

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN090822\  
 Data File : VN074360.D  
 Acq On : 08 Sep 2022 16:04  
 Operator : JC\MD  
 Sample : VN0908WBS01  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0908WBS01

Manual Integrations  
 APPROVED

Reviewed By : John Carlone 09/09/2022  
 Supervised By : Mahesh Dadoda 09/09/2022

Quant Time: Sep 09 05:36:19 2022  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N090822W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Fri Sep 09 05:24:20 2022  
 Response via : Initial Calibration

| Compound                     | R.T.           | QIon | Response            | Conc    | Units  | Dev(Min) |
|------------------------------|----------------|------|---------------------|---------|--------|----------|
| -----                        |                |      |                     |         |        |          |
| Internal Standards           |                |      |                     |         |        |          |
| 1) Bromochloromethane        | 7.575          | 128  | 64859               | 30.000  | ug/l   | 0.00     |
| 28) 1,4-Difluorobenzene      | 8.898          | 114  | 378725              | 30.000  | ug/l   | 0.00     |
| 57) Chlorobenzene-d5         | 11.686         | 117  | 345523              | 30.000  | ug/l   | 0.00     |
|                              |                |      |                     |         |        |          |
| System Monitoring Compounds  |                |      |                     |         |        |          |
| 27) 1,2-Dichloroethane-d4    | 8.369          | 65   | 201535              | 30.264  | ug/l   | 0.00     |
| Spiked Amount 30.000         | Range 91 - 110 |      | Recovery = 100.867% |         |        |          |
| 60) 4-Bromofluorobenzene     | 12.674         | 95   | 203437              | 29.442  | ug/l   | 0.00     |
| Spiked Amount 30.000         | Range 63 - 112 |      | Recovery = 98.133%  |         |        |          |
| 63) Toluene-d8               | 10.380         | 98   | 593376              | 30.574  | ug/l   | 0.00     |
| Spiked Amount 30.000         | Range 91 - 112 |      | Recovery = 101.900% |         |        |          |
|                              |                |      |                     |         |        |          |
| Target Compounds             |                |      |                     |         |        | Qvalue   |
| 2) Dichlorodifluoromethane   | 2.046          | 85   | 86054               | 18.743  | ug/l   | 100      |
| 3) Chloromethane             | 2.263          | 50   | 130535              | 20.630  | ug/l   | 92       |
| 4) Vinyl Chloride            | 2.404          | 62   | 142641              | 21.080  | ug/l   | 99       |
| 5) Bromomethane              | 2.793          | 94   | 101035              | 24.221  | ug/l   | 95       |
| 6) Chloroethane              | 2.957          | 64   | 93844               | 20.457  | ug/l   | 99       |
| 7) Trichlorofluoromethane    | 3.316          | 101  | 150774              | 19.697  | ug/l   | 90       |
| 8) Diethyl Ether             | 3.763          | 74   | 64571               | 20.235  | ug/l   | 83       |
| 9) 1,1,2-Trichlorotrifluo... | 4.134          | 101  | 90330               | 20.169  | ug/l   | 91       |
| 10) 1,1-Dichloroethene       | 4.104          | 96   | 85771               | 19.840  | ug/l   | 95       |
| 11) Methyl Iodide            | 4.346          | 142  | 105580              | 19.891  | ug/l   | 94       |
| 12) Methyl Acetate           | 4.775          | 43   | 185332              | 19.728  | ug/l   | 95       |
| 13) Acrolein                 | 3.981          | 56   | 125735              | 99.218  | ug/l   | 98       |
| 14) Acrylonitrile            | 5.469          | 53   | 367282              | 100.869 | ug/l   | 99       |
| 15) Acetone                  | 4.216          | 58   | 97893               | 101.455 | ug/l   | 86       |
| 16) Carbon Disulfide         | 4.451          | 76   | 242832              | 19.601  | ug/l   | 95       |
| 17) Allyl chloride           | 4.763          | 41   | 189940              | 20.346  | ug/l   | 85       |
| 18) Methylene Chloride       | 5.004          | 84   | 108705              | 19.754  | ug/l # | 87       |
| 19) trans-1,2-Dichloroethene | 5.504          | 96   | 95809               | 19.383  | ug/l   | 98       |
| 20) Diisopropyl ether        | 6.410          | 45   | 384969              | 20.026  | ug/l   | 93       |
| 21) 1,1-Dichloroethane       | 6.304          | 63   | 198346              | 19.643  | ug/l   | 98       |
| 22) cis-1,2-Dichloroethene   | 7.245          | 96   | 114793              | 19.108  | ug/l   | 91       |
| 23) tert-Butyl Alcohol       | 5.275          | 59   | 166845m             | 105.821 | ug/l   |          |
| 24) Methyl tert-Butyl Ether  | 5.528          | 73   | 363987              | 20.011  | ug/l   | 99       |
| 25) Chloroform               | 7.739          | 83   | 201986              | 19.689  | ug/l   | 99       |
| 26) Cyclohexane              | 8.022          | 56   | 184832              | 19.941  | ug/l   | 93       |
| 29) 1,1-Dichloropropene      | 8.145          | 75   | 146915              | 19.514  | ug/l   | 96       |
| 30) 2-Butanone               | 7.257          | 43   | 558799              | 104.812 | ug/l   | 93       |
| 31) 2,2-Dichloropropane      | 7.245          | 77   | 180612              | 19.606  | ug/l   | 95       |
| 32) 1,1,1-Trichloroethane    | 7.939          | 97   | 179141              | 19.303  | ug/l   | 96       |
| 33) Carbon Tetrachloride     | 8.133          | 117  | 156617              | 19.503  | ug/l   | 90       |
| 34) Benzene                  | 8.386          | 78   | 458572              | 19.812  | ug/l # | 92       |
| 35) Methacrylonitrile        | 7.563          | 41   | 119431              | 24.380  | ug/l   | 91       |
| 36) 1,2-Dichloroethane       | 8.463          | 62   | 171393              | 20.239  | ug/l   | 99       |
| 37) Trichloroethene          | 9.151          | 130  | 101106              | 19.008  | ug/l   | 88       |
| 38) Methylcyclohexane        | 9.392          | 83   | 184720              | 19.491  | ug/l   | 95       |
| 39) 1,2-Dichloropropane      | 9.428          | 63   | 120771              | 20.262  | ug/l   | 99       |
| 40) Dibromomethane           | 9.510          | 93   | 81131               | 19.563  | ug/l   | 98       |
| 41) Bromodichloromethane     | 9.698          | 83   | 166330              | 20.183  | ug/l # | 92       |
| 42) Vinyl Acetate            | 6.345          | 43   | 1776643             | 100.964 | ug/l   | 98       |

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 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0908WBS01

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 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Fri Sep 09 05:24:20 2022  
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| Compound                      | R.T.   | QIon | Response | Conc    | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|---------|--------|----------|
| 43) Ethyl Acetate             | 7.334  | 43   | 205879   | 19.460  | ug/l   | 99       |
| 44) Isopropyl Acetate         | 8.492  | 43   | 347029   | 20.639  | ug/l   | 97       |
| 45) 1,4-Dioxane               | 9.504  | 88   | 62695    | 402.828 | ug/l   | 92       |
| 46) Methyl methacrylate       | 9.492  | 41   | 145626   | 20.251  | ug/l   | 86       |
| 47) n-amyl Acetate            | 12.333 | 43   | 305064   | 19.962  | ug/l   | 96       |
| 48) t-1,3-Dichloropropene     | 10.657 | 75   | 181719   | 18.878  | ug/l   | 95       |
| 49) cis-1,3-Dichloropropene   | 10.128 | 75   | 187965   | 19.134  | ug/l   | 92       |
| 50) 1,1,2-Trichloroethane     | 10.839 | 97   | 115454   | 19.678  | ug/l   | 97       |
| 51) Ethyl methacrylate        | 10.704 | 69   | 200134   | 19.172  | ug/l   | 95       |
| 52) 1,3-Dichloropropane       | 10.986 | 76   | 207315   | 20.374  | ug/l   | 98       |
| 53) Dibromochloromethane      | 11.180 | 129  | 118915   | 18.849  | ug/l   | 100      |
| 54) 1,2-Dibromoethane         | 11.286 | 107  | 119093   | 19.364  | ug/l   | 96       |
| 55) 2-Chloroethyl vinyl ether | 9.980  | 63   | 494141   | 98.546  | ug/l   | 98       |
| 56) Bromoform                 | 12.398 | 173  | 86826    | 18.067  | ug/l # | 99       |
| 58) 4-Methyl-2-Pentanone      | 10.269 | 43   | 1122051  | 104.474 | ug/l   | 98       |
| 59) 2-Hexanone                | 11.027 | 43   | 891271   | 106.512 | ug/l   | 99       |
| 61) Tetrachloroethene         | 10.916 | 164  | 82787    | 19.312  | ug/l   | 92       |
| 62) Toluene                   | 10.445 | 91   | 501273   | 20.066  | ug/l   | 100      |
| 64) Chlorobenzene             | 11.710 | 112  | 287352   | 19.438  | ug/l   | 99       |
| 65) 1,1,1,2-Tetrachloroethane | 11.780 | 131  | 112595   | 20.110  | ug/l   | 99       |
| 66) Ethyl Benzene             | 11.786 | 91   | 551040   | 19.944  | ug/l   | 99       |
| 67) m/p-Xylenes               | 11.892 | 106  | 428826   | 40.706  | ug/l   | 100      |
| 68) o-Xylene                  | 12.221 | 106  | 216207   | 20.109  | ug/l   | 99       |
| 69) Styrene                   | 12.233 | 104  | 338291   | 19.021  | ug/l   | 95       |
| 70) Isopropylbenzene          | 12.521 | 105  | 542306   | 19.422  | ug/l   | 100      |
| 71) 1,1,2,2-Tetrachloroethane | 12.769 | 83   | 199572   | 20.496  | ug/l   | 97       |
| 72) 1,2,3-Trichloropropane    | 12.821 | 75   | 158104m  | 19.770  | ug/l   |          |
| 73) Bromobenzene              | 12.804 | 156  | 117311   | 19.371  | ug/l   | 82       |
| 74) n-propylbenzene           | 12.863 | 91   | 635274   | 19.575  | ug/l   | 98       |
| 75) 2-Chlorotoluene           | 12.951 | 91   | 393698   | 20.328  | ug/l   | 94       |
| 76) 1,3,5-Trimethylbenzene    | 13.004 | 105  | 456173   | 19.429  | ug/l   | 98       |
| 77) t-1,4-Dichloro-2-butene   | 12.569 | 75   | 67566    | 19.105  | ug/l   | 96       |
| 78) 4-Chlorotoluene           | 13.045 | 91   | 359765   | 18.873  | ug/l   | 96       |
| 79) tert-butylbenzene         | 13.268 | 119  | 405349   | 19.417  | ug/l   | 99       |
| 80) 1,2,4-Trimethylbenzene    | 13.310 | 105  | 451252m  | 19.092  | ug/l   |          |
| 81) sec-Butylbenzene          | 13.445 | 105  | 565987   | 19.440  | ug/l   | 100      |
| 82) p-Isopropyltoluene        | 13.557 | 119  | 450413   | 18.715  | ug/l   | 99       |
| 83) 1,3-Dichlorobenzene       | 13.557 | 146  | 217181   | 19.067  | ug/l   | 99       |
| 84) 1,4-Dichlorobenzene       | 13.639 | 146  | 215911   | 19.136  | ug/l   | 99       |
| 85) n-Butylbenzene            | 13.886 | 91   | 384684   | 18.213  | ug/l   | 96       |
| 86) Hexachloroethane          | 14.157 | 117  | 94035    | 20.009  | ug/l   | 94       |
| 87) 1,2-Dichlorobenzene       | 13.927 | 146  | 215030   | 18.259  | ug/l   | 99       |
| 88) 1,2-Dibromo-3-Chloropr... | 14.551 | 75   | 49461    | 20.741  | ug/l   | 90       |
| 89) 1,2,4-Trichlorobenzene    | 15.198 | 180  | 113655   | 18.460  | ug/l   | 97       |
| 90) Hexachlorobutadiene       | 15.304 | 225  | 47166    | 17.949  | ug/l   | 96       |
| 91) Naphthalene               | 15.439 | 128  | 466023   | 18.882  | ug/l   | 99       |
| 92) 1,2,3-Trichlorobenzene    | 15.633 | 180  | 115443   | 18.467  | ug/l   | 100      |

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

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