



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

**Case:** QHA3424  
**Date Received:** 20-Feb-2018  
**Print Date:** 27-Feb-2018  
**Report ID:** 4896-8A11-4129-1  
 Verify report at [www.vgl.ucdavis.edu/vet/vgl/vglh/](http://www.vgl.ucdavis.edu/vet/vgl/vglh/)

*Horse: MAGICAL VODOO*

*Reg: 5702218*

*YOB: 2014 Sex: Stallion Breed: Quarter Horse Alt. ID: 6658218*

*Sire: SHINERS VODOO DR*

*Reg: 5101811*

*Dam: VERY SMART SWEETHART*

*Reg: 5165985*

**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 a recessive disease.

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

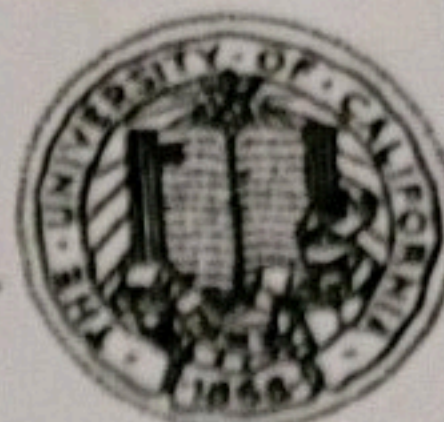
**HYPP - Hyperkalemic Periodic Paralysis.** Muscle disease caused by defect in sodium channel gene that causes involuntary muscle contraction and increased level of potassium. Inherited as dominant disease. Two copies of defective gene produce more severe signs than one copy.

**MH - Malignant Hyperthermia.** Rare but life-threatening skeletal muscle disease triggered by exposure to volatile anesthetics (halothane), depolarizing muscle relaxants, 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 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.





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

Case: **QHA3424**  
 Date Received: 20-Feb-2018  
 Print Date: 27-Feb-2018  
 Report ID: 4896-8411-4129-  
 Verify report at [www.vgl.ucdavis.edu/myvgl/](http://www.vgl.ucdavis.edu/myvgl/)

Horse: **MAGICAL VODOO**

Reg: 5702218

YOB: 2014 Sex: Stallion Breed: Quarter Horse Alt. ID: 6658218

Sire: **SHINERS VODOO DR**

Reg: 5101811

Dam: **VERY SMART SWEETHART**

Reg: 5165985

**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 a recessive disease.

HERDA - Hereditary Equine Regional Dermal Asthenia. Skin disease characterized by hyperextensible skin, scarring, and severe lesions along the back of affected horses 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. 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, 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 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.



Name: **MAGICAL VOODOO**

Registration: **584383**

DOB: **01/01/2014** Sex: **Stallion** Breed: **Quarter Horse**

Sire: **SHINERS VOODOO DR**  
Reg: **5101811**  
Microchip:

Dam: **VERY SMART SV**  
Reg: **5165985**  
Microchip:

RESULT		INTERPRETATION	RESULT	
RED FACTOR	<b>e/e</b>	Only red factor detected. Basic color is red in the absence of modifying genes.	SPLASHED WHITE	
AGOUTI	<b>A/a</b>	1 copy of agouti. If present, black pigment is restricted to the points.	TOBIANO	
CREAM	<b>N/Cr</b>	1 copy of Cream dilution detected.	LEOPARD	
PEARL	<b>N/N</b>	No copies of Pearl dilution detected.	PATTERN-1	
SILVER	<b>N/N</b>	No copies of Silver dilution detected.	BRINDLE 1	
DUN	<b>nd2/nd2</b>	Horse is not Dun dilute. Primitive markings are absent.	TIGER EYE	
CHAMPAGNE	<b>N/N</b>	No copies of Champagne dilution detected.	MUSHROOM (SHETLAND PONY)	
LETHAL WHITE OVERO		Not requested.	GRAY	<b>Absent</b>
SABINO 1		Not requested.	ROAN	
DOMINANT WHITE (W5, W10, W20, W22)		Not requested.		





**UC DAVIS**  
**VETERINARY MEDICINE**  
 Veterinary Genetics Laboratory

# MYOSIN-HEAVY CHAIN MYOPATHY (MYHM) TEST REPORT

<i>Provided Information:</i>	<i>Name:</i> <b>MAGICAL VOODOO</b>	<i>Case:</i> <b>NQ86118</b>
	<i>Registration:</i> <b>584383</b>	<i>Date Received:</i> 29-Aug-2022
		<i>Report Issue Date:</i> 18-Apr-2023
		<i>Report ID:</i> 2541-5288-2437-7162
		Verify report at <a href="http://www.vgl.ucdavis.edu/verify">www.vgl.ucdavis.edu/verify</a>

<i>DOB:</i> <b>01/01/2014</b> <i>Sex:</i> <b>Stallion</b> <i>Breed:</i> <b>Quarter Horse</b>	
<i>Sire:</i> SHINERS VOODOO DR	<i>Dam:</i> VERY SMART SWEETHART
<i>Reg:</i> 5101811	<i>Reg:</i> 5165985
<i>Microchip:</i>	<i>Microchip:</i>

## RESULT

<b>Myosin-Heavy Chain Myopathy (MYHM)</b>	<b>N/N</b>
-------------------------------------------	------------

## INTERPRETATION

Normal. No copies of the MYHM allele detected. Horse does not have increased susceptibility for immune mediated myositis or nonexertional rhabdomyolysis caused by the MYHM allele.