



CERTIFICATE OF ACCREDITATION

This is to attest

A&R (MACAU) TESTING LIMITED

BECO DA ILHA VERDE 62 F1 02, FLAT M, ED. CHING CHAU
MACAU, 000853, MACAU

Testing Laboratory TL-1201

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 December 22, 2025



IAS is an ILAC MRA Signatory

International Accreditation Service
Issued under the authority of IAS management

Visit www.iasonline.org for current accreditation information.

SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 101, Brea, California 92821, U.S.A. | www.iasonline.org

A&R (MACAU) TESTING LIMITED

www.aandrtesting.com

Contact Name Leo Choi

Contact Phone +853-62322128

Accredited to ISO/IEC 17025:2017

Effective Date December 22, 2025

Water		
APHA 2130 B	Turbidity	Nephelometric Method
APHA 2150 Method A&B	Odor	Threshold Odor Test
APHA 2320 B	Alkalinity	Titration Method
APHA 2340 C	Total Hardness	EDTA Titrimetric Method
APHA 2510 B	Conductivity	Conductivity Laboratory Method
APHA 2540 C	Total Dissolved Solids	Total dissolved solids dried at 180°C
APHA 2540 D	Total Suspended Solids	Total suspended solids dried from 103 to 105°C
APHA 3500-Ca	Calcium Hardness	EDTA Titrimetric Method
APHA 4500-Cl- B	Chloride	Argentometric Method
APHA 4500-H+ B	pH	Electrometric Method
APHA 4500-O G	Oxygen (Dissolved)	Membrane-Electrode Method
APHA 4500-SiO ₂ C	Silica	Molybdosilicate Method
APHA 9215 B	Heterotrophic plate count	Pour Plate Procedure
APHA 9222 D	Thermotolerant (Fecal) Coliform	Membrane Filter Procedure
ART TWI 03-8	Legionella pneumophila	Enumeration of Legionella pneumophila in Sanitary Waters and Cooling Tower Waters Method: MICA Advance Legionella
GB 4789. 10-2016 Method II	Staphylococcus aureus	Food microbiological examination: Staphylococcus aureus Method II Plate Count of Staphylococcus aureus
HACH Method 10029	Coliforms, Total and E.coli	Membrane Filtration
HACH Method 10291	Chloride	Mercuric Thiocyanate Method
HACH Method 10293	Hardness, Calcium/Magnesium	Metal Phthalein Colorimetric Method
HACH Method 8008	Iron, Total	US EPA FerroVer® Method
HACH Method 8009	Zinc	US EPA Zincon Method

TL-1201

A&R (MACAU) TESTING LIMITED

Effective Date December 22, 2025

Page 2 of 3

IAS/TL/101-3

SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 101, Brea, California 92821, U.S.A. | www.iasonline.org

HACH Method 8023	Chromium, Hexavalent	US EPA 1,5-Diphenylcarbohydrazide Method
HACH Method 8024	Chromium, Total	Alkaline Hypobromite Oxidation Method
HACH Method 8026	Pseudomonas	Membrane Filtration
HACH Method 8037	Nickel	USEPA Heptoxime Method
HACH Method 8149	Manganese, LR	1-(2-Pyridylazo)-2-Naphthol PAN Method
HACH Method 8155	Nitrogen, Ammonia	Salicylate Method
HACH Method 8506	Copper	US EPA Bicinchoninate Method
In-house method ART_TWI_02-17	Chlorite	Test Method for the Measurement of Chlorite
ISO 11731	Legionella spp.	Water quality Enumeration of Legionella
ISO 7887 Section 4 Method A	Colour	Water quality — Examination and determination of colour Method A: Visual Examination