MILK QUALITY INVESTIGATION CHECK SHEET

HERD FINANCIAL DETAILS

Name: Address: Telephone:	Veterinarian: Address: Telephone
DHIA Y/N Herd Codes: Breed: RHA milk/cow/year (lbs): Milk shipped / year (lbs):	Date of Visit: ETA: No. of Milking cows: No. of Dry Cows: No. of Culls for mastitis in last 12 months: Cull Cow Price $/lb: Average weight of Cull Cow (lbs):

MILK SALES

Milk Processor:	SCC Details	SPC Details
	Mean SCC	Mean SPC
Average Milk Price $	Goal SCC	Goal SPC
@ % Fat	Mean SCC Premium	Mean SPC Premium
@ % Protein	Goal SCC Premium	Goal SPC Premium

SEASONAL TRENDS

Record Annual variation in SCC, SPC and Mastitis case incidence

900													45
800													40
700													35
600													30
500													25
400													20
300													15
200													10
100													5
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	

MILKING PROCEDURES

MILKING TIME

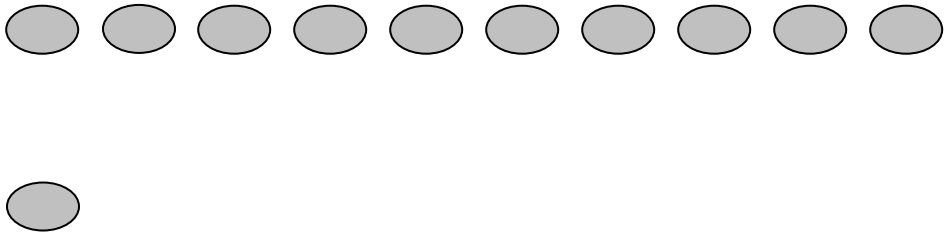
	TIME TAKEN	NO. OF MILKERS	COWS /MILKER /HOUR	MILKING ORDER F H L T ST
AM START				
AM STOP				
PM START				
PMSTOP				
3X START				
3X STOP				

UDDER PREPARATION

PRE-MILKING		POST-MILKING		
Pre-dip Product		Post-dip Product		
Application	Dip / Spray / Foamer	Application	Dip / Spray	
Wipe	Paper / Cloth /	Delay to dip	Short / Long	
Strip	Y/N	Coverage % teat		
	Floor / Cup	Dip Usage / week		
Gloves	Y/N	Cold Weather?		
Type		Unit Detacher Settings	Delay	
Udder	Clipped / flamed / hairy		Flow Rate	
Tails	Docked / clipped / hairy		Ohm Setting	

PREPARATION SEQUENCE

Strip **D**ip **W**ipe **A**pply 1 2 3 4 5 6 7 8 **D**ip **S**trip **W**ipe **A**pply



MILKER PERFORMANCE (1=Poor, 2=OK, 3=Good)

	Milker 1			Milker 2			Milker 3		
Observe foremilk	1	2	3	1	2	3	1	2	3
Pre-Dip coverage	1	2	3	1	2	3	1	2	3
Air at attachment	1	2	3	1	2	3	1	2	3
Alignment of unit	1	2	3	1	2	3	1	2	3
Machine stripping	1	2	3	1	2	3	1	2	3
Detachment	1	2	3	1	2	3	1	2	3
Post-Dip coverage	1	2	3	1	2	3	1	2	3
Glove Hygiene	1	2	3	1	2	3	1	2	3
Correct Liner Slip	1	2	3	1	2	3	1	2	3

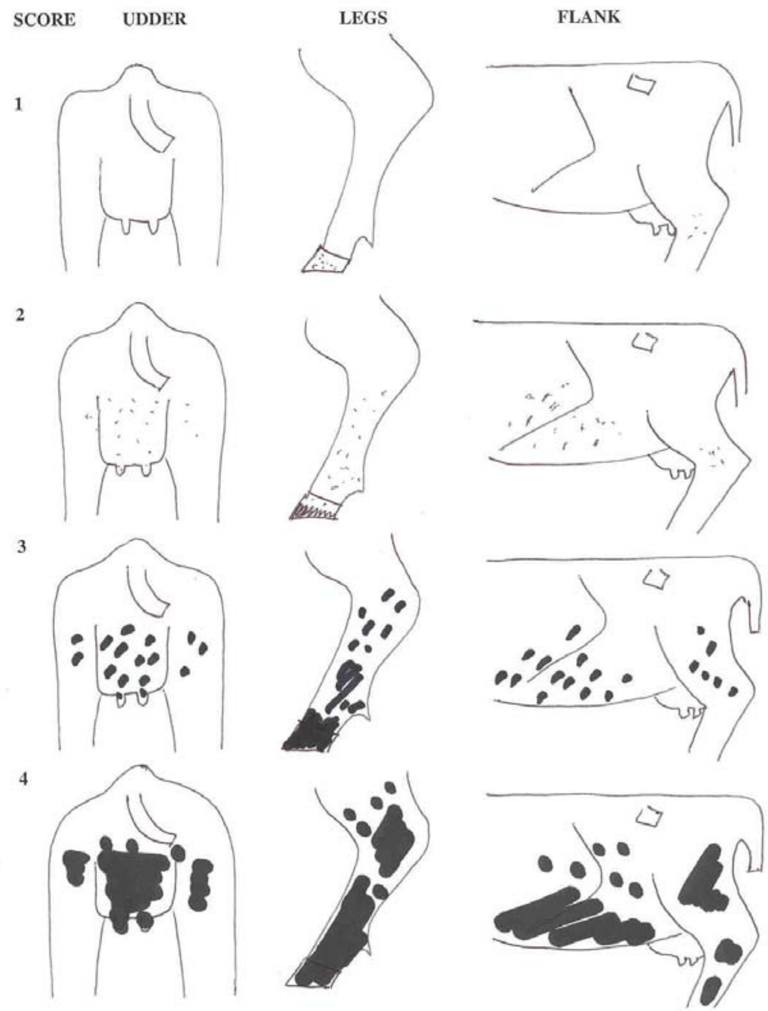
MILKING ROUTINE DATA COLLECTION FORM

COW	STIM START (DIP OR STRIP) A	DIP ON B	DIP CONTACT C-B	DIP WIPE C	STIM-UNIT-ON TIME D-A	UNIT ON D	LET DOWN AT 30S Y/N	MILK TIME E-D	UNIT OFF E	MILK (LBS)	RESI MILK (CC)	LINER SLIPS	POSITION IN PREP SEQUENCE
MEAN													
GOAL			30SECS		90 SECS						250CC	<5/100	

SIDE	START COW ENTRY A	1^{ST} COW PREP B	1^{ST} UNIT ON C	ALL UNITS ON D	ALL UNITS OFF E	ALL COWS OUT F	PREP TO ATTACH C-B		ALL UNITS ON D-A		MILKING TIME E-D		TURN TIME F-A	
								1.30		4.00		10		12-15
								1.30		4.00		10		12-15
								1.30		4.00		10		12-15
								1.30		4.00		10		12-15
								1.30		4.00		10		12-15
								1.30		4.00		10		12-15
								1.30		4.00		10		12-15
								1.30		4.00		10		12-15
								1.30		4.00		10		12-15
								1.30		4.00		10		12-15

HYGIENE SCORING (Score 25% of cows in each pen)

Key:



COW	UDDER	LEGS	FLANK	COW	UDDER	LEGS	FLANK
	1 2 3 4	1 2 3 4	1 2 3 4		1 2 3 4	1 2 3 4	1 2 3 4
	1 2 3 4	1 2 3 4	1 2 3 4		1 2 3 4	1 2 3 4	1 2 3 4
	1 2 3 4	1 2 3 4	1 2 3 4		1 2 3 4	1 2 3 4	1 2 3 4
	1 2 3 4	1 2 3 4	1 2 3 4		1 2 3 4	1 2 3 4	1 2 3 4
	1 2 3 4	1 2 3 4	1 2 3 4		1 2 3 4	1 2 3 4	1 2 3 4
	1 2 3 4	1 2 3 4	1 2 3 4		1 2 3 4	1 2 3 4	1 2 3 4
	1 2 3 4	1 2 3 4	1 2 3 4		1 2 3 4	1 2 3 4	1 2 3 4
	1 2 3 4	1 2 3 4	1 2 3 4		1 2 3 4	1 2 3 4	1 2 3 4
	1 2 3 4	1 2 3 4	1 2 3 4		1 2 3 4	1 2 3 4	1 2 3 4
	1 2 3 4	1 2 3 4	1 2 3 4		1 2 3 4	1 2 3 4	1 2 3 4
	1 2 3 4	1 2 3 4	1 2 3 4		1 2 3 4	1 2 3 4	1 2 3 4
	1 2 3 4	1 2 3 4	1 2 3 4		1 2 3 4	1 2 3 4	1 2 3 4
	1 2 3 4	1 2 3 4	1 2 3 4		1 2 3 4	1 2 3 4	1 2 3 4
	1 2 3 4	1 2 3 4	1 2 3 4		1 2 3 4	1 2 3 4	1 2 3 4
	1 2 3 4	1 2 3 4	1 2 3 4		1 2 3 4	1 2 3 4	1 2 3 4
	1 2 3 4	1 2 3 4	1 2 3 4		1 2 3 4	1 2 3 4	1 2 3 4
	1 2 3 4	1 2 3 4	1 2 3 4		1 2 3 4	1 2 3 4	1 2 3 4
	1 2 3 4	1 2 3 4	1 2 3 4		1 2 3 4	1 2 3 4	1 2 3 4
	1 2 3 4	1 2 3 4	1 2 3 4		1 2 3 4	1 2 3 4	1 2 3 4
	1 2 3 4	1 2 3 4	1 2 3 4		1 2 3 4	1 2 3 4	1 2 3 4
% 3+4				% 3+4			

HOUSING (Bedded Pack)

PEN NUMBER			
TYPE OF COW	Lactating / Far Dry / Close Up Dry / Maternity / Post-Fresh		
NUMBER OF COWS		AREA	
Stocking Density			
Base	Concrete / Lime / Earth / Sand / Mat / Mattress		Manufacturer:
Bedding	Type:	Depth:	Renewal:

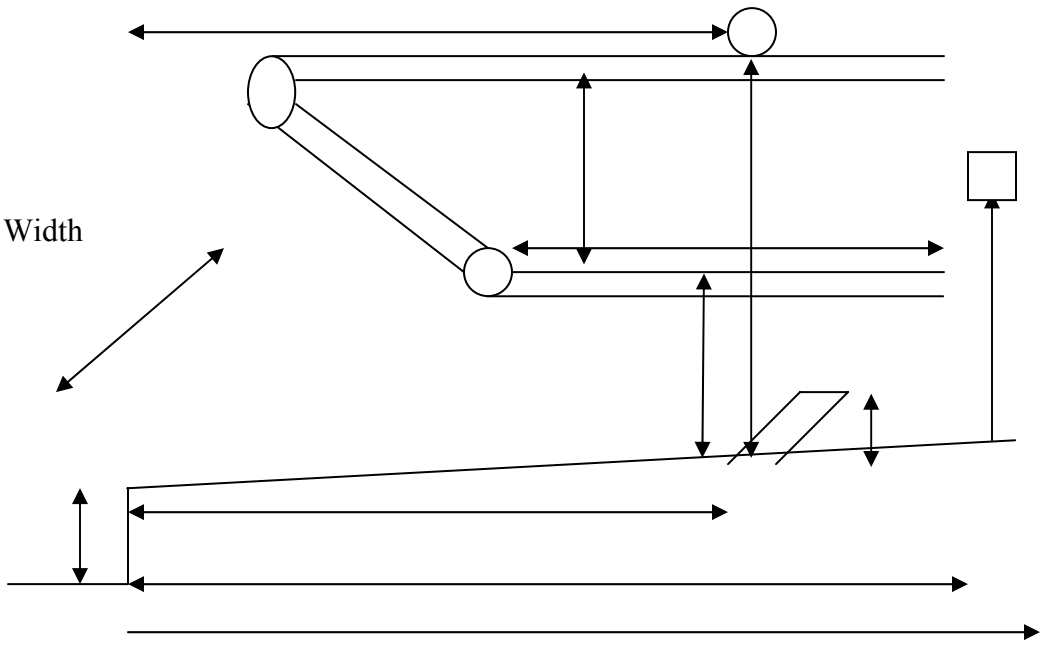
Design & Dimensions

Bedding Storage	Clean & Dry / Wet & Damp / Moldy

HOUSING (Freestall)

PEN NUMBER			
TYPE OF COW	Lactating / Far Dry / Close Up Dry / Maternity / Post-Fresh		
TYPE OF HOUSING	Free-stall		
NUMBER OF COWS		NUMBER OF STALLS	
Stocking Density			
COWS STANDING IN STALLS		COWS TOUCHING A STALL	
Stall Standing Index	Cows Standing in Stalls / Cows in Stalls (<15%) =		
Base	Concrete / Lime / Earth / Sand / Mat / Mattress		Manufacturer:
Bedding	Type: Depth: Renewal:		
% Beds with Manure Piles		Frequency of Passageway Scraping / Flushing	

Design & Dimensions

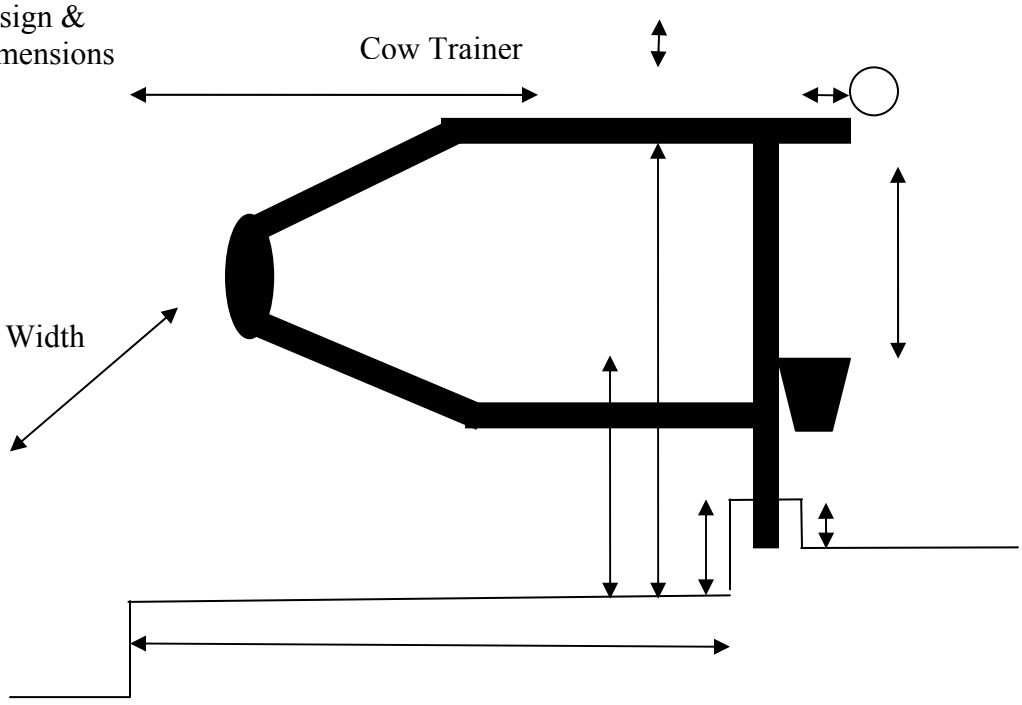


Bedding Storage	Clean & Dry / Wet & Damp / Moldy
% Cows with hock abrasions	

HOUSING (Tiestall / Stanchion)

PEN NUMBER			
TYPE OF COW	Lactating / Far Dry / Close Up Dry / Maternity / Post-Fresh		
TYPE OF HOUSING	Stanchion / Tie-Stall		
NUMBER OF COWS		NUMBER OF STALLS	
Stocking Density			
Base	Concrete / Lime / Earth / Sand / Mat / Mattress		Manufacturer:
Bedding	Type:	Depth:	Renewal:
% Beds with Manure Piles			

Design & Dimensions



Neck chain length to collar =

Bedding Storage	Clean & Dry / Wet & Damp / Moldy
% Cows with hock abrasions	

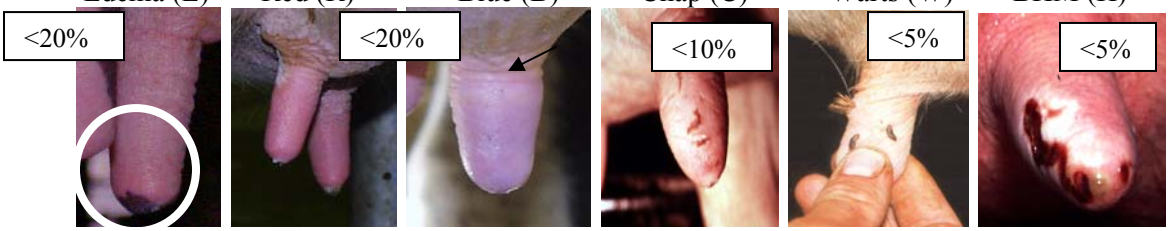
MILKING MACHINE CHECK SHEET

Machine test frequency:	Date of Last test:
Machine manufacturer:	Age:
Basic Layout:	
Rubberware	Milk hose / Pulsator hose / Short milk tube / Short Pulsator tube
Liner Life: Last changed ____ Expected Life = 1000 X units ( ) / Cows ( ) x 2* = days	
Liner type:	Shell type:
Mouthpiece diameter:	Bore: Length:
Milk Line: Slope:	Diameter: Units/Slope: Actual Allowed
Inlet Size: (5/8")	Location:
Claw Piece Type:	Weight: Outlet Diameter(5/8")
Top or Bottom unloading?	
Cracks?:	Hygiene?: Air Bleeds Open?:
Regulator Type:	Sensor? Hygiene:
Location:	Pop off valve?
Vacuum Recovery Time:	(<3sec) Override: (<0.5")

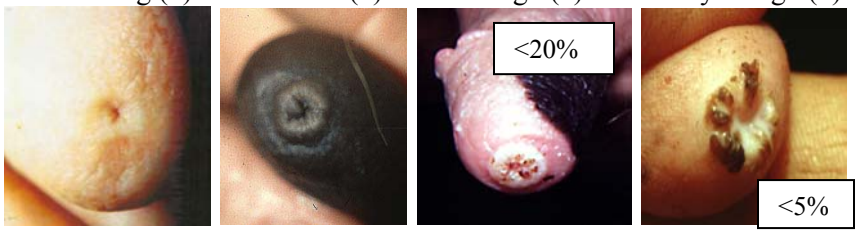
TEAT END SCORING (Score 20% cows in each pen)

Score: Color: R (Red) B (Blue) Black (Bl) and Mouthpiece mark at teat base (M)

Edema (E) Red (R) Blue (B) Chap (C) Warts (W) BHM (H)



No Ring (1) Smooth (2) Rough (3) Very Rough (4)



Cow ID	Lesion LF	Lesion RF	Cow	Lesion		Cow	Lesion	
	LR	RR						

Devised by Nigel B. Cook UW-Madison, using the guidelines developed by the "Teat Club International", 2002

CLEAN UP INVESTIGATION CHECK SHEET

LAB DATA	COLI COUNT		LPC	
Milk Filters: Condition			Frequency of change:	(4h max)
Hoses & Pipelines: Dead Ends? Visible films:			Diameter changes? Dissolve in acid / alkali	Y /T?
Bulk Tank Type:		Visible films:		Pick-up Temp: (below 38F in 30mins)
Wash Procedure AM PM			Automated / Manual	Shock Treatments?
Detergent Make:		Concentration:		Temperature Range:
Acid Rinse Make:		Concentration:		Temperature Range:
Capacity of Water tank:			Temperature:	
Capacity of Vat: L x W x H / 231 =			Gallons (x3.8 =	Litres)
(1" length = 1 gallon in most vats, 1.5 gallons in Surge vats, aim for 5" depth at all times during wash)				

Wash Procedure	Pre-milking Sanitizer	Pre-Wash Rinse	Detergent Wash	Acid Rinse
Start Temp				
End Temp				
Cycle Time				
Concentration				
pH				
Targets	200 ppm chlorine 95 – 110 ^{o}F	110 – 135 ^{o}F	> 120 ^{o}F 5 – 10 minutes pH 11 - 13	PH < 3 2 minutes 90 – 110 F
Unit Flow (aim 0.8 gallons/min)	Near Side 1 Side 2	Middle Side 1 Side 2	Far Side 1 Side 2	Other Side 1 Side2

Air Injection
Time Open Actual: Target: $\frac{\text{Distance from AI to REC}}{28 \text{ feet/sec}}$ = --------- = sec
Measured Slug Velocity = feet/sec Vacuum Drop = "Hg

Injector Problems:	Does receiver fill > 1/3 during wash ? Does Sanitary Trap Valve close during wash ? Does > 5 gallons water drain from balance tank ? Does Air Injector close just before slug hits Receiver jar ?

MASTITIS

LACTATION THERAPY	
Recognition: Clots Feel Filter In-Line	Identification:
Tube Insertion Technique: Milk Out: Disinfect: Alcohol: Full / Partial Insert: Massage: Dip:	Parlor Routine: Milk at end: Separate Cluster: How many : Used for fresh cows ? Disinfection:
Routine Protocol Oxytocin: Antibiotic IMM: Parenteral: Length of course: Withdrawal: Tested for residues? Test used: Other :	
Tubes used per year:	Estimated no. clinical cases per month:
CULTURE RESULTS	
Individual	Bulk Tank
Cow / Pathogen / Date	Pathogen / Dates
Drug Storage:	Drug labeling:
No. of residue failures in last 12 months :	
DRY COW THERAPY	
Tube Used: All Cows ?	
Technique: Milk Out Delay? Dip Wipe Alcohol Full / Partial Insert Dip Sealant? Where:	
J5 Vaccine Protocol:	

MASTITIS RECORD SHEET

Cow	Quarter(s) Affected	Dates of Treatment				Tube Used	Milk Out

CALIFORNIA MILK TEST WORKSHEET

COW	QUARTER SCORE				CULTURE	COMMENT
	LR	LF	RF	RR		