

#### **2025 DATA SHEET INFORMATION**

# **About Valera Vale Droughtmasters**

Valera Vale Droughtmasters is a large scale stud and commercial cattle enterprise operating on two properties in Western Qld: (Pinnacle, 32,000 acres near Augathella and Yanna Station, 57,000 acres between Charleville and Wyandra), multiple properties in Southeast Qld, and the Cleary's bull depot, Avilion just west of Warwick. We also have a partnership with AJ Bush and Sons at Bromelton which produces about 750 weaners annually, and lease Logan Park at Tamrookum from Libby Murphy and family. All up the herd consists of over 8,000 pure Droughtmasters.

Most of the Valera Vale income is from the sale of fat and feeder cattle and the stud contributes a relatively minor portion of the revenue. The main reason the stud was formed and still exists today is to produce reliable, commercially profitable genetics for our commercial business. As such we are focused on things that matter to the bottom line and don't look to breed cattle that just look pretty. If it isn't related to profit in a commercial enterprise, we don't focus on it. We understand firsthand the struggle to make a profit in the real beef industry.

#### **DNA Tests:**

All of the bulls and heifers catalogued have been DNA tested by Neogen Australasia to inform Parentage, Poll gene and Genetic disease incidence (including Double Muscling), and facilitate Genomic analysis to deliver Droughtmaster Single Step BreedPlan and Base Pair Multi-Breed Genomic Breeding Value data. As the names imply the Breedplan figures are relative to the Droughtmaster breed averages and the Base Pair analysis is across breeds in Northern Australia.

### Poll:

All of the bulls catalogued are "pure polls": they have two copies of the poll gene and will reliably pass on one copy to all their progeny. PcPc/Double Poll bulls are the only way to progress to an entirely Polled/Scurred herd. As the Polled (Pc) gene is dominant to the Horned (H) gene, animals having at least one copy of the polled gene do not grow true horns but may be scurred. It is our experience that very few of the HPc females and steers grow much in the way of scurs. The heifer catalogue is entirely polled, but some are not homozygous as noted in this data sheet and the catalogue.

The test used in the Valera Vale herd is the latest SNP test which we have found to be very accurate. We were frustrated with the unreliability of the earlier MiP test, but the SNP test has proven very accurate in our herd. We are involved in several genomics research projects including the search for a possible gene for scurs in genetically polled animals by Dr. Imtiaz Randhawa. This has involved completing Whole Genome Sequencing of four of our PcPc bulls that have grown small scurs to find unique gene/genome features resulting in the expression of scurs if indeed one exists.

#### **Genetic Diseases.**

The draft is tested free of the inherited lethal muscle wasting **Pompes Disease**.

Genetic researchers have found a surprising level of a **Double Muscling** mutation in Droughtmasters. Who would have thought this was possible. It is not necessary to have defective genes in cattle to breed good muscling as is demonstrated in our herd. Double Muscling comes with a myriad of problems including lower heat resistance, lower ADG and fertility and calving problems to name a few.

# **Base Pair Multi-Breed Genomic Breeding Values**

We have been privileged to be involved in this cutting edge research that puts more data behind selection by directly linking DNA patterns with measured performance. Genomic EBVs rely on collected data (on Valera Vale and in many other herds) and DNA analysis allowing identification of the genomes that are associated with better producing animals. Ben Hayes is a co-inventor of genomic selection in cattle and will be attending the sale. Genomic prediction is well proven in Dairy cattle and Genomics has facilitated phenomenal improvements in production including reproductive traits in these cattle.

We have included data on P4M, Pub, BCS, Wgt, Temp, Fly and Tick resistance and Hip Height. The animals are ranked on a 1-5 basis according to their assessed genetic ranking in these parameters with higher numbers being the more desirable in all traits except Hip Height.

**P4M (Pregnant within 4 Months)** is an assessment of an animal's genetic ability to get pregnant while lactating. While obviously these genetics can only be expressed in a female, P4M allows an estimation of a bull's ability to sire fertile daughters. We believe this is a great breakthrough in selection for female fertility as it isn't clouded by nutrition and random factors and allows selection of male and female cattle for genetic female fertility early in their life.

Almost all the dams of these bulls have produced calves every year and are back in calf. This is not by chance as we use dam performance as selection criteria when picking bulls for the sale as well as considering the P4M Genomic EBV. Any females listed as SOLD in the dam history have missed a pregnancy or a calf.



**PUB (Early Puberty)** is an assessment of when an animal will reach puberty based on its genetic makeup. For decades we routinely yearling mated on Valera Vale but abandoned the practice as an uneconomic proposition due to the unreliability of the seasons in the region. This means we haven't been able to directly select for early puberty for a while because our heifers have had no trouble joining as 2 year olds and hence we've lost selection pressure. PUB will allow us to solve this problem. Early Puberty is assessed by ultrasound ovarian scanning and recording when the ovaries become active.

**BCS (Body Condition Score)**. Animals are scored for fatness on a 1 to 5 scale and the results are linked to an analysis of its DNA. This is to some extent a measure of environmental adaptation but needs to be considered with growth and size data so that you don't just select for little fat animals.

**Wgt (Mature Weight)** is an assessment of animal's ability to gain weight and also mature size and is similar to the 600 day weight in traditional EBVs. At Valera Vale we do want fast growth but don't select for extremely big animals although we don't cull against this if they can perform reproductively.

**Temp (Temperament)** is an estimate of an animal's ability to achieve well in a Flight Score test. Unlike the other scores quoted, no data on Temp was recorded from our animals and we've had a little bit of trouble reconciling some of the Temp scores with our observations. This is probably due to what we define as and select on for temperament where we are looking for animals that are non-aggressive and comfortable around people which may or may not always be accurately replicated in a flight score test. All the bulls in this catalogue have been through the Valera Vale temperament assessment process and we stand behind their temperament.

**Hip Height** is a measure of frame score with taller animals scoring higher. Very tall animals may be less fertile, but this is yet to be fully explored and is the subject of ongoing research.

**Tick Resistance** is measured from the performance of lower content cattle and doesn't fully account for the substantial effect of Bos indicus genetics, so we believe based on our own observations that this number seriously understates the actual Tick Resistance of the Valera Vale cattle.

**Fly Resistance** is a measure of the animal's resistance to fly lesions. The heritability is surprisingly low and while lesions are a live export and welfare issue there is no variation in the loss of productivity.

# **Droughtmaster Group Breedplan Analysis (Single Step)**

The Valera Vale herd is almost entirely 50K SNP DNA recorded facilitating Single Step EBV data among other things. We are new to Breedplan EBVs hence our accuracies are not high yet, but we were fortunate to have now four sires included in David Johnstons Repronomics program which will facilitate better information in the future. We will be submitting increasing amounts of phenotypic data to the Breedplan database to increase accuracy in the future.





# **Bull Breeding Soundness Evaluation:**

All the bulls have passed an Australian Cattle Veterinarians (ACV) designed Bull Breeding Soundness Evaluation (BBSE) to ensure we are doing everything possible to guarantee the bulls you buy are fit for purpose. This examination was carried out by very experienced and ACV accredited veterinarian, Dr Paul Vetter who will be further endorsing the Valera Vale bulls by buying at the sale. Paul and Margaret's "Cooladdi Park" have used Valera Vale bulls exclusively for 27 years.

Subsequent laboratory morphology testing was undertaken by very experienced morphologist Mr. Paul Kenny. Valera Vale has two on site veterinarians on the team and our own morphology lab (featuring a very expensive DIC microscope through which we can see the detail in this photo) but we outsource this testing to ensure the results have arm's length credibility.



#### **Scrotal Circumference:**

Part of Dr Paul Vetter's BBSE assessment includes Scrotal Circumference measurement. To avoid variation a Barth Scrotal Tape with a tension indicator is used as per ACV standards. The magic numbers are 32 cm at under 24 months old and 34 cm minimum over 24 months. Scrotal Circumference is a practical estimate of the volume of the testicles as this is the size of the semen producing factory, and the numbers have been calculated to basically ensure the bull doesn't "run out of semen" if required to mate with reasonably high numbers of females in a limited time frame. It is, however, not simply a case of the bigger the better, as there are limits to normal. Whilst it is true that fertile herds tend to produce bulls with higher scrotal circumferences and highly fertile female herds seem to produce bulls with larger scrotal circumferences, trying to indirectly select for daughter fertility by selecting for scrotal circumference is not particularly effective. P4M Genomic EBVs are a much better bet. In bulls over 24 months, high 30s and low 40s are the ideal numbers to look for. This year's catalogue averages about 23 months and 40 cm.

#### **Semen Assessment:**

Each bull's semen has been assessed both Crush Side (for live, progressively motile sperm) and in the Laboratory for normal Morphology.

There is virtually no evidence that the crush side percentage has any bearing on the number of calves a bull produces once the threshold of 30% alive and progressively motile sperm is exceeded. In fact, the variation in crush side percentage is more due to factors not associated with the bull such as collection technique, operator and recent sexual activity. Quoting crush side percentages to compare the semen quality of different bulls is nonsense which is why the Australian Cattle Veterinarians assoc.

(ACV) suggests using a tick (60%+) or Q (30-59%) and fail (<30%) to eliminate any notion that differences in the actual number recorded is useful for ranking bulls.

Morphology on the other hand is a more useful assessment and there is a demonstrated association between the morphology percentage and the average number of calves a bull produces. There is also a possible association with the fertility of his daughters. More importantly some bulls have consistently very high crush side percentages but have DNA defects which are only picked up in morphology and these bulls may either be incapable of fertilizing an egg or worse, may produce an embryo that is non-viable and is slipped well before calving. The magic morphology numbers are set at 50% for a useful bull and 70% for an even more reliable result.

From 50% Normal the higher the better although some individual bulls with relatively low scores will outperform bulls with higher scores due to the effects of dominance, variations in libido, physical soundness etc.

Some bulls seem to be susceptible to stress induced morphology defects and have variable results at successive tests. These are probably not good bulls for our environment. In addition, bulls around puberty have higher levels of certain "defects" but will mature to be sound bulls although late sexual maturing bulls should be avoided because of the influence on daughter fertility.

Bulls with high levels of particular defects (especially those related to DNA issues) fail even though they have more than 50% Normal sperm because higher levels of these particular defects are considered to have a significant impact on pregnancy rates. All the bulls presented in this catalogue have passed a morphology test i.e. they not only have passed the morphology threshold of 50% Normal but do not have excessive levels of any individual defect that will impact fertility.

The detailed spermiogram will be available at the sale or by request.

The catalogue only has one bull (**Lot 70**) below 70% which we left in the catalogue because he has low birth weight combined with high growth EBVs. (but we don't recommend his use in single sire herds). The draft average % Normal Morphology is 82%.



# **Carcass Scanning:**

The bulls have had all the standard ultrasound scans including Intramuscular Fat percentage (IMF) a measure of marbling. This of course has a positive impact on eating quality and MSA compliance. Carcass scanning was performed by accredited and very experienced ultrasound scanner, Mr Paul Kenny. The average EMA of the draft is 131.5 sq cm.

An IMF% of 5 or higher is considered to indicate an animal with a high propensity to marble and this draft of bulls averages a very credible 5.1% with very moderate fat cover (12.5/10.4 mm). If selecting for a bull to increase marbling in your cattle it is probably more important to consider the number relative to the average of the mob than the absolute number.

Comparison of scan results across different vendor lines and small drafts is not particularly informative as the results reflect different levels of preparation to a greater extent than genetic variation. Evaluating the meaning of results across one big line of bulls with the same lifetime preparation is more useful. Selecting bulls with above average EMA or IMF from the catalogue will maximize genetic gains for these traits.

### **ADG Gain:**

Average Daily Weight Gain in Kg/day. These bulls have undergone a daily gain performance trial on a silage-based feed at "Avillion", Greymare. This allowed us to compare a cohort of over 500 bulls in the exact same nutritional environment and we selected our sale bulls on a variety of traits including ADG in this test.

### **Health:**

The bulls have had full vaccination courses for the 5 main Clostridial Diseases and Lepto (7 in 1), 3 Germ Tick Fever, Botulism, Vibriosis and 3 Day. For vaccination dates see the catalogue.

All of the properties used have been at least check tested for Johnes disease. "Valera Vale" and "Milbong Hills" have undergone Faecal Herd Screening tests and are compliant with WA import requirements.

Entry to WA currently requires faecal Liver Fluke testing +/- treatment with a flukicide. This will be done at our expense before leaving Avilion.

The bulls have been tested clear of persistent infection with Pestivirus. Pestivirus is a viral infection spread in two ways between animals (in a similar manner to the 'flu) which results in a short-term infection with usually few long-term consequences unless the animal is stressed or concurrently exposed to some other infectious agent. This exposure will induce high levels of natural immunity. Between a calf mother to her unborn calf. This results in either abortion or the production of a calf that is persistently infected (PI). These calves are infected for life, have poorly developed immune systems (there are parallels here with the human AIDS virus) and usually but not always have poor growth rates and succumb to infections with other diseases.

It is important to note that PI animals are not always easily identified visually, and an astounding number of PIs have been detected in stud cattle competing at the Royal Shows and offered at sales. Any cow that is PI will always produce a PI calf and PI bulls running with non-immune females will also produce PI and aborted calves. Therefore, as there is no way of visually ensuring an animal is not PI, buying bulls not tested for Pestivirus is an unnecessarily risky practice. Introducing a PI animal to a non-immune herd will have disastrous results, and a perfect storm situation is to introduce a young PI bull to susceptible maiden heifers. The Valera Vale catalogue is PI free.

### **Skin Lesions**

Some of the draft has some scarring from small focal skin infections with *Dermatophilus congolensis* as young calves due to the wet and humidity – see photo of active lesions. We get an outbreak every few years in the calves on one or more of the properties even the Western ones. Outbreaks are also reported across Northern Australia (including the Kimberleys) and NSW but the animal impact is cosmetic only.

Some of the heifer draft have some loss of hair from resolving ringworm marks which are healed and will resolve completely in a short time without any treatment.



# **Lifetime Traceability**

All bulls in the catalogue are lifetime traceable. Some bulls have replacement orange tags, but these have been linked on the database to their original breeder tag number to maintain their status.

# **Catalogue Errors**

Despite our best efforts errors crept into the catalogue.

- The dam of Lot 130 is by Valera Vale 16095M not 17095M (Just Spud).
  The Granddams of Lots 161, 162 and 164 should show the Valera Vale prefix.



	Anir	nal Det	ails			Data			Scan				Semen	l	Base	Pair Mu	lti-Bree	d Geno	mic Bree	ding Value	s	
Lot	Visual Id	Poll	Reg	Age	Teeth	Weight	ADG	P8	Rib	EMA	IMF%	SC	Live %	Morph %N	Wt	НН	BCS	Pub	P4M	Temp	Tick	Fly
1	24372M	PcPc	D3	22	М	852	1.72	13	12	141	5.3	37	80%	78%	83	88	92	12	20	80	87	57
2	24687M	PcPc	D3	23	М	863	1.89	14	12	136	5.6	43	60%	79%	52	58	63	8	47	92	52	66
3	24051M	PcPc	D4	25	2	821	1.67	13	12	139	5.2	41	70%	84%	71	85	65	52	32	97	81	15
4	24304M	PcPc	D5	24	2	798	1.53	15	12	138	5.9	42	70%	86%	83	76	30	75	56	66	97	37
5	24301M	PcPc	D4	23	М	816	1.64	13	12	135	5.6	42	80%	83%	78	76	80	28	39	34	77	37
6	24427M	PcPc	D5	24	2	817	1.76	12	9	138	5.4	44	80%	83%	27	28	52	14	9	91	61	4
7	24374M	РсРс	D4	25	2	805	1.68	13	10	137	5.2	38	60%	76%	74	66	59	64	37	77	92	33
8	24756M	PcPc	D3	23	М	827	1.79	12	9	137	5.4	42	80%	93%	87	52	96	57	61	87	77	35
9	24084M	PcPc	D3	24	М	797	1.57	13	9	131	4.9	40	80%	75%	77	80	40	27	19	99	61	33
10	24396M	РсРс	D4	25	2	785	1.47	13	12	136	5.8	40	70%	87%	39	17	50	85	30	97	48	40
11	24123M	РсРс	D3	24	М	782	1.54	14	12	139	5.1	41	90%	59%	49	81	38	14	67	52	52	11
12	24416M	PcPc	D4	24	2	764	1.52	14	12	138	5.5	41	90%	83%	22	34	36	77	72	22	90	49
13	24194M	РсРс	D4	24	М	773	1.28	14	13	137	5.5	40	70%	84%	22	72	21	36	34	74	90	52
14	24658M	РсРс	D3	24	М	788	1.83	13	12	138	5.2	41	30%	89%	65	31	76	52	18	81	74	6
15	24655M	PcPc	D4	20	М	763	1.58	13	12	139	5.2	37	70%	91%	77	91	38	2	22	74	90	17
16	24378M	PcPc	D5	25	М	754	1.52	13	12	137	4.8	41	80%	91%	22	67	35	32	21	35	65	70
17	24335M	PcPc	D5	22	М	764	1.72	11	9	138	5.4	41	70%	75%	66	81	75	34	27	36	44	80
18	24129M	PcPc	D5	23	2	765	1.78	13	12	136	5.5	43	90%	85%	41	51	34	46	59	52	19	49
19	24773M	РсРс	D4	23	М	783	1.79	14	12	132	5.0	40	80%	87%	68	40	62	61	22	46	44	74
20	24403M	РсРс	D4	25	М	793	1.67	12	11	139	5.2	38	60%	88%	30	68	68	13	48	93	77	90

			Drou	ghtma	ster Gı	roup B	reedpl	an Anal	lysis (S	ingle S	tep)								
Lot	Gestation Length (days)	Birth Wt.	200 Day WT. (Kg)	400 Day Wt	600 Day Wt	Mat Cow Wt	Milk (kg)	Scrotal Size (cm)	Days to Calving	Carcase Wt (kg)	Eye Muscle	Rib Fat (mm)	Rump Fat (mm)	Retail Beef Yield	IMF (%)	Shear Force	Flight Time	Jap Ox Index (\$)	
1	3.5	1.2	15	21	41	37	-	0.8	-	19	3.8	-1	-1.7	-	-0.2	-	0.1	-	
2	-3.5	0.8	18	29	44	35	6	1.5	3.7	17	0	-0.8	-0.8	0.5	-0.2	0.2	0	42	
3	0	0.9	9	14	23	23	5	1	ı	7	0.4	0.3	0.1	-	-0.1	-	0	-	
4	0.3	0.2	12	19	25	30	4	0.9	0.4	17	-0.2	-1.6	-2	1.2	-0.2	0	-0.1	44	
5	-1.2	-0.9	8	11	13	12	3	1.7	-2	3	-0.6	-0.3	-0.6	-	0.1	-0.1	0.2	-	
6	-0.3	0.7	13	14	20	2	-	0.8	1	10	0.6	1	1.5	-	0.2	-	0	-	
7	-1	2.1	20	30	43	22	5	1.9	-0.8	16	-0.7	0	-0.1	0	-0.2	0.1	-0.1	44	
8	-1.6	0.8	16	25	41	19	7	0.8	2.5	15	1.6	-0.8	-0.9	0.7	-0.3	0	0	47	
9	-1.6	0.1	13	17	27	6	4	0.8	0.3	7	-0.6	0.9	0.9	-	0.2	0	-0.2	40	
10	0.4	-1.7	7	12	19	15	3	2	-1.7	9	0.9	0.3	0.3	-	0.3	-	0.1	43	
11	0.1	-0.3	12	18	35	22	5	1.6	1.4	12	2.2	0.3	0.1	-	0	-	0.1	ı	
12	-1.2	-0.8	9	12	18	-3	6	1.7	-1.7	3	0	0.6	0.6	-	0.1	-0.1	0.1	40	
13	-0.6	-1.3	8	10	16	12	8	0.7	-1.6	7	0.5	0.4	0.6	-	0.2	-0.1	0	37	
14	-1.7	0.9	14	18	24	-5	5	0.6	3.4	7	-0.9	0.3	0.3	-	0.2	0.1	-0.1	30	
15	-1.6	-0.9	10	19	27	23	6	1.4	1.8	10	0.5	-0.8	-1	0.6	0	0.1	0	40	
16	0.4	-1.5	3	7	8	21	0	0.6	-3.2	6	0.6	0.6	0.6	-	0.2	0.1	-0.1	40	
17	0.2	0.3	13	20	29	19	8	1.2	-2.4	17	0.3	-0.2	0	-	0.1	0.1	-0.1	46	
18	-2	-0.6	13	22	31	27	7	1	0.9	18	1	-0.9	-0.7	-	-0.1	0.1	-0.1	ı	
19	-0.8	-1.3	11	20	35	31	-	0.7	-	20	2.7	0.2	0.4	-	-0.1	-	0.1	ı	
20	-3.2	-2.5	6	13	15	17	3	0.3	0.1	10	-0.2	-0.1	0.1	-	-0.1	0	0	42	
		D	roughtn	naster I	Breed A	vg. EB\	s for 20	023 Borı	n Calve	s									
EBV	-0.1	0	12	19	26	25	4	1.4	-0	14	1	-0	-0	0.6	0.1	0	0	\$41	

	Anir	nal Det	ails			Data			Scan				Semen	l	Base	Pair Mu	lti-Bree	3     18     37     70     52     5       7     37     27     21     37     1       1     5     22     12     44     8       4     64     34     48     77     1       4     29     6     57     69     8       7     33     29     38     92     3       8     54     22     11     95     6       8     74     32     92     74     7       37     5     21     44     5       2     39     36     16     97						
Lot	Visual Id	Poll	Reg	Age	Teeth	Weight	ADG	P8	Rib	EMA	IMF%	SC	Live %	Morph %N	Wt	НН	BCS	Pub	P4M	Temp	Tick	Fly		
21	24238M	РсРс	D4	23	М	776	1.6	14	10	137	5.2	41	80%	0.84	35	59	38	18	37	70	52	59		
22	24435M	РсРс	D3	26	М	781	1.59	13	11	135	5.5	41	90%	79%	28	57	27	37	27	21	37	13		
23	24331M	РсРс	D4	23	М	780	1.61	12	10	136	5.2	38	80%	79%	31	60	21	5	22	12	44	81		
24	24040M	РсРс	D3	24	2	765	1.58	12	9	134	5.1	42	80%	88%	80	75	54	64	34	48	77	15		
25	24457M	РсРс	D4	21	М	756	1.43	15	13	137	5.9	43	80%	81%	16	38	24	29	6	57	69	81		
26	24758M	РсРс	D3	23	М	761	1.56	14	11	135	5.8	39	70%	89%	22	32	97	33	29	38	92	3		
27	24048M	РсРс	D4	22	М	762	1.51	14	11	129	5.2	41	75%	79%	59	49	68	54	22	11	95	61		
28	24460M	РсРс	D3	25	2	749	1.56	13	12	135	5.5	39	70%	84%	58	86	38	74	32	92	74	72		
29	24386M	РсРс	D4	25	М	731	1.35	13	11	130	4.9	39	70%	80%	29	65	5	37	5	21	44	59		
30	24069M	РсРс	D4	23	М	730	1.44	13	15	135	5.6	40	50%	75%	78	66	52	39	36	16	97	5		
31	24108M	PcPc	D5	23	М	727	1.36	12	10	130	4.7	42	70%	87%	24	41	93	42	30	86	61	4		
32	24707M	PcPc	D4	22	М	742	1.53	13	10	130	4.7	39	70%	77%	35	80	62	35	30	68	77	86		
33	24379M	PcPc	D4	25	2	736	1.54	14	11	136	5.5	42	80%	77%	78	86	15	79	8	40	37	5		
34	24394M	РсРс	D4	24	2	741	1.47	13	11	133	5.6	38	75%	79%	95	93	49	33	63	28	61	70		
35	24400M	PcPc	D4	24	М	705	1.38	13	12	134	5.5	40	80%	73%	7	50	59	60	36	98	44	81		
36	24032M	PcPc	D3	23	М	704	1.51	10	8	131	4.9	39	80%	81%	73	84	45	34	59	56	33	42		
37	24551M	PcPc	D4	23	М	787	1.78	14	12	139	5.4	37	50%	93%	27	24	73	47	51	72	56	19		
38	24774M	PcPc	D3	24	М	787	1.69	11	10	135	5.2	45	70%	91%	58	19	87	74	44	79	81	8		
39	24295M	PcPc	D4	23	М	768	1.70	15	13	132	5.5	40	70%	86%	32	54	20	11	59	10	48	54		
40	24134M	PcPc	D5	23	М	770	1.61	13	11	131	4.9	41	70%	80%	44	44	46	75	38	70	30	7		

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<u> </u>						•	reedpl	an Anal					1						
Lot	Gestation Length (days)	Birth Wt. (kg)	200 Day WT. (Kg)	400 Day Wt	600 Day Wt	Mat Cow Wt	Milk (kg)	Scrotal Size (cm)	Days to Calving	Carcase Wt (kg)	Eye Muscle	Rib Fat (mm)	Rump Fat (mm)	Retail Beef Yield	IMF (%)	Shear Force	Flight Time	Jap Ox Index (\$)	
21	-1	0.7	14	22	37	14	6	1	-1.1	10	1.5	0.7	0.9	-	0.3	-	0.1	-	
22	1	0.5	16	19	32	15	ı	2	1	16	2.4	-0.3	-0.4	-	-0.2	-	0	-	
23	-1	-0.2	11	16	24	9	6	0.2	2.3	11	0.6	-0.8	-0.7	-	-0.2	0	0	-	
24	-2.1	-1.8	10	15	19	25	5	1.2	ı	14	1.4	-0.1	-0.3	-	-0.3	-	-0.1	-	
25	-0.6	-3.1	3	2	6	-15	ı	1.5	ı	0	1.1	0.5	0.6	-	0	-	-0.2		
26	-0.3	0.4	14	22	34	22	6	1.8	0.4	14	1.1	0.2	0.2	0.3	0	-0.2	0.1	44	
27	0.7	0.6	14	20	32	15	-	1.1	ı	14	1.8	0.1	0.2	-	-0.2	-	-0.1	-	
28	-0.4	-3.7	6	6	12	8	6	2.2	1	7	0.5	8.0	1	-	0.1	-	-0.1	-	
29	0.4	-1.8	6	9	10	0	7	1.4	ı	0	0.7	0	-0.3	-	0.2	-	0	-	
30	-0.9	-2.1	4	9	15	6	6	1.3	-3.4	3	-0.8	0.2	0.2	-	0.4	-0.2	0	37	
31	-0.8	-1.6	5	12	20	-1	5	1.6	-4.1	3	0.7	0.7	0.6	-	0.3	-	0	-	
32	0.7	1.4	20	22	37	29	ı	1.9	ı	18	3.3	0.4	0.5	-	0.1	-	0.1	-	
33	1.4	-0.6	10	15	23	12	ı	2.1	ı	9	2.3	-1	-1.4	-	-0.3	-	0.1	-	
34	1.6	0.3	11	22	35	49	ı	1.4	ı	15	2	-0.8	-1.3	-	0.1	-	0	-	
35	2.1	-1.3	1	2	2	1	3	1.1	-1.9	-2	0.4	1.1	0.7	-	0.3	-0.2	0	28	
36	2	-0.8	10	15	24	27	7	1.5	0.1	15	2.7	-0.2	-0.5	-	-0.3	0	0	43	
37	1.1	0.9	13	18	25	13	5	1.5	ı	11	0.4	-0.2	-0.2	-	-0.1	-	-0.1	31	
38	-0.5	0.5	14	21	32	14	4	1.8	1.8	10	1.6	-0.5	-0.5	0.5	-0.2	0	0.1	41	
39	-1	-0.3	15	22	33	26	6	1.8	-3.4	14	2	0.1	0.3	-	0.1	-0.1	-0.1	51	
40	-1.4	-2.4	1	4	6	-3	4	-0.1	-4.5	-1	-0.4	0.4	0.7	0.4	0.3	-0.4	0	44	
		Dı	roughtn	naster I	Breed A	vg. EB\	s for 20	023 Borr	n Calve	s									
EBV	-0.1	0	12	19	26	25	4	1.4	-0	14	1	-0	-0	0.6	0.1	0	0	\$41	

	Anir	nal Det	ails			Data			Scan				Semen	l	Base	Pair Mu	lti-Bree	80     39     76     30     5       16     52     86     40     6       49     21     75     81     1       32     45     68     92     6       51     33     61     65     7       6     41     15     80     65     8       9     44     45     98     96     1       1     76     35     87     22     1       1     2     4     80     56     2       1     2     4     80     69     3       1     24     24     84     77						
Lot	Visual Id	Poll	Reg	Age	Teeth	Weight	ADG	P8	Rib	EMA	IMF%	SC	Live %	Morph %N	Wt	НН	BCS	Pub	P4M	Temp	Tick	Fly		
41	24329M	РсРс	D5	23	М	737	1.57	10	8	134	5.2	37	80%	80%	60	92	30	80	39	76	30	52		
42	24440M	РсРс	D3	24	М	736	1.44	15	12	132	5.7	39	90%	77%	79	92	48	16	52	86	40	66		
43	24446M	PcPc	D4	25	М	752	1.82	12	10	137	5.2	40	70%	76%	88	86	60	49	21	75	81	12		
44	24553M	PcPc	D4	23	М	734	1.51	12	9	133	5.5	37	80%	79%	47	67	57	32	45	68	92	64		
45	24212M	PcPc	D4	22	М	718	1.50	10	9	129	5.0	43	60%	94%	51	40	73	51	33	61	65	76		
46	24414M	РсРс	D4	25	2	720	1.64	10	9	129	4.5	38	70%	79%	33	65	50	41	15	80	65	86		
47	24662M	РсРс	D4	22	М	710	1.44	14	12	135	5.2	40	80%	85%	35	23	89	44	45	98	96	10		
48	24222M	РсРс	D3	23	2	721	1.37	11	9	133	4.6	38	60%	77%	74	24	82	76	35	87	22	19		
49	24766M	РсРс	D4	23	М	712	1.51	11	8	128	4.7	39	80%	83%	39	91	70	2	4	80	56	22		
50	24109M	PcPc	D3	24	2	723	1.18	12	9	128	4.9	42	70%	83%	32	76	44	12	40	80	69	33		
51	24346M	РсРс	D5	22	М	741	1.65	11	9	135	4.9	40	80%	89%	14	18	30	24	24	84	77	7		
52	24082M	PcPc	D4	23	М	741	1.57	13	11	128	4.8	40	70%	72%	47	67	59	60	41	12	61	6		
53	24113M	РсРс	D4	24	М	673	1.28	11	9	124	4.7	42	70%	77%	60	84	62	43	54	53	40	52		
54	24195M	РсРс	D4	21	М	721	1.57	11	9	129	4.7	41	90%	85%	65	72	48	79	41	36	84	33		
55	24557M	PcPc	D4	23	М	709	1.66	12	9	130	5.3	40	80%	84%	79	82	42	48	33	10	56	15		
56	24548M	РсРс	D4	23	М	699	1.59	12	9	127	4.5	40	70%	90%	78	84	54	24	31	28	65	40		
57	24402M	PcPc	D4	24	М	696	1.42	12	9	130	4.7	41	60%	83%	15	35	32	27	49	30	7	33		
58	24718M	PcPc	D4	22	М	690	1.53	11	9	132	5.1	38	80%	89%	31	28	65	53	39	77	44	94		
59	24494M	PcPc	D4	22	М	704	1.33	13	10	133	4.9	45	80%	80%	28	43	54	25	31	46	15	26		
60	24164M	PcPc	D3	24	М	678	1.41	12	9	131	4.7	39	60%	77%	4	67	20	2	14	76	98	9		

			Drou	ghtma	ster Gı	roup B	reedpl	an Anal	lysis (S	Single S	tep)								
Lot	Gestation Length (days)	Birth Wt.	200 Day WT. (Kg)	400 Day Wt	600 Day Wt	Mat Cow Wt	Milk (kg)	Scrotal Size (cm)	Days to Calving	Carcase Wt (kg)	Eye Muscle	Rib Fat (mm)	Rump Fat (mm)	Retail Beef Yield	IMF (%)	Shear Force	Flight Time	Jap Ox Index (\$)	
41	-1.8	-1	16	22	33	21	7	1	-0.4	20	1.6	-0.5	-0.5	0.8	-0.1	0.3	-0.1	52	
42																			
43	-0.6	-1.6	10	14	20	14	6	1.7	1	13	0.9	-0.8	-1	-	-0.3	-	0	-	
44	1.1	1	11	18	26	29	-	8.0	-	12	0.4	-0.9	-1.1	-	0	-	0	-	
45	0.6	1.2	16	27	49	37	-	0.9	-	22	2.1	0	0.4	-	0	-	-0.1	-	
46	-0.8	-2.3	10	19	27	16	-	1.8	•	16	1	0.5	0.7	-	0.2	-	0	-	
47	-1.8	0.3	11	20	34	11	4	1.5	-0.6	8	0.3	0.2	0.1	0.4	0.1	0	-0.1	52	
48	-0.6	0.7	15	23	35	34	-	1.4	•	13	1	0.4	0.3	-	0.2	-	0	-	
49	1.5	-1.1	4	5	7	5	3	0.6	-3.1	1	0.5	0.5	0.1	-	0	-0.1	-0.1	-	
50	0.2	-0.2	10	17	26	19	-	1.2	1	11	0.9	-0.5	-0.9	-	0	-	0.1	-	
51	-1.7	-1.1	10	15	25	11	6	0.5	1.4	11	0.9	-0.1	0.3	-	0.1	0	0	-	
52	-0.9	-1.3	11	16	26	23	-	1.2	-	12	0.7	0.7	1.2	-	0.2	-	0	-	
53	-1.3	0.2	11	18	22	28	4	0.4	0.6	14	0.1	-1.6	-1.6	-	0	-0.1	0	-	
54	-1	-1.2	8	7	7	-4	-	0.9	1	0	0.5	0	-0.1	-	0.2	-	0.1	-	
55	-1.2	-0.4	12	20	33	32	5	1.7	-3.7	9	0.3	0.2	0.2	-	0.1	0.1	0	48	
56	-0.6	-1.2	5	10	16	13	5	0.6	-	8	0.1	0	-0.1	-	-0.1	-	-0.1	36	
57	0.5	-2.4	5	12	17	16	8	1.2	-3.4	4	0.9	0.9	0.9	-	0.3	-	0	-	
58	-0.1	-0.4	13	16	24	14	-	1.2	-	14	1.7	0.3	0.3	-	0.2	-	0	-	
59	0.1	-0.4	14	18	26	19	3	1.8	8.0	15	2.3	0	-0.1	-	0.1	-	-0.1	43	
60	0.6	0.3	16	21	36	30	8	1.2	-0.5	12	2.4	0.4	0.4	-	0.1	-0.3	0	-	
		D	roughtn	naster I	Breed A	vg. EB\	s for 20	023 Borr	n Calve	s				1					
EBV	-0.1	0	12	19	26	25	4	1.4	-0	14	1	-0	-0	0.6	0.1	0	0	\$41	

	Anir	nal Det	ails			Data			Scan				Semen	l	Base	Pair Mu	lti-Bree	d Geno	s			
Lot	Visual Id	Poll	Reg	Age	Teeth	Weight	ADG	P8	Rib	EMA	IMF%	SC	Live %	Morph %N	Wt	НН	BCS	Pub	P4M	Temp	Tick	Fly
61	24091M	РсРс	D4	24	М	681	1.36	13	12	132	5.1	39	70%	89%	22	39	55	51	44	89	17	8
62	24263M	РсРс	D3	21	М	651	1.45	11	8	123	4.1	40	80%	72%	53	24	39	39	57	22	81	5
63	24311M	РсРс	D5	23	М	668	1.30	13	10	130	4.7	41	70%	93%	31	33	71	72	53	32	65	3
64	24607M	PcPc	D3	23	М	627	1.26	13	10	129	5.4	37	70%	73%	43	67	73	68	36	83	15	28
65	24199M	PcPc	D4	23	М	633	1.39	13	9	124	4.9	39	70%	76%	51	64	49	32	16	86	81	30
66	24293M	PcPc	D4	22	2	618	1.34	14	11	129	5.2	40	90%	90%	28	39	76	68	49	14	33	66
67	24136M	РсРс	D3	23	М	654	1.34	12	10	126	4.8	36	70%	72%	62	96	20	42	42	32	44	10
68	24480M	РсРс	D3	20	М	706	1.54	13	12	135	5.9	39	70%	91%	69	71	55	51	13	6	74	12
69	24458M	PcPc	D4	25	М	691	1.29	15	11	131	5.9	42	70%	89%	74	70	95	89	46	33	69	21
70	24708M	РсРс	D4	21	М	659	1.27	11	9	124	4.1	37	75%	54%	5	42	26	23	38	49	84	52
71	24726M	PcPc	D3	23	М	678	1.41	13	10	128	5.2	36	80%	91%	25	19	73	71	29	28	96	80
72	24308M	РсРс	D4	23	М	653	1.18	12	9	128	5.1	37	70%	74%	22	56	59	8	47	96	90	44
73	24213M	РсРс	D4	22	М	665	1.35	14	11	127	5.7	40	75%	82%	94	80	73	29	39	50	81	5
74	24535M	РсРс	D2	24	М	655	1.45	12	11	130	4.9	37	80%	79%	57	31	90	56	16	33	84	40
75	24453M	РсРс	D4	25	1	667	1.37	13	11	131	4.6	36	80%	72%	48	63	80	90	19	96	37	13
76	24691M	РсРс	D4	19	Witho	drawn									19	23	66	7	9	96	48	80
77	24190M	РсРс	D4	22	М	638	1.21	13	10	126	4.9	38	80%	86%	68	70	59	44	53	75	95	44
78	24389M	PcPc	D4	24	М	718	1.43	12	11	130	5.0	36	70%	88%	41	60	36	43	12	91	94	11
79	24521M	РсРс	D3	24	М	720	1.61	13	12	132	5.7	41	80%	74%	49	67	71	50	36	47	74	33
80	24544M	PcPc	D4	21	М	878	1.63	14	11	137	5.4	42	70%	90%	62	77	61	1	2	96	52	74

			Drou	ghtma	ster Gı	roup B	reedpl	an Anal	lysis (S	Single S	tep)								
Lot	Gestation Length (days)	Birth Wt.	200 Day WT. (Kg)	400 Day Wt	600 Day Wt	Mat Cow Wt	Milk (kg)	Scrotal Size (cm)	Days to Calving	Carcase Wt (kg)	Eye Muscle	Rib Fat (mm)	Rump Fat (mm)	Retail Beef Yield	IMF (%)	Shear Force	Flight Time	Jap Ox Index (\$)	
61	0.4	-0.2	13	21	33	34	-	1.5	-	18	3.9	0.3	0.5	-	0.1	-	0.2	-	
62	-2.9	-0.3	17	20	28	11	3	1.2	3.5	12	1.7	-0.2	-0.1	1.1	-0.4	0	0.1	45	
63	-2.2	-2.1	11	15	24	16	7	0.9	0.5	14	1.2	-0.4	0	-	0	-	0.1	45	
64	0.2	-0.5	12	20	32	2	-	1.4	-	13	1.3	-0.2	0.1	-	0.1	-	0	-	
65																			
66	-0.9	-0.9	11	13	20	6	8	1	0.4	11	1.1	-0.4	-0.2	-	-0.1	0	0.1	-	
67	1.1	-1.8	5	6	10	0	-	1.1	-	3	0.9	0.3	0.5	-	-0.1	-	0	-	
68	0.7	-0.7	8	9	18	-3	-	0.8	-	7	1	1	1.2	-	0	-	-0.1	-	
69	-0.1	-3.1	6	10	15	11	7	2.1	-	10	2.2	1.2	1.5	-	0.2	-	0	-	
70	-0.2	-0.3	13	22	36	35	-	1.9	-	18	1.5	0.5	0.7	-	0.3	-	0.1	-	
71	-1.3	-0.7	9	15	22	22	-	0.8	-	14	0.4	0.3	0.6	-	0.3	-	0.1	-	
72	0.5	0.9	16	25	39	18	7	2.1	1.2	14	2	0.1	0	-	-0.1	-0.1	0.2	-	
73	-0.7	-1.4	8	11	21	22	4	1.2	-0.1	9	1.1	0.1	0.1	-	0.1	0.1	0	39	
74	-1.3	-0.1	8	12	18	12	4	0.9	-	6	-1.8	0.4	0.3	-	0	-	-0.1	-	
75	-0.3	-3.6	-2	-4	-5	-22	4	0.5	-1.6	-3	0.1	1.2	1.8	-	0.2	-	-0.1	-	
76	Withdraw	/n																	
77	-0.2	-0.6	10	12	16	9	0	8.0	-3.3	6	0.7	8.0	1	-	0.2	0	0.1	-	
78	-0.7	-0.7	12	12	17	0	-	1.4	-	9	1.2	0.1	0	-	-0.2	-	0	-	
79	-3.9	-1.8	10	20	30	26	3	1.5	-0.6	12	-0.4	-0.4	-0.2	0.6	0	0.1	0	53	
80	-0.4	0.6	10	16	24	15	6	0.9	2.8	8	-0.6	0.6	0.6	-	-0.1	-0.1	0	-	
		D	_	naster I	Breed A	vg. EB\	s for 20	023 Borr	1 Calve										
EBV	-0.1	0	12	19	26	25	4	1.4	-0	14	1	-0	-0	0.6	0.1	0	0	\$41	

	Anir	nal Det	ails			Data			Scan				Semen	1	Base	Pair Mu	lti-Bree	d Geno	mic Breed	ding Value	s	
Lot	Visual Id	Poll	Reg	Age	Teeth	Weight	ADG	P8	Rib	EMA	IMF%	SC	Live %	Morph %N	Wt	НН	BCS	Pub	P4M	Temp	Tick	Fly
81	24271M	PcPc	D3	21	М	722	1.54	13	12	132	5.6	39	70%	86%	60	7	87	80	33	86	77	7
82	24297M	PcPc	D3	21	2	700	1.52	11	10	128	4.7	39	50%	81%	29	72	17	55	50	38	12	35
83	24506M	PcPc	D3	21	М	703	1.56	11	10	128	5.0	39	70%	78%	58	25	31	61	37	40	56	40
84	24547M	PcPc	D3	22	М	699	1.55	12	9	125	4.7	40	80%	88%	20	25	87	30	44	99	17	91
85	24712M	PcPc	D4	22	2	699	1.47	12	10	130	4.4	42	70%	84%	49	19	43	4	68	19	81	90
86	24142M	PcPc	D4	23	2	688	1.40	13	10	132	4.8	39	70%	72%	16	75	30	26	45	74	33	64
87	24717M	PcPc	D3	21	М	703	1.58	15	11	125	5.2	39	80%	92%	67	86	60	25	52	26	61	66
88	24752M	PcPc	D4	22	М	712	1.53	10	8	126	4.5	38	80%	84%	15	20	47	16	43	99	84	59
89	24303M	PcPc	D3	20	М	720	1.62	13	11	134	4.9	39	90%	86%	79	93	79	21	18	91	24	26
90	24532M	PcPc	D4	24	М	705	1.57	14	12	132	5.3	37	70%	89%	69	67	61	71	24	45	90	2
91	24278M	PcPc	D3	20	М	682	1.51	13	10	124	4.6	37	80%	80%	75	29	97	49	56	77	69	9
92	24147M	PcPc	D4	22	М	678	1.31	12	9	125	4.4	42	80%	83%	55	66	82	80	37	75	33	24
93	24541M	PcPc	D3	21	М	691	1.56	14	12	130	5.9	41	0%	85%	14	32	76	28	29	35	65	40
94	24642M	PcPc	D4	20	М	661	1.58	14	12	130	5.5	42	70%	93%	69	88	77	64	62	59	90	59
95	24016M	PcPc	D4	24	М	661	1.26	12	9	126	4.9	40	60%	80%	44	41	57	52	44	88	84	40
96	24133M	PcPc	D3	23	М	638	1.33	13	10	128	5.0	39	60%	89%	10	32	65	19	79	92	52	83
97	24260M	PcPc	D4	22	М	614	1.24	10	8	124	4.7	36	70%	85%	17	8	78	47	36	98	61	37
98	24275M	PcPc	D3	22	М	613	1.29	10	8	124	4.5	41	60%	85%	24	20	66	6	37	74	95	17
99	24579M	PcPc	D4	22	М	621	1.26	12	10	124	4.9	39	60%	75%	16	36	75	22	52	23	24	68
100	24728M	РсРс	D4	21	М	625	1.19	10	8	120	4.2	35	70%	92%	15	16	65	4	19	74	17	86

			Droug	dhtm a	ctor C	oup P	roodsl	on Anal	voio /C	indo C	ton\								
	Gestation	Birth Wt.		gntma: 400 Day		Mat Cow		an Ana	Days to	Carcase	tep) <sub>Eye</sub>	Rib Fat	Rump	Retail		Shear	Flight	Jap Ox	
Lot	Length (days)	(kg)	WT. (Kg)	Wt	Wt	Wt	Milk (kg)	Size (cm)	Calving	Wt (kg)	Muscle	(mm)		Beef Yield	IMF (%)	Force	Time	Index (\$)	
81	-2.5	-0.4	10	20	31	16	2	1.2	-4.7	12	-0.4	0.5	8.0	0.2	0.2	0.3	0	57	
82	1	-0.5	6	10	17	5	9	1.2	-4.6	8	0.6	0.1	0.2	-	0.1	0	0	46	
83	-0.8	-1.5	11	18	27	19	6	1.7	-0.2	13	3	0.3	0.7	-	0.2	-	0.1	49	
84	-0.3	0.1	7	12	20	12	4	1.1	-	6	-0.7	8.0	0.9	-	0.4	-	0	-	
85	-1.2	0.9	16	22	33	24	6	1.5	-1.3	13	0.5	-0.2	-0.2	-	0.2	-0.1	0	-	
86	1.4	1.3	13	15	23	26	6	1	-1.4	15	1.9	0	0	-	0	0.2	-0.2	-	
87	-0.2	-0.1	13	22	39	23	7	1.5	0.6	15	3.2	0.5	0.8	-	0.1	-0.2	0.1	-	
88	0.7	-0.7	8	15	21	25	3	1.3	-	13	0.9	-0.3	-0.8	-	0.1	-	-0.1	-	
89	1	0.2	12	17	27	23	5	1	-0.3	12	1.3	-0.6	-1.4	-	0.1	-0.3	0	-	
90																			
91	-1.7	0.6	14	26	44	20	5	1.7	0.5	14	1	0.2	0.4	0.4	-0.1	-0.1	0.1	53	
92	-1.3	-1.4	3	10	17	16	6	0.3	-5.3	6	0.7	1.1	1.5	-	0.1	0	0	48	
93	-2	-4.1	0	0	-5	-19	5	0.8	ı	0	-0.8	0.7	1.1	-	0	-	-0.1	-	
94	-3.1	-1.1	10	14	19	4	5	1.5	-2.9	1	-0.3	0.5	0.6	-0.1	0.3	0.3	-0.1	41	
95																			
96	-1.4	-0.6	5	6	13	-5	5	0.7	-1.1	0	0.5	1.2	1.3	-	0	-	0.1	-	
97	-1.8	-2.9	5	13	19	16	-	1.9	-	9	0.1	0.2	0.5	-	0.1	-	0	-	
98	-1.1	1.2	17	22	32	17	6	1.4	1.1	8	1.8	0.4	0.5	0.5	0.1	-0.1	0.1	41	
99																			
100																			
		Dı	roughtn	naster l	Breed A	vg. EB\	s for 20	023 Borr	n Calve	S									
EBV	-0.1	0	12	19	26	25	4	1.4	-0	14	1	-0	-0	0.6	0.1	0	0	\$41	

	Anir	nal Det	ails			Data			Scan				Semen		Base	Pair Mu	lti-Bree	ed Geno	mic Breed	3 58 87 11 88 48 33 12 2 17 84 42 88 38 81 33			
Lot	Visual Id	Poll	Reg	Age	Teeth	Weight	ADG	P8	Rib	EMA	IMF%	SC	Live %	Morph %N	Wt	НН	BCS	Pub	P4M	Temp	Tick	Fly	
101	24177M	PcPc	D4	24	With	drawn																	
102	24428M	PcPc	D4	25	2	776	1.44	12	10	139	5.6	43	80%	92%	90	76	92	62	83	58	87	11	
103	24354M	РсРс	D5	22	М	742	1.42	12	10	127	5.2	41	80%	73%	46	80	14	30	38	48	33	12	
104	24052M	PcPc	D4	21	М	677	1.07	12	11	130	4.8	44	80%	91%	87	82	77	57	42	17	84	42	
105	24284M	PcPc	D3	22	М	682	1.40	13	9	130	5.4	38	70%	78%	24	13	22	65	88	38	81	33	
106	24318M	РсРс	D5	23	With	drawn																	
107	24777M	РсРс	D3	23	1	654	1.32	11	10	132	4.6	40	70%	77%	62	82	46	53	30	97	61	30	
108	24796M	РсРс	D4	21	М	644	1.10	9	7	122	4.0	38	60%	74%	60	40	51	39	48	44	14	61	

			Drou	ghtma	ster G	roup B	reedpl	an Ana	lysis (S	Single S	tep)								
Lot	Gestation Length (days)		200 Day WT. (Kg)		600 Day Wt	Mat Cow Wt	Milk (kg)	Scrotal Size (cm)	Days to Calving	Carcase Wt (kg)	Eye Muscle	Rib Fat (mm)	Rump Fat (mm)	Retail Beef Yield	IMF (%)	Shear Force	Flight Time	Jap Ox Index (\$)	
101	Withdraw	/n																	
102	-2.3	0.4	15	24	34	15	2	1.4	-1.3	13	0.7	0.7	1	-	-0.1	0.1	0	57	
103	-1.9	-1.8	9	12	19	17	5	0.6	0.2	10	0.7	0.3	0.6	-	0	0	-0.1	-	
104	-0.1	2.6	20	32	51	39	-	1.6	-	17	1.2	0	-0.4	-	-0.1	-	0.1	-	
105	-1.2	-0.3	14	22	33	15	5	1.6	4.2	12	1.1	-1	-1.3	-	-0.3	-0.1	0.1	43	
106	Withdraw	/n																	
107	0.9	-1.6	6	15	25	29	-	1.6	-	12	1	-0.3	-0.8	-	-0.1	-	-0.1	-	
108																			
		D	roughtr	naster	Breed A	lvg. EB\	/s for 20	023 Borı	า Calve	s									
EBV	-0.1	0	12	19	26	25	4	1.4	-0.1	14	1	-0.1	-0.1	0.6	0.1	0	0	\$ 41	

	Anir	nal Det	ails				Data		Base	Pair Mu	lti-Bree	d Gend	mic Bre	eeding V	/alues	
Lot	Visual Id	Poll	Reg	Age	Teeth	Weight	ADG	Wt	нн	BCS	Pub	P4M	Temp	Tick	Fly	Vet Reproductive Tract Scan
111	250101F	HPc	D5	14	М	455	1.33	86	96	22	49	48	14	30	74	
112	250143F	РсРс	D3	14	М	384	1.25	5	32	59	25	14	45	61	19	
113	250813F	РсРс	D4	10	М	382	1.23	93	84	85	26	77	14	44	12	
114	250083F	HPc	D4	10	М	446	1.30	77	99	23	26	18	93	65	15	
115	250139F	HPc	D4	14	М	405	1.03	66	57	72	28	30	62	48	81	
116	250122F	HPc	D4	13	М	437	1.59	60	72	58	42	34	48	69	70	
117	250074F	HPc	D3	12	М	379	1.00	8	31	40	22	52	98	61	66	
118	250145F	HPc	D4	13	М	414	1.52	36	43	60	58	46	57	74	35	
119	250151F	РсРс	D3	11	М	394	1.38	68	27	90	49	2	87	48	15	
120	250097F	РсРс	D4	10	М	365	1.05	70	48	69	36	54	74	27	74	
121	250085F	РсРс	D4	11	М	378	1.22	50	89	33	38	59	89	81	66	
122	250800F	РсРс	D4	10	М	358	1.30	69	96	13	42	51	16	37	54	
123	250050F	HPc	D4	12	М	371	1.27	66	69	65	61	51	66	92	68	
124	250103F	РсРс	D4	12	М	352	1.05	70	84	50	39	21	49	12	2	
125	250104F	РсРс	D5	14	М	391	1.56	32	90	64	36	11	82	96	49	
126	250790F	HPc	D4	9	М	373	1.38	39	64	51	66	46	66	52	44	
127	250899F	РсРс	D4	7	М	339	1.03	87	24	72	32	30	87	30	15	
128	250107F	РсРс	D4	12	М	332	1.02	28	22	50	52	61	80	87	30	
129	250100F	HPc	D4	13	М	341	1.03	14	47	21	55	67	81	37	57	
130	250843F	РсРс	D4	8	М	381	1.55	54	54	67	26	34	22	74	76	

			Drou	ghtma	ster G	roup B	reedpl	an Ana	lysis (S	ingle S	tep)									
Lot	Gestation Length (days)	Birth Wt. (kg)	200 Day WT. (Kg)	400 Day Wt	600 Day Wt	Mat Cow Wt	Milk (kg)	Scrotal Size (cm)	Days to Calving	Carcase Wt (kg)	Eye Muscle	Rib Fat (mm)	Rump Fat (mm)	Retail Beef Yield	IMF (%)	Shear Force	Flight Time	Jap Ox Index (\$)		
111	-	-	-	-	-	-	-	-	ı	-	-	-	-	-	-	-	-	-		
112	-	-	-	-	-	-	-	-	ı	-	-	-	-	-	-	ı	-	-		
113	-0.5	1.2	14	25	41	40	5	1.2	1.3	13	1	-1	-1.7	-	-0.2	0.1	0	-		
114	-0.7	-0.4	5	9	14	13	2	0.8	1.4	6	-0.4	-0.1	-0.1	-	0	-	0	-		
115	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
116	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
117	-0.3	-2.1	3	4	5	9	-	0.5	1	3	8.0	-0.7	-0.9	-	-0.1	-	0.1	-		
118	-	-	-	-	-	-	-	-	ı	-	-	-	-	-	-	-	-	-		
119	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	 	
120	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	_	-	 	
121	-0.6	-0.4	10	14	21	22	6	1.3	-	10	0.1	0.4	0.5	-	0	-	0	-		
122	-0.9	-1.4	12	18	28	24	-	1.5	-	15	2.3	0.1	-0.1	-	0.1	-	0	-		
123	-0.2	0.9	15	27	42	38	-	1.8	-	20	3.1	0.9	1.2	-	0	-	0.2	-		
124	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	 	
125	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	 	
126	-0.8	0.2	17	24	36	23	6	2.1	0.6	17	2.3	1	1.1	-	0	0	-0.1	48	 	
127	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	 	
128	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	 	
129	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	 	
130	-0.8	-3.3	1	3	9	13	5	0.6	-1.8	8	1.8	0	0.1	-	0.1	0	0	-	 	
	Droughtmaster Breed Avg. EBVs for 2023 Born Calves												 							
EBV	-0.1	0	12	19	26	25	4	1.4	-0.1	14	1	-0.1	-0.1	0.6	0.1	0	0	\$ 41		

	Anin	nal Det	ails				Data		Base	Pair Mu	lti-Bree	d Geno	mic Bre	eeding V	'alues	
Lot	Visual Id	Poll	Reg	Age	Teeth	Weight	ADG	Wt	НН	BCS	Pub	P4M	Temp	Tick	Fly	Vet Reproductive Tract Scan
131	250776F	PcPc	D4	9	М	369	1.35	58	63	53	39	9	38	48	54	
132	250872F	PcPc	D4	8	М	367	1.41	76	96	5	56	60	85	87	17	
133	250798F	PcPc	D4	10	М	350	1.44	12	14	36	37	31	99	87	59	
134	250869F	PcPc	D4	8	М	352	1.20	21	22	83	43	46	34	92	70	
135	250045F	РсРс	D4	12	М	348	1.19	53	54	14	62	23	90	56	61	
136	250230F	HPc	D4	9	М	333	1.05	90	80	24	23	35	96	33	2	
137	250741F	РсРс	D4	9	М	344	1.22	25	48	9	44	62	87	17	19	
138	250747F	РсРс	D5	9	М	343	1.25	68	93	14	29	57	8	22	59	
139	250210F	PcPc	D4	11	М	336	1.13	90	97	76	41	81	11	87	52	
140	250124F	РсРс	D3	13	М	332	1.08	45	36	50	27	20	76	10	21	
141	250856F	PcPc	D5	Wi	ithdra	wn										
142	250781F	PcPc	D4	8	М	342	1.27	27	69	12	21	45	17	40	59	
143	250106F	РсРс	D3	12	М	317	1.02	19	47	29	32	1	78	15	33	
144	250652F	РсРс	D4	10	М	338	1.22	91	99	20	45	45	57	84	61	
145	250721F	РсРс	D4	10	М	311	1.00	41	62	30	30	35	23	44	42	
146	250649F	РсРс	D4	9	М	328	1.17	46	44	14	81	45	44	69	24	
147	250142F	PcPc	D4	14	М	315	1.02	40	65	36	40	60	74	24	72	
148	250648F	НРс	D4	9	М	302	1.20	67	74	45	52	68	85	90	78	
149	250895F	НРс	D4	7	М	312	1.03	18	15	16	75	33	51	37	61	
150	250722F	PcPc	D4	9	М	316	1.16	21	40	67	26	38	76	97	26	

	Droughtmaster Group Breedplan Analysis (Single Step)  Gestation   Birth Wt.   200 Day   400 Day   600 Day   Mat Cow   200 Day   Strotal   Days to   Carcase   Eye   Rib Fat   Rump   Retail   200 Day   Shear   Flight   Jap Ox																			
Lot	Gestation Length (days)	Birth Wt. (kg)	200 Day WT. (Kg)	400 Day Wt	600 Day Wt	Mat Cow Wt	Milk (kg)	Scrotal Size (cm)	Days to Calving	Carcase Wt (kg)	Eye Muscle	Rib Fat (mm)	Rump Fat (mm)	Retail Beef Yield	IMF (%)	Shear Force	Flight Time	Jap Ox Index (\$)		
131	0.1	-0.5	9	11	14	14	3	1.6	-3.5	6	0.3	0.6	0.5	-	0.1	0	0	38		
132	-0.2	0.3	12	21	31	39	3	0.7	1.4	18	1.4	-1.3	-1.5	-	-0.2	0.2	0	-		
133	0	1.3	14	18	31	8	4	0.4	4.2	10	1.8	0.4	0.6	0.5	-0.2	0	0.1	38		
134	0.5	-1.7	11	17	32	17	8	1.5	0	16	4.3	0	-0.1	-	0.1	-0.1	0	-		
135	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
136	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
137	-0.2	-0.1	11	16	22	21	4	1	1.6	12	0.9	-0.1	-0.3	-	-0.2	0	0	-		
138	-0.6	1.4	18	24	35	31	7	1.2	-2.2	18	2	-0.2	0	-	0.1	0.2	-0.1	-	 	
139	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	 	
140	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
141	-1.5	-1.3	10	18	27	31	-	1.1	-	14	0.6	-0.2	0	-	0	-	0	-		
142	0.5	-1.5	9	14	21	14	7	2.3	-	9	0.4	0.1	0	-	0.1	-	-0.1	-		
143	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
144	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	 	
145	0.3	-0.4	12	14	24	20	9	1.7	-	11	0.7	0.7	1	-	0.2	-	0	-	 	
146	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
147	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
148	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
149	0	-0.6	9	10	14	0	4	1.2	-0.5	6	0.6	-0.2	0	-	0.2	-	-0.1	38	 	
150	0	0.3	13	18	30	31	-	1.2	-	11	1.9	0.1	0.3	-	0.1	-	0.1	-		
		D	roughtr	naster	Breed A	vg. EB\	s for 20	023 Borı	1 Calve	S									 	
EBV	-0.1	0	12	19	26	25	4	1.4	-0.1	14	1	-0.1	-0.1	0.6	0.1	0	0	\$ 41	 	

	Anir	nal Det	ails				Data		Base	Pair Mu	lti-Bree	d Geno	mic Bre	eeding V	'alues	
Lot	Visual Id	Poll	Reg	Age	Teeth	Weight	ADG	Wt	НН	BCS	Pub	P4M	Temp	Tick	Fly	Vet Reproductive Tract Scan
151	250712F	РсРс	D4	11	М	327	1.19	54	65	63	27	34	87	14	70	
152	250087F	РсРс	D5	11	М	322	1.24	42	74	13	50	46	33	74	72	
153	250630F	РсРс	D4	11	М	319	1.20	31	60	33	50	37	20	99	6	
154	250710F	PcPc	D4	9	М	322	1.25	1	3	32	43	45	66	94	19	
155	250629F	РсРс	D4	9	М	297	1.10	53	48	74	23	61	69	99	47	
156	250664F	РсРс	D4	9	М	295	1.02	42	54	96	28	74	45	87	52	
157	250916F	РсРс	D4	8	М	306	1.09	12	74	8	24	44	35	69	24	
158	250909F	РсРс	D3	7	М	278	1.10	8	21	11	32	47	55	74	30	
159	250696F	РсРс	D5	9	М	301	1.14	44	62	44	33	36	20	65	33	
160	250716F	РсРс	D4	9	М	305	1.24	32	51	31	42	5	7	77	5	
161	250237F	HPc	D3	9	М	286	1.10	79	54	56	44	43	43	90	33	
162	250846F	HPc	D4	8	М	271	1.09	20	63	12	27	35	78	37	57	
163	250878F	HPc	D4	8	М	267	1.00	15	24	45	43	74	56	77	16	
164	250866F	PcPc	D4	9	М	267	1.01	40	35	69	39	33	27	87	68	

	Droughtmaster Group Breedplan Analysis (Single Step)																		
Lot	Gestation   Birth Wt.   200 Day   400 Day   600 Day   Mat Cow   Milk (kg)   Scrotal   Days to   Carcase   Eye   Rib Fat   Rump   Retail   IMF (%)   Shear   Flight   Jap Ox   Force   Time   Index (\$)																		
151	0.2	-0.6	9	14	18	17	-	1.2	-	14	1.9	0.7	1.3	-	0.3	-	0.1	-	
152	-1.2	-1	5	2	2	-11	-	0.7	-	-1	-0.5	0	0.4	-	0.2	-	0	-	
153	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
154	-1.4	-2.1	8	14	23	18	4	1.2	-1.4	10	0.9	0.4	0.3	-	0	-0.1	0.1	-	
155	-	-	-	ı	-	-	-	-	-	-	-	ı	-	-	-	-	-	-	
156	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
157	-1	-1.9	9	17	24	18	-	1.9	-	9	1.5	-0.4	-0.9	-	0.3	-	0.1	-	
158	0.3	-2.9	2	4	8	8	5	0.8	-2.5	1	0.2	0.1	0.2	-	0.1	-	0	34	
159	-0.1	-1.4	11	13	16	23	3	1.1	-	14	1.6	-0.7	-0.8	-	-0.3	-	-0.1	33	
160	-3	-1.4	12	20	29	25	-	2.3	-	13	0.1	1.4	2	-	0.3	-	-0.1	-	
161	-	-	-	ı	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
162	0.2	-0.3	12	20	30	32	-	2.4	-	15	2.4	0.1	0	-	0	-	0	-	
163	2.4	1.1	13	22	38	32	-	1.3	-	17	2.5	0.9	1.4	-	0	-	0.1	-	
164	-	ı	ı	ı	-	-	-	-	ı	ı	-	ı	-	-	-	-	ı	-	
	Droughtmaster Breed Avg. EBVs for 2023 Born Calves																		
EBV	-0.1	0	12	19	26	25	4	1.4	-0	14	1	-0	-0	0.6	0.1	0	0	\$41	