



CERTIFICATE OF ACCREDITATION

The ANSI National Accreditation Board

Hereby attests that

IEH Laboratories and Consulting Group
3458 E. 33rd Place
Yuma, AZ 85365

Fulfills the requirements of

ISO/IEC 17025:2017

and

**AOAC International – Guidelines for Laboratories Performing
Microbiological and Chemical Analysis of Food, Dietary
Supplements, and Pharmaceuticals – Revision August 2018**

In the field of

TESTING

This certificate is valid only when accompanied by a current scope of accreditation document.
The current scope of accreditation can be verified at www.anab.org.

A handwritten signature in black ink, appearing to read 'R. Douglas Leonard Jr.', is positioned above a horizontal line.

R. Douglas Leonard Jr., VP, PILR SBU

Expiry Date: 20 February 2023

Certificate Number: AT-1502



This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017.
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).

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017
AOAC INTERNATIONAL – GUIDELINES FOR LABORATORIES
PERFORMING MICROBIOLOGICAL AND CHEMICAL ANALYSIS OF
FOOD, DIETARY SUPPLEMENTS, AND PHARMACEUTICALS –
REVISION AUGUST 2018

IEH Laboratories and Consulting Group

3458 E. 33rd Place
 Yuma, AZ 85365

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TESTING

Valid to: **February 20, 2023**

Certificate Number: **AT-1502**

Microbiological

| Specific Tests and/or Properties Measured | Specification, Standard, Method, or Test Technique | Items, Materials or Product Tested | Key Equipment or Technology |
|---|--|--|-----------------------------|
| <i>E. coli</i> O157, EHEC/STEC, <i>Salmonella</i> | MB217.01 AOAC-RI PTM 100701 (25 - 375 g) | Food, raw ground beef, raw beef trim, raw poultry, RTE turkey (not for STEC), mixed leafy greens, nuts, green onions, fruits, swabs, water | PCR System |
| <i>Salmonella</i> sp. | MB217.01 AOAC-RI PTM 100701 (25 - 375 g) | Food, raw ground beef, raw beef trim, raw poultry, RTE turkey, mixed leafy greens, nuts, green onions, fruits, swabs, water | PCR System |
| <i>Salmonella</i> sp. | MB315.01 (25 - 375 g) | Food, raw ground beef, raw beef trim, raw poultry, RTE turkey, mixed leafy greens, nuts, green onions, fruits, swabs, water | PCR System |
| <i>Listeria</i> sp. and <i>L. monocytogenes</i> | MB316.01 AOAC-RI PTM 021201 (25 - 375 g) | Food, raw ground beef, raw beef trim, raw poultry, RTE turkey, mixed leafy greens, nuts, green onions, fruits, swabs, water | PCR System |

Microbiological

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|--|--|---|------------------------------------|
| <i>E. coli</i> O157, EHEC / STEC, <i>Salmonella</i> sp., <i>Listeria</i> sp. and <i>L. monocytogenes</i> | MB490.01 MB316.01 AOAC-RI PTM 021201 (25 - 375 g) (1 - 2 L) | Sprouts: Irrigation Water and Processing Water | PCR System (24 hours) |
| Gram-Negative and Gram-Positive Bacterial Family Groups | MB491.01 Process Control Index (25 - 375 g) | Food, Raw ground beef, raw beef trim, raw poultry, RTE turkey, mixed leafy greens, nuts, green onions, fruits, swabs, water | PCR System |
| <i>Shigella</i> sp. | MB222.01 (25 - 375 g) | Food, raw ground beef, raw beef trim, raw poultry, RTE turkey, mixed leafy greens, nuts, green onions, fruits, swabs, water | PCR System |
| <i>E. coli</i> 0157 | MB217.02 AOAC-RI PTM 011401 (25 - 375 g) | Food, raw ground beef, raw beef trim, raw poultry, RTE turkey, mixed leafy-greens, nuts, green onions, fruits, swabs, water | Roka Atlas |
| STEC | MB217.02 AOAC-RI PTM 011401 (25 - 375 g) | Food, raw ground beef, raw beef trim, raw poultry, RTE turkey, mixed leafy-greens, nuts, green onions, fruits, swabs, water | Roka Atlas |
| <i>Salmonella</i> sp. | MB217.02 AOAC-RI PTM 031201; AOAC-RI PTM 041303 (25 - 375 g) | Food, raw ground beef, raw beef trim, raw poultry, RTE turkey, mixed leafy-greens, nuts, green onions, fruits, swabs, water | Roka Atlas |
| <i>Listeria</i> sp. <i>Listeria monocytogenes</i> | MB316.02 AOAC-RI PTM 011201; AOAC-RI PTM 061503; AOAC-RI PTM 111301 (25 - 375 g) | Food, raw ground beef, raw beef trim, raw poultry, RTE turkey, mixed leafy-greens, nuts, green onions, fruits, swabs, water | Roka Atlas |

Microbiological

| Specific Tests and/or Properties Measured | Specification, Standard, Method, or Test Technique | Items, Materials or Product Tested | Key Equipment or Technology |
|---|--|---|-----------------------------|
| Aerobic Plate Count | MB073.02 AOAC 990.12 (25 g) | Food, RTE foods (meats, dairy, produce, salads, cereals), raw meats, poultry, seafood, mixed leafy greens, green onions, fruits, seeds, grains, nuts and their derivatives, spices, swabs, water, animal food and feeds | Petrifilm |
| Aerobic Plate Count | MB073.01 FDA BAM Chapter 3 AOAC 966.23 CMMEF, 4 th Ed. (25 g) | Food, RTE foods (meats, dairy, produce, salads, cereals), raw meats, poultry, seafood, mixed leafy greens, green onions, fruits, seeds, grains, nuts and their derivatives, spices, swabs, water, animal food and feeds | Agar Plate |
| Total Coliform/ <i>E. coli</i> | MB072.01 AOAC 991.14; AOAC 998.08 (25 -125 g) | Food and Environmental Samples | Petrifilm |
| Total Coliform/ <i>E. coli</i> | MB072.02 CMMEF 4 th Ed. (25 -125 g) | Food and Environmental Samples | Agar Plate |
| Yeast & Mold Count | MB074.02 AOAC 997.02 (25 g) | Food and Environmental Samples | Petrifilm |
| Yeast & Mold Count | MB074.01 FDA BAM, Ch.18, 8 th Ed. (25 g) | Food and Environmental Samples | Agar Plate |
| <i>Staphylococcus aureus</i> | MB443.01 AOAC 2003.07; AOAC 2003.08; AOAC 2003.11 AOAC 2001.05 (25 g) | Food and Environmental Samples | Petrifilm |

Microbiological

| Specific Tests and/or Properties Measured | Specification, Standard, Method, or Test Technique | Items, Materials or Product Tested | Key Equipment or Technology |
|---|--|---|--|
| <i>Enterobacteriaceae</i> Count | MB219.01 CMMEF, 4 th Ed. (25 g) | Food, RTE foods (meats, dairy, produce, salads, cereals), raw meats, poultry, seafood, mixed leafy greens, green onions, fruits, seeds, grains, nuts and their derivatives, spices, swabs, water, animal food and feeds | Agar Plate |
| <i>Enterobacteriaceae</i> Count | MB219.02 AOAC 2003.01; FDA BAM, 8 th E. (25 g) | Food, RTE foods (meats, dairy, produce, salads, cereals), raw meats, poultry, seafood, mixed leafy greens, green onions, fruits, seeds, grains, nuts and their derivatives, spices, swabs, water, animal food and feeds | Petrifilm |
| Lactic Acid Bacteria Count | MB231 CMMEF, 4 th Ed. (25 g) | Food and Environmental Samples | Agar Plate |
| Total Coliform / Fecal Coliform / Generic <i>E. coli</i> | MB923 FDA BAM, 8 th Ed.; SM 9221 (25 - 125 g) (100-mL) | Food, mixed leafy-greens, swabs, fertilizers and soil amendments, irrigation and potable water | Multiple Fermentation 3-Tubes / 5-Tubes |
| Aerobic Plate Count / Total Coliform / Generic <i>E. coli</i> | MB705 (25 g) | Food, raw ground beef, raw beef trim, raw poultry, RTE turkey, mixed leafy-greens, swabs, water | Multiple Fermentation ACE-IEH MPN (24 hours) |
| Aerobic Plate Count | MB704.01 (25 g) | Food, mixed leafy-greens, swabs, water | Multiple Fermentation IEH MPN (12 hours) |
| Generic <i>E. coli</i> Count | MB707.01 (25 g) | Food, environmental swabs / sponges | Multiple Fermentation IEH MPN (12 hours) |
| Total Coliform / Fecal Coliform / Generic <i>E. coli</i> | SM 9221 (B, E, F) (100-mL) | Potable and non-potable water, wastewater, irrigation water | Multiple Fermentation 3-Tubes / 5-Tubes |
| Total Coliforms / Generic <i>E. coli</i> | US EPA Method 1604 (100-mL) | Potable and non-potable water, wastewater, irrigation water | Membrane Filtration Funnel System |

Microbiological

| Specific Tests and/or Properties Measured | Specification, Standard, Method, or Test Technique | Items, Materials or Product Tested | Key Equipment or Technology |
|---|--|---|--|
| Aerobic Plate Count | MB073.06 AOAC-RI PTM 051702 (25 g) | Food, RTE foods (meats, dairy, produce, salads, cereals), raw meats, poultry, seafood, mixed leafy greens, green onions, fruits, seeds, grains, nuts and their derivatives, spices, swabs, water, animal food and feeds, environmental, water | Microfilm |
| Total Coliform/ <i>E. coli</i> | MB072.04 AOAC-RI PTM 051702 (25 - 125 g) | Food, RTE foods (meats, dairy, produce, salads, cereals), raw meats, poultry, seafood, mixed leafy greens, green onions, fruits, seeds, grains, nuts and their derivatives, spices, swabs, water, animal food and feeds, environmental, water | Microfilm |
| Yeast and Mold Count | MB074.03 AOAC-RI PTM 051702 (25 g) | Food, RTE foods (meats, dairy, produce, salads, cereals), raw meats, poultry, seafood, mixed leafy greens, green onions, fruits, seeds, grains, nuts and their derivatives, spices, swabs, water, animal food and feeds, environmental, water | Microfilm |
| <i>E. coli</i> O157, EHEC / STEC, <i>Salmonella</i> sp. | MB320, Ver. 001 (25 g) | Mixed leafy greens | LF-PCR Direct Detection or Detection of Molecular Indicators (6 hours) |
| <i>Cyclospora cayetanensis</i> | MB928.02 FDA BAM Ch19 a,b,c (25 - 50 g) (10-L) | Vegetables, Fruits, Foods, Water and Environmental Samples | PCR System |
| <i>Pseudomonas</i> | MB391.01 | Food, RTE foods (meats, dairy, produce, salads, cereals), raw meats, poultry, seafood, mixed leafy greens, green onions, fruits, seeds, grains, nuts and their derivatives, spices, swabs, water, animal food and feeds | Agar Plate |

Microbiological

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|---|--|---|-----------------------------|
| <i>Enterobacteriaceae</i> Counts | MB291.04 | Food, RTE foods (meats, dairy, produce, salads, cereals), raw meats, poultry, seafood, mixed leafy greens, green onions, fruits, seeds, grains, nuts and their derivatives, spices, swabs, water, animal food and feeds | Microfilm |

Chemical

| Specific Tests and/or Properties Measured | Specification, Standard, Method, or Test Technique | Items, Materials or Product Tested | Key Equipment or Technology |
|--|--|---|--|
| Sample Preparation for Pesticide Multiresidue Analysis | RE942.01 CDFA, QuEChERS | Food (meats, dairy, produce, salads, cereals), raw meats, poultry, seafood, mixed leafy-greens, green onions, fruits, seeds, grains, nuts and their derivatives, water, animal food and feeds | Acetonitrile Extraction Multiple Systems |

Note:

1. This scope is formatted as part of a single document including Certificate of Accreditation No. AT -1502.



R. Douglas Leonard Jr., VP, PILR SBU