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SALTE AND	1000	OFA S	)

opedic Foundation for Animals

RIGHT EYE

 Nifong Blvd, Columbia, MO 65201-3806 ne: (573) 442-0418; Fax: (573)875-5073 vw.ofa.org, A not-for-profit organization

CORNEA

Co-Owner Nam

☐ free floating

elgnis □

lens pigment foci/no strands □ endothelial opacity/no strands

> to the database for statistical gathering purposes. I understand that only passing results will be or authorized agent appear in the understand that the results of this exam will be submitted by the examining ophthalmologist hereby certify that the animal examined is the animal described on this application, and eleased to the flublic unless the initials of a registered owner

☐ iris to cornea ☐ iris to lens ☐ iris to Iris

iris sheets

signature of owner or authorized agent/representative

I hereby authorize the OFA to release the results of the evaluation of the animal described on this application to the public if the results are non-passing (initials)

I DID NOT verify microchip/tattoo on this dog NO MICROCHIP / TATTOO PRESENT I DID verify microchip/tattoo on this dog

Punc. 

CATARACT

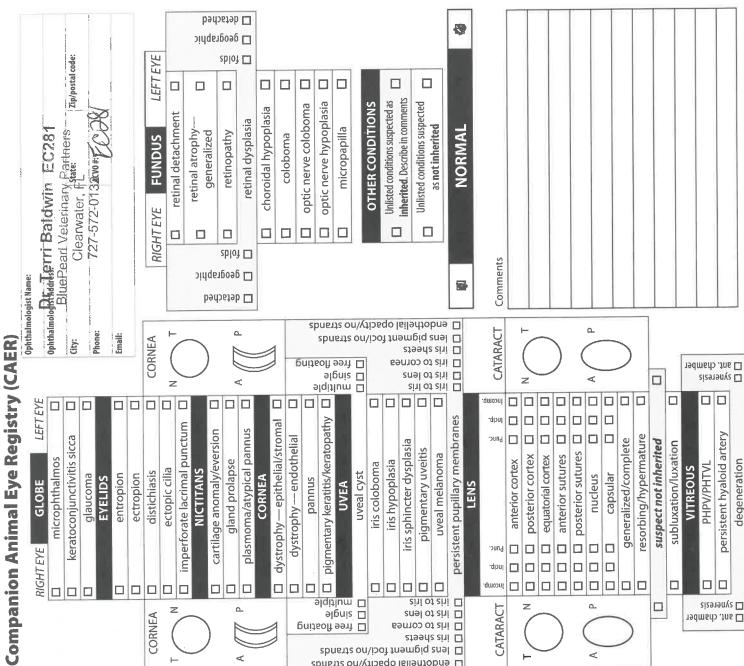
> certify that I have performed this ophthalmic examination using pharmacological mydriasis, ophthalmoscopy, and biomicroscopy.

ant, chamber 🗖

zizənənyz 🗖

Diplomate, American College of Veterinary Ophthalmologists

FEES AND CREDIT CARD INFORMATION ON THE BACK OF THE WHITE (OWNER)



WHITE = Owner/OFA Registration copy; PINK = ACVO Diplomate copy; YELLOW = ACVO Research copy

© American College of Veterinary Ophthalmologists

### ORTHOPEDIC FOUNDATION FOR ANIMALS, INC.

BARTON CREEK BAILEYS ON THE ROCKS, CH registered name

LABRADOR RETRIEVER breed

839330803 tattoo/microchip/DNA profile

1865114 application number

4/19/2019 date of report

\*\*\*\*\*

RESULTS:

Based upon the radiograph submitted, the consensus was that no evidence of hip dysplasia was recognized. The hip joint conformation was evaluated as:

**EXCELLENT** 

**LONNIE MORAN** DANNA HANCOCK 2928 COLUMBINE DR. **GRAPEVINE, TX 76051** 

SR93468803 registration no.

F sex

4/30/2016 date of birth

35

age at evaluation in months.

A Not-For-Profit Organization

LR-239772E35F-VPI

O.F.A. NUMBER

This number issued with the right to correct or revoke by the Orthopedic Foundation for Animals

Kellendin G.G.KELLER. D.V.M., M.S., DACVR

CHIEF OF VETERINARY SERVICES

www.ofa.org

### ORTHOPEDIC FOUNDATION FOR ANIMALS, INC.

BARTON CREEK BAILEYS ON THE ROCKS, CH

LABRADOR RETRIEVER

839330803 tattoo/microchip/DNA profile

1865114 application number

4/19/2019 date of report

RESULTS:

Based upon the radiograph submitted, the consensus was that no evidence of elbow dysplasia was recognized.

**NORMAL** 

**LONNIE MORAN DANNA HANCOCK** 2928 COLUMBINE DR. GRAPEVINE, TX 76051

F sex

4/30/2016 date of birth

SR93468803 registration no.

35

age at evaluation in months

A Not-For-Profit Organization

LR-EL89281F35-VPI O.F.A. NUMBER

This number issued with the right to correct or revoke by the Orthopedic Foundation for Animals.

G.G.KELLER. D.V.M., M.S., DACVR CHIEF OF VETERINARY SERVICES

www.ofa.org



### Canine Genetic Health Certificate™

Call Name:

Bailey

Laboratory #: Registration #:

120190

Registered Name:

Barton Creek's Bailey's On The Rocks

**Breed:** 

Labrador Retriever

SR93468803

Sex:

Female

Microchip #:

839\*330\*803

DOB: April 2016 **Certificate Date:** 

May 13, 2019

### This canine's DNA showed the following genotype(s):

Disease	Gene	Genotype	Interpretation
Centronuclear Myopathy	PTPLA	WT/WT	Normal (clear)
Congenital Myasthenic Syndrome (Labrador Retriever Type)	COLQ	WT/WT	Normal (clear)
Copper Toxicosis (Labrador Retriever Type) ATP7A	ATP7A	M/M	Two Copy Carrier Female
Copper Toxicosis (Labrador Retriever Type) ATP7B	ATP7B	WT/WT	Normal (clear)
Degenerative Myelopathy	SOD1	WT/WT	Normal (clear)
Exercise-Induced Collapse	DNM1	WT/WT	Normal (clear)
Hereditary Nasal Parakeratosis	SUV39H2	WT/WT	Normal (clear)
Progressive Retinal Atrophy, Progressive Rod-Cone Degeneration	PRCD	WT/WT	Normal (clear)
Retinal Dysplasia/Oculoskeletal Dysplasia 1	COL9A3	WT/WT	Normal (clear)
Skeletal Dysplasia 2	COL11A2	WT/WT	Normal (clear)

WT, wild type (normal); M, mutant; Y, Y chromosome (male)

Christina J Ramirez, PhD, DVM, DACVP

Medical Director

Cheffee

Casey R Carl, DVM

Associate Medical Director

Paw Print Genetics® performed the tests listed on this dog. See the Laboratory Report for interpretation and recommendations based on these findings. The genes/diseases reported here were selected by the client. Normal results do not exclude inherited mutations not tested in these or other genes that may cause medical problems or may be passed on to offspring. These tests were developed and their performance determined by Paw Print Genetics. This laboratory has established and verified the tests' accuracy and precision. Because all tests performed are DNA-based, rare genomic variations may interfere with the performance of some tests producing false results. If you think these results are in error, please contact the laboratory immediately for further evaluation. In the event of a valid dispute of results claim, Paw Print Genetics will do its best to resolve such a claim to the customer's satisfaction. If no resolution is possible after investigation by Paw Print Genetics with the cooperation of the customer, the extent of the customer's sole remedy is a refund of the fee paid. In no event shall Paw Print Genetics be liable for indirect, consequential or incidental damages of any kind. Any claim must be asserted within 60 days of the report of the test results. Genetic counseling is available at Paw Print Genetics.



### **Coat Color and Trait Certificate**

Call Name:

Bailey

Laboratory #: Registration #: 120190

**Registered Name:** 

Barton Creek's Bailey's On The Rocks

**Breed:** 

Labrador Retriever

SR93468803

Sex:

839\*330\*803

Female

Microchip #: Certificate Date:

May 13, 2019

DOB:

April 2016

### This canine's DNA showed the following genotype(s):

Coat Color/Trait Test	Gene	Genotype	Interpretation
D Locus (Dilute)	MLPH	D/D	Non dilute
L Locus (Long Hair/Fluffy)	FGF5	Sh/Sh	Shorthaired

### Interpretation:

This dog carries two copies of **D** which does not result in the "dilution" or lightening of the black and yellow/red pigments that produce the dog's coat color. The base coat color of this dog will be primarily determined by the E. K, A, and B genes. This dog will pass on **D** to 100% of its offspring.

This dog carries two copies of **Sh** which results in short hair. However, the overall coat type of this dog is dependent on the combination of this dog's genotypes at the L, Cu, and IC loci. This dog will pass Sh on to 100% of its offspring.

Paw Print Genetics® has genetic counseling available to you at no additional charge to answer any questions about these test results, their implications and potential outcomes in breeding this dog,

Christina J Ramirez, PhD, DVM, DACVP

Medical Director

Casey R Carl, DVM

Associate Medical Director

Normal results do not exclude inherited mutations not tested in these or other genes that may cause medical problems or may be passed on to offspring. These tests were developed and their performance determined by Paw Print Genetics. This laboratory has established and verified the tests' accuracy and precision. Because all tests performed are DNA-based, rare genomic variations may interfere with the performance of some tests producing false results. If you think these results are in error, please contact the laboratory immediately for further evaluation. In the event of a valid dispute of results claim, Paw Print Genetics will do its best to resolve such a claim to the customer's satisfaction. If no resolution is possible after investigation by Paw Print Genetics with the cooperation of the customer, the extent of the customer's sole remedy is a refund of the fee paid. In no event shall Paw Print Genetics be liable for indirect, consequential or incidental damages of any kind. Any claim must be asserted within 60 days of the report of the test results.



220 E. Rowan, Suite 220 Spokane, Washington 99207 www.pawprintgenetics.com (509) 483-5950

Barton Creek's Bailey's On The Rocks

### **Laboratory Report**

Laboratory #:

120190

Order #:

58581

Ordered By: (Co-)Owner:

Lonnie Moran Lonnie Moran / Danna

Hancock

Ordered: Received:

Reported:

April 17, 2019 May 3, 2019 May 13, 2019 Call Name:

Bailey

**Registered Name:** 

Labrador Retriever

Breed: Sex: DOB:

Female April 2016

Registration #:
Microchip #:

SR93468803 839\*330\*803

### **Results:**

Disease	Gene	Genotype	Interpretation
Centronuclear Myopathy	PTPLA	WT/WT	Normal (clear)
Congenital Myasthenic Syndrome (Labrador Retriever Type)	COLQ	WT/WT	Normal (clear)
Copper Toxicosis (Labrador Retriever Type) ATP7A	ATP7A	M/M	Two Copy Carrier Female
Copper Toxicosis (Labrador Retriever Type) ATP7B	ATP7B	WT/WT	Normal (clear)
Degenerative Myelopathy	SOD1	WT/WT	Normal (clear)
Exercise-Induced Collapse	DNM1	WT/WT	Normal (clear)
Hereditary Nasal Parakeratosis	SUV39H2	WT/WT	Normal (clear)
Progressive Retinal Atrophy, Progressive Rod-Cone Degeneration	PRCD	WT/WT	Normal (clear)
Retinal Dysplasia/Oculoskeletal Dysplasia 1	COL9A3	WT/WT	Normal (clear)
Skeletal Dysplasia 2	COL11A2	WT/WT	Normal (clear)

WT, wild type (normal); M, mutant; Y, Y chromosome (male)

### Interpretation:

Molecular genetic analysis was performed for 10 specific mutations reported to be associated with disease in dogs (nine deleterious mutations and one protective mutation). We identified two normal copies of the DNA sequences in nine of the mutations tested. Thus, this dog is not at an increased risk for the diseases associated with these nine mutations. However, we identified two mutant copies of the DNA sequences for *ATPTA*. Thus, this dog carries two copies of the protective mutation for Copper Toxicosis (Labrador Retriever Type) ATPTA.

### Recommendations:

This dog is not at an increased risk for the diseases caused by or associated with the mutations tested. Because this dog is "clear" of the nine disease-associated, deleterious mutations, this dog will only pass these normal genes on to its offspring. Normal results do not exclude inherited mutations not tested in these genes or other genes that may cause medical problems or may be passed on to offspring.

This dog was also tested for a genetic mutation of the canine *ATP7A* gene which partially protects against copper toxicosis in dogs that have inherited the *ATP7B* mutation described above. This dog carries two copies of the *ATP7A* gene mutation. Dogs that inherit two copies of the *ATP7A* mutation will have an even lesser risk of copper toxicosis than those inheriting just a single copy. The *ATP7A* gene mutation is more effective at decreasing the risk

of copper toxicosis in male dogs than females. However, since multiple factors (both genetic and environmental) play a role in causing copper toxicosis, the *ATP7A* mutation is not completely protective in either sex. Note: The *ATP7A* mutation is located on the X-chromosome. Since males only have a single X chromosome, they can only inherit a single copy of this mutation.

Paw Print Genetics<sup>®</sup> has genetic counseling available to you at no additional charge to answer any questions about these test results, their implications and potential outcomes in breeding this dog.

Christina J Ramirez, PhD, DVM, DACVP

Medical Director

Casey R Carl, DVM
Associate Medical Director

Normal results do not exclude inherited mutations not tested in these or other genes that may cause medical problems or may be passed on to offspring. These tests were developed and their performance determined by Paw Print Genetics. This laboratory has established and verified the tests' accuracy and precision. Because all tests performed are DNA-based, rare genomic variations may interfere with the performance of some tests producing false results. If you think these results are in error, please contact the laboratory immediately for further evaluation. In the event of a valid dispute of results claim, Paw Print Genetics will do its best to resolve such a claim to the customer's satisfaction. If no resolution is possible after investigation by Paw Print Genetics with the cooperation of the customer, the extent of the customer's sole remedy is a refund of the fee paid. In no event shall Paw Print Genetics be liable for indirect, consequential or incidental damages of any kind. Any claim must be asserted within 60 days of the report of the test results.

### CT - Copper Toxicosis (Labrador Type)

Copper Toxicosis in the Labrador Retriever is similar to the disease found in other breeds in that it manifests itself as a build up of copper in the liver of affected animals. Unlike the disease seen in Bedlington Terriers, the Labrador form is not inherited as a strictly recessive trait. The mutant genes have an additive affect, so one copy of the mutation increases copper levels, and a second copy when present increases levels even further. This affect is somewhat more extreme in females than in males. We know very little of the frequency of the disease itself. It is an uncommon diagnosis, but that may be due to the fact that it is a relatively late onset disease (middle aged or older dogs) and may have variable, difficult to diagnose, symptoms. The mutation responsible for copper toxicosis in Labradors has been identified by researchers at the University of Utrecht. Our test is based on their findings.

The primary cause of copper toxicosis in Labrador Retrievers is a mutant form of ATP7B. Dogs that inherit two normal versions of the gene (one from each parent) will have normal levels of copper in their liver. Dogs that inherit one normal copy and one mutant copy will have somewhat elevated levels of copper in their liver, while those that inherit two mutant copies will have the highest levels. Generally speaking, it is those dogs with two mutant copies that are at the highest risk for the disease, although there have been some dogs reported that only had one copy and still had dangerously high copper levels.

The second gene involved in the Labrador disease is a mutated form of ATP7A. This is a "good" mutation which helps minimize the accumulation of copper in the liver. Since this gene is located on the X chromosome, the mutation is inherited as a sex-linked recessive. Males inherit only a single copy of the gene either normal or mutant from their mother, while females inherit two copies, one on the x chromosome of each parent. Therefore, males only need to inherit one copy of the mutant gene to help with their copper levels, while females need to inherit two. This is why females are more commonly diagnosed with the disease than males.

Since the frequency of the ATP7B CT mutation is relatively high, we do not recommend breeding completely away from it, but rather avoiding pairings that might produce two-copy offspring.

Result Types for the ATP7B CT mutation (copper storage disease)

0 copies of the CT mutation: Negative - Zero copies of the CT ATP7B mutation

1 copy of the CT mutation: Positive (heterozygous) 1 copy of the CT ATP7B mutation

2 copies of the CT mutation: Positive (homozygous) 2 copies of the CT ATP7B mutation

Result Types for the ATP7A (dampening mutation)

Males -

O copies:

Negative - Zero copies of the CT ATP7A Dampener Mutation

1 copy

Positive (hemizygous) One copy of the CT ATP7A Dampener Mutation

Females -

0 copies:

Negative - Zero copies of the CT ATP7A Dampener Mutation

1 copy:

Positive (heterozygous) One copy of the CT ATP7A Dampener Mutation

2 copies:

Positive (homozygous) Two copies of the CT ATP7A Dampener Mutation

## AMERICAN KENNEL CLUB · FOUNDED 1884

## certified Dedigree

GCHB CH SADDLEHILL LATE KNIGHT

SCRAMBLE Sire

SR55452701 (09-11) OFA24G OFEL24 EYE72 **BLK AKC DNA #V639079** 

## **BARTON CREEK BAILEYS ON THE ROCKS**

SR93468803

LABRADOR RETRIEVER FEMALE BLK

Date Whelped: 04/30/2016

Breeder: KARL HANCOCK/DANNA HANCOCK/ERIN L MCCLURG-WEBSTER/DIANE L MCCLURG **GCH CH EDLYN MAIDSTONE VISIONS OF** SUGARPLUMS@BARTONCREEK JH Dam

SR64339603 (04-14) OFA29E OFEL29 YLW

KENNEL CLUB AMERICAN

The Seal of The American Kennel Club affixed hereto certifies that this pedigree was compiled from official Stud Book records on July 14, 2016.

**CH TABATHA'S KNIGHT CD JH** SN65156306 (04-01) OFA24G OFEL24 BLK AKC DNA #V112266

SR27438110 (11-07) OFA24G BLK AKC DNA

#V537381

**CH SHALANE FLY BY KNIGHT** 

CH SHALANE COME FLY WITH ME SN68115501 (06-02) OFA29F OFEL29 BLK

**CH DELBY'S ANCHOR STEAM JH** SN01699201 (05-94) OFA24G OFEL24 BLK AKC DNA #V66257

SN77712903 (04-04) OFA24G OFEL24 YLW SADDLEHILL BAILEY II

SR13891803 (08-07) OFA29G OFEL29 BLK CH SADDLEHILL DON'T BE LATE

GCH CH SURE SHOT HYSPIRE IMPRESSIVE SN92836302 (08-04) OFA24G OFEL24 BLK AKC DNA #V298014

SR20776907 (10-06) OFA26F OFEL26 YLW AKC

DNA #V460357

CH TULLAMORES TOBLERONE

CH TULLAMORES MIKIMOTO SN88206401 (01-05) OFA24F OFEL24 YLW

CH DICKENDALL DAVARON GABLE SN73023501 (06-01) OFA25G OFEL25 BLK AKC DNA #V191430

GCH CH BROOKSFLYWAY EM SPIRITOTEXAS RN SR11780703 (02-06) OFA24G OFEL24 YLW

CH EDLYN MAIDSTONE LOWOOD MISFIT CD SR29774603 (01-11) YLW

# THE AMERICAN KENNEL CLUB

## CHAMPIONSHIP CERTIFICATE

This certifies that

RETRIEVER (LABRADOR)

BARTON CREEK BAILEYS ON THE ROCKS ~ SR93468803

bred by

KARL HANCOCK & MRS. DANNA E HANCOCK & ERIN L MCCLURG-WEBSTER & MRS. DIANE L MCCLURG

owned by

MS. LONNIE J MORAN & DANNA HANCOCK

having completed the requirements on

JANUARY 26, 2019

has been officially recorded a

### CHAMPION

by The American Kennel Club



Executive Secretary