

20



Laboratory Corporation of America® Holdings
P.O. Box 13973
1912 Alexander Drive
Research Triangle Park, North Carolina 27709
Telephone: 800-533-0567
Fax: 919-361-7737

AMENDED CERTIFICATE OF ANALYSIS¹

February 5, 2007

Tucson Police Department
Crime Laboratory
270 S. Stone Ave.
Tucson, AZ 85701
Attn.: Mr. Robert Blackett

Agency #: TPD# 9001-31-0233

FS Lab #: F06-6490

Victim(s): Khalifa, Rashad

Suspect(s): Not listed.

Evidence Submitted: via Federal Express
(# 856934188936)

Date Received: 07/21/06

One sealed envelope containing:

- Item 1 One bag containing a tube with material listed as 4TM bloodstain.
- Item 2 One bag containing a tube with material listed as 7TM-A bloodstain.
- Item 3 One bag containing a tube with material listed as 7TM-B bloodstain.
- Item 4 One bag containing a tube with fibers listed as 9TM-1 bloodstain.
- Item 5 One bag containing a tube with material listed as 10TM-1 bloodstain.
- Item 6 One bag containing a tube with a swab cutting listed as 11TM-3 bloodstain.
- Item 7 One bag containing a tube with material listed as 105TM-1 bloodstain.
- Item 8 One bag containing a tube with material listed as from Rashad Khalifa 107TM-A.

Results:

Deoxyribonucleic acid (DNA) isolated from the above listed evidence was characterized through the polymerase chain reaction (PCR) at the following genetic systems using AmpFISTR® Profiler Plus™ and Cofiler™ kits:

Alleles Detected

Item	Sample	D3 S1358	vWA	FGA	D8 S1179	D21 S11	D18 S51	D5 S818	D13 S317	D7 S820	D16 S539	THO1	TPOX	CSF
8	R. Khalifa 107TM-A ^{XY}	16	15, 17	20, 21	13, 15	27, 30	13, 14	12, 13	9, 13	10, 12	9, 11	9	8, 11	10
1	4TM ^{XY}	16	15, 17	NR	13, 15	NA	NA	12, 13	NA	NR	9 ^a	9	8, 11	10
2	7TM-A ^{XY}	15, 16	15, 16, 17*	NR	11*, 13, 14	28	NA	11*, 12*, 13	NR	10 ^a	9, 11, 12	7, 8 ^a	9, 11	NR
3	7TM-B ^{XY}	16, 17*	15, 17	21 ^a	12*, 13, 15	27, 30	NA	11*, 12, 13	9 ^a	10, 12	9, 11	9	8, 11	NR
4	9TM-1 ^{XY}	16 ^a	15, 17	NA	13, 14*, 15*	NA	NA	13 ^a	NA	NA	NR	NR	NR	NA
5	10TM-1 ^{XY}	16	15, 17	NR	13, 15	27, 30	NA	12, 13	NR	10, 12	9, 11	9	8, 11	10
6	11TM-3 x ^a /y ^a	16	15 ^a	NA	13, 15	NA	NA	12 ^a	NR	NR	9, 11	9	8, 11	NR
7	105TM-1 ^{XY}	16	15, 17	20, 21	13, 15	27, 30	13, 14	12, 13	9, 13	10, 12	9, 11	9	8, 11	10

NR= No reportable activity detected.

NA= No activity detected.

a= Additional activity detected, however, it fails to meet reporting standards.

*= Additional activity detected, however, it fails to meet reporting standards.

/= Results obtained from different amplifications.

1= This report has been amended to reflect a change in the conclusion for Item 2.

Based on the results listed above, the DNA profiles obtained from the samples 4TM, 10TM-1, 11TM-3 and 105TM-1 (Items 1, 5, 6 and 7), are consistent with the DNA profile obtained from the reference sample from Rashad Khalifa 107TM-A (Item 8). Therefore, Rashad Khalifa cannot be excluded as the source of the genetic material in these samples. The probability of randomly selecting an unrelated individual with a DNA profile consistent with the profiles obtained from Items 5, 7 and Item 8 at the genetic systems listed above is approximately: (Note: It is the policy of this laboratory to report statistical estimates greater than the approximate world population as, "1 in greater than 6,500,000,000".)

1 in greater than 6,500,000,000 for the African American population.

1 in greater than 6,500,000,000 for the Caucasian population.

1 in greater than 6,500,000,000 for the Hispanic population.

Statistical estimates can be calculated for Items 1 and 6 upon request.

The DNA profile obtained from the sample 7TM-B (Item 3) is consistent with a mixture of DNA from more than one individual, at least one of which is a male. Rashad Khalifa (Item 8) cannot be excluded as the major contributor to the genetic material in this sample.

The probability of randomly selecting an unrelated individual with a DNA profile consistent with the major profile obtained from Item 3 and Item 8 at the genetic systems listed above is approximately: (Note: It is the policy of this laboratory to report statistical estimates greater than the approximate world population as, "1 in greater than 6,500,000,000".)

- 1 in greater than 6,500,000,000 for the African American population.
- 1 in greater than 6,500,000,000 for the Caucasian population.
- 1 in greater than 6,500,000,000 for the Hispanic population.

The partial DNA profile obtained from the sample 9TM-1 (Item 4) is consistent with a mixture of DNA from more than one individual, at least one of which is a male. Rashad Khalifa (Item 8) cannot be excluded as a contributor to the genetic material in this sample. Statistical estimates for this sample can be calculated upon request.

The partial DNA profile obtained from the sample 7TM-A (Item 2) is consistent with a mixture of DNA from more than one individual, at least one of which is a male. Rashad Khalifa (Item 8) is excluded as a contributor to the genetic material in this sample. This sample can be compared to any additional reference sample submitted. Statistical estimates can be calculated upon the submission of a matching reference sample.¹

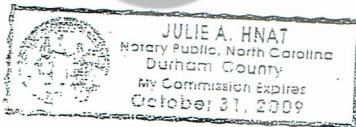
Disposition of Evidence:

Unless previous arrangements have been made, unused evidence will be returned to the submitting agency.

The results have been reviewed independently by the undersigned and are correct as reported.

Sworn to and subscribed
before me this 6th day
of FEBRUARY, 2007
at Research Triangle Park, NC.

Julie A. Hnat
Notary Public



Shawn M. Weiss
Shawn M. Weiss, BS
Associate Technical Director, Forensic Identity Testing

A. Dwayne Winston
A. Dwayne Winston, BS
Associate Technical Director, Forensic Identity Testing

RFB