

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN060622\  
 Data File : VN072659.D  
 Acq On : 06 Jun 2022 12:05  
 Operator : JC\MD  
 Sample : VSTDICC100  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICC100

Quant Time: Jun 06 13:13:08 2022  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N060622W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Mon Jun 06 13:10:13 2022  
 Response via : Initial Calibration

### Manual Integrations APPROVED

Reviewed By : John Carlone 06/07/2022  
 Supervised By : Mahesh Dadoda 06/07/2022

| Compound                     | R.T.           | QIon | Response             | Conc    | Units | Dev(Min) |
|------------------------------|----------------|------|----------------------|---------|-------|----------|
| -----                        |                |      |                      |         |       |          |
| Internal Standards           |                |      |                      |         |       |          |
| 1) Bromochloromethane        | 7.651          | 128  | 42556                | 30.000  | ug/l  | 0.00     |
| 28) 1,4-Difluorobenzene      | 8.963          | 114  | 246276               | 30.000  | ug/l  | # 0.00   |
| 57) Chlorobenzene-d5         | 11.739         | 117  | 234268               | 30.000  | ug/l  | 0.00     |
| System Monitoring Compounds  |                |      |                      |         |       |          |
| 27) 1,2-Dichloroethane-d4    | 8.433          | 65   | 143576               | 33.485  | ug/l  | 0.00     |
| Spiked Amount 30.000         | Range 91 - 110 |      | Recovery = 111.600%# |         |       |          |
| 60) 4-Bromofluorobenzene     | 12.727         | 95   | 152851               | 36.229  | ug/l  | 0.00     |
| Spiked Amount 30.000         | Range 63 - 112 |      | Recovery = 120.767%# |         |       |          |
| 63) Toluene-d8               | 10.439         | 98   | 382668               | 28.811  | ug/l  | 0.00     |
| Spiked Amount 30.000         | Range 91 - 112 |      | Recovery = 96.033%   |         |       |          |
| Target Compounds             |                |      |                      |         |       |          |
|                              |                |      |                      |         |       | Qvalue   |
| 2) Dichlorodifluoromethane   | 2.063          | 85   | 307828               | 106.034 | ug/l  | 98       |
| 3) Chloromethane             | 2.293          | 50   | 319878               | 83.586  | ug/l  | 96       |
| 4) Vinyl Chloride            | 2.434          | 62   | 300282               | 92.876  | ug/l  | 99       |
| 5) Bromomethane              | 2.816          | 94   | 155482               | 96.772  | ug/l  | 99       |
| 6) Chloroethane              | 2.993          | 64   | 197074               | 95.864  | ug/l  | 99       |
| 7) Trichlorofluoromethane    | 3.357          | 101  | 551014               | 115.705 | ug/l  | 99       |
| 8) Diethyl Ether             | 3.816          | 74   | 215045               | 110.503 | ug/l  | 90       |
| 9) 1,1,2-Trichlorotrifluo... | 4.198          | 101  | 287779               | 110.582 | ug/l  | 76       |
| 10) 1,1-Dichloroethene       | 4.175          | 96   | 271542               | 107.926 | ug/l  | 89       |
| 11) Methyl Iodide            | 4.416          | 142  | 306543               | 123.487 | ug/l  | 96       |
| 12) Methyl Acetate           | 4.845          | 43   | 555053               | 109.501 | ug/l  | 94       |
| 13) Acrolein                 | 4.034          | 56   | 237139               | 427.308 | ug/l  | 100      |
| 14) Acrylonitrile            | 5.545          | 53   | 1166128              | 539.743 | ug/l  | 99       |
| 15) Acetone                  | 4.275          | 58   | 306208               | 546.858 | ug/l  | 83       |
| 16) Carbon Disulfide         | 4.522          | 76   | 659397               | 97.049  | ug/l  | 97       |
| 17) Allyl chloride           | 4.834          | 41   | 600705               | 112.269 | ug/l  | 93       |
| 18) Methylene Chloride       | 5.087          | 84   | 336696               | 102.523 | ug/l  | # 85     |
| 19) trans-1,2-Dichloroethene | 5.593          | 96   | 290307               | 105.471 | ug/l  | 90       |
| 20) Diisopropyl ether        | 6.487          | 45   | 1203195              | 99.439  | ug/l  | 97       |
| 21) 1,1-Dichloroethane       | 6.375          | 63   | 655208               | 105.423 | ug/l  | 99       |
| 22) cis-1,2-Dichloroethene   | 7.316          | 96   | 369867               | 104.457 | ug/l  | 89       |
| 23) tert-Butyl Alcohol       | 5.357          | 59   | 529707               | 658.321 | ug/l  | # 100    |
| 24) Methyl tert-Butyl Ether  | 5.604          | 73   | 1236791              | 121.499 | ug/l  | 96       |
| 25) Chloroform               | 7.810          | 83   | 673134               | 105.444 | ug/l  | 98       |
| 26) Cyclohexane              | 8.092          | 56   | 533254               | 92.078  | ug/l  | # 94     |
| 29) 1,1-Dichloropropene      | 8.216          | 75   | 469240               | 103.482 | ug/l  | 95       |
| 30) 2-Butanone               | 7.328          | 43   | 1694608              | 549.355 | ug/l  | 95       |
| 31) 2,2-Dichloropropane      | 7.322          | 77   | 632795               | 129.578 | ug/l  | 94       |
| 32) 1,1,1-Trichloroethane    | 8.010          | 97   | 612611               | 117.420 | ug/l  | 96       |
| 33) Carbon Tetrachloride     | 8.198          | 117  | 532396               | 115.459 | ug/l  | 97       |
| 34) Benzene                  | 8.451          | 78   | 1381578              | 97.930  | ug/l  | 100      |
| 35) Methacrylonitrile        | 7.628          | 41   | 339049               | 106.873 | ug/l  | 92       |
| 36) 1,2-Dichloroethane       | 8.522          | 62   | 588421               | 120.688 | ug/l  | 99       |
| 37) Trichloroethene          | 9.210          | 130  | 334824               | 99.395  | ug/l  | 89       |
| 38) Methylcyclohexane        | 9.457          | 83   | 551253               | 98.453  | ug/l  | 92       |
| 39) 1,2-Dichloropropane      | 9.486          | 63   | 382222               | 100.934 | ug/l  | 99       |
| 40) Dibromomethane           | 9.575          | 93   | 264212               | 108.277 | ug/l  | 95       |
| 41) Bromodichloromethane     | 9.757          | 83   | 571793               | 114.670 | ug/l  | 95       |
| 42) Vinyl Acetate            | 6.422          | 43   | 5621198              | 555.430 | ug/l  | 99       |

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 Operator : JC\MD  
 Sample : VSTDICC100  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICC100

Quant Time: Jun 06 13:13:08 2022  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N060622W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Mon Jun 06 13:10:13 2022  
 Response via : Initial Calibration

Manual Integrations  
 APPROVED

Reviewed By : John Carlone 06/07/2022  
 Supervised By : Mahesh Dadoda 06/07/2022

| Compound                      | R.T.   | QIon | Response | Conc     | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|----------|--------|----------|
| 43) Ethyl Acetate             | 7.404  | 43   | 666756   | 110.890  | ug/l   | 98       |
| 44) Isopropyl Acetate         | 8.551  | 43   | 1075993  | 113.872  | ug/l   | 99       |
| 45) 1,4-Dioxane               | 9.563  | 88   | 179417   | 2267.152 | ug/l   | 89       |
| 46) Methyl methacrylate       | 9.557  | 41   | 487422   | 110.017  | ug/l   | 88       |
| 47) n-amyl Acetate            | 12.380 | 43   | 905667   | 131.469  | ug/l   | 97       |
| 48) t-1,3-Dichloropropene     | 10.716 | 75   | 661702   | 121.572  | ug/l   | 98       |
| 49) cis-1,3-Dichloropropene   | 10.186 | 75   | 669059   | 114.262  | ug/l   | 98       |
| 50) 1,1,2-Trichloroethane     | 10.892 | 97   | 369918   | 103.780  | ug/l   | 97       |
| 51) Ethyl methacrylate        | 10.757 | 69   | 693726   | 113.588  | ug/l   | 94       |
| 52) 1,3-Dichloropropane       | 11.039 | 76   | 666897   | 105.622  | ug/l   | 99       |
| 53) Dibromochloromethane      | 11.233 | 129  | 421608   | 113.616  | ug/l   | 100      |
| 54) 1,2-Dibromoethane         | 11.345 | 107  | 394770   | 107.700  | ug/l   | 97       |
| 55) 2-Chloroethyl vinyl ether | 10.039 | 63   | 1431842  | 545.008  | ug/l   | 98       |
| 56) Bromoform                 | 12.457 | 173  | 306087   | 116.184  | ug/l # | 99       |
| 58) 4-Methyl-2-Pentanone      | 10.327 | 43   | 3491179  | 517.475  | ug/l   | 99       |
| 59) 2-Hexanone                | 11.080 | 43   | 2697817  | 555.264  | ug/l   | 99       |
| 61) Tetrachloroethene         | 10.975 | 164  | 277130   | 92.467   | ug/l   | 96       |
| 62) Toluene                   | 10.504 | 91   | 1550771  | 97.070   | ug/l   | 97       |
| 64) Chlorobenzene             | 11.769 | 112  | 971257   | 103.366  | ug/l   | 99       |
| 65) 1,1,1,2-Tetrachloroethane | 11.839 | 131  | 380978   | 102.016  | ug/l   | 99       |
| 66) Ethyl Benzene             | 11.839 | 91   | 1824720  | 101.596  | ug/l   | 100      |
| 67) m/p-Xylenes               | 11.951 | 106  | 1340427  | 207.417  | ug/l   | 94       |
| 68) o-Xylene                  | 12.274 | 106  | 676481   | 104.353  | ug/l   | 93       |
| 69) Styrene                   | 12.292 | 104  | 1121439  | 109.573  | ug/l   | 95       |
| 70) Isopropylbenzene          | 12.574 | 105  | 1799131  | 108.448  | ug/l   | 99       |
| 71) 1,1,2,2-Tetrachloroethane | 12.821 | 83   | 610624   | 107.394  | ug/l   | 98       |
| 72) 1,2,3-Trichloropropane    | 12.874 | 75   | 505865m  | 93.962   | ug/l   |          |
| 73) Bromobenzene              | 12.857 | 156  | 372259   | 104.076  | ug/l   | 74       |
| 74) n-propylbenzene           | 12.916 | 91   | 2095480  | 111.392  | ug/l   | 99       |
| 75) 2-Chlorotoluene           | 13.004 | 91   | 1286147  | 112.003  | ug/l   | 93       |
| 76) 1,3,5-Trimethylbenzene    | 13.057 | 105  | 1498432  | 113.395  | ug/l   | 100      |
| 77) t-1,4-Dichloro-2-butene   | 12.621 | 75   | 237097   | 123.384  | ug/l   | 99       |
| 78) 4-Chlorotoluene           | 13.098 | 91   | 1249797  | 119.245  | ug/l   | 92       |
| 79) tert-butylbenzene         | 13.321 | 119  | 1326296  | 114.726  | ug/l   | 97       |
| 80) 1,2,4-Trimethylbenzene    | 13.498 | 105  | 1839244  | 138.271  | ug/l   | 100      |
| 81) sec-Butylbenzene          | 13.498 | 105  | 1839244  | 110.748  | ug/l   | 99       |
| 82) p-Isopropyltoluene        | 13.610 | 119  | 1499040  | 116.372  | ug/l   | 98       |
| 83) 1,3-Dichlorobenzene       | 13.610 | 146  | 660707   | 105.954  | ug/l   | 97       |
| 84) 1,4-Dichlorobenzene       | 13.692 | 146  | 658568   | 108.553  | ug/l   | 97       |
| 85) n-Butylbenzene            | 13.939 | 91   | 1291808  | 120.323  | ug/l   | 96       |
| 86) Hexachloroethane          | 14.204 | 117  | 323981   | 122.211  | ug/l   | 89       |
| 87) 1,2-Dichlorobenzene       | 13.986 | 146  | 644585   | 105.194  | ug/l   | 96       |
| 88) 1,2-Dibromo-3-Chloropr... | 14.598 | 75   | 152317   | 128.772  | ug/l   | 89       |
| 89) 1,2,4-Trichlorobenzene    | 15.257 | 180  | 337148   | 110.466  | ug/l   | 97       |
| 90) Hexachlorobutadiene       | 15.362 | 225  | 145322   | 97.108   | ug/l   | 99       |
| 91) Naphthalene               | 15.498 | 128  | 1326935  | 119.838  | ug/l   | 99       |
| 92) 1,2,3-Trichlorobenzene    | 15.698 | 180  | 336949   | 108.832  | ug/l   | 98       |

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

