

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011321\  
 Data File : VN065495.D  
 Acq On : 13 Jan 2021 18:44  
 Operator : JC/MD  
 Sample : VSTDIC050  
 Misc : 5.00mL/MSVOA\_N/WATER  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDIC050

Manual Integrations  
 APPROVED

MMDadoda  
 1/15/2021 4:13:54 PM

Quant Time: Jan 14 03:57:34 2021  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N011321W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Thu Jan 14 03:54:03 2021  
 Response via : Initial Calibration

| Compound                     | R.T.           | QIon | Response   | Conc   | Units  | Dev(Min) |
|------------------------------|----------------|------|------------|--------|--------|----------|
| -----                        |                |      |            |        |        |          |
| Internal Standards           |                |      |            |        |        |          |
| 1) Bromochloromethane        | 7.158          | 128  | 42309      | 30.00  | ug/l   | 0.00     |
| 28) 1,4-Difluorobenzene      | 8.553          | 114  | 227073     | 30.00  | ug/l   | 0.00     |
| 57) Chlorobenzene-d5         | 11.379         | 117  | 212332     | 30.00  | ug/l   | 0.00     |
|                              |                |      |            |        |        |          |
| System Monitoring Compounds  |                |      |            |        |        |          |
| 27) 1,2-Dichloroethane-d4    | 7.990          | 65   | 79508      | 26.62  | ug/l   | 0.00     |
| Spiked Amount 30.000         | Range 91 - 110 |      | Recovery = | 88.73% | #      |          |
| 60) 4-Bromofluorobenzene     | 12.376         | 95   | 99258      | 29.75  | ug/l   | 0.00     |
| Spiked Amount 30.000         | Range 63 - 112 |      | Recovery = | 99.17% |        |          |
| 63) Toluene-d8               | 10.061         | 98   | 280131     | 29.80  | ug/l   | 0.00     |
| Spiked Amount 30.000         | Range 91 - 112 |      | Recovery = | 99.33% |        |          |
|                              |                |      |            |        |        |          |
| Target Compounds             |                |      |            |        |        | Qvalue   |
| 2) Dichlorodifluoromethane   | 1.846          | 85   | 103952     | 46.18  | ug/l   | 96       |
| 3) Chloromethane             | 2.052          | 50   | 129577     | 49.34  | ug/l   | 98       |
| 4) Vinyl Chloride            | 2.180          | 62   | 143616     | 51.91  | ug/l   | 99       |
| 5) Bromomethane              | 2.524          | 94   | 101795     | 50.35  | ug/l   | 98       |
| 6) Chloroethane              | 2.676          | 64   | 94679      | 53.10  | ug/l   | 97       |
| 7) Trichlorofluoromethane    | 2.994          | 101  | 192058     | 48.38  | ug/l   | 98       |
| 8) Diethyl Ether             | 3.386          | 74   | 78803      | 53.10  | ug/l   | 97       |
| 9) 1,1,2-Trichlorotrifluo... | 3.720          | 101  | 114496     | 51.48  | ug/l   | 99       |
| 10) 1,1-Dichloroethene       | 3.701          | 96   | 117194     | 51.81  | ug/l   | 99       |
| 11) Methyl Iodide            | 3.913          | 142  | 192074     | 56.16  | ug/l   | 99       |
| 12) Methyl Acetate           | 4.296          | 43   | 115367     | 49.15  | ug/l   | 100      |
| 13) Acrolein                 | 3.579          | 56   | 94243      | 280.01 | ug/l   | 99       |
| 14) Acrylonitrile            | 4.949          | 53   | 263609     | 242.46 | ug/l   | 100      |
| 15) Acetone                  | 3.791          | 58   | 76933      | 231.00 | ug/l   | 90       |
| 16) Carbon Disulfide         | 4.010          | 76   | 285984     | 45.17  | ug/l   | 99       |
| 17) Allyl chloride           | 4.280          | 41   | 167503     | 43.65  | ug/l   | 98       |
| 18) Methylene Chloride       | 4.508          | 84   | 126086     | 48.83  | ug/l   | 99       |
| 19) trans-1,2-Dichloroethene | 4.994          | 96   | 117018     | 47.75  | ug/l   | 100      |
| 20) Diisopropyl ether        | 5.920          | 45   | 354557     | 45.52  | ug/l   | 95       |
| 21) 1,1-Dichloroethane       | 5.804          | 63   | 208748     | 47.22  | ug/l   | 99       |
| 22) cis-1,2-Dichloroethene   | 6.785          | 96   | 137729     | 49.00  | ug/l   | 98       |
| 23) tert-Butyl Alcohol       | 4.785          | 59   | 75271      | 170.19 | ug/l # | 100      |
| 24) Methyl tert-Butyl Ether  | 5.013          | 73   | 347584     | 45.38  | ug/l   | 99       |
| 25) Chloroform               | 7.334          | 83   | 217006     | 47.69  | ug/l   | 98       |
| 26) Cyclohexane              | 7.614          | 56   | 177571     | 46.27  | ug/l # | 100      |
| 29) 1,1-Dichloropropene      | 7.756          | 75   | 161914     | 48.77  | ug/l   | 99       |
| 30) 2-Butanone               | 6.804          | 43   | 322137     | 217.10 | ug/l   | 100      |
| 31) 2,2-Dichloropropane      | 6.781          | 77   | 169007     | 42.67  | ug/l   | 100      |
| 32) 1,1,1-Trichloroethane    | 7.531          | 97   | 185775     | 46.75  | ug/l   | 99       |
| 33) Carbon Tetrachloride     | 7.736          | 117  | 162811     | 46.69  | ug/l   | 99       |
| 34) Benzene                  | 8.006          | 78   | 503673     | 50.85  | ug/l # | 90       |
| 35) Methacrylonitrile        | 7.135          | 41   | 68249      | 48.61  | ug/l   | 98       |
| 36) 1,2-Dichloroethane       | 8.090          | 62   | 163668     | 45.27  | ug/l   | 99       |
| 37) Trichloroethene          | 8.804          | 130  | 150403     | 52.78  | ug/l   | 98       |
| 38) Methylcyclohexane        | 9.048          | 83   | 190905     | 47.54  | ug/l   | 98       |
| 39) 1,2-Dichloropropane      | 9.087          | 63   | 130289     | 50.41  | ug/l   | 98       |
| 40) Dibromomethane           | 9.177          | 93   | 87782      | 50.41  | ug/l   | 99       |
| 41) Bromodichloromethane     | 9.373          | 83   | 170701     | 46.95  | ug/l   | 99       |
| 42) Vinyl Acetate            | 5.855          | 43   | 1445022    | 224.04 | ug/l   | 99       |

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Quant Time: Jan 14 03:57:34 2021  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N011321W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Thu Jan 14 03:54:03 2021  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|-------------------------------|--------|------|----------|--------|-------|----------|
| 43) Ethyl Acetate             | 6.897  | 43   | 141687   | 48.01  | ug/l  | 93       |
| 44) Isopropyl Acetate         | 8.135  | 43   | 232840   | 42.38  | ug/l  | 98       |
| 45) 1,4-Dioxane               | 9.174  | 88   | 30341    | 734.20 | ug/l  | 98       |
| 46) Methyl methacrylate       | 9.170  | 41   | 117492   | 44.91  | ug/l  | 99       |
| 47) n-amyl Acetate            | 12.045 | 43   | 206341   | 44.75  | ug/l  | 100      |
| 48) t-1,3-Dichloropropene     | 10.354 | 75   | 191483   | 47.22  | ug/l  | 98       |
| 49) cis-1,3-Dichloropropene   | 9.810  | 75   | 209943   | 48.46  | ug/l  | 97       |
| 50) 1,1,2-Trichloroethane     | 10.534 | 97   | 129585   | 52.55  | ug/l  | 99       |
| 51) Ethyl methacrylate        | 10.402 | 69   | 182688   | 48.35  | ug/l  | 96       |
| 52) 1,3-Dichloropropane       | 10.678 | 76   | 212249   | 51.62  | ug/l  | 99       |
| 53) Dibromochloromethane      | 10.875 | 129  | 144544   | 50.00  | ug/l  | 99       |
| 54) 1,2-Dibromoethane         | 10.977 | 107  | 136455   | 51.71  | ug/l  | 100      |
| 55) 2-Chloroethyl vinyl ether | 9.666  | 63   | 394388   | 210.08 | ug/l  | 99       |
| 56) Bromoform                 | 12.100 | 173  | 112301   | 50.25  | ug/l  | 98       |
| 58) 4-Methyl-2-Pentanone      | 9.955  | 43   | 704359   | 220.95 | ug/l  | 98       |
| 59) 2-Hexanone                | 10.723 | 43   | 513797   | 220.45 | ug/l  | 98       |
| 61) Tetrachloroethene         | 10.601 | 164  | 173068   | 53.82  | ug/l  | 99       |
| 62) Toluene                   | 10.125 | 91   | 561702   | 49.91  | ug/l  | 100      |
| 64) Chlorobenzene             | 11.405 | 112  | 363770   | 51.91  | ug/l  | 100      |
| 65) 1,1,1,2-Tetrachloroethane | 11.482 | 131  | 137710   | 50.08  | ug/l  | 99       |
| 66) Ethyl Benzene             | 11.482 | 91   | 623876   | 49.94  | ug/l  | 99       |
| 67) m/p-Xylenes               | 11.595 | 106  | 487713   | 102.87 | ug/l  | 99       |
| 68) o-Xylene                  | 11.923 | 106  | 237516   | 51.81  | ug/l  | 99       |
| 69) Styrene                   | 11.936 | 104  | 400489   | 51.98  | ug/l  | 99       |
| 70) Isopropylbenzene          | 12.222 | 105  | 617274   | 50.62  | ug/l  | 100      |
| 71) 1,1,2,2-Tetrachloroethane | 12.479 | 83   | 173390   | 51.79  | ug/l  | 100      |
| 72) 1,2,3-Trichloropropane    | 12.527 | 75   | 159828m  | 48.16  | ug/l  |          |
| 73) Bromobenzene              | 12.498 | 156  | 175127   | 54.09  | ug/l  | 99       |
| 74) n-propylbenzene           | 12.566 | 91   | 698480   | 50.46  | ug/l  | 99       |
| 75) 2-Chlorotoluene           | 12.649 | 91   | 418427   | 50.82  | ug/l  | 99       |
| 76) 1,3,5-Trimethylbenzene    | 12.707 | 105  | 530163   | 50.89  | ug/l  | 100      |
| 77) t-1,4-Dichloro-2-butene   | 12.276 | 75   | 59424    | 46.31  | ug/l  | 97       |
| 78) 4-Chlorotoluene           | 12.746 | 91   | 425608   | 50.94  | ug/l  | 99       |
| 79) tert-butylbenzene         | 12.968 | 119  | 455160   | 51.33  | ug/l  | 99       |
| 80) 1,2,4-Trimethylbenzene    | 13.013 | 105  | 530244   | 51.34  | ug/l  | 98       |
| 81) sec-Butylbenzene          | 13.145 | 105  | 590077   | 50.61  | ug/l  | 100      |
| 82) p-Isopropyltoluene        | 13.264 | 119  | 555449   | 51.66  | ug/l  | 99       |
| 83) 1,3-Dichlorobenzene       | 13.257 | 146  | 298599   | 55.65  | ug/l  | 100      |
| 84) 1,4-Dichlorobenzene       | 13.337 | 146  | 294020   | 55.51  | ug/l  | 99       |
| 85) n-Butylbenzene            | 13.588 | 91   | 443483   | 49.09  | ug/l  | 99       |
| 86) Hexachloroethane          | 13.849 | 117  | 91165    | 47.57  | ug/l  | 99       |
| 87) 1,2-Dichlorobenzene       | 13.627 | 146  | 293869   | 56.39  | ug/l  | 99       |
| 88) 1,2-Dibromo-3-Chloropr... | 14.244 | 75   | 31674    | 46.81  | ug/l  | 98       |
| 89) 1,2,4-Trichlorobenzene    | 14.881 | 180  | 159227   | 58.48  | ug/l  | 97       |
| 90) Hexachlorobutadiene       | 14.980 | 225  | 100873   | 54.87  | ug/l  | 99       |
| 91) Naphthalene               | 15.103 | 128  | 382053   | 53.42  | ug/l  | 99       |
| 92) 1,2,3-Trichlorobenzene    | 15.283 | 180  | 152340   | 58.78  | ug/l  | 99       |

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

