

AFFIDAVIT OF ROBERT FRAM

Robert B. Fram being duly sworn does depose and say that:

1. In May, 2009 I retired from the Federal Bureau of Investigation (FBI) with over 28 years of service. From January 2006 until my retirement I served as the Section Chief of the Scientific Analysis Section of the FBI Laboratory. In that capacity I managed the five units that comprised the Scientific Analysis Section: nuclear and mitochondrial DNA units, CODIS (Combined DNA Index System), Chemistry and Trace Evidence.
2. In 1977 I received a Bachelor of Arts degree from Lehman College with a Major in Anthropology. In 1979 I received a Master of Arts in Physical Anthropology from Pennsylvania State University.
3. From March 1981 until March 1985 I was employed as a Physical Science Technician, in the Serology Unit of the FBI Laboratory.
4. In March 1985 I was appointed as a Special Agent of the FBI, and continued to hold that appointment until the time of my retirement in 2009. After completing New Agents Course at the FBI Academy, Quantico, Virginia, I worked as a Special Agent in various field assignments until March of 1989, primarily in organized crime and narcotics

investigations.

5. In March of 1989 I was assigned to what was then the Hairs and Fibers Unit of the FBI Laboratory in Washington, D.C. After successfully completing a one year training program in the Hairs and Fibers Unit, I was designated as a Supervisory Special Agent and qualified as a Laboratory Examiner of hairs and fibers. I continued in this capacity until June of 2001. My duties included the examination of physical evidence, including hairs, reporting the results of those examinations, and when required, testifying to those results as an expert witness in state or federal court. I have been accepted as an expert witness by federal or state courts in the examination of hairs or fibers over 100 times. While employed by the FBI I have conducted hundreds / thousands of examinations of hairs using a microscope.

6. In June, 2001 I was selected to be the Chief of the Trace Evidence Unit (formerly the Hairs and Fibers Unit), and my duties became primarily supervisory. I conducted administrative and peer reviews of reports, supervised casework done by other examiners, oversaw research projects and the day to day operations of the Unit. In addition, on occasion, I conducted hair and fiber examinations on cases submitted to the Trace Evidence Unit.

7. I had no involvement as an FBI Agent, Laboratory Examiner or Physical Science Technician in the investigation, trial, or prior habeas litigation of *United States v. Jeffrey*

R. MacDonald, until after the issuance of an order by the United States Court of Appeals For The Fourth Circuit on October 17, 1997 granting MacDonald's motion for DNA testing. On December 11, 1998 the United States District Court for the Eastern District of North Carolina directed that the United States produce and make available to MacDonald's experts within 60 days specified biological evidence " so that such experts may conduct any appropriate non-destructive DNA examinations thereof." (Exhibit 1). As I recall, in addition to the fact that all DNA testing destroys the biological sample being tested, there were a number of other unresolved issues concerning the evidence between the Justice Department and Jeffrey MacDonald's counsel. These issues included defense access to the evidence in the FBI Laboratory prior to the DNA testing, who was going to do the DNA testing, the divisibility of hairs subject to DNA testing, and who was going to inventory any residual contents in the pill vials used initially to collect the evidence. As I recall it took some months after the district court's initial order of December 11, 1998 to resolve these additional issues. See Order of March 26, 1999 (Exhibit 2. I was not directly involved in the resolution of these issues but rather, while these matters were being litigated, operated within the legal requirements and constraints as conveyed to me by the Department of Justice prosecutors. Unless precluded by these constraints, such as the prohibition against inventorying the contents of the pill vials, I followed standard FBI Laboratory procedures. Initially my role was to take custody of the evidence submitted by the Charlotte Field Office of the FBI, cause photo documentation of the unpacking of the items submitted (which had been previously identified by the Department of Justice as covered by the court orders mandating DNA

testing), inventory that evidence, if not previously compared, perform non-destructive comparative microscopic examinations of previously mounted slides containing hairs with other previously mounted slides containing known exemplar hairs, report any identifications resulting from these comparative examinations, and prepare the evidence for transfer to the independent laboratory designated by the court to conduct the DNA testing. Before any evidence was transferred to the independent DNA laboratory for destructive testing, the prosecutors wanted me to document the contents of the slides, particularly the number and other observable characteristics of any hairs present. In complying with this request in light of the unresolved issues between the parties, other than marking the slides for identification and, where necessary, putting the slides in protective cardboard mailers which were also marked for identification, I did not alter slides in any way. Specifically, I did not remove any hair or fiber that had previously been mounted on any slide, nor did I mount anything additional on an existing slide. I did not open or attempt to inventory the residual contents, if any, of the pill vials. I did not repeat comparisons of questioned and known hairs which had previously been conducted and reported by other examiners. As ordered by the district court, the Government was required to turn the evidence subject to DNA testing over to the independent DNA laboratory by May 17, 1999. (Exhibit 2, p.2)¹

¹ The Armed Forces Institute of Pathology (AFIP) was subsequently designated by the district court as the independent laboratory to conduct the DNA testing. The Armed Forces DNA Identification Laboratory (AFDIL) was the component of AFIP that would eventually perform the DNA testing.

8. On January 11, 1999, Special Agent C. Andrew Thomure personally delivered to me several boxes containing numerous items of evidence, many in clear plastic bags or envelopes bearing yellow "Government Exhibit" stickers. These items consisted of resubmitted evidence which had been previously marked with a "Q" number . (In the FBI Laboratory all questioned items are assigned sequential "Q" numbers, and known items are assigned sequential "K" numbers.) It is standard procedure for FBI Laboratory personnel inventorying or examining evidence to also mark it for identification with their initials. In cases involving items resubmitted to the FBI Laboratory which have previously been assigned "Q" or "K" numbers, and initialed by previous examiners, the new examiner adds his or her initials to the item. I also received items that appeared never to have been examined by the FBI Laboratory, based upon the absence of a "Q" number. These items were marked with sequential "Q" numbers and initialed. Numerous photographs were taken to record the unpacking and inventorying of these items of evidence. See Government Photographic Submissions Volumes Two and Three.²
9. On February 3, 1999 I inventoried some of the items previously received from Special Agent Thomure, including a clear plastic folder taped closed inside another clear plastic folder that was partially heat sealed. The inner plastic folder bore a yellow Government

²Each photo included within the Government Photographic Submission was also assigned individual number. For example Government Photographic Submission Volume Two contains photos numbered 35-111. Unless otherwise indicated, references in this affidavit to numbered photographs are to photos which have previously been filed with the district court. For convenience, copies of these numbered photographs are also included as numbered "Exhibits" to this affidavit.

Exhibit sticker, number 285/ 75-26 CR -3. Contained within this folder were: a clear plastic pill vial, marked # 7 on top of the lid, in which a folded piece of paper was visible, 1 glass microscope slide, and a loose paper label. See Photo 39 (Exhibit 3). After removing the items from the clear plastic bag, the slide was marked for identification as "Q137", as well as with the new FBI Lab case number (990111018ZJ) and with my initials "RBF". See Photos 153, 156 (Exhibits 4-5). In accordance with standard procedure in the FBI Laboratory, the slide was placed in a protective slide mailer which was also marked for identification Q137, as well as with the case number and my initials. While it would appear that the loose paper label, upon which someone had written "# 7 fibers Hair", had at one time been glued to the unprotected glass microscope slide, I have no personal knowledge of any prior examinations of Government Exhibit 285 including the slide now marked as Q137. The clear plastic pill vial was marked " Q137.1".

10. On February 3, 1999, I examined the slide marked as Q137 and determined that it contained a hair and a fiber. The hair was a very fine Caucasian hair approximately 3/4 of an inch in length with a "club" root and a natural tip. The hair did not possess enough individual characteristics to be of value for significant comparison purposes, or in FBI Lab terms was "NSFSCP". I subsequently took a photomicrograph of the Q137 hair. See Government's Photo Submissions, Volume Four, Photo 224.
11. The term club root in relation to the Q137 hair is the shorthand used by hair examiners in the FBI Lab to record that the characteristics of the hair root observable under the

microscope reveal that the hair was naturally shed, as opposed to having been forcibly pulled out. The examination of the root of a hair in an attempt to determine if the hair was forcibly removed or fell out naturally, and recording the examiner's conclusions are part of the standard FBI hair examination protocol. As everyone knows, hair grows from the skin or scalp. The sac-like organ in the skin of mammals from which the hair grows is known as the follicle. The root of the hair is imbedded in the skin. The lower end of the root beneath the skin expands to form the root bulb. Follicles have a period of activity which varies among species. The term *anagen* stage describes a follicle which is actively producing hair. After a period of activity in which hair is continuously produced the follicle starts to shut down, this transitional stage between the *anagen* stage and the resting stage is called the *catagen* stage. The third phase in which the follicle becomes inactive, and hair growth ceases, is known as the mature or *telogen* stage. During the *telogen* stage the hair is held in the follicle by means of a hardened bulbous root, that may resemble a club in appearance. When the root takes on a club shape it is ready to be naturally shed. In the telogen phase the hair may be naturally sloughed from the body, as occurs periodically, or may be fall out as the result brushing or combing. The mature or *telogen* phase root will have little or no follicular tissue adhering to it. Pigment is sparse in the mature root and there is frequently an abundance of cortical fusi (elongated or spindle- shaped air spaces found in the cortex of the hair). As a general principle, there is no scientifically valid means of determining the interval between the time when a *telogen* hair was naturally shed and when it was recovered from the substrata on which it was found. Stated another way, there is no way of determining whether a *telogen* hair found

inside an occupied dwelling had been there for days, weeks, or even years.

A root which has been plucked prior to maturation, as in the *anagen* phase will have a distorted appearance, and may have tissue adhering to it. In the plucked or forcibly removed hair, pigment is present down into the root and there are rarely cortical fusi (air pockets) near the root. A root near maturity at the *catagen* stage which has been plucked may exhibit the bulbous shape with a “tag” of soft tissue attached. While the presence or absence of a follicular tag is a factor in whether a hair has been forcibly removed, it is not the determining factor. For example pubic hairs which have been naturally shed frequently have a follicular tag. Rather, it is the observable characteristics of the hair itself which permits the qualified examiner to draw the conclusion that a hair was forcibly removed. In my opinion, and based upon my knowledge training and experience, I would not conclude that a hair had been forcibly removed unless it was an *anagen* hair (actively growing) with pigment down into the root, and the root was amorphous and stretched out. In the absence of any root at all it will not be possible to determine if the hair was pulled out forcibly while it was still growing. It is possible, however, based upon a microscopic examination of the proximal or root end of the hair shaft, to determine whether the hair was cut or broken off. Broken hairs will exhibit an irregular appearance at the point of the break. A crushed hair will exhibit a widening of the hair shaft and the cortical cells may appear ruptured or separated.³ The fact that I used the term “club root” in relation to the Q137 hair indicates that I observed nothing under the microscope which was

³See Deedrick, D.W. and Koch, S.L., *Microscopy of Hair Part I: A Practical Guide and Manual for Human Hairs*, Forensic Science Communications, January 2004, Volume 6, Number 1.

consistent with an anagen hair that had been forcibly removed, and what I did observe was a hair root that exhibited the characteristics of a naturally shed mature hair.

In my experience, the term "intact root" is not commonly used by hair examiners, and should not be considered synonymous with forcible removal. A naturally shed hair in the *telogen* stage could be said to have an "intact root, but it would not be accurate to conclude from the use of that term that the hair had been forcibly removed .

12. I have been shown AFDIL images from slides 13 and 14, Roll 1, depicting AFDIL Specimen # 99C-0438 - 91A (Exhibits.6-7), and I recognize the both the closed FBI slide mailer marked for identification (MFI) "Q137" depicted in slide 13 (Exhibit 6), and the glass microscope slide MFI "Q137" depicted in slide 14 (Exhibit 7), by my initials.

13. I have been shown AFDIL photomicrograph images 99C-0438-91A, Roll 9 slides 26, 27 and 28. (Exhibits 8-10). Slides 26 (Exhibit 8) and 27 (Exhibit 9) depict the proximal end of a Caucasian hair at lesser and greater magnifications, respectively, and Slide 28 (Exhibit 10) depicts the distal (tip) end of the hair. There are no red-brown stains visible on the hair depicted which would indicate the presence of blood. The hair root depicted in Slides 26 and 27 (Exhibits 8-9) does not have pigment growing down into the root, nor does the root appear to be amorphous or stretched out, but rather appears bulb shaped, and no follicular tissue, sheath or tag is present. There is no other observable evidence consistent with forcible removal of the hair depicted in Slides 26 and 27 Id. It appears that elongated air spaces, consistent with cortical fusi, are present in the cortex of the hair. See Slide 27 (Exhibit 9). Based upon the observable characteristics described above, it is

my opinion that the hair was not actively growing at the time it was shed, and was in the mature or telogen phase. I further conclude, based upon the observable characteristics, and in the absence of observable characteristics consistent with forcible removal, that this was a mature hair that was naturally shed. For note taking purposes, I would also describe this hair as having a "club" root. It should be noted that photomicrographs are not the proper way to conduct hair comparisons, however, certain characteristics can be clearly seen.

14. Among the resubmitted items I received from Special Agent Thomure was Q79. See Photo 67. (Exhibit 11). This item was received in zip-lock type clear plastic bag which had affixed to its outer surface the following:

(a) a piece of masking type tape upon which had been written
"Fibers + Debris from Area of Trunk +Legs of Rug under body- Master bed
Room
WFI-RBS 16 Mar 70 (14)

E-303
P-C- FP -82-70
DOB;

(b) a yellow "Government Exhibit" sticker upon which had been written

"E-303
Q79" ; and

(c) a second piece of masking type tape upon which had been written

" Q79 PMS E-303 MPM"

Id.

15. Contained within the zip- lock bag described above were the following:
One clear plastic vial MFI: "Q79 PMS MPM" in which a small amount of debris- possible blood flecks - were visible- but with no apparent hairs, 3 cardboard pillboxes MFI "Q79", 2 cardboard slide mailers one MFI: "Q79 Fibers" and the other MFI: " Q79 Hairs", each mailer contained one glass microscope slide, one MFI : "F.FS L2082 Q79" and the other MFI: "H L2082 Q79". Q79 also included one blue plastic slide mailer, MFI: "01022018 RQ Q79, containing 2 glass microscope slides, each MFI : " 01022018 Q79 MPM" one MFI: "Blue/Blk Yn." and the other " Brown Yn". See Photos 68-70 (Exhibits 12-14).
16. On February 3, 1999, with the aid of a microscope, I examined each of the four glass slides described above to determine if they contained human hairs. Only the slide MFI : "H L 2082 Q79 PMS MPM" (Photo 70, Exhibit 14) contained a human hair, which I determined was a brown Caucasian pubic hair, approximately 2 inches in length with a "club" root, indicating that it was naturally shed. I performed no other examinations or comparisons of any other item from Q79 as described above. Each of the slide mailers was marked for identification with the FBI Lab number (99011101825 ZJ) and with my initials("RBF"). I was not present at, and consequently can not attest to the results of any prior examinations of the contents of Q79/E303.
17. Upon being shown AFDIL images # 99C-0438 75A & 76 (Disc 2, Roll 2, Slide 1 and Disc 2, Roll 2, Slide 2) (Exhibits 15-16), I recognize the FBI Lab number and my initials

previously written on both the cardboard mailers and the two glass microscope slides MFI: "H L2082 Q79" and "F.F.S L2082 Q79, respectively.

18. I am shown AFDIL images 99C-0438 75A (Disc 2, Roll 8, Slides02, 03,04, 05, 06,07 and 08) (Exhibits17-23) depicting segments of what appears to be a pubic hair of Caucasian origin. Slides 02 and 03 (Exhibits 17-18) depict the root portion of the hair under lesser and greater powers of magnification, respectively. As depicted in Exhibits 17-18. there is some follicular tissue present surrounding the bulb of the root, however, it does not appear to be a follicular sheath. The root does not appear to be amorphous or stretched out, but rather is bulb-like in shape. The presence of some follicular tissue surrounding the root of a pubic hair is not forensically significant, and in and of itself does establish to a reasonable scientific certainty that the hair was forcibly removed, because pubic hairs which have been shed naturally often have some follicular tissue present. In my opinion this hair was a mature hair that was shed naturally. I would describe this hair for note taking purposes as having a "club" root.

19. Among the resubmitted items received from Special Agent Thomure was Q87 (E-52NB). This exhibit included 3 glass microscope slides MFI: "Q87 L2082 PMS MPM", which were contained in one double and one single cardboard mailer. (One mailer was empty.) On February 1, 1999, I examined all three slides using a microscope and determined that only one slide contained human hairs, of which there were two. (The other slides contained animal hairs and fibers.) One human hair was a light brown Caucasian body

area hair, approximately 1 inch in length with a club root. This hair was not sufficient for comparison purposes. The other hair on this slide was a dark brown Caucasian hair fragment approximately 1/8 inch in length, with a club root and broken distal end. This hair also was not sufficient for comparison purposes. See Photos 74,75, 85, and 86.(Exhibits 24-27).

20. Upon being shown AFDIL images #99C-0438 58A, Disc 2, Roll 2, Slides 5-6 (Exhibits 28-29) I recognize the Q87 slide mailer, and Q87 slide (MFI: "L2082 Q87 PMS MPM"), depicted respectively, now marked with FBI Lab No. 990111018 and with my initials.

21. I have been shown AFDIL images of specimen 99-0438-58A (Roll 8, Slides 09,14,and 15) (Exhibits30-32) depicting what appears to be segments of two human hairs, one dark brown and one light brown. The root of the dark brown hair is depicted in Slide 09 (Exhibit 30) and the root of the light brown hair is depicted in Slides 14-15 (Exhibits 31-32). Neither hair root is depicted as having any follicular tissue attached. I would characterize both hairs depicted in Slides 09,14 and 15 as having club roots, indicating that they were naturally shed.

22. Also among the resubmitted items received from Special Agent Thomure was exhibit Q125 (E-211), which included 2 glass microscope slides in a cardboard slide mailer. See Photos 77, 178, 179, 186 (Exhibits 33-36). One glass microscope slide was MFI:

“90103084 Q125 JCF MPM” The other glass microscope was MFI: “Hair 90103084 Q125 JCF MPM”. See Photo 77 (Exhibit 33) On February 1, 1999, I examined both slides and determined one slide contained only fibers. The other Q125 slide marked “Hair” contained a brown Caucasian body area hair, approximately 2 inches in length, forcibly removed, that was not sufficient for comparison purposes. There was a small amount of tissue on the root area.

23. Upon being show AFDIL images 99C-0438 45A &46A (Disc 2, Roll 1, Slides 04 and 05) (Exhibits 37-38) I recognize the Q125 mailer now marked with my initials and the additional FBI Lab No. 9901110187ZJ, as well as its contents the two glass microscope slides MFI: “Q125”.

[Note Graham has the slides upside down in the mailer so the numbers 45A and 46A on the ruler don't correspond to the slides.]

24. Upon being shown AFDIL images 99C-0438-46A, Roll 3, Slides 03 and 09 (Exhibits 39-40), I observe the presence of follicular tissue on the hair root. Upon being shown AFDIL image 99C-0438-46A, Slide 04, (Exhibit 41) I observe that the root of the hair has a distorted and elongated appearance. I can also observe the presence of pigment down into the root. Based upon what I can observe in these images, it is my conclusion that what is depicted is a human hair that was forcibly removed while it was still growing in the *anagen* stage. There is nothing observable about this hair depicted which is

consistent with it having been naturally shed in the *telogen* stage.

25. Also included among the items submitted to me was Q96(D229). See Photos 90, 91, 92, 93, and 94 (Exhibits 42-46). Contained within Exhibit Q96 were four cardboard single slide mailers each marked for identification "Q 96 PC L-2082 PMS MPM" See Photo 93- (Exhibit 45). Each slide mailer contained one glass microscope slide marked as follows:
- (a) "H (from thread) L 2082 Q96 PMS";
 - (b) "L2082 Q96 PMS";
 - (c) "19 ½ L2082 Q96 PMS"; and
 - (d) "yn. frag. L2082 Q96 PMS"

See Photo 94 (Exhibit 46).

26. The slide MFI: "19 ½ L2082 Q96 PMS", upon examination under the microscope, revealed the presence of four Caucasian hairs, a head hair with a forcibly removed root, two head hair fragments and a body hair without a root. I compared the forcibly removed hair, which was the only hair with a root on this Q96 slide, with the K2 specimen hairs, and determined that they exhibited the same microscopic characteristics as this Q96 hair. Accordingly, this Q96 hair is consistent with having originated from Kimberly MacDonald, the identified source of the K2 specimen. See Photos 78-81 (Exhibits 47-

50).⁴ The two Caucasian head hair fragments also found on this same Q96 slide are microscopically similar to the K2 specimen hairs; however, these hairs were too limited for significant comparison purposes. The Caucasian body area hair found on this slide is also not suitable for significant comparison purposes.

27. Upon being shown AFDIL image # 99C-0438 112A & 115A (Disc 2, Roll 1, Slide 07) (Exhibit 51), I recognize the two cardboard slide mailers depicted both marked for identification “ Q96 L2082 990111018ZJ” and with my initials “RBF”. The top mailer is also marked “99C-0438-112A” Id. Upon being shown AFDIL image # 99C-0438 112A & 115A (Disc 2, Roll 1, Slide 08) (Exhibit 52), I recognize the two glass slides depicted marked for identification (a) “ 19 ½ L2082 Q96 PMS 990111018 ZJ RBF” and (b) “L2082 Q96 PMS 990111018ZJ RBF”. The “Q96 19 ½” slide has also been marked “99C-0438-112A”. The other Q96 slide has been marked “99C-0438-115A”. Upon being shown AFDIL images 99C-0438-112A Slides 01 and 02 (Exhibits 54, 53, respectively) depicting a glass microscope slide and a slide mailer and a ruler with a red label marked for identification “99C-0438-112A JSR 3/21/01”, I recognize both the slide mailer as being the same Q96 slide and mailer previously described in this paragraph (Exhibits 51-52) and in paragraph 26 above.

⁴The comparison of the microscopic characteristics in hairs does not constitute a basis for absolute personal identification. The probative value of hair comparisons may be affected by the results of mitochondrial (mtDNA) analysis. Two hairs can exhibit the same microscopic characteristics and be shown to be different in mtDNA sequence. Conversely, two hairs that have the same mtDNA sequence can have very different microscopic characteristics, as in the case of two children with the same mother.

28. In 2001, after the evidence had been furnished to AFDIL in 1999, I had further occasion to examine the hairs which had been originally mounted on the Q96 slide described above in ¶ 26. My understanding is that after this slide had been designated Specimen 112A by AFDIL, and Master Sergeant Grant Graham of the Office of the Armed Forces Medical Examiner had determined that one of the four hairs had a root with tissue on it, an AFDIL DNA Analyst removed the cover slip of the slide on March 30, 2001 and found 9 pieces of hair. See AFDIL Divisibility and Suitability Assessment, AFDIL letter of April 2, 2001 (Exhibits 55-56) It was further my understanding that the parties agreed on the need for the hairs to undergo further microscopic examination before any DNA testing was done on Specimen 112A (Q96), however, as a result of Master Sergeant Graham's intervening retirement, AFDIL no longer had that capability in house. Initially it was agreed that the examination of Specimen 112A would be conducted at AFDIL by Dr. Peter De Forrest, the defense hair expert. See letter of July 31, 2001 from Philip G. Cormier (Exhibit 57). It is further my understanding that on August 6, 2001, Dr. De Forrest, prior to attempting limited non-comparative examinations, mounted the 9 hairs on separate glass microscope slides MFI :112A(1) through 112A(9). See Letter to Philip G. Cormier of September 13, 2001 (Exhibit 58). Subsequently, I was requested by the Department of Justice to attempt to re-associate or match, the nine hair fragments with the original four hairs present on the Q96 slide. Id.

This re-examination was pursuant to an agreement reached between AFDIL and the counsel for the parties. See October 1, 2001 letter of Philip G. Cormier (Exhibit 59).

29. On October 18, 2001, I received from AFDIL 9 glass microscope slides in separate blue plastic containers. Each slide contained a portion of a Caucasian hair, and was labeled "112A" and "06Aug01". Additionally, the slides were marked "#1- #9" and were initialed "JSR". For example see AFDIL images 99C-0438-112A Slides 04c and 05c depicting, respectively, slide 112A#4 (Exhibit 60) and slide 112A#5 (Exhibit 61). I numbered the slides Q96.1 through Q96.9 to correspond to the AFDIL numbering scheme, and with the aid of a microscope examined the hairs in attempt to associate the 9 hair fragments with the original 4 hairs on the Q96 slide. The results of my examinations are set forth in my report No. 011010030 ZJ of November 1, 2001 (Exhibit 62). The Q96.4 (112A(4)) slide contained a light brown Caucasian head hair, cut at the root end and broken at the tip end approximately 5-6 inches long. The Q96.5 (112A(5)) slide contained a light brown Caucasian head hair with forcibly removed root, cut at the tip end, approximately 4 inches long; the cut tip end was similar to the cut root end of Q96.4 (112A(4)) hair. Other than the tip end of the Q96.5 hair being similar to the root end of the Q96.4 hair, no conclusions could be reached as to which of these hairs might have, at one time, been joined to other of these hairs. As I stated in my report, it should also be noted that the Q96.5 head hair with the forcibly removed root is consistent with the forcibly removed Caucasian head hair found on the original Q96 slide (MFI: "19 ½ L2082 Q96 PMS") that was reported as being consistent with having originated from Kimberly MacDonald (FBI Laboratory report dated May 19, 1999, (Exhibit 63), in that both hairs are described as light brown Caucasian head hair with a forcibly removed root. The Q96.5 forcibly removed hair was considerably shorter than the original Q96 forcibly

removed head hair. (Exhibit 62).

30 Upon being shown AFDIL image 99C-0438-112A Slide 05a (Exhibit 64) which depicts a blue plastic slide mailer, a glass microscope slide marked "112A # 5 JSR", and a ruler with a tag marked "99C-0438-112A(5) JSR 12/4/01", I can just make out the FBI Lab number (011010030) and "Q96.5" also marked on the slide.

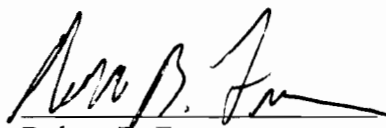
31 Upon being shown AFDIL images 99C-0438-112A Roll 8 Slides 21 and 22 (Exhibits 65-66) I can state that what I observe depicted is the elongated and distorted root of a Caucasian hair which is consistent in appearance with a hair that has been forcibly removed while it was still growing..

32. Upon being shown AFDIL images "99C-0438-112A (#5) JR root end", "99C-0438-112A(#5) JR root end (difexp2)" and "99C-0438-112A(#5) JR root end (difexp3)" (Exhibits 67-69), I can state that what I observe depicted in all three images is the elongated and distorted root of the same Caucasian hair which is consistent in appearance with a hair that has been forcibly removed while it was still growing. I can also state that

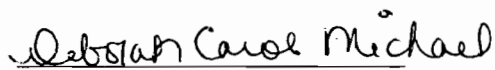
what I observe is consistent in appearance with the corresponding portion of the hair root

depicted in Exhibits 65-66 described in ¶ 31 above.

Further your affiant sayeth not.


Robert B. Fram

Subscribed and sworn before me this 23 day of February, 2010.


Notary Public,
State of Virginia
County of Stafford.

