CR Gram Case New

MINNESOTA DEPARTMENT OF COMMERCE

Weights & Measures Metrology Laboratory
14305 Southcross Drive #150
Burnsville, MN 55306-7008
651.215.5821 FAX 952.435.4040 TTY 952.435.4045

Receipt Date: December 19, 2011
Test Date: December 22 to January 12, 2012
Report Date: January 17, 2012

State Test No.: 328674
Set Serial No.: none
Now SN# HSS1

Calibration Report

HAWKEYE STATE SCALE
5040 BLAIRS FOREST WAY NE
CEDAR RAPIDS, IOWA 52402
Contact: John Fishbeck
Phone: 319-364-4173
PO Number: none
SOP: 14
Technician ID: 02

Item(s) Submitted: Polished ss and leaf metric weights
Manufacturer: Rice Lake
ASTM E617 Type: I or II
Equipment ID#: Wood Case
Condition: Good
Temperature: 20.2°C
Pressure: 735. mmHg
Relative Humidity: 43. %

Nominal Value	Serial No.	Correction (mg) As Found	Correction (mg) As Left	ASTM E617 Class As Found	ASTM E617 Class As Left	Unc. (mg) (k=2)
2000 g		2.	2.	2	2	0.7
1000 g		1.1	1.1	2	2	0.7
1000 . g		1.2	1.2	2	2	0.7
500 g		0.9	0.9	2	2	0.7
100 g		0.42	0.42	2	2	0.03
100 . g		0.32	0.32	2	2	0.03
100 .. g		0.42	0.42	2	2	0.03
100 :. g		0.07	0.07	2	2	0.03
50 g		0.054	0.054	2	2	0.016
50 g		0.122	0.122	2	2	0.016
20 g		0.063	0.063	2	2	0.015
10 g		0.056	0.056	2	2	0.015
5 g		0.043	0.043	3	3	0.015
2 g		0.027	0.027	2	2	0.015
2 g		0.028	0.028	2	2	0.015
1 g		0.059	0.059	3	3	0.015
0.5 g		0.02	0.02	2	2	0.003
0.2 g		0.002	0.002	2	2	0.003
0.2 g		0.002	0.002	2	2	0.003
0.1 g		0.003	0.003	2	2	0.003
0.05 g		0.003	0.003	2	2	0.003
0.02 g		0.001	0.001	2	2	0.003
0.02 g		0.005	0.005	2	2	0.003
0.005 g		0.006	0.006	2	2	0.003
0.002 g		0.004	0.004	2	2	0.003
0.002 g	lump	0.004	0.004	2	2	0.003

The resulting tolerance class of the weight is determined by combining the correction of the weight and the uncertainty of the measurement. The corrections given above correlate to a conventional mass scale versus 8.0 g/cm3 density and an air density of 1.2 mg/cm3. Weights have not been screened for magnetism, and no component of uncertainty due to possible magnetism has been included in the combined uncertainty value. The items listed above have been compared to the Standards of the State of Minnesota which are currently in control. These standards are traceable to the National Institute of Standards and Technology (NIST) through NIST Test Number 822/277846-09 and Minnesota Test Numbers 3XXXXX. Calibration processes were monitored and found to be in control. Uncertainty calculations conform to NIST Technical Note 1297. Results apply to items identified in this report only.

Bruce Adams
Metrologist

Reviewed by:
Nils Fleming
Approved Signatory