



VETERINARY GENETICS LABORATORY
 SCHOOL OF VETERINARY MEDICINE
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ONE SHIELDS AVENUE
 DAVIS, CALIFORNIA 95616-8744

COAT COLOR TEST RESULTS

DAVID SCARBOROUGH
 1029 ASHDON LANE
 MURPHY, TX 75094

Case: DT13804
Date Received: 01-Mar-2006
Report Date: 15-Mar-2006

<i>Horse:</i> HOLEY SMOKIN OLENA	<i>Reg:</i> 691398
<i>YOB:</i> 02 <i>Breed:</i> PT <i>Sex:</i> M	<i>Alt. ID:</i>
<i>Sire:</i> MR HOLEY STAR	<i>Reg:</i> 366285
<i>Dam:</i> A COUNTY QUEEN	<i>Reg:</i> 3324401

RED FACTOR	AGOUTI (BAY/BLACK)	CREAM DILUTION	LETHAL WHITE OVERO	SABINO 1
E/e	A/A	N/Cr		

Red Factor:

- e/e** Only the red factor detected. Basic color is sorrel or chestnut in the absence of other modifying genes.
- E/e** Both black and red factors detected. Either E or e transmitted to offspring. Basic color is black, bay or brown in the absence of other modifying genes.
- E/E** No red factor detected. It cannot have red foals regardless of the color of mate. Basic color is black, bay or brown in the absence of other modifying genes.

Agouti (Bay/Black):

- A/A** } Black pigment distributed in points pattern. Basic color is bay or brown in the absence of other modifying genes.
- A/a** }
- a/a** Only recessive allele detected. Black pigment distributed uniformly. Basic color is black in the absence of other modifying genes.

Cream Dilution:

- N/N** No evidence for the Cream dilution altered sequence detected. Basic color is sorrel or chestnut, bay or black in the absence of other modifying genes.
- N/Cr** Heterozygous, dilute, one copy of Cream gene. Typical colors are palomino, buckskin and smoky black in the absence of other modifying genes.
- Cr/Cr** Double dilute (two copies of Cream gene). Typical colors are cremello, perlino and smoky cream in the absence of other modifying genes.

Lethal White Overo:

- N/N** No evidence for the altered sequence detected.
 One copy of the altered sequence detected. Horse is at risk to produce a lethal white overo foal if bred to another N/O horse. Usually these horses have a spotting pattern described as overo, or they may have a combination of spotting patterns, such as tobiano and overo. The N/O type has been detected in overo Paints (including breeding stock), Pintos, Thoroughbreds, Miniatures and Quarter Horses. Occasionally N/O horses will not show the overo pattern due to suppression of the altered EDNRB gene.
- N/O** Only the altered sequence in the EDNRB gene detected.
- O/O** This result has only been obtained with samples from lethal white overo foals.

Sabino 1:

- N/N** No evidence of altered sequence detected.
- N/SB1** One copy of the Sabino 1 gene detected. Horse typically may have 2 or more white legs, blaze, spots or roaning in the midsection and jagged margins around white areas.
- SB1/SB1** 2 copies of the Sabino 1 gene detected. Complete or nearly complete white phenotype expected.