PERRY JOHNSON LABORATORY ACCREDITATION, INC.

Certificate of Accreditation

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

Phoenix National Laboratories, Inc

2837 East Chambers Street, Phoenix, AZ 85040

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

ISO/IEC 17025:2005

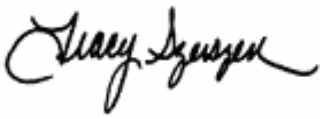
This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system
(as outlined by the joint ISO-ILAC-IAF Communiqué dated January 2009):

Mechanical and Nondestructive Testing and Welding Qualification Services

(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:



Initial Accreditation Date:	*Issue Date:*	*Accreditation No.:*	*Certificate No.:*
February 20, 2012	February 20, 2012	71936	L12-20

Tracy Szerszen
President/Operations Manager

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

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

Phoenix National Laboratories, Inc
2837 East Chambers Street, Phoenix, AZ 85040
Alexander Zuran III Phone: 602-431-8887

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
Physical/Mechanical	Elastomeric Bridge Bearings, Expansion Joints and Seals, Sealants, Rubber, Plastics, PTFE	Tensile Strength, Ultimate Elongation, Permanent Set	ASTM D412 ASTM 4894	6 to 12 000 lbs
		Hardness	ASTM D2240	Shore A, Shore D
		Heat Resistance, Change in Hardness, Tensile Strength, Ultimate Elongation	ASTM D573	100 °F – 600 °F
		Compression Set, oven aged	ASTM D395, Method B	100 °F – 600 °F
		Compression Set, low temp	ASTM D1229	-40 °F minimum
		Ozone Resistance	ASTM D1149, ASTM D518	5 – 1 000 pphm ozone concentration
		Low Temperature Brittleness	ASTM D746, Procedure B	-130 °F minimum
		Instantaneous Thermal Stiffening (Clashburg)	ASTM D1043	-70 °F minimum
		Shear Modulus	ASTM D4014, Annex A	40 – 2 000 psi -40 °F to SLA
		Low Temperature Crystallization	AASHTO LRFD, Sect 18, AASHTO M251	40 – 2000 psi -40° F to SLA
		Adhesion	ASTM D429, Method B	6 to 12 000 lbs
		Adhesion	TX-601-J	400 000 lb max
		Creep/Shear Bond	AASHTO M251-06	12 000 lb max load
		Tear Strength	ASTM D624 (Type C)	6 to 12 000 lbs
		Oil Swell	ASTM D471	ASTM Oil
		Chlorinated Compound Test	TX-601-J	
		Short/Long Duration Compression Test	AASHTO LRFD, Sect. 18	2 Million lb max. load, 36” x 48” plan size x 20” height
		Compression Strain	AASHTO M251	2 Million lb max. load, 36” x 48” plan size x 20” height

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Physical/Mechanical	Elastomeric Bridge Bearings, Expansion Joints and Seals, Sealants, Rubber, Plastics, PTFE	Coefficient of Friction	AASHTO LRFD, Sect 18	2 Million lb max. load, 36" x 48" plan size x 8" height
		Density and Specific Gravity	ASTM D4894 ASTM D792, Method A	Sheet
	Structural Steel, Welded Plate and Pipe	Mechanical Properties Tension Test Bend Test Hardness Test (Charpy Impact Test - subcontracted)	ASTM A370	400 000 lb max tensile
		Tension Testing of Metallic Materials	ASTM E8	400 000 lb max
		Testing of Steel Reinforcement Bars – Tension / Elongation / Yield Load	ASTM A615 ASTM A706	400 000 lb max
		Hardness	ASTM A833 ASTM E110	Micro hardness – field portable equipment
		Anchor Bolt Pull Out Tests	ASTM E488	Call for limits
		Positive Material Identification	Thermo Scientific Niton XL3t	XRF (X-ray Fluorescence) method – no carbon content
		Ground Penetrating Radar	Geophysics Structure Scan SIR-3000	1 600 MHz Antenna
Nondestructive Testing	Commercial and Industrial Based Construction Projects including Bridges, Buildings, Pressure Vessels, Pipelines, Tanks; Manufacturing during and after fabrication of materials and products	Ultrasonic Testing (UT)	ASME Section V Articles 4 and 5; ASME Sections I, VIII, IX, B31.1, B31.3; AWS D1.1, D1.5, API 1104, 650 ASTM A388, E164, A609, E797	Contact applications - 1 MHz to 25 MHz,

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Nondestructive Testing	Commercial and Industrial Based Construction Projects including Bridges, Buildings, Pressure Vessels, Pipelines, Tanks; Manufacturing during and after fabrication of materials and products	Ultrasonic Phased Array Testing (UTPA)	ASME Section V Article 4, AWS D1.1	2.25 MHz to 7.5 MHz LPA applications with or without encoded scanners
		Radiographic Testing (RT)	ASME Section V Article 2; ASME Sections I, VIII, IX, B31.1, B31.3; AWS D1.1, D1.5; API 1104, 650; ASTM E94, E1032, E1742	160 KV, 5 ma 300 KV, 10 ma IR 192 – 150 curies
		Computed Radiographic Testing (CRT)	ASME Section V Article 2, Appendix VIII	160 KV, 5 ma 300 KV, 10 ma IR 192 – 150 curies
		Magnetic Particle Testing (MT)	ASME Section V Article 7; ASME Sections I, VIII, IX, B31.1, B31.3; AWS D1.1, D1.5; API 1104, 650, ASTM E709	Portable and mobile applications, AC, DC, DCHW, Wet or Dry, Visible or Fluorescent, 6000 amp max.
		Liquid Penetrant Testing (PT)	ASME Section V Article 6; ASME Sections I, III, VIII, IX, B31.1, B31.3; AWS D1.1, D1.5; API 1104, 650, ASTM E165	Type I and II, Methods A and C
		Electromagnetic Testing (ET)	ASME Section V Article 8	Multi-frequency Ferrous and Non-ferrous Heat Exchanger Tubes, Single Frequency Contact Applications
		Visual Testing (VT)	ASME Section V Article 9; ASME Sections I, III, VIII, IX, B31.1, B31.3; AWS D1.1, D1.2, D1.3, D1.4, D1.5, D1.6; API 1104, 650	Most Applications – Call for limits

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Nondestructive Testing	Special Inspections per the International Building Code (IBC)	ICC – Spray Applied Fireproofing	IBC Section 1702, ASTM E605, ASTM E736, Technical Manuals 12A and 12B	Most Applications – Call for limits
		ICC – High Strength Bolts and Structural Steel	IBC, Section 1702 AISC Specification for A325 and A490 High Strength Bolts	Most Applications – Call for limits
		ICC – Welding	IBC Section 1702, AWS D1.1, D1.3, D1.4, AISC Code of Standard Practice	Most Applications– Call for limits
		ICC – Epoxied Anchors	IBC Section 1702 and Manufacturer's Documentation	Most Applications– Call for limits
Welding Qualification Services	Welding Procedure Qualification and Welder Qualifications	Administration of Qualifications at PNL weld test booths or in Field	ASME IX; API 1104; AWS B2.1, D1.1, D1.2, D1.3, D1.4, D1.5, D1.6, D17.1	In-house up to 350 Amps - SMAW, FCAW, GMAW, GTAW processes. Any process or amperage in the field
	PQR and WPQ testing	X-ray, Tensile Tests, Bend Tests, Fillet Weld Break Tests, Macro-etching, Twist Tests, Nick Break Tests, Hardness Profiles	ASME IX; API 1104; AWS B2.1, D1.1, D1.2, D1.3, D1.4, D1.5, D1.6, D17.1	All Welding Processes – Call for testing limits
		Charpy V-notch Testing, All Metal Weld Tensile Properties	ASME IX, AWS D1.1, AWS D1.5, ASTM A370	Subcontracted Services

Perry Johnson Laboratory Accreditation, Inc.

PJLA

February 20, 2012

Alexander Zuran III
Phoenix National Laboratories, Inc
2837 East Chambers Street
Phoenix, AZ 85040

Dear Mr. Zuran,

This letter is to confirm that you have successfully completed your accreditation assessment. A certificate has now been granted and posted on our website. As you are aware, PJLA will no longer be issuing expiration dates on our certificates. Your certificate # **L12-20** will remain valid as long as you continue to maintain your annual assessments and reaccreditation assessments as stated in your customer agreement with PJLA. At this time, we have confirmed that your annual assessments will be conducted during the month of **December** each calendar year. This will include an interim surveillance assessment and a full system reassessment to be completed by **December 2013**. Once your reassessment is conducted and approved by our accreditation committee a revised status letter will be provided to you. Please allow PJLA at least 120 days from your assessment due date to issue this letter.

Please feel free to release this letter to any interested parties as confirmation of your certificate validity. Also, please remind them that your certificate is posted on our website at all times. Any changes in regards to your accreditation status will be reflected on our website.

We would like to thank you for your patronage over the past years and look forward to continuously serving your accreditation needs in the future. If we can assist you any further, please feel free to contact us at any time.

Sincerely,

Tracy Szerszen
President/Operations Manager

755 W. Big Beaver Rd. · Suite 1325 · Troy, MI 48084 · Phone: 1-877-369-LABS or 248-519-2603 · Fax: 248-213-0737