

TESTING AND CALIBRATION LABORATORY ACCREDITATION PROGRAM (LAP)

Scope of Accreditation

Legal Name of Accredited Laboratory: Canadian Food Inspection Agency

Location Name or Operating as (if applicable): Calgary Laboratory

Contact Name: Masil Khan

Address: 3650-36 Street N.W.

Calgary, AB T2L 2L1

Telephone: 1 403 478-2704

Fax: 1 403 338-5299

Website: http://inspection.gc.ca

Email: masil.khan@inspection.gc.ca

SCC File Number:	15322
Accreditation Standard(s):	ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories
Fields of Testing:	Biological Chemical/Physical
Program Specialty Area:	Agriculture Inputs, Food, Animal Health and Plant Protection (AFAP) Test Method Development and Evaluation and Non-routine Testing (TMDNRT)
Initial Accreditation:	1997-10-08
Most Recent Accreditation:	2023-12-07
Accreditation Valid to:	2025-10-08

Remarque: La présente portée d'accréditation existe également en français, sous la forme d'un document distinct

Note: This scope of accreditation is also available in French as a document issued separately.





TEST METHOD DEVELOPMENT & EVALUTATION AND NON-ROUTINE TESTING

Description of activities – chemical analysis:

- 1. The development and validation of analytical methods for the detection, characterization and quantification and screening of pesticide residues in food and beverages, feeds, and fertilizers.
- 2. The development of methods for the detection, characterization and quantification of environmental contaminants in food and beverages, fish and seafood, feed and feed ingredients and in fertilizers (compost and bio solids.)
- 3. The modification, adaptation, improvement and validation of existing or published methods for identification and quantification of pesticide residues and other chemical contaminants in food and beverage, animal feeds and fertilizers (including compost).
- 4. The modification, adaptation, improvement and validation of published or existing methods for identification and quantification of environmental contaminants (including ultra-trace levels of dioxins, furans and PCBs) and other persistent organic pollutants in food such as fish and seafood, beverages (such as raw milk, wine), animal feeds and feed ingredients, and fertilizers (including compost and bio solids.)

Description of techniques – chemical analysis:

- 1. Evaluation and use of various extraction techniques such as liquid/liquid extraction, QuEChERS, SPE, Soxhlet, (and other extraction techniques including automated extraction techniques) for extraction of chemical contaminants from food, feed and fertilizer matrices.
- 2. Evaluation and use of instrumentation such as GC-MS, GC-MS/MS, LC-MS/MS, HPLC-Fluorescence for technology development and non-routine testing of Pesticides residues.
- GC-HRMS and GC-MS/MS for technology development and non-routine testing of environmental contaminants (including ultra-trace levels of dioxins, furans and PCBs), and the use of LC-MS/MS and UHPLC-Q-Orbitrap for non-targeted testing.

<u>Description of activities – biological analysis:</u>

- 1. De novo development and validation of analytical methods for detection, quantification, isolation, identification and characterization of bacteria in food, water and environmental samples.
- 2. Modification, improvement and validation of published or existing methods for quantification, isolation, identification and characterization of bacteria in food, water and environmental samples.
- 3. Development, modification and validation of methodology for identification and quantification of meat species.

<u>Description of techniques- biological analysis:</u>





- 1. Molecular (including traditional PCR, real-time PCR, digital PCR, commercial PCR platforms, whole genome sequencing, recombinase polymerase amplification) and cultural (including enrichment, selective enrichment, differential plating, biochemical confirmation, microscopy, serology) pathogen detection.
- 2. Enumeration of pathogens and indicator bacteria by agar spread and pour plates, overlay plates, and commercial agar alternatives.
- 3. ELISA for meat species detection.

ANIMAL AND PLANTS (AGRICULTURE)

Foods and Edible Products (Human and Animal Consumption):

(Biological Tests - Microbial Contaminants Unit)

	Microbial Contaminants Only
MFLP-113	Enumeration of Escherichia coli Using Compact Dry EC Medium Count
	Plates
ISO 21528	Horizontal method for the detection and enumeration of
	Enterobacteriaceae
ISO 22964	Horizontal method for the Detection of Cronobacter spp.
MFHPB-03	Determination of the pH of Foods Including Foods in Hermetically Sealed
	Containers
MFHPB-10	Isolation of Escherichia coli O157:H7/NM from foods and environmental
	surface samples
MFHPB-18	Determination of the Aerobic Colony Count in Foods Only for: Mesophilic
	bacteria
MFHPB-19	Enumeration of Coliforms, Faecal Coliforms and of E. coli in Foods Using
	the MPN Method
MFHPB-20	Isolation and Identification of Salmonella from Foods and Environmental
	Samples
MFHPB-21	Enumeration of Staphylococcus aureus in Foods
MFHPB-22	Enumeration of Yeasts and Moulds in Foods
MFHPB-30	Isolation of <i>Listeria monocytogenes</i> and other <i>Listeria spp.</i> from Food
	and Environmental Samples
MFHPB-33	Enumeration of Total Aerobic Bacteria in Food Products and Food
	Ingredients Using 3M [™] Petrifilm [™] Aerobic Count Plate
MFHPB-34	Enumeration of Escherichia coli and Coliforms in Food Products and
	Food Ingredient using 3M Petrifilm <i>Escherichia coli</i> Plates
MFLP-15	The Detection of Listeria Species from Environmental Surfaces Using the
	Dupont Qualicon BAX® System Method and Direct Plating
MFLP-22	Characterization of Verotoxigenic Escherichia coli O157:H7 Colonies by
	Polymerase Chain Reaction (PCR) and Cloth-Based Hybridization Array
	System (CHAS)





MFLP-28	The Qualicon BAX® System Method for the Detection of Listeria
	monocytogenes in a Variety of Food
MFLP-29	Detection of Salmonella in Foods and Environmental Surface Samples
	Using the BAX® System Salmonella Assay
MFLP-30	Detection of Escherichia coli O157:H7 in Select Foods using the
	BAX [®] System <i>E. coli</i> O157:H7 MP
MFLP-46	Isolation of Thermophilic Campylobacter in Foods
MFLP-52	Isolation and Identification of Priority Verotoxigenic Escherichia coli
	(VTEC) in Foods except for Section 7.7 Characterization of VTEC
	isolates by the EHEC multiplex PCR and cloth-based hybridization array
	system (CHAS)
MFLP-53	Identification of Listeria monocytogenes colonies by polymerase chain
	reaction (PCR) and cloth-based hybridization array system (CHAS)
MFLP-66	Determination of Water Activity Using the Aqualab Instrument
MFLP-70	Characterization of Verotoxigenic Escherichia coli (VTEC) Colonies by
	Polymerase Chain Reaction (PCR) and Cloth-Based Hybridization Array
	System (CHAS) for Virulence Markers and Seven O Serogroups
MFLP-74	Enumeration of Listeria monocytogenes in Food
MFLP-75	Procedure for the Isolation of Salmonella species by the Modified Semi-
	Solid Rappaport Vassiliadis (MSRV) Method
MFLP-76	The Dupont Qualicon BAX® System Real-Time Method for the Detection
	of <i>Escherichia coli</i> O157:H7 in Raw Beef Trim and Raw Ground Beef
USDA/FSIS	Identification of Animal Species in Meat and Poultry Products
Chap.17	

(Chemical Tests - Environmental Contaminants Unit)

Varioninoan rooto	
EC-001	Determination of Polychlorinated Dibenzo-p- Dioxins, Polychlorinated
	Dibenzofurans and Polychlorinated Biphenyls in Milk, Fish products and
	seafood, Feed Additives and Fertilizers by Isotope Dilution on GC/HRMS
EC-005	Determination of Polycyclic Aromatic Hydrocarbons in Fish and Smoked
	Fish by GC/HRMS

(Chemical Tests - Pesticide Residues Unit)

Official rests – resticiae residues offic	
F-F-001	Multiresidue Method for the Determination of Pesticides in Animal Feeds
	(GPC/SPE Clean-up and GC/MSD Detection)
PMR-001	Determination of Pesticides in Fruits and Vegetables (with Solid Phase
	Extraction Clean-Up and GC/MSD Detection)
PMR-005	Determination of Pesticides in Difficult Matrix Fruits and Vegetables (with
	Solid Phase Extraction Clean-Up and GC/MSD Detection)





	-
PMR-008	Multi-residue Method for the Determination of Organochlorine Pesticides
	in Fish Oil (GPC/SPE Clean-up, GC/MSD Detection)
PMR-016	Determination of Pesticides in Fruits and Vegetables Using Liquid
	Chromatography Electrospray Ionization Mass Spectrometry
	(UHPLC/ESI-MS/MS)
PMR-017	Determination of Glyphosate and Glufosinate and their Metabolites in
	Food of Plant Origin and Animal Feeds by LC-MS/MS
PMR-018	Determination of Pesticides in High Fat Content Food Matrices using LC-
	MS/MS
PMR-019	Determination of Pesticides in Nuts and Seeds by GC-MS Detection and
	QuEChERS Extraction
PMR-020	Determination of Pesticides Residues in Compost and Fertilizers using
	GC-MSD and LC-MS/MS
PMR-021	Determination of Pesticides in Fish and Shellfish using GC-MS/MS
PMR-022	Determination of Pesticides in Animal Feed using LC-MS/MS
PMR-025	Determination of Pesticides in Fruits and Vegetables using Liquid
	Chromatography Electrospray Ionization Mass Spectrometry
	(UHPLC/ESI-MS/MS)
SPR-002	Determination of EBDC as EDA Conversion in Fruits and Vegetables
	(HPLC with Fluorescence Detection Method)

Other (specify):

Number of Scope Listings: 42

Number of TMDNRT Techniques: 6

Notes:

ISO/IEC 17025:2017: General Requirements for the Competence of Testing and Calibration Laboratories

RG-TMDNRT: SCC Requirements and Guidance for Accreditation of Laboratories Engaged in Test Method Development and Non-Routine Testing

EC-; **F-F-**; **PMR-**; **SPR-**: Methods in the Analytical Methods Manuals of the Canadian Food Inspection Agency Calgary Laboratory.

CFIAFMWG: Methods from the Food Microbiology Working Group of the CFIA

MFHPB; **MFLP**: Methods in the Compendium of Methods for the Microbiological Examination of Foods. Health Canada

USDA/FSIS: Method in the United States Department of Agriculture/ Food Safety Inspection Service Microbiology Laboratory Guidebook





This document forms part of the Certificate of Accreditation issued by the Standards Council of Canada (SCC). The original version is available in the Directory of Accredited Laboratories on the SCC website at www.scc.ca.

Elias Rafoul Vice-President, Accreditation Services Publication on: 2023-12-07