

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU070318\  
 Data File : VU025183.D  
 Acq On : 03 Jul 2018 11:37  
 Operator : MD/SY  
 Sample : VU0703WBS01  
 Misc : 5.0mL/MSVOA U/WATER  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VU0703WBS01

Manual Integrations  
 APPROVED

sam  
 7/5/2018 2:30:02 PM

Quant Time: Jul 04 05:14:48 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\82U061318W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jun 13 13:55:26 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 4.99  | 168  | 171250   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 5.89  | 114  | 255915   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 9.09  | 117  | 238058   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 11.49 | 152  | 138694   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 5.31   | 65  | 135371   | 48.42 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 96.84%  |      |
| 35) Dibromofluoromethane  | 4.89   | 113 | 112414   | 52.93 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 105.86% |      |
| 50) Toluene-d8            | 7.57   | 98  | 349093   | 45.06 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 90.12%  |      |
| 62) 4-Bromofluorobenzene  | 10.31  | 95  | 149926   | 48.74 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 97.48%  |      |

## Target Compounds

|                               |      |     |        |         |      | Qvalue |
|-------------------------------|------|-----|--------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 1.20 | 85  | 36565  | 17.058  | ug/l | 99     |
| 3) Chloromethane              | 1.33 | 50  | 39080  | 17.845  | ug/l | 99     |
| 4) Vinyl Chloride             | 1.40 | 62  | 43038  | 19.057  | ug/l | 99     |
| 5) Bromomethane               | 1.62 | 94  | 26062  | 23.872  | ug/l | 100    |
| 6) Chloroethane               | 1.69 | 64  | 27235  | 20.969  | ug/l | 100    |
| 7) Trichlorofluoromethane     | 1.89 | 101 | 70517  | 20.460  | ug/l | 98     |
| 8) Diethyl Ether              | 2.10 | 74  | 27000  | 21.964  | ug/l | 88     |
| 9) 1,1,2-Trichlorotrifluoroet | 2.29 | 101 | 42933  | 20.079  | ug/l | 98     |
| 10) Methyl Iodide             | 2.41 | 142 | 36323  | 23.238  | ug/l | 96     |
| 11) Tert butyl alcohol        | 2.82 | 59  | 76537  | 112.565 | ug/l | 98     |
| 12) 1,1-Dichloroethene        | 2.28 | 96  | 40285  | 20.660  | ug/l | 97     |
| 13) Acrolein                  | 2.19 | 56  | 13482  | 37.759  | ug/l | 96     |
| 14) Allyl chloride            | 2.59 | 41  | 66408  | 18.342  | ug/l | 99     |
| 15) Acrylonitrile             | 2.93 | 53  | 141238 | 106.764 | ug/l | 98     |
| 16) Acetone                   | 2.32 | 43  | 162912 | 108.455 | ug/l | 99     |
| 17) Carbon Disulfide          | 2.48 | 76  | 101668 | 16.283  | ug/l | 99     |
| 18) Methyl Acetate            | 2.62 | 43  | 84911  | 26.368  | ug/l | 100    |
| 19) Methyl tert-butyl Ether   | 3.00 | 73  | 154864 | 21.128  | ug/l | 97     |
| 20) Methylene Chloride        | 2.70 | 84  | 48924  | 20.757  | ug/l | 97     |
| 21) trans-1,2-Dichloroethene  | 2.99 | 96  | 42502  | 19.790  | ug/l | 96     |
| 22) Diisopropyl ether         | 3.57 | 45  | 147626 | 20.569  | ug/l | 91     |
| 23) Vinyl Acetate             | 3.53 | 43  | 617261 | 96.009  | ug/l | 98     |
| 24) 1,1-Dichloroethane        | 3.45 | 63  | 83914  | 20.324  | ug/l | 98     |
| 25) 2-Butanone                | 4.26 | 43  | 217193 | 107.644 | ug/l | 96     |
| 26) 2,2-Dichloropropane       | 4.23 | 77  | 78633  | 20.057  | ug/l | 98     |
| 27) cis-1,2-Dichloroethene    | 4.23 | 96  | 52451  | 21.243  | ug/l | 96     |
| 28) Bromochloromethane        | 4.55 | 49  | 34807  | 19.140  | ug/l | # 82   |
| 29) Tetrahydrofuran           | 4.64 | 42  | 129648 | 103.761 | ug/l | 94     |
| 30) Chloroform                | 4.68 | 83  | 89421  | 21.398  | ug/l | 97     |
| 31) Cyclohexane               | 5.00 | 56  | 77500  | 19.951  | ug/l | 95     |
| 32) 1,1,1-Trichloroethane     | 4.92 | 97  | 80982  | 20.956  | ug/l | 96     |
| 36) 1,1-Dichloropropene       | 5.14 | 75  | 61131  | 20.328  | ug/l | 96     |
| 37) Ethyl Acetate             | 4.38 | 43  | 73535  | 22.435  | ug/l | 98     |
| 38) Carbon Tetrachloride      | 5.14 | 117 | 70256  | 21.245  | ug/l | 99     |

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 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\82U061318W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jun 13 13:55:26 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| -----                          |       |      |          |         |        |          |
| 39) Methylcyclohexane          | 6.42  | 83   | 76289    | 20.329  | ug/l   | 94       |
| 40) Benzene                    | 5.39  | 78   | 181726   | 21.208  | ug/l   | 100      |
| 41) Methacrylonitrile          | 4.54  | 41   | 41021    | 23.213  | ug/l   | 98       |
| 42) 1,2-Dichloroethane         | 5.41  | 62   | 76854    | 23.549  | ug/l   | 100      |
| 43) Isopropyl Acetate          | 5.55  | 43   | 117746   | 20.783  | ug/l   | 99       |
| 44) Trichloroethene            | 6.19  | 130  | 50593    | 20.746  | ug/l   | 100      |
| 45) 1,2-Dichloropropane        | 6.44  | 63   | 49336    | 21.578  | ug/l   | 99       |
| 46) Dibromomethane             | 6.56  | 93   | 35727    | 22.246  | ug/l   | 96       |
| 47) Bromodichloromethane       | 6.76  | 83   | 66986    | 20.946  | ug/l   | 97       |
| 48) Methyl methacrylate        | 6.63  | 41   | 60807    | 22.041  | ug/l   | 99       |
| 49) 1,4-Dioxane                | 6.62  | 88   | 29227    | 541.729 | ug/l   | 97       |
| 51) 4-Methyl-2-Pentanone       | 7.46  | 43   | 389734   | 109.495 | ug/l   | 99       |
| 52) Toluene                    | 7.64  | 92   | 117166   | 21.253  | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 7.88  | 75   | 72533    | 20.197  | ug/l   | 97       |
| 54) cis-1,3-Dichloropropene    | 7.27  | 75   | 76393    | 19.963  | ug/l   | 96       |
| 55) 1,1,2-Trichloroethane      | 8.07  | 97   | 48824    | 21.787  | ug/l   | 98       |
| 56) Ethyl methacrylate         | 8.02  | 69   | 76421    | 20.375  | ug/l   | 98       |
| 57) 1,3-Dichloropropane        | 8.25  | 76   | 82493    | 21.822  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 7.13  | 63   | 136177   | 94.769  | ug/l   | 95       |
| 59) 2-Hexanone                 | 8.36  | 43   | 314525   | 108.237 | ug/l   | 100      |
| 60) Dibromochloromethane       | 8.48  | 129  | 53436    | 19.122  | ug/l   | 100      |
| 61) 1,2-Dibromoethane          | 8.59  | 107  | 54195    | 21.728  | ug/l   | 98       |
| 64) Tetrachloroethene          | 8.23  | 164  | 48941    | 21.628  | ug/l   | 98       |
| 65) Chlorobenzene              | 9.12  | 112  | 134485   | 22.114  | ug/l   | 100      |
| 66) 1,1,1,2-Tetrachloroethane  | 9.21  | 131  | 50667    | 21.929  | ug/l   | 97       |
| 67) Ethyl Benzene              | 9.25  | 91   | 230921   | 21.660  | ug/l   | 97       |
| 68) m/p-Xylenes                | 9.38  | 106  | 180993   | 44.210  | ug/l   | 96       |
| 69) o-Xylene                   | 9.78  | 106  | 89197    | 22.015  | ug/l   | 96       |
| 70) Styrene                    | 9.80  | 104  | 137893   | 20.710  | ug/l   | 99       |
| 71) Bromoform                  | 9.96  | 173  | 41536    | 18.913  | ug/l # | 97       |
| 73) Isopropylbenzene           | 10.17 | 105  | 240607   | 22.596  | ug/l   | 100      |
| 74) N-amyl acetate             | 10.01 | 43   | 98438    | 19.435  | ug/l   | 98       |
| 75) 1,1,2,2-Tetrachloroethane  | 10.46 | 83   | 81231    | 22.765  | ug/l   | 98       |
| 76) 1,2,3-Trichloropropane     | 10.50 | 75   | 70936m   | 23.231  | ug/l   |          |
| 77) Bromobenzene               | 10.45 | 156  | 61020    | 22.635  | ug/l   | 94       |
| 78) n-propylbenzene            | 10.59 | 91   | 263802   | 21.031  | ug/l   | 98       |
| 79) 2-Chlorotoluene            | 10.66 | 91   | 165079   | 22.316  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 10.78 | 105  | 202287   | 21.918  | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-buten | 10.51 | 75   | 24361m   | 18.464  | ug/l   |          |
| 82) 4-Chlorotoluene            | 10.78 | 91   | 182373   | 21.182  | ug/l   | 99       |
| 83) tert-Butylbenzene          | 11.10 | 119  | 204350   | 23.018  | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 11.15 | 105  | 208073   | 22.122  | ug/l   | 99       |
| 85) sec-Butylbenzene           | 11.33 | 105  | 237366   | 21.359  | ug/l   | 98       |
| 86) p-Isopropyltoluene         | 11.48 | 119  | 208257   | 20.924  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 11.42 | 146  | 105970   | 21.277  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 11.51 | 146  | 106520   | 21.249  | ug/l   | 98       |
| 89) n-Butylbenzene             | 11.89 | 91   | 161795   | 18.310  | ug/l   | 97       |
| 90) Hexachloroethane           | 12.15 | 117  | 35164    | 18.111  | ug/l   | 97       |
| 91) 1,2-Dichlorobenzene        | 11.88 | 146  | 110374   | 22.125  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 12.66 | 75   | 19982    | 20.295  | ug/l   | 94       |

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Sample : VU0703WBS01  
Misc : 5.0mL/MSVOA U/WATER  
ALS Vial : 4 Sample Multiplier: 1

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Quant Title : SW846 8260  
QLast Update : Wed Jun 13 13:55:26 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 13.51 | 180  | 64828    | 21.044 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 13.70 | 225  | 36914    | 21.290 | ug/l  | 97       |
| 95) Naphthalene            | 13.75 | 128  | 217581   | 21.725 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 13.99 | 180  | 67449    | 21.973 | ug/l  | 98       |

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

