

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW090219\  
 Data File : VW012515.D  
 Acq On : 02 Sep 2019 23:21  
 Operator : SY/VA  
 Sample : VW0902SBSD02  
 Misc : 5.00G/5ML/MSVOA W/SOIL  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 VW0902SBSD02

Manual Integrations  
 APPROVED

MMDadoda  
 9/3/2019 10:56:03 AM

Quant Time: Sep 03 08:06:51 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W082319S.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Aug 26 07:18:31 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.95  | 168  | 189642   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.84  | 114  | 308197   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.63 | 117  | 262698   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.56 | 152  | 130780   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.31   | 65  | 122918   | 54.52 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 109.04% |      |
| 35) Dibromofluoromethane  | 7.88   | 113 | 99050    | 53.84 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 107.68% |      |
| 50) Toluene-d8            | 10.32  | 98  | 395167   | 52.98 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 105.96% |      |
| 62) 4-Bromofluorobenzene  | 12.62  | 95  | 142884   | 54.34 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 108.68% |      |

## Target Compounds

|                               |      |     |        |         |        | Qvalue |
|-------------------------------|------|-----|--------|---------|--------|--------|
| 2) Dichlorodifluoromethane    | 2.01 | 85  | 17644  | 15.110  | ug/l   | 97     |
| 3) Chloromethane              | 2.21 | 50  | 32231  | 17.816  | ug/l   | 97     |
| 4) Vinyl Chloride             | 2.36 | 62  | 37391  | 16.886  | ug/l   | 98     |
| 5) Bromomethane               | 2.76 | 94  | 19795  | 17.652  | ug/l   | 92     |
| 6) Chloroethane               | 2.92 | 64  | 22223  | 17.791  | ug/l   | 96     |
| 7) Trichlorofluoromethane     | 3.25 | 101 | 19328  | 17.384  | ug/l   | 93     |
| 8) Diethyl Ether              | 3.68 | 74  | 21130  | 20.022  | ug/l   | 94     |
| 9) 1,1,2-Trichlorotrifluoroet | 4.06 | 101 | 37548  | 19.868  | ug/l   | 97     |
| 10) Methyl Iodide             | 4.27 | 142 | 49630  | 19.409  | ug/l   | 98     |
| 11) Tert butyl alcohol        | 5.18 | 59  | 16927  | 124.768 | ug/l # | 86     |
| 12) 1,1-Dichloroethene        | 4.04 | 96  | 36497  | 19.187  | ug/l   | 93     |
| 13) Acrolein                  | 3.89 | 56  | 7751   | 60.694  | ug/l   | 90     |
| 14) Allyl chloride            | 4.67 | 41  | 77345  | 19.019  | ug/l   | 100    |
| 15) Acrylonitrile             | 5.37 | 53  | 56225  | 107.485 | ug/l   | 98     |
| 16) Acetone                   | 4.12 | 43  | 49188  | 85.356  | ug/l   | 96     |
| 17) Carbon Disulfide          | 4.38 | 76  | 87922  | 15.294  | ug/l   | 97     |
| 18) Methyl Acetate            | 4.67 | 43  | 42169  | 29.544  | ug/l   | 100    |
| 19) Methyl tert-butyl Ether   | 5.42 | 73  | 72571  | 23.591  | ug/l   | 95     |
| 20) Methylene Chloride        | 4.92 | 84  | 43270  | 19.862  | ug/l   | 95     |
| 21) trans-1,2-Dichloroethene  | 5.42 | 96  | 38948  | 19.094  | ug/l   | 90     |
| 22) Diisopropyl ether         | 6.31 | 45  | 157824 | 20.938  | ug/l   | 97     |
| 23) Vinyl Acetate             | 6.25 | 43  | 444372 | 95.792  | ug/l   | 99     |
| 24) 1,1-Dichloroethane        | 6.21 | 63  | 83749  | 20.405  | ug/l   | 100    |
| 25) 2-Butanone                | 7.17 | 43  | 78438  | 100.166 | ug/l   | 99     |
| 26) 2,2-Dichloropropane       | 7.16 | 77  | 44336  | 19.085  | ug/l   | 98     |
| 27) cis-1,2-Dichloroethene    | 7.17 | 96  | 44994  | 20.645  | ug/l   | 100    |
| 28) Bromochloromethane        | 7.51 | 49  | 37211  | 20.802  | ug/l # | 92     |
| 29) Tetrahydrofuran           | 7.53 | 42  | 52162  | 111.027 | ug/l   | 98     |
| 30) Chloroform                | 7.67 | 83  | 80158  | 21.347  | ug/l   | 100    |
| 31) Cyclohexane               | 7.95 | 56  | 72386  | 17.826  | ug/l   | 96     |
| 32) 1,1,1-Trichloroethane     | 7.87 | 97  | 63020  | 21.216  | ug/l   | 97     |
| 36) 1,1-Dichloropropene       | 8.08 | 75  | 60689  | 19.055  | ug/l   | 99     |
| 37) Ethyl Acetate             | 7.25 | 43  | 36936  | 21.164  | ug/l   | 100    |
| 38) Carbon Tetrachloride      | 8.07 | 117 | 55307  | 20.064  | ug/l   | 97     |

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 ALS Vial : 1 Sample Multiplier: 1

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 ClientSampleID :  
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 9/3/2019 10:56:03 AM

Quant Time: Sep 03 08:06:51 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W082319S.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Aug 26 07:18:31 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 9.34  | 83   | 66966    | 18.716  | ug/l   | 96       |
| 40) Benzene                    | 8.32  | 78   | 173356   | 19.934  | ug/l   | 97       |
| 41) Methacrylonitrile          | 7.48  | 41   | 24706    | 24.086  | ug/l # | 90       |
| 42) 1,2-Dichloroethane         | 8.40  | 62   | 56860    | 20.862  | ug/l   | 99       |
| 43) Isopropyl Acetate          | 8.42  | 43   | 67013    | 20.729  | ug/l   | 98       |
| 44) Trichloroethene            | 9.09  | 130  | 43127    | 20.400  | ug/l   | 91       |
| 45) 1,2-Dichloropropane        | 9.37  | 63   | 48096    | 20.550  | ug/l   | 97       |
| 46) Dibromomethane             | 9.46  | 93   | 21616    | 20.758  | ug/l   | 98       |
| 47) Bromodichloromethane       | 9.64  | 83   | 58595    | 21.142  | ug/l   | 95       |
| 48) Methyl methacrylate        | 9.43  | 41   | 32412    | 21.065  | ug/l   | 95       |
| 49) 1,4-Dioxane                | 9.46  | 88   | 7154     | 448.755 | ug/l # | 79       |
| 51) 4-Methyl-2-Pentanone       | 10.21 | 43   | 176161   | 107.136 | ug/l   | 98       |
| 52) Toluene                    | 10.38 | 92   | 106815   | 20.446  | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 10.60 | 75   | 57501    | 20.368  | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene    | 10.07 | 75   | 68438    | 20.077  | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane      | 10.79 | 97   | 32497    | 22.056  | ug/l   | 97       |
| 56) Ethyl methacrylate         | 10.65 | 69   | 46697    | 21.777  | ug/l   | 98       |
| 57) 1,3-Dichloropropane        | 10.93 | 76   | 58830    | 21.129  | ug/l   | 98       |
| 58) 2-Chloroethyl Vinyl ether  | 9.92  | 63   | 117934   | 107.160 | ug/l   | 100      |
| 59) 2-Hexanone                 | 10.97 | 43   | 118530   | 101.879 | ug/l   | 99       |
| 60) Dibromochloromethane       | 11.13 | 129  | 34923    | 21.280  | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 11.23 | 107  | 29978    | 21.840  | ug/l   | 98       |
| 64) Tetrachloroethene          | 10.86 | 164  | 37812    | 22.201  | ug/l   | 97       |
| 65) Chlorobenzene              | 11.66 | 112  | 109067   | 21.085  | ug/l   | 98       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.73 | 131  | 39359    | 21.811  | ug/l   | 99       |
| 67) Ethyl Benzene              | 11.73 | 91   | 209757   | 21.051  | ug/l   | 100      |
| 68) m/p-Xylenes                | 11.84 | 106  | 150116   | 41.823  | ug/l   | 100      |
| 69) o-Xylene                   | 12.16 | 106  | 71966    | 21.663  | ug/l   | 99       |
| 70) Styrene                    | 12.18 | 104  | 124190   | 21.598  | ug/l   | 99       |
| 71) Bromoform                  | 12.35 | 173  | 20250    | 22.523  | ug/l # | 99       |
| 73) Isopropylbenzene           | 12.46 | 105  | 202730   | 20.688  | ug/l   | 99       |
| 74) N-amyl acetate             | 12.27 | 43   | 58252    | 19.675  | ug/l   | 98       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.71 | 83   | 38562    | 21.465  | ug/l   | 98       |
| 76) 1,2,3-Trichloropropane     | 12.77 | 75   | 25819m   | 20.271  | ug/l   |          |
| 77) Bromobenzene               | 12.74 | 156  | 45478    | 21.452  | ug/l   | 94       |
| 78) n-propylbenzene            | 12.80 | 91   | 241259   | 20.167  | ug/l   | 99       |
| 79) 2-Chlorotoluene            | 12.89 | 91   | 139385   | 20.522  | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene     | 12.94 | 105  | 169311   | 20.677  | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-buten | 12.51 | 75   | 11116    | 19.135  | ug/l   | 94       |
| 82) 4-Chlorotoluene            | 12.99 | 91   | 144543   | 20.324  | ug/l   | 99       |
| 83) tert-Butylbenzene          | 13.21 | 119  | 147190   | 21.220  | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 13.25 | 105  | 169742   | 20.636  | ug/l   | 99       |
| 85) sec-Butylbenzene           | 13.38 | 105  | 204788   | 20.608  | ug/l   | 99       |
| 86) p-Isopropyltoluene         | 13.50 | 119  | 183124   | 20.634  | ug/l   | 100      |
| 87) 1,3-Dichlorobenzene        | 13.50 | 146  | 85674    | 20.661  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 13.58 | 146  | 85889    | 20.860  | ug/l   | 99       |
| 89) n-Butylbenzene             | 13.82 | 91   | 172473   | 19.543  | ug/l   | 99       |
| 90) Hexachloroethane           | 14.09 | 117  | 31307    | 20.107  | ug/l   | 93       |
| 91) 1,2-Dichlorobenzene        | 13.87 | 146  | 78061    | 21.459  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.48 | 75   | 6654     | 21.970  | ug/l   | 97       |

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Quant Time: Sep 03 08:06:51 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W082319S.M  
Quant Title : SW846 8260  
QLast Update : Mon Aug 26 07:18:31 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 15.13 | 180  | 52974    | 21.072 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 15.24 | 225  | 35843    | 21.593 | ug/l  | 99       |
| 95) Naphthalene            | 15.36 | 128  | 98327    | 22.531 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 15.55 | 180  | 47950    | 21.862 | ug/l  | 99       |

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

