

# United States Department of Commerce

## National Institute of Standards and Technology

Certificate of Metrological Traceability For:

# Minnesota

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

The Office of Weights and Measures Program assesses laboratories to NIST Handbook 143 - Program Handbook for State Weights and Measures Laboratories and ISO/IEC 17025:2017.

### Scope

#### Mass Echelon I

20 kg to 1 mg

#### Mass Echelon II

5 kg to 1 mg

2500 lb

1000 lb to 500 lb

50 lb to 0.001 lb

#### Mass Echelon III

50 kg to 1 mg

3000 lb to 0.001 lb

4 oz to 0.03125 oz

Weight Carts

5000 lb to 2000 lb

Wheel Load Weighers

12 000 lb to 2000 lb

Railroad Test Cars/Carts

110 000 lb to 80 000 lb

10 000 lb to 8000 lb

#### Volume Gravimetric, I

20 L to 10 mL

100 gal to 0.25 gal

12 fl oz

#### Volume Transfer, II

1500 gal to 5 gal

#### Volume Transfer, II LPG

200 gal to 25 gal



2022 to 2023

*Katrice Lippa, Chief  
NIST Office of Weights and Measures*

*Effective Dates: 2022-02-01 to 2024-02-01*