

Vermont Weights and Measures Metrology Laboratory
Test Report

Issued To:

Advanced Scales
13 Delta Drive Unit 6
Londonderry, NH 03106
603-626-0242

Vermont Test Number: VT16-101
Date of Test: May 23, 2016
Report of Test for Item (Make/Model/Serial Number/#Pieces):

Various/ Cast Iron Field Standards/See Chart/21 Pieces

The mass standards described above have been compared to the standards of the State of Vermont, by SOP 8 (modified substitution), and have been found at time of test, or adjusted, to meet the requirements stated in NIST Handbook 105-1 Specifications and Tolerances for Reference Standards and Field Standard Weights and Measures (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 errors relative to the reference standard and procedure used, 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 k (in chart) for an approximate 95% confidence interval.

Environmental conditions at time of test:

Temperature: 22.2^o C
Relative Humidity: 45.9 % RH

Mass Comparator: MT XP604KM



Weight	Nominal	Correction g	Uncertainty g	NIST Class F Tolerance g	Before Adjustment g	k Factor
1NJL	1000 lbs	6.9	5.8	45		2.09
1NJC	1000 lbs	5.6	5.8	45		2.09
1NJH	1000 lbs	12.4	5.8	45		2.09
1NJD	1000 lbs	26.4	5.8	45		2.09
1NJM	1000 lbs	28.0	5.8	45		2.09
9	1000 lbs	15.5	5.8	45		2.09
10	1000 lbs	9.1	5.8	45		2.09
1388	1000 lbs	6.1	5.8	45		2.09
13880	1000 lbs	31.0	5.8	45		2.09
1NJQ	1000 lbs	16.3	5.8	45		2.09
1NJN	1000 lbs	15.1	5.8	45		2.09
1NJG	1000 lbs	29.7	5.8	45		2.09
1NJP	1000 lbs	16.0	5.8	45		2.09
1NJF	1000 lbs	4.9	5.8	45		2.09
1NJE	1000 lbs	20.3	5.8	45		2.09
1NJI	1000 lbs	21.5	5.8	45		2.09
1NJJ	1000 lbs	11.4	5.8	45		2.09
1NJK	1000 lbs	-6.0	5.8	45		2.09
10003	1000 lbs	24.9	5.8	45		2.09
10004	1000 lbs	-13.2	5.8	45		2.09
10002	1000 lbs	-12.1	5.8	45		2.09

Additional documentation material available on request.

The following weights were adjusted: None



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Weights and Measures Specialist