

Vermont Weights and Measures Metrology Laboratory
Test Report

Issued To:

Advanced Scale
13 Delta Drive Unit 6
Londonderry, NH 03053-2372
603-626-0242Date of Receipt: January 18, 2019
Vermont Test Number: VT19-5
Date of Test: January 22, 2018
Report of Test for Item (Make/Model/Serial Number(s)/#Pieces):

U.S./Cast Iron Field Standards/See Chart/3 Pieces

The mass standards described above have been compared to the standards of the State of Vermont, by NISTIR 6969, SOP 8 (2018), and have been found at time of test, or been adjusted, to meet the requirements stated in NIST Handbook 105-1 Specifications and Tolerances for Reference Standards and Field Standard Weights and Measures (1990) (Class F). Standards of the state of Vermont are traceable to the SI and National Institute of Standards and Technology (NIST). The Vermont Laboratory is recognized by NIST, under the Laboratory Metrology Program at Mass Echelon III. The mass standards described above were found to have a mass value at the time of test as indicated in the following tabulation. Weights received in an out of tolerance condition show a value in the “before adjustment“ column.

The uncertainties shown are expressed as the sum of the following sources of inaccuracy; (1) Type B, systematic uncertainties relative to the reference standard and procedure used, and (2) Type A, random uncertainties 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 k (in chart) for an approximate 95 % confidence interval.

Environmental conditions at time of test:

Temperature: 21.2 °C to 21.3 °C
Relative Humidity: 39.9 % to 46.6 %
Barometric Pressure: 739.9 mmHg to 740.5 mmHg
Mass Comparator: MT XP604KM
Technician: Marc Paquette

Nominal & Marking	Before Adjustment	Conventional Mass Correction	Uncertainty	NIST Class F Tolerance	Units	<i>k</i> Factor
500 lb 130		-7.3	3.5	23	g	2.03
500 lb 131		-12.3	3.5	23	g	2.03
500 lb 132		9.1	3.5	23	g	2.03

The following weights were adjusted: NONE

Calibration Performed at:
322 Industrial Lane
Berlin, VT 05641

Additional documentation material available on request.



January 22, 2019

Marc Paquette/Vermont Agency of Agriculture
Consumer Protection Section/Metrologist
Weights & Measures Specialist

End of Report