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Mr. Victor W. Zhao
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In the Matter of Texas Observer et al. v. Bill Burnett
as San Jacinto District Attorney et al, cause no.
CV-12,040 in the 258th Judicial District of
San Jacinto County, Texas trial of Claude Howard Jones

Dear Mr. Zhao:

Results of Microscopic Hair Examination in case of Texas v. Claude Howard Jones:

Evidence delivered by DA's Investigator David Clark, San Jacinto Co. Texas DA's Office on October 26th, 2010 to Penn State University

Evidence Submitted:

1. Court Exhibit #77 8-3-90 (L-203322) Hair from Crime Scene marked #13 hair from counter and #24 hair from cash box
2. Court Exhibit #75 8-3-90 (L-203322): Known hair specimens from Mr. Claude Howard Jones
3. Court Exhibit #78 8-3-90 (L-203322): Known hair specimens from Mr. Allen Hilzendager (Victim)
4. Court Exhibit #76 (L-203322): Known Hair of Mr. Danny Dixon

Results of Examination:

1. A microscopic examination of the hair removed from the counter marked #13 disclosed the presence of the following: 1) one lightly pigmented, human hair fragment, approximately 2cm in length, having both the proximal and distal ends squarely cut; 2)

two 1cm long, brown colored facial hairs both exhibiting fleshy telogen root ends and blunt distal ends; and 3) one brown colored animal hair fragment.

2. A microscopic examination of the hair removed from the cash box marked #24 disclosed the presence of one lightly pigmented, human transitional hair.
3. It is the opinion of the undersigned that the questioned lightly pigmented human hair fragment (#13) recovered from the counter at the crime scene and the lightly pigmented, human transitional hair recovered from the cash box (#24) **are not suitable** for a meaningful microscopic comparison due to the following reasons:¹⁻⁷
 - General standards of practice requires that at least one complete human head or pubic hair (possessing a tip end and a root end) is necessary to conduct a meaningful forensic microscopic comparison of questioned and known hair specimens
 - A meaningful forensic hair comparison requires that suitable questioned and known hair specimens be compared from root (proximal) end to tip (distal) end while being observed side-by-side on a transmitted light comparison microscope
 - Comparison of short hair fragments with known hair specimens can lead to false positive results (**false inclusions**) and/or false negative results (**false exclusions**)
 - Comparison of transitional hairs with known hair specimens can lead to false positive results (**false inclusions**) and/or false negative results (**false exclusions**)

Respectfully submitted,

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Forensic Consultant

¹ J.A. Glaister, *A Study of Hairs and Wools Belonging to the Mammalian Groups of Animals, Including a Special Study of Human, Considered from the Medicolegal Aspects*, Publication No. 2, Cairo, MISR Press, 19931.

² J.W. Hicks, *Microscopy of Hair, Issue 2*, Washington D.C. FBI, 1977.

³ S.A. Shaffer, "A Protocol for the Examination of Hair Evidence," *Microscope*, 30, 151, 1982.

⁴ R.E. Bisbing, "The Forensic Identification of Human Hair," in *Forensic Science Handbook*, Chapter 5, Saferstein, R., Ed., Prentice-Hall, N.J., 1982.

⁵ *Proceedings of the International Symposium on Forensic Hair Comparisons*, FBI, June 1985.

⁶ R.R. Ogle, Jr., and M.J. Fox, *Atlas of Human Hair, Microscopic Characteristics*, CRC Press, Boca Raton, FL, 1999.

⁷ SWGMAT *Forensic Human Hair Examination Guidelines*, Forensic Science Communications, 7, No.4, April 2005.