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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: 2025-10-21

Holstein Cows

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List of Tables

1	Summary for Test-day 2025-10-21 (Number of Samples Tested: 56)	2
2	Quantification of Specific Cases (% of herd) and Loss in Production on 2025-10-21	2
3	Benchmark: Herd with the Top 25%, Average and Bottom 25% for different traits tested the last month of for Holstein Cows	2
4	Summary of Somatic Cell Counts per Lactation Group in the herd for 56 Holstein Cows	3
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	3
6	Bulk Tank Results for 2025-10-21 (Number of Samples Tested: 0)	3
7	Somatic Cell Count (SSC) distribution and Milk Loss Monitor 2025-10-21	5
8	Cows Under Pressure (SCC > 500k and Lactose % < 4.6)	6
9	Cows with Somatic Cell Counts > 200k (Status: N=New -, C=Chronic -, R=Recurring - and CR=Chronic and Recurring Infections)	7
10	Possible Ketosis Cases; Cows under 100 days in milk (Prot. Fat Ratio < 0.68 for Jerseys and < 0.74 for other Breeds)	8
11	Possible Acidosis Cases (Protein % > Butterfat %)	9
12	Dry Cows with a Dry Period more than 55 Days	10
13	Cows with an active Inter-Calving Period (ICP) > 400 days	11

List of Figures

1	Somatic Cell Count (SCC) Trend	3
2	Percentage (%) of Cows with Somatic Cell Counts (SCC) more than 200k and 750k, respectively, per Test-day	4
3	Somatic Cell Count (SCC) Monitor Trend	4
4	Average Somatic Cell Counts (SCC, x1000/ml) per Day In Milk (DIM)	5
5	Somatic Cell Count (SCC) Distribution for Test-day (2025-10-21)	5

HERD HEALTH SUMMARY REPORT

UNIVERSITEIT VAN PRETORIA - Holstein Cows

Table 1: Summary for Test-day 2025-10-21 (Number of Samples Tested: 56)

Analysis	Results	Norms*	% Cows outside norms*
Milk Production (kg)	Avg.: 32.4 Median: 32.1		
Butterfat (%)	Avg.: 4.53 Median: 4.44	3.5 % - 6.0 %	Too Low: 0 % Too High: 2 %
Protein (%)	Avg.: 3.35 Median: 3.32	3.0 % - 4.5 %	Too Low: 12 % Too High: 0 %
Lactose (%)	Avg.: 4.93 Median: 4.94	> 4.7 %	Too Low: 9 %
MUN (mg/dl)	Avg.: 16.36 Median: 16.50	8 - 16 mg/dl	Too Low: 0 % Too High: 50 %
SCC (x1000/ml)	Avg.: 211 Median: 50 % < 100 : 67.9 % % < 200 : 76.8 % % < 500 : 89.3 % % > 750 : 8.9 % % > 1 000 : 7.1 % % > 1 500 : 1.8 %	< 200 > 64 % > 75 % > 92 % < 4.8 % < 1 % NONE	Too High: 0 % Too High: 0 % Too High: 2.7 % Too High: 4.1 % Too High: 6.1 % Too High: 1.8 %
Butterfat Protein ratio	Average: 1.4	> 1.0	Too High: 0.0 %

Table 2: Quantification of Specific Cases (% of herd) and Loss in Production on 2025-10-21

Loss in Production due to:		Avg/Median SCC (Number (n)):	
SSC (kg per day):	84.6 (4.7 %)	1st Lact Cows:	257/40 (31)
DIM (kg per day):	1294.3 (71.3 %)	2nd Lact Cows:	112/70 (13)
No. of Cows Under Pressure:	0 (0.0 %)	3rd Lact Cows:	101/70 (7)
No. Cows with SCC > 200k:	13 (23.2 %)	4th Lact Cows:	336/210 (5)
No. Cows with SCC > 750k:	5 (8.9 %)	5th Lact Cows:	0/ (0)
No. New Infections:	0 (0.0 %)	6+ Lact Cows:	0/ (0)
No. Recurring Infections:	6 (10.7 %)	Avg. SCC for SCC > 750k (n):	1396 (5)
Cure Rate for SCC > 200k:	33.3 % (5)	Avg. Days In Milk (DIM) for Herd:	382
Cure Rate for SCC > 750k:	50.0 % (4)	Median of DIM for Herd:	363
No. Chronic Infections (SCC > 200k):	8 (14.3 %)	Avg. DIM for SCC < 200k (n):	401 (43)
No. Chronic Infections (SCC > 750k):	2 (3.6 %)	Avg. DIM for SCC > 200k and < 750k (n):	374 (8)
No. of Possible Ketosis Cases:	0	Avg. DIM for SCC > 750k (n):	233 (5)
No. of Possible Acidosis Cases:	0		
Avg. Age at First Calf (Months):	25	Avg. Parity for Herd:	2
Avg. Inter-Calf Period (Days):	425	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	4.53	3.35	4.93	211	16.36
Top 25%	46.9	3.91	3.58	4.92	25	11.40
Breed Avg	38.9	3.56	3.36	4.79	287	9.25
Bottom 25%	31.6	3.14	3.12	4.69	165	6.50

*** 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 56 Holstein Cows

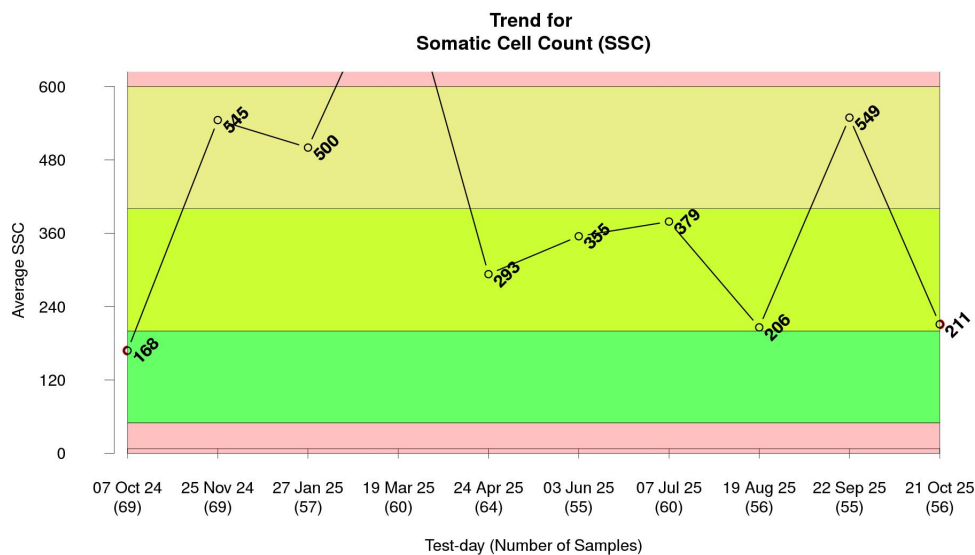
Lactation Group	% of Herd	Early Lactation	Mid Lactation	Late Lactation	% SCC > 200k	% SCC > 750k
1	55.4% (31)	0.0% (0)	7.1% (4)	48.2% (27)	12.5% (7)	7.1% (4)
2	23.2% (13)	0.0% (0)	5.4% (3)	17.9% (10)	3.6% (2)	0.0% (0)
3	12.5% (7)	0.0% (0)	3.6% (2)	8.9% (5)	1.8% (1)	0.0% (0)
4	8.9% (5)	0.0% (0)	3.6% (2)	5.4% (3)	5.4% (3)	1.8% (1)
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)	0% (0)	19.7% (11)	80.4% (45)	23.3% (13)	8.9% (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)	50.0% (2)	50.0% (2)	18.5% (5)	7.4% (2)
2	0% (0)	0% (0)	0.0% (0)	0.0% (0)	20.0% (2)	0.0% (0)
3	0% (0)	0% (0)	0.0% (0)	0.0% (0)	20.0% (1)	0.0% (0)
4	0% (0)	0% (0)	50.0% (1)	0.0% (0)	66.7% (2)	33.3% (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 2025-10-21 (Number of Samples Tested: 0)

Tank No	Butterfat (%)	Protein (%)	Lactose (%)	SCC (x1000/ml)	MUN (mg/dl)	pH
Calculated Tank	4.51	3.32	4.93	192	16	

**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.

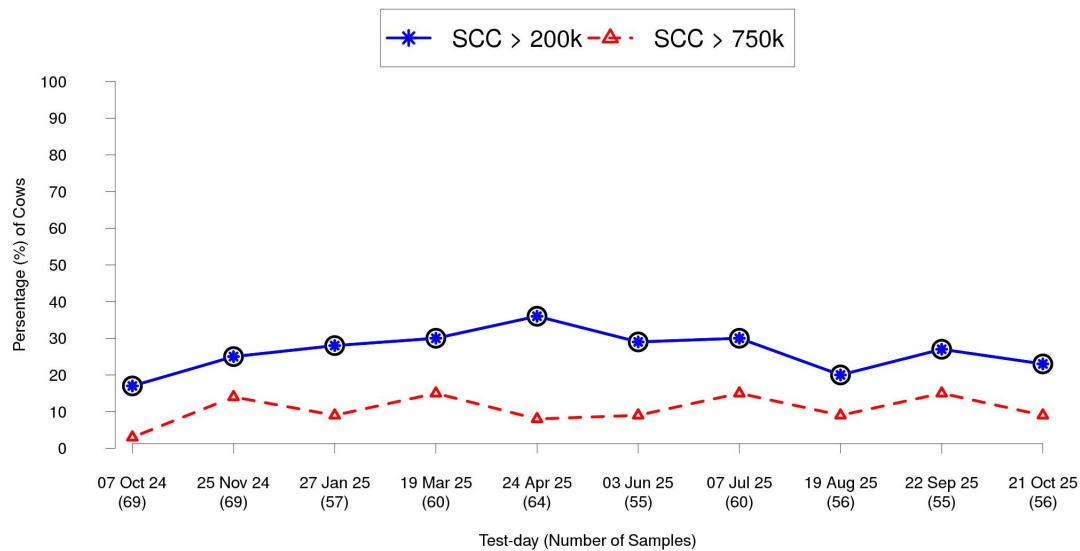


Figure 2: Percentage (%) of Cows with Somatic Cell Counts (SCC) more than 200k and 750k, respectively, per Test-day

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.

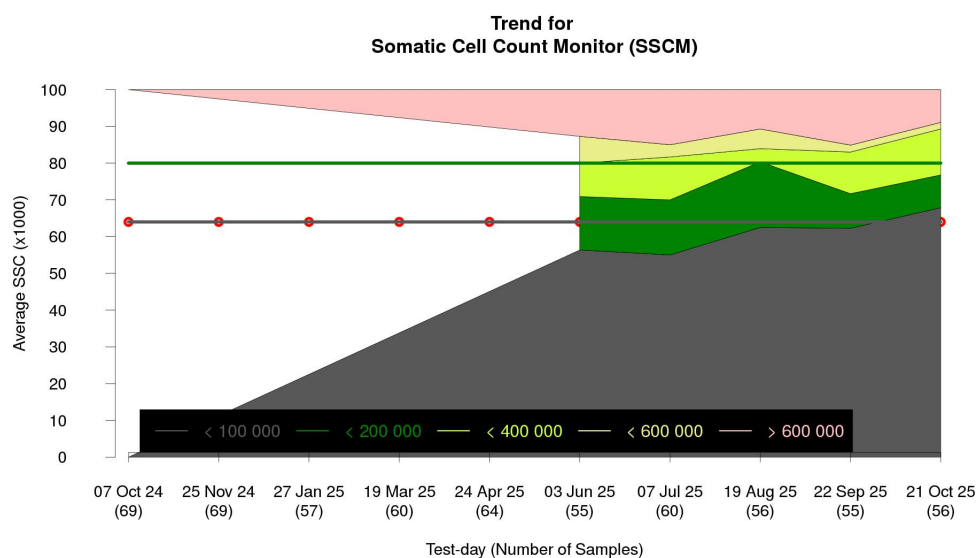


Figure 3: Somatic Cell Count (SCC) Monitor Trend

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.

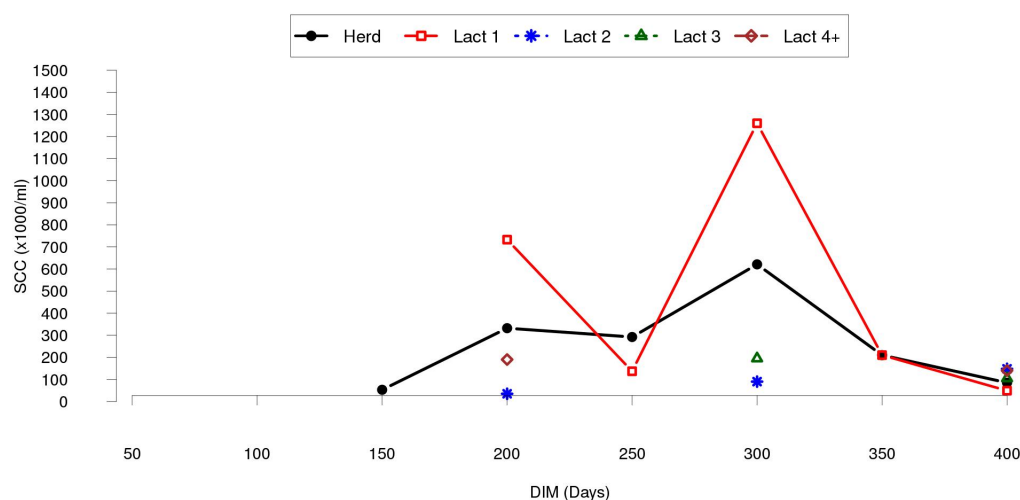


Figure 4: Average Somatic Cell Counts (SCC, x1000/ml) per Day In Milk (DIM)

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.

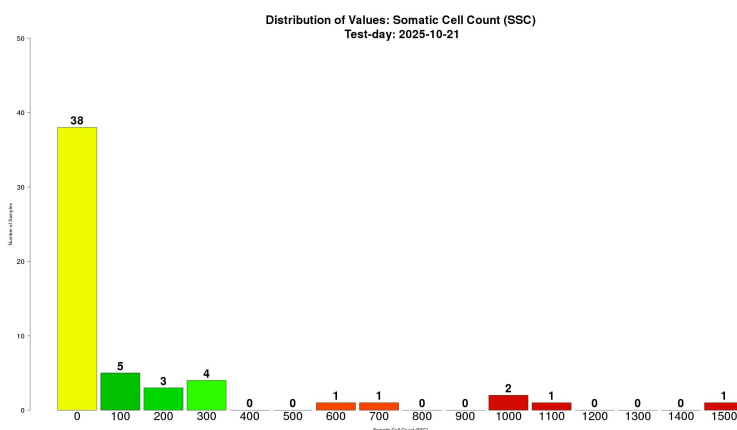


Figure 5: Somatic Cell Count (SCC) Distribution for Test-day (2025-10-21)

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 2025-10-21

SSC Levels	< 100k	100k - 200k	200k - 500k	500k - 800k	800k - 1 500k	> 1 500k
Number Cows	38	5	7	2	3	1
% Cows	67.9 %	8.9 %	12.5 %	3.6 %	5.4 %	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 2025-10-21 for the herd, was 211 000. 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
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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 2025-10-21	SCC 2025-09-22	SCC 2025-08-19	Production	DIM	Parity	Status
23007	23007	2980	798	416	22	289	1	C
23012	23012LUNAR	1130	1236	1051	27.4	191	1	C
23011	23011LUNAR	1060	-	72	24.9	190	1	R
1936	1936 MEGAMAN	1020	1137	1649	29	201	4	C
22021	22021 BRANTLEY	790	1159	606	35.6	295	1	C
23002	23002 FF TWIN	600	342	197	30.4	308	1	R
1919	1919	380	25	549	40.9	581	2	R
23010	23010 LUNAR	350	8529	1034	32.1	211	1	C
21007	21007 INTACT	350	332	432	33.5	412	2	CR
1940	1940 DUNHILL	320	516	1078	44.1	172	4	C
22016	22016 VEKOMO	260	1370	151	32.1	475	1	R
20033	20033MOVER	240	119	58	33.7	259	3	R
1835	1835	210	754	1138	29.8	571	4	C

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

Cow ID	Name	Production	DIM	Parity	Prot % to Fat %
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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	-	-	-	2134	1841

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	-	-	-	2134	-
ZNDP150019	1519	HST	500	401	5	1106	-
21027	21027	HST	-	-	-	679	30.6
-	20033	HST	-	-	-	656	-
22003	22003 LIWAY	HST	-	-	-	654	31.1
22001	22001	HST	-	-	-	649	24
ZNDP190038	1938 DUNHILL	HST	344	354	2	620	29.5
1917	1917 INTACT	HST	441	471	2	616	57.1
21006	21006	HST	363	363	1	614	-
ZNDP200031	20031	HST	424	424	1	606	31.1
ZNDP210003	21003	HST	388	388	1	604	36.5
ZNDP190004	1904 IKEA	HST	374	380	3	589	29.1
-	21038 LIWAY SIL	HST	-	-	-	586	20.3
1919	1919	HST	763	763	1	579	40.9
-	22002 LIWAY	HST	-	-	-	577	39.5
ZNDP180035	1835	HST	445	422	3	569	29.8
22011	22011 MIGNON	HST	-	-	-	551	31
-	22009 LIWAY SIL	HST	-	-	-	548	37.8
1945	1945 DUNHILL	HST	765	765	1	539	41.6
22004	22004 INTACT	HST	-	-	-	524	38.9
-	21041 MOVER	HST	-	-	-	518	36.9
-	22012 LIWAY	HST	-	-	-	509	34
-	22019	HST	-	-	-	502	35.2
22017	22017 BRANTLEY	HST	-	-	-	478	-
22016	22016 VEKOMO	HST	-	-	-	473	32.1
-	21019INTACT	HST	368	368	1	468	-
21012	21012MOVER	HST	394	394	1	465	39.2
22013	22013 INTACT	HST	-	-	-	449	40.6
22027	22027VEKOMA	HST	-	-	-	449	40.7
21007	21007 INTACT	HST	391	391	1	410	33.5
-	21026	HST	393	393	1	406	-
-	21008 MOVER	HST	465	465	1	402	40.2