

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW060519\  
 Data File : VW010699.D  
 Acq On : 05 Jun 2019 18:22  
 Operator : SY/VA  
 Sample : VSTDCCC050  
 Misc : 5.00G/5ML/MSVOA W/SOIL  
 ALS Vial : 19 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 VSTDCCC050EC

Manual Integrations  
 APPROVED

MMDadoda  
 6/6/2019 11:51:55 AM

Quant Time: Jun 06 08:06:12 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W060419S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jun 05 03:21:19 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.95  | 168  | 254295   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.84  | 114  | 418470   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.63 | 117  | 374011   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.56 | 152  | 182499   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.31   | 65  | 164061   | 54.74 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 109.48% |      |
| 35) Dibromofluoromethane  | 7.88   | 113 | 125031   | 55.05 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 110.10% |      |
| 50) Toluene-d8            | 10.32  | 98  | 520448   | 52.25 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 104.50% |      |
| 62) 4-Bromofluorobenzene  | 12.62  | 95  | 193643   | 53.43 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 106.86% |      |

## Target Compounds

|                               |      |     |         |         |      | Qvalue |
|-------------------------------|------|-----|---------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 2.00 | 85  | 113579  | 48.333  | ug/l | 99     |
| 3) Chloromethane              | 2.21 | 50  | 174121  | 50.362  | ug/l | 98     |
| 4) Vinyl Chloride             | 2.36 | 62  | 159076  | 49.800  | ug/l | 98     |
| 5) Bromomethane               | 2.75 | 94  | 91447   | 52.132  | ug/l | 96     |
| 6) Chloroethane               | 2.90 | 64  | 98030   | 51.127  | ug/l | 99     |
| 7) Trichlorofluoromethane     | 3.25 | 101 | 213024  | 51.374  | ug/l | 98     |
| 8) Diethyl Ether              | 3.68 | 74  | 79509   | 53.656  | ug/l | 99     |
| 9) 1,1,2-Trichlorotrifluoroet | 4.06 | 101 | 130944  | 51.364  | ug/l | 99     |
| 10) Methyl Iodide             | 4.27 | 142 | 110616  | 42.877  | ug/l | 99     |
| 11) Tert butyl alcohol        | 5.17 | 59  | 72747   | 297.920 | ug/l | 100    |
| 12) 1,1-Dichloroethene        | 4.04 | 96  | 124446  | 50.604  | ug/l | 98     |
| 13) Acrolein                  | 3.90 | 56  | 23571   | 236.227 | ug/l | 96     |
| 14) Allyl chloride            | 4.67 | 41  | 285455  | 52.644  | ug/l | 99     |
| 15) Acrylonitrile             | 5.37 | 53  | 204914  | 284.642 | ug/l | 99     |
| 16) Acetone                   | 4.12 | 43  | 237324  | 295.502 | ug/l | 99     |
| 17) Carbon Disulfide          | 4.38 | 76  | 396720  | 50.819  | ug/l | 98     |
| 18) Methyl Acetate            | 4.67 | 43  | 96890   | 56.045  | ug/l | 97     |
| 19) Methyl tert-butyl Ether   | 5.42 | 73  | 386464  | 54.488  | ug/l | 99     |
| 20) Methylene Chloride        | 4.92 | 84  | 142863  | 50.707  | ug/l | 97     |
| 21) trans-1,2-Dichloroethene  | 5.42 | 96  | 142695  | 51.114  | ug/l | 96     |
| 22) Diisopropyl ether         | 6.31 | 45  | 581658  | 53.581  | ug/l | 98     |
| 23) Vinyl Acetate             | 6.26 | 43  | 1823102 | 278.276 | ug/l | 100    |
| 24) 1,1-Dichloroethane        | 6.21 | 63  | 284426  | 52.281  | ug/l | 100    |
| 25) 2-Butanone                | 7.17 | 43  | 322556  | 289.642 | ug/l | 98     |
| 26) 2,2-Dichloropropane       | 7.17 | 77  | 228864  | 51.698  | ug/l | 99     |
| 27) cis-1,2-Dichloroethene    | 7.17 | 96  | 160026  | 52.087  | ug/l | 100    |
| 28) Bromochloromethane        | 7.51 | 49  | 125098  | 51.526  | ug/l | 98     |
| 29) Tetrahydrofuran           | 7.53 | 42  | 201783  | 288.068 | ug/l | 99     |
| 30) Chloroform                | 7.68 | 83  | 261462  | 52.544  | ug/l | 99     |
| 31) Cyclohexane               | 7.95 | 56  | 294735  | 48.736  | ug/l | 98     |
| 32) 1,1,1-Trichloroethane     | 7.87 | 97  | 226163  | 52.030  | ug/l | 100    |
| 36) 1,1-Dichloropropene       | 8.08 | 75  | 219706  | 51.291  | ug/l | 100    |
| 37) Ethyl Acetate             | 7.25 | 43  | 136430  | 57.476  | ug/l | 99     |
| 38) Carbon Tetrachloride      | 8.07 | 117 | 193306  | 52.276  | ug/l | 98     |

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 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W060419S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jun 05 03:21:19 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc     | Units | Dev(Min) |
|--------------------------------|-------|------|----------|----------|-------|----------|
| 39) Methylcyclohexane          | 9.34  | 83   | 279151   | 51.264   | ug/l  | 98       |
| 40) Benzene                    | 8.32  | 78   | 598212   | 51.192   | ug/l  | 100      |
| 41) Methacrylonitrile          | 7.48  | 41   | 79791    | 56.553   | ug/l  | 97       |
| 42) 1,2-Dichloroethane         | 8.40  | 62   | 198599   | 53.548   | ug/l  | 100      |
| 43) Isopropyl Acetate          | 8.43  | 43   | 259626   | 56.615   | ug/l  | 98       |
| 44) Trichloroethene            | 9.09  | 130  | 147370   | 51.124   | ug/l  | 99       |
| 45) 1,2-Dichloropropane        | 9.37  | 63   | 162624   | 52.572   | ug/l  | 99       |
| 46) Dibromomethane             | 9.46  | 93   | 76398    | 53.173   | ug/l  | 99       |
| 47) Bromodichloromethane       | 9.65  | 83   | 200753   | 53.902   | ug/l  | 96       |
| 48) Methyl methacrylate        | 9.44  | 41   | 134417   | 60.794   | ug/l  | 95       |
| 49) 1,4-Dioxane                | 9.45  | 88   | 25721    | 1145.016 | ug/l  | 97       |
| 51) 4-Methyl-2-Pentanone       | 10.21 | 43   | 677354   | 289.128  | ug/l  | 100      |
| 52) Toluene                    | 10.39 | 92   | 371398   | 51.655   | ug/l  | 99       |
| 53) t-1,3-Dichloropropene      | 10.60 | 75   | 212642   | 53.904   | ug/l  | 98       |
| 54) cis-1,3-Dichloropropene    | 10.07 | 75   | 247399   | 53.296   | ug/l  | 98       |
| 55) 1,1,2-Trichloroethane      | 10.79 | 97   | 111776   | 54.003   | ug/l  | 98       |
| 56) Ethyl methacrylate         | 10.65 | 69   | 179851   | 56.469   | ug/l  | 98       |
| 57) 1,3-Dichloropropane        | 10.93 | 76   | 208301   | 53.401   | ug/l  | 100      |
| 58) 2-Chloroethyl Vinyl ether  | 9.93  | 63   | 448774   | 269.018  | ug/l  | 100      |
| 59) 2-Hexanone                 | 10.97 | 43   | 498461   | 294.397  | ug/l  | 99       |
| 60) Dibromochloromethane       | 11.13 | 129  | 125901   | 54.871   | ug/l  | 100      |
| 61) 1,2-Dibromoethane          | 11.24 | 107  | 105279   | 53.684   | ug/l  | 98       |
| 64) Tetrachloroethene          | 10.86 | 164  | 125248   | 50.437   | ug/l  | 98       |
| 65) Chlorobenzene              | 11.66 | 112  | 375141   | 51.006   | ug/l  | 96       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.73 | 131  | 132703   | 52.122   | ug/l  | 98       |
| 67) Ethyl Benzene              | 11.73 | 91   | 722871   | 51.140   | ug/l  | 100      |
| 68) m/p-Xylenes                | 11.84 | 106  | 523837   | 103.526  | ug/l  | 100      |
| 69) o-Xylene                   | 12.17 | 106  | 249710   | 52.034   | ug/l  | 98       |
| 70) Styrene                    | 12.18 | 104  | 442005   | 53.021   | ug/l  | 99       |
| 71) Bromoform                  | 12.35 | 173  | 73224    | 55.610   | ug/l  | 100      |
| 73) Isopropylbenzene           | 12.47 | 105  | 693075   | 50.537   | ug/l  | 99       |
| 74) N-amyl acetate             | 12.27 | 43   | 250829   | 56.592   | ug/l  | 100      |
| 75) 1,1,2,2-Tetrachloroethane  | 12.71 | 83   | 140340   | 53.754   | ug/l  | 100      |
| 76) 1,2,3-Trichloropropane     | 12.77 | 75   | 102300m  | 53.379   | ug/l  |          |
| 77) Bromobenzene               | 12.75 | 156  | 152866   | 51.065   | ug/l  | 98       |
| 78) n-propylbenzene            | 12.80 | 91   | 840345   | 50.817   | ug/l  | 100      |
| 79) 2-Chlorotoluene            | 12.90 | 91   | 481478   | 50.963   | ug/l  | 99       |
| 80) 1,3,5-Trimethylbenzene     | 12.94 | 105  | 579540   | 51.628   | ug/l  | 99       |
| 81) trans-1,4-Dichloro-2-buten | 12.51 | 75   | 46095    | 55.279   | ug/l  | 100      |
| 82) 4-Chlorotoluene            | 12.99 | 91   | 499910   | 51.275   | ug/l  | 99       |
| 83) tert-Butylbenzene          | 13.21 | 119  | 486014   | 51.016   | ug/l  | 100      |
| 84) 1,2,4-Trimethylbenzene     | 13.26 | 105  | 582911   | 51.604   | ug/l  | 100      |
| 85) sec-Butylbenzene           | 13.38 | 105  | 708053   | 51.048   | ug/l  | 100      |
| 86) p-Isopropyltoluene         | 13.50 | 119  | 641271   | 51.700   | ug/l  | 100      |
| 87) 1,3-Dichlorobenzene        | 13.50 | 146  | 295433   | 51.175   | ug/l  | 100      |
| 88) 1,4-Dichlorobenzene        | 13.58 | 146  | 290728   | 50.798   | ug/l  | 100      |
| 89) n-Butylbenzene             | 13.83 | 91   | 645318   | 52.144   | ug/l  | 100      |
| 90) Hexachloroethane           | 14.10 | 117  | 115099   | 51.816   | ug/l  | 99       |
| 91) 1,2-Dichlorobenzene        | 13.87 | 146  | 268304   | 51.680   | ug/l  | 100      |
| 92) 1,2-Dibromo-3-Chloropropan | 14.49 | 75   | 26001    | 57.995   | ug/l  | 98       |

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| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 15.14 | 180  | 195113   | 53.555 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 15.24 | 225  | 119819   | 52.403 | ug/l  | 100      |
| 95) Naphthalene            | 15.37 | 128  | 375341   | 56.704 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 15.56 | 180  | 168651   | 54.432 | ug/l  | 98       |

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

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