AQHA
AMERICAN QUARTER
HORSE ASSOCIATION

December 10, 2013

Ronald S Yockim
[redacted]
Roseburg, OR 97471-9695

Dear Member:

The results for the disease panel test that you ordered for LITTLE ROYAL BOON, #4233978 are enclosed.

The DNA profile for this panel was compared to the original DNA. For more information regarding these diseases, please refer to AQHA Rules REG109.3 – REG109.7.

If you have any questions, please contact our office at (806) 376-4811. We are available Monday through Friday, 8 a.m. to 5 p.m. CT.

Sincerely,

Registration Department

/cma

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
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AQHA GENETIC DISEASE PANEL TEST RESULTS

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

Case: **QHA118720**
Date Received: 07-Nov-2013
Report Date: 13-Nov-2013
Report ID: 5081-4177-2722-0019
Verify report at https://www.vgl.ucdavis.edu/myvgl/verify.html

Horse: **LITTLE ROYAL BOON** *Reg:* **4233978**
YOB: **02** *Breed:* **QH** *Sex:* **S** *Alt. ID:* **4968177**

Sire: BRINKS ROYAL LEE *Reg:* 1307085
Dam: DEAR LITTLE BOON BAR *Reg:* 3643994

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.