

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW100219\  
 Data File : VW013401.D  
 Acq On : 03 Oct 2019 03:18  
 Operator : SY/VA  
 Sample : VW1002SBS02  
 Misc : 5.00G/5ML/MSVOA W/SOIL  
 ALS Vial : 33 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 VW1002SBS02

Manual Integrations  
 APPROVED

MMDadoda  
 10/4/2019 12:10:59 PM

Quant Time: Oct 04 08:19:11 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W100119S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Oct 02 11:49:57 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.95  | 168  | 278797   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.84  | 114  | 380091   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.63 | 117  | 326865   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.55 | 152  | 168524   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.30   | 65  | 118588   | 56.97 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 113.94% |      |
| 35) Dibromofluoromethane  | 7.88   | 113 | 114002   | 57.16 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 114.32% |      |
| 50) Toluene-d8            | 10.32  | 98  | 482700   | 58.32 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 116.64% |      |
| 62) 4-Bromofluorobenzene  | 12.61  | 95  | 161331   | 58.37 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 116.74% |      |

## Target Compounds

|                               |      |     |        |         |        | Qvalue |
|-------------------------------|------|-----|--------|---------|--------|--------|
| 2) Dichlorodifluoromethane    | 2.01 | 85  | 26683  | 24.744  | ug/l   | 91     |
| 3) Chloromethane              | 2.20 | 50  | 37187  | 20.898  | ug/l   | 98     |
| 4) Vinyl Chloride             | 2.35 | 62  | 53909  | 21.347  | ug/l   | 100    |
| 5) Bromomethane               | 2.76 | 94  | 29678  | 19.128  | ug/l   | 96     |
| 6) Chloroethane               | 2.91 | 64  | 27010  | 18.522  | ug/l   | 97     |
| 7) Trichlorofluoromethane     | 3.24 | 101 | 19524  | 17.820  | ug/l   | 94     |
| 8) Diethyl Ether              | 3.68 | 74  | 25289  | 19.942  | ug/l   | 100    |
| 9) 1,1,2-Trichlorotrifluoroet | 4.06 | 101 | 54791  | 22.556  | ug/l   | 98     |
| 10) Methyl Iodide             | 4.27 | 142 | 75484  | 19.242  | ug/l   | 99     |
| 11) Tert butyl alcohol        | 5.18 | 59  | 31093  | 175.508 | ug/l # | 85     |
| 12) 1,1-Dichloroethene        | 4.04 | 96  | 52588  | 20.490  | ug/l   | 92     |
| 13) Acrolein                  | 3.89 | 56  | 21951  | 110.458 | ug/l   | 99     |
| 14) Allyl chloride            | 4.66 | 41  | 70566  | 18.587  | ug/l   | 98     |
| 15) Acrylonitrile             | 5.37 | 53  | 70398  | 122.801 | ug/l   | 98     |
| 16) Acetone                   | 4.12 | 43  | 56910  | 89.189  | ug/l   | 97     |
| 17) Carbon Disulfide          | 4.38 | 76  | 144008 | 20.114  | ug/l   | 99     |
| 18) Methyl Acetate            | 4.67 | 43  | 42446  | 28.421  | ug/l   | 100    |
| 19) Methyl tert-butyl Ether   | 5.42 | 73  | 79355  | 21.008  | ug/l   | 98     |
| 20) Methylene Chloride        | 4.92 | 84  | 56322  | 20.072  | ug/l   | 92     |
| 21) trans-1,2-Dichloroethene  | 5.42 | 96  | 54252  | 19.850  | ug/l   | 89     |
| 22) Diisopropyl ether         | 6.31 | 45  | 144179 | 19.665  | ug/l   | 99     |
| 23) Vinyl Acetate             | 6.25 | 43  | 445953 | 101.364 | ug/l   | 100    |
| 24) 1,1-Dichloroethane        | 6.21 | 63  | 87725  | 19.644  | ug/l   | 99     |
| 25) 2-Butanone                | 7.17 | 43  | 92267  | 113.007 | ug/l   | 97     |
| 26) 2,2-Dichloropropane       | 7.16 | 77  | 49165  | 17.964  | ug/l   | 100    |
| 27) cis-1,2-Dichloroethene    | 7.16 | 96  | 56204  | 19.646  | ug/l   | 97     |
| 28) Bromochloromethane        | 7.51 | 49  | 30293  | 18.761  | ug/l   | 96     |
| 29) Tetrahydrofuran           | 7.53 | 42  | 62079  | 135.347 | ug/l   | 97     |
| 30) Chloroform                | 7.67 | 83  | 85085  | 19.430  | ug/l   | 98     |
| 31) Cyclohexane               | 7.95 | 56  | 100109 | 21.020  | ug/l   | 92     |
| 32) 1,1,1-Trichloroethane     | 7.87 | 97  | 72481  | 21.128  | ug/l   | 98     |
| 36) 1,1-Dichloropropene       | 8.08 | 75  | 77172  | 21.860  | ug/l   | 99     |
| 37) Ethyl Acetate             | 7.25 | 43  | 40671  | 26.175  | ug/l   | 97     |
| 38) Carbon Tetrachloride      | 8.06 | 117 | 67048  | 21.925  | ug/l   | 96     |

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 ALS Vial : 33 Sample Multiplier: 1

Instrument :  
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Manual Integrations  
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MMDadoda  
 10/4/2019 12:10:59 PM

Quant Time: Oct 04 08:19:11 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W100119S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Oct 02 11:49:57 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 9.34  | 83   | 104484   | 22.473  | ug/l   | 99       |
| 40) Benzene                    | 8.32  | 78   | 207949   | 20.808  | ug/l   | 98       |
| 41) Methacrylonitrile          | 7.48  | 41   | 24076    | 25.628  | ug/l   | 95       |
| 42) 1,2-Dichloroethane         | 8.40  | 62   | 55316    | 21.536  | ug/l   | 97       |
| 43) Isopropyl Acetate          | 8.42  | 43   | 69668    | 23.758  | ug/l   | 99       |
| 44) Trichloroethene            | 9.09  | 130  | 58850    | 20.912  | ug/l   | 100      |
| 45) 1,2-Dichloropropane        | 9.37  | 63   | 49753    | 20.735  | ug/l   | 99       |
| 46) Dibromomethane             | 9.46  | 93   | 26382    | 22.074  | ug/l   | 97       |
| 47) Bromodichloromethane       | 9.64  | 83   | 60372    | 20.520  | ug/l   | 100      |
| 48) Methyl methacrylate        | 9.43  | 41   | 36396    | 25.831  | ug/l   | 95       |
| 49) 1,4-Dioxane                | 9.45  | 88   | 11829    | 634.187 | ug/l # | 91       |
| 51) 4-Methyl-2-Pentanone       | 10.21 | 43   | 198926   | 129.114 | ug/l   | 99       |
| 52) Toluene                    | 10.38 | 92   | 133388   | 20.694  | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 10.60 | 75   | 61413    | 20.068  | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene    | 10.07 | 75   | 73500    | 19.809  | ug/l   | 99       |
| 55) 1,1,2-Trichloroethane      | 10.79 | 97   | 40539    | 22.738  | ug/l   | 97       |
| 56) Ethyl methacrylate         | 10.65 | 69   | 55415    | 23.092  | ug/l   | 97       |
| 57) 1,3-Dichloropropane        | 10.93 | 76   | 68982    | 22.256  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 9.92  | 63   | 128307   | 130.161 | ug/l   | 98       |
| 59) 2-Hexanone                 | 10.97 | 43   | 135607   | 126.984 | ug/l   | 99       |
| 60) Dibromochloromethane       | 11.13 | 129  | 44218    | 21.679  | ug/l   | 96       |
| 61) 1,2-Dibromoethane          | 11.23 | 107  | 38503    | 22.349  | ug/l   | 99       |
| 64) Tetrachloroethene          | 10.86 | 164  | 60422    | 24.298  | ug/l   | 97       |
| 65) Chlorobenzene              | 11.66 | 112  | 138012   | 20.610  | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.73 | 131  | 47098    | 20.650  | ug/l   | 98       |
| 67) Ethyl Benzene              | 11.73 | 91   | 252813   | 21.065  | ug/l   | 97       |
| 68) m/p-Xylenes                | 11.83 | 106  | 194771   | 42.044  | ug/l   | 99       |
| 69) o-Xylene                   | 12.16 | 106  | 88800    | 20.732  | ug/l   | 96       |
| 70) Styrene                    | 12.18 | 104  | 149856   | 20.467  | ug/l   | 99       |
| 71) Bromoform                  | 12.35 | 173  | 27976    | 22.624  | ug/l # | 99       |
| 73) Isopropylbenzene           | 12.46 | 105  | 258213   | 20.947  | ug/l   | 100      |
| 74) N-amyl acetate             | 12.27 | 43   | 59479    | 22.672  | ug/l   | 97       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.71 | 83   | 49121    | 23.543  | ug/l   | 98       |
| 76) 1,2,3-Trichloropropane     | 12.77 | 75   | 33023m   | 22.048  | ug/l   |          |
| 77) Bromobenzene               | 12.74 | 156  | 58469    | 19.753  | ug/l   | 97       |
| 78) n-propylbenzene            | 12.80 | 91   | 295210   | 20.819  | ug/l   | 99       |
| 79) 2-Chlorotoluene            | 12.89 | 91   | 162064   | 20.577  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 12.94 | 105  | 213218   | 20.822  | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-buten | 12.51 | 75   | 14132    | 22.579  | ug/l   | 98       |
| 82) 4-Chlorotoluene            | 12.99 | 91   | 165766   | 20.093  | ug/l   | 100      |
| 83) tert-Butylbenzene          | 13.21 | 119  | 191450   | 21.405  | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 13.25 | 105  | 206551   | 20.290  | ug/l   | 99       |
| 85) sec-Butylbenzene           | 13.38 | 105  | 266997   | 21.651  | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 13.50 | 119  | 242882   | 21.252  | ug/l   | 100      |
| 87) 1,3-Dichlorobenzene        | 13.50 | 146  | 112642   | 20.227  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 13.58 | 146  | 109390   | 19.619  | ug/l   | 97       |
| 89) n-Butylbenzene             | 13.82 | 91   | 215831   | 20.947  | ug/l   | 100      |
| 90) Hexachloroethane           | 14.09 | 117  | 38443    | 20.360  | ug/l   | 93       |
| 91) 1,2-Dichlorobenzene        | 13.87 | 146  | 101245   | 20.566  | ug/l   | 98       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.48 | 75   | 8237     | 26.394  | ug/l   | 95       |

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ALS Vial : 33 Sample Multiplier: 1

Instrument :  
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MMDadoda  
10/4/2019 12:10:59 PM

Quant Time: Oct 04 08:19:11 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W100119S.M  
Quant Title : SW846 8260  
QLast Update : Wed Oct 02 11:49:57 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 15.13 | 180  | 69084    | 19.554 | ug/l  | 98       |
| 94) Hexachlorobutadiene    | 15.24 | 225  | 49379    | 21.516 | ug/l  | 97       |
| 95) Naphthalene            | 15.36 | 128  | 138062   | 23.166 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 15.55 | 180  | 62309    | 20.200 | ug/l  | 99       |

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

