

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW093019\  
 Data File : VW013325.D  
 Acq On : 30 Sep 2019 10:50  
 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  
 10/1/2019 11:33:17 AM

Quant Time: Sep 30 17:34:07 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W092019S.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Sep 20 15:58:08 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.95  | 168  | 367742   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.84  | 114  | 518162   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.63 | 117  | 446204   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.56 | 152  | 225941   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.31   | 65  | 148265   | 49.40 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 98.80%  |      |
| 35) Dibromofluoromethane  | 7.88   | 113 | 153356   | 53.81 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 107.62% |      |
| 50) Toluene-d8            | 10.32  | 98  | 647322   | 54.27 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 108.54% |      |
| 62) 4-Bromofluorobenzene  | 12.62  | 95  | 219109   | 53.78 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 107.56% |      |

## Target Compounds

|                               |      |     |         |         |        | Qvalue |
|-------------------------------|------|-----|---------|---------|--------|--------|
| 2) Dichlorodifluoromethane    | 2.01 | 85  | 91988   | 43.365  | ug/l   | 98     |
| 3) Chloromethane              | 2.21 | 50  | 118103  | 43.311  | ug/l   | 99     |
| 4) Vinyl Chloride             | 2.36 | 62  | 169090  | 48.099  | ug/l   | 99     |
| 5) Bromomethane               | 2.78 | 94  | 107216  | 48.126  | ug/l   | 91     |
| 6) Chloroethane               | 2.92 | 64  | 99278   | 47.910  | ug/l   | 99     |
| 7) Trichlorofluoromethane     | 3.25 | 101 | 97910   | 48.301  | ug/l   | 94     |
| 8) Diethyl Ether              | 3.68 | 74  | 85477   | 49.367  | ug/l   | 95     |
| 9) 1,1,2-Trichlorotrifluoroet | 4.06 | 101 | 166870  | 50.563  | ug/l   | 99     |
| 10) Methyl Iodide             | 4.27 | 142 | 258885  | 50.596  | ug/l   | 99     |
| 11) Tert butyl alcohol        | 5.19 | 59  | 50691   | 233.975 | ug/l   | 97     |
| 12) 1,1-Dichloroethene        | 4.03 | 96  | 173233  | 50.690  | ug/l   | 100    |
| 13) Acrolein                  | 3.90 | 56  | 38763   | 224.360 | ug/l   | 97     |
| 14) Allyl chloride            | 4.67 | 41  | 279086  | 51.313  | ug/l   | 99     |
| 15) Acrylonitrile             | 5.37 | 53  | 173596  | 232.288 | ug/l   | 100    |
| 16) Acetone                   | 4.14 | 43  | 188156  | 277.996 | ug/l   | 95     |
| 17) Carbon Disulfide          | 4.38 | 76  | 509251  | 51.555  | ug/l   | 99     |
| 18) Methyl Acetate            | 4.67 | 43  | 82603   | 43.417  | ug/l   | 99     |
| 19) Methyl tert-butyl Ether   | 5.42 | 73  | 251552  | 48.027  | ug/l   | 100    |
| 20) Methylene Chloride        | 4.91 | 84  | 178236  | 51.583  | ug/l   | 98     |
| 21) trans-1,2-Dichloroethene  | 5.42 | 96  | 185987  | 50.353  | ug/l   | 98     |
| 22) Diisopropyl ether         | 6.31 | 45  | 514134  | 49.710  | ug/l   | 98     |
| 23) Vinyl Acetate             | 6.25 | 43  | 1503971 | 245.114 | ug/l   | 100    |
| 24) 1,1-Dichloroethane        | 6.21 | 63  | 314815  | 50.443  | ug/l   | 99     |
| 25) 2-Butanone                | 7.17 | 43  | 237215  | 233.472 | ug/l   | 99     |
| 26) 2,2-Dichloropropane       | 7.16 | 77  | 201134  | 54.138  | ug/l   | 100    |
| 27) cis-1,2-Dichloroethene    | 7.17 | 96  | 198063  | 50.811  | ug/l   | 99     |
| 28) Bromochloromethane        | 7.51 | 49  | 122957  | 51.332  | ug/l # | 96     |
| 29) Tetrahydrofuran           | 7.53 | 42  | 140845  | 226.039 | ug/l   | 100    |
| 30) Chloroform                | 7.67 | 83  | 297478  | 48.685  | ug/l   | 98     |
| 31) Cyclohexane               | 7.95 | 56  | 316821  | 48.699  | ug/l   | 99     |
| 32) 1,1,1-Trichloroethane     | 7.87 | 97  | 253516  | 51.228  | ug/l   | 99     |
| 36) 1,1-Dichloropropene       | 8.08 | 75  | 261440  | 52.093  | ug/l   | 99     |
| 37) Ethyl Acetate             | 7.25 | 43  | 100797  | 47.256  | ug/l   | 97     |
| 38) Carbon Tetrachloride      | 8.07 | 117 | 237307  | 52.747  | ug/l   | 97     |

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 ClientSampleId :  
 VSTDCCC050

Manual Integrations  
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Quant Time: Sep 30 17:34:07 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W092019S.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Sep 20 15:58:08 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 9.34  | 83   | 341178   | 52.899  | ug/l   | 98       |
| 40) Benzene                    | 8.32  | 78   | 726320   | 51.884  | ug/l   | 98       |
| 41) Methacrylonitrile          | 7.48  | 41   | 59269    | 46.557  | ug/l   | 96       |
| 42) 1,2-Dichloroethane         | 8.40  | 62   | 181561   | 48.247  | ug/l   | 98       |
| 43) Isopropyl Acetate          | 8.42  | 43   | 194026   | 47.462  | ug/l   | 99       |
| 44) Trichloroethene            | 9.09  | 130  | 204954   | 52.182  | ug/l   | 100      |
| 45) 1,2-Dichloropropane        | 9.37  | 63   | 175229   | 51.271  | ug/l   | 98       |
| 46) Dibromomethane             | 9.46  | 93   | 83669    | 50.425  | ug/l   | 99       |
| 47) Bromodichloromethane       | 9.64  | 83   | 219838   | 52.068  | ug/l   | 99       |
| 48) Methyl methacrylate        | 9.43  | 41   | 97083    | 50.504  | ug/l   | 94       |
| 49) 1,4-Dioxane                | 9.46  | 88   | 23812    | 956.037 | ug/l # | 86       |
| 51) 4-Methyl-2-Pentanone       | 10.21 | 43   | 481512   | 234.950 | ug/l   | 99       |
| 52) Toluene                    | 10.38 | 92   | 468991   | 52.274  | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 10.60 | 75   | 229592   | 52.928  | ug/l   | 98       |
| 54) cis-1,3-Dichloropropene    | 10.07 | 75   | 279753   | 53.042  | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane      | 10.79 | 97   | 124055   | 50.020  | ug/l   | 98       |
| 56) Ethyl methacrylate         | 10.65 | 69   | 165668   | 51.041  | ug/l   | 97       |
| 57) 1,3-Dichloropropane        | 10.93 | 76   | 215505   | 49.795  | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether  | 9.92  | 63   | 380591   | 253.286 | ug/l   | 100      |
| 59) 2-Hexanone                 | 10.97 | 43   | 358692   | 254.392 | ug/l   | 100      |
| 60) Dibromochloromethane       | 11.13 | 129  | 150041   | 53.279  | ug/l   | 100      |
| 61) 1,2-Dibromoethane          | 11.23 | 107  | 117116   | 49.666  | ug/l   | 98       |
| 64) Tetrachloroethene          | 10.86 | 164  | 178781   | 52.808  | ug/l   | 98       |
| 65) Chlorobenzene              | 11.66 | 112  | 484758   | 52.026  | ug/l   | 100      |
| 66) 1,1,1,2-Tetrachloroethane  | 11.73 | 131  | 170428   | 53.540  | ug/l   | 99       |
| 67) Ethyl Benzene              | 11.73 | 91   | 892612   | 52.872  | ug/l   | 100      |
| 68) m/p-Xylenes                | 11.83 | 106  | 689681   | 107.205 | ug/l   | 99       |
| 69) o-Xylene                   | 12.16 | 106  | 315021   | 52.669  | ug/l   | 98       |
| 70) Styrene                    | 12.18 | 104  | 546580   | 53.229  | ug/l   | 99       |
| 71) Bromoform                  | 12.35 | 173  | 89156    | 53.016  | ug/l # | 98       |
| 73) Isopropylbenzene           | 12.46 | 105  | 884887   | 53.017  | ug/l   | 100      |
| 74) N-amyl acetate             | 12.27 | 43   | 180123   | 48.634  | ug/l   | 98       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.71 | 83   | 133528   | 47.836  | ug/l   | 100      |
| 76) 1,2,3-Trichloropropane     | 12.77 | 75   | 104117m  | 52.180  | ug/l   |          |
| 77) Bromobenzene               | 12.74 | 156  | 206590   | 52.233  | ug/l   | 99       |
| 78) n-propylbenzene            | 12.80 | 91   | 1039545  | 53.210  | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 12.89 | 91   | 575492   | 52.580  | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene     | 12.94 | 105  | 738774   | 52.656  | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-buten | 12.51 | 75   | 46541    | 52.338  | ug/l   | 94       |
| 82) 4-Chlorotoluene            | 12.99 | 91   | 600016   | 51.985  | ug/l   | 99       |
| 83) tert-Butylbenzene          | 13.21 | 119  | 661099   | 53.685  | ug/l   | 98       |
| 84) 1,2,4-Trimethylbenzene     | 13.25 | 105  | 731859   | 52.421  | ug/l   | 99       |
| 85) sec-Butylbenzene           | 13.38 | 105  | 908656   | 53.521  | ug/l   | 99       |
| 86) p-Isopropyltoluene         | 13.50 | 119  | 843133   | 53.543  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 13.50 | 146  | 398901   | 52.404  | ug/l   | 100      |
| 88) 1,4-Dichlorobenzene        | 13.58 | 146  | 393329   | 52.687  | ug/l   | 100      |
| 89) n-Butylbenzene             | 13.82 | 91   | 776934   | 54.034  | ug/l   | 100      |
| 90) Hexachloroethane           | 14.09 | 117  | 145829   | 55.127  | ug/l   | 96       |
| 91) 1,2-Dichlorobenzene        | 13.87 | 146  | 342886   | 52.068  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.48 | 75   | 19755    | 46.270  | ug/l   | 92       |

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QLast Update : Fri Sep 20 15:58:08 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 15.13 | 180  | 258461   | 54.771 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 15.24 | 225  | 170989   | 52.964 | ug/l  | 98       |
| 95) Naphthalene            | 15.36 | 128  | 414869   | 53.754 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 15.55 | 180  | 220360   | 54.043 | ug/l  | 100      |

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

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