

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU092218\  
 Data File : VU027009.D  
 Acq On : 22 Sep 2018 10:01  
 Operator : MD/SY  
 Sample : J4958-02MS  
 Misc : 5.0mL/MSVOA U/WATER  
 ALS Vial : 49 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 BPSI-TT-MW308D-20180914MS

Manual Integrations  
 APPROVED

MMDadoda  
 9/24/2018 2:14:18 PM

Quant Time: Sep 24 04:24:31 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\82U092218W.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Sep 22 01:31:57 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 4.98  | 168  | 54781    | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 5.89  | 114  | 105179   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 9.09  | 117  | 99313    | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 11.48 | 152  | 51301    | 50.00 | ug/l  | 0.00     |

|                             |        |     |          |       |         |      |
|-----------------------------|--------|-----|----------|-------|---------|------|
| System Monitoring Compounds |        |     |          |       |         |      |
| 33) 1,2-Dichloroethane-d4   | 5.31   | 65  | 79143    | 71.78 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 143.56% |      |
| 35) Dibromofluoromethane    | 4.88   | 113 | 53695    | 58.90 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 117.80% |      |
| 50) Toluene-d8              | 7.57   | 98  | 165761   | 47.71 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 95.42%  |      |
| 62) 4-Bromofluorobenzene    | 10.31  | 95  | 59059    | 49.54 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 99.08%  |      |

| Target Compounds              |      |     |        |         |      | Qvalue |
|-------------------------------|------|-----|--------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 1.21 | 85  | 38662  | 54.055  | ug/l | 97     |
| 3) Chloromethane              | 1.33 | 50  | 83769  | 67.931  | ug/l | 99     |
| 4) Vinyl Chloride             | 1.40 | 62  | 70360  | 61.125  | ug/l | 100    |
| 5) Bromomethane               | 1.61 | 94  | 40916  | 62.420  | ug/l | 100    |
| 6) Chloroethane               | 1.69 | 64  | 48677  | 66.185  | ug/l | 100    |
| 7) Trichlorofluoromethane     | 1.88 | 101 | 62193  | 47.572  | ug/l | 100    |
| 8) Diethyl Ether              | 2.10 | 74  | 46140  | 73.323  | ug/l | 96     |
| 9) 1,1,2-Trichlorotrifluoroet | 2.29 | 101 | 28178  | 35.054  | ug/l | 98     |
| 10) Methyl Iodide             | 2.41 | 142 | 49229  | 49.379  | ug/l | 100    |
| 11) Tert butyl alcohol        | 2.83 | 59  | 96703  | 382.657 | ug/l | 99     |
| 12) 1,1-Dichloroethene        | 2.28 | 96  | 40805  | 53.931  | ug/l | 97     |
| 13) Acrolein                  | 2.20 | 56  | 61477  | 451.274 | ug/l | 99     |
| 14) Allyl chloride            | 2.59 | 41  | 91840  | 59.847  | ug/l | 97     |
| 15) Acrylonitrile             | 2.94 | 53  | 241054 | 378.458 | ug/l | 99     |
| 16) Acetone                   | 2.32 | 43  | 223134 | 390.301 | ug/l | 100    |
| 17) Carbon Disulfide          | 2.48 | 76  | 117665 | 47.739  | ug/l | 99     |
| 18) Methyl Acetate            | 2.62 | 43  | 83429  | 53.163  | ug/l | 99     |
| 19) Methyl tert-butyl Ether   | 3.00 | 73  | 220243 | 79.214  | ug/l | 99     |
| 20) Methylene Chloride        | 2.70 | 84  | 65722  | 66.559  | ug/l | 98     |
| 21) trans-1,2-Dichloroethene  | 2.98 | 96  | 46014  | 56.962  | ug/l | 99     |
| 22) Diisopropyl ether         | 3.58 | 45  | 254401 | 77.506  | ug/l | 94     |
| 23) Vinyl Acetate             | 3.53 | 43  | 692057 | 247.346 | ug/l | 100    |
| 24) 1,1-Dichloroethane        | 3.45 | 63  | 122502 | 67.764  | ug/l | 99     |
| 25) 2-Butanone                | 4.26 | 43  | 342735 | 369.894 | ug/l | 99     |
| 26) 2,2-Dichloropropane       | 4.23 | 77  | 32346  | 22.943  | ug/l | 89     |
| 27) cis-1,2-Dichloroethene    | 4.23 | 96  | 59212  | 64.906  | ug/l | 95     |
| 28) Bromochloromethane        | 4.55 | 49  | 65744  | 75.444  | ug/l | 97     |
| 29) Tetrahydrofuran           | 4.64 | 42  | 222882 | 397.637 | ug/l | 97     |
| 30) Chloroform                | 4.67 | 83  | 109580 | 65.302  | ug/l | 100    |
| 31) Cyclohexane               | 5.00 | 56  | 53823  | 32.552  | ug/l | 98     |
| 32) 1,1,1-Trichloroethane     | 4.92 | 97  | 75226  | 56.147  | ug/l | 99     |
| 36) 1,1-Dichloropropene       | 5.14 | 75  | 56893  | 40.530  | ug/l | 99     |
| 37) Ethyl Acetate             | 4.38 | 43  | 88483  | 46.563  | ug/l | 99     |
| 38) Carbon Tetrachloride      | 5.14 | 117 | 54471  | 40.777  | ug/l | 96     |

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Quant Time: Sep 24 04:24:31 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\82U092218W.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Sep 22 01:31:57 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc     | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|----------|--------|----------|
| 39) Methylcyclohexane          | 6.42  | 83   | 38704    | 25.372   | ug/l   | 99       |
| 40) Benzene                    | 5.39  | 78   | 226997   | 53.194   | ug/l   | 99       |
| 41) Methacrylonitrile          | 4.54  | 41   | 70817    | 71.757   | ug/l   | 98       |
| 42) 1,2-Dichloroethane         | 5.41  | 62   | 102144   | 63.354   | ug/l   | 99       |
| 43) Isopropyl Acetate          | 5.55  | 43   | 150815   | 54.420   | ug/l   | 99       |
| 44) Trichloroethene            | 6.19  | 130  | 41241    | 45.396   | ug/l   | 100      |
| 45) 1,2-Dichloropropane        | 6.44  | 63   | 71698    | 58.967   | ug/l   | 100      |
| 46) Dibromomethane             | 6.56  | 93   | 44279    | 60.297   | ug/l   | 100      |
| 47) Bromodichloromethane       | 6.76  | 83   | 87819    | 59.142   | ug/l   | 95       |
| 48) Methyl methacrylate        | 6.62  | 41   | 94681    | 62.512   | ug/l   | 99       |
| 49) 1,4-Dioxane                | 6.61  | 88   | 37710    | 1259.301 | ug/l   | 97       |
| 51) 4-Methyl-2-Pentanone       | 7.46  | 43   | 655097   | 351.468  | ug/l   | 99       |
| 52) Toluene                    | 7.64  | 92   | 120084   | 49.093   | ug/l   | 98       |
| 53) t-1,3-Dichloropropene      | 7.88  | 75   | 84898    | 53.215   | ug/l   | 98       |
| 54) cis-1,3-Dichloropropene    | 7.27  | 75   | 86041    | 49.049   | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane      | 8.07  | 97   | 64380    | 62.116   | ug/l   | 97       |
| 56) Ethyl methacrylate         | 8.02  | 69   | 107097   | 59.134   | ug/l   | 98       |
| 57) 1,3-Dichloropropane        | 8.24  | 76   | 121989   | 63.282   | ug/l   | 100      |
| 59) 2-Hexanone                 | 8.36  | 43   | 503557   | 345.135  | ug/l   | 99       |
| 60) Dibromochloromethane       | 8.48  | 129  | 62494    | 61.471   | ug/l   | 98       |
| 61) 1,2-Dibromoethane          | 8.59  | 107  | 66089    | 61.285   | ug/l   | 100      |
| 64) Tetrachloroethene          | 8.23  | 164  | 27379    | 35.777   | ug/l   | 96       |
| 65) Chlorobenzene              | 9.12  | 112  | 126104   | 47.888   | ug/l   | 100      |
| 66) 1,1,1,2-Tetrachloroethane  | 9.21  | 131  | 50918    | 56.139   | ug/l   | 98       |
| 67) Ethyl Benzene              | 9.25  | 91   | 192494   | 44.454   | ug/l   | 99       |
| 68) m/p-Xylenes                | 9.38  | 106  | 145385   | 83.161   | ug/l   | 99       |
| 69) o-Xylene                   | 9.78  | 106  | 77194    | 50.315   | ug/l   | 100      |
| 70) Styrene                    | 9.79  | 104  | 132247   | 46.304   | ug/l   | 100      |
| 71) Bromoform                  | 9.96  | 173  | 45091    | 64.288   | ug/l # | 98       |
| 73) Isopropylbenzene           | 10.17 | 105  | 171737   | 44.008   | ug/l   | 99       |
| 74) N-amyl acetate             | 10.02 | 43   | 107754   | 47.702   | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane  | 10.46 | 83   | 116864   | 65.133   | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 10.49 | 75   | 101529m  | 65.145   | ug/l   |          |
| 77) Bromobenzene               | 10.45 | 156  | 51854    | 54.376   | ug/l   | 95       |
| 78) n-propylbenzene            | 10.59 | 91   | 193964   | 42.007   | ug/l   | 99       |
| 79) 2-Chlorotoluene            | 10.66 | 91   | 139491   | 48.095   | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 10.77 | 105  | 151199   | 46.937   | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-buten | 10.51 | 75   | 29260m   | 60.081   | ug/l   |          |
| 82) 4-Chlorotoluene            | 10.77 | 91   | 155797   | 47.906   | ug/l   | 99       |
| 83) tert-Butylbenzene          | 11.10 | 119  | 140103   | 43.991   | ug/l   | 96       |
| 84) 1,2,4-Trimethylbenzene     | 11.15 | 105  | 161793   | 49.352   | ug/l   | 99       |
| 85) sec-Butylbenzene           | 11.32 | 105  | 148444   | 38.183   | ug/l   | 99       |
| 86) p-Isopropyltoluene         | 11.48 | 119  | 132779   | 36.650   | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 11.42 | 146  | 85853    | 48.379   | ug/l   | 100      |
| 88) 1,4-Dichlorobenzene        | 11.51 | 146  | 88276    | 45.642   | ug/l   | 99       |
| 89) n-Butylbenzene             | 11.89 | 91   | 107004   | 31.204   | ug/l   | 99       |
| 90) Hexachloroethane           | 12.15 | 117  | 27918    | 39.490   | ug/l   | 98       |
| 91) 1,2-Dichlorobenzene        | 11.88 | 146  | 94341    | 50.047   | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 12.66 | 75   | 24817    | 67.801   | ug/l   | 99       |
| 93) 1,2,4-Trichlorobenzene     | 13.50 | 180  | 54086    | 49.790   | ug/l   | 98       |

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Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 94) Hexachlorobutadiene    | 13.69 | 225  | 17036    | 29.640 | ug/l  | 99       |
| 95) Naphthalene            | 13.74 | 128  | 249846   | 58.528 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 13.99 | 180  | 64868    | 55.684 | ug/l  | 98       |

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

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