

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: MP3695 (Pete)
DATE OF REPORT: 02/15/2017
DATE RECEIVED: 02/13/2017
DATE OF TEST: 02/14-15/2017



Submitted By: Scale Center
Contact: Tim Huber
Mailing Address: 2900 W Russel St
City, State, Zip: Sioux Falls, SD 57107
Phone: 605-838-7107
S/A Number: 1

Standards Submitted:

1 - 3000 lb cart
19 - 1000 lb weights
50 - 50 lb weights
6 - kits

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



02/15/17
Date



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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:	Scale Center	Report Number: MP3695 (Pete)
Mailing Address:	2900 W Russel St	Date Received: 02/13/17
City, State, Zip:	Sioux Falls, SD 57107	Date tested: 02/14/17
Manufacturer:	Dunbar	Condition of Cart: FAIR
Serial Number:	86610842	Temperature (c): 20.0
Test Method Used:	SOP 33 Calibrations of Weight Carts, Jan 2016	Humidity: 40.0%
Nominal (lb):	3000	Pressure (mm/Hg): 717.6
Tolerance (lb):	1.00	

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Note: Gasoline tank must be filled to the 1.25 mark.

As Found (lb)	As Left (lb)	Uncertainty-lb. (k=)
1.22	0.06	0.23

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.

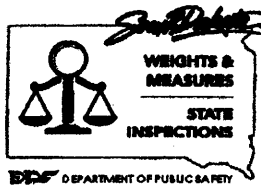
The above weight cart was compared with standards of the State of South Dakota, which are traceable the National Institute of Standards and Technology(NIST) Weights and Measures Division. The assigned test number provides documented evidence for measurement traceability.



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Submitted by: Scale Center Report Number: MP3695 (Pete)
 Mailing Address: 2900 W Russel St Date Received: 02/13/17
 City, State, Zip: Sioux Falls, SD 57107 Date tested: 02/14/17
 Artifacts Submitted: 1000 lb weights Condition of Weights: GOOD
 Temperature (c): 21
 Test Method Used: SOP 8/ MODIFIED SUB, Jun 2015 Humidity: 51.2
 Equipment Used: Russell Balance/ Vaisala PTU301 Pressure (mm/Hg): 717.7

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

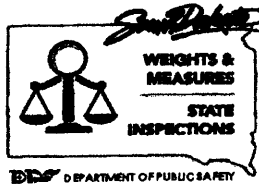
Standards Used: SD Lab 1000 lb and/or 500 lb Working Standards.

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Nominal	Serial Number	Correction As Found	Correction As Left	Tolerance	Uncertainty	k
1000 lb	1.09	0.025 lb 11.5 g	0.025 lb 11.5 g	45 g	5.9 g	2.04
1000 lb	2.09	0.015 lb 6.7 g	0.015 lb 6.7 g	45 g	5.9 g	2.04
1000 lb	3.09	0.033 lb 15.1 g	0.033 lb 15.1 g	45 g	5.9 g	2.04
1000 lb	4.09	0.008 lb 3.5 g	0.008 lb 3.5 g	45 g	5.9 g	2.04
1000 lb	5.09	0.074 lb 33.3 g	0.074 lb 33.3 g	45 g	5.9 g	2.04
1000 lb	6.09	0.010 lb 4.7 g	0.010 lb 4.7 g	45 g	5.9 g	2.04
1000 lb	7.09	0.005 lb 2.2 g	0.005 lb 2.2 g	45 g	5.9 g	2.04
1000 lb	8.09	0.021 lb 9.6 g	0.021 lb 9.6 g	45 g	5.9 g	2.04
1000 lb	9.09	0.007 lb 3.4 g	0.007 lb 3.4 g	45 g	5.9 g	2.04
1000 lb	10.09	-0.003 lb -1.5 g	-0.003 lb -1.5 g	45 g	5.9 g	2.04
1000 lb	11.09	0.046 lb 20.8 g	0.046 lb 20.8 g	45 g	5.9 g	2.04
1000 lb	12.09	0.062 lb 28.1 g	0.062 lb 28.1 g	45 g	5.9 g	2.04
1000 lb	13.09	0.080 lb 36.1 g	0.003 lb 1.5 g	45 g	5.9 g	2.04
1000 lb	14.09	0.043 lb 19.6 g	0.043 lb 19.6 g	45 g	5.9 g	2.04
1000 lb	15.09	0.057 lb 25.7 g	0.057 lb 25.7 g	45 g	5.9 g	2.04
1000 lb	16.09	-0.019 lb -8.7 g	-0.019 lb -8.7 g	45 g	5.9 g	2.04
1000 lb	18.09	0.013 lb 5.9 g	0.013 lb 5.9 g	45 g	5.9 g	2.04
1000 lb	19.09	0.075 lb 34.1 g	0.006 lb 2.8 g	45 g	5.9 g	2.04
1000 lb	TS-A12	-0.026 lb -11.9 g	-0.026 lb -11.9 g	45 g	5.9 g	2.04


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Submitted by:	Scale Center	Report Number:	MP3695 (Pete)
Mailing Address:	2900 W Russel St	Date Received:	02/13/17
City, State, Zip:	Sioux Falls, SD 57107	Date tested:	02/14-15/2017
Artifacts Submitted	50 lb test weights	Condition of Weights:	GOOD
		Temperature (c):	21.5
Test Method Used:	SOP 8/ MODIFIED SUB, Jun 2015	Humidity:	52.1%
Equipment Used:	Mettler KA-30/ Vaisala PTU301	Pressure (mm/Hg):	717.4

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

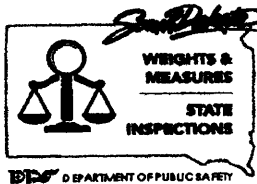
Standards Used: SD Lab Working Standards.

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Nominal	Serial Number	Correction As Found	Correction As Left	Tolerance	Uncertainty	k
50 lb	B	-1534 mg	-1534 mg	2300 mg	283 mg	2.04
50 lb	C-46	-384 mg	-384 mg	2300 mg	283 mg	2.04
50 lb	M-206	1106 mg	1106 mg	2300 mg	283 mg	2.04
50 lb	MA-102	-54 mg	-54 mg	2300 mg	283 mg	2.04
50 lb	SC-C14	331 mg	331 mg	2300 mg	283 mg	2.04
50 lb	SC-C166	2191 mg	91 mg	2300 mg	283 mg	2.04
50 lb	SC-C19	336 mg	336 mg	2300 mg	283 mg	2.04
50 lb	SC-C21	-1919 mg	-84 mg	2300 mg	283 mg	2.04
50 lb	SC-C25	61 mg	61 mg	2300 mg	283 mg	2.04
50 lb	SC-C26	1046 mg	1046 mg	2300 mg	283 mg	2.04
50 lb	SC-C27	1806 mg	-114 mg	2300 mg	283 mg	2.04
50 lb	SC-C29	1151 mg	1151 mg	2300 mg	283 mg	2.04
50 lb	SC-C35	-959 mg	-959 mg	2300 mg	283 mg	2.04
50 lb	SC-C36	-624 mg	-624 mg	2300 mg	283 mg	2.04
50 lb	SC-C4	-1299 mg	-1299 mg	2300 mg	283 mg	2.04
50 lb	SC-C43	1931 mg	51 mg	2300 mg	283 mg	2.04
50 lb	SC-C5	-1439 mg	-1439 mg	2300 mg	283 mg	2.04
50 lb	SC-C52	1231 mg	1231 mg	2300 mg	283 mg	2.04
50 lb	SC-C54	706 mg	706 mg	2300 mg	283 mg	2.04
50 lb	SCH-50-002	-1549 mg	-1549 mg	2300 mg	283 mg	2.04
50 lb	SCH-50-003	-1164 mg	-1164 mg	2300 mg	283 mg	2.04
50 lb	SCH-50-004	-279 mg	-279 mg	2300 mg	283 mg	2.04
50 lb	SCH-50-005	-1714 mg	-64 mg	2300 mg	283 mg	2.04
50 lb	SCH-50-007	1391 mg	1391 mg	2300 mg	283 mg	2.04
50 lb	SCH-50-009	-3304 mg	-14 mg	2300 mg	283 mg	2.04


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Submitted by:	Scale Center	Report Number:	MP3695 (Pete)
Mailing Address:	2900 W Russel St	Date Received:	02/13/17
City, State, Zip:	Sioux Falls, SD 57107	Date tested:	02/14-15/2017
Artifacts Submitted	50 lb test weights	Condition of Weights:	GOOD
		Temperature (c):	21.5
Test Method Used:	SOP 8/ MODIFIED SUB, Jun 2015	Humidity:	52.1%
Equipment Used:	Mettler KA-30/ Vaiala PTU301	Pressure (mm/Hg):	717.4

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

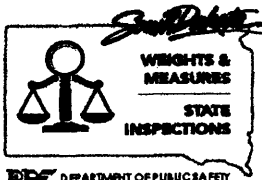
Standards Used: SD Lab Working Standards.

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50 lb	SCH-50-011	-3044 mg	1 mg	2300 mg	283 mg	2.04
50 lb	SCH-50-012	-1889 mg	-44 mg	2300 mg	283 mg	2.04
50 lb	SCH-50-013	-2084 mg	68 mg	2300 mg	283 mg	2.04
50 lb	SCH-50-014	1711 mg	1711 mg	2300 mg	283 mg	2.04
50 lb	SCH-50-015	1161 mg	1161 mg	2300 mg	283 mg	2.04
50 lb	SCH-50-017	616 mg	616 mg	2300 mg	283 mg	2.04
50 lb	SCH-50-018	-1449 mg	-1449 mg	2300 mg	283 mg	2.04
50 lb	SCH-50-019	1291 mg	1291 mg	2300 mg	283 mg	2.04
50 lb	SCH-50-020	-1329 mg	-1329 mg	2300 mg	283 mg	2.04
50 lb	SCH-50-08	-2234 mg	-14 mg	2300 mg	283 mg	2.04
50 lb	TC-C55	421 mg	421 mg	2300 mg	283 mg	2.04
50 lb	TS-C1	1076 mg	1076 mg	2300 mg	283 mg	2.04
50 lb	TS-C46	-14 mg	-14 mg	2300 mg	283 mg	2.04
50 lb	TS-C47	1996 mg	21 mg	2300 mg	283 mg	2.04
50 lb	TS-C51	-1264 mg	-1264 mg	2300 mg	283 mg	2.04
50 lb	TS-C53	-794 mg	-794 mg	2300 mg	283 mg	2.04
50 lb	TS-C54	-3154 mg	16 mg	2300 mg	283 mg	2.04
50 lb	TS-C55	1046 mg	1046 mg	2300 mg	283 mg	2.04
50 lb	TS-C57	-1944 mg	56 mg	2300 mg	283 mg	2.04
50 lb	TS-C58	-2834 mg	26 mg	2300 mg	283 mg	2.04
50 lb	TS-C66	-599 mg	-599 mg	2300 mg	283 mg	2.04
50 lb	TS-C67	2591 mg	111 mg	2300 mg	283 mg	2.04
50 lb	TS-C91	-3054 mg	-54 mg	2300 mg	283 mg	2.04
50 lb	TS-C92	-1639 mg	101 mg	2300 mg	283 mg	2.04
50 lb	TS-C93	261 mg	261 mg	2300 mg	283 mg	2.04


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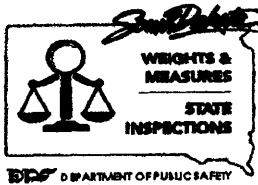
Submitted by:	Scale Center	Report Number:	MP3695 (Pete)
Mailing Address:	2900 W Russel St	Date Received:	02/13/17
City, State, Zip:	Sioux Falls, SD 57107	Date tested:	02/14/17
Artifacts Submitted	18 Piece avoirdupois kit	Condition of Weights:	FAIR
	SN SC487	Temperature (c):	20.8
Test Method Used:	SOP 8/ MODIFIED SUB, Jun 2015	Humidity:	48.2
Equipment Used:	Mettler AX 205 DR/ Mettler PR503/ Vaisala PTU301	Pressure (mm/Hg):	714.7

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
10 lb	1	28 mg	28 mg	450 mg	55 mg	2.05
10 lb	2	-77 mg	-77 mg	450 mg	55 mg	2.05
5 lb		34 mg	34 mg	230 mg	28 mg	2.04
1 lb	1	-26.4 mg	-26.4 mg	70 mg	8.5 mg	2.04
1 lb	2	-23.4 mg	-23.4 mg	70 mg	8.5 mg	2.04
1 lb	3	6.6 mg	6.6 mg	70 mg	8.5 mg	2.04
1 lb	4	-22.4 mg	-22.4 mg	70 mg	8.5 mg	2.04
1 lb	5	18.6 mg	18.6 mg	70 mg	8.5 mg	2.04
4 oz	1	3.1 mg	3.1 mg	23 mg	2.8 mg	2.05
4 oz	2	-0.1 mg	-0.1 mg	23 mg	2.8 mg	2.05
4 oz	6	2.8 mg	2.8 mg	23 mg	2.8 mg	2.05
1 oz		1.10 mg	1.10 mg	5.4 mg	0.66 mg	2.04
1 oz		1.74 mg	1.74 mg	5.4 mg	0.66 mg	2.04
1 oz		1.97 mg	1.97 mg	5.4 mg	0.66 mg	2.04
1/2 oz		1.55 mg	1.55 mg	2.8 mg	0.34 mg	2.04
1/2 oz		1.22 mg	1.22 mg	2.8 mg	0.34 mg	2.04
1/4 oz		0.74 mg	0.74 mg	1.7 mg	0.21 mg	2.04
1/4 oz		0.96 mg	0.96 mg	1.7 mg	0.21 mg	2.04


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Pierre SD 57501

Submitted by:	Scale Center	Report Number:	MP3695 (Pete)
Mailing Address:	2900 W Russel St	Date Received:	02/13/17
City, State, Zip:	Sioux Falls, SD 57107	Date tested:	02/14/17
Artifacts Submitted	20 piece avoirdupois kit SN MAS 2A86	Condition of Weights:	FAIR
Test Method Used:	SOP 8/ MODIFIED SUB. Jun 2015	Temperature (c):	20.8
Equipment Used:	Mettler AX 205 DR/ Mettler PR503/ Vaisala PTU301	Humidity:	48.2
		Pressure (mm/Hg):	714.7

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

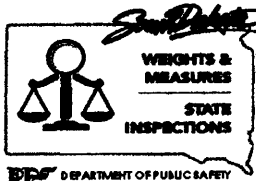
Standards Used: SD Lab Working Standards.

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Nominal	Identifier	Correction As Found	Correction As Left	Tolerance Class F	Uncertainty	k
5 lb	1	70 mg	70 mg	230 mg	28 mg	2.04
5 lb	2	-202 mg	-202 mg	230 mg	28 mg	2.04
5 lb	3	77 mg	77 mg	230 mg	28 mg	2.04
5 lb	4	61 mg	61 mg	230 mg	28 mg	2.04
5 lb	5	42 mg	42 mg	230 mg	28 mg	2.04
1 lb	1	-6.4 mg	-6.4 mg	70 mg	8.5 mg	2.04
1 lb	2	0.6 mg	0.6 mg	70 mg	8.5 mg	2.04
1 lb	3	17.6 mg	17.6 mg	70 mg	8.5 mg	2.04
1 lb	4	-2.4 mg	-2.4 mg	70 mg	8.5 mg	2.04
1 lb	5	-22.4 mg	-22.4 mg	70 mg	8.5 mg	2.04
8 oz		25.1 mg	25.1 mg	45 mg	5.6 mg	2.04
4 oz		5.1 mg	5.1 mg	23 mg	2.8 mg	2.05
2 oz		4.1 mg	4.1 mg	11 mg	1.3 mg	2.05
1 oz		1.26 mg	1.26 mg	5.4 mg	0.66 mg	2.04
1/2 oz		0.39 mg	0.39 mg	2.8 mg	0.34 mg	2.04
1/4 oz		-0.14 mg	-0.14 mg	1.7 mg	0.21 mg	2.04
1/8 oz		0.09 mg	0.09 mg	1.3 mg	0.16 mg	2.04
1/16 oz		0.27 mg	0.27 mg	1.1 mg	0.14 mg	2.04
1/32 oz		0.34 mg	0.34 mg	0.87 mg	0.14 mg	2.05
1/32 oz		0.18 mg	0.18 mg	0.87 mg	0.14 mg	2.05


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Submitted by:	Scale Center	Report Number:	MP3695 (Pete)
Mailing Address:	2900 W Russel St	Date Received:	02/13/17
City, State, Zip:	Sioux Falls, SD 57107	Date tested:	02/14/17
Artifacts Submitted	22 piece avoirdupois kit SN 031012A	Condition of Weights:	FAIR
Test Method Used:	SOP 8/ MODIFIED SUB, Jun 2015	Temperature (c):	20.8
Equipment Used:	Mettler AX 206 DR/ Mettler PR503/ Valsala PTU301	Humidity:	48.2
		Pressure (mm/Hg):	714.7

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

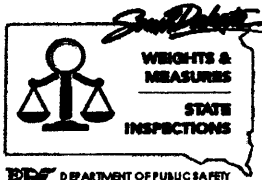
Standards Used: SD Lab Working Standards.

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Nominal	Identifier	Correction As Found	Correction As Left	Tolerance Class F	Uncertainty	k
5 lb	1	108 mg	108 mg	230 mg	28 mg	2.04
5 lb	2	85 mg	85 mg	230 mg	28 mg	2.04
5 lb	3	62 mg	62 mg	230 mg	28 mg	2.04
5 lb	4	148 mg	148 mg	230 mg	28 mg	2.04
5 lb	5	49 mg	49 mg	230 mg	28 mg	2.04
1 lb	1	22.6 mg	22.6 mg	70 mg	8.5 mg	2.04
1 lb	2	26.6 mg	26.6 mg	70 mg	8.5 mg	2.04
1 lb	3	14.6 mg	14.6 mg	70 mg	8.5 mg	2.04
1 lb	4	25.6 mg	25.6 mg	70 mg	8.5 mg	2.04
1 lb	5	30.6 mg	30.6 mg	70 mg	8.5 mg	2.04
0.5 lb		13.1 mg	13.1 mg	45 mg	5.6 mg	2.04
0.2 lb		8.4 mg	8.4 mg	18 mg	2.3 mg	2.05
0.2 lb		6.9 mg	6.9 mg	18 mg	2.3 mg	2.05
0.1 lb		4.7 mg	4.7 mg	9.1 mg	1.1 mg	2.05
0.05 lb		1.86 mg	1.86 mg	4.5 mg	0.55 mg	2.05
0.02 lb		0.52 mg	0.52 mg	1.8 mg	0.22 mg	2.05
0.02 lb		0.17 mg	0.17 mg	1.8 mg	0.22 mg	2.05
0.01 lb		0.41 mg	0.41 mg	1.5 mg	0.19 mg	2.05
0.005 lb		0.83 mg	0.83 mg	1.2 mg	0.19 mg	2.05
0.002 lb		0.60 mg	0.60 mg	0.87 mg	0.11 mg	2.05
0.002 lb		0.48 mg	0.48 mg	0.87 mg	0.11 mg	2.05
0.001 lb		0.37 mg	0.37 mg	0.7 mg	0.10 mg	2.05


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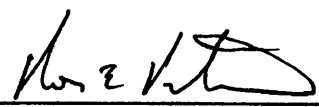


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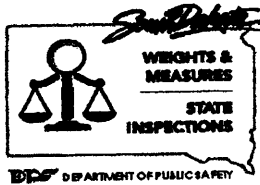
Submitted by:	Scale Center	Report Number:	MP3695 (Pete)
Mailing Address:	2900 W Russel St	Date Received:	02/13/17
City, State, Zip:	Sioux Falls, SD 57107	Date tested:	02/15/17
Artifacts Submitted	21 piece avoirdupois kit SN SC-001	Condition of Weights:	GOOD
Test Method Used:	SOP 8/ MODIFIED SUB, Jun 2015	Temperature (c):	21.1
Equipment Used:	Mettler AX 205 DR/ Mettler PR503/ Vaisala PTU301	Humidity:	52.3
		Pressure (mm/Hg):	717.7

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	-7 mg	-7 mg	91 mg	11 mg	2.05
2 lb	2	23 mg	23 mg	91 mg	11 mg	2.05
2 lb	3	5 mg	5 mg	91 mg	11 mg	2.05
2 lb	4	-6 mg	-6 mg	91 mg	11 mg	2.05
2 lb	5	11 mg	11 mg	91 mg	11 mg	2.05
2 lb	6	18 mg	18 mg	91 mg	11 mg	2.05
2 lb	7	3 mg	3 mg	91 mg	11 mg	2.05
2 lb	8	-4 mg	-4 mg	91 mg	11 mg	2.05
2 lb	9	-3 mg	-3 mg	91 mg	11 mg	2.05
2 lb	10	-22 mg	-22 mg	91 mg	11 mg	2.05
2 lb	11	3 mg	3 mg	91 mg	11 mg	2.05
2 lb	12	4 mg	4 mg	91 mg	11 mg	2.05
2 lb	13	17 mg	17 mg	91 mg	11 mg	2.05
2 lb	14	2 mg	2 mg	91 mg	11 mg	2.05
1 lb	1	-5.4 mg	-5.4 mg	70 mg	8.5 mg	2.04
1 lb	2	-8.4 mg	-8.4 mg	70 mg	8.5 mg	2.04
8 oz		8.1 mg	8.1 mg	45 mg	5.6 mg	2.04
4 oz		-2.5 mg	-2.5 mg	23 mg	2.8 mg	2.05
2 oz		6.9 mg	6.9 mg	11 mg	1.3 mg	2.05
1 oz		1.09 mg	1.09 mg	5.4 mg	0.66 mg	2.04
1/2 oz		-0.11 mg	-0.11 mg	2.8 mg	0.34 mg	2.04


 Ron Peterson, Metrologist

02/15/2017
 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:	Scale Center	Report Number:	MP3895 (Pete)
Mailing Address:	2900 W Russel St	Date Received:	02/13/17
City, State, Zip:	Sioux Falls, SD 57107	Date tested:	02/14-15/2017
Artifacts Submitted	24 piece metric kit SN 030512A	Condition of Weights:	GOOD
Test Method Used:	SOP 8/ MODIFIED SUB, Jun 2015	Temperature (c):	21.1
Equipment Used:	Mettler AX 205 DR/ Mettler PR503/ Vaisala PTU301	Humidity:	52.3
		Pressure (mm/Hg):	717.7

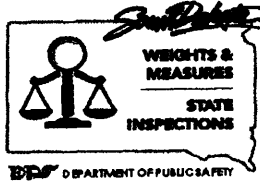
Treatment of artifacts prior to testing: Thermal equilibrium was obtained by placing the artifacts in the lab overnight.
Standards Used: SD Lab Working Standards.
The values reported below relate only to those observations made at the time and conditions of the test. This test report, so numbered, may 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.

Note: for weights 50 mg and smaller, the correction factor listed shows accuracy only and are not traceable.

Nominal	Identifier	Correction As Found	Correction As Left	Tolerance Class F	Uncertainty	k
5 kg		53 mg	53 mg	500 mg	61 mg	2.06
2 kg		78 mg	78 mg	200 mg	24 mg	2.05
2 kg		95 mg	95 mg	200 mg	24 mg	2.05
1 kg		31 mg	31 mg	100 mg	12 mg	2.05
500 g		14.7 mg	14.7 mg	70 mg	8.6 mg	2.05
200 g		12.8 mg	12.8 mg	40 mg	5.0 mg	2.05
200 g		8.9 mg	8.9 mg	40 mg	5.0 mg	2.05
100 g		8.1 mg	8.1 mg	20 mg	2.4 mg	2.05
50 g		0.9 mg	0.9 mg	10 mg	1.2 mg	2.05
20 g		1.51 mg	1.51 mg	4 mg	0.49 mg	2.04
20 g		1.37 mg	1.37 mg	4 mg	0.49 mg	2.04
10 g		0.74 mg	0.74 mg	2 mg	0.25 mg	2.04
5 g		0.78 mg	0.78 mg	1.5 mg	0.39 mg	2.05
2 g		0.15 mg	0.15 mg	1.1 mg	0.14 mg	2.05
2 g		0.25 mg	0.25 mg	1.1 mg	0.14 mg	2.05
1 g		0.22 mg	0.22 mg	0.9 mg	0.12 mg	2.05
500 mg		0.30 mg	0.30 mg	0.72 mg	0.09 mg	2.05
200 mg		0.24 mg	0.24 mg	0.54 mg	0.08 mg	2.05
200 mg		0.26 mg	0.26 mg	0.54 mg	0.08 mg	2.05
100 mg		0.09 mg	0.09 mg	0.43 mg	0.07 mg	2.16
50 mg		0.033 mg	0.033 mg	0.35 mg	0.050 mg	2.17
20 mg		0.069 mg	0.069 mg	0.26 mg	0.040 mg	2.17
20 mg		0.136 mg	0.136 mg	0.26 mg	0.040 mg	2.17
10 mg		0.035 mg	0.035 mg	0.21 mg	0.045 mg	2.17


Ron Peterson, Metrologist

02/15/2017
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:	Scale Center	Report Number:	MP3695 (Pete)
Mailing Address:	2900 W Russel St	Date Received:	02/13/17
City, State, Zip:	Sioux Falls, SD 57107	Date tested:	02/14-15/2017
Artifacts Submitted	21 piece metric kit SN SC 2000	Condition of Weights:	FAIR
Test Method Used:	SOP 8/ MODIFIED SUB, Jun 2015	Temperature (c):	21.1
Equipment Used:	Mettler AX 205 DR/ Mettler PR503/ Vaisala PTU301	Humidity:	52.3
		Pressure (mm/Hg):	717.7

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

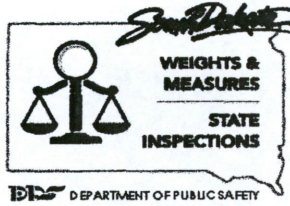
The values reported below relate only to those observations made at the time and conditions of the test. This test report, so numbered, may not be reproduced, except in full, without approval of the laboratory. These weights were not screened for magnetism and effects of magnetism is not included in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

Note: for weights 50 mg and smaller, the correction factor listed shows accuracy only and are not traceable.

Nominal	Identifier	Correction As Found	Correction As Left	Tolerance Class F	Uncertainty	k
5 kg		150 mg	150 mg	500 mg	61 mg	2.06
1 kg		-8 mg	-8 mg	100 mg	12 mg	2.05
1 kg	kilo	38 mg	38 mg	100 mg	12 mg	2.05
500 g		21.7 mg	21.7 mg	70 mg	8.6 mg	2.05
200 g		13.6 mg	13.6 mg	40 mg	5.0 mg	2.05
200 g		26.0 mg	26.0 mg	40 mg	5.0 mg	2.05
100 g		4.8 mg	4.8 mg	20 mg	2.4 mg	2.05
50 g		4.2 mg	4.2 mg	10 mg	1.2 mg	2.05
20 g		1.41 mg	1.41 mg	4 mg	0.49 mg	2.04
20 g		2.00 mg	2.00 mg	4 mg	0.49 mg	2.04
10 g		0.82 mg	0.82 mg	2 mg	0.25 mg	2.04
5 g		0.46 mg	0.46 mg	1.5 mg	0.39 mg	2.05
2 g		0.81 mg	0.81 mg	1.1 mg	0.14 mg	2.05
2 g		0.18 mg	0.18 mg	1.1 mg	0.14 mg	2.05
1 g		0.38 mg	0.38 mg	0.9 mg	0.12 mg	2.05
200 mg		0.14 mg	0.14 mg	0.54 mg	0.08 mg	2.05
200 mg		0.27 mg	0.27 mg	0.54 mg	0.08 mg	2.05
100 mg		0.25 mg	0.25 mg	0.43 mg	0.07 mg	2.16
50 mg		0.086 mg	0.086 mg	0.35 mg	0.050 mg	2.17
20 mg		0.007 mg	0.007 mg	0.26 mg	0.040 mg	2.17
10 mg		0.112 mg	0.112 mg	0.21 mg	0.045 mg	2.17


Ron Peterson, Metrologist

02/15/2017
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

REPORT OF CALIBRATION

LAB TEST NUMBER: MP3696 (Ford)
DATE OF REPORT: 02/16/2017
DATE RECEIVED: 02/15/2017
DATE OF TEST: 02/16/2017



Submitted By: Scale Center
Contact: Tim Huber
Mailing Address: 2900 W Russel St
City, State, Zip: Sioux Falls, SD 57107
Phone: 605-838-7107
S/A Number: 1

Standards Submitted:

18 - 1000 lb weights
30 - 50 lb weights
1 - 3000 lb weight cart
1 - 25 lb weight
3 weight kits

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:

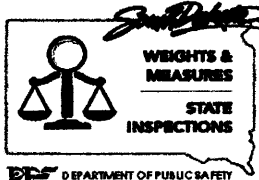
The Standards of the SD Metrology Laboratory used for comparison are traceable to the International System of Units (SI) through the National Institute of Standards and Technology. The laboratory test number identified above is the unique report number to be used in referencing measurement traceability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



02/16/17
Date



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:	Scale Center	Report Number: MP3696 (Ford)
Mailing Address:	2900 W Russel St	Date Received: 02/15/17
City, State, Zip:	Sioux Falls, SD 57107	Date tested: 02/16/17
Manufacturer:	Dunbar Mfg	Condition of Cart: FAIR
Serial Number:	029-1353082986	Temperature (c): 20.0
Test Method Used:	SOP 33 Calibrations of Weight Carts, Jan 2016	Humidity: 40.0%
Nominal (lb):	3000	Pressure (mm/Hg): 703.7
Tolerance (lb):	1.00	

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=)
1.40	-0.16	0.23

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.

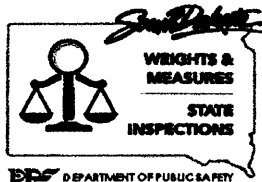
The above weight cart was compared with standards of the State of South Dakota, which are traceable the National Institute of Standards and Technology(NIST) Weights and Measures Division. The assigned test number provides documented evidence for measurement traceability.



 Ron Peterson, Metrologist

02/16/2017

 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:	Scale Center	Report Number:	MP3696 (Ford)
Mailing Address:	2900 W Russel St	Date Received:	02/15/17
City, State, Zip:	Sioux Falls, SD 57107	Date tested:	02/16/17
Artifacts Submitted	1000 lb weights	Condition of Weights:	GOOD
		Temperature (c):	21.1
Test Method Used:	SOP 8/ MODIFIED SUB, Jun 2015	Humidity:	50.5
Equipment Used:	Russell Balance/ Vaisala PTU301	Pressure (mm/Hg):	704

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

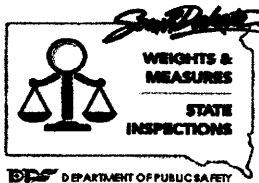
Standards Used: SD Lab 1000 lb and/or 500 lb Working Standards.

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	1	-0.091 lb	-41.4 g	0.005 lb	2.5 g	45 g	5.9 g	2.04
1000 lb	2	-0.047 lb	-21.2 g	-0.047 lb	-21.2 g	45 g	5.9 g	2.04
1000 lb	3	-0.024 lb	-10.9 g	-0.024 lb	-10.9 g	45 g	5.9 g	2.04
1000 lb	4	-0.056 lb	-25.4 g	0.003 lb	1.1 g	45 g	5.9 g	2.04
1000 lb	5	-0.049 lb	-22.1 g	-0.049 lb	-22.1 g	45 g	5.9 g	2.04
1000 lb	6	-0.015 lb	-7.0 g	-0.015 lb	-7.0 g	45 g	5.9 g	2.04
1000 lb	7	-0.052 lb	-23.6 g	0.004 lb	1.8 g	45 g	5.9 g	2.04
1000 lb	8	-0.035 lb	-15.8 g	-0.035 lb	-15.8 g	45 g	5.9 g	2.04
1000 lb	9	-0.002 lb	-1.1 g	-0.002 lb	-1.1 g	45 g	5.9 g	2.04
1000 lb	10	-0.072 lb	-32.8 g	0.007 lb	3.4 g	45 g	5.9 g	2.04
1000 lb	11	-0.019 lb	-8.5 g	-0.019 lb	-8.5 g	45 g	5.9 g	2.04
1000 lb	13	-0.029 lb	-13.1 g	-0.029 lb	-13.1 g	45 g	5.9 g	2.04
1000 lb	14	-0.007 lb	-3.1 g	-0.007 lb	-3.1 g	45 g	5.9 g	2.04
1000 lb	15	-0.050 lb	-22.5 g	-0.050 lb	-22.5 g	45 g	5.9 g	2.04
1000 lb	18	-0.027 lb	-12.3 g	-0.027 lb	-12.3 g	45 g	5.9 g	2.04
1000 lb	A	0.068 lb	30.8 g	0.068 lb	30.8 g	45 g	5.9 g	2.04
1000 lb	B	0.003 lb	1.3 g	0.003 lb	1.3 g	45 g	5.9 g	2.04
1000 lb	C	0.015 lb	6.7 g	0.015 lb	6.7 g	45 g	5.9 g	2.04


Ron Peterson, Metrologist

02/16/2017
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:	Scale Center	Report Number:	MP3698 (Ford)
Mailing Address:	2900 W Russel St	Date Received:	02/15/17
City, State, Zip:	Sioux Falls, SD 57107	Date tested:	02/16/17
Artifacts Submitted	50 lb weights	Condition of Weights:	GOOD
		Temperature (c):	20.9
Test Method Used:	SOP 8/ MODIFIED SUB, Jun 2015	Humidity:	53.8%
Equipment Used:	Mettler KA-30/ Vaisala PTU301	Pressure (mm/Hg):	706.0

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	Serial Number	Correction As Found	Correction As Left	Tolerance	Uncertainty	k
50 lb	11	-879 mg	-879 mg	2300 mg	283 mg	2.04
50 lb	115	316 mg	316 mg	2300 mg	283 mg	2.04
50 lb	A	281 mg	281 mg	2300 mg	283 mg	2.04
50 lb	B	226 mg	226 mg	2300 mg	283 mg	2.04
50 lb	BB	-414 mg	51 mg	2300 mg	283 mg	2.04
50 lb	C	-179 mg	-179 mg	2300 mg	283 mg	2.04
50 lb	D	76 mg	76 mg	2300 mg	283 mg	2.04
50 lb	E	-834 mg	-834 mg	2300 mg	283 mg	2.04
50 lb	EE	21 mg	21 mg	2300 mg	283 mg	2.04
50 lb	F	-229 mg	-229 mg	2300 mg	283 mg	2.04
50 lb	G	-394 mg	-394 mg	2300 mg	283 mg	2.04
50 lb	H	181 mg	181 mg	2300 mg	283 mg	2.04
50 lb	I	121 mg	121 mg	2300 mg	283 mg	2.04
50 lb	J	1666 mg	1666 mg	2300 mg	283 mg	2.04
50 lb	JJ	606 mg	606 mg	2300 mg	283 mg	2.04

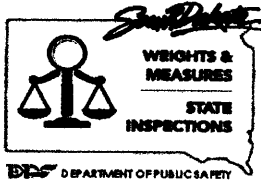

Ron Peterson, Metrologist

02/16/2017

Date of Report

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

Phone:605-773-3697
Fax:605-773-6631
www.dps.sd.gov



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: Scale Center Report Number: MP3696 (Ford)
 Mailing Address: 2900 W Russel St Date Received: 02/15/17
 City, State, Zip: Sioux Falls, SD 57107 Date tested: 02/16/17
 Artifacts Submitted: 50 lb weights Condition of Weights: GOOD
 Temperature (c): 20.9
 Test Method Used: SOP 8/ MODIFIED SUB, Jun 2015 Humidity: 53.8%
 Equipment Used: Mettler KA-30/ Vaisala PTU301 Pressure (mm/Hg): 706.0

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

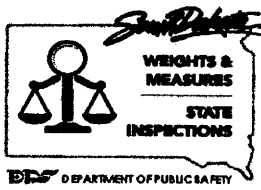
Standards Used: SD Lab Working Standards.

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	Serial Number	Correction As Found	Correction As Left	Tolerance	Uncertainty	k
50 lb	K	1251 mg	1251 mg	2300 mg	283 mg	2.04
50 lb	KK	-174 mg	-174 mg	2300 mg	283 mg	2.04
50 lb	L	-99 mg	-99 mg	2300 mg	283 mg	2.04
50 lb	M	1121 mg	1121 mg	2300 mg	283 mg	2.04
50 lb	NN	351 mg	351 mg	2300 mg	283 mg	2.04
50 lb	NN	26 mg	26 mg	2300 mg	283 mg	2.04
50 lb	O	746 mg	746 mg	2300 mg	283 mg	2.04
50 lb	P	1126 mg	1126 mg	2300 mg	283 mg	2.04
50 lb	Q	201 mg	201 mg	2300 mg	283 mg	2.04
50 lb	RR	-2089 mg	-2089 mg	2300 mg	283 mg	2.04
50 lb	RR	981 mg	981 mg	2300 mg	283 mg	2.04
50 lb	S	896 mg	896 mg	2300 mg	283 mg	2.04
50 lb	SC100	-739 mg	-739 mg	2300 mg	283 mg	2.04
50 lb	SC101	-3764 mg	291 mg	2300 mg	283 mg	2.04
50 lb	SC108	-994 mg	-994 mg	2300 mg	283 mg	2.04

Ron Peterson, Metrologist

02/16/2017
 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:	Scale Center	Report Number:	MP3696 (Ford)
Mailing Address:	2900 W Russel St	Date Received:	02/15/17
City, State, Zip:	Sioux Falls, SD 57107	Date tested:	02/16/17
Artifacts Submitted	25 lb weight	Condition of Weights:	GOOD
		Temperature (c):	20.9
Test Method Used:	SOP 8/ MODIFIED SUB, Jun 2015	Humidity:	53.8%
Equipment Used:	Mettler KA-30/ Vaisala PTU301	Pressure (mm/Hg):	706.0

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.

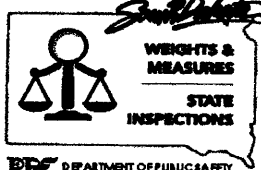
Nominal	Serial Number	Correction As Found	Correction As Left	Tolerance	Uncertainty	k
25 lb	SC-25-2	572 mg	572 mg	1100 mg	137 mg	2.05


 Ron Peterson, Metrologist

02/16/2017
 Date of Report

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

Phone:605-773-3697
 Fax:605-773-6631
 www.dps.sd.gov



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

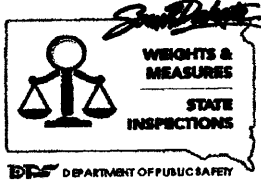
Submitted by:	Scale Center	Report Number:	MP3696 (Ford)
Mailing Address:	2900 W Russel St	Date Received:	02/15/17
City, State, Zip:	Sioux Falls, SD 57107	Date tested:	02/16/17
Artifacts Submitted	25 piece avoirdupois kit SN 041304	Condition of Weights:	FAIR
Test Method Used:	SOP 8/ MODIFIED SUB, Jun 2015	Temperature (c):	21.2
Equipment Used:	Mettler AX 205 DR/ Mettler PR503/ Vaisala PTU301	Humidity:	51.4
		Pressure (mm/Hg):	703.7

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
5 lb	1	-91 mg	-91 mg	230 mg	28 mg	2.04
5 lb	2	-130 mg	-130 mg	230 mg	28 mg	2.04
5 lb	3	30 mg	30 mg	230 mg	28 mg	2.04
5 lb	4	-72 mg	-72 mg	230 mg	28 mg	2.04
5 lb	5	-20 mg	-20 mg	230 mg	28 mg	2.04
1 lb	1	43.6 mg	43.6 mg	70 mg	8.5 mg	2.04
1 lb	2	-45.4 mg	-45.4 mg	70 mg	8.5 mg	2.04
1 lb	3	10.6 mg	10.6 mg	70 mg	8.5 mg	2.04
1 lb	4	-50.4 mg	-50.4 mg	70 mg	8.5 mg	2.04
1 lb	79	-14.4 mg	-14.4 mg	70 mg	8.5 mg	2.04
8 oz		8.1 mg	8.1 mg	45 mg	5.6 mg	2.04
4 oz		-1.3 mg	-1.3 mg	23 mg	2.8 mg	2.05
2 oz		0.1 mg	0.1 mg	11 mg	1.3 mg	2.05
1 oz		2.57 mg	2.57 mg	5.4 mg	0.66 mg	2.04
1/2 oz		0.28 mg	0.28 mg	2.8 mg	0.34 mg	2.04
1/4 oz		0.10 mg	0.10 mg	1.7 mg	0.21 mg	2.04
1/8 oz		0.29 mg	0.29 mg	1.3 mg	0.16 mg	2.04
1/16 oz		0.02 mg	0.02 mg	1.1 mg	0.14 mg	2.04
0.1 lb		1.5 mg	1.5 mg	9.1 mg	1.1 mg	2.05
0.05 lb		0.37 mg	0.37 mg	4.5 mg	0.55 mg	2.05
0.05 lb		-0.22 mg	-0.22 mg	4.5 mg	0.55 mg	2.05
0.02 lb		0.49 mg	0.49 mg	1.8 mg	0.22 mg	2.05
0.02 lb		0.66 mg	0.66 mg	1.8 mg	0.22 mg	2.05
0.01 lb		0.07 mg	0.07 mg	1.5 mg	0.19 mg	2.05
0.005 lb		0.92 mg	0.92 mg	1.2 mg	0.19 mg	2.05


 Ron Peterson, Metrologist

02/16/2017
 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

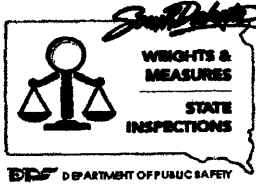
Submitted by:	Scale Center	Report Number:	MP3696 (Ford)
Mailing Address:	2900 W Russel St	Date Received:	02/15/17
City, State, Zip:	Sioux Falls, SD 57107	Date tested:	02/16/17
Artifacts Submitted	24 piece metric kit SN SC-2006-1	Condition of Weights:	GOOD
Test Method Used:	SOP 8/ MODIFIED SUB, Jun 2015	Temperature (c):	21.7
Equipment Used:	Mettler AX 205 DR/ Mettler PR503/ Vaisala PTU301	Humidity:	51
		Pressure (mm/Hg):	703.3

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
5 kg		196 mg	196 mg	500 mg	61 mg	2.06
2 kg		43 mg	43 mg	200 mg	24 mg	2.05
2 kg		42 mg	42 mg	200 mg	24 mg	2.05
1 kg		13 mg	13 mg	100 mg	12 mg	2.05
500 g		21.7 mg	21.7 mg	70 mg	8.6 mg	2.05
200 g		14.4 mg	14.4 mg	40 mg	5.0 mg	2.05
200 g		17.6 mg	17.6 mg	40 mg	5.0 mg	2.05
100 g		7.4 mg	7.4 mg	20 mg	2.4 mg	2.05
50 g		4.2 mg	4.2 mg	10 mg	1.2 mg	2.05
20 g		1.79 mg	1.79 mg	4 mg	0.49 mg	2.04
20 g		1.63 mg	1.63 mg	4 mg	0.49 mg	2.04
10 g		0.40 mg	0.40 mg	2 mg	0.25 mg	2.04
5 g		0.57 mg	0.57 mg	1.5 mg	0.39 mg	2.05
2 g		0.31 mg	0.31 mg	1.1 mg	0.14 mg	2.05
2 g		0.42 mg	0.42 mg	1.1 mg	0.14 mg	2.05
1 g		0.13 mg	0.13 mg	0.9 mg	0.12 mg	2.05
500 mg		0.272 mg	0.272 mg	0.72 mg	0.093 mg	2.05
200 mg		0.237 mg	0.237 mg	0.54 mg	0.079 mg	2.05
200 mg		0.278 mg	0.278 mg	0.54 mg	0.079 mg	2.05
100 mg		0.178 mg	0.178 mg	0.43 mg	0.072 mg	2.16
50 mg		0.166 mg	0.166 mg	0.35 mg	0.050 mg	2.17
20 mg		0.119 mg	0.119 mg	0.26 mg	0.040 mg	2.17
20 mg		0.058 mg	0.058 mg	0.26 mg	0.040 mg	2.17
10 mg		0.046 mg	0.046 mg	0.21 mg	0.045 mg	2.17


Ron Peterson, Metrologist

02/16/2017
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:	Scale Center	Report Number:	MP3896 (Ford)
Mailing Address:	2900 W Russel St	Date Received:	02/15/17
City, State, Zip:	Sioux Falls, SD 57107	Date tested:	02/16/17
Artifacts Submitted	24 piece metric kit SN 31609A	Condition of Weights:	GOOD
Test Method Used:	SOP 8/ MODIFIED SUB, Jun 2015	Temperature (c):	21.7
Equipment Used:	Mettler AX 205 DR/ Mettler PR503/ Vaisala PTU301	Humidity:	51
		Pressure (mm/Hg):	703.3

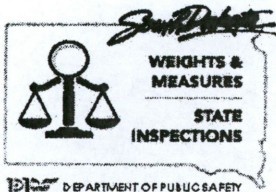
Treatment of artifacts prior to testing: Thermal equilibrium was obtained by placing the artifacts in the lab overnight.
 Standards Used: SD Lab Working Standards.
 The values reported below relate only to those observations made at the time and conditions of the test. This test report, so numbered, 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
5 kg		178 mg	178 mg	500 mg	61 mg	2.06
2 kg		75 mg	75 mg	200 mg	24 mg	2.05
2 kg		53 mg	53 mg	200 mg	24 mg	2.05
1 kg		21 mg	21 mg	100 mg	12 mg	2.05
500 g		25.7 mg	25.7 mg	70 mg	8.6 mg	2.05
200 g		10.2 mg	10.2 mg	40 mg	5.0 mg	2.05
200 g		14.3 mg	14.3 mg	40 mg	5.0 mg	2.05
100 g		8.5 mg	8.5 mg	20 mg	2.4 mg	2.05
50 g		2.2 mg	2.2 mg	10 mg	1.2 mg	2.05
20 g		1.65 mg	1.65 mg	4 mg	0.49 mg	2.04
20 g		1.95 mg	1.95 mg	4 mg	0.49 mg	2.04
10 g		0.73 mg	0.73 mg	2 mg	0.25 mg	2.04
5 g		0.68 mg	0.68 mg	1.5 mg	0.39 mg	2.05
2 g		0.44 mg	0.44 mg	1.1 mg	0.14 mg	2.05
2 g		0.53 mg	0.53 mg	1.1 mg	0.14 mg	2.05
1 g		0.43 mg	0.43 mg	0.9 mg	0.12 mg	2.05
500 mg		0.350 mg	0.350 mg	0.72 mg	0.093 mg	2.05
200 mg		0.242 mg	0.242 mg	0.54 mg	0.079 mg	2.05
200 mg		0.175 mg	0.175 mg	0.54 mg	0.079 mg	2.05
100 mg		0.177 mg	0.177 mg	0.43 mg	0.072 mg	2.16
50 mg		0.157 mg	0.157 mg	0.35 mg	0.050 mg	2.17
20 mg		0.125 mg	0.125 mg	0.26 mg	0.040 mg	2.17
20 mg		0.129 mg	0.129 mg	0.26 mg	0.040 mg	2.17
10 mg		0.101 mg	0.101 mg	0.21 mg	0.045 mg	2.17

End of Report


 Ron Peterson, Metrologist

02/16/2017
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

REPORT OF CALIBRATION

LAB TEST NUMBER: MP3697 (Sterling)
DATE OF REPORT: 03/01/2017
DATE RECEIVED: 02/27/2017
DATE OF TEST: 02/28/2017

Submitted By: Scale Center
Contact: Tim Huber
Mailing Address: 2900 W Russel St
City, State, Zip: Sioux Falls, SD 57107
Phone: 605-838-7107
S/A Number: 1

Standards Submitted:

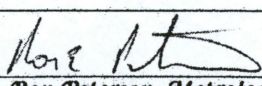
- 18 - 1000 lb weights
- 30 - 50 lb weights
- 3 - 25 lb weights
- 3 - weight kits (2 metric, 1 avoirdupois)
- 1 - 3500 lb weight cart

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.

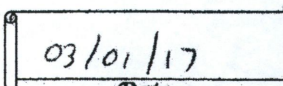
Traceability statement:

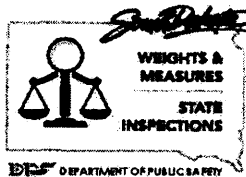
The Standards of the SD Metrology Laboratory used for comparison are traceable to the International System of Units (SI) through the National Institute of Standards and Technology. The laboratory test number identified above is the unique report number to be used in referencing measurement traceability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




03/01/17
Date



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:	Scale Center	Report Number: MP3697 (Sterling)
Mailing Address:	2900 W Russel St	Date Received: 02/27/17
City, State, Zip:	Sioux Falls, SD 57107	Date tested: 02/28/17
Manufacturer:	B-TEK INC	Condition of Cart: GOOD
Serial Number:	TC-202-138	Temperature (c): 20.0
Test Method Used:	SOP 33 Calibrations of Weight Carts, Jan 2016	Humidity: 40.0%
Nominal (lb):	3500	Pressure (mm/Hg): 714.6
Tolerance (lb):	1.00	

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=)
0.06	0.06	0.24

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.

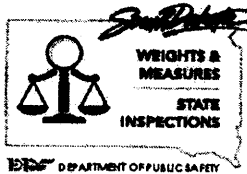
The above weight cart was compared with standards of the State of South Dakota, which are traceable the National Institute of Standards and Technology(NIST) Weights and Measures Division. The assigned test number provides documented evidence for measurement traceability.



 Ron Peterson, Metrologist

03/01/2017

 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:	Scale Center	Report Number:	MP3897 (Sterling)
Mailing Address:	2900 W Russel St	Date Received:	02/27/17
City, State, Zip:	Sioux Falls, SD 57107	Date tested:	02/28/17
Artifacts Submitted	1000 lb weights	Condition of Weights:	GOOD
		Temperature (c):	21
Test Method Used:	SOP 8/ MODIFIED SUB, Jun.2015	Humidity:	51.4
Equipment Used:	Russell Balance/ Valsala PTU301	Pressure (mm/Hg):	709

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.

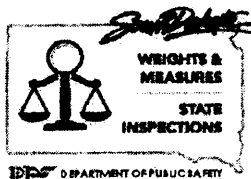
Nominal	Serial Number	Correction As Found	Correction As Left	Tolerance	Uncertainty	k
1000 lb	18.09	-0.078 lb -35.5 g	0.000 lb 0.0 g	45 g	5.9 g	2.04
1000 lb	19.09	-0.053 lb -24.1 g	-0.053 lb -24.1 g	45 g	5.9 g	2.04
1000 lb	20.09	-0.047 lb -21.1 g	-0.047 lb -21.1 g	45 g	5.9 g	2.04
1000 lb	21.09	-0.058 lb -26.3 g	-0.001 lb -0.6 g	45 g	5.9 g	2.04
1000 lb	22.09	-0.069 lb -31.2 g	0.002 lb 1.0 g	45 g	5.9 g	2.04
1000 lb	23.09	-0.011 lb -4.9 g	-0.011 lb -4.9 g	45 g	5.9 g	2.04
1000 lb	24.09	-0.078 lb -35.2 g	0.001 lb 0.6 g	45 g	5.9 g	2.04
1000 lb	25.09	-0.012 lb -5.5 g	-0.012 lb -5.5 g	45 g	5.9 g	2.04
1000 lb	26.09	-0.001 lb -0.3 g	-0.001 lb -0.3 g	45 g	5.9 g	2.04
1000 lb	27.09	-0.024 lb -10.8 g	-0.024 lb -10.8 g	45 g	5.9 g	2.04
1000 lb	28.09	-0.055 lb -24.8 g	-0.055 lb -24.8 g	45 g	5.9 g	2.04
1000 lb	29.09	-0.038 lb -17.4 g	-0.038 lb -17.4 g	45 g	5.9 g	2.04
1000 lb	30.09	-0.084 lb -38.2 g	0.001 lb 0.3 g	45 g	5.9 g	2.04
1000 lb	31.09	-0.095 lb -43.0 g	0.004 lb 1.9 g	45 g	5.9 g	2.04
1000 lb	32.09	-0.086 lb -39.0 g	-0.001 lb -0.4 g	45 g	5.9 g	2.04
1000 lb	33.09	-0.002 lb -1.1 g	-0.002 lb -1.1 g	45 g	5.9 g	2.04
1000 lb	34.09	-0.007 lb -3.4 g	-0.007 lb -3.4 g	45 g	5.9 g	2.04
1000 lb	17A	-0.161 lb -72.9 g	0.005 lb 2.2 g	45 g	5.9 g	2.04


Ron Peterson, Metrologist

03/01/2017
Date of Report

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

Phone:605-773-3697
Fax:605-773-6631
www.dps.sd.gov



**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: Scale Center **Report Number:** MP3697 (Sterling)
Mailing Address: 2900 W Russel St **Date Received:** 02/27/17
City, State, Zip: Sioux Falls, SD 57107 **Date tested:** 02/28/17
Artifacts Submitted: 50 lb weights **Condition of Weights:** GOOD
Temperature (c): 21.7
Test Method Used: SOP 8/ MODIFIED SUB, Jun 2015 **Humidity:** 50.6%
Equipment Used: Mettler KA-30/Vaisala PTU301 **Pressure (mm/Hg):** 708.4

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

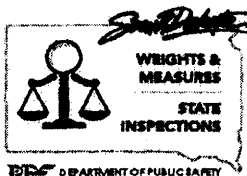
Standards Used: SD Lab Working Standards.

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	Serial Number	Correction As Found	Correction As Left	Tolerance	Uncertainty	k
50 lb	A-C1	-1574 mg	81 mg	2300 mg	283 mg	2.04
50 lb	B	-2649 mg	-29 mg	2300 mg	283 mg	2.04
50 lb	C	-229 mg	-229 mg	2300 mg	283 mg	2.04
50 lb	CA	-4584 mg	-4 mg	2300 mg	283 mg	2.04
50 lb	D	-1609 mg	-9 mg	2300 mg	283 mg	2.04
50 lb	E	-1869 mg	-9 mg	2300 mg	283 mg	2.04
50 lb	F	-49 mg	-49 mg	2300 mg	283 mg	2.04
50 lb	G	-1544 mg	98 mg	2300 mg	283 mg	2.04
50 lb	H	-1044 mg	-1044 mg	2300 mg	283 mg	2.04
50 lb	I	-854 mg	-854 mg	2300 mg	283 mg	2.04
50 lb	J	-2284 mg	81 mg	2300 mg	283 mg	2.04
50 lb	K	-929 mg	-929 mg	2300 mg	283 mg	2.04
50 lb	L	-949 mg	-949 mg	2300 mg	283 mg	2.04
50 lb	N	-2114 mg	11 mg	2300 mg	283 mg	2.04
50 lb	Q	-2114 mg	-39 mg	2300 mg	283 mg	2.04
50 lb	S	-674 mg	-674 mg	2300 mg	283 mg	2.04
50 lb	SC12	-3739 mg	-24 mg	2300 mg	283 mg	2.04
50 lb	SC15	-2639 mg	36 mg	2300 mg	283 mg	2.04
50 lb	SC18	-709 mg	-709 mg	2300 mg	283 mg	2.04
50 lb	SC-48	-39 mg	-39 mg	2300 mg	283 mg	2.04


Ron Peterson, Metrologist

03/01/2017
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: Scale Center **Report Number:** MP3697 (Sterling)
Mailing Address: 2900 W Russel St **Date Received:** 02/27/17
City, State, Zip: Sioux Falls, SD 57107 **Date tested:** 02/28/17
Artifacts Submitted: 50 lb weights **Condition of Weights:** GOOD
Temperature (c): 21.7
Test Method Used: SOP 8/ MODIFIED SUB, Jun 2015 **Humidity:** 60.6%
Equipment Used: Mettler KA-30/ Vaisala PTU301 **Pressure (mm/Hg):** 708.4

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.

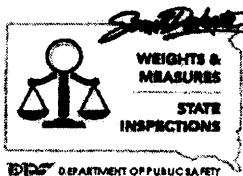
Nominal	Serial Number	Correction As Found	Correction As Left	Tolerance	Uncertainty	k
50 lb	SC7	-3879 mg	8 mg	2300 mg	283 mg	2.04
50 lb	SC8	-3909 mg	-24 mg	2300 mg	283 mg	2.04
50 lb	SC9	-2849 mg	-74 mg	2300 mg	283 mg	2.04
50 lb	SC-C4	-2334 mg	106 mg	2300 mg	283 mg	2.04
50 lb	SC-C51	-954 mg	-954 mg	2300 mg	283 mg	2.04
50 lb	SC-C56	-2829 mg	-9 mg	2300 mg	283 mg	2.04
50 lb	SCH.50.010	-569 mg	-569 mg	2300 mg	283 mg	2.04
50 lb	SCH.50.016	-629 mg	-629 mg	2300 mg	283 mg	2.04
50 lb	SCH.50.006	-4584 mg	-4 mg	2300 mg	283 mg	2.04
50 lb	TS-C56	-234 mg	-234 mg	2300 mg	283 mg	2.04


Ron Peterson, Metrologist

03/01/2017
Date of Report

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

Phone:605-773-3697
Fax:605-773-6631
www.dps.sd.gov



**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: Scale Center Report Number: MP3697 (Starling)
 Mailing Address: 2900 W Russel St Date Received: 02/27/17
 City, State, Zip: Sioux Falls, SD 57107 Date tested: 02/28/17
 Artifacts Submitted: 25 lb weights Condition of Weights: GOOD
 Temperature (c): 21.7
 Test Method Used: SOP 8/ MODIFIED SUB, Jun 2015 Humidity: 50.8%
 Equipment Used: Mettler KA-30/ Vaisala PTU301 Pressure (mm/Hg): 708.4

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.

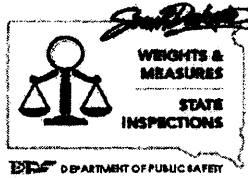
Nominal	Serial Number	Correction As Found	Correction As Left	Tolerance	Uncertainty	k
25 lb	GE-1A	577 mg	577 mg	1100 mg	137 mg	2.05
25 lb	SC-25-1	647 mg	647 mg	1100 mg	137 mg	2.05
25 lb	TS-D8	347 mg	347 mg	1100 mg	137 mg	2.05


 Ron Peterson, Metrologist

03/01/2017
 Date of Report

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

Phone: 605-773-3697
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 www.dps.sd.gov



**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:	Scale Center	Report Number:	MP3097 (Sterling)
Mailing Address:	2900 W Russel St	Date Received:	02/27/17
City, State, Zip:	Sioux Falls, SD 57107	Date tested:	02/28/17
Artifacts Submitted	22 piece avoirdupois kit SN 031012B	Condition of Weights:	GOOD
Test Method Used:	SOP 8/ MODIFIED SUB, Jun 2015	Temperature (c):	20.8
Equipment Used:	Mettler AX 205 DR/ Mettler PR503/ Vaisala PTU301	Humidity:	49.8
		Pressure (mm/Hg):	709.6

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.

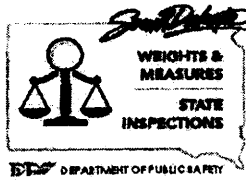
Nominal	Identifier	Correction As Found	Correction As Left	Tolerance Class F	Uncertainty	k
5 lb	1	63.100 mg	3.1 mg	230 mg	28 mg	2.04
5 lb	2	43.100 mg	3.1 mg	230 mg	28 mg	2.04
5 lb	3	38.100 mg	3.1 mg	230 mg	28 mg	2.04
5 lb	4	65.100 mg	3.1 mg	230 mg	28 mg	2.04
5 lb	5	42.100 mg	3.1 mg	230 mg	28 mg	2.04
1 lb	1	22.600 mg	0.6 mg	70 mg	9 mg	2.04
1 lb	2	18.600 mg	0.6 mg	70 mg	9 mg	2.04
1 lb	3	18.600 mg	0.6 mg	70 mg	9 mg	2.04
1 lb	4	23.600 mg	0.6 mg	70 mg	9 mg	2.04
1 lb	5	12.600 mg	0.6 mg	70 mg	9 mg	2.04
0.5 lb		7.100 mg	0.1 mg	45 mg	6 mg	2.04
0.2 lb		7.250 mg	0.1 mg	18 mg	2 mg	2.05
0.2 lb		2.830 mg	0.1 mg	18 mg	2 mg	2.05
0.1 lb		4.210 mg	0.1 mg	9.1 mg	1 mg	2.05
0.05 lb		0.550 mg	0.0 mg	4.5 mg	1 mg	2.05
0.02 lb		0.505 mg	0.0 mg	1.8 mg	0 mg	2.05
0.02 lb		0.785 mg	0.0 mg	1.8 mg	0 mg	2.05
0.01 lb		0.462 mg	0.0 mg	1.5 mg	0 mg	2.05
0.005 lb		0.972 mg	0.0 mg	1.2 mg	0 mg	2.05
0.002 lb		0.584 mg	0.1 mg	0.87 mg	0 mg	2.05
0.002 lb		0.515 mg	0.1 mg	0.87 mg	0 mg	2.05
0.001 lb		0.391 mg	0.1 mg	0.7 mg	0 mg	2.05


Ron Peterson, Metrologist

03/01/2017
Date of Report

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

Phone: 605-773-3697
Fax: 605-773-8631
www.dps.sd.gov



**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:	Scale Center	Report Number:	MP3697 (Sterling)
Mailing Address:	2900 W Russel St	Date Received:	02/27/17
City, State, Zip:	Sioux Falls, SD 57107	Date tested:	03/01/17
Artifacts Submitted:	21 piece metric kit SN 030512B	Condition of Weights:	GOOD
Test Method Used:	SOP 8/ MODIFIED SUB, Jun 2015	Temperature (c):	20.8
Equipment Used:	Mettler AX 205 DR/ Mettler PR303/ Weisala PTU301	Humidity:	49.8
		Pressure (mm/Hg):	709.6

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.

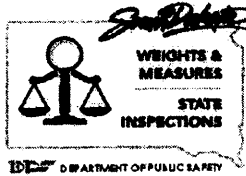
Nominal	Identifier	Correction As Found	Correction As Left	Tolerance Class F	Uncertainty	k
5 kg		66.000 mg	66.0 mg	500 mg	61 mg	2.06
2 kg		81.100 mg	81.1 mg	200 mg	24 mg	2.05
2 kg		75.100 mg	75.1 mg	200 mg	24 mg	2.05
1 kg		26.500 mg	26.5 mg	100 mg	12 mg	2.05
500 g		13.700 mg	13.7 mg	70 mg	8.6 mg	2.05
200 g		16.210 mg	16.2 mg	40 mg	5.0 mg	2.05
200 g		14.580 mg	14.6 mg	40 mg	5.0 mg	2.05
100 g		7.090 mg	7.1 mg	20 mg	2.4 mg	2.05
50 g		2.289 mg	2.3 mg	10 mg	1.2 mg	2.05
20 g		1.87 mg	1.87 mg	4 mg	0.49 mg	2.04
20 g		0.36 mg	0.36 mg	4 mg	0.49 mg	2.04
10 g		0.50 mg	0.50 mg	2 mg	0.25 mg	2.04
5 g		0.61 mg	0.61 mg	1.5 mg	0.39 mg	2.05
2 g		0.47 mg	0.47 mg	1.1 mg	0.14 mg	2.05
2 g		0.38 mg	0.38 mg	1.1 mg	0.14 mg	2.05
1 g		0.18 mg	0.18 mg	0.9 mg	0.12 mg	2.05
500 mg		0.182 mg	0.182 mg	0.72 mg	0.093 mg	2.05
200 mg		0.284 mg	0.284 mg	0.54 mg	0.079 mg	2.05
200 mg		0.226 mg	0.226 mg	0.54 mg	0.079 mg	2.05
100 mg		0.210 mg	0.210 mg	0.43 mg	0.072 mg	2.16
10 mg		0.085 mg	0.085 mg	0.21 mg	0.045 mg	2.17


Ron Peterson, Metrologist

03/01/2017
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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:	Scale Center	Report Number:	MP3897 (Sterling)
Mailing Address:	2900 W Russell St	Date Received:	02/27/17
City, State, Zip:	Sioux Falls, SD 57107	Date tested:	03/01/17
Artifacts Submitted:	22 piece metric kit	Condition of Weights:	GOOD
	SN SC-2006-2	Temperature (c):	20.8
Test Method Used:	SOP & MODIFIED SUB, Jun 2015	Humidity:	49.8
Equipment Used:	Mettler AX 205 DR/ Mettler PR503/ Velsala PTU301	Pressure (mm/Hg):	709.6

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		54 mg	54 mg	200 mg	24 mg	2.05
1 kg		21 mg	21 mg	100 mg	12 mg	2.05
500 g		18.7 mg	18.7 mg	70 mg	8.8 mg	2.05
200 g		18.1 mg	18.1 mg	40 mg	5.0 mg	2.05
200 g		19.1 mg	19.1 mg	40 mg	5.0 mg	2.05
100 g		5.3 mg	5.3 mg	20 mg	2.4 mg	2.05
50 g		3.6 mg	3.6 mg	10 mg	1.2 mg	2.05
20 g		1.51 mg	1.51 mg	4 mg	0.49 mg	2.04
20 g		1.59 mg	1.59 mg	4 mg	0.49 mg	2.04
10 g		0.98 mg	0.98 mg	2 mg	0.26 mg	2.04
5 g		0.52 mg	0.52 mg	1.5 mg	0.39 mg	2.05
2 g		0.57 mg	0.57 mg	1.1 mg	0.14 mg	2.05
2 g		0.26 mg	0.26 mg	1.1 mg	0.14 mg	2.05
1 g		0.32 mg	0.32 mg	0.9 mg	0.12 mg	2.05
500 mg		0.371 mg	0.371 mg	0.72 mg	0.093 mg	2.05
200 mg		0.264 mg	0.264 mg	0.54 mg	0.079 mg	2.05
200 mg		0.242 mg	0.242 mg	0.54 mg	0.079 mg	2.05
100 mg		0.176 mg	0.176 mg	0.43 mg	0.072 mg	2.16
50 mg		0.020 mg	0.020 mg	0.35 mg	0.050 mg	2.17
20 mg		0.081 mg	0.081 mg	0.26 mg	0.040 mg	2.17
20 mg		0.126 mg	0.126 mg	0.26 mg	0.040 mg	2.17
10 mg		0.101 mg	0.101 mg	0.21 mg	0.045 mg	2.17


Ron Peterson, Metrologist

03/01/2017
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.

Scope

Mass Echelon III
30 kg to 100 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



2017

A handwritten signature in cursive script, appearing to read "Georgia L. Harris".

Georgia L. Harris, Acting Chief
NIST Office of Weights and Measures

Effective Dates: 2017-01-01 to 2017-12-31