

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN062323\  
 Data File : VN078367.D  
 Acq On : 23 Jun 2023 10:22  
 Operator : JC\MD  
 Sample : VSTDICC050  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICC050

Quant Time: Jun 24 00:31:22 2023  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N062323W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Sat Jun 24 00:28:04 2023  
 Response via : Initial Calibration

### Manual Integrations APPROVED

Reviewed By :John  
 Carlone

06/24/2023  
 Supervised By :Mahesh  
 Dadoda

| Compound                | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|-------------------------|--------|------|----------|--------|-------|----------|
| -----                   |        |      |          |        |       |          |
| Internal Standards      |        |      |          |        |       |          |
| 1) Bromochloromethane   | 7.824  | 128  | 86156    | 30.000 | ug/l  | 0.00     |
| 28) 1,4-Difluorobenzene | 9.106  | 114  | 492131   | 30.000 | ug/l  | 0.00     |
| 57) Chlorobenzene-d5    | 11.870 | 117  | 441224   | 30.000 | ug/l  | 0.00     |

|                             |        |       |          |          |      |          |
|-----------------------------|--------|-------|----------|----------|------|----------|
| System Monitoring Compounds |        |       |          |          |      |          |
| 27) 1,2-Dichloroethane-d4   | 8.588  | 65    | 196594   | 30.302   | ug/l | 0.00     |
| Spiked Amount               | 30.000 | Range | 91 - 110 | Recovery | =    | 101.000% |
| 60) 4-Bromofluorobenzene    | 12.853 | 95    | 195063   | 31.379   | ug/l | 0.00     |
| Spiked Amount               | 30.000 | Range | 63 - 112 | Recovery | =    | 104.600% |
| 63) Toluene-d8              | 10.571 | 98    | 630538   | 29.494   | ug/l | 0.00     |
| Spiked Amount               | 30.000 | Range | 91 - 112 | Recovery | =    | 98.300%  |

|                              |       |     |         |         |        |        |
|------------------------------|-------|-----|---------|---------|--------|--------|
| Target Compounds             |       |     |         |         |        | Qvalue |
| 2) Dichlorodifluoromethane   | 2.136 | 85  | 248254  | 47.575  | ug/l   | 100    |
| 3) Chloromethane             | 2.371 | 50  | 295169  | 46.904  | ug/l   | 94     |
| 4) Vinyl Chloride            | 2.524 | 62  | 361544  | 46.705  | ug/l   | 94     |
| 5) Bromomethane              | 2.965 | 94  | 250284  | 39.772  | ug/l   | 97     |
| 6) Chloroethane              | 3.130 | 64  | 250404  | 45.414  | ug/l   | 95     |
| 7) Trichlorofluoromethane    | 3.506 | 101 | 429982  | 47.194  | ug/l   | 98     |
| 8) Diethyl Ether             | 3.971 | 74  | 143112  | 47.056  | ug/l   | 100    |
| 9) 1,1,2-Trichlorotrifluo... | 4.383 | 101 | 227038  | 45.842  | ug/l   | 98     |
| 10) 1,1-Dichloroethene       | 4.353 | 96  | 228807  | 47.116  | ug/l   | 97     |
| 11) Methyl Iodide            | 4.606 | 142 | 344525  | 50.078  | ug/l   | 99     |
| 12) Methyl Acetate           | 5.036 | 43  | 347200  | 46.099  | ug/l   | 96     |
| 13) Acrolein                 | 4.189 | 56  | 218046  | 231.143 | ug/l   | 98     |
| 14) Acrylonitrile            | 5.730 | 53  | 501188  | 242.370 | ug/l   | 97     |
| 15) Acetone                  | 4.436 | 58  | 130621  | 225.558 | ug/l   | 84     |
| 16) Carbon Disulfide         | 4.724 | 76  | 616642  | 46.469  | ug/l   | 96     |
| 17) Allyl chloride           | 5.036 | 41  | 288611  | 47.288  | ug/l   | 96     |
| 18) Methylene Chloride       | 5.289 | 84  | 269151  | 46.774  | ug/l   | 97     |
| 19) trans-1,2-Dichloroethene | 5.794 | 96  | 252528  | 47.120  | ug/l   | 99     |
| 20) Diisopropyl ether        | 6.683 | 45  | 705856  | 48.244  | ug/l   | 99     |
| 21) 1,1-Dichloroethane       | 6.577 | 63  | 454902  | 46.874  | ug/l   | 98     |
| 22) cis-1,2-Dichloroethene   | 7.494 | 96  | 292709  | 48.010  | ug/l   | 98     |
| 23) tert-Butyl Alcohol       | 5.530 | 59  | 167824  | 220.747 | ug/l   | 100    |
| 24) Methyl tert-Butyl Ether  | 5.806 | 73  | 733292  | 47.890  | ug/l   | 100    |
| 25) Chloroform               | 7.977 | 83  | 494898  | 48.255  | ug/l   | 98     |
| 26) Cyclohexane              | 8.265 | 56  | 345687  | 49.772  | ug/l # | 99     |
| 29) 1,1-Dichloropropene      | 8.377 | 75  | 366941  | 48.099  | ug/l   | 99     |
| 30) 2-Butanone               | 7.494 | 43  | 614715  | 229.884 | ug/l   | 99     |
| 31) 2,2-Dichloropropane      | 7.500 | 77  | 393569  | 48.250  | ug/l   | 98     |
| 32) 1,1,1-Trichloroethane    | 8.177 | 97  | 444747  | 47.844  | ug/l   | 99     |
| 33) Carbon Tetrachloride     | 8.371 | 117 | 391529  | 48.307  | ug/l   | 96     |
| 34) Benzene                  | 8.612 | 78  | 1080844 | 47.511  | ug/l   | 97     |
| 35) Methacrylonitrile        | 7.788 | 41  | 142819  | 46.542  | ug/l   | 88     |
| 36) 1,2-Dichloroethane       | 8.677 | 62  | 369726  | 47.668  | ug/l   | 100    |
| 37) Trichloroethene          | 9.359 | 130 | 276763  | 47.616  | ug/l   | 95     |
| 38) Methylcyclohexane        | 9.606 | 83  | 320521  | 47.821  | ug/l   | 99     |
| 39) 1,2-Dichloropropane      | 9.629 | 63  | 275084  | 48.271  | ug/l   | 93     |
| 40) Dibromomethane           | 9.712 | 93  | 193459  | 47.045  | ug/l   | 98     |
| 41) Bromodichloromethane     | 9.894 | 83  | 384501  | 48.130  | ug/l # | 95     |
| 42) Vinyl Acetate            | 6.612 | 43  | 2040371 | 239.528 | ug/l   | 99     |

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 Sample : VSTDIC050  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDIC050

Manual Integrations  
 APPROVED

Reviewed By :John  
 Carlone

06/24/2023  
 Supervised By :Mahesh  
 Dadoda

Quant Time: Jun 24 00:31:22 2023  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N062323W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Sat Jun 24 00:28:04 2023  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc    | Units | Dev(Min) |
|-------------------------------|--------|------|----------|---------|-------|----------|
| 43) Ethyl Acetate             | 7.571  | 43   | 272618   | 49.705  | ug/l  | 96       |
| 44) Isopropyl Acetate         | 8.694  | 43   | 481955   | 47.393  | ug/l  | 100      |
| 45) 1,4-Dioxane               | 9.694  | 88   | 81104    | 925.869 | ug/l  | 93       |
| 46) Methyl methacrylate       | 9.688  | 41   | 217195   | 47.980  | ug/l  | 97       |
| 47) n-amyl Acetate            | 12.500 | 43   | 385527   | 51.573  | ug/l  | 98       |
| 48) t-1,3-Dichloropropene     | 10.841 | 75   | 402552   | 49.089  | ug/l  | 99       |
| 49) cis-1,3-Dichloropropene   | 10.318 | 75   | 441793   | 48.876  | ug/l  | 96       |
| 50) 1,1,2-Trichloroethane     | 11.018 | 97   | 265280   | 48.121  | ug/l  | 99       |
| 51) Ethyl methacrylate        | 10.882 | 69   | 374259   | 49.626  | ug/l  | 94       |
| 52) 1,3-Dichloropropane       | 11.170 | 76   | 440410   | 47.600  | ug/l  | 98       |
| 53) Dibromochloromethane      | 11.365 | 129  | 285096   | 48.758  | ug/l  | 99       |
| 54) 1,2-Dibromoethane         | 11.476 | 107  | 263584   | 47.438  | ug/l  | 98       |
| 55) 2-Chloroethyl vinyl ether | 10.165 | 63   | 717133   | 257.751 | ug/l  | 98       |
| 56) Bromoform                 | 12.582 | 173  | 181253   | 50.641  | ug/l  | 99       |
| 58) 4-Methyl-2-Pentanone      | 10.447 | 43   | 1373912  | 233.177 | ug/l  | 99       |
| 59) 2-Hexanone                | 11.200 | 43   | 956052   | 234.942 | ug/l  | 100      |
| 61) Tetrachloroethene         | 11.112 | 164  | 224825   | 46.501  | ug/l  | 96       |
| 62) Toluene                   | 10.635 | 91   | 1202797  | 46.840  | ug/l  | 100      |
| 64) Chlorobenzene             | 11.894 | 112  | 723542   | 47.539  | ug/l  | 97       |
| 65) 1,1,1,2-Tetrachloroethane | 11.965 | 131  | 271195   | 46.208  | ug/l  | 99       |
| 66) Ethyl Benzene             | 11.970 | 91   | 1267146  | 48.495  | ug/l  | 100      |
| 67) m/p-Xylenes               | 12.076 | 106  | 968495   | 98.028  | ug/l  | 99       |
| 68) o-Xylene                  | 12.400 | 106  | 468468   | 48.898  | ug/l  | 99       |
| 69) Styrene                   | 12.417 | 104  | 765930   | 50.493  | ug/l  | 99       |
| 70) Isopropylbenzene          | 12.700 | 105  | 1146145  | 48.687  | ug/l  | 99       |
| 71) 1,1,2,2-Tetrachloroethane | 12.941 | 83   | 357237   | 46.664  | ug/l  | 99       |
| 72) 1,2,3-Trichloropropane    | 12.994 | 75   | 319882m  | 47.402  | ug/l  |          |
| 73) Bromobenzene              | 12.982 | 156  | 271459   | 48.231  | ug/l  | 98       |
| 74) n-propylbenzene           | 13.041 | 91   | 1275836  | 49.840  | ug/l  | 99       |
| 75) 2-Chlorotoluene           | 13.129 | 91   | 798353   | 46.071  | ug/l  | 99       |
| 76) 1,3,5-Trimethylbenzene    | 13.176 | 105  | 915479   | 46.898  | ug/l  | 99       |
| 77) t-1,4-Dichloro-2-butene   | 12.741 | 75   | 106908   | 51.833  | ug/l  | 92       |
| 78) 4-Chlorotoluene           | 13.229 | 91   | 776015   | 47.855  | ug/l  | 99       |
| 79) tert-butylbenzene         | 13.441 | 119  | 728479   | 45.366  | ug/l  | 96       |
| 80) 1,2,4-Trimethylbenzene    | 13.488 | 105  | 909268   | 49.295  | ug/l  | 99       |
| 81) sec-Butylbenzene          | 13.617 | 105  | 957229   | 47.783  | ug/l  | 99       |
| 82) p-Isopropyltoluene        | 13.735 | 119  | 798037   | 49.527  | ug/l  | 99       |
| 83) 1,3-Dichlorobenzene       | 13.735 | 146  | 455705   | 51.084  | ug/l  | 99       |
| 84) 1,4-Dichlorobenzene       | 13.817 | 146  | 446622   | 51.782  | ug/l  | 99       |
| 85) n-Butylbenzene            | 14.059 | 91   | 592274   | 49.762  | ug/l  | 98       |
| 86) Hexachloroethane          | 14.335 | 117  | 148075   | 47.745  | ug/l  | 99       |
| 87) 1,2-Dichlorobenzene       | 14.111 | 146  | 453995   | 51.342  | ug/l  | 95       |
| 88) 1,2-Dibromo-3-Chloropr... | 14.723 | 75   | 55140    | 47.803  | ug/l  | 99       |
| 89) 1,2,4-Trichlorobenzene    | 15.394 | 180  | 147329   | 54.643  | ug/l  | 99       |
| 90) Hexachlorobutadiene       | 15.505 | 225  | 74499    | 40.641  | ug/l  | 97       |
| 91) Naphthalene               | 15.647 | 128  | 452435   | 51.210  | ug/l  | 99       |
| 92) 1,2,3-Trichlorobenzene    | 15.847 | 180  | 158128   | 50.695  | ug/l  | 95       |

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

