

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_X\Data\VX091622\  
 Data File : VX031400.D  
 Acq On : 16 Sep 2022 10:40  
 Operator : JC/MD  
 Sample : VSTDICCC020  
 Misc : 5.0mL/MSVOA\_X/WATER  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 VSTDICCC020

Manual Integrations  
 APPROVED

Reviewed By : John Carlone 09/17/2022  
 Supervised By : Mahesh Dadoda 09/19/2022

Quant Time: Sep 16 12:33:10 2022  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_X\Method\624X091622W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Sat Jul 09 02:10:54 2022  
 Response via : Initial Calibration

| Compound                     | R.T.   | QIon     | Response | Conc       | Units  | Dev(Min) |
|------------------------------|--------|----------|----------|------------|--------|----------|
| -----                        |        |          |          |            |        |          |
| Internal Standards           |        |          |          |            |        |          |
| 1) Bromochloromethane        | 4.904  | 128      | 12854    | 30.000     | ug/l   | 0.00     |
| 28) 1,4-Difluorobenzene      | 6.763  | 114      | 71104    | 30.000     | ug/l   | 0.00     |
| 57) Chlorobenzene-d5         | 10.055 | 117      | 67643    | 30.000     | ug/l   | 0.00     |
|                              |        |          |          |            |        |          |
| System Monitoring Compounds  |        |          |          |            |        |          |
| 27) 1,2-Dichloroethane-d4    | 5.958  | 65       | 34575    | 32.987     | ug/l   | 0.00     |
| Spiked Amount 30.000         | Range  | 91 - 110 | Recovery | = 109.967% |        |          |
| 60) 4-Bromofluorobenzene     | 11.079 | 95       | 36824    | 28.887     | ug/l   | 0.00     |
| Spiked Amount 30.000         | Range  | 63 - 112 | Recovery | = 96.300%  |        |          |
| 63) Toluene-d8               | 8.647  | 98       | 106519   | 29.041     | ug/l   | 0.00     |
| Spiked Amount 30.000         | Range  | 91 - 112 | Recovery | = 96.800%  |        |          |
|                              |        |          |          |            |        |          |
| Target Compounds             |        |          |          |            |        | Qvalue   |
| 2) Dichlorodifluoromethane   | 1.167  | 85       | 14748    | 16.779     | ug/l   | 99       |
| 3) Chloromethane             | 1.288  | 50       | 20794    | 22.686     | ug/l   | 98       |
| 4) Vinyl Chloride            | 1.374  | 62       | 24235    | 23.334     | ug/l   | 97       |
| 5) Bromomethane              | 1.612  | 94       | 29105    | 68.016     | ug/l   | 99       |
| 6) Chloroethane              | 1.685  | 64       | 28437    | 51.126     | ug/l   | 98       |
| 7) Trichlorofluoromethane    | 1.886  | 101      | 56082    | 42.597     | ug/l   | 100      |
| 8) Diethyl Ether             | 2.136  | 74       | 17978    | 32.105     | ug/l   | 94       |
| 9) 1,1,2-Trichlorotrifluo... | 2.331  | 101      | 19271    | 21.739     | ug/l   | 93       |
| 10) 1,1-Dichloroethene       | 2.319  | 96       | 17982    | 19.865     | ug/l   | 88       |
| 11) Methyl Iodide            | 2.453  | 142      | 19005    | 26.039     | ug/l   | 98       |
| 12) Methyl Acetate           | 2.709  | 43       | 27344    | 18.548     | ug/l   | 94       |
| 13) Acrolein                 | 2.239  | 56       | 17672    | 102.041    | ug/l   | 99       |
| 14) Acrylonitrile            | 3.069  | 53       | 55333    | 87.210     | ug/l   | 99       |
| 15) Acetone                  | 2.386  | 58       | 17038    | 98.859     | ug/l   | 96       |
| 16) Carbon Disulfide         | 2.514  | 76       | 45183    | 19.121     | ug/l # | 94       |
| 17) Allyl chloride           | 2.666  | 41       | 28809    | 18.060     | ug/l   | 89       |
| 18) Methylene Chloride       | 2.788  | 84       | 21285    | 20.183     | ug/l   | 95       |
| 19) trans-1,2-Dichloroethene | 3.093  | 96       | 20464    | 20.833     | ug/l   | 96       |
| 20) Diisopropyl ether        | 3.758  | 45       | 64671    | 20.237     | ug/l   | 92       |
| 21) 1,1-Dichloroethane       | 3.605  | 63       | 36353    | 21.131     | ug/l   | 98       |
| 22) cis-1,2-Dichloroethene   | 4.495  | 96       | 23882    | 20.475     | ug/l   | 99       |
| 23) tert-Butyl Alcohol       | 2.989  | 59       | 27229    | 93.679     | ug/l # | 100      |
| 24) Methyl tert-Butyl Ether  | 3.117  | 73       | 66105    | 22.637     | ug/l   | 96       |
| 25) Chloroform               | 5.093  | 83       | 39180    | 22.851     | ug/l   | 97       |
| 26) Cyclohexane              | 5.471  | 56       | 31804    | 19.953     | ug/l # | 98       |
| 29) 1,1-Dichloropropene      | 5.696  | 75       | 28889    | 23.750     | ug/l   | 99       |
| 30) 2-Butanone               | 4.562  | 43       | 83476    | 101.675    | ug/l   | 99       |
| 31) 2,2-Dichloropropane      | 4.483  | 77       | 32112    | 27.622     | ug/l   | 100      |
| 32) 1,1,1-Trichloroethane    | 5.385  | 97       | 34525    | 26.397     | ug/l   | 96       |
| 33) Carbon Tetrachloride     | 5.678  | 117      | 30310    | 27.592     | ug/l   | 96       |
| 34) Benzene                  | 6.038  | 78       | 83707    | 21.415     | ug/l   | 100      |
| 35) Methacrylonitrile        | 4.922  | 41       | 15871    | 19.098     | ug/l   | 91       |
| 36) 1,2-Dichloroethane       | 6.086  | 62       | 30214    | 25.392     | ug/l   | 97       |
| 37) Trichloroethene          | 7.129  | 130      | 23430    | 22.413     | ug/l   | 100      |
| 38) Methylcyclohexane        | 7.379  | 83       | 33947    | 21.509     | ug/l   | 98       |
| 39) 1,2-Dichloropropane      | 7.434  | 63       | 20593    | 20.696     | ug/l   | 97       |
| 40) Dibromomethane           | 7.586  | 93       | 15775    | 23.389     | ug/l   | 93       |
| 41) Bromodichloromethane     | 7.824  | 83       | 29773    | 24.712     | ug/l   | 98       |
| 42) Vinyl Acetate            | 3.721  | 43       | 283322   | 107.910    | ug/l   | 98       |

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 QLast Update : Sat Jul 09 02:10:54 2022  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc    | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|---------|--------|----------|
| 43) Ethyl Acetate             | 4.715  | 43   | 31608    | 20.438  | ug/l   | 99       |
| 44) Isopropyl Acetate         | 6.342  | 43   | 51737    | 22.021  | ug/l   | 94       |
| 45) 1,4-Dioxane               | 7.690  | 88   | 11715    | 424.769 | ug/l # | 87       |
| 46) Methyl methacrylate       | 7.696  | 41   | 22584    | 20.285  | ug/l   | 91       |
| 47) n-amyl Acetate            | 10.842 | 43   | 44769    | 22.182  | ug/l   | 95       |
| 48) t-1,3-Dichloropropene     | 8.976  | 75   | 31733    | 23.833  | ug/l   | 99       |
| 49) cis-1,3-Dichloropropene   | 8.366  | 75   | 34071    | 22.788  | ug/l   | 94       |
| 50) 1,1,2-Trichloroethane     | 9.153  | 97   | 21582    | 21.599  | ug/l   | 97       |
| 51) Ethyl methacrylate        | 9.116  | 69   | 32377    | 20.822  | ug/l   | 89       |
| 52) 1,3-Dichloropropane       | 9.311  | 76   | 37059    | 23.056  | ug/l   | 99       |
| 53) Dibromochloromethane      | 9.525  | 129  | 22936    | 24.799  | ug/l   | 99       |
| 54) 1,2-Dibromoethane         | 9.610  | 107  | 23285    | 22.440  | ug/l   | 100      |
| 55) 2-Chloroethyl vinyl ether | 8.245  | 63   | 82666    | 103.134 | ug/l   | 98       |
| 56) Bromoform                 | 10.799 | 173  | 16011    | 24.730  | ug/l   | 98       |
| 58) 4-Methyl-2-Pentanone      | 8.574  | 43   | 167504   | 100.251 | ug/l   | 97       |
| 59) 2-Hexanone                | 9.427  | 43   | 129588   | 100.276 | ug/l   | 96       |
| 61) Tetrachloroethene         | 9.275  | 164  | 22069    | 21.729  | ug/l   | 98       |
| 62) Toluene                   | 8.720  | 91   | 94321    | 20.962  | ug/l   | 97       |
| 64) Chlorobenzene             | 10.080 | 112  | 59001    | 21.956  | ug/l   | 96       |
| 65) 1,1,1,2-Tetrachloroethane | 10.165 | 131  | 21862    | 23.330  | ug/l   | 95       |
| 66) Ethyl Benzene             | 10.195 | 91   | 105141   | 21.988  | ug/l   | 100      |
| 67) m/p-Xylenes               | 10.305 | 106  | 82465    | 44.443  | ug/l   | 99       |
| 68) o-Xylene                  | 10.640 | 106  | 40742    | 22.049  | ug/l   | 98       |
| 69) Styrene                   | 10.659 | 104  | 65927    | 21.561  | ug/l   | 99       |
| 70) Isopropylbenzene          | 10.964 | 105  | 105670   | 22.714  | ug/l   | 100      |
| 71) 1,1,2,2-Tetrachloroethane | 11.213 | 83   | 34976    | 20.674  | ug/l   | 99       |
| 72) 1,2,3-Trichloropropane    | 11.238 | 75   | 26762m   | 17.598  | ug/l   |          |
| 73) Bromobenzene              | 11.195 | 156  | 25509    | 22.866  | ug/l   | 98       |
| 74) n-propylbenzene           | 11.305 | 91   | 125765   | 22.535  | ug/l   | 98       |
| 75) 2-Chlorotoluene           | 11.366 | 91   | 71803    | 21.849  | ug/l   | 98       |
| 76) 1,3,5-Trimethylbenzene    | 11.451 | 105  | 89835    | 22.999  | ug/l   | 100      |
| 77) t-1,4-Dichloro-2-butene   | 11.018 | 75   | 9676     | 18.499  | ug/l   | 95       |
| 78) 4-Chlorotoluene           | 11.457 | 91   | 81532    | 22.105  | ug/l   | 97       |
| 79) tert-butylbenzene         | 11.713 | 119  | 84840    | 22.327  | ug/l   | 100      |
| 80) 1,2,4-Trimethylbenzene    | 11.750 | 105  | 87451    | 21.778  | ug/l   | 98       |
| 81) sec-Butylbenzene          | 11.890 | 105  | 109756   | 21.339  | ug/l   | 100      |
| 82) p-Isopropyltoluene        | 12.012 | 119  | 91986    | 22.215  | ug/l   | 99       |
| 83) 1,3-Dichlorobenzene       | 11.969 | 146  | 48594    | 22.514  | ug/l   | 98       |
| 84) 1,4-Dichlorobenzene       | 12.043 | 146  | 49776    | 22.739  | ug/l   | 99       |
| 85) n-Butylbenzene            | 12.335 | 91   | 80431    | 20.699  | ug/l   | 96       |
| 86) Hexachloroethane          | 12.543 | 117  | 15832    | 23.013  | ug/l   | 85       |
| 87) 1,2-Dichlorobenzene       | 12.335 | 146  | 48874    | 22.932  | ug/l   | 97       |
| 88) 1,2-Dibromo-3-Chloropr... | 12.945 | 75   | 7124     | 18.465  | ug/l   | 97       |
| 89) 1,2,4-Trichlorobenzene    | 13.591 | 180  | 29171    | 22.106  | ug/l   | 95       |
| 90) Hexachlorobutadiene       | 13.725 | 225  | 11417    | 22.813  | ug/l   | 97       |
| 91) Naphthalene               | 13.774 | 128  | 103037   | 19.589  | ug/l   | 99       |
| 92) 1,2,3-Trichlorobenzene    | 13.963 | 180  | 28417    | 21.142  | ug/l   | 99       |

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

