

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\WV122118\  
 Data File : VW007701.D  
 Acq On : 19 Dec 2018 14:53  
 Operator : SY/AP  
 Sample : VSTDICCC050  
 Misc : 5.00G/5ML/MSVOA W/SOIL  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 VSTDICCC050

Manual Integrations  
 APPROVED

apatel  
 12/20/2018 11:19:39 AM

Quant Time: Dec 20 06:34:36 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W122118S.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Dec 20 05:57:50 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.95  | 168  | 76042    | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.84  | 114  | 120499   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.63 | 117  | 109270   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.56 | 152  | 55956    | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |        |      |
|---------------------------|--------|-----|----------|-------|--------|------|
| 33) 1,2-Dichloroethane-d4 | 8.31   | 65  | 40224    | 48.26 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 96.52% |      |
| 35) Dibromofluoromethane  | 7.88   | 113 | 36031    | 49.01 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 98.02% |      |
| 50) Toluene-d8            | 10.32  | 98  | 137319   | 49.55 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 99.10% |      |
| 62) 4-Bromofluorobenzene  | 12.62  | 95  | 52532    | 49.07 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 98.14% |      |

## Target Compounds

|                               |      |     |        |         |      | Qvalue |
|-------------------------------|------|-----|--------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 2.01 | 85  | 33800  | 49.999  | ug/l | 100    |
| 3) Chloromethane              | 2.22 | 50  | 20085  | 48.385  | ug/l | 100    |
| 4) Vinyl Chloride             | 2.37 | 62  | 25300  | 47.879  | ug/l | 100    |
| 5) Bromomethane               | 2.78 | 94  | 16982  | 46.141  | ug/l | 100    |
| 6) Chloroethane               | 2.92 | 64  | 13418  | 47.464  | ug/l | 100    |
| 7) Trichlorofluoromethane     | 3.26 | 101 | 26386  | 47.963  | ug/l | 100    |
| 8) Diethyl Ether              | 3.68 | 74  | 16859  | 50.033  | ug/l | 100    |
| 9) 1,1,2-Trichlorotrifluoroet | 4.06 | 101 | 39009  | 48.764  | ug/l | 100    |
| 10) Methyl Iodide             | 4.26 | 142 | 62168  | 48.250  | ug/l | 100    |
| 11) Tert butyl alcohol        | 5.17 | 59  | 12852  | 228.589 | ug/l | 100    |
| 12) 1,1-Dichloroethene        | 4.04 | 96  | 35984  | 47.963  | ug/l | 100    |
| 13) Acrolein                  | 3.89 | 56  | 10184  | 226.544 | ug/l | 100    |
| 14) Allyl chloride            | 4.66 | 41  | 46737  | 47.504  | ug/l | 100    |
| 15) Acrylonitrile             | 5.36 | 53  | 35130  | 244.407 | ug/l | 100    |
| 16) Acetone                   | 4.12 | 43  | 38272  | 245.220 | ug/l | 100    |
| 17) Carbon Disulfide          | 4.37 | 76  | 110337 | 47.525  | ug/l | 100    |
| 18) Methyl Acetate            | 4.67 | 43  | 18772  | 50.575  | ug/l | 100    |
| 19) Methyl tert-butyl Ether   | 5.43 | 73  | 53236  | 49.426  | ug/l | 100    |
| 20) Methylene Chloride        | 4.91 | 84  | 39387  | 41.871  | ug/l | 100    |
| 21) trans-1,2-Dichloroethene  | 5.42 | 96  | 38749  | 46.961  | ug/l | 100    |
| 22) Diisopropyl ether         | 6.31 | 45  | 90562  | 49.159  | ug/l | 100    |
| 23) Vinyl Acetate             | 6.26 | 43  | 269838 | 246.537 | ug/l | 100    |
| 24) 1,1-Dichloroethane        | 6.21 | 63  | 64150  | 47.335  | ug/l | 100    |
| 25) 2-Butanone                | 7.17 | 43  | 43977  | 240.566 | ug/l | 100    |
| 26) 2,2-Dichloropropane       | 7.17 | 77  | 46257  | 46.643  | ug/l | 100    |
| 27) cis-1,2-Dichloroethene    | 7.17 | 96  | 42007  | 47.785  | ug/l | 100    |
| 28) Bromochloromethane        | 7.51 | 49  | 22377  | 48.427  | ug/l | 100    |
| 29) Tetrahydrofuran           | 7.52 | 42  | 27031  | 247.897 | ug/l | 100    |
| 30) Chloroform                | 7.68 | 83  | 73724  | 48.069  | ug/l | 100    |
| 31) Cyclohexane               | 7.95 | 56  | 55731  | 44.919  | ug/l | 100    |
| 32) 1,1,1-Trichloroethane     | 7.87 | 97  | 66867  | 47.870  | ug/l | 100    |
| 36) 1,1-Dichloropropene       | 8.08 | 75  | 56630  | 48.692  | ug/l | 100    |
| 37) Ethyl Acetate             | 7.25 | 43  | 19880  | 49.529  | ug/l | 100    |
| 38) Carbon Tetrachloride      | 8.07 | 117 | 66908  | 48.849  | ug/l | 100    |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\WV122118\  
 Data File : VW007701.D  
 Acq On : 19 Dec 2018 14:53  
 Operator : SY/AP  
 Sample : VSTDICCC050  
 Misc : 5.00G/5ML/MSVOA W/SOIL  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleID :  
 VSTDICCC050

Manual Integrations  
 APPROVED

apatel  
 12/20/2018 11:19:39 AM

Quant Time: Dec 20 06:34:36 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W122118S.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Dec 20 05:57:50 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc     | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|----------|--------|----------|
| 39) Methylcyclohexane          | 9.34  | 83   | 70227    | 48.594   | ug/l   | 100      |
| 40) Benzene                    | 8.32  | 78   | 149942   | 48.313   | ug/l   | 100      |
| 41) Methacrylonitrile          | 7.48  | 41   | 11492    | 50.429   | ug/l   | 100      |
| 42) 1,2-Dichloroethane         | 8.40  | 62   | 50890    | 48.930   | ug/l   | 100      |
| 43) Isopropyl Acetate          | 8.43  | 43   | 40154    | 49.934   | ug/l   | 100      |
| 44) Trichloroethene            | 9.09  | 130  | 44952    | 47.895   | ug/l   | 100      |
| 45) 1,2-Dichloropropane        | 9.37  | 63   | 34258    | 49.747   | ug/l   | 100      |
| 46) Dibromomethane             | 9.46  | 93   | 20848    | 49.180   | ug/l   | 100      |
| 47) Bromodichloromethane       | 9.64  | 83   | 54721    | 49.102   | ug/l   | 100      |
| 48) Methyl methacrylate        | 9.43  | 41   | 19906    | 49.593   | ug/l   | 100      |
| 49) 1,4-Dioxane                | 9.45  | 88   | 6777     | 1008.347 | ug/l   | 100      |
| 51) 4-Methyl-2-Pentanone       | 10.21 | 43   | 94204    | 247.882  | ug/l   | 100      |
| 52) Toluene                    | 10.39 | 92   | 100758   | 48.389   | ug/l   | 100      |
| 53) t-1,3-Dichloropropene      | 10.61 | 75   | 53985    | 48.702   | ug/l   | 100      |
| 54) cis-1,3-Dichloropropene    | 10.07 | 75   | 59480    | 48.579   | ug/l   | 100      |
| 55) 1,1,2-Trichloroethane      | 10.79 | 97   | 27969    | 47.860   | ug/l   | 100      |
| 56) Ethyl methacrylate         | 10.65 | 69   | 35403    | 51.274   | ug/l   | 100      |
| 57) 1,3-Dichloropropane        | 10.93 | 76   | 46986    | 48.418   | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether  | 9.93  | 63   | 80130    | 254.180  | ug/l   | 100      |
| 59) 2-Hexanone                 | 10.97 | 43   | 67748    | 253.484  | ug/l   | 100      |
| 60) Dibromochloromethane       | 11.13 | 129  | 38090    | 49.226   | ug/l   | 100      |
| 61) 1,2-Dibromoethane          | 11.24 | 107  | 28474    | 48.114   | ug/l   | 100      |
| 64) Tetrachloroethene          | 10.86 | 164  | 37495    | 48.458   | ug/l   | 100      |
| 65) Chlorobenzene              | 11.66 | 112  | 113461   | 47.974   | ug/l   | 100      |
| 66) 1,1,1,2-Tetrachloroethane  | 11.73 | 131  | 41419    | 49.012   | ug/l   | 100      |
| 67) Ethyl Benzene              | 11.73 | 91   | 197427   | 48.646   | ug/l   | 100      |
| 68) m/p-Xylenes                | 11.84 | 106  | 154078   | 97.869   | ug/l   | 100      |
| 69) o-Xylene                   | 12.17 | 106  | 72458    | 49.100   | ug/l   | 100      |
| 70) Styrene                    | 12.18 | 104  | 120051   | 49.489   | ug/l   | 100      |
| 71) Bromoform                  | 12.35 | 173  | 21999    | 50.146   | ug/l # | 100      |
| 73) Isopropylbenzene           | 12.47 | 105  | 206488   | 48.819   | ug/l   | 100      |
| 74) N-amyl acetate             | 12.27 | 43   | 36618    | 49.981   | ug/l   | 100      |
| 75) 1,1,2,2-Tetrachloroethane  | 12.72 | 83   | 31276    | 49.318   | ug/l   | 100      |
| 76) 1,2,3-Trichloropropane     | 12.77 | 75   | 24141m   | 28.499   | ug/l   |          |
| 77) Bromobenzene               | 12.75 | 156  | 47529    | 49.033   | ug/l   | 100      |
| 78) n-propylbenzene            | 12.81 | 91   | 241487   | 49.047   | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 12.90 | 91   | 138746   | 48.373   | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene     | 12.94 | 105  | 179762   | 49.272   | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-buten | 12.51 | 75   | 10549    | 51.199   | ug/l   | 100      |
| 82) 4-Chlorotoluene            | 12.99 | 91   | 148516   | 48.630   | ug/l   | 100      |
| 83) tert-Butylbenzene          | 13.21 | 119  | 157626   | 49.240   | ug/l   | 100      |
| 84) 1,2,4-Trimethylbenzene     | 13.26 | 105  | 181623   | 49.335   | ug/l   | 100      |
| 85) sec-Butylbenzene           | 13.39 | 105  | 216191   | 49.003   | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 13.50 | 119  | 196752   | 49.044   | ug/l   | 100      |
| 87) 1,3-Dichlorobenzene        | 13.50 | 146  | 92763    | 48.199   | ug/l   | 100      |
| 88) 1,4-Dichlorobenzene        | 13.58 | 146  | 93120    | 48.370   | ug/l   | 100      |
| 89) n-Butylbenzene             | 13.83 | 91   | 181089   | 49.233   | ug/l   | 100      |
| 90) Hexachloroethane           | 14.10 | 117  | 34409    | 48.856   | ug/l   | 100      |
| 91) 1,2-Dichlorobenzene        | 13.87 | 146  | 84127    | 48.821   | ug/l   | 100      |
| 92) 1,2-Dibromo-3-Chloropropan | 14.49 | 75   | 6663     | 51.161   | ug/l   | 100      |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW122118\  
Data File : VW007701.D  
Acq On : 19 Dec 2018 14:53  
Operator : SY/AP  
Sample : VSTDICCC050  
Misc : 5.00G/5ML/MSVOA W/SOIL  
ALS Vial : 6 Sample Multiplier: 1

Instrument :  
MSVOA\_W  
ClientSampleId :  
VSTDICCC050

Manual Integrations  
APPROVED

apatel  
12/20/2018 11:19:39 AM

Quant Time: Dec 20 06:34:36 2018  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W122118S.M  
Quant Title : SW846 8260  
QLast Update : Thu Dec 20 05:57:50 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 15.14 | 180  | 58393    | 48.818 | ug/l  | 100      |
| 94) Hexachlorobutadiene    | 15.24 | 225  | 30960    | 48.433 | ug/l  | 100      |
| 95) Naphthalene            | 15.38 | 128  | 113458   | 51.305 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 15.57 | 180  | 50943    | 49.754 | ug/l  | 100      |

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

