# CASE REPORT

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# An Unusual Rubber Stamp Case

**REFERENCE:** Moryan DD. An unusual rubber stamp case. J Forensic Sci 2002;47(2):399–401.

**ABSTRACT:** Given a questioned document and a questioned preinked rubber stamp, comparisons of each can be made with a microscope or similar magnification device. If sufficient evidence exists, these questioned items can be linked even if the stamp was not used as it was originally designed.

**KEYWORDS:** forensic science, questioned documents, rubber stamp, stamp pad, rubber stamp defects

Document examiners in the United States rarely are called upon to examine rubber stamps. Rubber stamps are still used, however, and therefore can be used in the commission of a crime, which may lead to the subsequent examination by a forensic laboratory. Although plastics and other materials are used in the production of stamps, the term "rubber stamp" will be used for simplification since it is the term commonly used in describing these type of devices.

One such "rubber stamp" case was submitted to a forensic laboratory for examination. The case involved handwriting comparison, photocopy identification, and rubber stamp identification. Only the rubber stamp identification will be dealt with in this article. Submitted for examination were a machine copy of a divorce decree from the state of California (Fig. 1), a pre-inked "COPY" stamp (Fig. 2) and a time/date rubber stamp. The divorce decree had a "COPY" inked stamp impression in the upper right of the document. A time/date stamp impression was below the "COPY" impression. This impression was, however, not an original but a machine-copied image. The toner of the questioned document was consistent throughout. The investigators wanted to know if one or both stamps were used to produce the original inked impressions on the divorce decree.

Researching this matter in the available forensic document literature revealed several articles regarding the examination of rubber stamp and document comparisons (1–3). Herbertson's (4) work was by far the most comprehensive of the literature researched by this author.

The question was simple. Were the stamps used to produce the impression on the divorce decree? Since the original stamps were present for examination and one stamped impression on the ques-

Received 24 Feb. 2001; and in revised form 14 May 2001 and 26 June 2001; accepted 26 June 2001.

tioned document was original ink, the answer should be simple as well. However, there was a slight problem with the original stamped impressions. There was an inked rectangle surrounding the "COPY" impression. Also, the questioned pre-inked "COPY" stamp was blue in color while the impression on the questioned document was a more blue-black color.

### Methods

It was determined that a three-phase examination process should be used in the examination of this rubber stamp case:

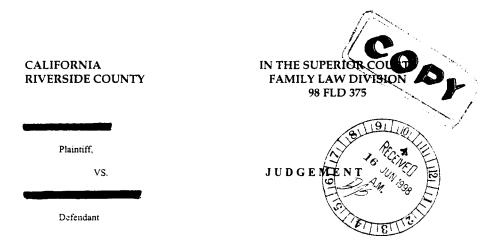
- Determine the type of process making the questioned impression.
- 2. Examine the known samples for individual characteristics.
- 3. Compare the known samples with the questioned material looking for similar individual characteristics if any.

It was determined from the outset that the text and the time/date stamped impression on the questioned divorce decree were toner and the "COPY" stamped impression was ink. The questioned stamps were available for examination. Regarding the "COPY" impression, the problem of examining nonoriginal impressions was eliminated. Eliminated, too, was the impression-to-impression examination. Impression-to-impression examinations are limited and make it difficult to determine if similar defects between the impressions are individual or class characteristics of a general design or manufacturing defect.

Examining the time/date stamp and the corresponding impression revealed they were similar style and size. No visible individual characteristics were noted. Very little can be told from machine-copied stamped impressions. One does not know if a suspected individual characteristic is a result of the original stamp or the reproduction process. No visible individual characteristics were found and no conclusion could be made regarding the identification of the time/date stamp as making the corresponding impression on the questioned document.

Examination of the "COPY" stamp revealed a defect. The defect was a slight bulge on the surface of the "O" on the "COPY" stamp (Fig. 3). This bulge was not permanently attached as it could be moved. It appeared to be some type of debris slightly affixed to the surface of the stamp. Making numerous test prints of the pre-inked stamp revealed that this anomaly did not let ink transfer from the stamp to the paper. A small rounded inkless spot appeared on the paper in the same area as the defect on the "O". Examination of the questioned divorce decree revealed a similar type defect in the same area as the known test stamps (Fig. 4). This type of temporary

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None of the parties hereto having requested a jury trial, this cause comes to be heard before the undersigned Judge presiding at the June 15, 1998, Session of the Family Law Division of the Superior Courts, Riverside County, California, and from the pleadings and Summons appearing in the record, and testimony of witnesses, the Court makes the following:

#### FINDINGS OF FACT

1.

That the Plaintiff has been a bona fide resident of the State of California for at least six (6) months next preceding the commencement of this action and the filing of the Complaint.

2.

The Plaintiff and Defendant were lawfully married to each other on or about March 5. 1993, in Otero County, New Mexico.

3.

The Plaintiff and the Defendant separated on or about 2 October, 1997, and have lived separate and apart continuously from each other in all respects since said separation and at no time resumed the marital relationship since the date of separation.

FIG. 1—Divorce decree with questioned stamped impressions.

unique defect normally leads to the identification of the stamp if the characteristic continues to print the same way as it appears on the questioned impression (4).

Making this case unusual was the problem of the color of the questioned impression not being the same as the original stamp and the curious rectangle surrounding the questioned stamped impression. Numerous tests of the questioned stamp failed to reproduce the color and the rectangle inked image surrounding the impression as seen on the questioned document. This problem complicated what should have been a relatively simple rubber stamp case. The solution was obvious after a little time, thought, and imagination.

The "COPY" stamp was a pre-inked type. The ink is in the printing surface, or die, and the background of the stamp. There is no stamp pad involved in the printing process. The stamp is recessed and printing is done by simply pressing down the stamp carriage and allowing the printing surface to contact the substrate. The device is spring loaded with a frame surrounding the printing surface. Examination of the questioned stamp revealed a metal frame surrounding the printing surface of the stamp. It was observed that the rectangle surrounding the "COPY" impression appeared to be the result of the metal frame surrounding the stamp. It was thought that the questioned impression was made by pressing the questioned stamp on a stamp pad and making the impression onto the questioned document. This would explain the problem of the curious rectangle and the different color of the questioned stamped impression.

Several test prints were made with the questioned stamp and a black ink stamp pad. It was noted the unusual rectangle was reproduced and the impression was more blue-black in color, similar to the questioned impression (Fig. 5). No individual features were present in the rectangle stamped impression from the metal frame.

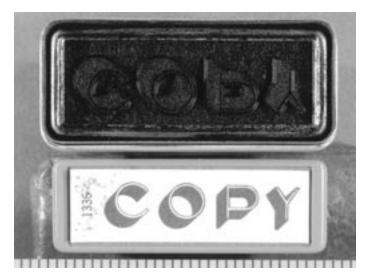


FIG. 2—Questioned pre-inked stamp.

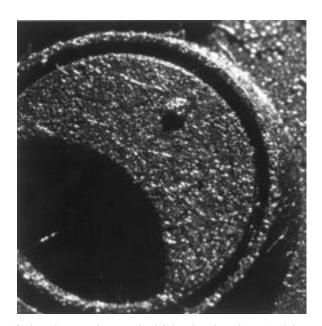


FIG. 3—Close-up photograph of defect found on the "O" of the questioned stamp.

The noninked area of the defect could also be seen in these test impressions. This meant the defect not only did not transfer the stamp ink from the stamp to the paper, it did not accept ink from the stamp pad (Fig. 5). The more impressions made after the ink pad was used resulted in the impressions returning to the purer blue color with no rectangle being reproduced. The black ink transferred from the pad eventually was removed from the stamp and frame during subsequent impressions.

## Results

The examination and observations made in this case resulted in a successful conclusion of the investigation. A temporary defect was found in the questioned stamp that was similar to the impression defect. Also, the explanation of the surrounding ink rectangle and discoloration of the questioned stamp were explained to the



FIG. 4—Close-up photograph of questioned stamped impression.





FIG. 5—Test prints of questioned pre-inked stamp showing first and second test impressions using a black ink stamp pad.

satisfaction of everyone involved. This case became more complicated by the user of the questioned stamp not utilizing the device as designed.

# Acknowledgments

Carl Kriigel, United States Army Criminal Investigation Laboratory and Barbara Peirce, Division of Forensic Science, Commonwealth of Virginia, were instrumental in the capture and reproduction of the figures used in this examination and in the preparation of this article.

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