

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW112018\  
 Data File : VW006956.D  
 Acq On : 19 Nov 2018 21:25  
 Operator : SY/AP  
 Sample : J5981-03MS  
 Misc : 4.26G/5ML/MSVOA W/SOIL  
 ALS Vial : 24 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 DTW-02(11-13)MS

Manual Integrations  
 APPROVED

apatel  
 11/20/2018 4:50:05 PM

Quant Time: Nov 20 05:52:04 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W111718S.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Nov 17 04:45:18 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.95  | 168  | 69848    | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.85  | 114  | 111489   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.63 | 117  | 97782    | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.56 | 152  | 36746    | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.31   | 65  | 39844    | 51.19 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 102.38% |      |
| 35) Dibromofluoromethane  | 7.89   | 113 | 34705    | 53.16 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 106.32% |      |
| 50) Toluene-d8            | 10.32  | 98  | 149833   | 53.41 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 106.82% |      |
| 62) 4-Bromofluorobenzene  | 12.62  | 95  | 50032    | 45.74 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 91.48%  |      |

## Target Compounds

|                               |      |     |        |         |      | Qvalue |
|-------------------------------|------|-----|--------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 2.00 | 85  | 31136  | 46.560  | ug/l | 98     |
| 3) Chloromethane              | 2.21 | 50  | 30758  | 51.093  | ug/l | 98     |
| 4) Vinyl Chloride             | 2.36 | 62  | 23819  | 41.739  | ug/l | 96     |
| 5) Bromomethane               | 2.78 | 94  | 16413  | 53.544  | ug/l | 98     |
| 6) Chloroethane               | 2.92 | 64  | 15236  | 48.480  | ug/l | 97     |
| 7) Trichlorofluoromethane     | 3.26 | 101 | 53516  | 48.183  | ug/l | 98     |
| 8) Diethyl Ether              | 3.69 | 74  | 21633  | 53.824  | ug/l | 98     |
| 9) 1,1,2-Trichlorotrifluoroet | 4.06 | 101 | 33062  | 46.094  | ug/l | 97     |
| 10) Methyl Iodide             | 4.28 | 142 | 33996  | 39.111  | ug/l | 98     |
| 11) Tert butyl alcohol        | 5.21 | 59  | 14044  | 237.151 | ug/l | 97     |
| 12) 1,1-Dichloroethene        | 4.04 | 96  | 26880  | 41.770  | ug/l | 97     |
| 13) Acrolein                  | 3.90 | 56  | 13120  | 244.332 | ug/l | 99     |
| 14) Allyl chloride            | 4.67 | 41  | 45131  | 39.866  | ug/l | 98     |
| 15) Acrylonitrile             | 5.38 | 53  | 41651  | 266.262 | ug/l | 99     |
| 16) Acetone                   | 4.14 | 43  | 36254  | 304.488 | ug/l | 99     |
| 17) Carbon Disulfide          | 4.39 | 76  | 44082  | 21.653  | ug/l | 100    |
| 18) Methyl Acetate            | 4.68 | 43  | 30570  | 70.159  | ug/l | 98     |
| 19) Methyl tert-butyl Ether   | 5.43 | 73  | 111159 | 58.924  | ug/l | 98     |
| 20) Methylene Chloride        | 4.92 | 84  | 41408  | 50.533  | ug/l | 94     |
| 21) trans-1,2-Dichloroethene  | 5.43 | 96  | 24585  | 32.026  | ug/l | 97     |
| 22) Diisopropyl ether         | 6.32 | 45  | 125567 | 54.341  | ug/l | 99     |
| 23) Vinyl Acetate             | 6.26 | 43  | 290426 | 226.970 | ug/l | 100    |
| 24) 1,1-Dichloroethane        | 6.22 | 63  | 65695  | 49.374  | ug/l | 100    |
| 25) 2-Butanone                | 7.18 | 43  | 59318  | 299.979 | ug/l | 100    |
| 26) 2,2-Dichloropropane       | 7.17 | 77  | 57639  | 49.648  | ug/l | 100    |
| 27) cis-1,2-Dichloroethene    | 7.17 | 96  | 34874  | 40.860  | ug/l | 99     |
| 28) Bromochloromethane        | 7.52 | 49  | 20623  | 42.200  | ug/l | 96     |
| 29) Tetrahydrofuran           | 7.54 | 42  | 37688  | 293.073 | ug/l | 99     |
| 30) Chloroform                | 7.68 | 83  | 70430  | 48.282  | ug/l | 96     |
| 31) Cyclohexane               | 7.96 | 56  | 52836  | 39.637  | ug/l | 97     |
| 32) 1,1,1-Trichloroethane     | 7.88 | 97  | 64222  | 51.140  | ug/l | 99     |
| 36) 1,1-Dichloropropene       | 8.09 | 75  | 43707  | 41.151  | ug/l | 100    |
| 37) Ethyl Acetate             | 7.26 | 43  | 25141  | 55.672  | ug/l | 99     |
| 38) Carbon Tetrachloride      | 8.07 | 117 | 51648  | 49.480  | ug/l | 97     |

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 Quant Title : SW846 8260  
 QLast Update : Sat Nov 17 04:45:18 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc     | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|----------|--------|----------|
| 39) Methylcyclohexane          | 9.34  | 83   | 41448    | 31.444   | ug/l   | 99       |
| 40) Benzene                    | 8.33  | 78   | 200468   | 66.783   | ug/l   | 97       |
| 41) Methacrylonitrile          | 7.49  | 41   | 15571    | 56.295   | ug/l   | 96       |
| 42) 1,2-Dichloroethane         | 8.40  | 62   | 47838    | 53.235   | ug/l   | 100      |
| 43) Isopropyl Acetate          | 8.43  | 43   | 47388    | 54.689   | ug/l   | 99       |
| 44) Trichloroethene            | 9.09  | 130  | 35044    | 43.419   | ug/l   | 98       |
| 45) 1,2-Dichloropropane        | 9.37  | 63   | 41409    | 54.612   | ug/l   | 96       |
| 46) Dibromomethane             | 9.46  | 93   | 18637    | 48.535   | ug/l   | 97       |
| 47) Bromodichloromethane       | 9.65  | 83   | 54991    | 54.386   | ug/l   | 98       |
| 48) Methyl methacrylate        | 9.44  | 41   | 24902    | 59.556   | ug/l   | 94       |
| 49) 1,4-Dioxane                | 9.47  | 88   | 6766     | 1162.770 | ug/l # | 98       |
| 51) 4-Methyl-2-Pentanone       | 10.21 | 43   | 133944   | 313.640  | ug/l   | 98       |
| 52) Toluene                    | 10.39 | 92   | 111239   | 55.392   | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 10.61 | 75   | 40828    | 41.318   | ug/l   | 96       |
| 54) cis-1,3-Dichloropropene    | 10.07 | 75   | 53709    | 45.419   | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane      | 10.79 | 97   | 33419    | 59.024   | ug/l   | 95       |
| 56) Ethyl methacrylate         | 10.65 | 69   | 41134    | 58.435   | ug/l   | 99       |
| 57) 1,3-Dichloropropane        | 10.93 | 76   | 53624    | 55.667   | ug/l   | 97       |
| 58) 2-Chloroethyl Vinyl ether  | 9.93  | 63   | 88980    | 257.117  | ug/l   | 97       |
| 59) 2-Hexanone                 | 10.97 | 43   | 94581    | 330.911  | ug/l   | 96       |
| 60) Dibromochloromethane       | 11.13 | 129  | 35922    | 55.637   | ug/l   | 100      |
| 61) 1,2-Dibromoethane          | 11.24 | 107  | 26570    | 50.493   | ug/l   | 100      |
| 64) Tetrachloroethene          | 10.87 | 164  | 32021    | 50.871   | ug/l   | 95       |
| 65) Chlorobenzene              | 11.66 | 112  | 106052   | 51.365   | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.73 | 131  | 36431    | 55.369   | ug/l   | 98       |
| 67) Ethyl Benzene              | 11.73 | 91   | 252477   | 67.825   | ug/l   | 98       |
| 68) m/p-Xylenes                | 11.84 | 106  | 154865   | 106.834  | ug/l   | 100      |
| 69) o-Xylene                   | 12.17 | 106  | 92705    | 67.382   | ug/l   | 98       |
| 70) Styrene                    | 12.18 | 104  | 118475   | 53.549   | ug/l   | 98       |
| 71) Bromoform                  | 12.35 | 173  | 18340    | 59.789   | ug/l # | 98       |
| 73) Isopropylbenzene           | 12.47 | 105  | 184354   | 63.350   | ug/l   | 99       |
| 74) N-amyl acetate             | 12.27 | 43   | 47125    | 80.913   | ug/l   | 94       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.72 | 83   | 33381    | 77.981   | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 12.77 | 75   | 25961m   | 87.914   | ug/l   |          |
| 77) Bromobenzene               | 12.75 | 156  | 40159    | 65.111   | ug/l   | 99       |
| 78) n-propylbenzene            | 12.81 | 91   | 186373   | 53.298   | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 12.90 | 91   | 121017   | 59.053   | ug/l   | 98       |
| 80) 1,3,5-Trimethylbenzene     | 12.94 | 105  | 167085   | 66.679   | ug/l   | 98       |
| 81) trans-1,4-Dichloro-2-buten | 12.52 | 75   | 8939     | 68.908   | ug/l   | 99       |
| 82) 4-Chlorotoluene            | 12.99 | 91   | 113570   | 52.564   | ug/l   | 97       |
| 83) tert-Butylbenzene          | 13.21 | 119  | 108089   | 50.795   | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 13.26 | 105  | 220110   | 87.437   | ug/l   | 99       |
| 85) sec-Butylbenzene           | 13.39 | 105  | 119987   | 39.517   | ug/l   | 97       |
| 86) p-Isopropyltoluene         | 13.51 | 119  | 117739   | 44.368   | ug/l   | 98       |
| 87) 1,3-Dichlorobenzene        | 13.50 | 146  | 61293    | 48.598   | ug/l   | 97       |
| 88) 1,4-Dichlorobenzene        | 13.58 | 146  | 60650    | 48.251   | ug/l   | 98       |
| 89) n-Butylbenzene             | 13.83 | 91   | 77284    | 30.767   | ug/l   | 92       |
| 90) Hexachloroethane           | 14.10 | 117  | 20733    | 47.925   | ug/l   | 82       |
| 91) 1,2-Dichlorobenzene        | 13.87 | 146  | 61117    | 54.193   | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.49 | 75   | 7189     | 97.049   | ug/l   | 85       |

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Quant Title : SW846 8260  
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Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc     | Units | Dev(Min) |
|----------------------------|-------|------|----------|----------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 15.14 | 180  | 20241    | 28.526   | ug/l  | 95       |
| 94) Hexachlorobutadiene    | 15.24 | 225  | 4972     | 13.265   | ug/l  | 93       |
| 95) Naphthalene            | 15.38 | 128  | 2693287  | 1969.951 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 15.56 | 180  | 17572    | 28.888   | ug/l  | 95       |

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

