

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU092218\  
 Data File : VU026968.D  
 Acq On : 21 Sep 2018 15:15  
 Operator : MD/SY  
 Sample : VSTDIC020  
 Misc : 5.0mL/MSVOA U/WATER  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTDIC020

Manual Integrations  
 APPROVED

MMDadoda  
 9/24/2018 2:14:04 PM

Quant Time: Sep 22 01:03:55 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\82U092218W.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Sep 22 00:44:52 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 4.99  | 168  | 80550    | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 5.89  | 114  | 132281   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 9.09  | 117  | 130811   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 11.48 | 152  | 69737    | 50.00 | ug/l  | 0.00     |

|                             |        |     |          |       |        |      |
|-----------------------------|--------|-----|----------|-------|--------|------|
| System Monitoring Compounds |        |     |          |       |        |      |
| 33) 1,2-Dichloroethane-d4   | 5.31   | 65  | 30868    | 23.69 | ug/l   | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 47.38% |      |
| 35) Dibromofluoromethane    | 4.88   | 113 | 21975    | 20.01 | ug/l   | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 40.02% |      |
| 50) Toluene-d8              | 7.57   | 98  | 80910    | 19.75 | ug/l   | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 39.50% |      |
| 62) 4-Bromofluorobenzene    | 10.31  | 95  | 26462    | 18.01 | ug/l   | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 36.02% |      |

| Target Compounds              |      |     |        |         |      | Qvalue |
|-------------------------------|------|-----|--------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 1.21 | 85  | 20720  | 23.069  | ug/l | 100    |
| 3) Chloromethane              | 1.33 | 50  | 34958  | 26.793  | ug/l | 98     |
| 4) Vinyl Chloride             | 1.41 | 62  | 33562  | 25.371  | ug/l | 99     |
| 5) Bromomethane               | 1.62 | 94  | 17892  | 22.048  | ug/l | 95     |
| 6) Chloroethane               | 1.70 | 64  | 22390  | 26.490  | ug/l | 99     |
| 7) Trichlorofluoromethane     | 1.89 | 101 | 37440  | 22.222  | ug/l | 100    |
| 8) Diethyl Ether              | 2.11 | 74  | 19040  | 25.199  | ug/l | 100    |
| 9) 1,1,2-Trichlorotrifluoroet | 2.29 | 101 | 23498  | 23.383  | ug/l | 98     |
| 10) Methyl Iodide             | 2.41 | 142 | 28162  | 32.107  | ug/l | 99     |
| 11) Tert butyl alcohol        | 2.83 | 59  | 37250  | 118.742 | ug/l | 100    |
| 12) 1,1-Dichloroethene        | 2.29 | 96  | 22416  | 23.529  | ug/l | 98     |
| 13) Acrolein                  | 2.20 | 56  | 21312  | 104.420 | ug/l | 99     |
| 14) Allyl chloride            | 2.59 | 41  | 45612  | 25.689  | ug/l | 98     |
| 15) Acrylonitrile             | 2.94 | 53  | 95191  | 138.616 | ug/l | 99     |
| 16) Acetone                   | 2.32 | 43  | 96333  | 131.542 | ug/l | 100    |
| 17) Carbon Disulfide          | 2.48 | 76  | 70536  | 23.117  | ug/l | 100    |
| 18) Methyl Acetate            | 2.62 | 43  | 46960  | 28.889  | ug/l | 100    |
| 19) Methyl tert-butyl Ether   | 3.00 | 73  | 81991  | 24.527  | ug/l | 100    |
| 20) Methylene Chloride        | 2.70 | 84  | 28239  | 24.231  | ug/l | 99     |
| 21) trans-1,2-Dichloroethene  | 2.99 | 96  | 24551  | 24.276  | ug/l | 90     |
| 22) Diisopropyl ether         | 3.58 | 45  | 99412  | 26.737  | ug/l | 98     |
| 23) Vinyl Acetate             | 3.53 | 43  | 420167 | 133.115 | ug/l | 100    |
| 24) 1,1-Dichloroethane        | 3.45 | 63  | 53786  | 25.975  | ug/l | 98     |
| 25) 2-Butanone                | 4.27 | 43  | 136467 | 136.560 | ug/l | 99     |
| 26) 2,2-Dichloropropane       | 4.23 | 77  | 41562  | 24.712  | ug/l | 98     |
| 27) cis-1,2-Dichloroethene    | 4.23 | 96  | 26726  | 23.079  | ug/l | 99     |
| 28) Bromochloromethane        | 4.55 | 49  | 25253  | 25.315  | ug/l | 98     |
| 29) Tetrahydrofuran           | 4.64 | 42  | 84942  | 139.629 | ug/l | 100    |
| 30) Chloroform                | 4.68 | 83  | 50233  | 24.949  | ug/l | 95     |
| 31) Cyclohexane               | 5.00 | 56  | 46924  | 21.975  | ug/l | 97     |
| 32) 1,1,1-Trichloroethane     | 4.92 | 97  | 40699  | 24.615  | ug/l | 99     |
| 36) 1,1-Dichloropropene       | 5.14 | 75  | 36201  | 23.700  | ug/l | 99     |
| 37) Ethyl Acetate             | 4.39 | 43  | 46655  | 24.732  | ug/l | 96     |
| 38) Carbon Tetrachloride      | 5.14 | 117 | 34719  | 21.850  | ug/l | 98     |

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 Misc : 5.0mL/MSVOA U/WATER  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
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 ClientSampleID :  
 VSTDIC020

Manual Integrations  
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MMDadoda  
 9/24/2018 2:14:04 PM

Quant Time: Sep 22 01:03:55 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\82U092218W.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Sep 22 00:44:52 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 6.42  | 83   | 37307    | 20.736  | ug/l   | 95       |
| 40) Benzene                    | 5.39  | 78   | 111353   | 23.569  | ug/l   | 99       |
| 41) Methacrylonitrile          | 4.55  | 41   | 26423    | 26.878  | ug/l   | 98       |
| 42) 1,2-Dichloroethane         | 5.41  | 62   | 42736    | 24.953  | ug/l   | 99       |
| 43) Isopropyl Acetate          | 5.55  | 43   | 72083    | 25.293  | ug/l   | 98       |
| 44) Trichloroethene            | 6.19  | 130  | 23630    | 20.688  | ug/l   | 99       |
| 45) 1,2-Dichloropropane        | 6.43  | 63   | 31774    | 24.513  | ug/l   | 96       |
| 46) Dibromomethane             | 6.56  | 93   | 19011    | 23.111  | ug/l   | 98       |
| 47) Bromodichloromethane       | 6.76  | 83   | 37737    | 23.163  | ug/l   | 97       |
| 48) Methyl methacrylate        | 6.63  | 41   | 35159    | 24.897  | ug/l   | 98       |
| 49) 1,4-Dioxane                | 6.62  | 88   | 15365    | 484.199 | ug/l   | 98       |
| 51) 4-Methyl-2-Pentanone       | 7.46  | 43   | 253149   | 131.682 | ug/l   | 100      |
| 52) Toluene                    | 7.64  | 92   | 65698    | 23.274  | ug/l   | 96       |
| 53) t-1,3-Dichloropropene      | 7.88  | 75   | 41101    | 22.625  | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene    | 7.27  | 75   | 45176    | 23.066  | ug/l   | 100      |
| 55) 1,1,2-Trichloroethane      | 8.07  | 97   | 28217    | 23.500  | ug/l   | 98       |
| 56) Ethyl methacrylate         | 8.02  | 69   | 39270    | 22.196  | ug/l   | 98       |
| 57) 1,3-Dichloropropane        | 8.24  | 76   | 51627    | 24.781  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 7.13  | 63   | 120941   | 133.372 | ug/l   | 99       |
| 59) 2-Hexanone                 | 8.36  | 43   | 192128   | 127.697 | ug/l   | 99       |
| 60) Dibromochloromethane       | 8.48  | 129  | 26642    | 20.924  | ug/l   | 98       |
| 61) 1,2-Dibromoethane          | 8.59  | 107  | 28486    | 21.956  | ug/l   | 98       |
| 64) Tetrachloroethene          | 8.23  | 164  | 20574    | 20.006  | ug/l   | 99       |
| 65) Chlorobenzene              | 9.12  | 112  | 67896    | 20.863  | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 9.21  | 131  | 24821    | 20.817  | ug/l   | 98       |
| 67) Ethyl Benzene              | 9.25  | 91   | 114590   | 21.165  | ug/l   | 98       |
| 68) m/p-Xylenes                | 9.38  | 106  | 87752    | 42.862  | ug/l   | 100      |
| 69) o-Xylene                   | 9.78  | 106  | 40921    | 20.608  | ug/l   | 100      |
| 70) Styrene                    | 9.79  | 104  | 67892    | 20.859  | ug/l   | 99       |
| 71) Bromoform                  | 9.96  | 173  | 18466    | 18.195  | ug/l # | 97       |
| 73) Isopropylbenzene           | 10.17 | 105  | 110915   | 22.783  | ug/l   | 100      |
| 74) N-amyl acetate             | 10.02 | 43   | 60399    | 25.441  | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane  | 10.46 | 83   | 48354    | 24.096  | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 10.49 | 75   | 42125m   | 25.800  | ug/l   |          |
| 77) Bromobenzene               | 10.45 | 156  | 25964    | 20.026  | ug/l   | 98       |
| 78) n-propylbenzene            | 10.59 | 91   | 131129   | 23.024  | ug/l   | 99       |
| 79) 2-Chlorotoluene            | 10.66 | 91   | 83381    | 23.661  | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene     | 10.77 | 105  | 94494    | 23.135  | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-buten | 10.51 | 75   | 12355m   | 22.115  | ug/l   |          |
| 82) 4-Chlorotoluene            | 10.77 | 91   | 91814    | 23.198  | ug/l   | 99       |
| 83) tert-Butylbenzene          | 11.10 | 119  | 86519    | 21.066  | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 11.15 | 105  | 95903    | 23.233  | ug/l   | 99       |
| 85) sec-Butylbenzene           | 11.32 | 105  | 110677   | 22.520  | ug/l   | 99       |
| 86) p-Isopropyltoluene         | 11.48 | 119  | 92750    | 21.769  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 11.42 | 146  | 47759    | 19.733  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 11.51 | 146  | 49559    | 19.678  | ug/l   | 98       |
| 89) n-Butylbenzene             | 11.89 | 91   | 79350    | 21.067  | ug/l   | 98       |
| 90) Hexachloroethane           | 12.15 | 117  | 18418    | 21.410  | ug/l   | 99       |
| 91) 1,2-Dichlorobenzene        | 11.88 | 146  | 49679    | 20.424  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 12.66 | 75   | 9530     | 23.692  | ug/l   | 98       |

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Operator : MD/SY  
Sample : VSTDICC020  
Misc : 5.0mL/MSVOA U/WATER  
ALS Vial : 5 Sample Multiplier: 1

Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTDICC020

Manual Integrations  
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MMDadoda  
9/24/2018 2:14:04 PM

Quant Time: Sep 22 01:03:55 2018  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_U\METHOD\82U092218W.M  
Quant Title : SW846 8260  
QLast Update : Sat Sep 22 00:44:52 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 13.50 | 180  | 28471    | 17.904 | ug/l  | 100      |
| 94) Hexachlorobutadiene    | 13.69 | 225  | 15417    | 18.855 | ug/l  | 98       |
| 95) Naphthalene            | 13.74 | 128  | 98778    | 20.078 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 13.99 | 180  | 31579    | 18.919 | ug/l  | 99       |

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

