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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: 2025-09-22

Holstein Cows

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HERD HEALTH SUMMARY REPORT

UNIVERSITEIT VAN PRETORIA - Holstein Cows

Table 1: Summary for Test-day 2025-09-22 (Number of Samples Tested: 53)

Analysis	Results	Norms*	% Cows outside norms*
Milk Production (kg)	Avg.: 32.4 Median: 32.5		
Butterfat (%)	Avg.: 4.37 Median: 4.25	3.5 % - 6.0 %	Too Low: 4 % Too High: 2 %
Protein (%)	Avg.: 3.46 Median: 3.46	3.0 % - 4.5 %	Too Low: 6 % Too High: 0 %
Lactose (%)	Avg.: 4.75 Median: 4.79	> 4.7 %	Too Low: 25 %
MUN (mg/dl)	Avg.: 15.67 Median: 15.90	8 - 16 mg/dl	Too Low: 0 % Too High: 43 %
SCC (x1000/ml)	Avg.: 549 Median: 58 % < 100 : 62.3 % % < 200 : 71.7 % % < 500 : 83.0 % % > 750 : 15.1 % % > 1 000 : 11.3 % % > 1 500 : 3.8 %	< 200 > 64 % > 75 % > 92 % < 4.8 % < 1 % NONE	Too High: 1.7 % Too High: 3.3 % Too High: 9.0 % Too High: 10.3 % Too High: 10.3 % Too High: 3.8 %
Butterfat Protein ratio	Average: 1.3	> 1.0	Too High: 1.9 %

Table 2: Quantification of Specific Cases (% of herd) and Loss in Production on 2025-09-22

Loss in Production due to:		Avg/Median SCC (Number (n)):	
SSC (kg per day):	143.1 (8.3 %)	1st Lact Cows:	514/36 (28)
DIM (kg per day):	1058.9 (61.7 %)	2nd Lact Cows:	130/74 (13)
No. of Cows Under Pressure:	2 (3.8 %)	3rd Lact Cows:	1489/90 (7)
No. Cows with SCC > 200k:	15 (28.3 %)	4th Lact Cows:	519/516 (5)
No. Cows with SCC > 750k:	8 (15.1 %)	5th Lact Cows:	0/ (0)
No. New Infections:	2 (3.8 %)	6+ Lact Cows:	0/ (0)
No. Recurring Infections:	6 (11.3 %)	Avg. SCC for SCC > 750k (n):	3123 (8)
Cure Rate for SCC > 200k:	9.1 % (1)	Avg. Days In Milk (DIM) for Herd:	353
Cure Rate for SCC > 750k:	20.0 % (1)	Median of DIM for Herd:	332
No. Chronic Infections (SCC > 200k):	8 (15.1 %)	Avg. DIM for SCC < 200k (n):	366 (38)
No. Chronic Infections (SCC > 750k):	3 (5.7 %)	Avg. DIM for SCC > 200k and < 750k (n):	364 (7)
No. of Possible Ketosis Cases:	1	Avg. DIM for SCC > 750k (n):	327 (8)
No. of Possible Acidosis Cases:	1		
Avg. Age at First Calf (Months):	25	Avg. Parity for Herd:	2
Avg. Inter-Calf Period (Days):	422	Avg. Parity for SCC < 200k:	2
No. Flushings:	NA	Avg. Parity for SCC > 200k and < 750k:	2
No. Embrios:	NA	Avg. Parity for SCC > 750k:	2

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	32.4	4.37	3.46	4.75	549	15.67
Top 25%	39.0	5.09	3.84	4.80	36	16.50
Breed Avg	31.6	4.42	3.56	4.66	293	12.47
Bottom 25%	23.0	3.78	3.28	4.55	213	8.50

*** 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 53 Holstein Cows

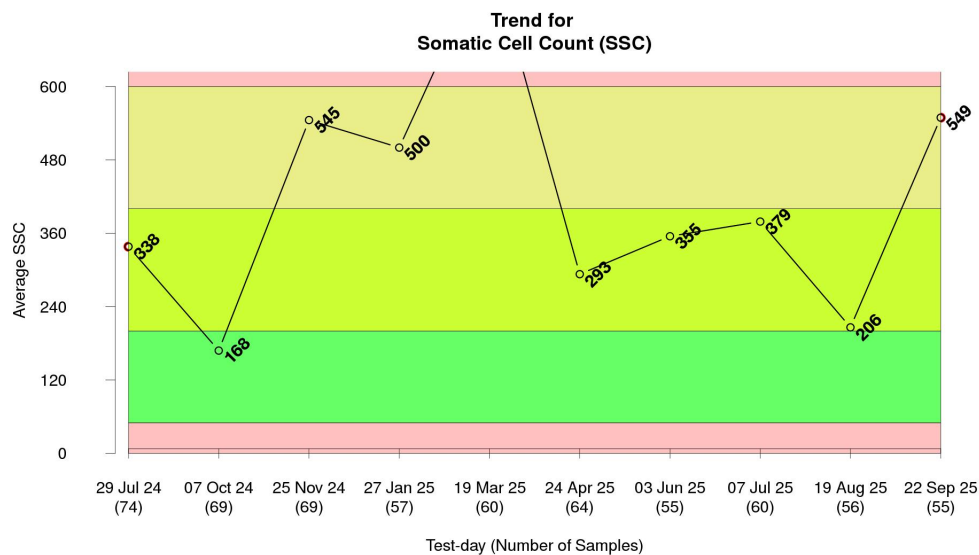
Lactation Group	% of Herd	Early Lactation	Mid Lactation	Late Lactation	% SCC > 200k	% SCC > 750k
1	52.8% (28)	1.9% (1)	5.7% (3)	45.3% (24)	13.2% (7)	9.4% (5)
2	24.5% (13)	0.0% (0)	5.7% (3)	18.9% (10)	7.5% (4)	0.0% (0)
3	13.2% (7)	1.9% (1)	3.8% (2)	7.5% (4)	1.9% (1)	1.9% (1)
4	9.4% (5)	0.0% (0)	5.7% (3)	3.8% (2)	5.7% (3)	3.8% (2)
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	99.9% (53)	3.8% (2)	20.9% (11)	75.5% (40)	28.3% (15)	15.1% (8)

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 53 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)	66.7% (2)	66.7% (2)	20.8% (5)	12.5% (3)
2	0% (0)	0% (0)	33.3% (1)	0.0% (0)	30.0% (3)	0.0% (0)
3	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	25.0% (1)	25.0% (1)
4	0% (0)	0% (0)	66.7% (2)	33.3% (1)	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 2025-09-22 (Number of Samples Tested: 1)

Tank No	Butterfat (%)	Protein (%)	Lactose (%)	SCC (x1000/ml)	MUN (mg/dl)	pH
Calculated Tank	4.37	3.44	4.76	465	16	
56 Tank	3.91	3.41	4.72	446	12.9	

**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.

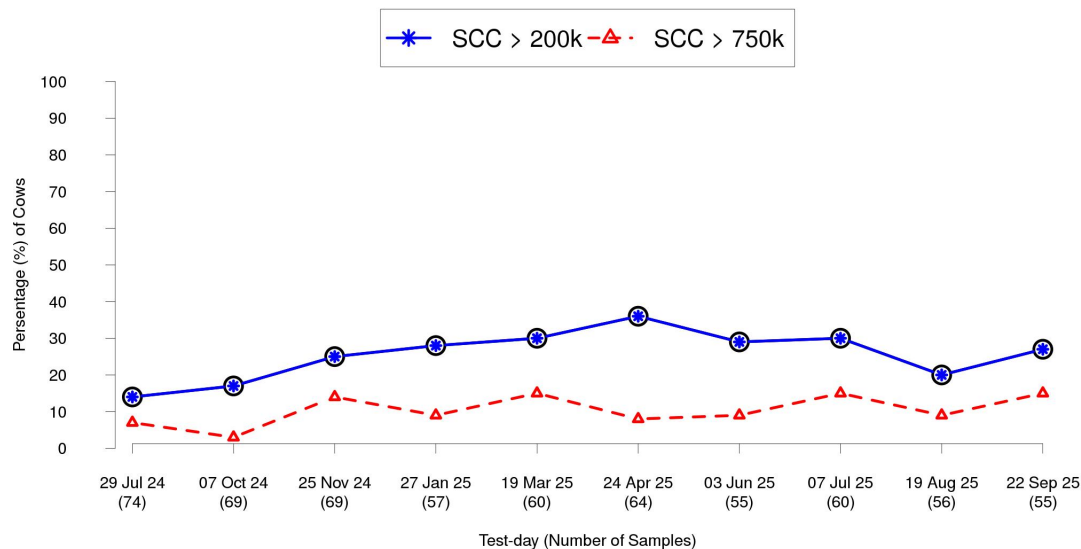


Figure 2: Percentage (%) of Cows with Somatic Cell Counts (SCC) more than 200k and 750k, respectively, per Test-day

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.

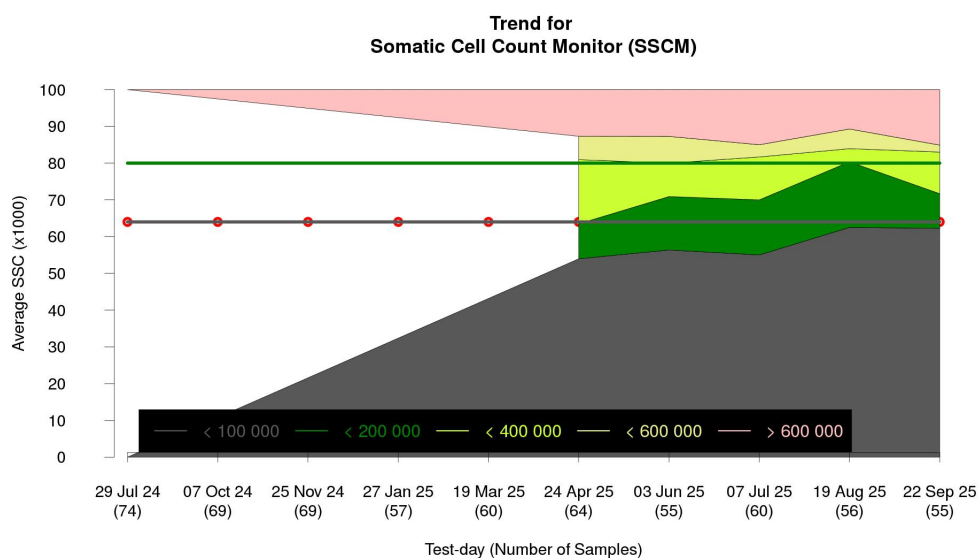


Figure 3: Somatic Cell Count (SCC) Monitor Trend

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.

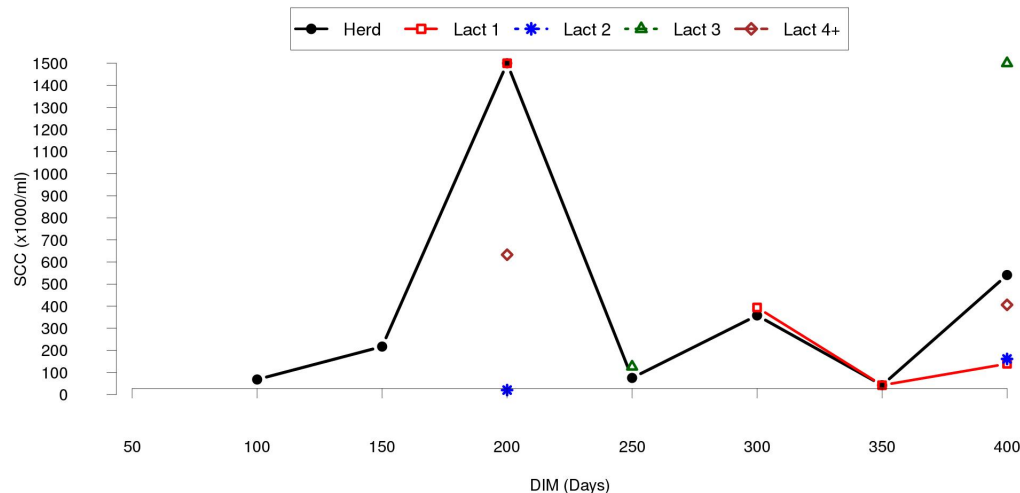


Figure 4: Average Somatic Cell Counts (SCC, x1000/ml) per Day In Milk (DIM)

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.

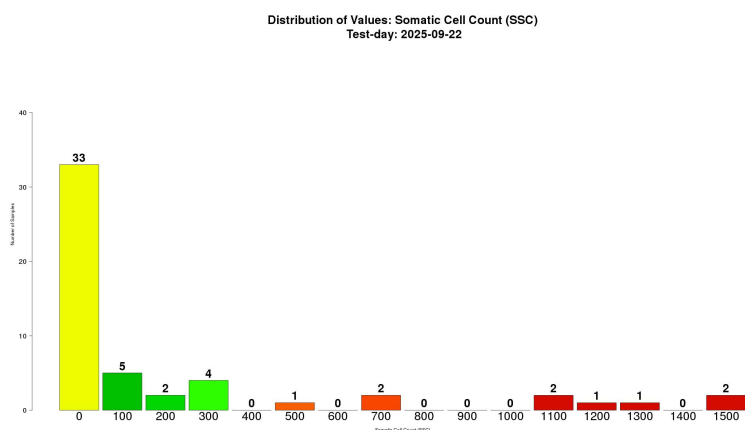


Figure 5: Somatic Cell Count (SCC) Distribution for Test-day (2025-09-22)

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 2025-09-22

SSC Levels	< 100k	100k - 200k	200k - 500k	500k - 800k	800k - 1 500k	> 1 500k
Number Cows	33	5	6	3	4	2
% Cows	62.3 %	9.4 %	11.3 %	5.7 %	7.5 %	3.8 %
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 2025-09-22 for the herd, was 549 000. This figure places the herd in the "Orange" SCC Zone and the milk quality is Poor. Milk loss due to SCC is between 8 and 10 %.

Udder Health: Mastitis infections are evident and needs slight improvement. Your mastitis control program needs improvement. Consult your veterinarian and/or registered animal scientist for assistance. Due to high somatic cell counts, your ability to supply milk is at risk.

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

Cow ID	Name	SCC	Lactose %	DIM	Parity	Production
1917	1917 INTACT	9999	3.13	589	3	19.9
1835	1835	754	4.51	542	4	36.1

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 2025-09-22	SCC 2025-08-19	SCC 2025-07-07	Production	DIM	Parity	Status
1917	1917 INTACT	9999	198	4836	19.9	589	3	R
23010	23010 LUNAR	8529	1034	977	31.3	182	1	C
22016	22016 VEKOMO	1370	151	101	31.9	446	1	R
23012	23012LUNAR	1236	1051	1453	24.3	162	1	C
22021	22021 BRANTLEY	1159	606	825	35.7	266	1	C
1936	1936 MEGAMAN	1137	1649	1247	30.7	172	4	C
23007	23007	798	416	208	22.2	260	1	C
1835	1835	754	1138	203	36.1	542	4	C
1940	1940 DUNHILL	516	1078	3221	37.1	143	4	C
21003	21003	388	203	132	36.6	577	2	R
23002	23002 FF TWIN	342	197	1163	31.3	279	1	R
21007	21007 INTACT	332	432	399	34	383	2	CR
22006	22006 LIWAY	304	20	27	37.2	107	2	N
22001	22001	283	56	36	24.8	622	1	N
21012	21012MOVER	207	110	312	38.9	438	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
23018	23018 LUNAR	28.3	95	1	0.73	HST

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

Cow ID	Name	Production	DIM	Parity	Prot % to Fat %
23001	23001 FF TWIN	26.7	286	1	1.20

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
1745	1745	HST	-	-	-	2113	1817
21031	21031 MOVER	HST	-	-	-	696	275

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
1745	1745	HST	-	-	-	2113	-
ZNDP150019	1519	HST	500	401	5	1085	-
21031	21031 MOVER	HST	-	-	-	696	-
-	21027	HST	-	-	-	658	31.8
-	20033	HST	-	-	-	635	-
22003	22003 LIWAY	HST	-	-	-	633	31.7
-	22001	HST	-	-	-	628	24.8
ZNDP190038	1938 DUNHILL	HST	344	354	2	599	31.6
1917	1917 INTACT	HST	441	471	2	595	19.9
21006	21006	HST	363	363	1	593	-
20031	20031	HST	424	424	1	585	32.6
ZNDP210003	21003	HST	388	388	1	583	36.6
1904	1904 IKEA	HST	374	380	3	568	32.9
-	21038 LIWAY SIL	HST	-	-	-	565	23.1
1919	1919	HST	763	763	1	558	42.3
22002	22002 LIWAY	HST	-	-	-	556	34.8
ZNDP180035	1835	HST	445	422	3	548	36.1
-	22011 MIGNON	HST	-	-	-	530	30.1
-	22009 LIWAY SIL	HST	-	-	-	527	36.9
-	1945 DUNHILL	HST	765	765	1	518	37.6
-	22004 INTACT	HST	-	-	-	503	39.8
21041	21041 MOVER	HST	-	-	-	497	35.2
-	22012 LIWAY	HST	-	-	-	488	34.6
22019	22019	HST	-	-	-	481	33
-	22017 BRANTLEY	HST	-	-	-	457	-
-	22016 VEKOMO	HST	-	-	-	452	31.9
21019	21019INTACT	HST	368	368	1	447	-
-	21012MOVER	HST	394	394	1	444	38.9
-	22013 INTACT	HST	-	-	-	428	37.6
-	22027VEKOMA	HST	-	-	-	428	38.6