# Evaluate Continuing Calibration Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN082719\
Data File : VN057548.D
Acq On : 27 Aug 2019 12:00
Operator : JC/SP
Sample : VSTDCCC020
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

**Instrument :** MSVOA_N
**LabSampleId :** VSTDCCC020

Quant Time: Aug 27 12:35:15 2019
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_N\METHODS\624N082319W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Aug 23 23:15:31 2019
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 | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | Bromochloromethane | 1.000 | 1.000 | 0.0 | 92 | 0.00 |
| 2 | M | Dichlorodifluoromethane | 1.569 | 1.638 | -4.4 | 93 | 0.00 |
| 3 | M | Chloromethane | 2.357 | 2.474 | -5.0 | 94 | 0.00 |
| 4 | M | Vinyl Chloride | 2.994 | 3.163 | -5.6 | 91 | 0.00 |
| 5 | M | Bromomethane | 1.937 | 1.926 | 0.6 | 87 | 0.00 |
| 6 | M | Chloroethane | 2.005 | 1.949 | 2.8 | 86 | 0.00 |
| 7 | M | Trichlorofluoromethane | 4.762 | 4.820 | -1.2 | 89 | 0.00 |
| 8 | T | Diethyl Ether | 1.829 | 1.775 | 3.0 | 86 | 0.00 |
| 9 | | 1,1,2-Trichlorotrifluoroeth | 2.682 | 1.628 | 39.3# | 53 | 0.00 |
| 10 | M | 1,1-Dichloroethene | 2.589 | 1.500 | 42.1# | 53 | 0.00 |
| 11 | | Methyl Iodide | 2.328 | 2.138 | 8.2 | 98 | 0.00 |
| 12 | | Methyl Acetate | 2.609 | 2.615 | -0.2 | 95 | 0.00 |
| 13 | M | Acrolein | 0.332 | 0.302 | 9.0 | 81 | 0.00 |
| 14 | M | Acrylonitrile | 0.906 | 0.901 | 0.6 | 91 | 0.00 |
| 15 | M | Acetone | 0.424 | 0.249 | 41.3# | 47 | 0.00 |
| 16 | M | Carbon Disulfide | 4.612 | 4.623 | -0.2 | 93 | 0.00 |
| 17 | | Allyl chloride | 3.533 | 3.570 | -1.0 | 92 | 0.00 |
| 18 | M | Methylene Chloride | 1.899 | 2.117 | -11.5 | 102 | 0.00 |
| 19 | M | trans-1,2-Dichloroethene | 1.788 | 1.898 | -6.2 | 100 | 0.00 |
| 20 | T | Diisopropyl ether | 7.542 | 7.522 | 0.3 | 90 | 0.00 |
| 21 | M | 1,1-Dichloroethane | 3.919 | 3.996 | -2.0 | 92 | 0.00 |
| 22 | M | cis-1,2-Dichloroethene | 2.175 | 2.250 | -3.4 | 94 | 0.00 |
| 23 | M | tert-Butyl Alcohol | 0.329 | 0.318 | 3.3 | 89 | 0.00 |
| 24 | M | Methyl tert-Butyl Ether | 5.983 | 6.268 | -4.8 | 95 | 0.00 |
| 25 | M | Chloroform | 3.891 | 4.123 | -6.0 | 97 | 0.00 |
| 26 | | Cyclohexane | 3.490 | 3.519 | -0.8 | 92 | 0.00 |
| 27 | s | 1,2-Dichloroethane-d4 | 2.892 | 2.870 | 0.8 | 89 | 0.00 |
| 28 | I | 1,4-Difluorobenzene | 1.000 | 1.000 | 0.0 | 90 | 0.00 |
| 29 | | 1,1-Dichloropropene | 0.510 | 0.514 | -0.8 | 94 | 0.00 |
| 30 | M | 2-Butanone | 0.245 | 0.231 | 5.7 | 85 | 0.00 |
| 31 | | 2,2-Dichloropropane | 0.583 | 0.583 | 0.0 | 92 | 0.00 |
| 32 | M | 1,1,1-Trichloroethane | 0.583 | 0.595 | -2.1 | 95 | 0.00 |
| 33 | M | Carbon Tetrachloride | 0.484 | 0.469 | 3.1 | 91 | 0.00 |
| 34 | M | Benzene | 1.499 | 1.540 | -2.7 | 95 | 0.00 |
| 35 | | Methacrylonitrile | 0.248 | 0.224 | 9.7 | 80 | 0.00 |
| 36 | M | 1,2-Dichloroethane | 0.588 | 0.601 | -2.2 | 96 | 0.00 |
| 37 | M | Trichloroethene | 0.342 | 0.345 | -0.9 | 93 | 0.00 |
| 38 | | Methylcyclohexane | 0.572 | 0.562 | 1.7 | 93 | 0.00 |
| 39 | M | 1,2-Dichloropropane | 0.426 | 0.430 | -0.9 | 93 | 0.00 |
| 40 | | Dibromomethane | 0.261 | 0.274 | -5.0 | 98 | 0.00 |
| 41 | M | Bromodichloromethane | 0.553 | 0.529 | 4.3 | 92 | 0.00 |
| 42 | M | Vinyl Acetate | 1.097 | 1.020 | 7.0 | 86 | 0.00 |
| 43 | | Ethyl Acetate | 0.477 | 0.469 | 1.7 | 91 | 0.00 |
| 44 | | Isopropyl Acetate | 0.911 | 0.850 | 6.7 | 87 | 0.00 |
| 45 | T | 1,4-Dioxane | 0.005 | 0.006# | -20.0 | 96 | 0.00 |

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**LabSampleId :** VSTDCCC020

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| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 46 | | Methyl methacrylate | 0.433 | 0.393 | 9.2 | 86 | 0.00 |
| 47 | | n-amyl Acetate | 0.733 | 0.611 | 16.6 | 83 | 0.00 |
| 48 | M | t-1,3-Dichloropropene | 0.584 | 0.513 | 12.2 | 86 | 0.00 |
| 49 | T | cis-1,3-Dichloropropene | 0.642 | 0.601 | 6.4 | 89 | 0.00 |
| 50 | M | 1,1,2-Trichloroethane | 0.342 | 0.352 | -2.9 | 95 | 0.00 |
| 51 | | Ethyl methacrylate | 0.568 | 0.528 | 7.0 | 90 | 0.00 |
| 52 | | 1,3-Dichloropropane | 0.623 | 0.615 | 1.3 | 91 | 0.00 |
| 53 | M | Dibromochloromethane | 0.364 | 0.325 | 10.7 | 85 | 0.00 |
| 54 | M | 1,2-Dibromoethane | 0.350 | 0.340 | 2.9 | 94 | 0.00 |
| 55 | M | 2-Chloroethyl vinyl ether | 0.140 | 0.136 | 2.9 | 107 | 0.00 |
| 56 | M | Bromoform | 0.217 | 0.176 | 18.9 | 82 | 0.00 |
| 57 | I | Chlorobenzene-d5 | 1.000 | 1.000 | 0.0 | 92 | 0.00 |
| 58 | M | 4-Methyl-2-Pentanone | 0.589 | 0.592 | -0.5 | 90 | 0.00 |
| 59 | M | 2-Hexanone | 0.408 | 0.397 | 2.7 | 87 | 0.00 |
| 60 | S | 4-Bromofluorobenzene | 0.495 | 0.479 | 3.2 | 93 | 0.00 |
| 61 | M | Tetrachloroethene | 0.344 | 0.379 | -10.2 | 98 | 0.00 |
| 62 | M | Toluene | 1.834 | 1.902 | -3.7 | 94 | 0.00 |
| 63 | S | Toluene-d8 | 1.515 | 1.552 | -2.4 | 91 | 0.00 |
| 64 | M | Chlorobenzene | 0.997 | 1.041 | -4.4 | 97 | 0.00 |
| 65 | | 1,1,1,2-Tetrachloroethane | 0.379 | 0.373 | 1.6 | 91 | 0.00 |
| 66 | M | Ethyl Benzene | 1.962 | 2.008 | -2.3 | 95 | 0.00 |
| 67 | M | m/p-Xylenes | 0.681 | 0.695 | -2.1 | 95 | 0.00 |
| 68 | M | o-Xylene | 0.673 | 0.674 | -0.1 | 91 | 0.00 |
| 69 | M | Styrene | 1.074 | 1.065 | 0.8 | 96 | 0.00 |
| 70 | | Isopropylbenzene | 1.799 | 1.827 | -1.6 | 95 | 0.00 |
| 71 | M | 1,1,2,2-Tetrachloroethane | 0.520 | 0.545 | -4.8 | 98 | 0.00 |
| 72 | | 1,2,3-Trichloropropane | 0.472 | 0.475 | -0.6 | 95 | 0.00 |
| 73 | | Bromobenzene | 0.364 | 0.365 | -0.3 | 97 | 0.00 |
| 74 | | n-propylbenzene | 2.052 | 2.005 | 2.3 | 95 | 0.00 |
| 75 | | 2-Chlorotoluene | 1.208 | 1.207 | 0.1 | 94 | 0.00 |
| 76 | | 1,3,5-Trimethylbenzene | 1.477 | 1.510 | -2.2 | 96 | 0.00 |
| 77 | | t-1,4-Dichloro-2-butene | 0.169 | 0.139 | 17.8 | 79 | 0.00 |
| 78 | | 4-Chlorotoluene | 1.142 | 1.112 | 2.6 | 98 | 0.00 |
| 79 | | tert-butylbenzene | 1.257 | 1.280 | -1.8 | 95 | 0.00 |
| 80 | | 1,2,4-Trimethylbenzene | 1.377 | 1.417 | -2.9 | 97 | 0.00 |
| 81 | | sec-Butylbenzene | 1.656 | 1.640 | 1.0 | 94 | 0.00 |
| 82 | | p-Isopropyltoluene | 1.392 | 1.332 | 4.3 | 95 | 0.00 |
| 83 | M | 1,3-Dichlorobenzene | 0.567 | 0.530 | 6.5 | 95 | 0.00 |
| 84 | M | 1,4-Dichlorobenzene | 0.552 | 0.519 | 6.0 | 99 | 0.00 |
| 85 | | n-Butylbenzene | 1.214 | 1.092 | 10.0 | 95 | 0.00 |
| 86 | T | Hexachloroethane | 0.281 | 0.242 | 13.9 | 82 | 0.00 |
| 87 | M | 1,2-Dichlorobenzene | 0.557 | 0.552 | 0.9 | 97 | 0.00 |
| 88 | | 1,2-Dibromo-3-Chloropropane | 0.087 | 0.077 | 11.5 | 91 | 0.00 |
| 89 | | 1,2,4-Trichlorobenzene | 0.209 | 0.149 | 28.7 | 105 | 0.00 |
| 90 | | Hexachlorobutadiene | 0.160 | 0.168 | -5.0 | 93 | 0.00 |

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|---|---|---|---|---|---|---|
| 91 M | Naphthalene | 0.675 | 0.484 | 28.3 | 93 | 0.00 |
| 92 | 1,2,3-Trichlorobenzene | 0.209 | 0.151 | 27.8 | 95 | 0.00 |

(#) = Out of Range SPCC's out = 0 CCC's out = 0