

Receipt Date: July 25, 2022  
Calibration Date: July 28, 2022  
Certificate Date: July 28, 2022

Certificate No.: 401647-1  
Set Serial No.: HSS 2 P  
Barcode: 200520

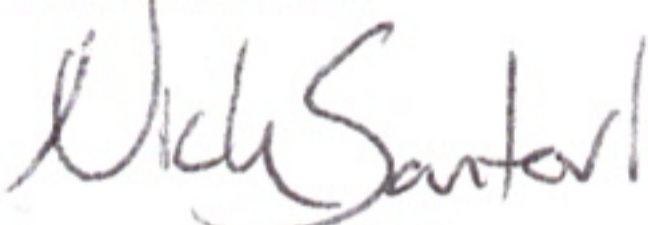
## Calibration Certificate


HAWKEYE STATE SCALE  
1357 HWY 965 NW  
SWISHER, IA 52338  
Contact: ANGIE WELCHER  
Phone: 319-364-4173  
PO Number: 10467  
Procedure: NIST SOP 8B (2019)  
Technician ID: 24

Item(s) Submitted: AVDP Weight Kit  
Manufacturer: RICE LAKE  
Weight Type: I & II  
Equipment ID: None  
Condition: ACCEPTABLE  
Temperature: 19.0 °C  
Pressure: 736.6 mmHg  
Relative Humidity: 49.7 %

Nominal Value	Serial No.	CM Correction (mg)		NIST Class F		<i>k</i>	U (mg)
		As Received	As Left	As Received	As Left		
10 lb	2	6	6	Meets	Meets	2.03	11
10 lb		112	112	Meets	Meets	2.03	11
5 lb		78.1	78.1	Meets	Meets	2.03	5.5
1 lb		19.7	19.7	Meets	Meets	2.03	1.1
1 . lb		21.9	21.9	Meets	Meets	2.03	1.1
1 : lb		16.9	16.9	Meets	Meets	2.03	1.1
1 :: lb		18.9	18.9	Meets	Meets	2.03	1.1
1 :: lb		25.7	25.7	Meets	Meets	2.03	1.1
4 oz		8.22	8.22	Meets	Meets	2.03	0.30
4 . oz		3.30	3.30	Meets	Meets	2.03	0.30
4 : oz		5.93	5.93	Meets	Meets	2.03	0.30
1 oz		1.93	1.93	Meets	Meets	2.03	0.11
1 . oz		2.51	2.51	Meets	Meets	2.03	0.11
1 : oz		0.70	0.70	Meets	Meets	2.03	0.11
1/2 oz		0.168	0.168	Meets	Meets	2.04	0.074
1/2 . oz		0.689	0.689	Meets	Meets	2.04	0.074
1/4 . oz		0.801	0.801	Meets	Meets	2.04	0.055
1/4 : oz		0.265	0.265	Meets	Meets	2.04	0.055

Artifact conformance to NIST HB105-1 (1990) specifications of shape, material, and type were evaluated. Tolerances were evaluated using NIST HB105-1 (1990) and MN SAP 20 (2020), which combines the conventional mass (CM) correction of the weight and the uncertainty of the measurement to evaluate the class. No other specifications were evaluated. The above CM corrections correspond to the mass scale versus 8.0 g/cm<sup>3</sup> density and an air density of 1.2 mg/cm<sup>3</sup> at 20 °C. Uncertainty calculations contain the components in NIST SOP 8 (2019) and conform to the ISO/IEC Guide to the Expression of Uncertainty in Measurement (2008), including coverage factors (*k*) calculated at the approximate 95.45 % confidence level. Calibration of items listed above used State of Minnesota Standards, which are currently in control. These standards are traceable to the SI through NIST. Calibration processes are monitored and in control at the time of calibration. Densities reported above are assumed unless noted. This calibration certificate shall not be reproduced, except in full, without written approval from the state of MN metrology laboratory, and the results only apply to items identified on this certificate.

Nick Santori  
  
Metrologist

Reviewed by:  
Anna Pierce  
  
Metrologist, Signatory