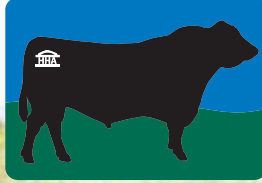# HARDHAT

ANGUS

ANNUAL BULL SALE

20 two year old bulls
9 yearling sires 14 - 19 months old

Lot 21

DKK21S75 - Sire: Sitz Stellar

Lot 3

DKKR83 - Sire: Rennylea Kodak K522

Lot 9

DKKR65 - Sire: SS Niagara

Lot 11

DKKR84 - Sire: Rennylea Kodak K522

Thursday 15th September 2022 - 1pm - **Harden Showground Cattle Shed**
Auction Sale Interfaced with Auctions**Plus**

Where cows that LAST breed bulls that LAST!

Brad Cavanagh | **M: 0428 638 384** | **E: bcavanagh1984@gmail.com**

Reference Sire - Hardhat Renown F143 N21

Lot 1

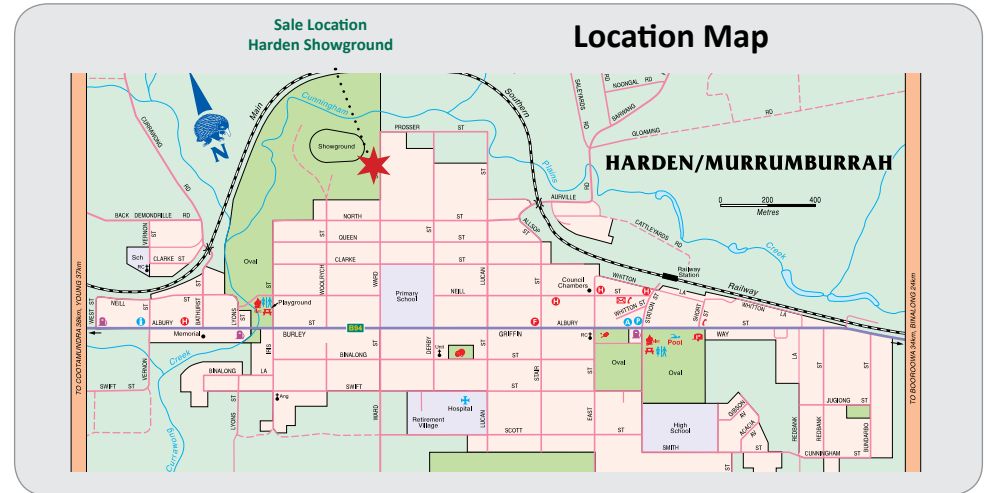Lot 2

Lot 4

Lot 12

HARDHAT

ANGUS

ANNUAL BULL SALE

20 two year old bulls
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Thursday 15th September 2022
1pm - Harden Showground Cattle Shed

Location Map

Sale Location
Harden Showground

HARDEN/MURRUMBURRAH

AuctionsPlus

Contact Information

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Email: bcavanagh1984@gmail.com

Selling Agents

strategic livestock marketing
Aaron Seaman's

Aaron Seaman's Strategic Livestock Marketing
Aaron Seaman 0488 915 315

Jim Hindmarsh & Co
Nick Harton 0418 571 711

Brad, Jess, Olive, Henry & Fleur Cavanagh

Malcolm and Alana Cavanagh

FOREWARD

Welcome to the 5th Hardhat Angus bull sale, which will be held on Thursday the 15th of September at the Harden Showground, Harden New South Wales.

Thank you for your interest in our genetics. We are extremely excited to offer 20 top of the drop two year old bulls and 9 elite yearling sires for your competition.

The sale draft has been grown out at our Harden property "Lynwood". We are very grateful to have been able to develop these bulls on grazing crop and improved pastures. The bulls will present in forward condition. We try to replicate the grass fed production systems of our area with very limited supplement. You can buy in confidence that the longevity of your bull has not been inhibited by overfeeding.

We are proud to offer you the male offspring produced from our elite cow herd. This herd has been carefully put together since our beginning in the year 2000.

Cows that last breed bulls that last!

The Hardhat Angus herd is based between Dubbo and Harden, New South Wales. We are committed to driving the functionality and low maintenance easy care nature of our herd. The seasonal variation over the past few years has placed a great environmental challenge on our cattle and our operation. We have seen severe drought followed by high rainfall years. Both extremes challenge the functionality of our cattle. Our breeding philosophy is based around combining the best cow making genetics we can find with high carcase merit sires. Our cows must thrive in a variable environment. These thriving females are the cattle our herd is focused on, moderate framed easy fleshing cows who have a structural conformation allowing them to stay productive to an old age. The selection pressure we place on the longevity of our females in turn results in male progeny who are athletic, robust and well prepared for a long working life.

Our 2022 bull draft offers some exciting genetics for your consideration. The bulls are catalogued in sire groups which gives you the opportunity to analyse how a sire line will add value to you herd in different areas.

Rennylea Kodak K522

The fourth calf crop of our resident herd sire Rennylea Kodak K522 will be one of the feature sire groups. Kodak has proven to be a great asset to the beef

industry as a whole. He has given us elite calving ease both directly and to his daughters. He provides well above breed average growth as well as breed leading fertility measures in both scrotal measures and days to calving. He provides highly positive rib fat which has been a great attribute over the past few years, where female fat stores have been under sustained pressure. He is a top 4% marbling bull giving him the ability to positively shift marbling averages across commercial herds where marbling premiums are beginning to become reality. As important as any of his qualities is his ability to improve foot claw set. Kodak in the flesh has an extremely long body and tremendous neck extension and shoulder set. His athletic movement reflects his great joint flexibility which is of high importance when trying to get an extended working life from your bull investment.

Kodak K522 died in August this year as an 8 year old bull. His semen and resulting progeny will be in limited supply into the future. We are extremely proud to have found Kodak, he will have a lasting impact on our herd. He now has over 1500 registered progeny and has been used over thousands of commercial heifers. We believe Kodak K522 is one of best Australian bred bulls of the past decade.

Brad visited Andrew Stewart at Stewart Select Angus in Indiana in 2016. In our opinion the Stewart Select cow herd was up there with the best in the US. At the time they had many Boyd New Day 454 and CA Bextor

SS Niagra

Jet SS X144 Dam of SS Niagara

daughters that were magnificent. SS Niagara is out of one of these magnificent New Day 454 cows, we had to use him! He was used as a cow making outcross sire. Two of his sons were used as yearlings over our mixed age spring calving group. Calves hitting the ground now are impressive. The two year old daughters of Niagara have calved easy this spring and look like females who will stay in our herd for many years.

SITZ STELLAR 726D

Sitz Stellar is a feature sire of 2 yearlings in this years sale. Stellar was used as a genuine muscle bull who gives great depth and width of rib shape. His progeny display great Angus breed character and we look forward to having his daughters in production. Stellar's early structural data out of the US is incredible. We now have two years worth of AI calves on the ground and embryos recently implanted. You can expect the Stellar calves to hit the ground with amazing vigour, they are standouts from birth!

Hardhat Mittagong E10

Hardhat Mclaren M125

We are pleased to offer three yearling sons of Hardhat McLaren E10 M125. McLaren M125 was the best son we bred out of our text book cow Hardhat Mittagong E10 pictured above. Many thanks to Stewie and Kirsty Edwards who owned M125 (Macca) for leasing him back to us for a breeding season. A bull with a mother as good as Hardhat Mittagong E10 is an asset to any breeding program.

The best thing about this excellent line up of sale bulls is we get to keep their sisters!

I look forward to seeing you on sale day.

Kind Regards, Brad Cavanagh - 0428 638 384

HARDHAT ANGUS GUARANTEE

Hardhat Angus places great pride in our bulls performing for their new owner.

If within 12 months from sale day your bull becomes infertile or breaks down **NOT** due to injury or disease. We will replace the bull with an appropriate replacement or give you a credit for the next Hardhat Angus bull sale. The credit amount will be less the salvage value of the bull.

We expect our bulls to last much longer than this guarantee period. Please contact Brad if you have any issues after this time. We will do our best to solve any problems. The traditional hand shake guarantee still has its place here.

INDEPENDENT STRUCTURAL ASSESSMENT

The structural conformation of our herd is a high priority. Jim Green of Beef Excel has been evaluating our herd for structure over the past few years. Liam Cardile has recently taken over these duties.

All of our bulls are structurally assessed at 400 day while our females are structurally assessed prior to calving at 22 months. The structural data is then submitted to Angus Breedplan to produce the Structural Trait Estimated Breeding Values. We have found this data to be very informing and accurate in analysing the genetic value of an animal's structure.

ANGUS SIRE BENCHMARKING PROGRAM (ASBP)

Hardhat Angus is a strong supporter of the Angus Sire Benchmarking Program. It has been a great tool to not only benchmark Angus genetics but also to incorporate cutting edge research projects on a trial population who are fully phenotyped and genotyped. We look forward to receiving the data on our bulls each time they are released.

Our bulls currently in the Angus Sire Benchmarking Program include;

- ✓ Hardhat GM Grass Range Y21 J518 (Cohort 6)
- ✓ Hardhat GM Agronomist Y21 J516 (Cohort 6)
- ✓ Rennylea Kodak K522 (Cohort 7)
- ✓ Hardhat GM Grass King Y21 K15 (Cohort 7)
- ✓ Hardhat RES Michelin J536 M56 (Cohort 8)
- ✓ Hardhat H708 Maimuru J51 M41 (Cohort 9 and 10)
- ✓ Hardhat K522 Nebraska F143 N43 (Cohort 10)
- ✓ Hardhat KOD PUNCH M5 P156 (Cohort 11)
- ✓ Hardhat K522 KODAK M33 Q110 (Cohort 12)
- ✓ Alpine Ronaldo R232 (Cohort 13)

Animal Health

7 in 1 Vaccinations- Our bulls receive many 7 in 1 vaccinations between birth and Sale. These include at 3 months, at weaning, at 400 days and the one in March 2022 before we develop bulls on grazing crops.

Vibriosis- The bulls have received 2 Vibrio vaccinations prior to the sale. They will be due for their annual booster in May each year.

Pestivirus- All bulls in the sale are either hair tested negative for persistently infected pestivirus. Bulls have also had two Pestigard vaccinations prior to the sale. An annual booster is due in May each year.

J BAS 6 – The Hardhat Angus herd is J BAS 6.

Please ensure your bulls stay up to date with their annual vaccination program. A 7 in 1 vaccination, as well as a Pestigard and Vibriovax. We normally give an annual booster prior to each spring joining season.

Pre Sale Vet Check

All bulls are crush side semen motility tested by Holbrook Vet Centre. Included in this pre sale inspection is a Physical reproductive examination (testicular palpation and measurement, penile inspection, temperament and structural soundness assessment).

Semen Interest

The purchaser of the bull owns 100% possession of the bull.

Hardhat Angus retains a 50% semen interest in all bulls within the Sale. This allows Hardhat Angus the right to have semen collected at our cost at a time and place suitable for the bull owner. If any semen is sold Hardhat Angus has the right to 50% of Semen proceeds.

UNDERSTANDING ANGUS BREEDPLAN EBVs

What is Angus BREEDPLAN?

Angus BREEDPLAN is the genetic evaluation program adopted by Angus Australia for Angus and Angus influenced beef cattle. Angus BREEDPLAN uses Best Linear Unbiased Prediction (BLUP) technology to produce Estimated Breeding Values (EBVs) of recorded cattle for a range of important production traits (e.g. weight, carcase, fertility).

Angus BREEDPLAN includes pedigree, performance and genomic information from the Angus Australia and New Zealand Angus Association databases to evaluate the genetics of animals across Australia and New Zealand.

Angus BREEDPLAN analyses are conducted by the Agricultural Business Research Institute (ABRI), using software developed by the Animal Genetics and Breeding Unit (AGBU), a joint institute of NSW Agriculture and the University of New England. Ongoing BREEDPLAN research and development is supported by Meat and Livestock Australia.

What is an EBV?

An animal's breeding value can be defined as its genetic merit for each trait. While it is not possible to determine an animal's true breeding value, it is possible to estimate it. These estimates of an animal's true breeding value are called EBVs (Estimated Breeding Values).

Using EBVs to Compare the Genetics of Two Animals

Angus BREEDPLAN EBVs can be used to estimate the expected difference in the genetics of two animals, with the expected difference equating to half the difference in the EBVs of the animals, all other things being equal (e.g. they are joined to the same animal/s).

For example, a bull with a 200 Day Growth EBV of +60 would be expected to produce progeny that are, on average, 10 kg heavier at 200 days of age than a bull with a 200 Day Growth EBV of +40 kg (i.e. 20 kg difference between the sire's EBVs, then halved as the sire only contributes half the genetics).

Or similarly, a bull with an IMF EBV of +3.0 would be expected to produce progeny with on average, 1% more intramuscular fat in a 400 kg carcase than a bull with a IMF EBV of +1.0 (i.e. 2% difference between the sire's EBVs, then halved as the sire only contributes half the genetics).

Using EBVs to Benchmark an Animal's Genetics with the Breed

EBVs can also be used to benchmark an animal's genetics relative to the genetics of other Angus or Angus infused animals in Australia and New Zealand.

To benchmark an animal's genetics relative to other Angus animals, an animal's EBV can be compared to:
- the breed average EBV
- the percentile table

The current breed average EBV and percentile table is provided in these explanatory notes.

Considering Accuracy

An accuracy value is published in association with each EBV, which is usually displayed as a percentage value immediately below the EBV.

The accuracy value provides an indication of the reliability of the EBV in estimating the animal's genetics (or true breeding value), and is an indication of the amount of information that has been used in the calculation of the EBV.

EBVs with accuracy values below 50% should be considered as preliminary or of low accuracy, 50- 74% as of medium accuracy, 75-90% of medium to high accuracy, and 90% or greater as high accuracy.

Description of Angus BREEDPLAN EBVs

EBVs are calculated for a range of traits within Angus BREEDPLAN, covering calving ease, growth, fertility, maternal performance, carcase merit, feed efficiency and structural soundness. A description of each EBV included in this sale catalogue is provided on the following pages.

1. **UPON ARRIVAL:**

   a) Ensure your new bulls socialises with a group of animals, (anything except other bulls) in the yards, when they arrive.
   b) Run the new bulls with a small group of empty females, (he has come from a different herd and may not have had exposure to some of the normal pathogens present in your herd – see further information below).
      i. **This MUST be done with the empty females, for a period of 2 to 4 weeks.** Ideally the bull can then be rested for 6-8 weeks prior to joining.
      ii. **Ideally give the cows prostaglandin every 2 weeks so they continue to cycle.**
   c) Ideally bulls should be insured for their first year as standard.

2. **PRE-JOINING:**

   a) We recommend a breeding soundness examination (BSE), including structural assessment, testicular palpation, service ability testing and semen testing (essential in single sire matings). This is mandatory for second joining and older bulls each year. It will improve the fertility performance of the herd, by removing infertile bulls from the joining group. If bulls are not service tested it is essential that you observe the bulls serve in the first week on joining.
      i. These bulls will be given a risk rating and mating potential which will influence joining bull teams.
   b) **Keep vaccinations up to date;** Vibrovax, Leptospirosis 7-in-1, Pestigard and an annual drench, 4-6 weeks prior to joining.

3. **JOINING** - new bulls have the highest risk of breakdown in the herd, this risk can be reduced by:

   a) **PROTECT a new bull by not over-joining, 30 females per virgin bull maximum.**
   b) **Recommended to multi-sire join.**
      i. Ideally mixing bulls of different age groups, experience levels and risk ratings.
   c) **It is recommended, IF single sire joining with a new bull, to rotate him with a proven bull for at least one cycle. Also, it is good practice to rotate proven bulls for the last cycle with all new bulls.**

"Most new bull fertility issues develop or are acquired during the joining period, rather than being pre-existing problems, this means that bull observation during the joining period is essential!

ONCE THE JOINING PROGRAM IS SET UP, MONITORING IS ESSENTIAL TO IDENTIFY ISSUES AS THEY DEVELOP.

Your new bulls need to be run in mobs that are easily monitored, keep them close to promote observation, check them 2 to 3 times a week for the first three weeks and then weekly thereafter. This involves looking for,
   1. The bull serving, (this has not been successful until the bull thrusts). If bulls are continually mounting without serving it is often a sign the bull has developed a penile infection and needs to be rested and replaced immediately. Sound bulls should serve every 1 to 2 mounts.
   2. Lameness.
   3. Evidence of penile or preputial swelling or inflammation.
   4. Signs of ill health, lethargy, etc.
   5. Estimate the number of females cycling, (for every 20 females, one cycles each day at the commencement of joining). After three weeks of joining, there should only be one cow cycling every three days in 20 females.

4. **POST-JOINING:**
   a. **Annual breeding soundness evaluation is a non-negotiable procedure.**
   b. Good management of bulls is a year-round procedure.
      i. Keep bulls in working body condition – they should be in body condition score 3/5 at the start of mating, which will involve removing weight following the joining period.
      ii. Manage bulls in groups of joining teams to establish stable social hierarchies and minimise bull fighting.

✓ Bulls need to be removed from the cows at the same time, to help create their bull mobs. This will limit the number of potential injuries by reducing the number of bull interactions.
✓ Bull paddock management is very important to minimise injury between joinings. The bulls need enough room to reduce fighting, restricted feed and water will increase interaction. Paddocks will require co-grazing with sheep, or crash-grazing by other mobs to manage feed quality and quantity on offer for the bulls.
✓ The target between joining is to restrict weight gain in older bulls to prevent breakdowns. Ideally young bulls have access to a higher level of nutrition as they continue to grow.
✓ Early pregnancy testing is essential for good female management and detection of surprises. The earlier the pregnancy testing is undertaken, the more likely the cause of the problem will be identified. This will not only give you early notice of the problem but also help in formulating a plan to help reduce the chance of the problem occurring again in the future.

PENILE INFECTIONS IN BULLS – "Balanoposthitis":

Penile infections are a common disease in young bulls during their first joining season in any new herd. Mitigating the risk of this disease as outlined above is essential to reduce the number of breakdowns and optimise bull cost per calf.

These infections are caused by a range of bacterial, viral, and other organisms ("pathogens"). The genital form of infectious bovine rhinotracheitis (IBR; herpes virus) is commonly implicated. The issue is that any given property has its own population of reproductive tract pathogens and if the new bulls make their first contact with these pathogens at the time of high workload (such as joining) they are at a high risk of developing a penile injury.

These injuries typically involve a reddened inflamed penis, developing to ulceration and pustules. Some bulls will stop serving due to pain (will continue to mount, but not serve), but other high libido bulls will continue to serve and create significant inflammation commonly leading to preputial tears, abscesses and prolapses. These are often perceived to be a "broken penis", which they are not and **IF treated promptly may regain normal function!**

Treatment involves prompt removal of the affected bull from the joining mob, sexual rest (typically for the remainder of the joining) and treatment with antibiotics and anti-inflammatories. Preputial prolapses require surgical replacement.

If undetected these injuries commonly cause a significant decrease in pregnancy rate and commonly result in permanent infertility in the bull. **Observation and intervention are essential!**

Prevention of this condition is best achieved as outlined above, by deliberate pre-exposure of new bulls to a small number of females (low workload) well before the joining so that they are exposed and can develop immunity to the herds' pathogens prior to the high workload of the joining period.

Positive fertility outcomes are a significant driver of profitability in beef breeding enterprises, but this requires informed and active management!

Dr. Shane P. Thomson. BVetBio. BVSc. MAnSc. | HVC Production & Breeding.

BIRTH

Calving Ease Direct	(%)	Genetic differences in the ability of a sire's calves to be born unassisted from 2 year old heifers.	Higher EBVs indicate fewer calving difficulties in 2 year old heifers.
Calving Ease Daughters	(%)	Genetic differences in the ability of a sire's daughters to calve unassisted at 2 years of age.	Higher EBVs indicate fewer calving difficulties in 2 year old heifers.
Gestation Length	days	Genetic differences between animals in the length of time from the date of conception to the birth of the calf.	Lower EBVs indicate shorter gestation length.
Birth Weight	kg	Genetic differences between animals in calf weight at birth.	Lower EBVs indicate lighter birth weight.

GROWTH

200 Day Growth	kg	Genetic differences between animals in live weight at 200 days of age due to genetics for growth.	Higher EBVs indicate heavier live weight.
400 Day Weight	kg	Genetic differences between animals in live weight at 400 days of age.	Higher EBVs indicate heavier live weight.
600 Day Weight	kg	Genetic differences between animals in live weight at 600 days of age.	Higher EBVs indicate heavier live weight.
Mature Cow Weight	kg	Genetic differences between animals in live weight of cows at 5 years of age.	Higher EBVs indicate heavier mature weight.
Milk	kg	Genetic differences between animals in live weight at 200 days of age due to the maternal contribution of its dam.	Higher EBVs indicate heavier live weight.

FERTILITY

Days to Calving	kg	Genetic differences between animals in the time from the start of the joining period (i.e. when the female is introduced to a bull) until subsequent calving.	Lower EBVs indicate shorter time to calving.
Scrotal Size	cm	Genetic differences between animals in scrotal circumference at 400 days of age.	Higher EBVs indicate larger scrotal circumference.

CARCASE

Carcase Weight	kg	Genetic differences between animals in hot standard carcase weight at 750 days of age.	Higher EBVs indicate heavier carcase weight.
Eye Muscle Area	cm²	Genetic differences between animals in eye muscle area at the 12/13th rib site in a 400 kg carcase.	Higher EBVs indicate larger eye muscle area.
Rib Fat	mm	Genetic differences between animals in fat depth at the 12/13th rib site in a 400 kg carcase.	Higher EBVs indicate more fat.
Rump Fat	mm	Genetic differences between animals in fat depth at the P8 rump site in a 400 kg carcase.	Higher EBVs indicate more fat.
Retail Beef Yield	%	Genetic differences between animals in boned out saleable meat from a 400 kg carcase.	Higher EBVs indicate higher yield.
Intramuscular Fat	%	Genetic differences between animals in intramuscular fat (marbling) at the 12/13th rib site in a 400 kg carcase.	Higher EBVs indicate more intramuscular fat.

FEED EFFICIENCY

Net Feed Intake (Post Weaning)	kg/day	Genetic differences between animals in feed intake at a standard weight and rate of weight gain when animals are in a growing phase.	Lower EBVs indicate more feed efficiency.
Net Feed Intake (Feedlot)	kg/day	Genetic differences between animals in feed intake at a standard weight and rate of weight gain when animals are in a feedlot finishing phase.	Lower EBVs indicate more feed efficiency.

TEMPERAMENT

Docility	%	Genetic differences between animals in temperament.	Higher EBVs indicate better temperament.

STRUCTURE

Front Feet Angle	%	Genetic differences between animals in desirable front feet angle (strength of pastern, depth of heel).	Higher EBVs indicate more desirable structure.
Front Feet Claw Set	%	Genetic differences between animals in desirable front feet claw set structure (shape and evenness of claw).	Higher EBVs indicate more desirable structure.
Rear Feet Angle	%	Genetic differences between animals in desirable rear feet angle (strength of pastern, depth of heel).	Higher EBVs indicate more desirable structure.
Rear Leg Hind View	%	Genetic differences between animals in desirable rear leg structure when viewed from behind.	Higher EBVs indicate more desirable structure.
Rear Leg Side View	%	Genetic differences between animals in desirable rear leg structure when viewed from the side.	Higher EBVs indicate more desirable structure.

SELECTION INDEXES

Angus Breeding Index	$	Genetic differences between animals in net profitability per cow joined in a typical commercial self replacing herd using Angus bulls. This selection index is not specific to a particular production system or market end-point, but identifies animals that will improve overall profitability in the majority of commercial grass and grain finishing beef production systems.	Higher selection index values indicate greater profitability.
Domestic Index	$	Genetic differences between animals in net profitability per cow joined in a commercial self replacing herd targeting the domestic supermarket trade.	Higher selection index values indicate greater profitability.
Heavy Grain Index	$	Genetic differences between animals in net profitability per cow joined in a commercial self replacing herd targeting pasture grown steers with a 200 day feedlot finishing period for the grain fed high quality, highly marbled markets.	Higher selection index values indicate greater profitability.
Heavy Grass Index	$	Genetic differences between animals in net profitability per cow joined in a commercial self replacing herd targeting pasture finished steers.	Higher selection index values indicate greater profitability.

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Annual Bull Sale   **Thursday 15th September 2022** - 1pm

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Harden Showground Cattle Shed

RECESSIVE GENETIC CONDITIONS

INFORMATION FOR BULL BUYERS

This is information for bull buyers about the recessive genetic conditions, Arthrogryposis Multiplex (AM), Hydrocephalus (NH), Contractural Arachnodactyly (CA) and Developmental Duplications (DD).

Putting undesirable Genetic Recessive Conditions in perspective

All animals, including humans, carry single copies (alleles) of undesirable or "broken" genes. In single copy form, these undesirable alleles usually cause no harm to the individual. But when animals carry 2 copies of certain undesirable or "broken" alleles it often results in bad consequences. Advances in genomics have facilitated the development of accurate diagnostic tests to enable the identification and management of numerous undesirable or "broken" genes. Angus Australia is proactive in providing its members and their clients with relevant tools and information to assist them in the management of known undesirable genes and our members are leading the industry in their use of this technology.

> **Key point: With today's DNA tools undesirable genetic conditions can be managed!**

What are AM, NH, CA and DD?

AM, NH, CA and DD are all recessive conditions caused by "broken" alleles within the DNA of individual animals. When a calf inherits 2 copies of the AM or NH alleles their development is so adversely affected that they will be still-born.

In other cases, such as CA and DD, calves carrying 2 copies of the broken allele may reach full-term. In such cases the animal may either appear relatively normal, or show physical symptoms that affect their health and/or performance.

> **Key point: The number of reported observations of AM, NH, CA and DD calves is very low and there is certainly no need for panic.**

How are the conditions inherited?

Research in the U.S. and Australia indicates that AM, NH, CA and DD are simply inherited recessive conditions. This means that a single gene (or pair of alleles) controls the condition. For this mode of inheritance two copies of the undesirable allele need to be present before the condition is seen; in which case you may get an abnormal calf. A more common example of a trait with a simple recessive pattern of inheritance is black and red coat colour.

Animals with only one copy of the undesirable allele (and one copy of the normal form of the allele) appear normal and are known as "carriers".

What happens when carriers are mated to other animals?

Carriers, will on average, pass the undesirable allele to a random half (50 %) of their progeny.

If animals tested free of the undesirable gene are mated to carrier animals the condition will not be expressed at all. All calves will appear normal, but approximately half (50%) could be expected to be carriers.

> **Key point: For the condition to be expressed the undesirable gene needs to be present on both sides of the pedigree and both the sire and dam need to be a carrier.**

How is the genetic status of animals reported?

DNA-based diagnostic tests have been developed which can be used to determine whether an individual animal i either a carrier or free of the alleles resulting in AM, NH, CA or DD.

Angus Australia uses advanced software to calculate the probability of (untested) animals to being carriers of AM NH, CA or DD. The software uses the test results of any relatives in the calculations and the probabilities may change as new results for additional animals become available.

The genetic status of animals is being reported using five categories:

AMF	Tested AM free
AMFU	Based on pedigree AM free – Animal has not been tested
AM__%	__% probability the animal is an AM carrier
AMC	Tested AM-Carrier
AMA	AM-Affected

For NH, CA and DD, simply replace AM in the above table with NH, CA or DD.

Registration certificates and the Angus Australia web-database display these codes. This information is displayed on the animal details page and can be accessed by conducting an "Animal Search" from the Angus Australia website or looking up individual animals listed in a sale catalogue.

> **Key point: The genetic status of an animal is subject to change and will be re- analysed and adjusted each week as DNA test results of relatives are received.**

Implications for Commercial Producers

Your decision on the importance of the genetic condition status of replacement bulls should depend on the genetics of your cow herd (which bulls you previously used) and whether some female progeny will be retained o sold as breeders.

Most Angus breeders are proactive and transparent in managing known genetic conditions, endeavouring to provide the best information available. The greatest risk to the commercial sector from undesirable genetic recessive conditions comes from unregistered bulls with unknown genetic background. The genetic condition testing that Angus Australia seedstock producers are investing in provides buyers of registered Angus bulls with unmatched quality assurance.

For further information contact Angus Australia's Breed Development and Innovation Manager at (02) 6773 4602

IMPORTANT NOTICES FOR PURCHASERS

~ SALE CATALOGUE DISCLAIMER ~

All reasonable care has been taken by the vendor to ensure that the information provided in this catalogue is correct at the time of publication. However, neither the vendor nor the selling agents make any other representations about the accuracy, reliability or completeness of any information provided in this catalogue and do not assume any responsibility for the use or interpretation of the information included in this catalogue. You are encouraged to seek independent verification of any information contained in this catalogue before relying on such information.

~ DNA PATERNITY VERIFICATION ~

It is a requirement of Angus Australia that all bulls used to sire calves for registration in the Angus Australia Herd Book Register, Red Angus Register or Angus Performance Register must have been DNA paternity verified if they are born in or after the 'Y' year (2003). Buyers intending to use bulls listed in this catalogue to produce calves to be registered in these registers should obtain DNA paternity verification on those bulls before they are used for breeding.

~ PRIVACY INFORMATION ~

In order for Angus Australia to process the transfer of a registered animal in this catalogue, the vendor will need to provide certain information to Angus Australia and the buyer consents to the collection and disclosure of that information by Angus Australia in certain circumstances. If the buyer does not wish for his or her information to be stored and disclosed by Angus Australia, the buyer must complete the form included below and forward it to Angus Australia. If the form is not completed, the buyer will be taken to have consented to the disclosure of such information.

BUYER'S OPTION TO OPT OUT OF DISCLOSING PERSONAL INFORMATION TO THE ANGUS AUSTRALIA

If you do not complete this form, you will be taken to have consented to Angus Australia using your name, address and phone number for the purposes of effecting a change of registration of the animal(s) that you have purchased, maintaining its databases and disclosing that information to its members on its website.

I, the buyer of animals with the following registration numbers …………………………………… …………………………………………………………………………….…………………… from member …………………………………………………… (name) do not consent to Angus Australia using my name, address and phone number for the purposes of effecting a change of registration of the following animal(s) that I have purchased, maintaining its databases and disclosing that information to its members on its website.

Signature: …………………………………

Date: ………………………………

Please forward this completed consent form to Angus Australia, Glen Innes Road, Locked Bag 11, Armidale NSW 2350. If you have any queries, please telephone 02 6772 3011 or e-mail office@angusaustralia.com.au.

EBV Quick Reference for Hardhat Angus 2022 Bull Sale

Animal Ident		Calving Ease				Growth					Fertility		Carcase						Feed	Temp.	Selection Indexes			
		CEDir	CEDtrs	GL	BWT	200	400	600	MCW	Milk	SS	DTC	CWT	EMA	RIB	P8	RBY	IMF	NFI-F	Doc	$A	$D	$GN	$GS
1	DKKR56	-2.1	-0.3	-1.9	+4.5	+44	+86	+112	+103	+16	+1.9	-2.9	+62	+5.2	-1.1	-1.1	+0.1	+3.9	+0.51	-	$169	$131	$240	$154
2	DKKR54	-6.1	+0.4	-1.8	+4.9	+43	+85	+102	+96	+12	+1.7	-2.5	+61	+6.3	-1.9	-2.5	+1.1	+3.5	-0.07	-	$158	$133	$223	$141
3	DKKR83	-6.7	+5.6	-5.2	+3.1	+48	+91	+124	+124	+16	+3.8	-4.8	+75	+5.0	-0.6	-2.4	+0.8	+3.1	+0.19	+6	$186	$148	$249	$173
4	DKKR95	-0.9	+7.0	-0.8	+6.5	+60	+106	+154	+168	+8	+1.2	-1.3	+77	-0.3	-0.4	-1.6	-1.4	+3.7	-0.08	+0	$155	$105	$229	$138
5	DKKR92	-5.2	+8.5	-2.6	+4.2	+57	+98	+136	+128	+16	+3.7	-7.8	+72	+1.0	-0.3	-1.3	+0.0	+2.5	+0.05	-	$218	$174	$285	$202
6	DKKR58	+2.1	-1.4	-4.8	+4.5	+50	+83	+109	+87	+15	+3.8	-5.0	+59	+5.9	+2.6	+2.5	+0.2	+1.9	-0.04	-	$204	$166	$261	$189
7	DKKR52	-3.5	-2.5	-4.4	+4.8	+65	+110	+141	+116	+17	+3.7	-4.0	+77	+7.2	-0.1	-0.2	+2.5	+1.1	-0.13	+16	$257	$220	$326	$239
8	DKKR53	-5.2	-2.2	-2.3	+3.1	+55	+101	+125	+98	+19	+2.8	-4.7	+73	+9.2	+0.6	+0.0	+1.6	+1.9	+0.25	-	$245	$210	$316	$230
9	DKKR65	-5.4	+3.5	-2.1	+2.6	+53	+95	+125	+126	+15	+1.3	-1.9	+71	+6.6	-1.8	-4.4	+0.8	+3.1	-0.18	+12	$185	$146	$261	$167
10	DKKR30	-6.2	+4.2	-5.1	+3.0	+49	+93	+121	+91	+17	+2.3	-6.4	+70	+5.4	+0.4	-0.5	-0.1	-3.1	-0.35	-4	$233	$190	$307	$220
11	DKKR84	+3.0	+4.0	-3.0	+4.8	+61	+102	+128	+134	+9	+2.9	-6.2	+74	+6.3	+1.0	-0.1	+0.5	+2.3	-0.35	-18	$217	$186	$286	$198
12	DKKR104	+5.9	+4.9	-3.9	+4.9	+49	+93	+130	+131	+15	+2.7	-5.1	+74	+4.4	-0.8	-1.3	+0.3	+2.7	+0.24	-18	$174	$138	$229	$160
13	DKKR79	+11.6	+9.0	-7.9	-0.9	+29	+52	+64	+46	+14	+2.6	-4.6	+29	+6.0	+4.1	+3.4	-0.7	+2.5	+0.95	-16	$176	$141	$229	$164
14	DKKR119	+9.1	+8.9	-5.5	-0.1	+37	+64	+94	+83	+22	+2.4	-3.8	+53	+1.0	+2.7	+1.5	-1.4	+2.2	+0.22	-13	$156	$109	$211	$140
15	DKKRt10	-1.8	+0.5	-2.2	+7.6	+62	+102	+134	+146	+14	+2.3	-4.1	+79	+3.1	-0.9	-2.5	+0.8	+2.2	-0.25	-	$171	$141	$235	$147
16	DKKR75	+12.3	+10.6	-9.9	+0.6	+44	+79	+98	+78	+17	+0.4	-3.9	+62	+10.6	+1.4	-2.1	+1.9	+1.4	+0.13	-27	$210	$181	$267	$192
20	DKK21S41	+4.5	+5.5	-7.5	+2.8	+48	+91	+119	+95	+20	+1.2	-4.6	+61	+3.1	+1.6	+2.2	-0.4	+1.1	+0.16	-	$197	$165	$247	$179
21	DKK21S75	+2.4	+3.7	-5.3	+3.7	+49	+93	+121	+96	+19	+1.5	-4.1	+63	+3.7	+1.6	+2.0	-0.4	+1.4	+0.31	-	$193	$162	$246	$176
22	DKK21S78	+1.2	+1.7	-1.5	+3.4	+45	+83	+106	+76	+25	+3.2	-2.6	+63	+8.8	-0.6	-0.3	+1.1	+2.2	+0.60	-	$197	$161	$261	$183
23	DKK21S1	+3.0	+8.2	-4.1	+2.9	+45	+84	+106	+76	+15	+1.3	-3.8	+56	+4.7	-0.1	-0.5	+0.3	+2.4	+0.30	-	$207	$173	$271	$191
24	DKK21S2	+3.2	+7.9	-4.5	+3.2	+48	+88	+115	+87	+15	+2.1	-4.7	+61	+3.4	+0.3	-1.0	+0.0	+3.2	+0.39	-	$220	$176	$295	$206
25	DKK21S4	+1.7	+5.8	-3.7	+3.8	+49	+88	+114	+78	+16	+1.9	-3.3	+57	+5.0	-0.5	-1.4	+0.9	+2.5	+0.19	-	$220	$180	$289	$204
26	DKK21S18	-4.6	-7.3	-5.0	+5.7	+56	+98	+126	+105	+16	+2.3	-3.7	+69	+7.5	+0.1	+0.4	+1.8	+0.1	-0.26	-	$185	$163	$229	$167
27	DKK21S19	-1.1	+1.0	-6.6	+4.7	+54	+95	+123	+99	+17	+1.8	-3.3	+71	+6.8	+0.7	+0.5	+1.4	+0.2	-0.04	-	$192	$168	$238	$174
28	DKK21S8	+0.7	-2.0	-5.7	+2.8	+45	+83	+101	+78	+17	+0.9	-4.1	+60	+5.1	+0.7	+0.9	+0.2	+1.3	-0.04	-	$184	$159	$237	$165
	TACE	+2.1	+2.5	-4.7	+4.1	+49	+89	+116	+100	+17	+2.1	-4.6	+66	+6.1	+0.0	-0.4	-0.5	+2.1	-0.18	+7	$193	$159	$254	+177

RS   G A R PHOENIX^{PV}   HBR

Ident: USA18636106

MYTTY IN FOCUS#
CONNEALY IN SURE 8524#
ENTREENA OF CONANGA 657#
Sire: USA17328461 G A R SURE FIRE^{SV}
G A R NEW DESIGN 5050#
CHAIR ROCK 5050 G A R 8086#
CHAIR ROCK GRID MAKER 2107#

C R A BEXTOR 872 5205 608#
G A R PROPHET^{SV}
G A R OBJECTIVE 1885#
Dam: USA18127279 G A R PROPHET N744#
MCC DAYBREAK#
G A R DAYBREAK 440#
G A R YIELD GRADE N76#

Mating Type: ET   **DOB:** 15/08/2016

$Index Values

$A	$D	$GN	$GS
$326	$271	$434	$317

AMF,CAF,DDF,NHF,DWF,MAF,MHF,OHF,
OSF,RGF

Traits Observed: *Genomics*

Mid August 2022 TransTasman Angus Cattle Evaluation

	Dir	Dtr	GL	BW	200	400	600	Mwt	Milk
EBV's	+8.5	+3.9	-3.9	+2.8	+73	+127	+165	+135	+19
Acc	80%	67%	98%	98%	97%	97%	96%	91%	87%
SC	**DC**	**CWT**	**EMA**	**Rib**	**Rump**	**RBY**	**IMF%**	**NFI-F**	**DOC**
+4.4	-5.6	+97	+9.8	-1.2	-1.7	+2.8	+2.9	+0.12	+15
96%	58%	87%	88%	88%	85%	84%	86%	78%	89%

Statistics: Number of Herds: 75, Prog Analysed: 905, Genomic Prog: 544

RS   G A R QUANTUM^{PV}   HBR

Ident: USA18636059

G A R PREDESTINED#
G A R PROGRESS^{SV}
G A R OBJECTIVE 2345#
Sire: USA17354145 G A R MOMENTUM^{PV}
ALC BIG EYE D09N#
G A R BIG EYE 1770#
G A R OBJECTIVE 3387#

MYTTY IN FOCUS#
CONNEALY IN SURE 8524#
ENTREENA OF CONANGA 657#
Dam: USA17965254 G A R IN SURE 1524#
SUMMITCREST COMPLETE 1P55#
G A R COMPLETE 3011#
G A R OBJECTIVE 277L#

Mating Type: Natural   **DOB:** 18/08/2016

$Index Values

$A	$D	$GN	$GS
$261	$220	$357	$247

AMF,CAF,DDF,NHF,DWF,MHF,OHF,OSF,RGF

Traits Observed: *Genomics*

Mid August 2022 TransTasman Angus Cattle Evaluation

	Dir	Dtr	GL	BW	200	400	600	Mwt	Milk
EBV's	+1.3	-0.5	-3.5	+4.6	+61	+109	+131	+101	+23
Acc	72%	60%	98%	96%	94%	94%	93%	86%	81%
SC	**DC**	**CWT**	**EMA**	**Rib**	**Rump**	**RBY**	**IMF%**	**NFI-F**	**DOC**
+3.3	-2.5	+84	+14.1	-1.3	-1.9	+2.2	+3.3	+0.55	-
91%	53%	85%	84%	85%	81%	81%	83%	66%	-

Statistics: Number of Herds: 3, Prog Analysed: 240, Genomic Prog: 27

RS   HARDHAT 2138 MACLAREN E10 M125^{PV}   HBR

Ident: DKKM125

MYTTY IN FOCUS#
A A R TEN X 7008 S A^{SV}
A A R LADY KELTON 5551^{SV}
Sire: USA17307074 DEER VALLEY ALL IN^{SV}
SITZ UPWARD 307R^{SV}
DEER VALLEY RITA 0274#
G A R OBJECTIVE 2345#

BOOROOMOOKA UNDERTAKEN U170^{PV}
BOOROOMOOKA UNDERTAKEN Y145^{PV}
BOOROOMOOKA UAAISE U101^{SV}
Dam: DKKE10 HARDHAT U170 MITTAGONG E10^{PV}
S A F 598 BANDO 5175#
KENNY'S CREEK MITTAGONG C75^{SV}
TE MANIA MITTAGONG V254#

Mating Type: ET   **DOB:** 21/08/2016

$Index Values

$A	$D	$GN	$GS
$236	$187	$323	$222

AMFU,CAFU,DDFU,NHFU

Traits Observed:
*BWT,200WT,400WT,600WT,SC,
Scan(EMA,Rib,Rump,IMF),DOC,Structure(-
Claw Set x 1, Foot Angle x 1),Genomics*

Mid August 2022 TransTasman Angus Cattle Evaluation

	Dir	Dtr	GL	BW	200	400	600	Mwt	Milk
EBV's	-0.7	+9.2	-5.0	+3.2	+47	+90	+115	+65	+20
Acc	65%	60%	73%	76%	73%	73%	74%	72%	69%
SC	**DC**	**CWT**	**EMA**	**Rib**	**Rump**	**RBY**	**IMF%**	**NFI-F**	**DOC**
+1.2	-4.1	+58	+2.3	-0.4	-1.7	-0.1	+3.6	+0.37	+0
73%	51%	70%	67%	71%	69%	69%	67%	60%	58%

Statistics: Number of Herds: 1, Prog Analysed: 5, Genomic Prog: 0

RS   HARDHAT RENOWN F143 N21^{PV}   HBR

Ident: DKKN21

R R RITO 707#
RITO 707 OF IDEAL 3407 7075#
IDEAL 3407 OF 1418 076#
Sire: USA17633839 S A V RENOWN 3439^{PV}
S A V 8180 TRAVELER 004#
S A V BLACKCAP MAY 4136#
S A V MAY 2397#

CONNEALY ONWARD#
SITZ UPWARD 307R^{SV}
SITZ HENRIETTA PRIDE 81M#
Dam: NKLF143 KANSAS ANNIE F143^{SV}
ARDROSSAN DIRECTION W109^{PV}
KANSAS ANNIE C10^{SV}
KANSAS ANNIE Y21^{SV}

Mating Type: ET   **DOB:** 10/03/2017

$Index Values

$A	$D	$GN	$GS
$183	$168	$222	$165

AMFU,CAFU,DDFU,NHFU

Traits Observed: *BWT,200WT,400WT,SC,
Scan(EMA,Rib,Rump,IMF),DOC,Structure(-
Claw Set x 1, Foot Angle x 1),Genomics*

Mid August 2022 TransTasman Angus Cattle Evaluation

	Dir	Dtr	GL	BW	200	400	600	Mwt	Milk
EBV's	-8.5	-7.7	-6.9	+6.4	+63	+113	+145	+127	+15
Acc	64%	54%	72%	83%	77%	77%	76%	74%	67%
SC	**DC**	**CWT**	**EMA**	**Rib**	**Rump**	**RBY**	**IMF%**	**NFI-F**	**DOC**
+1.5	-3.7	+83	+6.7	+0.4	+0.6	+1.9	-1.0	-0.40	-2
77%	43%	71%	68%	71%	69%	68%	66%	58%	54%

Statistics: Number of Herds: 1, Prog Analysed: 25, Genomic Prog: 4

Annual Bull Sale **Thursday 15th September 2022** - 1pm   Harden Showground Cattle Shed

RS   RENNYLEA H708^{PV} APR

Ident: NORH708

B/R NEW DESIGN 036#
G A R PREDESTINED#
G A R EXT 4206#
Sire: NORC511 RENNYLEA C511^{PV}
B/R NEW DIMENSION 7127^{SV}
RENNYLEA W449^{SV}
RENNYLEA T329^{SV}

TE MANIA ULONG U41^{SV}
TE MANIA AFRICA A217^{PV}
TE MANIA JEDDA Y32^{SV}
Dam: NORE176 RENNYLEA E176^{PV}
B/R NEW DIMENSION 7127^{SV}
RENNYLEA B124^{PV}
RENNYLEA X131^{SV}

Mating Type: ET   **DOB:** 07/08/2012

$Index Values

$A	$D	$GN	$GS
$205	$158	$307	$198

AMFU,CAFU,DDF,NHFU

Traits Observed:
BWT,200WT,400WT,600WT,SC,
Scan(EMA,Rib,Rump,IMF),DOC,Genomics

Mid August 2022 TransTasman Angus Cattle Evaluation

	Dir	Dtr	GL	BW	200	400	600	Mwt	Milk
EBV's	-3.4	-0.9	+1.2	+4.8	+48	+100	+129	+126	+13
Acc	89%	78%	98%	98%	97%	97%	97%	96%	93%
SC	**DC**	**CWT**	**EMA**	**Rib**	**Rump**	**RBY**	**IMF%**	**NFI-F**	**DOC**
+2.5	-3.7	+71	+10.5	-3.2	-5.1	+1.5	+6.3	+0.76	+11
97%	75%	94%	93%	94%	93%	91%	92%	91%	97%

Statistics: Number of Herds: 25, Prog Analysed: 465, Genomic Prog: 406

RS   RENNYLEA KODAK K522^{SV} HBR

Ident: NORK522

BOOROOMOOKA UNDERTAKEN U170^{PV}
BOOROOMOOKA UNDERTAKEN Y145^{PV}
BOOROOMOOKA UAAISE U101^{SV}
Sire: NORE11 RENNYLEA EDMUND E11^{PV}
YTHANBRAE HENRY VIII U8^{SV}
LAWSONS HENRY VIII Y5^{SV}
YTHANBRAE DIRECTION T270#

TE MANIA YORKSHIRE Y437^{PV}
TE MANIA BERKLEY B1^{PV}
TE MANIA LOWAN Z53#
Dam: NORF810 RENNYLEA EISA ERICA F810#
HYLINE RIGHT TIME 338#
RENNYLEA EISA ERICA C299^{PV}
RENNYLEA EISA ERICA X571#

Mating Type: AI   **DOB:** 11/08/2014

$Index Values

$A	$D	$GN	$GS
$207	$161	$284	$198

AMFU,CAFU,DDFU,NHFU

Traits Observed: GL,BWT,200WT,400WT,
600WT,SC,Scan(EMA,Rib,Rump,IMF),
DOC,Genomics

Mid August 2022 TransTasman Angus Cattle Evaluation

	Dir	Dtr	GL	BW	200	400	600	Mwt	Milk
EBV's	+10.6	+10.7	-5.8	+1.3	+48	+86	+114	+118	+10
Acc	91%	78%	99%	98%	98%	98%	98%	96%	95%
SC	**DC**	**CWT**	**EMA**	**Rib**	**Rump**	**RBY**	**IMF%**	**NFI-F**	**DOC**
+4.7	-7.2	+64	+3.4	+3.4	+1.3	-1.3	+4.0	+0.54	-8
97%	71%	93%	92%	93%	92%	91%	90%	86%	95%

Statistics: Number of Herds: 73, Prog Analysed: 1520, Genomic Prog: 599

RS   SITZ STELLAR 726D^{PV} HBR

Ident: USA18397542

H A IMAGE MAKER 0415#
BENFIELD SUBSTANCE 8506#
BENFIELD EDELLA 1105#
Sire: USA17292558 MOHNEN SUBSTANTIAL 272#
LT TERRITORY 5824 OF EA#
MOHNEN GLYN MAWR ELBA 1758#
MOHNEN GLYN MAWR ELBA 1345#

CONNEALY PRODUCT 568#
CONNEALY FINAL PRODUCT^{PV}
EBONISTA OF CONANGA 471#
Dam: USA17776820 SITZ PRIDE 200B#
SITZ UPWARD 307R^{SV}
SITZ PRIDE 308Y#
SITZ PRIDE 44P#

Mating Type: Natural   **DOB:** 23/01/2016

$Index Values

$A	$D	$GN	$GS
$257	$224	$317	$243

**AMF,CAF,DDF,NHF,DWF,MAF,MHF,
OHF,OSF**

Traits Observed: Genomics

Mid August 2022 TransTasman Angus Cattle Evaluation

	Dir	Dtr	GL	BW	200	400	600	Mwt	Milk
EBV's	+6.7	+7.2	-9.1	+2.8	+58	+114	+147	+112	+18
Acc	67%	47%	98%	97%	93%	92%	89%	83%	78%
SC	**DC**	**CWT**	**EMA**	**Rib**	**Rump**	**RBY**	**IMF%**	**NFI-F**	**DOC**
+1.7	-6.2	+73	+7.6	+2.4	+1.4	+0.4	+1.2	+0.39	+6
89%	41%	82%	80%	80%	77%	76%	76%	58%	60%

Statistics: Number of Herds: 36, Prog Analysed: 299, Genomic Prog: 60

RS   S S NIAGARA Z29^{SV} HBR

Ident: USA17287387

S A F CONNECTION#
SYDGEN C C & 7#
SYDGEN FOREVER LADY 4087#
Sire: USA16124994 HOOVER DAM#
TC GRIDIRON 258#
ERICA OF ELLSTON C124#
ERICA OF ELLSTON V65#

BOYD NEW DAY 8005#
B/R NEW DAY 454#
B/R RUBY 1224#
Dam: USA16715036 JET S S X144#
MYTTY IN FOCUS#
JET S S T151#
JET S S 54P#

Mating Type: Natural   **DOB:** 05/01/2012

$Index Values

$A	$D	$GN	$GS
$245	$203	$330	$229

AMF,CAF,DDF,NHF,DWF,MHF,OHF,OSF,RGF

Traits Observed: Genomics

Mid August 2022 TransTasman Angus Cattle Evaluation

	Dir	Dtr	GL	BW	200	400	600	Mwt	Milk
EBV's	+4.6	+2.2	-2.8	+3.3	+61	+113	+146	+125	+18
Acc	79%	62%	97%	96%	94%	93%	93%	88%	85%
SC	**DC**	**CWT**	**EMA**	**Rib**	**Rump**	**RBY**	**IMF%**	**NFI-F**	**DOC**
+0.7	-1.2	+84	+9.4	-1.2	-2.8	+1.9	+2.4	-0.03	+16
91%	53%	86%	84%	85%	81%	81%	82%	66%	86%

Statistics: Number of Herds: 24, Prog Analysed: 193, Genomic Prog: 73

Lot 1 — HARDHAT H708 J531 R56# — APR

Ident: DKKR56
Mating Type: AI
DOB: 25/07/2020

Sire: NORH708 RENNYLEA H708PV
- G A R PREDESTINED#
- RENNYLEA C511PV
- RENNYLEA W449SV
- TE MANIA AFRICA A217PV
- RENNYLEA E176PV
- RENNYLEA B124PV

Dam: DKKJ531 HARDHAT XXP SPICE GIRL Y97 J531#
- N BAR EMULATION EXT#
- SINCLAIR EMULATION XXPSV
- N BAR PRIMROSE Y3051#
- YTHANBRAE THE DON W57#
- KANSAS SPICE GIRL Y97SV
- KANSAS SPICE GIRL V105#

$Index Values

$A	$D	$GN	$GS
$169	$131	$240	$154

AMFU,CAFU,DDFU,NHFU

Traits Observed: GL,BWT

Mid August 2022 TransTasman Angus Cattle Evaluation

	Dir	Dtr	GL	BW	200	400	600	Mwt	Milk
EBV's	-2.1	-0.3	-1.9	+4.5	+44	+86	+112	+103	+16
Acc	59%	53%	84%	74%	66%	66%	67%	65%	61%

	SC	DC	CWT	EMA	Rib	Rump	RBY	IMF%	NFI-F	DOC
	+1.9	-2.9	+62	+5.2	-1.1	-1.1	+0.1	+3.9	+0.51	-
	64%	47%	64%	62%	66%	63%	64%	62%	58%	-

R56 is a long bodied RENNYLEA H708 son with a beautiful skin type. Use this sire to add Marbling. His Sinclair Emulation XXP dam produced our top price bull in 2021. The XXP cows are unique to Hardhat Angus.

Purchaser:.. $:................................

Lot 2 — HARDHAT H708 K27 R54SV — APR

Ident: DKKR54
Mating Type: AI
DOB: 24/07/2020

Sire: NORH708 RENNYLEA H708PV
- G A R PREDESTINED#
- RENNYLEA C511PV
- RENNYLEA W449SV
- TE MANIA AFRICA A217PV
- RENNYLEA E176PV
- RENNYLEA B124PV

Dam: DKKK27 HARDHAT XXP CLEO W05 K27#
- N BAR EMULATION EXT#
- SINCLAIR EMULATION XXPSV
- N BAR PRIMROSE Y3051#
- NOONEE ULMARRA U19#
- HARDHAT CLEO W05#
- NOONEE CLEO P143+94#

$Index Values

$A	$D	$GN	$GS
$158	$133	$223	$141

AMFU,CAFU,DD1%,NHFU

Traits Observed: GL,BWT,Genomics

Mid August 2022 TransTasman Angus Cattle Evaluation

	Dir	Dtr	GL	BW	200	400	600	Mwt	Milk
EBV's	-6.1	+0.4	-1.8	+4.9	+43	+85	+102	+96	+12
Acc	60%	55%	84%	74%	73%	72%	73%	71%	67%

	SC	DC	CWT	EMA	Rib	Rump	RBY	IMF%	NFI-F	DOC
	+1.7	-2.5	+61	+6.3	-1.9	-2.5	+1.1	+3.5	-0.07	-
	69%	49%	70%	68%	72%	69%	70%	68%	62%	-

R54 is a high marbling RENNYLEA H708 sire from the Sinclair Emulation XXP dam. XXP produces the best quality udders in the Angus breed.

Purchaser:.. $:................................

Lot 3 — HARDHAT KODAK L38 R83SV — HBR

Ident: DKKR83
Mating Type: Natural
DOB: 10/08/2020

Sire: NORK522 RENNYLEA KODAK K522SV
- BOOROOMOOKA UNDERTAKEN Y145PV
- RENNYLEA EDMUND E11PV
- LAWSONS HENRY VIII Y5SV
- TE MANIA BERKLEY B1PV
- RENNYLEA EISA ERICA F810#
- RENNYLEA EISA ERICA C299PV

Dam: DKKL38 HARDHAT A241 WILCOOLA A16 L38#
- PAPA EQUATOR 2928#
- ARDROSSAN EQUATOR A241PV
- ARDROSSAN PRINCESS W38PV
- B/R NEW FRONTIER 095#
- HARDHAT WILCOOLA A16#
- ARISAIG WILCOOLA V9SV

$Index Values

$A	$D	$GN	$GS
$186	$148	$249	$173

AMFU,CAFU,DDFU,NHFU

Traits Observed: BWT,400WT,SC, Scan(EMA,Rib,IMF),DOC,Structure(Claw Set x 1, Foot Angle x 1),Genomics

Mid August 2022 TransTasman Angus Cattle Evaluation

	Dir	Dtr	GL	BW	200	400	600	Mwt	Milk
EBV's	+6.7	+5.6	-5.2	+3.1	+48	+91	+124	+124	+16
Acc	62%	57%	71%	74%	72%	72%	73%	71%	68%

	SC	DC	CWT	EMA	Rib	Rump	RBY	IMF%	NFI-F	DOC
	+3.8	-4.8	+75	+5.0	-0.6	-2.4	+0.8	+3.1	+0.19	+6
	73%	50%	70%	68%	72%	69%	70%	68%	62%	57%

R83 is a stylish free moving RENNYLEA KODAK son . His skin is perfect. Extremely well balanced data set and phenotype. Good calving ease, growth, fertilty and marbling. The A241 dams in our herd are consistent producers year in year out.

Purchaser:.. $:................................

Lot 4 — HARDHAT K522 K182 R95SV — HBR

Ident: DKKR95
Mating Type: Natural
DOB: 16/08/2020

Sire: NORK522 RENNYLEA KODAK K522SV
- BOOROOMOOKA UNDERTAKEN Y145PV
- RENNYLEA EDMUND E11PV
- LAWSONS HENRY VIII Y5SV
- TE MANIA BERKLEY B1PV
- RENNYLEA EISA ERICA F810#
- RENNYLEA EISA ERICA C299PV

Dam: NKLK182 KANSAS K182#
- TC ABERDEEN 759SV
- KANSAS ABERDEEN F84SV
- KANSAS ANNIE D62#
- S A V NET WORTH 4200#
- KANSAS BEAUTY F136#
- KANSAS BEAUTY B45#

$Index Values

$A	$D	$GN	$GS
$155	$105	$229	$138

AMFU,CAFU,DDFU,NHFU

Traits Observed: BWT,400WT,SC, Scan(EMA,Rib,Rump,IMF),DOC,Structure(Claw Set x 1, Foot Angle x 1),Genomics

Mid August 2022 TransTasman Angus Cattle Evaluation

	Dir	Dtr	GL	BW	200	400	600	Mwt	Milk
EBV's	-0.9	+7.0	-0.8	+6.5	+60	+106	+154	+168	+8
Acc	61%	54%	71%	73%	72%	72%	73%	71%	68%

	SC	DC	CWT	EMA	Rib	Rump	RBY	IMF%	NFI-F	DOC
	+1.2	-1.3	+77	-0.3	-0.4	-1.6	-1.4	+3.7	-0.08	+0
	72%	46%	69%	67%	71%	68%	69%	67%	60%	55%

R95 is HIGH GROWTH, HIGH MARBLING Rennylea Kodak son. We see this sire having great commercial potential breeding premium feeder steers.

Purchaser:.. $:................................

Lot 5 — HARDHAT K522 L33 R92^SV — HBR

Ident: DKKR92
Mating Type: Natural
DOB: 15/08/2020

Sire: NORK522 RENNYLEA KODAK K522^SV
- BOOROOMOOKA UNDERTAKEN Y145^PV
- RENNYLEA EDMUND E11^PV
- LAWSONS HENRY VIII Y5^SV
- TE MANIA BERKLEY B1^PV
- RENNYLEA EISA ERICA F810^#
- RENNYLEA EISA ERICA C299^PV

Dam: DKKL33 HARDHAT A241 DIANA A11 L33^#
- PAPA EQUATOR 2928^#
- ARDROSSAN EQUATOR A241^PV
- ARDROSSAN PRINCESS W38^PV
- B/R NEW FRONTIER 095^#
- HARDHAT NF DIANA A11^#
- HARDHAT DIANA X07^#

$Index Values

$A	$D	$GN	$GS
$218	$174	$285	$202

AMFU,CAFU,DDFU,NHFU

Traits Observed: BWT,Genomics

Mid August 2022 TransTasman Angus Cattle Evaluation

	Dir	Dtr	GL	BW	200	400	600	Mwt	Milk
EBV's	+5.2	+8.5	-2.6	+4.2	+57	+98	+136	+128	+16
Acc	62%	57%	70%	73%	72%	72%	72%	71%	67%
SC	**DC**	**CWT**	**EMA**	**Rib**	**Rump**	**RBY**	**IMF%**	**NFI-F**	**DOC**
+3.7	-7.8	+72	+1.0	-0.3	-1.3	+0.0	+2.5	+0.05	-
68%	49%	69%	67%	71%	68%	69%	67%	61%	-

R92 is RENNYLEA KODAK son who combines calving ease and growth. He is a high fertility sire with marbling and highly ranked for foot claw and angle.

Purchaser:... $:...................................

Lot 6 — HARDHAT KODAK N99 R58^SV — APR

Ident: DKKR58
Mating Type: AI
DOB: 25/07/2020

Sire: NORK522 RENNYLEA KODAK K522^SV
- BOOROOMOOKA UNDERTAKEN Y145^PV
- RENNYLEA EDMUND E11^PV
- LAWSONS HENRY VIII Y5^SV
- TE MANIA BERKLEY B1^PV
- RENNYLEA EISA ERICA F810^#
- RENNYLEA EISA ERICA C299^PV

Dam: DKKN99 HARDHAT REN MITTAGONG K41 N99^#
- RITO 707 OF IDEAL 3407 7075^#
- S A V RENOWN 3439^PV
- S A V BLACKCAP MAY 4136^#
- SINCLAIR EMULATION XXP^SV
- HARDHAT XXP MITTAGONG H500 K41^#
- HARDHAT H500^#

$Index Values

$A	$D	$GN	$GS
$204	$166	$261	$189

AMFU,CA13%,DDFU,NHFU

Traits Observed: GL,BWT,Genomics

Mid August 2022 TransTasman Angus Cattle Evaluation

	Dir	Dtr	GL	BW	200	400	600	Mwt	Milk
EBV's	+2.1	-1.4	-4.8	+4.5	+50	+83	+109	+87	+15
Acc	60%	53%	82%	73%	71%	71%	72%	70%	67%
SC	**DC**	**CWT**	**EMA**	**Rib**	**Rump**	**RBY**	**IMF%**	**NFI-F**	**DOC**
+3.8	-5.0	+59	+5.9	+2.6	+2.5	+0.2	+1.9	+0.04	-
67%	45%	68%	66%	70%	67%	68%	66%	59%	-

R58 is a product of one of our favorite genetic combinations Rennylea Kodak x SAV Renown. R58 has been a standout since birth. He is a bull with HIGH FERTILITY and HIGH FATS. A seriously good bull.

Purchaser:... $:...................................

Lot 7 — HARDHAT PHOENIX M60 R52^SV — HBR

Ident: DKKR52
Mating Type: AI
DOB: 24/07/2020

Sire: USA18636106 G A R PHOENIX^PV
- CONNEALY IN SURE 8524^#
- G A R SURE FIRE^SV
- CHAIR ROCK 5050 G A R 8086^#
- G A R PROPHET^SV
- G A R PROPHET N744^#
- G A R DAYBREAK 440^#

Dam: DKKM60 HARDHAT RES WILCOOLA A16 M60^#
- RITO 707 OF IDEAL 3407 7075^#
- S A V RESOURCE 1441^PV
- S A V BLACKCAP MAY 4136^#
- B/R NEW FRONTIER 095^#
- HARDHAT WILCOOLA A16^#
- ARISAIG WILCOOLA V9^SV

$Index Values

$A	$D	$GN	$GS
$257	$220	$326	$239

AMFU,CAFU,DDFU,NHFU

Traits Observed: GL,BWT,400WT,SC, Scan(EMA,Rib,Rump,IMF),DOC,Structure(-Claw Set x 1, Foot Angle x 1),Genomics

Mid August 2022 TransTasman Angus Cattle Evaluation

	Dir	Dtr	GL	BW	200	400	600	Mwt	Milk
EBV's	+3.5	-2.5	-4.4	+4.8	+65	+110	+141	+116	+17
Acc	58%	51%	84%	73%	72%	71%	72%	69%	65%
SC	**DC**	**CWT**	**EMA**	**Rib**	**Rump**	**RBY**	**IMF%**	**NFI-F**	**DOC**
+3.7	-4.0	+77	+7.2	+0.1	-0.2	+2.5	+1.1	-0.13	+16
73%	42%	67%	65%	69%	66%	66%	65%	57%	53%

R52 is the first GAR PHEONIX son in the sale. This sire will add GROWTH, FERTILITY and CARCASE YIELD. A moderate frame thick Pheonix son which is very rare, this comes from his powerhouse SAV Resource dam.

Purchaser:... $:...................................

Lot 8 — HARDHAT PHOENIX M57 R53^# — APR

Ident: DKKR53
Mating Type: AI
DOB: 24/07/2020

Sire: USA18636106 G A R PHOENIX^PV
- CONNEALY IN SURE 8524^#
- G A R SURE FIRE^SV
- CHAIR ROCK 5050 G A R 8086^#
- G A R PROPHET^SV
- G A R PROPHET N744^#
- G A R DAYBREAK 440^#

Dam: DKKM57 HARDHAT RES ABIGAIL F12 M57^#
- RITO 707 OF IDEAL 3407 7075^#
- S A V RESOURCE 1441^PV
- S A V BLACKCAP MAY 4136^#
- RENNYLEA B77^PV
- HARDHAT B77 ABIGAIL F12^#
- HARDHAT ABIGAIL B24^#

$Index Values

$A	$D	$GN	$GS
$245	$210	$316	$230

AMFU,CAFU,DDFU,NHFU

Traits Observed: GL,BWT

Mid August 2022 TransTasman Angus Cattle Evaluation

	Dir	Dtr	GL	BW	200	400	600	Mwt	Milk
EBV's	+5.2	-2.2	-2.3	+3.1	+55	+101	+125	+98	+19
Acc	56%	47%	85%	73%	64%	64%	64%	62%	58%
SC	**DC**	**CWT**	**EMA**	**Rib**	**Rump**	**RBY**	**IMF%**	**NFI-F**	**DOC**
+2.8	-4.7	+73	+9.2	+0.6	+0.0	+1.6	+1.9	+0.25	-
61%	38%	59%	59%	62%	59%	59%	58%	51%	-

R53 is a long bodied sire with presence and balance. Another GAR PHEONIX x SAV Resource combination. Moderate birth, high growth with fertility, eye muscle and yield.

Purchaser:... $:...................................

Lot 9 — HARDHAT NIAGARA P146 R65 SV — HBR

Ident: DKKR65 **Mating Type:** AI **DOB:** 26/07/2020

SYDGEN C C & 7#
HOOVER DAM#
ERICA OF ELLSTON C124#
Sire: USA17287387 S S NIAGARA Z29SV
B/R NEW DAY 454#
JET S S X144#
JET S S T151#

RENNYLEA EDMUND E11PV
RENNYLEA KODAK K522SV
RENNYLEA EISA ERICA F810#
Dam: DKKP146 HARDHAT K522 MISS WILCOOLA M29 P146#
S A V RESOURCE 1441PV
HARDHAT RES MISS WILCOOLA C2 M29#
HARDHAT A50 MISS WILCOOLA C21#

$Index Values

$A	$D	$GN	$GS
$185	$146	$261	$167

AMFU,CAFU,DDFU,NHFU

Traits Observed: GL,BWT,400WT,SC, Scan(EMA,Rib,Rump,IMF),DOC,Structure(-Claw Set x 1, Foot Angle x 1),Genomics

Mid August 2022 TransTasman Angus Cattle Evaluation

	Dir	Dtr	GL	BW	200	400	600	Mwt	Milk
EBV's	+5.4	+3.5	-2.1	+2.6	+53	+95	+125	+126	+15
Acc	57%	48%	84%	72%	70%	70%	71%	68%	64%

	SC	DC	CWT	EMA	Rib	Rump	RBY	IMF%	NFI-F	DOC
	+1.3	-1.9	+71	+6.6	-1.8	-4.4	+0.8	+3.1	-0.18	+12
	71%	39%	66%	63%	68%	64%	65%	63%	54%	52%

R65 is a balanced meat machine by SS NIAGARA from the Rennylea Kodak dam. A curve bending docile sire with muscle and marbling. Excellent structural data for claw shape and foot angle. A true Angus type.

Purchaser:..................................... $:..................................

Lot 10 — HARDHAT NIAGARA L2 R30 SV — HBR

Ident: DKKR30 **Mating Type:** AI **DOB:** 20/07/2020

SYDGEN C C & 7#
HOOVER DAM#
ERICA OF ELLSTON C124#
Sire: USA17287387 S S NIAGARA Z29SV
B/R NEW DAY 454#
JET S S X144#
JET S S T151#

TE MANIA BARTEL B219PV
AYRVALE BARTEL E7PV
EAGLEHAWK JEDDA B32SV
Dam: DKKL2 HARDHAT E7 MITTAGONG J51 L2#
ARDROSSAN DIRECTION A50SV
HARDHAT A50 MITTAGONG E10 J51#
HARDHAT U170 MITTAGONG E10PV

$Index Values

$A	$D	$GN	$GS
$233	$190	$307	$220

AMFU,CAFU,DDFU,NHFU

Traits Observed: GL,BWT,Genomics

Mid August 2022 TransTasman Angus Cattle Evaluation

	Dir	Dtr	GL	BW	200	400	600	Mwt	Milk
EBV's	+6.2	+4.2	-5.1	+3.0	+49	+93	+121	+91	+17
Acc	58%	50%	83%	72%	70%	70%	70%	68%	63%

	SC	DC	CWT	EMA	Rib	Rump	RBY	IMF%	NFI-F	DOC
	+2.3	-6.4	+70	+5.4	+0.4	-0.5	-0.1	+3.1	+0.35	-
	66%	41%	65%	63%	67%	64%	64%	63%	53%	-

R30 was used as a yearling. A curve bending sire with calving ease and growth. This +3 Marbling bull also descends from the Mittagong cow family who also produced Hardhat Maimuru M41 who is one of the highest proven marbling sires in Australia.

Purchaser:..................................... $:..................................

Lot 11 — HARDHAT KODAK N26 R84 SV — HBR

Ident: DKKR84 **Mating Type:** Natural **DOB:** 10/08/2020

BOOROOMOOKA UNDERTAKEN Y145PV
RENNYLEA EDMUND E11PV
LAWSONS HENRY VIII Y5SV
Sire: NORK522 RENNYLEA KODAK K522SV
TE MANIA BERKLEY B1PV
RENNYLEA EISA ERICA F810#
RENNYLEA EISA ERICA C299PV

RITO 707 OF IDEAL 3407 7075#
S A V RENOWN 3439#
S A V BLACKCAP MAY 4136#
Dam: DKKN26 HARDHAT REN ANNIE F181 N26#
SITZ UPWARD 307RSV
KANSAS RITA F181SV
KANSAS ANNIE C10SV

$Index Values

$A	$D	$GN	$GS
$217	$186	$286	$198

AMFU,CAFU,DDFU,NHFU

Traits Observed: BWT,400WT,SC, Scan(EMA,Rump,IMF),DOC,Structure(Claw Set x 1, Foot Angle x 1),Genomics

Mid August 2022 TransTasman Angus Cattle Evaluation

	Dir	Dtr	GL	BW	200	400	600	Mwt	Milk
EBV's	+3.0	+4.0	-3.0	+4.8	+61	+102	+128	+134	+9
Acc	61%	54%	71%	73%	72%	71%	72%	71%	67%

	SC	DC	CWT	EMA	Rib	Rump	RBY	IMF%	NFI-F	DOC
	+2.9	-6.2	+74	+6.3	+1.0	-0.1	+0.5	+2.3	-0.35	-4
	72%	45%	69%	67%	71%	67%	68%	66%	60%	56%

R84 ia a high growth RENNYLEA KODAK son with a very balanced data set. Muscle, Marbling and positive structural data. Please note this sire is in the top 5% for Net Feed Intake. His dam is a powerhouse SAV Renown daughter from a long line of Kansas Annie donor dams.

Purchaser:..................................... $:..................................

Lot 12 — HARDHAT K522 F169 R104 PV — HBR

Ident: DKKR104 **Mating Type:** Natural **DOB:** 28/08/2020

BOOROOMOOKA UNDERTAKEN Y145PV
RENNYLEA EDMUND E11PV
LAWSONS HENRY VIII Y5SV
Sire: NORK522 RENNYLEA KODAK K522SV
TE MANIA BERKLEY B1PV
RENNYLEA EISA ERICA F810#
RENNYLEA EISA ERICA C299PV

S A V 8180 TRAVELER 004#
S A V NET WORTH 4200#
S A V MAY 2410#
Dam: NKLF169 KANSAS LEAH F169SV
YTHANBRAE THE DON W57#
KANSAS LEAH Y135#
KANSAS LEAH T33#

$Index Values

$A	$D	$GN	$GS
$174	$138	$229	$160

AMFU,CAFU,DDFU,NHFU

Traits Observed: BWT,400WT,SC, Scan(EMA,Rump,IMF),DOC,Structure(Claw Set x 1, Foot Angle x 1),Genomics

Mid August 2022 TransTasman Angus Cattle Evaluation

	Dir	Dtr	GL	BW	200	400	600	Mwt	Milk
EBV's	+5.9	+4.9	-3.9	+4.9	+49	+93	+130	+131	+15
Acc	62%	56%	71%	74%	73%	72%	73%	72%	69%

	SC	DC	CWT	EMA	Rib	Rump	RBY	IMF%	NFI-F	DOC
	+2.7	-5.1	+74	+4.4	+0.8	-1.3	+0.3	+2.7	+0.24	-18
	73%	48%	70%	68%	72%	69%	69%	67%	61%	57%

R104 is a HIGH GROWTH Rennylea Kodak son with a powerful butt shape. His SAV Net Worth dam has packed some punch into him. He is at the top of the breed for claw set top 2% and top 22% for foot angle.

Purchaser:..................................... $:..................................

Lot 13 — HARDHAT KODAK J532 R79^{SV} — HBR

Ident: DKKR79
Mating Type: Natural
DOB: 08/08/2020

BOOROOMOOKA UNDERTAKEN Y145^{PV}
RENNYLEA EDMUND E11^{PV}
LAWSONS HENRY VIII Y5^{SV}
Sire: NORK522 RENNYLEA KODAK K522^{SV}
TE MANIA BERKLEY B1^{PV}
RENNYLEA EISA ERICA F810[#]
RENNYLEA EISA ERICA C299^{PV}

BT RIGHT TIME 24J[#]
SINCLAIR GRASS MASTER[#]
N BAR PRIMROSE Y3051[#]
Dam: DKKJ532 HARDHAT GM ANNIE Y21 J532[#]
BON VIEW NEW DESIGN 1407[#]
KANSAS ANNIE Y21^{SV}
AMAROO EXPO ANNIE U024[#]

$Index Values

$A	$D	$GN	$GS
$176	$141	$229	$164

AMFU,CAFU,DDFU,NHFU

Traits Observed: BWT,400WT,SC, Scan(EMA,Rib,Rump,IMF),DOC,Structure(-Claw Set x 1, Foot Angle x 1),Genomics

Mid August 2022 TransTasman Angus Cattle Evaluation

	Dir	Dtr	GL	BW	200	400	600	Mwt	Milk
EBV's	+11.6	+9.0	-7.9	-0.9	+29	+52	+64	+46	+14
Acc	62%	56%	71%	74%	73%	72%	73%	72%	68%
SC	**DC**	**CWT**	**EMA**	**Rib**	**Rump**	**RBY**	**IMF%**	**NFI-F**	**DOC**
+2.6	-4.6	+29	+6.0	+4.1	+3.4	-0.7	+2.5	+0.95	-16
73%	48%	70%	68%	72%	69%	70%	68%	62%	57%

R79 is a BOMBPROOF CALVING EASE sire. Top 1% for calving ease direct and birth weight while also being in the top 2% for calving ease of daugters.He is also highly positive on fats being in the top 1% for rib and top 2% for rump fat. His dam is from our all time best flush of Sinclair Grass Master to Kansas Annie Y21.

Purchaser:... $:......................................

Lot 14 — HARDHAT K522 K16 R119^{SV} — HBR

Ident: DKKR119
Mating Type: Natural
DOB: 18/09/2020

BOOROOMOOKA UNDERTAKEN Y145^{PV}
RENNYLEA EDMUND E11^{PV}
LAWSONS HENRY VIII Y5^{SV}
Sire: NORK522 RENNYLEA KODAK K522^{SV}
TE MANIA BERKLEY B1^{PV}
RENNYLEA EISA ERICA F810[#]
RENNYLEA EISA ERICA C299^{PV}

N BAR EMULATION EXT[#]
SINCLAIR EMULATION XXP^{SV}
N BAR PRIMROSE Y3051[#]
Dam: DKKK16 HARDHAT XXP SPICE GIRL Y97 K16[#]
YTHANBRAE THE DON W57[#]
KANSAS SPICE GIRL Y97^{SV}
KANSAS SPICE GIRL V105[#]

$Index Values

$A	$D	$GN	$GS
$156	$109	$211	$140

AMFU,CAFU,DDFU,NHFU

Traits Observed: 400WT,SC, Scan(EMA,Rib,Rump,IMF),DOC,Genomics

Mid August 2022 TransTasman Angus Cattle Evaluation

	Dir	Dtr	GL	BW	200	400	600	Mwt	Milk
EBV's	+9.1	+8.9	-5.5	-0.1	+37	+64	+94	+83	+22
Acc	61%	54%	70%	73%	71%	71%	72%	70%	66%
SC	**DC**	**CWT**	**EMA**	**Rib**	**Rump**	**RBY**	**IMF%**	**NFI-F**	**DOC**
+2.4	-3.8	+53	+1.0	+2.7	+1.5	-1.4	+2.2	+0.22	-13
68%	45%	68%	66%	70%	67%	67%	65%	58%	55%

R119 is BOMBPROOF CALVING EASE sire who will add genetic fat to your herd. He ranks in the top 1% for birth weight and top 5% for calving ease direct. From the Sinclair Emulation XXP x Kansas Spice Girl Y97 flush that produced so many great cows for us.

Purchaser:... $:......................................

Lot 15 — HARDHAT K522 M40 R110^{SV} — HBR

Ident: DKKR110
Mating Type: Natural
DOB: 02/09/2020

BOOROOMOOKA UNDERTAKEN Y145^{PV}
RENNYLEA EDMUND E11^{PV}
LAWSONS HENRY VIII Y5^{SV}
Sire: NORK522 RENNYLEA KODAK K522^{SV}
TE MANIA BERKLEY B1^{PV}
RENNYLEA EISA ERICA F810[#]
RENNYLEA EISA ERICA C299^{PV}

S A V 8180 TRAVELER 004[#]
S A V NET WORTH 4200[#]
S A V MAY 2410[#]
Dam: DKKM40 HARDHAT NW LUCY J515 M40[#]
SINCLAIR EMULATION XXP^{SV}
HARDHAT XXP LUCY W58 J515[#]
KANSAS LUCY W58^{SV}

$Index Values

$A	$D	$GN	$GS
$171	$141	$235	$147

AMFU,CAFU,DDFU,NHFU

Traits Observed: BWT,Genomics

Mid August 2022 TransTasman Angus Cattle Evaluation

	Dir	Dtr	GL	BW	200	400	600	Mwt	Milk
EBV's	-1.8	+0.5	-2.2	+7.6	+62	+102	+134	+146	+14
Acc	61%	54%	72%	72%	71%	71%	71%	70%	66%
SC	**DC**	**CWT**	**EMA**	**Rib**	**Rump**	**RBY**	**IMF%**	**NFI-F**	**DOC**
+2.3	-4.1	+79	+3.1	-0.9	-2.5	+0.8	+2.2	-0.25	-
67%	46%	68%	66%	70%	67%	67%	65%	59%	-

R110 is a HIGH GROWTH Rennylea Kodak son who ranks highly on carcase weight, yield and net feed intake. His SAV Net Worth dam is a line bred Traveller cow who has a perfect udder.

Purchaser:... $:......................................

Lot 16 — HARDHAT KODAK F113 R75^{PV} — HBR

Ident: DKKR75
Mating Type: Natural
DOB: 05/08/2020

BOOROOMOOKA UNDERTAKEN Y145^{PV}
RENNYLEA EDMUND E11^{PV}
LAWSONS HENRY VIII Y5^{SV}
Sire: NORK522 RENNYLEA KODAK K522^{SV}
TE MANIA BERKLEY B1^{PV}
RENNYLEA EISA ERICA F810[#]
RENNYLEA EISA ERICA C299^{PV}

CONNEALY ONWARD[#]
SITZ UPWARD 307R^{SV}
SITZ HENRIETTA PRIDE 81M[#]
Dam: NKLF113 KANSAS ANNIE F113^{SV}
BON VIEW NEW DESIGN 1407[#]
KANSAS ANNIE Y66[#]
AMAROO EXPO ANNIE U024[#]

$Index Values

$A	$D	$GN	$GS
$210	$181	$267	$192

AMFU,CAFU,DDFU,NHFU

Traits Observed: BWT,400WT,SC, Scan(EMA,Rib,Rump,IMF),DOC,Genomics

Mid August 2022 TransTasman Angus Cattle Evaluation

	Dir	Dtr	GL	BW	200	400	600	Mwt	Milk
EBV's	+12.3	+10.6	-9.9	+0.6	+44	+79	+98	+78	+17
Acc	62%	56%	71%	74%	73%	72%	73%	71%	68%
SC	**DC**	**CWT**	**EMA**	**Rib**	**Rump**	**RBY**	**IMF%**	**NFI-F**	**DOC**
+0.4	-3.9	+62	+10.6	+1.4	-2.1	+1.9	+1.4	+0.13	-27
69%	48%	69%	67%	71%	68%	69%	67%	61%	58%

R75 is a BOMBPROOF CALVING EASE bull from our donor dam Kansas Annie F113 who is still going strong. He ranks in the top 1% for claving ease direct and daughter, while ranking in the top 2% for gestation length and 3% for birth weight. He is a bull who will add carcase muscle and yield from the famous Annie cow family.

Purchaser:... $:......................................

Lot 20 — HARDHAT S41^{SV} — HBR

Ident: DKK21S41

Mating Type: AI
DOB: 20/07/2021

BENFIELD SUBSTANCE 8506#
MOHNEN SUBSTANTIAL 272#
MOHNEN GLYN MAWR ELBA 1758#

Sire: USA18397542 SITZ STELLAR 726D^{PV}

CONNEALY FINAL PRODUCT^{PV}
SITZ PRIDE 200B#
SITZ PRIDE 308Y#

N BAR EMULATION EXT#
SINCLAIR EMULATION XXP^{SV}
N BAR PRIMROSE Y3051#

Dam: DKKM135 HARDHAT XXP SPICE GIRL Y97 M135#

YTHANBRAE THE DON W57#
KANSAS SPICE GIRL Y97^{SV}
KANSAS SPICE GIRL V105#

$Index Values

$A	$D	$GN	$GS
$197	$165	$247	$179

AMFU,CAFU,DDFU,NHFU

Traits Observed: GL,BWT

Mid August 2022 TransTasman Angus Cattle Evaluation

	Dir	Dtr	GL	BW	200	400	600	Mwt	Milk
EBV's	+4.5	+5.5	-7.5	+2.8	+48	+91	+119	+95	+20
Acc	52%	40%	84%	73%	64%	63%	62%	59%	54%

	SC	DC	CWT	EMA	Rib	Rump	RBY	IMF%	NFI-F	DOC
	+1.2	-4.6	+61	+3.1	+1.6	+2.2	-0.4	+1.1	+0.16	-
	59%	32%	57%	55%	58%	56%	55%	54%	43%	-

S41 is a thick set, heavily muscled SITZ STELLAR son. STELLAR is taking the breed by storm with his ability to breed great visible muscle with outstanding feet. Please see his updated genetic data on the supplementary sheet. We see him as being a low birth weight option with great Angus type. His dam is another magnificent Sinclair Emulation XXP daughter from the Kansas Spice Girl Y97 cow who gave 47 progeny.

Purchaser:.. $:...................................

Lot 22 — HARDHAT S78^{PV} — HBR

Ident: DKK21S78

Mating Type: AI
DOB: 27/07/2021

G A R PROGRESS^{SV}
G A R MOMENTUM^{PV}
G A R BIG EYE 1770#

Sire: USA18636059 G A R QUANTUM^{PV}

CONNEALY IN SURE 8524#
G A R IN SURE 1524#
G A R COMPLETE 3011#

BT RIGHT TIME 24J#
SINCLAIR GRASS MASTER#
N BAR PRIMROSE Y3051#

Dam: DKKJ520 HARDHAT GM SPICE GIRL Y97 J520^{PV}

YTHANBRAE THE DON W57#
KANSAS SPICE GIRL Y97^{SV}
KANSAS SPICE GIRL V105#

$Index Values

$A	$D	$GN	$GS
$197	$161	$261	$183

AMFU,CAFU,DDFU,NHFU

Traits Observed: GL,BWT

Mid August 2022 TransTasman Angus Cattle Evaluation

	Dir	Dtr	GL	BW	200	400	600	Mwt	Milk
EBV's	+1.2	+1.7	-1.5	+3.4	+45	+83	+106	+76	+25
Acc	55%	46%	84%	73%	67%	66%	67%	64%	59%

	SC	DC	CWT	EMA	Rib	Rump	RBY	IMF%	NFI-F	DOC
	+3.2	-2.6	+63	+8.8	-0.6	-0.3	+1.1	+2.2	+0.60	-
	64%	38%	62%	60%	64%	61%	61%	60%	50%	-

S87 is our first GAR QUANTUM bull to be offered. He offers great balance across his data with noteable high milk, scrotal and eye muscle. His dam is another donor by Sinclair Grass Master from the Kansas Spice Girl Y97 cow. Y97 had faultless structure and longevity.

Purchaser:.. $:...................................

Lot 21 — HARDHAT S75^{SV} — HBR

Ident: DKK21S75

Mating Type: AI
DOB: 25/07/2021

BENFIELD SUBSTANCE 8506#
MOHNEN SUBSTANTIAL 272#
MOHNEN GLYN MAWR ELBA 1758#

Sire: USA18397542 SITZ STELLAR 726D^{PV}

CONNEALY FINAL PRODUCT^{PV}
SITZ PRIDE 200B#
SITZ PRIDE 308Y#

N BAR EMULATION EXT#
SINCLAIR EMULATION XXP^{SV}
N BAR PRIMROSE Y3051#

Dam: DKKJ531 HARDHAT XXP SPICE GIRL Y97 J531#

YTHANBRAE THE DON W57#
KANSAS SPICE GIRL Y97^{SV}
KANSAS SPICE GIRL V105#

$Index Values

$A	$D	$GN	$GS
$193	$162	$246	$176

AMFU,CAFU,DDFU,NHFU

Traits Observed: GL,BWT

Mid August 2022 TransTasman Angus Cattle Evaluation

	Dir	Dtr	GL	BW	200	400	600	Mwt	Milk
EBV's	+2.4	+3.7	-5.3	+3.7	+49	+93	+121	+96	+19
Acc	53%	41%	84%	74%	64%	63%	63%	59%	55%

	SC	DC	CWT	EMA	Rib	Rump	RBY	IMF%	NFI-F	DOC
	+1.5	-4.1	+63	+3.7	+1.6	+2.0	-0.4	+1.4	+0.31	-
	61%	33%	58%	56%	58%	56%	56%	54%	44%	-

S75 is a near full brother to Lot 20. By the SITZ STELLAR sire who has stamped these bulls with butt shape and visible muscle. He has a moderate birth to good growth spread. The maternal line of lot 21 and 22 would be a tremendous asset to any commercial herd.

Purchaser:.. $:...................................

Lot 23 — HARDHAT S1[#] — HBR

Ident: DKK21S1

Mating Type: Natural
DOB: 19/02/2021

A A R TEN X 7008 S A^{SV}
DEER VALLEY ALL IN^{SV}
DEER VALLEY RITA 0274#

Sire: DKKM125 HARDHAT 2138 MACLAREN E10 M125^{PV}

BOOROOMOOKA UNDERTAKEN Y145^{PV}
HARDHAT U170 MITTAGONG E10^{PV}
KENNY'S CREEK MITTAGONG C75^{SV}

S A V FINAL ANSWER 0035#
CONNEALY CAPITALIST 028#
PRIDES PITA OF CONANGA 8821#

Dam: DKKP14 HARDHAT CAP TARIKU J62 P14#

S A V 707 RITO 9969#
KANSAS EXT J62#
KANSAS EXT E80^{SV}

$Index Values

$A	$D	$GN	$GS
$207	$173	$271	$191

AMFU,CAFU,DDFU,NHFU

Traits Observed: BWT

Mid August 2022 TransTasman Angus Cattle Evaluation

	Dir	Dtr	GL	BW	200	400	600	Mwt	Milk
EBV's	+3.0	+8.2	-4.1	+2.9	+45	+84	+106	+76	+15
Acc	48%	42%	53%	66%	54%	54%	55%	54%	50%

	SC	DC	CWT	EMA	Rib	Rump	RBY	IMF%	NFI-F	DOC
	+1.3	-3.8	+56	+4.7	+0.1	-0.5	+0.3	+2.4	+0.30	-
	52%	35%	52%	50%	54%	51%	52%	50%	43%	-

S1 is a homebred son of Hardhat Mclaren M125 who was the best son we bred from the pin up cow Hardhat Mittagong E10. The M125 sons have tremendous fleshing ability and softness.

Purchaser:.. $:...................................

Ident: DKK21S2

A A R TEN X 7008 S A^{SV}
DEER VALLEY ALL IN^{SV}
DEER VALLEY RITA 0274#

Sire: DKKM125 HARDHAT 2138 MACLAREN E10 M125^{PV}
BOOROOMOOKA UNDERTAKEN Y145^{PV}
HARDHAT U170 MITTAGONG E10^{PV}
KENNY'S CREEK MITTAGONG C75^{SV}

RENNYLEA EDMUND E11^{PV}
RENNYLEA KODAK K522^{SV}
RENNYLEA EISA ERICA F810#

Dam: DKKQ3 HARDHAT K522 LEAH M1 Q3#
S A V TEN SPEED 3022^{PV}
HARDHAT TS LEAH F169 M1#
KANSAS LEAH F169^{SV}

Mating Type: Natural   **DOB:** 26/02/2021

$Index Values

$A	$D	$GN	$GS
$220	$176	$295	$206

AMFU,CAFU,DDFU,NHFU

Traits Observed: BWT

Mid August 2022 TransTasman Angus Cattle Evaluation

	Dir	Dtr	GL	BW	200	400	600	Mwt	Milk
EBV's	+3.2	+7.9	-4.5	+3.2	+48	+88	+115	+87	+15
Acc	49%	44%	55%	66%	56%	56%	57%	56%	53%

	SC	DC	CWT	EMA	Rib	Rump	RBY	IMF%	NFI-F	DOC
	+2.1	-4.7	+61	+3.4	+0.3	-1.0	+0.0	+3.2	+0.39	-
	54%	36%	54%	52%	56%	53%	54%	52%	46%	-

S2 is an easy fleshing Mclaren M125 son. Please see his updated genetic data on the supplementary sheet. From the Rennylea Kodak dam who is extremely sound.

Purchaser:... $:................................

Ident: DKK21S4

A A R TEN X 7008 S A^{SV}
DEER VALLEY ALL IN^{SV}
DEER VALLEY RITA 0274#

Sire: DKKM125 HARDHAT 2138 MACLAREN E10 M125^{PV}
BOOROOMOOKA UNDERTAKEN Y145^{PV}
HARDHAT U170 MITTAGONG E10^{PV}
KENNY'S CREEK MITTAGONG C75^{SV}

S A V FINAL ANSWER 0035#
CONNEALY CAPITALIST 028#
PRIDES PITA OF CONANGA 8821#

Dam: DKKP18 HARDHAT CAP ANNIE M6 P18#
KANSAS EVIDENTLY J81^{SV}
HARDHAT J81 ANNIE G158 M6#
KANSAS ANNIE G158^{SV}

Mating Type: Natural   **DOB:** 28/02/2021

$Index Values

$A	$D	$GN	$GS
$220	$180	$289	$204

AMFU,CAFU,DDFU,NHFU

Traits Observed: BWT

Mid August 2022 TransTasman Angus Cattle Evaluation

	Dir	Dtr	GL	BW	200	400	600	Mwt	Milk
EBV's	+1.7	+5.8	-3.7	+3.8	+49	+88	+114	+78	+16
Acc	48%	43%	54%	66%	55%	55%	56%	55%	51%

	SC	DC	CWT	EMA	Rib	Rump	RBY	IMF%	NFI-F	DOC
	+1.9	-3.3	+57	+5.0	-0.5	-1.4	+0.9	+2.5	+0.19	-
	52%	35%	53%	50%	55%	52%	53%	51%	44%	-

S4 is an easy fleshing Hardhat Mclaren M125 son. His dam is a Capitalist daughter producing true to type beef bulls. Please see updated genetic data on the supplementary sheet.

Purchaser:... $:................................

Ident: DKK21S18

RITO 707 OF IDEAL 3407 7075#
S A V RENOWN 3439^{PV}
S A V BLACKCAP MAY 4136#

Sire: DKKN21 HARDHAT RENOWN F143 N21^{PV}
SITZ UPWARD 307R^{SV}
KANSAS ANNIE F143^{SV}
KANSAS ANNIE C10^{SV}

DUNOON EVIDENT E614^{PV}
KANSAS EVIDENTLY J81^{SV}
KANSAS ANNIE E109^E

Dam: DKKM6 HARDHAT J81 ANNIE G158 M6#
SITZ UPWARD 307R^{SV}
KANSAS ANNIE G158^{SV}
KANSAS ANNIE X164#

Mating Type: Natural   **DOB:** 08/04/2021

$Index Values

$A	$D	$GN	$GS
$185	$163	$229	$167

AMFU,CAFU,DDFU,NHFU

Traits Observed: BWT

Mid August 2022 TransTasman Angus Cattle Evaluation

	Dir	Dtr	GL	BW	200	400	600	Mwt	Milk
EBV's	-4.6	-7.3	-5.0	+5.7	+56	+98	+126	+105	+16
Acc	48%	42%	55%	65%	58%	58%	58%	57%	52%

	SC	DC	CWT	EMA	Rib	Rump	RBY	IMF%	NFI-F	DOC
	+2.3	-3.7	+69	+7.5	+0.1	+0.4	+1.8	+0.1	-0.26	-
	54%	32%	54%	52%	56%	53%	53%	51%	44%	-

S18 is a long bodied, long necked son of Hardhat Renown N21. These N21 sons have genuine growth and great feet.

Purchaser:... $:................................

Ident: DKK21S19

RITO 707 OF IDEAL 3407 7075#
S A V RENOWN 3439^{PV}
S A V BLACKCAP MAY 4136#

Sire: DKKN21 HARDHAT RENOWN F143 N21^{PV}
SITZ UPWARD 307R^{SV}
KANSAS ANNIE F143^{SV}
KANSAS ANNIE C10^{SV}

S A V FINAL ANSWER 0035#
S A V PIONEER 7301#
S A V BLACKBIRD 5297#

Dam: DKKJ527 HARDHAT 7301 SPICE GIRL Y97 J527#
YTHANBRAE THE DON W57#
KANSAS SPICE GIRL Y97^{SV}
KANSAS SPICE GIRL V105#

Mating Type: Natural   **DOB:** 08/04/2021

$Index Values

$A	$D	$GN	$GS
$192	$168	$238	$174

AMFU,CAFU,DDFU,NHFU

Traits Observed: BWT

Mid August 2022 TransTasman Angus Cattle Evaluation

	Dir	Dtr	GL	BW	200	400	600	Mwt	Milk
EBV's	-1.1	+1.0	-6.6	+4.7	+54	+95	+123	+99	+17
Acc	48%	41%	55%	65%	58%	58%	59%	57%	52%

	SC	DC	CWT	EMA	Rib	Rump	RBY	IMF%	NFI-F	DOC
	+1.8	-3.3	+71	+6.8	+0.7	+0.5	+1.4	+0.2	+0.04	-
	55%	33%	54%	52%	56%	53%	53%	51%	44%	-

S19 is a high growth, high muscle son of Hardhat Renown N21. From the powerhouse SAV Pioneer daughter J527. Who not surprisingly descends from Kansas Spice Girl Y97.

Purchaser:... $:................................

Ident: DKK21S8

RITO 707 OF IDEAL 3407 7075#
S A V RENOWN 3439PV
S A V BLACKCAP MAY 4136#
Sire: DKKN21 HARDHAT RENOWN F143 N21PV
SITZ UPWARD 307RSV
KANSAS ANNIE F143SV
KANSAS ANNIE C10SV

BT RIGHT TIME 24J#
SINCLAIR GRASS MASTER#
N BAR PRIMROSE Y3051#
Dam: DKKJ506 HARDHAT GM ANNIE Y21 J506PV
BON VIEW NEW DESIGN 1407#
KANSAS ANNIE Y21SV
AMAROO EXPO ANNIE U024#

Mating Type: Natural   **DOB:** 06/03/2021

$Index Values

$A	$D	$GN	$GS
$184	$159	$237	$165

AMFU,CAFU,DDFU,NHFU

Traits Observed: BWT

Mid August 2022 TransTasman Angus Cattle Evaluation

	Dir	Dtr	GL	BW	200	400	600	Mwt	Milk
EBV's	+0.7	-2.0	-5.7	+2.8	+45	+83	+101	+78	+17
Acc	51%	46%	60%	69%	63%	63%	64%	62%	57%
SC	**DC**	**CWT**	**EMA**	**Rib**	**Rump**	**RBY**	**IMF%**	**NFI-F**	**DOC**
+0.9	-4.1	+60	+5.1	+0.7	+0.9	+0.2	+1.3	-0.04	-
60%	37%	60%	58%	62%	59%	60%	57%	50%	-

S8 is an athletic son of Hardhat Renown N21. His dam J506 is from the Sinclair Grass Master x Kansas Annie Y21 flush which also produced Hardhat Grass Range who had a long stud career at Myanga Angus.

Purchaser:..   **$:**.......................................

Lot 23

Lot 9

Lot 3

Lot 11

TransTasman Angus Cattle Evaluation - Mid August 2022 Reference Tables

BREED AVERAGE EBVs

	Calving Ease		Birth		Growth				Fertility			Carcase					Other			Structure			Selection Indexes	
	CEDir	CEDtrs	GL	BW	200	400	600	MCW	Milk	SS	DTC	CWT	EMA	RIB	P8	RBY	IMF	NFI-F	DOC	Angle	Claw	$A	$A-L
Brd Avg	+2.1	+2.5	-4.7	+4.1	+49	+89	+116	+100	+17	+2.1	-4.6	+66	+6.1	+0.0	-0.4	+0.5	+2.1	+0.18	+7	+0.98	+0.85	+193	+334

PERCENTILE BANDS TABLE

% Band	CEDir	CEDtrs	GL	BW	200	400	600	MCW	Milk	SS	DTC	CWT	EMA	RIB	P8	RBY	IMF	NFI-F	DOC	Angle	Claw	$A	$A-L
1%	+10.8	+9.8	-10.6	-0.1	+69	+120	+161	+158	+28	+4.7	-9.9	+93	+12.7	+3.5	+3.6	+2.9	+4.6	-0.57	+36	+0.60	+0.44	+278	+450
5%	+9.0	+8.2	-8.7	+1.2	+62	+110	+146	+139	+25	+3.7	-8.3	+85	+10.5	+2.4	+2.2	+2.1	+3.8	-0.34	+27	+0.72	+0.56	+254	+419
10%	+7.8	+7.2	-7.8	+1.9	+59	+105	+139	+129	+23	+3.3	-7.5	+80	+9.4	+1.8	+1.6	+1.7	+3.4	-0.22	+23	+0.78	+0.62	+242	+402
15%	+7.0	+6.5	-7.2	+2.4	+57	+102	+135	+123	+22	+3.0	-6.9	+78	+8.7	+1.4	+1.2	+1.5	+3.1	-0.14	+20	+0.80	+0.66	+233	+390
20%	+6.3	+5.9	-6.7	+2.7	+56	+100	+131	+119	+21	+2.8	-6.5	+75	+8.1	+1.1	+0.9	+1.3	+2.9	-0.08	+17	+0.84	+0.70	+226	+380
25%	+5.6	+5.3	-6.3	+3.0	+54	+98	+128	+115	+20	+2.7	-6.1	+74	+7.7	+0.9	+0.6	+1.1	+2.6	-0.03	+15	+0.86	+0.72	+220	+372
30%	+5.0	+4.8	-5.9	+3.2	+53	+96	+125	+111	+20	+2.5	-5.8	+72	+7.3	+0.7	+0.4	+1.0	+2.4	-0.02	+14	+0.90	+0.76	+215	+365
35%	+4.4	+4.4	-5.6	+3.5	+52	+94	+123	+108	+19	+2.4	-5.5	+70	+6.9	+0.5	+0.2	+0.9	+2.4	-0.06	+12	+0.92	+0.78	+210	+358
40%	+3.9	+3.9	-5.2	+3.7	+51	+92	+120	+105	+18	+2.3	-5.2	+69	+6.6	+0.3	+0.0	+0.7	+2.3	-0.10	+10	+0.94	+0.80	+205	+351
45%	+3.3	+3.4	-4.9	+3.9	+50	+91	+118	+103	+18	+2.1	-4.9	+68	+6.3	+0.1	-0.2	+0.6	+2.2	-0.14	+9	+0.96	+0.82	+201	+345
50%	+2.7	+3.0	-4.7	+4.1	+49	+89	+116	+100	+17	+2.0	-4.6	+66	+6.0	+0.0	-0.4	+0.5	+2.0	-0.17	+8	+0.98	+0.84	+196	+338
55%	+2.1	+2.5	-4.4	+4.3	+49	+88	+114	+97	+17	+1.9	-4.1	+65	+5.7	-0.2	-0.6	+0.4	+1.9	-0.21	+6	+1.00	+0.86	+191	+332
60%	+1.5	+2.0	-4.1	+4.5	+48	+86	+112	+95	+16	+1.7	-3.8	+64	+5.4	-0.3	-0.8	+0.3	+1.8	-0.25	+4	+1.04	+0.88	+186	+325
65%	+0.8	+1.4	-3.8	+4.7	+47	+85	+110	+92	+15	+1.5	-3.5	+62	+5.1	-0.5	-1.0	+0.1	+1.7	-0.29	+3	+1.06	+0.92	+181	+318
70%	+0.1	+0.8	-3.4	+5.0	+46	+83	+107	+89	+15	+1.4	-3.1	+61	+4.8	-0.7	-1.2	-0.0	+1.5	-0.34	+1	+1.08	+0.94	+175	+310
75%	-0.8	+0.1	-3.1	+5.2	+45	+81	+104	+86	+14	+1.3	-2.8	+59	+4.5	-0.9	-1.4	-0.3	+1.3	-0.39	-1	+1.10	+0.98	+169	+301
80%	-1.7	-0.6	-2.7	+5.5	+43	+79	+102	+82	+14	+1.1	-2.3	+57	+4.1	-1.2	-1.6	-0.5	+1.1	-0.44	-3	+1.14	+1.00	+162	+291
85%	-2.9	-1.5	-2.2	+5.9	+42	+77	+98	+78	+13	+0.9	-1.8	+55	+3.6	-1.4	-2.0	-0.8	+0.9	-0.51	-5	+1.14	+1.04	+154	+278
90%	-4.5	-2.7	-1.5	+6.3	+40	+73	+94	+72	+12	+0.5	-1.2	+52	+3.1	-1.7	-2.2	-1.2	+0.5	-0.59	-12	+1.26	+1.10	+141	+262
95%	-6.9	-4.6	-0.7	+6.9	+37	+69	+87	+63	+10	+0.5	-0.8	+48	+2.2	-2.2	-3.0	-1.2	+0.0	-0.72	-20	+1.18	+1.18	+121	+232
99%	-12.3	-8.8	+1.3	+8.4	+30	+58	+72	+45	+7	-0.2	+1.2	+38	+0.2	-3.3	-4.3	-2.0	-0.1	-0.97	-20	+1.40	+1.32	+79	+168

*Breed average represents the average EBV of all 2020 drop Australian Angus and Angus-influenced seedstock animals analysed in the Mid August 2022 TransTasman Angus Cattle Evaluation.

*The percentile bands represent the distribution of EBVs across the 2020 drop Australian Angus and Angus-influenced seedstock animals analysed in the Mid August 2022 TransTasman Angus Cattle Evaluation.

2021 Hardhat Bull Sale

Top price bull at 2021 sale sold for $19,000.
He has two maternal brothers for sale, Lot 1 and Lot 21.

HARDHAT

A N G U S

"Where *Cows* that **LAST** breed *Bulls* that **LAST**"