

St Andrews Dairy Ltd

- Notes**
- Milking platform only
 - Supplement and pasture is reported as 11 MJME/kg DM equivalent
 - Overseer nitrogen numbers (red and green diamonds) include non-effective land, other metrics use effective area

Farm characteristics

Soils		Climate					
Soil family	Claremont Waitohi	Rainfall	14/15	15/16	16/17	17/18	18/19
PAW60	88 mm 90 mm	Evapo-transpiration	567 mm	586 mm	597 mm	728 mm	562 mm
			772 mm	772 mm	772 mm	772 mm	772 mm

Irrigation					
Irrigation applied	14/15	15/16	16/17	17/18	18/19
	520 mm	544 mm	154 mm	211 mm	256 mm

Fertiliser					
Nitrogen applied (effective)	14/15	15/16	16/17	17/18	18/19
	281 kg N/ha	297 kg N/ha	300 kg N/ha	280 kg N/ha	287 kg N/ha
	288	286	288	268	277

Farm management

Stock					
Peak cows	14/15	15/16	16/17	17/18	18/19
	1180	1029	1023	1142	1149
Stocking rate	3.8 cows/ha	3.3 cows/ha	3.3 cows/ha	3.7 cows/ha	3.7 cows/ha
Live weight	456 kg/cow	470 kg/cow	470 kg/cow	509 kg/cow	489 kg/cow

Feed					
Pasture eaten	14/15	15/16	16/17	17/18	18/19
	13.8 t DM/ha	14.9 t DM/ha	15.1 t DM/ha	15.5 t DM/ha	15.8 t DM/ha
Fertiliser efficiency	49 kg DM/kg N	50 kg DM/kg N	50 kg DM/kg N	55 kg DM/kg N	55 kg DM/kg N
Water efficiency	13 kg DM/mm	13 kg DM/mm	20 kg DM/mm	17 kg DM/mm	19 kg DM/mm
+					
Supplement					
Supplement per ha	3.5 t DM/ha	1.8 t DM/ha	1.3 t DM/ha	2.4 t DM/ha	3.3 t DM/ha
Supplement per cow	918 kg DM/cow	551 kg DM/cow	391 kg DM/cow	657 kg DM/cow	908 kg DM/cow
	72	44	31	73	100

Nitrogen summary	Calculation	14/15	15/16	16/17	17/18	18/19
Purchased N surplus	+ Fert N					
	+ Supplement N	243 kg N/ha	218 kg N/ha	205 kg N/ha	225 kg N/ha	257 kg N/ha
	- Product N					
	- Stored supplement N					
N leaching	Overseer v6.3.1	38 kg N/ha	34 kg N/ha	38 kg N/ha	34 kg N/ha	39 kg N/ha
Purchased N use efficiency	Product N					
	Stored supplement N					
	Fert N	33%	34%	36%	34%	32%
	Supplement N					

Farm production

Products					
Productivity	14/15	15/16	16/17	17/18	18/19
	1534 kg MS/ha	1514 kg MS/ha	1521 kg MS/ha	1619 kg MS/ha	1766 kg MS/ha
Milk from pasture	407 kg MS/cow	460 kg MS/cow	465 kg MS/cow	444 kg MS/cow	481 kg MS/cow
	78%	89%	92%	87%	83%
Fertiliser efficiency	5.5 kg MS/kg N	5.1 kg MS/kg N	5.1 kg MS/kg N	5.8 kg MS/kg N	6.2 kg MS/kg N
	89%	98%	99%	87%	98%
MS as % of liveweight	89%	98%	99%	87%	98%
	99	100	101	107	114

Stored supplement					
Harvest crop area	14/15	15/16	16/17	17/18	18/19
	31 ha	0 ha	0 ha	6.4 ha	12.3 ha
% of farm cut for silage	0%	38%	48%	12%	10%
Stored or exported feed	313 t DM	188 t DM	188 t DM	94 t DM	263 t DM
	18	12	13	9	6