# Evaluate Continuing Calibration Report

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_N\DATA\VN081719\
Data File : VN057357.D
Acq On : 16 Aug 2019 15:53
Operator : JC/SP
Sample : VSTDCCC020
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 14 Sample Multiplier: 1

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

Quant Time: Aug 19 09:13:24 2019
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_N\METHODS\624N081719W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Aug 16 15:42:00 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 | Amount | Calc. | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | Bromochloromethane | 30.000 | 30.000 | 0.0 | 88 | 0.00 |
| 2 | M | Dichlorodifluoromethane | 20.000 | 21.160 | -5.8 | 86 | 0.00 |
| 3 | M | Chloromethane | 20.000 | 20.676 | -3.4 | 89 | 0.00 |
| 4 | M | Vinyl Chloride | 20.000 | 21.165 | -5.8 | 90 | 0.00 |
| 5 | M | Bromomethane | 20.000 | 21.126 | -5.6 | 89 | 0.00 |
| 6 | M | Chloroethane | 20.000 | 20.826 | -4.1 | 89 | 0.00 |
| 7 | M | Trichlorofluoromethane | 20.000 | 20.510 | -2.6 | 87 | 0.00 |
| 8 | T | Diethyl Ether | 20.000 | 20.684 | -3.4 | 90 | 0.00 |
| 9 | | 1,1,2-Trichlorotrifluoroeth | 20.000 | 21.159 | -5.8 | 89 | 0.00 |
| 10 | M | 1,1-Dichloroethene | 20.000 | 21.109 | -5.5 | 91 | 0.00 |
| 11 | | Methyl Iodide | 20.000 | 20.316 | -1.6 | 89 | 0.00 |
| 12 | | Methyl Acetate | 20.000 | 20.323 | -1.6 | 91 | 0.00 |
| 13 | M | Acrolein | 100.000 | 109.248 | -9.2 | 106 | 0.00 |
| 14 | M | Acrylonitrile | 100.000 | 102.094 | -2.1 | 91 | 0.00 |
| 15 | M | Acetone | 100.000 | 91.897 | 8.1 | 76 | 0.00 |
| 16 | M | Carbon Disulfide | 20.000 | 20.262 | -1.3 | 90 | 0.00 |
| 17 | | Allyl chloride | 20.000 | 21.364 | -6.8 | 95 | 0.00 |
| 18 | M | Methylene Chloride | 20.000 | 20.608 | -3.0 | 89 | 0.00 |
| 19 | M | trans-1,2-Dichloroethene | 20.000 | 20.709 | -3.5 | 91 | 0.00 |
| 20 | T | Diisopropyl ether | 20.000 | 20.914 | -4.6 | 90 | 0.00 |
| 21 | M | 1,1-Dichloroethane | 20.000 | 20.723 | -3.6 | 89 | 0.00 |
| 22 | M | cis-1,2-Dichloroethene | 20.000 | 20.679 | -3.4 | 90 | 0.00 |
| 23 | M | tert-Butyl Alcohol | 100.000 | 100.480 | -0.5 | 91 | 0.00 |
| 24 | M | Methyl tert-Butyl Ether | 20.000 | 20.936 | -4.7 | 91 | 0.00 |
| 25 | M | Chloroform | 20.000 | 20.825 | -4.1 | 90 | 0.00 |
| 26 | | Cyclohexane | 20.000 | 20.447 | -2.2 | 88 | 0.00 |
| 27 | s | 1,2-Dichloroethane-d4 | 30.000 | 30.599 | -2.0 | 89 | 0.00 |
| 28 | I | 1,4-Difluorobenzene | 30.000 | 30.000 | 0.0 | 89 | 0.00 |
| 29 | | 1,1-Dichloropropene | 20.000 | 20.290 | -1.4 | 89 | 0.00 |
| 30 | M | 2-Butanone | 100.000 | 97.600 | 2.4 | 85 | 0.00 |
| 31 | | 2,2-Dichloropropane | 20.000 | 19.119 | 4.4 | 83 | 0.00 |
| 32 | M | 1,1,1-Trichloroethane | 20.000 | 20.471 | -2.4 | 88 | 0.00 |
| 33 | M | Carbon Tetrachloride | 20.000 | 20.132 | -0.7 | 89 | 0.00 |
| 34 | M | Benzene | 20.000 | 20.537 | -2.7 | 89 | 0.00 |
| 35 | | Methacrylonitrile | 20.000 | 17.341 | 13.3 | 90 | 0.00 |
| 36 | M | 1,2-Dichloroethane | 20.000 | 20.605 | -3.0 | 92 | 0.00 |
| 37 | M | Trichloroethene | 20.000 | 20.531 | -2.7 | 90 | 0.00 |
| 38 | | Methylcyclohexane | 20.000 | 19.889 | 0.6 | 87 | 0.00 |
| 39 | M | 1,2-Dichloropropane | 20.000 | 20.753 | -3.8 | 90 | 0.00 |
| 40 | | Dibromomethane | 20.000 | 20.748 | -3.7 | 91 | 0.00 |
| 41 | M | Bromodichloromethane | 20.000 | 20.199 | -1.0 | 89 | 0.00 |
| 42 | M | Vinyl Acetate | 100.000 | 102.179 | -2.2 | 89 | 0.00 |
| 43 | | Ethyl Acetate | 20.000 | 20.493 | -2.5 | 91 | 0.00 |
| 44 | | Isopropyl Acetate | 20.000 | 19.046 | 4.8 | 83 | -0.45 |
| 45 | T | 1,4-Dioxane | 400.000 | 407.288 | -1.8 | 92 | 0.00 |

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

| | | Compound | Amount | Calc. | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 46 | | Methyl methacrylate | 20.000 | 19.893 | 0.5 | 88 | 0.00 |
| 47 | | n-amyl Acetate | 20.000 | 18.487 | 7.6 | 88 | 0.00 |
| 48 | M | t-1,3-Dichloropropene | 20.000 | 19.853 | 0.7 | 88 | 0.00 |
| 49 | T | cis-1,3-Dichloropropene | 20.000 | 20.087 | -0.4 | 88 | 0.00 |
| 50 | M | 1,1,2-Trichloroethane | 20.000 | 20.541 | -2.7 | 90 | 0.00 |
| 51 | | Ethyl methacrylate | 20.000 | 19.755 | 1.2 | 89 | 0.00 |
| 52 | | 1,3-Dichloropropane | 20.000 | 20.763 | -3.8 | 90 | 0.00 |
| 53 | M | Dibromochloromethane | 20.000 | 20.393 | -2.0 | 90 | 0.00 |
| 54 | M | 1,2-Dibromoethane | 20.000 | 20.261 | -1.3 | 89 | 0.00 |
| 55 | M | 2-Chloroethyl vinyl ether | 100.000 | 88.122 | 11.9 | 88 | 0.00 |
| 56 | M | Bromoform | 20.000 | 19.349 | 3.3 | 91 | 0.00 |
| 57 | I | Chlorobenzene-d5 | 30.000 | 30.000 | 0.0 | 90 | 0.00 |
| 58 | M | 4-Methyl-2-Pentanone | 100.000 | 102.472 | -2.5 | 90 | 0.00 |
| 59 | M | 2-Hexanone | 100.000 | 98.223 | 1.8 | 87 | 0.00 |
| 60 | S | 4-Bromofluorobenzene | 30.000 | 28.012 | 6.6 | 86 | 0.00 |
| 61 | M | Tetrachloroethene | 20.000 | 20.311 | -1.6 | 85 | 0.00 |
| 62 | M | Toluene | 20.000 | 20.459 | -2.3 | 88 | 0.00 |
| 63 | S | Toluene-d8 | 30.000 | 30.716 | -2.4 | 90 | 0.00 |
| 64 | M | Chlorobenzene | 20.000 | 20.221 | -1.1 | 89 | 0.00 |
| 65 | | 1,1,1,2-Tetrachloroethane | 20.000 | 20.324 | -1.6 | 88 | 0.00 |
| 66 | M | Ethyl Benzene | 20.000 | 19.964 | 0.2 | 88 | 0.00 |
| 67 | M | m/p-Xylenes | 40.000 | 39.897 | 0.3 | 88 | 0.00 |
| 68 | M | o-Xylene | 20.000 | 19.959 | 0.2 | 87 | 0.00 |
| 69 | M | Styrene | 20.000 | 19.195 | 4.0 | 87 | 0.00 |
| 70 | | Isopropylbenzene | 20.000 | 20.079 | -0.4 | 88 | 0.00 |
| 71 | M | 1,1,2,2-Tetrachloroethane | 20.000 | 20.623 | -3.1 | 90 | 0.00 |
| 72 | | 1,2,3-Trichloropropane | 20.000 | 21.539 | -7.7 | 95 | 0.00 |
| 73 | | Bromobenzene | 20.000 | 18.987 | 5.1 | 87 | 0.00 |
| 74 | | n-propylbenzene | 20.000 | 18.746 | 6.3 | 86 | 0.00 |
| 75 | | 2-Chlorotoluene | 20.000 | 19.522 | 2.4 | 87 | 0.00 |
| 76 | | 1,3,5-Trimethylbenzene | 20.000 | 19.581 | 2.1 | 86 | 0.00 |
| 77 | | t-1,4-Dichloro-2-butene | 20.000 | 18.896 | 5.5 | 90 | 0.00 |
| 78 | | 4-Chlorotoluene | 20.000 | 18.407 | 8.0 | 88 | 0.00 |
| 79 | | tert-butylbenzene | 20.000 | 19.718 | 1.4 | 87 | 0.00 |
| 80 | | 1,2,4-Trimethylbenzene | 20.000 | 19.281 | 3.6 | 86 | 0.00 |
| 81 | | sec-Butylbenzene | 20.000 | 18.597 | 7.0 | 86 | 0.00 |
| 82 | | p-Isopropyltoluene | 20.000 | 18.265 | 8.7 | 87 | 0.00 |
| 83 | M | 1,3-Dichlorobenzene | 20.000 | 17.677 | 11.6 | 84 | 0.00 |
| 84 | M | 1,4-Dichlorobenzene | 20.000 | 17.249 | 13.8 | 86 | 0.00 |
| 85 | | n-Butylbenzene | 20.000 | 18.177 | 9.1 | 83 | 0.00 |
| 86 | T | Hexachloroethane | 20.000 | 19.105 | 4.5 | 88 | 0.00 |
| 87 | M | 1,2-Dichlorobenzene | 20.000 | 18.746 | 6.3 | 87 | 0.00 |
| 88 | | 1,2-Dibromo-3-Chloropropane | 20.000 | 18.392 | 8.0 | 92 | 0.00 |
| 89 | | 1,2,4-Trichlorobenzene | 20.000 | 11.936 | 40.3# | 80 | 0.00 |
| 90 | | Hexachlorobutadiene | 20.000 | 18.520 | 7.4 | 81 | 0.00 |

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| | Compound | Amount | Calc. | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|
| 91 M | Naphthalene | 20.000 | 11.181 | 44.1# | 86 | 0.00 |
| 92 | 1,2,3-Trichlorobenzene | 20.000 | 13.037 | 34.8# | 89 | 0.00 |

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