

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN012224\  
 Data File : VN080732.D  
 Acq On : 22 Jan 2024 11:44  
 Operator : JC\MD  
 Sample : VN0122WBS01  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0122WBS01

Manual Integrations  
 APPROVED

Reviewed By : John Carlone 01/23/2024  
 Supervised By : Mahesh Dadoda 01/23/2024

Quant Time: Jan 23 01:30:36 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N011124W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Fri Jan 12 05:20:11 2024  
 Response via : Initial Calibration

| Compound                     | R.T.   | QIon  | Response | Conc     | Units  | Dev(Min) |
|------------------------------|--------|-------|----------|----------|--------|----------|
| -----                        |        |       |          |          |        |          |
| Internal Standards           |        |       |          |          |        |          |
| 1) Bromochloromethane        | 7.812  | 128   | 11756    | 30.000   | ug/l   | 0.00     |
| 28) 1,4-Difluorobenzene      | 9.100  | 114   | 106357   | 30.000   | ug/l   | 0.00     |
| 57) Chlorobenzene-d5         | 11.865 | 117   | 118322   | 30.000   | ug/l   | 0.00     |
| System Monitoring Compounds  |        |       |          |          |        |          |
| 27) 1,2-Dichloroethane-d4    | 8.577  | 65    | 55126    | 29.037   | ug/l   | 0.00     |
| Spiked Amount                | 30.000 | Range | 91 - 110 | Recovery | =      | 96.800%  |
| 60) 4-Bromofluorobenzene     | 12.847 | 95    | 73025    | 27.899   | ug/l   | 0.00     |
| Spiked Amount                | 30.000 | Range | 63 - 112 | Recovery | =      | 93.000%  |
| 63) Toluene-d8               | 10.565 | 98    | 159151   | 30.648   | ug/l   | 0.00     |
| Spiked Amount                | 30.000 | Range | 91 - 112 | Recovery | =      | 102.167% |
| Target Compounds             |        |       |          |          |        |          |
|                              |        |       |          |          | Qvalue |          |
| 2) Dichlorodifluoromethane   | 2.124  | 85    | 34481    | 17.257   | ug/l   | 97       |
| 3) Chloromethane             | 2.365  | 50    | 52293    | 19.213   | ug/l   | 100      |
| 4) Vinyl Chloride            | 2.518  | 62    | 42368    | 20.464   | ug/l # | 89       |
| 5) Bromomethane              | 2.971  | 94    | 16567    | 21.792   | ug/l   | 97       |
| 6) Chloroethane              | 3.124  | 64    | 23424    | 20.927   | ug/l   | 92       |
| 7) Trichlorofluoromethane    | 3.494  | 101   | 55061    | 17.801   | ug/l   | 91       |
| 8) Diethyl Ether             | 3.953  | 74    | 25297    | 17.575   | ug/l   | 73       |
| 9) 1,1,2-Trichlorotrifluo... | 4.377  | 101   | 34202    | 19.189   | ug/l   | 31       |
| 10) 1,1-Dichloroethene       | 4.347  | 96    | 34245    | 17.886   | ug/l   | 83       |
| 11) Methyl Iodide            | 4.589  | 142   | 28605    | 17.517   | ug/l   | 92       |
| 12) Methyl Acetate           | 5.012  | 43    | 41204    | 18.191   | ug/l # | 63       |
| 13) Acrolein                 | 4.177  | 56    | 29259    | 97.174   | ug/l   | 99       |
| 14) Acrylonitrile            | 5.712  | 53    | 91549    | 89.690   | ug/l   | 99       |
| 15) Acetone                  | 4.424  | 58    | 19288    | 83.301   | ug/l   | 98       |
| 16) Carbon Disulfide         | 4.706  | 76    | 105886   | 17.852   | ug/l   | 97       |
| 17) Allyl chloride           | 5.024  | 41    | 69707    | 17.986   | ug/l   | 73       |
| 18) Methylene Chloride       | 5.271  | 84    | 41493    | 18.650   | ug/l # | 78       |
| 19) trans-1,2-Dichloroethene | 5.777  | 96    | 38705    | 19.228   | ug/l   | 94       |
| 20) Diisopropyl ether        | 6.665  | 45    | 152091   | 19.338   | ug/l # | 94       |
| 21) 1,1-Dichloroethane       | 6.565  | 63    | 78157    | 18.299   | ug/l   | 93       |
| 22) cis-1,2-Dichloroethene   | 7.488  | 96    | 45595    | 19.362   | ug/l # | 77       |
| 23) tert-Butyl Alcohol       | 5.512  | 59    | 29828    | 84.730   | ug/l # | 100      |
| 24) Methyl tert-Butyl Ether  | 5.788  | 73    | 121513   | 17.553   | ug/l # | 85       |
| 25) Chloroform               | 7.965  | 83    | 72010    | 18.109   | ug/l   | 100      |
| 26) Cyclohexane              | 8.253  | 56    | 64113    | 19.089   | ug/l # | 91       |
| 29) 1,1-Dichloropropene      | 8.371  | 75    | 56783    | 17.563   | ug/l   | 95       |
| 30) 2-Butanone               | 7.477  | 43    | 119087   | 83.241   | ug/l   | 91       |
| 31) 2,2-Dichloropropane      | 7.482  | 77    | 65264    | 16.804   | ug/l   | 97       |
| 32) 1,1,1-Trichloroethane    | 8.165  | 97    | 59437    | 16.708   | ug/l # | 92       |
| 33) Carbon Tetrachloride     | 8.359  | 117   | 46583    | 16.580   | ug/l   | 95       |
| 34) Benzene                  | 8.606  | 78    | 174594   | 18.207   | ug/l   | 99       |
| 35) Methacrylonitrile        | 7.777  | 41    | 30858    | 17.189   | ug/l   | 92       |
| 36) 1,2-Dichloroethane       | 8.665  | 62    | 56357    | 15.983   | ug/l   | 97       |
| 37) Trichloroethene          | 9.347  | 130   | 36728    | 17.561   | ug/l   | 90       |
| 38) Methylcyclohexane        | 9.600  | 83    | 58375    | 18.534   | ug/l   | 94       |
| 39) 1,2-Dichloropropane      | 9.624  | 63    | 49175    | 19.025   | ug/l   | 95       |
| 40) Dibromomethane           | 9.706  | 93    | 26402    | 17.168   | ug/l   | 85       |
| 41) Bromodichloromethane     | 9.882  | 83    | 56627    | 16.826   | ug/l # | 95       |
| 42) Vinyl Acetate            | 6.600  | 43    | 578142   | 86.948   | ug/l # | 93       |

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 Sample : VN0122WBS01  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0122WBS01

Manual Integrations  
 APPROVED

Reviewed By : John Carlone 01/23/2024  
 Supervised By : Mahesh Dadoda 01/23/2024

Quant Time: Jan 23 01:30:36 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N011124W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Fri Jan 12 05:20:11 2024  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc    | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|---------|--------|----------|
| 43) Ethyl Acetate             | 7.553  | 43   | 52725    | 17.551  | ug/l   | 95       |
| 44) Isopropyl Acetate         | 8.682  | 43   | 97985    | 17.087  | ug/l   | 90       |
| 45) 1,4-Dioxane               | 9.694  | 88   | 10517    | 322.463 | ug/l # | 79       |
| 46) Methyl methacrylate       | 9.682  | 41   | 43936    | 16.271  | ug/l   | 81       |
| 47) n-amyl Acetate            | 12.494 | 43   | 86321m   | 16.775  | ug/l   |          |
| 48) t-1,3-Dichloropropene     | 10.835 | 75   | 65914    | 16.622  | ug/l   | 99       |
| 49) cis-1,3-Dichloropropene   | 10.312 | 75   | 72438    | 17.211  | ug/l # | 88       |
| 50) 1,1,2-Trichloroethane     | 11.018 | 97   | 37768    | 17.882  | ug/l   | 98       |
| 51) Ethyl methacrylate        | 10.871 | 69   | 59921    | 16.412  | ug/l   | 75       |
| 52) 1,3-Dichloropropane       | 11.165 | 76   | 69246    | 17.416  | ug/l   | 99       |
| 53) Dibromochloromethane      | 11.359 | 129  | 36138    | 17.099  | ug/l   | 99       |
| 54) 1,2-Dibromoethane         | 11.470 | 107  | 34577    | 16.655  | ug/l   | 95       |
| 55) 2-Chloroethyl vinyl ether | 10.159 | 63   | 153834   | 81.975  | ug/l   | 94       |
| 56) Bromoform                 | 12.582 | 173  | 20381    | 16.325  | ug/l   | 98       |
| 58) 4-Methyl-2-Pentanone      | 10.441 | 43   | 257392   | 82.694  | ug/l # | 86       |
| 59) 2-Hexanone                | 11.194 | 43   | 190568   | 82.002  | ug/l # | 88       |
| 61) Tetrachloroethene         | 11.100 | 164  | 29849    | 18.951  | ug/l   | 82       |
| 62) Toluene                   | 10.629 | 91   | 171547   | 18.026  | ug/l   | 98       |
| 64) Chlorobenzene             | 11.894 | 112  | 97788    | 18.448  | ug/l   | 95       |
| 65) 1,1,1,2-Tetrachloroethane | 11.959 | 131  | 34408    | 18.067  | ug/l   | 93       |
| 66) Ethyl Benzene             | 11.965 | 91   | 179330   | 17.916  | ug/l   | 94       |
| 67) m/p-Xylenes               | 12.070 | 106  | 128175   | 35.628  | ug/l   | 95       |
| 68) o-Xylene                  | 12.394 | 106  | 63616    | 17.731  | ug/l   | 97       |
| 69) Styrene                   | 12.412 | 104  | 106232   | 17.624  | ug/l   | 99       |
| 70) Isopropylbenzene          | 12.694 | 105  | 153104   | 17.460  | ug/l   | 99       |
| 71) 1,1,2,2-Tetrachloroethane | 12.935 | 83   | 45594    | 15.930  | ug/l   | 95       |
| 72) 1,2,3-Trichloropropane    | 12.994 | 75   | 41046m   | 15.131  | ug/l   |          |
| 73) Bromobenzene              | 12.976 | 156  | 31633    | 16.924  | ug/l   | 74       |
| 74) n-propylbenzene           | 13.035 | 91   | 197403   | 18.666  | ug/l   | 96       |
| 75) 2-Chlorotoluene           | 13.123 | 91   | 115550   | 17.374  | ug/l   | 98       |
| 76) 1,3,5-Trimethylbenzene    | 13.170 | 105  | 127974   | 17.534  | ug/l   | 96       |
| 77) t-1,4-Dichloro-2-butene   | 12.741 | 75   | 19194    | 17.260  | ug/l   | 85       |
| 78) 4-Chlorotoluene           | 13.223 | 91   | 115693   | 17.403  | ug/l   | 95       |
| 79) tert-butylbenzene         | 13.441 | 119  | 101997   | 17.904  | ug/l   | 97       |
| 80) 1,2,4-Trimethylbenzene    | 13.482 | 105  | 126838   | 17.763  | ug/l   | 100      |
| 81) sec-Butylbenzene          | 13.617 | 105  | 156844   | 18.702  | ug/l   | 96       |
| 82) p-Isopropyltoluene        | 13.729 | 119  | 119646   | 18.708  | ug/l   | 97       |
| 83) 1,3-Dichlorobenzene       | 13.729 | 146  | 58284    | 17.974  | ug/l   | 99       |
| 84) 1,4-Dichlorobenzene       | 13.811 | 146  | 56786    | 17.392  | ug/l   | 97       |
| 85) n-Butylbenzene            | 14.053 | 91   | 117001   | 18.516  | ug/l   | 96       |
| 86) Hexachloroethane          | 14.335 | 117  | 20232    | 16.823  | ug/l   | 82       |
| 87) 1,2-Dichlorobenzene       | 14.106 | 146  | 57229    | 17.991  | ug/l   | 98       |
| 88) 1,2-Dibromo-3-Chloropr... | 14.717 | 75   | 8400     | 14.096  | ug/l   | 85       |
| 89) 1,2,4-Trichlorobenzene    | 15.835 | 180  | 26398    | 16.546  | ug/l   | 96       |
| 90) Hexachlorobutadiene       | 15.500 | 225  | 13274    | 18.159  | ug/l   | 98       |
| 91) Naphthalene               | 15.641 | 128  | 98320    | 15.808  | ug/l # | 92       |
| 92) 1,2,3-Trichlorobenzene    | 15.835 | 180  | 26398    | 16.546  | ug/l   | 96       |

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

