



CERTIFICATE OF ACCREDITATION

The ANSI National Accreditation Board

Hereby attests that

Standard Laboratories, Inc. – Division 66
2005 Donna Drive
Ashland, KY 41102

Fulfills the requirements of

ISO/IEC 17025:2017

In the field of

TESTING

This certificate is valid only when accompanied by a current scope of accreditation document.
The current scope of accreditation can be verified at www.anab.org.

Jason Stine, Vice President

Expiry Date: 08 July 2026

Certificate Number: L2179.11-1



This laboratory 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 (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

Standard Laboratories, Inc. – Division 66

2005 Donna Drive
Ashland, KY 41102
Jeremy Lutsy

TESTING

Valid to: **July 8, 2026**

Certificate Number: **L2179.11-1**

Chemical

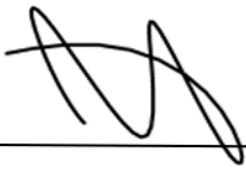
Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Sample Preparation	ASTM D2013/D346	Coal or Coke	Crushers, Pulverizers, Scales
Total Moisture	ASTM D2961	Coal	Oven & Balance
Residual Moisture	ASTM D3173	Coal/Coke	Oven & Balance
Two Stage Moisture	ASTM D3302	Coal	Oven & Balance
Total Moisture	ISO-579	Coke	Oven & Balance
Ash	ASTM D3174	Coal/Coke	Furnace & Balance
Sulfur	ASTM D4239	Coal/Coke	Leco 832 Sulfur Analyzer & Balance
Volatile Matter	ASTM D3175	Coal	Platinum crucible
Volatile Matter modified	ASTM D3175M	Coke	Quartz crucible
Gross Calorific Value	ASTM D5865	Coal/Coke	Calorimetry
Free Swelling Index	ASTM D720	Coal	Electric Furnace & Balance
Oxidation Index	ASTM D5263	Coal	Spectrophotometry
Sieve Analysis	ASTM D4749	Coal	Sieves & Balance
Sieve Analysis	ASTM D293	Coke	Sieves & Balance
Tumbler Test	ASTM D3402	Coke	Tumble Machine & Scales

Chemical

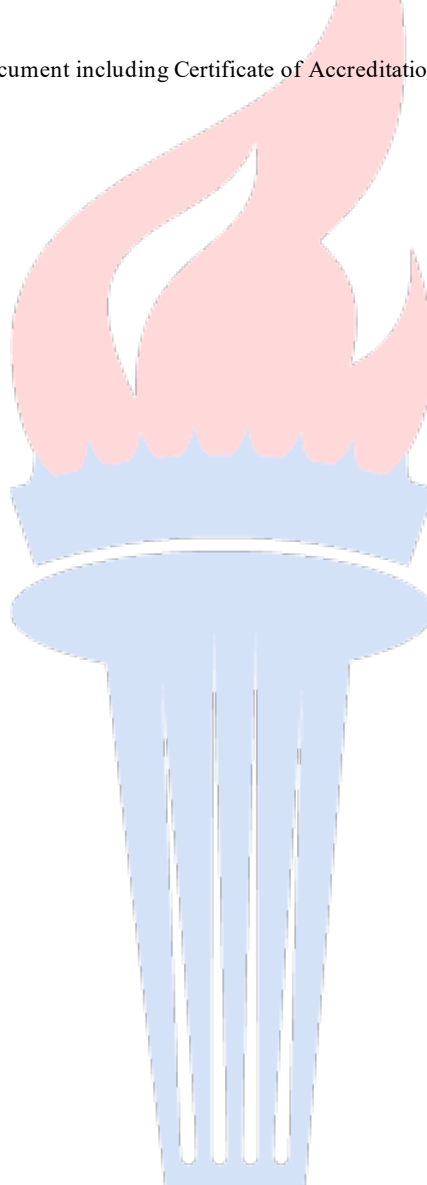
Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Bulk Density	ASTM D291	Coal	Gravimetric & Scales
CSR/CRI	ASTM D5341	Coke	Thermogravimetric

Note:

1. This scope is formatted as part of a single document including Certificate of Accreditation No. L2179.11-1.



Jason Stine, Vice President





CERTIFICATE OF ACCREDITATION

The ANSI National Accreditation Board

Hereby attests that

Standard Laboratories, Inc. – Division 61
1196 Whitman Run Road
Belington, WV 26250

Fulfills the requirements of

ISO/IEC 17025:2017

In the field of

TESTING

This certificate is valid only when accompanied by a current scope of accreditation document.
The current scope of accreditation can be verified at www.anab.org.

A handwritten signature in black ink, appearing to be 'Jason Stine', is positioned above a horizontal line.

Jason Stine, Vice President

Expiry Date: 08 July 2026

Certificate Number: L2179.03-1



This laboratory 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 (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

Standard Laboratories, Inc. – Division 61

1196 Whitman Run Road
Belington, WV 26250
Richard Malcolm
304-457-4749

TESTING

Valid to: **July 8, 2026**

Certificate Number: **L2179.03-1**

Chemical

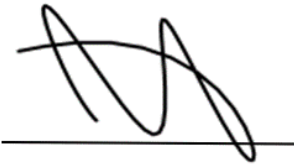
Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Preparing Coal Samples for Analysis	ASTM D2013/D2013M	Coal	Thermo-gravimetric
Single-Stage Total Moisture	ASTM D2961/D2961M	Coal	Thermo-gravimetric
Total Moisture	ASTM D3302/D3302M MOD	Coal	Thermo-gravimetric
Proximate Analysis by Macro Thermogravimetric Analysis	ASTM D7582	Coal and Coke	Thermo-gravimetric
Moisture in the Analysis Sample	ASTM D3173	Coal and Coke	Thermo-gravimetric
Ash in the Analysis Sample	ASTM D3174	Coal and Coke	Thermo-gravimetric
Sulfur in the Analysis Sample	ASTM D4239	Coal and Coke	High Temperature Tube Furnace Combustion
Gross Calorific Value	ASTM D 5865	Coal and Coke	Calorimetry
Volatile Matter in the Analysis Sample	ASTM D3175	Coal and Coke	Thermo-gravimetric
Volatile Matter in the Analysis Sample	ASTM D3175 MOD	Coal and Coke	Thermo-gravimetric
Grindability by Hardgrove-Machine Method	ASTM D409/D409M	Coal	Grindability Machine
Free-Swelling Index	ASTM D720	Coal	Electric Method
Major and Minor Elements By X-Ray Fluorescence	ASTM D4326	Coal and Coke	XRF Spectrometer

Chemical

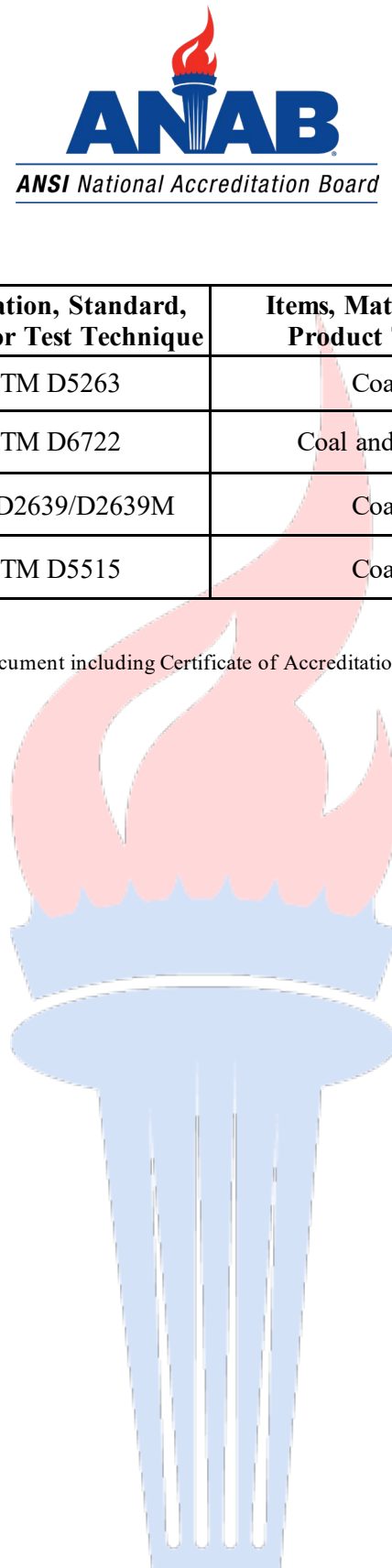
Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Oxidation by Alkali Extract	ASTM D5263	Coal	Colorimetrically
Total Mercury by Direct Combustion	ASTM D6722	Coal and Coke	Direct Combustion
Plastic Properties by Constant Torque	ASTM D2639/D2639M	Coal	Plastometer
Swelling Properties Using a Dilatometer	ASTM D5515	Coal	Dilatometer

Note:

1. This scope is formatted as part of a single document including Certificate of Accreditation No. L2179.03-1.



Jason Stine, Vice President





CERTIFICATE OF ACCREDITATION

The ANSI National Accreditation Board

Hereby attests that

Standard Laboratories, Inc. – Division 70
1880 North Loop Drive
Casper, WY 82601

Fulfills the requirements of

ISO/IEC 17025:2017

In the field of

TESTING

This certificate is valid only when accompanied by a current scope of accreditation document.
The current scope of accreditation can be verified at www.anab.org.

Jason Stine, Vice President

Expiry Date: 08 July 2026

Certificate Number: L2179.04-1



This laboratory 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 (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

Standard Laboratories, Inc. – Division 70

1880 North Loop Drive
Casper, WY 82601
Mike Herndon
307-234-9957

TESTING

Valid to: **July 8, 2026**

Certificate Number: **L2179.04-1**

Chemical

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Ash in the Analysis Sample	ASTM D3174	Coal	Furnace
Calorific Value	ASTM D5865	Coal	Calorimeter
Carbon, Hydrogen and Nitrogen	ASTM D5373	Coal	Elemental Analyzer
Equilibrium Moisture	ASTM D1412	Coal	Waterbath Method
Free-Swelling Index	ASTM D720	Coal	Electric Method
Fusibility of Ash	ASTM D1857	Coal	Furnace
Grindability of Coal	ASTM D409/D409M (MOD)	Coal	Grindability Machine
Major and Minor Elements	ASTM D6349	Coal	ICP-OES, Mixed Acid Digestion
Mercury	ASTM D6722	Coal	Direct Combustion Analysis
Moisture in the Analysis Sample	ASTM D3173	Coal	Oven
Moisture (Total)	ASTM D3302/D3302M (MOD)	Coal	Commercial Method
Preparing Samples for Analysis	ASTM D2013/D2013M (MOD)	Coal	Crusher/Pulverizer
Sulfur (Total)	ASTM D4239	Coal	Furnace
Volatile Matter	ASTM D7582	Coal	TGA

Chemical

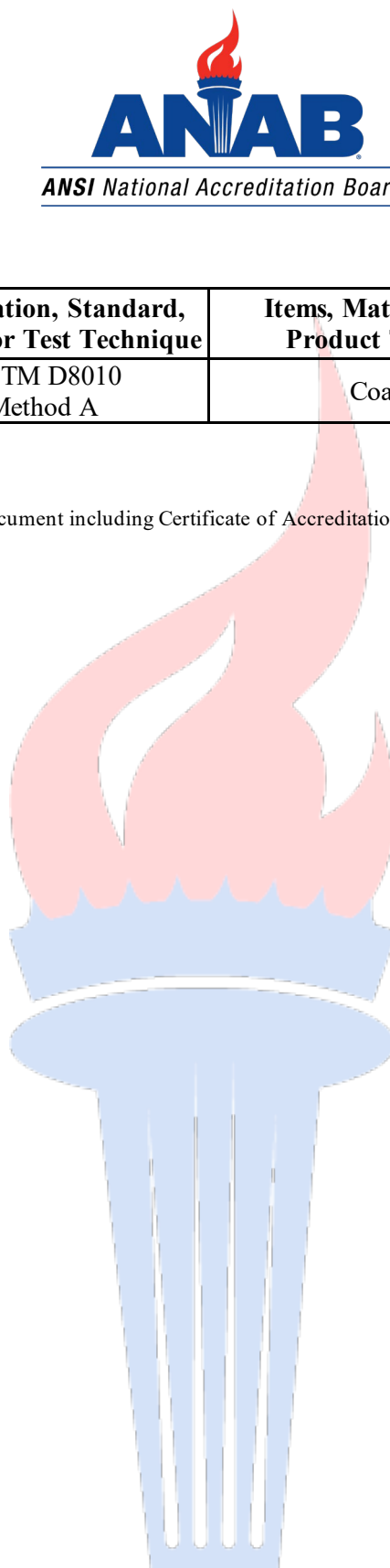
Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Water Soluble Alkali Content	ASTM D8010 Method A	Coal	ICP-OES

Note:

1. This scope is formatted as part of a single document including Certificate of Accreditation No. L2179.04-1



Jason Stine, Vice President





CERTIFICATE OF ACCREDITATION

The ANSI National Accreditation Board

Hereby attests that

Standard Laboratories, Inc. – Division 75
8451 River King Drive
Freeburg, IL 62243

Fulfills the requirements of

ISO/IEC 17025:2017

In the field of

TESTING

This certificate is valid only when accompanied by a current scope of accreditation document.
The current scope of accreditation can be verified at www.anab.org.

A handwritten signature in black ink, appearing to be 'Jason Stine', is positioned above a horizontal line.

Jason Stine, Vice President

Expiry Date: 08 July 2026

Certificate Number: L2179.02-1



This laboratory 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 (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

Standard Laboratories, Inc. – Division 75

8451 River King Drive
Freeburg, IL 62243
Tim Hutchison
618-539-5836

TESTING

Valid to: **July 8, 2026**

Certificate Number: **L2179.02-1**

Chemical

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Grindability of Coal	ASTM D409 ASTM D409M	Coal	Hardgrove Method
Free- Swell Index	ASTM D720	Coal	Gas Method
Equilibrium Moisture	ASTM D1412	Coal	Thermo-gravimetric
Single Stage Total Moisture	ASTM D2961	Coal	Thermo-gravimetric
Moisture in the Analysis Sample	ASTM D3173	Coal and Coke	Thermo-gravimetric
Total Moisture	ASTM D3302 ASTM D3302M	Coal	Thermo-gravimetric
Forms of Sulfur in Coal	ASTM D8214 MOD	Coal	ICP-OES
Sulfur Determination	ASTM D4239	Coal and Coke	High-Temperature Tube Furnace Combustion
Fusibility	ASTM D1857	Coal and Coke ash	Fusion Furnace
Sample Preparation	ASTM D2013 ASTM D2013M	Coal	Crusher, pulverizers, dividers
Ash in the Analysis Sample	ASTM D3174	Coal and Coke	Thermo-gravimetric
Volatile Matter	ASTM D3175	Coal and Coke	Thermo-gravimetric
Selenium Determination	ASTM D4606	Coal	Hydride Generation / Atomic Absorption Method
Carbon, Hydrogen and Nitrogen Determination	ASTM D5373	Coal and Coke	CHN Analyzer
Gross Calorific Value	ASTM D5865	Coal and Coke	Calorimetry

Chemical

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Total Fluorine Determination	ASTM D8247	Coal	Oxidative Pyrohydrolytic Combustion and Ion Chromatography Detection
Determination of Major & Minor Elements ICP-OES	ASTM D6349	Coal and Coke	ICP-OES
Determination of Trace Elements ICP-MS	ASTM D6357 ASTM D6357 MOD	Coal and Coke	ICP-MS
Chlorine Determination	ASTM D6721	Coal	Oxidative Hydrolysis Microcoulometry
Total Mercury	ASTM D6722	Coal	Direct Combustion Analysis
Water Soluble Alkali Content	ASTM D8010	Coal	ICP-OES
Total, Combustible, and Carbonate Carbon	ASTM D6316 MOD	Coal Residue	CHN Analyzer
Determination of Boron	ASTM D8213	Coal	Microwave and ICP-MS

Note:

1. This scope is formatted as part of a single document including Certificate of Accreditation No. L2179.02-1



Jason Stine, Vice President



CERTIFICATE OF ACCREDITATION

The ANSI National Accreditation Board

Hereby attests that

Standard Laboratories, Inc. – Division 25
2601 South Verity Parkway
Middletown, OH 45044

Fulfills the requirements of

ISO/IEC 17025:2017

In the field of

TESTING

This certificate is valid only when accompanied by a current scope of accreditation document.
The current scope of accreditation can be verified at www.anab.org.

A handwritten signature in black ink, appearing to be 'Jason Stine', is positioned above a horizontal line.

Jason Stine, Vice President

Expiry Date: 08 July 2026

Certificate Number: L2179.05-1



This laboratory 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 (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

Standard Laboratories, Inc. – Division 25

2601 South Verity Parkway
Middletown, Ohio 45044

Joy Wright
513-422-1088

TESTING

Valid to: **July 8, 2026**


Certificate Number: **L2179.05-1**

Chemical

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Total Moisture	ASTM D3302	Coal	Ovens/balances
Total Moisture	ISO 579	Coke	Ovens/balances
Lab Moisture	ASTM D3173	Coal, Coke	Ovens/balances
Total Ash	ASTM D3174	Coal, Coke	Furnaces/balances
Total Sulfur	ASTM D4239	Coal, Coke	Combustion/infrared detection
Volatile Matter	ASTM D3175 (MOD for Coke)	Coal, Coke	Furnaces/balances
Fixed Carbon	ASTM D3172	Coal, Coke	Calculation
Sieve Analysis	ASTM D4749; ASTM D293	Coal, Coke	Sieves/balances
Tumbler Test	ASTM D3402	Coke	Tumbler/sieves/balances
Bulk Density	ASTM D291	Coal	Cubic foot box/balance
Sample Preparation	ASTM D2013; ASTM D346	Coal, Coke	Shovels/rotary dividers
CSR / CRI	ASTM D5341	Coke	Furnace/tumbler/balance

Note:

1. This scope is formatted as part of a single document including Certificate of Accreditation No. L2179.05-1.



Jason Stine, Vice President



CERTIFICATE OF ACCREDITATION

The ANSI National Accreditation Board

Hereby attests that

Standard Laboratories, Inc.
5144 Hwy 133, P.O. Box 542
Somerset, CO 81434

Fulfills the requirements of

ISO/IEC 17025:2017

In the field of

TESTING

This certificate is valid only when accompanied by a current scope of accreditation document.
The current scope of accreditation can be verified at www.anab.org.

A handwritten signature in black ink, appearing to be 'Jason Stine', is positioned above a horizontal line.

Jason Stine, Vice President

Expiry Date: 08 July 2026

Certificate Number: L2179.07-1



This laboratory 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 (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

Standard Laboratories, Inc.

5144 Hwy 133, P.O Box 542

Somerset, CO 81434

Kayla Brown

970-929-5022

TESTING

Valid to: **July 8, 2026**


Certificate Number: **L2179.07-01**

Chemical

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Ash in the Analysis Sample	ASTM D7582	Coal	TGA-701
Calorific Value	ASTM D5865	Coal	Parr 6200 Calorimeter
Moisture in the Analysis Sample	ASTM D7582	Coal	TGA-701
Moisture (Total)	ASTM D3302 / D3302M	Coal	Drying Oven
Preparing Samples for Analysis	ASTM D2013 / D2013M	Coal	Crusher, pulverizers, dividers
Sulfur (Total)	ASTM D4239	Coal	Leco S-144 Combustion Method A
Volatile Matter	ASTM D7582	Coal	TGA-701

Note:

1. This scope is formatted as part of a single document including Certificate of Accreditation No. L2179.07-01



Jason Stine, Vice President

