

10430 Furnace Road, Suite 107 Lorton, VA 22079 Phone: 703-646-9740

## Forensic Case Report October 8, 2020

Bode Case #: CCA2088-0134 Agency Case #: 30-20-30029

**To:** Det. Anthony Ford Wilmington Police Department 300 N. Walnut Street Wilmington, DE 19801

Suspect: Jabri Hunter

# List of evidence received on July 6, 2020 for possible DNA analysis:

Bode Sample Name	Agency Sample ID	Agency Description
CCA2088-0134-E01	HS#1(a)	One (1) trace evidence swab of the 380 handgun (grips)
CCA2088-0134-E02	HS#1(b)	One (1) trace evidence swab of the 380 handgun (trigger)
CCA2088-0134-E03	HS#1(c)	One (1) trace evidence swab of the 380 handgun (slide)
CCA2088-0134-E04	HS#1(d)	One (1) trace evidence swab of the 380 handgun (magazine)
CCA2088-0134-E05	HS#1(e)	One (1) trace evidence swab of an ammunition cartridge
CCA2088-0134-R06	BM#1	State of Delaware Buccal swab kit for Jabri Hunter

## STR Processing, Results, Conclusions, and Statistics:

The evidence was processed for DNA typing using the PowerPlex® Fusion 6C kit.

- 1. A DNA profile was obtained from sample CCA2088-0134-R06 (Jabri Hunter).
- 2. The DNA profile obtained from sample CCA2088-0134-E01 is consistent with a mixture of three individuals including at least one male contributor. Only Contributors 1 and 2 are suitable for interpretation.

Jabri Hunter cannot be excluded as a possible contributor to the interpretable portion of the mixture DNA profile.

Assuming a mixture of three individuals, this mixture DNA profile obtained is at least 696 septillion times more likely to be observed if it originated from Jabri Hunter and two unknown, unrelated individuals than if from three unknown, unrelated individuals.

This statistical result provides very strong support for inclusion.

Due to the limited data obtained, no conclusions can be made on the uninterpretable Contributor 3 alleles.

# STR Processing, Results, Conclusions, and Statistics: (continued)

3. The partial DNA profile obtained from sample CCA2088-0134-E02 is consistent with a mixture of four individuals including at least one male contributor. Only Contributors 1 and 2 are suitable for interpretation.

Jabri Hunter cannot be excluded as a possible contributor to the interpretable portion of the mixture DNA profile.

Assuming a mixture of four individuals, this mixture DNA profile obtained is at least 21.4 million times more likely to be observed if it originated from Jabri Hunter and three unknown, unrelated individuals than if from four unknown, unrelated individuals.

This statistical result provides very strong support for inclusion.

Due to the limited data obtained, no conclusions can be made on the uninterpretable Contributor 3 and 4 alleles.

4. The partial DNA profile obtained from sample CCA2088-0134-E03 is consistent with a mixture of three individuals including at least one male contributor.

Jabri Hunter cannot be excluded as a possible contributor to the mixture DNA profile.

Assuming a mixture of three individuals, this mixture DNA profile obtained is at least 352 trillion times more likely to be observed if it originated from Jabri Hunter and two unknown, unrelated individuals than if from three unknown, unrelated individuals.

This statistical result provides very strong support for inclusion.

- 5. Sample CCA2088-0134-E04 was screened for human DNA. The results were below the limit of detection; therefore, the sample was not processed further.
- 6. The partial DNA profile obtained from sample CCA2088-0134-E05 is consistent with a mixture of two individuals. Due to the limited data obtained, no conclusions can be made on this mixture profile.

See Table 1 for summary of alleles reported for each sample.

#### Notes:

- 1. Testing performed for this case is in compliance with accredited procedures under the laboratory's ISO/IEC 17025:2017 accreditation issued by ANAB. Refer to certificate and scope of accreditation for certificate number FT-0268.
- The results reported in this case were determined by procedures that have been validated according to the standards established in the FBI's Quality Assurance Standards for Forensic DNA Testing Laboratories.
- 3. Evidence descriptions are based on the written descriptions of the samples by the submitting agency.
- 4. The results apply to the items tested or data provided, as received.
- 5. The opinions and interpretations included in this report are those of the undersigned analyst.
- 6. This test report shall not be reproduced, except in full, without the written approval of the laboratory.
- The submitted evidence and extracts generated by Bode associated with samples CCA2088-0134-E01, CCA2088-0134-E02, CCA2088-0134-E03, and CCA2088-0134-E05 were consumed. All remaining submitted evidence and secondary evidence generated by Bode will be returned to the Wilmington Police Department.

## Notes: (continued)

- 8. All statistical calculations were performed using allele frequencies taken from "US population data for 29 autosomal STR loci" as published in Forensic Sci. Int. Genet. 7 (3) (2013) e82-83 and updated according to Forensic Sci. Int. Genet. 31 (2017) e36-40.
- 9. Any statistical value reported is the 99% 1-sided lower highest posterior density (HPD) interval likelihood ratio which incorporates a correction factor for population substructure.
- 10. Any likelihood ratio reported was generated at the time of analysis. If additional hypotheses are requested, additional statistical calculations may be performed upon request.
- 11. The following verbal scale is used for likelihood ratio statistical results.

LR for $H_1$ OR $1/H_2$ Support	Qualifying Statement		
1	Uninformative		
2-99	Limited Support		
100-9,999	Moderate Support		
10,000-999,999	Strong Support		
≥1,000,000	Very Strong Support		

Report submitted by,

Danielle R. Reed, BS Senior DNA Analyst

# Table 1: Analysis of Short Tandem Repeat Loci

Locus	CCA2088-0134-E01a1	CCA2088-0134-E02a1	CCA2088-0134-E03a1	CCA2088-0134-E05a1	CCA2088-0134-R06a1 (Jabri Hunter)		
Amelogenin	X, (Y)	X, (Y)	X, (Y)	Х,	Х, Ү		
D3S1358	14, (15), 16	14, 15, 16, (17)	14, 15, 16	16,	15, 15		
D1S1656	12, (13), (14), 16	(11), 12, (13), (14), (15), (16)	12, 13, 14, (15), 16	16,	13, 14		
D2S441	11, 12, (14)	(10), 11, 12	(11), 12	12,	12, 12		
D10S1248	13, 15	(12), 13, 15	13, 15, (16)	15,	13, 15		
D13S317	(11), 12, (13)	(11), 12, 13	(11), 12, (13)	12,	11, 12		
PentaE	7, (8), (12), (16)	7,	(7), (8), 12	No Results	8, 12		
D16S539	9, 10, (11)	9, 10, 11, (12), (13), (14)	9, (10), 11, (13)	10,	11, 11		
D18S51	(14), 16, (18), 19	(12), (13), (14), 16, (17), (18), 19	14, 16, 19	(15), 16, 19	14, 19		
D2S1338	(17), 19, 20, (22)	(17), 19, 20, (22)	(17), 19, 20, (22)	19,	17, 22		
CSF1PO	10, 11, 12	10, 12	10, 11, 12	No Results	11, 11		
PentaD	7, (9), 11, (13)	7, (11), 13	7, 9, 11	No Results	9, 13		
TH01	7, 9.3	(5), (6), 7, (8), (9), (9.3)	7, (9.3)	No Results	7,7		
vWA	(11), 15, 16	(11), 15, 16, (17)	(11), 15, (16)	15,	11, 15		
D21S11	(28), (29), (30), 31, 31.2	(28), 29, (31), 31.2, (32.2)	28, 29, (31), (31.2)	31.2,	28, 29		
D7S820	8, 9, (11)	8, (9), (11)	8, (9), 11	8, 9	8, 11		
D5S818	8, (11), (12), (13)	8, (11)	8, 11, 13	No Results	11, 13		
TPOX	(8), 10, 11	(8), 10	11,	No Results	8, 11		
D8S1179	(10), (11), 13, 14	(10), (11), (12), 13, 14, (16)	(10), 11, (12), 13, 14	13, 14	10, 11		
D12S391	17, 19, (22), (23)	17, (18), 19, (20), (22)	17, (18), 19, (21), (22)	17, (19)	17, 22		
D19S433	12, (13), 13.2, (14.2)	12, (13.2), (14.2), (15.2)	12, (13.2), (14.2)	12, 13.2	12, 14.2		
SE33	(17), (19), 19.2, 20	(17), (19), 19.2, 20	17, 19, (19.2)	No Results	17, 19		
D22S1045	10, 16, (17)	10, 16	10, (16)	No Results	10, 17		
DYS391	(10), 11	(9), 11	(10), 11	No Results	11		
FGA	19, (21), (23), 24	(19), (21), (22), 23, 24	19, (22), 23, 24	19,	23, 24		
DYS576	17	17	17	No Results	17		
DYS570	17	No Results	17	No Results	17		
() = Minor Allele = Possible Additional Alleles							