



TransTasman Angus Cattle Evaluation

MSA Marbling

RESEARCH BREEDING VALUES

JUNE 2023

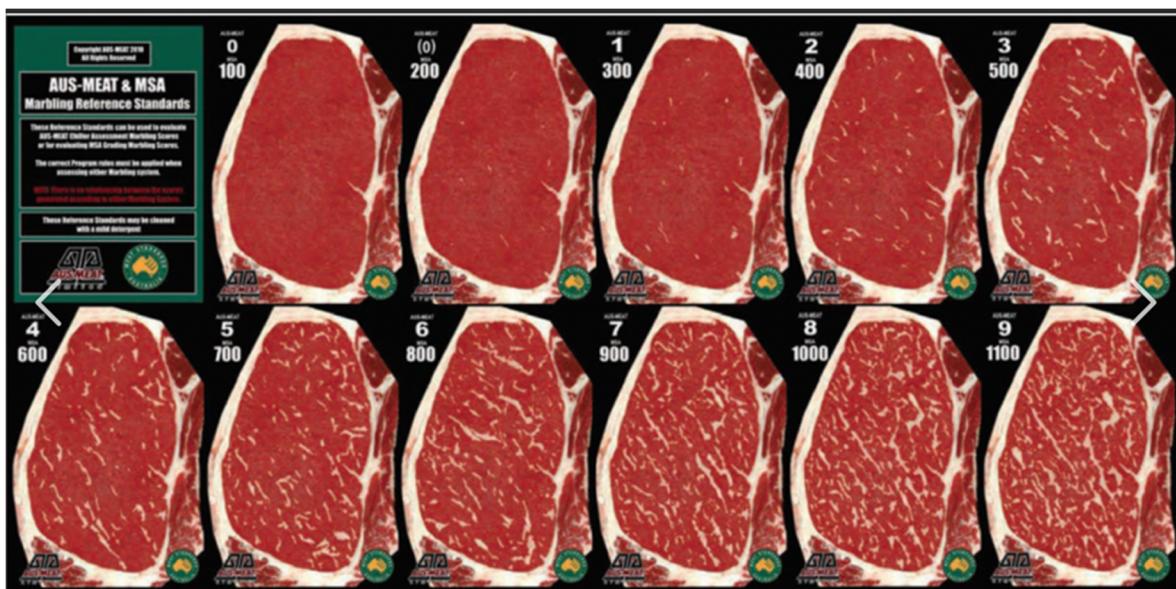
BACKGROUND

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					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	
NXOL172	AJC L172 ^{SV}			+55	+6.3	+7.3	-7.9	+3.1	+61	+106	+150	+136	+13	+2.0	-4.4	+77	+5.9	-0.6	-0.3	+0.2	+1.3	-0.97	+26	+1.40	+1.28	+1.24	\$218	\$405	
NXOF43		APR		89%	73%	55%	93%	95%	94%	93%	93%	85%	83%	79%	52%	90%	87%	82%	88%	80%	89%	81%	82%	85%	85%	81%			
NXOJ432				60	20	10	10	29	9	11	5	7	81	52	57	19	53	62	49	66	72	1	23	99	96	95	29	10	
NXOL99	AJC L99 ^{PV}			+83	+6.5	+0.2	-5.2	+5.4	+63	+112	+147	+122	+22	+3.3	-7.1	+100	+9.2	-1.5	+0.9	+0.6	+2.2	-0.57	+13	+1.26	+1.12	+0.96	\$274	\$458	
USA16073564		APR		91%	81%	69%	96%	97%	96%	96%	96%	90%	90%	90%	55%	92%	90%	89%	90%	79%	91%	84%	88%	90%	91%	87%			
NXOJ12				36	19	76	42	78	7	6	6	18	14	12	5	1	18	81	27	40	46	1	84	99	81	25	1	1	
DGJG10	ALLOURA GET CRACKING G10 ^{SV}			+184	+9.9	+8.8	-3.5	+2.5	+43	+74	+86	+74	+13	-0.3	-8.3	+47	+16.1	+1.5	-0.2	+1.1	+5.4	+0.54	-3	+0.50	+1.00	+0.94	\$282	\$436	
VTMB1		HBR		92%	93%	81%	99%	98%	98%	98%	98%	97%	97%	97%	74%	95%	93%	94%	94%	89%	92%	87%	96%	96%	95%	93%			
DGJZ15				2	3	4	70	18	81	89	96	87	84	99	1	93	1	17	47	14	2	88	99	3	57	20	1	3	
DGJL94	ALLOURA LOCK STOCK &			+72	+6.7	+4.4	-4.8	+2.8	+54	+87	+114	+108	+12	+0.8	-4.9	+61	+0.6	+1.3	-1.6	+0.3	+2.3	-0.36	+19	+0.94	+0.86	+0.92	\$198	\$353	
USA15832750		HBR		84%	73%	59%	93%	95%	93%	93%	93%	88%	80%	86%	50%	86%	81%	77%	82%	74%	84%	73%	86%	84%	82%	76%			
DGJH24				45	17	35	49	23	33	60	57	36	85	90	42	67	97	20	72	60	43	4	52	70	23	16	53	43	
DGJQ30	ALLOURA QUINELLA Q30 ^{SV}			+162	+4.2	+3.4	-0.9	+2.3	+51	+94	+111	+109	+17	+3.4	-7.8	+66	+13.2	+0.9	+0.9	+0.9	+4.6	+0.29	+16	+1.04	+1.08	+1.12	\$269	\$443	
WWEL3		HBR		68%	72%	60%	92%	89%	84%	79%	81%	78%	70%	76%	50%	73%	67%	69%	70%	64%	71%	62%	69%	70%	70%	69%			
DGJK117				3	38	46	95	16	46	40	63	34	54	11	2	51	3	27	27	23	5	65	72	85	74	76	2	2	
WJMF96	ARDCAIRNIE F96 ^{SV}			+24	+5.6	+4.0	-5.0	+3.0	+49	+89	+122	+91	+15	+1.8	-4.0	+68	+7.4	-1.3	-0.8	+1.2	+0.6	-0.31	+9	+0.48	+0.82	+0.92	\$204	\$346	
WJMB59		HBR		88%	88%	76%	98%	98%	97%	97%	97%	95%	95%	96%	63%	92%	90%	91%	91%	86%	91%	79%	88%	87%	87%	82%			
WJMD25				85	26	39	45	27	54	53	38	65	70	60	68	43	35	77	58	11	88	6	93	2	16	16	46	49	
WJMJ27	ARDCAIRNIE J27 ^{SV}			+16	+7.9	+9.7	-8.7	+2.7	+57	+100	+139	+130	+9	+0.4	-4.5	+97	+2.2	+2.2	+1.2	-0.1	+1.1	+0.29	+1	+0.88	+1.06	+1.18	\$205	\$390	
USA15354674		HBR		91%	81%	69%	96%	96%	95%	96%	96%	92%	90%	92%	63%	92%	91%	90%	91%	87%	92%	85%	83%	87%	87%	82%			
WJMG96				90	10	2	6	21	20	23	12	11	97	96	54	2	91	10	23	81	77	65	99	58	71	88	45	16	
WJMM117	ARDCAIRNIE M117 ^{SV}			+18	+6.0	+3.9	-6.3	+3.7	+58	+101	+133	+129	+1	+2.7	-5.0	+78	+11.4	-0.7	-2.0	+1.7	+0.3	-0.13	+20	+0.90	+1.00	+0.88	\$226	\$406	
WJMF96		HBR		80%	73%	60%	92%	95%	94%	93%	93%	86%	81%	89%	54%	84%	83%	83%	83%	76%	84%	72%	75%	80%	81%	76%			
WJMG78				88	23	40	25	41	17	20	19	11	99	26	39	18	7	64	78	3	92	15	50	62	57	9	22	9	
NAQA241	ARDROSSAN EQUATOR A241 ^{PV}			+23	-1.1	+2.2	-4.9	+4.1	+50	+91	+121	+108	+20	+3.1	-8.2	+85	+8.7	-1.7	-0.6	+1.3	+1.4	+0.52	+25	+0.46	+0.84	+1.00	\$225	\$380	
USA2928		HBR		98%	99%	97%	99%	99%	99%	99%	99%	99%	99%	99%	95%	98%	98%	98%	98%	98%	98%	96%	99%	99%	99%	99%			
NAQW38				86	78	58	47	50	53	48	41	36	25	16	1	7	22	84	55	9	69	86	25	2	20	38	23	22	
NAQN329	ARDROSSAN HOLBROOK N329			+77	-0.9	-2.5	-3.3	+3.2	+52	+96	+121	+90	+23	+3.1	-6.4	+75	+6.2	+2.0	+2.2	-1.0	+4.6	+1.01	+13	+0.78	+0.98	+0.98	\$222	\$360	
NAQH318		HBR		87%	69%	55%	96%	94%	94%	93%	91%	85%	73%	78%	50%	88%	87%	86%	87%	78%	89%	79%	79%	81%	87%	83%			
NAQK30				40	77	90	73	30	42	34	41	66	12	16	11	23	49	11	12	99	5	99	84	36	52	31	26	38	
NAQH255	ARDROSSAN HONOUR H255 ^{PV}			+49	-0.6	-1.2	-3.1	+4.6	+44	+74	+98	+93	+14	+2.1	-7.2	+61	+5.9	+1.1	-0.9	+0.5	+2.4	+0.94	+6	+0.42	+1.02	+1.24	\$181	\$311	
NORE11		HBR		94%	95%	86%	99%	99%	98%	98%	98%	98%	98%	98%	98%	93%	95%	96%	96%	94%	96%	91%	97%	97%	97%	95%			
NAQD17				65	75	85	76	62	78	90	85	63	77	48	4	67	53	24	60	47	41	99	97	1	62	95	70	74	
NAQQ67	ARDROSSAN NECTAR Q67 ^{PV}			+84	+4.9	+3.3	-11.2	+4.0	+56	+101	+135	+116	+16	+2.7	-5.4	+62	+7.8	+0.3	-0.3	+0.1	+3.2	-0.06	+34	+0.34	+0.84	+1.10	\$233	\$402	
NMMN334		HBR		63%	67%	52%	90%	91%	81%	77%	79%	75%	65%	75%	42%	68%	63%	65%	66%	59%	67%	55%	55%	64%	71%	68%			
NAQL96				34	32	47	1	48	23	20	17	24	57	26	29	64	30	40	49	72	22	21	7	1	20	70	16	11	
QQFH147	ASCOT HALLMARK H147 ^{PV}			+87	-5.9	+3.5	-5.2	+7.4	+60	+109	+152	+131	+15	+3.6	-5.9	+85	-2.4	+0.7	+0.6	-0.8	+2.6	+0.51	+14	+0.44	+0.80	+1.02	\$189	\$347	
VTME343		HBR		93%	94%	83%	98%	99%	98%	98%	98%	97%	97%	98%	76%	96%	94%	95%	95%	93%	95%	87%	97%	95%	95%	92%			
NMMF123				33	94	45	42	97	12	9	4	10	68	8	18	8	99	31	33	97	35	86	77	2	13	45	62	48	
Breed Average EBVs		+68.	+2.2	+2.6	-4.8	+4.1	+50	+90	+117	+100	+17	+2.1	-4.6	+66	+6.3	-0.1	-0.3	+0.5	+2.2	+0.19	+20	+0.84	+0.97	+1.03	+197	+339			

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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	
HIOE7	AYRVALE BARTEL E7 PV			+132		+10.1	+10.6	-5.1	+1.7	+49	+86	+111	+71	+26	+2.5	-7.9	+67	+8.2	-0.4	+1.0	+1.1	+3.6	+0.44	+2	+1.00	+1.00	+1.12 \$287 \$444	
VTMB219		HBR		97%		99%	96%	99%	99%	99%	99%	99%	99%	99%	93%	98%	98%	98%	98%	98%	95%	99%	99%	99%	98%			
BVVB32				10		3	1	44	10	56	65	63	90	4	33	2	48	27	57	26	14	15	80	99	79	57	76	1 2
HIOG11	AYRVALE GENETIC G11 PV			+51		-4.2	-16.3	-5.7	+5.1	+66	+118	+163	+142	+19	+1.8	-5.6	+83	-0.3	-3.4	-2.1	-0.4	+2.3	-0.25	+36	+1.08	+1.04 +1.14 \$191 \$342		
SEWD138		HBR		89%		87%	76%	98%	98%	97%	97%	97%	96%	95%	94%	59%	92%	89%	90%	91%	85%	91%	80%	87%	87%	88% 82%		
HIOE2				63		90	99	34	72	3	2	1	5	35	60	24	10	98	98	80	91	43	8	6	89	66 81 61 53		
NBBN47	BALD BLAIR NELSON N47 PV			-4		+4.9	-0.4	-5.5	+4.4	+58	+108	+159	+156	+20	+1.1	-3.7	+89	+5.0	-1.1	-1.4	+0.8	+0.6	-0.29	+29	+1.02	+1.14 +1.16 \$186 \$370		
HIOG18		HBR		85%		73%	60%	95%	94%	92%	92%	91%	88%	79%	88%	53%	87%	85%	85%	86%	78%	87%	78%	85%	85%	85% 81%		
NBBL83				96		32	80	37	57	18	10	2	2	27	84	76	5	65	73	69	28	88	6	16	82	84 85 65 30		
ECMM114	BANNABY BERKLEY M114 SV			+73		+4.0	+5.1	-10.6	+4.4	+61	+100	+146	+171	+5	+4.6	-8.8	+73	+3.0	-0.6	-3.5	+0.3	+1.9	-0.16	+25	+0.82	+0.74 +1.14 \$201 \$417		
VTMB1		HBR		83%		74%	65%	95%	93%	90%	91%	92%	84%	74%	86%	63%	84%	84%	84%	84%	78%	85%	75%	78%	87%	87% 83%		
BBAZ107				44		40	28	2	57	9	22	6	1	99	2	1	31	86	62	93	60	55	13	27	45	7 81 49 6		
ECMK63	BANNABY REALITY K63 PV			+10		+5.1	+3.1	-3.4	+3.7	+45	+78	+102	+106	+12	+1.8	-1.7	+52	+6.0	-0.5	-1.2	+0.6	+1.1	-0.16	+39	+0.58	+1.04 +1.18 \$136 \$271		
NZE14647008839		HBR		89%		76%	64%	96%	96%	92%	91%	92%	86%	78%	81%	59%	89%	88%	87%	88%	83%	90%	82%	83%	85%	85% 81%		
ECMH45				92		30	49	72	41	74	83	81	40	86	60	97	87	52	60	66	40	77	13	3	7	66 88 94 90		
ECMN187	BANNABY REALITY N187 SV			+117		+8.7	+6.8	-7.1	+3.7	+47	+75	+91	+82	+10	+4.0	-7.2	+54	+8.1	+2.5	+3.1	+0.1	+3.4	+0.44	+7	+0.82	+1.16 +1.42 \$233 \$387		
NZE14647008839		HBR		86%		73%	64%	94%	92%	90%	91%	91%	85%	74%	87%	60%	86%	86%	85%	86%	79%	88%	78%	82%	82%	87% 84%		
ECMF113				15		7	13	16	41	63	88	93	78	95	4	4	82	27	7	6	72	19	80	96	45	87 99 16 18		
VONG272	BANQUET GARRETT G272 SV			+112		-1.0	+4.6	-1.8	+6.4	+54	+98	+145	+147	+18	+4.7	-1.0	+56	+2.0	-2.6	-3.9	+0.3	+2.2	-0.79	+31	+0.56	+1.04 +1.10 \$125 \$282		
VOND412		HBR		85%		76%	60%	94%	96%	93%	94%	94%	88%	85%	90%	55%	88%	87%	87%	87%	79%	85%	78%	83%	87%	87% 81%		
VONC368				18		78	33	89	91	32	27	7	3	39	2	98	79	92	94	95	60	46	1	11	6	66 70 96 86		
VONN462	BANQUET NUTTELLA N462 PV			+15		-3.3	+2.6	-5.2	+6.1	+53	+100	+127	+96	+22	+3.3	-4.3	+70	+2.9	+0.6	+0.4	-0.1	+1.3	-0.01	+59	+0.58	+0.86 +0.98 \$180 \$310		
VONJ507		HBR		65%		68%	50%	94%	96%	91%	91%	89%	81%	69%	86%	42%	75%	71%	73%	73%	67%	72%	55%	86%	56%	56% 51%		
VONK244				90		88	54	42	88	37	23	28	57	13	12	60	37	87	34	36	81	72	26	1	7	23 31 71 74		
NBNN239	BEN NEVIS NEWSFLASH N239 PV			+17		-0.2	+5.2	-5.5	+4.5	+56	+98	+130	+116	+22	+0.9	-3.5	+82	+7.2	-1.5	-1.3	+0.8	+1.3	+0.06	+10	+1.04	+1.06 +0.96 \$195 \$342		
USA16956101		HBR		73%		78%	61%	97%	97%	95%	96%	96%	90%	82%	91%	50%	81%	82%	81%	81%	76%	80%	61%	89%	91%	90% 86%		
NBNH215				89		73	27	37	60	22	28	24	24	17	89	80	11	37	81	67	28	72	34	91	85	71 25 56 52		
NGXQ227	BONGONGO BE QUICK Q227 PV			+191		+1.3	-1.6	-4.9	+3.8	+59	+103	+127	+77	+23	+4.0	-5.3	+72	+14.4	+1.5	+3.3	-0.1	+6.2	+0.70	+24	+0.54	+0.92 +1.06 \$293 \$431		
VLYM518		HBR		68%		71%	58%	94%	92%	85%	83%	81%	79%	68%	73%	48%	73%	70%	72%	72%	67%	72%	60%	57%	70%	70% 70%		
NGXN221				1		63	87	47	44	14	16	29	84	10	4	32	33	2	17	5	81	1	95	32	5	37 58 1 3		
NGXP212	BONGONGO P212 SV			+135		+5.9	+8.3	-6.9	+3.0	+51	+92	+118	+101	+23	+3.7	-7.2	+60	+3.3	+2.8	+2.2	-0.9	+4.3	+0.71	+7	+0.88	+0.94 +1.04 \$230 \$400		
NORL508		HBR		72%		73%	59%	95%	95%	93%	92%	90%	84%	71%	83%	51%	77%	79%	79%	79%	74%	78%	62%	82%	69%	69% 68%		
NGXL13				9		23	5	18	27	47	44	47	47	10	7	4	70	84	5	12	98	8	95	96	58	42 51 18 11		
NGXP421	BONGONGO P421 SV			+104		+9.4	+6.4	-6.7	+1.9	+57	+96	+120	+79	+23	+2.9	-6.3	+66	+10.4	+1.6	+0.9	+0.3	+3.2	+0.85	+20	+1.08	+1.02 +1.10 \$273 \$430		
USA18229425		APR		67%		70%	55%	92%	91%	87%	85%	82%	79%	68%	80%	46%	73%	70%	73%	72%	67%	72%	57%	77%	70%	70% 65%		
NGXM413				22		4	16	21	11	19	34	44	82	9	21	12	52	11	16	27	60	22	98	49	89	62 70 1 3		
NUIF32	BONNY BROOKE FALCO F32 SV			+43		-7.1	-5.4	+0.1	+6.4	+51	+80	+111	+98	+19	-0.1	-3.4	+65	-1.9	+4.0	+4.1	-1.3	+2.1	-0.45	+6	+1.04	+0.92 +1.10 \$129 \$228		
NGMC196		HBR		80%		63%	48%	90%	88%	89%	88%	89%	81%	71%	67%	50%	83%	80%	81%	82%	72%	79%	70%	77%	79%	79% 74%		
NUID96				71		96	97	98	91	43	79	64	53	34	99	82	53	99	2	3	99	49	2	97	85	37 70 96 97		
Breed Average EBVs		+68.		+2.2	+2.6	-4.8	+4.1	+50	+90	+117	+100	+17	+2.1	-4.6	+66	+6.3	-0.1	-0.3	+0.5	+2.2	+0.19	+20	+0.84	+0.97	+1.03 +1.07 +339			

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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			
HCAG013	BOONAROO GRAVITY G013 PV	+108		+5.9	+1.1	-5.8	+3.4	+50	+88	+116	+107	+26	+3.8	-6.8	+57	+4.9	-2.9	-3.0	+1.2	+2.8	-0.50	+11	+0.46	+0.92	+1.08	\$217	\$376	
VTMA217	HBR	89%		88%	79%	98%	98%	97%	97%	97%	94%	94%	96%	70%	92%	91%	91%	91%	86%	90%	83%	93%	93%	94%	91%			
VTMZ618		19		23	69	33	34	53	56	53	38	3	6	7	78	66	96	89	11	31	2	88	2	37	65	31	25	
HCAN20	BOONAROO KASBAH N20 SV	+42		+6.6	+4.2	-6.3	+4.8	+47	+86	+111	+97	+19	+3.0	-5.3	+59	+5.7	+0.4	-0.8	+0.7	+1.5	+0.63	+7	+0.92	+0.94	+1.02	\$195	\$345	
VTMK338	HBR	87%		69%	52%	93%	95%	91%	91%	87%	82%	71%	82%	44%	87%	86%	86%	86%	87%	77%	89%	80%	86%	89%	88%	82%		
HCAL54		71		18	37	25	66	66	65	63	55	33	18	32	73	56	38	58	34	67	93	96	66	42	45	57	49	
NGME124	BOOROOMOOKA INSPIRED E124	+45		-5.9	+0.8	-6.6	+3.7	+46	+82	+107	+98	+14	+0.9	-8.0	+78	+3.5	-0.3	+3.3	-0.4	+2.4	+0.71	+24	+0.80	+0.84	+0.78	\$187	\$318	
NAQA241	HBR	94%		96%	90%	99%	99%	98%	98%	98%	98%	98%	98%	82%	96%	95%	96%	96%	94%	95%	88%	98%	97%	97%	96%			
NGMB325		69		94	71	22	41	70	74	71	53	75	89	1	17	82	55	5	91	41	95	30	40	20	2	64	70	
NGMN418	BOOROOMOOKA JACKPOT N418	+58		+2.9	+4.7	-8.8	+5.6	+61	+109	+139	+127	+12	+3.2	-7.3	+85	+10.8	+0.8	+2.2	+0.8	+1.9	+0.17	+26	+1.36	+1.08	+1.00	\$271	\$458	
WWEL3	HBR	82%		74%	61%	94%	96%	94%	94%	94%	91%	80%	91%	53%	85%	84%	84%	85%	78%	85%	76%	95%	90%	90%	84%			
NGML471		57		50	32	5	81	10	8	12	13	88	14	4	8	9	29	12	28	55	49	25	99	74	38	2	1	
NGMK9	BOOROOMOOKA KINGY K9 PV	+126		-5.3	-7.6	-2.2	+6.6	+49	+86	+121	+112	+19	+3.1	-7.1	+67	+8.7	+0.8	-0.5	+0.4	+4.5	+0.51	+12	+0.70	+0.92	+0.88	\$204	\$336	
BNAD145	HBR	89%		87%	78%	97%	98%	97%	97%	97%	96%	95%	95%	69%	92%	90%	91%	91%	88%	91%	82%	97%	95%	95%	90%			
NGMA281		11		93	99	86	92	53	65	41	30	32	16	5	47	22	29	53	53	6	86	85	21	37	9	47	57	
NGMN213	BOOROOMOOKA NORMANDY	+122		+11.7	+8.7	-8.2	+1.0	+39	+72	+99	+75	+25	+3.1	-7.3	+49	+2.5	-2.1	-2.3	+0.2	+3.6	+0.92	+38	+0.82	+0.70	+1.02	\$199	\$344	
NGML201	HBR	84%		69%	52%	93%	96%	94%	94%	94%	91%	79%	91%	47%	86%	85%	84%	85%	76%	87%	74%	94%	91%	91%	84%			
NGML45		13		1	4	8	5	91	91	84	86	5	16	4	92	89	89	82	66	15	99	3	45	4	45	52	51	
NGMP96	BOOROOMOOKA PARAGON P96	+79		-0.3	+2.8	-7.5	+3.9	+60	+123	+160	+124	+31	+3.3	-8.3	+110	+12.2	-1.2	+0.1	+1.0	+3.0	+0.52	+40	+0.96	+1.02	+1.18	\$297	\$483	
WWEL3	HBR	74%		80%	64%	97%	98%	97%	96%	96%	88%	75%	95%	55%	80%	80%	81%	80%	75%	79%	65%	97%	88%	86%	84%			
NGMM566		39		74	52	13	46	11	1	2	15	1	12	1	1	5	75	41	18	26	86	3	73	62	88	1	1	
NGMP22	BOOROOMOOKA PRESIDENT	+76		-0.4	+0.8	-7.0	+4.9	+54	+95	+127	+112	+21	+2.0	-6.9	+70	+8.1	+1.0	+0.6	+0.3	+2.9	+0.29	+19	+0.48	+0.66	+0.72	\$228	\$383	
NGMK9	HBR	69%		71%	55%	96%	95%	92%	92%	92%	84%	71%	83%	47%	77%	72%	75%	74%	69%	73%	60%	91%	71%	71%	69%			
NGMK640		41		74	71	17	68	31	36	29	30	20	52	6	38	27	25	33	60	28	65	56	2	3	1	20	21	
NGMQ5	BOOROOMOOKA QUALITY Q5 SV	+150		+4.4	+5.5	-5.9	+3.7	+58	+109	+147	+145	+18	+2.5	-5.5	+85	-2.1	+1.5	+2.3	-1.8	+5.3	+0.37	+29	+0.72	+0.90	+1.00	\$211	\$405	
NORL519	HBR	66%		70%	58%	86%	84%	78%	75%	77%	75%	69%	75%	50%	69%	66%	68%	68%	63%	69%	59%	64%	74%	74%	71%			
NGMK720		5		36	24	31	41	18	8	6	4	44	33	27	8	99	17	11	99	2	74	15	24	32	38	10		
BOWK2	BOWMAN AUSTRALIA K2 PV	+56		+5.6	+3.0	-6.9	+3.8	+48	+94	+121	+98	+20	+4.5	-7.8	+68	+7.3	+0.3	-1.4	+0.9	+1.2	-0.49	+30	+0.82	+0.98	+0.90	\$222	\$385	
VTME343	HBR	86%		75%	70%	92%	89%	88%	88%	88%	83%	79%	76%	65%	86%	86%	86%	86%	81%	84%	84%	81%	84%	84%	81%			
NAQZ31		59		26	50	18	44	61	39	41	54	28	2	2	44	36	40	69	23	75	2	13	45	52	12	26	19	
SRKK306	BOWMONT KING K306 PV	+170		-1.4	-9.4	-5.6	+4.7	+52	+82	+107	+89	-1	-0.1	-5.3	+69	+15.2	-0.6	-1.9	+1.7	+5.0	+0.57	+29	+0.54	+0.92	+0.76	\$253	\$371	
NJWG279	HBR	91%		85%	73%	97%	97%	97%	97%	97%	94%	92%	95%	66%	93%	92%	91%	92%	89%	93%	84%	94%	90%	91%	87%			
TFAD58		3		80	99	36	64	42	73	72	68	99	99	32	41	1	62	77	3	3	90	15	5	37	1	5	29	
BONQ007	BRIDGEWATER QUANTUM Q007	+61		-2.4	-1.3	-6.2	+5.4	+63	+99	+130	+98	+21	+0.1	-6.5	+82	+7.3	-0.4	-1.8	+0.3	+2.8	+0.03	+30	+0.98	+0.82	+1.06	\$244	\$379	
QMUM13	HBR	68%		72%	59%	92%	91%	88%	84%	84%	80%	69%	76%	47%	74%	69%	72%	66%	72%	61%	82%	70%	70%	68%				
HIOL28		54		84	85	27	78	6	25	23	53	22	98	10	11	36	57	76	60	31	30	14	77	16	58	9	23	
AMQH64	BROOKLANA HI TOWER H64 PV	+20		-6.8	-2.7	+0.9	+5.7	+51	+100	+141	+130	+19	+1.5	-3.2	+81	+5.2	+1.6	+0.9	+0.5	+1.4	+0.64	+29	+0.64	+0.94	+1.04	\$156	\$292	
VTME343	HBR	87%		76%	67%	93%	91%	89%	89%	90%	84%	76%	76%	62%	87%	86%	86%	87%	79%	88%	80%	80%	84%	84%	78%			
AMQF27		87		95	91	99	83	47	23	10	11	37	72	85	12	63	16	27	47	69	93	16	13	42	51	87	83	
Breed Average EBVs		+68.		+2.2	+2.6	-4.8	+4.1	+50	+90	+117	+100	+17	+2.1	-4.6	+66	+6.3	-0.1	-0.3	+0.5	+2.2	+0.19	+20	+0.84	+0.97	+1.03	+197	+339	

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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					
				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	
QBUG49	BURENDA GEIGER COUNTER			+132	+9.7	+10.0	-7.6	+2.3	+38	+80	+103	+82	+18	+2.2	-8.6	+59	+2.7	+0.9	-1.4	+0.1	+4.0	+0.13	+31	+0.98	+1.18	+0.96	\$222	\$383	
VTMB1	HBR			89%	84%	73%	96%	97%	95%	96%	94%	94%	93%	94%	68%	91%	90%	90%	91%	85%	89%	83%	95%	85%	85%	81%			
QBU5		9		3	1	12	16	92	80	79	78	40	44	1	71	88	27	69	72	10	43	12	77	89	25	26	20		
GTNM3	CHILTERN PARK MARBLES M3			+89	+3.7	-4.3	-6.1	+2.5	+41	+76	+93	+57	+27	+3.3	-6.8	+55	+4.1	-0.1	-3.0	+0.2	+3.6	-0.11	+11	+0.50	+1.08	+1.14	\$194	\$304	
NORE11	HBR			89%	81%	71%	96%	96%	96%	96%	96%	90%	86%	90%	66%	91%	89%	85%	90%	83%	91%	83%	88%	93%	93%	90%			
GTNJ4		31		42	95	28	18	85	87	90	97	2	12	7	81	76	50	89	66	15	16	88	3	74	81	57	78		
GTNM6	CHILTERN PARK MOE M6 PV			+20	+6.5	+3.3	-1.8	+3.0	+53	+102	+134	+82	+24	+1.6	-6.4	+80	+6.8	-0.3	+1.3	+0.2	+1.9	+0.20	+47	+0.72	+0.98	+1.06	\$258	\$410	
VTMF734	HBR			88%	92%	74%	99%	99%	98%	98%	98%	94%	92%	98%	60%	92%	91%	90%	91%	84%	91%	80%	98%	97%	97%	95%			
VSNF15		87		19	47	89	27	37	19	17	78	6	68	11	14	42	55	22	66	55	53	1	24	52	58	4	8		
GTNP9	CHILTERN PARK PICASSO P9 PV			+123	+9.0	+5.9	-3.5	+1.6	+57	+103	+134	+97	+22	+3.5	-7.5	+98	+7.8	-0.7	+1.1	-0.4	+4.6	+0.50	+35	+0.76	+0.70	+0.84	\$278	\$455	
HKFJ5	HBR			82%	76%	63%	97%	97%	92%	93%	92%	85%	72%	87%	54%	84%	82%	83%	83%	77%	85%	72%	75%	78%	80%	76%			
GTNK26		13		6	20	70	9	19	16	17	55	15	9	3	1	30	64	24	91	5	85	7	32	4	5	1	1		
GTNQ322	CHILTERN PARK QUADRANT			+87	+6.1	+3.7	-2.5	+3.7	+68	+123	+154	+114	+17	+4.5	-5.3	+96	+12.0	-0.7	-1.2	+0.4	+3.5	+0.63	+11	+1.24	+1.08	+0.98	\$293	\$477	
USA18636106	HBR			63%	71%	53%	97%	96%	84%	84%	85%	79%	67%	71%	41%	72%	64%	66%	65%	59%	67%	56%	61%	69%	69%	64%			
GTLN198		33		22	43	83	41	2	1	3	27	50	2	32	2	5	64	66	53	17	93	89	98	74	31	1	1		
THCL61	CLUDEN NEWRY ELEVATOR L61			-82	-3.2	-2.1	-3.9	+6.4	+64	+126	+159	+166	+20	+1.5	-3.9	+104	+9.8	-3.7	-2.0	+1.4	-1.1	+0.14	+40	+0.66	+0.92	+0.94	\$188	\$371	
WDCE11	HBR			88%	77%	65%	93%	95%	94%	94%	94%	89%	85%	89%	60%	89%	88%	84%	84%	89%	82%	90%	80%	91%	92%	92%	89%		
THCF92		99		87	89	64	91	5	1	2	1	25	72	71	1	14	99	78	7	99	44	2	15	37	20	63	29		
QMUM13	CLUNES CROSSING DUSTY M13			+51	+1.2	+3.8	-7.9	+5.3	+66	+102	+122	+67	+14	+1.0	-7.7	+72	+13.0	-2.5	-3.9	+1.4	+1.9	+0.09	+10	+0.88	+0.82	+1.02	\$305	\$440	
USA16295688	HBR			91%	93%	81%	99%	99%	98%	98%	98%	97%	95%	98%	68%	94%	93%	93%	93%	88%	93%	84%	97%	97%	97%	95%			
QMUG1		63		64	42	10	76	4	18	40	93	78	87	2	32	3	93	95	7	55	38	92	58	16	45	1	2		
NBHL348	CLUNIE RANGE LEGEND L348 PV			+77	-6.0	+4.4	-8.2	+6.1	+58	+103	+126	+156	+2	+2.9	-6.6	+63	+0.7	+3.6	+1.2	-0.8	+2.4	+0.09	+25	+0.48	+0.82	+1.28	\$164	\$341	
NZE14647008839	HBR			90%	93%	82%	99%	99%	98%	98%	98%	97%	96%	98%	73%	94%	93%	93%	93%	90%	93%	83%	97%	97%	97%	96%			
AHWJ81		41		94	35	8	88	16	16	31	2	99	21	9	61	97	3	23	97	41	38	25	2	16	98	83	53		
NBHP392	CLUNIE RANGE PLANTATION			+98	+7.1	+4.6	-6.0	+4.1	+68	+118	+143	+106	+23	+5.2	-4.7	+69	+2.6	-0.6	-0.7	-0.9	+3.1	+0.05	+19	+0.76	+1.00	+0.92	\$245	\$418	
USA17960722	HBR			73%	79%	60%	98%	98%	97%	96%	95%	85%	71%	94%	52%	79%	81%	81%	80%	75%	80%	62%	94%	92%	92%	88%			
NBHM516		25		15	33	30	50	2	2	8	40	11	1	48	41	89	62	57	98	24	33	55	32	57	16	9	5		
WDCH249	COONAMBLE HECTOR H249 SV			+16	-0.2	-2.1	-8.8	+4.5	+45	+80	+100	+86	+5	+1.2	-4.5	+46	+10.9	+3.5	+4.3	+0.9	+0.1	-0.50	+42	+0.42	+0.50	+0.82	\$188	\$310	
USA14885809	HBR			92%	94%	84%	99%	99%	98%	98%	98%	97%	97%	98%	73%	95%	94%	94%	94%	92%	94%	86%	98%	96%	96%	93%			
WDCE9		89		73	89	5	60	75	80	83	73	99	81	54	94	9	3	2	23	94	2	2	1	1	4	63	74		
WDCJ266	COONAMBLE JUNIOR J266 PV			+59	-8.7	-6.9	-0.5	+5.7	+59	+105	+143	+131	+17	+2.3	-5.2	+103	+10.8	-5.0	-5.0	+1.6	+2.3	-0.34	+8	+0.92	+0.78	+1.06	\$199	\$336	
BNAD145	HBR			89%	89%	77%	98%	98%	97%	97%	97%	94%	95%	96%	70%	93%	91%	91%	91%	88%	91%	83%	93%	94%	94%	90%			
WHHA61		56		97	99	96	83	14	14	8	10	48	40	34	1	9	99	99	4	43	5	94	66	11	58	51	57		
WDCK314	COONAMBLE KEVIN K314 PV			-14	-1.8	+3.1	-2.4	+5.0	+55	+103	+134	+109	+24	+4.3	-6.2	+89	+6.5	+0.3	+1.0	+0.1	+1.5	+0.31	+25	+0.48	+1.08	+1.22	\$212	\$365	
NAQA241	HBR			88%	83%	71%	95%	97%	96%	95%	96%	91%	91%	92%	65%	90%	89%	89%	89%	85%	90%	80%	81%	85%	85%	82%			
WDCD94		98		82	49	84	71	29	16	17	34	7	3	14	4	46	40	26	72	67	25	2	74	93	37	34			
USA19611994	DB ICONIC G95 PV			+125	+4.3	+7.9	-3.0	+3.0	+68	+129	+157	+139	+17	+3.0	-3.6	+93	+7.4	+0.3	-0.9	-0.3	+4.2	+0.00	+15	+1.22	+1.02	+0.94	\$258	\$455	
USA18467508	HBR			71%	70%	55%	94%	93%	86%	83%	81%	79%	76%	77%	42%	78%	75%	72%	68%	66%	78%	54%	56%	84%	86%	67%			
USA18974126		12		37	7	77	27	2	1	2	6	52	18	78	3	35	40	60	88	8	27	75	97	62	20	4	1		
Breed Average EBVs		+68.		+2.2	+2.6	-4.8	+4.1	+50	+90	+117	+100	+17	+2.1	-4.6	+66	+6.3	-0.1	-0.3	+0.5	+2.2	+0.19	+20	+0.84	+0.97	+1.03	+197	+339		

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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					
NGCN208	DULVERTON NEW APPROACH			+44	+0.4	+3.1	-6.4	+4.1	+54	+92	+121	+119	+14	+1.5	-5.2	+78	+11.7	-2.1	-1.8	+1.9	+1.2	-0.19	+35	+1.02	+1.12	+1.02	\$219	\$374
WWEL3	HBR	87%	72%	60%	95%	92%	94%	95%	95%	88%	80%	92%	55%	88%	87%	87%	88%	80%	89%	79%	80%	85%	85%	82%	82%			
NGCG037		70	69	49	24	50	31	44	42	20	75	72	34	18	6	89	76	2	75	11	6	82	81	45	29	26		
BHRE614	DUNOON EVIDENT E614 PV			+56	-11.3	-17.7	+0.0	+5.9	+52	+90	+111	+108	+14	+3.6	-5.9	+58	+11.2	-2.7	-1.4	+1.7	+1.7	+0.41	+43	+0.88	+1.06	+0.86	\$172	\$276
VTMB219	HBR	95%	97%	90%	99%	99%	99%	99%	99%	98%	98%	98%	83%	97%	96%	97%	97%	95%	96%	90%	98%	96%	96%	94%	94%			
BHRB681		59	99	99	97	85	42	51	64	36	76	8	18	74	8	94	69	3	61	78	2	58	71	7	77	88		
USA16198796	EF COMPLEMENT 8088 PV			+34	+5.6	+9.3	-5.2	+2.9	+53	+98	+130	+96	+21	+1.3	-8.0	+77	+7.6	+1.3	+2.0	+0.4	+1.8	+0.55	+21	+0.94	+1.30	+1.14	\$267	\$438
USA14686137	HBR	96%	98%	93%	99%	99%	99%	99%	99%	99%	99%	99%	90%	98%	97%	98%	97%	97%	97%	92%	99%	99%	99%	98%	98%			
USA15452880		78	26	2	42	25	37	28	24	57	17	78	1	21	33	20	14	53	58	88	41	70	97	81	2	2		
WWEQ15	ESSLEMONT GARTH Q15 PV			+97	-3.8	+2.3	-9.9	+5.9	+62	+107	+147	+135	+28	+2.5	-6.6	+69	+8.2	-3.7	-3.8	+0.9	+3.0	-0.40	+40	+0.94	+1.18	+1.04	\$230	\$394
VTMG67	HBR	68%	70%	60%	92%	89%	86%	80%	80%	77%	69%	74%	52%	73%	67%	69%	69%	64%	70%	62%	82%	69%	69%	68%	68%			
WWEN17		26	89	57	3	85	7	10	6	8	1	33	9	41	27	99	95	23	26	3	2	70	89	51	18	15		
WWEL3	ESSLEMONT LOTTO L3 PV			+133	-4.9	-2.8	-5.7	+4.5	+59	+109	+140	+134	+19	+3.6	-9.0	+90	+14.3	+0.5	+1.3	+1.3	+3.8	+0.28	+16	+1.12	+1.00	+1.16	\$280	\$456
HIOG18	HBR	94%	95%	87%	99%	99%	99%	99%	99%	98%	98%	98%	78%	97%	95%	96%	96%	94%	96%	90%	98%	98%	98%	97%	97%			
WWEJ8		9	92	92	34	60	13	9	11	8	35	8	1	4	2	36	22	9	13	63	71	92	57	85	1	1		
WWEQ24	ESSLEMONT QUOKKA Q24 PV			+114	+5.6	+0.6	-2.8	+2.5	+45	+84	+112	+70	+23	+4.2	-6.2	+66	+20.2	+1.0	+0.3	+2.3	+2.8	+0.99	+34	+0.76	+0.94	+0.98	\$277	\$414
WWEN12	HBR	68%	68%	53%	93%	93%	90%	85%	85%	80%	65%	80%	46%	73%	71%	73%	73%	67%	73%	58%	84%	60%	60%	60%	60%			
WWEN7		16	26	73	79	18	74	69	61	90	11	3	14	52	1	25	38	1	31	99	7	32	42	31	1	7		
NFSM99	FARRER MAXWELL M99 PV			+104	-8.9	+0.6	+0.0	+8.2	+68	+115	+156	+151	+15	+3.8	-5.7	+91	+14.2	-3.2	-5.0	+2.1	+2.6	+0.04	+52	+0.78	+0.72	+0.86	\$241	\$404
BHRH240	HBR	82%	72%	56%	95%	94%	93%	92%	92%	87%	76%	86%	52%	85%	84%	84%	84%	76%	86%	71%	89%	85%	85%	81%	81%			
NFSH124		22	98	73	97	99	2	4	3	3	69	6	22	3	2	97	99	1	35	32	1	36	5	7	11	10		
USA18217198	G A R ASHLAND PV			+96	+1.1	+3.1	-6.5	+3.4	+68	+117	+148	+120	+18	+1.5	-3.0	+82	+13.0	-3.0	-3.1	+1.2	+3.1	-0.08	+6	+1.24	+1.08	+0.84	\$265	\$427
USA17354178	HBR	87%	94%	78%	99%	99%	99%	99%	99%	97%	95%	98%	55%	93%	92%	91%	90%	86%	91%	73%	98%	99%	99%	96%	96%			
USA16934264		27	64	49	23	34	2	3	5	20	45	72	88	12	3	96	90	11	24	19	97	98	74	5	2	4		
USA16295688	G A R PROPHET SV			+114	+3.6	+4.5	-1.0	+3.6	+66	+106	+132	+81	+24	+0.7	-6.1	+71	+3.4	-0.6	-1.1	-0.8	+4.7	+0.63	+27	+1.02	+0.82	+0.90	\$275	\$420
USA13009379	HBR	96%	98%	92%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	97%	97%	97%	97%	99%	99%	99%	99%	99%	99%	98%			
USA15129456		17	43	34	94	39	3	12	20	79	7	92	15	36	83	62	64	97	5	93	20	82	16	12	1	5		
USA17328461	G A R SURE FIRE SV			+133	+7.2	+3.4	-3.3	+2.3	+50	+91	+110	+75	+18	+4.1	-6.9	+64	+7.7	-0.3	-0.2	+0.8	+3.2	-0.22	+28	+1.14	+0.94	+0.62	\$257	\$408
USA16205036	HBR	94%	94%	82%	99%	99%	98%	98%	98%	97%	98%	98%	77%	96%	95%	95%	95%	94%	95%	87%	95%	99%	99%	99%	99%			
USA16431932		9	14	46	73	16	49	49	66	86	44	4	6	57	31	55	47	28	22	9	18	94	42	1	4	9		
ASRM9	GATES MENTOR M9 SV			+111	+2.4	+4.3	-3.1	+6.2	+62	+112	+147	+130	+20	+4.1	-7.2	+88	+11.3	-5.0	-5.8	+2.0	+3.0	+0.42	+9	+1.00	+1.16	+1.16	\$275	\$459
HIOE7	HBR	83%	75%	64%	95%	93%	90%	90%	91%	84%	80%	81%	58%	85%	82%	82%	83%	75%	85%	76%	79%	81%	82%	78%				
ASRK93		18	54	36	76	89	7	6	6	10	29	4	4	6	7	99	99	1	26	79	94	79	87	85	1	1		
USA18690054	GB FIREBALL 672 PV			+164	+2.5	+5.6	-5.1	+2.5	+62	+99	+130	+122	+18	+2.8	-6.2	+78	+14.2	-2.2	-3.8	+1.0	+5.1	-0.21	+7	+0.96	+0.90	+0.86	\$269	\$443
USA17965471	HBR	79%	89%	65%	99%	99%	98%	98%	98%	95%	89%	98%	47%	88%	86%	86%	84%	78%	87%	61%	98%	99%	98%	92%				
USA18054344		3	53	23	44	18	7	25	24	17	46	23	14	18	2	90	95	18	3	10	96	73	32	7	2			
QBGH221	GLENOC HINMAN H221 SV			+143	+5.3	-2.8	-3.4	+3.1	+54	+92	+126	+115	+21	+1.0	-3.6	+85	+6.1	-2.6	-5.2	+0.6	+5.2	-0.43	+16	+0.88	+0.82	+1.04	\$208	\$355
BNAD145	HBR	89%	82%	71%	97%	97%	96%	96%	96%	90%	91%	95%	67%	91%	90%	90%	86%	91%	82%	82%	88%	88%	84%					
QBDG80		7	28	92	72	29	33	46	31	26	17	87	78	8	51	94	99	40	3	3	70	58	16	51	41	42		
Breed Average EBVs		+68.	+2.2	+2.6	-4.8	+4.1	+50	+90	+117	+100	+17	+2.1	-4.6	+66	+6.3	-0.1	-0.3	+0.5	+2.2	+0.19	+20	+0.84	+0.97	+1.03	+197	+339		

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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	
QBGK112	GLENOCHE KALLANGUR K112 PV			+34	-6.1	-2.3	-4.0	+6.9	+56	+98	+126	+103	+16	+2.0	-7.4	+93	+12.4	+1.1	+3.4	+0.6	+2.2	+0.49	+19	+0.74	+0.76	+0.68	\$245	\$383	
NAQA241		HBR		88%	77%	67%	93%	95%	94%	94%	93%	86%	85%	91%	60%	89%	88%	87%	88%	80%	89%	81%	80%	91%	91%	88%			
QBGG72				78	94	90	62	94	22	27	31	44	57	52	3	3	4	24	5	40	46	84	53	28	9	1	8	20	
EETN1	GVA NEWSWORTHY N1 PV			+70	+9.8	+5.8	-9.9	+1.9	+53	+92	+114	+88	+22	+2.3	-6.7	+74	+6.3	-0.1	-3.2	+0.2	+2.6	+0.20	+23	+1.04	+0.90	+0.94	\$227	\$383	
USA17031465		HBR		84%	69%	55%	91%	89%	86%	86%	85%	80%	69%	72%	46%	84%	84%	83%	84%	75%	86%	75%	81%	85%	85%	80%			
VSNL24				46	3	21	3	11	34	45	58	70	16	40	8	28	48	50	91	66	35	53	35	85	32	20	21	20	
DKKM41	HARDHAT H708 MAIMURU J51			+197	+3.8	+3.3	-2.5	+2.3	+45	+89	+116	+96	+11	+1.1	-3.9	+62	+2.7	+1.0	-2.6	-0.4	+6.7	+0.13	+23	+1.04	+1.02	+1.12	\$206	\$349	
NORH708		APR		88%	69%	55%	94%	92%	89%	89%	90%	83%	70%	77%	56%	87%	87%	86%	87%	78%	89%	81%	84%	88%	88%	85%			
DKKJ51				1	41	47	83	16	73	54	52	57	90	84	71	62	88	25	86	91	1	43	34	85	62	76	44	46	
DKKQ110	HARDHAT K522 KODAK M33			+118	+7.2	+9.9	-7.3	+2.5	+47	+87	+116	+106	+16	+2.7	-5.9	+59	+7.3	-1.6	-3.3	+0.8	+3.7	+0.25	+6	+0.64	+0.66	+0.72	\$219	\$388	
NORK522		HBR		66%	68%	55%	86%	86%	77%	75%	75%	74%	66%	74%	47%	68%	65%	67%	67%	63%	69%	59%	56%	75%	76%	73%			
DKKM33				14	14	1	15	18	63	61	53	39	62	26	18	73	36	82	92	28	14	59	96	13	3	1	29	18	
DKKN43	HARDHAT K522 NEBRASKA			+1	+9.6	+8.4	-9.6	+1.9	+61	+109	+144	+132	+16	+5.2	-5.9	+82	+3.2	+0.7	+0.4	-0.5	+0.2	+0.13	+9	+0.76	+0.86	+0.88	\$202	\$399	
NORK522		HBR		86%	73%	59%	93%	94%	92%	91%	88%	83%	70%	84%	50%	87%	85%	85%	86%	77%	88%	78%	88%	90%	90%	85%			
NKLF143				95	4	5	3	11	9	9	8	9	60	1	18	11	84	31	36	93	93	43	93	32	23	9	48	12	
DKKP156	HARDHAT KOD PUNCH M5 P156			+68	+4.8	+5.6	-9.6	+4.0	+57	+95	+119	+95	+16	+2.4	-5.5	+63	+9.1	-1.5	-3.5	+0.9	+1.8	-0.21	+14	+0.98	+1.06	+1.20	\$231	\$383	
DKKM4		HBR		60%	63%	48%	90%	87%	83%	76%	76%	73%	61%	72%	38%	66%	59%	61%	62%	54%	64%	52%	74%	71%	71%	66%			
DKKM5				48	33	23	3	48	20	35	45	58	63	36	27	60	19	81	93	23	58	10	78	77	71	91	17	21	
NHZF1023	HAZELDEAN F1023 SV			+206	+5.7	+2.2	-3.5	+2.8	+40	+76	+88	+66	+14	+3.8	-6.5	+51	+9.2	+3.1	+0.0	+0.1	+6.1	+1.31	+5	+0.48	+0.98	+1.04	\$233	\$366	
VTMB1		APR		91%	89%	76%	98%	98%	98%	98%	98%	96%	94%	97%	74%	94%	93%	93%	93%	89%	93%	86%	97%	97%	96%	94%			
NHZB723				1	25	58	70	23	88	86	94	93	74	6	10	88	18	4	43	72	1	99	98	2	52	51	16	33	
NHZJ140	HAZELDEAN JAIPUR J140 SV			+90	+8.7	+8.0	-5.0	+1.8	+39	+74	+101	+76	+29	+3.3	-7.6	+69	+5.0	-1.1	-1.2	+1.1	+2.7	+1.10	+53	+0.28	+0.78	+1.00	\$218	\$365	
NAQA241		HBR		92%	93%	79%	98%	98%	98%	98%	98%	97%	97%	98%	82%	95%	94%	94%	94%	92%	94%	87%	98%	98%	98%	95%			
NHZC33				31	7	6	45	10	91	89	82	86	1	12	2	41	65	73	66	14	33	99	1	1	11	38	30	34	
NHZK416	HAZELDEAN KATZEN K416 SV			+8	+9.6	+4.7	-11.6	+2.1	+55	+93	+121	+102	+17	+3.5	-8.4	+73	+1.0	+4.3	+2.8	-0.7	+0.8	+0.29	+55	+1.02	+1.00	+1.06	\$218	\$391	
NORE11		APR		91%	88%	75%	98%	98%	97%	97%	97%	95%	94%	97%	72%	93%	92%	90%	92%	87%	93%	86%	97%	97%	96%	94%			
NHZH342				93	4	32	1	13	29	42	41	47	53	9	1	29	96	1	8	96	84	65	1	82	57	58	30	16	
NHZM586	HAZELDEAN M586 SV			+183	+8.9	+9.7	-9.3	+2.1	+50	+91	+120	+99	+18	+4.3	-9.7	+73	+7.5	+0.9	+0.8	-0.1	+5.5	+0.98	+44	+0.52	+0.92	+1.10	\$281	\$468	
NHZJ140		APR		89%	83%	64%	98%	98%	96%	96%	96%	94%	88%	95%	62%	92%	90%	90%	90%	84%	91%	82%	93%	92%	92%	88%			
NHZH356				2	6	2	4	13	51	49	43	52	46	3	1	29	34	27	29	81	2	99	1	4	37	70	1	1	
NHZM182	HAZELDEAN MAVERICK M182 SV			+144	+3.5	+5.9	-5.4	+2.7	+47	+92	+130	+100	+22	+3.5	-4.7	+78	+9.5	+0.7	+0.6	-0.1	+5.0	+1.24	+67	+0.40	+0.70	+1.02	\$227	\$382	
NHZJ140		APR		73%	76%	58%	97%	96%	95%	95%	96%	86%	73%	95%	53%	80%	80%	81%	80%	75%	80%	63%	93%	91%	90%	85%			
NHZK807				6	44	20	39	21	63	45	24	51	13	9	48	18	16	31	33	81	3	99	1	1	4	45	21	21	
NHZP434	HAZELDEAN P434 SV			+106	+10.4	+7.2	-7.7	+1.5	+47	+86	+112	+95	+18	+2.9	-7.3	+74	+4.4	-0.9	-2.9	+0.8	+3.3	+0.69	+48	+0.60	+0.94	+0.90	\$227	\$391	
NHZJ140		APR		72%	72%	57%	97%	95%	94%	93%	93%	84%	71%	90%	55%	78%	76%	78%	77%	73%	77%	63%	89%	84%	84%	78%			
NHZL527				20	2	11	11	8	66	63	60	59	42	21	4	26	72	69	89	28	20	95	1	9	42	12	21	16	
NHZQ1229	HAZELDEAN Q1229 PV			+154	-0.3	+3.0	-3.4	+4.6	+59	+106	+136	+96	+23	+4.8	-6.6	+82	+8.6	-0.4	-2.0	+0.1	+4.7	+0.71	+18	+0.80	+0.98	+0.92	\$261	\$413	
NHZF1023		APR		68%	73%	56%	96%	95%	86%	85%	85%	80%	69%	83%	50%	75%	70%	72%	67%	72%	61%	78%	78%	78%	74%				
NHZJ823				4	74	50	72	62	13	12	15	58	12	1	9	11	23	57	78	72	5	95	60	40	52	16	3	7	
Breed Average EBVs		+68.	+2.2	+2.6	-4.8	+4.1	+50	+90	+117	+100	+17	+2.1	-4.6	+66	+6.3	-0.1	-0.3	+0.5	+2.2	+0.19	+20	+0.84	+0.97	+1.03	+1.97	+339			

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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	
NHZQ319	HAZELDEAN Q319 PV			+140	+6.8	+9.6	-10.3	+2.3	+58	+110	+149	+137	+19	+3.4	-9.6	+90	+5.1	+1.9	+0.7	-0.8	+5.0	+0.26	+28	+0.84	+1.10	+1.06	\$276	\$492	
NHZM586		APR		67%	68%	49%	97%	96%	82%	79%	80%	78%	67%	77%	43%	71%	66%	69%	69%	62%	70%	59%	61%	69%	64%	60%			
NHZN1175				7	17	2	2	16	17	7	5	7	34	11	1	4	64	12	31	97	3	61	19	49	78	58	1	1	
DYFN6	INGLEBRAE FARMS NOBLEMAN			+59	+8.6	+10.3	-7.7	+3.0	+61	+92	+112	+95	+10	+3.5	-3.7	+66	+9.5	+1.3	+1.4	+0.2	+1.8	-0.19	+22	+0.86	+1.12	+1.14	\$232	\$393	
NZE14647008839		HBR		85%	75%	63%	95%	95%	94%	94%	94%	86%	76%	92%	57%	87%	86%	85%	86%	79%	88%	77%	90%	88%	88%	85%			
DYFL18				56	7	1	11	27	10	45	62	58	95	9	76	52	16	20	20	66	58	11	40	54	81	81	16	15	
NZE13300018	KAKAHU PIVOTAL 18004 PV			+131	+2.7	+1.3	-8.6	+4.5	+58	+105	+124	+73	+26	+3.4	-7.2	+83	+11.0	+0.9	+1.1	+0.6	+3.6	+0.43	+2	+0.74	+1.00	+1.18	\$296	\$440	
WWEL3		HBR		72%	74%	59%	95%	95%	90%	88%	90%	83%	71%	87%	52%	77%	76%	77%	77%	73%	77%	63%	82%	77%	74%	70%			
NZE13300116373				10	51	67	6	60	18	14	35	88	4	11	4	10	8	27	24	40	15	79	99	28	57	88	1	2	
NDIP481	KENNY'S CREEK PINNACLE P481			+126	+3.8	+1.8	-5.2	+2.9	+52	+92	+118	+75	+19	+0.4	-3.1	+65	+4.9	+1.0	+0.9	-1.2	+5.2	+0.90	+36	+0.82	+0.98	+0.90	\$215	\$340	
USA17354145		HBR		72%	74%	59%	97%	96%	94%	93%	92%	85%	72%	89%	54%	78%	78%	79%	78%	74%	78%	63%	87%	69%	69%	66%			
NDIL236				11	41	62	42	25	42	45	49	86	36	96	86	54	66	25	27	99	3	99	5	45	52	12	33	54	
KILK18	KILLAIN ALASKA K18 PV			-25	-9.1	-5.1	+0.0	+7.1	+65	+121	+165	+174	+14	+3.6	-2.4	+89	+5.1	-2.6	-4.3	+0.9	-1.3	-0.75	+24	+1.16	+0.86	+1.02	\$119	\$280	
USA16417285		HBR		83%	68%	56%	88%	86%	85%	85%	86%	81%	77%	76%	47%	83%	83%	82%	83%	80%	85%	72%	68%	77%	77%	66%			
USA15107929				99	98	97	97	96	4	2	1	1	78	8	93	5	64	94	97	23	99	1	30	95	23	45	97	87	
KILP1	KILLAIN RAINMAN P1 PV			-23	-1.3	-6.0	-7.0	+4.8	+62	+110	+134	+124	+13	+2.7	-3.8	+73	+8.8	-1.8	-2.3	+1.6	-1.1	-0.23	+1	+0.94	+1.00	+1.04	\$192	\$340	
USA18578965		HBR		65%	65%	47%	94%	90%	88%	83%	84%	79%	69%	69%	38%	73%	68%	71%	70%	65%	71%	52%	79%	67%	67%	49%			
KILM9				99	79	98	17	66	8	7	17	16	82	26	73	29	21	85	82	4	99	9	99	70	57	51	60	54	
BLAP130	KNOWLA PACKER P130 PV			+92	+1.1	-0.9	-3.7	+5.3	+59	+105	+144	+126	+10	+1.2	-5.6	+88	+7.7	-0.2	-0.5	+0.7	+2.9	+0.25	+24	+0.86	+1.26	+1.00	\$243	\$409	
SRKK306		HBR		68%	67%	54%	91%	89%	85%	83%	84%	79%	69%	69%	38%	73%	68%	71%	70%	65%	71%	52%	79%	67%	67%	49%			
BLAK113				29	64	83	67	76	14	13	7	13	95	81	24	6	31	52	53	34	28	59	29	54	95	38	9	8	
BLAP91	KNOWLA PEPPER P91 PV			+72	+5.8	+4.1	-6.2	+4.1	+62	+121	+156	+163	+12	+1.8	-8.4	+83	+8.8	+1.9	+1.5	+0.6	+2.7	+0.47	-6	+1.00	+1.06	+0.94	\$280	\$506	
HIOG18		HBR		72%	72%	60%	95%	94%	91%	88%	89%	83%	72%	87%	56%	77%	75%	77%	72%	77%	64%	86%	86%	87%	83%				
BLAL06				45	24	38	27	50	8	2	3	1	86	60	1	10	21	12	19	40	33	83	99	79	71	20	1	1	
VLYR1549	LAWSONS ASHLAND R1549 SV			+118	-3.0	-2.4	-6.1	+4.4	+65	+112	+144	+125	+14	+0.4	-0.8	+82	+15.4	-2.9	-3.4	+1.3	+4.0	+0.21	+15	+1.10	+0.94	+0.78	\$232	\$373	
USA18217198		HBR		64%	69%	55%	88%	86%	78%	75%	76%	76%	68%	70%	40%	68%	65%	67%	67%	62%	68%	55%	58%	69%	69%	66%			
VLYP251				14	87	90	28	57	4	5	8	14	74	96	99	11	1	96	92	9	10	54	75	91	42	2	16	27	
VLYN131	LAWSONS CHARLIE N131 SV			+8	-4.0	-2.5	-4.7	+5.6	+74	+134	+167	+133	+24	+3.5	-5.2	+81	+6.0	-1.9	-2.2	+0.1	+1.2	+0.33	+30	+0.86	+0.76	+0.88	\$242	\$409	
USA16295688		HBR		83%	76%	66%	95%	96%	93%	92%	89%	84%	72%	86%	56%	85%	84%	84%	85%	77%	86%	76%	90%	91%	90%	86%			
VLYL710				93	90	90	51	81	1	1	1	9	6	9	34	13	52	87	81	72	75	69	13	54	9	10	8		
VLYL483	LAWSONS LINKEDIN L483 SV			+39	+5.4	-10.0	-1.3	+3.8	+58	+108	+152	+137	+28	+4.1	-4.9	+105	+9.8	-0.6	+2.3	+0.4	+1.5	-0.30	+22	+0.98	+0.74	+0.88	\$213	\$384	
HKFJ5		HBR		89%	84%	73%	98%	98%	97%	97%	96%	94%	94%	94%	65%	92%	88%	86%	90%	83%	90%	79%	87%	84%	84%	80%			
VLYH221				74	27	99	92	44	17	10	4	7	2	4	42	1	14	62	11	53	67	6	40	77	7	9	36	20	
VLYQ44	LAWSONS MIRACULOUS Q44 PV			+133	+4.0	-0.7	-8.2	+3.2	+49	+91	+112	+98	+13	+2.7	-4.0	+49	+21.5	+0.9	+0.4	+1.9	+2.6	+0.95	+27	+0.96	+0.90	+0.96	\$246	\$394	
VLYM518		HBR		70%	72%	57%	97%	95%	90%	90%	87%	82%	70%	87%	49%	76%	76%	77%	77%	72%	76%	61%	57%	70%	70%	68%			
VLYK914				9	40	82	8	30	55	49	62	53	84	26	68	91	1	27	36	2	35	99	40	73	32	25	8	14	
VLYM518	LAWSONS MOMENTOUS M518			+209	-2.8	-4.0	-5.8	+4.0	+51	+93	+114	+86	+24	+2.7	-2.7	+50	+13.7	-0.9	-0.7	+0.6	+5.8	+0.87	+40	+0.88	+0.94	+1.06	\$223	\$338	
USA17354145		HBR		91%	96%	83%	99%	99%	99%	99%	99%	98%	97%	98%	72%	95%	94%	94%	94%	91%	94%	85%	98%	98%	98%	97%			
VLYH229				1	86	95	33	48	47	41	58	72	7	26	91	90	2	69	57	40	1	99	3	58	42	25	55	55	
Breed Average EBVs		+68.	+2.2	+2.6	-4.8	+4.1	+50	+90	+117	+100	+17	+2.1	-4.6	+66	+6.3	-0.1	-0.3	+0.5	+2.2	+0.19	+20	+0.84	+0.97	+1.03	+197	+339			

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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		
VLYE398	LAWSONS NADAL E398 SV	+12	-7.5	-3.8	-1.7	+5.9	+56	+93	+109	+132	-8	+1.2	-5.8	+66	+12.5	-0.4	-1.4	+1.7	+0.6	+0.35	+0	+0.80	+0.80	+0.90	\$186	\$330	
USA15464043	HBR	89%	88%	76%	98%	98%	97%	97%	97%	95%	96%	95%	65%	93%	91%	91%	87%	91%	82%	84%	83%	83%	77%				
VLYB887		91	96	94	90	85	23	42	68	10	99	81	20	50	4	57	69	3	88	72	99	40	13	12	66	62	
VLYP316	LAWSONS PROPHET P316 PV	+123	+5.2	+4.0	-2.3	+3.3	+58	+93	+112	+70	+18	+1.0	-5.4	+69	+10.4	-3.5	-3.8	+1.3	+3.5	+0.28	+29	+0.66	+0.68	+0.82	\$274	\$407	
USA16295688	HBR	69%	72%	60%	91%	95%	88%	86%	83%	79%	70%	73%	54%	74%	72%	74%	74%	70%	74%	63%	72%	80%	80%	75%			
VLYM527		13	29	39	85	32	16	42	61	90	43	87	29	41	11	98	95	9	17	63	15	15	3	4	1	9	
CHKM122	MANEROO PARTNERSHIP M122	+107	+3.6	-4.5	-3.9	+3.7	+40	+76	+101	+95	+13	+1.8	-4.5	+55	+10.1	+1.8	+3.3	+0.5	+2.6	+0.37	+6	+1.22	+1.10	+0.96	\$183	\$314	
HKFJ5	APR	81%	73%	59%	92%	92%	89%	88%	87%	82%	74%	77%	52%	82%	81%	82%	82%	74%	84%	71%	73%	79%	79%	75%			
CHKE251		20	43	96	64	41	89	86	82	59	81	60	54	80	13	14	5	47	35	74	97	97	78	25	69	72	
NZE14647010	MATAURI OUTLIER F031 SV	+27	-3.2	+2.1	-4.6	+6.7	+54	+102	+137	+145	+16	+2.2	-3.1	+70	+0.2	+3.1	+1.9	-0.7	+0.9	+0.08	+14	+0.78	+1.18	+1.28	\$131	\$288	
NZE14647008839	HBR	94%	95%	87%	98%	99%	98%	98%	98%	98%	98%	98%	84%	96%	95%	96%	96%	94%	95%	88%	93%	92%	93%	89%			
NZE14647108860		83	87	59	52	93	32	20	14	4	57	44	86	38	98	4	15	96	82	37	77	36	89	98	95	84	
VRTP6	MERRIBROOK PROGRESSION OF	+3	+9.9	+6.9	-11.6	+1.1	+58	+103	+122	+95	+19	+0.3	-3.5	+78	+6.7	-0.3	-2.9	+1.1	+0.7	-0.15	+31	+0.90	+0.92	+1.06	\$226	\$381	
USA18219911	HBR	82%	68%	53%	90%	87%	85%	84%	84%	79%	68%	72%	45%	81%	82%	81%	82%	74%	84%	71%	76%	81%	81%	77%			
VRTJ2		95	3	13	1	6	18	17	39	59	30	96	80	18	43	55	89	14	86	13	12	62	37	58	21	21	
NMMF159	MILLAH MURRAH DOC F159 PV	-14	-7.0	+3.6	-6.1	+6.9	+58	+108	+148	+129	+28	+2.5	-5.5	+97	+5.0	+1.2	+2.1	+0.3	+0.3	-0.16	+17	+0.96	+1.12	+1.08	\$190	\$340	
NMMD78	HBR	89%	89%	78%	98%	98%	97%	97%	97%	95%	95%	96%	69%	93%	91%	92%	92%	88%	92%	82%	94%	88%	88%	84%			
NHZY275		98	96	44	28	94	16	10	5	11	1	33	27	2	65	22	13	60	92	13	64	73	81	65	61	54	
NMMG18	MILLAH MURRAH HIGHLANDER	+16	+0.5	-3.9	-3.7	+4.5	+49	+88	+110	+84	+22	+4.5	-3.5	+76	+10.6	-3.3	-1.8	+2.0	-0.1	+0.05	+11	+0.74	+0.88	+1.00	\$185	\$303	
NZE12170004408	HBR	89%	82%	70%	97%	95%	93%	93%	93%	90%	84%	89%	63%	90%	89%	89%	90%	83%	91%	82%	90%	84%	84%	79%			
NMMD85		90	69	95	67	60	54	58	66	76	15	2	80	22	10	98	76	1	96	33	89	28	27	38	66	78	
NMMK35	MILLAH MURRAH KINGDOM K35	-31	-13.2	-7.6	-2.6	+9.0	+55	+99	+138	+148	+11	+0.8	-5.6	+63	+7.6	+0.1	+0.4	+1.0	-0.6	-0.70	+26	+0.80	+1.26	+1.16	\$137	\$270	
NZE469	HBR	92%	95%	86%	99%	99%	98%	98%	98%	97%	98%	98%	79%	96%	94%	95%	95%	93%	94%	88%	97%	96%	96%	94%			
NMMG41		99	99	99	82	99	28	24	12	3	92	90	24	60	33	45	36	18	99	1	24	40	95	85	94	90	
NMMK42	MILLAH MURRAH KLOONEY K42	+82	+5.8	+3.5	-6.7	+5.7	+47	+86	+107	+92	+24	+2.1	-6.9	+64	+5.8	-1.3	-3.5	+1.1	+2.5	+0.16	+18	+0.82	+0.92	+1.02	\$217	\$365	
NGMT30	HBR	93%	96%	87%	99%	99%	98%	99%	98%	98%	98%	98%	79%	96%	95%	95%	95%	93%	95%	87%	98%	96%	97%	94%			
NMMH4		37	24	45	21	83	64	62	71	63	7	48	6	57	55	77	93	14	38	47	61	45	37	45	31	34	
NMML133	MILLAH MURRAH LOCH UP L133	+35	+4.7	+3.5	-6.0	+5.0	+58	+99	+132	+106	+26	+1.9	-1.8	+79	+1.9	-2.3	-4.1	-0.5	+1.7	-0.27	+35	+0.70	+1.06	+1.14	\$160	\$300	
USA17091363	HBR	93%	94%	85%	99%	99%	98%	98%	98%	98%	98%	98%	75%	96%	94%	95%	95%	93%	95%	87%	98%	97%	97%	95%			
NMMH49		77	34	45	30	71	15	24	20	40	3	56	96	17	93	91	96	93	61	7	6	21	71	81	85	79	
NMM308	MILLAH MURRAH MILESTONE	+66	+6.2	+5.2	-7.5	+4.7	+45	+81	+95	+80	+19	+2.4	-6.1	+48	+5.6	+2.1	+3.3	-0.1	+2.6	+0.17	+22	+0.88	+0.98	+1.20	\$213	\$356	
NZE14647008839	HBR	84%	78%	66%	97%	97%	96%	96%	95%	91%	83%	94%	59%	87%	86%	86%	86%	80%	87%	75%	93%	83%	84%	81%			
NMMH331		50	21	27	13	64	73	77	89	80	32	36	15	92	57	11	5	81	35	49	36	58	52	91	35	41	
NJWH194	MILWILLAH ELEVATOR H194 SV	-42	-9.2	-9.6	-0.7	+8.0	+47	+96	+124	+152	+19	+1.3	-1.6	+50	+3.8	-2.2	+0.9	+0.9	-1.3	-0.38	+43	+0.20	+0.44	+0.86	\$71	\$199	
WDCE11	HBR	85%	74%	65%	92%	92%	90%	90%	90%	85%	80%	84%	61%	86%	85%	86%	86%	80%	87%	77%	79%	87%	86%	80%			
VTMX64		99	98	99	95	99	64	34	34	2	38	78	97	90	79	90	27	23	99	4	2	1	7	99	99		
NJWH283	MILWILLAH ELSOM H283 PV	+47	+1.3	-3.6	-2.5	+3.5	+44	+79	+115	+97	+20	+1.8	-1.9	+71	+10.7	-2.1	-2.6	+1.7	+1.2	+0.40	+30	+0.76	+0.82	+1.06	\$158	\$274	
NJWF189	HBR	89%	80%	66%	97%	97%	96%	96%	95%	90%	92%	93%	60%	91%	89%	90%	90%	85%	91%	82%	84%	89%	89%	85%			
NJWE51		67	63	94	83	37	79	81	55	55	24	60	96	35	10	89	86	3	75	77	13	32	16	58	86	89	
Breed Average EBVs		+68.	+2.2	+2.6	-4.8	+4.1	+50	+90	+117	+100	+17	+2.1	-4.6	+66	+6.3	-0.1	-0.3	+0.5	+2.2	+0.19	+20	+0.84	+0.97	+1.03	+197	+339	

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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							
NJWE158	MILWILLAH LAD E158 SV			+103	-2.5	-6.8	-7.7	+8.1	+43	+82	+109	+111	+6	+2.0	-5.5	+45	+9.3	-1.0	-4.5	+1.3	+2.6	+0.19	+12	+0.76	+0.82	+0.72	\$162	\$291		
NZEE230	HBR	88%	82%	22	73%	95%	97%	96%	96%	96%	96%	92%	95%	92%	62%	91%	90%	90%	85%	91%	80%	86%	79%	79%	72%	79%	72%			
VTMX14					85	99	11	99	80	73	68	32	99	52	27	95	18	71	97	9	35	51	85	32	16	1	84	83		
BWFQ33	MOOGENILLA QUINELLA Q33 PV			+124	+0.7	+9.3	-5.8	+4.1	+59	+109	+140	+85	+24	+2.8	-3.8	+90	+10.9	-1.4	-1.1	+0.3	+4.1	+0.31	+39	+0.80	+0.98	+0.88	\$265	\$408		
USA18181757	HBR	65%	76%	12	57%	98%	98%	97%	85%	83%	79%	68%	76%	43%	74%	65%	68%	67%	61%	69%	57%	93%	69%	69%	65%	65%	65%			
BWFN9					67	2	33	50	13	8	11	75	8	23	73	4	9	79	64	60	9	67	3	40	52	9	2	8		
EGRM39	MOSQUITO CREEK MAXIMUS			+51	+5.4	+5.9	-7.3	+5.0	+60	+110	+140	+131	+19	+2.0	-8.0	+79	+6.9	+0.8	+0.2	+0.5	+2.2	+0.05	+9	+0.90	+0.92	+0.94	\$264	\$459		
HIOG18	HBR	72%	72%	64	61%	91%	94%	89%	92%	87%	83%	76%	90%	52%	78%	79%	80%	79%	75%	78%	62%	79%	66%	66%	64%	64%				
EGRD9					27	20	15	71	11	7	10	10	36	52	1	16	41	29	40	47	46	33	93	62	37	20	3	1		
EGRQ53	MOSQUITO CREEK QUALITY Q53			+17	+10.4	+10.1	-5.9	-0.1	+58	+105	+140	+108	+26	+1.8	-4.6	+84	+2.7	+0.3	-0.6	-0.3	+1.6	-0.13	+31	+1.00	+1.12	+1.06	\$220	\$394		
USA18463791	HBR	65%	67%	89	50%	87%	87%	83%	83%	80%	77%	66%	80%	42%	71%	70%	73%	72%	67%	71%	53%	65%	69%	69%	61%	61%				
EGRG2					2	1	31	2	18	14	10	37	3	60	51	8	88	40	55	88	64	15	13	79	81	58	28	14		
CSWP036	MURDEDUKE BLACK PEARL			+193	+2.0	+1.2	-8.7	+5.4	+48	+90	+127	+112	+18	+3.3	-4.4	+55	+3.0	-0.2	-1.5	-0.8	+5.9	+0.59	+13	+0.82	+1.16	+1.18	\$188	\$337		
USA17236055	HBR	87%	74%	1	63%	95%	95%	93%	93%	89%	84%	73%	87%	57%	87%	86%	87%	79%	89%	79%	93%	92%	92%	88%	88%					
CSWL123					57	68	6	78	62	51	29	30	39	12	57	82	86	52	71	97	1	91	84	45	87	88	64	56		
CSWH211	MURDEDUKE HUSSAR H211 PV			+10	+1.5	+2.8	-9.3	+6.5	+63	+124	+163	+170	+13	+3.9	-4.2	+88	+1.2	-1.8	-4.9	+0.4	-0.1	-0.80	+31	+0.54	+0.84	+1.02	\$162	\$360		
VTME343	HBR	89%	83%	92	74%	97%	96%	95%	95%	95%	91%	90%	93%	65%	90%	89%	89%	90%	84%	91%	82%	95%	95%	95%	93%	93%				
CSWE175					61	52	4	92	7	1	1	1	81	5	63	5	95	85	98	53	96	1	12	5	20	45	84	37		
CSWK428	MURDEDUKE KICKING K428 PV			+18	+9.0	+9.2	-8.2	+1.9	+49	+95	+119	+91	+24	+3.7	-5.3	+67	+1.4	-0.1	-2.3	+0.3	+0.5	-0.10	+44	+0.90	+1.02	+1.20	\$186	\$345		
VTME343	HBR	90%	86%	88	74%	98%	98%	97%	97%	97%	96%	94%	92%	97%	66%	92%	91%	88%	91%	85%	92%	84%	97%	97%	97%	95%	95%			
CSWE175					6	3	8	11	56	36	45	65	7	7	32	48	95	50	82	60	89	17	1	62	62	91	65	50		
CSWQ011	MURDEDUKE QUARTERBACK			+170	+7.7	+2.6	-10.1	+2.7	+54	+102	+137	+111	+24	+4.4	-5.6	+76	+6.5	+1.5	+1.7	-0.8	+5.1	+0.75	+25	+0.76	+0.98	+1.02	\$239	\$414		
VLYM518	HBR	75%	81%	2	62%	99%	99%	98%	98%	98%	97%	86%	72%	97%	54%	80%	84%	83%	83%	77%	82%	65%	98%	94%	94%	91%	91%			
CSWN026					11	54	2	21	32	19	14	31	7	2	24	22	46	17	17	97	3	96	27	32	52	45	12	6		
NURG20	MURRAY EL GRANDO G20 SV			+94	-13.2	+2.2	-6.9	+7.8	+67	+113	+157	+142	+13	+3.5	-5.3	+92	+16.0	-5.8	-7.0	+2.1	+2.4	-0.43	+20	+0.90	+0.78	+0.86	\$220	\$363		
USA13058662	HBR	90%	87%	28	77%	97%	97%	96%	96%	96%	94%	93%	92%	72%	92%	91%	90%	91%	86%	91%	82%	94%	94%	93%	91%	91%				
VTMD113					99	58	18	98	3	5	2	5	83	9	32	3	1	99	99	1	41	3	47	62	11	7	28	35		
NURM208	MURRAY GENESIS M208 PV			+17	+3.1	+5.8	-6.5	+5.2	+53	+101	+130	+107	+19	+3.7	-6.4	+86	+15.5	-0.1	-2.7	+1.7	+0.9	+1.21	+6	+0.98	+1.06	+0.68	\$243	\$409		
SMPG357	HBR	86%	75%	89	63%	92%	93%	91%	91%	91%	91%	85%	81%	79%	60%	87%	86%	83%	87%	81%	87%	78%	86%	90%	90%	87%				
NURK45					48	21	23	74	36	21	24	37	34	7	11	7	1	50	87	3	82	99	97	77	71	1	9	8		
NURN70	MURRAY KODAK N70 PV			+137	+4.0	+6.0	-7.2	+4.4	+59	+102	+136	+137	+14	+5.1	-6.4	+80	+9.7	-1.6	-2.1	+0.8	+3.9	-0.40	+23	+0.92	+0.88	+0.94	\$245	\$436		
NORK522	HBR	87%	75%	8	58%	97%	97%	94%	94%	93%	86%	73%	91%	54%	88%	87%	86%	87%	79%	89%	80%	91%	91%	91%	87%					
NURJ53					40	19	15	57	14	19	15	7	76	1	11	15	15	82	80	28	12	3	35	66	27	20	8	2		
NURM204	MURRAY PROCEED M204 PV			+249	-8.0	+6.6	-4.5	+4.5	+61	+109	+139	+123	+20	+3.3	-3.7	+88	+13.8	-4.7	-4.8	+0.6	+6.8	+0.11	+14	+0.96	+0.78	+0.92	\$234	\$379		
USA16956101	HBR	88%	78%	1	64%	95%	95%	93%	93%	92%	86%	78%	85%	59%	89%	88%	85%	89%	83%	90%	81%	91%	89%	90%	86%					
NURJ43					97	15	54	60	9	8	11	16	25	12	76	5	2	99	98	40	1	40	77	73	11	16	15	23		
NURP54	MURRAY TWINHEARTS P54 PV			+93	-0.1	+3.3	-6.7	+7.4	+74	+128	+170	+161	+22	+2.3	-4.3	+107	+8.3	-1.7	-3.6	+0.6	+3.0	+0.27	+17	+0.88	+1.24	+0.92	\$251	\$444		
USA16350631	HBR	82%	69%	28	57%	92%	90%	87%	87%	85%	82%	71%	77%	50%	83%	83%	83%	83%	75%	85%	74%	81%	87%	87%	82%					
NURM13					72	47	21	97	1	1	1	1	13	40	60	1	26	84	94	40	26	62	65	58	94	16	6	2		
Breed Average EBVs		+68.	+2.2	+2.6	-4.8	+4.1	+50	+90	+117	+100	+17	+2.1	-4.6	+66	+6.3	-0.1	-0.3	+0.5	+2.2	+0.19	+20	+0.84	+0.97	+1.03	+1.03	+197	+339			

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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							
				R	BV	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
SFNL21	NAMPARA LIBERTY L21 ^{SV}			-85		-5.0	-1.3	-6.5	+8.9	+67	+112	+152	+168	+19	+3.0	-1.6	+84	+7.2	-2.2	-0.9	+1.7	-2.7	-0.60	+19	+0.84	+0.84	+1.00	\$140	\$303
NZE10322010609	HBR			90%		84%	68%	98%	98%	96%	97%	97%	94%	91%	96%	58%	92%	90%	87%	91%	84%	92%	84%	94%	91%	92%	87%		
SFNH65				99		92	85	23	99	3	5	4	1	33	18	97	9	37	90	60	3	99	1	54	49	20	38	93	78
WLGP5	NARANDA PIMP P5 ^{SV}			+106		+11.3	+8.9	-11.6	+1.9	+52	+100	+130	+97	+23	+1.9	-3.5	+68	+5.2	+1.3	+0.9	-0.4	+3.4	+0.74	+4	+0.64	+0.76	+1.06	\$222	\$383
USA18229425	APR			65%		70%	53%	96%	93%	90%	87%	85%	80%	69%	74%	44%	74%	68%	70%	70%	65%	70%	55%	84%	78%	78%	72%		
WLGM24				20		1	3	1	11	42	24	24	55	12	56	80	46	63	20	27	91	19	96	98	13	9	58	26	21
SKOJ6	NEWLYN PARK EMPEROR J6 ^{PV}			+6		-10.7	-6.4	-8.0	+8.3	+69	+116	+154	+161	+9	+2.0	-5.3	+87	+7.5	-1.1	-1.5	+1.2	+0.1	-0.57	+27	+1.08	+0.76	+0.80	\$189	\$346
VTME343	HBR			84%		74%	65%	92%	90%	88%	88%	89%	85%	77%	78%	61%	85%	84%	84%	85%	78%	86%	76%	78%	85%	85%	80%		
NZCE115				94		99	98	9	99	2	3	3	1	97	52	32	6	34	73	71	11	94	1	20	89	9	3	63	49
NZE21095018	NGAPUTAHI P206 ^{SV}			+126		+10.8	+7.0	-1.5	-0.2	+41	+82	+96	+64	+28	+2.7	-6.3	+60	+7.3	+0.7	+0.0	+1.0	+3.5	+0.61	+21	+0.96	+1.10	+1.10	\$240	\$380
HIOE7	HBR			74%		74%	64%	92%	95%	92%	90%	88%	83%	72%	87%	59%	78%	77%	79%	78%	74%	77%	67%	82%	73%	73%	71%		
NZE21095112H49				11		2	12	91	2	87	74	88	94	2	26	12	68	36	31	43	18	17	92	42	73	78	70	11	23
USA16981588	PA FULL POWER 1208 ^{PV}			+115		-5.7	-4.8	-5.7	+3.7	+52	+98	+119	+77	+14	+1.9	-3.1	+68	+12.6	-1.5	+0.5	+0.8	+3.4	+0.80	+25	+1.24	+0.96	+0.70	\$223	\$328
USA16381311	HBR			92%		93%	81%	99%	98%	98%	98%	98%	97%	97%	98%	71%	95%	94%	94%	94%	91%	94%	85%	98%	98%	97%	90%		
USA16408070				16		94	96	34	41	42	28	46	84	74	56	86	45	4	81	34	28	19	98	27	98	47	1	25	63
USA17585042	PA RANCH HOUSE 349 ^{PV}			+70		+6.6	+3.1	-5.7	+4.0	+51	+89	+113	+95	+26	+0.0	-2.6	+61	+6.0	-0.2	+2.0	+0.4	+1.8	+0.69	-4	+1.50	+1.40	+0.92	\$200	\$338
USA16651533	HBR			91%		87%	69%	98%	98%	97%	97%	97%	94%	95%	96%	62%	93%	93%	92%	89%	93%	83%	86%	93%	93%	89%			
USA17193464				46		18	49	34	48	47	53	58	59	3	98	92	66	52	52	14	53	58	95	99	99	99	16	51	56
HKFE27	PARINGA IRON ORE E27 ^{PV}			+109		+8.2	+1.9	-8.0	+2.0	+37	+71	+94	+90	+15	+2.1	-6.9	+67	+8.3	+0.9	+1.5	+1.5	+1.7	+0.40	+40	+0.86	+0.96	+0.98	\$202	\$350
VTMA149	HBR			88%		81%	69%	97%	96%	94%	94%	94%	90%	91%	91%	63%	90%	89%	89%	90%	83%	90%	82%	85%	84%	84%	79%		
FAFC1				19		9	61	9	12	94	93	89	67	64	48	6	49	26	27	19	5	61	77	3	54	47	31	48	45
SMPG357	PATHFINDER GENESIS G357 ^{PV}			+0		+2.5	+5.3	-7.8	+6.7	+62	+109	+147	+140	+26	+4.3	-5.6	+96	+14.0	+0.9	-1.4	+1.4	+0.2	+0.63	+29	+0.86	+1.04	+0.76	\$231	\$415
VTMB1	HBR			94%		96%	87%	99%	99%	99%	99%	99%	98%	98%	98%	82%	97%	95%	96%	96%	94%	95%	89%	98%	97%	98%	96%		
SMPD245				96		53	26	11	93	8	8	6	5	3	3	24	2	2	27	69	7	93	93	15	54	66	1	18	6
SMPK22	PATHFINDER KOMPLETE K22 ^{SV}			+72		+11.4	+10.2	-9.7	+0.7	+39	+73	+92	+40	+27	+3.0	-5.8	+49	+6.8	+4.2	+5.5	+0.1	+2.3	+0.45	+28	+0.48	+0.84	+0.68	\$235	\$359
SMPG357	HBR			92%		91%	74%	99%	98%	98%	98%	98%	96%	96%	97%	69%	94%	93%	93%	92%	93%	93%	85%	96%	96%	96%	94%		
SMPH756				45		1	1	3	4	90	91	92	99	2	18	20	91	42	1	72	43	81	19	2	20	1	14	39	
SMPM651	PATHFINDER MASTERPIECE			+79		+1.1	+4.1	-5.7	+5.5	+59	+106	+137	+142	+20	+3.3	-8.0	+62	+9.7	-2.2	-3.5	+1.4	+2.0	-0.22	+48	+0.96	+1.18	+1.14	\$240	\$429
VTMG67	HBR			84%		75%	65%	90%	94%	91%	91%	91%	85%	81%	85%	60%	86%	84%	84%	85%	78%	86%	76%	70%	77%	77%	74%		
SMPH66				39		64	38	34	79	13	13	14	5	26	12	1	62	15	90	93	7	52	9	1	73	89	81	11	3
SMPM558	PATHFINDER MAXIMUS M558 ^{PV}			+99		-2.5	+2.1	-6.9	+6.1	+61	+101	+132	+135	+25	+4.7	-8.4	+56	+9.4	-2.1	-0.5	+0.6	+2.9	-0.27	+48	+0.92	+1.04	+0.88	\$238	\$413
VTMG67	HBR			88%		80%	68%	96%	96%	95%	94%	95%	89%	89%	92%	62%	90%	88%	86%	88%	85%	89%	80%	77%	78%	78%	74%		
SMPH458				24		85	59	18	88	10	22	21	8	6	2	1	78	17	89	53	40	28	7	1	66	66	9	12	7
SMPN56	PATHFINDER NUCLEUS N56 ^{SV}			+51		+4.3	+3.2	-4.0	+5.5	+62	+108	+140	+125	+16	+4.2	-6.4	+81	+13.6	+0.8	+0.9	+1.0	+1.7	+0.32	+19	+0.74	+0.80	+0.78	\$266	\$449
HIOG18	HBR			89%		74%	60%	96%	96%	94%	94%	94%	87%	80%	92%	55%	90%	89%	88%	89%	80%	90%	83%	84%	85%	85%	81%		
SMPL179				63		37	48	62	79	7	9	11	14	58	3	11	13	2	29	27	18	61	68	51	28	13	2	2	1
SMPP516	PATHFINDER PHAT CAT P516 ^{SV}			+144		+3.2	+1.6	-8.7	+5.6	+55	+95	+122	+95	+27	+4.9	-8.7	+61	+9.5	-1.9	-0.4	+0.3	+4.4	+0.17	+43	+0.80	+1.12	+1.06	\$269	\$429
SMPM558	HBR			70%		69%	54%	96%	94%	92%	91%	90%	82%	70%	85%	48%	77%	73%	75%	75%	70%	75%	61%	86%	73%	74%	68%		
SMPJ282				6		47	64	6	81	27	35	39	59	2	1	1	65	16	87	51	60	7	49	2	40	81	58	2	3
Breed Average EBVs		+68.	+2.2	+2.6	-4.8	+4.1	+50	+90	+117	+100	+17	+2.1	-4.6	+66	+6.3	-0.1	-0.3	+0.5	+2.2	+0.19	+20	+0.84	+0.97	+1.03	+197	+339			

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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					
				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	
SMPP41	PATHFINDER PREMIUM P41	SV		+116	+1.7	+7.0	-5.1	+4.8	+59	+106	+142	+129	+23	+4.1	-8.3	+57	+4.2	-0.2	+0.1	-0.2	+3.8	+0.16	+25	+0.84	+1.18	+1.20	\$250	\$438	
VTMG67		APR		72%	73%	62%	94%	94%	91%	91%	90%	84%	73%	86%	56%	78%	76%	77%	77%	73%	77%	65%	81%	69%	69%	69%	69%		
SMPM53				15	60	12	44	66	14	12	9	12	9	4	1	77	75	52	41	85	13	47	28	49	89	91	6	2	
SMPQ1357	PATHFINDER QUEST Q1357	PV		+111	-0.2	-2.2	-6.6	+5.4	+65	+122	+166	+168	+18	+2.3	-5.5	+91	+7.2	-0.5	-1.8	+0.5	+3.5	+0.43	+19	+0.84	+0.76	+0.96	\$236	\$433	
NORL519		HBR		66%	72%	60%	91%	94%	84%	79%	80%	78%	69%	73%	50%	72%	66%	68%	68%	63%	69%	59%	58%	69%	69%	69%	69%		
SMPM18				18	73	89	22	78	4	2	1	1	44	40	27	4	37	60	76	47	17	79	54	49	9	25	14	3	
NZE41-97	PINEBANK WAIGROUP 41/97	#		+17	+4.3	-4.8	-4.0	+3.6	+37	+63	+73	+48	+19	+0.8	-3.1	+17	+4.9	+1.4	+0.5	+0.8	+1.1	-0.14	+26	+0.34	+0.94	+1.00	\$150	\$234	
NZE53195		HBR		94%	95%	88%	98%	98%	98%	98%	98%	98%	98%	97%	87%	96%	95%	96%	96%	94%	95%	89%	90%	87%	87%	81%			
NZE63988				89	37	96	62	39	94	98	99	99	36	90	86	99	66	19	34	28	77	14	25	1	42	38	89	96	
WQCQ47	QUANDEN SPRINGS			+164	+11.0	+8.7	-9.7	-1.4	+47	+93	+126	+104	+29	+5.0	-4.4	+48	+11.9	+0.3	-0.1	+0.3	+4.1	+0.41	+19	+1.08	+1.06	+1.06	\$223	\$394	
VLYM518		HBR		67%	70%	56%	88%	89%	83%	79%	81%	77%	69%	76%	46%	71%	67%	69%	69%	64%	70%	59%	76%	70%	74%	70%			
VLYM1690				3	1	4	3	1	63	41	30	42	1	1	57	93	5	40	45	60	9	78	53	89	71	58	24	14	
NORE11	RENNYLEA EDMUND E11	PV		+114	+10.0	+0.8	-7.3	+1.1	+34	+65	+84	+54	+16	+1.9	-7.3	+51	+4.9	+3.4	+1.4	-0.3	+4.3	+0.78	+25	+0.56	+1.00	+1.10	\$202	\$322	
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%	99%		
VLYY5				16	3	71	15	6	97	97	96	97	58	56	4	89	66	3	20	88	8	97	26	6	57	70	49	67	
NORG255	RENNYLEA G255	PV		+131	-11.9	-8.1	-3.6	+4.6	+51	+95	+130	+127	+21	+0.8	-3.7	+90	+7.8	-0.3	-3.2	+0.7	+4.7	-0.11	+13	+1.20	+0.94	+0.86	\$161	\$276	
BNAD145		APR		94%	94%	86%	98%	98%	98%	98%	98%	98%	98%	97%	81%	96%	95%	95%	96%	93%	94%	90%	97%	94%	94%	92%			
NORC490				10	99	99	69	62	44	36	24	13	20	90	76	4	30	55	91	34	5	16	83	97	42	7	84	88	
NORH708	RENNYLEA H708	PV		+261	-4.5	-0.4	+1.2	+4.9	+50	+102	+132	+131	+9	+2.6	-3.9	+72	+13.1	-3.5	-6.4	+1.9	+7.1	+0.71	+26	+0.72	+0.74	+1.00	\$232	\$385	
NORC511		APR		93%	91%	80%	98%	98%	98%	98%	98%	98%	95%	97%	75%	95%	94%	94%	94%	91%	94%	91%	98%	95%	95%	95%	93%		
NORE176				1	91	80	99	68	49	18	20	10	96	29	71	33	3	98	99	2	1	95	23	24	7	38	16	19	
NORK835	RENNYLEA K835	PV		+112	-3.7	-5.1	-2.0	+6.7	+51	+91	+117	+98	+13	+3.2	-5.3	+56	+8.8	+0.7	-1.1	+0.2	+4.1	-0.13	+15	+0.64	+1.12	+1.10	\$202	\$328	
NORG420		HBR		87%	81%	65%	98%	95%	95%	95%	95%	90%	87%	89%	60%	89%	88%	87%	88%	84%	89%	78%	90%	88%	88%	85%			
NORH514				17	89	97	88	93	46	48	50	53	82	14	32	80	21	31	64	66	9	15	76	13	81	70	48	63	
NORK522	RENNYLEA KODAK K522	SV		+140	+10.6	+10.7	-5.4	+1.2	+46	+85	+111	+109	+10	+4.6	-6.5	+57	+4.3	+3.4	+1.8	-0.4	+4.1	+0.36	+7	+0.64	+0.82	+0.98	\$212	\$393	
NORE11		HBR		91%	92%	79%	99%	99%	98%	98%	98%	97%	96%	98%	71%	94%	93%	93%	93%	91%	93%	86%	95%	96%	96%	95%			
NORF810				7	2	1	39	6	69	67	63	35	94	2	10	77	74	3	16	91	9	73	96	13	16	31	36	15	
NORL508	RENNYLEA L508	PV		+168	+2.1	+8.5	-6.4	+2.5	+46	+86	+117	+91	+26	+1.3	-5.6	+58	+6.2	+1.6	-0.7	-0.3	+5.5	+0.56	+19	+0.72	+0.92	+0.92	\$222	\$366	
USA17366506		HBR		92%	94%	80%	99%	99%	98%	98%	98%	98%	97%	98%	73%	95%	94%	94%	95%	92%	94%	86%	98%	97%	97%	95%			
NORH414				3	56	4	24	18	68	62	50	65	3	78	24	75	49	16	57	88	2	89	54	24	37	16	26	33	
NORL683	RENNYLEA L683	PV		+36	+2.3	+0.6	-5.2	+5.3	+55	+94	+119	+105	+5	+1.9	-5.8	+80	+5.9	+0.5	-1.6	+0.8	+2.0	+0.72	+20	+0.74	+0.86	+0.98	\$220	\$370	
NORE11		APR		88%	82%	70%	98%	97%	96%	96%	94%	93%	90%	94%	65%	90%	89%	86%	89%	84%	90%	83%	95%	88%	88%	85%			
NORJ631				76	55	73	42	76	26	40	45	41	99	56	20	14	53	36	72	28	52	96	46	28	23	31	28	29	
NORM1078	RENNYLEA M1078	SV		+270	-2.0	-2.9	-2.3	+3.0	+40	+81	+101	+90	+12	+1.9	-5.1	+59	+10.9	-1.2	-4.6	+0.8	+8.0	+0.90	+11	+0.96	+1.04	+1.20	\$216	\$340	
NORH708		APR		89%	73%	61%	97%	96%	95%	95%	94%	92%	85%	92%	55%	90%	89%	89%	89%	81%	91%	82%	94%	87%	87%	84%			
NORF563				1	83	92	85	27	89	77	81	67	89	56	37	70	9	75	98	28	1	99	89	73	66	91	32	54	
NORP987	RENNYLEA P987	PV		+222	+9.4	+8.6	-8.7	+1.9	+52	+99	+130	+121	+14	+1.2	-4.5	+78	+4.9	+4.4	+3.1	-1.9	+8.3	+0.99	+9	+0.94	+0.92	+1.06	\$237	\$423	
NORM763		APR		71%	72%	55%	95%	95%	93%	92%	92%	85%	72%	89%	49%	78%	77%	78%	78%	72%	77%	61%	93%	61%	63%	60%			
NORM1184				1	4	4	6	11	42	24	23	19	77	81	54	18	66	1	6	99	1	99	94	70	37	58	13	4	
Breed Average EBVs		+68.	+2.2	+2.6	-4.8	+4.1	+50	+90	+117	+100	+17	+2.1	-4.6	+66	+6.3	-0.1	-0.3	+0.5	+2.2	+0.19	+20	+0.84	+0.97	+1.03	+197	+339			

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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	
NORQ1081	RENNYLEA Q1081 PV			+223	+1.5	+3.8	-4.0	+3.3	+50	+90	+112	+94	+11	+3.0	-6.0	+51	+11.8	+0.7	-0.7	+0.7	+6.3	+0.62	+13	+0.84	+0.98	+0.94	\$262	\$412	
NORH708		APR		70%	70%	58%	90%	90%	86%	83%	83%	80%	70%	81%	52%	75%	72%	73%	73%	69%	74%	64%	81%	69%	73%	69%			
NORL841			1		61	42	62	32	52	51	61	60	90	18	17	89	6	31	57	34	1	92	83	49	52	20	3	7	
NORQ213	RENNYLEA Q213 PV			+53	+10.5	+7.4	-7.9	+1.1	+65	+123	+153	+109	+28	+0.4	-8.6	+102	+10.4	-0.7	-1.1	+0.3	+3.7	+0.58	+27	+0.56	+0.76	+0.84	\$326	\$522	
NORK97		APR		71%	72%	57%	96%	96%	94%	93%	93%	84%	71%	90%	51%	78%	77%	78%	78%	73%	77%	62%	92%	69%	70%	67%			
NORL110			61		2	9	10	6	4	1	3	34	2	96	1	1	11	64	64	60	14	90	21	6	9	5	1	1	
TRHP52	RICHMOND HILL PLAY P52 SV			+111	+3.9	+2.4	-0.1	+3.9	+49	+84	+110	+113	+14	+4.2	-4.3	+66	+8.8	-4.8	-5.4	+1.7	+2.5	-0.17	+33	+1.06	+0.96	+1.12	\$185	\$335	
TRHL9		HBR		59%	65%	47%	92%	92%	89%	82%	80%	75%	64%	73%	36%	70%	61%	65%	65%	57%	65%	50%	87%	76%	77%	70%			
TRHH92			18		41	56	97	46	57	70	66	28	77	3	60	52	21	99	99	3	38	12	9	87	47	76	67	58	
NZE21159019	SEVEN HILLS 312/19 PV			+94	+2.7	+3.6	-8.2	+3.1	+57	+101	+128	+99	+23	-0.3	-2.5	+75	+10.2	-3.9	-5.3	+1.2	+3.9	+0.35	+22	+1.06	+0.94	+0.92	\$233	\$372	
USA18217198		HBR		64%	68%	53%	90%	86%	78%	75%	76%	75%	67%	70%	38%	67%	65%	66%	66%	60%	68%	54%	57%	74%	74%	69%			
NZE21159117053			28		51	44	8	29	21	22	27	51	10	99	93	25	12	99	99	11	12	72	38	87	42	16	16	28	
NZE21159018	SEVEN HILLS 410/18 SV			+119	-0.7	-1.1	-0.7	+3.4	+49	+96	+125	+97	+18	+1.4	-3.4	+75	+7.0	-0.1	+0.4	+0.1	+4.0	+0.68	+28	+0.60	+0.74	+1.10	\$205	\$337	
NZE21159016295		HBR		63%	68%	51%	93%	91%	88%	85%	83%	78%	63%	65%	39%	71%	67%	71%	70%	64%	70%	51%	84%	63%	63%	60%			
NZE21159116096			14		76	84	95	34	55	32	33	56	41	75	82	25	39	50	36	72	10	94	19	9	7	70	45	56	
APBK11	SHACORRAHDALU KINETIC K11			+82	+11.1	+11.1	-9.5	+0.8	+49	+91	+107	+97	+10	+4.9	-8.0	+61	+9.4	+2.4	+0.8	+0.9	+1.6	+0.67	+7	+0.94	+1.06	+0.96	\$245	\$427	
VTMB1		HBR		69%	73%	64%	91%	90%	87%	84%	83%	81%	77%	78%	58%	76%	68%	71%	64%	71%	72%	70%	69%						
APBF2			37		1	1	3	4	54	48	72	55	94	1	1	66	17	8	29	23	64	94	96	70	71	25	8	4	
APBR5	SHACORRAHDALU ROYALE R5			+103	+8.4	+7.9	-7.4	+1.8	+53	+97	+121	+75	+24	+2.3	-6.1	+75	+10.1	+2.2	+2.6	+0.3	+3.2	+0.57	+25	+0.80	+1.00	+0.78	\$277	\$434	
TFAK132		HBR		64%	68%	56%	82%	84%	78%	76%	76%	75%	67%	75%	45%	68%	64%	66%	66%	61%	68%	56%	57%	75%	71%	68%			
HBUP80			22		8	7	14	10	37	32	41	87	8	40	15	25	13	10	9	60	22	90	28	40	57	2	1	3	
SYAN340	STONEY POINT NOLTE N340 SV			+76	-0.5	-5.3	-5.6	+6.8	+74	+137	+171	+163	+20	+3.8	-4.5	+116	+7.4	-3.7	-6.0	+1.0	+2.6	-0.13	+4	+0.90	+0.86	+1.24	\$242	\$433	
SYAL178		HBR		83%	72%	60%	96%	96%	95%	94%	94%	88%	78%	89%	48%	86%	84%	84%	85%	76%	86%	72%	88%	87%	87%	83%			
SGMK250			41		75	97	36	94	1	1	1	1	27	6	54	1	35	99	99	18	35	15	98	62	23	95	10	3	
SYAP147	STONEY POINT PERRY P147 PV			+94	+5.6	+2.9	-5.2	+4.2	+58	+106	+131	+104	+24	+1.4	-5.7	+88	+11.3	-2.5	-3.4	+0.8	+3.6	-0.29	+15	+0.84	+0.82	+0.82	\$261	\$425	
USA17936442		HBR		65%	69%	51%	93%	92%	90%	86%	82%	78%	68%	82%	42%	73%	69%	71%	70%	64%	71%	55%	86%	76%	77%	68%			
SWAH233			28		26	51	42	53	18	12	22	42	9	75	22	5	7	93	92	28	15	6	75	49	16	4	3		
NZE19507018	STORTH OAKS FULLY LOADED			+149	+7.3	+8.2	-12.1	+1.4	+45	+83	+124	+120	+17	+2.7	-5.2	+63	+4.6	+1.5	+1.3	-0.7	+4.6	+0.49	+31	+0.60	+0.86	+1.00	\$193	\$368	
NORL508		HBR		72%	77%	59%	97%	96%	95%	93%	91%	84%	72%	88%	51%	78%	76%	78%	78%	72%	77%	63%	91%	76%	77%	73%			
NZE19507113J320			5		14	6	1	7	75	71	34	20	48	26	34	60	70	17	22	96	5	84	11	9	23	38	59	31	
NZE19507013	STORTH OAKS JACK J7 SV			+43	+7.1	+10.1	-5.3	+4.7	+60	+113	+154	+143	+20	+3.3	-2.2	+84	+8.3	-0.3	-2.9	-0.3	+2.4	+0.20	+24	+1.00	+1.00	+0.92	\$192	\$383	
VTME343		HBR		91%	86%	74%	98%	98%	97%	97%	97%	94%	93%	96%	68%	93%	92%	91%	92%	89%	93%	84%	96%	92%	93%	89%			
NZE19507111G183			70		15	1	41	64	11	5	3	4	28	12	95	8	26	55	89	88	41	53	32	79	57	16	59	21	
VSNG34	STRATHEWEN BERKLEY G34 PV			+57	+8.3	+7.9	-7.4	+3.9	+57	+103	+140	+143	+18	+2.2	-6.8	+83	+6.2	+1.0	+0.2	+0.5	+1.3	-0.15	+17	+1.12	+1.24	+1.10	\$225	\$428	
VTMB1		HBR		89%	79%	69%	94%	93%	91%	91%	88%	86%	83%	65%	89%	88%	89%	89%	84%	90%	82%	86%	88%	88%	84%				
VSNE22			58		8	7	14	46	20	16	11	4	45	44	7	10	49	25	40	47	72	13	67	92	94	70	22	4	
USA17236055	SYDGEN BLACK PEARL 2006 PV			+88	+4.4	+8.4	-7.5	+3.2	+51	+85	+122	+84	+22	+1.7	-3.1	+75	+8.7	+0.2	-0.5	+0.6	+2.2	+0.05	+14	+1.06	+1.20	+1.14	\$212	\$346	
USA15354674		HBR		95%	97%	91%	99%	99%	99%	99%	99%	98%	98%	99%	97%	97%	97%	96%	96%	91%	98%	99%	99%	97%					
USA16214508			32		36	5	13	30	45	67	39	76	14	64	86	26	22	42	53	40	46	33	78	87	91	81	36	49	
Breed Average EBVs		+68.	+2.2	+2.6	-4.8	+4.1	+50	+90	+117	+100	+17	+2.1	-4.6	+66	+6.3	-0.1	-0.3	+0.5	+2.2	+0.19	+20	+0.84	+0.97	+1.03	+1.97	+339			

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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				
VTMA149	TE MANIA ADA A149 PV	+2	-6.9	-4.2	-3.6	+6.5	+52	+95	+127	+168	+10	+1.8	-2.4	+81	+3.9	-3.4	-2.1	+1.5	-0.6	-0.69	+25	+0.88	+0.76	+0.78	\$95	\$247			
VTMX60	HBR	95%	97%	91%	99%	99%	99%	99%	98%	98%	98%	98%	86%	97%	96%	97%	97%	96%	96%	91%	96%	97%	97%	96%					
VTMU338		95	95	69	92	42	36	29	1	95	60	93	12	78	98	80	5	99	1	27	58	9	2	99	94				
VTMK52	TE MANIA KALIBROOK K52 PV	+140	+8.2	+4.8	-2.7	+1.5	+51	+105	+127	+92	+29	+1.8	-6.8	+68	+1.8	+1.1	+2.2	-1.1	+5.8	+1.47	+15	+1.10	+1.08	+1.08	\$258	\$427			
USA16295688	HBR	84%	74%	65%	93%	93%	89%	89%	88%	84%	74%	83%	62%	85%	84%	82%	85%	80%	86%	75%	83%	88%	88%	84%					
VTMH423		7	9	31	81	8	44	14	30	64	1	60	7	44	93	24	12	99	1	99	75	91	74	65	4	4			
VTMK138	TE MANIA KIRBY K138 PV	+237	+0.4	+6.5	-1.7	+4.3	+50	+90	+119	+92	+20	+2.5	-9.4	+67	+5.3	+1.7	+3.0	-1.9	+8.6	+1.21	+9	+0.82	+0.76	+0.98	\$267	\$427			
USA16295688	HBR	93%	93%	81%	99%	99%	98%	98%	98%	97%	97%	97%	77%	97%	95%	94%	96%	93%	95%	85%	98%	98%	98%	97%					
VTMH17		1	69	15	90	55	49	52	45	64	30	33	1	49	61	15	7	99	1	99	94	45	9	31	2	4			
VTMM13	TE MANIA MAGNATE M13 PV	+54	-2.0	+7.7	-12.2	+4.3	+51	+91	+113	+79	+31	+2.3	-8.1	+59	+5.4	-1.9	-1.4	+0.6	+1.7	+0.27	+29	+1.02	+1.26	+1.20	\$226	\$360			
HIOH9	HBR	92%	84%	70%	98%	98%	97%	97%	97%	95%	92%	96%	62%	95%	92%	89%	95%	85%	92%	79%	97%	91%	92%	87%					
VTMK200		61	83	8	1	55	43	47	60	82	1	40	1	71	60	87	69	40	61	62	15	82	95	91	21	38			
VTMN424	TE MANIA NEBO N424 PV	+185	+10.8	-1.4	-7.2	+3.8	+52	+102	+127	+103	+33	+4.5	-4.0	+57	+7.7	-1.1	-3.7	+0.4	+4.5	-0.01	+50	+0.72	+0.76	+1.02	\$212	\$364			
VTMJ89	HBR	92%	87%	76%	98%	98%	98%	98%	98%	96%	92%	96%	56%	93%	93%	89%	93%	84%	92%	80%	97%	92%	92%	88%					
VTMJ214		2	2	86	15	44	42	19	29	45	1	2	68	77	31	73	94	53	6	26	1	24	9	45	36	34			
VTMN1387	TE MANIA NEON N1387 SV	+272	-0.7	+3.4	-6.5	+3.6	+49	+89	+112	+90	+20	+1.9	-7.5	+52	+2.9	-0.6	-1.3	-2.0	+9.7	+0.44	+29	+0.80	+0.78	+1.06	\$232	\$375			
VTMK138	HBR	79%	79%	61%	98%	98%	96%	96%	93%	86%	72%	93%	54%	82%	84%	82%	84%	77%	83%	65%	95%	77%	77%	74%					
VTML452		1	76	46	23	39	53	53	62	67	25	56	3	88	87	62	67	99	1	80	15	40	11	58	17	26			
VTMN181	TE MANIA NERO N181 PV	+189	-13.5	-5.0	-3.1	+5.3	+61	+107	+142	+115	+30	+5.3	-5.9	+74	+6.4	-4.5	-5.0	+0.3	+6.2	+0.19	+31	+0.84	+0.98	+1.22	\$207	\$328			
VTML135	HBR	91%	83%	70%	98%	97%	97%	97%	97%	94%	87%	92%	52%	92%	91%	87%	91%	81%	90%	75%	93%	84%	84%	81%					
VTML1251		1	99	97	76	76	10	11	9	26	1	1	18	28	47	99	99	60	1	51	11	49	52	93	42	63			
VTMP888	TE MANIA PESO P888 PV	+24	+9.3	+4.7	-5.9	+1.4	+56	+117	+143	+109	+28	+2.3	-6.3	+92	+2.8	-0.5	+0.7	+0.1	+1.8	+0.54	+36	+0.84	+1.04	+0.96	\$249	\$431			
VTMK226	HBR	82%	81%	66%	98%	97%	97%	97%	96%	92%	82%	90%	54%	85%	87%	84%	86%	79%	84%	63%	94%	73%	73%	72%					
VTMH423		85	5	32	31	7	25	3	8	35	1	40	12	3	87	60	31	72	58	88	6	49	66	25	7	3			
VTMQ854	TE MANIA QUEBEC Q854 SV	+96	+8.3	+3.9	-2.7	+1.4	+50	+88	+115	+80	+26	+0.6	-3.9	+57	+6.0	+1.0	+2.2	+0.0	+3.4	+0.31	+33	+0.80	+0.92	+0.76	\$228	\$367			
USA18229488	HBR	69%	82%	58%	98%	97%	95%	95%	93%	89%	83%	70%	87%	44%	77%	75%	76%	71%	75%	57%	94%	77%	77%	72%					
VTML1244		27	8	40	81	7	48	57	55	81	4	93	71	78	52	25	12	77	19	67	9	40	37	1	20	32			
DXTM100	TEXAS MT KAPUTAR M100 PV	+71	+8.3	+8.2	-11.0	+4.2	+62	+109	+153	+145	+19	+3.7	-4.5	+91	+5.9	-3.0	-4.1	+0.7	+1.6	+0.07	+28	+0.94	+1.14	+1.02	\$213	\$410			
USA15848590	HBR	85%	77%	65%	97%	96%	94%	94%	93%	87%	84%	91%	58%	87%	87%	86%	87%	81%	87%	77%	89%	85%	85%	81%					
DXTZ183		46	8	6	1	53	7	8	3	4	37	7	54	4	53	96	96	34	64	35	17	70	84	45	36	8			
USA18704096	THOMAS EDISON 6764 PV	+68	-1.0	+7.6	-0.1	+4.3	+62	+102	+140	+128	+12	+0.4	-3.7	+85	+10.8	-5.5	-7.8	+1.6	+2.5	-0.10	+9	+0.86	+1.02	+0.92	\$217	\$374			
USA16933958	HBR	84%	70%	55%	93%	91%	89%	89%	89%	84%	80%	82%	49%	86%	85%	84%	84%	76%	87%	74%	73%	89%	87%	73%					
USA18048451		48	78	8	97	55	7	18	11	12	88	96	76	8	9	99	99	4	38	17	92	54	62	16	31	27			
DBLL292	TOPBOS LEADING EDGE L292 PV	+33	+1.7	+6.4	-5.9	+6.9	+73	+129	+168	+157	+22	+1.4	-5.3	+87	+3.8	-2.3	-4.9	+0.4	+1.1	+0.00	+26	+0.96	+0.76	+0.78	\$234	\$431			
USA16295688	HBR	89%	86%	70%	97%	98%	97%	97%	97%	94%	94%	96%	65%	92%	90%	88%	91%	85%	91%	84%	95%	91%	90%	87%					
VSNF04		79	60	16	31	94	1	1	2	15	75	32	6	79	91	98	53	77	27	23	73	9	2	15	3				
ELYH1	TRIO DOCKLANDS H1 PV	+45	+8.9	+3.1	-8.9	+2.1	+42	+83	+113	+73	+29	+2.9	-6.9	+70	-1.1	+2.7	+4.8	-0.9	+1.4	-0.46	+18	+0.82	+1.26	+1.10	\$193	\$334			
QHED62	HBR	85%	75%	63%	91%	94%	93%	92%	92%	89%	89%	87%	61%	88%	85%	85%	86%	83%	87%	77%	82%	83%	83%	78%					
NKLD15		69	6	49	5	13	83	72	58	88	1	21	6	38	99	6	2	98	69	2	61	45	95	70	59	58			
Breed Average EBVs		+68.	+2.2	+2.6	-4.8	+4.1	+50	+90	+117	+100	+17	+2.1	-4.6	+66	+6.3	-0.1	-0.3	+0.5	+2.2	+0.19	+20	+0.84	+0.97	+1.03	+197	+339			

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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			
				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	
NZE17691009	TURIHUA CRUMP E5 SV			+18	-3.0	-2.0	-5.8	+3.7	+29	+57	+82	+95	+14	+1.0	-10.4	+15	-0.4	+4.4	+2.7	-0.1	+1.2	+0.30	+29	+0.66	+1.20	+1.20	\$129	\$256	
NZE17691003Y167	HBR			92%	91%	82%	97%	98%	98%	98%	98%	97%	97%	97%	87%	95%	94%	94%	94%	93%	94%	85%	81%	84%	84%	78%			
NZE17691195Q263				89	87	89	33	41	99	99	99	97	58	72	87	1	99	99	1	8	81	75	66	16	15	91	91	96	93
NXTL096	TWYNAM L096 SV			+55	+8.8	+9.3	-8.2	+2.7	+58	+111	+159	+134	+28	+3.5	-8.7	+107	+2.5	+0.7	+0.8	-0.7	+3.0	-0.21	+11	+0.62	+0.86	+0.90	\$255	\$464	
NXTH111	APR			84%	69%	51%	93%	93%	89%	89%	88%	82%	68%	83%	49%	85%	83%	80%	85%	78%	85%	85%	75%	74%	75%	69%			
NXTJ078				60	6	2	8	21	18	6	2	8	2	9	1	1	89	31	29	96	26	10	90	11	23	12	5	1	
USA18066037	V A R LEGEND 5019 SV			+79	-2.0	+4.4	-6.8	+5.5	+70	+121	+148	+154	+11	+2.7	-4.4	+86	+10.0	-4.0	-6.0	+1.3	+2.1	-0.36	+17	+1.04	+0.68	+0.86	\$228	\$411	
USA17262835	HBR			85%	75%	60%	96%	96%	93%	93%	92%	88%	84%	87%	52%	88%	87%	86%	85%	79%	89%	76%	85%	97%	96%	81%			
USA16924432				39	83	35	19	79	2	2	5	2	93	26	57	7	13	99	99	9	49	4	63	85	3	7	20	7	
BCSF73	WAITARA PIO FEDERAL F73 SV			+25	+5.3	+5.8	-4.4	+1.6	+55	+103	+134	+89	+27	+2.6	-3.8	+90	+5.1	-0.6	-0.5	+0.3	+1.3	+0.33	+15	+1.40	+1.24	+0.92	\$220	\$367	
USA15688392	HBR			93%	88%	73%	98%	98%	97%	97%	97%	96%	96%	96%	68%	94%	93%	93%	94%	89%	93%	86%	96%	95%	95%	92%			
BSCZ66				84	28	21	56	9	26	17	18	69	3	29	73	4	64	62	53	60	72	69	72	99	94	16	28	32	
BSCP90	WAITARA PRINCETON P90 PV			+47	+0.7	+3.5	-2.4	+4.5	+50	+95	+124	+79	+23	+2.2	-4.4	+76	+9.2	+0.0	+0.1	+0.0	+2.6	+0.27	+44	+0.60	+0.78	+0.98	\$216	\$344	
GTNM6	HBR			72%	73%	55%	96%	94%	93%	93%	91%	84%	73%	89%	47%	78%	78%	78%	78%	73%	78%	61%	91%	85%	85%	81%			
BSCJ2				67	67	45	84	60	48	36	36	82	9	44	57	22	18	47	41	77	35	62	1	9	11	31	32	50	
QKBP29	WARRAWEE PATROL P29 PV			+36	+10.3	+11.6	-13.3	+2.3	+55	+106	+142	+124	+21	+2.5	-6.8	+103	+8.5	+3.4	+2.0	-0.1	+1.8	+0.49	+27	+0.80	+1.26	+0.96	\$246	\$446	
SMPG357	HBR			79%	71%	59%	93%	90%	87%	86%	85%	82%	73%	80%	56%	80%	81%	81%	75%	82%	71%	79%	77%	77%	73%				
QKBM01				76	2	1	1	16	29	11	9	15	19	33	7	1	24	3	14	81	58	84	21	40	95	25	8	2	
NWPG188	WATTLETOP FRANKLIN G188 SV			+17	+4.6	+7.2	-4.7	+2.2	+64	+109	+141	+119	+25	+3.7	-3.3	+87	+1.3	-1.4	-1.7	-0.3	+0.8	-1.13	+33	+1.00	+0.94	+0.92	\$191	\$358	
USA15462648	HBR			92%	94%	83%	99%	99%	98%	98%	98%	97%	97%	98%	72%	95%	94%	94%	94%	91%	93%	86%	97%	95%	95%	92%			
NWPE295				89	34	11	51	15	5	8	10	20	6	7	83	6	95	79	74	88	84	1	8	79	42	16	60	39	
NWPL4	WATTLETOP LOCK L4 SV			+42	-3.4	-0.9	-8.1	+6.2	+59	+108	+156	+150	+29	+1.7	-2.3	+101	+7.4	+1.4	+1.7	+0.3	+1.1	+0.10	+16	+1.10	+0.82	+0.78	\$172	\$330	
USA15738589	HBR			88%	77%	65%	96%	96%	94%	95%	95%	90%	86%	93%	61%	90%	89%	88%	89%	85%	90%	80%	91%	84%	84%	79%			
NWPJ70				71	88	83	9	89	14	9	3	3	1	64	94	1	35	19	17	60	77	39	70	91	16	2	78	62	
NWPE111	WATTLETOP SITZ 458N E111 SV			+146	+3.6	+6.6	-4.6	+2.8	+47	+86	+118	+88	+28	+1.9	-1.8	+76	+5.4	-3.9	-3.5	+1.0	+3.4	-0.51	+33	+0.88	+0.88	+1.04	\$188	\$315	
USA14474596	HBR			89%	88%	76%	97%	96%	97%	97%	95%	96%	95%	71%	93%	91%	92%	92%	88%	92%	83%	93%	87%	87%	81%				
NWPC36				6	43	15	52	23	65	62	47	70	2	56	96	21	60	99	93	18	19	2	9	58	27	51	63	71	
CWDJ17	WEATHERLY JAMES J17 SV			+116	-2.4	-4.6	-4.2	+6.4	+49	+85	+110	+110	+3	+1.7	-5.3	+65	+10.0	+1.5	+2.3	+1.1	+3.2	+0.07	+14	+0.86	+1.20	+1.00	\$214	\$351	
BNAD145	HBR			88%	75%	66%	93%	92%	90%	90%	91%	87%	84%	82%	65%	89%	88%	88%	88%	84%	90%	82%	83%	87%	86%	80%			
CWDF14				15	84	96	59	91	54	66	66	33	99	64	32	54	13	17	11	14	22	35	79	54	91	38	34	45	
Breed Average EBVs				+68.	+2.2	+2.6	-4.8	+4.1	+50	+90	+117	+100	+17	+2.1	-4.6	+66	+6.3	-0.1	-0.3	+0.5	+2.2	+0.19	+20	+0.84	+0.97	+1.03	+197	+339	

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