VERMONT

Food Safety & Consumer Protection Div [phone] 802-828-2426 *Agency of Agriculture Food & Markets*
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Montpelier, VT 05620
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Vermont Weights and Measures Metrology Laboratory
Test Report

Issued To:

Advanced Scale
13 Delta Drive Unit 6
Londonderry, NH 03053-2372
603-626-0242

Date of Receipt: January 18, 2019
Vermont Test Number: VT19-10
Date of Test: January 22, 2019
Report of Test for Item (Make/Model/Serial Number(s)/#Pieces):

Various/Cast Iron Field Standards/In Chart/40-50 lb. 6-25 lb. 2-20 kg. 3-10 kg

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: 20.8 ºC to 21.2 ºC
Relative Humidity: 49.8 % to 49.8 %
Barometric Pressure: 743.4 mmHg to 743.65 mmHg
Mass Comparator: MT XP64003L
Technician: Marc Paquette

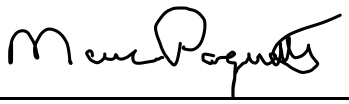
Nominal & Marking	Before Adjustment	Conventional Mass Correction	Uncertainty	NIST Class F Tolerance	Units	*k* Factor
50 lb 100		-1394	86	2300	mg	2.03
50 lb 101		-474	86	2300	mg	2.03
50 lb 102	-2984	316	86	2300	mg	2.03
50 lb 103		-1084	86	2300	mg	2.03
50 lb 104		-369	86	2300	mg	2.03
50 lb 105	-2454	161	86	2300	mg	2.03
50 lb 106		1096	86	2300	mg	2.03
50 lb 107		-1164	86	2300	mg	2.03
50 lb 108		-1364	86	2300	mg	2.03
50 lb 109		-549	86	2300	mg	2.03
50 lb 110		-1809	86	2300	mg	2.03
50 lb 111	-2264	-109	86	2300	mg	2.03
50 lb 112		91	86	2300	mg	2.03
50 lb 113		191	86	2300	mg	2.03
50 lb 114		-84	86	2300	mg	2.03
50 lb 115		-469	86	2300	mg	2.03
50 lb 116		-624	86	2300	mg	2.03
50 lb 117		766	86	2300	mg	2.03
50 lb 118		-44	86	2300	mg	2.03
50 lb 119		-1614	86	2300	mg	2.03
50 lb 300		-94	86	2300	mg	2.03
50 lb 301		-1019	86	2300	mg	2.03
50 lb 302	153644	946	86	2300	mg	2.03
50 lb 303		-109	86	2300	mg	2.03
50 lb 304	-2164	-124	86	2300	mg	2.03
50 lb 305		426	86	2300	mg	2.03
50 lb 306	-2739	326	86	2300	mg	2.03
50 lb 307		-1469	86	2300	mg	2.03
50 lb 308		-474	86	2300	mg	2.03
50 lb 309		186	86	2300	mg	2.03
50 lb 310		-1599	86	2300	mg	2.03
50 lb 311		-674	86	2300	mg	2.03
50 lb 312	-2089	266	86	2300	mg	2.03
50 lb 313		-714	86	2300	mg	2.03
50 lb 314		-1149	86	2300	mg	2.03
50 lb 315		-4	86	2300	mg	2.03
50 lb 316	-2569	791	86	2300	mg	2.03
50 lb 317		1146	86	2300	mg	2.03
50 lb 318		-174	86	2300	mg	2.03
50 lb 319	-2014	141	86	2300	mg	2.03
25 lb 160	-2484	502	64	1100	mg	2.04
25 lb 161	-1449	507	64	1100	mg	2.04
25 lb 260		107	64	1100	mg	2.04
25 lb 261		287	64	1100	mg	2.04
25 lb 360		52	64	1100	mg	2.04
25 lb 361		-249	64	1100	mg	2.04
20 kg 431		383	80	2000	mg	2.04
20 kg 432		-1442	80	2000	mg	2.04

10 kg 430		-253	63	1000	mg	2.04
10 kg 433		-258	63	1000	mg	2.04
10 kg 434		-773	63	1000	mg	2.04

The following weights were adjusted: 9-50 lb. & 2-25 lb.

Calibration Performed at:
322 Industial 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