TESTING AND CALIBRATION LABORATORY ACCREDITATION PROGRAM (LAP)

Scope of Accreditation

Accredited Laboratory No. 395

Legal Name of Accredited Laboratory:	**RCMP Forensic Science & Identification Services**
Location Name or Operating as (if applicable):	NATIONAL FORENSIC LABORATORY SERVICES - SURREY
Contact Name:	Nancy Ouellette
Address:	14200 Green Timbers Way, Mail Stop #401 Surrey, BC V3T 6P3
Telephone:	+1 613-991-1225
Website:	www.rcmp-grc.gc.ca/fsis-ssji
Email:	nancy.ouellette@rcmp-grc.gc.ca
Alternate Contact:	Gurjodh Singh, tel. +1 778-290-5489 Gurjodh.Singh@rcmp-grc.gc.ca

SCC File Number:	15489
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:	Forensic: (Forensic Firearms / Toolmarks, Forensic Biology / DNA, Forensic Toxicology)
Initial Accreditation:	2001-06-20
Most Recent Accreditation:	2021-05-06
Accreditation Valid to:	2025-06-20

Canada

SCC Group Accreditation:
This laboratory is a part of a Group Accreditation with the following facilities in accordance with SCC's policy on Group Accreditation documented in the Accreditation Services Accreditation Program Overview.

- RCMP Forensic Science & Identification Services - NATIONAL FORENSIC LABORATORY SERVICES -EDMONTON, Accredited Laboratory No. 337;
- RCMP Forensic Science & Identification Services - NATIONAL FORENSIC LABORATORY SERVICES - OTTAWA, Accredited Laboratory No. 435;
- RCMP Forensic Science & Identification Services - NATIONAL DNA DATA BANK, Accredited Laboratory No. 531

FORENSICS

Firearms / Tool Marks

Description of Activities:

The Firearms and Toolmark Identification Section carries out the following examinations/analyses:

- Legal classification and mechanical assessment of firearms, firearms components, ammunition and prohibited devices;
- Comparison and identification of firearm toolmarks on fired ammunition components (bullets and cartridge cases);
- Probable type and make determination of fired ammunition components (bullets and cartridge cases);
- Muzzle to target distance or range determination, bullet impact damage assessment and bullet path analysis;
- Comparison and identification of non-firearm toolmarks;
- Restoration of serial numbers;
- Physical match and comparisons;
- Unsolved case database searches using an Integrated Ballistics Identification System (IBIS), and participation in the Canadian Integrated Ballistics Identification Network (CIBIN); and
- * On-site examinations (crime scene and autopsies).

Techniques for which laboratory is accredited:

a. Measurements: linear, mass, force, velocity, sound level;
b. Inspection and functional testing of firearms; including shock discharge and trigger pull analysis;
c. Macroscopic and microscopic examination and comparison of toolmarks (firearm and non-firearm);
d. Chemical spot tests;
e. Chemical and electrolytic etching methods;
f. Magnetic particle inspection;
g. Image acquisition of fired ammunition components (bullets and cartridge cases) and virtual evaluation (correlation) of database search results; and
h. * On-site bullet impact damage assessment, bullet path analysis and chemical tests.

Forensic Biology / DNA

Description of Activities:

The Biology Services Section carries out the following examinations/analyses:

- Examination of evidentiary material for the presence of biological material, possible biological material and non-biological material;
- Autosomal STR and Y-STR DNA analysis of biological material recovered from evidentiary material, which included the extraction, purification and quantification of human and male DNA, the amplification of DNA and the resolution of DNA typing profiles using capillary electrophoresis; and
- Interpretation of DNA typing results to establish associations between individuals and crime scene samples, as well as paternity/parentage and other relatedness relationships.

Techniques for which laboratory is accredited:

a. Body fluid examination and identification using biochemical and/or microscopic procedures;
b. DNA extraction, purification, quantification, Polymerase Chain Reaction (PCR) amplification using autosomal STR and Y-STR Amplification Kits, and capillary electrophoresis;
c. Interpretation of DNA typing profiles;
d. Hair identification and determination of suitability for autosomal STR DNA typing; and
e. Macroscopic and microscopic examination.

Forensic Toxicology

Description of Activities:

The Toxicology Services Section carries out the following examinations/analyses:

- Body fluid and tissue screen and quantification for volatile substances including ethanol;
- Body fluid and tissue screen and quantification for drugs and poisons;
- Analysis of drugs, poisons and other toxic materials in or on clothing, foods, pharmaceuticals and miscellaneous exhibits; and
- Verifies the ethanol concentration of alcohol standard used in breath testing.

Techniques for which laboratory is accredited:

a. Immunoassay;
b. Macroscopic examination;
c. Sample preparation, extraction and general chemical and physical tests;
d. Ultra/High-performance liquid chromatography coupled with tandem mass spectrometry detection;
e. Gas chromatography coupled with nitrogen & phosphorus detection;
f. Gas chromatography coupled with flame ionization detection;
g. Gas chromatography coupled with mass spectrometry detection;
h. Ultra/High-performance liquid chromatography coupled with diode array detection;
i. Ultra/High-performance liquid chromatography coupled with quadrupole time-of-flight mass spectrometry detection; and
j. Infrared spectrophotometry.

Number of Scope Techniques: 23 techniques

Notes:

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

RG_Forensics: SCC Requirements and Guidance for the Accreditation for Forensic Testing Laboratories

RG-ON-SITE-Testing: SCC Requirements and Guidance for the Accreditation of Testing and Calibration Laboratories Performing On-Site Testing and Calibrations

* These test methods can be performed on-site as per RG-ONSITE.

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
Published on: 2021-06-11

Canada