DHI-302

DHI Herdcode	Test Type & Description	Breed	Sample Date	Process Date
41990010	41 DHI-OSAP	HO	4/02/10	4/05/10

Days	Test Interval		FRep	PString
41	2/21	4/02/10	97MN	HERD

MNDHIA SAMPLE HERD

Herd Summary

Minnesota DHIA

- 90% of 1st lactation cows should be in 0-3 range. If less than 90%, heifer management may be compromised.
- 80% of the whole herd should be under a Linear Score of 4.

Peak and Persistency

305 ME Milk	305 ME $ Value	Prod Index	Lact	Cows	DIM	Peak DIM	Peak Milk	
							78	
							101	80 +3.2
							102	79 +5.0
							90	75 +5.5

0.77

Sold	14604
Shipped	110%
Value	$2416
$ / cwt	15.00

Less than 20% of the herd should be infected.

BASED ON 127 COWS

Current SCC Evaluation

Number Cows	SCC LS	% Infected	Lact	% Cows by Linear Score 0,1	2,3	4,5,6	7,8,9
119	2.7	23	1	26	47	20	7
51	3.0	24	2	27	39	[illegible]	12
60	[illegible]	43	3+	21	30	32	17
230	3.1	28	All	26	41	23	10

MONTHLY SCC $ LOSS 2158

- If high <30 DIM - dry cow and prefresh housing may need attention. If only lactation 1, look into heifer housing and management.
- If high 30-220 DIM - ineffective milking procedure or marginal equipment. Could be ineffective control of cow to cow spread where contagious pathogens are of concern or high exposure to environmental pathogens.
- If high >220 DIM - possibly over milking late lactation cows, contracting a contagious pathogen from other cows. Chronic cows may also fall into this group.

- If the trend from <30 to >220 is low to high target milking procedure and teat dipping, have equipment and vacuum levels checked at least every 6 months. An inconsistent dry cow program may also be a problem.

Milk	> 200
	73
	81
	68
	74

Yearly SCC Summary

Lact	% Infected by DIM < 30	30-220	> 220
1	50	25	22
2	21	27	41
3+	38	40	44
All	40	30	34

BASED ON 2228 SAMPLES

Changes in SCC Status

Fresh vs Last Dry Off		Current vs Last Test	
Cures	Chronics	Cures	Chronics
24%	12%	10%	18%
Negatives	New Infections	Negatives	New Infections
50%	14%	62%	10%

BASED ON 103 COWS | BASED ON 230 COWS

Production Averages

								Quantity							Quality				New Infections	
								Milk Cows	Fresh Cows	DIM	Milk	MLM	% Fat	% Protein	Raw SCC	SCC LS	Number Infections	Fresh Infections	Number	%
20,577	769	642	266	88	62	110	4/02/10	234	27	178	70	76	3.6	3.0	375	3.0	65	8	24	10
20,641	772	646						227	44	169	63	70	3.9	3.2	417	3.4	74	15	33	15
20,884	777	654						209	30	176	65	72	3.8	3.2	379	3.5	71	10	32	15
21,214	784	662						212	18	183	63	70	4.1	3.3	534	3.6	81	6	44	21
21,421	788	667						213	32									9	2	11
21,608	796	671						200	11									5	19	10
21,748	801	674						207	26									8	36	17
21,900	803	676						205	26									9	28	14
21,820	803	672						207	24									8	24	12
21,765	801	670						194	16	165	73	76	3.6	3.0	426	3.4	55	3	17	9
21,851	806	673						201	18	160	73	74	3.5	3.0	516	3.3	64	6	23	11
21,942	810	676	253	86	58	101	3/28/09	218	33	157	68	71	3.9	3.2	408	3				
365 DAY AVERAGE >			249	84	56	106	AVG	210	25	175	67	73	3.7	3.1	417	3				

- A high percent of Cures and low percent of New Infections would indicate the dry cow program is effective.
- A high percent of New Infections may indicate the dry cow program or housing needs attention.

Effect of Percent New Infections on herd SCC:
- 4-7% lowers SCC
- 8-12% maintains current SCC
- >15% increases SCC

The sum of Chronics and New Infections should be below 20%. Under 20% designates the attempt to control spread is working.

NO PUBLICATION LIMITED DISCLOSURE DATA COLLECTION RATING (MILK) = 70.5

Further explanations and definitions on reverse.

Explanations and Definitions of SCC on the 302 Herd Summary

Current SCC Evaluation

- Schematic of where the herd currently is in regard to SCC and used to find out who and how bad the problem is. The information is categorized by first, second, and other lactation animals as well as an average for the entire herd.
- Linear scores of 0 and 1 are considered negligible with respect to mastitis. Scores of 2 and 3 are suspicious.
- Cows with a linear score above 4 (200,000) are considered likely to be infected with mastitis.
- Those above 7 (1,600,000) probably have clinical signs of mastitis and may have a significant impact on Bulk Tank SCC.
- Monthly SCC $ Loss – Dollars lost due to production loss. Calculated by using current linear score times yield loss times average milk price.

Year SCC Summary - shows the percentage of animals infected with a SCC over 200,000.

- Use to determine which lactation is the problem and when most infections occur

Changes in SCC Status – Compares animals' SCC status at the last test before dry off to their status at the first test after freshening.

- Fresh vs Last Dry Off
  - Negatives – Not infected at dry off, not infected after fresh
  - New Infections – Not infected at dry off, infected after fresh
  - Cures – Infected at dry off, not infected after fresh
  - Chronics - Infected at dry off, infected after fresh
- Current vs Last Test – Compares those animals at last test to the current test
  - Negatives – Not infected last test, not infected this test
  - New Infections – Not infected last test, infected this test
  - Cures – Infected last test, not infected after this test
  - Chronics - Infected lat test, infected after this test
- Goal: Have more cures than new infections for both Fresh vs Last Dry Off and Current vs Last Test

Production Averages - Right

- Raw SCC - The Raw SCC is weighted by pounds of milk, this value should be very similar to the bulk tank test. Unless high SCC cows or quarters are excluded from the bulk tank, then bulk tank will be lower.
- SCC LS – Herd average linear SCC may be compared to previous months, especially the preceding month and the same month one year earlier. An increase in SCC score indicates that subclinical mastitis is becoming increasingly more common and severe.
- Number infections - Cows are considered infected if the Raw SCC is over 200,000. New infections occur when a cow is now infected and was not infected at the previous test.
- Fresh infections - Count of fresh cows this test that are infected.
- Number new infections - Count of cows over 200 this test that were under 200 last test including fresh cows
- Percent New Infections – Percent of total infections that are new this test.

FLEX REPORT
DHI-370

41-99-0010
MINNESOTA DHIA
SAMPLE HERD

Test Date: **04-15-2010**
Processed: **04-16-2010**
Page 1 of 1

Test Type and Description	Breed
31 DHI AP	HO

TestDay Milk Actual	Expectd	Actual SCC Prev	Current	Cow		%of Tank	DIM	Lact #	Log SCC	Lact Avg This	Last	#> 200K	#SCC Tests	Prod Index	MUN	Pro %	Total Solids
55	61	857	1493	**718**	P	**33%**	183	3	6.9	6.2	4.2	6	6	75	8	3.4	
39	42	214	696	**769**	P	8%	387	3	5.8	4.2	1.7	8	12	9	11	3.8	
33	41	429	373	**752**	P	4%	414	3	4.9	4.5	3.8	10	13	104	10	3.0	
89				**2**					.9	4.9			1		15	3.3	
37				**4**					.1	4.9			9	103	10	4.1	
57	49	919	174	**706**		3%	296	3	3.8	4.5	2.0	5	9	101	10	3.5	
65	68	162	174	**749**		4%	239	6	3.8	3.5	4.3						
83	84	132	162	**727**		4%	55	2	3.7	3.6	3.3						
45	47	174	141	**698**		2%	433	6	3.5	2.8	1.5	1	14	123	9	4.0	
41	47	57	115	**744**		2%	285	3	3.2	1.5			8	102	11	3.5	
103			100	**767**		3%	14	5	3.0	3.0	4.0		1		11	3.3	
67	72	38	100	**726**		2%	125	1	3.0	2.2			5	91	6	3.0	
103	100	200	87	**784**		3%	43	4	2.8	3.4	1.7		2	90	9	2.7	
79	83	1493	76	**717**		2%	46	3	2.6	4.8	3.0	1	2	78	9	2.8	
99			76	**709**		2%	29	3	2.6	2.6	1.5		1		8	2.7	
85	101	107	76	**777**		2%	45	5	2.6	2.9	3.4		2	82	14	2.5	
69	71	57	66	**754**		1%	245	2	2.4	1.3	1.8		8	119	15	3.3	
45	41	76	66	**761**		1%	631	1	2.4	1.9		1	19	93	10	4.2	
53	46	107	66	**734**		1%	285	3	2.4	1.5	0.7		9	90	12	3.1	
85	81	57	57	**710**		2%	180	6	2.2	1.4	1.5		6	101	9	2.9	
71	69	87	50	**740**		1%	232	1	2.0	2.6			8	118	10	3.1	
85	85	20	38	**755**		1%	266	1	1.6	1.1			9	138	8	3.0	
67	56	66	38	**725**		1%	42	1	1.6	2.0			2	86	7	2.8	
61	63	20	29	**790**		1%	136	1	1.2	1.5		1	5	89	10	3.0	
37	43	20	29	**692**			174	1	1.2	1.8			6	70	5	2.8	
53	49	29	29	**742**		1%	230	1	1.2	1.2			8	93	11	3.5	
89	82	20	29	**758**		1%	179	2	1.2	1.2	1.1		6	111	7	3.1	
61		566	20	**764**			33	1	0.7	3.1		1	2		8	2.9	
67	71	20	20	**735**			202	1	0.7	0.9			6	111	10	3.4	
91	98	13	20	**728**		1%	157	5	0.7	1.5	1.2	1	5	110	13	2.9	
89	76	20	20	**695**		1%	135	2	0.7	0.6	1.3		5	96	8	3.0	
73	70	20	20	**745**		1%	198	1	0.7	1.1			7	104	9	3.2	
97	99	264	20	**782**		1%	89	3	0.7	2.1	2.1	1	3	95	12	2.7	
71			20	**794**			27	7	0.7	0.7			1		9	3.0	
				704			TF	2			2.2						
97	94	100	20	**776**			160	5		3.7	1.5	2	4	114		2.9	
70	**68**	**210**	**149**	**AVERAGE**			**186**		**2.5**	**2.6**	**2.3**			**100**	**10**	**3.2**	

718 only milk 55 pounds with 1493 SCC.

718 amounts for 33% of the total SCC for this herd.

All 6 tests she has been over 200K.

Production Index of 75 means she only produces 75% of the milk the average cow in this herd produces.

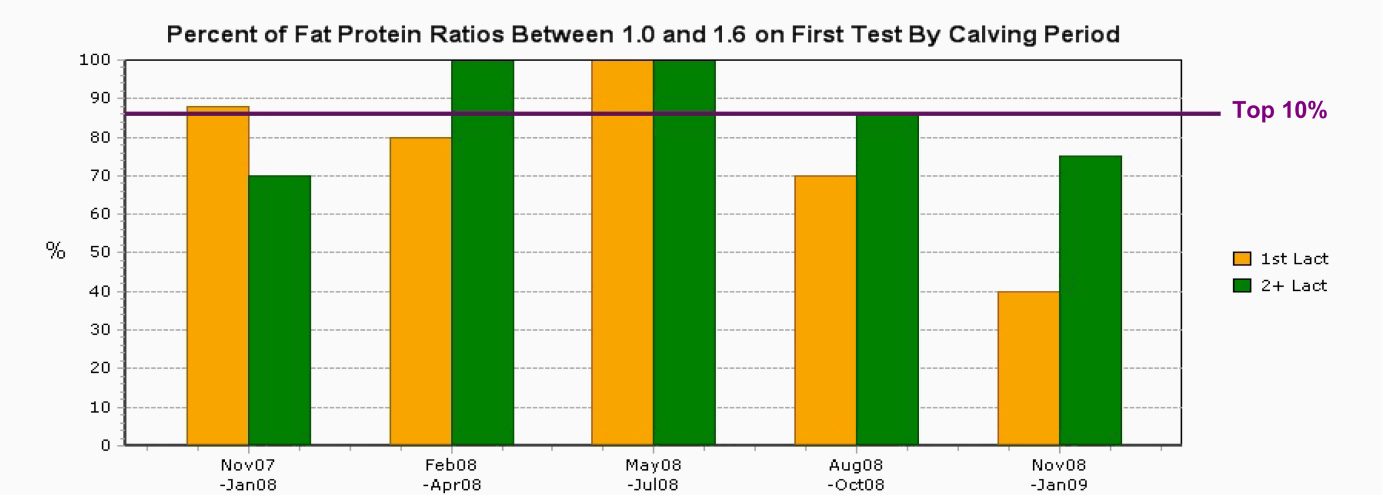
TF = Too Fresh to Test

N Cow SCC > 200,000 this test
P Cow SCC > 200,000 this test and last

Fat Protein Ratio (FPR)

Is it appropriate on the first test?

The ratio of milk fat% to protein% (FPR) can indicate metabolic problems resulting from an inadequate transition management program. A normal FPR of 1.0 to 1.6 indicates that cows began the lactation eating well, are maintaining bodyweight and have a low incidence of metabolic and infectious disorders. Although FPR does not indicate whether fat% or protein% is at the improper level, it is an alert for potential problems.

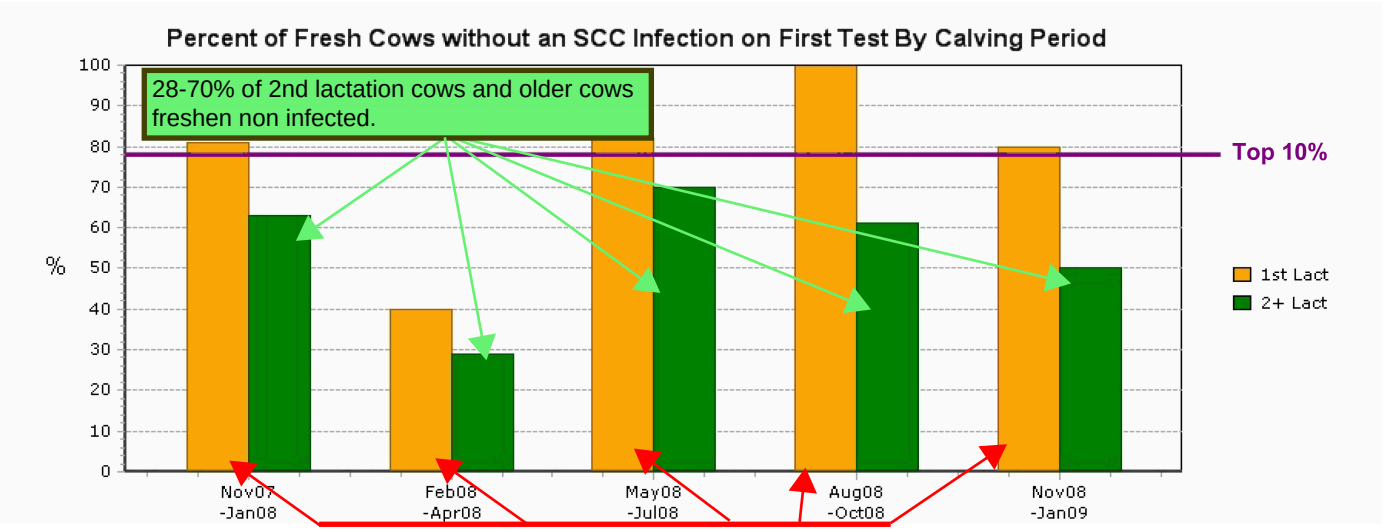


	Nov-Jan	Feb-Apr	May-Jul	Aug-Oct	Nov-Jan
# 1st Included	17	5	11	10	5
# 2+ Included	20	7	10	28	20

Udder Health

What percent of the herd does not have an SCC infection on the first test?

Although there is no absolute threshold of SCC for subclinical mastitis, it is usually accepted that a cow with 200,000 cells per ml or 4.0 SCC score has mastitis. A high percentage of infected cows early in lactation indicates potential problems in dry cow treatment programs or dry pen conditions. Note: cured=high at dry off but low at calving, and chronic=high at dry off and calving.



	Nov-Jan	Feb-Apr	May-Jul	Aug-Oct	Nov-Jan
# 1st Included	16	5	11	10	5
# 2+ Included	19	7	10	28	20

40-100% 1st lactation cows freshen non infected.

Udder Health for 2+ Lactation By Calving Period

	Nov-Jan	Feb-Apr	May-Jul	Aug-Oct	Nov-Jan	
% New Cases	21	50	10	25	32	= 25.6%
% Chronics	16	17	20	14	21	
% Cures	21	17	40	21	16	= 21.9%
# Included	19	6	10	28	19	

The yearly weighted average for New Cases is 25.6% and 21.9% for Cures. With higher new cases than cures, the total herd SCC will be increasing.

TEST DAY BULK TANK
DHI-421

41-99-0010
MINNESOTA DHIA
SAMPLE HERD

Test Date: **04-23-2010**
Processed: **04-26-2010**

Sum of Test Day Weights	3780
Bulk Tank Weight Reported	3665
Milk Price Reported	14.35
Value of Bulk Tank	533

Number of Milking Cows	63
Milk Per Cow	61
SCC Average	714

Barn Name	Milk	Cur. SCC	Prev. SCC	Value Adjusted by SCC	% of SCC in Tank	Without This Cow SCC	Without This Cow Income	Without This and Higher Cows SCC	Without This and Higher Cows Income
407	120	4526	429	16.88	20.1	587	531.91	587	531.91
436	72	6860	4851	10.13	18.3	592	539.02	458	527.24
356	34	6860	566	4.78	8.6	657	535.07	396	528.08
380							534.78	353	522.63
399			1715				527.51		
431				9.57	5.3	688	530.13		
366	72	1838	1715	10.13	4.9	692	529.55	243	496.80
357	64	1838	2263	9.01	4.4	694	530.71	211	486.95
359	64	1493	650	9.01	3.5	700	523.78	185	482.98
384	92	857	132	12.94	2.9	710	519.76	164	468.64
475	58	1213	429	8.16	2.6	706	524.64	143	459.59
367	84	400	100	12.58	1.2	721	520.91	136	446.50
388	42	696		6.11	1.1	714	526.93	127	439.95
392	62	460	429	9.28	1.1	718	524.06	120	430.28
345	72	348	264	10.90	0.9	721	522.63	114	419.06
364	98	174	696	15.28	0.6	729	518.90	112	403.78
373	96	174	303	14.97	0.6	728	519.18	109	388.82
378	88	187	400	13.72	0.6	727	520.33	106	375.10
404	44	373	1493	6.66	0.6	718	526.65	102	368.24
419	34	400	200	5.09	0.5	717	528.08	97	369.45
362	76	174	429	11.85	0.5	725	522.05	95	357.39
397	66	187	100	10.29	0.5	724	523.49	92	346.92
412	20	606	492	2.91	0.4	715	530.09	87	343.74
426	46	246	246	7.08	0.4	720	526.36	84	336.44
405	42	246	174	6.47	0.4	719	526.93	80	329.78
374	50	200	283	7.70	0.4	721	525.78	77	321.84
369	50	187	115	7.80	0.3	721	525.78	75	313.91
389	42	187	1600	6.55	0.3	720	526.93	72	307.24
392	66	115	76	10.29	0.3	725	523.49	71	296.77
396	66	115		10.29	0.3	725	523.49	69	286.30

407 and 436 are chronic cows infected both this test and last test.

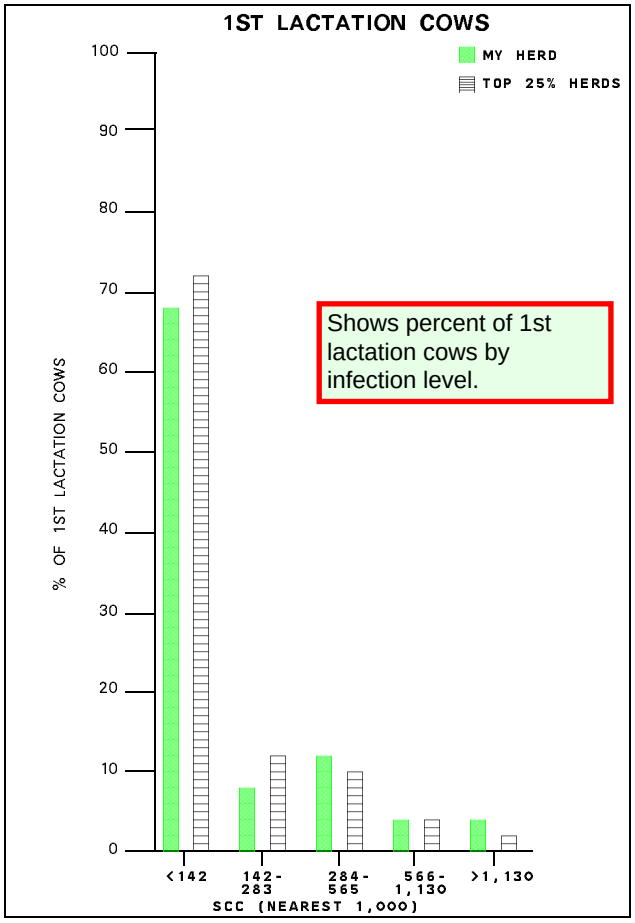
407 and 436 combined amount to 38% of the total herd SCC.

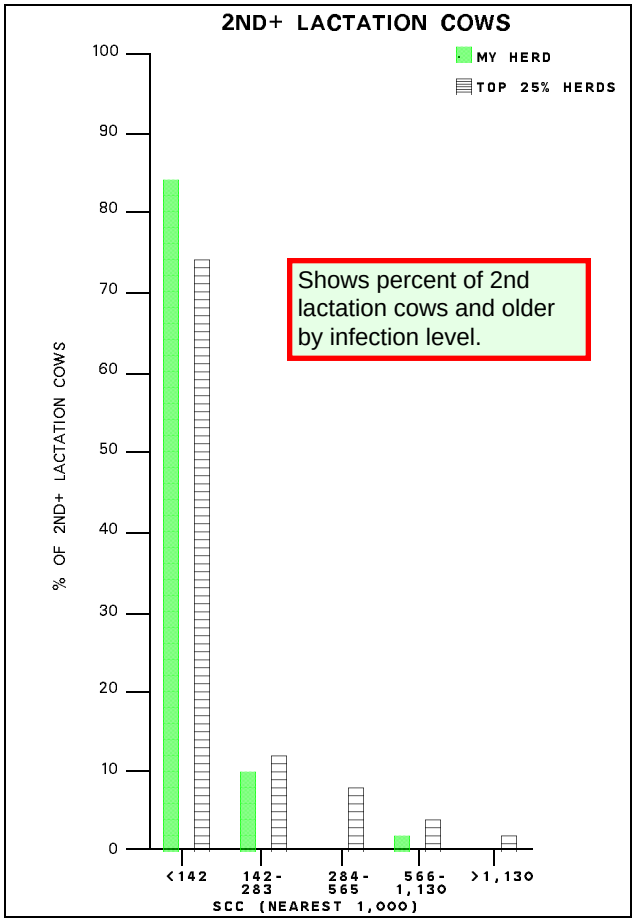
Removing just these 2 cows will lower the herd SCC from 714 to 396.

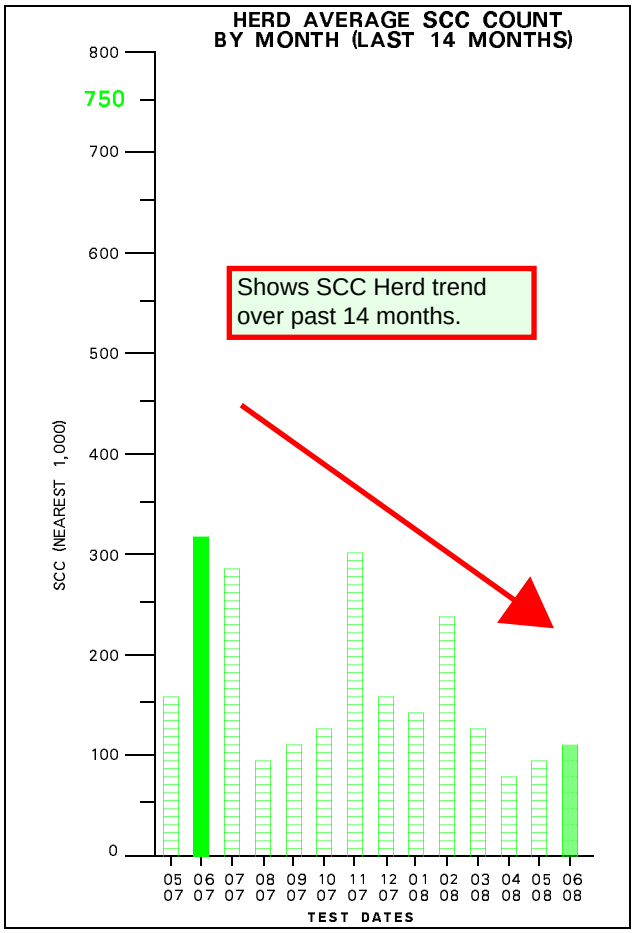
SCC GRAPHS DHI-522

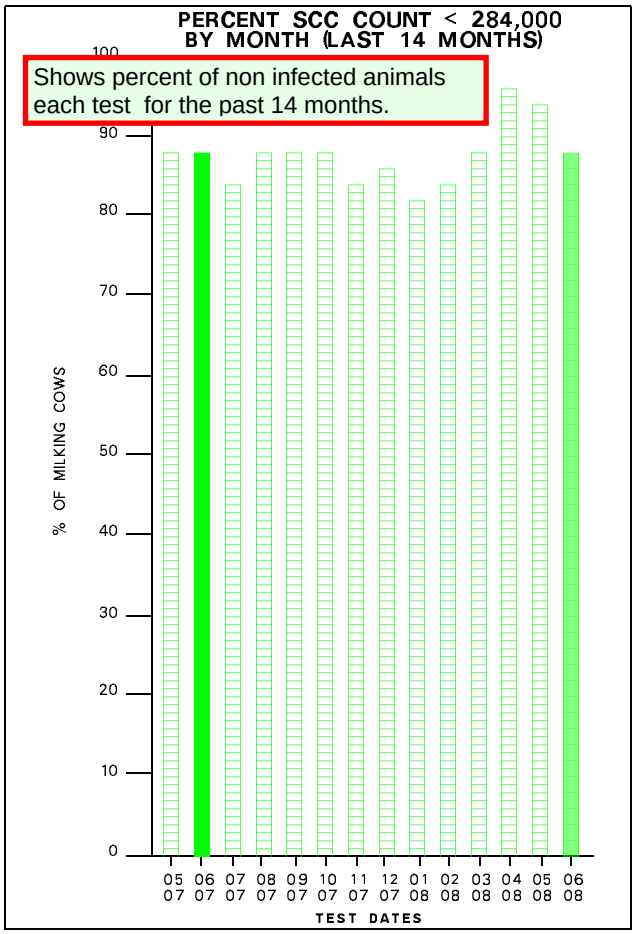
HERD CODE
41990010

1/94









Two herds - samples were taken from random cows after prep, but before milkers were applied (PRE), and after milking (POST) by stripping milk out from each quarter. The Meter represents the normal DHIA sample.

Cow	PRE	METER	POST
1	2475	296	4807
2	389	1128	1401
3	150	103	355
4	66	297	18
5	970	2197	102
6	56	72	47
7	143	18	67
8	52	27	66
9	3320	1687	6390
10	72	20	203
11	1614	3306	4399
12	715	1719	1812
13	1150	2242	3047
14	49	27	37
15	229	319	1065
16	113	109	215
17	1196	719	1526
18	396	193	708
19	25	56	250
20	66	122	244
21	1575	1733	386
22	238	62	217
23	937	272	1069
24	223	153	1021
25	5441	2475	5574
26	1790	170	1616
27	705	835	723
Average	**895**	**754**	**1384**