

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN061122\  
 Data File : VN072783.D  
 Acq On : 11 Jun 2022 16:06  
 Operator : JC\MD  
 Sample : VN0611WBSD01  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 14 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0611WBSD01

Manual Integrations  
 APPROVED

Reviewed By : John Carlone 06/13/2022  
 Supervised By : Mahesh Dadoda 06/13/2022

Quant Time: Jun 13 04:33:15 2022  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N060622W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Mon Jun 06 14:10:15 2022  
 Response via : Initial Calibration

| Compound                     | R.T.           | QIon | Response            | Conc    | Units  | Dev(Min) |
|------------------------------|----------------|------|---------------------|---------|--------|----------|
| -----                        |                |      |                     |         |        |          |
| Internal Standards           |                |      |                     |         |        |          |
| 1) Bromochloromethane        | 7.657          | 128  | 32107               | 30.000  | ug/l   | 0.00     |
| 28) 1,4-Difluorobenzene      | 8.963          | 114  | 191431              | 30.000  | ug/l   | 0.00     |
| 57) Chlorobenzene-d5         | 11.745         | 117  | 174915              | 30.000  | ug/l   | 0.00     |
|                              |                |      |                     |         |        |          |
| System Monitoring Compounds  |                |      |                     |         |        |          |
| 27) 1,2-Dichloroethane-d4    | 8.434          | 65   | 116569              | 31.834  | ug/l   | 0.00     |
| Spiked Amount 30.000         | Range 91 - 110 |      | Recovery = 106.100% |         |        |          |
| 60) 4-Bromofluorobenzene     | 12.727         | 95   | 102964              | 28.620  | ug/l   | 0.00     |
| Spiked Amount 30.000         | Range 63 - 112 |      | Recovery = 95.400%  |         |        |          |
| 63) Toluene-d8               | 10.439         | 98   | 296636              | 30.614  | ug/l   | 0.00     |
| Spiked Amount 30.000         | Range 91 - 112 |      | Recovery = 102.033% |         |        |          |
|                              |                |      |                     |         |        |          |
| Target Compounds             |                |      |                     |         |        | Qvalue   |
| 2) Dichlorodifluoromethane   | 2.069          | 85   | 44489               | 18.497  | ug/l   | 94       |
| 3) Chloromethane             | 2.299          | 50   | 45875               | 17.540  | ug/l   | 90       |
| 4) Vinyl Chloride            | 2.434          | 62   | 48252               | 20.460  | ug/l   | 91       |
| 5) Bromomethane              | 2.846          | 94   | 13994               | 11.475  | ug/l   | 84       |
| 6) Chloroethane              | 3.004          | 64   | 36775               | 23.387  | ug/l   | 92       |
| 7) Trichlorofluoromethane    | 3.363          | 101  | 83551               | 19.597  | ug/l   | 98       |
| 8) Diethyl Ether             | 3.822          | 74   | 32271               | 19.523  | ug/l   | 80       |
| 9) 1,1,2-Trichlorotrifluo... | 4.210          | 101  | 45191               | 20.121  | ug/l   | 81       |
| 10) 1,1-Dichloroethene       | 4.181          | 96   | 39239               | 18.498  | ug/l   | 89       |
| 11) Methyl Iodide            | 4.416          | 142  | 14219               | 6.695   | ug/l   | 90       |
| 12) Methyl Acetate           | 4.857          | 43   | 98438               | 22.491  | ug/l   | 93       |
| 13) Acrolein                 | 4.040          | 56   | 32534               | 84.920  | ug/l   | 98       |
| 14) Acrylonitrile            | 5.551          | 53   | 193801              | 108.631 | ug/l   | 99       |
| 15) Acetone                  | 4.281          | 58   | 52606               | 108.908 | ug/l   | 85       |
| 16) Carbon Disulfide         | 4.528          | 76   | 82931               | 15.508  | ug/l   | 95       |
| 17) Allyl chloride           | 4.834          | 41   | 86960               | 18.976  | ug/l   | 91       |
| 18) Methylene Chloride       | 5.087          | 84   | 52476m              | 19.701  | ug/l   |          |
| 19) trans-1,2-Dichloroethene | 5.598          | 96   | 42336               | 18.442  | ug/l   | 87       |
| 20) Diisopropyl ether        | 6.498          | 45   | 200976m             | 22.145  | ug/l   |          |
| 21) 1,1-Dichloroethane       | 6.387          | 63   | 99836               | 19.800  | ug/l   | 96       |
| 22) cis-1,2-Dichloroethene   | 7.322          | 96   | 56572               | 19.674  | ug/l   | 88       |
| 23) tert-Butyl Alcohol       | 5.357          | 59   | 79499               | 95.758  | ug/l # | 100      |
| 24) Methyl tert-Butyl Ether  | 5.604          | 73   | 189590              | 20.096  | ug/l   | 94       |
| 25) Chloroform               | 7.810          | 83   | 106998              | 20.658  | ug/l   | 99       |
| 26) Cyclohexane              | 8.098          | 56   | 79402               | 18.887  | ug/l # | 93       |
| 29) 1,1-Dichloropropene      | 8.216          | 75   | 71358               | 19.555  | ug/l   | 92       |
| 30) 2-Butanone               | 7.328          | 43   | 298057              | 112.862 | ug/l   | 93       |
| 31) 2,2-Dichloropropane      | 7.322          | 77   | 78780               | 15.949  | ug/l   | 95       |
| 32) 1,1,1-Trichloroethane    | 8.010          | 97   | 92412               | 19.354  | ug/l   | 95       |
| 33) Carbon Tetrachloride     | 8.204          | 117  | 75011               | 18.217  | ug/l   | 96       |
| 34) Benzene                  | 8.457          | 78   | 219010              | 20.287  | ug/l   | 96       |
| 35) Methacrylonitrile        | 7.628          | 41   | 58424               | 22.562  | ug/l   | 95       |
| 36) 1,2-Dichloroethane       | 8.528          | 62   | 92314               | 20.240  | ug/l   | 100      |
| 37) Trichloroethene          | 9.216          | 130  | 49343               | 18.959  | ug/l   | 85       |
| 38) Methylcyclohexane        | 9.457          | 83   | 79770               | 18.311  | ug/l   | 91       |
| 39) 1,2-Dichloropropane      | 9.486          | 63   | 62129               | 20.948  | ug/l   | 99       |
| 40) Dibromomethane           | 9.575          | 93   | 42108               | 20.682  | ug/l   | 92       |
| 41) Bromodichloromethane     | 9.757          | 83   | 86331               | 19.822  | ug/l # | 96       |
| 42) Vinyl Acetate            | 6.428          | 43   | 897890m             | 104.436 | ug/l   |          |

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 Acq On : 11 Jun 2022 16:06  
 Operator : JC\MD  
 Sample : VN0611WBSD01  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 14 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0611WBSD01

Manual Integrations  
 APPROVED

Reviewed By : John Carlone 06/13/2022  
 Supervised By : Mahesh Dadoda 06/13/2022

Quant Time: Jun 13 04:33:15 2022  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N060622W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Mon Jun 06 14:10:15 2022  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc    | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|---------|--------|----------|
| 43) Ethyl Acetate             | 7.404  | 43   | 113172   | 22.367  | ug/l   | 100      |
| 44) Isopropyl Acetate         | 8.557  | 43   | 172152   | 20.511  | ug/l   | 98       |
| 45) 1,4-Dioxane               | 9.569  | 88   | 28040    | 406.540 | ug/l # | 83       |
| 46) Methyl methacrylate       | 9.557  | 41   | 77479    | 20.645  | ug/l   | 86       |
| 47) n-amyl Acetate            | 12.386 | 43   | 127115   | 19.782  | ug/l   | 98       |
| 48) t-1,3-Dichloropropene     | 10.716 | 75   | 86303    | 17.361  | ug/l   | 96       |
| 49) cis-1,3-Dichloropropene   | 10.186 | 75   | 94313    | 18.684  | ug/l   | 92       |
| 50) 1,1,2-Trichloroethane     | 10.892 | 97   | 60027    | 20.853  | ug/l   | 98       |
| 51) Ethyl methacrylate        | 10.757 | 69   | 105517   | 20.237  | ug/l   | 95       |
| 52) 1,3-Dichloropropane       | 11.039 | 76   | 108591   | 21.199  | ug/l   | 98       |
| 53) Dibromochloromethane      | 11.233 | 129  | 60121    | 18.930  | ug/l   | 97       |
| 54) 1,2-Dibromoethane         | 11.345 | 107  | 59903    | 19.792  | ug/l   | 100      |
| 55) 2-Chloroethyl vinyl ether | 10.039 | 63   | 244951   | 119.950 | ug/l   | 97       |
| 56) Bromoform                 | 12.451 | 173  | 38936    | 17.595  | ug/l # | 100      |
| 58) 4-Methyl-2-Pentanone      | 10.328 | 43   | 606752   | 115.653 | ug/l   | 97       |
| 59) 2-Hexanone                | 11.080 | 43   | 457047   | 114.909 | ug/l   | 97       |
| 61) Tetrachloroethene         | 10.975 | 164  | 41199    | 19.033  | ug/l   | 93       |
| 62) Toluene                   | 10.504 | 91   | 243280   | 20.512  | ug/l   | 99       |
| 64) Chlorobenzene             | 11.769 | 112  | 143252   | 19.838  | ug/l   | 96       |
| 65) 1,1,1,2-Tetrachloroethane | 11.839 | 131  | 57373    | 20.153  | ug/l   | 97       |
| 66) Ethyl Benzene             | 11.839 | 91   | 268898   | 19.748  | ug/l   | 98       |
| 67) m/p-Xylenes               | 11.951 | 106  | 191080   | 38.473  | ug/l   | 90       |
| 68) o-Xylene                  | 12.280 | 106  | 99179    | 19.575  | ug/l   | 90       |
| 69) Styrene                   | 12.292 | 104  | 155199   | 19.296  | ug/l   | 95       |
| 70) Isopropylbenzene          | 12.574 | 105  | 264842   | 20.004  | ug/l   | 98       |
| 71) 1,1,2,2-Tetrachloroethane | 12.821 | 83   | 97523    | 21.761  | ug/l   | 99       |
| 72) 1,2,3-Trichloropropane    | 12.880 | 75   | 83253m   | 21.286  | ug/l   |          |
| 73) Bromobenzene              | 12.857 | 156  | 51602    | 19.173  | ug/l   | 71       |
| 74) n-propylbenzene           | 12.916 | 91   | 293157   | 19.351  | ug/l   | 97       |
| 75) 2-Chlorotoluene           | 13.004 | 91   | 188983   | 20.125  | ug/l   | 92       |
| 76) 1,3,5-Trimethylbenzene    | 13.057 | 105  | 216780   | 19.949  | ug/l   | 97       |
| 77) t-1,4-Dichloro-2-butene   | 12.621 | 75   | 25055    | 15.199  | ug/l   | 81       |
| 78) 4-Chlorotoluene           | 13.104 | 91   | 164095   | 18.497  | ug/l   | 93       |
| 79) tert-butylbenzene         | 13.321 | 119  | 189816   | 19.566  | ug/l   | 96       |
| 80) 1,2,4-Trimethylbenzene    | 13.498 | 105  | 258063   | 19.695  | ug/l   | 100      |
| 81) sec-Butylbenzene          | 13.498 | 105  | 258063   | 19.695  | ug/l   | 99       |
| 82) p-Isopropyltoluene        | 13.610 | 119  | 197115   | 18.845  | ug/l   | 97       |
| 83) 1,3-Dichlorobenzene       | 13.610 | 146  | 86294    | 18.315  | ug/l   | 96       |
| 84) 1,4-Dichlorobenzene       | 13.692 | 146  | 85409    | 18.669  | ug/l   | 97       |
| 85) n-Butylbenzene            | 13.939 | 91   | 158200   | 17.838  | ug/l   | 97       |
| 86) Hexachloroethane          | 14.210 | 117  | 39204    | 16.938  | ug/l   | 87       |
| 87) 1,2-Dichlorobenzene       | 13.986 | 146  | 88748    | 19.033  | ug/l   | 97       |
| 88) 1,2-Dibromo-3-Chloropr... | 14.604 | 75   | 21413    | 19.056  | ug/l   | 85       |
| 89) 1,2,4-Trichlorobenzene    | 15.262 | 180  | 40966    | 17.434  | ug/l   | 94       |
| 90) Hexachlorobutadiene       | 15.368 | 225  | 19549    | 18.544  | ug/l   | 96       |
| 91) Naphthalene               | 15.504 | 128  | 167530   | 17.868  | ug/l   | 99       |
| 92) 1,2,3-Trichlorobenzene    | 15.704 | 180  | 41824    | 17.496  | ug/l   | 97       |

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

