VERMONT

Food Safety & Consumer Protection Div [phone] 802-828-2426 *Agency of Agriculture Food & Markets*
Consumer Protection Section [fax] 802-828-5983
116 State Street
Montpelier, VT 05620
agriculture.vermont.gov

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: March 20, 2020
Vermont Test Number: VT20-106
Date of Test: March 23, 2020
Report of Test for Item (Make/Model/Serial Number(s)/#Pieces):

Various/Cast Class F Field Standards/See Chart/47 - 50 lb, 10 - 25 lb

The mass standards described above have been compared to the standards of the State of Vermont, by NISTIR 6969, SOP 8 (2019), and have been found at time of test, or been adjusted, to meet the tolerances stated in NIST Handbook 105-1 (1990) Specifications and Tolerances for Reference Standards and Field Standard Weights and Measures. 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 are considered in tolerance when the absolute value of the conventional mass correction plus the uncertainty is less than or equal to the specified tolerance. 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: 22.0 ºC to 22.1 ºC
Relative Humidity: 44.9 % to 45.3 %
Barometric Pressure: 737.25 mmHg to 737.55 mmHg
Mass Comparator: MT XP64003L
Technician: Scott Dolan, Sumner Kuehne, Dwight Brunnette

Nominal & Marking	Before Adjustment	Conventional Mass Correction	Uncertainty	NIST Class F Tolerance	Units	*k* Factor
50 lb 200		-817	85	2300	mg	2.02
50 lb 201		-542	85	2300	mg	2.02
50 lb 202		-52	85	2300	mg	2.02
50 lb 203	-2562	503	85	2300	mg	2.02
50 lb 204	-2137	783	85	2300	mg	2.02
50 lb 205		-492	85	2300	mg	2.02
50 lb 206		-82	85	2300	mg	2.02
50 lb 207		-1062	85	2300	mg	2.02
50 lb 208		998	85	2300	mg	2.02
50 lb 209		-967	85	2300	mg	2.02
50 lb 210		-637	85	2300	mg	2.02
50 lb 211		-1047	85	2300	mg	2.02
50 lb 212		-1932	85	2300	mg	2.02
50 lb 213		-252	85	2300	mg	2.02
50 lb 214		188	85	2300	mg	2.02
50 lb 215		-827	85	2300	mg	2.02
50 lb 216		-1462	85	2300	mg	2.02
50 lb 217		-272	85	2300	mg	2.02
50 lb 218		-552	85	2300	mg	2.02
50 lb 219		-1257	85	2300	mg	2.02
50 lb 400		-707	85	2300	mg	2.02
50 lb 401		-1252	85	2300	mg	2.02
50 lb 402		303	85	2300	mg	2.02
50 lb 403	-2137	-82	85	2300	mg	2.02
50 lb 404		-1587	85	2300	mg	2.02
50 lb 405		-792	85	2300	mg	2.02
50 lb 406		-1842	85	2300	mg	2.02
50 lb 407		-322	85	2300	mg	2.02
50 lb 408		-1492	85	2300	mg	2.02
50 lb 409		-267	85	2300	mg	2.02
50 lb 410		-1307	85	2300	mg	2.02
50 lb 411		543	85	2300	mg	2.02
50 lb 412		-717	85	2300	mg	2.02
50 lb 413	-2277	-62	85	2300	mg	2.02
50 lb 414		-337	85	2300	mg	2.02
50 lb 415		-1402	85	2300	mg	2.02
50 lb 416		-1457	85	2300	mg	2.02
50 lb 417		73	85	2300	mg	2.02
50 lb 418		-262	85	2300	mg	2.02
50 lb 419		-422	85	2300	mg	2.02
50 lb 420		28	85	2300	mg	2.02
50 lb 421		308	85	2300	mg	2.02
50 lb 422		-157	85	2300	mg	2.02
50 lb 423		-1697	85	2300	mg	2.02
50 lb 424		-1042	85	2300	mg	2.02
50 lb 425		-1067	85	2300	mg	2.02
50 lb 426		738	85	2300	mg	2.02
25 lb 460		407	32	1100	mg	2.02

25 lb 461		122	32	1100	mg	2.02
25 lb 462	-1023	-8	32	1100	mg	2.02
25 lb 463		-578	32	1100	mg	2.02
25 lb 464		-808	32	1100	mg	2.02
25 lb 465		-873	32	1100	mg	2.02
25 lb 466	-1073	-48	32	1100	mg	2.02
25 lb 467		-228	32	1100	mg	2.02
25 lb 468		82	32	1100	mg	2.02
25 lb 469		22	32	1100	mg	2.02

The following weights were adjusted: 4 - 50 lb, 2 - 25 lb

Calibration Performed at:
163 Admin Drive
Randolph Center, VT 05061

Additional documentation material available on request.

Scott Dolan

Digitally signed by Scott Dolan
Date: 2020.03.23 13:50:39 -04'00'
Adobe Acrobat version: 2020.006.20042

Scott Dolan/Vermont Agency of Agriculture
Consumer Protection Section/Metrologist
Consumer Protection Specialist

End of Report