Calculation for Measurement Assurance of Section Balances

$U_{final} = \sqrt{N} \times U_{balance}$

Where:

U_{final} = Final uncertainty for the measurement process

$U_{balance}$ = Total Expanded Uncertainty for the balance

Coverage Factor (k)=3 for a 99.7% confidence interval

N = number of weighings

When N = 1 for a single weighing event this equation becomes:

$U_{final} = \sqrt{N} \times U_{balance}$

$U_{final} = \sqrt{1} \times U_{balance}$

Therefore

$U_{final} = U_{balance}$

For the North Carolina State Crime Laboratory Drug Chemistry Section, the current values for a single weighing event effective 01/01/2019 are:

Type of Balance	**$U_{balance}$**
Section Wide Table top	+/- 0.05 gram
Section Wide Analytical	+/- 0.0007 gram
Triad Lab Bulk	+/- 0.002 kilogram
Raleigh Lab Bulk	+/- 0.10 kilogram
Western Lab (2 pt) Bulk	+/- 0.01 kilogram
Western Lab (3 pt) Bulk	+/- 0.002 kilogram

Form Approved for Use By:

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