



Intermountain Forensics

SOP #

EVD-203

Revision #

02

Forensic DNA Technical Leader Approval

Issue Date

0301/2023

Evidence Examination and Cutting

1. Purpose

This document describes the procedure for Evidence Examination and Sample Cutting in preparation for DNA laboratory testing.

2. Summary

Evidence packaging is opened and described in JusticeTrax LIMS. Items are prepared for laboratory testing before remaining evidence is re-packaged and re-sealed.

3. Procedure

Evidence Examination

1. Cover the cleaned workspace with disposable protector.
2. Initial and date the evidence packaging under the IMF case number.
3. Open evidence packaging without breaking any previous seals, if possible.
4. Mark each inner package evidence for identification with the IMF case and item number and the examiners initials and date.
5. Open and describe items, including any evidence packaging in JusticeTrax® LIMS.
 - a. Refer to EVD-204 JusticeTrax Evidence Documentation for the detailed process on note entry into JusticeTrax.
 - b. Descriptions should include sufficient information to accurately identify the item at trial, if required.
 - i. Observations may include the number of items (swabs), any staining, color, size, hairs, brand and designs on clothing, bedding, towels, etc.
 - c. Include the general condition if any suspected damage is noted (rips, tears, broken swab sticks). When appropriate, items contained within pockets should be inventoried and documented.
 - d. If hair is present and has the possibility of falling off or interfering with testing, collect separately and place securely with the evidence. Note the collection in the item description if performed.
6. Exam the item with the aid of an Alternate Light Source to identify the presence of possible fluorescing physiological fluids (i.e., saliva, semen), as necessary.
7. Mark Sub-item numbers on the evidence, if possible.
8. Capture an image of the item using the IMF camera and save the images as soon as practicable to the electronic case file in a file titled "Evidence Images".

Swabbing an Item

1. Moisten one wet swab with sterile water and rub across the surface, rolling the swab while rubbing the surface
2. Collect from the same area with one dry swab
3. Sample the swabs for extraction using the cutting procedure below for further processing, as necessary

Sampling from Hair

1. Examine the hair(s) visually for the presence of root-like material at the end of the hair(s).
 - a. Magnification may be used as necessary to visualize the material at the ends of the hairs.



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Sara E Walker

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2. Cut the hairs with visible root-like material approximately 1 centimeter above the material and place the cut portions in a tube.

Cutting

1. All items requested for screening and/or testing are cut for processing.
 - a. Cutting Amounts
 - i. Evidence
 1. Up to ½ of all swabs or stain for evidence items unless an order/approval to consume has been given.
 2. For items swabbed internally, the swabs may be consumed if it is reasonable to assume that additional swabbings may be taken and obtain similar results (clothing, etc.).
 - ii. Reference: Cutting amounts may be adjusted based on any additional information (time since collection, agency specific experience, etc.).
 1. Swabs: Cut entire swab head from one swab.
 2. Saliva on Non-swab Substrate: 1cm X 1cm. Larger cuttings may be taken if degradation is suspected.
 3. Blood on Substrate: 0.5cm X 0.5cm cutting. Larger cuttings may be taken if degradation is suspected.
 4. Liquid Blood: 25µl for EDTA preserved blood, 50+µl for non-preserved blood.
 5. Examiner discretion is used when multiple reference substrates are submitted.

Re-package Evidence

1. Re-package the evidence in its original packaging if possible.
 - a. If the item cannot be replaced in the original packaging, package the item together with the original packaging per ADM-121 Evidence Submission Guidelines
2. Seal the original packaging and add Initials and date across the seal.

Received Extracts

1. Document any tube markings.
2. Centrifuge briefly.
3. Measure the volume and transfer to a new tube.
4. Add water to bring volume above 35µL if necessary.
 - a. An equal amount of water must also be added to the associated reagent blank.

4. References

EVD-204 JusticeTrax Evidence Documentation

5. Definitions

N/A