



Criminalistics Section – 2007

B190 Analysis of ATM Security Ink at the FBI Laboratory

Pamela C. Reynolds, BS, and Jason D. Brewer, PhD, FBI Laboratory, Room 4220 Chemistry Unit, 2501 Investigation Parkway, Quantico, VA 22135*

After attending this presentation, attendees will learn information regarding procedures to analyze atm security ink. Various methodologies, along with their strengths and weaknesses, can be evaluated for use in their laboratories.

This presentation will impact the forensic community and/or humanity by demonstrating procedures and methodology will be presented that can be used in other forensic laboratories to analyze this type of evidence.

Bank security devices are disguised as a stack of bills with a hidden component that releases a red dye and/or tear gas when it is activated. These devices are given out by a bank teller during the course of a robbery to aid in the recovery of the stolen money. However, ATM machine robberies are increasing in numbers within the United States. Such acts of crime not only result in great losses of money, but also severe destruction of property to the bank and surrounding areas. 3SI Security has developed a security device to help protect ATM machines. When a robbery of an ATM machine occurs, and the money carriage is disturbed, an ink is released that will stain the bills contained within it. This staining renders the money useless, which can lead to its recovery. Advertisement for the presence of such security systems can also prevent any attempts of a robbery from the start.

The FBI Laboratory currently has validated procedures for the analysis of bank security devices involving the red dye and tear gas dye packs. This presentation will evaluate the techniques and methodology available to analyze evidence related to the ATM Security Ink systems.

ATM Security Ink, Forensic, Instrumentation