

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): Dartmouth Laboratory

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SCC File Number:	15582
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:	2002-07-24
Most Recent Accreditation:	2024-09-09
Accreditation Valid to:	2026-07-24

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 separately issued document.





ANIMAL AND PLANTS (AGRICULTURE)

Test Method Development & Evaluation and Non-Routine Testing

Chemistry

Activities:

- Development and validation of new testing methods for the screening and quantification of veterinary drug residues in fish products, toxins in food, shellfish and fish, and toxic elements and other contaminants in food and fish products.
- Modification, adaptation, improvement, and validation of existing testing methods for the screening and quantification of veterinary drug residues in fish products, toxins in food, shellfish and fish, and toxic elements and other contaminants in food and fish products.
- Development of instrumental techniques for screening and quantifying veterinary drug residues in fish products, toxins in food, shellfish and fish, and toxic elements and other contaminants in food and fish products.
- Non-routine testing to meet customer demnds

Techniques:

- High Perfprmance Liquid Chromatography (HPLC)
- Liquid Chromatography Mass Spectrometery (LC-MS-MS)
- Inductively Coupled Plasma Mass Spectrometery (ICP-MS)
- Liquid Chromatography Inductively Coupled Plasma Mass Spectrometery (LC-ICP-MS)
- Gas Chromatography Mass Spectrometry (GC-MS)

Microbiology and Molecular Biology

Activities:

- Development and validation of new analytical methods for screening, and determination of bacteria in food, water and environmental samples.
- Modification, improvement and validation of published or existing methods for screening and determination of bacteria in food, water and environmental samples.
- Development, modification and validation of methodology for molecular identification of fish species.
- Non-routine testing to meet customer demands.





Techniques:

- Direct plating, and MPN methods for enumerating microorganisms
- Biochemical and cultural identification of microorganisms
- Polymerase chain reaction (PCR)
- DNA Sequencing
- DNA Barcoding

The laboratory is accredited for the following routine test methods:

Chemical Examinations of Foods for Human Consumption Including Fish and Fish Products

SOM-DAR-CHE-001	Determination of Domoic Acid in Shellfish by LC-UV and LC-MS/MS
	For: DA
	In: Molluscs, live, frozen, or processed
SOM-DAR-CHE-002	Determination of Lipophilic Shellfish Toxins in Shellfish by LC-MS/MS
	For:
	Okadaic acid group: OA, DTX1, DTX2, OA esters, DTX1 esters, DTX2
	esters,14,15-dihydroDTX1,
	Pectenotoxin group: PTX1, PTX2, PTX3, PTX4, PTX6, PTX11,
	Azaspiracid group: AZA1, AZA2, AZA3,
	Yessotoxin group: YTX, homoYTX, 45-OH YTX, 45-OH homoYTX,
	In:Molluscs, live, frozen, or processed
SOM-DAR-CHE-028	Determination of Tetracyclines in Fish and Shellfish Products by LC-MS/MS
	For: OTC, TC, CTC, and DOXY
	In: Aquacultured fish and shellfish
SOM-DAR-CHE-036	Determination of Metals in a Variety of Foods by ICP-MS
	For: Li, Be, B, Mg, Al, Ti, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, As, Se, Mo, Cd, Sn,
	Sb, Hg, Tl, Pb, U
	In: All foods and fish
SOM-DAR-CHE-038	Determination of Nitrofuran Metabolites in Fish and Shellfish Products by
	LC-MS/MS
	For: AOZ, AHD, SEM, and AMOZ
	In: Aquacultured fish and shellfish products
SOM-DAR-CHE-041	Determination of Aflatoxin M-1 in Milk by LC-FLD
	For: Aflatoxin M-1
	In: Bovine milk and dried milk powders
SOM-DAR-CHE-051	Determination of Erythromycin in Fish and Shellfish Products by LC-MS/MS
	For: ERY
	In: Aquacultured fish and shellfish products
SOM-DAR-CHE-052	Determination of Paralytic Shellfish Toxins in Shellfish by LC-FLD with Post-
	column Oxidation (PCOX)
	For: GTX1, GTX2, GTX3, GTX4, GTX5, dcGTX2, dcGTX3, NEO, STX,
	dcSTX, C1, and C2
	In: Molluscs, live, frozen, or processed





SOM-DAR-CHE-053	Determination of Speciated Arsenic Compounds in Foods by LC-ICP-MS
	For: Arsenic acid, arsenious acid, arsenobetaine, arsenocholine, monomethyl
	arsenic acid and cacodylic acid
	In: All foods and fish
SOM-DAR-CHE-054	Determination of Formaldehyde in Maple Syrup by Spectrofluorimetry
	For: Formaldehyde
	In: Maple syrup
SOM-DAR-CHE-057	Determination of Nitroimidazoles in Fish and Shellfish Products by LC-
	MS/MS
	For: HMMNI, IPZ, IPZ-OH, MNZ, MNZ-OH, RNZ and DMZ
	In: Aquacultured fish and shellfish
SOM-DAR-CHE-060	Determination of Total Volatile Base Nitrogen in Fish and Fish Products by
	Distillation/Titration
	For: TVBN
SOM-DAR-CHE-061	In: Fish and fish products Determination of Carbapenems in Fish and Shellfish Products by LC-MS/MS
SOM-DAK-CHE-001	For: BIA, MERO, DORI and ERTA
	In: Aquacultured fish and shellfish
SOM-DAR-CHE-062	Determination of Multiple Veterinary Drug Residues in Fish and Shellfish
	Products by LC-MS/MS
	For:
	(Fluoro)quinolones: CIPRO, DANO, ENRO, SARA, MARBO, ORBI,
	DIFLOX, NOR, OXO, NLDX, FLMQ
	Triphenylmethane Dyes: LMG, MG, CV, LCV
	Sulfonamides: SAA, SCP, SDM, SDZ, SDX, SGD, SMZL, SMM, SMP,
	SMR, SMZ, SMX, SPY, SQX, STZ, SXL, SIX, SNL, TMP, OMP
	Tetracyclines: OTC, TC, CTC, DOXY
	Nitroimidazoles: MNZ, DMZ, RNZ, MNZ-OH, IPZ-OH, HMMNI, IPZ
	Steroids: MT, NAN, EPINAN, BOLD, epiBOLD
	Stilbenes: DES, DIEN, HEX
	Amphenicols: CAP, TAP, FLR, FLRA.
	In: Aquacultured fish and shellfish
SOM-DAR-CHE-063	Determination of Insecticides in Fish by LC-MS/MS
	For:
	Pyrethroids: CYP, DELT
	Avermectins: EMA, IVR
	Benzoylureas: TEF, LUF
	In: Aquacultured fish
SOM-DAR-CHE-066	Determination of Borates in Fish Products by
	Colorimetric Assay
	For: Borates
	In: Caviar and Roe

Microbiological and Molecular Examinations of Foods for Human Consumption Including Fish and Fish Products

FDA-BAM-Chapter 9	Other Vibrios, Vibrio parahaemolyticus A. Enrichment, isolation and
	enumeration, MPN Procedure



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-19	Enumeration of Coliforms, Faecal Coliforms and of <i>E. coli</i> in Foods using the
	MPN Method
MFHPB-20	Isolation and Identification of Salmonella from Food and Environmental
	Surface Samples
MFHPB-21	Enumeration of <i>Staphylococcus aureus</i> in Foods
MFHPB-30	Isolation of <i>Listeria monocytogenes</i> and other <i>Listera spp.</i> from Foods and
	Environmental Samples
MFHPB-33	Enumeration of Total Aerobic Bacteria in Food products and Food ingredients
WII T II D 00	using 3M [™] Petrifilm [™] Aerobic Count Plates
MFHPB-34	Enumeration of <i>Escherichia coli</i> and Coliforms in Food Products and Food
WII T II D-34	Ingredients
	using 3M™ Petrifilm™ <i>E. coli</i> Count Plates
MFLP-15	Detection of <i>Listeria</i> Species from Environmental Surface Samples Using
	the BAX® System Genus <i>Listeria</i> Assay
MFLP-22	,
WFLP-22	Characterization of Verotoxigenic <i>Escherichia coli</i> O157:H7 Colonies by
	Polymerase Chain Reaction (PCR) and Cloth-based Hybridization Array
MEL D. OO	System (CHAS)
MFLP-28	Detection of <i>Listeria monocytogenes</i> in Foods and Environmental Surfaces Using the Bax ® System <i>L. monocytogenes</i> Assay
MELD 00	
MFLP-29	Detection of Salmonella in Foods and Environmental Surface Samples Using the Bax® System Salmonella Assay
MELD 00	
MFLP-30	Detection of Escherichia coli O157:H7 in Select Foods using the BAX®
MELD 40	System PCR Assay for <i>E. coli</i> O157:H7 MP
MFLP-40	Detection of Salmonella in food products by the VIDAS® Easy Salmonella (SLM) method
MEL D. FO	
MFLP-52	Isolation and identification of priority Verotoxigenic <i>Escherichia coli</i> (VTEC) in
	foods
MFLP-53	Identification of <i>Listeria monocytogenes</i> colonies by polymerase chain
MFLP-66	reaction (PCR) and cloth-based hybridization array system (CHAS) Determination of Water Activity Using the Aqualab Instrument
MFLP-70	Characterization of Verotoxigenic Escherichia coli (VTEC) Colonies by
I WII EI -70	Polymerase Chain Reaction (PCR) and Cloth-Based Hybridization Array
	System (CHAS) for Virulence Markers and Seven O Serogroups
MFLP-74	Enumeration of <i>Listeria monocytogenes</i> in Foods
MFLP-77	Detection of <i>Listeria monocytogenes</i> and other <i>Listeria</i> spp. in food products
	and environmental samples by the VIDAS® <i>Listeria</i> species Xpress (LSX) method
MFLP-102	Identification of <i>Vibrio parahaemolyticus</i> colonies by real-time polymerase
102	chain reaction
MFLP-113	Enumeration of Escherichia coli Using Compact Dry EC Medium Count Plates
SOM-DAR-MIC-016	DNA Barcoding Generation for use in Fish Species Identification
	In: Fish tissue including fresh, frozen, salted, or dried



Number of Scope Listings: 40 plus 10 TMDNRT techniques

Notes:

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

SOM-DAR-CHE: Dartmouth Laboratory - Chemistry Section Method **SOM-DAR-MIC:** Dartmouth Laboratory - Microbiology Section Method

MFHPB: Microbiological Analysis of Foods Health Products and Food Branch, Health Canada Compendium of Analytical Methods

MFLP: Microbiological Analysis of Foods Laboratory Procedures, Health Canada Compendium of Analytical Methods

FDA-BAM: United States Food and Drug Administration, Bacteriological Analysis Manual

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-ccn.ca.

Elias Rafoul Vice-President, Accreditation Services Publication on: 2024-09-18