

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN100824\  
 Data File : VN084340.D  
 Acq On : 08 Oct 2024 10:55  
 Operator : JC\MD  
 Sample : VSTDICCC020  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICCC020

Manual Integrations  
 APPROVED

Reviewed By : John Carlone 10/09/2024  
 Supervised By : Mahesh Dadoda 10/09/2024

Quant Time: Oct 09 02:08:40 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N100824W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Wed Oct 09 02:04:33 2024  
 Response via : Initial Calibration

| Compound                       | R.T.           | QIon | Response            | Conc    | Units  | Dev(Min) |
|--------------------------------|----------------|------|---------------------|---------|--------|----------|
| -----                          |                |      |                     |         |        |          |
| Internal Standards             |                |      |                     |         |        |          |
| 1) Bromochloromethane          | 7.818          | 128  | 34673               | 30.000  | ug/l   | 0.00     |
| 28) 1,4-Difluorobenzene        | 9.100          | 114  | 193364              | 30.000  | ug/l   | 0.00     |
| 57) Chlorobenzene-d5           | 11.865         | 117  | 180372              | 30.000  | ug/l   | 0.00     |
|                                |                |      |                     |         |        |          |
| System Monitoring Compounds    |                |      |                     |         |        |          |
| 27) 1,2-Dichloroethane-d4      | 8.582          | 65   | 85525               | 30.638  | ug/l   | 0.00     |
| Spiked Amount 30.000           | Range 91 - 110 |      | Recovery = 102.133% |         |        |          |
| 60) 4-Bromofluorobenzene       | 12.847         | 95   | 88736               | 29.808  | ug/l   | 0.00     |
| Spiked Amount 30.000           | Range 63 - 112 |      | Recovery = 99.367%  |         |        |          |
| 63) Toluene-d8                 | 10.565         | 98   | 251690              | 30.121  | ug/l   | 0.00     |
| Spiked Amount 30.000           | Range 91 - 112 |      | Recovery = 100.400% |         |        |          |
|                                |                |      |                     |         |        |          |
| Target Compounds               |                |      |                     |         |        |          |
|                                |                |      |                     |         | Qvalue |          |
| 2) Dichlorodifluoromethane     | 2.124          | 85   | 44634               | 21.084  | ug/l   | 100      |
| 3) Chloromethane               | 2.359          | 50   | 49609               | 20.593  | ug/l   | 100      |
| 4) Vinyl Chloride              | 2.512          | 62   | 48486               | 20.524  | ug/l   | 100      |
| 5) Bromomethane                | 2.959          | 94   | 32772               | 20.938  | ug/l   | 100      |
| 6) Chloroethane                | 3.118          | 64   | 32274               | 20.839  | ug/l   | 100      |
| 7) Trichlorofluoromethane      | 3.495          | 101  | 78670               | 20.444  | ug/l   | 100      |
| 8) Diethyl Ether               | 3.965          | 74   | 28475               | 20.127  | ug/l   | 100      |
| 9) 1,1,2-Trichlorotrifluoro... | 4.365          | 101  | 43710               | 20.202  | ug/l   | 100      |
| 10) 1,1-Dichloroethene         | 4.342          | 96   | 42386               | 19.633  | ug/l   | 100      |
| 11) Methyl Iodide              | 4.594          | 142  | 57080               | 20.119  | ug/l   | 100      |
| 12) Methyl Acetate             | 5.030          | 43   | 52868               | 19.561  | ug/l   | 100      |
| 13) Acrolein                   | 4.183          | 56   | 46516               | 92.647  | ug/l   | 100      |
| 14) Acrylonitrile              | 5.718          | 53   | 123604              | 101.793 | ug/l   | 100      |
| 15) Acetone                    | 4.424          | 58   | 33083               | 95.376  | ug/l   | 100      |
| 16) Carbon Disulfide           | 4.706          | 76   | 131855              | 20.510  | ug/l   | 100      |
| 17) Allyl chloride             | 5.024          | 41   | 71450               | 20.416  | ug/l   | 100      |
| 18) Methylene Chloride         | 5.277          | 84   | 49627               | 20.406  | ug/l   | 100      |
| 19) trans-1,2-Dichloroethene   | 5.789          | 96   | 46499               | 20.351  | ug/l   | 100      |
| 20) Diisopropyl ether          | 6.671          | 45   | 153833              | 20.444  | ug/l   | 100      |
| 21) 1,1-Dichloroethane         | 6.571          | 63   | 88689               | 20.541  | ug/l   | 100      |
| 22) cis-1,2-Dichloroethene     | 7.488          | 96   | 54636               | 20.549  | ug/l   | 100      |
| 23) tert-Butyl Alcohol         | 5.524          | 59   | 46138               | 99.059  | ug/l # | 100      |
| 24) Methyl tert-Butyl Ether    | 5.800          | 73   | 145915              | 20.224  | ug/l   | 100      |
| 25) Chloroform                 | 7.965          | 83   | 90176               | 20.622  | ug/l   | 100      |
| 26) Cyclohexane                | 8.253          | 56   | 76065               | 21.064  | ug/l # | 100      |
| 29) 1,1-Dichloropropene        | 8.371          | 75   | 63494               | 20.003  | ug/l   | 100      |
| 30) 2-Butanone                 | 7.483          | 43   | 165771              | 98.088  | ug/l   | 100      |
| 31) 2,2-Dichloropropane        | 7.488          | 77   | 74258               | 19.908  | ug/l   | 100      |
| 32) 1,1,1-Trichloroethane      | 8.171          | 97   | 83522               | 20.585  | ug/l   | 100      |
| 33) Carbon Tetrachloride       | 8.365          | 117  | 70174               | 19.964  | ug/l   | 100      |
| 34) Benzene                    | 8.606          | 78   | 200730              | 20.202  | ug/l   | 100      |
| 35) Methacrylonitrile          | 7.783          | 41   | 35246               | 19.549  | ug/l   | 100      |
| 36) 1,2-Dichloroethane         | 8.671          | 62   | 67270               | 20.311  | ug/l   | 100      |
| 37) Trichloroethene            | 9.347          | 130  | 47143               | 20.604  | ug/l   | 100      |
| 38) Methylcyclohexane          | 9.600          | 83   | 66905               | 19.189  | ug/l   | 100      |
| 39) 1,2-Dichloropropane        | 9.624          | 63   | 49785               | 20.547  | ug/l   | 100      |
| 40) Dibromomethane             | 9.706          | 93   | 33881               | 20.007  | ug/l   | 100      |
| 41) Bromodichloromethane       | 9.888          | 83   | 72106               | 20.057  | ug/l   | 100      |
| 42) Vinyl Acetate              | 6.600          | 43   | 572205              | 97.351  | ug/l   | 100      |

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 ALS Vial : 5 Sample Multiplier: 1

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 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Wed Oct 09 02:04:33 2024  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc    | Units | Dev(Min) |
|-------------------------------|--------|------|----------|---------|-------|----------|
| 43) Ethyl Acetate             | 7.559  | 43   | 65636    | 19.692  | ug/l  | 100      |
| 44) Isopropyl Acetate         | 8.688  | 43   | 108346   | 19.860  | ug/l  | 100      |
| 45) 1,4-Dioxane               | 9.700  | 88   | 18510    | 376.387 | ug/l  | 100      |
| 46) Methyl methacrylate       | 9.682  | 41   | 52087    | 19.761  | ug/l  | 100      |
| 47) n-amyl Acetate            | 12.494 | 43   | 95368    | 19.654  | ug/l  | 100      |
| 48) t-1,3-Dichloropropene     | 10.835 | 75   | 72331    | 19.470  | ug/l  | 100      |
| 49) cis-1,3-Dichloropropene   | 10.312 | 75   | 79003    | 20.292  | ug/l  | 100      |
| 50) 1,1,2-Trichloroethane     | 11.018 | 97   | 45599    | 20.033  | ug/l  | 100      |
| 51) Ethyl methacrylate        | 10.876 | 69   | 74070    | 19.701  | ug/l  | 100      |
| 52) 1,3-Dichloropropane       | 11.165 | 76   | 80622    | 20.257  | ug/l  | 100      |
| 53) Dibromochloromethane      | 11.359 | 129  | 53563    | 19.920  | ug/l  | 100      |
| 54) 1,2-Dibromoethane         | 11.470 | 107  | 47708    | 20.362  | ug/l  | 100      |
| 55) 2-Chloroethyl vinyl ether | 10.159 | 63   | 161430   | 94.667  | ug/l  | 100      |
| 56) Bromoform                 | 12.576 | 173  | 34047    | 19.091  | ug/l  | 100      |
| 58) 4-Methyl-2-Pentanone      | 10.447 | 43   | 336052   | 100.014 | ug/l  | 100      |
| 59) 2-Hexanone                | 11.194 | 43   | 245030   | 98.139  | ug/l  | 100      |
| 61) Tetrachloroethene         | 11.100 | 164  | 41072    | 20.131  | ug/l  | 100      |
| 62) Toluene                   | 10.629 | 91   | 211795   | 20.058  | ug/l  | 100      |
| 64) Chlorobenzene             | 11.888 | 112  | 130620   | 19.878  | ug/l  | 100      |
| 65) 1,1,1,2-Tetrachloroethane | 11.959 | 131  | 46005    | 20.153  | ug/l  | 100      |
| 66) Ethyl Benzene             | 11.965 | 91   | 227198   | 19.804  | ug/l  | 100      |
| 67) m/p-Xylenes               | 12.070 | 106  | 174434   | 40.081  | ug/l  | 100      |
| 68) o-Xylene                  | 12.400 | 106  | 83154    | 19.823  | ug/l  | 100      |
| 69) Styrene                   | 12.412 | 104  | 142239   | 19.752  | ug/l  | 100      |
| 70) Isopropylbenzene          | 12.694 | 105  | 214822   | 20.060  | ug/l  | 100      |
| 71) 1,1,2,2-Tetrachloroethane | 12.935 | 83   | 66030    | 19.931  | ug/l  | 100      |
| 72) 1,2,3-Trichloropropane    | 12.988 | 75   | 56046m   | 19.781  | ug/l  |          |
| 73) Bromobenzene              | 12.982 | 156  | 51441    | 19.834  | ug/l  | 100      |
| 74) n-propylbenzene           | 13.035 | 91   | 253393   | 19.856  | ug/l  | 100      |
| 75) 2-Chlorotoluene           | 13.123 | 91   | 158981   | 20.048  | ug/l  | 100      |
| 76) 1,3,5-Trimethylbenzene    | 13.170 | 105  | 178878   | 19.838  | ug/l  | 100      |
| 77) t-1,4-Dichloro-2-butene   | 12.735 | 75   | 22530    | 18.583  | ug/l  | 100      |
| 78) 4-Chlorotoluene           | 13.217 | 91   | 159107   | 19.735  | ug/l  | 100      |
| 79) tert-butylbenzene         | 13.435 | 119  | 151487   | 19.692  | ug/l  | 100      |
| 80) 1,2,4-Trimethylbenzene    | 13.482 | 105  | 180628   | 19.743  | ug/l  | 100      |
| 81) sec-Butylbenzene          | 13.617 | 105  | 210010   | 19.829  | ug/l  | 100      |
| 82) p-Isopropyltoluene        | 13.729 | 119  | 173074   | 19.415  | ug/l  | 100      |
| 83) 1,3-Dichlorobenzene       | 13.735 | 146  | 95054    | 19.711  | ug/l  | 100      |
| 84) 1,4-Dichlorobenzene       | 13.812 | 146  | 91564    | 19.121  | ug/l  | 100      |
| 85) n-Butylbenzene            | 14.053 | 91   | 144192   | 18.676  | ug/l  | 100      |
| 86) Hexachloroethane          | 14.335 | 117  | 33531    | 19.524  | ug/l  | 100      |
| 87) 1,2-Dichlorobenzene       | 14.106 | 146  | 90933    | 19.503  | ug/l  | 100      |
| 88) 1,2-Dibromo-3-Chloropr... | 14.723 | 75   | 13240    | 19.543  | ug/l  | 100      |
| 89) 1,2,4-Trichlorobenzene    | 15.841 | 180  | 45853    | 18.915  | ug/l  | 100      |
| 90) Hexachlorobutadiene       | 15.500 | 225  | 20860    | 18.600  | ug/l  | 100      |
| 91) Naphthalene               | 15.641 | 128  | 154471   | 18.804  | ug/l  | 100      |
| 92) 1,2,3-Trichlorobenzene    | 15.841 | 180  | 45853    | 18.915  | ug/l  | 100      |

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

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ALS Vial : 5 Sample Multiplier: 1

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