

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW110218\  
 Data File : VW006553.D  
 Acq On : 01 Nov 2018 12:39  
 Operator : SY/AP  
 Sample : VW1102SBS01  
 Misc : 5.00G/5ML/MSVOA W/SOIL  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 VW1102SBS01

Manual Integrations  
 APPROVED

apatel  
 11/2/2018 3:20:53 PM

Quant Time: Nov 01 14:08:56 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W110218S.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Nov 01 03:48:08 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.95  | 168  | 319928   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.85  | 114  | 442964   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.63 | 117  | 402686   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.57 | 152  | 225247   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |        |      |
|---------------------------|--------|-----|----------|-------|--------|------|
| 33) 1,2-Dichloroethane-d4 | 8.31   | 65  | 125275   | 45.55 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 91.10% |      |
| 35) Dibromofluoromethane  | 7.88   | 113 | 133617   | 48.06 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 96.12% |      |
| 50) Toluene-d8            | 10.33  | 98  | 517739   | 48.92 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 97.84% |      |
| 62) 4-Bromofluorobenzene  | 12.62  | 95  | 185494   | 48.35 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 96.70% |      |

## Target Compounds

|                               |      |     |        |         |      | Qvalue |
|-------------------------------|------|-----|--------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 2.01 | 85  | 35655  | 21.498  | ug/l | 100    |
| 3) Chloromethane              | 2.21 | 50  | 40745  | 19.856  | ug/l | 97     |
| 4) Vinyl Chloride             | 2.37 | 62  | 59451  | 20.749  | ug/l | 100    |
| 5) Bromomethane               | 2.79 | 94  | 48962  | 20.362  | ug/l | 94     |
| 6) Chloroethane               | 2.93 | 64  | 39303  | 19.632  | ug/l | 100    |
| 7) Trichlorofluoromethane     | 3.26 | 101 | 51026  | 20.167  | ug/l | 100    |
| 8) Diethyl Ether              | 3.68 | 74  | 24060  | 17.396  | ug/l | 98     |
| 9) 1,1,2-Trichlorotrifluoroet | 4.06 | 101 | 57077  | 21.125  | ug/l | 99     |
| 10) Methyl Iodide             | 4.26 | 142 | 93389  | 19.063  | ug/l | 99     |
| 11) Tert butyl alcohol        | 5.23 | 59  | 15048m | 101.557 | ug/l |        |
| 12) 1,1-Dichloroethene        | 4.03 | 96  | 52836  | 20.247  | ug/l | 99     |
| 13) Acrolein                  | 3.90 | 56  | 18136  | 97.317  | ug/l | 100    |
| 14) Allyl chloride            | 4.67 | 41  | 67017  | 19.674  | ug/l | 99     |
| 15) Acrylonitrile             | 5.37 | 53  | 43465  | 87.644  | ug/l | 98     |
| 16) Acetone                   | 4.14 | 43  | 56391  | 127.007 | ug/l | 96     |
| 17) Carbon Disulfide          | 4.37 | 76  | 152522 | 20.539  | ug/l | 100    |
| 18) Methyl Acetate            | 4.67 | 43  | 20666  | 16.187  | ug/l | 98     |
| 19) Methyl tert-butyl Ether   | 5.43 | 73  | 72884  | 18.763  | ug/l | 96     |
| 20) Methylene Chloride        | 4.91 | 84  | 55709  | 15.204  | ug/l | 95     |
| 21) trans-1,2-Dichloroethene  | 5.42 | 96  | 58010  | 19.645  | ug/l | 97     |
| 22) Diisopropyl ether         | 6.31 | 45  | 134026 | 18.873  | ug/l | 97     |
| 23) Vinyl Acetate             | 6.26 | 43  | 373579 | 94.864  | ug/l | 99     |
| 24) 1,1-Dichloroethane        | 6.22 | 63  | 91641  | 19.041  | ug/l | 99     |
| 25) 2-Butanone                | 7.18 | 43  | 63576  | 100.346 | ug/l | 99     |
| 26) 2,2-Dichloropropane       | 7.17 | 77  | 63564  | 21.925  | ug/l | 97     |
| 27) cis-1,2-Dichloroethene    | 7.17 | 96  | 62609  | 18.952  | ug/l | 99     |
| 28) Bromochloromethane        | 7.51 | 49  | 34476  | 18.040  | ug/l | 100    |
| 29) Tetrahydrofuran           | 7.54 | 42  | 34878  | 87.523  | ug/l | 98     |
| 30) Chloroform                | 7.68 | 83  | 98636  | 18.693  | ug/l | 98     |
| 31) Cyclohexane               | 7.96 | 56  | 87759  | 20.034  | ug/l | 96     |
| 32) 1,1,1-Trichloroethane     | 7.88 | 97  | 89925  | 20.140  | ug/l | 99     |
| 36) 1,1-Dichloropropene       | 8.09 | 75  | 81111  | 20.822  | ug/l | 99     |
| 37) Ethyl Acetate             | 7.26 | 43  | 25857  | 19.154  | ug/l | 99     |
| 38) Carbon Tetrachloride      | 8.07 | 117 | 86208  | 21.179  | ug/l | 99     |

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Quant Time: Nov 01 14:08:56 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W110218S.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Nov 01 03:48:08 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 9.34  | 83   | 107032   | 21.651  | ug/l   | 97       |
| 40) Benzene                    | 8.32  | 78   | 220808   | 19.956  | ug/l   | 99       |
| 41) Methacrylonitrile          | 7.49  | 41   | 14329    | 17.310  | ug/l   | 97       |
| 42) 1,2-Dichloroethane         | 8.40  | 62   | 61175    | 19.279  | ug/l   | 99       |
| 43) Isopropyl Acetate          | 8.43  | 43   | 49947    | 18.542  | ug/l   | 99       |
| 44) Trichloroethene            | 9.09  | 130  | 68312    | 20.007  | ug/l   | 99       |
| 45) 1,2-Dichloropropane        | 9.37  | 63   | 50676    | 19.681  | ug/l   | 99       |
| 46) Dibromomethane             | 9.46  | 93   | 28321    | 18.711  | ug/l   | 98       |
| 47) Bromodichloromethane       | 9.65  | 83   | 68895    | 19.603  | ug/l   | 99       |
| 48) Methyl methacrylate        | 9.44  | 41   | 23827    | 18.359  | ug/l   | 98       |
| 49) 1,4-Dioxane                | 9.48  | 88   | 8300     | 374.688 | ug/l # | 1        |
| 51) 4-Methyl-2-Pentanone       | 10.21 | 43   | 126088   | 91.138  | ug/l   | 100      |
| 52) Toluene                    | 10.39 | 92   | 148542   | 20.016  | ug/l   | 100      |
| 53) t-1,3-Dichloropropene      | 10.61 | 75   | 66943    | 19.791  | ug/l   | 100      |
| 54) cis-1,3-Dichloropropene    | 10.07 | 75   | 79512    | 19.893  | ug/l   | 97       |
| 55) 1,1,2-Trichloroethane      | 10.79 | 97   | 40479    | 18.848  | ug/l   | 97       |
| 56) Ethyl methacrylate         | 10.65 | 69   | 44534    | 18.244  | ug/l   | 98       |
| 57) 1,3-Dichloropropane        | 10.93 | 76   | 66060    | 18.943  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 9.93  | 63   | 111766   | 94.191  | ug/l   | 99       |
| 59) 2-Hexanone                 | 10.98 | 43   | 98371    | 104.689 | ug/l   | 98       |
| 60) Dibromochloromethane       | 11.13 | 129  | 48576    | 19.090  | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 11.24 | 107  | 39676    | 18.603  | ug/l   | 99       |
| 64) Tetrachloroethene          | 10.87 | 164  | 62563    | 19.490  | ug/l   | 97       |
| 65) Chlorobenzene              | 11.66 | 112  | 171313   | 20.217  | ug/l   | 98       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.74 | 131  | 59132    | 19.854  | ug/l   | 99       |
| 67) Ethyl Benzene              | 11.74 | 91   | 291112   | 20.554  | ug/l   | 100      |
| 68) m/p-Xylenes                | 11.84 | 106  | 232196   | 41.034  | ug/l   | 100      |
| 69) o-Xylene                   | 12.17 | 106  | 109942   | 20.408  | ug/l   | 99       |
| 70) Styrene                    | 12.19 | 104  | 174570   | 19.876  | ug/l   | 99       |
| 71) Bromoform                  | 12.35 | 173  | 29712    | 18.819  | ug/l   | 99       |
| 73) Isopropylbenzene           | 12.47 | 105  | 306770   | 20.674  | ug/l   | 100      |
| 74) N-amyl acetate             | 12.28 | 43   | 47926    | 18.691  | ug/l   | 98       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.72 | 83   | 44650    | 19.052  | ug/l   | 100      |
| 76) 1,2,3-Trichloropropane     | 12.77 | 75   | 34329m   | 19.534  | ug/l   |          |
| 77) Bromobenzene               | 12.75 | 156  | 76806    | 19.992  | ug/l   | 100      |
| 78) n-propylbenzene            | 12.81 | 91   | 355919   | 20.854  | ug/l   | 99       |
| 79) 2-Chlorotoluene            | 12.90 | 91   | 197653   | 20.179  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 12.95 | 105  | 258368   | 20.726  | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-buten | 12.52 | 75   | 12015    | 19.424  | ug/l   | 96       |
| 82) 4-Chlorotoluene            | 12.99 | 91   | 211719   | 20.431  | ug/l   | 99       |
| 83) tert-Butylbenzene          | 13.21 | 119  | 230448   | 20.730  | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 13.26 | 105  | 263645   | 20.619  | ug/l   | 100      |
| 85) sec-Butylbenzene           | 13.39 | 105  | 329968   | 21.193  | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 13.51 | 119  | 297846   | 21.024  | ug/l   | 100      |
| 87) 1,3-Dichlorobenzene        | 13.51 | 146  | 154444   | 20.413  | ug/l   | 100      |
| 88) 1,4-Dichlorobenzene        | 13.58 | 146  | 153576   | 20.478  | ug/l   | 99       |
| 89) n-Butylbenzene             | 13.83 | 91   | 271326   | 21.575  | ug/l   | 99       |
| 90) Hexachloroethane           | 14.10 | 117  | 47492    | 20.397  | ug/l   | 99       |
| 91) 1,2-Dichlorobenzene        | 13.88 | 146  | 135245   | 19.872  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.49 | 75   | 6879     | 18.090  | ug/l   | 97       |

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ALS Vial : 4 Sample Multiplier: 1

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apatel  
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Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_W\METHOD\82W110218S.M  
Quant Title : SW846 8260  
QLast Update : Thu Nov 01 03:48:08 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 15.15 | 180  | 103405   | 20.434 | ug/l  | 100      |
| 94) Hexachlorobutadiene    | 15.24 | 225  | 67726    | 21.473 | ug/l  | 99       |
| 95) Naphthalene            | 15.38 | 128  | 154644   | 19.014 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 15.57 | 180  | 88485    | 19.895 | ug/l  | 99       |

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

