

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU092618\  
 Data File : VU027214.D  
 Acq On : 27 Sep 2018 06:13  
 Operator : MD/SY  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA U/WATER  
 ALS Vial : 55 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTDCCC050EC

Manual Integrations  
 APPROVED

MMDadoda  
 9/27/2018 3:33:27 PM

Quant Time: Sep 27 08:22:15 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  | 83894    | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 5.89  | 114  | 146457   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 9.09  | 117  | 141238   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 11.49 | 152  | 76640    | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 5.31   | 65  | 84070    | 49.79 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 99.58%  |      |
| 35) Dibromofluoromethane  | 4.88   | 113 | 60740    | 47.85 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 95.70%  |      |
| 50) Toluene-d8            | 7.57   | 98  | 228969   | 47.33 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 94.66%  |      |
| 62) 4-Bromofluorobenzene  | 10.31  | 95  | 84497    | 50.90 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 101.80% |      |

## Target Compounds

|                               |      |     |         |         |      | Qvalue |
|-------------------------------|------|-----|---------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 1.21 | 85  | 42968   | 39.228  | ug/l | 97     |
| 3) Chloromethane              | 1.33 | 50  | 67956   | 35.984  | ug/l | 99     |
| 4) Vinyl Chloride             | 1.40 | 62  | 71875   | 40.773  | ug/l | 99     |
| 5) Bromomethane               | 1.61 | 94  | 21910   | 21.826  | ug/l | 98     |
| 6) Chloroethane               | 1.69 | 64  | 48746   | 43.278  | ug/l | 99     |
| 7) Trichlorofluoromethane     | 1.88 | 101 | 84039   | 41.974  | ug/l | 100    |
| 8) Diethyl Ether              | 2.10 | 74  | 43568   | 45.209  | ug/l | 96     |
| 9) 1,1,2-Trichlorotrifluoroet | 2.29 | 101 | 49008   | 39.810  | ug/l | 97     |
| 10) Methyl Iodide             | 2.41 | 142 | 14362   | 9.407   | ug/l | 97     |
| 11) Tert butyl alcohol        | 2.83 | 59  | 118048  | 305.020 | ug/l | 99     |
| 12) 1,1-Dichloroethene        | 2.28 | 96  | 46809   | 40.398  | ug/l | 96     |
| 13) Acrolein                  | 2.19 | 56  | 36754   | 176.170 | ug/l | 99     |
| 14) Allyl chloride            | 2.59 | 41  | 113406  | 48.255  | ug/l | 97     |
| 15) Acrylonitrile             | 2.94 | 53  | 263013  | 269.637 | ug/l | 99     |
| 16) Acetone                   | 2.32 | 43  | 238593  | 267.152 | ug/l | 100    |
| 17) Carbon Disulfide          | 2.48 | 76  | 149490  | 39.604  | ug/l | 100    |
| 18) Methyl Acetate            | 2.61 | 43  | 137733  | 57.310  | ug/l | 99     |
| 19) Methyl tert-butyl Ether   | 3.00 | 73  | 225752  | 53.019  | ug/l | 99     |
| 20) Methylene Chloride        | 2.70 | 84  | 67613   | 44.712  | ug/l | 98     |
| 21) trans-1,2-Dichloroethene  | 2.98 | 96  | 56654   | 45.795  | ug/l | 99     |
| 22) Diisopropyl ether         | 3.57 | 45  | 270725  | 53.857  | ug/l | 98     |
| 23) Vinyl Acetate             | 3.52 | 43  | 1146340 | 267.532 | ug/l | 99     |
| 24) 1,1-Dichloroethane        | 3.45 | 63  | 136079  | 49.152  | ug/l | 100    |
| 25) 2-Butanone                | 4.26 | 43  | 385943  | 271.983 | ug/l | 100    |
| 26) 2,2-Dichloropropane       | 4.23 | 77  | 57107   | 26.449  | ug/l | 95     |
| 27) cis-1,2-Dichloroethene    | 4.22 | 96  | 71126   | 50.910  | ug/l | 96     |
| 28) Bromochloromethane        | 4.55 | 49  | 72036   | 53.978  | ug/l | 98     |
| 29) Tetrahydrofuran           | 4.64 | 42  | 246436  | 287.088 | ug/l | 98     |
| 30) Chloroform                | 4.68 | 83  | 123690  | 48.131  | ug/l | 97     |
| 31) Cyclohexane               | 5.00 | 56  | 114461  | 45.429  | ug/l | 96     |
| 32) 1,1,1-Trichloroethane     | 4.92 | 97  | 100685  | 49.071  | ug/l | 98     |
| 36) 1,1-Dichloropropene       | 5.14 | 75  | 88594   | 45.325  | ug/l | 98     |
| 37) Ethyl Acetate             | 4.38 | 43  | 135357  | 51.154  | ug/l | 100    |
| 38) Carbon Tetrachloride      | 5.13 | 117 | 84989   | 45.691  | ug/l | 97     |

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 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA U/WATER  
 ALS Vial : 55 Sample Multiplier: 1

Instrument :  
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 VSTDCCC050EC

Manual Integrations  
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MMDadoda  
 9/27/2018 3:33:27 PM

Quant Time: Sep 27 08:22:15 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   | 95873    | 45.135  | ug/l   | 98       |
| 40) Benzene                    | 5.39  | 78   | 272608   | 45.878  | ug/l   | 98       |
| 41) Methacrylonitrile          | 4.54  | 41   | 76983    | 56.019  | ug/l   | 98       |
| 42) 1,2-Dichloroethane         | 5.40  | 62   | 105173   | 46.848  | ug/l   | 100      |
| 43) Isopropyl Acetate          | 5.55  | 43   | 208619   | 54.061  | ug/l   | 99       |
| 44) Trichloroethene            | 6.19  | 130  | 60095    | 47.506  | ug/l   | 100      |
| 45) 1,2-Dichloropropane        | 6.43  | 63   | 81149    | 47.929  | ug/l   | 96       |
| 46) Dibromomethane             | 6.56  | 93   | 47976    | 46.918  | ug/l   | 99       |
| 47) Bromodichloromethane       | 6.76  | 83   | 99250    | 48.002  | ug/l   | 98       |
| 48) Methyl methacrylate        | 6.62  | 41   | 103926   | 49.491  | ug/l   | 99       |
| 49) 1,4-Dioxane                | 6.61  | 88   | 39578    | 948.747 | ug/l   | 100      |
| 51) 4-Methyl-2-Pentanone       | 7.46  | 43   | 725374   | 279.487 | ug/l   | 100      |
| 52) Toluene                    | 7.64  | 92   | 164703   | 48.357  | ug/l   | 98       |
| 53) t-1,3-Dichloropropene      | 7.88  | 75   | 105932   | 47.685  | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene    | 7.27  | 75   | 113676   | 46.539  | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane      | 8.07  | 97   | 70501    | 48.850  | ug/l   | 99       |
| 56) Ethyl methacrylate         | 8.02  | 69   | 121146   | 48.450  | ug/l   | 98       |
| 57) 1,3-Dichloropropane        | 8.24  | 76   | 130870   | 48.755  | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether  | 7.13  | 63   | 348797   | 245.526 | ug/l   | 100      |
| 59) 2-Hexanone                 | 8.36  | 43   | 561560   | 276.411 | ug/l   | 99       |
| 60) Dibromochloromethane       | 8.48  | 129  | 71652    | 50.615  | ug/l   | 98       |
| 61) 1,2-Dibromoethane          | 8.59  | 107  | 73296    | 48.812  | ug/l   | 98       |
| 64) Tetrachloroethene          | 8.23  | 164  | 52133    | 47.901  | ug/l   | 98       |
| 65) Chlorobenzene              | 9.12  | 112  | 173989   | 46.460  | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 9.21  | 131  | 63847    | 49.498  | ug/l   | 99       |
| 67) Ethyl Benzene              | 9.25  | 91   | 312460   | 50.739  | ug/l   | 99       |
| 68) m/p-Xylenes                | 9.38  | 106  | 229755   | 92.243  | ug/l   | 99       |
| 69) o-Xylene                   | 9.78  | 106  | 114242   | 52.359  | ug/l   | 100      |
| 70) Styrene                    | 9.79  | 104  | 191003   | 46.996  | ug/l   | 99       |
| 71) Bromoform                  | 9.96  | 173  | 53090    | 53.224  | ug/l # | 99       |
| 73) Isopropylbenzene           | 10.17 | 105  | 304590   | 52.246  | ug/l   | 100      |
| 74) N-amyl acetate             | 10.01 | 43   | 194236   | 57.558  | ug/l   | 98       |
| 75) 1,1,2,2-Tetrachloroethane  | 10.46 | 83   | 124863   | 46.583  | ug/l   | 100      |
| 76) 1,2,3-Trichloropropane     | 10.49 | 75   | 105900m  | 45.484  | ug/l   |          |
| 77) Bromobenzene               | 10.45 | 156  | 70472    | 49.466  | ug/l   | 97       |
| 78) n-propylbenzene            | 10.59 | 91   | 362938   | 52.614  | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 10.66 | 91   | 217384   | 50.170  | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene     | 10.77 | 105  | 252204   | 52.406  | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-buten | 10.51 | 75   | 28627m   | 39.347  | ug/l   |          |
| 82) 4-Chlorotoluene            | 10.77 | 91   | 250765   | 51.614  | ug/l   | 99       |
| 83) tert-Butylbenzene          | 11.10 | 119  | 243365   | 51.150  | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 11.15 | 105  | 257440   | 52.565  | ug/l   | 99       |
| 85) sec-Butylbenzene           | 11.32 | 105  | 305174   | 52.544  | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 11.48 | 119  | 259460   | 47.654  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 11.42 | 146  | 128783   | 48.577  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 11.51 | 146  | 132198   | 45.753  | ug/l   | 100      |
| 89) n-Butylbenzene             | 11.89 | 91   | 236284   | 44.978  | ug/l   | 100      |
| 90) Hexachloroethane           | 12.15 | 117  | 48184    | 45.622  | ug/l   | 99       |
| 91) 1,2-Dichlorobenzene        | 11.88 | 146  | 130667   | 46.400  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 12.66 | 75   | 29241    | 53.475  | ug/l   | 99       |

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Sample : VSTDCCC050  
Misc : 5.0mL/MSVOA U/WATER  
ALS Vial : 55 Sample Multiplier: 1

Instrument :  
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ClientSampleId :  
VSTDCCC050EC

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MMDadoda  
9/27/2018 3:33:27 PM

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Quant Method : Z:\V0ASRV\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) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 13.50 | 180  | 85434    | 52.645 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 13.69 | 225  | 40591    | 47.272 | ug/l  | 99       |
| 95) Naphthalene            | 13.74 | 128  | 310463   | 48.966 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 13.99 | 180  | 89885    | 51.649 | ug/l  | 99       |

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

