

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN041125\  
 Data File : VN086246.D  
 Acq On : 11 Apr 2025 12:40  
 Operator : JC\MD  
 Sample : VSTDICC005  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICC005

Manual Integrations  
 APPROVED

Reviewed By : John Carlone 04/14/2025  
 Supervised By : Mahesh Dadoda 04/14/2025

Quant Time: Apr 12 00:25:57 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N041125W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Sat Apr 12 00:09:06 2025  
 Response via : Initial Calibration

| Compound                     | R.T.   | QIon     | Response | Conc       | Units  | Dev(Min) |
|------------------------------|--------|----------|----------|------------|--------|----------|
| -----                        |        |          |          |            |        |          |
| Internal Standards           |        |          |          |            |        |          |
| 1) Bromochloromethane        | 7.812  | 128      | 26939    | 30.000     | ug/l   | 0.00     |
| 28) 1,4-Difluorobenzene      | 9.100  | 114      | 166827   | 30.000     | ug/l   | 0.00     |
| 57) Chlorobenzene-d5         | 11.865 | 117      | 146541   | 30.000     | ug/l   | 0.00     |
|                              |        |          |          |            |        |          |
| System Monitoring Compounds  |        |          |          |            |        |          |
| 27) 1,2-Dichloroethane-d4    | 8.577  | 65       | 80888    | 30.785     | ug/l   | 0.00     |
| Spiked Amount 30.000         | Range  | 91 - 110 | Recovery | = 102.600% |        |          |
| 60) 4-Bromofluorobenzene     | 12.847 | 95       | 86291    | 29.576     | ug/l   | 0.00     |
| Spiked Amount 30.000         | Range  | 63 - 112 | Recovery | = 98.600%  |        |          |
| 63) Toluene-d8               | 10.565 | 98       | 250531   | 30.283     | ug/l   | 0.00     |
| Spiked Amount 30.000         | Range  | 91 - 112 | Recovery | = 100.933% |        |          |
|                              |        |          |          |            |        |          |
| Target Compounds             |        |          |          |            |        | Qvalue   |
| 2) Dichlorodifluoromethane   | 2.124  | 85       | 9304     | 4.311      | ug/l   | 99       |
| 3) Chloromethane             | 2.359  | 50       | 15004    | 5.030      | ug/l   | 94       |
| 4) Vinyl Chloride            | 2.512  | 62       | 13469    | 4.740      | ug/l   | 100      |
| 5) Bromomethane              | 2.965  | 94       | 8169     | 5.763      | ug/l   | 98       |
| 6) Chloroethane              | 3.118  | 64       | 9245     | 5.152      | ug/l   | 97       |
| 7) Trichlorofluoromethane    | 3.501  | 101      | 14867    | 4.823      | ug/l   | 99       |
| 8) Diethyl Ether             | 3.959  | 74       | 7307     | 5.140      | ug/l   | 96       |
| 9) 1,1,2-Trichlorotrifluo... | 4.371  | 101      | 9194     | 4.837      | ug/l   | 92       |
| 10) 1,1-Dichloroethene       | 4.336  | 96       | 10856    | 5.292      | ug/l   | 98       |
| 11) Methyl Iodide            | 4.583  | 142      | 11623m   | 4.930      | ug/l   |          |
| 12) Methyl Acetate           | 5.024  | 43       | 14618    | 5.046      | ug/l   | 97       |
| 13) Acrolein                 | 4.177  | 56       | 10809    | 32.827     | ug/l   | 99       |
| 14) Acrylonitrile            | 5.718  | 53       | 31353    | 25.638     | ug/l   | 98       |
| 15) Acetone                  | 4.436  | 58       | 8149     | 26.259     | ug/l   | 77       |
| 16) Carbon Disulfide         | 4.712  | 76       | 32171    | 5.469      | ug/l   | 100      |
| 17) Allyl chloride           | 5.024  | 41       | 18652    | 5.217      | ug/l   | 96       |
| 18) Methylene Chloride       | 5.283  | 84       | 12832    | 5.487      | ug/l   | 85       |
| 19) trans-1,2-Dichloroethene | 5.777  | 96       | 11746m   | 6.348      | ug/l   |          |
| 20) Diisopropyl ether        | 6.671  | 45       | 37420    | 4.868      | ug/l   | 96       |
| 21) 1,1-Dichloroethane       | 6.571  | 63       | 20024    | 4.883      | ug/l   | 98       |
| 22) cis-1,2-Dichloroethene   | 7.488  | 96       | 13471    | 5.234      | ug/l   | 95       |
| 23) tert-Butyl Alcohol       | 5.518  | 59       | 12793    | 25.247     | ug/l # | 100      |
| 24) Methyl tert-Butyl Ether  | 5.794  | 73       | 38035m   | 5.147      | ug/l   |          |
| 25) Chloroform               | 7.959  | 83       | 19640    | 5.022      | ug/l   | 93       |
| 26) Cyclohexane              | 8.253  | 56       | 19181    | 4.999      | ug/l # | 100      |
| 29) 1,1-Dichloropropene      | 8.371  | 75       | 14353    | 4.803      | ug/l   | 97       |
| 30) 2-Butanone               | 7.483  | 43       | 39891    | 24.089     | ug/l   | 99       |
| 31) 2,2-Dichloropropane      | 7.483  | 77       | 17332    | 4.711      | ug/l # | 84       |
| 32) 1,1,1-Trichloroethane    | 8.165  | 97       | 17271    | 5.024      | ug/l   | 98       |
| 33) Carbon Tetrachloride     | 8.365  | 117      | 12727    | 4.633      | ug/l   | 95       |
| 34) Benzene                  | 8.606  | 78       | 46065    | 4.845      | ug/l # | 88       |
| 35) Methacrylonitrile        | 7.777  | 41       | 9403     | 5.037      | ug/l   | 96       |
| 36) 1,2-Dichloroethane       | 8.671  | 62       | 14350    | 4.823      | ug/l # | 87       |
| 37) Trichloroethene          | 9.353  | 130      | 10774    | 4.697      | ug/l   | 97       |
| 38) Methylcyclohexane        | 9.600  | 83       | 18064    | 4.929      | ug/l   | 97       |
| 39) 1,2-Dichloropropane      | 9.618  | 63       | 11201    | 4.735      | ug/l   | 94       |
| 40) Dibromomethane           | 9.706  | 93       | 7704     | 5.042      | ug/l   | 95       |
| 41) Bromodichloromethane     | 9.882  | 83       | 16772    | 5.109      | ug/l   | 100      |
| 42) Vinyl Acetate            | 6.600  | 43       | 138739   | 24.613     | ug/l   | 99       |

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 Sample : VSTDICC005  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICC005

Manual Integrations  
 APPROVED

Reviewed By : John Carlone 04/14/2025  
 Supervised By : Mahesh Dadoda 04/14/2025

Quant Time: Apr 12 00:25:57 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N041125W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Sat Apr 12 00:09:06 2025  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc   | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|--------|--------|----------|
| 43) Ethyl Acetate             | 7.559  | 43   | 16850    | 5.045  | ug/l # | 79       |
| 44) Isopropyl Acetate         | 8.683  | 43   | 33849    | 5.463  | ug/l   | 95       |
| 45) 1,4-Dioxane               | 9.688  | 88   | 4828     | 97.983 | ug/l # | 86       |
| 46) Methyl methacrylate       | 9.677  | 41   | 12994    | 4.759  | ug/l   | 95       |
| 47) n-amyl Acetate            | 12.488 | 43   | 24334    | 4.860  | ug/l   | 98       |
| 48) t-1,3-Dichloropropene     | 10.835 | 75   | 17815    | 4.801  | ug/l   | 100      |
| 49) cis-1,3-Dichloropropene   | 10.312 | 75   | 18616    | 4.740  | ug/l   | 96       |
| 50) 1,1,2-Trichloroethane     | 11.012 | 97   | 10709    | 4.997  | ug/l   | 96       |
| 51) Ethyl methacrylate        | 10.871 | 69   | 19475    | 4.890  | ug/l   | 91       |
| 52) 1,3-Dichloropropane       | 11.159 | 76   | 18666    | 4.887  | ug/l   | 95       |
| 53) Dibromochloromethane      | 11.359 | 129  | 11282    | 4.813  | ug/l   | 100      |
| 54) 1,2-Dibromoethane         | 11.465 | 107  | 10742    | 4.965  | ug/l   | 95       |
| 55) 2-Chloroethyl vinyl ether | 10.159 | 63   | 44228    | 29.389 | ug/l   | 99       |
| 56) Bromoform                 | 12.576 | 173  | 7367     | 4.804  | ug/l # | 98       |
| 58) 4-Methyl-2-Pentanone      | 10.441 | 43   | 81510    | 24.511 | ug/l   | 99       |
| 59) 2-Hexanone                | 11.194 | 43   | 60580    | 24.465 | ug/l   | 99       |
| 61) Tetrachloroethene         | 11.100 | 164  | 10135    | 4.683  | ug/l   | 96       |
| 62) Toluene                   | 10.624 | 91   | 48384    | 4.923  | ug/l   | 99       |
| 64) Chlorobenzene             | 11.888 | 112  | 29905    | 4.980  | ug/l   | 95       |
| 65) 1,1,1,2-Tetrachloroethane | 11.959 | 131  | 9602     | 4.845  | ug/l   | 96       |
| 66) Ethyl Benzene             | 11.965 | 91   | 53539    | 4.912  | ug/l   | 98       |
| 67) m/p-Xylenes               | 12.071 | 106  | 38897    | 9.597  | ug/l   | 97       |
| 68) o-Xylene                  | 12.394 | 106  | 19223    | 4.822  | ug/l   | 98       |
| 69) Styrene                   | 12.406 | 104  | 32582    | 4.846  | ug/l   | 100      |
| 70) Isopropylbenzene          | 12.694 | 105  | 47563    | 4.839  | ug/l   | 98       |
| 71) 1,1,2,2-Tetrachloroethane | 12.935 | 83   | 15293    | 5.466  | ug/l   | 93       |
| 72) 1,2,3-Trichloropropane    | 12.988 | 75   | 14811m   | 3.739  | ug/l   |          |
| 73) Bromobenzene              | 12.976 | 156  | 10521    | 4.831  | ug/l   | 96       |
| 74) n-propylbenzene           | 13.035 | 91   | 55104    | 4.734  | ug/l   | 100      |
| 75) 2-Chlorotoluene           | 13.123 | 91   | 35960    | 4.929  | ug/l   | 99       |
| 76) 1,3,5-Trimethylbenzene    | 13.170 | 105  | 38762    | 4.800  | ug/l   | 100      |
| 77) t-1,4-Dichloro-2-butene   | 12.735 | 75   | 6507     | 4.845  | ug/l   | 94       |
| 78) 4-Chlorotoluene           | 13.218 | 91   | 35898    | 4.927  | ug/l   | 98       |
| 79) tert-butylbenzene         | 13.435 | 119  | 35578    | 5.092  | ug/l   | 97       |
| 80) 1,2,4-Trimethylbenzene    | 13.482 | 105  | 38730    | 4.730  | ug/l   | 99       |
| 81) sec-Butylbenzene          | 13.612 | 105  | 46761    | 4.798  | ug/l   | 100      |
| 82) p-Isopropyltoluene        | 13.729 | 119  | 38146    | 4.692  | ug/l   | 99       |
| 83) 1,3-Dichlorobenzene       | 13.729 | 146  | 19501    | 4.818  | ug/l   | 98       |
| 84) 1,4-Dichlorobenzene       | 13.806 | 146  | 19847    | 4.888  | ug/l   | 99       |
| 85) n-Butylbenzene            | 14.053 | 91   | 34592    | 4.716  | ug/l   | 99       |
| 86) Hexachloroethane          | 14.329 | 117  | 6465     | 4.714  | ug/l   | 97       |
| 87) 1,2-Dichlorobenzene       | 14.106 | 146  | 19316    | 4.834  | ug/l   | 98       |
| 88) 1,2-Dibromo-3-Chloropr... | 14.717 | 75   | 3152     | 4.946  | ug/l   | 94       |
| 89) 1,2,4-Trichlorobenzene    | 15.835 | 180  | 9291     | 4.778  | ug/l   | 95       |
| 90) Hexachlorobutadiene       | 15.500 | 225  | 4734     | 5.639  | ug/l   | 96       |
| 91) Naphthalene               | 15.635 | 128  | 38531    | 5.026  | ug/l   | 100      |
| 92) 1,2,3-Trichlorobenzene    | 15.835 | 180  | 9291     | 4.778  | ug/l   | 95       |

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

