

2014 Iowa FFA Dairy Cattle Evaluation CDE Test
West Union, Iowa September 6, 2014

Mark the best answer in the proper blank on the Scantron sheet.

25 Objective Questions -- 2 pts. each

1. What components make up the hindgut of the digestive system?
a. Rumen, reticulum, omasum b. Rumen, rectum, esophagus
c. Cecum, colon, rectum d. Abomasum, small intestine, large intestine

2. Which of the following is a source of non-protein nitrogen?
a. Linseed meal b. Corn grain c. Soybean meal d. Urea

3. At what age do dairy cattle develop upper incisors?
a. Birth b. 3 days c. 3 months d. Never

4. What nutrient supplies the majority of energy in a cow's ration?
a. Minerals b. Water c. Carbohydrate d. Protein

5. Which of the following hormones is not directly associated with reproduction?
a. Testosterone b. Adrenaline c. Estrogen d. Progesterone

6. Which stomach area absorbs the majority volatile fatty acids produced during fermentation?
a. Reticulum b. Rumen c. Omasum d. Abomasum

7. Washing the udder prior to milking stimulates the release of _____ which induces milk letdown.
a. Estrogen b. Testosterone c. Adrenaline d. Oxytocin

8. What is the name of milk sugar?
a. Dextrose b. Fructose c. Lactose d. Sucrose

9. The average herd size in the US grew by nine cows this past year. What is the nation's current average herd size?
a. 102 b. 196 c. 573 d. 1198

10. What is the term given to a heifer born twin to a bull?
a. Displaced abomasums b. Gomer c. Freemartin d. Metritis

11. Which of the following feeds usually contains the most protein?
a. Alfalfa hay b. Corn silage c. Soybean oil meal d. Corn grain

12. The only part of a milking machine that touches the cow is the ?
a. Pulsator b. Vacuum pump c. Inflation d. Milk line
13. Fat has how many times as much energy per pound as carbohydrates?
a. .75 b. 1.25 c. 2.25 d. 4.40
14. At birth, which stomach area is the largest in a calf?
a. Abomasum b. Omasum c. Rumen d. Reticulum
15. If the following rumen content is “depressed”, fat content of milk is most likely depressed.
a. Lactic Acid b. Acetic Acid c. Butyric Acid d. Formalin
16. Where is oxytocin stored and released?
a. Ovarian follicle b. Corpus luteum c. Pituitary gland d. Adrenal gland
17. How does a robotic milker find the teats of a cow ready to be milked?
a. Teat sphincter sensors b. Milk detection sensors
c. Sonomatic cell sensors d. Lasers or vision cameras
18. Consumption of which dairy product hit a 44-year high in 2013?
a. Butter b. Cottage Cheese c. Ice Cream d. Fluid milk
19. Cows exposed to sunlight will readily make which vitamin on their own?
a. A b. D c. E d. K
20. What is the main support system holding the udder close to the cow’s body wall?
a. Skin & subcutaneous connective tissue b. Medial suspensory ligament
c. Sustentacular apparatus d. Lateral suspensory ligament
21. “UHT” milk is pasteurized at what approximate minimum temperature in degrees Fahrenheit?
a. 145 b. 161 c. 191 d. 280
22. What is the time period that a cow carried a calf?
a. Gestation b. Lactation c. Parturition d. Rumination
23. What component causes the yellow color in milk from certain breeds of dairy cattle?
a. Protein b. Lactose c. Beta hydroxybutyrate d. Beta carotene
24. Pregnancy can be detected by milk or blood samples or transrectal ultrasound how many days after insemination?
a. 10-12 days b. 28-30 days c. 35 days d. 47 days
25. What is the name of the process where warm milk is forced through tiny holes in order to break the fat particles into tiny pieces?
a. Conception b. Fertilization c. Homogenization d. Pasteurization

Dairy Management Problems -- 5 pts each

56. (Shelled corn -- 56 lb/bu Ear corn -- 70 lb/bu) A concentrate mix consists of 1700 lbs of corn & cob meal, 680 lbs of shelled corn and 625 lbs of 44% soybean oil meal. If shelled corn costs \$3.80/bu, ear corn at \$3.05/bu and soybean meal costs \$410/ton, what is the cost per pound of this mix?

- a. \$0.0826/lb b. \$0.0912/lb c. \$0.0987/lb d. \$0.1002/lb

57. What is the cost per pound of ground ear corn if ear corn sells for \$3.15/bu (70#/bu) and grinding is \$.52 per cwt.?

- a. \$.0451 b. \$.0492 c. \$.0502 d. \$.0512

58. What is the percent protein in the following ration?

Corn silage	1350	3.6%
Ground shelled corn	920	9.1%
Whole cottonseed	550	21.5%
Haylage	1250	5.8%
Hay	500	20.2%
Protein Mix	500	44%
Minerals	200	0%

- a. 13.91% b. 12.22% c. 11.97% d. 11.22%

59. What is the component value of a hundredweight of milk if the farm produces 414,000 pounds of milk with the following:

<u>Components</u>		<u>\$Basis Milk Value</u>
Butterfat	4.50%	1.789
Protein	4.11%	4.426
Solids	5.82%	.0825
SCC	295,000	.42

- a. \$25.78 b. \$27.14 c. \$28.16 d. \$29.57

60. You purchased the following hay at the Rock Valley Hay Auction. Which hay costs the least per pound of protein?

			%protein
Alfalfa large round	44,000 lbs	\$145/ton	19.2
Alfalfa 3x4 bales	57,000 lbs	\$130/ton	16.6
Grass large round	40,500 lbs	\$81/ton	11.2
Grass 3x3 bales	33,000 lbs	\$60/ton	7.8

- a. Alfalfa large round b. Alfalfa 3x4 bales
 c. Grass large round d. Grass 3x3 bales

Sire Evaluation Questions -- 5 pts each

Refer to **Appendix B (Accelerated Genetics--40 Bulls--USA Proof Criteria)** to answer the following questions.

61. Which bull should have the most impact on daughters producing high quality milk?
a. Gambler b. Joclassic c. Magnum d. Chops
62. Which trait could you look at if you wanted to know characteristics about the mammary system?
a. DCE b. FLC c. PTAT d. UDC
63. Which bull should raise the component value of fat and protein?
a. Chops b. Gifian c. Gambler d. Frost
64. What factor has put Supershot as the highest ranking sire on this sire report?
a. FLC b. TPI c. PTAF d. SCS
65. If PTAF determined the ranking order, which bull would be listed first?
a. Supershot b. Belair c. Hunk d. Mookie

Pedigree Questions -- 5 pts each

Refer to **Appendix C (Heifer pedigrees)** to answer the following questions.

- | | | |
|----|--------|---------------------------------|
| #1 | Lot 15 | Hard Core Kaiser Firefly |
| #2 | Lot 16 | Hard Core Premium Fire Maid EXP |
| #3 | Lot 26 | Hard Core Royal Rhythum |
| #4 | Lot 27 | Hard Core Playboy Royals |
66. Which heifer is the oldest?
a. #1 b. #2 c. #3 d. #4
67. Which heifer has a grandmother that classified excellent 95?
a. #1 b. #2 c. #3 d. #4
68. Which heifer's dam and sire were both an embryo transfer?
a. #1 b. #2 c. #3 d. #4
69. Which heifer's sire was classified as an excellent 91 points?
a. #1 b. #2 c. #3 d. #4
70. Which heifer has the least similar genetics?
a. #1 b. #2 c. #3 d. #4

Please use Placing Class Card for the next three sections.

Phase E -- Pedigree Evaluation

Refer to **Appendix C** (Heifer Pedigrees) to rank the animals based on their pedigree and indicate your ranking on the answer sheet.

#1	Lot 15	Hard Core Kaiser Firefly
#2	Lot 16	Hard Core Premium Fire Maid EXP
#3	Lot 26	Hard Core Royal Rhythum
#4	Lot 27	Hard Core Playboy Royals

Phase F -- Sire Evaluation

You are a Jersey dairy producer who wants cows that have good, well-attached udders, sound feet and legs and a long productive life as these cows do best in your system. Furthermore, you prefer cows with high production and high combined fat and protein. You may want to show some heifers as your children are now in 4-H and FFA. You currently have a large group of breeding age heifers that you would like to breed to the same bull with the hope of being one of the first dairy producers to have several milking daughters on the next “hot” bull. Consequently you want to use one of the following four sires who only have a genomic proof. Using **Appendix D** which sire should be your first, second, third and fourth choice to use on these heifers.

#1 Recognize	#2 Grant	#3 Neal	#4 Crosby
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Phase G -- Culling Class

You milk in a tie-stall barn and want to keep a milking cow in every stall and not have to shift cows in and out to get them all milked. All dry cows are housed elsewhere. You sell high volumes of high quality milk with emphasis on reproductive efficiency. You had a first-calf heifer calve this morning and you want to cull one of the following four cows to make room for this fresh heifer. Use the attached DHI-103 Cow Pages (**Appendix E**) to place the cows in the order that you would cull them from your herd. The first cow you would cull should be ranked #1 and the last cow you would cull should be ranked #4.

#1 Index 7705	#2 Index 7898	#3 Index 7966
#4 Index 8083		

HERD SUMMARY

42-77-0074

DHI-202

Test Date Samples at Lab Processed
08-25-2014 **08-27-2014** **08-27-2014**

IO STATE DAIRY
 JOE DETRICK

Page 1 of 6

Electronic Meters	Breed	HO	Type Test	DHI-APCS	Assoc.	400	Supv.	97	String	1
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Production, Income & Feed Cost Summary

	Daily Average per Cow on Test Day			Rolling Yearly Herd Averages		
Total Cows	361			398.1		
Cows in Milk	Number	%		Number	%	
	328	91		354.3	89	
Milk Lbs (All Cows)	68.8			25,889		
Fat Lbs (All Cows)	2.40			936		
Fat %	3.5			3.6		
Protein Lbs (All Cows)	2.03			812		
Protein %	3.0			3.1		
Milk Lbs (Milking Cows)	75.8					
	Milking Cows	All Cows				
Silage	Lbs Consumed		Lbs Consumed	%ENE		
Other Succulents or Blended Rations	Lbs Consumed		Lbs Consumed	%ENE		
Dry Forage	Lbs Consumed		Lbs Consumed	%ENE		
Other Feeds	Lbs Consumed		Lbs Consumed	%ENE		
Pasture			Days	%ENE		
Concentrates	Lbs Consumed		Lbs Consumed	%ENE		
Value of Product \$	18.38	16.50	6,136			
Cost of Concentrates \$						
Total Feed Cost \$						
Income Over Feed Cost \$						
Feed Cost per CWT Milk \$						
Milk Blend Price	Per CWT	% Fat	% Pro	Per CWT	% Fat	% Pro

Reproductive Summary Of Current Breeding Herd

Total Cows Breeding Herd	Voluntary Waiting Period (VWP)	Days to 1st Service	Cows With No Service Dates or Diag. Open			Cows Bred But Not Diag. Preg.				
			Open VWP to 100 Days	Open Over 100 Days	Number Diag. Open	Days Open at Last Service				
102	50	65	11	4	4	Number Cows		37	11	39

Reproductive Summary Of Total Herd

	Days Open at 1st Service			Avg. Days to 1st Service	Services per Pregnancy		Projected Minimum		Service or Heat Interval		Services for Past 12 Months			
	Number Under VWP	Number VWP to 100	Number Over 100		Preg. Cows	All Cows	Calving Interval	Days Open	Interval Length	Number Intervals	Service Number	Number Services	Conception Rate	Service Sire Merit \$
1st Lact	4	96	1	67	2.7	3.4	13.2	120	< 18	66	1st	353	27	+796
2nd Lact	5	76		64	2.2	3.2	13.0	114	18 - 24	146	2nd	257	28	+788
3+ Lacts	5	76		65	3.0	4.3	13.3	125	36 - 48	244	3rd +	444	28	+782
All Lacts	14	248	1	66	2.6	3.6	13.1	120	Other	90	Total	1054	28	+788
% of All 1st Services	5	94			Current Actual Calving Interval		13.2				Abortions	This Test		Past Year
											Actual	1		1
											Apparent	8		46

Birth Summary

Dam's Lact Num	Offspring Born								
	Males		Females		Calving Difficulty Score				
	Alive	Dead	Alive	Dead	1	2	3	4 & 5	% 4+5
1	44	7	53	5	78	11	8	6	6
2+	124	9	128	12	209	19	12	3	1
Total	168	16	181	17	287	30	20	9	3

Cows To Be Milking, Dry, Calving By Month

	Sep	Oct	Nov	Dec	Jan	Feb
* Milking	330	323	328	319	320	317
Dry	28	34	27	31	40	43
Cows to Calve	24	15	22	19	21	19
Heifers to Calve	14	13	12	9	24	14

* Assumes 3.9% per month culling rate.

Yearly Reproductive Summary

Test Date	% Heats Obs.	Conception Rate	Preg Rate	Number Services	Number Confirm Preg	Number Calving	Total Preg Cows
Test Dropped	62	28	18	117	34	41	188
10-09-13	75	24	23	120	32	37	195
11-13-13	75	26	25	124	30	32	196
12-11-13	69	21	20	90	34	25	202
2-13-14	65	27	21	193	58	81	193
3-26-14	65	33	26	102	29	54	182
4-30-14	65	24	17	99	40	32	193
6-04-14	63	34	22	104	30	34	187
7-11-14	61	31		105	37	30	183
8-25-14	59			102	40	52	172
Averages	66	28	22	115	37	42	189
Totals				1039		377	

Miscellaneous Herd Information

	Shipped-Test Day Comparison			Milking Times	Wgh	Spl
	Test Day	Yearly Avg.				
Sum of Test Day Wts	24602	27782		1st	12:02pm	Y N
Reported Avg.				2nd	8:00pm	Y N
Daily Bulk Tank Wts				3rd	4:20am	Y Y
% Deviation						

Remarks:

Cows milked 3 times daily for all or part of this yearly period.

Appendix B

NAAB	Name	TPI	NM\$	PTAM	PTAF	PTAF%	PTAP	PTAP%	MREL	PL	SCS	DPR	PTAT	UDC	FLC	SCE	DCE	EvalDate	SIRE x MGS x MGGS
224HO02881	Supershot	2616	1038	2503	96	0.02	84	0.03	73	7.3	2.69	2.1	2.20	1.66	1.56	6.3	4.3	201408	Supersire x Super x Shottle
014HO07303	Gambler	2501	867	2023	69	-0.02	60	0.00	75	6.3	2.54	1.0	3.16	2.92	2.62	7.2	5.3	201408	Mogul x Atwood x AltaThrone
202HO00995	Mikkel	2496	789	1616	74	0.06	64	0.06	75	4.5	2.70	2.9	2.79	2.29	2.80	7.9	5.1	201408	Mixer x Super x Shottle
014HO07418	Belair	2493	840	2013	97	0.08	79	0.07	74	4.9	3.05	0.6	2.82	2.37	2.24	6.4	4.8	201408	Supersire x Bookem x Dex
014HO07337	Chops	2491	793	1142	88	0.18	56	0.09	75	4.1	2.87	0.8	3.60	3.63	3.12	6.0	5.2	201408	Mogul x Man-O-Man x Mac
014HO07381	Barkley	2477	831	1094	72	0.12	46	0.05	75	6.1	2.67	1.4	3.16	3.26	3.15	6.2	4.0	201408	Mogul x Bowser x Mac
014HO07324	Gifian	2468	812	2500	92	0.00	76	0.00	75	4.0	2.74	0.2	2.95	2.47	2.38	7.8	6.2	201408	Mogul x Boxer x AltaJuryman
224HO03002	Paramount	2466	827	1228	75	0.11	55	0.07	74	5.5	2.55	1.5	2.65	2.59	3.27	6.6	5.0	201408	Mogul x Man-O-Man x Goldwyn
014HO07336	Kuhn	2463	775	1405	73	0.08	68	0.10	75	4.0	2.70	1.5	2.91	2.58	2.84	8.2	5.4	201408	Mixer x Man-O-Man x M-Leader BL
014HO07387	Zyke	2462	894	1910	89	0.07	63	0.02	73	5.7	2.61	0.7	2.45	2.50	2.17	7.6	6.0	201408	Headliner x Dorcy BY x O Man
014HO07328	Mookie	2458	901	1098	105	0.25	53	0.07	75	5.9	2.73	1.3	2.46	2.68	1.74	5.7	5.4	201408	Mogul x Observer x Shottle
014HO07340	Payton	2458	825	1455	72	0.07	62	0.07	75	4.7	2.63	2.1	2.47	2.71	2.30	5.8	5.1	201408	Mogul x Man-O-Man x Shottle
202HO01018	Jocclassic	2455	855	1833	82	0.06	65	0.04	72	6.2	2.90	1.5	2.37	2.26	2.28	7.4	5.0	201408	Supersire x Beacon x Jango
014HO07296	Racer	2421	812	1462	59	0.02	58	0.06	74	5.7	2.60	1.7	2.80	2.74	1.84	5.8	4.9	201408	Lexor x Observer x Ramos
014HO07420	Idaho	2408	785	663	77	0.19	37	0.06	74	5.8	2.59	1.6	3.24	3.15	1.82	6.8	4.4	201408	Numero Uno x Robust x Zenith
014HO07451	Hunk	2407	788	1485	88	0.12	65	0.08	74	4.5	2.81	1.3	2.42	2.10	1.87	6.1	4.5	201408	Supersire x Man-O-Man x Shottle
014HO07488	Halt	2403	827	622	71	0.19	41	0.08	74	6.2	2.52	1.2	2.89	3.19	1.74	5.9	3.9	201408	Predestine x Man-O-Man x Goldwyn
014HO07341	Rawlins	2402	827	1049	64	0.11	44	0.05	75	6.8	2.64	1.8	2.50	3.10	1.93	6.6	4.8	201408	Mogul x Observer x Shottle
014HO07349	Fairfax	2396	887	871	79	0.18	46	0.08	74	6.7	2.67	2.4	1.77	2.45	1.79	5.8	4.7	201408	Mogul x Freddie x Lancelot
014HO07313	Frost	2380	749	1335	65	0.07	43	0.01	75	5.2	2.52	0.3	3.24	3.48	2.60	6.4	5.2	201408	Mogul x Domain x Shottle
014HO07368	Magnum	2376	765	2181	80	0.00	64	-0.01	74	5.2	2.92	1.1	2.83	2.04	1.49	7.6	4.8	201408	Supersire x Planet x Shottle
014HO07432	Merritt	2370	731	1796	86	0.08	54	0.00	75	3.2	2.81	1.2	2.89	2.66	1.93	5.7	3.0	201408	Mccutchen x Mac x O Man
014HO07407	Niklaus	2370	728	1414	67	0.06	43	0.00	74	5.3	2.81	2.2	3.13	3.03	1.82	7.8	5.3	201408	Numero Uno x Observer x Toystory
014HO07292	Cotty	2361	823	827	50	0.08	34	0.03	76	6.8	2.41	3.0	2.41	2.56	1.61	5.0	3.8	201408	Ecoyne Isy x Man-O-Man x Mac
014HO07427	Lindy	2357	744	1934	65	-0.02	65	0.03	76	3.8	2.47	1.3	2.33	2.16	1.79	6.7	5.9	201408	Mascalese x O-Style x Nifty
014HO07223	Shakespeare	2330	720	1015	66	0.11	39	0.03	78	5.6	2.48	0.5	3.06	2.81	2.53	8.0	6.4	201408	Epic x Shottle x Debut
014HO07269	Lance	2328	673	697	48	0.08	33	0.05	75	5.3	2.59	2.3	3.26	3.26	2.13	7.8	5.7	201408	Numero Uno x Goldwyn x Zenith
014HO07485	All Day*RC	2327	739	1576	69	0.05	49	0.01	74	5.4	2.61	0.4	2.68	2.47	2.53	7.2	5.9	201408	Day x Snowman x Shottle
014HO07184	Triton	2327	713	1811	72	0.02	65	0.04	76	4.2	2.87	1.3	2.24	1.82	2.17	7.6	5.3	201408	Peoti x Super x Colby
014HO07281	Iceberg	2326	766	519	21	0.01	29	0.06	76	7.9	2.26	3.0	2.28	2.28	2.82	6.3	3.7	201408	Epic x Garrett x Goldwyn

Lot 15 DOB: 6/03/2013 **HARD CORE KAISER FIREFLY** 68314411 H195

Ecuafarm Peris Kaiser

USA 462555 EX91
PTA: +661M +16F +21P
PTAT: +2.8

**Hard Core Snoopy Firebug-
EXP**

USA 68309901 VG-88
1-11 284 12844 3.6 468 3.3 422
RIP

Gold Mine Frost Kourt

USA 454143
PTA: +40M +11F +8P
PTAT: +4.8

Kingsdale Peri 149th

USA 449185 EX-90 2E
2-00 347 25670 3.3 855 3.0 782
3-02 309 25530 3.3 835 3.1 786
4-02 365 33800 3.1 1045 3.0 1017
5-05 305 24730 3.3 825 3.5 854

Hard Core Othello Snoopy-ET

USA 68303119
PA: -215M -11F -9P
PA PTAT: +1.4

Springhill Firepower-ET

USA 360012235 EX-92 2E
3-00 315 21790 3.8 819 3.1 686
4-01 328 20380 3.8 784 3.2 651
5-03 295 16000 4.1 651 3.5 556
6-02 283 14020 3.5 496 3.4 474

3rd Dam:

Sunshine Now You See

Fireball EX-90 2E

7-10 274 19980 3.2 648 2.9 588
Resv AA Fall Yearling 2003
Res AA Fall Heifer 2002

4th Dam:

Sunshine Fig's Frosty EX90

5-05 305 20580 3.6 738 3.1 637
342 22520 3.5 797 3.1 700
6-05 305 19680 3.4 664 3.1 605
352 21090 3.4 717 3.1 651

Lot 16 DOB: 9/03/2013 **HARD CORE PREMIUM FIRE MAID-EXP** 68314413 H198

**Springville Logic Premium-
ET**

USA 68306847
PA: +103M +19F +4P
PA PTAT: +1.8

Springhill Firepower-ET

USA 360012235 EX-92 2E
3-00 315 21790 3.8 819 3.1 686
4-01 328 20380 3.8 784 3.2 651
5-03 295 16000 4.1 651 3.5 556
6-02 283 14020 3.5 496 3.4 474

GMC Rebel Logic-ET

USA 456757 EX90
PTA: +74M +36F +3P
PTAT: +2.8

Tex-Star Othello Peri

USA 459561 EX-94 2E
4-07 348 18220 3.7 676 3.1 565
5-11 291 19000 3.7 710 3.3 632
6-09 363 20760 3.6 755 3.4 706
2010 WDE Grand Champion

STBVQ Rubens-ET RC

USA 5844883
PTA: -561M -19F +1P
PTAT: +1.32

**Sunshine Now You See
Fireball**

USA 452512 EX-90 2E
7-10 274 19980 3.2 648 2.9 588
Resv AA Fall Yearling 2003
Res AA Fall Heifer 2002

Maternal Sister to Lot 12,14

3rd Dam:

Sunshine Fig's Frosty EX90

5-05 305 20580 3.6 738 3.1 637
342 22520 3.5 797 3.1 700
6-05 305 19680 3.4 664 3.1 605
352 21090 3.4 717 3.1 651

LOT 26 DOB: 9/01/2012 **HARD CORE ROYAL RHYTHM** 68312409 H183
Sells Open

Ecuafarm Kaiser Royalty

USA 68307222
PTA: +822M +29F +29P
PTAT: +3.1

Hard Core MRB Rockstar

USA 68307669 VG-85
2-00 305 12235 3.6 444 3.1 380
330 13139 3.6 478 3.1 408
3-01 175 8768 3.9 339 3.0 265 RIP
305 13503 3.9 522 3.1 413 Proj

Ecuafarm Peris Kaiser

USA 462555 EX91
PTA: +643M +14F +21P
PTAT: +3.2

Ecuafarm Koyote Reina

USA 460874 EX-93 2E
3-01 298 20212 4.3 865 3.3 657
4-01 365 25770 3.7 965 3.2 816
5-08 362 30730 4.2 1286 3.4 1059

HCTH Margaritas Rebel-ET

USA 457509
PTA: +97M -9F -3P
PTAT: +0.9

Hard Core Acad Rowan

USA 468557 EX-90
2-02 298 16280 3.5 562 3.1 501
3-01 311 18540 3.7 682 3.3 604
4-01 331 17990 3.3 600 3.2 571
Resv AA Jr. 3 Yr old 2010

3rd Dam:

**Hard Core Othello Rozella EX93
2E**

4th Dam:

**Horizon Enhancer Rozlyn-EXP
EX90-2E**

LOT 27 DOB: 9/29/2013 **HARD CORE PLAYBOY ROYALS** 68314558 H203

Spungold-R CD Playboy-ET

USA 68302215
PTA: -938M -34F -25P
PTAT: -0.5

Hard Core Money Remington

USA 68301987 EX-91
2-02 305 14680 4.5 656 3.6 522
343 15660 4.5 710 3.6 562
3-03 285 11810 4.3 510 3.7 435
4-02 255 10320 4.5 465 3.6 372
Nom AA Jr 2 yr old 2010

Bar-D Krauses Fawns C.D.

USA 454666
PTA: -49M +1F -4P
PTAT: -2.4

Gold Mine Poppys OT Kay

USA 446516 EX-95 2E
3-10 305 26713 4.1 1085 3.1 841
4-10 365 46666 3.3 1544 3.1 1427
5-10 365 43840 3.4 1484 3.1 1340
7-11 365 46980 3.4 1587 3.1 1437
LIFE: 230009M 7888F 7044P

HCTH Rebels Money-ET

USA 370010790
PTA: +368M -7F +13P
PTAT: -0.5

Hard Core Othello Rozella

USA 451283 EX-93 2E
3-07 365 24090 3.7 902 3.4 814
4-10 343 25950 3.8 996 3.2 842
5-11 325 21890 3.8 832 3.3 721
6-10 365 26360 3.7 984 3.2 852
8-01 365 23590 3.6 849 3.2 759
9-04 335 26320 3.8 990 3.1 824
10-05 365 26430 3.7 987 3.2 851

3rd Dam:

**Horizon Enhancer Rozlyn-EXP
EX90-2E**

APPENDIX D

RECOGNIZE



7JE1261 CINNAMON RIDGE V RECOGNIZE-ET
USA118120117 JH1F

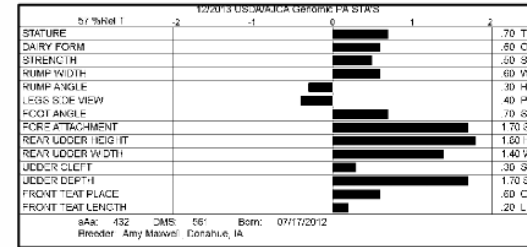
Sire: All Lynns Legal Visionary-ET
Dam: Cinnamon Ridge Artis Praise (VG-87%)
5-0 305d 26,960M 4.9% 1,331F 3.6% 970P
MGS: ISDK Jas Artist
MGD: Woodstock Hallmark Louisa (VG-88%)



SUPER SAMPLERS

USDA-CDCB Genomic Eval. (12/13)
(Rel 61%) +1,491Milk % Test Lbs. Net Merit (Rel 56%) +\$ 524
Protein - .01 + 50 Cheese Merit +\$ 558
Fat - .06 + 57 Fluid Merit +\$ 498
USDA/AJCA Genomic Evaluation (12/13)
+1.7Type Rel 57% GJPI +218
Jersey Udder Index +4.01
SCS 2.83 (Rel 55%) PL +3.5 (Rel 47%) DPR +0.0 (Rel 45%)

- Expect consistent performance with this Visionary son
- His Very Good (87%) Artist dam has two records over 25,000 pounds of milk
- Five generations of Excellent and Very Good dams with regular calving intervals



#1

GRANT



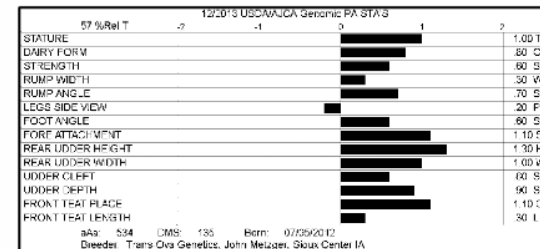
7JE1301 TRANS OVA CRITIC GRANT F655-ET
8403008897846 JH1C

Sire: Schultz Legal Critic-P
Dam: Tollenaar Louie 6528
MGS: Tollenaars Impuls Louie 260-ET
MGD: Tollenaar Matinee 4741 (VG-85%)



USDA-CDCB Genomic Eval. (12/13)
(Rel 61%) +1,246Milk % Test Lbs. Net Merit (Rel 56%) +\$ 498
Protein - .05 + 35 Cheese Merit +\$ 499
Fat - .11 + 39 Fluid Merit +\$ 500
USDA/AJCA Genomic Evaluation (12/13)
+1.2Type Rel 57% GJPI +185
Jersey Udder Index +2.92
SCS 2.88 (Rel 55%) PL +5.3 (Rel 48%) DPR +1.5 (Rel 46%)

- One of Critic's highest Milk sons
- Built for all milk markets – with high merit numbers
- Positive for PL, DPR and low SCS with solid Type



#2

NEAL



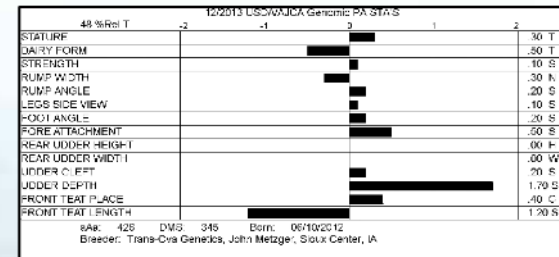
7JE1300 TRANS OVA BROILER NEAL F539-ET
USA118082729 JH1F

Sire: Isdk DJ Broiler
Dam: Tollenaar Louie 6528
MGS: Tollenaaars Impuls Louie 260-ET
MGD: Tollenaar Matinee 4741 (VG-85%)



USDA-CDCB Genomic Eval. (12/13)
(Rel 57%) +253Milk % Test Lbs. Net Merit (Rel 52%) +\$ 467
Protein + .04 + 17 Cheese Merit +\$ 519
Fat + .18 + 45 Fluid Merit +\$ 414
USDA/AJCA Genomic Evaluation (12/13)
+0.3Type Rel 48% GJPI +141
Jersey Udder Index +2.06
SCS 2.75 (Rel 49%) PL +5.2 (Rel 42%) DPR +1.4 (Rel 40%)

- An early Broiler son that offers low GFI
- High Merit values and positive components
- A good source of PL, DPR and low SCS



#3

CROSBY-P



7JE1277 DUTCH HOLLOW CROSBY-P-ET
USA67184843 JH1C

Sire: Schultz Legal Critic-P
Dam: Dutch Hollow Louie Charity (VG-86%)
MGS: Tollenaaars Impuls Louie 260-ET
MGD: Dutch Hollow Gm Cherish (E-90%)



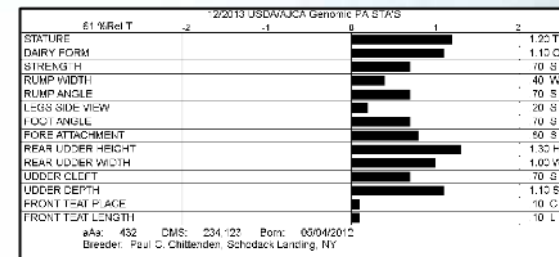
USDA-CDCB Genomic Eval. (12/13)
(Rel 65%) +1,282Milk % Test Lbs. Net Merit (Rel 60%) +\$ 392
Protein - .01 + 44 Cheese Merit +\$ 422
Fat - .03 + 51 Fluid Merit +\$ 371
USDA/AJCA Genomic Evaluation (12/13)
+1.1Type Rel 61% GJPI +174
Jersey Udder Index +3.01
SCS 2.90 (Rel 59%) PL +2.2 (Rel 52%) DPR -0.6 (Rel 49%)

SUPER SAMPLERS



DUTCH HOLLOW LOUIE CHARITY (VG-86%)
2-10 305d 3X 26,150M 4.7% 1,232F 3.4% 896P

- Two generations of 26,000 pounds actual milk
- One of Critic's highest sons for PTA Milk and CFP
- Polled genetics from Dutch Hollow



#4

Barn Name 7705		Index 7705								
Breed	Country	Identification	Birth Date	Body Wt.	Inbrd. Coef.	DCR Milk				
HO	USA	63429020 984000001159272	05-20-08	1460	8.2					
Predicted Transmitting Ability				Estimated Relative Producing Ability						
Milk	%Fat	Fat	%Pro	Pro	\$	%Rel %Rank	Milk	Fat	Pro	\$
-765	+01	-26	+02	-19	-234	58	-5137	-164	-168	-2204

Test Day Data				Lact No.	4	Calving Date	09-08-13
DIM	32	67	95	159	200	235	270
Milk	99	107	98	87	75	65	49
Fat %	3.2	4.1	3.2	2.0	3.6	3.0	4.0
Pro %	2.5	2.7	3.0	2.7	2.9	2.9	3.0
SCC	1715	606	230	200	187	696	81

Sire	ELM ELDWIN							
	Breed	Country	Identification			AI Code / Name		Inbrd
	HO	USA	17281340			1HO05502 ELDWIN		8.7
PTA	Milk	%Fat	Fat	%Pro	Pro	\$	%Rel	%Rank
	-385	-.09	-36	+05	+2	-139	99	

Dam	133195930							
	Breed	Country	Identification			Barn Name / Index		Inbrd
	HO	USA	133195930			2197		4.6
PTA	Milk	%Fat	Fat	%Pro	Pro	\$	%Rel	%Rank
	-555	+00	-20	-.02	-23	-196	63	

MGS	NUNESDALE KISMET ELATION-ET							
	Breed	Country	Identification			AI Code / Name		Inbrd
	HO	USA	2280338			7HO06247 ELATION		3.0
PTA	Milk	%Fat	Fat	%Pro	Pro	\$	%Rel	%Rank
	+322	-.07	-7	-.04	-1	-38	99	2

Lact No.	Test Plan	Calving Date	Age at Calving	Days Dry	Days Open	NO. BR.	305 Day Lactation					Days 3X	Complete Lactation					CAR	ME Lactation			Herdmate Deviation			
							Milk	% Fat	Fat	% Pro	Pro		DIM	Milk	Fat %	Fat	Pro %		Pro	Milk	Fat	Pro	Milk	Fat	Pro
1	2	06-09-10	2-00		101	1						301	17,087	4.0	688	3.1	534		21,870	875	657	-5717	-52	-181	
2	2	05-23-11	3-00	47	96	2					269	269	15,770	3.4	537	2.9	461		16,206	576	476	-9929	-365	-299	
3	2	05-14-12	3-11	88	206	3	20,534	3.6	731	2.9	596	402	402	24,973	3.6	892	2.9	735		18,913	704	565	-5830	-180	-176
4	2	09-08-13	5-03	80	59	5					291	291	23,953	3.2	769	2.8	676		22,667	744	650	-4108	-220	-182	
LIFETIME							4	95	55			1263	81,783	3.5	2886	2.9	2406		19,914	725	587	-6396	-204	-209	
							Number of Lactations	Reproductive Efficiency	Average Milk/Day	Totals							Averages								

* Dry thru Test Date: 07-11-14
Dried on 06-26-14
Number of Breedings = 1
Last Bred 11-06-13 To 1HO10989 HO Preg

Barn Name
7705
Index
7705

Barn Name	7705	Index Number	7705	Identification	63429020
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Barn Name		Index									
7898		7898									
Breed	Country	Identification		Birth Date		Body Wt.		Inbrd. Coef.		DCR Milk	
HO	USA	65927766 984000001159230		01-25-09		1460		5.3			
Predicted Transmitting Ability						Estimated Relative Producing Ability					
Milk	%Fat	Fat	%Pro	Pro	\$	%Rel	%Rank	Milk	Fat	Pro	\$
+1074	+0.2	+44	-0.2	+27	+331	82	84	+2477	+126	+45	+979

Sire								
HONEYCREST RUFFIAN-ET								
Breed	Country	Identification		AI Code / Name		Inbrd		
HO	USA	132135953		11HO07871 RUFFIAN		3.8		
Milk	%Fat	Fat	%Pro	Pro	\$	%Rel	%Rank	
+1586	-0.4	+46	-0.1	+45	+371	99	45	

Dam								
HO USA 63428625 7310 16.4								
Breed	Country	Identification		Barn Name / Index		Inbrd		
HO	USA	63428625		7310		16.4		
Milk	%Fat	Fat	%Pro	Pro	\$	%Rel	%Rank	
+1114	-0.6	+24	-0.3	+26	+201	82	56	

Test Day Data			Lact No.		3		Calving Date			05-10-13	
DIM	35	76	118	153	188	216	280	321	356	391	
Milk	132	118	106	111	102	90	82	72	64	46	
Fat %	4.5	3.6	4.0	3.9	3.6	3.3	3.3	3.9	3.5	4.3	
Pro %	2.8	2.6	2.8	2.9	3.2	3.2	3.1	3.1	3.0	3.1	
SCC	50	2786	3430	1493	2986	3200	152	87	100	132	

MGS								
HA-HO CUBBY MANFRED-ET								
Breed	Country	Identification		AI Code / Name		Inbrd		
HO	USA	2183007		14HO02090 MANFRED		5.2		
Milk	%Fat	Fat	%Pro	Pro	\$	%Rel	%Rank	
+834	-0.2	+25	+0.0	+26	+264	99	26	

Lact No.	Test Plan	Calving Date	Age at Calving	Days Dry	Days Open	NO. BR.	305 Day Lactation					Days 3X	Complete Lactation					CAR	ME Lactation			Herdmate Deviation				
							Milk	% Fat	Fat	% Pro	Pro		DIM	Milk	Fat %	Fat	Pro %		Pro	Milk	Fat	Pro	Milk	Fat	Pro	
1	2	12-27-10	1-11		136	1	23,192	3.5	816	2.9	667	71	367	27,321	3.6	970	2.9	792		28,247	982	798	+1654	+55	-8	
													365	27,215	3.5	966	2.9	788								
2	2	02-13-12	3-00	46	177	3	30,056	3.5	1063	2.8	835	409	409	37,442	3.6	1348	2.8	1065		29,001	1063	810	+5834	+240	+126	
													365	34,716	3.6	1240	2.8	982								
3	2	05-10-13	4-03	43	160	3	31,640	3.9	1221	3.0	936	391	391	37,129	3.8	1427	3.0	1105		28,587	1154	873	+2418	+208	+60	
													365	35,753	3.8	1373	3.0	1063								
LIFETIME							3	94			81			1167	101,892	3.7	3745	2.9	2962		28,612	1066	827	+3302	+168	+59
							Number of Lactations		Reproductive Efficiency		Average Milk/Day		Totals							Averages						

* Dry thru Test Date: 07-11-14
 Dried on 06-05-14
 Number of Breedings = 3
 Last Bred 10-17-13 To 1HO10598 HO Preg
 Prev Bred 09-05-13 To 1HO10696 HO
 Prev Bred 07-25-13 To 1HO10824 HO

Barn Name	7898	Index Number	7898	Identification	65927766
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Barn Name
7898
Index
7898

Barn Name 7966						Index 7966					
Breed	Country	Identification		Birth Date	Body Wt.	Inbrd. Coef.		DCR Milk			
HO	USA	65927834 984000001159349		04-01-09	1460	4.7					
Predicted Transmitting Ability						Estimated Relative Producing Ability					
Milk	%Fat	Fat	%Pro	Pro	\$	%Rel	%Rank	Milk	Fat	Pro	\$
+54	-.02	-4	+0.4	+12	+212	81	58	-881	-169	+9	-405

Test Day Data				Lact No.		3		Calving Date		07-12-13	
DIM	13	55	90	125	153	217	258	293	328		
Milk	94	56	93	88	73	65	61	61	50		
Fat %	3.7	2.5	1.5	2.4	2.2	2.6	2.6	2.6	4.0		
Pro %	3.0	3.2	3.3	3.5	3.7	3.5	3.5	3.5	3.1		
SCC	696	3940	132	566	746	857	1838	429	200		

Sire									
HONEYCREST BOMBAY NIFTY-ET									
Breed	Country	Identification			AI Code / Name			Inbrd	
HO	USA	132135971			14HO04148 NIFTY			2.9	
PTA	Milk	%Fat	Fat	%Pro	Pro	\$	%Rel	%Rank	
	+354	-.06	-3	+0.05	+22	+571	99	89	

Dam									
REGANCREST-BOMBAY NIFTY-ET									
Breed	Country	Identification			Barn Name / Index			Inbrd	
HO	USA	63428653			7-7338 7338			6.0	
PTA	Milk	%Fat	Fat	%Pro	Pro	\$	%Rel	%Rank	
	-379	-.01	-17	+0.03	-3	-47	83	8	

MGS									
REGANCREST-HHF MALIN-ET									
Breed	Country	Identification			AI Code / Name			Inbrd	
HO	USA	127549271			29HO10370 MALIN			5.2	
PTA	Milk	%Fat	Fat	%Pro	Pro	\$	%Rel	%Rank	
	-107	+0.01	-1	+0.03	+4	+117	99	11	

Lact No.	Test Plan	Calving Date	Age at Calving	Days Dry	Days Open	NO. BR.	305 Day Lactation					Days 3X	Complete Lactation					CAR	ME Lactation			Herdmate Deviation			
							Milk	% Fat	Fat	% Pro	Pro		DIM	Milk	Fat %	Fat	Pro %		Pro	Milk	Fat	Pro	Milk	Fat	Pro
1	2	04-10-11	2-00		164	1	22,690	3.1	708	3.1	709	137	396 365	28,502 26,707	3.3 3.2	928 853	3.2 3.1	906 840		27,413	852	830	+1183	-77	+49
2	2	07-01-12	3-03	52	100	5	25,399	2.9	743	3.3	837	305	333	26,755	2.9	784	3.3	887		26,590	790	862	+873	-133	+82
3	2	07-12-13	4-03	43	130	3	22,098	2.3	511	3.4	749	363	363	24,944	2.5	618	3.4	840		21,323	511	736	-5580	-464	-94
LIFETIME							3	94		67			1092	80,201	2.9	2330	3.3	2633		25,109	718	809	-1175	-225	+12
							Number of Lactations		Reproductive Efficiency		Average Milk/Day		Totals							Averages					

* Dry thru Test Date: 07-11-14
Dried on 07-10-14
Number of Breedings = 3
Last Bred 11-19-13 To 1HO10915 HO Preg
Prev Bred 11-07-13 To 1HO10915 HO
Prev Bred 09-26-13 To 1HO10218 HO

Barn Name	7966	Index Number	7966	Identification	65927834
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Barn Name
7966
Index
7966

Barn Name		Index				
8083		8083				
Breed	Country	Identification	Birth Date	Body Wt.	Inbrd. Coef.	DCR Milk
HO	USA	65927951 984000001159347	08-08-09	1460	3.3	
Predicted Transmitting Ability						Estimated Relative Producing Ability
Milk	%Fat	Fat	%Pro	Pro	\$	%Rel %Rank
+275	-.05	-3	+0.1	+10	+116	82 34
Milk	Fat	Pro	\$			
+2310	+8	+45	+788			

Test Day Data				Lact No.	3	Calving Date	07-02-13		
DIM	23	65	100	135	163	227	268	303	338
Milk	112	108	114	113	105	96	84	73	52
Fat %	3.1	3.1	2.6	2.9	3.6	3.3	3.0	3.4	4.2
Pro %	2.9	2.7	2.8	3.3	3.2	3.2	3.3	3.4	3.4
SCC	31	13	47	13	17	23	33	38	71

Sire									
J-K-R BW-MARSHLL BILLION-ET									
Breed	Country	Identification			AI Code / Name			Inbrd	
HO	USA	132035749			14HO04099 BILLION			3.6	
PTA	Milk	%Fat	Fat	%Pro	Pro	\$	%Rel	%Rank	
	+774	-.11	-1	+0.4	+34	+326	99	36	

Dam									
Breed Country Identification AI Code / Name Inbrd									
HO	USA	61963142			5-6624			1.5	
PTA	Milk	%Fat	Fat	%Pro	Pro	\$	%Rel	%Rank	
	-143	+0.4	+5	+0.1	-2	-32	82	9	

MGS									
HOSKING RUDOLPH LEVI-ET									
Breed	Country	Identification			AI Code / Name			Inbrd	
HO	USA	120566918			29HO09545 LEVI			3.8	
PTA	Milk	%Fat	Fat	%Pro	Pro	\$	%Rel	%Rank	
	+1110	-.06	+24	+0.2	+38	-2	96	3	

Lact No.	Test Plan	Calving Date	Age at Calving	Days Dry	Days Open	NO. BR.	305 Day Lactation					Days 3X	Complete Lactation					CAR	ME Lactation			Herdmate Deviation			
							Milk	% Fat	Fat	% Pro	Pro		DIM	Milk	Fat %	Fat	Pro %		Pro	Milk	Fat	Pro	Milk	Fat	Pro
1	2	07-08-11	1-11		56	1					46	286	20,405	3.4	685	2.9	586		28,387	941	780	+1544	-20	-9	
2	2	06-02-12	2-09	44	117	1	27,555	3.2	875	2.9	793	348	348	30,869	3.2	991	2.9	906		28,785	931	815	+3942	+38	+66
3	2	07-02-13	3-10	47	114	2	30,826	3.1	966	3.1	953	345	345	33,209	3.2	1057	3.1	1034		30,556	984	949	+3752	+14	+121
LIFETIME							3	104	79		979	84,483	3.2	2733	3.0	2526		29,243	952	848	+3079	+11	+59		
							Number of Lactations	Reproductive Efficiency	Average Milk/Day		Totals					Averages									

* Dry thru Test Date: 07-11-14
Dried on 06-12-14
Number of Breedings = 2
Last Bred 10-24-13 To 1HO11014 HO Preg
Prev Bred 09-12-13 To 1HO10989 HO

Barn Name
8083
Index
8083

Barn Name	8083	Index Number	8083	Identification	65927951
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2014 Iowa FFA Dairy Cattle Evaluation CDE Key

Test Key

1. C
2. D
3. D
4. C
5. B
6. B
7. D
8. C
9. B
10. C
11. C
12. C
13. C
14. A
15. B
16. C
17. D
18. A
19. B
20. B
21. D
22. A
23. D
24. B
25. C

DHIA Questions

51. B
52. D
53. A
54. D
55. C

Dairy Management

56. A
57. C
58. B
59. B
60. C

Sire Evaluation Questions

61. A
62. D
63. A
64. B
65. D

Pedigree Evaluation

66. C
67. D
68. B
69. A
70. B

Phase E Pedigree Placing

Placing 2 - 3 - 1 - 4

Cuts 2- 1- 4

- 2- Highest milk, fat, protein on the dam side
Excellent dam, not as good sire info
- 3- Close middle pair,
Sire had higher milk, fat, protein than #1
Higher PTAT
Dam records similar
- 1- Close to #3
- 4- Lowest PTA milk, fat, protein (sire)
Lowest PTAT, Excellent grandmothers
Lowest dam production

Phase F Sire Selection

Placing 1 - 2 - 4 - 3

Cuts 4- 3 - 4

- 1- Highest JPI (218)
Highest Net Merit
Highest Cheese & Fluid
Highest Type & JUI
PL (3.5)
- 2- 2nd high JPI
2nd high Net Merit
2nd high Cheese & Fluid
Highest PL (5.3)
- 4- 3rd JPI
Lower DPR, Low PL (2.2)
- 3- Fourth JPI
High PL (5.2)
Small teat size
Lowest NM, Cheese & Fluid

Phase G Culling

Placing 1 - 3 - 2 - 4

Cuts 3 - 3 - 4

- 1- Lowest milk, fat, protein
Biggest difference from herd mates
Med SCC
95 Reproductive Efficiency
- 3- Negative herd mate differential
Higher SCC
(Not consistent-SCC)
94 Reproductive Efficiency
- 2- Positive herd mate differential
High SCC, early in lactation
94 Reproductive Efficiency
- 4- Second highest herd mate differential
Superior in SCC & Reproductive Efficiency
Low SCC
104 Reproductive Efficiency