UCDAVIS VETERINARY MEDICINE
Veterinary Genetics Laboratory

CATTLE GENETIC MARKER TEST REPORT

Provided Information:	***Case:*** **IMC553**
Name: **CLG ARGENT**	***Date Received:*** 07-May-2026
Registration: **31483**	***Report Issue Date:*** 12-May-2026
	Report ID: 0714-5574-4757-2182
	Verify report at vgl.ucdavis.edu/verify

DOB: **05/02/2026** *Sex:* **Male** *Breed:* **American Highland**

Sire: CLG COAL	*Dam:* CLG ARIES
Reg: 30979	*Reg:* 30981
Microchip:	*Microchip:*

RESULTS AND INTERPRETATION

Permanent Record.

GENETIC MARKERS

LOCUS	TYPE	LOCUS	TYPE	LOCUS	TYPE
BM1818	260/270	*BM1824*	180/182	*BM2113*	127/133
BRR	258/260	*CYP21*	192/202	*ETH003*	121/125
ETH10	221	*ETH225*	144/146	*INRA23*	214
RM006	110/116	*RM067*	90	*SPS115*	248
TGLA122	143/147	*TGLA126*	117/123	*TGLA227*	81/89

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CATTLE GENETIC MARKER TEST REPORT

Client/Owner/Agent Information:	*Case:* **IMC553**
CASSAUNDRA GRIMM 23915 PALM AVENUE HOWEY IN THE HILLS, FL 34737	***Date Received:*** 07-May-2026 ***Report Issue Date:*** 12-May-2026 ***Report ID:*** 0714-5574-4757-2182 Verify report at vgl.ucdavis.edu/verify
Name: **CLG ARGENT**	

Additional Information

If testing for a disease or a disorder was performed and results indicate the animal is affected or at risk, we recommend contacting your veterinarian for further clinical evaluation and for additional information on disease and management.

The Veterinary Genetics Laboratory is an institutional member of ISAG. DNA types are reported according to standardized nomenclature for those markers tested in the ISAG core panel.

For more detailed information on Genetic Marker test results, please visit our website at:
vgl.ucdavis.edu/services/parentage

For terms and conditions of testing, please see vgl.ucdavis.edu/about/terms-and-conditions

Results are determined using PCR-based methods. The results relate only to the sample tested as identified by the submitter (for example, identity and/or breed).

Report authorized by Dr. Rebecca Bellone, VGL Director

ANAB ANSI National Accreditation Board ACCREDITED ISO/IEC 17025 TESTING LABORATORY

UCDAVIS VETERINARY MEDICINE
Veterinary Genetics Laboratory

CATTLE COAT COLOR TEST REPORT

Provided Information:	***Case:*** **IMC553**
Name: **CLG ARGENT**	***Date Received:*** 07-May-2026
Registration: **31483**	***Report Issue Date:*** 13-May-2026
	Report ID: 2627-3435-1325-7080
	Verify report at vgl.ucdavis.edu/verify

DOB: **05/02/2026** *Sex:* **Male** *Breed:* **American Highland**

RESULT		INTERPRETATION
DILUTION (PMEL17)	**Dh/Dh**	Two copies of PMEL17-delTTC dilution variant. Coat color is pale cream/white.
MC1R (EXTENSION)	**E^D/E^+**	Dominant black, carrier of wild type.

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CATTLE COAT COLOR TEST REPORT

Client/Owner/Agent Information:	*Case:* **IMC553**
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Name: **CLG ARGENT**	

Additional Information

If testing for a disease or a disorder was performed and results indicate the animal is affected or at risk, we recommend contacting your veterinarian for further clinical evaluation and for additional information on disease and management.

For more detailed information on Cattle Coat Color test results, please visit our website at:
vgl.ucdavis.edu/test/mc1r-cattle
vgl.ucdavis.edu/test/cattle-dilution

For terms and conditions of testing, please see vgl.ucdavis.edu/about/terms-and-conditions

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UC DAVIS VETERINARY MEDICINE
Veterinary Genetics Laboratory

Highland Coat Color

The coat color phenotype in cattle depends on multiple genes. The Veterinary Genetics Laboratory offers testing for Extension (*MC1R* gene) and Dilution (*PMEL17* gene).

The table below shows the expected phenotype based on the various possible genotype combinations of these two genes. While these two loci together explain some coat color phenotypes in Highland cattle, it is important to note that other, yet unknown, genes may influence the resulting coat color observed and the animal may have a different phenotype than what is predicted by the Extension and Dilution genotypes alone.

Extension (*MC1R*)	Dun Dilution (*PMEL17*)	Coat Color Phenotype Predictions
E+/E+	N/N	Red
E+/e	N/N	Red
e/e	N/N	Red
E+/E+	Dh/N	Yellow
E+/e	Dh/N	Yellow
e/e	Dh/N	Yellow
E+/E+	Dh/Dh	White/cream
E+/e	Dh/Dh	White/cream
e/e	Dh/Dh	White/cream
ED/ED	N/N	Black
ED/E+	N/N	Black
ED/e	N/N	Black
ED/ED	Dh/N	Dun
ED/E+	Dh/N	Dun
ED/e	Dh/N	Dun
ED/ED	Dh/Dh	Silver Dun (CAN) or Silver (USA)*
ED/E+	Dh/Dh	Silver Dun (CAN) or Silver (USA)*
ED/e	Dh/Dh	Silver Dun (CAN) or Silver (USA)*

Table 1: Coat color phenotypes based on Extension and Dilution genotypes. *Adapted from Schmutz SM, Dreger DL. (2013) doi: 10.1111/j.1365-2052.2012.02361.x.*

** The Canadian Highland Cattle Society uses the term "Silver Dun" whereas the American Highland Cattle Association refers to this phenotype as "Silver*

For more detailed information about these coat color genes, please visit our website at https://vgl.ucdavis.edu/test/mc1r-cattle and https://vgl.ucdavis.edu/test/cattle-dilution

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DEXTER GENETIC TEST REPORT

Provided Information:		*Case:*	**IMC553**
Name:	**CLG ARGENT**	***Date Received:***	07-May-2026
Registration:	**31483**	***Report Issue Date:***	13-May-2026
		Report ID:	6851-0618-9232-3080

Verify report at vgl.ucdavis.edu/verify

DOB: **05/02/2026** *Sex:* **Male** *Breed:* **American Highland**

RESULT	INTERPRETATION
MC1R (EXTENSION)	Animal has one copy of dominant black and one copy of wild type (red).
E^D/E^+	
Dun (TYRP1)	
Not Requested	
Dexter Dilution (SLC45A2)	
Not Requested	
Pulmonary Hypoplasia with Anasarca (PHA)	
Not Requested	
Polled vs. Horned	
Not Requested	
Bulldog Dwarfism (BD1)	Carrier, has one copy of the Dexter BD1 Bulldog mutation. Breeding to another carrier will produce 25% affected calves.
N/BD1	
Bulldog Dwarfism (BD2)	
Not Requested	

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DEXTER GENETIC TEST REPORT

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Name: **CLG ARGENT**	

Additional Information

If testing for a disease or a disorder was performed and results indicate the animal is affected or at risk, we recommend contacting your veterinarian for further clinical evaluation and for additional information on disease and management.

For more detailed information on Dexter Genetic test results, please visit our website at:
vgl.ucdavis.edu/services/cattle/dexter-tests

For terms and conditions of testing, please see vgl.ucdavis.edu/about/terms-and-conditions

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Report authorized by Dr. Rebecca Bellone, VGL Director

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