

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN090624\  
 Data File : VN083694.D  
 Acq On : 06 Sep 2024 13:33  
 Operator : JC\MD  
 Sample : VSTDICC005  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICC005

Manual Integrations  
 APPROVED

Reviewed By :John  
 Carlone

09/09/2024  
 Supervised By :Mahesh  
 Dadoda

Quant Time: Sep 06 23:34:51 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N090624W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Fri Sep 06 23:27:49 2024  
 Response via : Initial Calibration

| Compound                     | R.T.   | QIon  | Response | Conc     | Units  | Dev(Min) |
|------------------------------|--------|-------|----------|----------|--------|----------|
| -----                        |        |       |          |          |        |          |
| Internal Standards           |        |       |          |          |        |          |
| 1) Bromochloromethane        | 7.812  | 128   | 30350    | 30.000   | ug/l   | 0.00     |
| 28) 1,4-Difluorobenzene      | 9.100  | 114   | 170437   | 30.000   | ug/l   | 0.00     |
| 57) Chlorobenzene-d5         | 11.865 | 117   | 147783   | 30.000   | ug/l   | 0.00     |
| System Monitoring Compounds  |        |       |          |          |        |          |
| 27) 1,2-Dichloroethane-d4    | 8.583  | 65    | 80885    | 29.156   | ug/l   | 0.00     |
| Spiked Amount                | 30.000 | Range | 91 - 110 | Recovery | =      | 97.200%  |
| 60) 4-Bromofluorobenzene     | 12.847 | 95    | 74346    | 29.190   | ug/l   | 0.00     |
| Spiked Amount                | 30.000 | Range | 63 - 112 | Recovery | =      | 97.300%  |
| 63) Toluene-d8               | 10.565 | 98    | 211226   | 30.868   | ug/l   | 0.00     |
| Spiked Amount                | 30.000 | Range | 91 - 112 | Recovery | =      | 102.900% |
| Target Compounds             |        |       |          |          |        |          |
|                              |        |       |          |          | Qvalue |          |
| 2) Dichlorodifluoromethane   | 2.118  | 85    | 9429     | 4.639    | ug/l   | 92       |
| 3) Chloromethane             | 2.359  | 50    | 10500    | 4.972    | ug/l   | 91       |
| 4) Vinyl Chloride            | 2.512  | 62    | 10517    | 4.844    | ug/l   | 97       |
| 5) Bromomethane              | 2.906  | 94    | 6112     | 5.039    | ug/l   | 94       |
| 6) Chloroethane              | 3.071  | 64    | 7843     | 5.395    | ug/l   | 92       |
| 7) Trichlorofluoromethane    | 3.471  | 101   | 18303    | 5.029    | ug/l   | 86       |
| 8) Diethyl Ether             | 3.959  | 74    | 5867     | 4.744    | ug/l   | 89       |
| 9) 1,1,2-Trichlorotrifluo... | 4.359  | 101   | 9497     | 4.858    | ug/l # | 32       |
| 10) 1,1-Dichloroethene       | 4.330  | 96    | 9209     | 4.882    | ug/l   | 96       |
| 11) Methyl Iodide            | 4.577  | 142   | 11768    | 4.593    | ug/l   | 98       |
| 12) Methyl Acetate           | 5.024  | 43    | 13637    | 5.995    | ug/l # | 66       |
| 13) Acrolein                 | 4.177  | 56    | 6383m    | 19.226   | ug/l   |          |
| 14) Acrylonitrile            | 5.724  | 53    | 23305    | 25.315   | ug/l   | 97       |
| 15) Acetone                  | 4.430  | 58    | 5723m    | 18.740   | ug/l   |          |
| 16) Carbon Disulfide         | 4.700  | 76    | 26484    | 4.968    | ug/l # | 87       |
| 17) Allyl chloride           | 5.018  | 41    | 15469m   | 4.671    | ug/l   |          |
| 18) Methylene Chloride       | 5.265  | 84    | 10072    | 4.881    | ug/l   | 90       |
| 19) trans-1,2-Dichloroethene | 5.783  | 96    | 9461     | 4.839    | ug/l   | 94       |
| 20) Diisopropyl ether        | 6.671  | 45    | 32451    | 4.858    | ug/l   | 96       |
| 21) 1,1-Dichloroethane       | 6.559  | 63    | 18617m   | 4.881    | ug/l   |          |
| 22) cis-1,2-Dichloroethene   | 7.483  | 96    | 11350    | 4.770    | ug/l   | 92       |
| 23) tert-Butyl Alcohol       | 5.536  | 59    | 8086m    | 23.935   | ug/l   |          |
| 24) Methyl tert-Butyl Ether  | 5.795  | 73    | 31527    | 4.703    | ug/l # | 86       |
| 25) Chloroform               | 7.965  | 83    | 19387    | 4.796    | ug/l   | 92       |
| 26) Cyclohexane              | 8.253  | 56    | 15678    | 4.667    | ug/l # | 83       |
| 29) 1,1-Dichloropropene      | 8.365  | 75    | 13579    | 5.023    | ug/l   | 96       |
| 30) 2-Butanone               | 7.483  | 43    | 29808    | 23.391   | ug/l   | 96       |
| 31) 2,2-Dichloropropane      | 7.483  | 77    | 16409    | 4.761    | ug/l # | 88       |
| 32) 1,1,1-Trichloroethane    | 8.165  | 97    | 18056    | 5.001    | ug/l   | 96       |
| 33) Carbon Tetrachloride     | 8.365  | 117   | 15688    | 5.018    | ug/l   | 99       |
| 34) Benzene                  | 8.600  | 78    | 40249    | 4.962    | ug/l # | 80       |
| 35) Methacrylonitrile        | 7.777  | 41    | 7551     | 5.271    | ug/l   | 89       |
| 36) 1,2-Dichloroethane       | 8.665  | 62    | 15883    | 5.209    | ug/l # | 77       |
| 37) Trichloroethene          | 9.347  | 130   | 9867     | 5.180    | ug/l   | 93       |
| 38) Methylcyclohexane        | 9.600  | 83    | 15301    | 4.728    | ug/l   | 96       |
| 39) 1,2-Dichloropropane      | 9.618  | 63    | 9926     | 5.085    | ug/l   | 90       |
| 40) Dibromomethane           | 9.706  | 93    | 7111     | 4.982    | ug/l   | 95       |
| 41) Bromodichloromethane     | 9.883  | 83    | 14747    | 4.858    | ug/l   | 92       |
| 42) Vinyl Acetate            | 6.594  | 43    | 158467   | 30.245   | ug/l   | 95       |

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

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICC005

Manual Integrations  
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| Compound                      | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |     |
|-------------------------------|--------|------|----------|--------|-------|----------|-----|
| 43) Ethyl Acetate             | 7.559  | 43   | 13134    | 5.121  | ug/l  | #        | 90  |
| 44) Isopropyl Acetate         | 8.688  | 43   | 21530    | 4.853  | ug/l  |          | 94  |
| 45) 1,4-Dioxane               | 9.700  | 88   | 3419     | 98.810 | ug/l  | #        | 93  |
| 46) Methyl methacrylate       | 9.677  | 41   | 10480    | 4.881  | ug/l  |          | 80  |
| 47) n-amyl Acetate            | 12.494 | 43   | 16969    | 4.318  | ug/l  |          | 95  |
| 48) t-1,3-Dichloropropene     | 10.835 | 75   | 15652    | 4.902  | ug/l  |          | 96  |
| 49) cis-1,3-Dichloropropene   | 10.312 | 75   | 16087    | 4.845  | ug/l  | #        | 87  |
| 50) 1,1,2-Trichloroethane     | 11.012 | 97   | 8983     | 4.946  | ug/l  |          | 95  |
| 51) Ethyl methacrylate        | 10.871 | 69   | 14165    | 4.565  | ug/l  |          | 79  |
| 52) 1,3-Dichloropropane       | 11.165 | 76   | 17264    | 5.263  | ug/l  |          | 96  |
| 53) Dibromochloromethane      | 11.359 | 129  | 10280    | 4.719  | ug/l  |          | 98  |
| 54) 1,2-Dibromoethane         | 11.465 | 107  | 9173     | 4.882  | ug/l  |          | 100 |
| 55) 2-Chloroethyl vinyl ether | 10.159 | 63   | 31844    | 25.750 | ug/l  |          | 99  |
| 56) Bromoform                 | 12.582 | 173  | 6367     | 4.600  | ug/l  | #        | 95  |
| 58) 4-Methyl-2-Pentanone      | 10.447 | 43   | 59789    | 25.515 | ug/l  | #        | 88  |
| 59) 2-Hexanone                | 11.194 | 43   | 43379    | 24.499 | ug/l  |          | 90  |
| 61) Tetrachloroethene         | 11.100 | 164  | 8572     | 5.481  | ug/l  | #        | 80  |
| 62) Toluene                   | 10.630 | 91   | 43895    | 5.168  | ug/l  |          | 97  |
| 64) Chlorobenzene             | 11.888 | 112  | 28468    | 5.413  | ug/l  |          | 95  |
| 65) 1,1,1,2-Tetrachloroethane | 11.959 | 131  | 9342     | 5.099  | ug/l  |          | 98  |
| 66) Ethyl Benzene             | 11.965 | 91   | 49501    | 5.124  | ug/l  |          | 97  |
| 67) m/p-Xylenes               | 12.071 | 106  | 35390    | 9.958  | ug/l  |          | 95  |
| 68) o-Xylene                  | 12.400 | 106  | 16557    | 4.814  | ug/l  |          | 87  |
| 69) Styrene                   | 12.412 | 104  | 28202    | 4.853  | ug/l  |          | 96  |
| 70) Isopropylbenzene          | 12.694 | 105  | 44138    | 4.863  | ug/l  |          | 99  |
| 71) 1,1,2,2-Tetrachloroethane | 12.935 | 83   | 12572    | 5.071  | ug/l  |          | 99  |
| 72) 1,2,3-Trichloropropane    | 12.994 | 75   | 11376m   | 5.244  | ug/l  |          |     |
| 73) Bromobenzene              | 12.976 | 156  | 11265    | 5.403  | ug/l  |          | 97  |
| 74) n-propylbenzene           | 13.035 | 91   | 51761    | 4.871  | ug/l  |          | 100 |
| 75) 2-Chlorotoluene           | 13.123 | 91   | 34301    | 5.172  | ug/l  |          | 99  |
| 76) 1,3,5-Trimethylbenzene    | 13.171 | 105  | 36414    | 4.803  | ug/l  |          | 100 |
| 77) t-1,4-Dichloro-2-butene   | 12.735 | 75   | 4164     | 4.532  | ug/l  |          | 90  |
| 78) 4-Chlorotoluene           | 13.218 | 91   | 35595    | 5.293  | ug/l  |          | 99  |
| 79) tert-butylbenzene         | 13.441 | 119  | 32540    | 4.908  | ug/l  |          | 96  |
| 80) 1,2,4-Trimethylbenzene    | 13.482 | 105  | 37167    | 4.851  | ug/l  |          | 97  |
| 81) sec-Butylbenzene          | 13.618 | 105  | 44144    | 4.874  | ug/l  |          | 99  |
| 82) p-Isopropyltoluene        | 13.729 | 119  | 35731    | 4.689  | ug/l  |          | 98  |
| 83) 1,3-Dichlorobenzene       | 13.735 | 146  | 22005    | 5.484  | ug/l  |          | 98  |
| 84) 1,4-Dichlorobenzene       | 13.812 | 146  | 21795    | 5.433  | ug/l  |          | 100 |
| 85) n-Butylbenzene            | 14.053 | 91   | 32362    | 4.812  | ug/l  |          | 98  |
| 86) Hexachloroethane          | 14.335 | 117  | 6635     | 4.594  | ug/l  |          | 89  |
| 87) 1,2-Dichlorobenzene       | 14.106 | 146  | 20347    | 5.225  | ug/l  |          | 96  |
| 88) 1,2-Dibromo-3-Chloropr... | 14.723 | 75   | 2717     | 4.987  | ug/l  | #        | 86  |
| 89) 1,2,4-Trichlorobenzene    | 15.841 | 180  | 11428    | 5.357  | ug/l  |          | 96  |
| 90) Hexachlorobutadiene       | 15.506 | 225  | 4688     | 5.309  | ug/l  |          | 96  |
| 91) Naphthalene               | 15.641 | 128  | 35168    | 5.042  | ug/l  |          | 99  |
| 92) 1,2,3-Trichlorobenzene    | 15.841 | 180  | 11428    | 5.357  | ug/l  |          | 96  |

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

