

Data Path : W:\HPCHEM1\MSVOA X\DATA\VX041318\  
 Data File : VX000844.D  
 Acq On : 13 Apr 2018 13:01  
 Operator : JC/MD  
 Sample : J2133-07 LOD-MDL 0.2PPB  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 LOD-MDL-WATER-01-QT2-2018

Manual Integrations  
 APPROVED

MMDadoda  
 4/16/2018 12:59:56 PM

Quant Time: Apr 14 10:38:49 2018  
 Quant Method : W:\HPCHEM1\MSVOA\_X\METHOD\82X041018W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Apr 10 15:49:28 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.67  | 168  | 267514   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.87  | 114  | 352116   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.12 | 117  | 329668   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.09 | 152  | 221876   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|-----------------------------|-------|------|----------|-------|--------|----------|
| 33) 1,2-Dichloroethane-d4   | 6.07  | 65   | 154113   | 45.69 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 91.38% |          |
| 35) Dibromofluoromethane    | 5.51  | 113  | 127088   | 46.85 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 93.70% |          |
| 50) Toluene-d8              | 8.72  | 98   | 472281   | 46.76 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 93.52% |          |
| 62) 4-Bromofluorobenzene    | 11.15 | 95   | 189045   | 45.24 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 90.48% |          |

| Target Compounds              | R.T. | QIon | Response | Conc      | Units  | Qvalue |
|-------------------------------|------|------|----------|-----------|--------|--------|
| 2) Dichlorodifluoromethane    | 1.20 | 85   | 639      | 0.21      | ug/l   | 97     |
| 3) Chloromethane              | 1.32 | 50   | 722      | 0.28      | ug/l   | 94     |
| 4) Vinyl Chloride             | 1.40 | 62   | 655      | 0.22      | ug/l   | 97     |
| 5) Bromomethane               | 1.65 | 94   | 690      | Below Cal |        | 87     |
| 7) Trichlorofluoromethane     | 1.94 | 101  | 879      | 0.20      | ug/l   | 89     |
| 8) Diethyl Ether              | 2.20 | 74   | 398m     | 0.24      | ug/l   |        |
| 9) 1,1,2-Trichlorotrifluoroet | 2.39 | 101  | 600      | 0.23      | ug/l # | 89     |
| 12) 1,1-Dichloroethene        | 2.37 | 96   | 639      | 0.26      | ug/l   | 84     |
| 14) Allyl chloride            | 2.73 | 41   | 1327     | 0.29      | ug/l   | 91     |
| 15) Acrylonitrile             | 3.14 | 53   | 2153     | 1.69      | ug/l   | 88     |
| 16) Acetone                   | 2.45 | 43   | 1705     | 1.47      | ug/l   | 96     |
| 17) Carbon Disulfide          | 2.57 | 76   | 2506     | 0.34      | ug/l   | 96     |
| 18) Methyl Acetate            | 2.78 | 43   | 1156     | 0.38      | ug/l   | 92     |
| 19) Methyl tert-butyl Ether   | 3.21 | 73   | 1818     | 0.22      | ug/l # | 85     |
| 20) Methylene Chloride        | 2.86 | 84   | 1138     | 0.42      | ug/l   | 98     |
| 21) trans-1,2-Dichloroethene  | 3.17 | 96   | 864      | 0.32      | ug/l # | 75     |
| 22) Diisopropyl ether         | 3.89 | 45   | 1850     | 0.22      | ug/l # | 49     |
| 23) Vinyl Acetate             | 3.83 | 43   | 7423     | 1.01      | ug/l   | 99     |
| 24) 1,1-Dichloroethane        | 3.70 | 63   | 1300     | 0.28      | ug/l # | 64     |
| 25) 2-Butanone                | 4.71 | 43   | 2493     | 1.30      | ug/l   | 93     |
| 26) 2,2-Dichloropropane       | 4.57 | 77   | 1144m    | 0.25      | ug/l   |        |
| 27) cis-1,2-Dichloroethene    | 4.60 | 96   | 831      | 0.27      | ug/l   | 90     |
| 28) Bromochloromethane        | 5.02 | 49   | 430      | 0.23      | ug/l # | 86     |
| 29) Tetrahydrofuran           | 5.17 | 42   | 2101     | 1.72      | ug/l # | 86     |
| 30) Chloroform                | 5.22 | 83   | 1207     | 0.24      | ug/l # | 78     |
| 31) Cyclohexane               | 5.58 | 56   | 1279     | 0.29      | ug/l   | 90     |
| 32) 1,1,1-Trichloroethane     | 5.51 | 97   | 992      | 0.21      | ug/l # | 50     |
| 36) 1,1-Dichloropropene       | 5.81 | 75   | 1202     | 0.31      | ug/l   | 93     |
| 37) Ethyl Acetate             | 4.87 | 43   | 947      | 0.25      | ug/l # | 92     |
| 38) Carbon Tetrachloride      | 5.79 | 117  | 1217     | 0.28      | ug/l # | 64     |
| 39) Methylcyclohexane         | 7.46 | 83   | 999      | 0.21      | ug/l # | 90     |
| 40) Benzene                   | 6.15 | 78   | 2578     | 0.24      | ug/l   | 90     |
| 42) 1,2-Dichloroethane        | 6.21 | 62   | 1010     | 0.25      | ug/l # | 74     |
| 43) Isopropyl Acetate         | 6.47 | 43   | 1476     | 0.23      | ug/l # | 84     |

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MMDadoda  
 4/16/2018 12:59:56 PM

Quant Time: Apr 14 10:38:49 2018  
 Quant Method : W:\HPCHEM1\MSVOA\_X\METHOD\82X041018W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Apr 10 15:49:28 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|------|--------|----------|
| -----                          |       |      |          |      |        |          |
| 45) 1,2-Dichloropropane        | 7.52  | 63   | 610      | 0.22 | ug/l # | 39       |
| 46) Dibromomethane             | 7.67  | 93   | 482      | 0.25 | ug/l   | 91       |
| 47) Bromodichloromethane       | 7.91  | 83   | 808      | 0.21 | ug/l # | 91       |
| 48) Methyl methacrylate        | 7.78  | 41   | 693      | 0.21 | ug/l # | 76       |
| 49) 1,4-Dioxane                | 7.77  | 88   | 227      | 3.36 | ug/l # | 88       |
| 51) 4-Methyl-2-Pentanone       | 8.66  | 43   | 3828     | 1.00 | ug/l   | 100      |
| 52) Toluene                    | 8.79  | 92   | 1470     | 0.21 | ug/l   | 89       |
| 54) cis-1,3-Dichloropropene    | 9.05  | 75   | 906      | 0.20 | ug/l   | 97       |
| 55) 1,1,2-Trichloroethane      | 9.23  | 97   | 626      | 0.22 | ug/l # | 83       |
| 56) Ethyl methacrylate         | 9.20  | 69   | 949      | 0.22 | ug/l   | 95       |
| 57) 1,3-Dichloropropane        | 9.38  | 76   | 991      | 0.22 | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether  | 8.32  | 63   | 1929     | 0.94 | ug/l   | 98       |
| 59) 2-Hexanone                 | 9.51  | 43   | 3272     | 1.11 | ug/l   | 91       |
| 61) 1,2-Dibromoethane          | 9.68  | 107  | 608      | 0.20 | ug/l   | 99       |
| 64) Tetrachloroethene          | 9.34  | 164  | 743      | 0.23 | ug/l   | 90       |
| 65) Chlorobenzene              | 10.15 | 112  | 1804     | 0.22 | ug/l   | 91       |
| 67) Ethyl Benzene              | 10.26 | 91   | 3031     | 0.22 | ug/l # | 87       |
| 68) m/p-Xylenes                | 10.37 | 106  | 2395     | 0.44 | ug/l   | 98       |
| 69) o-Xylene                   | 10.70 | 106  | 1089     | 0.21 | ug/l   | 97       |
| 70) Styrene                    | 10.72 | 104  | 1910     | 0.22 | ug/l   | 96       |
| 73) Isopropylbenzene           | 11.02 | 105  | 3017     | 0.21 | ug/l   | 100      |
| 74) N-amyl acetate             | 6.47  | 43   | 1476     | 0.23 | ug/l # | 84       |
| 75) 1,1,2,2-Tetrachloroethane  | 11.27 | 83   | 915      | 0.22 | ug/l   | 89       |
| 76) 1,2,3-Trichloropropane     | 11.30 | 75   | 823m     | 0.22 | ug/l   |          |
| 77) Bromobenzene               | 11.26 | 156  | 890      | 0.22 | ug/l   | 95       |
| 78) n-propylbenzene            | 11.37 | 91   | 3474     | 0.22 | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 11.43 | 91   | 2075     | 0.22 | ug/l   | 99       |
| 82) 4-Chlorotoluene            | 11.52 | 91   | 2666     | 0.23 | ug/l   | 98       |
| 83) tert-Butylbenzene          | 11.77 | 119  | 2494     | 0.20 | ug/l   | 92       |
| 84) 1,2,4-Trimethylbenzene     | 11.82 | 105  | 2585     | 0.21 | ug/l   | 95       |
| 85) sec-Butylbenzene           | 11.95 | 105  | 3113     | 0.21 | ug/l   | 96       |
| 86) p-Isopropyltoluene         | 12.07 | 119  | 2968     | 0.22 | ug/l # | 73       |
| 87) 1,3-Dichlorobenzene        | 12.03 | 146  | 1881     | 0.25 | ug/l   | 92       |
| 88) 1,4-Dichlorobenzene        | 12.10 | 146  | 2157m    | 0.28 | ug/l   |          |
| 89) n-Butylbenzene             | 12.40 | 91   | 2854     | 0.24 | ug/l   | 95       |
| 91) 1,2-Dichlorobenzene        | 12.40 | 146  | 1596     | 0.22 | ug/l   | 96       |
| 92) 1,2-Dibromo-3-Chloropropan | 13.01 | 75   | 205      | 0.20 | ug/l   | 65       |
| 93) 1,2,4-Trichlorobenzene     | 13.65 | 180  | 1771     | 0.28 | ug/l   | 99       |
| 94) Hexachlorobutadiene        | 13.79 | 225  | 723      | 0.23 | ug/l   | 83       |
| 95) Naphthalene                | 13.84 | 128  | 3937     | 0.24 | ug/l   | 98       |
| 96) 1,2,3-Trichlorobenzene     | 14.03 | 180  | 1540     | 0.25 | ug/l   | 98       |
| -----                          |       |      |          |      |        |          |

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

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MSVOA\_X  
**ClientSampleId :**  
LOD-MDL-WATER-01-QT2-2018

## Manual Integrations APPROVED

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4/16/2018 12:59:56 PM

Quant Time: Apr 14 10:38:49 2018  
Quant Method : W:\HPCHEM1\MSVOA\_X\METHOD\82X041018W.M  
Quant Title : SW846 8260  
QLast Update : Tue Apr 10 15:49:28 2018  
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