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STUD BOOK

Logix Melk/Milk

Kudde Gesondheids Verslag / Herd Health Report

UNIVERSITEIT VAN PRETORIA

MILK UNIT

UP EXPERIMENTAL FARM

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Test-day: 2025-08-19

Holstein Cows

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HERD HEALTH SUMMARY REPORT

UNIVERSITEIT VAN PRETORIA - Holstein Cows

Table 1: Summary for Test-day 2025-08-19 (Number of Samples Tested: 56)

Analysis	Results	Norms*	% Cows outside norms*
Milk Production (kg)	Avg.: 32.0 Median: 31.8		
Butterfat (%)	Avg.: 4.67 Median: 4.62	3.5 % - 6.0 %	Too Low: 0 % Too High: 2 %
Protein (%)	Avg.: 3.49 Median: 3.49	3.0 % - 4.5 %	Too Low: 4 % Too High: 0 %
Lactose (%)	Avg.: 4.74 Median: 4.77	> 4.7 %	Too Low: 36 %
MUN (mg/dl)	Avg.: 16.74 Median: 16.55	8 - 16 mg/dl	Too Low: 0 % Too High: 57 %
SCC (x1000/ml)	Avg.: 206 Median: 66 % < 100 : 62.5 % % < 200 : 80.4 % % < 500 : 87.5 % % > 750 : 8.9 % % > 1 000 : 8.9 % % > 1 500 : 1.8 %	< 200 > 64 % > 75 % > 92 % < 4.8 % < 1 % NONE	Too High: 1.5 % Too High: 0 % Too High: 4.5 % Too High: 4.1 % Too High: 7.9 % Too High: 1.8 %
Butterfat Protein ratio	Average: 1.3	> 1.0	Too High: 1.8 %

Table 2: Quantification of Specific Cases (% of herd) and Loss in Production on 2025-08-19

Loss in Production due to:		Avg/Median SCC (Number (n)):	
SSC (kg per day):	83.5 (4.7 %)	1st Lact Cows:	160/57 (30)
DIM (kg per day):	896.0 (50.0 %)	2nd Lact Cows:	151/97 (14)
No. of Cows Under Pressure:	3 (5.4 %)	3rd Lact Cows:	100/58 (7)
No. Cows with SCC > 200k:	11 (19.6 %)	4th Lact Cows:	785/1078 (5)
No. Cows with SCC > 750k:	5 (8.9 %)	5th Lact Cows:	0/ (0)
No. New Infections:	2 (3.6 %)	6+ Lact Cows:	0/ (0)
No. Recurring Infections:	4 (7.1 %)	Avg. SCC for SCC > 750k (n):	1190 (5)
Cure Rate for SCC > 200k:	38.9 % (7)	Avg. Days In Milk (DIM) for Herd:	318
Cure Rate for SCC > 750k:	44.4 % (4)	Median of DIM for Herd:	297
No. Chronic Infections (SCC > 200k):	6 (10.7 %)	Avg. DIM for SCC < 200k (n):	322 (45)
No. Chronic Infections (SCC > 750k):	4 (7.1 %)	Avg. DIM for SCC > 200k and < 750k (n):	379 (6)
No. of Possible Ketosis Cases:	4	Avg. DIM for SCC > 750k (n):	206 (5)
No. of Possible Acidosis Cases:	1	Avg. Parity for Herd:	2
Avg. Age at First Calf (Months):	25	Avg. Parity for SCC < 200k:	2
Avg. Inter-Calf Period (Days):	422	Avg. Parity for SCC > 200k and < 750k:	2
No. Flushings:	NA	Avg. Parity for SCC > 750k:	3
No. Embrios:	NA		

Table 3: Benchmark: Herd with the Top 25%, Average and Bottom 25% for different traits tested the last month of for Holstein Cows

	Milk Production (kg)	Butterfat (%)	Protein (%)	Lactose (%)	SCC (x1000/ml)	MUN (mg/dl)
Herd	32.0	4.67	3.49	4.74	206	16.74
Top 25%	38.6	5.50	3.84	4.82	30	16.23
Breed Avg	32.1	4.72	3.57	4.46	269	17.31
Bottom 25%	25.3	3.89	3.28	4.41	234	8.30

*** PLEASE CONSULT YOUR VETERINARIAN, PROFESSIONAL ANIMAL SCIENTIST or LogixMilk TECHNICAL ADVISOR for the interpretation of these results and professional advisory services.**

Table 4: Summary of Somatic Cell Counts per Lactation Group in the herd for 56 Holstein Cows

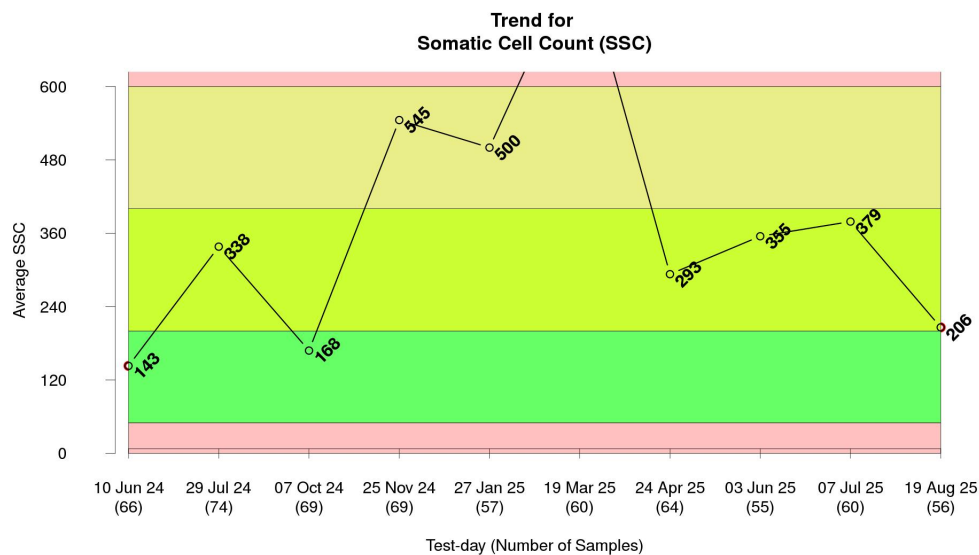
Lactation Group	% of Herd	Early Lactation	Mid Lactation	Late Lactation	% SCC > 200k	% SCC > 750k
1	53.6% (30)	1.8% (1)	10.7% (6)	41.1% (23)	7.1% (4)	3.6% (2)
2	25.0% (14)	1.8% (1)	3.6% (2)	19.6% (11)	7.1% (4)	0.0% (0)
3	12.5% (7)	3.6% (2)	3.6% (2)	5.4% (3)	0.0% (0)	0.0% (0)
4	8.9% (5)	0.0% (0)	5.4% (3)	3.6% (2)	5.4% (3)	5.4% (3)
5	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
6+	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
Herd	100% (56)	7.2% (4)	23.3% (13)	69.7% (39)	19.6% (11)	9% (5)

Table 5: Somatic Cell Count (SCC) Analysis: Percentage (Number) of Cows within Stage of Lactation and Lactation Group for SCC > 200k and SCC > 750k for 56 Holstein Cows

Lactation Group	Early Lactation		Mid Lactation		Late Lactation	
	% SCC > 200k	% SCC > 750k	% SCC > 200k	% SCC > 750k	% SCC > 200k	% SCC > 750k
1	0.0% (0)	0.0% (0)	33.3% (2)	33.3% (2)	8.7% (2)	0.0% (0)
2	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	36.4% (4)	0.0% (0)
3	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
4	0% (0)	0% (0)	66.7% (2)	66.7% (2)	50.0% (1)	50.0% (1)
5	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)
6+	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)

Table 6: Bulk Tank Results for 2025-08-19 (Number of Samples Tested: 1)

Tank No	Butterfat (%)	Protein (%)	Lactose (%)	SCC (x1000/ml)	MUN (mg/dl)	pH
Calculated Tank	4.67	3.47	4.75	209	17	
58 Tank	4.16	3.45	4.75	170	14.1	

**Figure 1:** Somatic Cell Count (SCC) Trend

The average Somatic Cell Count (SCC) and the trend over time is shown in the graph. The ideal is a herd with an average count of less than 200 000. A higher SCC results in lower milk production and possible udder infection. If animals with high SCC can be identified early, they can be treated in time, thereby preventing production loss and permanent udder damage resulting in lower herd life.

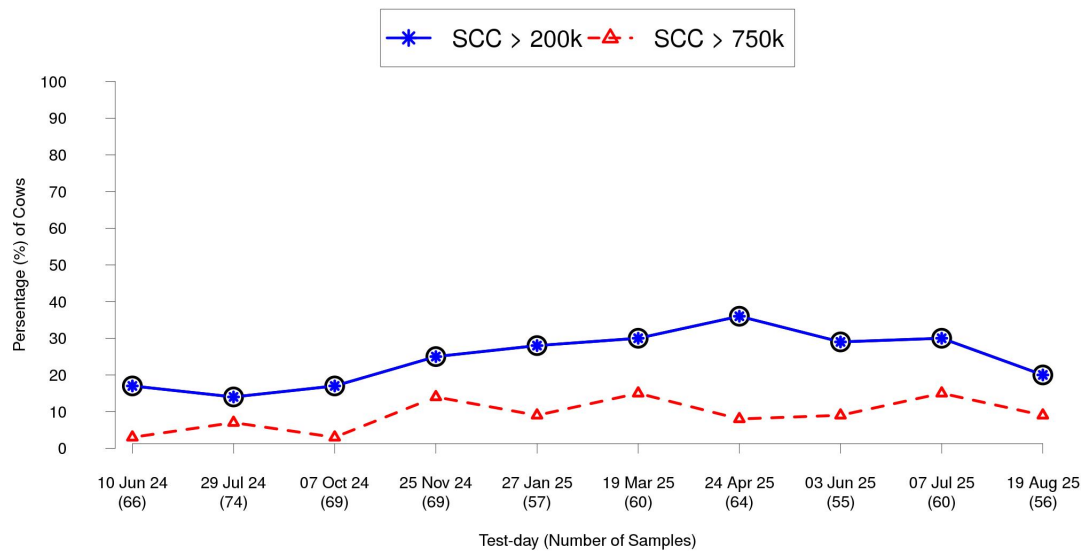


Figure 2: Percentage (%) of Cows with Somatic Cell Counts (SCC) more than 200k and 750k, respectively, per Test-day

The graph presents the trend of the % of cows with Somatic Cell Counts (SCC) more then 200k and 500k, respectively. The ideal is to have as few cows as possible with a SCC of more than 200K and none with a SCC of more than 750k.

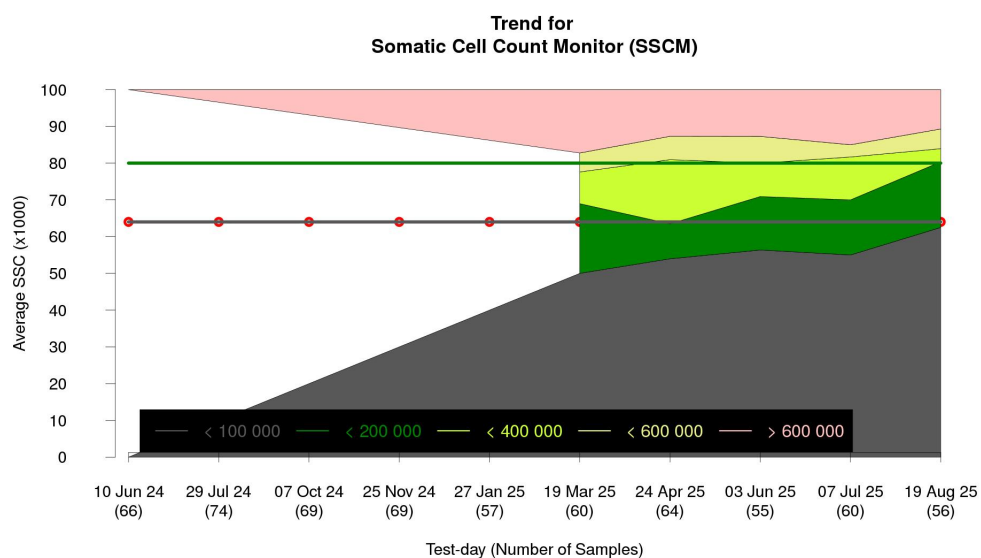


Figure 3: Somatic Cell Count (SCC) Monitor Trend

The graph shows the percentage of cows within certain Somatic Cell Count (SCC) levels. Ideally, at least 64% of the cows of a herd should have a SCC of less than 100 000 and 80% a SCC of less than 250 000. The danger zone is indicated in red, where ideally no cows should be indicated.

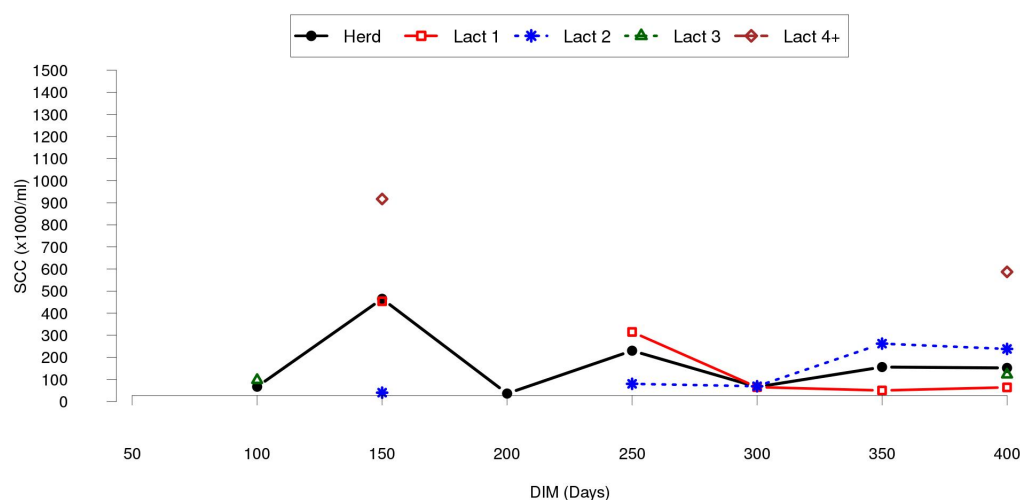


Figure 4: Average Somatic Cell Counts (SCC, x1000/ml) per Day In Milk (DIM)

This graph indicates the average Somatic Cell Counts (SCC, x1000/ml) per day in milk (DIM) for the complete herd, as well as for Lactation 1, 2, 3 and 4+ cows, separately.

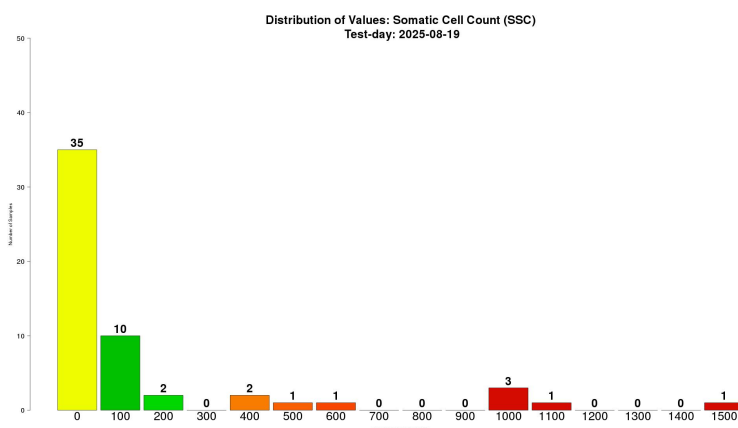


Figure 5: Somatic Cell Count (SCC) Distribution for Test-day (2025-08-19)

The graph depicts the number of animals within certain levels of Somatic Cell Counts (SCC). If the cows with SCCs higher than 600 000 can be identified early, they can be treated or even culled from the herd, preventing economic losses due to penalties paid for high SCCs in the milk.

Table 7: Somatic Cell Count (SSC) distribution and Milk Loss Monitor 2025-08-19

SSC Levels	< 100k	100k - 200k	200k - 500k	500k - 800k	800k - 1 500k	> 1 500k
Number Cows	35	10	4	2	4	1
% Cows	62.5 %	17.9 %	7.1 %	3.6 %	7.1 %	1.8 %
Milk Quality	Excellent	Very Good	Needs Improvement	Poor	Serious	BAD
% Milk Loss	< 2 %	2 - 4 %	4 - 8 %	8 - 10 %	10 - 35 %	> 35 %
% Quarters Infected	< 1 %	1 - 6 %	6 - 16 %	16 - 26 %	26 - 48 %	> 48 %

The average Somatic Cell Count (SCC) on 2025-08-19 for the herd, was 206 000. This figure places the herd in the "Yellow" SCC Zone and the milk quality Needs Improvement. Milk loss due to SCC is between 4 and 8 %.

Udder Health: Mastitis infections are evident and needs slight improvement. Check all management and control measures.

Table 8: Cows Under Pressure (SCC > 500k and Lactose % < 4.6)

Cow ID	Name	SCC	Lactose %	DIM	Parity	Production
1835	1835	1138	4.52	508	4	39.6
23012	23012LUNAR	1051	4.45	128	1	25.5
1919	1919	549	4.59	518	2	36.6

Table 9: Cows with Somatic Cell Counts > 200k (Status: N=New -, C=Chronic -, R=Recurring - and CR=Chronic and Recurring Infections)

Cow ID	Name	SCC 2025-08-19	SCC 2025-07-07	SCC 2025-06-03	Production	DIM	Parity	Status
1936	1936 MEGAMAN	1649	1247	1741	30.7	138	4	C
1835	1835	1138	203	-	39.6	508	4	N
1940	1940 DUNHILL	1078	3221	5235	41.9	109	4	C
23012	23012LUNAR	1051	1453	948	25.5	128	1	C
23010	23010 LUNAR	1034	977	2216	31.6	148	1	C
22021	22021 BRANTLEY	606	825	-	24.7	232	1	N
1919	1919	549	289	133	36.6	518	2	R
21007	21007 INTACT	432	399	671	32.5	349	2	CR
23007	23007	416	208	201	27.9	226	1	C
21019	21019INTACT	259	74	83	16.7	407	2	R
21003	21003	203	132	432	33.9	543	2	R

Table 10: Possible Ketosis Cases; Cows under 100 days in milk (Prot. Fat Ratio < 0.68 for Jerseys and < 0.74 for other Breeds)

Cow ID	Name	Production	DIM	Parity	Prot % to Fat %	Breed
22006	22006 LIWAY	35.4	73	2	0.62	HST
21020	21020MOVER	44.1	63	3	0.64	HST
23018	23018 LUNAR	27.5	61	1	0.68	HST
20021	20021	42.3	93	3	0.73	HST

Table 11: Possible Acidosis Cases (Protein % > Butterfat %)

Cow ID	Name	Production	DIM	Parity	Prot % to Fat %
21004	21004	33.3	146	3	1.03

Table 12: Dry Cows with a Dry Period more than 55 Days

Cow ID	Name	Breed	Last ICP	Avg. ICP	No. ICPs	Days Since Last Calf	Days Open
ZNDP170045	1745	HST	-	-	-	2071	1778
21031	21031 MOVER	HST	-	-	-	654	236

Table 13: Cows with an active Inter-Calving Period (ICP) > 400 days

Cow ID	Name	Breed	Last ICP	Avg. ICP	No. ICPs	Days Since Last Calf	Production
ZNDP170045	1745	HST	-	-	-	2071	-
1519	1519	HST	500	401	5	1043	-
21031	21031 MOVER	HST	-	-	-	654	-
21027	21027	HST	-	-	-	616	21.2
20033	20033	HST	-	-	-	593	-
22003	22003 LIWAY	HST	-	-	-	591	33.5
-	22001	HST	-	-	-	586	28.6
1938	1938 DUNHILL	HST	344	354	2	557	33.1
1917	1917 INTACT	HST	441	471	2	553	49.7
ZNDP210006	21006	HST	363	363	1	551	-
ZNDP200031	20031	HST	424	424	1	543	35.4
ZNDP210003	21003	HST	388	388	1	541	33.9
1904	1904 IKEA	HST	374	380	3	526	35.7
21038	21038 LIWAY SIL	HST	-	-	-	523	29.1
ZNDP190019	1919	HST	763	763	1	516	36.6
22002	22002 LIWAY	HST	-	-	-	514	39.1
1835	1835	HST	445	422	3	506	39.6
-	22011 MIGNON	HST	-	-	-	488	31.8
22009	22009 LIWAY SIL	HST	-	-	-	485	35.8
1945	1945 DUNHILL	HST	765	765	1	476	-
22004	22004 INTACT	HST	-	-	-	461	39.3
-	21041 MOVER	HST	-	-	-	455	36.5
22012	22012 LIWAY	HST	-	-	-	446	26.6
22019	22019	HST	-	-	-	439	34.5
-	22017 BRANTLEY	HST	-	-	-	415	27.2
22016	22016 VEKOMO	HST	-	-	-	410	31.5
-	21019INTACT	HST	368	368	1	405	16.7
21012	21012MOVER	HST	394	394	1	402	36.9