

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN111021\  
 Data File : VN069448.D  
 Acq On : 10 Nov 2021 19:36  
 Operator : JC/MD  
 Sample : VSTDCCC020  
 Misc : 5.00mL/MSVOA\_N/WATER  
 ALS Vial : 20 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDCCC020EC

Manual Integrations  
 APPROVED

Reviewed By : John Carlone 11/11/2021  
 Supervised By : Semsettin Yesilyurt 11/16/2021

Quant Time: Nov 11 03:14:49 2021  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N111021W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Wed Nov 10 14:36:17 2021  
 Response via : Initial Calibration

| Compound                     | R.T.           | QIon | Response            | Conc    | Units  | Dev(Min) |
|------------------------------|----------------|------|---------------------|---------|--------|----------|
| -----                        |                |      |                     |         |        |          |
| Internal Standards           |                |      |                     |         |        |          |
| 1) Bromochloromethane        | 7.659          | 128  | 169234              | 30.000  | ug/l   | 0.00     |
| 28) 1,4-Difluorobenzene      | 8.968          | 114  | 989966              | 30.000  | ug/l   | 0.00     |
| 57) Chlorobenzene-d5         | 11.747         | 117  | 910600              | 30.000  | ug/l   | 0.00     |
|                              |                |      |                     |         |        |          |
| System Monitoring Compounds  |                |      |                     |         |        |          |
| 27) 1,2-Dichloroethane-d4    | 8.440          | 65   | 461079              | 31.414  | ug/l   | 0.00     |
| Spiked Amount 30.000         | Range 91 - 110 |      | Recovery = 104.700% |         |        |          |
| 60) 4-Bromofluorobenzene     | 12.734         | 95   | 425685              | 29.212  | ug/l   | 0.00     |
| Spiked Amount 30.000         | Range 63 - 112 |      | Recovery = 97.367%  |         |        |          |
| 63) Toluene-d8               | 10.443         | 98   | 1304304             | 31.022  | ug/l   | 0.00     |
| Spiked Amount 30.000         | Range 91 - 112 |      | Recovery = 103.400% |         |        |          |
|                              |                |      |                     |         |        |          |
| Target Compounds             |                |      |                     |         |        | Qvalue   |
| 2) Dichlorodifluoromethane   | 2.073          | 85   | 279541              | 22.354  | ug/l   | 97       |
| 3) Chloromethane             | 2.303          | 50   | 301070              | 23.091  | ug/l   | 97       |
| 4) Vinyl Chloride            | 2.445          | 62   | 298557              | 22.582  | ug/l   | 99       |
| 5) Bromomethane              | 2.853          | 94   | 192366              | 22.719  | ug/l   | 100      |
| 6) Chloroethane              | 3.019          | 64   | 189953              | 22.772  | ug/l   | 99       |
| 7) Trichlorofluoromethane    | 3.373          | 101  | 424024              | 21.882  | ug/l   | 97       |
| 8) Diethyl Ether             | 3.824          | 74   | 133616              | 21.844  | ug/l   | 78       |
| 9) 1,1,2-Trichlorotrifluo... | 4.202          | 101  | 191432              | 21.349  | ug/l   | 73       |
| 10) 1,1-Dichloroethene       | 4.175          | 96   | 181694              | 21.484  | ug/l # | 82       |
| 11) Methyl Iodide            | 4.417          | 142  | 238891              | 20.274  | ug/l   | 98       |
| 12) Methyl Acetate           | 4.859          | 43   | 571302m             | 23.456  | ug/l   |          |
| 13) Acrolein                 | 4.041          | 56   | 56160               | 83.864  | ug/l   | 88       |
| 14) Acrylonitrile            | 5.559          | 53   | 750522              | 112.947 | ug/l   | 99       |
| 15) Acetone                  | 4.291          | 58   | 197282              | 89.100  | ug/l   | 77       |
| 16) Carbon Disulfide         | 4.524          | 76   | 425063              | 20.107  | ug/l   | 97       |
| 17) Allyl chloride           | 4.840          | 41   | 380977              | 21.195  | ug/l   | 90       |
| 18) Methylene Chloride       | 5.093          | 84   | 229954              | 21.343  | ug/l # | 86       |
| 19) trans-1,2-Dichloroethene | 5.597          | 96   | 192538              | 20.746  | ug/l   | 84       |
| 20) Diisopropyl ether        | 6.501          | 45   | 819755              | 21.283  | ug/l # | 94       |
| 21) 1,1-Dichloroethane       | 6.388          | 63   | 417165              | 21.349  | ug/l   | 99       |
| 22) cis-1,2-Dichloroethene   | 7.327          | 96   | 242161              | 21.038  | ug/l   | 94       |
| 23) tert-Butyl Alcohol       | 5.390          | 59   | 282816              | 122.293 | ug/l # | 100      |
| 24) Methyl tert-Butyl Ether  | 5.621          | 73   | 739194              | 21.809  | ug/l   | 96       |
| 25) Chloroform               | 7.820          | 83   | 433854              | 21.474  | ug/l   | 98       |
| 26) Cyclohexane              | 8.096          | 56   | 398641              | 21.488  | ug/l # | 87       |
| 29) 1,1-Dichloropropene      | 8.222          | 75   | 310074              | 20.519  | ug/l   | 96       |
| 30) 2-Butanone               | 7.343          | 43   | 1154904             | 105.583 | ug/l   | 91       |
| 31) 2,2-Dichloropropane      | 7.327          | 77   | 302905              | 18.960  | ug/l   | 98       |
| 32) 1,1,1-Trichloroethane    | 8.016          | 97   | 357169              | 20.246  | ug/l   | 94       |
| 33) Carbon Tetrachloride     | 8.209          | 117  | 292682              | 20.087  | ug/l   | 97       |
| 34) Benzene                  | 8.461          | 78   | 973047              | 21.174  | ug/l # | 95       |
| 35) Methacrylonitrile        | 7.640          | 41   | 218652              | 21.795  | ug/l   | 90       |
| 36) 1,2-Dichloroethane       | 8.534          | 62   | 374876              | 21.159  | ug/l   | 99       |
| 37) Trichloroethene          | 9.217          | 130  | 223963              | 20.173  | ug/l   | 92       |
| 38) Methylcyclohexane        | 9.459          | 83   | 376920              | 20.160  | ug/l   | 91       |
| 39) 1,2-Dichloropropane      | 9.494          | 63   | 255861              | 21.022  | ug/l   | 99       |
| 40) Dibromomethane           | 9.580          | 93   | 170591              | 20.928  | ug/l   | 97       |
| 41) Bromodichloromethane     | 9.765          | 83   | 307134              | 20.074  | ug/l   | 99       |
| 42) Vinyl Acetate            | 6.436          | 43   | 3252227m            | 105.209 | ug/l   |          |

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|-------------------------------|--------|------|----------|---------|--------|----------|
| 43) Ethyl Acetate             | 7.418  | 43   | 442874   | 21.848  | ug/l # | 82       |
| 44) Isopropyl Acetate         | 8.563  | 43   | 686462   | 21.721  | ug/l   | 96       |
| 45) 1,4-Dioxane               | 9.571  | 88   | 120475   | 469.615 | ug/l   | 89       |
| 46) Methyl methacrylate       | 9.561  | 41   | 309314   | 21.251  | ug/l   | 84       |
| 47) n-amyl Acetate            | 12.390 | 43   | 493276   | 20.326  | ug/l   | 99       |
| 48) t-1,3-Dichloropropene     | 10.719 | 75   | 316627   | 19.283  | ug/l   | 97       |
| 49) cis-1,3-Dichloropropene   | 10.191 | 75   | 351345   | 19.664  | ug/l   | 93       |
| 50) 1,1,2-Trichloroethane     | 10.899 | 97   | 243248   | 21.014  | ug/l   | 98       |
| 51) Ethyl methacrylate        | 10.762 | 69   | 401152   | 20.670  | ug/l   | 91       |
| 52) 1,3-Dichloropropane       | 11.047 | 76   | 419703   | 20.991  | ug/l   | 100      |
| 53) Dibromochloromethane      | 11.240 | 129  | 215679   | 19.499  | ug/l   | 99       |
| 54) 1,2-Dibromoethane         | 11.347 | 107  | 247545   | 20.649  | ug/l   | 96       |
| 55) 2-Chloroethyl vinyl ether | 10.044 | 63   | 401700   | 90.997  | ug/l   | 97       |
| 56) Bromoform                 | 12.460 | 173  | 145114   | 18.295  | ug/l # | 99       |
| 58) 4-Methyl-2-Pentanone      | 10.333 | 43   | 2349285  | 117.533 | ug/l   | 95       |
| 59) 2-Hexanone                | 11.087 | 43   | 1720164  | 113.135 | ug/l   | 95       |
| 61) Tetrachloroethene         | 10.980 | 164  | 200150   | 20.479  | ug/l   | 98       |
| 62) Toluene                   | 10.507 | 91   | 1076879  | 21.521  | ug/l   | 99       |
| 64) Chlorobenzene             | 11.773 | 112  | 624588   | 20.805  | ug/l   | 99       |
| 65) 1,1,1,2-Tetrachloroethane | 11.843 | 131  | 219920   | 20.807  | ug/l   | 99       |
| 66) Ethyl Benzene             | 11.846 | 91   | 1161639  | 20.973  | ug/l   | 99       |
| 67) m/p-Xylenes               | 11.956 | 106  | 866944   | 42.143  | ug/l   | 98       |
| 68) o-Xylene                  | 12.280 | 106  | 429426   | 20.848  | ug/l   | 96       |
| 69) Styrene                   | 12.296 | 104  | 684554   | 20.499  | ug/l   | 98       |
| 70) Isopropylbenzene          | 12.581 | 105  | 1129604  | 20.970  | ug/l   | 99       |
| 71) 1,1,2,2-Tetrachloroethane | 12.827 | 83   | 386126   | 21.723  | ug/l   | 97       |
| 72) 1,2,3-Trichloropropane    | 12.881 | 75   | 349466m  | 20.182  | ug/l   |          |
| 73) Bromobenzene              | 12.862 | 156  | 256150   | 20.628  | ug/l   | 94       |
| 74) n-propylbenzene           | 12.921 | 91   | 1253342  | 20.259  | ug/l   | 99       |
| 75) 2-Chlorotoluene           | 13.010 | 91   | 778077   | 20.660  | ug/l   | 97       |
| 76) 1,3,5-Trimethylbenzene    | 13.061 | 105  | 918772   | 20.781  | ug/l   | 100      |
| 77) t-1,4-Dichloro-2-butene   | 12.626 | 75   | 85203    | 18.228  | ug/l   | 78       |
| 78) 4-Chlorotoluene           | 13.106 | 91   | 728326   | 20.194  | ug/l   | 95       |
| 79) tert-butylbenzene         | 13.324 | 119  | 802011   | 20.621  | ug/l   | 99       |
| 80) 1,2,4-Trimethylbenzene    | 13.369 | 105  | 893388m  | 20.714  | ug/l   |          |
| 81) sec-Butylbenzene          | 13.503 | 105  | 1095986  | 20.140  | ug/l   | 100      |
| 82) p-Isopropyltoluene        | 13.619 | 119  | 872933   | 20.105  | ug/l   | 99       |
| 83) 1,3-Dichlorobenzene       | 13.619 | 146  | 438883   | 20.672  | ug/l   | 99       |
| 84) 1,4-Dichlorobenzene       | 13.696 | 146  | 414513   | 20.125  | ug/l   | 99       |
| 85) n-Butylbenzene            | 13.946 | 91   | 677254   | 18.689  | ug/l   | 99       |
| 86) Hexachloroethane          | 14.211 | 117  | 135128   | 18.805  | ug/l   | 91       |
| 87) 1,2-Dichlorobenzene       | 13.991 | 146  | 430171   | 20.994  | ug/l   | 99       |
| 88) 1,2-Dibromo-3-Chloropr... | 14.606 | 75   | 66500    | 21.371  | ug/l   | 97       |
| 89) 1,2,4-Trichlorobenzene    | 15.265 | 180  | 185542   | 18.886  | ug/l   | 96       |
| 90) Hexachlorobutadiene       | 15.373 | 225  | 107384   | 20.212  | ug/l   | 97       |
| 91) Naphthalene               | 15.507 | 128  | 581302   | 20.540  | ug/l   | 99       |
| 92) 1,2,3-Trichlorobenzene    | 15.702 | 180  | 193600   | 20.045  | ug/l   | 99       |

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

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