



# CERTIFICATE OF ACCREDITATION

*This is to attest that*

## **SANGUESA Y ASOCIADOS LIMITADA**

LOS MOLINOS 747  
QUILPUE, NA 2420000, REBUPLIC OF CHILE

### **Inspection Agency AA-824 (Type A)**

has met the requirements of AC98, *IAS Accreditation Criteria for Inspection Agencies*, and has demonstrated compliance with ISO/IEC Standard 17020:2012, *Conformity assessment - Requirements for the operation of various types of bodies performing inspection*. This organization is accredited to provide the services specified in the scope of accreditation.

Expiry Date April 1, 2023  
Effective Date March 22, 2022



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](http://www.iasonline.org)

## SANGUESA Y ASOCIADOS LIMITADA

[www.syagroupchile.com](http://www.syagroupchile.com)

**Contact Name** René Díaz

**Contact Phone** +56 952171114

*Accredited to ISO/IEC 17020:2012*

*Effective Date March 22, 2022*

Field and Range of Inspection	Regulations, Inspection Methods, Standards and/or Specifications
<b>Seawater</b>	
Sampling	NCh411/9:1997. Part 9. Marine Water Sampling Guide
In situ - Measurement of Redox Potential	Standard Methods for the Examination of Water and Wastewater, 2580 B. 23 <sup>rd</sup> Edition, 2017
In situ - Conductivity/Salinity Measurement	Standard Methods for the Examination of Water and Wastewater, 2520 B. 23 <sup>rd</sup> Edition, 2017
Field Transparency Measurement	IUDC v01 Disk Use Secchi
In situ - pH measurement	Standard Methods for the Examination of Water and Wastewater, 4500-H B. 23 <sup>rd</sup> Edition, 2017
In situ - Measurement of dissolved oxygen	Standard Methods for the Examination of Water and Wastewater, 4500-0 G. Membrane Electrode Method. O Oxygen (Dissolved). 23 <sup>rd</sup> Edition, 2017. SM - APHA/AWWA/WEF.
In situ - Measurement of dissolved oxygen	IUSMOI rev02 Based on ASTM D888-09, C
In situ - Temperature Measurement	Standard Methods for the Examination of Water and Wastewater, 2550 B. 23 <sup>rd</sup> Edition, 2017
In situ - Measurement of Residual Free Chlorine	IMCLB v.01 based on ISO Guide ISO 7393-2:20217
In situ - Measurement of Redox Potential	2580 B. Oxidation-Reduction Potential Measurement in Clean Water. Oxidation-Reduction Potential (ORP). 23 <sup>rd</sup> Edition, 2017. SM - APHA/AWWA/WEF.
<b>Groundwater</b>	
Sampling	NCh411/11:1998. Part 11. Guide to groundwater sampling. 1998. INN.
In situ - Measurement of dissolved oxygen	IUSMO1 rev02 based on ASTM D888-09, C
In situ - pH measurement	Standard Methods for the Examination of Water and Wastewater, 4500-H B. 23 <sup>rd</sup> Edition, 2017
Measurement of dissolved oxygen	Standard Methods for the Examination of Water and Wastewater, 4500-0 G. 23 <sup>rd</sup> Edition, 2017

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Field and Range of Inspection	Regulations, Inspection Methods, Standards and/or Specifications
In situ - Temperature Measurement	Standard Methods for the Examination of Water and Wastewater, 2550 B. 23 <sup>rd</sup> Edition, 2017
In situ - Conductivity/Salinity Measurement	Standard Methods for the Examination of Water and Wastewater, 2520 B. 23 <sup>rd</sup> Edition, 2017
In situ - Measurement of Redox Potential	IMORP V.01 Based on Standard Methods for the Examination of Water and Wastewater, 2580 B. 23 <sup>rd</sup> Edition, 2017
Phreatic Level	PMNF version 0 (in-house procedure)
<b>Surface Water</b>	
Sampling	NCh-ISO 5667/4:2016. Part 4. Guide to Sampling Natural and Artificial Lakes
Sampling	NCh-ISO 5667/6:2015. Part 6: Guide to sampling rivers and watercourses. Water quality - Sampling. 2015. INN.
In situ - pH measurement	Standard Methods for the Examination of Water and Wastewater, 4500-H B. 23 <sup>rd</sup> Edition, 2017
In situ - Measurement of dissolved oxygen	Standard Methods for the Examination of Water and Wastewater, 4500-0 G. 23 <sup>rd</sup> Edition, 2017
In situ - Flow Measurement	PMCAU V.0 Own method
In situ - Measurement of dissolved oxygen	IUSMO1 rev02 based on ASTM D888-09, C
In situ - Temperature Measurement	Standard Methods for the Examination of Water and Wastewater, 2550 B. 23 <sup>rd</sup> Edition, 2017
In situ - Conductivity/Salinity Measurement	Standard Methods for the Examination of Water and Wastewater, 2520 B. 23 <sup>rd</sup> Edition, 2017
In situ - Measurement of Residual Free Chlorine	IMCLB v.01 based on ISO Guide ISO 7393-2:20217
In situ - Measurement of Redox Potential	IMORP V.01 Based on Standard Methods for the Examination of Water and Wastewater, 2580 B. 23 <sup>rd</sup> Edition, 2017
<b>Wastewater</b>	
Manual and Automatic Sampling	NCh411/10.0f2005. Part 10-Wastewater sampling.
In situ - Temperature Measurement	NCh 2313/2:1995
In situ - Flow measurement	NCh411/10.0f2005. Part 10: Wastewater Sampling-Sample Collection and Management, 7.9
In situ - pH measurement	NCh 2313/1:2021
<b>Drinking Water</b>	
Sampling	NCh 409/2:2004. Part 2 Muestreo

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Field and Range of Inspection	Regulations, Inspection Methods, Standards and/or Specifications
In situ - pH measurement	IMPH V02 Based on Standard Methods for the Examination of Water and Wastewater, 4500-H B. 23 <sup>rd</sup> Edition, 2017
In situ - Temperature Measurement	IMTT v02 Based on Standard Methods for the Examination of Water and Wastewater, 2550 B. 23 <sup>rd</sup> Edition, 2017
In situ - Measurement of Residual Free Chlorine	IMCLB v.01 based on ISO Guide ISO 7393-2:20217
<b>Lake Sediments</b>	
Sampling	PMSEO1v01 Based on Standard Methods for the Examination of Water and Wastewater, 1060 B, C. 23 <sup>rd</sup> Edition, 2017
In situ - Measurement of Redox Potential	IMORP V.01 Based on Standard Methods for the Examination of Water and Wastewater, 2580 B. 23 <sup>rd</sup> Edition, 2017
<b>Aquatic Sediments</b>	
Sampling	PMSEO01v01 Based on Standard Methods for the Examination of Water and Wastewater, 1060 B, C. 23 <sup>rd</sup> Edition, 2017
In situ - Measurement of Redox Potential	IMORP V.01 Based on Standard Methods for the Examination of Water and Wastewater, 2580 B. 23 <sup>rd</sup> Edition, 2017
<b>Marine Sediments</b>	
Sampling	PMSED01 v01 Based on Standard Methods for the Examination of Water and Wastewater, 1060 B, C. 23 <sup>rd</sup> Edition, 2017
In situ - Measurement of Redox Potential	2580. B. Oxidation-Reduction Potential Measurement in Clean Water. Oxidation-Reduction Potential (ORP). 23 <sup>o</sup> Edición.2017. SM - APHA/AWWA/WEF.
Vessels, Marine Water and Sediment – Carbon Sampling	PMCN version 0 (in-house procedure)