

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN081123\  
 Data File : VN078855.D  
 Acq On : 11 Aug 2023 10:33  
 Operator : JC\MD  
 Sample : VN0811WBSD01  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0811WBSD01

Manual Integrations  
 APPROVED

Reviewed By : John Carlone 08/14/2023  
 Supervised By : Mahesh Dadoda 08/15/2023

Quant Time: Aug 12 01:38:57 2023  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N080823W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Wed Aug 09 05:05:47 2023  
 Response via : Initial Calibration

| Compound                     | R.T.           | QIon | Response            | Conc    | Units  | Dev(Min) |
|------------------------------|----------------|------|---------------------|---------|--------|----------|
| -----                        |                |      |                     |         |        |          |
| Internal Standards           |                |      |                     |         |        |          |
| 1) Bromochloromethane        | 7.818          | 128  | 30073               | 30.000  | ug/l   | 0.00     |
| 28) 1,4-Difluorobenzene      | 9.106          | 114  | 168850              | 30.000  | ug/l   | 0.00     |
| 57) Chlorobenzene-d5         | 11.870         | 117  | 145009              | 30.000  | ug/l   | 0.00     |
| System Monitoring Compounds  |                |      |                     |         |        |          |
| 27) 1,2-Dichloroethane-d4    | 8.588          | 65   | 73051               | 30.172  | ug/l   | 0.00     |
| Spiked Amount 30.000         | Range 91 - 110 |      | Recovery = 100.567% |         |        |          |
| 60) 4-Bromofluorobenzene     | 12.853         | 95   | 65864               | 32.358  | ug/l   | 0.00     |
| Spiked Amount 30.000         | Range 63 - 112 |      | Recovery = 107.867% |         |        |          |
| 63) Toluene-d8               | 10.570         | 98   | 218544              | 30.755  | ug/l   | 0.00     |
| Spiked Amount 30.000         | Range 91 - 112 |      | Recovery = 102.533% |         |        |          |
| Target Compounds             |                |      |                     |         |        |          |
|                              |                |      |                     |         | Qvalue |          |
| 2) Dichlorodifluoromethane   | 2.136          | 85   | 43195               | 20.837  | ug/l   | 99       |
| 3) Chloromethane             | 2.371          | 50   | 54719               | 22.167  | ug/l   | 91       |
| 4) Vinyl Chloride            | 2.524          | 62   | 51202               | 21.798  | ug/l   | 96       |
| 5) Bromomethane              | 2.965          | 94   | 34156               | 19.990  | ug/l   | 85       |
| 6) Chloroethane              | 3.124          | 64   | 34010               | 20.383  | ug/l   | 97       |
| 7) Trichlorofluoromethane    | 3.506          | 101  | 66068               | 20.494  | ug/l   | 98       |
| 8) Diethyl Ether             | 3.971          | 74   | 23873m              | 20.825  | ug/l   |          |
| 9) 1,1,2-Trichlorotrifluo... | 4.389          | 101  | 36544m              | 21.131  | ug/l   |          |
| 10) 1,1-Dichloroethene       | 4.347          | 96   | 34950               | 20.868  | ug/l   | 89       |
| 11) Methyl Iodide            | 4.594          | 142  | 46319               | 20.733  | ug/l   | 95       |
| 12) Methyl Acetate           | 5.036          | 43   | 68636               | 18.855  | ug/l # | 90       |
| 13) Acrolein                 | 4.194          | 56   | 37446               | 97.122  | ug/l   | 95       |
| 14) Acrylonitrile            | 5.736          | 53   | 103215              | 107.608 | ug/l   | 94       |
| 15) Acetone                  | 4.447          | 58   | 25956               | 105.025 | ug/l   | 88       |
| 16) Carbon Disulfide         | 4.724          | 76   | 101640              | 20.964  | ug/l   | 95       |
| 17) Allyl chloride           | 5.036          | 41   | 61857               | 21.129  | ug/l   | 95       |
| 18) Methylene Chloride       | 5.283          | 84   | 44470               | 21.277  | ug/l # | 87       |
| 19) trans-1,2-Dichloroethene | 5.794          | 96   | 38456               | 19.998  | ug/l   | 88       |
| 20) Diisopropyl ether        | 6.677          | 45   | 141232              | 21.483  | ug/l # | 90       |
| 21) 1,1-Dichloroethane       | 6.583          | 63   | 80860               | 21.574  | ug/l   | 98       |
| 22) cis-1,2-Dichloroethene   | 7.500          | 96   | 45736               | 21.458  | ug/l   | 90       |
| 23) tert-Butyl Alcohol       | 5.530          | 59   | 31829               | 89.302  | ug/l # | 100      |
| 24) Methyl tert-Butyl Ether  | 5.806          | 73   | 118253              | 21.096  | ug/l   | 93       |
| 25) Chloroform               | 7.971          | 83   | 78654               | 21.138  | ug/l   | 94       |
| 26) Cyclohexane              | 8.265          | 56   | 59816               | 20.262  | ug/l # | 96       |
| 29) 1,1-Dichloropropene      | 8.382          | 75   | 56776               | 20.697  | ug/l   | 96       |
| 30) 2-Butanone               | 7.494          | 43   | 141178              | 105.001 | ug/l   | 94       |
| 31) 2,2-Dichloropropane      | 7.500          | 77   | 63680               | 22.512  | ug/l   | 95       |
| 32) 1,1,1-Trichloroethane    | 8.171          | 97   | 65527               | 20.284  | ug/l   | 93       |
| 33) Carbon Tetrachloride     | 8.371          | 117  | 58841               | 21.104  | ug/l   | 95       |
| 34) Benzene                  | 8.612          | 78   | 176293              | 21.121  | ug/l   | 95       |
| 35) Methacrylonitrile        | 7.788          | 41   | 29449               | 18.652  | ug/l   | 77       |
| 36) 1,2-Dichloroethane       | 8.682          | 62   | 60802               | 20.838  | ug/l   | 96       |
| 37) Trichloroethene          | 9.359          | 130  | 42410               | 21.115  | ug/l   | 95       |
| 38) Methylcyclohexane        | 9.612          | 83   | 52495               | 20.213  | ug/l   | 93       |
| 39) 1,2-Dichloropropane      | 9.629          | 63   | 47739m              | 21.617  | ug/l   |          |
| 40) Dibromomethane           | 9.718          | 93   | 30871               | 20.993  | ug/l   | 95       |
| 41) Bromodichloromethane     | 9.894          | 83   | 62534               | 21.105  | ug/l # | 92       |
| 42) Vinyl Acetate            | 6.618          | 43   | 435734              | 102.985 | ug/l   | 95       |

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| Compound                      | R.T.   | QIon | Response | Conc    | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|---------|--------|----------|
| 43) Ethyl Acetate             | 7.571  | 43   | 57226    | 20.503  | ug/l   | 96       |
| 44) Isopropyl Acetate         | 8.694  | 43   | 107006m  | 21.350  | ug/l   |          |
| 45) 1,4-Dioxane               | 9.700  | 88   | 14155    | 420.958 | ug/l   | 95       |
| 46) Methyl methacrylate       | 9.682  | 41   | 44458    | 20.948  | ug/l   | 82       |
| 47) n-amyl Acetate            | 12.500 | 43   | 71472    | 20.398  | ug/l   | 96       |
| 48) t-1,3-Dichloropropene     | 10.841 | 75   | 60075    | 20.079  | ug/l   | 93       |
| 49) cis-1,3-Dichloropropene   | 10.318 | 75   | 69843    | 20.990  | ug/l # | 90       |
| 50) 1,1,2-Trichloroethane     | 11.018 | 97   | 41406    | 20.722  | ug/l   | 96       |
| 51) Ethyl methacrylate        | 10.882 | 69   | 54972    | 19.627  | ug/l   | 78       |
| 52) 1,3-Dichloropropane       | 11.170 | 76   | 71563    | 20.858  | ug/l   | 100      |
| 53) Dibromochloromethane      | 11.365 | 129  | 42389    | 20.326  | ug/l   | 98       |
| 54) 1,2-Dibromoethane         | 11.476 | 107  | 40144    | 20.564  | ug/l   | 99       |
| 55) 2-Chloroethyl vinyl ether | 10.165 | 63   | 102902   | 99.623  | ug/l   | 96       |
| 56) Bromoform                 | 12.588 | 173  | 26491    | 20.291  | ug/l # | 35       |
| 58) 4-Methyl-2-Pentanone      | 10.453 | 43   | 282459   | 101.340 | ug/l   | 91       |
| 59) 2-Hexanone                | 11.200 | 43   | 203061   | 104.839 | ug/l   | 91       |
| 61) Tetrachloroethene         | 11.112 | 164  | 35354    | 21.310  | ug/l   | 88       |
| 62) Toluene                   | 10.635 | 91   | 181959   | 21.314  | ug/l   | 98       |
| 64) Chlorobenzene             | 11.900 | 112  | 105726   | 21.154  | ug/l   | 97       |
| 65) 1,1,1,2-Tetrachloroethane | 11.965 | 131  | 38436    | 19.961  | ug/l   | 95       |
| 66) Ethyl Benzene             | 11.970 | 91   | 190121   | 21.443  | ug/l   | 95       |
| 67) m/p-Xylenes               | 12.076 | 106  | 144417   | 44.422  | ug/l   | 100      |
| 68) o-Xylene                  | 12.406 | 106  | 69205    | 21.386  | ug/l   | 100      |
| 69) Styrene                   | 12.417 | 104  | 113208   | 22.895  | ug/l   | 99       |
| 70) Isopropylbenzene          | 12.700 | 105  | 171084   | 21.404  | ug/l   | 99       |
| 71) 1,1,2,2-Tetrachloroethane | 12.941 | 83   | 54546    | 20.139  | ug/l   | 99       |
| 72) 1,2,3-Trichloropropane    | 13.000 | 75   | 50987m   | 21.566  | ug/l   |          |
| 73) Bromobenzene              | 12.982 | 156  | 38083    | 19.935  | ug/l   | 93       |
| 74) n-propylbenzene           | 13.041 | 91   | 196941   | 22.266  | ug/l   | 99       |
| 75) 2-Chlorotoluene           | 13.129 | 91   | 122358   | 22.207  | ug/l   | 97       |
| 76) 1,3,5-Trimethylbenzene    | 13.176 | 105  | 140817   | 22.182  | ug/l   | 98       |
| 77) t-1,4-Dichloro-2-butene   | 12.735 | 75   | 15891    | 21.413  | ug/l   | 80       |
| 78) 4-Chlorotoluene           | 13.229 | 91   | 113283   | 22.162  | ug/l   | 98       |
| 79) tert-butylbenzene         | 13.441 | 119  | 117003   | 22.463  | ug/l   | 96       |
| 80) 1,2,4-Trimethylbenzene    | 13.488 | 105  | 134716   | 22.488  | ug/l   | 97       |
| 81) sec-Butylbenzene          | 13.617 | 105  | 152160   | 21.820  | ug/l   | 99       |
| 82) p-Isopropyltoluene        | 13.735 | 119  | 116725   | 21.370  | ug/l   | 98       |
| 83) 1,3-Dichlorobenzene       | 13.735 | 146  | 64603    | 21.882  | ug/l   | 98       |
| 84) 1,4-Dichlorobenzene       | 13.817 | 146  | 60159    | 21.338  | ug/l   | 99       |
| 85) n-Butylbenzene            | 14.059 | 91   | 84052    | 20.911  | ug/l   | 96       |
| 86) Hexachloroethane          | 14.335 | 117  | 24157    | 20.996  | ug/l   | 97       |
| 87) 1,2-Dichlorobenzene       | 14.111 | 146  | 63430    | 21.838  | ug/l   | 93       |
| 88) 1,2-Dibromo-3-Chloropr... | 14.723 | 75   | 8288     | 21.543  | ug/l   | 85       |
| 89) 1,2,4-Trichlorobenzene    | 15.400 | 180  | 14711    | 18.299  | ug/l   | 96       |
| 90) Hexachlorobutadiene       | 15.505 | 225  | 11924    | 20.146  | ug/l   | 99       |
| 91) Naphthalene               | 15.647 | 128  | 39394    | 15.670  | ug/l   | 98       |
| 92) 1,2,3-Trichlorobenzene    | 15.847 | 180  | 16339    | 17.328  | ug/l   | 92       |

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

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ALS Vial : 5 Sample Multiplier: 1

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