

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW022119\  
 Data File : VW008768.D  
 Acq On : 21 Feb 2019 13:04  
 Operator : SY/VA  
 Sample : VSTDIC150  
 Misc : 5.00G/5ML/MSVOA W/SOIL  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 VSTDIC150

Manual Integrations  
 APPROVED

MMDadoda  
 2/22/2019 12:25:32 PM

Quant Time: Feb 22 00:36:15 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W022119S.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Feb 22 00:19:35 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.95  | 168  | 306348   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.84  | 114  | 455955   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.63 | 117  | 434272   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.56 | 152  | 248362   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |        |         |      |
|---------------------------|--------|-----|----------|--------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.30   | 65  | 464183   | 161.55 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =      | 323.10% |      |
| 35) Dibromofluoromethane  | 7.88   | 113 | 422333   | 154.27 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =      | 308.54% |      |
| 50) Toluene-d8            | 10.32  | 98  | 1612283  | 152.56 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =      | 305.12% |      |
| 62) 4-Bromofluorobenzene  | 12.62  | 95  | 632039   | 152.75 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =      | 305.50% |      |

## Target Compounds

|                               |      |     |         |         |      | Qvalue |
|-------------------------------|------|-----|---------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 2.00 | 85  | 465154  | 151.600 | ug/l | 99     |
| 3) Chloromethane              | 2.21 | 50  | 564521  | 151.145 | ug/l | 99     |
| 4) Vinyl Chloride             | 2.35 | 62  | 665045  | 168.174 | ug/l | 100    |
| 5) Bromomethane               | 2.73 | 94  | 449712  | 153.108 | ug/l | 99     |
| 6) Chloroethane               | 2.90 | 64  | 412716  | 146.974 | ug/l | 99     |
| 7) Trichlorofluoromethane     | 3.24 | 101 | 787634  | 157.482 | ug/l | 97     |
| 8) Diethyl Ether              | 3.68 | 74  | 245339  | 154.943 | ug/l | 97     |
| 9) 1,1,2-Trichlorotrifluoroet | 4.06 | 101 | 480674  | 158.263 | ug/l | 100    |
| 10) Methyl Iodide             | 4.27 | 142 | 631556  | 166.289 | ug/l | 99     |
| 11) Tert butyl alcohol        | 5.17 | 59  | 197202  | 790.244 | ug/l | 98     |
| 12) 1,1-Dichloroethene        | 4.03 | 96  | 426659  | 159.067 | ug/l | 97     |
| 13) Acrolein                  | 3.89 | 56  | 215953  | 892.758 | ug/l | 100    |
| 14) Allyl chloride            | 4.67 | 41  | 759425  | 164.045 | ug/l | 98     |
| 15) Acrylonitrile             | 5.37 | 53  | 541303  | 796.563 | ug/l | 99     |
| 16) Acetone                   | 4.12 | 43  | 514945  | 773.191 | ug/l | 97     |
| 17) Carbon Disulfide          | 4.37 | 76  | 1443873 | 162.243 | ug/l | 98     |
| 18) Methyl Acetate            | 4.67 | 43  | 239604  | 151.679 | ug/l | 97     |
| 19) Methyl tert-butyl Ether   | 5.42 | 73  | 1146435 | 157.909 | ug/l | 99     |
| 20) Methylene Chloride        | 4.92 | 84  | 459269  | 116.962 | ug/l | 98     |
| 21) trans-1,2-Dichloroethene  | 5.42 | 96  | 482477  | 155.502 | ug/l | 97     |
| 22) Diisopropyl ether         | 6.31 | 45  | 1463039 | 158.427 | ug/l | 98     |
| 23) Vinyl Acetate             | 6.26 | 43  | 4794481 | 840.288 | ug/l | 99     |
| 24) 1,1-Dichloroethane        | 6.21 | 63  | 843595  | 157.642 | ug/l | 100    |
| 25) 2-Butanone                | 7.17 | 43  | 762157  | 818.545 | ug/l | 98     |
| 26) 2,2-Dichloropropane       | 7.16 | 77  | 766306  | 157.730 | ug/l | 99     |
| 27) cis-1,2-Dichloroethene    | 7.16 | 96  | 522837  | 157.531 | ug/l | 99     |
| 28) Bromochloromethane        | 7.51 | 49  | 351570  | 156.996 | ug/l | 97     |
| 29) Tetrahydrofuran           | 7.52 | 42  | 498275  | 839.736 | ug/l | 99     |
| 30) Chloroform                | 7.68 | 83  | 851895  | 155.177 | ug/l | 100    |
| 31) Cyclohexane               | 7.95 | 56  | 796394  | 147.023 | ug/l | 93     |
| 32) 1,1,1-Trichloroethane     | 7.87 | 97  | 792353  | 158.710 | ug/l | 99     |
| 36) 1,1-Dichloropropene       | 8.08 | 75  | 668496  | 150.615 | ug/l | 99     |
| 37) Ethyl Acetate             | 7.25 | 43  | 327373  | 158.613 | ug/l | 98     |
| 38) Carbon Tetrachloride      | 8.07 | 117 | 718702  | 153.544 | ug/l | 99     |

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 Operator : SY/VA  
 Sample : VSTDICC150  
 Misc : 5.00G/5ML/MSVOA W/SOIL  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 VSTDICC150

Manual Integrations  
 APPROVED

MMDadoda  
 2/22/2019 12:25:32 PM

Quant Time: Feb 22 00:36:15 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W022119S.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Feb 22 00:19:35 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc     | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|----------|--------|----------|
| 39) Methylcyclohexane          | 9.34  | 83   | 864177   | 156.097  | ug/l   | 99       |
| 40) Benzene                    | 8.32  | 78   | 1775229  | 146.491  | ug/l   | 99       |
| 41) Methacrylonitrile          | 7.48  | 41   | 197064   | 162.431  | ug/l   | 93       |
| 42) 1,2-Dichloroethane         | 8.40  | 62   | 585516   | 152.526  | ug/l   | 100      |
| 43) Isopropyl Acetate          | 8.43  | 43   | 653932   | 158.748  | ug/l   | 98       |
| 44) Trichloroethene            | 9.09  | 130  | 504028   | 147.643  | ug/l   | 100      |
| 45) 1,2-Dichloropropane        | 9.37  | 63   | 441449   | 147.415  | ug/l   | 97       |
| 46) Dibromomethane             | 9.46  | 93   | 253742   | 152.332  | ug/l   | 97       |
| 47) Bromodichloromethane       | 9.65  | 83   | 631164   | 155.738  | ug/l   | 99       |
| 48) Methyl methacrylate        | 9.43  | 41   | 325799   | 165.137  | ug/l   | 96       |
| 49) 1,4-Dioxane                | 9.45  | 88   | 82340    | 3086.801 | ug/l   | 96       |
| 51) 4-Methyl-2-Pentanone       | 10.21 | 43   | 1692398  | 809.234  | ug/l   | 100      |
| 52) Toluene                    | 10.39 | 92   | 1224104  | 148.838  | ug/l   | 100      |
| 53) t-1,3-Dichloropropene      | 10.60 | 75   | 658081   | 159.312  | ug/l   | 98       |
| 54) cis-1,3-Dichloropropene    | 10.07 | 75   | 732914   | 155.567  | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane      | 10.79 | 97   | 338175   | 149.703  | ug/l   | 97       |
| 56) Ethyl methacrylate         | 10.65 | 69   | 478559   | 163.059  | ug/l   | 97       |
| 57) 1,3-Dichloropropane        | 10.93 | 76   | 595542   | 149.316  | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether  | 9.93  | 63   | 1143611  | 774.760  | ug/l   | 98       |
| 59) 2-Hexanone                 | 10.97 | 43   | 1228835  | 825.432  | ug/l   | 100      |
| 60) Dibromochloromethane       | 11.13 | 129  | 426365   | 154.742  | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 11.23 | 107  | 333539   | 149.166  | ug/l   | 100      |
| 64) Tetrachloroethene          | 10.86 | 164  | 456126   | 146.731  | ug/l   | 97       |
| 65) Chlorobenzene              | 11.66 | 112  | 1333999  | 146.088  | ug/l   | 97       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.73 | 131  | 472938   | 153.174  | ug/l   | 99       |
| 67) Ethyl Benzene              | 11.73 | 91   | 2495676  | 152.884  | ug/l   | 99       |
| 68) m/p-Xylenes                | 11.84 | 106  | 1974977  | 302.805  | ug/l   | 99       |
| 69) o-Xylene                   | 12.16 | 106  | 942973   | 154.034  | ug/l   | 98       |
| 70) Styrene                    | 12.18 | 104  | 1579477  | 160.368  | ug/l   | 99       |
| 71) Bromoform                  | 12.35 | 173  | 271984   | 163.879  | ug/l # | 100      |
| 73) Isopropylbenzene           | 12.46 | 105  | 2621553  | 153.971  | ug/l   | 100      |
| 74) N-amyl acetate             | 12.27 | 43   | 722377   | 168.434  | ug/l   | 98       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.71 | 83   | 422549   | 151.886  | ug/l   | 98       |
| 76) 1,2,3-Trichloropropane     | 12.77 | 75   | 300772m  | 139.976  | ug/l   |          |
| 77) Bromobenzene               | 12.75 | 156  | 577040   | 143.418  | ug/l   | 96       |
| 78) n-propylbenzene            | 12.80 | 91   | 3213877  | 154.313  | ug/l   | 99       |
| 79) 2-Chlorotoluene            | 12.90 | 91   | 1766470  | 149.388  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 12.94 | 105  | 2313972  | 156.390  | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-buten | 12.51 | 75   | 142767   | 169.260  | ug/l   | 98       |
| 82) 4-Chlorotoluene            | 12.99 | 91   | 1895272  | 152.098  | ug/l   | 99       |
| 83) tert-Butylbenzene          | 13.21 | 119  | 1954266  | 152.753  | ug/l   | 98       |
| 84) 1,2,4-Trimethylbenzene     | 13.26 | 105  | 2409679  | 157.327  | ug/l   | 99       |
| 85) sec-Butylbenzene           | 13.38 | 105  | 2873043  | 156.177  | ug/l   | 99       |
| 86) p-Isopropyltoluene         | 13.50 | 119  | 2744878  | 162.763  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 13.50 | 146  | 1270407  | 152.185  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 13.58 | 146  | 1204099  | 146.352  | ug/l   | 99       |
| 89) n-Butylbenzene             | 13.83 | 91   | 2555177  | 161.728  | ug/l   | 99       |
| 90) Hexachloroethane           | 14.10 | 117  | 446501   | 161.731  | ug/l   | 99       |
| 91) 1,2-Dichlorobenzene        | 13.87 | 146  | 1087792  | 146.247  | ug/l   | 98       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.49 | 75   | 78051    | 155.093  | ug/l   | 95       |

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Acq On : 21 Feb 2019 13:04  
Operator : SY/VA  
Sample : VSTDICC150  
Misc : 5.00G/5ML/MSVOA W/SOIL  
ALS Vial : 8 Sample Multiplier: 1

Instrument :  
MSVOA\_W  
ClientSampleId :  
VSTDICC150

Manual Integrations  
APPROVED

MMDadoda  
2/22/2019 12:25:32 PM

Quant Time: Feb 22 00:36:15 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_W\METHOD\82W022119S.M  
Quant Title : SW846 8260  
QLast Update : Fri Feb 22 00:19:35 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc    | Units | Dev(Min) |
|----------------------------|-------|------|----------|---------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 15.14 | 180  | 808992   | 150.953 | ug/l  | 98       |
| 94) Hexachlorobutadiene    | 15.24 | 225  | 475232   | 150.544 | ug/l  | 100      |
| 95) Naphthalene            | 15.37 | 128  | 1468487  | 160.935 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 15.56 | 180  | 689775   | 148.860 | ug/l  | 99       |

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

