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## Bull Evaluation Centre Report

**201818 CRYSTAL FARMS**

**( End of Test )**

Test Date: **01 Apr 2018** Days on Test: **112**

Centre Manager: **PAUL FERGUSON**

Start of Test Date: **10 Dec 2017**

Phone #: **613-275-2422**

End of Test Date: **01 Apr 2018**

E Mail: **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 be 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 (99<sup>th</sup> percentile) is in the top 1% of all animals evaluated for that trait or index; a bull in the 80<sup>th</sup> 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 (lbs)** - 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 (lbs/day)** - The regressed average daily gain during the animal evaluation period. All monthly weighings are used in determining the avg.

**WPDA - Weight Per Day of Age (lbs/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 Intramuscular Fat (Marbling)** - Measured ultrasonically between the 12th and 13th ribs (grading site) at the end of test. NR indicates the animal had 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 **unassisted** calvings if the bull is mated with heifers that are an average size and have average calving ability.

**BW - Birth Weight ABC ( lbs)** - 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 (lbs 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.

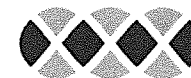
**REA - Rib Eye Area ABC (square inches)** - Predictor of the differences in progeny ribeye area (muscling), adjusted to a common age.

**%IMF - Intramuscular 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

## 201818 CRYSTAL FARMS



Genetic Evaluations (09 Feb 2018)

**Tag 003E** Pen      Tattoo      **DCM 3E**  
 Contact **DAVE & JANICE MASSEY - REBENMATT FARM**  
 HC/Breed **ANGUS**      613-283-6534  
 Birthdate **04Jan2017**      Colour **Black**  
 SireSire  
 Sire **JMB TRACTION 292**  
 Dam **WILGOR 203U PRIDE LADY 22Z**  
 DamSire

	CE	BW	WG	Milk	PWG	YG	FAT	REA	%IMF	SC	BIO\$						
%ab	82	80	78														
ABC Acc	4 PE	-3.4 PE	47 PE								N/R						
%wb	46	49	76														
CE	BW	AWW	WI	SOT	EOT	ADG	WPDA	HH	Frame	Fat	REA	AdjREA	%Imf	Adj%Imf	Grade	SC	AdjSC
U	68	N/A		1040	1510	4.14	3.34										

**Tag 005E** Pen      Tattoo      **PFER 5E**  
 Contact **PAUL FERGUSON - CRYSTAL FARMS**  
 HC/Breed **BLONDE D-AQUITAINE**      613-275-2422  
 Birthdate **06Jan2017**      Colour  
 SireSire **ARSHAS POLLED TROOPER**  
 Sire **CRYSTAL AMBUSH 18A**  
 Dam **WSS YTTTRIUM 3Y**  
 DamSire **CRYSTAL MR UNIVERSE 38U**

	CE	BW	WG	Milk	PWG	YG	FAT	REA	%IMF	SC	BIO\$						
%ab	15	14	47	71	1	4	1	94	1	1							
ABC Acc	-2 33	2.2 59	39 47	26 25	-2 PE	37 PE	-1.33 PE	.80 PE	-0.36 PE	-1.55 PE	N/R						
%wb	24	15	62	87	6	25	4	75	43	17							
CE	BW	AWW	WI	SOT	EOT	ADG	WPDA	HH	Frame	Fat	REA	AdjREA	%Imf	Adj%Imf	Grade	SC	AdjSC
U	98	718	106	1180	1525	3.16	3.39										

**Tag 007E** Pen      Tattoo      **GLBF 7E**  
 Contact **GEORGE BELL - BELLSTAR FARM**  
 HC/Breed **ANGUS**      613-284-2475  
 Birthdate **02Feb2017**      Colour **BLACK**  
 SireSire **S A V BRILLIANCE 8077**  
 Sire **PVF INSIGHT 0129**  
 Dam **BELLSTAR ECHO 7C**  
 DamSire

	CE	BW	WG	Milk	PWG	YG	FAT	REA	%IMF	SC	BIO\$						
%ab	79	78	70		61	68											
ABC Acc	4 PE	-3.2 PE	45 PE		34 PE	79 PE					N/R						
%wb	40	45	68		32	54											
CE	BW	AWW	WI	SOT	EOT	ADG	WPDA	HH	Frame	Fat	REA	AdjREA	%Imf	Adj%Imf	Grade	SC	AdjSC
U	75	N/A		950	1465	4.46	3.46										

**Tag 014E** Pen      Tattoo      **PFER 14E**  
 Contact **PAUL FERGUSON - CRYSTAL FARMS**  
 HC/Breed **BLONDE D-AQUITAINE**      613-275-2422  
 Birthdate **22Jan2017**      Colour  
 SireSire **ARSHAS POLLED TROOPER**  
 Sire **CRYSTAL AMBUSH 18A**  
 Dam **PFER 2A**  
 DamSire **CRYSTAL WALDO 23W**

	CE	BW	WG	Milk	PWG	YG	FAT	REA	%IMF	SC	BIO\$						
%ab	59	78	72	62	3	17	1	85	1	3							
ABC Acc	2 35	-3.2 59	45 49	25 24	7 PE	53 PE	-1.17 PE	.62 PE	-0.37 PE	-1.36 PE	N/R						
%wb	79	88	85	81	33	67	27	43	28	27							
CE	BW	AWW	WI	SOT	EOT	ADG	WPDA	HH	Frame	Fat	REA	AdjREA	%Imf	Adj%Imf	Grade	SC	AdjSC
U	80	694	103	1000	1325	2.91	3.05										

**Tag 016E** Pen      Tattoo      **PFER 16E**  
 Contact **PAUL FERGUSON - CRYSTAL FARMS**  
 HC/Breed **BLONDE D-AQUITAINE**      613-275-2422  
 Birthdate **23Jan2017**      Colour  
 SireSire **ARSHAS POLLED TROOPER**  
 Sire **CRYSTAL CHAMP 4C**  
 Dam **CRYSTAL TRISH 14T**  
 DamSire **SANDY TOWN METHUSELAH 1M**

	CE	BW	WG	Milk	PWG	YG	FAT	REA	%IMF	SC	BIO\$						
%ab	32	43	50	27	4	13	1	98	1	3							
ABC Acc	0 30	-.7 59	40 47	18 25	10 PE	49 PE	-1.25 PE	.96 PE	-0.37 PE	-1.26 PE	N/R						
%wb	52	56	64	51	45	58	10	93	29	42							
CE	BW	AWW	WI	SOT	EOT	ADG	WPDA	HH	Frame	Fat	REA	AdjREA	%Imf	Adj%Imf	Grade	SC	AdjSC
U	83	641	95	935	1310	3.32	3.03										

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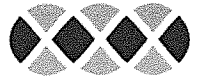
Genetic Evaluations (09 Feb 2018)

Tag	<b>019E</b>	Pen		Tattoo		<b>PFER 19E</b>
Contact	PAUL FERGUSON - CRYSTAL FARMS					
HC/Breed	BLONDE D-AQUITAINE					
Birthdate	27Jan2017	Colour				613-275-2422
SireSire	ARSHAS POLLED TROOPER					
Sire	CRYSTAL AMBUSH 18A					
Dam	PFER 13U					
DamSire	HANOVER ENCORE					

	CE	BW	WG	Milk	PWG	YG	FAT	REA	%IMF	SC	BIOS\$
%ab	45	50	42	60	2	6	1	77	1	3	
ABC Acc	1 <sup>35</sup>	-1.2 <sup>61</sup>	38 <sup>50</sup>	24 <sup>27</sup>	2 <sup>PE</sup>	40 <sup>PE</sup>	-1.21 <sup>PE</sup>	.51 <sup>PE</sup>	-.37 <sup>PE</sup>	-1.35 <sup>PE</sup>	N/R
%wb	69	66	57	80	15	34	11	30	29	35	

CE	BW	AWW	WI	SOT	EOT	ADG	WPDA	HH	Frame	Fat	REA	AdjREA	%Imf	Adj%Imf	Grade	SC	AdjSC
U	82	720	107	1010	1375	3.21	3.21										



**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	2	100	72		995	1128	1245	1348	1488	4.30	3.40									
BLONDE D-AQUITAINE	4	100	86	693	1031	1128	1200	1305	1384	3.15	3.17									
Group Averages	6	100	81	693	1019	1128	1215	1319	1418	3.53	3.25									

**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 pedigree 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 Opportunities harmless for any losses or damages that may be incurred as a result of receipt of and/or reliance upon this general comparative information. This clause shall be a complete defense to any claim brought by the purchaser and/or user in relation to such services.