

**Are you getting the most out of your bulls?
Identify most likely sires — and those most likely to succeed.**



How to Get Started with a Commercial Ranch Genetic Evaluation



BENEFITS OF A COMMERCIAL RANCH GENETIC EVALUATION.

About the IGENITY® Profile

Using the power of DNA, IGENITY provides cattle producers with a comprehensive genetic profile of individual animals. The easy-to-use IGENITY profile includes analyses for economically important traits, such as:

- Carcass composition, including:
 - Yield grade
 - Quality grade
 - Tenderness
 - Ribeye area
 - Fat thickness
 - Hot carcass weight
- Maternal milk yield
- Coat color
- Horned/polled (breed specific)
- Parentage in multisire situations
- BVD-PI
- And more

Armed with the inside information provided by an IGENITY profile, cow/calf producers and feedyard managers can make more confident and better-informed decisions concerning:

- Selections
- Management
- Procurement
- Marketing

IGENITY also helps you make these key decisions earlier in every step of the production process — and throughout an animal's lifetime.

About the Commercial Ranch Genetic Evaluation

Using the IGENITY profile to identify sires makes it possible — and practical — to calculate in-herd Expected Progeny Differences (EPDs) in multisire situations. The IGENITY Commercial Ranch Genetic Evaluation allows you to:

- Identify your superior and inferior bulls
- Run several sires in your pastures to improve your reproductive rate and grazing management
- Monitor your herd's genetic progress
- Separate your herd bull battery into breeding groups to make the most of their genetic assets
- Evaluate whether each bull is breeding to his potential

STEPS TO A SUCCESSFUL COMMERCIAL RANCH GENETIC EVALUATION.

Within-herd EPD calculations are a practical, powerful and reliable tool for all ranches. To receive the greatest benefits, define the goals you hope to achieve — and the EPDs you desire to calculate. Some of the most economically important traits include:

- Calving ease
- Weaning weight
- Yearling weight
- Carcass traits/grid value
- Heifer fertility
- Cow longevity

For more information on these traits and other indicators included in an IGENITY Sire Report, refer to the sample report on Pages 4 and 5.

Once your goals are established, follow these simple steps to begin calculating within-herd EPDs — and achieving those goals faster with an IGENITY profile:



1. Call 1-877-IGENITY or visit www.igenity.com to order IGENITY sample collection devices **at least 90 days before the breeding season**. At that time, you also will receive a free handbook that will guide you through the steps to successfully use the program.
2. Collect samples from bulls and send them to IGENITY for genotyping and sorting into breeding groups **45 days prior to turnout**. This can enhance the number of sire/calf matches — especially if the sires are closely related.
3. Manage bulls and cows for optimal results.
 - Keep bulls in the same pastures throughout the breeding season.
 - Attempt to run cows in the same groups throughout the breeding season and through branding or weaning.

- Maintain cows in the same groups throughout the breeding season and through branding or weaning.
4. Collect calf DNA samples at branding, preconditioning or weaning, and send samples to IGENITY. IGENITY will profile each calf and identify the most likely sire.
 5. Collect weaning, feedyard, carcass, heifer pregnancy or any other data for evaluation, using the IGENITY Genetic Evaluation Input Form (see Pages 6 and 7). Send the data to IGENITY, using the recommended format.
 6. Sort or remove bulls according to your goals, the IGENITY Commercial Ranch Genetic Evaluation Sire Report (see Pages 4 and 5) and the IGENITY profiles.

If you have any questions at any time, contact IGENITY at 1-877-IGENITY (1-877-443-6489).

WITHIN-HERD EPDS — INSIDE INFORMATION FOR A COMPETITIVE EDGE.

The IGENITY Sire Report helps producers make more confident decisions about herd sires. This report cross-references all information gathered from sires and their progeny, including:

Bull Identification Information

- SIRE ID:**
The visual IDs the sires are wearing.
- REGISTRATION NUMBER:**
Breed Association registration number (optional).
- SAMPLE COLLECTOR NUMBER:**
ID on DNA collector cross-referenced with animal ID.
- BREED:**
Breed or breeds of the sire (optional).
- # PROG:**
Number of calves in the analysis.
- ACC:**
Accuracy. The amount of information involved in the EPD calculation. The higher the number, the more data and less error in the EPD.



Sire Report

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ABC Ranch
1400 HWY 212 N.
Hiram, OK 78005

Date: 11-14-06

Number: USA00001-13002

Sire ID	Registration Number	Sample Collector Number	Breed	EPD	Calving Ease	Birth Wt	Wean Wt	Year Wt	Gain	Heifer Preg	Heifer Rebreed	Marb	Qual. Grade	Fat	REA	HCW	YG
127N	200780276	231047892567092	AN	EPD	+9	+0.3	+23	+56	+0.4	-2.3	-5.6	+1.50	+0.60	-0.05	+0.04	-4.5	0.00
				# Prog.	20	20	19	16	16	8	6	6	6	6	6	6	6
				ACC	0.34	0.54	0.47	0.58	0.54	0.34	0.28	0.34	.32	0.38	.44	0.42	0.43
310L	198077445	231047892567907	AN	EPD	+10	-0.5	+43	+87	+1.1	+0.6	+1.2	-0.56	-0.42	-0.35	1.40	+2.5	-0.92
				# Prog.	18	18	18	15	15	9	9	7	7	7	7	7	7
				ACC	0.34	0.54	0.47	0.58	0.54	0.4	0.38	0.4	.38	0.43	.44	0.44	0.47
004M	207843217	231047892568903	AN	EPD	-1	+2.8	+34	+67	+0.8	-2.9	+2.6	+0.80	+0.47	+0.45	+0.04	+4.1	+0.98
				# Prog.	5	5	5	5	5	2	1	2	2	2	2	2	2
				ACC	0.26	0.28	0.25	0.36	0.37	0.19	0.16	0.2	.18	0.23	0.25	0.26	0.23

Calving and Mature Size Indicators

- CALVING EASE:**
How easily a bull's calves will be born. The higher the bull's number the more unassisted calves he should sire.
- BIRTH WT:**
This is a predictor that ranks bulls for the weight of their calves at birth. It is associated with calving difficulties and mature animal size.

Maternal Indicators

- HEIFER PREG:**
The heifer or daughter pregnancy EPD ranks bulls on the daughter's ability to breed and calve at two years.
- HEIFER REBREED:**
The heifer rebreed EPD is the likelihood a bull's daughter will be in the herd at 3 years of age.

Carcass Indicators

- MARB:**
The marbling EPD predicts differences for carcass marbling score as expressed in marbling score units.
- QUAL. GRADE:**
A quality grade EPD compares progeny based on a composite evaluation of factors that affect palatability of meat (tenderness, juiciness and flavor).
- FAT:**
Also known as backfat; uses the inches of fat over the 12th rib on progeny carcasses.

Growth Indicators

- WEAN WT:**
Generated from weights taken around weaning time. Bulls with higher wean weight EPDs have the potential of siring heavier weaning calves. If you sell your calves at weaning this might be one of the most important traits.
- YEAR WT:**
The weight taken at approximately 1 year of age. This can be a good way to rank bulls if you are retaining ownership or keeping replacement heifers.
- GAIN:**
This EPD ranks bulls for the potential of their calves to gain weight after weaning.

- REA:**
Rib-eye area EPD uses square inches to predict differences in progeny carcass muscle between the 12th and 13th ribs.
- HCW:**
Hot carcass weight EPD is expressed in pounds and ranks the bulls for the prediction of their progeny's carcass weights.
- YG:**
Yield grade EPD predicts lean meat yield of progeny carcasses as expressed in grade units.

HOW TO COLLECT DNA SAMPLES

Tissue is the best source of DNA for the IGENITY profile. A unique tool makes it convenient to collect a tissue sample and attach an ear tag for visual identification in one simple action.

How to use the system

- ✓ Slide one male part onto the pin of the pliers as far as it will go.
- ✓ Insert the sample collector into the opening under the retention clip.
- ✓ You're now ready to collect a sample.
- ✓ Position the ear of the animal between the two tag parts of the loaded pliers.
- ✓ Squeeze the pliers quickly and firmly.
- ✓ Detach the sample container.
- ✓ Loaded sample container is ready to be mailed to IGENITY with completed identification/order form for analysis.



Sample Collection Tool

Easy to operate. Punch plug through tissue tag to collect a DNA sample automatically.

Sample Collection Tag

Equipment Needed

- DNA collection ear tags
- DNA collection ear tag applicator
- Extra pins for DNA collection ear tag applicator
- Animal restraint
- Envelopes and postage for sample mailing or storage containers
- Pencil and paper, or ID scanner to record animal ID and sample ID

To order your IGENITY Collection Kit or for more information, call 1-877-IGENITY or visit www.igenity.com.



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