

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN072825\  
 Data File : VN087419.D  
 Acq On : 28 Jul 2025 09:06  
 Operator : JC\MD  
 Sample : VSTDICC005  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICC005

Manual Integrations  
 APPROVED

Reviewed By : John Carlone 07/28/2025  
 Supervised By : Mahesh Dadoda 07/29/2025

Quant Time: Jul 28 11:25:33 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N072825W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Mon Jul 28 11:25:23 2025  
 Response via : Initial Calibration

| Compound                     | R.T.           | QIon | Response   | Conc     | Units  | Dev(Min) |
|------------------------------|----------------|------|------------|----------|--------|----------|
| -----                        |                |      |            |          |        |          |
| Internal Standards           |                |      |            |          |        |          |
| 1) Bromochloromethane        | 7.794          | 128  | 111157     | 30.000   | ug/l   | 0.00     |
| 28) 1,4-Difluorobenzene      | 9.083          | 114  | 632580     | 30.000   | ug/l   | 0.00     |
| 57) Chlorobenzene-d5         | 11.847         | 117  | 558264     | 30.000   | ug/l   | 0.00     |
|                              |                |      |            |          |        |          |
| System Monitoring Compounds  |                |      |            |          |        |          |
| 27) 1,2-Dichloroethane-d4    | 8.559          | 65   | 249605     | 27.227   | ug/l   | 0.00     |
| Spiked Amount 30.000         | Range 91 - 110 |      | Recovery = | 90.767%# |        |          |
| 60) 4-Bromofluorobenzene     | 12.829         | 95   | 270016     | 28.991   | ug/l   | 0.00     |
| Spiked Amount 30.000         | Range 63 - 112 |      | Recovery = | 96.633%  |        |          |
| 63) Toluene-d8               | 10.547         | 98   | 763779     | 30.084   | ug/l   | 0.00     |
| Spiked Amount 30.000         | Range 91 - 112 |      | Recovery = | 100.267% |        |          |
|                              |                |      |            |          |        |          |
| Target Compounds             |                |      |            |          |        | Qvalue   |
| 2) Dichlorodifluoromethane   | 2.142          | 85   | 27662      | 4.067    | ug/l   | 89       |
| 3) Chloromethane             | 2.383          | 50   | 33177      | 4.911    | ug/l   | 95       |
| 4) Vinyl Chloride            | 2.542          | 62   | 34614      | 4.649    | ug/l   | 96       |
| 5) Bromomethane              | 2.983          | 94   | 16578      | 3.598    | ug/l   | 95       |
| 6) Chloroethane              | 3.136          | 64   | 19448      | 3.399    | ug/l   | 91       |
| 7) Trichlorofluoromethane    | 3.512          | 101  | 42333      | 3.343    | ug/l   | 95       |
| 8) Diethyl Ether             | 3.965          | 74   | 18452      | 3.661    | ug/l   | 96       |
| 9) 1,1,2-Trichlorotrifluo... | 4.371          | 101  | 24197      | 3.606    | ug/l   | 43       |
| 10) 1,1-Dichloroethene       | 4.336          | 96   | 21489      | 3.085    | ug/l # | 89       |
| 11) Methyl Iodide            | 4.577          | 142  | 12010      | 2.363    | ug/l # | 76       |
| 12) Methyl Acetate           | 5.012          | 43   | 47978      | 5.295    | ug/l   | 97       |
| 13) Acrolein                 | 4.171          | 56   | 25461m     | 15.455   | ug/l   |          |
| 14) Acrylonitrile            | 5.712          | 53   | 105735     | 25.551   | ug/l   | 95       |
| 15) Acetone                  | 4.424          | 58   | 29546      | 20.223   | ug/l   | 86       |
| 16) Carbon Disulfide         | 4.700          | 76   | 86888      | 4.829    | ug/l   | 96       |
| 17) Allyl chloride           | 5.012          | 41   | 51046      | 5.349    | ug/l   | 85       |
| 18) Methylene Chloride       | 5.253          | 84   | 37558m     | 5.327    | ug/l   |          |
| 19) trans-1,2-Dichloroethene | 5.777          | 96   | 37272m     | 5.448    | ug/l   |          |
| 20) Diisopropyl ether        | 6.653          | 45   | 112757     | 4.672    | ug/l   | 96       |
| 21) 1,1-Dichloroethane       | 6.547          | 63   | 62412      | 4.842    | ug/l   | 100      |
| 22) cis-1,2-Dichloroethene   | 7.471          | 96   | 42036      | 5.245    | ug/l   | 94       |
| 23) tert-Butyl Alcohol       | 5.524          | 59   | 43138m     | 30.416   | ug/l   |          |
| 24) Methyl tert-Butyl Ether  | 5.789          | 73   | 110119     | 4.891    | ug/l   | 96       |
| 25) Chloroform               | 7.947          | 83   | 62140      | 4.402    | ug/l   | 95       |
| 26) Cyclohexane              | 8.241          | 56   | 60612      | 6.308    | ug/l # | 93       |
| 29) 1,1-Dichloropropene      | 8.353          | 75   | 44005      | 4.077    | ug/l   | 93       |
| 30) 2-Butanone               | 7.471          | 43   | 156277     | 21.262   | ug/l # | 95       |
| 31) 2,2-Dichloropropane      | 7.477          | 77   | 56115      | 3.959    | ug/l   | 96       |
| 32) 1,1,1-Trichloroethane    | 8.153          | 97   | 52285      | 3.702    | ug/l   | 97       |
| 33) Carbon Tetrachloride     | 8.341          | 117  | 42422      | 3.457    | ug/l   | 95       |
| 34) Benzene                  | 8.588          | 78   | 142708     | 4.094    | ug/l # | 85       |
| 35) Methacrylonitrile        | 7.771          | 41   | 36058      | 4.665    | ug/l   | 88       |
| 36) 1,2-Dichloroethane       | 8.653          | 62   | 46622      | 3.390    | ug/l # | 90       |
| 37) Trichloroethene          | 9.335          | 130  | 33934      | 4.266    | ug/l   | 94       |
| 38) Methylcyclohexane        | 9.583          | 83   | 60463      | 5.300    | ug/l   | 94       |
| 39) 1,2-Dichloropropane      | 9.600          | 63   | 35882      | 4.098    | ug/l   | 98       |
| 40) Dibromomethane           | 9.688          | 93   | 26662      | 3.935    | ug/l   | 75       |
| 41) Bromodichloromethane     | 9.871          | 83   | 51054      | 3.795    | ug/l   | 97       |
| 42) Vinyl Acetate            | 6.589          | 43   | 539799     | 21.680   | ug/l   | 100      |

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 Sample : VSTDICC005  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICC005

Manual Integrations  
 APPROVED

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 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N072825W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Mon Jul 28 11:25:23 2025  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc   | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|--------|--------|----------|
| 43) Ethyl Acetate             | 7.547  | 43   | 59963    | 4.007  | ug/l # | 70       |
| 44) Isopropyl Acetate         | 8.671  | 43   | 98859    | 4.185  | ug/l   | 99       |
| 45) 1,4-Dioxane               | 9.682  | 88   | 13370    | 91.864 | ug/l # | 65       |
| 46) Methyl methacrylate       | 9.665  | 41   | 45109    | 4.147  | ug/l   | 93       |
| 48) t-1,3-Dichloropropene     | 10.818 | 75   | 55578    | 3.873  | ug/l   | 100      |
| 49) cis-1,3-Dichloropropene   | 10.294 | 75   | 60505    | 4.216  | ug/l   | 94       |
| 50) 1,1,2-Trichloroethane     | 11.000 | 97   | 33604    | 3.841  | ug/l   | 97       |
| 51) Ethyl methacrylate        | 10.859 | 69   | 55437    | 4.143  | ug/l   | 86       |
| 52) 1,3-Dichloropropane       | 11.147 | 76   | 57620    | 3.830  | ug/l   | 98       |
| 53) Dibromochloromethane      | 11.341 | 129  | 37647    | 3.671  | ug/l   | 94       |
| 54) 1,2-Dibromoethane         | 11.447 | 107  | 35135    | 3.918  | ug/l   | 98       |
| 55) 2-Chloroethyl vinyl ether | 10.141 | 63   | 164801   | 22.140 | ug/l   | 99       |
| 56) Bromoform                 | 12.565 | 173  | 26052    | 3.572  | ug/l   | 99       |
| 58) 4-Methyl-2-Pentanone      | 10.430 | 43   | 298702   | 21.881 | ug/l   | 99       |
| 59) 2-Hexanone                | 11.182 | 43   | 185403   | 20.122 | ug/l   | 96       |
| 61) Tetrachloroethene         | 11.088 | 164  | 26530    | 4.256  | ug/l   | 93       |
| 62) Toluene                   | 10.612 | 91   | 155772   | 4.582  | ug/l   | 96       |
| 64) Chlorobenzene             | 11.871 | 112  | 96389    | 4.434  | ug/l   | 97       |
| 65) 1,1,1,2-Tetrachloroethane | 11.941 | 131  | 31396    | 3.952  | ug/l   | 95       |
| 66) Ethyl Benzene             | 11.941 | 91   | 166263   | 4.517  | ug/l   | 98       |
| 67) m/p-Xylenes               | 12.053 | 106  | 127883   | 8.779  | ug/l   | 99       |
| 68) o-Xylene                  | 12.376 | 106  | 60554    | 4.334  | ug/l   | 93       |
| 69) Styrene                   | 12.394 | 104  | 101722   | 4.184  | ug/l   | 97       |
| 70) Isopropylbenzene          | 12.676 | 105  | 155707   | 4.425  | ug/l   | 97       |
| 71) 1,1,2,2-Tetrachloroethane | 12.918 | 83   | 54103    | 4.370  | ug/l   | 99       |
| 72) 1,2,3-Trichloropropane    | 12.971 | 75   | 42197m   | 3.815  | ug/l   |          |
| 73) Bromobenzene              | 12.959 | 156  | 37530    | 4.097  | ug/l   | 96       |
| 74) n-propylbenzene           | 13.012 | 91   | 193226   | 4.348  | ug/l   | 99       |
| 75) 2-Chlorotoluene           | 13.106 | 91   | 115299   | 4.320  | ug/l   | 98       |
| 76) 1,3,5-Trimethylbenzene    | 13.153 | 105  | 129179   | 4.220  | ug/l   | 98       |
| 77) t-1,4-Dichloro-2-butene   | 12.718 | 75   | 17137    | 3.877  | ug/l # | 79       |
| 78) 4-Chlorotoluene           | 13.206 | 91   | 118459   | 4.161  | ug/l   | 95       |
| 79) tert-butylbenzene         | 13.418 | 119  | 112446   | 4.325  | ug/l   | 97       |
| 80) 1,2,4-Trimethylbenzene    | 13.465 | 105  | 129913   | 4.157  | ug/l   | 100      |
| 81) sec-Butylbenzene          | 13.594 | 105  | 168636   | 4.495  | ug/l   | 97       |
| 82) p-Isopropyltoluene        | 13.706 | 119  | 138314   | 4.295  | ug/l   | 96       |
| 83) 1,3-Dichlorobenzene       | 13.712 | 146  | 69907    | 3.788  | ug/l   | 98       |
| 84) 1,4-Dichlorobenzene       | 13.794 | 146  | 74654    | 4.098  | ug/l   | 96       |
| 85) n-Butylbenzene            | 14.035 | 91   | 139856   | 4.716  | ug/l   | 100      |
| 86) Hexachloroethane          | 14.312 | 117  | 27185    | 4.338  | ug/l   | 89       |
| 87) 1,2-Dichlorobenzene       | 14.088 | 146  | 65516    | 3.770  | ug/l   | 96       |
| 88) 1,2-Dibromo-3-Chloropr... | 14.694 | 75   | 13709    | 4.760  | ug/l # | 86       |
| 89) 1,2,4-Trichlorobenzene    | 15.817 | 180  | 40939    | 4.084  | ug/l   | 100      |
| 90) Hexachlorobutadiene       | 15.476 | 225  | 16528    | 3.998  | ug/l   | 95       |
| 91) Naphthalene               | 15.617 | 128  | 151552   | 4.542  | ug/l   | 99       |
| 92) 1,2,3-Trichlorobenzene    | 15.817 | 180  | 40939    | 4.084  | ug/l   | 100      |

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

## Manual Integrations

Quant Time: Jul 28 11:25:33 2025  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N072825W.M  
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
QLast Update : Mon Jul 28 11:25:23 2025  
Response via : Initial Calibration

