



INTERNATIONAL
ACCREDITATION
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CERTIFICATE OF ACCREDITATION

This is to attest that

LABORATORIO ROBOTIZADO GEOASSAY SANTIAGO

AV. AMERICO VESPUCIO ORIENTE #1273, PUDAHUEL
SANTIAGO, 9020000, REPUBLIC OF CHILE

Testing Laboratory TL-1003

has met the requirements of AC89, *IAS Accreditation Criteria for Testing Laboratories*, and has demonstrated compliance with ISO/IEC Standard 17025:2017, *General requirements for the competence of testing and calibration laboratories*. This organization is accredited to provide the services specified in the scope of accreditation.

Effective Date August 25, 2023



A handwritten signature in black ink that reads "Raj Nathan".

President

SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | www.iasonline.org

LABORATORIO ROBOTIZADO GEOASSAY SANTIAGO

www.geoassay.cl

Contact Name Solange Henriquez

Accredited to ISO/IEC 17025:2017

Contact Phone +56-958386756

Effective Date August 25, 2023

FIELDS OF TESTING	MATERIAL/ MATRIX	DETERMINANT(S)/ ANALYTE(S)	METHOD REFERENCE
Mining & Geology – Chemistry	Minerals and Ores	Determination of Copper in Copper Concentrate by Titrimetric methods.	PT-LB-CON-SCL-001 ISO 10258 Copper sulfide concentrates – Determination de cooper content – Titrimetric methods.
		Determination of Iron in Copper Concentrate by Atomic Absorption.	PT-LB-CON-SCL-004 Harris.D, Análisis Químico cuantitativo. Burriel F. Química Analítica Cualitativa. Ed. Thompson. 2008. Skoog. Douglas A, Fundamentos de Química Analítica, vol 2, Ed. Reverté 2001. SO/WD 20212-1 Copper, lead, zinc and nickel — Sampling Procedures — Part 1: Ores
		Determination of Molybdenum in Copper minerals by Atomic Absorption.	PT-LB-MIN-SCL-002 Harris.D, Análisis Químico cuantitativo. Burriel F. Química Analítica Cualitativa. Ed. Thompson. 2008. Skoog. Douglas A, Fundamentos de Química Analítica, vol 2, Ed. Reverté 2001. SO/WD 20212-1 Copper, lead, zinc and nickel — Sampling Procedures — Part 1: Ores
		Determination of Copper and Iron in Copper Minerals by Atomic Absorption.	PT-LB-MIN-SCL-001 Harris.D, Análisis Químico cuantitativo. Burriel F. Química Analítica Cualitativa. Ed. Thompson. 2008. Skoog. Douglas A, Fundamentos de Química

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FIELDS OF TESTING	MATERIAL/ MATRIX	DETERMINANT(S)/ ANALYTE(S)	METHOD REFERENCE
Mining & Geology – Chemistry continued	Minerals and Ores continued		Analítica, vol 2, Ed. Reverté 2001. ISO/WD 20212-1 Copper, lead, zinc and nickel — Sampling Procedures — Part 1: Ores
	Determination of Molybdenum in Molybdenum Concentrate by gravimetric methods.		PT-LB-CON-SCL-002 Assaying Molybdenite Concentrates The International Molybdenum Association (2003).
	Determination of Molybdenum in Copper Concentrate by Atomic Absorption.		PT-LB-CON-SCL-003 Assaying Molybdenite Concentrates The International Molybdenum Association (2003).
	Determination of Iron and Zinc in Concentrate Copper by Atomic Absorption		PT-LB-CON-SCL-004 Determination of Iron and Zinc in Concentrate Copper by Atomic Absorption
	Determination of Silver and Lead in Copper Concentrate by Atomic Absorption.		PT-LB-CON-SCL-006 Determination of Silver, Cobalt and Lead in Copper Concentrate by Atomic Absorption
	Determination of Arsenic in Copper Concentrate by Atomic Absorption.		PT-LB-MIN-SCL-007 Determination of Arsenic in Copper Concentrate by Atomic Absorption.
	Determination of Antimony of aqua regia digestion in Copper Concentrate by Atomic Absorption.		PT-LB-MIN-SCL-008 Determination of Antimony of aqua regia digestion in Copper Concentrate by Atomic Absorption.
	Determination of Mercury aqua regia digestion in Copper Concentrate by ICP-OES.		PT-LB-MIN-SCL-010 Determination of Mercury aqua regia digestion in Copper Concentrate by ICP-OES.