JFARMS EMPRESS NOVA

Photos
Age 3
180 lbs.

AMERICAN KENNEL CLUB

NAME
JFARMS EMPRESS NOVA

NUMBER
WS61567008

BREED
MASTIFF

SEX
FEMALE

COLOR
APRICOT, BLACK MASK

DATE OF BIRTH
JUNE 30, 2018

SIRE
JFARMS GENERAL BIG STUFF
WS53037501 10-18 (OFA24G EYE23 AKC DNA #V854750)

DAM
JFARMS-COOPERS DUCHESS OF JOHNSON FARMS
WS41575104 02-16 (OFA26E OFEL26)

BREEDER
DR. PAIGE EDWARD JOHNSON & MRS. SHARON KAY JOHNSON & BECKY COOPER

OWNER
DR. PAIGE EDWARD JOHNSON PH.D. & MS. SHARON K JOHNSON

PO BOX 125
LEONARDTOWN MD 20650-0125

PROUDLY BRED BY AN AKC BREEDER OF MERIT

AMERICAN KENNEL CLUB®

This certificate invalidates all previous certificates issued.
If a date appears after the name and number of the sire and dam, it indicates the issue of the Stud Book Register in which the sire or dam is published.
For Transfer Instructions, see back of Certificate.
This Certificate issued with the right to correct or revoke by the American Kennel Club.

REGISTRATION CERTIFICATE

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DNA Tests		
	Wisdom Panel – 214 Tests (all passing) – Note: Does not have Canine Multifocal Retinopathy 1 (CMR) and carries two (2) dominate non-CMR Infected Genes – Therefore, can be bred to any Sire and puppies will not have CMR.	**3**
Non-DNA Tests		
	Orthopedic Foundation for Animals (OFA) – 5 Tests (all passing) – Note: Due to Covid-19 protocols at the 4 local canine eye specialists, **no "well-dog"** OFA CAER exams *(dilate eyes and visual examination)* were permitted – However, the dog **passed all thirty-four (34) Eye (ocular) DNA Tests.**	**18**
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DNA Test Report

Owner Info

First Name
Paige

Last Name
Johnson

Pet Info

Registered Name
JFARMS EMPRESS NOVA

Date of Birth
6/30/2018

Nickname (Call Name)
JFARMS EMPRESS NOVA

Sample ID
DYGRVJV

Sex
Female

Registration
WS61567008

Country of Origin
US

Microchip ID
956000009808242

Owner Reported Breed
Mastiff

Tattoo ID
N/A

Genetic Diversity (Heterozygosity)

JFARMS EMPRESS NOVA's Percentage of Heterozygosity

32%

JFARMS EMPRESS NOVA's genome analysis shows an average level of genetic heterozygosity when compared with other Mastiffs.

Typical Range for Mastiffs

27 - 34%

Health Conditions Known in This Breed

Genetic Condition	Gene	Risk Variant	Copies	Result
Canine Multifocal Retinopathy 1	BEST1	C>T	0	Clear
Dominant Progressive Retinal Atrophy	RHO	C>G	0	Clear

Other Conditions Tested

Genetic Condition	Gene	Risk Variant	Copies	Result
2,8-dihydroxyadenine (DHA) Urolithiasis	APRT	G>A	0	Clear
Acral Mutilation Syndrome	GDNF	C>T	0	Clear
Acute Respiratory Distress Syndrome	ANLN	C>T	0	Clear
Alaskan Husky Encephalopathy	SLC19A3	G>A	0	Clear
Alexander Disease	GFAP	G>A	0	Clear
Amelogenesis Imperfecta	ENAM	Deletion	0	Clear
Bandera's Neonatal Ataxia	GRM1	Insertion	0	Clear
Benign Familial Juvenile Epilepsy	LGI2	A>T	0	Clear
Canine Leukocyte Adhesion Deficiency (CLAD), type III	FERMT3	Insertion	0	Clear
Canine Multifocal Retinopathy 2	BEST1	G>A	0	Clear
Canine Multifocal Retinopathy 3	BEST1	Deletion	0	Clear
Canine Scott Syndrome	ANO6	G>A	0	Clear
Centronuclear Myopathy (Discovered in the Great Dane)	BIN1	A>G	0	Clear
Centronuclear Myopathy (Discovered in the Labrador Retriever)	PTPLA	Insertion	0	Clear
Cerebellar Ataxia	RAB24	A>C	0	Clear
Cerebellar Cortical Degeneration	SNX14	C>T	0	Clear
Cerebellar Hypoplasia	VLDLR	Deletion	0	Clear
Cerebral Dysfunction	SLC6A3	G>A	0	Clear

Other Conditions Tested (continued)

Genetic Condition	Gene	Risk Variant	Copies	Result
Chondrodysplasia	ITGA10	C>T	0	Clear
Cleft Lip & Palate with Syndactyly	ADAMTS20	Deletion	0	Clear
Cleft Palate	DLX6	C>A	0	Clear
Collie Eye Anomaly (CEA)	NHEJ1	Deletion	0	Clear
Complement 3 Deficiency	C3	Deletion	0	Clear
Cone Degeneration (Discovered in the Alaskan Malamute)	CNGB3	Deletion	0	Clear
Cone Degeneration (Discovered in the German Shepherd Dog)	CNGA3	C>T	0	Clear
Cone Degeneration (Discovered in the German Shorthaired Pointer)	CNGB3	G>A	0	Clear
Cone-Rod Dystrophy	NPHP4	Deletion	0	Clear
Cone-Rod Dystrophy 1	PDE6B	Deletion	0	Clear
Cone-Rod Dystrophy 2	IQCB1	Insertion	0	Clear
Congenital Dyshormonogenic Hypothyroidism with Goiter (Discovered in the Shih Tzu)	SLC5A5	G>A	0	Clear
Congenital Hypothyroidism (Discovered in the Tenterfield Terrier)	TPO	C>T	0	Clear
Congenital Hypothyroidism (Discovered in the Toy Fox and Rat Terrier)	TPO	C>T	0	Clear
Congenital Myasthenic Syndrome (Discovered in the Golden Retriever)	COLQ	G>A	0	Clear
Congenital Myasthenic Syndrome (Discovered in the Jack Russell Terrier)	CHRNE	Insertion	0	Clear
Congenital Myasthenic Syndrome (Discovered in the Labrador Retriever)	COLQ	T>C	0	Clear
Congenital Myasthenic Syndrome (Discovered in the Old Danish Pointer)	CHAT	G>A	0	Clear
Congenital Stationary Night Blindness (CSNB)	RPE65	A>T	0	Clear
Craniomandibular Osteopathy	SLC37A2	C>T	0	Clear
Cystic Renal Dysplasia and Hepatic Fibrosis	INPP5E	G>A	0	Clear
Cystinuria Type I-A	SLC3A1	C>T	0	Clear

Other Conditions Tested (continued)

Genetic Condition	Gene	Risk Variant	Copies	Result
Cystinuria Type II-A	SLC3A1	Deletion	0	Clear
Deafness and Vestibular Dysfunction (Discovered in Doberman Pinscher)	PTPRQ	Insertion	0	Clear
Degenerative Myelopathy	SOD1	G>A	0	Clear
Demyelinating Neuropathy	SBF2	G>T	0	Clear
Dental Hypomineralization	FAM20C	C>T	0	Clear
Dilated Cardiomyopathy (Discovered in the Schnauzer)	Pending	Deletion	0	Clear
Dystrophic Epidermolysis Bullosa (Discovered in the Central Asian Ovcharka)	COL7A1	C>T	0	Clear
Dystrophic Epidermolysis Bullosa (Discovered in the Golden Retriever)	COL7A1	C>T	0	Clear
Early Adult Onset Deafness For Border Collies only (Linkage test)	Pending	Insertion	0	Clear
Early Retinal Degeneration (Discovered in the Norwegian Elkhound)	STK38L	A>C	0	Clear
Early-onset PRA (Discovered in the Portuguese Water Dog)	CCDC66	Insertion	0	Clear
Early-Onset Progressive Polyneuropathy (Discovered in the Alaskan Malamute)	NDRG1	G>T	0	Clear
Early-Onset Progressive Polyneuropathy (Discovered in the Greyhound)	NDRG1	Deletion	0	Clear
Enamel Hypoplasia (Discovered in the Parson Russell Terrier)	ENAM	C>T	0	Clear
Epidermolytic Hyperkeratosis	KRT10	G>T	0	Clear
Episodic Falling Syndrome	BCAN	Insertion	0	Clear
Exercise-Induced Collapse	DNM1	G>T	0	Clear
Factor VII Deficiency	F7	G>A	0	Clear
Factor XI Deficiency	FXI	Insertion	0	Clear
Fanconi Syndrome	FAN1	Deletion	0	Clear
Fetal Onset Neuroaxonal Dystrophy	MFN2	G>C	0	Clear
Focal Non-Epidermolytic Palmoplantar Keratoderma	KRT16	G>C	0	Clear

Other Conditions Tested (continued)

Genetic Condition	Gene	Risk Variant	Copies	Result
Generalized Progressive Retinal Atrophy (Discovered in the Schapendoes)	CCDC66	Insertion	0	Clear
Glanzmann Thrombasthenia Type I	ITGA2B	C>T	0	Clear
Glanzmann Thrombasthenia Type I (Discovered in Great Pyrenees)	ITGA2B	C>G	0	Clear
Globoid Cell Leukodystrophy (Discovered in Terriers)	GALC	A>C	0	Clear
Globoid Cell Leukodystrophy (Discovered in the Irish Setter)	GALC	A>T	0	Clear
Glycogen Storage Disease Type Ia	G6PC	G>C	0	Clear
Glycogen Storage Disease Type IIIa, (GSD IIIa)	AGL	Deletion	0	Clear
GM1 Gangliosidosis (Discovered in the Portuguese Water Dog)	GLB1	G>A	0	Clear
GM1 Gangliosidosis (Discovered in the Shiba)	GLB1	Deletion	0	Clear
GM2 Gangliosidosis (Discovered in the Japanese Chin)	HEXA	G>A	0	Clear
GM2 Gangliosidosis (Discovered in the Toy Poodle)	HEXB	Deletion	0	Clear
Goniodysgenesis and Glaucoma (Discovered in the Border Collie)	OLFML3	G>A	0	Clear
Hemophilia A (Discovered in Old English Sheepdog)	FVIII	C>T	0	Clear
Hemophilia A (Discovered in the Boxer)	FVIII	C>G	0	Clear
Hemophilia A (Discovered in the German Shepherd Dog - Variant 1)	FVIII	G>A	0	Clear
Hemophilia A (Discovered in the German Shepherd Dog - Variant 2)	FVIII	G>A	0	Clear
Hemophilia A (Discovered in the Havanese)	FVIII	Insertion	0	Clear
Hemophilia B	FIX	G>A	0	Clear
Hemophilia B (Discovered in the Airedale Terrier)	FIX	A>T	0	Clear
Hemophilia B (Discovered in the Lhasa Apso)	FIX	Deletion	0	Clear
Hereditary Ataxia (Discovered in the Norwegian Buhund)	KCNIP4	T>C	0	Clear
Hereditary Elliptocytosis	SPTB	C>T	0	Clear

Other Conditions Tested (continued)

Genetic Condition	Gene	Risk Variant	Copies	Result
Hereditary Footpad Hyperkeratosis	FAM83G	G>C	0	Clear
Hereditary Nasal Parakeratosis (Discovered in the Greyhound)	SUV39H2	Deletion	0	Clear
Hereditary Nasal Parakeratosis (Discovered in the Labrador Retriever)	SUV39H2	A>C	0	Clear
Hereditary Vitamin D-Resistant Rickets Type II	VDR	Deletion	0	Clear
Hyperekplexia or Startle Disease	SLC6A5	G>T	0	Clear
Hyperuricosuria	SLC2A9	G>T	0	Clear
Hypocatalasia	CAT	G>A	0	Clear
Hypomyelination	FNIP2	Deletion	0	Clear
Hypophosphatasia	Pending	T>G	0	Clear
Ichthyosis (Discovered in the American Bulldog)	NIPAL4	Deletion	0	Clear
Ichthyosis (Discovered in the Great Dane)	SLC27A4	G>A	0	Clear
Intestinal Cobalamin Malabsorption (Discovered in the Beagle)	CUBN	Deletion	0	Clear
Intestinal Cobalamin Malabsorption (Discovered in the Border Collie)	CUBN	Deletion	0	Clear
Intestinal Cobalamin Malabsorption (Discovered in the Komondor)	CUBN	G>A	0	Clear
Juvenile Encephalopathy (Discovered in the Parson Russell Terrier)	Pending	Deletion	0	Clear
Juvenile Laryngeal Paralysis and Polyneuropathy	RAB3GAP1	Deletion	0	Clear
Juvenile Myoclonic Epilepsy	DIRAS1	Deletion	0	Clear
L-2-Hydroxyglutaric Aciduria	L2HGDH	T>C	0	Clear
L-2-Hydroxyglutaric Aciduria (Discovered in the Westie)	Pending	Insertion	0	Clear
Lagotto Storage Disease	ATG4D	G>A	0	Clear
Lamellar Ichthyosis	TGM1	Insertion	0	Clear
Lethal Acrodermatitis (Discovered in the Bull Terrier)	MKLN1	A>C	0	Clear

Other Conditions Tested (continued)

Genetic Condition	Gene	Risk Variant	Copies	Result
Ligneous Membranitis	PLG	T>A	0	Clear
Lung Developmental Disease (Discovered in the Airedale Terrier)	LAMP3	C>T	0	Clear
Macrothrombocytopenia	TUBB1	G>A	0	Clear
May-Hegglin Anomaly	MYH9	G>A	0	Clear
MDR1 Medication Sensitivity	MDR1/ABCB1	Deletion	0	Clear
Microphthalmia (Discovered in the Soft-Coated Wheaten Terrier)	RBP4	Deletion	0	Clear
Mucopolysaccharidosis Type IIIA (Discovered in the Dachshund)	SGSH	C>A	0	Clear
Mucopolysaccharidosis Type IIIA (Discovered in the New Zealand Huntaway)	SGSH	Insertion	0	Clear
Mucopolysaccharidosis Type VII (Discovered in the Brazilian Terrier)	GUSB	C>T	0	Clear
Mucopolysaccharidosis Type VII (Discovered in the German Shepherd Dog)	GUSB	G>A	0	Clear
Muscular Dystrophy (Discovered in the Cavalier King Charles Spaniel)	Dystrophin	G>T	0	Clear
Muscular Dystrophy (Discovered in the Golden Retriever)	Dystrophin	A>G	0	Clear
Muscular Dystrophy (Discovered in the Landseer)	COL6A1	G>T	0	Clear
Muscular Dystrophy (Discovered in the Norfolk Terrier)	Dystrophin	Deletion	0	Clear
Muscular Hypertrophy (Double Muscling)	MSTN	T>A	0	Clear
Musladin-Lueke Syndrome	ADAMTSL2	C>T	0	Clear
Myeloperoxidase Deficiency	MOP	C>T	0	Clear
Myotonia Congenita	CLCN1	Insertion	0	Clear
Myotonia Congenita (Discovered in the Labrador Retriever)	CLCN1	T>A	0	Clear
Myotonia Congenita (Discovered in the Miniature Schnauzer)	CLCN1	C>T	0	Clear
Myotubular Myopathy	MTM1	A>C	0	Clear
Narcolepsy (Discovered in the Dachshund)	HCRTR2	G>A	0	Clear

Other Conditions Tested (continued)

Genetic Condition	Gene	Risk Variant	Copies	Result
Narcolepsy (Discovered in the Labrador Retriever)	HCRTR2	G>A	0	Clear
Nemaline Myopathy	NEB	C>A	0	Clear
Neonatal Cerebellar Cortical Degeneration	SPTBN2	Deletion	0	Clear
Neonatal Encephalopathy with Seizures	ATF2	T>G	0	Clear
Neuroaxonal Dystrophy	TECPR2	C>T	0	Clear
Neuroaxonal Dystrophy (Discovered in the Papillon)	PLA2G6	G>A	0	Clear
Neuroaxonal Dystrophy (Discovered in the Rottweiler)	VPS11	A>G	0	Clear
Neuronal Ceroid Lipofuscinosis 1	PPT1	Insertion	0	Clear
Neuronal Ceroid Lipofuscinosis 12 (Discovered in the Australian Cattle Dog)	ATP13A2	C>T	0	Clear
Neuronal Ceroid Lipofuscinosis 7	MFSD8	Deletion	0	Clear
Neuronal Ceroid Lipofuscinosis 8 (Discovered in the Alpine Dachsbracke)	CLN8	Deletion	0	Clear
Neuronal Ceroid Lipofuscinosis 8 (Discovered in the Australian Shepherd)	CLN8	G>A	0	Clear
Neuronal Ceroid Lipofuscinosis 8 (Discovered in the English Setter)	CLN8	T>C	0	Clear
Neuronal Ceroid Lipofuscinosis 8 (Discovered in the Saluki)	CLN8	Insertion	0	Clear
Obesity risk (POMC)	POMC	Deletion	0	Clear
Osteochondrodysplasia	SLC13A1	Deletion	0	Clear
Osteochondromatosis (Discovered in the American Staffordshire Terrier)	EXT2	C>A	0	Clear
Osteogenesis Imperfecta (Discovered in the Beagle)	COL1A2	C>T	0	Clear
Osteogenesis Imperfecta (Discovered in the Dachshund)	SERPINH1	T>C	0	Clear
P2RY12-associated Bleeding Disorder	P2RY12	Deletion	0	Clear
Paroxysmal Dyskinesia	PIGN	C>T	0	Clear
Persistent Müllerian Duct Syndrome	AMHR2	C>T	0	Clear

Other Conditions Tested (continued)

Genetic Condition	Gene	Risk Variant	Copies	Result
Phosphofructokinase Deficiency	PFKM	G>A	0	Clear
Polycystic Kidney Disease	PKD1	G>A	0	Clear
Prekallikrein Deficiency	KLKB1	T>A	0	Clear
Primary Ciliary Dyskinesia	CCDC39	C>T	0	Clear
Primary Ciliary Dyskinesia (Discovered in the Alaskan Malamute)	NME5	Deletion	0	Clear
Primary Lens Luxation	ADAMTS17	G>A	0	Clear
Primary Open Angle Glaucoma (Discovered in Basset Fauve de Bretagne)	ADAMTS17	G>A	0	Clear
Primary Open Angle Glaucoma (Discovered in Petit Basset Griffon Vendeen)	ADAMTS17	Insertion	0	Clear
Primary Open Angle Glaucoma and Lens Luxation (Discovered in Chinese Shar-Pei)	ADAMTS17	Deletion	0	Clear
Progressive Early-Onset Cerebellar Ataxia	SEL1L	T>C	0	Clear
Progressive Retinal Atrophy (Discovered in the Basenji)	SAG	T>C	0	Clear
Progressive Retinal Atrophy (Discovered in the Golden Retriever - GR-PRA1 variant)	SLC4A3	Insertion	0	Clear
Progressive Retinal Atrophy (Discovered in the Lhasa Apso)	Pending	Insertion	0	Clear
Progressive Retinal Atrophy (Discovered in the Papillon and Phalène)	CNGB1	Deletion	0	Clear
Progressive Retinal Atrophy (Discovered in the Shetland Sheepdog - BBS2 variant)	Pending	G>C	0	Clear
Progressive Retinal Atrophy (Discovered in the Shetland Sheepdog - CNGA1 variant)	CNGA1	Deletion	0	Clear
Progressive Retinal Atrophy (Discovered in the Swedish Vallhund)	MERTK	Insertion	0	Clear
Progressive Retinal Atrophy 1 (Discovered in the Italian Greyhound)	Pending	G>A	0	Clear
Progressive Retinal Atrophy Type III	FAM161A	Insertion	0	Clear
Progressive Rod Cone Degeneration (prcd-PRA)	PRCD	G>A	0	Clear
Protein Losing Nephropathy	NPHS1	G>A	0	Clear

Other Conditions Tested (continued)

Genetic Condition	Gene	Risk Variant	Copies	Result
Pyruvate Dehydrogenase Phosphatase 1 Deficiency	PDP1	C>T	0	Clear
Pyruvate Kinase Deficiency (Discovered in the Basenji)	PKLR	Deletion	0	Clear
Pyruvate Kinase Deficiency (Discovered in the Beagle)	PKLR	G>A	0	Clear
Pyruvate Kinase Deficiency (Discovered in the Pug)	PKLR	T>C	0	Clear
Pyruvate Kinase Deficiency (Discovered in the West Highland White Terrier)	PKLR	Insertion	0	Clear
QT Syndrome	KCNQ1	C>A	0	Clear
Renal Cystadenocarcinoma and Nodular Dermatofibrosis	FLCN	A>G	0	Clear
Rod-Cone Dysplasia 1	PDE6B	G>A	0	Clear
Rod-Cone Dysplasia 1a	PDE6B	Insertion	0	Clear
Rod-Cone Dysplasia 3	PDE6A	Deletion	0	Clear
Sensory Ataxic Neuropathy	tRNATyr	Deletion	0	Clear
Sensory Neuropathy	FAM134B	Insertion	0	Clear
Severe Combined Immunodeficiency	PRKDC	G>T	0	Clear
Severe Combined Immunodeficiency (Discovered in Frisian Water Dogs)	RAG1	G>T	0	Clear
Shaking Puppy Syndrome (Discovered in the Border Terrier)	Pending	G>A	0	Clear
Skeletal Dysplasia 2	COL11A2	G>C	0	Clear
Spinocerebellar Ataxia (Late-Onset Ataxia)	CAPN1	G>A	0	Clear
Spinocerebellar Ataxia with Myokymia and/or Seizures	KCNJ10	C>G	0	Clear
Spondylocostal Dysostosis	HES7	Deletion	0	Clear
Spongy Degeneration with Cerebellar Ataxia	SDCA1	T>C	0	Clear
Spongy Degeneration with Cerebellar Ataxia (Discovered in Belgian Malinois)	ATP1B2	Insertion	0	Clear
Stargardt Disease (Discovered in the Labrador Retriever)	ABCA4	Insertion	0	Clear

Other Conditions Tested (continued)

Genetic Condition	Gene	Risk Variant	Copies	Result
Trapped Neutrophil Syndrome	VPS13B	Deletion	0	Clear
Van den Ende-Gupta Syndrome	SCARF2	Deletion	0	Clear
von Willebrand's Disease, type 1	VWF	G>A	0	Clear
von Willebrand's Disease, type 2	VWF	T>G	0	Clear
von Willebrand's Disease, type 3 (Discovered in the Kooiker Hound)	VWF	G>A	0	Clear
von Willebrand's Disease, type 3 (Discovered in the Scottish Terrier)	VWF	Deletion	0	Clear
von Willebrand's Disease, type 3 (Discovered in the Shetland Sheepdog)	VWF	Deletion	0	Clear
X-Linked Ectodermal Dysplasia	EDA	G>A	0	Clear
X-Linked Hereditary Nephropathy (Discovered in the Navasota Dog)	COL4A5	Deletion	0	Clear
X-Linked Hereditary Nephropathy (Discovered in the Samoyed)	COL4A5	G>T	0	Clear
X-Linked Myotubular Myopathy	MTM1	C>A	0	Clear
X-Linked Progressive Retinal Atrophy 1	RPGR	Deletion	0	Clear
X-Linked Progressive Retinal Atrophy 2	RPGR	Deletion	0	Clear
X-Linked Severe Combined Immunodeficiency (Discovered in the Basset Hound)	IL2RG	Deletion	0	Clear
X-Linked Severe Combined Immunodeficiency (Discovered in the Cardigan Welsh Corgi)	IL2RG	Insertion	0	Clear
X-Linked Tremors	PLP1	A>C	0	Clear
Xanthinuria (Discovered in a mixed breed dog)	Pending	G>A	0	Clear
Xanthinuria (Discovered in the Cavalier King Charles Spaniel)	Pending	Deletion	0	Clear
Xanthinuria (Discovered in the Toy Manchester Terrier)	Pending	G>T	0	Clear

DNA Test Report

Coat Color

Genetic Trait	Gene	Variant	Copies	Result
Fawn	ASIP	a^y	2	**Fawn possible**
Recessive Black	ASIP	a	0	No effect
Tan Points	ASIP	a^t	0	No effect
Dominant Black	CBD103	K^B	0	No effect
Mask	MC1R	E^m	2	**Dark Muzzle possible**
Recessive Red (Variant 1)	MC1R	e^1	0	No effect
Recessive Red (Variant 2)	MC1R	e^2	0	No effect
Recessive Red (Variant 3)	MC1R	e^3	0	No effect
Widow's Peak (Discovered in Ancient dogs)	MC1R	e^A	0	No effect
Widow's Peak (Discovered in the Afghan Hound and Saluki)	MC1R	E^G	0	No effect
Red Intensity	MFSD12	i	1	**White to yellow coat shades unlikely**
Dilution (Variant 1) Linkage test	MLPH	d^1	0	No effect
Dilution (Variant 2)	MLPH	d^2	0	No effect
Dilution (Variant 3)	MLPH	d^3	0	No effect
Chocolate (Variant 1)	TYRP1	b^c	0	No effect
Chocolate (Variant 2)	TYRP1	b^s	0	No effect
Chocolate (Variant 3)	TYRP1	b^d	0	No effect
Chocolate (Variant 4)	TYRP1	b^{esd}	0	No effect

Coat Patterns

Genetic Trait	Gene	Variant	Copies	Result
Piebald	MITF	s^p	0	No effect

Coat Patterns (continued)

Genetic Trait	Gene	Variant	Copies	Result
Merle	PMEL	M	0	No effect
Harlequin	PSMB7	H	0	No effect
Saddle Tan	RALY	-	1	Saddle possible

Coat Length and Curl

Genetic Trait	Gene	Variant	Copies	Result
Long Hair (Variant 1)	FGF5	lh^{1}	0	No effect
Long Hair (Variant 2)	FGF5	lh^{2}	0	No effect
Long Hair (Variant 3)	FGF5	lh^{3}	0	No effect
Long Hair (Variant 4)	FGF5	lh^{4}	0	No effect
Long Hair (Variant 5)	FGF5	lh^{5}	0	No effect
Curly Coat	KRT71	C	0	No effect

Hairlessness

Genetic Trait	Gene	Variant	Copies	Result
Hairlessness (Discovered in the Chinese Crested Dog)	FOXI3	Hr^{cc}	0	No effect
Hairlessness (Discovered in the American Hairless Terrier)	SGK3	hr^{ahi}	0	No effect
Hairlessness (Discovered in the Scottish Deerhound)	SKG3	hr^{sd}	0	No effect

More Coat Traits

Genetic Trait	Gene	Variant	Copies	Result
Hair Ridge	FGF3, FGF4, FGF19, ORAOV1	R	0	No effect

More Coat Traits (continued)

Genetic Trait	Gene	Variant	Copies	Result
Reduced Shedding	MC5R	sd	2	Low shedder
Furnishings	RSPO2	F	0	No effect
Albino	SLC45A2	c^{al}	0	No effect

Head Shape

Genetic Trait	Gene	Variant	Copies	Result
Short Snout (Variant 2)	BMP3	-	0	No effect
Short Snout (Variant 1)	SMOC2	-	0	No effect

Hind Dewclaws

Genetic Trait	Gene	Variant	Copies	Result
Hind Dewclaws (Discovered in Asian breeds)	LMBR1	DC-1	0	No effect
Hind Dewclaws (Discovered in Western breeds)	LMBR1	DC-2	0	No effect

Body Features

Genetic Trait	Gene	Variant	Copies	Result
Back Muscle and Bulk	ACSL4	-	2	Bulky appearance likely
Blue Eyes	ALX4	-	0	No effect
High Altitude Adaptation	EPAS1	-	0	No effect
Short Legs	FGF4	-	0	Medium to long legs
Floppy Ears	MSRB3	-	2	Floppy ears more likely
Short Tail	T-box	T	0	Full tail length likely

Orthopedic Foundation for Animals
Preliminary (Consultation) Report

A Not-For-Profit Organization

JFARMS EMPRESS NOVA
registered name

WS61567008
registration number

MASTIFF
breed

F
sex

6/30/2018
date of birth

956000009808242
tattoo/microchip/DNA profile

12
age at evaluation in months

2070105
application number

7/16/2019
date of report

film/case no(s)

Owner
DR PAIGE E JOHNSON
SHARON K JOHNSON
PO BOX 125
LEONARDTOWN, MD 20650

Veterinarian
BANFIELD THE PET HOSPTIAL
2601 HOUSELY RD
ANNAPOLIS, MD 21401

RADIOGRAPHIC EVALUATION OF PELVIC PHENOTYPE WITH RESPECT TO HIP DYSPLASIA

* The study must be repeated when the animal is 24 months of age or older to qualify for an OFA number.

_____ **EXCELLENT HIP JOINT CONFORMATION***
superior hip joint conformation as compared with other individuals of the same breed and age

√ **GOOD HIP JOINT CONFORMATION***
well formed hip joint conformation as compared with other individuals of the same breed and age

_____ **FAIR HIP JOINT CONFORMATION***
minor irregularities of the hip joint conformation as compared with other individuals of the same breed and age

_____ **BORDERLINE HIP JOINT CONFORMATION**
marginal hip joint conformation of indeterminate status with respect to hip dysplasia at this time – **Repeat study in six months**

_____ **MILD HIP DYSPLASIA**
radiographic evidence of minor dysplastic changes of the hip joints

_____ **MODERATE HIP DYSPLASIA**
well defined radiographic evidence of dysplastic changes of the hip joints

_____ **SEVERE HIP DYSPLASIA**
radiographic evidence of marked dysplastic changes of the hip joints

HIP JOINTS - STANDARD VD VIEW

ELBOW JOINTS – FLEXED LATERAL VIEW

ORTHOPEDIC FOUNDATION FOR ANIMALS, INC.

JFARMS EMPRESS NOVA
registered name

MASTIFF
breed

NYAP01550720
film/test/lab #

956000009808242
tattoo/microchip/DNA profile

2070105
application number

7/16/2019
date of report

WS61567008
registration no.

F
sex

6/30/2018
date of birth

12
age at evaluation in months

MF-TH1862/12F-VPI
O.F.A. NUMBER

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

A Not-For-Profit Organization

RESULTS:
Based on the laboratory results submitted, no evidence of thyroid disease was recognized.

NORMAL

owner
DR PAIGE E JOHNSON
SHARON K JOHNSON
PO BOX 125
LEONARDTOWN, MD 20650

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

www.offa.org

ORTHOPEDIC FOUNDATION FOR ANIMALS, INC.

JFARMS EMPRESS NOVA
registered name

MASTIFF
breed

956000009808242
tattoo/microchip/DNA profile

2070105
application number

7/16/2019
date of report

WS61567008
registration no.

F
sex

6/30/2018
date of birth

12
age at evaluation in months

MF-PA3205/12F/P-VPI
O.F.A. NUMBER

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A Not-For-Profit Organization

RESULTS:
The results of the examination submitted to OFA indicate that no evidence of patellar luxation was recognized.

NORMAL - PRACTITIONER

owner
DR PAIGE E JOHNSON
SHARON K JOHNSON
PO BOX 125
LEONARDTOWN, MD 20650

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

www.ofa.org

ORTHOPEDIC FOUNDATION FOR ANIMALS, INC.

JFARMS EMPRESS NOVA
registered name

MASTIFF
breed

film/test/lab #

956000009808242
tattoo/microchip/DNA profile

2070105
application number

07/21/2020
date of report

WS61567008
registration no.

F
sex

06/30/2018
date of birth

24
age at evaluation in months

MF-9894G24F-VPI
O.F.A. NUMBER

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

A Not-For-Profit Organization

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

GOOD

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

owner

DR PAIGE E JOHNSON
SHARON K JOHNSON
PO BOX 125
LEONARDTOWN MD 20650

OFA eCert

Verify certificate with QR scan

www.ofa.org

ORTHOPEDIC FOUNDATION FOR ANIMALS, INC.

JFARMS EMPRESS NOVA
registered name

MASTIFF
breed

C074277
film/test/lab #

956000009808242
tattoo/microchip/DNA profile

2070105
application number

07/30/2020
date of report

WS61567008
registration no.

F
sex

06/30/2018
date of birth

24
age at evaluation in months

MF-ACA148/24F-VPI
O.F.A. NUMBER

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

A Not-For-Profit Organization

RESULTS:
NORMAL: NO EVIDENCE OF CONGENITAL OR ADULT ONSET INHERITED HEART DISEASE – AUSCULTATION ONLY (NOTE: THE CONGENITAL CLEARANCE IS CONSIDERED PERMANENT; ADULT ONSET CLEARANCE VALID FOR 1 YEAR FROM TEST DATE 07/21/2020.)
EXAMINER: CC13-RICHARD COBER, DVM, DACVIM

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

owner

DR PAIGE E JOHNSON
SHARON K JOHNSON
PO BOX 125
LEONARDTOWN MD 20650

OFA eCert

Verify certificate with QR scan

www.ofa.org