

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW083019\  
 Data File : VW012353.D  
 Acq On : 30 Aug 2019 16:33  
 Operator : SY/VA  
 Sample : K4620-06MSD  
 Misc : 6.21G/5ML/MSVOA W/SOIL  
 ALS Vial : 17 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :

Quant Time: Aug 30 18:00:45 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W082319S.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Aug 26 07:18:31 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.95  | 168  | 171805   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.84  | 114  | 277978   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.63 | 117  | 225678   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.56 | 152  | 83509    | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 8.31  | 65   | 117278   | 57.42 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 114.84% |          |
| 35) Dibromofluoromethane    | 7.88  | 113  | 89475    | 53.92 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 107.84% |          |
| 50) Toluene-d8              | 10.32 | 98   | 343854   | 51.11 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 102.22% |          |
| 62) 4-Bromofluorobenzene    | 12.62 | 95   | 103968   | 43.84 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 87.68%  |          |

| Target Compounds              | R.T. | QIon | Response | Conc     | Units  | Qvalue |
|-------------------------------|------|------|----------|----------|--------|--------|
| 2) Dichlorodifluoromethane    | 2.01 | 85   | 61554    | 58.187   | ug/l   | 98     |
| 3) Chloromethane              | 2.21 | 50   | 94011    | 57.361   | ug/l   | 99     |
| 4) Vinyl Chloride             | 2.36 | 62   | 487582   | 243.062  | ug/l   | 100    |
| 5) Bromomethane               | 2.77 | 94   | 60531    | 59.582   | ug/l   | 94     |
| 6) Chloroethane               | 2.92 | 64   | 66868    | 59.090   | ug/l   | 97     |
| 7) Trichlorofluoromethane     | 3.25 | 101  | 58107    | 57.688   | ug/l   | 96     |
| 8) Diethyl Ether              | 3.68 | 74   | 59199    | 61.918   | ug/l   | 96     |
| 9) 1,1,2-Trichlorotrifluoroet | 4.06 | 101  | 96123    | 56.142   | ug/l   | 99     |
| 10) Methyl Iodide             | 4.27 | 142  | 130522   | 56.342   | ug/l   | 99     |
| 11) Tert butyl alcohol        | 5.16 | 59   | 49262    | 400.807  | ug/l   | 98     |
| 12) 1,1-Dichloroethene        | 4.04 | 96   | 111429   | 64.661   | ug/l   | 98     |
| 13) Acrolein                  | 3.89 | 56   | 21347    | 184.511  | ug/l   | 93     |
| 14) Allyl chloride            | 4.67 | 41   | 169098   | 45.899   | ug/l   | 98     |
| 15) Acrylonitrile             | 5.36 | 53   | 166268   | 350.853  | ug/l   | 99     |
| 16) Acetone                   | 4.12 | 43   | 193268   | 370.199  | ug/l   | 99     |
| 17) Carbon Disulfide          | 4.39 | 76   | 290988   | 55.872   | ug/l   | 100    |
| 18) Methyl Acetate            | 4.67 | 43   | 116630   | 90.197   | ug/l   | 98     |
| 19) Methyl tert-butyl Ether   | 5.42 | 73   | 186634   | 66.970   | ug/l   | 99     |
| 20) Methylene Chloride        | 4.92 | 84   | 117339   | 59.454   | ug/l   | 97     |
| 21) trans-1,2-Dichloroethene  | 5.42 | 96   | 120906   | 65.427   | ug/l   | 97     |
| 22) Diisopropyl ether         | 6.31 | 45   | 412396   | 60.390   | ug/l   | 98     |
| 23) Vinyl Acetate             | 6.25 | 43   | 1156629  | 275.218  | ug/l   | 100    |
| 24) 1,1-Dichloroethane        | 6.21 | 63   | 240288   | 64.625   | ug/l   | 99     |
| 25) 2-Butanone                | 7.17 | 43   | 259481   | 365.762  | ug/l # | 68     |
| 26) 2,2-Dichloropropane       | 7.17 | 77   | 117144   | 55.662   | ug/l # | 1      |
| 27) cis-1,2-Dichloroethene    | 7.17 | 96   | 5184179  | 2625.719 | ug/l   | 93     |
| 28) Bromochloromethane        | 7.51 | 49   | 92088    | 56.824   | ug/l   | 99     |
| 29) Tetrahydrofuran           | 7.52 | 42   | 156450   | 367.576  | ug/l   | 99     |
| 30) Chloroform                | 7.67 | 83   | 191074   | 56.169   | ug/l   | 98     |
| 31) Cyclohexane               | 7.95 | 56   | 177275   | 48.190   | ug/l   | 99     |
| 32) 1,1,1-Trichloroethane     | 7.87 | 97   | 151941   | 56.461   | ug/l   | 100    |
| 36) 1,1-Dichloropropene       | 8.08 | 75   | 154595   | 53.817   | ug/l   | 99     |
| 37) Ethyl Acetate             | 7.25 | 43   | 104886   | 66.631   | ug/l # | 83     |
| 38) Carbon Tetrachloride      | 8.07 | 117  | 132004   | 53.093   | ug/l   | 99     |

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 MSVOA\_W  
 ClientSampleId :

Quant Time: Aug 30 18:00:45 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W082319S.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Aug 26 07:18:31 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc     | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|----------|--------|----------|
| 39) Methylcyclohexane          | 9.34  | 83   | 137195   | 42.513   | ug/l   | 99       |
| 40) Benzene                    | 8.32  | 78   | 437682   | 55.800   | ug/l   | 99       |
| 41) Methacrylonitrile          | 7.48  | 41   | 72572    | 78.442   | ug/l   | 88       |
| 42) 1,2-Dichloroethane         | 8.40  | 62   | 148826   | 60.540   | ug/l   | 100      |
| 43) Isopropyl Acetate          | 8.42  | 43   | 197238   | 67.645   | ug/l   | 98       |
| 44) Trichloroethene            | 9.09  | 130  | 108145   | 56.716   | ug/l   | 97       |
| 45) 1,2-Dichloropropane        | 9.37  | 63   | 119793   | 56.747   | ug/l   | 98       |
| 46) Dibromomethane             | 9.46  | 93   | 57168    | 60.866   | ug/l   | 98       |
| 47) Bromodichloromethane       | 9.65  | 83   | 142663   | 57.071   | ug/l   | 96       |
| 48) Methyl methacrylate        | 9.43  | 41   | 96292    | 69.386   | ug/l   | 97       |
| 49) 1,4-Dioxane                | 9.45  | 88   | 20340    | 1414.584 | ug/l   | 96       |
| 51) 4-Methyl-2-Pentanone       | 10.21 | 43   | 521734   | 351.796  | ug/l   | 100      |
| 52) Toluene                    | 10.38 | 92   | 258135   | 54.781   | ug/l   | 100      |
| 53) t-1,3-Dichloropropene      | 10.60 | 75   | 149356   | 58.656   | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene    | 10.07 | 75   | 173126   | 56.310   | ug/l   | 99       |
| 55) 1,1,2-Trichloroethane      | 10.79 | 97   | 81002    | 60.954   | ug/l   | 97       |
| 56) Ethyl methacrylate         | 10.65 | 69   | 123283   | 63.741   | ug/l   | 99       |
| 57) 1,3-Dichloropropane        | 10.93 | 76   | 152796   | 60.844   | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 9.93  | 63   | 239340   | 241.117  | ug/l   | 99       |
| 59) 2-Hexanone                 | 10.97 | 43   | 350831   | 334.329  | ug/l   | 100      |
| 60) Dibromochloromethane       | 11.13 | 129  | 87304    | 58.982   | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 11.23 | 107  | 76045    | 61.423   | ug/l   | 99       |
| 64) Tetrachloroethene          | 10.86 | 164  | 77003    | 52.629   | ug/l   | 98       |
| 65) Chlorobenzene              | 11.66 | 112  | 239054   | 53.795   | ug/l   | 100      |
| 66) 1,1,1,2-Tetrachloroethane  | 11.73 | 131  | 91750    | 59.184   | ug/l   | 99       |
| 67) Ethyl Benzene              | 11.73 | 91   | 462981   | 54.085   | ug/l   | 99       |
| 68) m/p-Xylenes                | 11.84 | 106  | 327538   | 106.223  | ug/l   | 100      |
| 69) o-Xylene                   | 12.16 | 106  | 153967   | 53.950   | ug/l   | 99       |
| 70) Styrene                    | 12.18 | 104  | 223098   | 45.164   | ug/l   | 97       |
| 71) Bromoform                  | 12.35 | 173  | 49821    | 64.503   | ug/l # | 98       |
| 73) Isopropylbenzene           | 12.46 | 105  | 402806   | 64.372   | ug/l   | 99       |
| 74) N-amyl acetate             | 12.27 | 43   | 127633   | 67.511   | ug/l   | 100      |
| 75) 1,1,2,2-Tetrachloroethane  | 12.71 | 83   | 96980    | 84.538   | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 12.77 | 75   | 68490m   | 84.211   | ug/l   |          |
| 77) Bromobenzene               | 12.74 | 156  | 90505    | 66.856   | ug/l   | 97       |
| 78) n-propylbenzene            | 12.80 | 91   | 444955   | 58.247   | ug/l   | 99       |
| 79) 2-Chlorotoluene            | 12.89 | 91   | 260994   | 60.178   | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene     | 12.94 | 105  | 308858   | 59.070   | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-buten | 12.51 | 75   | 28407    | 76.579   | ug/l   | 99       |
| 82) 4-Chlorotoluene            | 12.99 | 91   | 267862   | 58.985   | ug/l   | 99       |
| 83) tert-Butylbenzene          | 13.21 | 119  | 258452   | 58.353   | ug/l   | 98       |
| 84) 1,2,4-Trimethylbenzene     | 13.25 | 105  | 307471   | 58.539   | ug/l   | 99       |
| 85) sec-Butylbenzene           | 13.38 | 105  | 320940   | 50.577   | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 13.50 | 119  | 286659   | 50.584   | ug/l   | 100      |
| 87) 1,3-Dichlorobenzene        | 13.50 | 146  | 138453   | 52.289   | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 13.58 | 146  | 138723   | 52.764   | ug/l   | 99       |
| 89) n-Butylbenzene             | 13.82 | 91   | 229017   | 40.639   | ug/l   | 100      |
| 90) Hexachloroethane           | 14.09 | 117  | 46146    | 46.413   | ug/l   | 97       |
| 91) 1,2-Dichlorobenzene        | 13.87 | 146  | 127235   | 54.775   | ug/l   | 98       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.49 | 75   | 16144    | 83.477   | ug/l   | 97       |

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ALS Vial : 17 Sample Multiplier: 1

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MSVOA\_W  
ClientSampleId :

Quant Time: Aug 30 18:00:45 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_W\METHOD\82W082319S.M  
Quant Title : SW846 8260  
QLast Update : Mon Aug 26 07:18:31 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 15.13 | 180  | 48855    | 30.435 | ug/l  | 100      |
| 94) Hexachlorobutadiene    | 15.24 | 225  | 26084    | 24.609 | ug/l  | 96       |
| 95) Naphthalene            | 15.36 | 128  | 137979   | 44.340 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 15.55 | 180  | 42508    | 30.351 | ug/l  | 99       |

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

