

Results of Examinations:

Mitochondrial DNA (mtDNA) sequences were obtained from the Q1.1 hair from the Q1 hairs from the pliers, the K3 blood sample identified as coming from SCOTT PETERSON, and the K4 saliva sample identified as coming from SHARON ROCHA, the identified mother of LACI PETERSON. The mtDNA sequences obtained from Q1.1 and K4 are the same. Therefore, LACI PETERSON cannot be excluded as the source of the Q1.1 hair.

Using the mtDNA population database currently available to the FBI Laboratory (CODISmt version 1.2, containing 5071 individuals, searching nucleotide positions 16104-16365 and 73-340), the mtDNA sequence obtained from specimens Q1.1 and K4 has been observed as follows:

Database	Number of Observations	Individuals in Database	Upper Bound Frequency Estimate
Caucasian	10	1814	0.89%

The mtDNA sequences obtained from Q1.1 and K3 are different. Therefore, SCOTT PETERSON can be excluded as the source of the Q1.1 hair.

The mtDNA sequencing results are detailed below. Results are listed as differences from the published Cambridge Reference Sequence (rCRS).

Specimen	Q1.1 hair from pliers	K3 Scott Peterson	K4 Sharon Rocha
Range	np 15986-16389	np 15986-16389	np 15986-16389
EV1	16189 C	16147 T 16183 C 16189 C 16270 T	16189 C
Range	np 49-407	np 49-407	np 49-407
EVII	263 G 308.1 C 309.2 C* 315.1 C *C1TC8 C9TC8 - major C10TC8	75 G 190 T 263 G 315.1 C	263 G 308.1 C 309.2 C* 315.1 C *C1TC8 C9TC8 - major C10TC8 C11TC8

No other mtDNA examinations were conducted.

