

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\WV122118\  
 Data File : VW007707.D  
 Acq On : 19 Dec 2018 18:44  
 Operator : SY/AP  
 Sample : VW1221SBS01  
 Misc : 5.00G/5ML/MSVOA W/SOIL  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 VW1221SBS01

Manual Integrations  
 APPROVED

apatel  
 12/20/2018 11:19:55 AM

Quant Time: Dec 20 07:31:06 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W122118S.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Dec 20 06:30:23 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.95  | 168  | 78144    | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.84  | 114  | 125313   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.63 | 117  | 113247   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.56 | 152  | 59303    | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.31   | 65  | 44150    | 51.55 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 103.10% |      |
| 35) Dibromofluoromethane  | 7.88   | 113 | 39187    | 51.26 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 102.52% |      |
| 50) Toluene-d8            | 10.32  | 98  | 148913   | 51.67 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 103.34% |      |
| 62) 4-Bromofluorobenzene  | 12.62  | 95  | 56764    | 50.98 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 101.96% |      |

## Target Compounds

|                               |      |     |        |         |        | Qvalue |
|-------------------------------|------|-----|--------|---------|--------|--------|
| 2) Dichlorodifluoromethane    | 2.01 | 85  | 13775  | 19.829  | ug/l   | 98     |
| 3) Chloromethane              | 2.21 | 50  | 8807   | 20.646  | ug/l   | 98     |
| 4) Vinyl Chloride             | 2.36 | 62  | 10905  | 20.082  | ug/l   | 92     |
| 5) Bromomethane               | 2.78 | 94  | 7621   | 20.150  | ug/l   | 95     |
| 6) Chloroethane               | 2.92 | 64  | 5683   | 19.562  | ug/l   | 99     |
| 7) Trichlorofluoromethane     | 3.26 | 101 | 10286  | 18.194  | ug/l   | 96     |
| 8) Diethyl Ether              | 3.68 | 74  | 7290   | 21.053  | ug/l   | 97     |
| 9) 1,1,2-Trichlorotrifluoroet | 4.06 | 101 | 16149  | 19.396  | ug/l   | 97     |
| 10) Methyl Iodide             | 4.26 | 142 | 25839  | 19.515  | ug/l   | 99     |
| 11) Tert butyl alcohol        | 5.17 | 59  | 6474   | 112.051 | ug/l # | 93     |
| 12) 1,1-Dichloroethene        | 4.03 | 96  | 15449  | 20.038  | ug/l   | 99     |
| 13) Acrolein                  | 3.89 | 56  | 4691   | 101.545 | ug/l   | 93     |
| 14) Allyl chloride            | 4.66 | 41  | 20299  | 20.077  | ug/l   | 99     |
| 15) Acrylonitrile             | 5.37 | 53  | 14335  | 97.049  | ug/l   | 100    |
| 16) Acetone                   | 4.12 | 43  | 15123  | 94.291  | ug/l   | 98     |
| 17) Carbon Disulfide          | 4.37 | 76  | 45952  | 19.260  | ug/l   | 98     |
| 18) Methyl Acetate            | 4.67 | 43  | 7348   | 19.264  | ug/l   | 97     |
| 19) Methyl tert-butyl Ether   | 5.42 | 73  | 22933  | 20.719  | ug/l   | 98     |
| 20) Methylene Chloride        | 4.90 | 84  | 18391  | 19.022  | ug/l # | 95     |
| 21) trans-1,2-Dichloroethene  | 5.42 | 96  | 16883  | 19.911  | ug/l   | 96     |
| 22) Diisopropyl ether         | 6.31 | 45  | 38451  | 20.311  | ug/l   | 95     |
| 23) Vinyl Acetate             | 6.25 | 43  | 112578 | 100.090 | ug/l   | 100    |
| 24) 1,1-Dichloroethane        | 6.21 | 63  | 27703  | 19.892  | ug/l   | 99     |
| 25) 2-Butanone                | 7.17 | 43  | 17653  | 93.969  | ug/l   | 96     |
| 26) 2,2-Dichloropropane       | 7.16 | 77  | 20987  | 20.593  | ug/l   | 100    |
| 27) cis-1,2-Dichloroethene    | 7.17 | 96  | 18260  | 20.213  | ug/l   | 99     |
| 28) Bromochloromethane        | 7.51 | 49  | 9585   | 20.185  | ug/l   | 93     |
| 29) Tetrahydrofuran           | 7.53 | 42  | 10697  | 95.462  | ug/l   | 98     |
| 30) Chloroform                | 7.67 | 83  | 31933  | 20.261  | ug/l   | 100    |
| 31) Cyclohexane               | 7.95 | 56  | 25007  | 19.613  | ug/l   | 96     |
| 32) 1,1,1-Trichloroethane     | 7.87 | 97  | 29093  | 20.268  | ug/l   | 98     |
| 36) 1,1-Dichloropropene       | 8.08 | 75  | 24090  | 19.917  | ug/l   | 99     |
| 37) Ethyl Acetate             | 7.25 | 43  | 8185   | 19.609  | ug/l   | 99     |
| 38) Carbon Tetrachloride      | 8.07 | 117 | 27733  | 19.470  | ug/l   | 92     |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW122118\  
 Data File : VW007707.D  
 Acq On : 19 Dec 2018 18:44  
 Operator : SY/AP  
 Sample : VW1221SBS01  
 Misc : 5.00G/5ML/MSVOA W/SOIL  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 VW1221SBS01

Manual Integrations  
 APPROVED

apatel  
 12/20/2018 11:19:55 AM

Quant Time: Dec 20 07:31:06 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W122118S.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Dec 20 06:30:23 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 9.34  | 83   | 30203    | 20.096  | ug/l   | 99       |
| 40) Benzene                    | 8.32  | 78   | 65520    | 20.300  | ug/l   | 98       |
| 41) Methacrylonitrile          | 7.48  | 41   | 4609     | 19.448  | ug/l   | 96       |
| 42) 1,2-Dichloroethane         | 8.40  | 62   | 21582    | 19.954  | ug/l   | 100      |
| 43) Isopropyl Acetate          | 8.43  | 43   | 16502    | 19.733  | ug/l   | 97       |
| 44) Trichloroethene            | 9.09  | 130  | 19409    | 19.885  | ug/l   | 96       |
| 45) 1,2-Dichloropropane        | 9.37  | 63   | 14666    | 20.479  | ug/l   | 98       |
| 46) Dibromomethane             | 9.46  | 93   | 8964     | 20.334  | ug/l   | 95       |
| 47) Bromodichloromethane       | 9.65  | 83   | 22736    | 19.618  | ug/l   | 99       |
| 48) Methyl methacrylate        | 9.44  | 41   | 7565m    | 18.123  | ug/l   |          |
| 49) 1,4-Dioxane                | 9.45  | 88   | 2664     | 381.148 | ug/l   | 95       |
| 51) 4-Methyl-2-Pentanone       | 10.21 | 43   | 37454    | 94.768  | ug/l   | 100      |
| 52) Toluene                    | 10.39 | 92   | 44668    | 20.628  | ug/l   | 100      |
| 53) t-1,3-Dichloropropene      | 10.61 | 75   | 22958    | 19.916  | ug/l   | 98       |
| 54) cis-1,3-Dichloropropene    | 10.07 | 75   | 25751    | 20.224  | ug/l   | 96       |
| 55) 1,1,2-Trichloroethane      | 10.79 | 97   | 12442    | 20.472  | ug/l   | 96       |
| 56) Ethyl methacrylate         | 10.65 | 69   | 14191    | 19.763  | ug/l   | 99       |
| 57) 1,3-Dichloropropane        | 10.93 | 76   | 19933    | 19.752  | ug/l   | 97       |
| 58) 2-Chloroethyl Vinyl ether  | 9.93  | 63   | 33052    | 100.816 | ug/l   | 97       |
| 59) 2-Hexanone                 | 10.97 | 43   | 26678    | 95.983  | ug/l   | 98       |
| 60) Dibromochloromethane       | 11.13 | 129  | 15778    | 19.607  | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 11.23 | 107  | 11894    | 19.326  | ug/l   | 99       |
| 64) Tetrachloroethene          | 10.87 | 164  | 15653    | 19.519  | ug/l   | 96       |
| 65) Chlorobenzene              | 11.66 | 112  | 50062    | 20.424  | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.73 | 131  | 17969    | 20.516  | ug/l   | 99       |
| 67) Ethyl Benzene              | 11.73 | 91   | 85624    | 20.357  | ug/l   | 96       |
| 68) m/p-Xylenes                | 11.84 | 106  | 66547    | 40.786  | ug/l   | 99       |
| 69) o-Xylene                   | 12.17 | 106  | 31331    | 20.485  | ug/l   | 99       |
| 70) Styrene                    | 12.18 | 104  | 51851    | 20.624  | ug/l   | 99       |
| 71) Bromoform                  | 12.35 | 173  | 8891     | 19.555  | ug/l # | 99       |
| 73) Isopropylbenzene           | 12.47 | 105  | 89253    | 19.911  | ug/l   | 99       |
| 74) N-amyl acetate             | 12.27 | 43   | 14986    | 19.300  | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.72 | 83   | 12769    | 18.999  | ug/l   | 98       |
| 76) 1,2,3-Trichloropropane     | 12.77 | 75   | 10263m   | 22.391  | ug/l   |          |
| 77) Bromobenzene               | 12.75 | 156  | 20839    | 20.285  | ug/l   | 95       |
| 78) n-propylbenzene            | 12.81 | 91   | 103786   | 19.890  | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 12.90 | 91   | 60346    | 19.852  | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene     | 12.94 | 105  | 77903    | 20.148  | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-buten | 12.52 | 75   | 4104     | 18.795  | ug/l   | 98       |
| 82) 4-Chlorotoluene            | 12.99 | 91   | 63083    | 19.490  | ug/l   | 98       |
| 83) tert-Butylbenzene          | 13.21 | 119  | 67582    | 19.920  | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 13.26 | 105  | 78692    | 20.169  | ug/l   | 100      |
| 85) sec-Butylbenzene           | 13.39 | 105  | 93089    | 19.909  | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 13.51 | 119  | 85418    | 20.090  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 13.51 | 146  | 40327    | 19.771  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 13.58 | 146  | 40666    | 19.931  | ug/l   | 99       |
| 89) n-Butylbenzene             | 13.83 | 91   | 78956    | 20.254  | ug/l   | 99       |
| 90) Hexachloroethane           | 14.10 | 117  | 14177    | 18.993  | ug/l   | 99       |
| 91) 1,2-Dichlorobenzene        | 13.87 | 146  | 36516    | 19.995  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.49 | 75   | 2503     | 18.134  | ug/l   | 96       |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW122118\  
Data File : VW007707.D  
Acq On : 19 Dec 2018 18:44  
Operator : SY/AP  
Sample : VW1221SBS01  
Misc : 5.00G/5ML/MSVOA W/SOIL  
ALS Vial : 4 Sample Multiplier: 1

Instrument :  
MSVOA\_W  
ClientSampleId :  
VW1221SBS01

Manual Integrations  
APPROVED

apatel  
12/20/2018 11:19:55 AM

Quant Time: Dec 20 07:31:06 2018  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W122118S.M  
Quant Title : SW846 8260  
QLast Update : Thu Dec 20 06:30:23 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 15.14 | 180  | 24795    | 19.559 | ug/l  | 100      |
| 94) Hexachlorobutadiene    | 15.24 | 225  | 13388    | 19.762 | ug/l  | 99       |
| 95) Naphthalene            | 15.38 | 128  | 44506    | 18.989 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 15.57 | 180  | 21005    | 19.357 | ug/l  | 99       |

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

