

Bull Evaluation Centre Report

201916 CRYSTAL FARMS

(End of Test) Test Date: 30 Mar 2019 Days on Test: 112

Centre Manager: PAUL FERGUSON Start of Test Date: 08 Dec 2018

Phone #: 613-275-2422 End of Test Date: 30 Mar 2019

EMail: ferguson.maryellen@gmail.com Pick Up Date:

Address: 21 CRYSTAL RD.,R.R. #3 , JASPER , ON , K0G 1G0

Ration Statement:

Note: 1. Check the information on your BULL(s) to ensure the pedigree, birth date, tattoo, and weaning data is complete and accurate.

- 2. For best results clients need to submit complete herd data with complete weaning weights on all their calves to bioTrack, our Herd Evaluation Service. Calves with incomplete herd data will not receive genetic evaluations nor BIO Economic Indexes. If no data is submitted to BIO, then the calves in the bull evaluation centre will be regarded as UNOFFICIAL. Unofficial calves will not receive genetic evaluations, BIO Economic Indexes nor certificates and may not eligible for awards that are offered from time to time.
- 3. If you have questions on data submission, please contact our office.

A Guide to BIO's Bull and Heifer Evaluation Reports and BIO's Genetic Evaluations

Report Features

- Objectively Compare all animals using our across breed comparisons -ABCs Allows you to compare all the bulls in the group for their genetics, regardless of their breed. Bulls are listed on the report by the tag number.
- Quickly know where an animal ranks for a trait using the percentile ranking. Our percentile rankings range from 1 (lowest) to 99 (highest) tells you how an animal ranks for the trait you're looking at. All animals are ranked for each trait! The rankings compare all animals evaluated over the past 3 years for that trait.

Across breed Percentiles (%AB) allow you to compare purebred, crossbred, and composite animals across breeds.

Within breed Percentiles (%WB) allow you to compare purebred animals within its breed.

Example: A bull or heifer that has a percentile of 99 (99th percentile) is in the top 1% of all animals evaluated for that trait or index; a bull in the 80th percentile is in the top 20%, etc.

Most current genetic evaluations - The Herd Recording traits (CE, BW, WG, MILK) are updated on the 84-day and End-of-test reports, to reflect the added
information of weights taken on test. The End-of-test evaluations use the animal's on-test performance and all related performance data in the database to
calculate the ABC and are therefore the most current evaluations in the industry.

Features of BIO's Genetic Evaluations (ABCs) and Economic Indexes

- Genetic Evaluations the most accurate method to express genetic ability of an animal. They are adjusted for environment and can be used to compare animals across herds and evaluation centres.
- ABC Across Breed EPD or Comparison Estimate of how future progeny of an animal are expected to perform in each of the traits. Comparisons can be made within breeds and across breeds. For example, a bull or heifer with a Yearling Gain ABC of +85 will produce progeny that are on average 50 pounds heavier than progeny from a bull with a Yearling Gain ABC of +35.
- Accuracy Measure of the amount of information used to calculate the ABC. Ranges from 1 (least) to 99 (most). Evaluations based on pedigree information only are noted as 'PE' (pedigree estimate).
- BIO\$: This is an index that considers several traits in determining better bulls when mated to average cows and is aiming at efficient lean meat production for a
 market focused on AA carcasses between 775 and 900 pounds. Use the BIO\$ index to identify top prospect bulls and then look at specific ABC's within that group
 for traits that you value in your operation.
- ABCs (Across Breed EPDs) for all animals evaluated by BIO are on a fixed base. The base is a multi-breed average of animals born 1995-1998:

Trait	CE	BW	WG	MILK	PWG	YG	FAT	REA	%IMF	SC	BIO\$
Base	0	0	+30	+15	+20	+50	0	0	0	0	+2000

Report Definitions and Legend

Herd Measurements (BIO believes in Whole Herd Recording)

CE - Calving Ease - The ease or difficulty with which the animal was born. The categories are unassisted (U), easy pull (E), hard pull (H), surgical (S) or malpresentation (M).

BW - Birth weight (lbs) of the animal.

AWW - Adjusted Weaning Weight (Ibs) - The on-farm weaning weight of the animal adjusted to 200 days of age. Adjustments are made for age of dam and sex of calf.

WI - Weaning Index - Within-herd index based on adjusted weaning weight. Use to compare calves in the same pre-weaning management group. A minimum of five calves in a management group is required to receive an index. ET indicates an embryo transplant calf.

Test Evaluation Measurements (based on the animal's performance in the evaluation centre)

SOT - Start of Test Weight (lbs)

EOT - End of Test Weight (lbs)

ADG - Average Daily Gain (Ibs/day) - The regressed average daily gain during the animal evaluation period. All monthly weighings are used in determining the adg.

WPDA - Weight Per Day of Age (Ibs/day) - Weight taken at weigh period divided by days of age and includes birth weight.

HH - Hip Height (inches) - Height of the animal over the hip bones at EOT.

FRAME - Frame Score - A 1 to 10 scale calculated using hip height and age, according to Beef Improvement Federation guidelines.

FAT - Backfat (mm) - Measured ultrasonically between the 12th and 13th ribs (grading site) at the end of the test.

REA & AdjREA - Rib Eye Area (square inches) - Measured ultrasonically between the 12th and 13th ribs (grading site) at the end of the test. The AdjREA is adjusted to 365 days of age.

% IMF & Adj%IMF - Percent Intramus cular Fat (Marbling) - Measured ultrasonically between the 12th and 13th ribs (grading site) at the end of test. NR indicates the animal hald too little %IMF to measure. Adj %IMF is adjusted to 365 days.

GRADE - %IMF expressed as marbling grade (A, AA or AAA) - PD indicates practically devoid, which is less than 1.86 %IMF. Animals near the border of a category are shown as a combination of the two categories (i.e. A-AA).

SC & AdjSC - Scrotal Circumference (cm) - End of test measure of scrotal circumference. Indication of the semen producing ability of the bull. 'ABN' indicates abnormal testicles (size, shape, injury) and no measurement is taken. AdjSC is adjusted Scrotal circumference and is adjusted to one year of age.

Genetic Evaluations - Across Breed EPDS (ABCs)

CE - Calving Ease ABC - is a genetic prediction of the increase (+) or decrease (-) in percent <u>unassisted</u> calvings if the bull is mated with heifers that are an average size and have average calving ability.

BW - Birth Weight ABC (Ibs) - The effect the animal will have on the birth weight of their calves.

WG - Weaning Gain ABC (lbs) - The ability of the animal's calves to grow from birth to weaning.

MILK - Milk/ Mothering ability ABC (Ibs of calf at weaning) - The ability of a animal's daughters to provide their calves with milk and mothering ability.

PWG - Post-Weaning Gain ABC (lbs) - Indicates the ability of an animal's calves to grow from weaning to yearling.

YG - Yearling Gain ABC (lbs) - Indicates the ability of a animal's calves to grow from birth to yearling.

FAT - Backfat thickness ABC (mm) - The ability of a animal's progeny to deposit backfat (finishing ability), adjusted to a common age.

REA - Rib Eye Area ABC (s quare inches) - Predictor of the differences in progeny ribeye area (muscling), adjusted to a common age.

% IMF - Intramus cular Fat ABC (Marbling) - The ability of a animal's progeny to deposit marbling fat, adjusted to a common age.

SC - Scrotal Circumference ABC (cm) - Indicates the ability of a bull to transmit scrotal size to male progeny. It is a partial indicator of daughter's age at puberty.

Bull Evaluation EOT Report

201916 CRYSTAL FARMS



			Genetic	Evalu	atior	าร (03	Apr 20	19)								4			•		
Tag 001F	Pen	Tattoo	BGT 1F			CE	BW	WG		Milk	PWG	Y	3	FAT		REA	%IMF	= {	SC SC	BIO\$	
Contact JOHN LEHEUP HC/Breed P BLONDE D-AQUITAINE Birthdate 01Jan2018 Colour		=	613-353-1257	%ab ABC A %wb		64 3 35 80	72 -2.7 55 80	20 32 F 37	PE	40 21 PE 60	6 13 48 67	8 45 52	PE -	1 • 1.32 1	PE	90 . 69 PE 54			2 88 PE 80	N/R	
Sire RO	WSS REX 6R OSENEATH WILL OGART YVETTE 7	7Y		CE	BW 86	AWW N/A	WI	SOT 1100	EO1	ADG 3.13	WPDA 3.31	НН	Frame	Fat	REA	AdjREA	%Imf	Adj%lmf	Grade	SC	AdjSC
	CRYSTAL WILME					0=					D1110					5=4	0/11.15			DIOC	
HC/Breed Birthdate 04	EORGE BELL - BI ANGUS 4Jan2018	Colour BLACK	GLBF 3F 613-284-2475	%ab ABC A	Acc	89 5 PE 67	85 -3.9 PE 59	47 40 43		Milk	PWG 1 -2 45	5 38 1		68 . 54	PE	12 30 PE 51	%IMF 77 . 39 F 12	3 PE .1	SC 37 7 PE 7	BIO\$	
Sire S Dam H	S A V REGISTRY : A V SENSATION : F ECHO 195Z RIVERBEND POW	5615		CE	BW 75	AWW N/A	WI	SOT 890	EO1	ADG 2.70	WPDA 2.61	HH I	Frame	Fat	REA	AdjREA	%Imf	Adj%lmf	Grade	SC	AdjSC
Tag 005F	Pen	Tattoo	PFER 5F			CE	BW	WG		Milk	PWG	Y	3	FAT		REA	%IMF	=	SC SC	BIO\$	
Contact PAUL FERGUSON - CRYSTAL HC/Breed P BLONDE D-AQUITAINE Birthdate 05Jan2018 Colour		UITAINE Colour	613-275-2422	%ab ABC A		72 3 39 85	75 - 3.0 60 83	42 38 64	52	49 23 33 69	11 18 50 87	21 56 79	51	4 78 99	PE	68 . 40 PE 21	2 29 F	PE7	1 70 PE	N/R	
Sire TO	BAR SUMMIT 043 OP NATURS TOPI FER 23D CRYSTAL WALDO	PER 011C		CE	BW 78	AWW 681	WI 107	SOT 1085	EO1		3.40	НН	Frame	Fat	REA	AdjREA	%Imf	Adj%lmf	Grade	SC	AdjSC
Tag 008F	Pen	Tattoo	OOAK 8F			CE	BW	WG		Milk	PWG	Y	3	FAT		REA	%IMF	: (SC	BIO\$	
HC/Breed Birthdate 24	BLONDE D-AQ 4Mar2018	ONE OAK BLONDES UITAINE Colour	519-835-9099	%ab ABC A %wb		15 -2 PE 22	21 1.3 PE 22	12 28 F 24	PE	23 18 PE 43	3 7 41 36	4 35 26	PE							N/R	
Sire LA	FLAMBAR ANGSTAFRF DEZ ANGSTAFF DENIS ZORO 25Z			CE	BW 85	AWW N/A	WI	SOT 615	EOT	ADG 3.30	WPDA 2.70	НН	Frame	Fat	REA	AdjREA	%Imf	Adj%lmf	Grade	SC	AdjSC
Tag 010F	Pen	Tattoo	GTN 10F			CE	BW	WG		Milk	PWG	Y	3	FAT		REA	%IMF	= (SC SC	BIO\$	
Contact Da HC/Breed P Birthdate 02	avid and Lisa Pay BLONDE D-AQ 2Feb2018	Colour	613-859-9870	%ab ABC A %wb	Acc	55 2 37 73	58 -1.7 61 68	54 41 76	PE	44 22 PE 64	1 -3 50	5 38 34	PE -	1 - 1.22 12	PE	88 . 65 PE 47	1 38 F	°E -1.5	1 i1 PE 22	N/R	
Sire CF Dam W	ARSHAS POLLED RYSTAL AMBUSH /EST WINDS BRIT WEST WINDS WO	1 18A TNEY 152B		CE	BW 92	AWW N/A	WI	SOT 675	EO1	_	WPDA 2.38	НН	Frame	Fat	REA	AdjREA	%Imf	Adj%lmf	Grade	SC	AdjSC

04Apr2019 Page: 4 of 6

Bull Evaluation EOT Report

201916 CRYSTAL FARMS



Genetic Evaluations (03 Apr 2019)

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Tag 012	:F	Pen	Tattoo	PFER 12F			CE	BW	WG		Milk	PWG	Y	'G	FAT		REA	%IMF	: 5	SC	BIO\$	
Contact SHELDON ASSELSTINE HC/Breed P BLONDE D-AQUITAINE 613-483-3385					%ab		56	65	59		87	15	31									
					ABC	Acc	2 31	-2.2 58	1	48	31 20	20 45	1 -	47							N/R	
Birthdate	17Jar	12018	Colour		%wb		74	74	80		94	91	89	9								
SireSire		SENEATH WILI																				
		CELEBRATION	N 2C		CE	BW	AWW	WI	SOT	EO	T ADG	WPDA	НН	Frame	Fat	REA	AdjREA	%lmf	Adj%Imf	Grade	SC	AdjSC
	PFER		11.404		U	80	671	105	985	145	50 3.66	3.32										
DamSire	CRI	STAL AMBUS	H 18A																			
Tag 018	F	Pen	Tattoo	GTN 18F			CE	BW	WG		Milk	PWG	Y	′G	FAT		REA	%IMF	: 5	SC	BIO\$	
Contact	David	and Lisa Payı	ne - BAR K FARMS		%ab		30	47	25		39	4	7	,	1		86	1		2		
HC/Breed	Р В	LONDE D-AQU	JITAINE	613-859-9870	ABC	Acc	0 36	-1.0 60	1	PE	21 PE	9 48	42	PE -	1.16	PE	.62 PE	37 ⊧		5 PE	N/R	
Birthdate	-		Colour		%wb		47	57	46		60	46	47	,	38		43	31	3	2		
SireSire		SHAS POLLED																				1 1100
	-	STAL AMBUSH			CE	BW	AWW	WI	SOT	EO	T ADG	WPDA	НН	Frame	Fat	REA	AdjREA	%lmf	Adj%Imf	Grade	SC	AdjSC
Dam DamSire		STAL BESSIE 1 (STAL WALDO	· -		U	87	N/A		900	135	55 3.59	3.28										
Damone	CK	STAL WALDO) 23VV																			
Tag 027	'F	Pen	Tattoo	PFER 27F			CE	BW	WG		Milk	PWG	Y	′G	FAT		REA	%IMF	: 9	SC	BIO\$	
Contact	PAUL	FERGUSON -	CRYSTAL FARMS		%ab		31	35	21		49	13	14									
HC/Breed	Р В	LONDE D-AQU	JITAINE	613-275-2422	ABC	Acc	0 26	1 52	32	42	23 20	19 43	51	43							N/R	
Birthdate			Colour		%wb		48	42	38		68	89	67	,								
SireSire		SENEATH WILI																			0.5	4 110 5
		CELEBRATION	-		CE	BW	AWW	WI	SOT	EO	T ADG	WPDA	НН	Frame	Fat	REA	AdjREA	%lmf	Adj%Imf	Grade	SC	AdjSC
		nar Crystal 110			U	98	605	95	935	138	80 3.57	3.26										
DamSire	PFE	R 25Z																				

201916 CRYSTAL FARMS

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Genetic Evaluations (03 Apr 2019)

Breed Summary Averages

Breed	#	% U	BWT	AWW	SOT	28D	56D	84D	EOT	ADG	WPDA	Hip Height	Frame Score	Back Fat	REA	Adj REA	%IMF	Adj %IMF	Scrotal
ANGUS	1	100	75		890	990	1060	1175	1175	2.70	2.61								
BLONDE D-AQUITAINE	7	100	87	652	899	1022	1116	1154	1316	3.44	3.09								
Group Averages	8	100	85	652	898	1018	1109	1156	1298	3.35	3.03								

Provision and Use of Information Produced by BIO As part of the terms and conditions of Beef Improvement Opportunities (BIO) Beef Evaluation Services, it is understood that information provided by BIO including, but not limited to, genetic and carcass evaluations are produced using the very best knowledge available and are pursuant to generally accepted industry standards. The raw data and pedignee used in calculations is provided by the client. The intent of the information provided by BIO is for comparative purposes only for both the animal consignor and buyer. This information is provided for the purpose of general guidance only to beef producers. The purchaser and/or user of this information agrees to hold Beef Improvement to purpose of general comparative information. This clause shall be a complete defense to any data because of an area of the information and or reliance upon this general comparative information. This clause shall be a complete defense to any data because of the information are produced.

04Apr2019 Page: 6 of 6