SCALE TEST REPORT AND CERTIFICATION OF INSPECTION

I, Nicholas Gilbert, do certify under penalty of perjury as follows:

I am employed with Washington State Patrol as a Construction Maintenance and Project Supervisor. I have been employed in such a capacity for 3 years. Part of my duties include supervising the inspection and calibration of the traffic scales used by Washington State Patrol.

I have the following qualifications with respect to scale calibration:

Scale Technician Apprentice, Washington State Patrol	2018 - 2020
Maintenance Mechanic 4 (Scale Technician), Washington State Patrol	2019 - 2022
Construction Maintenance and Project Supervisor (Weights and Measures), Washington State Patrol	2022 - Present
Haenni 101 Theory Testing, Calibration, & Procedure, Load 0 Meter	2019
NIST Scale Handbook Training - NIST Handbook 44 & 112, Rice Lake Weighing Systems	2019
Fundamentals of Electronic Systems, Rice Lake Weighing Systems	2019
Advance Scale System Troubleshooting, Rice Lake Weighing Systems	2023

On September 11th, 2024, testing of the following scale was performed under my direction and the scale was evaluated to meet or exceed existing accuracy standards. District 6, Cle Elum #53 N, 12871 I-90 West Bound Milepost 80, Scale 53, Cle Elum, WA, 98922 – GSE 651 S/N #202174 – Class IIIL Scale. Using the testing procedures set forth in Handbook 44, promulgated by the National Institute of Standards and Technology, and test weights certified under oath as accurate as shown on the attached "Report of Calibration" under certification number(s) 200446-0-L4824 and 200446-0-L4731-2 and herein incorporated by reference, the above device met or exceeded the standards of accuracy.

Signature: Nicholas Gilbert Dated: March 13, 2025

Print Name: Nicholas Gilbert

Signature Location: 8623 Armstrong Rd SW, Olympia, WA, 98504-2626

WASHINGTON STATE PATROL

SCALE TEST REPORT AND CERTIFICATION OF INSPECTION

DATE: 9/11/2024 INITIALS: NLG OWNER: WASHINGTON STATE PATROL

DISTRICT: 6 ADDRESS: I-90W Bullfrog

LOCATION: CleElum 53 WB N COUNTY: Kittitas

MAKE: GSE TYPE: Trk Scale ACCURACY CLASS: IIIL

MODEL: 651 ID. NO: 202174 CAPACITY: 200000 lbs. SECTIONS: 2

MINIMUM GRADUATIONS: 20 lbs. REG. ELEMENT: Digital PLATFORM 12x20

Dual North

LOAD POSITION	TEST WEIGHT	SCALE INDICATION	ERROR	LOAD POSITION	TEST WEIGHT	SCALE INDICATION	ERROR
PLATFORM 1				PLATFORM 2			
SEC 1	20,000	20,000	0	SEC 1	20,000	20,000	0
CENTER	20,000	20,000	0	CENTER	20,000	20,000	0
SEC 2	20,000	20,000	0	SEC 2	20,000	20,000	0

Using testing procedures set forth in Handbook 44 promulgated by the National Institute of Standards and Technology and test weights which were certified as accurate as shown on the attached "Report of Calibration", Certification number(s): 200446-0-L4824 and 200446-0-L4731-2 the above device met or exceeded the standards of accuracy.

I declare or certify under penalty of perjury under the laws of the State of Washington that the foregoing is true and correct.

Signed by: Nicholas Gilbert Date: September 12, 2024

Print name: Nicholas Gilbert

Signature Location: 8623 Armstrong Rd. SW, Olympia, WA 98504-2626

JAY INSLEE
Governor

DEREK SANDISON
Director, Department of Agriculture

Mail
PO Box 42650
Olympia, WA 98504-2560
e-mail: lgerman@agr.wa.gov
Phone: (360) 753-5042

STATE OF WASHINGTON
DEPARTMENT OF AGRICULTURE
Plant Protection Division
Weights and Measures Program
Metrology Laboratory

Shipping
2747 29th Ave. SW
Tumwater, WA 98512

Fax: (360) 586-4728

Calibration Certificate

Certificate Number: 200446-0-L4824

Calibration Date: 08/14/2024
Calibration Due Date: 08/14/2026

Tested Item: 4000 lb Weight Carts, Inc Weight Cart

Issued To: Washington State Patrol
8623 Armstrong Road SW
Olympia, WA 98504

POC: Nicholas Gilbert
Phone: 360-764-0367

PO Number:

Date Received: 08/13/2024

Calibration Item Description

Test Item: 4000 lb Weight Cart
Serial No: P486-3R
Manufacture: Weight Carts, Inc
Condition: Good

Model No.: Unknown
Weight Cart Mfg. Date: Unknown
Class Specification: NIST HB 105-8 (2019)

Calibration Information

Job Order #: L4824
Metrologist: Leslie German
Procedure: NIST SOP 33 with SOP 4 modifications

Temperature: 21.2 °C
Pressure: 760.2 mm Hg
Humidity: 55.0 % RH

Laboratory Reference Standards Used

Description	Serial Number	Certification No.	Cal Date	Cal Due
1000 lb to 20 lb	SET WC	200446-0-L4721-1	10/04/2023	10/04/2025

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Calibration Certificate

Certificate Number: 200446-0-L4824

Calibration Date: 08/14/2024
Calibration Due Date: 08/14/2026

Tested Item: 4000 lb Weight Carts, Inc Weight Cart

Calibration Results

Nominal Mass (lb)	As Found Conventional Mass (lb)	As Left Conventional Mass (lb)	U ± (lb)	k factor	Degrees of Freedom	NIST HB 105-8 Tol. ± (lb)
4000	3998.6	4000.2	0.12	2.033	77	1.4

Traceability Statement

The calibration item described in this calibration certificate have been compared to the Standards of the State of Washington. The Standards of the State of Washington are traceable to the International System of Units (SI) through the National Institute of Standards and Technology (NIST) 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 SI for mass is the kilogram (kg) (see Conversion Factors below). The certificate number for this calibration is the only unique number to be used in referencing measurement traceability for the calibration item described in this certificate.

Uncertainty Statement

The combined standard uncertainty includes uncertainties reported for the standard, uncertainties associated with the measurement process, uncertainties for any observed deviations from reference values which are less than surveillance limits (previous similar determinations have demonstrated that the maximum permissible errors are sufficiently large that buoyancy corrections are not usually significant [i.e., corrections & their uncertainty will not change the last decimal place of the calibration value or uncertainty (with uncertainty rounded to 2 significant digits)]. The combined standard uncertainty is multiplied by a coverage factor, k, to give the expanded uncertainty, which defines an interval with a 95.45 % level of confidence. The expanded uncertainty presented in this certificate is consistent with the BIPM JCGM 100:2008, *Evaluation of measurement data — Guide to the expression of uncertainty in measurement (GUM 1995 with minor corrections)*. 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 maintained during use.

Accreditation Statement

Accredited by the National Institute of Standards and Technology (NIST) through the National Voluntary Laboratory Accreditation Program (NVLAP) for the specified scope of accreditation under lab code 200446-0. This laboratory meets the requirements of ISO/IEC 17025 (2017) and Handbook 150-2-2019.

JAY INSLEE
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Director, Department of Agriculture

Mail
PO Box 42650
Olympia, WA 98504-2560
e-mail: lgerman@agr.wa.gov
Phone: (360) 753-5042

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Plant Protection Division
Weights and Measures Program
Metrology Laboratory

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2747 29th Ave. SW
Tumwater, WA 98512

Fax: (360) 586-4728

Calibration Certificate

Certificate Number: 200446-0-L4824

Calibration Date: 08/14/2024
Calibration Due Date: 08/14/2026

Tested Item: 4000 lb Weight Carts, Inc Weight Cart

Pertinent Information

- In-accordance-with Washington Administrative Code (WAC) Chapter 16-663, Service Agents -- Reporting, Test Procedures, Standards And Calibration Of Weighing And Measuring Devices, Section 16-663-130, Adequacy of standards and submission of standards for certification, paragraph 2, '... All standards used for servicing, repairing and/or calibrating commercial weighing and measuring devices must be submitted at least every two years for examination and certification...'

- The reference for determining the tolerance is NIST HB 105-8 (2019), *Specifications and Tolerances for Field Standard Weight Carts.*

- The weight cart was allowed to come to thermal and environmental equilibrium in the laboratory prior to calibration. The weight cart listed above has been adjusted as close to nominal as possible and left within the tolerances for the specification stated above, except as noted. A weight cart is considered in-tolerance when the correction plus the measurement uncertainty is equal to or less than the specified tolerance. An out-of-tolerance condition is highlighted in RED (see the Inspection Checklist for changes that may have contributed to an out-of-tolerance condition).

- The attached Inspection Checklist is an integral component of this Calibration Report and a copy must be maintained with the cart and reviewed prior to use.

- Any maintenance, repairs, replacement of parts, 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, or other items listed on the checklist, require calibration of the weight cart prior to subsequent use.

- The adjusting cavity was sealed after adjustment with Seal Number 690935

- Conventional Mass: "The conventional value of the result of weighing a body in air is equal to the mass of a standard, of conventionally chosen density, at a conventionally chosen temperature, which balances this body at this reference temperature in air of conventionally chosen density." The conventions are: reference density 8.0 g/cm^3; reference temperature 20 °C; normal air density 0.0012 g/cm^3. Conventional mass was formerly called "Apparent Mass versus 8.0 g/cm^3" in the United States and is not recommended. See OIML D28 (2004).

- The results listed in this calibration certificate relate only to the calibration item described and extent of calibrations performed.

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e-mail: lgerman@agr.wa.gov
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Fax: (360) 586-4728

Calibration Certificate

Certificate Number: 200446-0-L4824

Calibration Date: 08/14/2024
Calibration Due Date: 08/14/2026

Tested Item: 4000 lb Weight Carts, Inc Weight Cart

- Please be advised that all laboratory data and records are considered official public record according to state law. The laboratory will release records in accordance with chapter 42.56 of the Revised Code of Washington (the Public Records Act), chapter 16-06 of the Washington Administrative Code (Public Records), and agency policy.

Conversion Factors

From NIST Special Publication 811, *Guide for the Use of the International System of Units (SI)*

Factors in **boldface** are exact

To convert from	to	multiply by
pound (avoirdupois) (lb)	to kilogram (kg)	**4.535 923 7 E-01**

NVLAP® CALIBRATION
NVLAP LAB CODE 200446-0

ilac-MRA

Accredited by the National Laboratory Accreditation Program for the specific scope of accreditation under lab code 200446-0. This calibration certificate may not be used to claim product certification, approval, or endorsement by NVLAP or any other government agency, and may not be reproduced, except in full, without written approval from the laboratory.

I declare or certify under penalty of perjury under the laws of the State of Washington that the foregoing is true and correct:

Signed on this 14th day of August, 2024 in the city of Tumwater, Thurston County, Washington

Signature: Leslie German
Leslie German, State Metrologist

WSDA Washington State Department of Agriculture

Attachment: Weight Cart Inspection Checklist

JAY INSLEE
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Weight Cart Inspection Checklist

Attachment to Certificate No.: 200446-0-L4824 **Inspection Date:** 08/14/2024

Manufacturer:	Weight Carts, Inc	Date of Manufacture:	Unknown
Model Number:	Unknown	ID/SN Number:	P486-3R
Nominal Mass of Weight Cart:	4000 lb	Nominal Mass Suitably Marked:	Yes

Power Source:	Battery (Sealed)	Power Source Reference Level:	N/A
Engine Oil:	N/A	Engine Oil Reference Mark:	N/A
Hydraulic Oil:	No	Hydraulic Oil Reference Mark:	N/A

No. of Axles:	2	No. of Tires:	4			Sealed Wheel Bearings?:	Yes
Tire Sizes:	Front:	18 x 7 x 12 1/8	Middle:	N/A		Rear:	21 x 7 x 15

Fluid drain tubes extend beyond the body of the cart:	N/A
Drain holes present in locations where water may accumulate:	Yes
Weight restraint railing permanently fixed and solid:	Yes
Adjusting Cavity Accessible:	Yes
Adjusting Cavity Sealed:	Yes
Adjusting cavity approximate capacity:	20 lb lb
Service brakes functioning properly:	Yes
Parking brakes functioning properly:	N/A
Remote control functioning properly:	N/A

General condition at time of calibration (note any accumulated dirt/debris, damage, loose parts, or evidence of tampering or unauthorized entry of seals).
Good, clean
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.
returned for calibration after replacing part.

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Shipping
2747 29th Ave. SW
Tumwater, WA 98512

Fax: (360) 586-4728

Calibration Certificate

Certificate Number: 200446-0-L4731-2

Calibration Date: 11/08/2023
Calibration Due Date: 11/08/2025

Tested Item(s): Test Weights, 1000 lb, 16 pieces

Issued To: Washington State Patrol
8623 Armstrong Road SW
Olympia, WA 98504

POC: Nicholas Gilbert
Phone: 360-764-0367

PO Number: NA

Date Received: 11/02/2023

Calibration Item(s) Description

Test Item(s): Test Weights, 1000 lb, 16 pieces
Serial No: See Calibration Results
ID / Asset No.:
Manufacture: See Calibration Results
Class Specification: NIST HB 105-1, Class F
Material: Cast Iron
Condition: Good

Calibration Information

Job Order #: L4731
Metrologist: Leslie German
Procedure: NIST SOP 8 (2019)

Temperature: 21.7 °C
Pressure: 768.7 mm Hg
Humidity: 40.5 % RH

Laboratory Reference Standards Used

Description	Serial Number	Certification No.	Cal Date	Cal Due
1000 lb to 25 lb	SET WC	200446-0-L4721-1	10/04/2023	10/04/2025

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Fax: (360) 586-4728

Calibration Certificate

Certificate Number: 200446-0-L4731-2

Calibration Date: 11/08/2023
Calibration Due Date: 11/08/2025

Tested Item(s): Test Weights, 1000 lb, 16 pieces

Calibration Results

Nominal Mass	Serial No. / ID	Manufacture	Conventional Mass Correction		U ± (g)	k factor	Degrees of Freedom	NIST HB 105-1, Class F MPE ± (g)	*Assumed Density (g/cm³)
			Found (g)	As Left (g)					
1000 lb	SP1	Toledo	-133	8	5.1	2.004	585	45	7.1
1000 lb	SP2	Toledo	-149	1	5.1	2.004	585	45	7.1
1000 lb	SP3	Toledo	-157	3	5.1	2.004	585	45	7.1
1000 lb	SP4	Toledo	-124	7	5.1	2.004	585	45	7.1
1000 lb	SP5	Toledo	-161	5	5.1	2.004	585	45	7.1
1000 lb	SP6	Toledo	-121	5	5.1	2.004	585	45	7.1
1000 lb	SP7	Toledo	-104	7	5.1	2.004	585	45	7.1
1000 lb	SP8	Toledo	-125	6	5.1	2.004	585	45	7.1
1000 lb	SP9	Toledo	-144	7	5.1	2.004	585	45	7.1
1000 lb	SP10	Hern	-172	4	5.1	2.004	585	45	7.1
1000 lb	SP11	Toledo	-62	9	5.1	2.004	585	45	7.1
1000 lb	SP12	Hern	-117	8	5.1	2.004	585	45	7.1
1000 lb	SP13	Hern	-148	8	5.1	2.004	585	45	7.1
1000 lb	SP14	Hern	-124	4	5.1	2.004	585	45	7.1
1000 lb	SP15	Hern	-135	0	5.1	2.004	585	45	7.1
1000 lb	SP16	Hern	-164	-2	5.1	2.004	585	45	7.1

*This laboratory uses the assumed density provided by the customer or the manufacturer.

Traceability Statement

The calibration item(s) described in this calibration certificate have been compared to the Standards of the State of Washington. The Standards of the State of Washington are traceable to the International System of Units (SI) through the National Institute of Standards and Technology (NIST) 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 SI for mass is the kilogram (kg) (see Conversion Factors below). The certificate number for this calibration is the only unique number to be used in referencing measurement traceability for the calibration item(s) described in this certificate.

JAY INSLEE
Governor

DEREK SANDISON
Director, Department of Agriculture

Mail
PO Box 42650
Olympia, WA 98504-2560
e-mail: lgerman@agr.wa.gov
Phone: (360) 753-5042

STATE OF WASHINGTON
DEPARTMENT OF AGRICULTURE
Plant Protection Division
Weights and Measures Program
Metrology Laboratory

Shipping
2747 29th Ave. SW
Tumwater, WA 98512

Fax: (360) 586-4728

Calibration Certificate

Certificate Number: 200446-0-L4731-2

Calibration Date: 11/08/2023
Calibration Due Date: 11/08/2025

Tested Item(s): Test Weights, 1000 lb, 16 pieces

Uncertainty Statement

The combined standard uncertainty includes uncertainties reported for the standard, uncertainties associated with the measurement process, uncertainties for any observed deviations from reference values which are less than surveillance limits (previous similar determinations have demonstrated that the maximum permissible errors are sufficiently large that buoyancy corrections are not usually significant [i.e., corrections & their uncertainty will not change the last decimal place of the calibration value or uncertainty (with uncertainty rounded to 2 significant digits)]. The combined standard uncertainty is multiplied by a coverage factor, k, to give the expanded uncertainty, which defines an interval with a 95.45 % level of confidence. The expanded uncertainty presented in this certificate is consistent with the BIPM JCGM 100:2008, *Evaluation of measurement data — Guide to the expression of uncertainty in measurement (GUM 1995 with minor corrections)*. Surface Roughness and Magnetic testing has not been performed, therefore, there are no components for the effects of either in the uncertainty budget.

Accreditation Statement

Accredited by the National Institute of Standards and Technology (NIST) through the National Voluntary Laboratory Accreditation Program (NVLAP) for the specified scope of accreditation under lab code 200446-0. This laboratory meets the requirements of ISO/IEC 17025:2017 *General requirements for the competence of testing and calibration laboratories,* Ed 3; and NIST Handbook 150-2-2019 NVLAP *Calibration Laboratories* (2019).

Pertinent Information

- In-accordance-with Washington Administrative Code (WAC) Chapter 16-663, Service Agents -- Reporting, Test Procedures, Standards And Calibration Of Weighing And Measuring Devices, Section 16-663-130, Adequacy of standards and submission of standards for certification, paragraph 2, '... All standards used for servicing, repairing and/or calibrating commercial weighing and measuring devices must be submitted at least every two years for examination and certification...'
- The references for determining the Maximum Permissible Error (MPE) are NIST HB 105-1 (1990) and NIST HB 105-1 (2019) *Specifications and Tolerances for Field Standard Weights (NIST Class F)*, ASTM E617 (2018), *Standard Specification for Laboratory Weights and Precision Mass Standards* and OIML R 111-1:2004, *International Recommendation Part 1 - Metrological and Technical Requirements.*
- The calibration item(s) listed above have been found and/or left within the MPE for the class specification stated in the calibration item(s) description above, except as noted. A calibration item is considered in-compliance when the correction plus the measurement uncertainty is equal to or less than the MPE. RED print indicates an out-of-compliance reading.
- Conventional Mass: "The conventional value of the result of weighing a body in air is equal to the mass of a standard, of conventionally chosen density, at a conventionally chosen temperature, which balances this body at this reference temperature in air of conventionally chosen density." The conventions are: reference density 8.0 g/cm³; reference temperature 20 °C; normal air density 0.0012 g/cm³. Conventional mass was formerly called "Apparent Mass versus 8.0 g/cm³" in the United States and is not recommended. See OIML D28 (2004).

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Calibration Certificate

Certificate Number: 200446-0-L4731-2

Calibration Date: 11/08/2023
Calibration Due Date: 11/08/2025

Tested Item(s): Test Weights, 1000 lb, 16 pieces

- The results listed in this calibration certificate relate only to the calibration item(s) described and extent of calibrations performed.
- Please be advised that all laboratory data and records are considered official public record according to state law. The laboratory will release records in accordance with chapter 42.56 of the Revised Code of Washington (the Public Records Act), chapter 16-06 of the Washington Administrative Code (Public Records), and agency policy.

Conversion Factors

- From NIST Special Publication 811, *Guide for the Use of the International System of Units (SI)(2008)*

Factors in **boldface** are exact

To convert from	to	multiply by
ounce (avoirdupois) (oz)	to kilogram (kg)	2.834 952 E-02
pound (avoirdupois) (lb)	to kilogram (kg)	**4.535 923 7 E-01**

NVLAP® CALIBRATION
NVLAP LAB CODE 200446-0

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I declare or certify under penalty of perjury under the laws of the State of Washington that the foregoing is true and correct. Signed on this 9th day of November, 2023 in the city of Tumwater, Thurston County, Washington

Signature: _____
Leslie German, State Metrologist

Washington State Department of Agriculture