APPLICATION FOR REGISTRATION AS A REGISTERED SERVICE COMPANY

Public Service Commission
SFN 51277 (2/2014)

RECEIVED
MAY 19 2014
ND Public Service Commission

TYPE OR PRINT - AN INCOMPLETE OR ILLEGIBLE APPLICATION WILL BE REJECTED

Name of Company	Email Address	Application Date	
Scale Center	jchristian@thescalecenter.com	5-19-14	
Mailing Address	**City**	**State**	**Zip Code**
2900 W. Russell St.	Sioux Falls	SD	57107
Telephone Number	**Cell Phone Number**	**Fax Number**	
605-332-8881		605-332-8886	

Select below all device types your company will certify:

Scales (include maximum capacity, if applicable)	**Liquid** (include maximum flow rate, if applicable)
☒ 1. Rail	☐ 1. Retail Fuel (less than 20 gal. per minute)
☒ 2. Truck	☐ 2. High Flow Retail Fuel (20 gal. per minute or greater)
☒ 3. Livestock	☐ 3. Vehicle Tank: Max. Flow Rate: _____
☒ 4. Hopper: Max. Capacity: _____	☐ 4. Stationary Bulk (fuel or oil): Max. Flow Rate: _____
☒ 5. Belt	☐ 5. LPG
☒ 6. Over 30 lbs.: Max. Capacity: _____	☐ 6. Stationary LPG
☒ 7. 30 lbs. or less	☐ 7. Fertilizer: Max. Flow Rate: _____
☒ 8. Class II **(indicate on your calibration report which weight kit is Class II certified)**	☐ 8. Chemical
☐ 9. Other: Please List:	☐ 9. Anhydrous
	☐ 10. Loading Rack
	☐ 11. Other: Please List:

List below all persons employed by your company as a North Dakota Registered Service Person and the device types they are registered to certify (attach a separate sheet to list additional employees):

Permit No.	Employee	Device Types Registered to Certify (list using device type numbers from above)
e.g. 1001	*e.g. John Doe*	*e.g. Scales – 2, 3, 6, 8; e.g. Liquid – 1, 2, 6*
1035	Wayne Weigelt	Scales 1-8
	Ken Hoff	Scales 1-8

Continued on Page 2

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List below all field standards (attach current calibration reports):

Additional Application Items (initial where appropriate):

Standardized Test Report	JC Copy enclosed ____ No change in report filed previously
Tested and Approved Sticker	JC Copy enclosed ____ No change in sticker filed previously
Photocopy of Crimped Lead Wire Seal	JC Copy enclosed ____ No change in crimped lead wire seal filed previously

Public Company Listing:

Include my company information on your registered service company list for public contact.
☒ Yes ☐ No

I am Wayne Weigelt, and have authority to represent this company. By signing this application, I declare that I have examined this form and accompanying documentation, and to the best of my knowledge and belief, the facts stated and documentation provided is true, correct, and complete.

Wayne W Weigelt
Signature

Send Completed Application and Related Documents To:

Public Service Commission
600 E Boulevard Ave Dept 408
Bismarck ND 58505-0480
Telephone: (701) 328-2400
Fax: (701) 328-2410

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

REPORT OF CALIBRATION

LAB TEST NUMBER: MP3318
DATE OF REPORT: 02/19/2014
DATE RECEIVED: 02/17/2014
DATE OF TEST: 02/18/2014

Submitted By: SCALE CENTER
Contact: TIM HUBER
Mailing Address: 2900 WEST RUSSELL
City, State, Zip: SIOUX FALLS, SD 57107
Phone: 605-838-7107
S/A Number:

Standards Submitted:

1	-WEIGHTS CARTS	5	-AVOIRDUPOIS WEIGHT KITS
17	-1000 LB TEST WEIGHTS	3	-METRIC WEIGHT KITS
	-500 LB TEST WEIGHTS		-5 GALLON TEST MEASURES
40	-50 LB TEST WEIGHTS		
4	-25 LB TEST WEIGHTS		

Uncertainty Statement: The combined standard uncertainty includes the standard uncertainty reported for the standard, the standard uncertainty for the measurement process, and a component of uncertainty to account for any observed deviations from values that are less than surveillance limits. The combined standard uncertainty is multiplied by a coverage factor of k = 2 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 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. All established Uncertainties are less than 1/3 applicable Class "F" tolerances.

Traceability statement:
The Standards of the SD Metrology Laboratory are traceable to the International System of Units (SI) through the National Institute of Standards and Technology recognized/traceable lab in the State of Minnesota, (Test Reports: 327678, 327681, 327682, 327683, 327684, 327685, 327686, 327687, 327813) and are part of a comprehensive measurement assurance program for ensuring continued accuracy and measurement traceability within the level of uncertainty reported by this laboratory. 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.

The artifacts submitted for calibration have been examined by the State of South Dakota and found to be appropriate for the intended use and to be accurate within Class "F" Tolerances as established by the National Institute of Standards and Technology-Weights and Measures Division. Test methods are in accordance with NIST Handbook 145 and NIST IR 6969.

This document does not represent or imply endorsement by NIST Office of Weights and Measures, NMI, 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

2/19/14
Date

SOUTH DAKOTA 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:**	MP3318
Mailing Address:	2900 WEST RUSSELL	**Date Received:**	02/17/14
City, State, Zip:	SIOUX FALLS, SD 57107	**Date tested:**	02/18/14
Manufacturer:		**Condition of Cart:**	Good
Serial Number:	NA	**Temperature (c):**	21.0
Test Method Used	SOP 33/ Double Sub.	**Humidity:**	40.0%
Nominal (lb):	3000	**Pressure (mm/Hg):**	710.1
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=2)
-0.63	0.09	0.13

The weight cart was cleaned and painted (if needed) and 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 were adjusted as close as possible to the full/reference marks. Liquid 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.

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 and have known values. The assigned test number provides documented evidence for measurement traceability

Ron Peterson, Metrologist

02/19/2014
Date of Report

SOUTH DAKOTA 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:**	MP3318
Mailing Address:	2900 WEST RUSSELL	**Date Received:**	02/17/14
City, State, Zip:	SIOUX FALLS, SD 57107	**Date tested:**	02/18/14
Artifacts Submitted	1000 lb Bulk weights	**Condition of Weights:**	Good
Manufacturer:	NA	**Temperature (c):**	21.1
Test Method Used:	SOP 8/ MODIFIED SUB	**Humidity:**	50.1%
Equipment Used:	Russell Balance/ Vaisala PTU301	**Pressure (mm/Hg):**	705.2

Treatment of artifacts prior to testing: Thermal equalibrium time/conditions were obtained by placing the artifacts in the lab overnight.

Compliance Statement: These weights and associated uncertainties were evaluated against NIST Handbook 105-1 NIST Class F tolerances and the weights were within tolerance at the time of calibration.

Standards Used: SD Lab 1000 Lb Working Standard.

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

Tolerance=0.10 lb **Uncertainty/lb=** 0.025 (K=2)

Nominal Value	Serial Number	As Received lb	As Left lb
1000 lb	01-09	0.031	0.031
1000 lb	02-09	0.037	0.037
1000 lb	03-09	0.022	0.022
1000 lb	04-09	0.033	0.033
1000 lb	05-09	0.059	0.059
1000 lb	06-09	0.092	0.010
1000 lb	07-09	0.018	0.018
1000 lb	08-09	0.005	0.005
1000 lb	09-09	0.077	0.047
1000 lb	10-09	0.092	0.004
1000 lb	11-09	0.027	0.027
1000 lb	12-09	0.053	0.053
1000 lb	13-09	0.070	0.070
1000 lb	14-09	0.046	0.046
1000 lb	15-09	0.044	0.044
1000 lb	16-09	0.008	0.008
1000 lb	17-09	0.057	0.057

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02/19/2014
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Office: 118 West Capitol Avenue Phone: 605-773-3697
Pierre, SD 57501

Submitted by:	SCALE CENTER	**Report Number:**	MP3318
Mailing Address:	2900 WEST RUSSELL	**Date Received:**	02/17/14
City, State, Zip:	SIOUX FALLS, SD 57107	**Date tested:**	02/18/14
Weight Kit Serial No	NA	**Condition of Weights:**	Good
Manufacturer:	NA	**Temperature (c):**	21.6
Test Method Used:	SOP 8/ MODIFIED SUB	**Humidity:**	46.2%
Equipment Used:	Mettler KA-30/ Vaisala PTU301	**Pressure (mm/Hg):**	710.5

Treatment of artifacts prior to testing: Thermal equalibrium time/conditions were obtained by placing the artifacts in the lab overnight.

Compliance Statement: These weights and associated uncertainties were evaluated against NIST Handbook 105-1 NIST Class F tolerances and the weights were within tolerance at the time of calibration.

Standards Used: SD Lab 50 Lb Working Standard.

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

Nominal=50 lb	As Received (mg)	As Left (mg)	Tolerance-mg	Uncertainty-mg (K=2)
			2300	262
Serial Number				
Unreadable	4687	-93		
Unreadable	4167	272		
Unreadable	1557	1557		
Unreadable	2417	117		
Unreadable	3102	7		
Unreadable	3787	57		
Unreadable	2972	217		
Unreadable	4577	-73		
Unreadable	4157	-8		
Unreadable	1097	1097		
Unreadable	1872	162		
Unreadable	4927	137		
Unreadable	2857	12		
Unreadable	2467	-8		
Unreadable	4377	102		
Unreadable	3612	12		
Unreadable	1837	142		
Unreadable	2002	137		
Unreadable	2882	52		
Unreadable	2507	62		
Unreadable	3252	37		
Unreadable	3282	167		

Ron Peterson, Metrologist

02/19/2014
Date of Report

SOUTH DAKOTA 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:**	MP3318
Mailing Address:	2900 WEST RUSSELL	**Date Received:**	02/17/14
City, State, Zip:	SIOUX FALLS, SD 57107	**Date tested:**	02/18/14
Weight Kit Serial No:	NA	**Condition of Weights:**	Good
Manufacturer:	NA	**Temperature (c):**	21.6
Test Method Used:	SOP 8/ MODIFIED SUB	**Humidity:**	46.2%
Equipment Used:	Mettler KA-30/ Vaisala PTU301	**Pressure (mm/Hg):**	710.5

Treatment of artifacts prior to testing: Thermal equalibrium time/conditions were obtained by placing the artifacts in the lab overnight.

Compliance Statement: These weights and associated uncertainties were evaluated against NIST Handbook 105-1 NIST Class F tolerances and the weights were within tolerance at the time of calibration.

Standards Used: SD Lab 50 Lb Working Standard.

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

Nominal=50 lb	As Received (mg)	As Left (mg)	Tolerance-mg	Uncertainty-mg (K=2)
			2300	262
Serial Number				
SC 4-50-017	2882	-388		
SC026	2512	322		
SC029	3702	417		
SC035	2122	287		
SC036	1792	52		
SC101	197	197		
SC102	-638	-638		
SC105	2622	-1158		
SC106	372	372		
SC107	-118	-118		
SC108	487	487		
SC110	-838	-838		
SC139	1177	1177		
SC164	-428	-428		
SCH 50-020	2912	262		
T-063	607	607		
T8-C-92	3297	17		
TS C11	2177	712		

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Pierre, SD 57501

Submitted by:	SCALE CENTER	**Report Number:**	MP3318
Mailing Address:	2900 WEST RUSSELL	**Date Received:**	02/17/14
City, State, Zip:	SIOUX FALLS, SD 57107	**Date tested:**	02/18/14
Weight Kit Serial No:	NA	**Condition of Weights:**	Good
Manufacturer:	NA	**Temperature (c):**	21.6
Test Method Used:	SOP 8/ MODIFIED SUB	**Humidity:**	46.2%
Equipment Used:	Mettler KA-30/ Vaisala PTU301	**Pressure (mm/Hg):**	710.5

Treatment of artifacts prior to testing: Thermal equalibrium time/conditions were obtained by placing the artifacts in the lab overnight.

Compliance Statement: These weights and associated uncertainties were evaluated against NIST Handbook 105-1 NIST Class F tolerances and the weights were within tolerance at the time of calibration.

Standards Used: SD Lab 25 Lb Working Standard.

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

Nominal=25 lb	As Received (mg)	As Left (mg)	Tolerance-mg	Uncertainty-mg (K=2)
			1100	131
Serial Number				
TS-D8	1935	335		
SC-D1	1000	330		
SC-25-1	5615	285		
Unreadable	2495	845		

Ron Peterson, Metrologist

02/19/2014
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Office: 118 West Capitol Avenue Phone: 605-773-3697
Pierre, SD 57501

Submitted by:	SCALE CENTER	**Report Number:**	MP3318
Mailing Address:	2900 WEST RUSSELL	**Date Received:**	02/17/14
City, State, Zip:	SIOUX FALLS, SD 57107	**Date tested:**	02/18/14
Weight Kit Serial No:	031012A	**Condition of Weights:**	Good
Kit Manufacturer:	Rice Lake	**Temperature (c):**	21.4
Test Method Used:	SOP 8/ MODIFIED SUB	**Humidity:**	48.1%
Equipment Used:	Mettler AX 205 DR/ Mettler PR503/ Vaisala PTU301	**Pressure (mm/Hg):**	710.0

Treatment of artifacts prior to testing: Thermal equalibrium time/conditions were obtained by placing the artifacts in the lab for a period of time.

Compliance Statement: These weights and associated uncertainties were evaluated against NIST Handbook 105-1 NIST Class F tolerances and the weights were within tolerance at the time of calibration.

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

Nominal	Identifier	Cx (mg)	Tolerance/mg	Uncertainty-mg/k=2
5 lb	1	109	230	16
5 lb	2	50	230	16
5 lb	3	49	230	16
5 lb	4	83	230	16
5 lb	5	50	230	16
1 lb	1	26.2	70	6.7
1 lb	2	27.2	70	6.7
1 lb	3	16.23	70	6.66
1 lb	4	25.23	70	6.66
1 lb	5	16.23	70	6.66
0.5 lb		20.78	45	4.95
0.2 lb		9.11	18	1.37
0.2 lb	.	7.20	18	1.37
0.1 lb		4.74	9.1	0.60
0.05 lb		2.48	4.5	0.39
0.02 lb		0.66	1.8	0.26
0.02 lb	.	0.26	1.8	0.26
0.01 lb		0.45	1.5	0.17
0.005 lb		0.67	1.2	0.11
0.002 lb		0.56	0.87	0.14
0.002 lb	.	0.34	0.87	0.14
0.001 lb		0.21	0.7	0.15

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Pierre, SD 57501

Submitted by:	SCALE CENTER	**Report Number:**	MP3318
Mailing Address:	2900 WEST RUSSELL	**Date Received:**	02/17/14
City, State, Zip:	SIOUX FALLS, SD 57107	**Date tested:**	02/18/14
Weight Kit Serial No:	41304	**Condition of Weights:**	POOR
Kit Manufacturer:	Rice Lake	**Temperature (c):**	21.4
Test Method Used:	SOP 8/ MODIFIED SUB	**Humidity:**	47.7%
Equipment Used:	Mettler AX 205 DR/ Mettler PR503/ Vaisala PTU301	**Pressure (mm/Hg):**	710.0

Treatment of artifacts prior to testing: Thermal equalibrium time/conditions were obtained by placing the artifacts in the lab for a period of time.

Compliance Statement: These weights and associated uncertainties were evaluated against NIST Handbook 105-1 NIST Class F tolerances and the weights were within tolerance at the time of calibration.

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

Nominal	Identifier	Cx (mg)	Tolerance/mg	Uncertainty-mg/k=2
5 lb	1	-50	230	16
5 lb	2	-129	230	16
5 lb	3	31	230	16
5 lb	4	**MISSING**	230	16.2
5 lb	5	-12.0	230	16.2
1 lb	1	-6.8	70	6.7
1 lb	2	-49.8	70	6.7
1 lb	3	7.2	70	6.7
1 lb	4	-55.8	70	6.7
1 lb	5	-3.8	70	6.7
8 oz		**MISSING**	45	4.9
4 oz		-1.51	23	1.5
2 oz		0.09	11	1.1
1 oz		2.89	5.4	0.38
1/2 oz		0.30	2.8	0.29
1/4 oz		0.08	1.7	0.16
1/8 oz		0.34	1.3	0.14
1/16 oz		0.02	1.1	0.13
0.1 lb		1.38	9.1	0.60
0.05 lb		-0.20	4.5	0.39
0.05 lb	.	0.34	4.5	0.39
0.02 lb		0.45	1.8	0.26
0.02 lb	.	0.61	1.8	0.26
0.01 lb		0.06	1.5	0.17
0.005 lb		0.63	1.2	0.11

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Mailing Address:	2900 WEST RUSSELL	**Date Received:**	02/17/14
City, State, Zip:	SIOUX FALLS, SD 57107	**Date tested:**	02/18/14
Weight Kit Serial No:	031609A	**Condition of Weights:**	Good
Kit Manufacturer:	Rice Lake	**Temperature (c):**	21.0
Test Method Used:	SOP 8/ MODIFIED SUB	**Humidity:**	50.1%
Equipment Used:	Mettler AX 205 DR/ Mettler PR503/ Vaisala PTU301	**Pressure (mm/Hg):**	708.1

Treatment of artifacts prior to testing: Thermal equalibrium time/conditions were obtained by placing the artifacts in the lab.

Compliance Statement: These weights and associated uncertainties were evaluated against NIST Handbook 105-1 NIST Class F tolerances and the weights were within tolerance at the time of calibration.

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

Nominal	Identifier	Cx (mg)	Tolerance/mg	Uncertainty-mg/k=2
5 kg		185	500	31
2 kg	1	77	200	14
2 kg	2	54	200	14
1 kg		20	100	8
500 g		26	70	6
200 g	1	10.3	40	3.3
200 g	2	13.8	40	3.3
100 g		8.9	20	1.3
50 g		2.2	10	0.7
20 g		1.74	4	0.27
20 g	.	1.96	4	0.27
10 g		0.71	2	0.17
5 g		0.63	1.5	0.12
2 g		0.45	1.1	0.10
2 g	.	0.53	1.1	0.10
1 g		0.456	0.9	0.080
500 mg		0.340	0.72	0.062
200 mg		0.275	0.54	0.051
200 mg	.	0.145	0.54	0.051
100 mg		0.211	0.43	0.045
50 mg		0.194	0.35	0.040
20 mg		0.049	0.26	0.035
20 mg	.	MISSING	0.26	0.035
10 mg		-0.010	0.21	0.032

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Submitted by:	SCALE CENTER	**Report Number:**	MP3318
Mailing Address:	2900 WEST RUSSELL	**Date Received:**	02/17/14
City, State, Zip:	SIOUX FALLS, SD 57107	**Date tested:**	02/18/14
Weight Kit Serial No:	MAS-2A86	**Condition of Weights:**	Fair
Kit Manufacturer:	Rice Lake	**Temperature (c):**	21.4
Test Method Used:	SOP 8/ MODIFIED SUB	**Humidity:**	47.0%
Equipment Used:	Mettler AX 205 DR/ Mettler PR503/ Vaisala PTU301	**Pressure (mm/Hg):**	710.1

Treatment of artifacts prior to testing: Thermal equalibrium time/conditions were obtained by placing the artifacts in the lab overnight.

Compliance Statement: These weights and associated uncertainties were evaluated against NIST Handbook 105-1 NIST Class F tolerances and the weights were within tolerance at the time of calibration.

Standards Used: SD Lab Working Standards.

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Nominal	Identifier	Cx (mg)	Tolerance/mg	Uncertainty-mg/k=2
5 lb	1	69	230	16
5 lb	2	-198	230	16
5 lb	3	75	230	16
5 lb	4	59.0	230	16.2
5 lb	5	43.0	230	16.2
1 lb	1	-0.8	70	6.7
1 lb	2	3.2	70	6.7
1 lb	3	22.2	70	6.7
1 lb	4	5.2	70	6.7
1 lb	5	-14.8	70	6.7
8 oz		24.8	45	4.9
4 oz		6.8	23	1.5
2 oz	.	4.1	11	1.1
1 oz		4.49	5.4	0.38
1 oz		1.58	5.4	0.38
1/2 oz		0.62	2.8	0.29
1/4 oz	.	-0.19	1.7	0.16
1/8 oz		0.10	1.3	0.14
1/16 oz		0.26	1.1	0.13
1/32 oz		0.13	0.87	0.11
1/32 oz	.	0.35	0.87	0.11

Ron Peterson, Metrologist

02/19/2014
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Submitted by:	SCALE CENTER	**Report Number:**	MP3318
Mailing Address:	2900 WEST RUSSELL	**Date Received:**	02/17/14
City, State, Zip:	SIOUX FALLS, SD 57107	**Date tested:**	02/18/14
Weight Kit Serial No:	SC-2006-1	**Condition of Weights:**	Good
Kit Manufacturer:	Rice Lake	**Temperature (c):**	21.2
Test Method Used:	SOP 8/ MODIFIED SUB	**Humidity:**	48.7%
Equipment Used:	Mettler AX 205 DR/ Mettler PR503/ Vaisala PTU301	**Pressure (mm/Hg):**	707.4

Treatment of artifacts prior to testing: Thermal equalibrium time/conditions were obtained by placing the artifacts in the lab overnight.

Compliance Statement: These weights and associated uncertainties were evaluated against NIST Handbook 105-1 NIST Class F tolerances and the weights were within tolerance at the time of calibration.

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

Nominal	Identifier	Cx (mg)	Tolerance/mg	Uncertainty-mg/k=2
5 kg		206	500	31
2 kg		45	200	14
2 kg	.	41	200	14
1 kg		19	100	7.5
500 g		25	70	5.7
200 g		14.6	40	3.3
200 g	.	18.5	40	3.3
100 g		7.8	20	1.3
50 g		4.3	10	0.66
20 g		1.6	4	0.27
20 g	.	1.7	4	0.27
10 g		0.4	2	0.17
5 g		0.6	1.5	0.12
2 g		0.3	1.1	0.10
2 g	.	0.42	1.1	0.10
1 g		0.12	0.9	0.08
500 mg		0.25	0.72	0.06
200 mg		0.27	0.54	0.05
200 mg	.	0.28	0.54	0.05
100 mg		0.17	0.43	0.04
50 mg		0.13	0.35	0.04
20 mg		0.07	0.26	0.04
20 mg	.	0.01	0.26	0.035
10 mg		-0.01	0.21	0.032

Ron Peterson, Metrologist

02/19/2014
Date of Report

SOUTH DAKOTA 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:**	MP3318
Mailing Address:	2900 WEST RUSSELL	**Date Received:**	02/17/14
City, State, Zip:	SIOUX FALLS, SD 57107	**Date tested:**	02/18/14
Weight Kit Serial No:	031012B	**Condition of Weights:**	Good
Kit Manufacturer:	Rice Lake	**Temperature (c):**	21.4
Test Method Used:	SOP 8/ MODIFIED SUB	**Humidity:**	46.7%
Equipment Used:	Mettler AX 205 DR/ Mettler PR503/ Vaisala PTU301	**Pressure (mm/Hg):**	710.3

Treatment of artifacts prior to testing: Thermal equalibrium time/conditions were obtained by placing the artifacts in the lab.

Compliance Statement: These weights and associated uncertainties were evaluated against NIST Handbook 105-1 NIST Class F tolerances and the weights were within tolerance at the time of calibration.

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

Nominal	Identifier	Cx (mg)	Tolerance/mg	Uncertainty-mg/k=2
5 lb	1	67	230	16
5 lb	2	87	230	16
5 lb	3	42	230	16
5 lb	4	70	230	16
5 lb	5	48	230	16
1 lb	1	23.2	70	6.7
1 lb	2	13.2	70	6.7
1 lb	3	26.2	70	6.7
1 lb	4	24.2	70	6.7
1 lb	5	33.2	70	6.7
0.5 lb		13.8	45	4.9
0.2 lb		7.44	18	1.37
0.2 lb	.	2.81	18	1.37
0.1 lb		4.38	9.1	0.60
0.05 lb		0.55	4.5	0.39
0.02 lb		0.63	1.8	0.26
0.02 lb	.	0.85	1.8	0.26
0.01 lb		0.52	1.5	0.17
0.005 lb		0.94	1.2	0.11
0.002 lb		0.53	0.87	0.14
0.002 lb	.	0.32	0.87	0.14
0.001 lb		0.36	0.7	0.15

Ron Peterson, Metrologist

02/19/2014
Date of Report

SOUTH DAKOTA 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:**	MP3318
Mailing Address:	2900 WEST RUSSELL	**Date Received:**	02/17/14
City, State, Zip:	SIOUX FALLS, SD 57107	**Date tested:**	02/18/14
Weight Kit Serial No:	SC31-2	**Condition of Weights:**	POOR
Kit Manufacturer:	Rice Lake	**Temperature (c):**	21.2
Test Method Used:	SOP 8/ MODIFIED SUB	**Humidity:**	49.7%
Equipment Used:	Mettler AX 205 DR/ Mettler PR503/ Vaisala PTU301	**Pressure (mm/Hg):**	708.0

Treatment of artifacts prior to testing: Thermal equalibrium time/conditions were obtained by placing the artifacts in the lab overnight.

Compliance Statement: These weights and associated uncertainties were evaluated against NIST Handbook 105-1 NIST Class F tolerances and the weights were within tolerance at the time of calibration.

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

Nominal	Identifier	Cx (mg)	Tolerance/mg	Uncertainty-mg/k=2
5 lb		-125	230	16
5 lb	2	-59	230	16
5 lb		-149	230	16
5 lb	4	-201	230	16
5 lb		-41	230	16
1 lb	1	-16.8	70	6.7
1 lb	2	-7.8	70	6.7
1 lb	3	-14.8	70	6.7
1 lb	4	-20.8	70	6.7
1 lb	5	2.2	70	6.7
0.1 lb		5.63	9.1	0.60
0.05 lb		0.12	4.5	0.39
0.05 lb		1.20	4.5	0.39
0.02 lb		0.98	1.8	0.26
0.02 lb		0.35	1.8	0.26
0.01 lb		0.05	1.5	0.17
0.005 lb		0.02	1.2	0.11

Ron Peterson, Metrologist

02/19/2014
Date of Report

SOUTH DAKOTA 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:**	MP3318
Mailing Address:	2900 WEST RUSSELL	**Date Received:**	02/17/14
City, State, Zip:	SIOUX FALLS, SD 57107	**Date tested:**	02/18/14
Weight Kit Serial No:	030512B	**Condition of Weights:**	Good
Kit Manufacturer:	Rice Lake	**Temperature (c):**	20.9
Test Method Used:	SOP 8/ MODIFIED SUB	**Humidity:**	46.4%
Equipment Used:	Mettler AX 205 DR/ Mettler PR503/ Vaisala PTU301	**Pressure (mm/Hg):**	707.9

Treatment of artifacts prior to testing: Thermal equalibrium time/conditions were obtained by placing the artifacts in the lab overnight.

Compliance Statement: These weights and associated uncertainties were evaluated against NIST Handbook 105-1 NIST Class F tolerances and the weights were within tolerance at the time of calibration.

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

Nominal	Identifier	Cx (mg)	Tolerance/mg	Uncertainty-mg/k=2
5 kg		74	500	31
2 kg		84	200	14
2 kg	.	78	200	14
1 kg		29.1	100	7.5
500 g		17.5	70	5.7
200 g		15.9	40	3.3
200 g	.	13.8	40	3.3
100 g		6.79	20	1.29
50 g		2.03	10	0.66
20 g		1.59	4	0.27
20 g	.	0.35	4	0.27
10 g		0.47	2	0.17
5 g		0.67	1.5	0.12
2 g		0.45	1.1	0.10
2 g	.	0.40	1.1	0.10
1 g		0.20	0.9	0.08
500 mg		0.150	0.72	0.062
200 mg		0.255	0.54	0.051
200 mg	.	0.195	0.54	0.051
100 mg		0.211	0.43	0.045
50 mg		MISSING	0.35	0.040
20 mg		0.009	0.26	0.035
20 mg	.	0.009	0.26	0.035
10 mg		0.030	0.21	0.032

Ron Peterson, Metrologist

02/19/2014
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

REPORT OF CALIBRATION

LAB TEST NUMBER: MP3319
DATE OF REPORT: 02/24/2014
DATE RECEIVED: 02/19/2014
DATE OF TEST: 02/20/2014

Submitted By: SCALE CENTER
Contact: TIM HUBER
Mailing Address: 2900 WEST RUSSELL
City, State, Zip: SIOUX FALLS, SD 57107
Phone: 605-838-7107
S/A Number:

Standards Submitted:

1 -WEIGHT CARTS
17 -1000 LB TEST WEIGHTS
-500 LB TEST WEIGHTS
39 -50 LB TEST WEIGHTS
2 -25 LB TEST WEIGHTS
1 -AVOIRDUPOIS WEIGHT KITS
2 -METRIC WEIGHT KITS
-5 GALLON TEST MEASURES

Uncertainty Statement: The combined standard uncertainty includes the standard uncertainty reported for the standard, the standard uncertainty for the measurement process, and a component of uncertainty to account for any observed deviations from values that are less than surveillance limits. The combined standard uncertainty is multiplied by a coverage factor of k = 2 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 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. All established Uncertainties are less than 1/3 applicable Class "F" tolerances.

Traceability statement:
The Standards of the SD Metrology Laboratory are traceable to the International System of Units (SI) through the National Institute of Standards and Technology recognized/traceable lab in the State of Minnesota, (Test Reports: 327678, 327681, 327682, 327683, 327684, 327685, 327686, 327687, 327813) and are part of a comprehensive measurement assurance program for ensuring continued accuracy and measurement traceability within the level of uncertainty reported by this laboratory. 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.

The artifacts submitted for calibration have been examined by the State of South Dakota and found to be appropriate for the intended use and to be accurate within Class "F" Tolerances as established by the National Institute of Standards and Technology-Weights and Measures Division. Test methods are in accordance with NIST Handbook 145 and NIST IR 6969.

This document does not represent or imply endorsement by NIST Office of Weights and Measures, NMI, 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

2/24/14
Date

SOUTH DAKOTA 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:**	MP3319
Mailing Address:	2900 WEST RUSSELL	**Date Received:**	02/19/14
City, State, Zip:	SIOUX FALLS, SD 57107	**Date tested:**	02/20/14
Manufacturer:		**Condition of Cart:**	Good
Serial Number:	NA	**Temperature (c):**	21.0
Test Method Used	SOP 33/ Double Sub.	**Humidity:**	40.0%
Nominal (lb):	3500	**Pressure (mm/Hg):**	708.5
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=2)
0.44	-0.02	0.14

The weight cart was cleaned and painted (if needed) and 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 were adjusted as close as possible to the full/reference marks. Liquid 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.

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 and have known values. The assigned test number provides documented evidence for measurement traceability

Ron Peterson, Metrologist

02/24/2014
Date of Report

SOUTH DAKOTA 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:**	MP3319
Mailing Address:	2900 WEST RUSSELL	**Date Received:**	02/19/14
City, State, Zip:	SIOUX FALLS, SD 57107	**Date tested:**	02/20/14
Artifacts Submitted	1000 lb Bulk weights	**Condition of Weights:**	Good
Manufacturer:	NA	**Temperature (c):**	20.7
Test Method Used:	SOP 8/ MODIFIED SUB	**Humidity:**	48.5%
Equipment Used:	Russell Balance/ Vaisala PTU301	**Pressure (mm/Hg):**	708.4

Treatment of artifacts prior to testing: Thermal equalibrium time/conditions were obtained by placing the artifacts in the lab overnight.

Compliance Statement: These weights and associated uncertainties were evaluated against NIST Handbook 105-1 NIST Class F tolerances and the weights were within tolerance at the time of calibration.

Standards Used: SD Lab 1000 Lb Working Standard.

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

Tolerance=0.10 lb **Uncertainty/lb=** 0.025 (K=2)

Nominal Value	Serial Number	As Received lb	As Left lb
1000 lb	18-09	-0.038	-0.038
1000 lb	19-09	-0.013	-0.013
1000 lb	20-09	-0.017	-0.017
1000 lb	21-09	-0.015	-0.015
1000 lb	22-09	-0.042	-0.042
1000 lb	23-09	-0.041	-0.041
1000 lb	24-09	-0.038	-0.038
1000 lb	25-09	-0.070	0.002
1000 lb	27-09	0.071	0.071
1000 lb	28-09	0.014	0.014
1000 lb	28-09	-0.020	-0.020
1000 lb	29-09	-0.017	-0.017
1000 lb	30-09	-0.011	-0.011
1000 lb	31-09	-0.030	-0.030
1000 lb	32-09	-0.004	-0.004
1000 lb	33-09	0.080	-0.002
1000 lb	34-09	0.007	0.007

Ron Peterson, Metrologist

02/24/2014
Date of Report

SOUTH DAKOTA 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:**	MP3319
Mailing Address:	2900 WEST RUSSELL	**Date Received:**	02/19/14
City, State, Zip:	SIOUX FALLS, SD 57107	**Date tested:**	02/20/14
Weight Kit Serial No	NA	**Condition of Weights:**	Good
Manufacturer:	NA	**Temperature (c):**	21.6
Test Method Used:	SOP 8/ MODIFIED SUB	**Humidity:**	46.2%
Equipment Used:	Mettler KA-30/ Vaisala PTU301	**Pressure (mm/Hg):**	710.5

Treatment of artifacts prior to testing: Thermal equalibrium time/conditions were obtained by placing the artifacts in the lab overnight.

Compliance Statement: These weights and associated uncertainties were evaluated against NIST Handbook 105-1 NIST Class F tolerances and the weights were within tolerance at the time of calibration.

Standards Used: SD Lab 50 Lb Working Standard.

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

Nominal=50 lb	As Received (mg)	As Left (mg)	Tolerance-mg	Uncertainty-mg (K=2)
			2300	262
Serial Number				
35	2827	77		
1-11	3702	822		
A-C1	3152	1112		
MA-06	1212	1212		
SC-021	5547	312		
SC-025	3907	272		
SC-027	2752	1092		
SC-043	4787	1252		
SC-048	2527	1017		
SC-054	2927	952		
SC-46	742	742		
SC-C4	3537	-48		
SCH-50-002	2582	-468		
SCH-50-003	3102	-58		
SCH-50-004	3952	547		
SCH-50-005	3527	297		
SCH-50-006	157	157		
SCH-50-007	3152	362		
SCH-50-008	2297	-58		
SCH-50-009	2807	617		

Ron Peterson, Metrologist

02/24/2014
Date of Report

SOUTH DAKOTA 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:**	MP3319
Mailing Address:	2900 WEST RUSSELL	**Date Received:**	02/19/14
City, State, Zip:	SIOUX FALLS, SD 57107	**Date tested:**	02/20/14
Weight Kit Serial No:	NA	**Condition of Weights:**	Good
Manufacturer:	NA	**Temperature (c):**	21.6
Test Method Used:	SOP 8/ MODIFIED SUB	**Humidity:**	46.2%
Equipment Used:	Mettler KA-30/ Vaisala PTU301	**Pressure (mm/Hg):**	710.5

Treatment of artifacts prior to testing: Thermal equalibrium time/conditions were obtained by placing the artifacts in the lab overnight.

Compliance Statement: These weights and associated uncertainties were evaluated against NIST Handbook 105-1 NIST Class F tolerances and the weights were within tolerance at the time of calibration.

Standards Used: SD Lab 50 Lb Working Standard.

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

Nominal=50 lb	As Received (mg)	As Left (mg)	Tolerance-mg	Uncertainty-mg (K=2)
			2300	262
Serial Number				
SCH-50-010	2162	322		
SCH-50-011	2537	77		
SCH-50-012	2732	542		
SCH-50-013	3512	-8		
SCH-50-014	3022	457		
SCH-50-015	4417	-588		
SCH-50-016	3622	382		
SCH-50-018	3257	-13		
SCH-50-019	3957	517		
SCH-50-051	2367	187		
SC-OA	2602	-163		
TS-051	5442	-48		
TS-052	1408	1408		
TS-053	3047	667		
TS-054	3347	837		
TS-091	3967	77		
TS-C58	1867	77		
TS-C93	4527	712		
unreadable	3687	112		

Ron Peterson, Metrologist

02/24/2014
Date of Report

SOUTH DAKOTA 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:**	MP3319
Mailing Address:	2900 WEST RUSSELL	**Date Received:**	02/19/14
City, State, Zip:	SIOUX FALLS, SD 57107	**Date tested:**	02/20/14
Weight Kit Serial No:	NA	**Condition of Weights:**	Good
Manufacturer:	NA	**Temperature (c):**	21.6
Test Method Used:	SOP 8/ MODIFIED SUB	**Humidity:**	46.2%
Equipment Used:	Mettler KA-30/ Vaisala PTU301	**Pressure (mm/Hg):**	710.5

Treatment of artifacts prior to testing: Thermal equalibrium time/conditions were obtained by placing the artifacts in the lab overnight.

Compliance Statement: These weights and associated uncertainties were evaluated against NIST Handbook 105-1 NIST Class F tolerances and the weights were within tolerance at the time of calibration.

Standards Used: SD Lab 25 Lb Working Standard.

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

Nominal=25 lb	As Received (mg)	As Left (mg)	Tolerance-mg	Uncertainty-mg (K=2)
			1100	131
Serial Number				
TS-D2	2160	450		
TS-D4	295	295		

Ron Peterson, Metrologist

02/24/2014
Date of Report

SOUTH DAKOTA 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:**	MP3319
Mailing Address:	2900 WEST RUSSELL	**Date Received:**	02/19/14
City, State, Zip:	SIOUX FALLS, SD 57107	**Date tested:**	02/20/14
Weight Kit Serial No:	030512A	**Condition of Weights:**	Good
Kit Manufacturer:	Rice Lake	**Temperature (c):**	21.0
Test Method Used:	SOP 8/ MODIFIED SUB	**Humidity:**	45.1%
Equipment Used:	Mettler AX 205 DR/ Mettler PR503/ Vaisala PTU301	**Pressure (mm/Hg):**	706.6

Treatment of artifacts prior to testing: Thermal equalibrium time/conditions were obtained by placing the artifacts in the lab overnight.

Compliance Statement: These weights and associated uncertainties were evaluated against NIST Handbook 105-1 NIST Class F tolerances and the weights were within tolerance at the time of calibration.

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

Nominal	Identifier	Cx (mg)	Tolerance/mg	Uncertainty-mg/k=2
5 kg		57	500	31
2 kg		79	200	14
2 kg	.	97	200	14
1 kg		30.1	100	7.5
500 g		13.5	70	5.7
200 g		12.5	40	3.3
200 g	.	8.5	40	3.3
100 g		8.27	20	1.29
50 g		1.09	10	0.66
20 g		1.69	4	0.27
20 g	.	1.44	4	0.27
10 g		0.75	2	0.17
5 g		0.79	1.5	0.12
2 g		0.09	1.1	0.10
2 g	.	0.25	1.1	0.10
1 g		0.23	0.9	0.08
500 mg		0.310	0.72	0.062
200 mg		0.185	0.54	0.051
200 mg	.	0.305	0.54	0.051
100 mg		0.031	0.43	0.045
50 mg		-0.006	0.35	0.040
20 mg		0.049	0.26	0.035
20 mg	.	0.049	0.26	0.035
10 mg		0.010	0.21	0.032

Ron Peterson, Metrologist

02/24/2014
Date of Report

SOUTH DAKOTA 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:**	MP3319
Mailing Address:	2900 WEST RUSSELL	**Date Received:**	02/19/14
City, State, Zip:	SIOUX FALLS, SD 57107	**Date tested:**	02/20/14
Weight Kit Serial No:	SC-2000	**Condition of Weights:**	Good
Kit Manufacturer:	Rice Lake	**Temperature (c):**	21.3
Test Method Used:	SOP 8/ MODIFIED SUB	**Humidity:**	47.2%
Equipment Used:	Mettler AX 205 DR/ Mettler PR503/ Vaisala PTU301	**Pressure (mm/Hg):**	705.9

Treatment of artifacts prior to testing: Thermal equalibrium time/conditions were obtained by placing the artifacts in the lab overnight.

Compliance Statement: These weights and associated uncertainties were evaluated against NIST Handbook 105-1 NIST Class F tolerances and the weights were within tolerance at the time of calibration.

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

Nominal	Identifier	Cx (mg)	Tolerance/mg	Uncertainty-mg/k=2
5 kg		-165	500	31
1 kg	Kilo	-11	100	8
1 kg		34	100	7.5
500 g		26	70	5.7
200 g		13.6	40	3.3
200 g	.	16.3	40	3.3
100 g		4.8	20	1.3
50 g		4.2	10	0.66
20 g		1.5	4	0.27
20 g	.	2.1	4	0.27
10 g		0.9	2	0.17
5 g		0.5	1.5	0.12
2 g		0.8	1.1	0.10
2 g	.	0.16	1.1	0.10
1 g		0.38	0.9	0.08
200 mg		0.11	0.54	0.05
200 mg	.	0.29	0.54	0.05
100 mg		0.26	0.43	0.04
50 mg		0.03	0.35	0.04
20 mg		0.01	0.26	0.04

Ron Peterson, Metrologist

02/24/2014
Date of Report

SOUTH DAKOTA 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:**	MP3319
Mailing Address:	2900 WEST RUSSELL	**Date Received:**	02/19/14
City, State, Zip:	SIOUX FALLS, SD 57107	**Date tested:**	02/20/14
Weight Kit Serial No:	SC487	**Condition of Weights:**	Fair
Kit Manufacturer:	Rice Lake	**Temperature (c):**	22.2
Test Method Used:	SOP 8/ MODIFIED SUB	**Humidity:**	44.3%
Equipment Used:	Mettler AX 205 DR/ Mettler PR503/ Vaisala PTU301	**Pressure (mm/Hg):**	706.9

Treatment of artifacts prior to testing: Thermal equalibrium time/conditions were obtained by placing the artifacts in the lab overnight.

Compliance Statement: These weights and associated uncertainties were evaluated against NIST Handbook 105-1 NIST Class F tolerances and the weights were within tolerance at the time of calibration.

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

Nominal	Identifier	Cx (mg)	Tolerance/mg	Uncertainty-mg/k=2
10 lb	1	32	450	30
10 lb	2	-76	450	30
5 lb		34	230	16
1 lb	1	-25.8	70	6.7
1 lb	2	-24.8	70	6.7
1 lb	3	5.2	70	6.7
1 lb	4	-21.8	70	6.7
1 lb	5	16.2	70	6.7
4 oz	1	4.3	23	1.5
4 oz	2	0.3	23	1.5
4 oz	3	2.2	23	1.5
1 oz		1.0	5.4	0.4
1 oz	.	1.8	5.4	1.1
1 oz	..	2.12	5.4	0.38
1/2 oz		1.51	2.8	0.29
1/2 oz	.	1.09	2.8	0.29
1/4 oz		0.62	1.7	0.16
1/4 oz	.	0.94	1.7	0.16

Ron Peterson, Metrologist

02/24/2014
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

REPORT OF CALIBRATION

LAB TEST NUMBER: MP3320
DATE OF REPORT: 02/26/2014
DATE RECEIVED: 02/24/2014
DATE OF TEST: 02/25/2014

Submitted By: SCALE CENTER
Contact: TIM HUBER
Mailing Address: 2900 WEST RUSSELL
City, State, Zip: SIOUX FALLS, SD 57107
Phone: 605-838-7107
S/A Number:

Standards Submitted:

1 -WEIGHT CARTS
17 -1000 LB TEST WEIGHTS
-500 LB TEST WEIGHTS
30 -50 LB TEST WEIGHTS
1 -25 LB TEST WEIGHTS

1 -AVOIRDUPOIS WEIGHT KITS
-METRIC WEIGHT KITS
-5 GALLON TEST MEASURES

Uncertainty Statement: The combined standard uncertainty includes the standard uncertainty reported for the standard, the standard uncertainty for the measurement process, and a component of uncertainty to account for any observed deviations from values that are less than surveillance limits. The combined standard uncertainty is multiplied by a coverage factor of k = 2 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 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. All established Uncertainties are less than 1/3 applicable Class "F" tolerances.

Traceability statement:
The Standards of the SD Metrology Laboratory are traceable to the International System of Units (SI) through the National Institute of Standards and Technology recognized/traceable lab in the State of Minnesota, (Test Reports: 327678, 327681, 327682, 327683, 327684, 327685, 327686, 327687, 327813) and are part of a comprehensive measurement assurance program for ensuring continued accuracy and measurement traceability within the level of uncertainty reported by this laboratory. 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.

The artifacts submitted for calibration have been examined by the State of South Dakota and found to be appropriate for the intended use and to be accurate within Class "F" Tolerances as established by the National Institute of Standards and Technology-Weights and Measures Division. Test methods are in accordance with NIST Handbook 145 and NIST IR 6969.

This document does not represent or imply endorsement by NIST Office of Weights and Measures, NMI, 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

2/26/14
Date

SOUTH DAKOTA 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:**	MP3320
Mailing Address:	2900 WEST RUSSELL	**Date Received:**	02/24/14
City, State, Zip:	SIOUX FALLS, SD 57107	**Date tested:**	02/25/14
Manufacturer:		**Condition of Cart:**	Good
Serial Number:	NA	**Temperature (c):**	21.0
Test Method Used	SOP 33/ Double Sub.	**Humidity:**	40.0%
Nominal (lb):	3000	**Pressure (mm/Hg):**	724.2
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=2)
1.20	-0.05	0.13

The weight cart was cleaned and painted (if needed) and 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 were adjusted as close as possible to the full/reference marks. Liquid 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.

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 and have known values. The assigned test number provides documented evidence for measurement traceability

Ron Peterson, Metrologist

02/26/2014
Date of Report

SOUTH DAKOTA 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:**	MP3320
Mailing Address:	2900 WEST RUSSELL	**Date Received:**	02/24/14
City, State, Zip:	SIOUX FALLS, SD 57107	**Date tested:**	02/25/14
Artifacts Submitted	1000 lb Bulk weights	**Condition of Weights:**	Good
Manufacturer:	NA	**Temperature (c):**	21.4
Test Method Used:	SOP 8/ MODIFIED SUB	**Humidity:**	38.6%
Equipment Used:	Russell Balance/ Vaisala PTU301	**Pressure (mm/Hg):**	724.0

Treatment of artifacts prior to testing: Thermal equalibrium time/conditions were obtained by placing the artifacts in the lab overnight.

Compliance Statement: These weights and associated uncertainties were evaluated against NIST Handbook 105-1 NIST Class F tolerances and the weights were within tolerance at the time of calibration.

Standards Used: SD Lab 1000 Lb Working Standard.

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

Tolerance=0.10 lb **Uncertainty/lb=** 0.025 (K=2)

Nominal Value	Serial Number	As Received lb	As Left lb
1000 lb	2	-0.008	-0.008
1000 lb	3	-0.034	-0.034
1000 lb	4	-0.127	0.008
1000 lb	5	-0.073	0.005
1000 lb	6	-0.063	0.004
1000 lb	7	-0.024	-0.024
1000 lb	8	-0.039	-0.039
1000 lb	9	-0.002	-0.002
1000 lb	10	-0.140	0.006
1000 lb	11	-0.126	0.001
1000 lb	13	-0.046	-0.046
1000 lb	14	-0.061	-0.001
1000 lb	15	-0.062	-0.015
1000 lb	18	-0.108	-0.003
1000 lb	A	0.054	0.054
1000 lb	B	0.067	0.067
1000 lb	C	0.072	0.072

Ron Peterson, Metrologist

02/26/2014
Date of Report

SOUTH DAKOTA 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:**	MP3320
Mailing Address:	2900 WEST RUSSELL	**Date Received:**	02/24/14
City, State, Zip:	SIOUX FALLS, SD 57107	**Date tested:**	02/25/14
Weight Kit Serial No:	NA	**Condition of Weights:**	Good
Manufacturer:	NA	**Temperature (c):**	20.9
Test Method Used:	SOP 8/ MODIFIED SUB	**Humidity:**	45.7%
Equipment Used:	Mettler KA-30/ Vaisala PTU301	**Pressure (mm/Hg):**	724.2

Treatment of artifacts prior to testing: Thermal equalibrium time/conditions were obtained by placing the artifacts in the lab overnight.

Compliance Statement: These weights and associated uncertainties were evaluated against NIST Handbook 105-1 NIST Class F tolerances and the weights were within tolerance at the time of calibration.

Standards Used: SD Lab 50 Lb Working Standard.

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

Nominal=50 lb	As Received (mg)	As Left (mg)	Tolerance-mg	Uncertainty-mg (K=2)
			2300	262
Serial Number				
MA-102	867	867		
SC-50-01	-2358	82		
SC-50-02	-583	-583		
SC-50-03	542	542		
SC-50-04	152	152		
SC-50-05	572	572		
SC-50-06	2127	117		
SC-50-07	507	507		
SC-50-08	2392	22		
SC-50-09	2092	2		
SC-50-11	1327	1327		
SC-50-12	-463	-463		
SC-50-14	327	327		
SC-50-15	-1893	77		
SC-50-16	1377	1377		
SC-50-17	472	472		
SC-50-18	-1263	-1263		
SC-50-19	-338	-338		
SC-50-20	-213	-213		

Ron Peterson, Metrologist

02/26/2014
Date of Report

SOUTH DAKOTA 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:**	MP3320
Mailing Address:	2900 WEST RUSSELL	**Date Received:**	02/24/14
City, State, Zip:	SIOUX FALLS, SD 57107	**Date tested:**	02/25/14
Weight Kit Serial No:	NA	**Condition of Weights:**	Good
Manufacturer:	NA	**Temperature (c):**	20.9
Test Method Used:	SOP 8/ MODIFIED SUB	**Humidity:**	45.7%
Equipment Used:	Mettler KA-30/ Vaisala PTU301	**Pressure (mm/Hg):**	724.2

Treatment of artifacts prior to testing: Thermal equalibrium time/conditions were obtained by placing the artifacts in the lab overnight.

Compliance Statement: These weights and associated uncertainties were evaluated against NIST Handbook 105-1 NIST Class F tolerances and the weights were within tolerance at the time of calibration.

Standards Used: SD Lab 50 Lb Working Standard.

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

Nominal=50 lb	As	As	Tolerance-mg	Uncertainty-mg (K=2)
	Received (mg)	Left (mg)	2300	262
Serial Number				
SC-C14	1192	1192		
SC-C166	-658	-658		
SC-C19	-368	-368		
SC-C5	2072	77		
SC-C52	487	487		
SCH-50-24	1927	7		
TS-57	-348	-348		
TS-C46	407	407		
TS-C47	-2118	22		
TS-C55	-853	-853		

Ron Peterson, Metrologist

02/26/2014
Date of Report

SOUTH DAKOTA 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:**	MP3320
Mailing Address:	2900 WEST RUSSELL	**Date Received:**	02/24/14
City, State, Zip:	SIOUX FALLS, SD 57107	**Date tested:**	02/25/14
Weight Kit Serial No:	NA	**Condition of Weights:**	Good
Manufacturer:	NA	**Temperature (c):**	20.9
Test Method Used:	SOP 8/ MODIFIED SUB	**Humidity:**	45.7%
Equipment Used:	Mettler KA-30/ Vaisala PTU301	**Pressure (mm/Hg):**	724.2

Treatment of artifacts prior to testing: Thermal equalibrium time/conditions were obtained by placing the artifacts in the lab overnight.

Compliance Statement: These weights and associated uncertainties were evaluated against NIST Handbook 105-1 NIST Class F tolerances and the weights were within tolerance at the time of calibration.

Standards Used: SD Lab 25 Lb Working Standard.

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

Nominal=25 lb	As Received (mg)	As Left (mg)	Tolerance-mg	Uncertainty-mg (K=2)
			1100	131
Serial Number				
SCH- 25-2	415	415		

Ron Peterson, Metrologist

02/26/2014
Date of Report

SOUTH DAKOTA 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:**	MP3320
Mailing Address:	2900 WEST RUSSELL	**Date Received:**	02/24/14
City, State, Zip:	SIOUX FALLS, SD 57107	**Date tested:**	02/26/14
Weight Kit Serial No:	SC001	**Condition of Weights:**	Fair
Kit Manufacturer:	NA	**Temperature (c):**	19.7
Test Method Used:	SOP 8/ MODIFIED SUB	**Humidity:**	45.3%
Equipment Used:	Mettler AX 205 DR/ Mettler PR503/ Vaisala PTU301	**Pressure (mm/Hg):**	715.9

Treatment of artifacts prior to testing: Thermal equalibrium time/conditions were obtained by placing the artifacts in the lab overnight.

Compliance Statement: These weights and associated uncertainties were evaluated against NIST Handbook 105-1 NIST Class F tolerances and the weights were within tolerance at the time of calibration.

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

Nominal	Identifier	Cx (mg)	Tolerance/mg	Uncertainty-mg/k=2
2 lb	1	-6	91	11
2 lb	2	23	91	11
2 lb	3	7	91	11
2 lb	4	-5	91	11
2 lb	5	12	91	11
2 lb	6	20	91	11
2 lb	7	3	91	11
2 lb	8	-4	91	11
2 lb	9	1	91	11
2 lb	10	-22	91	11
2 lb	11	1	91	11
2 lb	12	4	91	11
2 lb	13	11	91	11
2 lb	14	2	91	11
1 lb	1	-5.8	70	6.7
1 lb	2	-5.8	70	6.7
8 oz		9.8	45	4.9
4 oz		-2.2	23	1.5
2 oz		6.9	11	2.8
1 oz		1.15	5.4	0.38
1/2 oz		0.03	2.8	0.29
1/4 oz		0.03	1.7	0.16

Ron Peterson, Metrologist

02/26/2014
Date of Report

SCALE CENTER

2900 West Russel Street • Sioux Falls, South Dakota 57107
Phone: 605-332-8881 • Toll Free: 1-800-456-1486 • Fax: 605-332-8886 • www.TheScaleCenter.com

CALIBRATION REPORT

Technician Name:	Date:	Date Last Tested:	CHECK ALL THAT APPLY:
Customer Name:			☐ Self Certification ☐ None-Commercial ☐ Equipment Repair ☐ New Installation
Location Of Scale:			☐ Preventative Maint. Type: _____ ☐ Rejected Equipment ☐ Tag #: _____
Mailing Address:			☐ Service Contract? Expires: _____
City:	State:	Zip Code:	Frequency Schedule: ☐ Annual ☐ Semi Annual ☐ Qtrly ☐ Monthly Other _____
Telephone Number:		Contact Name:	Printer Present? ☐ Yes ☐ No

INDICATOR INFORMATION:					
Manufacture:	COC #:	Model #:	Seal Applied	☐ Yes	☐ No
			Sticker Applied	☐ Yes	☐ No
Serial #:	Capacity:	Divisions:	Computer Interface Present	☐ Yes	☐ No
			Truck Scale?	☐ Pit Type	☐ Above Ground

SCALE TYPE:

☐ Digital ☐ DigiTOL ☐ Dial Beam ☐ T.R. ☐ Elect/Mech Conv. ☐ Over/Under ☐ Multi-Scale ☐ Multi-Range ☐ Lab Balance

LOAD CELL INFORMATION:			PLATFORM INFORMATION:		
Manufacturer:	COC #:	Model #:	Manufacturer:	COC #:	Model #:
Style:	Type:	Class:	Serial #:	Section or CLC Capacity:	Capacity:
nMax:	Capacity:	vMin:	Number Of Sections:	Deck Size:	Pit Depth:
Loadcell Serial No:			Test Weight Serial No.:		

TESTING PEFORMED: SPAN

Position	Weight	As Found	In Tol.	Tolerance	As Left
In Tolerance:					

CORNERS

Position	Weight	As Found	In Tol.	Tolerance	As Left
In Tolerance:					

STRAIN LOAD TEST:		REMARKS
Empty Truck Weight		
Total Test Weight Applied		
Truck Plus Test Weights		
Error On Added Test Weights		

Technicians Signature Permit Number Customer Signature Date

SCALE CENTER
800-456-1486

MODEL _____
S/N _____
SERVICE: CAL ___ PM ___ S ___

DATE	DUE	BY