

## Laboratory Report

|                      |               |                         |                              |
|----------------------|---------------|-------------------------|------------------------------|
| <b>Laboratory #:</b> | 433973        | <b>Call Name:</b>       | Rebel                        |
| <b>Order #:</b>      | 197341        | <b>Registered Name:</b> | Broken Arrow's No Rulz Apply |
| <b>Ordered By:</b>   | Penny Allen   | <b>Breed:</b>           | Australian Shepherd          |
| <b>Ordered:</b>      | Jan. 5, 2024  | <b>Sex:</b>             | Female                       |
| <b>Received:</b>     | Jan. 25, 2024 | <b>DOB:</b>             | Feb. 2021                    |
| <b>Reported:</b>     | Feb. 21, 2024 | <b>Registration #:</b>  | -                            |

### Results:

| Disease  | Gene              | Genotype | Interpretation                                  |
|--|-------------------|----------|---|
| Chondrodystrophy with Intervertebral Disc Disease Risk Factor (CDDY with IVDD) | <i>CFA12 FGF4</i> | WT/WT    | Normal (Clear) - No CDDY or Increased IVDD Risk |
| Coagulation Factor VII Deficiency  | <i>F7</i>         | WT/WT    | Normal (Clear)                                  |
| Collie Eye Anomaly   | <i>NHEJ1</i>      | WT/WT    | Normal (Clear)                                  |
| Cone Degeneration  | <i>CNGB3</i>      | WT/WT    | Normal (Clear)                                  |
| Craniomandibular Osteopathy  | <i>SLC37A2</i>    | WT/WT    | Normal (Clear)                                  |
| Degenerative Myelopathy (Common Variant)                                       | <i>SOD1</i>       | WT/WT    | Normal (Clear)                                  |
| Exercise-Induced Collapse  | <i>DNM1</i>       | WT/WT    | Normal (Clear)                                  |
| Hereditary Ataxia (Australian Shepherd Type)                                   | <i>PNPLA8</i>     | WT/WT    | Normal (Clear)                                  |
| Hereditary Cataracts (Australian Shepherd Type)                                | <i>HSF4</i>       | WT/WT    | Normal (Clear)                                  |
| Hyperuricosuria  | <i>SLC2A9</i>     | WT/WT    | Normal (Clear)                                  |
| Intestinal Cobalamin Malabsorption (Australian Shepherd Type)                  | <i>AMN</i>        | WT/WT    | Normal (Clear)                                  |
| Intestinal Cobalamin Malabsorption (Border Collie Type)                        | <i>CUBN</i>       | WT/WT    | Normal (Clear)                                  |
| Junctional Epidermolysis Bullosa (Australian Shepherd Type)                    | <i>LAMB3</i>      | WT/WT    | Normal (Clear)                                  |
| Multidrug Resistance 1   | <i>ABCB1</i>      | WT/WT    | Normal (Clear)                                  |
| Multifocal Retinopathy 1   | <i>BEST1</i>      | WT/WT    | Normal (Clear)                                  |
| Neuronal Ceroid Lipofuscinosis 5 (Herding Dog Type)                            | <i>CLN5</i>       | WT/WT    | Normal (Clear)                                  |
| Neuronal Ceroid Lipofuscinosis 6   | <i>CLN6</i>       | WT/WT    | Normal (Clear)                                  |
| Neuronal Ceroid Lipofuscinosis 8 (Australian Shepherd Type)                    | <i>CLN8</i>       | WT/WT    | Normal (Clear)                                  |
| Progressive Retinal Atrophy, Progressive Rod-Cone Degeneration                 | <i>PRCD</i>       | WT/WT    | Normal (Clear)                                  |
| Von Willebrand Disease I   | <i>VWF</i>        | WT/WT    | Normal (Clear)                                  |

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

### Interpretation:

Molecular genetic analysis was performed for 20 specific mutations reported to be associated with disease in dogs. We identified two normal copies of the DNA sequences in 20 mutations tested. Thus, this dog is not at an increased risk for the diseases associated with these 20 mutations.

### **Recommendations:**

No mutations were identified. Thus, 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 these mutations, this dog will only pass the normal genes on to its offspring. 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. 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.

Paw Print Genetics® performed the tests listed on this dog. 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. The results included in this report relate only to the items tested using the sample provided. These tests were developed and their performance determined by Paw Print Genetics. This laboratory has established and verified the test(s)' accuracy and precision with >99.9% sensitivity and specificity. The presence of mosaicism may not be detected by this test. Non-paternity may lead to unexpected results. This is not a breed identification test. Because all tests performed are DNA-based, rare genomic variations may interfere with the performance of some tests producing false results. If you think any 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.