

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX081519\  
 Data File : VX011567.D  
 Acq On : 15 Aug 2019 19:14  
 Operator : JC/SP  
 Sample : VSTDIC100  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 7 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 VSTDIC100

Manual Integrations  
 APPROVED

MMDadoda  
 8/16/2019 8:29:34 AM

Quant Time: Aug 16 04:05:22 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X081519W.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Aug 16 03:49:44 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.65  | 168  | 399445   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.85  | 114  | 548019   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.11 | 117  | 499654   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 283453   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 6.06   | 65  | 338920   | 82.35 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 164.70% |      |
| 35) Dibromofluoromethane  | 5.49   | 113 | 329667   | 95.47 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 190.94% |      |
| 50) Toluene-d8            | 8.71   | 98  | 1061491  | 84.56 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 169.12% |      |
| 62) 4-Bromofluorobenzene  | 11.13  | 95  | 451454   | 96.20 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 192.40% |      |

## Target Compounds

|                               |      |     |         |         |      | Qvalue |
|-------------------------------|------|-----|---------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 1.19 | 85  | 405893  | 108.345 | ug/l | 100    |
| 3) Chloromethane              | 1.32 | 50  | 371426  | 100.118 | ug/l | 99     |
| 4) Vinyl Chloride             | 1.40 | 62  | 363986  | 97.882  | ug/l | 99     |
| 5) Bromomethane               | 1.63 | 94  | 159177  | 78.071  | ug/l | 98     |
| 6) Chloroethane               | 1.70 | 64  | 169752  | 74.944  | ug/l | 98     |
| 7) Trichlorofluoromethane     | 1.92 | 101 | 497294  | 81.133  | ug/l | 99     |
| 8) Diethyl Ether              | 2.18 | 74  | 171397  | 80.733  | ug/l | 99     |
| 9) 1,1,2-Trichlorotrifluoroet | 2.37 | 101 | 326986  | 90.662  | ug/l | 99     |
| 10) Methyl Iodide             | 2.50 | 142 | 520395  | 108.672 | ug/l | 100    |
| 11) Tert butyl alcohol        | 3.05 | 59  | 452394  | 457.651 | ug/l | 99     |
| 12) 1,1-Dichloroethene        | 2.36 | 96  | 322288  | 91.693  | ug/l | 98     |
| 13) Acrolein                  | 2.29 | 56  | 133465  | 260.183 | ug/l | 97     |
| 14) Allyl chloride            | 2.71 | 41  | 565668  | 107.389 | ug/l | 100    |
| 15) Acrylonitrile             | 3.14 | 53  | 1035066 | 509.805 | ug/l | 99     |
| 16) Acetone                   | 2.44 | 43  | 884492  | 462.693 | ug/l | 99     |
| 17) Carbon Disulfide          | 2.56 | 76  | 801155  | 89.836  | ug/l | 100    |
| 18) Methyl Acetate            | 2.76 | 43  | 580344  | 123.578 | ug/l | 97     |
| 19) Methyl tert-butyl Ether   | 3.19 | 73  | 1106153 | 96.258  | ug/l | 99     |
| 20) Methylene Chloride        | 2.85 | 84  | 362603  | 89.719  | ug/l | 98     |
| 21) trans-1,2-Dichloroethene  | 3.15 | 96  | 347819  | 92.692  | ug/l | 98     |
| 22) Diisopropyl ether         | 3.85 | 45  | 1109224 | 100.297 | ug/l | 99     |
| 23) Vinyl Acetate             | 3.81 | 43  | 4551025 | 493.894 | ug/l | 100    |
| 24) 1,1-Dichloroethane        | 3.69 | 63  | 613541  | 96.357  | ug/l | 99     |
| 25) 2-Butanone                | 4.67 | 43  | 1453546 | 520.140 | ug/l | 97     |
| 26) 2,2-Dichloropropane       | 4.57 | 77  | 475506  | 92.380  | ug/l | 99     |
| 27) cis-1,2-Dichloroethene    | 4.59 | 96  | 407982  | 93.415  | ug/l | 100    |
| 28) Bromochloromethane        | 5.01 | 49  | 272325  | 91.414  | ug/l | 100    |
| 29) Tetrahydrofuran           | 5.12 | 42  | 951736  | 532.313 | ug/l | 100    |
| 30) Chloroform                | 5.20 | 83  | 645630  | 94.055  | ug/l | 99     |
| 31) Cyclohexane               | 5.57 | 56  | 535964  | 92.892  | ug/l | 97     |
| 32) 1,1,1-Trichloroethane     | 5.49 | 97  | 578512  | 97.570  | ug/l | 99     |
| 36) 1,1-Dichloropropene       | 5.79 | 75  | 466238  | 102.411 | ug/l | 100    |
| 37) Ethyl Acetate             | 4.83 | 43  | 541225  | 114.109 | ug/l | 100    |
| 38) Carbon Tetrachloride      | 5.77 | 117 | 520720  | 108.861 | ug/l | 99     |

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 Sample : VSTDICC100  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 7 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 VSTDICC100

Manual Integrations  
 APPROVED

MMDadoda  
 8/16/2019 8:29:34 AM

Quant Time: Aug 16 04:05:22 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X081519W.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Aug 16 03:49:44 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc     | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|----------|--------|----------|
| 39) Methylcyclohexane          | 7.46  | 83   | 562869   | 96.140   | ug/l   | 99       |
| 40) Benzene                    | 6.13  | 78   | 1421841  | 101.898  | ug/l   | 99       |
| 41) Methacrylonitrile          | 5.04  | 41   | 303086   | 111.248  | ug/l   | 99       |
| 42) 1,2-Dichloroethane         | 6.18  | 62   | 496020   | 101.428  | ug/l   | 99       |
| 43) Isopropyl Acetate          | 6.44  | 43   | 852871   | 110.015  | ug/l   | 100      |
| 44) Trichloroethene            | 7.21  | 130  | 428777   | 103.679  | ug/l   | 99       |
| 45) 1,2-Dichloropropane        | 7.51  | 63   | 366181   | 102.741  | ug/l   | 98       |
| 46) Dibromomethane             | 7.66  | 93   | 254122   | 100.694  | ug/l   | 100      |
| 47) Bromodichloromethane       | 7.90  | 83   | 494970   | 108.982  | ug/l   | 100      |
| 48) Methyl methacrylate        | 7.77  | 41   | 434571   | 113.878  | ug/l   | 100      |
| 49) 1,4-Dioxane                | 7.74  | 88   | 219703   | 2091.307 | ug/l   | 99       |
| 51) 4-Methyl-2-Pentanone       | 8.64  | 43   | 2799789  | 554.855  | ug/l   | 99       |
| 52) Toluene                    | 8.78  | 92   | 917075   | 100.463  | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 9.04  | 75   | 551310   | 113.264  | ug/l   | 100      |
| 54) cis-1,3-Dichloropropene    | 8.43  | 75   | 595149   | 110.200  | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane      | 9.21  | 97   | 388982   | 103.081  | ug/l   | 99       |
| 56) Ethyl methacrylate         | 9.18  | 69   | 611076   | 110.502  | ug/l   | 99       |
| 57) 1,3-Dichloropropane        | 9.37  | 76   | 614518   | 102.396  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 8.31  | 63   | 1480367  | 556.932  | ug/l   | 99       |
| 59) 2-Hexanone                 | 9.49  | 43   | 2188244  | 560.908  | ug/l   | 99       |
| 60) Dibromochloromethane       | 9.58  | 129  | 449889   | 116.548  | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 9.67  | 107  | 423664   | 105.674  | ug/l   | 99       |
| 64) Tetrachloroethene          | 9.34  | 164  | 399941   | 100.357  | ug/l   | 98       |
| 65) Chlorobenzene              | 10.13 | 112  | 1045194  | 100.375  | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 10.22 | 131  | 408783   | 111.104  | ug/l   | 100      |
| 67) Ethyl Benzene              | 10.25 | 91   | 1785943  | 101.570  | ug/l   | 100      |
| 68) m/p-Xylenes                | 10.36 | 106  | 1378068  | 203.590  | ug/l   | 98       |
| 69) o-Xylene                   | 10.69 | 106  | 678435   | 103.043  | ug/l   | 97       |
| 70) Styrene                    | 10.71 | 104  | 1183212  | 107.522  | ug/l   | 99       |
| 71) Bromoform                  | 10.85 | 173  | 384897   | 129.660  | ug/l # | 99       |
| 73) Isopropylbenzene           | 11.02 | 105  | 1815597  | 94.695   | ug/l   | 100      |
| 74) N-amyl acetate             | 10.90 | 43   | 793632   | 107.384  | ug/l   | 100      |
| 75) 1,1,2,2-Tetrachloroethane  | 11.27 | 83   | 611561   | 97.136   | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 11.29 | 75   | 521927m  | 100.707  | ug/l   |          |
| 77) Bromobenzene               | 11.26 | 156  | 531583   | 99.319   | ug/l   | 99       |
| 78) n-propylbenzene            | 11.36 | 91   | 2002397  | 94.908   | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 11.42 | 91   | 1201305  | 94.335   | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 11.51 | 105  | 1550113  | 96.844   | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-buten | 11.07 | 75   | 202948   | 108.966  | ug/l   | 96       |
| 82) 4-Chlorotoluene            | 11.51 | 91   | 1399555  | 94.632   | ug/l   | 100      |
| 83) tert-Butylbenzene          | 11.77 | 119  | 1577138  | 99.646   | ug/l   | 100      |
| 84) 1,2,4-Trimethylbenzene     | 11.80 | 105  | 1569184  | 97.108   | ug/l   | 99       |
| 85) sec-Butylbenzene           | 11.94 | 105  | 1781937  | 96.859   | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 12.06 | 119  | 1718893  | 100.509  | ug/l   | 100      |
| 87) 1,3-Dichlorobenzene        | 12.02 | 146  | 925988   | 100.033  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 12.10 | 146  | 933891   | 98.588   | ug/l   | 99       |
| 89) n-Butylbenzene             | 12.38 | 91   | 1456191  | 100.486  | ug/l   | 99       |
| 90) Hexachloroethane           | 12.59 | 117  | 284490   | 105.873  | ug/l   | 100      |
| 91) 1,2-Dichlorobenzene        | 12.39 | 146  | 927871   | 101.063  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 13.00 | 75   | 146062   | 109.841  | ug/l   | 99       |

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Sample : VSTDICC100  
Misc : 5.0mL/MSVOA X/WATER  
ALS Vial : 7 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :  
VSTDICC100

Manual Integrations  
APPROVED

MMDadoda  
8/16/2019 8:29:34 AM

Quant Time: Aug 16 04:05:22 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X081519W.M  
Quant Title : SW846 8260  
QLast Update : Fri Aug 16 03:49:44 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc    | Units | Dev(Min) |
|----------------------------|-------|------|----------|---------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 13.65 | 180  | 738522   | 116.545 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 13.78 | 225  | 389720   | 121.646 | ug/l  | 98       |
| 95) Naphthalene            | 13.83 | 128  | 2128793  | 114.391 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 14.02 | 180  | 734868   | 116.097 | ug/l  | 99       |

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

