



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

WORLD SURVEY SERVICES S.A.
 Junge #142,
 Concepción, CHILE 4030000
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BIOLOGICAL

Valid To: September 30, 2027

Certificate Number: 5166.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following tests on fishmeal, hydrobiological products, drinking water and ice, animal feed, food, fish oil, utensils, food handlers, work surfaces:

<u>Test/Technology</u>	<u>Test Method(s)</u>	<u>Reference Method(s)</u>
Determination of Aerobic Mesophilic Microorganisms and Facultative Anaerobes Count – CFU	INS-LAB/MET-025	GOST 10444.15-94
Determination of Aerobic Mesophilic Microorganisms at 35C – CFU	INS-LAB/MET-004	NCh2659.Of2002
	INS-LAB/MET-037	NCh2659.Of2002; NCh3057.Of2007
Determination of <i>Bacillus cereus</i> – MPN-UFC	INS-LAB/MET-044	BAM Online Chapter 14: <i>Bacillus cereus</i> (Modified)
Determination of Coliforms and Fecal Coliforms – MPN	INS-LAB/MET-012	NCh2635/1.Of 2001; Manual de Inocuidad y Certificación, Parte II, Sección IV, Online, SERNAPESCA
Determination of Coliforms – CFU	INS-LAB/MET-043	NCh2635/2.Of 2001; Manual de Inocuidad y Certificación, Parte II, Sección IV, Online, SERNAPESCA
	INS-LAB/MET-039	NCh2635/2.Of 2001; NCh3057.Of 2007
Detection and Determination of Coliforms (Presence/Absence)	INS-LAB/MET-026	GOST 31747-2012
Determination of Coliforms and <i>Escherichia coli</i> (Presence/Absence) – CFU by Membrane Filtration	INS-LAB/MET-021	ISO 9308-1:2014/Amd1:2016
Determination of Coliforms, Fecal Coliforms and <i>E. coli</i> – MPN	INS-LAB/MET-018	NCh2732.Of 2002
Determination of <i>Clostridium perfringens</i> – CFU	INS-LAB/MET-032	BAM Online Chapter 16: <i>Clostridium perfringens</i>
	INS-LAB/MET-028	Directive 98/83/CE of November 3 rd 1988 Membrane Filtration

<u>Test/Technology</u>	<u>Test Method(s)</u>	<u>Reference Method(s)</u>
Detection and Determination of Enterococcus – CFU by Membrane Filtration	INS-LAB/MET-022	ISO 7899-2:2000
Determination of <i>E. coli</i> – MPN	INS-LAB/MET-011	NCh2636.Of2001
	INS-LAB/MET-034	NCh2636.Of2001; NCh3057.Of2007
Determination of <i>E. coli</i> (β -Glucoronidase Positive) – MPN	INS-LAB/MET-031	NCh3056.Of.2007; ISO 16649-3:2015
Determination of Enterobacteriaceae without Resuscitation – MPN-CFU	INS-LAB/MET-008	NCh2676.Of2002
	INS-LAB/MET-035	NCh2676.Of2002; NCh3057.Of2007
Determination of Fungi- <i>Aspergillus</i> (Presence/Absence)	INS-LAB/MET-015	NCh2735.Of2002
Determination of Fungi- Yeast and Mold – CFU	INS-LAB/MET-006	NCh2734.Of2002
	INS-LAB/MET-036	NCh2734.Of2002; NCh3057.Of2007
Detection of <i>Listeria monocytogenes</i> (Presence/Absence)	INS-LAB/MET-016	ISO11290-1:2017; Manual de Inocuidad y Certificación, Parte II, Sección IV, Online, SERNAPESCA
	INS-LAB/MET-013	NCh2657.Of 2001; Manual de Inocuidad y Certificación, Parte II, Sección IV, Online, SERNAPESCA
	INS-LAB/MET-041	NCh 2657.Of 2001; NCh 3057.Of 2007
Determination of <i>Staphylococcus aureus</i> Coagulase Positive – CFU	INS-LAB/MET-009	NCh 2671.Of2002
	INS-LAB/MET-038	NCh 2671.Of2002; NCh 3057.Of2007
Determination of <i>S. aureus</i> Coagulase Positive – Presence/Absence	INS-LAB/MET-042	GOST 31746:2012; Manual de Inocuidad y Certificación, Parte II, Sección IV, Online, SERNAPESCA
Determination of <i>S. aureus</i> Coagulase Positive –MPN	INS-LAB/MET-010	NCh2828.Of2003
Detection of <i>Salmonella</i> spp. (Presence/Absence)	INS-LAB/MET-007	NCh2675.Of2002; Manual de Inocuidad y Certificación, Parte II, Sección IV, Online, SERNAPESCA
	INS-LAB/MET-033	NCh2675.Of2002; NCh3057.Of2007
Detection of <i>Salmonella</i> spp. (Presence/Absence)	INS-LAB/MET-045	ISO 6579-1:2017/Amd 1:2020; Manual de Inocuidad y Certificación, Parte II, Sección IV, Online, SERNAPESCA
Detection of <i>Shigella</i> spp. (Presence/Absence)	INS-LAB/MET-023	ISO 21567:2004
Determination of <i>Vibrio parahaemolyticus</i> – MPN	INS-LAB/MET-024	BAM Online Chapter 9: <i>Vibrio</i> (Modified)
Enumeration of <i>L. monocytogenes</i> – CFU	INS-LAB/MET-040	ISO11290-2:2017

<u>Test/Technology</u>	<u>Test Method(s)</u>	<u>Reference Method(s)</u>
Organoleptic and Physical Test	INS-LAB/MET-029	Manual de Inocuidad y Certificación, Parte II, Sección III, Capítulo IV; Parte II, Sección IV, Capítulo III, Online, SERNAPESCA
Sampling		
Drinking Water and Ice; Fishmeal; Fish Oil; Food and Hydrobiological Products; Utensils, Manipulators, Surfaces, and Ambiance	PRO-IYM-005 PRO-IYM-008 PRO-IYM-009 PRO-IYM-003 PRO-IYM-004	NCh409/2; Manual de Métodos de Análisis de Agua Potable, SISS Manual de Inocuidad y Certificación, Parte II, Sección IV, Capítulo II, Online, SERNAPESCA; NCh43





Accredited Laboratory

A2LA has accredited

WORLD SURVEY SERVICES S.A.

Concepción, CHILE

for technical competence in the field of

Biological 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 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 3rd day of November 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 5166.01
Valid to September 30, 2027

For the tests to which this accreditation applies, please refer to the laboratory's Biological Scope of Accreditation.



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CHEMICAL

Valid To: September 30, 2027

Certificate Number: 5166.02

On recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following tests on fishmeal, fish oil, fish feed, hydrobiological products, and dried animal feed:

Test/Technology	Test Method(s)	Reference Method(s)
Determination of Antioxidants: BHA, BHT, TBHQ – HPLC	INS-LAQ-052	AOAC 983.15 (modified)
Determination of Arsenic – Flame AA Spectrometry-Hydride Generation	INS-LAQ-043	NCh3140.Of 2008
	INS-LAQ-043 (Fish Oil)	NCh3140.Of 2008 (modified)
Determination of Cadmium – Flame AA Spectrometry	INS-LAQ-044	NCh2638.Of 2001
	INS-LAQ-044 (Fish Oil)	NCh2638.Of 2001 (modified)
Determination of Chlorides – Volhard Method	INS-LAQ-029	NCh2739/1.Of 2002
Determination of Chrome – Flame AA Spectrometry	INS-LAQ-045	NCh2751.Of 2003 (modified)
Determination of Crude Protein – Kjeldahl Method	INS-LAQ-015	ISO 5983-2:2009
Determination of Ethoxyquin – HPLC	INS-LAQ-041	AOAC 996.13 (modified)
Determination of Free Fatty Acids – Titrimetric Method	INS-LAQ-018	NCh2759.Of 2002
	INS-LAQ-018 (Fishmeal)	NCh2759.Of2002 (modified)
Determination of Fluoride - ISE	INS-LAQ-069	GB/T 13083-2018
Determination of Histamine – HPLC	INS-LAQ-039	NCh2637.Of 2001 (modified)
Determination of Humidity and Impurities on Dried Seaweed – Gravimetric Method	INS-LAQ-056	NCh765:2018
Determination of Lead – Flame AA Spectrometry	INS-LAQ-046	NCh2751.Of 2003
	INS-LAQ-046 (Fish Oil)	NCh2751.Of 2003 (modified)
Analysis of Lipids – Gravimetric	INS-LAQ-013	I.A.F.M.M Technical Bulletin N°3, 1980 (modified)

<u>Test/Technology</u>	<u>Test Method(s)</u>	<u>Reference Method(s)</u>
Determination of Malondialdehyde - HPLC	INS-LAQ-065	GBT 28717-2012 (modified)
Determination of Mercury – AA Spectrometry	INS-LAQ-047	NCh2667.Of 2001
	INS-LAQ-047 (Fish Oil)	NCh2667.Of 2001 (modified)
Determination of Moisture and Volatile Material – Gravimetric Method	INS-LAQ-035 (Fish oil)	AOCS CA 2C25
Determination of Moisture – Gravimetric Method	INS-LAQ-001	NCh2670.Of 2001, Method A
Determination of Nitrites – UV-Vis Spectrometry	INS-LAQ-064	NCh1370/6.Of 79 (modified) GB/T13085-2018 (modified)
Determination of pH	INS-LAQ-051	NCh2738.Of2002
Peroxide Index – Titrimetric Method	INS-LAQ-026	NCh2758.Of2002
	INS-LAQ-026 (Fishmeal)	NCh2758.Of 2002 (modified)
Determination of Total Ash and Insoluble Residue in Sand – Gravimetric Method	INS-LAQ-023	NCh515.Of1980
Determination of Total Fat – Soxhlet Method	INS-LAQ-033	NCh1790.Of1980 NCh514.Of1980
Determination of Total Volatile Basic Nitrogen – Steam Distillation	INS-LAQ-036	NCh2668:2018
Tocopherols (α , γ and δ) – HPLC	INS-LAQ-040	AOCS Ce 8-89 (modified)
<u>Sampling</u>		
Fishmeal Fish Oil Hydrobiological Products	PRO-IYM-008 PRO-IYM-009 PRO-IYM-003	Manual de Inocuidad y Certificación, Parte II, Sección IV, Capítulo II, on line SERNAPESCA; NCh 43.Of 1961



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