

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN032423\  
 Data File : VN077175.D  
 Acq On : 24 Mar 2023 11:33  
 Operator : JC\MD  
 Sample : VN0324WBSD01  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0324WBSD01

Manual Integrations  
 APPROVED

Reviewed By : John Carlone 03/27/2023  
 Supervised By : Semsettin Yesilyurt 03/27/2023

Quant Time: Mar 24 23:27:51 2023  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N032423W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Fri Mar 24 05:55:38 2023  
 Response via : Initial Calibration

| Compound                     | R.T.           | QIon | Response            | Conc    | Units  | Dev(Min) |
|------------------------------|----------------|------|---------------------|---------|--------|----------|
| -----                        |                |      |                     |         |        |          |
| Internal Standards           |                |      |                     |         |        |          |
| 1) Bromochloromethane        | 7.825          | 128  | 40503               | 30.000  | ug/l   | 0.00     |
| 28) 1,4-Difluorobenzene      | 9.107          | 114  | 293395              | 30.000  | ug/l   | 0.00     |
| 57) Chlorobenzene-d5         | 11.866         | 117  | 323347              | 30.000  | ug/l   | 0.00     |
|                              |                |      |                     |         |        |          |
| System Monitoring Compounds  |                |      |                     |         |        |          |
| 27) 1,2-Dichloroethane-d4    | 8.583          | 65   | 129755              | 31.545  | ug/l   | 0.00     |
| Spiked Amount 30.000         | Range 91 - 110 |      | Recovery = 105.133% |         |        |          |
| 60) 4-Bromofluorobenzene     | 12.848         | 95   | 169840              | 29.238  | ug/l   | 0.00     |
| Spiked Amount 30.000         | Range 63 - 112 |      | Recovery = 97.467%  |         |        |          |
| 63) Toluene-d8               | 10.572         | 98   | 345521              | 29.935  | ug/l   | 0.00     |
| Spiked Amount 30.000         | Range 91 - 112 |      | Recovery = 99.767%  |         |        |          |
|                              |                |      |                     |         |        |          |
| Target Compounds             |                |      |                     |         |        | Qvalue   |
| 2) Dichlorodifluoromethane   | 2.137          | 85   | 63106               | 23.662  | ug/l   | 99       |
| 3) Chloromethane             | 2.378          | 50   | 82147               | 19.355  | ug/l   | 96       |
| 4) Vinyl Chloride            | 2.525          | 62   | 107873              | 18.027  | ug/l   | 92       |
| 5) Bromomethane              | 2.966          | 94   | 68276               | 16.273  | ug/l   | 97       |
| 6) Chloroethane              | 3.137          | 64   | 74570               | 14.948  | ug/l   | 95       |
| 7) Trichlorofluoromethane    | 3.507          | 101  | 178719              | 20.748  | ug/l   | 99       |
| 8) Diethyl Ether             | 3.978          | 74   | 62132               | 20.557  | ug/l   | 98       |
| 9) 1,1,2-Trichlorotrifluo... | 4.384          | 101  | 93810               | 20.827  | ug/l   | 85       |
| 10) 1,1-Dichloroethene       | 4.354          | 96   | 89480               | 21.231  | ug/l   | 94       |
| 11) Methyl Iodide            | 4.607          | 142  | 101555              | 22.626  | ug/l   | 99       |
| 12) Methyl Acetate           | 5.037          | 43   | 181165              | 19.935  | ug/l   | 95       |
| 13) Acrolein                 | 4.190          | 56   | 128039              | 103.962 | ug/l   | 98       |
| 14) Acrylonitrile            | 5.731          | 53   | 275034              | 99.766  | ug/l   | 99       |
| 15) Acetone                  | 4.443          | 58   | 86471               | 119.961 | ug/l   | 97       |
| 16) Carbon Disulfide         | 4.725          | 76   | 242753              | 20.395  | ug/l   | 100      |
| 17) Allyl chloride           | 5.037          | 41   | 154780              | 20.881  | ug/l   | 97       |
| 18) Methylene Chloride       | 5.290          | 84   | 106634              | 20.587  | ug/l   | 93       |
| 19) trans-1,2-Dichloroethene | 5.801          | 96   | 94573               | 20.945  | ug/l   | 99       |
| 20) Diisopropyl ether        | 6.684          | 45   | 361807              | 21.547  | ug/l   | 92       |
| 21) 1,1-Dichloroethane       | 6.578          | 63   | 200879              | 21.249  | ug/l   | 97       |
| 22) cis-1,2-Dichloroethene   | 7.489          | 96   | 109351              | 20.512  | ug/l # | 82       |
| 23) tert-Butyl Alcohol       | 5.525          | 59   | 87419               | 93.423  | ug/l   | 100      |
| 24) Methyl tert-Butyl Ether  | 5.807          | 73   | 315627              | 21.094  | ug/l   | 98       |
| 25) Chloroform               | 7.972          | 83   | 196450              | 21.238  | ug/l   | 99       |
| 26) Cyclohexane              | 8.266          | 56   | 167078              | 20.954  | ug/l # | 95       |
| 29) 1,1-Dichloropropene      | 8.378          | 75   | 142563              | 20.030  | ug/l   | 99       |
| 30) 2-Butanone               | 7.489          | 43   | 398928              | 97.158  | ug/l   | 99       |
| 31) 2,2-Dichloropropane      | 7.501          | 77   | 156990              | 23.546  | ug/l # | 67       |
| 32) 1,1,1-Trichloroethane    | 8.178          | 97   | 169146              | 19.711  | ug/l   | 99       |
| 33) Carbon Tetrachloride     | 8.372          | 117  | 148272              | 20.567  | ug/l   | 94       |
| 34) Benzene                  | 8.607          | 78   | 423261              | 19.401  | ug/l   | 94       |
| 35) Methacrylonitrile        | 7.783          | 41   | 87261               | 19.360  | ug/l   | 97       |
| 36) 1,2-Dichloroethane       | 8.678          | 62   | 165286              | 20.550  | ug/l   | 98       |
| 37) Trichloroethene          | 9.360          | 130  | 99199               | 20.112  | ug/l   | 97       |
| 38) Methylcyclohexane        | 9.607          | 83   | 167869              | 19.813  | ug/l   | 97       |
| 39) 1,2-Dichloropropane      | 9.625          | 63   | 114940              | 19.679  | ug/l # | 88       |
| 40) Dibromomethane           | 9.713          | 93   | 73966               | 19.804  | ug/l   | 96       |
| 41) Bromodichloromethane     | 9.889          | 83   | 149790              | 19.695  | ug/l   | 92       |
| 42) Vinyl Acetate            | 6.613          | 43   | 1160680             | 94.309  | ug/l   | 99       |

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 Sample : VN0324WBSD01  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
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 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Fri Mar 24 05:55:38 2023  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc    | Units | Dev(Min) |
|-------------------------------|--------|------|----------|---------|-------|----------|
| 43) Ethyl Acetate             | 7.572  | 43   | 154966   | 18.892  | ug/l  | 100      |
| 44) Isopropyl Acetate         | 8.695  | 43   | 244134   | 18.443  | ug/l  | 98       |
| 45) 1,4-Dioxane               | 9.701  | 88   | 42625    | 396.010 | ug/l  | 97       |
| 46) Methyl methacrylate       | 9.683  | 41   | 118315   | 19.385  | ug/l  | 95       |
| 47) n-amyl Acetate            | 12.495 | 43   | 204434   | 18.357  | ug/l  | 98       |
| 48) t-1,3-Dichloropropene     | 10.836 | 75   | 151233   | 19.577  | ug/l  | 97       |
| 49) cis-1,3-Dichloropropene   | 10.313 | 75   | 167059   | 19.753  | ug/l  | 98       |
| 50) 1,1,2-Trichloroethane     | 11.019 | 97   | 104513   | 19.934  | ug/l  | 92       |
| 51) Ethyl methacrylate        | 10.872 | 69   | 150914   | 18.643  | ug/l  | 98       |
| 52) 1,3-Dichloropropane       | 11.166 | 76   | 183396   | 19.706  | ug/l  | 99       |
| 53) Dibromochloromethane      | 11.360 | 129  | 103914   | 19.143  | ug/l  | 100      |
| 54) 1,2-Dibromoethane         | 11.477 | 107  | 101075   | 19.591  | ug/l  | 99       |
| 55) 2-Chloroethyl vinyl ether | 10.160 | 63   | 298243   | 88.120  | ug/l  | 97       |
| 56) Bromoform                 | 12.583 | 173  | 70034    | 18.386  | ug/l  | 99       |
| 58) 4-Methyl-2-Pentanone      | 10.448 | 43   | 797998   | 95.622  | ug/l  | 98       |
| 59) 2-Hexanone                | 11.195 | 43   | 582517   | 95.732  | ug/l  | 99       |
| 61) Tetrachloroethene         | 11.101 | 164  | 80945    | 19.946  | ug/l  | 98       |
| 62) Toluene                   | 10.630 | 91   | 455555   | 20.046  | ug/l  | 99       |
| 64) Chlorobenzene             | 11.895 | 112  | 267194   | 19.873  | ug/l  | 99       |
| 65) 1,1,1,2-Tetrachloroethane | 11.960 | 131  | 98300    | 19.908  | ug/l  | 96       |
| 66) Ethyl Benzene             | 11.966 | 91   | 491320   | 20.121  | ug/l  | 97       |
| 67) m/p-Xylenes               | 12.071 | 106  | 379993   | 40.437  | ug/l  | 96       |
| 68) o-Xylene                  | 12.401 | 106  | 181360   | 19.711  | ug/l  | 97       |
| 69) Styrene                   | 12.413 | 104  | 292283   | 19.563  | ug/l  | 98       |
| 70) Isopropylbenzene          | 12.701 | 105  | 476483   | 19.971  | ug/l  | 97       |
| 71) 1,1,2,2-Tetrachloroethane | 12.942 | 83   | 155544   | 19.917  | ug/l  | 99       |
| 72) 1,2,3-Trichloropropane    | 12.995 | 75   | 117947m  | 17.063  | ug/l  |          |
| 73) Bromobenzene              | 12.983 | 156  | 105359   | 19.753  | ug/l  | 91       |
| 74) n-propylbenzene           | 13.036 | 91   | 552993   | 20.020  | ug/l  | 100      |
| 75) 2-Chlorotoluene           | 13.130 | 91   | 334496   | 20.085  | ug/l  | 98       |
| 76) 1,3,5-Trimethylbenzene    | 13.177 | 105  | 403510   | 20.375  | ug/l  | 95       |
| 77) t-1,4-Dichloro-2-butene   | 12.736 | 75   | 42183    | 19.143  | ug/l  | 96       |
| 78) 4-Chlorotoluene           | 13.224 | 91   | 310821   | 19.402  | ug/l  | 96       |
| 79) tert-butylbenzene         | 13.442 | 119  | 338030   | 19.980  | ug/l  | 96       |
| 80) 1,2,4-Trimethylbenzene    | 13.483 | 105  | 392237   | 19.958  | ug/l  | 96       |
| 81) sec-Butylbenzene          | 13.618 | 105  | 479830   | 19.642  | ug/l  | 100      |
| 82) p-Isopropyltoluene        | 13.730 | 119  | 379724   | 19.391  | ug/l  | 98       |
| 83) 1,3-Dichlorobenzene       | 13.736 | 146  | 195433   | 19.788  | ug/l  | 99       |
| 84) 1,4-Dichlorobenzene       | 13.813 | 146  | 185194   | 19.249  | ug/l  | 96       |
| 85) n-Butylbenzene            | 14.060 | 91   | 311825   | 18.839  | ug/l  | 99       |
| 86) Hexachloroethane          | 14.336 | 117  | 69540    | 18.622  | ug/l  | 90       |
| 87) 1,2-Dichlorobenzene       | 14.107 | 146  | 191746   | 19.414  | ug/l  | 98       |
| 88) 1,2-Dibromo-3-Chloropr... | 14.718 | 75   | 27146    | 18.116  | ug/l  | 98       |
| 89) 1,2,4-Trichlorobenzene    | 15.395 | 180  | 78314    | 17.775  | ug/l  | 98       |
| 90) Hexachlorobutadiene       | 15.501 | 225  | 48686    | 19.587  | ug/l  | 99       |
| 91) Naphthalene               | 15.648 | 128  | 246531   | 17.051  | ug/l  | 98       |
| 92) 1,2,3-Trichlorobenzene    | 15.842 | 180  | 77310    | 17.671  | ug/l  | 99       |

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

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 Sample : VN0324WBSD01  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
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