Genetics Catalogue
2022 Dairy

There's always room for improvement
And you’ll find the entire range of LIC’s best genomically-selected bulls right here in this publication, along with dozens of Daughters Proven options. Enjoy reading about what they offer, because the detail is extraordinary and, believe me, there’s something here for all farm-types, cow-types, and farmer-types.

Once again, LIC’s genetics team have done an amazing job in putting together such a fantastic selection of bulls that make up LIC’s impressive array of Premier Sires teams, together with the individual selections for farmers who prefer to nominate their own.

All bull teams and individuals profiled here in the catalogue have been selected under the assumption and expectation that ‘udder overall’ will be part of Breeding Worth calculations coming into effect in the April (NZAEL) Animal Evaluation run.

We’ve seen 1 million additional cows enter dairy industry sheds during the past 16 years, but you’ll no-doubt be aware the industry’s rate of growth must be about breeding better cows, rather than breeding more cows. Evidence of the response comes in the form of LIC farmers utilising significantly more fresh/liquid sexed semen, combined with beef genetics, in a bid to fine-tune their herd improvement plans.

Farmer demand continues to spike for sexed semen and LIC is working with Sexing Technologies to bring in more sexing machines onto the co-operative’s campus, enabling a boost to capacity of another 150,000 straws (on top of the current capacity of 200,000 straws per season).

As more farmers utilise this technology that provides them with more replacements from their better-producing cows, it seems likely LIC will experience similar distribution limitations at the peak of the bull season. Only so many straws can be sorted by a machine on any given day, so to avoid disappointment make sure you book-in early with your local Agri-Manager.

With more farmers using sexed on the genomically superior end of their herd, there’s greater opportunity and flexibility to use beef at the other end of the herd which provides a good chance to create additional revenue streams. We know what farmers are after in their beef options, because ‘we’ve told us. Easy-coping with short gestation – also imperative are good growth rates and great carcass merit.

LIC will continue to work with beef breeders that are recognised throughout the industry as being innovative and driven, and we’ll continue to work with Beef + Lamb in the dairy beef progeny test scheme. We want access to all additional, proven, high-merit bulls, and it’s our aim never to miss a trick.

Not only do we want to ensure we’re delivering the best beef bulls, we are also highly mindful of the environmental and animal welfare aspects of our beef selections. There’s a high emphasis on selecting as many bulls as possible that are homozygous-polled, and this year LIC will be marketing a homozygous-polled, heat-tolerance, beef sire. Check out Savannah in the beef section.

Environmentally, many of our beef bulls will have been selected with feed efficiency intake data that allows us to generate a BeefPrint for Nitrogen and Methane efficiency per kg of lifetime meat production. This year customers will also be able to purchase BeefPrint tags to gain in the ears of calves sired by the feed efficiency tested environmentally-assessed beef sires.

LIC continues to purposefully invest in both dairy genetics and beef bulls, because our industry’s future, and that of our farmers, depends on it.

Whatever your style, I hope you enjoy flicking-through, or intently studying, the 2022 Genetics Dairy and Beef section. Together with the individual teams, plus the individual genetics, there’s something here for all farm-types, cow-types and farmer-types.

Greg Hamill
LIC Genetics business manager

Because I’m penning the introduction to my 16th consecutive, but final, Genetics Catalogue, I’m reflecting on the significant changes over the years in the publication’s presentation and content. I also guess reflects the huge shifts we’ve seen within the dairy industry over that time.

Most of the change has been driven by LIC’s investment in genomics. LIC’s programme of investment in genomics has contributed a leading role in such gains – and so have the shareholding farmers who have shown their faith and belief in what LIC was driving at.

Results speak for themselves. Today, 70% of LIC’s Premier Sires customers are utilising teams that contain genomically-selected bulls.

For a number of years, LIC has consistently advised the average rate of genetic gain achieved on-farm is 150gBW per cow per year. More recently, however (since 2017), there’s evidence that among farmers who have predominantly used LIC semen for 10 years or more, the average rate of genetic gain is 190gBW per cow per year.

This can be at least partly attributed to use of genomics; LIC’s sire analysts are able to earlier-select better bulls to enter the world-leading Sire Proving Scheme, also capitalising on the opportunity to utilise elite genetics as sires-of-sows, resulting in better cows being bred, and reared, on-farm.

Since the first catalogue I was involved with at LIC, the average cow has moved from producing 330kg of milk per year to 350kg of milk per year. This is a remarkable increase in milksold output, and there’s little doubt LIC’s programme of investment in genomics has contributed a leading role in such gains - and so have the shareholding farmers who have shown their faith and belief in what LIC was driving at.

Results speak for themselves. Today, 70% of LIC’s Premier Sires customers are utilising teams that contain genomically-selected bulls.
**Genomic Jersey**

- [521050] Kooara Knocken ET 19
- [521069] Pukenui Start-Up ET 19
- [521070] Van Stroeden Hulk ET 19
- [521071] Vespera Olympian ET 19
- [521075] Paynes Stamina ET 19
- [52008] Julian Multiplier ET 96

**Daughter Proven KiwiCross®**

- [518034] Shelby Integ ET 0
- [518047] Clarkes ET 0
- [518019] Diggs Rocco ET 0
- [518030] Howses ET 0
- [518072] Deans ET 0
- [518051] Dicksons ET 0

**Economy KiwiCross®**

- [51006] Van Stroeden Diet ET 0
- [51005] Donegal Gameplan ET 0
- [51006] Woodcock’s Spot On ET 0
- [51001] Plicas Sierra ET 0
- [51007] Clarke Masterclass ET 0
- [51007] Lomond Knockout ET 0
- [51007] Brockcesto Cadence ET 0
- [51007] Kooara® Also Available ET 0

**Ayrshire**

- [51055] Macc Polka ET 14
- [51054] and 2 Costello ET 14
- [51050] Kooara Super Sonic ET 14
- [51000] and Macc Picas ET 14
- [51003] and Macc Picas ET 14
- [51002] and Macc Picas ET 14
- [51001] and Macc Picas ET 14
- [51000] and Macc Picas ET 14

**Genomic KiWiCross®**

- [52019] Buls PC Fellow ET 62
- [52019] Foston QM First Class ET 64
- [52016] Tanoa GL Montage ET 65
- [52016] Glena Zambini Lincoln ET 65
- [52021] Taroa Ggg My Ngabota ET 66
- [52050] Bayleys CL Decipher ET 66
- [52007] Churhons Hero Magnify ET 67
- [52029] Rockleigh C Berkly ET 67
- [52024] Stoney Hill Litigator ET 66
- [52048] Thornwood PHC Taaun ET 69
- [52010] Stinson Puck Belfast ET 69
- [52024] Stilton GC Celestial ET 70
- [52008] Stilton Flynn Brisbane ET 70
- [52030] Thordoor Ranch Titus ET 71

**How to Read a Dairy Sire Page**

**Labels**

- Bulls with standout attributes have these highlighted.
- Attributes are calculated within breed and based on 15,000/20,000 daughters.

**Protein and Milkfat**

- A gBV of 381 litres indicates that the bull will produce daughters which on average, are generally superior to the base cow by 215 kg per 5t dry matter consumed.

**Fertility**

- A gBV of 4.0% indicates that 2.6% more daughters are expected to calve in the first 40 days of a herd calving per 100 cows, compared to a bull with a gBV of 0.

**Milk**

- A gBV of 381 litres indicates the bull will produce daughters which on average will produce 170.5 litres more than the base cow per 5t of dry matter feed. Remember this is a sire’s average towards a Jersey. Crossbred animals may show variable gBV.

**Functional Survival**

- The likely percentage of cows surviving to the next lactation independent of culling for low production or poor health.

**Shed Temperament**

- A gBV of 0.01 indicates that the bull will produce daughters which on average will produce daughters which on average produce daughters which on average have a shed temperament of 0.62 or 0.62% higher probability of surviving to the next lactation than a bull with a gBV of 0.

**HoofPrint®**


**Statue**

- Again as the gBV for a sire is comparing his progeny against the base cow which is across breed. Statues for Jersey are usually negative and Holstein are positive.

**Understanding NZ Information**

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- **HoofPrint®**
Understanding New Zealand Information

Base cow

The New Zealand Breeding Values are compared across breed to a group of animals, commonly known as the base cow. There are 21,585 cows in the base group, made up of all breeds. These cows were born in 2005 and came into milk in 2007. All animals had to be TOP (Traits Other than Production) inspected, weighed and have had four herd tests. The production information was collated over four years and then averaged out.

All of the bulls information in this catalogue is expressed relative to the base group, whose production and TOP information has been set to zero.

Assessing the animal

Each trait is scored separately on a scale from 1-9. The traits included in the TOP system are the traits considered most important in dairy cattle and contain 4 farmer scored traits, and 13 conformation traits.

The main advantage of the TOP system is that inspectors describe the animal rather than an imagined ideal animal. Any additional characteristics of an animal not described by these traits are noted as additional comment codes. (e.g: OW- predominantly white).

Data processing

The raw data is then sent through to the New Zealand Animal Evaluation unit where within herd, region and national comparisons are analysed and processed. This information is then fed into the national database as breeding values for sires.

Production

When calculating the genetic response expected from production breeding values, it is calculated at an expected response when fed 5 tonnes of dry matter. This is because the average New Zealand cow will consume 5 tonnes of dry matter in one lactation when fed a pasture only diet. If grain or additional supplements are fed on top of the pasture diet you would expect a much higher genetic response.

Volume

Because Breeding Values (gBV) are calculated across breed you would expect a Holstein-Friesian to have a much higher (positive) gBV for milk and you would expect Jerseys to have a lower (negative) gBV.

Base cow production information

<table>
<thead>
<tr>
<th>Milkfat</th>
<th>Protein</th>
<th>Milk Volume</th>
<th>Liveweight</th>
</tr>
</thead>
<tbody>
<tr>
<td>218 kg/5t DM</td>
<td>174 kg/5t DM</td>
<td>4595 l/5t DM</td>
<td>500 kg</td>
</tr>
</tbody>
</table>

TOPs

The average raw TOP scores of the 2005 base cow are as follows.

Farmer scored management traits

<table>
<thead>
<tr>
<th>Low Score</th>
<th>High Score</th>
<th>Base cow average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adaptability to milking - describes how soon the heifer settled into the milking routine after calving</td>
<td>slowly</td>
<td>quickly</td>
</tr>
<tr>
<td>Shed tempermament - describes the temperament of the heifer in the farm dairy while being handled and milked</td>
<td>nervous</td>
<td>placid</td>
</tr>
<tr>
<td>Milking speed - describes the milking speed of the heifer</td>
<td>slow</td>
<td>fast</td>
</tr>
<tr>
<td>Overall opinion - describes the farmer’s overall acceptance of the heifer as a herd member</td>
<td>undesirable</td>
<td>desirable</td>
</tr>
</tbody>
</table>

Inspector scored conformation traits

<table>
<thead>
<tr>
<th>Stature - describes the height at the shoulders of the heifer in five centimetre bands.</th>
</tr>
</thead>
<tbody>
<tr>
<td>small</td>
</tr>
<tr>
<td>Capacity - describes depth and width of chest and body in relation to the physical size of the heifer.</td>
</tr>
<tr>
<td>frail</td>
</tr>
<tr>
<td>Rump angle - describes the angle of a line between the centre of the hips and the top of the pins.</td>
</tr>
<tr>
<td>high pins</td>
</tr>
<tr>
<td>Rump width - describes the width of pins, hips and thurls relative to the size of the heifer.</td>
</tr>
<tr>
<td>narrow</td>
</tr>
<tr>
<td>Legs - describes the straightness or curvature of the back legs while the heifer is walking.</td>
</tr>
<tr>
<td>straight</td>
</tr>
<tr>
<td>Udder support - describes the strength of the suspensory ligament, and the udder depth relative to the hocks.</td>
</tr>
<tr>
<td>weak</td>
</tr>
<tr>
<td>Front udder - describes the attachment of the front udder to the body wall.</td>
</tr>
<tr>
<td>loose</td>
</tr>
<tr>
<td>Rear udder - describes the height and width of the rear udder attachment.</td>
</tr>
<tr>
<td>low</td>
</tr>
<tr>
<td>Front teat placement - describes the placement of the front teats relative to the centre of the quarters.</td>
</tr>
<tr>
<td>wide</td>
</tr>
<tr>
<td>Rear teat placement - describes the placement of the rear teats relative to the centre of the quarters.</td>
</tr>
<tr>
<td>wide</td>
</tr>
<tr>
<td>Teat Length - describes the length of the rear teats from the udder to the tip of the teat.</td>
</tr>
<tr>
<td>short</td>
</tr>
<tr>
<td>Udder overall - assesses the desirability of all traits pertaining to the udder.</td>
</tr>
<tr>
<td>undesirable</td>
</tr>
<tr>
<td>Dairy conformation - assesses the desirability of all traits pertaining to dairy conformation, but excluding udder traits.</td>
</tr>
<tr>
<td>undesirable</td>
</tr>
</tbody>
</table>

*Teat length was first scored in 2018 so there is no phenotypic average for the Base cow; this average is calculated from raw scores, from daughters of bulls that have a BV if 0.
**Premier Sires® Pricing**

Increase your herd's genetic value with Premier Sires, a cost-effective and convenient way to mate your herd with New Zealand’s top bulls.

### Number of inseminations (LIC Technician) #

<table>
<thead>
<tr>
<th>Product</th>
<th>Details</th>
<th>Bulls</th>
<th>$/Straw</th>
<th>$/Straw (Inc 10% InvestaMate)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economy Pack</td>
<td>Minimum order of 20 straws, Can mix breeds</td>
<td>3+ Bulls</td>
<td>$16.60</td>
<td>$14.94</td>
</tr>
<tr>
<td>Classic Pack</td>
<td>Minimum order of 30 straws, Can mix breeds</td>
<td>4 Bulls</td>
<td>$25.85</td>
<td>$23.27</td>
</tr>
<tr>
<td>Adapta Pack</td>
<td>Minimum order of 30 straws, Can include Daughter &amp; Genomic bulls, Minimum of 3 Daughter proven bulls, Can mix breeds</td>
<td>3 Bulls</td>
<td>$28.10</td>
<td>$25.29</td>
</tr>
<tr>
<td>Genomic Pack</td>
<td>Minimum order of 30 straws, Can mix breeds</td>
<td>5+ Bulls</td>
<td>$26.80</td>
<td>$24.12</td>
</tr>
<tr>
<td>Ayrshire Pack</td>
<td>Minimum order of 20 straws, Can mix breeds</td>
<td>3+ Bulls</td>
<td>$20.20</td>
<td>$18.18</td>
</tr>
<tr>
<td>Compact Calving +</td>
<td></td>
<td>501-600</td>
<td>$20.50</td>
<td>$18.40</td>
</tr>
<tr>
<td></td>
<td></td>
<td>601-700</td>
<td>$24.45</td>
<td>$22.65</td>
</tr>
<tr>
<td></td>
<td></td>
<td>701-800</td>
<td>$23.85</td>
<td>$21.90</td>
</tr>
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<td></td>
<td></td>
<td>801-900</td>
<td>$23.25</td>
<td>$21.30</td>
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<tr>
<td></td>
<td></td>
<td>901-1000</td>
<td>$22.65</td>
<td>$20.70</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1001-1100</td>
<td>$22.05</td>
<td>$20.10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1101-2000</td>
<td>$21.40</td>
<td>$19.45</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2001-5000</td>
<td>$20.55</td>
<td>$18.60</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5001+</td>
<td>$20.30</td>
<td>$18.35</td>
</tr>
<tr>
<td>Beef Pack</td>
<td>Range of breeds available - refer to beef section</td>
<td>1001-1100</td>
<td>$21.40</td>
<td>$19.31</td>
</tr>
<tr>
<td>No Choice Packs</td>
<td>VMSI (page 12)</td>
<td>1001-1100</td>
<td>$21.40</td>
<td>$19.31</td>
</tr>
<tr>
<td></td>
<td>High Input (page 11)</td>
<td>1001-1100</td>
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The Premier Sires Forward Pack teams are comprised of the best daughter proven and best genomically-selected bulls only.

The Premier Sires Daughter Proven teams are comprised of the best daughter proven bulls.

Customers are charged per 100 inseminations or part thereof, depending on the number of inseminations to Premier Sires. As described in the tables, as the number of inseminations increase, prices move down the graduated price scale, and each insemination is charged at the appropriate Forward Pack, A2, Daughter Proven or SGL Dairy rate. Example: The 100th and your 101st Forward Pack insemination would be charged at $27.85 and $27.35 respectively.

* DIY Premier Sires follows the same graduated price scale, less $1.00 per insemination.

All prices exclude GST.

**Alpha® Pack Purchasing**

Alpha packs give you the control to choose the bulls best suited to your breeding requirements, while taking advantage of our discounted pack pricing.

Packs must contain equal quantities of each bull and in quantities of 5 straws per bull, minimum order will apply.

### Alpha Packs

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<tr>
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Volume discounts (1-10%) may apply and will be additional to the InvestaMate discount outlined above (see page 124 for details). Prices exclude insemination costs. All prices exclude GST.

**Sexed Semen (Liquid)**

$57.00 plus technician per straw

As sexed semen is processed via a third party, customers will be billed for every straw ordered/delivered.

**Sexed Semen (Frozen)**

$57.00 N/A

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<th>A2 team (per insemination)</th>
<th>Daughter Proven (per insemination)</th>
<th>SGL Dairy (per insemination)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-100</td>
<td>$27.85</td>
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<td>$24.85</td>
<td>$25.90</td>
</tr>
<tr>
<td>101-200</td>
<td>$27.35</td>
<td>$27.35</td>
<td>$24.35</td>
<td>$25.40</td>
</tr>
<tr>
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The Premier Sires Forward Pack teams are comprised of the best daughter proven and best genomically-selected bulls only.

The Premier Sires Daughter Proven teams are comprised of the best daughter proven bulls.

Customers are charged per 100 inseminations or part thereof, depending on the number of inseminations to Premier Sires. As described in the tables, as the number of inseminations increase, prices move down the graduated price scale, and each insemination is charged at the appropriate Forward Pack, A2, Daughter Proven or SGL Dairy rate. Example: The 100th and your 101st Forward Pack insemination would be charged at $27.85 and $27.35 respectively.

* DIY Premier Sires follows the same graduated price scale, less $1.00 per insemination.

All prices exclude GST.
High Input Teams

LIC has updated its High Input Index to include a focus on a range of traits alongside Breeding Worth to identify animals best suited to High Input systems. Those traits include: Capacity, Udder support, Udder overall and Protein.

For 2022 LIC have put together the below no choice packs which are available from $19.31*

What makes up LIC’s High Input Index?

The graph shows the weighting of the traits within the High Input Index, in addition to the existing eight traits of gBW.

How do I interpret the High Input Index?

The High Input index allows two animals to be compared based on their suitability to the system. Unlike gBW & PW, it does not represent an economic value of the animal’s productive performance or ability to breed profitable replacements.

Short Gestation Length (SGL) Dairy

SGL Dairy® semen was an initiative developed by LIC so farmers could benefit by having cows that will calve earlier the following season.

Not only will farmers benefit financially through more days in milk, using SGL Dairy® gives cows a longer period to recover increasing their chances of getting back in calf to AB.

2021 sales activity of SGL Dairy® is expected to generate in excess of $10 million in additional revenue to the New Zealand dairy farmer in the upcoming 2022 season.

It is expected that progeny from SGL Dairy bulls will not be kept as dairy replacements as these bulls have been bred for gestation length only; their index and TOP traits are not part of the selection criteria.

*InvestaMate and volume discounts may apply (see page 124)

Frozen $18.20
Fresh (Including technician) Premier Sires sliding Scale
Fresh DIY SGL Dairy

High Input Teams

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Holstein-Friesian

<table>
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<tr>
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<th>Milkfat</th>
<th>HI Index</th>
<th>Udder O</th>
<th>Volume</th>
<th>Fertility</th>
<th>SCC</th>
<th>Opinion</th>
<th>Capacity</th>
<th>Udder O</th>
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<td>0.21</td>
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Average 327/98 1367 43 48 949 -0.1 0.07 0.47 0.25 0.59

KiwiCross®

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<th>Opinion</th>
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Average 379/98 1401 41 26 103 3.3 0.01 0.41 0.46 0.73

* These bulls are available by breed in No Choice Packs from $19.31*

* If 10% InvestaMate discount applies (see page 124)
Variable Milking Selection Index (VMSI)

Variable milking regimes are gaining popularity as an efficient way of managing seasonal conditions and resources with benefits in reduction of farm working expenses and improved animal health. Variable milking regimes covers everything from Once-a-day (OAD) to 16 hours and 10 in 7.

Variable milking regimes may be used exclusively as the overall farming system, or strategically for part of the herd or for shorter periods during the season.

LIC’s Variable Milking Selection Index (VMSI) has been developed to help farmers breed animals most suitable to their system.

Our goal is to support variable milking regime farmers in breeding cows that persist throughout the lactation and have longevity in the herd. The index has a strong correlation to Breeding Worth (gBW) but also combines the non-negotiable functional traits required for variable milking.

It reflects what farmers have told us is required in a desirable cow and takes into the following traits:

- Udder support
- Front teat placement
- Milking speed

The index (VMSI) places less emphasis on Functional Survival and Fertility because these factors are less of an issue than in twice-a-day (TAD) herds.

What makes up LIC’s VMSI?

The graph shows the weighting of the traits within the VMSI, in addition to the existing eight traits of gBW.

How do I interpret the Variable Milking Selection Index?

The VMSI allows animals to be compared based on their suitability for variable milking regimes. The index increases based on the animal’s suitability.

Unlike gBW & PW, the VMSI does not represent an economic value of the animal’s productive performance or ability to breed profitable replacements.

VMSI Teams

Holstein-Friesian

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<th>SCC</th>
<th>Opinion</th>
<th>Capacity</th>
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Average: 308/88 | 1317 | 38 | 37 | 626 | 2.6 | 0.10 | 0.52 | 0.28 | 0.53 |

Jersey

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Average: 387/98 | 1347 | 36 | 14 | -298 | 4.5 | -0.16 | -0.08 | 0.63 | 0.79 |

KiwiCross®

<table>
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<tr>
<th>Code</th>
<th>Name</th>
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<th>VMSI</th>
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<th>SCC</th>
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Average: 375/98 | 1598 | 38 | 29 | 466 | 2.1 | -0.07 | -0.41 | 0.64 | 0.88 |

* These bulls are available by breed in No Choice Packs from $19.31*

* If 10% InvestaMate discount applies (see page 124)
## Polled Bulls

### 2022 Polled Bulls

#### Holstein-Friesian

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<tr>
<th>Code</th>
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Friesian Polled are available in No Choice Packs from $19.31*, Individually $24.95 + gst per straw.

#### Jersey

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<th>Opinion</th>
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Jersey Polled are available in No Choice Packs from $19.31*, Individually $24.95 + gst per straw.

#### KiwiCross®

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KiwiCross Polled are available in No Choice Packs from $19.31*, Individually $24.95 + gst per straw.

[QR Code for updated bull information after each AE run]

For updated bull information after each AE run, scan the QR code.
Potential 2022 Holstein-Friesian Premier Sires — Forward Pack Team

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<th>117068 MEANDER TS ARROW ET S2F</th>
<th>118032 PAYNES GR PACHM AN ET S2F</th>
<th>115077 TAFTS W H TRANQUIL ET</th>
<th>116026 WERDERS MH</th>
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WEIGHTED AVERAGES OF PREMIER SIRES

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<td>Protein</td>
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<tr>
<td>Liveweight</td>
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<tr>
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<tr>
<td>Cow Calving Diff</td>
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<tr>
<td>Fertility</td>
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NB: the reliability of a team of bulls is always higher than using just one bull.

Date: 18/02/2022

Shaded bulls include Daughter information

Potential 2022 Jersey Premier Sires — Forward Pack Team

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<th>318021 GLANTON DESI BANFT</th>
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Date: 18/02/2022

Shaded bulls include Daughter information
Potential 2022 KiwiCross® Premier Sires® **Forward Pack Team (F9J7)**

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**WEIGHTED AVERAGES OF PREMIER SIRES**

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**WEIGHTED AVERAGES OF PREMIER SIRES**

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Potential 2022 Holstein-Friesian Premier Sires® **Daughter Proven Team**

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### Daughter Proven Team

#### Potential 2022 Jersey Premier Sires

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#### Weighted Averages of Premier Sires

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**NB:** the reliability of a team of bulls is always higher than using just one bull.

Date: 18/02/2022

### HD Weighted Averages of Premier Sires

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### HOOFPRINT®

**Methane Efficiency**

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**Nitrogen Efficiency**

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**518072 DEANS PROFESSIONAL**

**518016 HORIZON ASCOTT**

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**518001 ARKANS PATRIARCH-ET**

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**518051 DICKSONS TRADITION**

**Sire**

**518033 WERDERS PREMONITION**

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<td>121004 MAH SUPER STARDUST</td>
<td>.26</td>
<td>.53</td>
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</tr>
<tr>
<td>121007 SANSONG GO VIRDIAN</td>
<td>.20</td>
<td>.53</td>
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<tr>
<td>121036 HOWSES GG ECLIPSE</td>
<td>.20</td>
<td>.53</td>
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</tr>
<tr>
<td>121043 MAHAREE TO NIRVANA</td>
<td>.26</td>
<td>.53</td>
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</tr>
<tr>
<td>121032 MEANDER TR ALADDIN</td>
<td>.26</td>
<td>.53</td>
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### SEXED Team

#### Potential 2022 Holstein-Friesian Premier Sires®

<table>
<thead>
<tr>
<th>Sire</th>
<th>Management</th>
<th>Conformation</th>
<th>Overall Opinion</th>
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<tbody>
<tr>
<td>121040 SPRING RIVER GG SPYRO</td>
<td>.25</td>
<td>.75</td>
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</tr>
<tr>
<td>121036 BALANTIS TR TONTO</td>
<td>.25</td>
<td>.75</td>
<td>desirable</td>
</tr>
<tr>
<td>121015 ASHDALE GG HIGHLANDER</td>
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<td>.75</td>
<td>desirable</td>
</tr>
<tr>
<td>121046 BELLAMYS RE GADSBY</td>
<td>.25</td>
<td>.75</td>
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</tr>
<tr>
<td>121079 VIALLUS GG ROYALE</td>
<td>.25</td>
<td>.75</td>
<td>desirable</td>
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<tr>
<td>121045 BELLAMYS MONEYMOON</td>
<td>.25</td>
<td>.75</td>
<td>desirable</td>
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<tr>
<td>121077 CHATFIELDS TS ZINGER</td>
<td>.25</td>
<td>.75</td>
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<tr>
<td>121051 MILL-RIDGE RC FORD</td>
<td>.25</td>
<td>.75</td>
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### Potential 2022 Jersey Premier Sires® Sexed Team

<table>
<thead>
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<th>Sire Sire</th>
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<tbody>
<tr>
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<td>Conformation -.5 0 .5 1</td>
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<tr>
<td>321008</td>
<td>GLANTON FYNN BRISBANE</td>
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<td>Structure -.70</td>
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<tr>
<td>321018</td>
<td>BELS PC FELLOW</td>
<td>Shed Temperature .28</td>
<td>Capacity .57</td>
</tr>
<tr>
<td>321013</td>
<td>FREYDAN HOSS CRUDEN ET</td>
<td>Milking Speed .25</td>
<td>Rump angle -.22</td>
</tr>
<tr>
<td>320030</td>
<td>GLENUI CH LAZARO</td>
<td>Overall Opinion .39</td>
<td>Rump width .10</td>
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<tr>
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<td>CARATACUS TB DUKE</td>
<td>Udder support -.37</td>
<td>Leg length .10</td>
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<tr>
<td>321033</td>
<td>MILNE CH VICTORIOUS</td>
<td>Front udder .37</td>
<td>Body length .50</td>
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<tr>
<td>320028</td>
<td>LOCHRAGL INSULATOR</td>
<td>Rear udder .58</td>
<td>Feet length .54</td>
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<td>320035</td>
<td>SHELBY HOSS LATITUDE</td>
<td>Fr teat .01</td>
<td>Ir teat .04</td>
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<tr>
<td>321002</td>
<td>PURIRI MATUA SABRE</td>
<td>Test length -.11</td>
<td>Test overall -.11</td>
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<tr>
<td>320034</td>
<td>FOXTON OM CELESTIAL</td>
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<td>Diary conf .54</td>
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<tr>
<td>321204</td>
<td>HAWTHORN GROVE GH OGANEED</td>
<td>Dairy conf .54</td>
<td>Desirable</td>
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**WEIGHTED AVERAGES OF PREMIER SIRES**

<table>
<thead>
<tr>
<th>g/l/l/l/l %</th>
<th>$385/96</th>
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<tbody>
<tr>
<td>Milkfat</td>
<td>34 kgs</td>
</tr>
<tr>
<td>Protein</td>
<td>11 kgs</td>
</tr>
<tr>
<td>Milk</td>
<td>-478 Litres</td>
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<tr>
<td>Live</td>
<td>-373 kgs</td>
</tr>
<tr>
<td>Functional Survival</td>
<td>3.3%</td>
</tr>
<tr>
<td>Milkfat %</td>
<td>8.0%</td>
</tr>
<tr>
<td>Protein %</td>
<td>4.4%</td>
</tr>
<tr>
<td>Heifer Calving Df</td>
<td>-2.2%</td>
</tr>
<tr>
<td>Cow Calving Df</td>
<td>-2.1%</td>
</tr>
<tr>
<td>Fertility</td>
<td>4.0%</td>
</tr>
<tr>
<td>SCC</td>
<td>-0.20</td>
</tr>
<tr>
<td>BCS</td>
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</table>

**NB:** The reliability of a team of bulls is always higher than using just one bull.

**Date:** 18/02/2022

### Potential 2022 KiwiCross® Premier Sires® Sexed Team (F8J8)

<table>
<thead>
<tr>
<th>Sire</th>
<th>Sire Sire</th>
<th>Management</th>
<th>Conformation</th>
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</thead>
<tbody>
<tr>
<td>521028</td>
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<td>Management -.5 0 .5 1</td>
<td>Conformation -.5 0 .5 1</td>
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<tr>
<td>521039</td>
<td>HACKER ADVANTAGE ET</td>
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<td>Structure -.15</td>
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<tr>
<td>521011</td>
<td>ALAH BUSTLE</td>
<td>Shed Temperature .33</td>
<td>Capacity .69</td>
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<td>521035</td>
<td>HOFFEN CENTURION</td>
<td>Milking Speed .15</td>
<td>Rump angle -.05</td>
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<tr>
<td>521038</td>
<td>SPRING RIVER JUPITER</td>
<td>Overall Opinion .37</td>
<td>Rump width .09</td>
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<td>521041</td>
<td>ARKANS POTENTIAL ET</td>
<td>Udder support .55</td>
<td>Leg length .05</td>
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<tr>
<td>520008</td>
<td>JULIAN MULTIPLIER ET</td>
<td>Front udder .58</td>
<td>Body length .50</td>
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<tr>
<td>521007</td>
<td>JULIAN STRAIGHT UP</td>
<td>Rear udder .60</td>
<td>Udder length -.01</td>
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<td>521037</td>
<td>SPRING RIVER BRADY</td>
<td>Fr teat .01</td>
<td>Fr teat .04</td>
</tr>
<tr>
<td>521034</td>
<td>ARKANS WILLPOWER</td>
<td>Ir teat .17</td>
<td>Test length -.13</td>
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<tr>
<td>521039</td>
<td>PAYNES POWERBALL ET</td>
<td>Udder overall .57</td>
<td>Udder overall .57</td>
</tr>
<tr>
<td>521048</td>
<td>RHANTANA IRIS ET</td>
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<td>Dairy conf .64</td>
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</table>

**WEIGHTED AVERAGES OF PREMIER SIRES**

<table>
<thead>
<tr>
<th>g/l/l/l/l %</th>
<th>$390/97</th>
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<tbody>
<tr>
<td>Milkfat</td>
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<tr>
<td>Protein</td>
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<tr>
<td>Milk</td>
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</tr>
<tr>
<td>Live</td>
<td>-5 kgs</td>
</tr>
<tr>
<td>Functional Survival</td>
<td>3.4%</td>
</tr>
<tr>
<td>Milkfat %</td>
<td>5.6%</td>
</tr>
<tr>
<td>Protein %</td>
<td>4.3%</td>
</tr>
<tr>
<td>Heifer Calving Df</td>
<td>0.5%</td>
</tr>
<tr>
<td>Cow Calving Df</td>
<td>-0.2%</td>
</tr>
<tr>
<td>Fertility</td>
<td>4.7%</td>
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<tr>
<td>SCC</td>
<td>-0.18</td>
</tr>
<tr>
<td>BCS</td>
<td>0.18</td>
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</tbody>
</table>

**NB:** The reliability of a team of bulls is always higher than using just one bull.

**Date:** 18/02/2022
Organic
LIC holds organic certification meaning LIC is an approved supplier to organic systems making it even easier to breed organic dairy cows.
Organic input certification provides reassurance that our semen products meet required international standards. For example, you can be sure no GE (genetic engineering) has gone into the development of our product, and that all LIC processes and practices are environmentally sustainable.
Organic dairy farmers now have access to LIC’s extensive range of top elite sires, without having to apply for dispensation. The certification is restricted to all semen collected and processed at LIC (Milking Shorthorn, Brown Swiss and most beef breeds are excluded, while Beef Pack Hereford and Short Gestation Hereford are included).
Sexing Technologies®, who process LIC’s Sexed Semen, also hold Organic certification meaning LIC’s Sexed Semen can be used in organic systems.

Customate® Plus
You know your farm- the conditions, the climate and the animals that suit your system.
Alpha® gives you the ability to choose from the widest selection of high genetic merit bulls and with Customate® Plus you can create a programme capable of achieving those breeding goals most important to you.
Using Customate Plus, we can create your own breeding index, view your herd information down to each individual cow, and select any group of animals to mate. From there you choose the best team of bulls to meet your personalised objectives and we will enter constraints for the resulting progeny— all designed to push the boundaries within your own herd.
Into crossbreeding? Customate Plus can also maximise hybrid vigour for your crossbreed matings. It couldn't be easier.
If you’re ready to take total control of your breeding programme contact your Agri Manager or the Genetics team today.

- $2.60 per cow
- Minimum of 50 cows
- Automatic inbreeding, CVM and recessive gene protection
- A full comprehensive report is provided, along with an A3 laminated Mating Shed Sheet

Mycoplasma Bovis (M.Bovis)
LIC has no reason to believe that any of our bulls are infected, due to strict quarantine procedures and our close veterinarian monitoring. We will continue to test all sires marketed by LIC to provide a greater level of assurance and peace of mind. For further information please contact your LIC Agri Manager.
What is Mycoplasma Bovis?
• A bacterial disease found in cattle all over the world.
• No risk to humans or food.
• Leads to serious conditions in cattle.
• Spreads from animal to animal through close contact. Potentially spread on contaminated equipment and the feeding of untreated milk to calves. It is not windborne.
• Affected cattle will always be carriers of the disease
• Does not affect sheep or cause illness in goats although it is thought goats could carry and transmit it.
### TOP 5 Combined Rankings

#### Breeding Worth

National herd breed average  
**$ 81**

<table>
<thead>
<tr>
<th>Code</th>
<th>Name</th>
<th>gBW/yr</th>
<th>Tel.</th>
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<tbody>
<tr>
<td>120002</td>
<td>Mill-Ridge TS Flex ET S1F</td>
<td>451</td>
<td>56</td>
</tr>
<tr>
<td>120001</td>
<td>Mill-Ridge TS Finn ET S1F</td>
<td>432</td>
<td>56</td>
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<tr>
<td>120073</td>
<td>Meander TS Alloy ET S1F</td>
<td>396</td>
<td>62</td>
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<tr>
<td>120015</td>
<td>MAH Super Stardust S1F</td>
<td>410</td>
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<tr>
<td>118001</td>
<td>Waimata SB Ransom ET S2F</td>
<td>402</td>
<td>81</td>
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#### Protein

National herd breed average  
**21 kg**

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<tr>
<td>118001</td>
<td>Waimata SB Ransom ET S2F</td>
<td>60</td>
</tr>
<tr>
<td>118101</td>
<td>Woodcote MF Lochi ET S3F</td>
<td>57</td>
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<tr>
<td>120045</td>
<td>Woodcote V H Lucid ET S3F</td>
<td>53</td>
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<tr>
<td>118016</td>
<td>Wenders MH Optimal S2F</td>
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<tr>
<td>120015</td>
<td>MAH Super Stardust S1F</td>
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#### Milkfat

National herd breed average  
**15 kg**

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<th>Name</th>
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</tr>
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<td>MAH Super Stardust S1F</td>
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<tr>
<td>120002</td>
<td>Mill-Ridge TS Flex ET S1F</td>
<td>55</td>
</tr>
<tr>
<td>120153</td>
<td>Busybrook BE Imply ET S2F</td>
<td>55</td>
</tr>
<tr>
<td>118001</td>
<td>Waimata SB Ransom ET S2F</td>
<td>54</td>
</tr>
<tr>
<td>120001</td>
<td>Mill-Ridge TS Finn ET S1F</td>
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</tbody>
</table>

#### Milk Volume

National herd breed average  
**545 litres**

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<thead>
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<th>Name</th>
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<tbody>
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<td>Woodcote MF Lochi ET S3F</td>
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<td>Waimata SB Ransom ET S2F</td>
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<td>120045</td>
<td>Woodcote V H Lucid ET S3F</td>
<td>1315</td>
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<tr>
<td>117090</td>
<td>Tronnoco MH Samba ET S3F</td>
<td>1116</td>
</tr>
<tr>
<td>118016</td>
<td>Meander TS Feature ET S2F</td>
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#### Fertility

National herd breed average  
**-0.9 %**

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<td>120111</td>
<td>Lombardi Maverick S1F</td>
<td>11.6</td>
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<tr>
<td>120002</td>
<td>Mill-Ridge TS Flex ET S1F</td>
<td>10.2</td>
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<td>120001</td>
<td>Mill-Ridge TS Finn ET S1F</td>
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<tr>
<td>120073</td>
<td>Meander TS Alloy ET S1F</td>
<td>9.1</td>
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<tr>
<td>118061</td>
<td>Hallivie All Calo ET S6F</td>
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#### Functional Survival

National herd breed average  
**0.7 %**

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<td>121014</td>
<td>Mattajude WA Mojo ET S2F</td>
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<tr>
<td>120073</td>
<td>Meander TS Alloy ET S1F</td>
<td>3.6</td>
</tr>
<tr>
<td>118059</td>
<td>Lightburn AB Riptide S1F</td>
<td>4.5</td>
</tr>
<tr>
<td>118053</td>
<td>Greenwell GR Governor S2F</td>
<td>4.4</td>
</tr>
<tr>
<td>118001</td>
<td>Waimata SB Ransom ET S2F</td>
<td>4.3</td>
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#### Somatic Cell Score

National herd breed average  
**0.05**

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<td>118053</td>
<td>Greenwell GR Governor S2F</td>
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<td>117067</td>
<td>Meander KJ Rhapsody S2F</td>
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<tr>
<td>121040</td>
<td>Spring River DG Spyro S1F</td>
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<tr>
<td>118001</td>
<td>Waimata SB Ransom ET S2F</td>
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#### Capacity

National herd breed average  
**.17**

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<td>Lightburn Blade Gusta</td>
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<tr>
<td>120056</td>
<td>Dicksons VR Merger ET S1F</td>
<td>76</td>
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<tr>
<td>118059</td>
<td>Lightburn AB Riptide S3F</td>
<td>74</td>
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<td>118056</td>
<td>Lightburn MG Relic S2F</td>
<td>71</td>
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<td>115031</td>
<td>Grady’s MP Lancerot S3F</td>
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#### Udder Overall

National herd breed average  
**.22**

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<th>Name</th>
<th>gPV</th>
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<tr>
<td>117011</td>
<td>Lombardi Maverick S1F</td>
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<td>117090</td>
<td>Tronnoco MH Samba ET S3F</td>
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<td>Meander TS Feature ET S2F</td>
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<tr>
<td>115007</td>
<td>Lightburn Blade Gusta</td>
<td>0.87</td>
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#### Overall Opinion

Sire breed average  
**.18**

<table>
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<td>117068</td>
<td>Meander SB Arrow ET S2F</td>
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<tr>
<td>121014</td>
<td>Mattajude WA Mojo ET S2F</td>
<td>0.75</td>
</tr>
<tr>
<td>120045</td>
<td>Woodcote V H Lucid ET S3F</td>
<td>0.68</td>
</tr>
<tr>
<td>118001</td>
<td>Waimata SB Ransom ET S2F</td>
<td>0.64</td>
</tr>
</tbody>
</table>
121031 Meander MA Fulltime S2F

Breeding Details
Breeder: R & L A Ryan
Sire: Meander MA Milker S2F MGS Marlow IB Gauquntia-ET
Dam: Meander MA Milker S2F MGS Mavetla Monta Wassawi

HOOFPRINT®
- Udder Overall: 1.6
- Foot & Leg: 0.9
- Marrowbone: 1.0
- Overall Opinion: 9.3

LIC Initiatives
VMG: 1334 AJ2 Protein A1A2
High Input: 1417 % Black 90

5-year-old dam. Owner: Millridge Limited, Ohaupo

120002 Mill-Ridge TS Flex-ET S1F

Breeding Details
Breeder: B & S & R Fullerton
Sire: Tuffs 321 Supreme S2F MGS Merivue Miss Westmin
Dam: Mill-Ridge TS Flex-ET S1F MGS GHDVY-10-21

HOOFPRINT®
- Udder Overall: 2.1
- Foot & Leg: 0.9
- Marrowbone: 1.0
- Overall Opinion: 9.3

LIC Initiatives
VMG: 1332 AJ2 Protein A1A2
High Input: 1417 % Black 90

5-year-old dam. Owner: CView Trust, Hawera

11904 Buelin BM Equator S2F

Breeding Details
Breeder: S Buhler
Sire: Bothwell BF Master BF S2F MGS Fairmont Mini Edition
Dam: Buelin BM Equator S2F MGS Glenkoru G-8 Emera-ET S2F

HOOFPRINT®
- Udder Overall: 1.6
- Foot & Leg: 0.9
- Marrowbone: 0.9
- Overall Opinion: 9.3

LIC Initiatives
VMG: 1334 AJ2 Protein A1A2
High Input: 1417 % Black 90

5-year-old dam. Owner: CView Trust, Hawera

121011 Lombardi Maverick S3F

Breeding Details
Breeder: A T Megney
Sire: Boyanui M2 Currency S3F MGS Saraboy/Milbarner-ET S2F
Dam: BPNK-16-4 S2F MGS Lombardi Brizet Meg S2F

HOOFPRINT®
- Udder Overall: 1.6
- Foot & Leg: 0.9
- Marrowbone: 3.0
- Overall Opinion: 9.3

LIC Initiatives
VMG: 1334 AJ2 Protein A1A2
High Input: 1417 % Black 90

5-year-old dam. Owner: CView Trust, Hawera

Genomically Selected

VMSI 1314 A2 Protein A1A2
High Input: 1355 % Black 90

VMSI 1314 A2 Protein A1A2
High Input: 1355 % Black 90

VMSI 1314 A2 Protein A1A2
High Input: 1355 % Black 90
Breeding Details
Breeder: Woodcote Farms
Sire: VanTuynje x Banberry/SF
Dam: Woodcote/FuLaurex-ET-SF

Genomic Production gBVs
- Milkfat: 47 kg
- Protein: 53 kg
- Milk Volume: 105 l
- Liveweight: 79 kg

Genomic TOP traits
- gBV - 0.5 0 0
- Adapt to Milking: 0.9
- Sheath Temperament: 0.7
- Milking Speed: 0.6
- Overall Opinion: 1.1
- Stature: 0.4
- Capacity: 0.2
- Ramp Angle: 0.3
- Ramp Width: 0.4
- Legs: 0.0
- Udder Support: 0.2
- Front Udder: 0.2
- Rear Udder: 0.2
- Front Teat Placement: 0.2
- Rear Teat Placement: 0.2
- Teat Length: 0.1
- Udder Overall: 0.6
- Diary Conformation: 0.8

LIC Initiatives
- VMS: 1384
- AJ2 Protein: 138
- A2A2: 134
- High Input: 113
- % Black: 30

Sire: Tufts GS Super Varioor SF
Dam: MAHERY Lairoux ET SF

Genomic Production gBVs
- Milkfat: 58 kg
- Protein: 49 kg
- Milk Volume: 105 l
- Liveweight: 79 kg

Genomic TOP traits
- gBV - 0.5 0 0
- Adapt to Milking: 0.9
- Sheath Temperament: 0.7
- Milking Speed: 0.6
- Overall Opinion: 1.1
- Stature: 0.4
- Capacity: 0.2
- Ramp Angle: 0.3
- Ramp Width: 0.4
- Legs: 0.0
- Udder Support: 0.2
- Front Udder: 0.2
- Rear Udder: 0.2
- Front Teat Placement: 0.2
- Rear Teat Placement: 0.2
- Teat Length: 0.1
- Udder Overall: 0.6
- Diary Conformation: 0.8

LIC Initiatives
- VMS: 1452
- AJ2 Protein: 142
- A2A2: 141
- High Input: 141
- % Black: 90

Breeding Details
Breeder: MAH Berkers
Sire: Geenwood G Governoor SF
Dam: MAH Pierre Sixty RR SF

Genomic Production gBVs
- Milkfat: 48 kg
- Protein: 22 kg
- Milk Volume: 34 l
- Liveweight: 56 kg

Genomic TOP traits
- gBV - 0.5 0 0
- Adapt to Milking: 0.9
- Sheath Temperament: 0.7
- Milking Speed: 0.6
- Overall Opinion: 1.1
- Stature: 0.4
- Capacity: 0.2
- Ramp Angle: 0.3
- Ramp Width: 0.4
- Legs: 0.0
- Udder Support: 0.2
- Front Udder: 0.2
- Rear Udder: 0.2
- Front Teat Placement: 0.2
- Rear Teat Placement: 0.2
- Teat Length: 0.1
- Udder Overall: 0.6
- Diary Conformation: 0.8

LIC Initiatives
- VMS: 1362
- AJ2 Protein: 136
- A2A2: 135
- High Input: 135
- % Black: 85

Breeding Details
Breeder: P A Lovejoy
Sire: Greenwood G Governor SF
Dam: Spring River P Sunny SF

Genomic Production gBVs
- Milkfat: 55 kg
- Protein: 43 kg
- Milk Volume: 34 l
- Liveweight: 56 kg

Genomic TOP traits
- gBV - 0.5 0 0
- Adapt to Milking: 0.9
- Sheath Temperament: 0.7
- Milking Speed: 0.6
- Overall Opinion: 1.1
- Stature: 0.4
- Capacity: 0.2
- Ramp Angle: 0.3
- Ramp Width: 0.4
- Legs: 0.0
- Udder Support: 0.2
- Front Udder: 0.2
- Rear Udder: 0.2
- Front Teat Placement: 0.2
- Rear Teat Placement: 0.2
- Teat Length: 0.1
- Udder Overall: 0.6
- Diary Conformation: 0.8

LIC Initiatives
- VMS: 1350
- AJ2 Protein: 135
- A2A2: 134
- High Input: 134
- % Black: 85
Genomically Selected

121063 Marchel WM Jackpot-ET S2F

Breeding Details
Breeder: M & M Kone
Sire: Woodcote F1 Mastermind MGS
Dam: Marchel Grand Joy S1F MGD

Genetic Production gBVs
Production Efficiency
Milkfat Protein Milk Volume Liveweight
49 kg 34 kg 6991 l 64 kg

Robustness
Fertility Semen Count Body Cond. Score Functional Surviv Udder Overall
9.9% -0.09 0.14 3.4% 0.50

Other

Heifer Calving Difficulty Cow Calving Capacity
3.8%/35% 1.0%/35% -3.4 days

Genomic TOP traits

Adapts to Milking .38
Sheed Temperament .38
Milking Speed .17
Overall Opinion .52
Stature .87
Capacity .46
Rump Angle .71
Rump Width .39
Legs .12
Udder Support .48
Front Udder .51
Rear Udder .44
Front Test Placement .04
Rear Test Placement .01
Teat Length .50
Udder Overall .50
Dairy Conformation .49

120073 Meander TS Alloy-ET S1F

Breeding Details
Breeder: R & A Bruin
Sire: Taufs BT Equator SIF MGS
Dam: Meander E2 Plynt S2F MGD

Genetic Production gBVs
Production Efficiency
Milkfat Protein Milk Volume Liveweight
53 kg 32 kg 470 l 52 kg

Robustness
Fertility Semen Count Body Cond. Score Functional Surviv Udder Overall
8.1% -0.17 0.15 3.3%/3.9% -0.35% 7.4 days

Other

Heifer Calving Difficulty Cow Calving Capacity
3.3%/3.9% -0.35% 7.4 days

Genomic TOP traits

Adapts to Milking .50
Sheed Temperament .37
Milking Speed .30
Overall Opinion .59
Stature .64
Capacity .00
Rump Angle .43
Rump Width .57
Legs .19
Udder Support .38
Front Udder .40
Rear Udder .40
Front Test Placement .02
Rear Test Placement .20
Teat Length .00
Udder Overall .36
Dairy Conformation .12

121057 Tronno E Saini-ET S3F

Breeding Details
Breeder: T & K O’Connor
Sire: Taufs BT Equator SIF MGS
Dam: Tronnoo Stella-ET MGD

Genetic Production gBVs
Production Efficiency
Milkfat Protein Milk Volume Liveweight
51 kg 30 kg 363 l 46 kg

Robustness
Fertility Semen Count Body Cond. Score Functional Surviv Udder Overall
3.5% 0.18 0.01 3.7% 0.62

Other

Heifer Calving Difficulty Cow Calving Capacity
1.4%/37% 3.0 days

Genomic TOP traits

Adapts to Milking .56
Sheed Temperament .57
Milking Speed .37
Overall Opinion .59
Stature .87
Capacity .56
Rump Angle .00
Rump Width .56
Legs .92
Udder Support .75
Front Udder .30
Rear Udder .31
Front Test Placement .11
Rear Test Placement .72
Teat Length .03
Udder Overall .62
Dairy Conformation .51

121014 Mattojade WA Mojo-ET S2F

Breeding Details
Breeder: M & Brady
Sire: Whitemare MG Alpina S2F MGS
Dam: NTHK-15-30 MGD

Genetic Production gBVs
Production Efficiency
Milkfat Protein Milk Volume Liveweight
51 kg 35 kg 465 l 67 kg

Robustness
Fertility Semen Count Body Cond. Score Functional Surviv Udder Overall
1.5% 0.26 0.10 5.0% 0.72

Other

Heifer Calving Difficulty Cow Calving Capacity
1.5%/33% -1.2 days

Genomic TOP traits

Adapts to Milking .68
Sheed Temperament .68
Milking Speed .42
Overall Opinion .75
Stature .84
Capacity .56
Rump Angle .00
Rump Width .64
Legs .92
Udder Support .77
Front Udder .54
Rear Udder .71
Front Test Placement .41
Rear Test Placement .73
Teat Length .06
Udder Overall .72
Dairy Conformation .64

LIC Initiatives
VMSI 1357 A2 Protein A3A2
High Input 1338 % Black 80

LIC Initiatives
VMSI 1364 A2 Protein A1A2
High Input 1403 % Black 90

LIC Initiatives
VMSI 1362 A2 Protein A1A2
High Input 1392 % Black 20

LIC Initiatives
VMSI 1146 A2 Protein A3A2
High Input 1369 % Black 15

HOOFPRINT®

Methane Efficiency
Nitrogen Efficiency

HOOFPRINT®

Methane Efficiency
Nitrogen Efficiency

HOOFPRINT®

Methane Efficiency
Nitrogen Efficiency

HOOFPRINT®

Methane Efficiency
Nitrogen Efficiency

Seven-year-old dam. Owner: R & A Bruin, Otautau
**Genomically Selected**

**LIC Initiatives**

- **VMG**
  - 1131
gbW/Rel: 312/62% REL
  - High Input: 1139
  - % Black: 35

- **Genomic Production gBVs**
  - Milkfat
  - Protein
  - Milk Volume
  - Liveweight

- **Genomic TOP traits**
  - gbv: -.5
  - 0
  - .5
  - 1.0

**Genomic Packs from**

- **2022 Yearling Bulls**
  - Individually...
  - $32.35
  - $26.37

Want the very latest genetics?

LIC has therefore decided to wait until straws have been collected before announcing the 2022 yearling sires.

**Yearling bulls will be exclusively available for purchase via Alpha.**

If you're looking to fast track your genetic gain and/or want access to the yearling bulls our Bull Acquisition team are using, make sure you register your interest with your LIC Agri Manager. Alternatively view the bulls online at [lic.co.nz/alpha](http://lic.co.nz/alpha).

**Breeding Details**

**Dicksons Free-May-ET SIF**

- **Breed:** Holstein-Friesian
- **Age:** Four-year-old dam
- **Owner:** M & J Dickson, Te Awamutu

**Breeding Details**

**Mill-Ridge TS Finn-ET SIF**

- **Breed:** Holstein-Friesian
- **Age:** Five-year-old dam
- **Owner:** Mill-Ridge Limited, Ohaupo

**Breeding Details**

**Tronnoco M Saquoon-ET S3F**

- **Breed:** Holstein-Friesian
- **Age:** Four-year-old dam
- **Owner:** T & K O'Connor, Hanmer Springs

**Genomic Production gBVs**

- **Milkfat**
- **Protein**
- **Milk Volume**
- **Liveweight**

**Genomic TOP traits**

- gbv: -.5
- 0
- .5
- 1.0

**Genomic TOP traits**

- gbv: -.5
- 0
- .5
- 1.0

This season the Alpha yearling bulls won't be selected until September.

Due to their age, the earliest these bulls can be collected from is mid-winter and this has caused some supply issues in the past. LIC has therefore decided to wait until straws have been collected before announcing the 2022 yearling sires.

Yearling bulls will be exclusively available for purchase via Alpha. So, if you're looking to fast track your genetic gain and/or want access to the yearling bulls our Bull Acquisition team are using, make sure you register your interest with your LIC Agri Manager. Alternatively view the bulls online at [lic.co.nz/alpha](http://lic.co.nz/alpha).
**118001 Waimata SB Ransom-ET S2F**

- **Genetic Grade (gBW)**: $402/81% REL
- **Top 5 Protein**: 34.5%
- **Top 5 Milkfat**: 39%

**Breeding Details**
- **Bred by**: A & S Stevenson
- **Dam**: Waimata 13-14 S2F
- **Sire**: Spring Triple Base ET S2F

**Production gBVs**
- **96 Daughters, 36 Herds**
- **Efficiency**
  - Nitrogen: 48
- **Robustness**
  - Udder Overall: -30%

**TOP traits**
- **91 Daughters Top Inspected**
- **Adapts to Milking**: -5
- **Shed temperament**: -5
- **Conformation**: -5
- **Sires**: Premier

**LIC Initiatives**
- **VMSI**: 1316
- **A2 Protein**: A2A2
- **High Input**: 1384

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**117068 Meander SB Arrow-ET S2F**

- **Genetic Grade (gBW)**: $351/88% REL
- **Top 5 Protein**: 34.95%
- **Top 5 Milkfat**: 38%

**Breeding Details**
- **Bred by**: R & A Bruin
- **Dam**: Meander FM-April S2F
- **Sire**: San Ray FM Beamer ET S2F

**Production gBVs**
- **140 Daughters, 50 Herds**
- **Efficiency**
  - Nitrogen: 48
- **Robustness**
  - Udder Overall: -40%

**TOP traits**
- **105 Daughters Top Inspected**
- **Adapts to Milking**: -5
- **Shed temperament**: -5
- **Conformation**: -5
- **Sires**: Premier

**LIC Initiatives**
- **VMSI**: 1186
- **A2 Protein**: A1A2
- **High Input**: 1396
118032 Paynes LR Pacman-ET S2F

**Breeding Details**
- **Breeder**: B Payne
- **Dam**: Paynes Pulse Paisley S1F
- **Sire**: Carsons Mecca Pulse S1F

**Production gBVs**
- **98 Daughters 40 Herds**
- **Production Efficiency**
  - Milkfat: 33 kg
  - Protein: 35 kg
  - Milk Volume: 341 l
  - Liveweight: 45 kg

**Robustness**
- Fertility: 4.5%
- Somatic Cell Count: 0.23
- Body Condition Score: 0.18
- Functional Survival: 3.3%
- Udder Overall: 0.42

**Other**
- Heifer Calving Difficulty: 2.8% 34%
- Cow Calving Difficulty: 5.1% 12%
- Gestation Length: 2.1 68 days

**TOP traits**
- **90 Daughters TOP Inspected**
- **Management gBV**: -0.5
- **Adapts to Milking**: -0.5
- **Shed Temperament**: -0.5
- **Milking Speed**: -0.5
- **Overall Opinion**: -0.5

**Conformation gBV**: -0.5
- **Stature**: -0.4
- **Capacity**: -0.3
- **Rump Angle**: -0.3
- **Rump Width**: -0.3
- **Legs**: -0.3
- **Udder Support**: -0.3
- **Front Udder**: -0.3
- **Rear Udder**: -0.3
- **Front Teat Placement**: -0.3
- **Rear Teat Placement**: -0.3
- **Test Length**: -0.3
- **Udder Overall**: -0.3
- **Diary Conformation**: -0.3

**LIC Initiatives**
- **VM5**: 1314
- **A2 Protein**: 1314
- **A1A2**: 1314
- **High Input**: 1335
- **% Black**: 80

**New Zealand Genetics**: 36%

18/02/2022

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118076 Meander TT Feature-ET S2F

**Breeding Details**
- **Breeder**: R & A Bruin
- **Dam**: Meander 15-35-ET S2F
- **Sire**: Tecragon Technician S2F

**Production gBVs**
- **39 Daughters 13 Herds**
- **Production Efficiency**
  - Milkfat: 39 kg
  - Protein: 46 kg
  - Milk Volume: 1114 l
  - Liveweight: 39 kg

**Robustness**
- Fertility: 4.5%
- Somatic Cell Count: 0.03
- Body Condition Score: 0.09
- Functional Survival: 2.5%
- Udder Overall: 0.90

**Other**
- Heifer Calving Difficulty: 2.8% 34%
- Cow Calving Difficulty: 5.1% 22%
- Gestation Length: 0.06% 12%
- **Difficult calving -1.8 days**

**TOP traits**
- **36 Daughters TOP Inspected**
- **Management gBV**: -0.5
- **Adapts to Milking**: -0.5
- **Shed Temperament**: -0.5
- **Milking Speed**: -0.5
- **Overall Opinion**: -0.5

**Conformation gBV**: -0.5
- **Stature**: -0.4
- **Capacity**: -0.3
- **Rump Angle**: -0.2
- **Rump Width**: -0.3
- **Legs**: -0.3
- **Udder Support**: -0.3
- **Front Udder**: -0.3
- **Rear Udder**: -0.3
- **Front Teat Placement**: -0.3
- **Rear Teat Placement**: -0.3
- **Test Length**: -0.3
- **Udder Overall**: -0.3
- **Diary Conformation**: -0.3

**LIC Initiatives**
- **VM5**: 1351
- **A2 Protein**: 1351
- **A1A2**: 1351
- **High Input**: 1382
- **% Black**: 80

**New Zealand Genetics**: 41%

18/02/2022
## 118103 Woodcote BG Victory SIF

**Breeder:** Woodcote Farms  
**Dam:** Woodcote HH Verona-ET S2F  
**Sire:** Bagworth PF Grandeur S1F  
**MGS:** Mourne Grove Hothouse S2F

**Production gBVs**  
95 Daughters 45 Herds  

<table>
<thead>
<tr>
<th>Trait</th>
<th>Management</th>
<th>Milkfat</th>
<th>Protein</th>
<th>Milk Volume</th>
<th>Liveweight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production Efficiency</td>
<td>3.8</td>
<td>45 kg</td>
<td>34 kg</td>
<td>947 l</td>
<td>73 kg</td>
</tr>
<tr>
<td>Robustness</td>
<td></td>
<td>4.0%</td>
<td>4.0%</td>
<td>8.0%</td>
<td>8.0%</td>
</tr>
</tbody>
</table>

**Other**  
- Heifer Calving Difficulty: 2.4%/29%  
- Cow Calving Difficulty: 8.8%/98%  
- Gestation Length: 3.6 days

**Top traits**  
89 Daughters TOP Inspected

<table>
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<tr>
<th>Trait</th>
<th>gBV</th>
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<th>1.0</th>
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<td>Adapts to Milking</td>
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<tr>
<td>Shed Temperament</td>
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<tr>
<td>Milking Speed</td>
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<tr>
<td>Overall Opinion</td>
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<tr>
<td>Conformation</td>
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<tr>
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<tr>
<td>Dairy Conformation</td>
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</tbody>
</table>

**New Zealand Genetics:** 42%  

**LIC Initiatives**  
- VMSI: 1303  
- A2 Protein: A2A2  
- High Input: 1330  
- % Black: 90

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## 118053 Greenwell GR Governor SIF

**Breeder:** A, A & P Looney  
**Dam:** CPR-13-1  
**Sire:** Galatea MGH Regiment S1F  
**MGS:** Farside M Illustrious S3F

**Production gBVs**  
124 Daughters 49 Herds  

<table>
<thead>
<tr>
<th>Trait</th>
<th>Management</th>
<th>Milkfat</th>
<th>Protein</th>
<th>Milk Volume</th>
<th>Liveweight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production Efficiency</td>
<td>3.8</td>
<td>39 kg</td>
<td>37 kg</td>
<td>576 l</td>
<td>31 kg</td>
</tr>
<tr>
<td>Robustness</td>
<td>.66</td>
<td>4.1%</td>
<td>4.1%</td>
<td>1.4%</td>
<td>1.4%</td>
</tr>
</tbody>
</table>

**Other**  
- Heifer Calving Difficulty: 4.1%/77%  
- Cow Calving Difficulty: 1.4%/96%  
- Gestation Length: -5.8 days

**Top traits**  
100 Daughters TOP Inspected

<table>
<thead>
<tr>
<th>Trait</th>
<th>gBV</th>
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<th>5</th>
<th>1.0</th>
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</thead>
<tbody>
<tr>
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<tr>
<td>Adapts to Milking</td>
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<td>Shed Temperament</td>
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<tr>
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<tr>
<td>Overall Opinion</td>
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<td>Conformation</td>
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<tr>
<td>Dairy Conformation</td>
<td>.03</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**New Zealand Genetics:** 42%  

**LIC Initiatives**  
- VMSI: 1183  
- A2 Protein: A2A2  
- High Input: 1375  
- % Black: 45
115021 Gordons AM Lancelot S3F

Aquabon-Friesian F1c
Registered pedigree (Supplementary)
gBVs: $276/98%

<table>
<thead>
<tr>
<th>Trait</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production efficiency</td>
<td>$276</td>
</tr>
<tr>
<td>Robustness</td>
<td>$329</td>
</tr>
<tr>
<td>Nitrogen efficiency</td>
<td>17%</td>
</tr>
<tr>
<td>Methane efficiency</td>
<td>15%</td>
</tr>
</tbody>
</table>

Breeding Details
- Breeder: S & S Gordon, Morrinsville
- Dam: BCCY-08-37
- Sire: AJB TEF Maroatan-ET S3F

Production gBVs
- Milkfat: 44 kg
- Protein: 35 kg
- Milk Volume: 541 l
- Liveweight: 37 kg

Robustness
- Fertility: 0.96
- Udder: 0.30

Other
- Heifer Calving Difficulty: 4.2%
- Cow Calving Difficulty: 3.6%
- Gestation Length: 2.0 days

TOP traits
- Management: -5
- Adapt to Milking: 0
- Shed Temperament: 0
- Milking Speed: 0
- Overall Opinion: 1.0

Conformation: -5
- Stature: 0
- Capacity: 0
- Rump Angle: 0
- Rump Width: 0

Lic Initiatives
- VMSI: 1279
- High Input: 1301

New Zealand Genetics 35%
18/02/2022

118016 Werders MH Optimat S2F

Aquabon-Friesian F1c
Registered pedigree (Supplementary)
gBVs: $318/82%

<table>
<thead>
<tr>
<th>Trait</th>
<th>Value</th>
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<tbody>
<tr>
<td>Production efficiency</td>
<td>$318</td>
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<tr>
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<tr>
<td>Nitrogen efficiency</td>
<td>15%</td>
</tr>
<tr>
<td>Methane efficiency</td>
<td>17%</td>
</tr>
</tbody>
</table>

Breeding Details
- Breeder: T & C Werder, Morrinsville
- Dam: BMWJ-12-16
- Sire: Mourne Grove Hathor S2F

Production gBVs
- Milkfat: 44 kg
- Protein: 32 kg
- Milk Volume: 971 l
- Liveweight: 55 kg

Robustness
- Fertility: 0.10
- Udder: 0.30

Other
- Heifer Calving Difficulty: 3.1%
- Cow Calving Difficulty: 1.0%
- Gestation Length: 6.7 days

TOP traits
- Management: -5
- Adapt to Milking: 0
- Shed Temperament: -1.5
- Milking Speed: -2.0
- Overall Opinion: 0

Conformation: -5
- Stature: 0
- Capacity: 0
- Rump Angle: 0
- Rump Width: 0

Lic Initiatives
- VMSI: 1371
- High Input: 1382

New Zealand Genetics 45%
18/02/2022
### 118056 Lightburn MG Relic S2F

**Production gBVs**
- Milkfat: 25.2 kg
- Protein: 4.5 kg
- Milk Volume: 1049 liters
- Liveweight: 50 kg

**Heifer Calving Difficulty**
- 3.7%

**Cow Calving Difficulty**
- 1.7%

**Gestation Length**
- 5.6 days

**TOP traits**
- 90 Daughters TOP Inspected
  - gBV: 1.6

**Other**
- Management: $30.95
- Sire: Kingsdown AM Jaxon-ET S2F
- Breeder: J & W Allen
- Dam: Moorby FM Granite S2F

**Registered Pedigree**
- RELgBW
- Holstein-Friesian F16

**LIC Initiatives**
- Robustness: $25 8%

**Production Efficiency**
- Milkfat: 4.6%
- Protein: 3.7%

### 117067 Meander KJ Rhapsody S2F

**Production gBVs**
- Milkfat: 43 kg
- Protein: 37 kg
- Milk Volume: 1049 liters
- Liveweight: 60 kg

**Heifer Calving Difficulty**
- 0.46

**Cow Calving Difficulty**
- 0.06

**Gestation Length**
- 1.5 years

**TOP traits**
- 95 Daughters TOP Inspected
  - gBV: 1.43

**Other**
- Management: $32.95
- Sire: Invernia TGF Ignition S3F
- Breeder: Breeding Details
- Dam: Savannahs HF Hammer S1F

**Registered Pedigree**
- RELgBW
- Holstein-Friesian F16

**LIC Initiatives**
- Robustness: $27 82%

**Production Efficiency**
- Milkfat: 4.9%
- Protein: 4.2%

### 115107 Lightburn Blade Gusto

**Production gBVs**
- Milkfat: 49 kg
- Protein: 59.5 kg
- Milk Volume: 60 kg
- Liveweight: 57 kg

**Heifer Calving Difficulty**
- 2.2%

**Cow Calving Difficulty**
- 0.35

**Gestation Length**
- 1.8 years

**TOP traits**
- 105 Daughters 80 Herds
  - gBV: 1.79

**Other**
- Management: $303 90%
- Sire: Kingsdown AM Jaxon-ET S2F
- Breeder: J & W Allen
- Dam: Moorby FM Granite S2F

**Registered Pedigree**
- RELgBW
- Holstein-Friesian F16

**LIC Initiatives**
- Robustness: $32.95

**Production Efficiency**
- Milkfat: 4.9%
- Protein: 4.2%
**118034 Paynes TT Pastime-ET S2F**

- **Holstein-Friesian F1**
- **Registered Pedigree (Supplementary)**
- **gBV**: 259/82% REL

**Individually** $32.95 incl. gst

**Classic Packs** from $21.24* incl. gst

*Includes 10% InvestaMate discount

**BREEDING DETAILS**

- **BREEDER**: B Payne
- **DAM**: Paynes Pulse Paisley S1F
- **SIRE**: Tregaron Technician S2F MGS

**PRODUCTION gBVs**

- **115 Daughters 41 Herds**

**Management**
- Total gBV: -.5
- Production Efficiency: .3
- Milkfat: 28 kg
- Protein: 37 kg
- Milk Volume: 791 l
- Liveweight: 20 kg

**Robustness**
- Total gBV: 0
- Fertility: 7.8%
- Somatic Cell Count: 0.24
- Body Condition Score: .07
- Functional Survival: 3.2%
- Udder Overall: .73

**OTHER**
- **Heifer Calving Difficulty**: 4.6%/28%
- **Cow Calving Difficulty**: 0.6%/72%
- **Gestation Length**: >4.0 days

**TOP traits**

- **106 Daughters TOP Inspected**

**Management**
- Total gBV: -.3
- Production Efficiency: .5
- Milkfat: .25
- Protein: .0%
- Milk Volume: .5%
- Liveweight: 1.0

**Conformation**
- Total gBV: 0
- Structure: .10
- Capacity: -.04
- Rump Angle: -.42
- Rump Width: .30
- Legs: -.12
- Udder Support: .55
- Front Udder: .79
- Rear Udder: .17
- Front Teat Placement: .63
- Rear Teat Placement: .24
- Test Length: -.25
- Udder Overall: .73
- Dairy Conformation: .04

**NEW ZEALAND GENETICS**: 42%

**18/02/2022**

**LIC INITIATIVES**

- **VMSI**: 1269
- **A2 Protein**: A2A2
- **% Black**: 70

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**118071 Glenmead SB Trapeze SiF**

- **Holstein-Friesian F1**
- **Registered Pedigree (Supplementary)**
- **gBV**: 299/79% REL

**Individually** $34.95 incl. gst

**Classic Packs** from $21.24* incl. gst

*Includes 10% InvestaMate discount

**BREEDING DETAILS**

- **BREEDER**: K & F Clark
- **DAM**: Glenmead 14-19-ET S0F
- **SIRE**: Spring Tralee Bass-ET S2F MGS

**PRODUCTION gBVs**

- **73 Daughters 40 Herds**

**Management**
- Total gBV: -.3
- Production Efficiency: .5
- Milkfat: 29 kg
- Protein: 37 kg
- Milk Volume: 791 l
- Liveweight: 20 kg

**Robustness**
- Total gBV: 0
- Fertility: 5.9%
- Somatic Cell Count: .07
- Body Condition Score: .13
- Functional Survival: 4.2%
- Udder Overall: .57

**OTHER**
- **Heifer Calving Difficulty**: 0.4%/94%
- **Cow Calving Difficulty**: 4.6%/94%
- **Gestation Length**: >5.7 days

**TOP traits**

- **62 Daughters TOP Inspected**

**Management**
- Total gBV: -.3
- Production Efficiency: .5
- Milkfat: .28
- Protein: .0%
- Milk Volume: .5%
- Liveweight: 1.0

**Conformation**
- Total gBV: 0
- Structure: .09
- Capacity: .55
- Rump Angle: .51
- Rump Width: .22
- Legs: .09
- Udder Support: .55
- Front Udder: .44
- Rear Udder: .38
- Front Teat Placement: .60
- Rear Teat Placement: .69
- Test Length: -.15
- Udder Overall: .57
- Dairy Conformation: .35

**NEW ZEALAND GENETICS**: 41%

**18/02/2022**

**LIC INITIATIVES**

- **VMSI**: 1286
- **A2 Protein**: A2A2
- **% Black**: 85
### Premier Sire

**115062 Paavilasts MT Cyclone S2F**

**Breeding Details**
- **Breeder:** L & S Paalvast
- **Dam:** DVOP-11-109
- **Sire:** Mitchells/M Typhoon S2F
- **MGS:** Fairmont Mint-Edison

**Production GBVs**
- **112 Daughters, 52 Herds**
- **Efficiency GBVs**
  - Milkfat: Individual: 0.32
  - Protein: Individual: 0.32
  - Milk Volume: Individual: 0.32
  - Liveweight: Individual: 0.32

**Robustness**
- Fertility: 0.33
- Somatic Count: 0.02
- Body Condition: 0.23
- Overall: 0.39

**Other**
- Heifer Calving Difficulty: 0.75
- Cow Calving Difficulty: 0.40
- Gestation Length: 2.6 days

**TOP traits**
- 101 Daughters TOP Inspected
  - Management: GBV: -0.5
  - Adapted to Milking: 0.42
  - Shed Temperature: 0.41
  - Milking Speed: 0.43
  - Overall Opinion: 0.55

**Conformation**
- GBV: -0.5
- Stature: 0.75
- Capacity: 0.21
- Rump Angle: -0.15
- Rump Width: 0.24
- Legs: -0.26
- Udder Support: -0.40
- Front Udder: 0.13
- Rear Udder: 0.28
- Rear Teat Placement: 0.20
- Test Length: 0.20
- Udder Overall: 0.39
- Dairy Conformation: 0.28

**LIC Initiatives**
- **VMIS:** 1293
- **High Input:** 1109

**Genomic Graduates**
- New Zealand Genetics: 41%

**Other**
- gBV: 289

### LIC Initiatives

**Top 5 udders**

Two-year-old daughter. Owner: Bellcon Farm Trust, Te Awamutu

Two-year-old daughter. Owner: C H Land Limited, Matamata

### LIC Initiatives

**Top 5 capacity**

Two-year-old daughter. Owner: Birchlands Holdings Ltd, Morrinsville

### LIC Initiatives

**Top 5 graduates**

Two-year-old daughter. Owner: Birchlands Holdings Ltd, Morrinsville

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### Premier Sire

**118059 Lightburn AB Riptide S3F**

**Breeding Details**
- **Breeder:** J & W Allen
- **Dam:** Lightburn/WTPha-OC S3F
- **Sire:** Arkan/EO Bagnat-ET S3F
- **MGS:** Weames FE Te Pae S3F

**Production GBVs**
- **113 Daughters, 44 Herds**
- **Efficiency GBVs**
  - Milkfat: Individual: 0.34
  - Protein: Individual: 0.34
  - Milk Volume: Individual: 0.34
  - Liveweight: Individual: 0.34

**Robustness**
- Fertility: 0.42
- Somatic Count: 0.41
- Body Condition: 0.45
- Overall: 1.00

**Other**
- Heifer Calving Difficulty: -0.64
- Cow Calving Difficulty: -1.00
- Gestation Length: 2.5 days

**TOP traits**
- 110 Daughters TOP Inspected
  - Management: GBV: -0.5
  - Adapted to Milking: -0.20
  - Shed Temperature: -0.19
  - Milking Speed: -0.17
  - Overall Opinion: -0.28

**Conformation**
- GBV: -0.5
- Stature: -0.80
- Capacity: 0.74
- Rump Angle: -0.18
- Rump Width: 0.00
- Legs: -0.09
- Udder Support: -0.99
- Front Udder: 1.13
- Rear Udder: -0.67
- Rear Teat Placement: -0.67
- Test Length: -0.25
- Udder Overall: 1.08
- Dairy Conformation: -0.61

**LIC Initiatives**
- **VMIS:** 1267
- **High Input:** 1133

**Genomic Graduates**
- New Zealand Genetics: 34%

**Other**
- gBV: 235

---
118068 Bagworth GI Original S3F

Breeding Details
Breeder: R & A Siddins
Dam: Bagworth FMV Sex SBF
Sire: Gyseldan Excel InS3F MGS

Production gBVs
Production Efficiency
- Milkfat: 42 kg
- Protein: 5.5 kg
- Milk Volume: 524 l
- Liveweight: 84 kg

Robustness
- Fertility: 4.7%
- Somatic Cell Count: 4.1%
- Body Condition Score: 4.1%
- Calving Difficulty: 0.16
- Overall Opinion: 4.1%
- Milking Speed: 0.16
- Shed Temperament: 0.16
- Udder Support: 0.16
- Legs: 0.16
- Rump Angle: 0.16
- Overall Opinion: 0.16

TOP traits
- Adapts to Milking: .05
- Sheath Temperature: .04
- Milking Speed: .13
- Overall Opinion: .28
- Structure: 1.25
- Capacity: .25
- Rump Angle: .11
- Rump Width: .38
- Utter Support: .36
- Front Udder: .22
- Rear Udder: .40
- Front Test Placement: .11
- Rear Test Placement: .15
- Test Length: .70
- Udder Overall: .33
- Dairy Conformation: .49

New Zealand Genetics 33%

Top 5 gBV
- GL: 297/81%
- GL: 259/81%
- GL: 263/86%

LIC Initiatives
VMS: 1277
A2 Protein: A1A2
High Input: 1313

Classic Packs
Individually: $32.95

Classics Packs
Individually: $21.24

Two-year-old daughter. Owner: Newton Lee Willows Ltd, Morrinsville.

Hoofprint® Efficiencies
- Methane Efficiency
- Nitrogen Efficiency

Dairy Conformation
- Front Udder: .25
- Rear Udder: .41
- Udder Overall: .33
- Adapts to Milking: .05
- Sheath Temperature: .04
- Milking Speed: .13
- Overall Opinion: .28
- Structure: 1.25
- Capacity: .25
- Rump Angle: .11
- Rump Width: .38
- Utter Support: .36
- Front Udder: .22
- Rear Udder: .40
- Front Test Placement: .11
- Rear Test Placement: .15
- Test Length: .70
- Udder Overall: .33
- Dairy Conformation: .49

118101 Woodcote MF Lochi-ET S3F

Breeding Details
Breeder: Woodcote Farms
Dam: Woodcote Hoth Lowest ET S3F
Sire: Moore Mint Fire-Up MGS

Production gBVs
Production Efficiency
- Milkfat: 40 kg
- Protein: 5.7 kg
- Milk Volume: 140 l
- Liveweight: 83 kg

Robustness
- Fertility: 1.1%
- Somatic Cell Count: 0.01%
- Body Condition Score: 0.8%
- Calving Difficulty: 0.16
- Overall Opinion: 0.8%
- Milking Speed: 0.34
- Shed Temperament: 0.34
- Udder Support: 0.34
- Legs: 0.34
- Rump Angle: 0.34
- Overall Opinion: 0.34

TOP traits
- Adapts to Milking: .23
- Sheath Temperature: .32
- Milking Speed: .18
- Overall Opinion: .43
- Structure: 1.10
- Capacity: -.12
- Rump Angle: .23
- Rump Width: .72
- Legs: -.07
- Udder Support: .37
- Front Udder: .05
- Rear Udder: .17
- Front Test Placement: .27
- Rear Test Placement: .35
- Test Length: .09
- Udder Overall: .33
- Dairy Conformation: .31

New Zealand Genetics 33%

Top 5 gBV
- GL: 297/81%
- GL: 259/81%
- GL: 263/86%

LIC Initiatives
VMS: 1204
A2 Protein: A1A2
High Input: 1172

Classic Packs
Individually: $32.95

Classics Packs
Individually: $21.24


Hoofprint® Efficiencies
- Methane Efficiency
- Nitrogen Efficiency

Dairy Conformation
- Front Udder: .25
- Rear Udder: .41
- Udder Overall: .33
- Adapts to Milking: .05
- Sheath Temperature: .04
- Milking Speed: .13
- Overall Opinion: .28
- Structure: 1.25
- Capacity: .25
- Rump Angle: .11
- Rump Width: .38
- Utter Support: .36
- Front Udder: .22
- Rear Udder: .40
- Front Test Placement: .11
- Rear Test Placement: .15
- Test Length: .70
- Udder Overall: .33
- Dairy Conformation: .49

117090 Tronnoco MH Samba-ET S3F

Breeding Details
Breeder: 1 & K O Connor
Dam: Tronnoco Mass Sancha MGS
Sire: Woodcote TF Maximiser

Production gBVs
Production Efficiency
- Milkfat: 33 kg
- Protein: 48 kg
- Milk Volume: 116 l
- Liveweight: 37 kg

Robustness
- Fertility: 1.4%
- Somatic Cell Count: 0.34%
- Body Condition Score: 1.8%
- Calving Difficulty: 1.8%
- Overall Opinion: 0.94

TOP traits
- Adapts to Milking: .33
- Sheath Temperature: .34
- Milking Speed: .04
- Overall Opinion: .50
- Structure: 1.10
- Capacity: -.12
- Rump Angle: .23
- Rump Width: .72
- Legs: -.07
- Udder Support: .37
- Front Udder: .05
- Rear Udder: .17
- Front Test Placement: .27
- Rear Test Placement: .35
- Test Length: .09
- Udder Overall: .33
- Dairy Conformation: .31

New Zealand Genetics 33%

Top 5 gBV
- GL: 297/81%
- GL: 259/81%
- GL: 263/86%

LIC Initiatives
VMS: 1319
A2 Protein: A1A2
High Input: 1311

Classic Packs
Individually: $34.95

Classics Packs
Individually: $24.95

Two-year-old daughter. Owner: Bellcon Farm Trust, Te Awamutu.

Hoofprint® Efficiencies
- Methane Efficiency
- Nitrogen Efficiency

Dairy Conformation
- Front Udder: .25
- Rear Udder: .41
- Udder Overall: .33
- Adapts to Milking: .05
- Sheath Temperature: .04
- Milking Speed: .13
- Overall Opinion: .28
- Structure: 1.25
- Capacity: .25
- Rump Angle: .11
- Rump Width: .38
- Utter Support: .36
- Front Udder: .22
- Rear Udder: .40
- Front Test Placement: .11
- Rear Test Placement: .15
- Test Length: .70
- Udder Overall: .33
- Dairy Conformation: .49

Premier Sire
Top 5 udders

HOOFPRINT®
- Methane Efficiency
- Nitrogen Efficiency

HOOFPRINT®
- Methane Efficiency
- Nitrogen Efficiency

HOOFPRINT®
- Methane Efficiency
- Nitrogen Efficiency
Two-year-old daughter. Owner: LC & SA Kay Limited, Morrinsville

Two-year-old daughter. Owner Bellcon Farm Trust, Te Awamutu

Daughter Proven

Methane Efficiency
Nitrogen Efficiency

HOOFPRINT®

118061 Hallville AS Cola S2F

Breed Details
Breeder: G & J Hall
Dam: Hallville BSK Coca S1F
Sire: Aro-Amy MH Salute-ET S2F

Production Details
Production GVs:
- Milkfat: 27 kg
- Protein: 35 kg
- Milk Volume: 779 L
- Liveweight: 34 kg

Top 5 Traits:
Management: 82 Daughters TOP Inspected
- Adaptability to Milking: +0.5
- Shed Temperament: +0.5
- Milking Speed: +0.5
- Overall Opinion: +0.5

Conformation: 82 Daughters TOP Inspected
- Stature: +0.5
- Capacity: +0.5
- Udder Support: +0.5
- Front Udder: +0.5
- Rear Udder: +0.5
- Front Teat Placement: +0.5
- Test Length: +0.5
- Udder Overall: +0.5

Dairy Conformation: +0.5

GBC: $253/79%

New Zealand Genetics: 41% 

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LIC Initiatives
VMIS: 1265
High Input: 1110

117057 Maire GL Graduate-ET

Breed Details
Breeder: C & C Rowe
Dam: Lightburn F M Grace-ET
Sire: Gordons AM Lancelot S3F

Production Details
Production GVs:
- Milkfat: 36 kg
- Protein: 37 kg
- Milk Volume: 394 L
- Liveweight: 37 kg

Top 5 Traits:
Management: 74 Daughters TOP Inspected
- Adaptability to Milking: +0.5
- Shed Temperament: +0.5
- Milking Speed: +0.5
- Overall Opinion: +0.5

Conformation: 74 Daughters TOP Inspected
- Stature: +0.5
- Capacity: +0.5
- Udder Support: +0.5
- Front Udder: +0.5
- Rear Udder: +0.5
- Front Teat Placement: +0.5
- Test Length: +0.5
- Udder Overall: +0.5

Dairy Conformation: +0.5

GBC: $294/85%

New Zealand Genetics: 34% 

18/02/2022

LIC Initiatives
VMIS: 1334
High Input: 1335

Two-year-old daughter. Owner: Hartlands Livestock Limited, Morrinsville

Two-year-old daughter. Owner: A & K Pouwels, Hamilton

Two-year-old daughter. Owner: LC & SA Kay Limited, Morrinsville

Two-year-old daughter. Owner: A & K Pouwels, Hamilton

New Zealand Genetics: 34%
118042 Dicksons MH Mason-ET S2F

**Breeding Details**

**Breeder**
M & J Dickson

**Dam**
Dicksons CP Margy S1F

**Sire**
Mourne Grove Hothouse S2F MGS

**MGS**
Carsons Mecca Pulse S2F

**Production gBVs**

165 Daughters 70 Herds

- Milking Efficiency
  - Milkfat: $282/84% REL
  - Protein: $282/84% REL
  - Milk Volume: $282/84% REL
  - Liveweight: $282/84% REL

- Robustness
  - Fertility: $282/84% REL
  - Somatic Cell Count: $282/84% REL
  - Body Condition Score: $282/84% REL
  - Functional Survival: $282/84% REL
  - Udder Overall: $282/84% REL

**Other**

- Heifer Calving Difficulty: -0.8%/75%
- Cow Calving Difficulty: -0.2%/89%
- Gestation Length: 1.0 days

**TOP traits**

91 Daughters TOP Inspected

- Management: gBV -0.5 0.0 0.5 1.0
- Accepts to Milking: 0.51
- Shed Temperament: 0.52
- Milking Speed: 0.17
- Overall Opinion: 0.48

- Conformation: gBV -0.5 0.0 0.5 1.0
- Udder Support: 0.52
- Front Udder: 0.66
- Rear Udder: 0.17
- Front Teat Placement: 0.34
- Rear Teat Placement: 0.41
- Test Length: -0.09
- Udder Overall: 0.53
- Dairy Conformation: 0.27

**HOOFPRINT®**

- Methane Efficiency: 40%
- Nitrogen Efficiency: 40%

**VMSI**

- 1293 A2 Protein
- 1293 % Black

**LIC Initiatives**

- 1293 A2 Protein
- 1293 % Black


117044 Telesis GI Esquire S2F

**Breeding Details**

**Breeder**
G Wilson

**Dam**
Telesis Hammer Heidi S1F

**Sire**
Gydeland Excel Inca S3F MGS

**MGS**
Savannahs HF Hammer S1F

**Production gBVs**

1784 Daughters 376 Herds

- Milking Efficiency
  - Milkfat: $291/92% REL
  - Protein: $291/92% REL
  - Milk Volume: $291/92% REL
  - Liveweight: $291/92% REL

- Robustness
  - Fertility: $291/92% REL
  - Somatic Cell Count: $291/92% REL
  - Body Condition Score: $291/92% REL
  - Functional Survival: $291/92% REL
  - Udder Overall: $291/92% REL

**Other**

- Heifer Calving Difficulty: 2.0%/64%
- Cow Calving Difficulty: 0.5%/81%
- Gestation Length: -3.2 days

**TOP traits**

107 Daughters TOP Inspected

- Management: gBV -0.5 0.0 0.5 1.0
- Accepts to Milking: 0.33
- Shed Temperament: 0.22
- Milking Speed: 0.19
- Overall Opinion: 0.36

- Conformation: gBV -0.5 0.0 0.5 1.0
- Udder Support: 0.54
- Front Udder: 0.57
- Rear Udder: 0.44
- Front Teat Placement: 0.34
- Rear Teat Placement: 0.43
- Test Length: 0.62
- Udder Overall: 0.48
- Dairy Conformation: 0.37

**HOOFPRINT®**

- Methane Efficiency: 31%
- Nitrogen Efficiency: 31%

**VMSI**

- 1295 A2 Protein
- 1295 % Black

**LIC Initiatives**

- 1295 A2 Protein
- 1295 % Black

---

Two-year-old daughter. Owner: LC & SA Kay Limited, Morrinsville

Two-year-old daughter. Owner: Birchlands Holdings Ltd, Morrinsville

Two-year-old daughter. Owner: LC & SA Kay Limited, Morrinsville

New Zealand Genetics 40%

New Zealand Genetics 31%

18/02/2022

18/02/2022
### Breeding Details

**Breeder**: P & O Love  
**Dam**: Spring River P Busy SIF  
**Sire**: Dokkne Holstein SIF  
**MGS**: Upton VA Phoenix SIF

### Production gBVs

- **Milkfat**: 4.3%  
- **Protein**: 3.7%  
- **Milk**: 1380  
- **Liveweight**: 54 kg  
- **Fertility**: 4.0%  
- **Count-Body Condition**: 0.2  
- **Functional Survival**: 3.1%  
- **Cow Calving Difficulty**: 1.3%  
- **Gestation Length**: 2.5 days

### TOP traits

- **Overall Opinion**: 0.8  
- **Capacity**: 0.8  
- **Udder Overall**: 0.8  
- **Diary Conformation**: 0.8

### Individually

- **Milkfat**: 37 kg  
- **Protein**: 36 kg  
- **Milk**: 3521  
- **Liveweight**: 104 kg  
- **Fertility**: 2.5%  
- **Count-Body Condition**: 0.5  
- **Functional Survival**: 2.5%  
- **Cow Calving Difficulty**: 2.0 days  
- **Gestation Length**: 1.0 days

### Economy Packs

- **Overall Opinion**: 0.58  
- **Capacity**: 0.47  
- **Udder Overall**: 0.47  
- **Diary Conformation**: 0.47

---

### Breeding Details

**Breeder**: T & C Werder  
**Dam**: BMKU-12-18  
**Sire**: Dokaane Holstein SIF  
**MGS**: Forede M Holstein SIF

### Production gBVs

- **Milkfat**: 5.4%  
- **Protein**: 4.2%  
- **Milk**: 2321  
- **Liveweight**: 7 kg  
- **Fertility**: 1.6%  
- **Count-Body Condition**: 0.0  
- **Functional Survival**: 1.2%  
- **Cow Calving Difficulty**: 1.3%  
- **Gestation Length**: 7.7 days

### TOP traits

- **Overall Opinion**: 0.47  
- **Capacity**: 0.58  
- **Udder Overall**: 0.58  
- **Diary Conformation**: 0.58

### Individually

- **Milkfat**: 37 kg  
- **Protein**: 36 kg  
- **Milk**: 821 l  
- **Liveweight**: 44 kg  
- **Fertility**: 2.0%  
- **Count-Body Condition**: 0.02  
- **Functional Survival**: 1.5%  
- **Cow Calving Difficulty**: 0.8 days  
- **Gestation Length**: 98 days

### Economy Packs

- **Overall Opinion**: 0.52  
- **Capacity**: 0.52  
- **Udder Overall**: 0.52  
- **Diary Conformation**: 0.52

---

### Breeding Details

**Breeder**: J & J Bellamy  
**Dam**: MGN-07-7  
**Sire**: Morne PF Golden Boy SIF  
**MGS**: Valden M/Appliance ET SIF

### Production gBVs

- **Milkfat**: 4.8%  
- **Protein**: 3.9%  
- **Milk**: 541 l  
- **Liveweight**: 15 kg  
- **Fertility**: 3.0%  
- **Count-Body Condition**: 0.0  
- **Functional Survival**: 3.8%  
- **Cow Calving Difficulty**: 3.2 days  
- **Gestation Length**: 1.0 days

### TOP traits

- **Overall Opinion**: 0.8  
- **Capacity**: 0.7  
- **Udder Overall**: 0.7  
- **Diary Conformation**: 0.7

### Individually

- **Milkfat**: 37 kg  
- **Protein**: 35 kg  
- **Milk**: 821 l  
- **Liveweight**: 59 kg  
- **Fertility**: 2.5%  
- **Count-Body Condition**: 0.0  
- **Functional Survival**: 2.0%  
- **Cow Calving Difficulty**: 4.0 days  
- **Gestation Length**: 1.0 days

### Economy Packs

- **Overall Opinion**: 0.58  
- **Capacity**: 0.58  
- **Udder Overall**: 0.58  
- **Diary Conformation**: 0.58

---

### Breeding Details

**Breeder**: Busybrook Dam  
**Sire**: Murray PF Golden Boy SIF  
**MGS**: Murray M/Appliance ET SIF

### Production gBVs

- **Milkfat**: 4.8%  
- **Protein**: 3.9%  
- **Milk**: 541 l  
- **Liveweight**: 15 kg  
- **Fertility**: 3.0%  
- **Count-Body Condition**: 0.0  
- **Functional Survival**: 3.8%  
- **Cow Calving Difficulty**: 3.2 days  
- **Gestation Length**: 1.0 days

### TOP traits

- **Overall Opinion**: 0.8  
- **Capacity**: 0.7  
- **Udder Overall**: 0.7  
- **Diary Conformation**: 0.7

### Individually

- **Milkfat**: 37 kg  
- **Protein**: 35 kg  
- **Milk**: 821 l  
- **Liveweight**: 59 kg  
- **Fertility**: 2.5%  
- **Count-Body Condition**: 0.0  
- **Functional Survival**: 2.0%  
- **Cow Calving Difficulty**: 4.0 days  
- **Gestation Length**: 1.0 days

### Economy Packs

- **Overall Opinion**: 0.58  
- **Capacity**: 0.58  
- **Udder Overall**: 0.58  
- **Diary Conformation**: 0.58

---

### Breeding Details

**Breeder**: R & A Hocking  
**Sire**: Firmont Mini-Edition  
**MGS**: SRC Max Secret Skulon

### Production gBVs

- **Milkfat**: 4.8%  
- **Protein**: 4.0%  
- **Milk**: 658 l  
- **Liveweight**: 44 kg  
- **Fertility**: 0.5%  
- **Count-Body Condition**: 0.0  
- **Functional Survival**: 1.5%  
- **Cow Calving Difficulty**: 0.4%  
- **Gestation Length**: 4.2 days

### TOP traits

- **Overall Opinion**: 0.27  
- **Capacity**: 0.27  
- **Udder Overall**: 0.27  
- **Diary Conformation**: 0.27

### Individually

- **Milkfat**: 37 kg  
- **Protein**: 38 kg  
- **Milk**: 658 l  
- **Liveweight**: 44 kg  
- **Fertility**: 0.5%  
- **Count-Body Condition**: 0.0  
- **Functional Survival**: 1.5%  
- **Cow Calving Difficulty**: 0.4%  
- **Gestation Length**: 4.2 days

### Economy Packs

- **Overall Opinion**: 0.27  
- **Capacity**: 0.27  
- **Udder Overall**: 0.27  
- **Diary Conformation**: 0.27

---

### Breeding Details

**Breeder**: P & O Love  
**Dam**: Spring River P Busy SIF  
**Sire**: Dokkne Holstein SIF  
**MGS**: Upton VA Phoenix SIF

### Production gBVs

- **Milkfat**: 4.3%  
- **Protein**: 3.7%  
- **Milk**: 1380  
- **Liveweight**: 54 kg  
- **Fertility**: 4.0%  
- **Count-Body Condition**: 0.2  
- **Functional Survival**: 3.1%  
- **Cow Calving Difficulty**: 1.3%  
- **Gestation Length**: 2.5 days

### TOP traits

- **Overall Opinion**: 0.8  
- **Capacity**: 0.8  
- **Udder Overall**: 0.8  
- **Diary Conformation**: 0.8

### Individually

- **Milkfat**: 37 kg  
- **Protein**: 36 kg  
- **Milk**: 3521  
- **Liveweight**: 104 kg  
- **Fertility**: 2.5%  
- **Count-Body Condition**: 0.5  
- **Functional Survival**: 2.5%  
- **Cow Calving Difficulty**: 2.0 days  
- **Gestation Length**: 1.0 days

### Economy Packs

- **Overall Opinion**: 0.58  
- **Capacity**: 0.58  
- **Udder Overall**: 0.58  
- **Diary Conformation**: 0.58
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For updated bull information after each AE run, scan the QR code.
### Jersey

#### TOP 5 Combined Rankings

##### Breeding Worth

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<td>Shelby BC Lotto ET SJU</td>
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National herd breed average: $177

##### Protein

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National herd breed average: -1 kg

##### Milkfat

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National herd breed average: 10 kg

##### Milk Volume

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<td>Okura SL Litigator</td>
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National herd breed average: -430 litres

##### Fertility

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National herd breed average: 1.2 %

##### Functional Survival

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<td>Thornwood Banff Titus</td>
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National herd breed average: 0.9 %

##### Capacity

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National herd breed average: .20

##### Udder Overall

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National herd breed average: .24

##### Stature

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National herd breed average: -.82

##### Liveweight

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National herd breed average: -50 kg
### Jersey J16

#### Genomically Selected

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<td>Dam</td>
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#### Genomic Production gBVs

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<th>Protein</th>
<th>Milk Volume</th>
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#### Genomic TOP traits

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#### LIC Initiatives

- **VMG:** 1316
- **A2 Protein:** A2A2
- **High Input:** 1406

---

### High Input 1406

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#### Genomic Production gBVs

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#### Genomic TOP traits

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<tr>
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<td>Dairy Conformation</td>
<td>.34</td>
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</tbody>
</table>

#### LIC Initiatives

- **VMG:** 1319
- **A2 Protein:** A2A2
- **High Input:** 1194

---

### Jersey J16

#### Genomically Selected

| Breeder | M & J Gabb
<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>Sire</td>
<td>Glanton SS Beattles S3J</td>
</tr>
<tr>
<td>Dam</td>
<td>Tironui Integ Meg</td>
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</table>

#### Genomic Production gBVs

<table>
<thead>
<tr>
<th>Milkfat</th>
<th>Protein</th>
<th>Milk Volume</th>
<th>Liveweight</th>
</tr>
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<tbody>
<tr>
<td>38 kg</td>
<td>15 kg</td>
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<td>-25 kg</td>
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#### Genomic TOP traits

<table>
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</tbody>
</table>

#### LIC Initiatives

- **VMG:** 1223
- **A2 Protein:** A2A2
- **High Input:** 1367

---

### Jersey J16

#### Genomically Selected

<table>
<thead>
<tr>
<th>Breeder</th>
<th>H &amp; G Bell</th>
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<tbody>
<tr>
<td>Sire</td>
<td>Braedene ENS Bastille</td>
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<tr>
<td>Dam</td>
<td>Foxton Noontime Frill</td>
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</table>

#### Genomic Production gBVs

<table>
<thead>
<tr>
<th>Milkfat</th>
<th>Protein</th>
<th>Milk Volume</th>
<th>Liveweight</th>
</tr>
</thead>
<tbody>
<tr>
<td>386 kg</td>
<td>81 kg</td>
<td>-242 l</td>
<td>-35 kg</td>
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#### Genomic TOP traits

<table>
<thead>
<tr>
<th>gBV</th>
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</table>

#### LIC Initiatives

- **VMG:** 1566
- **A2 Protein:** A2A2
- **High Input:** 1415

---

### Jersey J16

#### Genomically Selected

<table>
<thead>
<tr>
<th>Breeder</th>
<th>A &amp; L Lombers</th>
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<tr>
<td>Sire</td>
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#### Genomic Production gBVs

<table>
<thead>
<tr>
<th>Milkfat</th>
<th>Protein</th>
<th>Milk Volume</th>
<th>Liveweight</th>
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<tbody>
<tr>
<td>49 kg</td>
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<td>211 l</td>
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#### Genomic TOP traits

<table>
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</tbody>
</table>

#### LIC Initiatives

- **VMG:** 1316
- **A2 Protein:** A2A2
- **High Input:** 1415
Genomically Selected

Breeding Details

**Decipher ET**
- **Breeder:** J & T Bailey
- **Sire:** Genomic Leader ET 53J
- **Dam:** Arrieta Brahms Desi
- **Production Efficiency**
  - MilkFat: 33 kg
  - Protein: 12 kg
  - Milk Volume: -477 l
  - Liveweight: -51 kg
- **Genomic Production gBVs**
  - PW/Rel: 316/72
  - gBW/Rel: 45/69
  - Genomic Production gBVs: 66/76

**Magnify**
- **Breeder:** J & S Charlton
- **Sire:** Crescendo Excel Mya ET 88J
- **Dam:** Pukeroro 15-13 J3J
- **Production Efficiency**
  - MilkFat: 37 kg
  - Protein: 10 kg
  - Milk Volume: -510 l
  - Liveweight: -52 kg
- **Genomic Production gBVs**
  - PW/Rel: 38/64
  - gBW/Rel: 16/64
  - Genomic Production gBVs: 32/70

**Ngatoro**
- **Breeder:** Cartwright Family
- **Sire:** McCallum Bern Hardy 53J
- **Dam:** Te Aranga PCG Jingo
- **Production Efficiency**
  - MilkFat: 42 kg
  - Protein: 11 kg
  - Milk Volume: -508 l
  - Liveweight: -53 kg
- **Genomic Production gBVs**
  - PW/Rel: 350/69
  - gBW/Rel: 122/64
  - Genomic Production gBVs: 418/78

**Baileys GL**
- **Breeder:** J & T Bailey
- **Sire:** Genomic Leader ET 53J
- **Dam:** Arrieta Brahms Desi
- **Production Efficiency**
  - MilkFat: 33 kg
  - Protein: 12 kg
  - Milk Volume: -477 l
  - Liveweight: -51 kg
- **Genomic Production gBVs**
  - PW/Rel: 316/72
  - gBW/Rel: 45/69
  - Genomic Production gBVs: 66/76

**Rockland LQ**
- **Breeder:** M & E Darke
- **Sire:** Lynbrook King Quadrant
- **Dam:** Rockland Larson Bilee
- **Production Efficiency**
  - MilkFat: 49 kg
  - Protein: 21 kg
  - Milk Volume: -131 l
  - Liveweight: -22 kg
- **Genomic Production gBVs**
  - PW/Rel: 420/68
  - gBW/Rel: 317/64
  - Genomic Production gBVs: 440/70

**Tawa Grove Jingo Jody**
- **Breeder:** Cartwright Family
- **Sire:** McCallum Bern Hardy 53J
- **Dam:** Te Aranga PCG Jingo
- **Production Efficiency**
  - MilkFat: 42 kg
  - Protein: 11 kg
  - Milk Volume: -508 l
  - Liveweight: -53 kg
- **Genomic Production gBVs**
  - PW/Rel: 350/69
  - gBW/Rel: 122/64
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**Tawa Grove Maunga Dee**
- **Breeder:** Cartwright Family
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- **Dam:** Te Aranga PCG Jingo
- **Production Efficiency**
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  - Protein: 12 kg
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  - PW/Rel: 316/72
  - gBW/Rel: 45/69
  - Genomic Production gBVs: 66/76
Genomically selected

Genomic Production gBVs

**Production Efficiency**
- Milkfat
- Protein
- Milk Volume
- Liveweight

**Genomic TOP traits**
- Adapts to Milking
- Sheath Temperature
- Milking Speed
- Overall Opinion
- Texture
- Capacity
- Rump Angle
- Rump Width
- Legs
- Udder Support
- Front Udder
- Rear Udder
- Front Teat Placement
- Rear Teat Placement
- Teat Length
- Udder Overall
- Diary Conformation

LIC Initiatives
- VMG
- J2 Protein
- A2A2

High Input

South Canterbury Livestock Improvement Ltd.
Genomically Selected

**VMSI 1305 A2 Protein A2A2**

Jersey J16

High Input

LIC Initiatives

**VMSI** 1343 J2 Protein A2A2

High Input 1196

*Includes 10% InvestaMate discount

**VMSI 1343 A2 Protein A2A2**

Jersey J16

High Input

LIC Initiatives

**VMSI** 1343 J2 Protein A2A2

High Input 1196

*Includes 10% InvestaMate discount

**VMSI 1343 A2 Protein A2A2**

Jersey J16

High Input

LIC Initiatives

**VMSI** 1343 J2 Protein A2A2

High Input 1196

*Includes 10% InvestaMate discount

**VMSI 1343 A2 Protein A2A2**

Jersey J16

High Input

LIC Initiatives

**VMSI** 1343 J2 Protein A2A2

High Input 1196

*Includes 10% InvestaMate discount

Want the very latest genetics?

**2022 Yearling Bulls**

This season the Alpha yearling bulls won't be selected until September.

Due to their age, the earliest these bulls can be collected from is mid-winter and this has caused some supply issues in the past. LIC has therefore decided to wait until straws have been collected before announcing the 2022 yearling sires.

Yearling bulls will be exclusively available for purchase via Alpha. So, if you’re looking to fast track your genetic gain and/or want access to the yearling bulls our Bull Acquisition team are using, make sure you register your interest with your LIC Agri Manager. Alternatively view the bulls online in September lic.co.nz/alpha

Genomic Packs from $26.37* +gst

*Individually

$32.35** +gst

**Includes 10% InvestaMate discount
318032 Shelby Integ Labyrinth ET

Production gBVs
139 Daughters 61 Herds

Production Efficiency
- Milkfat
- Protein
- Milk Volume
- Liveweight

Robustness
- Fertility
- Somatic Cell Count
- Body Cond. Score
- Functional Survival
- Udder Overall

Management gBV
- -.5
- 0
- .5
- 1.0

Adapts to Milking
- .06

Shed Temperament
- .05

Milking Speed
- .07

Overall Opinion
- .25

Conformation gBV
- -.5
- 0
- .5
- 1.0

Stature
- 1.01

Capacity
- .81

Rump Angle
- .57

Rump Width
- .02

Legs
- .14

Udder Support
- .31

Front Udder
- .11

Rear Udder
- .41

Front Teat Placement
- .17

Rear Teat Placement
- .48

Teat Length
- -.44

Udder Overall
- .33

Diary Conformation
- .68

New Zealand Genetics 65.5%
18/02/2022

TOP traits
104 Daughters TOP inspected

Management gBV
- -.05
- .5
- 1.0

Adapts to Milking
- .54

Shed Temperament
- .54

Milking Speed
- .05

Overall Opinion
- .26

Conformation gBV
- -.5
- 0
- .5
- 1.0

Stature
- .59

Capacity
- .49

Rump Angle
- -.90

Rump Width
- .44

Legs
- .11

Udder Support
- .31

Front Udder
- .11

Rear Udder
- .41

Front Teat Placement
- .17

Rear Teat Placement
- .48

Teat Length
- -.44

Udder Overall
- .33

Diary Conformation
- .68

New Zealand Genetics 71.3%
18/02/2022

LIC Initiatives
- VM3
- A2 Protein
- A1A2

High Input
- 1404

HOOFPRINT®
Methane Efficiency
Nitrogen Efficiency

Breeding Details
Breeder
T Hughes & V Scott
Sire
Okura LT Integrity

18/02/2022

318009 Tironui Superman-ET

Production gBVs
161 Daughters 54 Herds

Production Efficiency
- Milkfat
- Protein
- Milk Volume
- Liveweight

Robustness
- Fertility
- Somatic Cell Count
- Body Cond. Score
- Functional Survival
- Udder Overall

Management gBV
- -.5
- 0
- .5
- 1.0

Adapts to Milking
- .14

Shed Temperament
- .14

Milking Speed
- .05

Overall Opinion
- .26

Conformation gBV
- -.5
- 0
- .5
- 1.0

Stature
- .59

Capacity
- .49

Rump Angle
- -.90

Rump Width
- .44

Legs
- .11

Udder Support
- .31

Front Udder
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Rear Udder
- .41

Front Teat Placement
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Rear Teat Placement
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Teat Length
- -.44

Udder Overall
- .33

Diary Conformation
- .68

New Zealand Genetics 71.3%
18/02/2022

LIC Initiatives
- VM3
- A2 Protein
- A1A2

High Input
- 1461

HOOFPRINT®
Methane Efficiency
Nitrogen Efficiency

Breeding Details
Breeder
M & J Gibb
Sire
Puketawa AD Superstition

18/02/2022
Two-year-old daughter. Owner: D W Gibson, Hawera

Four-year-old dam. Owner: T Hughes & V Scott, Stratford

Daughter Proven

**Production gBVs**

**120 Daughters 56 Herds**

- Milkfat
- Protein
- Milk Volume
- Liveweight
- Management gBV
- Adapt to Milking
- Shed Temperament
- Milking Speed
- Overall Opinion
- Conformation gBV
- Stature
- Capacity
- Rump Angle
- Rump Width
- Legs
- Udder Support
- Front Udder
- Rear Udder
- Front Teat Placement
- Rear Teat Placement
- Teat Length
- Udder Overall
- Diary Conformation

**New Zealand Genetics 75%**

**TOP traits**

99 Daughters TOP Inspected

Management gBV - .5 0 .5 1.0
Adapts to Milking .31
Milking Speed .34
Overall Opinion .12
Conformation gBV - .5 0 .5 1.0
Stature - .52
Capacity .07
Rump Angle - .81
Rump Width .11
Legs .16
Udder Support .06
Front Udder .32
Rear Udder .06
Front Teat Placement .33
Rear Teat Placement -.67
Teat Length .51
Udder Overall .27
Diary Conformation .12

**Diary**

- Methane Efficiency
- Nitrogen Efficiency

**LIC Initiatives**

VMSI 1139 A2 Protein A2A2
High Input 1419

---

**318035 Shelby BC Lotto ET S3J**

Breeder: T Hughes & V Scott

Sire: Bells CM Conrad S2J MGS

**Production gBVs**

120 Daughters 56 Herds

- Milkfat
- Protein
- Milk Volume
- Liveweight
- Management gBV
- Adapt to Milking
- Shed Temperament
- Milking Speed
- Overall Opinion
- Conformation gBV
- Stature
- Capacity
- Rump Angle
- Rump Width
- Legs
- Udder Support
- Front Udder
- Rear Udder
- Front Teat Placement
- Rear Teat Placement
- Teat Length
- Udder Overall
- Diary Conformation

**New Zealand Genetics 75%**

**TOP traits**

99 Daughters TOP Inspected

Management gBV - .5 0 .5 1.0
Adapts to Milking .31
Milking Speed .34
Overall Opinion .12
Conformation gBV - .5 0 .5 1.0
Stature - .52
Capacity .07
Rump Angle - .81
Rump Width .11
Legs .16
Udder Support .06
Front Udder .32
Rear Udder .06
Front Teat Placement .33
Rear Teat Placement -.67
Teat Length .51
Udder Overall .27
Diary Conformation .12

**Diary**

- Methane Efficiency
- Nitrogen Efficiency

**LIC Initiatives**

VMSI 1139 A2 Protein A2A2
High Input 1419

---

**318015 Glenui Super Lamar**

Breeder: A & L Landers

Sire: Puketawa AD Superstition MGS

**Production gBVs**

162 Daughters 55 Herds

- Milkfat
- Protein
- Milk Volume
- Liveweight
- Management gBV
- Adapt to Milking
- Shed Temperament
- Milking Speed
- Overall Opinion
- Conformation gBV
- Stature
- Capacity
- Rump Angle
- Rump Width
- Legs
- Udder Support
- Front Udder
- Rear Udder
- Front Teat Placement
- Rear Teat Placement
- Teat Length
- Udder Overall
- Diary Conformation

**New Zealand Genetics 77%**

**TOP traits**

120 Daughters TOP Inspected

Management gBV - .5 0 .5 1.0
Adapts to Milking .31
Milking Speed .34
Overall Opinion .12
Conformation gBV - .5 0 .5 1.0
Stature - .52
Capacity .07
Rump Angle - .81
Rump Width .11
Legs .16
Udder Support .06
Front Udder .32
Rear Udder .06
Front Teat Placement .33
Rear Teat Placement -.67
Teat Length .51
Udder Overall .27
Diary Conformation .12

**Diary**

- Methane Efficiency
- Nitrogen Efficiency

**LIC Initiatives**

VMSI 1139 A2 Protein A2A2
High Input 1419

---
### 318029 Glenui BC Laredo ET S3J

**Breeding Details**
- **Breeder:** A & L Landers
- **Dam:** Glenui Integrity Lace ET
- **Sire:** Bells CM Conrad S2J
- **MGS:** Okura LT Integrity

**Production gBVs**
- 129 Daughters 57 Herds
  - **Production Efficiency**
    - Milkfat: 35 kg
    - Protein: 21 kg
    - Milk Volume: 431 l
    - Liveweight: -51 kg
  - **Robustness**
    - Fertility: 7.5%
    - Somatic Cell Count: 0.32
    - Body Condition Score: 0.13
    - Functional Survival: 4.3%
    - Udder Overall: 0.68

**Other**
- Heifer Calving Difficulty: -2.6/8.4%
- Cow Calving Difficulty: -0.6/35%
- Gestation Length: 2.7 days

**TOP traits**
- 101 Daughters TOP Inspected
  - Management: gBV -0.5
  - Adapts to Milking: -0.31
  - Shed Temperament: -0.31
  - Milking Speed: -0.22
  - Overall Opinion: -0.38
  - Conformation: gBV -0.5
  - Stature: -0.96
  - Capacity: -0.28
  - Rump Angle: -0.18
  - Rump Width: -0.03
  - Legs: -0.03
  - Udder Support: -0.49
  - Front Udder: -0.36
  - Rear Udder: -0.71
  - Front Teat Placement: -0.29
  - Rear Teat Placement: -0.22
  - Test Length: -0.05
  - Udder Overall: -0.68
  - Diary Conformation: -0.33

**LIC Initiatives**
- **VMS:** 1460
- **A2 Protein:** A2A2
- **High Input:** 1404

**Production Efficiency**
- Milkfat: 35 kg
- Protein: 21 kg
- Milk Volume: 431 l
- Liveweight: -51 kg

**Robustness**
- Fertility: 7.5%
- Somatic Cell Count: 0.32
- Body Condition Score: 0.13
- Functional Survival: 4.3%
- Udder Overall: 0.68

**Other**
- Heifer Calving Difficulty: -2.6/8.4%
- Cow Calving Difficulty: -0.6/35%
- Gestation Length: 2.7 days

**TOP traits**
- 101 Daughters TOP Inspected
  - Management: gBV -0.5
  - Adapts to Milking: -0.31
  - Shed Temperament: -0.31
  - Milking Speed: -0.22
  - Overall Opinion: -0.38
  - Conformation: gBV -0.5
  - Stature: -0.96
  - Capacity: -0.28
  - Rump Angle: -0.18
  - Rump Width: -0.03
  - Legs: -0.03
  - Udder Support: -0.49
  - Front Udder: -0.36
  - Rear Udder: -0.71
  - Front Teat Placement: -0.29
  - Rear Teat Placement: -0.22
  - Test Length: -0.05
  - Udder Overall: -0.68
  - Diary Conformation: -0.33

**LIC Initiatives**
- **VMS:** 1460
- **A2 Protein:** A2A2
- **High Input:** 1404

### 316039 Ulmarra TT Gallivant

**Breeding Details**
- **Breeder:** G & H McCallum
- **Dam:** Ulmarra 15-56
- **Sire:** Thornwood OLM Thor MGS
- **MGS:** Marsden NN Excell ET

**Production gBVs**
- 137 Daughters 55 Herds
  - **Production Efficiency**
    - Milkfat: 44 kg
    - Protein: 14 kg
    - Milk Volume: -251 l
    - Liveweight: -14 kg
  - **Robustness**
    - Fertility: 5.9%
    - Somatic Cell Count: 0.02
    - Body Condition Score: 0.07
    - Functional Survival: 2.5%
    - Udder Overall: 0.02

**Other**
- Heifer Calving Difficulty: -2.5/91%
- Cow Calving Difficulty: -0.5/94%
- Gestation Length: -0.2 days

**TOP traits**
- 117 Daughters TOP Inspected
  - Management: gBV -0.5
  - Adapts to Milking: -0.31
  - Shed Temperament: -0.31
  - Milking Speed: -0.05
  - Overall Opinion: -0.38
  - Conformation: gBV -0.5
  - Stature: -0.29
  - Capacity: -0.62
  - Rump Angle: -0.05
  - Rump Width: -0.06
  - Legs: -0.11
  - Udder Support: -0.34
  - Front Udder: -0.36
  - Rear Udder: -0.75
  - Front Teat Placement: -0.34
  - Rear Teat Placement: -0.05
  - Test Length: -0.24
  - Udder Overall: -0.62
  - Diary Conformation: -0.59

**LIC Initiatives**
- **VMS:** 1337
- **A2 Protein:** A1A2
- **High Input:** 1389

**Production Efficiency**
- Milkfat: 44 kg
- Protein: 14 kg
- Milk Volume: -251 l
- Liveweight: -14 kg

**Robustness**
- Fertility: 5.9%
- Somatic Cell Count: 0.02
- Body Condition Score: 0.07
- Functional Survival: 2.5%
- Udder Overall: 0.02

**Other**
- Heifer Calving Difficulty: -2.5/91%
- Cow Calving Difficulty: -0.5/94%
- Gestation Length: -0.2 days

**TOP traits**
- 117 Daughters TOP Inspected
  - Management: gBV -0.5
  - Adapts to Milking: -0.31
  - Shed Temperament: -0.31
  - Milking Speed: -0.05
  - Overall Opinion: -0.38
  - Conformation: gBV -0.5
  - Stature: -0.29
  - Capacity: -0.62
  - Rump Angle: -0.05
  - Rump Width: -0.06
  - Legs: -0.11
  - Udder Support: -0.34
  - Front Udder: -0.36
  - Rear Udder: -0.75
  - Front Teat Placement: -0.34
  - Rear Teat Placement: -0.05
  - Test Length: -0.24
  - Udder Overall: -0.62
  - Diary Conformation: -0.59

**LIC Initiatives**
- **VMS:** 1337
- **A2 Protein:** A1A2
- **High Input:** 1389
Two-year-old daughter. Owner: Goreland Partnership, Hawera

**318066 Little River OI Samurai**

- **Breeder:** Brewer Family
- **Sire:** Little River Gem Shilo

**Production gBVs**
112 Daughters, 42 Herds

<table>
<thead>
<tr>
<th>Trait</th>
<th>gBV</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Milkfat</td>
<td>41.1</td>
<td>6.0%</td>
</tr>
<tr>
<td>Protein</td>
<td>16.4</td>
<td>4.4%</td>
</tr>
<tr>
<td>Milk Volume</td>
<td>37.6</td>
<td>6.0%</td>
</tr>
<tr>
<td>Liveweight</td>
<td>12.0</td>
<td>4.4%</td>
</tr>
</tbody>
</table>

**Robustness**

<table>
<thead>
<tr>
<th>Trait</th>
<th>gBV</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fertility</td>
<td>2.9%</td>
<td>0.1%</td>
</tr>
<tr>
<td>Somatic Cell Count</td>
<td>0.6%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Body Cond. Score</td>
<td>0.1%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Functional Survival</td>
<td>3.6%</td>
<td>0.1%</td>
</tr>
<tr>
<td>Udder Overall</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

**Other**

<table>
<thead>
<tr>
<th>Trait</th>
<th>gBV</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heifer Calving Difficulty</td>
<td>-0.4%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Cow Calving Difficulty</td>
<td>-0.7%</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

**TOP traits**
69 Daughters TOP Inspected

<table>
<thead>
<tr>
<th>Trait</th>
<th>gBV</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management</td>
<td>-0.3</td>
<td>0.0%</td>
</tr>
<tr>
<td>Adapts to Milking</td>
<td>.5</td>
<td>1.0%</td>
</tr>
<tr>
<td>Sheed Temperament</td>
<td>.5</td>
<td>1.0%</td>
</tr>
<tr>
<td>Milking Speed</td>
<td>.3</td>
<td>1.0%</td>
</tr>
<tr>
<td>Overall Opinion</td>
<td>.4</td>
<td>1.0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Trait</th>
<th>gBV</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stature</td>
<td>-0.9</td>
<td>0.0%</td>
</tr>
<tr>
<td>Capacity</td>
<td>.6</td>
<td>1.0%</td>
</tr>
<tr>
<td>Rump Angle</td>
<td>.06</td>
<td>0.0%</td>
</tr>
<tr>
<td>Rump Width</td>
<td>-.4</td>
<td>0.0%</td>
</tr>
<tr>
<td>Legs</td>
<td>.7</td>
<td>1.0%</td>
</tr>
<tr>
<td>Udder Support</td>
<td>.15</td>
<td>0.0%</td>
</tr>
<tr>
<td>Front Udder</td>
<td>.40</td>
<td>1.0%</td>
</tr>
<tr>
<td>Rear Udder</td>
<td>.30</td>
<td>1.0%</td>
</tr>
<tr>
<td>Front Teat Placement</td>
<td>.21</td>
<td>1.0%</td>
</tr>
<tr>
<td>Rear Teat Placement</td>
<td>.06</td>
<td>1.0%</td>
</tr>
<tr>
<td>Test Length</td>
<td>-.1</td>
<td>0.0%</td>
</tr>
<tr>
<td>Udder Overall</td>
<td>.30</td>
<td>1.0%</td>
</tr>
<tr>
<td>Dairy Conformation</td>
<td>.57</td>
<td>1.0%</td>
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</table>

**LIC Initiatives**

<table>
<thead>
<tr>
<th>Initiative</th>
<th>gBV</th>
</tr>
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<tbody>
<tr>
<td>VM8I</td>
<td>1341</td>
</tr>
<tr>
<td>A2 Protein</td>
<td>A2A2</td>
</tr>
<tr>
<td>High Input</td>
<td>13.5</td>
</tr>
</tbody>
</table>

New Zealand Genetics 65%

**HOOFPRINT®**

- Methane Efficiency
- Nitrogen Efficiency

18/02/2022

---

Two-year-old daughter. Owner: Glanton Holdings Limited, Hawera

**318021 Glanton Desi Banff**

- **Breeder:** R & A Thwaites
- **Sire:** Glanton Tana Blysse ET

**Production gBVs**
152 Daughters, 66 Herds

<table>
<thead>
<tr>
<th>Trait</th>
<th>gBV</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Milkfat</td>
<td>42.0</td>
<td>6.7%</td>
</tr>
<tr>
<td>Protein</td>
<td>10.0</td>
<td>4.7%</td>
</tr>
<tr>
<td>Milk Volume</td>
<td>-702</td>
<td>-3.8%</td>
</tr>
<tr>
<td>Liveweight</td>
<td>-38.0</td>
<td>-2.5%</td>
</tr>
</tbody>
</table>

**Robustness**

<table>
<thead>
<tr>
<th>Trait</th>
<th>gBV</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fertility</td>
<td>5.4%</td>
<td>0.4%</td>
</tr>
<tr>
<td>Somatic Cell Count</td>
<td>-0.4</td>
<td>0.0%</td>
</tr>
<tr>
<td>Body Cond. Score</td>
<td>.1</td>
<td>0.0%</td>
</tr>
<tr>
<td>Functional Survival</td>
<td>3.2%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Udder Overall</td>
<td>0.26</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

**Other**

<table>
<thead>
<tr>
<th>Trait</th>
<th>gBV</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heifer Calving Difficulty</td>
<td>-0.5%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Cow Calving Difficulty</td>
<td>-0.7%</td>
<td>0.0%</td>
</tr>
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</table>

**TOP traits**
113 Daughters TOP Inspected

<table>
<thead>
<tr>
<th>Trait</th>
<th>gBV</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management</td>
<td>.39</td>
<td>1.0%</td>
</tr>
<tr>
<td>Adapts to Milking</td>
<td>.40</td>
<td>1.0%</td>
</tr>
<tr>
<td>Sheed Temperament</td>
<td>.07</td>
<td>1.0%</td>
</tr>
<tr>
<td>Milking Speed</td>
<td>.45</td>
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<table>
<thead>
<tr>
<th>Trait</th>
<th>gBV</th>
<th>%</th>
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<tbody>
<tr>
<td>Stature</td>
<td>.72</td>
<td>1.0%</td>
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<tr>
<td>Capacity</td>
<td>.59</td>
<td>1.0%</td>
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<tr>
<td>Rump Angle</td>
<td>-.26</td>
<td>1.0%</td>
</tr>
<tr>
<td>Rump Width</td>
<td>.30</td>
<td>1.0%</td>
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<tr>
<td>Legs</td>
<td>.04</td>
<td>1.0%</td>
</tr>
<tr>
<td>Udder Support</td>
<td>.05</td>
<td>1.0%</td>
</tr>
<tr>
<td>Front Udder</td>
<td>.29</td>
<td>1.0%</td>
</tr>
<tr>
<td>Rear Udder</td>
<td>.40</td>
<td>1.0%</td>
</tr>
<tr>
<td>Front Teat Placement</td>
<td>-.11</td>
<td>1.0%</td>
</tr>
<tr>
<td>Rear Teat Placement</td>
<td>-.69</td>
<td>1.0%</td>
</tr>
<tr>
<td>Test Length</td>
<td>-.12</td>
<td>1.0%</td>
</tr>
<tr>
<td>Udder Overall</td>
<td>.26</td>
<td>1.0%</td>
</tr>
<tr>
<td>Dairy Conformation</td>
<td>.53</td>
<td>1.0%</td>
</tr>
</tbody>
</table>

**LIC Initiatives**

<table>
<thead>
<tr>
<th>Initiative</th>
<th>gBV</th>
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</thead>
<tbody>
<tr>
<td>VM8I</td>
<td>1331</td>
</tr>
<tr>
<td>A2 Protein</td>
<td>A2A2</td>
</tr>
<tr>
<td>High Input</td>
<td>1336</td>
</tr>
</tbody>
</table>

New Zealand Genetics 74%

**HOOFPRINT®**

- Methane Efficiency
- Nitrogen Efficiency

18/02/2022

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Premier Sire
Genomic graduate

318034 Shelby BC

**Lunar ET S3J**

- Owner: T Hughes & V Scott, Stratford
- Daughter Proven

**Methane Efficiency**
- **Nitrogen Efficiency**

### Breeding Details

- **Breeder:** T Hughes & V Scott
- **Dam:** Shelby 13-3
- **Sire:** Bells CM Conrad S2J MGS Arristo NN Degree ET

### Production gBVs

- 100 Daughters, 43 Herds
- **Production Efficiency**
  - Milkfat: 35 kg
  - Protein: 21 kg
  - Milk Volume: 6.1 l
  - Liveweight: -15 kg
- **Robustness**
  - Fertility: 8.5%
  - Somatic Cell Count: -0.32
  - Body Condition Score: 0.24
  - Functional Survivability: 3.9%
  - Udder Overall: 0.12

### Other

- Heifer Calving Difficulty: -3.4%/78%
- Cow Calving Difficulty: -0.1%/86%
- Gestation Length: 0.5 days

### TOP traits

- 87 Daughters TOP Inspected
- **Management**
  - gBV: 0.5
- **Conformation**
  - gBV: 0.5
- **Udder Overall**
  - gBV: 0.12
- **Diary Conformation**
  - gBV: 0.59

### LIC Initiatives

- **VMS:** 1219
- **A2 Protein:** A2
- **A2A2**

### Individually

- $30.95

### Classic Packs

- from $21.24*

### Individually

- *Includes 10% InvestaMate discount

---

318020 Glenui Super

**Larkin ET**

- Owner: Valentina Farms Ltd, Morrinsville
- Daughter Proven

**Methane Efficiency**
- **Nitrogen Efficiency**

### Breeding Details

- **Breeder:** A & L Landers
- **Dam:** Glenui Integrity Lace ET
- **Sire:** Puketawa AD Superstition MGS Okura LT Integrity

### Production gBVs

- 86 Daughters, 39 Herds
- **Production Efficiency**
  - Milkfat: 49 kg
  - Protein: 26 kg
  - Milk Volume: 104 l
  - Liveweight: -41 kg
- **Robustness**
  - Fertility: -0.2%
  - Somatic Cell Count: -0.48
  - Body Condition Score: 0.01
  - Functional Survivability: 3.7%
  - Udder Overall: 0.56

### Other

- Heifer Calving Difficulty: -7.7%/41%
- Cow Calving Difficulty: -1.0%/71%
- Gestation Length: -3.4 days

### TOP traits

- 82 Daughters TOP Inspected
- **Management**
  - gBV: 0.5
- **Conformation**
  - gBV: 0.5
- **Udder Overall**
  - gBV: 0.12
- **Diary Conformation**
  - gBV: 0.59

### LIC Initiatives

- **VMS:** 1399
- **A2 Protein:** A2
- **A2A2**

### Individually

- $32.95

### Classic Packs

- from $21.24*

### Individually

- *Includes 10% InvestaMate discount

---

**HOOFPRINT**

- Methane Efficiency
- Nitrogen Efficiency

---

**Premier Sire**

- Genomic graduate

---

**Daughter Proven**

- Four-year-old daughter
- Owner: T Hughes & V Scott, Stratford

---

Two-year-old daughter
- Owner: Valentina Farms Ltd, Morrinsville

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80

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81
### 31103 Okura LT Integrity

**Breeding Details**
- **Sire**: Lyndeeck Terrific ET SSJ
- **Dam**: Okura Leeds I-Charmeuse ET

**Production gBVs**
- **Milker**: 39 Daughters 1390 Herds
  - **Protein**: 29 kg
  - **Milk**: 45 kg
  - **LIV**: 40 kg
  - **Fertility**: 4.8 kg
  - **28 kg**: -0.11
  - **24 kg**: -12%

**TOP traits**
- **Overall Opinion**: 0.7
- **Somatic Cell**: 0.08
- **Body Condition**: 0.25
- **Survival**: 0.31
- **Calving Difficulty**: 1.0

*Includes 10% InvestaMate discount

### 31706 Williams PGO Tenor

**Breeding Details**
- **Sire**: Williams Integrity Toby
- **Dam**: Lyndeeck Terrific ET SSJ

**Production gBVs**
- **Milker**: 58 Daughters 202 Herds
  - **Protein**: 32 kg
  - **Milk**: 49 kg
  - **LIV**: 47 kg
  - **Fertility**: 4.9 kg
  - **28 kg**: -0.03
  - **24 kg**: -3.1%

**TOP traits**
- **Overall Opinion**: 0.4
- **Somatic Cell**: 0.35
- **Body Condition**: 0.57
- **Survival**: 0.56
- **Calving Difficulty**: 1.0

*Includes 10% InvestaMate discount

### 315045 Genui Degree Ross ET

**Breeding Details**
- **Sire**: Genui Degree ET DS9
- **Dam**: Ross ET Dam

**Production gBVs**
- **Milker**: 69 Daughters 234 Herds
  - **Protein**: 30 kg
  - **Milk**: 48 kg
  - **LIV**: 45 kg
  - **Fertility**: 4.8 kg
  - **28 kg**: -0.31
  - **24 kg**: -23%

**TOP traits**
- **Overall Opinion**: 0.7
- **Somatic Cell**: 0.06
- **Body Condition**: 0.21
- **Survival**: 0.34
- **Calving Difficulty**: 1.0

*Includes 10% InvestaMate discount

---

### 31009 Riverview AND Dexter S2J

**Breeding Details**
- **Sire**: Shepherds Integrity S2J
- **Dam**: Shepherds Corona S2J

**Production gBVs**
- **Milker**: 34 Daughters 144 Herds
  - **Protein**: 22 kg
  - **Milk**: 37 kg
  - **LIV**: 34 kg
  - **Fertility**: 4.4 kg
  - **28 kg**: -0.2
  - **24 kg**: -16%

**TOP traits**
- **Overall Opinion**: 0.5
- **Somatic Cell**: 0.26
- **Body Condition**: 0.21
- **Survival**: 0.21
- **Calving Difficulty**: 1.0

*Includes 10% InvestaMate discount

---

### 315029 Thornwood Degree Trigger

**Breeding Details**
- **Sire**: Shepherds Corona S2J
- **Dam**: Shepherds Corona S2J

**Production gBVs**
- **Milker**: 22 Daughters 114 Herds
  - **Protein**: 20 kg
  - **Milk**: 32 kg
  - **LIV**: 28 kg
  - **Fertility**: 4.3 kg
  - **28 kg**: -0.2
  - **24 kg**: -16%

**TOP traits**
- **Overall Opinion**: 0.6
- **Somatic Cell**: 0.16
- **Body Condition**: 0.21
- **Survival**: 0.21
- **Calving Difficulty**: 1.0

*Includes 10% InvestaMate discount

---

### 317023 Shepherds LT Flint ET SSJ

**Breeding Details**
- **Sire**: Shepherds Integrity S2J
- **Dam**: Shepherds Corona S2J

**Production gBVs**
- **Milker**: 63 Daughters 253 Herds
  - **Protein**: 30 kg
  - **Milk**: 47 kg
  - **LIV**: 42 kg
  - **Fertility**: 4.5 kg
  - **28 kg**: -0.2
  - **24 kg**: -16%

**TOP traits**
- **Overall Opinion**: 0.6
- **Somatic Cell**: 0.16
- **Body Condition**: 0.21
- **Survival**: 0.21
- **Calving Difficulty**: 1.0

*Includes 10% InvestaMate discount

---

### 317049 Shelby SS Lorenzo S3J

**Breeding Details**
- **Sire**: Shepherds Corona S2J
- **Dam**: Shepherds Corona S2J

**Production gBVs**
- **Milker**: 40 Daughters 164 Herds
  - **Protein**: 20 kg
  - **Milk**: 32 kg
  - **LIV**: 28 kg
  - **Fertility**: 4.3 kg
  - **28 kg**: -0.2
  - **24 kg**: -16%

**TOP traits**
- **Overall Opinion**: 0.6
- **Somatic Cell**: 0.16
- **Body Condition**: 0.21
- **Survival**: 0.21
- **Calving Difficulty**: 1.0

*Includes 10% InvestaMate discount

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A. Alpha® Sires

For updated bull information after each AE run, scan the QR code.
TOP 5 Combined Rankings

Breeding Worth
National herd breed average
$137

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<th>Name</th>
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<td>Snowline Andy ET</td>
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<td>Hacker Advantage ET</td>
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Protein
National herd breed average
14 kg

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Milkfat
National herd breed average
14 kg

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Milk Volume
National herd breed average
168 litres

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Fertility
National herd breed average
0.1%

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Functional Survival
National herd breed average
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Somatic Cell Score
National herd breed average
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Capacity
National herd breed average
0.21

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<td>Julian Multiplier ET</td>
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Udder Overall
National herd breed average
0.18

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Overall Opinion
National herd breed average
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Breeding Details

52013 Werders Olympian
Breeder: T & C Werder
Sire: Breggs Prestige-ET
Dam: BMWJ-16-2
Genomic Production gBVs
Production Efficiency
Milkfat 45 kg
Protein 20 kg
Milk Volume -711 l
Liveweight 4 kg
Robustness
Fertility 3.0%
Somatic Cell Count 0.01
Body Condem. Score 0.16
Functional Surviv. 3.4%
Udder Overall 0.56
Other
Heifer Calving Difficulty 1.7%
Cow Calving Difficulty -0.2%
Gestation Length 5.7 days
Genomic TOP traits
gbV - .5
Adapts to Milking .64
Sheat Temperament .64
Milk Speed .65
Overall Opinion .58
Stature .10
Capacitity .79
Rump Angle .10
Rump Width .04
Legs .08
Udder Support .60
Front Udder .53
Rear Udder .49
Front Test Placement .00
Rear Test Placement .00
Test Length .22
Udder Overall .56
Dairy Conformation .80

52015 Paynes Stamina-ET
Breeder: B Paynes
Sire: Murray T/A Azaro-ET 599
Dam: Paynes Sonata
Genomic Production gBVs
Production Efficiency
Milkfat 48 kg
Protein 24 kg
Milk Volume -1271 l
Liveweight 13 kg
Robustness
Fertility 6.0%
Somatic Cell Count -0.02
Body Condem. Score 0.10
Functional Surviv. 5.0%
Udder Overall 0.54
Other
Heifer Calving Difficulty -0.7%
Cow Calving Difficulty -0.7%
Gestation Length 5.9 days
Genomic TOP traits
gbV - .5
Adapts to Milking .22
Sheat Temperament .21
Milk Speed .33
Overall Opinion .36
Stature .01
Capacity .24
Rump Angle .15
Rump Width .30
Legs .05
Udder Support .58
Front Udder .49
Rear Udder .58
Front Test Placement -.04
Rear Test Placement .13
Test Length -.32
Udder Overall .54
Dairy Conformation .17

52008 Julian Multiplier-ET
Breeder: K & R Julian
Sire: Glen Koru-Pracolaster-ET
Dam: HJQB-11-6
Genomic Production gBVs
Production Efficiency
Milkfat 39 kg
Protein 28 kg
Milk Volume 94 l
Liveweight -8 kg
Robustness
Fertility 6.0%
Somatic Cell Count 0.04
Body Condem. Score 0.06
Functional Surviv. 3.3%
Udder Overall 0.85
Other
Heifer Calving Difficulty 1.2%
Cow Calving Difficulty -0.1%
Gestation Length 1.5 days
Genomic TOP traits
gbV - .5
Adapts to Milking .10
Sheat Temperament .09
Milk Speed .05
Overall Opinion .25
Stature .31
Capacity .66
Rump Angle -.07
Rump Width -.25
Legs .02
Udder Support .74
Front Udder .78
Rear Udder .94
Front Test Placement .12
Rear Test Placement .27
Test Length -.52
Udder Overall .85
Dairy Conformation .71

HOOFPRINT® Methane Efficiency Nitrogen Efficiency

LIC Initiatives
VMRJ 1357 A2 Protein A2A2
High Input 1401

Want the very latest genetics?
Individually $32.35
Genomic Packs from $26.37* *(Includes 10% InvestAMate discount)

Genomically Selected 2022 Yearling Bulls
This season the Alpha yearling bulls won’t be selected until September.
Due to their age, the earliest these bulls can be collected from is mid-winter and this has caused some supply issues in the past. LIC has therefore decided to wait until straws have been collected before announcing the 2022 yearling sires.
Yearling bulls will be exclusively available for purchase via Alpha. So, if you’re looking to fast track your genetic gain and/or want access to the yearling bulls our Bull Acquisition team are using, make sure you register your interest with your LIC Agri Manager. Alternatively view the bulls online in September lic.co.nz/alpha

LIC Initiatives
VMRJ 1312 A2 Protein A2A2
High Input 1426

2022 Yearling Bulls
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LIC Initiatives
VMRJ 1312 A2 Protein A2A2
High Input 1426

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Due to their age, the earliest these bulls can be collected from is mid-winter and this has caused some supply issues in the past. LIC has therefore decided to wait until straws have been collected before announcing the 2022 yearling sires.
Yearling bulls will be exclusively available for purchase via Alpha. So, if you’re looking to fast track your genetic gain and/or want access to the yearling bulls our Bull Acquisition team are using, make sure you register your interest with your LIC Agri Manager. Alternatively view the bulls online in September lic.co.nz/alpha
Two-year-old daughter. Owner: Our Cow Company Ltd, Otorohanga

Two-year-old daughter. Owner: Cow Freaks Ltd, Te Awamutu

Daughter Proven

Methane Efficiency
Nitrogen Efficiency

HOOFPRINT®

Genomic graduate

Top 5 fertility

Breeding Details

Breeder: J & J Jackson
DAM: HYC-12-21
SIRE: Arrieta Branson-ET

Production gBVs

99 Daughters 48 Herds

Robustness

Fertility Somatic Cell Count Body Condition Score Functional Survival Udder Overall

-0.5 0.63 0.02 1.8% 0.59

Other

Heifer Calving Difficulty Cow Calving Difficulty Gestation Length

0.2% 0.0% 7.1 days

TOP traits

88 Daughters TOP Inspected

Management gBV -0.5 0 0 1.0

Adapts to Milking -0.27

Shed Temperament -0.50

Milking Speed -0.34

Overall Opinion -0.39

Conformation gBV -0.5 0 0 1.0

Stature -0.68

Capacity -0.00

Rump Angle -0.25

Rump Width -0.07

Legs -0.16

Udder Support -0.56

Front Udder -0.40

Rear Udder -0.38

Front Teat Placement -0.41

Rear Teat Placement -0.55

Test Length -0.63

Udder Overall -0.59

Dairy Conformation -0.05

New Zealand Genetics 60%

96/02/2022

LIC Initiatives

VMHI: 1397

A2 Protein: A2A2

A2A2

High Input: 1412

$410/81% REL

Individually $34.95

Classic Packs from $21.24*

*Includes 10% InvestaMate discount

Breeding Details

Breeder: T & C Werder
DAM: BMWJ-13-65
SIRE: Priests Sierra

Production gBVs

518038 Werders Premonition

Robustness

Fertility Somatic Cell Count Body Condition Score Functional Survival Udder Overall

-0.9% -0.43% 0.07% 4.0% 0.71

Other

Heifer Calving Difficulty Cow Calving Difficulty Gestation Length

-0.1% 0.9% -7.5 days

TOP traits

87 Daughters TOP Inspected

Management gBV -0.5 0 0 1.0

Adapts to Milking -0.50

Shed Temperament -0.51

Milking Speed -0.27

Overall Opinion -0.61

Conformation gBV -0.5 0 0 1.0

Stature -0.13

Capacity -0.61

Rump Angle -0.16

Rump Width -0.11

Legs -0.01

Udder Support -0.65

Front Udder -0.67

Rear Udder -0.69

Front Teat Placement -0.34

Rear Teat Placement -0.90

Test Length -0.36

Udder Overall -0.71

Dairy Conformation -0.69

New Zealand Genetics 63%

96/02/2022

LIC Initiatives

VMHI: 1428

A2 Protein: A2A2

A2A2

High Input: 1450

$446/83% REL

Individually $34.95

Classic Packs from $21.24*

*Includes 10% InvestaMate discount

Eight-year-old dam. Owner: T & C Werder, Patea

New Zealand Genetics 63%

TOP traits

87 Daughters TOP Inspected

Management gBV -0.5 0 0 1.0

Adapts to Milking -0.50

Shed Temperament -0.51

Milking Speed -0.27

Overall Opinion -0.61

Conformation gBV -0.5 0 0 1.0

Stature -0.13

Capacity -0.61

Rump Angle -0.16

Rump Width -0.11

Legs -0.01

Udder Support -0.65

Front Udder -0.67

Rear Udder -0.69

Front Teat Placement -0.34

Rear Teat Placement -0.90

Test Length -0.36

Udder Overall -0.71

Dairy Conformation -0.69

New Zealand Genetics 63%

96/02/2022

LIC Initiatives

VMHI: 1428

A2 Protein: A2A2

A2A2

High Input: 1450

$446/83% REL

Individually $34.95

Classic Packs from $21.24*

*Includes 10% InvestaMate discount

Eleven-year-old dam. Owner: T & C Werder, Patea

New Zealand Genetics 63%

TOP traits

87 Daughters TOP Inspected

Management gBV -0.5 0 0 1.0

Adapts to Milking -0.50

Shed Temperament -0.51

Milking Speed -0.27

Overall Opinion -0.61

Conformation gBV -0.5 0 0 1.0

Stature -0.13

Capacity -0.61

Rump Angle -0.16

Rump Width -0.11

Legs -0.01

Udder Support -0.65

Front Udder -0.67

Rear Udder -0.69

Front Teat Placement -0.34

Rear Teat Placement -0.90

Test Length -0.36

Udder Overall -0.71

Dairy Conformation -0.69

New Zealand Genetics 63%

96/02/2022

LIC Initiatives

VMHI: 1428

A2 Protein: A2A2

A2A2

High Input: 1450

$446/83% REL

Individually $34.95

Classic Packs from $21.24*

*Includes 10% InvestaMate discount

Four-year-old dam. Owner: T & C Werder, Patea

New Zealand Genetics 63%

TOP traits

87 Daughters TOP Inspected

Management gBV -0.5 0 0 1.0

Adapts to Milking -0.50

Shed Temperament -0.51

Milking Speed -0.27

Overall Opinion -0.61

Conformation gBV -0.5 0 0 1.0

Stature -0.13

Capacity -0.61

Rump Angle -0.16

Rump Width -0.11

Legs -0.01

Udder Support -0.65

Front Udder -0.67

Rear Udder -0.69

Front Teat Placement -0.34

Rear Teat Placement -0.90

Test Length -0.36

Udder Overall -0.71

Dairy Conformation -0.69

New Zealand Genetics 63%

96/02/2022

LIC Initiatives

VMHI: 1428

A2 Protein: A2A2

A2A2

High Input: 1450

$446/83% REL

Individually $34.95

Classic Packs from $21.24*

*Includes 10% InvestaMate discount

Eleven-year-old dam. Owner: T & C Werder, Patea
518019 Diggs Hardcopy

**Premier Sire**

**TOP 5 fertility**

**TOP 5 SCC**

### Breeding Details

**Breeder**: M & M Diggelmann

**Dam**: Zara

**Sire**: Drysdale Sovereign MGS Annalyser

### Production gBVs

86 Daughters, 36 Herds

- **Milkfat**: 39 kg, 6 kg
- **Protein**: 21 kg, 1 kg
- **Milk Volume**: 271 l
- **Liveweight**: 5 kg

**Robustness**

- **Fertility**: 0.16
- **Mammary Function**: 0.20
- **Udder Overall**: 0.20

**TOP traits**

78 Daughters TOP Inspected

- **Management**: $34.95
- **Production Efficiency**: $21.24

**Lic Initiatives**

- **VMS**: 1341
- **A2 Protein**: A2A2
- **High Input**: 1375

Fertility 1 - 4 corner

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515025 Speakes Slipstream ET

**Premier Sire**

**TOP 5 udders**

### Breeding Details

**Breeder**: M & F Speake

**Dam**: Blackjack M Sparkles S0F

**Sire**: Pukeroa TGM Manzello MGS Fairmont Mint Edition

### Production gBVs

86 Daughters, 30 Herds

- **Milkfat**: 40 kg, 8 kg
- **Protein**: 18 kg, 2 kg
- **Milk Volume**: 19 l
- **Liveweight**: 4 kg

**Robustness**

- **Fertility**: 0.07
- **Mammary Function**: 1.05
- **Udder Overall**: 0.20

**TOP traits**

81 Daughters TOP Inspected

- **Management**: $36.9
- **Production Efficiency**: $307

**Lic Initiatives**

- **VMS**: 1370
- **A2 Protein**: A2A2
- **High Input**: 1415

Fertility 1 - 4 corner
### 518061 Innovation Homebrew

**Daughter Proven**

**Premier Sire**
LIC Innovation Farm

**Genomic graduate**
MGS

**Top 5 survival**
Te Awamutu

**Owner:** Cow Freaks Ltd

**HOOFPRINT®**

- **Methane Efficiency**
- **Nitrogen Efficiency**

**Production gBVs**

- **90 Daughters 38 Herds**

**Production Efficiency**
- Milkfat: $34.95
- Protein: $21.24
- Milk Volume: $34.95
- Liveweight: $34.95

**Robustness**
- Fertility: $34.95
- Somatic Cell Count: $34.95
- Body Cond. Score: $34.95
- Functional Survival: $34.95
- Udder Overall: $34.95

**Other**
- Heifer Calving Difficulty: $34.95
- Cow Calving Difficulty: $34.95
- Gestation Length: $34.95

**TOP traits**

- **96 Daughters TOP Inspected**
- **Management**
  - gBV: $361
- **Conformation**
  - gBV: $361

**Production efficiency**
$361/81%

**Robustness**
$34/15%

### 518016 Horizon Ascott

**Daughter Proven**

**Premier Sire**
M & P Scott

**Genomic graduate**
MGS

**Top 5 survival**
Te Awamutu

**Owner:** J & S Shewan

**HOOFPRINT®**

- **Methane Efficiency**
- **Nitrogen Efficiency**

**Production gBVs**

- **159 Daughters 66 Herds**

**Production Efficiency**
- Milkfat: $34.95
- Protein: $21.24
- Milk Volume: $34.95
- Liveweight: $34.95

**Robustness**
- Fertility: $34.95
- Somatic Cell Count: $34.95
- Body Cond. Score: $34.95
- Functional Survival: $34.95
- Udder Overall: $34.95

**Other**
- Heifer Calving Difficulty: $34.95
- Cow Calving Difficulty: $34.95
- Gestation Length: $34.95

**TOP traits**

- **94 Daughters TOP Inspected**
- **Management**
  - gBV: $347
- **Conformation**
  - gBV: $347

**Production efficiency**
$347/83%

**Robustness**
$39/11%

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**New Zealand Genetics**:
- 46%
- 58%
Two-year-old daughter. Owner: Jakero Farms, Otorohanga

Two-year-old daughter. Owner: Bouton Farming Limited, Walton

Daughter Proven

Methane Efficiency

Nitrogen Efficiency

HOOFPRINT®

Premier Sire

Top 5 SCC

Production Details


Production gBVs

119 Daughters 38 Herds

Production Efficiency

Milkfat Protein Milk Volume Liveweight

37 kg 10 kg 123 l -2 kg

5.4% 4.1% 3.9% 2.2%

Robustness

Fertility Somatic Cell Score Body Cond. Score Functional Survival Udder Overall

4.3% 0.1 0.1 0.2 0.3

Other

Heifer Calving Difficulty Cow Calving Difficulty Gestation Length

-1.5%/99% -0.7%/98% -3.1 days

TOP traits

107 Daughters TOP Inspected

Management

Adapts to Milking .48
Shed Temperament .49
Milk Speed .12
Overall Opinion .44

Conformation

gBV -.5 0 .5 1.0

Stature -.53
Capacity .23
Rump Angle -.14
Rump Width -.26
Legs -.06
Udder Support .33
Front Udder .35
Rear Udder .04
Front Teat Placement .52
Rear Teat Placement .72

Teat Length -.38
Udder Overall .38
Dairy Conformation .38

New Zealand Genetics 67% 18/02/2022

LIC Initiatives

VMIS 1370 A2 Protein A2A2 High Input 1387

Two-year-old daughter. Owner: Jake’s Farming Limited, Walton

Two-year-old daughter. Owner: Payne Farms Ltd, Cambridge

LIC Initiatives

VMIS 1347 A2 Protein A1A2 High Input 1381

Six-year-old dam. Owner: S & K Anderson, Otorohanga

Six-year-old dam. Owner: S & K Anderson, Otorohanga

Premier Sire

Genomic graduate

BREEDING DETAILS


Production gBVs

1481 Daughters 513 Herds

Production Efficiency

Milkfat Protein Milk Volume Liveweight

35 kg 16 kg -139 l -18 kg

5.7% 4.3% 3.6% 2.3%

Robustness

Fertility Somatic Cell Score Body Cond. Score Functional Survival Udder Overall

3.5% 0.0 0.1 0.2 0.3

Other

Heifer Calving Difficulty Cow Calving Difficulty Gestation Length

0.6%/99% -1.2%/93% -4.1 days

TOP traits

107 Daughters TOP Inspected

Management

Adapts to Milking .17
Shed Temperament .15
Milk Speed .37
Overall Opinion .33

Conformation

gBV -.5 0 .5 1.0

Stature -.37
Capacity .26
Rump Angle -.20
Rump Width .22
Legs .06
Udder Support .92
Front Udder 1.06
Rear Udder 1.08
Front Teat Placement .94
Rear Teat Placement .61

Teat Length -.74
Udder Overall 1.01
Dairy Conformation .42

New Zealand Genetics 47% 18/02/2022

LIC Initiatives

VMIS 1347 A2 Protein A1A2 High Input 1381

Two-year-old daughter. Owner: Jake’s Farming Limited, Walton

Two-year-old daughter. Owner: Payne Farms Ltd, Cambridge

18/02/2022

*Includes 10% InvestaMate discount

$341/90% REL

Individually $34.95

Classic Packs $21.24*

$340/92% REL

Individually $34.95

Classic Packs $21.24*
**Breeding Details**

**Breeder:** B & S Watson  
**Sire:** Werders Prelude  
**MGS Dam:** MGS  
**Breeder:** B & D Dean  
**Sire:** Transmilk Technicians  
**MGS Dam:** Castlegrace Doredevil  

**Production gBVs**

**Production Efficiency**
- Milkfat: 4.9%  
- Protein: 4.0%  
- Milk Volume: 6.5%  
- Liveweight: 7.0%  
- Efficiency: 3.1%  
- Survival: 0.1%/29%  
- Overall: 4.0%  
- Robustness: 4.0%  

**Other**
- Heifer Calving Difficulty: -3.2%  
- Cow Calving Difficulty: -2.9%  
- Gestation Length: -0.8%  
- Milkfat: 5.1%  
- Protein: 4.2%  
- Milk Volume: 5.1%  
- Liveweight: 6.0%  
- Efficiency: 0.3%/37%  
- Survival: -0.8%/70%  
- Overall: 4.5%  
- Robustness: 4.2%  

**TOP traits**

- gBW: 297  
- udder: 0.3  
- overall: 0.3  
- other: 0.0  
- gBW: 324  
- udder: 0.3  
- overall: 0.3  
- other: 0.0  
- gBW: 297  
- udder: 0.3  
- overall: 0.3  
- other: 0.0  

**LIC Initiatives**

- Milk Fat: 132  
- Protein: 132  
- Nitrogen: 132  
- Efficiency: 132  
- Milk Fat: 132  
- Protein: 132  
- Nitrogen: 132  
- Efficiency: 132  
- Milk Fat: 132  
- Protein: 132  
- Nitrogen: 132  
- Efficiency: 132
518022 Crossans Centenary

KiwiCross® F127

$299/79% REL

Individually $34.95

Classic Packs.... $21.24

*Includes 10% InvestaMate discount

Breeding Details

Breeder: P & J Crossan
Sire: Werdens Prelude

Production gBVs

70 Daughters 32 Herds

Production Efficiency

MilkFat Protein Milk Volume Liveweight
3.4 kg 28 kg 562 l 63 kg
4.9% 4.1% 3.5% 0.6%

Robustness

Fertility Somatic Cell Count
3.5% -0.05 0.29 3.5% 0.46

Other

Heifer Calving Difficulty Cow Calving Difficulty Gestation Length
0.8%/14% -0.7%/66% -4.3 days

TOP traits

57 Daughters TOP Inspected

gBV -.5 0 0 .5 1.0

Adapts to Milking .55
Sheet Temperament .56
Milking Speed .23
Overall Opinion .59
Stature .38
Capacity .92
Rump Angle .50
Rump Width .27
Legs .07
Udder Support .57
Front Udder .56
Rear Udder .20
Front Test Placement .30
Rear Test Placement .57
Test Length .64
Udder Overall .46
Diary Conformation .87

LIC Initiatives

VMS: 1298 A2 Protein A2A2
High Input 1336

517067 Cawdor Pinnacle

KiwiCross® F127

$385/91% REL

Individually $32.95

Classic Packs.... $21.24

*Includes 10% InvestaMate discount

Breeding Details

Breeder: F & C MacBeth
Sire: SanRay/MiBarret-ET25

Production gBVs

1993 Daughters 625 Herds

Production Efficiency

MilkFat Protein Milk Volume Liveweight
3.3 kg 22 kg -171 l -58 kg
5.7% 4.4% 1.7% 0.29

Robustness

Fertility Somatic Cell Count
5.1% 0.65 -0.16 1.7% 0.29

Other

Heifer Calving Difficulty Cow Calving Difficulty Gestation Length
-1.2%/83% 0.0%/90% -4.4 days

TOP traits

101 Daughters TOP Inspected

gBV -.5 0 0 .5 1.0

Adapts to Milking .24
Sheet Temperament .22
Milking Speed .24
Overall Opinion .04
Stature .58
Capacity .24
Rump Angle .50
Rump Width .11
Legs .25
Udder Support .25
Front Udder .14
Rear Udder .31
Front Test Placement .21
Rear Test Placement .49
Test Length .11
Udder Overall .30
Diary Conformation .55

HOOFPRINT®

Methane Efficiency Nitrogen Efficiency

LIC Initiatives

VMS: 1150 A2 Protein A2A2
High Input 1172

518030 Howses Rocco

KiwiCross® F127

$280/82% REL

Individually $32.95

Classic Packs.... $21.24

*Includes 10% InvestaMate discount

Breeding Details

Breeder: B & W Howse
Sire: Arkansas Brimstone-ET

Production gBVs

1993 Daughters 625 Herds

Production Efficiency

MilkFat Protein Milk Volume Liveweight
3.2 kg 32 kg 441 l -3 kg
4.7% 4.3% 3.2% 1.0%

Robustness

Fertility Somatic Cell Count
2.6% 0.33 0.07 1.5% 1.0%

Other

Heifer Calving Difficulty Cow Calving Difficulty Gestation Length
-0.4%/26% 1.0%/77% -6.9 days

TOP traits

101 Daughters TOP Inspected

gBV -.5 0 0 .5 1.0

Adapts to Milking .34
Sheet Temperament .36
Milking Speed .01
Overall Opinion .29
Stature .22
Capacity .64
Rump Angle .11
Rump Width .17
Legs .16
Udder Support .11
Front Udder 1.01
Rear Udder 1.00
Front Test Placement .54
Rear Test Placement .63
Test Length .58
Udder Overall 1.07
Diary Conformation .47

HOOFPRINT®

Methane Efficiency Nitrogen Efficiency

LIC Initiatives

VMS: 1339 A2 Protein A1A2
High Input 1569

Two-year-old dam: Owner: F & C MacBeth, Matamata

Four-year-old dam: Owner: B & W Howse, Matamata

New Zealand Genetics 54%
Two-year-old daughter. Owner: Cow Freaks Ltd, Te Awamutu

**Son Cross**

- **Production gBVs**
  - 102 Daughters 38 Herds
  - Production Efficiency
    - Milkfat: 38 kg
    - Protein: 26 kg
    - Milk Volume: 235 l
    - Liveweight: 16 kg
  - Robustness
    - Fertility: 4.1%
    - Somatic Cell Count: 0.03
    - Body Condition Score: 1.6
    - Functional Survival: -0.07
    - Udder Overall: 0.67

- **TOP traits**
  - 100 Daughters TOP Inspected
  - Management: -0.5
  - Adaptation to Milking: 0.4
  - Shed Temperament: 0.42
  - Milking Speed: 0.01
  - Overall Opinion: 0.38
  - Conformation: -0.5
  - Stature: 0.37
  - Capacity: 0.11
  - Udder Support: 0.73
  - Rear Udder: 0.56
  - Teat Length: -0.09
  - Udder Overall: 0.67
  - Dairy Conformation: 0.38

- **LIC Initiatives**
  - VM51: 1328
  - A2 Protein: A2A2
  - High Input: 1342

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**Premier Sire**

- **Production gBVs**
  - 115 Daughters 42 Herds
  - Production Efficiency
    - Milkfat: 43 kg
    - Protein: 32 kg
    - Milk Volume: 614 l
    - Liveweight: 22 kg
  - Robustness
    - Fertility: 0.5%
    - Somatic Cell Count: 0.03
    - Body Condition Score: 1.5
    - Functional Survival: 1.0
    - Udder Overall: 0.70

- **TOP traits**
  - 108 Daughters TOP Inspected
  - Management: -0.5
  - Adaptation to Milking: 0.38
  - Shed Temperament: 0.40
  - Milking Speed: -0.03
  - Overall Opinion: 0.47
  - Conformation: -0.5
  - Stature: 0.18
  - Capacity: 0.66
  - Udder Support: 0.70
  - Rear Udder: 0.57
  - Teat Length: -0.81
  - Udder Overall: 0.70
  - Dairy Conformation: 0.69

- **LIC Initiatives**
  - VM51: 1336
  - A2 Protein: A2A2
  - High Input: 1356

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**Daughter Proven**

- **Premier Sire**
  - **Production gBVs**
    - Milkfat: 36 kg
    - Protein: 25 kg
    - Milk Volume: 254 l
    - Liveweight: 16 kg
  - Robustness
    - Fertility: 0.1%
    - Somatic Cell Count: 0.00
    - Body Condition Score: 1.6
    - Functional Survival: 1.6
    - Udder Overall: 0.67

- **TOP traits**
  - 100 Daughters TOP Inspected
  - Management: -0.5
  - Adaptation to Milking: 0.38
  - Shed Temperament: 0.40
  - Milking Speed: 0.01
  - Overall Opinion: 0.47
  - Conformation: -0.5
  - Stature: 0.37
  - Capacity: 0.11
  - Udder Support: 0.73
  - Rear Udder: 0.56
  - Teat Length: -0.09
  - Udder Overall: 0.67
  - Dairy Conformation: 0.38

- **LIC Initiatives**
  - VM51: 1328
  - A2 Protein: A2A2
  - High Input: 1342

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**Genomic graduate**

- **Premier Sire**
  - **Production gBVs**
    - Milkfat: 43 kg
    - Protein: 32 kg
    - Milk Volume: 614 l
    - Liveweight: 22 kg
  - Robustness
    - Fertility: 0.5%
    - Somatic Cell Count: 0.03
    - Body Condition Score: 1.5
    - Functional Survival: 1.0
    - Udder Overall: 0.70

- **TOP traits**
  - 108 Daughters TOP Inspected
  - Management: -0.5
  - Adaptation to Milking: 0.38
  - Shed Temperament: 0.40
  - Milking Speed: -0.03
  - Overall Opinion: 0.47
  - Conformation: -0.5
  - Stature: 0.18
  - Capacity: 0.66
  - Udder Support: 0.70
  - Rear Udder: 0.57
  - Teat Length: -0.81
  - Udder Overall: 0.70
  - Dairy Conformation: 0.69

- **LIC Initiatives**
  - VM51: 1336
  - A2 Protein: A2A2
  - High Input: 1356
51704/ Marshalls Silver Lining

**Breeding Details**
- Dam: KwiCross F16/J6
- Sire: Marshall Family
- Breeder: R & J Duggan

**Production gBVs**
- Earnings: $290/91%
- Milk: 18 kg
- Fat: 20 kg
- Protein: 17 kg
- Liveweight: 92 kg
- Fertility: 17 kg

**TOP traits**
- Overall Opinion: 1.0
- Dairy Conformation: 0.5
- Udder Overall: 0.5

**Economy Packs**
- Individually: $21.95
- Economy Packs from: $14.94

515066 Van Straalers Duel

**Breeding Details**
- Dam: KwiCross F16/J6
- Sire: D & R Van Straalen
- Breeder: BDRB-08-9

**Production gBVs**
- Earnings: $312/90%
- Milk: 19 kg
- Fat: 19 kg
- Protein: 90 kg
- Liveweight: 17 kg

**TOP traits**
- Overall Opinion: 1.0
- Dairy Conformation: 0.5
- Udder Overall: 0.5

511011 Priests Sierra

**Breeding Details**
- Dam: KwiCross F16/J6
- Sire: Priests Titan
- Breeder: Fairmont Mint Edition

**Production gBVs**
- Earnings: $313/99%
- Milk: 20 kg
- Fat: 21 kg
- Protein: 27 kg

**TOP traits**
- Overall Opinion: 1.0
- Dairy Conformation: 0.5
- Udder Overall: 0.5

518047 Clarke's Masterclass

**Breeding Details**
- Dam: KwiCross F16/J6
- Sire: Farmon T M Edigen
- Breeder: Igorszams

**Production gBVs**
- Earnings: $295/81%
- Milk: 20 kg
- Fat: 21 kg
- Protein: 37 kg

**TOP traits**
- Overall Opinion: 1.0
- Dairy Conformation: 0.5
- Udder Overall: 0.5

515062 Duggans Gameplan

**Breeding Details**
- Dam: KwiCross F14/J6
- Sire: Duggans Glamour
- Breeder: Scotts Northsea

**Production gBVs**
- Earnings: $364/91%
- Milk: 19 kg
- Fat: 19 kg
- Protein: 81 kg

**TOP traits**
- Overall Opinion: 1.0
- Dairy Conformation: 0.5
- Udder Overall: 0.5

515068 Woodwards Spot On

**Breeding Details**
- Dam: KwiCross F14/J6
- Sire: Woodwards Vision
- Breeder: Scotts Northsea

**Production gBVs**
- Earnings: $295/88%
- Milk: 19 kg
- Fat: 19 kg
- Protein: 91 kg

**TOP traits**
- Overall Opinion: 1.0
- Dairy Conformation: 0.5
- Udder Overall: 0.5

517073 Lynbrook Knockout

**Breeding Details**
- Dam: KwiCross F17/J6A
- Sire: Lynbrook LI Karan
- Breeder: L & R Hamilton

**Production gBVs**
- Earnings: $339/86%
- Milk: 20 kg
- Fat: 21 kg
- Protein: 27 kg

**TOP traits**
- Overall Opinion: 1.0
- Dairy Conformation: 0.5
- Udder Overall: 0.5

517069 Brookstead Cadence

**Breeding Details**
- Dam: KwiCross F17/J6
- Sire: Brookstead Crusader
- Breeder: S & V Clarke

**Production gBVs**
- Earnings: $272/88%
- Milk: 20 kg
- Fat: 21 kg
- Protein: 92 kg

**TOP traits**
- Overall Opinion: 1.0
- Dairy Conformation: 0.5
- Udder Overall: 0.5
<table>
<thead>
<tr>
<th>Breed</th>
<th>Sire</th>
<th>Dam</th>
<th>Sex</th>
<th>Birth</th>
<th>Weaning</th>
<th>Milk</th>
<th>Fat</th>
<th>Protein</th>
<th>SCC</th>
<th>Fat</th>
<th>Protein</th>
<th>MFG</th>
<th>MFS</th>
<th>Price (+GST)</th>
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</tr>
</tbody>
</table>

Alpha Sires

- 13/02/2023

- KiwiCross® Also Available

- A. Recessive Fertility Gene carrier

- Q. How can you customise your own bull team?

- A. Alpha Sires
### Breeding Details

**Breeder**: T & J Ackermann  
**Dam**: Musica 13-67  
**Sire**: Samrosa Snr-M 260ET  

#### Production gBVs

**Milkfat**  
24 kg  
22 kg  
83.5 l  
31 kg

**Protein**  
16 kg  
21 kg  
70.5 l  
28 kg

**Production Efficiency**

- **Milkfat**: 24 kg
- **Protein**: 16 kg
- **Milk Volume**: 83.5 l
- **Liveweight**: 31 kg

**Robustness**

- **Fertility**: 0.29
- **Somatic Cell Count (SCC)**: 0.02
- **Body Condition Score (BCS)**: 1.2
- **Milk Production Survival (MPS)**: 0.29

**Other**

- **Heifer Calving Difficulty**: 0.16
- **Cow Calving Difficulty**: 0.68
- **Gestation Length**: 267 days

#### TOP traits

**36 Daughters TOP Inspected**

- **Adapts to Milking**: 0.48
- **Sheep Temperament**: 0.36
- **Breed**: 0.18
- **Capacity**: 0.37
- **Rump Angle**: 0.49
- **Rump Wedge**: 0.45
- **Legs**: 0.40
- **Udder Support**: 0.28
- **Front Udder**: 0.26
- **Rear Udder**: 0.25
- **Front Teat Placement**: 0.24
- **Rear Teat Placement**: 0.23
- **Teat Length**: 0.22
- **Tails**: 0.21
- **Udder Overall**: 0.20
- **Diary Conformation**: 0.19

**LIC Initiatives**

- **VMS**: 1077
- **A2 Protein**: 1076
- **A1A2**: 1085

- **High Input**: 1038

---

### Breeding Details

**Breeder**: Iwa Syndicate  
**Dam**: Samrosa Snr-M 260ET  
**Sire**: Southwind Jac Box  

#### Production gBVs

**Milkfat**  
17 kg  
8 kg  
251 l  
-17 kg

**Protein**  
4.9 kg  
4 kg  
83.5 l  
31 kg

**Production Efficiency**

- **Milkfat**: 17 kg
- **Protein**: 4.9 kg
- **Milk Volume**: 251 l
- **Liveweight**: -17 kg

**Robustness**

- **Fertility**: 0.38
- **Somatic Cell Count (SCC)**: 0.05
- **Body Condition Score (BCS)**: 1.6
- **Milk Production Survival (MPS)**: 0.16

**Other**

- **Heifer Calving Difficulty**: 0.12
- **Cow Calving Difficulty**: 0.49
- **Gestation Length**: 267 days

#### TOP traits

**48 Daughters TOP Inspected**

- **Adapts to Milking**: 0.48
- **Sheep Temperament**: 0.36
- **Breed**: 0.18
- **Capacity**: 0.37
- **Rump Angle**: 0.49
- **Rump Wedge**: 0.45
- **Legs**: 0.40
- **Udder Support**: 0.28
- **Front Udder**: 0.26
- **Rear Udder**: 0.25
- **Front Teat Placement**: 0.24
- **Rear Teat Placement**: 0.23
- **Teat Length**: 0.22
- **Tails**: 0.21
- **Udder Overall**: 0.20
- **Diary Conformation**: 0.19

**LIC Initiatives**

- **VMS**: 1099
- **A2 Protein**: 1098
- **A1A2**: 1097

- **High Input**: 1101

---

### Breeding Details

**Breeder**: Iwa Syndicate  
**Dam**: Samrosa Snr-M 260ET  
**Sire**: Southwind Jac Box  

#### Production gBVs

**Milkfat**  
24 kg  
22 kg  
83.5 l  
31 kg

**Protein**  
16 kg  
21 kg  
70.5 l  
28 kg

**Production Efficiency**

- **Milkfat**: 24 kg
- **Protein**: 16 kg
- **Milk Volume**: 83.5 l
- **Liveweight**: 31 kg

**Robustness**

- **Fertility**: 0.29
- **Somatic Cell Count (SCC)**: 0.02
- **Body Condition Score (BCS)**: 1.2
- **Milk Production Survival (MPS)**: 0.29

**Other**

- **Heifer Calving Difficulty**: 0.16
- **Cow Calving Difficulty**: 0.68
- **Gestation Length**: 267 days

#### TOP traits

**15 Daughters TOP Inspected**

- **Adapts to Milking**: 0.48
- **Sheep Temperament**: 0.36
- **Breed**: 0.18
- **Capacity**: 0.37
- **Rump Angle**: 0.49
- **Rump Wedge**: 0.45
- **Legs**: 0.40
- **Udder Support**: 0.28
- **Front Udder**: 0.26
- **Rear Udder**: 0.25
- **Front Teat Placement**: 0.24
- **Rear Teat Placement**: 0.23
- **Teat Length**: 0.22
- **Tails**: 0.21
- **Udder Overall**: 0.20
- **Diary Conformation**: 0.19

**LIC Initiatives**

- **VMS**: 1104
- **A2 Protein**: 1105
- **A1A2**: 1106

- **High Input**: 1107

---

### Breeding Details

**Breeder**: Iwa Syndicate  
**Dam**: Samrosa Snr-M 260ET  
**Sire**: Southwind Jac Box  

#### Production gBVs

**Milkfat**  
24 kg  
22 kg  
83.5 l  
31 kg

**Protein**  
16 kg  
21 kg  
70.5 l  
28 kg

**Production Efficiency**

- **Milkfat**: 24 kg
- **Protein**: 16 kg
- **Milk Volume**: 83.5 l
- **Liveweight**: 31 kg

**Robustness**

- **Fertility**: 0.29
- **Somatic Cell Count (SCC)**: 0.02
- **Body Condition Score (BCS)**: 1.2
- **Milk Production Survival (MPS)**: 0.29

**Other**

- **Heifer Calving Difficulty**: 0.16
- **Cow Calving Difficulty**: 0.68
- **Gestation Length**: 267 days

#### TOP traits

**25 Daughters TOP Inspected**

- **Adapts to Milking**: 0.48
- **Sheep Temperament**: 0.36
- **Breed**: 0.18
- **Capacity**: 0.37
- **Rump Angle**: 0.49
- **Rump Wedge**: 0.45
- **Legs**: 0.40
- **Udder Support**: 0.28
- **Front Udder**: 0.26
- **Rear Udder**: 0.25
- **Front Teat Placement**: 0.24
- **Rear Teat Placement**: 0.23
- **Teat Length**: 0.22
- **Tails**: 0.21
- **Udder Overall**: 0.20
- **Diary Conformation**: 0.19

**LIC Initiatives**

- **VMS**: 1104
- **A2 Protein**: 1105
- **A1A2**: 1106

- **High Input**: 1107
**Breeding Details**

**Young Unproven Ayrshire**

**522500 Hatherleigh Nolan**
- **Sire:** Iwa Super Sonic
- **Dam:** Kokoamo Bro Nicky
- **MGS:** Carmelglen Brody
- **gBV:** $-162/52% REL

**522501 Lodore John Paul**
- **Sire:** VR Viking-Viper Vania
- **Dam:** Lodore Blue Jezebel
- **MGS:** Muco's Blues S3A
- **gBV:** $-44/40% REL

**522502 Musica JJ Illusion S3A**
- **Sire:** Vacon 01-02-90 Jeff
- **Dam:** Muco's 17-46 S2A
- **MGS:** Iwa Icar Castleford ET
- **gBV:** $-59/49% REL

**522503 Musica SS Malone**
- **Sire:** Iwa Super Sonic
- **Dam:** Pa Hill Ayrshire Irma ET
- **MGS:** Waerenga Blaze-Austure
- **gBV:** $-96/53% REL

**522504 Pa Hill Sonic Ira**
- **Sire:** Iwa Super Sonic
- **Dam:** Pa Hill Ayrshire Irma ET
- **MGS:** Waerenga Blaze-Austure
- **gBV:** $-25/165% REL

**522505 Sanrosa Carmichael**
- **Sire:** Iwa Super Sonic
- **Dam:** Sanrosa Carmel-16-105
- **MGS:** Sanrosa Decanon ET
- **gBV:** $-17/39% REL

**522506 Te Matai Gunner**
- **Sire:** Iwa Super Sonic
- **Dam:** Te Matai Glamour ET
- **MGS:** Southwind lasers
- **gBV:** $-112/52% REL

**Production gBVs**

- **55 Daughters 21 Heards**
- **53 Daughters 18 Heards**
- **51 Daughters 16 Heards**

---

**TOP traits**

**18 Daughters TOP Inspected**
- Adapts to Milking: .59
- Sheet Temperature: .60
- Milking Speed: .37
- Overall Opinion: .56
- Nib: .84
- Capacity: .34
- Rump Width: .30
- Legs: .01
- Udder Support: .87
- Front Udder: .69
- Rear Udder: .47
- Front Teat Placement: .56
- Rear Teat Placement: .55
- Teat Length: .86
- Udder Overall: .80
- Diary Conformation: .67

**19 Daughters TOP Inspected**
- Adapts to Milking: .36
- Sheet Temperature: .38
- Milking Speed: .04
- Overall Opinion: .32
- Nib: .02
- Capacity: .14
- Rump Angle: .47
- Rump Width: .03
- Legs: .01
- Udder Support: .87
- Front Udder: .69
- Rear Udder: .47
- Front Teat Placement: .56
- Rear Teat Placement: .55
- Teat Length: .86
- Udder Overall: .80
- Diary Conformation: .67

---

**Lic Initiatives**

- **VMR:** A1, A2 Protein, A2A2
- **High Input:** 1078

---

**518509 Iwa Dynasty**

**Breeding Details**

**518511 Thornton Park Pets Express**

- **Ayrshire A**
  - Registered Ayrshire

**Production Efficiency**

- **Milkfat:** 20 kg
- **Protein:** 12 kg
- **Milk Volume:** 732 l
- **Liveweight:** 44 kg

**Robustness**

- **Fertility:** -9.3%
- **Somatic Cell Count:** -0.16
- **Body Cond. Score:** -0.09
- **Functional Survival:** 1.9%
- **Udder Overall:** 0.80

**Other**

- **Heifer Calving Difficulty:** -0.11/16%
- **Cow Calving Difficulty:** 0.4%/95%
- **Gestation Length:** -3.9 days

**TOP traits**

- **Adapts to Milking:** .69
- **Sheet Temperature:** .60
- **Milking Speed:** .37
- **Overall Opinion:** .56
- **Nib:** .46
- **Capacity:** .84
- **Rump Angle:** .34
- **Rump Width:** .30
- **Legs:** .01
- **Udder Support:** .67
- **Front Udder:** .69
- **Rear Udder:** .47
- **Front Teat Placement:** .56
- **Rear Teat Placement:** .55
- **Teat Length:** .86
- **Udder Overall:** .80
- **Diary Conformation:** .67

**Lic Initiatives**

- **VMR:** A1, A2 Protein, A2A2
- **High Input:** 1078

---

**18/02/2022**

**Young Ayrshire Also Available**

- **504332 Southhun Jamie**
- **515514 Sanrosa Dalston ET**
- **504354 Carmelglen Brody**
- **504370 Sanrosa Dice**
- **502564 Pa Hill Guards Iva ET**
- **506801 Lodore Blake**
- **546185 Te Matai Elva**

**NB:** Young unproven Ayrshire not available for winter mating.

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**18/02/2022**

**Lic Initiatives**

- **VMR:** A1, A2 Protein, A2A2
- **High Input:** 1078
Breeding Details
Breeder: Red Cow Farms Ltd
Dam: Brecon ND Lucy SOS
Sire: Beaulands Hilly MGS
Blend: AUR 8, SHM 4, FRI 2, NWR 1, SWR 1

Individually $15.00
+gst

Breeding Details
Breeder: W & C Bjerring
Dam: Landlyst 04-3 SOS
Sire: Birchlands Eccles ET MGS
MGS: Te Kirpi Astronaut MR2
Blend: AUR 8, SHM 4, FRI 2, NWR 1, SWR 1

Individually $18.00
+gst

Breeding Details
Breeder: Red Cow Farms Ltd
Dam: Brecon GTH Hope SOS
Sire: VR Hel P MGS
MGS: Brecon Goliath SOS
Blend: DAR 8, FR 4, SWR 1, SHM 1, NWR 1

Individually $16.00
+gst

Breeding Details
Breeder: Red Cow Farms Ltd
Dam: Brecon ND Eliza SOS
Sire: Brecon Bart SOS MGS
MGS: Northbrook Duncan SOS
Blend: SHM 8, FRI 4, SWR 2, NWR 1

Individually $16.00
+gst
What is HoofPrint®?

LIC has developed HoofPrint index to provide farmers with an indication of the predicted environmental footprint of LIC’s dairy genetics. Enteric methane emissions and urinary nitrogen excretion from cattle are two of the major contributors to the environmental impact of dairy production in New Zealand. It is extremely difficult to measure and assess actual emissions and excretion in pasture-based systems. Therefore, a modelling methodology has been used to quantify the expected emissions and excretion.

How does the model work?
The modeling uses seven breeding values (BV) for each animal. These BVs are used to calculate the expected levels of production, calving events, and removals. These BVs are:

1. Liveweight
2. Milk Volume
3. Milkfat
4. Protein
5. Fertility
6. Functional Survival
7. Gestation Length

The model's calculations for energy requirements, partitioning and emissions were based on the 'Methodology for calculation of New Zealand's agricultural greenhouse gas emissions' (the inventory). An understanding of an animal's energy requirements was used to estimate dry matter intake from which emissions and excretion were calculated. In the inventory, energy requirements refers to the amount of energy needed for an animal to survive (maintenance), produce (i.e. milk, meat), and conceive (pregnancy). The inventory model assumes the animals' energy requirements are met by a pasture-only diet with no supplementary feed use. However, LIC conducted additional modeling involving supplementary feeds and found only very minor changes in model output – suggesting HoofPrint to be representative of most feeding systems.

Reference Base population:
The reference population for the HoofPrint index includes over 4,000 NZAEL-registered bulls born since January 2011. Beef and SGI Dairy® bulls are excluded. LIC’s sires have been rated on their emission and excretion values per kilogram of milk solids relative to this reference population.

Ranking system:
The ranking system is from 1 to 10 with 10 being the best (lowest environmental impact per kg product) and 1 being the poorest ranking (highest environmental impact per kg product). The distribution of ratings for the bulls in the reference population can be seen below.

In the example, this bull ranked at 7 for both Methane Efficiency and Nitrogen Efficiency is in the top 32% of bulls born since January 1st 2011.
Animal Evaluation

The method of ranking New Zealand dairy animals is known as Animal Evaluation, and the national system is governed by New Zealand Animal Evaluation Ltd (NZAEL). The three main features of Animal Evaluation are:

- Across breed evaluations – evaluations produced by the system allow animals of all breeds to be compared on the same basis.
- Accuracy – all available information on an animal’s relatives, plus all of its own records, are used in calculating its evaluation.
- Breeding animals for profit and efficiency – animals are ranked according to their ability to convert feed into profit. This allows you to identify your most (and least) profitable and efficient animals and increase the money-earning potential of your herd.

There are two types of evaluations calculated for New Zealand dairy animals:

1. Trait evaluations
   Trait evaluations are a measure of an animal’s genetic merit (Breeding Values), lifetime productive ability (Production Values), and current season productive ability (Lactation Values) for individual traits. Currently breeding values are generated from milkfat, protein, volume, liveweight, survival, somatic cells, fertility, body condition score, calving difficulty in cows and heifers, gestation length and traits other than production (conformation and management traits).

2. Economic evaluations
   Economic evaluations combine an animal’s individual trait evaluations into a measure of its ability to convert feed into profit through breeding replacements (Breeding Worth), lifetime production (Production Worth) and current season profit through breeding replacements (Breeding Worth), evaluations into a measure of its ability to convert feed into profit. This results in more accurate predictions of an animal’s genetic merit and is shown throughout the catalogue as gBW and gBV.

LIC’s Genomic Animal Evaluation system

In addition to the outputs of the national system, LIC operates its own animal evaluation system. LIC’s evaluation incorporates all the same pedigree and phenotypic information as the national system but also incorporates genomic data. This results in more accurate predictions of an animal’s genetic merit and is shown throughout the catalogue as gBW and gBV.

Genomic Breeding Worth

Genomic Breeding Worth (gBW) can be used as a guide for selecting a team of bulls to breed the most profitable and efficient replacements. A Genomic Breeding Worth (gBW) of 220/84 indicates the bull is expected to generate an extra $220 profit per year, through breeding replacements which are more efficient converters of feed into profit, above the base of 0. A bull passes half his gBW to his immediate offspring. The other half is from the dam.

Reliability

In 220/84 %, the 84 % represents the reliability of the 220 gBW. Reliability is a measure of the amount of information which has contributed to an evaluation.

The more ancestry records, herd tests, liveweight records, progeny information and genomic data included in the evaluation, the higher the reliability or confidence we can place in the gBW figure, and the less likely it is to change with additional records.

Reliability ranges from 0, meaning we know nothing about the animal or any of its ancestors, to 99. You should be cautious about using a bull with a gBW of low reliability, unless he is being used as part of a large team.

The following table shows the indicative reliabilities for Genomic Breeding Worth of bulls with differing amounts of information:

<table>
<thead>
<tr>
<th>Reliability</th>
<th>Ancestry Records</th>
<th>Genomic Data</th>
<th>Number of Progeny</th>
<th>gBW Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>20</td>
<td>70%</td>
<td>35%</td>
</tr>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>0</td>
<td>55%</td>
<td>55%</td>
</tr>
<tr>
<td>Yes</td>
<td>No</td>
<td>0</td>
<td>35%</td>
<td>35%</td>
</tr>
</tbody>
</table>

gBW is a combination of an animal’s genetic merit for milkfat, protein, milk volume, liveweight, fertility, somatic cells, survivability and body condition score. The genetic merit of an animal for these individual traits is measured using Genomic Breeding Values (gBVs). Based on ancestry, genomic information, individual and progeny records, an animal’s gBVs are calculated for each trait and combined into a gBW. Each gBV is allocated an economic weighting, the latest values are as follows:

- Protein - 19% / $5.21
- Milk Volume - 11% / $0.0951
- Liveweight - 10% / $1.38
- BCS - 7% / $116.93
- Fertility - 17% / $6.33
- Functional Survival - 3% / $2.65
- Somatic Cell Score - 7% / $-42.98
- Milkfat - 26% / $5.18

The economic weighting placed on each trait is calculated using the predicted average prices of fat, protein and milk, minus the feed cost of producing them.

The economic values for this season were updated by NZAEL on 18/02/2022. Always check the date to ensure the latest gBW information has been given.

Your herd management reports will always show the latest information, so the sire information shown on a recent herd report, for example, may be more up-to-date than information published in other places.

Timetable for Animal Evaluation runs

Animal Evaluations are calculated every three to four weeks. This means it is virtually impossible for publications advertising dairy semen to be absolutely up-to-date. We recommend you check the evaluation date whenever you are looking at any sire information. If it is not a recent date, ask your semen supplier for the latest evaluation. Alternatively, visit the LIC website, which is updated automatically after each AE run (www.lic.co.nz or scan the QR codes). LIC updates its genomics evaluation system in accordance with the NZAEL schedule below.

<table>
<thead>
<tr>
<th>Timetable for Animal Evaluation runs</th>
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<tbody>
<tr>
<td>29 April 2022</td>
</tr>
<tr>
<td>27 May 2022</td>
</tr>
<tr>
<td>1st June 2022</td>
</tr>
<tr>
<td>22 July 2022</td>
</tr>
</tbody>
</table>
Alpha® Information

Alpha® allows you to breed a herd to optimise your breeding objectives by hand picking sires that best fit your criteria. We offer some of the highest-ranking bulls for production, management and type, and to suit farming systems from variable milking to High Input.

Daughter Proven
Daughter Proven bulls are selected from the Sire Proving Scheme, and have proofs produced from the first lactation of their daughters in herds across New Zealand.

Genomically Selected
Genomically Selected sires are selected based on their DNA profile and ancestry information.

Selecting the bulls in this way, rather than waiting for information gathered from the performance of their daughters, shortens the generation interval by 3-4 years leading to greater rates of genetic gain.

The data gathered from the DNA, once added to the ancestry information, gives genomic sires a reliability of around 55%. This is a much more reliable estimate of their genetic merit than the 35% reliability figure we see for an individual bull’s proof.

Genomically selected sires have proofs produced from the first lactation of their daughters in herds across New Zealand.

Genomics InvestaMate discount
To qualify for the InvestaMate discount, the number of Premier Sires® and/or Alpha® straws purchased in the season must be greater than, or equal to, 95% of qualifying animals (female animals born prior to 31 December 2020 billed at the time of October charging).

For example, if you had 400 qualifying animals billed in October then you would need to purchase 380 straws or more within the season to qualify for an InvestaMate discount.

The discounts are as follows:
- 3% discount applied in the first year of qualification - applied as a credit in March following the season's mating
- 5% discount will be applied in second year of qualification - applied as a credit in March following the season's mating
- 10% discount applied in third and subsequent years of qualification - applied at time of charging

Alpha® discounts
Volume discount (applies at time of dispatch)
The table below shows the volume discounts applied for Alpha® frozen semen.

<table>
<thead>
<tr>
<th>No. of straws</th>
<th>Discount</th>
<th>No. of straws</th>
<th>Discount</th>
</tr>
</thead>
<tbody>
<tr>
<td>100-199</td>
<td>5%</td>
<td>600-699</td>
<td>6%</td>
</tr>
<tr>
<td>200-299</td>
<td>2%</td>
<td>700-799</td>
<td>7%</td>
</tr>
<tr>
<td>300-399</td>
<td>3%</td>
<td>800-899</td>
<td>8%</td>
</tr>
<tr>
<td>400-499</td>
<td>4%</td>
<td>900-999</td>
<td>9%</td>
</tr>
<tr>
<td>500-599</td>
<td>5%</td>
<td>1,000+</td>
<td>10%</td>
</tr>
</tbody>
</table>

Inbreeding and Recessive Gene Protection
Clients using an LIC AB Technician have access to DataMATE technology, which will warn against potential inbreeding and recessive genes. DIY clients can order a DIY mating report from their Agi Manager. You supply a list of bull codes of the sires you plan to use over your herd, and the report identifies any cows that are closely related to these bulls, or have a risk of being a carrier. The report only shows the cows affected along with the codes of the bulls that cow should not be mated to. Alpha’s Customate Plus programme also incorporates protection for inbreeding and recessive genes.

CVM (Complex Vertebral Malformation)
The genetic defect CVM in dairy cattle (found only in Holstein-Friesian and crossbred animals) is caused by a single locus recessive gene. If a CVM-positive bull is mated with a CVM-positive dam, the expectation is that one out of four of the offspring will die before, or just after, birth as the result of CVM. It is considered possible that CVM causes not only stillbirths and malformations, but also embryonic mortality and abortion.

Fertility 1, 2, 3 & 4
Fertility 1, 2, 3 & 4 are genetic variations which is one of the causes of dairy cows being empty through the loss of their pregnancy. The variations affect fertility and calf survival. Animals are thought to die in utero or stillborn. No live animals have been seen with the variation.

The fertility genes are recessive genetic variations which means that both the sire and dam need to have a copy of the genetic variation before a calf will be affected. Fertility 1 variation is present in 3% of Jersey animals and 1.5% of crossbred animals. Fertility 2, 3 & 4 are present in about 2% of the Holstein-Friesian population and 1% of the crossbred.

If using LIC Tech service Datamate will minimise the frequency of carrier to carrier matings.

You will move up or down the InvestaMate scale each season depending on whether the 95% threshold was met in the previous season.

Please note: your straw purchase can be made up of any combination of Premier Sires® or Alpha® straws. Premier Sires Fresh Sexed and Sire Proving Scheme inseminations contribute towards the 95% of qualifying inseminations but the discount does not apply to these products.

Calving Difficulty Breeding values
The information is supplied to assess the suitability of bulls for mating with cows and to identify heifers and to give farmers knowledge about bulls which may cause higher than usual rates of calving assistance. The breeding values (BV’s) have now been split between calving assistance over cows and over yearling heifers.

Cow calving difficulty
Cow calving difficulty breeding value for a sire is calculated from the difficulty its progeny has been born from a three-year-old cow or older, and is expressed as a percentage of assisted calvings expected when compared to a bull of 0.

Heifer calving difficulty
Heifer calving difficulty breeding value for a sire is calculated from the difficulty its progeny has been born from a two-year-old cow, and is expressed as a percentage of assisted calvings expected when compared to a bull of 0.

Calving Difficulty Reliability
The accuracy of heifer and cow calving difficulty will vary depending on the age of the sire and on how widely used he has been within the industry, young sires generally will have a low reliability compared to an older sire. Reliability figures will also vary between the heifer calving difficulty BV and the cow calving difficulty BV depending on his use over those cohorts of animals. It is highly recommended that farmers utilise the reliability figures of the calving difficulty BV’s when making breeding decisions around calving difficulty. For example reliability figures around 30% would indicate there is little more information above parent average feeding into the breeding value, and figures over 60% would indicate there would be a minimum of 100 calvings feeding into the BV.

Fertility 1 variation is present in 3% of Jersey animals and 1.5% of crossbred animals. Fertility 2, 3 & 4 are present in about 2% of the Holstein-Friesian population and 1% of the crossbred.
Small Calf Syndrome (SCS)
Small Calf Syndrome is a recessive genetic variation which can result in affected calves showing a smaller appearance at birth or as they grow out. SCS needs both sire and dam to carry a copy of the genetic variation in order for the progeny to have a chance of being affected (one in four chance of being affected from carrier to carrier matings). This genetic variation has been in the New Zealand national herd since at least 1960 and it is estimated 0.25% of calves bred from Holstein-Friesian or crossbred animals are likely to have been affected by SCS.
LIC has a policy to ensure that no new bulls entering the LIC Sire Proving Scheme will be SCS carriers. Combine this with the use of DataMATE to minimise carrier to carrier matings and affected calves will reduce to almost zero over time.

New releases
During the year, additional bulls that have not been catalogued may become available. Please visit LIC’s website for the most up to date information, or speak to your Agri Manager.

AB Technician Service
The LIC AB Technician service is a simple, door-to-door service that makes AB easier.

Why use an LIC AB Technician?
When you choose LIC’s technician service, you get the peace of mind of knowing that you are using skilled professionals for a first-class AB service, backed by both peace of mind.

Heat Detection Aids
LIC has a range of cost-effective heat detection aids that are designed to help farmers identify more cows in heat, improving heat detection accuracy and enabling better timing of AI services.

“The best heat detection results are achieved by combining paddock observation with heat detection aids.”
- Dairy NZ InCalf book.

Just one missed heat costs around $288* in lost production at today’s milk price, so when the heat is on our range of products makes picking heats that much easier.

*21 days less in milk X 1.96 kg MS/day in peak lactation = 41.16 kg MS lost) 41.16 kg MS X $9.00 = $370

AB Equipment

<table>
<thead>
<tr>
<th>DIY AB Supplies</th>
<th>Unit Price</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>AB Insemination Gloves - Full length, disposable</td>
<td>Per 100</td>
<td>$41.00</td>
</tr>
<tr>
<td>Insemination Wipes</td>
<td>Per 100</td>
<td>$14.00</td>
</tr>
<tr>
<td>AB Lubricant</td>
<td>Per 2</td>
<td>$18.00</td>
</tr>
<tr>
<td>Sheaths Clear Tip</td>
<td>Per 50</td>
<td>$8.85</td>
</tr>
<tr>
<td>Sheaths Green Tip</td>
<td>Per 50</td>
<td>$8.50</td>
</tr>
<tr>
<td>AB Inseminators Stainless Steel GSI</td>
<td>Per 50</td>
<td>$95.00</td>
</tr>
<tr>
<td>Tweezers</td>
<td>Per 10</td>
<td>$10.00</td>
</tr>
<tr>
<td>Scissors</td>
<td>Per 10</td>
<td>$12.20</td>
</tr>
<tr>
<td>LN2 Measuring Stick</td>
<td>Per Each</td>
<td>$3.16</td>
</tr>
</tbody>
</table>

Product: LIC Bulls-i®
(Starting from $1.95**)

Features:
- Self-adhesive
- Available in five colours: Red, green, yellow, pink and blue
- Sold in multiples of 50

Benefits:
- No need to spend time gluing the cow or the heat patch
- 5 colours allow for multiple rounds of heat detection
- Friction-based technology

Product: LIC Heat Patch
(Starting from $2.60**)

Features:
- Self-adhesive
- Available in two colours: Red and blue
- Built-in timing mechanism
- Sold in multiples of 50

Benefits:
- No need to spend time gluing the cow or the heat patch
- 2 colours, allow for multiple rounds of heat detection
- 4-second time release technology helps to identify true standing heats

Product: LIC Heat Patch Plus
(Starting from $2.85**)

Features:
- Self-adhesive
- Available in three colours: Red, blue and pink
- Built-in timing mechanism
- Channel and chamber technology
- Sold in multiples of 50

Benefits:
- No need to spend time gluing the cow or the heat patch
- 3 colours, allow for multiple rounds of heat detection
- 4-second time release technology helps to identify true standing heats
- New technology allows the dye to bleed to the edges of the patch for greater visibility and prioritisation

Product: KAMAR® Heatmount® Detectors
(Classic starting from: $2.35**)
Peel n’Glue starting from: $3.00**)

Features:
- Available in classic and peel and glue options
- Built-in timing mechanism
- Available in two colours: Red and blue

Benefits:
- 4-second time release technology helps to identify true standing heats
- 2 colours allow for subsequent heat detection

Prices exclude GST and are subject to change.
**Further volume discounts may apply.
Calving Ease and Gestation Length

It is important to remember that whilst LIC selects for easier-calving sires and reports calving difficulty/calving ease breeding values where available, there is always natural variation within a trait. This means that even some of the easiest calving sires can still be associated with difficult calvings. The use of larger breeds (i.e. beef) can increase the risk of calving difficulty, but a number of factors also influence this:

- Image credit to Agrisciencer (2019), sourced from https://www.agrisciencer.com/post/calving-difficulty-in-dairy-cattle-genetics

Relative to other genetic traits, gestation length is quite heritable. Despite this, there is significant natural variation in gestation length. Based on New Zealand research:

- 68% of calves will be born within ±5 days of their expected calving date.
  - For example, if 100 heifers were expected to calve on July 20th, 68 of them should calve between July 15th and July 25th.
- 95% of calves will be born within ±9 days of their expected calving date.
  - For example, of those same 100 heifers expected to calve on July 20th, 95 of them should calve between July 11th and July 29th. The remaining five heifers would still be expected to calve outside of this window due to normal biological variation.


<table>
<thead>
<tr>
<th>Production gBVs</th>
<th>New Zealand</th>
<th>Jersey</th>
<th>LF X USDA</th>
<th>Angus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breeding Worth ($)</td>
<td>81</td>
<td>177</td>
<td>137</td>
<td>-94</td>
</tr>
<tr>
<td>Protein (kg)</td>
<td>21</td>
<td>-1</td>
<td>14</td>
<td>-1</td>
</tr>
<tr>
<td>Milkfat (kg)</td>
<td>15</td>
<td>10</td>
<td>14</td>
<td>-6</td>
</tr>
<tr>
<td>Milk Volume (litres)</td>
<td>545</td>
<td>-430</td>
<td>168</td>
<td>133</td>
</tr>
<tr>
<td>Liveweight (kg)</td>
<td>40</td>
<td>-50</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>Fertility (%)</td>
<td>-0.9</td>
<td>1.2</td>
<td>0.1</td>
<td>-8.0</td>
</tr>
<tr>
<td>Somatic Cell (score)</td>
<td>0.05</td>
<td>-0.08</td>
<td>0.00</td>
<td>-0.19</td>
</tr>
<tr>
<td>Functional Survival (%)</td>
<td>0.7</td>
<td>0.9</td>
<td>1.0</td>
<td>-0.1</td>
</tr>
<tr>
<td>Body Condition (score)</td>
<td>0.03</td>
<td>0.63</td>
<td>0.04</td>
<td>-0.02</td>
</tr>
</tbody>
</table>

Traits Other Than Production

- Adaptable to Milking | 0.12 | 0.15 | 0.14 | 0.20 |
- Shed Temperament | 0.12 | 0.15 | 0.14 | 0.21 |
- Milking Speed | 0.05 | 0.08 | 0.06 | 0.00 |
- Overall Opinion | 0.8 | 1.3 | 1.6 | 1.8 |
- Stature | 0.59 | -0.82 | 0.2 | -1.1 |
- Capacitor | 0.17 | 0.20 | 0.21 | 0.29 |
- Rump Angle | -0.04 | -0.09 | -0.06 | -0.11 |
- Rump Width | -0.29 | -0.21 | 0.08 | -0.11 |
- Legs | -0.02 | 0.09 | 0.04 | 0.02 |
- Udder Support | 0.26 | 0.10 | 0.18 | 0.10 |
- Front Udder | 0.17 | 0.24 | 0.15 | 0.12 |
- Rear Udder | 0.16 | 0.29 | 0.18 | 0.07 |
- Front Teat Placement | 0.07 | 0.06 | 0.04 | 0.12 |
- Rear Teat Placement | 0.21 | -0.12 | 0.12 | 0.11 |
- Teat Length | -0.04 | -0.03 | -0.07 | -0.10 |
- Udder Overall | 0.22 | 0.24 | 0.18 | 0.09 |
- Dairy Conformation | 0.21 | 0.16 | 0.20 | 0.14 |

Sire Breed Average

- Heifer Calving Difficulty (%) | 1.9 | -2.0 | 0.0 | -0.3 |
- Cow Calving Difficulty (%) | 0.9 | -0.9 | -0.2 | -0.2 |

These statistics are calculated by LIC. Production and TOP information includes all current cows in the national herd (i.e. Animals signed up for herd testing with 80 or more numbered cows current in the herd aged over 490 days), whereas the calving difficulty gBV, which is a sire trait, is based on all enrolled bulls, with a gBV reliability of at least 60%, at least 20 herd tested daughters and at least one two-year old daughter milking in the last 5 years.

Want to know how your herd compares? Ask your Agri Manager for a breakdown of your Herd gBV Averages.