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February 5, 2007

**Certificate of Re-Examination  
Supplement**

L. I. van der Vyver  
No. 1, Villa Marina,  
Beach Road, Mouille Point  
Green Point Post Office  
8005  
South Africa

Reference: Inge Lotz Homicide/ Footwear Impression Evidence

Evidence Submitted:

Electronic images of a court chart and known impressions of a Hi Tec athletic shoe.

Results:

This report supplements and confirms the results of my re-examination of the impression evidence in this case.

S.F.S. 98/011      S.A.P. 322  
SUID-AFRIKAANSE POLISIED      SOUTH AFRICAN POLICE SERVICE

PKRS Verw No.      STAAT teen  
LCRC Ref No. ....230/03/2005.....      STATE vs .....FREDERICK BAREND VAN DER VYFER



VAN AFDRUK OP  
IMPRESSION ON .BLOEDMERK OP BADKAMER VLOER.....



VAN  
OF .REGTER SKOEN.....

DESKUNDIGE  
EXPERT .....SUPT B.S. BARTHOLOMEW.....

The images depicted in the court chart marked State vs. Federick Barend Van Der Vyfer and bearing the name Supt B. S. Bartholomew, each contain two elliptical markings designated 1 and 2. It should be noted that these areas in question are quite different to the competently trained impression evidence examiner.

This court chart clearly depicts a manipulation of the factual aspects of the two photographic images. These aspects include the following observations:

Characteristic 1 of the questioned impression appears as a random blood spatter or smear at approximately 30 degrees to the right of a vertical plain. This characteristic also possesses a curved design feature above and to the right of the oval.

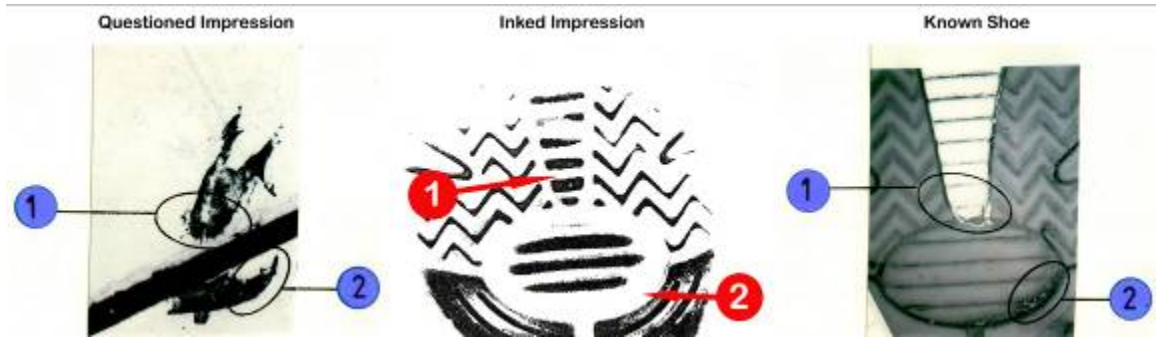
Characteristic 1 of the known shoe depicts a vertical design element divided by a series of horizontal grooves. This design element is adjacent to two areas of zig-zag or herringbone design features. Characteristic 1 in this image appears at approximately 5 degrees left of the vertical plain.

Characteristic 2 of the unknown impression includes a curved lower right border which straightens as it flows downward to the left. This characteristic includes the manipulated or tampered area set forth in my previous Certificate of Re-Examination.

Characteristic 2 of the known shoe depicts the right side of an oval shaped design element that is divided by a series of horizontal parallel grooves. The lower center portion of this oval connects with a vertical groove in the outsole of this shoe. It should be noted that the oval design element continues to curve upward and to the left at this point, unlike the questioned impression.

If a substance such as blood were present on the suggested areas of the suspect shoe shown in this court chart, those areas would produce either an exact reproduction of the design element or a reverse color image depicting the grooves of the elements. This would include the horizontal lines or grooves in Characteristics 1 and 2 and depicted in the known inked impression of the shoe heel. Likewise and most important, Characteristics 1 and 2 would possess the same spatial relationship (distance between ovals) to each other. There would never be the drastic spatial difference between these characteristics as exhibited in the court chart.

It should further be noted that the manner in which the photograph of the shoe sole on the right has been cropped at the base of the image to infer that it corresponds with the manipulated or fabricated area of the questioned impression is a further deception of the facts.



The purported individual characteristics (grains of sand) have no scientific basis for consideration due to their inconsistency with the class characteristics (design elements) in both images. To assert otherwise by an expert would conflict with the basic principles of forensic comparisons. These principles or standards require that class characteristic must be in direct agreement before individual characteristics can be considered. It is further important to consider, that there is nothing about the questioned impression image that would cause myself or any qualified examiner to believe that the white specks depicted in the image were caused by sand. These features could just as well be anomalies in the floor tile. If these features were made by grains of sand adhering to a shoe sole, it is beyond my comprehension that they would remain but for a brief moment and would not presently be attached to the sole. Most significant, it is quite apparent from the inked impressions provided, that were sand particles adhering to the shoe in the suggested area, that they could not have made contact with the floor, thus preventing any form of association. To suggest that this area of the shoe made contact with the floor is beyond scientific probability.

## Final Conclusion

It is my expert opinion that this court chart is a misrepresentation of the scientific facts of this examination and a blatant attempt to convince the courts to the contrary. Any attempt by Supt Bartholomew or the South African Police Services to perpetuate this erroneous and fabricated conclusion shall be considered unethical by the international forensic science community. There is no consistency whatsoever between the two images depicted in this chart.

I attest that the afore stated results are a true and accurate compilation of my findings in the captioned case and that these results are based on my independent analysis of the aforementioned photographic images. These results are in no way based on conclusions reached previously by other examiners, whether contradictory or affirming my results.

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Michael R. Grimm, Forensic Consultant