



Manufacturer's Information

Firearms Examination Test No. 10-526

Each sample pack contained five items: Item 1 consisted of three cartridge cases fired in the "suspect's weapon". Items 2, 3, 4 and 5 each consisted of one expended cartridge case "recovered from the bank". Federal Cartridge Company American Eagle® .40 S&W 165 grain full metal jacket (FMJ) ammunition was used for all five items. Participants were requested to determine which, if any, of the questioned expended cartridge cases (Items 2-5) were discharged from the same firearm as the known expended cartridge cases.

The expended cartridge cases in Items 1 and 2 were fired in a 40 S&W Springfield Armory XD40 handgun (Serial number US372267). Items 3 and 5 were expended from a 40 S&W Springfield Armory XD Compact handgun (Serial number US487102). Item 4 was expended from a .40 Sig Sauer P226 handgun (Serial number U672227).

SAMPLE PREPARATION-

Items expended from the three weapons were prepared and packaged separately from each other, and no other firearm was present in the production area other than the one being used to create the immediate items. A water tank, fitted with a cartridge catch net, was used in the firing and recovery of most of the expended cartridges used in this test. Also, an indoor firing range was used in the firing and recovery of some of the expended cartridges used in this test.

ITEM 4 (ELIMINATION): A total of 84 cartridges were loaded into magazines in preparation for shooting with the .40 Sig Sauer P226 handgun. After the 84 cartridges were expended, the cartridge cases were collected and packaged together as a batch in zip top bags. This process was repeated until the required number were produced. Out of each batch, the necessary number of cartridge cases were selected and inscribed with a "4" item number (one cartridge case), then sealed into an Item 4 jewel box.

ITEMS 3 and 5 (ELIMINATION): A total of 84 cartridges were loaded into magazines in preparation for shooting with the 40 S&W Springfield Armory XD Compact handgun. After the 84 cartridges were expended, the cartridge cases were collected and packaged together as a batch in zip top bags. This process was repeated until the required number were produced. Out of each batch, the necessary number of cartridge cases were selected and inscribed with the following item numbers: "3" or "5" (one cartridge case each), then sealed into their respective jewel boxes and kept together as an elimination batch.

ITEMS 1 and 2 (IDENTIFICATION): A total of 84 cartridges were loaded into magazines in preparation for shooting with the 40 S&W Springfield Armory XD40 handgun. After the 84 cartridges were expended, the cartridge cases were collected and packaged together as a batch in zip top bags. This process was repeated until the required number were produced. Out of each batch, the necessary number of cartridge cases were selected and inscribed with the following item numbers: "1" (three cartridge cases) or "2" (one cartridge case), then sealed in their respective jewel boxes and kept together as an association batch.

SAMPLE SET ASSEMBLY: For each sample pack, Items 1 and 2 of the same association batch, Items 3 and 5 of the same elimination batch along with an Item 4 were placed in a sample pack box. This process was repeated until all of the sample sets were prepared. Once verification was completed, the sample packs were sealed with evidence tape and initialed "CTS".

VERIFICATION-

During test production, 9 cartridge cases from each batch of 84 cartridge cases were randomly selected and intercompared to confirm that markings were consistent within each batch. In addition, laboratories that conducted the predistribution examination of the completed sample sets reported the expected identification and eliminations.