

## BALANCE SHEET

December 31, 2001

### Liquidity

**Current ratio:**  $\$298,287 \div \$246,668 = 1.17$

- ❖ This is acceptable. There are adequate current assets to cover current liabilities, with some safety margin (C.R. = 1 means there are just enough current assets to cover current liabilities). This is a positive result, even though it is on the low side.

**Working capital:**  $\$289,287 - \$246,668 = \$42,619$

- ❖ Represents the margin of safety for liquidity. This is also an acceptable result in that the value obtained is positive.

**Debt Structure:**  $\$246,668 \div \$425,747 = 0.58 \times 100 = 58\%$

- ❖ This is within acceptable levels. If this is too high, there could be a potential liquidity problem. Given that current assets are above 1, this level of debt structure should not be a problem.

### Solvency

**Debt/Asset Ratio** =  $\$425,747 \div \$764,500 = 0.56$

- ❖ This value should be less than 1 and smaller values are preferred. This value is acceptable. If this value is decreasing, however slightly, this means that assets are growing faster than debt, which would be a positive sign of improving solvency.

**Equity/Asset Ratio** =  $\$338,753 \div \$764,500 = 0.44$

- ❖ Higher values are preferred, but new businesses often have lower numbers. This is an acceptable value, because it is positive; a negative value would indicate an insolvent business. If this number would increase from year to year, this would indicate that equity is growing in relation to asset levels.

**Debt/Equity Ratio** =  $\$425,747 \div \$338,753 = 1.26$

- ❖ This value would be expected to be higher for newer farms that are highly leveraged. Nevertheless, this number would be expected to decrease over time as debt is paid off and equity in the business increases. Older farms with low debt loads would have a lower debt/equity ratio.

## INCOME STATEMENT

**Rate of Return on Assets (%)** = Avg. Farm Asset Value

Net Farm Income				\$17,577
+ Interest Expense		+		\$49,693
= Adjusted Net Farm Income				\$67,270
- Op. cost of unpaid labor		-		\$15,000
- Op. cost of management		-		\$25,000
= Return to Assets				\$27,270

**ROA =**  $\frac{\text{Return to Assets}}{\text{Avg. farm asset value}}$  =  $\frac{\$27,270}{\$764,500}$  = 4%

**Rate of Return on Equity (%)**

Net Farm Income				\$17,577
- Op. cost of unpaid labor		-		\$15,000
- Op. cost of management		-		\$25,000
=Return on Equity				-\$22,423

Rate of Return on Equity (%) =  $\text{return on equity} \div \text{average equity} \times 100$   
 =  $-\$22,423 \div \$338,753 \times 100$   
 = - 7%

**Operating Profit Margin Ratio**

Net Farm Income				\$17,577
+ Interest		+		\$49,693
- Op. cost of unpaid labor		-		\$15,000
- Op. cost of management		-		\$25,000
= Operating profit		=		\$27,270

Operating profit margin ratio =  $\frac{\text{Operating profit}}{\text{Total revenue}}$  x 100

=  $\$27,270 \div \$271,349$  x 100

= 10%

- ❖ OPMR calculates operating profit as a percent of total revenue. For every dollar of revenue, there remained \$0.10 as profit after paying operating expenses needed to generate that dollar. Would like this to be high.

### **Return to Labor and Management**

Net Farm Income From Operations		\$17,577
+ Interest expenses		\$49,693
= Adjusted net farm income		\$67,270
- Op. cost of all capital (10%)	-	<u>\$76,450</u>
= Return to labor and management		-\$9,180
- Op. cost of management	-	<u>\$25,000</u>
Return to labor		-\$34,180
-Op. cost of labor	-	\$15,000
= Return to management		-\$24,180