

1. I was asked to examine a photocopy of a one-page (1) Florida Marriage Record, dated October 10, 1991, bearing the purported signature of "Jack Donald Lewis" (Q1) and a photocopy of a three-page (3) Durable Power of Attorney, dated November 21, 1996, bearing the signature of "Jack Donald Lewis" (K1). The purpose of my examination was to determine if the questioned signature of "Jack Donald Lewis" appearing on Q1 was traced from the "Jack Donald Lewis" signature appearing on K1.
2. I am currently employed as a full-time Forensic Document Examiner with Robson Forensic, Inc. I have been conducting forensic document examinations for over 25 years. My *curriculum vitae* is attached to this Affidavit as Exhibit A. I have served as a Special Agent and Document Analyst with the Federal Bureau of Investigation where I received much of my formal training in Questioned Document Examinations. I have conducted examinations on hundreds of cases including bank robbery notes, death threats to congressional members, suicide letters, disputed wills, contracts and agreements. I have analyzed paper, printers, copiers, inks, indented writings, tracings, cut/paste issues, simulations and disguised writings. I have completed numerous courses and apprenticeship trainings related to document analysis through the FBI and other agencies, including the United States Secret Service, Immigration and Naturalization Service, Naval Criminal Investigative Service, United States Postal Inspectors Service, Los Angeles Police Department and the Los Angeles Sheriff's Office. I have taught undergraduate and graduate level courses in Forensic Science/Forensic Document Examinations as an Adjunct Professor at National University in San Diego, the University of California and Colorado Technical University. I am currently a Forensic Science adjunct faculty member at Bethune-Cookman University.
3. The scientific methodology used in my analysis is based on the "ACE-V" method that comprises **A**nalysis, **C**omparison, **E**valuation and **V**erify. The ACE methodology has been validated as being reliable and generally accepted in the field of forensic document examinations. This methodology involves a four-stage process in which a forensic document examiner can reach an opinion concerning whether two handwritten items were written by the same person, which is outlined below.

Analysis: The examination begins with the analysis of the items submitted for comparison to determine if the writing is original, naturally prepared, and exhibits characteristics suitable for comparison.

Comparison: The second stage consists of a side-by-side comparison of the items. The numerous characteristics exhibited in the writing between the items are compared to determine the similarities, differences, and limitations, if present.

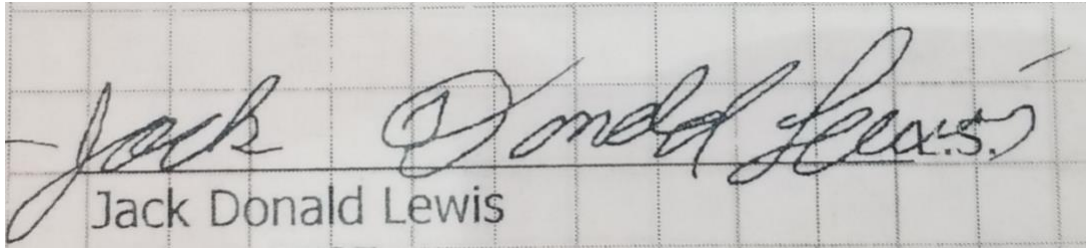
Evaluation: The third stage is the formulation of a conclusion based on the significance and combination of the characteristics observed during the comparison and any limitations, if present.

Verification: The final stage of the examination process is verification. At this stage, another qualified examiner reviews the results of the initial examiner using the same methodology described above. This process is performed to ensure the appropriate examinations have been conducted, the examiner's conclusions are accurate and consistent with technical notes and are within the limits of the discipline, there is supporting data, and all records conform to laboratory standards.

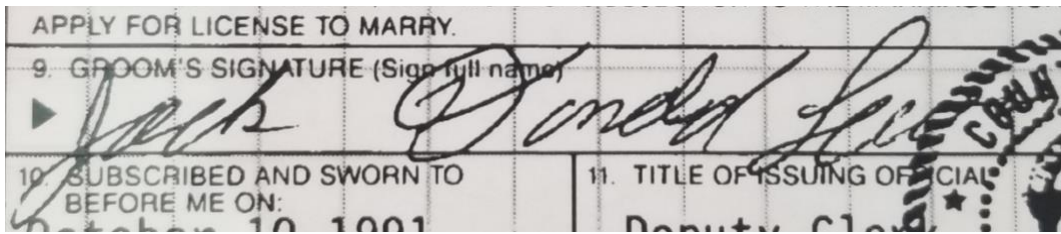
4. In addition, I subscribe to standards developed by professionals in the Forensic Document Examination discipline and guidelines published by the National Institute of Science and Technology (NIST), Organization of Scientific Area Sub-Committee in Forensic Document Examinations (OSAC), as well as the Scientific Working Group for Forensic Document Examiners (SWGDOC). These standards have been thoroughly studied through extensive scientific research and validated through rigorous peer review and publication.
5. Certain limitations were present in this case due to original questioned and known documents being unavailable for comparison at the time of my examination. The photocopy process can cause loss of detail due to factors such as copy machine type and copying from multigenerational documents. All of these factors may impede the ability of the examiner in reaching a positive conclusion. However, in this case, copy quality was sufficient enough to provide a qualified opinion.
6. The fundamental principle of handwriting identification is based on the premise that no two writings are ever exactly alike. Handwriting is a complex motor skill consisting of sensory, neurological, and physiological impulses. Through practice and repetition, writers interject their own individual characteristics into their writings which become a pattern of habitual formations that are repeated from one writing to the next. This is known as the principle of individuality which forms the basis for handwriting analysis. *"If the known and unknown writings contain a sufficient number of distinctive writing characteristics so that the likelihood of accidental coincidence can be eliminated, and provided no basic or fundamental differences exist between the two sets of writing, then it's safe to conclude that the questioned and specimen writings were written by the same person"*. Kelly, Jan and Lindblom, Brian. *Scientific Examination of Questioned Document*. Boca Raton, FL: CRC Press, 2006.

7. In addition, the writer's natural range of variation must be assessed. Variation is found in all writers. Because we are not machines, we cannot exactly replicate our own writing every time we write. This is done by dissecting each of the known writings, letter by letter, to determine all of the different ways in which the writer forms their lower and upper-case letters. Next, the questioned writing is broken down into individual letters and each letter is inter-compared to determine if the questioned letter forms are within the known writer's range of natural variation.

8. I conducted a side by side comparison of both Q1 and K1 and discovered that the questioned signature of "*Jack Donald Lewis*" was found to be **consistent** with having been traced from the Jack Donald Lewis signature appearing on K1 which was more likely used as the model, as depicted in Figure 1. Both writings coincide sufficiently well with one another. My observations was confirmed by overlaying an acetate transparency measuring grid composed of regular quadrilateral squares measuring 4 squares per inch to determine the alignment of writings appearing on both Q1 and K1. I took into consideration that both documents are photocopies which could possibly alter the size and dimensions of documents. However, in this case distortion was minimal and had no bearing on the results of my examination. This technique illustrated complete alignment agreement in terms of content, arrangement, size, style, and design, as depicted in Figure 2. Tracing is a drawing process rather than a writing process in which the writer tries to replicate the pictorial features of the genuine signature, which usually consists of uncertainty of writing direction, tremor, pen lifts and hesitation. Furthermore, it was noted that the "*is*" in "*Lewis*" on Q1 appears distorted and is the only portion of the questioned signature that is. This distortion coincides exactly with the "*is*" in Lewis appearing on K1 in which the letters are concealed due to the county court seal that is stamped over it.



Q1



K1

Figure 1: Q1 and K1 signatures illustrating narrow variations with one another.



Figure 2: Questioned signature (Q1) transposed over Known signature (K1).

9. Within the bounds of reasonable scientific certainty, and subject to change if additional information becomes available, it is my professional opinion that the known signature of Jack Donald Lewis (K1), was used to create the "Jack Donald Lewis" signature by means of a tracing process.
10. The opinion expressed in this report regarding identification or elimination adheres to ASTM E Standard E1658 and as well SWGDOC Standard Terminology for Expressing Conclusions of Forensic Document Examiners.