

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_X\Data\VX010824\  
 Data File : VX039666.D  
 Acq On : 08 Jan 2024 17:07  
 Operator : JC/MD  
 Sample : VSTDICCC020  
 Misc : 5.0mL/MSVOA\_X/WATER  
 ALS Vial : 16 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 VSTDICCC020

Manual Integrations  
 APPROVED

Reviewed By : John Carlone 01/09/2024  
 Supervised By : Mahesh Dadoda 01/09/2024

Quant Time: Jan 09 06:04:07 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_X\Method\624X010824W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Tue Jan 09 05:58:07 2024  
 Response via : Initial Calibration

| Compound                     | R.T.           | QIon | Response            | Conc    | Units  | Dev(Min) |
|------------------------------|----------------|------|---------------------|---------|--------|----------|
| -----                        |                |      |                     |         |        |          |
| Internal Standards           |                |      |                     |         |        |          |
| 1) Bromochloromethane        | 4.898          | 128  | 8136                | 30.000  | ug/l   | 0.00     |
| 28) 1,4-Difluorobenzene      | 6.757          | 114  | 68149               | 30.000  | ug/l   | 0.00     |
| 57) Chlorobenzene-d5         | 10.055         | 117  | 80566               | 30.000  | ug/l   | 0.00     |
|                              |                |      |                     |         |        |          |
| System Monitoring Compounds  |                |      |                     |         |        |          |
| 27) 1,2-Dichloroethane-d4    | 5.952          | 65   | 38731               | 30.366  | ug/l   | 0.00     |
| Spiked Amount 30.000         | Range 91 - 110 |      | Recovery = 101.233% |         |        |          |
| 60) 4-Bromofluorobenzene     | 11.079         | 95   | 53622               | 30.176  | ug/l   | 0.00     |
| Spiked Amount 30.000         | Range 63 - 112 |      | Recovery = 100.600% |         |        |          |
| 63) Toluene-d8               | 8.647          | 98   | 98863               | 29.846  | ug/l   | 0.00     |
| Spiked Amount 30.000         | Range 91 - 112 |      | Recovery = 99.500%  |         |        |          |
|                              |                |      |                     |         |        |          |
| Target Compounds             |                |      |                     |         |        |          |
|                              |                |      |                     |         | Qvalue |          |
| 2) Dichlorodifluoromethane   | 1.167          | 85   | 27413               | 19.943  | ug/l   | 97       |
| 3) Chloromethane             | 1.295          | 50   | 30807               | 20.173  | ug/l   | 96       |
| 4) Vinyl Chloride            | 1.374          | 62   | 28100               | 18.854  | ug/l   | 97       |
| 5) Bromomethane              | 1.593          | 94   | 13778               | 19.345  | ug/l   | 100      |
| 6) Chloroethane              | 1.666          | 64   | 16287               | 24.063  | ug/l   | 97       |
| 7) Trichlorofluoromethane    | 1.874          | 101  | 41273               | 19.611  | ug/l   | 99       |
| 8) Diethyl Ether             | 2.130          | 74   | 15310               | 19.442  | ug/l   | 96       |
| 9) 1,1,2-Trichlorotrifluo... | 2.325          | 101  | 25174               | 19.529  | ug/l   | 98       |
| 10) 1,1-Dichloroethene       | 2.313          | 96   | 24768               | 20.053  | ug/l   | 98       |
| 11) Methyl Iodide            | 2.447          | 142  | 26428               | 19.526  | ug/l   | 99       |
| 12) Methyl Acetate           | 2.703          | 43   | 39221               | 19.717  | ug/l   | 94       |
| 13) Acrolein                 | 2.233          | 56   | 25871               | 87.167  | ug/l   | 98       |
| 14) Acrylonitrile            | 3.063          | 53   | 91165               | 99.937  | ug/l   | 99       |
| 15) Acetone                  | 2.380          | 58   | 28162               | 97.874  | ug/l   | 96       |
| 16) Carbon Disulfide         | 2.502          | 76   | 65310               | 19.613  | ug/l   | 96       |
| 17) Allyl chloride           | 2.660          | 41   | 47697               | 19.584  | ug/l   | 95       |
| 18) Methylene Chloride       | 2.788          | 84   | 28891               | 20.010  | ug/l   | 98       |
| 19) trans-1,2-Dichloroethene | 3.087          | 96   | 26228               | 20.012  | ug/l   | 97       |
| 20) Diisopropyl ether        | 3.758          | 45   | 93853               | 19.742  | ug/l   | 98       |
| 21) 1,1-Dichloroethane       | 3.605          | 63   | 52534               | 19.791  | ug/l   | 99       |
| 22) cis-1,2-Dichloroethene   | 4.483          | 96   | 30249               | 19.745  | ug/l   | 97       |
| 23) tert-Butyl Alcohol       | 2.989          | 59   | 44877               | 104.452 | ug/l # | 100      |
| 24) Methyl tert-Butyl Ether  | 3.111          | 73   | 89636               | 19.800  | ug/l   | 97       |
| 25) Chloroform               | 5.093          | 83   | 51577               | 19.799  | ug/l   | 91       |
| 26) Cyclohexane              | 5.465          | 56   | 45384               | 19.709  | ug/l # | 99       |
| 29) 1,1-Dichloropropene      | 5.684          | 75   | 37137               | 18.989  | ug/l   | 97       |
| 30) 2-Butanone               | 4.556          | 43   | 134027              | 95.552  | ug/l   | 99       |
| 31) 2,2-Dichloropropane      | 4.471          | 77   | 40530               | 18.640  | ug/l   | 99       |
| 32) 1,1,1-Trichloroethane    | 5.373          | 97   | 42149               | 18.648  | ug/l   | 97       |
| 33) Carbon Tetrachloride     | 5.672          | 117  | 32915               | 18.472  | ug/l   | 97       |
| 34) Benzene                  | 6.038          | 78   | 109440              | 18.864  | ug/l   | 99       |
| 35) Methacrylonitrile        | 4.916          | 41   | 25476               | 18.876  | ug/l   | 93       |
| 36) 1,2-Dichloroethane       | 6.080          | 62   | 41796               | 18.372  | ug/l   | 98       |
| 37) Trichloroethene          | 7.129          | 130  | 25896               | 18.787  | ug/l   | 96       |
| 38) Methylcyclohexane        | 7.379          | 83   | 45243               | 18.909  | ug/l   | 97       |
| 39) 1,2-Dichloropropane      | 7.428          | 63   | 28905               | 18.491  | ug/l   | 95       |
| 40) Dibromomethane           | 7.580          | 93   | 19642               | 18.602  | ug/l   | 98       |
| 41) Bromodichloromethane     | 7.818          | 83   | 36064               | 18.432  | ug/l   | 99       |
| 42) Vinyl Acetate            | 3.715          | 43   | 442406              | 95.393  | ug/l   | 100      |

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 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
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 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc    | Units | Dev(Min) |
|-------------------------------|--------|------|----------|---------|-------|----------|
| 43) Ethyl Acetate             | 4.709  | 43   | 51156    | 19.458  | ug/l  | 98       |
| 44) Isopropyl Acetate         | 6.336  | 43   | 76124    | 18.730  | ug/l  | 97       |
| 45) 1,4-Dioxane               | 7.659  | 88   | 14910    | 380.505 | ug/l  | 98       |
| 46) Methyl methacrylate       | 7.690  | 41   | 37392    | 19.156  | ug/l  | 95       |
| 47) n-amyl Acetate            | 10.842 | 43   | 67402    | 18.989  | ug/l  | 100      |
| 48) t-1,3-Dichloropropene     | 8.976  | 75   | 38282    | 18.179  | ug/l  | 99       |
| 49) cis-1,3-Dichloropropene   | 8.366  | 75   | 42699    | 18.514  | ug/l  | 95       |
| 50) 1,1,2-Trichloroethane     | 9.153  | 97   | 27608    | 19.074  | ug/l  | 95       |
| 51) Ethyl methacrylate        | 9.116  | 69   | 45869    | 18.971  | ug/l  | 95       |
| 52) 1,3-Dichloropropane       | 9.305  | 76   | 46623    | 18.667  | ug/l  | 100      |
| 53) Dibromochloromethane      | 9.519  | 129  | 24866    | 18.461  | ug/l  | 96       |
| 54) 1,2-Dibromoethane         | 9.610  | 107  | 28584    | 18.844  | ug/l  | 98       |
| 55) 2-Chloroethyl vinyl ether | 8.238  | 63   | 110671   | 94.069  | ug/l  | 99       |
| 56) Bromoform                 | 10.799 | 173  | 16325    | 17.994  | ug/l  | 98       |
| 58) 4-Methyl-2-Pentanone      | 8.574  | 43   | 262360   | 99.001  | ug/l  | 98       |
| 59) 2-Hexanone                | 9.433  | 43   | 211354   | 98.526  | ug/l  | 96       |
| 61) Tetrachloroethene         | 9.275  | 164  | 20254    | 18.978  | ug/l  | 96       |
| 62) Toluene                   | 8.714  | 91   | 116251   | 19.464  | ug/l  | 98       |
| 64) Chlorobenzene             | 10.080 | 112  | 67549    | 19.452  | ug/l  | 98       |
| 65) 1,1,1,2-Tetrachloroethane | 10.159 | 131  | 23589    | 19.107  | ug/l  | 99       |
| 66) Ethyl Benzene             | 10.189 | 91   | 127511   | 19.442  | ug/l  | 98       |
| 67) m/p-Xylenes               | 10.299 | 106  | 94997    | 39.655  | ug/l  | 98       |
| 68) o-Xylene                  | 10.640 | 106  | 46846    | 19.478  | ug/l  | 97       |
| 69) Styrene                   | 10.653 | 104  | 75423    | 19.617  | ug/l  | 99       |
| 70) Isopropylbenzene          | 10.957 | 105  | 123521   | 19.459  | ug/l  | 99       |
| 71) 1,1,2,2-Tetrachloroethane | 11.214 | 83   | 47289    | 19.396  | ug/l  | 98       |
| 72) 1,2,3-Trichloropropane    | 11.238 | 75   | 39500m   | 18.994  | ug/l  |          |
| 73) Bromobenzene              | 11.195 | 156  | 27128    | 19.357  | ug/l  | 96       |
| 74) n-propylbenzene           | 11.305 | 91   | 146406   | 19.344  | ug/l  | 99       |
| 75) 2-Chlorotoluene           | 11.366 | 91   | 91511    | 19.462  | ug/l  | 99       |
| 76) 1,3,5-Trimethylbenzene    | 11.451 | 105  | 106126   | 19.570  | ug/l  | 99       |
| 77) t-1,4-Dichloro-2-butene   | 11.018 | 75   | 12020    | 17.961  | ug/l  | 87       |
| 78) 4-Chlorotoluene           | 11.451 | 91   | 101433   | 19.450  | ug/l  | 98       |
| 79) tert-butylbenzene         | 11.713 | 119  | 101620   | 19.777  | ug/l  | 98       |
| 80) 1,2,4-Trimethylbenzene    | 11.750 | 105  | 105008   | 19.512  | ug/l  | 98       |
| 81) sec-Butylbenzene          | 11.890 | 105  | 128605   | 19.474  | ug/l  | 100      |
| 82) p-Isopropyltoluene        | 12.006 | 119  | 101024   | 19.222  | ug/l  | 99       |
| 83) 1,3-Dichlorobenzene       | 11.969 | 146  | 50553    | 19.299  | ug/l  | 98       |
| 84) 1,4-Dichlorobenzene       | 12.043 | 146  | 49449    | 19.033  | ug/l  | 100      |
| 85) n-Butylbenzene            | 12.329 | 91   | 90257    | 18.763  | ug/l  | 96       |
| 86) Hexachloroethane          | 12.536 | 117  | 16146    | 17.957  | ug/l  | 99       |
| 87) 1,2-Dichlorobenzene       | 12.335 | 146  | 51275    | 19.533  | ug/l  | 99       |
| 88) 1,2-Dibromo-3-Chloropr... | 12.939 | 75   | 10566    | 18.098  | ug/l  | 92       |
| 89) 1,2,4-Trichlorobenzene    | 13.585 | 180  | 27519    | 18.594  | ug/l  | 97       |
| 90) Hexachlorobutadiene       | 13.725 | 225  | 12242    | 18.895  | ug/l  | 99       |
| 91) Naphthalene               | 13.774 | 128  | 110666   | 19.166  | ug/l  | 100      |
| 92) 1,2,3-Trichlorobenzene    | 13.957 | 180  | 28842    | 18.822  | ug/l  | 97       |

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

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ALS Vial : 16 Sample Multiplier: 1

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MSVOA\_X  
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