UNIVERSITY OF CALIFORNIA, DAVIS

BERKELEY • DAVIS • IRVINE • LOS ANGELES • MERCED • RIVERSIDE • SAN DIEGO • SAN FRANCISCO SANTA BARBARA • SANTA CRUZ

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: **QHA258586**
Date Received: 08-Aug-2016
Print Date: 12-Aug-2016
Report ID: 8584-6360-1557-6160
Verify report at www.vgl.ucdavis.edu/myvgl/verify.html

Horse: **KR GUN POWDER** *Reg:* **5348738**
YOB: ***2010*** *Sex:* ***Stallion*** *Breed:* ***Quarter Horse*** *Alt. ID:* ***6251457***

Sire: COLONELS SMOKING GUN *Reg:* 4472679
Dam: A BUENO POCO DUNIT *Reg:* 4086852

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

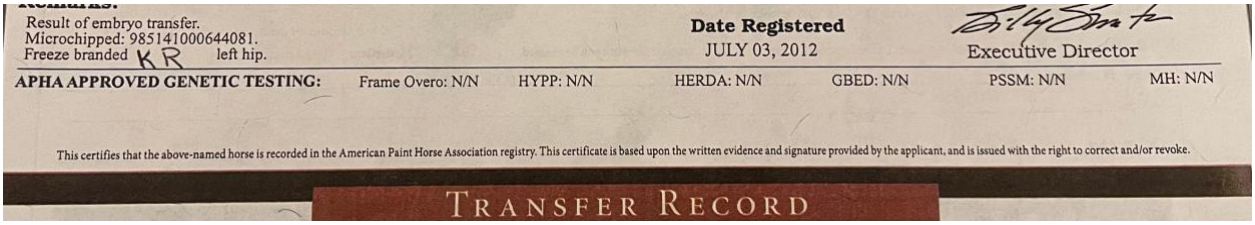
GBED - Glycogen Branching Enzyme Deficiency. Fatal disease of newborn foals caused by defect in glycogen storage. Affects heart and skeletal muscles and brain. Inherited as recessive disease.

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.


Result of embryo transfer.
Microchipped: 985141000644081.
Freeze branded KR left hip.

Date Registered
JULY 03, 2012

Executive Director

APHA APPROVED GENETIC TESTING: Frame Overo: N/N HYPP: N/N HERDA: N/N GBED: N/N PSSM: N/N MH: N/N

This certifies that the above-named horse is recorded in the American Paint Horse Association registry. This certificate is based upon the written evidence and signature provided by the applicant, and is issued with the right to correct and/or revoke.

TRANSFER RECORD