Commonwealth of Virginia
Department of Criminal Justice Service

DIVISION OF FORENSIC SCIENCE

ORIGINAL

CERTIFICATE OF ANALYSIS

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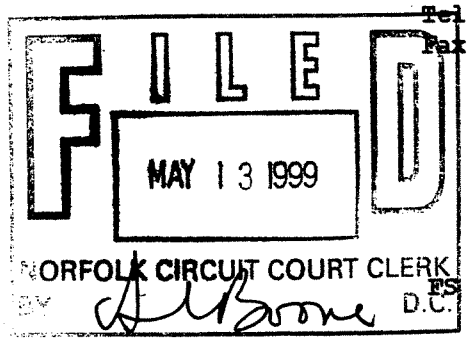
May 6, 1999



TO: R. G. FORD
NORFOLK POLICE DEPARTMENT
3661 E VIRGINIA BEACH BLV
NORFOLK VA 23502

FS Lab #T97-6363

Your Case #: - - -

Victim(s): MOORE-BOSKO, Michelle

Suspect(s): BALLARD, Omar A.

Evidence Submitted By: Maureen A. Evans — Date Received: 07/10/97

Item 1A Stain from Blanket
Item 7 Living Room Ashtray Contents
Item 8 Dining Room Table Ashtray Contents
Item 9 Bedside Table Ashtray Contents

Evidence Submitted By: Scott F. Halverson — Date Received: 07/15/97

Item 14A Known Blood Sample from Michelle Moore-Bosko
Item 14B Vaginal Swabs from Michelle Moore-Bosko
Item 14F Left Hand Fingernail Clippings from Michelle Moore-Bosko

Evidence Submitted By: B. E. Wray — Date Received: 03/08/99

Item 27 Known blood sample from Omar A. Ballard

RESULTS:

Human deoxyribonucleic acid (DNA) was isolated from the known blood sample from O. Ballard (Item 27). This sample was amplified and typed in the PowerPlex system (which includes the CSF1PO, TPOX, TH01, vWA, D16S539, D7S820, D13S317, and D5S818 loci). Refer to the Table for typing results on the known blood sample from O. Ballard (Item 27), and the results of the analysis previously conducted and reported in my Certificate of Analysis dated 2-18-99 on the stain from the blanket (Item 1A), the four cigarette butts from the living room ashtray (Item 7), the cigarette butt from the dining room table ashtray (Item 8), the cigarette butt from the bedside table ashtray (Item 9), and the vaginal swabs (Item 14B), left hand fingernail clippings (Item 14F), and known blood sample (Item 14A) from M. Moore-Bosko.

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Table of PowerPlex Typing Results

Item	Description	CSF1PO	TPOX	TH01	vWA	D16S539	D7S820	D13S317	D5S818
14A	M. Moore-Bosko's blood	12,13	10,11	8,9.3	18,19	8,10	11,12	9,12	12,13
27	O. Ballard's blood	10,11	8,10	7,8	17,17	11,11	8,11	11,12	10,14
1A	Blanket stain:								
	-sperm fraction	10,11	8,10	7,8	17,17	11,11	8,11	11,12	10,14
	-non-sperm fraction	10,11	8,10	7,8	17,17	11,11	8,11	11,12	10,14
7	Cig. butts(4)-living room	12,13	10,11	8,9.3	18,19	8,10	11,12	9,12	12,13
8	Cig. butt-dining room tbl.	11,11	8,11	8,9.3	16,17	11,12	12,12	8,12	11,12
9	Cig. butt-bedside table	11,11	8,11	8,9.3	16,17	11,12	12,12	8,12	11,12
14B	Vaginal swabs from M. Moore-Bosko:								
	-sperm fraction	10,11	8,10, (11)	7,8, (9.3)	17,(18) ,(19)	11,(8), (10)	11,(8), (12)	9,12, (11)	12,13, (10), (14)
	-non-sperm fraction	12,13	10,11	8,9.3	18,19	8,10	11,12	9,12	12,13
14F	Left fingernail clippings from M. Moore-Bosko	---	10,11	8,9.3 ,(7)	17,18 ,19	8,10	11,12, (8)	9,12, (11)	12,13, (10), (14)

Types in parentheses ( ) are lesser in intensity than those not in parentheses
-- no results obtained at this locus

CONCLUSIONS:

The DNA profile obtained from the sperm and non-sperm fractions of the blanket stain (Item 1A), at the PowerPlex loci, is consistent with the DNA profile of O. Ballard (Item 27). Therefore, O. Ballard cannot be eliminated as a possible contributor of the genetic material detected in this stain. The DNA profile obtained from the blanket stain (Item 1A) is:

21 billion times more likely to have originated from O. Ballard than from an unknown individual in the Caucasian population.

4.6 billion times more likely to have originated from O. Ballard than from an unknown individual in the Black population.

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CONCLUSIONS: (cont.)

87 billion times more likely to have originated from O. Ballard than from an unknown individual in the Hispanic population.

The DNA profiles obtained from the cigarette butts from the living room ashtray (Item 7), the dining room table ashtray (Item 8), and the bedside table ashtray (Item 9), at the PowerPlex loci, are different from the DNA profile of O. Ballard (Item 27). Therefore, he is eliminated as a possible contributor of the genetic material detected in these samples.

The DNA profile obtained from the sperm fraction of the vaginal swabs from M. Moore-Bosko (Item 14B), at the PowerPlex loci, is consistent with a mixture of the DNA profiles of M. Moore-Bosko (Item 14A) and O. Ballard (Item 27). Therefore, M. Moore-Bosko and O. Ballard cannot be eliminated as possible co-contributors of the the genetic material detected in this fraction. The foreign DNA profile detected in the sperm fraction of the vaginal swabs from M. Moore-Bosko (Item 14B) is:

23 million times more likely to have originated from O. Ballard than from an unknown individual in the Caucasian population.

20 million times more likely to have originated from O. Ballard than from an unknown individual in the Black population.

51 million times more likely to have originated from O. Ballard than from an unknown individual in the Hispanic population.

No DNA profile foreign to that of M. Moore-Bosko (Item 14A) was detected in the non-sperm fraction of her vaginal swabs (Item 14B).

The DNA profile obtained from the left hand fingernail clippings from M. Moore-Bosko (Item 14F), at the PowerPlex loci, is consistent with a mixture. Neither M. Moore-Bosko (Item 14A) nor O. Ballard (Item 27) can be eliminated as possible co-contributors of the genetic material detected in this mixture.

The evidence will be available at the Tidewater Laboratory after you have received the results of all requested examinations.

Attest:

I certify that I performed the above analysis or examination as an employee of and in a laboratory operated by the Division of Forensic Science, and that the above is an accurate record of the results of that analysis or examination.

Robert W. Scanlon
Forensic Scientist

RWS