



TransTasman Angus Cattle Evaluation

MSA Marbling

RESEARCH BREEDING VALUES

DECEMBER 2023

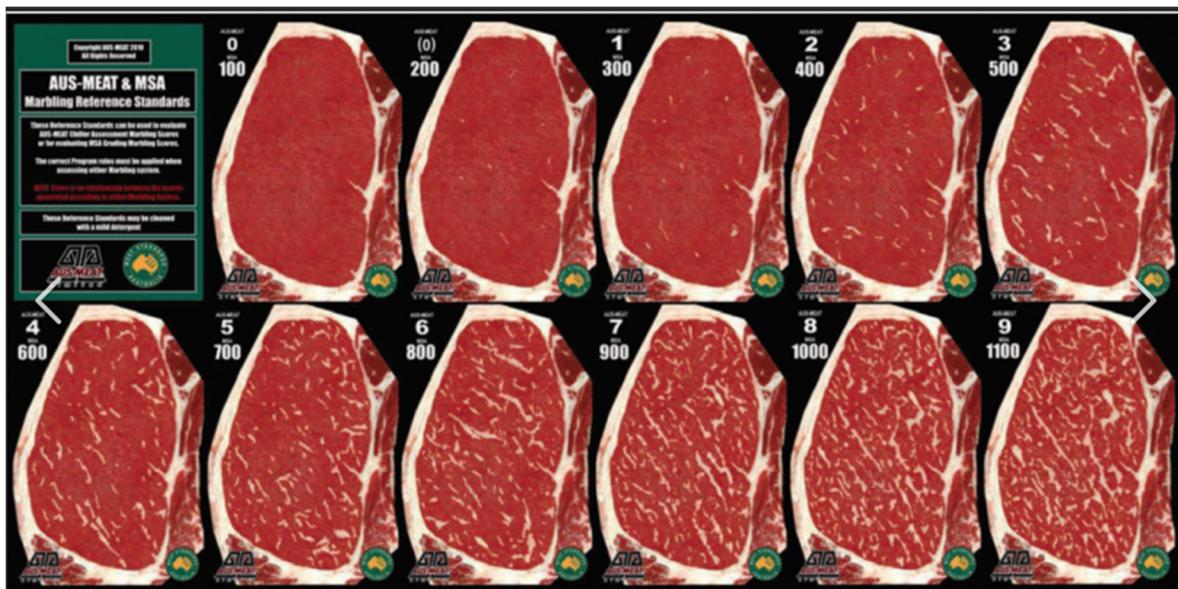
BACKGROUND

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 carcase.

MMS RBVs are calculated from MSA marbling scores (taken by a trained/accredited carcase grader), pedigree, genomics and correlated traits (e.g. Carcase 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 carcase.

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	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		
NXOL172	AJC L172 SV	+56	+6.1	+8.3	-6.8	+3.3	+61	+102	+142	+134	+12	+2.4	-5.0	+73	+6.7	-0.3	+0.4	+0.2	+1.1	-1.01	+21	+1.42	+1.28	+1.26	\$221	\$409		
NXOF43	APR	90%	75%	60%	94%	96%	94%	94%	94%	87%	87%	83%	54%	91%	88%	83%	89%	81%	91%	83%	85%	85%	85%	81%				
NXOJ432		59	17	5	19	33	10	17	9	9	86	37	40	29	43	55	36	67	76	1	44	99	96	97	26	8		
NXOL99	AJC L99 PV	+83	+5.3	+1.5	-5.8	+4.7	+62	+109	+143	+113	+23	+3.2	-7.2	+97	+8.9	-1.9	+0.8	+0.4	+2.4	-0.35	+13	+1.24	+1.12	+0.96	\$273	\$450		
USA16073564	APR	92%	84%	74%	96%	97%	96%	96%	96%	92%	92%	91%	60%	93%	91%	90%	91%	80%	92%	86%	89%	91%	91%	87%				
NXOJ12		37	23	64	32	65	8	8	8	29	13	15	7	2	21	86	30	55	41	6	76	98	81	26	2	2		
ARRR11	ALKIRA RENEGADE R11 PV	+43	+7.6	+6.9	-4.9	+2.5	+48	+101	+132	+113	+23	+2.3	-6.9	+67	+9.9	+0.6	-0.6	+0.6	+1.7	-0.02	+2	+0.74	+0.70	+0.90	\$230	\$413		
CAN2043806	HBR	68%	64%	52%	82%	83%	83%	81%	81%	77%	72%	78%	39%	69%	68%	68%	69%	60%	73%	59%	75%	66%	66%	57%				
QMUN24		69	9	13	46	19	58	19	19	29	12	40	9	46	14	34	55	43	61	26	98	28	4	13	18	7		
DGJG10	ALLOURA GET CRACKING G10 SV	+184	+8.2	+7.6	-3.3	+2.5	+43	+74	+87	+80	+13	-0.4	-8.5	+48	+14.6	+1.8	+0.6	+1.0	+5.2	+0.44	+6	+0.52	+1.02	+0.94	\$277	\$434		
VTMB1	HBR	93%	93%	82%	99%	98%	98%	98%	98%	97%	97%	97%	75%	95%	94%	94%	94%	90%	93%	88%	97%	96%	96%	93%				
DGJZ15		2	6	9	72	19	80	89	95	79	80	99	2	92	2	14	33	21	3	76	94	4	61	21	1	3		
DGJL94	ALLOURA LOCK STOCK &	+73	+5.4	+4.3	-4.3	+2.8	+55	+93	+124	+123	+13	+1.1	-4.6	+65	+0.9	+1.7	-1.5	+0.2	+2.1	-0.38	+25	+0.92	+0.88	+0.94	\$191	\$357		
USA15832750	HBR	86%	77%	64%	93%	95%	93%	93%	94%	89%	84%	87%	52%	88%	84%	80%	85%	76%	87%	77%	92%	84%	82%	76%				
DGJH24		45	22	36	56	24	26	40	34	18	76	83	50	55	95	15	70	67	49	6	28	65	27	21	59	38		
DGQJ30	ALLOURA QUINELLA Q30 SV	+147	+2.3	+2.5	-0.1	+3.1	+53	+99	+119	+123	+16	+3.2	-8.1	+73	+13.8	+0.7	+0.8	+1.1	+4.1	+0.49	+14	+1.02	+1.12	+1.14	\$270	\$453		
WWEL3	HBR	75%	71%	64%	93%	92%	90%	86%	86%	83%	77%	81%	52%	78%	74%	74%	75%	68%	78%	69%	88%	70%	70%	69%				
DGJK117		7	49	54	97	29	33	25	45	17	54	15	3	30	2	32	30	17	10	80	74	82	81	81	2	1		
CGKR232	ALPINE RONALDO R232 PV	+91	+7.3	+5.9	-6.0	+1.4	+52	+95	+132	+112	+24	+3.4	-5.6	+76	+11.3	-3.3	-3.9	+0.9	+3.2	+0.46	+23	+0.70	+0.74	+1.02	\$230	\$402		
NORN542	HBR	71%	66%	58%	90%	88%	84%	83%	83%	80%	75%	80%	46%	73%	71%	71%	72%	64%	75%	64%	78%	71%	71%	69%				
CGKM152		32	10	20	29	7	38	34	19	30	7	11	27	23	8	97	94	25	23	77	36	21	7	46	18	10		
WJMF96	ARDCAIRNIE F96 SV	+37	+4.7	+0.1	-4.8	+3.2	+49	+88	+122	+91	+14	+1.8	-3.4	+67	+6.8	-1.6	-1.8	+1.2	+1.0	-0.12	+24	+0.50	+0.84	+0.92	\$194	\$328		
WJMB59	HBR	89%	89%	77%	98%	98%	97%	97%	97%	95%	95%	96%	64%	92%	91%	91%	91%	86%	92%	81%	89%	87%	87%	82%				
WJMD25		74	28	75	48	31	54	55	38	64	69	60	77	48	42	82	75	13	79	18	32	3	20	16	55	61		
WJMJ27	ARDCAIRNIE J27 SV	+14	+6.9	+8.9	-7.9	+3.0	+56	+96	+132	+130	+9	+0.4	-4.2	+95	+2.3	+2.4	+1.1	-0.1	+0.9	+0.20	+1	+0.90	+1.10	+1.16	\$191	\$372		
USA15354674	HBR	92%	82%	72%	96%	97%	96%	96%	96%	92%	91%	93%	65%	93%	91%	91%	92%	88%	93%	86%	86%	87%	87%	82%				
WJMG96		88	12	3	10	27	23	31	20	12	95	95	60	2	89	8	25	82	81	50	98	61	78	85	59	27		
WJMM117	ARDCAIRNIE M117 SV	+24	+4.8	-0.9	-6.3	+3.7	+56	+100	+131	+135	+4	+3.0	-3.6	+78	+10.8	-0.7	-2.1	+1.5	+0.3	-0.05	+12	+0.88	+1.00	+0.92	\$192	\$363		
WJMF96	HBR	83%	76%	64%	93%	96%	94%	94%	94%	88%	84%	90%	57%	86%	85%	84%	85%	77%	86%	76%	82%	81%	81%	76%				
WJMG78		83	27	82	25	42	21	21	22	9	99	19	73	19	10	64	79	6	91	23	81	57	56	16	57	33		
NAQA241	ARDROSSAN EQUATOR A241 PV	+25	-2.1	+2.6	-4.8	+4.1	+49	+91	+122	+107	+21	+3.2	-8.0	+87	+8.9	-1.9	-0.4	+1.4	+1.3	+0.62	+25	+0.46	+0.84	+0.98	\$223	\$376		
USA2928	HBR	98%	99%	98%	99%	99%	99%	99%	99%	99%	99%	99%	95%	98%	98%	98%	98%	98%	98%	99%	99%	99%	99%	99%				
NAQW38		82	80	53	48	51	52	46	38	37	23	15	3	6	21	86	51	8	72	88	29	2	20	32	24	24		
NAQN329	ARDROSSAN HOLBROOK N329	+72	-2.8	-1.3	-3.4	+2.9	+48	+89	+113	+83	+22	+2.8	-6.7	+71	+5.7	+2.4	+2.4	-0.9	+4.2	+1.05	+15	+0.80	+1.00	+0.98	\$210	\$338		
NAQH318	HBR	89%	75%	64%	96%	94%	95%	94%	93%	88%	83%	85%	54%	90%	88%	88%	89%	80%	90%	82%	88%	81%	87%	83%				
NAQK30		46	83	84	71	25	58	53	57	76	14	24	11	36	56	8	11	98	9	99	70	40	56	32	37	53		
NAQH255	ARDROSSAN HONOUR H255 PV	+47	-1.6	-1.5	-3.1	+4.6	+43	+75	+98	+96	+13	+2.2	-6.0	+61	+5.9	+0.9	-0.9	+0.6	+2.3	+1.03	+8	+0.44	+1.02	+1.24	\$168	\$294		
NORE11	HBR	95%	96%	88%	99%	99%	98%	98%	98%	98%	98%	98%	96%	96%	96%	96%	95%	96%	96%	92%	97%	97%	97%	95%				
NAQD17		67	77	85	75	63	79	88	85	56	81	44	20	66	53	28	60	43	44	99	91	2	61	95	80	82		
Breed Average EBVs		+68.	+1.6	+2.5	-4.7	+4.0	+50	+90	+116	+100	+17	+2.1	-4.6	+66	+6.3	+0.0	-0.3	+0.5	+2.2	+0.20	+20	+0.84	+0.97	+1.03	+196	+337		

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Ident	Name					Performance Traits																							
Sire	Dam	Reg.		MSA	MBL	Calv-Ease	Birth	Growth			Maternal			Fert		Carcase						Feed	Temp	Structural			Selection Index		
				RBV	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	
NAQQ67	ARDROSSAN NECTAR Q67 PV			+74	+3.5	+3.2	-10.5	+3.9	+57	+102	+132	+123	+14	+2.9	-6.1	+56	+7.0	+0.3	-0.2	+0.1	+2.8	-0.08	+43	+0.36	+0.84	+1.12	\$228	\$404	
NMMN334	HBR			73%	73%	60%	92%	94%	91%	89%	88%	84%	76%	81%	47%	78%	74%	75%	76%	68%	77%	65%	86%	64%	71%	68%			
NAQL96				44	39	47	2	46	18	17	19	17	73	21	19	79	40	41	47	73	31	21	2	1	20	77	19	10	
QQFH147	ASCOT HALLMARK H147 PV			+105	-3.6	+2.8	-5.4	+7.2	+59	+109	+151	+132	+16	+3.6	-5.5	+81	-2.0	+0.8	+0.0	-0.8	+2.9	+0.30	+17	+0.44	+0.82	+1.04	\$190	\$353	
VTME343	HBR			93%	95%	86%	98%	99%	98%	98%	98%	97%	97%	98%	78%	96%	95%	95%	95%	93%	95%	89%	97%	95%	95%	93%			
NMMF123				23	86	51	38	96	13	8	4	10	59	9	29	13	99	30	44	97	29	62	61	2	16	52	59	41	
HIOE7	AYRVALE BARTEL E7 PV			+124	+8.8	+9.8	-4.9	+1.8	+49	+86	+112	+73	+26	+2.5	-7.9	+67	+7.4	-0.5	+0.7	+1.3	+3.2	+0.32	+4	+1.02	+1.00	+1.12	\$284	\$440	
VTMB219	HBR			97%	99%	97%	99%	99%	99%	99%	99%	99%	99%	99%	99%	93%	98%	98%	98%	98%	98%	96%	99%	99%	99%	99%			
BVVB32				14	4	2	46	11	54	62	60	87	4	33	3	47	35	60	31	11	23	64	96	82	56	77	1	2	
HIOG11	AYRVALE GENETIC G11 PV			+52	-5.5	-12.8	-5.4	+5.2	+65	+117	+161	+139	+19	+1.6	-5.7	+84	+0.5	-3.8	-2.9	-0.1	+2.1	-0.23	+43	+1.10	+1.08	+1.10	\$194	\$344	
SEWD138	HBR			90%	87%	78%	98%	98%	97%	97%	97%	96%	95%	94%	61%	93%	90%	90%	91%	86%	92%	82%	89%	88%	88%	82%			
HIOE2				63	92	99	38	75	4	3	2	7	34	68	25	9	96	99	88	82	49	11	2	91	74	71	56	49	
NBBN47	BALD BLAIR NELSON N47 PV			+6	+3.0	-2.3	-5.2	+4.3	+54	+102	+150	+152	+15	+1.0	-4.7	+83	+3.9	-1.2	-0.6	+0.9	+0.8	-0.22	+29	+1.02	+1.14	+1.16	\$183	\$361	
HIOG18	HBR			87%	78%	66%	95%	95%	93%	93%	93%	89%	84%	90%	59%	88%	87%	87%	88%	79%	89%	81%	89%	85%	85%	81%			
NBBL83				92	43	88	41	56	28	18	4	3	62	85	48	11	76	75	55	25	83	12	16	82	84	85	67	34	
NBB21S86	BALD BLAIR STIRLING S86 PV			+105	+8.7	+10.0	-4.2	+1.7	+63	+109	+145	+111	+21	+4.1	-4.4	+93	+6.0	-2.0	-2.8	+0.1	+3.8	-0.18	+6	+0.80	+0.72	+1.00	\$253	\$433	
NMMP15	HBR			70%	70%	60%	91%	88%	85%	83%	83%	80%	75%	80%	42%	72%	70%	70%	71%	63%	74%	62%	78%	70%	70%	68%			
NBBQ25				23	5	1	58	10	6	8	7	32	19	4	55	3	52	87	87	73	13	14	94	40	6	39	5	3	
ECMK63	BANNABY REALITY K63 PV			+11	+3.6	+0.6	-3.2	+3.7	+44	+78	+101	+104	+13	+2.4	-0.6	+51	+5.3	-1.1	-1.4	+0.5	+1.3	-0.18	+28	+0.58	+1.04	+1.18	\$119	\$244	
NZE1464700839	HBR			90%	80%	69%	96%	96%	94%	94%	94%	89%	83%	84%	62%	91%	89%	88%	90%	84%	91%	84%	91%	85%	85%	81%			
ECMH45				90	38	72	73	42	75	83	80	43	79	37	98	87	60	73	69	49	72	14	20	7	66	89	98	95	
VONG272	BANQUET GARRETT G272 SV			+133	+1.9	+4.1	-1.7	+6.1	+54	+96	+140	+147	+20	+4.1	-2.0	+54	+1.1	-2.4	-3.8	+0.2	+2.9	-0.82	+24	+0.54	+1.04	+1.10	\$143	\$309	
VOND412	HBR			87%	79%	65%	94%	96%	94%	94%	95%	89%	87%	91%	58%	90%	88%	88%	89%	80%	87%	81%	86%	87%	87%	81%			
VONC368				10	53	38	89	88	32	31	10	4	28	4	93	83	94	92	94	67	29	1	30	5	66	71	92	74	
VONN462	BANQUET NUTTELLA N462 PV			-3	-2.7	+3.5	-5.2	+6.5	+55	+101	+130	+99	+24	+3.2	-4.6	+68	+3.3	-0.2	-1.6	+0.2	+1.2	-0.33	+54	+0.56	+0.88	+0.96	\$187	\$321	
VONJ507	HBR			74%	76%	59%	95%	97%	95%	95%	94%	86%	78%	91%	47%	81%	79%	80%	80%	74%	80%	64%	93%	56%	56%	53%			
VONK224				94	83	44	41	92	25	19	22	51	7	15	50	44	82	52	72	67	74	7	1	6	27	26	63	66	
NBNN239	BEN NEVIS NEWSFLASH N239 PV			+32	-2.4	+2.4	-4.9	+4.9	+58	+99	+133	+117	+20	+0.8	-3.9	+88	+4.6	-1.5	-0.7	+0.3	+1.8	+0.24	+11	+1.06	+1.06	+0.96	\$195	\$338	
USA16956101	HBR			78%	80%	70%	97%	97%	96%	96%	96%	92%	87%	92%	54%	84%	85%	84%	84%	79%	84%	83%	90%	92%	92%	88%			
NBNH215				78	81	55	46	69	17	23	18	23	28	89	67	6	69	80	56	62	58	55	84	87	70	26	55	53	
NBNP122	BEN NEVIS PRIME P122 PV			+149	+3.8	+6.2	-0.3	+2.6	+57	+89	+116	+81	+12	+3.2	-4.0	+62	+5.2	+0.8	+1.8	-0.5	+4.6	+0.48	+21	+0.66	+0.76	+0.98	\$239	\$378	
USA17960722	HBR			75%	76%	65%	92%	94%	90%	92%	92%	85%	77%	87%	54%	79%	78%	78%	78%	73%	79%	67%	77%	87%	86%	82%			
NBNM115				6	36	18	96	20	19	53	51	78	84	15	65	64	62	30	17	93	6	79	45	15	9	32	12	22	
NBNR138	BEN NEVIS RONAN R138 PV			+12	+3.9	+5.2	-8.2	+4.1	+73	+124	+153	+144	+11	+2.3	-3.2	+83	+9.3	-2.0	-2.5	+0.7	+0.8	-0.09	+17	+0.70	+0.88	+0.90	\$240	\$430	
USA17960722	HBR			72%	74%	64%	84%	87%	86%	85%	82%	77%	81%	50%	76%	72%	72%	73%	66%	76%	66%	78%	75%	78%	73%				
NBNP153				89	35	26	8	51	1	1	3	5	88	40	80	11	18	87	84	36	83	20	60	21	27	13	11	3	
NGXQ227	BONGONGO BE QUICK Q227 PV			+184	+2.6	+1.1	-4.5	+3.3	+53	+96	+116	+66	+24	+3.9	-5.2	+59	+12.3	+1.0	+3.2	+0.1	+5.6	+0.41	+17	+0.60	+0.96	+1.04	\$280	\$414	
VLYM518	HBR			75%	71%	63%	96%	95%	92%	89%	88%	84%	77%	81%	52%	78%	77%	78%	78%	72%	79%	67%	85%	70%	70%	70%			
NGXN221				2	47	68	53	33	35	31	51	92	7	5	36	71	5	26	6	73	2	73	62	9	46	52	1	7	
Breed Average EBVs		+68.	+1.6	+2.5	-4.7	+4.0	+50	+90	+116	+100	+17	+2.1	-4.6	+66	+6.3	+0.0	-0.3	+0.5	+2.2	+0.20	+20	+0.84	+0.97	+1.03	+196	+337			

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Ident	Name					Calv-Ease												Birth		Growth				Maternal			Fert		Carcase						Feed		Temp		Structural				Selection Index	
Sire	Dam	Reg.			MSA MBL	RBV	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														
NGXP212	BONGONGO P212	SV			+131		+5.9	+10.5	-7.1	+2.3	+46	+85	+99	+78	+23	+3.9	-7.7	+47	+2.0	+3.6	+4.0	-1.0	+4.2	+0.92	+13	+0.82	+0.88	+0.96	\$232	\$391														
NORL508		HBR			77%		70%	61%	96%	96%	94%	94%	93%	87%	80%	87%	56%	81%	83%	82%	82%	77%	83%	81%	86%	84%	84%	84%	80%															
NGXL13					11		19	1	16	16	69	65	83	81	12	5	4	93	91	3	4	99	9	97	76	44	27	26	16	15														
NGXP421	BONGONGO P421	SV			+116		+8.5	+5.4	-6.4	+2.0	+60	+100	+128	+94	+24	+2.6	-6.4	+75	+8.8	+2.9	+1.6	+0.0	+3.6	+0.71	+13	+1.08	+1.04	+1.12	\$275	\$442														
USA18229425		APR			74%		70%	60%	93%	92%	90%	90%	90%	85%	77%	83%	51%	78%	79%	79%	79%	73%	80%	81%	83%	79%	78%	73%	73%															
NGXM413					17		5	25	24	13	12	22	26	60	8	30	15	24	22	5	19	78	16	92	77	89	66	77	2	2														
NUIF32	BONNY BROOKE FALCO F32	SV			+21		-4.8	-10.6	-0.3	+6.5	+49	+76	+100	+95	+17	-1.0	-2.4	+61	-2.3	+2.6	+2.4	-0.9	+1.5	-0.34	+20	+1.06	+0.96	+1.12	\$109	\$199														
NGMC196		HBR			82%		67%	53%	91%	89%	90%	89%	90%	84%	76%	76%	51%	84%	82%	82%	83%	73%	82%	73%	81%	79%	79%	74%	74%															
NUID96					85		90	99	96	92	52	85	82	58	45	99	90	66	99	7	11	98	66	7	46	87	46	77	99	99														
HCAG013	BOONAROO GRAVITY G013	PV			+127		+4.2	+2.9	-5.8	+3.7	+51	+87	+114	+104	+23	+3.8	-6.2	+57	+4.2	-2.9	-3.3	+1.3	+3.2	-0.71	+23	+0.48	+0.92	+1.08	\$220	\$373														
VTMA217		HBR			90%		90%	82%	98%	98%	97%	97%	97%	94%	95%	97%	71%	93%	92%	92%	92%	87%	91%	85%	94%	93%	94%	94%	91%															
VTMZ618					13		32	50	32	42	44	59	57	43	12	6	17	76	73	95	91	11	23	1	36	2	36	65	27	25														
HCAN20	BOONAROO KASBAH N20	SV			+47		+5.6	+2.9	-5.6	+5.4	+47	+88	+115	+108	+18	+3.1	-5.0	+56	+6.3	-0.2	-1.4	+1.0	+1.5	+0.67	+15	+0.92	+0.96	+1.02	\$189	\$345														
VTMK338		HBR			89%		73%	59%	93%	95%	94%	94%	90%	86%	79%	84%	51%	89%	88%	88%	89%	79%	90%	83%	93%	89%	88%	82%																
HCAL54					66		21	50	35	78	63	55	54	36	44	17	40	78	48	52	69	21	66	91	71	65	46	60	48															
NGMN418	BOOROOMOOKA JACKPOT N418				+80		+2.0	+7.3	-9.0	+5.4	+62	+108	+135	+128	+8	+3.4	-6.9	+80	+9.9	-0.6	+0.4	+1.0	+2.4	+0.31	+29	+1.32	+1.06	+0.98	\$269	\$457														
WWEL3		HBR			85%		70%	64%	95%	96%	95%	95%	95%	92%	84%	93%	59%	88%	86%	86%	86%	79%	88%	79%	95%	92%	92%	85%																
NGML471					40		52	10	5	78	8	8	15	13	97	11	9	14	14	62	36	21	41	63	18	99	70	32	2	1														
NGMN213	BOOROOMOOKA NORMANDY				+111		+11.1	+10.5	-7.8	+1.3	+40	+72	+102	+76	+25	+3.2	-9.5	+53	+4.0	-2.3	-2.6	+0.7	+3.3	+0.95	+31	+0.80	+0.68	+1.04	\$229	\$386														
NGML201		HBR			86%		76%	63%	94%	96%	95%	95%	95%	92%	83%	92%	53%	88%	87%	87%	87%	78%	89%	78%	95%	92%	92%	84%																
NGML45					20		1	1	10	7	87	92	79	84	7	15	1	83	76	91	85	36	21	98	12	40	3	52	19	18														
NGMP96	BOOROOMOOKA PARAGON P96				+68		-3.9	+3.0	-7.8	+3.8	+62	+119	+162	+123	+28	+3.5	-8.8	+113	+11.5	-2.2	-0.7	+1.2	+2.9	+0.97	+34	+0.84	+1.00	+1.14	\$297	\$474														
WWEL3		HBR			79%		81%	71%	98%	98%	97%	97%	97%	90%	81%	96%	57%	84%	84%	84%	84%	79%	84%	85%	97%	95%	95%	95%	92%															
NGMM566					49		87	49	10	44	8	2	1	17	2	10	1	1	7	90	56	13	29	98	8	49	56	81	1	1														
NGMP22	BOOROOMOOKA PRESIDENT				+72		-1.5	+2.7	-6.5	+4.9	+58	+107	+142	+123	+22	+2.6	-6.9	+80	+6.7	+0.6	+0.5	+0.3	+2.8	+0.49	+19	+0.40	+0.64	+0.76	\$242	\$410														
NGMK9		HBR			76%		75%	63%	96%	96%	94%	95%	95%	87%	78%	87%	51%	81%	81%	81%	81%	75%	81%	83%	93%	85%	86%	80%																
NGMK640					46		77	52	22	69	17	10	9	18	14	30	9	15	43	34	35	62	31	80	51	1	2	10	8															
NGMQ5	BOOROOMOOKA QUALITY Q5	SV			+171		+3.5	+7.3	-6.9	+3.7	+55	+104	+144	+139	+20	+2.4	-4.9	+82	-2.4	+0.8	+2.0	-1.7	+5.6	+0.51	+36	+0.74	+0.92	+1.04	\$203	\$389														
NORL519		HBR			73%		75%	65%	92%	90%	89%	85%	85%	83%	77%	81%	53%	77%	73%	73%	74%	66%	77%	67%	85%	75%	75%	72%																
NGMK720					3		39	10	18	42	26	15	7	7	26	37	43	12	99	30	15	99	2	81	6	28	36	52	45	16														
NGMR49	BOOROOMOOKA RAUDONIKIS				+31		+3.7	+6.2	-5.6	+3.9	+63	+105	+129	+98	+19	+3.7	-2.2	+72	+11.5	-0.2	-1.7	+1.3	+0.8	+0.16	+34	+0.90	+0.86	+0.90	\$233	\$382														
USA17960722		HBR			71%		70%	62%	88%	89%	87%	86%	85%	82%	76%	80%	48%	75%	71%	72%	72%	65%	75%	65%	82%	76%	76%	72%																
NGMP361					79		37	18	35	46	7	13	25	53	31	7	92	34	7	52	73	11	83	46	8	61	23	13	15	20														
BOWK2	BOWMAN AUSTRALIA K2	PV			+49		+7.1	+3.4	-6.9	+3.3	+48	+96	+119	+93	+22	+4.9	-8.2	+68	+7.2	+0.2	-1.4	+0.9	+1.1	-0.63	+13	+0.84	+1.02	+0.90	\$229	\$397														
VTME343		HBR			88%		79%	75%	94%	91%	90%	90%	90%	87%	84%	83%	68%	88%	87%	88%	88%	82%	90%	82%	86%	84%	84%	81%																
NAQZ31					65		11	45	18	33	60	33	44	62	15	1	2	46	37	43	69	25	76	2	78	49	61	13	18	12														
SRKK306	BOWMONT KING K306	PV			+170		-1.9	-9.6	-5.3	+4.5	+49	+79	+104	+85	+2	-0.3	-5.2	+67	+15.6	-0.4	-1.9	+1.7	+4.9	+0.40	+24	+0.50	+0.90	+0.74	\$244	\$357														
NJWG279		HBR			92%		87%	78%	97%	98%	97%	97%	97%	94%	93%	96%	68%	93%	92%	92%	93%	90%	93%	86%	96%	91%	91%	88%																
TFAD58					3		79	99	40	60	52	81	76	73	99	99	36	48	1	57	76	4	4	72	32	3	32	1	9	38														
Breed Average EBVs		+68.		+1.6	+2.5	-4.7	+4.0	+50	+90	+116	+100	+17	+2.1	-4.6	+66	+6.3	+0.0	-0.3	+0.5	+2.2	+0.20	+20	+0.84	+0.97	+1.03	+196	+337																	

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Ident	Name					Performance Traits																						
Sire	Dam	Reg.		MSA	MBL	Calv-Ease	Birth	Growth			Maternal		Fert	Carcase						Feed	Temp	Structural		Selection Index				
				RBV	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
BONQ007	BRIDGEWATER QUANTUM Q007			+69	-2.7	-2.6	-5.6	+5.6	+64	+100	+134	+106	+21	+0.5	-5.3	+86	+7.4	-0.9	-2.5	+0.2	+3.0	+0.16	+23	+1.02	+0.88	+1.08	\$229	\$364
QMUM13	HBR			76%	69%	62%	93%	92%	90%	90%	91%	86%	78%	83%	53%	80%	80%	80%	74%	81%	84%	86%	79%	80%	77%			
HIOL28				48	83	90	35	81	4	21	17	39	19	94	34	7	35	69	84	67	27	46	34	82	27	65	19	32
AMQH64	BROOKLANA HI TOWER H64 PV			+19	-5.7	-3.0	-0.5	+5.1	+53	+102	+143	+128	+16	+2.0	-2.6	+85	+4.8	+2.2	+1.6	+0.4	+1.2	+0.53	+28	+0.62	+0.94	+1.04	\$163	\$301
VTME343	HBR			88%	79%	70%	94%	92%	91%	91%	91%	86%	81%	83%	63%	88%	88%	87%	88%	81%	90%	83%	85%	84%	84%	79%		
AMQF27				86	92	91	96	73	35	18	8	13	60	52	88	9	66	10	19	55	74	83	20	11	41	52	83	78
GTNM6	CHILTERN PARK MOE M6 PV			+14	+5.5	+3.9	-1.7	+3.0	+51	+99	+134	+87	+25	+1.6	-6.2	+78	+5.5	+0.1	+1.7	+0.0	+1.9	+0.30	+38	+0.72	+1.00	+1.02	\$242	\$395
VTMF734	HBR			90%	91%	74%	99%	99%	99%	99%	98%	95%	94%	98%	65%	93%	92%	91%	92%	86%	92%	84%	99%	98%	98%	96%		
VSNF15				88	22	40	89	27	44	23	17	71	5	68	17	20	58	46	18	78	55	62	4	24	56	46	10	13
GTNP9	CHILTERN PARK PICASSO P9 PV			+113	+7.9	+8.1	-3.4	+1.2	+56	+105	+136	+94	+24	+3.6	-7.6	+95	+7.0	-0.6	+1.1	-0.4	+4.2	+0.63	+29	+0.74	+0.66	+0.88	\$279	\$458
HKFJ5	HBR			85%	77%	67%	98%	97%	94%	95%	94%	88%	81%	91%	60%	87%	85%	85%	86%	79%	88%	76%	86%	88%	89%	81%		
GTNK26				19	7	6	71	6	21	12	15	59	8	9	5	2	40	62	25	91	9	89	17	28	3	9	1	1
GTNQ322	CHILTERN PARK QUADRANT			+107	+6.4	+4.7	-3.0	+3.0	+61	+114	+143	+101	+18	+4.3	-5.1	+90	+12.4	-0.8	-1.6	+0.4	+4.1	+0.88	+4	+1.18	+1.06	+1.00	\$280	\$454
USA18636106	HBR			71%	76%	61%	97%	96%	91%	91%	89%	84%	77%	81%	46%	78%	71%	72%	73%	65%	75%	65%	86%	69%	69%	65%		
GTNL198				22	15	31	76	27	9	4	8	48	37	3	38	4	5	67	72	55	10	97	96	96	70	39	1	1
QMUM13	CLUNES CROSSING DUSTY M13			+58	-0.3	+3.9	-7.4	+5.4	+65	+101	+119	+62	+15	+0.9	-6.7	+72	+13.2	-2.4	-3.5	+1.2	+2.0	+0.08	+10	+0.92	+0.86	+1.00	\$293	\$419
USA16295688	HBR			92%	85%	80%	99%	99%	98%	98%	98%	97%	96%	98%	73%	95%	94%	94%	94%	90%	94%	87%	98%	97%	97%	95%		
QMUG1				57	70	40	13	78	4	20	44	94	67	87	11	32	3	92	92	13	52	36	87	65	23	39	1	5
NBHL348	CLUNIE RANGE LEGEND L348 PV			+68	-6.4	+4.9	-8.1	+5.8	+58	+102	+125	+154	+1	+3.0	-6.8	+62	+0.5	+3.7	+0.8	-0.7	+2.4	+0.05	+27	+0.48	+0.80	+1.26	\$166	\$343
NZE14647008839	HBR			92%	94%	86%	99%	99%	98%	98%	98%	97%	97%	98%	76%	95%	93%	94%	94%	92%	94%	86%	97%	97%	97%	96%		
AHWJ81				49	93	29	8	84	17	17	31	3	99	19	10	62	96	3	30	96	41	33	22	2	14	97	81	49
NBHP392	CLUNIE RANGE PLANTATION			+78	+6.9	+4.4	-5.5	+4.2	+67	+118	+136	+102	+21	+5.4	-3.6	+68	+0.4	-0.8	-1.2	+2.7	+0.09	+19	+0.74	+1.00	+0.92	\$219	\$387	
USA17960722	HBR			77%	84%	69%	99%	98%	98%	97%	97%	88%	79%	97%	55%	82%	84%	83%	83%	77%	83%	80%	96%	93%	93%	89%		
NBHM516				41	12	34	36	53	3	2	14	46	19	1	73	45	96	67	58	99	33	37	53	28	56	16	27	17
WDCH249	COONAMBLE HECTOR H249 SV			+6	+0.7	+0.3	-8.7	+4.4	+44	+78	+99	+92	+6	+1.2	-4.6	+45	+9.5	+3.6	+4.0	+0.7	+0.1	-0.51	+39	+0.42	+0.50	+0.82	\$178	\$309
USA14885809	HBR			93%	95%	86%	99%	99%	98%	98%	98%	97%	98%	98%	76%	96%	94%	95%	95%	93%	95%	88%	98%	96%	96%	93%		
WDCE9				91	63	74	6	58	77	82	84	63	99	80	50	94	17	3	4	36	93	3	4	1	1	4	71	74
WDCJ266	COONAMBLE JUNIOR J266 PV			+84	-7.0	-4.4	-0.3	+5.6	+57	+100	+138	+134	+15	+1.8	-4.9	+96	+9.9	-5.2	-5.1	+1.6	+2.8	-0.27	+20	+0.94	+0.78	+1.08	\$197	\$339
BNAD145	HBR			90%	90%	79%	98%	98%	97%	97%	97%	95%	96%	96%	72%	93%	92%	92%	92%	89%	92%	85%	94%	94%	94%	91%		
WHHA61				37	94	94	96	81	19	21	12	9	62	60	43	2	14	99	98	5	31	9	47	69	11	65	52	52
WDCK314	COONAMBLE KEVIN K314 PV			-1	-1.3	+3.5	-2.7	+4.6	+50	+100	+131	+110	+24	+4.3	-7.0	+83	+7.5	+0.4	+1.1	+0.1	+1.5	+0.60	+42	+0.48	+1.10	+1.22	\$207	\$366
NAQA241	HBR			89%	85%	74%	95%	97%	97%	95%	96%	92%	94%	93%	67%	91%	90%	90%	90%	86%	91%	82%	85%	85%	85%	82%		
WDCC94				94	76	44	80	63	48	21	21	33	8	3	8	11	34	39	25	73	66	87	2	2	78	94	41	30
USA19611994	DB ICONIC G95 PV			+127	+3.0	+7.5	-3.4	+3.0	+67	+127	+157	+145	+17	+2.9	-3.5	+94	+8.9	+1.2	+0.0	-0.5	+4.3	+0.25	+38	+1.18	+1.00	+0.94	\$251	\$449
USA18467508	HBR			79%	75%	62%	96%	95%	92%	90%	88%	86%	83%	85%	47%	84%	82%	78%	75%	73%	84%	64%	85%	94%	94%	67%		
USA18974126				13	43	9	71	27	3	1	2	5	52	21	75	3	21	23	44	93	8	56	4	96	56	21	6	2
NJS21S15	DEVANAH SATURN S15 PV			+64	+4.6	+2.2	-8.2	+4.0	+64	+108	+142	+94	+24	+4.3	-7.2	+86	+8.1	-1.1	-2.5	+0.2	+2.4	+0.34	+13	+1.00	+0.98	+0.82	\$269	\$431
USA18636106	HBR			70%	71%	59%	89%	89%	86%	84%	84%	81%	76%	80%	45%	74%	71%	72%	64%	75%	64%	76%	71%	71%	67%			
QHEJ100				52	29	57	8	49	5	9	9	60	8	3	7	7	28	73	84	67	41	66	78	79	51	4	2	
Breed Average EBVs		+68.	+1.6	+2.5	-4.7	+4.0	+50	+90	+116	+100	+17	+2.1	-4.6	+66	+6.3	+0.0	-0.3	+0.5	+2.2	+0.20	+20	+0.84	+0.97	+1.03	+196	+337		

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Ident	Name																												
Sire	Dam	Reg.		MSA	MBL	Calv-Ease	Birth	Growth		Maternal		Fert	Carcase						Feed	Temp	Structural		Selection Index						
				RBV	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	
WKGQ202	DIAMOND ONE ALL IN Q202 ^{sv}			-13	-8.7	-6.8	-5.5	+7.9	+71	+120	+166	+154	+23	+2.7	-3.9	+101	+11.2	-5.9	-6.3	+2.0	-0.5	-0.74	+21	+0.90	+0.60	+0.86	\$192	\$343	
WKGN129		HBR		67%	68%	54%	91%	87%	84%	82%	82%	79%	73%	77%	39%	70%	67%	68%	69%	60%	72%	58%	73%	59%	59%	53%			
WKGL21				97	97	98	36	98	1	2	1	3	12	27	67	1	8	99	99	2	98	1	45	61	1	7	58	50	
NGCN208	DULVERTON NEW APPROACH			+42	-1.6	+1.3	-6.2	+4.1	+51	+89	+115	+113	+13	+1.5	-5.0	+73	+11.4	-1.9	-1.4	+2.0	+1.0	+0.05	+24	+1.04	+1.14	+1.04	\$206	\$350	
WWEL3		HBR		88%	70%	65%	95%	94%	95%	95%	95%	89%	87%	92%	60%	90%	89%	88%	89%	81%	90%	81%	87%	85%	85%	82%			
NGCG037				70	77	66	26	51	42	54	55	29	79	71	40	30	8	86	69	2	79	33	31	85	84	52	42	43	
BHRH744	DUNOON HIGHPOINT H744 ^{sv}			+46	-11.3	-14.1	-4.2	+6.9	+56	+97	+128	+134	+17	+2.7	-4.9	+87	+5.3	-1.6	-1.2	+1.4	+1.0	-0.52	+21	+0.68	+0.82	+1.10	\$151	\$273	
BNAD145		HBR		91%	85%	76%	97%	97%	96%	96%	96%	94%	94%	95%	69%	92%	91%	91%	92%	87%	92%	85%	94%	89%	89%	86%			
BHRD202				67	99	99	58	95	23	29	25	9	52	27	43	7	60	82	65	8	79	3	45	18	16	71	89	89	
CYIR18	EBONY BEEF BILLIE RAY R18 ^{PV}			+67	+3.9	+8.2	-5.4	+4.6	+66	+106	+126	+66	+22	+2.6	-5.7	+81	+12.4	-1.5	-1.2	+0.9	+2.1	+0.13	-4	+1.06	+0.92	+1.14	\$301	\$443	
QMUM13		APR		74%	69%	63%	83%	83%	84%	82%	83%	80%	77%	80%	51%	74%	74%	73%	74%	66%	77%	68%	78%	76%	76%	73%			
CYIM611				50	35	6	38	63	4	11	30	91	17	30	25	14	5	80	65	25	49	42	99	87	36	81	1	2	
USA16198796	EF COMPLEMENT 8088 ^{PV}			+40	+4.8	+7.5	-5.1	+2.9	+52	+97	+130	+97	+22	+1.4	-7.7	+79	+8.1	+1.4	+1.4	+0.7	+1.8	+0.58	+20	+0.94	+1.28	+1.14	\$263	\$431	
USA14686137		HBR		96%	99%	94%	99%	99%	99%	99%	99%	99%	99%	99%	90%	98%	97%	98%	98%	97%	97%	94%	99%	99%	99%	98%			
USA15452880				71	27	9	43	25	39	28	23	54	17	74	4	17	28	19	21	36	58	86	50	69	96	81	3	3	
WWEQ15	ESSLEMONT GARTH Q15 ^{PV}			+112	-3.5	+2.2	-8.8	+5.7	+63	+111	+151	+139	+29	+2.4	-6.5	+72	+6.5	-3.7	-3.5	+0.5	+3.6	-0.46	+45	+0.92	+1.14	+1.06	\$234	\$404	
VTMG67		HBR		77%	75%	66%	93%	90%	89%	89%	90%	85%	78%	82%	57%	79%	80%	80%	80%	75%	81%	82%	86%	80%	80%	77%			
WWEN17				19	86	57	5	83	7	6	4	7	2	37	13	32	45	98	92	49	16	4	2	65	84	59	15	10	
WWEL3	ESSLEMONT LOTTO L3 ^{PV}			+121	-6.2	-1.0	-5.8	+4.5	+60	+110	+140	+132	+18	+3.5	-9.2	+91	+14.3	+0.0	+1.1	+1.4	+3.5	+0.38	+16	+1.12	+1.02	+1.14	\$284	\$459	
HIOG18		HBR		95%	87%	85%	99%	99%	99%	99%	99%	98%	98%	98%	80%	97%	96%	96%	96%	94%	96%	91%	98%	98%	98%	97%			
WWEJ8				15	93	82	32	60	12	7	10	10	42	10	1	4	2	48	25	8	18	70	67	92	61	81	1	1	
WWEQ24	ESSLEMONT QUOKKA Q24 ^{PV}			+108	+4.9	-0.3	-4.2	+1.8	+41	+81	+98	+48	+22	+4.2	-6.4	+61	+17.6	+1.8	+1.0	+2.1	+2.9	+1.23	+28	+0.76	+0.88	+0.92	\$275	\$396	
WWEN12		HBR		76%	74%	62%	95%	95%	92%	92%	92%	86%	77%	86%	51%	80%	81%	81%	81%	75%	81%	83%	87%	73%	73%	70%			
WWEN7				21	26	78	58	11	86	76	85	98	17	4	15	65	1	14	27	1	29	99	20	32	27	16	2	13	
WWE21S6	ESSLEMONT SEAN S6 ^{PV}			+117	+5.8	+7.9	-5.9	+2.9	+56	+98	+115	+88	+16	+4.4	-5.7	+81	+17.4	+2.8	+1.0	+1.4	+3.7	+1.16	+23	+1.04	+1.16	+1.02	\$294	\$458	
NGMN418		HBR		75%	68%	61%	92%	89%	87%	84%	85%	82%	77%	81%	49%	77%	75%	74%	76%	67%	78%	69%	82%	65%	65%	63%			
WWEN7				17	19	7	30	25	24	28	54	69	53	3	25	13	1	6	27	8	15	99	36	85	87	46	1	1	
NFSM99	FARRER MAXWELL M99 ^{PV}			+104	-6.0	+1.4	-0.5	+7.7	+66	+114	+152	+146	+13	+4.0	-6.4	+90	+13.5	-3.0	-4.9	+2.0	+2.5	-0.19	+44	+0.76	+0.72	+0.86	\$251	\$424	
BHRH240		HBR		85%	74%	62%	95%	94%	94%	93%	93%	91%	85%	88%	54%	87%	85%	85%	86%	77%	88%	76%	92%	85%	85%	81%			
NFSH124				24	93	65	96	98	3	4	3	4	81	5	15	5	3	96	98	2	38	13	2	32	6	7	6		
USA18217198	G A R ASHLAND ^{PV}			+94	+0.8	+1.1	-6.4	+3.3	+67	+115	+144	+117	+14	+1.4	-3.1	+81	+12.6	-3.1	-2.9	+1.1	+3.3	+0.09	+11	+1.28	+1.08	+0.84	\$263	\$422	
USA17354178		HBR		90%	94%	84%	99%	99%	99%	99%	99%	97%	97%	98%	64%	95%	93%	93%	93%	90%	93%	80%	99%	99%	99%	97%			
USA16934264				30	62	68	24	33	3	4	7	24	72	74	82	14	4	96	88	17	21	37	84	99	74	5	3	5	
USA16295688	G A R PROPHET ^{sv}			+114	+2.9	+5.1	-1.0	+3.7	+67	+107	+133	+84	+23	+0.7	-4.5	+72	+3.3	-0.6	-1.5	-0.7	+4.7	+0.68	+26	+1.04	+0.82	+0.90	\$264	\$406	
USA13009379		HBR		97%	98%	93%	99%	99%	99%	99%	99%	99%	99%	99%	99%	89%	98%	97%	97%	97%	97%	97%	94%	99%	99%	99%	98%		
USA15129456				18	44	27	93	42	3	10	18	75	12	91	52	34	82	62	70	96	5	91	25	85	16	13	3	9	
USA17328461	G A R SURE FIRE ^{sv}			+135	+6.2	+2.9	-3.4	+2.2	+50	+91	+112	+81	+19	+4.1	-7.5	+65	+8.2	-0.5	-0.8	+0.9	+3.5	-0.09	+26	+1.16	+0.92	+0.60	\$261	\$415	
USA16205036		HBR		94%	95%	85%	99%	99%	98%	98%	98%	97%	98%	98%	78%	96%	95%	96%	95%	94%	96%	89%	96%	99%	99%	92%			
USA16431932				10	17	50	71	15	50	46	61	78	32	4	5	53	27	60	58	25	18	20	26	95	36	1	4	6	
Breed Average EBVs		+68.	+1.6	+2.5	-4.7	+4.0	+50	+90	+116	+100	+17	+2.1	-4.6	+66	+6.3	+0.0	-0.3	+0.5	+2.2	+0.20	+20	+0.84	+0.97	+1.03	+196	+337			

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Ident	Name	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		
USA18690054	GB FIREBALL 672 PV	+159	+2.5	+6.8	-5.0	+2.6	+61	+98	+129	+120	+14	+2.7	-7.6	+78	+15.1	-2.5	-3.5	+0.9	+5.2	+0.49	+10	+1.02	+0.94	+0.86	\$284	\$464		
USA17965471	HBR	84%	91%	79%	99%	99%	98%	98%	98%	96%	93%	98%	52%	91%	90%	89%	88%	83%	90%	82%	98%	99%	99%	94%				
USA18054344		5	48	13	45	20	9	27	24	20	69	27	5	18	1	92	92	25	3	80	85	82	41	7	1	1		
QBGH221	GLENOC HINMAN H221 SV	+149	+5.3	-1.6	-3.5	+3.0	+53	+92	+123	+114	+20	+0.9	-4.1	+84	+7.2	-1.6	-4.8	+0.7	+5.2	-0.41	+10	+0.88	+0.78	+1.04	\$216	\$367		
BNAD145	HBR	90%	84%	74%	97%	97%	96%	96%	96%	91%	93%	95%	69%	92%	91%	91%	91%	87%	92%	84%	86%	88%	89%	85%				
QBGD80		6	23	85	69	27	35	43	36	27	26	87	62	10	37	82	98	36	3	5	86	57	11	52	30	30		
QBGK112	GLENOC KALLANGUR K112 PV	+53	-8.2	-3.0	-4.0	+6.6	+56	+98	+126	+104	+16	+1.6	-6.7	+92	+12.4	+1.0	+3.5	+0.5	+2.5	+0.39	+23	+0.72	+0.74	+0.70	\$236	\$367		
NAQA241	HBR	89%	79%	70%	93%	95%	94%	94%	94%	88%	87%	92%	64%	90%	89%	89%	89%	82%	91%	84%	84%	91%	91%	88%				
QBGG72		62	96	91	61	93	23	26	29	42	61	68	11	4	5	26	5	49	38	71	37	24	7	1	14	30		
EETN1	GVA NEWSWORTHY N1 PV	+61	+8.2	+4.7	-9.6	+1.7	+51	+89	+112	+90	+22	+2.4	-7.9	+70	+5.7	-0.2	-3.0	+0.4	+2.1	+0.31	+18	+1.06	+0.88	+0.90	\$226	\$385		
USA17031465	HBR	86%	73%	62%	92%	90%	89%	88%	88%	84%	77%	80%	55%	86%	86%	85%	86%	77%	88%	79%	85%	85%	85%	80%				
VSNL24		55	6	31	3	10	44	53	60	66	16	37	3	39	56	52	89	55	49	63	57	87	27	13	21	18		
DKKM41	HARDHAT H708 MAIMURU J51	+190	+0.3	+4.5	-2.2	+2.2	+44	+91	+119	+96	+13	+1.4	-4.3	+64	+2.6	+1.0	-2.0	-0.4	+6.4	+0.08	+21	+1.02	+0.98	+1.08	\$204	\$345		
NORH708	APR	89%	68%	61%	95%	93%	91%	91%	91%	86%	79%	82%	63%	89%	89%	88%	89%	80%	91%	83%	88%	88%	88%	85%				
DKKJ51		2	66	33	85	15	78	48	45	56	81	74	57	57	87	26	78	91	1	36	42	82	51	65	44	47		
DKKQ110	HARDHAT K522 KODAK M33	+115	+3.9	+9.9	-7.3	+2.3	+46	+85	+115	+110	+16	+2.9	-7.0	+54	+8.2	-0.8	-2.8	+1.0	+3.4	+0.38	+9	+0.62	+0.64	+0.76	\$221	\$390		
NORK522	HBR	73%	74%	61%	91%	91%	88%	84%	84%	81%	75%	79%	49%	76%	72%	73%	73%	66%	76%	66%	84%	76%	76%	73%				
DKKM33		18	35	2	14	16	67	66	53	33	59	21	8	82	27	67	87	21	19	70	88	11	2	2	26	16		
DKKN43	HARDHAT K522 NEBRASKA	+3	+9.1	+8.5	-10.4	+1.7	+59	+100	+137	+132	+13	+5.2	-5.6	+76	+2.8	+0.3	+0.3	-0.4	+0.2	+0.17	+12	+0.76	+0.86	+0.90	\$186	\$379		
NORK522	HBR	88%	75%	64%	94%	95%	93%	92%	90%	86%	81%	87%	56%	88%	87%	86%	87%	78%	89%	81%	91%	90%	90%	85%				
NKLF143		92	4	5	2	10	13	22	13	10	77	1	27	24	86	41	38	91	92	47	79	32	23	13	63	22		
NHZF1023	HAZELDEAN F1023 SV	+203	+4.4	+1.4	-2.9	+3.2	+39	+75	+88	+70	+14	+3.6	-5.3	+49	+8.0	+2.6	-0.1	+0.1	+6.0	+1.25	+12	+0.48	+1.00	+1.04	\$213	\$341		
VTMB1	APR	92%	90%	79%	98%	98%	98%	98%	98%	97%	96%	97%	75%	95%	93%	93%	94%	90%	94%	88%	97%	97%	96%	94%				
NHZB723		1	31	65	77	31	90	88	94	89	74	9	34	91	29	7	45	73	1	99	80	2	56	52	34	51		
NHZM586	HAZELDEAN M586 SV	+179	+6.6	+9.5	-8.7	+2.4	+49	+86	+115	+103	+18	+4.1	-11.5	+72	+5.6	+0.2	-0.3	+0.0	+5.4	+0.81	+34	+0.50	+0.92	+1.14	\$279	\$469		
NHZJ140	APR	91%	86%	69%	98%	98%	97%	97%	96%	95%	92%	96%	68%	93%	91%	91%	92%	86%	92%	87%	94%	94%	94%	90%				
NHZH356		2	14	2	6	17	53	61	54	44	37	4	1	32	57	43	49	78	2	95	8	3	36	81	1	1		
NHZP434	HAZELDEAN P434 SV	+93	+9.0	+6.2	-7.4	+2.0	+46	+87	+114	+96	+21	+3.0	-7.8	+75	+3.4	-0.5	-3.2	+1.0	+2.8	+0.68	+45	+0.58	+0.96	+1.02	\$225	\$389		
NHZJ140	APR	78%	76%	62%	97%	96%	94%	95%	94%	88%	79%	92%	57%	82%	82%	82%	82%	76%	82%	82%	91%	88%	88%	83%				
NHZL527		31	4	18	13	13	69	60	57	56	19	19	4	24	81	60	90	21	31	91	1	7	46	46	22	16		
NHZQ1229	HAZELDEAN Q1229 PV	+158	+0.6	+5.1	-3.7	+3.8	+55	+101	+126	+81	+22	+4.6	-6.6	+77	+8.8	-1.1	-1.9	+0.4	+4.6	+0.59	+23	+0.78	+0.98	+0.90	\$266	\$412		
NHZF1023	APR	75%	77%	62%	97%	96%	95%	93%	90%	85%	78%	93%	53%	80%	75%	76%	76%	69%	78%	69%	88%	78%	78%	74%				
NHZJ823		5	64	27	66	44	26	19	30	79	17	2	12	20	22	73	76	55	6	87	35	36	51	13	3	7		
NHZQ319	HAZELDEAN Q319 PV	+137	+4.6	+9.7	-9.4	+2.6	+55	+105	+138	+134	+18	+3.2	-11.5	+83	+5.6	+2.0	+0.3	-0.6	+4.9	+0.12	+22	+0.90	+1.12	+1.08	\$279	\$494		
NHZM586	APR	76%	75%	59%	97%	96%	95%	94%	89%	85%	78%	94%	51%	81%	75%	75%	76%	67%	79%	70%	86%	69%	65%	60%				
NHZL1175		9	29	2	3	20	26	12	12	9	43	15	1	11	57	12	38	95	4	41	38	61	81	65	1	1		
NHZR1561	HAZELDEAN RONALDO R1561 PV	+107	-6.1	+3.4	-6.1	+5.6	+65	+107	+140	+139	+9	+0.6	-4.1	+74	+5.7	-1.1	-1.2	+0.1	+3.4	+0.45	+27	+0.64	+0.72	+0.96	\$209	\$365		
NORL519	HBR	74%	72%	64%	95%	94%	92%	90%	87%	84%	78%	90%	54%	79%	73%	73%	74%	67%	77%	68%	79%	76%	75%	70%				
NHZJ115		22	93	45	28	81	4	10	10	7	95	92	62	28	56	73	65	73	19	77	21	13	6	26	38	31		
Breed Average EBVs		+68.	+1.6	+2.5	-4.7	+4.0	+50	+90	+116	+100	+17	+2.1	-4.6	+66	+6.3	+0.0	-0.3	+0.5	+2.2	+0.20	+20	+0.84	+0.97	+1.03	+196	+337		

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Ident	Name													Carcase						Feed	Temp	Structural		Selection Index					
Sire	Dam	Reg.		MSA	MBL	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	INGLEBRAE FARMS NOBLEMAN			+75		+8.9	+10.7	-7.8	+2.0	+57	+90	+110	+95	+13	+3.4	-2.0	+65	+10.3	+1.1	+1.2	+0.2	+2.1	-0.29	+25	+0.86	+1.10	+1.16	\$210	\$366
NZE14647008839	HBR			87%		78%	68%	95%	96%	94%	95%	94%	89%	83%	92%	62%	89%	87%	87%	88%	80%	89%	80%	92%	89%	88%	85%		
DYFL18				44		4	1	10	13	18	48	66	57	81	11	93	54	12	24	24	67	49	8	28	53	78	85	36	31
NZE13300018	KAKAHU PIVOTAL 18004 PV			+148		+3.0	+1.4	-7.8	+4.0	+54	+102	+119	+63	+28	+3.7	-7.8	+80	+9.3	+0.5	+0.5	+0.6	+3.9	+0.56	-1	+0.74	+1.00	+1.10	\$294	\$434
WWEL3	HBR			78%		73%	64%	95%	96%	94%	94%	93%	87%	79%	92%	55%	81%	82%	81%	82%	76%	82%	70%	91%	78%	76%	70%		
NZE13300116373				6		43	65	10	49	28	18	44	93	2	7	4	15	18	36	35	43	12	85	99	28	56	71	1	3
GXNQ209	KELLY ANGUS QUINN Q209 SV			+41		+7.5	+9.9	-7.5	+2.0	+64	+113	+141	+117	+27	+0.6	-8.5	+86	+6.8	-1.5	-3.3	+0.6	+2.1	-0.06	+24	+1.28	+1.28	+1.18	\$284	\$479
USA18463791	HBR			72%		73%	58%	93%	93%	90%	89%	87%	84%	76%	81%	45%	77%	75%	76%	77%	70%	78%	63%	78%	69%	69%	63%		
VLYL1327				71		9	2	12	13	5	4	10	23	3	92	2	8	42	80	91	43	49	22	30	99	96	89	1	1
NDIP481	KENNY'S CREEK PINNACLE P481			+133		+2.1	-0.9	-4.6	+3.2	+49	+86	+115	+68	+21	+0.0	-2.2	+65	+4.7	+1.3	+0.8	-1.3	+5.6	+1.14	+19	+0.88	+0.94	+0.84	\$198	\$306
USA17354145	HBR			78%		78%	67%	98%	97%	95%	95%	95%	88%	81%	93%	57%	82%	83%	83%	83%	78%	83%	83%	90%	83%	83%	78%		
NDIL236				11		51	82	51	31	56	62	53	90	18	98	92	53	68	21	30	99	2	99	51	57	41	5	51	76
KILK18	KILLAIN ALASKA K18 PV			-26		-6.4	-4.0	-0.6	+6.8	+66	+120	+165	+173	+14	+4.0	-1.9	+86	+6.5	-2.7	-4.6	+1.0	-1.3	-0.59	+39	+1.14	+0.86	+0.98	\$129	\$296
USA16417285	HBR			85%		74%	62%	90%	89%	89%	88%	89%	85%	82%	82%	51%	85%	85%	85%	85%	82%	87%	77%	79%	77%	77%	66%		
USA15107929				98		93	94	95	94	4	2	1	1	71	5	94	7	45	94	97	21	99	2	3	94	23	32	96	81
KILP1	KILLAIN RAINMAN P1 PV			-15		-2.2	-4.9	-7.3	+4.2	+61	+107	+134	+124	+13	+3.1	-3.8	+74	+10.9	-2.1	-2.7	+1.9	-0.9	+0.38	+4	+0.90	+0.96	+1.08	\$195	\$343
USA18578965	HBR			74%		73%	59%	95%	93%	91%	90%	91%	85%	78%	81%	45%	79%	78%	79%	79%	73%	80%	77%	86%	75%	75%	63%		
KILM9				97		80	95	14	53	10	10	17	16	77	17	69	28	9	89	86	2	99	70	96	61	46	65	54	49
BLAP130	KNOWLA PACKER P130 PV			+109		+2.4	+0.5	-3.3	+4.5	+54	+100	+131	+111	+11	+1.0	-6.6	+82	+9.4	+0.1	-0.2	+0.9	+2.9	+0.12	+26	+0.84	+1.24	+0.96	\$253	\$416
SRKK306	HBR			76%		73%	62%	93%	91%	89%	88%	89%	84%	77%	85%	51%	79%	78%	78%	79%	73%	80%	77%	84%	78%	78%	73%		
BLAK113				21		49	72	72	60	30	21	21	31	88	85	12	12	18	46	47	25	29	41	26	49	94	26	6	6
BLAP91	KNOWLA PEPPER P91 PV			+80		+4.8	+2.4	-6.2	+3.7	+60	+116	+143	+159	+9	+1.6	-8.5	+71	+7.9	+1.5	+0.6	+0.9	+2.8	+0.36	+0	+0.96	+1.06	+0.98	\$270	\$488
HIOG18	HBR			78%		78%	68%	95%	95%	93%	92%	93%	87%	80%	89%	59%	81%	81%	81%	82%	76%	82%	82%	90%	89%	90%	86%		
BLAL06				40		27	55	26	42	11	3	8	2	95	68	2	35	30	18	33	25	31	68	99	73	70	32	2	1
BLAR190	KNOWLA REVOLUTION R190 PV			+181		+9.8	+5.0	-10.7	+0.6	+39	+76	+101	+65	+24	+2.7	-4.0	+48	+14.5	+4.7	+3.6	+0.0	+5.0	+0.73	+46	+0.82	+1.04	+0.98	\$228	\$360
BLAN127	HBR			69%		66%	54%	89%	91%	84%	82%	83%	80%	74%	79%	41%	71%	69%	70%	71%	61%	74%	61%	76%	72%	73%	69%		
BLAP172				2		2	29	1	3	90	86	81	92	7	27	65	91	2	1	5	78	4	93	1	44	66	32	19	35
BLA21S48	KNOWLA SO RIGHT S48 PV			+140		+2.5	-1.5	-5.2	+3.9	+55	+99	+125	+104	+17	+3.6	-5.9	+84	+11.2	+1.4	+0.8	+0.3	+3.8	+0.31	+33	+0.84	+0.86	+0.80	\$246	\$402
USA18837398	HBR			70%		75%	56%	97%	96%	85%	83%	84%	81%	74%	80%	42%	73%	71%	71%	71%	63%	75%	61%	77%	76%	76%	70%		
BLAL21				8		48	85	41	46	25	24	31	42	48	9	22	10	8	19	30	62	13	63	9	49	23	3	8	10
NZCP117	KO B074 BEAST MODE P117 PV			+131		+2.7	+6.6	-6.0	+1.3	+59	+100	+123	+122	+10	+2.2	-4.6	+64	+1.1	+0.5	-0.5	-0.8	+3.7	+0.58	+13	+0.76	+0.62	+0.84	\$202	\$372
USA17960722	HBR			77%		78%	64%	98%	97%	95%	95%	94%	87%	78%	91%	54%	81%	84%	82%	83%	77%	83%	68%	89%	87%	87%	83%		
NZCM67				11		46	15	29	7	14	22	35	18	93	44	50	57	94	36	53	97	15	86	78	32	2	5	47	27
VLYR1549	LAWSONS ASHLAND R1549 SV			+120		-3.7	-5.1	-6.9	+3.6	+60	+104	+133	+112	+12	+0.3	-0.2	+78	+15.3	-2.1	-2.2	+1.1	+4.2	+0.54	+24	+1.14	+0.94	+0.78	\$215	\$339
USA18217198	HBR			72%		72%	64%	91%	91%	89%	85%	85%	83%	77%	81%	46%	76%	72%	73%	73%	66%	76%	65%	85%	69%	69%	66%		
VLYP251				16		87	96	18	39	11	14	19	30	83	96	99	19	1	89	80	17	9	83	31	94	41	2	31	52
VLYN131	LAWSONS CHARLIE N131 SV			+8		-4.0	-2.9	-4.4	+5.3	+71	+126	+158	+126	+21	+2.8	-4.4	+78	+5.8	-1.7	-2.0	+0.0	+1.3	+0.35	+32	+0.86	+0.76	+0.88	\$226	\$383
USA16295688	HBR			86%		77%	70%	95%	96%	95%	94%	92%	87%	84%	87%	62%	87%	85%	85%	86%	78%	88%	79%	94%	91%	90%	86%		
VLYL710				91		87	91	55	77	1	1	2	15	18	24	55	18	54	83	78	78	72	67	11	53	9	9	21	20
Breed Average EBVs		+68.	+1.6	+2.5	-4.7	+4.0	+50	+90	+116	+100	+17	+2.1	-4.6	+66	+6.3	+0.0	-0.3	+0.5	+2.2	+0.20	+20	+0.84	+0.97	+1.03	+196	+337			

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Ident	Name					Performance Traits																								
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							
VLYL483	LAWSONS LINKEDIN L483	sv	+46	+4.5	-7.2	-1.6	+4.0	+56	+107	+151	+137	+26	+3.9	-3.9	+104	+9.2	-0.6	+2.3	+0.3	+1.6	-0.18	+20	+0.94	+0.76	+0.88	\$200	\$370			
HKFJ5	HBR	90%	86%	77%	98%	98%	97%	97%	97%	95%	94%	94%	67%	92%	89%	87%	91%	84%	91%	82%	88%	84%	85%	80%						
VLYH221		67	30	98	90	49	21	10	4	8	4	5	67	1	19	62	12	62	63	14	46	69	9	9	48	28				
VLYQ44	LAWSONS MIRACULOUS Q44	PV	+132	+4.4	-2.2	-7.7	+3.7	+49	+90	+112	+104	+9	+3.1	-3.4	+49	+21.3	+0.8	+0.1	+2.0	+2.4	+1.00	+34	+0.96	+0.92	+0.94	\$233	\$382			
VLYM518	HBR	76%	76%	63%	97%	96%	93%	93%	91%	86%	77%	89%	52%	80%	80%	80%	80%	74%	81%	68%	84%	71%	71%	68%						
VLYM518	LAWSONS MOMENTOUS M518		11	31	88	11	42	54	49	61	43	94	17	77	90	1	30	42	2	41	99	8	73	36	21	15	20			
VLYM518	USA17354145	HBR	93%	96%	86%	99%	99%	99%	99%	99%	98%	98%	99%	76%	96%	94%	95%	95%	93%	95%	88%	99%	99%	99%	98%					
VLYH229		1	82	92	33	49	50	43	59	73	12	27	85	88	4	55	42	62	2	96	5	57	46	59	27	54				
VLYP316	LAWSONS PROPHET P316	PV	+147	+6.0	+5.6	-2.6	+3.1	+56	+86	+102	+57	+16	+0.3	-3.8	+65	+10.7	-3.9	-4.2	+1.7	+3.7	+0.13	+29	+0.66	+0.66	+0.84	\$270	\$390			
USA16295688	HBR	76%	77%	67%	93%	95%	94%	93%	89%	85%	78%	81%	56%	80%	77%	78%	78%	73%	80%	70%	93%	80%	80%	75%						
VLYM527		7	18	23	81	29	24	62	80	96	56	96	69	53	10	99	96	4	15	42	16	15	3	5	2	16				
VLYR4010	LAWSONS ROCKY R4010	PV	+145	+6.0	+4.8	-5.0	+2.7	+53	+93	+120	+93	+23	+2.4	-4.2	+68	+11.4	+2.2	+1.6	+0.0	+5.1	+1.39	+26	+0.92	+1.08	+1.06	\$250	\$403			
USA17354145	HBR	77%	79%	66%	98%	98%	97%	96%	90%	86%	79%	91%	54%	81%	81%	81%	81%	76%	82%	70%	97%	74%	72%	76%						
VLYP4005		7	18	30	45	22	35	40	42	61	11	37	60	45	8	10	19	78	3	99	26	65	74	59	7	10				
NMMK35	MILLAH MURRAH KINGDOM K35		-42	-12.1	-7.8	-2.4	+8.8	+54	+99	+137	+149	+11	+0.8	-5.1	+62	+8.0	+0.1	+0.2	+1.2	-1.1	-0.75	+26	+0.82	+1.28	+1.18	\$132	\$267			
NZE469	HBR	93%	96%	88%	99%	99%	98%	98%	98%	98%	98%	98%	98%	80%	96%	95%	95%	95%	93%	95%	89%	98%	96%	96%	94%					
NMMG41		99	99	99	83	99	30	25	13	4	87	89	38	61	29	46	40	13	99	1	26	44	96	89	95	91				
NMMK42	MILLAH MURRAH KLOONEY K42		+81	+4.6	+3.4	-6.6	+5.6	+47	+86	+108	+92	+23	+2.2	-6.3	+65	+6.4	-1.3	-3.1	+1.3	+2.1	+0.01	+18	+0.84	+0.92	+1.00	\$213	\$358			
NGMT30	HBR	94%	96%	89%	99%	99%	98%	98%	99%	98%	98%	98%	98%	96%	95%	95%	95%	96%	93%	95%	89%	98%	97%	97%	94%					
NMMH4		39	29	45	21	81	63	62	70	63	10	44	16	54	47	77	89	11	49	29	59	49	36	39	34	37				
NMML133	MILLAH MURRAH LOCH UP L133		+39	+4.8	+3.9	-5.9	+4.8	+58	+99	+131	+103	+26	+2.1	-1.6	+80	+1.7	-2.0	-4.0	-0.6	+1.9	-0.13	+33	+0.70	+1.06	+1.14	\$162	\$301			
USA17091363	HBR	94%	80%	80%	99%	99%	98%	98%	98%	98%	98%	98%	98%	80%	96%	95%	95%	95%	93%	95%	88%	98%	97%	97%	95%					
NMMH49		73	27	40	30	67	16	24	21	45	4	48	95	15	92	87	95	95	55	17	10	21	70	81	83	78				
NMMM308	MILLAH MURRAH MILESTONE		+61	+6.0	+4.9	-7.8	+4.6	+43	+78	+91	+78	+17	+2.7	-5.7	+43	+4.2	+2.5	+4.5	-0.3	+2.1	+0.12	+21	+0.84	+0.98	+1.20	\$196	\$336			
NZE14647008839	HBR	87%	82%	72%	97%	97%	96%	96%	96%	95%	93%	90%	95%	66%	89%	88%	89%	89%	82%	90%	79%	95%	83%	84%	81%					
NMMH331		55	18	29	10	63	78	82	92	81	50	27	25	96	73	8	2	89	49	41	45	49	51	91	53	55				
NJWH194	MILWILLAH ELEVATOR H194	sv	-23	-7.6	-7.6	-1.4	+8.3	+50	+101	+136	+161	+18	+1.9	+0.6	+56	+4.5	-2.4	+0.8	+0.9	-1.1	-0.29	+43	+0.20	+0.42	+0.86	\$72	\$208			
WDCE11	HBR	87%	78%	69%	93%	93%	91%	92%	92%	88%	84%	86%	63%	88%	87%	87%	88%	82%	89%	81%	85%	87%	87%	80%						
VTMX64		98	95	99	91	99	47	19	14	2	43	56	99	78	70	92	30	25	99	8	2	1	1	7	99	99				
NJWH283	MILWILLAH ELSOM H283	PV	+55	+1.1	-4.4	-2.6	+3.9	+47	+83	+121	+108	+21	+1.7	-1.7	+77	+9.8	-2.4	-2.7	+1.6	+1.4	+0.37	+22	+0.78	+0.84	+1.02	\$159	\$282			
NJWF189	HBR	90%	82%	70%	97%	97%	96%	96%	96%	91%	93%	94%	63%	92%	91%	90%	91%	86%	92%	84%	87%	89%	90%	85%						
NJWE51		60	60	94	81	46	62	70	39	36	20	64	95	21	15	92	86	5	69	69	41	36	20	46	85	86				
BWFQ33	MOOGENILLA QUINELLA Q33	PV	+139	+1.2	+10.2	-6.4	+3.9	+58	+116	+144	+79	+26	+2.7	-2.6	+99	+11.5	-1.2	-0.5	+0.1	+4.5	+0.63	+31	+0.88	+0.94	+0.90	\$271	\$414			
USA18181757	HBR	77%	80%	64%	99%	98%	98%	98%	98%	91%	87%	79%	96%	51%	81%	85%	83%	84%	78%	84%	70%	95%	88%	88%	83%					
BWFN9		9	59	1	24	46	17	3	7	81	4	27	88	2	7	75	53	73	7	89	12	57	41	13	2	7				
BWFQ33	MOOGENILLA QUINELLA Q33	PV	+139	+1.2	+10.2	-6.4	+3.9	+58	+116	+144	+79	+26	+2.7	-2.6	+99	+11.5	-1.2	-0.5	+0.1	+4.5	+0.63	+31	+0.88	+0.94	+0.90	\$271	\$414			
USA18181757	HBR	77%	80%	64%	99%	98%	98%	98%	98%	91%	87%	79%	96%	51%	81%	85%	83%	84%	78%	84%	70%	95%	88%	88%	83%					
BWFN9		9	59	1	24	46	17	3	7	81	4	27	88	2	7	75	53	73	7	89	12	57	41	13	2	7				
Breed Average EBVs		+68.	+1.6	+2.5	-4.7	+4.0	+50	+90	+116	+100	+17	+2.1	-4.6	+66	+6.3	+0.0	-0.3	+0.5	+2.2	+0.20	+20	+0.84	+0.97	+1.03	+196	+337				

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Ident	Name					Performance Traits																								
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							
EGRM39	MOSQUITO CREEK MAXIMUS			+43	+3.5	+3.6	-6.6	+5.1	+60	+107	+137	+132	+17	+1.9	-8.5	+75	+7.2	+0.5	-0.2	+0.6	+2.3	+0.04	+15	+0.86	+0.88	+1.04	\$261	\$452		
HIOG18	HBR			77%	77%	67%	91%	95%	92%	93%	92%	87%	81%	91%	56%	82%	82%	82%	77%	83%	75%	82%	76%	77%	72%					
EGRD9				69	39	43	21	73	11	10	13	10	47	56	2	26	37	36	47	43	44	32	70	53	27	52	3	1		
EGRQ53	MOSQUITO CREEK QUALITY Q53			+10	+8.8	+9.8	-7.1	+0.2	+58	+105	+138	+114	+28	+1.8	-5.2	+82	+1.6	-0.5	-1.9	-0.2	+1.6	-0.01	+30	+1.04	+1.16	+1.04	\$214	\$393		
USA18463791	HBR			72%	73%	57%	91%	92%	90%	88%	87%	83%	75%	83%	46%	77%	75%	76%	76%	70%	77%	62%	84%	69%	69%	63%				
EGRG2				90	4	2	16	2	15	12	12	28	2	60	36	12	93	60	76	85	63	27	14	85	87	52	32	14		
CSWH211	MURDEDUKE HUSSAR H211 PV			-6	+1.6	+4.4	-9.3	+6.0	+59	+117	+153	+166	+14	+3.9	-5.3	+82	+2.0	-2.0	-5.3	+0.8	-0.6	-0.72	+32	+0.54	+0.84	+1.04	\$159	\$358		
VTME343	HBR			90%	82%	74%	97%	96%	95%	95%	95%	92%	91%	93%	66%	91%	90%	90%	90%	85%	91%	84%	94%	95%	95%	93%				
CSWE175				95	56	34	4	87	13	3	3	1	75	5	34	12	91	87	99	31	98	1	11	5	20	52	85	37		
CSWK428	MURDEDUKE KICKING K428 PV			+24	+7.7	+8.5	-8.1	+1.9	+48	+94	+117	+90	+24	+3.5	-5.3	+68	+2.3	-0.2	-2.5	+0.4	+0.7	-0.02	+42	+0.90	+1.02	+1.20	\$188	\$345		
VTME343	HBR			91%	85%	75%	98%	98%	97%	97%	97%	94%	93%	97%	68%	92%	89%	92%	86%	92%	86%	97%	97%	97%	95%					
CSWE175				83	8	5	8	12	61	39	49	65	9	10	34	44	89	52	84	55	85	26	2	61	61	91	62	48		
CSWQ011	MURDEDUKE QUARTERBACK			+161	+6.2	+0.7	-10.0	+2.9	+53	+99	+132	+117	+21	+4.1	-5.0	+75	+6.8	+2.4	+3.1	-1.0	+4.9	+0.68	+25	+0.76	+1.02	+1.04	\$221	\$394		
VLYM518	HBR			80%	87%	74%	99%	99%	98%	98%	98%	89%	80%	98%	57%	83%	87%	85%	85%	79%	85%	78%	98%	97%	97%	95%				
CSWN026				4	17	71	2	25	35	23	19	24	22	4	40	24	42	8	7	99	4	91	27	32	61	52	25	14		
NURM208	MURRAY GENESIS M208 PV			+20	+1.2	+5.6	-6.3	+4.7	+50	+95	+128	+107	+21	+3.8	-6.4	+83	+16.7	-0.3	-2.8	+2.2	+0.8	+1.38	+5	+0.96	+1.06	+0.66	\$237	\$397		
SMPG357	HBR			88%	79%	69%	93%	94%	93%	92%	93%	88%	86%	85%	63%	89%	88%	85%	88%	83%	89%	82%	88%	90%	90%	87%				
NURK45				85	59	23	25	65	51	34	26	38	19	6	15	11	1	55	87	1	83	99	95	73	70	1	13	12		
NURN70	MURRAY KODAK N70 PV			+138	+1.8	+5.3	-7.1	+4.0	+56	+102	+133	+136	+14	+5.2	-5.9	+80	+9.2	-1.3	-1.4	+0.9	+3.8	-0.31	+16	+0.94	+0.90	+0.92	\$234	\$419		
NORK522	HBR			89%	79%	66%	98%	97%	96%	96%	94%	89%	81%	96%	61%	90%	89%	88%	89%	81%	90%	83%	93%	91%	91%	87%				
NURJ53				9	54	26	16	49	21	18	18	8	72	1	22	15	19	77	69	25	13	8	67	69	32	16	15	5		
NURM204	MURRAY PROCEED M204 PV			+241	-7.3	+6.9	-4.4	+4.4	+61	+107	+140	+129	+19	+2.3	-3.7	+90	+13.6	-5.0	-5.9	+0.9	+6.6	+0.09	+24	+0.96	+0.78	+0.90	\$235	\$385		
USA16956101	HBR			90%	80%	69%	96%	96%	94%	94%	94%	89%	84%	90%	62%	91%	90%	87%	90%	85%	91%	84%	93%	89%	90%	86%				
NURJ43				1	95	13	55	58	10	10	11	13	33	40	71	5	3	99	99	25	1	37	33	73	11	13	14	18		
NURP54	MURRAY TWINHEARTS P54 PV			+109	-0.1	+3.8	-6.5	+6.4	+69	+125	+165	+159	+25	+2.0	-5.2	+104	+8.8	-2.2	-4.4	+1.1	+3.2	+0.22	+17	+0.88	+1.24	+0.90	\$257	\$452		
USA16350631	HBR			85%	74%	63%	93%	91%	90%	89%	88%	86%	79%	82%	57%	85%	85%	86%	77%	87%	78%	86%	87%	87%	82%					
NURM13				21	69	41	22	91	2	1	1	2	5	52	36	1	22	90	96	17	23	53	61	57	94	13	5	1		
SFNL21	NAMPARA LIBERTY L21 SV			-76	-6.4	-2.7	-6.8	+8.5	+66	+110	+148	+158	+16	+2.9	-0.9	+80	+8.2	-2.1	-0.5	+1.9	-2.6	-0.65	+23	+0.86	+0.84	+0.98	\$142	\$292		
NZE10322010609	HBR			91%	85%	71%	98%	98%	97%	97%	97%	94%	93%	96%	61%	93%	91%	88%	86%	93%	93%	86%	94%	92%	92%	87%				
SFNH65				99	93	90	19	99	3	7	5	2	53	21	98	15	27	89	53	2	99	2	36	53	20	32	92	82		
WLGP5	NARANDA PIMP P5 SV			+126	+11.0	+8.8	-11.7	+1.7	+52	+99	+128	+96	+21	+1.8	-2.8	+73	+5.8	+1.7	+1.1	-0.4	+3.9	+0.34	+5	+0.64	+0.74	+1.00	\$222	\$381		
USA18229425	APR			73%	75%	60%	97%	95%	93%	93%	92%	86%	78%	85%	49%	79%	77%	78%	78%	72%	78%	81%	88%	84%	85%	79%				
WLGM24				13	1	4	1	10	40	24	25	55	19	60	86	29	54	15	25	91	12	66	95	13	7	39	25	21		
SKOJ6	NEWLYN PARK EMPEROR J6 PV			+9	-8.8	-5.1	-7.8	+7.5	+66	+112	+146	+155	+10	+1.5	-4.5	+82	+8.0	-1.3	-1.2	+1.3	+0.2	-0.68	+19	+1.08	+0.78	+0.78	\$187	\$342		
VTME343	HBR			86%	78%	69%	93%	92%	90%	90%	91%	87%	82%	84%	63%	87%	86%	85%	86%	80%	88%	79%	84%	85%	85%	80%				
NZCE115				90	97	96	10	97	3	5	6	2	94	71	52	12	29	77	65	11	92	1	51	89	11	2	63	50		
NZE21095018	NGAPUTAHI P206 SV			+127	+9.5	+5.2	-1.8	+0.3	+42	+83	+95	+66	+28	+2.8	-7.1	+60	+6.9	+0.6	-0.9	+1.3	+3.3	+0.23	+18	+0.96	+1.06	+1.12	\$246	\$388		
HIOE7	HBR			79%	79%	69%	93%	93%	92%	90%	91%	87%	80%	92%	62%	82%	83%	83%	83%	78%	83%	82%	87%	81%	81%	78%				
NZE21095112H49				13	3	26	88	3	84	70	88	91	2	24	8	68	41	34	60	11	21	54	59	73	70	77	8	17		
Breed Average EBVs		+68.	+1.6	+2.5	-4.7	+4.0	+50	+90	+116	+100	+17	+2.1	-4.6	+66	+6.3	+0.0	-0.3	+0.5	+2.2	+0.20	+20	+0.84	+0.97	+1.03	+196	+337				

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Ident	Name					Performance Traits																						
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					
USA16981588	PA FULL POWER 1208 PV			+116	-5.4	-4.8	-5.4	+3.8	+52	+99	+120	+75	+14	+2.0	-2.1	+70	+12.5	-1.7	+0.2	+1.1	+3.2	+0.91	+20	+1.24	+0.96	+0.70	\$222	\$325
USA16381311	HBR			92%	94%	85%	99%	98%	98%	98%	98%	97%	97%	98%	72%	95%	94%	94%	92%	94%	87%	98%	98%	98%	91%			
USA16408070				17	91	95	38	44	38	25	43	85	75	52	93	38	4	83	40	17	23	97	47	98	46	1	25	63
HKFE27	PARINGA IRON ORE E27 PV			+102	+7.5	+1.2	-7.3	+2.1	+36	+67	+90	+95	+12	+1.8	-7.1	+67	+6.7	+1.6	+2.4	+1.2	+1.6	+0.32	+32	+0.86	+0.94	+0.94	\$188	\$337
VTMA149	HBR			90%	71%	65%	97%	96%	95%	95%	94%	91%	92%	92%	65%	91%	90%	90%	91%	83%	91%	84%	89%	84%	84%	79%		
FAFC1				25	9	67	14	14	95	96	93	58	84	60	8	48	43	17	11	13	63	64	11	53	41	21	62	54
SMPG357	PATHFINDER GENESIS G357 PV			-2	+0.5	+4.0	-7.6	+6.6	+61	+108	+146	+137	+26	+4.4	-6.3	+94	+13.8	+0.7	-1.0	+1.5	-0.1	+0.66	+28	+0.84	+1.04	+0.78	\$232	\$412
VTMB1	HBR			94%	96%	88%	99%	99%	99%	99%	99%	98%	98%	98%	84%	97%	95%	96%	96%	95%	95%	90%	98%	97%	98%	96%		
SMPD245				94	64	39	12	93	9	9	6	7	4	3	16	3	2	32	62	6	95	90	18	49	66	2	17	7
SMPK22	PATHFINDER KOMPLETE K22 SV			+70	+10.6	+9.1	-9.5	+0.8	+40	+73	+94	+41	+28	+3.0	-5.7	+52	+6.4	+3.7	+5.4	+0.2	+2.2	+0.49	+26	+0.48	+0.84	+0.68	\$235	\$357
SMPG357	HBR			92%	92%	78%	99%	98%	98%	98%	98%	97%	97%	97%	73%	95%	93%	94%	94%	92%	94%	87%	97%	96%	96%	94%		
SMPH756				48	1	3	3	4	89	90	89	99	2	19	25	86	47	3	1	67	46	80	25	2	20	1	14	38
SMPM651	PATHFINDER MASTERPIECE			+82	+1.8	+3.6	-6.6	+5.4	+59	+106	+134	+139	+20	+3.8	-7.8	+59	+9.8	-2.1	-3.5	+1.7	+1.6	-0.24	+33	+0.96	+1.22	+1.14	\$243	\$432
VTMG67	HBR			86%	79%	71%	92%	95%	93%	92%	92%	88%	86%	88%	62%	88%	86%	86%	87%	80%	88%	80%	82%	77%	77%	74%		
SMPH66				38	54	43	21	78	14	11	16	7	28	6	4	71	15	89	92	4	63	11	9	73	93	81	10	3
SMPM558	PATHFINDER MAXIMUS M558 PV			+103	-2.2	+3.0	-6.8	+6.1	+61	+100	+131	+138	+21	+4.6	-8.2	+56	+10.9	-2.8	-1.6	+0.9	+2.9	-0.36	+50	+0.94	+1.08	+0.86	\$240	\$419
VTMG67	HBR			89%	83%	73%	96%	97%	95%	95%	95%	91%	91%	93%	64%	91%	90%	88%	90%	86%	91%	84%	86%	78%	79%	76%		
SMPH458				25	80	49	19	88	9	22	22	7	20	2	2	78	9	95	72	25	29	6	1	69	74	7	11	5
SMPN56	PATHFINDER NUCLEUS N56 SV			+63	+3.4	+2.3	-3.6	+5.3	+60	+107	+139	+133	+15	+4.6	-6.5	+77	+13.5	+0.7	+0.9	+1.1	+1.7	+0.34	+9	+0.72	+0.80	+0.80	\$255	\$443
HIOG18	HBR			90%	77%	67%	96%	97%	95%	95%	95%	91%	91%	93%	64%	91%	90%	88%	90%	86%	91%	84%	86%	78%	79%	76%		
SMPL179				53	40	56	68	77	11	10	11	10	65	2	13	20	3	32	28	17	61	66	87	24	14	3	5	2
SMPP516	PATHFINDER PHAT CAT P516 SV			+161	+5.8	+3.8	-8.2	+4.5	+52	+91	+116	+84	+27	+5.1	-9.0	+53	+11.0	-3.1	-1.5	+0.7	+4.6	+0.11	+40	+0.80	+1.14	+0.98	\$281	\$442
SMPM558	HBR			77%	74%	61%	96%	96%	93%	93%	93%	86%	78%	88%	52%	81%	80%	80%	81%	75%	82%	78%	88%	84%	84%	78%		
SMPJ282				4	19	41	8	60	40	48	52	75	3	1	1	83	9	96	70	36	6	40	3	40	84	32	1	2
SMPQ1357	PATHFINDER QUEST Q1357 PV			+134	-2.8	-0.8	-6.8	+5.3	+63	+116	+162	+175	+18	+2.0	-5.2	+83	+4.8	-1.3	-2.7	+0.7	+3.7	+0.44	+31	+0.86	+0.78	+0.96	\$214	\$407
NORL519	HBR			74%	76%	65%	94%	95%	93%	90%	88%	84%	78%	85%	54%	79%	75%	76%	76%	70%	78%	67%	88%	69%	70%	69%		
SMPM18				10	83	81	19	77	6	3	1	1	42	52	36	11	66	77	86	36	15	76	12	53	11	26	33	9
WQCQ47	QUANDEN SPRINGS			+131	+10.2	+7.7	-10.0	-0.8	+51	+99	+132	+120	+29	+5.0	-5.0	+50	+12.2	+1.5	+1.1	+0.3	+3.4	+0.24	+26	+1.12	+1.10	+1.06	\$229	\$415
VLYM518	HBR			75%	76%	64%	91%	92%	90%	88%	87%	84%	77%	85%	51%	78%	77%	78%	78%	71%	79%	68%	87%	70%	74%	70%		
VLYM1690				11	2	8	2	1	43	25	19	20	2	1	40	89	5	18	25	62	19	55	26	92	78	59	18	6
NORE11	RENNYLEA EDMUND E11 PV			+104	+8.8	+1.4	-7.2	+1.2	+34	+64	+85	+53	+17	+1.9	-6.9	+52	+4.5	+3.3	+1.6	-0.1	+3.9	+0.76	+23	+0.56	+1.02	+1.12	\$200	\$319
NGMY145	HBR			97%	99%	97%	99%	99%	99%	99%	99%	99%	99%	99%	94%	98%	98%	98%	98%	98%	98%	95%	99%	99%	99%	99%		
VLYY5				24	4	65	15	6	97	97	96	97	52	56	9	85	70	4	19	82	12	94	35	6	61	77	48	67
NORG255	RENNYLEA G255 PV			+144	-12.0	-4.8	-3.3	+4.6	+50	+94	+127	+124	+21	+0.7	-3.3	+87	+7.3	-0.4	-3.3	+0.8	+4.8	-0.03	+9	+1.16	+0.90	+0.84	\$161	\$276
BNAD145	APR			95%	81%	79%	98%	98%	98%	98%	98%	98%	98%	97%	82%	96%	95%	95%	96%	93%	95%	90%	97%	95%	95%	93%		
NORC490				7	99	95	72	63	51	38	28	16	21	79	7	36	57	91	31	5	25	87	95	32	5	84	88	
NORH708	RENNYLEA H708 PV			+269	-6.6	+2.6	+0.8	+4.7	+48	+102	+130	+129	+12	+2.5	-3.8	+73	+12.6	-3.8	-6.1	+2.1	+7.1	+0.68	+21	+0.70	+0.64	+0.90	\$231	\$380
NORC511	APR			94%	91%	83%	98%	98%	98%	98%	98%	97%	96%	97%	78%	96%	95%	95%	95%	93%	95%	92%	98%	97%	97%	95%		
NORE176				1	94	53	99	65	57	17	23	12	82	33	69	29	4	99	99	1	1	91	43	21	2	13	17	21
Breed Average EBVs		+68.	+1.6	+2.5	-4.7	+4.0	+50	+90	+116	+100	+17	+2.1	-4.6	+66	+6.3	+0.0	-0.3	+0.5	+2.2	+0.20	+20	+0.84	+0.97	+1.03	+196	+337		

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Ident	Name	MSA MBL RBV		Calv-Ease		Birth		Growth			Maternal		Fert		Carcase						Feed		Temp		Structural				Selection Index	
Sire Dam	Reg.	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					
NORK163	RENNYLEA K163 PV	+93		+4.1	-8.2	-4.1	+2.5	+40	+74	+95	+62	+10	+0.8	-4.5	+62	+18.5	-0.2	-0.9	+2.5	+2.8	+0.17	+18	+0.68	+0.68	+1.02	\$238	\$344			
NORH106	APR	93%		89%	78%	98%	98%	98%	98%	97%	96%	96%	95%	75%	94%	94%	94%	94%	91%	94%	88%	91%	90%	90%	87%					
NORE176		30		33	99	60	19	88	90	88	94	92	89	52	64	1	52	60	1	31	47	57	18	3	46	12	48			
NORK835	RENNYLEA K835 PV	+121		-3.9	-4.3	-2.4	+6.3	+48	+87	+112	+92	+12	+3.1	-4.9	+56	+10.0	+0.9	-1.0	+0.4	+4.2	-0.21	+11	+0.60	+1.10	+1.12	\$200	\$321			
NORG420	APR	88%		83%	70%	98%	95%	96%	95%	95%	91%	88%	90%	62%	90%	89%	88%	89%	86%	90%	81%	91%	89%	88%	86%					
NORH514		15		87	94	83	90	61	58	61	63	85	17	43	78	14	28	62	55	9	12	84	9	78	77	49	66			
NORK522	RENNYLEA KODAK K522 SV	+145		+9.0	+9.9	-5.3	+1.4	+45	+83	+110	+111	+10	+4.6	-6.1	+53	+3.8	+2.9	+1.6	-0.2	+3.9	+0.33	+8	+0.62	+0.82	+1.00	\$204	\$382			
NORE11	HBR	92%		93%	82%	99%	99%	98%	98%	98%	97%	97%	98%	73%	95%	93%	94%	94%	91%	94%	88%	96%	96%	96%	95%					
NORF810		7		4	2	40	7	72	70	65	32	93	2	19	83	78	5	19	85	12	65	91	11	16	39	44	20			
NORL508	RENNYLEA L508 PV	+171		+0.3	+8.4	-6.4	+2.6	+46	+86	+117	+93	+26	+1.4	-6.3	+56	+5.4	+1.2	-0.1	-0.1	+5.1	+0.78	+17	+0.68	+0.86	+0.86	\$225	\$370			
USA17366506	HBR	93%		84%	77%	99%	99%	98%	98%	98%	97%	97%	98%	78%	96%	95%	95%	95%	93%	95%	88%	99%	98%	98%	97%					
NORH414		3		66	5	24	20	67	62	49	62	5	74	16	77	59	23	45	82	3	94	62	18	23	7	22	28			
NORM1078	RENNYLEA M1078 SV	+261		-4.9	-1.0	-2.2	+3.3	+42	+83	+102	+103	+11	+1.8	-5.3	+61	+10.2	-1.7	-4.9	+0.9	+7.8	+0.72	+11	+0.94	+1.00	+1.16	\$208	\$338			
NORH708	APR	91%		77%	67%	97%	96%	95%	95%	95%	93%	87%	93%	62%	91%	90%	90%	91%	83%	92%	84%	94%	91%	92%	89%					
NORF563		1		90	82	85	33	84	70	79	45	88	60	34	66	13	83	98	25	1	92	84	69	56	85	39	53			
NORP987	RENNYLEA P987 PV	+201		+9.8	+9.6	-8.5	+1.2	+49	+98	+124	+126	+14	+0.5	-2.6	+76	+5.6	+4.8	+3.4	-1.2	+7.1	+0.93	+8	+0.88	+0.92	+1.04	\$217	\$400			
NORM763	APR	78%		72%	63%	97%	97%	94%	94%	94%	88%	80%	92%	54%	82%	83%	83%	83%	77%	83%	80%	93%	90%	90%	85%					
NORM1184		1		2	2	6	6	52	28	34	15	72	94	88	22	57	1	6	99	1	98	90	57	36	52	29	11			
NORQ1081	RENNYLEA Q1081 PV	+231		-1.4	+5.1	-4.3	+3.6	+50	+88	+112	+99	+11	+3.4	-5.8	+46	+10.6	+0.2	-0.7	+0.8	+6.4	+0.78	+13	+0.84	+0.92	+0.84	\$252	\$400			
NORH708	APR	77%		76%	65%	92%	93%	91%	89%	88%	85%	79%	87%	56%	80%	78%	79%	79%	74%	81%	71%	88%	76%	79%	73%					
NORL841		1		76	27	56	39	48	56	60	51	89	11	24	93	11	43	56	31	1	94	75	49	36	5	6	11			
NORQ213	RENNYLEA Q213 PV	+55		+9.1	+7.1	-7.6	+1.2	+68	+122	+154	+109	+25	+0.8	-10.7	+101	+9.4	+0.3	-0.1	+0.1	+3.8	+0.71	+24	+0.56	+0.72	+0.80	\$348	\$552			
NORK907	APR	77%		78%	66%	97%	97%	95%	95%	95%	89%	80%	94%	54%	82%	82%	82%	82%	77%	83%	79%	93%	92%	92%	88%					
NORL110		60		4	11	12	6	2	2	3	35	7	89	1	1	18	41	45	73	13	92	32	6	6	3	1	1			
NORR992	RENNYLEA R992 PV	+174		+4.3	+6.4	+1.8	+1.2	+45	+84	+116	+84	+26	+1.8	-5.3	+71	+11.6	+1.5	+1.9	+0.0	+5.9	+1.14	+25	+0.56	+0.78	+0.84	\$250	\$397			
NORN542	APR	75%		66%	58%	95%	94%	92%	91%	88%	85%	77%	90%	49%	78%	79%	79%	80%	73%	80%	66%	89%	70%	70%	71%					
NORM1034		3		31	16	99	6	74	67	53	74	4	60	34	36	7	18	16	78	1	99	29	6	11	5	7	12			
TRHP52	RICHMOND HILL PLAY P52 SV	+115		+5.6	+3.6	-0.5	+4.0	+53	+95	+116	+122	+11	+4.4	-5.4	+72	+10.5	-4.6	-4.8	+1.8	+2.5	-0.39	+30	+1.08	+0.98	+1.08	\$220	\$393			
TRHL9	HBR	72%		70%	56%	93%	93%	92%	91%	92%	85%	74%	79%	45%	78%	78%	79%	79%	72%	79%	83%	86%	85%	85%	81%					
TRHH92		18		21	43	96	49	33	34	51	18	90	3	31	32	11	99	98	3	38	5	15	89	51	65	27	14			
USA16396573	S A V CAMARO 9272 SV	+69		+4.2	+1.1	-7.1	+3.6	+48	+78	+98	+94	+9	+1.4	-6.3	+43	+0.8	-0.4	-2.4	+0.9	+1.6	+1.07	+19	+1.14	+0.84	+0.82	\$186	\$326			
USA0035	HBR	91%		86%	72%	97%	97%	96%	95%	96%	92%	94%	91%	62%	93%	91%	91%	91%	84%	93%	84%	86%	86%	86%	78%					
USA15688516		48		32	68	16	39	57	82	85	59	95	74	16	96	95	57	83	25	63	99	53	94	20	4	63	63			
NZE21159019	SEVEN HILLS 312/19 PV	+100		+1.6	+4.4	-8.0	+3.4	+51	+93	+116	+86	+20	-0.9	-2.4	+69	+8.6	-3.7	-5.0	+1.0	+4.3	+0.84	+6	+1.06	+0.92	+0.96	\$219	\$344			
USA18217198	HBR	72%		71%	62%	92%	91%	89%	85%	85%	83%	77%	81%	44%	76%	72%	72%	73%	65%	76%	64%	86%	74%	74%	70%					
NZE21159117053		26		56	34	9	35	42	40	52	71	26	99	41	24	98	98	21	8	96	94	87	36	26	28	48				
APBK11	SHACORRAHDALU KINETIC K11	+84		+10.2	+10.6	-9.5	+0.4	+48	+86	+100	+92	+10	+4.5	-7.6	+60	+9.9	+3.5	+2.2	+0.7	+1.7	+0.83	+1	+0.94	+1.16	+1.08	\$241	\$417			
VTMB1	HBR	77%		77%	69%	92%	92%	90%	90%	90%	87%	82%	84%	61%	81%	79%	80%	80%	75%	81%	77%	85%	82%	81%	78%					
APBF2		36		2	1	3	3	60	62	82	62	93	2	5	69	14	3	13	36	61	96	99	69	87	65	11	6			
Breed Average EBVs		+68.		+1.6	+2.5	-4.7	+4.0	+50	+90	+116	+100	+17	+2.1	-4.6	+66	+6.3	+0.0	-0.3	+0.5	+2.2	+0.20	+20	+0.84	+0.97	+1.03	+196	+337			

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Ident	Name													Carcase						Feed	Temp	Structural		Selection Index					
Sire	Dam	Reg.		MSA	MBL	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		
APB21S24	SHACORRAHDALU PHOENIX			+46		+8.5	+6.4	-8.2	-0.6	+53	+100	+134	+85	+27	+2.8	-8.1	+92	+5.0	+2.5	+4.0	+0.0	+2.0	+0.85	+12	+0.90	+1.10	+1.04	\$274	\$444
USA18636106	HBR			73%		71%	62%	84%	85%	85%	83%	84%	81%	77%	81%	49%	75%	73%	73%	74%	66%	77%	67%	80%	71%	71%	67%		
APBJ23				67		5	16	8	1	33	23	17	74	3	24	3	4	64	8	4	78	52	96	81	61	78	52	2	2
APBR5	SHACORRAHDALU ROYALE R5			+128		+7.4	+8.3	-6.8	+2.2	+49	+93	+116	+71	+23	+2.4	-6.3	+73	+9.8	+2.8	+3.6	+0.4	+3.4	+0.79	+12	+0.84	+1.08	+0.80	\$277	\$431
TFAK132	HBR			71%		75%	63%	93%	93%	91%	86%	86%	83%	77%	81%	49%	77%	71%	72%	73%	65%	75%	64%	87%	77%	73%	68%		
HBUP80				12		10	5	19	15	54	41	52	88	12	37	16	30	15	6	5	55	19	95	80	49	74	3	1	3
SYAN340	STONEY POINT NOLTE N340 SV			+88		-1.3	-4.9	-6.3	+6.3	+71	+128	+164	+160	+20	+3.5	-3.4	+109	+6.3	-3.4	-5.6	+0.9	+2.9	-0.16	+7	+0.92	+0.86	+1.20	\$220	\$400
SYAL178	HBR			85%		74%	65%	96%	96%	95%	96%	95%	90%	82%	92%	55%	88%	86%	86%	87%	78%	88%	76%	88%	87%	87%	83%		
SGMK250				34		76	95	25	90	1	1	1	2	28	10	77	1	48	97	99	25	29	15	93	65	23	91	27	11
NZE19507018	STORTH OAKS FULLY LOADED			+133		+8.2	+7.8	-11.7	+1.1	+44	+86	+132	+130	+19	+3.4	-6.0	+67	+4.0	+0.7	+1.2	-0.4	+3.9	+0.89	+30	+0.52	+0.80	+1.00	\$191	\$378
NORL508	HBR			78%		75%	64%	97%	97%	95%	95%	94%	88%	79%	93%	56%	82%	82%	82%	82%	76%	83%	82%	93%	81%	81%	78%		
NZE19507113J320				11		6	8	1	6	77	62	20	12	33	11	20	48	76	32	24	91	12	97	15	4	14	39	58	22
NZE19507013	STORTH OAKS JACK J7 SV			+47		+5.8	+8.2	-5.0	+4.5	+61	+112	+152	+145	+18	+3.4	-1.3	+82	+8.3	-0.1	-2.7	-0.3	+2.3	+0.03	+18	+1.00	+1.00	+0.92	\$182	\$367
VTME343	HBR			92%		88%	78%	98%	98%	97%	97%	97%	95%	94%	96%	69%	93%	92%	92%	93%	89%	93%	86%	96%	92%	93%	89%		
NZE19507111G183				66		19	6	45	60	9	5	4	4	44	11	97	12	26	50	86	89	44	31	55	79	56	16	68	30
VSNG34	STRATHEWEN BERKLEY G34 PV			+58		+6.1	+7.6	-6.8	+3.8	+56	+106	+141	+145	+17	+2.3	-7.5	+84	+5.7	+0.8	+0.1	+0.3	+1.5	-0.12	+30	+1.12	+1.26	+1.10	\$227	\$433
VTMB1	HBR			90%		82%	74%	95%	94%	92%	92%	92%	90%	88%	87%	67%	90%	90%	89%	90%	86%	91%	85%	89%	88%	88%	84%		
VSNE22				57		17	9	19	44	23	11	9	5	46	40	5	10	56	30	42	62	66	18	14	92	95	71	20	3
USA17236055	SYDGEN BLACK PEARL 2006 PV			+95		+2.8	+8.4	-7.4	+3.2	+51	+85	+123	+84	+21	+1.6	-3.0	+74	+8.6	+0.4	-0.3	+0.4	+2.4	+0.19	+15	+1.04	+1.18	+1.14	\$209	\$341
USA15354674	HBR			95%		98%	92%	99%	99%	99%	99%	99%	98%	99%	99%	88%	98%	97%	97%	96%	97%	97%	92%	99%	99%	99%	97%		
USA16214508				29		45	5	13	31	44	66	37	75	18	68	83	26	24	39	49	55	41	49	69	85	89	81	38	51
VTMA149	TE MANIA ADA A149 PV			+0		-6.5	-2.1	-3.6	+6.5	+53	+97	+129	+170	+10	+2.0	-2.0	+83	+3.1	-3.2	-1.8	+1.5	-0.7	-0.67	+26	+0.88	+0.76	+0.78	\$98	\$254
VTMX60	HBR			95%		97%	91%	99%	99%	99%	99%	99%	98%	98%	98%	86%	90%	90%	86%	91%	85%	89%	88%	88%	88%	86%	96%		
VTMU338				93		94	88	68	92	35	30	24	1	92	52	93	11	84	97	75	6	99	1	26	57	9	2	99	93
VTMK52	TE MANIA KALIBROOK K52 PV			+128		+7.8	+4.8	-3.3	+1.4	+52	+103	+127	+101	+30	+1.6	-5.7	+73	+2.4	+0.7	+1.8	-0.6	+5.4	+1.42	+8	+1.12	+1.08	+1.06	\$248	\$418
USA16295688	HBR			87%		77%	69%	94%	94%	91%	92%	91%	87%	81%	87%	64%	87%	86%	84%	87%	82%	88%	79%	86%	88%	88%	84%		
VTMH423				12		8	30	72	7	40	16	28	48	1	68	25	31	89	32	17	95	2	99	91	92	59	7	6	
VTMK138	TE MANIA KIRBY K138 PV			+223		+0.4	+6.7	-1.6	+4.6	+51	+89	+118	+93	+18	+2.3	-9.2	+66	+4.7	+1.5	+3.3	-1.6	+8.0	+1.06	+12	+0.84	+0.78	+0.96	\$270	\$430
USA16295688	HBR			94%		88%	79%	99%	99%	98%	98%	98%	97%	97%	98%	80%	97%	95%	95%	96%	93%	95%	87%	99%	98%	98%	97%		
VTMH17				1		65	14	90	63	42	53	47	60	38	40	1	49	68	18	6	99	1	99	80	49	11	26	2	3
VTMN424	TE MANIA NEBO N424 PV			+180		+9.7	-0.5	-7.0	+4.0	+52	+99	+126	+105	+32	+4.5	-4.6	+54	+7.2	-0.8	-3.7	+0.4	+4.2	-0.11	+47	+0.72	+0.76	+1.04	\$210	\$365
VTMJ89	HBR			93%		86%	81%	98%	98%	98%	98%	98%	96%	93%	97%	64%	94%	94%	91%	94%	87%	93%	83%	98%	92%	92%	88%		
VTMJ214				2		2	79	17	49	40	24	29	40	1	2	50	81	37	67	93	52	67	99	1	24	9	52	37	31
VTMN1387	TE MANIA NEON N1387 SV			+261		+0.2	+2.9	-6.4	+3.6	+48	+87	+108	+88	+20	+1.5	-7.9	+48	+0.8	-0.2	-1.3	-1.9	+9.2	+0.04	+27	+0.80	+0.78	+1.04	\$231	\$375
VTMK138	HBR			84%		80%	67%	98%	98%	97%	97%	95%	88%	79%	95%	57%	86%	87%	85%	87%	80%	86%	71%	97%	77%	77%	74%		
VTML452				1		66	50	24	39	57	59	69	69	26	71	3	92	95	52	67	99	1	32	23	40	11	52	17	24
VTMP888	TE MANIA PESO P888 PV			+35		+8.4	+6.2	-5.5	+1.9	+55	+113	+142	+117	+26	+1.9	-6.5	+93	+3.0	-0.4	+1.2	+0.4	+1.8	+0.04	+26	+0.84	+1.08	+0.90	\$250	\$438
VTMK226	HBR			84%		83%	73%	98%	97%	97%	97%	97%	93%	86%	92%	59%	87%	88%	87%	88%	82%	87%	82%	94%	83%	83%	80%		
VTMH423				76		6	18	36	12	25	5	8	23	4	56	13	3	85	57	24	55	58	32	25	49	74	13	7	2
Breed Average EBVs		+68.		+1.6	+2.5	-4.7	+4.0	+50	+90	+116	+100	+17	+2.1	-4.6	+66	+6.3	+0.0	-0.3	+0.5	+2.2	+0.20	+20	+0.84	+0.97	+1.03	+196	+337		

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Ident	Name													Carcase						Feed	Temp	Structural		Selection Index					
Sire	Dam	Reg.		MSA	MBL	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		
VTMQ854	TE MANIA QUEBEC Q854 <small>SV</small>			+115		+8.6	+2.4	-2.9	+1.4	+52	+92	+124	+84	+25	+1.1	-3.4	+62	+4.8	+0.8	+2.1	-0.4	+4.2	+0.61	+30	+0.84	+0.90	+0.76	\$228	\$368
USA18229488	HBR			76%		84%	66%	98%	98%	96%	97%	93%	87%	77%	95%	49%	80%	84%	82%	82%	76%	83%	66%	96%	77%	77%	73%		
VTML1244				18		5	55	77	7	37	43	34	74	7	83	77	63	66	30	14	91	9	88	16	49	32	2	20	30
VTMR970	TE MANIA RESOLUTION R970 <small>PV</small>			+78		+0.3	+4.5	-4.6	+3.4	+59	+108	+137	+102	+22	+2.2	-7.0	+80	+10.1	+0.1	-0.3	+0.9	+2.7	-0.02	+22	+0.70	+0.94	+1.14	\$276	\$439
VTMP149	HBR			69%		67%	57%	83%	85%	83%	82%	82%	80%	74%	79%	42%	70%	69%	69%	70%	62%	74%	61%	77%	66%	66%	65%		
VTMP287				41		66	33	51	35	13	8	13	46	16	44	8	15	13	46	49	25	33	26	41	21	41	81	2	2
DXTR725	TEXAS ICEMAN R725 <small>PV</small>			+75		+1.9	+3.0	-4.6	+3.3	+53	+98	+122	+96	+12	+2.2	-3.7	+74	+12.6	+2.7	+3.1	+0.4	+2.2	+0.21	+36	+1.24	+1.02	+0.72	\$232	\$380
USA18962396	HBR			75%		78%	59%	98%	98%	95%	94%	90%	85%	78%	91%	48%	80%	79%	80%	80%	74%	80%	65%	89%	78%	78%	76%		
DXTH647				44		53	49	51	33	33	27	37	56	87	44	71	27	4	6	7	55	46	51	6	98	61	1	16	21
DXTM100	TEXAS MT KAPUTAR M100 <small>PV</small>			+87		+6.4	+6.8	-10.6	+4.5	+61	+106	+146	+139	+16	+3.6	-4.3	+85	+5.3	-2.9	-4.1	+0.4	+1.9	+0.15	+32	+1.00	+1.12	+1.00	\$203	\$390
USA15848590	HBR			87%		80%	69%	97%	96%	94%	94%	94%	89%	89%	92%	61%	89%	88%	87%	88%	82%	89%	80%	93%	85%	85%	81%		
DXTZ183				34		15	13	1	60	9	11	6	7	59	9	57	9	60	95	95	55	55	44	11	79	81	39	46	16
USA18704096	THOMAS EDISON 6764 <small>PV</small>			+76		-1.0	+8.1	-0.4	+4.0	+62	+102	+137	+134	+13	+0.6	-4.6	+84	+11.9	-5.5	-8.5	+1.7	+2.6	-0.17	+20	+0.84	+0.98	+0.90	\$221	\$387
USA16933958	HBR			87%		74%	60%	94%	92%	91%	91%	91%	87%	84%	86%	52%	88%	87%	86%	86%	77%	89%	78%	82%	89%	87%	74%		
USA18048451				43		74	6	96	49	7	17	13	9	76	92	50	10	6	99	99	4	36	14	47	49	51	13	25	17
DBLL292	TOPBOS LEADING EDGE L292 <small>PV</small>			+35		+0.9	+7.7	-6.2	+6.7	+73	+125	+163	+149	+21	+1.4	-4.3	+83	+4.3	-2.4	-5.2	+0.3	+1.3	+0.00	+22	+0.94	+0.76	+0.78	\$226	\$413
USA16295688	HBR			90%		87%	73%	98%	98%	97%	97%	97%	95%	95%	96%	68%	93%	91%	90%	92%	87%	92%	86%	97%	92%	91%	87%		
VSNF04				76		61	8	26	93	1	1	1	4	19	74	57	10	72	92	98	62	72	28	40	69	9	2	21	7
NZE17691009	TURIHAUA CRUMP E5 <small>SV</small>			+18		-0.8	-0.9	-6.3	+3.2	+28	+58	+82	+91	+15	+1.2	-9.9	+16	-0.5	+5.0	+3.4	-0.3	+1.4	+0.43	+33	+0.68	+1.22	+1.20	\$133	\$265
NZE17691003Y167	HBR			93%		93%	85%	97%	98%	98%	98%	98%	97%	97%	97%	97%	89%	95%	95%	95%	93%	95%	88%	90%	84%	84%	78%		
NZE17691195Q263				86		73	82	25	31	99	99	97	64	67	80	1	99	98	1	6	89	69	75	10	18	93	91	95	91
USA18066037	V A R LEGEND 5019 <small>SV</small>			+91		-3.1	+5.3	-6.6	+5.2	+68	+122	+147	+160	+9	+2.8	-4.7	+87	+10.3	-4.0	-6.4	+1.4	+2.3	-0.28	+20	+1.04	+0.68	+0.88	\$224	\$413
USA17262835	HBR			87%		79%	67%	96%	96%	94%	94%	93%	90%	87%	89%	59%	90%	88%	87%	87%	80%	90%	79%	89%	97%	96%	81%		
USA16924432				32		84	26	21	75	2	1	5	2	96	24	48	7	12	99	99	8	44	9	48	85	3	9	23	7
NZE18954020	WAITANGI R257 <small>PV</small>			+176		+1.2	-1.0	-7.3	+3.6	+53	+92	+126	+103	+27	+3.3	-7.0	+67	+9.2	+0.0	-1.3	+0.0	+5.3	+1.27	+22	+0.82	+0.74	+0.92	\$241	\$392
NZE21159016327	HBR			73%		67%	58%	83%	90%	89%	88%	86%	83%	76%	84%	45%	76%	75%	76%	77%	63%	74%	71%	71%	63%	63%			
NZE18954118P105				3		59	82	14	39	34	43	29	44	3	13	8	48	19	48	67	78	3	99	38	44	7	16	11	15
BSCF73	WAITARA PIO FEDERAL F73 <small>SV</small>			+24		+4.8	+4.9	-4.7	+1.6	+56	+102	+133	+87	+25	+2.5	-2.9	+87	+5.4	-0.2	-0.2	+0.2	+1.5	+0.30	+12	+1.40	+1.26	+0.94	\$216	\$358
USA15688392	HBR			93%		90%	76%	98%	98%	97%	98%	97%	96%	96%	97%	70%	95%	94%	93%	94%	89%	94%	88%	96%	95%	95%	92%		
BSCZ66				83		27	29	50	9	24	17	18	70	6	33	85	7	59	52	47	67	66	62	81	99	95	21	30	37
BSCP90	WAITARA PRINCETON P90 <small>PV</small>			+43		+0.3	+4.2	-2.6	+3.7	+48	+94	+122	+75	+24	+2.2	-3.8	+77	+7.5	+0.3	+0.7	-0.3	+2.9	+0.63	+34	+0.62	+0.78	+0.96	\$207	\$332
GTNM6	HBR			77%		73%	60%	96%	95%	94%	94%	93%	87%	80%	91%	51%	81%	82%	82%	82%	76%	83%	80%	92%	90%	90%	86%		
BSCJ2				70		66	37	81	42	60	38	37	85	8	44	69	22	34	41	31	89	29	89	9	11	11	26	41	58
LEJ21S102	WALLAWONG SAFE & SOUND			+99		+4.4	+3.6	-4.1	+4.2	+45	+81	+104	+110	+12	+2.1	-2.3	+51	+3.9	-0.5	-1.2	+0.4	+2.9	+0.39	+14	-	-	-	\$154	\$297
NJWN498	HBR			60%		61%	52%	70%	71%	72%	70%	70%	68%	63%	68%	40%	62%	61%	62%	62%	57%	64%	53%	65%	-	-	-		
ASHL24				26		31	43	60	53	73	76	77	34	86	48	91	87	76	60	65	55	29	71	71	-	-	88	80	
QKBP29	WARRAWEE PATROL P29 <small>PV</small>			+38		+7.6	+11.5	-12.4	+2.6	+55	+104	+137	+125	+19	+2.3	-9.3	+102	+9.4	+3.6	+2.2	+0.3	+1.7	+0.71	+26	+0.80	+1.22	+1.02	\$270	\$478
SMPG357	HBR			84%		78%	69%	94%	92%	91%	90%	89%	87%	81%	87%	63%	85%	84%	84%	85%	78%	86%	77%	87%	77%	78%	73%		
QKBM01				73		9	1	1	20	27	14	13	16	33	40	1	1	18	3	13	62	61	92	26	40	93	46	2	1
Breed Average EBVs		+68.	+1.6	+2.5	-4.7	+4.0	+50	+90	+116	+100	+17	+2.1	-4.6	+66	+6.3	+0.0	-0.3	+0.5	+2.2	+0.20	+20	+0.84	+0.97	+1.03	+196	+337			

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Ident	Name					Performance Traits														Structural			Selection Index						
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
NWPG188	WATTLETOP FRANKLIN G188 SV			+10		+4.8	+6.3	-4.7	+2.3	+63	+108	+140	+119	+25	+3.8	-3.4	+81	+1.4	-1.4	-1.9	-0.2	+0.5	-1.16	+32	+1.08	+0.96	+0.94	\$187	\$354
USA15462648		HBR		93%		95%	86%	99%	99%	98%	98%	98%	97%	97%	98%	75%	96%	94%	95%	95%	92%	94%	88%	97%	96%	96%	94%		
NWPE295				90		27	17	50	16	6	9	11	21	6	6	77	13	93	79	76	85	88	1	11	89	46	21	62	40
CWDJ17	WEATHERLY JAMES J17 SV			+122		-2.8	-3.8	-3.8	+6.0	+49	+83	+110	+115	+2	+1.5	-4.0	+66	+8.7	+1.5	+2.7	+1.0	+3.2	-0.04	+5	+0.84	+1.18	+1.00	\$198	\$333
BNAD145		HBR		90%		79%	71%	93%	93%	92%	91%	92%	89%	86%	86%	66%	90%	89%	89%	90%	85%	91%	84%	87%	87%	86%	80%		
CWDF14				15		83	93	65	87	54	70	65	26	99	71	65	50	23	18	9	21	23	24	95	49	89	39	51	57
CWDM5	WEATHERLY MOXY M5 SV			+37		+4.2	+7.4	-5.5	+3.9	+54	+96	+128	+105	+28	+2.4	-5.6	+88	+7.9	+2.7	-0.2	+0.7	+1.8	+0.14	+28	+0.96	+1.06	+1.00	\$231	\$393
SMPG357		HBR		78%		77%	67%	91%	95%	93%	93%	93%	91%	86%	87%	59%	83%	81%	82%	82%	77%	82%	71%	88%	88%	88%	74%		
CWDJ15				74		32	10	36	46	29	32	26	40	2	37	27	6	30	6	47	36	58	43	20	73	70	39	17	14
Breed Average EBVs				+68.		+1.6	+2.5	-4.7	+4.0	+50	+90	+116	+100	+17	+2.1	-4.6	+66	+6.3	+0.0	-0.3	+0.5	+2.2	+0.20	+20	+0.84	+0.97	+1.03	+196	+337

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