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

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AQHA GENETIC DISEASE PANEL TEST RESULTS

AMERICAN QUARTER HORSE ASSOCIATION
P.O. BOX 200
AMARILLO, TX 79168-0001

Case: **QHA278347**
Date Received: 13-Dec-2016
Print Date: 16-Dec-2016
Report ID: 6518-3429-5401-2022
Verify report at www.vgl.ucdavis.edu/myvgl/verify.html

Horse: VERY ESPECIAL CAT *Reg:* 5428799
YOB: 2011 *Sex:* Stallion *Breed:* Quarter Horse *Alt. ID:* 6357518

Sire: HIGH BROW CAT *Reg:* 2706274
Dam: VERY SHORTLY *Reg:* 4307294

GBED	**N/N**	N/N - Normal - Does not possess the disease-causing GBED gene
HERDA	**N/HRD**	N/HRD - Carrier - horse carries one copy of 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.

UCDAVIS VETERINARY MEDICINE
Veterinary Genetics Laboratory

MYOSIN-HEAVY CHAIN MYOPATHY (MYHM) GENETIC TEST REPORT

Provided Information:	***Case:*** **NQ82380**
Name: **VERY ESPECIAL CAT**	***Date Received:*** 23-May-2022
Registration: **5428799**	***Report Issue Date:*** 08-Jun-2022
	Report ID: 4515-9602-6272-3084
	Verify report at www.vgl.ucdavis.edu/verify

DOB: **01/20/2011** *Sex:* **Stallion** *Breed:* **Quarter Horse**

Sire: HIGH BROW CAT	*Dam:* VERY SHORTLY
Reg:	*Reg:*
Microchip:	*Microchip:*

RESULT

Myosin-Heavy Chain Myopathy (MYHM)	**N/My**

INTERPRETATION

1 copy of the MYHM mutation is present. Horse may develop IMM following infection or vaccination, or nonexertional rhabdomyolysis. Horse can pass on the mutation to 50% of offspring.