

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_X\Data\VX040623\  
 Data File : VX034959.D  
 Acq On : 06 Apr 2023 17:04  
 Operator : JC/MD  
 Sample : VSTDCCC020  
 Misc : 5.0mL/MSVOA\_X/WATER  
 ALS Vial : 13 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 VSTDCCC020EC

Manual Integrations  
 APPROVED

Reviewed By : John Carlone 04/07/2023  
 Supervised By : Mahesh Dadoda 04/07/2023

Quant Time: Apr 07 03:20:56 2023  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_X\Method\624X032823W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Tue Mar 28 09:11:00 2023  
 Response via : Initial Calibration

| Compound                     | R.T.           | QIon | Response            | Conc    | Units  | Dev(Min) |
|------------------------------|----------------|------|---------------------|---------|--------|----------|
| -----                        |                |      |                     |         |        |          |
| Internal Standards           |                |      |                     |         |        |          |
| 1) Bromochloromethane        | 4.904          | 128  | 27362               | 30.000  | ug/l   | 0.00     |
| 28) 1,4-Difluorobenzene      | 6.763          | 114  | 196820              | 30.000  | ug/l   | 0.00     |
| 57) Chlorobenzene-d5         | 10.055         | 117  | 213291              | 30.000  | ug/l   | 0.00     |
|                              |                |      |                     |         |        |          |
| System Monitoring Compounds  |                |      |                     |         |        |          |
| 27) 1,2-Dichloroethane-d4    | 5.952          | 65   | 85688               | 32.593  | ug/l   | 0.00     |
| Spiked Amount 30.000         | Range 91 - 110 |      | Recovery = 108.633% |         |        |          |
| 60) 4-Bromofluorobenzene     | 11.079         | 95   | 127110              | 29.825  | ug/l   | 0.00     |
| Spiked Amount 30.000         | Range 63 - 112 |      | Recovery = 99.400%  |         |        |          |
| 63) Toluene-d8               | 8.647          | 98   | 215004              | 29.662  | ug/l   | 0.00     |
| Spiked Amount 30.000         | Range 91 - 112 |      | Recovery = 98.867%  |         |        |          |
|                              |                |      |                     |         |        |          |
| Target Compounds             |                |      |                     |         |        | Qvalue   |
| 2) Dichlorodifluoromethane   | 1.166          | 85   | 60781               | 23.421  | ug/l   | 99       |
| 3) Chloromethane             | 1.295          | 50   | 66130               | 19.652  | ug/l   | 96       |
| 4) Vinyl Chloride            | 1.374          | 62   | 63590               | 19.154  | ug/l   | 99       |
| 5) Bromomethane              | 1.612          | 94   | 30272               | 13.862  | ug/l   | 95       |
| 6) Chloroethane              | 1.691          | 64   | 38092               | 17.630  | ug/l   | 96       |
| 7) Trichlorofluoromethane    | 1.886          | 101  | 91776               | 17.354  | ug/l   | 99       |
| 8) Diethyl Ether             | 2.130          | 74   | 35006               | 18.387  | ug/l   | 100      |
| 9) 1,1,2-Trichlorotrifluo... | 2.331          | 101  | 54868               | 20.450  | ug/l   | 99       |
| 10) 1,1-Dichloroethene       | 2.319          | 96   | 49671               | 18.289  | ug/l   | 93       |
| 11) Methyl Iodide            | 2.453          | 142  | 40894               | 11.824  | ug/l   | 99       |
| 12) Methyl Acetate           | 2.703          | 43   | 117868              | 19.597  | ug/l   | 99       |
| 13) Acrolein                 | 2.239          | 56   | 57557               | 82.523  | ug/l   | 98       |
| 14) Acrylonitrile            | 3.062          | 53   | 159033              | 96.023  | ug/l   | 100      |
| 15) Acetone                  | 2.386          | 58   | 49869               | 110.910 | ug/l   | 92       |
| 16) Carbon Disulfide         | 2.514          | 76   | 111756              | 16.087  | ug/l   | 100      |
| 17) Allyl chloride           | 2.666          | 41   | 96025               | 18.271  | ug/l   | 97       |
| 18) Methylene Chloride       | 2.788          | 84   | 59233               | 18.514  | ug/l   | 97       |
| 19) trans-1,2-Dichloroethene | 3.093          | 96   | 55055               | 18.525  | ug/l   | 92       |
| 20) Diisopropyl ether        | 3.757          | 45   | 202707              | 18.827  | ug/l   | 96       |
| 21) 1,1-Dichloroethane       | 3.605          | 63   | 106763              | 18.544  | ug/l   | 99       |
| 22) cis-1,2-Dichloroethene   | 4.489          | 96   | 62760               | 18.132  | ug/l   | 97       |
| 23) tert-Butyl Alcohol       | 2.983          | 59   | 67758m              | 90.929  | ug/l   |          |
| 24) Methyl tert-Butyl Ether  | 3.111          | 73   | 189342              | 18.761  | ug/l   | 98       |
| 25) Chloroform               | 5.093          | 83   | 110986              | 18.953  | ug/l   | 98       |
| 26) Cyclohexane              | 5.464          | 56   | 93908               | 18.614  | ug/l # | 98       |
| 29) 1,1-Dichloropropene      | 5.690          | 75   | 80761               | 17.841  | ug/l   | 98       |
| 30) 2-Butanone               | 4.556          | 43   | 240148              | 95.125  | ug/l   | 99       |
| 31) 2,2-Dichloropropane      | 4.471          | 77   | 81390               | 17.729  | ug/l   | 98       |
| 32) 1,1,1-Trichloroethane    | 5.385          | 97   | 95390               | 17.962  | ug/l   | 100      |
| 33) Carbon Tetrachloride     | 5.678          | 117  | 77685               | 17.724  | ug/l   | 98       |
| 34) Benzene                  | 6.038          | 78   | 230424              | 17.516  | ug/l   | 98       |
| 35) Methacrylonitrile        | 4.922          | 41   | 51392               | 18.599  | ug/l   | 96       |
| 36) 1,2-Dichloroethane       | 6.086          | 62   | 94776               | 18.375  | ug/l   | 99       |
| 37) Trichloroethene          | 7.129          | 130  | 60070               | 17.942  | ug/l   | 97       |
| 38) Methylcyclohexane        | 7.379          | 83   | 87152               | 17.622  | ug/l   | 96       |
| 39) 1,2-Dichloropropane      | 7.428          | 63   | 57992               | 16.959  | ug/l   | 99       |
| 40) Dibromomethane           | 7.580          | 93   | 41398               | 17.624  | ug/l   | 99       |
| 41) Bromodichloromethane     | 7.824          | 83   | 76832               | 17.365  | ug/l   | 98       |
| 42) Vinyl Acetate            | 3.721          | 43   | 728337              | 88.433  | ug/l   | 99       |

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| Compound                      | R.T.   | QIon | Response | Conc    | Units | Dev(Min) |
|-------------------------------|--------|------|----------|---------|-------|----------|
| 43) Ethyl Acetate             | 4.715  | 43   | 87779    | 17.928  | ug/l  | 100      |
| 44) Isopropyl Acetate         | 6.336  | 43   | 142149   | 17.150  | ug/l  | 99       |
| 45) 1,4-Dioxane               | 7.690  | 88   | 30499    | 371.413 | ug/l  | 92       |
| 46) Methyl methacrylate       | 7.690  | 41   | 73344    | 18.161  | ug/l  | 93       |
| 47) n-amyl Acetate            | 10.842 | 43   | 116905   | 16.223  | ug/l  | 97       |
| 48) t-1,3-Dichloropropene     | 8.976  | 75   | 76142    | 15.795  | ug/l  | 96       |
| 49) cis-1,3-Dichloropropene   | 8.366  | 75   | 87580    | 16.536  | ug/l  | 99       |
| 50) 1,1,2-Trichloroethane     | 9.153  | 97   | 58991    | 18.026  | ug/l  | 96       |
| 51) Ethyl methacrylate        | 9.116  | 69   | 90124    | 16.968  | ug/l  | 100      |
| 52) 1,3-Dichloropropane       | 9.305  | 76   | 102797   | 17.782  | ug/l  | 98       |
| 53) Dibromochloromethane      | 9.519  | 129  | 54076    | 16.704  | ug/l  | 97       |
| 54) 1,2-Dibromoethane         | 9.610  | 107  | 61039    | 17.437  | ug/l  | 100      |
| 55) 2-Chloroethyl vinyl ether | 8.238  | 63   | 272248   | 97.403  | ug/l  | 99       |
| 56) Bromoform                 | 10.799 | 173  | 33911    | 15.192  | ug/l  | 95       |
| 58) 4-Methyl-2-Pentanone      | 8.574  | 43   | 453473   | 92.729  | ug/l  | 100      |
| 59) 2-Hexanone                | 9.427  | 43   | 343185   | 93.207  | ug/l  | 99       |
| 61) Tetrachloroethene         | 9.275  | 164  | 52628    | 18.312  | ug/l  | 98       |
| 62) Toluene                   | 8.720  | 91   | 249881   | 17.917  | ug/l  | 99       |
| 64) Chlorobenzene             | 10.080 | 112  | 152061   | 17.705  | ug/l  | 100      |
| 65) 1,1,1,2-Tetrachloroethane | 10.165 | 131  | 53541    | 17.438  | ug/l  | 99       |
| 66) Ethyl Benzene             | 10.195 | 91   | 282557   | 18.190  | ug/l  | 99       |
| 67) m/p-Xylenes               | 10.299 | 106  | 214040   | 36.214  | ug/l  | 99       |
| 68) o-Xylene                  | 10.640 | 106  | 103430   | 17.696  | ug/l  | 95       |
| 69) Styrene                   | 10.653 | 104  | 171992   | 17.849  | ug/l  | 98       |
| 70) Isopropylbenzene          | 10.964 | 105  | 273170   | 18.058  | ug/l  | 99       |
| 71) 1,1,2,2-Tetrachloroethane | 11.213 | 83   | 87814    | 17.661  | ug/l  | 98       |
| 72) 1,2,3-Trichloropropane    | 11.238 | 75   | 75689m   | 16.722  | ug/l  |          |
| 73) Bromobenzene              | 11.195 | 156  | 64645    | 17.794  | ug/l  | 96       |
| 74) n-propylbenzene           | 11.305 | 91   | 319336   | 18.134  | ug/l  | 99       |
| 75) 2-Chlorotoluene           | 11.366 | 91   | 201302   | 18.337  | ug/l  | 97       |
| 76) 1,3,5-Trimethylbenzene    | 11.451 | 105  | 227613   | 17.875  | ug/l  | 99       |
| 77) t-1,4-Dichloro-2-butene   | 11.018 | 75   | 17906    | 12.881  | ug/l  | 89       |
| 78) 4-Chlorotoluene           | 11.451 | 91   | 223781   | 17.781  | ug/l  | 100      |
| 79) tert-butylbenzene         | 11.713 | 119  | 215484   | 17.727  | ug/l  | 97       |
| 80) 1,2,4-Trimethylbenzene    | 11.750 | 105  | 229274   | 18.119  | ug/l  | 98       |
| 81) sec-Butylbenzene          | 11.890 | 105  | 260637   | 17.695  | ug/l  | 99       |
| 82) p-Isopropyltoluene        | 12.006 | 119  | 219215   | 17.637  | ug/l  | 99       |
| 83) 1,3-Dichlorobenzene       | 11.969 | 146  | 119537   | 17.424  | ug/l  | 98       |
| 84) 1,4-Dichlorobenzene       | 12.043 | 146  | 119107   | 17.288  | ug/l  | 98       |
| 85) n-Butylbenzene            | 12.335 | 91   | 184317   | 17.206  | ug/l  | 100      |
| 86) Hexachloroethane          | 12.536 | 117  | 30659    | 15.060  | ug/l  | 96       |
| 87) 1,2-Dichlorobenzene       | 12.335 | 146  | 116407   | 17.340  | ug/l  | 97       |
| 88) 1,2-Dibromo-3-Chloropr... | 12.939 | 75   | 18426    | 16.958  | ug/l  | 92       |
| 89) 1,2,4-Trichlorobenzene    | 13.585 | 180  | 68899    | 17.109  | ug/l  | 98       |
| 90) Hexachlorobutadiene       | 13.725 | 225  | 29417    | 18.941  | ug/l  | 97       |
| 91) Naphthalene               | 13.774 | 128  | 247344   | 17.384  | ug/l  | 100      |
| 92) 1,2,3-Trichlorobenzene    | 13.963 | 180  | 68726    | 17.071  | ug/l  | 98       |

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

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