



<b>ATF-LS-QD15</b> <b>Impression Devices Examinations</b>	Published Online: <b>March 2018</b>
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**PRINCIPLE:**

To determine, if possible, if a device made an impression(s) or whether or not two or more impressions were the result of a common device. These devices can include checkwriter machines, stamps of various types and dry seals.

**SPECIAL HANDLING:**

1. Evidence containing body fluids that is received in the Document Section should be dried under a hood and then repackaged in a paper box or envelope. Items should be handled in order to prevent examiner exposure and preserve DNA, if requested by the submitter. Contents should be documented on the front of the packaging.
2. When handling a contaminated document the examiner must have on a lab coat and rubber gloves. The evidence should be opened and examined only under a biohazard safety hood. After examination the document should be heat sealed. The work area should be disinfected and the lab coat placed in a biohazard bag and sent to the laundry. The gloves must be placed in a properly labeled biohazard disposal after the examination is concluded.
3. Evidence submitted requesting a latent print examination should be placed in a plastic or mylar sheet protector covering the evidence. In this case, item and examiner identifying marks should be placed on the protective sheet.

**SPECIMEN(S):**

1. A questioned impression and known stamp, or
2. Two or more questioned impressions, or
3. Two or more questioned impressions and known stamp

**APPARATUS REQUIRED:**

Stereo microscope, hand magnifier, sufficient light source(s), UV wavelength source, VSC2000HR

**PROCEDURES:**

1. Examine the questioned and known impressions for the following characteristics:
  - A. Presence of ink(s)
    1. What colors are present?
    2. Are the questioned and known inks similar in color and reactivity?
    3. Does the ink come from an inked roller or ribbon?

4. Is there any unusual blending or bleeding of the ink?
5. Is the ink being deposited in its normal location?
6. Does the checkwriter shred, tear or perforate the document?
7. What are the shapes of the letters/numbers and what sort of pattern is used to produce them?
8. Is a removable prefix, etc. present?

B. After the examination, determine whether the suspected checkwriter qualifies as a source of the impressions on the questioned documents. If it does, then evaluate the characteristics seen and determine whether they are indicative of class characteristics or individual characteristics.

Individual characteristics may include patterns of unevenness of perforation and shredding patterns or inking errors. Broken or damaged letters/numbers may leave identifiable defects in the checkwriter impressions.

C. Incorporate the information into a questioned document examination or issue a report.

If a suspect check writer has not been found or submitted, the reference files or Tom Vastrick's monograph/article "Checkwriter Identification" can be consulted for any possible manufacturers or sources. This article is also a resource for helping identify class or individual characteristics for checkwriter impressions.

### Stamps

A. Examine the questioned and known impressions for the following characteristics:

1. Ink type and color
2. Any "defects" or wear patterns
  - a. For apparent "defects", the original stamp should be examined to make sure it is not a class characteristic.
  - b. Many notary stamps have pre-set borders which may look like they contain possible individual defects. However, the border may appear on many stamps with only the interior material changed.
3. Type of stamp used (rubber, synthetic, metal, etc.)
4. Make sure the stamped impression is not the product of a hand duplicator

5. Check to make sure the spatial relationships of printing areas is consistent between the impression(s) and the stamp
  - B. After the examination, determine whether the suspected stamp qualifies as a possible source of the stamped impression(s). If so, determine whether the pattern of characteristics noted is consistent with class characteristics or individual characteristics.
  - C. Either incorporate the finding into a questioned document examination or issue a report.
- If a known stamp was not submitted, determine whether there is any investigative information that may be obtained from the stamped impressions.

### Dry Seals

- A. Examine the dry seal impression(s) for the following characteristics:
    1. Depth and quality of the impression
    2. Any "defects" or wear patterns

Check possible "defects" against the original seal to make sure they are individual and not class characteristic.

    3. Characteristics of the dry seal
    4. Check the "fit" of the two parts of the dry seal
  - B. After the examination, check to see if the suspect seal could have produced the questioned seal. If so, determine whether the pattern of characteristics present is class characteristic or an individual pattern.
  - C. Arrive at a conclusion based on the examination.
  - D. Report the results of these procedures as appropriate.
- If the suspected dry seal has not been found or submitted, see if there is any investigative information present.
2. If none of the known specimen impressions are suitable for comparison and no others are obtained, discontinue these procedures and report accordingly.
  3. Conduct a side-by-side comparison of the questioned impressions, or the questioned impression to the known impressions and/or to the rubber stamp(s).

4. Compare class characteristics (e.g., size, type style, text, shape). If different, discontinue and report accordingly.
5. Compare individualizing characteristics in common such as wear and damage defects, reproducible blemishes, impression voids, improper and extraneous inking, or coincidental peripheral printing (use transparency overlays when needed).
6. Evaluate similarities, differences, and limitations. Determine their significance individually and in combination. Consideration should be given to the possibility that a rubber stamp can be manufactured which duplicates the impressions of another stamp, and that various forms of simulations, imitations, and duplicates of rubber stamps or rubber stamp impressions can be generated by computer and other means.
7. Make written notes on photocopies and/or worksheet(s) of a representative sample of the significant characteristics of the evidence documenting similarities and dissimilarities of each item.
8. Formulate a conclusion based on all the evidence examined.
9. A complete technical review is conducted by another qualified examiner and documented and initialed on Technical Case File Review Form.
10. Record findings in written form and have the results recorded on a formal laboratory report.
11. The bases and reasons for the conclusion(s), opinion(s), or finding(s) should be included either on the examiner's worksheet or on photocopies and may be also included in the report.

## **REFERENCES**

ASTM E2285 (current edition) – Standard Guide for Examination of Mechanical Checkwriter Impressions

ASTM E2286 (current edition) – Standard Guide for Examination of Mechanical Dry Seal Impressions

Various professional papers on aspects of impression examinations.