

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN071519\  
 Data File : VN056697.D  
 Acq On : 15 Jul 2019 8:49  
 Operator : JC/SP  
 Sample : VSTDIC001  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDIC001

Manual Integrations  
 APPROVED

MMDadoda  
 7/17/2019 1:31:13 AM

Quant Time: Jul 16 01:27:06 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N071519W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Jul 16 01:03:16 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.66  | 168  | 343381   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.58  | 114  | 536385   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.41 | 117  | 445559   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.34 | 152  | 148097   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |      |       |  |
|---------------------------|--------|-----|----------|------|-------|--|
| 33) 1,2-Dichloroethane-d4 | 0.00   | 65  | 0d       | 0.00 | ug/l  |  |
| Spiked Amount             | 50.000 |     | Recovery | =    | 0.00% |  |
| 35) Dibromofluoromethane  | 0.00   | 113 | 0d       | 0.00 | ug/l  |  |
| Spiked Amount             | 50.000 |     | Recovery | =    | 0.00% |  |
| 50) Toluene-d8            | 0.00   | 98  | 0d       | 0.00 | ug/l  |  |
| Spiked Amount             | 50.000 |     | Recovery | =    | 0.00% |  |
| 62) 4-Bromofluorobenzene  | 0.00   | 95  | 0d       | 0.00 | ug/l  |  |
| Spiked Amount             | 50.000 |     | Recovery | =    | 0.00% |  |

## Target Compounds

|                               |      |     |       |              | Qvalue |
|-------------------------------|------|-----|-------|--------------|--------|
| 2) Dichlorodifluoromethane    | 1.85 | 85  | 3701  | 1.267 ug/l   | 99     |
| 3) Chloromethane              | 2.06 | 50  | 5169  | 1.295 ug/l   | 96     |
| 4) Vinyl Chloride             | 2.18 | 62  | 4775  | 1.240 ug/l   | 90     |
| 6) Chloroethane               | 2.70 | 64  | 2960  | 1.332 ug/l   | 97     |
| 7) Trichlorofluoromethane     | 3.01 | 101 | 6202  | 1.246 ug/l   | 98     |
| 8) Diethyl Ether              | 3.41 | 74  | 2180  | 1.040 ug/l   | 98     |
| 9) 1,1,2-Trichlorotrifluoroet | 3.76 | 101 | 3636  | 1.151 ug/l # | 67     |
| 12) 1,1-Dichloroethene        | 3.73 | 96  | 3582  | 1.177 ug/l   | 86     |
| 14) Allyl chloride            | 4.32 | 41  | 5983  | 1.171 ug/l   | 96     |
| 15) Acrylonitrile             | 5.00 | 53  | 9088  | 5.102 ug/l   | 94     |
| 16) Acetone                   | 3.82 | 43  | 9859  | 5.251 ug/l   | 99     |
| 17) Carbon Disulfide          | 4.05 | 76  | 9396  | 1.323 ug/l # | 94     |
| 18) Methyl Acetate            | 4.34 | 43  | 7218  | 1.500 ug/l # | 73     |
| 19) Methyl tert-butyl Ether   | 5.05 | 73  | 11368 | 1.131 ug/l   | 97     |
| 20) Methylene Chloride        | 4.55 | 84  | 4504  | 1.148 ug/l   | 94     |
| 21) trans-1,2-Dichloroethene  | 5.05 | 96  | 3582m | 1.090 ug/l   |        |
| 22) Diisopropyl ether         | 5.95 | 45  | 11234 | 1.052 ug/l # | 80     |
| 23) Vinyl Acetate             | 5.90 | 43  | 42202 | 5.009 ug/l   | 99     |
| 24) 1,1-Dichloroethane        | 5.85 | 63  | 6964  | 1.138 ug/l # | 83     |
| 25) 2-Butanone                | 6.84 | 43  | 12971 | 5.149 ug/l   | 97     |
| 26) 2,2-Dichloropropane       | 6.82 | 77  | 4759  | 1.108 ug/l   | 90     |
| 27) cis-1,2-Dichloroethene    | 6.83 | 96  | 3967  | 1.035 ug/l   | 57     |
| 28) Bromochloromethane        | 7.19 | 49  | 3003  | 1.000 ug/l # | 99     |
| 29) Tetrahydrofuran           | 7.21 | 42  | 8536  | 5.464 ug/l   | 97     |
| 30) Chloroform                | 7.37 | 83  | 7571  | 1.256 ug/l   | 97     |
| 32) 1,1,1-Trichloroethane     | 7.57 | 97  | 5186  | 1.082 ug/l # | 50     |
| 36) 1,1-Dichloropropene       | 7.79 | 75  | 5653  | 1.190 ug/l   | 89     |
| 37) Ethyl Acetate             | 6.93 | 43  | 5280m | 1.130 ug/l   |        |
| 38) Carbon Tetrachloride      | 7.77 | 117 | 5290  | 1.257 ug/l   | 87     |
| 39) Methylcyclohexane         | 9.08 | 83  | 6639  | 1.129 ug/l   | 92     |
| 40) Benzene                   | 8.04 | 78  | 16606 | 1.136 ug/l   | 100    |
| 41) Methacrylonitrile         | 7.17 | 41  | 1876  | 0.918 ug/l # | 100    |
| 42) 1,2-Dichloroethane        | 8.13 | 62  | 5129  | 1.068 ug/l   | 86     |
| 43) Isopropyl Acetate         | 8.16 | 43  | 7253  | 1.002 ug/l # | 94     |

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 QLast Update : Tue Jul 16 01:03:16 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|--------|--------|----------|
| 44) Trichloroethene            | 8.83  | 130  | 4767     | 1.215  | ug/l   | 93       |
| 45) 1,2-Dichloropropane        | 9.12  | 63   | 4369     | 1.118  | ug/l   | 98       |
| 46) Dibromomethane             | 9.21  | 93   | 2570     | 1.052  | ug/l   | 98       |
| 47) Bromodichloromethane       | 9.40  | 83   | 4963     | 1.136  | ug/l   | 95       |
| 48) Methyl methacrylate        | 9.20  | 41   | 3494     | 0.962  | ug/l   | 97       |
| 49) 1,4-Dioxane                | 9.19  | 88   | 1517m    | 20.283 | ug/l   |          |
| 51) 4-Methyl-2-Pentanone       | 9.98  | 43   | 25034    | 5.358  | ug/l   | 94       |
| 52) Toluene                    | 10.15 | 92   | 8963     | 1.004  | ug/l   | 92       |
| 53) t-1,3-Dichloropropene      | 10.38 | 75   | 4388     | 0.992  | ug/l # | 82       |
| 54) cis-1,3-Dichloropropene    | 9.84  | 75   | 5510     | 1.050  | ug/l   | 99       |
| 55) 1,1,2-Trichloroethane      | 10.56 | 97   | 4271     | 1.191  | ug/l   | 96       |
| 56) Ethyl methacrylate         | 10.43 | 69   | 4655     | 0.882  | ug/l # | 93       |
| 57) 1,3-Dichloropropane        | 10.71 | 76   | 6352     | 1.056  | ug/l   | 95       |
| 58) 2-Chloroethyl Vinyl ether  | 9.69  | 63   | 10245    | 5.069  | ug/l   | 97       |
| 59) 2-Hexanone                 | 10.75 | 43   | 15752    | 4.572  | ug/l   | 96       |
| 60) Dibromochloromethane       | 10.90 | 129  | 3544     | 1.074  | ug/l   | 97       |
| 61) 1,2-Dibromoethane          | 11.01 | 107  | 3624     | 0.990  | ug/l   | 98       |
| 64) Tetrachloroethene          | 10.63 | 164  | 4745     | 1.333  | ug/l   | 95       |
| 65) Chlorobenzene              | 11.43 | 112  | 10132    | 1.130  | ug/l   | 95       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.50 | 131  | 3638     | 1.189  | ug/l # | 64       |
| 67) Ethyl Benzene              | 11.51 | 91   | 16722    | 1.060  | ug/l   | 96       |
| 68) m/p-Xylenes                | 11.62 | 106  | 12338    | 2.133  | ug/l   | 97       |
| 69) o-Xylene                   | 11.94 | 106  | 6256     | 1.093  | ug/l   | 94       |
| 70) Styrene                    | 11.96 | 104  | 8757     | 0.957  | ug/l   | 99       |
| 71) Bromoform                  | 12.12 | 173  | 2214     | 1.020  | ug/l # | 94       |
| 73) Isopropylbenzene           | 12.25 | 105  | 14410    | 1.112  | ug/l   | 96       |
| 74) N-amyl acetate             | 12.07 | 43   | 4808     | 1.021  | ug/l # | 90       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.50 | 83   | 5572     | 1.373  | ug/l   | 97       |
| 76) 1,2,3-Trichloropropane     | 12.55 | 75   | 3640m    | 1.170  | ug/l   |          |
| 77) Bromobenzene               | 12.53 | 156  | 3805     | 1.157  | ug/l   | 97       |
| 78) n-propylbenzene            | 12.59 | 91   | 15496    | 1.144  | ug/l   | 97       |
| 79) 2-Chlorotoluene            | 12.67 | 91   | 10535    | 1.237  | ug/l   | 93       |
| 80) 1,3,5-Trimethylbenzene     | 12.73 | 105  | 12224    | 1.154  | ug/l   | 97       |
| 82) 4-Chlorotoluene            | 12.77 | 91   | 8966     | 1.122  | ug/l   | 98       |
| 83) tert-Butylbenzene          | 12.99 | 119  | 11091    | 1.151  | ug/l   | 98       |
| 84) 1,2,4-Trimethylbenzene     | 13.04 | 105  | 11117    | 1.115  | ug/l   | 99       |
| 85) sec-Butylbenzene           | 13.17 | 105  | 12698    | 1.071  | ug/l   | 95       |
| 86) p-Isopropyltoluene         | 13.28 | 119  | 11386    | 1.115  | ug/l   | 98       |
| 87) 1,3-Dichlorobenzene        | 13.28 | 146  | 5794     | 1.155  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 13.36 | 146  | 5802m    | 1.189  | ug/l   |          |
| 89) n-Butylbenzene             | 13.61 | 91   | 8281     | 1.054  | ug/l   | 98       |
| 90) Hexachloroethane           | 13.87 | 117  | 1901     | 1.184  | ug/l   | 95       |
| 91) 1,2-Dichlorobenzene        | 13.65 | 146  | 6436     | 1.290  | ug/l   | 93       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.26 | 75   | 627      | 1.122  | ug/l   | 94       |
| 93) 1,2,4-Trichlorobenzene     | 14.91 | 180  | 1555     | 0.722  | ug/l   | 91       |
| 94) Hexachlorobutadiene        | 15.00 | 225  | 2440     | 1.290  | ug/l   | 98       |
| 95) Naphthalene                | 15.13 | 128  | 4385     | 0.772  | ug/l # | 93       |
| 96) 1,2,3-Trichlorobenzene     | 15.31 | 180  | 1748     | 0.762  | ug/l   | 84       |

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

