

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU080618\  
 Data File : VU025931.D  
 Acq On : 07 Aug 2018 09:41  
 Operator : MD/SY  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA U/WATER  
 ALS Vial : 56 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTDCCC050EC

Manual Integrations  
 APPROVED

apatel  
 8/7/2018 2:24:48 PM

Quant Time: Aug 07 10:30:46 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\82U072718W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Aug 07 00:49:55 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 4.99  | 168  | 201324   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 5.89  | 114  | 307744   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 9.09  | 117  | 294632   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 11.49 | 152  | 184133   | 50.00 | ug/l  | 0.00     |

|                             |        |     |          |       |        |      |
|-----------------------------|--------|-----|----------|-------|--------|------|
| System Monitoring Compounds |        |     |          |       |        |      |
| 33) 1,2-Dichloroethane-d4   | 5.31   | 65  | 151512   | 48.30 | ug/l   | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 96.60% |      |
| 35) Dibromofluoromethane    | 4.89   | 113 | 127179   | 47.51 | ug/l   | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 95.02% |      |
| 50) Toluene-d8              | 7.57   | 98  | 456280   | 48.71 | ug/l   | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 97.42% |      |
| 62) 4-Bromofluorobenzene    | 10.31  | 95  | 176250   | 48.48 | ug/l   | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 96.96% |      |

|                               |      |     |         |        |      |     |
|-------------------------------|------|-----|---------|--------|------|-----|
| Target Compounds              |      |     |         | Qvalue |      |     |
| 2) Dichlorodifluoromethane    | 1.20 | 85  | 111177  | 36.54  | ug/l | 97  |
| 3) Chloromethane              | 1.33 | 50  | 111521  | 38.35  | ug/l | 99  |
| 4) Vinyl Chloride             | 1.40 | 62  | 125204  | 45.75  | ug/l | 99  |
| 5) Bromomethane               | 1.62 | 94  | 66197   | 49.52  | ug/l | 99  |
| 6) Chloroethane               | 1.70 | 64  | 77405   | 48.37  | ug/l | 98  |
| 7) Trichlorofluoromethane     | 1.89 | 101 | 184294  | 46.57  | ug/l | 99  |
| 8) Diethyl Ether              | 2.10 | 74  | 68812   | 48.06  | ug/l | 99  |
| 9) 1,1,2-Trichlorotrifluoroet | 2.29 | 101 | 101667  | 44.39  | ug/l | 99  |
| 10) Methyl Iodide             | 2.41 | 142 | 81625   | 40.24  | ug/l | 98  |
| 11) Tert butyl alcohol        | 2.83 | 59  | 159375  | 232.06 | ug/l | 99  |
| 12) 1,1-Dichloroethene        | 2.28 | 96  | 98120   | 45.39  | ug/l | 94  |
| 13) Acrolein                  | 2.19 | 56  | 92483   | 372.84 | ug/l | 99  |
| 14) Allyl chloride            | 2.59 | 41  | 165307  | 42.55  | ug/l | 95  |
| 15) Acrylonitrile             | 2.94 | 53  | 341247  | 248.87 | ug/l | 99  |
| 16) Acetone                   | 2.32 | 43  | 353507  | 231.15 | ug/l | 98  |
| 17) Carbon Disulfide          | 2.48 | 76  | 331478  | 47.38  | ug/l | 99  |
| 18) Methyl Acetate            | 2.62 | 43  | 159587  | 43.35  | ug/l | 98  |
| 19) Methyl tert-butyl Ether   | 3.00 | 73  | 395595  | 50.50  | ug/l | 99  |
| 20) Methylene Chloride        | 2.70 | 84  | 127710  | 47.12  | ug/l | 95  |
| 21) trans-1,2-Dichloroethene  | 2.99 | 96  | 121899  | 48.78  | ug/l | 97  |
| 22) Diisopropyl ether         | 3.58 | 45  | 387254  | 50.59  | ug/l | 93  |
| 23) Vinyl Acetate             | 3.53 | 43  | 1659850 | 248.81 | ug/l | 99  |
| 24) 1,1-Dichloroethane        | 3.45 | 63  | 224879  | 48.94  | ug/l | 98  |
| 25) 2-Butanone                | 4.27 | 43  | 598645  | 287.55 | ug/l | 100 |
| 26) 1,2-Dichloropropane       | 4.23 | 77  | 95249   | 22.80  | ug/l | 91  |
| 27) cis-1,2-Dichloroethene    | 4.23 | 96  | 137956  | 48.97  | ug/l | 93  |
| 28) Bromochloromethane        | 4.55 | 49  | 99234   | 48.30  | ug/l | 93  |
| 29) Tetrahydrofuran           | 4.64 | 42  | 306042  | 245.37 | ug/l | 99  |
| 30) Chloroform                | 4.68 | 83  | 233452  | 48.13  | ug/l | 98  |
| 31) Cyclohexane               | 5.00 | 56  | 200590  | 50.19  | ug/l | 99  |
| 32) 1,1,1-Trichloroethane     | 4.92 | 97  | 214448  | 49.11  | ug/l | 98  |
| 36) 1,1-Dichloropropene       | 5.14 | 75  | 173526  | 48.25  | ug/l | 97  |
| 37) Ethyl Acetate             | 4.38 | 43  | 180131  | 48.30  | ug/l | 99  |
| 38) Carbon Tetrachloride      | 5.14 | 117 | 195448  | 47.98  | ug/l | 98  |

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Instrument :  
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 8/7/2018 2:24:48 PM

Quant Time: Aug 07 10:30:46 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\82U072718W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Aug 07 00:49:55 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|--------|--------|----------|
| 39) Methylcyclohexane          | 6.42  | 83   | 199449   | 48.40  | ug/l   | 98       |
| 40) Benzene                    | 5.39  | 78   | 502082   | 47.76  | ug/l   | 98       |
| 41) Methacrylonitrile          | 4.55  | 41   | 98821    | 47.71  | ug/l   | 97       |
| 42) 1,2-Dichloroethane         | 5.41  | 62   | 187883   | 46.41  | ug/l   | 99       |
| 43) Isopropyl Acetate          | 5.55  | 43   | 295155   | 47.90  | ug/l   | 98       |
| 44) Trichloroethene            | 6.19  | 130  | 144889   | 49.49  | ug/l   | 94       |
| 45) 1,2-Dichloropropane        | 6.44  | 63   | 132377   | 48.28  | ug/l   | 100      |
| 46) Dibromomethane             | 6.56  | 93   | 94232    | 47.43  | ug/l   | 97       |
| 47) Bromodichloromethane       | 6.76  | 83   | 182337   | 48.12  | ug/l   | 95       |
| 48) Methyl methacrylate        | 6.63  | 41   | 149207   | 49.40  | ug/l   | 95       |
| 49) 1,4-Dioxane                | 6.62  | 88   | 69213    | 941.70 | ug/l   | 96       |
| 51) 4-Methyl-2-Pentanone       | 7.46  | 43   | 1160925  | 300.91 | ug/l   | 99       |
| 52) Toluene                    | 7.64  | 92   | 325658   | 49.86  | ug/l   | 100      |
| 53) t-1,3-Dichloropropene      | 7.88  | 75   | 188929   | 44.40  | ug/l   | 96       |
| 54) cis-1,3-Dichloropropene    | 7.27  | 75   | 200495   | 45.87  | ug/l   | 95       |
| 55) 1,1,2-Trichloroethane      | 8.07  | 97   | 134459   | 49.54  | ug/l   | 99       |
| 56) Ethyl methacrylate         | 8.02  | 69   | 201757   | 52.03  | ug/l   | 95       |
| 57) 1,3-Dichloropropane        | 8.25  | 76   | 223007   | 48.86  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 7.13  | 63   | 364915   | 208.99 | ug/l   | 99       |
| 59) 2-Hexanone                 | 8.36  | 43   | 892885   | 295.24 | ug/l   | 97       |
| 60) Dibromochloromethane       | 8.48  | 129  | 157076   | 49.08  | ug/l   | 100      |
| 61) 1,2-Dibromoethane          | 8.59  | 107  | 148107   | 49.07  | ug/l   | 100      |
| 64) Tetrachloroethene          | 8.23  | 164  | 143672   | 55.40  | ug/l   | 99       |
| 65) Chlorobenzene              | 9.12  | 112  | 375465   | 49.43  | ug/l   | 100      |
| 66) 1,1,1,2-Tetrachloroethane  | 9.21  | 131  | 141368   | 51.44  | ug/l   | 99       |
| 67) Ethyl Benzene              | 9.25  | 91   | 637676   | 50.68  | ug/l   | 100      |
| 68) m/p-Xylenes                | 9.38  | 106  | 508751   | 105.31 | ug/l   | 97       |
| 69) o-Xylene                   | 9.78  | 106  | 241879   | 51.23  | ug/l   | 99       |
| 70) Styrene                    | 9.80  | 104  | 403644   | 52.93  | ug/l   | 98       |
| 71) Bromoform                  | 9.96  | 173  | 123639   | 51.89  | ug/l # | 98       |
| 73) Isopropylbenzene           | 10.17 | 105  | 650152   | 51.73  | ug/l   | 99       |
| 74) N-amyl acetate             | 10.01 | 43   | 262866   | 51.24  | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane  | 10.46 | 83   | 209862   | 48.29  | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 10.50 | 75   | 194809m  | 48.02  | ug/l   |          |
| 77) Bromobenzene               | 10.45 | 156  | 176260   | 50.85  | ug/l   | 97       |
| 78) n-propylbenzene            | 10.59 | 91   | 754032   | 51.41  | ug/l   | 99       |
| 79) 2-Chlorotoluene            | 10.66 | 91   | 448612   | 52.22  | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene     | 10.78 | 105  | 550529   | 51.58  | ug/l   | 98       |
| 81) trans-1,4-Dichloro-2-buten | 10.50 | 75   | 231574   | 143.13 | ug/l # | 100      |
| 82) 4-Chlorotoluene            | 10.78 | 91   | 529309   | 52.26  | ug/l   | 99       |
| 83) tert-Butylbenzene          | 11.10 | 119  | 530446   | 50.02  | ug/l   | 98       |
| 84) 1,2,4-Trimethylbenzene     | 11.15 | 105  | 567370   | 52.46  | ug/l   | 97       |
| 85) sec-Butylbenzene           | 11.33 | 105  | 645586   | 49.86  | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 11.48 | 119  | 587477   | 50.67  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 11.42 | 146  | 325680   | 50.62  | ug/l   | 98       |
| 88) 1,4-Dichlorobenzene        | 11.51 | 146  | 326448   | 48.67  | ug/l   | 99       |
| 89) n-Butylbenzene             | 11.89 | 91   | 501766   | 46.90  | ug/l   | 99       |
| 90) Hexachloroethane           | 12.15 | 117  | 99143    | 48.10  | ug/l   | 99       |
| 91) 1,2-Dichlorobenzene        | 11.88 | 146  | 319931   | 50.73  | ug/l   | 98       |
| 92) 1,2-Dibromo-3-Chloropropan | 12.66 | 75   | 51698    | 50.18  | ug/l   | 100      |

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Sample : VSTDCCC050  
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ALS Vial : 56 Sample Multiplier: 1

Instrument :  
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Quant Time: Aug 07 10:30:46 2018  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\82U072718W.M  
Quant Title : SW846 8260  
QLast Update : Tue Aug 07 00:49:55 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 13.51 | 180  | 217064   | 50.99 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 13.69 | 225  | 96085    | 42.82 | ug/l  | 97       |
| 95) Naphthalene            | 13.74 | 128  | 667458   | 48.85 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 13.99 | 180  | 219537   | 51.70 | ug/l  | 99       |

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

