

Data Path : Z:\VOASRV\HPCHEM1\MSVOA V\DATA\VV073118\  
 Data File : VV006797.D  
 Acq On : 31 Jul 2018 20:46  
 Operator : SY/MD  
 Sample : VSTDCCC005EC  
 Misc : 25 mL/MSVOA V/WATER  
 ALS Vial : 25 Sample Multiplier: 1

Instrument :  
 MSVOA\_V  
 ClientSampleId :

Quant Time: Aug 01 01:47:49 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVTR072318WMA.M  
 Quant Title : TRACE VOA SOM01.0  
 QLast Update : Wed Aug 01 01:43:21 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.67  | 114  | 211644   | 5.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 8.90  | 117  | 195854   | 5.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.30 | 152  | 93247    | 5.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |        |       |          |          |      |         |
|--------------------------------|--------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.32   | 65    | 47979    | 4.36     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 40 - 130 | Recovery | =    | 87.20%  |
| 7) Chloroethane-d5             | 1.58   | 69    | 46220    | 5.34     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 130 | Recovery | =    | 106.80% |
| 11) 1,1-Dichloroethene-d2      | 2.13   | 63    | 104715   | 4.85     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 125 | Recovery | =    | 97.00%  |
| 20) 2-Butanone-d5              | 3.95   | 46    | 186290   | 54.13    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 40 - 130 | Recovery | =    | 108.26% |
| 24) Chloroform-d               | 4.41   | 84    | 117885   | 5.70     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 114.00% |
| 26) 1,2-Dichloroethane-d4      | 5.09   | 65    | 57698    | 5.73     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 114.60% |
| 32) Benzene-d6                 | 5.10   | 84    | 223521   | 5.55     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 111.00% |
| 36) 1,2-Dichloropropane-d6     | 6.12   | 67    | 77530    | 5.70     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 140 | Recovery | =    | 114.00% |
| 41) Toluene-d8                 | 7.36   | 98    | 198169   | 5.63     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 112.60% |
| 43) trans-1,3-Dichloropropene- | 7.67   | 79    | 25148    | 5.67     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 55 - 130 | Recovery | =    | 113.40% |
| 46) 2-Hexanone-d5              | 8.14   | 63    | 156237   | 55.60    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 45 - 130 | Recovery | =    | 111.20% |
| 57) 1,1,2,2-Tetrachloroethane- | 10.27  | 84    | 63295    | 5.71     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 120 | Recovery | =    | 114.20% |
| 64) 1,2-Dichlorobenzene-d4     | 11.68  | 152   | 77767    | 5.60     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 80 - 120 | Recovery | =    | 112.00% |

## Target Compounds

| Target Compounds               | R.T. | QIon | Response | Conc   | Units | Ovalue |
|--------------------------------|------|------|----------|--------|-------|--------|
| 2) Dichlorodifluoromethane     | 1.14 | 85   | 85185    | 4.473  | ug/L  | # 85   |
| 3) Chloromethane               | 1.26 | 50   | 97211    | 6.012  | ug/L  | 99     |
| 5) Vinyl chloride              | 1.32 | 62   | 95633    | 4.722  | ug/L  | 90     |
| 6) Bromomethane                | 1.52 | 94   | 10165    | 2.051  | ug/L  | 98     |
| 8) Chloroethane                | 1.59 | 64   | 60641    | 5.471  | ug/L  | 98     |
| 9) Trichlorofluoromethane      | 1.77 | 101  | 111081   | 4.781  | ug/L  | 99     |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.14 | 101  | 68428    | 4.833  | ug/L  | 99     |
| 12) 1,1-Dichloroethene         | 2.14 | 96   | 68065    | 4.909  | ug/L  | 97     |
| 13) Acetone                    | 2.19 | 43   | 112675   | 51.455 | ug/L  | 99     |
| 14) Carbon disulfide           | 2.32 | 76   | 213130   | 4.571  | ug/L  | 100    |
| 15) Methyl Acetate             | 2.46 | 43   | 33622    | 5.180  | ug/L  | 99     |
| 16) Methylene chloride         | 2.54 | 84   | 78850    | 4.961  | ug/L  | 99     |
| 17) Methyl tert-butyl Ether    | 2.81 | 73   | 178790   | 5.257  | ug/L  | 100    |
| 18) trans-1,2-Dichloroethene   | 2.79 | 96   | 78177    | 5.191  | ug/L  | 98     |
| 19) 1,1-Dichloroethane         | 3.23 | 63   | 149517   | 5.397  | ug/L  | 99     |
| 21) 2-Butanone                 | 4.03 | 43   | 190360   | 51.901 | ug/L  | 99     |
| 22) cis-1,2-Dichloroethene     | 3.96 | 96   | 84319    | 5.370  | ug/L  | 97     |

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 Acq On : 31 Jul 2018 20:46  
 Operator : SY/MD  
 Sample : VSTDCCC005EC  
 Misc : 25 mL/MSVOA V/WATER  
 ALS Vial : 25 Sample Multiplier: 1

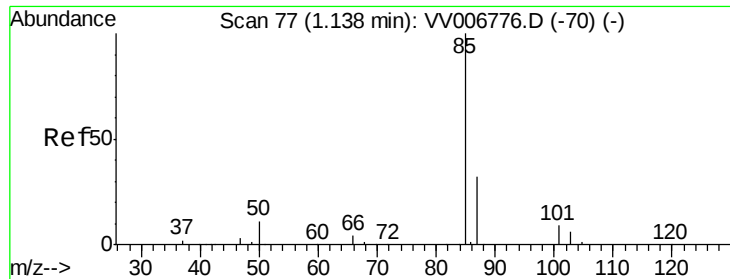
Instrument :  
 MSVOA\_V  
 ClientSampleId :

Quant Time: Aug 01 01:47:49 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVTR072318WMA.M  
 Quant Title : TRACE VOA SOM01.0  
 QLast Update : Wed Aug 01 01:43:21 2018  
 Response via : Initial Calibration

| Internal Standards              | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|---------------------------------|-------|------|----------|--------|-------|----------|
| -----                           |       |      |          |        |       |          |
| 23) Bromochloromethane          | 4.30  | 128  | 33891    | 5.245  | ug/L  | 98       |
| 25) Chloroform                  | 4.43  | 83   | 139479   | 5.366  | ug/L  | 98       |
| 27) 1,2-Dichloroethane          | 5.19  | 62   | 80277    | 5.264  | ug/L  | 100      |
| 29) 1,1,1-Trichloroethane       | 4.66  | 97   | 114082   | 5.414  | ug/L  | 100      |
| 30) Cyclohexane                 | 4.72  | 56   | 111784   | 4.738  | ug/L  | 98       |
| 31) Carbon tetrachloride        | 4.88  | 117  | 92574    | 5.140  | ug/L  | 100      |
| 33) Benzene                     | 5.15  | 78   | 319953   | 5.434  | ug/L  | 100      |
| 34) Trichloroethene             | 5.96  | 95   | 77879    | 5.240  | ug/L  | 98       |
| 35) Methylcyclohexane           | 6.18  | 83   | 115050   | 4.634  | ug/L  | 99       |
| 37) 1,2-Dichloropropane         | 6.23  | 63   | 83067    | 5.496  | ug/L  | 100      |
| 38) Bromodichloromethane        | 6.56  | 83   | 90730    | 5.374  | ug/L  | 97       |
| 39) cis-1,3-Dichloropropene     | 7.08  | 75   | 104673   | 5.316  | ug/L  | 100      |
| 40) 4-Methyl-2-pentanone        | 7.28  | 43   | 445244   | 53.587 | ug/L  | 99       |
| 42) Toluene                     | 7.44  | 91   | 330562   | 5.452  | ug/L  | 99       |
| 44) trans-1,3-Dichloropropene   | 7.70  | 75   | 83060    | 5.365  | ug/L  | 97       |
| 45) 1,1,2-Trichloroethane       | 7.89  | 97   | 54779    | 5.381  | ug/L  | 99       |
| 47) Tetrachloroethene           | 8.02  | 164  | 61973    | 5.249  | ug/L  | 98       |
| 48) 2-Hexanone                  | 8.19  | 43   | 312373   | 53.880 | ug/L  | 100      |
| 49) Dibromochloromethane        | 8.30  | 129  | 57982    | 5.382  | ug/L  | 98       |
| 50) 1,2-Dibromoethane           | 8.40  | 107  | 48798    | 5.364  | ug/L  | 98       |
| 51) Chlorobenzene               | 8.93  | 112  | 213500   | 5.414  | ug/L  | 100      |
| 52) Ethylbenzene                | 9.06  | 91   | 347570   | 5.378  | ug/L  | 99       |
| 53) m,p-xylene                  | 9.19  | 106  | 133015   | 5.452  | ug/L  | 99       |
| 54) o-xylene                    | 9.59  | 106  | 131256   | 5.522  | ug/L  | 100      |
| 55) Styrene                     | 9.61  | 104  | 222147   | 5.541  | ug/L  | 99       |
| 56) Isopropylbenzene            | 9.98  | 105  | 339038   | 5.493  | ug/L  | 99       |
| 58) 1,1,1,2,2-Tetrachloroethane | 10.29 | 83   | 67062    | 5.385  | ug/L  | 99       |
| 59) 1,2,3-Trichloropropane      | 10.32 | 75   | 48186    | 5.416  | ug/L  | 99       |
| 61) Bromoform                   | 9.78  | 173  | 29173    | 5.147  | ug/L  | 99       |
| 62) 1,3-Dichlorobenzene         | 11.23 | 146  | 155696   | 5.401  | ug/L  | 100      |
| 63) 1,4-Dichlorobenzene         | 11.32 | 146  | 158999   | 5.412  | ug/L  | 98       |
| 65) 1,2-Dichlorobenzene         | 11.70 | 146  | 151969   | 5.412  | ug/L  | 99       |
| 66) 1,2-Dibromo-3-chloropropan  | 12.48 | 75   | 9407     | 5.598  | ug/L  | 98       |
| 67) 1,3,5-Trichlorobenzene      | 12.70 | 180  | 122176   | 5.551  | ug/L  | 98       |
| 68) 1,2,4-trichlorobenzene      | 13.31 | 180  | 99144    | 5.671  | ug/L  | 99       |
| 69) Naphthalene                 | 13.56 | 128  | 175900   | 5.880  | ug/L  | 99       |
| 70) 1,2,3-Trichlorobenzene      | 13.80 | 180  | 94815    | 5.731  | ug/L  | 99       |
| -----                           |       |      |          |        |       |          |

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





#2

Dichlorodifluoromethane

Concen: 4.473 ug/L

RT: 1.14 min Scan# 77

Delta R.T. -0.00 min

Lab File: VV006797.D

Acq: 31 Jul 2018 20:46

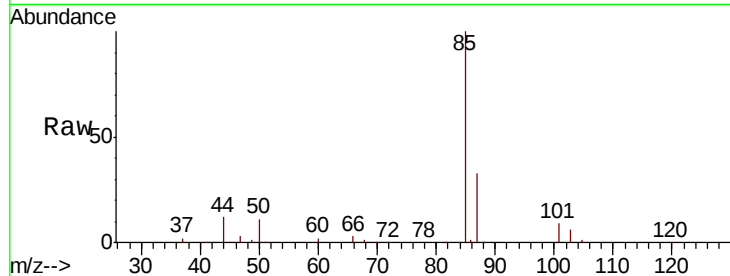
Instrument :  
MSVOA\_V  
ClientSampled :

Tot Ion: 85 Resp: 85185

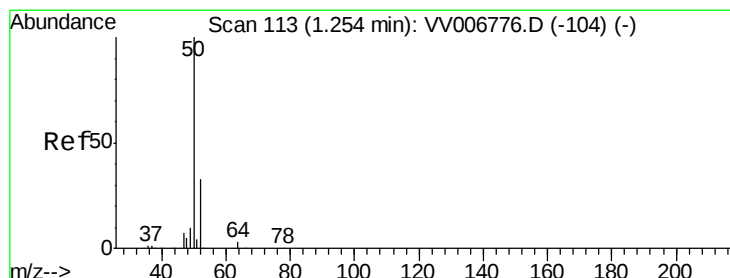
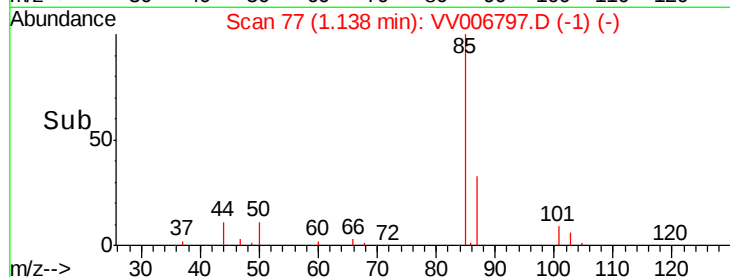
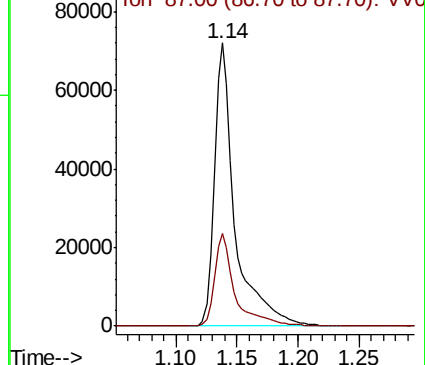
Ion Ratio Lower Upper

85 100

87 32.2 19.9 29.9#



Abundance Ion 85.00 (84.70 to 85.70): VV006776.D (-70) (-)



#3

Chloromethane

Concen: 6.012 ug/L

RT: 1.26 min Scan# 114

Delta R.T. 0.00 min

Lab File: VV006797.D

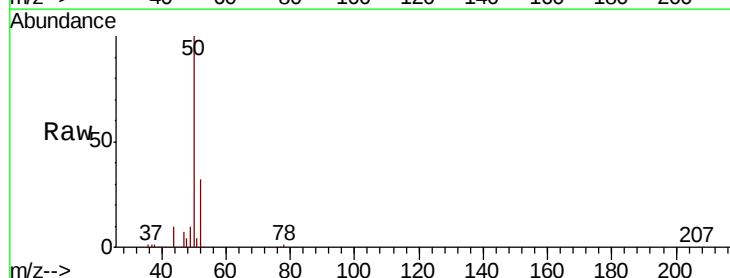
Acq: 31 Jul 2018 20:46

Tgt Ion: 50 Resp: 97211

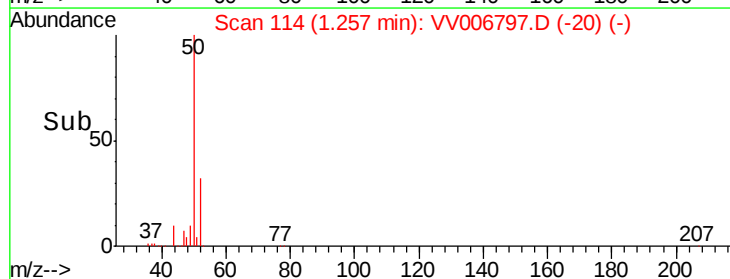
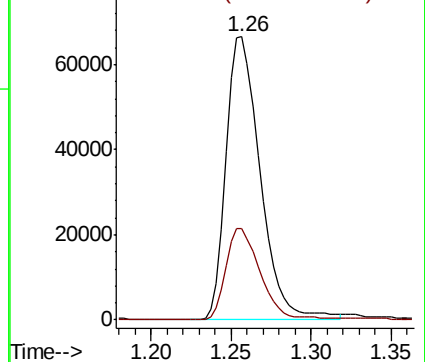
Ion Ratio Lower Upper

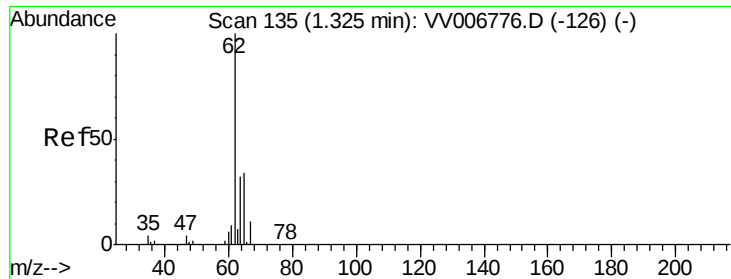
50 100

52 32.2 22.1 41.1



Abundance Ion 50.05 (49.75 to 50.75): VV006776.D (-104) (-)





#5

Vinyl chloride

Concen: 4.722 ug/L

RT: 1.32 min Scan# 135

Delta R.T. -0.00 min

Lab File: VV006797.D

Acq: 31 Jul 2018 20:46

Instrument :

MSVOA\_V

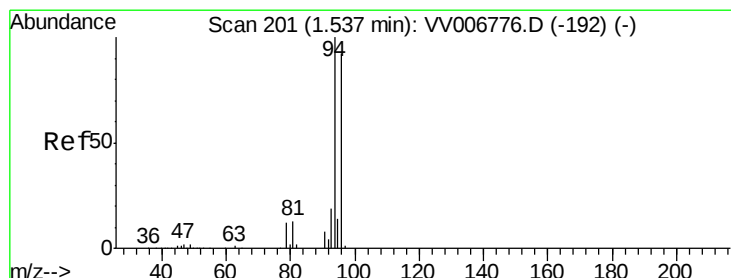
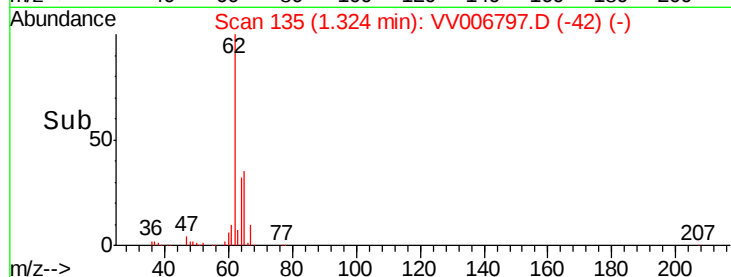
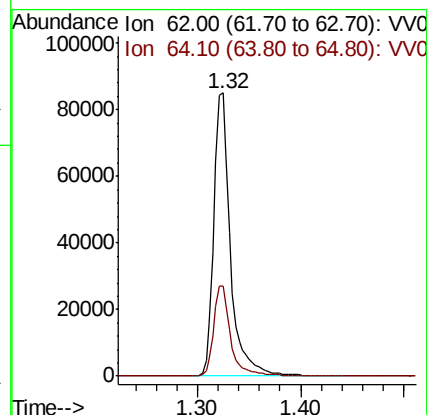
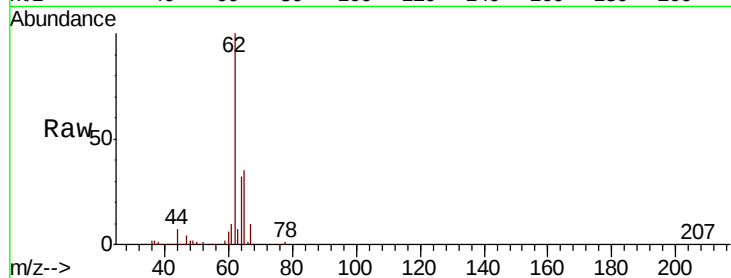
ClientSampleId :

Tot Ion: 62 Resp: 95633

Ion Ratio Lower Upper

62 100

64 31.9 26.5 49.3



#6

Bromomethane

Concen: 2.051 ug/L

RT: 1.52 min Scan# 196

Delta R.T. -0.02 min

Lab File: VV006797.D

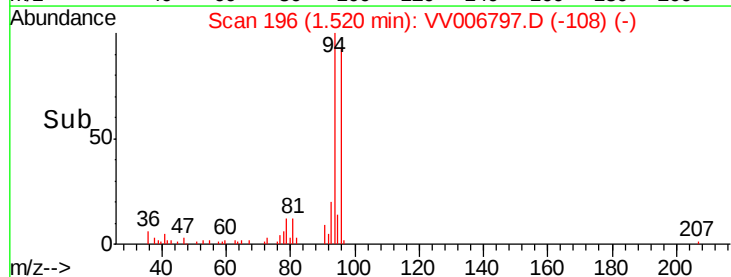
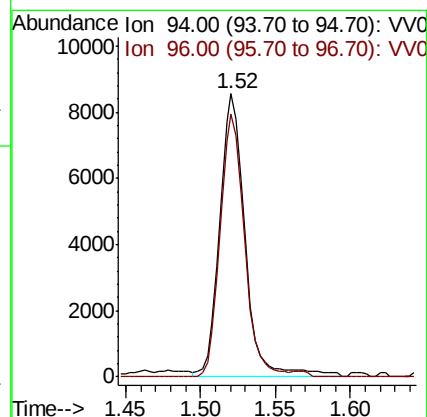
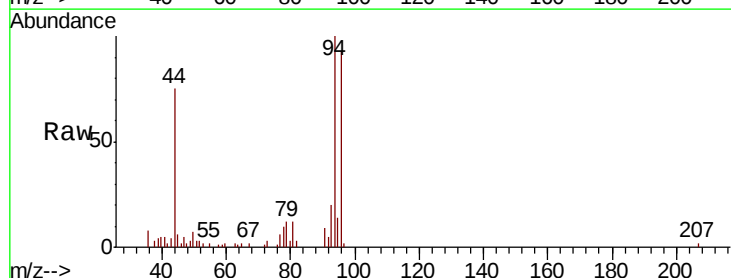
Acq: 31 Jul 2018 20:46

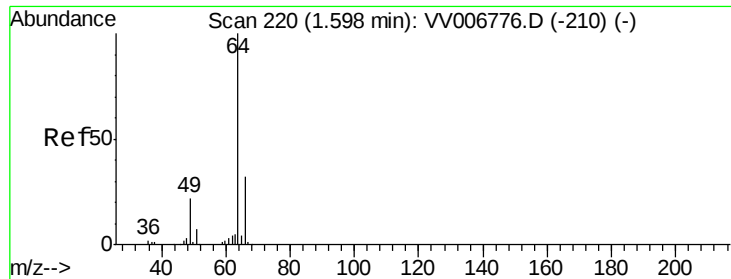
Tgt Ion: 94 Resp: 10165

Ion Ratio Lower Upper

94 100

96 92.9 66.4 123.4

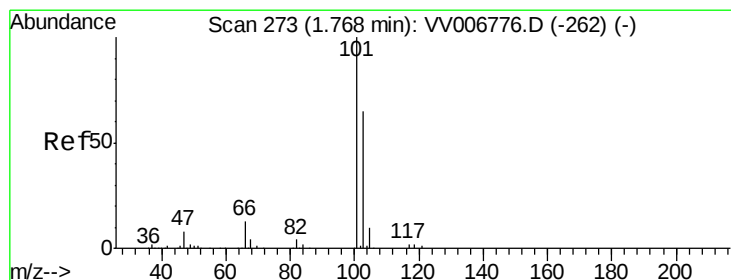
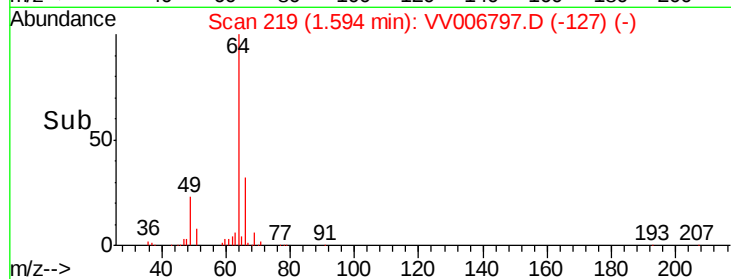
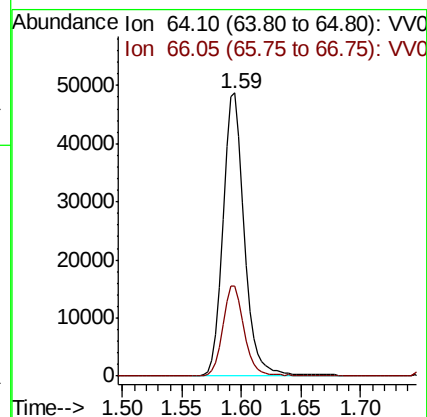
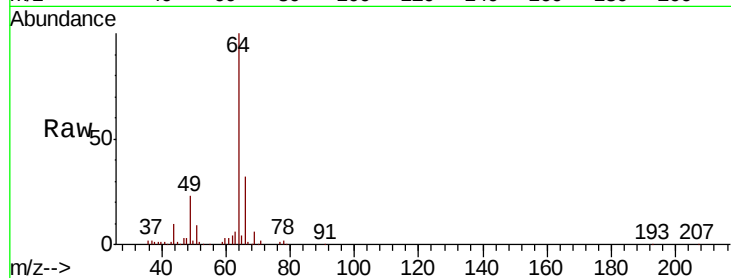




#8  
Chloroethane  
Concen: 5.471 ug/L  
RT: 1.59 min Scan# 219  
Delta R.T. -0.00 min  
Lab File: VV006797.D  
Acq: 31 Jul 2018 20:46

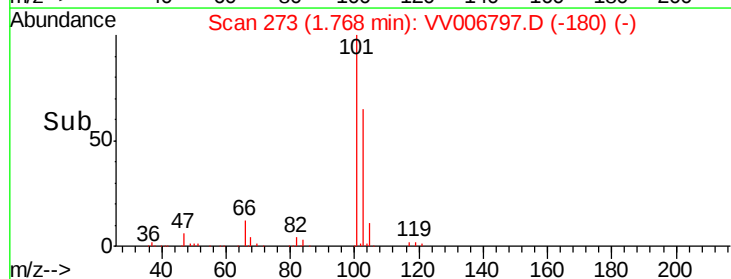
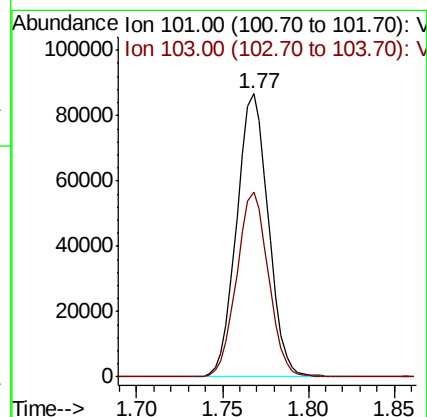
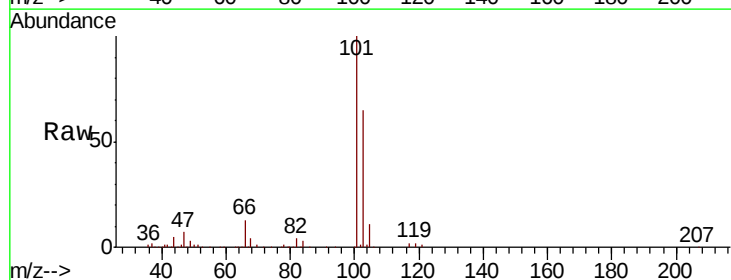
Instrument :  
MSVOA\_V  
ClientSampled :

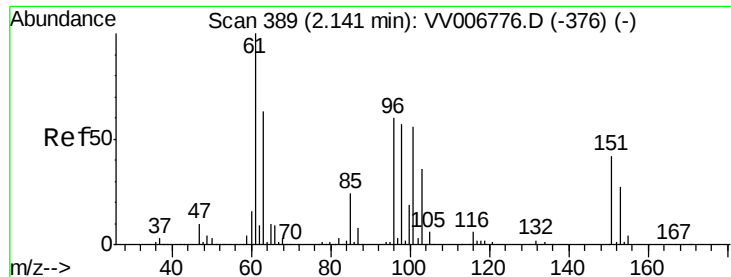
Tot Ion: 64 Resp: 60641  
Ion Ratio Lower Upper  
64 100  
66 32.0 21.8 40.4



#9  
Trichlorofluoromethane  
Concen: 4.781 ug/L  
RT: 1.77 min Scan# 273  
Delta R.T. -0.00 min  
Lab File: VV006797.D  
Acq: 31 Jul 2018 20:46

Tgt Ion: 101 Resp: 111081  
Ion Ratio Lower Upper  
101 100  
103 65.5 51.8 77.6





#10

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

Concen: 4.833 ug/L

RT: 2.14 min Scan# 389

Delta R.T. -0.00 min

Lab File: VV006797.D

Acq: 31 Jul 2018 20:46

Instrument :

MSVOA\_V

ClientSampleId :

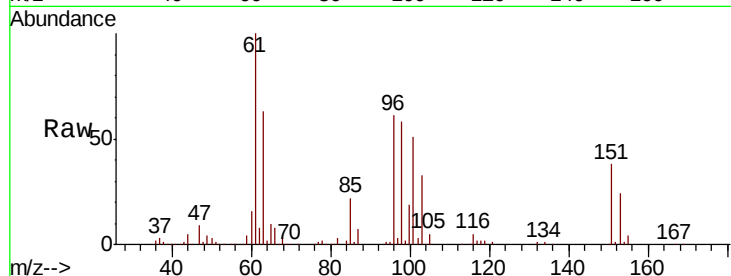
Tot Ion:101 Resp: 68428

Ion Ratio Lower Upper

101 100

85 41.3 33.1 49.7

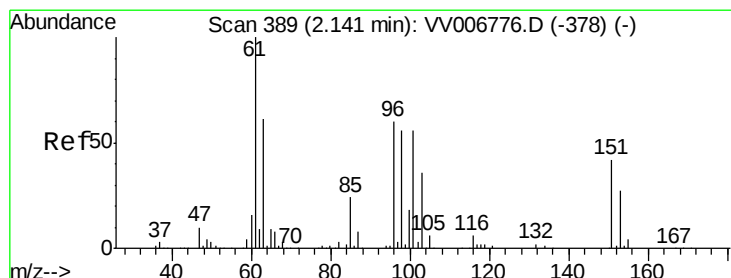
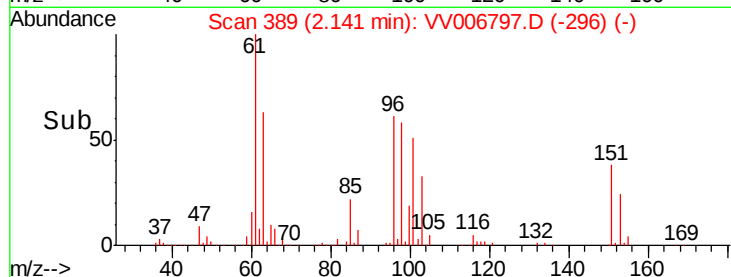
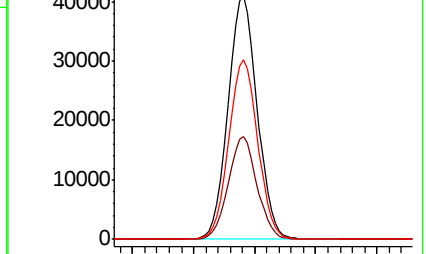
151 73.4 59.7 89.5



Abundance Ion 101.00 (100.70 to 101.70): VV006797.D (-296) (-)

Ion 85.00 (84.70 to 85.70): VV006797.D (-296) (-)

Ion 151.00 (150.70 to 151.70): VV006797.D (-296) (-)



#12

1,1-Dichloroethene

Concen: 4.909 ug/L

RT: 2.14 min Scan# 389

Delta R.T. -0.00 min

Lab File: VV006797.D

Acq: 31 Jul 2018 20:46

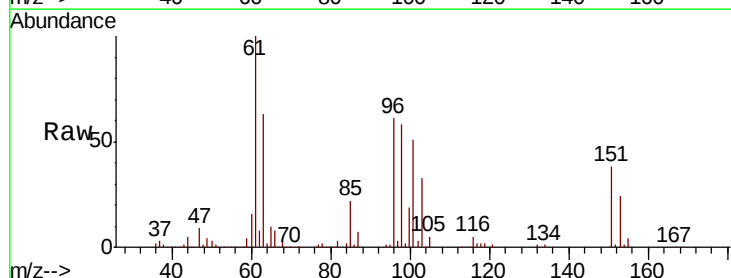
Tgt Ion: 96 Resp: 68065

Ion Ratio Lower Upper

96 100

61 164.4 113.5 210.9

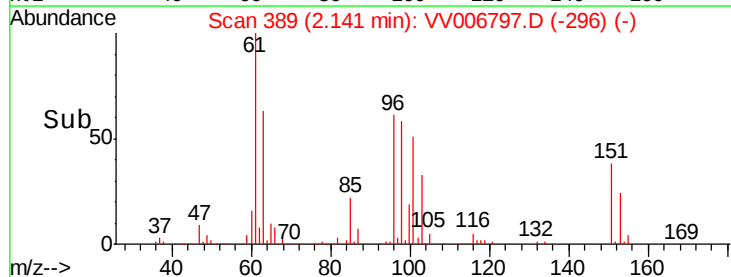
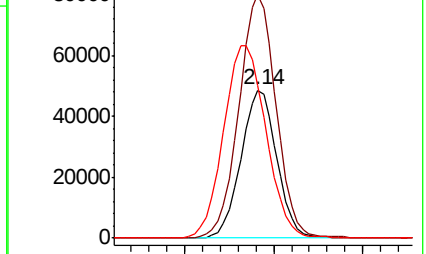
63 103.3 69.5 129.1

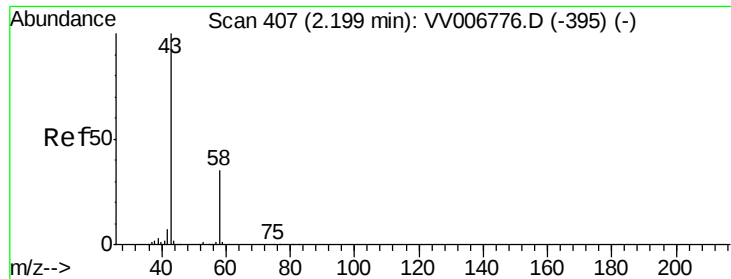


Abundance Ion 96.00 (95.70 to 96.70): VV006797.D (-296) (-)

Ion 61.05 (60.75 to 61.75): VV006797.D (-296) (-)

Ion 63.00 (62.70 to 63.70): VV006797.D (-296) (-)





#13

Acetone

Concen: 51.455 ug/L

RT: 2.19 min Scan# 404

Delta R.T. -0.01 min

Lab File: VV006797.D

Acq: 31 Jul 2018 20:46

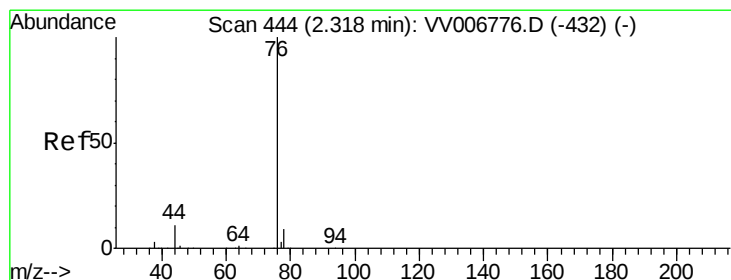
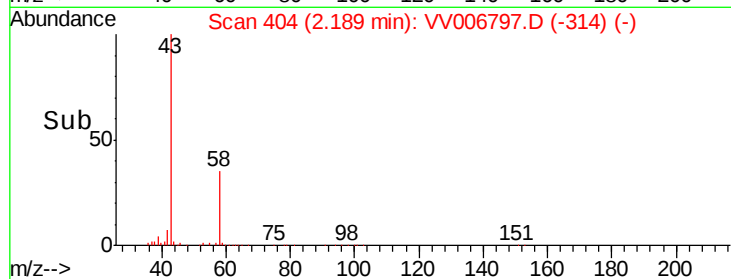
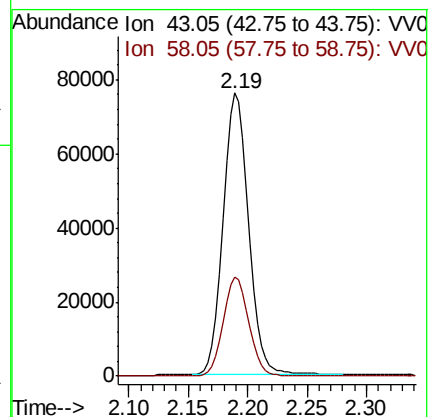
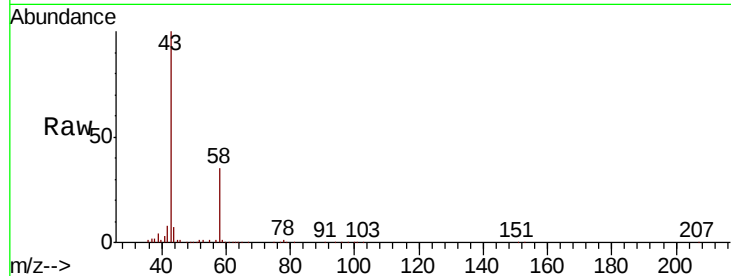
Instrument :  
MSVOA\_V  
ClientSampled :

Tot Ion: 43 Resp: 112675

Ion Ratio Lower Upper

43 100

58 35.3 0.0 71.4



#14

Carbon disulfide

Concen: 4.571 ug/L

RT: 2.32 min Scan# 444

Delta R.T. -0.00 min

Lab File: VV006797.D

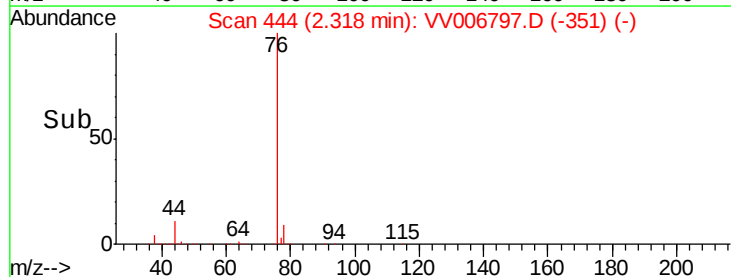
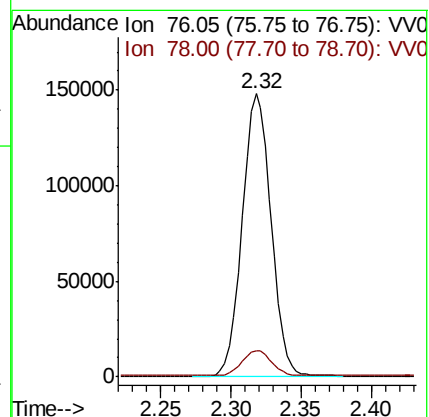
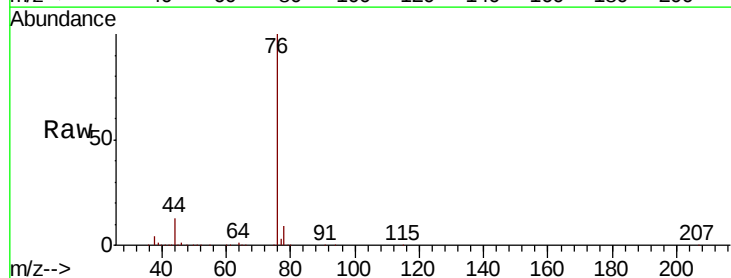
Acq: 31 Jul 2018 20:46

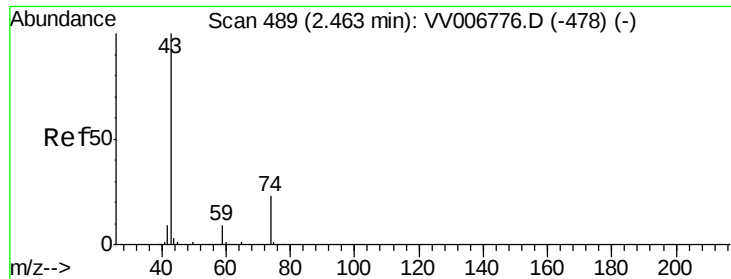
Tgt Ion: 76 Resp: 213130

Ion Ratio Lower Upper

76 100

78 9.4 7.4 11.2





#15

Methvl Acetate

Concen: 5.180 ug/L

RT: 2.46 min Scan# 488

Delta R.T. -0.00 min

Lab File: VV006797.D

Acq: 31 Jul 2018 20:46

Instrument :

MSVOA\_V

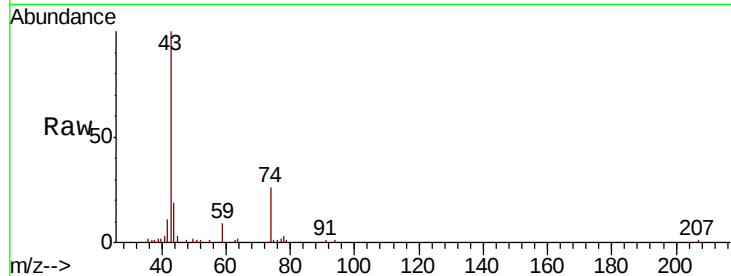
ClientSampleId :

Tot Ion: 43 Resp: 33622

Ion Ratio Lower Upper

43 100

74 25.3 20.6 31.0



Abundance Ion 43.05 (42.75 to 43.75): VV0

Ion 74.05 (73.75 to 74.75): VV0

25000

20000

15000

10000

5000

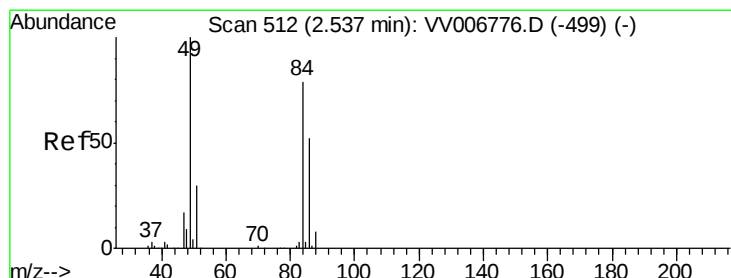
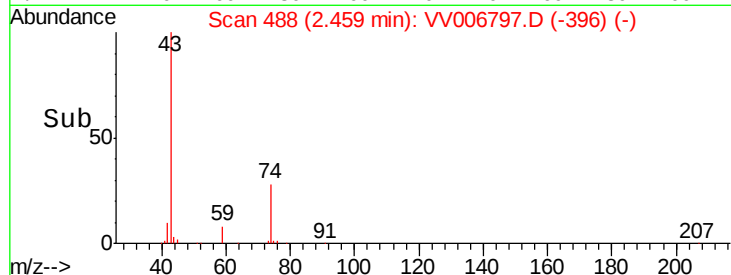
0

Time-->

2.40

2.45

2.50



#16

Methylene chloride

Concen: 4.961 ug/L

RT: 2.54 min Scan# 512

Delta R.T. -0.00 min

Lab File: VV006797.D

Acq: 31 Jul 2018 20:46

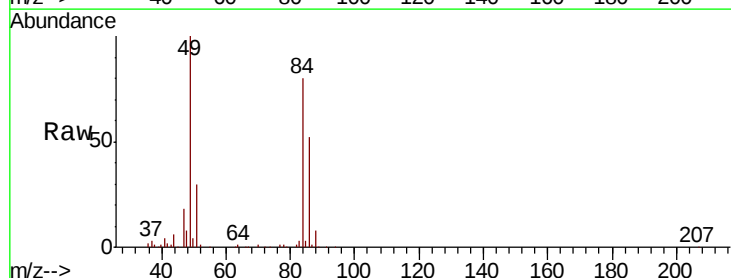
Tgt Ion: 84 Resp: 78850

Ion Ratio Lower Upper

84 100

86 64.3 44.7 83.1

49 124.7 86.7 160.9



Abundance Ion 84.05 (83.75 to 84.75): VV0

Ion 86.00 (85.70 to 86.70): VV0

Ion 49.10 (48.80 to 49.80): VV0

80000

60000

40000

20000

0

Time-->

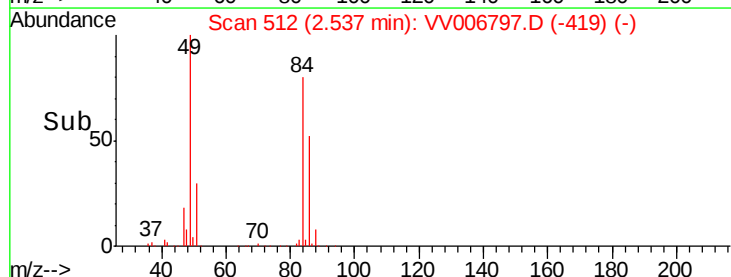
2.45

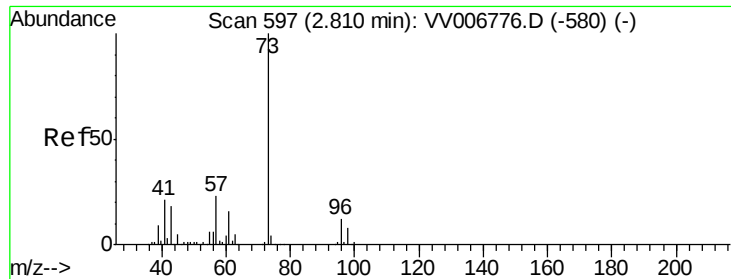
2.50

2.55

2.60

2.65

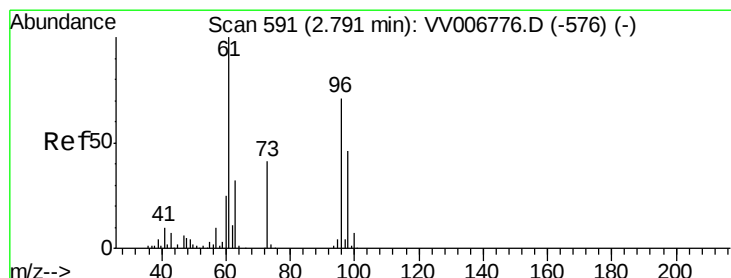
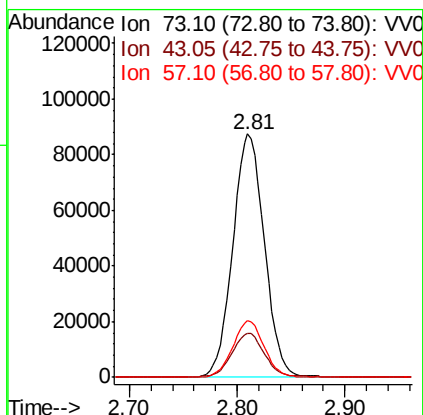
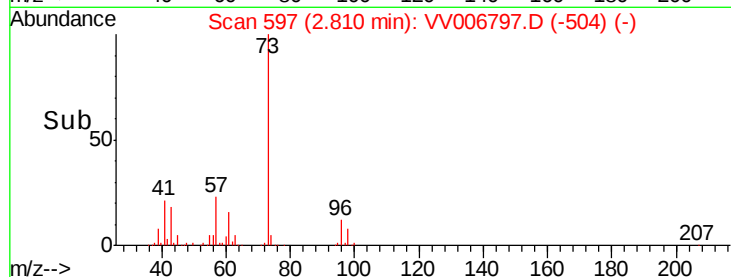
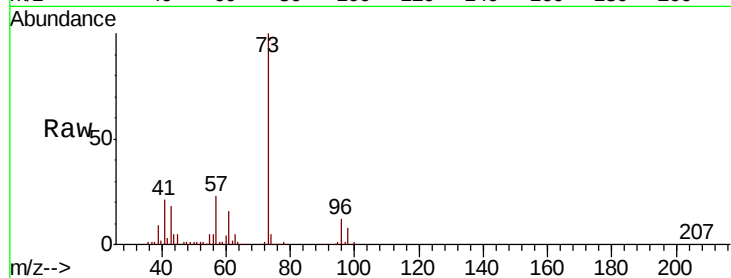




#17  
Methvl tert-butvl Ether  
Concen: 5.257 ug/L  
RT: 2.81 min Scan# 597  
Delta R.T. -0.00 min  
Lab File: VV006797.D  
Acq: 31 Jul 2018 20:46

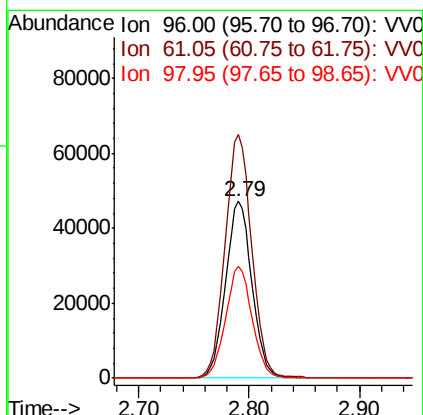
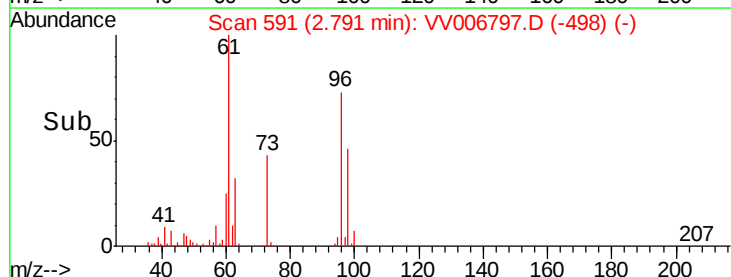
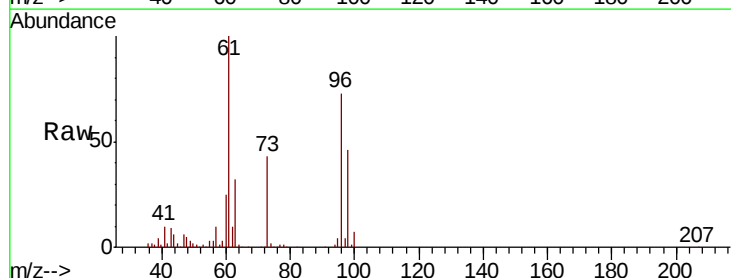
Instrument :  
MSVOA\_V  
ClientSampleId :

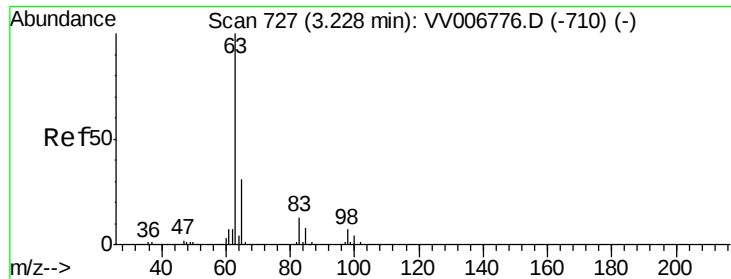
Tot Ion: 73 Resp: 178790  
Ion Ratio Lower Upper  
73 100  
43 17.8 14.2 21.4  
57 22.9 18.2 27.2



#18  
trans-1,2-Dichloroethene  
Concen: 5.191 ug/L  
RT: 2.79 min Scan# 591  
Delta R.T. -0.00 min  
Lab File: VV006797.D  
Acq: 31 Jul 2018 20:46

Tgt Ion: 96 Resp: 78177  
Ion Ratio Lower Upper  
96 100  
61 137.8 98.5 182.9  
98 63.0 45.4 84.4

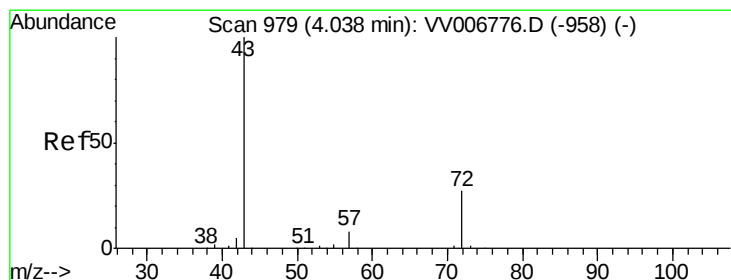
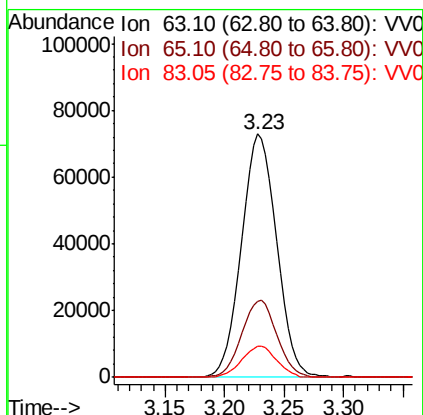
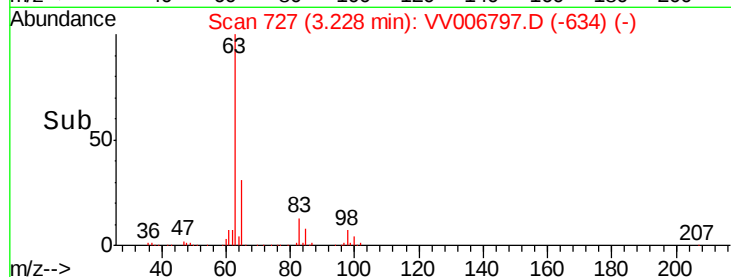
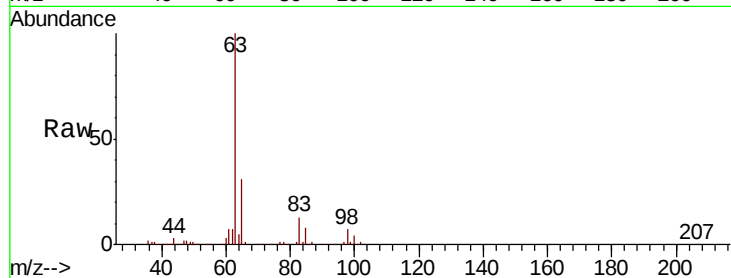




#19  
 1,1-Dichloroethane  
 Concen: 5.397 ug/L  
 RT: 3.23 min Scan# 727  
 Delta R.T. -0.00 min  
 Lab File: VV006797.D  
 Acq: 31 Jul 2018 20:46

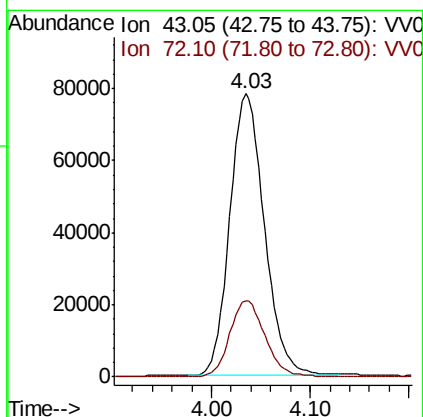
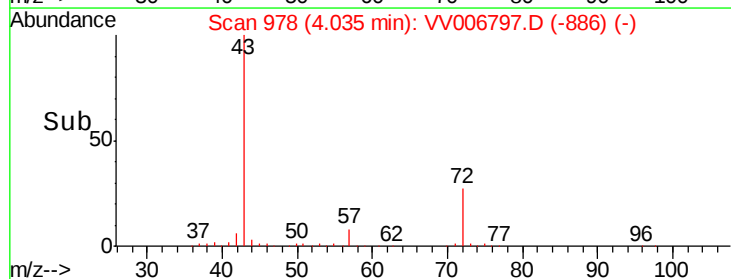
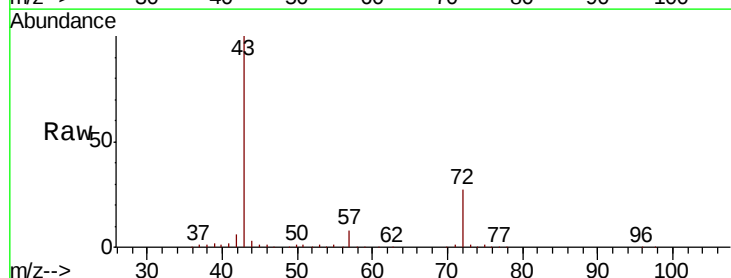
Instrument :  
 MSVOA\_V  
 ClientSampleId :

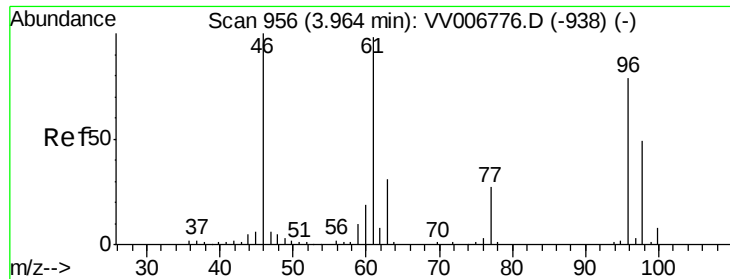
Tot Ion: 63 Resp: 149517  
 Ion Ratio Lower Upper  
 63 100  
 65 31.4 22.4 41.6  
 83 12.7 9.0 16.8



#21  
 2-Butanone  
 Concen: 51.901 ug/L  
 RT: 4.03 min Scan# 978  
 Delta R.T. -0.00 min  
 Lab File: VV006797.D  
 Acq: 31 Jul 2018 20:46

Tgt Ion: 43 Resp: 190360  
 Ion Ratio Lower Upper  
 43 100  
 72 27.9 13.8 41.4



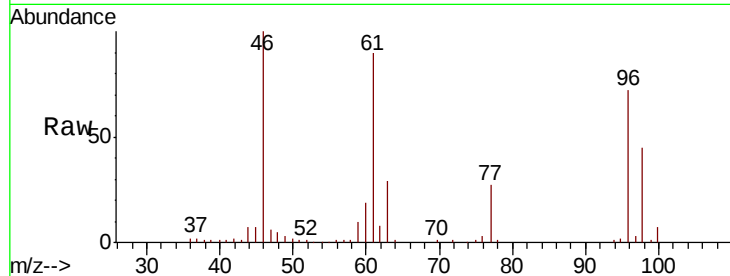


#22

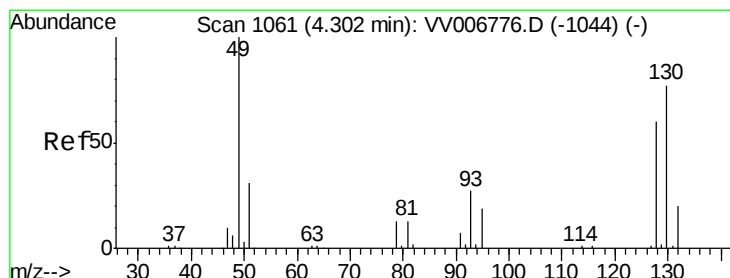
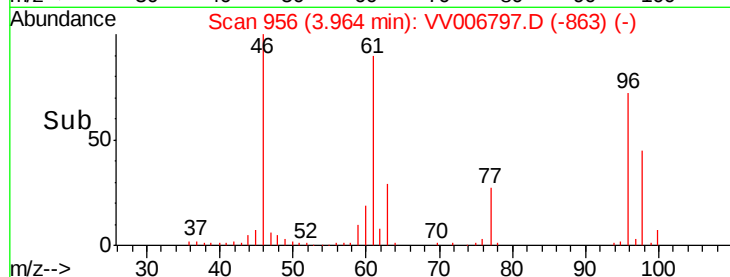
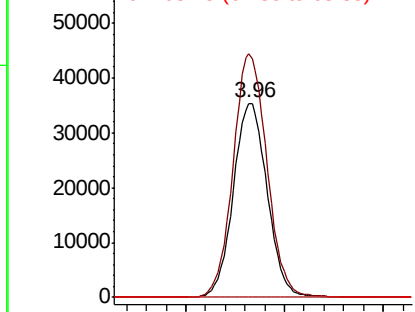
cis-1,2-Dichloroethene  
Concen: 5.370 ug/L  
RT: 3.96 min Scan# 956  
Delta R.T. -0.00 min  
Lab File: VV006797.D  
Acq: 31 Jul 2018 20:46

Instrument :  
MSVOA\_V  
ClientSampled :

Tot Ion: 96 Resp: 84319  
Ion Ratio Lower Upper  
96 100  
61 125.7 85.5 158.9  
68 0.0 0.0 0.0



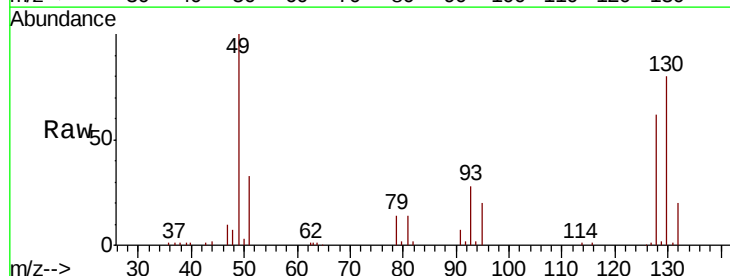
Abundance Ion 96.00 (95.70 to 96.70): VV0  
Ion 61.05 (60.75 to 61.75): VV0  
Ion 68.15 (67.85 to 68.85): VV0



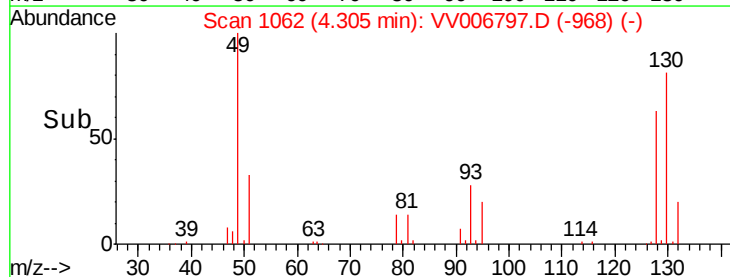
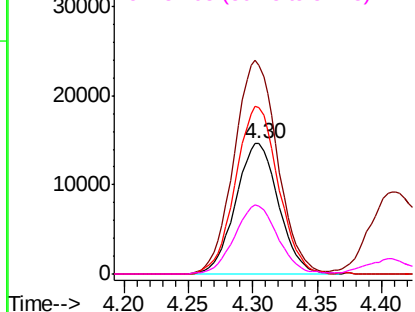
#23

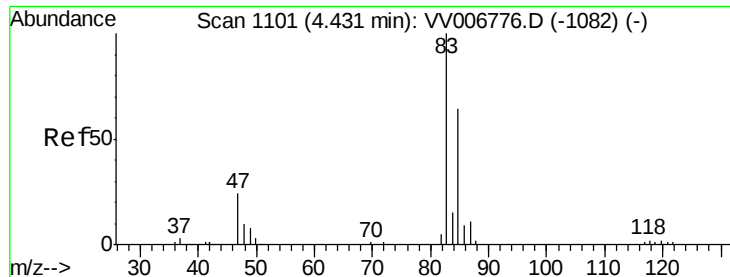
Bromochloromethane  
Concen: 5.245 ug/L  
RT: 4.30 min Scan# 1062  
Delta R.T. 0.00 min  
Lab File: VV006797.D  
Acq: 31 Jul 2018 20:46

Tgt Ion: 128 Resp: 33891  
Ion Ratio Lower Upper  
128 100  
49 160.2 112.6 209.0  
130 128.1 87.1 161.7  
51 52.2 40.9 61.3



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





#25

Chloroform

Concen: 5.366 ug/L

RT: 4.43 min Scan# 1102

Delta R.T. 0.00 min

Lab File: VV006797.D

Acq: 31 Jul 2018 20:46

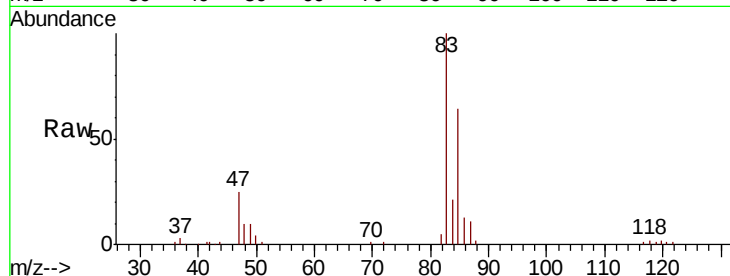
Instrument :  
MSVOA\_V  
ClientSampleId :

Tot Ion: 83 Resp: 139479

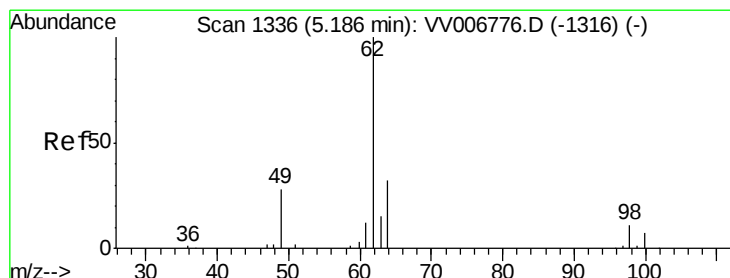
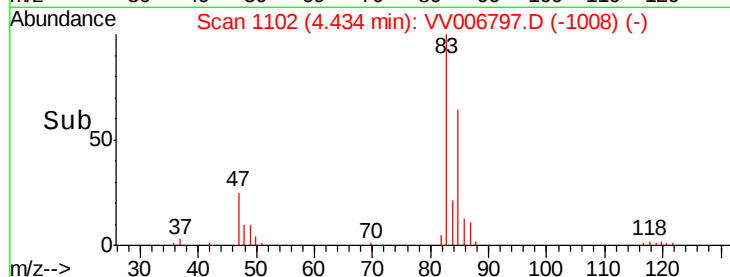
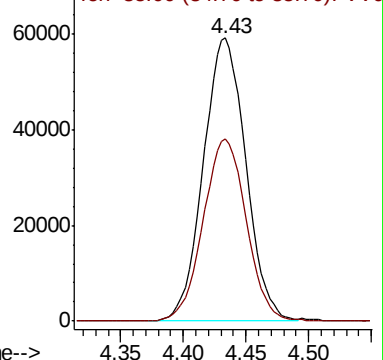
Ion Ratio Lower Upper

83 100

85 64.3 46.1 85.5



Abundance Ion 83.05 (82.75 to 83.75): VV006797.D (-1243) (-)



#27

1,2-Dichloroethane

Concen: 5.264 ug/L

RT: 5.19 min Scan# 1336

Delta R.T. -0.00 min

Lab File: VV006797.D

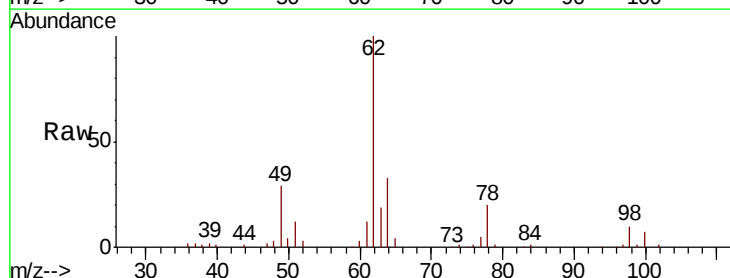
Acq: 31 Jul 2018 20:46

Tgt Ion: 62 Resp: 80277

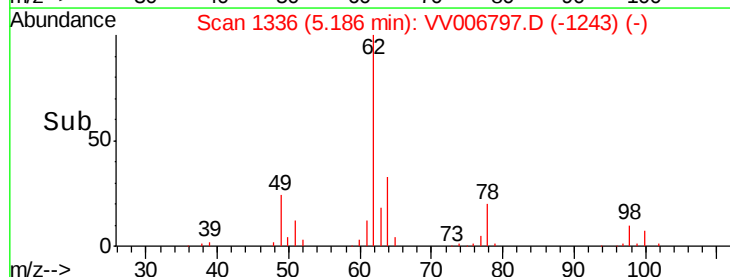
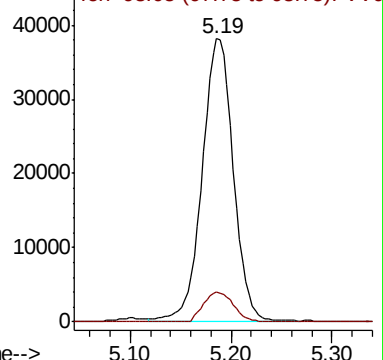
Ion Ratio Lower Upper

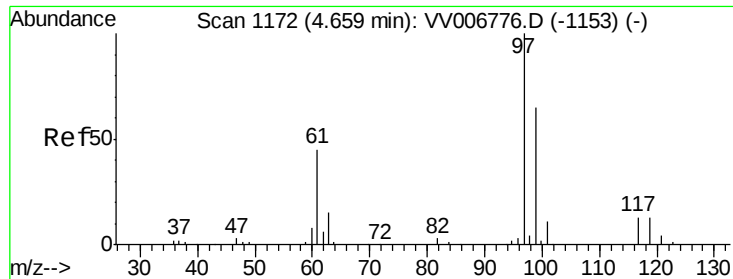
62 100

98 10.4 8.4 12.6



Abundance Ion 62.00 (61.70 to 62.70): VV006797.D (-1243) (-)

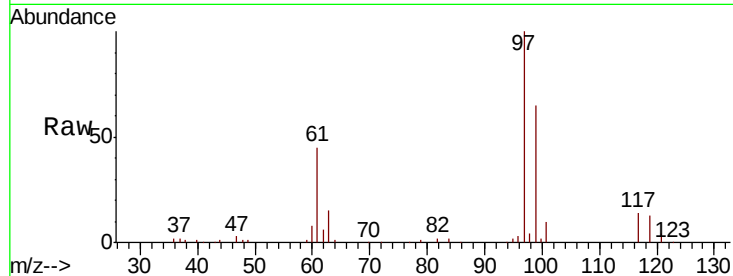




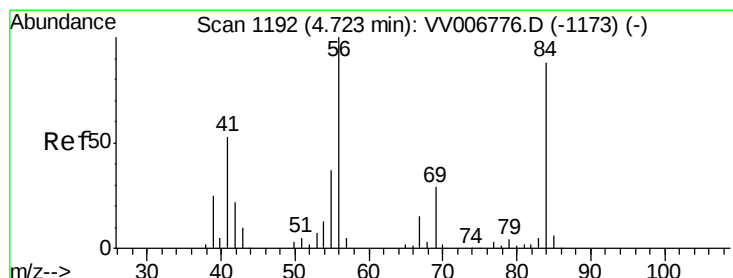
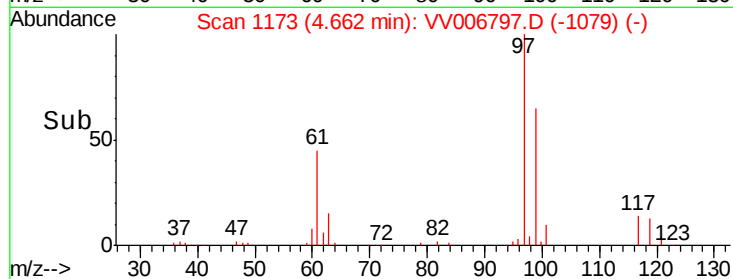
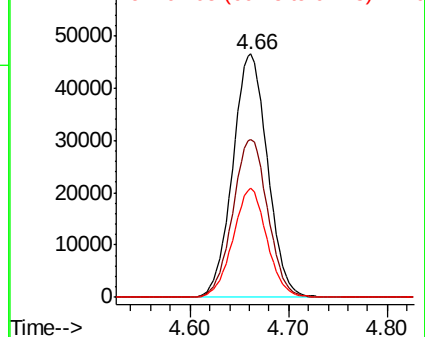
#29  
 1,1,1-Trichloroethane  
 Concen: 5.414 ug/L  
 RT: 4.66 min Scan# 1173  
 Delta R.T. 0.00 min  
 Lab File: VV006797.D  
 Acq: 31 Jul 2018 20:46

Instrument :  
 MSVOA\_V  
 ClientSampleId :

Tot Ion: 97 Resp: 114082  
 Ion Ratio Lower Upper  
 97 100  
 99 65.0 51.7 77.5  
 61 43.6 34.9 52.3

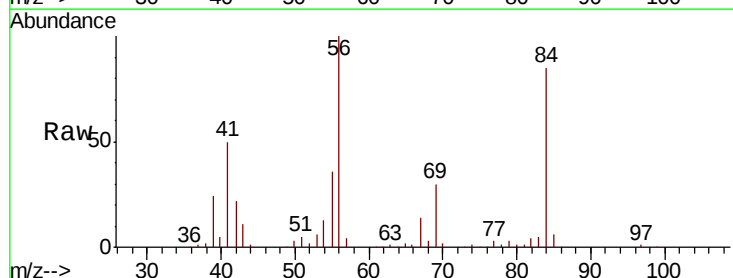


Abundance Ion 96.95 (96.65 to 97.65): VV0  
 Ion 99.05 (98.75 to 99.75): VV0  
 Ion 61.05 (60.75 to 61.75): VV0

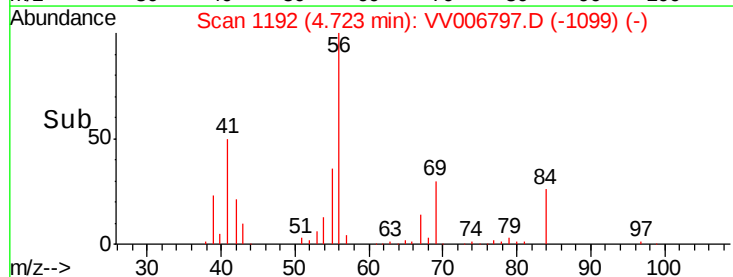
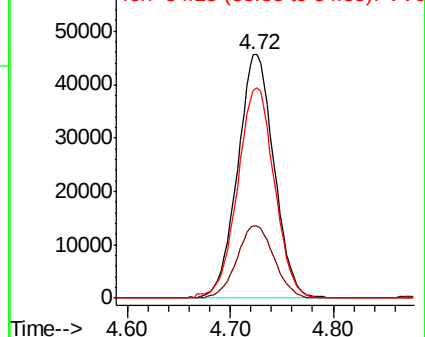


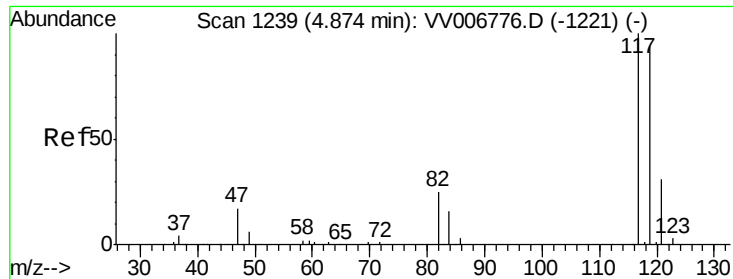
#30  
 Cyclohexane  
 Concen: 4.738 ug/L  
 RT: 4.72 min Scan# 1192  
 Delta R.T. -0.00 min  
 Lab File: VV006797.D  
 Acq: 31 Jul 2018 20:46

Tgt Ion: 56 Resp: 111784  
 Ion Ratio Lower Upper  
 56 100  
 69 30.4 24.6 36.8  
 84 87.4 71.4 107.2



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

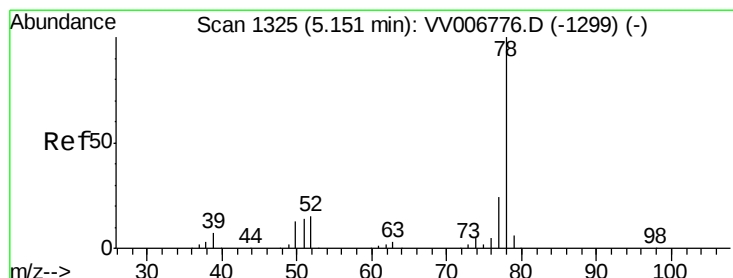
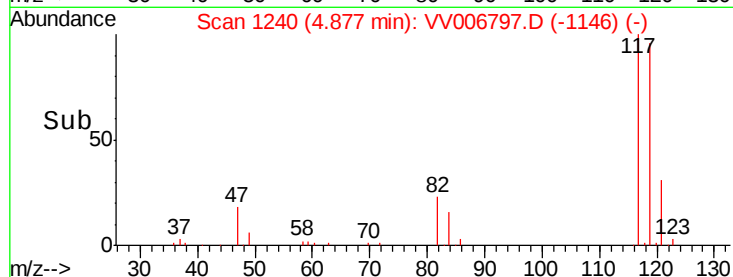
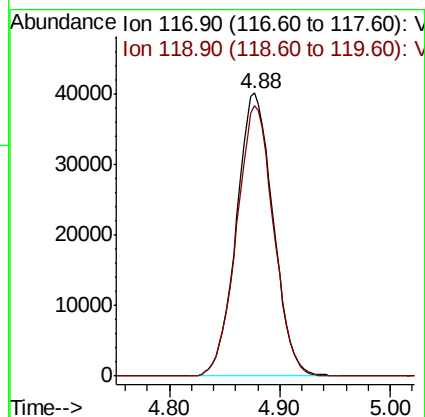
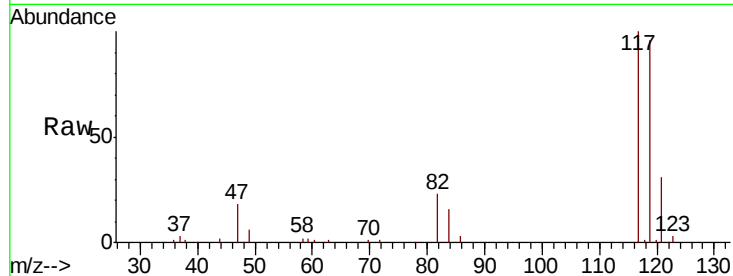




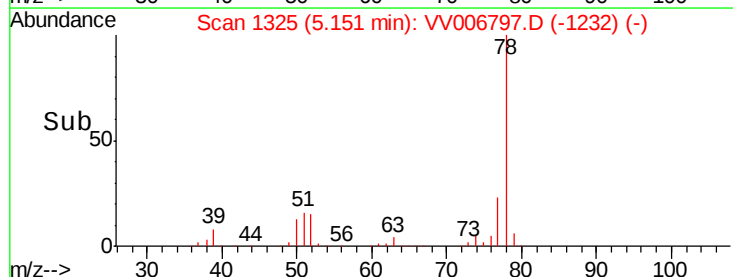
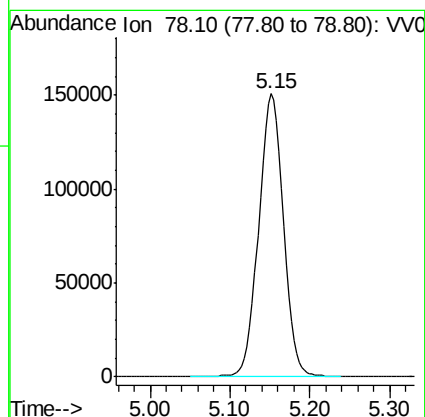
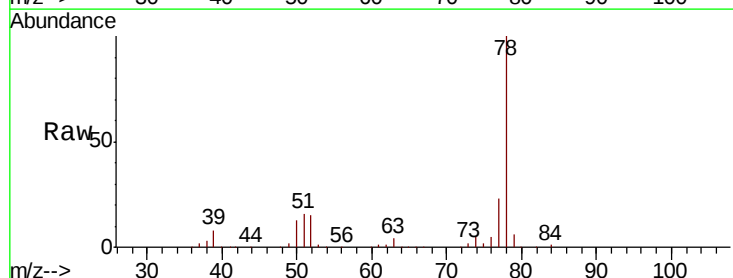
#31  
Carbon tetrachloride  
Concen: 5.140 ug/L  
RT: 4.88 min Scan# 1240  
Delta R.T. 0.00 min  
Lab File: VV006797.D  
Acq: 31 Jul 2018 20:46

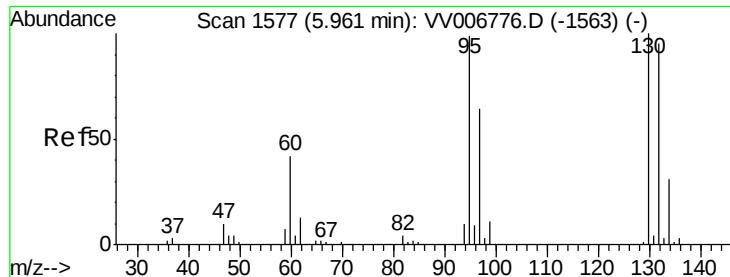
Instrument :  
MSVOA\_V  
ClientSampleId :

Tot Ion:117 Resp: 92574  
Ion Ratio Lower Upper  
117 100  
119 96.0 77.0 115.6



#33  
Benzene  
Concen: 5.434 ug/L  
RT: 5.15 min Scan# 1325  
Delta R.T. -0.00 min  
Lab File: VV006797.D  
Acq: 31 Jul 2018 20:46  
Tgt Ion: 78 Resp: 319953

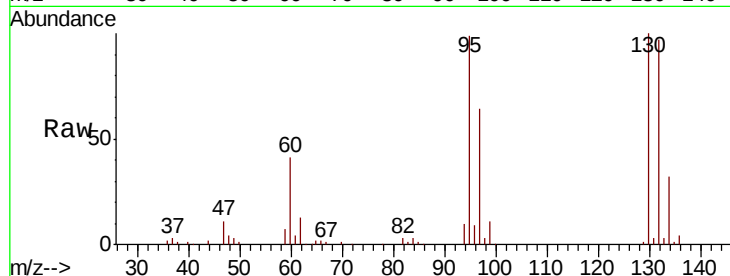




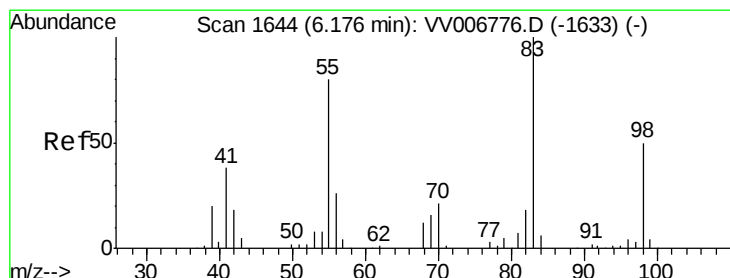
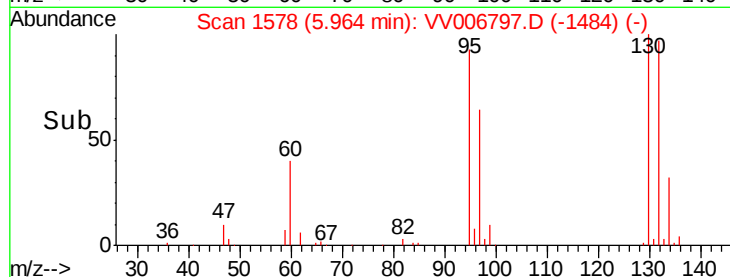
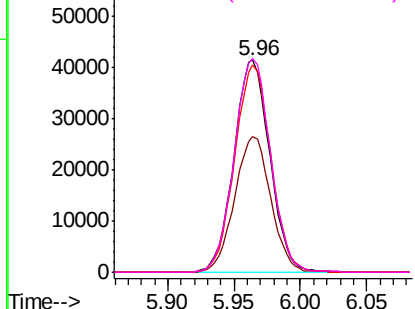
#34  
 Trichloroethene  
 Concen: 5.240 ug/L  
 RT: 5.96 min Scan# 1578  
 Delta R.T. 0.00 min  
 Lab File: VV006797.D  
 Acq: 31 Jul 2018 20:46

Instrument :  
 MSVOA\_V  
 ClientSampleId :

Tot Ion: 95 Resp: 77879  
 Ion Ratio Lower Upper  
 95 100  
 97 64.0 44.9 83.3  
 132 97.4 68.9 127.9  
 130 100.6 73.4 136.4

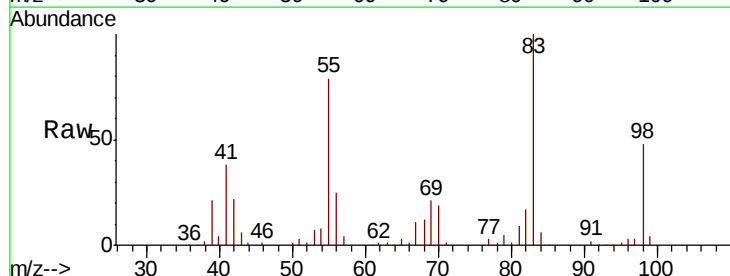


Abundance Ion 95.00 (94.70 to 95.70): VV0  
 Ion 96.95 (96.65 to 97.65): VV0  
 Ion 131.95 (131.65 to 132.65): VV0  
 Ion 129.95 (129.65 to 130.65): VV0

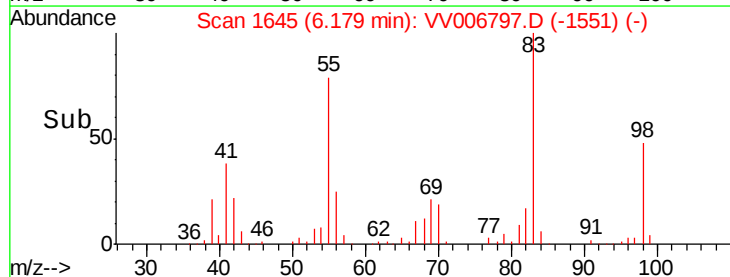
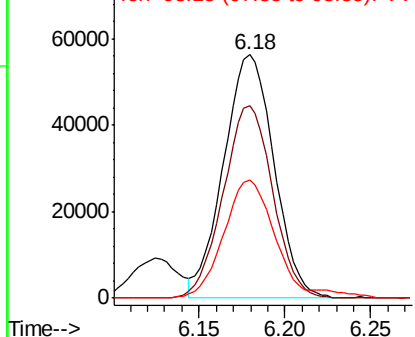


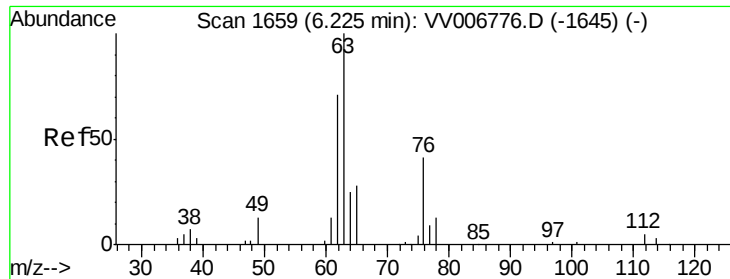
#35  
 Methylcyclohexane  
 Concen: 4.634 ug/L  
 RT: 6.18 min Scan# 1645  
 Delta R.T. 0.00 min  
 Lab File: VV006797.D  
 Acq: 31 Jul 2018 20:46

Tgt Ion: 83 Resp: 115050  
 Ion Ratio Lower Upper  
 83 100  
 55 78.1 61.9 92.9  
 98 50.5 39.7 59.5



Abundance Ion 83.15 (82.85 to 83.85): VV0  
 Ion 55.10 (54.80 to 55.80): VV0  
 Ion 98.15 (97.85 to 98.85): VV0

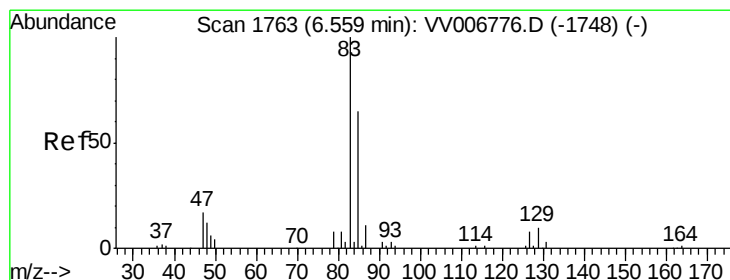
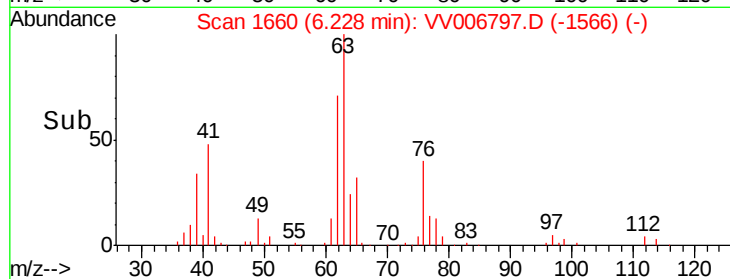
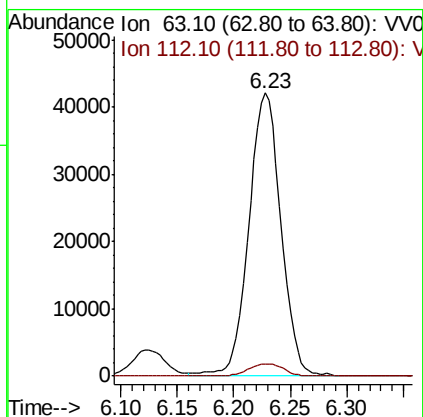
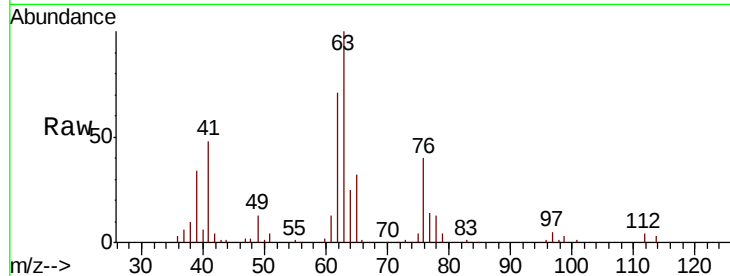




#37  
 1,2-Dichloropropane  
 Concen: 5.496 ug/L  
 RT: 6.23 min Scan# 1660  
 Delta R.T. 0.00 min  
 Lab File: VV006797.D  
 Acq: 31 Jul 2018 20:46

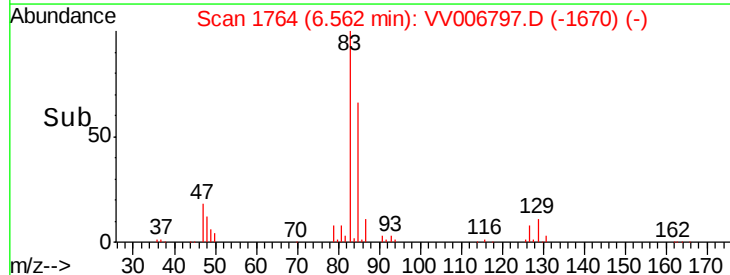
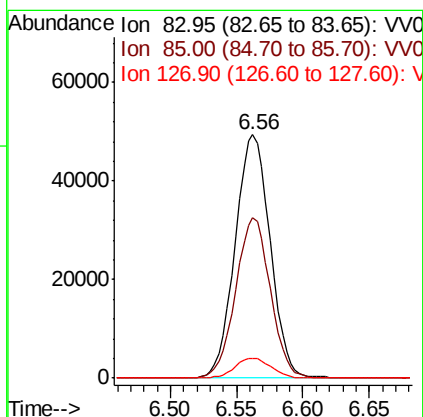
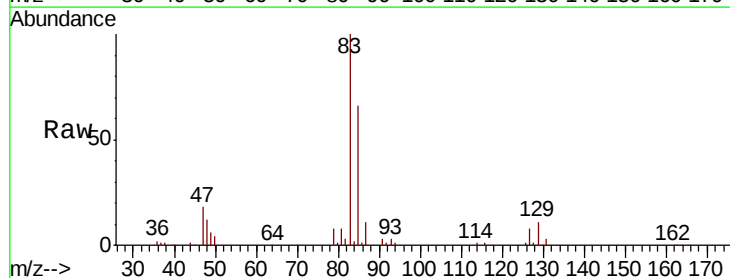
Instrument :  
 MSVOA\_V  
 ClientSampleId :

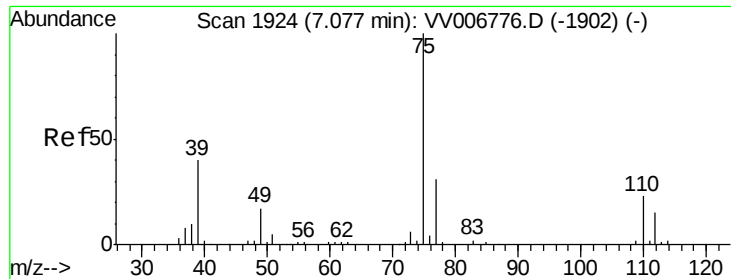
Tot Ion: 63 Resp: 83067  
 Ion Ratio Lower Upper  
 63 100  
 112 4.7 3.8 5.6



#38  
 Bromodichloromethane  
 Concen: 5.374 ug/L  
 RT: 6.56 min Scan# 1764  
 Delta R.T. 0.00 min  
 Lab File: VV006797.D  
 Acq: 31 Jul 2018 20:46

Tgt Ion: 83 Resp: 90730  
 Ion Ratio Lower Upper  
 83 100  
 85 65.9 44.4 82.4  
 127 8.2 6.6 9.8



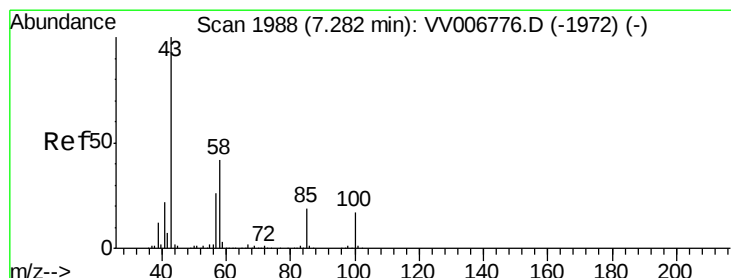
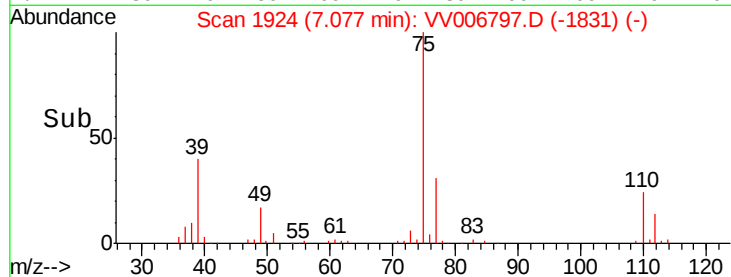
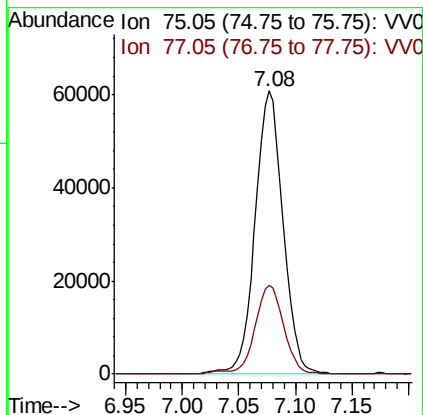
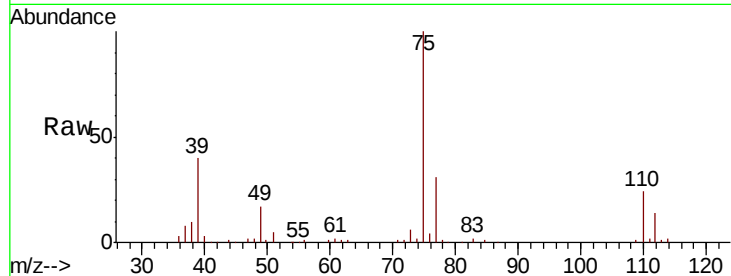


#39

cis-1,3-Dichloropropene  
 Concen: 5.316 ug/L  
 RT: 7.08 min Scan# 1924  
 Delta R.T. -0.00 min  
 Lab File: VV006797.D  
 Acq: 31 Jul 2018 20:46

Instrument :  
 MSVOA\_V  
 ClientSampleId :

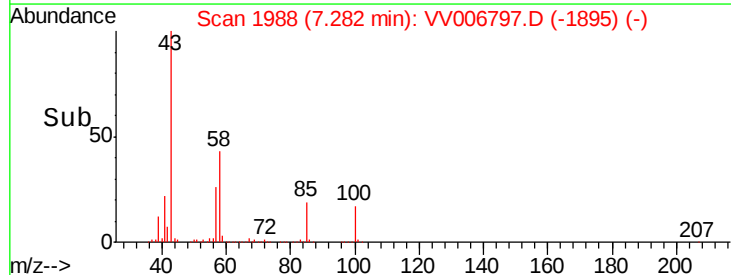
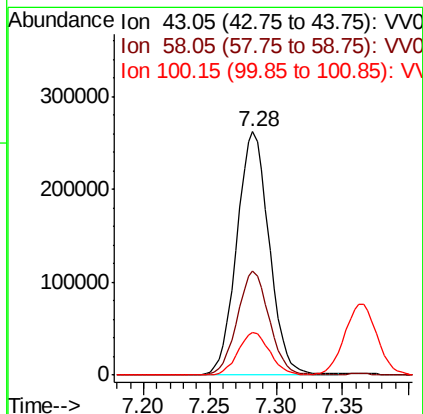
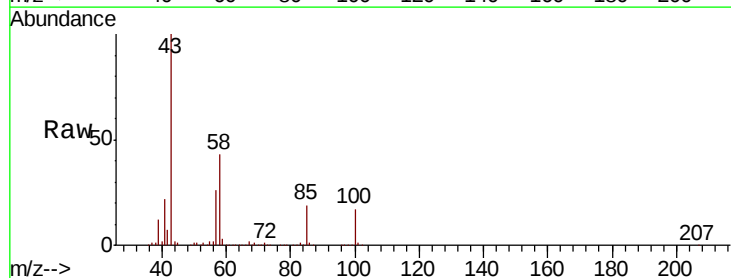
Tot Ion: 75 Resp: 104673  
 Ion Ratio Lower Upper  
 75 100  
 77 31.4 22.0 40.8

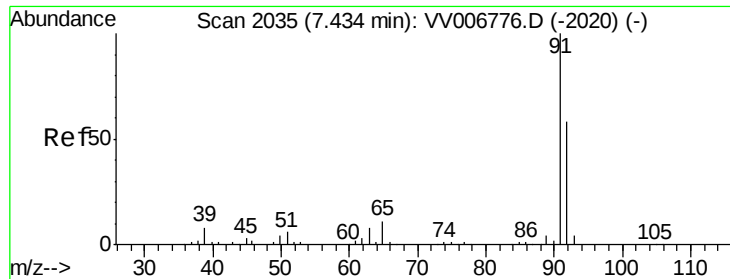


#40

4-Methyl-2-pentanone  
 Concen: 53.587 ug/L  
 RT: 7.28 min Scan# 1988  
 Delta R.T. -0.00 min  
 Lab File: VV006797.D  
 Acq: 31 Jul 2018 20:46

Tgt Ion: 43 Resp: 445244  
 Ion Ratio Lower Upper  
 43 100  
 58 42.1 33.4 50.0  
 100 17.1 13.6 20.4





#42

Toluene

Concen: 5.452 ug/L

RT: 7.44 min Scan# 2036

Delta R.T. 0.00 min

Lab File: VV006797.D

Acq: 31 Jul 2018 20:46

Instrument :

MSVOA\_V

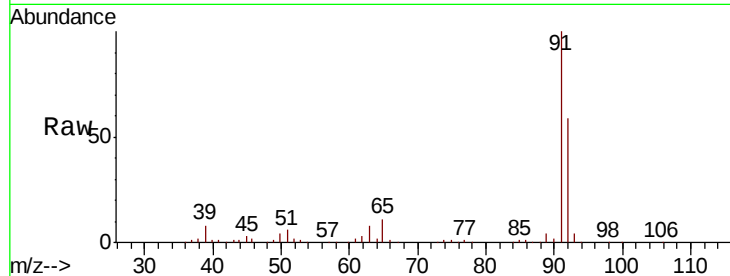
ClientSampleId :

Tot Ion: 91 Resp: 330562

Ion Ratio Lower Upper

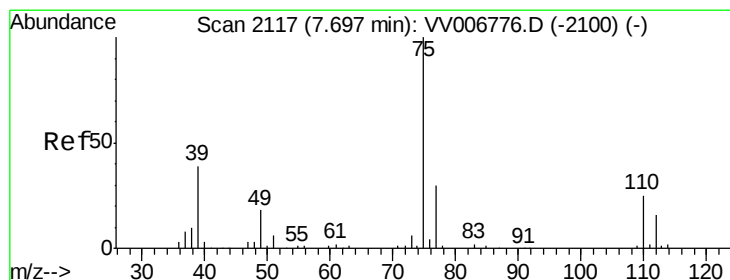
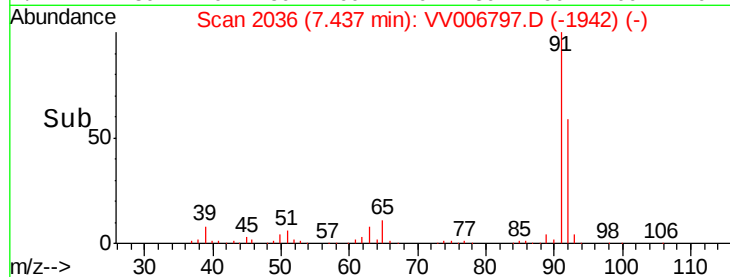
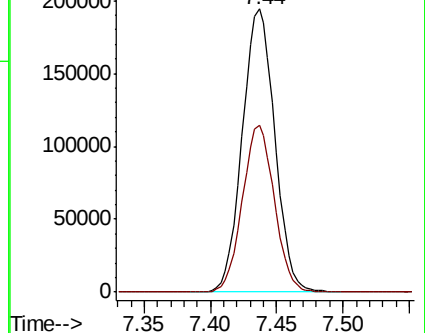
91 100

92 58.8 40.7 75.7



Abundance Ion 91.15 (90.85 to 91.85): VV0

Ion 92.15 (91.85 to 92.85): VV0



#44

trans-1,3-Dichloropropene

Concen: 5.365 ug/L

RT: 7.70 min Scan# 2118

Delta R.T. 0.00 min

Lab File: VV006797.D

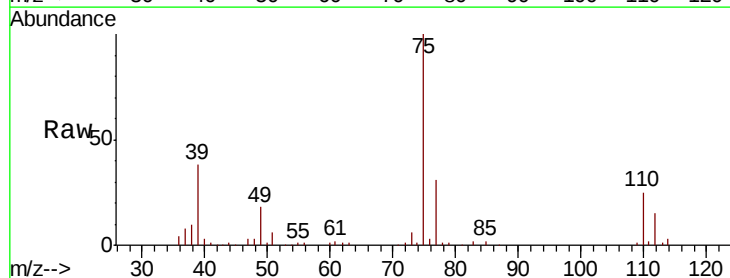
Acq: 31 Jul 2018 20:46

Tgt Ion: 75 Resp: 83060

Ion Ratio Lower Upper

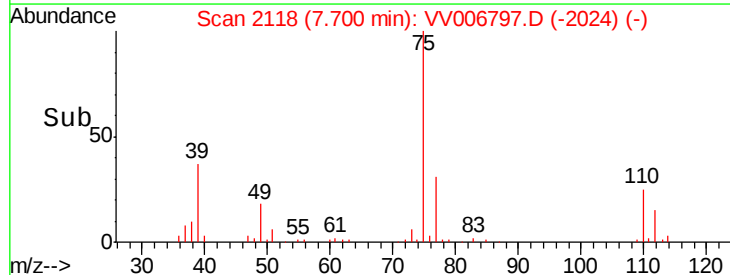
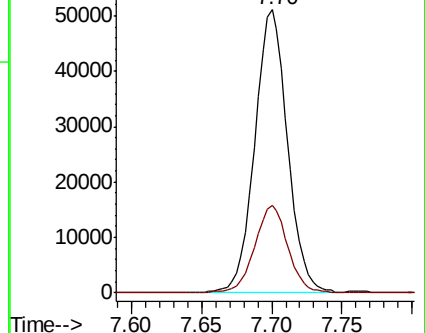
75 100

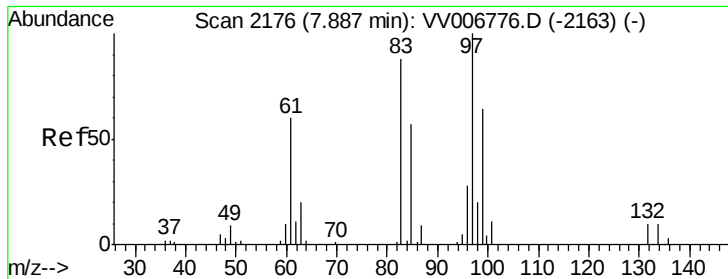
77 30.9 22.8 42.4



Abundance Ion 75.05 (74.75 to 75.75): VV0

Ion 77.05 (76.75 to 77.75): VV0

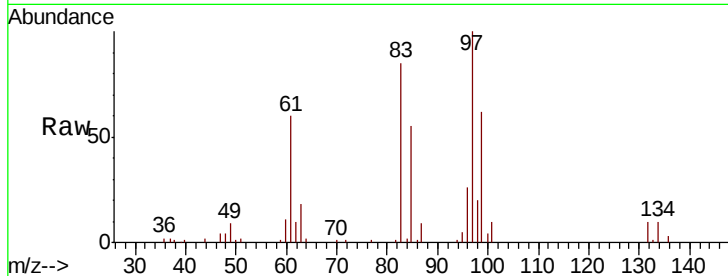




#45  
 1,1,2-Trichloroethane  
 Concen: 5.381 ug/L  
 RT: 7.89 min Scan# 2177  
 Delta R.T. 0.00 min  
 Lab File: VV006797.D  
 Acq: 31 Jul 2018 20:46

Instrument :  
 MSVOA\_V  
 ClientSampled :

|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 97    | Resp: | 54779 |
| Ion      | Ratio | Lower | Upper |
| 97       | 100   |       |       |
| 99       | 62.4  | 43.0  | 79.8  |
| 83       | 85.3  | 59.4  | 110.4 |
| 85       | 55.0  | 37.5  | 69.7  |



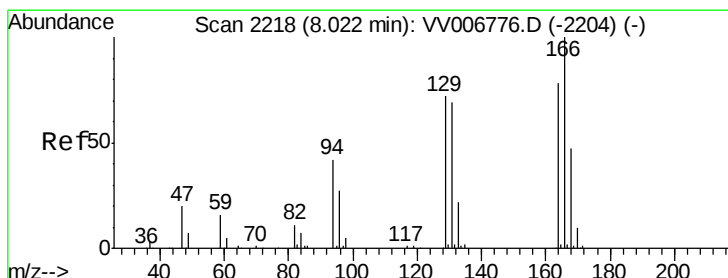
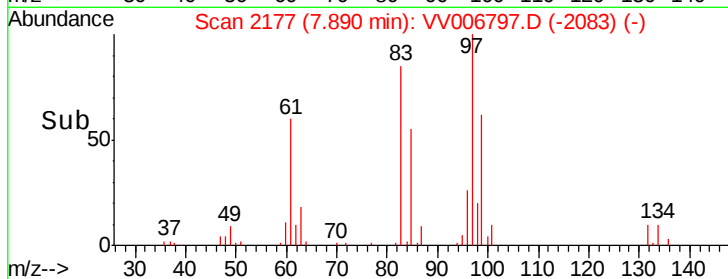
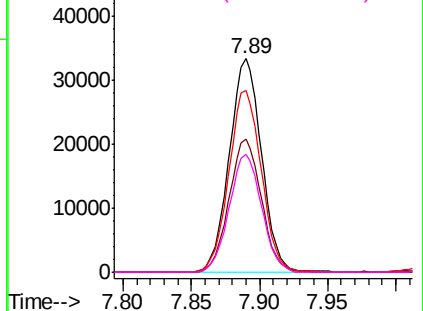
Abundance

Ion 96.95 (96.65 to 97.65): VV0

Ion 99.05 (98.75 to 99.75): VV0

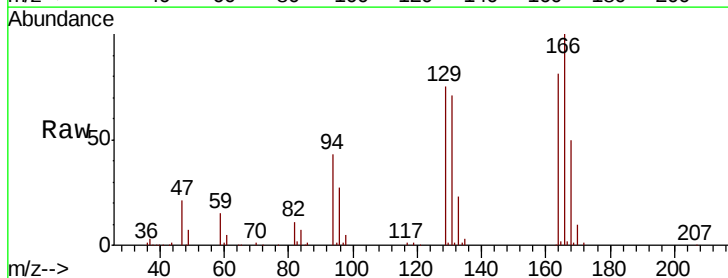
Ion 82.95 (82.65 to 83.65): VV0

Ion 85.00 (84.70 to 85.70): VV0



#47  
 Tetrachloroethene  
 Concen: 5.249 ug/L  
 RT: 8.02 min Scan# 2218  
 Delta R.T. -0.00 min  
 Lab File: VV006797.D  
 Acq: 31 Jul 2018 20:46

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 164   | Resp: | 61973 |
| Ion      | Ratio | Lower | Upper |
| 164      | 100   |       |       |
| 129      | 92.4  | 65.0  | 120.8 |
| 131      | 87.3  | 61.9  | 115.1 |
| 166      | 123.7 | 89.3  | 165.9 |



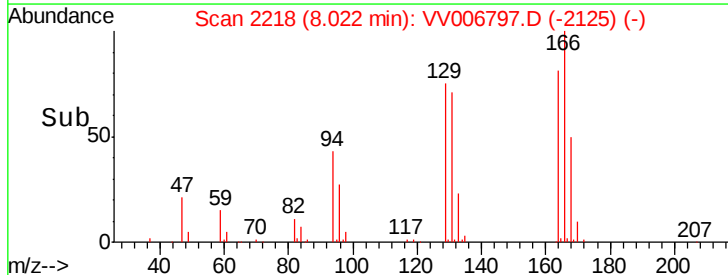
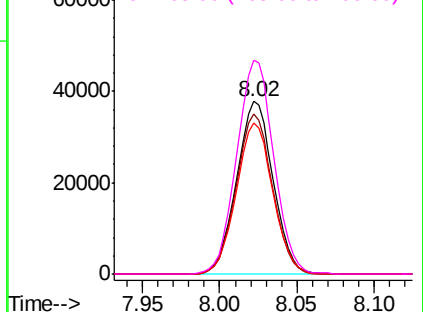
Abundance

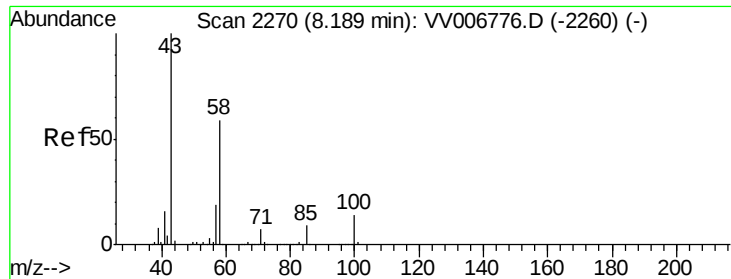
Ion 163.90 (163.60 to 164.60): V

Ion 128.95 (128.65 to 129.65): V

Ion 130.95 (130.65 to 131.65): V

Ion 165.90 (165.60 to 166.60): V

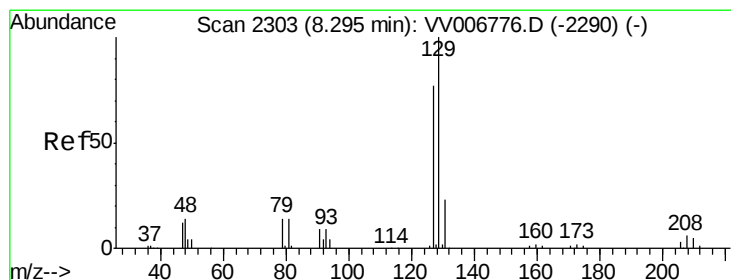
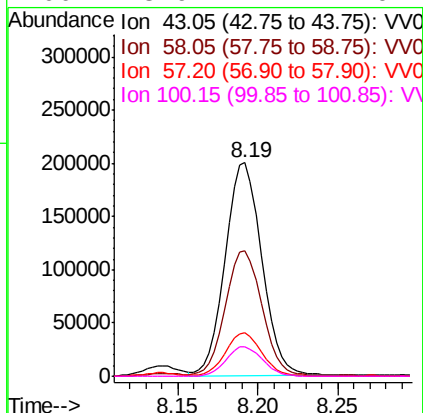
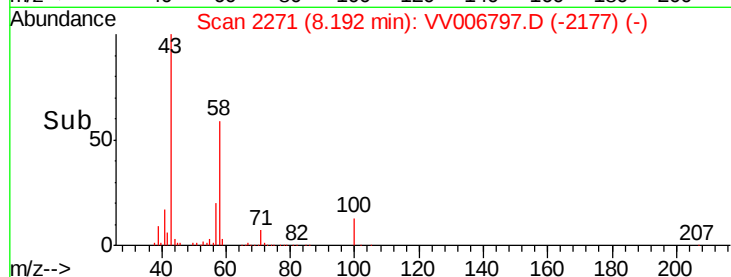
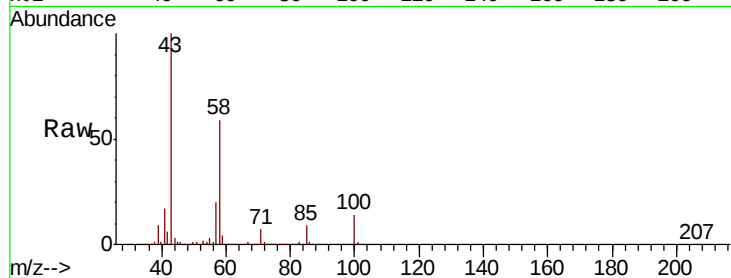




#48  
2-Hexanone  
Concen: 53.880 ug/L  
RT: 8.19 min Scan# 2271  
Delta R.T. 0.00 min  
Lab File: VV006797.D  
Acq: 31 Jul 2018 20:46

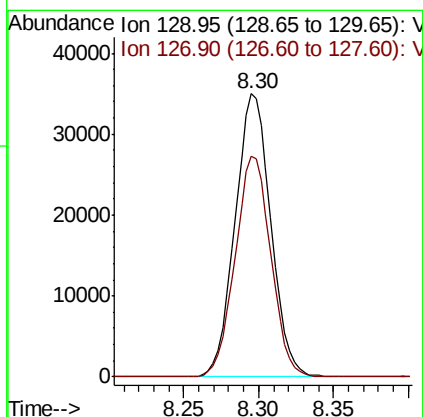
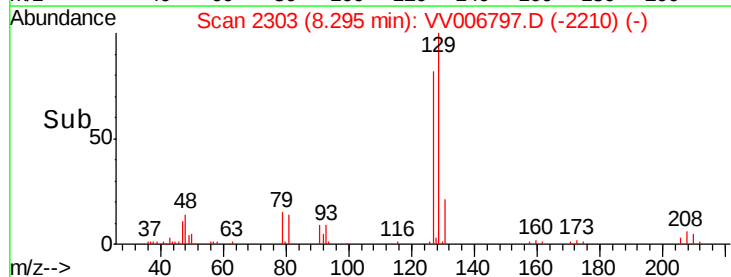
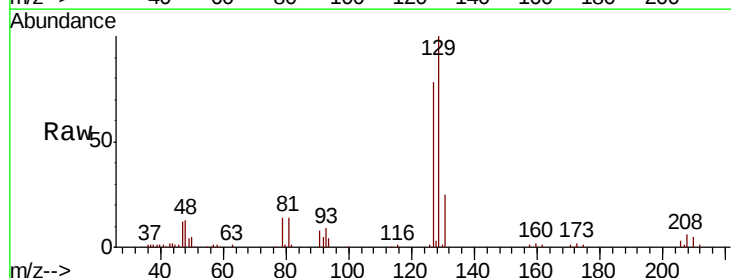
Instrument :  
MSVOA\_V  
ClientSampleId :

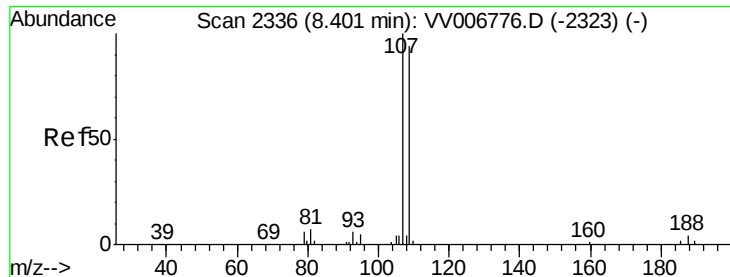
Tot Ion: 43 Resp: 312373  
Ion Ratio Lower Upper  
43 100  
58 59.3 47.2 70.8  
57 20.3 16.1 24.1  
100 13.9 11.1 16.7



#49  
Dibromochloromethane  
Concen: 5.382 ug/L  
RT: 8.30 min Scan# 2303  
Delta R.T. -0.00 min  
Lab File: VV006797.D  
Acq: 31 Jul 2018 20:46

Tgt Ion: 129 Resp: 57982  
Ion Ratio Lower Upper  
129 100  
127 78.2 53.5 99.5

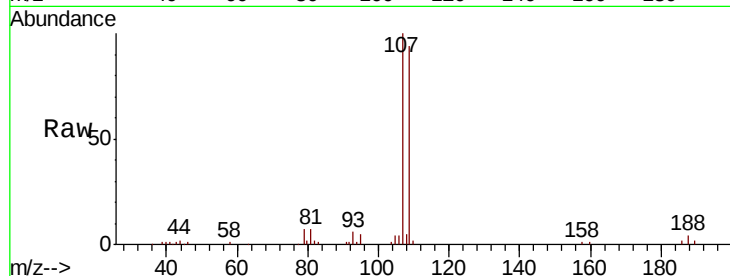




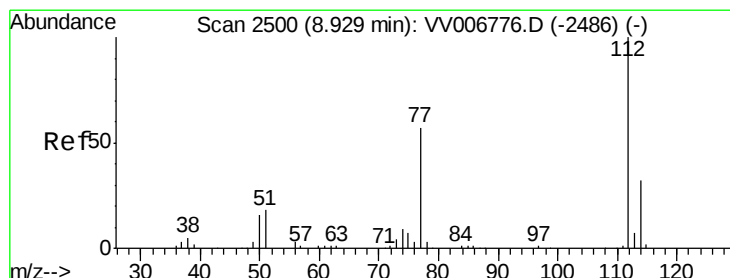
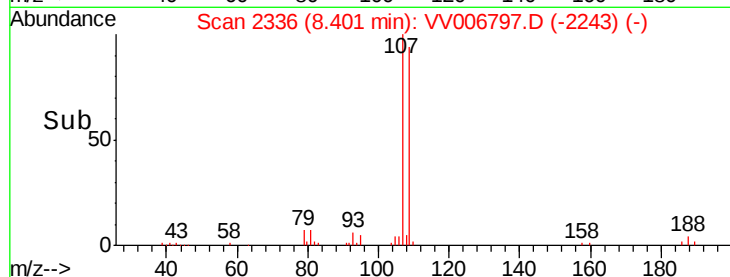
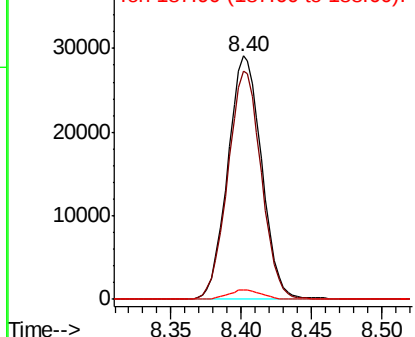
#50  
1,2-Dibromoethane  
Concen: 5.364 ug/L  
RT: 8.40 min Scan# 2336  
Delta R.T. -0.00 min  
Lab File: VV006797.D  
Acq: 31 Jul 2018 20:46

Instrument :  
MSVOA\_V  
ClientSampleId :

Tot Ion:107 Resp: 48798  
Ion Ratio Lower Upper  
107 100  
109 93.8 66.8 124.0  
188 3.9 3.1 4.7

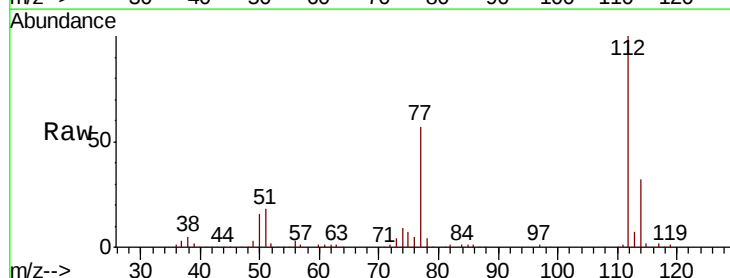


Abundance Ion 106.95 (106.65 to 107.65): V  
Ion 109.00 (108.70 to 109.70): V  
Ion 187.90 (187.60 to 188.60): V

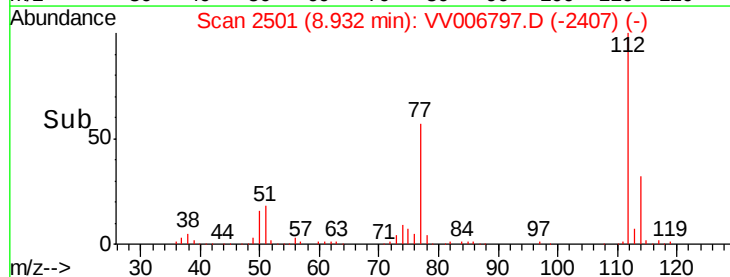
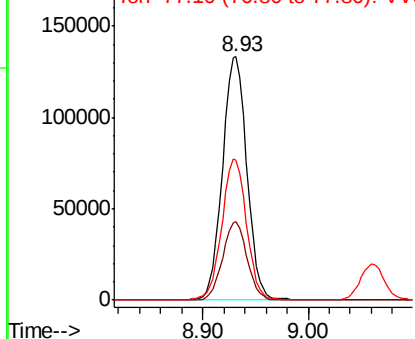


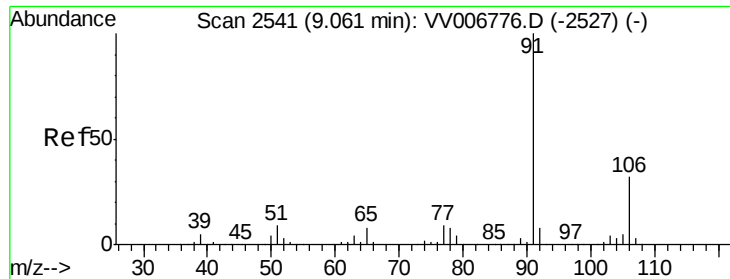
#51  
Chlorobenzene  
Concen: 5.414 ug/L  
RT: 8.93 min Scan# 2501  
Delta R.T. 0.00 min  
Lab File: VV006797.D  
Acq: 31 Jul 2018 20:46

Tgt Ion:112 Resp: 213500  
Ion Ratio Lower Upper  
112 100  
114 32.4 22.5 41.9  
77 57.4 46.2 69.2



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): VV0





#52

Ethylbenzene

Concen: 5.378 ug/L

RT: 9.06 min Scan# 2541

Delta R.T. -0.00 min

Lab File: VV006797.D

Acq: 31 Jul 2018 20:46

Instrument :

MSVOA\_V

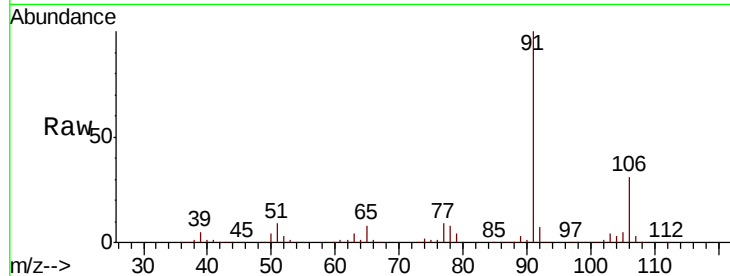
ClientSampleId :

Tot Ion: 91 Resp: 347570

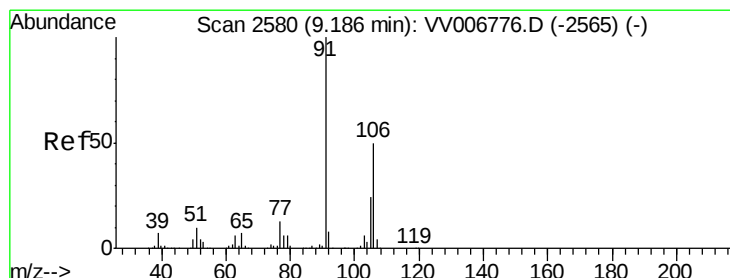
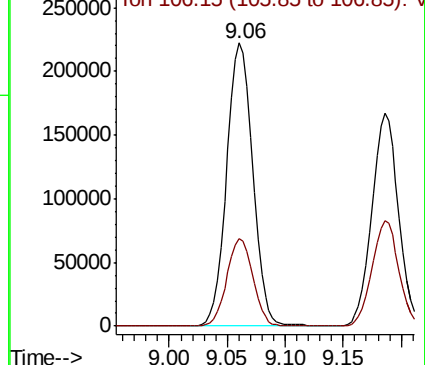
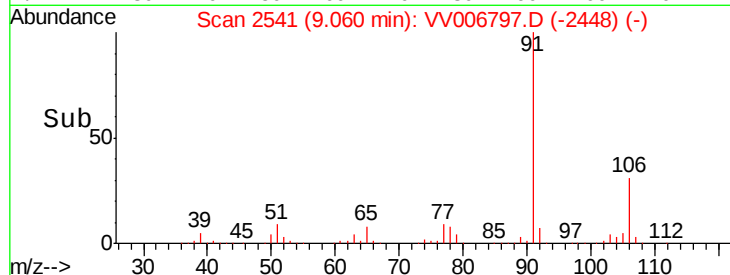
Ion Ratio Lower Upper

91 100

106 30.8 21.8 40.6



Abundance Ion 91.15 (90.85 to 91.85): VV006797.D (-2448) (-)



#53

m,p-xylene

Concen: 5.452 ug/L

RT: 9.19 min Scan# 2580

Delta R.T. -0.00 min

Lab File: VV006797.D

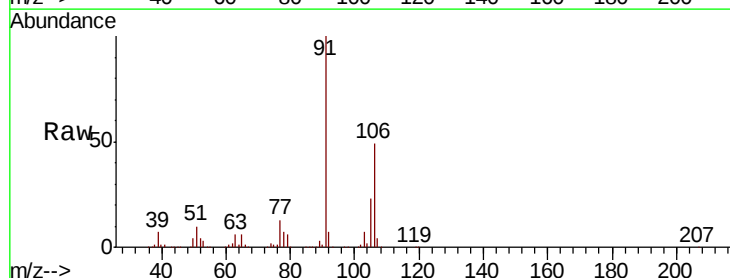
Acq: 31 Jul 2018 20:46

Tgt Ion: 106 Resp: 133015

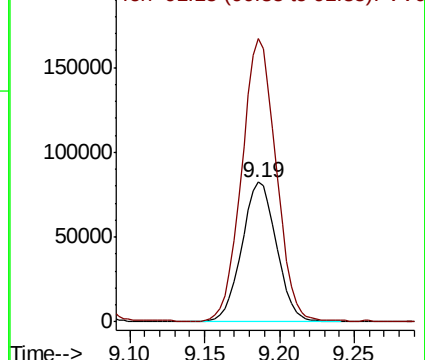
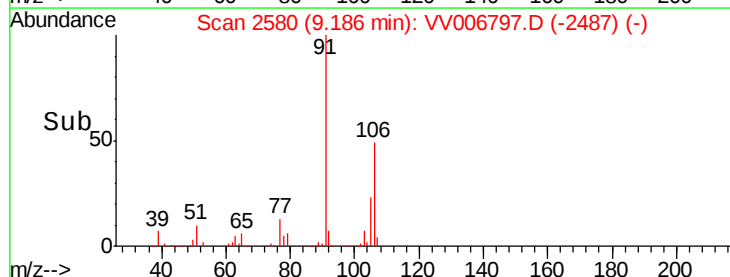
Ion Ratio Lower Upper

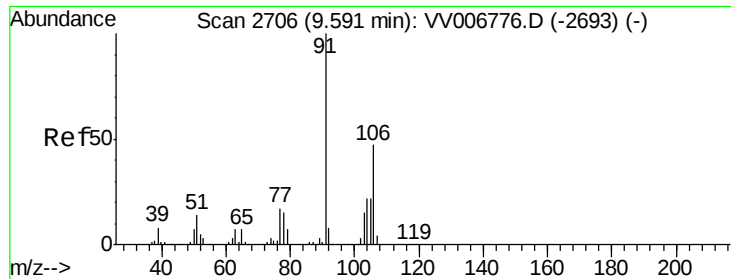
106 100

91 202.4 140.3 260.5



Abundance Ion 106.15 (105.85 to 106.85): VV006797.D (-2487) (-)

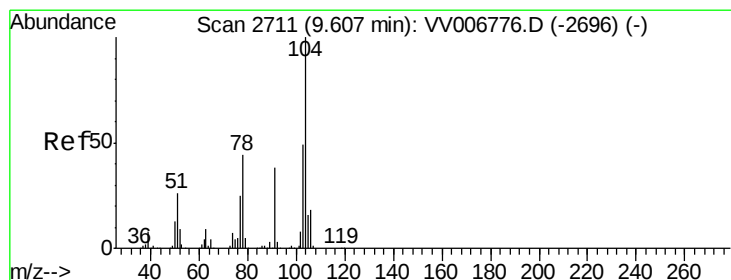
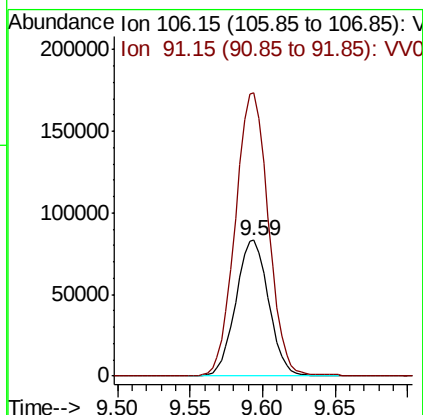
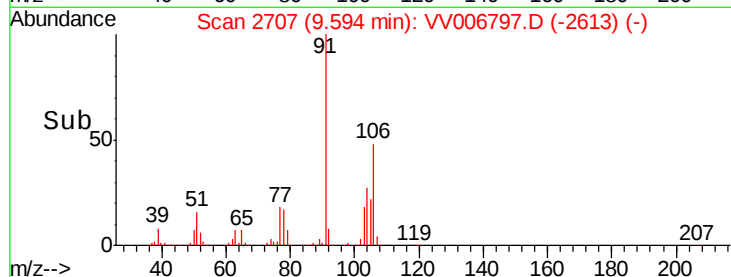
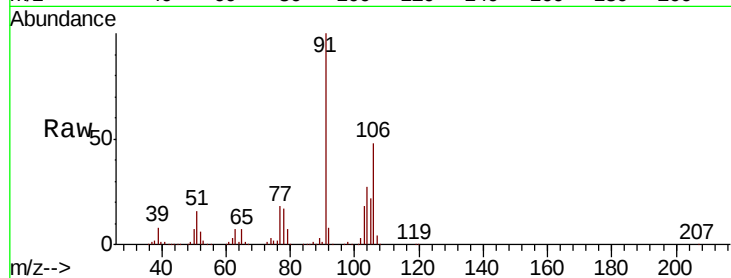




#54  
o-xylene  
Concen: 5.522 ug/L  
RT: 9.59 min Scan# 2707  
Delta R.T. 0.00 min  
Lab File: VV006797.D  
Acq: 31 Jul 2018 20:46

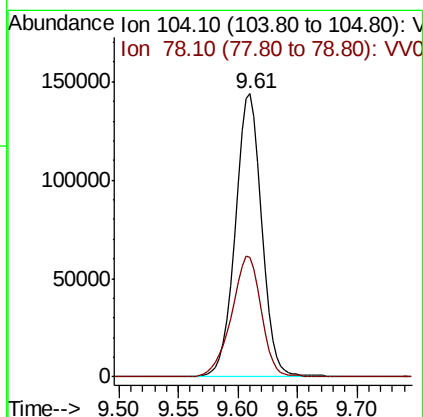
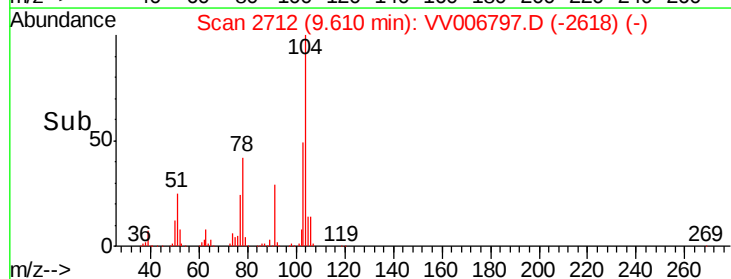
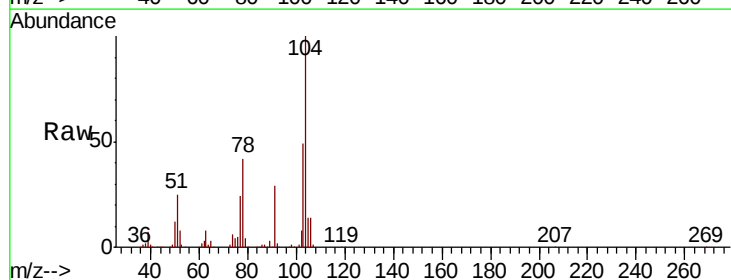
Instrument :  
MSVOA\_V  
ClientSampleId :

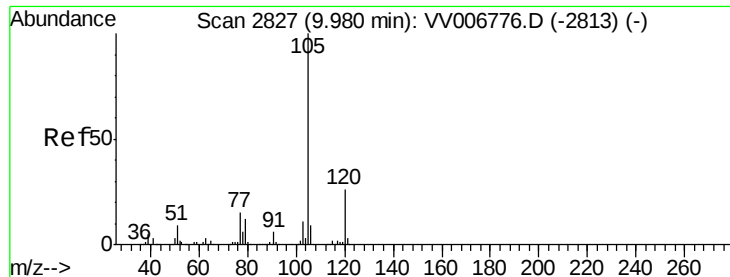
Tot Ion:106 Resp: 131256  
Ion Ratio Lower Upper  
106 100  
91 208.8 146.0 271.2



#55  
Styrene  
Concen: 5.541 ug/L  
RT: 9.61 min Scan# 2712  
Delta R.T. 0.00 min  
Lab File: VV006797.D  
Acq: 31 Jul 2018 20:46

Tgt Ion:104 Resp: 222147  
Ion Ratio Lower Upper  
104 100  
78 42.3 29.0 53.9





#56

Isopropylbenzene

Concen: 5.493 ug/L

RT: 9.98 min Scan# 2827

Delta R.T. -0.00 min

Lab File: VV006797.D

Acq: 31 Jul 2018 20:46

Instrument :

MSVOA\_V

ClientSampleId :

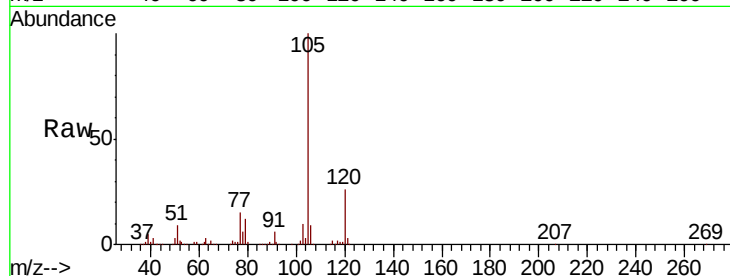
Tot Ion:105 Resp: 339038

Ion Ratio Lower Upper

105 100

120 26.2 21.5 32.3

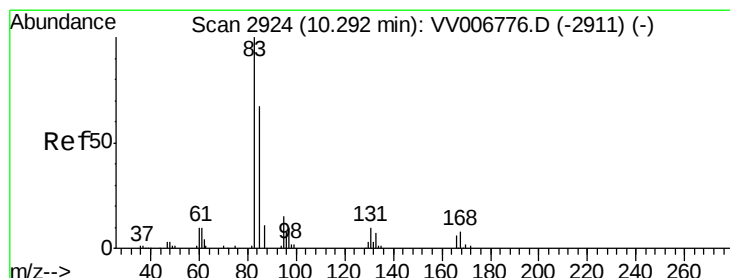
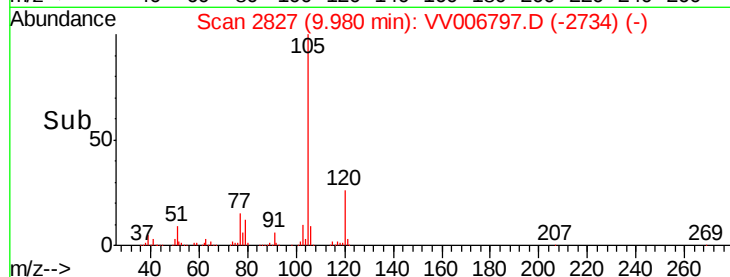
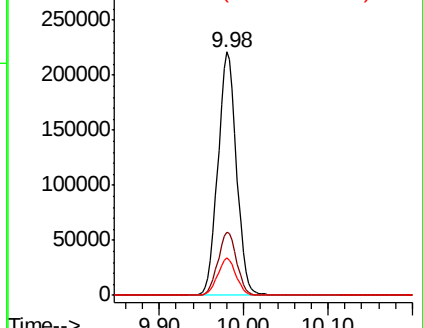
77 15.2 12.2 18.2



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: 5.385 ug/L

RT: 10.29 min Scan# 2924

Delta R.T. -0.00 min

Lab File: VV006797.D

Acq: 31 Jul 2018 20:46

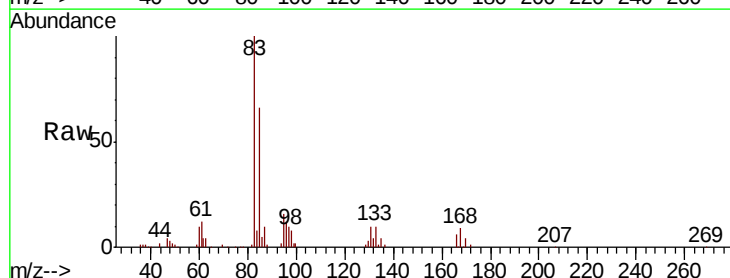
Tgt Ion: 83 Resp: 67062

Ion Ratio Lower Upper

83 100

85 65.7 45.6 84.6

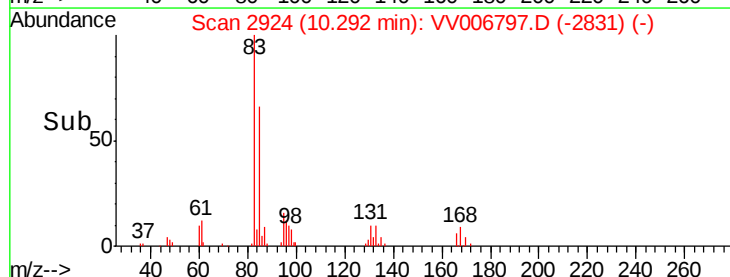
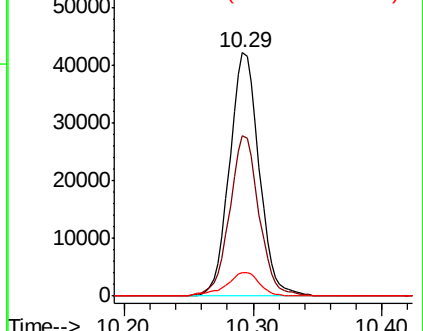
131 9.8 8.0 12.0

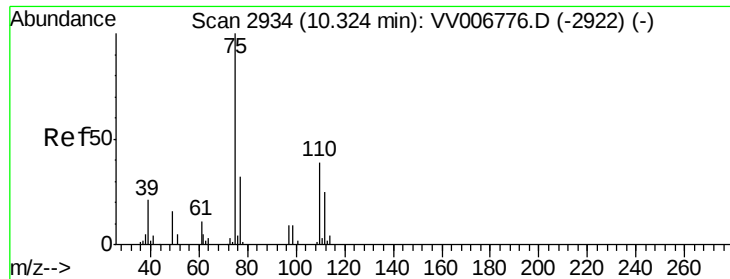


Abundance Ion 82.95 (82.65 to 83.65): VV0

Ion 85.00 (84.70 to 85.70): VV0

Ion 130.95 (130.65 to 131.65): V





#59

1,2,3-Trichloropropane

Concen: 5.416 ug/L

RT: 10.32 min Scan# 2934

Delta R.T. -0.00 min

Lab File: VV006797.D

Acq: 31 Jul 2018 20:46

Instrument :

MSVOA\_V

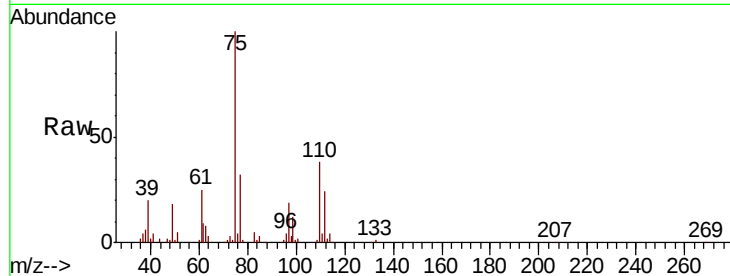
ClientSampleId :

Tot Ion: 75 Resp: 48186

Ion Ratio Lower Upper

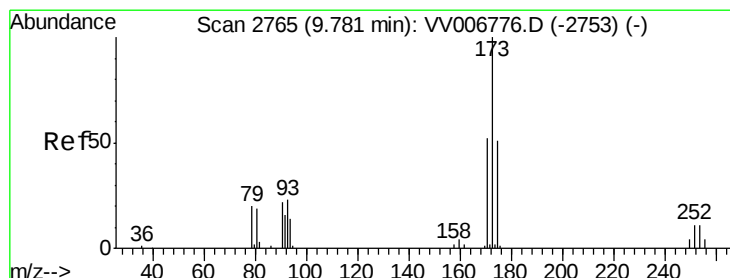
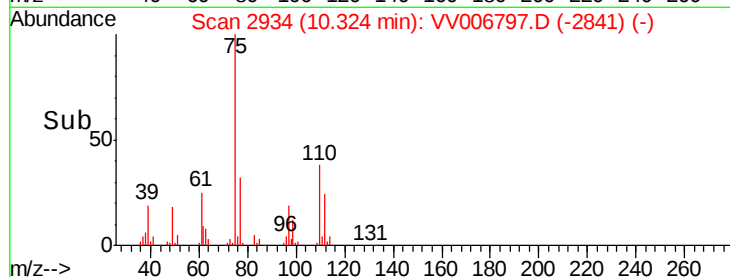
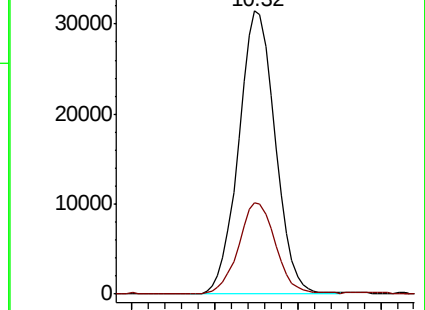
75 100

77 32.9 26.1 39.1



Abundance Ion 75.00 (74.70 to 75.70): VV006776.D (-2922) (-)

Ion 77.00 (76.70 to 77.70): VV006776.D (-2922) (-)



#61

Bromoform

Concen: 5.147 ug/L

RT: 9.78 min Scan# 2765

Delta R.T. -0.00 min

Lab File: VV006797.D

Acq: 31 Jul 2018 20:46

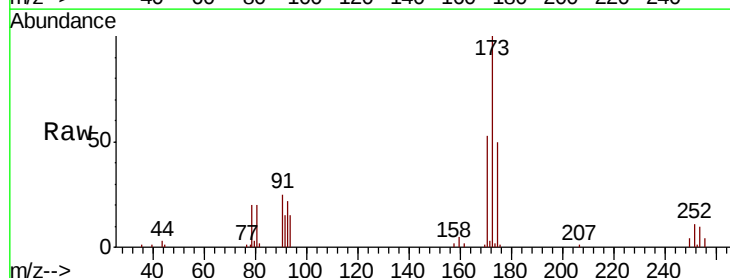
Tgt Ion: 173 Resp: 29173

Ion Ratio Lower Upper

173 100

175 48.5 39.1 58.7

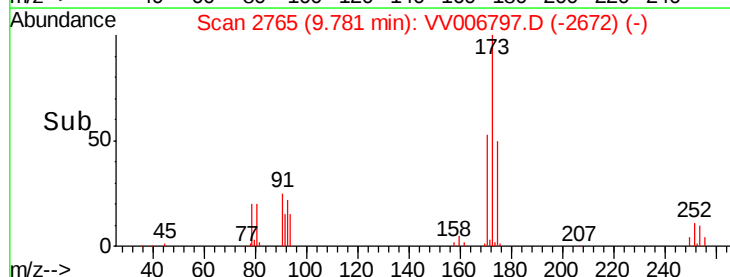
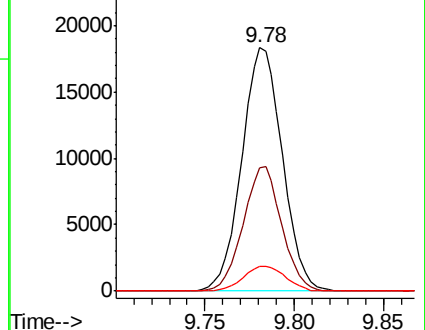
254 10.5 9.1 13.7

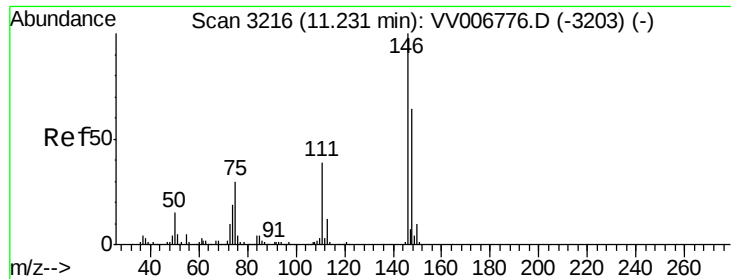


Abundance Ion 172.90 (172.60 to 173.60): VV006776.D (-2753) (-)

Ion 174.90 (174.60 to 175.60): VV006776.D (-2753) (-)

Ion 253.75 (253.45 to 254.45): VV006776.D (-2753) (-)





#62

1,3-Dichlorobenzene

Concen: 5.401 ug/L

RT: 11.23 min Scan# 3216

Delta R.T. -0.00 min

Lab File: VV006797.D

Acq: 31 Jul 2018 20:46

Instrument :

MSVOA\_V

ClientSampleId :

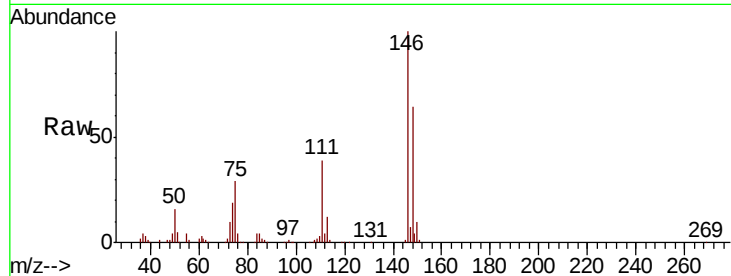
Tot Ion:146 Resp: 155696

Ion Ratio Lower Upper

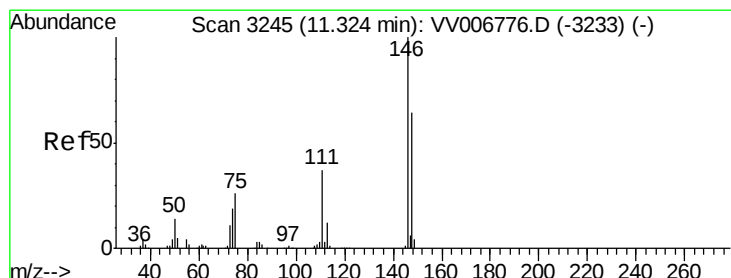
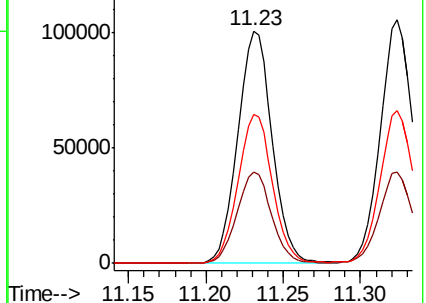
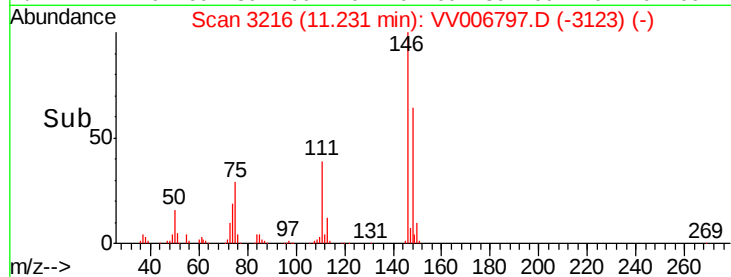
146 100

111 39.3 27.5 51.1

148 64.2 44.5 82.7



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



#63

1,4-Dichlorobenzene

Concen: 5.412 ug/L

RT: 11.32 min Scan# 3245

Delta R.T. -0.00 min

Lab File: VV006797.D

Acq: 31 Jul 2018 20:46

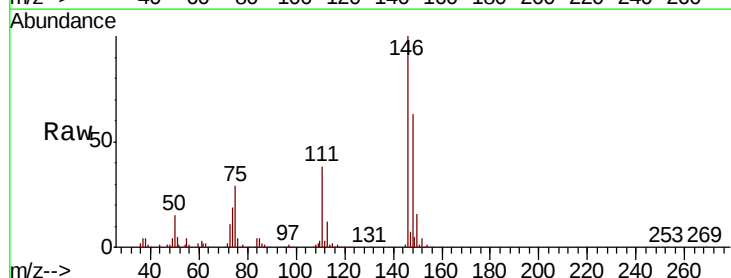
Tgt Ion:146 Resp: 158999

Ion Ratio Lower Upper

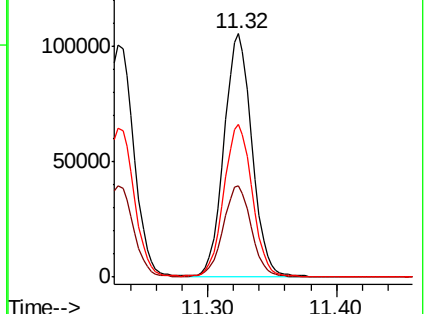
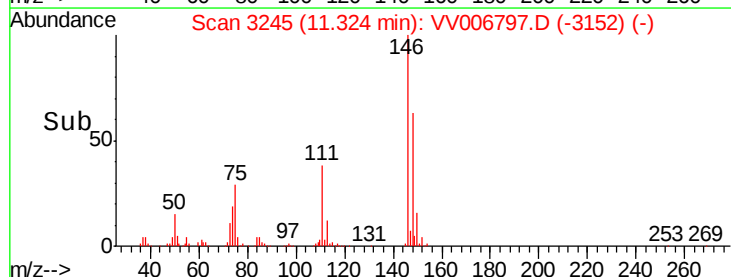
146 100

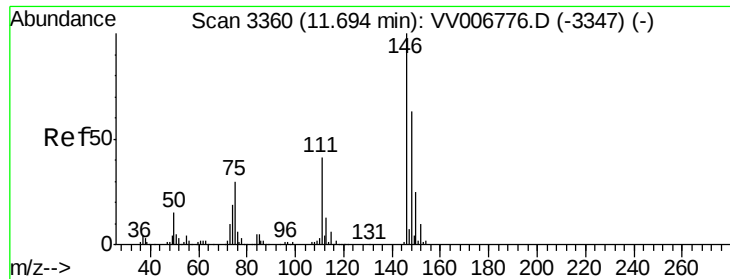
111 37.8 27.0 50.2

148 62.8 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

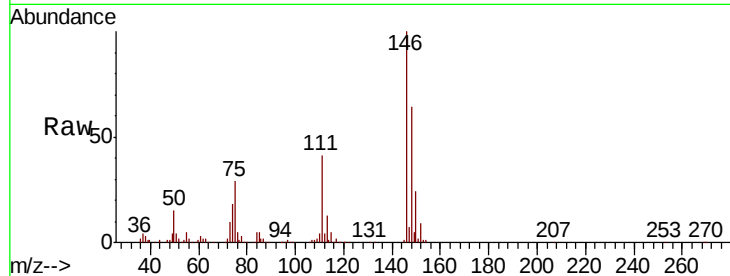




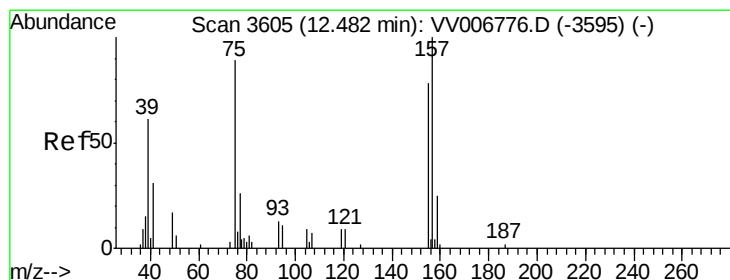
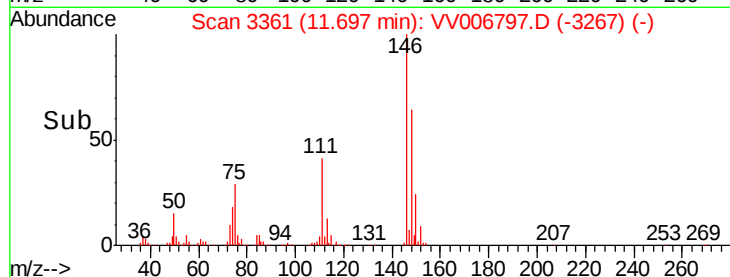
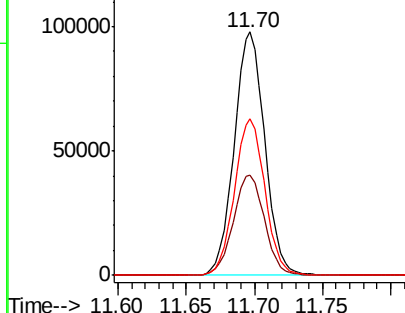
#65  
 1,2-Dichlorobenzene  
 Concen: 5.412 ug/L  
 RT: 11.70 min Scan# 3361  
 Delta R.T. 0.00 min  
 Lab File: VV006797.D  
 Acq: 31 Jul 2018 20:46

Instrument :  
 MSVOA\_V  
 ClientSampleId :

Tot Ion:146 Resp: 151969  
 Ion Ratio Lower Upper  
 146 100  
 111 41.2 32.9 49.3  
 148 64.2 50.2 75.4

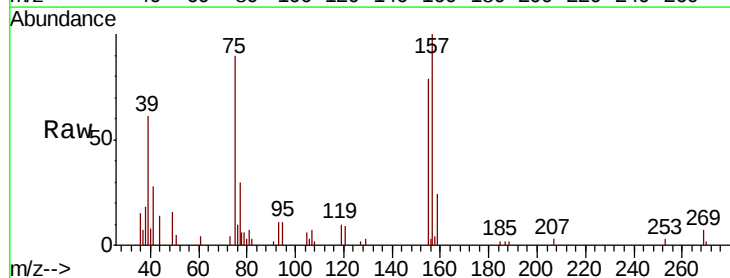


Abundance Ion 145.95 (145.65 to 146.65): V  
 Ion 111.00 (110.70 to 111.70): V  
 Ion 148.00 (147.70 to 148.70): V

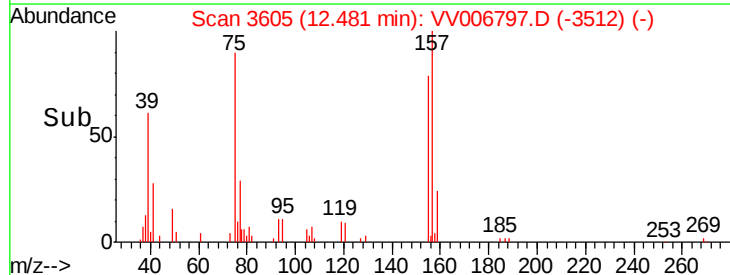
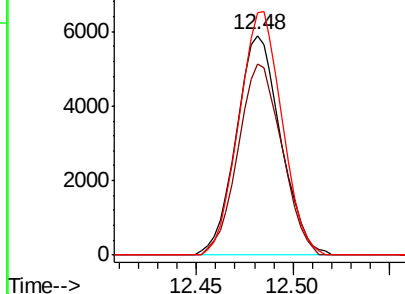


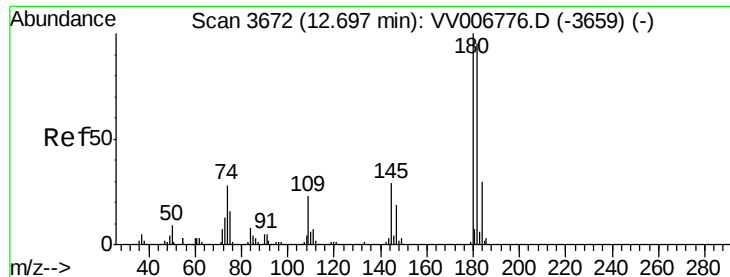
#66  
 1,2-Dibromo-3-chloropropane  
 Concen: 5.598 ug/L  
 RT: 12.48 min Scan# 3605  
 Delta R.T. -0.00 min  
 Lab File: VV006797.D  
 Acq: 31 Jul 2018 20:46

Tgt Ion: 75 Resp: 9407  
 Ion Ratio Lower Upper  
 75 100  
 155 87.0 68.8 103.2  
 157 110.6 85.6 128.4



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

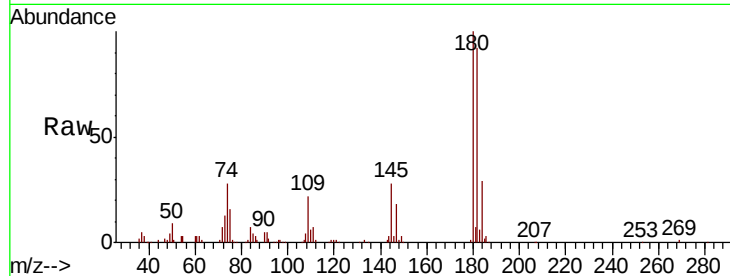




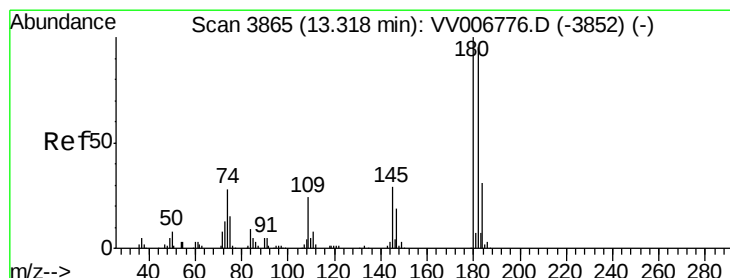
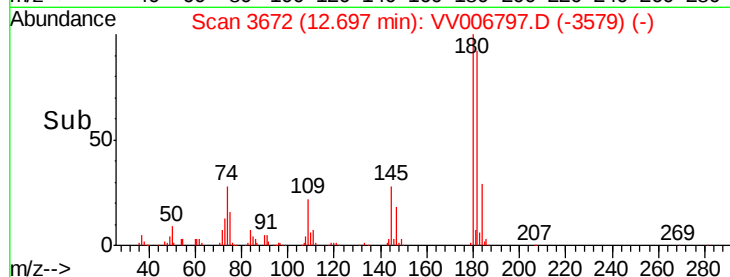
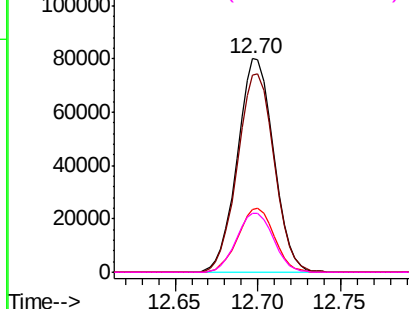
#67  
 1,3,5-Trichlorobenzene  
 Concen: 5.551 ug/L  
 RT: 12.70 min Scan# 3672  
 Delta R.T. -0.00 min  
 Lab File: VV006797.D  
 Acq: 31 Jul 2018 20:46

Instrument :  
 MSVOA\_V  
 ClientSampleId :

|             |       |            |
|-------------|-------|------------|
| Tot Ion:180 | Resp: | 122176     |
| Ion Ratio   | Lower | Upper      |
| 180         | 100   |            |
| 182         | 94.1  | 76.8 115.2 |
| 184         | 30.0  | 24.6 37.0  |
| 145         | 28.3  | 22.8 34.2  |

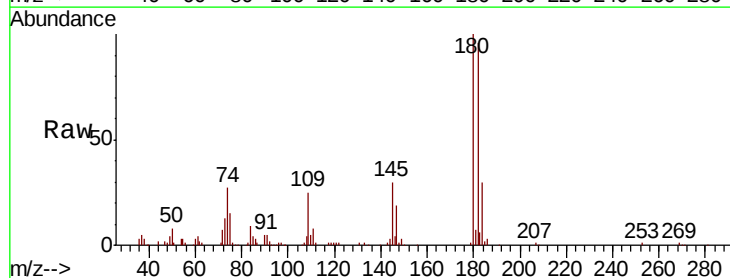


Abundance Ion 180.00 (179.70 to 180.70): V  
 Ion 182.00 (181.70 to 182.70): V  
 Ion 184.00 (183.70 to 184.70): V  
 Ion 145.00 (144.70 to 145.70): V

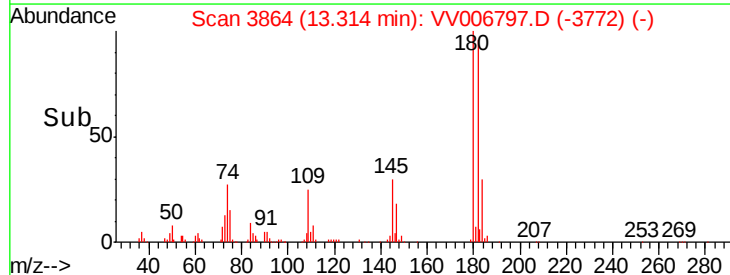
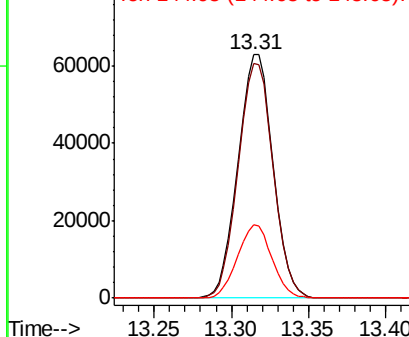


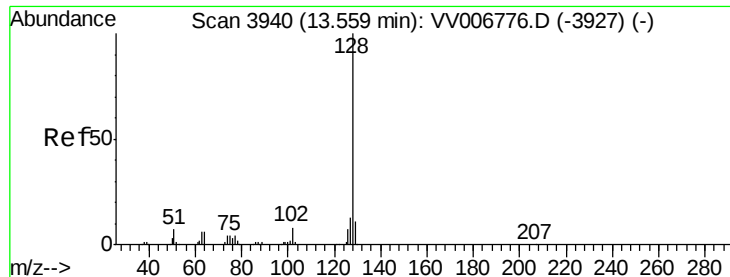
#68  
 1,2,4-trichlorobenzene  
 Concen: 5.671 ug/L  
 RT: 13.31 min Scan# 3864  
 Delta R.T. -0.00 min  
 Lab File: VV006797.D  
 Acq: 31 Jul 2018 20:46

|             |       |            |
|-------------|-------|------------|
| Tgt Ion:180 | Resp: | 99144      |
| Ion Ratio   | Lower | Upper      |
| 180         | 100   |            |
| 182         | 96.3  | 76.2 114.4 |
| 145         | 29.5  | 23.4 35.0  |



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: 5.880 ug/L

RT: 13.56 min Scan# 3939

Delta R.T. -0.00 min

Lab File: VV006797.D

Acq: 31 Jul 2018 20:46

Instrument :

MSVOA\_V

ClientSampled :

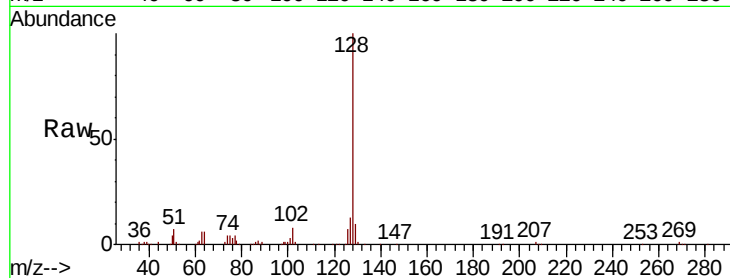
Tot Ion:128 Resp: 175900

Ion Ratio Lower Upper

128 100

129 10.4 8.7 13.1

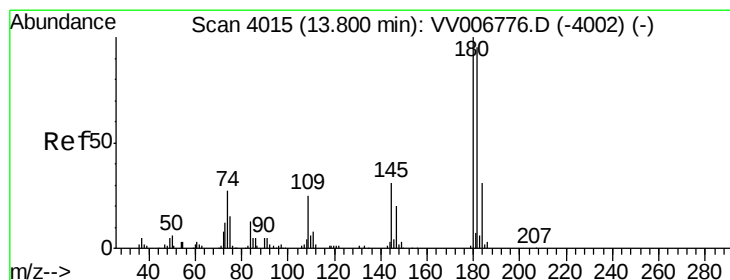
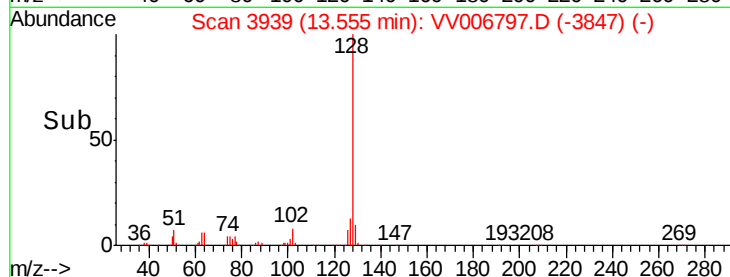
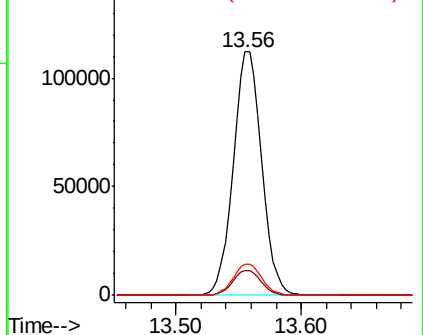
127 13.1 10.3 15.5



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: 5.731 ug/L

RT: 13.80 min Scan# 4015

Delta R.T. -0.00 min

Lab File: VV006797.D

Acq: 31 Jul 2018 20:46

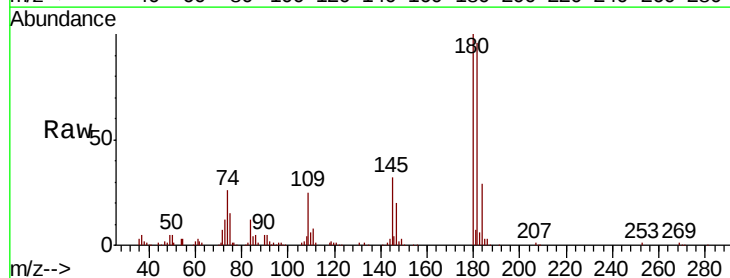
Tgt Ion:180 Resp: 94815

Ion Ratio Lower Upper

180 100

182 95.3 75.3 112.9

145 31.7 24.5 36.7



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

