

# Individual Report Test 09-539: Fibers Examination

Participant Code: **U1234A**  
WebCode: **ABCDEF**

Test Summary: Participants were provided with a one inch piece of known yarn (Item 1) and two questioned individual fibers (Items 2 and 3). They were requested to examine the submitted items and determine if the questioned fibers could share a common origin with the known fiber. Items 1, 2, and 3 were from the same skein of yarn labeled as 70% Acrylic and 30% Alpaca. The yarn was purchased from a local store. (Please see the Summary Report for additional summary comments and information.)

Association, Identification Results			
	Item 1	Item 2	Item 3
Could the questioned fibers (Item 2 and/or Item 3) have originated from the victim's scarf (Item 1)?	-	Yes	Yes
What types of fibers were identified in Items 1-3?	Manufactured, Acrylic and Animal, Wool	Manufactured, Acrylic and Animal, Wool	Manufactured, Acrylic and Animal, Wool
<b>Consensus Results</b> Participants: 187			
ASSOCIATION:	-	Yes (96%)	Yes (98%)
IDENTIFICATION:	<b>Acrylic, 185 (99%)</b>	<b>Acrylic, 184 (98%)</b>	<b>Acrylic, 184 (98%)</b>
	<b>Animal, 177 (95%)</b>	<b>Animal, 177 (95%)</b>	<b>Animal, 177 (95%)</b>

Examination Methods			
Microscopic Exams:	<input checked="" type="checkbox"/> Stereomicroscope	<input checked="" type="checkbox"/> Comparison	
	<input checked="" type="checkbox"/> Polarized Light	<input checked="" type="checkbox"/> Fluorescence	
<input type="checkbox"/> Macroscopic Exam	<input checked="" type="checkbox"/> IR/FTIR	<input checked="" type="checkbox"/> Microspectrophotometry	
<input type="checkbox"/> Solubility Tests	<input type="checkbox"/> Cross-Section	<input type="checkbox"/> Melting Point	
Other:	<u>Liquid chromatography</u>		

**Conclusions**

The questioned fibers recovered from the coat and the vehicle could not be differentiated from the known fibers from the scarf based on the properties examined. The questioned fibers have originated from the scarf or another source or sources made from indistinguishable fibers.

**Additional Comments**

The animal (wool) fibers were colorless so MSP and FTIR was only done with the acrylic fibers.