

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_X\Data\VX070822\  
 Data File : VX029965.D  
 Acq On : 08 Jul 2022 11:47  
 Operator : JC/MD  
 Sample : VSTDIC005  
 Misc : 5.0mL/MSVOA\_X/WATER  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 VSTDIC005

Manual Integrations  
 APPROVED

Reviewed By : John Carlone 07/11/2022  
 Supervised By : Mahesh Dadoda 07/11/2022

Quant Time: Jul 08 13:22:53 2022  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_X\Method\624X070822W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Fri Jul 08 13:22:30 2022  
 Response via : Initial Calibration

| Compound                     | R.T.   | QIon     | Response | Conc        | Units  | Dev(Min) |
|------------------------------|--------|----------|----------|-------------|--------|----------|
| -----                        |        |          |          |             |        |          |
| Internal Standards           |        |          |          |             |        |          |
| 1) Bromochloromethane        | 4.897  | 128      | 32553    | 30.000      | ug/l   | 0.00     |
| 28) 1,4-Difluorobenzene      | 6.763  | 114      | 182589   | 30.000      | ug/l   | 0.00     |
| 57) Chlorobenzene-d5         | 10.055 | 117      | 162587   | 30.000      | ug/l   | 0.00     |
|                              |        |          |          |             |        |          |
| System Monitoring Compounds  |        |          |          |             |        |          |
| 27) 1,2-Dichloroethane-d4    | 5.958  | 65       | 76210    | 36.812      | ug/l   | 0.00     |
| Spiked Amount 30.000         | Range  | 91 - 110 | Recovery | = 122.700%# |        |          |
| 60) 4-Bromofluorobenzene     | 11.079 | 95       | 88228    | 34.894      | ug/l   | 0.00     |
| Spiked Amount 30.000         | Range  | 63 - 112 | Recovery | = 116.300%# |        |          |
| 63) Toluene-d8               | 8.653  | 98       | 262187   | 38.066      | ug/l   | 0.00     |
| Spiked Amount 30.000         | Range  | 91 - 112 | Recovery | = 126.900%# |        |          |
|                              |        |          |          |             |        |          |
| Target Compounds             |        |          |          |             |        | Qvalue   |
| 2) Dichlorodifluoromethane   | 1.166  | 85       | 9061     | 7.867       | ug/l   | 99       |
| 3) Chloromethane             | 1.288  | 50       | 11254    | 12.394      | ug/l   | 92       |
| 4) Vinyl Chloride            | 1.374  | 62       | 12937    | 11.208      | ug/l   | 95       |
| 5) Bromomethane              | 1.611  | 94       | 6733     | 7.080       | ug/l   | 90       |
| 6) Chloroethane              | 1.685  | 64       | 6190     | 6.964       | ug/l   | 98       |
| 7) Trichlorofluoromethane    | 1.886  | 101      | 16262    | 6.443       | ug/l   | 99       |
| 8) Diethyl Ether             | 2.136  | 74       | 7233     | 7.266       | ug/l   | 97       |
| 9) 1,1,2-Trichlorotrifluo... | 2.331  | 101      | 11442    | 7.709       | ug/l   | 94       |
| 10) 1,1-Dichloroethene       | 2.313  | 96       | 10850    | 8.841       | ug/l   | 95       |
| 11) Methyl Iodide            | 2.453  | 142      | 4249     | 2.578       | ug/l   | 95       |
| 12) Methyl Acetate           | 2.709  | 43       | 18486    | 9.436       | ug/l   | 95       |
| 13) Acrolein                 | 2.239  | 56       | 11491    | 28.904      | ug/l   | 94       |
| 14) Acrylonitrile            | 3.069  | 53       | 38222    | 42.852      | ug/l   | 100      |
| 15) Acetone                  | 2.392  | 58       | 10375    | 41.070      | ug/l   | 84       |
| 16) Carbon Disulfide         | 2.514  | 76       | 28298    | 19.510      | ug/l # | 93       |
| 17) Allyl chloride           | 2.666  | 41       | 19364    | 10.500      | ug/l   | 88       |
| 18) Methylene Chloride       | 2.788  | 84       | 13531    | 8.581       | ug/l   | 96       |
| 19) trans-1,2-Dichloroethene | 3.093  | 96       | 12624    | 9.311       | ug/l   | 96       |
| 20) Diisopropyl ether        | 3.764  | 45       | 39210    | 8.555       | ug/l   | 93       |
| 21) 1,1-Dichloroethane       | 3.611  | 63       | 21409    | 7.903       | ug/l   | 97       |
| 22) cis-1,2-Dichloroethene   | 4.489  | 96       | 14932    | 7.823       | ug/l   | 97       |
| 23) tert-Butyl Alcohol       | 2.983  | 59       | 23398m   | 48.571      | ug/l   |          |
| 24) Methyl tert-Butyl Ether  | 3.117  | 73       | 35917    | 6.656       | ug/l # | 79       |
| 25) Chloroform               | 5.099  | 83       | 21387    | 6.718       | ug/l   | 98       |
| 26) Cyclohexane              | 5.471  | 56       | 19864    | 11.598      | ug/l # | 96       |
| 29) 1,1-Dichloropropene      | 5.696  | 75       | 16263    | 8.374       | ug/l   | 99       |
| 30) 2-Butanone               | 4.562  | 43       | 53651    | 43.832      | ug/l   | 98       |
| 31) 2,2-Dichloropropane      | 4.483  | 77       | 15297    | 6.413       | ug/l # | 68       |
| 32) 1,1,1-Trichloroethane    | 5.391  | 97       | 17085    | 6.257       | ug/l   | 99       |
| 33) Carbon Tetrachloride     | 5.678  | 117      | 13936    | 5.997       | ug/l   | 88       |
| 34) Benzene                  | 6.044  | 78       | 52352    | 8.463       | ug/l   | 98       |
| 35) Methacrylonitrile        | 4.928  | 41       | 10367    | 8.410       | ug/l   | 89       |
| 36) 1,2-Dichloroethane       | 6.092  | 62       | 15929    | 6.910       | ug/l   | 100      |
| 37) Trichloroethene          | 7.129  | 130      | 14447    | 7.625       | ug/l   | 100      |
| 38) Methylcyclohexane        | 7.385  | 83       | 20651    | 10.383      | ug/l   | 98       |
| 39) 1,2-Dichloropropane      | 7.434  | 63       | 13418    | 8.252       | ug/l   | 94       |
| 40) Dibromomethane           | 7.586  | 93       | 8766     | 7.029       | ug/l   | 91       |
| 41) Bromodichloromethane     | 7.824  | 83       | 15186    | 6.417       | ug/l   | 98       |
| 42) Vinyl Acetate            | 3.727  | 43       | 161807   | 42.655      | ug/l   | 98       |

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 Sample : VSTDIC005  
 Misc : 5.0mL/MSVOA\_X/WATER  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 VSTDIC005

Manual Integrations  
 APPROVED

Reviewed By : John Carlone 07/11/2022  
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Quant Time: Jul 08 13:22:53 2022  
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 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Fri Jul 08 13:22:30 2022  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc    | Units | Dev(Min) |
|-------------------------------|--------|------|----------|---------|-------|----------|
| 43) Ethyl Acetate             | 4.721  | 43   | 18777    | 8.198   | ug/l  | # 89     |
| 44) Isopropyl Acetate         | 6.342  | 43   | 29748    | 8.055   | ug/l  | 99       |
| 45) 1,4-Dioxane               | 7.690  | 88   | 6951     | 144.537 | ug/l  | 99       |
| 46) Methyl methacrylate       | 7.696  | 41   | 13668    | 8.098   | ug/l  | 98       |
| 47) n-amyl Acetate            | 10.842 | 43   | 22761    | 7.119   | ug/l  | 99       |
| 48) t-1,3-Dichloropropene     | 8.982  | 75   | 16533    | 6.651   | ug/l  | 99       |
| 49) cis-1,3-Dichloropropene   | 8.366  | 75   | 18429    | 6.900   | ug/l  | 95       |
| 50) 1,1,2-Trichloroethane     | 9.153  | 97   | 13412    | 6.839   | ug/l  | 96       |
| 51) Ethyl methacrylate        | 9.116  | 69   | 18811    | 6.703   | ug/l  | 95       |
| 52) 1,3-Dichloropropane       | 9.311  | 76   | 21456    | 6.993   | ug/l  | 98       |
| 53) Dibromochloromethane      | 9.525  | 129  | 11391    | 5.677   | ug/l  | 97       |
| 54) 1,2-Dibromoethane         | 9.610  | 107  | 13548    | 6.640   | ug/l  | 95       |
| 55) 2-Chloroethyl vinyl ether | 8.244  | 63   | 50162    | 34.045  | ug/l  | 96       |
| 56) Bromoform                 | 10.799 | 173  | 7069     | 4.570   | ug/l  | 98       |
| 58) 4-Methyl-2-Pentanone      | 8.574  | 43   | 100548   | 42.512  | ug/l  | 99       |
| 59) 2-Hexanone                | 9.433  | 43   | 76033    | 41.536  | ug/l  | 97       |
| 61) Tetrachloroethene         | 9.275  | 164  | 13207    | 7.364   | ug/l  | 91       |
| 62) Toluene                   | 8.720  | 91   | 57037    | 8.089   | ug/l  | 94       |
| 64) Chlorobenzene             | 10.079 | 112  | 32957    | 6.625   | ug/l  | 99       |
| 65) 1,1,1,2-Tetrachloroethane | 10.165 | 131  | 11296    | 5.814   | ug/l  | 92       |
| 66) Ethyl Benzene             | 10.195 | 91   | 59014    | 7.098   | ug/l  | 96       |
| 67) m/p-Xylenes               | 10.305 | 106  | 45886    | 13.769  | ug/l  | 97       |
| 68) o-Xylene                  | 10.640 | 106  | 21873    | 6.458   | ug/l  | 98       |
| 69) Styrene                   | 10.659 | 104  | 35770    | 6.323   | ug/l  | 97       |
| 70) Isopropylbenzene          | 10.963 | 105  | 56348    | 6.395   | ug/l  | 100      |
| 71) 1,1,2,2-Tetrachloroethane | 11.213 | 83   | 20448    | 6.835   | ug/l  | 97       |
| 72) 1,2,3-Trichloropropane    | 11.244 | 75   | 17843m   | 6.703   | ug/l  |          |
| 73) Bromobenzene              | 11.201 | 156  | 13709    | 5.770   | ug/l  | 92       |
| 74) n-propylbenzene           | 11.305 | 91   | 65490    | 6.666   | ug/l  | 98       |
| 75) 2-Chlorotoluene           | 11.366 | 91   | 40026    | 6.576   | ug/l  | 100      |
| 76) 1,3,5-Trimethylbenzene    | 11.451 | 105  | 47547    | 6.435   | ug/l  | 100      |
| 77) t-1,4-Dichloro-2-butene   | 11.018 | 75   | 4956     | 6.148   | ug/l  | 94       |
| 78) 4-Chlorotoluene           | 11.457 | 91   | 42945    | 6.238   | ug/l  | 92       |
| 79) tert-butylbenzene         | 11.713 | 119  | 44842    | 5.982   | ug/l  | 99       |
| 80) 1,2,4-Trimethylbenzene    | 11.756 | 105  | 47253    | 6.371   | ug/l  | 100      |
| 81) sec-Butylbenzene          | 11.890 | 105  | 59779    | 6.728   | ug/l  | 98       |
| 82) p-Isopropyltoluene        | 12.012 | 119  | 46747    | 6.061   | ug/l  | 98       |
| 83) 1,3-Dichlorobenzene       | 11.969 | 146  | 25524    | 5.728   | ug/l  | 99       |
| 84) 1,4-Dichlorobenzene       | 12.043 | 146  | 25133    | 5.547   | ug/l  | 98       |
| 85) n-Butylbenzene            | 12.335 | 91   | 42506    | 6.829   | ug/l  | 93       |
| 86) Hexachloroethane          | 12.536 | 117  | 7188     | 5.923   | ug/l  | 89       |
| 87) 1,2-Dichlorobenzene       | 12.335 | 146  | 26103    | 5.816   | ug/l  | 99       |
| 88) 1,2-Dibromo-3-Chloropr... | 12.945 | 75   | 3972     | 6.215   | ug/l  | 93       |
| 89) 1,2,4-Trichlorobenzene    | 13.591 | 180  | 15101    | 5.387   | ug/l  | 95       |
| 90) Hexachlorobutadiene       | 13.725 | 225  | 6009     | 5.056   | ug/l  | 96       |
| 91) Naphthalene               | 13.780 | 128  | 57445    | 5.864   | ug/l  | 99       |
| 92) 1,2,3-Trichlorobenzene    | 13.963 | 180  | 15587    | 5.547   | ug/l  | 99       |

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

