

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW092019\  
 Data File : VW013197.D  
 Acq On : 20 Sep 2019 21:52  
 Operator : SY/VA  
 Sample : VSTDCCC050  
 Misc : 5.00G/5ML/MSVOA W/SOIL  
 ALS Vial : 23 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 VSTDCCC050

Manual Integrations  
 APPROVED

MMDadoda  
 9/24/2019 5:28:58 AM

Quant Time: Sep 21 05:26:28 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W092019S.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Sep 20 15:58:08 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.95  | 168  | 337215   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.84  | 114  | 480172   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.63 | 117  | 413145   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.55 | 152  | 211815   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.31   | 65  | 147189   | 53.48 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 106.96% |      |
| 35) Dibromofluoromethane  | 7.88   | 113 | 140349   | 53.14 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 106.28% |      |
| 50) Toluene-d8            | 10.32  | 98  | 590890   | 53.46 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 106.92% |      |
| 62) 4-Bromofluorobenzene  | 12.62  | 95  | 199935   | 52.96 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 105.92% |      |

## Target Compounds

|                               |      |     |         |         |      | Qvalue |
|-------------------------------|------|-----|---------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 2.01 | 85  | 84147   | 43.259  | ug/l | 98     |
| 3) Chloromethane              | 2.21 | 50  | 113605  | 45.433  | ug/l | 100    |
| 4) Vinyl Chloride             | 2.35 | 62  | 150645  | 46.732  | ug/l | 100    |
| 5) Bromomethane               | 2.77 | 94  | 96635   | 47.304  | ug/l | 95     |
| 6) Chloroethane               | 2.92 | 64  | 88285   | 46.462  | ug/l | 98     |
| 7) Trichlorofluoromethane     | 3.25 | 101 | 83450   | 44.894  | ug/l | 97     |
| 8) Diethyl Ether              | 3.67 | 74  | 78331   | 49.335  | ug/l | 99     |
| 9) 1,1,2-Trichlorotrifluoroet | 4.06 | 101 | 148829  | 49.179  | ug/l | 98     |
| 10) Methyl Iodide             | 4.26 | 142 | 222201  | 47.358  | ug/l | 100    |
| 11) Tert butyl alcohol        | 5.18 | 59  | 56001   | 284.041 | ug/l | 98     |
| 12) 1,1-Dichloroethene        | 4.03 | 96  | 150310  | 47.964  | ug/l | 98     |
| 13) Acrolein                  | 3.89 | 56  | 44650   | 281.829 | ug/l | 99     |
| 14) Allyl chloride            | 4.66 | 41  | 240592  | 48.240  | ug/l | 99     |
| 15) Acrylonitrile             | 5.36 | 53  | 188565  | 275.159 | ug/l | 99     |
| 16) Acetone                   | 4.12 | 43  | 156463  | 252.097 | ug/l | 100    |
| 17) Carbon Disulfide          | 4.38 | 76  | 440801  | 48.665  | ug/l | 98     |
| 18) Methyl Acetate            | 4.67 | 43  | 95658   | 54.830  | ug/l | 98     |
| 19) Methyl tert-butyl Ether   | 5.42 | 73  | 248212  | 51.680  | ug/l | 96     |
| 20) Methylene Chloride        | 4.91 | 84  | 154670  | 48.650  | ug/l | 97     |
| 21) trans-1,2-Dichloroethene  | 5.42 | 96  | 164708  | 48.628  | ug/l | 94     |
| 22) Diisopropyl ether         | 6.31 | 45  | 471637  | 49.729  | ug/l | 98     |
| 23) Vinyl Acetate             | 6.25 | 43  | 1470551 | 261.364 | ug/l | 100    |
| 24) 1,1-Dichloroethane        | 6.21 | 63  | 276757  | 48.359  | ug/l | 99     |
| 25) 2-Butanone                | 7.17 | 43  | 249846  | 268.164 | ug/l | 93     |
| 26) 2,2-Dichloropropane       | 7.16 | 77  | 163815  | 47.686  | ug/l | 99     |
| 27) cis-1,2-Dichloroethene    | 7.17 | 96  | 171895  | 48.090  | ug/l | 98     |
| 28) Bromochloromethane        | 7.51 | 49  | 122226  | 55.646  | ug/l | 99     |
| 29) Tetrahydrofuran           | 7.52 | 42  | 159583  | 279.297 | ug/l | 99     |
| 30) Chloroform                | 7.67 | 83  | 269106  | 48.029  | ug/l | 98     |
| 31) Cyclohexane               | 7.95 | 56  | 282142  | 47.295  | ug/l | 95     |
| 32) 1,1,1-Trichloroethane     | 7.87 | 97  | 221451  | 48.799  | ug/l | 99     |
| 36) 1,1-Dichloropropene       | 8.08 | 75  | 230311  | 49.521  | ug/l | 99     |
| 37) Ethyl Acetate             | 7.25 | 43  | 109415  | 55.355  | ug/l | 99     |
| 38) Carbon Tetrachloride      | 8.07 | 117 | 210532  | 50.498  | ug/l | 98     |

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 VSTDCCC050

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 9/24/2019 5:28:58 AM

Quant Time: Sep 21 05:26:28 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W092019S.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Sep 20 15:58:08 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc     | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|----------|--------|----------|
| 39) Methylcyclohexane          | 9.34  | 83   | 300793   | 50.327   | ug/l   | 98       |
| 40) Benzene                    | 8.32  | 78   | 645422   | 49.753   | ug/l   | 99       |
| 41) Methacrylonitrile          | 7.48  | 41   | 59974    | 50.838   | ug/l   | 91       |
| 42) 1,2-Dichloroethane         | 8.40  | 62   | 175393   | 50.295   | ug/l   | 100      |
| 43) Isopropyl Acetate          | 8.42  | 43   | 208061   | 54.922   | ug/l   | 98       |
| 44) Trichloroethene            | 9.09  | 130  | 178269   | 48.979   | ug/l   | 100      |
| 45) 1,2-Dichloropropane        | 9.37  | 63   | 159006   | 50.205   | ug/l   | 96       |
| 46) Dibromomethane             | 9.46  | 93   | 78052    | 50.761   | ug/l   | 99       |
| 47) Bromodichloromethane       | 9.64  | 83   | 194086   | 49.606   | ug/l   | 97       |
| 48) Methyl methacrylate        | 9.43  | 41   | 104347   | 58.577   | ug/l   | 96       |
| 49) 1,4-Dioxane                | 9.46  | 88   | 27381    | 1186.307 | ug/l # | 92       |
| 51) 4-Methyl-2-Pentanone       | 10.21 | 43   | 539320   | 283.977  | ug/l   | 99       |
| 52) Toluene                    | 10.38 | 92   | 411428   | 49.486   | ug/l   | 98       |
| 53) t-1,3-Dichloropropene      | 10.60 | 75   | 205756   | 51.186   | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene    | 10.07 | 75   | 244490   | 50.023   | ug/l   | 99       |
| 55) 1,1,2-Trichloroethane      | 10.79 | 97   | 115379   | 50.203   | ug/l   | 99       |
| 56) Ethyl methacrylate         | 10.65 | 69   | 167400   | 55.655   | ug/l   | 98       |
| 57) 1,3-Dichloropropane        | 10.93 | 76   | 206724   | 51.545   | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 9.92  | 63   | 399446   | 286.866  | ug/l   | 99       |
| 59) 2-Hexanone                 | 10.96 | 43   | 369464   | 282.763  | ug/l   | 99       |
| 60) Dibromochloromethane       | 11.13 | 129  | 135085   | 51.764   | ug/l   | 100      |
| 61) 1,2-Dibromoethane          | 11.23 | 107  | 114631   | 52.459   | ug/l   | 99       |
| 64) Tetrachloroethene          | 10.86 | 164  | 158982   | 50.717   | ug/l   | 97       |
| 65) Chlorobenzene              | 11.66 | 112  | 422993   | 49.030   | ug/l   | 98       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.73 | 131  | 151516   | 51.407   | ug/l   | 100      |
| 67) Ethyl Benzene              | 11.73 | 91   | 792511   | 50.699   | ug/l   | 100      |
| 68) m/p-Xylenes                | 11.83 | 106  | 603456   | 101.308  | ug/l   | 99       |
| 69) o-Xylene                   | 12.16 | 106  | 278418   | 50.274   | ug/l   | 98       |
| 70) Styrene                    | 12.18 | 104  | 484537   | 50.963   | ug/l   | 100      |
| 71) Bromoform                  | 12.35 | 173  | 86232    | 55.380   | ug/l # | 97       |
| 73) Isopropylbenzene           | 12.46 | 105  | 777259   | 49.675   | ug/l   | 100      |
| 74) N-amyl acetate             | 12.27 | 43   | 189538   | 54.590   | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.71 | 83   | 138942   | 53.096   | ug/l   | 100      |
| 76) 1,2,3-Trichloropropane     | 12.77 | 75   | 86236m   | 46.101   | ug/l   |          |
| 77) Bromobenzene               | 12.74 | 156  | 182452   | 49.206   | ug/l   | 97       |
| 78) n-propylbenzene            | 12.80 | 91   | 915324   | 49.976   | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 12.89 | 91   | 506163   | 49.329   | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene     | 12.94 | 105  | 652529   | 49.611   | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-buten | 12.51 | 75   | 45305    | 54.346   | ug/l   | 99       |
| 82) 4-Chlorotoluene            | 12.99 | 91   | 530813   | 49.056   | ug/l   | 99       |
| 83) tert-Butylbenzene          | 13.21 | 119  | 577486   | 50.023   | ug/l   | 98       |
| 84) 1,2,4-Trimethylbenzene     | 13.25 | 105  | 648757   | 49.568   | ug/l   | 100      |
| 85) sec-Butylbenzene           | 13.38 | 105  | 791140   | 49.707   | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 13.49 | 119  | 741717   | 50.244   | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 13.50 | 146  | 348514   | 48.838   | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 13.58 | 146  | 343628   | 49.099   | ug/l   | 99       |
| 89) n-Butylbenzene             | 13.82 | 91   | 683340   | 50.695   | ug/l   | 99       |
| 90) Hexachloroethane           | 14.09 | 117  | 125038   | 50.420   | ug/l   | 100      |
| 91) 1,2-Dichlorobenzene        | 13.87 | 146  | 308044   | 49.897   | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.48 | 75   | 22253    | 55.597   | ug/l   | 97       |

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9/24/2019 5:28:58 AM

Quant Time: Sep 21 05:26:28 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W092019S.M  
Quant Title : SW846 8260  
QLast Update : Fri Sep 20 15:58:08 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 15.13 | 180  | 220273   | 49.792 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 15.24 | 225  | 145711   | 48.144 | ug/l  | 99       |
| 95) Naphthalene            | 15.36 | 128  | 403612   | 55.783 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 15.55 | 180  | 193341   | 50.579 | ug/l  | 100      |

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

