

PERRY JOHNSON LABORATORY ACCREDITATION, INC.

Certificate of Accreditation

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

IWS Gas and Supply 111 Buras Drive, Belle Chasse, LA 70037

(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):

Testing of Specialty Gases (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

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

Issue Date:

Expiration Date:

July 3, 2008

October 24, 2020

December 31, 2022

Accreditation No.:

Certificate No.:

62778

L20-651

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 Drive, Belle Chasse, LA 70037 Contact Name: Bill Vernon Phone: 504-392-2400

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

FIELD OF TEST	ITEMS, MATERIALS OR PRODUCTS TESTED	SPECIFIC TESTS OR PROPERTIES MEASURED	SPECIFICATION, STANDARD METHOD OR TECHNIQUE USED	RANGE (WHERE APPROPRIATE) AND DETECTION LIMIT
Chemical F	High Pressure and	Trace Moisture	Electrolytic Moisture	0.000 01 % mol fraction to
	Cryogenic Gases	Concentration	Analysis	0.01 % mol fraction
				(0.000 01 % mol fraction LoD)
		Trace Hydrocarbon	Flame Ionization	0.000 01 % mol fraction to
		Concentration	Detector/Non-dispersive	10 % mol fraction
			Infrared (NDIR) Analysis	(0.000 01 % mol fraction LoD)
		Trace Oxygen	Electrochemical Oxygen	0.000 01 % mol fraction to
		Concentration	Analysis	0.099 9 % mol fraction
				(0.000 01 % mol fraction LoD)
		Percent Oxygen	Paramagnetic Oxygen	0.1 % mol fraction to
		Concentration	Analysis	100 % mol fraction
				(0.1 % mol fraction LoD)
		Gas Mixture	Gas Chromatography with a	0.001 % mol fraction to
		Concentration	Thermal Conductivity	100 % mol fraction
			Detector	(0.001 % mol fraction LoD)
		Gas Mixture	Gas Chromatography with a	0.000 1 % mol fraction to
		Concentration	Flame Ionization Detector	100 % mol fraction
				(0.000 01 % mol fraction LoD)
		Trace Nitric Oxide	Chemiluminescence Analysis	0 % mol fraction to
		Concentration		1 % mol fraction
				(0.000 1 % mol fraction LoD)
		Trace Hydrogen Sulfide		0 % mol fraction to
		Concentration		0.1 % mol fraction
				(0.000 01 % mol fraction LoD)
		Trace Carbon Monoxide	Non-dispersive Infrared	0 % mol fraction to
		Concentration	(NDIR) Analysis	0.3 % mol fraction
				(0.000 5 % mol fraction LoD)
		Concentration of Carbon		0 % mol fraction to
		Dioxide		30 % mol fraction
				(0.1 % mol fraction LoD)
		Trace Sulfur Dioxide		0 % mol fraction to
		Concentration		0.5 % mol fraction
				(0.000 05 % mol fraction LoD)

1. The presence of a superscript F means that the laboratory performs testing of the indicated parameter at its fixed location. Example: Outside Micrometer ^F would mean that the laboratory performs this testing at its fixed location.