

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU082919\  
 Data File : VU034016.D  
 Acq On : 28 Aug 2019 12:02  
 Operator : JC/SP  
 Sample : VSTDIC005  
 Misc : 5.0mL/MSVOA U/WATER  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTDIC005

Manual Integrations  
 APPROVED

MMDadoda  
 8/29/2019 8:27:30 AM

Quant Time: Aug 29 03:42:44 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\82U082919W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Aug 29 03:17:02 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 4.96  | 168  | 433338   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 5.86  | 114  | 671913   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 9.07  | 117  | 637971   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 11.47 | 152  | 320562   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc | Units  | Dev(Min) |
|-----------------------------|-------|------|----------|------|--------|----------|
| 33) 1,2-Dichloroethane-d4   | 5.29  | 65   | 29869    | 5.93 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =    | 11.86% |          |
| 35) Dibromofluoromethane    | 4.86  | 113  | 26754    | 5.84 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =    | 11.68% |          |
| 50) Toluene-d8              | 7.55  | 98   | 82256    | 4.83 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =    | 9.66%  |          |
| 62) 4-Bromofluorobenzene    | 10.29 | 95   | 35249    | 5.35 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =    | 10.70% |          |

| Target Compounds              | R.T. | QIon | Response | Conc   | Units  | Qvalue |
|-------------------------------|------|------|----------|--------|--------|--------|
| 2) Dichlorodifluoromethane    | 1.20 | 85   | 19670    | 4.397  | ug/l   | 98     |
| 3) Chloromethane              | 1.32 | 50   | 31671    | 5.596  | ug/l   | 97     |
| 4) Vinyl Chloride             | 1.40 | 62   | 28230    | 5.973  | ug/l   | 100    |
| 5) Bromomethane               | 1.60 | 94   | 17894    | 6.483  | ug/l   | 97     |
| 6) Chloroethane               | 1.68 | 64   | 18545    | 6.597  | ug/l   | 99     |
| 7) Trichlorofluoromethane     | 1.87 | 101  | 33029    | 5.498  | ug/l   | 100    |
| 8) Diethyl Ether              | 2.09 | 74   | 13912    | 5.961  | ug/l   | 96     |
| 9) 1,1,2-Trichlorotrifluoroet | 2.27 | 101  | 21895    | 5.763  | ug/l   | 100    |
| 10) Methyl Iodide             | 2.39 | 142  | 26187    | 4.585  | ug/l   | 100    |
| 11) Tert butyl alcohol        | 2.82 | 59   | 29425    | 22.886 | ug/l   | 98     |
| 12) 1,1-Dichloroethene        | 2.27 | 96   | 21698    | 5.465  | ug/l   | 99     |
| 13) Acrolein                  | 2.18 | 56   | 15847    | 36.490 | ug/l   | 100    |
| 14) Allyl chloride            | 2.58 | 41   | 40320    | 5.664  | ug/l   | 98     |
| 15) Acrylonitrile             | 2.92 | 53   | 70654    | 26.689 | ug/l   | 99     |
| 16) Acetone                   | 2.31 | 43   | 75276    | 30.888 | ug/l   | 100    |
| 17) Carbon Disulfide          | 2.46 | 76   | 68661    | 5.282  | ug/l   | 99     |
| 18) Methyl Acetate            | 2.60 | 43   | 35187    | 5.880  | ug/l   | 99     |
| 19) Methyl tert-butyl Ether   | 2.98 | 73   | 68823    | 5.171  | ug/l   | 98     |
| 20) Methylene Chloride        | 2.68 | 84   | 27555    | 5.450  | ug/l   | 99     |
| 21) trans-1,2-Dichloroethene  | 2.96 | 96   | 24240    | 5.400  | ug/l   | 96     |
| 22) Diisopropyl ether         | 3.55 | 45   | 74721    | 5.704  | ug/l # | 82     |
| 23) Vinyl Acetate             | 3.50 | 43   | 304321   | 27.261 | ug/l   | 100    |
| 24) 1,1-Dichloroethane        | 3.42 | 63   | 45616    | 5.639  | ug/l   | 99     |
| 25) 2-Butanone                | 4.24 | 43   | 95873    | 27.409 | ug/l   | 98     |
| 26) 2,2-Dichloropropane       | 4.20 | 77   | 36668    | 5.390  | ug/l   | 98     |
| 27) cis-1,2-Dichloroethene    | 4.20 | 96   | 26506    | 5.265  | ug/l   | 100    |
| 28) Bromochloromethane        | 4.52 | 49   | 22154    | 5.896  | ug/l   | 99     |
| 29) Tetrahydrofuran           | 4.62 | 42   | 55909    | 25.656 | ug/l   | 97     |
| 30) Chloroform                | 4.65 | 83   | 44972    | 5.467  | ug/l   | 98     |
| 31) Cyclohexane               | 4.97 | 56   | 45868    | 6.128  | ug/l # | 84     |
| 32) 1,1,1-Trichloroethane     | 4.89 | 97   | 36513    | 5.302  | ug/l   | 99     |
| 36) 1,1-Dichloropropene       | 5.11 | 75   | 31754    | 5.045  | ug/l   | 98     |
| 37) Ethyl Acetate             | 4.37 | 43   | 33052    | 5.150  | ug/l   | 99     |
| 38) Carbon Tetrachloride      | 5.11 | 117  | 31058    | 4.895  | ug/l   | 96     |

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 Sample : VSTDIC005  
 Misc : 5.0mL/MSVOA U/WATER  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTDIC005

Manual Integrations  
 APPROVED

MMDadoda  
 8/29/2019 8:27:30 AM

Quant Time: Aug 29 03:42:44 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\82U082919W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Aug 29 03:17:02 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|--------|--------|----------|
| 39) Methylcyclohexane          | 6.40  | 83   | 36764    | 4.942  | ug/l   | 95       |
| 40) Benzene                    | 5.37  | 78   | 100842   | 5.382  | ug/l   | 99       |
| 41) Methacrylonitrile          | 4.53  | 41   | 17026    | 5.094  | ug/l   | 96       |
| 42) 1,2-Dichloroethane         | 5.38  | 62   | 34081    | 5.360  | ug/l   | 97       |
| 43) Isopropyl Acetate          | 5.53  | 43   | 50169    | 5.084  | ug/l   | 100      |
| 44) Trichloroethene            | 6.17  | 130  | 26488    | 5.039  | ug/l   | 99       |
| 45) 1,2-Dichloropropane        | 6.41  | 63   | 27563    | 5.456  | ug/l   | 100      |
| 46) Dibromomethane             | 6.54  | 93   | 17627    | 5.193  | ug/l   | 97       |
| 47) Bromodichloromethane       | 6.74  | 83   | 34212    | 5.274  | ug/l   | 95       |
| 48) Methyl methacrylate        | 6.61  | 41   | 23550    | 4.970  | ug/l   | 97       |
| 49) 1,4-Dioxane                | 6.60  | 88   | 11945    | 95.349 | ug/l   | 97       |
| 51) 4-Methyl-2-Pentanone       | 7.44  | 43   | 178371   | 26.108 | ug/l   | 99       |
| 52) Toluene                    | 7.62  | 92   | 59738    | 5.064  | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 7.86  | 75   | 35121    | 4.859  | ug/l   | 100      |
| 54) cis-1,3-Dichloropropene    | 7.25  | 75   | 39791    | 5.115  | ug/l   | 96       |
| 55) 1,1,2-Trichloroethane      | 8.05  | 97   | 25469    | 5.085  | ug/l   | 97       |
| 56) Ethyl methacrylate         | 8.01  | 69   | 33777    | 4.732  | ug/l   | 98       |
| 57) 1,3-Dichloropropane        | 8.23  | 76   | 42611    | 5.230  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 7.11  | 63   | 64035    | 24.391 | ug/l   | 100      |
| 59) 2-Hexanone                 | 8.35  | 43   | 135324   | 25.793 | ug/l   | 94       |
| 60) Dibromochloromethane       | 8.46  | 129  | 26013    | 4.671  | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 8.57  | 107  | 26598    | 5.060  | ug/l   | 97       |
| 64) Tetrachloroethene          | 8.21  | 164  | 22939    | 4.549  | ug/l   | 99       |
| 65) Chlorobenzene              | 9.10  | 112  | 68005    | 5.101  | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 9.19  | 131  | 24586    | 4.991  | ug/l   | 98       |
| 67) Ethyl Benzene              | 9.23  | 91   | 111835   | 5.005  | ug/l   | 99       |
| 68) m/p-Xylenes                | 9.36  | 106  | 84822    | 9.873  | ug/l   | 96       |
| 69) o-Xylene                   | 9.76  | 106  | 40040    | 4.863  | ug/l   | 98       |
| 70) Styrene                    | 9.78  | 104  | 67086    | 4.758  | ug/l   | 99       |
| 71) Bromoform                  | 9.94  | 173  | 20590    | 4.722  | ug/l # | 98       |
| 73) Isopropylbenzene           | 10.15 | 105  | 106811   | 5.048  | ug/l   | 100      |
| 74) N-amyl acetate             | 10.00 | 43   | 41235    | 5.070  | ug/l   | 97       |
| 75) 1,1,2,2-Tetrachloroethane  | 10.44 | 83   | 43002    | 5.591  | ug/l   | 98       |
| 76) 1,2,3-Trichloropropane     | 10.48 | 75   | 38307m   | 5.811  | ug/l   |          |
| 77) Bromobenzene               | 10.44 | 156  | 29439    | 4.969  | ug/l   | 97       |
| 78) n-propylbenzene            | 10.57 | 91   | 121696   | 5.051  | ug/l   | 99       |
| 79) 2-Chlorotoluene            | 10.64 | 91   | 76367    | 5.248  | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene     | 10.76 | 105  | 90939    | 5.024  | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-buten | 10.50 | 75   | 8780m    | 3.960  | ug/l   |          |
| 82) 4-Chlorotoluene            | 10.76 | 91   | 86417    | 5.144  | ug/l   | 99       |
| 83) tert-Butylbenzene          | 11.08 | 119  | 87244    | 4.947  | ug/l   | 98       |
| 84) 1,2,4-Trimethylbenzene     | 11.13 | 105  | 87805    | 4.929  | ug/l   | 99       |
| 85) sec-Butylbenzene           | 11.31 | 105  | 109055   | 5.187  | ug/l   | 97       |
| 86) p-Isopropyltoluene         | 11.46 | 119  | 94531    | 4.830  | ug/l   | 97       |
| 87) 1,3-Dichlorobenzene        | 11.40 | 146  | 52496    | 5.000  | ug/l   | 98       |
| 88) 1,4-Dichlorobenzene        | 11.49 | 146  | 52537    | 4.962  | ug/l   | 95       |
| 89) n-Butylbenzene             | 11.87 | 91   | 77766    | 4.704  | ug/l   | 99       |
| 90) Hexachloroethane           | 12.13 | 117  | 16466    | 5.068  | ug/l   | 96       |
| 91) 1,2-Dichlorobenzene        | 11.86 | 146  | 49885    | 4.837  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 12.64 | 75   | 7758m    | 5.087  | ug/l   |          |

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Acq On : 28 Aug 2019 12:02  
Operator : JC/SP  
Sample : VSTDICC005  
Misc : 5.0mL/MSVOA U/WATER  
ALS Vial : 5 Sample Multiplier: 1

Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTDICC005

Manual Integrations  
APPROVED

MMDadoda  
8/29/2019 8:27:30 AM

Quant Time: Aug 29 03:42:44 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\82U082919W.M  
Quant Title : SW846 8260  
QLast Update : Thu Aug 29 03:17:02 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 13.49 | 180  | 26396m   | 4.181 | ug/l  |          |
| 94) Hexachlorobutadiene    | 13.68 | 225  | 19712    | 4.710 | ug/l  | 98       |
| 95) Naphthalene            | 13.73 | 128  | 60983    | 3.643 | ug/l  | 98       |
| 96) 1,2,3-Trichlorobenzene | 13.98 | 180  | 28407m   | 4.355 | ug/l  |          |

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

