



PERRY JOHNSON LABORATORY ACCREDITATION, INC.

Certificate of Accreditation

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

Middlesex Gases & Technologies, Inc.

292 Second Street, Everett, MA 02149

(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):

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/Operations Manager

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

Initial Accreditation Date:

August 23, 2010

Issue Date:

October 27, 2014

Expiration Date:

February 28, 2017

Accreditation No.:

68528

Certificate No.:

L14-310

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.pjilabs.com



Certificate of Accreditation: Supplement

Middlesex Gases & Technologies, Inc.

292 Second Street, Everett, MA 02149
Mike Beaulieu Phone: 617-387-5050

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 Cryogenic Gases	Trace Moisture Concentration	Electrolytic Hygrometer	0.000 01 % mol fraction to 0.1 % mol fraction – (0.000 01 % mol fraction LoD)
		Trace Hydrocarbon Concentration	Flame Ionization Detector	0.000 01 % mol fraction to 10 % mol fraction – (0.000 01 % mol fraction LoD)
		Trace Oxygen Concentration	Electrochemical Oxygen Analyzer	0.000 001 % mol fraction to 23.0 % mol fraction – (0.000 001 % mol fraction LoD)
		Gas Mixture Concentration	Binary Gas Analyzer (Thermal Conductivity Detector)	0.01 % mol fraction to 100 % mol fraction – (0.01 % mol fraction LoD)
		Percent Oxygen Concentration	Paramagnetic Oxygen Analyzer	0.1 % mol fraction to 100 % mol fraction – (0.1 % mol fraction LoD)
		Trace Carbon Monoxide Concentration	Non-Dispersive Infrared Analyzer	0.000 01 % mol fraction to 0.10 % mol fraction – (0.000 01 % mol fraction LoD)
		Percent Carbon Monoxide Concentration	Non-Dispersive Infrared Analyzer	0.01 % mol fraction to 50 % mol fraction – (0.01 % mol fraction LoD)
		Carbon Dioxide Concentration	Non-Dispersive Infrared Analyzer	0.01 % mol fraction to 90 % mol fraction – (0.01 % mol fraction LoD)

- 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.