

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF AGRICULTURE
BUREAU OF FOOD SAFETY AND LABORATORY SERVICES
LABORATORY DIVISION

Facility/Laboratory Name: _____

Coefficient of variation (C_v) for Repeatability for Electronic Optical Somatic Cell Counters.

| COUNT | D | D ² |
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| Σx = | | |

1. $\Sigma x =$ _____ Sum of the 10 counts
2. $x =$ _____ Mean (average) of the 10 counts
3. D Difference from the Mean
4. D² Square of the Differences
5. $\Sigma D^2 =$ _____ Sum of Squares of Differences
6. n = _____ Number of counts
7. $S_d = \sqrt{\Sigma D^2/n-1} =$ _____ Standard Deviation
8. $C_v = S_d \cdot 100/x =$ _____ Coefficient of Variation.

Note: Coefficient of Variation(C_v) must be (less than or equal to) ≤ 5%.