

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW072419\  
 Data File : VW011462.D  
 Acq On : 24 Jul 2019 05:16  
 Operator : SY/VA  
 Sample : VSTDCCC050  
 Misc : 5.00G/5ML/MSVOA W/SOIL  
 ALS Vial : 27 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 VSTDCCC050EC

Manual Integrations  
 APPROVED

MMDadoda  
 7/24/2019 9:34:32 AM

Quant Time: Jul 24 08:15:59 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W070819S.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Jul 11 08:14:17 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.95  | 168  | 220895   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.84  | 114  | 380794   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.63 | 117  | 326775   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.56 | 152  | 153384   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |        |      |
|---------------------------|--------|-----|----------|-------|--------|------|
| 33) 1,2-Dichloroethane-d4 | 8.31   | 65  | 126187   | 45.46 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 90.92% |      |
| 35) Dibromofluoromethane  | 7.88   | 113 | 104803   | 46.17 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 92.34% |      |
| 50) Toluene-d8            | 10.32  | 98  | 418807   | 45.65 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 91.30% |      |
| 62) 4-Bromofluorobenzene  | 12.62  | 95  | 150286   | 44.69 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 89.38% |      |

## Target Compounds

|                               |      |     |         |         |      | Qvalue |
|-------------------------------|------|-----|---------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 2.01 | 85  | 58943   | 35.778  | ug/l | 96     |
| 3) Chloromethane              | 2.21 | 50  | 95466   | 44.971  | ug/l | 95     |
| 4) Vinyl Chloride             | 2.36 | 62  | 121627  | 43.774  | ug/l | 97     |
| 5) Bromomethane               | 2.76 | 94  | 62285   | 44.611  | ug/l | 99     |
| 6) Chloroethane               | 2.91 | 64  | 69638   | 46.532  | ug/l | 99     |
| 7) Trichlorofluoromethane     | 3.24 | 101 | 51825   | 52.505  | ug/l | 97     |
| 8) Diethyl Ether              | 3.68 | 74  | 69016   | 50.534  | ug/l | 98     |
| 9) 1,1,2-Trichlorotrifluoroet | 4.06 | 101 | 108562  | 45.917  | ug/l | 99     |
| 10) Methyl Iodide             | 4.27 | 142 | 161054  | 49.528  | ug/l | 98     |
| 11) Tert butyl alcohol        | 5.17 | 59  | 51736   | 251.759 | ug/l | 97     |
| 12) 1,1-Dichloroethene        | 4.04 | 96  | 114045  | 46.474  | ug/l | 89     |
| 13) Acrolein                  | 3.89 | 56  | 37647   | 230.064 | ug/l | 100    |
| 14) Allyl chloride            | 4.66 | 41  | 242538  | 54.200  | ug/l | 97     |
| 15) Acrylonitrile             | 5.36 | 53  | 178464  | 256.577 | ug/l | 99     |
| 16) Acetone                   | 4.12 | 43  | 143846  | 215.387 | ug/l | 97     |
| 17) Carbon Disulfide          | 4.38 | 76  | 315726  | 42.439  | ug/l | 99     |
| 18) Methyl Acetate            | 4.67 | 43  | 91473   | 48.111  | ug/l | 99     |
| 19) Methyl tert-butyl Ether   | 5.42 | 73  | 203631  | 54.690  | ug/l | 99     |
| 20) Methylene Chloride        | 4.92 | 84  | 130817  | 49.653  | ug/l | 93     |
| 21) trans-1,2-Dichloroethene  | 5.42 | 96  | 127778  | 50.112  | ug/l | 94     |
| 22) Diisopropyl ether         | 6.31 | 45  | 509687  | 52.957  | ug/l | 98     |
| 23) Vinyl Acetate             | 6.25 | 43  | 1521357 | 255.418 | ug/l | 99     |
| 24) 1,1-Dichloroethane        | 6.21 | 63  | 260975  | 51.638  | ug/l | 99     |
| 25) 2-Butanone                | 7.17 | 43  | 255368  | 243.592 | ug/l | 98     |
| 26) 2,2-Dichloropropane       | 7.17 | 77  | 127980  | 48.715  | ug/l | 99     |
| 27) cis-1,2-Dichloroethene    | 7.17 | 96  | 147069  | 53.469  | ug/l | 98     |
| 28) Bromochloromethane        | 7.51 | 49  | 96639   | 42.053  | ug/l | 99     |
| 29) Tetrahydrofuran           | 7.52 | 42  | 167354  | 243.456 | ug/l | 99     |
| 30) Chloroform                | 7.67 | 83  | 240692  | 51.425  | ug/l | 99     |
| 31) Cyclohexane               | 7.95 | 56  | 243628  | 45.312  | ug/l | 98     |
| 32) 1,1,1-Trichloroethane     | 7.87 | 97  | 182644  | 51.298  | ug/l | 98     |
| 36) 1,1-Dichloropropene       | 8.08 | 75  | 192582  | 47.491  | ug/l | 100    |
| 37) Ethyl Acetate             | 7.25 | 43  | 114880  | 47.151  | ug/l | 99     |
| 38) Carbon Tetrachloride      | 8.07 | 117 | 161215  | 46.897  | ug/l | 97     |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW072419\  
 Data File : VW011462.D  
 Acq On : 24 Jul 2019 05:16  
 Operator : SY/VA  
 Sample : VSTDCCC050  
 Misc : 5.00G/5ML/MSVOA W/SOIL  
 ALS Vial : 27 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleID :  
 VSTDCCC050EC

Manual Integrations  
 APPROVED

MMDadoda  
 7/24/2019 9:34:32 AM

Quant Time: Jul 24 08:15:59 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W070819S.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Jul 11 08:14:17 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 9.34  | 83   | 230521   | 46.902  | ug/l   | 99       |
| 40) Benzene                    | 8.32  | 78   | 555640   | 49.581  | ug/l   | 98       |
| 41) Methacrylonitrile          | 7.48  | 41   | 70983    | 50.940  | ug/l   | 93       |
| 42) 1,2-Dichloroethane         | 8.40  | 62   | 170781   | 46.977  | ug/l   | 98       |
| 43) Isopropyl Acetate          | 8.42  | 43   | 222909   | 48.459  | ug/l   | 98       |
| 44) Trichloroethene            | 9.09  | 130  | 135620   | 50.289  | ug/l   | 97       |
| 45) 1,2-Dichloropropane        | 9.37  | 63   | 154101   | 50.779  | ug/l   | 100      |
| 46) Dibromomethane             | 9.46  | 93   | 68526    | 48.069  | ug/l   | 97       |
| 47) Bromodichloromethane       | 9.64  | 83   | 178637   | 48.974  | ug/l   | 99       |
| 48) Methyl methacrylate        | 9.43  | 41   | 109733   | 49.586  | ug/l   | 99       |
| 49) 1,4-Dioxane                | 9.45  | 88   | 21587    | 907.197 | ug/l   | 96       |
| 51) 4-Methyl-2-Pentanone       | 10.21 | 43   | 576084   | 239.748 | ug/l   | 99       |
| 52) Toluene                    | 10.38 | 92   | 338563   | 49.802  | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 10.60 | 75   | 185158   | 47.689  | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene    | 10.07 | 75   | 221816   | 48.537  | ug/l   | 95       |
| 55) 1,1,2-Trichloroethane      | 10.79 | 97   | 99119    | 49.011  | ug/l   | 99       |
| 56) Ethyl methacrylate         | 10.65 | 69   | 154781   | 50.269  | ug/l   | 97       |
| 57) 1,3-Dichloropropane        | 10.93 | 76   | 188266   | 49.228  | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether  | 9.92  | 63   | 331452   | 232.199 | ug/l   | 99       |
| 59) 2-Hexanone                 | 10.97 | 43   | 388701   | 233.259 | ug/l   | 99       |
| 60) Dibromochloromethane       | 11.13 | 129  | 137261   | 61.894  | ug/l   | 84       |
| 61) 1,2-Dibromoethane          | 11.23 | 107  | 93311    | 48.709  | ug/l   | 99       |
| 64) Tetrachloroethene          | 10.86 | 164  | 114827   | 52.075  | ug/l   | 98       |
| 65) Chlorobenzene              | 11.66 | 112  | 341259   | 51.366  | ug/l   | 100      |
| 66) 1,1,1,2-Tetrachloroethane  | 11.73 | 131  | 120559   | 51.537  | ug/l   | 99       |
| 67) Ethyl Benzene              | 11.73 | 91   | 656324   | 51.604  | ug/l   | 100      |
| 68) m/p-Xylenes                | 11.84 | 106  | 472119   | 102.589 | ug/l   | 99       |
| 69) o-Xylene                   | 12.16 | 106  | 225031   | 51.880  | ug/l   | 98       |
| 70) Styrene                    | 12.18 | 104  | 391718   | 52.328  | ug/l   | 99       |
| 71) Bromoform                  | 12.35 | 173  | 64419    | 51.795  | ug/l # | 93       |
| 73) Isopropylbenzene           | 12.46 | 105  | 621332   | 54.189  | ug/l   | 100      |
| 74) N-amyl acetate             | 12.27 | 43   | 202539   | 50.719  | ug/l   | 98       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.71 | 83   | 118083   | 50.240  | ug/l   | 98       |
| 76) 1,2,3-Trichloropropane     | 12.77 | 75   | 81189m   | 45.804  | ug/l   |          |
| 77) Bromobenzene               | 12.74 | 156  | 138282   | 53.740  | ug/l   | 96       |
| 78) n-propylbenzene            | 12.80 | 91   | 735107   | 52.045  | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 12.89 | 91   | 422477   | 51.978  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 12.94 | 105  | 526463   | 54.046  | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-buten | 12.51 | 75   | 35036    | 44.707  | ug/l   | 95       |
| 82) 4-Chlorotoluene            | 12.99 | 91   | 434996   | 51.383  | ug/l   | 100      |
| 83) tert-Butylbenzene          | 13.21 | 119  | 444884   | 54.762  | ug/l   | 97       |
| 84) 1,2,4-Trimethylbenzene     | 13.25 | 105  | 529253   | 54.110  | ug/l   | 99       |
| 85) sec-Butylbenzene           | 13.38 | 105  | 605247   | 51.632  | ug/l   | 99       |
| 86) p-Isopropyltoluene         | 13.50 | 119  | 546043   | 51.935  | ug/l   | 100      |
| 87) 1,3-Dichlorobenzene        | 13.50 | 146  | 253604   | 51.225  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 13.58 | 146  | 251376   | 50.423  | ug/l   | 99       |
| 89) n-Butylbenzene             | 13.82 | 91   | 517691   | 49.358  | ug/l   | 99       |
| 90) Hexachloroethane           | 14.10 | 117  | 97134    | 50.557  | ug/l   | 96       |
| 91) 1,2-Dichlorobenzene        | 13.87 | 146  | 228880   | 50.959  | ug/l   | 100      |
| 92) 1,2-Dibromo-3-Chloropropan | 14.49 | 75   | 19238    | 46.145  | ug/l   | 90       |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW072419\  
Data File : VW011462.D  
Acq On : 24 Jul 2019 05:16  
Operator : SY/VA  
Sample : VSTDCCC050  
Misc : 5.00G/5ML/MSVOA W/SOIL  
ALS Vial : 27 Sample Multiplier: 1

Instrument :  
MSVOA\_W  
ClientSampleId :  
VSTDCCC050EC

Manual Integrations  
APPROVED

MMDadoda  
7/24/2019 9:34:32 AM

Quant Time: Jul 24 08:15:59 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W070819S.M  
Quant Title : SW846 8260  
QLast Update : Thu Jul 11 08:14:17 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 15.13 | 180  | 154348   | 49.893 | ug/l  | 98       |
| 94) Hexachlorobutadiene    | 15.24 | 225  | 92571    | 48.740 | ug/l  | 99       |
| 95) Naphthalene            | 15.37 | 128  | 312692   | 52.747 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 15.56 | 180  | 137459   | 50.347 | ug/l  | 99       |

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

