APPENDIX B: GLOSSARY

AFIS Automated fingerprint identification system. Biometric database with image

storage and search capabilities. This system may or may not be part of the national

integrated system (IAFIS).

Laboratory personnel whose primary responsibilities are the analysis of physical analyst/examiner

evidence, review and reporting of analytical results and providing expert testimony.

See analyst/examiner. No professional experience necessary to qualify for hiring at analyst/examiner entry-level

this level.

analyst/examiner

intermediate/senior-level

See analyst/examiner. Professional experience necessary to qualify for hiring at this

level. Includes all levels of above entry-level.

analyst/examiner See analyst/examiner. The highest level of analyst/examiner at the laboratory.

senior-level

A DNA reference sample from an arrestee collected and analyzed for inclusion into arrestee sample

a database.

audit trail Automatically generated data/time stamped records that track all operator entries

and record all actions that create, change or delete information.

authorized FTE The organization that has administrative control of the laboratory has approved a

position, but has not necessarily supplied funds to hire.

Reports that inform on the evidence analysis backlog; either discipline specific or backlog reports

laboratory-wide.

backlogged case A case that has been submitted to a crime laboratory and remains unreported for a

period of 30 days or longer.

backlogged request A request that has been submitted to a disciplinary area of the crime laboratory and

remains unreported for a period of 30 days or longer.

All physical evidence from a single criminal investigation submitted for crime case

laboratory analysis

case outcomes Current status of a criminal investigation for which physical evidence has been

submitted to the laboratory and the final case disposition.

case tracking Time and/or date information regarding case submission, analysis, and reporting to

the submitting agency. Individual cases are provided with a unique identifier.

chain of custody Documentation that tracks the possession and location of evidence from collection

through analysis, possible court presentation and long term storage.

chemical unknown Microscopic and/or instrumental analysis of evidence to determine chemical

composition of substances that do not fit into the criteria of other trace

subdisciplines.

Laboratory personnel whose primary responsibility is to provide support to other clerical/administrative support

laboratory personnel through the performance of organizational/admin duties.

controlled substances The identification of drugs and other substances whose possession or use, either in

pure, legal or illicit dosages, is restricted by the government.

convicted offender sample A DNA reference sample from a convicted offender collected and analyzed for the

inclusion into a database.

A scientific laboratory with at least one full time natural scientist that examines crime laboratory physical evidence in criminal matters, provides reports and opinion testimony with respect to such physical evidence in courts of law. This definition does not include operations that engage exclusively in fingerprint recovery, development, and examination, crime scene investigation, computer crime inquiries and photography. Forensic discipline that conducts the identification, documentation, collection crime scene and/or interpretation of physical evidence at a location external to a laboratory facility and where a suspected crime has occurred. Laboratory personnel whose primary responsibility is to respond to crime scenes, crime scene technician record and collect evidence, and submit that evidence to a laboratory for analysis. Duties at the senior level may include crime scene reconstruction and blood spatter analysis. digital & multimedia evidence The analysis of evidence stored or transmitted in the binary form; and Analog or digital media, including, but not limited to, film, tape, magnetic and optical media, and/or information contained therein. Nonexpendable items purchased that have a useful life of more than two years and equipment cost more than \$5,000. explosives analysis Microscopic and/or instrumental analysis of physical evidence and devices rendered safe for the quantitative/qualitative chemical analysis of low and/or high explosives and/or explosives residue. fiber examination Microscopic and/or instrumental examination of fibers. This analysis may identify the fiber type and other class characteristics by observation of physical, chemical and optical properties. fire debris analysis Instrumental analysis of physical evidence in order to detect the presence of possible ignitable liquid residues foreign to the substrate. firearms/toolmarks Examination and comparison of evidence resulting from discharge and/or use of firearms; comparison of marks made by various tools. forensic biology The location, screening, identification and characterizations of physiological fluids and DNA analysis of biological evidence. This category combines the "biology screening" and "DNA analysis" categories used in the 2002 and 2005 Census of Publicly Funded Crime Labs. fringe benefits Costs incurred by the laboratory to provide non-wage benefits to employees. These retirement. FTE Full Time Equivalent. An employee is considered full time if they are expected to

costs include, but are not limited to, insurance, taxes, vacation, unemployment and

work 40 hours per week. If a part time employee works 20 hours a week he or she should be counted as 0.5 FTE.

The organization that has administrative control of the laboratory has approved a position and funds have been appropriated to support one full time equivalent.

FTE hours spent without duties and pay because of lack of work, funds or other non-disciplinary reasons.

Microscopic and/or instrumental analysis of evidence in order to detect any particulates expelled from any and all openings of a firearm during firing. This

Microscopic examination of the structural characteristics of hair to determine characteristics of the hair source or for comparison with a set of known exemplars.

gunshot residue testing definition does not include weapon-to-target distance determination. hair examination

funded FTE

furlough

hard sources Repeated and dependable sources of funding including, but not limited to, funds

provided from the city, county, state or federal government.

impressions Identification, documentation, collection, and interpretation of two-dimensional and

three dimensional impressions and imprints found at crime scenes. Two subcategories are specified in the survey: footwear and tire tread.

instrument tracking The tracking of all usage, maintenance and calibration data for laboratory

instrumentation.

laboratory system

An organization containing at least two physically separate laboratory facilities that

are independently managed under the control of a single manager in an

organizational chart.

laser microdissection Visualization, isolation and recovery of specific cells from samples mounted on

slides using laser illumination. Frequently abbreviated LMD.

latent prints Development and/or comparison of fingerprint impressions on physical evidence or

other substrates.

LC-MS/MS Liquid chromatography with tandem mass spectrometry. Used for the qualitative

and quantitative analysis of drugs and other compounds. The tandem MS capability

allows analysis of many compounds in a single sample injection.

LIMS Laboratory Information Management System. Any software based system that

records information about items submitted and analyzed by the laboratory.

managerial FTE Laboratory personnel whose primary responsibility is the management or

supervision of other employees.

NIBIN National Integrated Ballistic Information Network. Repository of digital images of

the markings made on spent ammunition recovered from a crime scene or a crime

gun test fire.

outsource Physical evidence from the jurisdiction served is sent to another laboratory, public

or private, for analysis. This does not refer to physical evidence sent to other

laboratories in the same multiple laboratory system.

paint analysis Microscopic and/or instrumental analysis of paint and coating evidence to

determine chemical and physical characteristics that can indicate a specific source type (automotive, architectural, etc.) or be compared to submitted exemplars.

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Paint Data Query. PDQ contains information on the chemical composition of paint

from most domestic and foreign car manufacturers and the majority of vehicles marketed in North America after 1973. This database is maintained by the Royal

Canadian Mounted Police (RCMP).

pending request A request that has been submitted to a disciplinary area of a crime laboratory, but

has not yet been examined and reported to the submitting agency. A pending request will become a backlogged request after it remains unreported for a period of

30 days.

PDQ

performance expectation The expected number of requests, analyzed and reported, for one full time examiner

in one year. This number is a managerial expectation and may be higher or lower

than the actual number of requests completed for 2009.

personnel Total amount budgeted for annual salaries and fringe benefits of all employees

within a laboratory. Fringe benefits include, but are not limited to, insurance, taxes,

vacation, unemployment and retirement.

polynomial texture mapping Images taken from a fixed point of view with lighting at multiple angles are combined to create an image with increased photorealism. Forensic applications

include imaging of impression evidence. Frequently abbreviated "PTM".

quality assurance document management Secure storage and version control of controlled documents including all SOPs and

QA documents.

questioned documents Examination of printed, typed or written material for the purpose of identifying the

source, determining alterations or other means of gaining information about the

item or the circumstances surrounding its production.

reconstruction Determining past events that address questions of investigative importance from the

record of physical evidence that has resulted from those events.

report generation Automatic and/or customizable report creation including but not limited to

certificates of analysis and workload reports.

request Submissions of one or more items of physical evidence from the same case to a

single disciplinary area of a crime laboratory. Multiple submissions of new evidence over time from the same case to one or more disciplinary sections of the

laboratory would may as a new request.

sample tracking Individual items provided with a unique identifying number are tracked with

reference to location and progress of analysis. Unit of entry may be date and/or

time.

scientist A person with a minimum of a bachelor's degree in a natural science who employs

the scientific method in the examination and interpretation of evidence in a crime

laboratory.

sexual assault evidence Any physical evidence submitted from the commission of a sexual assault. This

category includes, but is not limited to, items referred to as sexual assault kits,

victim physical evidence kits and rape kits.

soft sources One-time or unpredictable sources of funding including but not limited to grants

and awards.

supplies Any materials that are expendable and consumed during the course of the year,

including but not limited to: office supplies, postage, training materials, copying

paper and expendable equipment costing less than \$5000.

technical support FTE A FTE whose primary responsibility is to provide support to analysts/examiners via

the performance of laboratory-based tasks such as sample preparation, reagent

preparation and analytical instrumentation maintenance.

toxicology Analysis of biological materials for the presence of drugs and other potentially toxic

materials.

trace Microscopic, chemical and/or instrumental analysis of transferable evidence and

other materials not specifically covered in other disciplines including, but not limited to, gunshot residue, fire debris, explosives, paint, glass, hair, fibers, tape and

other varieties of trace and/or transferable evidence.

turnaround time The time from evidence assignment to report generation.

UPLC Ultra performance liquid chromatography. This technology can be used with the

same sample types as traditional HPLC; drugs and other compounds that degrade at high temperatures. Stationary phase packing particles are smaller than 2.5 micrometers allowing for increased separation efficiency at higher flow rates

without significant losses in resolution.

Y-STR Analysis of short tandem repeat loci on the Y chromosome.