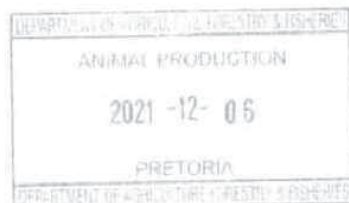




**agriculture,
forestry & fisheries**

Department:
Agriculture, Forestry and Fisheries
REPUBLIC OF SOUTH AFRICA



VETERINARY MASTER PERMIT NO: NO MASTER

**VALID FROM: 2021/12/06
EXPIRY DATE: 2022/06/05**

IMPORTATION OF SEMEN: AUTHORISATION NO. S0451/21-1

(Issued in terms of section 16 of the Animal Improvement Act, 1998)

Expiry date: 2022/06/05 for Authorization No. S0451/21-1

Authorization is hereby granted to: **EMBRIO PLUS.**

of: **PO BOX 2644, BRITS, 0250.**

for the importation **BOVINE** semen of the **SHORTHORN** breed
from (country of origin): **CANADA.**

Semen will be cleared by:
EMBRIO PLUS.

Name of Animals	Reg. No.	Number of doses
CROOKED POST CURFEW 8F	M481693	279

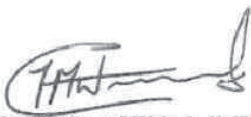
ALTA GENETICS R.R.2. BALZAC, ALBERTA, CANADA.

TOTAL: 279

CONDITION

- Certification by the exporting country that the number of unfrozen (live) spermatozoa per dose complies with the minimum amount specified on the reverse side of this document.
- DNA profiles must be provided to the Registrar of Animal Improvement, and the relevant Breeders Society before release from quarantine, if not available at time of importation.

This authorization is subject to the compliance with the veterinary requirements set out in the attached permit and is also subject thereto that the intended importation meets with all the provisions of the said Act. This authorization does not exempt the importer from the provisions of any other law. This authorization may withdrawn by the Registrar should any false information be discovered in the application. This authorization is also not transferable. Imported semen shall under no circumstances be transferred, sold, given or donated to may other person or body unless prior written approval from the Registrar has been obtained. Any such approval shall be considered as new application for the importation of semen.

10 

REGISTRAR: ANIMAL IMPROVEMENT

DATE: 2021/12/06



Batch Detail Report

Batch : 15732U
Owner :Shorthorn Cattle Breeders
Farm :
Account :
Origin : PRIVATE
Invoice To : Owner

Created : 2023-11-06

SAMPLE	ANIMAL	SPECIES	BREED	DM	UNE	TEST	Tissue Type	RESULT	INVOICE
15732U001	SLU 8F (M.97)	CATTLE	SHORTHORN (97)			PROFX_C	External Profile	PEX : External Profile	

Report Date : 06-Nov-2023 11:15

Page : 1

Unistel report these results on the premise that the biological samples received are from the individuals nominated by the owner/ breeder/ requestee. This Certificate replaces all previously issued certificates.

Disclaimer: While every reasonable effort is made to prevent faulty results, Unistel Medical Laboratories do not accept any responsibility for any losses that may occur as a result of human or technical error. The results relate only to the samples tested. Should gross negligence be proven, the claim shall not exceed the value of the contract

Please note: some STR profiles used in parentage analysis may have been sourced from another laboratory. While every reasonable effort is made to prevent incorrect results, Unistel Medical Laboratories does not accept any responsibility for parentage mismatches due to incompatible marker scoring strategies between laboratories. Unistel Medical Laboratories participates in ISAG comparison testing and therefore incorporates international scoring standards in the generation of our STR profiles.

CHARNÉ ROSSOUW
DIVISION MANAGER



agriculture, land reform & rural development

Department:
Agriculture, Land Reform and Rural Development
REPUBLIC OF SOUTH AFRICA

Directorate of Animal Health
Import-Export Policy Unit
Private Bag X138
Pretoria, 0001
Republic of South Africa

Tel: (27)-012-3197514

Fax: (27)-012-3298292

IMPORTERS:
EMBRIO PLUS
P O BOX 2644
BRITS
0250



Permit no: 13/1/15/2/2-
202112000557

Valid from: 2021-12-07

Expiry date: 2022-06-07

VETERINARY IMPORT PERMIT FOR BOVINE SEMEN FROM CANADA (Issued in terms of the Animal Diseases Act, 1984)

With reference to Permit No **S0451/21-1** date **2021-12-06** Issued in your favour by the Registrar, Animal Improvement Act, 1998 authority is hereby granted to introduce into the Republic of South Africa **279 DOSES** of semen provided that the following conditions are complied with:

1. By making use of this veterinary import permit, the importer, named above, accepts the sole responsibility to ensure that all the conditions stated in this veterinary import permit and the veterinary health certificate on the overleaf, are complied with in full.
2. The consignment may only be exported from Canada to South Africa, and may not travel by land, air or ship through any third country or area, unless written permission is granted by the Director Animal Health.
3. The consignment must be accompanied by:
 - 3.1 this original import permit and
 - 3.2 the agreed upon model health certificate HA1033 (Reviewed 6 July 2010), completed by an official veterinarian duly authorised by the Government of Canada
 - 3.2.1 The semen referred to above was collected at an artificial insemination centre which is licensed by the Canadian Food Inspection Agency and is under supervision of an approved veterinarian;
 - 3.2.2 No outbreaks of Foot and Mouth Disease or Vesicular Stomatitis have occurred at, or within twenty (20) kilometres of the said insemination centre during the twelve (12) months immediately preceding the date on which the semen for export was collected;
 - 3.2.3 The animals in the insemination station have not been vaccinated against Foot and Mouth Disease within the three (3) months preceding the date of collection of the semen;
 - 3.2.4 The donor bulls:
 - a) were continuously resident at the approved A.I. Centre, or at another approved A.I. centre, for a period of at least one (1) month prior to collection of the semen for export to the Republic of South Africa and in that time had not been used for natural mating;
 - b) were clinically healthy and clinically free from diseases which are transmitted via semen;
 - c) were tested for Tuberculosis with negative results within the twelve (12) months preceding the collection;
 - d) were tested for *Trichomonas fetus* with negative results, using culture and direct microscopic examination on two (2) sheath washings collected at least fourteen (14) days apart, taken during the three (3) months immediately preceding date of

- e) collection;
were tested for *Campylobacter fetus* with negative results, using culture examination on one (1) sheath washing taken from them during the three (3) months preceding date of collection;
- f) were tested serologically for *Leptospira* serotypes prevalent in cattle in Canada with negative results within three (3) months preceding the date of collection;
- g) were tested serologically for Brucellosis with negative results within the three (3) months preceding the date of collection;
- h) were tested serologically for IBR/IPV with negative results using the ELISA test or representative samples of semen collected from the donor bull while resident in the centre have been examined for IBR/IPV by tissue culture inoculation with negative results on two passages;
- i) were tested serologically for Enzootic Bovine Leucosis with negative results using the AGID or ELISA test within the three (3) months preceding the date of collection;
- j) were tested serologically for John's disease with negative results using the CF or ELISA test within the three (3) months preceding the date of collection;

NOTE - In the case of donor bulls continuously resident at the A.I. centre for periods longer than three (3) months, negative results for the disease conditions mentioned above will be acceptable provided the tests were performed at the A.I. centre during this period of residence and not more than twelve (12) months prior to the date of collection.

- k) were tested for BVD by virus isolation with negative results prior to entering the artificial insemination centre and as a resident animals has been tested according to the Canadian Artificial Insemination Program in compliance with the Office International des Epizooties, Terrestrial Animal Health Code, Article 4.5.2;
 - l) originate from Canada or the United States, where BSE is compulsory notifiable in accordance with OIE standards;
4. The semen must be adequately, securely and hygienically packed in flasks which were cleansed and disinfected and containing unused cryogenic material; sealed under veterinary supervision and conveyed by air **O R TAMBO INTERNATIONAL AIRPORT** (Port of entry).
 5. The arrival of the consignment must be reported to the State Veterinarian **KEMPTON PARK** Tel: **011 393 7980/83/84/85** and may not be removed from the place/port of entry without his/her permission and subject to any conditions imposed by such written permission.
 6. The animals which have been inseminated with the imported semen may not be removed from the property for a period of at least thirty (30) days after insemination.
 7. Any illness or death of cattle during this period of restriction must immediately be reported to the State Veterinarian of the area.
 8. Full records of all sales reflecting the specific end users of the semen must be kept on file and made available to the Directorate of Animal Health on request.
 9. The container and receptacles in which the semen is transported as well as all insemination apparatus used must be disinfected to the satisfaction of the State Veterinarian concerned
 10. This permit is subject to amendment or cancellation by the Director Animal Health at any time and without prior notice being given.
 11. This permit is valid for ONE CONSIGNMENT ONLY.


DIRECTOR: ANIMAL HEALTH

NOTE: From 1st January 2005 any consignment imported into South Africa packed with either wood packing material or dunnage, will require treatment to remove any pests present (by heat or methyl bromide fumigation). Treatment must be indicated on packing material. [Enquiries: Directorate Plant Health & Quality Fax: 012 319 6350 or www.daff.gov.za]

TABLE 5
LIVE SPERMATOZOA IN A DOSE OF SEMEN
[Reg. 11 (2) (e)]

Kinds of animals	Minimum amount	Line
1. Goats		
(a) Unfrozen semen		
(i) for servical insemination	80 million	60%
(ii) for laparoscopic insemination	10 million	60%
(b) Frozen semen		
(i) for servical insemination	80 million	30%
(ii) for laparoscopic insemination	20 million	30%
2. Horses		
(a) Unfrozen semen	500 million	25%
(b) Frozen	200 million	25%
3. Sheep		
(a) Unfrozen semen		
(i) for servical insemination	80 million	60%
(ii) for laparoscopic insemination	10 million	60%
(b) Frozen semen		
(i) for servical insemination	80 million	30%
(ii) for laparoscopic insemination	20 million	30%
4. Pigs		
(a) Unfrozen semen	1500 million	70%
(b) Frozen semen	1500 million	30%
5. Cattle		
Frozen (Post thawing)	5 million	35%



Shorthorn Cattle Breeders' Society of SA
PO Box 506, Bloemfontein, 9300
Tel: 051 410 0958 | Fax: 051 448 4220
Email: shorthorn@studbook.co.za

2 Dec 2021

ATTENTION: **VIVIAN MVIMBI**

Per email - VivianM@daff.gov.za

Department Agriculture
Private Bag X138
Pretoria
0001

RE: APPLICATION FOR IMPORTATION SEMEN

The Council of the Shorthorn Cattle Breeders' Society of SA support the importation of the following semen for Neil Dry, Barry Stretton, Victor Lourens, Gray Edwards and Hendrik Strydom

Name	Registration number	Number of doses
CROOKED POST CURFEW	SLU 8F (RE)	279
	Total	279

Kind regards,

Anna-Marie Viljoen
Secretary
On behalf of
Barry Stretton
President



agriculture, forestry & fisheries

Department:
Agriculture, Forestry and Fisheries
REPUBLIC OF SOUTH AFRICA

Directorate Animal Production
Private Bag X138, Pretoria (Tshwane), 0001
Delpen Building, C/o Annie Botha & Union Street, Riviera, 0084

APPLICATION FOR THE IMPORTATION OF ANIMALS AND GENETIC MATERIAL

CONFIDENTIAL

ANIMAL IMPROVEMENT ACT, 1998 (ACT NO. 62 OF 1998) AND THE REGULATIONS PROMULGATED IN TERMS THEREOF

A. IMPORTANT INFORMATION!

1. Complete fully in print.
2. Complete in full in duplicate. Incomplete applications will be returned to the applicant and no responsibility for any inconvenience will be accepted.
3. Application to be submitted 30 days prior to importation.
4. Import permits are valid for a limited period and one consignment only.
5. Ensure that the following documentation is attached to the application –
 - (a) An extended two generation pedigree;
 - (b) The performance records; and
 - (c) Blood typing certificate (if not available refer to regulation 13(2)(b) and/or NDA certificate/s; and
 - (d) Approval from relevant Breeder Society.
6. The applicant must be a juristic person, e.g. John Peter Citizen, or John Peter Citizen T/A Diepsloot Stud, or Diepsloot Stud CC, or Diepsloot Stud (Pty) Ltd, or Diepsloot Ltd.
7. If the applicant does not sign the application personally, a letter authorizing the signatory (agent) to sign the application on behalf of the applicant must accompany the application.
8. If an applicant has entered into an agreement with the foreign supplier of the animal's to be imported, in terms of which royalties, fees or concessions, in addition to the purchase price are payable or to be given in respect of the use of such animal/s or progeny thereof, this application shall also be accompanied by a confirmation by the Director-General of the Department of Trade and Industries that such agreement has been approved by this Department.
9. The correct fee (**R330.00**) must accompany each application.
10. Make cheques and postal orders payable to:
Director General: Agriculture
11. Applications must be submitted to the:
Registrar of Animal Improvement
Private Bag X138
Pretoria
0001
Tel: (27) 12-319 7576 / 7590
Fax: (27) 12-319 7570 / 7425

Bank Details:
Standard Bank
Branch: Arcadia
Acc.: 011219556
Branch Code: 000845 / 010845

B. IF APPLICATION IS MADE BY AN AGENT ON BEHALF OF AN IMPORTER, PLEASE PROVIDE:

1. Full names of importer.

EMBRIO PLUS

2. Registration number (if applicable).

ZA15/9

3. Address of importer.

P.O. BOX 2644, BRITS, 0250

4. Attach proof in the form of a signed letter (on the importer's letterhead where applicable) stating:

- a) That you are authorised to apply on behalf of that importer AND
b) That the importer agrees to be bound to all the terms and conditions of this application as well as any permission, permit or authorisation issued as a result thereof.

NO APPLICATION WILL BE CONSIDERED WITHOUT SUCH CONFIRMATION BEING ATTACHED.

C. PARTICULARS

1. Surname and initials of the applicant or the name of the company.

EMBRIO PLUS

2. Identity number/Passport number: _____

3. If the applicant is an immigrant, supply details.

4. Registered name of farm: CROCODILEDRIFT EAST

5. Magisterial district: BRITS

6. Complete postal/Residential address.

P.O. BOX 2644, BRITS, 0250

7. Postal code: 0250

8. Telephone (code and number): 012 250 0026 / 082 786 7324

9. Fax (code and number): 012 250 2299 / 082 786 7324

10. E-mail: info@embryoplus.com

11. Membership number with SA Stud Book: 18796

12. Prefix: EMBRIO PLUS

13. Purpose of importation (give reasons and motivation).

HERD IMPROVEMENT

14. Expected date of importation: AS SOON AS POSSIBLE

15. Approved clearing agent: EMBRIO PLUS

16. Quarantine station: EMBRIO PLUS

17. Animal/s genetic material for which application is made.

Breed: BEEF SHORTHORN

18. Specie: BOVINE

19. DETAILS OF GENETIC MATERIAL

Name	Registration number	Number of doses
CROOKED POST CURFEW 8F	M481693	279
TOTAL		279

Semen donor/Name & Reg. Bumber	Ova donor/Name & Reg. Number	Number of doses
	TOTAL	

Name	Registration number	Number of doses

21. Full address of establishment or AI center from whom the import is to be made.

R.R.2 T0M E0E BALZAC , ALBERTA , CANADA

22. Port of entry: O.R. TAMBO

D. DECLARATION BY APPLICANT

I, the undersigned, hereby declare that—

- (a) I acknowledge that I have read and understood the provisions of the Animal Improvement Act, 1998 (Act 62 of 1998) where applicable, and any regulations promulgated there-under, as far as it relates to this application and anything contemplated herein.
- (b) the animal/s to be imported to the best of my knowledge complies with the prescribed minimum import requirements as stipulated in the Animal Improvement Act, 1998.
- (c) application shall be made for the recording/registration of the animal/s/genetic material with the SA Stud Book and Animal Improvement Association within 3 months of arrival in the country; and
- (d) negotiations to buy the animal/s/genetic material from the foreign owner are already under way; and
- (e) all veterinary and currency exchange requirements will be strictly adhered to; and
- (f) to the best of my knowledge the particulars given in this application are true and correct.



SIGNATURE
M. DE LA REY

INITIALS AND SURNAME

2 DECEMBER 2021

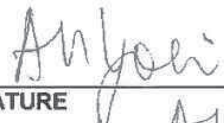
DATE
DIRECTOR – EMBRIO PLUS

CAPACITY

E. DECLARATION BY BREEDERS' SOCIETY

Name: Beek Shorthorn Cattle Breeders' Society
It is hereby declared that: of SA

- (a) that the donor animal/s mentioned in this application does/do comply with the prescribed minimum import requirements of the breeders' society; and
- (b) the applicant is a member of this breeders' society and he/she is in the possession of recorded/registered females of this breed; and
- (c) all changes made on the application form have been initialized by this breeders' society; and
- (d) all the relevant requirements of the constitution of the breeders' society, as far as the importation is concerned, have been complied with.



SIGNATURE
AVILGEN

INITIALS AND SURNAME

2. 12. 2021

DATE
Secretary

CAPACITY

**CANADIAN
SHORTHORN
ASSOCIATION**



**SOCIÉTÉ
CANADIENNE
SHORTHORN**

Incorporated under the Animal Pedigree Act at the Department of Agriculture and Agri-Food / Incorporée en vertu de la Loi sur la généalogie des animaux au Ministère de l'Agriculture et Agro-Alimentation.

~ CERTIFICATE OF REGISTRATION ~

CLOSED PUREBRED REGISTRY

**NAME/
NOM**

CROOKED POST CURFEW 8F

Roan

Sex/Sexe: **MALE**

Tattoo: **SLU 8F (RE)**

Birth Date/Date de naissance
January 28, 2018

CCID

Purebred

Number/ Numéro
X-[CAN]M481703

SASKVALLEY ALAMO 8A
SASKVALLEY STOCK FARM
Red

X-[CAN]M477475

JT TRANS X 28X
POPLAR PARK FARM
Red

X-[CAN]M475345

SASKVALLEY ANNE 7Y
SASKVALLEY STOCK FARM
Roan

X-[CAN]F689438

sire/Père: SASKVALLEY CURFEW 41C X-[CAN]M478950
SASKVALLEY STOCK FARM
Roan

SASKVALLEY BLOSSOM 295A
SASKVALLEY STOCK FARM
Roan

X-[CAN]F691605

MURIDALE CUMBERLAND 5X
MURIDALE SHORTHORNS
Roan

X-[CAN]M475062

SASKVALLEY BLOSSOM 206S
SASKVALLEY STOCK FARM
Red with White Markings

X-[CAN]F683460

BELL M DETAIL 130A
RYLEY MOELLENBECK
Roan

X-[CAN]*20982

BELL M VISONARY 127Y
ARNOLD MOELLENBECK
Roan

X-[CAN]M476087

ACC CROCUS 43Y
ROSS C GRAY
Roan

X-[CAN]*19135

Dam/Mère: CROOKED POST SAM 8D X-[CAN]F697126
THOMAS K SEABORN
Red

CROOKED POST SAM 38B
THOMAS K SEABORN
Red

X-[CAN]F697125

CROOKED POST STOCKMAN 4Z
THOMAS K SEABORN
Red

X-[CAN]M476682

CROOKED POST SAM 28X ET
THOMAS K SEABORN
Red

X-[CAN]F697062

Breeder/Éleveur: Thomas K Seaborn, Rocky Mountain House, AB ID No 5217338

Owner/Propriétaires: Thomas K Seaborn, Rocky Mountain House, AB, ID No 5217338 on January 28, 2018

Expected Progeny Differences

Growth and Maternal

Carcass

Indexes

Performance Data

CED	BW	WW	YW	MK	TM	CEM	ST	CW	REA	MB	FT	SCEZ	SBMH	SF	Actual Birth Wt	205-Day Adj. Wt	365-Day Adj. Wt
ACC	ACC	ACC	ACC	ACC	ACC	ACC	ACC	ACC	ACC	ACC	ACC				lbs	lbs	Ratio
12	2.0	62	92	28	59	5	22	19	0.31	-0.06	-0.08	35.70	140.76	57.90	85	740	104.0
0.41	0.45	0.41	0.40	0.07		0.16	0.21	0.45	0.42	0.34	0.31					1207	107.0



Secretary

Belinda Wagner

August 10, 2021

Date of Issue/Date D'Émission



CANADIAN SHORTHORN ASSOCIATION
DNA TESTING SUMMARY

PRINT DATE: 10/08/2021

REGISTRATION NUMBER

CROOKED POST CURFEW 8F

SLU

8F

TATTOO 1

TATTOO 2

Bull

SEX

28/01/2018

BIRTH DATE

ANIMAL NAME

Sample Barcode	Request		Lab	Order#	Result			Verified	
	Date	Reason			Status	Date	Type	Markers	Sire Dam
DG19B000911-1	4/4/2019	Parentage Only	Neogen Canada		Test Complete	5/14/2019	GGP-50K	Y	Y
DG19B000911	12/17/2018	Parentage Only	Neogen Canada		Test Complete	1/28/2019	SNP_LD	Y	Y
	12/15/2020	Parentage Only	Neogen Canada		Test Complete			N	
DG19B000911		Parentage Only			Test Complete	7/11/2019	SNP	Y	

Genetic Conditions		Result	Order#	Lab	Barcode	Test Date	Results Date	Sample ID	Member ID
Digital Subluxation (DS)		Free		Neogen Canada	DG19B000911		24/04/2019	DG19B000911	
Pulmonary Hypoplasia w/Anasarca (PHA)		Free		Neogen Canada	DG19B000911-1		05/06/2019	DG19B000911	
Tibial Hemimelia (TH)		Free				28/01/2018			
Myostatin m419 (m419)		0		Neogen Canada	DG19B000911-1	27/05/2019	27/05/2019	DG19B000911	
Myostatin E226X (E226X)		0		Neogen Canada	DG19B000911-1	27/05/2019	27/05/2019	DG19B000911	
Myostatin P94L (P94L)		0		Neogen Canada	DG19B000911-1	27/05/2019	27/05/2019	DG19B000911	

Genetic Traits		Result	Order#	Lab	Barcode	Test Date	Results Date	Sample ID	Member ID
Horned/Polled		PP		Neogen Canada	DG19B000911-1		17/12/2020	DG19B000911-1	

Horned/Polled: HH = Homozygous Horned; PP = Homozygous Polled; HP = Heterozygous Polled; NR = No Result;
Myostatin: 2 = 2 copies of the variant; 1 = 1 copy of the variant; 0 = not a carrier of the variant; NR = No Result; PP = not a carrier by parentage;

DNA Disclaimer: The Canadian Shorthorn Association recognizes and agrees that DNA tests are based upon scientific, biologic analysis and assessment of statistical probabilities. The lab believes that there is a range of probabilities and does not assure 100% accuracy. The lab may fail, from time to time, and either (i) not be able to make a determination or (ii) make an incorrect determination. The lab performing the testing assumes responsibility for the accuracy of its test.



Canadian Shorthorn Association
Box 3771
Regina, SK S4P 3N8
Phone: 306-757-2212

DNA Genotype Certificate

Date: October 14, 2021

GeneSeek Laboratories Case Number: DG19B000911

ANIMAL INFORMATION: CROOKED POST CURFEW 8F

Registration No: M481703

Tattoo: SLU 8F

Sex: Bull

Breed: Shorthorn

Based on samples and information received, this animal qualifies as an offspring of:

Sire Name: SASKVALLEY CURFEW 41C

Sire Registration #: M478950

Dam Name: CROOKED POST SAM 8D

Dam Registration #: F697126

PV Results: Qualified

GENOTYPE RESULTS Adjusted to ISAG (1995) standard

BM1818	266/270	MGTG4B	--
BM1824	178/182	RM006	116/116
BM2113	133/137	RM067	102/102
CSSM36	--	SPS113	--
BRR	257/257	SPS115	248/248
CYP21	191/207	TGLA122	151/151
ETH10	217/219	TGLA126	115/115
ETH225	--	TGLA227	87/89
ETH3	117/125	TGLA48	--
HEL1	--	TGLA53	162/164
INRA23	--		

Shayla Chappell
Canadian Shorthorn Association



GeneSeek™ a Neogen Company
7323 Roper Road NW Edmonton, Alberta Canada T6E 0W4 Phone: 855-324-9774

[Header]

GSGT Version 1.9.4
 Processing Date 2020-10-16 11:29:25
 Content 215 SNP Panel
 Num SNPs 215
 Total SNPs 215
 Num Samples 1
 Total Samples 1

[Data]

BSHCANM000000481703

ARS-BFGL-BAC-19454	AA
ARS-BFGL-BAC-27364	AA
ARS-BFGL-BAC-35552	AB
ARS-BFGL-NGS-10035	BB
ARS-BFGL-NGS-101456	BB
ARS-BFGL-NGS-102169	BB
ARS-BFGL-NGS-106015	BB
ARS-BFGL-NGS-111053	AB
ARS-BFGL-NGS-111076	AB
ARS-BFGL-NGS-111114	BB
ARS-BFGL-NGS-112094	BB
ARS-BFGL-NGS-112325	AB
ARS-BFGL-NGS-11383	BB
ARS-BFGL-NGS-114006	AB
ARS-BFGL-NGS-115514	AB
ARS-BFGL-NGS-117319	BB
ARS-BFGL-NGS-117322	AB
ARS-BFGL-NGS-118319	BB
ARS-BFGL-NGS-118340	BB
ARS-BFGL-NGS-119662	BB
ARS-BFGL-NGS-14740	BB
ARS-BFGL-NGS-15506	BB
ARS-BFGL-NGS-15731	BB
ARS-BFGL-NGS-24419	BB
ARS-BFGL-NGS-26517	AB
ARS-BFGL-NGS-27577	AA
ARS-BFGL-NGS-31640	AB
ARS-BFGL-NGS-31807	BB
ARS-BFGL-NGS-36513	AB
ARS-BFGL-NGS-38423	AB
ARS-BFGL-NGS-38620	AB
ARS-BFGL-NGS-39978	AB
ARS-BFGL-NGS-42283	AB
ARS-BFGL-NGS-42505	AA
ARS-BFGL-NGS-55943	AA
ARS-BFGL-NGS-57711	BB
ARS-BFGL-NGS-58613	BB
ARS-BFGL-NGS-67146	BB
ARS-BFGL-NGS-70946	BB
ARS-BFGL-NGS-72471	AB
ARS-BFGL-NGS-76191	AB
ARS-BFGL-NGS-76330	AB
ARS-BFGL-NGS-86662	AA
ARS-BFGL-NGS-93119	AA

ARS-BFGL-NGS-96125	BB
ARS-BFGL-NGS-99210	AA
ARS-USMARC-569	AB
ARS-USMARC-Parent-AY761135-rs29003723	BB
ARS-USMARC-Parent-AY776154-no-rs	AB
ARS-USMARC-Parent-AY841151-rs29003466	BB
ARS-USMARC-Parent-AY842472-rs29001941	AA
ARS-USMARC-Parent-AY842473-rs29001956	AB
ARS-USMARC-Parent-AY842474-rs29003226	AB
ARS-USMARC-Parent-AY842475-rs29002127	AB
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ARS-USMARC-Parent-AY849380-no-rs	BB
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BM1824 178/182
BM2113 133/137
BRR 257/257
CYP21 191/207
ETH10 217/219
ETH225 --
ETH3 117/125
INRA23 --
RM006 116/116
RM067 102/102
SPS115 248/248
TGLA122 151/151
TGLA126 115/115
TGLA227 87/89
TGLA53 162/164



CANADIAN SHORTHORN ASSOCIATION
DNA TESTING SUMMARY

PRINT DATE: 01/11/2023

REGISTRATION NUMBER: X-[CAN]M481703
ANIMAL NAME: CROOKED POST CURFEW 8F
SLU: 8F
PREFIX: TATTOO 1
TATTOO 2:
Bull: 28/01/2018
SEX: BIRTH DATE:

Sample Barcode	Request		Lab	Order#	Result			Verified		
	Date	Reason			Status	Date	Type	Markers	Sire	Dam
DG19B000911-3	12/15/2020	Parentage Only	Neogen Canada		Test Complete	10/13/2021		N	M478950-Q	
DG19B000911-3	9/9/2021	Parentage Only	Neogen Canada		Test Complete	10/13/2021		N	M478950-Q	
DG19B000911		Parentage Only	Neogen Canada		Test Complete	7/11/2019	SNP	Y	M478950-Q	
DG19B000911-1	4/4/2019	Parentage Only	Neogen Canada		Test Complete	5/14/2019	50K	Y	M478950-Q	
DG19B000911	12/17/2018	Parentage Only	Neogen Canada		Test Complete	1/28/2019	L.D	Y	M478950-Q	

Genetic Conditions		Result	Order#	Lab	Barcode	Test Date	Results Date	Sample ID	Member ID
Digital Subluxation (DS)		Free		Neogen Canada	DG19B000911		30/05/2019	DG19B000911	
Pulmonary Hypoplasia w/Anasarca (PHA)		Free		Neogen Canada	DG19B000911-1		30/05/2019	DG19B000911	
Tibial Hemimelia (TH)		Free				28/01/2018	28/01/2018		
Myostatin n419 (n419)		0		Neogen Canada	DG19B000911-1	27/05/2019	30/05/2019	DG19B000911	
Myostatin E226X (E226X)		0		Neogen Canada	DG19B000911-1	27/05/2019	27/05/2019	DG19B000911	
Myostatin F94L (F94L)		0		Neogen Canada	DG19B000911-1	27/05/2019	30/05/2019	DG19B000911	

Genetic Traits		Result	Order#	Lab	Barcode	Test Date	Results Date	Sample ID	Member ID
Horned Polled		PP		Neogen Canada	DG19B000911-1		17/12/2020	DG19B000911-1	

Horned/Polled: HH = Homozygous Horned; PP = Homozygous Polled; HP = Heterozygous Polled; NR = No Result;
Myostatin: 2 = 2 copies of the variant; 1 = 1 copy of the variant; 0 = not a carrier of the variant; NR = No Result; PP = not a carrier by parentage.

DNA Disclaimer: The Canadian Shorthorn Association recognizes and agrees that DNA tests are based upon scientific, biologic analysis and assessment of statistical probabilities. The lab believes that there is a range of probabilities and does not assure 100% accuracy. The lab may fail, from time to time, and either (i) not be able to make a determination or (ii) make an incorrect determination. The lab performing the testing assumes responsibility for the accuracy of its test.