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Logix Melk/Milk

Kudde Gesondheids Verslag / Herd Health Report

UNIVERSITEIT VAN PRETORIA

MILK UNIT

UP EXPERIMENTAL FARM

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Test-day: 2025-04-24

Holstein Cows

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HERD HEALTH SUMMARY REPORT

UNIVERSITEIT VAN PRETORIA - Holstein Cows

Table 1: Summary for Test-day 2025-04-24 (Number of Samples Tested: 63)

Analysis	Results	Norms*	% Cows outside norms*
Milk Production (kg)	Avg.: 26.4 Median: 26.2		
Butterfat (%)	Avg.: 4.88 Median: 4.81	3.5 % - 6.0 %	Too Low: 2 % Too High: 8 %
Protein (%)	Avg.: 3.57 Median: 3.46	3.0 % - 4.5 %	Too Low: 8 % Too High: 8 %
Lactose (%)	Avg.: 5.11 Median: 5.16	> 4.7 %	Too Low: 5 %
MUN (mg/dl)	Avg.: 17.49 Median: 18.31	8 - 16 mg/dl	Too Low: 6 % Too High: 73 %
SCC (x1000/ml)	Avg.: 293 Median: 92 % < 100 : 54.0 % % < 200 : 63.5 % % < 500 : 85.7 % % > 750 : 7.9 % % > 1 000 : 4.8 % % > 1 500 : 3.2 %	< 200 > 64 % > 75 % > 92 % < 4.8 % < 1 % NONE	Too High: 10.0 % Too High: 11.5 % Too High: 6.3 % Too High: 3.1 % Too High: 3.8 % Too High: 3.2 %
Butterfat Protein ratio	Average: 1.4	> 1.0	Too High: 1.6 %

Table 2: Quantification of Specific Cases (% of herd) and Loss in Production on 2025-04-24

Loss in Production due to:		Avg/Median SCC (Number (n)):	
SSC (kg per day):	88.6 (5.3 %)	1st Lact Cows:	220/88 (33)
DIM (kg per day):	515.6 (31.0 %)	2nd Lact Cows:	532/101 (14)
No. of Cows Under Pressure:	2 (3.2 %)	3rd Lact Cows:	131/38 (9)
No. Cows with SCC > 200k:	23 (36.5 %)	4th Lact Cows:	426/419 (6)
No. Cows with SCC > 750k:	5 (7.9 %)	5th Lact Cows:	0/ (0)
No. New Infections:	21 (33.3 %)	6+ Lact Cows:	38/38 (1)
No. Recurring Infections:	1 (1.6 %)	Avg. SCC for SCC > 750k (n):	1806 (5)
Cure Rate for SCC > 200k:	61.1 % (11)	Avg. Days In Milk (DIM) for Herd:	261
Cure Rate for SCC > 750k:	88.9 % (8)	Median of DIM for Herd:	270
No. Chronic Infections (SCC > 200k):	1 (1.6 %)	Avg. DIM for SCC < 200k (n):	280 (40)
No. Chronic Infections (SCC > 750k):	0 (0.0 %)	Avg. DIM for SCC > 200k and < 750k (n):	192 (18)
No. of Possible Ketosis Cases:	1	Avg. DIM for SCC > 750k (n):	356 (5)
No. of Possible Acidosis Cases:	1		
Avg. Age at First Calf (Months):	26	Avg. Parity for Herd:	2
Avg. Inter-Calf Period (Days):	426	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:	3

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	26.4	4.88	3.57	5.11	293	17.49
Top 25%	29.3	5.00	3.79	4.91	43	22.81
Breed Avg	23.0	4.56	3.55	4.73	291	19.12
Bottom 25%	15.9	4.09	3.27	4.60	238	15.74

*** 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 63 Holstein Cows

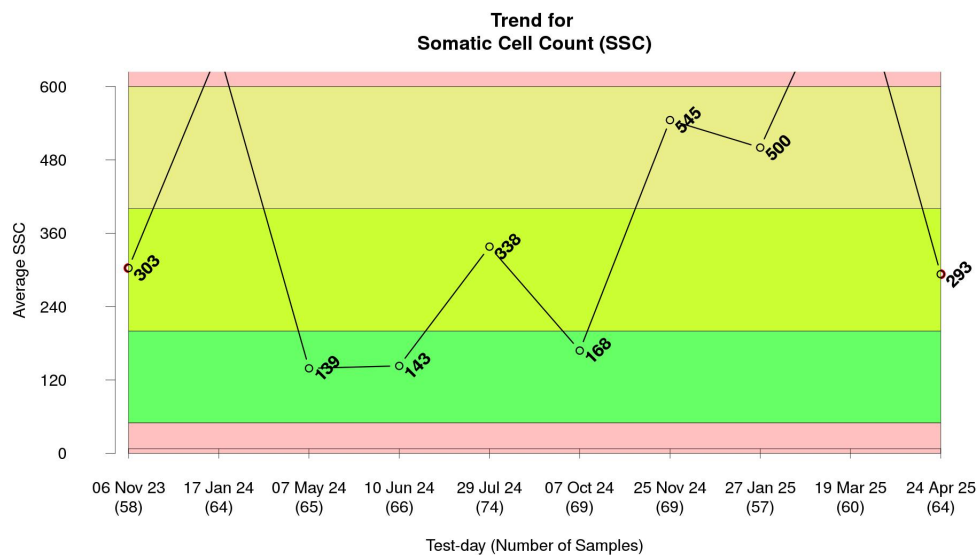
Lactation Group	% of Herd	Early Lactation	Mid Lactation	Late Lactation	% SCC > 200k	% SCC > 750k
1	52.4% (33)	9.5% (6)	15.9% (10)	27.0% (17)	17.5% (11)	1.6% (1)
2	22.2% (14)	1.6% (1)	3.2% (2)	17.5% (11)	7.9% (5)	3.2% (2)
3	14.3% (9)	3.2% (2)	1.6% (1)	9.5% (6)	4.8% (3)	0.0% (0)
4	9.5% (6)	1.6% (1)	1.6% (1)	6.3% (4)	6.3% (4)	3.2% (2)
5	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
6+	1.6% (1)	0.0% (0)	0.0% (0)	1.6% (1)	0.0% (0)	0.0% (0)
Herd	100% (63)	15.9% (10)	22.3% (14)	61.9% (39)	36.5% (23)	8% (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 63 Holstein Cows

Lactation Group	Early Lactation		Mid Lactation		Late Lactation	
	% SCC > 200k	% SCC > 750k	% SCC > 200k	% SCC > 750k	% SCC > 200k	% SCC > 750k
1	50.0% (3)	0.0% (0)	50.0% (5)	0.0% (0)	17.6% (3)	5.9% (1)
2	100.0% (1)	100.0% (1)	50.0% (1)	0.0% (0)	27.3% (3)	9.1% (1)
3	50.0% (1)	0.0% (0)	100.0% (1)	0.0% (0)	16.7% (1)	0.0% (0)
4	100.0% (1)	0.0% (0)	0.0% (0)	0.0% (0)	75.0% (3)	50.0% (2)
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)	0.0% (0)

Table 6: Bulk Tank Results for 2025-04-24 (Number of Samples Tested: 1)

Tank No	Butterfat (%)	Protein (%)	Lactose (%)	SCC (x1000/ml)	MUN (mg/dl)	pH
Calculated Tank	4.88	3.59	5.11	266	18	
65 Tank	4.09	3.45	5.08	198	16.31	

**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.

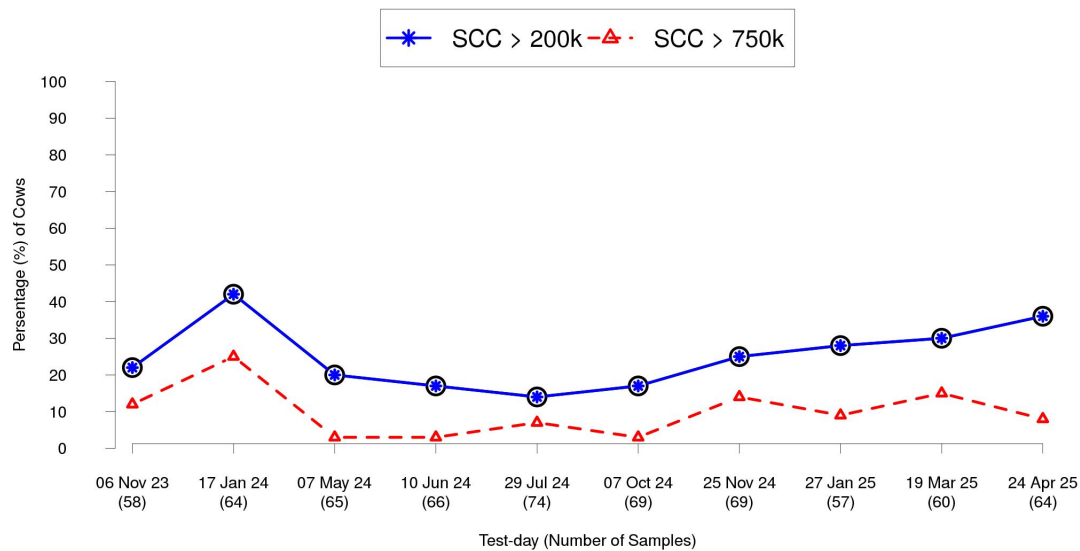


Figure 2: Percentage (%) of Cows with Somatic Cell Counts (SCC) more than 200k and 750k, respectively, per Test-day

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.

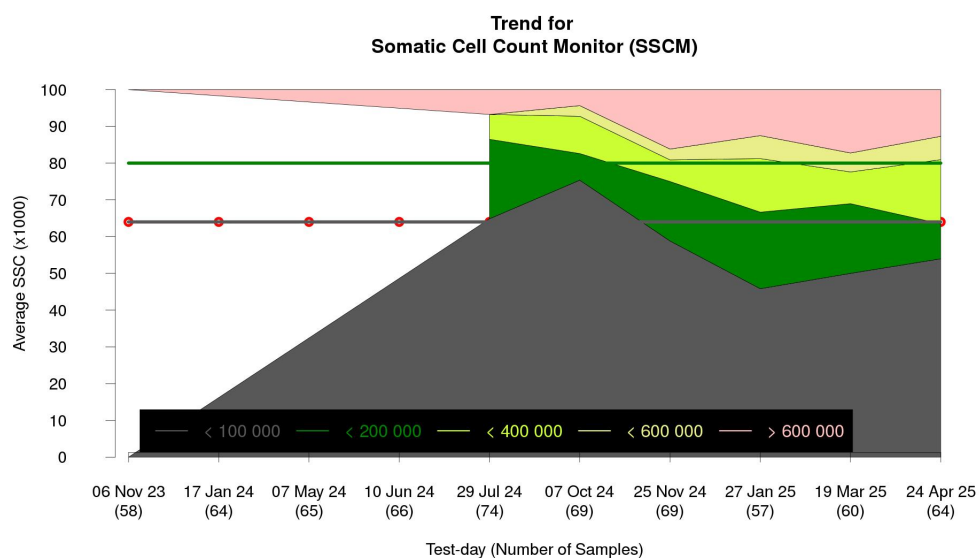


Figure 3: Somatic Cell Count (SCC) Monitor Trend

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.

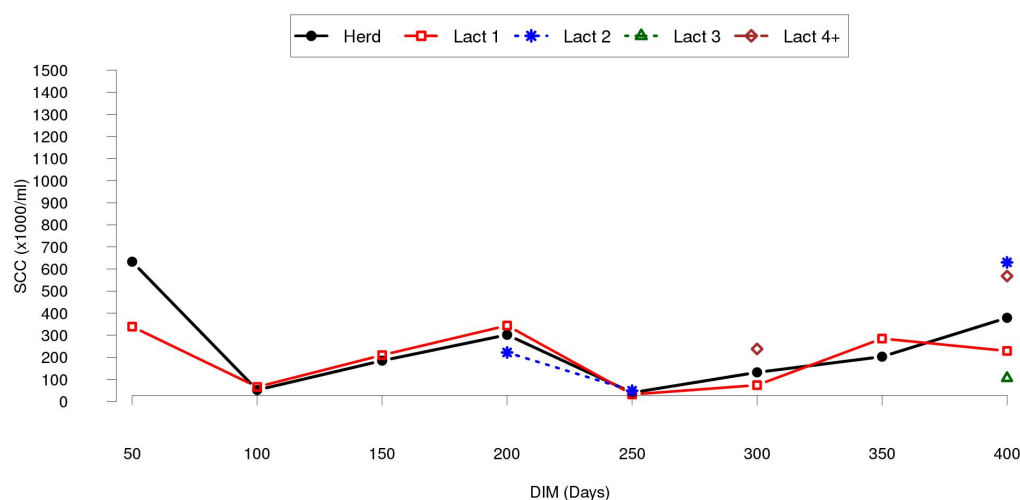


Figure 4: Average Somatic Cell Counts (SCC, x1000/ml) per Day In Milk (DIM)

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.

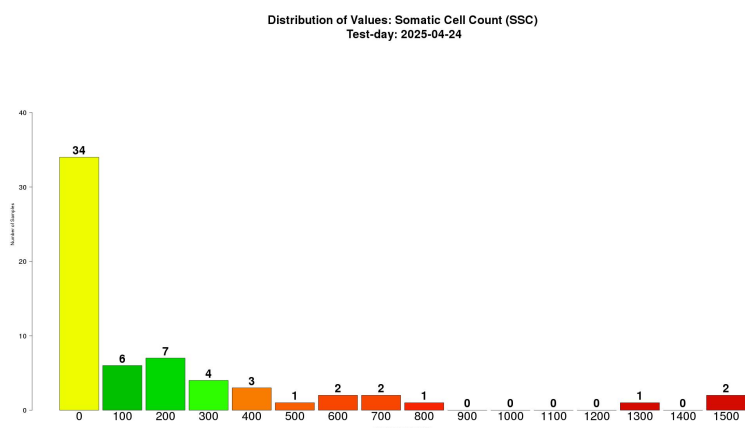


Figure 5: Somatic Cell Count (SCC) Distribution for Test-day (2025-04-24)

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 2025-04-24

SSC Levels	< 100k	100k - 200k	200k - 500k	500k - 800k	800k - 1 500k	> 1 500k
Number Cows	34	6	14	5	2	2
% Cows	54.0 %	9.5 %	22.2 %	7.9 %	3.2 %	3.2 %
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 2025-04-24 for the herd, was 293 000. 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
22022	22022 LUNAR	2335	3.93	29	2	22.5
1904	1904 IKEA	776	4.24	411	4	34.4

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 2025-04-24	SCC 2025-03-19	SCC 2025-01-27	Production	DIM	Parity	Status
20031	20031	3674	-	201	12.3	428	2	N
22022	22022 LUNAR	2335	-	93	22.5	29	2	N
21037	21037 MOVER	1355	15	63	33.1	519	1	N
1835	1835	890	8327	-	43.5	391	4	N
1904	1904 IKEA	776	120	-	34.4	411	4	N
22062	22062	705	99	54	24	195	1	N
23010	23010 LUNAR	646	-	-	32.7	10	1	N
23007	23007	633	194	-	21.8	109	1	N
22004	22004 INTACT	513	26	15	23.9	346	1	N
22007	22007 MOVER	477	-	161	20.3	355	1	N
1908	1908 INTACT	454	3008	9803	6.8	270	4	C
23011	23011LUNAR	437	-	-	17.6	10	1	N
21023	21023	392	64	71	39.5	179	2	N
1936	1936 MEGAMAN	384	-	337	26	21	4	N
21004	21004	353	-	48	32.7	29	3	N
22036	22036	347	141	50	19.1	185	1	N
20032	32MOVER	295	233	52	19.8	163	3	N
20015	20015	257	-	44	9.8	372	3	N
23009	23009	256	103	-	25.3	106	1	N
22029	22029 LUNAR	243	26	119	23.5	186	1	N
23012	23012LUNAR	238	-	-	27.1	11	1	N
20016	20016	237	16	-	37.3	507	2	N
1919	1919	208	2725	-	29.7	401	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
21004	21004	32.7	29	3	0.66	HST

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

Cow ID	Name	Production	DIM	Parity	Prot % to Fat %
1904	1904 IKEA	34.4	411	4	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
ZNDP170045	1745	HST	-	-	-	1966	1670
21006	21006	HST	-	-	-	809	504
ZNDP200029	20029	HST	-	-	-	891	404
21005	21005	HST	342	342	1	458	247
-	20023	HST	367	367	1	541	177

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	-	-	-	1966	-
ZNDP150019	1519	HST	500	401	5	938	-
ZNDP200029	20029	HST	-	-	-	891	-
21006	21006	HST	-	-	-	809	-
1932	1932 DUNHILL	HST	350	350	1	630	-
-	21031 MOVER	HST	-	-	-	549	-
-	20023	HST	367	367	1	541	-
-	21037 MOVER	HST	-	-	-	529	33.1
21028	21028 FOXCATCHER	HST	-	-	-	529	32.9
ZNDP200016	20016	HST	520	520	1	517	37.3
21039	21039 MOVER	HST	-	-	-	511	-
-	21027	HST	-	-	-	511	38.2
-	20024	HST	389	389	1	503	21.8
-	20033	HST	-	-	-	488	-
-	22003 LIWAY	HST	-	-	-	486	33.9
22001	22001	HST	-	-	-	481	28.9
DZNP210004	21004	HST	333	333	1	463	32.7
21005	21005	HST	342	342	1	458	-
ZNDP190038	1938 DUNHILL	HST	344	354	2	452	35.9
1917	1917 INTACT	HST	441	471	2	448	-
ZNDP200031	20031	HST	424	424	1	438	12.3
ZNDP210003	21003	HST	388	388	1	436	39.6
ZNDP190040	1940 DUNHILL	HST	409	391	2	426	-
ZNDP190004	1904 IKEA	HST	374	380	3	421	34.4
-	21038 LIWAY SIL	HST	-	-	-	418	24.9
ZNDP190019	1919	HST	763	763	1	411	29.7
22002	22002 LIWAY	HST	-	-	-	409	38.9
ZNDP180035	1835	HST	445	422	3	401	43.5