



bio  
660 Speedvale Ave. West,  
Suite #205, Guelph ON, N1K 1E5  
p: 519.767.2665  
f: 519.767.2502  
www.biobeef.com

## Bull Evaluation Centre Report

**201002 LISKEARD FARMS #2**

**( End of Test )**

Test Date: **21 Dec 2009** Days on Test: **109**

Centre Manager: **VERN AND DENISE BURNETT**

Start of Test Date: **03 Sep 2009**

Phone #: **705-647-8553**

End of Test Date: **21 Dec 2009**

E-Mail:

Pick Up Date:

Address: **884514 HWY 65 WEST,R.R. #1 , NEW LISKEARD , ON , P0J 1P0**

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 our Herd Evaluation Service or bioTrack. If no data is submitted to BIO's Herd Evaluations Services, 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. Give the office a call for worksheets or instructions on using bioTrack (on-line entry) to submit your herd data.**

**QUEBEC BLUE PAPER - While there are other requirements that the bull must meet (BVD test, registration, etc.) the following bulls, based on their performance, meet the requirements as outlined in the guidelines for Quebec Blue Papers. Please note that these bulls qualify with their current end of test data and these data (ABC) could change after several months and may not qualify anymore.**

**0018 0028 0030 0033 0114**

# 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).
- **Prime Plus Economic Index - Prime Plus** is the bull's predicted dollar difference (PDD) for his ability to sire market calves that produce a 700 pound carcass with AAA marbling, and productive heifer replacements. Prime Plus is based on using the bull for 2 years on 30 average cows, with 85% of heifers kept as replacements. *Prime Plus is only for Bulls not Heifers.*
- **Beef Builder Economic Index - Beef Builder** is the bull's predicted dollar difference (PDD) for his ability to sire market calves that produce up to an 800 pound carcass and sire productive heifer replacements. Beef Builder is based on using the bull for 2 years on 30 average cows, with 40% of heifers kept as replacements. *BeefBuilder is only for Bulls not Heifers.*
- **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	Prime Plus	Beef Builder
Base	0	0	+30	+15	+20	+50	0	0	0	0	+2000	+2000

## ***Report Definitions and Legend***

### **Herd Measurements (BIO encourages 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. Only Bulls have SC evaluations.

# Bull Evaluation EOT Report

## 201002 LISKEARD FARMS #2



Genetic Evaluations (04 Jan 2010)

Tag	Pen	Tattoo	YXR 1W
0001			
Contact	DALTON POTTER - MOFFAT CREEK		
HC/Breed	RED ANGUS		705-563-8373
Birthdate	03Jan2009	Colour	
SireSire	RED BRYLOR MASTER PLAN 17M		
Sire	RED STALBURN SEADOG 45S		
Dam	RED STALBURN VERONICA 61R		
DamSire	RED LCC MR MARBLING 1309K		

	CE	BW	WG	Milk	PWG	YG	FAT	REA	%IMF	SC	PPIndex	BBIndex
%ab	93	93	24	90	31	26	64	2	86	25	63	13
ABC Acc	6 <sup>26</sup>	-5.2 <sup>56</sup>	29 <sup>45</sup>	29 <sup>18</sup>	21 <sup>47</sup>	49 <sup>46</sup>	.40 <sup>49</sup>	-0.69 <sup>43</sup>	.46 <sup>43</sup>	-0.22 <sup>62</sup>	3422	1802
%wb	77	77	19	86	7	9	5	4	54	3	23	8

	CE	BW	AWW	WI	SOT	EOT	ADG	WPDA	HH	Frame	Fat	REA	AdjREA	%Imf	Adj%Imf	Grade	SC	AdjSC
U	78	593	93		725	1158	3.89	3.29	49.0	5.2	6	11.7	12.0	4.14	4.29	AA	33.0	33.5

Tag	Pen	Tattoo	YXR 2W
0002			
Contact	DALTON POTTER - MOFFAT CREEK		
HC/Breed	RED ANGUS		705-563-8373
Birthdate	09Jan2009	Colour	
SireSire	RED BRYLOR MASTER PLAN 17M		
Sire	RED STALBURN SEADOG 45S		
Dam	RED STALBURN LARK 3S		
DamSire	RED STALBURN KINDLE 10K		

	CE	BW	WG	Milk	PWG	YG	FAT	REA	%IMF	SC	PPIndex	BBIndex
%ab	97	96	50	65	57	54	74	3	87	38	73	30
ABC Acc	7 <sup>28</sup>	-6.3 <sup>56</sup>	35 <sup>46</sup>	22 <sup>19</sup>	29 <sup>48</sup>	64 <sup>47</sup>	.73 <sup>50</sup>	-0.63 <sup>44</sup>	.47 <sup>44</sup>	.18 <sup>62</sup>	3897	2357
%wb	91	88	48	50	27	35	23	6	59	12	35	22

	CE	BW	AWW	WI	SOT	EOT	ADG	WPDA	HH	Frame	Fat	REA	AdjREA	%Imf	Adj%Imf	Grade	SC	AdjSC
U	77	574	90		665	1120	4.09	3.24	47.5	4.5	7	12.8	13.2	4.04	4.26	AA	35.0	35.7

Tag	Pen	Tattoo	DSMR 03U
0003			
Contact	DOUG & ROB MARRIOTT - DSMR STOCK FARM		
HC/Breed	ANGUS		519-357-4978
Birthdate	03Dec2008	Colour	
SireSire	S A V PATHFINDER 3134		
Sire	S A V LEGACY 5216		
Dam	LFL 35S		
DamSire	T J ELDORADO W708		

	CE	BW	WG	Milk	PWG	YG	FAT	REA	%IMF	SC	PPIndex	BBIndex
%ab	91	86	36	89	91	74	88	14	82	33	77	57
ABC Acc	5 <sup>31</sup>	-4.1 <sup>58</sup>	32 <sup>47</sup>	29 <sup>12</sup>	42 <sup>46</sup>	74 <sup>47</sup>	1.14 <sup>46</sup>	-0.36 <sup>41</sup>	.42 <sup>41</sup>	.06 <sup>60</sup>	4114	2976
%wb	70	59	31	85	79	60	61	32	41	8	41	48

	CE	BW	AWW	WI	SOT	EOT	ADG	WPDA	HH	Frame	Fat	REA	AdjREA	%Imf	Adj%Imf	Grade	SC	AdjSC
U	78	719	94		920	1445	4.80	3.77	52.0	6.3	12	14.4	13.9	4.60	4.38	AA	35.5	34.8

Tag	Pen	Tattoo	YXR 5W
0005			
Contact	DALTON POTTER - MOFFAT CREEK		
HC/Breed	RED ANGUS		705-563-8373
Birthdate	27Jan2009	Colour	
SireSire	RED BUF CRK CHF 824-1658		
Sire	RED BFCK CHEROKEE CNYN 4912		
Dam	RED GOLD QUEST BONNIE 633		
DamSire	RED BUF CRK GOLD QUEST 4506		

	CE	BW	WG	Milk	PWG	YG	FAT	REA	%IMF	SC	PPIndex	BBIndex
%ab	96	97	92	67	26	63	92	12	89	54	70	35
ABC Acc	7 <sup>37</sup>	-6.7 <sup>57</sup>	49 <sup>49</sup>	23 <sup>35</sup>	19 <sup>49</sup>	68 <sup>49</sup>	1.27 <sup>51</sup>	-0.39 <sup>47</sup>	.50 <sup>47</sup>	.61 <sup>63</sup>	3736	2473
%wb	89	91	92	53	4	46	72	28	64	31	31	26

	CE	BW	AWW	WI	SOT	EOT	ADG	WPDA	HH	Frame	Fat	REA	AdjREA	%Imf	Adj%Imf	Grade	SC	AdjSC
U	84	658	103		720	1130	3.70	3.45	47.0	4.5	10	12.4	13.3	4.61	5.13	AA	35.5	36.9

Tag	Pen	Tattoo	YXR 017U
0017			
Contact	DALTON POTTER - MOFFAT CREEK		
HC/Breed	RED ANGUS		705-563-8373
Birthdate	22Dec2008	Colour	
SireSire	RED TKP BODACIOUS 693		
Sire	RED BRYLOR BODASIU 79K		
Dam	RED STALBURN BONNIE 49R		
DamSire	RED BFCK CHEROKEE CNYN 4912		

	CE	BW	WG	Milk	PWG	YG	FAT	REA	%IMF	SC	PPIndex	BBIndex
%ab	75	69	82	74	70	79	72	20	81	94	81	54
ABC Acc	3 <sup>28</sup>	-2.4 <sup>56</sup>	44 <sup>45</sup>	24 <sup>18</sup>	33 <sup>44</sup>	77 <sup>45</sup>	.66 <sup>46</sup>	-0.28 <sup>40</sup>	.40 <sup>40</sup>	1.77 <sup>60</sup>	4374	2911
%wb	32	26	82	63	44	67	18	47	37	93	49	45

	CE	BW	AWW	WI	SOT	EOT	ADG	WPDA	HH	Frame	Fat	REA	AdjREA	%Imf	Adj%Imf	Grade	SC	AdjSC
U	89	656	103		855	1345	4.47	3.70	50.0	5.5	8	14.0	14.0	3.98	3.99	A-AA	40.0	40.0

# Bull Evaluation EOT Report

## 201002 LISKEARD FARMS #2



Genetic Evaluations (04 Jan 2010)

Tag	0018	Pen		Tattoo	YXR 018U
Contact	DALTON POTTER - MOFFAT CREEK				
HC/Breed	RED ANGUS				705-563-8373
Birthdate	30Dec2008			Colour	
SireSire	RED LCHMN MDLD HVYWT 2463				
Sire	RED LEACHMAN BETTER HVY 8041				
Dam	RED STALBURN ROSEBUD 28K				
DamSire	RED LMAN KING ROB 8621				

	CE	BW	WG	Milk	PWG	YG	FAT	REA	%IMF	SC	PPIndex	BBIndex
%ab	84	86	89	85	99	99	85	35	86	87	97	96
ABC Acc	4 27	-4.1 56	47 45	27 25	62 47	109 46	1.04 46	-1.10 41	.45 41	1.38 60	6028	4395
%wb	51	59	89	78	98	98	53	76	52	81	90	94

CE	BW	AWW	WI	SOT	EOT	ADG	WPDA	HH	Frame	Fat	REA	AdjREA	%Imf	Adj%Imf	Grade	SC	AdjSC
U	94	700	110	955	1555	5.38	4.37	52.0	6.6	10	15.0	15.2	4.21	4.32	AA	40.0	40.3

Tag	0024	Pen		Tattoo	LFL 24U
Contact	VERN AND DENISE BURNETT - LISKEARD FARMS LTD.				
HC/Breed	ANGUS				705-647-8553
Birthdate	04Nov2008			Colour	
SireSire	S A V PATHFINDER 3134				
Sire	S A V LEGACY 5216				
Dam	LFL 39S				
DamSire	RR SCOTCHCAP 9440				

	CE	BW	WG	Milk	PWG	YG	FAT	REA	%IMF	SC	PPIndex	BBIndex
%ab	96	93	25	66	65	46	87	9	81	38	63	33
ABC Acc	7 32	-5.4 58	29 48	23 13	31 46	60 47	1.11 47	-1.44 42	.40 42	.19 61	3423	2421
%wb	86	80	21	52	36	27	59	21	37	12	23	24

CE	BW	AWW	WI	SOT	EOT	ADG	WPDA	HH	Frame	Fat	REA	AdjREA	%Imf	Adj%Imf	Grade	SC	AdjSC
U	70	637	89	935	1408	4.39	3.42	50.5	5.2	11	14.4	13.3	4.71	4.17	AA-AAA	37.0	35.3

Tag	0028	Pen		Tattoo	LFL 28U
Contact	VERN AND DENISE BURNETT - LISKEARD FARMS LTD.				
HC/Breed	ANGUS				705-647-8553
Birthdate	29Nov2008			Colour	
SireSire	S A V 8180 TRAVELER 004				
Sire	S A V NET WORTH 4200				
Dam	STALBURN ZARA 11N				
DamSire	STEVENSON ROYCE 741C				

	CE	BW	WG	Milk	PWG	YG	FAT	REA	%IMF	SC	PPIndex	BBIndex
%ab	93	94	88	90	87	90	99	50	89	77	58	67
ABC Acc	6 37	-5.6 61	47 52	29 21	40 54	86 53	2.64 53	.06 49	.50 49	1.10 65	3217	3226
%wb	77	82	88	85	72	83	99	91	64	67	18	58

CE	BW	AWW	WI	SOT	EOT	ADG	WPDA	HH	Frame	Fat	REA	AdjREA	%Imf	Adj%Imf	Grade	SC	AdjSC
U	80	752	105	1060	1525	4.09	3.94	51.0	5.7	17	15.5	14.9	4.45	4.20	AA	39.0	38.2

Tag	0029	Pen		Tattoo	LFL 29U
Contact	VERN AND DENISE BURNETT - LISKEARD FARMS LTD.				
HC/Breed	RED ANGUS				705-647-8553
Birthdate	07Dec2008			Colour	
SireSire	PRF CHIEFLINE K589				
Sire	RED LEACHMAN PRF-R012				
Dam	RED STALBURN VERONICA 31P				
DamSire	RED GLACIER MARIAS 548E				

	CE	BW	WG	Milk	PWG	YG	FAT	REA	%IMF	SC	PPIndex	BBIndex
%ab	76	82	42	99	90	76	83	23	70	99	80	73
ABC Acc	3 33	-3.6 61	33 50	39 34	42 53	75 52	.96 46	-1.24 40	.26 40	2.47 60	4307	3354
%wb	34	47	38	99	79	63	46	54	8	99	47	65

CE	BW	AWW	WI	SOT	EOT	ADG	WPDA	HH	Frame	Fat	REA	AdjREA	%Imf	Adj%Imf	Grade	SC	AdjSC
U	68	688	96	900	1445	4.98	3.81	50.0	5.3	10	14.3	14.0	3.49	3.36	A	43.5	43.0

Tag	0030	Pen		Tattoo	LFL 30U
Contact	VERN AND DENISE BURNETT - LISKEARD FARMS LTD.				
HC/Breed	RED ANGUS				705-647-8553
Birthdate	11Dec2008			Colour	
SireSire	RED LEACHMAN HEAVENLY 8141				
Sire	RED LCC HEAVEN OR BUST 1000B				
Dam	LFL 40S				
DamSire	RED FINE LINE MULBERRY 26P				

	CE	BW	WG	Milk	PWG	YG	FAT	REA	%IMF	SC	PPIndex	BBIndex
%ab	88	71	64	97	92	85	70	29	64	36	71	70
ABC Acc	5 37	-2.5 59	39 51	34 31	43 51	82 51	.60 51	-1.17 46	.16 46	.14 62	3812	3281
%wb	62	28	63	95	82	76	14	65	1	11	32	61

CE	BW	AWW	WI	SOT	EOT	ADG	WPDA	HH	Frame	Fat	REA	AdjREA	%Imf	Adj%Imf	Grade	SC	AdjSC
U	76	731	102	900	1395	4.53	3.72	50.5	5.6	9	15.4	15.1	3.24	3.15	A	35.5	35.1

# Bull Evaluation EOT Report

## 201002 LISKEARD FARMS #2



Genetic Evaluations (04 Jan 2010)

**Tag 0033** Pen      Tattoo **LFL 33U**  
 Contact **VERN AND DENISE BURNETT - LISKEARD FARMS LTD.**  
 HC/Breed **ANGUS**      **705-647-8553**  
 Birthdate **21Dec2008**      Colour  
 SireSire **TC FREEDOM 104**  
 Sire **LFL 42S**  
 Dam **LFL 58R**  
 DamSire **STALBURN NORDIC 47N**

	CE	BW	WG	Milk	PWG	YG	FAT	REA	%IMF	SC	PPIndex	BBIndex
%ab	77	75	87	91	73	83	98	37	96	55	80	55
ABC Acc	3 <sup>27</sup>	-2.9 <sup>56</sup>	46 <sup>45</sup>	29 <sup>20</sup>	34 <sup>47</sup>	80 <sup>46</sup>	1.90 <sup>49</sup>	-0.07 <sup>43</sup>	.65 <sup>43</sup>	.63 <sup>62</sup>	4311	2949
%wb	35	34	87	87	47	73	96	79	89	33	48	46

CE	BW	AWW	WI	SOT	EOT	ADG	WPDA	HH	Frame	Fat	REA	AdjREA	%Imf	Adj%Imf	Grade	SC	AdjSC
U	81	764	107	925	1365	4.04	3.74	50.5	5.7	13	14.5	14.5	4.64	4.64	AA-AAA	36.0	36.0

**Tag 0114** Pen      Tattoo **DSMR 114U**  
 Contact **DOUG & ROB MARRIOTT - DSMR STOCK FARM**  
 HC/Breed **ANGUS**      **519-357-4978**  
 Birthdate **04Nov2008**      Colour  
 SireSire **S A V 8180 TRAVELER 004**  
 Sire **S A V NET WORTH 4200**  
 Dam **STALBURN ROSEBUD 24K**  
 DamSire **WHITESTONE WIDESPREAD MB**

	CE	BW	WG	Milk	PWG	YG	FAT	REA	%IMF	SC	PPIndex	BBIndex
%ab	60	50	83	88	97	95	97	70	89	73	92	92
ABC Acc	2 <sup>39</sup>	-0.9 <sup>62</sup>	45 <sup>53</sup>	28 <sup>23</sup>	50 <sup>54</sup>	95 <sup>54</sup>	1.60 <sup>54</sup>	.26 <sup>50</sup>	.49 <sup>50</sup>	1.00 <sup>65</sup>	5325	4084
%wb	16	11	83	82	94	92	89	98	63	60	77	88

CE	BW	AWW	WI	SOT	EOT	ADG	WPDA	HH	Frame	Fat	REA	AdjREA	%Imf	Adj%Imf	Grade	SC	AdjSC
U	88	780	102	1180	1650	4.36	4.00	51.5	5.7	12	16.4	15.0	4.75	4.21	AA-AAA	40.0	38.3



## 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	5	100	79	730	1004	1146	1264	1384	1479	4.34	3.77	51.1	5.7	13	15.0	14.3	4.63	4.32	37.5
RED ANGUS	7	100	81	657	817	962	1076	1197	1307	4.43	3.65	49.4	5.3	9	13.6	13.8	3.96	4.07	37.5
Group Averages	12	100	80	688	895	1038	1154	1275	1378	4.39	3.70	50.1	5.5	10	14.2	14.0	4.24	4.18	37.5

**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.