

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN102620\  
 Data File : VN064313.D  
 Acq On : 26 Oct 2020 20:39  
 Operator : JC/MD  
 Sample : VN1026WBS01  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 14 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN1026WBS01

Manual Integrations  
 APPROVED

MMDadoda  
 10/27/2020 2:21:31 PM

Quant Time: Oct 27 02:47:26 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA N\METHODS\624N102620W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Mon Oct 26 17:44:53 2020  
 Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 7.15  | 128  | 45963    | 30.00 | ug/l  | 0.00     |
| 28) 1,4-Difluorobenzene | 8.55  | 114  | 261172   | 30.00 | ug/l  | 0.00     |
| 57) Chlorobenzene-d5    | 11.38 | 117  | 239856   | 30.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |       |          |          |      |         |
|---------------------------|--------|-------|----------|----------|------|---------|
| 27) 1,2-Dichloroethane-d4 | 7.99   | 65    | 132074   | 31.94    | ug/l | 0.00    |
| Spiked Amount             | 30.000 | Range | 91 - 110 | Recovery | =    | 106.47% |
| 60) 4-Bromofluorobenzene  | 12.38  | 95    | 129345   | 30.14    | ug/l | 0.00    |
| Spiked Amount             | 30.000 | Range | 63 - 112 | Recovery | =    | 100.47% |
| 63) Toluene-d8            | 10.06  | 98    | 316867   | 29.62    | ug/l | 0.00    |
| Spiked Amount             | 30.000 | Range | 91 - 112 | Recovery | =    | 98.73%  |

## Target Compounds

|                               |      |     |         |        | Ovalue     |
|-------------------------------|------|-----|---------|--------|------------|
| 2) Dichlorodifluoromethane    | 1.83 | 85  | 75026   | 19.958 | ug/l 89    |
| 3) Chloromethane              | 2.04 | 50  | 67440   | 19.200 | ug/l 95    |
| 4) Vinyl Chloride             | 2.16 | 62  | 65927   | 19.251 | ug/l 98    |
| 5) Bromomethane               | 2.53 | 94  | 41317   | 19.547 | ug/l 90    |
| 6) Chloroethane               | 2.67 | 64  | 36801   | 19.238 | ug/l 98    |
| 7) Trichlorofluoromethane     | 2.98 | 101 | 108833  | 20.628 | ug/l 92    |
| 8) Diethyl Ether              | 3.38 | 74  | 31427   | 18.595 | ug/l 96    |
| 9) 1,1,2-Trichlorotrifluoroet | 3.72 | 101 | 51294   | 19.086 | ug/l 83    |
| 10) 1,1-Dichloroethene        | 3.70 | 96  | 46832   | 18.134 | ug/l 90    |
| 11) Methyl Iodide             | 3.91 | 142 | 64960   | 17.566 | ug/l 99    |
| 12) Methyl Acetate            | 4.28 | 43  | 55161   | 17.838 | ug/l 98    |
| 13) Acrolein                  | 3.57 | 56  | 16758   | 82.049 | ug/l 100   |
| 14) Acrylonitrile             | 4.93 | 53  | 129077  | 95.961 | ug/l 98    |
| 15) Acetone                   | 3.78 | 58  | 33303   | 90.008 | ug/l 98    |
| 16) Carbon Disulfide          | 4.01 | 76  | 138081  | 18.012 | ug/l 99    |
| 17) Allyl chloride            | 4.28 | 41  | 88725   | 18.094 | ug/l 98    |
| 18) Methylene Chloride        | 4.51 | 84  | 55652   | 18.924 | ug/l 96    |
| 19) trans-1,2-Dichloroethene  | 4.99 | 96  | 50963m  | 18.182 | ug/l       |
| 20) Diisopropyl ether         | 5.90 | 45  | 190398  | 19.183 | ug/l 96    |
| 21) 1,1-Dichloroethane        | 5.79 | 63  | 104909  | 18.870 | ug/l # 94  |
| 22) cis-1,2-Dichloroethene    | 6.78 | 96  | 61310   | 18.956 | ug/l 96    |
| 23) tert-Butyl Alcohol        | 4.74 | 59  | 59255   | 96.792 | ug/l # 100 |
| 24) Methyl tert-Butyl Ether   | 4.99 | 73  | 185093  | 18.973 | ug/l 98    |
| 25) Chloroform                | 7.33 | 83  | 110482  | 19.263 | ug/l 95    |
| 26) Cyclohexane               | 7.62 | 56  | 83848   | 18.411 | ug/l # 99  |
| 29) 1,1-Dichloropropene       | 7.75 | 75  | 81151   | 18.049 | ug/l 98    |
| 30) 2-Butanone                | 6.78 | 43  | 189129  | 89.272 | ug/l # 98  |
| 31) 2,2-Dichloropropane       | 6.78 | 77  | 92374   | 17.103 | ug/l # 62  |
| 32) 1,1,1-Trichloroethane     | 7.53 | 97  | 106391  | 18.903 | ug/l 99    |
| 33) Carbon Tetrachloride      | 7.73 | 117 | 94821   | 18.413 | ug/l 99    |
| 34) Benzene                   | 8.00 | 78  | 223715  | 18.540 | ug/l 97    |
| 35) Methacrylonitrile         | 7.14 | 41  | 38972m  | 17.615 | ug/l       |
| 36) 1,2-Dichloroethane        | 8.09 | 62  | 101071m | 18.857 | ug/l       |
| 37) Trichloroethene           | 8.80 | 130 | 59878   | 18.193 | ug/l 99    |
| 38) Methylcyclohexane         | 9.05 | 83  | 76927   | 17.706 | ug/l 98    |
| 39) 1,2-Dichloropropane       | 9.08 | 63  | 59809   | 18.360 | ug/l 97    |
| 40) Dibromomethane            | 9.18 | 93  | 41545   | 18.374 | ug/l 97    |

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| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 41) Bromodichloromethane       | 9.37  | 83   | 90453    | 18.523  | ug/l   | 96       |
| 42) Vinyl Acetate              | 5.84  | 43   | 810173   | 89.491  | ug/l   | 99       |
| 43) Ethyl Acetate              | 6.88  | 43   | 82750    | 19.162  | ug/l # | 89       |
| 44) Isopropyl Acetate          | 8.13  | 43   | 143604   | 18.098  | ug/l   | 98       |
| 45) 1,4-Dioxane                | 9.16  | 88   | 22355    | 365.309 | ug/l   | 93       |
| 46) Methyl methacrylate        | 9.16  | 41   | 69189    | 17.869  | ug/l   | 99       |
| 47) n-amyl Acetate             | 12.04 | 43   | 116708   | 17.470  | ug/l   | 98       |
| 48) t-1,3-Dichloropropene      | 10.35 | 75   | 96723    | 17.560  | ug/l   | 99       |
| 49) cis-1,3-Dichloropropene    | 9.81  | 75   | 101005   | 17.994  | ug/l   | 96       |
| 50) 1,1,2-Trichloroethane      | 10.53 | 97   | 53867    | 17.745  | ug/l   | 94       |
| 51) Ethyl methacrylate         | 10.40 | 69   | 82886    | 17.487  | ug/l   | 99       |
| 52) 1,3-Dichloropropane        | 10.68 | 76   | 96422    | 18.089  | ug/l   | 94       |
| 53) Dibromochloromethane       | 10.87 | 129  | 66983    | 18.067  | ug/l   | 99       |
| 54) 1,2-Dibromoethane          | 10.98 | 107  | 60943    | 18.794  | ug/l   | 99       |
| 55) 2-Chloroethyl vinyl ether  | 9.66  | 63   | 218885   | 92.779  | ug/l   | 98       |
| 56) Bromoform                  | 12.10 | 173  | 45152    | 16.987  | ug/l # | 92       |
| 58) 4-Methyl-2-Pentanone       | 9.95  | 43   | 418221   | 94.246  | ug/l   | 99       |
| 59) 2-Hexanone                 | 10.72 | 43   | 307382   | 92.704  | ug/l   | 98       |
| 61) Tetrachloroethene          | 10.60 | 164  | 60716    | 18.982  | ug/l   | 95       |
| 62) Toluene                    | 10.12 | 91   | 243022   | 18.394  | ug/l   | 100      |
| 64) Chlorobenzene              | 11.41 | 112  | 149056   | 18.097  | ug/l   | 96       |
| 65) 1,1,1,2-Tetrachloroethane  | 11.48 | 131  | 58925    | 18.109  | ug/l   | 95       |
| 66) Ethyl Benzene              | 11.48 | 91   | 272088   | 18.019  | ug/l   | 96       |
| 67) m/p-Xylenes                | 11.59 | 106  | 198939   | 35.875  | ug/l   | 97       |
| 68) o-Xylene                   | 11.92 | 106  | 97946    | 17.960  | ug/l   | 99       |
| 69) Styrene                    | 11.94 | 104  | 161465   | 17.765  | ug/l   | 98       |
| 70) Isopropylbenzene           | 12.22 | 105  | 261162   | 18.061  | ug/l   | 100      |
| 71) 1,1,2,2-Tetrachloroethane  | 12.48 | 83   | 76225    | 18.502  | ug/l   | 99       |
| 72) 1,2,3-Trichloropropane     | 12.53 | 75   | 83364m   | 19.001  | ug/l   |          |
| 73) Bromobenzene               | 12.50 | 156  | 63393    | 17.884  | ug/l   | 99       |
| 74) n-propylbenzene            | 12.57 | 91   | 292944   | 17.775  | ug/l   | 99       |
| 75) 2-Chlorotoluene            | 12.65 | 91   | 183177   | 17.973  | ug/l   | 98       |
| 76) 1,3,5-Trimethylbenzene     | 12.71 | 105  | 219529   | 17.952  | ug/l   | 98       |
| 77) t-1,4-Dichloro-2-butene    | 12.27 | 75   | 28263    | 17.253  | ug/l   | 94       |
| 78) 4-Chlorotoluene            | 12.75 | 91   | 186274   | 17.465  | ug/l   | 99       |
| 79) tert-butylbenzene          | 12.97 | 119  | 177734   | 17.636  | ug/l   | 99       |
| 80) 1,2,4-Trimethylbenzene     | 13.01 | 105  | 219725   | 17.813  | ug/l   | 99       |
| 81) sec-Butylbenzene           | 13.14 | 105  | 228454   | 17.466  | ug/l   | 100      |
| 82) p-Isopropyltoluene         | 13.26 | 119  | 203861   | 17.015  | ug/l   | 98       |
| 83) 1,3-Dichlorobenzene        | 13.26 | 146  | 107306   | 17.427  | ug/l   | 98       |
| 84) 1,4-Dichlorobenzene        | 13.34 | 146  | 105139   | 17.004  | ug/l   | 100      |
| 85) n-Butylbenzene             | 13.59 | 91   | 174412   | 16.694  | ug/l   | 97       |
| 86) Hexachloroethane           | 13.85 | 117  | 37861    | 16.945  | ug/l   | 94       |
| 87) 1,2-Dichlorobenzene        | 13.63 | 146  | 105728   | 17.438  | ug/l   | 98       |
| 88) 1,2-Dibromo-3-Chloropropan | 14.24 | 75   | 19593    | 18.815  | ug/l   | 95       |
| 89) 1,2,4-Trichlorobenzene     | 14.88 | 180  | 57786    | 16.821  | ug/l   | 96       |
| 90) Hexachlorobutadiene        | 14.98 | 225  | 30471    | 16.480  | ug/l   | 96       |
| 91) Naphthalene                | 15.10 | 128  | 178093   | 17.173  | ug/l   | 99       |
| 92) 1,2,3-Trichlorobenzene     | 15.28 | 180  | 54487    | 16.419  | ug/l   | 99       |

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

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