

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN032421\  
 Data File : VN066310.D  
 Acq On : 24 Mar 2021 14:29  
 Operator : JC/MD  
 Sample : VSTDIC010  
 Misc : 5.00mL/MSVOA\_N/WATER  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDIC010

Manual Integrations  
 APPROVED

MMDadoda  
 3/30/2021 10:41:02 AM

Quant Time: Mar 25 04:37:22 2021  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N032421W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Thu Mar 25 04:35:34 2021  
 Response via : Initial Calibration

| Compound                     | R.T.           | QIon | Response   | Conc    | Units  | Dev(Min) |
|------------------------------|----------------|------|------------|---------|--------|----------|
| -----                        |                |      |            |         |        |          |
| Internal Standards           |                |      |            |         |        |          |
| 1) Bromochloromethane        | 7.104          | 128  | 81305      | 30.00   | ug/l   | 0.00     |
| 28) 1,4-Difluorobenzene      | 8.515          | 114  | 441755     | 30.00   | ug/l   | 0.00     |
| 57) Chlorobenzene-d5         | 11.350         | 117  | 387320     | 30.00   | ug/l   | 0.00     |
|                              |                |      |            |         |        |          |
| System Monitoring Compounds  |                |      |            |         |        |          |
| 27) 1,2-Dichloroethane-d4    | 7.949          | 65   | 186620     | 26.97   | ug/l   | 0.00     |
| Spiked Amount 30.000         | Range 91 - 110 |      | Recovery = | 89.90%  | #      |          |
| 60) 4-Bromofluorobenzene     | 12.345         | 95   | 176027     | 26.63   | ug/l   | 0.00     |
| Spiked Amount 30.000         | Range 63 - 112 |      | Recovery = | 88.77%  |        |          |
| 63) Toluene-d8               | 10.028         | 98   | 546350     | 31.24   | ug/l   | 0.00     |
| Spiked Amount 30.000         | Range 91 - 112 |      | Recovery = | 104.13% |        |          |
|                              |                |      |            |         |        |          |
| Target Compounds             |                |      |            |         |        |          |
|                              |                |      |            |         |        | Qvalue   |
| 2) Dichlorodifluoromethane   | 1.818          | 85   | 44624      | 10.70   | ug/l   | 99       |
| 3) Chloromethane             | 2.014          | 50   | 59303      | 10.81   | ug/l   | 97       |
| 4) Vinyl Chloride            | 2.146          | 62   | 61617      | 10.68   | ug/l   | 97       |
| 5) Bromomethane              | 2.510          | 94   | 43320      | 10.84   | ug/l   | 91       |
| 6) Chloroethane              | 2.650          | 64   | 38639      | 11.21   | ug/l   | 96       |
| 7) Trichlorofluoromethane    | 2.958          | 101  | 88095      | 10.20   | ug/l   | 99       |
| 8) Diethyl Ether             | 3.342          | 74   | 29455      | 9.98    | ug/l   | 98       |
| 9) 1,1,2-Trichlorotrifluo... | 3.685          | 101  | 42878      | 11.44   | ug/l   | 100      |
| 10) 1,1-Dichloroethene       | 3.664          | 96   | 43883      | 10.66   | ug/l   | 94       |
| 11) Methyl Iodide            | 3.873          | 142  | 60611      | 9.48    | ug/l   | 95       |
| 12) Methyl Acetate           | 4.237          | 43   | 67197      | 13.75   | ug/l   | 97       |
| 13) Acrolein                 | 3.532          | 56   | 17592      | 25.34   | ug/l   | 95       |
| 14) Acrylonitrile            | 4.881          | 53   | 136317     | 60.22   | ug/l   | 99       |
| 15) Acetone                  | 3.736          | 58   | 39945      | 62.02   | ug/l   | 93       |
| 16) Carbon Disulfide         | 3.972          | 76   | 114773     | 9.55    | ug/l   | 97       |
| 17) Allyl chloride           | 4.235          | 41   | 73459      | 9.68    | ug/l   | 96       |
| 18) Methylene Chloride       | 4.463          | 84   | 50846m     | 9.99    | ug/l   |          |
| 19) trans-1,2-Dichloroethene | 4.940          | 96   | 45680      | 9.78    | ug/l   | 96       |
| 20) Diisopropyl ether        | 5.852          | 45   | 167908     | 11.25   | ug/l   | 91       |
| 21) 1,1-Dichloroethane       | 5.747          | 63   | 91299m     | 10.03   | ug/l   |          |
| 22) cis-1,2-Dichloroethene   | 6.734          | 96   | 55365      | 9.72    | ug/l   | 99       |
| 23) tert-Butyl Alcohol       | 4.680          | 59   | 58096      | 58.44   | ug/l # | 100      |
| 24) Methyl tert-Butyl Ether  | 4.937          | 73   | 162254m    | 9.78    | ug/l   |          |
| 25) Chloroform               | 7.287          | 83   | 91218      | 9.37    | ug/l   | 95       |
| 26) Cyclohexane              | 7.577          | 56   | 78644      | 10.95   | ug/l # | 97       |
| 29) 1,1-Dichloropropene      | 7.711          | 75   | 64980      | 9.87    | ug/l   | 82       |
| 30) 2-Butanone               | 6.740          | 43   | 194810     | 67.43   | ug/l # | 97       |
| 31) 2,2-Dichloropropane      | 6.726          | 77   | 82696      | 9.71    | ug/l   | 100      |
| 32) 1,1,1-Trichloroethane    | 7.488          | 97   | 81226      | 9.67    | ug/l   | 98       |
| 33) Carbon Tetrachloride     | 7.694          | 117  | 66233      | 9.20    | ug/l   | 97       |
| 34) Benzene                  | 7.965          | 78   | 202394     | 10.11   | ug/l # | 90       |
| 35) Methacrylonitrile        | 7.083          | 41   | 33764      | 11.07   | ug/l   | 97       |
| 36) 1,2-Dichloroethane       | 8.049          | 62   | 73272      | 9.13    | ug/l   | 99       |
| 37) Trichloroethene          | 8.767          | 130  | 53279      | 9.89    | ug/l   | 99       |
| 38) Methylcyclohexane        | 9.011          | 83   | 80901      | 11.10   | ug/l   | 99       |
| 39) 1,2-Dichloropropane      | 9.049          | 63   | 54634      | 10.58   | ug/l   | 98       |
| 40) Dibromomethane           | 9.140          | 93   | 35237      | 10.14   | ug/l   | 97       |
| 41) Bromodichloromethane     | 9.336          | 83   | 75507      | 9.75    | ug/l   | 96       |
| 42) Vinyl Acetate            | 5.796          | 43   | 719857     | 57.94   | ug/l   | 99       |

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| Compound                      | R.T.   | QIon | Response | Conc   | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|--------|--------|----------|
| 43) Ethyl Acetate             | 6.836  | 43   | 75024    | 11.92  | ug/l # | 100      |
| 44) Isopropyl Acetate         | 8.089  | 43   | 134035   | 12.35  | ug/l # | 100      |
| 45) 1,4-Dioxane               | 9.137  | 88   | 16960    | 193.39 | ug/l   | 98       |
| 46) Methyl methacrylate       | 9.135  | 41   | 62185    | 12.27  | ug/l   | 94       |
| 47) n-amyl Acetate            | 12.031 | 43   | 28042    | 3.91   | ug/l   | 98       |
| 48) t-1,3-Dichloropropene     | 10.323 | 75   | 79491    | 8.98   | ug/l   | 97       |
| 49) cis-1,3-Dichloropropene   | 9.776  | 75   | 87123    | 9.48   | ug/l   | 97       |
| 50) 1,1,2-Trichloroethane     | 10.503 | 97   | 50014    | 10.16  | ug/l   | 97       |
| 51) Ethyl methacrylate        | 10.371 | 69   | 77990    | 10.34  | ug/l   | 99       |
| 52) 1,3-Dichloropropane       | 10.647 | 76   | 83553    | 9.81   | ug/l   | 100      |
| 53) Dibromochloromethane      | 10.843 | 129  | 56115    | 9.44   | ug/l   | 100      |
| 54) 1,2-Dibromoethane         | 10.948 | 107  | 52493    | 10.15  | ug/l   | 100      |
| 55) 2-Chloroethyl vinyl ether | 9.631  | 63   | 55168    | 23.94  | ug/l   | 98       |
| 56) Bromoform                 | 12.071 | 173  | 40574    | 10.11  | ug/l # | 96       |
| 58) 4-Methyl-2-Pentanone      | 9.921  | 43   | 396992   | 69.87  | ug/l   | 100      |
| 59) 2-Hexanone                | 10.693 | 43   | 264467   | 66.55  | ug/l   | 100      |
| 61) Tetrachloroethene         | 10.572 | 164  | 54046    | 10.66  | ug/l   | 95       |
| 62) Toluene                   | 10.092 | 91   | 216100   | 10.55  | ug/l   | 99       |
| 64) Chlorobenzene             | 11.374 | 112  | 127454   | 9.71   | ug/l   | 99       |
| 65) 1,1,1,2-Tetrachloroethane | 11.452 | 131  | 50589    | 10.02  | ug/l   | 98       |
| 66) Ethyl Benzene             | 11.455 | 91   | 232226   | 9.98   | ug/l   | 99       |
| 67) m/p-Xylenes               | 11.565 | 106  | 171299   | 19.13  | ug/l   | 98       |
| 68) o-Xylene                  | 11.892 | 106  | 86310    | 9.80   | ug/l   | 97       |
| 69) Styrene                   | 11.911 | 104  | 131048   | 9.07   | ug/l   | 97       |
| 70) Isopropylbenzene          | 12.195 | 105  | 223114   | 9.67   | ug/l   | 99       |
| 71) 1,1,2,2-Tetrachloroethane | 12.450 | 83   | 72435    | 11.17  | ug/l   | 100      |
| 72) 1,2,3-Trichloropropane    | 12.498 | 75   | 69455m   | 10.73  | ug/l   |          |
| 73) Bromobenzene              | 12.468 | 156  | 54693    | 9.77   | ug/l   | 97       |
| 74) n-propylbenzene           | 12.535 | 91   | 240586   | 9.42   | ug/l   | 99       |
| 75) 2-Chlorotoluene           | 12.619 | 91   | 148824   | 9.21   | ug/l   | 99       |
| 76) 1,3,5-Trimethylbenzene    | 12.678 | 105  | 182359   | 8.94   | ug/l   | 100      |
| 77) t-1,4-Dichloro-2-butene   | 12.249 | 75   | 19621    | 8.62   | ug/l   | 98       |
| 78) 4-Chlorotoluene           | 12.718 | 91   | 141634   | 8.64   | ug/l   | 99       |
| 79) tert-butylbenzene         | 12.938 | 119  | 160863   | 9.45   | ug/l   | 97       |
| 80) 1,2,4-Trimethylbenzene    | 12.983 | 105  | 177129   | 8.86   | ug/l   | 97       |
| 81) sec-Butylbenzene          | 13.115 | 105  | 198616   | 9.25   | ug/l   | 99       |
| 82) p-Isopropyltoluene        | 13.233 | 119  | 169461   | 8.43   | ug/l   | 99       |
| 83) 1,3-Dichlorobenzene       | 13.227 | 146  | 87026    | 9.07   | ug/l   | 99       |
| 84) 1,4-Dichlorobenzene       | 13.311 | 146  | 82948    | 8.89   | ug/l   | 99       |
| 85) n-Butylbenzene            | 13.560 | 91   | 134769   | 8.38   | ug/l   | 98       |
| 86) Hexachloroethane          | 13.815 | 117  | 31230    | 9.52   | ug/l   | 97       |
| 87) 1,2-Dichlorobenzene       | 13.598 | 146  | 85644    | 9.05   | ug/l   | 97       |
| 88) 1,2-Dibromo-3-Chloropr... | 14.217 | 75   | 14133    | 9.31   | ug/l   | 96       |
| 89) 1,2,4-Trichlorobenzene    | 14.853 | 180  | 53587    | 9.98   | ug/l   | 99       |
| 90) Hexachlorobutadiene       | 14.949 | 225  | 29587    | 11.99  | ug/l   | 99       |
| 91) Naphthalene               | 15.070 | 128  | 166206   | 10.51  | ug/l   | 99       |
| 92) 1,2,3-Trichlorobenzene    | 15.250 | 180  | 51776    | 9.60   | ug/l   | 96       |

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

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 ALS Vial : 3 Sample Multiplier: 1

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