# Evaluate Continuing Calibration Report

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_N\DATA\VN071819\
Data File : VN056801.D
Acq On : 18 Jul 2019 9:22
Operator : JC/SP
Sample : VSTDCCC020
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

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

Quant Time: Jul 19 05:39:44 2019
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_N\METHODS\624N071319W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Jul 12 23:58:13 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 | 1.705 | 1.846 | -8.3 | 96 | 0.00 |
| 3 | M | Chloromethane | 2.280 | 2.386 | -4.6 | 94 | 0.00 |
| 4 | M | Vinyl Chloride | 2.242 | 2.322 | -3.6 | 93 | 0.00 |
| 5 | M | Bromomethane | 1.413 | 1.397 | 1.1 | 92 | 0.00 |
| 6 | M | Chloroethane | 1.281 | 1.302 | -1.6 | 93 | 0.00 |
| 7 | M | Trichlorofluoromethane | 2.876 | 3.037 | -5.6 | 95 | 0.00 |
| 8 | T | Diethyl Ether | 1.176 | 1.167 | 0.8 | 92 | 0.00 |
| 9 | | 1,1,2-Trichlorotrifluoroeth | 1.793 | 1.900 | -6.0 | 95 | 0.00 |
| 10 | M | 1,1-Dichloroethene | 1.769 | 1.801 | -1.8 | 94 | 0.00 |
| 11 | | Methyl Iodide | 2.351 | 2.192 | 6.8 | 89 | 0.00 |
| 12 | | Methyl Acetate | 2.368 | 2.135 | 9.8 | 91 | 0.00 |
| 13 | M | Acrolein | 0.167 | 0.162 | 3.0 | 100 | 0.00 |
| 14 | M | Acrylonitrile | 1.043 | 1.002 | 3.9 | 91 | 0.00 |
| 15 | M | Acetone | 0.360 | 0.398 | -10.6 | 87 | 0.00 |
| 16 | M | Carbon Disulfide | 4.667 | 4.626 | 0.9 | 95 | 0.00 |
| 17 | | Allyl chloride | 3.095 | 3.049 | 1.5 | 94 | 0.00 |
| 18 | M | Methylene Chloride | 2.077 | 2.100 | -1.1 | 94 | 0.00 |
| 19 | M | trans-1,2-Dichloroethene | 1.894 | 1.925 | -1.6 | 93 | 0.00 |
| 20 | T | Diisopropyl ether | 6.167 | 6.297 | -2.1 | 94 | 0.00 |
| 21 | M | 1,1-Dichloroethane | 3.524 | 3.587 | -1.8 | 94 | 0.00 |
| 22 | M | cis-1,2-Dichloroethene | 2.215 | 2.213 | 0.1 | 93 | 0.00 |
| 23 | M | tert-Butyl Alcohol | 0.364 | 0.352 | 3.3 | 92 | 0.00 |
| 24 | M | Methyl tert-Butyl Ether | 5.644 | 5.661 | -0.3 | 94 | 0.00 |
| 25 | M | Chloroform | 3.433 | 3.524 | -2.7 | 94 | 0.00 |
| 26 | | Cyclohexane | 3.275 | 3.362 | -2.7 | 94 | 0.00 |
| 27 | s | 1,2-Dichloroethane-d4 | 2.032 | 1.953 | 3.9 | 90 | 0.00 |
| 28 | I | 1,4-Difluorobenzene | 1.000 | 1.000 | 0.0 | 94 | 0.00 |
| 29 | | 1,1-Dichloropropene | 0.477 | 0.487 | -2.1 | 94 | 0.00 |
| 30 | M | 2-Butanone | 0.276 | 0.269 | 2.5 | 85 | 0.00 |
| 31 | | 2,2-Dichloropropane | 0.462 | 0.484 | -4.8 | 98 | 0.00 |
| 32 | M | 1,1,1-Trichloroethane | 0.508 | 0.526 | -3.5 | 96 | 0.00 |
| 33 | M | Carbon Tetrachloride | 0.437 | 0.453 | -3.7 | 96 | 0.00 |
| 34 | M | Benzene | 1.465 | 1.509 | -3.0 | 94 | 0.00 |
| 35 | | Methacrylonitrile | 0.211 | 0.209 | 0.9 | 104 | 0.00 |
| 36 | M | 1,2-Dichloroethane | 0.471 | 0.477 | -1.3 | 93 | 0.00 |
| 37 | M | Trichloroethene | 0.398 | 0.405 | -1.8 | 93 | 0.00 |
| 38 | | Methylcyclohexane | 0.602 | 0.633 | -5.1 | 96 | 0.00 |
| 39 | M | 1,2-Dichloropropane | 0.393 | 0.398 | -1.3 | 93 | 0.00 |
| 40 | | Dibromomethane | 0.251 | 0.254 | -1.2 | 94 | 0.00 |
| 41 | M | Bromodichloromethane | 0.462 | 0.474 | -2.6 | 96 | 0.00 |
| 42 | M | Vinyl Acetate | 0.919 | 0.929 | -1.1 | 93 | 0.00 |
| 43 | | Ethyl Acetate | 0.499 | 0.478 | 4.2 | 88 | 0.00 |
| 44 | | Isopropyl Acetate | 0.778 | 0.754 | 3.1 | 92 | 0.00 |
| 45 | T | 1,4-Dioxane | 0.008 | 0.008# | 0.0 | 88 | 0.00 |

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

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

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 46 | | Methyl methacrylate | 0.374 | 0.362 | 3.2 | 91 | 0.00 |
| 47 | | n-amyl Acetate | 0.636 | 0.589 | 7.4 | 91 | 0.00 |
| 48 | M | t-1,3-Dichloropropene | 0.508 | 0.504 | 0.8 | 96 | 0.00 |
| 49 | T | cis-1,3-Dichloropropene | 0.573 | 0.575 | -0.3 | 95 | 0.00 |
| 50 | M | 1,1,2-Trichloroethane | 0.365 | 0.367 | -0.5 | 94 | 0.00 |
| 51 | | Ethyl methacrylate | 0.561 | 0.545 | 2.9 | 92 | 0.00 |
| 52 | | 1,3-Dichloropropane | 0.611 | 0.621 | -1.6 | 92 | 0.00 |
| 53 | M | Dibromochloromethane | 0.369 | 0.376 | -1.9 | 98 | 0.00 |
| 54 | M | 1,2-Dibromoethane | 0.379 | 0.388 | -2.4 | 96 | 0.00 |
| 55 | M | 2-Chloroethyl vinyl ether | 0.271 | 0.248 | 8.5 | 86 | 0.00 |
| 56 | M | Bromoform | 0.273 | 0.269 | 1.5 | 97 | 0.00 |
| 57 | I | Chlorobenzene-d5 | 1.000 | 1.000 | 0.0 | 93 | 0.00 |
| 58 | M | 4-Methyl-2-Pentanone | 0.565 | 0.559 | 1.1 | 91 | 0.00 |
| 59 | M | 2-Hexanone | 0.429 | 0.421 | 1.9 | 87 | 0.00 |
| 60 | S | 4-Bromofluorobenzene | 0.459 | 0.454 | 1.1 | 92 | 0.00 |
| 61 | M | Tetrachloroethene | 0.431 | 0.464 | -7.7 | 96 | 0.00 |
| 62 | M | Toluene | 1.762 | 1.839 | -4.4 | 94 | 0.00 |
| 63 | S | Toluene-d8 | 1.371 | 1.400 | -2.1 | 92 | 0.00 |
| 64 | M | Chlorobenzene | 1.075 | 1.114 | -3.6 | 95 | 0.00 |
| 65 | | 1,1,1,2-Tetrachloroethane | 0.394 | 0.409 | -3.8 | 95 | 0.00 |
| 66 | M | Ethyl Benzene | 1.905 | 1.952 | -2.5 | 93 | 0.00 |
| 67 | M | m/p-Xylenes | 0.719 | 0.742 | -3.2 | 93 | 0.00 |
| 68 | M | o-Xylene | 0.701 | 0.726 | -3.6 | 96 | 0.00 |
| 69 | M | Styrene | 1.162 | 1.176 | -1.2 | 94 | 0.00 |
| 70 | | Isopropylbenzene | 1.838 | 1.895 | -3.1 | 93 | 0.00 |
| 71 | M | 1,1,2,2-Tetrachloroethane | 0.596 | 0.585 | 1.8 | 90 | 0.00 |
| 72 | | 1,2,3-Trichloropropane | 0.510 | 0.519 | -1.8 | 93 | 0.00 |
| 73 | | Bromobenzene | 0.480 | 0.487 | -1.5 | 94 | 0.00 |
| 74 | | n-propylbenzene | 2.073 | 2.130 | -2.7 | 93 | 0.00 |
| 75 | | 2-Chlorotoluene | 1.249 | 1.289 | -3.2 | 93 | 0.00 |
| 76 | | 1,3,5-Trimethylbenzene | 1.567 | 1.635 | -4.3 | 93 | 0.00 |
| 77 | | t-1,4-Dichloro-2-butene | 0.169 | 0.158 | 6.5 | 94 | 0.00 |
| 78 | | 4-Chlorotoluene | 1.211 | 1.214 | -0.2 | 92 | 0.00 |
| 79 | | tert-butylbenzene | 1.333 | 1.379 | -3.5 | 94 | 0.00 |
| 80 | | 1,2,4-Trimethylbenzene | 1.555 | 1.601 | -3.0 | 93 | 0.00 |
| 81 | | sec-Butylbenzene | 1.765 | 1.802 | -2.1 | 92 | 0.00 |
| 82 | | p-Isopropyltoluene | 1.605 | 1.660 | -3.4 | 93 | 0.00 |
| 83 | M | 1,3-Dichlorobenzene | 0.800 | 0.789 | 1.4 | 92 | 0.00 |
| 84 | M | 1,4-Dichlorobenzene | 0.767 | 0.744 | 3.0 | 91 | 0.00 |
| 85 | | n-Butylbenzene | 1.324 | 1.295 | 2.2 | 91 | 0.00 |
| 86 | T | Hexachloroethane | 0.252 | 0.263 | -4.4 | 98 | 0.00 |
| 87 | M | 1,2-Dichlorobenzene | 0.804 | 0.811 | -0.9 | 94 | 0.00 |
| 88 | | 1,2-Dibromo-3-Chloropropane | 0.103 | 0.099 | 3.9 | 94 | 0.00 |
| 89 | | 1,2,4-Trichlorobenzene | 0.433 | 0.365 | 15.7 | 88 | 0.00 |
| 90 | | Hexachlorobutadiene | 0.281 | 0.300 | -6.8 | 96 | 0.00 |

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| | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|
| 91 M | Naphthalene | 1.164 | 0.900 | 22.7 | 86 | 0.00 |
| 92 | 1,2,3-Trichlorobenzene | 0.454 | 0.395 | 13.0 | 89 | 0.00 |

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