

PERRY JOHNSON LABORATORY ACCREDITATION, INC.

Certificate of Accreditation

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

Toll Company

3005 Niagara Lane North, Plymouth, MN 55447

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

ISO/IEC 17025:2005

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 January 2009):

Chemical 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:

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Tracy Szerszen President/Operations Manager

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

Initial Accreditation Date:Issue Date:Expiration Date:April 9, 2009June 21, 2015September 30, 2017Accreditation No.:Certificate No.:64630L15-212

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: <u>www.pjlabs.com</u>



Certificate of Accreditation: Supplement

Toll Company 3005 Niagara Lane North, Plymouth, MN 55447 Chuck Allard Phone: 763-551-5300

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

Chemical			
MEASURED INSTRUMENT, OUANTITY OR GAUGE	RANGE OR NOMINAL DEVICE SIZE AS	CALIBRATION AND MEASUREMENT	CALIBRATION EOUIPMENT
Quality of one of	APPROPRIATE	CAPABILITY EXPRESSED	AND REFERENCE
		AS AN UNCERTAINTY (±)	STANDARDS USED
Calibration Gas Cylinder ^F	0.000 01 % mol fraction to	0.000 05 % mol fraction to	Electrolytic Hygrometer
	0.01 % mol fraction	0.000 5 % mol fraction	
	0.000 01 % mol fraction to	0.000 02 % mol fraction to	Flame Ionization Detector
	10 % mol fraction	0.23 % mol fraction	
	0.000 01 % mol fraction to	0.000 02 % mol fraction to	Electrochemical Oxygen
	23.0 % mol fraction	0.23 % mol fraction	Analyzer
	0.01 % mol fraction to	0.02 % mol fraction to	GC with TCD
	100 % mol fraction	2 % mol fraction	
	0.000 01 % mol fraction to	0.000 02 % mol fraction to	GC with Pulsed
	0.1 % mol fraction	0.002 % mol fraction	Discharge Ionization
			Detector – PDID
	1.0 % mol fraction to 100	0.1 % mol fraction	Paramagnetic Oxygen
	% mol fraction		Analyzer
	1.0 % mol fraction to 100	0.2 % mol fraction to 2 %	TCD
	% mol fraction	mol fraction	
Gravimetric Balance – Gas	0.000 01 % mol fraction to	0.000 1 % mol fraction to 1	Gravimetric Balance
Mixture Concentration ^F	100 % mol fraction	% mol fraction	

- 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.
- 3. The presence of a superscript F means that the laboratory performs calibration of the indicated parameter at its fixed location. Example: Outside Micrometer^F would mean that the laboratory performs this calibration at its fixed location.
- 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 "X" proceeded by a number represents the number of times a lense system magnifies an image relative to its actual size. CMC stated as "% of magnification" represents the CMC of magnification expressed as a percentage of the total magnification.