



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

PROTON POWER INC
164 Locomotive Drive
Lenoir City, TN 37771
Dr. Samuel Weaver Phone: 865 323 9002

CHEMICAL

Valid To: December 31, 2018

Certificate Number: 4118.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following tests on gas, fuel, coal, coke, and biomass:

TEST	TEST METHOD(S)
Gas Analysis	
Analysis of Natural Gas by Gas Chromatography	ASTM D1945
Analysis of Reformed Gas by Gas Chromatography	ASTM D1946
Refinery Gas Analysis by Gas Chromatography	UOP539-97
Fuel Analysis	
Instrumental Determination of Carbon, Hydrogen, and Nitrogen in Petroleum Products and Lubricants	ASTM D5291B
Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter	ASTM D240
Distillation of Petroleum Products and Liquid Fuels at Atmospheric Pressure	ASTM D86
Determination of Total Sulfur in Light Hydrocarbons, Spark Ignition Engine Fuel, Diesel Engine Fuel, and Engine Oil by Ultraviolet Fluorescence	ASTM D5453
Ash from Petroleum Products	ASTM D482
ASTM Color of Petroleum Products (ASTM Color Scale)	ASTM D1500
Cloud Point of Petroleum Products and Liquid Fuels	ASTM D2500

(A2LA Cert. No. 4118.01) 11/4/2016

Page 1 of 2

TEST	TEST METHOD(S)
Fuel Analysis (continued)	
Pour Point of Petroleum Products	ASTM D97
Corrosiveness to Copper from Petroleum Products by Copper Strip Test.	ASTM D130
Acid Number of Petroleum Products by Potentiometric Titration	ASTM D664
Ramsbottom Carbon Residue of Petroleum Products	ASTM D524
Flash Point by Pensky-Martens Closed Cup Flash Tester	ASTM D93C
Biomass / Biochar / Coke / Coal Analysis	
Determination of Carbon, Hydrogen, and Nitrogen in Analysis Samples of Coal and Carbon in Analysis Samples of Coal and Coke	ASTM D5373A
Gross Calorific Value of Coal and Coke	ASTM D5865





Accredited Laboratory

A2LA has accredited

PROTON POWER INC

Lenoir City, TN

for technical competence in the field of

Chemical Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005 *General requirements for the competence of testing and calibration laboratories*. 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 8 January 2009).



Presented this 4th day of November 2016.

A handwritten signature in black ink, appearing to read "L. Sen", written over a horizontal line.

President and CEO
For the Accreditation Council
Certificate Number 4118.01
Valid to December 31, 2018

For the tests to which this accreditation applies, please refer to the laboratory's Chemical Scope of Accreditation.