

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN102618\  
 Data File : VN052023.D  
 Acq On : 26 Oct 2018 13:00  
 Operator : MD\SY  
 Sample : VN1026WBSD01  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 6 Sample Multiplier: 28

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN1026WBSD01

Manual Integrations  
 APPROVED

MMDadoda  
 10/29/2018 3:46:33 PM

Quant Time: Oct 27 00:04:45 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N102318W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Oct 24 10:12:55 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.67  | 168  | 1211689  | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.59  | 114  | 1750478  | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.41 | 117  | 1605772  | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.34 | 152  | 777363   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.03   | 65  | 524431   | 48.60 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 97.20%  |      |
| 35) Dibromofluoromethane  | 7.59   | 113 | 563198   | 50.42 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 100.84% |      |
| 50) Toluene-d8            | 10.09  | 98  | 2036415  | 50.45 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 100.90% |      |
| 62) 4-Bromofluorobenzene  | 12.40  | 95  | 643835   | 46.41 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 92.82%  |      |

## Target Compounds

|                               |      |     |         |         |      | Qvalue |
|-------------------------------|------|-----|---------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 1.85 | 85  | 234776  | 30.533  | ug/l | 99     |
| 3) Chloromethane              | 2.06 | 50  | 160129  | 23.129  | ug/l | 99     |
| 4) Vinyl Chloride             | 2.19 | 62  | 195036  | 21.017  | ug/l | 99     |
| 5) Bromomethane               | 2.57 | 94  | 188315  | 21.194  | ug/l | 99     |
| 6) Chloroethane               | 2.71 | 64  | 137154  | 19.907  | ug/l | 99     |
| 7) Trichlorofluoromethane     | 3.02 | 101 | 349351  | 21.127  | ug/l | 96     |
| 8) Diethyl Ether              | 3.41 | 74  | 96905   | 19.711  | ug/l | 99     |
| 9) 1,1,2-Trichlorotrifluoroet | 3.76 | 101 | 206622  | 20.859  | ug/l | 96     |
| 10) Methyl Iodide             | 3.96 | 142 | 321535  | 21.940  | ug/l | 98     |
| 11) Tert butyl alcohol        | 4.78 | 59  | 39767   | 71.205  | ug/l | 98     |
| 12) 1,1-Dichloroethene        | 3.74 | 96  | 187699  | 21.159  | ug/l | 97     |
| 13) Acrolein                  | 3.61 | 56  | 26038   | 106.194 | ug/l | 96     |
| 14) Allyl chloride            | 4.33 | 41  | 183286  | 19.526  | ug/l | 97     |
| 15) Acrylonitrile             | 4.99 | 53  | 226916  | 96.249  | ug/l | 99     |
| 16) Acetone                   | 3.82 | 43  | 162856  | 91.596  | ug/l | 99     |
| 17) Carbon Disulfide          | 4.06 | 76  | 434385  | 20.600  | ug/l | 100    |
| 18) Methyl Acetate            | 4.33 | 43  | 94431   | 15.916  | ug/l | 99     |
| 19) Methyl tert-butyl Ether   | 5.05 | 73  | 474874  | 19.939  | ug/l | 95     |
| 20) Methylene Chloride        | 4.55 | 84  | 207104  | 19.856  | ug/l | 97     |
| 21) trans-1,2-Dichloroethene  | 5.05 | 96  | 209850  | 20.888  | ug/l | 95     |
| 22) Diisopropyl ether         | 5.95 | 45  | 436298  | 20.315  | ug/l | 99     |
| 23) Vinyl Acetate             | 5.90 | 43  | 1494446 | 102.293 | ug/l | 100    |
| 24) 1,1-Dichloroethane        | 5.85 | 63  | 319459  | 20.375  | ug/l | 98     |
| 25) 2-Butanone                | 6.84 | 43  | 241486  | 95.272  | ug/l | 99     |
| 26) 2,2-Dichloropropane       | 6.83 | 77  | 283720  | 19.778  | ug/l | 100    |
| 27) cis-1,2-Dichloroethene    | 6.83 | 96  | 241348  | 20.564  | ug/l | 98     |
| 28) Bromochloromethane        | 7.19 | 49  | 127111  | 20.115  | ug/l | 94     |
| 29) Tetrahydrofuran           | 7.21 | 42  | 155030  | 90.274  | ug/l | 98     |
| 30) Chloroform                | 7.37 | 83  | 386003  | 20.162  | ug/l | 99     |
| 31) Cyclohexane               | 7.66 | 56  | 276429  | 20.402  | ug/l | 97     |
| 32) 1,1,1-Trichloroethane     | 7.57 | 97  | 354215  | 20.233  | ug/l | 99     |
| 36) 1,1-Dichloropropene       | 7.80 | 75  | 270566  | 20.150  | ug/l | 99     |
| 37) Ethyl Acetate             | 6.93 | 43  | 116770  | 18.245  | ug/l | 97     |
| 38) Carbon Tetrachloride      | 7.77 | 117 | 310077  | 20.115  | ug/l | 99     |

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 Sample : VN1026WBSD01  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 6 Sample Multiplier: 28

Instrument :  
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 ClientSampleId :  
 VN1026WBSD01

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MMDadoda  
 10/29/2018 3:46:33 PM

Quant Time: Oct 27 00:04:45 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N102318W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Oct 24 10:12:55 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 9.08  | 83   | 332014   | 20.244  | ug/l   | 98       |
| 40) Benzene                    | 8.04  | 78   | 825815   | 20.713  | ug/l   | 99       |
| 41) Methacrylonitrile          | 7.18  | 41   | 65197    | 21.607  | ug/l   | 87       |
| 42) 1,2-Dichloroethane         | 8.13  | 62   | 255939   | 20.022  | ug/l   | 100      |
| 43) Isopropyl Acetate          | 8.17  | 43   | 217457   | 19.337  | ug/l # | 86       |
| 44) Trichloroethene            | 8.84  | 130  | 269874   | 21.089  | ug/l   | 92       |
| 45) 1,2-Dichloropropane        | 9.12  | 63   | 187668   | 20.809  | ug/l   | 99       |
| 46) Dibromomethane             | 9.21  | 93   | 144869   | 19.927  | ug/l   | 96       |
| 47) Bromodichloromethane       | 9.40  | 83   | 276040   | 20.104  | ug/l   | 99       |
| 48) Methyl methacrylate        | 9.20  | 41   | 102092   | 18.783  | ug/l   | 97       |
| 49) 1,4-Dioxane                | 9.20  | 88   | 28409    | 285.039 | ug/l   | 96       |
| 51) 4-Methyl-2-Pentanone       | 9.99  | 43   | 583113   | 94.268  | ug/l   | 100      |
| 52) Toluene                    | 10.16 | 92   | 562587   | 20.809  | ug/l   | 100      |
| 53) t-1,3-Dichloropropene      | 10.38 | 75   | 250931   | 18.694  | ug/l   | 98       |
| 54) cis-1,3-Dichloropropene    | 9.84  | 75   | 291451   | 20.309  | ug/l   | 99       |
| 55) 1,1,2-Trichloroethane      | 10.56 | 97   | 204054   | 20.428  | ug/l   | 98       |
| 56) Ethyl methacrylate         | 10.43 | 69   | 210188   | 19.575  | ug/l   | 98       |
| 57) 1,3-Dichloropropane        | 10.71 | 76   | 300817   | 19.837  | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether  | 9.70  | 63   | 546946   | 97.351  | ug/l   | 99       |
| 59) 2-Hexanone                 | 10.75 | 43   | 384163   | 92.433  | ug/l   | 100      |
| 60) Dibromochloromethane       | 10.90 | 129  | 223209   | 18.801  | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 11.01 | 107  | 211028   | 20.037  | ug/l   | 99       |
| 64) Tetrachloroethene          | 10.63 | 164  | 254641   | 20.661  | ug/l   | 98       |
| 65) Chlorobenzene              | 11.43 | 112  | 664174   | 20.486  | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.51 | 131  | 242704   | 20.827  | ug/l   | 100      |
| 67) Ethyl Benzene              | 11.51 | 91   | 1052745  | 20.201  | ug/l   | 99       |
| 68) m/p-Xylenes                | 11.62 | 106  | 858389   | 41.225  | ug/l   | 99       |
| 69) o-Xylene                   | 11.95 | 106  | 421642   | 20.822  | ug/l   | 97       |
| 70) Styrene                    | 11.96 | 104  | 660124   | 20.396  | ug/l   | 99       |
| 71) Bromoform                  | 12.13 | 173  | 135753   | 18.245  | ug/l # | 99       |
| 73) Isopropylbenzene           | 12.25 | 105  | 1099023  | 22.292  | ug/l   | 100      |
| 74) N-amyl acetate             | 12.07 | 43   | 182395   | 18.796  | ug/l   | 98       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.50 | 83   | 201598   | 19.790  | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 12.55 | 75   | 170662m  | 21.254  | ug/l   |          |
| 77) Bromobenzene               | 12.53 | 156  | 313009   | 23.005  | ug/l   | 94       |
| 78) n-propylbenzene            | 12.59 | 91   | 1156053  | 21.737  | ug/l   | 99       |
| 79) 2-Chlorotoluene            | 12.67 | 91   | 681526   | 22.006  | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene     | 12.73 | 105  | 873321   | 22.079  | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-buten | 12.30 | 75   | 43203    | 18.522  | ug/l   | 98       |
| 82) 4-Chlorotoluene            | 12.77 | 91   | 691427   | 21.563  | ug/l   | 100      |
| 83) tert-Butylbenzene          | 12.99 | 119  | 810089   | 21.654  | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 13.04 | 105  | 875561   | 21.460  | ug/l   | 99       |
| 85) sec-Butylbenzene           | 13.17 | 105  | 1037495  | 21.234  | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 13.29 | 119  | 930086   | 21.144  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 13.28 | 146  | 520328   | 20.735  | ug/l   | 100      |
| 88) 1,4-Dichlorobenzene        | 13.36 | 146  | 513132   | 20.741  | ug/l   | 99       |
| 89) n-Butylbenzene             | 13.61 | 91   | 683861   | 19.524  | ug/l   | 99       |
| 90) Hexachloroethane           | 13.87 | 117  | 135013   | 20.602  | ug/l   | 98       |
| 91) 1,2-Dichlorobenzene        | 13.65 | 146  | 488058   | 20.104  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.27 | 75   | 22390    | 14.315  | ug/l   | 97       |

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Sample : VN1026WBSD01  
Misc : 5.00mL/MSVOA N/WATER  
ALS Vial : 6 Sample Multiplier: 28

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN1026WBSD01

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10/29/2018 3:46:33 PM

Quant Time: Oct 27 00:04:45 2018  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N102318W.M  
Quant Title : SW846 8260  
QLast Update : Wed Oct 24 10:12:55 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.91 | 180  | 180408   | 12.581 | ug/l  | 97       |
| 94) Hexachlorobutadiene    | 15.01 | 225  | 116620   | 15.827 | ug/l  | 99       |
| 95) Naphthalene            | 15.13 | 128  | 331847   | 10.656 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 15.31 | 180  | 142288   | 10.381 | ug/l  | 99       |

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

