PERRY JOHNSON LABORATORY ACCREDITATION, INC.

Certificate of Accreditation

Perry Johnson Laboratory Accreditation, Inc. has assessed the Laboratory of:

CLC Calibration, LLC

2617 Ten Ten Road, Apex, NC 27539

(Hereinafter called the Organization) and hereby declares that Organization is accredited in accordance with the recognized International Standard:

ISO/IEC 17025:2017

This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system
(as outlined by the joint ISO-ILAC-IAF Communiqué dated April 2017):

Mechanical, Mass, Force, Weighing Devices, and Thermodynamics Calibration

(As detailed in the supplement)

Accreditation claims for such testing and/or calibration services shall only be made from addresses referenced within this certificate. This Accreditation is granted subject to the system rules governing the Accreditation referred to above, and the Organization hereby covenants with the Accreditation body's duty to observe and comply with the said rules.

For PJLA:

Tracy Szerszen
President/Operations Manager

Perry Johnson Laboratory Accreditation, Inc. (PJLA)
755 W. Big Beaver, Suite 1325
Troy, Michigan 48084

Initial Accreditation Date:	*Issue Date:*	*Expiration Date:*
December 7, 2009	December 19, 2019	April 30, 2022

Accreditation No:	*Certificate No:*
65587	L19-628

The validity of this certificate is maintained through ongoing assessments based on a continuous accreditation cycle. The validity of this certificate should be confirmed through the PJLA website: www.pjlabs.com

Certificate of Accreditation: Supplement

CLC Calibration, LLC
2617 Ten Ten Road, Apex, NC 27539
Contact Name: Kimberly Malone Phone: 919-362-7497

Accreditation is granted to the facility to perform the following calibrations:

Mechanical

MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (±)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED
Burettes[FO]	0.5 µL to 49 µL	(0.15 + 0.042V) µL	Analytical Balances ISO 8655-06 Supported by CLC-PC-01
Diluters[FO]			
Dispensers[FO]	50 µL to 10 000 µL	(0.64 µL + 1.7 x 10^{-4}V) µL	
Pipettes[FO]			

Mass, Force, and Weighing Devices

MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (±)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED
Analytical Balances[FO]	1 g to 500 g	(1.8 x 10^{-4} + 1.2 x 10^{-5} Wt) g	Class 1 Weights/CP-BAL-01
Electronic Balances & Scales[FO]	10 g to 120 000 g	(1.154 7 + 1.06 x 10^{-4} Wt) g	Class F Weights/CP-BAL-01
	500 g to 3 000 g	(1.16 x 10^{1} + 1.26 x 10^{-7} Wt) g	Class 1 Weights/CP-BAL-01

Thermodynamics

MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (±)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED
LIG Thermometers[FO]	-20 ºC to 0 ºC	0.12 ºC	Amatek ATC-140B Jofra Calibrator Amatek ATC-14BP Probe ITS-90, ASTM E1-14
	0 ºC to 140 ºC		
Digital Thermometers, Thermocouples, Infared Thermometers[FO]	-20 ºC to 0 ºC	0.12 ºC	
	0 ºC to 140 ºC		

1. The CMC (Calibration and Measurement Capability) stated for calibrations included on this scope of accreditation represents the smallest measurement uncertainty attainable by the laboratory when performing a more or less routine calibration of a nearly ideal device under nearly ideal conditions. It is typically expressed at a confidence level of 95 % using a coverage factor k (usually equal to 2). The actual measurement uncertainty associated with a specific calibration performed by the laboratory will typically be larger than the CMC for the same calibration since capability and performance of the device being calibrated and the conditions related to the calibration may reasonably be expected to deviate from ideal to some degree.

2. The laboratories range of calibration capability for all disciplines for which they are accredited is the interval from the smallest calibrated standard to the largest calibrated standard used in performing the calibration. The low end of this range must be an attainable value for which the laboratory has or has access to the standard referenced. Verification of an indicated value of zero in the absence of a standard is common practice in the procedure for many calibrations but by its definition it does not constitute calibration of zero capacity.

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Accreditation is granted to the facility to perform the following calibrations (on-site and off-site):

3. The presence of a superscript FO means that the laboratory performs calibration of the indicated parameter both at its fixed location and onsite at customer locations. Example: Outside Micrometer^{FO} would mean that the laboratory performs this calibration at its fixed location and onsite at customer locations.

4. Measurement uncertainties obtained for calibrations performed at customer sites can be expected to be larger than the measurement uncertainties obtained at the laboratories fixed location for similar calibrations. This is due to the effects of transportation of the standards and equipment and upon environmental conditions at the customer site which are typically not controlled as closely as at the laboratories fixed location.

5. The term Wt represents weight in pounds or grams (including SI multiple and submultiple units) appropriate to the uncertainty statement.

6. The term V represents volume in liters (including SI multiple and submultiple units) appropriate to the uncertainty statement.