STATE OF MAINE
DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY
DIVISION OF QUALITY ASSURANCE AND REGULATIONS
28 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0028

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Director

REPORT OF CALIBRATION
MAINE TEST NUMBER 7426ME
(18) 1000 lb. Cast Iron Weights
Date of Report: May 23, 2019

SUBMITTED BY:
Advanced Scale, Inc.
13 Delta Drive; Unit 6
Londonderry, NH 03053

The mass standards described above have been compared with standards of the State of Maine, by modified substitution, and were found to be, or adjusted to within NIST Handbook 105-1 Class "F" tolerances.

Standards of the state of Maine are traceable to the National Institute of Standards and Technology through Oklahoma Bureau of Standards test no. OBS 17-1193. The Maine Laboratory is recognized by NIST, OWM, under the "Laboratory Metrology Program", at Mass Echelon III for 2019. Measurements by this laboratory are traceable to the National Standards at NIST.

The mass standards described above were found to have mass values at the time of test as indicated in the following tabulation. Weights received in an out of tolerance condition show a bold value in the "before adjustment" column. Weights received in good condition. The combined measurement uncertainty and measurement result have been taken in to account when issuing statements of compliance.

The uncertainties shown with reported values are calculated on the conventional mass values and expressed as the sum of the following sources of inaccuracy; (1) Type B, systematic errors relative to the reference standard and procedure used, including bias, and (2) Type A, random errors determined by the standard deviation of the measurement process. Type A and Type B uncertainties are combined by the root sum squared method and multiplied by a coverage factor of 2 (K=2) representing approximately a 95 % confidence level. All mass values have been determined as "conventional mass" with respect to stainless steel with a density of 8.0 g/cm^3 at 20 °C.

NVLAP® CALIBRATION

PHONE: (207) 287-7587 FAX: (207) 287-7161

Serial Number	Nominal	Correction g	NIST Class F Tolerance, g	Uncertainty g	Before Adjustment, g
9	1000 lb.	10.8	45	5.7	---
10	1000 lb.	-2.1	45	5.7	---
1388	1000 lb.	28.0	45	5.7	---
13880	1000 lb.	9.6	45	5.7	---
1NIF	1000 lb.	-29.5	45	5.7	---
1NJC	1000 lb.	14.4	45	5.7	---
1NJD	1000 lb.	20.3	45	5.7	---
1NJE	1000 lb.	-0.6	45	5.7	---
1NJG	1000 lb.	4.6	45	5.7	---
1NJH	1000 lb.	-4.2	45	5.7	---
1NJI	1000 lb.	11.3	45	5.7	---
1NJJ	1000 lb.	-1.7	45	5.7	---
1NJK	1000 lb.	15.1	45	5.7	---
1NJL	1000 lb.	-0.6	45	5.7	---
1NJM	1000 lb.	20.3	45	5.7	---
1NJN	1000 lb.	25.7	45	5.7	---
1NJO	1000 lb.	18.9	45	5.7	---
1NJP	1000 lb.	8.1	45	5.7	---

Environmental conditions at time of test:
Temperature: 20.6 °C
Relative Humidity: 41.8 %
Pressure: 749.17 mmHg
Data reduction sheets are on file at the laboratory.

Calibrations performed by this laboratory comply with the requirements of ISO/IEC 17025:2017.

SI conversion: 1-pound avoirdupois equals <u>0.45359237</u> kilograms.

NVLAP® CALIBRATION

Date Received: May 17, 2019
Date of Test: May 21, 2019
Calibration Due: May 31, 2020
Calibration by: Michael Picard

Bradford Bachelder, Metrologist

Calibrations performed at 333 Cony Road, Augusta ME.