

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW110918\  
 Data File : VW006784.D  
 Acq On : 09 Nov 2018 13:07  
 Operator : SY/AP  
 Sample : VSTDIC020  
 Misc : 5.00G/5ML/MSVOA W/SOIL  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 VSTDIC020

Manual Integrations  
 APPROVED

apatel  
 11/12/2018 3:40:33 PM

Quant Time: Nov 12 00:54:50 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W110918S.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Nov 09 13:58:37 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.96  | 168  | 300890   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.85  | 114  | 403276   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.63 | 117  | 395264   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.57 | 152  | 225641   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |        |      |
|---------------------------|--------|-----|----------|-------|--------|------|
| 33) 1,2-Dichloroethane-d4 | 8.31   | 65  | 46282    | 17.89 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 35.78% |      |
| 35) Dibromofluoromethane  | 7.89   | 113 | 47091    | 18.61 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 37.22% |      |
| 50) Toluene-d8            | 10.33  | 98  | 199185   | 20.67 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 41.34% |      |
| 62) 4-Bromofluorobenzene  | 12.62  | 95  | 71209    | 20.39 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 40.78% |      |

## Target Compounds

|                               |      |     |        |         |        | Qvalue |
|-------------------------------|------|-----|--------|---------|--------|--------|
| 2) Dichlorodifluoromethane    | 2.00 | 85  | 56421  | 36.172  | ug/l   | 97     |
| 3) Chloromethane              | 2.21 | 50  | 65641  | 34.012  | ug/l   | 97     |
| 4) Vinyl Chloride             | 2.36 | 62  | 67995  | 25.232  | ug/l   | 98     |
| 5) Bromomethane               | 2.78 | 94  | 44059  | 19.482  | ug/l   | 100    |
| 6) Chloroethane               | 2.92 | 64  | 43492  | 23.099  | ug/l   | 95     |
| 7) Trichlorofluoromethane     | 3.26 | 101 | 82748  | 34.773  | ug/l   | 98     |
| 8) Diethyl Ether              | 3.69 | 74  | 23884  | 18.361  | ug/l   | 99     |
| 9) 1,1,2-Trichlorotrifluoroet | 4.07 | 101 | 54957  | 21.627  | ug/l   | 99     |
| 10) Methyl Iodide             | 4.28 | 142 | 74523  | 16.174  | ug/l   | 99     |
| 11) Tert butyl alcohol        | 5.21 | 59  | 14067  | 100.944 | ug/l # | 93     |
| 12) 1,1-Dichloroethene        | 4.04 | 96  | 45721  | 18.629  | ug/l   | 99     |
| 13) Acrolein                  | 3.90 | 56  | 15693  | 89.536  | ug/l   | 98     |
| 14) Allyl chloride            | 4.68 | 41  | 60388  | 18.850  | ug/l   | 100    |
| 15) Acrylonitrile             | 5.38 | 53  | 45871  | 98.348  | ug/l   | 98     |
| 16) Acetone                   | 4.15 | 43  | 31326  | 75.018  | ug/l   | 100    |
| 17) Carbon Disulfide          | 4.39 | 76  | 147673 | 21.144  | ug/l   | 99     |
| 18) Methyl Acetate            | 4.68 | 43  | 21756  | 18.119  | ug/l   | 100    |
| 19) Methyl tert-butyl Ether   | 5.43 | 73  | 114256 | 31.275  | ug/l   | 99     |
| 20) Methylene Chloride        | 4.92 | 84  | 62729  | 19.293  | ug/l   | 96     |
| 21) trans-1,2-Dichloroethene  | 5.43 | 96  | 54222  | 19.524  | ug/l   | 99     |
| 22) Diisopropyl ether         | 6.32 | 45  | 133492 | 19.987  | ug/l   | 98     |
| 23) Vinyl Acetate             | 6.26 | 43  | 380012 | 102.603 | ug/l   | 99     |
| 24) 1,1-Dichloroethane        | 6.22 | 63  | 84180  | 18.597  | ug/l   | 100    |
| 25) 2-Butanone                | 7.18 | 43  | 55149  | 92.552  | ug/l   | 99     |
| 26) 2,2-Dichloropropane       | 7.18 | 77  | 80980  | 29.699  | ug/l   | 99     |
| 27) cis-1,2-Dichloroethene    | 7.18 | 96  | 58579  | 18.854  | ug/l   | 99     |
| 28) Bromochloromethane        | 7.52 | 49  | 30400  | 16.914  | ug/l   | 98     |
| 29) Tetrahydrofuran           | 7.54 | 42  | 34700  | 92.586  | ug/l   | 99     |
| 30) Chloroform                | 7.68 | 83  | 92770  | 18.693  | ug/l   | 100    |
| 31) Cyclohexane               | 7.96 | 56  | 89098  | 21.627  | ug/l   | 98     |
| 32) 1,1,1-Trichloroethane     | 7.88 | 97  | 90769  | 21.615  | ug/l   | 100    |
| 36) 1,1-Dichloropropene       | 8.09 | 75  | 81125  | 22.875  | ug/l   | 100    |
| 37) Ethyl Acetate             | 7.26 | 43  | 26857  | 21.853  | ug/l   | 100    |
| 38) Carbon Tetrachloride      | 8.07 | 117 | 84692  | 22.854  | ug/l   | 99     |

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 Quant Title : SW846 8260  
 QLast Update : Fri Nov 09 13:58:37 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 9.34  | 83   | 95707    | 21.266  | ug/l   | 96       |
| 40) Benzene                    | 8.33  | 78   | 221294   | 21.969  | ug/l   | 98       |
| 41) Methacrylonitrile          | 7.49  | 41   | 15562    | 20.650  | ug/l   | 92       |
| 42) 1,2-Dichloroethane         | 8.41  | 62   | 59845    | 20.716  | ug/l   | 100      |
| 43) Isopropyl Acetate          | 8.43  | 43   | 49598    | 20.224  | ug/l   | 99       |
| 44) Trichloroethene            | 9.10  | 130  | 70102    | 22.552  | ug/l   | 99       |
| 45) 1,2-Dichloropropane        | 9.37  | 63   | 52707    | 22.484  | ug/l   | 98       |
| 46) Dibromomethane             | 9.46  | 93   | 28546    | 20.715  | ug/l   | 99       |
| 47) Bromodichloromethane       | 9.65  | 83   | 71242    | 22.266  | ug/l   | 99       |
| 48) Methyl methacrylate        | 9.44  | 41   | 23159    | 19.600  | ug/l   | 99       |
| 49) 1,4-Dioxane                | 9.48  | 88   | 7933     | 393.364 | ug/l # | 99       |
| 51) 4-Methyl-2-Pentanone       | 10.21 | 43   | 124675   | 98.986  | ug/l   | 100      |
| 52) Toluene                    | 10.39 | 92   | 150642   | 22.297  | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 10.61 | 75   | 67587    | 21.948  | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene    | 10.08 | 75   | 81929    | 22.515  | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane      | 10.79 | 97   | 41533    | 21.242  | ug/l   | 97       |
| 56) Ethyl methacrylate         | 10.65 | 69   | 43294    | 19.482  | ug/l   | 97       |
| 57) 1,3-Dichloropropane        | 10.93 | 76   | 68436    | 21.555  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 9.93  | 63   | 111319   | 103.047 | ug/l   | 99       |
| 59) 2-Hexanone                 | 10.98 | 43   | 83806    | 97.966  | ug/l   | 98       |
| 60) Dibromochloromethane       | 11.13 | 129  | 50275    | 21.703  | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 11.24 | 107  | 40320    | 20.766  | ug/l   | 99       |
| 64) Tetrachloroethene          | 10.87 | 164  | 62702    | 19.900  | ug/l   | 99       |
| 65) Chlorobenzene              | 11.66 | 112  | 176306   | 21.197  | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.73 | 131  | 57105    | 19.533  | ug/l   | 99       |
| 67) Ethyl Benzene              | 11.74 | 91   | 294162   | 21.159  | ug/l   | 100      |
| 68) m/p-Xylenes                | 11.85 | 106  | 243116   | 43.771  | ug/l   | 100      |
| 69) o-Xylene                   | 12.17 | 106  | 110354   | 20.869  | ug/l   | 100      |
| 70) Styrene                    | 12.19 | 104  | 180227   | 20.906  | ug/l   | 100      |
| 71) Bromoform                  | 12.35 | 173  | 30388    | 19.609  | ug/l # | 100      |
| 73) Isopropylbenzene           | 12.47 | 105  | 299100   | 20.122  | ug/l   | 100      |
| 74) N-amyl acetate             | 12.27 | 43   | 47556    | 18.515  | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.72 | 83   | 44718    | 19.048  | ug/l   | 100      |
| 76) 1,2,3-Trichloropropane     | 12.77 | 75   | 34555m   | 19.628  | ug/l   |          |
| 77) Bromobenzene               | 12.75 | 156  | 78427    | 20.379  | ug/l   | 100      |
| 78) n-propylbenzene            | 12.81 | 91   | 361222   | 21.128  | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 12.90 | 91   | 203445   | 20.734  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 12.95 | 105  | 264780   | 21.203  | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-buten | 12.52 | 75   | 12230    | 20.173  | ug/l   | 97       |
| 82) 4-Chlorotoluene            | 12.99 | 91   | 218318   | 21.031  | ug/l   | 100      |
| 83) tert-Butylbenzene          | 13.21 | 119  | 223868   | 20.103  | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 13.26 | 105  | 274371   | 21.421  | ug/l   | 99       |
| 85) sec-Butylbenzene           | 13.39 | 105  | 323794   | 20.760  | ug/l   | 99       |
| 86) p-Isopropyltoluene         | 13.51 | 119  | 299060   | 21.073  | ug/l   | 100      |
| 87) 1,3-Dichlorobenzene        | 13.51 | 146  | 158414   | 20.901  | ug/l   | 100      |
| 88) 1,4-Dichlorobenzene        | 13.58 | 146  | 159482   | 21.228  | ug/l   | 99       |
| 89) n-Butylbenzene             | 13.83 | 91   | 275259   | 21.849  | ug/l   | 99       |
| 90) Hexachloroethane           | 14.10 | 117  | 45627    | 19.561  | ug/l   | 98       |
| 91) 1,2-Dichlorobenzene        | 13.88 | 146  | 141157   | 20.705  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.49 | 75   | 6970     | 18.297  | ug/l   | 95       |

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| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 15.14 | 180  | 103820   | 20.480 | ug/l  | 100      |
| 94) Hexachlorobutadiene    | 15.24 | 225  | 64595    | 20.445 | ug/l  | 97       |
| 95) Naphthalene            | 15.38 | 128  | 150872   | 18.518 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 15.57 | 180  | 88622    | 19.891 | ug/l  | 99       |

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

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