

**COLORADO DEPARTMENT OF TRANSPORTATION  
 NUCLEAR EQUIPMENT STATISTICAL STABILITY/DRIFT TEST**

Statistical stability test, (Allow gauge to warm up 30 minutes, perform 20 one minute counts)

Counts N (or X)	Density standard count (M/D or TLD gauge)	Moisture standard count (M/D or AC gauge)
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
Average counts $\bar{N}$ (or $\bar{X}$ )		
Standard deviation s (or S)		
Ratio $[S \div (\sqrt{\bar{X}})]$		
Ideal ratio _____ / Acceptable limits _____ - _____ (Values found in the calibration procedures)		

Date:	Operator:
CDOT no.:	Model of gauge:
Gauge no.:	Serial no.:

**NUCLEAR EQUIPMENT STATISTICAL STABILITY/DRIFT TEST**

**DRIFT TEST** (Gauge must be on and active a minimum of 3 hours after the completion of the Statistical Stability Test, perform 5 four minute counts)

Counts N (or X)	Density standard count (M/D or TLD gauge)	Moisture standard count (M/D or AC gauge)
1		
2		
3		
4		
5		
Average counts $\bar{N}$ (or $\bar{X}$ )		

[Total average = the sum of the Statistical Stability average count and the Drift Test average count, divided by 2]

Density total average = ( \_\_\_\_\_ + \_\_\_\_\_ ) ÷ 2 = \_\_\_\_\_

Moisture total average = ( \_\_\_\_\_ + \_\_\_\_\_ ) ÷ 2 = \_\_\_\_\_

[Difference = the value between the Statistical Stability average count and the Drift Test average count]

Density difference = \_\_\_\_\_ - \_\_\_\_\_ = \_\_\_\_\_

Moisture difference = \_\_\_\_\_ - \_\_\_\_\_ = \_\_\_\_\_

[Drift =  $\frac{\text{Difference}}{\text{Total average}} \times 100 =$  \_\_\_\_\_ %]

Density drift = \_\_\_\_\_ X 100 = \_\_\_\_\_ %

Moisture drift = \_\_\_\_\_ X 100 = \_\_\_\_\_ %