

U. S. DEPARTMENT OF JUSTICE  
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U. S. CASE No.

37-F-2795

## BUREAU OF CRIMINAL IDENTIFICATION AND INVESTIGATION

P. O. Box 1859, Sacramento 95809

To: Thomas Joyce  
Sheriff of Solano County  
Fairfield, California 94533  
Attn: Det. Sgt. Leslie Lundblad

Copies To:

Following is a report concerning physical evidence examinations requested by your office. In any future correspondence regarding this case please use the C.I.I. case number appearing at the top of this report. If court testimony is required, please notify the Bureau at least two weeks in advance whenever possible.

A. L. COFFEY  
*Chef of Bureau*

## PHYSICAL EVIDENCE EXAMINATION REPORT

TYPE OF CASE LS? PC	REQUESTING AGENCY SOLANO COUNTY SHERIFF'S OFFICE	
SUBJECT	JENSEN: Betty Lou (V)/FARADAY: David (V)	
EXHIBITS RECEIVED FROM DET. SGT. LESLIE LUNDBLAD	DATE 1-3-69	TIME 10:15 AM
REFERENCE IN PERSON		

The following exhibits were submitted:

1. Bullet from Faraday's body.
2. Two bullets from Jensen's body.
3. Bullet found in panties of Jensen.
4. Five Super X .22 cartridge cases found at scene by coroner.
5. Four Super X .22 cartridge cases found at scene by Sgt. Silva.
6. One bullet found on top of 1961 Rambler, Lic DTL 962.
7. One bullet found in floor mat, left side storage area of 1961 Rambler, Lic DTL 962.
8. One bullet found on ground near Jensen's body.
9. Purple dress of Jensen.

RESULTS AND CONCLUSIONS:

Examinations have been conducted of all bullets and cartridge cases present in Items 1 thru 8. Various markings on those exhibits were extensively examined, evaluated and checked against records maintained by this laboratory and our rather large test bullet and cartridge file. As a result of these studies

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We find that the exhibits correspond only with tests fired in J. C. Higgins, Model 80, .22 automatic <sup>rifles</sup>. It should not be assumed that the exhibits must have been fired in such a weapon but this is the only type presently in our files which corresponds, therefore, it appears somewhat probable that the responsible weapon was of this type.

In addition to subjecting to further tests any J. C. Higgins, Model 80 automatic <sup>rifles</sup> recovered, further tests should be made on any weapons having the following characteristics:

- a. Cartridge cases: Semi-circular firing pin impression at 12 o'clock position, small extractor markings at 3 o'clock position. Very faint ejector marking at 8 o'clock position (latter may not always be detectable).
- b. Weapon barrel or test bullets: Six right hand grooves, land and groove ratio 1:1+. Bullet groove width approximately .056 inch. Bullet land width approximately .060 inch.

Intercomparison of the cartridge cases in Items 4 and 5 indicates that all were probably fired in the same weapon and all are the same make and type of ammunition. Due to lack of sufficient unique structure it appears that considerable difficulty will be encountered in positively identifying the responsible weapon if it should be recovered.

All bullets submitted were Western copper coated .22 Long Rifle bullets. Although some were damaged it was possible to determine that all but Item 1 contained the same (6 R H) class characteristics. The best bullets were those in Items 2, 3 and 8. Each of these was microscopically compared with the others but in no case was an absolutely positive identification possible. This is apparently due to the condition of the rifle barrel, which does not leave course structure on bullets fired therein, as well as the effect of the copper coating on the bullet. From our examination it appears that a conclusive identification of the responsible weapon will be extremely difficult, if not impossible, even though it should be recovered.

Examination of the dress (Item 9) revealed one hole in the front near the center and five holes on the upper right side of the back. No smoke or gunpowder residue was found in the vicinity of any of these holes except the topmost hole on the back. Near the latter one single grain of gunpowder was found. From these examinations, it therefore appears that the weapon was held at least several feet from the victim at the time of the shooting. The minimum distance it could have been held cannot be established without testing of the responsible weapon when it is recovered. The one single granule of gunpowder found

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near the topmost hole on the back of the dress may have been transferred by the bullet itself. If not, it would appear that when this hole was produced the weapon was somewhat closer to the victim than in the case of the other holes.

DISPOSITION OF THE EVIDENCE:

The exhibits submitted will be retained at the laboratory pending receipt of further instructions.

January 8, 1969  
DQB:HLP



DAVID Q. BURD  
Criminalist