Document Title: Physical Evidence Examination
Controlled: Yes, with red stamp present
Controlled By: Quality Manager

Prepared By: _____ Date: _____

Approved By: _____ Date: _____

A. PURPOSE:

To examine physical evidence for the presence of blood, semen, saliva, trace materials and/or other body fluids. To collect and preserve samples for further analysis.

B. RESPONSIBILITY:

Forensic Science Examiners from the Connecticut State Forensic Science Laboratory who have been trained in the discipline of physical evidence examination according to SOP-FB-31 (Training Manual) and SOP-GL-4 (LIMS/Justice Trax).

C. SAFETY:

Use appropriate measures for the proper handling of physical evidence according to SOP-GL-2 (Safety Manual).

D. DEFINITIONS:

LIMS: Laboratory Information Management System

E. PROCEDURE:

Physical evidence will be examined and serological tests will be performed based on the examiner's knowledge, training and experience according to the submitting agency requests, case information and the condition of the evidence.

1. Disinfecting Utensils and Laboratory Areas

   a. Disinfect utensils between each item or sample examined or handled with Conflikt® or 20% bleach followed by ethanol.

   b. Disinfect other lab equipment, if used, with Conflikt® or 20% bleach. Do not follow with ethanol.

   c. Disinfect laboratory surfaces between each case, submission or item examined as needed with 20% bleach or Conflikt®.

   d. Replace examination paper between each submission or item examined.

E. 2. Evidence Retrieval

a. Examiners will be notified of case assignments by a Forensic Biology Supervisor or through the LIMS computer system according to SOP-GL-4 (LIMS/Justice Trax).

b. Examiners will retrieve evidence from the Evidence Receiving Unit through a secure transfer with the LIMS computer system according to SOP-GL-4 (LIMS/Justice Trax).

3. Evidence Examination

a. Document the package and evidence according to the appropriate Quality Record Worksheets (FBQR-01 through FBQR-04 and FBQR-06).

b. When possible leave the submitting agency seal intact when opening the package.

c. Record and date all written documentation and test results in blue ink on the appropriate Quality Record Worksheets (FBQR-01 through FBQR-04 and FBQR-06). Attach sketches, photocopies and/or photographs as necessary.

d. If the submission contains more than one (1) piece of evidence, sequential item numbers shall be designated for each object, as necessary (e.g. #3-1, #3-2).

e. Evidence that is received wet, should be removed from the package and air dried. Once dry, the evidence may be examined or re-packaged and sealed until future examination.

f. Collect trace materials from the evidence when necessary.

g. Use an alternate light source to locate stains, if necessary, and mark the location on the evidence.

h. Perform serological tests according to SOP-FB-07 through SOP-FB-17 (Forensic Biology Serological Tests) and SOP-FB-03 (Flow Charts).

i. Sampling is conducted according to the substrate and the type and amount of sample present.

Sampling details will be included on the appropriate Quality Record Worksheets (FBQR-01 through FBQR-04 and FBQR-06) according to SOP-GL-1 (Quality Manual). These details will not be included with the results stated in the report.

j. When appropriate, collect blood and/or body fluid samples from the evidence based on the submitting agency requests, case information, type of evidence/stain(s) and number, size and quantity of stain(s).

k. Samples for touch/wearer DNA analysis may also be collected based on the submitting agency requests, case information and type of evidence.

E. 3. l. A physical match examination may be performed macroscopically and microscopically to determine if two (2) items can be physically fit together demonstrating that they were once part of the same item. A 2nd examiner will observe and confirm the physical match and initial the Quality Record Worksheet.

m. A sample may be examined macroscopically and microscopically to determine if it is tissue-like material. Record the findings on the appropriate Quality Record Worksheet.

n. Mark the evidence, sketches, photocopies and/or photographs with the location where the samples were collected.

o. Mark the package and evidence with the examiner's initials.

p. Designate or sub-item the samples collected according to using the letter 'S' for the Forensic Biology Section with the corresponding sample number (e.g. #3-S1, #3-S2).

q. Once the examination(s) is/are complete, place the evidence back in the original packaging, seal and initial the seal. If the original packaging is not suitable for re-packaging do not discard. Place with evidence in new packaging, seal and initial the seal. Store evidence in the designated room temperature storage area.

r. Create the samples collected from the evidence in the LIMS computer system according to SOP-GL-4 (LIMS/Justice Trax) using the designated sub-items.

s. Store samples in designated, secure and temperature appropriate areas or transfer to other sections/units of the Laboratory using the LIMS computer system according to SOP-GL-4 (LIMS/Justice Trax). Print the LIMS transfer sheets as needed. Record transfers to other sections/units on the Request for Examination Sheet (FBQR-10).

t. A secure and password protected LIMS computer system is used in accordance with SOP-GL-5 (Ethics).

u. The transfer of samples from laboratory cases which were opened prior to 1998, will be recorded on the Evidence Transfer Sheet (FBQR-11).

4. For additional information, refer to the Work Instructions described in SOP-FB-31 (Training Manual).

F. REFERENCES:

1. SOP-GL-1 (Quality Manual).
2. SOP-GL-2 (Safety Manual).
3. SOP-GL-4 (LIMS/Justice Trax).
4. SOP-GL-5 (Ethics).