

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN091321\  
 Data File : VN068466.D  
 Acq On : 13 Sep 2021 19:59  
 Operator : JC/MD  
 Sample : VSTDCCC020  
 Misc : 5.00mL/MSVOA\_N/WATER  
 ALS Vial : 16 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDCCC020EC

Manual Integrations  
 APPROVED

Reviewed By : John Carlone 09/14/2021  
 Supervised By : Mahesh Dadoda 09/14/2021

Quant Time: Sep 14 04:29:53 2021  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N091321W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Tue Sep 14 04:23:31 2021  
 Response via : Initial Calibration

| Compound                     | R.T.           | QIon | Response            | Conc   | Units  | Dev(Min) |
|------------------------------|----------------|------|---------------------|--------|--------|----------|
| -----                        |                |      |                     |        |        |          |
| Internal Standards           |                |      |                     |        |        |          |
| 1) Bromochloromethane        | 7.659          | 128  | 99024               | 30.000 | ug/l   | 0.00     |
| 28) 1,4-Difluorobenzene      | 8.971          | 114  | 516616              | 30.000 | ug/l   | 0.00     |
| 57) Chlorobenzene-d5         | 11.746         | 117  | 471624              | 30.000 | ug/l   | 0.00     |
|                              |                |      |                     |        |        |          |
| System Monitoring Compounds  |                |      |                     |        |        |          |
| 27) 1,2-Dichloroethane-d4    | 8.440          | 65   | 179278              | 30.656 | ug/l   | 0.00     |
| Spiked Amount 30.000         | Range 91 - 110 |      | Recovery = 102.200% |        |        |          |
| 60) 4-Bromofluorobenzene     | 12.733         | 95   | 199586              | 29.690 | ug/l   | 0.00     |
| Spiked Amount 30.000         | Range 63 - 112 |      | Recovery = 98.967%  |        |        |          |
| 63) Toluene-d8               | 10.446         | 98   | 635551              | 30.977 | ug/l   | 0.00     |
| Spiked Amount 30.000         | Range 91 - 112 |      | Recovery = 103.267% |        |        |          |
|                              |                |      |                     |        |        |          |
| Target Compounds             |                |      |                     |        |        | Qvalue   |
| 2) Dichlorodifluoromethane   | 2.073          | 85   | 89963               | 19.946 | ug/l   | 100      |
| 3) Chloromethane             | 2.303          | 50   | 87609               | 20.080 | ug/l   | 99       |
| 4) Vinyl Chloride            | 2.443          | 62   | 139836              | 20.222 | ug/l   | 99       |
| 5) Bromomethane              | 2.858          | 94   | 138396              | 20.149 | ug/l   | 95       |
| 6) Chloroethane              | 3.017          | 64   | 98709               | 19.999 | ug/l   | 97       |
| 7) Trichlorofluoromethane    | 3.376          | 101  | 167365              | 19.635 | ug/l   | 100      |
| 8) Diethyl Ether             | 3.827          | 74   | 52334               | 19.466 | ug/l   | 99       |
| 9) 1,1,2-Trichlorotrifluo... | 4.215          | 101  | 91324               | 18.809 | ug/l   | 99       |
| 10) 1,1-Dichloroethene       | 4.183          | 96   | 86538               | 19.177 | ug/l   | 97       |
| 11) Methyl Iodide            | 4.425          | 142  | 126592              | 18.067 | ug/l   | 99       |
| 12) Methyl Acetate           | 4.856          | 43   | 92667               | 19.746 | ug/l   | 96       |
| 13) Acrolein                 | 4.049          | 56   | 28116               | 74.482 | ug/l   | 98       |
| 14) Acrylonitrile            | 5.556          | 53   | 197013              | 96.860 | ug/l   | 99       |
| 15) Acetone                  | 4.291          | 58   | 50339               | 90.814 | ug/l   | 97       |
| 16) Carbon Disulfide         | 4.535          | 76   | 216120              | 18.558 | ug/l   | 100      |
| 17) Allyl chloride           | 4.846          | 41   | 109888              | 19.502 | ug/l   | 97       |
| 18) Methylene Chloride       | 5.098          | 84   | 103090              | 19.084 | ug/l   | 98       |
| 19) trans-1,2-Dichloroethene | 5.599          | 96   | 96731               | 19.131 | ug/l   | 97       |
| 20) Diisopropyl ether        | 6.498          | 45   | 251501              | 20.123 | ug/l   | 97       |
| 21) 1,1-Dichloroethane       | 6.393          | 63   | 161674              | 19.463 | ug/l   | 99       |
| 22) cis-1,2-Dichloroethene   | 7.329          | 96   | 116292              | 19.129 | ug/l   | 97       |
| 23) tert-Butyl Alcohol       | 5.366          | 59   | 76984m              | 93.658 | ug/l   |          |
| 24) Methyl tert-Butyl Ether  | 5.618          | 73   | 299629              | 19.500 | ug/l   | 100      |
| 25) Chloroform               | 7.820          | 83   | 193205              | 19.435 | ug/l   | 99       |
| 26) Cyclohexane              | 8.099          | 56   | 133760              | 19.047 | ug/l # | 97       |
| 29) 1,1-Dichloropropene      | 8.225          | 75   | 132254              | 19.100 | ug/l   | 98       |
| 30) 2-Butanone               | 7.337          | 43   | 248015              | 93.846 | ug/l # | 69       |
| 31) 2,2-Dichloropropane      | 7.327          | 77   | 139529              | 17.510 | ug/l   | 97       |
| 32) 1,1,1-Trichloroethane    | 8.021          | 97   | 182333              | 19.391 | ug/l   | 99       |
| 33) Carbon Tetrachloride     | 8.209          | 117  | 170846              | 19.438 | ug/l   | 99       |
| 34) Benzene                  | 8.464          | 78   | 411167              | 19.473 | ug/l   | 97       |
| 35) Methacrylonitrile        | 7.640          | 41   | 50481               | 19.806 | ug/l   | 98       |
| 36) 1,2-Dichloroethane       | 8.533          | 62   | 139405              | 19.609 | ug/l   | 99       |
| 37) Trichloroethene          | 9.217          | 130  | 126679              | 18.723 | ug/l   | 99       |
| 38) Methylcyclohexane        | 9.461          | 83   | 165272              | 18.569 | ug/l   | 99       |
| 39) 1,2-Dichloropropane      | 9.494          | 63   | 96232               | 19.364 | ug/l   | 95       |
| 40) Dibromomethane           | 9.579          | 93   | 77504               | 18.982 | ug/l   | 97       |
| 41) Bromodichloromethane     | 9.764          | 83   | 150653              | 19.092 | ug/l   | 97       |
| 42) Vinyl Acetate            | 6.436          | 43   | 940701              | 96.609 | ug/l   | 99       |

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 Sample : VSTDCCC020  
 Misc : 5.00mL/MSVOA\_N/WATER  
 ALS Vial : 16 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDCCC020EC

Manual Integrations  
 APPROVED

Reviewed By : John Carlone 09/14/2021  
 Supervised By : Mahesh Dadoda 09/14/2021

Quant Time: Sep 14 04:29:53 2021  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N091321W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Tue Sep 14 04:23:31 2021  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc    | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|---------|--------|----------|
| 43) Ethyl Acetate             | 7.412  | 43   | 112191m  | 20.127  | ug/l   |          |
| 44) Isopropyl Acetate         | 8.563  | 43   | 185790   | 19.472  | ug/l   | 99       |
| 45) 1,4-Dioxane               | 9.569  | 88   | 37513    | 388.827 | ug/l   | 96       |
| 46) Methyl methacrylate       | 9.561  | 41   | 72959    | 18.905  | ug/l   | 98       |
| 47) n-amyl Acetate            | 12.393 | 43   | 127075   | 18.968  | ug/l   | 99       |
| 48) t-1,3-Dichloropropene     | 10.722 | 75   | 149357   | 18.695  | ug/l   | 97       |
| 49) cis-1,3-Dichloropropene   | 10.191 | 75   | 162335   | 18.906  | ug/l   | 99       |
| 50) 1,1,2-Trichloroethane     | 10.899 | 97   | 112598   | 19.083  | ug/l   | 97       |
| 51) Ethyl methacrylate        | 10.765 | 69   | 141392   | 18.664  | ug/l   | 95       |
| 52) 1,3-Dichloropropane       | 11.046 | 76   | 170935   | 19.480  | ug/l   | 98       |
| 53) Dibromochloromethane      | 11.242 | 129  | 134278   | 18.507  | ug/l   | 100      |
| 54) 1,2-Dibromoethane         | 11.350 | 107  | 118684   | 18.755  | ug/l   | 99       |
| 55) 2-Chloroethyl vinyl ether | 10.043 | 63   | 94516    | 73.700  | ug/l   | 98       |
| 56) Bromoform                 | 12.460 | 173  | 101598   | 17.434  | ug/l # | 99       |
| 58) 4-Methyl-2-Pentanone      | 10.333 | 43   | 551861   | 99.402  | ug/l   | 99       |
| 59) 2-Hexanone                | 11.087 | 43   | 382044   | 99.290  | ug/l   | 100      |
| 61) Tetrachloroethene         | 10.979 | 164  | 128225   | 18.909  | ug/l   | 98       |
| 62) Toluene                   | 10.507 | 91   | 481843   | 19.412  | ug/l   | 100      |
| 64) Chlorobenzene             | 11.773 | 112  | 313560   | 19.153  | ug/l   | 100      |
| 65) 1,1,1,2-Tetrachloroethane | 11.846 | 131  | 128391   | 19.216  | ug/l   | 99       |
| 66) Ethyl Benzene             | 11.848 | 91   | 514773   | 19.082  | ug/l   | 99       |
| 67) m/p-Xylenes               | 11.956 | 106  | 432930   | 38.933  | ug/l   | 99       |
| 68) o-Xylene                  | 12.286 | 106  | 212273   | 19.334  | ug/l   | 99       |
| 69) Styrene                   | 12.296 | 104  | 336429   | 19.325  | ug/l   | 99       |
| 70) Isopropylbenzene          | 12.581 | 105  | 534969   | 19.191  | ug/l   | 99       |
| 71) 1,1,2,2-Tetrachloroethane | 12.830 | 83   | 150248   | 19.801  | ug/l   | 98       |
| 72) 1,2,3-Trichloropropane    | 12.884 | 75   | 120314m  | 19.047  | ug/l   |          |
| 73) Bromobenzene              | 12.862 | 156  | 147616   | 18.654  | ug/l   | 97       |
| 74) n-propylbenzene           | 12.924 | 91   | 566587   | 18.847  | ug/l   | 100      |
| 75) 2-Chlorotoluene           | 13.010 | 91   | 354011   | 19.567  | ug/l   | 100      |
| 76) 1,3,5-Trimethylbenzene    | 13.061 | 105  | 453060   | 19.466  | ug/l   | 100      |
| 77) t-1,4-Dichloro-2-butene   | 12.629 | 75   | 36505    | 17.513  | ug/l   | 95       |
| 78) 4-Chlorotoluene           | 13.106 | 91   | 337997   | 19.467  | ug/l   | 100      |
| 79) tert-butylbenzene         | 13.326 | 119  | 421976   | 19.735  | ug/l   | 98       |
| 80) 1,2,4-Trimethylbenzene    | 13.372 | 105  | 441351m  | 19.601  | ug/l   |          |
| 81) sec-Butylbenzene          | 13.503 | 105  | 543544   | 19.232  | ug/l   | 100      |
| 82) p-Isopropyltoluene        | 13.618 | 119  | 450114   | 18.568  | ug/l   | 99       |
| 83) 1,3-Dichlorobenzene       | 13.618 | 146  | 259207   | 18.845  | ug/l   | 100      |
| 84) 1,4-Dichlorobenzene       | 13.696 | 146  | 252522   | 19.164  | ug/l   | 98       |
| 85) n-Butylbenzene            | 13.946 | 91   | 303990   | 17.630  | ug/l   | 100      |
| 86) Hexachloroethane          | 14.214 | 117  | 82358    | 18.495  | ug/l   | 98       |
| 87) 1,2-Dichlorobenzene       | 13.991 | 146  | 263311   | 19.921  | ug/l   | 99       |
| 88) 1,2-Dibromo-3-Chloropr... | 14.603 | 75   | 26482    | 20.640  | ug/l   | 97       |
| 89) 1,2,4-Trichlorobenzene    | 15.265 | 180  | 105897   | 16.582  | ug/l   | 98       |
| 90) Hexachlorobutadiene       | 15.372 | 225  | 69467    | 17.199  | ug/l   | 99       |
| 91) Naphthalene               | 15.509 | 128  | 268052   | 19.457  | ug/l   | 99       |
| 92) 1,2,3-Trichlorobenzene    | 15.705 | 180  | 102151   | 16.985  | ug/l   | 99       |

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

