SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017
& ANSI/NCSL Z540-1-1994

SP HB INSTRUMENT CALIBRATION LABORATORY
1002 Harding Hwy
Buena, NJ 08310
Lauren Wagner Phone: 610 489 5500 x 4327

CALIBRATION

Valid To: June 30, 2026 Certificate Number: 2448.01

In recognition of the successful completion of the A2LA evaluation process, (including an assessment of the organization's compliance with A2LA's Calibration Program Requirements), accreditation is granted to this laboratory to perform the following calibrations[1, 4]:

I. Fluid Quantities

Parameter/Equipment	Range	CMC[2, 3] (±)	Comments[3]
Hydrometers –			
Percent Proof Spirit Hydrometers	(0 to 206) % Proof Spirit	0.098 % Proof Spirit	Alcohol solution
Specific Gravity Hydrometers (Relative Density & Other Related Conversions: kg/M^3, g/L, Brix, NaCl, CaCl, Kg/L, Balling, Quevenne)	(0.635 to 1.99) Specific Gravity (g/cm^3) (2.00 to 3.02) Specific Gravity (g/cm^3)	0.000 44 Specific Gravity (g/cm^3) 0.0015 Specific Gravity (g/cm^3)	Sodium polytungstate solution or alcohol/water solution or petroleum ether/alcohol solution
Baume Heavy Hydrometers	(0 to 70)° Be Hy	0.03° Be Hy	Sodium polytungstate solution
Baume Light Hydrometers	(0 to 90)° Be Lt	0.03° Be Lt	Alcohol/water solution or petroleum ether/alcohol solution
American Petroleum Institute Scale Hydrometers	(0 to 90)° API	0.03° API	Alcohol/water solution or petroleum ether/alcohol solution

5202 Presidents Court, Suite 220 | Frederick, MD 21703-8398 | Phone: 301 644 3248 | Fax: 240 454 9449 | www.A2LA.org

II. Thermodynamics

Parameter/Equipment	Range	CMC[2] (±)	Comments
Thermometers – Liquid-in-Glass, Electronic, Bi Metal	(-80 to -1) °C 0 °C (1 to 100) °C (101 to 200) °C (201 to 300) °C (301 to 400) °C	0.027 °C 0.015 °C 0.019 °C 0.020 °C 0.021 °C 0.028 °C	ASL F250 display with T100-450 PRT probe

III. Time & Frequency

Parameter/Equipment	Range	CMC[2] (±)	Comments
Digital Stopwatch & Timers (Type I)	(2 to 120) s/day	0.43 s/day	TM-4500 vibrograph & digital multitester

[1] This laboratory offers commercial calibration service.

[2] Calibration and Measurement Capability Uncertainty (CMC) is the smallest uncertainty of measurement that a laboratory can achieve within its scope of accreditation when performing more or less routine calibrations of nearly ideal measurement standards or nearly ideal measuring equipment. CMCs represent expanded uncertainties expressed at approximately the 95 % level of confidence, usually using a coverage factor of $k = 2$. The actual measurement uncertainty of a specific calibration performed by the laboratory may be greater than the CMC due to the behavior of the customer's device and to influences from the circumstances of the specific calibration.

[3] The definition and identification of the hydrometer scale graduations follow the NBS Circular 555.

[4] This scope meets A2LA's *P112 Flexible Scope Policy*.

Accredited Laboratory

A2LA has accredited

SP HB INSTRUMENT CALIBRATION LABORATORY

Buena, NJ

for technical competence in the field of

Calibration

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 *General requirements for the competence of testing and calibration laboratories*. This laboratory also meets the requirements of ANSI/NCSL Z540-1-1994 and R205 – Specific Requirements: Calibration Laboratory Accreditation Program. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (*refer to joint ISO-ILAC-IAF Communiqué dated April 2017*).

Presented this 3rd day of June 2024.

Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 2448.01
Valid to June 30, 2026

For the calibrations to which this accreditation applies, please refer to the laboratory's Calibration Scope of Accreditation.