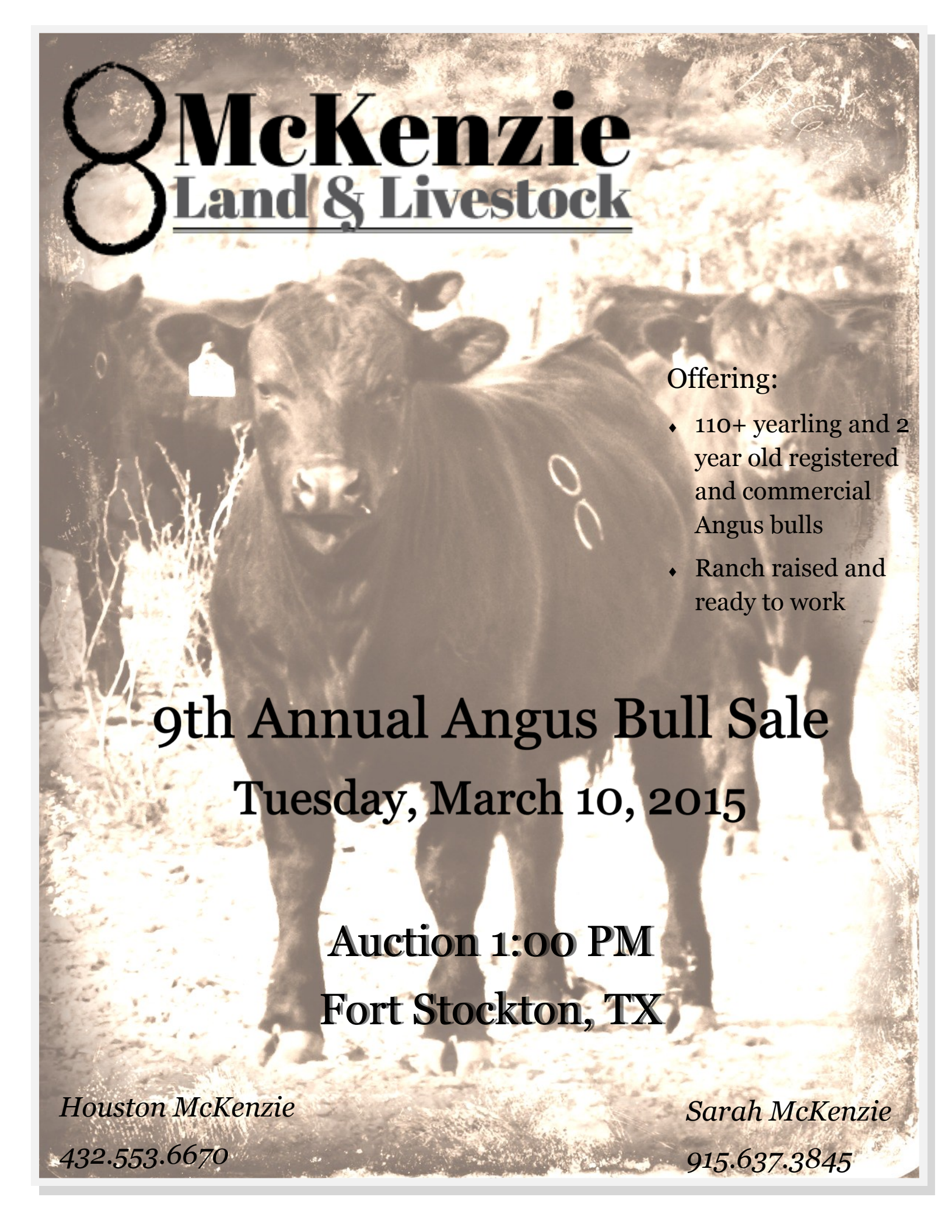




McKenzie **Land & Livestock**

Offering:

- ♦ 110+ yearling and 2 year old registered and commercial Angus bulls
- ♦ Ranch raised and ready to work

9th Annual Angus Bull Sale

Tuesday, March 10, 2015

Auction 1:00 PM

Fort Stockton, TX

Houston McKenzie

432.553.6670

Sarah McKenzie

915.637.3845



8 Ranch
HC 73 Box 3
McCamey, Texas 79752

Phone: 432.395.2250
Cell: 432.553.6670
houston.mckenzie@yahoo.com

Greetings,

Welcome to our 9th Annual Angus Bull Sale. Looking back on the last nine years, it is amazing to look at the changes we have made in our herd. We think we have made a lot of progress towards providing some nice Angus bulls for you, our customers.

Each year we continue to refine our breeding program and criteria; selecting sires that bring superior traits to our herd. Our goal is to use genetics that will make you more money in the commercial herd. We know you can get great genetics from many breeders, but we believe good Angus bulls that are raised here in our rocky, dry, tough country have added value. MLL bulls know prickly pear, burro grass and chamisa and are grown out in large rocky traps; so they are in good condition to go to work. Our bulls are young but they were raised here and will work in this environment with little transition time.

We appreciate your support at our sales and the confidence you have in our animals.

Thank you,

Houston

Houston McKenzie
President, McKenzie Land & Livestock

Sarah

Sarah McKenzie
Herd Manager



Sale Terms and Conditions

Sale order:

Bulls will sell in the order listed in the catalog. The LOT number can be found on the green tag in the left ear. Sale order is determined by average daily gain within the following groups: Registered Larger Bulls, Commercial Larger Bulls, Registered Smaller Bulls and Commercial Smaller Bulls. Please listen for announcements regarding sale order.

Commercial Bulls:

Commercial bulls are just that, commercial. In some cases parentage is not known, or are from some of the top commercial cows we have in our herd. Commercial bulls from our MLL Palma Ranch in Santa Rosa, New Mexico are in the sale again this year. These bulls are out of commercial cows that we used at Fort Stockton, you might remember the "Cortese" cows. The cows were moved to Palma in the fall of 2011 to "greener pastures." Because they were in a commercial setting, we have no data on dam or sire of these bulls. But we can tell you they are straight Angus and all have registered Angus sires.

Fertility and Health:

All sale bulls are guaranteed virgin and have passed a breeding soundness exam with excellent semen quality. Bulls older than 1 year have been trich tested. The testing of these animals was performed on February 24 and 25, 2015 by Dr. Ronald Box, DVM.

All bulls in sale have been BVD-PI tested and are negative for BVD. Testing was performed by Gold Standard Labs.

Delivery options:

Buyers are responsible for transportation of bulls purchased at the sale. New Mexico buyers will have the option of picking up their bulls at the MLL Palma Ranch; 40 miles west of Santa Rosa at no additional charge.

Loading:

All bulls will be paid for before loading unless other arrangements are made. Please see the cashier to settle up prior to loading your bull; you will need your invoice/loading ticket when picking up your bull(s). Please listen to general announcements indicating location of loading and personnel responsible for loading. *Please help us and double check the eartag and lot number to ensure that you are getting the bull you purchased.*

Guarantee: We guarantee that all animals in the sale are fertile to the best of our knowledge. If a bull is injured at any time in the first 12 months of ownership so as to make them functionally infertile, we will offer a suitable replacement if available. If not available we will offer you a credit equal to the bull's purchase price minus the salvage value received for that bull. We ask that you contact us prior to the disposal of the animal. HOWEVER, we cannot offer a guarantee on a death of an animal.

Please remember:

It is important to consider that these are young bulls; they will need to be taken care of to ensure that they continue to grow out good and be able to serve your herd. It is essential that a young bull not get too thin and are turned out at a stocking ratio of 15 cows/1bull.

Sire Information:

The first section of the catalog features the sires of the bulls for sale. The first Artificial Insemination (AI) sires include: ALC Big Eye, B3R Tender Ten, Connealy Final Product, GAR Predestined, Gardens Wave and SS Objective T510 OT26; the rest of the sires are natural service sires owned by MLL.

CATALOG INFORMATION

REGISTERED OR COMMERCIAL?

There are several ways to differentiate between the registered and commercial animals in the sale. All commercial animals have a "C" before the number in their name. All commercial animals have a "registration number" that starts with a "6".

Example: MLL TEN X C4005; 623032172 (*this is an AI calf but is un-registerable because his great-granddam's papers were not in order.*) The Angus Association allows us to collect and track data on the commercial animals, so they are treated just like our registered animals.

COMMENTS SECTION

This section contains information that is not shown in the table, but that we feel adds additional sorting tools for the customer. You will find the following comments in this section: Calving Ease, Average Daily Gain, Average Daily Gain Ratio, Top % EPD comparison and any genetic testing that was done.

CALVING EASE

Bulls that we feel comfortable in using on heifers are labeled ****CALVING EASE PROSPECT****. You can also refer to the CED EPD to help with selecting a calving ease bull. However, it is important to remember that there other factors that play into a heifer's unassisted delivery and we cannot guarantee a calving ease.

AVERAGE DAILY GAIN(ADG)

This is the average daily gain of the bull during the 95 day gain test. . Bulls were put on feed 11/6/13 and a final weight was taken 2/12/14.

GAIN RATIO (ADG Ratio):

The bulls in the sale are ranked by their gain ratio within their respective groups as explained under sale order The top gaining registered bull will be the first in the sale. You will see the gain ratio in the catalog under the "notes" section (**ADG Ratio**).

50K GENOMIC ENHANCED EPDS

This is the first year that we are offering the 50K Genomic testing to enhance epds. All yearling registered and a few commercial bulls have been 50K tested. This allows for higher accuracy in EPDs, so you can have a better picture of the bull's genetic potential.

TOP % EPD comments

These numbers highlight how that individual bull ranks within the entire breed. For example: MLL WAVE 3522 ranks: Top 10% CED EPD, Top 4% REA EPD...this bulls CED EPD ranks in the top 10% of the Angus breed and in the top 4% of the Angus breed for REA EPD.

• • •
One ton of alfalfa hay will be given to the high dollar volume buyer and one ton of alfalfa hay will be given to the buyer of the high selling bull.
• • •



Tuesday, March 10, 2015

Glossary of Terms

Expected Progeny Difference (EPD), is the prediction of how future progeny of each animal are expected to perform relative to the progeny of other animals listed in the database. EPDs are expressed in units of measure for the trait, plus or minus. [Interim EPDs](#) may appear on young animals when their performance has yet to be incorporated into the American Angus Association National Cattle Evaluation (NCE) procedures. This EPD will be preceded by an "I", and may or may not include the animal's own performance record for a particular trait, depending on its availability, appropriate contemporary grouping, or data edits needed for NCE.

\$Value Indexes, are multi-trait selection indexes, expressed in dollars per head, to assist beef producers by adding simplicity to genetic selection decisions. The \$Value is an estimate of how future progeny of each sire are expected to perform, on average, compared to progeny of other sires in the database if the sires were randomly mated to cows and if calves were exposed to the same environment.

PRODUCTION EPDs

Calving Ease Direct (CED), is expressed as a difference in percentage of unassisted births, with a higher value indicating greater calving ease in first-calf heifers. It predicts the average difference in ease with which a sire's calves will be born when he is bred to first-calf heifers.

Birth Weight EPD (BW), expressed in pounds, is a predictor of a sire's ability to transmit birth weight to his progeny compared to that of other sires.

Weaning Weight EPD (WW), expressed in pounds, is a predictor of a sire's ability to transmit weaning growth to his progeny compared to that of other sires.

Yearling Weight EPD (YW), expressed in pounds, is a predictor of a sire's ability to transmit yearling growth to his progeny compared to that of other sires.

Scrotal Circumference EPD (SC), expressed in centimeters, is a predictor of the difference in transmitting ability for scrotal size compared to that of other sires.

MATERNAL EPDs

Maternal Milk EPD (Milk), is a predictor of a sire's genetic merit for milk and mothering ability as expressed in his daughters compared to daughters of other sires. In other words, it is that part of a calf's weaning weight attributed to milk and mothering ability.

Cow Energy Value (\$EN), expressed in dollar savings per cow per year, assesses differences in cow energy requirements as an expected dollar savings

difference in daughters of sires. A larger value is more favorable when comparing two animals (more dollars saved on feed energy expenses).

Components for computing the cow \$EN savings difference include lactation energy requirements and energy costs associated with differences in mature cow size.

CARCASS EPDs

Carcass Weight EPD (CW), expressed in pounds is a predictor of the differences in hot carcass weight of a sire's progeny compared to progeny of other sires.

Marbling EPD (Marb), expressed as a fraction of the difference in USDA marbling score of a sire's progeny compared to progeny of other sires.

Ribeye Area EPD (RE), expressed in square inches, is a predictor of the difference in ribeye area of a sire's progeny compared to progeny of other sires.

Fat Thickness EPD (Fat), expressed in inches, is a predictor of the differences in external fat thickness at the 12th rib (as measured between the 12th and 13th ribs) of a sire's progeny compared to progeny of other sires.

\$VALUE INDEXES

\$Value indexes are multi-trait selection indexes, expressed in dollars per head, to assist beef producers by adding simplicity to genetic selection decisions. The \$Value is an estimate of how future progeny of each sire are expected to perform, on average, compared to progeny of other sires in the database if the sires were randomly mated to cows

and if calves were exposed to the same environment.

Weaned Calf Value (\$W), an index value expressed in dollars per head, is the expected average difference in future progeny performance for pre-weaning merit. \$W includes both revenue and cost adjustments associated with differences in birth weight, weaning direct growth, maternal milk and mature cow size.

Feedlot Value (\$F), an index value expressed in dollars per head, is the expected average difference in future progeny performance for postweaning merit compared to progeny of other sires.

Grid Value (\$G), an index value expressed in dollars per head, is the expected average difference in future progeny performance for carcass grid merit compared to progeny of other sires.

Quality Grade (\$QG) \$QG represents the quality grade segment of the economic advantage found in \$G. \$QG is intended for the specialized user wanting to place more emphasis on improving quality grade.

The carcass marbling (Marb) EPD contributes to \$QG.

Yield Grade (\$YG) \$YG represents the yield grade segment of the economic advantage found in \$G. \$YG is intended for the specialized user wanting to place more emphasis on red meat yield. It provides a multi-trait approach to encompass ribeye, fat thickness and weight into an economic value for red meat yield.

Beef Value (\$B), an index value expressed in dollars per head, is the expected average difference in future progeny performance for postweaning and carcass value compared to progeny of other sires.

ULTRASOUND DATA

Ultrasound allows for the evaluation of the carcass traits on a live animal. The three carcass measures that the ultrasound system estimates are: back fat (Rib), rib eye area (REA) and intramuscular fat (%IMF).

The numbers shown on in the catalog are the actual data for ultrasound data.

Genetic Defect Information

We test all the bulls registered and commercial) raised on the Fort Stockton ranch for any genetic defects that they may be at risk of carrying. Testing is done through Zoetis Genetics and the genetic status is listed in the notes section. You will see that we have tested some animals for the following: **AM**(*Arthrogryposis Multiplex*), **CA**(*Contractural Arachnodactyly*), **NH**(*Neuropathic Hydrocephalus*) and **DD**(*Developmental Duplication*). We have made a practice of culling animals that are carriers for AM, CA and NH so only a few of the bulls will have to be tested for these defects and will be noted by having the defect abbreviation followed by a "F" for example: **CAF**. We do not routinely sell defect carriers; the only carriers that you will find in the sale will be DD carriers. It is generally accepted that a DDC bull can be used in a commercial setting with no adverse effect on the commercial herd. We cannot guarantee defect status of Palma bulls, as they are strictly a commercially produced animal, but in a commercial setting there should be little risk of defect expression.

Lot AI
Gardens Wave
DOB: 10/11/00 **Bull # 13818764** **Tattoo: A272**

Sire: Summitcrest Scotch Cap 0B45
Green Garden Highmark
Green Garden Pride 6128 S1
N Bar Emulation EXT
Dam: Green Garden Lady 6255 S2
Green Garden Lady 4256 S2

\$W	+61.60
\$F	+22.66
\$G	+55.88
\$YG	+10.66
\$B	+120.65
\$EN	+42.82

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
+ 12	+ 0.4	+ 37	+ 62	+ 0.76	+ 18	+ 25	+ 1.20	+ 1.07	+ 0.029
Act. BW	Adj. WW	Adj. YW	Act. SC	ADG	Act. %IMF	Act. REA	Act. RibFat	Act. RmpFat	

CALVING EASE One of the most unique bulls in the Angus Breed. Ranks top 1% \$EN, \$W and top 2% \$B. Only one other proven bull ranks in the top 5% for all major indexes. 2 sons sell.

Lot AI
A A R Ten X 7008 S A
DOB: 02/09/07 **Bull** **15719841** **Tattoo: 7008**

Sire: S A F Focus of E R
MYTTY IN FOCUS
Mytty Countess 906
S A V Adaptor 2213
Dam: A A R Lady Kelton 5551
H S A F Lady Kelton 504B

\$W	+73.16
\$F	+82.95
\$G	+51.61
\$YG	+1.23
\$B	+148.26
\$EN	+3.47

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
+ 9	+ 0.5	+ 68	+ 130	+ 1.57	+ 21	+ 78	+ 1.45	+ 0.89	+ 0.012
Act. BW	Adj. WW	Adj. YW	Act. SC	ADG	Act. %IMF	Act. REA	Act. RibFat	Act. RmpFat	

This popular In Focus son, has calving ease and incredible growth and muscle. Unique combination of high \$B and +\$E. His fall 2014 MLL calves are outstanding!

Lot AI
Sydney Trust 6228
DOB: 02/07/06 **Bull** **15354674** **Tattoo: 6228**

Sire: C A Future Direction 5321
SCR Promise 4042
SCR Queen 2167
Bon View New Design 1407
Dam: SydGen Forever Lady 4413
S A F Forever Lady 0182

\$W	+57.65
\$F	+53.27
\$G	+45.57
\$YG	+8.12
\$B	+130.31
\$EN	+0.66

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
+ 4	+ 0.1	+ 57	+ 101	+ 0.89	+ 22	+ 52	+ 0.83	+ 0.76	-0.026
Act. BW	Adj. WW	Adj. YW	Act. SC	ADG	Act. %IMF	Act. REA	Act. RibFat	Act. RmpFat	

Powerful overall EPD profile. Breed leader in \$W,\$F,\$G,\$B. Unique combination of high \$B and +\$E.

Lot AI
K C F Bennett Absolute
DOB: 03/08/09 **Bull** **16430795** **Tattoo: W299**

Sire: Sitz Traveler 8180
S A V Final Answer 0035
S A V Emulous 8145
Wulffs Ext 6106
Dam: Thomas Miss Lucy 5152
Thomas Miss Lucy 3050

\$W	+65.52
\$F	+82.66
\$G	+37.92
\$YG	-1.32
\$B	+125.81
\$EN	-7.89

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
+ 15	-0.8	+ 66	+ 121	+ 1.35	+ 23	+ 50	+ 0.90	+ 0.84	+ 0.071
Act. BW	Adj. WW	Adj. YW	Act. SC	ADG	Act. %IMF	Act. REA	Act. RibFat	Act. RmpFat	

Multi-trait excellence; calving ease, growth, great maternal traits, outstanding carcass traits and documented feed efficiency traits. Top 1% feed efficiency and top 10% total profit in Angus Alliance Sire testing.

Lot AI
Connealy Forward
DOB: 01/14/06 **Bull # 15491633** **Tattoo: 623**

Sire: Connealy Lead On
Connealy Onward
Altune of Conanga 6104
G A R Grid Maker
Dam: Becky Lee of Conanga 74
Beckon Lee of Conanga 73

\$W	+73.61
\$F	+56.96
\$G	+32.04
\$YG	+8.23
\$B	+95.43
\$EN	-4.51

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
+ 16	+ 1.5	+ 58	+ 107	+ 0.94	+ 32	+ 37	+ 0.40	+ 0.95	+ 0.021
Act. BW	Adj. WW	Adj. YW	Act. SC	ADG	Act. %IMF	Act. REA	Act. RibFat	Act. RmpFat	

****CALVING EASE**** Complete and balanced EPDs with a positive \$EN. 3 sons sell.

Lot AI
LCC NEW STANDARD
DOB: 03/07/02 **Bull # 14218253** **Tattoo: G256**

Sire: B/R New Design 036
Bon View New Design 1407
Bon View Pride 664
War Venture 8030 6008
Dam: LCC Sunset K3118
Leachman Sunset G3008

\$W	+77.10
\$F	+64.50
\$G	+39.70
\$YG	+7.10
\$B	+87.84
\$EN	-9.48

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
+ 12	-0.3	+ 56	+ 108	+ 0.45	+ 36	+ 23	+ 0.65	+ 0.60	+ 0.017
Act. BW	Adj. WW	Adj. YW	Act. SC	ADG	Act. %IMF	Act. REA	Act. RibFat	Act. RmpFat	

Ranks among the top for calving ease and growth in the Angus breed. Top 1% \$W.

Lot AI
B P F Special Focus 504
DOB: 01/16/05 **Bull # 15140670** **Tattoo: 504**

Sire: S A F Focus of E R
MYTTY IN FOCUS
Mytty Countess 906
J R Something Special
Dam: B P F Black Cash 341
B P F Black Cash 944

\$W	+57.40
\$F	+48.17
\$G	+21.89
\$YG	-12.98
\$B	+105.42
\$EN	-12.66

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
+ 17	-1.2	+ 54	+ 96	+ 1.25	+ 29	+ 50	+ 0.73	+ 0.43	+ 0.100
Act. BW	Adj. WW	Adj. YW	Act. SC	ADG	Act. %IMF	Act. REA	Act. RibFat	Act. RmpFat	

CALVING EASE This son of In Focus offers calving ease, solid growth and moderate mature size. 1 son to sell.

Lot AI
G A R Predestined
DOB: 08/16/99 **Bull # 13395344** **Tattoo: 5899**

Sire: V D A R New Trend 315
B/R New Design 036
B/R Blackcap Empress 76
N Bar Emulation EXT
Dam: G A R Ext 4206
G A R 6807 Traveler 1432

\$W	+57.01
\$F	+29.57
\$G	+51.54
\$YG	+3.57
\$B	+96.75
\$EN	+8.00

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
+ 0	+ 4.0	+ 51	+ 91	+ 0.56	+ 27	+ 30	+ 1.34	+ 0.49	+ 0.026
Act. BW	Adj. WW	Adj. YW	Act. SC	ADG	Act. %IMF	Act. REA	Act. RibFat	Act. RmpFat	

Continues to be a breed leader ranking in the 1% of the breed for marbling, \$QG and \$B, top 2% \$G and top 3% \$W. Excellent daughters. 1 son sells, this will be the last Predestine bull we will have.

Lot AI **S S Objective T510 0T26**
DOB: 04/25/00 Bull # 13776378 Tattoo: 0T26

Sire: D H D Traveler 6807
 S S Traveler 6807 T510
 S S Miss Hi Spade A114
 S S Rito Rito R76 R011
Dam: S S Miss Rita R011 7R8
 S S Miss Ultress U56

\$W	+69.22
\$F	+58.40
\$G	+48.17
\$YG	+9.72
\$B	+80.37
\$EN	-15.62

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
+ 11	+ 1.1	+ 70	+ 119	+ 0.48	+ 27	+ 22	+ 0.87	+ 0.44	-0.030

Act. BW	Adj. WW	Adj. YW	Act. SC	ADG	Act. %IMF	Act. REA	Act. RibFat	Act. RmpFat
66	623							

CALVING EASE Ranks among the top 40 proven sires for \$W, fast growing, has excellent daughters. 4 Objective sons sell in this sale.

Lot MLL **Packard Focus 29**
DOB: 01/17/09 Bull 16398233 Tattoo: 29

Sire: MYTTY IN FOCUS
 Packard In Focus 137
 Packard Emulass 75
 Connealy Lead On
Dam: Packard Firefly 36
 Packard Firefly 43

\$W	+41.80
\$F	+18.18
\$G	+45.46
\$YG	+10.28
\$B	+83.55
\$EN	+6.11

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
+ 7	+ 0.4	+ 44	+ 78	+ 0.85	+ 21	+ 23	+ 0.74	+ 0.10	-0.084

Act. BW	Adj. WW	Adj. YW	Act. SC	ADG	Act. %IMF	Act. REA	Act. RibFat	Act. RmpFat

Purchased from Midland Bull Test 2010. Test Index: 126ADG(3.96), 113YR(1329YW). This +\$E bull will make easier keeping cows. Gentle disposition.

Lot MLL **J-C Future Direction 1110**
DOB: 03/17/11 Bull 17021412 Tattoo: 1110

Sire: C A Future Direction 5321
 B/R Future Direction 6171
 B/R Blackcap Empress 470
 S S Objective T510 0T26
Dam: J-C Faye 0837
 J-C Faye 0622

\$W	+42.21
\$F	+30.24
\$G	+41.99
\$YG	+10.94
\$B	+95.90
\$EN	-4.61

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
+ 5	+ 2.3	+ 47	+ 83	+ 0.18	+ 26	+ 29	+ 0.60	+ 0.77	-0.016

Act. BW	Adj. WW	Adj. YW	Act. SC	ADG	Act. %IMF	Act. REA	Act. RibFat	Act. RmpFat
					4.97	16.40	0.37	0.45

High indexing bull at the 2012 Tucumcari Bull Test. 4.8 ADG, 121.7 ADG Ratio, Text Index 118.3, Top 5% REA, 16.0 actual rib eye, #1 Feed Efficiency in Test.

Lot MLL **RAB-GAR Future Design 4518T**
DOB: 01/01/07 Bull 16028944 Tattoo: 4518T

Sire: C A Future Direction 5321
 RAB-EGL Future Design
 Eagle 1407 Isabel 2215
 RAB-GAR Load Up 4049J
Dam: RAB-GAR MS Load UP - 4870N
 RAB-GAR MS Primetime 4642K

\$W	+43.04
\$F	+44.07
\$G	+36.35
\$YG	+7.95
\$B	+87.04
\$EN	-8.21

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
+ 14	-0.2	+ 48	+ 92	+ 0.81	+ 25	+ 26	+ 0.52	+ 0.62	+ 0.005

Act. BW	Adj. WW	Adj. YW	Act. SC	ADG	Act. %IMF	Act. REA	Act. RibFat	Act. RmpFat

CALVING EASE This big framed bull is easy to get along with and keeps well in our country. He is an 8 year old bull and is in great shape!

Lot MLL **J-C Total 0922**
DOB: 02/05/09 Bull 16418897 Tattoo: 0922

Sire: Bon View New Design 208
 TC Total 410
 TC Erica Eileen 2047
 Stepladder Fame 740
Dam: J-C Faye 0257
 B&H Faye 9683

\$W	+25.92
\$F	+28.74
\$G	+41.09
\$YG	+11.67
\$B	+77.14
\$EN	+1.28

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
+ 11	-0.8	+ 43	+ 78	-0.18	+ 16	+ 16	+ 0.55	+ 0.49	-0.036

Act. BW	Adj. WW	Adj. YW	Act. SC	ADG	Act. %IMF	Act. REA	Act. RibFat	Act. RmpFat

CALVING EASE Is an easy keeper and gentle, gentle, gentle. Positive \$E and moderate Milk make his daughters some of our favorite young cows.

Lot MLL **P S E23**
DOB: 02/23/08 Bull 16131434 Tattoo: E23

Sire: Bon View New Design 208
 Connealy Whitman
 Ella Tina of Conanga 989
 Ranger G 1720
Dam: P S Miss 758
 P S 162 of Ext

\$W	+38.63
\$F	+14.43
\$G	+43.18
\$YG	+7.01
\$B	+103.78
\$EN	-9.89

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
+ 6	+ 0.7	+ 44	+ 75	+ 1.09	+ 27	+ 38	+ 0.78	+ 0.54	-0.015

Act. BW	Adj. WW	Adj. YW	Act. SC	ADG	Act. %IMF	Act. REA	Act. RibFat	Act. RmpFat

Moderate sized bull for mature cows. Purchased from the Midland Bull Test. Test ratios: 125 ADG Ratio, 136 IMF Ratio, 109 REA Ratio, RFI- 1.7. 10 sons sell. Top 10% breed in \$B; fast growth and great carcass.

Lot MLL **H A R B Freedom 1156-288**
DOB: 03/06/08 Bull 16234904 Tattoo: 288

Sire: TC Freedom 104
 R E B Freedom 1156
 D R F B M Zena 1163
 H A R B High Plains 975 JH
Dam: H A R B Jumboleen 0102
 H A R B Jumboleen D03

\$W	+47.15
\$F	+22.62
\$G	+26.37
\$YG	-7.49
\$B	+82.53
\$EN	-3.49

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
+ 4	+ 0.3	+ 39	+ 77	+ 1.28	+ 31	+ 33	+ 0.69	-0.15	+ 0.035

Act. BW	Adj. WW	Adj. YW	Act. SC	ADG	Act. %IMF	Act. REA	Act. RibFat	Act. RmpFat

Larger framed bull, purchased from Midland Bull Test in Montana. Test Index: 114. Test Ratios: 108 ADG, 131 IMF, 108 REA, RFI 1.27, 117 YR.

Lot MLL **RAB 1023 Precision 203U**
DOB: 01/04/08 Bull 16438728 Tattoo: 203U

Sire: G A R Precision 1680
 E&B 1680 Precision 1023
 E&b 6807 Lady Traveler 61
 MYTTY IN FOCUS
Dam: RAB MS IN Focus 902S
 RAB MS 1407 608P

\$W	+43.65
\$F	+30.53
\$G	+38.55
\$YG	+5.61
\$B	+116.32
\$EN	+8.83

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
+ 13	-0.4	+ 41	+ 80	+ 0.82	+ 22	+ 46	+ 0.66	+ 0.76	+ 0.011

Act. BW	Adj. WW	Adj. YW	Act. SC	ADG	Act. %IMF	Act. REA	Act. RibFat	Act. RmpFat

CALVING EASE Used on heifers as a clean up bull. This bulls has a unique combination of high \$B and +E.

Lot
MLL

J-C Future Direction 0952
DOB: 03/20/09 Bull 16416914 Tattoo: 0952

C A Future Direction 5321
Sire: B/R Future Direction 6171
B/R Blackcap Empress 470
F A R Krugerrand 410H
Dam: J-C Julie 0586
J-C Julie 0249

\$W +39.46
\$F +56.13
\$G +27.44
\$YG +5.54
\$B +102.88
\$EN -8.07

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
+ 5	+ 1.1	+ 53	+ 98	+ 1.45	+ 21	+ 39	+ 0.35	+ 0.47	-0.010
Act. BW	Adj. WW	Adj. YW	Act. SC	ADG	Act. % IMF	Act. REA	Act. RibFat	Act. RmpFat	

CALVING EASE Top Indexing Bull at the Tucumcari Bull Test 2010.

Lot
MLL

RRR 1540 5050 2048 846 552
DOB: 04/15/10 Bull 17015861 Tattoo: 1540R

B/R New Design 036
Sire: G A R New Design 5050
G A R Precision 706
RRR 846 GRP 3132 510 1030
Dam: RRR 2048 846 552 Univ 3298
RRR 552 Univ 3298 T365 284

\$W +40.13
\$F +47.74
\$G +52.71
\$YG +12.83
\$B +109.90
\$EN -9.35

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
+ 4	+ 2.8	+ 50	+ 92	+ 0.73	+ 26	+ 27	+ 0.93	+ 0.91	-0.019
Act. BW	Adj. WW	Adj. YW	Act. SC	ADG	Act. % IMF	Act. REA	Act. RibFat	Act. RmpFat	

Larger framed bull we use on cows. Calves are thick and fast growing. Top %EPDs:10% RADG, 5% Marb, 4% REA, 2% \$G

Lot
MLL

SPA Bluegrass 800
DOB: 01/12/08 Bull 16280789 Tattoo: 800

Hyline Right Time 338
Sire: Bluegrass Right Time 500
Bluegrass Bonny 200 900
Rito 3M1 of 5H11 GT Maximum
Dam: S P A 825 93 3M1
S P A Extra Lady

\$W +28.89
\$F +19.40
\$G +28.13
\$YG +1.90
\$B +82.97
\$EN +17.44

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
+ 8	+ 0.9	+ 42	+ 75	+ 0.24	+ 12	+ 31	+ 0.46	+ 0.25	+ 0.012
Act. BW	Adj. WW	Adj. YW	Act. SC	ADG	Act. % IMF	Act. REA	Act. RibFat	Act. RmpFat	

Purchased from the Midland Bull Test, Test Index 111. Test Ratios: 139 ADG, 143 IMF, 93 REA, RFI-0.96. 3 sons sell.

Lot
1

MLL PF29 C3619
DOB: 04/20/13 Bull Tattoo: C3619

Sire: Packard In Focus 137
Packard Focus 29
Packard Firefly 36
G A R Retail Product

\$W
\$F
\$G
\$YG
\$B
\$EN

Dam: MLL RETAIL PRODUCT C6516
MLL BORDEN C436

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
Act. BW	Adj. WW	Adj. YW	Act. SC	ADG	Act. % IMF	Act. REA	Act. RibFat	Act. RmpFat	
75			38.00						



Lot
2

MLL 3614
DOB: 04/16/13 Bull Tattoo: 3614

Sire: SIRE DATA PENDING
GAR Objective 561
Dam: J-C Cathy 0938
J-C Cathy 0510

\$W
\$F
\$G
\$YG
\$B
\$EN

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
Act. BW	Adj. WW	Adj. YW	Act. SC	ADG	Act. % IMF	Act. REA	Act. RibFat	Act. RmpFat	
68			40.00						

Registration pending sire data

Lot
5

MLL 3628
DOB: 05/06/13 Bull Tattoo: 3628

Sire: SIRE DATA PENDING
GAR Objective 561
Dam: J-C Beverly 0937
J-C Beverly 0509

\$W
\$F
\$G
\$YG
\$B
\$EN

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
Act. BW	Adj. WW	Adj. YW	Act. SC	ADG	Act. % IMF	Act. REA	Act. RibFat	Act. RmpFat	
75			41.00						

Registration pending sire data

Lot
3

MLL 3580
DOB: 03/25/13 Bull Tattoo: 3580

Sire: SIRE DATA PENDING
RAB-GAR Objective 149U
Dam: MLL 149U 1578
J-C CATHY 0924

\$W
\$F
\$G
\$YG
\$B
\$EN

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
Act. BW	Adj. WW	Adj. YW	Act. SC	ADG	Act. % IMF	Act. REA	Act. RibFat	Act. RmpFat	
75			40.00						

Registration pending sire data

Lot
6

MLL C3615
DOB: 04/16/13 Bull Tattoo: C3615

Sire: SIRE DATA PENDING
LK 07 Fame
Dam: MLL FAME C9532
MLL RETAIL PRODUCT C6516

\$W
\$F
\$G
\$YG
\$B
\$EN

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
Act. BW	Adj. WW	Adj. YW	Act. SC	ADG	Act. % IMF	Act. REA	Act. RibFat	Act. RmpFat	
78			41.00						

Lot
4

MLL C3591
DOB: 04/01/13 Bull Tattoo: C3591

Sire: SIRE DATA PENDING
MCC DAYBREAK
Dam: MLL DAYBREAK C1516
MLL PREDESTINED 9523

\$W
\$F
\$G
\$YG
\$B
\$EN

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
Act. BW	Adj. WW	Adj. YW	Act. SC	ADG	Act. % IMF	Act. REA	Act. RibFat	Act. RmpFat	
75			37.00						



Lot
7

MLL 3592
DOB: 04/03/13 Bull Tattoo: 3592

Sire: SIRE DATA PENDING

B3R Tender Ten R065
Dam: MLL TENDER TEN 1503
J-C GAR Objective 0957

\$W	
\$F	
\$G	
\$YG	
\$B	
\$EN	

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
Act. BW	Adj. WW	Adj. YW	Act. SC	ADG	Act. % IMF	Act. REA	Act. RibFat	Act. RmpFat	
75			40.00						

Registration pending sire data



Lot
8

MLL 3613
DOB: 04/16/13 Bull Tattoo: 3613

Sire: SIRE DATA PENDING

Leachman Right Time
Dam: FALCON BLACKBIRD 319M
Vermilion Blackbird 3525

\$W	
\$F	
\$G	
\$YG	
\$B	
\$EN	

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
Act. BW	Adj. WW	Adj. YW	Act. SC	ADG	Act. % IMF	Act. REA	Act. RibFat	Act. RmpFat	
70			42.00						

Registration pending sire data

Lot
11

MLL 3578
DOB: 03/24/13 Bull Tattoo: 3578

Sire: SIRE DATA PENDING

Packard Focus 29
Dam: MLL PF29 1561
MLL Bextor 9554

\$W	
\$F	
\$G	
\$YG	
\$B	
\$EN	

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
Act. BW	Adj. WW	Adj. YW	Act. SC	ADG	Act. % IMF	Act. REA	Act. RibFat	Act. RmpFat	
75			40.00						

Registration pending sire data

Lot
9

MLL 4518T 3625
DOB: 04/24/13 Bull 17709740 Tattoo: 3625

Sire: RAB-EGL Future Design
RAB-GAR Future Design 4518T
RAB-GAR MS Load UP - 4870N
G A R Retail Product
Dam: MLL Retail Product 8515
MS MLL 533

\$W	+37.16
\$F	+30.28
\$G	+29.79
\$YG	+6.73
\$B	+67.28
\$EN	-1.92

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
I + 9	I + 1.1	I + 44	I + 81	I + 0.70	I + 23	I + 18	I + 0.38	I + 0.34	I -0.001
Act. BW	Adj. WW	Adj. YW	Act. SC	ADG	Act. % IMF	Act. REA	Act. RibFat	Act. RmpFat	
80	536								

CALVING EASE PROSPECT

Lot
12

MLL C3026
DOB: 05/04/13 Bull Tattoo: C3026

Sire: SIRE DATA UNKNOWN

Dam: MLL PREDESTINED C0013

\$W	
\$F	
\$G	
\$YG	
\$B	
\$EN	

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
Act. BW	Adj. WW	Adj. YW	Act. SC	ADG	Act. % IMF	Act. REA	Act. RibFat	Act. RmpFat	
75			38.00						

Lot
10

MLL C3590
DOB: 03/31/13 Bull Tattoo: C3590

Sire: SIRE DATA PENDING

Blevins Fortune Design 9836
Dam: MLL Fortune Design C1599
MLL RETAIL PRODUCT C6534

\$W	
\$F	
\$G	
\$YG	
\$B	
\$EN	

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
Act. BW	Adj. WW	Adj. YW	Act. SC	ADG	Act. % IMF	Act. REA	Act. RibFat	Act. RmpFat	
			41.00						



Lot 13 **MLL Predestined 3636**
DOB: 09/14/13 Bull 17710255 Tattoo: 3636

Sire: B/R New Design 036
 G A R Predestined
 G A R Ext 4206
 J-C FAME 0212
 Dam: MS MLL J-C Fame 6524
 Miss H M Power 548

\$W	+28.78
\$F	+21.73
\$G	+38.15
\$YG	+5.55
\$B	+78.54
\$EN	+0.51

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
+ 2	+ 2.8	+ 43	+ 75	I + 0.30	+ 21	+ 20	+ 0.65	+ 0.38	+ 0.012
Act. BW	Adj. WW	Adj. YW	Act. SC	ADG	Act. % IMF	Act. REA	Act. RibFat	Act. RmpFat	
80	550	928	40.00	2.36	2.93	11.50	0.13	0.23	

Lot 17 **MLL 5050 3660**
DOB: 10/23/13 Bull 17945333 Tattoo: 3660

Sire: G A R New Design 5050
 RRR 1540 5050 2048 846 552
 RRR 2048 846 552 Univ 3298
 LK 07 Fame
 Dam: MLL FAME 0532
 MLL MONTANA 7547

\$W	+26.93
\$F	+23.24
\$G	
\$YG	
\$B	
\$EN	+1.57

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
+ 2	+ 3.0	+ 43	+ 76	I + 0.86	+ 20				
Act. BW	Adj. WW	Adj. YW	Act. SC	ADG	Act. % IMF	Act. REA	Act. RibFat	Act. RmpFat	
75	496								

Lot 14 **MLL E23 3645**
DOB: 09/24/13 Bull 17945322 Tattoo: 3645

Sire: Connealy Whitman
 P S E23
 P S Miss 758
 G A R Retail Product
 Dam: MS MLL 503
 L K 45 Rose

\$W	+37.43
\$F	+23.24
\$G	+38.93
\$YG	+8.57
\$B	+90.67
\$EN	-7.61

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
+ 7	+ 0.6	+ 43	+ 76	I + 1.03	+ 26	+ 27	+ 0.58	+ 0.47	-0.021
Act. BW	Adj. WW	Adj. YW	Act. SC	ADG	Act. % IMF	Act. REA	Act. RibFat	Act. RmpFat	
70	550	892	40.00	2.14	2.97	9.50	0.12	0.18	

Lot 18 **MLL PRECISION 3682**
DOB: 11/21/13 Bull 18066001 Tattoo: 3682

Sire: E&B 1680 Precision 1023
 RAB 1023 Precision 203U
 RAB MS IN Focus 902S
 J-C Total 0922
 Dam: MLL Total 1627
 Meads Monica Power 93

\$W	+36.85
\$F	+23.58
\$G	+32.51
\$YG	+6.28
\$B	+90.39
\$EN	-0.56

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
+ 10	+ 0.2	+ 45	+ 77		+ 21	+ 31	+ 0.46	+ 0.53	+ 0.003
Act. BW	Adj. WW	Adj. YW	Act. SC	ADG	Act. % IMF	Act. REA	Act. RibFat	Act. RmpFat	
70	744	1,061	36.00	1.98	2.51	10.20	0.20	0.14	

****CALVING EASE PROSPECT****

Lot 15 **MLL FORWARD 3635**
DOB: 09/14/13 Bull 17712502 Tattoo: 3635

Sire: Connealy Onward
 Connealy Forward
 Becky Lee of Conanga 74
 J-C FAME 0212
 Dam: MLL J-C FAME 7506
 Meads Joy of Erica 220

\$W	+36.24
\$F	+28.15
\$G	+26.32
\$YG	+8.41
\$B	+65.46
\$EN	-3.27

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
+ 11	+ 1.6	+ 45	+ 80	I + 0.55	+ 23	+ 19	+ 0.26	+ 0.55	+ 0.004
Act. BW	Adj. WW	Adj. YW	Act. SC	ADG	Act. % IMF	Act. REA	Act. RibFat	Act. RmpFat	
78	530	810	36.00	1.75	2.80	10.30	0.12	0.12	

****CALVING EASE PROSPECT****

Lot 19 **MLL 800 3646**
DOB: 10/02/13 Bull 17945323 Tattoo: 3646

Sire: Bluegrass Right Time 500
 SPA Bluegrass 800
 S P A 825 93 3M1
 J-C FAME 0212
 Dam: MLL J-C FAME 9517
 MS MLL 449

\$W	+22.44
\$F	+3.32
\$G	+23.07
\$YG	+3.77
\$B	+55.77
\$EN	+22.79

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
+ 7	+ 1.0	+ 34	+ 59	I + 0.27	+ 12	+ 16	+ 0.29	+ 0.10	+ 0.003
Act. BW	Adj. WW	Adj. YW	Act. SC	ADG	Act. % IMF	Act. REA	Act. RibFat	Act. RmpFat	
75	473	753	38.00	1.75	2.77	8.10	0.11	0.13	

Lot 16 **MLL FUTURE DIRECTION 3643**
DOB: 09/25/13 Bull 623038684 Tattoo: 3643

Sire: B/R Future Direction 6171
 J-C Future Direction 1110
 J-C Faye 0837
 SVA Precision Edge 3178
 Dam: MCCALL CHAMPSTOCK SAV 720T
 McCall ChampStock SAV221M
 Sire EPD: CED + 5; BW + 2.3; WN + 47; YR + 83; Milk + 26
 Sire \$Values: \$W +42.21; \$F +30.24; \$G +41.99; \$B +95.90

\$W	
\$F	
\$G	
\$YG	
\$B	
\$EN	

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
Act. BW	Adj. WW	Adj. YW	Act. SC	ADG	Act. % IMF	Act. REA	Act. RibFat	Act. RmpFat	
72	510	846	39.00	2.10	1.64	10.30	0.13	0.11	

Registration pending genetic test



Lot 20 **MLL 203U 3648**
DOB: 10/18/13 Bull 17945324 Tattoo: 3648

Sire: E&B 1680 Precision 1023
 RAB 1023 Precision 203U
 RAB MS IN Focus 902S
 SPA Bluegrass 800

Dam: MLL 800 1614
 MCCALL DATELINE 311N

\$W	+21.84
\$F	+16.47
\$G	+32.13
\$YG	+5.14
\$B	+95.17
\$EN	+10.51

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
+ 10	+ 0.9	+ 34	+ 68		+ 17	+ 35	+ 0.48	+ 0.50	+ 0.004
Act. BW	Adj. WW	Adj. YW	Act. SC	ADG	Act. % IMF	Act. REA	Act. RibFat	Act. RmpFat	
68	464	779	36.00	1.97	2.67	8.30	0.09	0.13	

****CALVING EASE PROSPECT****

Lot 24 **MLL TOTAL 3668**
DOB: 11/02/13 Bull 17945338 Tattoo: 3668

Sire: TC Total 410
 J-C Total 0922
 J-C Faye 0257
 J-C FAME 0212

Dam: MS MLL 566
 Miss H M Power 548

\$W	+24.57
\$F	+9.43
\$G	+24.07
\$YG	+7.48
\$B	+45.77
\$EN	+14.44

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
+ 7	+ 0.6	+ 36	+ 64	I -0.09	+ 15	+ 10	+ 0.23	+ 0.20	-0.012
Act. BW	Adj. WW	Adj. YW	Act. SC	ADG	Act. % IMF	Act. REA	Act. RibFat	Act. RmpFat	
76	506	828	38.00	2.01	1.94	8.70	0.16	0.12	

****CALVING EASE PROSPECT****

Lot 21 **MLL FUTURE DIRECTION 3652**
DOB: 10/08/13 Bull 17945326 Tattoo: 3652

Sire: B/R Future Direction 6171
 J-C Future Direction 0952
 J-C Julie 0586
 KCH Spirit 282 76

Dam: A6 PRINCESS
 A 6 Suzie 325

\$W	+19.65
\$F	+20.37
\$G	+23.25
\$YG	+3.95
\$B	+68.33
\$EN	+15.29

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
+ 9	+ 0.4	+ 35	+ 71	I + 0.94	+ 13	+ 23	+ 0.29	+ 0.13	-0.007
Act. BW	Adj. WW	Adj. YW	Act. SC	ADG	Act. % IMF	Act. REA	Act. RibFat	Act. RmpFat	
70	482	797	38.00	1.97	2.21	8.10	0.13	0.18	

****CALVING EASE PROSPECT****



Lot 22 **MLL 288 3653**
DOB: 10/06/13 Bull 17945327 Tattoo: 3653

Sire: R E B Freedom 1156
 H A R B Freedom 1156-288
 H A R B Jumbolen 0102
 GAR Objective 561

Dam: J-C FAYE 1039
 J-C Faye 0562

\$W	+33.24
\$F	+21.29
\$G	+34.54
\$YG	+2.22
\$B	+84.74
\$EN	-1.21

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
+ 6	+ 0.9	+ 36	+ 72	I + 0.92	+ 26	+ 26	+ 0.64	+ 0.15	+ 0.006
Act. BW	Adj. WW	Adj. YW	Act. SC	ADG	Act. % IMF	Act. REA	Act. RibFat	Act. RmpFat	
72	495	837	40.00	2.14	2.99	8.90	0.15	0.22	

Lot 25 **MLL FUTURE DESIGN 3683**
DOB: 11/28/13 Bull 18066003 Tattoo: 3683

Sire: RAB-EGL Future Design
 RAB-GAR Future Design 4518T
 RAB-GAR MS Load UP - 4870N
 H A R B Freedom 1156-288

Dam: MLL FREEDOM 0563
 Miss MLL Precision 6507

\$W	+26.09
\$F	+17.96
\$G	+34.28
\$YG	+5.47
\$B	+74.34
\$EN	+0.46

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
+ 11	+ 0.4	+ 34	+ 69	I + 0.69	+ 23	+ 20	+ 0.53	+ 0.33	+ 0.007
Act. BW	Adj. WW	Adj. YW	Act. SC	ADG	Act. % IMF	Act. REA	Act. RibFat	Act. RmpFat	
75	607	807	34.00	1.25	2.73	9.20	0.11	0.20	

****CALVING EASE PROSPECT****

Lot 23 **MLL E23 3659**
DOB: 10/24/13 Bull 17945332 Tattoo: 3659

Sire: Connealy Whitman
 P S E23
 P S Miss 758
 J-C Far Krugerrand 0488

Dam: J-C Lady 0992
 J-C Lady Midland 0787

\$W	+30.93
\$F	+26.87
\$G	+33.06
\$YG	+3.99
\$B	+84.73
\$EN	-1.09

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
+ 7	+ 0.9	+ 42	+ 78	I + 0.91	+ 21	+ 27	+ 0.54	+ 0.20	-0.006
Act. BW	Adj. WW	Adj. YW	Act. SC	ADG	Act. % IMF	Act. REA	Act. RibFat	Act. RmpFat	
78	547	933	37.00	2.41	2.58	8.30	0.17	0.14	

Lot 27 **MLL SPECIAL FOCUS 3631**
DOB: 09/06/13 Bull 623038680 Tattoo: 3631

Sire: MYTTY IN FOCUS
 B P F Special Focus 504
 B P F Black Cash 341

Dam: MLL 1647
 Meads Blossom 10

Sire EPD: CED + 17; BW -1.2; WN + 54; YR + 96; Milk + 29
 Sire \$Values: \$W +57.40; \$F +48.17; \$G +21.89; \$B +105.42

\$W	
\$F	
\$G	
\$YG	
\$B	
\$EN	

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
Act. BW	Adj. WW	Adj. YW	Act. SC	ADG	Act. % IMF	Act. REA	Act. RibFat	Act. RmpFat	
65	424	710	37.00	1.79	2.49	9.90	0.12	0.18	

Registration pending dam data

Lot
28

MLL CONTRAST 3633
DOB: 09/10/13 Bull 623038682 Tattoo: 3633

Sire: Conneally Danny Boy
Conneally Contrast
Doris of Conanga 669

\$W
\$F
\$G
\$YG
\$B
\$EN

Dam: MLL
MLL 6005 NEW DESIGN 9577
Sire EPD: CED + 11; BW -1.0; WN + 41; YR + 80; Milk + 18
Sire \$Values: \$W +31.91; \$F +30.14; \$G +25.98; \$B +89.45

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
Act. BW	Adj. WW	Adj. YW	Act. SC	ADG	Act. % IMF	Act. REA	Act. RibFat	Act. RmpFat	
68	519	889	42.00	2.31	3.04	8.80	0.16	0.17	

Registration pending dam data

Lot
32

MLL 5050 C3035
DOB: 10/22/13 Bull 623038695 Tattoo: C3035

Sire: G A R New Design 5050
RRR 1540 5050 2048 846 552
RRR 2048 846 552 Univ 3298

\$W
\$F
\$G
\$YG
\$B
\$EN

Dam: MLL COMMERCIAL COW
Sire EPD: CED + 4; BW + 2.8; WN + 50; YR + 92; Milk + 26
Sire \$Values: \$W +40.13; \$F +47.74; \$G +52.71; \$B +109.90

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
Act. BW	Adj. WW	Adj. YW	Act. SC	ADG	Act. % IMF	Act. REA	Act. RibFat	Act. RmpFat	
75	482	804	34.00	2.01	3.05	7.70	0.16	0.09	

Lot
29

MLL 3642
DOB: 10/03/13 Bull 623038683 Tattoo: 3642

Sire:

\$W
\$F
\$G
\$YG
\$B
\$EN

Dam: LK12 TON
MLL LK12 TON 1628
MLL MONTANA 7541

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
Act. BW	Adj. WW	Adj. YW	Act. SC	ADG	Act. % IMF	Act. REA	Act. RibFat	Act. RmpFat	
62	461	768	35.00	1.92	2.40	8.90	0.16	0.16	

Registration pending sire data

Lot
33

MLL TOTAL C3661
DOB: 10/25/13 Bull 623038699 Tattoo: C3661

Sire: TC Total 410
J-C Total 0922
J-C Faye 0257
G A R Retail Product

\$W
\$F
\$G
\$YG
\$B
\$EN

Dam: MLL RETAIL PRODUCT
Sire EPD: CED + 11; BW -0.8; WN + 43; YR + 78; Milk + 16
Sire \$Values: \$W +25.92; \$F +28.74; \$G +41.09; \$B +77.14

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
Act. BW	Adj. WW	Adj. YW	Act. SC	ADG	Act. % IMF	Act. REA	Act. RibFat	Act. RmpFat	
78	572	935	38.00	2.27	2.36	10.30	0.17	0.16	

CALVING EASE PROSPECT

Lot
30

MLL 203U 3647
DOB: 10/18/13 Bull 623038686 Tattoo: 3647

Sire: E&B 1680 Precision 1023
RAB 1023 Precision 203U
RAB MS IN Focus 902S

\$W
\$F
\$G
\$YG
\$B
\$EN

Dam: Mll Merger 7529
Sire EPD: CED + 13; BW -0.4; WN + 41; YR + 80; Milk + 22
Sire \$Values: \$W +43.65; \$F +30.53; \$G +38.55; \$B +116.32

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
Act. BW	Adj. WW	Adj. YW	Act. SC	ADG	Act. % IMF	Act. REA	Act. RibFat	Act. RmpFat	
70	475	782	36.00	1.92	2.97	9.00	0.16	0.20	

Registration pending dam data

Lot
34

MLL FUTURE DIRECTION C3673
DOB: 10/27/13 Bull 623038700 Tattoo: C3673

Sire: B/R Future Direction 6171
J-C Future Direction 0952
J-C Julie 0586

\$W
\$F
\$G
\$YG
\$B
\$EN

Dam: MLL FAME C0525
MLL RETAIL PRODUCT C6534
Sire EPD: CED + 5; BW + 1.1; WN + 53; YR + 98; Milk + 21
Sire \$Values: \$W +39.46; \$F +56.13; \$G +27.44; \$B +102.88

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
Act. BW	Adj. WW	Adj. YW	Act. SC	ADG	Act. % IMF	Act. REA	Act. RibFat	Act. RmpFat	
75	532	818	36.00	1.79	2.57	10.50	0.16	0.13	

Lot
31

MLL E23 C3037
DOB: 11/05/13 Bull 623038697 Tattoo: C3037

Sire: Conneally Whitman
P S E23
P S Miss 758
ALC Big Eye D09N

\$W
\$F
\$G
\$YG
\$B
\$EN

Dam: MLL BIG EYE 9014
FALCON SEABOARD 314M
Sire EPD: CED + 6; BW + 0.7; WN + 44; YR + 75; Milk + 27
Sire \$Values: \$W +38.63; \$F +14.43; \$G +43.18; \$B +103.78

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
Act. BW	Adj. WW	Adj. YW	Act. SC	ADG	Act. % IMF	Act. REA	Act. RibFat	Act. RmpFat	
80	649	1,012	38.00	2.27	3.47	9.80	0.11	0.16	

Lot
35

MLL C3032
DOB: 03/15/13 Bull Tattoo: C3032

Sire: SIRE DATA UNKNOWN

\$W
\$F
\$G
\$YG
\$B
\$EN

Dam: G A R 1407 New Design 6005
MLL NEW DESIGN 0001
MLL LK15 C424

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
Act. BW	Adj. WW	Adj. YW	Act. SC	ADG	Act. % IMF	Act. REA	Act. RibFat	Act. RmpFat	
75									

Lot
36

MLL C3677
DOB: 11/14/13 Bull Tattoo: C3677

Sire: SIRE DATA PENDING

RAB-GAR Future Design 4518T
Dam: MLL 4518T 1642
L K 49 Lisa

\$W
\$F
\$G
\$YG
\$B
\$EN

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
Act. BW	Adj. WW	Adj. YW	Act. SC	ADG	Act. % IMF	Act. REA	Act. RibFat	Act. RmpFat	
70									

registration pending sire data



Houston and Brenna at RA Brown Sale October 2013

Lot
69

MLL WAVE C4004

DOB: 01/27/14Bull623032171Tattoo: C4004

Mc Kenzie Land & Livestock

Sire: Gardens Highmark

Sire: Gardens Wave

Sire: Green Garden Lady 6255 S2

Sire: SF PREDESTINED 821

Dam: MLL 821 C2032

Dam: MLL 8561

Sire EPD: CED + 12; BW + 0.4; WN + 37; YR + 62; Milk + 18

Sire \$Values: \$W +61.60; \$F +22.66; \$G +55.88; \$B +120.65

\$W

\$F

\$G

\$YG

\$B

\$EN

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
70	605	1,077	35.00	2.95	3.41	12.90	0.23	0.32	

CALVING EASE PROSPECT

HD50K Percentile Rank

CED	BW	WW	ADG	YW	RFI	DMI	CEM	Milk	CW	Marb	RE	Fat	Tend	YH	SC	Doc	MW	MH	Color

Lot
74

MLL PALMA C4232

DOB: 02/15/14BullTattoo: C4232

Mc Kenzie Land & Livestock

Sire:

Dam: DAM DATA UNKNOWN

\$W

\$F

\$G

\$YG

\$B

\$EN

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
Act. BW	Adj. WW	Adj. YW	Act. SC	ADG	Act. % IMF	Act. REA	Act. RibFat	Act. RmpFat	
			40.00		3.53	12.20	0.14	0.25	

HD50K Percentile Rank

CED	BW	WW	ADG	YW	RFI	DMI	CEM	Milk	CW	Marb	RE	Fat	Tend	YH	SC	Doc	MW	MH	Color

Lot
70

MLL

DOB: 02/11/14Bull623034454Tattoo: C4008

Mc Kenzie Land & Livestock

J-C SS Objective 0852

Sire: PS LOOKOUT 1253

Sire: J-C Beverly 0882

Sire: P S E23

Dam: MLL E23 C2026

Dam: MLL RETAIL PRODUCT

Sire EPD: CED + 9; BW + 0.7; WN + 52; YR + 93; Milk + 20

Sire \$Values: \$W +41.40; \$F +46.20; \$G +39.17; \$B +86.41

\$W

\$F

\$G

\$YG

\$B

\$EN

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
75	598	1,152	33.00	3.46	2.85	13.10	0.16	0.20	

EPDs enhanced by 50Kgenomic test.

HD50K Percentile Rank

CED	BW	WW	ADG	YW	RFI	DMI	CEM	Milk	CW	Marb	RE	Fat	Tend	YH	SC	Doc	MW	MH	Color
75	62	81		63	47	26	89	75	74	73	78	16	44	57	15	85	31	10	

Lot
75

MLL PALMA C4259

DOB: 02/15/14BullTattoo: C4259

Mc Kenzie Land & Livestock

Sire:

Dam: DAM DATA UNKNOWN

\$W

\$F

\$G

\$YG

\$B

\$EN

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
Act. BW	Adj. WW	Adj. YW	Act. SC	ADG	Act. % IMF	Act. REA	Act. RibFat	Act. RmpFat	
			34.00		2.96	13.30	0.12	0.23	

HD50K Percentile Rank

CED	BW	WW	ADG	YW	RFI	DMI	CEM	Milk	CW	Marb	RE	Fat	Tend	YH	SC	Doc	MW	MH	Color

Lot
72

MLL PALMA C4250

DOB: 02/15/14BullTattoo: C4250

Mc Kenzie Land & Livestock

Sire: SIRE DATA UNKNOWN

Dam: DAM DATA UNKNOWN

\$W

\$F

\$G

\$YG

\$B

\$EN

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
Act. BW	Adj. WW	Adj. YW	Act. SC	ADG	Act. % IMF	Act. REA	Act. RibFat	Act. RmpFat	
			39.00		3.44	13.60	0.18	0.29	

HD50K Percentile Rank

CED	BW	WW	ADG	YW	RFI	DMI	CEM	Milk	CW	Marb	RE	Fat	Tend	YH	SC	Doc	MW	MH	Color

Lot
76

MLL PALMA C4211

DOB: 02/15/14BullTattoo: C4211

Mc Kenzie Land & Livestock

Sire: SIRE DATA UNKNOWN

Dam: DAM DATA UNKNOWN

\$W

\$F

\$G

\$YG

\$B

\$EN

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
Act. BW	Adj. WW	Adj. YW	Act. SC	ADG	Act. % IMF	Act. REA	Act. RibFat	Act. RmpFat	
			37.00		3.73	9.60	0.11	0.27	

HD50K Percentile Rank

CED	BW	WW	ADG	YW	RFI	DMI	CEM	Milk	CW	Marb	RE	Fat	Tend	YH	SC	Doc	MW	MH	Color

Lot
73

MLL PALMA C4262

DOB: 02/15/14BullTattoo: C4262

Mc Kenzie Land & Livestock

Sire:

Dam: DAM DATA UNKNOWN

\$W

\$F

\$G

\$YG

\$B

\$EN

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
Act. BW	Adj. WW	Adj. YW	Act. SC	ADG	Act. % IMF	Act. REA	Act. RibFat	Act. RmpFat	
			34.00		3.42	12.30	0.14	0.25	

HD50K Percentile Rank

CED	BW	WW	ADG	YW	RFI	DMI	CEM	Milk	CW	Marb	RE	Fat	Tend	YH	SC	Doc	MW	MH	Color

Lot
77

MLL PALMA C4221

DOB: 02/15/14BullTattoo: C4221

Mc Kenzie Land & Livestock

Sire: SIRE DATA UNKNOWN

Dam: DAM DATA UNKNOWN

\$W

\$F

\$G

\$YG

\$B

\$EN

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
Act. BW	Adj. WW	Adj. YW	Act. SC	ADG	Act. % IMF	Act. REA	Act. RibFat	Act. RmpFat	
			36.00		3.15	11.90	0.12	0.20	

HD50K Percentile Rank

CED	BW	WW	ADG	YW	RFI	DMI	CEM	Milk	CW	Marb	RE	Fat	Tend	YH	SC	Doc	MW	MH	Color

Lot
85

MLL FREEDOM 4609
DOB: 03/23/14 Bull 18019235 Tattoo: 4609

Mc Kenzie Land & Livestock

Sire: R E B Freedom 1156
H A R B Freedom 1156-288
H A R B Jumboleen 0102
LK70 Montana

Dam: MS MLL Montana 6540
L K 12 LeAnn

\$W +47.00
\$F +31.15
\$G +18.45
\$YG -2.98
\$B +73.48
\$EN -0.33

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
-1	+1.9	+48	+81	+0.61	+25	+27	+0.34	-0.11	+0.017
Act. BW	Adj. WW	Adj. YW	Act. SC	ADG	Act. % IMF	Act. REA	Act. RibFat	Act. RmpFat	
70	589	1,103	34.00	3.21	3.23	10.00	0.14	0.27	

EPD enhanced by 50K genomic test

HD50K Percentile Rank

CED	BW	WW	ADG	YW	RFI	DMI	CEM	Milk	CW	Marb	RE	Fat	Tend	YH	SC	Doc	MW	MH	Color
99	93	53		67	54	20	68	81	82	79	96	48	69	19	42	31	76	71	

Lot
88

MLL 1540R 4651
DOB: 04/16/14 Bull 18019263 Tattoo: 4651

Mc Kenzie Land & Livestock

Sire: G A R New Design 5050
RRR 1540 5050 2048 846 552
RRR 2048 846 552 Univ 3298
LK 07 Fame

Dam: MLL FAME 9537
MS MLL Montana 6541

\$W +47.66
\$F +43.88
\$G +44.82
\$YG +10.96
\$B +99.31
\$EN +0.19

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
+2	+2.7	+53	+88	+1.66	+23	+23	+0.69	+0.66	-0.019
Act. BW	Adj. WW	Adj. YW	Act. SC	ADG	Act. % IMF	Act. REA	Act. RibFat	Act. RmpFat	
78	635		37.00		3.32	12.90	0.16	0.34	

EPD enhanced by 50K genomic test. Top %EPDs:\$W-15%, \$G-10%,\$B-25%

HD50K Percentile Rank

CED	BW	WW	ADG	YW	RFI	DMI	CEM	Milk	CW	Marb	RE	Fat	Tend	YH	SC	Doc	MW	MH	Color
82	66	51		52	35	7	69	74	41	34	17	12	50	20	8	26	72	33	

Lot
86

MLL E23 4627
DOB: 03/28/14 Bull 18019250 Tattoo: 4627

Mc Kenzie Land & Livestock

Sire: Connealy Whitman
P S E23
P S Miss 758
J-C Total 0922

Dam: MLL TOTAL 1540
MS MLL 535

\$W +28.59
\$F +24.73
\$G +35.22
\$YG +11.41
\$B +82.57
\$EN +1.60

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
+7	+0.7	+43	+79	+0.28	+18	+26	+0.40	+0.45	-0.057
Act. BW	Adj. WW	Adj. YW	Act. SC	ADG	Act. % IMF	Act. REA	Act. RibFat	Act. RmpFat	
68	549	1,053	35.00	3.15	3.23	11.60	0.09	0.18	

EPD enhanced by 50K genomic test

HD50K Percentile Rank

CED	BW	WW	ADG	YW	RFI	DMI	CEM	Milk	CW	Marb	RE	Fat	Tend	YH	SC	Doc	MW	MH	Color
76	56	58		54	76	43	58	89	61	63	51	2	45	67	67	46	13	8	

Lot
89

MLL FUTURE DIRECTION 4624
DOB: 04/04/14 Bull 18019247 Tattoo: 4624

Mc Kenzie Land & Livestock

Sire: B/R Future Direction 6171
J-C Future Direction 1110
J-C Faye 0837
RAB-GAR Objective 149U

Dam: MLL 149U 2581
MLL BAR OBJ 0547

\$W +35.45
\$F +35.74
\$G +42.75
\$YG +9.47
\$B +100.29
\$EN -10.88

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
+2	+3.5	+51	+89	+0.30	+25	+32	+0.67	+0.82	+0.001
Act. BW	Adj. WW	Adj. YW	Act. SC	ADG	Act. % IMF	Act. REA	Act. RibFat	Act. RmpFat	
75	548	1,062	32.00	3.21	3.71	11.90	0.18	0.24	

EPD enhanced by 50K genomic test. Top % EPDs:\$G-15%, \$B-25%

HD50K Percentile Rank

CED	BW	WW	ADG	YW	RFI	DMI	CEM	Milk	CW	Marb	RE	Fat	Tend	YH	SC	Doc	MW	MH	Color
63	69	39		43	38	58	59	52	29	25	25	22	95	8	84	89	22	42	

Lot
87

MLL FUTURE DESIGN 4608
DOB: 03/16/14 Bull 18064053 Tattoo: 4608

Mc Kenzie Land & Livestock

Sire: RAB-EGL Future Design
RAB-GAR Future Design 4518T
RAB-GAR MS Load UP - 4870N
M C M 308/042 X 037

Dam: MLL 308 1527
FALCON QUEEN SUSAN 309N

\$W +33.92
\$F +30.00
\$G +30.46
\$YG +9.03
\$B +71.15
\$EN -6.88

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
+3	+2.1	+47	+81	+0.20	+23	+19	+0.34	+0.42	-0.018
Act. BW	Adj. WW	Adj. YW	Act. SC	ADG	Act. % IMF	Act. REA	Act. RibFat	Act. RmpFat	
76	577	1,092	34.00	3.22	3.20	11.40	0.18	0.18	

EPD enhanced by 50K genomic test

HD50K Percentile Rank

CED	BW	WW	ADG	YW	RFI	DMI	CEM	Milk	CW	Marb	RE	Fat	Tend	YH	SC	Doc	MW	MH	Color
67	57	76		89	14	41	84	41	77	55	59	21	70	58	84	59	35	33	

Lot
90

MLL FUTURE DIRECTION 4540
DOB: 02/26/14 Bull 18019199 Tattoo: 4540

Mc Kenzie Land & Livestock

Sire: B/R Future Direction 6171
J-C Future Direction 1110
J-C Faye 0837
S S Objective T510 OT26

Dam: MLL OBJECTIVE 2504
MLL PREDESTINED 0522

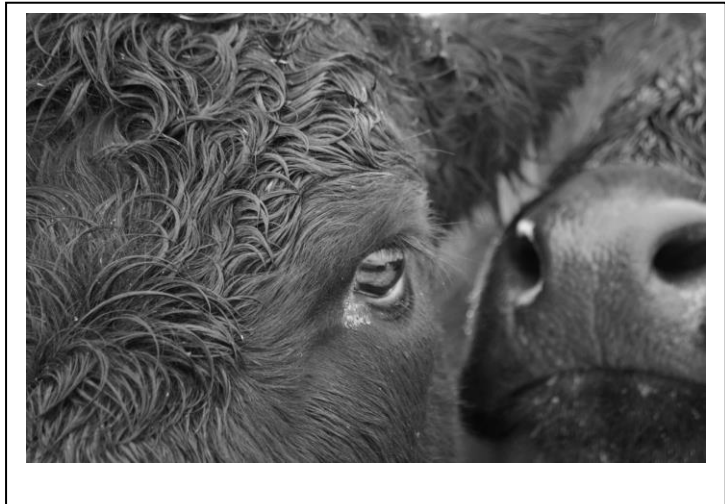
\$W +36.77
\$F +33.47
\$G +37.85
\$YG +11.21
\$B +71.40
\$EN +0.47

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
+3	+2.8	+47	+86	+0.61	+22	+17	+0.47	+0.49	-0.032
Act. BW	Adj. WW	Adj. YW	Act. SC	ADG	Act. % IMF	Act. REA	Act. RibFat	Act. RmpFat	
70	524	1,047	34.00	3.27	3.36	11.20	0.16	0.14	

EPD enhanced by 50K genomic test.

HD50K Percentile Rank

CED	BW	WW	ADG	YW	RFI	DMI	CEM	Milk	CW	Marb	RE	Fat	Tend	YH	SC	Doc	MW	MH	Color
57	61	54		57	42	30	75	70	73	30	55	8	53	18	69	56	49	31	



Lot
91

MLL TOTAL 4535
DOB: 02/18/14 Bull 18019194 Tattoo: 4535

Mc Kenzie Land & Livestock

Sire: TC Total 410
J-C Total 0922
J-C Faye 0257
M C M 308/042 X 037

Dam: MLL M308 1580
L K 42 Elba

\$W +28.75
\$F +26.78
\$G +29.44
\$YG +8.89
\$B +80.07
\$EN +18.59

CED	BW	WN	YR	SC	Milk	CW	Marb	RE	Fat
+8	-0.8	+41	+75	-0.44	+11	+24	+0.32	+0.49	-0.017
Act. BW	Adj. WW	Adj. YW	Act. SC	ADG	Act. % IMF	Act. REA	Act. RibFat	Act. RmpFat	
65	534	1,081	34.00	3.42	3.65	12.70	0.20	0.25	

CALVING EASE PROSPECT EPD enhanced by 50K genomic test. Top% EPDs:CED-20%,\$E-4%,

HD50K Percentile Rank

CED	BW	WW	ADG	YW	RFI	DMI	CEM	Milk	CW	Marb	RE	Fat	Tend	YH	SC	Doc	MW	MH	Color
80	41	81		83	13	22	50	96	55	65	55	13	55	52	91	44	33	28	

American Angus Association Genomic Enhanced EPDs

Genomic results are a way to enhance predictability of current selection tools, to achieve more accuracy on EPDs for younger animals, and to characterize genetics for traits where it's difficult to measure the animal's own performance for the trait, such as carcass traits in breeding stock or maternal traits in bulls. With the investment in genomic technology, this means that in addition to the pedigree, performance and progeny information that are used in the calculation and reporting of Angus EPDs, genomic test results have also been incorporated into the EPD.

Genomic-enhanced EPDs (GE-EPDs) are important because they make use of the results from the genomic, or DNA, test in addition to all other sources of information to provide added accuracy and reliability to the animal's EPD (Figure 1). In fact, depending on the trait, GE-EPDs on unproven animals have the same amount of accuracy as if they had already sired 8-20 calves.

Figure 1. Information contributing to the GE-EPD



Genomic-Enhanced EPDs (GE-EPD)

Genomic impact on the EPDs

In the American Angus Association genetic evaluations, the genomic results are incorporated into the EPDs as a correlated trait. Through AGI research and development, a genetic relationship is calculated between the values obtained from the genomic test results and the phenotypic data at the Association. Typically there are two measures used to report the relationship of a genomic test and phenotype, the genetic correlation and percent of additive genetic variance accounted for by the test. These two measures are related, and if one is

known, the other can be calculated. The genetic correlation is the square root of the percent additive genetic variance and, conversely, the percent additive genetic variance is the squared value of the genetic correlation.

For example, if the genetic correlation between the genomic result and the phenotypic measure is .60, then the genomic result explains 36% of the additive genetic variance for that particular trait. Simply stated, the more genetic variance a test explains, the more impact it will have on your EPDs and accuracies for that trait. Across all traits, the genetic correlations that have been estimated between the high density genomic tests purchased through AGI and the American Angus Association's phenotypic database effectively ranged from .60 to .70, except for milk and heifer pregnancy.

Importance of phenotypic performance data

Genomic results are used as indicator traits in the evaluations to compute EPDs. Genomics do not completely describe the variation in the traits of interest. Breeders sometimes ask if it is no longer necessary to collect weights and measures (e.g., weaning weights, scan data, carcass measures). On the contrary, phenotypic measures collected by Angus breeders continue to be an important part in further development of improved genomic panels and the refinement of this technology over time, not to mention an important component in EPD calculation.

Available traits that include genomic results

Breeders and users of Angus genetics are strongly encouraged to use EPDs as the genetic improvement tool of choice, because EPDs account for all the available information on an animal, such as individual measures, progeny data, pedigree and genomic results.

Several considerations regarding genomic results merit special mention. The multi-trait genetic evaluation for mature weight and height includes the genomic prediction for only mature weight, because there is a high correlation between the genomic breeding values for mature weight and height. Likewise, the calving ease evaluation that includes calving score and birth weight phenotypes incorporates genomic results for calving ease direct only. The residual average daily gain (RADG) values provided in the weekly genetic evaluation include the genomic indicator for dry matter intake (DMI) rather than the genomic test result for residual feed intake (RFI).

Percent Ranks provided with genomic purchase

Percent ranks (1-100) are provided by the American Angus Association to assist in establishing direction of interest for each trait, as illustrated in Table 1. If you are making selection decisions for traits that have an EPD provided by the Association, then the EPDs should be considered the selection tool of choice. The EPD and accuracy account for all sources of information available on the animal of interest (e.g., pedigree, own record, weights/measures, genomic results). Using EPDs and genomic percent ranks separately leads to double counting information and will lessen selection efficiency. For the percent ranks, a lower value indicates a more favorable ranking for the trait.

The genomic percent rank format, ranging from 1% to 100% in integer increments, is similar to that used in EPD percentile rankings. For example, a smaller numeric percent ranking for birth weight and carcass fat indicates an expectation of lighter calves and leaner carcasses.

Table 1. Establishing direction of percent ranks

	Percent Rank 'Favorable'
Calving Ease Direct (more unassisted)	1%
Calving Ease Maternal	1%
Birth Weight (lighter)	1%
Weaning Weight	1%
Yearling Weight	1%
Milk (more maternal milk in daughter calves)	1%
Carcass Marbling	1%
Carcass Rib (larger)	1%
Carcass Fat (leaner)	1%
Carcass Weight (heavier)	1%
Dry Matter Intake (eat less)	1%
RFI (lower feed intake than predicted)	1%
Tenderness (more tender)	1%
Docility (more docile)	1%
Yearling height (more hip height)	1%
Scrotal (larger size)	1%
Mature weight (larger cow wt)	1%
Mature height (more cow height)	1%
Heifer Pregnancy	1%

Conclusion

Genomic results are a way to enhance the current selection tools, to achieve more accuracy on predictions for younger animals, and to characterize genetics for traits where it's difficult to measure the phenotype. To learn more about available genomic tests and place an order, go to <http://www.angus.org/AGI/default.aspx>.