

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN090822\  
 Data File : VN074358.D  
 Acq On : 08 Sep 2022 14:51  
 Operator : JC\MD  
 Sample : VSTDICV020  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 ICSVN090822

Quant Time: Sep 09 05:28:00 2022  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N090822W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Fri Sep 09 05:24:20 2022  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

|      | Compound                    | AvgRF | CCRF  | %Dev   | Area% | Dev(min) |
|------|-----------------------------|-------|-------|--------|-------|----------|
| 1 I  | Bromochloromethane          | 1.000 | 1.000 | 0.0    | 104   | 0.00     |
| 2 M  | Dichlorodifluoromethane     | 2.124 | 2.116 | 0.4    | 98    | 0.00     |
| 3 M  | Chloromethane               | 2.927 | 2.845 | 2.8    | 93    | 0.00     |
| 4 M  | Vinyl Chloride              | 3.130 | 3.110 | 0.6    | 99    | 0.00     |
| 5 M  | Bromomethane                | 1.929 | 2.478 | -28.5# | 112   | 0.00     |
| 6 M  | Chloroethane                | 2.122 | 2.280 | -7.4   | 106   | 0.00     |
| 7 M  | Trichlorofluoromethane      | 3.541 | 3.466 | 2.1    | 96    | 0.00     |
| 8 T  | Diethyl Ether               | 1.476 | 1.451 | 1.7    | 94    | 0.00     |
| 9    | 1,1,2-Trichlorotrifluoroeth | 2.072 | 2.108 | -1.7   | 102   | 0.00     |
| 10 M | 1,1-Dichloroethene          | 2.000 | 1.989 | 0.5    | 96    | 0.00     |
| 11   | Methyl Iodide               | 2.455 | 2.414 | 1.7    | 96    | 0.00     |
| 12   | Methyl Acetate              | 4.345 | 4.257 | 2.0    | 101   | 0.00     |
| 13 M | Acrolein                    | 0.586 | 0.567 | 3.2    | 100   | 0.00     |
| 14 M | Acrylonitrile               | 1.684 | 1.692 | -0.5   | 101   | 0.00     |
| 15 M | Acetone                     | 0.446 | 0.453 | -1.6   | 100   | 0.00     |
| 16 M | Carbon Disulfide            | 5.730 | 5.768 | -0.7   | 100   | 0.00     |
| 17   | Allyl chloride              | 4.318 | 4.233 | 2.0    | 99    | 0.00     |
| 18 M | Methylene Chloride          | 2.545 | 2.544 | 0.0    | 103   | 0.00     |
| 19 M | trans-1,2-Dichloroethene    | 2.286 | 2.230 | 2.4    | 99    | 0.00     |
| 20 T | Diisopropyl ether           | 8.892 | 8.880 | 0.1    | 98    | 0.00     |
| 21 M | 1,1-Dichloroethane          | 4.671 | 4.573 | 2.1    | 97    | 0.00     |
| 22 M | cis-1,2-Dichloroethene      | 2.779 | 2.654 | 4.5    | 95    | 0.00     |
| 23 M | tert-Butyl Alcohol          | 0.729 | 0.770 | -5.6   | 102   | 0.00     |
| 24 M | Methyl tert-Butyl Ether     | 8.413 | 8.271 | 1.7    | 98    | 0.00     |
| 25 M | Chloroform                  | 4.745 | 4.643 | 2.1    | 97    | 0.00     |
| 26   | Cyclohexane                 | 4.287 | 4.244 | 1.0    | 96    | 0.00     |
| 27 s | 1,2-Dichloroethane-d4       | 3.080 | 3.169 | -2.9   | 98    | 0.00     |
| 28 I | 1,4-Difluorobenzene         | 1.000 | 1.000 | 0.0    | 101   | 0.00     |
| 29   | 1,1-Dichloropropene         | 0.596 | 0.576 | 3.4    | 97    | 0.00     |
| 30 M | 2-Butanone                  | 0.422 | 0.433 | -2.6   | 100   | 0.00     |
| 31   | 2,2-Dichloropropane         | 0.730 | 0.718 | 1.6    | 95    | 0.00     |
| 32 M | 1,1,1-Trichloroethane       | 0.735 | 0.698 | 5.0    | 96    | 0.00     |
| 33 M | Carbon Tetrachloride        | 0.636 | 0.596 | 6.3    | 97    | 0.00     |
| 34 M | Benzene                     | 1.833 | 1.783 | 2.7    | 96    | 0.00     |
| 35   | Methacrylonitrile           | 0.388 | 0.420 | -8.2   | 112   | 0.00     |
| 36 M | 1,2-Dichloroethane          | 0.671 | 0.645 | 3.9    | 95    | 0.00     |
| 37 M | Trichloroethene             | 0.421 | 0.398 | 5.5    | 96    | 0.00     |
| 38   | Methylcyclohexane           | 0.751 | 0.723 | 3.7    | 99    | 0.00     |
| 39 M | 1,2-Dichloropropane         | 0.472 | 0.466 | 1.3    | 97    | 0.00     |
| 40   | Dibromomethane              | 0.329 | 0.324 | 1.5    | 100   | 0.00     |
| 41 M | Bromodichloromethane        | 0.653 | 0.631 | 3.4    | 96    | 0.00     |
| 42 M | Vinyl Acetate               | 1.394 | 1.366 | 2.0    | 97    | 0.00     |
| 43   | Ethyl Acetate               | 0.838 | 0.822 | 1.9    | 94    | 0.00     |
| 44   | Isopropyl Acetate           | 1.332 | 1.324 | 0.6    | 99    | 0.00     |
| 45 T | 1,4-Dioxane                 | 0.012 | 0.013 | -8.3   | 101   | 0.00     |
| 46   | Methyl methacrylate         | 0.570 | 0.558 | 2.1    | 98    | 0.00     |
| 47   | n-amyl Acetate              | 1.211 | 1.169 | 3.5    | 97    | 0.00     |
| 48 M | t-1,3-Dichloropropene       | 0.762 | 0.710 | 6.8    | 96    | 0.00     |

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Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 ICVVN090822

Quant Time: Sep 09 05:28:00 2022  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N090822W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Fri Sep 09 05:24:20 2022  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

|      | Compound                    | AvgRF | CCRF  | %Dev | Area% | Dev(min) |
|------|-----------------------------|-------|-------|------|-------|----------|
| 49 T | cis-1,3-Dichloropropene     | 0.778 | 0.747 | 4.0  | 98    | 0.00     |
| 50 M | 1,1,2-Trichloroethane       | 0.465 | 0.447 | 3.9  | 99    | 0.00     |
| 51   | Ethyl methacrylate          | 0.827 | 0.813 | 1.7  | 99    | 0.00     |
| 52   | 1,3-Dichloropropane         | 0.806 | 0.795 | 1.4  | 98    | 0.00     |
| 53 M | Dibromochloromethane        | 0.500 | 0.463 | 7.4  | 95    | 0.00     |
| 54 M | 1,2-Dibromoethane           | 0.487 | 0.465 | 4.5  | 97    | 0.00     |
| 55 M | 2-Chloroethyl vinyl ether   | 0.397 | 0.368 | 7.3  | 96    | 0.00     |
| 56 M | Bromoform                   | 0.381 | 0.343 | 10.0 | 100   | 0.00     |
| 57 I | Chlorobenzene-d5            | 1.000 | 1.000 | 0.0  | 102   | 0.00     |
| 58 M | 4-Methyl-2-Pentanone        | 0.932 | 0.910 | 2.4  | 95    | 0.00     |
| 59 M | 2-Hexanone                  | 0.727 | 0.723 | 0.6  | 98    | 0.00     |
| 60 S | 4-Bromofluorobenzene        | 0.600 | 0.590 | 1.7  | 101   | 0.00     |
| 61 M | Tetrachloroethene           | 0.372 | 0.346 | 7.0  | 96    | 0.00     |
| 62 M | Toluene                     | 2.169 | 2.103 | 3.0  | 98    | 0.00     |
| 63 S | Toluene-d8                  | 1.685 | 1.677 | 0.5  | 100   | 0.00     |
| 64 M | Chlorobenzene               | 1.284 | 1.227 | 4.4  | 98    | 0.00     |
| 65   | 1,1,1,2-Tetrachloroethane   | 0.486 | 0.471 | 3.1  | 97    | 0.00     |
| 66 M | Ethyl Benzene               | 2.399 | 2.326 | 3.0  | 97    | 0.00     |
| 67 M | m/p-Xylenes                 | 0.915 | 0.882 | 3.6  | 96    | 0.00     |
| 68 M | o-Xylene                    | 0.934 | 0.902 | 3.4  | 98    | 0.00     |
| 69 M | Styrene                     | 1.544 | 1.436 | 7.0  | 98    | 0.00     |
| 70   | Isopropylbenzene            | 2.424 | 2.290 | 5.5  | 96    | 0.00     |
| 71 M | 1,1,2,2-Tetrachloroethane   | 0.845 | 0.814 | 3.7  | 98    | 0.00     |
| 72   | 1,2,3-Trichloropropane      | 0.694 | 0.748 | -7.8 | 112   | 0.00     |
| 73   | Bromobenzene                | 0.526 | 0.495 | 5.9  | 101   | 0.00     |
| 74   | n-propylbenzene             | 2.818 | 2.648 | 6.0  | 98    | 0.00     |
| 75   | 2-Chlorotoluene             | 1.682 | 1.599 | 4.9  | 98    | 0.00     |
| 76   | 1,3,5-Trimethylbenzene      | 2.039 | 1.931 | 5.3  | 99    | 0.00     |
| 77   | t-1,4-Dichloro-2-butene     | 0.307 | 0.284 | 7.5  | 95    | 0.00     |
| 78   | 4-Chlorotoluene             | 1.655 | 1.541 | 6.9  | 99    | 0.00     |
| 79   | tert-butylbenzene           | 1.813 | 1.684 | 7.1  | 96    | 0.00     |
| 80   | 1,2,4-Trimethylbenzene      | 2.052 | 1.907 | 7.1  | 96    | 0.00     |
| 81   | sec-Butylbenzene            | 2.528 | 2.389 | 5.5  | 101   | 0.00     |
| 82   | p-Isopropyltoluene          | 2.090 | 1.949 | 6.7  | 101   | 0.00     |
| 83 M | 1,3-Dichlorobenzene         | 0.989 | 0.926 | 6.4  | 102   | 0.00     |
| 84 M | 1,4-Dichlorobenzene         | 0.980 | 0.908 | 7.3  | 101   | 0.00     |
| 85   | n-Butylbenzene              | 1.834 | 1.603 | 12.6 | 96    | 0.00     |
| 86 T | Hexachloroethane            | 0.408 | 0.391 | 4.2  | 101   | 0.00     |
| 87 M | 1,2-Dichlorobenzene         | 1.023 | 0.953 | 6.8  | 100   | 0.00     |
| 88   | 1,2-Dibromo-3-Chloropropane | 0.207 | 0.196 | 5.3  | 96    | 0.00     |
| 89   | 1,2,4-Trichlorobenzene      | 0.535 | 0.480 | 10.3 | 101   | 0.00     |
| 90   | Hexachlorobutadiene         | 0.228 | 0.204 | 10.5 | 95    | 0.00     |
| 91 M | Naphthalene                 | 2.143 | 1.961 | 8.5  | 99    | 0.00     |
| 92   | 1,2,3-Trichlorobenzene      | 0.543 | 0.498 | 8.3  | 105   | 0.00     |

(#) = Out of Range

SPCC's out = 0 CCC's out = 0