



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

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BIOLOGICAL

Valid To: March 31, 2021

Certificate Number: 4057.02

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following tests on food, processed food, fruits, vegetables, juices, wines, meat, dairy products, prepared meal, egg, milk, fat, flour, seafood products, drinking water, utility water, utensils, surfaces, environmental samples, and manipulators:

| <b><u>Test</u></b>   | <b><u>Internal Method(s)</u></b> | <b><u>Reference Method(s)</u></b>                |
|--|----------------------------------|--|
| <b>Colony count</b>  |                                  |  |
| Aerobic Mesophilic – Petrifilm   | -----                            | AOAC 990.12;<br>3M Petrifilm, March 2002         |
| Aerobic Mesophylls and Psychrophiles on Surfaces                                     | CQ-MIC-050-D                     | NCh3057:2007;<br>ISO 18593:2004;<br>NCh2659:2002 |
| Aerobic Mesophylls in Food   | -----                            | NCh2659:2002                                     |
| Aerobic Mesophylls in Milk and Milk Products   | CQ-MIC-002-D                     | NCh2045:1998                                     |
| Aerobic Mesophylls, Mold, and Yeast per Sedimentation Plate on Environmental Samples | CQ-MIC-003-D/B                   | NCh3057:2007                                     |
| <i>Aspergillus</i> in Fish Flour   | -----                            | NCh2735:2002                                     |
| <i>Bacillus cereus</i> in Food by Plate Count and MPN                                | CQ-MIC-053-D                     | FDA BAM Chapter 14                               |
| <i>Clostridium</i> (Spores Sulfite Reducing)   | CQ-MIC-063-D                     | ISO 15213:2003                                   |
| <i>Clostridium perfringens</i> – Plate Count in Food and Seafood Products            | CQ-MIC-017-D/A                   | FDA BAM Chapter 16                               |
| <i>Escherichia coli</i> – Petrifilm  | -----                            | AOAC 991.14;<br>3M Petrifilm, March 2002         |

| <b><u>Test</u></b>  | <b><u>Internal Method(s)</u></b> | <b><u>Reference Method(s)</u></b>  |
|---|----------------------------------|--|
| <i>E. coli</i> , Coliforms, Fecal Coliforms, and Total Coliforms – Plate Count on Surfaces and Manipulators | CQ-MIC-048-D                     | NCh2635/2:2001   |
| Enterobacteriaceae – Plate Count  | CQ-MIC-026-D                     | NCh2676:2002;<br>NCh3057:2007  |
| Enterobacteriaceae – Plate Count on Surfaces and Manipulators   | CQ-MIC-049-D                     | ISO 18593:2004   |
| <i>E. coli</i> , Coliforms, and Fecal Coliforms – Plate Count in Food                                       | CQ-MIC-006-D                     | NCh2635/2:2001   |
| Heterotrophic Bacteria in Water   | CQ-MIC-072-D                     | SM 9215  |
| <i>Listeria monocytogenes</i> – Enumeration on Surfaces   | CQ-MIC-042-D                     | ISO 11290/2:2017;<br>NCh2657/2:2007  |
| <i>Lactobacillus</i> – Plate Count  | CQ-MIC-025-D                     | Compendium of Methods for the Microbiological Examination of Foods, Chapter 15 |
| <i>L. monocytogenes</i> and <i>Listeria</i> spp. – UFC  | CQ-MIC-066-D                     | ISO 11290/2:2017;<br>NCh2657/2:2007  |
| <i>Listeria</i> spp. – Petrifilm  | -----                            | AOAC 030601  |
| Molds by Heat Resistant Enumeration in Juice and Mist   | CQ-MIC-022-D/B                   | Compendium of Methods for the Microbiological Examination of Foods, Chapter 21 |
| <i>Staphylococcus aureus</i> – UFC on Surfaces and Manipulators   | CQ-MIC-051-D                     | NCh2671:2002;<br>NCh3057:2007;<br>ISO 18593:2004                               |
| <i>Salmonella</i> – Petrifilm   |                                  | AOAC 2014.01<br>3M Petrifilm, March 2018                                       |
| <i>S. aureus</i> Coagulase Positive – Plate Count   | CQ-MIC-009-D                     | NCh2671:2002;<br>NCh3057:2007;<br>ISO 18593:2004                               |
| Sulfite Reducer – Plate Count in Food   | CQ-MIC-005-D                     | NCh2730:2002   |
| TAB (Thermophilic Acidophilus Bacterium)  | CQ-MIC-055-D                     | IFU Standard 12:2007   |
| Thermotolerant Microorganism – UFC in Foods   | CQ-MIC-004-D;<br>CQ-MIC-004-D/A  | Compendium of Methods for the Microbiological Examination of Foods, Chapter 22 |



| <b><u>Test</u></b>   | <b><u>Internal Method(s)</u></b> | <b><u>Reference Method(s)</u></b>   |
|--|----------------------------------|---|
| Yeasts and Molds – Plate Count in Food, Surfaces, Environmental Samples, and Manipulators                        | CQ-MIC-021-D;<br>CQ-MIC-021-D/C  | NCh2734:2002;<br>NCh3057:2007   |
| <b>Detection</b>   |                                  |   |
| Aerobic Mesophylls and Aerobic and Anaerobic Thermophiles in Canned Food   | CQ-MIC-047-D                     | NCh2731:2002  |
| <i>E. coli</i> O157:H7   | CQ-MIC-034-D                     | FDA BAM Chapter 4A  |
| <i>E. coli</i> , Coliforms, Fecal Coliforms, and Total Coliforms – Presence/Absence on Surfaces and Manipulators | CQ-MIC-048-D/A                   | NCh2635/2:2001;<br>NCh2636:2001;<br>NCh3057:2007  |
| <i>L. monocytogenes</i> – Detection  | CQ-MIC-065-D                     | ISO 11290/1:2017;<br>NCh 2657:2001  |
| <i>Pseudomonas aeruginosa</i> – Detection in Food  | CQ-MIC-036-D                     | ISO 13720:2010  |
| <i>S. aureus</i> – Presence/Absence  | CQ-MIC-011-D                     | FDA BAM Online, Chapter 12  |
| <i>Salmonella</i> – Detection in Food  | CQ-MIC-060-D                     | FDA BAM Chapter 5   |
| <i>Salmonella</i> – Detection on Surfaces  | CQ-MIC-067-D                     | Instructivo técnico para la detección de <i>Salmonella</i> spp. Según;<br>ISO 6579:2002 |
| <i>Salmonella</i> – Rapid BIO-RAD  | CQ-MIC-060-D;<br>CQ-MIC-061-D    | ISO 16140:2003  |
| <i>Salmonella</i> and <i>Shigella</i> – Presence/Absence in Food   | CQ-MIC-014-D;<br>CQ-MIC-014-D/A  | NCh2675:2002  |
| <i>Shigella</i> spp. – Detection in Food   | CQ-MIC-023-D                     | ISO 21567:2016  |
| Total Coliforms – Detection  | CQ-MIC-046-D                     | Gost R 52816:2007   |
| <i>Vibrio parahaemolyticus</i> – Determination   | CQ-MIC-015-D/B/C                 | FDA BAM, 2001, Chapter 9 Section V  |
| <b>Most Probable Number (MPN)</b>  |                                  |   |
| <i>E. coli</i> NMP – UFC and Membrane Filtration in Food   | CQ-MIC-058-D                     | ISO 16649/1:2018;<br>ISO 16649/2:2001;<br>ISO 16649/1:2015                              |
| <i>E. coli</i> and Fecal Coliforms – Determination and NMP   | CQ-MIC-040-D                     | NCh2732:2002  |

| <b><u>Test</u></b>   | <b><u>Internal Method(s)</u></b>                 | <b><u>Reference Method(s)</u></b>           |
|--|--|---|
| <i>E. coli</i> , Coliforms, and Total Coliforms – Determination                              | CQ-MIC-007-D                                     | NCh2635/1:2001;<br>NCh2636:2001             |
| Enterobacteriaceae – NMP   | CQ-MIC-027-D                                     | NCh2676:2002                                |
| <i>S. aureus</i> – NMP in Foods, Seafood, and Dairy Products                                 | CQ-MIC-010-D;<br>CQ-MIC-010-D/A                  | NCh2828:2003;<br>ISO 6888/3:2003            |
| Total Coliforms – NMP in Water and Non-Chlorinated Water                                     | CQ-MIC-037-D;<br>CQ-MIC-038-D;<br>CQ-MIC-038-D/A | NCh1620:1984                                |
| <b>Membrane Filtration</b>   |  |   |
| <i>E. coli</i> – UFC in Water  | CQ-MIC-070-D                                     | EPA Method 1103/1/2010                      |
| <i>E. coli</i> and Coliform – Enumeration in Water   | CQ-MIC-059-D                                     | ISO 9308/1:2014                             |
| <i>Enterococcus faecalis</i> – Detection/Enumeration in Water                                | CQ-MIC-043-D                                     | ISO 7899/2:2000                             |
| <i>Legionella</i> – Enumeration in Water   | CQ-MIC-071-D                                     | ISO 11731:2017                              |
| <i>P. aeruginosa</i> – Enumeration in Recreational Water                                     | CQ-MIC-069-D                                     | SM 9213E                                    |
| <i>Salmonella</i> – Enumeration in Water   | CQ-MIC-068-D                                     | Method of DW 2006B                          |
| <i>Shigella</i> in Water – Presence/Absence in Low Turbidity Water                           | CQ-MIC-024-D<br>CQ-MIC-024-D/A                   | SMWW 9260 E/2006<br>METHOD WATER 2006/PART9 |
| <i>Staphylococcus aureus</i> – Presence/Absence in Recreational Water by Membrane Filtration | CQ-MIC-062-D                                     | SM 9213B                                    |
| <b>VIDAS Methods</b>   |  |   |
| <i>L. monocytogenes</i> Detection in Foods – VIDAS LMX                                       | -----  | AFNOR Bio 12/27-02/10                       |
| <i>Salmonella</i> spp. Detection in Foods – VIDAS UP   | -----  | AFNOR Bio 12/32-10/11                       |

| <b><u>Test</u></b>   | <b><u>Internal Method(s)</u></b> | <b><u>Reference Method(s)</u></b>                          |
|--|----------------------------------|--|
| <b>Others</b>  |                                  |  |
| Determination of the Components of Animal Origin (Microscopic Examination) | CQ-MIC-037-I                     | Regulation (UE) N°51:2013                                  |
| Organoleptic Appearance in Hydrobiological Products                        | CQ-MIC-023-T                     | Safety and Certification Manual Online SERNAPESCA          |
| Determination of <i>Dermestes</i> spp. in Fish Flour                       | CQ-MIC-022-T                     | Manual de Inocuidad y Certificación de SERNAPESCA Dic-2018 |





## *Accredited Laboratory*

A2LA has accredited

### **CORTHORN QUALITY**

*Santiago, 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 12<sup>th</sup> day of April 2019.

A blue ink signature of the Vice President of Accreditation Services.

Vice President, Accreditation Services  
For the Accreditation Council  
Certificate Number 4057.02  
Valid to March 31, 2021

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