PERRY JOHNSON LABORATORY ACCREDITATION, INC.

Certificate of Accreditation

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

IWS Gas and Supply

111 Buras Dr., Belle Chasse, LA 70037

and hereby declares that the Organization is accredited in accordance with the recognized International Standard:

ISO/IEC 17025:2017

Whereby, technical competence has been confirmed for the associated scope supplement, in the fields of:

Chemical Calibration

(As detailed in the supplement)

Accreditation claims for conformity assessment activities shall only be made from the addresses referenced within this certificate and shall apply solely to those activities identified in the related scope. This Accreditation is granted subject to the Accreditation Body rules governing the Accreditation referred to above, and the Organization hereby commits to observing and complying with those rules in their entirety.

For PJLA:

Tracy Szerszen
President

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

Initial Accreditation Date:	*Issue Date:*	*Expiration Date:*
July 03, 2008	March 12, 2025	March 31, 2027

Accreditation No.:	*Certificate No.:*
62778	L25-199

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

IWS Gas and Supply

111 Buras Dr., Belle Chasse, LA 70037
Contact Name: Bill Vernon Phone: 504-392-2400

Accreditation is granted to the facility to perform the following conformity assessment activities:

FIELD OF CALIBRATION	MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (±)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED	CALIBRATION MEASUREMENT METHOD OR PROCEDURES USED	LOCATION OF ACTIVITY
Chemical	Calibration Gas Cylinder (Trace Moisture Concentration)	0.000 15 % mol fraction to 0.1 % mol fraction	$(4.4 \times 10^{-5} + 4.57 \times 10^{-2}C)$ % mol fraction	Electrolytic Moisture Analysis	OEM Manual	F
Chemical	Calibration Gas Cylinder (Trace Hydrocarbon Concentration)	0.000 06 % mol fraction to 10 % mol fraction	$(1.9 \times 10^{-5} + 2 \times 10^{-2}C)$ % mol fraction	Flame Ionization Detector/Non-dispersive Infrared (NDIR) Analysis	OEM Manual	F
Chemical	Calibration Gas Cylinder (Trace Oxygen Concentration)	0.000 06 % mol fraction to 0.099 9 % mol fraction	$(2 \times 10^{-5} + 9.82 \times 10^{-3}C)$ % mol fraction	Electrochemical Oxygen Analysis/	OEM Manual	F
Chemical	Calibration Gas Cylinder (Percent Oxygen Concentration)	0.3 % mol fraction to 100 % mol fraction	$(1 \times 10^{-1} + 0 \times 10^{+0}C)$ % mol fraction	Paramagnetic Oxygen Analysis/	OEM Manual	F
Chemical	Calibration Gas Cylinder (Gas Mixture Concentration)	0.001 5 % mol fraction to 100 % mol fraction	$(4.71 \times 10^{-4} + 2 \times 10^{-2}C)$ % mol fraction	Gas Chromatography with a Thermal Conductivity Detector	OEM Manual	F
Chemical	Calibration Gas Cylinder (Gas Mixture Concentration)	0.000 1 % mol fraction to 100 % mol fraction	$(9 \times 10^{-6} + 1 \times 10^{-2}C)$ % mol fraction	Gas chromatography with a Flame Ionization Detector	OEM Manual	F
Chemical	Gravimetric Balance (Gas Mixture Concentration)	0.000 3 % mol fraction to 100 % mol fraction	$(7 \times 10^{-6} + 1 \times 10^{-2}C)$ % mol fraction	Gravimetric Balance	OEM Manual	F
Chemical	Trace Concentration (Nitric Oxide)	0.000 3 % mol fraction to 1 % mol fraction (0.000 1 % mol fraction LoD)	$(9.8 \times 10^{-5} + 9.9 \times 10^{-3}C)$ % of mol fraction	Chemiluminescence Analysis	OEM Manual	F
Chemical	Trace Concentration (Hydrogen Sulfide)	0.000 03 % mol fraction to 0.1 % mol fraction (0.000 01 % mol fraction LoD)	$(1 \times 10^{-5} + 9.9 \times 10^{-3}C)$ % mol fraction	Chemiluminescence Analysis	OEM Manual	F
Chemical	Trace Concentration (Carbon Monoxide)	0.001 5 % mol fraction to 0.3 % mol fraction (0.000 5 % mol fraction LoD)	$(4.88 \times 10^{-2} + 6.74 \times 10^{-3}C)$ % of mol fraction	Non-dispersive Infrared (NDIR) Analysis	OEM Manual	F

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Chemical	Trace Concentration (Sulfur Dioxide)	0.000 15 % mol fraction to 0.5 % mol fraction (0.000 5 % mol fraction LoD)	$(4.9 \times 10^{-5} + 9.9 \times 10^{-3}C)$ % mol fraction	Non-dispersive Infrared (NDIR) Analysis	OEM Manual	F
Chemical	Concentration (Carbon Dioxide)	0.3 % mol fraction to 30 % mol fraction (0.1 % mol fraction LoD)	$(9.8 \times 10^{-2} + 6.74 \times 10^{-3}C)$ % mol fraction	Non-dispersive Infrared (NDIR) Analysis	OEM Manual	F

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. Location of activity:

Location Code	Location
F	Conformity assessment activity is performed at the CABs fixed facility

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.