## UNIVERSITY OF CALIFORNIA, DAVIS

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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:
Date Received:

QHA47412

Report Date:

28-Feb-2012 01-Mar-2012

Report Date:

1990-4584-6858-1051

Verify report at https://www.vgl.ucdavis.edu/myvgl/verify.html

Horse: SEVEN FROM HEAVEN

YOB: 99

Breed: QH

Sex: S

Alt. ID: 4415010

Sire: PLAYGUN

Dam: PEPPYS FROM HEAVEN

Reg: 3178989

Reg: 3793189

Reg: 2579469

GBED	N/N
HERDA	N/N
НҮРР	N/N
МН	N/N
PSSM1	N/N

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

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

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

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

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.

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 - Polysocharide 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.