American Border Collie Association, Inc.

Certificate of Registration

ABC No: **473997**

Name IVORY | Sex Female | Date of Birth 2/24/2019 | Tran. No. _____ | Litter Females 4 | Litter Males 1

Color and Markings: BLONDE W/BLAZE; Medium ; Medium

Owner LOGAN FRAKER
227 WALNUT LN
FT. LITTLETON, PA
17223

Breeder: LOGAN FRAKER
227 WALNUT LN
FT. LITTLETON, PA
17223

Sire PHBC MONTY ABC 422251

Owner: LOGAN&ASHLEY FRAKER
FT. LITTLETON, PA

Breeder: JENNIFER R. NEITZKE
HEMLOCK, MI

Dam HONEY ABC 405753

Owner: LOGAN FRAKER
FT. LITTLETON, PA

Breeder: CLAUDIA WHEELER (ABT EWE BC)
PITTSBURG, TX

Transfer of Ownership To:

Name: _____

Address: _____

This the _____ day of _____, _____

SIGNATURE OF PREVIOUS OWNER(S)

BLAZZIN OZ RED ABC 348955
JENNIFER R. NEITZKE
HEMLOCK, MI
JEFFERY CARROLL/ WENDY GOFF
BIG CLIFTY, KY

PEARL ABC 395812
JENNIFER R. NEITZKE
HEMLOCK, MI
DAKOTA OCKEL
CAMPBELL, MO

BIZZARE ABC 361388
WENDY GOFF
BIG CLIFTY, KY
JEFFERY CARROLL/ WENDY GOFF
BIG CLIFTY, KY

AEBC WYNONA ABC 335702
JENNIFER R. NEITZKE
HEMLOCK, MI
JEFFERY CARROLL/ WENDY GOFF
BIG CLIFTY, KY

AEBC SYLER ABC 303321
WENDY GOFF
BIG CLIFTY, KY

DIAMOND ABC 250376
JEFFERY CARROLL/ WENDY GOFF
BIG CLIFTY, KY

BISHOPS RANGER ABC 374154
STEVEN STURTZ
SAN ANGELO, TX

FIVE OAKS LUCKY ABC 380910
DAKOTA OCKEL
CAMPBELL, MO

SHEP ABC 333917
WENDY GOFF
BIG CLIFTY, KY

BLAZZIN JESSIE ABC 265555
JEFFERY CARROLL/ WENDY GOFF
BIG CLIFTY, KY

NICK ABC 257145
JEFFERY CARROLL/ WENDY GOFF
BIG CLIFTY, KY

WILLOW ABC 297726
JEFFERY CARROLL/ WENDY GOFF
BIG CLIFTY, KY

@¢CHIP ABC 248320
CLAUDIA WHEELER, PITTSBURG, T
¢SADIE ABC 204970
CLAUDIA WHEELER, PITTSBURG, T

DUKE OF THE MILL ABC 178557
JEFFERY CARROLL/ WENDY GOFF, I
BLUE DALLAS ABC 233773
JEFFERY CARROLL/ WENDY GOFF, I

HILLS TIM ABC 239696
JIM HILL, ELLINGTON, MO
SNOWBALL ABC 258142
GARY OWENS, SEYMOUR, MO

MAX ABC 305582
GARY ALEXANDER, BIRCH TREE, M
KATTIE ABC 333620
MARC CHRISTOPHER, MOODY, MO

ORION ISDS 287626
MISS J.P. BEALE, ANGUS, SCOTLAND
@¢IMP.ASTRASTYLE ABC 333914
KIM RUSSELL, HAMBURG, NY

SAM ABC 133021
WENDY GOFF, BIG CLIFTY, KY
BLUE DALLAS ABC 233773
JEFFERY CARROLL/ WENDY GOFF, B

RHOSFA MIRK ABC 213250
RANDY DAVIS, MC MINNVILLE, TN
JESS ABC 109279
J.T. BARRETT, WATERTOWN, TN

DAKOTA JACK ABC 171880
JEFF/APRIL CAMPBELL, BELTON, SC
DOLLY ABC 258515
JUSTIN MORGAN, SENECA, SC

This is to certify that the above named and described Border Collie has been registered in the Stud Book of the American Border Collie Association. This certificate is issued in reliance on a written application submitted and attested by the owner at time of whelping and upon the express condition that the Association has the right to correct and/or cancel this certificate for cause under its rules and regulations.

@Hips-Veterinary Radiologist Approved (OFA or Canadian Equivalent) | ##G.B. International Champion | # G.B. National Champion | * USBCHA Finals Champion | ¢ CEA Normal

Note: If this dog is named a conformation champion by any registry after January 1, 2004, its ABCA registration will be rescinded and its offspring will not be eligible for registration with the American Border Collie Association.

This the 7 day of April, 2019

AMERICAN BORDER COLLIE ASSSOCIATION

Signature Deborah A. Bailey

ABCA, PO Box 100 Cataula GA 31804
abca@americanbordercollie.org (706) 322-4400

Paw Print Genetics
A division of Genetic Veterinary Sciences, Inc.

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

Laboratory Report

Laboratory #:	121348	**Call Name:**	Ivory
Order #:	59653	**Registered Name:**	-
Ordered By:	Logan Fraker	**Breed:**	Border Collie
Ordered:	May 7, 2019	**Sex:**	Female
Received:	May 8, 2019	**DOB:**	Dec. 2018
Reported:	May 14, 2019	**Registration #:**	-

Results:

Disease	Gene	Genotype	Interpretation
Collie Eye Anomaly	*NHEJ1*	WT/WT	Normal (clear)

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

Interpretation:

Molecular genetic analysis was performed for a specific mutation reported to be associated with Collie Eye Anomaly in dogs. We identified two normal copies of the DNA sequences in the mutation tested.

Recommendations:

No mutations were identified. Thus, this dog is not at an increased risk for the disease caused by or associated with the mutation tested. Because this dog is "clear" of this mutation, this dog will only pass the normal gene on to its offspring. Normal results do not exclude inherited mutations not tested in this gene or other genes that may cause medical problems or may be passed on to 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.

**Note: The preliminary result was reported to the client via phone on May 10, 2019.*

Helen F Smith, PhD
Assistant Laboratory 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.

Paw Print Genetics
A division of Genetic Veterinary Sciences, Inc.

Coat Color and Trait Certificate

Call Name:	Ivory	**Laboratory #:**	121348
Registered Name:	-	**Registration #:**	-
Breed:	Border Collie	**Certificate Date:**	May 15, 2019
Sex:	Female		
DOB:	Dec. 2018		

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

Coat Color/Trait Test	Gene	Genotype	Interpretation
D Locus (Dilute)	*MLPH*	D/D	Non dilute
E Locus (Yellow/Red)	*MC1R*	e/e	Yellow/red
M Locus (Merle)	*PMEL*	m/m	Non merle

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 **e** which inhibits production of black pigment. The coat color of this dog will be yellow/red (including shades of white, cream, yellow, apricot or red). This dog will pass **e** on to 100% of its offspring.

This dog carries two copies of **m**, the non-merle, wild-type allele of the *PMEL* gene, and, therefore, does not have a merle coat color/pattern. This dog will pass on one copy of the **m** allele 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.

Helen F Smith, PhD
Assistant Laboratory 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.