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STUD BOOK

Logix Melk/Milk

Kudde Gesondheids Verslag / Herd Health Report

VERLORENKLOOF DEVELOPMENT

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Test-day: 2024-10-21

Friesland Cows

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HERD HEALTH SUMMARY REPORT

VERLORENKLOOF DEVELOPMENT - Friesland Cows

Table 1: Summary for Test-day 2024-10-21 (Number of Samples Tested: 50)

Analysis	Results	Norms*	% Cows outside norms*
Milk Production (kg)	Avg.: 18.4 Median: 18.4		
Butterfat (%)	Avg.: 4.45 Median: 4.42	3.5 % - 6.0 %	Too Low: 2 % Too High: 0 %
Protein (%)	Avg.: 3.43 Median: 3.33	3.0 % - 4.5 %	Too Low: 6 % Too High: 2 %
Lactose (%)	Avg.: 4.61 Median: 4.64	> 4.7 %	Too Low: 72 %
MUN (mg/dl)	Avg.: 9.21 Median: 8.45	8 - 16 mg/dl	Too Low: 38 % Too High: 2 %
SCC (x1000/ml)	Avg.: 375 Median: 125 % < 100 : 36.0 % % < 200 : 66.0 % % < 500 : 80.0 % % > 750 : 12.0 % % > 1 000 : 10.0 % % > 1 500 : 6.0 %	< 200 > 64 % > 75 % > 92 % < 4.8 % < 1 % NONE	Too High: 28.0 % Too High: 9.0 % Too High: 12.0 % Too High: 7.2 % Too High: 9.0 % Too High: 6.0 %
Butterfat Protein ratio	Average: 1.3	> 1.0	Too High: 4.0 %

Table 2: Quantification of Specific Cases (% of herd) and Loss in Production on 2024-10-21

Loss in Production due to:		Avg/Median SCC (Number (n)):	
SSC (kg per day):	61.3 (6.7 %)	1st Lact Cows:	88/89 (4)
DIM (kg per day):	0 (0.0 %)	2nd Lact Cows:	312/120 (10)
No. of Cows Under Pressure:	7 (14.0 %)	3rd Lact Cows:	394/104 (20)
No. Cows with SCC > 200k:	17 (34.0 %)	4th Lact Cows:	331/166 (7)
No. Cows with SCC > 750k:	6 (12.0 %)	5th Lact Cows:	666/231 (7)
No. New Infections:	11 (22.0 %)	6+ Lact Cows:	194/194 (2)
No. Recurring Infections:	4 (8.0 %)	Avg. SCC for SCC > 750k (n):	1824 (6)
Cure Rate for SCC > 200k:	27.8 % (5)	Avg. Days In Milk (DIM) for Herd:	153
Cure Rate for SCC > 750k:	40.0 % (2)	Median of DIM for Herd:	130
No. Chronic Infections (SCC > 200k):	4 (8.0 %)	Avg. DIM for SCC < 200k (n):	156 (33)
No. Chronic Infections (SCC > 750k):	0 (0.0 %)	Avg. DIM for SCC > 200k and < 750k (n):	169 (11)
No. of Possible Ketosis Cases:	11	Avg. DIM for SCC > 750k (n):	104 (6)
No. of Possible Acidosis Cases:	2	Avg. Parity for Herd:	3
Avg. Age at First Calf (Months):	32	Avg. Parity for SCC < 200k:	3
Avg. Inter-Calf Period (Days):	493	Avg. Parity for SCC > 200k and < 750k:	4
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 Friesland Cows

	Milk Production (kg)	Butterfat (%)	Protein (%)	Lactose (%)	SCC (x1000/ml)	MUN (mg/dl)
Herd	18.4	4.45	3.43	4.61	375	9.21
Top 25%	47.3	4.42	3.53	4.92	31	14.90
Breed Avg	40.0	4.06	3.32	4.78	306	12.60
Bottom 25%	33.6	3.66	3.09	4.66	194	10.30

*** 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 50 Friesland Cows

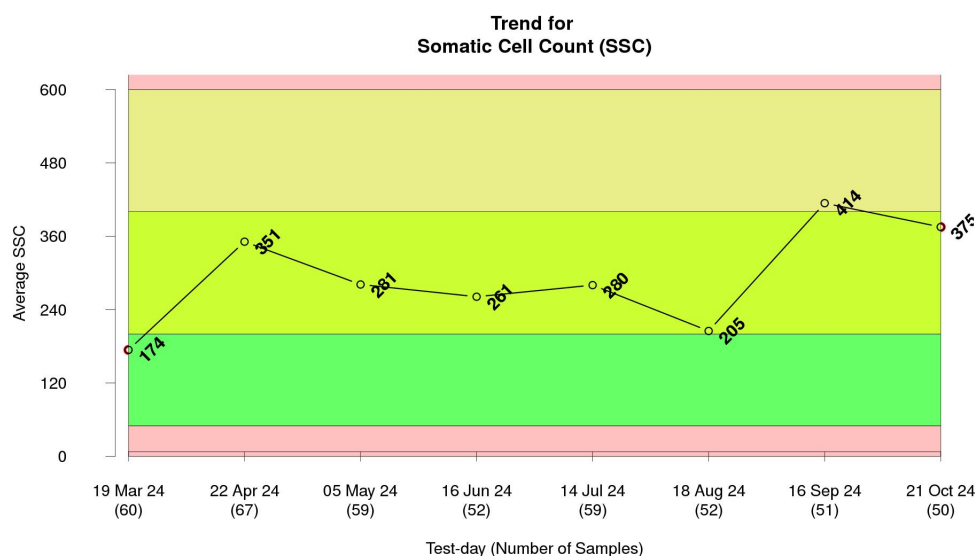
Lactation Group	% of Herd	Early Lactation	Mid Lactation	Late Lactation	% SCC > 200k	% SCC > 750k
1	8.0% (4)	4.0% (2)	2.0% (1)	2.0% (1)	0.0% ()	0.0% ()
2	20.0% (10)	12.0% (6)	8.0% (4)	0.0% (0)	4.0% (2)	2.0% (1)
3	40.0% (20)	14.0% (7)	10.0% (5)	16.0% (8)	12.0% (6)	6.0% (3)
4	14.0% (7)	0.0% (0)	2.0% (1)	12.0% (6)	6.0% (3)	2.0% (1)
5	14.0% (7)	6.0% (3)	6.0% (3)	2.0% (1)	10.0% (5)	2.0% (1)
6+	4.0% (2)	0.0% (0)	4.0% (2)	0.0% (0)	2.0% (1)	0.0% ()
Herd	100% (50)	36% (18)	32% (16)	32% (16)	34% (17)	12% (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 50 Friesland 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% ()	0.0% ()
2	33.3% (2)	16.7% (1)	0.0% ()	0.0% ()	0% ()	0% ()
3	42.9% (3)	28.6% (2)	0.0% ()	0.0% ()	37.5% (3)	12.5% (1)
4	0% ()	0% ()	0.0% ()	0.0% ()	50.0% (3)	16.7% (1)
5	66.7% (2)	33.3% (1)	66.7% (2)	0.0% ()	100.0% (1)	0.0% ()
6+	0% ()	0% ()	50.0% (1)	0.0% ()	0% ()	0% ()

Table 6: Bulk Tank Results for 2024-10-21 (Number of Samples Tested: 0)

Tank No	Butterfat (%)	Protein (%)	Lactose (%)	SCC (x1000/ml)	MUN (mg/dl)	pH
Calculated Tank	4.43	3.40	4.61	394	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.

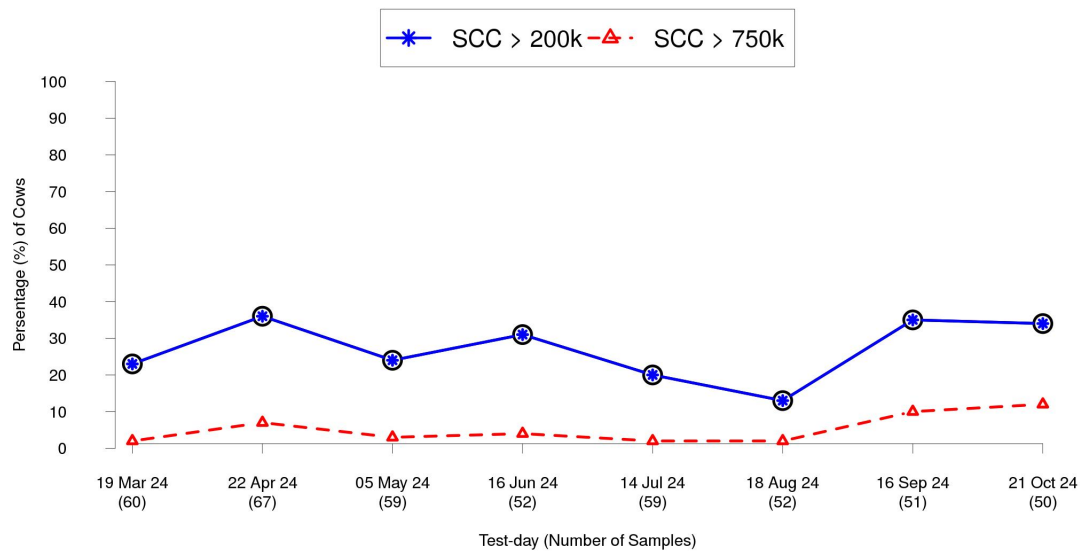


Figure 2: Percentage (%) of Cows with Somatic Cell Counts (SCC) more than 200k and 750k, respectively, per Test-day

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.

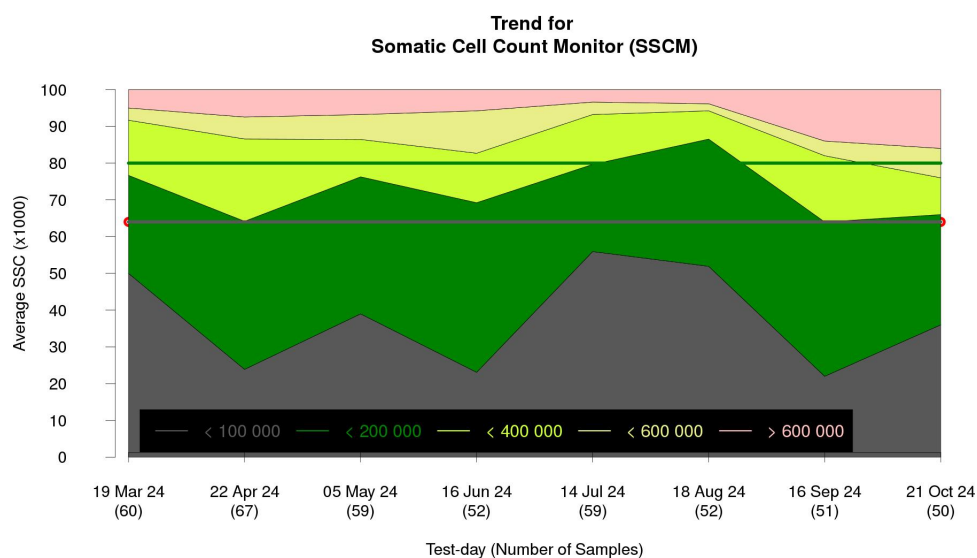


Figure 3: Somatic Cell Count (SCC) Monitor Trend

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.

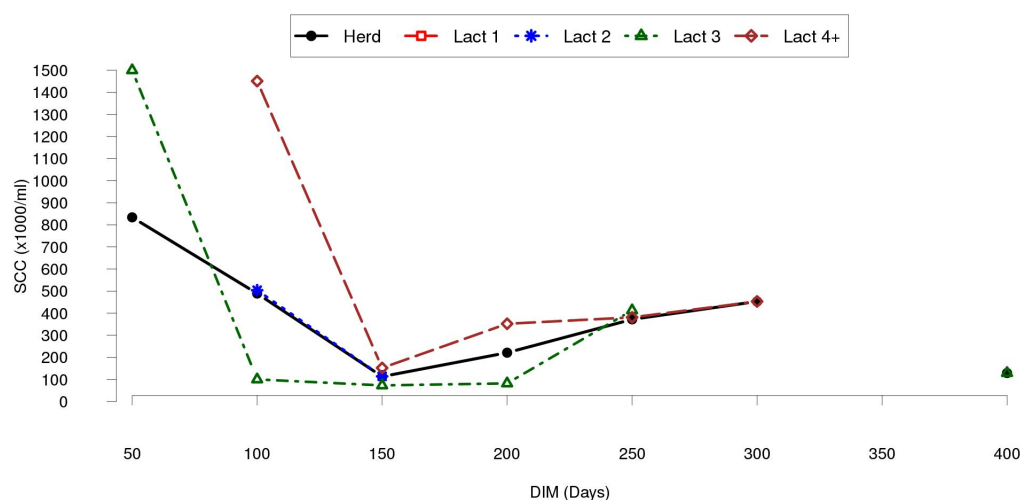


Figure 4: Average Somatic Cell Counts (SCC, x1000/ml) per Day In Milk (DIM)

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.

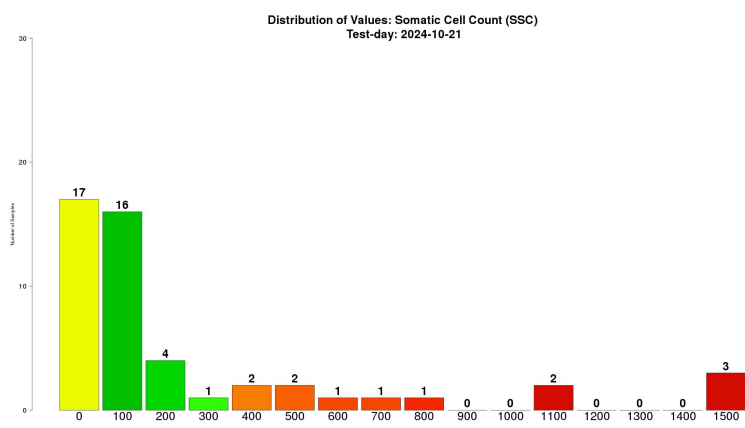


Figure 5: Somatic Cell Count (SCC) Distribution for Test-day (2024-10-21)

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 2024-10-21

SSC Levels	< 100k	100k - 200k	200k - 500k	500k - 800k	800k - 1 500k	> 1 500k
Number Cows	17	16	7	4	3	3
% Cows	34.0 %	32.0 %	14.0 %	8.0 %	6.0 %	6.0 %
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 2024-10-21 for the herd, was 375 000. 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
201710	201710	2688	4.56	59	5	21.8
201928	201928	1159	4.04	16	3	13.4
201827	201827	1120	4.40	239	3	18.4
201610	201610	807	4.16	224	4	21.2
201626	201626	708	4.41	176	5	15.2
201619	201619	683	4.36	264	5	14.3
201727	201727	567	4.12	256	4	13.4

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 2024-10-21	SCC 2024-09-16	SCC 2024-08-18	Production	DIM	Parity	Status
201809	201809	3210	-	-	24.6	16	3	N
201710	201710	2688	1097	-	21.8	59	5	N
202029	202029	1957	4432	-	18.4	67	2	N
201928	201928	1159	-	-	13.4	16	3	N
201827	201827	1120	171	87	18.4	239	3	N
201610	201610	807	331	230	21.2	224	4	CR
201626	201626	708	707	4066	15.2	176	5	C
201619	201619	683	719	375	14.3	264	5	CR
201829	201829	579	231	187	16.5	243	3	R
201727	201727	567	189	115	13.4	256	4	R
201713	201713	420	466	456	17	213	4	C
202010	202010	413	202	-	18.8	72	2	N
202005	202005	339	-	-	19.8	5	3	N
201611	201611	280	231	168	16.4	177	6	N
201632	201632	231	107	80	20.6	122	5	N
201921	201921	225	2316	-	15.8	247	3	N
201621	201621	214	192	168	21.8	87	5	N

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
201710	201710	21.8	59	5	0.70	FLD
202205	202205	18.8	32	1	0.71	FLD
202010	202010	18.8	72	2	0.71	FLD
201928	201928	13.4	16	3	0.71	FLD
201807	201807	31.4	75	3	0.71	FLD
201933	201933	20.6	73	3	0.71	FLD
201922	201922	21.8	75	3	0.72	FLD
202128	202128	14	59	2	0.72	FLD
201821	201821	23	65	3	0.73	FLD
202217	202217	17.2	51	1	0.74	FLD
201809	201809	24.6	16	3	0.74	FLD

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

Cow ID	Name	Production	DIM	Parity	Prot % to Fat %
201931	201931	13.6	243	3	1.14
201619	201619	14.3	264	5	1.11

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
VKL 180008	201808	FLD	651	651	1	792	471

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
VKL 190032	201932	FLD	-	-	-	793	23
VKL 180008	201808	FLD	651	651	1	792	-
201929	201929	FLD	-	-	-	791	17.8
VKL 170005	201705	FLD	981	981	1	718	20.2
201621	201621	FLD	551	471	3	699	21.8
VKL 190028	201928	FLD	-	-	-	677	13.4
201710	201710	FLD	485	434	3	667	21.8
202031	202031	FLD	-	-	-	661	20.6
VKL 200011	202011	FLD	-	-	-	660	17.8
VKL 190006	201906	FLD	-	-	-	659	20
VKL 180019	201819	FLD	479	479	1	659	19.4
VKL 160036	201636	FLD	372	332	4	652	-
201821	201821	FLD	612	612	1	647	23
VKL 180007	201807	FLD	846	846	1	630	31.4
201632	201632	FLD	651	503	3	605	20.6
VKL 170001	201701	FLD	350	350	1	604	22.4
VKL 160031	201631	FLD	692	502	3	580	23.8
VKL 170002	201702	FLD	424	470	3	575	-
202024	202024	FLD	-	-	-	575	18.4
VKL 180005	201805	FLD	380	438	2	570	-
201809	201809	FLD	740	740	1	526	24.6
VKL 200018	202018	FLD	-	-	-	523	-
202019	202019	FLD	-	-	-	521	-
VKL 200010	202010	FLD	-	-	-	515	18.8
VKL 170017	201717	FLD	435	426	3	511	-
VKL 190015	201915	FLD	466	466	1	509	-
202017	202017	FLD	-	-	-	508	16
VKL 210007	202107	FLD	-	-	-	508	-
201818	201818	FLD	456	456	1	497	14.8
201734	201734	FLD	748	640	2	495	-
VKL 190022	201922	FLD	474	474	1	487	21.8
201933	201933	FLD	-	-	-	484	20.6
202029	202029	FLD	-	-	-	475	18.4
201616	201616	FLD	331	345	5	462	-
VKL 160013	201613	FLD	711	593	3	428	-
VKL 190027	201927	FLD	383	383	1	425	-
VKL 170022	201722	FLD	288	457	2	422	-
VKL 170012	201712	FLD	485	366	4	422	-
VKL 170008	201708	FLD	376	388	4	417	-
201802	201802	FLD	460	520	2	401	13.2
201902	201902	FLD	540	540	1	401	-