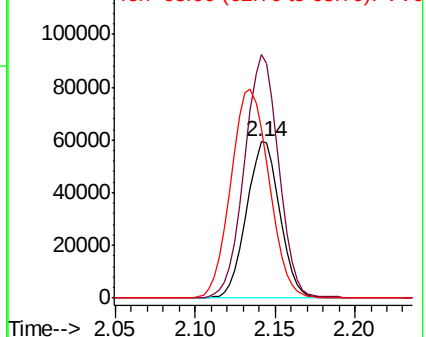
63 108.8 84.9 157.7

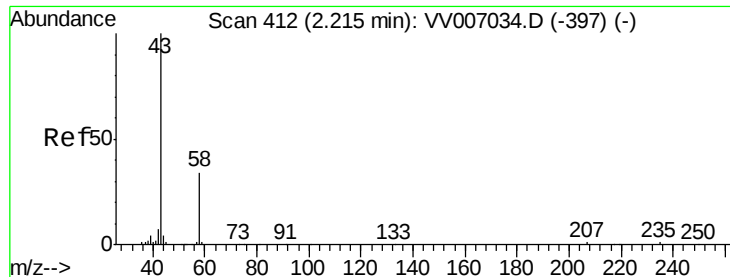


Abundance Ion 96.00 (95.70 to 96.70): VV007034.D (-376) (-)

Ion 61.05 (60.75 to 61.75): VV007034.D (-376) (-)

Ion 63.00 (62.70 to 63.70): VV007034.D (-376) (-)





#13

Acetone

Concen: 40.900 ug/L

RT: 2.21 min Scan# 410

Delta R.T. 0.00 min

Lab File: VV007043.D

Acq: 16 Aug 2018 15:07

Instrument :

MSVOA\_V

ClientSampleId :

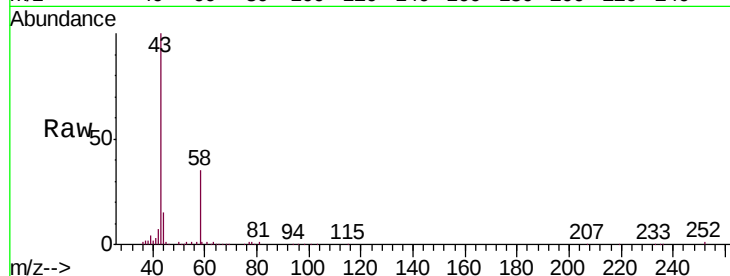
VSTD00562

Tgt Ion: 43 Resp: 91102

Ion Ratio Lower Upper

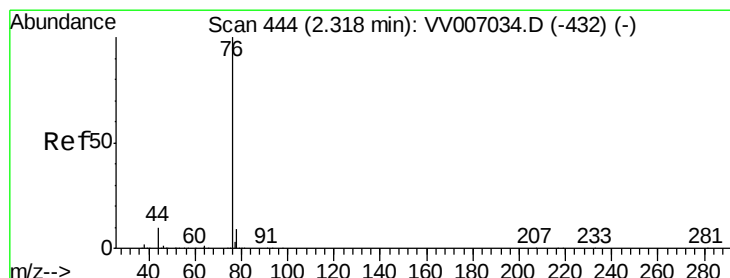
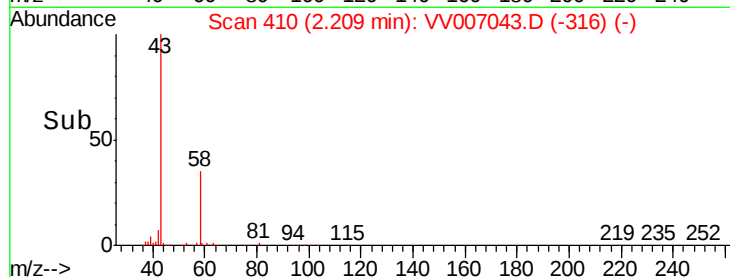
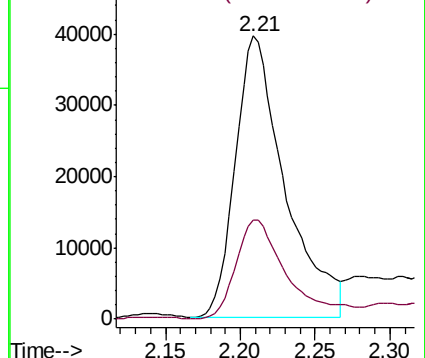
43 100

58 37.4 0.0 71.4



Abundance Ion 43.05 (42.75 to 43.75): VV0

Ion 58.05 (57.75 to 58.75): VV0



#14

Carbon disulfide

Concen: 4.527 ug/L

RT: 2.32 min Scan# 444

Delta R.T. 0.00 min

Lab File: VV007043.D

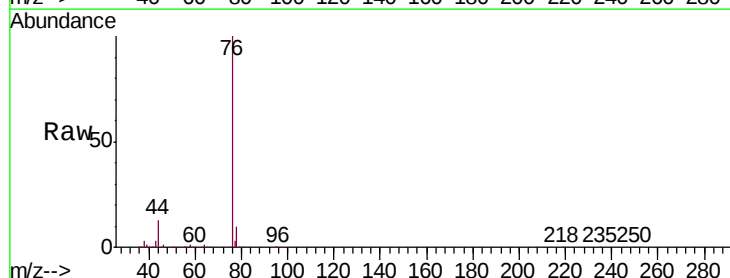
Acq: 16 Aug 2018 15:07

Tgt Ion: 76 Resp: 250099

Ion Ratio Lower Upper

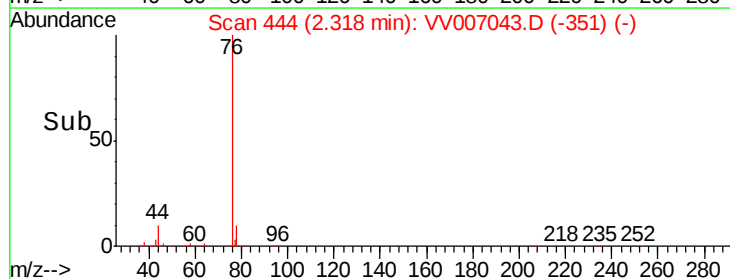
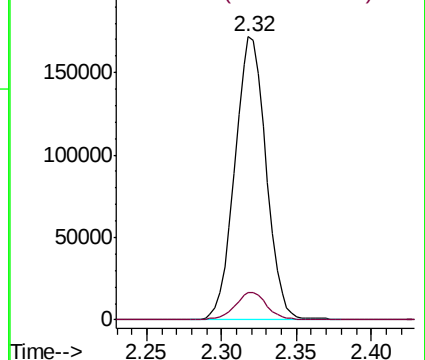
76 100

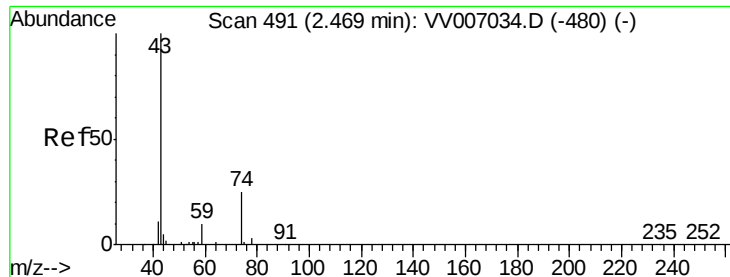
78 9.9 7.6 11.4



Abundance Ion 76.05 (75.75 to 76.75): VV0

Ion 78.00 (77.70 to 78.70): VV0

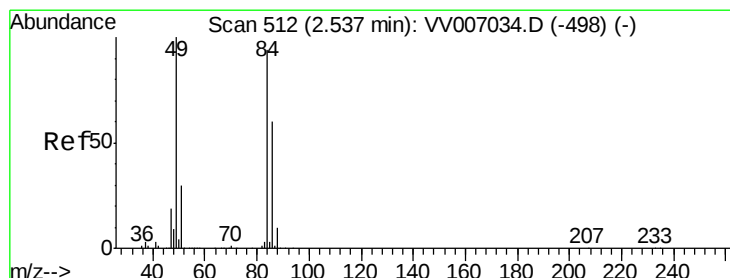
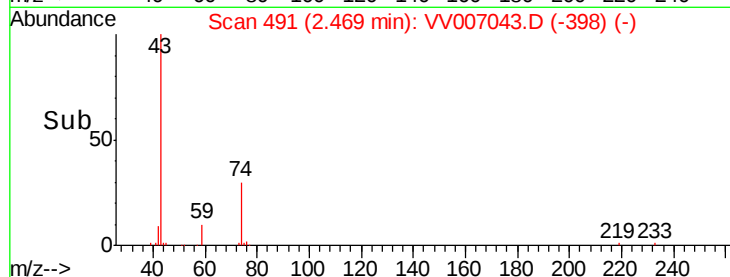
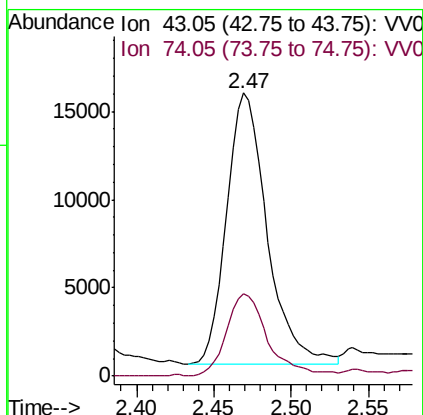
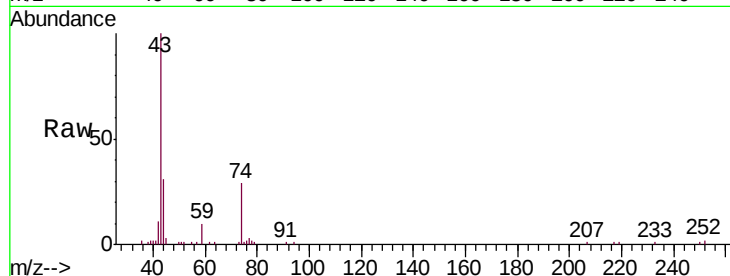




#15  
Methyl Acetate  
Concen: 4.445 ug/L  
RT: 2.47 min Scan# 491  
Delta R.T. 0.00 min  
Lab File: VV007043.D  
Acq: 16 Aug 2018 15:07

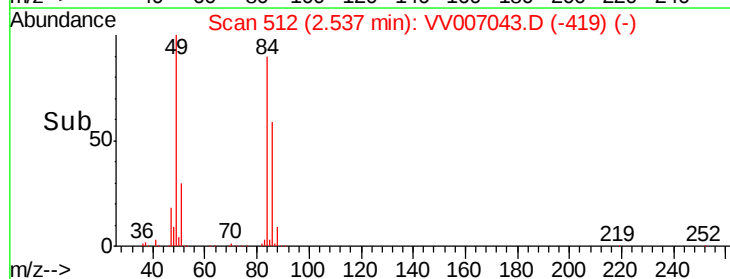
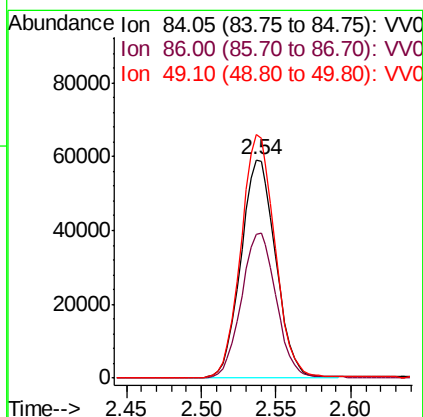
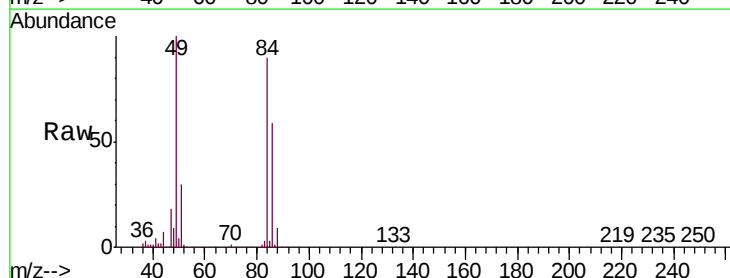
Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD00562

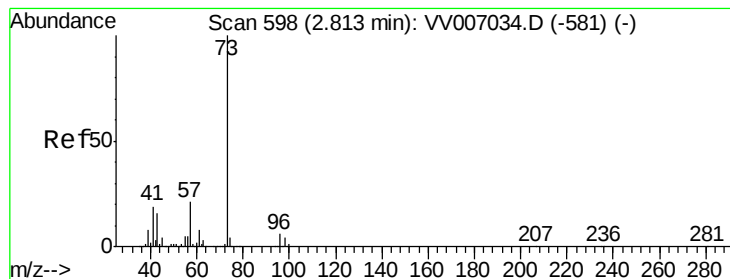
Tgt Ion: 43 Resp: 27867  
Ion Ratio Lower Upper  
43 100  
74 30.5 24.6 37.0



#16  
Methylene chloride  
Concen: 4.749 ug/L  
RT: 2.54 min Scan# 512  
Delta R.T. 0.00 min  
Lab File: VV007043.D  
Acq: 16 Aug 2018 15:07

Tgt Ion: 84 Resp: 95813  
Ion Ratio Lower Upper  
84 100  
86 66.0 45.7 84.9  
49 111.6 78.8 146.4





#17

Methyl tert-butyl Ether

Concen: 4.950 ug/L

RT: 2.82 min Scan# 599

Delta R.T. 0.00 min

Lab File: VV007043.D

Acq: 16 Aug 2018 15:07

Instrument :

MSVOA\_V

ClientSampleId :

VSTD00562

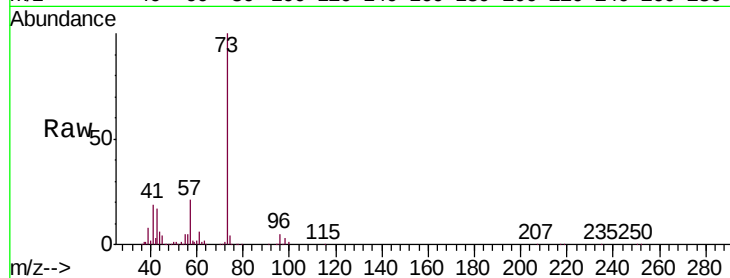
Tgt Ion: 73 Resp: 198608

Ion Ratio Lower Upper

73 100

43 17.2 14.4 21.6

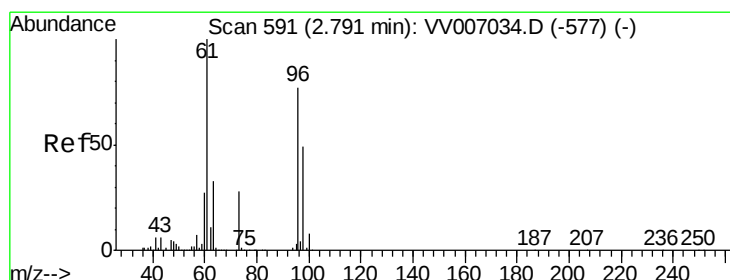
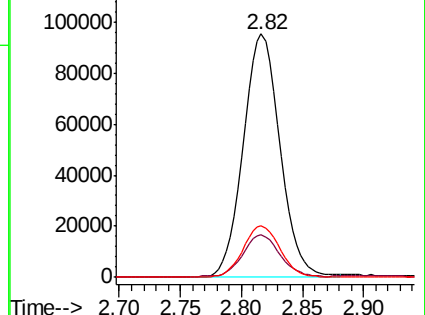
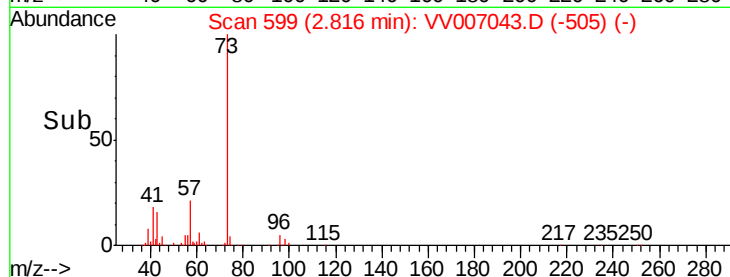
57 21.4 17.9 26.9



Abundance Ion 73.10 (72.80 to 73.80): VV0

Ion 43.05 (42.75 to 43.75): VV0

Ion 57.10 (56.80 to 57.80): VV0



#18

trans-1,2-Dichloroethene

Concen: 5.135 ug/L

RT: 2.79 min Scan# 591

Delta R.T. 0.00 min

Lab File: VV007043.D

Acq: 16 Aug 2018 15:07

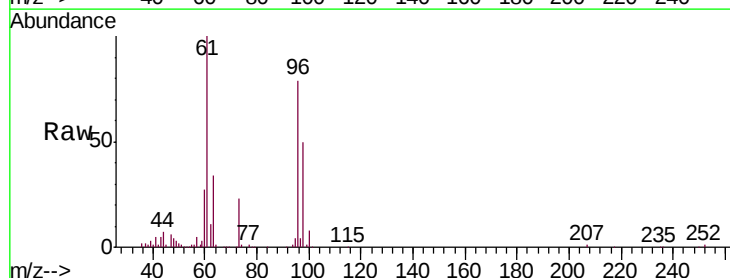
Tgt Ion: 96 Resp: 92007

Ion Ratio Lower Upper

96 100

61 127.2 91.1 169.3

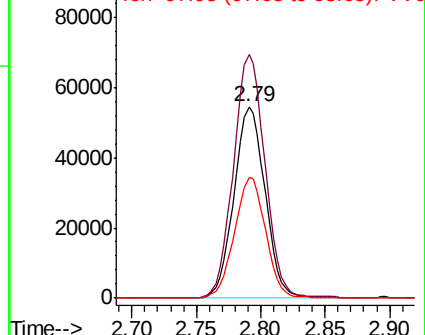
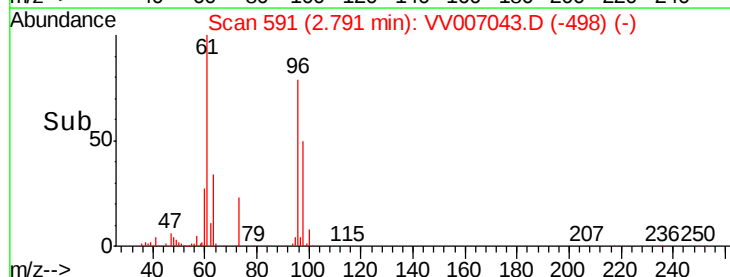
98 63.0 43.5 80.9

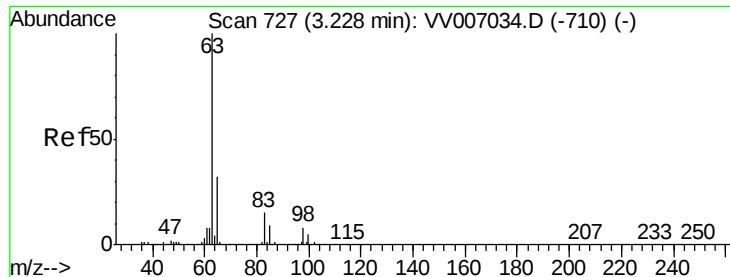


Abundance Ion 96.00 (95.70 to 96.70): VV0

Ion 61.05 (60.75 to 61.75): VV0

Ion 97.95 (97.65 to 98.65): VV0





#19

1,1-Dichloroethane

Concen: 5.011 ug/L

RT: 3.23 min Scan# 728

Delta R.T. 0.00 min

Lab File: VV007043.D

Acq: 16 Aug 2018 15:07

Instrument :

MSVOA\_V

ClientSampleId :

VSTD00562

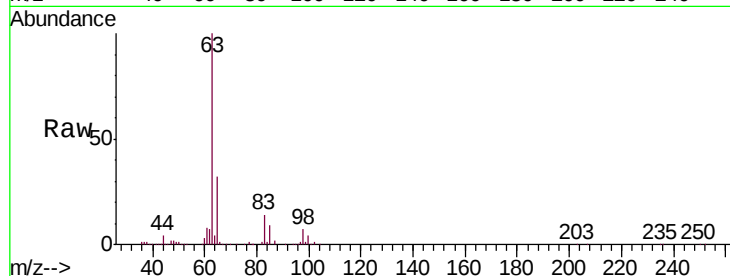
Tgt Ion: 63 Resp: 162086

Ion Ratio Lower Upper

63 100

65 32.2 21.7 40.3

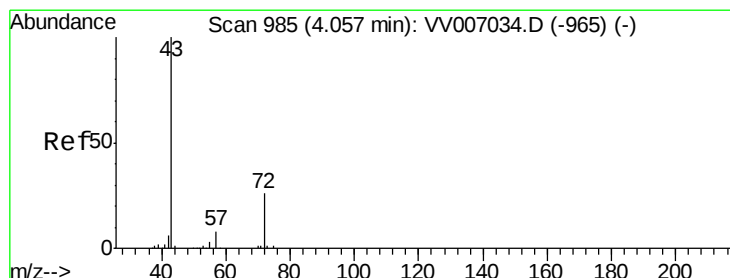
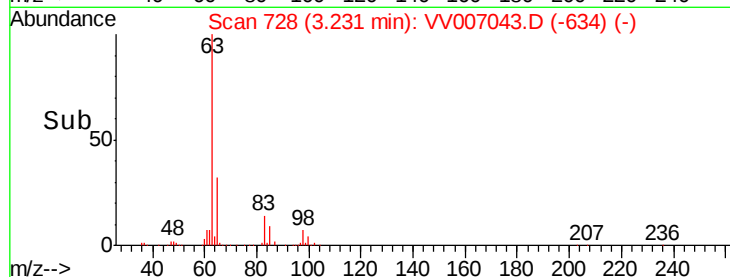
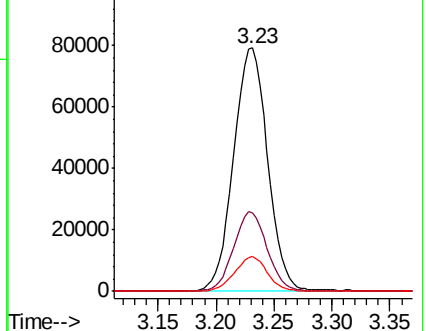
83 14.1 10.0 18.6



Abundance Ion 63.10 (62.80 to 63.80): VV007034.D (-710) (-)

Ion 65.10 (64.80 to 65.80): VV007034.D (-710) (-)

Ion 83.05 (82.75 to 83.75): VV007034.D (-710) (-)



#21

2-Butanone

Concen: 41.576 ug/L

RT: 4.05 min Scan# 984

Delta R.T. 0.00 min

Lab File: VV007043.D

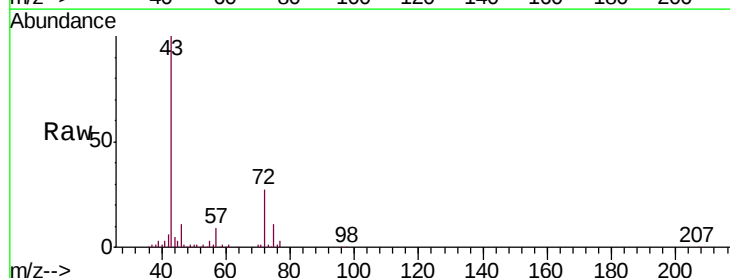
Acq: 16 Aug 2018 15:07

Tgt Ion: 43 Resp: 201068

Ion Ratio Lower Upper

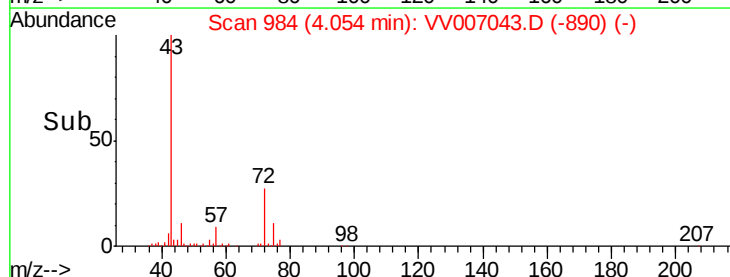
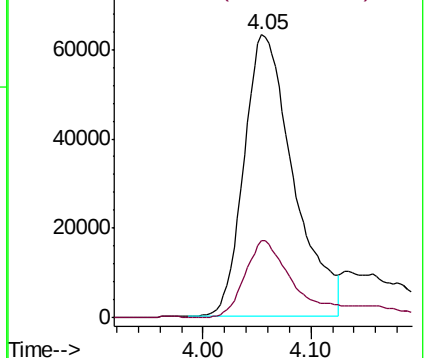
43 100

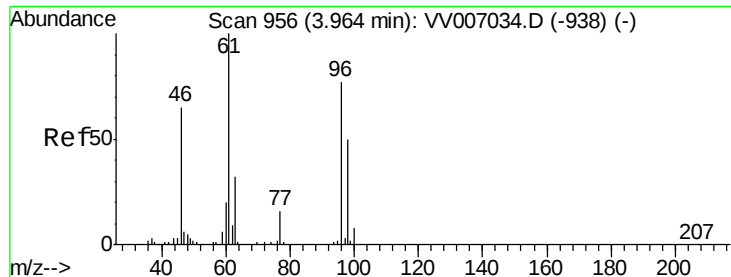
72 28.2 12.4 37.2



Abundance Ion 43.05 (42.75 to 43.75): VV007034.D (-965) (-)

Ion 72.10 (71.80 to 72.80): VV007034.D (-965) (-)



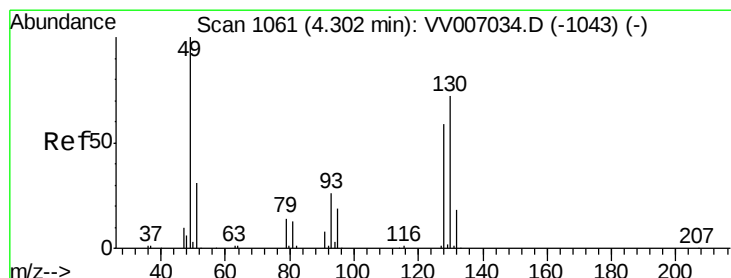
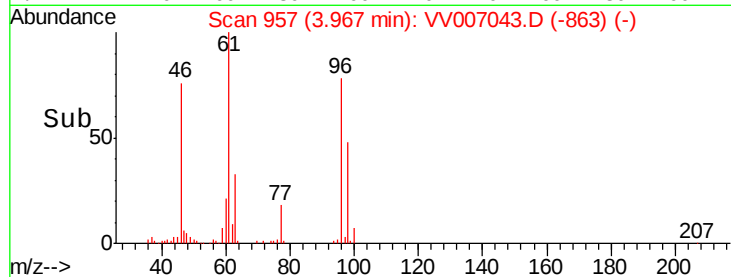
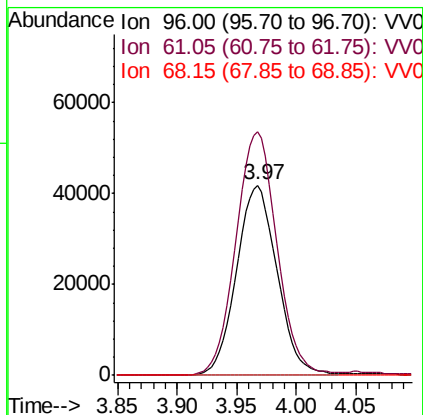
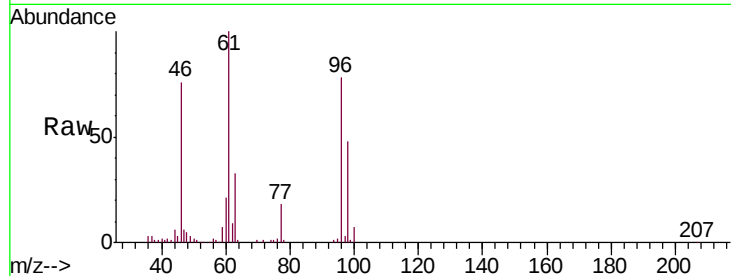


#22

cis-1,2-Dichloroethene  
 Concen: 4.877 ug/L  
 RT: 3.97 min Scan# 957  
 Delta R.T. 0.00 min  
 Lab File: VV007043.D  
 Acq: 16 Aug 2018 15:07

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD00562

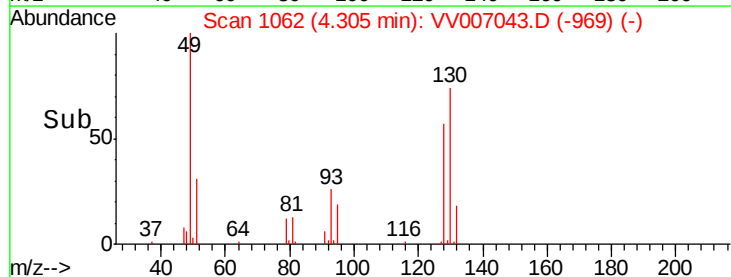
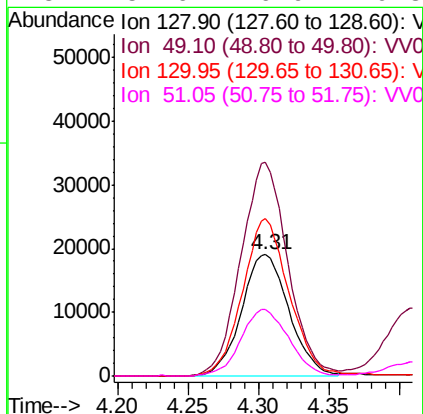
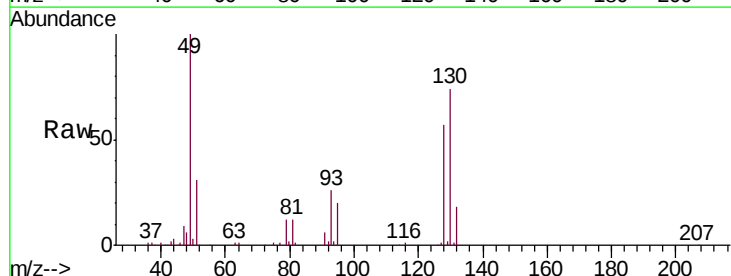
Tgt Ion: 96 Resp: 99154  
 Ion Ratio Lower Upper  
 96 100  
 61 128.2 91.1 169.1  
 68 0.0 0.0 0.0

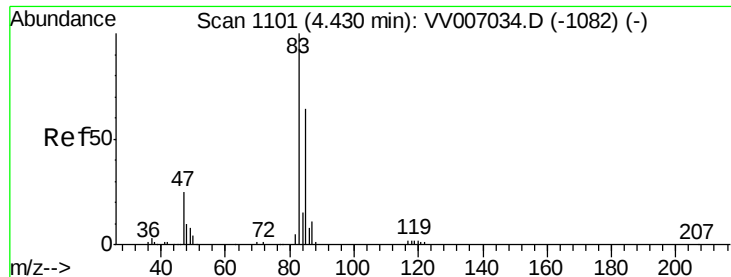


#23

Bromochloromethane  
 Concen: 5.413 ug/L  
 RT: 4.31 min Scan# 1062  
 Delta R.T. 0.00 min  
 Lab File: VV007043.D  
 Acq: 16 Aug 2018 15:07

Tgt Ion: 128 Resp: 44861  
 Ion Ratio Lower Upper  
 128 100  
 49 176.5 138.6 257.4  
 130 130.5 90.0 167.2  
 51 54.6 46.9 70.3





#25

Chloroform

Concen: 5.204 ug/L

RT: 4.43 min Scan# 1102

Delta R.T. 0.00 min

Lab File: VV007043.D

Acq: 16 Aug 2018 15:07

Instrument :

MSVOA\_V

ClientSampleId :

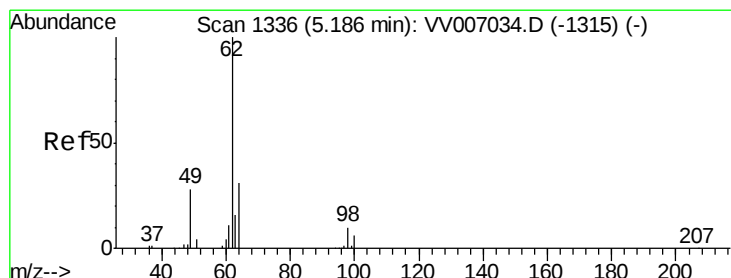
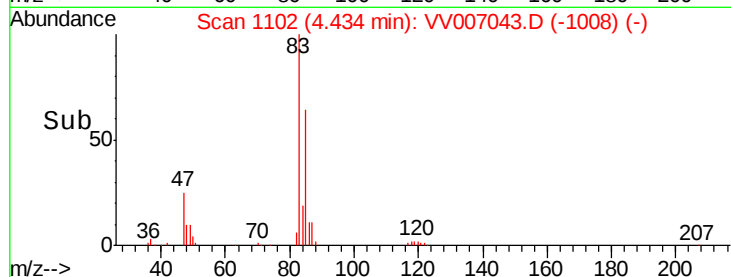
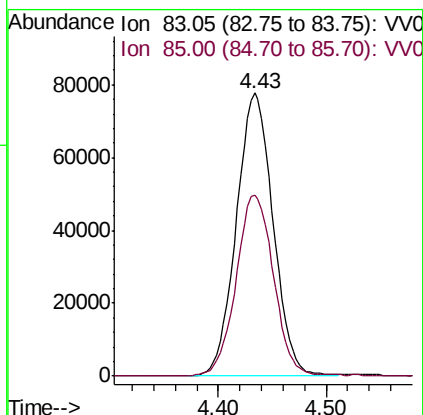
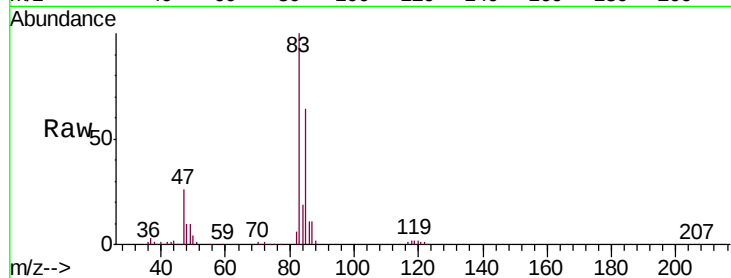
VSTD00562

Tgt Ion: 83 Resp: 184188

Ion Ratio Lower Upper

83 100

85 63.9 44.7 82.9



#27

1,2-Dichloroethane

Concen: 4.997 ug/L

RT: 5.19 min Scan# 1337

Delta R.T. 0.00 min

Lab File: VV007043.D

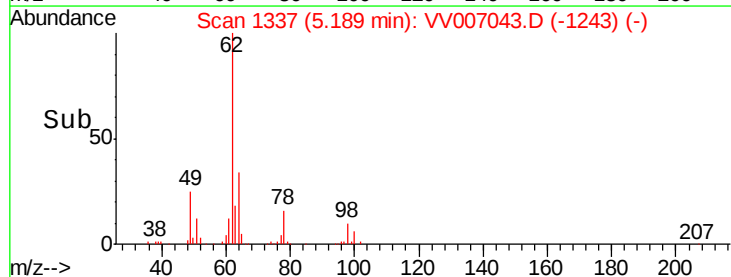
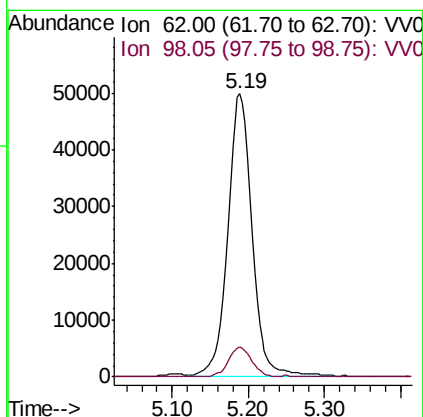
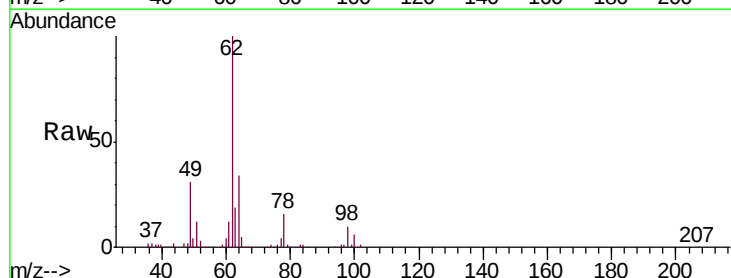
Acq: 16 Aug 2018 15:07

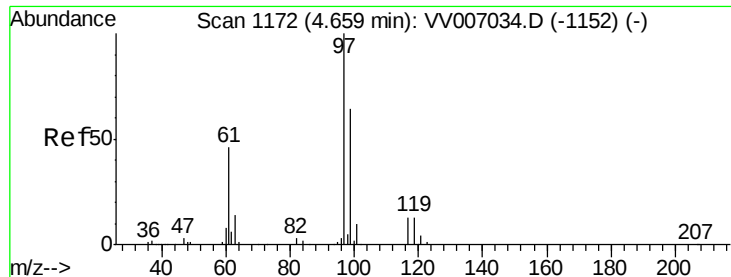
Tgt Ion: 62 Resp: 110304

Ion Ratio Lower Upper

62 100

98 10.4 7.6 11.4

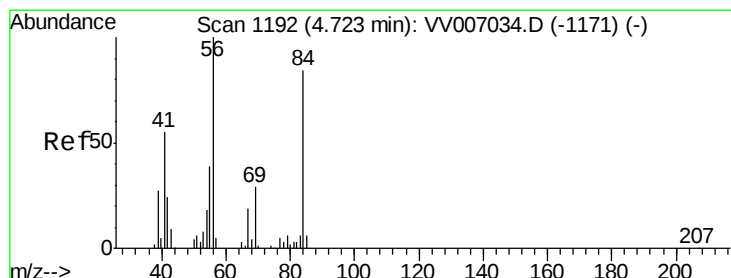
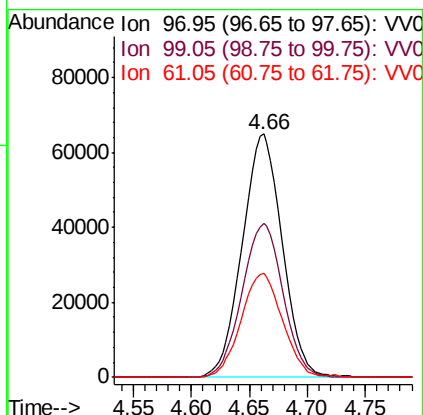
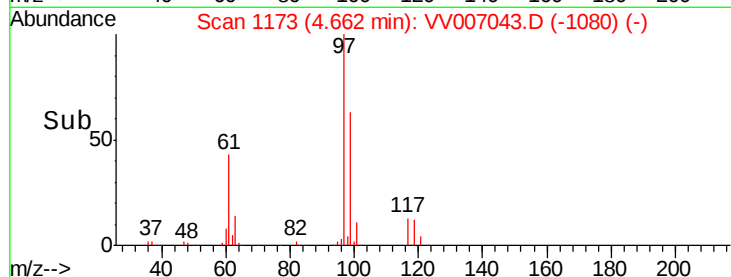
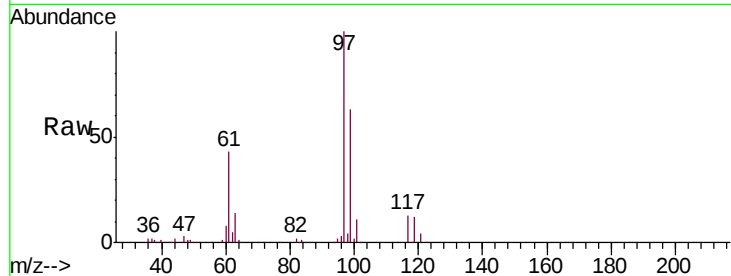




#29  
 1,1,1-Trichloroethane  
 Concen: 5.143 ug/L  
 RT: 4.66 min Scan# 1173  
 Delta R.T. 0.00 min  
 Lab File: VV007043.D  
 Acq: 16 Aug 2018 15:07

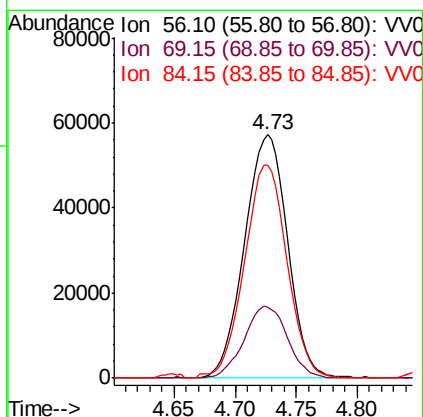
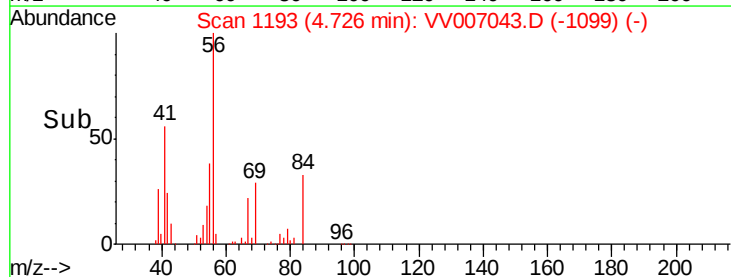
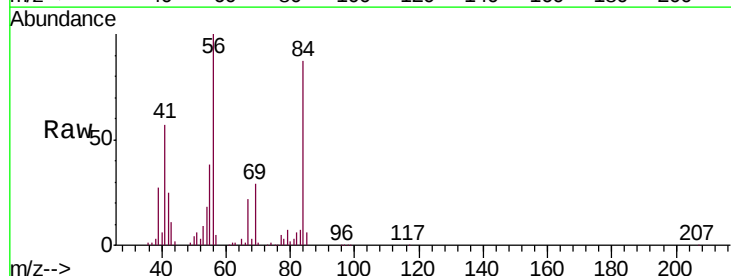
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD00562

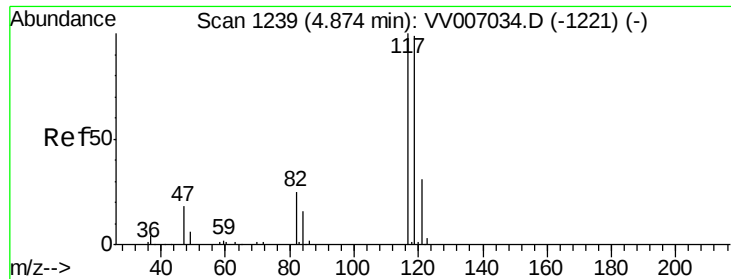
Tgt Ion: 97 Resp: 156086  
 Ion Ratio Lower Upper  
 97 100  
 99 64.8 51.0 76.6  
 61 44.1 36.6 54.8



#30  
 Cyclohexane  
 Concen: 4.430 ug/L  
 RT: 4.73 min Scan# 1193  
 Delta R.T. 0.00 min  
 Lab File: VV007043.D  
 Acq: 16 Aug 2018 15:07

Tgt Ion: 56 Resp: 139929  
 Ion Ratio Lower Upper  
 56 100  
 69 29.8 23.8 35.6  
 84 86.5 67.9 101.9

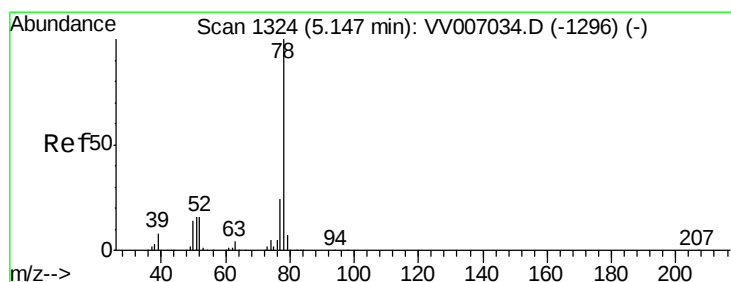
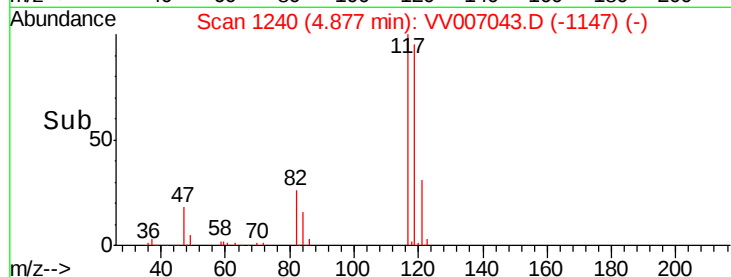
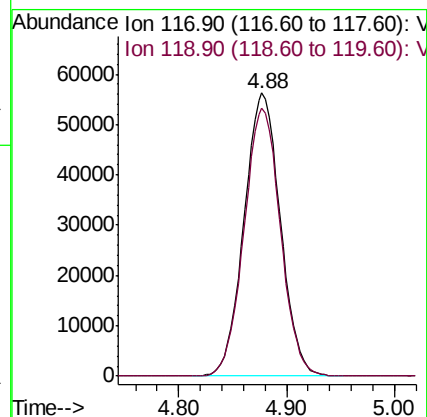
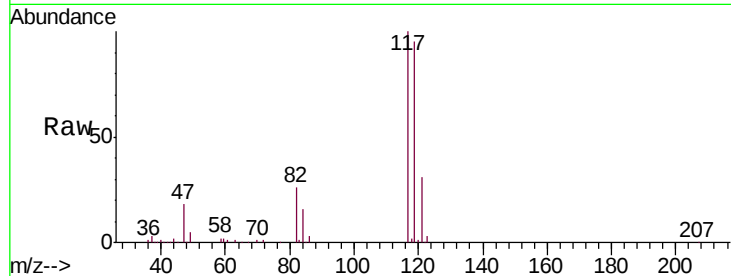




#31  
Carbon tetrachloride  
Concen: 5.171 ug/L  
RT: 4.88 min Scan# 1240  
Delta R.T. 0.00 min  
Lab File: VV007043.D  
Acq: 16 Aug 2018 15:07

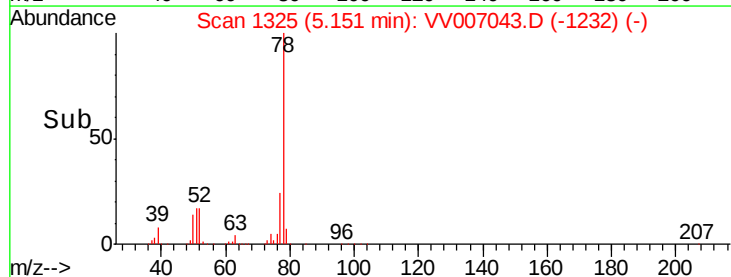
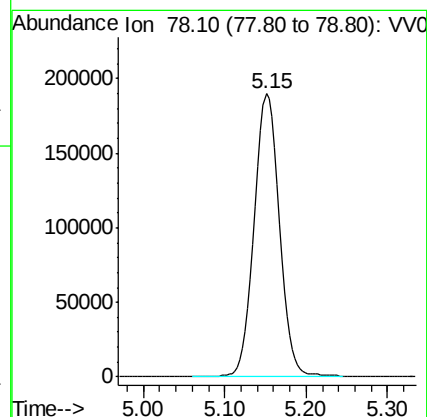
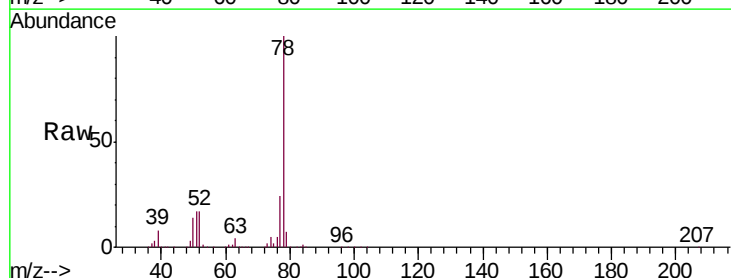
Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD00562

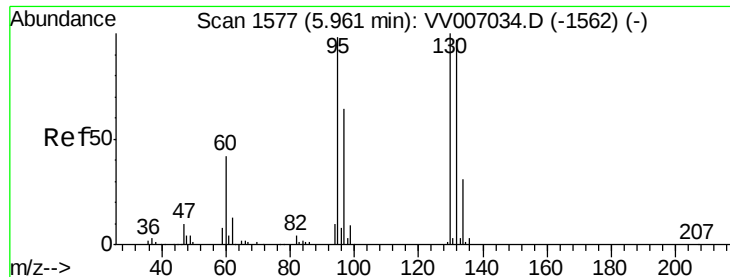
Tgt Ion:117 Resp: 131589  
Ion Ratio Lower Upper  
117 100  
119 95.0 76.2 114.4



#33  
Benzene  
Concen: 5.135 ug/L  
RT: 5.15 min Scan# 1325  
Delta R.T. 0.00 min  
Lab File: VV007043.D  
Acq: 16 Aug 2018 15:07

Tgt Ion: 78 Resp: 404900





#34

Trichloroethene

Concen: 4.941 ug/L

RT: 5.96 min Scan# 1578

Delta R.T. 0.00 min

Lab File: VV007043.D

Acq: 16 Aug 2018 15:07

Instrument :

MSVOA\_V

ClientSampleId :

VSTD00562

Tgt Ion: 95 Resp: 93411

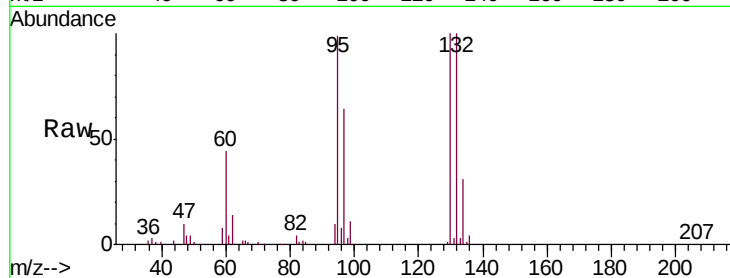
Ion Ratio Lower Upper

95 100

97 64.5 44.8 83.2

132 101.2 65.5 121.6

130 101.5 66.4 123.4

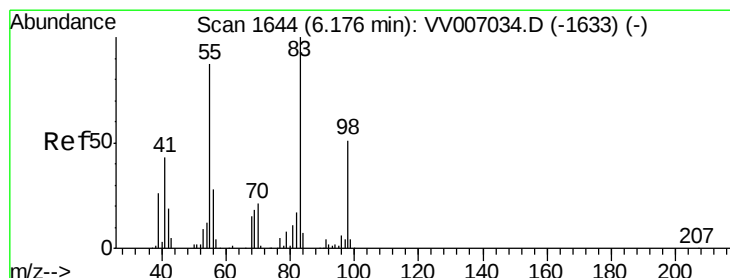
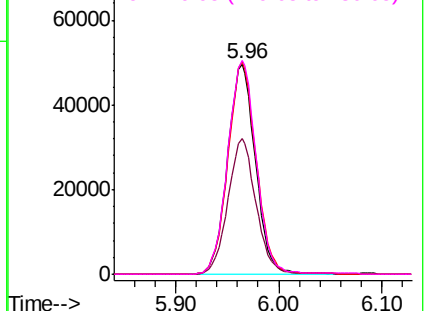
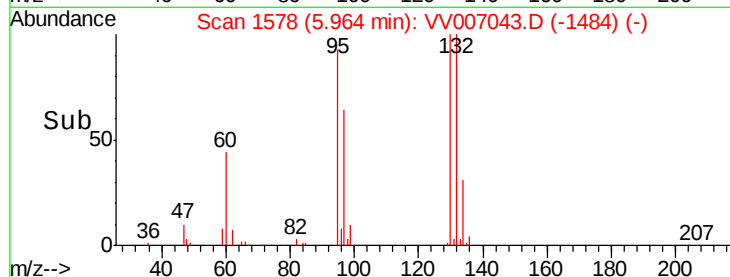


Abundance Ion 95.00 (94.70 to 95.70): VV007034.D (-1562) (-)

Ion 96.95 (96.65 to 97.65): VV007034.D (-1562) (-)

Ion 131.95 (131.65 to 132.65): VV007034.D (-1562) (-)

Ion 129.95 (129.65 to 130.65): VV007034.D (-1562) (-)



#35

Methylcyclohexane

Concen: 4.587 ug/L

RT: 6.18 min Scan# 1645

Delta R.T. 0.00 min

Lab File: VV007043.D

Acq: 16 Aug 2018 15:07

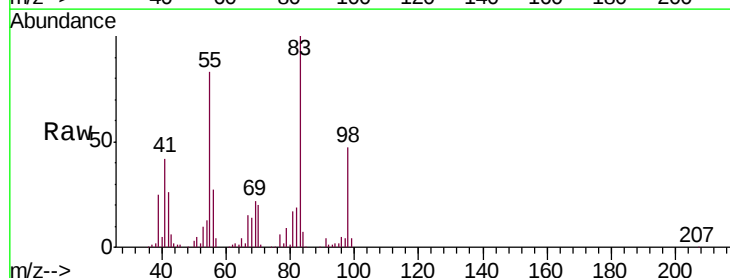
Tgt Ion: 83 Resp: 139227

Ion Ratio Lower Upper

83 100

55 85.6 68.1 102.1

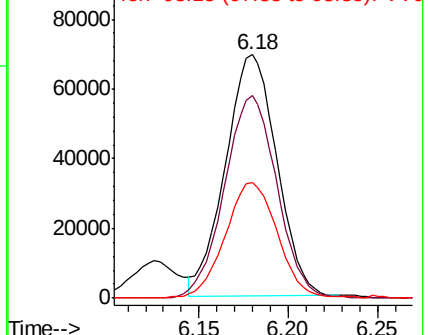
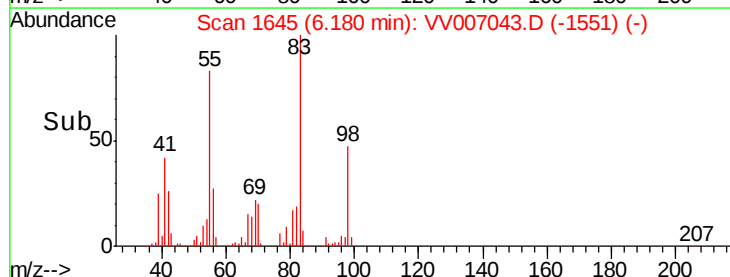
98 48.6 37.9 56.9

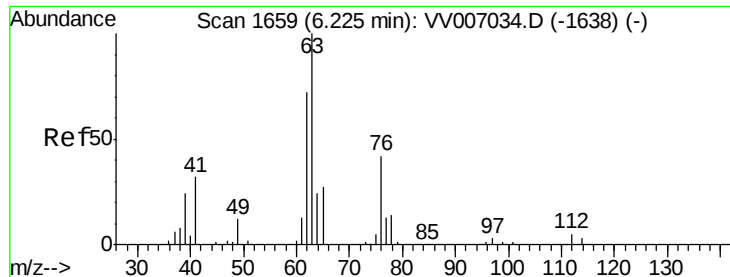


Abundance Ion 83.15 (82.85 to 83.85): VV007034.D (-1633) (-)

Ion 55.10 (54.80 to 55.80): VV007034.D (-1633) (-)

Ion 98.15 (97.85 to 98.85): VV007034.D (-1633) (-)

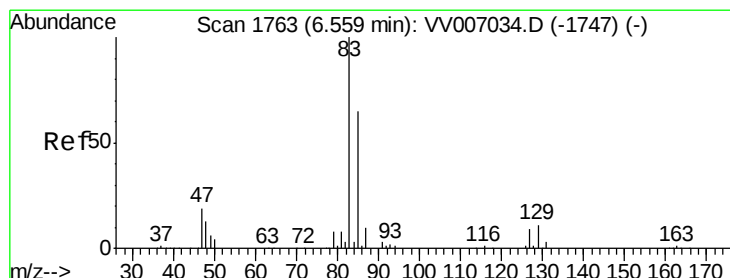
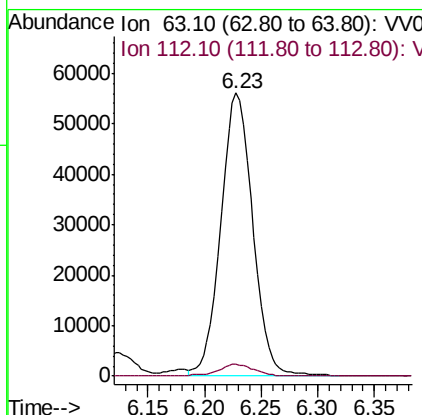
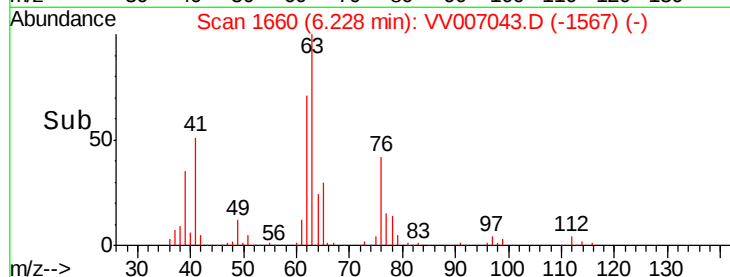
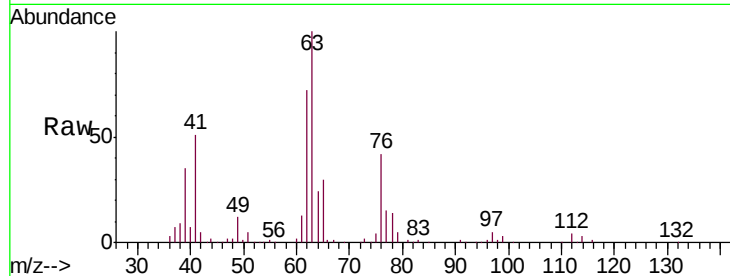




#37  
 1,2-Dichloropropane  
 Concen: 5.070 ug/L  
 RT: 6.23 min Scan# 1660  
 Delta R.T. 0.00 min  
 Lab File: VV007043.D  
 Acq: 16 Aug 2018 15:07

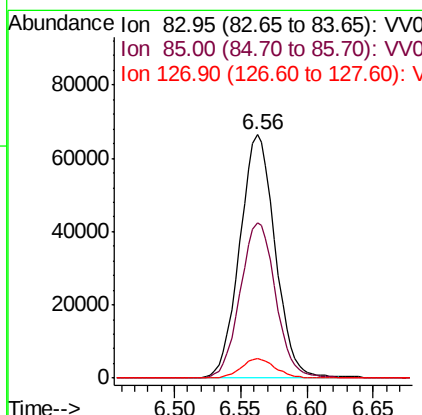
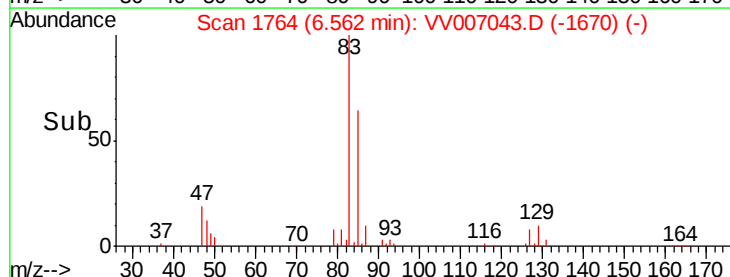
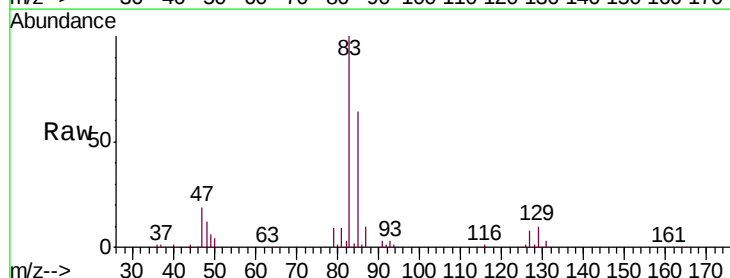
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD00562

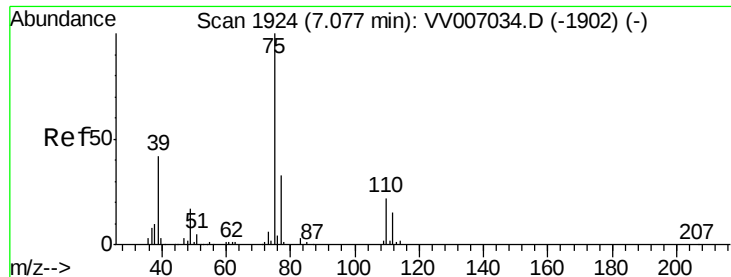
Tgt Ion: 63 Resp: 109415  
 Ion Ratio Lower Upper  
 63 100  
 112 4.7 3.5 5.3



#38  
 Bromodichloromethane  
 Concen: 5.037 ug/L  
 RT: 6.56 min Scan# 1764  
 Delta R.T. 0.00 min  
 Lab File: VV007043.D  
 Acq: 16 Aug 2018 15:07

Tgt Ion: 83 Resp: 123512  
 Ion Ratio Lower Upper  
 83 100  
 85 64.0 43.8 81.4  
 127 8.0 6.6 10.0

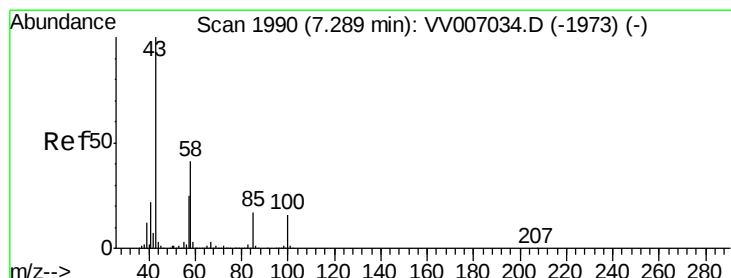
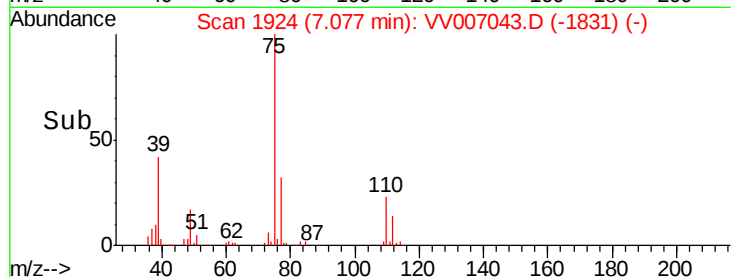
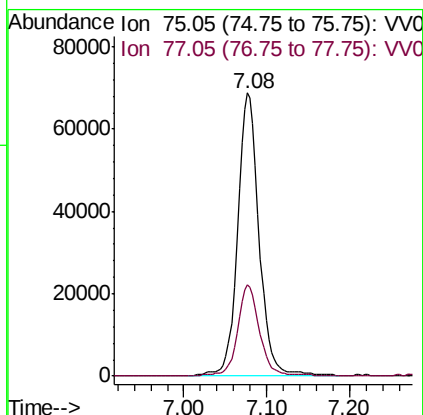
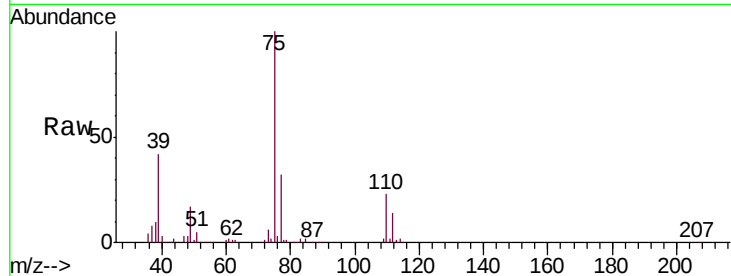




#39  
 cis-1,3-Dichloropropene  
 Concen: 4.803 ug/L  
 RT: 7.08 min Scan# 1924  
 Delta R.T. 0.00 min  
 Lab File: VV007043.D  
 Acq: 16 Aug 2018 15:07

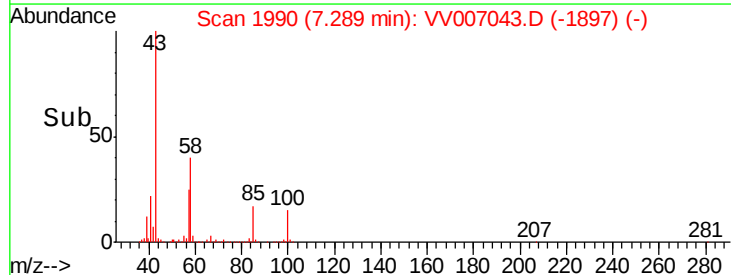
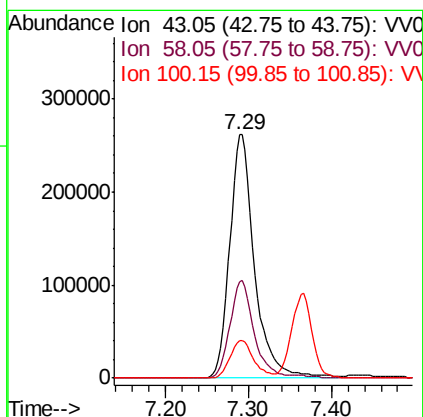
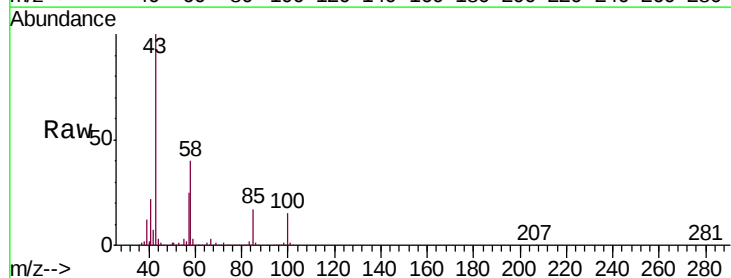
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD00562

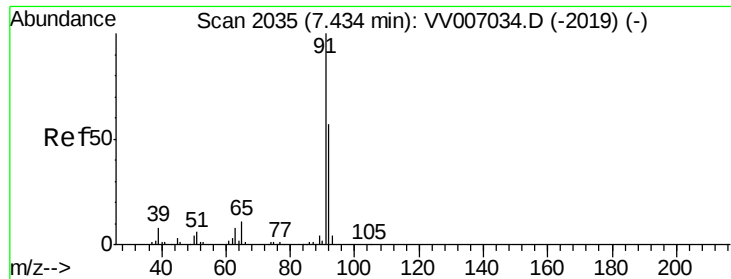
Tgt Ion: 75 Resp: 125218  
 Ion Ratio Lower Upper  
 75 100  
 77 32.1 22.0 40.8



#40  
 4-Methyl-2-pentanone  
 Concen: 46.785 ug/L  
 RT: 7.29 min Scan# 1990  
 Delta R.T. 0.00 min  
 Lab File: VV007043.D  
 Acq: 16 Aug 2018 15:07

Tgt Ion: 43 Resp: 545425  
 Ion Ratio Lower Upper  
 43 100  
 58 39.0 30.7 46.1  
 100 14.9 11.2 16.8





#42

Toluene

Concen: 5.359 ug/L

RT: 7.44 min Scan# 2036

Delta R.T. 0.00 min

Lab File: VV007043.D

Acq: 16 Aug 2018 15:07

Instrument :

MSVOA\_V

ClientSampleId :

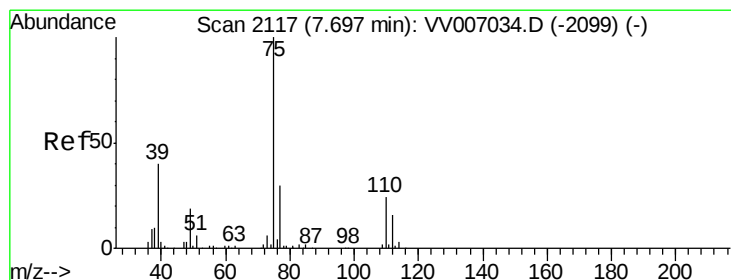
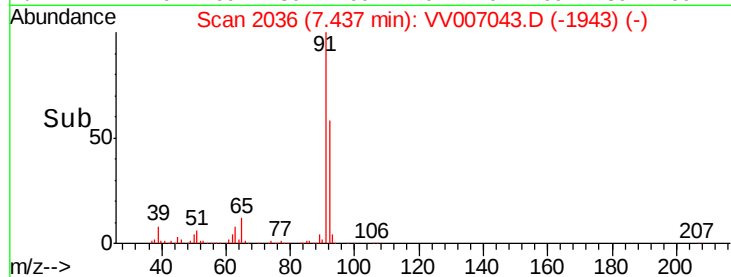
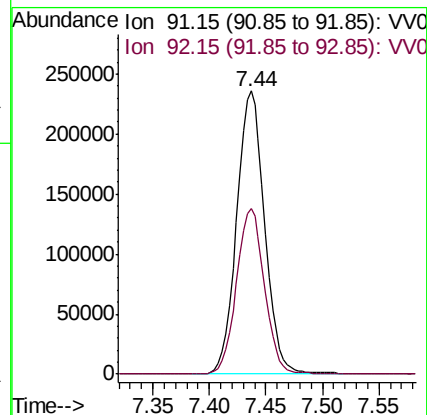
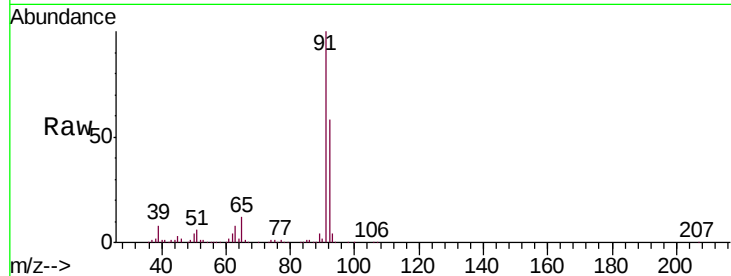
VSTD00562

Tgt Ion: 91 Resp: 406047

Ion Ratio Lower Upper

91 100

92 58.3 40.2 74.6



#44

trans-1,3-Dichloropropene

Concen: 4.866 ug/L

RT: 7.70 min Scan# 2118

Delta R.T. 0.00 min

Lab File: VV007043.D

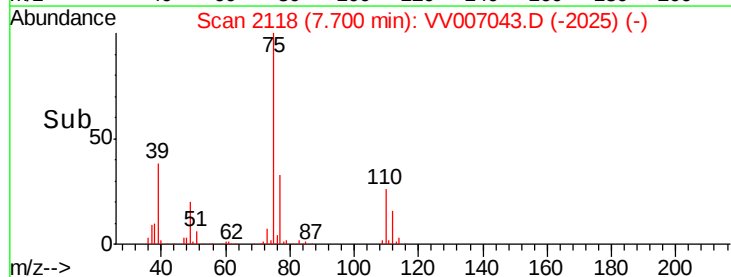
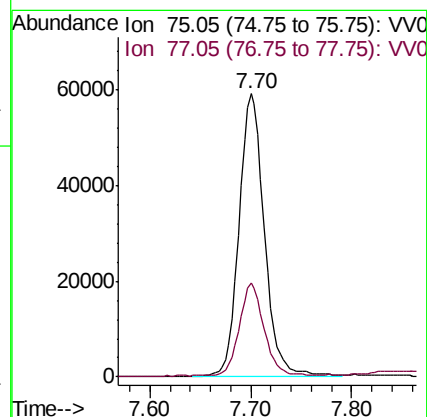
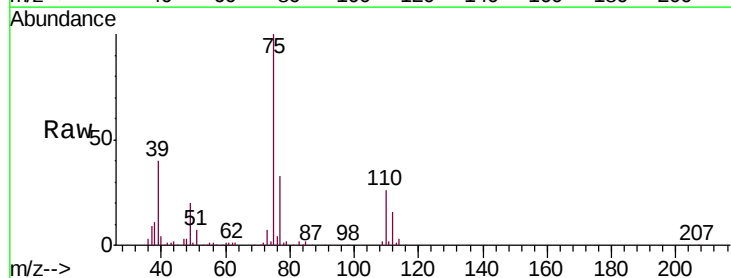
Acq: 16 Aug 2018 15:07

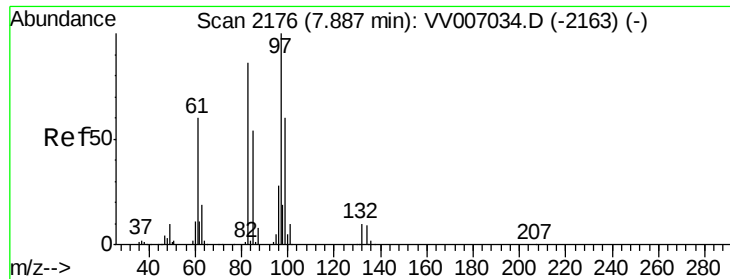
Tgt Ion: 75 Resp: 104128

Ion Ratio Lower Upper

75 100

77 33.0 22.3 41.3

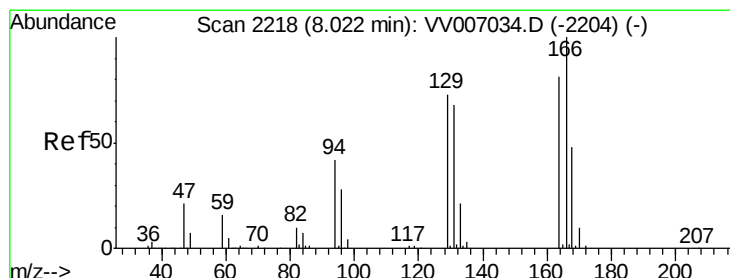
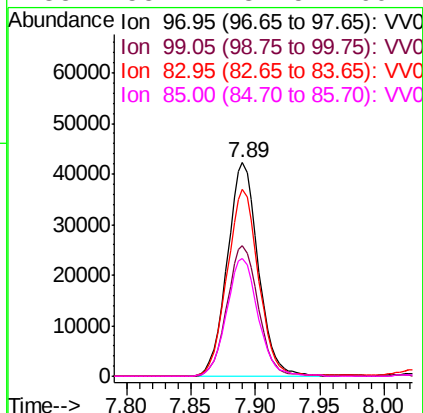
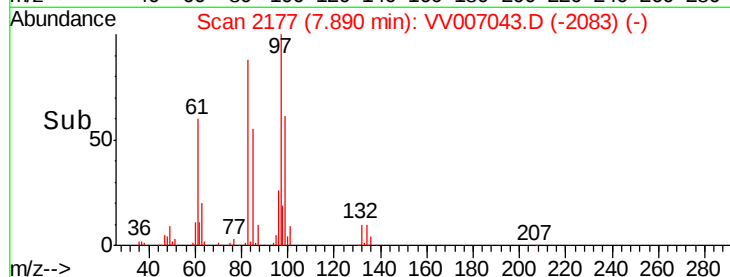
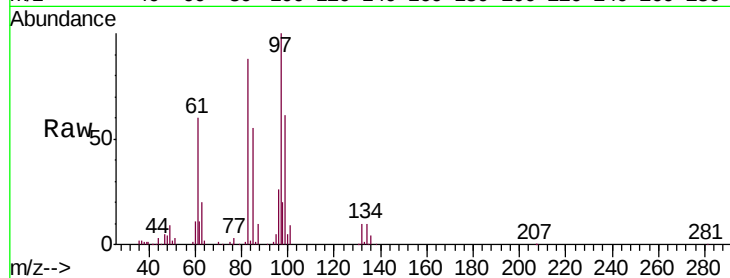




#45  
 1,1,2-Trichloroethane  
 Concen: 5.036 ug/L  
 RT: 7.89 min Scan# 2177  
 Delta R.T. 0.00 min  
 Lab File: VV007043.D  
 Acq: 16 Aug 2018 15:07

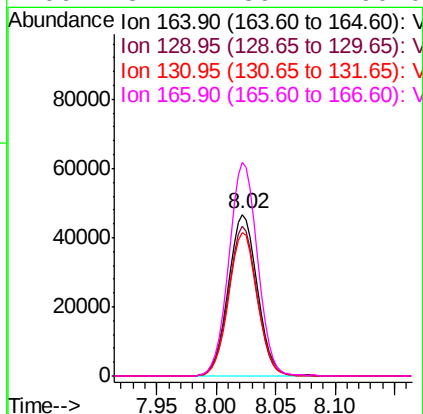
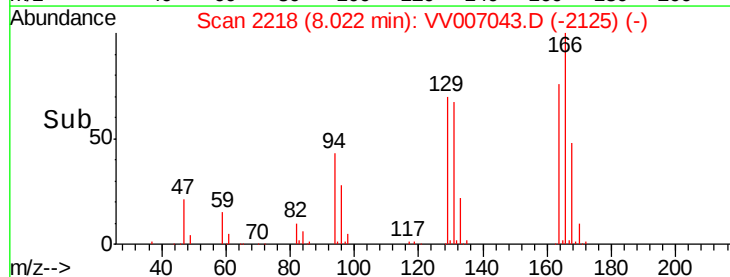
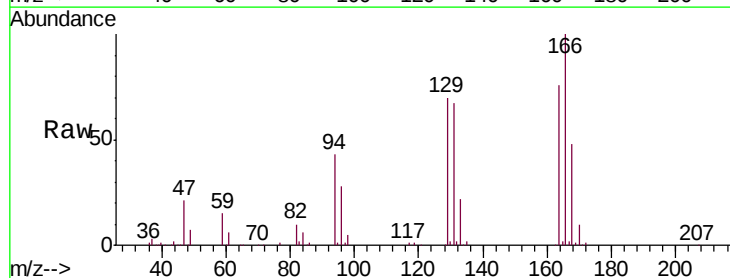
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD00562

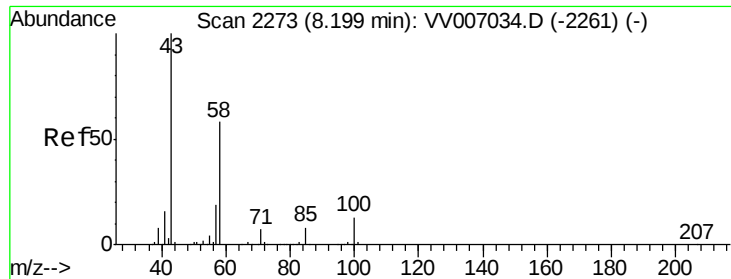
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 97    | Resp: | 70708 |
| Ion      | Ratio | Lower | Upper |
| 97       | 100   |       |       |
| 99       | 60.9  | 40.6  | 75.4  |
| 83       | 87.8  | 58.0  | 107.8 |
| 85       | 55.2  | 37.5  | 69.7  |



#47  
 Tetrachloroethene  
 Concen: 5.165 ug/L  
 RT: 8.02 min Scan# 2218  
 Delta R.T. 0.00 min  
 Lab File: VV007043.D  
 Acq: 16 Aug 2018 15:07

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 164   | Resp: | 79177 |
| Ion      | Ratio | Lower | Upper |
| 164      | 100   |       |       |
| 129      | 93.0  | 65.9  | 122.3 |
| 131      | 88.6  | 64.2  | 119.2 |
| 166      | 132.1 | 89.4  | 166.0 |

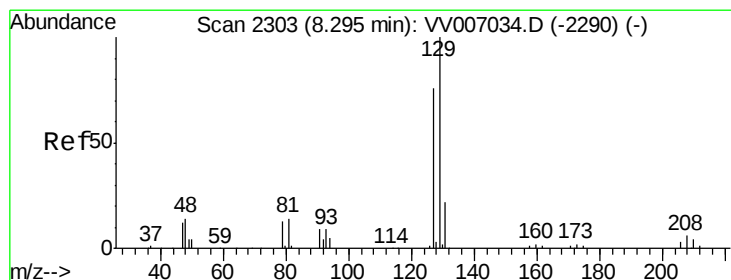
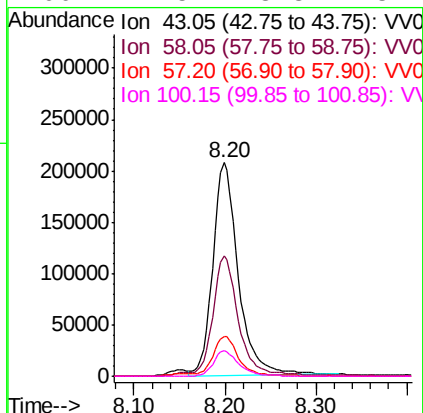
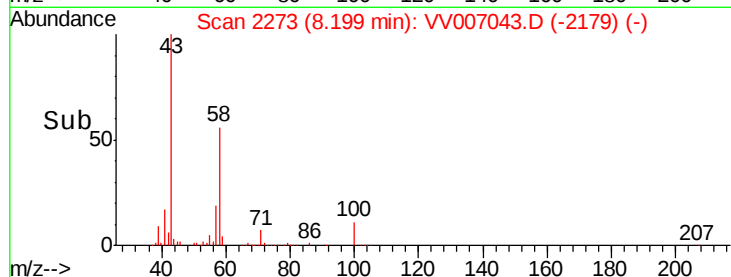
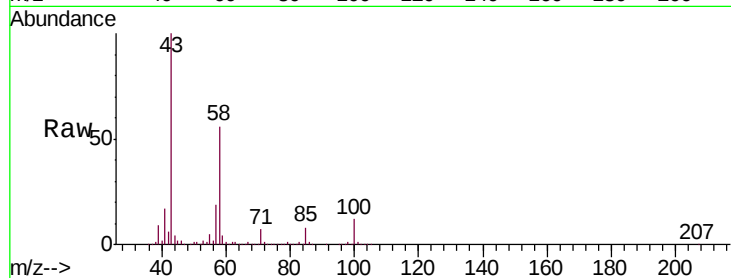




#48  
2-Hexanone  
Concen: 48.998 ug/L  
RT: 8.20 min Scan# 2273  
Delta R.T. 0.00 min  
Lab File: VV007043.D  
Acq: 16 Aug 2018 15:07

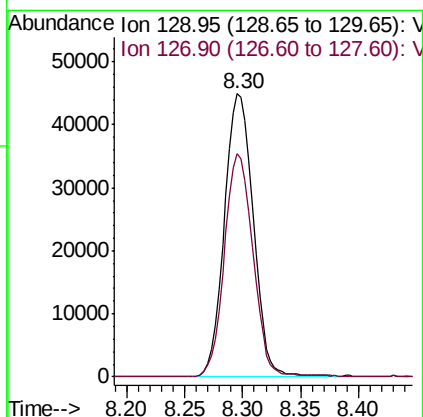
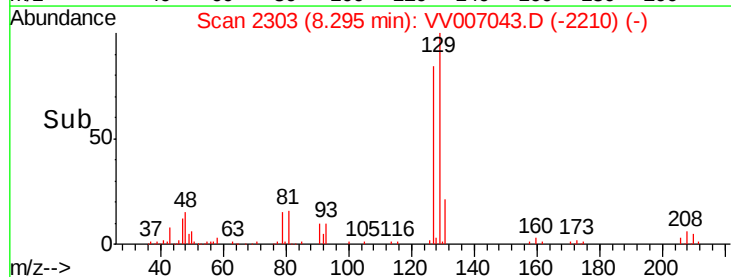
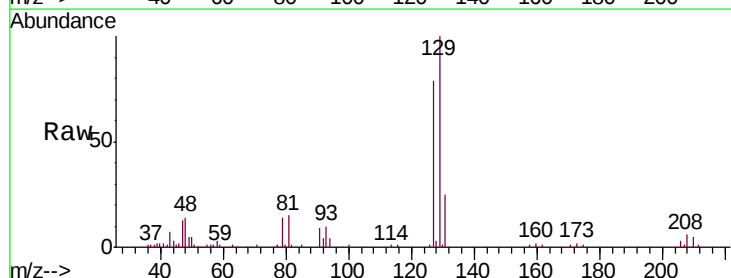
Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD00562

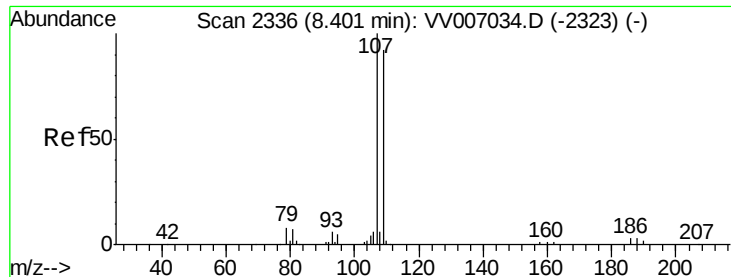
Tgt Ion: 43 Resp: 402871  
Ion Ratio Lower Upper  
43 100  
58 58.1 44.2 66.2  
57 19.3 14.8 22.2  
100 12.5 8.8 13.2



#49  
Dibromochloromethane  
Concen: 5.294 ug/L  
RT: 8.30 min Scan# 2303  
Delta R.T. 0.00 min  
Lab File: VV007043.D  
Acq: 16 Aug 2018 15:07

Tgt Ion: 129 Resp: 77972  
Ion Ratio Lower Upper  
129 100  
127 78.9 53.3 98.9

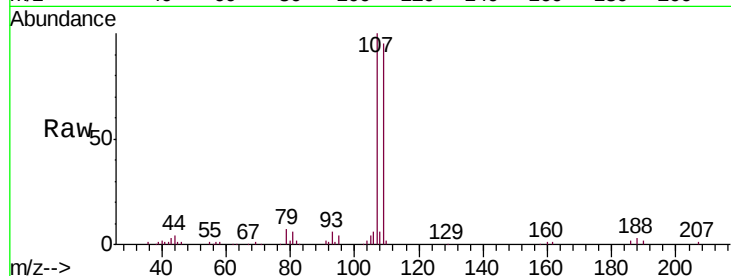




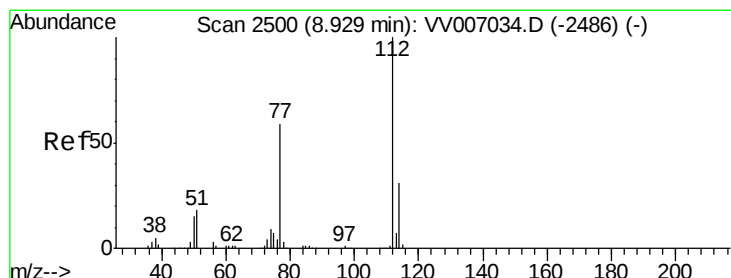
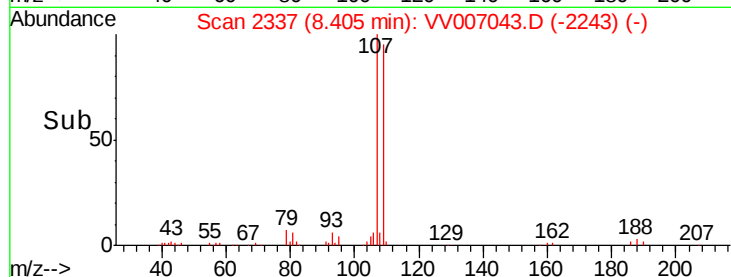
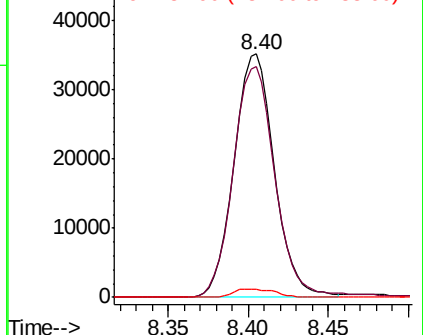
#50  
1,2-Dibromoethane  
Concen: 5.105 ug/L  
RT: 8.40 min Scan# 2337  
Delta R.T. 0.00 min  
Lab File: VV007043.D  
Acq: 16 Aug 2018 15:07

Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD00562

Tgt Ion:107 Resp: 60540  
Ion Ratio Lower Upper  
107 100  
109 94.6 64.1 119.1  
188 3.1 4.0 6.0#

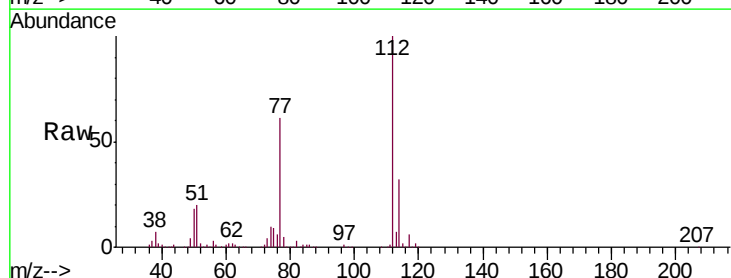


Abundance Ion 106.95 (106.65 to 107.65): V  
Ion 109.00 (108.70 to 109.70): V  
Ion 187.90 (187.60 to 188.60): V

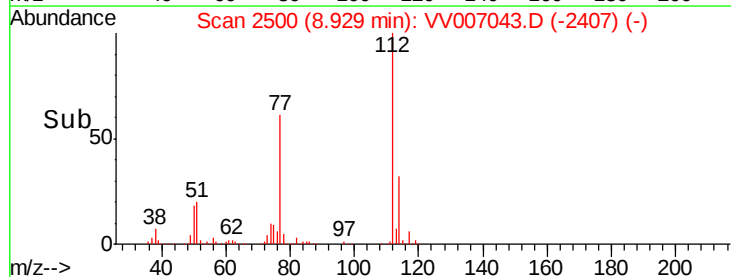
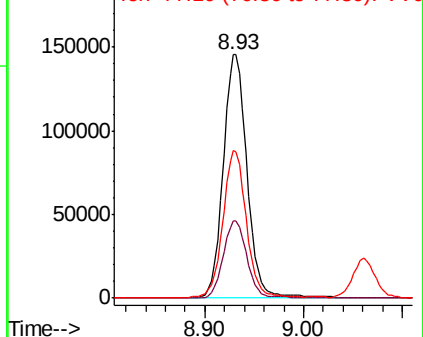


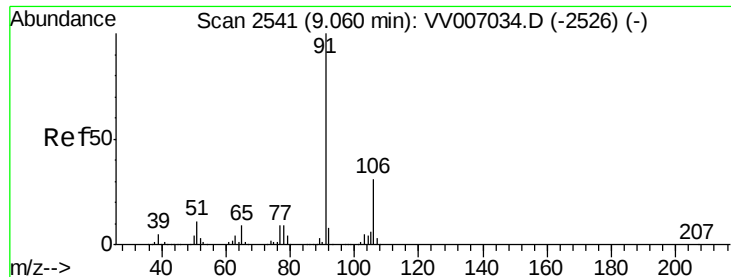
#51  
Chlorobenzene  
Concen: 5.107 ug/L  
RT: 8.93 min Scan# 2500  
Delta R.T. 0.00 min  
Lab File: VV007043.D  
Acq: 16 Aug 2018 15:07

Tgt Ion:112 Resp: 246635  
Ion Ratio Lower Upper  
112 100  
114 31.7 21.8 40.6  
77 60.8 48.0 72.0



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: 4.981 ug/L

RT: 9.06 min Scan# 2541

Delta R.T. 0.00 min

Lab File: VV007043.D

Acq: 16 Aug 2018 15:07

Instrument :

MSVOA\_V

ClientSampleId :

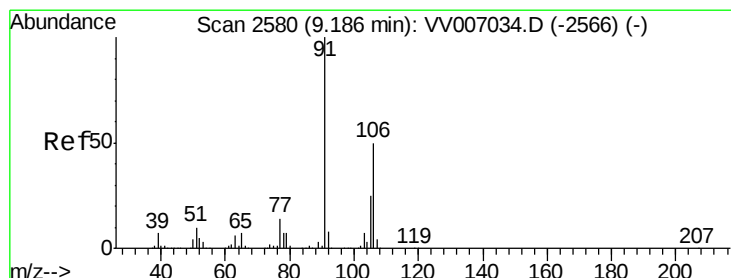
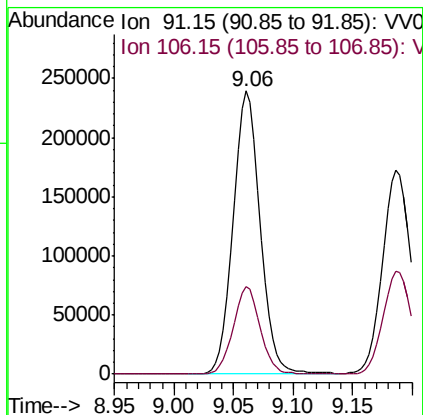
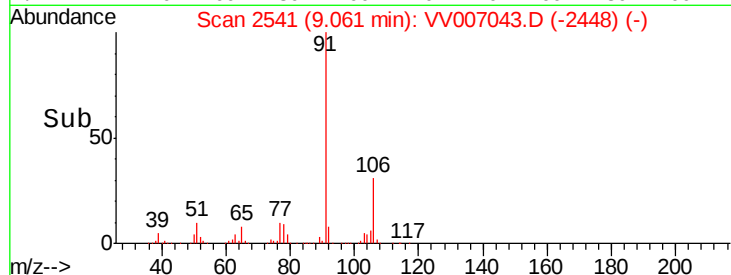
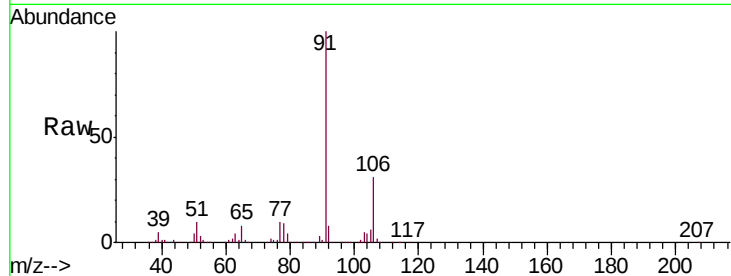
VSTD00562

Tgt Ion: 91 Resp: 376863

Ion Ratio Lower Upper

91 100

106 30.9 21.3 39.5



#53

m,p-xylene

Concen: 5.148 ug/L

RT: 9.19 min Scan# 2580

Delta R.T. 0.00 min

Lab File: VV007043.D

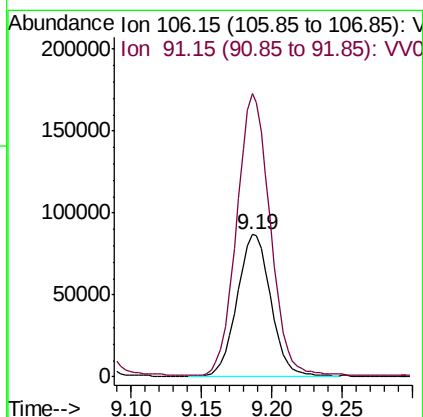
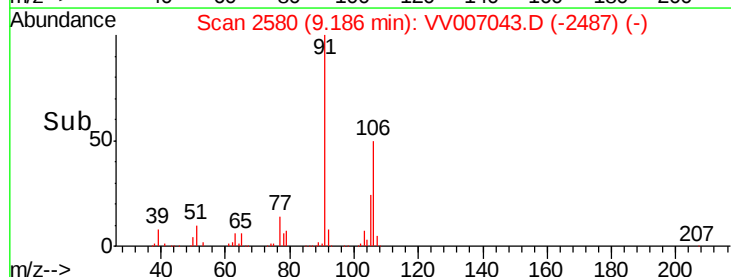
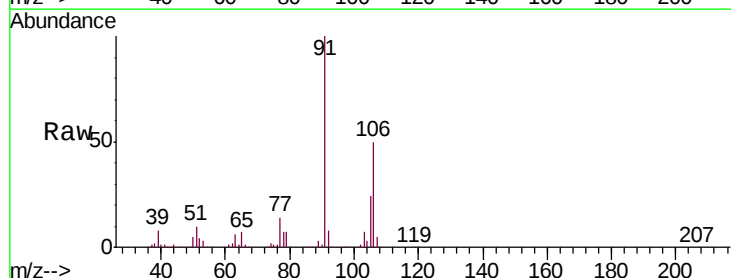
Acq: 16 Aug 2018 15:07

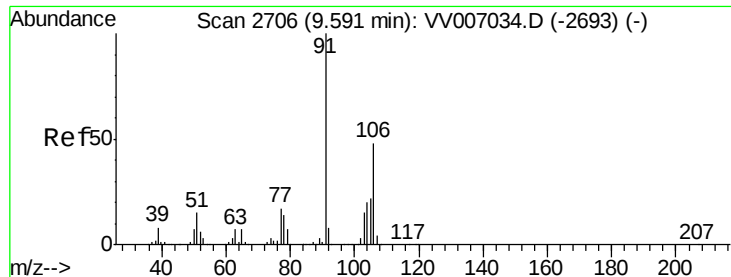
Tgt Ion: 106 Resp: 145175

Ion Ratio Lower Upper

106 100

91 198.8 141.6 263.0





#54

o-xylene

Concen: 5.175 ug/L

RT: 9.59 min Scan# 2706

Delta R.T. 0.00 min

Lab File: VV007043.D

Acq: 16 Aug 2018 15:07

Instrument :

MSVOA\_V

ClientSampleId :

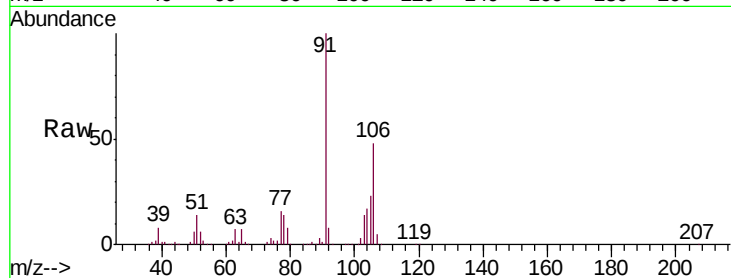
VSTD00562

Tgt Ion:106 Resp: 138280

Ion Ratio Lower Upper

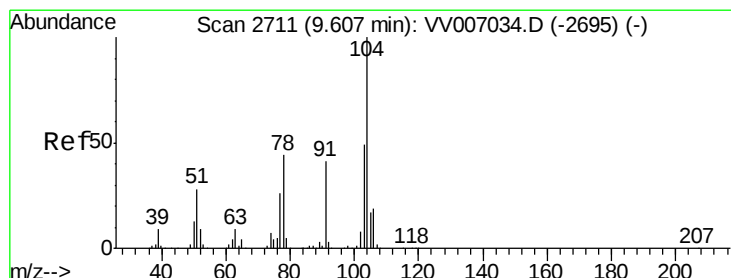
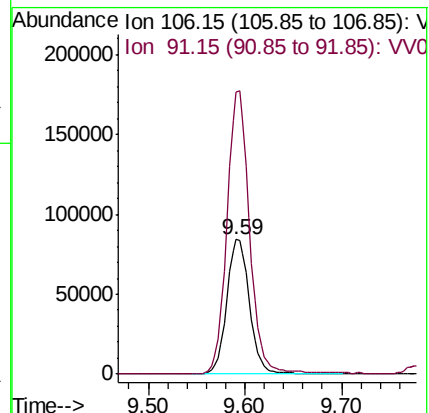
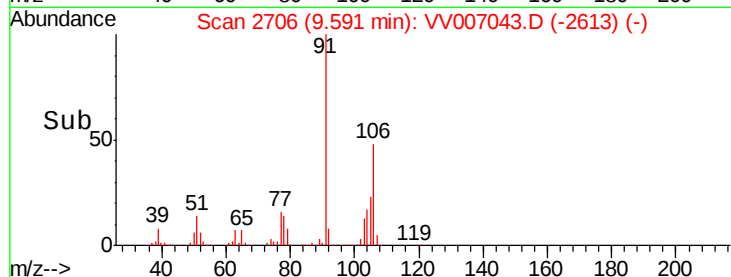
106 100

91 209.7 149.8 278.2



Abundance Ion 106.15 (105.85 to 106.85): V

Ion 91.15 (90.85 to 91.85): VV0



#55

Styrene

Concen: 5.307 ug/L

RT: 9.61 min Scan# 2712

Delta R.T. 0.00 min

Lab File: VV007043.D

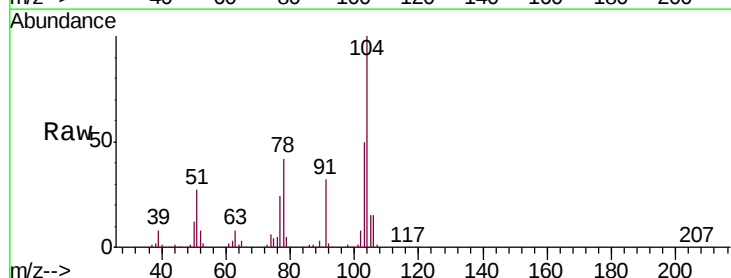
Acq: 16 Aug 2018 15:07

Tgt Ion:104 Resp: 239056

Ion Ratio Lower Upper

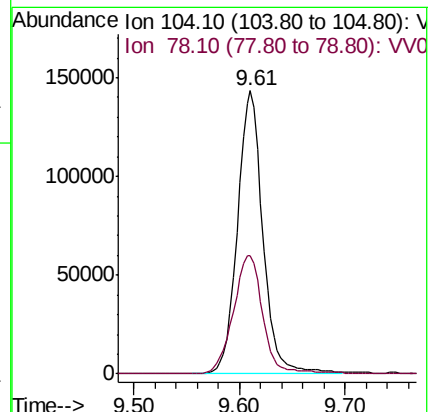
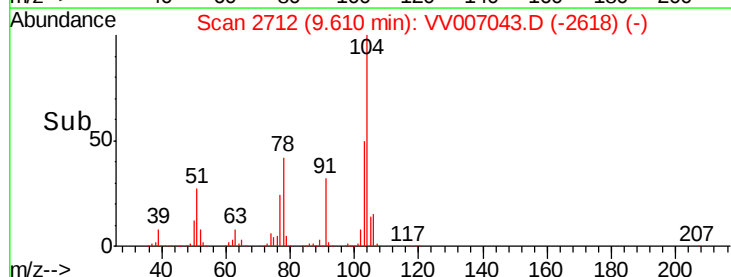
104 100

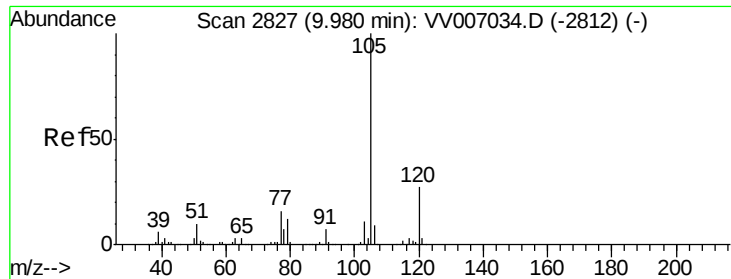
78 41.8 30.4 56.5



Abundance Ion 104.10 (103.80 to 104.80): V

Ion 78.10 (77.80 to 78.80): VV0





#56

Isopropylbenzene

Concen: 5.074 ug/L

RT: 9.98 min Scan# 2827

Delta R.T. 0.00 min

Lab File: VV007043.D

Acq: 16 Aug 2018 15:07

Instrument :

MSVOA\_V

ClientSampleId :

VSTD00562

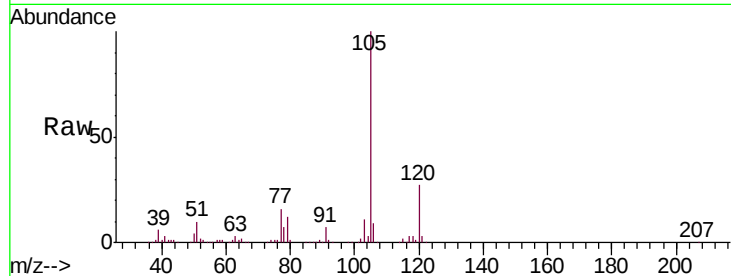
Tgt Ion: 105 Resp: 355718

Ion Ratio Lower Upper

105 100

120 26.9 21.1 31.7

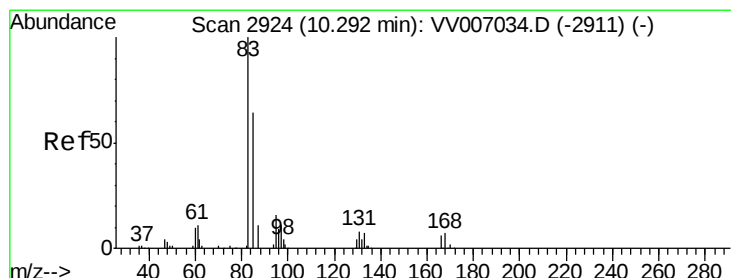
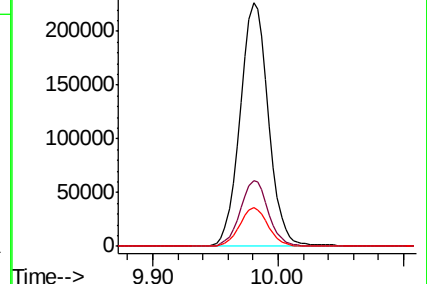
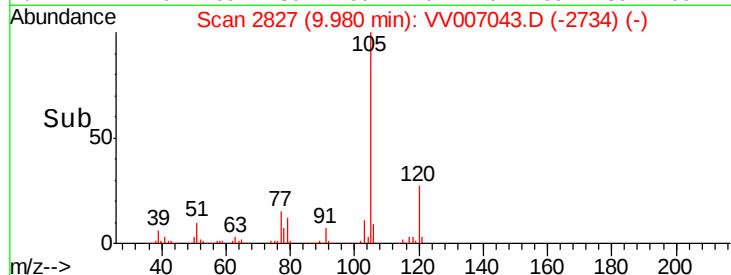
77 16.0 13.0 19.4



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: 5.059 ug/L

RT: 10.29 min Scan# 2924

Delta R.T. 0.00 min

Lab File: VV007043.D

Acq: 16 Aug 2018 15:07

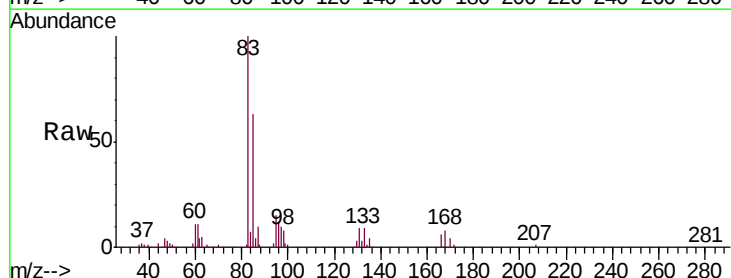
Tgt Ion: 83 Resp: 86332

Ion Ratio Lower Upper

83 100

85 63.2 43.0 79.8

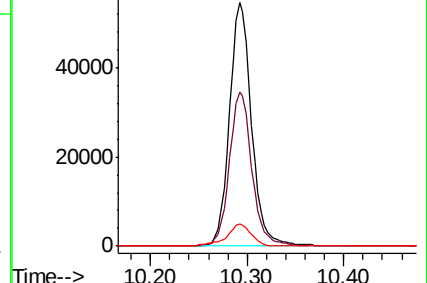
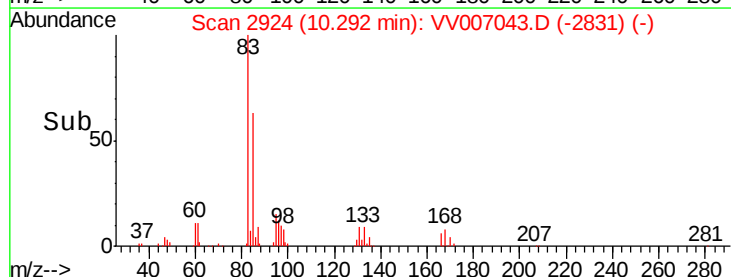
131 9.0 7.4 11.2

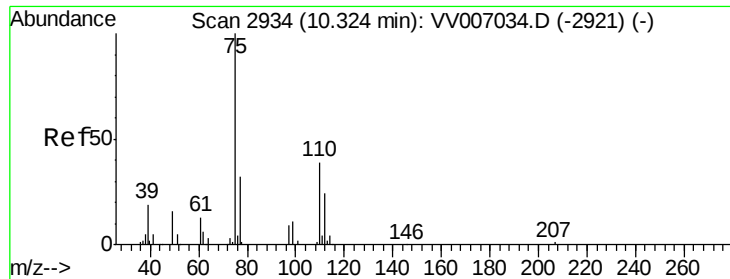


Abundance Ion 82.95 (82.65 to 83.65): V

Ion 85.00 (84.70 to 85.70): V

Ion 130.95 (130.65 to 131.65): V





#59

1,2,3-Trichloropropane

Concen: 4.971 ug/L

RT: 10.32 min Scan# 2934

Delta R.T. 0.00 min

Lab File: VV007043.D

Acq: 16 Aug 2018 15:07

Instrument :

MSVOA\_V

ClientSampleId :

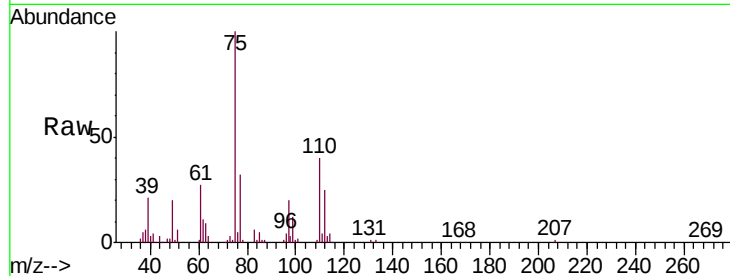
VSTD00562

Tgt Ion: 75 Resp: 60058

Ion Ratio Lower Upper

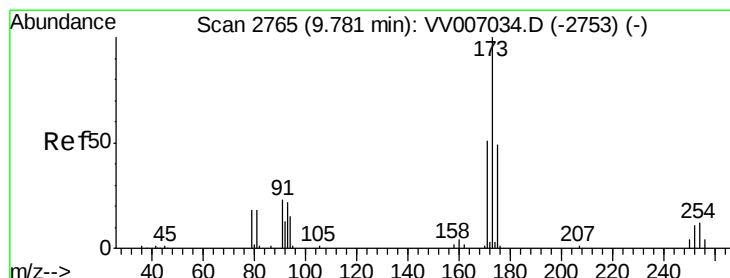
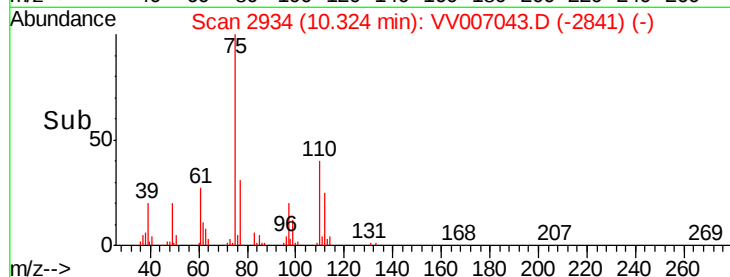
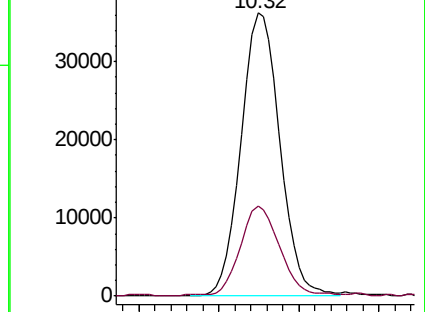
75 100

77 32.7 25.4 38.0



Abundance Ion 75.00 (74.70 to 75.70): VV007034.D (-2921) (-)

Ion 77.00 (76.70 to 77.70): VV007034.D (-2921) (-)



#61

Bromoform

Concen: 5.272 ug/L

RT: 9.78 min Scan# 2765

Delta R.T. 0.00 min

Lab File: VV007043.D

Acq: 16 Aug 2018 15:07

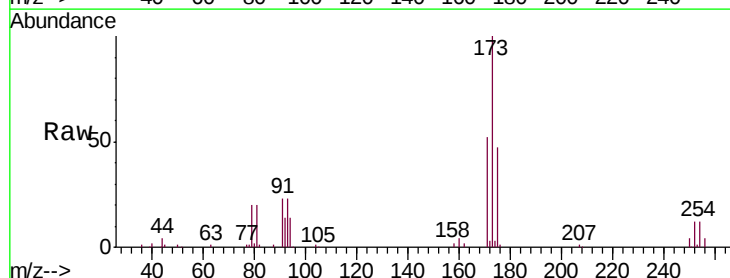
Tgt Ion: 173 Resp: 41513

Ion Ratio Lower Upper

173 100

175 47.7 39.3 58.9

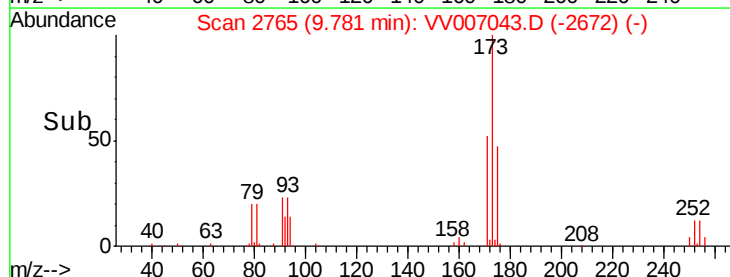
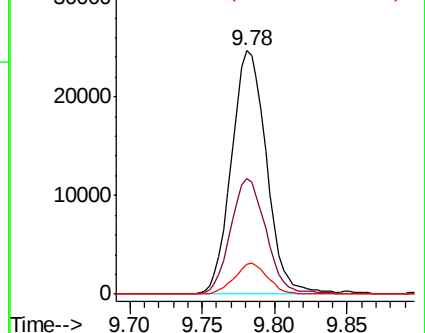
254 11.9 8.3 12.5

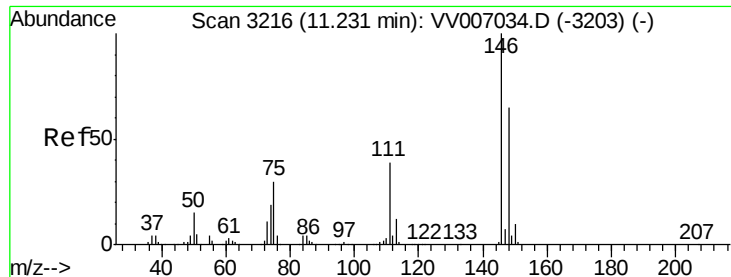


Abundance Ion 172.90 (172.60 to 173.60): VV007034.D (-2753) (-)

Ion 174.90 (174.60 to 175.60): VV007034.D (-2753) (-)

Ion 253.75 (253.45 to 254.45): VV007034.D (-2753) (-)





#62

1,3-Dichlorobenzene

Concen: 5.029 ug/L

RT: 11.23 min Scan# 3216

Delta R.T. 0.00 min

Lab File: VV007043.D

Acq: 16 Aug 2018 15:07

Instrument :

MSVOA\_V

ClientSampleId :

VSTD00562

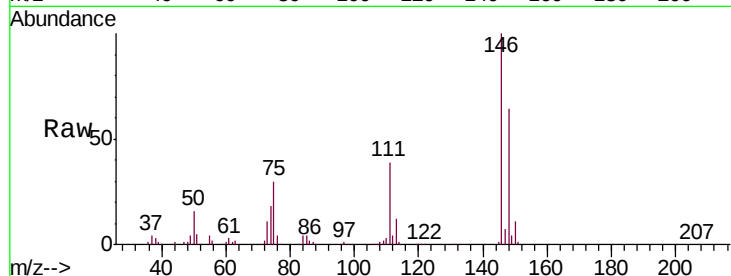
Tgt Ion:146 Resp: 169211

Ion Ratio Lower Upper

146 100

111 38.5 28.1 52.3

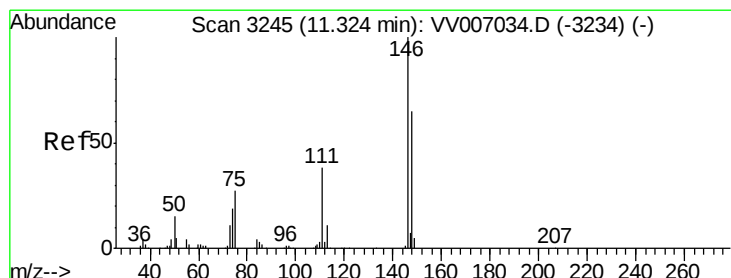
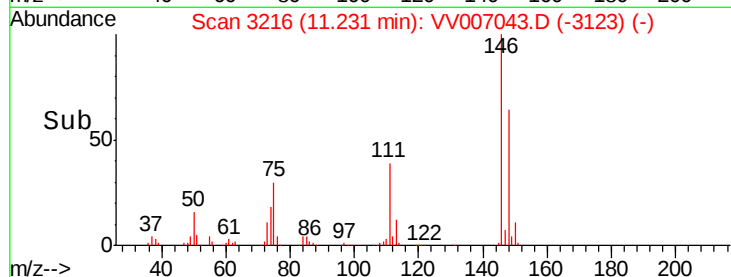
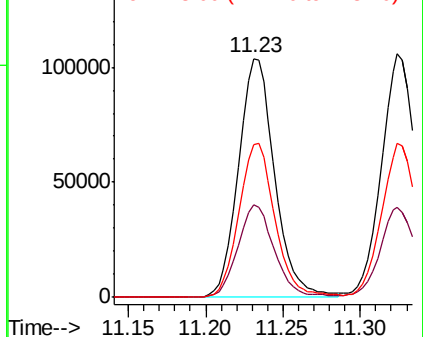
148 63.9 44.2 82.2



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



#63

1,4-Dichlorobenzene

Concen: 5.050 ug/L

RT: 11.32 min Scan# 3245

Delta R.T. 0.00 min

Lab File: VV007043.D

Acq: 16 Aug 2018 15:07

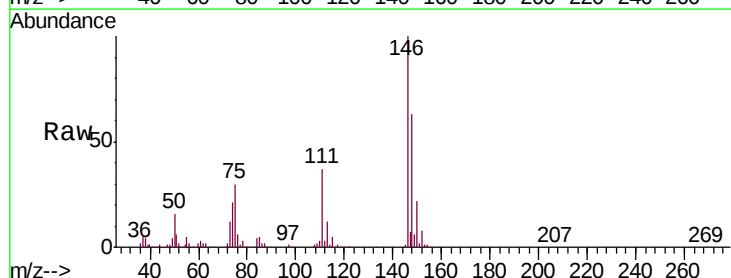
Tgt Ion:146 Resp: 174134

Ion Ratio Lower Upper

146 100

111 37.0 26.6 49.4

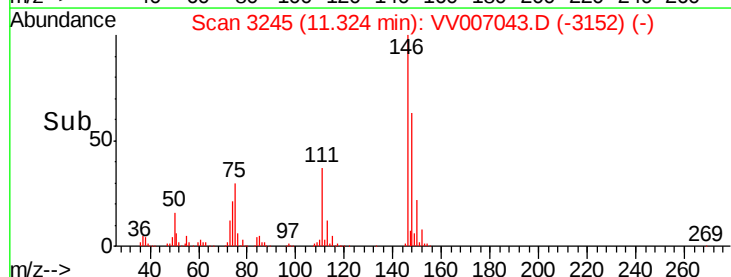
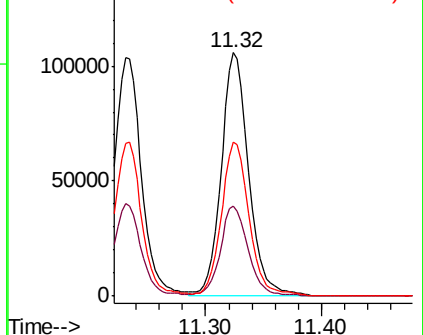
148 63.0 46.4 86.2

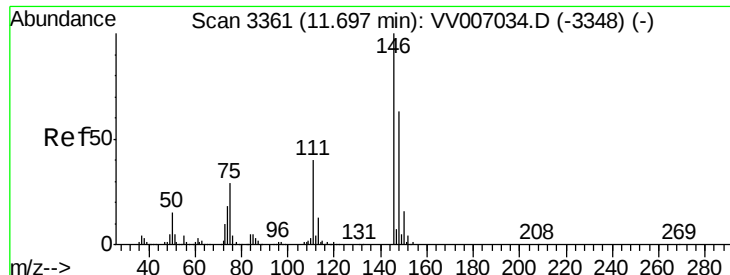


Abundance Ion 145.95 (145.65 to 146.65): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V

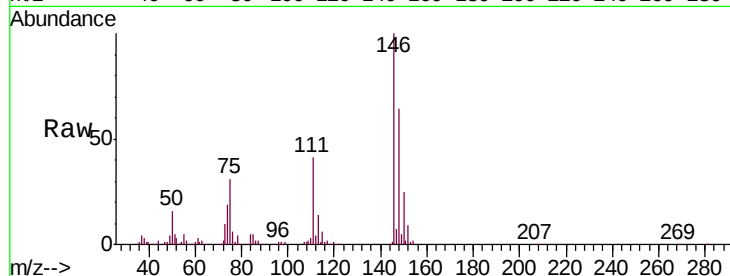




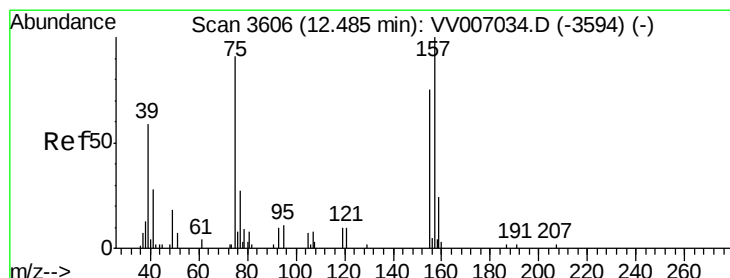
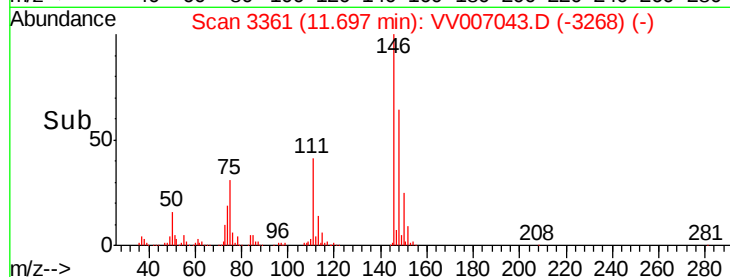
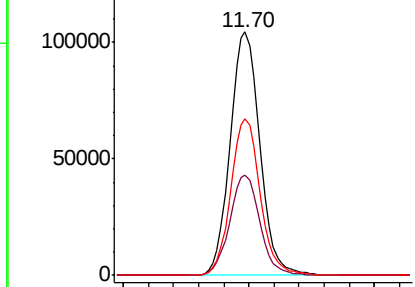
#65  
 1,2-Dichlorobenzene  
 Concen: 5.206 ug/L  
 RT: 11.70 min Scan# 3361  
 Delta R.T. 0.00 min  
 Lab File: VV007043.D  
 Acq: 16 Aug 2018 15:07

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD00562

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 146     | 100   |       |       |
| 111     | 41.2  | 33.0  | 49.6  |
| 148     | 64.3  | 50.6  | 75.8  |

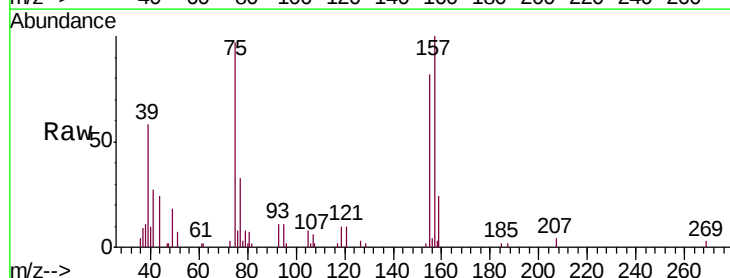


Abundance Ion 145.95 (145.65 to 146.65): V  
 Ion 111.00 (110.70 to 111.70): V  
 Ion 148.00 (147.70 to 148.70): V

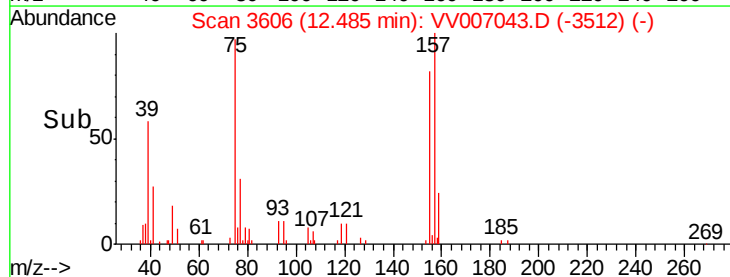
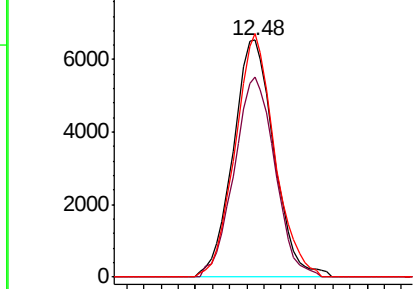


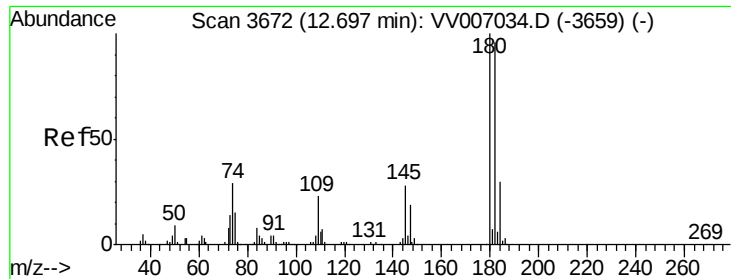
#66  
 1,2-Dibromo-3-chloropropane  
 Concen: 4.596 ug/L  
 RT: 12.48 min Scan# 3606  
 Delta R.T. 0.00 min  
 Lab File: VV007043.D  
 Acq: 16 Aug 2018 15:07

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 155     | 84.3  | 62.6  | 94.0  |
| 157     | 102.7 | 77.0  | 115.6 |



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

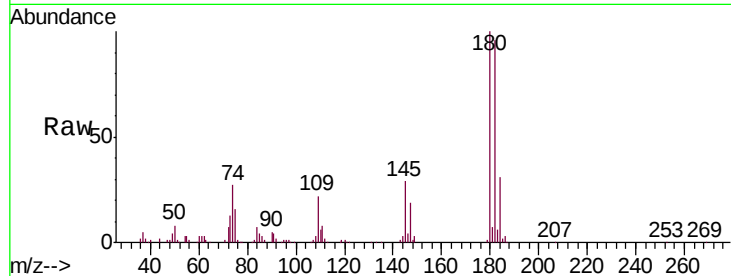




#67  
 1,3,5-Trichlorobenzene  
 Concen: 5.077 ug/L  
 RT: 12.70 min Scan# 3673  
 Delta R.T. 0.00 min  
 Lab File: VV007043.D  
 Acq: 16 Aug 2018 15:07

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD00562

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 180   | Resp: | 129276 |
| Ion      | Ratio | Lower | Upper  |
| 180      | 100   |       |        |
| 182      | 96.0  | 75.1  | 112.7  |
| 184      | 31.3  | 23.8  | 35.8   |
| 145      | 28.4  | 21.9  | 32.9   |



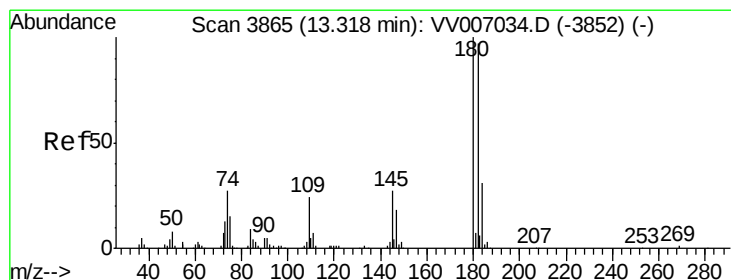
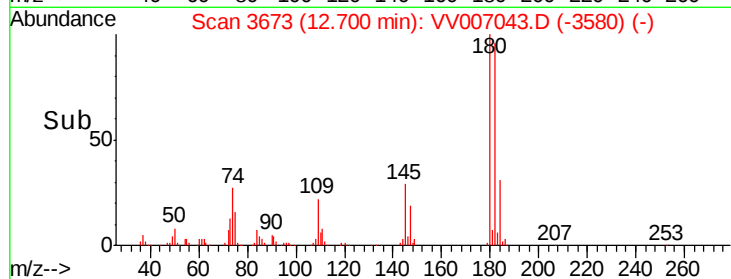
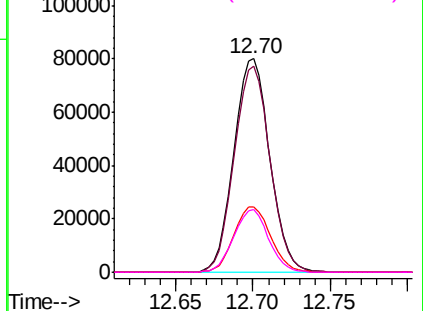
Abundance

Ion 180.00 (179.70 to 180.70): V

Ion 182.00 (181.70 to 182.70): V

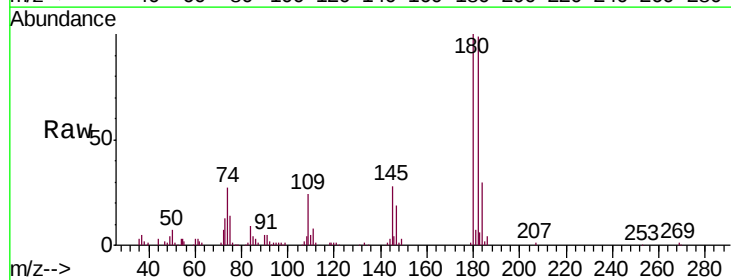
Ion 184.00 (183.70 to 184.70): V

Ion 145.00 (144.70 to 145.70): V



#68  
 1,2,4-trichlorobenzene  
 Concen: 4.730 ug/L  
 RT: 13.32 min Scan# 3865  
 Delta R.T. 0.00 min  
 Lab File: VV007043.D  
 Acq: 16 Aug 2018 15:07

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 180   | Resp: | 88394 |
| Ion      | Ratio | Lower | Upper |
| 180      | 100   |       |       |
| 182      | 97.7  | 76.5  | 114.7 |
| 145      | 28.8  | 23.6  | 35.4  |

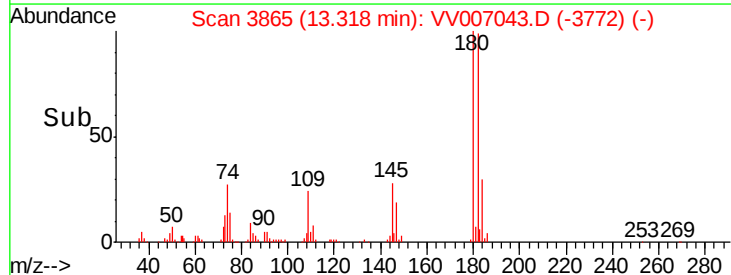
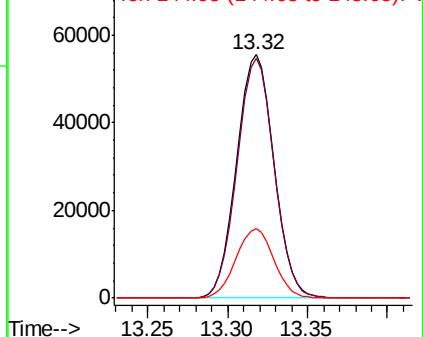


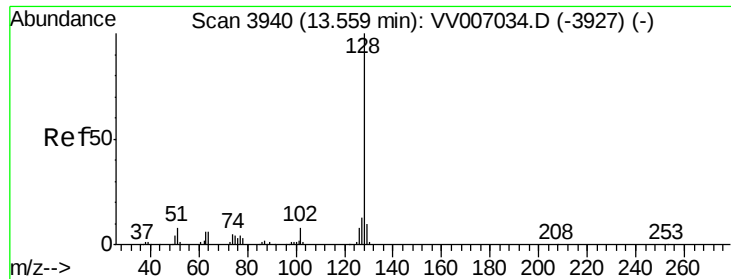
Abundance

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: 4.084 ug/L

RT: 13.56 min Scan# 3940

Delta R.T. -0.00 min

Lab File: VV007043.D

Acq: 16 Aug 2018 15:07

Instrument :

MSVOA\_V

ClientSampleId :

VSTD00562

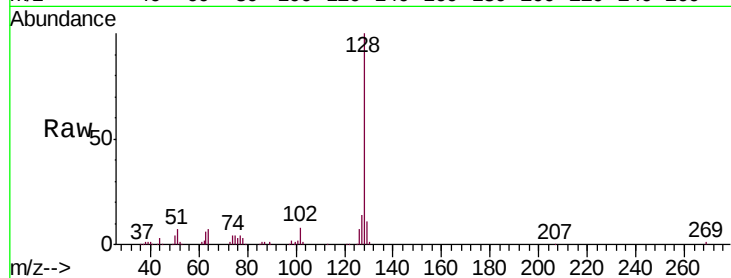
Tgt Ion:128 Resp: 109595

Ion Ratio Lower Upper

128 100

129 10.5 8.5 12.7

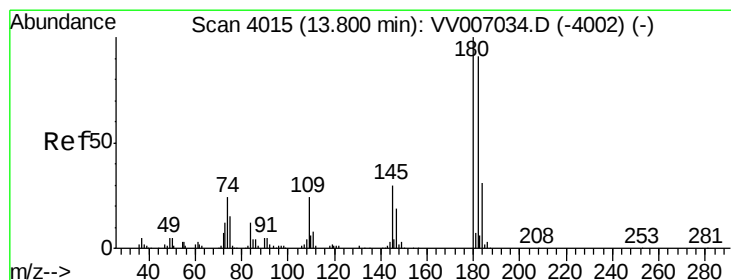
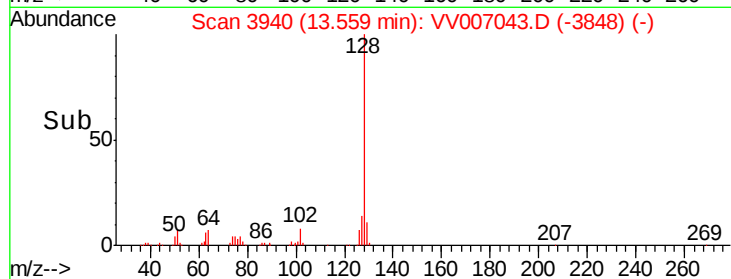
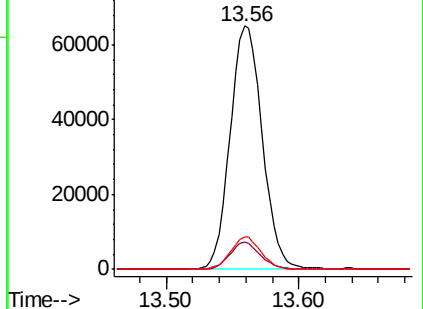
127 12.7 10.6 16.0



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: 4.834 ug/L

RT: 13.80 min Scan# 4015

Delta R.T. 0.00 min

Lab File: VV007043.D

Acq: 16 Aug 2018 15:07

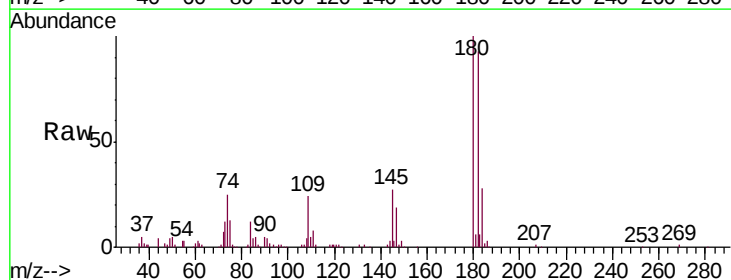
Tgt Ion:180 Resp: 87083

Ion Ratio Lower Upper

180 100

182 94.5 76.1 114.1

145 29.9 24.6 36.8



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

