

CL Case #:	C20091828	Agency Case #:	091054602
Agency:	WVC - WEST VALLEY PD	Report #:	460491
ORI:	UT0182500		

Criminalistic Analysis Report - DNA TESTING

Evidence Submission Information

Evidence Submitted: 10/11/2011
 How Received: IN PERSON
 Haz. Materials: BIO MATERIAL
 Submitted By: [REDACTED]
 Delivered By: [REDACTED]
 Received By: [REDACTED]

Evidence Submitted: 10/21/2011
 How Received: IN PERSON
 Haz. Materials: NONE
 Submitted By: [REDACTED]
 Delivered By: [REDACTED]
 Received By: [REDACTED]

Victims and Suspects

<u>Vic/Susp</u>	<u>Name</u>	<u>DOB</u>	<u>Sex</u>	<u>Race</u>
Victim	POWELL, SUSAN	[REDACTED]	F	W

Crimes

<u>NCIC Code</u>	<u>Description</u>
0999	HOMICIDE / MURDER (INC: ATTEMPTED)

CHAIN OF CUSTODY STATEMENT Re: Chain of Custody

The item(s) submitted under the police agency case numbers referenced in this report were in a sealed condition at the time any examination, testing, or analysis was commenced by the undersigned, and that said examination or handling, if any, of the actual items within any such sealed containers was accomplished in a manner to preserve the integrity of the item to assure that any chance of misidentification, or environmental cross-contamination would be avoided by adherence to standardized procedures within the Utah State Crime Laboratory appropriate to any processes applicable to the examination, analysis, or testing of said items. Any deviation from said procedures, and reasons therefore is noted below. The breaking of any seal or part of the container in which the item was submitted, has been followed by a reinsertion of the item into its original container, followed by any examination, testing or analysis and resealing of that container with the undersigned's initials placed over such new seal.

Criminalistics Analysis Report and Conclusions

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Criminalistic Analysis Report - DNA TESTING

DNA analysis complete. See attached report.

I declare under criminal penalty of the State of Utah that the foregoing is true and correct.

Executed On: 11/17/2011

[Redacted Signature]

[Redacted Title]

STATE OF UTAH
CRIME LABORATORY REPORT

[REDACTED]
[REDACTED]
[REDACTED]

CL Case #: C2009-1828

Submitted Date: 11/2/2011

Submitted By: [REDACTED]

[REDACTED]

Agency Code/No.: WVC – West Valley PD/ 09I054602

Delivered By: [REDACTED]

[REDACTED]

Received By: [REDACTED]

[REDACTED]

Report #: C20091828-111611

Victim	Last Name Powell	First Name Susan	Middle Name
Suspect	Last Name	First Name	Middle Name

CHAIN OF CUSTODY STATEMENT RE: Chain of Custody

The item(s) submitted under the police agency case number(s) referenced in this report were in a sealed condition at the time any examination, testing or analysis was commenced by the undersigned and that said examination or handling, if any, of the actual items within any such sealed container(s) was accomplished in a manner to preserve the integrity of the item to assure that any chance of misidentification or environmental or cross-contamination would be avoided by adherence to standardized procedures within the Utah State Crime Laboratory appropriate to any processes applicable to the examination, analysis or testing of said items. Any deviation from said procedures and reasons therefore is noted below. The breaking of any seal or part of the container in which the item was submitted, has been followed by a reinsertion of the item into its original container following any examination, testing or analysis and resealing of that container with the undersigned's initials placed over such new seal.

Criminalistic Analysis Report Follows

STATE OF UTAH CRIME LABORATORY

CL Case #: C2009-1828

Submitted Date: 11/2/2011

Agency / Agency Case #: WVC – West Valley PD/ 09I054602

Report #: C20091828-111611

Criminalistic Analysis Report – DNA – STR
** SUPPLEMENTAL REPORT **

EVIDENCE SUBMITTED:

- Q7: Hair fragments from carpet piece A – trunk (Item 285A8)
- Q8: Swabs of carpet A – area 1 – trunk (Item 285A-A1)
- Q9: Swabs of carpet A – area 2 – trunk (Item 285A-A2)
- Q10: Swabs of carpet A – area 3 – trunk (Item 285A-A3)
- Q11: Swabs of carpet A – area 4 – trunk (Item 285A-A4)
- Q12: Swabs of carpet A – area 5 – trunk (Item 285A-A5)
- Q13: Swabs of carpet A – area 6 – trunk (Item 285A-A6)
- Q14: Swabs of carpet A – area 7 – trunk (Item 285A-A7)
- Q15: Swabs of carpet A – area 8 – trunk (Item 285A-A8)
- Q16: Swabs of carpet A – area 9 – trunk (Item 285A-A9)
- Q17: Swabs of carpet B – area 2 – trunk (Item 285B2)
- Q18: Swabs of carpet B – area 9 – trunk (Item 285B9)
- Q19: Swab of seatbelt (Item 288A)
- Q20: Swabs of seatbelt (Item 288B)
- Q21: Swab of quarter (Item 394090A)
- Q22: Swab of rock (Item 394089B)
- Q23: Swab of carpet – area B – backseat (Item 449285B)
- Q24: Swab of carpet – area C – backseat (Item 449285C)
- Q25: Swab of carpet – area D – backseat (Item 449285D)
- Q26: Swab of carpet – area E – backseat (Item 449285E)
- Q27: Swab of carpet – area J – backseat (Item 449285J)
- Q28: Swab of carpet – area T – backseat (Item 449285T)
- Q29: Swabs of charred debris (Item MVB1)
- Q30: Swabs of stick (Item MVB2)

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**Criminalistic Analysis Report – DNA – STR
** SUPPLEMENTAL REPORT ****

RESULTS OF ANALYSIS:

Deoxyribonucleic acid (DNA) analysis using Polymerase Chain Reaction (PCR) based typing was attempted on the above listed items. Results are as follows:

DNA extractions were performed on the following samples:

- Q7: Hair fragments from carpet piece A – trunk
- Q8: Swabs of carpet A – area 1 – trunk
- Q9: Swabs of carpet A – area 2 – trunk
- Q10: Swabs of carpet A – area 3 – trunk
- Q11: Swabs of carpet A – area 4 – trunk
- Q12: Swabs of carpet A – area 5 – trunk
- Q13: Swabs of carpet A – area 6 – trunk
- Q14: Swabs of carpet A – area 7 – trunk
- Q15: Swabs of carpet A – area 8 – trunk
- Q16: Swabs of carpet A – area 9 – trunk
- Q17: Swabs of carpet B – area 2 – trunk
- Q18: Swabs of carpet B – area 9 – trunk
- Q19: Swab of seatbelt
- Q20: Swabs of seatbelt
- Q21: Swab of quarter
- Q22: Swab of rock
- Q23: Swab of carpet – area B – backseat
- Q24: Swab of carpet – area C – backseat
- Q25: Swab of carpet – area D – backseat
- Q26: Swab of carpet – area E – backseat
- Q27: Swab of carpet – area J – backseat
- Q28: Swab of carpet – area T – backseat
- Q29: Swabs of charred debris
- Q30: Swabs of stick

The following sample was previously analyzed and reported on January 21, 2010, report #C20091828-011910:

- V1: Blood “standard” from Susan Powell (Item 47A)

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Criminalistic Analysis Report – DNA – STR
** SUPPLEMENTAL REPORT **

No human DNA was detected on the following samples. No further analysis was conducted at this time.

- Q7: Hair fragments from carpet piece A – trunk
- Q10: Swabs of carpet A – area 3 – trunk
- Q12: Swabs of carpet A – area 5 – trunk
- Q13: Swabs of carpet A – area 6 – trunk
- Q14: Swabs of carpet A – area 7 – trunk
- Q15: Swabs of carpet A – area 8 – trunk
- Q16: Swabs of carpet A – area 9 – trunk
- Q17: Swabs of carpet B – area 2 – trunk
- Q18: Swabs of carpet B – area 9 – trunk
- Q19: Swab of seatbelt
- Q20: Swabs of seatbelt
- Q21: Swab of quarter
- Q25: Swab of carpet – area D – backseat
- Q26: Swab of carpet – area E – backseat
- Q27: Swab of carpet – area J – backseat
- Q29: Swabs of charred debris
- Q30: Swabs of stick

DNA amplification was performed using the Applied Biosystems AmpF/STR® Identifiler Plus™ Amplification Kit. The analysis of the amplified product was performed on a capillary electrophoresis instrument.

DNA amplification was previously performed on sample V1 using the Applied Biosystems AmpF/STR® Identifiler™ Amplification Kit. The analysis of the amplified product was performed on a capillary electrophoresis instrument.

DNA profiles obtained from the fifteen attempted loci are indicated in the table below:

STATE OF UTAH CRIME LABORATORY

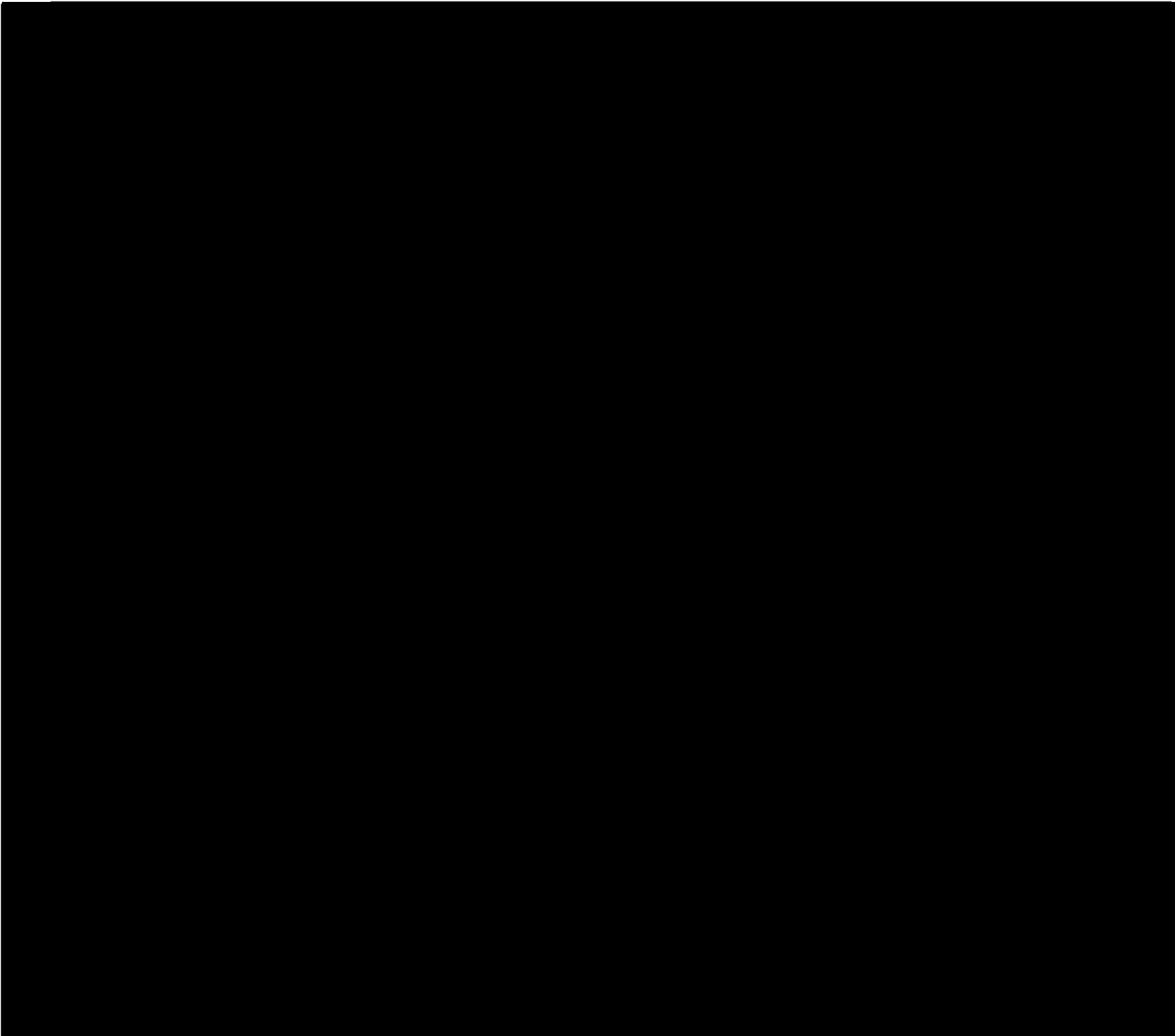
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() = Intensity indicates a mixed sample
* = indicates a possibility of an allele(s) below threshold

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Criminalistic Analysis Report – DNA – STR
** SUPPLEMENTAL REPORT **

CONCLUSIONS:

Based on a comparison of the DNA profiles from the samples listed above...

No DNA profiles were developed on the following samples:

Q8: Swabs of carpet A – area 1 – trunk

Q9: Swabs of carpet A – area 2 – trunk

Q23: Swab of carpet – area B – backseat

Q24: Swab of carpet – area C – backseat

Q28: Swab of carpet – area T – backseat

The amelogenin only DNA profile of sample Q11 (Swabs of carpet A – area 4 – trunk) is insufficient for comparison.

The 10 loci and amelogenin DNA profile of sample Q22 (Swab of rock) appears to be a mixture of DNA from more than one individual. The sample does not exhibit a clearly discernable major and minor profile.

- Sample V1 (Blood “standard” from Susan Powell) is excluded as a possible contributor to sample Q22.

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Criminalistic Analysis Report – DNA – STR
** SUPPLEMENTAL REPORT **

DISPOSITION OF EVIDENCE:

All items were retained in the laboratory.

I declare under criminal penalty of the State of Utah that the foregoing is true and correct.

Executed on November 17, 2011.

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The above interpretation does not represent the totality of the forensic scientist's observations and conclusions. Further discussion and/or questions are encouraged.