

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN120919\  
 Data File : VN059526.D  
 Acq On : 9 Dec 2019 14:46  
 Operator : JC/SP  
 Sample : VSTDIC001  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDIC001

Manual Integrations  
 APPROVED

apatel  
 12/10/2019 5:10:30 PM

Quant Time: Dec 09 16:29:32 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N120919W.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Dec 09 16:19:24 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.64  | 168  | 221357   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.57  | 114  | 361371   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.40 | 117  | 404608   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.34 | 152  | 138582   | 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    | 1.83 | 85  | 2751  | 1.129 | ug/l   | 96     |
| 3) Chloromethane              | 2.04 | 50  | 5324  | 1.601 | ug/l   | 90     |
| 4) Vinyl Chloride             | 2.17 | 62  | 3856  | 1.721 | ug/l   | 89     |
| 6) Chloroethane               | 2.68 | 64  | 2446  | 1.869 | ug/l   | 97     |
| 7) Trichlorofluoromethane     | 3.00 | 101 | 4474  | 1.674 | ug/l   | 97     |
| 8) Diethyl Ether              | 3.39 | 74  | 1286  | 0.849 | ug/l   | 80     |
| 9) 1,1,2-Trichlorotrifluoroet | 3.73 | 101 | 2050  | 0.893 | ug/l   | 92     |
| 12) 1,1-Dichloroethene        | 3.71 | 96  | 2067  | 0.927 | ug/l # | 85     |
| 14) Allyl chloride            | 4.29 | 41  | 4887  | 1.104 | ug/l # | 87     |
| 15) Acrylonitrile             | 4.97 | 53  | 6108  | 4.484 | ug/l # | 65     |
| 16) Acetone                   | 3.81 | 43  | 10858 | 6.012 | ug/l   | 94     |
| 17) Carbon Disulfide          | 4.03 | 76  | 12724 | 1.661 | ug/l   | 99     |
| 18) Methyl Acetate            | 4.30 | 43  | 4956  | 1.369 | ug/l   | 93     |
| 19) Methyl tert-butyl Ether   | 5.00 | 73  | 7267m | 0.948 | ug/l   |        |
| 20) Methylene Chloride        | 4.52 | 84  | 4481  | 1.579 | ug/l   | 94     |
| 21) trans-1,2-Dichloroethene  | 5.00 | 96  | 2418  | 0.964 | ug/l # | 73     |
| 22) Diisopropyl ether         | 5.92 | 45  | 6810  | 0.825 | ug/l # | 87     |
| 23) Vinyl Acetate             | 5.87 | 43  | 28786 | 4.326 | ug/l   | 96     |
| 24) 1,1-Dichloroethane        | 5.82 | 63  | 4464  | 0.954 | ug/l # | 85     |
| 25) 2-Butanone                | 6.82 | 43  | 9300  | 4.555 | ug/l   | 90     |
| 26) 2,2-Dichloropropane       | 6.80 | 77  | 4382  | 1.072 | ug/l # | 71     |
| 27) cis-1,2-Dichloroethene    | 6.80 | 96  | 2830  | 1.014 | ug/l   | 63     |
| 28) Bromochloromethane        | 7.17 | 49  | 518   | 0.347 | ug/l # | 32     |
| 29) Tetrahydrofuran           | 7.20 | 42  | 6874  | 5.328 | ug/l   | 94     |
| 30) Chloroform                | 7.35 | 83  | 4418  | 0.970 | ug/l   | 94     |
| 32) 1,1,1-Trichloroethane     | 7.55 | 97  | 3824  | 0.963 | ug/l # | 53     |
| 36) 1,1-Dichloropropene       | 7.77 | 75  | 3445  | 0.935 | ug/l # | 87     |
| 37) Ethyl Acetate             | 6.91 | 43  | 2680  | 0.651 | ug/l # | 74     |
| 38) Carbon Tetrachloride      | 7.75 | 117 | 3304  | 0.928 | ug/l   | 94     |
| 39) Methylcyclohexane         | 9.07 | 83  | 3392  | 0.772 | ug/l   | 93     |
| 40) Benzene                   | 8.02 | 78  | 9991  | 0.930 | ug/l   | 97     |
| 41) Methacrylonitrile         | 7.14 | 41  | 1083  | 0.638 | ug/l # | 100    |
| 42) 1,2-Dichloroethane        | 8.11 | 62  | 3721  | 0.998 | ug/l   | 83     |
| 43) Isopropyl Acetate         | 8.14 | 43  | 5329  | 0.865 | ug/l # | 85     |

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| Internal Standards             | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|--------|--------|----------|
| 44) Trichloroethene            | 8.82  | 130  | 2583     | 0.922  | ug/l   | 96       |
| 45) 1,2-Dichloropropane        | 9.10  | 63   | 2471     | 0.860  | ug/l   | 93       |
| 46) Dibromomethane             | 9.20  | 93   | 1669     | 0.928  | ug/l   | 94       |
| 47) Bromodichloromethane       | 9.39  | 83   | 3399     | 0.939  | ug/l # | 97       |
| 48) Methyl methacrylate        | 9.18  | 41   | 2526     | 0.911  | ug/l # | 88       |
| 49) 1,4-Dioxane                | 9.20  | 88   | 578      | 14.150 | ug/l   | 92       |
| 51) 4-Methyl-2-Pentanone       | 9.98  | 43   | 14001    | 3.839  | ug/l   | 99       |
| 52) Toluene                    | 10.15 | 92   | 5440     | 0.840  | ug/l   | 98       |
| 53) t-1,3-Dichloropropene      | 10.37 | 75   | 3863     | 0.910  | ug/l # | 87       |
| 54) cis-1,3-Dichloropropene    | 9.83  | 75   | 3900     | 0.871  | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane      | 10.56 | 97   | 2385     | 0.932  | ug/l   | 91       |
| 56) Ethyl methacrylate         | 10.43 | 69   | 2605     | 0.703  | ug/l # | 84       |
| 57) 1,3-Dichloropropane        | 10.70 | 76   | 4281     | 0.964  | ug/l   | 94       |
| 58) 2-Chloroethyl Vinyl ether  | 9.68  | 63   | 8265     | 7.633  | ug/l   | 90       |
| 59) 2-Hexanone                 | 10.75 | 43   | 12783    | 4.657  | ug/l   | 92       |
| 60) Dibromochloromethane       | 10.89 | 129  | 2674     | 0.973  | ug/l   | 93       |
| 61) 1,2-Dibromoethane          | 11.00 | 107  | 2773     | 1.046  | ug/l   | 97       |
| 64) Tetrachloroethene          | 10.63 | 164  | 2037     | 0.621  | ug/l   | 94       |
| 65) Chlorobenzene              | 11.43 | 112  | 8309     | 0.965  | ug/l   | 96       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.50 | 131  | 2679     | 0.863  | ug/l # | 53       |
| 67) Ethyl Benzene              | 11.51 | 91   | 12833    | 0.849  | ug/l   | 96       |
| 68) m/p-Xylenes                | 11.62 | 106  | 8850     | 1.559  | ug/l   | 88       |
| 69) o-Xylene                   | 11.94 | 106  | 4401     | 0.814  | ug/l   | 94       |
| 70) Styrene                    | 11.96 | 104  | 6650     | 0.768  | ug/l   | 98       |
| 71) Bromoform                  | 12.13 | 173  | 2011     | 0.820  | ug/l # | 95       |
| 73) Isopropylbenzene           | 12.25 | 105  | 10985    | 1.040  | ug/l   | 97       |
| 74) N-amyl acetate             | 12.07 | 43   | 4602     | 1.067  | ug/l # | 91       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.50 | 83   | 4374     | 1.276  | ug/l   | 97       |
| 76) 1,2,3-Trichloropropane     | 12.55 | 75   | 3121m    | 0.922  | ug/l   |          |
| 77) Bromobenzene               | 12.52 | 156  | 3290     | 1.230  | ug/l   | 96       |
| 78) n-propylbenzene            | 12.59 | 91   | 12156    | 0.979  | ug/l   | 98       |
| 79) 2-Chlorotoluene            | 12.67 | 91   | 6393     | 0.853  | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene     | 12.73 | 105  | 7396     | 0.827  | ug/l   | 95       |
| 82) 4-Chlorotoluene            | 12.77 | 91   | 7337     | 0.945  | ug/l   | 100      |
| 83) tert-Butylbenzene          | 12.99 | 119  | 6047     | 0.780  | ug/l   | 91       |
| 84) 1,2,4-Trimethylbenzene     | 13.04 | 105  | 6872     | 0.785  | ug/l   | 98       |
| 85) sec-Butylbenzene           | 13.17 | 105  | 8517     | 0.827  | ug/l   | 99       |
| 86) p-Isopropyltoluene         | 13.29 | 119  | 7000     | 0.756  | ug/l   | 97       |
| 87) 1,3-Dichlorobenzene        | 13.28 | 146  | 4893     | 1.028  | ug/l   | 98       |
| 88) 1,4-Dichlorobenzene        | 13.36 | 146  | 5471m    | 1.138  | ug/l   |          |
| 89) n-Butylbenzene             | 13.62 | 91   | 7924     | 0.952  | ug/l   | 95       |
| 90) Hexachloroethane           | 13.88 | 117  | 1634     | 0.915  | ug/l   | 97       |
| 91) 1,2-Dichlorobenzene        | 13.65 | 146  | 4669     | 1.025  | ug/l   | 97       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.27 | 75   | 1467     | 1.773  | ug/l # | 48       |
| 93) 1,2,4-Trichlorobenzene     | 14.91 | 180  | 3857     | 1.346  | ug/l   | 95       |
| 94) Hexachlorobutadiene        | 15.01 | 225  | 2093     | 1.173  | ug/l   | 93       |
| 95) Naphthalene                | 15.13 | 128  | 13081    | 1.557  | ug/l   | 99       |
| 96) 1,2,3-Trichlorobenzene     | 15.30 | 180  | 4328     | 1.412  | ug/l   | 95       |

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

