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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: 2025-12-10

Holstein Cows

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HERD HEALTH SUMMARY REPORT

UNIVERSITEIT VAN PRETORIA - Holstein Cows

Table 1: Summary for Test-day 2025-12-10 (Number of Samples Tested: 52)

Analysis	Results	Norms*	% Cows outside norms*
Milk Production (kg)	Avg.: 28.2 Median: 28.9		
Butterfat (%)	Avg.: 4.47 Median: 4.45	3.5 % - 6.0 %	Too Low: 2 % Too High: 0 %
Protein (%)	Avg.: 3.43 Median: 3.48	3.0 % - 4.5 %	Too Low: 10 % Too High: 0 %
Lactose (%)	Avg.: 4.77 Median: 4.79	> 4.7 %	Too Low: 25 %
MUN (mg/dl)	Avg.: 15.40 Median: 16.00	8 - 16 mg/dl	Too Low: 0 % Too High: 33 %
SCC (x1000/ml)	Avg.: 446 Median: 118 % < 100 : 46.2 % % < 200 : 67.3 % % < 500 : 88.5 % % > 750 : 11.5 % % > 1 000 : 7.7 % % > 1 500 : 5.8 %	< 200 > 64 % > 75 % > 92 % < 4.8 % < 1 % NONE	Too High: 17.8 % Too High: 7.7 % Too High: 3.5 % Too High: 6.7 % Too High: 6.7 % Too High: 5.8 %
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 2025-12-10

Loss in Production due to:		Avg/Median SCC (Number (n)):	
SSC (kg per day):	107.5 (7.3 %)	1st Lact Cows:	654/118 (27)
DIM (kg per day):	1129.1 (77.0 %)	2nd Lact Cows:	225/50 (14)
		3rd Lact Cows:	207/117 (7)
No. of Cows Under Pressure:	2 (3.8 %)	4th Lact Cows:	236/175 (4)
No. Cows with SCC > 200k:	17 (32.7 %)	5th Lact Cows:	0/ (0)
No. Cows with SCC > 750k:	6 (11.5 %)	6+ Lact Cows:	0/ (0)
No. New Infections:	2 (3.8 %)		
No. Recurring Infections:	10 (19.2 %)	Avg. SCC for SCC > 750k (n):	2846 (6)
Cure Rate for SCC > 200k:	15.4 % (2)		
Cure Rate for SCC > 750k:	40.0 % (2)	Avg. Days In Milk (DIM) for Herd:	399
No. Chronic Infections (SCC > 200k):	8 (15.4 %)	Median of DIM for Herd:	373
No. Chronic Infections (SCC > 750k):	2 (3.8 %)		
		Avg. DIM for SCC < 200k (n):	375 (35)
No. of Possible Ketosis Cases:	1	Avg. DIM for SCC > 200k and < 750k (n):	436 (11)
No. of Possible Acidosis Cases:	1	Avg. DIM for SCC > 750k (n):	438 (6)
Avg. Age at First Calf (Months):	25	Avg. Parity for Herd:	2
Avg. Inter-Calf Period (Days):	418	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	28.2	4.47	3.43	4.77	446	15.40
Top 25%	39.5	4.62	3.71	4.87	30	15.80
Breed Avg	33.4	4.17	3.48	4.71	301	13.48
Bottom 25%	27.1	3.67	3.21	4.59	200	11.10

*** 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 52 Holstein Cows

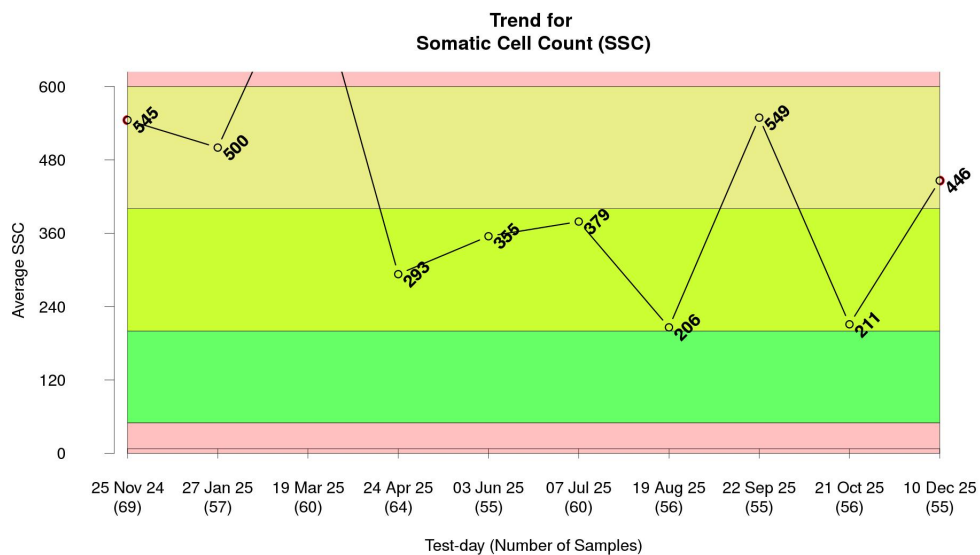
Lactation Group	% of Herd	Early Lactation	Mid Lactation	Late Lactation	% SCC > 200k	% SCC > 750k
1	51.9% (27)	7.7% (4)	0.0% (0)	44.2% (23)	15.4% (8)	7.7% (4)
2	26.9% (14)	1.9% (1)	3.8% (2)	21.2% (11)	9.6% (5)	1.9% (1)
3	13.5% (7)	0.0% (0)	3.8% (2)	9.6% (5)	5.8% (3)	1.9% (1)
4	7.7% (4)	0.0% (0)	0.0% (0)	7.7% (4)	1.9% (1)	0.0% (0)
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% (52)	9.6% (5)	7.6% (4)	82.7% (43)	32.7% (17)	11.5% (6)

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 52 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)	0% (0)	0% (0)	34.8% (8)	17.4% (4)
2	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	45.5% (5)	9.1% (1)
3	0% (0)	0% (0)	50.0% (1)	0.0% (0)	40.0% (2)	20.0% (1)
4	0% (0)	0% (0)	0% (0)	0% (0)	25.0% (1)	0.0% (0)
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 2025-12-10 (Number of Samples Tested: 0)

Tank No	Butterfat (%)	Protein (%)	Lactose (%)	SCC (x1000/ml)	MUN (mg/dl)	pH
Calculated Tank	4.39	3.39	4.77	382	15	

**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.

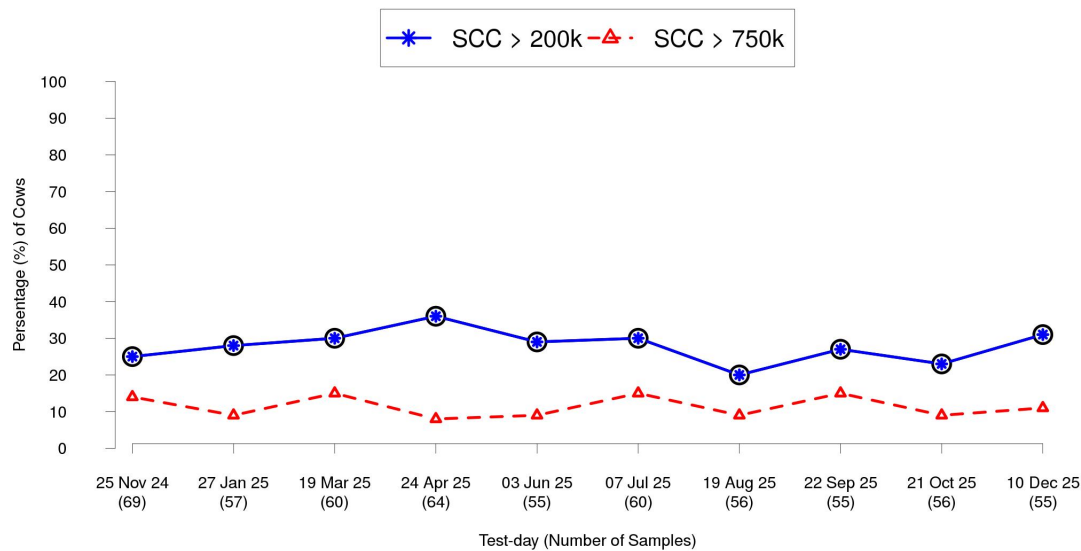


Figure 2: Percentage (%) of Cows with Somatic Cell Counts (SCC) more than 200k and 750k, respectively, per Test-day

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.

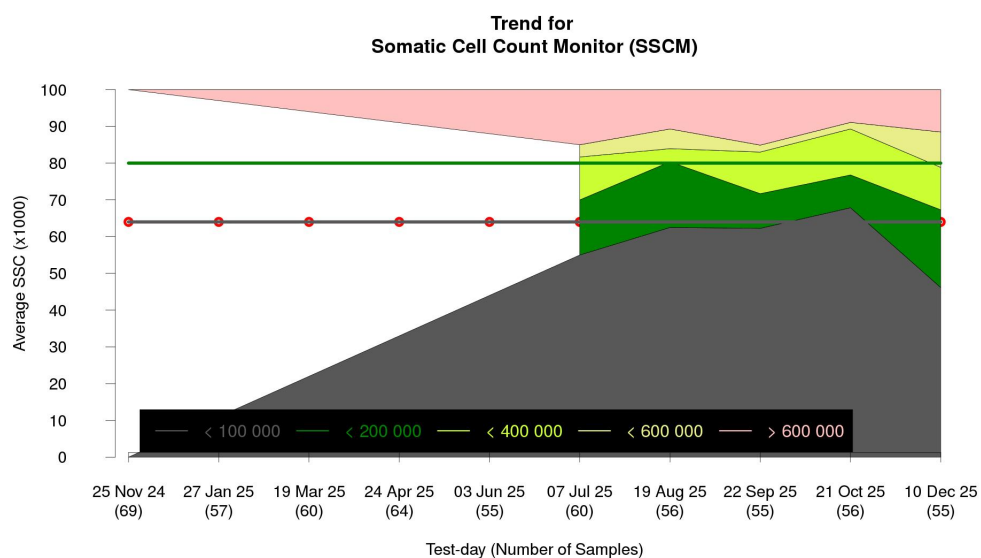


Figure 3: Somatic Cell Count (SCC) Monitor Trend

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.

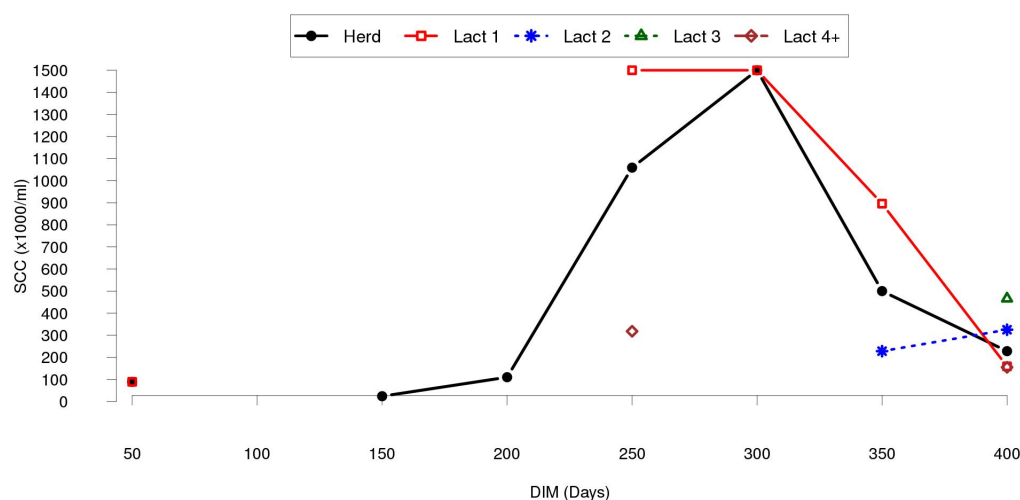


Figure 4: Average Somatic Cell Counts (SCC, x1000/ml) per Day In Milk (DIM)

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.

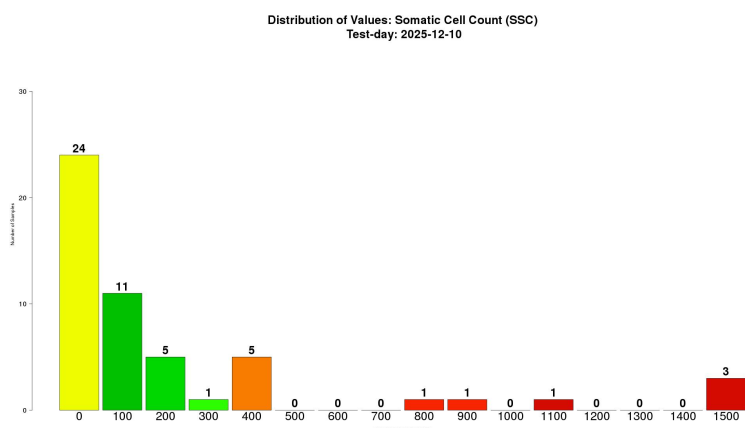


Figure 5: Somatic Cell Count (SCC) Distribution for Test-day (2025-12-10)

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 2025-12-10

SSC Levels	< 100k	100k - 200k	200k - 500k	500k - 800k	800k - 1 500k	> 1 500k
Number Cows	24	11	11	0	3	3
% Cows	46.2 %	21.2 %	21.2 %	0.0 %	5.8 %	5.8 %
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 2025-12-10 for the herd, was 446 000. 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
23010	23010 LUNAR	6062	4.50	261	1	25
1917	1917 INTACT	816	4.24	668	3	47.1

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 2025-12-10	SCC 2025-10-21	SCC 2025-09-22	Production	DIM	Parity	Status
23012	23012LUNAR	6582	1130	1236	16.4	241	1	C
23010	23010 LUNAR	6062	350	8529	25	261	1	C
23007	23007	1574	2980	798	18.5	339	1	C
1945	1945 DUNHILL	1123	90	82	29.6	591	2	R
22016	22016 VEKOMO	920	260	1370	29	525	1	CR
1917	1917 INTACT	816	170	9999	47.1	668	3	R
1940	1940 DUNHILL	447	320	516	33.6	223	4	C
21003	21003	447	140	388	30	656	2	R
21027	21027	441	40	102	20.7	731	1	R
21028	21028 FOXCATCHER	440	160	141	30.5	343	2	N
21007	21007 INTACT	430	350	332	27	462	2	CR
1919	1919	393	380	25	41.7	631	2	R
20033	20033MOVER	253	240	119	29.2	310	3	R
23002	23002 FF TWIN	244	600	342	28.1	358	1	CR
22012	22012 LIWAY	240	30	20	29.2	561	1	N
22021	22021 BRANTLEY	218	790	1159	19.9	345	1	C
21020	21020MOVER	209	70	90	36.1	177	3	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
23014	23014 VECOMO	25.3	31	1	0.64	HST

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

Cow ID	Name	Production	DIM	Parity	Prot % to Fat %
1917	1917 INTACT	47.1	668	3	1.07

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	-	-	-	2183	1889

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	-	-	-	2183	-
1519	1519	HST	500	401	5	1155	-
-	21027	HST	-	-	-	728	20.7
-	20033	HST	-	-	-	705	-
-	22003 LIWAY	HST	-	-	-	703	29.4
22001	22001	HST	-	-	-	698	15
ZNDP190038	1938 DUNHILL	HST	344	354	2	669	19.3
1917	1917 INTACT	HST	441	471	2	665	47.1
ZNDP210006	21006	HST	363	363	1	663	-
20031	20031	HST	424	424	1	655	30.2
ZNDP210003	21003	HST	388	388	1	653	30
1904	1904 IKEA	HST	374	380	3	638	22.1
-	21038 LIWAY SIL	HST	-	-	-	635	14.2
1919	1919	HST	763	763	1	628	41.7
-	22002 LIWAY	HST	-	-	-	626	34.1
1835	1835	HST	445	422	3	618	23.8
-	22011 MIGNON	HST	-	-	-	600	28.9
-	22009 LIWAY SIL	HST	-	-	-	597	34.1
1945	1945 DUNHILL	HST	765	765	1	588	29.6
-	22004 INTACT	HST	-	-	-	573	36.6
-	21041 MOVER	HST	-	-	-	567	27.9
-	22012 LIWAY	HST	-	-	-	558	29.2
-	22019	HST	-	-	-	551	30.4
-	22017 BRANTLEY	HST	-	-	-	527	37.2
22016	22016 VEKOMO	HST	-	-	-	522	29
21019	21019INTACT	HST	368	368	1	517	38.9
-	21012MOVER	HST	394	394	1	514	28
-	22013 INTACT	HST	-	-	-	498	31.3
21007	21007 INTACT	HST	391	391	1	459	27
-	21026	HST	393	393	1	455	35.8
-	22028VEKOMA	HST	-	-	-	435	-
-	22062	HST	-	-	-	422	-
-	22037	HST	-	-	-	408	-
21023	21023	HST	479	479	1	406	-