



TransTasman Angus Cattle Evaluation

MSA Marbling

RESEARCH BREEDING VALUES

MARCH 2024

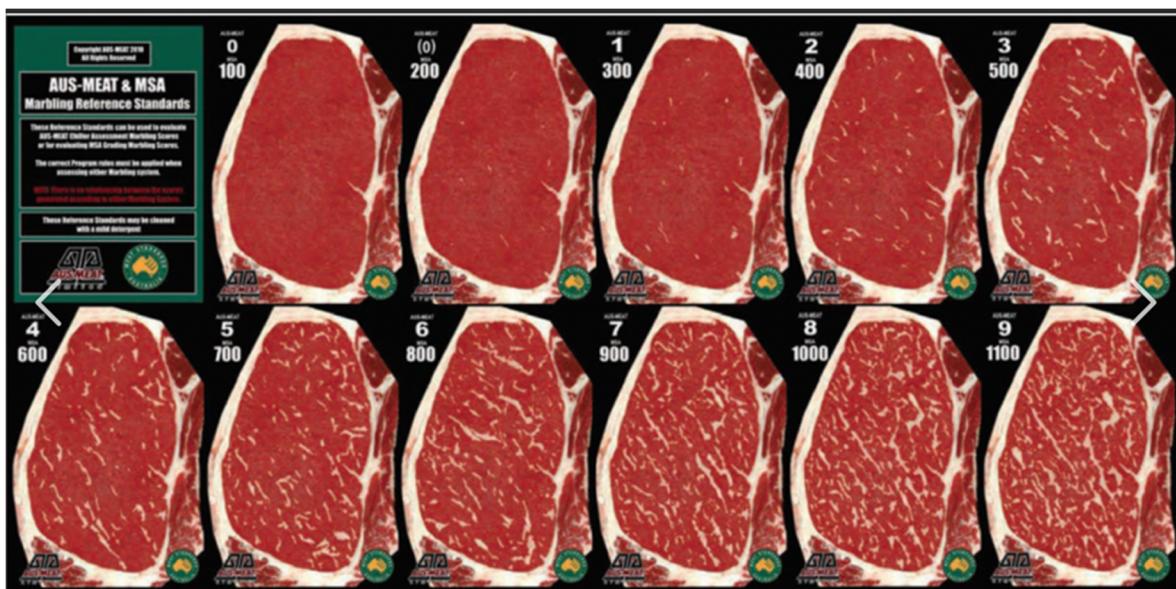
BACKGROUND

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

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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	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 <small>SV</small>			+67	+6.4	+8.3	-6.1	+3.2	+60	+102	+138	+131	+13	+2.4	-4.9	+72	+6.9	-0.7	+0.2	+0.3	+1.1	-1.03	+22	+1.40	+1.28	+1.22	\$219	\$407	
NXOF43	APR	90%	76%	61%	94%	96%	94%	94%	94%	94%	87%	87%	83%	55%	91%	89%	84%	89%	82%	91%	83%	85%	85%	85%	81%				
NXOJ432		55	15	5	24	32	13	22	14	12	81	39	43	36	44	64	40	60	80	1	45	99	96	93	32	11			
NXOL99	AJC L99 <small>PV</small>			+85	+5.2	+0.7	-5.4	+4.8	+62	+109	+145	+113	+21	+3.3	-7.0	+96	+8.9	-2.0	+0.9	+0.4	+2.4	-0.34	+14	+1.22	+1.10	+0.94	\$272	\$447	
USA16073564	APR	92%	84%	74%	96%	97%	96%	96%	96%	96%	92%	93%	91%	61%	93%	91%	90%	91%	80%	92%	86%	89%	91%	91%	87%				
NXOJ12		41	24	74	34	69	9	9	8	30	18	15	8	2	23	88	28	54	45	6	78	98	78	22	2	2			
ARRR11	ALKIRA RENEGADE R11 <small>PV</small>			+49	+7.6	+6.7	-4.4	+2.2	+48	+100	+132	+108	+23	+2.4	-7.0	+67	+8.4	+1.0	+0.0	+0.3	+1.8	+0.01	+2	+0.74	+0.70	+0.90	\$229	\$408	
CAN2043806	HBR	69%	65%	53%	95%	92%	85%	82%	83%	80%	73%	79%	39%	72%	69%	69%	70%	61%	74%	59%	75%	66%	67%	59%					
QMUN24		69	8	14	50	15	65	27	23	38	12	39	8	52	28	26	43	60	61	27	98	28	4	14	23	10			
DGJG10	ALLOURA GET CRACKING G10 <small>SV</small>			+184	+8.5	+7.4	-3.0	+2.5	+44	+75	+88	+82	+12	-0.3	-8.5	+47	+14.3	+1.7	+0.5	+0.9	+5.3	+0.44	+6	+0.50	+1.00	+0.92	\$276	\$435	
VTMB1	HBR	93%	94%	84%	99%	99%	98%	98%	98%	98%	97%	97%	76%	95%	94%	94%	94%	91%	93%	88%	97%	96%	96%	93%					
DGJZ15		3	5	10	72	20	81	91	96	79	85	99	2	93	2	15	35	24	3	74	95	3	56	18	2	3			
DGJL94	ALLOURA LOCK STOCK &			+89	+6.2	+4.2	-3.9	+2.9	+55	+93	+124	+121	+14	+1.1	-4.1	+64	+0.7	+1.6	-1.7	+0.2	+2.3	-0.39	+26	+0.86	+0.88	+0.94	\$189	\$354	
USA15832750	HBR	86%	78%	68%	93%	95%	94%	94%	94%	94%	89%	84%	87%	52%	88%	84%	80%	85%	76%	87%	77%	92%	84%	82%	77%				
DGJH24		38	16	38	58	26	29	46	39	20	72	84	63	61	96	16	74	66	48	5	29	53	27	22	66	47			
DGQJ30	ALLOURA QUINELLA Q30 <small>SV</small>			+156	+2.7	+2.2	+0.5	+3.0	+53	+98	+118	+120	+15	+3.2	-7.8	+74	+13.5	+0.5	+0.7	+1.1	+4.3	+0.51	+14	+1.02	+1.12	+1.18	\$271	\$450	
WWEL3	HBR	75%	72%	65%	94%	92%	90%	86%	86%	83%	77%	81%	53%	78%	74%	75%	76%	68%	78%	69%	88%	70%	70%	70%					
DGJK117		7	47	60	98	28	36	31	51	21	63	17	4	32	3	36	31	16	10	80	75	82	81	88	3	2			
CGKR232	ALPINE RONALDO R232 <small>PV</small>			+97	+6.2	+5.4	-5.0	+1.6	+52	+95	+134	+113	+24	+3.4	-5.5	+76	+12.1	-3.4	-3.3	+0.9	+3.1	+0.47	+23	+0.66	+0.70	+0.98	\$231	\$401	
NORN542	HBR	72%	67%	59%	94%	92%	90%	85%	83%	83%	81%	76%	80%	47%	73%	72%	72%	73%	64%	76%	64%	78%	71%	71%	69%				
CGKM152		33	16	25	40	9	44	39	20	30	9	13	29	25	6	98	91	24	29	76	38	15	4	33	21	13			
WJMF96	ARDCAIRNIE F96 <small>SV</small>			+38	+4.4	+0.0	-4.4	+3.1	+49	+88	+121	+89	+14	+1.8	-3.8	+66	+6.8	-1.5	-1.6	+1.1	+1.0	-0.09	+27	+0.46	+0.84	+0.94	\$196	\$329	
WJMB59	HBR	89%	89%	78%	98%	98%	97%	97%	97%	95%	95%	96%	64%	92%	91%	91%	91%	86%	92%	81%	89%	87%	87%	83%					
WJMD25		78	31	79	50	30	61	62	44	69	71	62	70	53	46	80	72	16	82	19	25	2	19	22	59	66			
WJMJ27	ARDCAIRNIE J27 <small>SV</small>			+15	+6.7	+8.8	-7.6	+3.0	+55	+95	+131	+128	+8	+0.3	-3.8	+94	+1.9	+2.4	+1.2	-0.1	+0.9	+0.20	-1	+0.94	+1.12	+1.14	\$186	\$364	
USA15354674	HBR	92%	82%	72%	96%	97%	96%	96%	96%	93%	92%	93%	65%	93%	92%	91%	92%	88%	93%	86%	86%	87%	87%	82%					
WJMG96		90	13	4	10	28	28	39	25	14	97	96	70	3	93	8	24	81	84	48	99	69	81	81	69	39			
WJMM117	ARDCAIRNIE M117 <small>SV</small>			+36	+5.2	+0.0	-5.7	+3.7	+56	+100	+130	+137	+2	+3.0	-3.9	+76	+10.6	-0.8	-1.8	+1.5	+0.4	-0.03	+12	+0.88	+1.02	+0.92	\$197	\$372	
WJMF96	HBR	83%	77%	65%	93%	96%	94%	94%	94%	94%	89%	85%	90%	57%	86%	85%	85%	85%	78%	86%	76%	82%	81%	81%	76%				
WJMG78		79	24	79	30	43	25	27	26	8	99	21	67	26	12	66	75	6	92	23	82	58	61	18	59	31			
NAQA241	ARDROSSAN EQUATOR A241 <small>PV</small>			+23	-2.0	+2.7	-4.4	+4.1	+50	+91	+122	+108	+20	+3.2	-7.8	+87	+8.5	-2.1	-0.2	+1.4	+1.2	+0.63	+25	+0.48	+0.86	+1.00	\$223	\$375	
USA2928	HBR	98%	99%	98%	99%	99%	99%	99%	99%	99%	99%	99%	99%	95%	98%	98%	98%	98%	98%	98%	99%	99%	99%	99%	99%				
NAQW38		87	81	55	50	53	56	51	43	38	24	17	4	8	27	89	47	7	77	87	32	3	23	39	29	29			
NAQN329	ARDROSSAN HOLBROOK N329			+62	-2.8	-0.9	-3.0	+2.9	+48	+88	+112	+82	+22	+2.8	-7.1	+71	+5.3	+2.5	+2.5	-0.9	+4.1	+1.04	+14	+0.82	+1.02	+0.94	\$211	\$339	
NAQH318	HBR	89%	76%	65%	96%	94%	95%	94%	93%	88%	83%	85%	56%	90%	88%	88%	89%	80%	90%	82%	88%	81%	87%	83%					
NAQK30		59	85	84	72	26	62	60	64	78	17	26	8	40	64	8	11	98	13	99	76	45	61	22	42	59			
NAQH255	ARDROSSAN HONOUR H255 <small>PV</small>			+41	-1.2	-1.1	-2.8	+4.5	+43	+75	+98	+96	+13	+2.2	-5.9	+60	+5.8	+1.0	-1.1	+0.6	+2.1	+1.01	+8	+0.44	+1.02	+1.24	\$164	\$291	
NORE11	HBR	95%	96%	89%	99%	99%	98%	98%	98%	98%	98%	98%	98%	84%	96%	96%	96%	95%	96%	96%	97%	97%	97%	96%					
NAQD17		75	77	85	75	62	82	91	89	58	83	47	22	71	58	26	64	41	53	98	92	2	61	95	86	86			
Breed Average EBVs		+75.	+1.7	+2.8	-4.4	+4.0	+51	+92	+118	+101	+17	+2.2	-4.6	+67	+6.6	+0.0	-0.3	+0.5	+2.4	+0.23	+21	+0.84	+0.97	+1.03	+202	+345			

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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		
NAQQ67	ARDROSSAN NECTAR Q67 PV			+78		+3.2	+3.3	-10.1	+3.9	+57	+103	+132	+124	+14	+2.9	-6.3	+57	+7.8	+0.3	-0.7	+0.2	+2.9	-0.07	+44	+0.36	+0.82	+1.08	\$232	\$409
NMMN334	HBR			74%		74%	61%	92%	94%	91%	89%	90%	85%	77%	81%	49%	79%	76%	77%	78%	71%	79%	66%	86%	64%	71%	68%		
NAQL96				47		42	48	2	48	21	20	23	18	72	24	16	79	34	40	56	66	33	20	2	1	16	65	20	10
QQFH147	ASCOT HALLMARK H147 PV			+113		-3.6	+2.1	-5.0	+7.3	+60	+110	+152	+132	+15	+3.7	-5.6	+80	-2.0	+0.6	-0.2	-0.8	+3.1	+0.29	+17	+0.46	+0.82	+1.04	\$195	\$358
VTME343	HBR			94%		95%	87%	98%	99%	98%	98%	98%	97%	98%	98%	78%	96%	95%	95%	95%	94%	95%	89%	97%	95%	95%	93%		
NMMF123				23		88	61	40	97	13	9	4	11	64	9	27	17	99	34	47	97	29	59	63	2	16	53	60	43
HIOE7	AYRVALE BARTEL E7 PV			+129		+8.6	+9.5	-4.5	+1.8	+49	+86	+112	+72	+26	+2.5	-8.2	+64	+7.7	-0.7	+0.4	+1.3	+3.4	+0.32	+4	+1.04	+1.00	+1.14	\$288	\$445
VTMB219	HBR			97%		99%	97%	99%	99%	99%	99%	99%	99%	99%	99%	93%	98%	98%	98%	98%	98%	98%	96%	99%	99%	99%	99%		
BVVB32				15		5	2	48	11	59	67	64	89	4	36	3	60	35	64	36	10	23	62	97	85	56	81	1	2
HIOG11	AYRVALE GENETIC G11 PV			+57		-4.9	-12.9	-5.0	+5.1	+65	+117	+162	+139	+18	+1.6	-5.7	+83	+0.7	-3.8	-2.7	-0.1	+2.1	-0.24	+43	+1.06	+1.04	+1.08	\$195	\$346
SEWD138	HBR			90%		87%	78%	98%	98%	97%	97%	97%	96%	95%	94%	61%	93%	90%	90%	91%	86%	92%	82%	89%	88%	88%	83%		
HIOE2				63		92	99	40	75	4	3	2	7	40	69	25	12	96	99	86	81	53	10	2	87	66	65	60	53
NBBN47	BALD BLAIR NELSON N47 PV			+3		+2.8	-2.2	-4.9	+4.3	+55	+103	+149	+154	+15	+0.9	-4.3	+82	+4.2	-1.2	-1.0	+0.9	+0.6	-0.22	+29	+0.98	+1.14	+1.20	\$176	\$354
HIOG18	HBR			87%		78%	67%	95%	95%	93%	93%	93%	90%	84%	90%	61%	88%	87%	87%	88%	80%	89%	82%	90%	85%	85%	82%		
NBBL83				94		46	90	42	58	31	19	5	3	64	88	58	13	77	75	62	24	89	10	18	76	84	91	78	47
NBB21S86	BALD BLAIR STIRLING S86 PV			+99		+6.1	+8.9	-4.2	+2.5	+65	+110	+147	+112	+21	+4.0	-4.3	+95	+5.9	-2.2	-3.1	+0.0	+3.7	-0.20	+9	+0.76	+0.70	+1.04	\$251	\$427
NMMP15	HBR			70%		73%	61%	94%	93%	85%	83%	84%	82%	76%	80%	44%	73%	71%	72%	64%	75%	62%	78%	70%	70%	68%			
NBBQ25				32		17	3	53	20	5	8	6	32	21	6	58	3	57	90	90	76	18	11	90	32	4	53	8	5
ECMK63	BANNABY REALITY K63 PV			+11		+3.6	+0.6	-2.8	+3.8	+44	+77	+100	+103	+13	+2.0	-0.4	+51	+5.2	-1.3	-1.6	+0.4	+1.3	-0.20	+28	+0.50	+1.00	+1.22	\$114	\$237
NZE14647008839	HBR			90%		80%	70%	96%	97%	94%	94%	94%	90%	84%	90%	62%	91%	89%	89%	90%	85%	91%	85%	91%	89%	89%	85%		
ECMH45				92		38	75	75	46	79	88	85	46	81	54	99	89	65	77	72	54	75	11	21	3	56	93	99	97
VONG272	BANQUET GARRETT G272 SV			+127		+1.1	+4.2	-1.4	+6.1	+54	+97	+141	+147	+19	+4.3	-2.2	+56	+1.3	-2.2	-3.6	+0.1	+2.8	-0.80	+23	+0.54	+1.04	+1.10	\$141	\$307
VOND412	HBR			87%		79%	65%	94%	96%	94%	94%	95%	90%	88%	91%	58%	90%	88%	88%	89%	80%	87%	81%	86%	87%	87%	82%		
VONC368				16		61	38	89	89	34	33	11	4	31	4	92	80	95	90	93	72	35	1	38	5	66	71	94	79
VONN462	BANQUET NUTTELLA N462 PV			+0		-2.3	+3.7	-4.6	+6.5	+55	+100	+132	+104	+23	+3.4	-4.1	+67	+3.5	+0.4	-1.0	+0.0	+1.1	-0.26	+51	+0.56	+0.90	+0.86	\$178	\$315
VONJ507	HBR			76%		77%	60%	96%	97%	95%	96%	94%	87%	80%	93%	49%	81%	81%	81%	75%	82%	65%	93%	56%	56%	53%			
VONK224				95		83	44	47	93	31	25	22	45	10	13	63	52	83	38	62	76	80	9	1	6	31	8	77	75
NBNN239	BEN NEVIS NEWSFLASH N239 PV			+34		-2.0	+2.5	-4.6	+4.9	+58	+100	+133	+117	+18	+0.9	-2.8	+85	+5.5	-2.2	-0.4	+0.5	+1.4	+0.21	+11	+1.08	+1.04	+0.94	\$189	\$331
USA16956101	HBR			89%		81%	71%	97%	97%	96%	96%	97%	92%	87%	93%	60%	91%	90%	90%	83%	92%	83%	90%	92%	92%	89%			
NBNH215				80		81	57	47	71	17	26	21	25	41	88	87	10	62	90	51	47	72	49	85	89	66	22	66	65
NBNP122	BEN NEVIS PRIME P122 PV			+160		+3.8	+5.5	+0.3	+2.6	+57	+88	+114	+80	+11	+3.2	-4.1	+61	+4.7	+0.8	+1.7	-0.5	+4.7	+0.43	+21	+0.68	+0.74	+1.00	\$238	\$376
USA17960722	HBR			76%		76%	65%	94%	94%	91%	92%	92%	86%	77%	87%	55%	80%	79%	80%	74%	81%	68%	78%	87%	86%	82%			
NBNM115				6		36	24	97	21	21	60	61	81	88	17	63	68	71	30	18	92	7	73	46	18	7	39	15	28
NBNR138	BEN NEVIS RONAN R138 PV			+24		+4.0	+5.3	-8.6	+3.9	+73	+122	+150	+142	+11	+2.3	-3.5	+80	+8.5	-1.8	-2.3	+0.6	+1.0	-0.08	+21	+0.72	+0.86	+0.92	\$241	\$431
USA17960722	HBR			73%		75%	65%	87%	88%	87%	86%	85%	82%	77%	81%	51%	76%	73%	74%	67%	77%	66%	78%	75%	78%	73%			
NBNP153				86		34	26	5	48	1	2	5	6	90	43	76	16	27	85	82	41	82	19	49	25	23	18	13	4
NGXQ227	BONGONGO BE QUICK Q227 PV			+183		+2.9	+1.3	-4.2	+3.2	+51	+93	+113	+67	+24	+3.8	-5.5	+53	+11.6	+0.8	+3.4	+0.1	+5.4	+0.38	+16	+0.64	+1.04	+1.14	\$274	\$408
VLYM518	HBR			75%		71%	64%	96%	95%	92%	90%	89%	85%	77%	82%	53%	79%	79%	79%	80%	73%	80%	67%	85%	71%	71%	70%		
NGXN221				3		45	69	53	32	48	46	63	92	7	8	29	86	7	30	6	72	3	68	68	13	66	81	2	10
Breed Average EBVs				+75.		+1.7	+2.8	-4.4	+4.0	+51	+92	+118	+101	+17	+2.2	-4.6	+67	+6.6	+0.0	-0.3	+0.5	+2.4	+0.23	+21	+0.84	+0.97	+1.03	+202	+345

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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
NGXP212	BONGONGO P212 SV		+169		+5.6	+10.0	-6.7	+2.1	+45	+85	+101	+76	+23	+3.9	-8.6	+53	+3.8	+3.3	+5.6	-1.0	+4.8	+0.95	+13	+0.82	+0.88	+1.00	\$254	\$416
NORL508		HBR	87%		70%	62%	96%	96%	94%	94%	94%	90%	82%	87%	59%	89%	88%	88%	89%	81%	90%	81%	86%	84%	84%	80%		
NGXL13			4		21	1	18	14	76	71	84	85	11	7	2	86	80	4	1	98	6	97	79	45	27	39	7	8
NGXP421	BONGONGO P421 SV		+93		+8.8	+5.6	-5.9	+2.0	+59	+98	+127	+89	+24	+2.6	-6.7	+74	+11.0	+3.8	+2.8	-0.1	+3.0	+0.65	+13	+1.12	+1.04	+1.10	\$276	\$441
USA18229425		APR	87%		70%	61%	93%	92%	91%	91%	90%	87%	79%	84%	53%	88%	87%	86%	87%	78%	89%	81%	84%	79%	78%	73%		
NGXM413			36		4	23	27	13	17	31	32	69	9	32	11	31	10	2	9	81	31	88	80	92	66	71	2	3
HCAG013	BOONAROO GRAVITY G013 PV		+121		+4.6	+3.8	-5.3	+3.6	+51	+87	+114	+103	+23	+3.8	-6.0	+56	+4.6	-2.8	-3.2	+1.3	+2.9	-0.74	+21	+0.50	+0.92	+1.06	\$218	\$372
VTMA217		HBR	90%		90%	83%	98%	98%	97%	97%	97%	94%	95%	97%	72%	93%	92%	92%	87%	91%	85%	94%	94%	94%	91%			
VTMZ618			19		29	43	36	41	50	64	60	47	11	8	20	80	72	95	90	10	33	1	46	3	36	59	33	31
HCAN20	BOONAROO KASBAH N20 SV		+65		+4.2	+2.6	-5.4	+5.4	+47	+88	+114	+106	+18	+3.7	-6.2	+56	+6.0	-0.4	-1.4	+1.0	+1.9	+0.72	+15	+0.86	+0.98	+1.08	\$201	\$357
VTMK338		HBR	89%		75%	61%	93%	96%	94%	94%	90%	87%	79%	89%	54%	90%	88%	88%	89%	79%	91%	83%	93%	91%	91%	85%		
HCAL54			57		33	56	34	80	69	62	60	40	45	9	17	81	56	57	69	20	59	91	73	53	51	65	54	44
NGMN418	BOOROOMOOKA JACKPOT N418		+82		+2.5	+7.0	-8.7	+5.3	+61	+108	+134	+128	+8	+3.4	-6.5	+79	+9.4	-0.4	+0.1	+0.9	+2.4	+0.32	+30	+1.32	+1.08	+1.04	\$260	\$446
WWEL3		HBR	85%		70%	65%	95%	96%	95%	95%	95%	92%	85%	94%	61%	88%	86%	86%	87%	79%	88%	79%	95%	92%	92%	85%		
NGML471			44		49	12	5	78	11	11	19	14	98	13	13	18	19	57	42	24	45	62	17	99	74	53	5	2
NGMN213	BOOROOMOOKA NORMANDY		+115		+11.0	+10.5	-7.5	+1.2	+40	+72	+101	+75	+24	+3.2	-9.6	+51	+4.0	-2.6	-3.1	+0.9	+3.3	+0.97	+32	+0.82	+0.66	+1.06	\$232	\$389
NGML201		HBR	86%		76%	64%	94%	96%	95%	95%	95%	93%	86%	93%	54%	89%	87%	86%	87%	78%	89%	79%	95%	92%	92%	84%		
NGML45			22		1	1	11	6	90	94	84	87	7	17	1	90	78	93	90	24	25	98	12	45	3	59	20	20
NGMP96	BOOROOMOOKA PARAGON P96		+60		-3.7	+2.0	-7.5	+3.9	+61	+118	+160	+123	+30	+3.4	-8.1	+109	+13.6	-2.7	-1.5	+1.8	+1.8	+0.87	+34	+0.86	+1.00	+1.14	\$286	\$459
WWEL3		HBR	90%		81%	72%	98%	98%	97%	97%	97%	93%	86%	96%	61%	92%	90%	90%	90%	82%	92%	85%	97%	95%	95%	92%		
NGMM566			60		88	62	11	48	11	3	2	18	1	13	3	1	3	94	71	3	61	96	9	53	56	81	1	1
NGMP22	BOOROOMOOKA PRESIDENT		+64		-1.1	+3.0	-6.3	+4.7	+58	+107	+142	+126	+22	+2.7	-6.3	+76	+5.9	+0.0	+0.5	+0.3	+2.5	+0.50	+18	+0.40	+0.60	+0.82	\$231	\$399
NGMK9		HBR	89%		75%	64%	97%	96%	94%	95%	95%	89%	80%	88%	58%	90%	89%	88%	89%	80%	91%	83%	93%	86%	86%	81%		
NGMK640			58		76	52	22	67	18	13	10	15	17	29	16	25	57	47	35	60	42	79	59	1	1	5	21	14
NGMQ5	BOOROOMOOKA QUALITY Q5 SV		+185		+2.8	+6.9	-6.5	+3.7	+55	+103	+144	+139	+20	+2.4	-4.6	+78	-3.4	+1.0	+2.1	-1.8	+6.0	+0.54	+35	+0.78	+0.92	+1.04	\$199	\$382
NORL519		HBR	74%		76%	66%	92%	90%	89%	85%	86%	83%	78%	81%	54%	77%	73%	74%	75%	67%	77%	67%	85%	75%	75%	72%		
NGMK720			3		46	13	20	43	30	18	8	7	29	39	50	22	99	26	14	99	2	82	7	36	36	53	56	24
NGMR49	BOOROOMOOKA RAUDONIKIS		+37		+3.7	+5.3	-5.5	+3.7	+63	+104	+128	+97	+19	+3.7	-2.5	+72	+11.1	-0.3	-1.7	+1.2	+0.9	+0.17	+33	+0.88	+0.82	+0.92	\$232	\$379
USA17960722		HBR	72%		71%	63%	92%	91%	87%	86%	86%	83%	77%	82%	50%	76%	72%	72%	73%	65%	76%	65%	83%	76%	76%	72%		
NGMP361			78		37	26	32	43	8	17	29	57	31	9	90	37	9	55	74	12	84	45	11	58	16	18	20	
BOWK2	BOWMAN AUSTRALIA K2 PV		+60		+6.9	+3.4	-6.5	+3.5	+48	+97	+121	+94	+22	+4.9	-8.2	+68	+8.0	+0.0	-1.6	+1.0	+1.2	-0.63	+12	+0.84	+1.02	+0.94	\$233	\$402
VTME343		HBR	88%		79%	75%	94%	91%	91%	90%	90%	87%	84%	83%	68%	88%	87%	88%	88%	82%	90%	83%	87%	84%	84%	81%		
NAQZ31			60		12	47	20	39	62	34	45	61	14	2	3	48	32	47	72	20	77	1	83	49	61	22	19	13
SRKK306	BOWMONT KING K306 PV		+158		-1.6	-9.8	-4.8	+4.4	+49	+78	+103	+86	+2	-0.4	-5.1	+64	+15.3	-0.3	-2.0	+1.6	+4.7	+0.40	+26	+0.54	+0.90	+0.76	\$236	\$347
NJWG279		HBR	92%		87%	78%	97%	98%	97%	97%	97%	94%	93%	96%	68%	93%	93%	92%	93%	90%	93%	86%	96%	91%	91%	88%		
TFAD58			6		79	99	43	60	58	87	82	73	99	99	38	59	1	55	78	4	7	70	29	5	31	2	17	52
BON21S004	BRIDGEWATER HOMETOWN		+75		+9.2	+8.4	-9.5	+1.1	+60	+100	+131	+92	+17	+3.0	-7.2	+87	+8.8	+1.7	+0.0	-0.1	+2.9	+0.38	+40	+1.34	+1.06	+0.90	\$273	\$446
USA19266718		HBR	71%		68%	59%	91%	89%	85%	83%	83%	80%	75%	80%	43%	73%	71%	72%	64%	75%	62%	78%	71%	71%	68%			
BONQ008			49		3	5	3	6	14	26	24	64	47	21	7	8	24	15	43	81	33	68	3	99	70	14	2	2
Breed Average EBVs		+75.	+1.7	+2.8	-4.4	+4.0	+51	+92	+118	+101	+17	+2.2	-4.6	+67	+6.6	+0.0	-0.3	+0.5	+2.4	+0.23	+21	+0.84	+0.97	+1.03	+202	+345		

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Ident	Name																														
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		
BONQ007	BRIDGEWATER QUANTUM Q007			+43		-3.7	-3.5	-5.2	+5.7	+65	+101	+134	+105	+21	+0.5	-5.6	+89	+7.1	-0.1	-1.9	+0.2	+2.1	+0.10	+22	+1.02	+0.86	+1.04	\$225	\$356		
QMUM13	HBR			90%		69%	63%	93%	92%	91%	90%	91%	86%	78%	83%	56%	89%	89%	88%	89%	79%	91%	84%	86%	79%	80%	77%				
HIOL28				74		88	94	37	84	5	23	20	42	21	94	27	6	42	50	76	66	53	37	45	82	23	53	27	45		
AMQH64	BROOKLANA HI TOWER H64 PV			+23		-4.8	-3.2	-0.3	+5.1	+53	+102	+141	+124	+16	+2.0	-2.3	+84	+5.1	+2.2	+1.3	+0.4	+1.2	+0.52	+26	+0.60	+0.94	+1.06	\$163	\$298		
VTME343	HBR			88%		79%	70%	94%	92%	91%	91%	91%	87%	81%	83%	64%	88%	88%	87%	88%	81%	90%	83%	85%	84%	84%	79%				
AMQF27				87		91	93	95	75	39	22	11	17	57	54	92	11	67	10	23	54	77	80	27	9	41	59	86	84		
GTNM6	CHILTERN PARK MOE M6 PV			+28		+4.7	+4.2	-1.3	+3.1	+51	+99	+134	+88	+26	+1.6	-6.4	+77	+5.3	-0.3	+1.1	+0.1	+2.0	+0.30	+38	+0.70	+1.06	+1.08	\$241	\$393		
VTMF734	HBR			90%		91%	79%	99%	99%	99%	99%	99%	96%	95%	98%	66%	94%	92%	92%	93%	87%	93%	84%	99%	99%	99%	98%				
VSNF15				84		28	38	90	30	49	28	20	70	4	69	15	22	64	55	25	72	56	60	5	21	70	65	14	17		
GTNP9	CHILTERN PARK PICASSO P9 PV			+114		+7.7	+7.4	-3.1	+1.4	+57	+106	+136	+96	+23	+3.7	-7.7	+94	+7.0	-0.9	+0.8	-0.4	+4.2	+0.63	+30	+0.72	+0.68	+0.86	\$279	\$459		
HKFJ5	HBR			85%		78%	68%	98%	98%	94%	95%	94%	89%	81%	91%	61%	88%	86%	86%	86%	79%	88%	77%	87%	89%	89%	83%				
GTNK26				23		8	10	71	8	22	13	17	59	12	9	4	3	43	69	30	90	11	87	17	25	3	8	2	1		
GTNQ322	CHILTERN PARK QUADRANT			+113		+6.6	+4.1	-2.5	+3.2	+62	+115	+142	+103	+18	+4.3	-5.8	+87	+12.6	-0.5	-0.8	+0.3	+4.2	+0.89	+4	+1.22	+1.10	+1.00	\$289	\$468		
USA18636106	HBR			73%		78%	64%	97%	97%	92%	95%	91%	85%	78%	82%	48%	80%	74%	75%	75%	68%	77%	66%	86%	69%	69%	65%				
GTNL198				23		14	39	79	32	8	4	10	46	42	4	23	8	5	59	58	60	11	96	96	98	78	39	1	1		
QMUM13	CLUNES CROSSING DUSTY M13			+51		-0.3	+3.4	-7.0	+5.3	+65	+102	+119	+62	+15	+0.9	-6.7	+73	+13.0	-2.4	-3.3	+1.2	+1.7	+0.09	+10	+0.88	+0.86	+1.00	\$291	\$416		
USA16295688	HBR			93%		85%	81%	99%	99%	98%	98%	98%	97%	97%	98%	75%	95%	94%	94%	94%	91%	94%	87%	98%	97%	97%	96%				
QMUG1				68		71	47	15	78	5	22	48	95	65	88	11	34	4	92	91	12	64	36	89	58	23	39	1	7		
NBHK330	CLUNIE RANGE KALUHA K330 PV			+93		-1.5	-12.8	-4.9	+5.5	+54	+96	+126	+98	+15	+1.5	-7.1	+91	+9.5	+0.1	-1.2	+1.2	+3.0	+0.22	+5	+0.70	+1.00	+1.18	\$242	\$371		
NJWG279	HBR			91%		84%	74%	97%	97%	96%	96%	96%	92%	89%	96%	66%	92%	91%	91%	92%	89%	93%	86%	94%	87%	88%	85%				
NBHH381				36		79	99	42	81	33	37	34	54	64	73	8	4	19	45	65	12	31	51	96	21	56	88	13	32		
NBHL348	CLUNIE RANGE LEGEND L348 PV			+81		-6.6	+4.6	-7.8	+5.8	+57	+102	+125	+154	+2	+3.0	-7.2	+62	+0.2	+3.6	+1.1	-0.8	+2.5	+0.03	+26	+0.48	+0.80	+1.24	\$165	\$342		
NZE14647008839	HBR			92%		95%	86%	99%	99%	98%	98%	98%	97%	97%	98%	77%	95%	94%	94%	94%	92%	94%	86%	97%	97%	97%	96%				
AHWJ81				44		95	34	9	86	20	21	35	3	99	21	7	67	98	3	25	97	42	29	28	3	13	95	85	57		
NBHP392	CLUNIE RANGE PLANTATION			+129		+4.6	+3.9	-5.2	+3.9	+66	+115	+137	+104	+21	+5.4	-4.0	+69	-0.6	-0.3	-1.0	-1.4	+3.9	+0.20	+22	+0.74	+0.96	+0.88	\$220	\$383		
USA17960722	HBR			87%		86%	71%	99%	99%	98%	98%	98%	97%	80%	97%	57%	89%	89%	89%	89%	81%	90%	80%	97%	95%	95%	92%				
NBHM516				15		29	42	37	48	4	4	16	44	21	1	65	46	99	55	62	99	15	48	45	28	46	11	31	24		
WDCH249	COONAMBLE HECTOR H249 SV			+8		+0.5	+0.1	-8.3	+4.5	+45	+79	+100	+89	+6	+1.3	-4.8	+45	+9.3	+4.0	+4.4	+0.6	+0.1	-0.52	+39	+0.42	+0.50	+0.78	\$183	\$311		
USA14885809	HBR			93%		95%	87%	99%	99%	98%	98%	98%	97%	98%	98%	77%	96%	95%	95%	95%	93%	95%	88%	98%	96%	96%	93%				
WDCE9				93		66	78	6	62	78	85	86	69	99	79	45	95	20	2	3	41	95	2	4	1	3	72	77			
WDCJ266	COONAMBLE JUNIOR J266 PV			+89		-7.1	-4.2	+0.1	+5.7	+56	+100	+138	+134	+16	+1.9	-5.0	+95	+10.2	-5.0	-4.9	+1.5	+2.9	-0.24	+20	+0.92	+0.78	+1.06	\$194	\$336		
BNAD145	HBR			91%		90%	80%	98%	98%	97%	97%	97%	95%	96%	96%	73%	93%	92%	92%	92%	89%	93%	85%	94%	94%	94%	91%				
WHHA61				39		96	95	97	84	24	27	14	10	61	58	40	3	14	99	98	6	33	10	51	66	11	59	61	61		
WDCK314	COONAMBLE KEVIN K314 PV			+2		-1.2	+3.9	-2.3	+4.5	+51	+100	+131	+113	+24	+4.4	-7.1	+81	+7.3	+0.2	+0.7	+0.1	+1.6	+0.61	+43	+0.50	+1.10	+1.24	\$206	\$367		
NAQA241	HBR			89%		86%	75%	95%	98%	97%	95%	96%	92%	94%	93%	68%	92%	90%	90%	91%	86%	91%	83%	86%	85%	86%	82%				
WDCD94				95		77	42	81	62	51	25	23	31	8	3	8	16	40	43	31	72	67	86	2	3	78	95	48	36		
USA19611994	DB ICONIC G95 PV			+147		+1.1	+7.6	-3.0	+2.9	+66	+126	+154	+140	+16	+3.1	-3.6	+93	+9.2	+1.3	+0.6	-0.5	+4.6	+0.26	+39	+1.18	+1.00	+0.96	\$252	\$443		
USA18467508	HBR			79%		75%	62%	96%	95%	93%	91%	88%	86%	83%	85%	49%	84%	82%	79%	76%	73%	84%	64%	86%	94%	94%	68%				
USA18974126				9		61	8	72	26	3	1	3	7	58	19	74	4	21	21	33	92	7	55	4	96	56	27	8	2		
Breed Average EBVs		+75.		+1.7	+2.8	-4.4	+4.0	+51	+92	+118	+101	+17	+2.2	-4.6	+67	+6.6	+0.0	-0.3	+0.5	+2.4	+0.23	+21	+0.84	+0.97	+1.03	+202	+345				

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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
NJS21S15	DEVANAH SATURN S15 PV			+71	+5.3	+1.3	-7.7	+3.7	+63	+108	+142	+97	+24	+4.3	-7.4	+84	+8.3	-1.1	-2.6	+0.2	+2.6	+0.33	+13	+0.94	+0.98	+0.84	\$267	\$432
USA18636106	HBR			71%	72%	60%	92%	91%	86%	84%	84%	81%	76%	80%	46%	74%	71%	72%	72%	64%	75%	64%	80%	71%	71%	68%		
QHEJ100				52	23	69	10	43	6	11	10	56	8	4	6	11	29	73	85	66	40	63	79	69	51	6	3	4
WKGQ202	DIAMOND ONE ALL IN Q202 SV			-3	-9.1	-7.9	-5.4	+8.2	+72	+122	+168	+156	+23	+2.8	-4.0	+101	+11.1	-6.2	-6.4	+2.0	-0.4	-0.72	+23	+0.94	+0.62	+0.88	\$193	\$344
WKGN129	HBR			68%	70%	54%	93%	90%	84%	82%	83%	80%	74%	77%	39%	71%	67%	68%	69%	60%	72%	58%	73%	59%	59%	53%		
WKGL21				96	98	99	34	99	1	2	1	2	12	26	65	1	9	99	99	2	98	1	39	69	2	11	63	55
NGCM028	DULVERTON MEDAGLIA M028 PV			+83	-8.2	-2.0	-4.7	+7.4	+72	+122	+161	+152	+10	+1.2	-3.9	+86	+5.9	-1.2	-4.3	+0.4	+2.6	-0.80	+19	+1.14	+1.14	+1.06	\$208	\$366
QHEJ134	HBR			86%	72%	62%	93%	90%	93%	94%	94%	88%	86%	90%	53%	88%	86%	86%	87%	78%	88%	77%	82%	78%	79%	74%		
NGCK204				42	97	89	45	97	1	2	2	3	92	81	67	9	57	75	96	54	40	1	57	94	84	59	46	37
NGCN208	DULVERTON NEW APPROACH			+38	-1.5	+1.8	-5.7	+4.1	+51	+87	+113	+112	+12	+1.5	-5.1	+73	+11.5	-1.8	-1.6	+2.1	+0.9	+0.09	+24	+1.02	+1.12	+1.04	\$207	\$350
WWEL3	HBR			88%	70%	65%	95%	94%	95%	96%	95%	90%	87%	92%	62%	90%	89%	88%	89%	81%	90%	81%	87%	85%	85%	82%		
NGCG037				78	79	64	30	53	50	64	63	31	84	73	38	32	8	85	72	1	84	36	35	82	81	53	47	50
BHRH744	DUNOON HIGHPOINT H744 SV			+48	-11.8	-14.1	-3.8	+6.9	+56	+97	+129	+132	+17	+2.8	-5.4	+88	+5.6	-1.9	-1.4	+1.5	+1.0	-0.52	+19	+0.68	+0.86	+1.08	\$157	\$276
BNAD145	HBR			91%	85%	76%	97%	97%	96%	96%	96%	94%	94%	95%	70%	92%	91%	91%	92%	88%	92%	85%	94%	89%	89%	86%		
BHRD202				71	99	99	60	95	25	33	28	11	52	26	31	7	61	86	69	6	82	2	55	18	23	65	89	91
CYIR18	EBONY BEEF BILLIE RAY R18 PV			+58	+3.7	+8.4	-4.1	+4.8	+66	+107	+127	+67	+21	+2.5	-5.6	+80	+12.6	-1.6	-1.0	+0.9	+2.0	+0.09	-3	+1.02	+0.88	+1.14	\$302	\$445
QMUM13	APR			75%	70%	63%	93%	91%	85%	83%	84%	82%	77%	80%	53%	76%	74%	74%	75%	67%	78%	68%	78%	76%	77%	73%		
CYIM611				62	37	5	55	69	4	12	32	92	18	36	27	17	5	82	62	24	56	36	99	82	27	81	1	2
USA16198796	EF COMPLEMENT 8088 PV			+38	+4.6	+7.1	-4.7	+2.9	+52	+97	+129	+97	+22	+1.4	-7.6	+75	+7.9	+1.2	+0.5	+0.9	+1.5	+0.58	+20	+0.92	+1.28	+1.16	\$258	\$424
USA14686137	HBR			96%	99%	95%	99%	99%	99%	99%	99%	99%	99%	99%	99%	91%	98%	97%	98%	97%	97%	94%	99%	99%	99%	98%		
USA15452880				77	29	11	45	26	44	33	27	57	17	76	5	28	33	22	35	24	70	84	52	66	96	85	5	5
WWEQ15	ESSLEMONT GARTH Q15 PV			+139	-3.8	+2.2	-8.4	+5.7	+63	+112	+153	+145	+28	+2.4	-6.5	+69	+6.1	-3.7	-3.9	+0.4	+4.1	-0.47	+45	+0.92	+1.14	+1.06	\$230	\$403
VTMG67	HBR			88%	75%	67%	93%	91%	90%	90%	90%	86%	79%	83%	61%	87%	87%	86%	87%	78%	89%	82%	86%	80%	80%	77%		
WWEN17				11	88	60	6	84	6	6	4	5	2	39	13	44	54	98	95	54	13	3	1	66	84	59	22	12
WWEL3	ESSLEMONT LOTTO L3 PV			+117	-6.3	-1.7	-5.4	+4.5	+60	+110	+139	+132	+18	+3.6	-8.8	+92	+14.6	-0.4	+0.3	+1.7	+3.2	+0.39	+15	+1.12	+1.02	+1.16	\$280	\$451
HIOG18	HBR			95%	87%	86%	99%	99%	99%	99%	99%	98%	98%	98%	81%	97%	96%	96%	96%	95%	96%	92%	98%	98%	98%	97%		
WWEJ8				21	94	88	34	62	14	9	12	11	45	10	2	4	57	38	3	27	69	72	92	61	85	2	2	
WWEQ24	ESSLEMONT QUOKKA Q24 PV			+56	+4.7	+0.3	-4.3	+1.7	+42	+82	+98	+48	+22	+4.1	-6.1	+65	+16.9	+1.4	-0.1	+2.2	+2.1	+1.24	+27	+0.74	+0.88	+0.96	\$264	\$383
WWEN12	HBR			89%	74%	62%	95%	95%	93%	93%	92%	87%	78%	89%	56%	89%	88%	88%	89%	79%	91%	83%	87%	73%	73%	70%		
WWEN7				64	28	77	52	10	86	77	88	99	14	5	19	56	1	19	45	1	53	99	23	28	27	4	24	
WWE21S6	ESSLEMONT SEAN S6 PV			+109	+6.0	+7.7	-5.4	+2.9	+55	+97	+114	+86	+17	+4.4	-5.3	+78	+17.4	+2.5	+0.6	+1.4	+3.6	+1.17	+24	+1.04	+1.16	+1.08	\$286	\$447
NGMN418	HBR			76%	68%	61%	94%	91%	87%	85%	85%	83%	77%	82%	51%	77%	75%	75%	76%	67%	79%	70%	82%	65%	65%	63%		
WWEN7				25	18	8	34	26	30	35	61	73	52	3	33	20	1	8	33	7	20	99	34	85	87	65	1	2
NFSM99	FARRER MAXWELL M99 PV			+115	-5.9	+1.5	-0.2	+7.6	+66	+113	+151	+145	+13	+4.1	-6.2	+89	+13.7	-2.9	-4.8	+2.0	+2.6	-0.18	+42	+0.76	+0.74	+0.86	\$250	\$421
BRRH240	HBR			85%	76%	63%	95%	95%	94%	93%	93%	91%	85%	89%	55%	87%	86%	86%	86%	77%	88%	76%	92%	85%	85%	81%		
NFSH124				22	94	67	96	98	4	6	4	5	81	5	17	6	3	95	98	2	40	12	2	32	7	8	9	6
USA18217198	G A R ASHLAND PV			+96	+1.8	+2.2	-6.0	+3.2	+67	+116	+145	+115	+14	+1.5	-2.9	+82	+12.9	-3.3	-2.7	+1.0	+3.3	+0.09	+10	+1.24	+1.10	+0.86	\$265	\$426
USA17354178	HBR			91%	95%	85%	99%	99%	99%	99%	99%	98%	97%	98%	70%	96%	94%	95%	94%	92%	94%	82%	99%	99%	99%	98%		
USA16934264				33	55	60	26	32	3	4	8	27	76	73	86	15	4	97	86	20	25	36	87	98	78	8	4	5
Breed Average EBVs		+75.	+1.7	+2.8	-4.4	+4.0	+51	+92	+118	+101	+17	+2.2	-4.6	+67	+6.6	+0.0	-0.3	+0.5	+2.4	+0.23	+21	+0.84	+0.97	+1.03	+202	+345		

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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	
USA16295688	G A R PROPHET SV			+121	+3.2	+4.9	-0.6	+3.7	+67	+107	+133	+83	+23	+0.7	-4.8	+72	+3.9	-0.7	-1.2	-0.7	+4.7	+0.68	+26	+1.02	+0.82	+0.92	\$270	\$413	
USA13009379	HBR			97%	98%	94%	99%	99%	99%	99%	99%	99%	99%	99%	90%	98%	97%	97%	97%	97%	94%	99%	99%	99%	98%				
USA15129456				19	42	30	94	43	3	12	21	77	12	92	45	35	79	64	65	96	7	90	27	82	16	18	3	8	
USA17328461	G A R SURE FIRE SV			+144	+6.5	+2.2	-3.0	+2.2	+50	+91	+112	+80	+19	+4.1	-7.6	+64	+8.4	-0.5	-0.6	+0.9	+3.7	-0.10	+25	+1.16	+0.94	+0.58	\$264	\$418	
USA16205036	HBR			94%	95%	86%	99%	99%	98%	98%	98%	97%	98%	98%	79%	96%	96%	96%	96%	94%	96%	89%	96%	99%	99%	99%	92%		
USA16431932				10	14	60	72	15	54	51	65	82	32	5	5	61	28	59	54	24	18	18	30	95	41	1	4	7	
USA18690054	GB FIREBALL 672 PV			+179	+2.5	+6.4	-4.8	+2.5	+61	+98	+129	+117	+17	+2.7	-7.1	+79	+14.7	-2.8	-4.0	+0.9	+5.6	+0.47	+11	+1.02	+0.92	+0.80	\$282	\$458	
USA17965471	HBR			90%	92%	80%	99%	99%	98%	98%	98%	97%	95%	98%	61%	94%	93%	92%	92%	86%	93%	83%	98%	99%	99%	97%			
USA18054344				3	49	16	43	20	10	31	28	25	53	29	8	19	2	95	95	24	3	76	85	82	36	4	1	1	
QBGH221	GLENOC HINMAN H221 SV			+155	+5.4	-1.6	-3.1	+2.9	+52	+92	+123	+113	+20	+0.8	-3.9	+84	+7.6	-1.8	-5.0	+0.9	+5.3	-0.40	+8	+0.88	+0.80	+1.04	\$219	\$369	
BNAD145	HBR			90%	84%	75%	97%	97%	96%	96%	96%	92%	93%	95%	69%	92%	91%	91%	91%	87%	92%	84%	86%	88%	89%	85%			
QBGD80				7	22	88	71	26	41	48	40	30	29	90	67	12	36	85	98	24	3	4	92	58	13	53	33	34	
QBGK112	GLENOC KALLANGUR K112 PV			+58	-9.0	-3.0	-3.7	+6.5	+56	+98	+126	+105	+15	+1.6	-7.3	+90	+12.1	+1.0	+3.3	+0.5	+2.6	+0.40	+23	+0.74	+0.76	+0.70	\$237	\$368	
NAQA241	HBR			89%	79%	70%	93%	96%	94%	94%	94%	89%	87%	92%	65%	90%	89%	89%	90%	82%	91%	84%	85%	91%	92%	88%			
QBGG72				62	98	93	62	93	26	30	34	43	64	69	6	5	6	26	6	47	40	70	39	28	9	1	16	35	
EETN1	GVA NEWSWORTHY N1 PV			+60	+8.1	+4.7	-9.3	+1.7	+51	+89	+113	+89	+22	+2.3	-7.1	+70	+5.5	-0.2	-3.1	+0.5	+1.9	+0.27	+19	+1.06	+0.90	+0.90	\$220	\$375	
USA17031465	HBR			86%	73%	62%	92%	90%	89%	88%	88%	84%	78%	81%	56%	86%	86%	85%	86%	77%	88%	79%	85%	85%	85%	80%			
VSNL24				61	6	33	3	10	50	60	62	70	15	43	8	42	62	52	90	47	59	56	58	87	31	14	32	29	
DKKM41	HARDHAT H708 MAIMURU J51			+190	-0.8	+3.8	-1.7	+2.3	+44	+91	+119	+97	+12	+1.4	-3.8	+62	+2.4	+1.0	-2.1	-0.4	+6.4	+0.09	+21	+1.04	+1.02	+1.10	\$195	\$331	
NORH708	APR			89%	70%	61%	95%	93%	91%	91%	91%	91%	86%	79%	82%	63%	89%	88%	89%	80%	91%	83%	88%	88%	88%	85%			
DKKJ51				2	75	43	87	17	81	51	49	56	86	76	70	65	90	26	79	90	1	36	48	85	61	71	61	65	
DKKQ110	HARDHAT K522 KODAK M33			+112	+3.3	+9.2	-6.8	+2.4	+46	+84	+115	+108	+17	+2.9	-7.4	+50	+8.0	-1.0	-3.4	+1.0	+3.4	+0.38	+9	+0.64	+0.68	+0.76	\$220	\$387	
NORK522	HBR			73%	74%	62%	91%	91%	88%	84%	84%	81%	75%	79%	50%	76%	72%	73%	74%	66%	76%	67%	84%	76%	76%	73%			
DKKM33				24	41	3	17	18	72	73	59	38	53	24	6	90	32	71	92	20	23	68	90	13	3	2	31	21	
DKKN43	HARDHAT K522 NEBRASKA			+10	+7.8	+6.9	-10.0	+1.9	+60	+101	+138	+132	+12	+5.2	-6.3	+75	+2.7	+0.3	+0.2	-0.3	+0.2	+0.16	+14	+0.76	+0.86	+0.88	\$196	\$389	
NORK522	HBR			88%	77%	66%	94%	95%	93%	92%	91%	87%	82%	88%	58%	89%	87%	86%	88%	79%	89%	81%	91%	90%	90%	85%			
NKLF143				92	8	13	2	12	13	24	14	11	84	1	16	28	89	40	40	87	94	43	77	32	23	11	60	20	
NHZF1023	HAZELDEAN F1023 SV			+201	+3.8	+0.9	-2.5	+3.2	+39	+75	+88	+70	+13	+3.6	-5.2	+48	+8.0	+2.5	-0.2	+0.2	+5.9	+1.27	+12	+0.48	+1.00	+1.04	\$212	\$337	
VTMB1	APR			92%	92%	81%	98%	98%	98%	98%	98%	97%	96%	97%	75%	95%	93%	93%	94%	90%	94%	88%	97%	97%	96%	94%			
NHZB723				2	36	72	79	32	92	91	96	90	78	10	36	93	32	8	47	66	2	99	83	3	56	53	41	60	
NHZM586	HAZELDEAN M586 SV			+137	+6.6	+9.1	-8.3	+2.5	+49	+86	+114	+102	+19	+4.0	-12.0	+68	+5.1	+0.1	+0.2	+0.0	+4.4	+0.79	+39	+0.48	+0.92	+1.16	\$274	\$464	
NHZJ140	APR			92%	87%	71%	98%	98%	97%	97%	97%	95%	93%	96%	70%	94%	92%	92%	93%	86%	93%	87%	96%	94%	94%	90%			
NHZH356				12	14	3	6	20	60	68	61	48	35	6	1	48	67	45	40	76	9	94	4	3	36	85	2	1	
NHZP434	HAZELDEAN P434 SV			+42	+8.6	+6.4	-7.1	+2.0	+46	+86	+111	+96	+21	+2.9	-7.5	+69	+2.2	+0.3	-3.8	+0.9	+1.7	+0.65	+46	+0.58	+0.98	+1.02	\$202	\$364	
NHZJ140	APR			88%	77%	64%	97%	96%	94%	95%	94%	89%	79%	93%	61%	89%	88%	87%	88%	80%	90%	82%	91%	88%	88%	83%			
NHZL527				75	5	16	14	13	74	67	66	57	21	24	5	46	91	40	94	24	64	88	1	7	51	46	52	38	
NHZQ1229	HAZELDEAN Q1229 PV			+146	+0.8	+4.1	-3.6	+3.7	+55	+101	+125	+76	+21	+4.6	-6.9	+77	+9.2	-1.3	-1.8	+0.4	+4.3	+0.59	+28	+0.76	+0.98	+0.92	\$269	\$413	
NHZF1023	APR			75%	77%	63%	98%	98%	95%	94%	90%	85%	78%	93%	53%	81%	75%	76%	77%	69%	78%	69%	94%	78%	78%	75%			
NHZJ823				9	63	39	63	43	28	22	37	86	21	3	9	23	21	77	75	54	10	85	23	32	51	18	3	9	
Breed Average EBVs		+75.	+1.7	+2.8	-4.4	+4.0	+51	+92	+118	+101	+17	+2.2	-4.6	+67	+6.6	+0.0	-0.3	+0.5	+2.4	+0.23	+21	+0.84	+0.97	+1.03	+202	+345			

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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			+118	+4.0	+9.3	-8.8	+2.8	+55	+104	+137	+136	+17	+3.2	-12.0	+77	+5.1	+1.9	+0.4	-0.6	+4.4	+0.09	+32	+0.88	+1.10	+1.08	\$274	\$489	
NHZM586		APR		77%	76%	60%	97%	97%	95%	94%	89%	85%	78%	94%	52%	82%	75%	76%	77%	67%	79%	70%	94%	69%	65%	61%			
NHZN1175				20	34	2	4	24	31	16	15	9	47	17	1	23	67	13	36	94	9	36	12	58	78	65	2	1	
NHZR1561	HAZELDEAN RONALDO R1561 PV			+115	-5.7	+3.9	-5.6	+5.6	+64	+107	+139	+139	+8	+0.7	-4.1	+72	+4.6	-1.1	-1.6	+0.0	+3.5	+0.45	+11	+0.66	+0.72	+0.98	\$204	\$360	
NORL519		HBR		74%	73%	65%	97%	96%	92%	90%	88%	84%	78%	90%	55%	80%	73%	74%	75%	67%	77%	68%	90%	76%	76%	70%			
NHZJ15				22	93	42	31	83	5	13	13	7	97	92	63	36	72	73	72	76	21	75	85	15	5	33	51	41	
DYFN6	INGLEBRAE FARMS NOBLEMAN			+81	+8.8	+10.5	-7.4	+2.0	+57	+89	+108	+93	+11	+3.5	-2.6	+62	+10.0	+0.9	+1.3	+0.2	+2.2	-0.23	+25	+0.86	+1.12	+1.16	\$217	\$372	
NZE14647008839		HBR		87%	79%	68%	95%	96%	95%	95%	94%	89%	84%	92%	63%	89%	88%	87%	88%	80%	89%	80%	93%	89%	88%	85%			
DYFL18				44	4	1	12	13	23	58	73	63	90	12	89	66	15	28	23	66	50	10	30	53	81	85	35	31	
VICG43	IRELANDS GALAXY G43 SV			-27	-4.3	-10.5	-2.1	+6.1	+43	+72	+100	+101	+14	+1.2	-3.6	+48	+4.9	+0.1	-0.9	+0.9	-0.4	+0.49	+0	+0.70	+0.98	+1.04	\$103	\$202	
VICD2		HBR		92%	90%	77%	98%	98%	97%	97%	97%	95%	96%	97%	73%	94%	93%	93%	94%	90%	94%	87%	87%	87%	87%	81%			
VICC4				99	90	99	83	89	83	94	86	49	74	81	74	93	69	45	60	24	98	78	99	21	51	53	99	99	
NZE13300018	KAKAHU PIVOTAL 18004 PV			+153	+3.0	+1.4	-7.5	+4.0	+55	+101	+120	+63	+28	+3.7	-7.4	+81	+9.2	+0.3	+0.1	+0.6	+4.0	+0.57	+0	+0.72	+0.98	+1.12	\$292	\$429	
WWEL3		HBR		78%	73%	64%	95%	96%	94%	94%	93%	87%	79%	92%	56%	82%	82%	82%	82%	77%	83%	70%	91%	78%	76%	70%			
NZE13300116373				7	44	68	11	50	31	23	48	94	2	9	6	16	21	40	42	41	14	84	99	25	51	76	1	4	
GXNQ209	KELLY ANGUS QUINN Q209 SV			+56	+7.6	+9.6	-6.8	+1.8	+64	+114	+142	+113	+26	+0.5	-8.8	+89	+7.0	-1.4	-2.9	+0.5	+2.6	-0.05	+26	+1.34	+1.26	+1.28	\$295	\$490	
USA18463791		HBR		73%	74%	59%	95%	94%	90%	90%	87%	84%	77%	81%	47%	77%	77%	78%	78%	72%	79%	63%	78%	73%	73%	68%			
VLYL1327				64	8	2	17	11	6	5	10	30	3	94	2	6	43	79	88	47	40	22	28	99	95	97	1	1	
NDIP481	KENNY'S CREEK PINNACLE P481			+163	+2.2	-0.5	-4.1	+3.1	+48	+85	+114	+66	+21	+0.0	-2.2	+76	+4.1	+1.5	+1.1	-1.4	+6.4	+1.20	+19	+0.88	+0.92	+0.86	\$202	\$309	
USA17354145		HBR		88%	79%	67%	98%	97%	95%	95%	95%	90%	84%	93%	61%	90%	89%	88%	89%	81%	91%	83%	90%	88%	88%	84%			
NDIL236				5	51	82	55	30	63	69	62	93	18	98	92	25	78	18	25	99	1	99	54	58	36	8	53	79	
KILK18	KILLAIN ALASKA K18 PV			-22	-7.7	-4.7	-0.3	+6.9	+66	+121	+164	+175	+15	+3.9	-2.2	+86	+6.6	-2.9	-4.9	+1.1	-1.1	-0.60	+37	+1.16	+0.86	+1.00	\$129	\$294	
USA16417285		HBR		85%	74%	62%	90%	89%	89%	88%	89%	85%	82%	82%	51%	85%	85%	85%	86%	82%	87%	77%	80%	77%	77%	66%			
USA15107929				99	96	96	95	95	4	2	1	1	70	7	92	9	48	95	98	16	99	2	6	95	23	39	97	85	
KILP1	KILLAIN RAINMAN P1 PV			-29	-2.9	-4.6	-7.0	+4.3	+60	+106	+133	+124	+14	+3.3	-2.7	+74	+14.3	-2.7	-1.8	+2.2	-1.6	+0.33	+6	+0.90	+0.96	+1.12	\$186	\$329	
USA18578965		HBR		86%	74%	60%	95%	93%	92%	90%	91%	86%	78%	81%	51%	87%	86%	85%	86%	77%	88%	76%	86%	76%	76%	64%			
KILM9				99	85	96	15	58	12	13	21	17	76	15	88	30	2	94	75	1	99	63	95	62	46	76	69	66	
BLAP130	KNOWLA PACKER P130 PV			+59	+1.9	+0.2	-2.8	+4.5	+54	+100	+131	+113	+12	+1.0	-6.1	+76	+8.0	+0.4	-0.9	+0.8	+2.0	+0.10	+29	+0.86	+1.24	+0.96	\$230	\$389	
SRKK306		HBR		85%	73%	63%	93%	91%	89%	89%	89%	85%	78%	85%	54%	85%	84%	84%	85%	77%	87%	77%	84%	78%	78%	74%			
BLAK113				62	54	78	75	62	32	26	25	31	87	86	19	25	32	38	60	29	56	37	19	53	94	27	22	20	
BLAP91	KNOWLA PEPPER P91 PV			+60	+4.6	+2.2	-5.8	+3.7	+60	+115	+143	+160	+10	+1.6	-8.2	+67	+8.6	+1.5	-1.3	+1.1	+2.5	+0.37	-2	+0.96	+1.08	+0.98	\$260	\$475	
HIOG18		HBR		89%	78%	69%	95%	95%	93%	92%	93%	88%	80%	90%	61%	89%	88%	88%	89%	80%	90%	82%	90%	89%	90%	87%			
BLAL06				61	29	60	28	43	13	4	10	2	94	69	3	51	26	18	67	16	42	67	99	73	74	33	5	1	
BLAR190	KNOWLA REVOLUTION R190 PV			+177	+9.4	+5.6	-9.7	+0.9	+39	+77	+102	+69	+24	+2.7	-4.2	+51	+14.8	+4.9	+3.6	+0.1	+5.0	+0.74	+47	+0.82	+1.04	+1.04	\$231	\$368	
BLAN127		HBR		70%	66%	55%	92%	92%	85%	83%	83%	80%	74%	79%	42%	72%	70%	70%	71%	62%	74%	61%	77%	73%	73%	70%			
BLAP172				3	3	23	2	5	92	88	83	91	7	29	60	89	2	5	72	5	92	1	45	66	53	21	35		
BLA21S48	KNOWLA SO RIGHT S48 PV			+152	+3.2	-2.5	-4.5	+3.5	+54	+97	+125	+103	+18	+3.4	-5.8	+81	+11.2	+1.3	+1.4	+0.2	+4.0	+0.32	+31	+0.86	+0.92	+0.82	\$244	\$398	
USA18837398		HBR		71%	76%	58%	97%	97%	91%	86%	86%	82%	75%	80%	43%	76%	71%	72%	72%	63%	75%	61%	88%	76%	76%	70%			
BLAL21				8	42	91	48	39	32	33	36	46	41	13	23	15	9	21	66	14	62	14	53	36	5	12	15		
Breed Average EBVs		+75.	+1.7	+2.8	-4.4	+4.0	+51	+92	+118	+101	+17	+2.2	-4.6	+67	+6.6	+0.0	-0.3	+0.5	+2.4	+0.23	+21	+0.84	+0.97	+1.03	+202	+345			

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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					
NZCP117	KO B074 BEAST MODE P117 PV	+142	+2.0	+6.5	-5.7	+1.7	+61	+101	+124	+123	+9	+2.3	-4.7	+63	+1.5	+0.4	-0.6	-0.8	+4.0	+0.57	+14	+0.72	+0.60	+0.82	\$209	\$379				
USA17960722	HBR	77%	78%	66%	98%	97%	95%	96%	94%	87%	79%	91%	55%	81%	85%	83%	83%	78%	84%	69%	89%	87%	87%	83%						
NZCM67		11	53	16	30	10	11	23	38	19	96	43	48	62	94	38	54	97	14	84	77	25	1	5	44	27				
VLYR1549	LAWSONS ASHLAND R1549 SV	+123	-3.3	-3.4	-6.4	+3.8	+60	+106	+135	+113	+12	+0.2	-0.1	+83	+16.0	-1.8	-1.4	+1.1	+4.1	+0.57	+22	+1.10	+0.94	+0.78	\$221	\$350				
USA18217198	HBR	73%	76%	65%	91%	91%	89%	85%	85%	83%	78%	81%	49%	77%	73%	73%	74%	67%	76%	65%	85%	69%	69%	66%						
VLYP251		18	87	94	21	46	12	14	18	30	84	97	99	12	1	85	69	16	13	84	44	91	41	3	30	50				
VLYN131	LAWSONS CHARLIE N131 SV	-1	-3.7	-1.2	-3.9	+5.4	+72	+127	+158	+125	+20	+2.9	-4.4	+79	+5.6	-1.8	-1.7	+0.0	+1.0	+0.35	+32	+0.88	+0.74	+0.88	\$229	\$388				
USA16295688	HBR	86%	79%	72%	95%	96%	95%	94%	92%	88%	84%	91%	65%	87%	86%	86%	87%	79%	88%	80%	94%	92%	92%	88%						
VLYL710		95	88	86	58	80	1	1	2	16	27	24	55	19	61	85	74	76	82	65	12	58	7	11	23	21				
VLYL483	LAWSONS LINKEDIN L483 SV	+54	+4.6	-6.2	-1.2	+4.0	+57	+108	+151	+138	+26	+4.0	-4.1	+103	+9.2	-1.0	+2.0	+0.3	+1.8	-0.18	+21	+1.00	+0.80	+0.86	\$206	\$378				
HKFJ5	HBR	90%	87%	77%	98%	98%	97%	97%	97%	95%	94%	94%	67%	92%	89%	88%	91%	84%	91%	82%	88%	85%	85%	81%						
VLYH221		65	29	98	91	50	22	11	4	7	4	6	63	1	21	71	15	60	61	12	46	79	13	8	48	27				
VLYQ44	LAWSONS MIRACULOUS Q44 PV	+144	+4.4	-2.1	-7.1	+3.8	+49	+91	+112	+104	+10	+3.2	-3.5	+49	+21.2	+0.4	+0.5	+2.0	+2.6	+1.01	+37	+1.00	+0.96	+0.98	\$238	\$387				
VLYM518	HBR	77%	76%	65%	97%	96%	93%	93%	91%	86%	78%	90%	53%	81%	80%	81%	81%	75%	82%	68%	84%	71%	71%	68%						
VLYK914		10	31	90	14	46	57	53	66	45	94	17	76	92	1	38	35	2	40	98	6	79	46	33	15	21				
VLYM518	LAWSONS MOMENTOUS M518	+197	-2.6	-2.7	-5.3	+4.0	+50	+92	+112	+84	+22	+2.7	-3.0	+49	+12.6	-0.5	+0.2	+0.3	+5.7	+0.85	+37	+0.92	+1.02	+1.14	\$221	\$338				
USA17354145	HBR	93%	97%	89%	99%	99%	99%	99%	99%	98%	98%	99%	78%	96%	95%	96%	96%	93%	95%	89%	99%	99%	99%	98%						
VLYH229		2	84	92	36	50	56	50	65	76	13	29	84	92	5	59	40	60	2	95	6	66	61	81	31	60				
VLYP316	LAWSONS PROPHET P316 PV	+152	+5.8	+5.7	-2.3	+3.3	+57	+88	+104	+60	+17	+0.3	-3.9	+68	+11.3	-3.9	-4.0	+1.7	+3.8	+0.13	+29	+0.62	+0.72	+0.86	\$275	\$398				
USA16295688	HBR	77%	77%	69%	93%	96%	94%	93%	89%	85%	79%	90%	58%	81%	80%	80%	80%	75%	82%	71%	93%	88%	88%	84%						
VLYM527		8	19	22	81	34	22	62	80	95	52	96	67	47	9	99	95	3	16	40	19	11	5	8	2	15				
VLYR4010	LAWSONS ROCKY R4010 PV	+135	+6.4	+5.9	-4.6	+2.7	+53	+92	+121	+93	+23	+2.4	-4.4	+71	+11.9	+2.0	+1.8	+0.2	+4.6	+1.36	+23	+0.90	+1.04	+1.02	\$254	\$410				
USA17354145	HBR	79%	80%	66%	99%	98%	97%	97%	93%	88%	80%	95%	56%	82%	84%	83%	83%	78%	84%	70%	97%	91%	91%	88%						
VLYP4005		13	15	21	47	23	37	47	44	63	12	39	55	39	7	12	17	66	7	99	39	62	66	46	7	10				
VLYR1217	LAWSONS ROMULUS R1217 PV	+140	+3.0	+6.6	-5.6	+3.7	+64	+107	+147	+112	+17	+1.4	-2.4	+82	+10.9	-4.4	-4.5	+1.3	+4.1	+0.41	+14	+1.18	+1.12	+0.94	\$261	\$418				
USA18217198	HBR	72%	75%	64%	93%	90%	85%	83%	83%	81%	76%	80%	49%	73%	72%	72%	72%	66%	75%	64%	78%	71%	71%	68%						
VLYN976		11	44	15	31	43	6	12	6	32	52	76	91	13	10	99	97	10	13	71	78	96	81	22	5	7				
NMMD78	MILLAH MURRAH EQUATOR D78	+3	-1.3	+6.2	-9.1	+5.0	+62	+110	+157	+181	+18	+2.1	-4.2	+89	+2.0	-1.9	-3.6	+1.0	+0.1	-1.00	+22	+0.84	+0.96	+1.06	\$158	\$354				
USA14237157	HBR	93%	96%	89%	99%	99%	98%	98%	98%	98%	98%	98%	80%	96%	95%	96%	96%	94%	95%	89%	98%	95%	95%	92%						
NMMY119		94	78	18	4	73	9	8	3	1	39	50	60	6	92	86	93	20	95	1	43	49	46	59	89	47				
NMMH250	MILLAH MURRAH HERCULES	+70	-3.6	+3.1	-2.9	+6.0	+42	+75	+106	+93	+12	+2.5	-4.7	+59	+3.1	-1.4	-0.5	+0.4	+2.4	+0.16	+17	+0.92	+1.16	+1.08	\$153	\$271				
NMME78	HBR	90%	86%	73%	98%	98%	97%	97%	97%	94%	94%	95%	65%	92%	91%	90%	91%	87%	92%	84%	91%	89%	89%	84%						
NMME120		52	88	51	74	88	86	91	77	64	84	36	48	73	86	79	53	54	45	43	65	66	87	65	91	92				
NMMK35	MILLAH MURRAH KINGDOM K35	-41	-11.9	-7.0	-2.0	+8.8	+54	+99	+137	+148	+12	+0.8	-5.0	+62	+7.7	+0.0	+0.1	+1.1	-1.1	-0.76	+26	+0.82	+1.26	+1.18	\$129	\$263				
NZE469	HBR	93%	96%	89%	99%	99%	98%	98%	98%	98%	98%	98%	80%	96%	95%	95%	95%	93%	95%	89%	98%	96%	96%	94%						
NMMG41		99	99	99	84	99	34	29	16	4	85	90	40	66	35	47	42	16	99	1	28	45	95	88	97	94				
NMMK42	MILLAH MURRAH KLOONEY K42	+76	+4.1	+1.9	-6.1	+5.6	+47	+86	+107	+90	+23	+2.2	-6.2	+64	+6.5	-1.2	-3.1	+1.3	+1.9	+0.00	+18	+0.82	+0.90	+1.06	\$210	\$350				
NGMT30	HBR	94%	96%	89%	99%	99%	98%	99%	98%	98%	98%	98%	98%	98%	96%	96%	96%	94%	95%	89%	98%	97%	97%	95%						
NMMH4		48	34	63	24	83	68	68	75	67	11	47	17	60	49	75	90	10	59	26	60	45	31	59	44	50				
Breed Average EBVs		+75.	+1.7	+2.8	-4.4	+4.0	+51	+92	+118	+101	+17	+2.2	-4.6	+67	+6.6	+0.0	-0.3	+0.5	+2.4	+0.23	+21	+0.84	+0.97	+1.03	+202	+345				

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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
NMML133	MILLAH MURRAH LOCH UP L133			+38	+4.5	+4.2	-5.5	+4.8	+58	+100	+131	+100	+26	+2.1	-1.6	+80	+1.6	-2.2	-4.2	-0.6	+1.8	-0.15	+32	+0.70	+1.08	+1.16	\$163	\$300
USA17091363		HBR		94%	80%	81%	99%	99%	98%	98%	98%	98%	98%	98%	80%	96%	95%	95%	96%	94%	95%	89%	98%	97%	97%	96%		
NMMH49				77	30	38	32	69	17	26	23	51	4	50	96	17	94	90	96	94	61	14	11	21	74	85	86	83
NMMM308	MILLAH MURRAH MILESTONE			+62	+6.5	+5.6	-7.5	+4.5	+43	+79	+92	+81	+19	+2.7	-5.6	+43	+4.4	+2.5	+5.0	-0.4	+2.1	+0.10	+19	+0.82	+0.98	+1.22	\$195	\$339
NZE14647008839		HBR		87%	83%	73%	97%	97%	96%	96%	95%	94%	91%	95%	67%	90%	89%	88%	89%	83%	90%	79%	95%	83%	84%	81%		
NMMH331				59	14	23	11	62	82	85	93	80	35	29	27	96	74	8	2	90	53	37	54	45	51	93	61	59
NJWH194	MILWILLAH ELEVATOR H194 SV			-24	-7.0	-6.5	-0.9	+8.2	+50	+102	+137	+162	+19	+2.0	+1.3	+56	+4.2	-2.6	+0.5	+0.9	-1.1	-0.30	+41	+0.20	+0.46	+0.88	\$65	\$201
WDCE11		HBR		87%	78%	70%	93%	93%	92%	92%	92%	88%	84%	86%	63%	88%	87%	87%	88%	82%	89%	81%	85%	87%	87%	81%		
VTMX64				99	95	98	92	99	52	21	16	2	37	54	99	81	77	93	35	24	99	7	3	1	1	11	99	99
NJWH283	MILWILLAH ELSOM H283 PV			+57	+1.1	-5.7	-2.3	+3.9	+47	+83	+122	+106	+21	+1.8	-1.6	+75	+9.5	-2.5	-2.7	+1.6	+1.5	+0.39	+20	+0.76	+0.84	+1.04	\$159	\$279
NJWF189		HBR		90%	82%	70%	97%	97%	96%	96%	95%	92%	93%	94%	63%	92%	91%	91%	91%	86%	92%	85%	88%	89%	90%	85%		
NJWE51				63	61	98	81	48	67	75	43	42	19	62	96	28	19	93	86	4	70	69	51	32	19	53	88	90
BWFQ33	MOOGENILLA QUINELLA Q33 PV			+147	+2.1	+10.0	-6.4	+3.8	+58	+116	+147	+82	+26	+3.0	-2.8	+101	+11.4	-1.1	-0.2	+0.1	+4.6	+0.72	+32	+0.86	+0.94	+0.90	\$274	\$422
USA18181757		HBR		79%	81%	65%	99%	99%	98%	98%	95%	88%	79%	97%	54%	82%	86%	84%	85%	79%	85%	70%	97%	92%	92%	88%		
BWFN9				9	52	1	21	46	18	4	6	79	4	21	87	1	8	73	47	72	7	91	12	53	41	14	2	6
BWFQ33	MOOGENILLA QUINELLA Q33 PV			+147	+2.1	+10.0	-6.4	+3.8	+58	+116	+147	+82	+26	+3.0	-2.8	+101	+11.4	-1.1	-0.2	+0.1	+4.6	+0.72	+32	+0.86	+0.94	+0.90	\$274	\$422
USA18181757		HBR		79%	81%	65%	99%	99%	98%	98%	95%	88%	79%	97%	54%	82%	86%	84%	85%	79%	85%	70%	97%	92%	92%	88%		
BWFN9				9	52	1	21	46	18	4	6	79	4	21	87	1	8	73	47	72	7	91	12	53	41	14	2	6
EGRM39	MOSQUITO CREEK MAXIMUS			+48	+3.2	+3.7	-6.2	+5.2	+60	+106	+138	+134	+17	+1.9	-7.8	+72	+6.6	+0.7	+0.2	+0.4	+2.4	+0.07	+15	+0.84	+0.84	+1.04	\$252	\$440
HIOG18		HBR		84%	77%	67%	91%	95%	92%	94%	93%	88%	83%	92%	57%	86%	85%	85%	86%	79%	87%	76%	83%	76%	77%	72%		
EGRD9				70	42	44	23	77	13	13	14	10	48	58	4	36	48	32	40	54	45	33	72	49	19	53	8	3
EGRQ53	MOSQUITO CREEK QUALITY Q53			+14	+8.4	+9.5	-6.7	+0.3	+57	+103	+136	+107	+28	+1.6	-5.4	+82	+0.9	-0.6	-2.2	-0.2	+1.7	-0.06	+30	+1.06	+1.14	+1.06	\$215	\$388
USA18463791		HBR		73%	73%	58%	91%	92%	91%	89%	88%	84%	76%	85%	47%	78%	75%	77%	77%	70%	78%	62%	85%	70%	70%	63%		
EGRG2				91	5	2	18	3	21	19	16	39	2	69	31	13	96	62	81	84	64	21	17	87	84	59	37	21
CSWH211	MURDEDUKE HUSSAR H211 PV			-3	+1.2	+4.7	-8.8	+6.0	+60	+117	+153	+166	+13	+4.0	-5.2	+82	+1.9	-2.0	-5.4	+0.8	-0.6	-0.70	+31	+0.52	+0.86	+1.02	\$159	\$358
VTME343		HBR		90%	83%	74%	97%	96%	95%	95%	95%	92%	91%	94%	67%	91%	90%	90%	91%	85%	92%	84%	95%	95%	95%	93%		
CSWE175				96	60	33	4	88	14	3	4	1	81	6	36	13	93	88	99	29	99	1	13	4	23	46	88	44
CSWK428	MURDEDUKE KICKING K428 PV			+30	+7.6	+8.4	-7.7	+1.9	+48	+93	+115	+86	+24	+3.4	-5.7	+67	+2.2	-0.4	-2.9	+0.4	+0.7	-0.03	+42	+0.88	+1.02	+1.20	\$191	\$345
VTME343		HBR		91%	86%	75%	98%	98%	97%	97%	97%	95%	94%	97%	69%	93%	92%	89%	92%	87%	93%	86%	97%	97%	97%	95%		
CSWE175				83	8	5	10	12	64	45	59	73	8	13	25	52	91	57	88	54	87	23	3	58	61	91	65	54
CSWQ011	MURDEDUKE QUARTERBACK			+181	+6.4	+0.9	-9.5	+2.9	+52	+99	+131	+112	+23	+4.1	-5.7	+74	+5.0	+1.9	+2.5	-1.0	+5.3	+0.67	+26	+0.78	+1.04	+1.06	\$227	\$399
VLYM518		HBR		86%	88%	77%	99%	99%	98%	98%	98%	92%	83%	98%	63%	89%	88%	88%	89%	81%	89%	79%	99%	98%	98%	96%		
CSWN026				3	15	72	3	26	41	29	25	32	12	5	25	30	68	13	11	98	3	89	29	36	66	59	24	14
NURM208	MURRAY GENESIS M208 PV			+28	+0.9	+5.9	-5.8	+4.7	+50	+96	+128	+107	+21	+3.8	-6.2	+82	+16.5	-0.3	-2.4	+2.1	+0.9	+1.38	+5	+0.94	+1.04	+0.66	\$236	\$396
SMPG357		HBR		88%	79%	69%	93%	94%	93%	92%	93%	88%	86%	85%	64%	89%	85%	88%	83%	83%	89%	82%	88%	90%	90%	87%		
NURK45				84	63	21	28	67	52	38	29	39	22	8	17	14	1	55	83	1	84	99	96	69	66	1	17	16
NURN70	MURRAY KODAK N70 PV			+134	+1.9	+4.7	-6.7	+4.0	+56	+102	+134	+139	+15	+5.2	-6.3	+79	+9.2	-1.2	-1.5	+0.9	+3.7	-0.32	+14	+0.96	+0.90	+0.92	\$233	\$421
NORK522		HBR		89%	80%	67%	98%	97%	96%	96%	95%	89%	82%	96%	62%	90%	89%	88%	89%	81%	91%	83%	96%	91%	91%	87%		
NURJ53				13	54	33	18	50	25	22	20	7	70	1	16	19	21	75	71	24	18	7	77	73	31	18	19	6
Breed Average EBVs		+75.	+1.7	+2.8	-4.4	+4.0	+51	+92	+118	+101	+17	+2.2	-4.6	+67	+6.6	+0.0	-0.3	+0.5	+2.4	+0.23	+21	+0.84	+0.97	+1.03	+202	+345		

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Ident	Name																												
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			
NURM204	MURRAY PROCEED M204 PV		+245		-7.7	+7.2	-4.0	+4.3	+61	+106	+141	+133	+19	+2.2	-3.2	+90	+13.5	-4.7	-5.7	+0.8	+6.7	+0.10	+22	+0.96	+0.76	+0.90	\$226	\$375	
USA16956101	HBR		90%		81%	69%	96%	96%	94%	94%	94%	89%	84%	90%	63%	91%	90%	87%	90%	86%	91%	84%	93%	90%	90%	87%			
NURJ43			1		96	11	57	58	10	14	11	11	36	47	81	5	3	99	99	29	1	37	41	73	9	14	26	30	
NURP54	MURRAY TWINHEARTS P54 PV		+106		-0.8	+3.6	-6.0	+6.5	+69	+125	+166	+157	+24	+1.9	-4.2	+104	+8.3	-2.2	-3.9	+1.0	+3.0	+0.17	+17	+0.88	+1.26	+0.90	\$245	\$433	
USA16350631	HBR		85%		74%	64%	93%	91%	90%	89%	89%	86%	79%	82%	59%	85%	85%	85%	86%	77%	87%	78%	86%	87%	87%	82%			
NURM13			27		75	45	26	93	2	1	1	2	7	58	60	1	29	90	95	20	31	45	67	58	95	14	11	4	
SFNL21	NAMPARA LIBERTY L21 SV		-76		-6.3	-3.6	-6.5	+8.7	+66	+111	+149	+160	+19	+2.9	-0.4	+79	+8.3	-1.9	-0.6	+1.8	-2.5	-0.64	+24	+0.86	+0.86	+0.98	\$135	\$283	
NZE10322010609	HBR		91%		86%	72%	98%	98%	97%	97%	97%	94%	94%	96%	62%	93%	92%	89%	92%	87%	93%	86%	94%	92%	92%	87%			
SFNH65			99		94	94	20	99	3	8	6	2	37	24	99	19	29	86	54	3	99	1	37	53	23	33	96	89	
WLGP5	NARANDA PIMP P5 SV		+109		+10.7	+8.6	-11.4	+1.8	+53	+99	+128	+97	+20	+1.7	-3.1	+82	+6.9	+1.4	+2.5	-0.3	+3.3	+0.33	-1	+0.70	+0.76	+1.08	\$229	\$390	
USA18229425	APR		88%		75%	61%	97%	95%	94%	93%	93%	87%	78%	87%	54%	89%	87%	86%	87%	78%	89%	82%	90%	87%	87%	82%			
WLGM24			25		1	4	1	11	39	28	30	57	25	66	83	14	44	19	11	87	25	63	99	21	9	65	23	19	
SKOJ6	NEWLYN PARK EMPEROR J6 PV		+19		-8.1	-5.2	-7.3	+7.4	+65	+112	+143	+160	+10	+1.4	-5.0	+80	+7.7	-1.1	-1.1	+1.3	+0.3	-0.68	+16	+1.08	+0.80	+0.78	\$187	\$348	
VTME343	HBR		86%		78%	68%	93%	92%	91%	90%	91%	87%	83%	85%	64%	87%	86%	86%	87%	80%	88%	79%	85%	85%	85%	81%			
NZCE115			88		97	97	12	97	5	7	9	2	94	76	40	17	35	73	64	10	93	1	68	89	13	3	69	51	
NZE21095018	NGAPUTAHI P206 SV		+145		+9.5	+5.1	-1.4	+0.2	+41	+84	+97	+69	+28	+2.6	-7.3	+52	+6.3	-0.4	-2.8	+1.2	+4.3	+0.21	+16	+0.96	+1.06	+1.14	\$244	\$388	
HIOE7	HBR		88%		79%	70%	93%	96%	95%	95%	94%	89%	82%	93%	67%	89%	89%	88%	89%	81%	90%	82%	87%	80%	81%	78%			
NZE21095112H49			9		2	28	89	3	87	73	89	91	2	32	6	88	52	57	87	12	10	49	68	73	70	81	12	21	
USA16981588	PA FULL POWER 1208 PV		+119		-5.6	-4.6	-4.9	+3.8	+52	+99	+120	+74	+13	+2.1	-2.4	+70	+13.0	-1.8	+0.2	+1.1	+3.2	+0.92	+20	+1.24	+0.98	+0.68	\$224	\$326	
USA16381311	HBR		93%		95%	85%	99%	98%	98%	98%	98%	98%	97%	98%	73%	95%	94%	94%	94%	92%	95%	87%	98%	98%	98%	91%			
USA16408070			20		93	96	42	46	41	29	47	87	78	50	91	41	4	85	40	16	27	97	50	98	51	1	27	68	
HKFE27	PARINGA IRON ORE E27 PV		+105		+6.9	+0.5	-6.8	+2.1	+35	+67	+90	+96	+12	+1.9	-7.3	+66	+6.9	+1.6	+2.5	+1.2	+1.7	+0.33	+31	+0.86	+0.94	+0.96	\$187	\$337	
VTMA149	HBR		90%		71%	66%	97%	96%	95%	95%	94%	91%	92%	92%	65%	91%	90%	90%	91%	84%	92%	84%	89%	84%	84%	79%			
FAFC1			28		12	76	17	14	97	97	95	58	84	58	6	53	44	16	11	12	64	63	13	53	41	27	69	61	
SMPG357	PATHFINDER GENESIS G357 PV		-1		+0.2	+4.2	-7.3	+6.7	+61	+108	+147	+139	+26	+4.4	-5.9	+94	+13.5	+0.5	-0.8	+1.4	+0.0	+0.66	+28	+0.86	+1.06	+0.78	\$226	\$406	
VTMB1	HBR		94%		97%	88%	99%	99%	99%	99%	99%	98%	98%	98%	84%	97%	96%	96%	96%	95%	95%	90%	98%	98%	98%	96%			
SMPD245			95		68	38	12	94	10	11	7	7	5	3	22	3	3	36	58	7	95	89	22	53	70	3	25	11	
SMPK22	PATHFINDER KOMPLETE K22 SV		+65		+10.5	+9.2	-9.1	+0.8	+40	+73	+94	+44	+28	+3.0	-5.6	+51	+6.4	+3.6	+5.4	+0.3	+2.1	+0.51	+26	+0.50	+0.86	+0.66	\$233	\$357	
SMPG357	HBR		93%		93%	78%	99%	98%	98%	98%	98%	97%	97%	97%	74%	95%	94%	94%	94%	93%	94%	87%	97%	96%	96%	94%			
SMPH756			56		1	3	4	4	91	93	92	99	2	21	27	89	51	3	1	60	53	80	28	3	23	1	19	44	
SMPM651	PATHFINDER MASTERPIECE		+80		+1.8	+4.6	-5.6	+5.3	+58	+106	+133	+140	+20	+3.7	-7.7	+55	+9.4	-1.8	-3.8	+1.6	+1.5	-0.27	+34	+0.96	+1.22	+1.16	\$234	\$424	
VTMG67	HBR		86%		79%	71%	92%	95%	93%	92%	92%	88%	86%	88%	63%	88%	86%	86%	87%	80%	88%	80%	82%	77%	74%				
SMPH66			45		55	34	31	78	20	14	21	7	29	9	4	82	19	85	94	4	70	8	9	73	93	85	18	5	
SMPM558	PATHFINDER MAXIMUS M558 PV		+129		-2.3	+2.7	-6.6	+6.0	+60	+100	+130	+140	+21	+4.7	-8.6	+53	+11.1	-2.5	-2.3	+0.9	+3.5	-0.35	+49	+0.94	+1.06	+0.86	\$242	\$423	
VTMG67	HBR		90%		84%	74%	96%	97%	95%	95%	95%	91%	91%	93%	66%	91%	90%	89%	91%	87%	91%	84%	86%	78%	79%	76%			
SMPH458			15		83	55	19	88	12	27	26	7	20	2	2	87	9	93	82	24	21	6	1	69	70	8	13	6	
SMPN56	PATHFINDER NUCLEUS N56 SV		+54		+3.5	+2.8	-3.3	+5.4	+60	+107	+139	+134	+16	+4.6	-7.3	+77	+13.2	+0.6	+0.6	+1.1	+1.5	+0.35	+9	+0.72	+0.80	+0.82	\$257	\$448	
HIOG18	HBR		90%		79%	68%	96%	97%	95%	95%	95%	90%	87%	93%	62%	91%	90%	90%	90%	82%	92%	85%	89%	85%	85%	81%			
SMPL179			66		39	54	68	80	12	12	13	10	58	3	6	23	3	34	33	16	70	65	1	69	70	8	13	5	6
Breed Average EBVs		+75.			+1.7	+2.8	-4.4	+4.0	+51	+92	+118	+101	+17	+2.2	-4.6	+67	+6.6	+0.0	-0.3	+0.5	+2.4	+0.23	+21	+0.84	+0.97	+1.03	+202	+345	

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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	
SMPP516	PATHFINDER PHAT CAT P516 ^{SV}		+220		+5.7	+2.8	-7.6	+4.4	+52	+89	+118	+87	+25	+5.3	-9.6	+49	+12.1	-3.2	-2.7	+0.8	+6.0	+0.15	+40	+0.78	+1.12	+0.96	\$294	\$457	
SMPM558	HBR		84%		74%	63%	96%	96%	94%	94%	94%	87%	78%	91%	57%	86%	84%	84%	85%	78%	87%	79%	92%	85%	84%	79%			
SMPJ282		1			20	54	10	60	41	57	52	72	5	1	1	91	6	97	86	29	2	42	3	36	81	27	1	1	
SMPQ1357	PATHFINDER QUEST Q1357 ^{PV}		+141		-3.5	-0.4	-6.4	+5.3	+63	+116	+162	+177	+17	+1.8	-5.0	+82	+4.7	-1.2	-2.4	+0.5	+3.9	+0.42	+30	+0.88	+0.74	+1.02	\$209	\$401	
NORL519	HBR		75%		76%	66%	94%	95%	93%	91%	89%	85%	78%	86%	56%	80%	76%	77%	78%	72%	79%	67%	88%	70%	70%	70%			
SMPM18		11			87	82	21	78	7	4	2	1	49	62	40	13	71	75	83	47	15	72	17	58	7	46	45	13	
NZE41-97	PINEBANK WAIGROUP 41/97 [#]		+12		+4.0	-3.7	-3.6	+3.5	+37	+64	+76	+51	+18	+1.0	-3.7	+17	+5.2	+1.1	+0.2	+0.9	+1.1	-0.07	+32	+0.36	+0.94	+1.02	\$156	\$245	
NZE53195	HBR		95%		96%	90%	98%	99%	98%	98%	98%	98%	98%	97%	88%	97%	96%	96%	96%	95%	96%	90%	92%	87%	87%	81%			
NZE63988		92			34	94	63	39	95	99	99	98	38	86	72	99	65	24	40	24	80	20	12	1	41	46	89	96	
WQCQ47	QUANDEN SPRINGS		+131		+9.9	+7.7	-9.3	-0.8	+51	+98	+131	+119	+29	+5.1	-5.1	+48	+12.0	+1.5	+1.1	+0.3	+3.2	+0.23	+26	+1.08	+1.12	+1.10	\$227	\$412	
VLYM518	HBR		76%		76%	65%	91%	92%	90%	89%	88%	85%	78%	85%	53%	79%	77%	78%	78%	71%	79%	68%	88%	70%	74%	71%			
VLYM1690		14			2	8	3	1	50	31	25	22	1	1	38	93	6	18	25	60	27	52	27	89	81	71	24	9	
NORE11	RENNYLEA EDMUND E11 ^{PV}		+104		+8.8	+1.2	-6.9	+1.2	+34	+64	+84	+53	+16	+1.9	-7.6	+51	+4.0	+3.5	+1.5	-0.1	+3.9	+0.77	+23	+0.54	+1.02	+1.12	\$204	\$324	
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		28			4	70	16	6	98	98	97	97	56	58	5	89	78	3	20	81	15	93	37	5	61	76	51	70	
NORG255	RENNYLEA G255 ^{PV}		+141		-11.3	-5.7	-3.0	+4.6	+50	+94	+128	+125	+21	+0.7	-3.1	+88	+7.2	-0.6	-3.8	+0.7	+5.0	-0.03	+10	+1.14	+0.90	+0.84	\$158	\$272	
BNAD145	APR		95%		81%	79%	98%	98%	98%	98%	98%	98%	98%	97%	82%	96%	95%	95%	96%	93%	95%	90%	97%	95%	95%	95%	93%		
NORC490		11			99	98	72	64	55	44	30	16	22	92	83	6	41	62	94	35	5	23	89	94	31	6	89	92	
NORH708	RENNYLEA H708 ^{PV}		+271		-7.1	+2.6	+1.2	+4.7	+48	+102	+130	+129	+12	+2.5	-3.5	+73	+12.5	-3.8	-6.4	+2.2	+7.1	+0.68	+20	+0.72	+0.70	+0.92	\$227	\$373	
NORC511	APR		94%		93%	84%	98%	98%	98%	98%	98%	97%	96%	97%	95%	95%	95%	95%	95%	93%	95%	92%	98%	98%	98%	97%			
NORE176		1			96	56	99	67	64	21	26	13	88	36	76	34	5	99	99	1	1	90	54	25	4	18	25	31	
NORK163	RENNYLEA K163 ^{PV}		+82		+4.6	-8.4	-3.8	+2.5	+40	+73	+94	+65	+10	+0.7	-4.4	+61	+18.4	-0.1	-1.0	+2.6	+2.4	+0.14	+17	+0.66	+0.68	+1.00	\$230	\$336	
NORH106	APR		93%		89%	79%	98%	98%	98%	98%	97%	97%	96%	95%	77%	94%	94%	94%	94%	91%	94%	88%	91%	90%	90%	87%			
NORE176		43			29	99	60	20	91	93	92	93	93	92	55	70	1	50	62	1	45	41	63	15	3	39	22	61	
NORK835	RENNYLEA K835 ^{PV}		+126		-4.3	-4.5	-2.0	+6.3	+47	+87	+112	+94	+12	+3.1	-4.5	+55	+10.0	+1.0	-1.2	+0.4	+4.2	-0.21	+11	+0.62	+1.10	+1.12	\$190	\$309	
NORG420	APR		88%		83%	70%	98%	95%	96%	95%	95%	91%	89%	90%	64%	90%	89%	89%	89%	86%	90%	81%	91%	89%	89%	86%			
NORH514		17			90	96	84	91	67	65	66	61	88	19	53	84	15	26	65	54	11	11	86	11	78	76	66	79	
NORK522	RENNYLEA KODAK K522 ^{SV}		+143		+8.8	+9.0	-4.9	+1.3	+45	+83	+109	+110	+10	+4.7	-6.8	+51	+3.2	+3.0	+1.4	-0.3	+3.9	+0.34	+7	+0.62	+0.82	+0.96	\$205	\$384	
NORE11	HBR		92%		94%	83%	99%	99%	98%	98%	98%	97%	97%	98%	74%	95%	93%	94%	94%	91%	94%	88%	96%	97%	96%	95%			
NORF810		10			4	3	42	7	77	76	71	35	94	2	10	90	85	5	21	87	15	64	94	11	16	27	50	23	
NORL508	RENNYLEA L508 ^{PV}		+164		+0.2	+8.3	-5.9	+2.6	+45	+85	+117	+91	+26	+1.4	-6.9	+56	+5.2	+1.2	+0.0	-0.1	+5.1	+0.81	+16	+0.68	+0.84	+0.88	\$228	\$373	
USA17366506	HBR		93%		84%	78%	99%	99%	98%	98%	98%	98%	98%	98%	79%	96%	95%	95%	95%	93%	95%	89%	99%	98%	98%	97%			
NORH414		5			68	5	27	21	75	71	54	67	4	76	9	81	65	22	43	81	4	94	69	18	19	11	23	30	
NORM1078	RENNYLEA M1078 ^{SV}		+264		-5.6	-0.1	-1.8	+3.3	+41	+83	+103	+101	+11	+1.9	-4.7	+59	+10.3	-1.8	-5.2	+1.0	+7.8	+0.71	+10	+0.94	+1.02	+1.14	\$202	\$326	
NORH708	APR		91%		78%	68%	97%	96%	95%	95%	95%	93%	89%	93%	64%	91%	90%	90%	91%	83%	92%	84%	94%	91%	92%	89%			
NORF563		1			93	80	86	34	87	75	82	49	90	58	48	73	13	85	99	20	1	91	87	69	61	81	53	68	
NORP987	RENNYLEA P987 ^{PV}		+217		+10.3	+9.7	-7.9	+1.3	+49	+96	+121	+122	+8	+0.4	-2.7	+71	+5.7	+3.4	+2.3	-1.0	+7.7	+0.97	+6	+0.86	+0.92	+1.06	\$225	\$406	
NORM763	APR		87%		74%	64%	97%	97%	96%	95%	95%	92%	85%	92%	60%	89%	88%	87%	88%	80%	90%	80%	95%	91%	91%	86%			
NORM1184		1			1	2	8	7	57	36	44	19	97	95	88	38	59	3	12	98	1	98	95	53	36	59	26	11	
Breed Average EBVs		+75.			+1.7	+2.8	-4.4	+4.0	+51	+92	+118	+101	+17	+2.2	-4.6	+67	+6.6	+0.0	-0.3	+0.5	+2.4	+0.23	+21	+0.84	+0.97	+1.03	+202	+345	

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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			+231	-1.7	+5.4	-3.7	+3.8	+50	+89	+112	+98	+11	+3.3	-5.9	+48	+10.4	+0.3	-1.1	+0.8	+6.3	+0.75	+13	+0.86	+0.92	+0.84	\$250	\$396	
NORH708		APR		77%	76%	66%	92%	93%	92%	90%	89%	86%	79%	87%	57%	81%	79%	79%	80%	74%	81%	71%	89%	77%	79%	74%			
NORL841			1		80	25	62	46	52	59	65	55	90	15	22	93	13	40	64	29	1	92	81	53	36	6	8	16	
NORQ213	RENNYLEA Q213 PV			+39	+9.5	+6.8	-7.1	+1.1	+65	+119	+149	+93	+24	+0.7	-10.0	+102	+8.7	+0.6	+0.1	+0.2	+3.1	+0.72	+27	+0.56	+0.72	+0.84	\$340	\$528	
NORK907		APR		86%	78%	67%	97%	97%	97%	96%	95%	92%	84%	94%	57%	89%	87%	86%	87%	79%	88%	79%	96%	92%	92%	88%			
NORL110			77		2	13	14	6	4	3	5	63	7	92	1	1	25	34	42	66	29	91	23	6	5	6	1	1	
NORR992	RENNYLEA R992 PV			+183	+4.8	+6.9	+2.3	+1.3	+44	+84	+115	+82	+26	+1.8	-5.6	+69	+10.9	+1.7	+1.9	-0.1	+6.1	+1.20	+27	+0.58	+0.78	+0.84	\$252	\$399	
NORN542		APR		75%	67%	59%	95%	95%	92%	92%	88%	85%	78%	90%	50%	79%	79%	79%	80%	73%	81%	66%	90%	74%	75%	72%			
NORM1034			3		27	13	99	7	80	74	59	78	4	62	27	44	10	15	16	81	2	99	24	7	11	6	8	14	
TRHP52	RICHMOND HILL PLAY P52 SV			+139	+5.6	+3.6	+0.0	+4.0	+53	+93	+117	+122	+11	+4.3	-6.1	+74	+11.2	-4.9	-3.0	+1.6	+3.0	-0.36	+31	+1.06	+1.00	+1.02	\$233	\$410	
TRHL9		HBR		90%	72%	58%	93%	94%	92%	91%	92%	86%	75%	80%	53%	90%	89%	88%	89%	78%	91%	84%	86%	86%	86%	81%			
TRHH92			12		21	45	96	50	40	45	54	19	90	4	19	30	9	99	89	4	31	5	14	87	56	46	19	10	
NZE14572019	RISSINGTON SOVEREIGN Q485			+172	+10.6	+8.8	-6.6	+0.4	+62	+114	+149	+120	+20	+3.0	-3.7	+88	+8.5	-1.9	-4.1	+0.1	+6.0	+0.15	+7	+0.98	+1.00	+1.06	\$265	\$451	
HKFM103		HBR		71%	79%	60%	97%	96%	93%	86%	86%	82%	75%	79%	43%	76%	70%	71%	72%	62%	75%	62%	90%	65%	65%	63%			
NZE14572117009			4		1	4	19	3	8	5	5	22	27	21	72	7	27	86	95	72	2	42	93	76	56	59	4	2	
USA16396573	S A V CAMARO 9272 SV			+72	+4.0	+0.8	-6.7	+3.6	+48	+78	+99	+97	+9	+1.3	-6.6	+45	+0.6	-0.5	-2.4	+0.9	+1.6	+1.09	+20	+1.14	+0.82	+0.82	\$186	\$328	
USA0035		HBR		91%	86%	72%	97%	97%	96%	93%	86%	86%	75%	79%	43%	76%	70%	71%	72%	62%	75%	62%	90%	65%	65%	63%			
USA15688516			51		34	73	18	41	62	86	87	55	96	79	12	96	97	59	83	24	67	99	91	51	94	16	5	69	
NZE21159019	SEVEN HILLS 312/19 PV			+91	+2.1	+5.2	-7.6	+3.2	+51	+93	+117	+86	+20	-1.0	-1.9	+69	+8.5	-4.1	-5.0	+1.0	+4.1	+0.82	+6	+1.04	+0.92	+0.96	\$215	\$340	
USA18217198		HBR		73%	75%	64%	92%	91%	89%	87%	86%	83%	77%	81%	47%	77%	74%	74%	75%	67%	77%	65%	86%	74%	74%	70%			
NZE21159117053			37		52	27	10	32	48	44	53	74	26	99	94	45	27	99	98	20	13	95	95	85	36	27	38	58	
APBK11	SHACORRAHDALU KINETIC K11			+96	+10.0	+10.3	-9.1	+0.4	+49	+88	+103	+94	+9	+4.5	-7.0	+64	+10.3	+3.4	+2.2	+0.8	+2.1	+0.86	-1	+0.94	+1.14	+1.08	\$246	\$422	
VTMB1		HBR		84%	77%	70%	92%	92%	90%	90%	90%	87%	82%	84%	64%	85%	84%	85%	77%	86%	78%	85%	82%	81%	78%				
APBF2			34		2	1	4	3	58	61	82	61	95	3	8	61	13	3	13	29	53	96	99	69	84	65	10	6	
APB21S24	SHACORRAHDALU PHOENIX			+47	+8.5	+6.2	-8.1	-0.8	+54	+100	+131	+82	+26	+2.7	-7.7	+88	+5.0	+2.3	+4.1	-0.1	+1.9	+0.82	+12	+0.90	+1.08	+1.06	\$271	\$437	
USA18636106		HBR		74%	74%	63%	93%	91%	86%	84%	85%	82%	78%	81%	50%	76%	73%	74%	74%	67%	77%	68%	80%	71%	71%	67%			
APBJ23			71		5	18	7	1	35	26	23	79	4	29	4	7	68	9	3	81	59	95	83	62	74	59	2	3	
APBR5	SHACORRAHDALU ROYALE R5			+128	+7.8	+7.7	-6.7	+2.0	+48	+93	+115	+68	+23	+2.4	-6.8	+70	+9.6	+3.2	+3.9	+0.4	+3.2	+0.80	+14	+0.78	+1.00	+0.76	\$279	\$433	
TFAK132		HBR		72%	76%	64%	93%	93%	91%	87%	86%	83%	77%	82%	50%	77%	72%	73%	73%	66%	76%	65%	87%	77%	73%	69%			
HBUP80			15		8	8	18	13	62	46	57	92	10	39	10	41	18	4	4	54	27	94	78	36	56	2	4		
SYAN340	STONEY POINT NOLTE N340 SV			+89	-1.5	-6.3	-5.9	+6.1	+71	+128	+166	+161	+20	+3.6	-2.5	+109	+5.5	-3.1	-5.2	+0.7	+2.9	-0.17	+6	+0.96	+0.88	+1.22	\$207	\$382	
SYAL178		HBR		85%	76%	66%	96%	96%	95%	96%	95%	90%	83%	92%	58%	88%	86%	86%	87%	78%	88%	76%	88%	87%	87%	84%			
SGMK250			39		79	98	27	89	1	1	1	2	29	10	90	1	62	96	99	35	33	13	95	73	27	93	47	24	
SYAP147	STONEY POINT PERRY P147 PV			+124	+4.7	+1.6	-4.6	+4.6	+56	+102	+133	+106	+21	+1.8	-7.2	+97	+10.2	-1.2	-0.7	+0.5	+3.8	-0.21	+8	+0.86	+0.82	+0.70	\$269	\$436	
USA17936442		HBR		88%	74%	60%	93%	93%	92%	91%	91%	86%	78%	86%	56%	88%	87%	87%	88%	78%	90%	80%	88%	84%	84%	76%			
SWAH233			17		28	66	47	64	25	20	21	40	21	62	7	14	75	56	47	16	11	93	53	16	1	3	3		
NZE19507018	STORTH OAKS FULLY LOADED			+104	+7.9	+7.1	-11.4	+1.1	+44	+86	+130	+131	+19	+3.3	-6.9	+62	+2.4	+1.0	+0.3	-0.5	+3.6	+0.93	+30	+0.54	+0.78	+1.00	\$185	\$373	
NORL508		HBR		88%	75%	64%	97%	97%	95%	95%	95%	88%	80%	93%	58%	89%	88%	88%	89%	80%	90%	82%	93%	81%	81%	78%			
NZE19507113J320			28		7	11	1	6	81	68	25	12	32	15	9	65	90	26	38	92	20	97	17	5	11	39	71	31	
Breed Average EBVs		+75.	+1.7	+2.8	-4.4	+4.0	+51	+92	+118	+101	+17	+2.2	-4.6	+67	+6.6	+0.0	-0.3	+0.5	+2.4	+0.23	+21	+0.84	+0.97	+1.03	+202	+345			

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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
NZE19507013	STORTH OAKS JACK J7	SV	+58		+5.2	+8.0	-4.8	+4.5	+61	+113	+151	+140	+17	+3.5	-1.2	+82	+8.4	-0.2	-3.0	-0.3	+2.4	+0.03	+18	+0.98	+0.96	+0.92	\$184	\$364
VTME343	HBR		92%		88%	79%	98%	98%	97%	97%	97%	95%	94%	96%	69%	93%	92%	92%	93%	90%	93%	86%	96%	93%	93%	89%		
NZE19507111G183			62		24	7	43	62	10	6	4	6	48	12	97	14	28	52	89	87	45	29	60	76	46	18	71	38
VSNG34	STRATHEWEN BERKLEY G34	PV	+69		+6.2	+7.4	-6.2	+3.8	+56	+107	+142	+148	+18	+2.3	-7.6	+83	+5.8	+0.9	+0.0	+0.3	+1.7	-0.12	+32	+1.12	+1.26	+1.10	\$229	\$437
VTMB1	HBR		90%		83%	74%	95%	94%	93%	92%	93%	90%	88%	87%	68%	90%	90%	89%	90%	86%	91%	85%	89%	88%	88%	84%		
VSNE22			53		16	10	23	46	24	12	10	4	41	43	5	13	58	28	43	60	64	16	12	92	95	71	23	3
USA17236055	SYDGEN BLACK PEARL 2006	PV	+107		+2.3	+8.1	-7.0	+3.2	+51	+85	+123	+85	+21	+1.6	-3.6	+75	+8.6	+0.5	+0.1	+0.4	+2.6	+0.19	+15	+1.04	+1.18	+1.14	\$216	\$349
USA15354674	HBR		95%		98%	93%	99%	99%	99%	99%	99%	98%	99%	99%	88%	98%	97%	97%	96%	97%	92%	99%	99%	99%	98%			
USA16214508			27		51	6	15	32	47	70	40	75	19	69	74	28	26	36	42	54	40	47	72	85	89	81	36	51
VTMA149	TE MANIA ADA A149	PV	+12		-7.0	-2.3	-3.2	+6.5	+53	+97	+129	+170	+10	+2.0	-2.0	+82	+2.9	-3.2	-1.9	+1.4	-0.4	-0.66	+27	+0.88	+0.76	+0.78	\$96	\$250
VTMX60	HBR		95%		97%	91%	99%	99%	99%	99%	99%	98%	98%	98%	86%	97%	96%	97%	97%	96%	91%	97%	97%	97%	96%			
VTMU338			91		95	90	69	93	40	34	27	1	94	54	94	14	87	97	76	7	98	1	26	58	9	3	99	96
VTMK52	TE MANIA KALIBROOK K52	PV	+133		+7.7	+5.0	-3.0	+1.5	+52	+103	+129	+104	+29	+1.7	-5.9	+72	+3.2	+0.6	+2.1	-0.7	+5.4	+1.42	+9	+1.18	+1.10	+1.10	\$249	\$421
USA16295688	HBR		87%		78%	69%	94%	95%	92%	92%	91%	87%	82%	87%	65%	87%	86%	84%	87%	82%	88%	79%	86%	89%	89%	86%		
VTMH423			14		8	29	72	8	42	19	28	44	1	66	22	35	85	34	14	96	3	99	90	96	78	71	9	6
VTMK138	TE MANIA KIRBY K138	PV	+254		+0.3	+6.8	-1.2	+4.6	+51	+89	+118	+95	+18	+2.4	-9.2	+65	+5.9	+1.5	+3.3	-1.6	+8.3	+1.04	+12	+0.78	+0.76	+0.92	\$272	\$434
USA16295688	HBR		95%		88%	79%	99%	99%	98%	98%	98%	97%	97%	98%	81%	97%	96%	95%	95%	94%	96%	88%	99%	99%	99%	98%		
VTMH17			1		67	13	91	64	47	58	51	59	38	39	1	56	57	18	6	99	1	99	82	36	9	18	2	4
VTMN424	TE MANIA NEBO N424	PV	+164		+9.4	-0.4	-6.6	+4.0	+52	+99	+127	+101	+31	+4.4	-4.2	+56	+7.1	-1.0	-4.1	+0.5	+3.9	-0.12	+46	+0.98	+0.92	+0.94	\$208	\$359
VTMJ89	HBR		95%		88%	82%	98%	98%	98%	98%	98%	97%	95%	97%	66%	96%	95%	94%	96%	88%	94%	83%	98%	98%	98%	97%		
VTMJ214			5		3	82	19	50	42	28	32	49	1	3	60	81	42	71	95	47	15	16	1	76	36	22	45	43
VTMN1387	TE MANIA NEON N1387	SV	+267		-0.6	+2.8	-6.0	+3.7	+49	+87	+109	+94	+19	+1.4	-8.4	+49	+2.6	+0.0	-1.5	-1.7	+9.1	+0.05	+26	+0.76	+0.82	+1.02	\$236	\$383
VTMK138	HBR		87%		80%	69%	98%	98%	97%	97%	96%	93%	84%	95%	58%	89%	89%	87%	89%	81%	88%	71%	97%	95%	95%	94%		
VTML452			1		73	54	26	43	60	64	72	61	36	76	2	91	89	47	71	99	1	31	28	32	16	46	17	23
VTMP888	TE MANIA PESO P888	PV	+39		+8.3	+6.4	-5.1	+1.9	+56	+113	+143	+118	+25	+2.1	-6.2	+89	+5.5	-0.4	+1.2	+0.6	+1.5	-0.01	+26	+0.84	+1.10	+1.00	\$254	\$442
VTMK226	HBR		91%		84%	75%	98%	97%	97%	97%	97%	95%	90%	92%	62%	93%	92%	91%	92%	84%	92%	82%	95%	93%	94%	90%		
VTMH423			77		6	16	39	12	26	6	10	24	5	50	17	6	62	57	24	41	70	25	26	49	78	39	7	2
VTMQ854	TE MANIA QUEBEC Q854	SV	+113		+8.4	+2.8	-2.6	+1.5	+52	+92	+123	+80	+28	+1.3	-3.3	+62	+4.9	+0.8	+2.3	-0.4	+4.1	+0.58	+29	+0.68	+0.84	+0.78	\$228	\$365
USA18229488	HBR		77%		84%	67%	98%	98%	97%	97%	94%	90%	81%	95%	50%	81%	84%	83%	83%	77%	83%	66%	96%	94%	94%	92%		
VTML1244			23		5	54	78	8	41	49	40	82	2	79	80	67	69	30	12	90	13	84	19	18	3	23	37	
VTMR970	TE MANIA RESOLUTION R970	PV	+78		+0.6	+4.5	-4.1	+3.6	+60	+108	+137	+101	+22	+2.2	-6.8	+80	+10.3	-0.1	+0.0	+0.9	+2.6	-0.04	+21	+0.74	+0.94	+1.22	\$278	\$439
VTMP149	HBR		70%		69%	58%	84%	89%	84%	82%	83%	81%	75%	79%	43%	72%	70%	70%	71%	62%	74%	61%	77%	76%	76%	73%		
VTMP287			47		65	35	55	41	14	10	15	50	17	47	10	18	13	50	43	24	40	23	46	28	41	93	2	3
DXTR725	TEXAS ICEMAN R725	PV	+76		-0.4	+2.3	-4.0	+3.6	+53	+102	+124	+96	+12	+2.3	-3.9	+76	+13.4	+3.1	+4.6	+0.5	+1.9	+0.23	+36	+1.22	+1.00	+0.66	\$237	\$382
USA18962396	HBR		76%		79%	60%	98%	98%	96%	96%	91%	86%	79%	93%	50%	81%	82%	82%	82%	76%	82%	66%	93%	83%	83%	80%		
DXTH647			48		72	59	57	41	37	22	38	58	85	43	67	26	3	4	2	47	59	52	7	98	56	1	16	24
USA18704096	THOMAS EDISON 6764	PV	+68		-1.6	+8.2	-0.3	+4.0	+62	+102	+136	+133	+13	+0.6	-4.3	+82	+12.0	-5.4	-8.3	+1.7	+2.4	-0.17	+21	+0.82	+1.00	+0.96	\$216	\$378
USA16933958	HBR		87%		74%	61%	94%	93%	91%	91%	91%	87%	84%	86%	52%	88%	87%	86%	86%	77%	89%	78%	82%	89%	88%	74%		
USA18048451			55		79	6	95	50	9	21	17	11	79	93	58	14	6	99	99	3	45	13	45	56	27	36	27	
Breed Average EBVs		+75.	+1.7	+2.8	-4.4	+4.0	+51	+92	+118	+101	+17	+2.2	-4.6	+67	+6.6	+0.0	-0.3	+0.5	+2.4	+0.23	+21	+0.84	+0.97	+1.03	+202	+345		

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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					
DBLL292	TOPBOS LEADING EDGE L292 PV	+42		+1.7	+7.2	-5.7	+6.6	+73	+126	+164	+149	+22	+1.4	-4.1	+83	+4.4	-2.5	-5.1	+0.2	+1.3	-0.01	+21	+0.94	+0.76	+0.78	\$225	\$412			
USA16295688	HBR	90%		88%	74%	98%	98%	97%	97%	97%	95%	95%	96%	69%	93%	92%	90%	92%	87%	92%	86%	97%	92%	91%	88%					
VSNF04		75		56	11	30	93	1	1	1	4	17	76	63	12	74	93	98	66	75	25	46	69	9	3	27	9			
NZE17691009	TURIHAUA CRUMP E5 SV	+24		-1.2	-0.9	-5.9	+3.2	+29	+59	+83	+92	+15	+1.2	-9.8	+16	-0.4	+5.1	+3.4	-0.3	+1.5	+0.43	+30	+0.64	+1.20	+1.20	\$136	\$267			
NZE17691003Y167	HBR	93%		93%	86%	97%	98%	98%	98%	98%	97%	97%	97%	89%	95%	95%	95%	95%	93%	95%	88%	90%	84%	84%	79%					
NZE17691195Q263		86		77	84	27	32	99	99	98	65	69	81	1	99	98	1	6	87	70	73	16	13	91	91	96	93			
USA18066037	V A R LEGEND 5019 SV	+88		-4.2	+5.1	-6.2	+5.3	+68	+122	+147	+157	+8	+2.7	-3.5	+87	+9.9	-4.0	-6.1	+1.3	+2.2	-0.28	+18	+1.04	+0.68	+0.88	\$211	\$391			
USA17262835	HBR	87%		80%	68%	96%	96%	94%	94%	93%	90%	87%	89%	61%	90%	88%	87%	87%	80%	90%	79%	89%	97%	96%	81%					
USA16924432		39		90	28	23	78	2	2	7	2	98	29	76	8	16	99	99	10	50	8	59	85	3	11	42	19			
NZE18954020	WAITANGI R257 PV	+181		+0.7	-0.8	-6.8	+3.7	+54	+93	+127	+105	+26	+3.2	-7.4	+69	+8.7	-0.3	-1.4	+0.0	+5.5	+1.27	+21	+0.82	+0.70	+0.94	\$246	\$400			
NZE21159016327	HBR	73%		68%	58%	95%	95%	89%	89%	87%	84%	76%	84%	46%	77%	76%	77%	77%	70%	78%	64%	75%	71%	71%	63%					
NZE18954118P105		3		64	84	17	43	36	47	32	43	5	17	6	46	25	55	69	76	3	99	48	45	4	22	10	14			
BSCF73	WAITARA PIO FEDERAL F73 SV	+25		+4.5	+5.1	-4.3	+1.6	+56	+102	+134	+88	+24	+2.5	-2.9	+88	+5.5	-0.2	+0.1	+0.2	+1.5	+0.31	+11	+1.40	+1.26	+0.96	\$218	\$361			
USA15688392	HBR	93%		90%	77%	98%	98%	97%	98%	97%	96%	96%	97%	70%	95%	94%	94%	94%	89%	94%	88%	96%	95%	95%	92%					
BSCZ66		86		30	28	52	9	26	20	20	71	8	36	86	7	62	52	42	66	70	61	85	99	95	27	33	41			
BSCP90	WAITARA PRINCETON P90 PV	+108		-0.2	+4.8	-2.2	+3.7	+48	+94	+123	+79	+24	+2.3	-3.8	+80	+7.4	+0.0	+0.2	-0.2	+3.9	+0.66	+35	+0.62	+0.84	+1.00	\$212	\$339			
GTNM6	HBR	87%		73%	62%	96%	95%	94%	95%	94%	89%	82%	92%	55%	89%	87%	87%	88%	79%	90%	80%	92%	90%	90%	86%					
BSCJ2		26		71	32	82	43	63	43	40	83	8	43	70	18	39	47	40	84	15	89	7	11	19	39	40	59			
LEJ21S102	WALLAWONG SAFE & SOUND	+134		+5.6	+3.7	-6.2	+4.5	+51	+91	+114	+100	+18	+2.0	-3.0	+66	+7.1	-1.5	-1.5	+0.7	+4.1	+0.38	+18	+0.60	+0.76	+1.12	\$215	\$362			
NJWN498	HBR	70%		72%	59%	93%	90%	85%	83%	83%	80%	75%	79%	44%	72%	70%	70%	71%	63%	74%	62%	76%	68%	68%	65%					
ASHL24		13		21	44	23	62	47	53	60	51	41	54	84	53	42	80	71	35	13	68	62	9	9	76	37	40			
QKBP29	WARRAWEE PATROL P29 PV	+41		+7.2	+11.3	-12.2	+2.8	+56	+105	+139	+129	+18	+2.2	-9.1	+100	+9.3	+3.4	+1.7	+0.4	+1.7	+0.72	+27	+0.82	+1.24	+1.00	\$269	\$479			
SMPG357	HBR	84%		78%	69%	96%	94%	92%	90%	90%	87%	82%	87%	64%	85%	84%	84%	85%	78%	86%	77%	88%	77%	78%	73%					
QKBM01		76		10	1	1	24	26	16	13	13	38	47	1	2	20	3	18	54	64	91	26	45	94	39	3	1			
NWPG188	WATTLETOP FRANKLIN G188 SV	+10		+4.5	+6.3	-4.4	+2.3	+63	+109	+140	+119	+25	+3.8	-3.4	+83	+1.4	-1.5	-2.2	-0.1	+0.5	-1.17	+33	+1.10	+0.96	+0.94	\$188	\$355			
USA15462648	HBR	93%		95%	87%	99%	99%	98%	98%	98%	97%	98%	98%	76%	96%	94%	95%	95%	92%	94%	88%	97%	96%	96%	94%					
NWPE295		92		30	17	50	17	6	10	12	22	6	8	78	13	95	80	81	90	1	10	91	46	22	67	46				
CWDJ17	WEATHERLY JAMES J17 SV	+126		-3.6	-3.7	-3.3	+6.1	+49	+83	+109	+115	+1	+1.5	-4.3	+65	+8.5	+1.2	+2.3	+1.1	+3.4	-0.03	+4	+0.86	+1.22	+1.00	\$200	\$334			
BNAD145	HBR	90%		79%	71%	93%	93%	92%	92%	92%	89%	87%	86%	67%	90%	89%	89%	90%	85%	91%	84%	87%	87%	81%						
CWDF14		16		88	94	68	89	57	76	70	27	99	73	58	58	27	22	12	16	23	23	97	53	93	39	55	63			
CWDM5	WEATHERLY MOXY M5 SV	+50		+3.6	+7.5	-5.0	+4.0	+56	+97	+130	+109	+27	+2.6	-5.6	+89	+7.4	+2.3	-0.6	+0.6	+2.3	+0.20	+21	+1.00	+1.08	+0.96	\$233	\$397			
SMPG357	HBR	80%		78%	68%	93%	95%	93%	93%	94%	92%	88%	89%	60%	84%	83%	84%	84%	79%	84%	71%	90%	91%	91%	82%					
CWDJ15		68		38	9	40	50	27	33	26	36	3	32	27	6	39	9	54	41	48	48	48	79	74	27	19	16			
Breed Average EBVs		+75.		+1.7	+2.8	-4.4	+4.0	+51	+92	+118	+101	+17	+2.2	-4.6	+67	+6.6	+0.0	-0.3	+0.5	+2.4	+0.23	+21	+0.84	+0.97	+1.03	+202	+345			

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