



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

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ENVIRONMENTAL

Valid To: May 31, 2027

Certificate Number: 6203.01

In recognition of the successful completion of the A2LA evaluation process, including an evaluation of the laboratory's compliance with ISO/IEC 17025:2017 and the NELAC Institute's National Environmental Field Activities Program (NEFAP) Field Sampling and Measurement Organization Volume 1 (TNI FSMO V1 2014, Rev 2.0) accreditation is granted to this organization to perform recognized methods using the following sampling and measurement technologies:

FSMO Type: Commercial, Public and Private Water System, Industrial, Gases

Mobile Units: U Trucks

Water and Solids Sampling:

<u>Matrix</u>	<u>Technology</u> ⁽¹⁾	<u>Method(s)</u>
Drinking Water	Grab sampling	NCh 409/02 2004: Sampling and Sampling Instructions NCh ISO 5667/1 2017 Water quality Sampling Part 1: Guidance for the design of sampling programs and sampling techniques
Superficial Water, Underground Water, Water for Industrial Purposes, Wastewater	Grab sampling, Automatic samplers	NCh ISO 5667/1 2017 Water quality Sampling Part 1: Guidance for the design of sampling programs and sampling techniques NCh ISO 5667/6 2015 Water quality Sampling Part 6: Guidance for sampling rivers and watercourses Standard for wastewater 1060 B Ed 24th, 2023 MMA-01-0 Internal method for Superficial Water, Underground Water, Water for Industrial Purposes, Wastewater sampling. Version 0 – 05/08/2020
Sludges	Grab sampling	Soil sampling protocol of the Agricultural and Livestock Service, Chile Government 2009
Soils, Solid Industrial Waste, Hazardous Waste and Solids Waste	Grab sampling	MMD-01-0 Internal method for soils, solid industrial waste, hazardous waste and solids waste sampling. Version 0 – 05/08/2020

Surfaces, Manipulators and Environment, Water and Dialysate Sampling:

<u>Matrix</u>	<u>Technology⁽¹⁾</u>	<u>Method(s)</u>
Surfaces, manipulators and environment	Contact plates and swabs	NCh3057 Of 2007 ISO 18593:2004 Microbiology of food for human and animal consumption - Horizontal methods for sampling techniques from surfaces using contact plates and swabs
Dialyze water	Grab sampling	MEA-55-0 Rev. 0, 2025 Determination of endotoxins in water and dialysate, LAL method MMA-01-2 Dialysis water sampling

Air Emissions Sampling:

<u>Matrix</u>	<u>Technology⁽¹⁾</u>	<u>Method</u>
Air - Particulate Matter	Isokinetic train	Methodologies for measuring emissions from stationary sources, MINSAL, ISP CH5, rev. 3 December, 2020
Metals: Sb, As, Ba, Be, Cd, Cr, Co, Cu, Pb, Mn, Hg, Ni, Fe, Se, Ag, Tl, Zn, P in Air and Particulate Matter	Isokinetic train, probe, filter, and absorbing solutions	Methodologies for measuring emissions from stationary sources, MINSAL ISP CH29, rev 1. June 2010
Air emissions	Isokinetic train, probe, filter, and absorbing solutions	Determination of emissions of organic compounds volatiles by gas chromatography CH-18 Method Rev 01, Feb1998
Air emissions	Isokinetic train, probe, filter, and absorbing solutions	Determination of polychlorinated dibenzo-p-dioxins and polychlorinated dibenzofurans from municipal waste combustion. CH-23 Method Rev 01, Jun2010
Air emissions	Isokinetic train, probe, filter, and absorbing solutions	Determination of ammonia emissions in stationary Sources CTM-027. EPA 1997
Air emissions	Isokinetic train, probe, filter, and absorbing solutions	Determination of Particulate Matter (PM) Emissions from Stationary Sources. EPA-17, 2017
Air emissions	Isokinetic train, probe, filter, and absorbing solutions	Determination of sulfuric acid and sulfur dioxide emissions from stationary sources EPA-8, January 2019

Air Emissions Measurements:

<u>Matrix</u>	<u>Analyte(s)/Technology⁽¹⁾</u>	<u>Method(s)</u>
Gases and Particulate Matter	Sampling points/speed selection of sampling ports and traverse points	Methodologies for measuring emissions from stationary sources, MINSAL, ISP CH1 rev. 1 March, 1996
Gases and Particulate Matter	Transverse/speed	Methodologies for measuring emissions from stationary sources, MINSAL, ISP CH-1A rev. 1 March, 1996



Matrix	Analyte(s)/Technology ⁽¹⁾	Method(s)
Gases and Particulate Matter	Speed and flow, pitot tube	Methodologies for measuring emissions from stationary sources, MINSAL, ISP CH-2 rev. 1 March, 1996
Gases and Particulate Matter	Flow rate/speed, pitot tube	Methodologies for measuring emissions from stationary sources, MINSAL, ISP CH-2C rev. 1 March, 1996
Gases and Particulate Matter	Dry molecular weight orsat analyzer	Methodologies for measuring emissions from stationary sources, MINSAL, ISP CH-3 rev. 1 March, 1996
Gases and Particulate Matter	Determination of Emission Rate Correction Factor or Excess Air.	Methodologies for measuring emissions from stationary sources, MINSAL, ISP CH-3B rev. 1 March, 1996
Gases and Particulate Matter	Humidity	Methodologies for measuring emissions from stationary sources, MINSAL, ISP CH4 rev. 1 March, 1996
Gases	Determination of the concentration of total volatile organic compounds using an ionization analyzer flame-FID	Methodology for measuring emissions in stationary sources, MINSAL, ISP CH25A rev 1. December 1998
Gases	Determination of Oxygen, Carbon Dioxide and Carbon Monoxide Concentration in Emissions from Stationary Sources (Instrument Analyzer Procedure) (Gases O ₂ , CO ₂ , CO)	Methodologies for measuring emissions from stationary sources, MINSAL, ISP CH-3A rev 1 March, 1996
Gases	Determination of Sulfur Dioxide Emissions from Stationary Sources (Instrumental Analyzer Procedure) (SO ₂)	Methodologies for measuring emissions from stationary sources, MINSAL, ISP CH-6C rev 1 March, 1996
Gases	Determination of Nitrogen Oxides Emissions from Stationary Sources (Instrumental Analyzer Procedure) (NO _x)	Methodologies for measuring emissions from stationary sources, MINSAL, ISP CH-7E rev 1 March, 1998
Gases	Determination of Carbon Monoxide (CO) and Oxygen (O ₂) in Stationary Sources	SMA Exempt Resolution N° 2439; 16, November, 2021

Water Measurements: Surface Water, Underground Water, Potable, Water for Industrial Purposes, Water Intake Sources and Wastewater, Seawater

Analyte ⁽¹⁾	Technology ⁽¹⁾	Method
Conductivity	Electrode cell probe	SM 2510 B, Ed 24th, 2023
pH	Potentiometric	SM 4500H-B, Ed 24th, 2023
pH	Electrometric	NCh 2313/1, Of 2021
pH	Electrometric	SISS ME-29-2024, 3rd Edition, 2024
Temperature	Thermistor	SM 2550 B, Ed 24th, 2023



Analyte ⁽¹⁾	Technology ⁽¹⁾	Method
Temperature	Thermistor	NCh 2313/2, Of 95
Chlorine (Residual)	Colorimetric Method	SM 4500 Cl G, Ed 24th, 2023
Chlorine (Residual)	Colorimetric Method	SISS ME-33-2024, 3rd Edition, 2024
Dissolved Oxygen	Polarographic probe	MUF-03-8 Version 0 – 05/08/2020
Settleable Solids	Sedimentation	SM 2540 F, Ed 24th, 2023
Settleable Solids	Sedimentation	NCh 2313/4, Of 95
Flow	Metered, longitudinal, calculation	IEA-01-1 Flow measurement instructions Version 2 – 12/03/2025

Waters Analysis: Surface Water, Underground Water, Potable, Water for Industrial Purposes, Water Intake Sources and Wastewater, seawater

Analyte(s)	Method(s)
Alkalinity, Volumetric	SM 2320 B, Ed 24th, 2023
Residual Chloride	SM 4500 Cl G, Ed 24th, 2023
Residual Chloride	SISS ME-33-2024, 3rd Edition, 2024
Metals by ICP (Al, As, Sb, Ba, Be, B, Ca, Cd, Cr, Co, Cu, Fe, Pb, Li, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, Tl, V, Hg, Zn, and Silicon Dioxide)	SM 3120 B, Ed 24th, 2023 SM 3030 D, Ed 24th, 2023
Dissolved metals by ICP: Al, Sb, As, Ba, Be, Bi, B, Cd, Co, Cu, Cr, Sc, Sn, Sr, P, Ga, Fe, Li, Mn, Hg, Mo, Ni, Ag, Pb, Se, Tl, Te, Ti, Th, U, V, W, Zn Total metals by ICP: Al, Sb, As, Ba, Be, Bi, B, Cd, Co, Cu, Cr, Sc, Sn, Sr, P, Ga, Fe, Li, Mn, Hg, Mo, Ni, Ag, Pb, Se, Tl, Te, Ti, Th, U, V, W, Zn	NCh 2313/25 Of.97
Chlorides Volumetric	SM 4500CL-B, Ed 24th, 2023
Chlorides Volumetric	NCh 2313/32, Of 99
Chlorides Volumetric	SISS ME-28-2024, 3rd Edition, 2024
Conductivity, Electrometric	SM 2510 B, Ed 24th, 2023
Fluoride, Spectrometric	SM 4500F- D, Ed 24th, 2023
Fluoride, Potentiometric	NCh 2313/33, Of 99
Fluoride, Specific electrode	SISS ME-06-2024, 3rd Edition, 2024
Hexavalent Chromium Colorimetric Method	SM 3500-Cr. B, Ed 24th, 2023
pH, Electrometric	SM 4500H+B, Ed 24th, 2023
pH, Electrometric	NCh 2313/1, Of 2021
pH, Electrometric	SISS ME-29-2024, 3rd Edition, 2024
Temperature	SM 2550 B, Ed 24th, 2023
Temperature	NCh 2313/2, Of 95
Turbidity, Nephelometric	SM 2130 B, Ed 24th, 2023
Turbidity, Nephelometric	SISS ME-03-2024, 3rd Edition, 2024
True Color, Visual	SM 2120 B, Ed 24th, 2023
True Color, Visual	SISS ME-24-2024, 3rd Edition, 2024
Monochloramine, Titrimetric DPD method with FAS	SISS ME-23-2024, 3rd Edition, 2024
Nitrate, Potentiometric	SM 4500NO3- D, Ed 24th, 2023

Analyte(s)	Method(s)
Nitrogen-nitrate, Specific electrode	SISS ME-16-2024, 3rd Edition, 2024
Nitrite, Spectrometric	SM 4500NO2- B, Ed 24th, 2023
Nitrogen-nitrite, Spectrometry	SISS ME-17-2024, 3rd Edition, 2024
Odor, Organoleptic	SISS ME-25-2024, 3rd Edition, 2024
Flavor, Organoleptic	SISS ME-26-2024, 3rd Edition, 2024
Total Dissolved Solids at 180 °C, Gravimetric	SM 2540 C, Ed 24th, 2023
Total Dissolved Solids at 180 °C, Gravimetric	SISS ME-31-2024, 3rd Edition, 2024
Sulfates, Turbidimetric	SM 4500SO4 2- E, Ed 24th, 2023
Dissolved Sulfates, Gravimetric	NCh 2313/18, Of 97
Sulfates, Gravimetric	SISS ME-30-2024, 3rd Edition, 2024
BOD, Electrometric	SM 5210B, Ed 24th, 2023
BOD, Electrometric	NCh 2313/5, Of 2005
COD, Spectrometric	SM 5220D, Ed 24th, 2023
Total phosphorus, Spectrometric	NCh 2313/15, Of 2009
Oils and Fats, Gravimetric	SM 5520 B, Ed 24th, 2023
Oils and Fats, Gravimetric	NCh 2313/6, Of 2015
Total and fixed hydrocarbons, Gravimetric	NCh 2313/7 Of. 2021
Sulfide, Spectrometric	SM 4500S2- D, Ed 24th, 2023
Sulfide, Potentiometric	SM 4500S2- G, Ed 24th, 2023
Total Sulfide, Specific electrode	NCh 2313/17, Of 97
Total Cyanide, Spectrometry	SM 4500CN- E, Ed 24th, 2023 SM 4500CN- B, Ed 24th, 2023 SM 4500CN- C, Ed 24th, 2023
Total Cyanide, Specific Electrode	SISS ME-14-2024, 3rd Edition, 2024
Total Cyanide, Specific Electrode	SM 4500CN- F, Ed 24th, 2023 SM 4500CN- B, Ed 24th, 2023 SM 4500CN- C, Ed 24th, 2023
Total Cyanides, Potentiometric	NCh 2313/14, Of 97
Nitrogen. Kjeldahl, Titrimetric	SM 4500Norg-B, Ed 24th, 2023
Nitrogen. Kjeldahl	NCh 2313/28, Of 2009
Suspended Solids, Gravimetric	SM 2540 D, Ed 24th, 2023
Suspended Solids, Gravimetric	NCh 2313/3, Of 95
Foaming power	NCh 2313/21, Of 2010
Phenol index, Spectrometric	NCh 2313/19, Of 2001
Phenolic compounds, Spectrometric	SISS ME-32-2024, 3rd Edition, 2024
Anionic surfactants (SAAM), Spectrometric	NCh 2313/27, Of 98
Ammonia, Specific electrode	SISS ME-27-2024, 3rd Edition, 2024
Determination of trihalomethanes (THM) and tetrachloroethene. Method by gas chromatography with electron capture detector (ECD): Bromodichloromethane Dibromochloromethane Tribromomethane Trichloromethane Tetrachloroethene	NCh 2313/20 Of. 1998
Determination of pentachlorophenol. Method by gas chromatography with electron capture detector (ECD).	NCh 2313/29 Of. 1999.

Analyte(s)	Method(s)
Determination of benzene, toluene, ethylbenzene and xylenes. Gas chromatography method using headspace.	NCh 2313/31 Of. 1999.
Determination of benzene, toluene, and xylenes by gas chromatography using headspace.	SISS ME-19-2024, 3rd Edition, 2024
Determination of lindane, methoxychlor, 4,4'-DDT, and DDD+DDE by gas chromatography with an electron capture detector (ECD).	SISS ME-20-2024, 3rd Edition, 2024
Determination of 2,4-D and pentachlorophenol by gas chromatography with an electron capture detector (ECD).	SISS ME-21-2024, 3rd Edition, 2024
Determination of trihalomethanes (Bromodichloromethane, dibromochloromethane, tribromomethane, and trichloromethane) and tetrachloroethene by gas chromatography with an electron capture detector (ECD).	SISS ME-22-2024, 3rd Edition, 2024
Volatile hydrocarbons by GC with FID detector	NCh 2313/7 Of. 2021
Determination of mercury - atomic absorption spectrophotometry method with cold vapor generation	NCh 2313/12 Of. 1996.
Determination of total mercury by atomic absorption spectrophotometry method with generation of atomic vapor (cold vapor).	SISS-ME-15-2024, 3rd Edition, 2024

Surface Water, Underground Water, Potable, Water for Industrial Purposes, Wastewater, Seawater, Dialysis, Surfaces, Manipulators and Environment Analysis

Analyte(s)	Method(s)
Fecal Coliform MPN	SM 9221 E, Ed 24th, 2023
Fecal Coliform MPN	NCh 2313/22, Of 95
<i>Escherichia coli</i> MPN	SM 9221 F, Ed 24th, 2023
<i>Escherichia coli</i> MPN	SISS ME-01-2024, 3rd Edition, 2024
Determination of coliforms and fecal coliforms - Most probable number (MPN) technique	NCh2635/1 Of 2001
Horizontal method for the detection and enumeration of <i>Listeria monocytogenes</i> - Part 2: enumeration method	NCh2657/2 Of 2007
Determination of fungi and yeasts - Plate counting technique	NCh2734 Of 2002
Detection of Salmonella	NCh2675 Of 2002
Count of coagulase-positive <i>Staphylococcus aureus</i> - Plate counting technique on Baird-Parker agar	NCh2671 Of 2002
Determination of Enterobacteriaceae without resuscitation - NMP technique and plate count technique	NCh2676 Of 2002
Determination of mesophilic aerobic microorganisms - Plate count technique at 35 °C	NCh2659 Of 2002
Determination of endotoxins in water and dialysate, LAL method	MEA-55-0 Rev. 0, 2025

Solids Analysis: Soils, Sludges, Solid Industrial Waste, Hazardous Waste and Solids Waste

Analyte(s)/Technology	Method(s)
Total metals by ICP: As, Ba, Cd, Cr, Ag, Pb, Se (TCLP extraction)	EPA 1311 Rev 0, 1992 SM 3120 B, Ed 24th, 2023
Conductivity Electrometric	MED-21-0 Internal method for the determination of conductivity in Soils, Sludges, Solid Industrial Waste, Hazardous Waste and Solids Waste. Version 0 – 05/08/2020
Corrosivity	EPA 1110A, Rev 1, 2002
pH	EPA 9045D, Rev 4, 2004
Metals by ICP (Al, As, Sb, Ba, Be, B, Ca, Cd, Cr, Co, Cu, Fe, Pb, Li, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, Tl, V, Hg, Zn, and Silicon Dioxide) in Soils and Sludges	EPA 6010D Rev 5, 2018 EPA 3050B Rev 2, 1996
Metals by ICP (Al, As, Sb, Ba, Be, B, Ca, Cd, Cr, Co, Cu, Fe, Pb, Li, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, Tl, V, Hg, Zn, and Silicon Dioxide) in Solid Industrial Waste, Hazardous Waste and Solids Waste	EPA 6010D Rev 5, 2018 EPA 1312 Rev 0, 1994
Total Cyanides	EPA 9010C Rev 3, 2004 EPA 9014 Rev 1, 2014
Reactivity to Sulfides in Residues	EPA 9030B Rev 2, 1996 EPA 9034 Rev 0, 1996
Flammability test	EPA 1010, Rev. 0, 1986
Ignitability of solids	EPA 1030, Rev. 1, 2014
Determination of mercury in solid or semisolid waste (manual cold-vapor technique)	EPA 7471B Rev. 2, 2007
Nonhalogenated organics by gas chromatography (benzene, toluene, ethylbenzene and xylenes)	EPA 1311 Rev 0, 1992, EPA 8015 C Rev. 3, 2007
Organochlorine pesticides by gas chromatography (lindane, methoxychlor, 4,4'-DDT, 4,4'-DDD and 4,4'-DDE)	EPA 1311 Rev 0, 1992, EPA 8081 B Rev. 2, 2007
Chlorinated herbicides by GC using methylation or pentafluorobenzoylation derivatization (2,4-D and pentachlorophenol)	EPA 1311 Rev 0, 1992, EPA 8151 A Rev. 1, 1996

Air Emissions Analysis:

Matrix	Analyte(s)/Technology	Method(s)
Gases and Particulate Matter	Determination of particulate matter from stationary sources, gravimetry	Methodologies for measuring emissions from stationary sources, MINSAL, ISP CH5 rev. 3, December, 2020
Gases and Particulate Matter	Metal analysis (Sb, As, Ba, Be, Cd, Cr, Co, Cu, Pb, Mn, Hg, Ni, Fe, Se, Ag, Tl, Zn, P) by ICP	Methodology for measuring emissions in stationary sources, MINSAL, ISP CH29 rev 1. June 2010

Matrix	Analyte(s)/Technology	Method(s)
Gases and Particulate Matter	Determination of ammonia emissions in stationary Sources	CTM-027. EPA 1997
Gases and Particulate Matter	Determination of Particulate Matter (PM) Emissions From Stationary Sources.	EPA-17, 2017
Gases and Particulate Matter	Determination of sulfuric acid mist and sulfur dioxide emissions from stationary sources	EPA-8, 2019

¹ This laboratory performs field testing activities for these test methods.





Accredited Laboratory

A2LA has accredited

AIRTESTLAB SPA

Región Metropolitana, CHILE

for technical competence in the field of

Environmental Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 *General requirements for the competence of testing and calibration laboratories*. This laboratory also meets the requirements of A2LA R219 – *Specific Requirements – TNI Field Sampling and Measurement Organization Accreditation*. 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 April 2017).



Presented this 2nd day of September 2025.

A blue ink signature of Mr. Trace McInturff, written over a horizontal line.

Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 6203.01
Valid to May 31, 2027

For the tests to which this accreditation applies, please refer to the laboratory's Environmental«field» Scope of Accreditation.