



# **IGENITY<sup>®</sup> BEEF** HANDBOOK

The Path of Confidence



## WELCOME TO IGENITY

Since its introduction in 2003, the revolutionary Igenity® DNA testing portfolio has powered confident decisions in cow-calf production. Igenity profiles provide a tool to rank cattle on traits that impact productivity, helping commercial producers select replacement heifers based on genetic merit. Igenity ranks cattle using simple 1–10 scores for key traits.

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# Getting Started

## **BEEF GENOMICS EMPOWER YOUR FUTURE**

Select, manage, and market cattle with more confidence. Evaluate maternal, performance, and carcass traits in one step. Focus time, feed, and resources on young breeding stock of verified merit.

- Invest in heifers that improve stayability and reproduction.
- Raise cows tailored to your production and grazing goals.
- Confidently select for grids, value-added marketing programs, and retained ownership.

## **LEVERAGE CROSSBREEDING PLUS DNA SELECTION**

Igenity® is designed for crossbred and straightbred cattle of eight key breeds. This unique design helps you use heterosis plus DNA scores to make faster progress on your goals.

The U.S. Meat Animal Research Center has shown that lifetime production in weaning weights increased about 36 percent due to heterosis in British-cross cows. Longevity increased 16 percent.

Add in Igenity and you can put targeted selection pressure on traits your heifers will pass on to their offspring. By combining Igenity and crossbreeding, you get the benefits of both.

## **MAXIMIZE POTENTIAL, GENERATION AFTER GENERATION**

A study by the Red Angus Association profiled 91 Red Angus calves with Igenity and followed them through harvest. The top 25 head scored 2.4 Igenity points higher for ADG and marbling than the bottom 25 head. The top calves netted \$50 per head more at harvest.

Improving a 250-head cow herd's Igenity weaning weight scores by one-point would increase calf-crop production by 1,750 pounds annually.

Fertility traits are considered lowly heritable, but even modest gains make an impact on your bottom line. A one-point increase in Igenity stayability scores would reduce your cow replacement rate by 48 heifers needed to maintain a 250-cow herd over six years.

Holding back a heifer is a risk of \$2,000 per head in costs and lost opportunity. A reduction of 48 replacement heifers would save around \$96,000. Plus, it may take years to see if you retained the best. With Igenity, you can more confidently select the heifers that will protect your investment and maximize potential in each generation.

## **COMMERCIAL CATTLE PRODUCTS**

### **Igenity Beef Profile/Crossbred and Straightbred Heifers**

Get 16 maternal, performance, and carcass traits plus parentage — ideal for maternal line improvement (and bulls without EPDs).

- Maternal: Birth weight, calving ease direct, calving ease maternal, stayability, heifer pregnancy, docility, and milk
- Performance: Residual feed intake, average daily gain, weaning weight, and yearling weight
- Carcass: Tenderness, marbling, ribeye area, fat thickness, and hot carcass weight
- SeekSire™ parentage

# Igenity Beef Results Key

## HOW TO INTERPRET YOUR IGENITY BEEF RESULTS

Igenity® profiles of replacement heifers and non-registered bulls help you evaluate their genetic potential for maternal, performance, and carcass traits. This makes it easy to review and focus on those making the biggest impact.

Igenity reports on 16 traits to help you select, manage, and market your cattle. Using Igenity profiles can help you know more about the genetic potential of young breeding stock before you have made significant investments in their development.

## MATERNAL TRAITS DRIVE PRODUCTION

### Maternal

Birth weight, calving ease direct, calving ease maternal, stayability, heifer pregnancy, docility, and milk

Calving difficulties, cows that don't breed back, heifers with poor conception, cattle with poor dispositions, and cows that milk too much, or not enough, all hurt your bottom line. Evaluating maternal traits in your breeding stock helps you develop a cow-herd that will be more productive for years to come.

## PERFORMANCE TRAITS DRIVE EFFICIENCY

### Performance

Residual feed intake, average daily gain, weaning weight, and yearling weight

Heifers and cows that don't require extra feed to maintain body condition are more efficient cows. By selecting females with lower RFI and higher ADG, you will improve efficiency of maintenance and gain in your herd. Selection pressure on these traits can help improve feed efficiency in future calf crops, too. For example, pens of feeder calves can be grouped with other animals of similar potential, and be fed or marketed based on that potential. This leads to more uniform and efficient gain in the finishing phase.

## CARCASS TRAITS DRIVE VALUE

### Carcass

Tenderness, marbling, ribeye area, fat thickness, and hot carcass weight

Predicting carcass merit is important whether you are raising feeder calves for sale at weaning, retaining calves to finish, and/or selling on quality grids. Igenity allows you to select breeding stock that produce high-quality carcasses among their progeny. Plus, sorting high-quality cattle from lower-potential cattle helps you manage and market each group more appropriately.

# How to Use Your Scores

Igenity Genetic Effects Table							
Maternal Traits							
Igenity Scores	Birth Weight	Calving Ease Direct	Calving Ease Maternal	Docility	Heifer Pregnancy Rate	Milk	Stayability
	(lbs.)	(%)	(%)	(%)	(lbs.)	(lbs.)	(%)
10	11.8	13.9	20.6	22.7	10.1	32.7	17.9
9	10.5	12.3	18.3	19.8	9.0	29.0	15.9
8	9.2	10.8	16.0	17.4	7.8	25.4	13.9
7	7.8	9.2	13.8	15.0	6.7	21.8	11.9
6	6.5	7.7	11.5	12.7	5.6	18.1	9.9
5	5.2	6.2	9.2	10.3	4.5	14.5	7.9
4	3.9	4.6	6.9	7.9	3.4	10.9	6.0
3	2.6	3.1	4.6	5.4	2.2	7.3	4.0
2	1.3	1.5	2.3	2.9	1.1	3.6	2.0
1	0	0	0	0	0	0	0

Igenity Genetic Effects Table				
Performance Traits				
Igenity Scores	Average Daily Gain	Residual Feed Intake	Weaning Weight	Yearling Weight
	(lbs.)	(lbs.)	(lbs.)	(lbs.)
10	0.14	2.1	35.7	56.8
9	0.12	1.8	31.8	50.5
8	0.11	1.6	27.8	44.2
7	0.09	1.4	23.8	37.8
6	0.08	1.1	19.9	31.5
5	0.06	0.9	15.9	25.2
4	0.05	0.7	11.9	18.9
3	0.03	0.5	7.9	12.6
2	0.02	0.2	4.0	6.3
1	0	0	0	0

Igenity Genetic Effects Table					
Carcass Traits					
Igenity Scores	Hot Carcass Weight	Fat Thickness	Ribeye Area	Tenderness	USDA Marbling Score
	(lbs.)	(in.)	(sq. in.)	(lbs. WBSF)	(marb. units)
10	60.9	0.097	1.09	-1.2	73
9	54.1	0.086	0.97	-1.0	65
8	47.4	0.075	0.85	-1.0	57
7	40.6	0.065	0.72	-0.8	49
6	33.8	0.054	0.61	-0.6	41
5	27.1	0.043	0.48	-0.6	33
4	20.3	0.032	0.36	-0.4	24
3	13.5	0.022	0.24	-0.2	16
2	6.8	0.011	0.12	-0.1	8
1	0	0	0	0	0

## UNDERSTANDING 1-10 IGENITY SCORING

This chart allows you to cross reference the 1–10 Igenity® scores for traits with their corresponding Molecular Breeding Values (MBV) or expected effects. This MBV is the prediction of how future progeny of an animal are expected to perform compared to the progeny of other profiled animals. Higher scores are not necessarily better — they just mean the animal has more genetic potential for that trait.

### COMPARING SCORES BETWEEN PROFILED ANIMALS

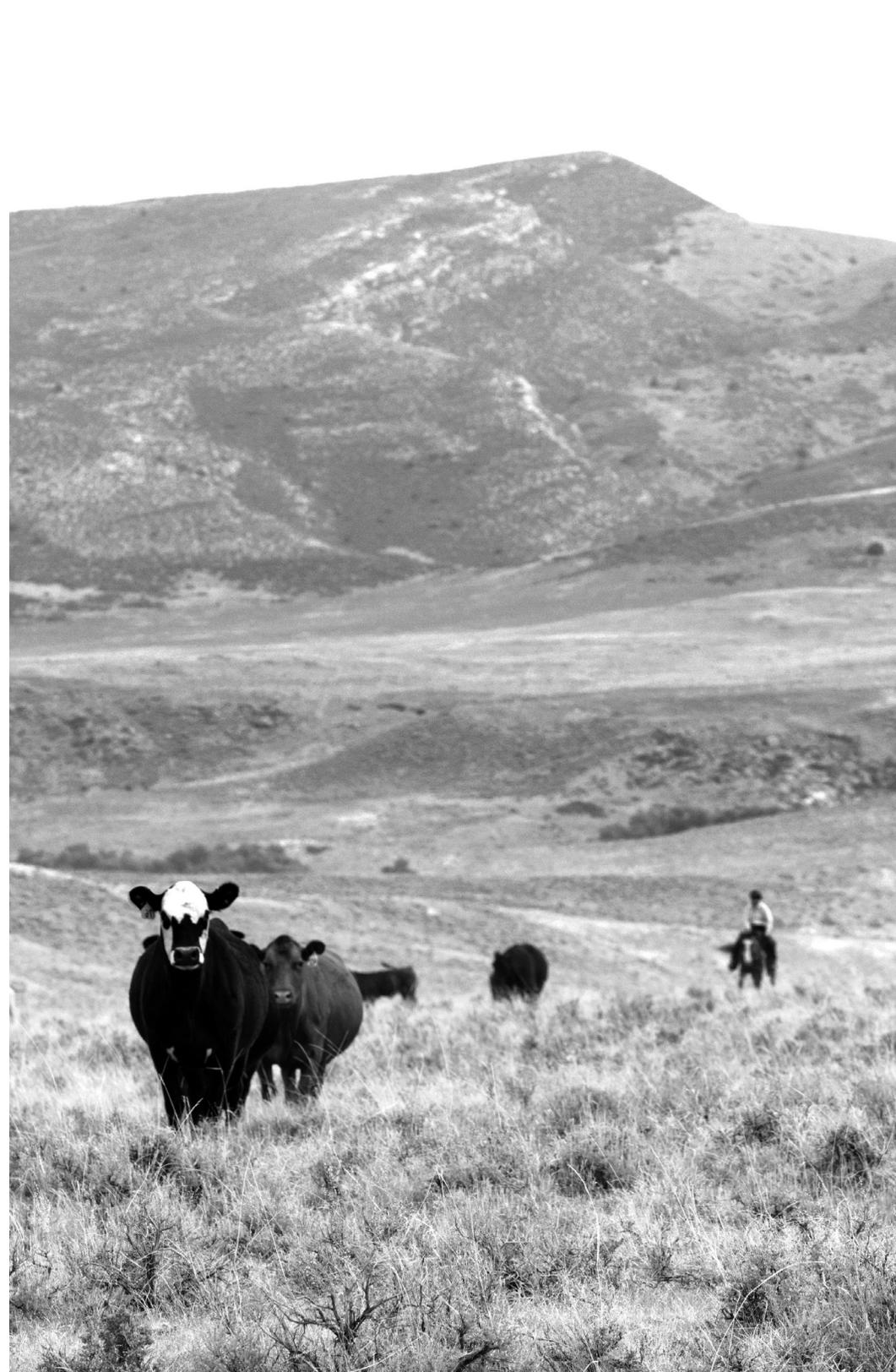
The examples below show you how to equate Igenity® scores to variations in MBV effects from the genetic table.

Heifer Pregnancy Rate (HPR)	Igenity Score	Genetic Effect	Description
Animal A	8	7.8%	Animal A will produce daughters with a 5.6% higher probability of conceiving during a normal breeding season compared to daughters of Animal B.
Animal B	3	2.2%	
		5.6%	

Stayability (STAY)	Igenity Score	Genetic Effect	Description
Animal A	8	13.9%	Daughters of Animal A have a 9.9% greater probability of staying in the herd until six years of age than daughters of Animal B.
Animal B	3	4.0%	
		9.9%	

Average Daily Gain (ADG)	Igenity Score	Genetic Effect	Description
Animal A	8	0.11 lbs.	Animal A is expected to produce progeny that will gain 0.08 pounds more per day than progeny of Animal B, and therefore weigh 12 pounds more after 150 days on feed.
Animal B	3	0.03 lbs.	
		0.08 lbs. per day	

Residual Feed Intake (RFI)	Igenity Score	Genetic Effect	Description
Animal A	8	1.6 lbs.	Progeny of Animal B are predicted to consume 1.1 pounds less feed per day than progeny of Animal A to achieve the same daily gain.
Animal B	3	0.5 lbs.	
		1.1 lbs.	



# Definitions of Traits Reported

## MATERNAL TRAITS

**Birth weight (BW)** — Variation in birth weight a heifer or bull will pass along to its offspring. A higher score indicates greater genetic potential for heavier birth weight.

**Calving ease direct (CED)** — Percentage of unassisted births, indicating greater probability a calf will be born unassisted out of a first-calf heifer. Genetic factors such as birth weight and shape of the calf are included in CED. A higher value is greater calving ease.

**Calving ease maternal (CEM)** — The probability a first-calf heifer will calve unassisted. CEM includes all genetic factors that impact a heifer's ability to calve unassisted, such as pelvic area and her genetic contribution to birth weight. A higher value is greater calving ease.

**Stayability (STAY)** — The chance a heifer will remain in the herd as a productive cow until at least six years of age. A higher value is desired.

**Heifer pregnancy rate (HPR)** — A heifer's potential to conceive during breeding season, relative to other heifers. A higher value is desired.

**Docility (DOC)** — The animal's genetic potential to be calm or have calm offspring. Higher scores indicate a higher probability of progeny with acceptable disposition.

**Milk (M)** — Expressed as pounds of calf weaning weight affected by the milk production of a calf's dam. This is not a prediction of actual pounds of milk produced.

## PERFORMANCE TRAITS

**Residual feed intake (RFI)** — This is an indicator of feed efficiency. It is the difference in animals' daily consumption of feed to achieve the same level of daily gain. Lower RFI indicates greater feed efficiency.

**Average daily gain (ADG)** — Based on pounds of gain per day. The Igenity score for ADG identifies an animal's genetic potential for post-weaning growth.

**Weaning weight (WW)** — Pounds at age of 205 days.

**Yearling weight (YW)** — Pounds at age of 365 days.

## CARCASS TRAITS

**Tenderness (TEND)** — Animals' genetic potential for carcass tenderness as measured by the Warner-Bratzler Shear Force test. A higher score indicates greater tenderness.

**USDA marbling (MARB)** — Marbling score indicates the degree of marbling in the rib eye at the twelfth rib expressed in USDA marbling units.

**Ribeye area (REA)** — Estimates muscling in a beef carcass and is measured in square inches of the ribeye muscle at the twelfth rib.

**Fat thickness (FAT)** — Scored as depth of fat in inches over the ribeye muscle at the twelfth rib. Higher fat thickness scores equate to lower lean yield.

**Hot carcass weight (HCW)** — Hot carcass weight is the hot or unchilled weight of the carcass after slaughter and the removal of the head, hide, intestinal tract, and internal organs.

## OTHER REPORTS

**Sample rejected (SR)** — The quality of DNA testing starts with the quality of the sample. Common reasons for sample rejection are: lack of animal ID on the sample, improper or blank information on an order form, insufficient hair follicle samples, mold, dirt, foreign or fecal matter, evidence of tampering, or sending in decomposing animal tissue.

**No result (NR)** — Some samples appear normal but don't produce acceptable results due to contaminants that are undetectable to the eye. To test the animal, a new sample will need to be submitted.

**Results are not complete (X)** — At times, NEOGEN® will send out partial results, such as providing BVD PI results before Igenity® profiling is completed. The traits scored as an X indicate the analysis for that test has not yet been completed.

# Envigor Results Key

## WHAT IS ENVIGOR™

Envigor reports an estimate of heterosis in crossbred cattle. Reported on a scale of 1–10, the results can be used as an indication of hybrid vigor. A higher score indicates increased heterosis.

## BENEFITS OF HYBRID VIGOR

- Increased fertility
- Lower cull rates
- More pounds weaned per cow exposed
- Greater feed efficiency

## LOWLY VS HIGHLY HERITABLE TRAITS

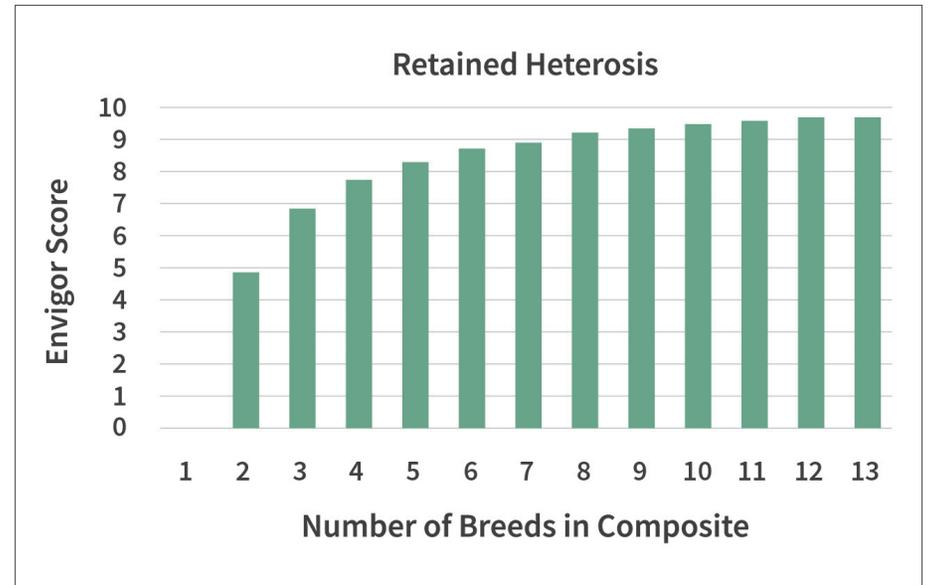
General Rule of Thumb: Some traits are strongly influenced by genetics while others are more impacted by management and environment			
	Structural/Carcass Traits	Performance Traits	Maternal/Fertility Traits
Heritability	High	Moderate	Low
Traits	Ribeye area, marbling, and fat thickness	Weaning weight, yearling weight, average daily gain, and residual feed intake	Birth weight, calving ease, stayability, heifer pregnancy, and milk
Igenity Beef	Strong influence	Moderate influence	Minimal influence
Envigor	Minimal advantage	Moderate advantage	Strong advantage

## IMPACT ON FERTILITY/STAYABILITY

- A 1 score increase leads to a 4% increase in the probability of a heifer breeding as a yearling.
- A 1 score increase leads to a 4% increase in the probability of a cow staying in the herd for six years.
- A 1 score increase leads to a 2% decrease in the probability of an animal having a health event.

## LAW OF DIMINISHING RETURNS

The advantage of increased heterosis diminishes as more breeds are added. Unlike Igenity® Beef Scores, Envigor results are not about achieving a “10”.



## HOW TO USE THE SCORES

- Even producers with a well-managed crossbreeding scheme will have a wide variety of heterosis in a single calf crop.
- Envigor scores can be used to select replacements that are benefiting the most from a crossbreeding program.

# Putting Your Results to Work

## HOW TO USE THE RESULTS

Using the reports can help in many ways. For example, you can use the scores to sort cattle and manage them for breeding or production, or the data can help you pinpoint strengths and weaknesses in your cow herd and identify traits you want to improve. Long term, you can use your Igenity® reports to track improvements across multiple traits, increase uniformity in your cattle, and measure your progress.

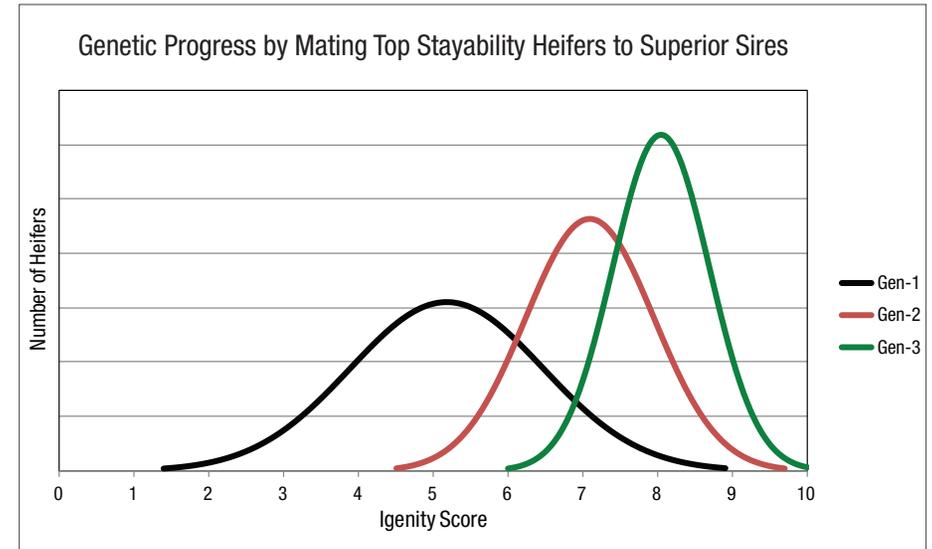
To learn more about how to apply your results, visit [igenitybeefdashboard.com](http://igenitybeefdashboard.com) or talk to your NEOGEN® representative.

## IGENITY MATERNAL INDEX (IMI)

The Igenity Maternal index places emphasis on fertility, reproduction and weaning weight. This index is designed for producers wanting to keep their own replacement females and market calves at weaning.

- Improved stayability and cow maintenance trends.
- Modest increases in milk.
- Still favorable impacts on gain and carcass traits.

**Custom index options:** If the IMI does not reflect your goals, you can create your own index at [igenitybeefdashboard.com](http://igenitybeefdashboard.com).



This chart shows how using Igenity profiling to identify the top heifers for stayability and mating them to bulls in the top 5% of their respective breed can improve cow longevity in just two generations. The black line indicates the initial distribution of Igenity stayability scores in the starting generation of cows in the herd. The red and green lines show the Igenity stayability scores for the second and third generations of females that result from mating bulls in the top 5% of their respective breed to heifers in the top third for stayability. Shifting the scores to the right indicates more cows will stay productive in the herd for a longer period of time. You can make similar advancements in other traits you wish to improve in your herd by profiling young heifers and using the information to make more informed selection and breeding decisions.

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**Detailed Report**

Animal Information				Decision Indexes				Maternal						Growth				Carcass					
Animal ID Number	Sample Barcode Number	Gender (M/F)	Breed	Igenity Total Cow Index	Igenity Maternal Index	Igenity Production Index	Emiger Score	BW	CEM	HPR	MILK	STAY	DOC	WW	ADG	YW	RFI	MARB	REA	FAT	TEND	HCW	
7906	NE0038115	F	AN	6.79	6.75	6.30	7	3	8	7	8	8	7	6	6	7	7	8	6	6	5	6	5
3027	NE0038095	M	AN	6.68	7.50	6.55	2	3	9	9	7	7	6	7	7	7	7	7	7	5	6	5	6
7901	NE0038120	F	AN	6.27	7.20	7.35	1	3	10	8	8	6	7	7	7	9	8	7	8	5	9	7	6
2001	NE0038110	F	AN	6.23	7.15	7.30	1	4	8	5	8	7	8	7	8	9	9	6	8	6	7	7	7
7913	NE0038119	F	AN	6.34	7.05	6.30	1	4	7	7	8	7	6	8	9	10	10	7	6	6	6	3	8
6008	NE0038114	F	AN	6.09	6.10	5.30	6	5	6	6	6	4	5	8	9	7	8	6	5	6	5	4	8
3023	NE0038092	M	AN	6.06	6.25	5.80	5	4	6	7	8	7	6	7	6	5	6	8	7	5	8	7	5
3001	NE0038108	F	AN	6.06	6.60	6.35	3	3	7	5	7	7	7	7	7	7	7	5	6	4	8	5	6
3010	NE0038111	F	AN	6.06	6.95	5.95	1	5	8	7	8	7	6	6	8	7	8	7	7	5	6	4	7
3024	NE0038091	M	AN	6.04	6.40	6.40	4	3	8	8	8	4	7	7	5	6	6	7	5	4	5	10	6
3040	NE0038094	M	AN	6.02	6.90	6.45	1	4	7	7	7	8	6	4	8	8	8	6	7	7	5	6	7
6023	NE0038112	F	AN	5.96	6.30	6.75	4	1	10	7	5	7	7	7	5	7	6	7	7	4	8	9	5
40	NE0038098	F	AN	5.95	6.65	6.05	2	3	8	6	7	7	7	7	7	7	7	6	6	7	5	6	6
64	NE0038109	F	AN	5.83	6.50	6.30	2	2	8	5	8	6	8	8	6	4	5	9	8	8	4	8	7
7902	NE0038118	F	AN	5.83	6.50	6.45	2	4	8	7	7	5	7	7	7	6	7	8	8	5	7	7	6
7914	NE0038116	F	AN	5.79	6.10	6.30	4	5	6	7	7	4	5	6	8	8	8	7	8	3	9	5	6
802	NE0038107	F	AN	5.78	6.45	6.30	2	4	5	5	8	6	7	7	7	8	7	5	5	5	8	6	6
8001	NE0038102	F	AN	5.66	6.30	6.45	2	3	8	6	8	6	7	6	7	7	7	7	5	5	10	6	6
3035	NE0038104	F	AN	5.64	5.75	5.80	5	3	7	7	6	7	5	6	5	6	6	7	7	3	5	7	5
2002	NE0038096	M	AN	5.63	6.45	6.80	1	4	7	7	6	5	8	8	6	7	7	6	7	4	6	5	6
3007	NE0038103	F	AN	5.53	6.15	6.40	2	1	9	5	6	7	6	6	5	7	6	4	7	4	6	6	4
4007	NE0038099	F	AN	5.46	6.25	5.30	1	2	8	7	8	9	5	6	5	7	6	8	6	5	8	4	4
4000	NE0038105	F	AN	5.44	6.05	6.50	2	4	6	5	6	5	8	8	7	7	8	7	4	8	7	7	7

**Detailed report:** All traits in the test order are scored from 1–10, including the selection indexes — 10 is more of the trait and 1 is less of the trait. Traits are grouped by maternal, performance, and carcass categories. The report ranks cattle in the test order based on the IMI.

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**Fast Report**

Animal Information			Decision Indexes				Selection
Gender (M/F)	Breed	Animal ID Number	Igenity Total Cow Index Star Quartile Ranking	Igenity Total Cow Index	Igenity Maternal Index	Igenity Production Index	Selection
F	AN	7906	*****	6.79	6.75	6.10	
M	AN	3027	*****	6.68	7.50	6.55	
F	AN	7901	*****	6.27	7.20	7.15	
F	AN	2001	*****	6.23	7.15	7.30	
F	AN	7913	****	6.34	7.05	6.10	
F	AN	6008	*****	6.09	6.10	5.30	
M	AN	3023	*****	6.06	6.25	5.80	
F	AN	3001	*****	6.06	6.60	6.25	
F	AN	3010	***	6.06	6.95	5.95	
M	AN	3024	***	6.04	6.40	6.40	
M	AN	3040	***	6.02	6.90	6.45	
F	AN	6023	***	5.96	6.30	6.75	
F	AN	40	***	5.95	6.65	6.05	
F	AN	64	***	5.83	6.50	6.20	
F	AN	7902	***	5.83	6.50	6.45	

- Fast Report**
- Use this report for quick, simple sorting of top-performing and bottom-performing replacement heifers.
  - Final selection decisions should be made to fit an operation's goals, objectives, and replacement rate.
  - Have Questions? Your territory manager would be happy to help.
- Star Quartiles**
- This is a ranking of animals within the order into four groups, based on their Index scores.
  - The system is designed for producers who need a fast, simple sorting method.
- Indexes for Selection Decisions**
- Use multi-trait selection pressure.
  - For selection, management, marketing.
- Online Tools to Custom Sort**
- Visit [Igenitybeefdashboard.com](#)
  - Build your own indexes.
  - Sort and compare cattle.
- Need to Reorder Test Kits?**
- Visit [order.igenity.com](#)

**Fast report:** The fast report is designed for producers who want to use a fast, simple DNA score when retaining heifers during a gate-cut visual inspection. It is based on IMI scores. Cattle are sorted into four-star, three-star, two-star, and single-star groupings. The cattle could be sorted into replacement or feeder groups using the star system.

**NEOGEN** Cecile Dubois

**Test Records: 7209**

Tools + Gold/Silver Scores

Animal ID	Sample Barcode	Order ID	Profile	Sex	Breed	BVD-PI	Active Inactive	Igenity Production Index	OS BWT Score	OS CED Score	OS CEM Score	Doc Score	OS HPRG Score	OS Milk Score	GI
535 Marcee	NE007784921	101719	Multiple	M	GV	Negative	✓	7.2	4	7	4	4	4	8	6
208 Vanlek	NE007781741	101719	Multiple	M	GV	Negative	✓	6.95	4	7	7	8	8	8	8
7171 Marcee	NE007781751	101719	Multiple	M	GV	Negative	✓	6.85	5	5	6	8	8	7	
796 Marcee	NE007781761	101719	Multiple	M	GV	Negative	✓	6.85	5	7	5	7	8	6	
K205 Van Beek	NE007795001	101719	Multiple	M	GV	Negative	✓	6.75	4	8	7	7	7	7	7
85 Nick R	NE007794941	101719	Multiple	M	GV	Negative	✓	6.75	2	10	7	7	7	6	
V59	NE007794911	101719	Multiple	M	GV	Negative	✓	6.7	2	8	5	8	8	6	
V04	NE007794981	101719	Multiple	M	GV	Negative	✓	6.65	6	5	5	7	8	7	
93 Nick R	NE007781721	101719	Multiple	M	GV	Negative	✓	6.6	6	5	4	6	8	6	
<b>Order Average:</b>								6.6	4.3	6.5	5.5	6.7	7.6	6.5	

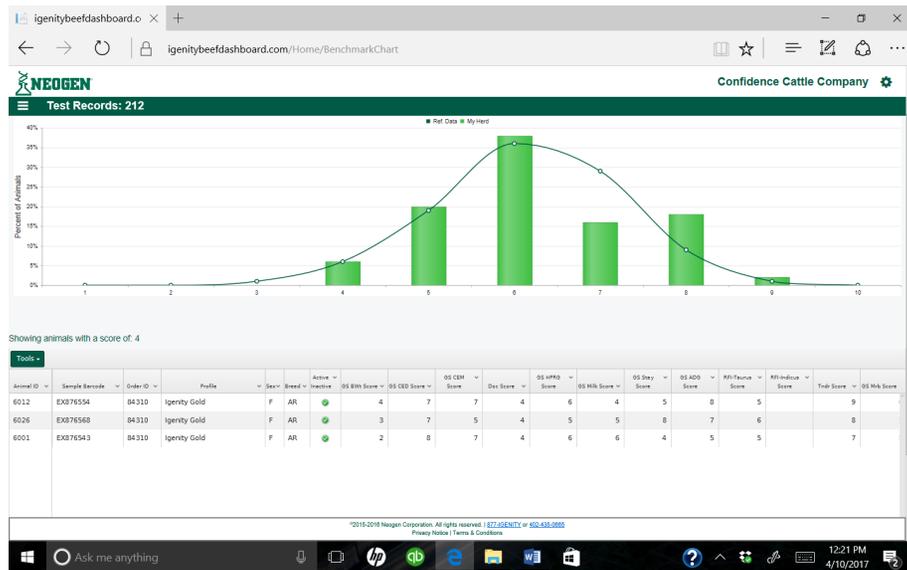
1 - 15 of 15 items

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**Igenity Beef Dashboard:** The beef dashboard is an online resource for benchmarking, custom sorting, and analysis.

See [Igenitybeefdashboard.com](#) or contact your territory manager.

# Igenity Beef Dashboard



Logging into your Igenity® Beef Dashboard account gives you access to DNA test results, details of DNA reports, and profiling tools, all created to enhance decision making.

If you wish to try the Igenity Beef Dashboard, a practice account is set up that you can access.

**Username:** Confidence@igenity.com

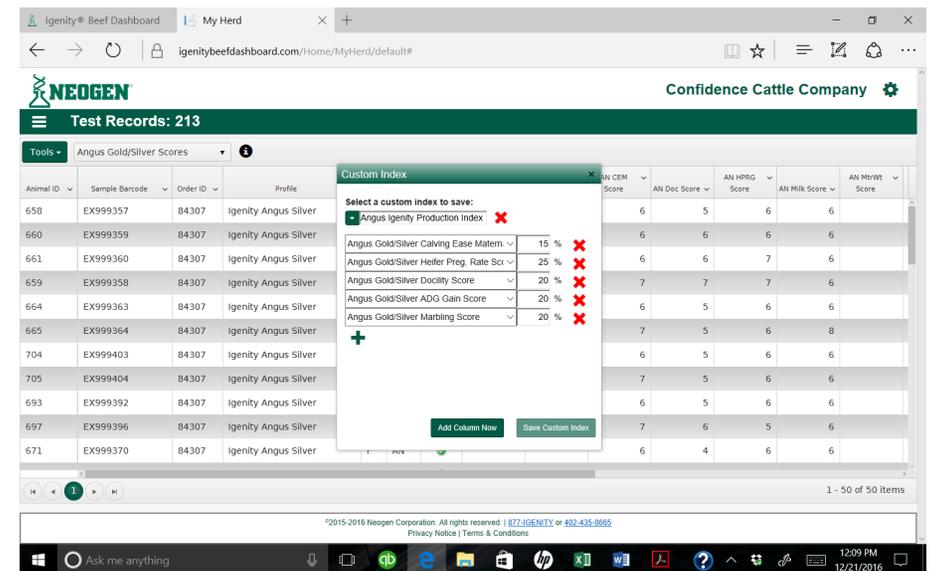
**Password:** confidence

**USE THE IGENITY BEEF DASHBOARD TO COMPARE, RANK, AND SELECT CATTLE**  
**The Igenity Beef Dashboard will help you evaluate the DNA of your commercial breeding stock.**

You can call up herd reports and assess their maternal, performance, and carcass traits. Use the site to sort cattle, compare them to herd mates, and benchmark against other herds in the database.

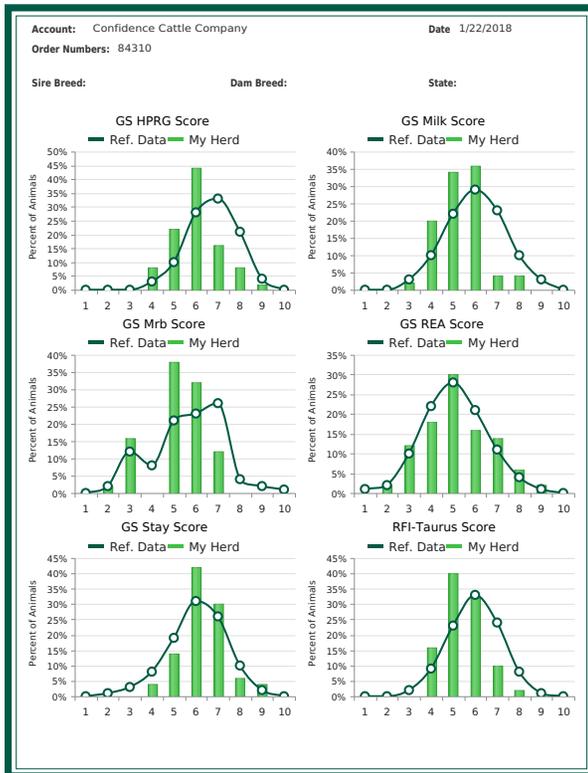
By using the site tools, you can easily see patterns, strengths, and areas needing improvement.

Igenity dashboard index sorts and ranks cattle using multiple traits in a simultaneous fashion. In a few moments, you have a prioritized ranking of calves for selection and management decisions.



## Custom Indexing

We explain how the traits are used in the index, but not every ranch is the same. If you want a unique index for your management plan or region, you can create a new index in seconds and save it for your future use.



## Benchmarking

You can generate a report on your replacements. By comparing your cattle (green bars) to the Igenity® database (curved line) you can output a report on the cattle tests. Identify high potential cattle, pinpoint animals with undesired scores, assess areas to improve, and use that insight to buy bulls.

## Fine-tuning Your Analysis

Benchmarking tools allow you to compare your cattle to others in the database. You can filter results that you are comparing to by region, gender, breed composition, and other factors for precise analysis.



# SeekSire™ Parentage

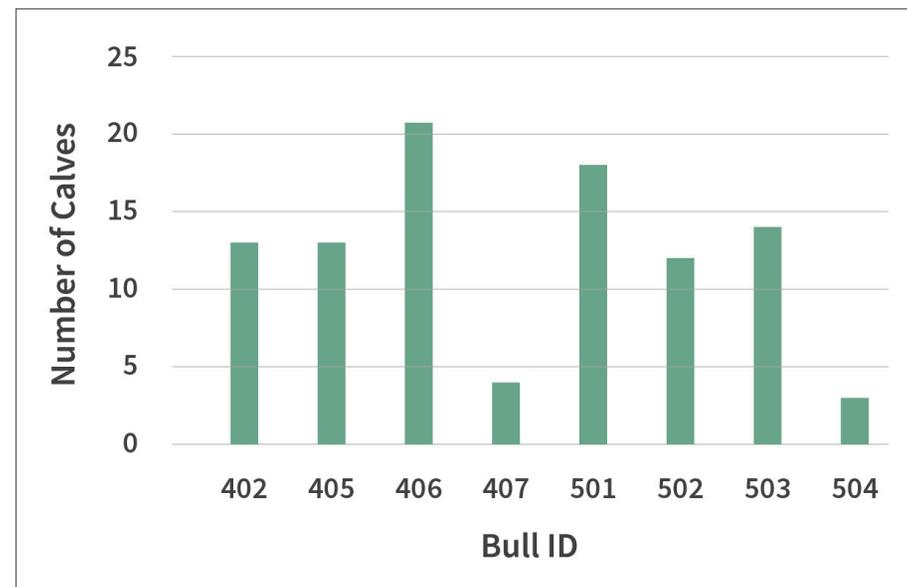
## HOW SIRE PARENTAGE INFORMATION COMPLEMENTS HEIFER PROFILING

DNA profiles can help you select replacement heifers. You can also use DNA testing to determine sire parentage. Following both practices helps you pick your best heifers, find your best bulls, and make faster progress on genetic improvement in your herd.

### Advantages of Parentage Verification

- Find the top and bottom bulls.
  - Identify bulls with most influence in your calf crop.
  - Confirm sires that caused calving problems.
  - Discover the sires of early born calves.
  - Identify the sires of any abnormal calves.
  - Retain ownership? Find the bulls siring the top and bottom carcasses.
- Know earlier which traits to emphasize when purchasing your next bulls.
- Match calves to their dams to track cow productivity.
- Best of all, compliments Igenity Beef at the time of order. Discover the sires of your best replacement heifers and most productive cows.

Each of these advantages can have a major impact on the bottom line. If you do have a problem bull, it may take an extra year to identify him without verifying the parentage of the current year's calf crop.



**Getting value:** In this real example of yearling bulls, No. 407 and No. 504 are under-performing compared to the group.



To get on the path to value, call 877.IGENITY or visit [IgentyBeef.com](http://IgentyBeef.com)

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