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DOG COAT COLOR / NATURAL BOBTAIL REPORT

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Case: **NCD97806**
Date Received: 30-Apr-2019
Print Date: 06-May-2019
Report ID: 3581-7133-3290-5077
Verify report at www.vgl.ucdavis.edu/myvgl/verify.htm

Name: **GREENWOOD PARK CAUZ FOR CELEBRATION** *Reg:* **WALA00002365**
DOB: **05/27/2017** *Sex:* **Male** *Breed:* **Australian Labradoodle** *Color:* **Chocolate**

Call Name: **Miggie**

Sire: ALPENRIDGE CAUZ N EFFECT *Reg:*
Dam: GREENWOOD PARK CELEBRATION *Reg:*

MC1R (E LOCUS)	**E/e^1**	1 copy of black and 1 copy of red/yellow/cream
BROWN (TYRP1)		Not requested.
DILUTE (MLPH)	**D/D**	Full color, no dilute gene present
DOMINANT BLACK	**K/N**	1 copy of dominant black is present *
AGOUTI	**a^t/a^t**	Homozygous for black-and-tan
MERLE		Not requested.
PIEBALD	**N/N**	Dog has no copies of piebald.
HARLEQUIN		Not requested.
NATURAL BOBTAIL		Not requested.
DOBERMAN OCA		Not requested.
PANDA SPOTTING		Not requested.

* This result is sometimes associated with the brindle pattern.

For more detailed information on Dog Coat Color results, please go to:
www.vgl.ucdavis.edu/services/coatcolordog.php

Dog Coat Color / Fur Type Results with Explanations

MC1R - All Variants

E^m/E^m - 2 copies of mask - dog has mask

E^m/E - 1 copy of mask and 1 copy of black - dog has mask and carries black

E^m/e - 1 copy of mask and 1 copy of red/yellow - dog has mask and carries red/yellow/cream

E/E - 2 copies of black

E/e - 1 copy of black and 1 copy of red/yellow/cream

e/e - 2 copies of red/yellow are present. Dog is red/yellow/cream

E^m/E^g - 1 copy of mask and 1 copy of grizzle - dog has mask and carries grizzle

E^g/E^g - 2 copies of grizzle - dog is grizzle if Dominant black is N/N and agouti is at/at

E^g/E - 1 copy of grizzle and 1 copy of black - dog is grizzle if Dominant black is N/N and agouti is at/at

E^g/e - 1 copy of grizzle and 1 copy of red/yellow - dog is grizzle if Dominant black is N/N and agouti is at/at

DILUTE (MLPH)

D/D - Full color, no dilute gene present.

D/d - Full color, carries 1 copy of the dilute gene.

d/d - Dilute, 2 copies of the dilute gene.

DOMINANT BLACK - Black/ brindle or fawn

K/K - 2 copies of dominant black are present.

K/N - 1 copy of dominant black is present. *

N/N - Dog does not have the dominant black mutation.

* This result is sometimes associated with the brindle pattern.

COAT LENGTH

S/S - Dog has short hair. Long-haired offspring cannot be produced.

S/L - Dog has short hair and carries long hair gene.

L/L - Dog has long hair.

CURL

N/N - Dog has straight coat.

N/C - Dog has wavy coat.

C/C - Dog has curly coat.

FURNISHINGS

N/N - Dog does not have furnishings.

N/F - Dog has furnishings and carries 1 copy of the non-furnishing gene.

F/F - Dog has furnishings. All offspring will have furnishings.

HARLEQUIN

N/N - No copies of Harlequin mutation are present.

N/H - 1 copy of the Harlequin mutation is present. If the dog has merle and is black pigmented, the Harlequin pattern is expressed. Breedings between N/H dogs are expected to result in 25% embryonic lethal offspring.

DOBERMAN OCULOCUTANEOUS ALBINISM (OCA)

N/N - Normal - no copies of the OCA mutation.

N/OCA - Carrier - 1 copy of the OCA mutation.

OCA/OCA - Affected - 2 copies of the OCA mutation.

BROWN (TYRP1)

B/B - Does not carry brown - cannot have brown offspring.

B/b - 1 copy of brown present - carrier.

b/b - 2 copies of brown present - black pigment (if present) is diluted to brown, red/yellow dogs have brown noses and foot pads.

IMPROPER COAT

N/N - No copies of Improper Coat, normal.

N/IC - 1 copy of Improper Coat, carrier.

IC/IC - 2 copies of Improper Coat, dog has Improper Coat.

AGOUTI*

a^y/a^y - Homozygous for fawn/sable.

a^y/a^w - Dog has fawn and carries wild sable.

a^y/a^t - Dog has fawn and carries black-and-tan.

a^y/a -Dog has fawn and carries recessive black.

a^w/a^w - Homozygous for wild-sable.

a^w/a^t - Dog has wild-sable and carries black-and-tan.

a^w/a - Dog has wild-sable and carries recessive black.

a^t/a^t - Homozygous for black-and-tan.

a^t/a - Dog has black-and-tan and carries recessive black.

a/a - Homozygous for recessive black.

a^y/a^{yt} - Dog has a normal fawn allele and a recombinant fawn plus black-and-tan allele. The recombinant allele behaves as a normal fawn allele.

a^{yt}/a^t - Dog has a recombinant fawn plus black-and-tan allele and carries a black-and-tan allele. The recombinant allele behaves as a normal fawn allele.

* Expression of agouti is dependent on complex interaction of other coat color genes such as MC1R and Dominant Black.

PIEBALD/WHITE SPOTTING**

S/S - Dog has 2 copies of piebald.

N/S - Dog has 1 copy of piebald.

N/N - Dog has no copies of piebald.

** Expression of white patterns varies from breed to breed and among individuals within a breed. This test is specific for the mutation in MITF known to be associated with piebald/white spotting.

MERLE

M/M - 2 copies of merle are present (double merle).

M/Mc - 1 copy of merle and 1 copy of cryptic merle are present.

M/N - 1 copy of merle is present.

Mc/Mc - 2 copies of cryptic merle are present.

Mc/N - 1 copy of cryptic merle is present

N/N - No copies of merle or cryptic merle are present.

Many genes are involved in production of coat color and fur type. The results above are specific for known variants in ASIP, MC1R, TYRP, MLPH, CB3, KRT71, RSPO2, MITF and FGF5. The results do not completely describe the color and fur type of a dog.