

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN050919\  
 Data File : VN055489.D  
 Acq On : 9 May 2019 11:53  
 Operator : JC/SP  
 Sample : K2241-07  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 LOD-MDL-WATER-01-QT2-2019

Manual Integrations  
 APPROVED

MMDadoda  
 5/10/2019 12:43:29 PM

Quant Time: May 10 12:39:18 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N050819W.M  
 Quant Title : SW846 8260  
 QLast Update : Fri May 10 06:38:13 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.67  | 168  | 677084   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.59  | 114  | 1209792  | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.41 | 117  | 1015690  | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.34 | 152  | 286466   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.03   | 65  | 527723   | 51.76 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 103.52% |      |
| 35) Dibromofluoromethane  | 7.59   | 113 | 394970   | 50.61 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 101.22% |      |
| 50) Toluene-d8            | 10.09  | 98  | 1465622  | 48.19 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 96.38%  |      |
| 62) 4-Bromofluorobenzene  | 12.40  | 95  | 435595   | 42.48 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 84.96%  |      |

## Target Compounds

|                               |      |     |        |       | Qvalue |     |
|-------------------------------|------|-----|--------|-------|--------|-----|
| 2) Dichlorodifluoromethane    | 1.85 | 85  | 6538   | 0.948 | ug/l   | 100 |
| 3) Chloromethane              | 2.06 | 50  | 10750  | 0.960 | ug/l   | 99  |
| 4) Vinyl Chloride             | 2.19 | 62  | 8971   | 0.849 | ug/l   | 89  |
| 6) Chloroethane               | 2.70 | 64  | 6279   | 1.020 | ug/l   | 99  |
| 7) Trichlorofluoromethane     | 3.02 | 101 | 10814  | 0.932 | ug/l   | 93  |
| 8) Diethyl Ether              | 3.42 | 74  | 4876   | 0.936 | ug/l   | 92  |
| 9) 1,1,2-Trichlorotrifluoroet | 3.75 | 101 | 6810   | 0.923 | ug/l # | 89  |
| 12) 1,1-Dichloroethene        | 3.73 | 96  | 6949   | 0.939 | ug/l   | 89  |
| 14) Allyl chloride            | 4.32 | 41  | 13409  | 0.885 | ug/l   | 94  |
| 15) Acrylonitrile             | 5.00 | 53  | 17910  | 3.843 | ug/l   | 99  |
| 16) Acetone                   | 3.83 | 43  | 20636  | 4.372 | ug/l   | 92  |
| 17) Carbon Disulfide          | 4.05 | 76  | 18370  | 0.910 | ug/l   | 96  |
| 18) Methyl Acetate            | 4.33 | 43  | 16069m | 1.376 | ug/l   |     |
| 19) Methyl tert-butyl Ether   | 5.05 | 73  | 20202  | 0.822 | ug/l   | 95  |
| 20) Methylene Chloride        | 4.55 | 84  | 8707   | 0.902 | ug/l   | 92  |
| 21) trans-1,2-Dichloroethene  | 5.04 | 96  | 6589   | 0.821 | ug/l   | 96  |
| 22) Diisopropyl ether         | 5.96 | 45  | 25012  | 0.812 | ug/l # | 71  |
| 23) Vinyl Acetate             | 5.91 | 43  | 89495  | 3.757 | ug/l   | 100 |
| 24) 1,1-Dichloroethane        | 5.84 | 63  | 14472m | 0.870 | ug/l   |     |
| 25) 2-Butanone                | 6.85 | 43  | 21803  | 3.344 | ug/l   | 94  |
| 26) 2,2-Dichloropropane       | 6.82 | 77  | 9212   | 0.889 | ug/l   | 89  |
| 27) cis-1,2-Dichloroethene    | 6.83 | 96  | 7994   | 0.862 | ug/l   | 84  |
| 28) Bromochloromethane        | 7.20 | 49  | 7238   | 0.838 | ug/l # | 94  |
| 29) Tetrahydrofuran           | 7.22 | 42  | 18461  | 4.283 | ug/l   | 95  |
| 30) Chloroform                | 7.37 | 83  | 13626  | 0.886 | ug/l   | 95  |
| 32) 1,1,1-Trichloroethane     | 7.57 | 97  | 11050  | 0.944 | ug/l # | 50  |
| 36) 1,1-Dichloropropene       | 7.79 | 75  | 10635  | 0.892 | ug/l   | 95  |
| 37) Ethyl Acetate             | 6.95 | 43  | 10508m | 0.808 | ug/l   |     |
| 38) Carbon Tetrachloride      | 7.77 | 117 | 10104  | 1.007 | ug/l # | 80  |
| 39) Methylcyclohexane         | 9.07 | 83  | 11572  | 0.796 | ug/l   | 96  |
| 40) Benzene                   | 8.04 | 78  | 30153  | 0.815 | ug/l   | 95  |
| 41) Methacrylonitrile         | 7.18 | 41  | 4313   | 0.715 | ug/l # | 82  |
| 42) 1,2-Dichloroethane        | 8.13 | 62  | 12058  | 0.928 | ug/l   | 97  |
| 43) Isopropyl Acetate         | 8.17 | 43  | 15377  | 0.779 | ug/l   | 95  |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN050919\  
 Data File : VN055489.D  
 Acq On : 9 May 2019 11:53  
 Operator : JC/SP  
 Sample : K2241-07  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 LOD-MDL-WATER-01-QT2-2019

Manual Integrations  
 APPROVED

MMDadoda  
 5/10/2019 12:43:29 PM

Quant Time: May 10 12:39:18 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N050819W.M  
 Quant Title : SW846 8260  
 QLast Update : Fri May 10 06:38:13 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|--------|--------|----------|
| 44) Trichloroethene            | 8.83  | 130  | 7928     | 0.901  | ug/l   | 77       |
| 45) 1,2-Dichloropropane        | 9.12  | 63   | 8499     | 0.803  | ug/l   | 96       |
| 46) Dibromomethane             | 9.21  | 93   | 4994     | 0.814  | ug/l   | 97       |
| 47) Bromodichloromethane       | 9.40  | 83   | 9568     | 0.815  | ug/l   | 93       |
| 48) Methyl methacrylate        | 9.21  | 41   | 8126     | 0.854  | ug/l   | 89       |
| 49) 1,4-Dioxane                | 9.20  | 88   | 2345     | 12.643 | ug/l # | 79       |
| 51) 4-Methyl-2-Pentanone       | 9.99  | 43   | 45020    | 3.466  | ug/l   | 98       |
| 52) Toluene                    | 10.16 | 92   | 17528    | 0.829  | ug/l   | 94       |
| 53) t-1,3-Dichloropropene      | 10.38 | 75   | 8646     | 0.767  | ug/l   | 96       |
| 54) cis-1,3-Dichloropropene    | 9.84  | 75   | 10013    | 0.743  | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane      | 10.56 | 97   | 7012     | 0.818  | ug/l   | 91       |
| 56) Ethyl methacrylate         | 10.43 | 69   | 8566     | 0.672  | ug/l # | 84       |
| 57) 1,3-Dichloropropane        | 10.71 | 76   | 11887    | 0.781  | ug/l   | 95       |
| 59) 2-Hexanone                 | 10.75 | 43   | 30614    | 3.360  | ug/l   | 96       |
| 60) Dibromochloromethane       | 10.90 | 129  | 6280     | 0.806  | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 11.01 | 107  | 6023     | 0.732  | ug/l   | 93       |
| 64) Tetrachloroethene          | 10.63 | 164  | 6541     | 0.786  | ug/l # | 88       |
| 65) Chlorobenzene              | 11.43 | 112  | 17137    | 0.820  | ug/l   | 98       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.51 | 131  | 5724     | 0.796  | ug/l # | 56       |
| 67) Ethyl Benzene              | 11.51 | 91   | 29769    | 0.759  | ug/l   | 99       |
| 68) m/p-Xylenes                | 11.62 | 106  | 20621    | 1.464  | ug/l   | 96       |
| 69) o-Xylene                   | 11.95 | 106  | 9739     | 0.704  | ug/l   | 98       |
| 70) Styrene                    | 11.96 | 104  | 14913    | 0.672  | ug/l   | 96       |
| 71) Bromoform                  | 12.13 | 173  | 3416     | 0.704  | ug/l # | 100      |
| 73) Isopropylbenzene           | 12.25 | 105  | 27045    | 0.963  | ug/l   | 98       |
| 74) N-amyl acetate             | 12.07 | 43   | 7943     | 0.730  | ug/l # | 95       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.50 | 83   | 9527     | 1.037  | ug/l   | 97       |
| 76) 1,2,3-Trichloropropane     | 12.55 | 75   | 9771m    | 1.253  | ug/l   |          |
| 77) Bromobenzene               | 12.53 | 156  | 6754     | 1.070  | ug/l   | 96       |
| 78) n-propylbenzene            | 12.59 | 91   | 27297    | 0.888  | ug/l   | 98       |
| 79) 2-Chlorotoluene            | 12.67 | 91   | 19270    | 1.006  | ug/l   | 98       |
| 80) 1,3,5-Trimethylbenzene     | 12.73 | 105  | 21056    | 0.919  | ug/l   | 97       |
| 81) trans-1,4-Dichloro-2-buten | 12.30 | 75   | 2478m    | 1.172  | ug/l   |          |
| 82) 4-Chlorotoluene            | 12.77 | 91   | 15566    | 0.860  | ug/l   | 96       |
| 83) tert-Butylbenzene          | 12.99 | 119  | 18027    | 0.918  | ug/l   | 96       |
| 84) 1,2,4-Trimethylbenzene     | 13.04 | 105  | 17360    | 0.826  | ug/l   | 95       |
| 85) sec-Butylbenzene           | 13.17 | 105  | 22779    | 0.873  | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 13.29 | 119  | 16518    | 0.778  | ug/l   | 98       |
| 87) 1,3-Dichlorobenzene        | 13.28 | 146  | 8372     | 0.858  | ug/l   | 98       |
| 88) 1,4-Dichlorobenzene        | 13.36 | 146  | 8238m    | 0.856  | ug/l   |          |
| 89) n-Butylbenzene             | 13.61 | 91   | 11640    | 0.707  | ug/l   | 97       |
| 90) Hexachloroethane           | 13.88 | 117  | 3661     | 1.057  | ug/l   | 100      |
| 91) 1,2-Dichlorobenzene        | 13.65 | 146  | 7812     | 0.801  | ug/l   | 93       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.27 | 75   | 1218     | 0.925  | ug/l   | 76       |
| 93) 1,2,4-Trichlorobenzene     | 14.91 | 180  | 2930     | 0.880  | ug/l   | 97       |
| 94) Hexachlorobutadiene        | 15.01 | 225  | 3450     | 0.984  | ug/l   | 94       |
| 95) Naphthalene                | 15.14 | 128  | 7485     | 0.758  | ug/l   | 97       |
| 96) 1,2,3-Trichlorobenzene     | 15.31 | 180  | 2957     | 0.752  | ug/l   | 96       |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN050919\  
Data File : VN055489.D  
Acq On : 9 May 2019 11:53  
Operator : JC/SP  
Sample : K2241-07  
Misc : 5.00mL/MSVOA N/WATER  
ALS Vial : 6 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
LOD-MDL-WATER-01-QT2-2019

Manual Integrations  
APPROVED

MMDadoda  
5/10/2019 12:43:29 PM

Quant Time: May 10 12:39:18 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N050819W.M  
Quant Title : SW846 8260  
QLast Update : Fri May 10 06:38:13 2019  
Response via : Initial Calibration

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|--------------------|------|------|----------|------|-------|----------|
|--------------------|------|------|----------|------|-------|----------|

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

