





### DNA Pedigree Verification:

The draft has been pedigree verified. On the data sheet PV indicates both parents have been DNA proven, SV indicates the sire is DNA proven and DV in the case of Lot 67 indicates we were unable to positively identify a sire but the dam has been DNA verified.

### 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. To ensure that we were not offering problem bulls we have tested this draft for the mutation and did find some carriers and this has resulted in a higher level of withdrawals from the catalogue than usual. If anyone has previously bought a Valera Vale bull and suspects they may be carriers of this highly undesirable gene, please contact us and we will test that bull at our expense. If the bull proves to be a carrier we will give a credit towards a replacement, tested free Valera Vale bull.

### Genomic EBVs:

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, and Hip Height. The animals are ranked on a 1 – 5 basis according to their assessed genetic ranking in these parameters with 5 being Very High ability and 1 very low.

**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. The entire catalogue is moderate or better for P4M.

**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.

### **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 25 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 are have arm's length credibility.









## **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.


These Lot numbers were assigned their branding date as birth dates instead of their actual birth date which resulted in incorrect ages being catalogued as well.


Lot No	Bull Id	Correct Birth Date	Age
<b>2</b>	22259M	17/09/2021	24 mths
<b>32</b>	22247M	17/10/2021	23 mths
<b>38</b>	22223M	8/09/2021	24 mths
<b>57</b>	22222M	5/09/2021	24 mths
<b>59</b>	22257M	5/09/2021	24 mths
<b>60</b>	22265M	21/10/2021	23 mths
<b>72</b>	22253M	21/09/2021	24 mths
<b>77</b>	22239M	27/09/2021	24 mths


		Age (Mths)	Poll DNA Test	Scrotal Circum.	Semen		VET PHYSICAL SOUNDNESS	Teeth	Final Wgt	ADG on Silage test	Carcass Scan Data				GENOMIC ANALYSIS						NOTES		
					% Motile Crush Side	% NORMAL Morphology					P8	Rib	EMA	IMF	P4M	Pub	BCS	WGT	TEMP	HIP HEIGHT		DNA PARENTAGE	
LOT	ID																						
1	22395M	24	PcPc	39	70%	76%	✓	1	877	1.42	12	10	140	5.5	3	2	5	5	3	5	PV		
2	22259M	WITHDRAWN																					
3	22022M	27	HPc	43	60%	91%	✓	2	852	1.22	13	10	138	4.8	4	4	5	3	5	3	SV		
4	22375M	24	HPc	45	80%	75%	✓	1	884	1.57	13	11	140	5.5	3	1	4	4	5	4	PV		
5	22330M	24	PcPc	42	80%	81%	✓	M	819	1.41	14	11	140	5.2	5	2	5	5	5	2	PV		
6	22364M	24	PcPc	40	60%	81%	✓	2	790	1.28	13	10	133	4.9	5	2	4	3	5	3	PV		
7	22335M	24	PcPc	42	70%	81%	✓	2	869	1.80	15	12	136	5.8	5	2	2	4	5	4	PV		
8	22311M	24	HPc	41	80%	90%	✓	2	846	1.18	15	10	133	5.1	3	1	4	5	5	4	PV		
9	22162M	WITHDRAWN																					
10	22270M	24	HPc	42	70%	90%	✓	2	848	1.39	12	10	140	5.7	5	4	4	4	3	3	PV		
11	22553M	22	PcPc	40	70%	80%	✓	1	886	1.36	12	9	138	4.7	5	1	2	4	4	5	PV		
12	22157M	23	PcPc	44	80%	95%	✓	M	804	1.55	14	12	136	5.7	3	1	4	2	5	3	SV		
13	22281M	24	PcPc	42	70%	84%	✓	2	852	1.36	13	11	141	5.0	3	2	5	4	2	5	PV		
14	22173M	25	HPc	38	80%	73%	✓	2	817	1.49	11	9	134	4.9	4	2	4	1	3	2	SV		
15	22014M	WITHDRAWN																					
16	22137M	26	PcPc	45	60%	77%	✓	1	804	1.14	12	10	138	5.6	5	1	4	3	4	2	SV		
17	22287M	24	PcPc	41	80%	91%	✓	2	784	1.42	14	11	138	5.8	4	2	1	2	4	3	PV		
18	22401M	24	HPc	41	90%	86%	✓	2	780	1.30	15	12	135	5.6	3	2	4	2	5	1	PV		
19	22087M	24	PcPc	41	80%	74%	✓	2	759	1.29	14	11	134	5.5	3	2	4	2	5	1	SV		
20	22161M	27	HPc	42	90%	87%	✓	2	773	1.36	14	10	144	4.2	5	2	4	1	4	1	SV		
21	22091M	WITHDRAWN																					
22	22076M	26	HPc	42	90%	88%	✓	2	777	1.32	12	10	130	4.1	5	2	3	5	4	5	SV		
23	22308M	24	PcPc	38	70%	89%	✓	2	773	1.44	15	11	135	4.9	3	1	4	5	5	4	PV		
24	22701M	WITHDRAWN																					
25	22206M	25	HPc	39	70%	72%	✓	2	752	1.19	15	12	133	6.0	5	3	2	2	2	2	SV		
26	22319M	24	PcPc	37	75%	73%	✓	2	744	1.17	12	9	128	4.7	4	4	4	2	5	1	PV		
27	22355M	23	PcPc	36	75%	91%	✓	2	694	1.19	15	12	134	5.8	3	1	4	2	5	3	PV		
28	22388M	24	PcPc	41	70%	81%	✓	2	728	1.17	12	10	133	4.9	4	3	5	4	4	4	PV		
29	22625M	22	HPc	40	80%	90%	✓	M	746	1.27	13	10	128	4.1	5	2	5	5	5	5	PV		
30	22143M	27	PcPc	39	60%	78%	✓	2	721	1.31	14	10	127	4.1	4	1	2	3	5	3	SV		
31	22561M	22	HPc	42	70%	87%	✓	1	771	1.27	14	13	133	6.0	4	2	4	2	5	1	PV		





			Poll DNA Test	Scrotal Circum.	Semen		VET PHYSICAL SOUNDNESS	Teeth	Final Wgt	ADG on Silage test	Carcass Scan Data				GENOMIC ANALYSIS						DNA PARENTAGE	NOTES
LOT	ID	Age (Mths)			% Motile Crush Side	% NORMAL Morphology					P8	Rib	EMA	IMF	P4M	Pub	BCS	WGT	TEMP	HIP HEIGHT		
63	22419M	24	PcPc	42	70%	74%	✓	M	782	1.31	15	13	135	6.0	3	3	2	4	4	5	PV	
64	22146M	26	HPc	35	80%	73%	✓	1	765	1.24	14	11	129	6.0	3	4	5	1	4	1	SV	
65	22636M	WITHDRAWN																				
66	22167M	26	HPc	38	80%	75%	✓	2	715	1.37	13	10	130	4.8	4	4	2	2	2	4	SV	
67	22547M	23	HPc	43	90%	75%	✓	2	933	1.41	14	12	142	5.8	3	2	2	4	4	5	DV	
68	21611M	32	PcPc	38	80%	86%	✓	2	933	1.46	13	10	141	5.7	3	1	5	5	3	4	PV	
69	21630M	28	HPc	44	60%	73%	✓	2	877	1.36	14	12	140	5.8	4	2	5	4	2	3	SV	
70	21697M	28	PcPc	40	80%	90%	✓	2	827	1.51	13	12	139	5.8	4	2	1	1	3	2	SV	
71	21746M	30	PcPc	38	80%	80%	✓	2	815	1.25	15	12	134	6.2	5	1	4	2	4	1	PV	
72	22253M	24	PcPc	36	60%	91%	✓	2	821	1.76	12	9	139	5.1	3	3	1	4	2	5	PV	24 Months
73	22115M	25	HPc	39	80%	72%	✓	2	865	1.26	13	10	137	5.1	3	1	5	4	3	3	PV	
74	22141M	26	HPc	39	70%	90%	✓	2	827	1.14	13	11	132	5.1	4	1	3	4	5	2	SV	
75	22102M	25	PcPc	39	80%	71%	✓	M	819	1.22	15	12	141	5.9	3	1	4	2	4	2	PV	
76	22188M	26	PcPc	46	60%	94%	✓	2	840	1.63	13	11	141	4.8	3	3	2	2	5	3	SV	
77	22239M	24	PcPc	40	60%	73%	✓	2	838	1.26	13	10	136	5.0	3	1	4	4	5	3	PV	24 Months
78	22809M	WITHDRAWN																				
79	22213M	24	HPc	43	90%	89%	✓	2	848	1.22	14	10	140	5.0	5	5	5	3	5	3	PV	
80	21662M	29	PcPc	43	70%	75%	✓	2	807	1.22	13	12	139	4.8	4	4	4	4	2	4	SV	
81	22432M	24	PcPc	42	80%	72%	✓	M	790	1.16	14	10	138	6.1	3	1	4	4	5	3	PV	
82	22637M	WITHDRAWN																				
83	22351M	24	HPc	42	80%	95%	✓	2	782	1.23	16	12	129	6.0	4	4	4	2	5	2	PV	
84	22034M	27	HPc	37	70%	87%	✓	2	784	1.16	13	11	138	4.8	3	4	2	2	2	5	SV	
85	21391M	32	HPc	38	60%	90%	✓	4	902	1.24	15	12	140	4.9	5	3	2	3	3	3	SV	
86	22688M	22	HPc	45	80%	81%	✓	M	813	1.30	12	9	138	5.6	3	4	3	4	5	4	SV	
87	22071M	27	PcPc	41	80%	77%	✓	M	728	1.29	12	9	128	4.8	4	3	2	1	5	2	SV	
88	22042M	26	HPc	37	70%	86%	✓	2	765	1.24	14	12	132	5.8	4	3	2	2	4	2	SV	
89	22035M	26	HPc	41	85%	60%	✓	2	744	1.12	14	10	127	4.4	3	4	3	2	5	2	SV	
90	22052M	27	PcPc	36	60%	73%	✓	2	748	1.15	14	10	131	5.1	3	3	1	1	4	3	SV	
91	22541M	22	HPc	41	70%	75%	✓	M	698	1.07	13	11	128	4.9	4	1	4	1	4	3	PV	
92	22596M	22	PcPc	36	80%	74%	✓	M	715	1.12	13	11	130	4.5	5	2	2	4	5	3	SV	
93	22529M	21	HPc	39	80%	78%	✓	1	686	1.27	15	12	135	5.9	4	4	2	2	3	3	PV	

			Poll DNA Test	Scrotal Circum.	Semen		VET PHYSICAL SOUNDNESS	Teeth	Final Wgt	ADG on Silage test	Carcass Scan Data				GENOMIC ANALYSIS						DNA PARENTAGE	NOTES
LOT	ID	Age (Mths)			% Motile Crush Side	% NORMAL Morphology					P8	Rib	EMA	IMF	P4M	Pub	BCS	WGT	TEMP	HIP HEIGHT		
94	22674M	21	PcPc	39	80%	80%	✓	2	721	1.25	12	9	134	5.7	3	3	3	3	4	2	PV	
95	22215M	24	HPc	40	70%	74%	✓	2	707	1.18	14	11	133	4.9	5	1	4	3	4	2	PV	
96	22574M	22	PcPc	45	70%	73%	✓	M	715	1.29	12	9	126	4.5	3	3	2	4	2	4	PV	
97	22224M	24	HPc	40	80%	73%	✓	2	698	1.11	13	11	129	4.9	4	2	2	2	5	2	PV	24 Months
98	22650M	22	PcPc	40	80%	75%	✓	M	705	1.11	10	8	124	4.0	3	3	1	1	5	4	PV	
99	22392M	24	HPc	39	90%	78%	✓	2	669	1.20	11	9	127	4.1	5	5	3	2	3	4	PV	
100	22654M	22	HPc	40	75%	76%	✓	M	684	1.13	14	12	128	4.9	3	2	3	4	3	4	PV	
101	22679M	22	PcPc	35	70%	73%	✓	M	700	1.25	13	11	126	5.0	3	3	3	4	4	4	PV	
102	22428M	24	HPc	39	70%	87%	✓	2	690	1.31	10	9	125	4.1	4	2	3	2	5	3	PV	
103	22331M	WITHDRAWN																				
104	22715M	20	PcPc	38	30%	73%	✓	M	688	1.12	11	10	130	5.1	4	2	4	3	1	2	PV	
105	22551M	22	HPc	38	80%	72%	✓	M	657	1.09	14	12	127	5.9	3	3	3	3	2	4	PV	
106	22522M	22	PcPc	40	50%	89%	✓	M	632	1.10	11	9	123	4.1	5	1	3	4	5	4	PV	
107	22710M	22	HPc	43	70%	73%	✓	M	796	1.45	17	13	137	6.2	4	4	5	4	2	3	PV	
108	22669M	WITHDRAWN																				
109	22787M	22	HPc	35	75%	75%	✓	M	694	1.27	13	10	133	4.1	3	4	5	2	3	1	SV	
110	22191M	25	PcPc	38	70%	85%	✓	M	736	1.15	12	9	134	5.1	3	3	3	3	1	4	SV	
111	22342M	WITHDRAWN																				
112	22440M	24	PcPc	41	80%	73%	✓	M	723	1.24	14	11	130	5.9	5	1	3	2	3	2	PV	
113	22232M	24	PcPc	38	80%	78%	✓	2	742	1.25	14	11	134	5.0	4	3	1	2	2	3	PV	24 Months
114	22651M	22	HPc	38	70%	73%	✓	M	740	1.29	14	12	132	5.1	3	2	3	2	2	2	PV	
115	22299M	24	HPc	36	60%	80%	✓	2	705	1.16	13	11	134	5.2	5	1	4	4	5	2	PV	
116	22621M	WITHDRAWN																				
117	22118M	24	PcPc	41	75%	79%	✓	M	707	1.28	11	9	127	4.2	4	4	5	3	5	2	SV	
118	22578M	WITHDRAWN																				
119	22537M	22	PcPc	39	80%	78%	✓	M	738	1.20	12	10	134	5.1	3	4	5	4	5	2	PV	
120	22536M	21	PcPc	42	85%	83%	✓	2	755	1.28	12	10	136	4.5	4	3	4	3	2	4	PV	
121	22595M	WITHDRAWN																				
122	22572M	22	PcPc	38	70%	75%	✓	M	696	1.16	13	11	129	4.9	3	5	5	5	2	2	PV	
123	22358M	24	PcPc	40	90%	76%	✓	M	790	1.22	13	10	138	5.8	3	2	4	4	1	4	PV	
124	22446M	24	HPc	40	60%	72%	✓	2	746	1.42	16	12	130	6.0	4	3	4	4	5	4	PV	

		Age (Mths)	Poll DNA Test	Scrotal Circum.	Semen		VET PHYSICAL SOUNDNESS	Teeth	Final Wgt	ADG on Silage test	Carcass Scan Data				GENOMIC ANALYSIS						DNA PARENTAGE	NOTES	
					% Motile Crush Side	% NORMAL Morphology					P8	Rib	EMA	IMF	P4M	Pub	BCS	WGT	TEMP	HIP HEIGHT			
LOT	ID																						
125	22516M		WITHDRAWN																				
126	22687M		WITHDRAWN																				
127	22582M		WITHDRAWN																				
128	22172M	25	PcPc	38	90%	72%	✓	2	676	1.13	12	10	129	4.8	3	4	4	2	5	1	SV		
129	22194M	26	HPc	41	60%	71%	✓	M	759	1.12	15	12	137	6.2	3	2	2	2	2	3	SV		
130	22546M	22	HPc	41	80%	83%	✓	M	734	1.24	12	9	135	4.9	4	1	2	1	4	3	PV		
131	22791M	22	HPc	38	70%	89%	✓	2	715	1.22	13	10	130	5.0	4	2	2	2	5	3	SV		
132	22602M	22	PcPc	41	60%	74%	✓	M	761	1.24	15	12	134	6.1	3	3	5	5	1	4	PV		
133	22579M	22	PcPc	37	80%	95%	✓	M	744	1.41	11	10	133	4.8	3	1	2	5	2	5	PV		
134	22717M	22	PcPc	37	80%	79%	✓	M	692	1.16	14	10	133	4.9	3	2	4	2	3	3	PV		
135	22526M	21	PcPc	39	70%	73%	✓	M	713	1.28	12	9	134	4.7	3	1	3	2	5	2	PV		
136	22694M		WITHDRAWN																				
137	22372M	24	PcPc	35	75%	59%	✓	M	626	1.01	11	9	124	4.5	5	3	4	3	3	2	PV		
138	22530M	21	HPc	36	80%	90%	✓	M	632	1.11	14	11	130	5.2	4	2	5	5	1	3	PV		
139	22792M	22	PcPc	37	70%	74%	✓	M	628	1.15	13	10	127	4.1	3	2	3	2	5	3	SV		
140	22606M	21	PcPc	38	80%	88%	✓	2	638	1.36	13	10	130	4.4	4	1	2	1	4	4	SV		
	Average	24		40.0	73%	80%			776	1.28	13.3	10.7	134.4	5.2	3.8	2.4	3.3	3.0	3.8	3.0			