

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN070518\  
 Data File : VN049714.D  
 Acq On : 5 Jul 2018 15:41  
 Operator : MD\SY  
 Sample : VN0705WBSD01  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 7 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0705WBSD01

Manual Integrations  
 APPROVED

sam  
 7/6/2018 4:26:02 PM

Quant Time: Jul 05 16:46:24 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N062918W.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Jun 30 00:55:30 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.67  | 168  | 1235212  | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.59  | 114  | 1838255  | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.41 | 117  | 1628008  | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.35 | 152  | 867845   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |        |      |
|---------------------------|--------|-----|----------|-------|--------|------|
| 33) 1,2-Dichloroethane-d4 | 8.03   | 65  | 735815   | 45.11 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 90.22% |      |
| 35) Dibromofluoromethane  | 7.59   | 113 | 628058   | 45.70 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 91.40% |      |
| 50) Toluene-d8            | 10.09  | 98  | 2354108  | 43.76 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 87.52% |      |
| 62) 4-Bromofluorobenzene  | 12.40  | 95  | 809446   | 44.07 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 88.14% |      |

## Target Compounds

|                               |      |     |         |         |        | Qvalue |
|-------------------------------|------|-----|---------|---------|--------|--------|
| 2) Dichlorodifluoromethane    | 1.85 | 85  | 253324  | 18.198  | ug/l   | 98     |
| 3) Chloromethane              | 2.06 | 50  | 326584  | 18.784  | ug/l   | 99     |
| 4) Vinyl Chloride             | 2.18 | 62  | 366270  | 19.615  | ug/l   | 99     |
| 5) Bromomethane               | 2.56 | 94  | 164092  | 16.729  | ug/l   | 97     |
| 6) Chloroethane               | 2.70 | 64  | 230969  | 19.542  | ug/l   | 99     |
| 7) Trichlorofluoromethane     | 3.01 | 101 | 467149  | 21.901  | ug/l   | 99     |
| 8) Diethyl Ether              | 3.41 | 74  | 173100  | 20.022  | ug/l   | 99     |
| 9) 1,1,2-Trichlorotrifluoroet | 3.75 | 101 | 303240  | 19.760  | ug/l   | 99     |
| 10) Methyl Iodide             | 3.94 | 142 | 349163  | 18.180  | ug/l   | 99     |
| 11) Tert butyl alcohol        | 4.80 | 59  | 116627  | 124.595 | ug/l # | 90     |
| 12) 1,1-Dichloroethene        | 3.73 | 96  | 273697  | 18.865  | ug/l   | 99     |
| 13) Acrolein                  | 3.61 | 56  | 46259   | 52.907  | ug/l   | 99     |
| 14) Allyl chloride            | 4.32 | 41  | 422649  | 21.209  | ug/l   | 98     |
| 15) Acrylonitrile             | 5.00 | 53  | 537419  | 111.162 | ug/l   | 98     |
| 16) Acetone                   | 3.82 | 43  | 436296  | 129.327 | ug/l   | 98     |
| 17) Carbon Disulfide          | 4.05 | 76  | 780273  | 19.320  | ug/l   | 99     |
| 18) Methyl Acetate            | 4.33 | 43  | 313912  | 18.263  | ug/l   | 98     |
| 19) Methyl tert-butyl Ether   | 5.05 | 73  | 779328  | 20.838  | ug/l   | 99     |
| 20) Methylene Chloride        | 4.55 | 84  | 329112  | 19.593  | ug/l   | 97     |
| 21) trans-1,2-Dichloroethene  | 5.04 | 96  | 288683  | 19.334  | ug/l   | 100    |
| 22) Diisopropyl ether         | 5.96 | 45  | 922372  | 20.458  | ug/l   | 96     |
| 23) Vinyl Acetate             | 5.90 | 43  | 2970662 | 101.603 | ug/l   | 100    |
| 24) 1,1-Dichloroethane        | 5.85 | 63  | 562333  | 19.798  | ug/l   | 100    |
| 25) 2-Butanone                | 6.84 | 43  | 648245  | 119.707 | ug/l   | 96     |
| 26) 2,2-Dichloropropane       | 6.82 | 77  | 472855  | 20.044  | ug/l   | 99     |
| 27) cis-1,2-Dichloroethene    | 6.83 | 96  | 324375  | 19.448  | ug/l   | 99     |
| 28) Bromochloromethane        | 7.20 | 49  | 259231  | 21.504  | ug/l   | 98     |
| 29) Tetrahydrofuran           | 7.22 | 42  | 414047  | 119.961 | ug/l   | 100    |
| 30) Chloroform                | 7.37 | 83  | 577967  | 19.961  | ug/l   | 100    |
| 31) Cyclohexane               | 7.65 | 56  | 486963  | 19.549  | ug/l   | 97     |
| 32) 1,1,1-Trichloroethane     | 7.57 | 97  | 495208  | 20.201  | ug/l   | 100    |
| 36) 1,1-Dichloropropene       | 7.79 | 75  | 419566  | 20.287  | ug/l   | 100    |
| 37) Ethyl Acetate             | 6.94 | 43  | 285715  | 23.686  | ug/l   | 98     |
| 38) Carbon Tetrachloride      | 7.77 | 117 | 395272  | 19.648  | ug/l   | 98     |

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 Sample : VN0705WBSD01  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 7 Sample Multiplier: 1

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 VN0705WBSD01

Manual Integrations  
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sam  
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Quant Time: Jul 05 16:46:24 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N062918W.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Jun 30 00:55:30 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| -----                          |       |      |          |         |        |          |
| 39) Methylcyclohexane          | 9.08  | 83   | 431209   | 19.017  | ug/l   | 96       |
| 40) Benzene                    | 8.04  | 78   | 1284056  | 20.333  | ug/l   | 100      |
| 41) Methacrylonitrile          | 7.18  | 41   | 139448   | 20.508  | ug/l   | 94       |
| 42) 1,2-Dichloroethane         | 8.13  | 62   | 412000   | 20.443  | ug/l   | 99       |
| 43) Isopropyl Acetate          | 8.17  | 43   | 548783   | 22.595  | ug/l   | 98       |
| 44) Trichloroethene            | 8.84  | 130  | 370915   | 19.476  | ug/l   | 96       |
| 45) 1,2-Dichloropropane        | 9.12  | 63   | 341791   | 20.949  | ug/l   | 100      |
| 46) Dibromomethane             | 9.21  | 93   | 209115   | 21.186  | ug/l   | 98       |
| 47) Bromodichloromethane       | 9.41  | 83   | 427812   | 20.360  | ug/l   | 98       |
| 48) Methyl methacrylate        | 9.20  | 41   | 243189   | 22.687  | ug/l   | 99       |
| 49) 1,4-Dioxane                | 9.20  | 88   | 66834    | 463.769 | ug/l   | 94       |
| 51) 4-Methyl-2-Pentanone       | 9.99  | 43   | 1422503  | 120.277 | ug/l   | 99       |
| 52) Toluene                    | 10.16 | 92   | 781431   | 20.482  | ug/l   | 98       |
| 53) t-1,3-Dichloropropene      | 10.38 | 75   | 400927   | 19.927  | ug/l   | 98       |
| 54) cis-1,3-Dichloropropene    | 9.84  | 75   | 477392   | 20.302  | ug/l   | 99       |
| 55) 1,1,2-Trichloroethane      | 10.56 | 97   | 298227   | 20.994  | ug/l   | 100      |
| 56) Ethyl methacrylate         | 10.43 | 69   | 365365   | 21.942  | ug/l   | 98       |
| 57) 1,3-Dichloropropane        | 10.71 | 76   | 492311   | 21.373  | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether  | 9.70  | 63   | 731168   | 91.427  | ug/l   | 100      |
| 59) 2-Hexanone                 | 10.76 | 43   | 970194   | 124.056 | ug/l   | 98       |
| 60) Dibromochloromethane       | 10.90 | 129  | 326600   | 21.272  | ug/l   | 100      |
| 61) 1,2-Dibromoethane          | 11.01 | 107  | 287947   | 21.155  | ug/l   | 100      |
| 64) Tetrachloroethene          | 10.63 | 164  | 428054   | 19.418  | ug/l   | 98       |
| 65) Chlorobenzene              | 11.44 | 112  | 840484   | 19.790  | ug/l   | 100      |
| 66) 1,1,1,2-Tetrachloroethane  | 11.51 | 131  | 310495   | 20.347  | ug/l   | 100      |
| 67) Ethyl Benzene              | 11.51 | 91   | 1396289  | 19.889  | ug/l   | 99       |
| 68) m/p-Xylenes                | 11.62 | 106  | 1113566  | 41.390  | ug/l   | 100      |
| 69) o-Xylene                   | 11.95 | 106  | 527730   | 20.488  | ug/l   | 98       |
| 70) Styrene                    | 11.97 | 104  | 853424   | 20.477  | ug/l   | 99       |
| 71) Bromoform                  | 12.13 | 173  | 216380   | 21.340  | ug/l # | 99       |
| 73) Isopropylbenzene           | 12.25 | 105  | 1395894  | 20.193  | ug/l   | 99       |
| 74) N-amyl acetate             | 12.07 | 43   | 411392   | 21.787  | ug/l   | 98       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.51 | 83   | 360072   | 24.365  | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 12.56 | 75   | 349089m  | 25.081  | ug/l   |          |
| 77) Bromobenzene               | 12.53 | 156  | 365445   | 19.441  | ug/l   | 98       |
| 78) n-propylbenzene            | 12.59 | 91   | 1614498  | 20.378  | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 12.68 | 91   | 983406   | 19.613  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 12.73 | 105  | 1194489  | 20.794  | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-buten | 12.30 | 75   | 79824    | 19.479  | ug/l   | 99       |
| 82) 4-Chlorotoluene            | 12.78 | 91   | 987999   | 19.597  | ug/l   | 100      |
| 83) tert-Butylbenzene          | 13.00 | 119  | 976538   | 19.789  | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 13.04 | 105  | 1213030  | 20.551  | ug/l   | 100      |
| 85) sec-Butylbenzene           | 13.17 | 105  | 1332704  | 20.384  | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 13.29 | 119  | 1163589  | 20.547  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 13.28 | 146  | 642212   | 19.835  | ug/l   | 98       |
| 88) 1,4-Dichlorobenzene        | 13.37 | 146  | 627395   | 19.799  | ug/l   | 100      |
| 89) n-Butylbenzene             | 13.62 | 91   | 899993   | 18.563  | ug/l   | 99       |
| 90) Hexachloroethane           | 13.88 | 117  | 123292   | 20.727  | ug/l   | 100      |
| 91) 1,2-Dichlorobenzene        | 13.66 | 146  | 645490   | 20.455  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.27 | 75   | 59218    | 24.025  | ug/l   | 99       |

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ALS Vial : 7 Sample Multiplier: 1

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Quant Title : SW846 8260  
QLast Update : Sat Jun 30 00:55:30 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.91 | 180  | 261382   | 17.964 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 15.01 | 225  | 197566   | 20.099 | ug/l  | 100      |
| 95) Naphthalene            | 15.14 | 128  | 540059   | 18.125 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 15.32 | 180  | 271875   | 18.962 | ug/l  | 98       |

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

