

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_X\Data\VX071523\  
 Data File : VX036559.D  
 Acq On : 14 Jul 2023 16:23  
 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

Quant Time: Jul 17 01:29:59 2023  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_X\Method\624X071423W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Fri Jul 14 04:32:22 2023  
 Response via : Initial Calibration

| Compound                     | R.T.   | QIon  | Response | Conc     | Units  | Dev(Min) |
|------------------------------|--------|-------|----------|----------|--------|----------|
| -----                        |        |       |          |          |        |          |
| Internal Standards           |        |       |          |          |        |          |
| 1) Bromochloromethane        | 4.903  | 128   | 29730    | 30.000   | ug/l   | 0.00     |
| 28) 1,4-Difluorobenzene      | 6.757  | 114   | 162038   | 30.000   | ug/l   | 0.00     |
| 57) Chlorobenzene-d5         | 10.055 | 117   | 153547   | 30.000   | ug/l   | 0.00     |
| System Monitoring Compounds  |        |       |          |          |        |          |
| 27) 1,2-Dichloroethane-d4    | 5.952  | 65    | 73515    | 29.793   | ug/l   | 0.00     |
| Spiked Amount                | 30.000 | Range | 91 - 110 | Recovery | =      | 99.300%  |
| 60) 4-Bromofluorobenzene     | 11.079 | 95    | 74014    | 29.716   | ug/l   | 0.00     |
| Spiked Amount                | 30.000 | Range | 63 - 112 | Recovery | =      | 99.067%  |
| 63) Toluene-d8               | 8.647  | 98    | 205231   | 29.046   | ug/l   | 0.00     |
| Spiked Amount                | 30.000 | Range | 91 - 112 | Recovery | =      | 96.833%  |
| Target Compounds             |        |       |          |          |        |          |
|                              |        |       |          |          | Qvalue |          |
| 2) Dichlorodifluoromethane   | 1.166  | 85    | 29022    | 17.472   | ug/l   | 98       |
| 3) Chloromethane             | 1.300  | 50    | 41120    | 18.094   | ug/l   | 98       |
| 4) Vinyl Chloride            | 1.374  | 62    | 41749    | 17.816   | ug/l   | 96       |
| 5) Bromomethane              | 1.611  | 94    | 37371    | 15.572   | ug/l   | 100      |
| 6) Chloroethane              | 1.685  | 64    | 32685    | 20.491   | ug/l   | 98       |
| 7) Trichlorofluoromethane    | 1.886  | 101   | 68579    | 18.038   | ug/l   | 99       |
| 8) Diethyl Ether             | 2.130  | 74    | 29578    | 18.724   | ug/l   | 99       |
| 9) 1,1,2-Trichlorotrifluo... | 2.325  | 101   | 30940    | 17.975   | ug/l   | 97       |
| 10) 1,1-Dichloroethene       | 2.319  | 96    | 30543    | 17.556   | ug/l   | 97       |
| 11) Methyl Iodide            | 2.447  | 142   | 32564    | 16.426   | ug/l   | 96       |
| 12) Methyl Acetate           | 2.703  | 43    | 76593    | 18.730   | ug/l   | 96       |
| 13) Acrolein                 | 2.239  | 56    | 23914    | 71.283   | ug/l   | 96       |
| 14) Acrylonitrile            | 3.062  | 53    | 110366   | 96.282   | ug/l   | 99       |
| 15) Acetone                  | 2.386  | 58    | 30801    | 94.910   | ug/l   | 96       |
| 16) Carbon Disulfide         | 2.508  | 76    | 70889    | 16.795   | ug/l   | 99       |
| 17) Allyl chloride           | 2.660  | 41    | 55534    | 17.994   | ug/l   | 98       |
| 18) Methylene Chloride       | 2.788  | 84    | 39935    | 19.063   | ug/l   | 99       |
| 19) trans-1,2-Dichloroethene | 3.087  | 96    | 33889    | 17.821   | ug/l   | 97       |
| 20) Diisopropyl ether        | 3.757  | 45    | 122503   | 19.475   | ug/l   | 91       |
| 21) 1,1-Dichloroethane       | 3.611  | 63    | 69175    | 18.863   | ug/l   | 99       |
| 22) cis-1,2-Dichloroethene   | 4.489  | 96    | 42838    | 18.717   | ug/l   | 99       |
| 23) tert-Butyl Alcohol       | 2.977  | 59    | 42867    | 80.531   | ug/l # | 1        |
| 24) Methyl tert-Butyl Ether  | 3.111  | 73    | 125106   | 19.774   | ug/l   | 100      |
| 25) Chloroform               | 5.092  | 83    | 72717    | 19.179   | ug/l   | 93       |
| 26) Cyclohexane              | 5.470  | 56    | 49664    | 17.652   | ug/l # | 97       |
| 29) 1,1-Dichloropropene      | 5.690  | 75    | 47659    | 19.504   | ug/l   | 98       |
| 30) 2-Butanone               | 4.556  | 43    | 151128   | 98.229   | ug/l   | 99       |
| 31) 2,2-Dichloropropane      | 4.477  | 77    | 50834    | 18.971   | ug/l # | 80       |
| 32) 1,1,1-Trichloroethane    | 5.379  | 97    | 56758    | 19.548   | ug/l   | 97       |
| 33) Carbon Tetrachloride     | 5.678  | 117   | 46458    | 18.755   | ug/l   | 98       |
| 34) Benzene                  | 6.037  | 78    | 150317   | 19.958   | ug/l   | 98       |
| 35) Methacrylonitrile        | 4.922  | 41    | 32722    | 20.499   | ug/l   | 96       |
| 36) 1,2-Dichloroethane       | 6.080  | 62    | 59304    | 20.507   | ug/l   | 99       |
| 37) Trichloroethene          | 7.123  | 130   | 37746    | 19.042   | ug/l   | 97       |
| 38) Methylcyclohexane        | 7.379  | 83    | 53599    | 18.855   | ug/l   | 96       |
| 39) 1,2-Dichloropropane      | 7.427  | 63    | 40904    | 20.035   | ug/l   | 96       |
| 40) Dibromomethane           | 7.580  | 93    | 29350    | 19.847   | ug/l   | 98       |
| 41) Bromodichloromethane     | 7.818  | 83    | 54355    | 20.252   | ug/l   | 99       |
| 42) Vinyl Acetate            | 3.721  | 43    | 481011   | 103.507  | ug/l   | 100      |

07/17/2023  
 Supervised By :Semsettin  
 Cesilyurt

07/17/2023

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 Data File : VX036559.D  
 Acq On : 14 Jul 2023 16:23  
 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

Quant Time: Jul 17 01:29:59 2023  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_X\Method\624X071423W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Fri Jul 14 04:32:22 2023  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc    | Units  | Dev(Min) |                          |
|-------------------------------|--------|------|----------|---------|--------|----------|--------------------------|
| 43) Ethyl Acetate             | 4.708  | 43   | 61155    | 20.420  | ug/l   | 99       | 07/17/2023               |
| 44) Isopropyl Acetate         | 6.336  | 43   | 97797    | 20.477  | ug/l   | 98       | Supervised By :Semsettin |
| 45) 1,4-Dioxane               | 7.690  | 88   | 19486    | 359.440 | ug/l # | 1        | Yesilyurt                |
| 46) Methyl methacrylate       | 7.690  | 41   | 46624    | 20.425  | ug/l   | 92       |                          |
| 47) n-amyl Acetate            | 10.841 | 43   | 84000    | 20.736  | ug/l   | 100      |                          |
| 48) t-1,3-Dichloropropene     | 8.976  | 75   | 57401    | 19.500  | ug/l   | 96       |                          |
| 49) cis-1,3-Dichloropropene   | 8.366  | 75   | 61960    | 19.485  | ug/l   | 98       | 07/17/2023               |
| 50) 1,1,2-Trichloroethane     | 9.153  | 97   | 40544    | 20.197  | ug/l   | 98       |                          |
| 51) Ethyl methacrylate        | 9.116  | 69   | 64160    | 20.357  | ug/l   | 96       |                          |
| 52) 1,3-Dichloropropane       | 9.305  | 76   | 70686    | 20.865  | ug/l   | 98       |                          |
| 53) Dibromochloromethane      | 9.518  | 129  | 39904    | 19.693  | ug/l   | 97       |                          |
| 54) 1,2-Dibromoethane         | 9.610  | 107  | 43247    | 20.507  | ug/l   | 98       |                          |
| 55) 2-Chloroethyl vinyl ether | 8.238  | 63   | 170233   | 100.431 | ug/l   | 99       |                          |
| 56) Bromoform                 | 10.799 | 173  | 26729    | 18.960  | ug/l   | 96       |                          |
| 58) 4-Methyl-2-Pentanone      | 8.574  | 43   | 313570   | 98.758  | ug/l   | 99       |                          |
| 59) 2-Hexanone                | 9.427  | 43   | 235524   | 97.504  | ug/l   | 100      |                          |
| 61) Tetrachloroethene         | 9.275  | 164  | 32262    | 17.542  | ug/l   | 98       |                          |
| 62) Toluene                   | 8.714  | 91   | 164811   | 19.130  | ug/l   | 99       |                          |
| 64) Chlorobenzene             | 10.079 | 112  | 103093   | 19.221  | ug/l   | 98       |                          |
| 65) 1,1,1,2-Tetrachloroethane | 10.159 | 131  | 36837    | 19.017  | ug/l   | 99       |                          |
| 66) Ethyl Benzene             | 10.195 | 91   | 176767   | 18.879  | ug/l   | 97       |                          |
| 67) m/p-Xylenes               | 10.299 | 106  | 139183   | 38.130  | ug/l   | 99       |                          |
| 68) o-Xylene                  | 10.640 | 106  | 69150    | 19.088  | ug/l   | 97       |                          |
| 69) Styrene                   | 10.652 | 104  | 112803   | 19.205  | ug/l   | 99       |                          |
| 70) Isopropylbenzene          | 10.963 | 105  | 168759   | 18.704  | ug/l   | 97       |                          |
| 71) 1,1,2,2-Tetrachloroethane | 11.213 | 83   | 66498    | 20.192  | ug/l   | 99       |                          |
| 72) 1,2,3-Trichloropropane    | 11.238 | 75   | 62803m   | 20.580  | ug/l   |          |                          |
| 73) Bromobenzene              | 11.195 | 156  | 43376    | 19.448  | ug/l   | 98       |                          |
| 74) n-propylbenzene           | 11.305 | 91   | 200772   | 18.906  | ug/l   | 100      |                          |
| 75) 2-Chlorotoluene           | 11.366 | 91   | 123730   | 19.159  | ug/l   | 99       |                          |
| 76) 1,3,5-Trimethylbenzene    | 11.451 | 105  | 145843   | 18.810  | ug/l   | 98       |                          |
| 77) t-1,4-Dichloro-2-butene   | 11.018 | 75   | 16938    | 16.903  | ug/l   | 96       |                          |
| 78) 4-Chlorotoluene           | 11.451 | 91   | 140170   | 19.063  | ug/l   | 98       |                          |
| 79) tert-butylbenzene         | 11.713 | 119  | 134007   | 18.210  | ug/l   | 99       |                          |
| 80) 1,2,4-Trimethylbenzene    | 11.750 | 105  | 146848   | 19.115  | ug/l   | 99       |                          |
| 81) sec-Butylbenzene          | 11.890 | 105  | 168578   | 18.200  | ug/l   | 99       |                          |
| 82) p-Isopropyltoluene        | 12.012 | 119  | 144731   | 18.781  | ug/l   | 99       |                          |
| 83) 1,3-Dichlorobenzene       | 11.969 | 146  | 78307    | 18.875  | ug/l   | 98       |                          |
| 84) 1,4-Dichlorobenzene       | 12.042 | 146  | 79892    | 19.326  | ug/l   | 99       |                          |
| 85) n-Butylbenzene            | 12.335 | 91   | 124427   | 17.737  | ug/l   | 99       |                          |
| 86) Hexachloroethane          | 12.536 | 117  | 21972    | 17.221  | ug/l   | 97       |                          |
| 87) 1,2-Dichlorobenzene       | 12.335 | 146  | 79518    | 19.109  | ug/l   | 99       |                          |
| 88) 1,2-Dibromo-3-Chloropr... | 12.945 | 75   | 13958    | 18.850  | ug/l   | 99       |                          |
| 89) 1,2,4-Trichlorobenzene    | 13.585 | 180  | 47915    | 18.259  | ug/l   | 99       |                          |
| 90) Hexachlorobutadiene       | 13.725 | 225  | 16533    | 17.346  | ug/l   | 99       |                          |
| 91) Naphthalene               | 13.774 | 128  | 178144   | 19.347  | ug/l   | 100      |                          |
| 92) 1,2,3-Trichlorobenzene    | 13.963 | 180  | 47550    | 17.952  | ug/l   | 97       |                          |

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

