

March 3, 2022

Paul D'Amato D'Amato Law Firm, P.C. 2900 Fire Road, Suite 200 Egg Harbor Township, New Jersey 08234

Re: DDC # F19-25058; Tiffany Valiante

Dear Mr. D'Amato:

The purpose of this letter is to inform you of the condition of the evidence from Tiffany Valiante's case submitted to DDC Forensics for serological and DNA analysis. The packaging and the maintenance of the evidence and a reference blood card that was obtained by the New Jersey Transit Police Department was not in conformity with acceptable protocols...

During our examination we noted some issues with the packaging and preservation of the evidence. A number of the items were sealed with tape, but the initials of the individual who accessed the evidence, and the date this occurred, were absent from the seals. In addition, we could see that the tape had been placed over tape that had been previously placed on the packages, making it difficult to observe the initials and date on the previous seals. The blood card from Tiffany Valiante did not have initials and the date from the collector or the individual who packaged the blood card. It is industry standard in forensics to maintain the chain of custody of the evidence by opening the packaging in a new location each time and documenting who opened the evidence and when, by labeling the seals with initials and the date.

During the extraction and quantification of DNA from the blood card of Tiffany Valiante, male DNA was detected. A second extraction and quantification of DNA from the blood card of Tiffany Valiante was performed and again male DNA was detected. Y-STR analysis was performed on the first extracted sample from the blood card and a partial, mixed Y-STR DNA profile, unsuitable for comparison, was obtained. Although a single female DNA profile was amplified from the blood card using STR analysis, we felt it necessary, due to the male contamination and lack of initials and date on the seal, to further compare the DNA samples from Tiffany Valiante's mother and father to verify that the female DNA profile from the blood card was in fact from Tiffany Valiante.



One package of evidence, containing a stained white towel, was placed in a paper bag that was not properly sealed, initialed or dated. It is important that the evidence is completely sealed so trace evidence, such as hairs, can't fall out, and to prevent contamination or access to the evidence.

One piece of evidence maintained in a plastic bag appeared to be covered in mold. Once this happens it is extremely difficult, if not impossible, to obtain a DNA profile. The critical piece of evidence, which was a T-shirt worn by Tiffany Valiante, had been placed in a plastic bag and knotted closed. When storing evidence that may contain DNA, it is important to make sure the evidence is dry before packaging it and it should remain dry and at room temperature. Evidence should be stored in paper bags or envelopes and should never be placed in plastic bags because they retain moisture and they provide a growth medium for bacteria and mold that will degrade DNA evidence. The testing our lab performed on the T-shirt had no probative value and this could be due to the condition of the evidence.

A number of items submitted to our laboratory for DNA analysis had been outdoors, exposed to the elements for a few weeks, prior to being collected. Our laboratory was unable to obtain DNA from any of the items of evidence.

Evidence must be identified, collected, packaged, secured, and maintained correctly, following a strict chain of custody so that it can be analyzed appropriately. It is essential that the integrity of the evidence is protected in order to make it admissible in the court of law. Our laboratory has extensive experience performing DNA analysis on evidentiary samples with degraded or limited DNA, and we have had great success obtaining DNA profiles for further comparison from these challenging samples. However, if the evidence is not properly acquired and maintained, the likelihood of achieving worthwhile test results is remote. Unfortunately after extensive testing, our laboratory was unable to obtain DNA from the evidence of any probative value.

I am available to further discuss my findings and can be contacted at 800-406-1940.

Sincerely.

Julie A. Heinig, Ph.D.

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