

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_X\Data\VX011022\  
 Data File : VX026410.D  
 Acq On : 10 Jan 2022 18:16  
 Operator : JC/MD  
 Sample : VSTDCCC020  
 Misc : 5.0mL/MSVOA\_X/WATER  
 ALS Vial : 20 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 VSTDCCC020EC

Manual Integrations  
 APPROVED

Reviewed By : John Carlone 01/11/2022  
 Supervised By : Mahesh Dadoda 01/12/2022

Quant Time: Jan 11 04:57:26 2022  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_X\Method\624X011022W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Mon Jan 10 12:50:55 2022  
 Response via : Initial Calibration

| Compound                     | R.T.   | QIon     | Response | Conc       | Units  | Dev(Min) |
|------------------------------|--------|----------|----------|------------|--------|----------|
| -----                        |        |          |          |            |        |          |
| Internal Standards           |        |          |          |            |        |          |
| 1) Bromochloromethane        | 4.897  | 128      | 19567    | 30.000     | ug/l   | 0.00     |
| 28) 1,4-Difluorobenzene      | 6.763  | 114      | 110939   | 30.000     | ug/l   | 0.00     |
| 57) Chlorobenzene-d5         | 10.055 | 117      | 93732    | 30.000     | ug/l   | 0.00     |
|                              |        |          |          |            |        |          |
| System Monitoring Compounds  |        |          |          |            |        |          |
| 27) 1,2-Dichloroethane-d4    | 5.958  | 65       | 48520    | 30.837     | ug/l   | 0.00     |
| Spiked Amount 30.000         | Range  | 91 - 110 | Recovery | = 102.800% |        |          |
| 60) 4-Bromofluorobenzene     | 11.079 | 95       | 46524    | 29.741     | ug/l   | 0.00     |
| Spiked Amount 30.000         | Range  | 63 - 112 | Recovery | = 99.133%  |        |          |
| 63) Toluene-d8               | 8.647  | 98       | 129206   | 30.006     | ug/l   | 0.00     |
| Spiked Amount 30.000         | Range  | 91 - 112 | Recovery | = 100.033% |        |          |
|                              |        |          |          |            |        |          |
| Target Compounds             |        |          |          |            |        | Qvalue   |
| 2) Dichlorodifluoromethane   | 1.172  | 85       | 23915    | 20.292     | ug/l   | 99       |
| 3) Chloromethane             | 1.294  | 50       | 20067    | 19.489     | ug/l   | 98       |
| 4) Vinyl Chloride            | 1.380  | 62       | 21561    | 18.942     | ug/l   | 98       |
| 5) Bromomethane              | 1.617  | 94       | 7539     | 14.711     | ug/l   | 92       |
| 6) Chloroethane              | 1.691  | 64       | 13867    | 21.470     | ug/l   | 97       |
| 7) Trichlorofluoromethane    | 1.892  | 101      | 35025    | 19.416     | ug/l   | 99       |
| 8) Diethyl Ether             | 2.136  | 74       | 12742    | 19.796     | ug/l   | 96       |
| 9) 1,1,2-Trichlorotrifluo... | 2.331  | 101      | 21749    | 19.316     | ug/l   | 98       |
| 10) 1,1-Dichloroethene       | 2.325  | 96       | 20952    | 19.920     | ug/l   | 96       |
| 11) Methyl Iodide            | 2.459  | 142      | 12695    | 11.113     | ug/l   | 97       |
| 12) Methyl Acetate           | 2.703  | 43       | 42707    | 19.381     | ug/l   | 99       |
| 13) Acrolein                 | 2.239  | 56       | 13575    | 59.445     | ug/l   | 97       |
| 14) Acrylonitrile            | 3.068  | 53       | 59291    | 96.466     | ug/l   | 99       |
| 15) Acetone                  | 2.386  | 58       | 18700    | 96.858     | ug/l   | 99       |
| 16) Carbon Disulfide         | 2.520  | 76       | 55903    | 18.821     | ug/l   | 99       |
| 17) Allyl chloride           | 2.666  | 41       | 37146    | 18.351     | ug/l   | 98       |
| 18) Methylene Chloride       | 2.794  | 84       | 22778    | 19.662     | ug/l   | 96       |
| 19) trans-1,2-Dichloroethene | 3.093  | 96       | 21642    | 19.142     | ug/l   | 97       |
| 20) Diisopropyl ether        | 3.763  | 45       | 76655    | 19.484     | ug/l   | 99       |
| 21) 1,1-Dichloroethane       | 3.611  | 63       | 41771    | 19.285     | ug/l   | 99       |
| 22) cis-1,2-Dichloroethene   | 4.495  | 96       | 25525    | 19.297     | ug/l   | 97       |
| 23) tert-Butyl Alcohol       | 2.977  | 59       | 19934    | 89.416     | ug/l # | 100      |
| 24) Methyl tert-Butyl Ether  | 3.117  | 73       | 74343    | 19.006     | ug/l   | 99       |
| 25) Chloroform               | 5.099  | 83       | 44316    | 19.745     | ug/l   | 100      |
| 26) Cyclohexane              | 5.477  | 56       | 38592    | 19.479     | ug/l # | 99       |
| 29) 1,1-Dichloropropene      | 5.696  | 75       | 32673    | 19.068     | ug/l   | 98       |
| 30) 2-Butanone               | 4.556  | 43       | 90976    | 91.427     | ug/l   | 100      |
| 31) 2,2-Dichloropropane      | 4.483  | 77       | 29395    | 16.563     | ug/l   | 100      |
| 32) 1,1,1-Trichloroethane    | 5.385  | 97       | 38713    | 18.559     | ug/l   | 99       |
| 33) Carbon Tetrachloride     | 5.678  | 117      | 33754    | 18.265     | ug/l   | 95       |
| 34) Benzene                  | 6.043  | 78       | 89842    | 18.910     | ug/l   | 99       |
| 35) Methacrylonitrile        | 4.922  | 41       | 19711    | 18.906     | ug/l   | 98       |
| 36) 1,2-Dichloroethane       | 6.086  | 62       | 36114    | 18.821     | ug/l   | 99       |
| 37) Trichloroethene          | 7.129  | 130      | 25268    | 18.415     | ug/l   | 99       |
| 38) Methylcyclohexane        | 7.385  | 83       | 39110    | 19.047     | ug/l   | 100      |
| 39) 1,2-Dichloropropane      | 7.427  | 63       | 23014    | 18.943     | ug/l   | 99       |
| 40) Dibromomethane           | 7.580  | 93       | 16376    | 19.188     | ug/l   | 98       |
| 41) Bromodichloromethane     | 7.824  | 83       | 32254    | 18.312     | ug/l   | 99       |
| 42) Vinyl Acetate            | 3.721  | 43       | 288962   | 93.729     | ug/l   | 100      |

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 Misc : 5.0mL/MSVOA\_X/WATER  
 ALS Vial : 20 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
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 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Mon Jan 10 12:50:55 2022  
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| Compound                      | R.T.   | QIon | Response | Conc    | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|---------|--------|----------|
| 43) Ethyl Acetate             | 4.714  | 43   | 33662    | 18.606  | ug/l # | 80       |
| 44) Isopropyl Acetate         | 6.342  | 43   | 55565    | 18.608  | ug/l   | 99       |
| 45) 1,4-Dioxane               | 7.677  | 88   | 8421     | 363.840 | ug/l   | 97       |
| 46) Methyl methacrylate       | 7.696  | 41   | 27436    | 18.731  | ug/l   | 98       |
| 47) n-amyl Acetate            | 10.841 | 43   | 40340    | 18.056  | ug/l   | 99       |
| 48) t-1,3-Dichloropropene     | 8.982  | 75   | 29713    | 16.894  | ug/l   | 98       |
| 49) cis-1,3-Dichloropropene   | 8.366  | 75   | 34269    | 17.621  | ug/l   | 99       |
| 50) 1,1,2-Trichloroethane     | 9.153  | 97   | 22540    | 19.208  | ug/l   | 98       |
| 51) Ethyl methacrylate        | 9.116  | 69   | 35087    | 18.753  | ug/l   | 98       |
| 52) 1,3-Dichloropropane       | 9.311  | 76   | 38970    | 19.163  | ug/l   | 99       |
| 53) Dibromochloromethane      | 9.525  | 129  | 23166    | 18.164  | ug/l   | 98       |
| 54) 1,2-Dibromoethane         | 9.610  | 107  | 22955    | 18.445  | ug/l   | 99       |
| 55) 2-Chloroethyl vinyl ether | 8.244  | 63   | 108271   | 108.179 | ug/l   | 99       |
| 56) Bromoform                 | 10.799 | 173  | 14573    | 17.212  | ug/l   | 99       |
| 58) 4-Methyl-2-Pentanone      | 8.574  | 43   | 171878   | 98.309  | ug/l   | 100      |
| 59) 2-Hexanone                | 9.433  | 43   | 128491   | 94.914  | ug/l   | 100      |
| 61) Tetrachloroethene         | 9.275  | 164  | 26623    | 19.271  | ug/l   | 97       |
| 62) Toluene                   | 8.720  | 91   | 96100    | 19.204  | ug/l   | 99       |
| 64) Chlorobenzene             | 10.079 | 112  | 56805    | 18.698  | ug/l   | 97       |
| 65) 1,1,1,2-Tetrachloroethane | 10.165 | 131  | 21586    | 18.659  | ug/l   | 99       |
| 66) Ethyl Benzene             | 10.195 | 91   | 105851   | 18.905  | ug/l   | 100      |
| 67) m/p-Xylenes               | 10.299 | 106  | 79100    | 38.025  | ug/l   | 100      |
| 68) o-Xylene                  | 10.640 | 106  | 38341    | 19.004  | ug/l   | 96       |
| 69) Styrene                   | 10.659 | 104  | 63443    | 18.918  | ug/l   | 99       |
| 70) Isopropylbenzene          | 10.963 | 105  | 104554   | 19.315  | ug/l   | 100      |
| 71) 1,1,2,2-Tetrachloroethane | 11.213 | 83   | 28444    | 19.282  | ug/l   | 98       |
| 72) 1,2,3-Trichloropropane    | 11.238 | 75   | 28164m   | 18.826  | ug/l   |          |
| 73) Bromobenzene              | 11.201 | 156  | 23388    | 18.876  | ug/l   | 99       |
| 74) n-propylbenzene           | 11.305 | 91   | 119517   | 19.115  | ug/l   | 99       |
| 75) 2-Chlorotoluene           | 11.366 | 91   | 71654    | 19.077  | ug/l   | 99       |
| 76) 1,3,5-Trimethylbenzene    | 11.451 | 105  | 87221    | 19.290  | ug/l   | 100      |
| 77) t-1,4-Dichloro-2-butene   | 11.018 | 75   | 6051     | 13.449  | ug/l   | 81       |
| 78) 4-Chlorotoluene           | 11.457 | 91   | 81951    | 19.138  | ug/l   | 99       |
| 79) tert-butylbenzene         | 11.713 | 119  | 80131    | 19.146  | ug/l   | 100      |
| 80) 1,2,4-Trimethylbenzene    | 11.750 | 105  | 86133    | 19.286  | ug/l   | 99       |
| 81) sec-Butylbenzene          | 11.890 | 105  | 104782   | 19.112  | ug/l   | 99       |
| 82) p-Isopropyltoluene        | 12.012 | 119  | 87845    | 18.967  | ug/l   | 99       |
| 83) 1,3-Dichlorobenzene       | 11.969 | 146  | 42818    | 18.568  | ug/l   | 100      |
| 84) 1,4-Dichlorobenzene       | 12.042 | 146  | 43130    | 18.665  | ug/l   | 99       |
| 85) n-Butylbenzene            | 12.335 | 91   | 74729    | 18.643  | ug/l   | 100      |
| 86) Hexachloroethane          | 12.542 | 117  | 11332    | 16.207  | ug/l   | 98       |
| 87) 1,2-Dichlorobenzene       | 12.335 | 146  | 42657    | 19.251  | ug/l   | 99       |
| 88) 1,2-Dibromo-3-Chloropr... | 12.945 | 75   | 6606     | 17.551  | ug/l   | 95       |
| 89) 1,2,4-Trichlorobenzene    | 13.591 | 180  | 25374    | 17.493  | ug/l   | 98       |
| 90) Hexachlorobutadiene       | 13.725 | 225  | 11394    | 17.997  | ug/l   | 99       |
| 91) Naphthalene               | 13.774 | 128  | 91332    | 18.214  | ug/l   | 99       |
| 92) 1,2,3-Trichlorobenzene    | 13.963 | 180  | 26520    | 18.381  | ug/l   | 99       |

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

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 Misc : 5.0mL/MSVOA\_X/WATER  
 ALS Vial : 20 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
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