

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN040220\  
 Data File : VN060815.D  
 Acq On : 2 Apr 2020 11:49  
 Operator : JC/MD  
 Sample : VN0402WBS01  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0402WBS01

Manual Integrations  
 APPROVED

MMDadoda  
 4/3/2020 12:06:20 PM

Quant Time: Apr 03 08:19:02 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N031820W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Mar 18 08:49:09 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.64  | 168  | 192889   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.56  | 114  | 312477   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.40 | 117  | 284031   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.34 | 152  | 131294   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.00   | 65  | 129623   | 48.95 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 97.90%  |      |
| 35) Dibromofluoromethane  | 7.56   | 113 | 97086    | 51.38 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 102.76% |      |
| 50) Toluene-d8            | 10.08  | 98  | 384016   | 49.76 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 99.52%  |      |
| 62) 4-Bromofluorobenzene  | 12.39  | 95  | 137840   | 48.73 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 97.46%  |      |

## Target Compounds

|                               |      |     |        |         |      | Qvalue |
|-------------------------------|------|-----|--------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 1.83 | 85  | 33175  | 17.775  | ug/l | 99     |
| 3) Chloromethane              | 2.04 | 50  | 57601  | 16.525  | ug/l | 97     |
| 4) Vinyl Chloride             | 2.17 | 62  | 46597  | 17.091  | ug/l | 98     |
| 5) Bromomethane               | 2.55 | 94  | 23483  | 19.952  | ug/l | 97     |
| 6) Chloroethane               | 2.69 | 64  | 29385  | 18.710  | ug/l | 98     |
| 7) Trichlorofluoromethane     | 3.00 | 101 | 62893  | 18.726  | ug/l | 99     |
| 8) Diethyl Ether              | 3.38 | 74  | 26486  | 19.631  | ug/l | 99     |
| 9) 1,1,2-Trichlorotrifluoroet | 3.74 | 101 | 38170  | 19.614  | ug/l | 100    |
| 10) Methyl Iodide             | 3.93 | 142 | 33154  | 19.145  | ug/l | 99     |
| 11) Tert butyl alcohol        | 4.72 | 59  | 39320  | 100.969 | ug/l | 99     |
| 12) 1,1-Dichloroethene        | 3.72 | 96  | 38546  | 18.457  | ug/l | 97     |
| 13) Acrolein                  | 3.57 | 56  | 31394  | 72.739  | ug/l | 99     |
| 14) Allyl chloride            | 4.29 | 41  | 70876  | 19.296  | ug/l | 96     |
| 15) Acrylonitrile             | 4.94 | 53  | 109391 | 95.526  | ug/l | 100    |
| 16) Acetone                   | 3.78 | 43  | 104443 | 111.352 | ug/l | 99     |
| 17) Carbon Disulfide          | 4.03 | 76  | 107715 | 16.959  | ug/l | 99     |
| 18) Methyl Acetate            | 4.29 | 43  | 53021  | 20.083  | ug/l | 98     |
| 19) Methyl tert-butyl Ether   | 5.00 | 73  | 135635 | 18.890  | ug/l | 97     |
| 20) Methylene Chloride        | 4.52 | 84  | 42934  | 18.608  | ug/l | 99     |
| 21) trans-1,2-Dichloroethene  | 5.01 | 96  | 41307  | 18.559  | ug/l | 98     |
| 22) Diisopropyl ether         | 5.91 | 45  | 153626 | 19.797  | ug/l | 99     |
| 23) Vinyl Acetate             | 5.86 | 43  | 623505 | 98.477  | ug/l | 100    |
| 24) 1,1-Dichloroethane        | 5.82 | 63  | 82979  | 19.615  | ug/l | 99     |
| 25) 2-Butanone                | 6.80 | 43  | 149961 | 98.804  | ug/l | 98     |
| 26) 2,2-Dichloropropane       | 6.79 | 77  | 69869  | 20.992  | ug/l | 99     |
| 27) cis-1,2-Dichloroethene    | 6.80 | 96  | 48092  | 19.014  | ug/l | 98     |
| 28) Bromochloromethane        | 7.17 | 49  | 38960  | 19.249  | ug/l | 99     |
| 29) Tetrahydrofuran           | 7.18 | 42  | 100566 | 93.647  | ug/l | 98     |
| 30) Chloroform                | 7.34 | 83  | 78077  | 19.252  | ug/l | 97     |
| 31) Cyclohexane               | 7.63 | 56  | 79231  | 18.578  | ug/l | 98     |
| 32) 1,1,1-Trichloroethane     | 7.54 | 97  | 66232  | 18.945  | ug/l | 99     |
| 36) 1,1-Dichloropropene       | 7.77 | 75  | 60073  | 19.854  | ug/l | 99     |
| 37) Ethyl Acetate             | 6.89 | 43  | 62532  | 19.127  | ug/l | 99     |
| 38) Carbon Tetrachloride      | 7.75 | 117 | 52728  | 19.444  | ug/l | 100    |

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 Operator : JC/MD  
 Sample : VN0402WBS01  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleID :  
 VN0402WBS01

Manual Integrations  
 APPROVED

MMDadoda  
 4/3/2020 12:06:20 PM

Quant Time: Apr 03 08:19:02 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N031820W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Mar 18 08:49:09 2020  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 9.06  | 83   | 71846    | 19.981  | ug/l   | 97       |
| 40) Benzene                    | 8.02  | 78   | 179246   | 19.624  | ug/l   | 100      |
| 41) Methacrylonitrile          | 7.13  | 41   | 27003    | 19.353  | ug/l # | 100      |
| 42) 1,2-Dichloroethane         | 8.10  | 62   | 62281    | 19.952  | ug/l   | 99       |
| 43) Isopropyl Acetate          | 8.14  | 43   | 105399   | 19.548  | ug/l   | 100      |
| 44) Trichloroethene            | 8.81  | 130  | 45273    | 19.662  | ug/l   | 99       |
| 45) 1,2-Dichloropropane        | 9.10  | 63   | 49828    | 20.674  | ug/l   | 99       |
| 46) Dibromomethane             | 9.19  | 93   | 29074    | 19.953  | ug/l   | 100      |
| 47) Bromodichloromethane       | 9.38  | 83   | 60743    | 20.061  | ug/l   | 98       |
| 48) Methyl methacrylate        | 9.18  | 41   | 45201    | 18.829  | ug/l   | 99       |
| 49) 1,4-Dioxane                | 9.18  | 88   | 13794    | 483.424 | ug/l   | 97       |
| 51) 4-Methyl-2-Pentanone       | 9.97  | 43   | 302307   | 98.529  | ug/l   | 99       |
| 52) Toluene                    | 10.14 | 92   | 108273   | 19.628  | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 10.37 | 75   | 70257    | 20.200  | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene    | 9.82  | 75   | 76805    | 20.129  | ug/l   | 99       |
| 55) 1,1,2-Trichloroethane      | 10.55 | 97   | 42072    | 19.825  | ug/l   | 98       |
| 56) Ethyl methacrylate         | 10.42 | 69   | 62784    | 18.974  | ug/l   | 98       |
| 57) 1,3-Dichloropropane        | 10.70 | 76   | 73538    | 19.969  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 9.68  | 63   | 130513   | 79.358  | ug/l   | 99       |
| 59) 2-Hexanone                 | 10.74 | 43   | 215368   | 97.443  | ug/l   | 100      |
| 60) Dibromochloromethane       | 10.89 | 129  | 42396    | 19.340  | ug/l   | 98       |
| 61) 1,2-Dibromoethane          | 10.99 | 107  | 42236    | 19.792  | ug/l   | 100      |
| 64) Tetrachloroethene          | 10.62 | 164  | 43352    | 19.396  | ug/l   | 98       |
| 65) Chlorobenzene              | 11.43 | 112  | 109238   | 19.401  | ug/l   | 100      |
| 66) 1,1,1,2-Tetrachloroethane  | 11.50 | 131  | 40691    | 19.960  | ug/l   | 98       |
| 67) Ethyl Benzene              | 11.50 | 91   | 205905   | 19.664  | ug/l   | 99       |
| 68) m/p-Xylenes                | 11.61 | 106  | 152869   | 39.287  | ug/l   | 99       |
| 69) o-Xylene                   | 11.94 | 106  | 72671    | 19.564  | ug/l   | 99       |
| 70) Styrene                    | 11.96 | 104  | 114854   | 18.906  | ug/l   | 99       |
| 71) Bromoform                  | 12.12 | 173  | 30006    | 18.794  | ug/l # | 99       |
| 73) Isopropylbenzene           | 12.24 | 105  | 197070   | 20.001  | ug/l   | 99       |
| 74) N-amyl acetate             | 12.06 | 43   | 87199    | 19.152  | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.50 | 83   | 58972    | 19.792  | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 12.55 | 75   | 53971m   | 19.050  | ug/l   |          |
| 77) Bromobenzene               | 12.52 | 156  | 45964    | 19.359  | ug/l   | 99       |
| 78) n-propylbenzene            | 12.59 | 91   | 230747   | 19.822  | ug/l   | 98       |
| 79) 2-Chlorotoluene            | 12.67 | 91   | 134845   | 19.387  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 12.73 | 105  | 165750   | 19.823  | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-buten | 12.29 | 75   | 21125    | 19.151  | ug/l   | 98       |
| 82) 4-Chlorotoluene            | 12.77 | 91   | 140095   | 19.776  | ug/l   | 99       |
| 83) tert-Butylbenzene          | 12.99 | 119  | 138887   | 20.037  | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 13.04 | 105  | 165579   | 20.016  | ug/l   | 99       |
| 85) sec-Butylbenzene           | 13.17 | 105  | 190191   | 20.405  | ug/l   | 99       |
| 86) p-Isopropyltoluene         | 13.28 | 119  | 169205   | 20.188  | ug/l   | 100      |
| 87) 1,3-Dichlorobenzene        | 13.28 | 146  | 83083    | 19.841  | ug/l   | 98       |
| 88) 1,4-Dichlorobenzene        | 13.36 | 146  | 82721    | 19.662  | ug/l   | 99       |
| 89) n-Butylbenzene             | 13.61 | 91   | 154093   | 20.363  | ug/l   | 100      |
| 90) Hexachloroethane           | 13.87 | 117  | 25305    | 20.770  | ug/l   | 98       |
| 91) 1,2-Dichlorobenzene        | 13.65 | 146  | 80531    | 20.112  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.26 | 75   | 11294    | 17.925  | ug/l   | 93       |

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Sample : VN0402WBS01  
Misc : 5.00mL/MSVOA N/WATER  
ALS Vial : 4 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0402WBS01

Manual Integrations  
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MMDadoda  
4/3/2020 12:06:20 PM

Quant Time: Apr 03 08:19:02 2020  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N031820W.M  
Quant Title : SW846 8260  
QLast Update : Wed Mar 18 08:49:09 2020  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.91 | 180  | 48228    | 19.614 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 15.01 | 225  | 25560    | 21.205 | ug/l  | 100      |
| 95) Naphthalene            | 15.13 | 128  | 134860   | 18.235 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 15.31 | 180  | 46219    | 19.084 | ug/l  | 99       |

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

