



*Dairy*  
**SUCCESS &  
PROFITABILITY REVIEW**

**2022 MY FARM REVIEW**

**1 - Sample Farm**



**FARM CREDIT**

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NMLS #452721

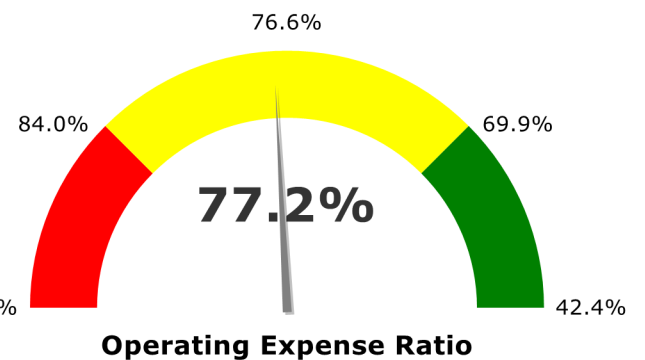
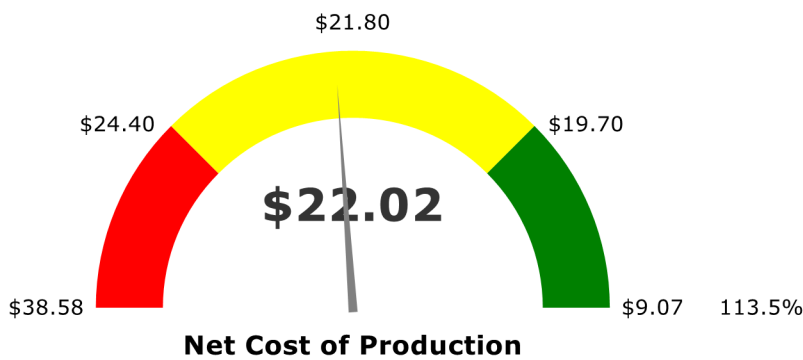
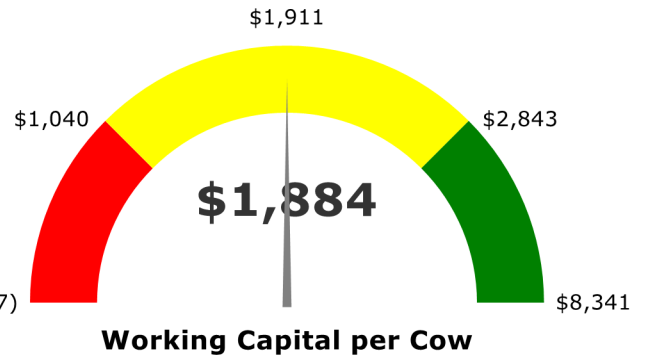
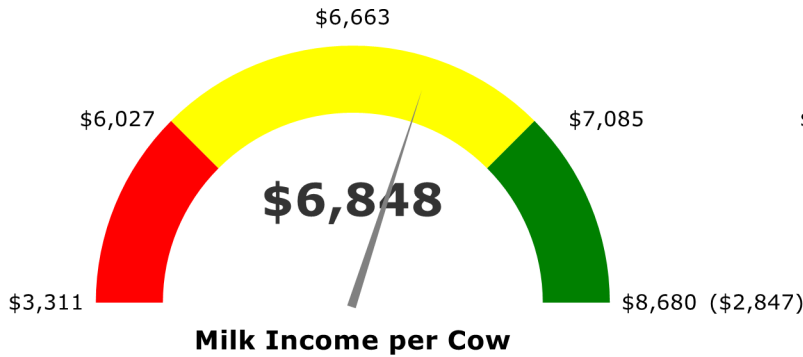
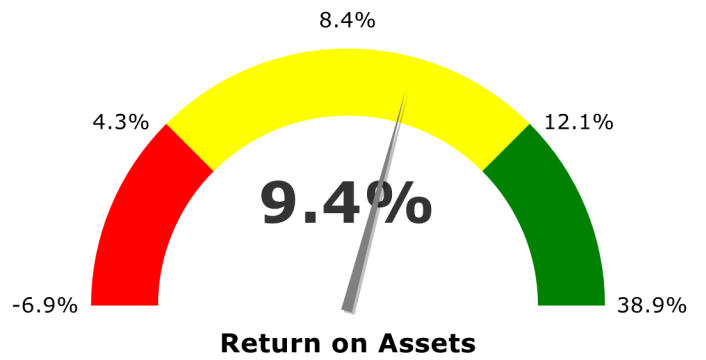
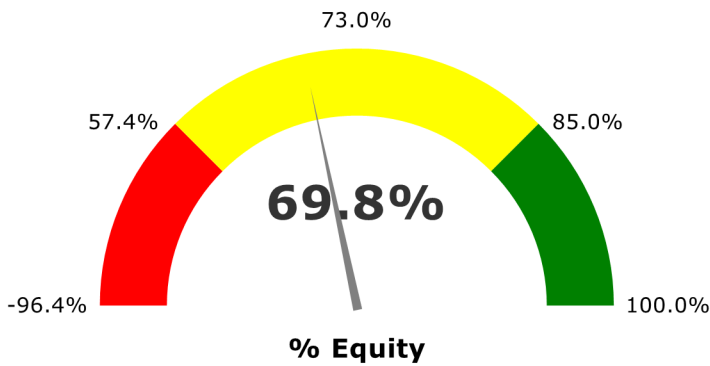
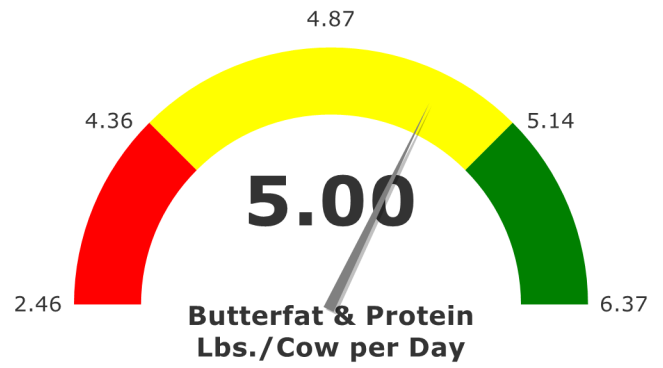
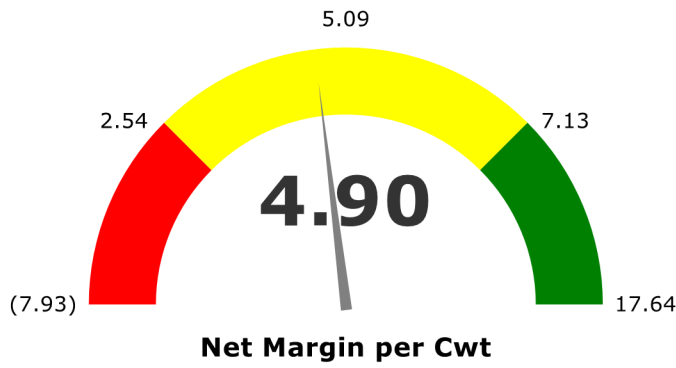
## **2022 Dairy Success and Profitability Review**

### **1 - Sample Farm**

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# 2022 Dairy Success and Profitability Review

## 1 - Sample Farm



## **2022 Dairy Success and Profitability Review**

### **1 - Sample Farm**

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## 2022 Dairy Success and Profitability Review

### 1 - Sample Farm

#### Dairy SPR Top 25%--Range of Key Factors

(Top 25% consists of 43 farms)

Gross Margin Analysis	Net Margin per Cwt.	Gross Milk Price	Cost of Goods Sold per Cwt.	% Gross Margin	Overhead per Cwt.	Operating Expense Ratio
Top	\$17.64	\$31.49	(\$13.74)	153.8%	\$5.64	42.4%
75th Percentile	\$10.82	\$27.86	\$3.93	85.7%	\$7.40	60.3%
					<b>\$7.69</b>	
50th Percentile	\$9.45	\$27.14	\$7.81	71.6%	\$9.90	64.5%
		<b>\$27.13</b>				
25th Percentile	\$7.91	\$26.68	\$10.20	61.9%	\$12.75	69.1%
			<b>\$14.33</b>	<b>55.3%</b>		<b>77.2%</b>
Bottom	\$7.13	\$25.02	\$15.19	47.3%	\$26.76	97.2%
	<b>\$4.90</b>					

Some Keys to Profitability	Milk Income per Cow	Lbs. Milk Sold per Cow	Lbs. Milk Sold per FTWE	Feed and Crop as % of Milk Inc.	Cows per FTWE	Energy Corrected Milk Sold per Cow
Top	\$8,680	31,491	2,028,493	20.4%	74	33,993
75th Percentile	\$7,237	25,878	1,403,913	30.5%	55	28,200
	<b>\$6,848</b>	<b>25,436</b>	<b>1,080,160</b>		<b>45</b>	<b>27,085</b>
50th Percentile	\$6,836	25,000	982,474	36.5%	41	26,695
				<b>40.5%</b>		
25th Percentile	\$6,366	23,036	762,151	41.2%	33	24,840
Bottom	\$3,852	12,744	321,117	61.1%	15	13,461

Other Financial	EBITDA per Cow	ROA	Debt to EBITDA	Working Capital per Cow	Other Income per Cwt. (1)	Total Labor Expense per Cwt.
Top	\$6,434	38.9%	-	\$8,341	\$34.59	\$0.02
75th Percentile	\$3,945	14.6%	0.62	\$3,847	\$15.87	\$2.31
50th Percentile	\$3,296	10.6%	1.71	\$3,009	\$9.57	\$3.71
		<b>9.4%</b>				
25th Percentile	\$2,937	8.3%	2.33	\$2,089	\$6.39	\$4.13
			<b>2.44</b>	<b>\$1,884</b>	<b>\$4.03</b>	<b>\$4.18</b>
Bottom	\$2,219	3.1%	8.53	(\$117)	\$2.40	\$11.34
	<b>\$2,145</b>					

## 2022 Dairy Success and Profitability Review

### 1 - Sample Farm

#### Range of Key Factors for All Herds

(All Herds consists of 171 farms)

Financial Performance	Net Margin per Cwt.	ROA	ROE	% Equity	Working Capital per Cow	Debt to EBITDA (2)	EBITDA per Cow
Top	\$17.64	38.9%	84.1%	100.0%	\$8,341	-	\$6,434
75th Percentile	\$7.13	12.1%	17.8%	85.0%	\$2,843	0.97	\$3,044
		9.4%	13.0%				
50th Percentile	\$5.09	8.4%	9.6%	73.0%	\$1,911	2.02	\$2,291
	\$4.90			69.8%	\$1,884	2.44	\$2,145
25th Percentile	\$2.54	4.3%	4.1%	57.4%	\$1,040	3.94	\$1,608
Bottom	(\$7.93)	-6.9%	-14.4%	-96.4%	(\$2,847)	9,999.00	(\$93)

Gross Revenue	Milk Income per Cow	Lbs. Milk Sold per Cow	Gross Milk Price	Net Milk Price	Energy Corrected Milk Sold per Cow
Top	\$8,680	32,208	\$33.57	\$31.01	33,993
75th Percentile	\$7,085	26,209	\$27.65	\$25.67	27,966
	\$6,848	25,436	\$27.13		27,085
50th Percentile	\$6,663	24,945	\$27.08	\$25.02	26,513
				\$24.96	
25th Percentile	\$6,027	22,402	\$26.35	\$24.11	23,630
Bottom	\$3,311	10,286	\$23.23	\$18.91	13,168

Production Efficiency	% Gross Margin	Full Time Worker Equivalents	Lbs. Milk per FTWE	Feed as % of Milk Income	Feed and Crop as % of Milk Inc.
Top	153.8%	66.8	2,107,215	6.5%	20.4%
		7.9			
75th Percentile	64.2%	7.9	1,337,662	24.3%	34.3%
	55.3%		1,080,160	30.3%	40.5%
50th Percentile	51.6%	4.5	1,051,445	30.9%	40.6%
25th Percentile	43.3%	2.7	819,580	34.9%	46.0%
Bottom	16.3%	0.9	241,089	60.7%	61.1%

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#### Range of Key Factors for All Herds

(All Herds consists of 171 farms)

Capacity	Overhead per Cwt.	Overhead per Cow	Cows per FTWE	Acres per Cow
Top	\$3.19	\$837	103	7.8
75th Percentile	\$7.36	\$1,758	55	2.9
	<b>\$7.69</b>	<b>\$1,956</b>	<b>45</b>	
50th Percentile	\$8.97	\$2,118	44	2.0
				<b>1.9</b>
25th Percentile	\$11.81	\$2,772	34	1.5
Bottom	\$28.28	\$5,753	15	-

Industry Skills	Butter Fat Percent	Protein Percent	Butterfat & Protein Lbs./Cow per Day	Somatic Cell Count	Death Rate in Herd
Top	5.5%	4.0%	6.37	56	0.0%
75th Percentile	4.1%	3.2%	5.14	123	2.8%
	<b>4.1%</b>	<b>3.2%</b>	<b>5.00</b>		
50th Percentile	4.0%	3.1%	4.87	164	4.7%
				<b>175</b>	<b>5.3%</b>
25th Percentile	3.9%	3.1%	4.36	215	6.9%
Bottom	3.6%	2.8%	2.46	486	14.2%

Cost Control	Net Cost of Production	Operating Expense Ratio	Cost of Goods Sold per Cwt.	Other Inc per Cwt. (1)	Total Labor Exp per Cwt.	Feed & Crop Exp per Cow	Capital Purch per Cow
Top	\$9.07	42.4%	(\$13.74)	\$34.59	\$0.02	\$819	-
75th Percentile	\$19.70	69.9%	\$9.94	\$9.21	\$2.91	\$2,147	\$358
50th Percentile	\$21.80	76.6%	\$13.02	\$6.26	\$3.86	\$2,653	\$864
	<b>\$22.02</b>	<b>77.2%</b>	<b>\$14.33</b>		<b>\$4.18</b>	<b>\$2,816</b>	<b>\$1,281</b>
25th Percentile	\$24.40	84.0%	\$14.93	\$4.04	\$4.88	\$3,102	\$1,519
				<b>\$4.03</b>			
Bottom	\$38.58	113.5%	\$22.87	(\$0.99)	\$11.34	\$4,556	\$19,352

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### 1 - Sample Farm

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## 2022 Dairy Success and Profitability Review

### 1 - Sample Farm

Income Statement Comparison	(\$ per Cow)				
	My Farm 2022	Dairy SPR Average	300+ Cows Peer Group	Dairy SPR Top 25%	Top 25% Difference
Average Number of Cows	357	357	811	219	137
Gross Milk Pounds Shipped	9,073,335	9,073,335	21,114,436	5,538,579	3,534,756
Butterfat Percent	4.06%	4.06%	4.06%	4.06%	-0.01%
Protein Percent	3.16%	3.16%	3.18%	3.13%	0.03%
Other non-fat Solid Percent	5.78%	5.78%	5.79%	5.79%	-0.01%
Butterfat & Protein Lbs./Cow	1,829	1,829	1,869	1,823	6
Somatic Cell Count (000's omitted)	175	175	180	149	25
Milk Shipped per Cow	25,436	25,436	26,026	25,255	180
<b>Milk Income</b>	<b>6,848</b>	<b>6,848</b>	<b>6,995</b>	<b>6,938</b>	<b>(89)</b>
<b><u>Cost of Goods Sold (Variable Costs):</u></b>					
Employee Labor	716	716	871	515	201
Purchased Feed	2,172	2,172	2,265	1,882	290
Boarding Expense	75	75	95	97	(22)
Custom Hire	247	247	218	294	(47)
Crop Expense (Seed, Fertilizer, & Chemicals)	644	644	631	793	(148)
Fuel	241	241	247	260	(18)
Livestock Expense (Supplies, Vet., Breeding)	506	506	503	458	48
Advertising/Milk Marketing Exp.	473	473	454	538	(65)
Cow Replacements	19	19	20	11	8
Other Expenses	87	87	79	80	7
Less Non-Milk Income	1,026	1,026	919	1,511	(484)
Less Non-Farm Income	88	88	50	260	(172)
Less Accrual Adjustments	423	423	456	907	(483)
<b>Total Cost of Goods Sold</b>	<b>3,644</b>	<b>3,644</b>	<b>3,957</b>	<b>2,250</b>	<b>1,394</b>
<b>Gross Margin</b>	<b>3,205</b>	<b>3,205</b>	<b>3,038</b>	<b>4,688</b>	<b>(1,483)</b>
<b><u>Overhead (Fixed Costs):</u></b>					
Owner	347	347	254	433	(86)
Repairs	434	434	432	489	(55)
Interest	207	207	197	229	(22)
Rent/Lease	219	219	196	272	(53)
Property Taxes	71	71	67	116	(45)
Insurance (Fire & Liability)	100	100	100	111	(11)
Utilities	148	148	153	144	4
Depreciation	430	430	391	541	(111)
<b>Total Overhead</b>	<b>1,956</b>	<b>1,956</b>	<b>1,790</b>	<b>2,334</b>	<b>(378)</b>
<b>Net Cost of Production</b>	<b>5,601</b>	<b>5,601</b>	<b>5,748</b>	<b>4,584</b>	<b>1,017</b>
<b>Net Margin (Net Income)</b>	<b>1,247</b>	<b>1,247</b>	<b>1,247</b>	<b>2,353</b>	<b>(1,106)</b>
Add Back Depreciation	430	430	391	541	(111)
Adjustment for Accruals	(423)	(423)	(456)	(907)	483
Principal Payments	(389)	(389)	(379)	(424)	35
<b>Net Residual Income</b>	<b>865</b>	<b>865</b>	<b>803</b>	<b>1,564</b>	<b>(699)</b>

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Income Statement Comparison	(\$ per Cwt.)				
	My Farm 2022	Dairy SPR Average	300+ Cows Peer Group	Dairy SPR Top 25%	Top 25% Difference
Average Number of Cows	357	357	811	219	137
Gross Milk Pounds Shipped	9,073,335	9,073,335	21,114,436	5,538,579	3,534,756
Milk Shipped per Cow	25,436	25,436	26,026	25,255	180
<b>Milk Income</b>	<b>26.92</b>	<b>26.92</b>	<b>26.88</b>	<b>27.47</b>	<b>(0.55)</b>
<b><u>Cost of Goods Sold (Variable Costs):</u></b>					
Employee Labor	2.82	2.82	3.35	2.04	0.78
Purchased Feed	8.54	8.54	8.70	7.45	1.09
Boarding Expense	0.29	0.29	0.36	0.38	(0.09)
Custom Hire	0.97	0.97	0.84	1.16	(0.19)
Crop Expense (Seed, Fertilizer, & Chemicals)	2.53	2.53	2.42	3.14	(0.61)
Fuel	0.95	0.95	0.95	1.03	(0.08)
Livestock Expense (Supplies, Vet., Breeding)	1.99	1.99	1.93	1.81	0.18
Advertising/Milk Marketing Exp.	1.86	1.86	1.75	2.13	(0.27)
Cow Replacements	0.07	0.07	0.08	0.04	0.03
Other Expenses	0.34	0.34	0.30	0.31	0.03
Less Non-Milk Income	4.03	4.03	3.53	5.98	(1.95)
Less Non-Farm Income	0.35	0.35	0.19	1.03	(0.68)
Less Accrual Adjustments	1.66	1.66	1.75	3.59	(1.93)
<b>Total Cost of Goods Sold</b>	<b>14.33</b>	<b>14.33</b>	<b>15.21</b>	<b>8.91</b>	<b>5.42</b>
<b>Gross Margin</b>	<b>12.60</b>	<b>12.60</b>	<b>11.67</b>	<b>18.56</b>	<b>(5.96)</b>
<b><u>Overhead (Fixed Costs):</u></b>					
Owner	1.36	1.36	0.98	1.71	(0.35)
Repairs	1.71	1.71	1.66	1.94	(0.23)
Interest	0.81	0.81	0.76	0.91	(0.09)
Rent/Lease	0.86	0.86	0.75	1.08	(0.21)
Property Taxes	0.28	0.28	0.26	0.46	(0.18)
Insurance (Fire & Liability)	0.39	0.39	0.38	0.44	(0.05)
Utilities	0.58	0.58	0.59	0.57	0.01
Depreciation	1.69	1.69	1.50	2.14	(0.45)
<b>Total Overhead</b>	<b>7.69</b>	<b>7.69</b>	<b>6.88</b>	<b>9.24</b>	<b>(1.55)</b>
<b>Net Cost of Production</b>	<b>22.02</b>	<b>22.02</b>	<b>22.08</b>	<b>18.15</b>	<b>3.87</b>
<b>Net Margin (Net Income)</b>	<b>4.90</b>	<b>4.90</b>	<b>4.79</b>	<b>9.32</b>	<b>(4.41)</b>
Add Back Depreciation	1.69	1.69	1.50	2.14	(0.45)
Adjustment for Accruals	(1.66)	(1.66)	(1.75)	(3.59)	1.93
Principal Payments	(1.53)	(1.53)	(1.46)	(1.68)	0.15
<b>Net Residual Income</b>	<b>3.40</b>	<b>3.40</b>	<b>3.09</b>	<b>6.19</b>	<b>(2.79)</b>
<b>Breakeven Milk Price</b>	<b>23.44</b>	<b>23.44</b>	<b>24.47</b>	<b>20.94</b>	<b>2.50</b>
Class III Actual	21.96	21.96	21.96	21.96	-
Class III Basis	5.17	5.17	5.30	5.37	(0.20)
Class IV Actual	24.47	24.47	24.47	24.47	-
Class IV Basis	2.66	2.66	2.79	2.86	(0.20)

## 2022 Dairy Success and Profitability Review

### 1 - Sample Farm

Income Statement Comparison	(\$ per Cwt.)				
<u>Component Corrected Cwt.</u> (3.5% BF; 3.2% Prot.)	My Farm 2022	Dairy SPR Average	300+ Cows Peer Group	Dairy SPR Top 25%	Top 25% Difference
Average Number of Cows	357	357	811	219	137
Gross Milk Pounds Shipped	9,073,335	9,073,335	21,114,436	5,538,579	3,534,756
Component Corrected Milk Pounds Shipped	9,661,707	9,661,707	22,461,337	5,927,147	3,734,560
Component Correct Milk Shipped per Cow	27,085	27,085	27,687	27,027	58
Milk Shipped per Cow	25,436	25,436	26,026	25,255	180
<b>Milk Income</b>	<b>25.28</b>	<b>25.28</b>	<b>25.26</b>	<b>25.67</b>	<b>(0.38)</b>
<b><u>Cost of Goods Sold (Variable Costs):</u></b>					
Employee Labor	2.64	2.64	3.15	1.91	0.74
Purchased Feed	8.02	8.02	8.18	6.96	1.06
Boarding Expense	0.28	0.28	0.34	0.36	(0.08)
Custom Hire	0.91	0.91	0.79	1.09	(0.17)
Crop Expense (Seed, Fertilizer, & Chemicals)	2.38	2.38	2.28	2.93	(0.55)
Fuel	0.89	0.89	0.89	0.96	(0.07)
Livestock Expense (Supplies, Vet., Breeding)	1.87	1.87	1.82	1.70	0.17
Advertising/Milk Marketing Exp.	1.75	1.75	1.64	1.99	(0.25)
Cow Replacements	0.07	0.07	0.07	0.04	0.03
Other Expenses	0.32	0.32	0.28	0.29	0.03
Less Non-Milk Income	3.79	3.79	3.32	5.59	(1.80)
Less Non-Farm Income	0.32	0.32	0.18	0.96	(0.64)
Less Accrual Adjustments	1.56	1.56	1.65	3.35	(1.79)
<b>Total Cost of Goods Sold</b>	<b>13.45</b>	<b>13.45</b>	<b>14.29</b>	<b>8.32</b>	<b>5.13</b>
<b>Gross Margin</b>	<b>11.83</b>	<b>11.83</b>	<b>10.97</b>	<b>17.34</b>	<b>(5.51)</b>
<b><u>Overhead (Fixed Costs):</u></b>					
Owner	1.28	1.28	0.92	1.60	(0.32)
Repairs	1.60	1.60	1.56	1.81	(0.21)
Interest	0.76	0.76	0.71	0.85	(0.08)
Rent/Lease	0.81	0.81	0.71	1.00	(0.20)
Property Taxes	0.26	0.26	0.24	0.43	(0.17)
Insurance (Fire & Liability)	0.37	0.37	0.36	0.41	(0.04)
Utilities	0.55	0.55	0.55	0.53	0.01
Depreciation	1.59	1.59	1.41	2.00	(0.41)
<b>Total Overhead</b>	<b>7.22</b>	<b>7.22</b>	<b>6.47</b>	<b>8.64</b>	<b>(1.42)</b>
<b>Net Cost of Production</b>	<b>20.68</b>	<b>20.68</b>	<b>20.76</b>	<b>16.96</b>	<b>3.72</b>
<b>Net Margin (Net Income)</b>	<b>4.61</b>	<b>4.61</b>	<b>4.50</b>	<b>8.71</b>	<b>(4.10)</b>
Add Back Depreciation	1.59	1.59	1.41	2.00	(0.41)
Adjustment for Accruals	(1.56)	(1.56)	(1.65)	(3.35)	1.79
Principal Payments	(1.44)	(1.44)	(1.37)	(1.57)	0.13
<b>Net Residual Income</b>	<b>3.19</b>	<b>3.19</b>	<b>2.90</b>	<b>5.79</b>	<b>(2.59)</b>
<b>Breakeven Milk Price</b>	<b>22.09</b>	<b>22.09</b>	<b>22.36</b>	<b>19.88</b>	<b>2.21</b>

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### 1 - Sample Farm

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Key Performance Indicators						
	2018	2019	2020	2021	2022	Average
Average Number of Cows	265	337	311	308	357	316
<b>Financial Performance Measures:</b>						
Net Margin per Cwt.	(1.39)	1.29	2.38	1.85	4.90	1.81
ROA	-0.5%	3.1%	5.3%	5.1%	9.4%	4.5%
ROE	-3.1%	3.7%	7.8%	6.0%	13.0%	5.5%
% Equity	66%	62%	66%	67%	70%	66%
Working Capital Per Cow	702.58	778.53	1,116.17	1,419.40	1,884.18	1,180.17
Debt to EBITDA	9.90	4.59	3.46	4.20	2.44	4.92
EBITDA per Cow	538	1,156	1,494	1,316	2,145	1,330
<b>Gross Revenue:</b>						
Milk Income per Cow	4,096	4,575	4,630	4,787	6,848	4,987
Lbs. milk sold per Cow	23,668	23,652	24,543	24,810	25,436	24,422
Gross Milk Price	17.31	19.45	18.82	19.48	27.13	20.44
Net Milk Price	15.61	17.69	16.98	17.64	24.96	18.58
Energy Corrected Milk Sold per Cow	24,333	24,607	25,787	26,297	27,085	25,622
<b>Production Efficiency:</b>						
% Gross Margin	32%	48%	56%	57%	55%	50%
Full Time Worker Equivalents (FTWE)	6.2	7.5	6.6	6.8	7.9	7.0
Lbs. Milk Sold Per FTWE	1,018,112	987,927	1,104,067	1,068,373	1,080,160	1,051,728
Purchased Feed as % of Milk Income	32.1%	31.9%	33.8%	33.9%	30.3%	32.4%
Purchased Feed / Crop as % of Milk Incom	40.5%	41.4%	45.3%	43.5%	40.5%	42.3%
<b>Capacity:</b>						
Overhead per Cwt.	6.91	6.79	7.09	6.93	7.69	7.08
Overhead per Cow	1,635	1,605	1,740	1,719	1,956	1,731
Cows per FTWE	43	44	47	45	45	45
Acres per Cow	2.2	2.1	2.1	2.1	1.9	2.1
<b>Industry Skills:</b>						
Butter Fat Percent	3.79%	3.92%	3.97%	4.04%	4.06%	3.96%
Protein Percent	3.07%	3.12%	3.11%	3.14%	3.16%	3.12%
Butter Fat & Protein Lbs./Cow per Day	4.44	4.51	4.73	4.84	5.00	4.70
Somatic Cell Count (000's omitted)	182	180	171	183	175	178
Death Rate in Herd	5.5%	5.5%	5.6%	6.1%	5.3%	5.6%
<b>Cost Control:</b>						
Net Cost of Production	18.69	18.05	16.49	17.45	22.02	18.54
Operating Expense Ratio	94.9%	83.4%	80.9%	82.9%	77.2%	83.9%
Cost of Goods Sold per Cwt.	11.79	11.27	9.38	10.52	14.33	11.46
Non-milk Income per Cwt.	2.82	3.40	5.72	4.51	4.03	4.10
Total Labor Expense per Cwt.	3.53	3.65	3.79	3.67	4.18	3.77
Feed & Crop Expense per Cow	1,661	1,836	2,132	2,067	2,816	2,103
Capital Purchases per Cow	588	676	899	1,199	1,281	929

## 2022 Dairy Success and Profitability Review

### 1 - Sample Farm

Financial Statement -- Trend	(thousands)					
	2018	2019	2020	2021	2022	Average
Average Number of Cows	265	337	311	308	357	316
Gross Milk Pounds Shipped	6,276,696	7,973,374	7,624,354	7,650,938	9,073,335	7,719,740
Butterfat Percent	3.79%	3.92%	3.97%	4.04%	4.06%	3.96%
Protein Percent	3.07%	3.12%	3.11%	3.14%	3.16%	3.12%
Butterfat & Protein Lbs./Cow	1,624	1,649	1,732	1,772	1,829	1,721
Milk Shipped per Cow	23,668	23,652	24,543	24,810	25,436	24,422
<b>Assets:</b>						
Cash	28	37	50	58	93	53
Accounts Receivable	82	139	129	102	138	118
Feed & Crop Inventory	306	398	416	505	634	452
Supplies & Prepaid Expenses	32	20	39	28	66	37
Other Current Assets	8	23	21	25	11	18
<b>Total Current Assets</b>	<b>456</b>	<b>617</b>	<b>655</b>	<b>718</b>	<b>942</b>	<b>678</b>
Dairy Livestock	558	721	634	628	715	651
Machinery/Equipment	568	705	695	732	866	713
Real Estate	2,262	2,803	2,703	2,904	3,354	2,805
Other Assets	259	234	212	229	269	241
<b>Total Fixed Assets</b>	<b>3,647</b>	<b>4,463</b>	<b>4,244</b>	<b>4,494</b>	<b>5,204</b>	<b>4,410</b>
<b>Total Assets</b>	<b>4,103</b>	<b>5,079</b>	<b>4,899</b>	<b>5,212</b>	<b>6,146</b>	<b>5,088</b>
<b>Liabilities &amp; Equity:</b>						
Accounts Payable & Accrued Expenses	58	65	52	33	51	52
Other Current Liabilities	112	164	138	120	75	122
Current Portion Term Loans	100	128	118	127	144	123
<b>Total Current Liabilities</b>	<b>270</b>	<b>356</b>	<b>308</b>	<b>280</b>	<b>270</b>	<b>297</b>
Term Loans	1,244	1,545	1,416	1,552	1,741	1,500
Less Current Portion	(100)	(128)	(118)	(127)	(144)	(123)
<b>Total Term Loans</b>	<b>1,144</b>	<b>1,418</b>	<b>1,298</b>	<b>1,425</b>	<b>1,597</b>	<b>1,376</b>
<b>Total Liabilities</b>	<b>1,413</b>	<b>1,774</b>	<b>1,606</b>	<b>1,705</b>	<b>1,867</b>	<b>1,673</b>
<b>Owner's Equity</b>	<b>2,690</b>	<b>3,329</b>	<b>3,293</b>	<b>3,507</b>	<b>4,279</b>	<b>3,419</b>
<b>Ratios:</b>						
% Equity	65.6%	62.0%	65.7%	67.1%	69.8%	66.1%
Current Ratio	1.69	2.57	3.93	5.05	6.32	3.91
Working Capital	186	261	347	438	672	381
Return on Assets	(0.5%)	3.1%	5.3%	5.1%	9.4%	4.5%
Return on Equity	(3.1%)	3.7%	7.8%	6.0%	13.0%	5.5%
Prior Year Total Assets	<b>4,039</b>	<b>4,904</b>	<b>4,619</b>	<b>4,804</b>	<b>5,599</b>	<b>4,793</b>
Prior Year Total Liabilities	<b>1,327</b>	<b>1,731</b>	<b>1,608</b>	<b>1,587</b>	<b>1,865</b>	<b>1,624</b>
<b>Beginning Net Worth</b>	<b>2,712</b>	<b>3,173</b>	<b>3,011</b>	<b>3,217</b>	<b>3,734</b>	<b>3,169</b>
+ Net Income: Profit or (Loss)	(83)	103	181	142	445	158
+ Asset Appreciation, or (Depreciation)	51	55	79	124	154	93
+ Extraordinary Capital Contributions	8	-	-	-	-	2
+ Asset Valuation Changes / Other Adj	2	-	-	-	-	-
<b>Ending Net Worth</b>	<b>2,690</b>	<b>3,331</b>	<b>3,282</b>	<b>3,473</b>	<b>4,365</b>	<b>3,428</b>

## 2022 Dairy Success and Profitability Review

### 1 - Sample Farm

Income Statement -- Trend	(thousands)					
	2018	2019	2020	2021	2022	Average
Average Number of Cows	265	337	311	308	357	316
Gross Milk Pounds Shipped	6,276,696	7,973,374	7,624,354	7,650,938	9,073,335	7,719,740
Butterfat Percent	3.79%	3.92%	3.97%	4.04%	4.06%	3.96%
Protein Percent	3.07%	3.12%	3.11%	3.14%	3.16%	3.12%
Other non-fat Solid Percent	5.77%	5.76%	5.77%	5.76%	5.78%	5.77%
Butterfat & Protein Lbs./Cow	1,624	1,649	1,732	1,772	1,829	1,721
Somatic Cell Count (000's omitted)	182	180	171	183	175	178
Milk Shipped per Cow	23,668	23,652	24,543	24,810	25,436	24,422
<b>Milk Income</b>	<b>1,086</b>	<b>1,542</b>	<b>1,438</b>	<b>1,476</b>	<b>2,443</b>	<b>1,597</b>
<b>Cost of Goods Sold (Variable Costs):</b>						
Employee Labor	144	203	183	186	255	194
Purchased Feed	349	484	512	516	775	527
Boarding Expense	23	42	34	29	27	31
Custom Hire	41	53	59	63	88	61
Crop Exp (Seed, Fertilizer, & Chemicals)	92	131	150	122	230	145
Fuel	39	46	32	44	86	50
Livestock Exp (Supplies, Vet., Breeding)	106	140	138	133	181	139
Advertising/Milk Marketing Exp.	106	125	126	126	169	130
Cow Replacements	3	6	3	10	7	6
Other Expenses	13	18	19	19	31	20
Less Non-Milk Income	198	269	436	345	366	323
Less Non-Farm Income	15	16	19	25	31	21
Less Accrual Adjustments	(36)	69	87	73	151	69
<b>Total Cost of Goods Sold</b>	<b>740</b>	<b>899</b>	<b>715</b>	<b>805</b>	<b>1,300</b>	<b>892</b>
<b>Gross Margin</b>	<b>347</b>	<b>644</b>	<b>723</b>	<b>672</b>	<b>1,143</b>	<b>706</b>
<b>Overhead (Fixed Costs):</b>						
Owner	78	87	104	95	124	97
Repairs	71	90	104	99	155	104
Interest	62	84	70	64	74	71
Rent/Lease	46	59	58	57	78	59
Property Taxes	18	21	21	21	25	21
Insurance (Fire & Liability)	22	28	21	26	36	26
Utilities	32	39	36	38	53	40
Depreciation	105	131	126	131	153	129
<b>Total Overhead</b>	<b>434</b>	<b>541</b>	<b>541</b>	<b>530</b>	<b>698</b>	<b>549</b>
<b>Net Cost of Production</b>	<b>1,173</b>	<b>1,439</b>	<b>1,257</b>	<b>1,335</b>	<b>1,998</b>	<b>1,440</b>
<b>Net Margin (Net Income)</b>	<b>(87)</b>	<b>103</b>	<b>181</b>	<b>142</b>	<b>445</b>	<b>157</b>
Add Back Depreciation	105	131	126	131	153	129
Adjustment for Accruals	36	(69)	(87)	(73)	(151)	(69)
Principal Payments	(91)	(127)	(126)	(118)	(139)	(120)
<b>Net Residual Income</b>	<b>(38)</b>	<b>37</b>	<b>96</b>	<b>82</b>	<b>309</b>	<b>97</b>

## 2022 Dairy Success and Profitability Review

### 1 - Sample Farm

Income Statement -- Trend	(\$ per cow)					
	2018	2019	2020	2021	2022	Average
Average Number of Cows	265	337	311	308	357	316
Gross Milk Pounds Shipped	6,276,696	7,973,374	7,624,354	7,650,938	9,073,335	7,719,740
Butterfat Percent	3.79%	3.92%	3.97%	4.04%	4.06%	3.96%
Protein Percent	3.07%	3.12%	3.11%	3.14%	3.16%	3.12%
Other non-fat Solid Percent	5.77%	5.76%	5.77%	5.76%	5.78%	5.77%
Butterfat & Protein Lbs./Cow	1,624	1,649	1,732	1,772	1,829	1,721
Somatic Cell Count (000's omitted)	182	180	171	183	175	178
Milk Shipped per Cow	23,668	23,652	24,543	24,810	25,436	24,422
<b>Milk Income</b>	<b>4,096</b>	<b>4,575</b>	<b>4,630</b>	<b>4,787</b>	<b>6,848</b>	<b>4,987</b>
<b>Cost of Goods Sold (Variable Costs):</b>						
Employee Labor	542	601	589	604	716	611
Purchased Feed	1,315	1,435	1,649	1,672	2,172	1,649
Boarding Expense	86	125	108	94	75	97
Custom Hire	156	158	192	205	247	192
Crop Exp (Seed, Fertilizer, & Chemicals)	346	388	483	396	644	451
Fuel	148	137	104	143	241	155
Livestock Exp (Supplies, Vet., Breeding)	401	414	444	430	506	439
Advertising/Milk Marketing Exp.	402	370	406	407	473	411
Cow Replacements	12	16	10	33	19	18
Other Expenses	51	53	62	60	87	63
Less Non-Milk Income	748	799	1,405	1,119	1,026	1,019
Less Non-Farm Income	56	48	61	83	88	67
Less Accrual Adjustments	(136)	204	279	235	423	201
<b>Total Cost of Goods Sold</b>	<b>2,790</b>	<b>2,665</b>	<b>2,302</b>	<b>2,609</b>	<b>3,644</b>	<b>2,802</b>
<b>Gross Margin</b>	<b>1,307</b>	<b>1,909</b>	<b>2,328</b>	<b>2,179</b>	<b>3,205</b>	<b>2,185</b>
<b>Overhead (Fixed Costs):</b>						
Owner	293	258	336	307	347	308
Repairs	269	266	335	321	434	325
Interest	234	248	225	209	207	225
Rent/Lease	173	174	187	185	219	187
Property Taxes	68	62	66	68	71	67
Insurance (Fire & Liability)	82	82	69	84	100	83
Utilities	122	117	115	122	148	125
Depreciation	395	387	406	423	430	408
<b>Total Overhead</b>	<b>1,635</b>	<b>1,605</b>	<b>1,740</b>	<b>1,719</b>	<b>1,956</b>	<b>1,731</b>
<b>Net Cost of Production</b>	<b>4,424</b>	<b>4,270</b>	<b>4,046</b>	<b>4,328</b>	<b>5,601</b>	<b>4,534</b>
<b>Net Margin (Net Income)</b>	<b>(328)</b>	<b>305</b>	<b>584</b>	<b>459</b>	<b>1,247</b>	<b>453</b>
Add Back Depreciation	395	387	406	423	430	408
Adjustment for Accruals	136	(204)	(279)	(235)	(423)	(201)
Principal Payments	(344)	(377)	(405)	(381)	(389)	(379)
<b>Net Residual Income</b>	<b>(142)</b>	<b>109</b>	<b>308</b>	<b>266</b>	<b>865</b>	<b>281</b>



## 2022 Dairy Success and Profitability Review

### 1 - Sample Farm

Income Statement -- Trend	(\$ per Cwt.)					
	2018	2019	2020	2021	2022	Average
Average Number of Cows	265	337	311	308	357	316
Gross Milk Pounds Shipped	6,276,696	7,973,374	7,624,354	7,650,938	9,073,335	7,719,740
Butterfat & Protein Lbs./Cow	1,624	1,649	1,732	1,772	1,829	1,721
Milk Shipped per Cow	23,668	23,652	24,543	24,810	25,436	24,422
<b>Milk Income</b>	<b>17.31</b>	<b>19.34</b>	<b>18.86</b>	<b>19.30</b>	<b>26.92</b>	<b>20.35</b>
<b>Cost of Goods Sold (Variable Costs):</b>						
Employee Labor	2.29	2.54	2.40	2.44	2.82	2.50
Purchased Feed	5.56	6.07	6.72	6.74	8.54	6.72
Boarding Expense	0.36	0.53	0.44	0.38	0.29	0.40
Custom Hire	0.66	0.67	0.78	0.83	0.97	0.78
Crop Exp (Seed, Fertilizer, & Chemicals)	1.46	1.64	1.97	1.59	2.53	1.84
Fuel	0.62	0.58	0.43	0.58	0.95	0.63
Livestock Exp (Supplies, Vet., Breeding)	1.70	1.75	1.81	1.73	1.99	1.80
Advertising/Milk Marketing Exp.	1.70	1.56	1.65	1.64	1.86	1.68
Cow Replacements	0.05	0.07	0.04	0.13	0.07	0.07
Other Expenses	0.21	0.23	0.25	0.24	0.34	0.26
Less Non-Milk Income	3.16	3.38	5.72	4.51	4.03	4.16
Less Non-Farm Income	0.24	0.20	0.25	0.33	0.35	0.27
Less Accrual Adjustments	(0.57)	0.86	1.14	0.95	1.66	0.81
<b>Total Cost of Goods Sold</b>	<b>11.79</b>	<b>11.27</b>	<b>9.38</b>	<b>10.52</b>	<b>14.33</b>	<b>11.46</b>
<b>Gross Margin</b>	<b>5.52</b>	<b>8.07</b>	<b>9.48</b>	<b>8.78</b>	<b>12.60</b>	<b>8.89</b>
<b>Overhead (Fixed Costs):</b>						
Owner	1.24	1.09	1.37	1.24	1.36	1.26
Repairs	1.14	1.12	1.37	1.29	1.71	1.33
Interest	0.99	1.05	0.92	0.84	0.81	0.92
Rent/Lease	0.73	0.73	0.76	0.74	0.86	0.77
Property Taxes	0.29	0.26	0.27	0.27	0.28	0.27
Insurance (Fire & Liability)	0.34	0.35	0.28	0.34	0.39	0.34
Utilities	0.52	0.49	0.47	0.49	0.58	0.51
Depreciation	1.67	1.64	1.65	1.71	1.69	1.67
<b>Total Overhead</b>	<b>6.91</b>	<b>6.79</b>	<b>7.09</b>	<b>6.93</b>	<b>7.69</b>	<b>7.08</b>
<b>Net Cost of Production</b>	<b>18.69</b>	<b>18.05</b>	<b>16.49</b>	<b>17.45</b>	<b>22.02</b>	<b>18.54</b>
<b>Net Margin (Net Income)</b>	<b>(1.39)</b>	<b>1.29</b>	<b>2.38</b>	<b>1.85</b>	<b>4.90</b>	<b>1.81</b>
Add Back Depreciation	1.67	1.64	1.65	1.71	1.69	1.67
Adjustment for Accruals	0.57	(0.86)	(1.14)	(0.95)	(1.66)	(0.81)
Principal Payments	(1.46)	(1.59)	(1.65)	(1.54)	(1.53)	(1.55)
<b>Net Residual Income</b>	<b>(0.60)</b>	<b>0.46</b>	<b>1.25</b>	<b>1.07</b>	<b>3.40</b>	<b>1.12</b>
<b>Breakeven Milk Price</b>	<b>17.91</b>	<b>19.32</b>	<b>17.78</b>	<b>18.12</b>	<b>23.44</b>	<b>19.31</b>
Class III Actual	14.61	16.96	18.16	17.08	21.96	17.75
Class III Basis	2.70	2.49	0.66	2.40	5.17	2.68
Class IV Actual	14.23	16.30	13.49	16.09	24.47	16.92
Class IV Basis	3.08	3.15	5.33	3.39	2.66	3.52

## **2022 Dairy Success and Profitability Review**

### **1 - Sample Farm**

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## 2022 Dairy Success and Profitability Review

### 1 - Sample Farm

#### Definitions

#### My Farm Review

#### **Financial Statement – (Balance Sheet, Net Worth Statement)**

Individual farm data includes a snapshot on herd size & output, farm assets, liabilities and net worth. Key liquidity and profitability ratios show the financial health of the operations. These statements are focused on how the assets are generating revenue. Financial statements are provided in thousands and a per cow basis.

**Current Ratio** – Current assets divided by current liabilities.

**% Equity** - Owner's equity divided by total assets.

**Return on Assets (ROA)** – Total interest expense added to net income divided by average total assets.

**Return on Equity (ROE)** - Net income divided by average net worth.

**Working Capital** - Current assets less current liabilities.

#### **Income Statement**

Revenue, costs and profitability are provided on an actual dollar amount (in thousands), per cow, and per cwt. Accrual adjustments were made to reflect cost of production including changes in inventories, accounts receivable, cow numbers and accounts payable.

**Variable costs** – expenses used to generate farm revenue are included here. These costs will vary depending on herd size, feeding programs & efficiency. These expenses are more in management's control and often areas to focus on control measures to increase profitability.

**Fixed costs** – these constant expenses do not typically fluctuate based on the amount of milk produced or number of cows.

**Gross milk income** – tabulated through analysis of actual milk check data for the whole year, this figure provides consistency for all farms in the benchmark by adjusting farms that report net milk income for reporting purposes.

**Crop expense** – total seed and plant expenses plus fertilizer, lime and chemical expenses.

**Gross margin** – calculated reducing gross milk income by total variable costs.

**Net cost of production** – the total of the farm's variable and fixed costs.

**Depreciation** – the dairy benchmark uses an economic depreciation versus tax depreciation to provide more consistency. Tax depreciation can vary greatly per farm based on the use of Section 179 or more aggressive depreciation schedules.

- Machinery and equipment was depreciated by using year-end balance sheet values divided by 8 years.
- Buildings and improvements depreciation equals \$127 times the average number of cows.
  - AgChoice dairy farm appraisals determine building & improvements have a contributory value of approximately \$1,900 per cow.
  - \$1,900 divided by the expected useful life of 15 years = \$127 annual depreciation per cow
- Both of these figures added together equal the depreciation listed on the reports.

**Net Margin** – Gross milk income less net cost of production

#### **Component Corrected Cwt. Costs**

Total pounds of milk shipped has been adjusted to a 3.5% butterfat and 3.2% protein, and then the actual costs are recalculated on the component corrected pounds. This allows you to look at how your components affect costs and is needed for different breeds to compare to each other.

## 2022 Dairy Success and Profitability Review

### 1 - Sample Farm

#### **Definitions**

##### **Key Performance Indicators**

There are five areas that each farm is measured and compared to within the benchmark. Volume, efficiency, capacity, industry skills and cost control are all vital to the long-term viability of any operation. Your farm report will show year over year progress on these areas and can help identify trends to help improve the net margin of the operation.

**Volume** – this measurement simply looks at the gross amount of milk pounds and income generated by the operation.

**Efficiency** – two of the highest costs on a dairy farm are feed and labor costs. Efficiency is measuring how well those variable cost inputs are generating profit for the farm. Looking at full-time worker equivalents (FTWE) tells us how good the work force is at getting production from cows. Feed and crop expenses are combined to see how much it takes to generate milk income. FTWE is calculated accounting for all the paid and unpaid hours worked on the farm to generate the crops and milk income divided by 2,907 hours which is a standard full time worker equivalent.

**Capacity** – this indicator shows how well the fixed overhead costs are working for the operation. Generally, these costs will not increase dramatically with a moderate increase in production.

**Industry skills** – farms that struggle with industry skills often have difficulty maintaining profitability. They often have to spend more on replacement cows, have lower milk component and quantity output and spend more time on a less healthy herd lowering their efficiencies.

**Cost control** – managing costs will certainly improve profitability. During periods of low milk prices, producers are forced to evaluate every purchase and try and reduce costs to manage positive cash flow for the operation. (**NOTE:** (Other Income in the KPIs includes Non-Milk Income, Non-Farm Income, and Accrual Adjustments.)

**Internal Herd Growth** – measures the farms ability to grow or maintain cow numbers from within. Formula: (Ending Cow Numbers - Beginning Cow Numbers + Number Cows Sold for Dairy Purposes + Number Heifers >1 Year old Sold for Dairy Purposes - Number of Cows Purchased - Number Springers or Bred Heifers Purchased and Calved during year)/Beginning Cow numbers

**EBITDA** - Earnings Before Interest, Taxes, Depreciation, and Amortization

**Full Time Worker Equivalents (FTWE)** – (Total Hired Labor + Total Owner Hours)/2,907

#### **Comparative Statements**

The comparative statements take your farms data and compare it to all the farms in the benchmark and by peer group.

**Dairy SPR Average Farm** – compares your farm to all the farms in the benchmark

**Peer Group Farm** – Broken down by number of cows

**Dairy SPR Top 25%** - this is based on net margin per cwt

#### **End Notes**

(1) Other Income here includes Non-Milk Income, Non-Farm Income, and Accrual Adjustments.

(2) If Debt to EBITDA is 9999, this indicates negative EBITDA. Please look at the Key Performance Indicators by Year page to see actual results.