G. Laboratory, Medical and Other Findings:

1. Ithaca, Model M1911-A1, .45 caliber pistol, serial number 2102279:

provided the investigating Agents with an Ithaca, Model M1911-A1, .45 caliber pistol which her brother, believes was owned by J.W. Milam and used to kill Emmett Till. The pistol had been owned by the father and was given to

Misc o/s

Interview of Lamarcus Pilate by Fox 13 News

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by her father. Manufacturer's data reflects that this weapon was manufactured in 1945 and was inspected by Ithaca inspector. Latent print analysis was conducted on this weapon; however, no latent prints of value were detected. This weapon was test fired in the laboratory and was found to function normally.

2. Identification and Search of Barn: A review of the trial transcript, published accounts, photographs and information from individuals, identified Drew, Mississippi as the location of the former Clint Shurden Plantation. The property is currently owned by and Situated on the property are that appear to have been standing in 1955. traveled to Mississippi during April 2005 and visited the property in the company of investigators. During the tour of the property explained the layout of the property.
as it existed in 1955, the location of the various buildings and homes also positively identified the barn, shown above, as the barn in which Emmett Till had been taken and from which heard screams on August 28, 1955.\(^{207}\)

Additionally who met with Roy Bryant in 1985, was taken to the property by Bryant and told that Till had been tortured/murdered inside the barn. The photograph taken by in the presence of Roy Bryant is depicted below:

![Barn Identified by Roy Bryant in 1985](image-url)

On May 18, 2005, a search was conducted of the barn identified by The search included the removal and sifting of dirt from the barn floor in one of the rooms known to exist in 1955 and the use of luminal on framing believed to exist in 1955. Seized during the search were five items believed to be possible bone fragments.\(^{208}\) Examination of these items by \[\text{Blank}\]
revealed three of these fragments to be animal bones and the remaining two items as rocks. 209

3. Exhumation & Autopsy of Remains: Pursuant to an Illinois State Court Order, on June 1, 2005 the remains interred at the Burr Oak Cemetery, Alsip, Illinois, in a grave marked to be that of Emmett Louis Till, were exhumed. 210, 211 Following the exhumation of the gravesite, the vault containing the casket and remains were transported to the Cook County Medical Examiner’s Office. The vault was opened, the casket removed from the vault, and the remains removed from the casket. Following removal of the remains from the casket, an autopsy was performed under the direction of [Redacted] Chief Medical Examiner, Cook County, Illinois. 212, 213, 214

a. CT Examination: Upon removal from the casket, and prior to any physical examination, the remains were transported to the John H. Stroger, Jr. Hospital of Cook County and subjected to CT testing. The examination revealed there were extensive and dramatic fractures of the skull, metallic fragments were identified in the cranium, and a vertical symphysisal fracture of the thyroid cartilage was observed. The distal left femur was fractured. A possible subtle fracture of the right capitate bone was observed in the right wrist, as well as a fracture to the left lunate bone of the left wrist. 215, 216
b. Forensic Dental Examination: Dental examination of the remains was conducted to establish the approximate age of the subject and to conduct a photographic comparison of dental details. The dental development and the tooth eruption of the remains revealed that the estimated mean dental age of the remains was 14.6 years, with a standard deviation of one year.217

Family photographs of Emmett Till, taken during his lifetime, were obtained and provided to the Cook County Medical Examiner for use in a forensic dental examination.218 Examination of the ante mortem photographs revealed a distinctive gap or space between the maxillary left lateral incisor and the maxillary left canine. Measurements taken on the ante mortem photograph revealed an angle of 74 degrees for the proximal angle of this gap. Postmortem examination of this gap revealed an angle of 77 degrees for the proximal angle of this gap.

A photographic comparison wherein the superimposition of the left maxillary lateral incisor and maxillary left canine teeth were compared to an overlay of the ante mortem and post mortem dental images. This comparison revealed a concordance of both the anatomic contours of the incisal one-third of these teeth and their proximal angles.

The dental examination concluded that based on a reasonable degree of dental certainty, the dental age, and proximal angle comparisons, are consistent with that of Emmett Louis Till.
c. Evidence of Injury. The autopsy revealed the following evidence of injury to the remains: 219
d. Mitochondrial DNA Examination:

(1.) Till Family Genealogy: The data presented on the chart below was provided by other data sources, and verified through vital records checks.220, 221, 222, 223

(2.) Laboratory Results: A blood sample and two buccal swabs were obtained from for mtDNA comparison purposes.224 A piece of muscle tissue was obtained from the remains exhumed on June 1, 2005. The mtDNA sequences obtained from the specimens contributed by and the muscle tissue from the remains are the same. Therefore, Emmett Till cannot be excluded as the source of the muscle tissue. A search of the mtDNA population database available at the time of testing revealed two observations of this sequence in the African American population, with 1,148 individuals represented. The upper bound frequency for this occurrence is .42%.225
**LAW ENFORCEMENT SENSITIVE**

**mtDNA Sequencing Results**

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<th>Specimen</th>
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<tr>
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<td>*C8TC6-Major</td>
<td>C9TC6</td>
</tr>
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**Anthropological Examination**: During the autopsy process, anthropological examinations were conducted and the following conclusions reached: 226

1. Observations of age at death factors are consistent with the known age at death of Emmett Till of 14 years. In particular, an age at death of approximately 14 years is suggested by the extent of dental formation, bone development, and epiphyseal union.

2. The cranium exhibited extensive fractures with areas of missing bone, with the fractures concentrated in areas of the cranial vault and base. No evidence of healing was associated with the fractures and they did not display evidence of having been produced during exhumation and examination. The characteristics of the fractures are consistent with having been produced at or about the time of death.
(3.) Areas of radiodensity were noted during radiographic
examination and samples were collected.

(4.) Deposits of dark, metallic-appearing material were noted during
examination of the cranial skeletal remains. Samples of these deposits were collected for further
examination.

f. Laboratory Results:

(1.) Lead Fragments: Four of the lead fragments recovered during
autopsy were found to be consistent in their remaining physical characteristics with deformed shot
pellets. The weights of these pellets are consistent with either number 7 1/2 or number 8 lead shot
pellets. 227

(2.) Metallic Deposits: The deposits of dark, metallic-appearing
material collected during the anthropological examination were found to contain lead residue. 228

g. Ammunition Data: Remington Arms Company manufactured two .45
caliber pistol cartridges prior to 1955 which contained shot, the M12 and the M15 cartridges. Each
of these cartridges contained number 7 1/2 chilled lead shot and were manufactured for the Army Air
Force to be utilized by aircraft combat crews for survival purposes. 229

[Redacted]

advised that his [Redacted] was very accurate with his .45 caliber pistol and that "I
can tell ya how good he was with that old pistol. I seen him shoot bumble bees out of the air with
it." 230

[Redacted]
h. Processing of Evidence: Following the June 2, 2005 autopsy of the remains removed from the gravesite alleged to contain the remains of Emmett Till evidence collected was processed and forwarded to the laboratory. 231, 232

1. Anatomic Diagnosis: 233

(1.) Gunshot wound of the head.
(2.) Multiple comminuted skull fractures.
(3.) Multiple lead fragments recovered from head and skull.
(4.) Fractures of the right and left wrist bones.
(5.) Fracture of the distal left femur.
(6.) Embalmed body with numerous venting incisions in the skin and floor of mouth.
(7.) Missing left upper central incisor with open socket.
j. **Medical Examiner's Opinion:** Emmett Louis Till died of a gunshot wound of the head. Manner of death: homicide. 234