

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_X\Data\VX112822\  
 Data File : VX033095.D  
 Acq On : 28 Nov 2022 17:24  
 Operator : JC/MD  
 Sample : VX1128WBSD02  
 Misc : 5.0mL/MSVOA\_X/WATER  
 ALS Vial : 17 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 VX1128WBSD02

Manual Integrations  
 APPROVED

Reviewed By : John Carlone 11/29/2022  
 Supervised By : Mahesh Dadoda 11/29/2022

Quant Time: Nov 29 03:44:57 2022  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_X\Method\624X111022W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Fri Nov 11 05:24:06 2022  
 Response via : Initial Calibration

| Compound                     | R.T.   | QIon     | Response | Conc   | Units   | Dev(Min) |
|------------------------------|--------|----------|----------|--------|---------|----------|
| -----                        |        |          |          |        |         |          |
| Internal Standards           |        |          |          |        |         |          |
| 1) Bromochloromethane        | 4.898  | 128      | 11966    | 30.000 | ug/l    | 0.00     |
| 28) 1,4-Difluorobenzene      | 6.763  | 114      | 82147    | 30.000 | ug/l    | 0.00     |
| 57) Chlorobenzene-d5         | 10.055 | 117      | 91496    | 30.000 | ug/l    | 0.00     |
|                              |        |          |          |        |         |          |
| System Monitoring Compounds  |        |          |          |        |         |          |
| 27) 1,2-Dichloroethane-d4    | 5.958  | 65       | 33560    | 29.071 | ug/l    | 0.00     |
| Spiked Amount 30.000         | Range  | 91 - 110 | Recovery | =      | 96.900% |          |
| 60) 4-Bromofluorobenzene     | 11.079 | 95       | 51884    | 29.645 | ug/l    | 0.00     |
| Spiked Amount 30.000         | Range  | 63 - 112 | Recovery | =      | 98.800% |          |
| 63) Toluene-d8               | 8.647  | 98       | 90609    | 29.344 | ug/l    | 0.00     |
| Spiked Amount 30.000         | Range  | 91 - 112 | Recovery | =      | 97.800% |          |
|                              |        |          |          |        |         |          |
| Target Compounds             |        |          |          |        | Qvalue  |          |
| 2) Dichlorodifluoromethane   | 1.166  | 85       | 18874    | 17.822 | ug/l    | 99       |
| 3) Chloromethane             | 1.295  | 50       | 19879    | 18.916 | ug/l    | 99       |
| 4) Vinyl Chloride            | 1.374  | 62       | 22750    | 19.145 | ug/l    | 99       |
| 5) Bromomethane              | 1.618  | 94       | 14805    | 14.034 | ug/l    | 99       |
| 6) Chloroethane              | 1.691  | 64       | 17870    | 19.039 | ug/l    | 93       |
| 7) Trichlorofluoromethane    | 1.892  | 101      | 44541    | 19.445 | ug/l    | 98       |
| 8) Diethyl Ether             | 2.136  | 74       | 14221    | 19.201 | ug/l    | 71       |
| 9) 1,1,2-Trichlorotrifluo... | 2.337  | 101      | 23854    | 19.577 | ug/l    | 99       |
| 10) 1,1-Dichloroethene       | 2.319  | 96       | 22486    | 19.317 | ug/l    | 91       |
| 11) Methyl Iodide            | 2.453  | 142      | 20449    | 16.340 | ug/l    | 97       |
| 12) Methyl Acetate           | 2.709  | 43       | 33233    | 19.273 | ug/l    | 89       |
| 13) Acrolein                 | 2.239  | 56       | 22003    | 95.688 | ug/l    | 96       |
| 14) Acrylonitrile            | 3.069  | 53       | 58143    | 94.060 | ug/l    | 98       |
| 15) Acetone                  | 2.392  | 58       | 15357    | 95.539 | ug/l    | 94       |
| 16) Carbon Disulfide         | 2.514  | 76       | 56729    | 19.577 | ug/l    | 99       |
| 17) Allyl chloride           | 2.666  | 41       | 34963    | 18.903 | ug/l    | 88       |
| 18) Methylene Chloride       | 2.788  | 84       | 24923    | 18.565 | ug/l    | 93       |
| 19) trans-1,2-Dichloroethene | 3.093  | 96       | 23801    | 18.561 | ug/l #  | 79       |
| 20) Diisopropyl ether        | 3.757  | 45       | 76208    | 18.375 | ug/l    | 94       |
| 21) 1,1-Dichloroethane       | 3.611  | 63       | 44049    | 18.919 | ug/l    | 94       |
| 22) cis-1,2-Dichloroethene   | 4.495  | 96       | 28459    | 19.008 | ug/l    | 87       |
| 23) tert-Butyl Alcohol       | 2.995  | 59       | 19365    | 96.483 | ug/l #  | 100      |
| 24) Methyl tert-Butyl Ether  | 3.111  | 73       | 78096    | 18.736 | ug/l #  | 91       |
| 25) Chloroform               | 5.099  | 83       | 49335    | 18.999 | ug/l    | 100      |
| 26) Cyclohexane              | 5.471  | 56       | 38581    | 18.975 | ug/l #  | 85       |
| 29) 1,1-Dichloropropene      | 5.696  | 75       | 34980    | 19.200 | ug/l    | 96       |
| 30) 2-Butanone               | 4.562  | 43       | 79584    | 93.684 | ug/l    | 92       |
| 31) 2,2-Dichloropropane      | 4.477  | 77       | 35181    | 22.579 | ug/l    | 98       |
| 32) 1,1,1-Trichloroethane    | 5.385  | 97       | 44667    | 19.491 | ug/l    | 95       |
| 33) Carbon Tetrachloride     | 5.678  | 117      | 39753    | 19.756 | ug/l    | 94       |
| 34) Benzene                  | 6.038  | 78       | 100033   | 19.487 | ug/l    | 97       |
| 35) Methacrylonitrile        | 4.922  | 41       | 17610    | 18.303 | ug/l    | 93       |
| 36) 1,2-Dichloroethane       | 6.086  | 62       | 40765    | 19.290 | ug/l #  | 92       |
| 37) Trichloroethene          | 7.129  | 130      | 28047    | 19.530 | ug/l    | 87       |
| 38) Methylcyclohexane        | 7.385  | 83       | 40303    | 19.744 | ug/l    | 88       |
| 39) 1,2-Dichloropropane      | 7.434  | 63       | 24833    | 19.112 | ug/l    | 94       |
| 40) Dibromomethane           | 7.580  | 93       | 19065    | 19.217 | ug/l    | 97       |
| 41) Bromodichloromethane     | 7.824  | 83       | 38024    | 20.109 | ug/l    | 95       |
| 42) Vinyl Acetate            | 3.721  | 43       | 304815   | 93.382 | ug/l #  | 91       |

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 Misc : 5.0mL/MSVOA\_X/WATER  
 ALS Vial : 17 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 VX1128WBSD02

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 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Fri Nov 11 05:24:06 2022  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc    | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|---------|--------|----------|
| 43) Ethyl Acetate             | 4.715  | 43   | 32533    | 19.038  | ug/l # | 87       |
| 44) Isopropyl Acetate         | 6.342  | 43   | 54084    | 18.886  | ug/l   | 95       |
| 45) 1,4-Dioxane               | 7.702  | 88   | 11395    | 414.258 | ug/l # | 90       |
| 46) Methyl methacrylate       | 7.696  | 41   | 27456    | 19.045  | ug/l   | 85       |
| 47) n-amyl Acetate            | 10.842 | 43   | 46313    | 18.192  | ug/l   | 97       |
| 48) t-1,3-Dichloropropene     | 8.976  | 75   | 36563    | 18.848  | ug/l   | 99       |
| 49) cis-1,3-Dichloropropene   | 8.366  | 75   | 39721    | 19.391  | ug/l # | 87       |
| 50) 1,1,2-Trichloroethane     | 9.153  | 97   | 27180    | 19.926  | ug/l   | 96       |
| 51) Ethyl methacrylate        | 9.116  | 69   | 38679    | 18.987  | ug/l   | 82       |
| 52) 1,3-Dichloropropane       | 9.311  | 76   | 43363    | 19.445  | ug/l   | 98       |
| 53) Dibromochloromethane      | 9.519  | 129  | 29396    | 19.817  | ug/l   | 99       |
| 54) 1,2-Dibromoethane         | 9.610  | 107  | 28591    | 19.459  | ug/l   | 100      |
| 55) 2-Chloroethyl vinyl ether | 8.244  | 63   | 93880    | 95.362  | ug/l   | 94       |
| 56) Bromoform                 | 10.799 | 173  | 20569    | 19.367  | ug/l   | 100      |
| 58) 4-Methyl-2-Pentanone      | 8.574  | 43   | 170790   | 95.355  | ug/l # | 91       |
| 59) 2-Hexanone                | 9.433  | 43   | 126741   | 96.107  | ug/l   | 92       |
| 61) Tetrachloroethene         | 9.275  | 164  | 24789    | 19.386  | ug/l   | 95       |
| 62) Toluene                   | 8.720  | 91   | 114081   | 19.172  | ug/l   | 99       |
| 64) Chlorobenzene             | 10.079 | 112  | 70087    | 19.052  | ug/l   | 99       |
| 65) 1,1,1,2-Tetrachloroethane | 10.165 | 131  | 26595    | 18.978  | ug/l   | 99       |
| 66) Ethyl Benzene             | 10.195 | 91   | 128027   | 19.179  | ug/l   | 97       |
| 67) m/p-Xylenes               | 10.299 | 106  | 97960    | 37.716  | ug/l   | 88       |
| 68) o-Xylene                  | 10.640 | 106  | 48422    | 19.000  | ug/l   | 90       |
| 69) Styrene                   | 10.659 | 104  | 80030    | 18.888  | ug/l   | 94       |
| 70) Isopropylbenzene          | 10.963 | 105  | 130165   | 19.126  | ug/l   | 97       |
| 71) 1,1,2,2-Tetrachloroethane | 11.213 | 83   | 39899    | 19.332  | ug/l   | 99       |
| 72) 1,2,3-Trichloropropane    | 11.238 | 75   | 36806m   | 20.533  | ug/l   |          |
| 73) Bromobenzene              | 11.201 | 156  | 31474    | 19.037  | ug/l   | 88       |
| 74) n-propylbenzene           | 11.305 | 91   | 149042   | 19.275  | ug/l   | 96       |
| 75) 2-Chlorotoluene           | 11.366 | 91   | 90481    | 19.326  | ug/l   | 93       |
| 76) 1,3,5-Trimethylbenzene    | 11.451 | 105  | 111087   | 19.308  | ug/l   | 97       |
| 77) t-1,4-Dichloro-2-butene   | 11.018 | 75   | 10461    | 19.125  | ug/l   | 89       |
| 78) 4-Chlorotoluene           | 11.457 | 91   | 104192   | 19.320  | ug/l   | 94       |
| 79) tert-butylbenzene         | 11.713 | 119  | 105680   | 18.902  | ug/l   | 93       |
| 80) 1,2,4-Trimethylbenzene    | 11.750 | 105  | 109604   | 19.484  | ug/l   | 94       |
| 81) sec-Butylbenzene          | 11.890 | 105  | 131981   | 19.607  | ug/l   | 95       |
| 82) p-Isopropyltoluene        | 12.012 | 119  | 111462   | 19.649  | ug/l   | 96       |
| 83) 1,3-Dichlorobenzene       | 11.969 | 146  | 58939    | 19.431  | ug/l   | 97       |
| 84) 1,4-Dichlorobenzene       | 12.043 | 146  | 59397    | 19.500  | ug/l   | 99       |
| 85) n-Butylbenzene            | 12.335 | 91   | 92243    | 19.185  | ug/l   | 94       |
| 86) Hexachloroethane          | 12.536 | 117  | 17791    | 19.104  | ug/l   | 98       |
| 87) 1,2-Dichlorobenzene       | 12.335 | 146  | 58488    | 19.397  | ug/l   | 97       |
| 88) 1,2-Dibromo-3-Chloropr... | 12.945 | 75   | 8691     | 19.848  | ug/l # | 81       |
| 89) 1,2,4-Trichlorobenzene    | 13.585 | 180  | 34830    | 18.808  | ug/l   | 99       |
| 90) Hexachlorobutadiene       | 13.725 | 225  | 14699    | 19.721  | ug/l   | 98       |
| 91) Naphthalene               | 13.774 | 128  | 118836   | 19.012  | ug/l   | 98       |
| 92) 1,2,3-Trichlorobenzene    | 13.963 | 180  | 34733    | 18.648  | ug/l   | 98       |

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

