**Understanding Your Financial Ratios - 2019**

**Liquidity:**

Current Ratio = A / C = $4,500,000 / $4,150,000 = 1.08

Working Capital = (A – C) = $4,500,000 - $4,150,000 = $350,000

Working Capital / Total Expenses = (A – C) / I = $350,000 / $13,500,000 = 2.6%

**Solvency:**

Debt / Asset Ratio = D / B = $5,200,000 / $22,500,000 = 23%

Equity / Asset Ratio = E / B = $17,300,000 / $22,500,000 = 77%

**Repayment Ability:**

**Debt Coverage Ratio**

= [J + G + H + Non-farm Income– Family Living & Taxes ] / Sched. P&I Payments

 Family Living = annual household living expenses

 Income Taxes = Federal & State Income Taxes + Self-Employment Taxes

 Scheduled P&I Payments = regularly scheduled loan payments for the year

 Net Farm Income (J) $1,500,000

 + Interest (G) + $200,000

+ Depreciation (H) + $385,000

+ Non-farm Income (K) + $20,000

- Family Living & Income Taxes (L) - $105,000

= Debt Repayment Capacity = $2,000,000

Scheduled Principal & Interest Payments on Term Debt (M) $1,200,000

Debt Repayment Capacity / Scheduled P&I = 167%

**Profitability:**

**Rate of Return on Assets (aka ROA)**

= [Net Farm Income + Interest – Mgt Fee] / Total Assets

= [J + G – L ] / B

ROA = ($1,500,000 + $200,000 - $105,000) / $22,500,000 = 7.1%

 Mgt Fee = Owner Withdrawals or Salaries or Family Living Expense = Line L

**Financial Efficiency:**

**Operating Expense / Receipt Ratio**

 = [Total Farm Expenses – Interest – Depreciation] / Gross Income

= [I – G – H] / F

= ($13,500,000 - $200,000 - $385,000) / $15,000,000 = 86%

**Capital Turnover Ratio (aka Sales/ Total Assets)**

= Gross Income / Total Assets

= F / B

 = $15,000,000 / $22,500,000 = 67%

**Breakeven Formulas (in general):**

**Short Run Cost of Production**

= [Total Expenses – Interest – Depreciation] / Cwts of Milk Shipped

**Long Run Cost of Production**

 = Total Expenses / Cwts of Milk Shipped

**Short Run Breakeven Selling Price**

= [Total Dairy-Related Expenses – Non-Milk Revenues] / Cwts of Milk Shipped

**Long Run Breakeven Selling Price/Unit**

= [Total Farm Expenses – Non-Milk Revenues] / Cwts of Milk Shipped