

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN091321\  
 Data File : VN068460.D  
 Acq On : 13 Sep 2021 16:13  
 Operator : JC/MD  
 Sample : VSTDICV020  
 Misc : 5.00mL/MSVOA\_N/WATER  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 ICVVN091321

Quant Time: Sep 14 04:26:54 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

### Manual Integrations APPROVED

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

| Compound                     | R.T.           | QIon | Response            | Conc    | Units  | Dev(Min) |
|------------------------------|----------------|------|---------------------|---------|--------|----------|
| -----                        |                |      |                     |         |        |          |
| Internal Standards           |                |      |                     |         |        |          |
| 1) Bromochloromethane        | 7.662          | 128  | 105805              | 30.000  | ug/l   | 0.00     |
| 28) 1,4-Difluorobenzene      | 8.971          | 114  | 574751              | 30.000  | ug/l   | 0.00     |
| 57) Chlorobenzene-d5         | 11.746         | 117  | 522480              | 30.000  | ug/l   | 0.00     |
|                              |                |      |                     |         |        |          |
| System Monitoring Compounds  |                |      |                     |         |        |          |
| 27) 1,2-Dichloroethane-d4    | 8.440          | 65   | 193515              | 30.970  | ug/l   | 0.00     |
| Spiked Amount 30.000         | Range 91 - 110 |      | Recovery = 103.233% |         |        |          |
| 60) 4-Bromofluorobenzene     | 12.733         | 95   | 227497              | 30.548  | ug/l   | 0.00     |
| Spiked Amount 30.000         | Range 63 - 112 |      | Recovery = 101.833% |         |        |          |
| 63) Toluene-d8               | 10.443         | 98   | 696545              | 30.645  | ug/l   | 0.00     |
| Spiked Amount 30.000         | Range 91 - 112 |      | Recovery = 102.133% |         |        |          |
|                              |                |      |                     |         |        |          |
| Target Compounds             |                |      |                     |         |        |          |
|                              |                |      |                     |         |        | Qvalue   |
| 2) Dichlorodifluoromethane   | 2.075          | 85   | 101688              | 21.101  | ug/l   | 97       |
| 3) Chloromethane             | 2.303          | 50   | 96846               | 20.774  | ug/l   | 98       |
| 4) Vinyl Chloride            | 2.443          | 62   | 151944              | 20.565  | ug/l   | 96       |
| 5) Bromomethane              | 2.858          | 94   | 152671              | 20.803  | ug/l   | 99       |
| 6) Chloroethane              | 3.019          | 64   | 105558              | 20.016  | ug/l   | 97       |
| 7) Trichlorofluoromethane    | 3.373          | 101  | 185341              | 20.350  | ug/l   | 97       |
| 8) Diethyl Ether             | 3.827          | 74   | 57295               | 19.946  | ug/l   | 97       |
| 9) 1,1,2-Trichlorotrifluo... | 4.215          | 101  | 105037              | 20.247  | ug/l   | 99       |
| 10) 1,1-Dichloroethene       | 4.189          | 96   | 96051               | 19.921  | ug/l   | 97       |
| 11) Methyl Iodide            | 4.427          | 142  | 132083              | 17.643  | ug/l   | 98       |
| 12) Methyl Acetate           | 4.859          | 43   | 101724              | 20.286  | ug/l   | 98       |
| 13) Acrolein                 | 4.041          | 56   | 37058m              | 91.879  | ug/l   |          |
| 14) Acrylonitrile            | 5.556          | 53   | 211718              | 97.418  | ug/l   | 99       |
| 15) Acetone                  | 4.293          | 58   | 63628               | 107.431 | ug/l   | 100      |
| 16) Carbon Disulfide         | 4.535          | 76   | 246234              | 19.789  | ug/l   | 99       |
| 17) Allyl chloride           | 4.843          | 41   | 122816              | 20.400  | ug/l   | 97       |
| 18) Methylene Chloride       | 5.098          | 84   | 114422              | 19.825  | ug/l   | 97       |
| 19) trans-1,2-Dichloroethene | 5.605          | 96   | 107762              | 19.947  | ug/l   | 99       |
| 20) Diisopropyl ether        | 6.498          | 45   | 270159              | 20.230  | ug/l   | 99       |
| 21) 1,1-Dichloroethane       | 6.390          | 63   | 178099              | 20.067  | ug/l   | 99       |
| 22) cis-1,2-Dichloroethene   | 7.327          | 96   | 128699              | 19.813  | ug/l   | 98       |
| 23) tert-Butyl Alcohol       | 5.366          | 59   | 86507               | 98.498  | ug/l # | 100      |
| 24) Methyl tert-Butyl Ether  | 5.618          | 73   | 323462              | 19.702  | ug/l   | 99       |
| 25) Chloroform               | 7.820          | 83   | 208566              | 19.635  | ug/l   | 99       |
| 26) Cyclohexane              | 8.096          | 56   | 151362              | 20.172  | ug/l # | 100      |
| 29) 1,1-Dichloropropene      | 8.225          | 75   | 147935              | 19.204  | ug/l   | 99       |
| 30) 2-Butanone               | 7.340          | 43   | 282013              | 95.917  | ug/l # | 98       |
| 31) 2,2-Dichloropropane      | 7.327          | 77   | 172413              | 19.448  | ug/l   | 98       |
| 32) 1,1,1-Trichloroethane    | 8.016          | 97   | 196421              | 18.776  | ug/l   | 99       |
| 33) Carbon Tetrachloride     | 8.209          | 117  | 184304              | 18.848  | ug/l   | 99       |
| 34) Benzene                  | 8.464          | 78   | 447790              | 19.062  | ug/l   | 97       |
| 35) Methacrylonitrile        | 7.640          | 41   | 50599               | 17.844  | ug/l   | 93       |
| 36) 1,2-Dichloroethane       | 8.533          | 62   | 147336              | 18.628  | ug/l   | 100      |
| 37) Trichloroethene          | 9.217          | 130  | 141818              | 18.840  | ug/l   | 95       |
| 38) Methylcyclohexane        | 9.461          | 83   | 187583              | 18.944  | ug/l   | 99       |
| 39) 1,2-Dichloropropane      | 9.494          | 63   | 105351              | 19.055  | ug/l   | 96       |
| 40) Dibromomethane           | 9.579          | 93   | 84814               | 18.671  | ug/l   | 96       |
| 41) Bromodichloromethane     | 9.762          | 83   | 163241              | 18.595  | ug/l   | 93       |
| 42) Vinyl Acetate            | 6.439          | 43   | 1032677             | 95.328  | ug/l   | 99       |

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| Compound                      | R.T.   | QIon | Response | Conc    | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|---------|--------|----------|
| 43) Ethyl Acetate             | 7.415  | 43   | 107708   | 17.368  | ug/l # | 81       |
| 44) Isopropyl Acetate         | 8.563  | 43   | 199106   | 18.757  | ug/l   | 99       |
| 45) 1,4-Dioxane               | 9.571  | 88   | 41938    | 390.724 | ug/l   | 98       |
| 46) Methyl methacrylate       | 9.561  | 41   | 79762    | 18.577  | ug/l   | 97       |
| 47) n-amyl Acetate            | 12.390 | 43   | 142378   | 19.102  | ug/l   | 99       |
| 48) t-1,3-Dichloropropene     | 10.722 | 75   | 165729   | 18.646  | ug/l   | 100      |
| 49) cis-1,3-Dichloropropene   | 10.191 | 75   | 177125   | 18.542  | ug/l   | 99       |
| 50) 1,1,2-Trichloroethane     | 10.902 | 97   | 122542   | 18.667  | ug/l   | 97       |
| 51) Ethyl methacrylate        | 10.765 | 69   | 157723   | 18.714  | ug/l   | 98       |
| 52) 1,3-Dichloropropane       | 11.046 | 76   | 182303   | 18.674  | ug/l   | 99       |
| 53) Dibromochloromethane      | 11.240 | 129  | 146312   | 18.126  | ug/l   | 100      |
| 54) 1,2-Dibromoethane         | 11.347 | 107  | 129097   | 18.337  | ug/l   | 98       |
| 55) 2-Chloroethyl vinyl ether | 10.043 | 63   | 117276   | 82.198  | ug/l   | 98       |
| 56) Bromoform                 | 12.460 | 173  | 111032   | 17.126  | ug/l # | 100      |
| 58) 4-Methyl-2-Pentanone      | 10.333 | 43   | 598642   | 97.333  | ug/l   | 99       |
| 59) 2-Hexanone                | 11.087 | 43   | 416891   | 97.801  | ug/l   | 99       |
| 61) Tetrachloroethene         | 10.979 | 164  | 138106   | 18.384  | ug/l   | 93       |
| 62) Toluene                   | 10.507 | 91   | 526890   | 19.160  | ug/l   | 99       |
| 64) Chlorobenzene             | 11.773 | 112  | 343673   | 18.949  | ug/l   | 100      |
| 65) 1,1,1,2-Tetrachloroethane | 11.843 | 131  | 141636   | 19.135  | ug/l   | 98       |
| 66) Ethyl Benzene             | 11.848 | 91   | 572531   | 19.157  | ug/l   | 100      |
| 67) m/p-Xylenes               | 11.956 | 106  | 481777   | 39.108  | ug/l   | 100      |
| 68) o-Xylene                  | 12.283 | 106  | 235022   | 19.323  | ug/l   | 98       |
| 69) Styrene                   | 12.299 | 104  | 370532   | 19.212  | ug/l   | 99       |
| 70) Isopropylbenzene          | 12.583 | 105  | 600322   | 19.439  | ug/l   | 99       |
| 71) 1,1,2,2-Tetrachloroethane | 12.830 | 83   | 165039   | 19.633  | ug/l   | 99       |
| 72) 1,2,3-Trichloropropane    | 12.884 | 75   | 131596m  | 18.805  | ug/l   |          |
| 73) Bromobenzene              | 12.865 | 156  | 164763   | 18.794  | ug/l   | 97       |
| 74) n-propylbenzene           | 12.924 | 91   | 647270   | 19.435  | ug/l   | 100      |
| 75) 2-Chlorotoluene           | 13.010 | 91   | 395058   | 19.710  | ug/l   | 99       |
| 76) 1,3,5-Trimethylbenzene    | 13.061 | 105  | 512822   | 19.890  | ug/l   | 100      |
| 77) t-1,4-Dichloro-2-butene   | 12.629 | 75   | 41226    | 17.853  | ug/l   | 97       |
| 78) 4-Chlorotoluene           | 13.109 | 91   | 389418   | 20.245  | ug/l   | 100      |
| 79) tert-butylbenzene         | 13.326 | 119  | 472357   | 19.941  | ug/l   | 97       |
| 80) 1,2,4-Trimethylbenzene    | 13.372 | 105  | 501842m  | 20.118  | ug/l   |          |
| 81) sec-Butylbenzene          | 13.506 | 105  | 622505   | 19.882  | ug/l   | 99       |
| 82) p-Isopropyltoluene        | 13.618 | 119  | 534493   | 19.902  | ug/l   | 99       |
| 83) 1,3-Dichlorobenzene       | 13.618 | 146  | 304863   | 20.007  | ug/l   | 99       |
| 84) 1,4-Dichlorobenzene       | 13.699 | 146  | 290109   | 19.874  | ug/l   | 98       |
| 85) n-Butylbenzene            | 13.946 | 91   | 369834   | 19.361  | ug/l   | 99       |
| 86) Hexachloroethane          | 14.214 | 117  | 93438    | 18.941  | ug/l   | 98       |
| 87) 1,2-Dichlorobenzene       | 13.991 | 146  | 287782   | 19.653  | ug/l   | 100      |
| 88) 1,2-Dibromo-3-Chloropr... | 14.605 | 75   | 27361    | 19.249  | ug/l   | 94       |
| 89) 1,2,4-Trichlorobenzene    | 15.268 | 180  | 132363   | 18.708  | ug/l   | 97       |
| 90) Hexachlorobutadiene       | 15.372 | 225  | 83334    | 18.624  | ug/l   | 98       |
| 91) Naphthalene               | 15.509 | 128  | 309643   | 20.288  | ug/l   | 100      |
| 92) 1,2,3-Trichlorobenzene    | 15.705 | 180  | 130295   | 19.555  | ug/l   | 99       |

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

