

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW010919\  
 Data File : VW008094.D  
 Acq On : 09 Jan 2019 11:00  
 Operator : SY/AP  
 Sample : VSTDCCC050  
 Misc : 5.00G/5ML/MSVOA W/SOIL  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 VSTDCCC050

Manual Integrations  
 APPROVED

MMDadoda  
 1/10/2019 4:50:52 PM

Quant Time: Jan 10 06:06:40 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W010819S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 09 04:40:48 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.95  | 168  | 87063    | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.84  | 114  | 145205   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.63 | 117  | 131360   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.56 | 152  | 63399    | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.30   | 65  | 48707    | 49.78 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 99.56%  |      |
| 35) Dibromofluoromethane  | 7.88   | 113 | 46649    | 55.08 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 110.16% |      |
| 50) Toluene-d8            | 10.32  | 98  | 201860   | 56.80 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 113.60% |      |
| 62) 4-Bromofluorobenzene  | 12.62  | 95  | 67198    | 52.74 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 105.48% |      |

## Target Compounds

|                               |      |     |        |         |        | Qvalue |
|-------------------------------|------|-----|--------|---------|--------|--------|
| 2) Dichlorodifluoromethane    | 2.01 | 85  | 38189  | 53.746  | ug/l   | 99     |
| 3) Chloromethane              | 2.21 | 50  | 47053  | 51.043  | ug/l   | 99     |
| 4) Vinyl Chloride             | 2.37 | 62  | 61431  | 51.060  | ug/l   | 97     |
| 5) Bromomethane               | 2.79 | 94  | 40956  | 45.442  | ug/l   | 97     |
| 6) Chloroethane               | 2.93 | 64  | 39624  | 43.767  | ug/l   | 98     |
| 7) Trichlorofluoromethane     | 3.26 | 101 | 49247  | 50.349  | ug/l   | 93     |
| 8) Diethyl Ether              | 3.68 | 74  | 25249  | 45.662  | ug/l   | 98     |
| 9) 1,1,2-Trichlorotrifluoroet | 4.06 | 101 | 47453  | 48.864  | ug/l   | 98     |
| 10) Methyl Iodide             | 4.26 | 142 | 68724  | 48.557  | ug/l   | 99     |
| 11) Tert butyl alcohol        | 5.23 | 59  | 13334  | 219.049 | ug/l # | 100    |
| 12) 1,1-Dichloroethene        | 4.04 | 96  | 47082  | 49.381  | ug/l   | 95     |
| 13) Acrolein                  | 3.90 | 56  | 18743  | 287.939 | ug/l   | 97     |
| 14) Allyl chloride            | 4.67 | 41  | 87128  | 50.332  | ug/l   | 99     |
| 15) Acrylonitrile             | 5.37 | 53  | 46060  | 218.794 | ug/l   | 99     |
| 16) Acetone                   | 4.14 | 43  | 47630  | 272.721 | ug/l   | 93     |
| 17) Carbon Disulfide          | 4.37 | 76  | 149580 | 50.221  | ug/l   | 100    |
| 18) Methyl Acetate            | 4.67 | 43  | 28822  | 46.604  | ug/l   | 95     |
| 19) Methyl tert-butyl Ether   | 5.43 | 73  | 68784  | 44.376  | ug/l # | 89     |
| 20) Methylene Chloride        | 4.91 | 84  | 47062  | 48.727  | ug/l   | 98     |
| 21) trans-1,2-Dichloroethene  | 5.42 | 96  | 51136  | 49.354  | ug/l   | 98     |
| 22) Diisopropyl ether         | 6.31 | 45  | 158451 | 47.995  | ug/l   | 97     |
| 23) Vinyl Acetate             | 6.26 | 43  | 403500 | 232.712 | ug/l   | 99     |
| 24) 1,1-Dichloroethane        | 6.21 | 63  | 92371  | 48.020  | ug/l   | 97     |
| 25) 2-Butanone                | 7.18 | 43  | 61138  | 224.563 | ug/l   | 98     |
| 26) 2,2-Dichloropropane       | 7.16 | 77  | 62319  | 47.813  | ug/l   | 99     |
| 27) cis-1,2-Dichloroethene    | 7.16 | 96  | 53050  | 46.928  | ug/l   | 100    |
| 28) Bromochloromethane        | 7.51 | 49  | 37195  | 48.886  | ug/l   | 97     |
| 29) Tetrahydrofuran           | 7.54 | 42  | 39419  | 216.753 | ug/l   | 98     |
| 30) Chloroform                | 7.68 | 83  | 86505  | 47.245  | ug/l   | 95     |
| 31) Cyclohexane               | 7.95 | 56  | 95192  | 46.226  | ug/l   | 99     |
| 32) 1,1,1-Trichloroethane     | 7.87 | 97  | 75734  | 47.537  | ug/l   | 99     |
| 36) 1,1-Dichloropropene       | 8.08 | 75  | 75631  | 50.564  | ug/l   | 99     |
| 37) Ethyl Acetate             | 7.26 | 43  | 27157  | 45.319  | ug/l   | 99     |
| 38) Carbon Tetrachloride      | 8.07 | 117 | 69657  | 50.880  | ug/l   | 98     |

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 Sample : VSTDCCC050  
 Misc : 5.00G/5ML/MSVOA W/SOIL  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleID :  
 VSTDCCC050

Manual Integrations  
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MMDadoda  
 1/10/2019 4:50:52 PM

Quant Time: Jan 10 06:06:40 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W010819S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 09 04:40:48 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 9.34  | 83   | 96299    | 50.775  | ug/l   | 96       |
| 40) Benzene                    | 8.32  | 78   | 205258   | 50.594  | ug/l   | 98       |
| 41) Methacrylonitrile          | 7.48  | 41   | 16795    | 44.368  | ug/l   | 93       |
| 42) 1,2-Dichloroethane         | 8.40  | 62   | 51996    | 45.569  | ug/l   | 98       |
| 43) Isopropyl Acetate          | 8.43  | 43   | 55081    | 45.973  | ug/l   | 99       |
| 44) Trichloroethene            | 9.09  | 130  | 52779    | 50.821  | ug/l   | 99       |
| 45) 1,2-Dichloropropane        | 9.37  | 63   | 50694    | 50.395  | ug/l   | 98       |
| 46) Dibromomethane             | 9.46  | 93   | 22940    | 46.435  | ug/l   | 96       |
| 47) Bromodichloromethane       | 9.65  | 83   | 61759    | 49.233  | ug/l   | 97       |
| 48) Methyl methacrylate        | 9.44  | 41   | 26588    | 47.030  | ug/l   | 97       |
| 49) 1,4-Dioxane                | 9.49  | 88   | 7319     | 921.231 | ug/l # | 96       |
| 51) 4-Methyl-2-Pentanone       | 10.21 | 43   | 128377   | 221.356 | ug/l   | 99       |
| 52) Toluene                    | 10.39 | 92   | 128196   | 49.479  | ug/l   | 96       |
| 53) t-1,3-Dichloropropene      | 10.61 | 75   | 62963    | 48.254  | ug/l   | 96       |
| 54) cis-1,3-Dichloropropene    | 10.07 | 75   | 76501    | 49.442  | ug/l   | 99       |
| 55) 1,1,2-Trichloroethane      | 10.79 | 97   | 32681    | 47.117  | ug/l   | 99       |
| 56) Ethyl methacrylate         | 10.65 | 69   | 40391    | 47.022  | ug/l   | 99       |
| 57) 1,3-Dichloropropane        | 10.93 | 76   | 59614    | 46.995  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 9.93  | 63   | 98076    | 221.040 | ug/l   | 100      |
| 59) 2-Hexanone                 | 10.97 | 43   | 93110    | 237.408 | ug/l   | 98       |
| 60) Dibromochloromethane       | 11.13 | 129  | 37702    | 49.500  | ug/l   | 100      |
| 61) 1,2-Dibromoethane          | 11.24 | 107  | 30910    | 46.966  | ug/l   | 99       |
| 64) Tetrachloroethene          | 10.86 | 164  | 43360    | 50.720  | ug/l   | 96       |
| 65) Chlorobenzene              | 11.66 | 112  | 135732   | 48.773  | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.73 | 131  | 45061    | 49.782  | ug/l   | 97       |
| 67) Ethyl Benzene              | 11.73 | 91   | 250350   | 49.165  | ug/l   | 97       |
| 68) m/p-Xylenes                | 11.84 | 106  | 193026   | 99.315  | ug/l   | 97       |
| 69) o-Xylene                   | 12.17 | 106  | 89868    | 49.931  | ug/l   | 97       |
| 70) Styrene                    | 12.18 | 104  | 142045   | 50.386  | ug/l   | 99       |
| 71) Bromoform                  | 12.35 | 173  | 20296    | 50.100  | ug/l # | 98       |
| 73) Isopropylbenzene           | 12.47 | 105  | 247587   | 49.742  | ug/l   | 99       |
| 74) N-amyl acetate             | 12.27 | 43   | 52204    | 47.360  | ug/l   | 98       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.72 | 83   | 34897    | 43.802  | ug/l   | 100      |
| 76) 1,2,3-Trichloropropane     | 12.77 | 75   | 26303m   | 45.511  | ug/l   |          |
| 77) Bromobenzene               | 12.75 | 156  | 51472    | 48.941  | ug/l   | 92       |
| 78) n-propylbenzene            | 12.81 | 91   | 301901   | 49.502  | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 12.90 | 91   | 163668   | 48.102  | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene     | 12.94 | 105  | 203006   | 49.632  | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-buten | 12.52 | 75   | 11251    | 45.333  | ug/l   | 98       |
| 82) 4-Chlorotoluene            | 12.99 | 91   | 172338   | 48.091  | ug/l   | 98       |
| 83) tert-Butylbenzene          | 13.21 | 119  | 178799   | 49.411  | ug/l   | 98       |
| 84) 1,2,4-Trimethylbenzene     | 13.26 | 105  | 205585   | 48.733  | ug/l   | 99       |
| 85) sec-Butylbenzene           | 13.39 | 105  | 263427   | 49.697  | ug/l   | 99       |
| 86) p-Isopropyltoluene         | 13.51 | 119  | 227254   | 49.647  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 13.51 | 146  | 105781   | 49.582  | ug/l   | 97       |
| 88) 1,4-Dichlorobenzene        | 13.58 | 146  | 103863   | 48.523  | ug/l   | 98       |
| 89) n-Butylbenzene             | 13.83 | 91   | 224321   | 50.037  | ug/l   | 99       |
| 90) Hexachloroethane           | 14.10 | 117  | 39200    | 50.702  | ug/l   | 92       |
| 91) 1,2-Dichlorobenzene        | 13.88 | 146  | 90448    | 48.240  | ug/l   | 98       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.49 | 75   | 5612     | 43.770  | ug/l   | 93       |

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Sample : VSTDCCC050  
Misc : 5.00G/5ML/MSVOA W/SOIL  
ALS Vial : 2 Sample Multiplier: 1

Instrument :  
MSVOA\_W  
ClientSampleId :  
VSTDCCC050

Manual Integrations  
APPROVED

MMDadoda  
1/10/2019 4:50:52 PM

Quant Time: Jan 10 06:06:40 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W010819S.M  
Quant Title : SW846 8260  
QLast Update : Wed Jan 09 04:40:48 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 15.14 | 180  | 64010    | 51.420 | ug/l  | 94       |
| 94) Hexachlorobutadiene    | 15.24 | 225  | 36268    | 54.434 | ug/l  | 98       |
| 95) Naphthalene            | 15.38 | 128  | 107766   | 46.364 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 15.57 | 180  | 51882    | 48.891 | ug/l  | 98       |

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

