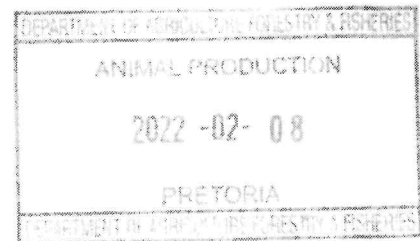




agriculture, forestry & fisheries

Department:
Agriculture, Forestry and Fisheries
REPUBLIC OF SOUTH AFRICA



IMPORTATION OF EMBRYOS: AUTHORISATION NO. E0001/22-1

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

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

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

for the importation of **BOVINE** embryos of the **ANGUS** breed
from (country of origin) : **CANADA.**

Embryos will be cleared by:
EMBRIO PLUS.

<u>Name of Donors</u>	<u>Reg. No.</u>	<u>Number of Embryos</u>
BROOKING FIREBRAND 6068	1909246	
X DMM LADY BLACKBIRD 41Y	1658249	3
SCHIEFELBEIN ATTRACTIVE 4565	1938699	
X DMM LADY BLACKBIRD 41Y	1658249	4
BOSS LAKE BONAFIDE 722E	230772	
X DMM BLACKBIRD 105A	1765827	3

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

TOTAL: 10

Conditions

- a) 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.

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 This authorization may withdrawn by the Registrar should any false information be discovered in the application.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 embryos shall under no circumstances be transferred, sold, given or donated to nay other person or body unless prior written approval from the Registrar has been obtained. Any such approval shall be considered as a new application for the importation of embryos.


PP

REGISTRAR: ANIMAL IMPROVEMENT

DATE: 2022/02/08

Embryo Plus 6/6/23
Geno ✓
Verslag ✓
Permit ✓

Canadian Angus Association
Tabulated Pedigree (Not a Certificate of Registration)

Name: BROOKING FIREBRAND 6068 **Reg #: 1906246** **Defect Test Result(s): Free-DM**
Born: January 31, 2016
Parentage: Parent Verified **Tattoo: Right Ear JSTN 68D** **Male (AI)**
Breeder: 5233951, Brooking Angus Ranch, PO Box 813 Radville SK S0C 2G0 **Current Owner: Scott & Rebecca Bohrsen, Brooking Angus Ranch, Rust Mountain View Ranch,**

Elite	SITZ ALLIANCE 6595	(IMP 6595E)	1036949 *	DDF
* Premier Dam	KMK ALLIANCE 6595 I87	(IMP 87J)	1191922 *	M1F NHF OSF DDF
	G A R EXT 916		[US] 12921677	AMF
	CONNEALY CONSENSUS		[US] 15513367	DDF
	RITO 616 OF 4B20 6807	(IMP 0616F)	985134	M1F NHF OSF DDF
	BLINDA OF CONANGA 004		[US] 14220093	
	BLENDA OF CONANGA 129		[US] 13676181	OSF DDF
	CONNEALY EARNAN 076E	(IMP 076X)	1767036	DDF
	BON VIEW NEW DESIGN 208	(IMP 0208H)	1088254	AMF OHF NHF DDF
	CONNEALY TOBIN		[US] 15497354	AMC NHF
	DELIA OF CONANGA 667		[US] 14843034	CAF
	BRAZILA OF CONANGA 3991 839A		[US] 16246696	CAF OHF DDF
	CONNEALY DEEP CANYON 454		[US] 13676131	CAF
	BREESHA OF CONANGA 1251		[US] 14527868	CAF OHF
	BREETA OF CONANGA 525		[US] 13948387	M1F NHF OSF DDF
Sire BROOKING BANK NOTE 4040		(JSTN 40B)	1776488	AMF CAF OHF M1F NHF OSF DDF
	G D A R TRAVELER 71	(IMP 786W)	725786 *	
	SITZ TRAVELER 8180	(IMP 7940Z)	866597 *	DDF
	SITZ EVERELDA ENTENSE 1137		[US] 10912116	DDF
	S A V FINAL ANSWER 0035	(IMP 035K)	1061938 *	CAF
	BON VIEW BANDO 598	(IMP 142X)	780142 *	
	S A V EMULOUS 8145		[US] 13094078	
	S A V SKY EMULOUS 2124		[US] 11586266	
	E A ROSE 918	(IMP 918W)	1577552	M1F NHF DDF
	VERMILION DATELINE 7078	(IMP 7078G)	1018284 *	
	SITZ TRADITION RLS 8702	(IMP 8702M)	1292830	
	R L S EISA EVERGREEN 5018		[US] 13139883	
	E A ROSE 738		[US] 15892985	
	S A V 5175 BANDO 0703		[US] 13875834	
	M A S BANDO ROSE 4536		[US] 14852109	
	S A V NURSE 2907		[US] 14272396	
	G D A R TRAVELER 044	(IMP 6578H)	838617 *	NHF OSF DDF
	G A R GRID MAKER	(IMP 617Z)	1129870	M1F NHF OSF DDF
	G A R PRECISION 2536		[US] 12716656	AMC NHF
	S A V BISMARCK 5682		1369591 *	DDF
	SCHOENES FIX IT 826		[US] 11196470	DDF
	S A V ABIGALE 0451		[US] 13593085	
	S A V ABIGALE 6062		[US] 12554427	OHF
	S A V BEST INTEREST 0136	(IMP 0136X)	1670575	M1F NHF OSF DDF
	S A V 8180 TRAVELER 004	(IMP 1004K)	1421804	DDF
	S A V NET WORTH 4200	(IMP 4200P)	1309743 *	DDF
	S A V MAY 2410		[US] 14140883	
	S A V EMBLYNETTE 8172		[US] 16056325	CAF
	S A F 598 BANDO 5175	(IMP 05175E)	994198 *	M1F NHF OSF DDF
	S A V EMBLYNETTE 3240		[US] 14454882	CAF DDF
	S A V MISS EMBLYNETTE 7369		[US] 12819937	
Dam BROOKING ANNIE K 390		(JSTN 90A)	1764389	
	TC FREEDOM 104	(IMP 104L)	1169224 *	M1F NHF OSF DDF
	TC STOUT 407	(IMP 407P)	1302212	AMF CAF NHF
	TC PRIDE 2053		[US] 14232127	
	BAR-E-L THOR 6T	(DTL 6T)	1400680	DDF
	TC STOCKMAN 365	(IMP 4601C)	876845 *	
	BAR-E-L 365 ENCHANTRES 36J	(DTL 36J)	983895 *	
	HAPPYVALE ENCHANTRESS 37E	(AEJ 37E)	837331	
	SOO LINE ANNIE K 9165	(SOO 165W)	1504834	M1F NHF DDF
	VERMILION YELLOWSTONE	(IMP 244J)	1019171 *	
	CUDLOBE YELLOWSTONE 80M	(UF 80M)	1130994	
	STEVENSON ENCHANTRESS 425F	(IMP 964F)	945607	CAF DDF
	SOO LINE ANNIE K 6271	(SOO 271S)	1322293	
	GEIS MAXIMUM 26'95	(GEIS 26E)	834596 *	
	SOO LINE ANNIE K 3012	(SOO 12N)	1181845	
	GEIS ANNIE K 230'97	(GEIS 230G)	888310	

This pedigree contains known carriers of genetic defects denoted in the pedigree as follows: AM: Arthrogryposis Multiplex , CA: Contractural Arachnodactyly

I hereby certify this is a true copy of the Pedigree for said animal as reflected in the records maintained by the Canadian Angus Association.

Issue Date **October 08, 2021**
Myles Immerkar, CEO, Canadian Angus Association

AMERICAN ANGUS ASSOCIATION - THE BUSINESS BREED

Brooking Firebrand 6068 Reg: AAA *18730602 Bull

Birth Date: 01/31/2016 Tattoo: 68D

Parentage: SNP Genomic: HD50K Genomic Prog: 66

Parents Qualified

Breeder: 1256794 - Brooking Angus Ranch, Radville SK Canada

Owner(s): 1219689 - Rust Mountain View Ranch, Mercer ND
1256794 - Brooking Angus Ranch, Radville SK Canada

	Connealy Earnan 076E	Connealy Consensus AAA #+*16969555 [RDF]	AAA #*15513367
Brooking Bank Note 4040	AAA *18069951	Brazila of Conanga 3991 839A	AAA +*16246696
	E A Rose 918	S A V Final Answer 0035 AAA *16460381	AAA #*13592905 [RDF]
		E A Rose 738	AAA 15892985
	S A V Best Interest 0136	S A V Bismarck 5682 AAA *16687652	AAA #+15109865 [RDF]
Brooking Annie K 390	AAA 19303622	S A V Emblynette 8172	AAA #*16056325
	Soo Line Annie K 9165	Bar-E-L Thor 6T CAA 1504834	AAA 17292851
		Soo Line Annie K 6271	AAA 16424727

Pathfinder + Embryo Transplant * Parents Qualified

As of 10/14/2021

Production								Maternal						
CED Acc %	BW Acc %	WW Acc %	YW Acc %	RADG Acc %	DMI Acc %	YH Acc %	SC Acc %	HP Acc %	CEM Acc %	Milk Acc %	MkH MkD	MW Acc %	MH Acc %	\$EN %
Prog	Prog	Prog	Prog	Prog	Prog	Prog	Prog	Daus	Daus			Prog	Prog	
+2 .50 85% 26	+3.2 .87 90% 463	+59 .80 50% 252	+93 .72 70% 140	+.22 .38 65%	+.11 .38 10%	+.4 .66 55% 23	+1.21 .57 25% 19	+.9 .22 95%	+11 .37 25% 8	+23 .34 65%		+19 .41 90%	+.1 .42 70%	+3 15%
Management														
Doc Acc %			Claw Acc %			Angle Acc %			PAP Acc %					
Prog			Prog			Prog			Prog					
-3 .52 95% 17			+.29 .29 1% 5			+.53 .28 70% 5			+1.09 .22 50%					
Carcass							\$Values							
CW Acc %	Marb Acc %	RE Acc %	Fat Acc %	Carc Grp Prog	Usnd Grp Prog	\$M %	\$W %	\$F %	\$G %	\$B %	\$C %			
+22 .47 90%	-.01 .41 95%	+.46 .42 65%	+.027 .38 70%		22 62	+48 75%	+58 55%	+56 95%	+18 95%	+74 95%	+144 95%			

Phenotypic traits: N/A

1219689 12292017; 1256794 BO 03012017

American Angus Association | 3201 Frederick Ave, Saint Joseph, MO 64506 | 816-383-5100 | ©Copyright 2021, All rights reserved.

Batch Detail Report

Batch : 21968U
Owner :Hanlo Smith/Blacksmith Angus
Farm :Blacksmith
Account : SMIH02
Origin : ANGUS CATTLE BREEDERS' SOCIETY
Invoice To : Owner

Created : 2025-03-14

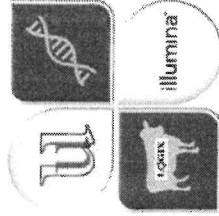
SAMPLE	ANIMAL	SPECIES	BREED	DAM	SIRE	TEST	Tissue Type	RESULT	INVOICE
21968U001	68D BROOKING FIREBRAND (M,22)	CATTLE	BLACK ANGUS (22)			SNP50_C	Semen Straw	IG50 : IGENITY 50K	52324

Report Date : 13-May-2025 14:26

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



Unistel Medical Laboratories Genetic Report

BOVINESNP50-24 v3 BeadChip

Hanlo Smith/Blacksmith Angus
Blacksmith
Black Angus
Animal Tested: **68D BROOKING FIREBRAND**
21968U001

Description		Mutations	Status	Description	Mutations Tested	Status	Semen
Coat colouration	MC1R - e	MC1R - ED	E+/E+	Meat	Calpain 1 - 316	G/C - Intermediate breakdown	
	MC1R - ED		Insufficient data	Tenderness	Calpain 1 - 4751	C/C - Faster breakdown	
	Dun Dexter Dilution (TYPR1)		+/+		Calpain 1 - 530	G/G - Normal breakdown	
	Silver Dilution type 1		+/+		Calpastatin - 282	G/C - Intermediate inhibition of Calpain	
	Silver Dilution type 2		+/+		Calpastatin - 2870	A/G - Intermediate inhibition of Calpain	
Myostatin Status	Myostatin C313Y		Clear		Calpastatin - 2959	A/G - Intermediate inhibition of Calpain	
	Myostatin E226X		Clear				
	Myostatin E291X		Clear	Milk status	Beta Casein - 245	A1/A2	
	Myostatin nt419		Clear		Beta Casein - 411	B/B	
	Myostatin nt821		Clear		Kappa Casein - 352	A/A	
	Myostatin Q204X		Clear		Kappa Casein - 467	A/A	
	Myostatin D182N		Clear		Kappa Casein - 470	A/A	
	Myostatin F94L		Clear		Kappa Casein - 506	B/B	
	Myostatin S105C		Clear		Kappa Casein - 526	A/A	
	E7 mutation		Clear				
POMPE Status	E13 mutation		Clear	Milk quality	Growth Hormone F279Y	Increased milk, casein & lactose yield; decreased protein & fat yield	
	E18 mutation		Clear		Growth Hormone 2141	Normal milk protein & fat yield	
					Growth Hormone 2291	Normal milk fat yield, fat & protein %	
Heat Tolerance	SLICK		No added resistance		ABCG2 - protein yield milk	Normal fat, protein & milk yield; normal fat & protein %	
Eye Disorders	Pinkeye resistance		Reduced risk 8-13%		AcylCoA - milk fat percentage	Normal fat, protein & milk yield. Normal fat & protein %.	
Bone Disorder	Osteopetrosis		Clear		Trimethylaminuria excess in milk	Clear	
Breed mutations	Alpha Mannosidosis 961		Clear		Yellow milk fat	Normal yellow fat	
	Neuropathic hydrocephalus		Clear	Hornedness	Polled (Celtic and Friesian)	Homozygous Polled	
	Developmental Duplication		Clear				
	Mulefoot (P1647L)		Clear				

Disclaimer: Unistel reports these results on the premise that the biological samples received are from the individuals nominated by the owner/breeder/requester. This certificate replaces all previous issued certificates. While every effort is made to prevent incorrect results, Unistel Medical Laboratories does not accept any responsibility for any losses that may occur as a result of human or technical error. Should gross negligence be proven, the claim shall not exceed the value of the contract.



DNA Genotype Certificate

Neogen Canada Inc.
7323 Roper Road NW
, Edmonton, Alberta, T6E 0W4, Canada
Phone: 1-855-324-9774 Email: neogencanada@neogen.com

Case No. DG17B021120-2

ANIMAL INFORMATION

Species BOVINE
Breed ANGUS
Name BROOKING FIREBRAND 6068
Registration No. 1906246

Gender MALE
Date of Birth 31-January-2016
Tag 6068
Tattoo JSTN 68D

Alternate Identification:

GENOTYPE RESULTS Adjusted to ISAG (1995) standard

AVAILABLE AT THE REGISTRY OFFICE

FILED AT TESTING LABORATORY

TGLA53	/
CYP21	/
SPS113	/
BM1818	268 / 268
TGLA48	/
MGTG4B	/
BM1824	180 / 188
RM067	90 / 102
BM2113	133 / 133

SPS115	248 / 248
TGLA126	117 / 123
TGLA122	143 / 155
INRA23	206 / 208
TGLA227	81 / 87
ETH225	148 / 148
ETH10	215 / 219
ETH3	117 / 121
	/

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

Sire: BROOKING BANK NOTE 4040

Reg # 1776488

Dam: N/A

Notes

SIRE QUALIFIED

QUALIFIED SIRE: BROOKING BANK NOTE 4040 REG#: 1776488 TATTOO: JSTN 40B TAG: 4040

NO GENOTYPE FOR DAM: BROOKING ANNIE K 390 REG#: 1764389 TATTOO: JSTN 90A TAG: 390

SAMPLE SUBMITTED BY:

Lee & Dawn Wilson (Miller Wilson Angus)
PO Box 550
Bashaw AB T0B 0H0

Date Issued 10/8/2021

Issued By Canadian Angus Association
292140 Wagon Wheel Blvd
Rocky View County AB T4A 0E2

Direct: 403 571 3580
Toll Free: 1 888 571 3580

