



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

TELEPHONE: (530) 752-2211  
 FAX: (530) 752-3556

**HERDA TEST RESULT**

SUSAN WATKINS 6068 S STATE ROAD 1 HAMILTON, IN 46742	<b>Case:</b> HRD6063 <b>Date Received:</b> 12-Jan-2012 <b>Report Date:</b> 19-Jan-2012 <b>Report ID:</b> 5700-4633-8684-8175 Verify report at <a href="https://www.vgl.ucdavis.edu/myvgl/verify.html">https://www.vgl.ucdavis.edu/myvgl/verify.html</a>
<b>Name:</b> THE GOOD RANGER <b>YOB:</b> 03 <b>Breed:</b> QH <b>Sex:</b> S <b>Alt. ID:</b>	<b>Reg:</b> 4411768
<b>Sire:</b> ZIPPOS MR GOOD BAR <b>Dam:</b> SONNYS SILVER SKIP	<b>Reg:</b> 2259600 <b>Reg:</b> 2496233

**HERDA Test Result**

N/N

**Result Codes:**

- N/N      Normal - horse does not have the HERDA gene
- N/HRD      Carrier - horse carries one copy of the HERDA gene
- HRD/HRD      Affected - horse has two copies of the HERDA gene

Hereditary equine regional dermal asthenia (**HERDA**) is a degenerative skin disease characterized by hyperextensible skin, scarring, and severe lesions along the back of affected horses. Affected foals rarely show symptoms at birth. The condition typically occurs by the age of two, most notably when the horse is first being broke to saddle. HERDA is an autosomal recessive trait which means that breedings between carrier (N/HRD) horses have a 25% chance of producing an affected foal (HRD/HRD). Breedings between carrier and normal (N/N) horses produce normal foals, but 50% of these are expected to be carriers.

This test is specific for the mutation in the *cyclophilin B* gene (PPIB) that has been shown to be associated with HERDA. For more information go to <http://vgl.ucdavis.edu>.



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**GBED REPORT**

SUSAN WATKINS 6068 S STATE ROAD 1 HAMILTON, IN 46742	<b>Case: GBE863</b> <b>Date Received:</b> 12-Jan-2012 <b>Report Date:</b> 25-Jan-2012 <b>Report ID:</b> 8050-0346-8394-8100 Verify report at <a href="https://www.vgl.ucdavis.edu/myvgl/verify.html">https://www.vgl.ucdavis.edu/myvgl/verify.html</a>
<i>Horse:</i> <b>THE GOOD RANGER</b> <span style="float: right;"><i>Reg:</i> <b>4411768</b></span> <i>YOB:</i> <b>03</b> <i>Breed:</i> <b>QH</b> <i>Sex:</i> <b>S</b> <i>Alt. ID:</i>	
<i>Sire:</i> ZIPPOS MR GOOD BAR <span style="float: right;"><i>Reg:</i> 2259600</span> <i>Dam:</i> SONNYS SILVER SKIP <span style="float: right;"><i>Reg:</i> 2496233</span>	

**GBED Test Result**

**N/N**

**Result Codes:**

- G/G      Affected - Homozygous for GBED (two copies of the GBED gene).
- N/G      Carrier - Heterozygous (one normal and one GBED gene).
- N/N      Normal - Does not possess the disease-causing GBED gene.

The condition is inherited as a recessive trait. This means that breedings between two carrier (N/G) horses have a 25% chance of producing an affected foal (G/G). Affected foals usually die at a young age or will need to be euthanized due to weakness. Breedings between carrier and normal (N/N) horses produce only normal foals but 50% of these are expected to be carriers.



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**HORSE COAT COLOR TEST RESULTS**

SUSAN WATKINS 6068 S STATE ROAD 1 HAMILTON, IN 46742	<b>Case:</b> DT29179 <b>Date Received:</b> 12-Jan-2012 <b>Report Date:</b> 27-Jan-2012 <b>Report ID:</b> 3405-4787-6564-5019 Verify report at <a href="https://www.vgl.ucdavis.edu/myvgl/verify.html">https://www.vgl.ucdavis.edu/myvgl/verify.html</a>
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Horse: <b>THE GOOD RANGER</b> YOB: <b>03</b> Breed: <b>QH</b> Sex: <b>S</b> Alt. ID:	Reg: <b>4411768</b>
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Sire: ZIPPOS MR GOOD BAR Dam: SONNYS SILVER SKIP	Reg: 2259600 Reg: 2496233
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RED FACTOR		Not requested.
AGOUTI		Not requested.
CREAM DILUTION		Not requested.
PEARL DILUTION		Not requested.
SILVER DILUTION		Not requested.
LETHAL WHITE OVERO		Not requested.
SABINO 1		Not requested.
TOBIANO		Not requested.
CHAMPAGNE		Not requested.
W10 DOMINANT WHITE		Not requested.
SPLASHED WHITE		Not requested.
GRAY	<b>N/G</b>	One copy of the gray gene. Horse will turn gray and approximately 50% of offspring will be gray.



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**HORSE COAT COLOR TEST RESULTS**

SUSAN WATKINS 6068 S STATE ROAD 1 HAMILTON, IN 46742	<b>Case: DT29180</b> <b>Date Received: 12-Jan-2012</b> <b>Report Date: 23-Jan-2012</b> <b>Report ID: 9938-7439-7968-2159</b> Verify report at <a href="https://www.vgl.ucdavis.edu/myvgl/verify.html">https://www.vgl.ucdavis.edu/myvgl/verify.html</a>
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<b>Horse: THE GOOD RANGER</b> YOB: 03      Breed: QH      Sex: S      Alt. ID:	Reg: 4411768
Sire: ZIPPOS MR GOOD BAR	Reg: 2259600
Dam: SONNYS SILVER SKIP	Reg: 2496233

RED FACTOR	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.
AGOUTI	A/A	Black pigment distributed in points pattern. Basic color is bay or brown 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.
PEARL DILUTION		Not requested.
SILVER DILUTION		Not requested.
LETHAL WHITE OVERO		Not requested.
SABINO 1		Not requested.
TOBIANO		Not requested.
CHAMPAGNE		Not requested.
W10 DOMINANT WHITE		Not requested.
SPLASHED WHITE SW-1		Not requested.