



# Questioned Documents Section - 2015

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## J21 The Origin of a Tracing

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After attending this presentation, attendees will have a better understanding of how signature tracings are created.

This presentation will impact the forensic science community by showing examination techniques involving traced signatures.

This presentation details a case study regarding a life insurance document in which the beneficiary information was allegedly changed. The authenticity of the principle signature was in question. Examination revealed the signature was spurious and possibly a simulation or a tracing of a genuine signature. At first glance, the questioned signature appeared to be spurious. It contained many features associated with a simulation/tracing of a genuine signature. Unnatural movement and the apparent lack of speed in writing was present. The signature also was of poor line quality and contained pen lifts. Blunt beginning and ending strokes were present as well. Further inspection revealed the questioned signature was pictorially similar to the victim's standard signatures that were provided. The signatures were so similar that detailed scrutiny of each known signature was warranted to ascertain if indeed one of them was used as a possible model for the questioned signature.

The examination revealed that one known signature and the questioned signature looked remarkably alike. Microscopic examination of the questioned signature did not reveal any of the typical signs of a tracing, such as pencil or carbon remnants nor any indented lines. Also, examination of the original standard signature did not reveal any such evidence. Overlaying the questioned and known signatures proved the questioned signature was a tracing of the known signature. Examination of one of the known documents with oblique lighting techniques revealed indented lines adjacent to letters of the first name. These indentations corresponded exactly to the questioned signature. This proved the known signature was used as the model for the questioned signature. The tracing was undoubtedly made with the use of transmitted light. This would account for the stray indented lines on the known document. Conclusions that can be drawn from this examination are: (1) the questioned signature is a tracing; and, (2) the signature appearing on the bottom of the copied emergency data record was the model used to make the questioned signature.

Determining authorship was another matter. Traced signatures contain no evidence of their writer as the following of a written line has nothing to do with natural writing. They do not contain handwriting characteristics of their maker and therefore are not identifiable. Therefore, in this case, no opinion could be made on the maker of the traced signature. Even if no conclusion regarding authorship could be made, the discovery of the model signature is very important, even though forgery can be proven without locating the model signature.

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### Tracing, Simulation, Model Signature