

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN092821\  
 Data File : VN068722.D  
 Acq On : 28 Sep 2021 15:36  
 Operator : JC/MD  
 Sample : VSTDICCC020  
 Misc : 5.00mL/MSVOA\_N/WATER  
 ALS Vial : 11 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICCC020

Manual Integrations  
 APPROVED

MMDadoda  
 9/30/2021 12:17:29 PM

Quant Time: Sep 29 01:52:42 2021  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N092821W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Wed Sep 29 01:51:17 2021  
 Response via : Initial Calibration

| Compound                     | R.T.           | QIon | Response   | Conc     | Units  | Dev(Min) |
|------------------------------|----------------|------|------------|----------|--------|----------|
| -----                        |                |      |            |          |        |          |
| Internal Standards           |                |      |            |          |        |          |
| 1) Bromochloromethane        | 7.659          | 128  | 83704      | 30.000   | ug/l   | 0.00     |
| 28) 1,4-Difluorobenzene      | 8.968          | 114  | 494781     | 30.000   | ug/l   | 0.00     |
| 57) Chlorobenzene-d5         | 11.746         | 117  | 465716     | 30.000   | ug/l   | 0.00     |
|                              |                |      |            |          |        |          |
| System Monitoring Compounds  |                |      |            |          |        |          |
| 27) 1,2-Dichloroethane-d4    | 8.440          | 65   | 206056     | 26.929   | ug/l   | 0.00     |
| Spiked Amount 30.000         | Range 91 - 110 |      | Recovery = | 89.767%# |        |          |
| 60) 4-Bromofluorobenzene     | 12.733         | 95   | 205195     | 24.905   | ug/l   | 0.00     |
| Spiked Amount 30.000         | Range 63 - 112 |      | Recovery = | 83.000%  |        |          |
| 63) Toluene-d8               | 10.443         | 98   | 640453     | 29.525   | ug/l   | 0.00     |
| Spiked Amount 30.000         | Range 91 - 112 |      | Recovery = | 98.433%  |        |          |
|                              |                |      |            |          |        |          |
| Target Compounds             |                |      |            |          |        |          |
|                              |                |      |            |          | Qvalue |          |
| 2) Dichlorodifluoromethane   | 2.073          | 85   | 80564      | 17.156   | ug/l   | 100      |
| 3) Chloromethane             | 2.303          | 50   | 102531     | 17.159   | ug/l   | 100      |
| 4) Vinyl Chloride            | 2.443          | 62   | 194760     | 24.055   | ug/l   | 100      |
| 5) Bromomethane              | 2.858          | 94   | 177864     | 29.214   | ug/l   | 100      |
| 6) Chloroethane              | 3.019          | 64   | 161710     | 26.476   | ug/l   | 100      |
| 7) Trichlorofluoromethane    | 3.373          | 101  | 167620     | 18.872   | ug/l   | 100      |
| 8) Diethyl Ether             | 3.827          | 74   | 55144      | 17.586   | ug/l   | 100      |
| 9) 1,1,2-Trichlorotrifluo... | 4.215          | 101  | 95037      | 19.286   | ug/l   | 100      |
| 10) 1,1-Dichloroethene       | 4.186          | 96   | 87052      | 19.063   | ug/l   | 100      |
| 11) Methyl Iodide            | 4.425          | 142  | 101074     | 17.405   | ug/l   | 100      |
| 12) Methyl Acetate           | 4.859          | 43   | 151779     | 16.180   | ug/l   | 100      |
| 13) Acrolein                 | 4.046          | 56   | 30891      | 96.481   | ug/l   | 100      |
| 14) Acrylonitrile            | 5.559          | 53   | 235078     | 83.093   | ug/l   | 100      |
| 15) Acetone                  | 4.285          | 58   | 72753      | 92.807   | ug/l   | 100      |
| 16) Carbon Disulfide         | 4.535          | 76   | 236159     | 18.431   | ug/l   | 100      |
| 17) Allyl chloride           | 4.843          | 41   | 139344     | 15.898   | ug/l   | 100      |
| 18) Methylene Chloride       | 5.098          | 84   | 108644     | 19.320   | ug/l   | 100      |
| 19) trans-1,2-Dichloroethene | 5.605          | 96   | 101712     | 19.951   | ug/l   | 100      |
| 20) Diisopropyl ether        | 6.498          | 45   | 316058     | 16.614   | ug/l   | 100      |
| 21) 1,1-Dichloroethane       | 6.391          | 63   | 184020     | 18.067   | ug/l   | 100      |
| 22) cis-1,2-Dichloroethene   | 7.329          | 96   | 119115     | 19.380   | ug/l   | 100      |
| 23) tert-Butyl Alcohol       | 5.369          | 59   | 88837      | 92.474   | ug/l # | 100      |
| 24) Methyl tert-Butyl Ether  | 5.615          | 73   | 332588     | 18.805   | ug/l   | 100      |
| 25) Chloroform               | 7.820          | 83   | 214023     | 18.704   | ug/l   | 100      |
| 26) Cyclohexane              | 8.099          | 56   | 157249     | 16.713   | ug/l   | 100      |
| 29) 1,1-Dichloropropene      | 8.222          | 75   | 149125     | 15.858   | ug/l   | 100      |
| 30) 2-Butanone               | 7.335          | 43   | 350568     | 80.931   | ug/l   | 100      |
| 31) 2,2-Dichloropropane      | 7.327          | 77   | 174800     | 18.375   | ug/l   | 100      |
| 32) 1,1,1-Trichloroethane    | 8.016          | 97   | 195189     | 17.949   | ug/l   | 100      |
| 33) Carbon Tetrachloride     | 8.209          | 117  | 169961     | 16.712   | ug/l   | 100      |
| 34) Benzene                  | 8.464          | 78   | 453102     | 17.801   | ug/l   | 100      |
| 35) Methacrylonitrile        | 7.638          | 41   | 71436      | 16.139   | ug/l   | 100      |
| 36) 1,2-Dichloroethane       | 8.533          | 62   | 170412     | 17.307   | ug/l   | 100      |
| 37) Trichloroethene          | 9.217          | 130  | 120413     | 18.846   | ug/l   | 100      |
| 38) Methylcyclohexane        | 9.461          | 83   | 186093     | 15.918   | ug/l   | 100      |
| 39) 1,2-Dichloropropane      | 9.491          | 63   | 112876     | 15.485   | ug/l   | 100      |
| 40) Dibromomethane           | 9.579          | 93   | 86547      | 17.422   | ug/l   | 100      |
| 41) Bromodichloromethane     | 9.762          | 83   | 169323     | 16.991   | ug/l   | 100      |
| 42) Vinyl Acetate            | 6.433          | 43   | 1251276    | 79.920   | ug/l   | 100      |

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 ALS Vial : 11 Sample Multiplier: 1

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Quant Time: Sep 29 01:52:42 2021  
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 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Wed Sep 29 01:51:17 2021  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc    | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|---------|--------|----------|
| 43) Ethyl Acetate             | 7.412  | 43   | 127809   | 15.117  | ug/l   | 100      |
| 44) Isopropyl Acetate         | 8.560  | 43   | 246312   | 15.684  | ug/l   | 100      |
| 45) 1,4-Dioxane               | 9.571  | 88   | 40865    | 350.544 | ug/l   | 100      |
| 46) Methyl methacrylate       | 9.561  | 41   | 103154   | 13.084  | ug/l   | 100      |
| 47) n-amyl Acetate            | 12.390 | 43   | 199869   | 13.510  | ug/l   | 100      |
| 48) t-1,3-Dichloropropene     | 10.719 | 75   | 181884   | 16.589  | ug/l   | 100      |
| 49) cis-1,3-Dichloropropene   | 10.191 | 75   | 188516   | 16.817  | ug/l   | 100      |
| 50) 1,1,2-Trichloroethane     | 10.899 | 97   | 121204   | 17.684  | ug/l   | 100      |
| 51) Ethyl methacrylate        | 10.762 | 69   | 174890   | 16.462  | ug/l   | 100      |
| 52) 1,3-Dichloropropane       | 11.046 | 76   | 195048   | 17.746  | ug/l   | 100      |
| 53) Dibromochloromethane      | 11.240 | 129  | 130969   | 16.722  | ug/l   | 100      |
| 54) 1,2-Dibromoethane         | 11.347 | 107  | 128225   | 17.981  | ug/l   | 100      |
| 55) 2-Chloroethyl vinyl ether | 10.041 | 63   | 235968   | 76.252  | ug/l   | 100      |
| 56) Bromoform                 | 12.460 | 173  | 91108    | 15.946  | ug/l # | 100      |
| 58) 4-Methyl-2-Pentanone      | 10.330 | 43   | 762744   | 79.022  | ug/l   | 100      |
| 59) 2-Hexanone                | 11.087 | 43   | 573192   | 77.939  | ug/l   | 100      |
| 61) Tetrachloroethene         | 10.979 | 164  | 106435   | 18.647  | ug/l   | 100      |
| 62) Toluene                   | 10.507 | 91   | 544405   | 18.291  | ug/l   | 100      |
| 64) Chlorobenzene             | 11.773 | 112  | 327313   | 19.032  | ug/l   | 100      |
| 65) 1,1,1,2-Tetrachloroethane | 11.843 | 131  | 127465   | 18.178  | ug/l   | 100      |
| 66) Ethyl Benzene             | 11.846 | 91   | 597766   | 17.735  | ug/l   | 100      |
| 67) m/p-Xylenes               | 11.956 | 106  | 457143   | 34.915  | ug/l   | 100      |
| 68) o-Xylene                  | 12.283 | 106  | 222666   | 16.657  | ug/l   | 100      |
| 69) Styrene                   | 12.296 | 104  | 361107   | 15.956  | ug/l   | 100      |
| 70) Isopropylbenzene          | 12.581 | 105  | 591136   | 16.957  | ug/l   | 100      |
| 71) 1,1,2,2-Tetrachloroethane | 12.830 | 83   | 171819   | 17.505  | ug/l   | 100      |
| 72) 1,2,3-Trichloropropane    | 12.881 | 75   | 144147m  | 15.867  | ug/l   |          |
| 73) Bromobenzene              | 12.862 | 156  | 130958   | 17.156  | ug/l   | 100      |
| 74) n-propylbenzene           | 12.924 | 91   | 681176   | 17.304  | ug/l   | 100      |
| 75) 2-Chlorotoluene           | 13.010 | 91   | 395536   | 17.627  | ug/l   | 100      |
| 76) 1,3,5-Trimethylbenzene    | 13.061 | 105  | 494189   | 18.428  | ug/l   | 100      |
| 77) t-1,4-Dichloro-2-butene   | 12.629 | 75   | 50986    | 15.013  | ug/l   | 100      |
| 78) 4-Chlorotoluene           | 13.106 | 91   | 390816   | 17.820  | ug/l   | 100      |
| 79) tert-butylbenzene         | 13.326 | 119  | 420496   | 18.382  | ug/l   | 100      |
| 80) 1,2,4-Trimethylbenzene    | 13.372 | 105  | 486622m  | 19.447  | ug/l   |          |
| 81) sec-Butylbenzene          | 13.503 | 105  | 601311   | 19.553  | ug/l   | 100      |
| 82) p-Isopropyltoluene        | 13.618 | 119  | 490539   | 17.747  | ug/l   | 100      |
| 83) 1,3-Dichlorobenzene       | 13.618 | 146  | 240335   | 18.133  | ug/l   | 100      |
| 84) 1,4-Dichlorobenzene       | 13.696 | 146  | 232872   | 19.047  | ug/l   | 100      |
| 85) n-Butylbenzene            | 13.946 | 91   | 404356   | 18.281  | ug/l   | 100      |
| 86) Hexachloroethane          | 14.211 | 117  | 92537    | 18.017  | ug/l   | 100      |
| 87) 1,2-Dichlorobenzene       | 13.991 | 146  | 227230   | 19.064  | ug/l   | 100      |
| 88) 1,2-Dibromo-3-Chloropr... | 14.605 | 75   | 31891    | 16.890  | ug/l   | 100      |
| 89) 1,2,4-Trichlorobenzene    | 15.265 | 180  | 112627   | 18.636  | ug/l   | 100      |
| 90) Hexachlorobutadiene       | 15.372 | 225  | 57735    | 17.849  | ug/l   | 100      |
| 91) Naphthalene               | 15.509 | 128  | 354164   | 21.580  | ug/l   | 100      |
| 92) 1,2,3-Trichlorobenzene    | 15.702 | 180  | 114763   | 19.910  | ug/l   | 100      |

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

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 ALS Vial : 11 Sample Multiplier: 1

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