Breed: HO
Type Test: 31-DHI-AP

Minnesota DHIA

Herd Summary

DHI-302

Prev. Test	Test Date	Days	Processed
02-27-2017	03-28-2017	29	03-31-2017

String = HERD
FRep = 74BW

Peak and Persistency
Peak Milk Lact 1 is Yellow if Peak Ratio (1st/Others) is < .70 (Indicates under performance versus older cows)
Peak Milk Lacts 2/3+ are Yellow if Peak Ratio (1st/Others) is > .85 (Indicates under performance versus younger cows)

Highlighting Legend (Number of Cows in Herd/String must be Greater than 40)

Yearly SCC Summary
Lact 1 DIM < 30 is Yellow if >= 34% (Ideally should be < 20%)

Changes in SCC Status
Cures >= 20% are Green if at least 5% higher than New Infections
New Infections >=15% are Yellow if at least 5% higher than Cures (New Infections ideally should be < 5%)

Current SCC Evaluation
Yellow if % Infected >= 25 for Lact 1, >= 35 for Lact 2, >= 45 for Lact 3+
Yellow if % Cows by Linear Score 7,8,9 >= 5 for Lact 1, >= 10 for Lact 2, >= 15 for Lact 3+

Production Averages
MLM is Green if 10+% increase from previous test and is Yellow if 10+% decrease from previous test.
Fresh Infections are Yellow if >= 30% of Fresh Cows (Min. 10 Fresh Cows. Fresh infections should be < 20%)

Dry Period Summary

Avg Days	Cows by Days Dry		
	< 40	40 - 70	> 70
57	1	32	1
	3%	94%	3%

Based on 34 Cows

Peak and Persistency

305 ME Milk	305 ME $ Value	Prod Index	Lact	Cows	DIM	Peak DIM	Peak Milk	MLM Current	MLM C-L
31,489	4,257	103	1	19	189	118	94	102	-1.8
30,557	4,093	99	2	24	204	86	115	104	+1.8
31,238	3,973	96	3+	10	145	79	133	102	-7.3
31,006	4,138	100	All	53	186	100	107	103	-1.1

Peak Ratio (1st/Others) is 0.79

Daily Milk

DHI	4562
Sold	4499
Shipped %	101
Value $	838
$ / cwt	18.37

Current SCC Evaluation

Cows	SCC LS	% Infected	Lact	% Cows by Linear Score 0,1	2,3	4,5,6	7,8,9
16	1.7	6	1	44	44	13	
21	2.9	29	2	24	43	24	10
10	3.4	20	3+	20	40	20	20
47	2.6	19	All	30	43	19	9

Monthly SCC Production Loss is 1227 Lbs with a $ Loss of 225

Management Level Milk

Annual Summary Days in Milk < 100	Annual Summary Days in Milk 100 - 200	Annual Summary Days in Milk > 200	Annual Summary All Cows	Lact	Current Test All Cows	Current Test Days in Milk < 100	Current Test Days in Milk 100 - 200	Current Test Days in Milk > 200
87	95	86	92	1	102	108	103	100
84	95	88	97	2	104	87	110	103
89	82	98	102	3+	102	99	119	71
91	96	97	96	All	103	97	109	99

Based on 11 Tests

Yearly SCC Summary

Lact	% Infected by DIM < 30	% Infected by DIM 30 - 220	% Infected by DIM > 220
1	7	2	20
2	36	15	25
3+	40	21	33
All	25	10	25

Based on 509 Samples

Changes in SCC Status (Distribution of Cows Sampled)

Annual Fresh vs Dry Off (%) Cures	Annual Fresh vs Dry Off (%) Chronics	Current vs Last Test (%) Cures	Current vs Last Test (%) Chronics
13	16	2	11
Negatives	**New Infections**	**Negatives**	**New Infections**
61	10	77	9

Based on 31 Cows Sampled | Based on 44 Cows Sampled

Production Averages

Rolling Herd Milk	Rolling Herd Fat	Rolling Herd Pro	Test Day All Cows	Test Day % In Milk	Test Day Milk	Test Day % Shipped	Date	Quantity Milk Cows	Quantity Fresh Cows	Quantity DIM	Quantity Milk	Quantity MLM	Quantity % Fat	Quantity % Pro	Quality Raw SCC	Quality LS SCC	Quality Number Infections	Quality Fresh Infections	Quality New Infections Number	Quality New Infections %
29,149	1118	929	53	89	87	101	03-28-17	47	3	186	98	103	3.9	3.2	216	2.6	9		4	9
29,029	1113	923	53	89	89	101	02-27-17	47	2	177	100	104	3.6	3.2	113	2.1	6	1	2	4
28,728	1102	914	55	89	84	100	01-28-17	49	3	171	94	100	4.0	3.1	189	2.1	6	1	3	6
28,463	1090	907	53	91	81	98	12-27-16	48	6	160	90	96	3.8	3.2	82	1.8	4		1	2
28,287	1082	902	53	85	73	99	11-25-16	45	6	158	86	92	4.1	3.2	142	2.3	9	2	5	11
28,145	1077	899	52	85	71	99	10-25-16	44	7	164	84	92	3.8	3.3	115	2.2	5	2	2	5
28,099	1077	899	53	85	70	103	09-27-16	45	6	194	83	94	3.8	3.1	157	2.2	8	1	6	13
28,214	1083	904	53	85	68	99	08-24-16	45	6	195	80	90	3.7	3.1	247	2.5	8	1	4	9
28,314	1087	905	52	90	76	100	07-18-16	47	2	223	85	95	3.8	3.3	157	2.3	10		4	9
28,410	1088	905	50	96	80	97	06-20-16	48	3	211	83	91	3.9	3.1	180	2.4	10		6	13
28,281	1078	901	50	98	92	103	05-12-16	49	1	190	94	98	3.8	3.1	222	2.2	11	1	4	8
27,991	1066	891	50	98	93	101	04-13-16	49	3	169	95	98	3.7	3.1	262	2.2	9		2	4
Averages >			52	90	80	100		47	4	183	89	96	3.8	3.2	174	2.2	8	1	4	9

Record Publication | Open Disclosure | Data Collection Rating (Milk) = 97.6

Breed: HO
Type Test: 31-DHI-AP

Minnesota DHIA

Consultant Summary

Prev. Test	Test Date	Days	Processed
02-27-2017	03-28-2017	29	03-31-2017

DHI-302

String = HERD
FRep = 74BW

Herd Genetic Profile (Source: CDCB)

Service Sires: Num Bred	Progeny Test: %	Progeny Test: NM$	Progeny Test: % Rk	Genomic: %	Genomic: NM$	Genomic: % Rk	Group	Animal PTA: Num	Animal PTA: NM$	Animal PTA: % Rank	Sire PTA: % AI	Sire PTA: NM$	Sire PTA: % Rank
							Calves	17	+449	84	100	+730	94
17	29	+777	94	65	+813	98	Yearlings	27	+436	78	100	+689	92
14	43	+661	90	57	+818	99	Lact 1	12	+404	92	100	+555	76
19	42	+624	86	58	+757	95	Lact 2	24	+280	80	100	+390	54
4	25	+417	57	75	+807	99	Lact 3+	10	+205	70	100	+342	49
37	41	+625	86	59	+786	97	Cows	46	+296	81	100	+440	61

Inventory

% Herd	Group	Age	Num	% Identified: Sire	% Identified: Dam
	Calves	0-05	17	100	100
	Yearlings	1-07	27	100	100
	Youngstock	1-00	44	100	100
36	Lact 1	2-00	19	100	100
45	Lact 2	3-02	24	100	100
19	Lact 3+	5-02	10	100	100
	Cows	3-02	53	100	100

Cows Entering and Leaving Herd

Number Entered	Number Left	Lact	Reason for Leaving: Dairy	Low Milk	Repro	Sick	Mastitis	Ft/Legs	Died	Other	% Turnover
19	2	1								2	4
	7	2			4				1	2	13
	7	3+			2					5	13
19	16	All			6				1	9	30
		Left Herd			38%				6%	56%	

Reproduction Summary

Breeding Herd	Cows	Heifers
Animals	49	27
Animals Served (%)	84	63
Waiting Period (days or mo)	63	14
First Served (<100 days or 15 mo) (%)	63	26
Time to First Services (days or mo)	88	15
Services per Animal	2.0	1.7
Open Period (<150 days or 17 mo) (%)	35	37
Min Calving Interval (months)	14.0	27.0
Heat Detection Index (%)	33	

Pregnant Animals	Cows	Heifers
Animals	28	14
Conceived at First Service (%)	43	57
Services per Conception	2.1	1.7
Pregnancy Rate (%)	11	
Open Period (days or mo)	147	18
Calving Interval (months)	14.0	27.4
CI - Standard Deviation (months)		

Management Calving Interval = 14.1 Months

Monthly Herd Turnover

	<— History						Test	Planning —>					
	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Total Cows	53	53	53	54	55	53	52	51	51	51	53	53	54
Cows Milking	45	46	45	48	49	48	48	45	47	49	47	48	50
Heifers Calving	3	3	1	2	1				1	1	3	1	2
Cows Calving	1	6	3	5	1	3	2	3	3	4	1	4	3
Cows Dried Off	2	5	4	3	1	2	3	3	1	2	5	3	2
Cows Dry	8	7	8	6	6	5	6	6	4	2	6	5	4
Cows Left	3	3	1	1		2	1	1	1	1	1	1	1

% Left Non-Dairy by 80 DIM

Lact	1 Month	3 Months	6 Months	12 Months
1	0	0	0	0
2	0	0	0	0
3+	0	0	0	0
All	0	0	0	0

Birth Summary

Dam's Lact Num	Offspring Born: Males: Alive	Males: Dead	Females: Alive	Females: Dead	Calving Difficulty Score: 1	2	3	4 & 5	% 4+5
1	13		6		13			1	7
2+	20		8	2	12			1	8
Total	33		14	2	25			2	7

Service or Heat Intervals (Number)

< 18 Days	1
18-24 Days	6
36-48 Days	8
Other	31

Breed: HO
Type Test: 31-DHI-AP

Minnesota DHIA

LACTATION

Prev. Test: 02-27-2017 | Test Date: 03-29-2017 | Processed: 03-31-2017

DHI-512

Index		Permanent ID	Sire	Prev Milk	Sample Day Data: Milk	% Fat	% Pro	SCC	Inc Over Feed Cost	Index	Lct #	Age at Calvng	Days Dry	Calving Date	Due Date	Lactation to Date: DIM	Milk	% Fat	Fat	% Pro	Pro	ME$	Prod Index	Remarks
201	HO	71616553	14HO06429	80	69	4.3	3.9	93	8.54	201	2	3-01	57	02-05-16	08-20-17	418	41822	4.0	1661	3.4	1419	6775	119	
202	HO	73698510	29HO14142	102	97	3.2	3.0	13	13.82	202	1	1-11		10-05-16	11-27-17	175	15299	3.3	499	2.9	441	5391	95	
203	HO	71616564	1HO10245	108	105	4.3	3.2	132	15.28	203	2	3-04	62	10-31-16	Poss PG	149	16097	4.2	673	3.0	480	5890	100	
204	HO	73698509	200HO00402	96	93	3.3	3.1	50	12.94	204	1	2-00		10-28-16		152	12767	3.5	452	3.1	402	5441	96	
205	HO	71616572	14HO06429	106	101	4.3	3.5	17	14.51	205	2	3-01	60	10-19-16	11-27-17	161	15485	3.9	609	3.4	526	5591	99	
206	HO	69155096	14HO05880	62	49	4.9	4.1	123	4.53	206	5	6-01	60	05-05-16	06-06-17	328	30482	3.8	1172	3.3	1007	5641	99	
207	HO	71616560	1HO09527	112	101	3.2	3.3	2263	14.01	207	2	3-05	59	08-28-16	09-04-17	213	23883	3.6	850	3.0	724	6360	112	V
208	HO	71616543	14HO05639	78					-4.35	208	2	3-04	2	01-30-16	05-21-17	422	36983	4.5	1666	3.3	1235	5922	104	
209	HO	71616584	14HO05560	92	91	3.5	3.1	15	12.28	209	2	2-11	81	02-14-17		43	3763	3.6	136	3.3	125	4688	83	
210	HO	71616544	7HO10606	86	71	4.2	3.6	38	6.87	210	2	3-06	55	03-17-16	07-22-17	377	32469	4.3	1389	3.2	1046	5492	97	
211	HO	71616581	1HO10218	98	95	3.7	3.1	246	13.50	211	1	2-08		08-07-16	11-27-17	234	19938	3.7	730	3.1	613	5659	100	
212	HO	71616555	11HO10579	84	33	4.5	3.7	214	1.85	212	2	3-02	46	02-27-16	08-03-17	396	32253	3.4	1104	3.1	988	4966	87	
213	HO	71616550	1HO10245						-4.35	213	2	2-11	93	11-19-15	04-21-17	403	27818	3.8	1052	3.1	873	4270	75	
214	HO	71616565	14HO06429	116	140	4.4	3.1	123	21.87	214	2	3-04	57	12-11-16	Poss PG	106	13390	3.8	478	3.1	415	6362	112	
215	HO	71616574	29HO13665	112	103	4.5	3.5	107	14.99	215	2	2-11	59	08-31-16	08-23-17	210	21884	4.1	898	3.2	709	7017	124	
216	HO	71616577	1HO10218	124	105	4.2	3.2	19	15.21	216	2	3-01	63	11-21-16	Poss PG	128	14215	4.2	603	3.3	485	5982	105	
217	HO	71616586	29HO13665	122	130	3.9	3.0	214	19.67	217	2	3-02	50	10-11-16	11-27-17	169	19711	3.8	743	3.0	596	6382	112	
218	HO	73698508	14HO05434	94	91	3.4	2.9	19	12.62	218	1	1-11		09-01-16	08-15-17	209	16215	3.5	574	2.9	470	5160	91	
219	HO	73698512	7HO11351	90	89	4.2	3.1	27	12.62	219	1	1-10		10-14-16		166	13055	4.3	558	3.0	398	5680	100	
220	HO	71616561	29HO14768	98	89	3.4	3.4	246	11.87	220	2	3-06	59	12-02-16		117	9865	3.7	369	3.2	315	4216	74	
221	HO	73698505	29HO14422	82	81	4.2	3.6	50	11.13	221	1	2-00		08-23-16	09-05-17	218	17174	4.3	741	3.4	579	6078	107	
222	HO	73698500	1HO10648	88	75	4.4	3.6	100	10.06	222	1	2-02		06-18-16	06-29-17	284	24697	4.0	992	3.3	811	6286	111	
223	HO	73698506	200HO00402	80					-3.96	223	1	1-09	11	08-20-16	05-18-17	271	21647	3.6	822	3.1	678	6006	106	
224	HO	69155116	7HO10011	122	109	4.3	3.2	1393	15.59	224	4	5-10	84	10-11-16	10-17-17	169	18675	3.9	724	3.0	561	5251	92	
225	HO	71616554	29HO13363		126	4.3	2.8	29	18.76	225	3	4-02	67	03-03-17		26	2817	4.8	134	3.2	89			
226	HO	66196174	7HO09679	122	111	2.9	2.4	1131	15.18	226	5	7-06	68	02-01-17		58	6245	3.7	228	2.7	170	4140	73	
227	HO	73698513	1HO11022	94	83	3.2	3.5	44	11.08	227	1	1-09		09-16-16		194	15777	3.5	551	3.4	529	5815	99	V
228	HO	69155135	7HO10849	114	95	3.7	3.2	141	12.69	228	3	3-11	48	12-03-15	Poss PG	482	53835	3.5	1871	2.8	1520	6052	107	Y
229	HO	71616573	14HO06429	102	97	4.2	3.6	141	13.72	229	2	3-00	61	09-16-16	11-27-17	194	19490	3.8	735	3.3	650	5895	104	
230	HO	73698502	29HO14422	76					-3.96	230	1	1-11	2	06-08-16	05-17-17	292	23408	4.0	936	2.9	674	5781	102	
231	HO	69155132	7HO10721		97	4.7	3.3	31	13.54	231	4	5-04	58	03-16-17		13	996	5.1	51	3.7	37			
232	HO	73698511	200HO00402	122	111	3.6	2.8	174	16.38	232	1	2-01		11-17-16	Poss PG	132	14401	4.0	569	3.0	429	6637	117	
233	HO	73698515	1HO11022	94	105	4.6	3.1	13	15.91	233	1	2-01		01-18-17		70	5951	4.3	254	3.2	191	6018	108	
234	HO	73698507	29HO14422 27	66	93	4.3	3.0	54	13.41	234	1	1-10		07-23-16	11-19-17	249	19202	3.8	728	2.9	560	5966	105	

Remarks Codes: V = Fat < Protein Y = Days Open > 250

DHI-360

Type & Description	Breed	Sample Date	Process Date
DHI-AP	HO	3/28/17	3/31/17

REPRODUCTION

Minnesota DHIA

MONTHS	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR
MONTHLY REPRODUCTIVE CYCLES													
Est Num Heats	23	24	23	24	25	24	23	23	23	23	23	22	22
Reported Heats	25	21	29	24	39	18	21	18	23	25	19	23	20
Num Breedings	12	8	12	13	12	9	8	6	9	11	8	13	9
Num Conceived	17	17	19	20	28	25	23	23	21	18	22	23	28
MONTHLY CALVING PATTERN													
Cows Calved Last	5		1		2	3	1	6	3	5	1	3	2
Heifers Calved Last				5	2	2	3	3	1	2	1		
Cows In Calve		3	3	4	1	4							
Heifers In Calve			1	1	3	1							

COWS WITH HIGHEST DAYS OPEN

BARN NAME	DAYS OPEN	BARN NAME	DAYS OPEN	BARN NAME	DAYS OPEN
LONER	194	SASHA	89		
PEGGY	174	MOOKIE	70		
FITZ	166	SPARKY	67		
BOCHI	152				
PACER	130				
PEARL	117				
FLINT	117				
SHADIE	93				

Index	COW'S SIRE ID	COW'S SIRE NMS	DATE CALVED	LANCTM	DAYS TO 1ST HEAT	DAYS OPEN	LAST BREEDING OR HEAT Svc	LAST BREEDING OR HEAT DATE	LAST BREEDING OR HEAT SERVICE SIRE ID	LAST BREEDING OR HEAT SERVICE SIRE NMS	Index	DATE TO DRY	DUE DATE	DAYS IN MILK	PROD INDEX
301	14HO06429	+383	2/05/16	2	86	282	4	11/13/16	542HO00746	+430	301	7/01	8/20	418	120
302	29HO14142	+485	10/05/16	1	138	138	1	2/20/17	1HO11905	+838	302	10/08	11/27	175	95
303	1HO10245	+257	10/31/16	2	72	128	3	3/08/17	1HO11905	+838	303	10/24	POSS PG	149	101
304	200HO00402	+598	10/28/16	1	62	152	2	2/20/17	1HO11905	+838	304			152	96
305	14HO06429	+383	10/19/16	2	67	124	2	2/20/17	14HO07780	+793	305	10/08	11/27	161	99
306	14HO05880	+115	5/05/16	5	71	117	3	8/30/16	1HO11889	+791	306	4/17	6/06	328	100
307	1HO09527	+518	8/28/16	2	92	92	1	11/28/16	14HO07726	+753	307	7/16	9/04	213	112
308	14HO05639	+408	1/30/16	2	76	197	4	8/14/16	7HO12175	+555	308	DRY	5/21	422	105
309	14HO05560	+298	2/14/17	2		43					309			43	83
310	7HO10606	+428	3/17/16	2	79	212	3	10/15/16	29HO17573	+781	310	6/02	7/22	377	97
311	1HO10218	+542	8/07/16	1	59	197	4	2/20/17	7HO11419	+624	311	10/08	11/27	234	100
312	11HO10579	+223	2/27/16	2	134	182	2	8/27/16	7HO11419	+624	312	4/14	6/03	396	87
313	1HO10245	+257	11/19/15	2	88	239	4	7/15/16	7HO12111	+608	313	DRY	4/21	403	75
314	14HO06429	+383	12/11/16	2	99	99	1	3/20/17	29HO17573	+781	314	11/05	POSS PG	108	113
315	29HO13665	+185	8/31/16	2	77	77	1	11/16/16	7HO11351	+896	315	7/04	8/23	210	124
316	1HO10218	+542	11/21/16	2	116	116	1	3/17/17	29HO17944	+878	316	11/02	POSS PG	128	106
317	29HO13665	+185	10/11/16	2	132	132	1	2/20/17	29HO17964	+837	317	10/08	11/27	169	112
318	14HO05434	+245	9/01/16	1	68	68	1	11/08/16	7HO11419	+624	318	6/26	8/15	209	91
319	7HO11351	+896	10/14/16	1	100	166	1	1/22/17	29HO17944	+878	319			166	101
320	29HO14768	+378	12/02/16	2		117					320			117	74
321	29HO14422	+545	8/23/16	1	98	98	1	11/29/16	1HO11373	+742	321	7/17	9/05	218	108
322	1HO10648	+569	6/18/16	1	96	96	1	9/22/16	29HO17964	+837	322	5/10	6/29	284	111
323	200HO00402	+598	6/20/16	1	52	52	1	8/11/16	7HO11351	+896	323	DRY	5/18	271	106
324	7HO10011	+17	10/11/16	4	91	91	1	1/10/17	14HO07726	+753	324	8/28	10/17	169	92
325	29HO13363	+411	3/03/17	3		26					325			26	
326	7HO09879	+223	2/01/17	5		56					326			56	72
327	1HO11022	+651	9/16/16	1		194					327			194	99
328	7HO10849	+607	12/03/15	3	106	457	6	3/04/17	542HO05199	+417	328	10/20	POSS PG	482	106
329	14HO06429	+383	9/16/16	2	77	157	2	2/20/17	14HO07780	+793	329	10/08	11/27	194	104
330	29HO14422	+545	6/08/16	1	63	63	1	8/10/16	7HO11419	+624	330	DRY	5/17	292	102
331	7HO10721	+566	3/16/17	4		13					331			13	
332	200HO00402	+598	11/17/16	1	123	123	1	3/20/17	29HO17944	+878	332	11/05	POSS PG	132	117
333	1HO11022	+651	1/18/17	1		70					333			70	107
334	29HO14422	+545	7/23/16	1	99	204	3	2/12/17	1HO11905	+838	334	9/30	11/19	249	105
335	1HO02683	+266	11/19/16	4		130					335			130	92
336	14HO06429	+383	12/02/16	3	88	117	1	2/28/17	11HO11202	+642	336			117	110
337	14HO06429	+383	10/06/16	2	70	174	3	2/12/17	1HO11889	+791	337			174	106
338	29HO16251	+498	7/18/16	2	63	120	2	11/15/16	29HO17573	+781	338	7/03	8/22	254	99
339	14HO05560	+298	6/20/16	1	61	245	3	2/20/17	1HO11889	+791	339	10/08	POSS PG	282	114
340	14HO05639	+408	10/03/16	2	96	163	3	3/15/17	11HO11202	+642	340	10/31	POSS PG	177	104

FLEX REPORT
DHI-370

Test Date: 03-28-2017
Processed: 03-31-2017

Test Type and Description	Breed
31 DHI-AP	HO

TestDay Milk Actual	TestDay Milk Expectd	Actual SCC Prev	Actual SCC Current	Index		%of Tank	DIM	Lact #	Log SCC	Lact Avg This	Lact Avg Last	#> 200K	#SCC Tests	Prod Index	MUN	Pro %	Total Solids
69	75	66	93	101		1%	418	2	2.9	2.0	0.9	1	14	120	10	3.9	
97	92	13	13	102			175	1	0.1	0.2			6	95	14	3.0	
105	99	66	132	103		2%	149	2	3.4	3.6	1.3	1	5	101	14	3.2	
93	91	44	50	104		1%	152	1	2.0	2.1			5	96	12	3.1	
101	95	18	17	105			161	2	0.4	0.4	0.8		6	100	8	3.5	
49	68	62	123	106		1%	328	5	3.3	2.1	2.0	1	11	100	13	4.1	
101	108	38	2263	107	N	14%	213	2	7.5	3.3	1.0	2	7	112	6	3.3	
91	103	25	15	108			43	2	0.3	0.7	2.6		2	83	16	3.1	
71	71	50	38	109			377	2	1.6	1.0	4.2		12	98	7	3.6	
95	87	115	246	110	N	3%	234	1	4.3	2.3		2	8	100	13	3.1	
33	60	87	214	111	N	1%	396	2	4.1	2.3	2.0	2	13	88	13	3.7	
140	120	13	123	112		2%	108	2	3.3	1.5	1.6		4	113	14	3.1	
103	99	174	107	113		1%	210	2	3.1	1.3	1.4		7	125	13	3.5	
105	107	13	19	114			128	2	0.6	0.6	1.2		5	107	10	3.2	
130	112	264	214	115	P	3%	169	2	4.1	4.9	5.3	6	6	112	10	3.0	
91	87	20	19	116			209	1	0.6	0.4			7	91	9	2.9	
89	84	29	27	117			166	1	1.1	1.2			6	101	10	3.1	
89	82	919	246	118	P	3%	117	2	4.3	5.3		3	4	74	11	3.4	
81	88	50	50	119		1%	218	1	2.0	1.5			7	108	10	3.6	
75	80	62	100	120		1%	284	1	3.0	3.2		1	9	112	12	3.6	
109	104	985	1393	121	P	17%	169	4	6.8	6.1	5.2	6	6	92	13	3.2	
126			29	122			26	3	1.2	1.2	1.9		1		12	2.8	
111	129	429	1131	123	P	14%	56	5	6.5	5.8	4.0	2	2	72	8	2.4	
83	85	19	44	124			194	1	1.8	0.9			7	100	10	3.5	
95	93	81	141	125		2%	482	3	3.5	0.7	1.0		16	107	9	3.2	
97	90	230	141	126		2%	194	2	3.5	3.9	5.5	3	7	104	10	3.6	
97			31	127			13	4	1.3	1.3	2.4		1		8	3.3	
111	114	13	174	128		2%	132	1	3.8	1.5			5	118	14	2.8	
105	87	20	13	129			70	1	0.1	1.0			3	107	12	3.1	
93	76	35	54	130		1%	249	1	2.1	1.5			8	106	8	3.0	
117	119	100	187	131		3%	130	4	3.9	3.0	3.1	1	5	92	13	3.0	
158	138	81	38	132		1%	117	3	1.6	1.7	2.6		4	111	12	2.9	
113	98	50	13	133			174	2	0.1	0.6	0.8		6	106	12	3.4	
85	77	44	57	134		1%	254	2	2.2	1.4	0.8		8	99	10	3.3	
95	87	29	38	135			282	1	1.6	1.6			9	114	10	3.4	
115	95	31	44	136		1%	177	2	1.8	1.0	2.0		6	104	10	3.4	
119	97	76	50	137		1%	125	2	2.0	1.2	2.4		4	101	10	3.1	
83	78	93	1715	138	N	16%	239	2	7.1	1.8	5.4	1	8	95	9	3.2	
103	89	15	20	139			89	1	0.7	0.6			3	101	2	3.3	
117	113	25	66	140		1%	93	2	2.4	1.6	2.3		3	100	12	3.0	
91	97	13	14	141			117	1	0.2	0.2			4	99	12	3.2	
95	88	44	17	142			67	2	0.4	3.6	1.0	1	3	73	11	2.8	
138	137	13	93	143		1%	98	3	2.9	1.1	0.8		4	99	12	2.9	
71	59	200	325	144	N	3%	478	2	4.7	3.1	1.0	5	16	111	13	3.7	
81	87	44	47	145			206	1	1.9	1.5			7	97	15	3.2	

TF = Too Fresh to Test

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

2017 State FFA Dairy Management Group Activity

To answer the questions below, put the correct three digit "Index" or "computer" number in the "Herd Record" part of the answer sheet of contestant 11. Each correct answer is worth 4 points for a total of 100 points.

Lactation Report (use "Index" number)

_____ 1. Which cow has the most days open and not yet confirmed pregnant?
_____ 2. Which is the oldest cow in the herd?
_____ 3. Which lactating cow has the most days in milk in the current lactation?
___ 4. Which cow was most recently fresh?
_____ 5. Which cow has the lowest "Production Index"?
_____ 6. Which cow is expected to calve next?
___ 7. Which cow has lowest fat to protein ratio?
_____ 8. Which cow had the highest SCC?
_____ 9. Which lactating cow had the biggest increase in milk lbs. from last month to this month (lactating both months)?
_____ 10. Which first lactation, lactating cow was the youngest when she first freshened?
___ 11. Which cow had the highest income over feed cost?
_____ 12 Which currently dry cow has the most days dry to date?
___ 13. Which cow has the highest Mature Equivalent Dollar Value Milk?
_____ 14. Which cow contributed the greatest amount of somatic cells to the bulk tank?
___ 15. Which cow had the lowest fat test for the lactation to date?

Reproduction Report (use "computer number")

___ 16. Which cow was sired by the bull with the lowest NM$?
_____ 17 Which cow was bred the most times during this lactation?
___ 18. Which cow is bred to a bull with the lowest Net Merit Dollar?
_____ 19. Which cow, with a due date, had the fewest days open?
_____ 20. Which cow had the most days to first heat?
_____ 21. Which cow needs to be dried off next?

FLEX Report (use "Index" number)

_____ 22. Which cow had the highest somatic cell count on the previous test day?
_____ 23. Which 2nd lactation cow had the most tests over 200,000 somatic cells?
_____ 24. Which cow has the highest average Log SCC this lactation?
_____ 25. Which 1st lactation cow had the biggest increase in somatic cell count from last month?

2017 State FFA Dairy Management Group Activity

To answer the questions below, put the correct three digit "Index" or "computer" number in the "Herd Record" part of the answer sheet of contestant 11. Each correct answer is worth 4 points for a total of 100 points.

Lactation Report (use "Index" number)

228 1. Which cow has the most days open and not yet confirmed pregnant?
226 2. Which is the oldest cow in the herd?
228 3. Which lactating cow has the most days in milk in the current lactation?
231 4. Which cow was most recently fresh?
226 5. Which cow has the lowest "Production Index"?
213 6. Which cow is expected to calve next?
227 7. Which cow has lowest fat to protein ratio?
207 8. Which cow had the highest SCC?
234 9. Which lactating cow had the biggest increase in milk lbs. from last month to this month (lactating both months)?
227 10. Which first lactation, lactating cow was the youngest when she first freshened?
214 11. Which cow had the highest income over feed cost?
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Reproduction Report (use "computer number")

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302 20. Which cow had the most days to first heat?
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FLEX Report (use "Index" number)

121 22. Which cow had the highest somatic cell count on the previous test day?
115 23. Which 2nd lactation cow had the most tests over 200,000 somatic cells?
121 24. Which cow has the highest average Log SCC this lactation?
128 25. Which 1st lactation cow had the biggest increase in somatic cell count from last month?

2017 State FFA Dairy Management Group Activity

Questions from the DHIA Herd Summary (Put answers on Written Exam).

___ 39. What percent of the cows are identified by sire ?
a. 13 b. 75 c. 53 d. 100

___ 40. Which group of cows had the highest peak milk production?
a. 1st lactation b. 2nd lactation c. 3rd lactation and older

___ 41. What percent of cows were dry more than 70 days or dry less than 40 days?
a. 6 b. 10 c. 15 d. 94

___ 42. Which age of cows had the highest yearly average mastitis infection rate?
a. 1st lactation b. 2nd lactation c. 3+ lactations

___ 43. Relative to raw average somatic cell count over the last year, which statement best applies?
a. SCC has decreased over the last year
b. SCC has increased over the last year
c. SCC has bounced up and down with no definite trend

___ 44. What percent of the cows both dried off with a high SCC and then freshened with the SCC still high?
a. 5 b. 16 c. 19 d. 60

___ 45. What percent of the cows that left the herd left because of reproductive reasons ?
a. 13 b. 75 c. 38 d. 100

___ 46. What was the average age at first calving?
a. 24 months b. 26 months c. 28 months d. 30 months

___ 47. What is the minimum calving interval (months) of the breeding herd?
a. 12.9 b. 13.3 c. 14.0 d. 15.8

___ 48. What % of the cows that left the herd had died?
a. 2 b. 6 c. 15 d. 22

___ 49 Approximately, what % of the calvings was classified as difficult?
a. 7 b. 25 c. 38

___ 50. In what month zero cows leave the herd?
a. January b. February c. June d. October

2017 State FFA Dairy Management Group Activity

Questions from the DHIA Herd Summary (Put answers on Written Exam).

d 39. What percent of the cows are identified by sire ?
a. 13 b. 75 c. 53 d. 100

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a. January b. February c. June d. October

2017 State FFA Dairy Judging Contest

1

COW

Comp num	Name	Identification	Birth Date
99	Paula	19764524	6/10/12

SIRE

Code/Name	Identification
29HO7324	H2174868

GENETIC EVALUATION

	Milk	%fat	Fat	%prot	Protein	NM$	Rel
ETA	779	.04	33	.08	36	231	55

GENETIC EVALUATION

	Milk	%fat	%prot	NM$	Rel
ETA	29	.04	.07	357	99

Summary of Lactations

	Lact	305-Day Actual					Complete						305-Day-ME		
Age	Num	Milk	%fat	Fat	%prot	Protein	DIM	Milk	%fat	Fat	%prot	Protein	Milk	Fat	Protein
2-02	1	15801	4.0	627	3.2	642	387	19991	4.0	799	3.2	640	20004	790	632
3-05	2	21935	4.0	877	3.2	692	351	25051	4.0	1002	3.2	792	24614	980	692
4-08	3											projected	25009	999	742

2

COW

Comp num	Name	Identification	Birth Date
110	Shelly	126905412	6/14/12

SIRE

Code/Name	Identification
7HO4638	H2195662

GENETIC EVALUATION

	Milk	%fat	Fat	%prot	Protein	NM$	Rel
ETA	1335	.02	53	.03	44	531	66

GENETIC EVALUATION

	Milk	%fat	%prot	NM$	Rel
ETA	1751	-.09	-.03	535	99

Summary of Lactations

	Lact	305-Day Actual					Complete						305-Day-ME		
Age	Num	Milk	%fat	Fat	%prot	Protein	DIM	Milk	%fat	Fat	%prot	Protein	Milk	Fat	Protein
2-04	1	21918	4.1	904	3.2	690	385	26658	4.1	1093	3.2	852	27837	1141	891
3-07	2	27750	3.8	1054	3.0	832	365	32710	3.8	1242	3.0	981	31025	1212	956
4-09	3											projected	30012	1140	900

3

COW

Comp num	Name	Identification	Birth Date
509	Princess	122145544	5/28/12

SIRE

Code/Name	Identification
7HO4164	H2149849

GENETIC EVALUATION

	Milk	%fat	Fat	%prot	Protein	NM$	Rel
ETA	981	- .05	40	.00	43	405	60

GENETIC EVALUATION

	Milk	%fat	%prot	NM$	Rel
ETA	187	.20	.06	411	99

Summary of Lactations

	Lact	305-Day Actual					Complete						305-Day-ME		
Age	Num	Milk	%fat	Fat	%prot	Protein	DIM	Milk	%fat	Fat	%prot	Protein	Milk	Fat	Protein
2-03	1	18359	3.8	706	3.2	595	323	19171	3.9	740	3.3	624	23317	855	746
3-03	2	23345	3.4	786	3.4	783	390	28888	3.4	1080	3.4	982	27314	929	930
4-05	3											projected	28001	980	922

4

COW

Comp num	Name	Identification	Birth Date
534	Kimber	1302008376	07/21/12

SIRE

Code/Name	Identification
7HO3707	H 2080263

GENETIC EVALUATION

	Milk	%fat	Fat	%prot	Protein	NM$	Rel
ETA	1930	-.01	67	.03	60	530	84

GENETIC EVALUATION

	Milk	%fat	%prot	NM$	Rel
ETA	1226	.00	-.07	457	99

Summary of Lactations

	Lact	305-Day Actual					Complete						305-Day-ME		
Age	Num	Milk	%fat	Fat	%prot	Protein	DIM	Milk	%fat	Fat	%prot	Protein	Milk	Fat	Protein
2-00	1	21460	3.7	791	3.2	680	360	25610	3.8	973	3.2	819	27340	1008	872
3-02	2	26092	4.0	1043	3.1	806	305	26092	4.0	1043	3.1	806	31310	1250	960
4-01	3											projected	33012	1320	1023

2017 State FFA Dairy Judging Contest

This pedigree/production class is placed 4-2-3-1 with cuts of 2-4-6.

In analyzing this group of four cows we can do a preliminary placing by NM$, which would be 2-4-3-1.

4 places over 2 at the top of this class. While their NM$ are very similar, 4 has a more desirable calving interview, calving for the 3rd time 8 months earlier than 2. 4 also has a higher projected third lactation record. Granted, 2 had slightly higher actual production in 1st and 2nd lactation.

2 places over 3 because of higher $NM and higher production records. 3 did have a slightly shorter calving interval.

3 places over 1 because 1 has the lowest NM$ and the lowest 305-Day –ME. She calved at 15 month intervals which is longer than usually desired. Hence, 1 has cemented her place on the bottom of this class.

2017 State FFA
Dairy Judging Contest
Sire Selection Problem

Situation:

Semen from the following four bulls is being considered for purchase to breed the 4 year-old cow on the left.

The dairy farmer has a 150-cow grade herd that averages 27,000 lbs. of milk. Net Merit Dollars is the main criteria that he selects for. He would like to put some addition selection weight on PTA Somatic Cell Score (wants to make sure the herd maintains a low average somatic cell count). After that, if cows have serious linear faults, the farmer likes to find bulls that will correct those faults. Finally, he prefers to use bulls with better than average calving ease.

COWS TO BE MATED		BULLS TO CONSIDER			
3 YR OLD RECORD	TRAITS	1	2	3	4
3 Yr. 2 MO-ME					
	REL	90	99	89	91
28366	PTA:Milk	1358	1804	2197	2178
3.8	F %	.17	.09	.03	.05
1087	Fat	99	94	90	95
3.1	P %	.04	-.02	.01	.00
885	Protein	51	48	71	67
	Type	1.10	2.09	2.04	1.56
	Somatic Cell Score	2.96	3.23	2.47	2.94
	Productive Life	6.7	2.5	6.2	6.0
	Sire calving ease	7	12	4	7
	Net Merit $	822	599	819	812
LINEAR SCORES					
25	Stature	-.56	1.88	1.88	.01
28	Angularity	2.80	1.02	2.77	1.05
44	Strength	1.50	3.32	0.32	-.05
41	Body Depth	0.42	2.57	0.57	-.40
24	Pelvic Width	1.61	.55	1.93	1.28
24	Pelvic Angle	1.45	-.95	-0.51	.55
25	Legs-side view	-1.00	.20	-0.94	.98
30	Foot Angle	1.20	1.08	2.88	2.61
05	Fore Udder	0.13	1.04	3.51	2.60
23	R Udder Height	1.26	1.91	4.43	1.29
22	R Udder Width	1.10	1.66	4.97	1.23
20	Udder Support	0.02	3.64	1.30	3.56
22	Udder Depth	0.00	2.67	0.95	2.38
10	Teat Placement	0.08	1.39	2.51	3.44

The farmer's criteria are in this order of importance:

1. Net Merit Dollars (1,3,and 4 are equal for Net Merit Dollars)
2. PTA Somatic Cell Score
3. Match bulls to correct worst faults of cow (the cow needs some help in all udder traits – especially udder depth, teat placement, and fore udder).
4. Better than average calving ease

This class is placed 3-4-1-2 with cuts of 4-2-4.

Upon analyzing this class, 1,3, and 4 are essentially the same for Net Merit Dollars. 2 is lower for NM$. The has a needs help in the fore udder and teat placement.

3 places over 4 because 3 excels in somatic cell score and calving ease (low numbers are better for these two traits). 3 has a slight advantage in fore udder but recognizing 4's advantage in teat placement.

4 places over 1 with the big advantages across all udder traits. 1 is $10 higher for NM$ but this is very minor.

1 places over 2 because of the $223 advantage in NM$ and advantages in Somatic Cell Score and calving ease. Granted that 2 is higher in all of the udder traits.

2017 FFA Dairy Judging – Team Quiz – Written Exam

_____ 1. Which dairy breed originated from Scotland?
a. Ayrshire b. Guernsey c. Jersey d. Brown Swiss e. Montbeliarde

_____ 2. Which breed is the most numerous in the U.S. and worldwide?
a. Holstein b. Montbeliarde c. Ayrshire d. Guernsey e. Brown Swiss

_____ 3. Which breed has imported outstanding genetics from Denmark in recent years?
a. Holstein b. Jersey c. Montbeliarde d. Guernsey e. Brown Swiss

_____ 4. Which gene is recessive to the other in dairy cattle?
a. polled gene b. horned gene

_____ 5. Which PTA would most influence success in the show ring?
a. PTA milk b. PTAT c. PTA PL d. PTA SCS

_____ 6. Which trait is an example of a simply inherited trait?
a. milk b. fat c. type d. polled e. productive life

_____ 7. How many cow "eggs" would fit in an ordinary thimble?
a. one b. two c. ten d. twenty e. two million

_____ 8. What ligament attaches the uterus to the pelvis?
a. medial b. broad c. lateral d. primal e. copal

_____ 9. What is the main hormone produced by the testicles?
a. estrogen b. progesterone c. testosterone

_____ 10. What organ produces GnRH?
a. ovary b. Hypothalmus c. uterus d. pituitary

_____ 11. When is the best time to inseminate a cow?
a. at the beginning standing heat b. at the end of standing heat
c. 18 hours after the end of standing heat

_____ 12. At what age should heifers freshen for the first time?
a. 23 months b. 28 months c. 32 months d. 36 months

_____ 13. Which stomach compartment is associated with hardware disease?
a. rumen b. reticulum c. omasum d. abomasum

_____ 14. Which animal would have the highest % fat in their diet?
a. milk fed calf b. heifer on pasture c. high milk producing cow

_____ 15. Which one of the following vitamins is manufactured by the cow if exposed to sunlight?
a. Vit. A b. Vit. K c. Vitamin C d. Vitamin D e. Vitamin E

_____ 16. Which one of the following is a macro-mineral?
a. manganese b. iron c. zinc d. sulfur e. copper

_____ 17. Which one of the following is an ionophore?
a. decoquinate b. lasalocid c. phosphate d. salt e. soybeans

_____ 18. What should the % protein be in a cow's diet during early lactation on a dry matter basis?
a. 3% b. 5% c. 11% d. 18%

_____ 19. What is the most common cause of death in calves less than 3 weeks of age?
a. pneumonia b. scours c. injury d. BVD

_____ 20. What type of immunity does a calf get from a vaccination injection?
a. passive b. active

_____ 21. What category of organism causes pneumonia?
a. bacterium b. virus c. a and b

_____ 22. What season of the year are lice most apt to be a problem?
a. summer b. fall c. winter

_____ 23. What disease is often spread in a herd by a persistently infected (PI) animal?
a. BVD b. pinkeye c. shipping fever

_____ 24. What is the main disadvantage of bedded pack barns?
a. high cost of bedding b. high building costs c. poor cow comfort

_____ 25. For how many weeks prior to calving is it recommended that cows get a transition diet?
a. 1 week b. 3 weeks c. 6 weeks

_____ 26. What is the hollow cavity inside of the teat called?
a. gland cistern b. teat cistern c. steak canal d. teat orifice

_____ 27. How many cows does one robot usually serve?
a. 55 b. 100 d. 150

_____ 28. What pasteurization process allows milk to be stored at room temperature for at least 3 months?
a. clarification b. homogenization c. standardization d. UHT

_____ 29. What class of milk product can Grade B milk be used for?
a. Class III b. Class IV c. a and b

_____ 30. What is the percent butterfat in whole milk sold in stores?
a. 2% b. 3.25% c. 6.5% d. 10%

_____ 31. What does the Babcock test measure?
a. antibodies b. antibiotics c. butterfat d. protein e. lactose

_____ 32. What act created the land grant college system?
a. Morrill Act b. Smith-lever Act c. Capper-Volstead Act

_____ 33. When was frozen dairy semen first used in the U.S.?
a. 1954 b. 1966 c. 1974 d. 1993

_____ 34. Which one of the following states produces less milk than Minnesota?
a. California b. Wisconsin c. New York d. Iowa

_____ 35. What percent of the U.S. population is employed in an agricultural career according to the USDA?
a. 3% b. 21% c. 33% d. 58%

_____ 36. What is the circumference of the body behind the shoulders called?
a. crops b. heart girth c. gaskin d, chine

_____ 37. What is the loose skin on the neck in front of the brisket called?
a. point of shoulder b. dewlap c. stifle d. throat

_____ 38. What was the average sized dairy herd in Minnesota in 2014?
a. 38 cows b. 128 cows c. 259 cows d. 1,129 cows

2017 FFA Dairy Judging – Team Quiz – Written Exam

A___ 1. Which dairy breed originated from Scotland?
a. Ayrshire b. Guernsey c. Jersey d. Brown Swiss e. Montbeliarde

A___ 2. Which breed is the most numerous in the U.S. and worldwide?
a. Holstein b. Montbeliarde c. Ayrshire d. Guernsey e. Brown Swiss

B___ 3. Which breed has imported outstanding genetics from Denmark in recent years?
a. Holstein b. Jersey c. Montbeliarde d. Guernsey e. Brown Swiss

B___ 4. Which gene is recessive to the other in dairy cattle?
a. polled gene b. horned gene

B___ 5. Which PTA would most influence success in the show ring?
a. PTA milk b. PTAT c. PTA PL d. PTA SCS

D___ 6. Which trait is an example of a simply inherited trait?
a. milk b. fat c. type d. polled e. productive life

E___ 7. How many cow "eggs" would fit in an ordinary thimble?
a. one b. two c. ten d. twenty e. two million

B___ 8. What ligament attaches the uterus to the pelvis?
a. medial b. broad c. lateral d. primal e. copal

C___ 9. What is the main hormone produced by the testicles?
a. estrogen b. progesterone c. testosterone

B___ 10. What organ produces GnRH?
a. ovary b. Hypothalmus c. uterus d. pituitary

B___ 11. When is the best time to inseminate a cow?
a. at the beginning standing heat b. at the end of standing heat
c. 18 hours after the end of standing heat

A___ 12. At what age should heifers freshen for the first time?
a. 23 months b. 28 months c. 32 months d. 36 months

B___ 13. Which stomach compartment is associated with hardware disease?
a. rumen b. reticulum c. omasum d. abomasum

A___ 14. Which animal would have the highest % fat in their diet?
a. milk fed calf b. heifer on pasture c. high milk producing cow

D___ 15. Which one of the following vitamins is manufactured by the cow if exposed to sunlight?
a. Vit. A b. Vit. K c. Vitamin C d. Vitamin D e. Vitamin E

D___ 16. Which one of the following is a macro-mineral?
a. manganese b. iron c. zinc d. sulfur e. copper

B___ 17. Which one of the following is an ionophore?
a. decoquinate b. lasalocid c. phosphate d. salt e. soybeans

D___ 18. What should the % protein be in a cow's diet during early lactation on a dry matter basis?
a. 3% b. 5% c. 11% d. 18%

B 19. What is the most common cause of death in calves less than 3 weeks of age?
a. pneumonia b. scours c. injury d. BVD

B 20. What type of immunity does a calf get from a vaccination injection?
a. passive b. active

C 21. What category of organism causes pneumonia?
a. bacterium b. virus c. a and b

C 22. What season of the year are lice most apt to be a problem?
a. summer b. fall c. winter

A 23. What disease is often spread in a herd by a persistently infected (PI) animal?
a. BVD b. pinkeye c. shipping fever

A 24. What is the main disadvantage of bedded pack barns?
a. high cost of bedding b. high building costs c. poor cow comfort

B 25. For how many weeks prior to calving is it recommended that cows get a transition diet?
a. 1 week b. 3 weeks c. 6 weeks

B 26. What is the hollow cavity inside of the teat called?
a. gland cistern b. teat cistern c. steak canal d. teat orifice

A 27. How many cows does one robot usually serve?
a. 55 b. 100 d. 150

D 28. What pasteurization process allows milk to be stored at room temperature for at least 3 months?
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