



BIO
294 Mill St E Unit 209
Elora, ON N0B 1S0
p: 855.246.2333
f: 519.767.2502
www.bridgingintelligence.com

Bull Evaluation Centre Report

201512 FIRST LINE ANGUS

(End of Test)

Test Date: **10 Mar 2015** Days on Test:**114**

Centre Manager: **BRIAN WHITWELL**

Start of Test Date: **16 Nov 2014**

Phone #: **905-768-5148**

End of Test Date: **10 Mar 2015**

E Mail: **whitbk@xplornet.com**

Pick Up Date:

Address: **560 1st Line, R.R.#3 , HAGERSVILLE , ON , N0A 1H0**

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 (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 adg.

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

201512 FIRST LINE ANGUS



Genetic Evaluations (13 Mar 2015)

Tag 0002 Pen Tattoo **FLA 2B**
 Contact **BRIAN A. WHITWELL - FIRST LINE ANGUS**
 HC/Breed **ANGUS** **905-768-5148**
 Birthdate **01Jan2014** Colour
 SireSire **SITZ UPWARD 307R**
 Sire **EXAR UPSHOT 0562B**
 Dam **FLA 7X**
 DamSire **S A V HERITAGE 6295**

	CE	BW	WG	Milk	PWG	YG	FAT	REA	%IMF	SC	BIO\$
%ab	83	83	86	78	92	93	69	22	90	38	70
ABC Acc	4 27	-3.5 55	49 45	27 14	46 46	95 46	.56 49	-.24 43	.54 43	.34 62	3698
%wb	49	51	88	74	81	88	7	60	64	21	65

CE	BW	AWW	WI	SOT	EOT	ADG	WPDA	HH	Frame	Fat	REA	AdjREA	%Imf	Adj%Imf	Grade	SC	AdjSC
U	85	795	106	1182	1573	3.49	3.63	53.0	6.2	8	16.0	14.2	4.88	4.11	AA-AAA	39.0	36.5

Tag 0005 Pen Tattoo **FLA 5B**
 Contact **BRIAN A. WHITWELL - FIRST LINE ANGUS**
 HC/Breed **ANGUS** **905-768-5148**
 Birthdate **06Jan2014, Twin** Colour
 SireSire **SITZ UPWARD 307R**
 Sire **EXAR UPSHOT 0562B**
 Dam **LLB ANNIE K 508T**
 DamSire

	CE	BW	WG	Milk	PWG	YG	FAT	REA	%IMF	SC	BIO\$
%ab	85	81	94	57	96	97	63	7	89	38	59
ABC Acc	4 22	-3.3 50	54 40	23 14	50 45	104 43	.35 48	-.50 42	.54 42	.33 62	3387
%wb	54	47	95	47	90	95	2	21	63	20	51

CE	BW	AWW	WI	SOT	EOT	ADG	WPDA	HH	Frame	Fat	REA	AdjREA	%Imf	Adj%Imf	Grade	SC	AdjSC
U	78	815	109	1084	1504	3.70	3.51	54.0	6.8	7	14.2	12.8	5.15	4.39	AA-AAA	38.5	36.2

Tag 0006 Pen Tattoo **FLA 6B**
 Contact **BRIAN A. WHITWELL - FIRST LINE ANGUS**
 HC/Breed **ANGUS** **905-768-5148**
 Birthdate **06Jan2014, Twin** Colour
 SireSire **SITZ UPWARD 307R**
 Sire **EXAR UPSHOT 0562B**
 Dam **LLB ANNIE K 508T**
 DamSire

	CE	BW	WG	Milk	PWG	YG	FAT	REA	%IMF	SC	BIO\$
%ab	82	76	96	57	95	97	56	5	83	22	49
ABC Acc	4 22	-2.9 50	57 40	23 14	49 45	106 43	.10 48	-.54 42	.47 42	-.08 62	3151
%wb	45	38	97	47	88	96	1	16	41	7	41

CE	BW	AWW	WI	SOT	EOT	ADG	WPDA	HH	Frame	Fat	REA	AdjREA	%Imf	Adj%Imf	Grade	SC	AdjSC
U	80	841	112	1074	1494	3.59	3.49	54.0	6.8	5	13.8	12.4	4.55	3.88	AA	36.5	34.2

Tag 0007 Pen Tattoo **FLA 7B**
 Contact **BRIAN A. WHITWELL - FIRST LINE ANGUS**
 HC/Breed **ANGUS** **905-768-5148**
 Birthdate **07Jan2014** Colour
 SireSire **S A V IRON MOUNTAIN 8066**
 Sire **PEAK DOT MOUNTAIN TOP 940X**
 Dam **YOUNG DALE ELBA 80P**
 DamSire

	CE	BW	WG	Milk	PWG	YG	FAT	REA	%IMF	SC	BIO\$
%ab	58	53	84	34	60	76	78	4	92	19	22
ABC Acc	2 18	-1.2 47	48 37	19 17	34 43	82 40	.87 46	-.58 41	.57 41	-.16 61	2384
%wb	13	13	85	22	31	64	27	13	71	6	15

CE	BW	AWW	WI	SOT	EOT	ADG	WPDA	HH	Frame	Fat	REA	AdjREA	%Imf	Adj%Imf	Grade	SC	AdjSC
U	97	807	108	1198	1574	3.33	3.69	55.5	7.5	9	13.8	12.4	5.52	4.72	AAA	36.5	34.2

Tag 0010 Pen Tattoo **FLA 10B**
 Contact **BRIAN A. WHITWELL - FIRST LINE ANGUS**
 HC/Breed **ANGUS** **905-768-5148**
 Birthdate **14Jan2014** Colour
 SireSire **SITZ UPWARD 307R**
 Sire **EXAR UPSHOT 0562B**
 Dam **FIRST LINE TRINITEE**
 DamSire **JUST-ROCK SOLID 621P**

	CE	BW	WG	Milk	PWG	YG	FAT	REA	%IMF	SC	BIO\$
%ab	87	88	27	31	76	55	98	8	98	25	35
ABC Acc	5 27	-4.2 56	33 45	18 15	38 48	71 47	1.76 48	-.47 43	.76 43	.02 62	2775
%wb	60	65	24	19	51	38	93	24	95	9	27

CE	BW	AWW	WI	SOT	EOT	ADG	WPDA	HH	Frame	Fat	REA	AdjREA	%Imf	Adj%Imf	Grade	SC	AdjSC
U	79	643	86	993	1378	3.38	3.28	51.0	5.3	15	14.6	13.3	6.08	5.28	AAA	36.5	34.5

Bull Evaluation EOT Report

201512 FIRST LINE ANGUS



Genetic Evaluations (13 Mar 2015)

Tag 0012	Pen	Tattoo	FLA 12B
Contact	BRIAN A. WHITWELL - FIRST LINE ANGUS		
HC/Breed	ANGUS		905-768-5148
Birthdate	16Jan2014	Colour	
SireSire			
Sire	VISION UNANIMOUS 1418		
Dam	FLA 45X		
DamSire	FIRST LINE NEW YEAR		

	CE	BW	WG	Milk	PWG	YG	FAT	REA	%IMF	SC	BIO\$
%ab	96	98	73	26	71	75	85	5	86	22	39
ABC Acc	7 22	-7.0 53	44 41	17 13	37 46	81 44	1.07 47	-56 41	.49 41	-0.7 61	2882
%wb	89	94	74	15	44	62	48	14	49	7	30

	CE	BW	AWW	WI	SOT	EOT	ADG	WPDA	HH	Frame	Fat	REA	AdjREA	%Imf	Adj%Imf	Grade	SC	AdjSC
U	80	710	95		1088	1482	3.49	3.55	51.5	5.6	10	14.5	13.2	4.68	4.09	AA-AAA	36.0	34.1

Tag 0017	Pen	Tattoo	FLA 17B
Contact	BRIAN A. WHITWELL - FIRST LINE ANGUS		
HC/Breed	ANGUS		905-768-5148
Birthdate	04Feb2014	Colour	
SireSire	SITZ UPWARD 307R		
Sire	EXAR UPSHOT 0562B		
Dam	FIRST LINE GERTIE 8Z		
DamSire	FIRST LINE KODIAK 8X		

	CE	BW	WG	Milk	PWG	YG	FAT	REA	%IMF	SC	BIO\$
%ab	96	96	94	74	85	93	80	17	97	12	73
ABC Acc	7 26	-6.0 53	54 43	26 10	42 45	96 44	.93 48	-33 42	.70 42	-53 61	3781
%wb	89	89	95	68	67	89	33	47	91	2	68

	CE	BW	AWW	WI	SOT	EOT	ADG	WPDA	HH	Frame	Fat	REA	AdjREA	%Imf	Adj%Imf	Grade	SC	AdjSC
U	69	662	101		992	1379	3.45	3.46	52.5	6.3	9	15.3	14.4	6.15	5.63	AAA	34.5	33.3

Tag 0027	Pen	Tattoo	FLA 27B
Contact	BRIAN A. WHITWELL - FIRST LINE ANGUS		
HC/Breed	ANGUS		905-768-5148
Birthdate	14Feb2014	Colour	
SireSire	CONNELLY CONSENSUS 7229		
Sire	EXAR SIGNIFICANT 1769B		
Dam	FIRST LINE MARIE 40Y		
DamSire	S A V HEAVY HITTER 6347		

	CE	BW	WG	Milk	PWG	YG	FAT	REA	%IMF	SC	BIO\$
%ab	42	50	73	59	80	80	91	3	77	87	25
ABC Acc	1 26	-1.0 54	44 44	23 10	40 44	84 44	1.33 44	-60 38	.40 38	1.40 59	2488
%wb	6	11	74	50	57	69	69	10	22	87	18

	CE	BW	AWW	WI	SOT	EOT	ADG	WPDA	HH	Frame	Fat	REA	AdjREA	%Imf	Adj%Imf	Grade	SC	AdjSC
U	93	796	106		1048	1466	3.57	3.77	52.5	6.4	10	13.6	13.0	4.41	4.14	AA	40.0	39.1

Tag 0032	Pen	Tattoo	FLA 32B
Contact	BRIAN A. WHITWELL - FIRST LINE ANGUS		
HC/Breed	ANGUS		905-768-5148
Birthdate	18Mar2014	Colour	
SireSire	HF KODIAK 57U		
Sire	FIRST LINE KODIAK 8X		
Dam	FLA 30U		
DamSire	JUST-ROCK SOLID 621P		

	CE	BW	WG	Milk	PWG	YG	FAT	REA	%IMF	SC	BIO\$
%ab	81	79	82	73	10	37	89	2	76	9	4
ABC Acc	4 30	-3.2 58	47 48	26 22	15 47	63 48	1.25 50	-69 45	.38 45	-76 63	1405
%wb	44	45	82	67	1	19	63	6	18	1	2

	CE	BW	AWW	WI	SOT	EOT	ADG	WPDA	HH	Frame	Fat	REA	AdjREA	%Imf	Adj%Imf	Grade	SC	AdjSC
U	87	721	110		832	1112	2.39	3.11	51.0	6.1	9	13.3	13.5	3.90	3.99	A-AA	32.5	32.8

Tag 0123	Pen	Tattoo	GRFA 123B
Contact	DAVID GRIST - GRIST FARM		
HC/Breed	RED ANGUS		519-855-9540
Birthdate	23Jan2014	Colour	
SireSire	RED MESSMER JOSHUA 019P		
Sire	RED MESSMER PACKER S008		
Dam	RED HARPNEY URRISAL 6Z		
DamSire	RED LCC CHEYENNE B221L		

	CE	BW	WG	Milk	PWG	YG	FAT	REA	%IMF	SC	BIO\$
%ab	87	81	85	83	99	98	88	52	68	77	93
ABC Acc	5 24	-3.3 52	49 41	28 9	60 43	108 42	1.19 46	.16 40	.23 40	1.07 60	4747
%wb	60	47	87	80	98	97	59	98	2	74	93

	CE	BW	AWW	WI	SOT	EOT	ADG	WPDA	HH	Frame	Fat	REA	AdjREA	%Imf	Adj%Imf	Grade	SC	AdjSC
U	76	699	106		882	1361	4.30	3.31	53.0	6.4	10	17.3	15.9	3.59	3.19	A-AA	39.0	37.3

Bull Evaluation EOT Report

201512 FIRST LINE ANGUS



Genetic Evaluations (13 Mar 2015)

Tag **0128** Pen Tattoo **GRFA 128B**
 Contact **DAVID GRIST - GRIST FARM**
 HC/Breed **ANGUS** **519-855-9540**
 Birthdate **28Jan2014** Colour
 SireSire **MYTTY IN FOCUS**
 Sire **CONNELLY IN FOCUS 4925**
 Dam **FIRST LINE GERTIE 32**
 DamSire **S A V BISMARCK 5682**

	CE	BW	WG	Milk	PWG	YG	FAT	REA	%IMF	SC	BIO\$
%ab	85	75	90	77	99	99	88	5	76	33	71
ABC Acc	4 ²⁵	-2.8 ⁵³	51 ⁴²	26 ¹⁸	63 ⁴⁶	114 ⁴⁴	1.20 ⁴⁷	-.57 ⁴²	.38 ⁴²	.23 ⁵⁹	3723
%wb	54	36	92	72	99	98	60	14	18	16	65

CE	BW	AWW	WI	SOT	EOT	ADG	WPDA	HH	Frame	Fat	REA	AdjREA	%Imf	Adj%Imf	Grade	SC	AdjSC
U	78	673	102	876	1365	4.39	3.36	53.0	6.5	10	13.4	12.5	4.44	3.99	AA	36.5	35.0

Tag **0929** Pen Tattoo **JSL 929B**
 Contact **FRED REICHEL**
 HC/Breed **SIMMENTAL** **519-587-2190**
 Birthdate **13Jan2014** Colour
 SireSire
 Sire
 Dam **JARVIS TOM BLAZE ERIN**
 DamSire **IRCC TOMAHAWK 706T**

	CE	BW	WG	Milk	PWG	YG	FAT	REA	%IMF	SC	BIO\$
%ab					45		16	88	5	81	
ABC Acc					30 ³⁸		-.48 ⁴³	.58 ³⁷	-.27 ³⁷	1.21 ⁵⁸	N/R
%wb					39		18	86	4	55	

CE	BW	AWW	WI	SOT	EOT	ADG	WPDA	HH	Frame	Fat	REA	AdjREA	%Imf	Adj%Imf	Grade	SC	AdjSC
	N/A	566		980	1351	3.33	3.21	52.0	5.8	5	17.7	15.9	2.65	2.30	PD-A	40.0	38.0

Tag **0930** Pen Tattoo **JSL 930B**
 Contact **FRED REICHEL**
 HC/Breed **SIMMENTAL** **519-587-2190**
 Birthdate **04Jan2014** Colour
 SireSire
 Sire
 Dam **JARVIS TOM FRESHLADY II**
 DamSire **IRCC TOMAHAWK 706T**

	CE	BW	WG	Milk	PWG	YG	FAT	REA	%IMF	SC	BIO\$
%ab					6		13	65	10	58	
ABC Acc					11 ³⁸		-.52 ⁴³	.30 ³⁷	-.21 ³⁷	.71 ⁵⁸	N/R
%wb					1		14	46	11	24	

CE	BW	AWW	WI	SOT	EOT	ADG	WPDA	HH	Frame	Fat	REA	AdjREA	%Imf	Adj%Imf	Grade	SC	AdjSC
	N/A	542		968	1249	2.57	2.90	51.5	5.5	5	16.1	14.3	3.04	2.58	A	38.5	36.1

Tag **H001** Pen Tattoo **HFA 1B**
 Contact **BYRAN HEDLEY - HEDLEY FARMS**
 HC/Breed **ANGUS** **905-971-2653**
 Birthdate **21Jan2014** Colour
 SireSire **B C LOOKOUT 7024**
 Sire **BC EAGLE EYE 110-7**
 Dam **HARPREY BARBARA 5T**
 DamSire **JUST-ROCK SOLID 621P**

	CE	BW	WG	Milk	PWG	YG	FAT	REA	%IMF	SC	BIO\$
%ab	82	83	42	53	76	64	75	8	80	25	
ABC Acc	4 ^{PE}	-3.6 ^{PE}	37 ^{PE}	22 ^{PE}	39 ⁴⁶	75 ^{PE}	.79 ⁵⁰	-.48 ⁴⁵	.43 ⁴⁵	.02 ⁶³	N/R
%wb	45	53	39	42	52	48	21	23	30	9	

CE	BW	AWW	WI	SOT	EOT	ADG	WPDA	HH	Frame	Fat	REA	AdjREA	%Imf	Adj%Imf	Grade	SC	AdjSC
	N/A	N/A		1065	1479	3.54	3.58	53.0	6.4	10	14.0	12.9	4.88	4.31	AA-AAA	37.0	35.2

Tag **P001** Pen Tattoo **PHZ 1B**
 Contact **GLEN SMITH**
 HC/Breed **ANGUS** **519-647-2690**
 Birthdate **01Jan2014** Colour
 SireSire
 Sire
 Dam
 DamSire

	CE	BW	WG	Milk	PWG	YG	FAT	REA	%IMF	SC	BIO\$
%ab					20		96	19	90	53	
ABC Acc					21 ³⁷		1.50 ⁴³	-.28 ³⁷	.54 ³⁷	.62 ⁵⁸	N/R
%wb					4		86	53	64	39	

CE	BW	AWW	WI	SOT	EOT	ADG	WPDA	HH	Frame	Fat	REA	AdjREA	%Imf	Adj%Imf	Grade	SC	AdjSC
	N/A	N/A		1132	1475	2.99	3.41	52.5	6.0	11	15.4	13.7	5.46	4.60	AAA	39.5	37.0



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	12	83	83	746	1047	1123	1222	1314	1440	3.44	3.49	52.8	6.3	9	14.3	13.2	5.01	4.43	36.9
RED ANGUS	1	100	76	699	882	960	1134	1222	1361	4.30	3.31	53.0	6.4	10	17.3	15.9	3.59	3.19	39.0
SIMMENTAL	2			554	974	1021	1119	1205	1300	2.95	3.05	51.8	5.7	5	16.9	15.1	2.85	2.44	39.3
Group Averages	15	73	82	713	1026	1099	1202	1293	1416	3.43	3.42	52.7	6.2	9	14.9	13.6	4.63	4.08	37.4

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 to hold Beef Improvement Ontario 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.

