



# FORENSIC FIREARM & TOOLMARK EXAMINER

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**COMPETITION: #2410-50175699**

**STATUS:** Regular full-time  
**SECTION:** Forensic Firearm & Toolmark Unit, Forensic Services Section  
**HOURS OF WORK:** Tuesday to Friday, 8:00 a.m. to 4:00 p.m.  
**SALARY:** Pay Grade 30 - \$49.61 to \$58.74 per hour  
**COMPETITION END DATE:** Thursday, January 25, 2024

Responsible for providing Forensic Firearm and Toolmark Identification services for the Vancouver Police Department and other law enforcement agencies as required.

## ESSENTIAL DUTIES

- Examines a variety of physical evidence for toolmarks and damage in order to determine a relationship between the toolmarks and suspect tools using acceptable methodology
- Examines and physically matches various materials for same source determination
- Examines and test fires firearms to determine their mechanical condition and legal classification
- Examines and identifies ammunition, ammunition components, and firearm parts and accessories, including air guns, modified blank firing guns, and flare guns
- Maintains and checks firearms with evidence from unsolved case files
- Examines gunshot residue to perform distance determinations
- Mixes and applies chemical reagents for serial number restorations and range determination testing
- Performs accurate and complete forensic examinations and prepares reports and certificates of analyst as required
- Forms opinions based on observations using a generally accepted range of conclusions in the scientific community
- Interprets visual and microscopic marks with careful consideration of uniqueness
- Gives opinions on possible bullet trajectories at crime scenes
- Maintains evidentiary continuity in regards to various forms of physical evidence
- Provides expert witness testimony in court based on examination findings
- Maintains certification and keeps current on new methodologies in the field of forensic firearm and toolmark identification
- Completes proficiency examinations
- Acts as a consultant for the VPD on scientific matters and provides assistance at crime scenes
- Attends autopsies to provide assistance with entrance and exit wound determination and evidence retrieval
- Ensures safety protocols with respect to the shooting and handling of firearms, lead exposure, and chemical and biohazardous procedures are maintained
- Performs administrative and technical peer reviews of work notes, forensic reports, and certificates of analyst
- Manages unit caseload to meet court disclosure deadlines and priority investigations
- Prepares and co-ordinates relevant documentation to ensure thoroughness in investigations and for court presentation including a current and relevant CV
- Performs other related duties and responsibilities as assigned

## KNOWLEDGE, SKILLS, AND ABILITIES

- Extensive knowledge of police laboratory methods, techniques, terminology, and equipment
- Extensive knowledge of CAD, Photoshop, Excel, Word, Leica Microscope Imaging Software, Firearms Reference Table, General Rifling Characteristics, PRIME, and Firearms Reference Collection Inventory Program
- Thorough knowledge of criminal investigation methods, especially in the field of scientific analysis and the examination of physical evidence
- Thorough working knowledge of firearm function and handling



- Working knowledge of Vancouver Police Department policies
- Working knowledge of court admissibility standards, the laws of evidence, and their application to the preparation and submission of exhibits in court
- Working knowledge of the necessary safety precautions when handling firearms, explosives or volatile solvents
- Working knowledge of police examination practices and techniques
- Ability to design, construct, modify, and test various types of laboratory equipment
- Ability to maintain adequate laboratory notes and records
- Ability to do original research work and to devise new methods of testing
- Skill in performing complex laboratory tests and in interpreting their results
- Ability to write technical reports and articulate scientific information and expert opinion to investigators and the Courts
- Ability to use time and resources productively to complete investigations or projects within diary dates and meet the required standard
- Ability to maintain positive working relationships in a team environment

## EXPERIENCE

### Required:

- Experience as a qualified Forensic Firearm and Toolmark Examiner
- Experience in appearing in court and providing expert witness testimony

### Preferred:

- Laboratory experience related to police investigational work

## EDUCATION

### Required:

- Bachelors of science degree in natural or physical science
- Completion of an approved specialized training program in Firearm and Toolmark Identification
- Professional membership in the Association of Firearm and Toolmark Examiners
- Valid Firearms Possession/Acquisition Licence

### Preferred:

- Completion of recognized technical courses and/or workshops related to Firearm and Toolmark Identification

## OTHER REQUIREMENTS

- Willingness to be called out on a rotational basis
- Required to attend courses to achieve and maintain professional skills to be declared an expert
- Witness in various courts of law
- Required to be sworn in as a Special Municipal Constable and to consequently be governed under the *Police Act*
- Valid BC Driver's licence (preferred)
- All employees must maintain their enhanced security clearance while employed with the Vancouver Police Department, which will be renewed every five years or as required



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## SELECTION PROCESS

Candidates will be required to achieve a minimum of 70% on all the tests in order to move forward to the interview stage.

- The practical portion of the test will be completed in the lab using a microscope and will account for 60% of overall score
- The interview will account for 40% of overall score

***NOTE: This position falls under the jurisdiction of Teamsters Local 31.***

Applicants should submit a resume via email to [vpd.civilian.jobs@vpd.ca](mailto:vpd.civilian.jobs@vpd.ca) by 4:30 p.m. on the closing date. The competition number must be indicated in the subject line of the email.

***We thank all applicants, however, only those short-listed will be contacted.***