SOUTH DAKOTA
DEPARTMENT OF PUBLIC SAFETY
prevention ~ protection ~ enforcement

Office of Weights and Measures
Metrology Laboratory
Office: 118 West Capitol Avenue, Pierre, SD 57501
Lab: 1100 Otter Rd, Bldg D, Sturgis, SD 57785
Lab: 605-347-7541, Office: 605-773-3697, Cell: 605-280-4572
Email: ron.peterson@state.sd.us https://dps.sd.gov/inspections/weights-measures

CALIBRATION CERTIFICATE

Capital Scale (Wanda)

Physical Address:
3021 Valley Forge St
Bismarck, ND 58503
Contact: Travis Will
Phone: 701-255-1556

Billing Address:
3021 Valley Forge St
Bismarck, ND 58503

Certificate number: M26023
Received Date: 08/25/2025
Certificate Issued: 08/26/2025

Artifacts Submitted and Summary of Results:

Quantity	Artifact	Total Pieces	Recvd in Tol	Adjusted	Rejected	As Left In Tolerance
2	2000 lb Weight Carts	2	2	1	0	2
16	1000 lb Weights	16	16	0	0	16
20	50 lb weights	20	19	2	0	20
1	Avoirdupois kit	20	20	0	0	20
1	Metric kit	14	14	0	0	14

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 2008 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. For weight carts, factors included on the inspection checklist have not been included in the calibration uncertainty. However, factors on the checklist may contribute measurement errors that are significant if not properly maintained during use.

Conformity Statement:
The artifacts submitted for this calibration are calibrated to NIST Handbook 105-1 (1990 or 2019), NIST Handbook 105-8 (2019), NIST Handbook 105-3 (2010), or ASTM E617 (2023), Standard Specification for Laboratory Weights and Precision Mass Standards specifications. The reported test values relate only to the observations made at the time and conditions of the test. Artifacts fully comply with all requirements (both specifications and tolerances) of the applicable documentary standard unless otherwise stated. Stated expanded uncertainties are less than one-third of the specified tolerances (maximum permissible errors, m.p.e.) for mass calibrations and less than the specified tolerances for volume calibrations. The correction value plus or minus the expanded uncertainty is within the stated tolerances. It is the decision rule of the SD State Metrology Laboratory that any cast weights determined to have a correction within 66 % of the upper tolerance or 50 % of the lower tolerance will be adjusted closer to zero mass correction, even if the mass correction originally met the applicable tolerance.. SD Metrology laboratory uses an assumed density provided by the customer or weight manufacturer which could affect measurement results.

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 certificate number identified above is the unique report number to be used in referencing measurement traceability for artifacts identified in this report only.

Ron E Peterson, Metrologist 08/26/2025 Wade Robbins, Reviewer 08/26/2025

NVLAP CALIBRATION
NVLAP LAB CODE 600384-0

Accredited by the National Voluntary Laboratory Accreditation Program for the specific scope of accreditation under lab code 600384-0. This certificate may not be used to claim product endorsement by NVLAP, NIST Office of Weights and Measures or any other government agency, and may not be reproduced, except in full without written approval from this laboratory.

South Dakota Department of Public Safety
Office of Weights and Measures
Metrology Lab
Lab: 1100 Otter Rd, Bldg D Sturgis, SD 57785 Phone: 605-347-7541
Office: 118 West Capitol Avenue Pierre, SD 57501 Phone: 605-773-3697

CALIBRATION CERTIFICATE

Calibrated for: **Capital Scale (Wanda)** Certificate Number: **M26023**

Calibration Date: **08/26/2025**

Environmental conditions at time of test:

Temperature: 21.5 °C **Humidity:** 51.2 % **Pressure:** 672.4 mmhg

Test method used: SOP 33 Calibrations of Weight Carts, May 2019

Test equipment used: Recently calibrated weights and a Sartorius Loadcell PR6246/33 C6 with X4 Process controller . Vaisala PT301

Condition of Carts: Used but in good condition

Manufacturer: Unk **SN:** 2016-1

Nominal (lb)	AS Found (lb)	As Found (g)	As Left (lb)	As Left (g)	Uncertainty (lb)	*k*	Tolerance (lb)	Condition as Left
2000	0.03	11	0.03	11	0.11	2.01	0.70	In-Tolerance

Notes:

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

The above weight cart was allowed to come to environmental equilibrium in the laboratory prior to calibration. The weight cart was adjusted if needed and as noted above to as close as practical 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 recalibration of the weight cart prior to subsequent use.

Conformity Assessment:
The weight cart identified on this calibration certificate complies with NIST Handbook 105-8, 2019 specifications and tolerances. Additional details regarding the assessment are included in the associated checklist that is an integral part of this calibration certifcate. The weight cart was found (or adjusted) to within the specified tolerances.

The above weight cart was compared with standards of the State of South Dakota, which are traceable to the International System of Units (SI) through the National Institute of Standards and Technology (NIST) and have current calibration values. The assigned certificate number provides documented evidence for measurement traceability.

Ron E Peterson, Metrologist 08/26/2025 Wade Robbins, Reviewer 08/26/2025

Ver 20250114

South Dakota Department of Public Safety
Office of Weights and Measures
Metrology Lab
Lab: 1100 Otter Rd, Bldg D Sturgis, SD 57785 Phone: 605-347-7541
Office: 118 West Capitol Avenue Pierre, SD 57501 Phone: 605-773-3697

Inspection Checklist for Weight Cart

Calibrated for: Capital Scale (Wanda) **Certificate number:** M26023

Calibration Date: 08/27/2025

Manufacturer:	Unk	**Date of Manufacture**	2016
Model Number:	2000	**ID/SN Number**	2016-1

✓	Nominal Mass of Weight Cart	2000 lbs	Suitably marked: Yes/No		Yes
✓	Powered by:	Electric/generator ✓	Diesel		Gasoline
✓	Fluid Levels:	Engine Oil			
		Hydraulic Fluid		Sealed: Yes/No	
		Battery ✓		Sealed: Yes/No	Yes
		Liquid Fuel		Reference Line Present: Yes/No	

✓	Fluid drain tubes extend beyond the body of the cart: Yes/No	Yes
✓	Number of axles:	2
✓	Number /Size of Tires	15x5x11.25
✓	Sealed wheel bearings: Yes/No	Yes
✓	Drain holes present in locations where water may accumulate: Yes/No	Yes
✓	Weight restraint railing permanently fixed and solid: Yes/No	Yes
✓	Adjusting cavity accessible: Yes/No	Yes
✓	Adjusting cavity sealed: Yes/No	Yes
✓	Service brakes functioning properly: Yes/No	Yes
✓	Parking brakes functioning properly: Yes/No	Yes
	Remote control functioning properly: Yes/No	

Approximate capacity:(lbs) 20

✓ General condition at time of calibration (note any accumulated dirt/debris, damage, loose parts, or evidence of tampering or unauthorized entry of seals).

List and report any repair and maintenance performed, parts replaced, etc., Leaks repaired, new battery, carburetor, exhaust system, wheels changed, welding performed, etc. Include any comments or changes since the last calibration.

✓

Ron E Peterson, Metrologist 08/26/2025 Wade Robbins, Reviewer 08/26/2025

Ver Ver 20250114

South Dakota Department of Public Safety
Office of Weights and Measures
Metrology Lab
Lab: 1100 Otter Rd, Bldg D Sturgis, SD 57785 Phone: 605-347-7541
Office: 118 West Capitol Avenue Pierre, SD 57501 Phone: 605-773-3697

CALIBRATION CERTIFICATE

Calibrated for: **Capital Scale (Wanda)** Certificate Number: **M26023**

Calibration Date: **08/26/2025**

Environmental conditions at time of test:

Temperature: 21.46 °C **Humidity:** 51.21 % **Pressure:** 672.38 mmhg

Test method used: SOP 33 Calibrations of Weight Carts, May 2019

Test equipment used: Recently calibrated weights and a Sartorius Loadcell PR6246/33 C6 with X4 Process controller . Vaisala PT301

Condition of Carts: Used but in good condition

Manufacturer: UNK **SN:** 2016-2

Nominal (lb)	AS Found (lb)	As Found (g)	As Left (lb)	As Left (g)	Uncertainty (lb)	*k*	Tolerance (lb)	Condition as Left
2000	0.18	80	-0.13	-61	0.11	2.01	0.70	Adjusted

Notes:

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

The above weight cart was allowed to come to environmental equilibrium in the laboratory prior to calibration. The weight cart was adjusted if needed and as noted above to as close as practical 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 recalibration of the weight cart prior to subsequent use.

Conformity Assessment:
The weight cart identified on this calibration certificate complies with NIST Handbook 105-8, 2019 specifications and tolerances. Additional details regarding the assessment are included in the associated checklist that is an integral part of this calibration certifcate. The weight cart was found (or adjusted) to within the specified tolerances.

The above weight cart was compared with standards of the State of South Dakota, which are traceable to the International System of Units (SI) through the National Institute of Standards and Technology (NIST) and have current calibration values. The assigned certificate number provides documented evidence for measurement traceability.

Ron E Peterson, Metrologist 08/26/2025 Wade Robbins, Reviewer 08/26/2025

Ver 20250114

South Dakota Department of Public Safety
Office of Weights and Measures
Metrology Lab
Lab: 1100 Otter Rd, Bldg D Sturgis, SD 57785 Phone: 605-347-7541
Office: 118 West Capitol Avenue Pierre, SD 57501 Phone: 605-773-3697

Inspection Checklist for Weight Cart

Calibrated for: Capital Scale (Wanda) **Certificate number:** M26023

Calibration Date: 08/27/2025

Manufacturer:	UNK	**Date of Manufacture**	2016
Model Number:	2000	**ID/SN Number**	2016-2

✓	Nominal Mass of Weight Cart	2000 lbs		Suitably marked: Yes/No	Yes	
✓	Powered by:	Electric/generator	✓	Diesel		Gasoline	
✓	Fluid Levels:	Engine Oil				
		Hydraulic Fluid			Sealed: Yes/No	
		Battery	✓		Sealed: Yes/No	Yes
		Liquid Fuel			Reference Line Present: Yes/No	

✓	Fluid drain tubes extend beyond the body of the cart: Yes/No	Yes	
✓	Number of axles:	2	
✓	Number /Size of Tires	15x5x11.25	
✓	Sealed wheel bearings: Yes/No	Yes	
✓	Drain holes present in locations where water may accumulate: Yes/No		Yes
✓	Weight restraint railing permanently fixed and solid: Yes/No		Yes
✓	Adjusting cavity accessible: Yes/No	Yes	Approximate capacity:(lbs) 20
✓	Adjusting cavity sealed: Yes/No	Yes	
✓	Service brakes functioning properly: Yes/No		Yes
✓	Parking brakes functioning properly: Yes/No		Yes
	Remote control functioning properly: Yes/No		

✓ General condition at time of calibration (note any accumulated dirt/debris, damage, loose parts, or evidence of tampering or unauthorized entry of seals).

List and report any repair and maintenance performed, parts replaced, etc., Leaks repaired, new battery, carburetor, exhaust system, wheels changed, welding performed, etc. Include any comments or changes since the last calibration.

Ron E Peterson, Metrologist 08/26/2025 Wade Robbins, Reviewer 08/26/2025

Ver Ver 20250114

South Dakota Department of Public Safety
Office of Weights and Measures
Metrology Lab
Lab: 1100 Otter Rd, Bldg. D Sturgis, SD 57785 Phone: 605-347-7541
Office: 118 West Capitol Avenue Pierre, SD 57501 Phone: 605-773-3697

CALIBRATION CERTIFICATE

Calibrated for: Capital Scale (Wanda) **Certificate number:** M26023

Calibration Date: 08/26/2025

Environmental conditions at time of test:

Temperature: 22.3 °C **Humidity:** 51 % **Pressure:** 673.3 mmhg

Test method used: SOP 8 Medium Accuracy Calibrations of Mass Standards by Modified Substitution, May 2019

Test equipment used: Lab standards traceable to the SI, an XPE604KMC balance, and a Vaisala PTU301

Condition of Weights: Cleaned and painted

Artifact(s): 16 1000 lb weights

Nominal		Correction as Found		Correction as Left		NIST Class F	Uncertainty		Condition
	SN/ID	lb	g	lb	g	Tolerance (g)	g	*k*	As Left
1000 lb	13.1	-0.01	-6.4	-0.01	-6	45	4.7	2.0	In-Tolerance
1000 lb	13.2	0.00	-0.2	0.00	-0.2	45	4.7	2.0	In-Tolerance
1000 lb	13.3	-0.04	-17.5	-0.04	-17.5	45	4.7	2.0	In-Tolerance
1000 lb	13.4	-0.01	-3.8	-0.01	-3.8	45	4.7	2.0	In-Tolerance
1000 lb	13.5	-0.03	-13.5	-0.03	-13.5	45	4.7	2.0	In-Tolerance
1000 lb	13.6	-0.02	-9.2	-0.02	-9.2	45	4.7	2.0	In-Tolerance
1000 lb	13.7	-0.03	-11.5	-0.03	-11.5	45	4.7	2.0	In-Tolerance
1000 lb	13.8	-0.04	-19.8	-0.04	-19.8	45	4.7	2.0	In-Tolerance
1000 lb	13.9	-0.03	-12.7	-0.03	-12.7	45	4.7	2.0	In-Tolerance
1000 lb	16.1	-0.04	-16.2	-0.04	-16.2	45	4.7	2.0	In-Tolerance
1000 lb	16.2	0.01	2.5	0.01	2.5	45	4.7	2.0	In-Tolerance
1000 lb	16.3	-0.03	-14.8	-0.03	-14.8	45	4.7	2.0	In-Tolerance
1000 lb	16.4	-0.03	-14.4	-0.03	-14.4	45	4.7	2.0	In-Tolerance
1000 lb	16.5	-0.04	-16.2	-0.04	-16.2	45	4.7	2.0	In-Tolerance
1000 lb	16.6	-0.03	-12.9	-0.03	-12.9	45	4.7	2.0	In-Tolerance
1000 lb	16.7	-0.02	-7.9	-0.02	-7.9	45	4.7	2.0	In-Tolerance

* Adjusted artifacts are in tolerance. Rejected and Condemned artifacts were tagged and must be placed out of service.

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

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

Ron E Peterson, Metrologist 08/26/2025 Wade Robbins, Reviewer 08/26/2025

South Dakota Department of Public Safety
Office of Weights and Measures
Metrology Lab
Lab: 1100 Otter Rd, Bldg. D Sturgis, SD 57785 Phone: 605-347-7541
Office: 118 West Capitol Avenue Pierre, SD 57501 Phone: 605-773-3697

CALIBRATION CERTIFICATE

Calibrated for: Capital Scale (Wanda)
Certificate number: M26023
Calibration Date: 08/26/2025
Purchase Order Number:

Environmental conditions at time of test:

Temperature: 22.93 °C **Humidity:** 48.05 % **Pressure:** 673.49 mmhg

Test method used: SOP 8 Medium Accuracy Calibrations of Mass Standards by Modified Substitution, May 2019
Test equipment used: Lab standards traceable to the SI, XPR64003LD5C, XPR5003SC, XPR226CDR, XPR36C, Vaisala PTU301
Condition of Weights: Suitable for use. No significant wear or damage
Artifact(s): **20 50 lb weights**

Nominal		Correction as Found	Correction as Left	NIST Class F	Uncertainty		Condition
	SN/ID	mg	mg	Tolerance (mg)	mg	*k*	As Left
50 lb	0	-723	-723	2300	200	2.02	In-Tolerance
50 lb	3	117	117	2300	200	2.02	In-Tolerance
50 lb	11	-503	-503	2300	200	2.02	In-Tolerance
50 lb	12	62	62	2300	200	2.02	In-Tolerance
50 lb	14	-1028	-1028	2300	200	2.02	In-Tolerance
50 lb	17	-978	-978	2300	200	2.02	In-Tolerance
50 lb	28	767	767	2300	200	2.02	In-Tolerance
50 lb	38	1527	1527	2300	200	2.02	In-Tolerance
50 lb	56	1382	1382	2300	200	2.02	In-Tolerance
50 lb	59	-458	-458	2300	200	2.02	In-Tolerance
50 lb	65	-1928	-3	2300	200	2.02	Adjusted
50 lb	67	-123	-123	2300	200	2.02	In-Tolerance
50 lb	68	-3008	2	2300	200	2.02	Adjusted
50 lb	78	962	962	2300	200	2.02	In-Tolerance
50 lb	79	-583	-583	2300	200	2.02	In-Tolerance
50 lb	U	-698	-698	2300	200	2.02	In-Tolerance
50 lb	W	562	562	2300	200	2.02	In-Tolerance
50 lb	X	-683	-683	2300	200	2.02	In-Tolerance
50 lb	Y	-693	-693	2300	200	2.02	In-Tolerance
50 lb	Z	-823	-823	2300	200	2.02	In-Tolerance

* Adjusted artifacts are in tolerance. Rejected and Condemned artifacts were tagged and must be placed out of service.

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

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

Ron E Peterson, Metrologist 08/26/2025 Wade Robbins, Reviewer 08/26/2025

South Dakota Department of Public Safety
Office of Weights and Measures
Metrology Lab
Lab: 1100 Otter Rd, Bldg. D Sturgis, SD 57785 Phone: 605-347-7541
Office: 118 West Capitol Avenue Pierre, SD 57501 Phone: 605-773-3697

CALIBRATION CERTIFICATE

Calibrated for: Capital Scale (Wanda) **Certificate number:** M26023

Calibration Date: 08/26/2025 **Purchase Order Number:**

Environmental conditions at time of test:

Temperature: 21.28 °C **Humidity:** 45.22 % **Pressure:** 763.49 mmhg

Test method used: SOP 8 Medium Accuracy Calibrations of Mass Standards by Modified Substitution, May 2019

Test equipment used: Lab standards traceable to the SI, XPR64003LD5C, XPR5003SC, XPR226CDR, XPR36C, Vaisala PTU301

Condition of Weights: Suitable for use. No significant wear or damage

Artifact(s): **20 piece Avoirdupois Kit** **SN 119050**

Nominal		Correction as Found	Correction as Left	NIST Class F	Uncertainty		Condition
	SN/ID	mg	mg	Tolerance (mg)	mg	*k*	As Left
5 lb	1	33	33	230	20	2.04	In-Tolerance
5 lb	2	99	99	230	20	2.04	In-Tolerance
5 lb	3	126	126	230	20	2.04	In-Tolerance
5 lb	4	11	11	230	20	2.04	In-Tolerance
5 lb	5	126	126	230	20	2.04	In-Tolerance
1 lb	1	28.5	28.5	70	6.1	2.04	In-Tolerance
1 lb	2	9.5	9.5	70	6.1	2.04	In-Tolerance
1 lb	3	13.5	13.5	70	6.1	2.04	In-Tolerance
1 lb	4	27.5	27.5	70	6.1	2.04	In-Tolerance
1 lb	5	32.5	32.5	70	6.1	2.04	In-Tolerance
8 oz		5.2	5.2	45	4.0	2.04	In-Tolerance
4 oz		3.7	3.7	23	2.0	2.03	In-Tolerance
2 oz		2.11	2.11	11	0.95	2.04	In-Tolerance
1 oz		2.14	2.14	5.4	0.48	2.03	In-Tolerance
0.5 oz		1.48	1.48	2.8	0.25	2.04	In-Tolerance
0.25 oz		1.18	1.18	1.7	0.15	2.03	In-Tolerance
0.125 oz		0.29	0.29	1.3	0.12	2.03	In-Tolerance
0.0625 oz		0.568	0.568	1.1	0.095	2.03	In-Tolerance
0.03125 oz	.	0.308	0.308	0.87	0.077	2.03	In-Tolerance
0.03125 oz		0.343	0.343	0.87	0.077	2.03	In-Tolerance

* Adjusted artifacts are in tolerance. Rejected and Condemned artifacts were tagged and must be placed out of service.

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

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

Ron E Peterson, Metrologist 08/26/2025 Wade Robbins, Reviewer 08/26/2025

South Dakota Department of Public Safety
Office of Weights and Measures
Metrology Lab
Lab: 1100 Otter Rd, Bldg. D Sturgis, SD 57785 Phone: 605-347-7541
Office: 118 West Capitol Avenue Pierre, SD 57501 Phone: 605-773-3697

CALIBRATION CERTIFICATE

Calibrated for: Capital Scale (Wanda)
Certificate number: M26023
Calibration Date: 08/26/2025
Purchase Order Number:

Environmental conditions at time of test:

Temperature: 21.28 °C **Humidity:** 45.22 % **Pressure:** 673.49 mmhg

Test method used: SOP 8 Medium Accuracy Calibrations of Mass Standards by Modified Substitution, May 2019
Test equipment used: Lab standards traceable to the SI, XPR64003LD5C, XPR5003SC, XPR226CDR, XPR36C, Vaisala PTU301
Condition of Weights: Suitable for use. No significant wear or damage
Artifact(s): **14 piece Metric Kit** **SN F308**

Nominal		Correction as Found	Correction as Left	NIST Class F	Uncertainty		Condition
	SN/ID	mg	mg	Tolerance (mg)	mg	*k*	As Left
2 kg		33	33	200	17	2.04	In-Tolerance
1 kg		27.0	27.0	100	8.7	2.04	In-Tolerance
500 g		7.5	7.5	70	6.1	2.04	In-Tolerance
200 g	.	12.8	12.8	40	3.4	2.04	In-Tolerance
200 g		10.1	10.1	40	3.4	2.04	In-Tolerance
100 g		6.8	6.8	20	1.7	2.04	In-Tolerance
50 g		2.07	2.07	10	0.86	2.04	In-Tolerance
20 g	.	0.69	0.69	4	0.34	2.04	In-Tolerance
20 g		1.39	1.39	4	0.34	2.04	In-Tolerance
10 g		0.82	0.82	2	0.17	2.04	In-Tolerance
5 g		0.18	0.18	1.5	0.13	2.04	In-Tolerance
2 g	.	0.731	0.731	1.1	0.095	2.04	In-Tolerance
2 g		0.941	0.941	1.1	0.095	2.04	In-Tolerance
1 g	.	0.267	0.267	0.9	0.078	2.04	In-Tolerance

* Adjusted artifacts are in tolerance. Rejected and Condemned artifacts were tagged and must be placed out of service.

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

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

Ron E Peterson, Metrologist 08/26/2025 Wade Robbins, Reviewer 08/26/2025

SOUTH DAKOTA
DEPARTMENT OF PUBLIC SAFETY
prevention ~ protection ~ enforcement

Office of Weights and Measures
Metrology Laboratory
Office: 118 West Capitol Avenue, Pierre, SD 57501
Lab: 1100 Otter Rd, Bldg D, Sturgis, SD 57785
Lab: 605-347-7541, Office: 605-773-3697, Cell: 605-280-4572
Email: ron.peterson@state.sd.us https://dps.sd.gov/inspections/weights-measures

CALIBRATION CERTIFICATE

Capital Scale (Shop)

Physical Address:
3021 Valley Forge St
Bismarck, ND 58503
Contact: Travis Will
Phone: 701-255-1556

Billing Address:
3021 Valley Forge St
Bismarck, ND 58503

Certificate number: M26024
Received Date: 08/25/2025
Certificate Issued: 08/26/2025

Artifacts Submitted and Summary of Results:

Quantity	Artifact	Total Pieces	Recvd in Tol	Adjusted	Rejected	As Left In Tolerance
1	50 lb weight	1	0	1	0	1

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 2008 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. For weight carts, factors included on the inspection checklist have not been included in the calibration uncertainty. However, factors on the checklist may contribute measurement errors that are significant if not properly maintained during use.

Conformity Statement:
The artifacts submitted for this calibration are calibrated to NIST Handbook 105-1 (1990 or 2019), NIST Handbook 105-8 (2019), NIST Handbook 105-3 (2010), or ASTM E617 (2023), Standard Specification for Laboratory Weights and Precision Mass Standards specifications. The reported test values relate only to the observations made at the time and conditions of the test. Artifacts fully comply with all requirements (both specifications and tolerances) of the applicable documentary standard unless otherwise stated. Stated expanded uncertainties are less than one-third of the specified tolerances (maximum permissible errors, m.p.e.) for mass calibrations and less than the specified tolerances for volume calibrations. The correction value plus or minus the expanded uncertainty is within the stated tolerances. It is the decision rule of the SD State Metrology Laboratory that any cast weights determined to have a correction within 66 % of the upper tolerance or 50 % of the lower tolerance will be adjusted closer to zero mass correction, even if the mass correction originally met the applicable tolerance.. SD Metrology laboratory uses an assumed density provided by the customer or weight manufacturer which could affect measurement results.

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 certificate number identified above is the unique report number to be used in referencing measurement traceability for artifacts identified in this report only.

Ron E Peterson, Metrologist 08/26/2025 Wade Robbins, Reviewer 08/26/2025

NVLAP CALIBRATION
NVLAP LAB CODE 600384-0

Accredited by the National Voluntary Laboratory Accreditation Program for the specific scope of accreditation under lab code 600384-0. This certificate may not be used to claim product endorsement by NVLAP, NIST Office of Weights and Measures or any other government agency, and may not be reproduced, except in full without written approval from this laboratory.

South Dakota Department of Public Safety
Office of Weights and Measures
Metrology Lab
Lab: 1100 Otter Rd, Bldg. D Sturgis, SD 57785 Phone: 605-347-7541
Office: 118 West Capitol Avenue Pierre, SD 57501 Phone: 605-773-3697

CALIBRATION CERTIFICATE

Calibrated for: Capital Scale (Shop) **Certificate number:** M26024

Calibration Date: 08/26/2025 **Purchase Order Number:**

Environmental conditions at time of test:

Temperature: 22.93 °C **Humidity:** 48.05 % **Pressure:** 673.49 mmhg

Test method used: SOP 8 Medium Accuracy Calibrations of Mass Standards by Modified Substitution, May 2019

Test equipment used: Lab standards traceable to the SI, XPR64003LD5C, XPR5003SC, XPR226CDR, XPR36C, Vaisala PTU301

Condition of Weights: Suitable for use. No significant wear or damage

Artifact(s): **1 50 lb weights**

Nominal		Correction as Found	Correction as Left	NIST Class F	Uncertainty		Condition
	SN/ID	mg	mg	Tolerance (mg)	mg	*k*	As Left
50 lb	30	-20063	7	2300	200	2.02	Adjusted

* Adjusted artifacts are in tolerance. Rejected and Condemned artifacts were tagged and must be placed out of service.

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

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

Ron E Peterson, Metrologist 08/26/2025 Wade Robbins, Reviewer 08/26/2025

SOUTH DAKOTA
DEPARTMENT OF PUBLIC SAFETY
prevention ~ protection ~ enforcement

Office of Weights and Measures
Metrology Laboratory
Office: 118 West Capitol Avenue, Pierre, SD 57501
Lab: 1100 Otter Rd, Bldg D, Sturgis, SD 57785
Lab: 605-347-7541, Office: 605-773-3697, Cell: 605-280-4572
Email: ron.peterson@state.sd.us https://dps.sd.gov/inspections/weights-measures

CALIBRATION CERTIFICATE

Capital Scale Systems SA# **61** **Certificate number:** M26066

Physical Address:
3021 Valley Forge Dr.
Bismark, ND 58503

Billing Address:
3021 Valley Forge Dr.
Bismark, ND 58503

Contact: Travis Will
Phone: 701-255-1556

Received Date: 01/14/2026
Certificate Issued: 01/15/2026

Artifacts Submitted and Summary of Results:

Quantity	Artifact	Total Pieces	Recvd in Tol	Adjusted	Rejected	As Left In Tolerance
2	4000 lb Weight Carts	2	0	2	0	2
20	1000 lb Weights	20	20	3	0	20
76	50 lb Weights	75	53	45	1	75
6	Cast Weights	6	5	3	0	6
24	1 lb Weights	24	20	0	4	20
3	Avoirdupois kits	50	50	0	0	50
2	Metric Kits	31	31	0	0	31

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 2008 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. For weight carts, factors included on the inspection checklist have not been included in the calibration uncertainty. However, factors on the checklist may contribute measurement errors that are significant if not properly maintained during use.

Conformity Statement:
The artifacts submitted for this calibration are calibrated to NIST Handbook 105-1 (1990 or 2019), NIST Handbook 105-8 (2019), NIST Handbook 105-3 (2010), or ASTM E617 (2023), Standard Specification for Laboratory Weights and Precision Mass Standards specifications. The reported test values relate only to the observations made at the time and conditions of the test. Artifacts fully comply with all requirements (both specifications and tolerances) of the applicable documentary standard unless otherwise stated. Stated expanded uncertainties are less than one-third of the specified tolerances (maximum permissible errors, m.p.e.) for mass calibrations and less than the specified tolerances for volume calibrations. The correction value plus or minus the expanded uncertainty is within the stated tolerances. It is the decision rule of the SD State Metrology Laboratory that any cast weights determined to have a correction within 66 % of the upper tolerance or 50 % of the lower tolerance will be adjusted closer to zero mass correction, even if the mass correction originally met the applicable tolerance.. SD Metrology laboratory uses an assumed density provided by the customer or weight manufacturer which could affect measurement results.

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 certificate number identified above is the unique report number to be used in referencing measurement traceability for artifacts identified in this report only.

Ron E Peterson, Metrologist 01/15/2026

Wade Robbins, Reviewer 01/15/2026

NVLAP CALIBRATION
NVLAP LAB CODE 600384-0

Accredited by the National Voluntary Laboratory Accreditation Program for the specific scope of accreditation under lab code 600384-0. This certificate may not be used to claim product endorsement by NVLAP, NIST Office of Weights and Measures or any other government agency, and may not be reproduced, except in full without written approval from this laboratory.

South Dakota Department of Public Safety
Office of Weights and Measures
Metrology Lab
Lab: 1100 Otter Rd, Bldg D Sturgis, SD 57785 Phone: 605-347-7541
Office: 118 West Capitol Avenue Pierre, SD 57501 Phone: 605-773-3697

CALIBRATION CERTIFICATE

Calibrated for: **Capital Scale Systems** Certificate Number: **M26066**

Calibration Date: **01/15/2026**

Environmental conditions at time of test:

Temperature: 21.12 °C **Humidity:** 44.57 % **Pressure:** 664.79 mmhg

Test method used: SOP 33 Calibrations of Weight Carts, May 2019

Test equipment used: Recently calibrated weights and a Mettler SLS510 Load Cell with IND570 Indicator. Vaisala PT301

Condition of Carts: Used but in good condition

Manufacturer: Unk **SN:** Unk

Nominal (lb)	AS Found (lb)	As Found (g)	As Left (lb)	As Left (g)	Uncertainty (lb)	*k*	Tolerance (lb)	Condition as Left
2000	0.90	408	-0.02	-9	0.11	2.01	0.70	Adjusted

Notes:

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

The above weight cart was allowed to come to environmental equilibrium in the laboratory prior to calibration. The weight cart was adjusted if needed and as noted above to as close as practical 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 recalibration of the weight cart prior to subsequent use.

Conformity Assessment:
The weight cart identified on this calibration certificate complies with NIST Handbook 105-8, 2019 specifications and tolerances. Additional details regarding the assessment are included in the associated checklist that is an integral part of this calibration certifcate. The weight cart was found (or adjusted) to within the specified tolerances.

The above weight cart was compared with standards of the State of South Dakota, which are traceable to the International System of Units (SI) through the National Institute of Standards and Technology (NIST) and have current calibration values. The assigned certificate number provides documented evidence for measurement traceability.

Ron E Peterson, Metrologist 01/15/2026 Wade Robbins, Reviewer 01/15/2026

Ver 20260109

South Dakota Department of Public Safety
Office of Weights and Measures
Metrology Lab
Lab: 1100 Otter Rd, Bldg D Sturgis, SD 57785 Phone: 605-347-7541
Office: 118 West Capitol Avenue Pierre, SD 57501 Phone: 605-773-3697

Inspection Checklist for Weight Cart

Calibrated for: Capital Scale Systems **Certificate number:** M26066

Calibration Date: 01/15/2026

Manufacturer:	Unk	**Date of Manufacture**	Unk
Model Number:	Unk	**ID/SN Number**	Unk

✓	Nominal Mass of Weight Cart	2000 lbs		Suitably marked: Yes/No	Yes	
✓	Powered by:	Electric/generator	✓	Diesel		Gasoline	
✓	Fluid Levels:	Engine Oil					
		Hydraulic Fluid		Sealed: Yes/No	Yes	
		Battery	✓	Sealed: Yes/No	Yes	
		Liquid Fuel		Reference Line Present: Yes/No	Yes	
✓	Fluid drain tubes extend beyond the body of the cart: Yes/No				Yes	
✓	Number of axles:		2			
✓	Number /Size of Tires		16.25x5x11			
✓	Sealed wheel bearings: Yes/No		Yes			
✓	Drain holes present in locations where water may accumulate: Yes/No				Yes	
✓	Weight restraint railing permanently fixed and solid: Yes/No				Yes	
✓	Adjusting cavity accessible: Yes/No		Yes	Approximate capacity:(lbs)	25	
✓	Adjusting cavity sealed: Yes/No		Yes			
✓	Service brakes functioning properly: Yes/No			Yes		
✓	Parking brakes functioning properly: Yes/No			Yes		
	Remote control functioning properly: Yes/No					

✓ General condition at time of calibration (note any accumulated dirt/debris, damage, loose parts, or evidence of tampering or unauthorized entry of seals).

List and report any repair and maintenance performed, parts replaced, etc., Leaks repaired, new battery, carburetor, exhaust system, wheels changed, welding performed, etc. Include any comments or changes since the last calibration.

✓

Ron E Peterson, Metrologist 01/15/2026 Wade Robbins, Reviewer 01/15/2026

Ver Ver 20260109

South Dakota Department of Public Safety
Office of Weights and Measures
Metrology Lab
Lab: 1100 Otter Rd, Bldg D Sturgis, SD 57785 Phone: 605-347-7541
Office: 118 West Capitol Avenue Pierre, SD 57501 Phone: 605-773-3697

CALIBRATION CERTIFICATE

Calibrated for: **Capital Scale Systems** Certificate Number: **M26066**

Calibration Date: **01/15/2026**

Environmental conditions at time of test:

Temperature: 21.12 °C **Humidity:** 44.57 % **Pressure:** 664.79 mmhg

Test method used: SOP 33 Calibrations of Weight Carts, May 2019

Test equipment used: Recently calibrated weights and a Mettler SLS510 Load Cell with IND570 Indicator.
Vaisala PT301

Condition of Carts: Used but in good condition

Manufacturer: Unk **SN:** 541094

Nominal (lb)	AS Found (lb)	As Found (g)	As Left (lb)	As Left (g)	Uncertainty (lb)	*k*	Tolerance (lb)	Condition as Left
2000	-0.89	-406	-0.04	-17	0.11	2.01	0.70	Adjusted

Notes:

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

The above weight cart was allowed to come to environmental equilibrium in the laboratory prior to calibration. The weight cart was adjusted if needed and as noted above to as close as practical 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 recalibration of the weight cart prior to subsequent use.

Conformity Assessment:
The weight cart identified on this calibration certificate complies with NIST Handbook 105-8, 2019 specifications and tolerances. Additional details regarding the assessment are included in the associated checklist that is an integral part of this calibration certifcate. The weight cart was found (or adjusted) to within the specified tolerances.

The above weight cart was compared with standards of the State of South Dakota, which are traceable to the International System of Units (SI) through the National Institute of Standards and Technology (NIST) and have current calibration values. The assigned certificate number provides documented evidence for measurement traceability.

Ron E Peterson, Metrologist 01/15/2026 Wade Robbins, Reviewer 01/15/2026

Ver 20260109

South Dakota Department of Public Safety
Office of Weights and Measures
Metrology Lab
Lab: 1100 Otter Rd, Bldg D Sturgis, SD 57785 Phone: 605-347-7541
Office: 118 West Capitol Avenue Pierre, SD 57501 Phone: 605-773-3697

Inspection Checklist for Weight Cart

Calibrated for: Capital Scale Systems **Certificate number:** M26066

Calibration Date: 01/15/2026

Manufacturer:	Unk	**Date of Manufacture**	Unk
Model Number:	Unk	**ID/SN Number**	541094

✓	Nominal Mass of Weight Cart	2000 lbs		Suitably marked: Yes/No		Yes
✓	Powered by:	Electric/generator	✓	Diesel		Gasoline	
✓	Fluid Levels:	Engine Oil					
		Hydraulic Fluid			Sealed: Yes/No		
		Battery	✓		Sealed: Yes/No	Yes
		Liquid Fuel			Reference Line Present: Yes/No	

✓	Fluid drain tubes extend beyond the body of the cart: Yes/No	Yes		
✓	Number of axles:	2		
✓	Number /Size of Tires	16.25x5x11		
✓	Sealed wheel bearings: Yes/No	Yes		
✓	Drain holes present in locations where water may accumulate: Yes/No		Yes	
✓	Weight restraint railing permanently fixed and solid: Yes/No		Yes	
✓	Adjusting cavity accessible: Yes/No	Yes		Approximate capacity:(lbs) 25
✓	Adjusting cavity sealed: Yes/No	Yes		
✓	Service brakes functioning properly: Yes/No		Yes	
✓	Parking brakes functioning properly: Yes/No		Yes	
	Remote control functioning properly: Yes/No			

✓ General condition at time of calibration (note any accumulated dirt/debris, damage, loose parts, or evidence of tampering or unauthorized entry of seals).

List and report any repair and maintenance performed, parts replaced, etc., Leaks repaired, new battery, carburetor, exhaust system, wheels changed, welding performed, etc. Include any comments or changes since the last calibration.

✓

Ron E Peterson, Metrologist 01/15/2026 Wade Robbins, Reviewer 01/15/2026

Ver Ver 20260109

South Dakota Department of Public Safety
Office of Weights and Measures
Metrology Lab
Lab: 1100 Otter Rd, Bldg. D Sturgis, SD 57785 Phone: 605-347-7541
Office: 118 West Capitol Avenue Pierre, SD 57501 Phone: 605-773-3697

CALIBRATION CERTIFICATE

Calibrated for: **Capital Scale Systems** **Certificate number:** **M26066**

Calibration Date: 018/15/2025 Purchase Order Number: **0**

Environmental conditions at time of test: Serial#

Temperature: 665.1 °C **Humidity:** 21 % **Pressure:** 45 mmhg

Test method used: SOP 8 Medium Accuracy Calibrations of Mass Standards by Modified Substitution, May 2019

Test equipment used: Lab standards traceable to the SI, an XPE604KMC balance, and a Vaisala PTU301

Condition of Weights: Cleaned and painted

Artifact(s): **20 1000 lb weights**

Nominal		Correction as Found		Correction as Left		NIST Class F	Uncertainty		Condition
	SN/ID	lb	g	lb	g	Tolerance (g)	g	*k*	As Left
1000 lb	13.10	-0.03	-13.2	-0.03	-13.2	45	4.7	2.0	In-Tolerance
1000 lb	13.11	-0.06	-26.4	0.00	0.3	45	4.7	2.0	Adjusted
1000 lb	13.12	-0.03	-15.3	-0.03	-15.3	45	4.7	2.0	In-Tolerance
1000 lb	13.13	-0.04	-17.9	-0.04	-17.9	45	4.7	2.0	In-Tolerance
1000 lb	13.14	-0.05	-24.6	0.00	0.0	45	4.7	2.0	Adjusted
1000 lb	13.15	-0.03	-14.9	-0.03	-14.9	45	4.7	2.0	In-Tolerance
1000 lb	13.16	-0.02	-10.1	-0.02	-10.1	45	4.7	2.0	In-Tolerance
1000 lb	13.17	-0.04	-19.3	-0.04	-19.3	45	4.7	2.0	In-Tolerance
1000 lb	13.17	-0.04	-19.7	-0.04	-19.7	45	4.7	2.0	In-Tolerance
1000 lb	13.18	-0.03	-11.4	-0.03	-11.4	45	4.7	2.0	In-Tolerance
1000 lb	13.19	-0.01	-5.2	-0.01	-5.2	45	4.7	2.0	In-Tolerance
1000 lb	13.20	-0.03	-11.5	-0.03	-11.5	45	4.7	2.0	In-Tolerance
1000 lb	13.21	0.02	8.4	0.02	8.4	45	4.7	2.0	In-Tolerance
1000 lb	13.22	-0.02	-10.5	-0.02	-10.5	45	4.7	2.0	In-Tolerance
1000 lb	13.23	-0.02	-10.2	-0.02	-10.2	45	4.7	2.0	In-Tolerance
1000 lb	13.24	-0.03	-11.6	-0.03	-11.6	45	4.7	2.0	In-Tolerance
1000 lb	13.26	-0.02	-7.9	-0.02	-7.9	45	4.7	2.0	In-Tolerance
1000 lb	13.27	-0.06	-26.2	0.00	0.0	45	4.7	2.0	Adjusted
1000 lb	13.28	-0.03	-14.3	-0.03	-14.3	45	4.7	2.0	In-Tolerance
1000 lb	13.29	-0.03	-14.7	-0.03	-14.7	45	4.7	2.0	In-Tolerance

* Adjusted artifacts are in tolerance. Rejected and Condemned artifacts were tagged and must be placed out of service.

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

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

Ron E Peterson, Metrologist 018/15/2025 Wade Robbins, Reviewer 018/15/2025

South Dakota Department of Public Safety
Office of Weights and Measures
Metrology Lab
Lab: 1100 Otter Rd, Bldg. D Sturgis, SD 57785 Phone: 605-347-7541
Office: 118 West Capitol Avenue Pierre, SD 57501 Phone: 605-773-3697

CALIBRATION CERTIFICATE

Calibrated for: Capital Scale Systems **Certificate number:** M26066

Calibration Date: 01/15/2026 **Purchase Order Number:**

Environmental conditions at time of test:

Temperature: 20.7 °C **Humidity:** 45.8 % **Pressure:** 666 mmhg

Test method used: SOP 8 Medium Accuracy Calibrations of Mass Standards by Modified Substitution, May 2019

Test equipment used: Lab standards traceable to the SI, XPR64003LD5C, XPR5003SC, XPR226CDR, XPR36C, Vaisala PTU301

Condition of Weights: Cleaned and painted

Artifact(s): **28 50 lb weights**

Nominal		Correction as Found	Correction as Left	NIST Class F	Uncertainty		Condition
	SN/ID	mg	mg	Tolerance (mg)	mg	*k*	As Left
50 lb	2	-2318	-18	2300	200	2.02	Adjusted
50 lb	3	-1363	-3	2300	200	2.02	Adjusted
50 lb	4	-28	-28	2300	200	2.02	In-Tolerance
50 lb	6	-118	-118	2300	200	2.02	In-Tolerance
50 lb	7	-743	-743	2300	200	2.02	In-Tolerance
50 lb	8	-1698	27	2300	200	2.02	Adjusted
50 lb	9	-2068	2	2300	200	2.02	Adjusted
50 lb	10	-2658	-3	2300	200	2.02	Adjusted
50 lb	13	-8	-8	2300	200	2.02	In-Tolerance
50 lb	15	-828	-828	2300	200	2.02	In-Tolerance
50 lb	16	-3003	27	2300	200	2.02	Adjusted
50 lb	18	-963	-963	2300	200	2.02	In-Tolerance
50 lb	19	-1193	-18	2300	200	2.02	Adjusted
50 lb	21	1257	1257	2300	200	2.02	In-Tolerance
50 lb	22	1137	1137	2300	200	2.02	In-Tolerance
50 lb	23	-843	-843	2300	200	2.02	In-Tolerance
50 lb	26	1667	27	2300	200	2.02	Adjusted
50 lb	27	-1593	27	2300	200	2.02	Adjusted
50 lb	29	-2123	22	2300	200	2.02	Adjusted
50 lb	30	-1518	12	2300	200	2.02	Adjusted
50 lb	31	-943	-943	2300	200	2.02	In-Tolerance
50 lb	32	-2748	-8	2300	200	2.02	Adjusted
50 lb	33	-1038	-1038	2300	200	2.02	In-Tolerance
50 lb	34	-783	-783	2300	200	2.02	In-Tolerance
50 lb	34	-73	-73	2300	200	2.02	In-Tolerance
50 lb	35	-1808	-28	2300	200	2.02	Adjusted
50 lb	36	-1328	32	2300	200	2.02	Adjusted
50 lb	37	182	182	2300	200	2.02	In-Tolerance

* Adjusted artifacts are in tolerance. Rejected and Condemned artifacts were tagged and must be placed out of service.

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

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

Ron E Peterson, Metrologist 01/15/2026 Wade Robbins, Reviewer 01/15/2026

South Dakota Department of Public Safety
Office of Weights and Measures
Metrology Lab
Lab: 1100 Otter Rd, Bldg. D Sturgis, SD 57785 Phone: 605-347-7541
Office: 118 West Capitol Avenue Pierre, SD 57501 Phone: 605-773-3697

CALIBRATION CERTIFICATE

Calibrated for: Capital Scale Systems **Certificate number:** M26066

Calibration Date: 01/15/2026 **Purchase Order Number:**

Environmental conditions at time of test:

Temperature: 20.7 °C **Humidity:** 45.8 % **Pressure:** 666 mmhg

Test method used: SOP 8 Medium Accuracy Calibrations of Mass Standards by Modified Substitution, May 2019

Test equipment used: Lab standards traceable to the SI, XPR64003LD5C, XPR5003SC, XPR226CDR, XPR36C, Vaisala PTU301

Condition of Weights: Cleaned and painted

Artifact(s): **26 50 lb weights**

Nominal		Correction as Found	Correction as Left	NIST Class F	Uncertainty		Condition
	SN/ID	mg	mg	Tolerance (mg)	mg	*k*	As Left
50 lb	40	-2238	-3	2300	200	2.02	Adjusted
50 lb	41	-1863	-3	2300	200	2.02	Adjusted
50 lb	42	-1763	12	2300	200	2.02	Adjusted
50 lb	43	-1968	-3	2300	200	2.02	Adjusted
50 lb	44	-2873	-18	2300	200	2.02	Adjusted
50 lb	45	-2508	7	2300	200	2.02	Adjusted
50 lb	46	-1718	-3	2300	200	2.02	Adjusted
50 lb	47	-2013	2	2300	200	2.02	Adjusted
50 lb	48	-2113	-18	2300	200	2.02	Adjusted
50 lb	49	-568	-568	2300	200	2.02	In-Tolerance
50 lb	50	-2973	17	2300	200	2.02	Adjusted
50 lb	50	-368	-368	2300	200	2.02	In-Tolerance
50 lb	51	-67538	2	2300	200	2.02	Adjusted
50 lb	52	-1363	47	2300	200	2.02	Adjusted
50 lb	53	-233	-233	2300	200	2.02	In-Tolerance
50 lb	54	-513	-513	2300	200	2.02	In-Tolerance
50 lb	55	-1933	-13	2300	200	2.02	Adjusted
50 lb	60	-1478	12	2300	200	2.02	Adjusted
50 lb	61	-1793	27	2300	200	2.02	Adjusted
50 lb	64	-593	-593	2300	200	2.02	In-Tolerance
50 lb	69	-473	-473	2300	200	2.02	In-Tolerance
50 lb	71	292	292	2300	200	2.02	In-Tolerance
50 lb	72	-213	-213	2300	200	2.02	In-Tolerance
50 lb	72	-103	-103	2300	200	2.02	In-Tolerance
50 lb	73	-718	-718	2300	200	2.02	In-Tolerance
50 lb	77	-53	-53	2300	200	2.02	In-Tolerance

* Adjusted artifacts are in tolerance. Rejected and Condemned artifacts were tagged and must be placed out of service.

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

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

Ron E Peterson, Metrologist 01/15/2026 Wade Robbins, Reviewer 01/15/2026

South Dakota Department of Public Safety
Office of Weights and Measures
Metrology Lab
Lab: 1100 Otter Rd, Bldg. D Sturgis, SD 57785 Phone: 605-347-7541
Office: 118 West Capitol Avenue Pierre, SD 57501 Phone: 605-773-3697

CALIBRATION CERTIFICATE

Calibrated for: Capital Scale Systems **Certificate number:** M26066

Calibration Date: 01/15/2026 **Purchase Order Number:**

Environmental conditions at time of test:

Temperature: 20.7 °C **Humidity:** 45.8 % **Pressure:** 666 mmhg

Test method used: SOP 8 Medium Accuracy Calibrations of Mass Standards by Modified Substitution, May 2019

Test equipment used: Lab standards traceable to the SI, XPR64003LD5C, XPR5003SC, XPR226CDR, XPR36C, Vaisala PTU301

Condition of Weights: Cleaned and painted

Artifact(s): **22 50 lb weights**

Nominal		Correction as Found	Correction as Left	NIST Class F	Uncertainty		Condition
	SN/ID	mg	mg	Tolerance (mg)	mg	*k*	As Left
50 lb	A	-1823	22	2300	200	2.02	Adjusted
50 lb	AAA	92	92	2300	200	2.02	In-Tolerance
50 lb	B	-1618	-3	2300	200	2.02	Adjusted
50 lb	C	-5758	-18	2300	200	2.02	Adjusted
50 lb	D	-2713	Reject	2300	200	2.02	Reject
50 lb	E	-1238	7	2300	200	2.02	Adjusted
50 lb	G	-1758	27	2300	200	2.02	Adjusted
50 lb	J	-1293	-8	2300	200	2.02	Adjusted
50 lb	L	-2038	-3	2300	200	2.02	Adjusted
50 lb	M	-1508	12	2300	200	2.02	Adjusted
50 lb	N	-1723	27	2300	200	2.02	Adjusted
50 lb	P	-518	-518	2300	200	2.02	In-Tolerance
50 lb	Q	-3493	17	2300	200	2.02	Adjusted
50 lb	R	-2263	32	2300	200	2.02	Adjusted
50 lb	R	-3633	22	2300	200	2.02	Adjusted
50 lb	S	-1193	-8	2300	200	2.02	Adjusted
50 lb	T	-998	-998	2300	200	2.02	In-Tolerance
50 lb	T	-2333	7	2300	200	2.02	Adjusted
50 lb	U	-373	-373	2300	200	2.02	In-Tolerance
50 lb	W	-3713	32	2300	200	2.02	Adjusted
50 lb	Y	-1003	-1003	2300	200	2.02	In-Tolerance
50 lb	Z	-1778	2	2300	200	2.02	Adjusted

* Adjusted artifacts are in tolerance. Rejected and Condemned artifacts were tagged and must be placed out of service.

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

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

Ron E Peterson, Metrologist 01/15/2026 Wade Robbins, Reviewer 01/15/2026

South Dakota Department of Public Safety
Office of Weights and Measures
Metrology Lab
Lab: 1100 Otter Rd, Bldg. D Sturgis, SD 57785 Phone: 605-347-7541
Office: 118 West Capitol Avenue Pierre, SD 57501 Phone: 605-773-3697

CALIBRATION CERTIFICATE

Calibrated for: Capital Scale Systems **Certificate number:** M26066

Calibration Date: 01/15/2026 **Purchase Order Number:**

Environmental conditions at time of test:

Temperature: 20.7 °C **Humidity:** 45.8 % **Pressure:** 666 mmhg

Test method used: SOP 8 Medium Accuracy Calibrations of Mass Standards by Modified Substitution, May 2019

Test equipment used: Lab standards traceable to the SI, XPR64003LD5C, XPR5003SC, XPR226CDR, XPR36C, Vaisala PTU301

Condition of Weights: Cleaned and painted

Artifact(s): **6 Avoirdupois Weight(s)**

Nominal		Correction as Found	Correction as Left	NIST Class F	Uncertainty		Condition
	SN/ID	mg	mg	Tolerance (mg)	mg	*k*	As Left
25 lb	A	-39	-39	1100	120	2.02	In-Tolerance
25 lb	B	-789	151	1100	120	2.02	Adjusted
20 lb	A	125	125	910	120	2.02	In-Tolerance
10 lb	1	120	120	450	39	2.04	In-Tolerance
10 lb	2	426	3	450	39	2.04	Adjusted
10 lb	3	259	7	450	39	2.04	Adjusted

* Adjusted artifacts are in tolerance. Rejected and Condemned artifacts were tagged and must be placed out of service.

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

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

Ron E Peterson, Metrologist 01/15/2026 Wade Robbins, Reviewer 01/15/2026

South Dakota Department of Public Safety
Office of Weights and Measures
Metrology Lab
Lab: 1100 Otter Rd, Bldg. D Sturgis, SD 57785 Phone: 605-347-7541
Office: 118 West Capitol Avenue Pierre, SD 57501 Phone: 605-773-3697

CALIBRATION CERTIFICATE

Calibrated for: Capital Scale Systems **Certificate number:** M26066

Calibration Date: 01/15/2026 **Purchase Order Number:**

Environmental conditions at time of test:

Temperature: 21.4 °C **Humidity:** 43.8 % **Pressure:** 666.3 mmhg

Test method used: SOP 8 Medium Accuracy Calibrations of Mass Standards by Modified Substitution, May 2019

Test equipment used: Lab standards traceable to the SI, XPR64003LD5C, XPR5003SC, XPR226CDR, XPR36C, Vaisala PTU301

Condition of Weights: Cleaned and painted

Artifact(s): **24 Avoirdupois Weight(s)**

Nominal		Correction as Found	Correction as Left	NIST Class F	Uncertainty		Condition
	SN/ID	mg	mg	Tolerance (mg)	mg	*k*	As Left
1 lb	1	-56.6	-56.6	70	6.1	2.04	In-Tolerance
1 lb	2	-21.6	-21.6	70	6.1	2.04	In-Tolerance
1 lb	3	14.4	14.4	70	6.1	2.04	In-Tolerance
1 lb	4	-8.6	-8.6	70	6.1	2.04	In-Tolerance
1 lb	5	4.4	4.4	70	6.1	2.04	In-Tolerance
1 lb	6	-17.6	-17.6	70	6.1	2.04	In-Tolerance
1 lb	7	16.4	16.4	70	6.1	2.04	In-Tolerance
1 lb	8	12.4	12.4	70	6.1	2.04	In-Tolerance
1 lb	9	19.4	19.4	70	6.1	2.04	In-Tolerance
1 lb	10	14.4	14.4	70	6.1	2.04	In-Tolerance
1 lb	11	-119.6	-119.6	70	6.1	2.04	Rejected
1 lb	12	-55.6	-55.6	70	6.1	2.04	In-Tolerance
1 lb	13	-11.6	-11.6	70	6.1	2.04	In-Tolerance
1 lb	14	-85.6	-85.6	70	6.1	2.04	Rejected
1 lb	15	-1.6	-1.6	70	6.1	2.04	In-Tolerance
1 lb	16	12.4	12.4	70	6.1	2.04	In-Tolerance
1 lb	17	18.4	18.4	70	6.1	2.04	In-Tolerance
1 lb	18	-64.6	-64.6	70	6.1	2.04	Rejected
1 lb	19	0.4	0.4	70	6.1	2.04	In-Tolerance
1 lb	20	16.4	16.4	70	6.1	2.04	In-Tolerance
1 lb	21	0.4	0.4	70	6.1	2.04	In-Tolerance
1 lb	22	-164.6	-164.6	70	6.1	2.04	Rejected
1 lb	23	29.4	29.4	70	6.1	2.04	In-Tolerance
1 lb	24	-13.6	-13.6	70	6.1	2.04	In-Tolerance

* Adjusted artifacts are in tolerance. Rejected and Condemned artifacts were tagged and must be placed out of service.

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

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

Ron E Peterson, Metrologist 01/15/2026 Wade Robbins, Reviewer 01/15/2026

South Dakota Department of Public Safety
Office of Weights and Measures
Metrology Lab
Lab: 1100 Otter Rd, Bldg. D Sturgis, SD 57785 Phone: 605-347-7541
Office: 118 West Capitol Avenue Pierre, SD 57501 Phone: 605-773-3697

CALIBRATION CERTIFICATE

Calibrated for: Capital Scale Systems **Certificate number:** M26066

Calibration Date: 01/15/2026 **Purchase Order Number:**

Environmental conditions at time of test:

Temperature: 21.6 °C **Humidity:** 44.4 % **Pressure:** 666.2 mmhg

Test method used: SOP 8 Medium Accuracy Calibrations of Mass Standards by Modified Substitution, May 2019

Test equipment used: Lab standards traceable to the SI, XPR64003LD5C, XPR5003SC, XPR226CDR, XPR36C, Vaisala PTU301

Condition of Weights: Suitable for use. No significant wear or damage

Artifact(s): **20 piece Avoirdupois Kit** **SN 010813A**

Nominal		Correction as Found	Correction as Left	NIST Class F	Uncertainty		Condition
	SN/ID	mg	mg	Tolerance (mg)	mg	*k*	As Left
5 lb	1	70	70	230	20	2.04	In-Tolerance
5 lb	2	67	67	230	20	2.04	In-Tolerance
5 lb	3	66	66	230	20	2.04	In-Tolerance
5 lb	4	64	64	230	20	2.04	In-Tolerance
5 lb	5	65	65	230	20	2.04	In-Tolerance
1 lb	1	24.4	24.4	70	6.1	2.04	In-Tolerance
1 lb	2	24.4	24.4	70	6.1	2.04	In-Tolerance
1 lb	3	25.4	25.4	70	6.1	2.04	In-Tolerance
1 lb	4	18.4	18.4	70	6.1	2.04	In-Tolerance
1 lb	5	28.4	28.4	70	6.1	2.04	In-Tolerance
8 oz		21.2	21.2	45	4.0	2.03	In-Tolerance
4 oz		9.5	9.5	23	2.0	2.03	In-Tolerance
2 oz		3.96	3.96	11	0.95	2.04	In-Tolerance
1 oz		1.80	1.80	5.4	0.48	2.02	In-Tolerance
0.5 oz		0.97	0.97	2.8	0.24	2.03	In-Tolerance
0.25 oz		0.38	0.38	1.7	0.15	2.02	In-Tolerance
0.125 oz		0.63	0.63	1.3	0.12	2.02	In-Tolerance
0.0625 oz		0.177	0.177	1.1	0.095	2.03	In-Tolerance
0.03125 oz		0.211	0.211	0.87	0.077	2.03	In-Tolerance
0.03125 oz	.	0.321	0.321	0.87	0.077	2.03	In-Tolerance

* Adjusted artifacts are in tolerance. Rejected and Condemned artifacts were tagged and must be placed out of service.

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

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

Ron E Peterson, Metrologist 01/15/2026 Wade Robbins, Reviewer 01/15/2026

South Dakota Department of Public Safety
Office of Weights and Measures
Metrology Lab
Lab: 1100 Otter Rd, Bldg. D Sturgis, SD 57785 Phone: 605-347-7541
Office: 118 West Capitol Avenue Pierre, SD 57501 Phone: 605-773-3697

CALIBRATION CERTIFICATE

Calibrated for: Capital Scale Systems **Certificate number:** M26066

Calibration Date: 01/15/2026 **Purchase Order Number:**

Environmental conditions at time of test:

Temperature: 21.6 °C **Humidity:** 44.4 % **Pressure:** 666.2 mmhg

Test method used: SOP 8 Medium Accuracy Calibrations of Mass Standards by Modified Substitution, May 2019

Test equipment used: Lab standards traceable to the SI, XPR64003LD5C, XPR5003SC, XPR226CDR, XPR36C, Vaisala PTU301

Condition of Weights: Suitable for use. No significant wear or damage

Artifact(s): **21 piece Metric Kit** **SN 11111A**

Nominal		Correction as Found	Correction as Left	NIST Class F	Uncertainty		Condition
	SN/ID	mg	mg	Tolerance (mg)	mg	*k*	As Left
5 kg	1	168	168	500	43	2.04	In-Tolerance
5 kg	2	146	146	500	43	2.04	In-Tolerance
2 kg	1	36	36	200	17	2.04	In-Tolerance
2 kg	2	47	47	200	17	2.04	In-Tolerance
1 kg		32.1	32.1	100	8.7	2.04	In-Tolerance
500 g	1	17.4	17.4	70	6.1	2.04	In-Tolerance
500 g	2	20.4	20.4	70	6.1	2.04	In-Tolerance
500 g	3	12.4	12.4	70	6.1	2.04	In-Tolerance
500 g	4	20.4	20.4	70	6.1	2.04	In-Tolerance
500 g	5	20.4	20.4	70	6.1	2.04	In-Tolerance
200 g	1	9.8	9.8	40	3.4	2.04	In-Tolerance
200 g	2	9.9	9.9	40	3.4	2.04	In-Tolerance
100 g		8.5	8.5	20	1.7	2.04	In-Tolerance
50 g		1.97	1.97	10	0.86	2.04	In-Tolerance
20 g		1.79	1.79	4	0.34	2.04	In-Tolerance
20 g	.	1.30	1.30	4	0.34	2.04	In-Tolerance
10 g		0.62	0.62	2	0.17	2.03	In-Tolerance
5 g		0.80	0.80	1.5	0.13	2.04	In-Tolerance
2 g		0.295	0.295	1.1	0.095	2.04	In-Tolerance
2 g	.	0.580	0.580	1.1	0.095	2.04	In-Tolerance
1 g		0.164	0.164	0.9	0.078	2.04	In-Tolerance

* Adjusted artifacts are in tolerance. Rejected and Condemned artifacts were tagged and must be placed out of service.

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

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

Ron E Peterson, Metrologist 01/15/2026 Wade Robbins, Reviewer 01/15/2026

South Dakota Department of Public Safety
Office of Weights and Measures
Metrology Lab
Lab: 1100 Otter Rd, Bldg. D Sturgis, SD 57785 Phone: 605-347-7541
Office: 118 West Capitol Avenue Pierre, SD 57501 Phone: 605-773-3697

CALIBRATION CERTIFICATE

Calibrated for: Capital Scale Systems **Certificate number:** M26066

Calibration Date: 01/15/2026 **Purchase Order Number:**

Environmental conditions at time of test:

Temperature: 21.5 °C **Humidity:** 45.6 % **Pressure:** 666.6 mmhg

Test method used: SOP 8 Medium Accuracy Calibrations of Mass Standards by Modified Substitution, May 2019

Test equipment used: Lab standards traceable to the SI, XPR64003LD5C, XPR5003SC, XPR226CDR, XPR36C, Vaisala PTU301

Condition of Weights: Suitable for use. No significant wear or damage

Artifact(s): **14 piece Metric Kit** **SN 11905E**

Nominal		Correction as Found	Correction as Left	NIST Class F	Uncertainty		Condition
	SN/ID	mg	mg	Tolerance (mg)	mg	*k*	As Left
2 kg		42	42	200	17	2.04	In-Tolerance
1 kg		48.1	48.1	100	8.7	2.04	In-Tolerance
500 g		27.4	27.4	70	6.1	2.04	In-Tolerance
200 g		13.4	13.4	40	3.4	2.04	In-Tolerance
200 g		18.5	18.5	40	3.4	2.04	In-Tolerance
100 g		9.9	9.9	20	1.7	2.04	In-Tolerance
50 g		5.49	5.49	10	0.86	2.04	In-Tolerance
20 g		2.87	2.87	4	0.34	2.04	In-Tolerance
20 g		1.03	1.03	4	0.34	2.04	In-Tolerance
10 g		0.40	0.40	2	0.17	2.03	In-Tolerance
5 g		0.70	0.70	1.5	0.13	2.04	In-Tolerance
2 g		0.715	0.715	1.1	0.095	2.04	In-Tolerance
2 g		0.175	0.175	1.1	0.095	2.04	In-Tolerance
1 g		0.319	0.319	0.9	0.078	2.04	In-Tolerance

* Adjusted artifacts are in tolerance. Rejected and Condemned artifacts were tagged and must be placed out of service.

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

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

Ron E Peterson, Metrologist 01/15/2026 Wade Robbins, Reviewer 01/15/2026

South Dakota Department of Public Safety
Office of Weights and Measures
Metrology Lab
Lab: 1100 Otter Rd, Bldg. D Sturgis, SD 57785 Phone: 605-347-7541
Office: 118 West Capitol Avenue Pierre, SD 57501 Phone: 605-773-3697

CALIBRATION CERTIFICATE

Calibrated for: Capital Scale Systems **Certificate number:** M26066

Calibration Date: 01/15/2026 **Purchase Order Number:**

Environmental conditions at time of test:

Temperature: 21.65 °C **Humidity:** 46.2 % **Pressure:** 666.7 mmhg

Test method used: SOP 8 Medium Accuracy Calibrations of Mass Standards by Modified Substitution, May 2019

Test equipment used: Lab standards traceable to the SI, XPR64003LD5C, XPR5003SC, XPR226CDR, XPR36C, Vaisala PTU301

Condition of Weights: Suitable for use. No significant wear or damage

Artifact(s): **17 piece Avoirdupois Kit** **SN 11905B**

Nominal		Correction as Found	Correction as Left	NIST Class F	Uncertainty		Condition
	SN/ID	mg	mg	Tolerance (mg)	mg	*k*	As Left
2 lb	1	26.4	26.4	91	7.9	2.04	In-Tolerance
2 lb	2	11.4	11.4	91	7.9	2.04	In-Tolerance
2 lb	3	11.4	11.4	91	7.9	2.04	In-Tolerance
1 lb		20.4	20.4	70	6.1	2.04	In-Tolerance
8 oz		14.2	14.2	45	4.0	2.03	In-Tolerance
4 oz		-2.7	-2.7	23	2.0	2.03	In-Tolerance
2 oz		4.58	4.58	11	0.95	2.04	In-Tolerance
1 oz		0.63	0.63	5.4	0.48	2.02	In-Tolerance
0.5 oz		0.11	0.11	2.8	0.24	2.03	In-Tolerance
0.25 oz		0.37	0.37	1.7	0.15	2.02	In-Tolerance
0.3 lb		-0.6	-0.6	27	3.9	2.04	In-Tolerance
0.2 lb		0.9	0.9	18	1.6	2.04	In-Tolerance
0.1 lb		4.29	4.29	9.1	0.78	2.04	In-Tolerance
0.05 lb		0.44	0.44	4.5	0.39	2.04	In-Tolerance
0.03 lb		-1.40	-1.40	2.7	0.39	2.03	In-Tolerance
0.02 lb		0.25	0.25	1.8	0.16	2.03	In-Tolerance
0.01 lb		-0.42	-0.42	1.5	0.13	2.04	In-Tolerance

* Adjusted artifacts are in tolerance. Rejected and Condemned artifacts were tagged and must be placed out of service.

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

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

Ron E Peterson, Metrologist 01/15/2026 Wade Robbins, Reviewer 01/15/2026

South Dakota Department of Public Safety
Office of Weights and Measures
Metrology Lab
Lab: 1100 Otter Rd, Bldg. D Sturgis, SD 57785 Phone: 605-347-7541
Office: 118 West Capitol Avenue Pierre, SD 57501 Phone: 605-773-3697

CALIBRATION CERTIFICATE

Calibrated for: Capital Scale Systems **Certificate number:** M26066

Calibration Date: 01/15/2026 **Purchase Order Number:**

Environmental conditions at time of test:

Temperature: 21.5 °C **Humidity:** 46.05 % **Pressure:** 666.5 mmhg

Test method used: SOP 8 Medium Accuracy Calibrations of Mass Standards by Modified Substitution, May 2019

Test equipment used: Lab standards traceable to the SI, XPR64003LD5C, XPR5003SC, XPR226CDR, XPR36C, Vaisala PTU301

Condition of Weights: Suitable for use. No significant wear or damage

Artifact(s): **13 piece Avoirdupois Kit** **SN 11905A**

Nominal		Correction as Found	Correction as Left	NIST Class F	Uncertainty		Condition
	SN/ID	mg	mg	Tolerance (mg)	mg	*k*	As Left
10 lb		64	64	450	39	2.04	In-Tolerance
10 lb	.	96	96	450	39	2.04	In-Tolerance
5 lb		-91	-91	230	20	2.04	In-Tolerance
2 lb		32.4	32.4	91	7.9	2.04	In-Tolerance
2 lb	.	15.4	15.4	91	7.9	2.04	In-Tolerance
1 lb		-3.6	-3.6	70	6.1	2.04	In-Tolerance
8 oz		14.2	14.2	45	4.0	2.03	In-Tolerance
4 oz		-4.6	-4.6	23	2.0	2.03	In-Tolerance
1 oz		2.95	2.95	5.4	0.48	2.02	In-Tolerance
1 oz	.	3.00	3.00	5.4	0.48	2.02	In-Tolerance
1 oz	..	1.82	1.82	5.4	0.48	2.02	In-Tolerance
0.5 oz		1.47	1.47	2.8	0.24	2.03	In-Tolerance
0.25 oz		-1.33	-1.33	1.7	0.15	2.02	In-Tolerance

* Adjusted artifacts are in tolerance. Rejected and Condemned artifacts were tagged and must be placed out of service.

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

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

Ron E Peterson, Metrologist 01/15/2026 Wade Robbins, Reviewer 01/15/2026