## UNIVERSITY OF CALIFORNIA, DAVIS

N/N

N/N

N/N

N/N

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

HERDA

HYPP

MH

PSSM1

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				Case: Date Received: Report Date: Report ID: Verify report	<b>QHA84287</b> 04-Jan-2013 06-Feb-2013 2731-6505-2161-5022 at https://www.vgl.ucdavis.
Horse: KID COOLSIFIED			<i>Reg:</i> <b>3944761</b>		
<i>YOB:</i> <b>00</b>	Breed: QH	Sex: S	Alt. ID:45979	09	
Sire: KID CL	USIFIED	<i>Reg:</i> 3463137			
Dam: COOLSIE COOSA		<i>Reg:</i> 3492650			
GBED	N/N	N/N - Normal - Does not possess the disease-causing GBED 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.

N/N - Normal - horse does not have the HERDA gene

N/N - Normal - horse does not have the MH gene

N/N - Normal - horse does not have the PSSM1 gene

N/N - Normal - Does not possess the disease-causing HYPP gene

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.

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