## #10

# **Balance Calibration Verification Analytical Method**

## 1.0.0 Background and Scope

In order to ensure the integrity of the reported weights of controlled substances each laboratory within the Idaho State Police system maintains a set of weights that are used to verify the calibration of all balances and scales located in each laboratory.

### 2.0.0 Equipment

One set of ASTM Class 2, or better, weights. These weights must be NIST traceable and certified at the time of purchase. The documentation for the certification/calibration of the weights will be retained.

#### 3.0.0 Procedure

Within 45 days prior to use, each balance is to have its calibration checked (intermediate check) against a set of certified NIST traceable weights. Results are to be recorded in a log for future reference.

- 3.1.0 Each balance is checked using a set of ASTM weights as reference. This set should span the expected weights of samples that will be measured on each balance. An example, for the typical top loader 1g, 100g, and 2000g weights would be sufficient. The allowable deviation from the standard weights will be 0.01 g or 0.1%, which ever is greater.
- 3.2.0 Each laboratory will keep a log sheet for each balance in use. The log sheet will list the balance identification, the weights used, their indicated weight, whether or not the observed weight is within the tolerance of the balance, the analyst and the date on which the check was performed.
- 3.30 Once a year an independent vendor will calibrate each balance.
  - 40 An independent vendor will calibrate each weight set on a yearly basis.
- The weights will be handled with gloves or tweezers to keep them clean. They will be transported and stored in their case.

#### 4.0.0 Consequences

If a balance fails a calibration check, the check is repeated. If the balance still fails then it will be taken out of service until it can be recalibrated or repaired. The balance shall be tagged indicating that it is out of service.

# **5.0.0** History

Revision #	Issue or review date	History	<b>Author or Reviewer</b>
0	4/26/02	Original Issue	D.C. Sincerbeaux
1	8/27/02	Add#	D.C. Sincerbeaux
2	5/23/03	Added to section 3.0.0 and 3.1.0	D.C.Sincerbeaux
2.1	1/12/07	Added page #s, history & changed wording in 3.00 changed title.	and 4.0.0 "shall",
3	7/3/2007	added 3.5 and changed 2	D.C. Sincerbeaux
4	9/9/2011	Change 3.00, 4.0.0	D.C. Sincerbeaux
	ty of Idaho nto	added 3.5 and changed 2.0 Change 3.00, 4.0.0	
orope	OBS		