

CERTIFICATE OF ACCREDITATION

The ANSI National Accreditation Board

Hereby attests that

Instituto do Petróleo e dos Recursos Naturais (IPR) | PUCRS

Ave. Ipiranga, 6681 Prédio 96J CEP 90619-900 Porto Alegre City, RS – Brazil

Fulfills the requirements of

ISO 17034:2016

In the field of

REFERENCE MATERIAL PRODUCER

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: 18 January 2027 Certificate Number: AR-3170





SCOPE OF ACCREDITATION TO ISO 17034:2016

Instituto do Petróleo e dos Recursos Naturais (IPR) | PUCRS

Ave. Ipiranga, 6681 Prédio 96J CEP 90619-900 Porto Alegre City, RS – Brazil Filipe de Medeiros Albano ipr@pucrs.br

REFERENCE MATERIAL PRODUCER

Valid to: January 18, 2027 Certificate Number: AR-3170

Chemical Properties

Type of Reference Material	Description of the Reference Material Matrix or Artifact including the Property-Properties Characterized	Method or Techniques Used by the RMP Laboratory to Determine the Assigned Value (if Appropriate)
Reference Materials and Certified Reference Materials	Waters, Soil, Environmental Anions	Ionic Chromatography by using a single reference measurement procedure in a single laboratory
Reference Materials and Certified Reference Materials	Waters, Soil, Environmental, Petroleum and Natural Products (Oil, Fuels, Rocks) Metals	ICP-OES ICP-MS by using a single reference measurement procedure in a single laboratory
Reference Materials and Certified Reference Materials	Isotopic Standards Carbon, Oxygen, Nitrogen	Isotope Ratio Mass Spectrometry (IRMS) by using a single reference measurement procedure in a single laboratory
Reference Materials and Certified Reference Materials	Oil, Ore, Rocks, Soil Carbon	Elemental Analysis by using a single reference measurement procedure in a single laboratory
Reference Materials and Certified Reference Materials	Water pH Conductivity	pH Meter Conductivity Meter by using a single reference measurement procedure in a single laboratory





Chemical Properties

Type of Reference Material	Description of the Reference Material Matrix or Artifact including the Property-Properties Characterized	Method or Techniques Used by the RMP Laboratory to Determine the Assigned Value (if Appropriate)
Reference Materials and Certified Reference Materials	Ore, Rocks, Soil, Cement Major Oxides	XRF by using a single reference measurement procedure in a single laboratory

Notes:

- 1. Please contact the RMP organization for more information on CRM uncertainty values, Ucrm values, and other specific lot values. Some of this information may also be available on the RMP's website.
- 2. This scope is formatted as part of a single document including Certificate of Accreditation No. AR-3170.

Jason Stine, Vice President



