



# **Human vs Non-Human Bone Origin Determination**

## **Test No. 24-5501 Summary Report**

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Each sample set consisted of digital images of five different bones of unknown origin. Participants were asked to determine if each bone was of human origin or non-human origin. Data were returned from 37 participants and are compiled into the following tables:

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This report contains the data received from the participants in this test. Since these participants are located in many countries around the world, and it is their option how the samples are to be used (e.g., training exercise, known or blind proficiency testing, research and development of new techniques, etc.), the results compiled in the Summary Report are not intended to be an overview of the quality of work performed in the profession and cannot be interpreted as such. The Summary Comments are included for the benefit of participants to assist with maintaining or enhancing the quality of their results. These comments are not intended to reflect the general state of the art within the profession.

Participant results are reported using a randomly assigned "WebCode". This code maintains participant's anonymity, provides linking of the various report sections, and will change with every report.

## Manufacturer's Information

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Each digital sample set consisted of several images of five different bones. Participants were asked to determine which of the bones (Items 1 - 5) were human in origin and which were of non-human animal origin.

SAMPLE PREPARATION: Bones from a variety of species were selected and photographed. Photographs of several representative perspectives were chosen for each bone. These images were digitally resized to scale and adjusted for consistency of color and contrast. The images were then zipped and uploaded to the CTS Portal for download by test participants.

VERIFICATION: All predistribution laboratories reported the expected identification results for all items.

Item	Source
1	Bear, Proximal Phalanx
2	Coyote, Scapula
3	Human, Fifth Metatarsal
4	Cow, Atlas
5	Coyote, Ulna

## **Summary Comments**

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This test was designed to allow participants to assess their proficiency in determining whether a bone was of human origin or non-human origin. Items 1, 2, 4, and 5 were of non-human origin, and Item 3 was of human origin. Refer to the Manufacturer's Information for preparation details.

All participants reported the expected identification results for all items.

# Examination Results

*What is the origin of the bone represented in the submitted photographs (Items 1-5)?*

TABLE 1

WebCode	Item 1	Item 2	Item 3	Item 4	Item 5
2JVCM6	Non-Human	Non-Human	Human	Non-Human	Non-Human
2LMAA2	Non-Human	Non-Human	Human	Non-Human	Non-Human
2PMK72	Non-Human	Non-Human	Human	Non-Human	Non-Human
3GWNJZ	Non-Human	Non-Human	Human	Non-Human	Non-Human
3KWYEZ	Non-Human	Non-Human	Human	Non-Human	Non-Human
43GPEY	Non-Human	Non-Human	Human	Non-Human	Non-Human
4AUXF2	Non-Human	Non-Human	Human	Non-Human	Non-Human
4GFQQZ	Non-Human	Non-Human	Human	Non-Human	Non-Human
4XZHQZ	Non-Human	Non-Human	Human	Non-Human	Non-Human
7DR3C4	Non-Human	Non-Human	Human	Non-Human	Non-Human
7JEPEX	Non-Human	Non-Human	Human	Non-Human	Non-Human
7LZTMV	Non-Human	Non-Human	Human	Non-Human	Non-Human
7VTQ43	Non-Human	Non-Human	Human	Non-Human	Non-Human
8ZZRBT	Non-Human	Non-Human	Human	Non-Human	Non-Human
9G4LGR	Non-Human	Non-Human	Human	Non-Human	Non-Human
BB2LVR	Non-Human	Non-Human	Human	Non-Human	Non-Human
BR28VT	Non-Human	Non-Human	Human	Non-Human	Non-Human
CAQ72R	Non-Human	Non-Human	Human	Non-Human	Non-Human
FKZH8K	Non-Human	Non-Human	Human	Non-Human	Non-Human
FPGRMV	Non-Human	Non-Human	Human	Non-Human	Non-Human
G7DRKM	Non-Human	Non-Human	Human	Non-Human	Non-Human

TABLE 1

WebCode	Item 1	Item 2	Item 3	Item 4	Item 5
KPU7PM	Non-Human	Non-Human	Human	Non-Human	Non-Human
LTCPAG	Non-Human	Non-Human	Human	Non-Human	Non-Human
MUNQXM	Non-Human	Non-Human	Human	Non-Human	Non-Human
MYA2HJ	Non-Human	Non-Human	Human	Non-Human	Non-Human
PXRRHG	Non-Human	Non-Human	Human	Non-Human	Non-Human
RJQJ7J	Non-Human	Non-Human	Human	Non-Human	Non-Human
TNGCE4	Non-Human	Non-Human	Human	Non-Human	Non-Human
ULL89C	Non-Human	Non-Human	Human	Non-Human	Non-Human
V6RZQ6	Non-Human	Non-Human	Human	Non-Human	Non-Human
V7AXBF	Non-Human	Non-Human	Human	Non-Human	Non-Human
V8YEXB	Non-Human	Non-Human	Human	Non-Human	Non-Human
V9VJ43	Non-Human	Non-Human	Human	Non-Human	Non-Human
VEW876	Non-Human	Non-Human	Human	Non-Human	Non-Human
VZW9H8	Non-Human	Non-Human	Human	Non-Human	Non-Human
YY94C6	Non-Human	Non-Human	Human	Non-Human	Non-Human
ZBLMA7	Non-Human	Non-Human	Human	Non-Human	Non-Human

Response Summary					Participants: 37
<i>What is the origin of the bone represented in the submitted photographs (Items 1-5)?</i>					
	<u>Item 1</u>	<u>Item 2</u>	<u>Item 3</u>	<u>Item 4</u>	<u>Item 5</u>
Human	<b>0 (0.0%)</b>	<b>0 (0.0%)</b>	<b>37 (100.0%)</b>	<b>0 (0.0%)</b>	<b>0 (0.0%)</b>
Non-Human	<b>37 (100.0%)</b>	<b>37 (100.0%)</b>	<b>0 (0.0%)</b>	<b>37 (100.0%)</b>	<b>37 (100.0%)</b>
Inconclusive	<b>0 (0.0%)</b>	<b>0 (0.0%)</b>	<b>0 (0.0%)</b>	<b>0 (0.0%)</b>	<b>0 (0.0%)</b>

# Additional Comments

TABLE 2

WebCode	Additional Comments
KPU7PM	The submitted photographs are clear and suitable for the analyst in terms of forensic anthropology.
TNGCE4	Item 1: Proximal phalanx / fauna (non-human). Item 2: Left scapula / fauna (non-human). O. Carnivora possible Fam. Canidae. Item 3: Left V MTT / human. Item 4: Atlas / fauna (non-human). Item 5: Left ulna / fauna (non-human). O. Carnivora possible Fam. Canidae.
V6RZQ6	Would prefer that items are photographed from six sides or 3D scanned. Views showing only 2 sides are not ideal for assessment.

-End of Report-  
(Appendix may follow)

## Test No. 24-5501: Human vs Non-Human Bone Origin Determination

DATA MUST BE SUBMITTED BY **March 11, 2024, 11:59 p.m. EDT** TO BE INCLUDED IN THE REPORT

Participant Code: U1234A

WebCode: BDFTRT

The Accreditation Release section can be accessed by using the "Continue to Final Submission" button above. This information can be entered at any time prior to submitting to CTS.

### Scenario:

In five unrelated cases, photographs of bones have been submitted for analysis to determine whether they are human or non-human in origin. Each Item (1-5) below represents a separate, independent case.

### Items Submitted (Sample Pack HNH):

- Item 1: Images 1a, 1b
- Item 2: Images 2a, 2b
- Item 3: Images 3a, 3b, 3c
- Item 4: Images 4a, 4b, 4c
- Item 5: Images 5a, 5b, 5c, 5d

To verify a complete and accurate download, the hash value for the downloaded .ZIP file is as follows:

24-5501 Human vs Non-Human.zip MD5 hash value: ae6d93d2e3ea0f6268912576c9f16e8b

24-5501 Human vs Non-Human.zip SHA1 hash value: 3e52d09a24ce6b1c4204ece930eceb1854d1b6d1

### 1.) What is the origin of the bone represented in the submitted photographs (Items 1-5)?

- |               |                             |                                 |                                     |
|---------------|-----------------------------|---------------------------------|-------------------------------------|
| <i>Item 1</i> | Human <input type="radio"/> | Non-Human <input type="radio"/> | Inconclusive* <input type="radio"/> |
| <i>Item 2</i> | Human <input type="radio"/> | Non-Human <input type="radio"/> | Inconclusive* <input type="radio"/> |
| <i>Item 3</i> | Human <input type="radio"/> | Non-Human <input type="radio"/> | Inconclusive* <input type="radio"/> |
| <i>Item 4</i> | Human <input type="radio"/> | Non-Human <input type="radio"/> | Inconclusive* <input type="radio"/> |
| <i>Item 5</i> | Human <input type="radio"/> | Non-Human <input type="radio"/> | Inconclusive* <input type="radio"/> |

\*Should an item(s) be marked "Inconclusive", please document the reason in the Additional Comments section of this data sheet.

*Please note: Any additional formatting applied in the free form space below will not transfer to the Summary Report and may cause your information to be illegible. This includes additional spacing and returns that present your responses in lists and tabular formats.*

## 2.) Additional Comments



## RELEASE OF DATA TO ACCREDITATION BODIES

The Accreditation Release is accessed by pressing the "Continue to Final Submission" button online and can be completed at any time prior to submission to CTS.

CTS submits external proficiency test data directly to ANAB and/or A2LA. Please select one of the following statements to ensure your data is handled appropriately.

- This participant's data is intended for submission to ANAB and/or A2LA. (Accreditation Release section below must be completed.)
- This participant's data is **not** intended for submission to ANAB and/or A2LA.

Have the laboratory's designated individual complete the following steps **only if your laboratory is accredited in this testing/calibration discipline** by one or more of the following Accreditation Bodies.

### **Step 1: Provide the applicable Accreditation Certificate Number(s) for your laboratory.**

ANAB Certificate No.

A2LA Certificate No.

### **Step 2: Complete the Laboratory Identifying Information in its entirety.**

Authorized Contact Person and Title

Laboratory Name

Location (City/State)

Submitted to CTS on:  
**NOT SUBMITTED**