CERTIFICATE OF REGISTRAT	
THE PROPERTY OF THE PROPERTY O	SEX: BULL LEFT ID: POLLED RIGHT ID: 110 945
	OBBED
CHONDRO Non-Carrier BREE	DL Reuben 025258
Kirkhaven My Cabernet 030931	DE Reason 625256
	Jerac Violet 023793
FACE	PRF Hondo Lane 031963
Moosters Harvest Moon 037698	
5 C.	Gladhour Wrencesky 022562
EE Freedom's Kirkhaven 032243	FF Freedom's Valor 026101
11 Treedon's Kirkilaven 052245	WHF My Genesis Dawn 025666
se 038768	Mr.
<ul> <li>Kirkhaven Our Anniversary 033882</li> </ul>	DL Reuben 025258
Eline Const	Ridings Farm Mary J 025089
al described above has been accepted for the Americ	
sociation of the breeding of this animal.	inited in the application the therefor, but in no event is
	AMERICAN DEXTER CATTLE ASSOCIATION
Owner #10711	Chee Oclaney
	Registrar Date of Issue; April-10-2022
Owner #13740	If ownership is transferred this certificate is to be endoresed on the reverse side and mailed to the Registrar with the proper fee.
	COLOR: Red CHONDRO Non-Carrier BREE CG Sire qualifies G4 dam qualifies G5 sire and dam qualify Kirkhaven My Cabernet 030931  Moosters Harvest Moon 037698  FF Freedom's Kirkhaven 032243  se 038768  Kirkhaven Our Anniversary 033882  al described above has been accepted for the America full reliance upon the truth of the statements contassociation of the breeding of this animal.  Owner #10711



# CATTLE MILK PROTEIN GENETIC TEST REPORT

Provided Information: Case: DEX7451

Name: AF DILLONS KING Date Received: 01-Nov-2021
Report Issue Date: 15-Nov-2021

Registration: 1897-9577-0742-6113

Verify report at www vgl ucdavis edu/verify

DOB: 07/18/2021 Sex: Male Breed: Dexter

Beta Casein Result	Kappa Casein Result	Beta Lactoglobulin Result
A2/A2	A/B	B/B

#### Beta Casein (A2 Genotyping) Interpretation

In the A2C nomenclature for A2 genotyping, the Beta Casein above corresponds to A2/A2.

Milk yield and protein content. The A2 variant has been shown to have a positive association with milk yield and protein content. The expanded beta case in test reflected in this report detects variants A1, A2, A3, B, C, D, E, F, G, H1, H2, I, K and L.

Based on the aminoacid present in position 67 these variants can be classified into 2 groups - A1 and A2. Variants in the A1-group (Histidine) are A1, B, C, F and G. Variants in the A2-group (Proline) are A2, A3, D, E, H1, H2, I, K and L. The levels of bioactive peptide beta-casomorphin 7 (BCM7) produced from the metabolism of beta casein is several-fold higher for variants in the A1 group than in the A2 group. Higher levels of BCM7 have been associated with negative health effects in humans. Relative to levels of BCM7 production, variants within each group behave similarly but may differ in other properties.

#### Kappa Casein Interpretation

Protein yield and percentage. The A variant and AA genotype are associated with higher milk production. The B variant and BB genotype are associated with increased milk protein and casein content, and better cheese yield. Relative to protein content and cheese production, BB is the most favorable genotype, AB is intermediate and AA is the least favorable.

#### Beta Lactoglobulin Interpretation

Milk yield and whey protein content. The A variant is associated with increased milk yield and whey protein content. The B variant is associated with increased casein and fat content and is favorable for cheese production.



# CATTLE PARENTAGE AND GENETIC MARKER TEST REPORT

Provided Information:

AF DILLONS KING

Registration:

Case:

**DEX7451** 

Date Received:

01-Nov-2021

Report Issue Date:

12-Nov-2021

Report ID:

2402-8162-2336-1184

Verify report at www vgl.ucdavis edu/verify

DOB: 07/18/2021 Sex: Male Breed: Dexter

Microchip:

Sire: KIRKHAVEN DILLON

Reg: pending

Dam: Reg:

KIRKHAVEN DAKOTA SURPRISE 038768

Microchip:

# RESULTS AND INTERPRETATION

AF Dillons King qualifies as an offspring of Kirkhaven Dillon pending without consideration of the dam.

# GENETIC MARKERS

LOCUS	TYPE	LOCUS	ТҮРЕ	LOCUS	ТҮРЕ
BM1818	266	BM1824	182	BM2113	137
BRR	258/260	CYP21	192/198	ETH003	117/127
ETH10	219	ETH225	146/150	INRA23	208/214
RM006	110/116	RM067	94/102	SPS115	248/256
TGLA122	151/175	TGLA126	115/117	TGLA227	87

AMERICAN DE	EXTER CATT	LE ASSOCIATION
NAME:Bar None's April DATE OF BIRTH: 08/14/2013	NUMBER: 033870 COLOR: Dun	SEX: HEIFER LEFT ID: DJ23A POLLED RIGHT ID:
PARENTAGE DNA:		REEDING: PASTURE PHA: Non-Carrier
PARENTAGE DNA: G1 no genotype on file G2 genotype on fil  SIRE: Moses Meadow's Clint 0	Trinity FF Sampson 019934	Svo Coco 14454  Prairie Aster 017090
SIRE: Moses Meadows Cliff U	High Pines Calli 018763	Shome Jack 15140  HPR Lilly 17 018756
	JL MidKnight 15735	Lone Pine Farms Klondike 11420  SGF Dana 8635
DAM: Bar None's Angie 02226	Hickory Hill Honey 018656	Rainbow Hills Champ 7041  J.C. Hershey 7514
herd book. This certificate is issued in	al described above has been accepted for the A n full reliance upon the truth of the statements sociation of the breeding of this animal.	E STATE OF THE STA
Bred By: David Jones 6730 Delbello Rd Manvel,TX 77578	Owner #781	AMERICAN DEXTER CATTLE ASSOCIATION  City Clary Registrar Date of Issue: April-10-2022
Owner: Rodney Wrenfroe 2738 Grantham Drive Chipley,FL 32428	Owner #13740	If ownership is transferred this certificate is to be endoresed of the reverse side and mailed to the Registrar with the proper for

#### VIVERSITY OF CALIFORNIA, DAVIS

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# A2 GENOTYPING TEST

DOUGLAS LOYD 23211 TONY WALLACE RD ROBERTSDALE, AL 36567

Case:

**DEX2494** 

Date Received:

28-Nov-2016

Print Date: Report ID: 03-Dec-2016

7955-2843-5746-1195

Verify report at www.vgl.ucdavis.edu/myvgl/verify.html

Reg: 033870

DOB: 08/14/2013 Sex: Female Breed: Dexter

Sire: MOSES MEADOW'S CLINT

\_\_\_\_

Dam: BAR NONE'S ANGIE

Name: BAR NONE'S APRIL

Reg: 025773

Reg: 022266

#### **Test Result**

# A1/A2

#### Result Codes:

A2/A2 2 copies of A2 present. If bred to other A2/A2 animals, only A2/A2 offspring will be produced

A1/A2 1 copy of A2 present. If bred to A2/A2 animals, 50% of offspring will be A2/A2

A1/A1 No copies of A2 present

As a licensed laboratory, VGL is required to send A2 Corporation Limited a copy of all A2 Gene Tests and to disclose the following:

VGL is an A2 Corporation Limited (A2C) accredited and registered A2 Gene Tester. A2 Gene Tests conform to the specification and are validated to the standards of A2C. A2C will only access information relating to you and your animals from testing carried out by the VGL for the purpose of contacting you about potential milk supply and to maintain a register of A2 gene tested animals. A2C owns various intellectual property rights (including patent rights, trade marks, and technical and commercial know how) relating to the commercial production and sale of a2<sup>TM</sup> branded milk or milk with reduced beta casein A1. It is possible that commercial use of test results may fall within the scope of such intellectual property rights, so if you intend to form a herd of animals used to produce a2<sup>TM</sup> branded milk or milk with reduced beta casein A1 on a commercial scale, you should contact A2C for more information.

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#### MILK PROTEIN DNA TEST REPORT

DOUGLAS LOYD **DEX2494** Case: 23211 TONY WALLACE RD 28-Nov-2016 Date Received: ROBERTSDALE, AL 36567 01-Dec-2016 Print Date: 5641-1672-9424-5115 Report ID: Verify report at www.vgl.ucdavis.edu/myvgl/verify.html Reg: 033870 Name: BAR NONE'S APRIL DOB: 08/14/2013 Sex: Female Breed: Dexter Sire: MOSES MEADOW'S CLINT Reg: 025773 Dam: BAR NONE'S ANGIE Reg: 022266

A2 Genotyping	Kappa Casein	Beta Lactoglobulin
A1/A2	Not Requested	Not Requested

A2 Genotyping (Beta Casein) - milk yield and protein content. The A2 variant has been shown to have a positive association with milk yield and protein content. The A2/A2 genotype is also considered to have positive effects on human health.

Kappa Casein - protein yield and percentage. The A variant and AA genotype are associated with higher milk production. The B variant and BB genotype are associated with increased milk protein and casein content, and better cheese yield. Relative to protein content and cheese production, BB is the most favorable genotype, AB is intermediate and AA is the least favorable.

Beta Lactoglobulin - milk yield and whey protein content. The A variant is associated with increased milk yield and whey protein content. The B variant is associated with increased casein and fat content and is favorable for cheese production.

As a licensed laboratory, VGL is required to send A2 Corporation Limited a copy of all A2 Gene Tests. Note: ONLY the A2 Beta Casein result will be sent to A2 Corporation Limited.

VGL is an A2 Corporation Limited (A2C) accredited and registered A2 Gene Tester. A2 Gene Tests conform to the specification and are validated to the standards of A2C. A2C will only access information relating to you and your animals from testing carried out by the VGL for the purpose of contacting you about potential milk supply and to maintain a register of A2 gene tested animals. A2C owns various intellectual property rights (including patent rights, trade marks, and technical and commercial know how) relating to the commercial production and sale of a2<sup>TM</sup> branded milk or milk with reduced beta casein A1. It is possible that commercial use of test results may fall within the scope of such intellectual property rights, so if you intend to form a herd of animals used to produce a2<sup>TM</sup> branded milk or milk with reduced beta casein A1 on a commercial scale, you should contact A2C for more information.

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TELEPHONE: (530) 752-2211 FAX: (530) 752-3556

# DEXTER / POLLED TEST RESULTS

**DOUGLAS LOYD** 23211 TONY WALLACE RD ROBERTSDALE, AL 36567

Case:

**DEX2494** 

Date Received:

28-Nov-2016

Print Date:

01-Dec-2016

Report ID:

8990-8950-7456-2046

Verify report at www.vgl.ucdavis.edu/myvgl/verify.html

Name: BAR NONE'S APRIL

DOB: 08/14/2013 Sex: Female Breed: Dexter

Sire: MOSES MEADOW'S CLINT

Dam: BAR NONE'S ANGIE

Reg: 025773

Reg: 033870

Reg: 022266

MC1R (EXTENSION)	·,	
ED/E+		
DUN	Animal is dun and carries red.	
b/b		
РНА		
Not Requested	•	
POLLED	POLLED. One copy of the Polled-Celtic molecular marker is present. At	
Pc/H	least 50% of the offspring will be polled.	
BULLDOG DWARFISM - BD1		
Not Requested		
BULLDOG DWARFISM - BD2		
Not Requested	1	

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# CATTLE GENETIC MARKER REPORT

DOUGLAS LOYD 23211 TONY WALLACE RD ROBERTSDALE, AL 36567

Case:

**DEX2494** 

Date Received:

28-Nov-2016

Print Date:

01-Dec-2016

Report ID:

6882-5106-7048-7162

Verify report at www.vgl.ucdavis.edu/myvgl/verify.html

Name: BAR NONE'S APRIL

Reg: 033870

DOB: 08/14/2013 Sex: Female Breed: Dexter

Sire: MOSES MEADOW'S CLINT

Reg: 025773

Dam: BAR NONE'S ANGIE

Reg: 022266

# **ANALYSIS**

Permanent Record.

# **GENETIC MARKERS**

LOCUS	TYPE	LOCUS	ТҮРЕ	LOCUS	TYPE
BM1818	258/262	BM1824	182/188	BM2113	125/135
BRR	258/260	CYP21	198/202	ETH003	117
ETH10	219/221	ETH225	144	INRA23	208/214
RM006	110/118	RM067	102	SPS115	248/261
TGLA122	141/143	TGLA126	115/123	TGLA227	89/93
TGLA53	162/168				

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# **DEXTER / POLLED TEST RESULTS**

DOUGLAS LOYD 23211 TONY WALLACE RD ROBERTSDALE, AL 36567

Case:

**DEX2494** 

Date Received:

28-Nov-2016

Print Date:

01-Dec-2016

Verify report at www.vgl.ucdavis.edu/myvgl/verify.html

Report ID:

8990-8950-7456-2046

\_\_\_\_

Name: BAR NONE'S APRIL

Reg: 033870

DOB: 08/14/2013 Sex: Female Breed: Dexter

Sire: MOSES MEADOW'S CLINT

Reg: 025773

Dam: BAR NONE'S ANGIE

Reg: 022266

MC1R (EXTENSION)					
E <sup>D</sup> /E <sup>+</sup>	Animal is due and carries rad				
DUN	Animal is dun and carries red.				
b/b					
РНА					
Not Requested					
POLLED	POLLED. One copy of the Polled-Celtic molecular marker is present. At				
Pc/H	least 50% of the offspring will be polled.				
BULLDOG DWARFISM - BD1					
Not Requested					
BULLDOG DWARFISM - BD2					
Not Requested					

	CERTIFICATE OF REGISTR	RATION
NAME: A.F. October Fire	NUMBER: 050687	SEX: HEIFER LEFT ID:
DATE OF BIRTH: 10/15/2021	COLOR: Red	POLLED RIGHT ID: 110 928
PARENTAGE DNA: G5 PARENTAGE DNA: G1 no genotype on file G2 genotype on file SIRE: Kirkhaven Dillon 04265	• G3 sire qualifies G4 dam qualifies G5 sire and dam qualify  Kirkhaven My Cabernet 030931	DL Reuben 025258  Jerac Violet 023793
SIRE. RIIKIIAVEIT DIIIOII 04203	Moosters Harvest Moon 037698	PRF Hondo Lane 031963 Gladhour Wrencesky 022562
	Moses Meadow's Clint 025773	Trinity FF Sampson 019934  High Pines Calli 018763
DAM: Bar None's April 033870	Bar None's Angie 022266	JL MidKnight 15735  Hickory Hill Honey 018656
herd book. This certificate is issued in	al described above has been accepted for the An n full reliance upon the truth of the statements c sociation of the breeding of this animal.	nerican Dexter Cattle Association ontained in the application file therefor, but in no event is
Bred By: Holly & Marvin Golden 455 Hansell Chastain Rd Thomasville,GA 31757	Owner #10711	AMERICAN DEXTER CATTLE ASSOCIATION  Registrar
Owner: Rodney Wrenfroe 2738 Grantham Drive Chipley,FL 32428	Owner #13740	Date of Issue: April 10-2022  If ownership is transferred this certificate is to be endoresed the reverse side and mailed to the Registrar with the proper



# CATTLE PARENTAGE AND GENETIC MARKER TEST REPORT

Provided Information: Case: DEX7510

Name: AF OCTOBER FIRE Date Received: 24-Nov-2021 Report Issue Date: 13-Dec-2021

*Registration:* 8758-0050-2979-6182

Verify report at www.vgl.ucdavis.edu/verify

DOB: 10/15/2021 Sex: Female Breed: Dexter

Sire: KIRKHAVEN DILLON Dam: BAR NONE'S APRIL

Reg:pendingReg:033870Microchip:Microchip:

# RESULTS AND INTERPRETATION

AF October Fire qualifies as an offspring of Bar None's April 033870 and Kirkhaven Dillon pending.

# **GENETIC MARKERS**

LOCUS	TYPE	LOCUS	TYPE	LOCUS	TYPE
BM1818	258	BM1824	182/188	BM2113	125/137
BRR	258/260	CYP21	198/202	ETH003	117/127
ETH10	221/223	ETH225	144/150	INRA23	208/214
RM006	116/118	RM067	102	SPS115	248/261
TGLA122	141/175	TGLA126	115/123	TGLA227	87/93



# CATTLE PARENTAGE AND GENETIC MARKER TEST REPORT

Client/Owner/Agent Information:

HOLLY GOLDEN 455 HANSELL CHASTAIN ROAD THOMASVILLE, GA 31757 *Case:* **DEX7510** 

Date Received: 24-Nov-2021
Report Issue Date: 13-Dec-2021

Report ID: 8758-0050-2979-6182

Verify report at www.vgl.ucdavis.edu/verify

Name: AF OCTOBER FIRE

#### **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 markers in the ISAG panel.

For more detailed information on Parentage test results, please visit our website at: www.vgl.ucdavis.edu/services/dnatyping.php

For terms and conditions of testing, please see www.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).







# CATTLE COAT COLOR TEST REPORT

Provided Information: Case: DEX7510

 Name:
 AF OCTOBER FIRE
 Date Received:
 24-Nov-2021

 Report Issue Date:
 13-Dec-2021

Registration: Report ID: 6860-0963-1638-2122

Verify report at www.vgl.ucdavis.edu/verify

DOB: 10/15/2021 Sex: Female Breed: Dexter

**RESULT** 

#### INTERPRETATION

DILUTION		Not Requested
MC1R (EXTENSION)	E+/E+	Wild type.



#### CATTLE COAT COLOR TEST REPORT

Client/Owner/Agent Information:

HOLLY GOLDEN 455 HANSELL CHASTAIN ROAD THOMASVILLE, GA 31757 *Case:* DEX7510

Date Received:24-Nov-2021Report Issue Date:13-Dec-2021

Report ID: 6860-0963-1638-2122

Verify report at www.vgl.ucdavis.edu/verify

Name: AF OCTOBER FIRE

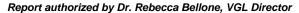
#### **Additional Information**

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: www.vgl.ucdavis.edu/test/mc1r-cattle www.vgl.ucdavis.edu/test/cattle-dilution

For terms and conditions of testing, please see www.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).







#### CATTLE MILK PROTEIN GENETIC TEST REPORT

Provided Information: Case: DEX7510

Name: AF OCTOBER FIRE Date Received: 24-Nov-2021 Report Issue Date: 16-Dec-2021

Registration: 5865-0214-3292-9115

Verify report at www.vgl.ucdavis.edu/verify

DOB: 10/15/2021 Sex: Female Breed: Dexter

Beta Casein Result	Kappa Casein Result	Beta Lactoglobulin Result
A2/A2	A/A	B/B

# Beta Casein (A2 Genotyping) Interpretation

In the A2C nomenclature for A2 genotyping, the Beta Casein above corresponds to A2/A2.

Milk yield and protein content. The A2 variant has been shown to have a positive association with milk yield and protein content. The expanded beta case in test reflected in this report detects variants A1, A2, A3, B, C, D, E, F, G, H1, H2, I, K and L.

Based on the aminoacid present in position 67 these variants can be classified into 2 groups - A1 and A2. Variants in the A1-group (Histidine) are A1, B, C, F and G. Variants in the A2-group (Proline) are A2, A3, D, E, H1, H2, I, K and L. The levels of bioactive peptide beta-casomorphin 7 (BCM7) produced from the metabolism of beta casein is several-fold higher for variants in the A1 group than in the A2 group. Higher levels of BCM7 have been associated with negative health effects in humans. Relative to levels of BCM7 production, variants within each group behave similarly but may differ in other properties.

#### Kappa Casein Interpretation

Protein yield and percentage. The A variant and AA genotype are associated with higher milk production. The B variant and BB genotype are associated with increased milk protein and casein content, and better cheese yield. Relative to protein content and cheese production, BB is the most favorable genotype, AB is intermediate and AA is the least favorable.

#### **Beta Lactoglobulin Interpretation**

Milk yield and whey protein content. The A variant is associated with increased milk yield and whey protein content. The B variant is associated with increased casein and fat content and is favorable for cheese production.



#### CATTLE MILK PROTEIN GENETIC TEST REPORT

Client/Owner/Agent Information:

HOLLY GOLDEN 455 HANSELL CHASTAIN ROAD THOMASVILLE, GA 31757 Case:
Date Received:

**DEX7510** 

Report Issue Date:

24-Nov-2021 16-Dec-2021

Report ID: 5865-0214-3292-9115

Verify report at www.vgl.ucdavis.edu/verify

Name: AF OCTOBER FIRE

#### **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 Milk Protein test results, please visit our website at: www.vgl.ucdavis.edu/panel/cattle-milk-protein-panel

For terms and conditions of testing, please see www.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).



