

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW082919\  
 Data File : VW012316.D  
 Acq On : 29 Aug 2019 20:46  
 Operator : SY/VA  
 Sample : VSTDCCC050  
 Misc : 5.00G/5ML/MSVOA W/SOIL  
 ALS Vial : 26 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 VSTDCCC050EC

Manual Integrations  
 APPROVED

MMDadoda  
 8/30/2019 11:44:24 AM

Quant Time: Aug 30 08:20:41 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  | 219747   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.84  | 114  | 368078   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.63 | 117  | 321269   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.56 | 152  | 152595   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.30   | 65  | 143037   | 54.76 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 109.52% |      |
| 35) Dibromofluoromethane  | 7.88   | 113 | 117596   | 53.52 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 107.04% |      |
| 50) Toluene-d8            | 10.32  | 98  | 461208   | 51.77 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 103.54% |      |
| 62) 4-Bromofluorobenzene  | 12.62  | 95  | 164814   | 52.48 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 104.96% |      |

## Target Compounds

|                               |      |     |         |         |      | Qvalue |
|-------------------------------|------|-----|---------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 2.01 | 85  | 59957   | 44.312  | ug/l | 99     |
| 3) Chloromethane              | 2.21 | 50  | 103731  | 49.483  | ug/l | 100    |
| 4) Vinyl Chloride             | 2.36 | 62  | 122178  | 47.619  | ug/l | 100    |
| 5) Bromomethane               | 2.75 | 94  | 61485   | 47.317  | ug/l | 98     |
| 6) Chloroethane               | 2.90 | 64  | 72112   | 49.822  | ug/l | 96     |
| 7) Trichlorofluoromethane     | 3.25 | 101 | 66144   | 51.340  | ug/l | 100    |
| 8) Diethyl Ether              | 3.68 | 74  | 69764   | 57.049  | ug/l | 100    |
| 9) 1,1,2-Trichlorotrifluoroet | 4.06 | 101 | 104588  | 47.759  | ug/l | 98     |
| 10) Methyl Iodide             | 4.26 | 142 | 160970  | 54.326  | ug/l | 99     |
| 11) Tert butyl alcohol        | 5.18 | 59  | 44093   | 280.482 | ug/l | 100    |
| 12) 1,1-Dichloroethene        | 4.03 | 96  | 109885  | 49.853  | ug/l | 96     |
| 13) Acrolein                  | 3.89 | 56  | 30865   | 208.576 | ug/l | 99     |
| 14) Allyl chloride            | 4.66 | 41  | 258360  | 54.828  | ug/l | 99     |
| 15) Acrylonitrile             | 5.36 | 53  | 173711  | 286.587 | ug/l | 100    |
| 16) Acetone                   | 4.12 | 43  | 152308  | 228.092 | ug/l | 100    |
| 17) Carbon Disulfide          | 4.38 | 76  | 316063  | 47.447  | ug/l | 99     |
| 18) Methyl Acetate            | 4.67 | 43  | 97613   | 59.020  | ug/l | 99     |
| 19) Methyl tert-butyl Ether   | 5.42 | 73  | 211387  | 59.304  | ug/l | 99     |
| 20) Methylene Chloride        | 4.91 | 84  | 151981  | 60.206  | ug/l | 97     |
| 21) trans-1,2-Dichloroethene  | 5.42 | 96  | 126155  | 53.373  | ug/l | 98     |
| 22) Diisopropyl ether         | 6.31 | 45  | 503171  | 57.608  | ug/l | 97     |
| 23) Vinyl Acetate             | 6.25 | 43  | 1535336 | 285.626 | ug/l | 100    |
| 24) 1,1-Dichloroethane        | 6.21 | 63  | 260691  | 54.816  | ug/l | 100    |
| 25) 2-Butanone                | 7.16 | 43  | 240896  | 265.482 | ug/l | 99     |
| 26) 2,2-Dichloropropane       | 7.16 | 77  | 132513  | 49.228  | ug/l | 99     |
| 27) cis-1,2-Dichloroethene    | 7.16 | 96  | 141714  | 56.117  | ug/l | 99     |
| 28) Bromochloromethane        | 7.51 | 49  | 113729  | 54.867  | ug/l | 97     |
| 29) Tetrahydrofuran           | 7.52 | 42  | 158638  | 291.402 | ug/l | 99     |
| 30) Chloroform                | 7.67 | 83  | 238580  | 54.833  | ug/l | 100    |
| 31) Cyclohexane               | 7.95 | 56  | 215481  | 45.796  | ug/l | 98     |
| 32) 1,1,1-Trichloroethane     | 7.87 | 97  | 178544  | 51.872  | ug/l | 100    |
| 36) 1,1-Dichloropropene       | 8.08 | 75  | 186449  | 49.018  | ug/l | 99     |
| 37) Ethyl Acetate             | 7.25 | 43  | 110863  | 53.188  | ug/l | 100    |
| 38) Carbon Tetrachloride      | 8.07 | 117 | 159843  | 48.553  | ug/l | 98     |

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 8/30/2019 11:44:24 AM

Quant Time: Aug 30 08:20:41 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   | 203571   | 47.640   | ug/l  | 99       |
| 40) Benzene                    | 8.32  | 78   | 540278   | 52.019   | ug/l  | 100      |
| 41) Methacrylonitrile          | 7.48  | 41   | 60966    | 49.766   | ug/l  | 90       |
| 42) 1,2-Dichloroethane         | 8.40  | 62   | 171637   | 52.728   | ug/l  | 99       |
| 43) Isopropyl Acetate          | 8.42  | 43   | 212165   | 54.953   | ug/l  | 99       |
| 44) Trichloroethene            | 9.09  | 130  | 131138   | 51.939   | ug/l  | 95       |
| 45) 1,2-Dichloropropane        | 9.37  | 63   | 148548   | 53.143   | ug/l  | 99       |
| 46) Dibromomethane             | 9.46  | 93   | 66576    | 53.531   | ug/l  | 99       |
| 47) Bromodichloromethane       | 9.64  | 83   | 175577   | 53.045   | ug/l  | 99       |
| 48) Methyl methacrylate        | 9.43  | 41   | 103328   | 56.230   | ug/l  | 98       |
| 49) 1,4-Dioxane                | 9.45  | 88   | 19158    | 1006.233 | ug/l  | 97       |
| 51) 4-Methyl-2-Pentanone       | 10.21 | 43   | 536100   | 272.997  | ug/l  | 100      |
| 52) Toluene                    | 10.38 | 92   | 326619   | 52.348   | ug/l  | 99       |
| 53) t-1,3-Dichloropropene      | 10.60 | 75   | 182956   | 54.264   | ug/l  | 100      |
| 54) cis-1,3-Dichloropropene    | 10.07 | 75   | 219404   | 53.894   | ug/l  | 98       |
| 55) 1,1,2-Trichloroethane      | 10.79 | 97   | 95278    | 54.146   | ug/l  | 98       |
| 56) Ethyl methacrylate         | 10.65 | 69   | 144840   | 56.556   | ug/l  | 99       |
| 57) 1,3-Dichloropropane        | 10.93 | 76   | 180926   | 54.409   | ug/l  | 100      |
| 58) 2-Chloroethyl Vinyl ether  | 9.92  | 63   | 375169   | 285.437  | ug/l  | 100      |
| 59) 2-Hexanone                 | 10.97 | 43   | 362667   | 261.008  | ug/l  | 99       |
| 60) Dibromochloromethane       | 11.13 | 129  | 105215   | 53.683   | ug/l  | 98       |
| 61) 1,2-Dibromoethane          | 11.23 | 107  | 90003    | 54.902   | ug/l  | 100      |
| 64) Tetrachloroethene          | 10.86 | 164  | 107889   | 51.798   | ug/l  | 99       |
| 65) Chlorobenzene              | 11.66 | 112  | 328265   | 51.891   | ug/l  | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.73 | 131  | 116393   | 52.740   | ug/l  | 98       |
| 67) Ethyl Benzene              | 11.73 | 91   | 633409   | 51.978   | ug/l  | 100      |
| 68) m/p-Xylenes                | 11.83 | 106  | 455944   | 103.870  | ug/l  | 99       |
| 69) o-Xylene                   | 12.16 | 106  | 217062   | 53.428   | ug/l  | 99       |
| 70) Styrene                    | 12.18 | 104  | 376942   | 53.603   | ug/l  | 99       |
| 71) Bromoform                  | 12.35 | 173  | 58745    | 53.427   | ug/l  | 100      |
| 73) Isopropylbenzene           | 12.46 | 105  | 594970   | 52.034   | ug/l  | 99       |
| 74) N-amyl acetate             | 12.27 | 43   | 190109   | 55.031   | ug/l  | 100      |
| 75) 1,1,2,2-Tetrachloroethane  | 12.71 | 83   | 110665   | 52.793   | ug/l  | 99       |
| 76) 1,2,3-Trichloropropane     | 12.77 | 75   | 74639m   | 50.223   | ug/l  |          |
| 77) Bromobenzene               | 12.74 | 156  | 133746   | 54.068   | ug/l  | 97       |
| 78) n-propylbenzene            | 12.80 | 91   | 713810   | 51.137   | ug/l  | 99       |
| 79) 2-Chlorotoluene            | 12.89 | 91   | 415332   | 52.408   | ug/l  | 100      |
| 80) 1,3,5-Trimethylbenzene     | 12.94 | 105  | 500940   | 52.430   | ug/l  | 100      |
| 81) trans-1,4-Dichloro-2-buten | 12.51 | 75   | 36282    | 53.527   | ug/l  | 96       |
| 82) 4-Chlorotoluene            | 12.99 | 91   | 433221   | 52.207   | ug/l  | 100      |
| 83) tert-Butylbenzene          | 13.21 | 119  | 425822   | 52.614   | ug/l  | 99       |
| 84) 1,2,4-Trimethylbenzene     | 13.25 | 105  | 500273   | 52.125   | ug/l  | 100      |
| 85) sec-Butylbenzene           | 13.38 | 105  | 583883   | 50.356   | ug/l  | 100      |
| 86) p-Isopropyltoluene         | 13.50 | 119  | 533921   | 51.561   | ug/l  | 100      |
| 87) 1,3-Dichlorobenzene        | 13.50 | 146  | 249122   | 51.489   | ug/l  | 100      |
| 88) 1,4-Dichlorobenzene        | 13.58 | 146  | 250466   | 52.135   | ug/l  | 99       |
| 89) n-Butylbenzene             | 13.82 | 91   | 521778   | 50.670   | ug/l  | 99       |
| 90) Hexachloroethane           | 14.09 | 117  | 92136    | 50.714   | ug/l  | 94       |
| 91) 1,2-Dichlorobenzene        | 13.87 | 146  | 223569   | 52.672   | ug/l  | 98       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.49 | 75   | 18404    | 52.079   | ug/l  | 99       |

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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  | 159112   | 54.245 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 15.24 | 225  | 99850    | 51.554 | ug/l  | 98       |
| 95) Naphthalene            | 15.36 | 128  | 307501   | 53.129 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 15.55 | 180  | 141181   | 55.167 | ug/l  | 99       |

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

