

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN030619\  
 Data File : VN054121.D  
 Acq On : 6 Mar 2019 17:20  
 Operator : JC/SP  
 Sample : VN0306WBS01  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 13 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0306WBS01

Manual Integrations  
 APPROVED

MMDadoda  
 3/7/2019 11:39:27 AM

Quant Time: Mar 07 06:59:16 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N030619W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Mar 07 06:25:49 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.66  | 168  | 646084   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.58  | 114  | 1012437  | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.41 | 117  | 864429   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.34 | 152  | 381165   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.02   | 65  | 379783   | 48.95 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 97.90%  |      |
| 35) Dibromofluoromethane  | 7.59   | 113 | 332763   | 50.61 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 101.22% |      |
| 50) Toluene-d8            | 10.09  | 98  | 1260170  | 50.47 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 100.94% |      |
| 62) 4-Bromofluorobenzene  | 12.40  | 95  | 409977   | 50.43 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 100.86% |      |

## Target Compounds

|                               |      |     |         |        |        | Qvalue |
|-------------------------------|------|-----|---------|--------|--------|--------|
| 2) Dichlorodifluoromethane    | 1.85 | 85  | 118093  | 19.018 | ug/l   | 98     |
| 3) Chloromethane              | 2.05 | 50  | 161966  | 19.940 | ug/l   | 98     |
| 4) Vinyl Chloride             | 2.18 | 62  | 159697  | 18.983 | ug/l   | 100    |
| 5) Bromomethane               | 2.57 | 94  | 96866   | 21.132 | ug/l   | 99     |
| 6) Chloroethane               | 2.71 | 64  | 92022   | 18.046 | ug/l   | 99     |
| 7) Trichlorofluoromethane     | 3.02 | 101 | 201034  | 19.559 | ug/l   | 100    |
| 8) Diethyl Ether              | 3.41 | 74  | 75217   | 18.366 | ug/l   | 97     |
| 9) 1,1,2-Trichlorotrifluoroet | 3.76 | 101 | 127641  | 19.089 | ug/l   | 97     |
| 10) Methyl Iodide             | 3.95 | 142 | 138170  | 19.820 | ug/l   | 100    |
| 11) Tert butyl alcohol        | 4.79 | 59  | 46730   | 98.993 | ug/l # | 87     |
| 12) 1,1-Dichloroethene        | 3.74 | 96  | 120409  | 19.303 | ug/l   | 95     |
| 13) Acrolein                  | 3.60 | 56  | 21796   | 69.402 | ug/l   | 97     |
| 14) Allyl chloride            | 4.32 | 41  | 213613  | 19.005 | ug/l   | 97     |
| 15) Acrylonitrile             | 4.99 | 53  | 247927  | 93.049 | ug/l   | 98     |
| 16) Acetone                   | 3.82 | 43  | 231681  | 96.946 | ug/l   | 100    |
| 17) Carbon Disulfide          | 4.05 | 76  | 357659  | 19.232 | ug/l   | 100    |
| 18) Methyl Acetate            | 4.32 | 43  | 109101  | 19.587 | ug/l   | 98     |
| 19) Methyl tert-butyl Ether   | 5.04 | 73  | 338985  | 19.364 | ug/l   | 100    |
| 20) Methylene Chloride        | 4.55 | 84  | 140055  | 19.633 | ug/l   | 99     |
| 21) trans-1,2-Dichloroethene  | 5.04 | 96  | 129744  | 18.946 | ug/l   | 98     |
| 22) Diisopropyl ether         | 5.95 | 45  | 432796  | 19.763 | ug/l   | 96     |
| 23) Vinyl Acetate             | 5.90 | 43  | 1499058 | 96.366 | ug/l   | 99     |
| 24) 1,1-Dichloroethane        | 5.85 | 63  | 252040  | 19.236 | ug/l   | 99     |
| 25) 2-Butanone                | 6.84 | 43  | 300408  | 94.479 | ug/l   | 100    |
| 26) 2,2-Dichloropropane       | 6.82 | 77  | 185912  | 19.686 | ug/l   | 99     |
| 27) cis-1,2-Dichloroethene    | 6.83 | 96  | 147573  | 19.326 | ug/l   | 99     |
| 28) Bromochloromethane        | 7.19 | 49  | 130805  | 20.002 | ug/l   | 99     |
| 29) Tetrahydrofuran           | 7.21 | 42  | 190692  | 91.499 | ug/l   | 99     |
| 30) Chloroform                | 7.37 | 83  | 244427  | 19.470 | ug/l   | 97     |
| 31) Cyclohexane               | 7.65 | 56  | 241938  | 20.084 | ug/l   | 96     |
| 32) 1,1,1-Trichloroethane     | 7.57 | 97  | 200028  | 19.217 | ug/l   | 99     |
| 36) 1,1-Dichloropropene       | 7.79 | 75  | 182463  | 19.201 | ug/l   | 100    |
| 37) Ethyl Acetate             | 6.93 | 43  | 130025  | 19.015 | ug/l   | 100    |
| 38) Carbon Tetrachloride      | 7.77 | 117 | 177721  | 19.590 | ug/l   | 98     |

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 Sample : VN0306WBS01  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 13 Sample Multiplier: 1

Instrument :  
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 ClientSampleID :  
 VN0306WBS01

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 3/7/2019 11:39:27 AM

Quant Time: Mar 07 06:59:16 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N030619W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Mar 07 06:25:49 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| -----                          |       |      |          |         |        |          |
| 39) Methylcyclohexane          | 9.08  | 83   | 216222   | 19.715  | ug/l   | 97       |
| 40) Benzene                    | 8.04  | 78   | 566164   | 20.138  | ug/l   | 100      |
| 41) Methacrylonitrile          | 7.17  | 41   | 53482    | 15.007  | ug/l # | 100      |
| 42) 1,2-Dichloroethane         | 8.12  | 62   | 177375   | 19.917  | ug/l   | 100      |
| 43) Isopropyl Acetate          | 8.16  | 43   | 211916   | 19.656  | ug/l # | 89       |
| 44) Trichloroethene            | 8.83  | 130  | 149978   | 19.894  | ug/l   | 94       |
| 45) 1,2-Dichloropropane        | 9.12  | 63   | 157177   | 20.268  | ug/l   | 100      |
| 46) Dibromomethane             | 9.21  | 93   | 87054    | 19.665  | ug/l   | 98       |
| 47) Bromodichloromethane       | 9.40  | 83   | 183536   | 19.806  | ug/l   | 100      |
| 48) Methyl methacrylate        | 9.20  | 41   | 100665   | 19.251  | ug/l   | 99       |
| 49) 1,4-Dioxane                | 9.20  | 88   | 28918    | 384.700 | ug/l   | 97       |
| 51) 4-Methyl-2-Pentanone       | 9.98  | 43   | 590262   | 97.294  | ug/l   | 99       |
| 52) Toluene                    | 10.16 | 92   | 336099   | 20.178  | ug/l   | 100      |
| 53) t-1,3-Dichloropropene      | 10.38 | 75   | 176045   | 19.261  | ug/l   | 100      |
| 54) cis-1,3-Dichloropropene    | 9.84  | 75   | 215140   | 19.916  | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane      | 10.56 | 97   | 125731   | 20.045  | ug/l   | 99       |
| 56) Ethyl methacrylate         | 10.43 | 69   | 146758   | 19.931  | ug/l   | 98       |
| 57) 1,3-Dichloropropane        | 10.71 | 76   | 214627   | 20.055  | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether  | 9.69  | 63   | 317727   | 94.275  | ug/l   | 99       |
| 59) 2-Hexanone                 | 10.75 | 43   | 384920   | 96.175  | ug/l   | 99       |
| 60) Dibromochloromethane       | 10.90 | 129  | 131840   | 19.658  | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 11.00 | 107  | 115349   | 19.327  | ug/l   | 98       |
| 64) Tetrachloroethene          | 10.63 | 164  | 144342   | 20.347  | ug/l   | 99       |
| 65) Chlorobenzene              | 11.43 | 112  | 357275   | 19.861  | ug/l   | 100      |
| 66) 1,1,1,2-Tetrachloroethane  | 11.51 | 131  | 127204   | 19.754  | ug/l   | 99       |
| 67) Ethyl Benzene              | 11.51 | 91   | 608513   | 20.215  | ug/l   | 100      |
| 68) m/p-Xylenes                | 11.62 | 106  | 469547   | 41.334  | ug/l   | 100      |
| 69) o-Xylene                   | 11.95 | 106  | 225492   | 20.628  | ug/l   | 99       |
| 70) Styrene                    | 11.96 | 104  | 355561   | 20.491  | ug/l   | 100      |
| 71) Bromoform                  | 12.13 | 173  | 86464    | 19.509  | ug/l # | 98       |
| 73) Isopropylbenzene           | 12.25 | 105  | 600616   | 19.804  | ug/l   | 100      |
| 74) N-amyl acetate             | 12.07 | 43   | 156088   | 19.432  | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.50 | 83   | 144545   | 20.267  | ug/l   | 98       |
| 76) 1,2,3-Trichloropropane     | 12.55 | 75   | 120352m  | 18.528  | ug/l   |          |
| 77) Bromobenzene               | 12.53 | 156  | 144092   | 20.077  | ug/l   | 98       |
| 78) n-propylbenzene            | 12.59 | 91   | 703842   | 20.624  | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 12.67 | 91   | 411475   | 19.852  | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene     | 12.73 | 105  | 507059   | 20.567  | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-buten | 12.30 | 75   | 35905    | 18.982  | ug/l   | 97       |
| 82) 4-Chlorotoluene            | 12.77 | 91   | 407371   | 19.715  | ug/l   | 100      |
| 83) tert-Butylbenzene          | 12.99 | 119  | 444498   | 20.358  | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 13.04 | 105  | 502760   | 20.546  | ug/l   | 99       |
| 85) sec-Butylbenzene           | 13.17 | 105  | 611308   | 20.632  | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 13.29 | 119  | 516590   | 20.739  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 13.28 | 146  | 257251   | 19.382  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 13.36 | 146  | 251383   | 19.084  | ug/l   | 99       |
| 89) n-Butylbenzene             | 13.61 | 91   | 423591   | 20.141  | ug/l   | 99       |
| 90) Hexachloroethane           | 13.87 | 117  | 90526    | 18.948  | ug/l   | 99       |
| 91) 1,2-Dichlorobenzene        | 13.65 | 146  | 250207   | 20.276  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.27 | 75   | 20405    | 18.439  | ug/l   | 95       |

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ALS Vial : 13 Sample Multiplier: 1

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Quant Title : SW846 8260  
QLast Update : Thu Mar 07 06:25:49 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.91 | 180  | 117940   | 18.699 | ug/l  | 98       |
| 94) Hexachlorobutadiene    | 15.01 | 225  | 93972    | 22.464 | ug/l  | 98       |
| 95) Naphthalene            | 15.13 | 128  | 221866   | 18.661 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 15.31 | 180  | 119180   | 20.337 | ug/l  | 99       |

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

