

Test No. 12-595:
GSR - Distance Determination Research Test

DATA MUST BE RECEIVED BY April 02, 2012 TO BE INCLUDED IN THE REPORT

Participant Code:

WebCode:

Scenario:

Police are investigating a shooting at a gas station. The victim's t-shirt was cut and removed by paramedics. The portion of the shirt with the bullet hole was recovered and is being submitted for examination. The coroner confirmed that no exit hole was present. A suspect was apprehended later that day and the police seized a GSG-5PK .22 caliber semiautomatic pistol with a 4.5" barrel from him. The bullet recovered from the victim was identified as having come from the suspect's firearm. Rounds of Federal American Eagle® 36 grain copper plated hollowpoint ammunition (which was consistent with the bullet recovered from the victim) were test fired with the suspect firearm and the distance standards prepared. Investigators are asking you to compare the recovered victim's t-shirt with the distance standards provided to determine the muzzle to target distance of the firearm from the t-shirt.

Please note the following:

- For the Sodium Rhodizonate treatment, before use the solution was tested on a lead mark on filter paper which tested positive.
- Multiple shots were fired at each distance to confirm consistency in patterns. The best pattern was selected for reproduction to represent the known standard.

Items Submitted:

K1a-c: Distance Standards at 3" increments from Contact to 27" provided as photographs of the Powder Pattern on fabric, and Modified Griess Test and Sodium Rhodizonate chemical treatments.

Q1: T-shirt with bullet hole.

- 1.) What is the minimum and maximum distance that the firearm could have been from the t-shirt (Q1) at the time of discharge?

Minimum distance _____(inches) and Maximum distance _____(inches)

2.) Are the instructions on the data sheet clear and sufficient for testing purposes? _____

If not, which instructions?

3.) Does the quality of the sample (t-shirt) meet your lab's requirements for testing? _____

If not, in what way is it lacking?

4.) Is the packaging adequate (including protection of the sample & labeling)? _____

If not, what changes are needed?

5.) Does the quality of the photos meet your requirement for examination? _____

If not, where or why are they lacking?

6.) Were the distance standard photos of the Powder Pattern on fabric, and the Modified Griess and Sodium Rhodizonate chemical treatment tests adequate for the evaluation? _____

If not, where or why are they lacking?

7.) What other substrate types do you commonly encounter in casework?

8.) How much time did it take to complete this examination? _____(in hours)

9.) Would your laboratory partake in yearly testing of GSR-Distance Determination? _____

If not yearly, how often would your laboratory participate? _____

10.) Additional Comments on Overall Test Design

Return Instructions

Data Sheets can be mailed or faxed (please include a cover sheet) and must be received by *April 02, 2012* to be included in the report.

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