

South Dakota Department of Public Safety
Office of Weights and Measures
Metrology Lab
Lab: 1500 N Garfield - E. Truck Bypass Phone: 605-773-3170
Office: 118 West Capitol Avenue Phone: 605-773-3697
Pierre SD 57501

REPORT OF CALIBRATION

LAB TEST NUMBER: MP3754
DATE OF REPORT: 01/17/2018
DATE RECEIVED: 01/11/2018
DATE OF TEST: 01/15-16/2018

Submitted By: Capital Scale Company
Contact: Travis Will
Mailing Address: 3021 Valley Forge Dr
City, State, Zip: Bismarck, ND 58503
Phone: 701-255-1556
S/A Number: 61

Standards Submitted:

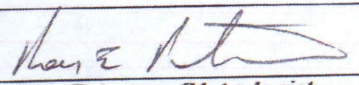
72 - 50 lb weights	3 - avoirdupois kits
20 - 1000 lb weights	1 - metric kit
2 - 2000 lb weight carts	

Uncertainty Statement: The combined standard uncertainty includes the standard uncertainty reported for the standard and the standard uncertainty for the measurement process. The combined standard uncertainty is multiplied by a coverage factor k to provide an expanded uncertainty which defines an interval having a level of confidence of approximately 95 percent. The expanded uncertainty presented in this report is consistent with the 1995 ISO/IEC Guide to the Expression of Uncertainty in Measurement. The expanded uncertainty is not to be confused with a tolerance limit for the user during application.

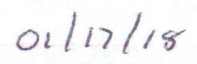
Traceability statement:

The Standards of the SD Metrology Laboratory used for comparison are traceable to the International System of Units (SI) through the National Institute of Standards and Technology. The laboratory test number identified above is the unique report number to be used in referencing measurement traceability for artifacts identified in this report only.

This document does not represent or imply endorsement by NIST Office of Weights and Measures or any agency of the State and/or national governments. The reported test values relate only to the observations made at the time and conditions of the test. This report may not be reproduced, except in full without the written approval of this laboratory. The client must not use this document to claim product endorsement by this laboratory.

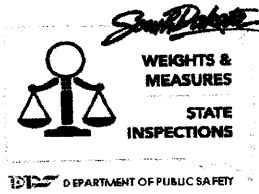

Ron Peterson, Metrologist




Date

Office of Weights and Measures
118 W. Capitol Ave
Pierre, SD 57501

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www.dps.sd.gov



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Submitted by:	Capital Scale Company	Report Number:	MP3754
Mailing Address:	3021 Valley Forge Dr	Date Received:	01/11/18
City, State, Zip:	Bismarck, ND 58503	Date tested:	01/16/18
Manufacturer:	Unknown	Condition of Cart:	GOOD
Serial Number:	Unknown	Temperature (c):	19.5
Test Method Used:	SOP 33 Calibrations of Weight Carts, Jan 2016	Humidity:	12.3%
Nominal (lb):	2000	Pressure (mm/Hg):	726.3
Tolerance (lb):	0.50		

The values reported below relate only to those observations made at the time and conditions of the test. This test report, so numbered, may not be reproduced, except in full, without approval of the laboratory.

As Found (lb)	As Left (lb)	Uncertainty-lb. (k=)
3.56	0.02	0.16

The weight cart was allowed to come to environmental equilibrium in the laboratory prior to calibration. The weight cart was adjusted, as needed and noted above, as close as possible to zero error. All fluid levels must be maintained as close to reference levels as possible during use. Any maintenance, repairs or damage to weight cart or its components will likely result in an out-of-tolerance condition; therefore, maintenance or replacement of components such as batteries, tires, filters, etc. will require calibration of the weight cart prior to subsequent use.

Test equipment used include recently calibrated weights and a Sartorius PR 6246/33 load cell.

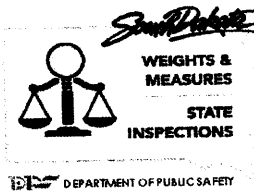
The above weight cart was compared with standards of the State of South Dakota, which are traceable the National Institute of Standards and Technology(NIST) Weights and Measures Division. The assigned test number provides documented evidence for measurement traceability.



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Submitted by:	Capital Scale Company	Report Number:	MP3754
Mailing Address:	3021 Valley Forge Dr	Date Received:	01/11/18
City, State, Zip:	Bismarck, ND 58503	Date tested:	01/16/18
Manufacturer:	Unknown	Condition of Cart:	GOOD
Serial Number:	541094	Temperature (c):	19.5
Test Method Used:	SOP 33 Calibrations of Weight Carts, Jan 2016	Humidity:	12.3%
Nominal (lb):	2000	Pressure (mm/Hg):	726.3
Tolerance (lb):	0.50		

The values reported below relate only to those observations made at the time and conditions of the test. This test report, so numbered, may not be reproduced, except in full, without approval of the laboratory.

As Found (lb)	As Left (lb)	Uncertainty-lb. (k=)
1.49	0.05	0.16

The weight cart was allowed to come to environmental equilibrium in the laboratory prior to calibration. The weight cart was adjusted, as needed and noted above, as close as possible to zero error. All fluid levels must be maintained as close to reference levels as possible during use. Any maintenance, repairs or damage to weight cart or its components will likely result in an out-of-tolerance condition; therefore, maintenance or replacement of components such as batteries, tires, filters, etc. will require calibration of the weight cart prior to subsequent use.

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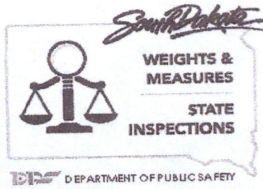
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Submitted by:	Capital Scale Company	Report Number:	MP3754
Mailing Address:	3021 Valley Forge Dr	Date Received:	01/11/18
City, State, Zip:	Bismarck, ND 58503	Date tested:	01/16/18
Artifacts Submitted	1000 lb weights	Condition of Weights:	GOOD
		Temperature (c):	20.6
Test Method Used:	SOP 8/ MODIFIED SUB, Jun 2015	Humidity:	48.2
Equipment Used:	Russell Balance/ Vaisala PTU301	Pressure (mm/Hg):	727.6

Treatment of artifacts prior to testing: Thermal equilibrium was obtained by placing the artifacts in the lab overnight.

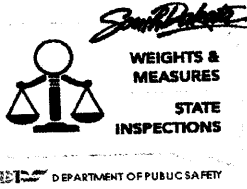
Standards Used: SD Lab 1000 lb and/or 500 lb Working Standards.

The values reported below relate only to those observations made at the time and conditions of the test. This test report, so numbered, may not be reproduced, except in full, without approval of the laboratory. These weights were not screened for magnetism and effects of magnetism is not included in the uncertainties.

Nominal	Serial Number	Correction As Found	Correction As Left	Tolerance	Uncertainty	k
1000 lb	13.10	0.010 lb 4.5 g	0.010 lb 4.5 g	45 g	5.9 g	2.04
1000 lb	13.11	0.015 lb 6.7 g	0.015 lb 6.7 g	45 g	5.9 g	2.04
1000 lb	13.12	-0.002 lb -0.9 g	-0.002 lb -0.9 g	45 g	5.9 g	2.04
1000 lb	13.13	0.009 lb 4.1 g	0.009 lb 4.1 g	45 g	5.9 g	2.04
1000 lb	13.14	-0.016 lb -7.3 g	-0.016 lb -7.3 g	45 g	5.9 g	2.04
1000 lb	13.15	0.000 lb 0.2 g	0.000 lb 0.2 g	45 g	5.9 g	2.04
1000 lb	13.16	-0.005 lb -2.1 g	-0.005 lb -2.1 g	45 g	5.9 g	2.04
1000 lb	13.17	-0.051 lb -23.1 g	0.001 lb 0.3 g	45 g	5.9 g	2.04
1000 lb	13.18	-0.013 lb -5.8 g	-0.013 lb -5.8 g	45 g	5.9 g	2.04
1000 lb	13.19	-0.011 lb -5.1 g	-0.011 lb -5.1 g	45 g	5.9 g	2.04
1000 lb	13.20	-0.017 lb -7.7 g	-0.017 lb -7.7 g	45 g	5.9 g	2.04
1000 lb	13.21	-0.019 lb -8.4 g	-0.019 lb -8.4 g	45 g	5.9 g	2.04
1000 lb	13.22	-0.023 lb -10.5 g	-0.023 lb -10.5 g	45 g	5.9 g	2.04
1000 lb	13.23	-0.011 lb -5.0 g	-0.011 lb -5.0 g	45 g	5.9 g	2.04
1000 lb	13.24	-0.008 lb -3.8 g	-0.008 lb -3.8 g	45 g	5.9 g	2.04
1000 lb	13.25	-0.014 lb -6.1 g	-0.014 lb -6.1 g	45 g	5.9 g	2.04
1000 lb	13.26	-0.039 lb -17.7 g	-0.039 lb -17.7 g	45 g	5.9 g	2.04
1000 lb	13.27	-0.037 lb -16.8 g	-0.037 lb -16.8 g	45 g	5.9 g	2.04
1000 lb	13.28	-0.015 lb -7.0 g	-0.015 lb -7.0 g	45 g	5.9 g	2.04
1000 lb	13.29	-0.021 lb -9.5 g	-0.021 lb -9.5 g	45 g	5.9 g	2.04

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Submitted by:	Capital Scale Company	Report Number:	MP3754
Mailing Address:	3021 Valley Forge Dr	Date Received:	01/11/18
City, State, Zip:	Bismarck, ND 58503	Date tested:	01/15/18
Artifacts Submitted	50 lb handle weights	Condition of Weights:	GOOD
		Temperature (c):	20.2
Test Method Used:	SOP 8/ MODIFIED SUB, Jun 2015	Humidity:	41.7%
Equipment Used:	Mettler KA-30/ Vaisala PTU301	Pressure (mm/Hg):	731.6

Treatment of artifacts prior to testing: Thermal equilibrium was obtained by placing the artifacts in the lab overnight.

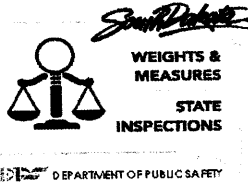
Standards Used: SD Lab Working Standards.

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Nominal	Serial Number	Correction As Found	Correction As Left	Tolerance	Uncertainty	k
50 lb	03	221 mg	221 mg	2300 mg	282 mg	2.03
50 lb	04	1126 mg	1126 mg	2300 mg	282 mg	2.03
50 lb	08	-104 mg	-104 mg	2300 mg	282 mg	2.03
50 lb	09	1571 mg	6 mg	2300 mg	282 mg	2.03
50 lb	10	2136 mg	96 mg	2300 mg	282 mg	2.03
50 lb	12	1691 mg	21 mg	2300 mg	282 mg	2.03
50 lb	14	2316 mg	-99 mg	2300 mg	282 mg	2.03
50 lb	15	46 mg	46 mg	2300 mg	282 mg	2.03
50 lb	16	-1034 mg	-1034 mg	2300 mg	282 mg	2.03
50 lb	18	1736 mg	1736 mg	2300 mg	282 mg	2.03
50 lb	19	656 mg	656 mg	2300 mg	282 mg	2.03
50 lb	20	561 mg	561 mg	2300 mg	282 mg	2.03
50 lb	22	-24 mg	-24 mg	2300 mg	282 mg	2.03
50 lb	23	1826 mg	26 mg	2300 mg	282 mg	2.03
50 lb	24	71 mg	71 mg	2300 mg	282 mg	2.03
50 lb	26	1811 mg	131 mg	2300 mg	282 mg	2.03
50 lb	27	3496 mg	81 mg	2300 mg	282 mg	2.03
50 lb	28	706 mg	706 mg	2300 mg	282 mg	2.03
50 lb	29	-584 mg	-584 mg	2300 mg	282 mg	2.03
50 lb	30	661 mg	661 mg	2300 mg	282 mg	2.03


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Submitted by:	Capital Scale Company	Report Number:	MP3754
Mailing Address:	3021 Valley Forge Dr	Date Received:	01/11/18
City, State, Zip:	Bismarck, ND 58503	Date tested:	01/15/18
Artifacts Submitted	50 lb handle weights	Condition of Weights:	GOOD
		Temperature (c):	20.2
Test Method Used:	SOP 8/ MODIFIED SUB, Jun 2015	Humidity:	41.7%
Equipment Used:	Mettler KA-30/ Vaisala PTU301	Pressure (mm/Hg):	731.6

Treatment of artifacts prior to testing: Thermal equilibrium was obtained by placing the artifacts in the lab overnight.

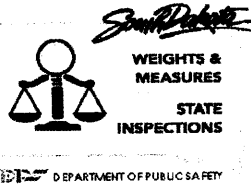
Standards Used: SD Lab Working Standards.

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Nominal	Serial Number	Correction As Found	Correction As Left	Tolerance	Uncertainty	k
50 lb	31	2096 mg	151 mg	2300 mg	282 mg	2.03
50 lb	32	201 mg	201 mg	2300 mg	282 mg	2.03
50 lb	33	1491 mg	1491 mg	2300 mg	282 mg	2.03
50 lb	34	1532 mg	56 mg	2300 mg	282 mg	2.03
50 lb	35	1331 mg	1331 mg	2300 mg	282 mg	2.03
50 lb	36	1916 mg	21 mg	2300 mg	282 mg	2.03
50 lb	37	3191 mg	226 mg	2300 mg	282 mg	2.03
50 lb	40	1531 mg	1531 mg	2300 mg	282 mg	2.03
50 lb	41	1251 mg	1251 mg	2300 mg	282 mg	2.03
50 lb	43	221 mg	221 mg	2300 mg	282 mg	2.03
50 lb	44	2551 mg	41 mg	2300 mg	282 mg	2.03
50 lb	45	1531 mg	1531 mg	2300 mg	282 mg	2.03
50 lb	46	331 mg	331 mg	2300 mg	282 mg	2.03
50 lb	47	1041 mg	1041 mg	2300 mg	282 mg	2.03
50 lb	48	-256529 mg	66 mg	2300 mg	282 mg	2.03
50 lb	51	2006 mg	26 mg	2300 mg	282 mg	2.03
50 lb	52	1151 mg	1151 mg	2300 mg	282 mg	2.03
50 lb	54	971 mg	971 mg	2300 mg	282 mg	2.03
50 lb	55	3176 mg	66 mg	2300 mg	282 mg	2.03
50 lb	60	1371 mg	1371 mg	2300 mg	282 mg	2.03


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Submitted by:	Capital Scale Company	Report Number:	MP3754
Mailing Address:	3021 Valley Forge Dr	Date Received:	01/11/18
City, State, Zip:	Bismarck, ND 58503	Date tested:	01/15/18
Artifacts Submitted	50 lb handle weights	Condition of Weights:	GOOD
		Temperature (c):	20.2
Test Method Used:	SOP 8/ MODIFIED SUB, Jun 2015	Humidity:	41.7%
Equipment Used:	Mettler KA-30/ Vaisala PTU301	Pressure (mm/Hg):	731.6

Treatment of artifacts prior to testing: Thermal equilibrium was obtained by placing the artifacts in the lab overnight.

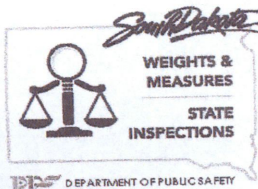
Standards Used: SD Lab Working Standards.

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Nominal	Serial Number	Correction As Found	Correction As Left	Tolerance	Uncertainty	k
50 lb	61	2251 mg	221 mg	2300 mg	282 mg	2.03
50 lb	64	2646 mg	366 mg	2300 mg	282 mg	2.03
50 lb	65	816 mg	816 mg	2300 mg	282 mg	2.03
50 lb	66	2531 mg	86 mg	2300 mg	282 mg	2.03
50 lb	69	236 mg	236 mg	2300 mg	282 mg	2.03
50 lb	70	2126 mg	226 mg	2300 mg	282 mg	2.03
50 lb	72	791 mg	791 mg	2300 mg	282 mg	2.03
50 lb	78	1476 mg	1476 mg	2300 mg	282 mg	2.03
50 lb	80	-114 mg	-114 mg	2300 mg	282 mg	2.03
50 lb	A	1796 mg	26 mg	2300 mg	282 mg	2.03
50 lb	aa	1401 mg	1401 mg	2300 mg	282 mg	2.03
50 lb	B	451 mg	451 mg	2300 mg	282 mg	2.03
50 lb	bb	-169 mg	-169 mg	2300 mg	282 mg	2.03
50 lb	cc	1386 mg	1386 mg	2300 mg	282 mg	2.03
50 lb	D	231 mg	231 mg	2300 mg	282 mg	2.03
50 lb	dd	-1554 mg	-29 mg	2300 mg	282 mg	2.03
50 lb	E	2196 mg	76 mg	2300 mg	282 mg	2.03
50 lb	F	986 mg	986 mg	2300 mg	282 mg	2.03
50 lb	G	-329 mg	-329 mg	2300 mg	282 mg	2.03
50 lb	H	211 mg	211 mg	2300 mg	282 mg	2.03

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Mailing Address:	3021 Valley Forge Dr	Date Received:	01/11/18
City, State, Zip:	Bismarck, ND 58503	Date tested:	01/15/18
Artifacts Submitted	50 lb handle weights	Condition of Weights:	GOOD
		Temperature (c):	20.2
Test Method Used:	SOP 8/ MODIFIED SUB, Jun 2015	Humidity:	41.7%
Equipment Used:	Mettler KA-30/ Vaisala PTU301	Pressure (mm/Hg):	731.6

Treatment of artifacts prior to testing: Thermal equilibrium was obtained by placing the artifacts in the lab overnight.

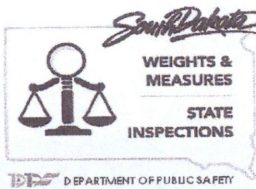
Standards Used: SD Lab Working Standards.

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Nominal	Serial Number	Correction As Found	Correction As Left	Tolerance	Uncertainty	k
50 lb	I	-209 mg	-209 mg	2300 mg	282 mg	2.03
50 lb	K	3866 mg	31 mg	2300 mg	282 mg	2.03
50 lb	L	-1034 mg	-1034 mg	2300 mg	282 mg	2.03
50 lb	M	541 mg	541 mg	2300 mg	282 mg	2.03
50 lb	P	-2229 mg	91 mg	2300 mg	282 mg	2.03
50 lb	R	1736 mg	91 mg	2300 mg	282 mg	2.03
50 lb	S	286 mg	286 mg	2300 mg	282 mg	2.03
50 lb	T	1486 mg	1486 mg	2300 mg	282 mg	2.03
50 lb	U	1051 mg	1051 mg	2300 mg	282 mg	2.03
50 lb	W	2801 mg	51 mg	2300 mg	282 mg	2.03
50 lb	X	1906 mg	221 mg	2300 mg	282 mg	2.03
50 lb	Y	1281 mg	1281 mg	2300 mg	282 mg	2.03

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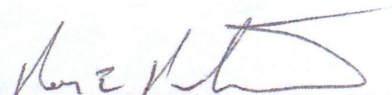
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Mailing Address:	3021 Valley Forge Dr	Date Received:	01/11/18
City, State, Zip:	Bismarck, ND 58503	Date tested:	01/16/18
Artifacts Submitted	20 piece avoirdupois kit	Condition of Weights:	NEW
	SN 010813A	Temperature (c):	20.5
Test Method Used:	SOP 8/ MODIFIED SUB, Jun 2015	Humidity:	43.2
Equipment Used:	Mettler AX 205 DR/ Mettler PR503/ Vaisala PTU301	Pressure (mm/Hg):	731.6

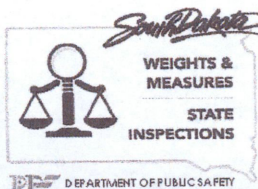
Treatment of artifacts prior to testing: Thermal equilibrium was obtained by placing the artifacts in the lab overnight.
Standards Used: SD Lab Working Standards.

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Nominal	Identifier	Correction As Found	Correction As Left	Tolerance Class F	Uncertainty	k
5 lb	1	65 mg	65 mg	230 mg	30 mg	2.17
5 lb	2	62 mg	62 mg	230 mg	30 mg	2.17
5 lb	3	61 mg	61 mg	230 mg	30 mg	2.17
5 lb	4	59 mg	59 mg	230 mg	30 mg	2.17
5 lb	5	61 mg	61 mg	230 mg	30 mg	2.17
1 lb	1	22.6 mg	22.6 mg	70 mg	9.2 mg	2.18
1 lb	2	22.6 mg	22.6 mg	70 mg	9.2 mg	2.18
1 lb	3	23.6 mg	23.6 mg	70 mg	9.2 mg	2.18
1 lb	4	16.6 mg	16.6 mg	70 mg	9.2 mg	2.18
1 lb	5	27.6 mg	27.6 mg	70 mg	9.2 mg	2.18
8 oz		20.1 mg	20.1 mg	45 mg	6.0 mg	2.17
4 oz		8.3 mg	8.3 mg	23 mg	3.0 mg	2.17
2 oz		2.5 mg	2.5 mg	11 mg	1.4 mg	2.17
1 oz		1.60 mg	1.60 mg	5.4 mg	0.69 mg	2.17
1/2 oz		0.92 mg	0.92 mg	2.8 mg	0.36 mg	2.17
1/4 oz		0.48 mg	0.48 mg	1.7 mg	0.22 mg	2.17
1/8 oz		0.54 mg	0.54 mg	1.3 mg	0.17 mg	2.17
1/16 oz		0.18 mg	0.18 mg	1.1 mg	0.14 mg	2.17
1/32 oz		0.20 mg	0.20 mg	0.87 mg	0.11 mg	2.17
1/32 oz		0.27 mg	0.27 mg	0.87 mg	0.11 mg	2.17


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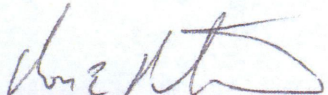
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Pierre SD 57501

Submitted by:	Capital Scale Company	Report Number:	MP3754
Mailing Address:	3021 Valley Forge Dr	Date Received:	01/11/18
City, State, Zip:	Bismarck, ND 58503	Date tested:	01/16/18
Artifacts Submitted	13 piece avoirdupois kit	Condition of Weights:	GOOD
	SN 11905A	Temperature (c):	20.5
Test Method Used:	SOP 8/ MODIFIED SUB, Jun 2015	Humidity:	43.2
Equipment Used:	Mettler AX 205 DR/ Mettler PR503/ Vaisala PTU301	Pressure (mm/Hg):	731.6

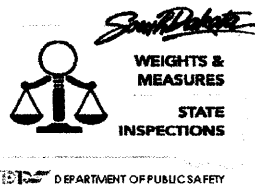
Treatment of artifacts prior to testing: Thermal equilibrium was obtained by placing the artifacts in the lab overnight.
Standards Used: SD Lab Working Standards.
The values reported below relate only to those observations made at the time and conditions of the test. This test report, so numbered, may not be reproduced, except in full, without approval of the laboratory. These weights were not screened for magnetism and effects of magnetism is not included in the uncertainties.

Nominal	Identifier	Correction As Found	Correction As Left	Tolerance Class F	Uncertainty	k
10 lb		57 mg	57 mg	450 mg	58 mg	2.17
10 lb	.	90 mg	90 mg	450 mg	58 mg	2.17
5 lb		-90 mg	-90 mg	230 mg	30 mg	2.17
2 lb		32 mg	32 mg	91 mg	12 mg	2.17
2 lb	.	15 mg	15 mg	91 mg	12 mg	2.17
1 lb		-3.4 mg	-3.4 mg	70 mg	9.2 mg	2.18
8 oz		12.1 mg	12.1 mg	45 mg	6.0 mg	2.17
4 oz		-4.9 mg	-4.9 mg	23 mg	3.0 mg	2.17
1 oz		2.97 mg	2.97 mg	5.4 mg	0.69 mg	2.17
1 oz	.	2.99 mg	2.99 mg	5.4 mg	0.69 mg	2.17
1 oz	..	1.68 mg	1.68 mg	5.4 mg	0.69 mg	2.17
1/2 oz		1.32 mg	1.32 mg	2.8 mg	0.36 mg	2.17
1/4 oz		-1.06 mg	-1.06 mg	1.7 mg	0.22 mg	2.17



Ron Peterson, Metrologist

01/17/2018
Date of Report



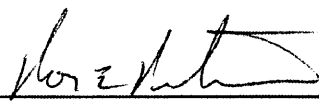
**South Dakota Department of Public Safety
Office of Weights and Measures
Metrology Lab**

Lab: 1500 N Garfield – E. Truck Bypass Phone: 605-773-3170
Office: 118 West Capitol Avenue Phone: 605-773-3697
Pierre SD 57501

Submitted by:	Capital Scale Company	Report Number:	MP3754
Mailing Address:	3021 Valley Forge Dr	Date Received:	01/11/18
City, State, Zip:	Bismarck, ND 58503	Date tested:	01/16/18
Artifacts Submitted	17 piece avoirdupois kit SN 11905B	Condition of Weights:	FAIR
Test Method Used:	SOP 8/ MODIFIED SUB, Jun 2015	Temperature (c):	20.5
Equipment Used:	Mettler AX 205 DR/ Mettler PR503/ Vaisala PTU301	Humidity:	43.2
		Pressure (mm/Hg):	731.6

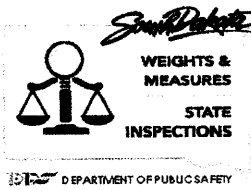
Treatment of artifacts prior to testing: Thermal equilibrium was obtained by placing the artifacts in the lab overnight.
Standards Used: SD Lab Working Standards.
The values reported below relate only to those observations made at the time and conditions of the test. This test report, so numbered, may not be reproduced, except in full, without approval of the laboratory. These weights were not screened for magnetism and effects of magnetism is not included in the uncertainties.

Nominal	Identifier	Correction As Found	Correction As Left	Tolerance Class F	Uncertainty	k
2 lb	1	25 mg	25 mg	91 mg	12 mg	2.17
2 lb	2	10 mg	10 mg	91 mg	12 mg	2.17
2 lb	3	10 mg	10 mg	91 mg	12 mg	2.17
1 lb		19.6 mg	19.6 mg	70 mg	9.2 mg	2.18
8 oz		12.1 mg	12.1 mg	45 mg	6.0 mg	2.17
4 oz		-3.0 mg	-3.0 mg	23 mg	3.0 mg	2.17
2 oz		4.1 mg	4.1 mg	11 mg	1.4 mg	2.17
1 oz		0.51 mg	0.51 mg	5.4 mg	0.69 mg	2.17
1/2 oz		0.04 mg	0.04 mg	2.8 mg	0.36 mg	2.17
1/4 oz		0.37 mg	0.37 mg	1.7 mg	0.22 mg	2.17
0.3 lb		-0.9 mg	-0.9 mg	27 mg	3.3 mg	2.17
0.2 lb		0.8 mg	0.8 mg	18 mg	2.3 mg	2.17
0.1 lb		4.3 mg	4.3 mg	9.1 mg	1.2 mg	2.17
0.05 lb		0.44 mg	0.44 mg	4.5 mg	0.58 mg	2.17
0.03 lb		-1.45 mg	-1.45 mg	2.7 mg	0.35 mg	2.17
0.02 lb		0.20 mg	0.20 mg	1.8 mg	0.23 mg	2.17
0.01 lb		-0.40 mg	-0.40 mg	1.5 mg	0.19 mg	2.17



Ron Peterson, Metrologist

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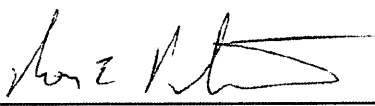
**South Dakota Department of Public Safety
Office of Weights and Measures
Metrology Lab**

Lab: 1500 N Garfield – E. Truck Bypass Phone: 605-773-3170
Office: 118 West Capitol Avenue Phone: 605-773-3697
Pierre SD 57501

Submitted by:	Capital Scale Company	Report Number:	MP3754
Mailing Address:	3021 Valley Forge Dr	Date Received:	01/11/18
City, State, Zip:	Bismarck, ND 58503	Date tested:	01/16/18
Artifacts Submitted	14 piece metric kit	Condition of Weights:	GOOD
	SN 11905E	Temperature (c):	20.5
Test Method Used:	SOP 8/ MODIFIED SUB, Jun 2015	Humidity:	43.2
Equipment Used:	Mettler AX 205 DR/ Mettler PR503/ Vaisala PTU301	Pressure (mm/Hg):	731.6

Treatment of artifacts prior to testing: Thermal equilibrium was obtained by placing the artifacts in the lab overnight.
Standards Used: SD Lab Working Standards.
The values reported below relate only to those observations made at the time and conditions of the test. This test report, so numbered, may not be reproduced, except in full, without approval of the laboratory. These weights were not screened for magnetism and effects of magnetism is not included in the uncertainties.

Nominal	Identifier	Correction As Found	Correction As Left	Tolerance Class F	Uncertainty	k
2 kg		44 mg	44 mg	200 mg	26 mg	2.18
1 kg		35 mg	35 mg	100 mg	13 mg	2.18
500 g		26.7 mg	26.7 mg	70 mg	9.1 mg	2.18
200 g		12.5 mg	12.5 mg	40 mg	5.2 mg	2.18
200 g		17.6 mg	17.6 mg	40 mg	5.2 mg	2.18
100 g		9.5 mg	9.5 mg	20 mg	2.6 mg	2.17
50 g		4.9 mg	4.9 mg	10 mg	1.3 mg	2.17
20 g		2.50 mg	2.50 mg	4 mg	0.52 mg	2.17
20 g		0.78 mg	0.78 mg	4 mg	0.52 mg	2.17
10 g		0.24 mg	0.24 mg	2 mg	0.26 mg	2.17
5 g		0.50 mg	0.50 mg	1.5 mg	0.19 mg	2.17
2 g		0.68 mg	0.68 mg	1.1 mg	0.15 mg	2.17
2 g		0.11 mg	0.11 mg	1.1 mg	0.15 mg	2.17
1 g		0.31 mg	0.31 mg	0.9 mg	0.12 mg	2.17



 Ron Peterson, Metrologist

01/17/2018
Date of Report

United States Department of Commerce

National Institute of Standards and Technology

Certificate of Metrological Traceability For:

South Dakota



This laboratory has demonstrated evidence of an unbroken chain of metrological traceability of its standards to the international system of units (SI), documented measurement uncertainties, uses documented measurement procedures, successfully completed training and proficiency tests, documented calibration intervals, submitted a quality management system, and demonstrated suitable measurement assurance for the Scope listed on this certificate.

The Office of Weights and Measures Program assesses laboratories to NIST Handbook 143 - Program Handbook for State Weights and Measures Laboratories and ISO/IEC 17025:2005.

2018

Scope

Mass Echelon III
30 kg to 1 mg
1000 lb to 0.001 lb
8 oz to 0.03125 oz

Weight Carts
4000 lb to 2000 lb

Volume Transfer, II
5 gal

A handwritten signature in black ink, reading "Douglas A. Olson".

Douglas A. Olson, Chief
NIST Office of Weights and Measures

Effective Dates: 2018-01-01 to 2018-12-31