

Data Path : Z:\voasrv\HPCHEM1\MSVOA X\Data\VX050820\  
 Data File : VX016136.D  
 Acq On : 08 May 2020 20:59  
 Operator : JC/SP  
 Sample : VSTDCCC020  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 29 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 LabSampleId :  
 VSTDCCC020

Quant Time: May 09 05:42:45 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA X\METHOD\624X043020W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Thu Apr 30 12:42:44 2020  
 Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 30% Max. Rel. Area : 150%

|      | Compound                    | AvqRF | CCRF   | %Dev  | Area% | Dev(min) |
|------|-----------------------------|-------|--------|-------|-------|----------|
| 1 I  | Bromochloromethane          | 1.000 | 1.000  | 0.0   | 99    | 0.00     |
| 2 M  | Dichlorodifluoromethane     | 2.066 | 2.044  | 1.1   | 96    | 0.00     |
| 3 M  | Chloromethane               | 2.025 | 1.885  | 6.9   | 93    | 0.00     |
| 4 M  | Vinyl Chloride              | 2.300 | 2.113  | 8.1   | 94    | 0.00     |
| 5 M  | Bromomethane                | 1.410 | 1.057  | 25.0  | 69    | 0.00     |
| 6 M  | Chloroethane                | 1.508 | 1.262  | 16.3  | 85    | 0.00     |
| 7 M  | Trichlorofluoromethane      | 3.295 | 2.682  | 18.6  | 84    | 0.00     |
| 8 T  | Diethyl Ether               | 1.315 | 1.055  | 19.8  | 85    | 0.00     |
| 9    | 1,1,2-Trichlorotrifluoroeth | 1.701 | 1.509  | 11.3  | 94    | 0.00     |
| 10 M | 1,1-Dichloroethene          | 1.717 | 1.540  | 10.3  | 94    | 0.00     |
| 11   | Methyl Iodide               | 2.344 | 1.321  | 43.6# | 62    | 0.00     |
| 12   | Methyl Acetate              | 2.997 | 2.937  | 2.0   | 100   | 0.00     |
| 13 M | Acrolein                    | 0.240 | 0.130  | 45.8# | 66    | 0.00     |
| 14 M | Acrylonitrile               | 1.107 | 1.064  | 3.9   | 103   | 0.00     |
| 15 M | Acetone                     | 0.293 | 0.296  | -1.0  | 109   | 0.00     |
| 16 M | Carbon Disulfide            | 5.222 | 4.748  | 9.1   | 97    | 0.00     |
| 17   | Allyl chloride              | 3.185 | 2.857  | 10.3  | 94    | 0.00     |
| 18 M | Methylene Chloride          | 1.923 | 1.799  | 6.4   | 100   | 0.00     |
| 19 M | trans-1,2-Dichloroethene    | 1.878 | 1.717  | 8.6   | 98    | 0.00     |
| 20 T | Diisopropyl ether           | 6.140 | 5.554  | 9.5   | 96    | 0.00     |
| 21 M | 1,1-Dichloroethane          | 3.424 | 3.172  | 7.4   | 98    | 0.00     |
| 22 M | cis-1,2-Dichloroethene      | 2.131 | 1.952  | 8.4   | 99    | 0.00     |
| 23 M | tert-Butyl Alcohol          | 0.542 | 0.497  | 8.3   | 98    | 0.00     |
| 24 M | Methyl tert-Butyl Ether     | 6.165 | 5.639  | 8.5   | 97    | 0.00     |
| 25 M | Chloroform                  | 3.477 | 3.159  | 9.1   | 97    | 0.00     |
| 26   | Cyclohexane                 | 3.131 | 2.868  | 8.4   | 97    | 0.00     |
| 27 s | 1,2-Dichloroethane-d4       | 2.306 | 2.267  | 1.7   | 95    | 0.00     |
| 28 I | 1,4-Difluorobenzene         | 1.000 | 1.000  | 0.0   | 101   | 0.00     |
| 29   | 1,1-Dichloropropene         | 0.472 | 0.425  | 10.0  | 99    | 0.00     |
| 30 M | 2-Butanone                  | 0.281 | 0.261  | 7.1   | 101   | 0.00     |
| 31   | 2,2-Dichloropropane         | 0.568 | 0.439  | 22.7  | 84    | 0.00     |
| 32 M | 1,1,1-Trichloroethane       | 0.572 | 0.496  | 13.3  | 94    | 0.00     |
| 33 M | Carbon Tetrachloride        | 0.510 | 0.436  | 14.5  | 94    | 0.00     |
| 34 M | Benzene                     | 1.378 | 1.265  | 8.2   | 100   | 0.00     |
| 35   | Methacrylonitrile           | 0.299 | 0.270  | 9.7   | 99    | 0.00     |
| 36 M | 1,2-Dichloroethane          | 0.526 | 0.447  | 15.0  | 92    | 0.00     |
| 37 M | Trichloroethene             | 0.490 | 0.390  | 20.4  | 83    | 0.00     |
| 38   | Methylcyclohexane           | 0.577 | 0.497  | 13.9  | 95    | 0.00     |
| 39 M | 1,2-Dichloropropane         | 0.354 | 0.328  | 7.3   | 102   | 0.00     |
| 40   | Dibromomethane              | 0.246 | 0.218  | 11.4  | 96    | 0.00     |
| 41 M | Bromodichloromethane        | 0.506 | 0.443  | 12.5  | 98    | 0.00     |
| 42 M | Vinyl Acetate               | 0.930 | 0.813  | 12.6  | 97    | 0.00     |
| 43   | Ethyl Acetate               | 0.555 | 0.498  | 10.3  | 98    | 0.00     |
| 44   | Isopropyl Acetate           | 0.900 | 0.791  | 12.1  | 96    | 0.00     |
| 45 T | 1,4-Dioxane                 | 0.010 | 0.009# | 10.0  | 99    | 0.00     |

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 Max. RRF Dev : 30% Max. Rel. Area : 150%

|      | Compound                    | AvqRF | CCRF  | %Dev  | Area% | Dev(min) |
|------|-----------------------------|-------|-------|-------|-------|----------|
| 46   | Methyl methacrylate         | 0.427 | 0.373 | 12.6  | 97    | 0.00     |
| 47   | n-amyl Acetate              | 0.787 | 0.663 | 15.8  | 95    | 0.00     |
| 48 M | t-1,3-Dichloropropene       | 0.588 | 0.506 | 13.9  | 97    | 0.00     |
| 49 T | cis-1,3-Dichloropropene     | 0.608 | 0.541 | 11.0  | 98    | 0.00     |
| 50 M | 1,1,2-Trichloroethane       | 0.346 | 0.312 | 9.8   | 100   | 0.00     |
| 51   | Ethyl methacrylate          | 0.572 | 0.501 | 12.4  | 100   | 0.00     |
| 52   | 1,3-Dichloropropane         | 0.598 | 0.545 | 8.9   | 100   | 0.00     |
| 53 M | Dibromochloromethane        | 0.394 | 0.339 | 14.0  | 98    | 0.00     |
| 54 M | 1,2-Dibromoethane           | 0.380 | 0.335 | 11.8  | 99    | 0.00     |
| 55 M | 2-Chloroethyl vinyl ether   | 0.311 | 0.293 | 5.8   | 108   | 0.00     |
| 56 M | Bromoform                   | 0.297 | 0.255 | 14.1  | 101   | 0.00     |
| 57 I | Chlorobenzene-d5            | 1.000 | 1.000 | 0.0   | 101   | 0.00     |
| 58 M | 4-Methyl-2-Pentanone        | 0.592 | 0.543 | 8.3   | 100   | 0.00     |
| 59 M | 2-Hexanone                  | 0.457 | 0.414 | 9.4   | 99    | 0.00     |
| 60 S | 4-Bromofluorobenzene        | 0.503 | 0.498 | 1.0   | 101   | 0.00     |
| 61 M | Tetrachloroethene           | 0.593 | 0.483 | 18.5  | 84    | 0.00     |
| 62 M | Toluene                     | 1.603 | 1.457 | 9.1   | 99    | 0.00     |
| 63 S | Toluene-d8                  | 1.287 | 1.304 | -1.3  | 100   | 0.00     |
| 64 M | Chlorobenzene               | 1.021 | 0.915 | 10.4  | 98    | 0.00     |
| 65   | 1,1,1,2-Tetrachloroethane   | 0.387 | 0.345 | 10.9  | 99    | 0.00     |
| 66 M | Ethyl Benzene               | 1.825 | 1.643 | 10.0  | 98    | 0.00     |
| 67 M | m/p-Xylenes                 | 0.695 | 0.620 | 10.8  | 99    | 0.00     |
| 68 M | o-Xylene                    | 0.670 | 0.590 | 11.9  | 99    | 0.00     |
| 69 M | Styrene                     | 1.147 | 0.994 | 13.3  | 98    | 0.00     |
| 70   | Isopropylbenzene            | 1.810 | 1.586 | 12.4  | 97    | 0.00     |
| 71 M | 1,1,2,2-Tetrachloroethane   | 0.336 | 0.411 | -22.3 | 169#  | 0.00     |
| 72   | 1,2,3-Trichloropropane      | 0.545 | 0.493 | 9.5   | 100   | 0.00     |
| 73   | Bromobenzene                | 0.456 | 0.393 | 13.8  | 96    | 0.00     |
| 74   | n-propylbenzene             | 2.102 | 1.847 | 12.1  | 98    | 0.00     |
| 75   | 2-Chlorotoluene             | 1.236 | 1.106 | 10.5  | 100   | 0.00     |
| 76   | 1,3,5-Trimethylbenzene      | 1.536 | 1.323 | 13.9  | 97    | 0.00     |
| 77   | t-1,4-Dichloro-2-butene     | 0.234 | 0.194 | 17.1  | 95    | 0.00     |
| 78   | 4-Chlorotoluene             | 1.462 | 1.287 | 12.0  | 99    | 0.00     |
| 79   | tert-butylbenzene           | 1.312 | 1.163 | 11.4  | 101   | 0.00     |
| 80   | 1,2,4-Trimethylbenzene      | 1.535 | 1.336 | 13.0  | 98    | 0.00     |
| 81   | sec-Butylbenzene            | 1.770 | 1.517 | 14.3  | 96    | 0.00     |
| 82   | p-Isopropyltoluene          | 1.640 | 1.410 | 14.0  | 97    | 0.00     |
| 83 M | 1,3-Dichlorobenzene         | 0.822 | 0.710 | 13.6  | 98    | 0.00     |
| 84 M | 1,4-Dichlorobenzene         | 0.817 | 0.714 | 12.6  | 99    | 0.00     |
| 85   | n-Butylbenzene              | 1.498 | 1.251 | 16.5  | 96    | 0.00     |
| 86 T | Hexachloroethane            | 0.289 | 0.237 | 18.0  | 96    | 0.00     |
| 87 M | 1,2-Dichlorobenzene         | 0.795 | 0.694 | 12.7  | 97    | 0.00     |
| 88   | 1,2-Dibromo-3-Chloropropane | 0.141 | 0.127 | 9.9   | 104   | 0.00     |
| 89   | 1,2,4-Trichlorobenzene      | 0.586 | 0.501 | 14.5  | 96    | 0.00     |
| 90   | Hexachlorobutadiene         | 0.252 | 0.205 | 18.7  | 89    | 0.00     |

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|------|------------------------|-------|-------|------|-------|----------|
| 91 M | Naphthalene            | 1.865 | 1.681 | 9.9  | 100   | 0.00     |
| 92   | 1,2,3-Trichlorobenzene | 0.563 | 0.501 | 11.0 | 101   | 0.00     |

(#) = Out of Range

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