

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW012219\  
 Data File : VW008386.D  
 Acq On : 22 Jan 2019 11:18  
 Operator : SY/VA  
 Sample : VSTDCCC050  
 Misc : 5.00G/5ML/MSVOA W/SOIL  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 VSTDCCC050

Manual Integrations  
 APPROVED

MMDadoda  
 1/23/2019 11:42:23 AM

Quant Time: Jan 23 01:35:15 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W011719S.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Jan 18 00:57:07 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.95  | 168  | 99877    | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.84  | 114  | 171320   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.63 | 117  | 163233   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.57 | 152  | 83977    | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |        |      |
|---------------------------|--------|-----|----------|-------|--------|------|
| 33) 1,2-Dichloroethane-d4 | 8.31   | 65  | 46137    | 44.41 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 88.82% |      |
| 35) Dibromofluoromethane  | 7.88   | 113 | 46190    | 42.24 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 84.48% |      |
| 50) Toluene-d8            | 10.32  | 98  | 198492   | 46.20 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 92.40% |      |
| 62) 4-Bromofluorobenzene  | 12.62  | 95  | 70106    | 45.50 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 91.00% |      |

## Target Compounds

|                               |      |     |        |         |        | Qvalue |
|-------------------------------|------|-----|--------|---------|--------|--------|
| 2) Dichlorodifluoromethane    | 2.01 | 85  | 29117  | 46.267  | ug/l   | 95     |
| 3) Chloromethane              | 2.21 | 50  | 45443  | 49.260  | ug/l   | 98     |
| 4) Vinyl Chloride             | 2.37 | 62  | 72692  | 61.670  | ug/l   | 90     |
| 5) Bromomethane               | 2.78 | 94  | 53543  | 59.940  | ug/l   | 97     |
| 6) Chloroethane               | 2.93 | 64  | 47087  | 61.031  | ug/l   | 99     |
| 7) Trichlorofluoromethane     | 3.26 | 101 | 59500  | 68.748  | ug/l   | 96     |
| 8) Diethyl Ether              | 3.68 | 74  | 26061  | 43.424  | ug/l   | 99     |
| 9) 1,1,2-Trichlorotrifluoroet | 4.07 | 101 | 48117  | 47.753  | ug/l   | 95     |
| 10) Methyl Iodide             | 4.26 | 142 | 68670  | 42.256  | ug/l   | 98     |
| 11) Tert butyl alcohol        | 5.19 | 59  | 13483  | 192.744 | ug/l # | 92     |
| 12) 1,1-Dichloroethene        | 4.04 | 96  | 46129  | 45.012  | ug/l   | 87     |
| 13) Acrolein                  | 3.89 | 56  | 25399  | 347.486 | ug/l   | 95     |
| 14) Allyl chloride            | 4.67 | 41  | 88409  | 51.603  | ug/l   | 96     |
| 15) Acrylonitrile             | 5.37 | 53  | 51807  | 224.720 | ug/l   | 97     |
| 16) Acetone                   | 4.13 | 43  | 60094  | 249.061 | ug/l   | 95     |
| 17) Carbon Disulfide          | 4.37 | 76  | 157618 | 50.545  | ug/l   | 98     |
| 18) Methyl Acetate            | 4.67 | 43  | 26127m | 40.537  | ug/l   |        |
| 19) Methyl tert-butyl Ether   | 5.43 | 73  | 71125  | 45.338  | ug/l   | 97     |
| 20) Methylene Chloride        | 4.91 | 84  | 53653  | 47.766  | ug/l # | 85     |
| 21) trans-1,2-Dichloroethene  | 5.42 | 96  | 57034  | 49.551  | ug/l   | 91     |
| 22) Diisopropyl ether         | 6.31 | 45  | 174833 | 52.269  | ug/l   | 97     |
| 23) Vinyl Acetate             | 6.25 | 43  | 463239 | 259.088 | ug/l   | 97     |
| 24) 1,1-Dichloroethane        | 6.21 | 63  | 103299 | 50.721  | ug/l   | 99     |
| 25) 2-Butanone                | 7.17 | 43  | 79227  | 256.369 | ug/l   | 96     |
| 26) 2,2-Dichloropropane       | 7.17 | 77  | 70051  | 53.899  | ug/l   | 100    |
| 27) cis-1,2-Dichloroethene    | 7.17 | 96  | 61948  | 49.675  | ug/l   | 94     |
| 28) Bromochloromethane        | 7.51 | 49  | 48102  | 57.328  | ug/l # | 98     |
| 29) Tetrahydrofuran           | 7.53 | 42  | 44073  | 228.764 | ug/l   | 99     |
| 30) Chloroform                | 7.67 | 83  | 105179 | 52.197  | ug/l   | 95     |
| 31) Cyclohexane               | 7.95 | 56  | 103674 | 53.428  | ug/l   | 94     |
| 32) 1,1,1-Trichloroethane     | 7.87 | 97  | 91209  | 53.934  | ug/l   | 98     |
| 36) 1,1-Dichloropropene       | 8.08 | 75  | 88907  | 51.581  | ug/l   | 98     |
| 37) Ethyl Acetate             | 7.26 | 43  | 29458  | 41.444  | ug/l   | 98     |
| 38) Carbon Tetrachloride      | 8.07 | 117 | 81646  | 47.970  | ug/l # | 88     |

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 1/23/2019 11:42:23 AM

Quant Time: Jan 23 01:35:15 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W011719S.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Jan 18 00:57:07 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 9.34  | 83   | 108979   | 53.154  | ug/l   | 96       |
| 40) Benzene                    | 8.32  | 78   | 245623   | 50.307  | ug/l   | 99       |
| 41) Methacrylonitrile          | 7.48  | 41   | 19743    | 47.715  | ug/l   | 94       |
| 42) 1,2-Dichloroethane         | 8.40  | 62   | 63673    | 46.638  | ug/l   | 100      |
| 43) Isopropyl Acetate          | 8.42  | 43   | 58802    | 43.797  | ug/l   | 97       |
| 44) Trichloroethene            | 9.09  | 130  | 63129    | 47.194  | ug/l   | 97       |
| 45) 1,2-Dichloropropane        | 9.37  | 63   | 60071    | 49.531  | ug/l   | 100      |
| 46) Dibromomethane             | 9.46  | 93   | 29761    | 47.083  | ug/l   | 89       |
| 47) Bromodichloromethane       | 9.65  | 83   | 76006    | 48.748  | ug/l   | 97       |
| 48) Methyl methacrylate        | 9.44  | 41   | 30100    | 47.623  | ug/l   | 96       |
| 49) 1,4-Dioxane                | 9.45  | 88   | 9638     | 947.170 | ug/l # | 81       |
| 51) 4-Methyl-2-Pentanone       | 10.21 | 43   | 158166   | 232.651 | ug/l   | 98       |
| 52) Toluene                    | 10.39 | 92   | 160908   | 52.077  | ug/l   | 100      |
| 53) t-1,3-Dichloropropene      | 10.61 | 75   | 75725    | 48.661  | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene    | 10.07 | 75   | 89816    | 48.960  | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane      | 10.79 | 97   | 42051    | 47.964  | ug/l   | 96       |
| 56) Ethyl methacrylate         | 10.65 | 69   | 47289    | 45.928  | ug/l   | 97       |
| 57) 1,3-Dichloropropane        | 10.93 | 76   | 73168    | 48.065  | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether  | 9.93  | 63   | 135709   | 273.248 | ug/l   | 99       |
| 59) 2-Hexanone                 | 10.97 | 43   | 122465   | 257.095 | ug/l   | 97       |
| 60) Dibromochloromethane       | 11.13 | 129  | 48444    | 46.298  | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 11.24 | 107  | 38604    | 45.472  | ug/l   | 99       |
| 64) Tetrachloroethene          | 10.87 | 164  | 51593    | 45.077  | ug/l   | 98       |
| 65) Chlorobenzene              | 11.66 | 112  | 171657   | 48.212  | ug/l   | 96       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.73 | 131  | 56817    | 46.365  | ug/l   | 98       |
| 67) Ethyl Benzene              | 11.73 | 91   | 313254   | 50.671  | ug/l   | 97       |
| 68) m/p-Xylenes                | 11.84 | 106  | 249799   | 104.102 | ug/l   | 98       |
| 69) o-Xylene                   | 12.17 | 106  | 113164   | 50.478  | ug/l   | 96       |
| 70) Styrene                    | 12.18 | 104  | 183650   | 51.000  | ug/l   | 97       |
| 71) Bromoform                  | 12.35 | 173  | 26732    | 43.790  | ug/l # | 97       |
| 73) Isopropylbenzene           | 12.47 | 105  | 319282   | 52.181  | ug/l   | 99       |
| 74) N-amyl acetate             | 12.27 | 43   | 57014    | 43.480  | ug/l   | 98       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.72 | 83   | 47257    | 45.406  | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 12.77 | 75   | 27879m   | 36.456  | ug/l   |          |
| 77) Bromobenzene               | 12.75 | 156  | 67130    | 45.675  | ug/l   | 95       |
| 78) n-propylbenzene            | 12.81 | 91   | 396570   | 53.547  | ug/l   | 97       |
| 79) 2-Chlorotoluene            | 12.90 | 91   | 213536   | 50.463  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 12.95 | 105  | 268901   | 52.664  | ug/l   | 96       |
| 81) trans-1,4-Dichloro-2-buten | 12.52 | 75   | 14956    | 46.671  | ug/l   | 99       |
| 82) 4-Chlorotoluene            | 12.99 | 91   | 225525   | 51.003  | ug/l   | 98       |
| 83) tert-Butylbenzene          | 13.21 | 119  | 234235   | 52.121  | ug/l   | 98       |
| 84) 1,2,4-Trimethylbenzene     | 13.26 | 105  | 276128   | 53.087  | ug/l   | 98       |
| 85) sec-Butylbenzene           | 13.39 | 105  | 345219   | 53.502  | ug/l   | 99       |
| 86) p-Isopropyltoluene         | 13.51 | 119  | 302281   | 53.638  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 13.51 | 146  | 143430   | 49.117  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 13.58 | 146  | 138870   | 47.467  | ug/l   | 98       |
| 89) n-Butylbenzene             | 13.83 | 91   | 294935   | 54.559  | ug/l   | 99       |
| 90) Hexachloroethane           | 14.10 | 117  | 53178    | 50.989  | ug/l   | 89       |
| 91) 1,2-Dichlorobenzene        | 13.88 | 146  | 120293   | 46.657  | ug/l   | 98       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.49 | 75   | 7487     | 43.994  | ug/l   | 90       |

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ALS Vial : 2 Sample Multiplier: 1

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Quant Title : SW846 8260  
QLast Update : Fri Jan 18 00:57:07 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 15.14 | 180  | 76366    | 43.755 | ug/l  | 98       |
| 94) Hexachlorobutadiene    | 15.24 | 225  | 46807    | 47.586 | ug/l  | 98       |
| 95) Naphthalene            | 15.38 | 128  | 131618   | 41.259 | ug/l  | 98       |
| 96) 1,2,3-Trichlorobenzene | 15.57 | 180  | 65679    | 43.204 | ug/l  | 99       |

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

