

TACE 

TransTasman Angus Cattle Evaluation

MSA Marbling

RESEARCH BREEDING VALUES

JANUARY 2025

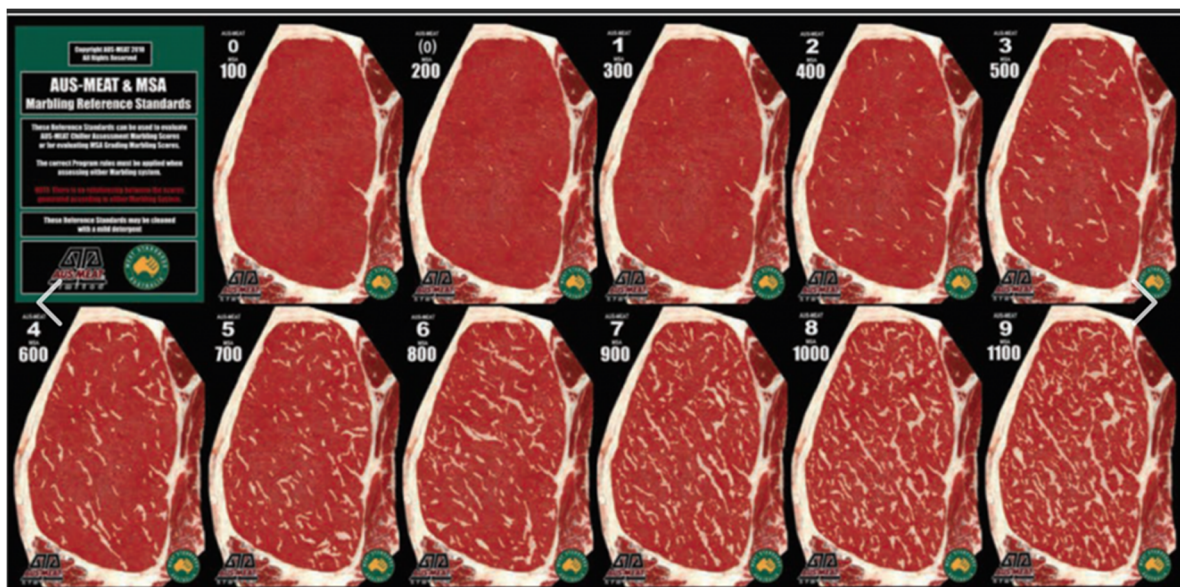
BACKGROUND

Angus Australia has partnered with the Animal Genetics and Breeding Unit (AGBU) and the Agricultural Business Research Institute (ABRI) to undertake research into the genetics Meat Standards Australia (MSA) Marbling Score in Australian Angus Cattle.

MSA Marbling Score, being the subjective visual assessment of intramuscular fat at the chilled carcass grading site, has been identified as a trait of importance, particularly as it is related to Angus carcass value and consumer eating experience. It is also the commercially recognised method for describing marbling in the national grading system, MSA.

As a result of this collaborative research, MSA Marbling Score RBVs are now routinely analyzed every two weeks in the TransTasman Angus Cattle Evaluation (TACE). To underpin this analysis, MSA marbling scores are utilised from both member collected data and from progeny in the Angus Sire Benchmarking Program. Angus animals, mostly steers, that are MSA graded between 300 and 1000 days of age at slaughter are included in the analysis.

MSA Marbling scores are collected using the industry standard 100 – 1100 scoring system (with increments of 10 score unit). A score of 100 indicates no/minimal marbling and a score of 1100 indicates abundant marbling. Along with the amount of marbling, the scores also take into account distribution and size of fleck (i.e. coarse or fine marbling).



Study of the Angus Australia data by AGBU has demonstrated that a significant portion of the differences in the MSA marbling score of individual animals can be attributed to genetics, having a high **heritability of 0.54**. The study also estimated the genetic correlation between MSA marbling score and a wide range of production traits included in the multi-trait analysis model utilized in TACE (from the BREEDPLAN program). As expected, the genetic correlations with carcass IMF, bull ultrasound scan IMF and heifer ultrasound scan IMF had the strongest relationship of 0.80, 0.35 and 0.35 respectively.

From this collaborative research it is now possible to generate breeding values for MSA Marbling Score and select animals for use within Angus breeding programs with desirable genetics for this trait. This is underpinned by a large and growing reference population of MSA Marbling Scores ($n > 10,000$ as of May 2023), coupled with genomic and pedigree data.

UNDERSTANDING THE RESEARCH BREEDING VALUES

MSA Marbling Research Breeding Values (RBVs) are provided in this publication for sires with (i) at least 50% accuracy for their MSA Marbling RBV, and (ii) one or more progeny born in the last two years.

MSA Marbling Score (MMS) RBVs are estimates of genetic differences between animals in MSA marbling score at the 12/13th rib grading site in a 400 kg steer carcass.

MMS RBVs are calculated from MSA marbling scores (taken by a trained/accredited carcass grader), pedigree, genomics and correlated traits (e.g. Carcass IMF, bull and heifer ultrasound scan IMF). MMS EBVs are expressed in MSA marbling score units.

Higher, more positive MMS RBVs indicate the animal is expected to produce progeny with higher marbling scores in a 400 kg steer carcass.

USING THE RESEARCH BREEDING VALUES IN SELECTION

The Research Breeding Values in this publication enable Angus breeders to select animals with desirable genetics for MSA marbling score, balanced with selection for other traits of importance within their breeding objective.

It is important to note that the Research Breeding Values are subject to greater potential change than EBVs routinely reported as part of the TransTasman Angus Cattle Evaluation (TACE) and should be used with caution in animal selection decisions.

Research Breeding Values may change as improvements are made to the analytical models that are used, and as additional performance information is collected.

ACKNOWLEDGEMENTS

Angus Australia gratefully acknowledges the contributions of Animal Genetics and Breeding Unit (AGBU) and the Agricultural Business Research Institute (ABRI), and in particular, Dr Gilbert Jeyaruban, Dr Steve Miller, Dr Natalie Connors, Dr Andrew Swan, Dr David Johnston and Dr Brad Crook, in the calculation of the Research Breeding Values that are included in this publication.

Angus Australia also acknowledges Meat and Livestock Australia (MLA) for the related R&D funding supplied to AGBU and Angus Australia for the ASBP. Also, for overseeing the MSA grading system, including the collection of MSA marbling scores in the ASBP, particularly through the grading by Janie Lau.

DISCLAIMER

The Research Breeding Values contained within this publication were calculated from data supplied to Angus Australia by members and/or third parties. Whilst every effort is made to ensure the accuracy of the data, Angus Australia, its officers and employees, assume no responsibility for the accuracy of the RBVs, nor the outcome (including consequential loss) of an action taken based on the information presented in this publication.

Angus Australia - MSA Marbling Research Breeding Values

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Ident	Name																										
Sire Dam	Reg.	MSA MBL RBV	Calv-Ease		Birth		Growth			Maternal			Fert		Carcase					Feed	Temp	Structural		Selection Index			
			Dir	Dtrs	GL	BW	200	400	600	MCW	Milk	SS	DC	CW	EMA	Rib	P8	RBY	IMF	NFI-F	Doc	Claw	Angle	Leg	\$A	\$A-L	
USA15719841 USA13880818 USA15151449	A A R TEN X 7008 S A ^{SV} HBR	+82 94% 45	+4.5 96% 35	+7.0 90% 15	-4.5 99% 50	+2.8 98% 25	+59 98% 21	+105 98% 20	+136 98% 20	+106 98% 45	+19 98% 38	+2.2 98% 48	-3.4 84% 80	+79 96% 24	+5.8 95% 58	-3.1 95% 97	-6.7 95% 99	+0.8 94% 23	+2.4 95% 49	+0.00 89% 26	+13 97% 81	+1.44 99% 99	+1.02 99% 63	+0.78 94% 3	\$212 46	\$366 43	
NXOL172 NXOF43 NXOJ432	AJC L172 ^{SV} APR	+64 90% 59	+6.8 77% 16	+8.0 62% 9	-6.2 94% 25	+3.0 96% 29	+58 94% 23	+99 94% 33	+137 94% 19	+127 88% 17	+14 89% 74	+2.1 84% 52	-4.8 55% 49	+72 91% 42	+6.5 89% 49	-0.6 84% 64	+0.3 89% 40	+0.3 82% 53	+1.1 91% 81	-0.97 83% 1	+22 85% 45	+1.42 85% 99	+1.26 85% 96	+1.16 81% 86	\$210 48	\$388 25	
ARRR11 CAN2043806 QMUN24	ALKIRA RENEGADE R11 ^{PV} HBR	+62 73% 60	+7.8 67% 10	+6.7 56% 18	-4.3 95% 54	+2.2 94% 16	+44 91% 83	+94 92% 50	+127 89% 36	+103 84% 49	+25 76% 6	+2.3 86% 44	-7.3 45% 8	+61 78% 74	+9.2 77% 21	+2.0 77% 13	+1.4 77% 23	+0.1 70% 65	+2.1 78% 57	+0.17 62% 44	+3 87% 98	+0.74 67% 29	+0.68 67% 4	+0.90 59% 15	\$220 36	\$390 24	
DGJG10 VTMB1 DGJZ15	ALLOURA GET CRACKING G10 ^{SV} HBR	+202 93% 2	+8.4 95% 7	+8.0 85% 9	-2.9 99% 75	+2.5 99% 20	+43 98% 86	+74 98% 94	+86 98% 98	+83 98% 79	+13 97% 83	-0.4 97% 99	-7.9 77% 4	+45 96% 96	+14.2 94% 2	+1.5 94% 20	+0.5 95% 37	+0.8 91% 23	+5.9 93% 2	+0.45 89% 74	+6 97% 95	+0.48 96% 3	+0.98 96% 53	+0.94 94% 24	\$266 4	\$418 9	
DGJL94 USA15832750 DGJH24	ALLOURA LOCK STOCK & HBR	+75 86% 51	+5.7 79% 25	+1.2 71% 74	-4.0 93% 59	+2.7 95% 23	+56 94% 30	+94 94% 49	+125 91% 41	+121 87% 22	+11 88% 88	+1.1 88% 85	-4.2 53% 64	+65 89% 62	+0.7 84% 97	+2.2 81% 11	-1.1 85% 66	+0.1 77% 65	+2.0 87% 59	-0.41 78% 4	+25 93% 33	+0.84 84% 49	+0.86 82% 25	+0.94 77% 24	\$185 75	\$344 61	
DGJQ30 WWEL3 DGJK117	ALLOURA QUINELLA Q30 ^{SV} HBR	+285 88% 1	+2.5 73% 54	+1.8 66% 68	+0.5 94% 98	+3.0 93% 29	+53 91% 44	+97 91% 40	+117 92% 60	+120 86% 23	+14 79% 76	+3.4 82% 13	-7.9 57% 4	+64 89% 64	+14.2 88% 2	+0.1 87% 48	+0.5 88% 37	+0.8 79% 23	+7.4 90% 1	+0.45 82% 74	+16 88% 72	+0.92 85% 66	+1.04 86% 67	+1.18 81% 89	\$290 1	\$469 1	
CGKR232 NORN542 CGKM152	ALPINE RONALDO R232 ^{PV} HBR	+98 75% 34	+7.6 74% 11	+7.2 62% 14	-5.3 95% 38	+1.7 93% 10	+52 91% 49	+97 91% 40	+136 88% 21	+115 84% 30	+25 78% 7	+3.1 84% 19	-5.4 50% 35	+79 79% 23	+11.5 77% 8	-3.3 77% 98	-3.1 78% 91	+0.7 71% 29	+3.4 79% 27	+0.35 66% 64	+25 87% 36	+0.60 78% 9	+0.68 78% 4	+0.96 75% 29	\$229 27	\$400 17	
NAQA241 USA2928 NAQW38	ARDROSSAN EQUATOR A241 ^{PV} HBR	+29 98% 84	-1.4 99% 81	+3.0 98% 57	-4.4 99% 52	+4.1 99% 54	+50 99% 62	+91 99% 58	+121 99% 50	+108 99% 41	+20 99% 28	+3.2 99% 17	-9.0 95% 1	+87 99% 10	+8.1 98% 31	-2.1 98% 90	-0.3 98% 51	+1.3 98% 7	+1.5 98% 72	+0.70 96% 90	+25 99% 33	+0.46 99% 2	+0.86 99% 25	+1.00 99% 41	\$234 23	\$392 22	
NAQN329 NAQH318 NAQK30	ARDROSSAN HOLBROOK N329 HBR	+60 89% 62	-2.9 77% 87	+1.4 69% 72	-3.0 96% 74	+2.6 95% 22	+46 95% 76	+84 95% 77	+109 94% 87	+76 90% 75	+23 89% 13	+2.4 86% 4	-7.6 58% 6	+70 91% 48	+5.3 89% 65	+2.7 89% 7	+2.6 90% 11	-1.0 81% 97	+4.0 91% 16	+1.04 83% 99	+15 90% 76	+0.84 81% 49	+1.00 87% 58	+0.92 83% 19	\$211 48	\$337 67	
NAQH255 NORE11 NAQD17	ARDROSSAN HONOUR H255 ^{PV} HBR	+47 95% 72	-1.9 96% 84	-0.9 89% 86	-2.7 99% 78	+4.6 98% 65	+43 98% 86	+75 98% 93	+97 98% 91	+94 98% 64	+13 98% 80	+2.2 98% 48	-5.8 85% 27	+61 97% 74	+5.7 96% 60	+1.0 96% 28	-1.4 96% 71	+0.6 95% 34	+2.4 96% 49	+1.03 92% 98	+9 98% 92	+0.42 97% 1	+1.02 97% 63	+1.24 96% 95	\$166 88	\$290 90	
NAQQ67 NMMN334 NAQL96	ARDROSSAN NECTAR Q67 ^{PV} HBR	+55 87% 66	+5.1 78% 30	+5.8 65% 26	-9.1 93% 4	+3.5 95% 40	+55 93% 34	+101 93% 29	+133 93% 24	+129 87% 15	+12 81% 85	+3.0 82% 22	-6.2 52% 20	+55 88% 86	+5.7 87% 60	+1.9 87% 14	+0.1 88% 44	-0.4 79% 86	+2.8 89% 39	+0.08 80% 34	+36 91% 7	+0.36 83% 1	+0.82 85% 17	+1.04 81% 54	\$211 47	\$395 20	
QQFH147 VTME343 NMMF123	ASCOT HALLMARK H147 ^{PV} HBR	+119 94% 21	-2.7 96% 87	+1.7 88% 69	-5.0 99% 42	+7.1 99% 97	+60 98% 16	+110 98% 12	+152 98% 5	+135 98% 10	+14 98% 72	+3.8 98% 8	-6.0 79% 23	+81 96% 20	-1.5 95% 99	+0.7 95% 34	-0.2 96% 49	-0.9 94% 96	+3.4 95% 27	+0.33 90% 62	+19 97% 61	+0.48 95% 3	+0.86 95% 25	+1.04 93% 54	\$200 60	\$369 40	
HIOE7 VTMB219 BVBV32	AYRVALE BARTEL E7 ^{PV} HBR	+134 98% 14	+9.0 99% 5	+9.5 97% 3	-4.4 99% 52	+1.8 99% 11	+49 99% 64	+86 99% 72	+113 99% 68	+75 99% 88	+25 99% 6	+2.5 99% 37	-9.0 94% 1	+64 98% 66	+8.4 98% 28	-0.2 98% 55	+0.6 98% 35	+1.2 98% 9	+3.6 98% 23	+0.34 96% 63	+5 99% 97	+1.04 99% 85	+1.00 99% 58	+1.12 99% 77	\$289 1	\$445 3	
Breed Average EBVs		+77.	+2.3	+3.2	-4.6	+3.9	+52	+94	+121	+103	+17	+2.2	-4.8	+69	+6.6	+0.1	-0.2	+0.4	+2.5	+0.23	+21	+0.84	+0.96	+1.02	+206	+353	

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Sire Dam	Reg.	MSA MBL RBV	Calv-Ease		Birth		Growth			Maternal			Fert		Carcase					Feed	Temp	Structural		Selection Index			
			Dir	Dtrs	GL	BW	200	400	600	MCW	Milk	SS	DC	CW	EMA	Rib	P8	RBY	IMF	NFI-F	Doc	Claw	Angle	Leg	\$A	\$A-L	
NBB21S86 NMMMP15 NBBQ25	BALD BLAIR STIRLING S86 ^{PV} HBR	+105 73% 30	+6.7 74% 17	+9.4 64% 3	-4.4 94% 52	+2.5 95% 20	+64 93% 8	+107 92% 16	+143 88% 11	+114 84% 31	+19 78% 35	+3.8 81% 8	-4.9 47% 46	+93 79% 5	+6.2 74% 53	-2.4 76% 93	-3.6 76% 94	+0.2 69% 59	+3.8 77% 19	-0.31 65% 7	+5 90% 97	+0.72 71% 25	+0.70 71% 5	+1.06 68% 61	\$248 11	\$423 8	
VONN462 VONJ507 VONK224	BANQUET NUTTELLA N462 ^{PV} HBR	+13 86% 91	-3.2 81% 88	+2.2 66% 65	-4.1 94% 57	+7.0 97% 96	+56 96% 31	+104 96% 21	+141 90% 13	+109 84% 40	+24 85% 10	+3.5 94% 12	-4.1 52% 66	+69 89% 50	+3.6 88% 82	+0.1 87% 48	-1.4 88% 71	+0.0 80% 70	+1.1 89% 81	-0.27 77% 9	+55 95% 1	+0.56 78% 6	+0.92 78% 38	+0.80 72% 4	\$179 79	\$318 78	
NBNN239 USA16956101 NBNH215	BEN NEVIS NEWSFLASH N239 ^{PV} HBR	+36 90% 79	-0.8 85% 78	+3.1 73% 56	-4.3 97% 54	+4.9 98% 72	+59 96% 21	+99 97% 35	+134 97% 24	+115 93% 30	+18 90% 39	+0.8 93% 91	-2.5 62% 92	+85 92% 12	+5.4 91% 63	-2.3 90% 92	-0.2 91% 49	+0.4 84% 46	+1.4 92% 74	+0.26 84% 54	+9 91% 91	+0.98 92% 76	+0.98 92% 53	+0.90 89% 15	\$191 69	\$332 70	
NBNP122 USA17960722 NBNM115	BEN NEVIS PRIME P122 ^{PV} HBR	+166 77% 5	+4.6 77% 34	+6.7 67% 18	+0.0 93% 97	+2.5 95% 20	+57 92% 29	+87 93% 71	+112 93% 70	+78 87% 85	+11 79% 88	+3.1 87% 19	-4.2 57% 64	+60 81% 75	+5.3 81% 65	+1.2 81% 24	+1.7 81% 19	-0.6 76% 92	+4.9 82% 7	+0.45 69% 74	+22 84% 45	+0.72 87% 25	+0.74 86% 8	+0.96 82% 29	\$238 18	\$375 35	
NBNR138 USA17960722 NBNP153	BEN NEVIS RONAN R138 ^{PV} HBR	+30 75% 83	+4.3 76% 37	+5.8 67% 26	-8.8 87% 50	+3.4 90% 37	+72 90% 1	+119 90% 4	+145 89% 9	+139 85% 8	+12 78% 86	+2.2 81% 48	-4.6 54% 54	+80 79% 21	+8.5 76% 27	-1.4 77% 80	-2.2 77% 82	+0.6 71% 34	+1.2 79% 79	-0.09 68% 19	+27 84% 27	+0.76 85% 32	+0.86 87% 25	+0.90 83% 15	\$247 12	\$435 4	
NGXQ227 VLYM518 NGXN221	BONGONGO BE QUICK Q227 ^{PV} HBR	+192 89% 2	+3.6 72% 44	+2.6 66% 61	-4.5 97% 50	+3.0 97% 29	+50 94% 58	+91 94% 59	+114 93% 65	+60 88% 96	+23 81% 13	+3.8 85% 8	-6.7 57% 13	+67 90% 57	+11.5 89% 8	+0.6 88% 36	+2.9 89% 9	+0.1 81% 65	+5.8 91% 2	+1.10 81% 99	+20 88% 55	+0.64 86% 13	+1.06 86% 71	+1.12 83% 77	\$289 1	\$422 8	
NGXP212 NORL508 NGXL13	BONGONGO P212 ^{PV} HBR	+167 88% 5	+6.3 71% 20	+9.7 63% 2	-6.9 96% 17	+2.2 96% 16	+47 95% 73	+87 95% 69	+103 94% 84	+80 90% 83	+22 85% 16	+3.8 87% 8	-9.2 61% 1	+55 89% 86	+3.7 89% 82	+3.4 88% 4	+5.9 89% 1	-1.1 82% 98	+4.8 90% 7	+0.88 81% 96	+11 86% 86	+0.80 84% 41	+0.84 84% 21	+0.98 80% 35	\$257 7	\$422 8	
NUIF32 NGMC196 NUID96	BONNY BROOKE FALCO F32 ^{SV} HBR	+38 82% 78	-4.6 67% 92	-10.0 54% 99	-0.2 91% 96	+6.2 89% 91	+54 91% 42	+84 89% 78	+109 91% 76	+99 84% 57	+18 78% 46	-0.5 77% 99	-2.2 52% 94	+64 84% 64	-2.1 82% 99	+2.4 82% 9	+1.6 83% 20	-1.2 73% 99	+2.2 82% 54	-0.34 73% 6	+20 81% 55	+1.00 79% 79	+0.92 79% 38	+1.06 74% 61	\$126 98	\$226 99	
HCAG013 VTMA217 VTMZ618	BOONAROO GRAVITY G013 ^{PV} HBR	+117 90% 22	+5.3 91% 28	+3.4 84% 52	-5.3 98% 38	+3.7 98% 44	+51 97% 53	+88 97% 67	+116 97% 62	+102 95% 51	+23 96% 12	+3.9 97% 7	-5.4 72% 35	+57 93% 82	+5.4 92% 93	-2.8 92% 95	-3.3 92% 92	+1.3 88% 7	+3.0 91% 35	-0.72 86% 1	+22 94% 47	+0.50 93% 3	+0.92 94% 38	+1.06 91% 61	\$214 44	\$365 44	
HCAN20 VTMK338 HCAL54	BOONAROO KASBAH N20 ^{SV} HBR	+75 89% 50	+4.8 76% 33	+2.4 63% 63	-5.3 93% 38	+5.5 96% 82	+48 95% 70	+89 94% 65	+114 91% 65	+107 87% 43	+15 82% 65	+3.8 90% 8	-6.3 55% 18	+56 90% 85	+5.7 88% 60	-0.6 89% 64	-1.5 89% 72	+0.9 79% 19	+2.1 91% 57	+0.70 83% 90	+17 94% 66	+0.86 91% 54	+1.02 91% 63	+1.08 85% 67	\$202 58	\$359 48	
NGMN418 WWEL3 NGML471	BOOROOMOOKA JACKPOT N418 HBR	+89 85% 40	+2.3 71% 56	+7.1 66% 15	-8.6 95% 6	+5.5 96% 82	+63 96% 10	+111 96% 10	+137 96% 19	+134 94% 11	+5 88% 99	+3.5 94% 12	-7.2 62% 8	+80 89% 21	+8.5 86% 27	-0.7 86% 67	-0.3 87% 51	+0.7 80% 29	+2.7 88% 42	+0.25 80% 53	+29 95% 22	+1.32 93% 99	+1.08 93% 75	+1.04 87% 54	\$264 4	\$457 2	
NGMN213 NGML201 NGML45	BOOROOMOOKA NORMANDY HBR	+116 87% 23	+11.7 79% 1	+11.2 66% 1	-7.7 94% 10	+1.1 96% 6	+41 95% 91	+74 96% 94	+101 95% 87	+73 94% 90	+23 88% 13	+3.3 94% 15	-9.4 55% 1	+51 89% 91	+4.0 87% 79	-2.8 87% 95	-3.1 88% 91	+1.0 79% 15	+3.2 89% 31	+0.94 79% 97	+32 95% 15	+0.74 93% 29	+0.58 93% 1	+1.02 85% 48	\$232 24	\$383 29	
NGMP96 WWEL3 NGMM566	BOOROOMOOKA PARAGON P96 HBR	+75 91% 51	-3.2 82% 88	+2.9 74% 58	-7.7 98% 10	+3.6 98% 42	+63 98% 10	+120 98% 3	+162 98% 2	+130 95% 14	+30 91% 1	+3.6 97% 10	-8.4 63% 3	+110 93% 1	+13.1 91% 4	-2.7 91% 95	-1.3 92% 69	+1.6 83% 3	+2.2 93% 54	+0.85 86% 95	+32 98% 14	+0.84 97% 49	+0.96 97% 48	+1.08 94% 67	\$292 1	\$474 1	
Breed Average EBVs		+77.	+2.3	+3.2	-4.6	+3.9	+52	+94	+121	+103	+17	+2.2	-4.8	+69	+6.6	+0.1	-0.2	+0.4	+2.5	+0.23	+21	+0.84	+0.96	+1.02	+206	+353	

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Sire Dam	Reg.	MSA MBL RBV	Calv-Ease		Birth		Growth			Maternal			Fert		Carcase					Feed	Temp	Structural		Selection Index			
			Dir	Dtrs	GL	BW	200	400	600	MCW	Milk	SS	DC	CW	EMA	Rib	P8	RBY	IMF	NFI-F	Doc	Claw	Angle	Leg	\$A	\$A-L	
NGMP22 NGMK9 NGMK640	BOOROOMOOKA PRESIDENT HBR	+72 89% 53	-0.5 78% 76	+4.4 66% 41	-6.3 97% 24	+4.9 96% 72	+58 95% 23	+108 95% 14	+144 96% 10	+129 91% 14	+21 83% 20	+3.1 91% 19	-6.0 59% 23	+78 91% 25	+5.6 89% 61	+0.2 88% 46	+0.8 89% 32	+0.2 80% 59	+2.6 91% 44	+0.57 83% 83	+18 94% 63	+0.38 87% 1	+0.60 88% 1	+0.82 81% 5	\$229 27	\$402 16	
NGMR49 USA17960722 NGMP361	BOOROOMOOKA RAUDONIKIS HBR	+31 74% 83	+4.3 72% 37	+5.8 65% 26	-5.4 92% 36	+3.9 93% 49	+62 91% 11	+104 89% 22	+128 85% 34	+96 85% 61	+20 78% 30	+3.7 86% 9	-3.0 53% 86	+72 79% 41	+12.1 76% 6	-0.5 77% 62	-2.0 78% 79	+1.2 71% 9	+0.9 78% 85	+0.10 67% 36	+29 88% 21	+0.98 79% 76	+0.80 79% 14	+0.82 74% 5	\$233 23	\$381 30	
BOWK2 VTME343 NAQZ31	BOWMAN AUSTRALIA K2 PV HBR	+67 88% 57	+7.9 80% 10	+2.7 75% 60	-6.6 94% 20	+3.5 91% 40	+49 91% 65	+98 91% 38	+121 91% 49	+96 87% 61	+23 86% 14	+4.9 84% 2	-7.8 68% 5	+69 88% 51	+8.0 88% 32	-0.1 88% 53	-1.6 88% 74	+0.9 83% 19	+1.5 90% 72	-0.62 83% 2	+14 88% 79	+0.86 84% 54	+1.00 85% 58	+0.94 81% 24	\$228 28	\$391 23	
SRKK306 NJWG279 TFAD58	BOWMONT KING K306 PV HBR	+155 92% 7	-1.0 88% 79	-9.0 80% 99	-4.5 97% 50	+4.6 98% 65	+50 97% 61	+78 97% 88	+103 97% 85	+86 95% 76	+2 95% 99	-0.3 96% 99	-4.7 69% 51	+65 94% 64	+14.8 93% 2	-0.5 93% 62	-1.8 93% 77	+1.5 91% 4	+4.8 94% 7	+0.51 87% 79	+26 96% 32	+0.54 92% 5	+0.90 92% 33	+0.72 90% 1	\$238 19	\$351 56	
BON21S004 USA19266718 BONQ008	BRIDGEWATER HOMETOWN HBR	+67 74% 57	+10.0 70% 2	+8.8 61% 5	-9.3 92% 3	+1.3 89% 7	+61 88% 15	+101 88% 28	+131 86% 29	+98 83% 58	+16 77% 57	+3.0 81% 22	-7.8 47% 5	+88 77% 8	+9.0 75% 22	+2.1 76% 12	+0.7 77% 34	-0.1 69% 75	+2.6 78% 44	+0.35 64% 64	+39 85% 5	+1.36 71% 99	+1.06 71% 71	+0.88 68% 12	\$272 3	\$447 3	
BONQ007 QMUM13 HIOL28	BRIDGEWATER QUANTUM Q007 HBR	+44 90% 74	-3.0 70% 88	-1.5 64% 89	-5.3 93% 38	+5.6 93% 84	+64 91% 7	+101 91% 29	+133 92% 26	+107 87% 43	+21 79% 19	+0.5 86% 95	-5.9 57% 25	+87 90% 10	+6.9 89% 44	+0.1 88% 48	-1.7 89% 75	+0.1 89% 65	+2.1 91% 57	+0.15 84% 42	+22 86% 46	+0.98 79% 76	+0.82 80% 17	+1.00 77% 41	\$227 29	\$365 44	
QBUG49 VTMB1 QBUE5	BURENDA GEIGER COUNTER HBR	+118 90% 22	+8.3 86% 8	+8.6 76% 6	-6.9 97% 17	+2.9 97% 27	+42 96% 90	+80 96% 85	+105 95% 81	+91 94% 70	+17 93% 50	+2.1 94% 52	-8.8 69% 2	+65 92% 63	+4.0 91% 79	+0.4 91% 41	-1.3 91% 69	+0.4 85% 46	+3.3 90% 29	+0.15 85% 42	+26 95% 30	+0.96 85% 73	+1.18 85% 90	+0.98 82% 35	\$221 36	\$381 31	
WLHD19 USA13058662 USA14311946	CHERYLTON STEWIE D19 PV HBR	+139 94% 12	+2.4 94% 55	+2.5 89% 62	-4.7 98% 47	+3.2 98% 33	+45 98% 79	+90 98% 61	+111 98% 72	+95 97% 62	+20 98% 31	+2.2 98% 48	-7.4 77% 7	+57 96% 83	+4.5 95% 74	-1.6 95% 84	+1.3 95% 24	-0.3 92% 83	+4.1 95% 15	+0.40 89% 69	+15 96% 76	+1.02 95% 82	+1.00 95% 58	+1.04 92% 54	\$221 36	\$373 37	
GTNM6 VTMF734 VSNF15	CHILTERN PARK MOE M6 PV HBR	+16 92% 90	+5.3 91% 28	+3.3 84% 54	-1.3 99% 91	+3.1 99% 31	+50 99% 57	+99 99% 34	+134 99% 24	+78 97% 86	+29 97% 2	+1.5 98% 17	-6.4 74% 17	+82 95% 17	+6.3 93% 93	-0.7 94% 67	+0.6 94% 35	+0.2 90% 59	+1.8 94% 64	+0.27 86% 55	+38 99% 6	+0.70 99% 22	+1.04 99% 67	+1.10 98% 73	\$242 16	\$386 27	
GTNP9 HKFJ5 GTNK26	CHILTERN PARK PICASSO P9 PV HBR	+105 86% 30	+9.3 82% 4	+8.8 69% 5	-3.6 98% 65	+1.0 98% 6	+54 96% 38	+101 97% 28	+133 96% 26	+95 90% 63	+24 85% 9	+3.3 95% 15	-7.9 62% 4	+91 88% 6	+6.4 87% 51	-0.1 87% 53	+1.1 87% 27	-0.6 80% 92	+4.2 88% 14	+0.70 77% 90	+26 93% 32	+0.64 93% 13	+0.72 93% 6	+0.82 88% 5	\$263 5	\$437 4	
GTNQ322 USA18636106 GTNL198	CHILTERN PARK QUADRANT HBR	+113 89% 25	+6.2 79% 20	+3.7 66% 49	-2.3 97% 82	+3.3 97% 35	+62 93% 12	+115 96% 6	+145 94% 10	+108 88% 42	+19 79% 34	+4.2 84% 5	-5.5 51% 33	+92 90% 5	+13.0 88% 4	-1.7 88% 85	-1.1 89% 66	+0.7 79% 29	+3.9 90% 18	+0.87 82% 96	+7 87% 95	+1.12 85% 92	+1.14 85% 85	+1.02 81% 48	\$284 1	\$460 1	
QMUM13 USA16295688 QMUG1	CLUNES CROSSING DUSTY M13 HBR	+59 93% 62	+1.9 85% 59	+5.8 81% 26	-6.8 99% 18	+5.3 99% 79	+64 98% 7	+101 98% 28	+119 98% 54	+65 98% 94	+16 97% 62	+1.0 98% 87	-7.9 76% 4	+71 96% 45	+12.9 94% 4	-2.4 95% 93	-3.2 95% 91	+1.0 92% 15	+2.1 95% 57	+0.23 88% 51	+10 98% 89	+0.88 98% 58	+0.86 98% 25	+0.98 96% 35	\$301 1	\$437 4	
NBHK330 NJWG279 NBHH381	CLUNIE RANGE KALUHA K330 PV HBR	+99 91% 33	-1.8 85% 83	-12.0 75% 99	-4.8 97% 45	+5.6 97% 84	+54 96% 39	+95 96% 44	+125 96% 40	+99 93% 56	+15 90% 67	+1.5 96% 74	-7.4 67% 7	+93 93% 5	+9.8 91% 16	+0.2 91% 46	-1.2 92% 67	+1.2 90% 9	+3.2 93% 31	+0.31 86% 60	+5 94% 96	+0.70 88% 22	+0.94 88% 43	+1.16 85% 86	\$247 12	\$380 31	
Breed Average EBVs		+77.	+2.3	+3.2	-4.6	+3.9	+52	+94	+121	+103	+17	+2.2	-4.8	+69	+6.6	+0.1	-0.2	+0.4	+2.5	+0.23	+21	+0.84	+0.96	+1.02	+206	+353	

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Ident	Name																										
Sire Dam	Reg.	MSA MBL RBV	Calv-Ease		Birth		Growth			Maternal			Fert			Carcase				Feed	Temp	Structural		Selection Index			
			Dir	Dtrs	GL	BW	200	400	600	MCW	Milk	SS	DC	CW	EMA	Rib	P8	RBY	IMF	NFI-F	Doc	Claw	Angle	Leg	\$A	\$A-L	
NBHL348 NZE14647008839 AHWJ81	CLUNIE RANGE LEGEND L348 ^{PV} HBR	+79 92% 47	-5.6	+4.2	-7.8	+5.8	+57	+102	+123	+151	+1	+2.9	-7.9	+62	-0.1	+3.7	+0.9	-0.8	+2.6	+0.08	+24	+0.50	+0.80	+1.24	\$177	\$358	
NBHP392 USA17960722 NBHM516	CLUNIE RANGE PLANTATION HBR	+130 88% 15	+4.9	+3.4	-5.1	+4.3	+67	+116	+143	+109	+22	+5.6	-4.8	+71	-1.1	-0.4	-1.5	-1.5	+4.1	+0.22	+24	+0.70	+0.86	+0.90	\$223	\$391	
WDCH249 USA14885809 WDCE9	COONAMBLE HECTOR H249 ^{SV} HBR	+3 94% 95	+1.1	+0.5	-8.2	+4.6	+45	+80	+99	+93	+5	+1.3	-4.7	+46	+9.1	+4.2	+4.5	+0.5	+0.1	-0.46	+40	+0.40	+0.50	+0.80	\$179	\$312	
WDCK314 NAQA241 WDCD94	COONAMBLE KEVIN K314 ^{PV} HBR	+0 89% 95	+0.8	+5.1	-2.2	+4.5	+51	+101	+134	+111	+25	+4.5	-7.5	+84	+7.4	+0.1	+0.7	+0.2	+1.6	+0.56	+41	+0.50	+1.12	+1.20	\$219	\$385	
USA19611994 USA18467508 USA18974126	DB ICONIC G95 ^{PV} HBR	+132 90% 15	+3.9	+7.9	-3.1	+3.1	+66	+123	+152	+143	+15	+3.0	-3.8	+88	+6.4	+0.2	+0.6	-0.7	+4.2	+0.18	+41	+1.22	+0.98	+0.84	\$241	\$437	
NJS21S15 USA18636106 QHEJ100	DEVANAH SATURN S15 ^{PV} HBR	+54 74% 67	+6.0	+1.7	-7.5	+3.6	+65	+110	+144	+104	+25	+4.3	-7.0	+86	+8.2	-1.0	-2.2	+0.2	+2.2	+0.38	+19	+0.86	+0.98	+0.86	\$261	\$429	
WKGQ202 WKGN129 WKGL21	DIAMOND ONE ALL IN Q202 ^{SV} HBR	-4 69% 96	-8.1	-7.7	-5.3	+8.0	+72	+123	+167	+156	+22	+2.7	-4.6	+98	+10.0	-5.9	-6.0	+1.9	-0.4	-0.77	+34	+0.94	+0.60	+0.86	\$204	\$364	
NGCM028 QHEJ134 NGCK204	DULVERTON MEDAGLIA M028 ^{PV} HBR	+70 86% 54	-9.6	-2.5	-4.5	+7.4	+72	+120	+159	+151	+11	+1.2	-4.6	+85	+5.8	-1.1	-3.7	+0.4	+2.3	-0.82	+18	+1.12	+1.14	+1.10	\$211	\$368	
CYIR18 QMUM13 CYIM611	EBONY BEEF BILLIE RAY R18 ^{PV} APR	+54 76% 67	+3.6	+8.6	-3.9	+5.2	+67	+107	+129	+73	+22	+2.7	-6.3	+81	+12.3	-1.8	-1.0	+0.8	+2.0	+0.20	-2	+1.04	+0.90	+1.12	\$300	\$447	
USA16198796 USA14686137 USA15452880	EF COMPLEMENT 8088 ^{PV} HBR	+44 97% 74	+4.4	+7.4	-4.6	+2.9	+52	+98	+130	+98	+21	+1.4	-6.7	+76	+7.5	+1.3	+0.8	+0.7	+1.6	+0.52	+20	+0.94	+1.26	+1.16	\$247	\$408	
WWEQ15 VTMG67 WWEN17	ESSLEMONT GARTH Q15 ^{PV} HBR	+143 88% 11	-1.1	+3.1	-8.2	+5.6	+63	+110	+151	+143	+27	+2.2	-6.9	+69	+6.4	-3.4	-3.9	+0.4	+4.2	-0.40	+44	+0.90	+1.14	+1.04	\$241	\$421	
WWEL3 HIOG18 WWEJ8	ESSLEMONT LOTTO L3 ^{PV} HBR	+139 95% 12	-5.8	-1.2	-5.4	+4.6	+61	+110	+140	+135	+15	+3.6	-9.5	+89	+14.7	-0.3	+0.7	+1.5	+3.8	+0.37	+15	+1.12	+0.98	+1.16	\$294	\$474	
WWEQ24 WWEN12 WWEN7	ESSLEMONT QUOKKA Q24 ^{PV} HBR	+61 89% 61	+5.7	+1.5	-5.0	+1.6	+42	+83	+95	+51	+19	+3.9	-6.8	+64	+16.8	+1.4	+0.1	+2.2	+2.2	+1.18	+29	+0.74	+0.88	+0.94	\$269	\$395	
Breed Average EBVs		+77.	+2.3	+3.2	-4.6	+3.9	+52	+94	+121	+103	+17	+2.2	-4.8	+69	+6.6	+0.1	-0.2	+0.4	+2.5	+0.23	+21	+0.84	+0.96	+1.02	+206	+353	

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Ident	Name																										
Sire Dam	Reg.	MSA MBL RBV	Calv-Ease		Birth		Growth			Maternal			Fert		Carcase					Feed	Temp	Structural		Selection Index			
			Dir	Dtrs	GL	BW	200	400	600	MCW	Milk	SS	DC	CW	EMA	Rib	P8	RBY	IMF	NFI-F	Doc	Claw	Angle	Leg	\$A	\$A-L	
WWE21S6 NGMN418 WWEN7	ESLEMONT SEAN S6 ^{PV} HBR	+118 77% 22	+5.6 69% 25	+7.5 62% 12	-5.8 94% 30	+2.9 91% 27	+57 91% 25	+101 90% 28	+116 88% 61	+90 85% 71	+14 79% 71	+4.5 82% 3	-6.0 52% 23	+77 80% 27	+17.0 76% 1	+2.1 76% 12	+0.3 77% 40	+1.2 68% 9	+4.0 80% 16	+1.04 70% 99	+27 88% 26	+1.04 65% 85	+1.22 65% 93	+1.10 64% 73	\$291 1	\$457 2	
USA18217198 USA17354178 USA16934264	G A R ASHLAND ^{PV} HBR	+86 94% 42	+2.7 97% 52	+3.7 87% 49	-6.0 99% 27	+3.2 99% 33	+67 99% 4	+116 99% 6	+147 99% 8	+122 98% 21	+15 98% 69	+1.4 98% 77	-2.9 74% 88	+87 97% 9	+12.8 96% 4	-2.4 96% 93	-1.6 96% 74	+1.1 94% 12	+2.7 96% 42	+0.07 89% 33	+11 99% 87	+1.22 99% 97	+1.12 99% 82	+0.86 98% 9	\$263 5	\$430 6	
USA16295688 USA13009379 USA15129456	G A R PROPHET ^{SV} HBR	+122 97% 19	+3.9 98% 41	+6.2 94% 22	-0.7 99% 94	+3.8 99% 47	+67 99% 4	+108 99% 15	+133 99% 24	+86 99% 77	+23 99% 13	+0.7 99% 92	-5.8 90% 27	+71 98% 44	+4.2 97% 77	-0.6 97% 64	-1.5 98% 72	-0.8 97% 95	+4.8 97% 7	+0.78 94% 93	+27 99% 28	+1.02 99% 82	+0.82 99% 17	+0.92 98% 19	\$274 2	\$424 7	
USA17328461 USA16205036 USA16431932	G A R SURE FIRE ^{SV} HBR	+136 95% 13	+6.9 96% 15	+3.7 87% 49	-3.0 99% 74	+2.3 99% 17	+49 98% 64	+90 98% 63	+112 98% 70	+84 97% 78	+20 98% 27	+4.1 98% 5	-7.2 80% 8	+63 96% 67	+8.0 96% 32	-0.2 96% 55	-0.4 96% 53	+0.9 95% 19	+3.4 96% 27	-0.09 89% 19	+26 96% 31	+1.18 99% 96	+0.92 99% 38	+0.60 92% 1	\$250 10	\$403 16	
USA18690054 USA17965471 USA18054344	GB FIREBALL 672 ^{PV} HBR	+174 92% 4	+2.2 95% 57	+6.7 84% 18	-4.8 99% 45	+2.7 99% 23	+62 98% 11	+99 99% 33	+132 98% 26	+124 98% 20	+16 97% 61	+2.8 98% 27	-7.5 67% 6	+81 95% 19	+14.4 94% 2	-2.5 94% 93	-3.9 93% 95	+0.8 90% 23	+5.5 94% 82	+0.55 86% 8	+11 98% 86	+1.06 99% 87	+0.94 99% 43	+0.84 97% 7	\$279 2	\$459 2	
QBGH221 BNAD145 QBGD80	GLENOCH HINMAN H221 ^{SV} HBR	+153 90% 8	+6.3 85% 20	-2.2 76% 91	-3.0 97% 74	+3.0 97% 29	+53 96% 43	+94 96% 48	+126 96% 38	+115 92% 30	+21 94% 24	+0.8 95% 91	-3.3 70% 82	+87 92% 10	+7.6 91% 36	-2.0 91% 89	-4.9 92% 98	+0.8 88% 23	+5.3 92% 4	-0.34 85% 6	+10 86% 90	+0.88 88% 58	+0.78 89% 12	+1.06 85% 61	\$212 46	\$361 47	
DKKM41 NORH708 DKKJ51	HARDHAT H708 MAIMURU J51 APR	+181 90% 3	-1.1 71% 80	+3.0 63% 57	-1.5 95% 90	+2.4 94% 19	+43 92% 86	+91 91% 58	+118 87% 57	+97 82% 60	+11 86% 89	+1.3 65% 80	-3.4 89% 80	+63 89% 69	+1.8 88% 93	+0.8 88% 32	-2.0 89% 79	-0.5 81% 89	+6.3 91% 1	+0.13 84% 39	+23 88% 42	+1.08 89% 89	+1.04 90% 67	+1.10 86% 73	\$185 75	\$319 78	
DKKN43 NORK522 NKLK143	HARDHAT K522 NEBRASKA HBR	+11 88% 92	+8.1 79% 9	+6.8 68% 17	-9.5 94% 3	+2.1 95% 15	+59 93% 19	+100 93% 31	+137 91% 18	+133 87% 12	+14 85% 74	+5.1 88% 1	-7.1 58% 9	+72 89% 40	+2.7 87% 89	+0.5 87% 39	+0.1 88% 44	-0.4 79% 86	+0.3 90% 93	+0.11 82% 37	+13 92% 81	+0.78 91% 36	+0.82 91% 17	+0.90 86% 15	\$192 69	\$382 29	
NHZF1023 VTMB1 NHZB723	HAZELDEAN F1023 ^{SV} APR	+198 93% 2	+4.6 93% 34	+1.6 81% 70	-2.6 98% 79	+3.1 98% 31	+39 98% 94	+74 98% 94	+88 98% 97	+70 97% 92	+13 97% 80	+3.7 97% 97	-5.3 77% 80	+49 95% 37	+8.6 94% 26	+2.8 94% 6	-0.2 94% 49	+0.1 91% 65	+5.9 94% 2	+1.32 89% 99	+13 98% 83	+0.46 97% 2	+0.98 97% 53	+1.06 94% 61	\$210 49	\$336 67	
NHZP434 NHZJ140 NHZL527	HAZELDEAN P434 ^{SV} APR	+40 88% 77	+8.9 78% 5	+6.4 65% 20	-7.3 97% 13	+1.8 96% 11	+46 95% 75	+87 95% 70	+114 90% 66	+96 84% 61	+19 93% 34	+2.7 62% 30	-7.4 90% 7	+70 88% 46	+2.4 88% 91	+0.4 89% 41	-3.9 89% 95	+0.9 80% 19	+1.8 90% 64	+0.67 82% 89	+47 92% 1	+0.58 88% 8	+0.96 88% 48	+1.06 84% 61	\$201 60	\$357 50	
NHZQ1229 NHZF1023 NHZJ823	HAZELDEAN Q1229 ^{PV} APR	+126 89% 17	+0.9 78% 67	+5.6 64% 28	-3.5 98% 67	+4.0 97% 52	+57 97% 28	+103 97% 25	+126 95% 39	+80 88% 84	+19 81% 33	+4.7 96% 2	-7.9 57% 4	+80 90% 21	+11.3 89% 8	+0.1 88% 48	-2.3 89% 83	+0.3 80% 53	+4.1 91% 15	+0.92 83% 97	+28 97% 23	+0.62 92% 11	+0.96 92% 48	+0.98 88% 35	\$277 2	\$428 6	
NHZQ319 NHZM586 NHZL1175	HAZELDEAN Q319 ^{PV} APR	+146 90% 10	+4.1 77% 39	+9.6 61% 3	-8.6 97% 6	+2.7 97% 23	+55 96% 37	+106 96% 17	+144 95% 11	+140 89% 8	+17 81% 50	+3.3 95% 15	-11.3 57% 1	+81 91% 18	+2.5 89% 90	+2.7 88% 7	+1.1 89% 27	-1.0 80% 97	+5.0 91% 6	+0.54 82% 81	+32 96% 15	+0.80 89% 41	+1.04 88% 67	+1.12 84% 77	\$266 4	\$480 1	
NHZR1561 NORL519 NHZJ115	HAZELDEAN RONALDO R1561 ^{PV} HBR	+129 77% 16	-6.2 78% 95	+5.3 68% 31	-5.8 97% 30	+6.1 96% 90	+67 95% 4	+111 95% 10	+147 92% 8	+147 86% 5	+8 79% 98	+0.7 93% 92	-4.5 59% 57	+74 82% 35	+4.3 78% 76	-0.9 79% 71	-1.6 79% 74	-0.3 73% 83	+4.0 80% 16	+0.49 70% 77	+14 94% 77	+0.64 82% 13	+0.76 82% 10	+0.98 75% 35	\$213 45	\$379 32	
Breed Average EBVs		+77.	+2.3	+3.2	-4.6	+3.9	+52	+94	+121	+103	+17	+2.2	-4.8	+69	+6.6	+0.1	-0.2	+0.4	+2.5	+0.23	+21	+0.84	+0.96	+1.02	+206	+353	

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Sire Dam	Reg.	MSA MBL RBV	Calv-Ease		Birth		Growth			Maternal			Fert			Carcase					Feed	Temp	Structural		Selection Index		
			Dir	Dtrs	GL	BW	200	400	600	MCW	Milk	SS	DC	CW	EMA	Rib	P8	RBY	IMF	NFI-F	Doc	Claw	Angle	Leg	\$A	\$A-L	
DYFN6 NZE14647008839 DYFL18	INGLEBRAE FARMS NOBLEMAN HBR	+88 87% 41	+9.4	+10.4	-6.9	+2.1	+56	+90	+109	+102	+11	+3.4	-2.9	+61	+10.5	+0.8	+1.0	+0.2	+2.3	-0.31	+24	+0.84	+1.10	+1.18	\$207	\$365	
VMIC31 USA14739204 VMIU102	INNESDALE CARBINE C31^{SV} HBR	+3 90% 94	+0.6	-5.7	-1.5	+5.4	+37	+63	+82	+86	+19	+0.6	-5.1	+36	+3.2	-0.1	-0.7	+1.0	+0.7	+0.39	+6	+0.66	+0.94	+1.08	\$127	\$233	
NZE13300018 WWEL3 NZE13300116373	KAKAHU PIVOTAL 18004^{PV} HBR	+175 88% 4	+4.9	+3.2	-7.3	+3.8	+55	+102	+120	+67	+28	+3.6	-7.4	+83	+9.7	+0.9	+1.4	+0.4	+4.4	+0.67	+1	+0.72	+0.88	+1.08	\$297	\$443	
GXNQ209 USA18463791 VLYL1327	KELLY ANGUS QUINN Q209^{SV} HBR	+51 75% 69	+7.7	+9.7	-6.9	+2.1	+65	+117	+143	+120	+27	+0.6	-9.6	+90	+6.7	-1.4	-2.8	+0.4	+2.4	-0.15	+36	+1.32	+1.28	+1.26	\$293	\$491	
NDIP481 USA17354145 NDIL236	KENNY'S CREEK PINNACLE P481 HBR	+159 89% 6	+2.7	-1.9	-3.9	+3.0	+48	+89	+116	+64	+20	+0.2	-3.4	+78	+3.9	+1.6	+1.6	-1.5	+6.3	+1.26	+18	+0.94	+0.88	+0.84	\$215	\$326	
KILP1 USA18578965 KILM9	KILLAIN RAINMAN P1^{PV} HBR	-31 86% 99	-4.6	-6.6	-6.8	+4.3	+58	+103	+128	+121	+13	+3.1	-2.5	+75	+13.7	-2.6	-1.6	+2.3	-1.7	+0.33	+5	+0.98	+0.98	+1.08	\$177	\$311	
BLAP130 SRKK306 BLAK113	KNOWLA PACKER P130^{PV} HBR	+53 85% 67	+2.6	+1.6	-3.0	+4.6	+56	+102	+134	+113	+11	+1.1	-6.0	+78	+8.2	-0.1	-0.9	+0.8	+1.9	+0.16	+27	+0.84	+1.20	+0.94	\$237	\$398	
BLAR190 BLAN127 BLAP172	KNOWLA REVOLUTION R190^{PV} HBR	+168 73% 5	+11.0	+5.6	-11.0	+0.5	+39	+78	+102	+69	+26	+2.7	-3.4	+52	+14.7	+4.4	+3.5	+0.0	+4.8	+0.74	+42	+0.78	+1.04	+1.08	\$215	\$343	
BLA21S48 USA18837398 BLAL21	KNOWLA SO RIGHT S48^{PV} HBR	+134 76% 14	+3.3	-1.5	-4.7	+3.6	+57	+101	+129	+108	+15	+3.0	-5.9	+80	+8.7	+1.3	+1.6	-0.2	+4.1	+0.23	+31	+0.84	+0.92	+0.96	\$245	\$405	
NZCP117 USA17960722 NZCM67	KO B074 BEAST MODE P117^{PV} HBR	+149 79% 9	+1.9	+6.1	-5.2	+1.9	+61	+102	+127	+126	+11	+2.2	-5.2	+63	+1.9	+1.1	-0.2	-1.0	+4.3	+0.56	+14	+0.64	+0.50	+0.74	\$211	\$383	
VLYL483 HKFJ5 VLYH221	LAWSONS LINKEDIN L483^{SV} HBR	+60 90% 62	+3.8	-6.3	-1.3	+4.1	+58	+109	+153	+141	+25	+4.1	-4.6	+103	+9.3	-1.1	+2.2	+0.2	+2.0	-0.19	+20	+1.02	+0.78	+0.88	\$211	\$386	
VLYQ44 VLYM518 VLYK914	LAWSONS MIRACULOUS Q44^{PV} HBR	+103 88% 31	+4.7	-1.9	-7.5	+3.5	+49	+89	+108	+98	+9	+3.0	-3.7	+42	+18.6	-0.2	+0.2	+1.9	+2.0	+0.30	+36	+0.94	+0.88	+1.00	\$228	\$372	
VLYM518 USA17354145 VLYH229	LAWSONS MOMENTOUS M518 HBR	+192 94% 2	-2.3	-0.6	-5.1	+3.9	+50	+92	+114	+80	+22	+2.7	-3.6	+52	+11.8	-1.3	+0.1	+0.3	+5.7	+0.77	+36	+0.86	+0.98	+1.16	\$232	\$352	
Breed Average EBVs		+77.	+2.3	+3.2	-4.6	+3.9	+52	+94	+121	+103	+17	+2.2	-4.8	+69	+6.6	+0.1	-0.2	+0.4	+2.5	+0.23	+21	+0.84	+0.96	+1.02	+206	+353	

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Ident	Name																										
Sire Dam	Reg.	MSA MBL RBV	Calv-Ease		Birth		Growth			Maternal			Fert			Carcase				Feed	Temp	Structural		Selection Index			
			Dir	Dtrs	GL	BW	200	400	600	MCW	Milk	SS	DC	CW	EMA	Rib	P8	RBY	IMF	NFI-F	Doc	Claw	Angle	Leg	\$A	\$A-L	
VLYP316 USA16295688 VLYM527	LAWSONS PROPHET P316^{PV} HBR	+154 86% 8	+5.6	+5.8	-1.9	+3.4	+57	+88	+106	+63	+17	+0.3	-5.2	+67	+13.0	-3.2	-3.3	+1.5	+4.1	+0.39	+30	+0.68	+0.72	+0.80	\$284	\$412	
VLJR4010 USA17354145 VLYP4005	LAWSONS ROCKY R4010^{PV} HBR	+129 80% 16	+7.2	+6.7	-4.7	+2.5	+54	+97	+126	+96	+23	+2.4	-4.6	+75	+11.3	+1.9	+1.6	+0.1	+4.6	+1.30	+19	+1.04	+1.02	+1.02	\$254	\$413	
VLJR1217 USA18217198 VLYN976	LAWSONS ROMULUS R1217^{PV} HBR	+144 75% 10	+3.7	+7.9	-5.7	+3.7	+64	+109	+149	+118	+18	+1.2	-2.6	+87	+10.4	-3.8	-3.7	+1.1	+4.2	+0.47	+13	+1.16	+1.12	+0.92	\$260	\$423	
NMMD78 USA14237157 NMMY119	MILLAH MURRAH EQUATOR D78 HBR	+6 94% 93	-0.4	+6.5	-9.0	+5.0	+62	+111	+157	+181	+18	+2.1	-4.0	+89	+1.5	-2.0	-3.2	+0.9	+0.1	-1.01	+22	+0.82	+0.94	+1.08	\$159	\$356	
NMMH250 NMME78 NMME120	MILLAH MURRAH HERCULES HBR	+68 90% 56	-1.5	+3.1	-2.9	+6.0	+42	+76	+106	+93	+12	+2.5	-4.6	+62	+3.0	-1.6	-0.7	+0.4	+2.4	+0.16	+20	+0.92	+1.14	+1.08	\$157	\$280	
NMMK35 NZE469 NMMG41	MILLAH MURRAH KINGDOM K35 HBR	-41 94% 99	-12.2	-6.1	-2.0	+8.7	+55	+99	+138	+150	+11	+0.8	-5.3	+65	+7.9	+0.3	+0.1	+1.1	-1.0	-0.73	+28	+0.82	+1.28	+1.18	\$140	\$280	
NMMK42 NGMT30 NMMH4	MILLAH MURRAH KLOONEY K42 HBR	+72 94% 53	+4.0	+1.5	-6.0	+5.6	+47	+86	+107	+89	+22	+2.1	-4.7	+64	+6.7	-1.2	-3.2	+1.1	+1.9	-0.02	+17	+0.82	+0.90	+1.06	\$192	\$324	
NMML133 USA17091363 NMMH49	MILLAH MURRAH LOCH UP L133 HBR	+38 94% 78	+4.9	+4.3	-5.5	+4.8	+59	+99	+131	+102	+25	+2.1	-2.6	+80	+1.6	-2.2	-3.9	-0.7	+1.8	-0.12	+32	+0.68	+1.06	+1.16	\$168	\$309	
NMMM308 NZE14647008839 NMMH331	MILLAH MURRAH MILESTONE HBR	+77 87% 49	+6.5	+4.7	-7.3	+4.6	+43	+79	+90	+74	+16	+2.5	-5.8	+43	+5.0	+2.3	+4.6	-0.3	+2.5	+0.17	+20	+0.84	+0.98	+1.22	\$202	\$338	
NJWH283 NJWF189 NJWE51	MILWILLAH ELSOM H283^{PV} HBR	+57 90% 64	+1.2	-5.2	-2.2	+3.9	+46	+82	+122	+109	+21	+1.7	-1.2	+77	+9.2	-2.4	-2.7	+1.5	+1.5	+0.34	+20	+0.76	+0.84	+1.04	\$148	\$269	
NJWE158 NZEE230 VTMX114	MILWILLAH LAD E158^{SV} HBR	+137 90% 13	-3.1	-8.5	-7.7	+7.9	+40	+77	+104	+106	+6	+2.0	-5.1	+42	+8.9	-0.9	-4.8	+1.4	+3.3	+0.27	+13	+0.76	+0.80	+0.72	\$157	\$277	
BWFQ33 USA18181757 BWFN9	MOOGENILLA QUINELLA Q33^{PV} HBR	+142 85% 11	+3.7	+10.1	-6.4	+3.8	+60	+116	+147	+87	+26	+3.0	-2.7	+99	+9.3	-1.0	+0.4	-0.5	+4.9	+0.68	+31	+0.90	+0.92	+0.90	\$264	\$416	
EGRM39 HIOG18 EGRD9	MOSQUITO CREEK MAXIMUS HBR	+42 84% 76	+4.3	+4.0	-6.2	+5.0	+59	+106	+138	+135	+16	+1.9	-7.2	+74	+6.9	+1.0	+0.5	+0.3	+2.3	+0.03	+12	+0.84	+0.86	+0.96	\$242	\$430	
Breed Average EBVs		+77.	+2.3	+3.2	-4.6	+3.9	+52	+94	+121	+103	+17	+2.2	-4.8	+69	+6.6	+0.1	-0.2	+0.4	+2.5	+0.23	+21	+0.84	+0.96	+1.02	+206	+353	

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Sire Dam	Reg.	MSA MBL RBV	Calv-Ease		Birth		Growth			Maternal			Fert			Carcase					Feed	Temp	Structural		Selection Index		
			Dir	Dtrs	GL	BW	200	400	600	MCW	Milk	SS	DC	CW	EMA	Rib	P8	RBY	IMF	NFI-F	Doc	Claw	Angle	Leg	\$A	\$A-L	
EGRQ53 USA18463791 EGRG2	MOSQUITO CREEK QUALITY Q53 HBR	-45 89% 99	+8.7 74% 6	+9.7 60% 2	-6.5 93% 21	+0.4 93% 3	+59 91% 18	+105 91% 19	+132 92% 27	+101 86% 53	+28 77% 74	+1.5 86% 29	-5.7 50% 90	+88 89% 90	+2.5 88% 55	-0.2 89% 46	+0.0 79% 75	-0.1 90% 97	-0.45 81% 4	+31 85% 15	+1.10 85% 91	+1.20 85% 92	+1.14 80% 82	\$216 41	\$382 29		
CSWP036 USA17236055 CSWL123	MURDEDUKE BLACK PEARL HBR	+196 91% 2	+2.3 79% 56	+3.3 70% 54	-8.4 96% 6	+4.7 96% 68	+49 95% 63	+94 95% 50	+132 94% 26	+120 91% 24	+21 85% 21	+3.2 90% 17	-7.4 68% 7	+61 91% 74	+1.3 90% 95	+0.5 90% 39	-1.1 91% 66	-1.0 82% 97	+6.3 92% 1	+0.63 85% 87	+16 95% 73	+0.84 93% 49	+1.18 93% 90	+1.24 90% 95	\$215 43	\$384 28	
CSWK428 VTME343 CSWE175	MURDEDUKE KICKING K428 PV HBR	+25 91% 86	+7.8 88% 10	+9.9 77% 2	-7.6 98% 11	+1.9 98% 12	+48 97% 71	+93 97% 53	+115 97% 65	+88 96% 74	+25 95% 6	+3.3 97% 15	-6.3 70% 18	+66 93% 58	+2.4 92% 91	-0.4 90% 60	-3.0 92% 90	+0.3 87% 53	+0.8 93% 86	-0.07 86% 20	+42 97% 3	+0.86 97% 54	+1.00 97% 58	+1.18 95% 89	\$189 71	\$343 62	
CSWQ011 VLYM518 CSWN026	MURDEDUKE QUARTERBACK HBR	+174 88% 4	+6.9 89% 15	+1.0 80% 75	-9.5 99% 3	+3.0 99% 29	+53 99% 43	+100 99% 31	+133 99% 25	+111 97% 37	+24 94% 10	+4.1 98% 5	-6.2 66% 20	+77 93% 29	+4.5 91% 74	+1.5 91% 20	+2.6 91% 11	-1.1 86% 98	+5.3 91% 4	+0.60 81% 85	+23 99% 42	+0.72 99% 25	+1.12 99% 82	+1.06 98% 61	\$231 25	\$400 17	
NURM208 SMPG357 NURK45	MURRAY GENESIS M208 PV HBR	+35 88% 80	+1.4 80% 63	+5.6 70% 28	-5.9 93% 29	+4.6 94% 65	+50 93% 60	+94 92% 48	+127 93% 36	+105 89% 46	+19 87% 33	+3.8 86% 8	-6.5 64% 16	+82 89% 16	+16.4 88% 1	-0.3 86% 57	-2.5 89% 85	+2.0 83% 90	+1.2 82% 99	+1.39 88% 95	+7 91% 62	+0.90 90% 58	+1.00 90% 1	+0.68 87% 19	\$238 19	\$395 20	
NURM204 USA16956101 NURJ43	MURRAY PROCEED M204 PV HBR	+254 90% 1	-5.5 81% 94	+7.8 71% 10	-4.3 96% 54	+4.3 96% 59	+61 95% 13	+106 95% 18	+144 94% 10	+134 90% 11	+19 85% 36	+2.3 90% 44	-3.4 64% 80	+89 91% 8	+13.6 90% 3	-4.7 88% 99	-5.6 91% 99	+0.7 86% 29	+6.9 92% 1	+0.13 85% 39	+24 93% 37	+0.94 91% 69	+0.74 91% 8	+0.88 87% 12	\$237 20	\$394 21	
SFNL21 NZE10322010609 SFNH65	NAMPARA LIBERTY L21 SV HBR	-72 91% 99	-4.5 87% 92	-2.6 73% 93	-6.5 98% 21	+8.6 98% 99	+67 97% 4	+110 97% 11	+148 97% 8	+167 95% 1	+19 95% 37	+2.8 96% 27	-1.3 64% 98	+78 93% 24	+7.7 92% 35	-2.0 90% 89	-0.8 93% 60	+1.8 87% 2	-2.3 93% 99	-0.62 86% 2	+24 94% 38	+0.92 92% 66	+0.90 92% 33	+0.98 88% 35	\$147 94	\$309 83	
WLG P5 USA18229425 WLG M24	NARANDA PIMP P5 SV APR	+109 88% 27	+11.4 76% 1	+10.2 63% 2	-11.5 97% 1	+1.6 95% 10	+53 94% 47	+99 94% 35	+128 93% 35	+95 88% 63	+20 80% 30	+1.7 87% 67	-3.9 54% 71	+83 89% 15	+6.8 87% 46	+1.5 87% 20	+2.7 88% 10	-0.4 78% 86	+3.5 90% 25	+0.32 82% 61	+0 90% 99	+0.68 87% 19	+0.72 87% 6	+1.08 82% 67	\$234 22	\$394 21	
SKOJ6 VTME343 NZCE115	NEWLYN PARK EMPEROR J6 PV HBR	+14 86% 91	-7.6 78% 97	-5.2 70% 97	-7.1 93% 15	+7.4 92% 98	+64 91% 7	+110 90% 11	+142 91% 12	+157 88% 3	+8 84% 98	+1.2 85% 83	-4.2 64% 64	+79 87% 24	+8.3 86% 29	-1.0 86% 73	-1.0 87% 64	+1.3 80% 7	+0.2 88% 94	-0.72 80% 1	+15 85% 76	+1.06 85% 87	+0.80 85% 14	+0.78 81% 3	\$183 77	\$343 62	
NZE21095018 HIOE7 NZE21095112H49	NGAPUTAH I P206 PV HBR	+135 89% 13	+9.9 80% 3	+5.2 72% 32	-1.3 93% 91	+0.0 97% 2	+42 95% 88	+84 95% 77	+97 94% 91	+73 89% 89	+28 83% 2	+2.6 94% 33	-7.9 68% 4	+54 89% 87	+5.9 88% 57	-0.1 89% 53	-2.2 90% 82	+1.1 82% 12	+4.0 83% 16	+0.18 89% 45	+18 89% 65	+0.94 80% 69	+1.06 81% 71	+1.10 78% 73	\$241 16	\$385 27	
USA16981588 USA16381311 USA16408070	PA FULL POWER 1208 PV HBR	+112 93% 25	-4.9 95% 93	-4.3 86% 96	-4.8 99% 45	+3.8 98% 47	+52 98% 51	+98 98% 37	+119 98% 55	+75 98% 88	+14 98% 76	+2.0 98% 56	-2.3 74% 94	+72 96% 43	+12.9 95% 4	-1.6 94% 84	+0.6 95% 35	+1.0 92% 15	+3.0 95% 35	+0.90 88% 96	+22 98% 48	+1.24 98% 98	+0.92 98% 38	+0.70 91% 1	\$224 33	\$329 72	
SMPG357 VTMB1 SMPD245	PATHFINDER GENESIS G357 PV HBR	+7 94% 93	+0.1 97% 73	+4.1 90% 45	-7.2 99% 14	+6.6 99% 94	+61 99% 13	+109 99% 13	+148 99% 8	+135 98% 10	+26 98% 5	+4.4 98% 4	-6.7 85% 13	+97 97% 3	+13.9 96% 2	+0.4 96% 41	-0.9 96% 62	+1.4 95% 6	+0.3 96% 93	+0.63 90% 87	+28 99% 23	+0.86 98% 54	+1.04 98% 67	+0.78 96% 3	\$239 18	\$419 9	
SMPK22 SMPG357 SMPH756	PATHFINDER COMPLETE K22 SV HBR	+67 93% 56	+10.4 93% 2	+8.2 81% 8	-9.1 99% 4	+0.9 98% 5	+41 98% 92	+74 98% 94	+96 98% 92	+45 97% 99	+27 97% 4	+2.9 98% 24	-6.5 75% 16	+54 95% 88	+7.0 94% 43	+3.6 94% 3	+5.3 94% 1	+0.2 93% 59	+2.3 94% 51	+0.52 88% 79	+27 97% 27	+0.52 96% 4	+0.82 96% 17	+0.66 94% 1	\$238 18	\$360 48	
Breed Average EBVs		+77.	+2.3	+3.2	-4.6	+3.9	+52	+94	+121	+103	+17	+2.2	-4.8	+69	+6.6	+0.1	-0.2	+0.4	+2.5	+0.23	+21	+0.84	+0.96	+1.02	+206	+353	

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			Dir	Dtrs	GL	BW	200	400	600	MCW	Milk	SS	DC	CW	EMA	Rib	P8	RBY	IMF	NFI-F	Doc	Claw	Angle	Leg	\$A	\$A-L
SMPM651 VTMG67 SMPH66	PATHFINDER MASTERPIECE HBR	+79 87% 47	+3.9	+5.1	-6.1	+5.1	+56	+104	+129	+136	+20	+3.6	-7.8	+54	+9.7	-1.7	-3.9	+1.6	+1.6	-0.24	+33	+0.98	+1.22	+1.18	\$234	\$424
SMPN56 HIOG18 SMPL179	PATHFINDER NUCLEUS N56^{SV} HBR	+53 91% 67	+4.4	+2.6	-3.4	+5.3	+60	+106	+138	+132	+15	+4.6	-7.2	+75	+12.9	+0.9	+1.1	+0.9	+1.7	+0.42	+9	+0.76	+0.78	+0.84	\$256	\$445
SMPP516 SMPM558 SMPJ282	PATHFINDER PHAT CAT P516^{SV} HBR	+214 84% 1	+5.4	+2.6	-7.5	+4.4	+52	+89	+119	+87	+26	+5.4	-9.3	+49	+12.4	-3.2	-2.9	+0.8	+5.9	+0.12	+39	+0.74	+1.08	+0.92	\$285	\$446
NZE41-97 NZE53195 NZE63988	PINEBANK WAIGROUP 41/97[#] HBR	+12 95% 92	+3.8	-3.7	-3.4	+3.6	+37	+64	+76	+50	+18	+0.9	-4.1	+17	+5.2	+1.2	+0.3	+0.9	+1.1	-0.07	+32	+0.32	+0.94	+1.00	\$160	\$248
WQCQ47 VLYM518 VLYM1690	QUANDEN SPRINGS HBR	+105 85% 29	+10.2	+7.7	-9.2	-0.7	+52	+99	+130	+112	+28	+5.1	-5.5	+49	+10.0	+0.3	+1.4	+0.4	+2.4	-0.24	+27	+1.02	+1.02	+1.08	\$227	\$403
NORF340 NZE04379 VLYZ1393	RENNYLEA BLACK GOLD F340^{PV} HBR	+143 90% 11	+5.9	+1.8	-2.9	+1.3	+35	+66	+80	+83	+3	+0.9	-2.7	+21	+2.1	-0.5	+0.1	-0.1	+4.4	-0.06	+15	+0.76	+0.82	+0.70	\$143	\$264
NORE11 NGMY145 VLYY5	RENNYLEA EDMUND E11^{PV} HBR	+108 97% 28	+9.1	+1.3	-6.8	+1.2	+34	+64	+84	+54	+16	+1.8	-8.5	+51	+4.3	+3.5	+1.3	-0.2	+4.1	+0.76	+23	+0.56	+1.02	+1.10	\$206	\$326
NORH708 NORC511 NORE176	RENNYLEA H708^{PV} APR	+257 95% 1	-6.7	+2.1	+1.2	+4.7	+48	+102	+130	+130	+12	+2.4	-3.6	+73	+12.0	-3.8	-6.7	+2.0	+7.1	+0.74	+21	+0.72	+0.68	+0.90	\$224	\$373
NORK163 NORH106 NORE176	RENNYLEA K163^{PV} APR	+89 93% 40	+5.3	-8.1	-3.8	+2.6	+39	+73	+93	+65	+10	+0.8	-5.7	+62	+19.1	-0.2	-1.1	+2.6	+2.6	+0.16	+19	+0.62	+0.72	+1.02	\$240	\$353
NORK522 NORE11 NORF810	RENNYLEA KODAK K522^{SV} HBR	+143 93% 11	+9.0	+9.3	-4.8	+1.4	+45	+83	+109	+111	+11	+4.6	-7.5	+47	+3.7	+3.4	+1.4	-0.4	+4.0	+0.23	+7	+0.62	+0.80	+0.96	\$205	\$382
NORL508 USA17366506 NORH414	RENNYLEA L508^{PV} HBR	+170 94% 4	+1.8	+9.0	-5.9	+2.6	+46	+86	+118	+93	+27	+1.3	-7.8	+55	+5.6	+0.9	-0.5	-0.2	+5.4	+0.68	+16	+0.66	+0.82	+0.88	\$240	\$392
NORL683 NORE11 NORJ631	RENNYLEA L683^{PV} APR	+57 89% 64	+2.6	+2.2	-4.4	+5.0	+55	+95	+118	+104	+5	+2.4	-6.5	+77	+4.8	+0.7	-1.3	+0.8	+2.3	+0.62	+23	+0.72	+0.88	+1.02	\$230	\$385
NORP987 NORM763 NORM1184	RENNYLEA P987^{PV} APR	+232 88% 1	+10.4	+9.2	-8.1	+1.4	+51	+98	+124	+130	+10	+0.4	-3.4	+71	+5.8	+3.7	+2.3	-1.2	+8.2	+0.94	+7	+0.88	+0.98	+1.04	\$226	\$409
Breed Average EBVs		+77.	+2.3	+3.2	-4.6	+3.9	+52	+94	+121	+103	+17	+2.2	-4.8	+69	+6.6	+0.1	-0.2	+0.4	+2.5	+0.23	+21	+0.84	+0.96	+1.02	+206	+353

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Ident	Name																										
Sire Dam	Reg.	MSA MBL RBV	Calv-Ease		Birth		Growth			Maternal			Fert		Carcase					Feed	Temp	Structural		Selection Index			
			Dir	Dtrs	GL	BW	200	400	600	MCW	Milk	SS	DC	CW	EMA	Rib	P8	RBY	IMF	NFI-F	Doc	Claw	Angle	Leg	\$A	\$A-L	
NORQ1081 NORH708 NORL841	RENNYLEA Q1081 ^{PV} APR	+233 87% 1	-1.5 77% 82	+5.3 67% 31	-3.8 93% 62	+3.8 93% 47	+51 92% 54	+92 91% 55	+120 92% 52	+108 87% 41	+12 80% 84	+3.6 89% 10	-6.2 59% 20	+49 88% 93	+9.0 87% 22	+0.5 88% 39	-0.7 80% 46	+0.4 89% 1	+6.8 80% 95	+0.86 89% 79	+14 87% 58	+0.88 88% 33	+0.90 83% 12	+0.88 83% 10	\$250 83% 14	\$406 83% 14	
NORQ213 NORK907 NORL110	RENNYLEA Q213 ^{PV} APR	+46 87% 73	+9.2 84% 4	+8.3 70% 7	-7.4 98% 12	+1.0 98% 6	+65 97% 6	+119 97% 4	+151 96% 6	+102 93% 51	+24 86% 10	+0.6 96% 94	-10.3 61% 1	+102 90% 1	+8.5 89% 27	+0.9 89% 30	+0.2 89% 42	+0.1 83% 65	+3.3 90% 29	+0.70 81% 90	+28 96% 23	+0.48 94% 3	+0.68 94% 4	+0.84 91% 7	\$334 91% 1	\$526 91% 1	
NORR992 NORN542 NORM1034	RENNYLEA R992 ^{PV} APR	+181 77% 3	+4.9 69% 32	+7.9 61% 9	+1.8 95% 99	+1.2 95% 7	+44 93% 84	+84 93% 78	+116 92% 62	+85 87% 78	+27 79% 3	+1.7 91% 67	-6.1 52% 22	+69 81% 52	+11.0 81% 10	+2.0 81% 13	+2.6 81% 11	-0.3 75% 83	+6.3 82% 1	+1.09 68% 99	+25 92% 34	+0.56 84% 6	+0.80 84% 14	+0.82 78% 5	\$252 78% 9	\$402 78% 16	
TRHP52 TRHL9 TRHH92	RICHMOND HILL PLAY P52 ^{SV} HBR	+142 90% 11	+4.6 72% 34	+2.9 59% 58	+0.1 93% 97	+4.1 94% 54	+53 93% 44	+93 92% 52	+117 92% 60	+126 86% 18	+11 78% 90	+4.3 80% 4	-6.5 53% 16	+75 90% 33	+11.4 89% 8	-5.0 88% 99	-2.9 89% 89	+1.6 78% 3	+3.1 91% 33	-0.34 84% 6	+33 88% 13	+1.06 86% 87	+1.04 86% 67	+0.98 81% 35	\$231 81% 25	\$406 81% 14	
NZE14572019 HKFM103 NZE14572117009	RISSINGTON SOVEREIGN Q485 HBR	+174 76% 4	+12.0 83% 1	+9.8 62% 2	-7.2 98% 14	+0.4 98% 3	+62 97% 12	+115 97% 6	+153 90% 5	+125 86% 18	+20 78% 25	+2.5 94% 37	-4.9 48% 46	+93 80% 5	+7.9 83% 33	-1.6 82% 84	-4.0 82% 95	-0.2 75% 79	+0.55 82% 1	-4 72% 82	+0.90 96% 99	+0.94 81% 62	+1.06 81% 43	\$268 76% 61	\$457 76% 2		
USA16396573 USA0035 USA15688516	S A V CAMARO 9272 ^{SV} HBR	+74 91% 51	+4.5 86% 35	+0.1 73% 81	-6.8 97% 18	+3.6 97% 42	+48 96% 70	+78 96% 89	+97 96% 91	+100 93% 55	+9 94% 96	+1.2 91% 83	-5.6 63% 31	+41 93% 98	+0.5 91% 97	-0.4 91% 60	-2.1 91% 81	+0.9 84% 19	+1.5 93% 72	+1.08 84% 99	+22 87% 47	+1.10 86% 91	+0.86 86% 25	+0.80 78% 4	\$174 83% 83	\$312 83% 81	
NZE21159019 USA18217198 NZE21159117053	SEVEN HILLS 312/19 ^{PV} HBR	+104 87% 30	+3.1 76% 49	+5.8 65% 26	-7.6 93% 11	+3.5 92% 40	+51 91% 52	+94 89% 48	+123 91% 45	+95 86% 63	+21 79% 23	-1.0 82% 99	-2.0 52% 95	+76 87% 30	+9.7 87% 17	-3.5 86% 98	-4.1 87% 96	+1.0 78% 15	+3.8 89% 19	+1.20 81% 99	+7 87% 94	+1.02 86% 82	+0.94 86% 43	+1.06 81% 61	\$215 43% 43	\$347 59% 59	
APBK11 VTMB1 APBF2	SHACORRAHDALU KINETIC K11 HBR	+111 84% 26	+10.1 78% 2	+10.6 71% 1	-9.2 93% 4	+0.4 92% 3	+50 91% 60	+89 90% 64	+105 91% 82	+94 88% 64	+9 84% 95	+4.7 86% 2	-6.9 64% 11	+64 86% 64	+10.1 84% 14	+3.6 84% 3	+2.3 85% 13	+0.5 77% 40	+2.5 86% 46	+0.87 78% 96	+1 86% 99	+0.96 83% 73	+1.18 82% 90	+1.08 79% 67	\$242 16% 16	\$412 11% 11	
APB21S24 USA18636106 APBJ23	SHACORRAHDALU PHOENIX HBR	+37 76% 79	+8.9 75% 5	+6.2 65% 22	-8.0 93% 8	-0.6 91% 30	+56 90% 26	+102 89% 21	+135 87% 76	+86 84% 94	+24 79% 9	+2.9 84% 24	-8.7 52% 2	+91 79% 6	+4.8 77% 70	+2.5 77% 8	+4.4 78% 3	-0.2 71% 79	+1.8 79% 64	+0.91 69% 97	+14 86% 79	+0.94 75% 69	+1.12 75% 82	+1.08 70% 67	\$278 2% 2	\$446 3% 3	
APBR5 TFAK132 HBUP80	SHACORRAHDALU ROYALE R5 HBR	+29 87% 84	+8.2 76% 8	+8.7 66% 5	-6.7 93% 19	+2.2 93% 16	+48 92% 70	+91 91% 58	+113 91% 69	+66 86% 94	+23 79% 11	+2.3 87% 44	-6.4 54% 17	+67 88% 56	+6.0 86% 56	+4.1 86% 2	+5.2 87% 2	-0.2 77% 79	+1.5 89% 72	+1.02 80% 98	+11 88% 87	+0.86 89% 54	+1.06 88% 71	+0.76 83% 2	\$243 15% 15	\$387 26% 26	
SYAN340 SYAL178 SGMK250	STONEY POINT NOLTE N340 ^{SV} HBR	+92 86% 38	-1.3 79% 81	-8.4 68% 99	-6.2 96% 25	+6.0 96% 89	+72 96% 2	+128 96% 1	+164 96% 2	+161 93% 2	+16 88% 59	+3.5 93% 12	-2.7 59% 90	+105 89% 1	+6.2 87% 53	-3.1 87% 97	-5.3 87% 99	+0.7 79% 29	+3.0 89% 35	-0.13 77% 16	+6 88% 96	+0.98 89% 76	+0.90 90% 33	+1.20 84% 92	\$211 47% 47	\$387 26% 26	
SYAP147 USA17936442 SWAH233	STONEY POINT PERRY P147 ^{PV} HBR	+128 88% 17	+4.7 75% 34	+1.4 62% 72	-4.7 93% 47	+4.7 93% 68	+56 92% 30	+103 91% 23	+134 91% 24	+111 87% 37	+21 80% 21	+1.7 86% 67	-7.1 56% 9	+96 88% 3	+10.1 87% 14	-1.1 87% 75	-0.3 88% 51	+0.4 78% 46	+3.8 90% 19	-0.18 80% 13	+7 88% 95	+0.84 84% 49	+0.76 84% 10	+0.64 76% 1	\$263 5% 5	\$432 5% 5	
NZE19507018 NORL508 NZE19507113J320	STORTH OAKS FULLY LOADED HBR	+116 88% 22	+8.8 76% 6	+7.0 66% 15	-11.5 97% 1	+1.2 97% 7	+46 96% 76	+90 96% 62	+136 95% 21	+136 89% 10	+21 82% 21	+3.2 93% 17	-8.3 60% 3	+66 90% 59	+3.1 89% 86	+0.8 88% 32	+0.3 89% 40	-0.6 80% 92	+4.1 90% 15	+0.85 83% 95	+31 93% 16	+0.50 86% 3	+0.76 86% 10	+1.06 83% 61	\$203 57% 57	\$396 20% 20	
Breed Average EBVs		+77.	+2.3	+3.2	-4.6	+3.9	+52	+94	+121	+103	+17	+2.2	-4.8	+69	+6.6	+0.1	-0.2	+0.4	+2.5	+0.23	+21	+0.84	+0.96	+1.02	+206	+353	

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Sire Dam	Reg.	MSA MBL RBV	Calv-Ease		Birth		Growth			Maternal			Fert			Carcase				Feed	Temp	Structural		Selection Index			
			Dir	Dtrs	GL	BW	200	400	600	MCW	Milk	SS	DC	CW	EMA	Rib	P8	RBY	IMF	NFI-F	Doc	Claw	Angle	Leg	\$A	\$A-L	
NZE19507013 VTME343 NZE19507111G183	STORTH OAKS JACK J7 ^{SV} HBR	+56 92% 65	+5.9	+8.2	-4.8	+4.4	+61	+113	+152	+144	+17	+3.5	-1.8	+81	+8.2	-0.2	-3.0	-0.3	+2.5	-0.01	+20	+0.98	+0.96	+0.90	\$184	\$369	
VSNG34 VTMB1 VSNE22	STRATHEWEN BERKLEY G34 ^{PV} HBR	+77 90% 49	+7.9	+8.2	-6.4	+3.6	+57	+108	+142	+147	+19	+2.3	-7.1	+83	+6.0	+0.9	+0.0	+0.2	+2.1	-0.07	+30	+1.12	+1.24	+1.08	\$227	\$432	
USA17236055 USA15354674 USA16214508	SYDGEN BLACK PEARL 2006 ^{PV} HBR	+120 96% 21	+2.5	+7.6	-7.0	+3.2	+51	+85	+123	+87	+21	+1.5	-3.5	+74	+8.2	+0.3	-0.6	+0.4	+2.9	+0.27	+16	+1.04	+1.20	+1.14	\$211	\$342	
VTMA149 VTMX60 VTMU338	TE MANIA ADA A149 ^{PV} HBR	+12 95% 92	-7.0	-2.1	-3.1	+6.6	+53	+96	+128	+170	+9	+1.9	-1.1	+82	+2.8	-3.1	-1.7	+1.3	-0.4	-0.66	+26	+0.86	+0.74	+0.78	\$90	\$243	
VTMK52 USA16295688 VTMH423	TE MANIA KALIBROOK K52 ^{PV} HBR	+139 87% 12	+8.0	+5.7	-3.1	+1.3	+50	+102	+128	+102	+30	+1.7	-6.4	+71	+4.4	+0.7	+2.0	-0.7	+5.6	+1.47	+9	+1.20	+1.10	+1.14	\$248	\$417	
VTMK138 USA16295688 VTMH17	TE MANIA KIRBY K138 ^{PV} HBR	+259 96% 1	+0.2	+8.0	-1.2	+4.7	+53	+90	+119	+99	+19	+2.6	-9.1	+64	+6.1	+1.5	+3.1	-1.9	+8.7	+0.88	+15	+0.78	+0.74	+0.94	\$268	\$432	
VTMN424 VTMJ89 VTMJ214	TE MANIA NEBO N424 ^{PV} HBR	+161 96% 6	+9.5	-0.1	-6.6	+4.1	+54	+102	+134	+104	+29	+4.4	-5.0	+58	+7.1	-0.9	-4.2	+0.4	+4.0	-0.16	+47	+0.92	+0.86	+0.94	\$219	\$372	
VTMN1387 VTMK138 VTML452	TE MANIA NEON N1387 ^{SV} HBR	+314 93% 1	+0.6	+3.4	-6.3	+3.5	+48	+86	+107	+98	+19	+1.3	-7.9	+40	+3.2	-0.1	-1.1	-2.2	+10.	-0.30	+26	+0.74	+0.80	+0.98	\$229	\$380	
VTMP888 VTMK226 VTMH423	TE MANIA PESO P888 ^{PV} HBR	+54 92% 67	+7.9	+6.0	-5.2	+2.1	+57	+115	+145	+120	+25	+2.4	-7.4	+90	+5.8	-0.4	+1.0	+0.5	+1.8	-0.03	+23	+0.84	+1.12	+0.96	\$262	\$451	
VTMQ854 USA18229488 VTML1244	TE MANIA QUEBEC Q854 ^{SV} HBR	+71 92% 53	+9.0	+2.7	-2.3	+1.5	+54	+93	+121	+79	+26	+1.2	-3.5	+69	+3.2	+1.5	+0.2	-0.3	+3.4	+0.45	+29	+0.62	+0.76	+0.74	\$216	\$346	
VTMR970 VTMP149 VTMP287	TE MANIA RESOLUTION R970 ^{PV} HBR	+99 72% 33	+2.6	+5.4	-4.6	+3.5	+58	+108	+137	+103	+23	+2.1	-6.7	+82	+10.1	-0.3	-0.4	+0.8	+3.0	+0.03	+27	+0.74	+0.88	+1.18	\$275	\$440	
DXTR725 USA18962396 DXTM647	TEXAS ICEMAN R725 ^{PV} HBR	+60 78% 62	-0.9	+3.3	-3.8	+3.7	+53	+98	+126	+102	+13	+2.2	-3.2	+76	+12.8	+3.2	+4.9	+0.3	+1.6	+0.20	+39	+1.28	+0.96	+0.60	\$218	\$361	
DBLL292 USA16295688 VSNF04	TOPBOS LEADING EDGE L292 ^{PV} HBR	+50 91% 70	+2.3	+8.3	-5.8	+6.6	+73	+125	+164	+150	+23	+1.4	-4.3	+84	+4.6	-2.2	-5.0	+0.1	+1.5	+0.04	+21	+0.92	+0.76	+0.80	\$226	\$415	
Breed Average EBVs		+77.	+2.3	+3.2	-4.6	+3.9	+52	+94	+121	+103	+17	+2.2	-4.8	+69	+6.6	+0.1	-0.2	+0.4	+2.5	+0.23	+21	+0.84	+0.96	+1.02	+206	+353	

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Ident	Name																										
Sire Dam	Reg.	MSA MBL RBV	Calv-Ease		Birth		Growth			Maternal			Fert			Carcase				Feed		Temp		Structural		Selection Index	
			Dir	Dtrs	GL	BW	200	400	600	MCW	Milk	SS	DC	CW	EMA	Rib	P8	RBY	IMF	NFI-F	Doc	Claw	Angle	Leg	\$A	\$A-L	
NZE17691009	TURIHAU CRUMP E5^{SV}	+22	-0.9	-1.4	-5.7	+3.2	+28	+59	+83	+92	+13	+1.1	-9.9	+17	-0.3	+5.2	+3.8	-0.2	+1.4	+0.47	+30	+0.58	+1.20	+1.20	\$138	\$271	
NZE17691003Y167	HBR	93%	93%	87%	97%	98%	98%	98%	97%	97%	97%	89%	95%	95%	95%	94%	95%	88%	91%	84%	84%	79%					
NZE17691195Q263		87	79	89	32	33	99	99	98	68	78	85	1	99	98	1	4	79	74	75	19	8	92	92	97	94	
USA18066037	V A R LEGEND 5019^{SV}	+74	-3.7	+5.5	-6.1	+5.1	+68	+122	+148	+157	+8	+2.8	-3.8	+88	+9.4	-3.9	-5.9	+1.4	+1.9	-0.24	+18	+1.06	+0.64	+0.88	\$215	\$398	
USA17262835	HBR	87%	81%	69%	96%	96%	94%	94%	94%	90%	88%	90%	62%	90%	88%	87%	87%	80%	90%	80%	89%	97%	96%	81%			
USA16924432		51	90	29	26	76	3	2	7	2	97	27	73	8	19	99	99	6	62	10	65	87	2	12	42	19	
NZE18954020	WAITANGI R257^{PV}	+184	+1.1	+1.3	-6.5	+3.6	+53	+93	+125	+104	+26	+3.3	-8.1	+70	+9.1	-0.1	-0.5	-0.1	+5.6	+1.47	+20	+0.84	+0.70	+0.94	\$254	\$413	
NZE21159016327	HBR	75%	69%	59%	95%	96%	94%	93%	91%	86%	78%	87%	49%	80%	79%	79%	80%	73%	80%	65%	89%	76%	78%	68%			
NZE18954118P105		3	66	73	21	42	45	51	41	48	5	15	3	49	22	53	55	75	3	99	54	49	5	24	8	11	
LEJ21S102	WALLAWONG SAFE & SOUND	+139	+7.2	+2.9	-6.3	+4.5	+49	+86	+111	+94	+18	+2.2	-2.8	+63	+6.7	-1.3	-1.3	+0.5	+4.2	+0.40	+14	+0.58	+0.74	+1.12	\$201	\$338	
NJWN498	HBR	72%	73%	61%	92%	90%	89%	88%	86%	83%	77%	80%	46%	76%	74%	75%	75%	68%	77%	63%	84%	68%	68%	65%			
ASHL24		12	14	58	24	63	64	72	72	64	44	48	89	67	47	79	69	40	14	69	77	8	8	77	59	66	
QKBP29	WARRAWEE PATROL P29^{PV}	+50	+7.4	+11.0	-12.1	+2.9	+55	+104	+139	+129	+18	+2.3	-9.7	+100	+9.1	+3.6	+2.0	+0.2	+2.0	+0.72	+30	+0.82	+1.20	+1.00	\$266	\$472	
SMPG357	HBR	85%	79%	71%	96%	94%	93%	92%	90%	88%	82%	87%	65%	86%	85%	85%	86%	79%	87%	78%	88%	77%	78%	73%			
QKBM01		70	12	1	1	27	36	21	16	14	39	44	1	2	22	3	16	59	59	91	20	45	92	41	4	1	
NWPG188	WATTLETOP FRANKLIN G188^{SV}	+3	+4.5	+6.8	-4.4	+2.3	+64	+109	+141	+116	+24	+3.7	-3.7	+84	+1.4	-1.4	-2.6	-0.1	+0.4	-1.20	+33	+1.08	+0.98	+0.96	\$191	\$354	
USA15462648	HBR	93%	96%	88%	99%	99%	98%	98%	98%	98%	98%	98%	77%	96%	95%	95%	95%	93%	94%	88%	97%	96%	96%	94%			
NWPE295		95	35	17	52	17	8	13	14	30	8	9	75	13	95	80	86	75	92	1	12	89	53	29	70	53	
NWPE111	WATTLETOP SITZ 458N E111^{SV}	+119	+4.6	+6.7	-3.8	+2.8	+51	+91	+125	+99	+25	+2.0	-1.4	+83	+5.6	-4.2	-3.4	+0.9	+2.8	-0.53	+25	+0.96	+0.90	+1.10	\$186	\$322	
USA14474596	HBR	91%	90%	80%	97%	98%	97%	97%	95%	96%	95%	74%	93%	92%	92%	93%	89%	93%	85%	95%	87%	87%	83%				
NWPC36		21	34	18	62	25	56	58	41	56	6	56	98	15	61	99	92	19	39	2	35	73	33	73	74	76	
CWDJ17	WEATHERLY JAMES J17^{SV}	+119	-2.9	-4.4	-3.3	+6.0	+50	+84	+110	+119	+3	+1.3	-3.8	+66	+8.7	+1.1	+2.4	+1.0	+3.4	-0.04	+5	+0.86	+1.24	+1.04	\$198	\$335	
BNAD145	HBR	90%	80%	72%	93%	93%	92%	92%	93%	90%	87%	86%	67%	90%	89%	89%	90%	85%	91%	84%	88%	87%	87%	81%			
CWDF14		21	87	96	70	89	61	79	74	26	99	80	73	60	25	26	12	15	27	23	97	54	95	54	63	68	
CWDM5	WEATHERLY MOXY M5^{SV}	+55	+3.0	+6.9	-4.4	+4.0	+55	+100	+133	+112	+28	+2.6	-6.3	+91	+7.3	+2.8	-0.1	+0.3	+2.7	+0.27	+21	+0.98	+1.04	+0.94	\$234	\$400	
SMPG357	HBR	80%	80%	70%	93%	96%	94%	94%	95%	93%	90%	89%	61%	86%	84%	85%	85%	80%	84%	72%	92%	91%	91%	82%			
CWDJ15		66	50	16	52	52	33	32	25	35	3	33	18	6	40	6	48	53	42	55	51	76	67	24	22	17	
Breed Average EBVs		+77.	+2.3	+3.2	-4.6	+3.9	+52	+94	+121	+103	+17	+2.2	-4.8	+69	+6.6	+0.1	-0.2	+0.4	+2.5	+0.23	+21	+0.84	+0.96	+1.02	+206	+353	

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