

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN101222\  
 Data File : VN074883.D  
 Acq On : 12 Oct 2022 18:21  
 Operator : JC\MD  
 Sample : N4955-07 2.5PPB LOD  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 19 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 LOD-MDL-WATER-01-QT4-2022

Quant Time: Oct 13 08:00:36 2022  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N101222W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Thu Oct 13 07:52:24 2022  
 Response via : Initial Calibration

Manual Integrations  
 APPROVED

Reviewed By : John Carlone 10/13/2022  
 Supervised By : Mahesh Dadoda 10/14/2022

| Compound                     | R.T.           | QIon | Response   | Conc     | Units  | Dev(Min) |
|------------------------------|----------------|------|------------|----------|--------|----------|
| Internal Standards           |                |      |            |          |        |          |
| 1) Bromochloromethane        | 7.830          | 128  | 69339      | 30.000   | ug/l   | 0.00     |
| 28) 1,4-Difluorobenzene      | 9.112          | 114  | 390659     | 30.000   | ug/l   | 0.00     |
| 57) Chlorobenzene-d5         | 11.870         | 117  | 338568     | 30.000   | ug/l   | 0.00     |
| System Monitoring Compounds  |                |      |            |          |        |          |
| 27) 1,2-Dichloroethane-d4    | 8.582          | 65   | 193325     | 29.781   | ug/l   | 0.00     |
| Spiked Amount 30.000         | Range 91 - 110 |      | Recovery = | 99.267%  |        |          |
| 60) 4-Bromofluorobenzene     | 12.853         | 95   | 158513     | 26.401   | ug/l   | 0.00     |
| Spiked Amount 30.000         | Range 63 - 112 |      | Recovery = | 88.000%  |        |          |
| 63) Toluene-d8               | 10.571         | 98   | 617524     | 31.602   | ug/l   | 0.00     |
| Spiked Amount 30.000         | Range 91 - 112 |      | Recovery = | 105.333% |        |          |
| Target Compounds             |                |      |            |          |        |          |
|                              |                |      |            |          | Qvalue |          |
| 2) Dichlorodifluoromethane   | 2.142          | 85   | 13285      | 3.450    | ug/l   | 78       |
| 3) Chloromethane             | 2.383          | 50   | 22365m     | 3.591    | ug/l   |          |
| 4) Vinyl Chloride            | 2.536          | 62   | 26835      | 2.926    | ug/l # | 79       |
| 5) Bromomethane              | 2.953          | 94   | 24122      | 3.318    | ug/l   | 92       |
| 6) Chloroethane              | 3.136          | 64   | 37487m     | 5.451    | ug/l   |          |
| 7) Trichlorofluoromethane    | 3.512          | 101  | 21777      | 3.186    | ug/l   | 97       |
| 8) Diethyl Ether             | 3.995          | 74   | 8958m      | 2.810    | ug/l   |          |
| 9) 1,1,2-Trichlorotrifluo... | 4.389          | 101  | 12621m     | 2.934    | ug/l   |          |
| 10) 1,1-Dichloroethene       | 4.347          | 96   | 13274m     | 3.137    | ug/l   |          |
| 11) Methyl Iodide            | 4.600          | 142  | 14752m     | 2.793    | ug/l   |          |
| 12) Methyl Acetate           | 5.053          | 43   | 34160m     | 3.349    | ug/l   |          |
| 13) Acrolein                 | 4.206          | 56   | 21460      | 14.891   | ug/l # | 41       |
| 14) Acrylonitrile            | 5.741          | 53   | 54886      | 14.428   | ug/l # | 35       |
| 15) Acetone                  | 4.471          | 58   | 14505m     | 13.912   | ug/l   |          |
| 16) Carbon Disulfide         | 4.742          | 76   | 31910      | 2.935    | ug/l # | 94       |
| 17) Allyl chloride           | 5.042          | 41   | 28326m     | 3.362    | ug/l   |          |
| 18) Methylene Chloride       | 5.300          | 84   | 19834m     | 3.615    | ug/l   |          |
| 19) trans-1,2-Dichloroethene | 5.812          | 96   | 13375m     | 2.879    | ug/l   |          |
| 20) Diisopropyl ether        | 6.688          | 45   | 53809m     | 2.736    | ug/l   |          |
| 21) 1,1-Dichloroethane       | 6.571          | 63   | 28215m     | 2.820    | ug/l   |          |
| 22) cis-1,2-Dichloroethene   | 7.500          | 96   | 16697m     | 2.870    | ug/l   |          |
| 23) tert-Butyl Alcohol       | 5.553          | 59   | 31765m     | 19.817   | ug/l   |          |
| 24) Methyl tert-Butyl Ether  | 5.818          | 73   | 46935m     | 2.656    | ug/l   |          |
| 25) Chloroform               | 7.977          | 83   | 24658      | 2.482    | ug/l   | 97       |
| 26) Cyclohexane              | 8.277          | 56   | 24392      | 2.775    | ug/l # | 91       |
| 29) 1,1-Dichloropropene      | 8.377          | 75   | 19490      | 2.765    | ug/l   | 72       |
| 30) 2-Butanone               | 7.506          | 43   | 73099      | 12.998   | ug/l   | 95       |
| 31) 2,2-Dichloropropane      | 7.512          | 77   | 22044      | 2.555    | ug/l # | 68       |
| 32) 1,1,1-Trichloroethane    | 8.177          | 97   | 21650      | 2.561    | ug/l # | 75       |
| 33) Carbon Tetrachloride     | 8.371          | 117  | 18859m     | 2.717    | ug/l   |          |
| 34) Benzene                  | 8.612          | 78   | 61914      | 2.657    | ug/l # | 53       |
| 35) Methacrylonitrile        | 7.794          | 41   | 13899m     | 2.405    | ug/l   |          |
| 36) 1,2-Dichloroethane       | 8.677          | 62   | 21129      | 2.723    | ug/l # | 90       |
| 37) Trichloroethene          | 9.359          | 130  | 14703      | 3.034    | ug/l   | 98       |
| 38) Methylcyclohexane        | 9.606          | 83   | 20152      | 2.353    | ug/l   | 89       |
| 39) 1,2-Dichloropropane      | 9.624          | 63   | 15452m     | 2.558    | ug/l   |          |
| 40) Dibromomethane           | 9.712          | 93   | 11624      | 2.904    | ug/l   | 73       |
| 41) Bromodichloromethane     | 9.900          | 83   | 19945m     | 2.559    | ug/l   |          |
| 42) Vinyl Acetate            | 6.624          | 43   | 215748m    | 12.878   | ug/l   |          |

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 ClientSampleId :  
 LOD-MDL-WATER-01-QT4-2022

Quant Time: Oct 13 08:00:36 2022  
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Manual Integrations  
 APPROVED

Reviewed By :John Carlone 10/13/2022  
 Supervised By :Mahesh Dadoda 10/14/2022

| Compound                      | R.T.   | QIon | Response | Conc   | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|--------|--------|----------|
| 43) Ethyl Acetate             | 7.583  | 43   | 34828m   | 3.185  | ug/l   |          |
| 44) Isopropyl Acetate         | 8.700  | 43   | 44034    | 2.604  | ug/l   | 100      |
| 45) 1,4-Dioxane               | 9.718  | 88   | 8544m    | 55.103 | ug/l   |          |
| 46) Methyl methacrylate       | 9.688  | 41   | 20977m   | 2.864  | ug/l   |          |
| 47) n-amyl Acetate            | 12.494 | 43   | 34376    | 2.323  | ug/l   | 93       |
| 48) t-1,3-Dichloropropene     | 10.847 | 75   | 20309    | 2.271  | ug/l   | 97       |
| 49) cis-1,3-Dichloropropene   | 10.318 | 75   | 24316    | 2.564  | ug/l # | 86       |
| 50) 1,1,2-Trichloroethane     | 11.012 | 97   | 16285    | 2.765  | ug/l # | 67       |
| 51) Ethyl methacrylate        | 10.876 | 69   | 22255    | 2.222  | ug/l   | 83       |
| 52) 1,3-Dichloropropane       | 11.171 | 76   | 27622    | 2.717  | ug/l   | 99       |
| 53) Dibromochloromethane      | 11.365 | 129  | 13334    | 2.311  | ug/l   | 92       |
| 54) 1,2-Dibromoethane         | 11.476 | 107  | 14606    | 2.581  | ug/l   | 99       |
| 55) 2-Chloroethyl vinyl ether | 10.159 | 63   | 44444    | 11.344 | ug/l   | 97       |
| 56) Bromoform                 | 12.594 | 173  | 9277m    | 2.231  | ug/l   |          |
| 58) 4-Methyl-2-Pentanone      | 10.447 | 43   | 142521   | 13.535 | ug/l   | 98       |
| 59) 2-Hexanone                | 11.200 | 43   | 106081   | 13.091 | ug/l   | 98       |
| 61) Tetrachloroethene         | 11.112 | 164  | 10819m   | 2.997  | ug/l   |          |
| 62) Toluene                   | 10.641 | 91   | 62317    | 2.664  | ug/l   | 91       |
| 64) Chlorobenzene             | 11.900 | 112  | 35125    | 2.642  | ug/l   | 90       |
| 65) 1,1,1,2-Tetrachloroethane | 11.959 | 131  | 12048    | 2.406  | ug/l   | 97       |
| 66) Ethyl Benzene             | 11.970 | 91   | 63887    | 2.512  | ug/l   | 93       |
| 67) m/p-Xylenes               | 12.070 | 106  | 44694    | 4.677  | ug/l   | 95       |
| 68) o-Xylene                  | 12.406 | 106  | 23951    | 2.466  | ug/l   | 98       |
| 69) Styrene                   | 12.418 | 104  | 35984    | 2.264  | ug/l   | 95       |
| 70) Isopropylbenzene          | 12.700 | 105  | 57257    | 2.286  | ug/l   | 98       |
| 71) 1,1,2,2-Tetrachloroethane | 12.941 | 83   | 25911    | 2.765  | ug/l   | 94       |
| 72) 1,2,3-Trichloropropane    | 13.000 | 75   | 31314    | 3.978  | ug/l   | 38       |
| 73) Bromobenzene              | 12.982 | 156  | 13072    | 2.490  | ug/l   | 88       |
| 74) n-propylbenzene           | 13.041 | 91   | 61967    | 2.122  | ug/l   | 99       |
| 75) 2-Chlorotoluene           | 13.129 | 91   | 41591    | 2.434  | ug/l   | 100      |
| 76) 1,3,5-Trimethylbenzene    | 13.170 | 105  | 41879    | 2.057  | ug/l   | 95       |
| 77) t-1,4-Dichloro-2-butene   | 12.741 | 75   | 7274     | 2.224  | ug/l   | 85       |
| 78) 4-Chlorotoluene           | 13.223 | 91   | 36546    | 2.241  | ug/l   | 96       |
| 79) tert-butylbenzene         | 13.441 | 119  | 41640    | 2.300  | ug/l   | 90       |
| 80) 1,2,4-Trimethylbenzene    | 13.482 | 105  | 41980    | 2.050  | ug/l   | 99       |
| 81) sec-Butylbenzene          | 13.617 | 105  | 55971    | 2.151  | ug/l   | 95       |
| 82) p-Isopropyltoluene        | 13.735 | 119  | 35810    | 1.732  | ug/l   | 96       |
| 83) 1,3-Dichlorobenzene       | 13.735 | 146  | 21704    | 2.119  | ug/l   | 97       |
| 84) 1,4-Dichlorobenzene       | 13.812 | 146  | 22705    | 2.308  | ug/l   | 94       |
| 85) n-Butylbenzene            | 14.059 | 91   | 34913    | 1.913  | ug/l   | 99       |
| 86) Hexachloroethane          | 14.329 | 117  | 9027     | 2.229  | ug/l   | 80       |
| 87) 1,2-Dichlorobenzene       | 14.106 | 146  | 22525    | 2.215  | ug/l   | 95       |
| 88) 1,2-Dibromo-3-Chloropr... | 14.717 | 75   | 5119     | 2.707  | ug/l   | 91       |
| 89) 1,2,4-Trichlorobenzene    | 15.394 | 180  | 12212    | 2.629  | ug/l   | 88       |
| 90) Hexachlorobutadiene       | 15.506 | 225  | 4049     | 1.788  | ug/l   | 67       |
| 91) Naphthalene               | 15.647 | 128  | 57071    | 3.097  | ug/l   | 98       |
| 92) 1,2,3-Trichlorobenzene    | 15.847 | 180  | 15936m   | 3.280  | ug/l   |          |

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

