

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\U100118\  
 Data File : VU027316.D  
 Acq On : 01 Oct 2018 12:02  
 Operator : MD/SY  
 Sample : VSTDICC150  
 Misc : 5.0mL/MSVOA U/WATER  
 ALS Vial : 7 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTDICC150

Manual Integrations  
 APPROVED

MMDadoda  
 10/3/2018 11:41:44 AM

Quant Time: Oct 01 23:43:18 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\82U100118W.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Oct 01 23:17:56 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 4.98  | 168  | 119903   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 5.89  | 114  | 203073   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 9.09  | 117  | 194604   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 11.48 | 152  | 104095   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |        |         |      |
|---------------------------|--------|-----|----------|--------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 5.31   | 65  | 288378   | 151.57 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =      | 303.14% |      |
| 35) Dibromofluoromethane  | 4.88   | 113 | 206750   | 154.91 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =      | 309.82% |      |
| 50) Toluene-d8            | 7.57   | 98  | 828294   | 159.04 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =      | 318.08% |      |
| 62) 4-Bromofluorobenzene  | 10.31  | 95  | 318782   | 167.33 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =      | 334.66% |      |

## Target Compounds

|                               |      |     |         |         |      | Qvalue |
|-------------------------------|------|-----|---------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 1.20 | 85  | 288551  | 166.922 | ug/l | 99     |
| 3) Chloromethane              | 1.33 | 50  | 360986  | 154.244 | ug/l | 99     |
| 4) Vinyl Chloride             | 1.40 | 62  | 354498  | 161.136 | ug/l | 99     |
| 5) Bromomethane               | 1.60 | 94  | 167989  | 176.469 | ug/l | 99     |
| 6) Chloroethane               | 1.68 | 64  | 190961  | 144.450 | ug/l | 99     |
| 7) Trichlorofluoromethane     | 1.87 | 101 | 362047  | 162.193 | ug/l | 97     |
| 8) Diethyl Ether              | 2.10 | 74  | 159471  | 155.087 | ug/l | 97     |
| 9) 1,1,2-Trichlorotrifluoroet | 2.28 | 101 | 205635  | 158.627 | ug/l | 99     |
| 10) Methyl Iodide             | 2.40 | 142 | 196923  | 208.676 | ug/l | 100    |
| 11) Tert butyl alcohol        | 2.84 | 59  | 332550  | 788.736 | ug/l | 99     |
| 12) 1,1-Dichloroethene        | 2.28 | 96  | 200567  | 158.359 | ug/l | 98     |
| 13) Acrolein                  | 2.19 | 56  | 272279  | 769.615 | ug/l | 100    |
| 14) Allyl chloride            | 2.59 | 41  | 504417  | 167.715 | ug/l | 91     |
| 15) Acrylonitrile             | 2.94 | 53  | 858472  | 782.297 | ug/l | 100    |
| 16) Acetone                   | 2.32 | 43  | 790930  | 668.690 | ug/l | 100    |
| 17) Carbon Disulfide          | 2.47 | 76  | 703547  | 154.020 | ug/l | 100    |
| 18) Methyl Acetate            | 2.61 | 43  | 398783  | 147.791 | ug/l | 100    |
| 19) Methyl tert-butyl Ether   | 3.00 | 73  | 794911  | 156.639 | ug/l | 99     |
| 20) Methylene Chloride        | 2.70 | 84  | 247126  | 149.993 | ug/l | 98     |
| 21) trans-1,2-Dichloroethene  | 2.98 | 96  | 220798  | 155.279 | ug/l | 98     |
| 22) Diisopropyl ether         | 3.57 | 45  | 958694  | 156.830 | ug/l | 98     |
| 23) Vinyl Acetate             | 3.52 | 43  | 4305153 | 806.435 | ug/l | 100    |
| 24) 1,1-Dichloroethane        | 3.44 | 63  | 489240  | 155.682 | ug/l | 100    |
| 25) 2-Butanone                | 4.26 | 43  | 1245123 | 771.959 | ug/l | 99     |
| 26) 2,2-Dichloropropane       | 4.22 | 77  | 386008  | 149.487 | ug/l | 99     |
| 27) cis-1,2-Dichloroethene    | 4.22 | 96  | 253501  | 155.894 | ug/l | 100    |
| 28) Bromochloromethane        | 4.55 | 49  | 225162  | 148.509 | ug/l | 100    |
| 29) Tetrahydrofuran           | 4.64 | 42  | 801058  | 788.058 | ug/l | 99     |
| 30) Chloroform                | 4.67 | 83  | 430591  | 154.220 | ug/l | 99     |
| 31) Cyclohexane               | 4.99 | 56  | 481908  | 131.133 | ug/l | 98     |
| 32) 1,1,1-Trichloroethane     | 4.92 | 97  | 365962  | 155.630 | ug/l | 100    |
| 36) 1,1-Dichloropropene       | 5.13 | 75  | 348851  | 158.215 | ug/l | 99     |
| 37) Ethyl Acetate             | 4.38 | 43  | 450503  | 165.695 | ug/l | 100    |
| 38) Carbon Tetrachloride      | 5.13 | 117 | 316671  | 158.993 | ug/l | 98     |

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 Misc : 5.0mL/MSVOA U/WATER  
 ALS Vial : 7 Sample Multiplier: 1

Instrument :  
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 VSTDICC150

Manual Integrations  
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 10/3/2018 11:41:44 AM

Quant Time: Oct 01 23:43:18 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\82U100118W.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Oct 01 23:17:56 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc     | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|----------|--------|----------|
| 39) Methylcyclohexane          | 6.42  | 83   | 428477   | 166.241  | ug/l   | 98       |
| 40) Benzene                    | 5.39  | 78   | 1010636  | 157.355  | ug/l   | 100      |
| 41) Methacrylonitrile          | 4.54  | 41   | 259802   | 161.302  | ug/l   | 99       |
| 42) 1,2-Dichloroethane         | 5.40  | 62   | 371896   | 155.994  | ug/l   | 100      |
| 43) Isopropyl Acetate          | 5.55  | 43   | 728404   | 164.582  | ug/l   | 100      |
| 44) Trichloroethene            | 6.19  | 130  | 225444   | 157.418  | ug/l   | 98       |
| 45) 1,2-Dichloropropane        | 6.43  | 63   | 294857   | 159.167  | ug/l   | 96       |
| 46) Dibromomethane             | 6.56  | 93   | 169484   | 161.989  | ug/l   | 99       |
| 47) Bromodichloromethane       | 6.76  | 83   | 351217   | 161.776  | ug/l   | 99       |
| 48) Methyl methacrylate        | 6.62  | 41   | 376410   | 171.026  | ug/l   | 99       |
| 49) 1,4-Dioxane                | 6.62  | 88   | 127113   | 3356.745 | ug/l   | 99       |
| 51) 4-Methyl-2-Pentanone       | 7.47  | 43   | 2408527  | 837.479  | ug/l   | 99       |
| 52) Toluene                    | 7.64  | 92   | 612363   | 161.084  | ug/l   | 98       |
| 53) t-1,3-Dichloropropene      | 7.88  | 75   | 437176   | 171.748  | ug/l   | 100      |
| 54) cis-1,3-Dichloropropene    | 7.27  | 75   | 454624   | 166.138  | ug/l   | 99       |
| 55) 1,1,2-Trichloroethane      | 8.07  | 97   | 241923   | 160.507  | ug/l   | 99       |
| 56) Ethyl methacrylate         | 8.02  | 69   | 453478   | 181.287  | ug/l   | 99       |
| 57) 1,3-Dichloropropane        | 8.24  | 76   | 467950   | 159.930  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 7.13  | 63   | 1227222  | 878.228  | ug/l   | 100      |
| 59) 2-Hexanone                 | 8.37  | 43   | 1888417  | 846.473  | ug/l   | 99       |
| 60) Dibromochloromethane       | 8.48  | 129  | 255598   | 169.081  | ug/l   | 100      |
| 61) 1,2-Dibromoethane          | 8.59  | 107  | 259147   | 161.710  | ug/l   | 99       |
| 64) Tetrachloroethene          | 8.23  | 164  | 189512   | 156.435  | ug/l   | 99       |
| 65) Chlorobenzene              | 9.12  | 112  | 649007   | 158.439  | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 9.21  | 131  | 229686   | 162.426  | ug/l   | 99       |
| 67) Ethyl Benzene              | 9.25  | 91   | 1203303  | 165.803  | ug/l   | 100      |
| 68) m/p-Xylenes                | 9.38  | 106  | 890499   | 335.447  | ug/l   | 100      |
| 69) o-Xylene                   | 9.78  | 106  | 432809   | 171.566  | ug/l   | 100      |
| 70) Styrene                    | 9.79  | 104  | 741414   | 178.971  | ug/l   | 100      |
| 71) Bromoform                  | 9.96  | 173  | 197678   | 173.748  | ug/l # | 100      |
| 73) Isopropylbenzene           | 10.17 | 105  | 1180483  | 156.143  | ug/l   | 99       |
| 74) N-amyl acetate             | 10.02 | 43   | 714393   | 165.059  | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane  | 10.46 | 83   | 441227   | 148.631  | ug/l   | 100      |
| 76) 1,2,3-Trichloropropane     | 10.50 | 75   | 402005m  | 138.528  | ug/l   |          |
| 77) Bromobenzene               | 10.45 | 156  | 270793   | 154.119  | ug/l   | 98       |
| 78) n-propylbenzene            | 10.59 | 91   | 1461707  | 160.899  | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 10.66 | 91   | 835760   | 152.367  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 10.77 | 105  | 995925   | 161.802  | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-buten | 10.51 | 75   | 178604m  | 158.614  | ug/l   |          |
| 82) 4-Chlorotoluene            | 10.77 | 91   | 994618   | 159.787  | ug/l   | 99       |
| 83) tert-Butylbenzene          | 11.10 | 119  | 968933   | 162.834  | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 11.15 | 105  | 1022095  | 162.560  | ug/l   | 100      |
| 85) sec-Butylbenzene           | 11.33 | 105  | 1238867  | 165.239  | ug/l   | 99       |
| 86) p-Isopropyltoluene         | 11.48 | 119  | 1066665  | 166.164  | ug/l   | 100      |
| 87) 1,3-Dichlorobenzene        | 11.42 | 146  | 510504   | 153.441  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 11.51 | 146  | 516855   | 152.025  | ug/l   | 99       |
| 89) n-Butylbenzene             | 11.89 | 91   | 1056655  | 176.467  | ug/l   | 100      |
| 90) Hexachloroethane           | 12.15 | 117  | 197091   | 162.885  | ug/l   | 99       |
| 91) 1,2-Dichlorobenzene        | 11.88 | 146  | 506294   | 156.336  | ug/l   | 100      |
| 92) 1,2-Dibromo-3-Chloropropan | 12.66 | 75   | 104357   | 158.617  | ug/l   | 97       |

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Quant Time: Oct 01 23:43:18 2018  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\82U100118W.M  
Quant Title : SW846 8260  
QLast Update : Mon Oct 01 23:17:56 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc    | Units | Dev(Min) |
|----------------------------|-------|------|----------|---------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 13.50 | 180  | 357582   | 170.643 | ug/l  | 98       |
| 94) Hexachlorobutadiene    | 13.69 | 225  | 170582   | 161.119 | ug/l  | 99       |
| 95) Naphthalene            | 13.74 | 128  | 1213987  | 172.800 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 13.99 | 180  | 356215   | 163.166 | ug/l  | 99       |

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

