# CARTRIDGE/SHOTGUN SHELL EXAMINATION PROTOCOL

#### 6.0 Cartridge/Shotgun Shell Examination Protocol

- 6.1 Handle evidence cartridges/shotgun shells carefully
  - 6.1.1 Refer to the SBI Policy and Procedure Manual Evidence Which May Carry Infectious Diseases Page 37-3
    - Read SBI-5 to determine if request for serological examination was made or if summary of incident indicates that such an examination is necessary. If determined that serological examination is necessary, transfer evidence to Molecular Genetics Section prior to examining.
  - 6.1.2 Wear recommended laboratory gloves when handling evidence cartridge/shotgun shells that may be contaminated with blood/body matter or other biological material.
  - 6.1.3 Cartridges/shotgun shells that are contaminated with blood/body matter or other biological material should be cleaned with a disinfectant such as 10% bleach, Hibiclens or denatured Ethanol.
    - Body matter may be cleaned off with a clean cotton tipped swab.
- 6.2 Mark all evidence cartridges/ shotgun shells for identification.
  - 6.2.1 Do not mark on base or rim or mark on possible extractor or chamber marks.
    - Mark with item #, case #, date and initials

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- 6.3 Fill out a Cartridges/Cartridge Cases Work Sheet with the following fields:
  - 6.3.1 Item #:
    - The "K" number assigned to the cartridge/shotgun shell by the examiner.
    - When applicable, the Laboratory Item number assigned to the item(s) by the Evidence Control Unit.
    - The item number assigned by the submitting agency to this/these cartridge case(s)/shotgun shell(s).

### 6.3.2 Caliber/Gauge:

• Enter the appropriate caliber/gauge as determined by examination of the base of the cartridge or comparison with known standards.

#### 6.3.3 Manufacturer:

- Enter the manufacturer as determined by examination of the base of the cartridge or comparison of known standards.
- 6.3.4 Description: (may include):
  - Centerfire or Rimfire.
  - Shape of the cartridge. E.g., belted, rimless, tapered, etc.
  - Shape, weight, description of the bullet loaded in the cartridge.
  - Composition of casing or shotgun base and hull.
  - Composition of primer.

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- > Description of primer sealant if present.
- Position and number of any cannelures.
- Shotgun shell load information. E.g., Max 11/4 #6
- Written and/or sketched description of head stamp.

### 6.3.5 Firing Pin Impression Shape:

- Description of firing pin impression shape if any.
- Place NA (not applicable) if no firing pin impression present.

#### 6.3.6 Extractor:

- Is there an extractor mark present?
- Are there multiple extractor marks present?
- An examiner may note the shape and quality of an extractor mark.
- If it can be determined, a clock relationship for the extractor may be noted. Based on looking at the base of the cartridge.
- Place NA (not applicable) if no extractor mark is present.

#### 6.3.7 Ejector:

- Is there an ejector mark present?
- Are there multiple ejector marks present?

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- An examiner may note the shape and quality of an ejector mark.
- If it can be determined, a clock relationship for the ejector may be noted. This clock relationship is determined by looking at the base of the cartridge case with 12 o'clock at the top.
- Place NA (not applicable) if no ejector mark is present.
- 6.3.8 Notes: (may include:)
  - Trace evidence noted. Is the case/shotgun shell damaged?
  - Are there resizing marks present? Indicative of remanufactured ammunition.
  - Are there chamber marks present?
  - Are there magazine or clip markings present?
  - Are there any other markings present that may help in identifying cartridge/shotgun shell?
- 6.4 A sample cartridge/cartridge case examination work sheet may be viewed on the following page.
- 6.5 No formatted spaces on any case work sheets are to be left blank. It is permissible to use N/A (not applicable) or a single line through unused spaces. If a work sheet contains multiple formatted sections, those not utilized must be crossed through or deleted.

Evidence Examination Works	sheet	Παγε 2 οφ		
	Laboratory #:			
	Examiner's Initials:			
Report #:	Date:			
Centerfire Ca	artridge Case/Shotshell Examination			
Caliber/Gauge:				
<b>Description:</b>				
Manufacturer:				
Firing Pin Shape:				
Extractor:				
Ejector:				
Trace Evidence:				

**Container(s):** 

through:

**Notes:** 

Package entered

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	Παγε 3 οφ 6
Laboratory #:	
Examiner's Initials:	

Report #: Date: