

Data Path : W:\HPCHEM1\MSVOA W\DATA\VW051518\  
 Data File : VW002547.D  
 Acq On : 15 May 2018 12:09  
 Operator : JC/SY  
 Sample : VSTDCCC050  
 Misc : 5.00G/5ML/MSVOA W/SOIL  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 VSTDCCC050

Manual Integrations  
 APPROVED

apatel  
 5/16/2018 12:25:34 PM

Quant Time: May 16 05:42:56 2018  
 Quant Method : W:\HPCHEM1\MSVOA\_W\METHOD\82W051518S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue May 15 03:32:11 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.95  | 168  | 244441   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.84  | 114  | 349951   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.64 | 117  | 321045   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.57 | 152  | 172547   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.31   | 65  | 117284   | 46.43 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 92.86%  |      |
| 35) Dibromofluoromethane  | 7.88   | 113 | 113498   | 51.12 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 102.24% |      |
| 50) Toluene-d8            | 10.33  | 98  | 448447   | 53.09 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 106.18% |      |
| 62) 4-Bromofluorobenzene  | 12.63  | 95  | 156974   | 50.82 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 101.64% |      |

## Target Compounds

|                               |      |     |        |        |      | Qvalue |
|-------------------------------|------|-----|--------|--------|------|--------|
| 2) Dichlorodifluoromethane    | 2.00 | 85  | 49546  | 52.53  | ug/l | 99     |
| 3) Chloromethane              | 2.21 | 50  | 89362  | 49.53  | ug/l | 96     |
| 4) Vinyl Chloride             | 2.36 | 62  | 146324 | 51.72  | ug/l | 95     |
| 5) Bromomethane               | 2.77 | 94  | 111668 | 48.13  | ug/l | 93     |
| 6) Chloroethane               | 2.92 | 64  | 98150  | 50.41  | ug/l | 99     |
| 7) Trichlorofluoromethane     | 3.25 | 101 | 74944  | 60.11  | ug/l | 100    |
| 8) Diethyl Ether              | 3.67 | 74  | 72143  | 48.36  | ug/l | 99     |
| 9) 1,1,2-Trichlorotrifluoroet | 4.05 | 101 | 108626 | 52.59  | ug/l | 99     |
| 10) Methyl Iodide             | 4.26 | 142 | 161003 | 48.91  | ug/l | 99     |
| 11) Tert butyl alcohol        | 5.18 | 59  | 35394  | 182.28 | ug/l | 96     |
| 12) 1,1-Dichloroethene        | 4.02 | 96  | 103793 | 50.77  | ug/l | 98     |
| 13) Acrolein                  | 3.88 | 56  | 48731  | 254.75 | ug/l | 99     |
| 14) Allyl chloride            | 4.65 | 41  | 154867 | 51.05  | ug/l | 98     |
| 15) Acrylonitrile             | 5.36 | 53  | 114586 | 212.99 | ug/l | 98     |
| 16) Acetone                   | 4.12 | 43  | 135475 | 254.04 | ug/l | 96     |
| 17) Carbon Disulfide          | 4.37 | 76  | 279794 | 49.73  | ug/l | 100    |
| 18) Methyl Acetate            | 4.67 | 43  | 64126  | 41.25  | ug/l | 98     |
| 19) Methyl tert-butyl Ether   | 5.42 | 73  | 170273 | 45.33  | ug/l | 98     |
| 20) Methylene Chloride        | 4.90 | 84  | 103035 | 48.48  | ug/l | 98     |
| 21) trans-1,2-Dichloroethene  | 5.41 | 96  | 109610 | 49.59  | ug/l | 96     |
| 22) Diisopropyl ether         | 6.31 | 45  | 319444 | 47.53  | ug/l | 97     |
| 23) Vinyl Acetate             | 6.25 | 43  | 950186 | 233.28 | ug/l | 99     |
| 24) 1,1-Dichloroethane        | 6.21 | 63  | 201146 | 49.66  | ug/l | 100    |
| 25) 2-Butanone                | 7.17 | 43  | 161923 | 214.72 | ug/l | 99     |
| 26) 2,2-Dichloropropane       | 7.16 | 77  | 122342 | 53.90  | ug/l | 99     |
| 27) cis-1,2-Dichloroethene    | 7.16 | 96  | 121668 | 48.25  | ug/l | 99     |
| 28) Bromochloromethane        | 7.51 | 49  | 80032  | 44.26  | ug/l | 98     |
| 29) Tetrahydrofuran           | 7.53 | 42  | 95265  | 202.23 | ug/l | 99     |
| 30) Chloroform                | 7.67 | 83  | 210164 | 48.59  | ug/l | 95     |
| 31) Cyclohexane               | 7.95 | 56  | 173757 | 48.42  | ug/l | 96     |
| 32) 1,1,1-Trichloroethane     | 7.87 | 97  | 166763 | 51.12  | ug/l | 98     |
| 36) 1,1-Dichloropropene       | 8.08 | 75  | 164293 | 53.20  | ug/l | 99     |
| 37) Ethyl Acetate             | 7.25 | 43  | 64736  | 42.27  | ug/l | 99     |
| 38) Carbon Tetrachloride      | 8.06 | 117 | 163466 | 54.06  | ug/l | 95     |

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 Quant Title : SW846 8260  
 QLast Update : Tue May 15 03:32:11 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|--------|--------|----------|
| 39) Methylcyclohexane          | 9.34  | 83   | 193866   | 54.81  | ug/l   | 99       |
| 40) Benzene                    | 8.32  | 78   | 452236   | 51.00  | ug/l   | 100      |
| 41) Methacrylonitrile          | 7.48  | 41   | 38715    | 45.16  | ug/l   | 95       |
| 42) 1,2-Dichloroethane         | 8.40  | 62   | 135363   | 48.07  | ug/l   | 99       |
| 43) Isopropyl Acetate          | 8.43  | 43   | 128981   | 43.78  | ug/l   | 98       |
| 44) Trichloroethene            | 9.09  | 130  | 126083   | 51.89  | ug/l   | 99       |
| 45) 1,2-Dichloropropane        | 9.37  | 63   | 114239   | 50.56  | ug/l   | 98       |
| 46) Dibromomethane             | 9.46  | 93   | 60177    | 46.81  | ug/l   | 99       |
| 47) Bromodichloromethane       | 9.65  | 83   | 152540   | 50.87  | ug/l   | 99       |
| 48) Methyl methacrylate        | 9.44  | 41   | 63569    | 44.54  | ug/l   | 99       |
| 49) 1,4-Dioxane                | 9.45  | 88   | 18977    | 885.68 | ug/l   | 97       |
| 51) 4-Methyl-2-Pentanone       | 10.22 | 43   | 343694   | 212.50 | ug/l   | 99       |
| 52) Toluene                    | 10.39 | 92   | 293824   | 52.41  | ug/l   | 100      |
| 53) t-1,3-Dichloropropene      | 10.61 | 75   | 153937   | 50.77  | ug/l   | 100      |
| 54) cis-1,3-Dichloropropene    | 10.08 | 75   | 172678   | 51.09  | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane      | 10.79 | 97   | 84135    | 46.45  | ug/l   | 97       |
| 56) Ethyl methacrylate         | 10.65 | 69   | 103272   | 46.79  | ug/l   | 99       |
| 57) 1,3-Dichloropropane        | 10.94 | 76   | 143361   | 47.72  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 9.93  | 63   | 242907   | 224.16 | ug/l   | 98       |
| 59) 2-Hexanone                 | 10.98 | 43   | 250193   | 224.06 | ug/l   | 98       |
| 60) Dibromochloromethane       | 11.13 | 129  | 103077   | 48.23  | ug/l   | 98       |
| 61) 1,2-Dibromoethane          | 11.24 | 107  | 82625    | 47.26  | ug/l   | 98       |
| 64) Tetrachloroethene          | 10.87 | 164  | 109799   | 48.52  | ug/l   | 96       |
| 65) Chlorobenzene              | 11.66 | 112  | 328683   | 51.40  | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.74 | 131  | 116763   | 51.01  | ug/l   | 99       |
| 67) Ethyl Benzene              | 11.74 | 91   | 585946   | 53.92  | ug/l   | 99       |
| 68) m/p-Xylenes                | 11.85 | 106  | 452959   | 107.20 | ug/l   | 100      |
| 69) o-Xylene                   | 12.18 | 106  | 213783   | 53.25  | ug/l   | 98       |
| 70) Styrene                    | 12.19 | 104  | 350350   | 52.44  | ug/l   | 100      |
| 71) Bromoform                  | 12.36 | 173  | 64342    | 47.84  | ug/l # | 99       |
| 73) Isopropylbenzene           | 12.48 | 105  | 598180   | 56.24  | ug/l   | 100      |
| 74) N-amyl acetate             | 12.28 | 43   | 126645   | 46.74  | ug/l   | 100      |
| 75) 1,1,2,2-Tetrachloroethane  | 12.73 | 83   | 99760    | 46.29  | ug/l   | 100      |
| 76) 1,2,3-Trichloropropane     | 12.77 | 75   | 75828m   | 46.49  | ug/l   |          |
| 77) Bromobenzene               | 12.76 | 156  | 141945   | 52.31  | ug/l   | 96       |
| 78) n-propylbenzene            | 12.82 | 91   | 721188   | 56.14  | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 12.90 | 91   | 397883   | 54.55  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 12.96 | 105  | 506406   | 55.79  | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-buten | 12.52 | 75   | 30311    | 50.67  | ug/l   | 96       |
| 82) 4-Chlorotoluene            | 13.00 | 91   | 426298   | 54.05  | ug/l   | 100      |
| 83) tert-Butylbenzene          | 13.22 | 119  | 443581   | 56.59  | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 13.26 | 105  | 521400   | 55.34  | ug/l   | 100      |
| 85) sec-Butylbenzene           | 13.40 | 105  | 645560   | 57.32  | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 13.51 | 119  | 581903   | 57.44  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 13.51 | 146  | 289316   | 52.71  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 13.59 | 146  | 284004   | 52.01  | ug/l   | 100      |
| 89) n-Butylbenzene             | 13.84 | 91   | 549735   | 57.37  | ug/l   | 100      |
| 90) Hexachloroethane           | 14.11 | 117  | 101400   | 55.89  | ug/l   | 99       |
| 91) 1,2-Dichlorobenzene        | 13.88 | 146  | 250916   | 50.39  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.50 | 75   | 16767    | 44.10  | ug/l   | 97       |

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| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 15.15 | 180  | 183388   | 50.58 | ug/l  | 98       |
| 94) Hexachlorobutadiene    | 15.26 | 225  | 111412   | 55.22 | ug/l  | 99       |
| 95) Naphthalene            | 15.38 | 128  | 308377   | 46.78 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 15.57 | 180  | 159790   | 49.26 | ug/l  | 100      |

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

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