



PERRY JOHNSON LABORATORY ACCREDITATION, INC.

Certificate of Accreditation

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

Twin Ports Testing II, Inc.
1301 North 3rd Street, Superior, WI 54880

*(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):

Chemical and Mechanical Testing
(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

Initial Accreditation Date:

March 01, 2013

Issue Date:

July 13, 2023

Expiration date

July 31, 2025

Accreditation No.:

60243

Certificate No.:

L23-539

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.pjlab.com*



Certificate of Accreditation: Supplement

Twin Ports Testing II, Inc.

1301 North 3rd Street Superior, WI 54880
Contact Name: Katy Jahr Phone: 715-392-7114

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	Solid Biofuels	Moisture Analysis of Solid Biofuels	ASTM E871	Detection Limit: 0.01 % mass fraction
			EN 14774-1	
			ISO 18134-1	
		Ash Analysis of Solid Biofuels	EN 14774-3	
			ISO 18134-3	
			ASTM D1102	
			EN 14775	
			ISO 18122	
		Determination of Calorific Value of Solid Biofuels	ASTM E711	3 000 BTU/lb to 14 000 BTU/lb
			EN 14918	7 MJ/kg to 33 MJ/kg
			ISO 18125	
		Determination of Total Chlorine in Solid Biofuels	ASTM D6721	Detection Limit: 10 mg/kg
			EN 15289	
			ISO 16994	
		Determination of Total Sulfur in Solid Biofuels	ASTM D4239	Detection Limit: 0.001 % mass fraction
			EN 15289	
			ISO 16994	
	Coal/ Coke	Determination of Carbon, Hydrogen, and Nitrogen in Solid Biofuels	ASTM D5373	Detection Limit: 0.01 % mass fraction
			EN 15104	
			ISO 16948	
		Determination of Volatile Matter in Solid Biofuels	ASTM D3175	
			EN 15148	
			ISO 18123	
		Determination of Ash Melting Behavior in Solid Biofuels	ASTM D1857	550 °C to 1 450 °C
			CEN/TS 15370-1	
	Coal/ Coke	Determination of Moisture Analysis in Coal/coke	ASTM D3302	Detection Limit: 0.01 % mass fraction
			ASTM D3173	
		Determination of Ash Analysis in Coal/coke	ASTM D3174	
		Determination of Volatile Matter Analysis in Coal/coke	ASTM D3175	
		Determination of Total Mercury in Coal/coke	ASTM D6722	Detection Limit: 0.001 mg/kg
		Determination of Sulfur Analysis in Coal/coke	ASTM D4239	Detection Limit: 0.001 % mass fraction



Certificate of Accreditation: Supplement

Twin Ports Testing II, Inc.

1301 North 3rd Street Superior, WI 54880
Contact Name: Katy Jahr Phone: 715-392-7114

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	Coal/ Coke	Determination of Gross Calorific Value Analysis in Coal/coke by Bomb Calorimeter	ASTM D5865	3 000 BTU/lb to 18 000 BTU/lb
		Determination of Chlorine Analysis by Oxidative Hydrolysis Micro-coulometry in Coal/coke	ASTM D6721	Detection Limit: 10 mg/kg
		Determination of Carbon, Hydrogen, and Nitrogen Analysis in Coal/coke	ASTM D5373	Detection Limit: 0.01 % mass fraction
Mechanical ^F	Solid Biofuels	Determination of Fines in Densified Fuel Pellets	PFI Standard Method PFI Alternate Method	Detection Limit: 0.01 lb/ft ³ Detection Limit: 1 kg/m ³ Detection Limit: 0.01 % mass fraction
		Particle Size Distribution	EN 15149-2 ISO 17827-2 ISO 18846	
		Determination of Bulk Density	ASTM E873 EN 15103 ISO 17828	
		Mechanical Durability of Pellets	Kansas State Method EN 15210-1 ISO 17831-1	Detection Limit: 0.01 % mass fraction Detection Limit: 0.1 % mass fraction
		Length and Diameter of Pellets	PFI Method EN 16127 ISO 17829	Detection Limit: 0.001 in Detection Limit: 0.1 mm
		Particle Size Distribution of Disintegrated Pellets	EN 16126 ISO 17830	Detection Limit: 0.01 % mass fraction
		Determination of Ash Melting Behavior in Solid Biofuels	ISO 21404	550 °C to 1 450 °C
		PFI Pellet Fuel Quality Package, Sample Preparation & Analysis	PFI Standard Specifications for Residential/Commercial Densified Fuel	N/A
		Preparation of Densified Fuel Pellets	EN 14780 ISO 14780	
		Coal Samples Preparation	ASTM D2013	
	Coal/ Coke	Coal Samples Preparation	ASTM D2013	

- 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.