



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

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

### AQHA GENETIC DISEASE PANEL TEST RESULTS

AMERICAN QUARTER HORSE ASSOCIATION P.O. BOX 200 AMARILLO, TX 79168-0001	<b>Case:</b> CCBlock - 11/8/2019 <b>Date Received:</b> KMISCHAK 11/8/2019 11:51:13 AM <sup>4</sup> <b>Print Date:</b> 14-Nov-2014 <b>Report ID:</b> 5294-4282-3966-0159 Verify report at <a href="http://www.vgl.ucdavis.edu/myvgl/verify.html">www.vgl.ucdavis.edu/myvgl/verify.html</a>
<b>Horse: LITTLE NIC</b> <b>YOB: 2009</b> <b>Breed: QH</b> <b>Sex: S</b> <b>Alt. ID: 6103201</b>	<b>Reg: 5193929</b>
<b>Sire: WIMPYS LITTLE STEP</b> <b>Dam: SMART CHEXY NIC</b>	<b>Reg: 3863115</b> <b>Reg: 4136718</b>

GBED	N/G	N/G - Carrier - Heterozygous (one normal and one GBED gene)
HERDA	N/N	N/N - Normal - horse does not have the HERDA gene
HYPP	N/N	N/N - Normal - Does not possess the disease-causing HYPP gene
MH	N/N	N/N - Normal - horse does not have the MH gene
PSSM1	N/N	N/N - Normal - horse does not have the PSSM1 gene

GBED - Glycogen Branching Enzyme Deficiency. Fatal disease of newborn foals caused by defect in glycogen storage. Affects heart and skeletal muscles and brain. Inherited as recessive disease.

HERDA - Hereditary Equine Regional Dermal Asthenia. Skin disease characterized by hyperextensible skin, scarring, and severe lesions along the back of affected horses. Typical onset is around 2 years of age. Inherited as a recessive disease.

HYPP - Hyperkalemic Periodic Paralysis. Muscle disease caused by defect in sodium channel gene that causes involuntary muscle contraction and increased level of potassium in blood. Inherited as dominant disease. Two copies of defective gene produce more severe signs than one copy.

MH - Malignant Hyperthermia. Rare but life-threatening skeletal muscle disease triggered by exposure to volatile anesthetics (halothane), depolarizing muscle relaxants (succinylcholine), and stress. Presumed inheritance as dominant disease.

PSSM1 - Polysaccharide Storage Myopathy Type 1. Muscle disease characterized by accumulation of abnormal complex sugars in skeletal muscles. Signs include muscle pain, stiffness, skin twitching, sweating, weakness and reluctance to move. Inherited as a dominant disease.

GBED testing performed under a license agreement with the University of Minnesota.  
 HERDA testing performed under a license agreement with the University of California, Davis.  
 PSSM1 testing performed under a license agreement with the American Quarter Horse Association.