

SEMEN AND SPERM DETECTION INC.

1201 W. Airport Freeway, STE 251, Euless TX 76040
(817) 283-4774 (214) 742-4362
(888) 875-7574 Fax (800) 886-2148
<http://www.Semen-Detection.com>



Analysis Report

Case # PSA82288A-B

On 1 December 2008, UPS (1Z335060371000####) delivered to SSDI an envelope containing two pair of ladies panties. The items were logged in and testing was completed on 12/1/08.

Evidence

Both items are ladies panties manufactured by Victoria's Secret size M. Item A is black trade name "Angels" with ID RN70817. Item B is white with ID of RN54867. UV long and short wave light confirmed the locations for both tested samples.



Photograph 1- Tested Item A



Photograph 2- Tested Item B

Analysis

A test for the presence of Acid Phosphatase (AP) was conducted. Acid phosphatase is an enzyme present in semen at concentrations of 20 to 400 times other body fluids. The presence of acid phosphatase is a presumptive test for the presence of semen and needs to be confirmed by DNA or the presence of a Prostate Specific Antigen (PSA).

A Prostate Specific Antigen (PSA) test was completed. The detection of the PSA on forensic samples is often helpful because it confirms the presence of semen even in samples that involve

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vasectomized or azoospermic individuals. The PSA is a glycoprotein produced by the prostate gland and secreted in seminal fluid at concentrations (from 2.0x10⁵ to 5.5x10⁶ ng/ml).

A microscopic examination was completed. Microscopic examination is a presumptive test for the presence of sperm unless intact, non-degraded sperm are detected. Intact sperm are rarely visible after 4 days unless the sample was immediately frozen and properly stored.

A test for human salivary amylase (HSA), an enzyme found in human saliva was performed. This test will detect as little as 1 µl of saliva with no cross-reaction to blood, semen, urine, vaginal secretions or menstrual blood, however a low-level detection from breast milk and human fecal matter may be observed.

Results

Item B tested positive for the presence of semen by PSA, and negative for AP, and negative for sperm heads by microscopic examination. Item A tested negative for the presence of semen by AP and PSA, and negative for sperm heads by microscopic examination. Item A tested negative and Item B tested positive for human saliva. The following chart provides the comparative strengths of the results of each sample and the four tests (1 to 10 scale, 10 being the strongest outcome).

Item	Item Marking	PSA	AP	Sperm	HSA
A	A – 11/23/08	0	0	0	0
B	B – 11/09/08	9	0	0	6

Conclusions

Item B tested positive for the presence of semen. Item A tested negative for the presence of semen. Item B tested positive for human saliva. No whole sperm heads were detected microscopically on Item B which may be attributed to the age or amount of the sample or the contributor could be vasectomized or azoospermic. Item B was most likely worn within 80 hours following intercourse. A successful DNA extraction for a male YPLEX profile on Item B is estimated above 85% and is not recommended for Item A. The tested items and proof of tests will be held for one year then destroyed. Results were emailed.

Steve Calvert

State of Texas, County of Tarrant

Before me, Steve Calvert, on this day personally appeared to me and presented his Texas drivers license to be the person whose name is subscribed to the foregoing instrument and acknowledged that he executed the same for the purposes and consideration therein expressed.

Given under my hand and seal of office this 1st day of December 2008.

Julie Green