

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN092521\  
 Data File : VN068692.D  
 Acq On : 26 Sep 2021 3:39  
 Operator : JC/MD  
 Sample : VN0925WBS02  
 Misc : 5.00mL/MSVOA\_N/WATER  
 ALS Vial : 39 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0925WBS02

Manual Integrations  
 APPROVED

MMDadoda  
 9/27/2021 11:01:38 AM

Quant Time: Sep 27 07:23:03 2021  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N092521W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Mon Sep 27 07:10:18 2021  
 Response via : Initial Calibration

| Compound                     | R.T.           | QIon | Response             | Conc    | Units  | Dev(Min) |
|------------------------------|----------------|------|----------------------|---------|--------|----------|
| -----                        |                |      |                      |         |        |          |
| Internal Standards           |                |      |                      |         |        |          |
| 1) Bromochloromethane        | 7.659          | 128  | 73296                | 30.000  | ug/l   | 0.00     |
| 28) 1,4-Difluorobenzene      | 8.968          | 114  | 410793               | 30.000  | ug/l   | 0.00     |
| 57) Chlorobenzene-d5         | 11.746         | 117  | 387995               | 30.000  | ug/l   | 0.00     |
|                              |                |      |                      |         |        |          |
| System Monitoring Compounds  |                |      |                      |         |        |          |
| 27) 1,2-Dichloroethane-d4    | 8.437          | 65   | 214903               | 35.663  | ug/l   | 0.00     |
| Spiked Amount 30.000         | Range 91 - 110 |      | Recovery = 118.867%# |         |        |          |
| 60) 4-Bromofluorobenzene     | 12.731         | 95   | 169831               | 28.654  | ug/l   | 0.00     |
| Spiked Amount 30.000         | Range 63 - 112 |      | Recovery = 95.500%   |         |        |          |
| 63) Toluene-d8               | 10.443         | 98   | 533988               | 31.098  | ug/l   | 0.00     |
| Spiked Amount 30.000         | Range 91 - 112 |      | Recovery = 103.667%  |         |        |          |
|                              |                |      |                      |         |        |          |
| Target Compounds             |                |      |                      |         |        |          |
|                              |                |      |                      |         | Qvalue |          |
| 2) Dichlorodifluoromethane   | 2.073          | 85   | 79469                | 19.605  | ug/l   | 96       |
| 3) Chloromethane             | 2.303          | 50   | 107091               | 19.952  | ug/l   | 99       |
| 4) Vinyl Chloride            | 2.443          | 62   | 124783               | 20.229  | ug/l   | 100      |
| 5) Bromomethane              | 2.861          | 94   | 89568                | 22.248  | ug/l   | 96       |
| 6) Chloroethane              | 3.025          | 64   | 90465                | 21.377  | ug/l   | 100      |
| 7) Trichlorofluoromethane    | 3.379          | 101  | 143361               | 19.576  | ug/l   | 97       |
| 8) Diethyl Ether             | 3.832          | 74   | 50342                | 19.095  | ug/l   | 99       |
| 9) 1,1,2-Trichlorotrifluo... | 4.221          | 101  | 74696                | 18.845  | ug/l   | 99       |
| 10) 1,1-Dichloroethene       | 4.189          | 96   | 72939                | 19.125  | ug/l   | 97       |
| 11) Methyl Iodide            | 4.427          | 142  | 85843                | 17.676  | ug/l   | 97       |
| 12) Methyl Acetate           | 4.856          | 43   | 156723               | 19.092  | ug/l   | 98       |
| 13) Acrolein                 | 4.046          | 56   | 28409                | 112.509 | ug/l # | 23       |
| 14) Acrylonitrile            | 5.556          | 53   | 234441               | 97.314  | ug/l   | 99       |
| 15) Acetone                  | 4.288          | 58   | 57663                | 96.793  | ug/l   | 90       |
| 16) Carbon Disulfide         | 4.540          | 76   | 211320               | 18.734  | ug/l   | 99       |
| 17) Allyl chloride           | 4.848          | 41   | 137559               | 18.512  | ug/l   | 95       |
| 18) Methylene Chloride       | 5.101          | 84   | 93035                | 19.977  | ug/l   | 96       |
| 19) trans-1,2-Dichloroethene | 5.602          | 96   | 79538                | 18.809  | ug/l   | 94       |
| 20) Diisopropyl ether        | 6.498          | 45   | 352222               | 21.982  | ug/l   | 98       |
| 21) 1,1-Dichloroethane       | 6.393          | 63   | 190647               | 22.243  | ug/l   | 98       |
| 22) cis-1,2-Dichloroethene   | 7.329          | 96   | 97520                | 19.537  | ug/l   | 98       |
| 23) tert-Butyl Alcohol       | 5.374          | 59   | 80898m               | 100.169 | ug/l   |          |
| 24) Methyl tert-Butyl Ether  | 5.618          | 73   | 290143               | 20.225  | ug/l # | 79       |
| 25) Chloroform               | 7.820          | 83   | 189064               | 21.034  | ug/l   | 99       |
| 26) Cyclohexane              | 8.096          | 56   | 148159               | 17.775  | ug/l # | 100      |
| 29) 1,1-Dichloropropene      | 8.225          | 75   | 123592               | 17.851  | ug/l   | 98       |
| 30) 2-Butanone               | 7.335          | 43   | 336923               | 96.458  | ug/l # | 81       |
| 31) 2,2-Dichloropropane      | 7.329          | 77   | 102218               | 17.646  | ug/l   | 100      |
| 32) 1,1,1-Trichloroethane    | 8.016          | 97   | 152200               | 17.925  | ug/l   | 100      |
| 33) Carbon Tetrachloride     | 8.209          | 117  | 135496               | 18.349  | ug/l   | 93       |
| 34) Benzene                  | 8.461          | 78   | 411739               | 20.312  | ug/l   | 96       |
| 35) Methacrylonitrile        | 7.638          | 41   | 67138                | 17.825  | ug/l   | 97       |
| 36) 1,2-Dichloroethane       | 8.531          | 62   | 153572               | 19.539  | ug/l   | 98       |
| 37) Trichloroethene          | 9.217          | 130  | 93536                | 18.789  | ug/l   | 97       |
| 38) Methylcyclohexane        | 9.461          | 83   | 140428               | 17.575  | ug/l   | 99       |
| 39) 1,2-Dichloropropane      | 9.491          | 63   | 98672                | 18.494  | ug/l   | 99       |
| 40) Dibromomethane           | 9.579          | 93   | 70181                | 18.389  | ug/l   | 97       |
| 41) Bromodichloromethane     | 9.764          | 83   | 152334               | 19.812  | ug/l   | 98       |
| 42) Vinyl Acetate            | 6.436          | 43   | 1392240              | 109.673 | ug/l # | 77       |

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 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc    | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|---------|--------|----------|
| 43) Ethyl Acetate             | 7.412  | 43   | 137537   | 17.846  | ug/l   | 100      |
| 44) Isopropyl Acetate         | 8.560  | 43   | 246785   | 18.393  | ug/l   | 98       |
| 45) 1,4-Dioxane               | 9.569  | 88   | 32497    | 375.595 | ug/l   | 97       |
| 46) Methyl methacrylate       | 9.561  | 41   | 105309   | 17.119  | ug/l   | 96       |
| 47) n-amyl Acetate            | 12.390 | 43   | 166879   | 13.719  | ug/l   | 100      |
| 48) t-1,3-Dichloropropene     | 10.719 | 75   | 138053   | 14.806  | ug/l   | 98       |
| 49) cis-1,3-Dichloropropene   | 10.194 | 75   | 147752   | 15.651  | ug/l   | 96       |
| 50) 1,1,2-Trichloroethane     | 10.899 | 97   | 104436   | 16.790  | ug/l   | 98       |
| 51) Ethyl methacrylate        | 10.762 | 69   | 163872   | 15.731  | ug/l   | 99       |
| 52) 1,3-Dichloropropane       | 11.046 | 76   | 181266   | 16.797  | ug/l   | 99       |
| 53) Dibromochloromethane      | 11.240 | 129  | 114244   | 16.919  | ug/l   | 99       |
| 54) 1,2-Dibromoethane         | 11.347 | 107  | 107173   | 16.736  | ug/l   | 98       |
| 55) 2-Chloroethyl vinyl ether | 10.043 | 63   | 145673   | 62.664  | ug/l   | 100      |
| 56) Bromoform                 | 12.460 | 173  | 69934    | 15.412  | ug/l # | 99       |
| 58) 4-Methyl-2-Pentanone      | 10.330 | 43   | 734196   | 97.004  | ug/l   | 99       |
| 59) 2-Hexanone                | 11.087 | 43   | 584248   | 101.012 | ug/l   | 99       |
| 61) Tetrachloroethene         | 10.979 | 164  | 91239    | 20.225  | ug/l   | 97       |
| 62) Toluene                   | 10.507 | 91   | 411543   | 19.425  | ug/l   | 99       |
| 64) Chlorobenzene             | 11.773 | 112  | 255982   | 18.855  | ug/l   | 100      |
| 65) 1,1,1,2-Tetrachloroethane | 11.843 | 131  | 97951    | 19.284  | ug/l   | 97       |
| 66) Ethyl Benzene             | 11.846 | 91   | 446915   | 18.211  | ug/l   | 100      |
| 67) m/p-Xylenes               | 11.953 | 106  | 333319   | 36.190  | ug/l   | 98       |
| 68) o-Xylene                  | 12.283 | 106  | 170649   | 19.111  | ug/l   | 96       |
| 69) Styrene                   | 12.296 | 104  | 261267   | 18.250  | ug/l   | 97       |
| 70) Isopropylbenzene          | 12.581 | 105  | 441020   | 19.340  | ug/l   | 98       |
| 71) 1,1,2,2-Tetrachloroethane | 12.827 | 83   | 132317   | 19.241  | ug/l   | 99       |
| 72) 1,2,3-Trichloropropane    | 12.884 | 75   | 124992m  | 19.515  | ug/l   |          |
| 73) Bromobenzene              | 12.862 | 156  | 94647    | 18.489  | ug/l   | 96       |
| 74) n-propylbenzene           | 12.921 | 91   | 463730   | 17.918  | ug/l   | 99       |
| 75) 2-Chlorotoluene           | 13.010 | 91   | 318169   | 20.463  | ug/l   | 97       |
| 76) 1,3,5-Trimethylbenzene    | 13.061 | 105  | 365180   | 19.962  | ug/l   | 98       |
| 77) t-1,4-Dichloro-2-butene   | 12.626 | 75   | 34129    | 16.636  | ug/l   | 96       |
| 78) 4-Chlorotoluene           | 13.106 | 91   | 270512   | 18.340  | ug/l   | 99       |
| 79) tert-butylbenzene         | 13.326 | 119  | 301442   | 19.101  | ug/l   | 99       |
| 80) 1,2,4-Trimethylbenzene    | 13.369 | 105  | 334295m  | 19.276  | ug/l   |          |
| 81) sec-Butylbenzene          | 13.506 | 105  | 414756   | 19.171  | ug/l   | 99       |
| 82) p-Isopropyltoluene        | 13.618 | 119  | 328655   | 19.014  | ug/l   | 98       |
| 83) 1,3-Dichlorobenzene       | 13.618 | 146  | 160838   | 18.977  | ug/l   | 98       |
| 84) 1,4-Dichlorobenzene       | 13.696 | 146  | 169584   | 20.696  | ug/l   | 98       |
| 85) n-Butylbenzene            | 13.946 | 91   | 266697   | 18.668  | ug/l   | 99       |
| 86) Hexachloroethane          | 14.211 | 117  | 65587    | 19.369  | ug/l   | 97       |
| 87) 1,2-Dichlorobenzene       | 13.989 | 146  | 162094   | 19.631  | ug/l   | 99       |
| 88) 1,2-Dibromo-3-Chloropr... | 14.605 | 75   | 25357    | 20.616  | ug/l   | 97       |
| 89) 1,2,4-Trichlorobenzene    | 15.265 | 180  | 71330    | 17.479  | ug/l   | 99       |
| 90) Hexachlorobutadiene       | 15.372 | 225  | 42432    | 20.152  | ug/l   | 97       |
| 91) Naphthalene               | 15.507 | 128  | 189243   | 16.920  | ug/l   | 99       |
| 92) 1,2,3-Trichlorobenzene    | 15.702 | 180  | 73285    | 18.691  | ug/l   | 98       |

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

