

# Quality Assurance Manual – Part II

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## Quality Assurance Manual – Part II

### 1 EVIDENCE HANDLING

All QDU personnel will take appropriate measures to ensure the integrity of the evidence for future examinations in other forensic disciplines and safeguard the evidence against contamination, loss, or deleterious changes.

#### 1.1 Evidence Storage

A duplicate of each evidence locker access key will be provided to the Unit Chief for inclusion in the unit security cabinet. The Unit Chief will designate an individual to serve as the QDU key custodian. Each entry to the cabinet is recorded in the security cabinet key log and maintained by the key custodian.

#### 1.2 Evidence Packaging

- Anyone writing on packaging containing evidence should exercise caution and ensure no extraneous indentations are placed onto the evidence.
- Machine printed material should not be placed in plastic document holders or bags due to the tendency for the medium to transfer to the plastic if pressure or heat is applied. Printed documents should be placed inside paper envelopes for proper storage and protection.
- Liquid-soaked/wet evidence should not be placed into any plastic document holder or bag, as this may damage the document further and promote mold growth. The evidence should be placed in a paper envelope after it has dried.

#### 1.3 Sealing Evidence

Evidence in the Questioned Documents Unit will be placed under proper seal as soon as practicable. All cases being processed by a pool examiner, assigned examiner, and/or assigned analysts and cases in the technical, verification, and/or blind verification process are considered under active examination. In addition, analysis or comparison of case evidence at least once every sixty days will constitute active examination.

#### 1.4 Evidence Transfers

In instances when multiple QDU personnel are assisting with or conducting examinations on the same evidence, but the evidence is not being transferred, a list of those individuals will be maintained by the assigned examiner within the case file.

### 2 EXAMINATION PROCESS

#### 2.1 General Considerations

Redacted

- If QDU personnel observe trace evidence (e.g., hair, fiber), care must be taken to preserve this evidence and the pool examiner or assigned examiner should be notified.
- Care must be taken as to not tear the evidence or adhere it to any surface, possibly causing damage.
  - If an adhesive material is on the evidence, a barrier sheet may be used to prevent sticking. Analysts will consult with the pool examiner or assigned examiner prior to proceeding with this method.
  - If evidence contains an adhesive material that inhibits the analyst's ability to scan or conduct indented writing examinations, the analyst must consult with the pool examiner or assigned examiner before using a material such as un-du® to remove the adhesive.
- Especially fragile evidence such as charred or liquid-soaked documents must be handled with great care. In most situations, the pool examiner or assigned examiner will have attempted to protect and preserve the charred or soaked evidence before it is transferred to an analyst.

## 2.2 Processing Evidence Prior to DNA Examinations

In the few instances where QDU receives evidence prior to DNA examinations, QDU personnel will take the following precautions:

- A clean disposable surface (e.g., brown paper, Kimwipe, or paper equivalent) must be placed down on any surface where the evidence will be handled, as appropriate.
- QDU personnel will wear at minimum gloves and a mask to prevent their DNA from being transferred to the evidence.
- QDU personnel will clean with alcohol wipes (and let air dry) any scanners that will be used to scan evidence received prior to DNA examinations.

## 2.3 Processing Evidence Prior to Friction Ridge Examinations

For evidence received in QDU prior to being examined for friction ridges (latent prints), QDU personnel will take the following precautions:

- QDU personnel will wear nitrile gloves at all times. Two sets of gloves should be worn if the nitrile gloves fit too tightly.
- If the evidence is composed of a hard surface (e.g., plastic, metal), handling of the evidence should be minimized.
- If an analyst handles latent evidence without gloves, they must immediately inform the pool examiner or assigned examiner.

## 2.4 Processing Biohazard Evidence and Evidence Containing Substances

For evidence received in QDU as containing a biohazard or substance, QDU personnel will take the following precautions:

- All evidence containing biohazards and/or substances will be examined in the biohazard laboratory space using appropriate personal protective equipment (PPE).

- All surfaces which contact the evidence will be properly cleaned using a 10 percent bleach solution prepared that day or a comparable commercial cleaner, where feasible.
- Evidence containing substances that may be harmful will be worked in an area equipped to handle such substances (i.e., chemical fume hood).

## 2.5 Inventory of Evidence

- Evidence items will be labeled with the item identifier, laboratory number, and the examiner's initials whenever the item lends itself to marking.
- The following types of evidence received in the QDU do not lend themselves to some or all of the required markings:
  - **Redacted** postage stamps, or other small items in which space is limited
  - Items requiring other forensic examinations, such as friction ridge examinations
  - Items requiring indented writing examinations
  - Ransom notes
  - Items that may be returned
  - Items covered in biological matter
  - Charred or brittle items
  - Legal documents, such as passports, identification cards, and certificates
  - Historical items
  - Valuable items, such as artwork
  - Other items in which markings would be considered destructive
- If an item does not lend itself to marking, the proximal evidence container/packaging or identifying tag will be initialed.

## 2.6 Case Assignment

- These are general guidelines that should be followed to determine the examiner assignment, but the individual assigning a case has latitude in deciding if any, or all, of the following criteria have a bearing on a particular case assignment:
  - The number of cases that are currently assigned to the examiner
  - The complexity of the cases that are currently assigned to the examiner
  - The number of deadline cases that are currently assigned to the examiner
  - Other projects currently assigned to the examiner
- The Unit Chief may direct other examiners to assist in the examination of major cases, cases with voluminous items, multiple requests for examinations, or cases of a complex nature.

## 2.7 Altering Evidence for Examination

If evidence needs to be altered for examinations (excluding splitting the sides of an envelope or removing spiral rings from notebooks for ESDA purposes), the pool examiner or assigned examiner must contact the contributor to obtain consent for the alteration.

- The request and the contributor’s consent or disapproval will be recorded in the communication log.
- If permission is granted to alter the evidence, the pool examiner or assigned examiner will alter the evidence.
  - Any alterations performed by the examiner will be recorded within the case notes and/or communication log.

## 2.8 Digital Processing of Images

- The following are requirements for digital processing:
  - The original image will remain unaltered.
  - A working copy of the original image will be created and used for digital processing to preserve the integrity of the original image.
- If QDU personnel digitally process an image in casework and enhances or changes its appearance, the software being used and the processing steps performed to the image (e.g., Photoshop – adjusted levels and brightness) will be recorded.
  - The record may be written, printed, or kept in a digital format with the processed image.
  - The record will be maintained in the case file and/or provided to the contributor as secondary evidence.
- QDU cases are dynamic in nature and may require the use of all available digital processing tools; however, the primary processing tools used in casework typically include, but are not limited to:
  - Black & White
  - Brightness/Contrast
  - Channels
  - Curves
  - Dodge/Burn
  - Exposure
  - Filters
  - Hue/Saturation
  - Invert
  - Levels
- File format conversions (e.g., TIFF to JPEG) are routinely performed to reduce file size, allow the file to be used in various applications, and share files. These conversions are not considered digital processing since they do not alter the appearance of the image; therefore, they do not need to be recorded.

## 2.9 Secondary Evidence

- The QDU considers the following items to be secondary evidence when created within the Laboratory:
  - Electrostatic lifts
  - Photographs or images of indentations
  - Lifts of impressions

- Casts of impressions
- Test impressions
- Known exemplars
- Image files may be treated as secondary evidence or included as a record in a digital or physical 1A.
- Each type of secondary evidence will be added as a separate item. The secondary evidence item description will include the discipline, the number of pieces of secondary evidence, and the type of secondary evidence.

Item 5	Questioned Documents Secondary Evidence (12 electrostatic lifts)
Item 6	Questioned Documents Secondary Evidence (Three photographs)
Item 7	Shoe Prints/Tire Treads Secondary Evidence (Twenty footwear test impressions)
Item 8	Shoe Prints/Tire Treads Secondary Evidence (16 tire test impressions)

**Figure 1: Examples of naming different types of QDU secondary evidence.**

- A secondary evidence inventory log will be created and maintained within the laboratory information management system (LIMS).

## 2.10 Facilitation of Document Examinations by Other Forensic Laboratories

- Upon recognizing the need for an examination that is not conducted in the FBI Laboratory, the QDU employee will:
  - Determine the facilitating laboratory that is best equipped to facilitate the examination.
  - Contact the contributor and record the contributor’s consent or non-consent for the use of another forensic laboratory in the communication log.
  - Upon the contributor’s consent, prepare appropriate administrative records to accompany the item(s) or image(s) to be transferred to the other forensic laboratory.
    - The administrative records to accompany the item(s) or image(s) are:
      - A copy of the request for examinations that was submitted to the FBI with the item(s).
      - An electronic formal request on official Bureau letterhead that includes the appropriate administrative information.
  - Contact the other forensic laboratory and transfer the item(s)/image(s) and appropriate records in person, or by FedEx.
    - If only images of the item(s) are required for the completion of the requested examination(s) Redacted the images may be submitted electronically or saved to a disc and submitted in person or by FedEx.
  - Record the transfer(s) of the evidentiary item(s) within the LIMS.
    - Prior to mailing the evidence to the other forensic laboratory, the QDU employee will complete a shipping invoice and deliver the item(s) to the Laboratory mailroom.

- The FedEx tracking number will be recorded in the comments field when the mailroom transfers the evidence out.
- Upon receiving the evidence back from the other forensic laboratory, the QDU employee will record the incoming FedEx number in the comments field during the transfer of the evidence back into the Laboratory.
- It is the responsibility of the other forensic laboratory to forward any original report from their laboratory to the contributor.
- The other forensic laboratory will forward a copy of their report to the FBI Laboratory which will be retained within the FBI’s case file (i.e., Sentinel).

## 2.11 FBI Laboratory File/1A Records

All records will be maintained in the case file, which consists of physical records (if applicable) within a 1A envelope and/or electronic records retained within Sentinel and/or the LIMS.

### 2.11.1 Administrative Records

- In addition to records listed in section 7.1 of the [Laboratory Operations Manual](#), photograph(s) and/or digital image(s) prepared and retained for record purposes will be maintained within the case file by QDU personnel as administrative records.

### 2.11.2 Technical Records

- The following items are considered case-related notes/records which support the examiner’s conclusion(s):
  - Printouts or images from instrumentation
  - Copies or images of positive indented writing lifts
  - Copies or images of reference materials/standards
  - Any drawings, simulations, images, or writing/text depicting observed characteristics
  - Examination images/photographs
  - Examination overlays
  - Manufacturer’s information/specifications
  - Copies or images of test impressions
  - Information associated with database searches
- All technical records will be numbered to account for each page, followed by the total number of pages, using the “Page \_\_ of \_\_” or “\_\_ / \_\_” format.

## 3 REPORTING OF RESULTS

### 3.1 Laboratory Reports

QDU Laboratory Reports will include the general methods and limitations of those methods, as applicable to the examinations conducted, in an appendix format following the Remarks section. Limitations specific to the examination(s) conducted will be provided with the conclusion(s) rendered in the Results of Examinations section.

## 3.2 Reviews

- Upon completing a case, the case examiner will submit the case records and report to a reviewer. The case examiner and reviewer will ensure that the reviewer has not completed any work on the case.
- If corrections are needed, any changes made will be appropriately recorded and the case will be resubmitted for review.

### 3.2.1 Verifications

- The following reported results will be verified:
  - Comparison results
  - Printing process results
  - Alteration/obliteration interpretations
  - Interpretations of indented writing
  - Database associations
  - Any other results deemed necessary by the technical reviewer
- Verifications within the Questioned Documents Unit will be conducted prior to or at the same time as the technical review.
- The verifier will confirm the above-described observation(s), result(s), and/or opinion(s) of the initial examiner/analyst by conducting a review of the submitted item(s) of evidence and the notations made by the initial examiner/analyst.
- A verifier does not create case notes.

### 3.2.2 Blind Verifications (BV)

- Blind verifications conducted within QDU will be performed after the completion of any verifications, but prior to completion of an administrative review.
- Blind verifications will not be conducted when there are fewer than four examiners qualified and authorized in a discipline.
- For a case to qualify to be blind verified it must meet the following criteria:
  - The case is a single submission comparison case
  - The case involves one examination type
  - There are two or fewer questioned items/impressions, and two or fewer known sources/items
  - A comparison has been conducted by the original examiner
- Additional cases may be blind verified at the discretion of the applicable Technical Leader or the Unit Chief.
- Not all cases that qualify to be blind verified must be blind verified, as long as an appropriate number of cases spanning a range of conclusions are conducted annually, as determined by the Unit Chief and/or Technical Leader for that discipline.
- Blind verifications will not be conducted on the following types of cases:
  - Intelligence casework
  - i3 products/services
  - Biohazard cases



- Classified cases
- Grand jury cases
- Cases containing drugs and/or valuable evidence
- Cases containing unknown substances
- Cases with expeditious deadlines
- Blind verifications are managed by the applicable Technical Leader, who reviews the notes, opinions, and results prepared by both examiners and determines if consultation(s) is needed with the examiner(s).
- The verifying examiner's notes and results generated for the blind verification will be included in the case records, along with any record of consultations, if necessary.
- All blind verifications are recorded and tracked by the Technical Leader in a database.

### 3.2.3 Technical Reviews

All cases containing reports with a "Results of Examinations" section will be technically reviewed.

### 3.2.4 Administrative Reviews

All cases will be administratively reviewed.

## 3.3 Intelligence, Information, and/or Investigative Leads (i3) Products

All information regarding QDU procedures for issuing i3 products is contained in [QD-850](#).

## 3.4 Dissemination of Expeditious Results

- The following information is considered technical in nature and will not be provided to the contributor prior to conducting a verification:
  - Whether an alteration or tampering of an item is detected
  - Interpretation of indented writing
  - Results of a database search association
  - Printing process(es) used to produce an item
  - Whether text is located on an office equipment ribbon
  - Authenticity of an item based on reference material
  - Dating verification of an item based on reference material
  - Any interpretive results
- The following information may be provided to the contributor prior to conducting a verification and technical review:
  - Request for additional evidence items (e.g., known items, images of impressions taken prior to casting/lifting)
  - Inquiry concerning the known writing (e.g., is the writing dictated or undictated, how the writing was obtained)
  - Inquiry of whether the original or a better copy of a non-original item is available or can be obtained

- The suitability of an item for comparison Redacted
- The lack of sufficient comparability of items for comparison Red  
acte
- Suggestion of additional examinations that may be probative
- Notification that a requested examination cannot or will not be conducted
- Request for consent to facilitate submission of an item to another forensic laboratory
- Redacted

#### 4 DISAGREEMENT

To report a Source Identification or Source Exclusion, all parties involved must agree to the result.

When inconclusive or qualified opinions are reached by the original examiner, the Technical Leader may establish an acceptable range of conclusions. The acceptable range will not exceed one level of opinion.

All disagreements will follow the process described in section 6 of the [Laboratory Operations Manual](#), when practicable.

#### 5 REVISION HISTORY

Revision	Issued	Changes
00	01/14/2022	Drafted new manual- Combined QD-109-06, QD-110-05, QD-112-08, QD-116-05, and QD-117-04
01	06/30/2023	Throughout document updated references to LAB-200. Updated section 1.3 to align better with LAB-200. Updated sections 2.8 and 2.9 for clarity. Expanded description of the processes in section 3.2.1 and section 3.2.2.
02	09/15/2023	Removed requirement that blind verifications be completed prior to technical reviews in section 3.2.2.