



VETERINARY GENETICS LABORATORY
 SCHOOL OF VETERINARY MEDICINE
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AQHA GENETIC DISEASE PANEL TEST RESULTS

AMERICAN QUARTER HORSE ASSOCIATION P.O. BOX 200 AMARILLO, TX 79168-0001		Case: QHA180057 Date Received: 17-Feb-2015 Print Date: 19-Feb-2015 Report ID: 6279-6890-7470-3022 Verify report at www.vgl.ucdavis.edu/myvgl/verify.html
Horse: THESE IRONS ARE HOT YOB: 2001 Breed: QH Sex: S Alt. ID: 4835301		Reg: 4564813
Sire: DUPLICATED DECK Dam: GEORGIA RABLING 84		Reg: 2868346 Reg: T0472261

GBED	N/N	N/N - Normal - Does not possess the disease-causing 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.

Equine Genetic Testing Report

Submitted By	AG106241
Amy Gumz Gumz Farms 1385 SR 56 East Morganfield, KY 42437	



Subject Horse

Date Received: 11/25/2014

Horse Name: These Irons Are Hot	Lab Reference #: 00062389
Breed: Quarter Horse	Registration: 4564813
Phenotype: Brown	Birth: 2001
Sex: Stallion	

Sire	Dam
Sire Name:	Dam Name:
Breed:	Breed:
Registration:	Registration:
Phenotype:	Phenotype:

Coat Color and Pattern Testing

	Tobiano		Pending
X	Frame Overo	nn	Negative for Frame Overo (LWO).
	Sabino 1		Pending
	Splashed White 1		Pending
	Splashed White 2		Pending
	Splashed White 3		Pending
	Appaloosa (LP)		Pending
	Red/Black Factor		Pending
	Agouti		Pending
	Cream Dilution		Pending
	Dun Dilution		Pending
	Silver Dilution		Pending
	Champagne		Pending
	Pearl Dilution		Pending
	Gray		Pending
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Genetic Disorders

	HYPP		Pending
	HERDA		Pending
	GBED		Pending
	PSSM 1		Pending
X	MH	n/n	Clear: Negative for the MH gene mutation found in Quarter horses and related breeds.
	JEB		Pending
	CA		Pending
	LFS		Pending

Genetic Marker Results

Run Date: Not Tested

-	-	-	-	-	-	-
AHT4	AHT5	ASB17	ASB2	ASB23	AME	CA425UK
-	-	-	-	-	-	-
HMS3	HMS6	HMS7	HTG10	HTG4	LEX3	LEX33
-	-	-	-	-	-	-
VHL20	UM011	HMS1	HMS2	HTG6	HTG7	

CA = Cerebellar Abiotrophy
 GBED = Glycogen branching enzyme deficiency
 HERDA = Hereditary equine regional dermal asthenia
 HYPP = Hyperkalemic Periodic Paralysis
 JEB1 = Junctional Epidermolysis Bullosa - Belgian Draft Horse
 JEB2 = Junctional Epidermolysis Bullosa - American Saddlebred
 LFS = Lavender Foal Syndrome
 LWO = Lethal White Overo
 MH = Malignant Hyperthermia
 PSSM1 = Polysaccharide Storage Myopathy - Type 1

Additional Comments

None

Thank you for choosing Animal Genetics Inc.