

Bull Evaluation Centre Report

202101 Patchell Bull Group 1

(End of Test) Test Date: 01 Mar 2021 Days on Test: 112

Centre Manager: BRUCE & BRENDA PATCHELL Start of Test Date: 09 Nov 2020

Phone #: 226-820-0899 End of Test Date: 01 Mar 2021

EMail: Pick Up Date:

Address: 402304 GREY RD. 4,R.R. #1, HANOVER, ON, N4N 3B8

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 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 <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

202101 Patchell Bull Group 1



				Genetic	Evalu	atior	าร (09	Mar 20)21)											•	4.4	
Tag 001	H Pen		Tattoo	BBP 1H			CE	BW	WG		Milk	PWG	Y	′G	FAT		REA	%IMF	S	С	BIO\$	
Contact BRUCE & BRENDA PATCHELL - PATCHELL LIVESTOCK HC/Breed 1/2 ANGUS 1/2 CROSSBRED 226-820-0899 Birthdate 10Feb2020 Colour SireSire					%ab ABC A %wb		86 5 19 59	87 -4.3 49 64	4 22 1	38	45 23 10 40	16 21 43	7 43 1	3 41	47 . 13 1	47	6 46 42 22	67 . 34 4	6 .7 5	2 59	4 1717 3	
Sire	COAR 2202	W			CE	BW	AWW	WI	SOT	EOT	ADG			Frame		REA			Adj%lmf	Grade	SC	AdjSC
DamSire	RED BAR	5 AR WA	REHOUSE 244R		U	87	629	88	871	1250	3.49	3.25	53.5	7.0	5	12.8	12.4	1.75	1.66	PD	42.0	41.3
Tag 003	H Pen		Tattoo	BBP 3H			CE	BW	WG		Milk	PWG	Y	′G	FAT		REA	%IMF	S	С	BIO\$	
HC/Breed	BRUCE & B ANGUS 20Jan2020		PATCHELL - PATCHELL Colour RED	LIVESTOCK 226-820-0899	%ab ABC A %wb		62 3 32 20	88 - 4.4 55 66	96 61 96	45	44 23 26 39	95 51 48	97 111 94	47	89 1.29 68	49	40 .05 44 97	71 . 38 4	4 .4 .3	5 62	88 4515 88	
SireSire Sire			NG V415 107K RCEDES K 116M		CE	BW	AWW	WI	SOT	EOT	ADG	WPDA	НН	Frame	Fat	REA	AdiREA	%lmf	Adj%lmf	Grade	SC	AdiSC
Dam DamSire	RED PATCH	IELLS NA			U	88	772	108	1088	1584			53.0			16.0		1.84	1.65	PD	40.5	39.0
Tag 005	H Pen		Tattoo	BBP 5H			CE	BW	WG		Milk	PWG	Y	G	FAT		REA	%IMF	S	С	BIO\$	
HC/Breed	BRUCE & B ANGUS 19Jan2020	—	PATCHELL - PATCHELL Colour Red	LIVESTOCK 226-820-0899	%ab ABC A %wb		45 1 18 10	33 . 0 48	19 32 13	36	40 22 11 34	80 41 42 60	51 73 33	39	96 1.55 88	43	5 51 37	91 .55 3	7 . 8 7	9 58	14 2388 14	
SireSire Sire Dam DamSire	PATCHELL RED BBP C	NICKERE RACKER			CE	BW 105	AWW 691	WI 97	SOT 956	EOT 1405	ADG 4.08		HH 52.5	Frame		REA 13.1	AdjREA	%lmf 2.76	Adj%lmf 2.48	Grade PD-A	SC 43.5	AdjS0
Tag 013		NON I OL	Tattoo	BBP 13H			CE	BW	WG		Milk	PWG		'G	FAT		REA	%IMF	. 9	С	BIO\$	
Contact HC/Breed Birthdate	BRUCE & B ANGUS 25Jan2020		PATCHELL - PATCHELL Colour Red		%ab ABC A %wb	сс	63 3 16 21	90 -4.7 45 71	39 38 33	34	44 23 8 39	60 35 40 34	51	3 37	75 . 95 28	43	14 34 37 48	90 . 53 3	5	3 1 58	30 2942 33	
SireSire Sire	SOO LINE	EEL MOT	IVE 9E		CE	BW	AWW	WI	SOT	EOT	ADG	WPDA	НН	Frame	Fat	REA	AdjREA	%lmf	Adj%lmf	Grade	SC	AdjSC
Dam DamSire	RED TNF DO				Н	79	686	96	933	1353	3.83	3.37	51.5	5.8	9	14.2	13.3	2.61	2.38	PD-A	41.5	40.2
Tag 022	H Pen		Tattoo	BBP 22H			CE	BW	WG		Milk	PWG	Y	′G	FAT		REA	%IMF	S	С	BIO\$	
HC/Breed Birthdate	ANGUS 04Feb2020		PATCHELL - PATCHELL Colour Red	LIVESTOCK 226-820-0899	%ab ABC A %wb		69 3 34 28	61 -2.1 57 25	15 31 9	48	92 33 27 93	16 21 48	14 51	48	98 1.82 95	46	17 30 40	85 .49 4 56	8 1.0	6 60	6 1910 5	
SireSire Sire	RED RMJ RED LAZY I				CE	BW	AWW	WI	SOT	EOT	ADG	WPDA	НН	Frame	Fat	REA	AdiREA	%lmf	Adj%lmf	Grade	SC	AdjSC
Dam	RED PATCH	IELL FOF	RGET ME NOT LBERRY 26P		U	96	681	96	967	1344	-		51.0			13.6		2.29	2.14	PD-A	43.5	42.6

Page: 4 of 6 09Mar2021

Bull Evaluation EOT Report

202101 Patchell Bull Group 1



Genetic Evaluations (09 Mar 2021)

Tag 023	Н	Pen	Tattoo	BBP 23H			CE	BW	WG		Milk	PWG	Y	G	FAT		REA	%IMF	- 8	SC	BIO\$	
Contact	BRUC		PATCHELL - PATCHEL	L LIVESTOCK	%ab		95	93	71		66	50	63		96		23	72	3	8	36	
HC/Breed		NGUS		226-820-0899	ABC A	Acc	7 15	-5.4 45	47	34	26 7	32 40	79	37	1.60	44	22 38	.39 3	. 2	4 59	3083	
	10Jar		Colour Red		%wb		86	81	67		65	25	47	·	89		78	19	1	7	39	
SireSire Sire		RINGSTEAD RINGSTEAD K			CE	BW	AWW	WI	SOT	EO	T ADG	WPDA	НН	Frame	Fat	REA	AdiREA	%lmf	Adj%lmf	Grade	SC	AdjSC
		HELL HALO									-				-			1	•			-
DamSire	_	_	NATURE 295B		U	75	756	106	1043	144	3.61	3.47	51.0	5.4	13	15.0	13.7	1.72	1.51	PD	41.0	39.1
T 050		D	Т-и	DDD 5011			05	DW	14/0		N A'II	DIAGO	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	· O	ГАТ		DEA	0/1845	- 6	0	BIO\$	
Tag 050		Pen	Tattoo	BBP 50H			CE	BW	WG		Milk	PWG	Y	G	FAT		REA	%IMF		SC	БΙΟΦ	
			PATCHELL - PATCHEL		%ab		93	90	23		43	20	20		94		18	91	5	9	13	
HC/Breed		NGUS	Oalassa Basil	226-820-0899	ABC A	Acc	6 15	-4.7 45	34	34	23 7	23 40	57	37	1.48	44	30 38	.54	.6	2 59	2332	
	09Jar		Colour Red		%wb		79	71	17		37	5	7		83		62	73	4	8	12	
SireSire Sire		RINGSTEAD RINGSTEAD K			CE	BW	AWW	WI	SOT	EO ⁻	T ADG	WPDA	НН	Frame	Fat	REA	AdiREA	%lmf	Adi%lmf	Grade	SC	AdjSC
Dam	PATC	HELL NEON M	IOON																.,			40.6
DamSire	RED	SIX MILE SIG	NATURE 295B		U	77	662	93	953	132	25 3.33	3.18	50.2	5.0	12	14.4	13.2	2.75	2.41	PD-A	42.5	40.0
Tag 210	L	Pen	Tattoo	BBP 210H			CE	BW	WG		Milk	PWG	V	'G	FAT		REA	%IMF	: 0	SC C	BIO\$	
		1	PATCHELL - PATCHEL				-						1	-				, •			,	
HC/Breed		,E & BRENDA NGUS	PAICHELL - PAICHEL	226-820-0899	%ab		92	91	90		81	81	89		80		26	76	6	- 11	69	
	م 10Jar		Colour Red	220-020-0099	ABC A	ACC	6 33	-5.0 55	55	47	30 28	41 49	96		1.07	49	16 44	.42 4		8 62	3830	
SireSire			ULBERRY 449M		%wb		75	76	89		83	62	81		41		84	30	6	1	71	
		FINE LINE MUL			CE	BW	AWW	WI	SOT	EO	T ADG	WPDA	НН	Frame	Fat	REA	AdjREA	%Imf	Adj%lmf	Grade	SC	AdjSC
Dam DamSire		PATCHELL BA LAZY MC CC	RONESS BURLEQUE DETOUR 2W		U	85	821	115	1224	165	3.75	3.98	53.5	6.6	9	14.9	13.6	2.04	1.79	PD-A	43.5	41.6

202101 Patchell Bull Group 1



Genetic Evaluations (09 Mar 2021)

Breed Summary Averages

Breed	#	% U	BWT	AWW	SOT	28D	56D	84D	EOT	ADG	WPDA	Hip Height	Frame Score		REA	Adj REA	%IMF	Adj %IMF	Scrotal
ANGUS	7	86	86	724	1023	1116	1216	1326	1444	3.76	3.54	51.8	5.9	11	14.5	13.4	2.29	2.05	42.3
CROSSBRED	1	100	87	629	871	931	1044	1150	1250	3.49	3.25	53.5	7.0	5	12.8	12.4	1.75	1.66	42.0
Group Averages	8	88	87	712	1004	1093	1194	1304	1420	3.72	3.50	52.0	6.0	10	14.3	13.3	2.22	2.00	42.3

Provision and Use of Information Produced by BIO As part of the terms and conditions of Beef Improvement Ontario (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 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 dain brought by the purchaser and/or user in relation to such services.

09Mar2021 Page: 6 of 6