



# **2001–2002 Arizona Vegetable Crop Budgets**

**Southern Arizona  
Cochise, Pima,  
and Pinal Counties**

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Research Specialist  
The University of Arizona**

**Robert Call  
Horticulture Agent  
Cochise County**

**Rick Gibson  
County Director, Pinal County**



**Cooperative Extension**

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Department of Agricultural and Resource Economics



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## **2001**

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## **Abstract**

This 2001–2002 Vegetable Crop Budget Book is composed of tables estimating operating and ownership costs of producing vegetable crops in Southern Arizona. The costs are computed for a representative farm using representative cropping operations derived from expert opinions of Arizona crop management specialists, county extension agents, and local growers, but they are not a statistical sample of farms in the area. These estimated costs are based on materials, custom services, labor, utilities, and machinery costs derived from surveys of input suppliers both within the county and throughout the state. Tables show individual operations required for producing the crop and they estimate the cumulative costs of production. Monthly resource and cash flows are also estimated. Summary tables include information on the total operating and ownership costs of production.

## **Acknowledgments**

The authors would like acknowledge the cooperation of farmers, county extension agents, crop specialists, lenders, and input suppliers in providing information used in the cost estimates.

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# 2001–2002 Arizona Vegetable Crop Budgets

## INTRODUCTION

The tables of this publication provide information on the costs of producing vegetable crops in Arizona. The crop production techniques and associated costs are to serve as general guides to the costs incurred by producers in the area. Operations and procedures vary with local conditions and farmer preference. Growers, lenders, and other users of this information should recognize the representative nature of these income and cost estimates. Some growers may be more efficient than others. Adjustments to yields, prices, and input requirements are probably needed to refine the estimates of income and costs for a particular grower and area within a county. Crops selected for this publication are based on their economic importance within the county and the availability of data for each crop.

The remainder of this publication is divided as follows:

- Descriptive narrative of budget tables,
- Tables of average yields and prices,
- Tables of farm descriptions,
- Budget tables for each crop, and
- Appendices providing the support data for the cost estimates, including estimated costs of alternative water sources.

This publication will not give the details of calculating each item within the budget since most calculations are evident.

The table descriptions that follow give clarifying definitions and assumptions where such information is needed.

## DESCRIPTIONS OF BUDGET TABLES

The Arizona Crop Budgeting System provides six tables to describe the details of each crop production system and the costs of production. These tables are labeled as follows:

**Table A. Income and Operating Cost Summary**

**Table B. Allocation of Ownership Costs**

**Table C. Variable Operating Costs**

**Table D. Resource and Cash Flow Requirements**

**Table E. Schedule of Operations**

**Table F. Operations Calendar**

All six tables are provided for each budgeted crop with the table number designating the budget and the following letter designating the table.

These tables are ordered to provide

- General summaries of cost,
- Detailed categorization of costs, and
- Technical information required for calculation of all costs.

Each table is briefly described in the following paragraphs.

## Yield and Price Assumptions

Yield and price assumptions are very important in estimating the gross revenue of various cropping systems. For the purposes of this budget publication

**Budgeted yields** are based, in so far as possible, on five-year county average yields using the most recent five years available.

**Budgeted prices** for each commodity are based on five-year state average prices since county level prices are not available. Due to the highly seasonal nature of most vegetable prices, particular caution is warranted in using these state level prices.

## Table Headings

All tables have the same general heading immediately following the table number and title. This heading gives location and crop-specific descriptions that define the crop being budgeted. The data provided include information on the location, soil type, irrigation water source, and crop yield.

## Income and Cash Operating Cost Summary (Table A)

Table A for each budget provides a summary of the estimated income and operating costs incurred in producing the specified crop. The total income estimate is the sum of the contributions toward projected income of all products produced by the cropping system, including possible subsidies.

Income estimates are based on five-year county averages for yields for most crops and five-year state averages for commodity prices. These estimates are shown in Table 1.

The income projection is followed by a summary of operating cost in several categories:

**Labor,  
Chemical and Custom Application,  
Farm Machinery and Vehicles,  
Irrigation Water, and  
Other Purchased Inputs and Services.**

These items are subtotaled as **Total Cash Land Preparation Growing Expenses.**

In addition, itemized harvest costs are

**Labor,  
Chemical and Custom Application,  
Farm Machinery and Vehicles,  
Custom Harvest/Post Harvest,  
Crop Assessments, and  
Other Materials.**

These items are subtotaled as **Total Harvest and Post Harvest Expenses.**

Estimates of **Operating Overhead for Pickup Use** and **Operating Interest** are listed separately.

Operating costs, including sales taxes where appropriate, are summed to provide an estimate of cash operating expenses. The final entry in the table provides an estimate of the **Returns Over Cash Operating Expenses.**

The costs of this table are detailed in Table C described in a following section.

## Allocation of Ownership Costs (Table B)

Table B provides a summary of the allocation of ownership costs and the resulting expected returns of the enterprise. The first three lines of this table are summaries of the information from Table A.

Two sets of columns provide information on a “Cash Basis” and on a “Total Cost Basis.” The distinction is important. The long-term profitability of the enterprise requires that *all cost* (not just cash cost) be paid.

## Important Assumptions for Operating Costs

1. A charge is included for all labor services (except management) including “non-paid” operator and family labor.
2. An interest charge is calculated for all operating costs irrespective of the source of operating funds (loan or equity funds).
3. Yields are estimated using historical averages and trends for the appropriate crop and technology.
4. Crop price estimates are based on commodity trend and outlook information.
5. Costs of individual input items are derived from extensive data surveys and are reported in the appendices of this document.

An overview of the table shows that **Cash Overhead Expenses** include estimates for

**Taxes, Housing, and Insurance on Farm Machinery** (including vehicles),  
**Taxes, Housing, and Insurance on Irrigation Equipment** (excluding ditches),  
**General and Office Overhead**, and  
**General Farm Insurance**.

The last two items are estimated as percentages of the Total Operating Expenses. The percentages are derived from conversations with farm owners and managers. Estimating procedures for Taxes, Housing, and Insurance are more complex and are documented elsewhere.<sup>1</sup> This group of costs is designated as “cash costs” since they are generally paid in cash during the cropping year.

**Capital Allocations** are designated on a “Total Cost Basis” since they may or may not be paid during the cropping year depending upon the equity/debt structure of the farm and the capital replacement strategy used. Farmers often replace capital equipment with large “lump sum” purchases. New equipment is then depreciated for tax purposes and replaced when sufficiently worn out or when personal tax strategy calls for replacement. The funds for such purchases will be borrowed capital, equity capital, or a combination of the two. Interest will be cash interest on borrowed capital and/or opportunity interest on equity capital. Capital Replacement estimates and interest costs for Farm Machinery, Vehicles, and Irrigation Equipment are shown in Table B.

Cash rental rates are used as the total cost of land. In utilizing the cash rental rates all cost; opportunity costs, time costs, user costs, property taxes, and other overhead costs associated with the land are captured in the rental rate. Management Services are estimated on “Total Cost Basis” by taking a percentage of Total Operating Cost as is the common practice of professional farm management farms, since these costs *may or may not* be paid by the grower depending upon the farm’s organization. Most owner- or renter-managed farms will not pay these costs directly. Assessments made by irrigation districts, which must be paid whether or not a farm is producing, are charged as land costs. If the budgeted crop is part of a “double crop” sequence, one-half of the land costs are attributed to each crop of the sequence.

Table B also provides estimates of net returns at various levels of allocation of ownership costs. The level of net returns depends on whether one examines costs on a “Cash Basis” or a “Total Cost Basis.” Returns Over Cash Operating Expenses, Returns Over Cash Operating Expenses and Overhead, Returns to Land, Management and Risk, Returns to Management and Risk, and Returns to Risk (Profits) are all listed in Table B.

**Returns over Cash Operating Expenses** are the differences between Total Income and the Cash Operating Expenses. If positive, these returns represent the funds available to pay overhead, ownership expenses, land expenses, and management services plus profits.

<sup>1</sup> Teegerstrom, T. 2000–2001 *Arizona Farm machinery Costs*, Extension Bulletin No. 198026, Cooperative Extension, The University of Arizona, Tucson, AZ, February 2000.

**Definition—Cash Basis**

Cash Basis includes all costs for labor, materials, custom services, and an interest charge. Land rent, land taxes, and irrigation assessments are assumed to be paid in cash if applicable.

**Definition—Total Cost Basis**

Allocations for costs which may or may not be paid in cash, but which are normally *not* paid in cash, are considered in addition to the cash items. These costs include allocations for capital replacement of farm equipment, opportunity interest on farm equipment and farm land, and a charge for management.

**Definition—Opportunity Costs**

Capital invested in farm equipment and farm land would earn interest or other revenue in alternative investment opportunities. Either the interest paid for the use of the capital or its opportunity cost is expensed.

**Returns over Cash Operating Expenses and Overhead** are the residual funds available after Cash Operating and Cash Overhead expenses are paid (excluding cash land costs). These funds are available to pay for equipment capital usage, land usage, and management services. These returns are identical to **Returns to Land, Capital, Management and Risk**.

**Returns to Land, Management, and Risk** further reduce the funds available by extracting the costs of equipment capital usage through Capital Allocations. These include the costs of Capital Replacement and opportunity interest on equipment. The grower is assumed to have 75% equity in all equipment. Thus, 75% of the costs are considered non-cash and are allocated on a "Total Cost Basis" only. These costs might be partially cash as noted above in the category **Capital Allocations**.

**Returns to Management and Risk** are the returns remaining after charges for land usage have been extracted. Land clearly represents a dilemma in the allocation of costs since it can be cash in the form of rents or leases, or can be partially cash and partially "economic" cost. For 100% equity ownership of lands, the cash costs are for taxes. However, opportunity interest on land ownership is charged for the "Total Cost Basis."

**Returns to Risk (Profits)** further reduce the net returns for the costs of Management Services. This charge is made on a "Total Cost Basis" only, since many farmers do not directly pay the cost of such management services. Returns to Risk represent the purest level of profits after all resources have been allocated an appropriate portion of the returns. If an

investment is risk-free and all inputs, including management, are paid an appropriate amount equal to their contribution, then net economic profit will be zero in a competitive industry (such as agriculture).

Table B concludes with an estimate of the break-even prices of the primary output considering all of the costs previously described and the assumed yield. Break-even prices are those commodity prices below which all resources will not be paid.

### **Variable Operating Costs (Table C)**

Table C provides the detail costs of each operation required to produce the crop (some operations are performed more than one time). The operations are listed sequentially, with the machine and labor hours required to produce one acre displayed in the first two columns after the operation name. The next five columns give the Machine, Labor, Custom, Materials, and Total Costs for completing the operation *one time*. The next column gives the number of times the specific operation will be performed. The final cost column gives the Total Expense (Cash) for the total number of times the operation is performed. The final column classifies the operation:

**Land Preparation (L),  
Growing (G),  
Harvest (H),  
Post Harvest (P), or  
Marketing (M).**

The total cost for each of these categories is presented at the end of the table.

### **Water Costs**

Arizona is a patchwork of irrigated farms which receive irrigation water from many different sources. This document estimates costs of production for each crop based on one assumed water source. Producing the crop in some other area of the county or state likely uses water from different sources. To use these estimates for areas other than their original ones, new water cost estimates should be made. New water costs estimates can be made by removing the water costs from the original budget and replacing them with the cost of irrigation water in the new area.

**All Costs presented in this table are variable operating expenses.** No ownership costs are presented. A line entry (if appropriate) following the last operation describes the assumptions for pickup truck usage.

Operating Interest is included as the last line of the table and represents the interest paid on the cash operating expenses excluding pickup truck costs. Total Cash Operating Expenses summarizes the total cost for each category for the total number of times the operations are performed. The specific physical details of operations are presented in Table E, including assumed job rates, materials, applications rates, equipment requirements, labor requirements, and custom costs.

Table C also includes a summary of cost by Class of Operation:

**Land Preparation (L),  
Growing (G),  
Harvest (H),  
Post Harvest (P),  
Marketing (M), and  
Operating Overhead (O).**

Finally, a sensitivity of Net Revenues over Total Cash Expenses examines changes in net returns with changes in price and yield of the produced commodities.

### **Resource and Cash Flow Requirements (Table D)**

Resource and Cash Flow Requirements are summarized in Table D by month where the abbreviations P, C, and N represent Previous Year, Current Year, and Next Year, respectively. The Current Year is defined as the calendar year in which harvesting of the output takes place. Summary columns give information on the number of irrigations, water applied, and labor required in each month. Variable (cash) operating expenses are subdivided into Water, Machine, Labor, Chemical, Other Purchases, and Services for each month. The last column gives the Total Cash required to pay variable expenses in each month. These dates all are based on the schedule and calendar of operations described in Table E.

Additional summary information totals all the requirement columns and provides plant nutrient, water, labor, and purchased energy (fuels) summaries.

Finally, detailed lists of all of the equipment, labor, and material requirements for the enterprise are provided.

### **Schedule of Operations (Table E)**

The Schedule of Operations (Table E) provides the underlying information for the budgeted costs. The physical requirement and description of each operation is listed in detail, including the first month in which the operation is performed, the number of times the operation is performed, the tractors and implements required, the job rate (acres per labor hour) of each operation, the required materials (quantity, price, and units), the prices and units of required custom (or hired) services, and the labor type used to complete the operation.

Since this table is very important in defining the physical elements of the budgeting process, each column is described in some detail in the table below. The physical descriptions of the cropping operations provide the documentation of the cropping system for which cost estimates are being made.

### **Operations Calendar (Table F)**

The Operations Calendar (Table F) is a flow chart of the operations used in the production process of each crop presented in the budgets. The table provides information on which month each operation occurs and the number of times each operation occurs.

## **THE BUDGET TABLES**

The results of the cost of production estimates are included in a series of Tables A through F for each crop as noted in the Table of Contents. To aid the users of this publication, a table of the abbreviations is presented below. Background data for these estimates are provided in Table 2, Representative Farm Description for Budget Estimates, and Appendices A and B. Appendix A identifies those data groups uniquely specified by each county while Appendix B identifies the input items where state average prices were used.

Chemical materials provide a unique challenge for these estimates since each material is identified by its common generic name. However, in order to avoid confusion some (most) items are also identified, insofar as possible because of limited printing space, by trade names. Some identifiers are truncated because of space limitations.

## List of Column Headings for Table E

Column Heading	Description	Column Heading	Description
<b>No.</b>	The sequence number of each operation is provided for the ordering of operations.	<b>Job Rate</b>	Job Rate (Acres/Hr) is defined as the number of acres that can be completed per hour of <i>labor</i> . Machinery hours are usually less than labor hours. The budgeting program adjusts all job rates to provide labor and machine hours, as shown in Table C.
<b>First Month</b>	The first month in which each operation is to be performed is identified. An operation name may occur several times in a sequence of budget operations, but usually if all elements of the operation are identical (e.g., job rate or quantity of materials) then the operations will be combined into a single entry.	<b>Material Use and Cost</b>	Under this broad heading, all materials applied during a specific operation are identified using the following information.
<b>Operation</b>	The operation name is identified. Some abbreviations are necessary to fit the limited space available in the table.	<b>Name</b>	The name or names of any fertilizer, chemical, seed, water, or miscellaneous materials used in crop production are listed (one per line). In so far as possible, the names used are generic, non-trade names. This entry may be truncated. If questions about the actual material arise, refer to Appendices A and B.
<b>Equipment/ Custom Oper.</b>	This general heading identifies either 1) the combination of equipment required to accomplish the operations, or 2) the custom or hired service activity. This entry may be truncated. If questions arise about the actual material, refer to the alphabetical entries in Appendices A or B.	<b>Appl. Rate</b>	Each material application rate is identified with the appropriate application unit.
<b>HP</b>	The horsepower rating of the tractor used in this operation is identified. If no tractor is used, this entry is blank.	<b>\$/Unit</b>	This column specifies the cost of the material with the appropriate units at which the material is purchased.
<b>Self-Prop./ Implement</b>	The implement column identifies 1) the descriptive name of an implement used in the operation, 2) the descriptive name of the self-propelled implement used in the operation, or 3) the descriptive name of a custom activity used in the operation (preceded by the abbreviation CST). Multiple lines may be required for identification of implements towed behind tractors or vehicles.	<b>Service Cost</b>	The cost and purchase unit (\$/unit) of any custom operation identified in the Self-Prop./Implem. column is noted here with the appropriate purchase unit.
		<b>Labor Type</b>	The type of labor used in the operation is identified.

### Table of Abbreviations

				Units of Measure			
ai	Active ingredient	L	Liquid	AF	Acre-Foot	Gm	Gram
Appl	Applications	Oper.	Operating	AI	Acre-Inch	HD	Head Days
CST	Custom	Over.	Overhead	Ac, AC	Acre	Hr, Hrs	Hours
Defol.	Defoliant	Prop.	Propelled	Ba	Bale	Lb, Lbs	Pound
Fld	Field	Rw	Row	Bn	12 Bun	Lg	Lug
G	Granules	Sk	Shank	CW, CWT	100 Pounds	M	Meter
Gnd	Ground	Spr	Spray	Cl, Cwl	100 Pounds Lint	MI, Mi	Miles
Gr	Graded	W/	With	Cotton		Mu	Module
Herb	Herbicides	X	Times	Ct, Ctn	Carton	Qt	Quart
Insur	Insurance	#	Number	DB	1 Dozen Bunches	Sk	Sack
Irrig	Irrigation			Ea	Each	TF	Thousand Feet
				Er	12 Ears of Corn	Th	Thousand
				Fn	Feet/ton	Tn, T	Ton
				Ft	Feet	Tp	Tarp
				Ga, Gal	Gallon		

**Table 1. Five Year Average Yields and Prices, Southern Arizona Vegetables**

	<u>Pima Fall Lettuce</u>		<u>Fall Cantaloupe 1/</u>		<u>Cochise Spring Lettuce 2/</u>		<u>Dry Onions 3/</u>	
	Harvested Acres	Yield/Acre (Cartons)	Harvested Acres	Yield/Acre (Cartons)	Harvested Acres	Yield/Acre (Cartons)	Harvested Acres	Yield/Acre CWT
<b>Southern Arizona Acreage and Yields</b>								
1996	250	443	6,000	204	500	244	250	316
1997	600	349	3,400	225	800	207	800	361
1998	600	443	2,000	288	1,500	222	1,500	417
1999	600	813	2,000	299	400	340	350	494
2000			3,600	285	500	300	500	430
Average	363	401	3,400	269	740	263	680	404
<b>Arizona Prices ( Dollars per Carton )</b>								
	<u>Pima Fall Lettuce</u>		<u>Fall Cantaloupe 1/</u>		<u>Cochise Spring Lettuce 2/</u>		<u>Dry Onions 3/</u>	
	Price per	47	Price per	75	Price per	47	Price per	100
	pound carton		pound carton		pound carton		pounds	
1996	\$6.11		\$15.60		\$6.11		\$8.60	
1997	\$5.41		\$14.40		\$5.41		\$12.60	
1998	\$11.70		\$10.43		\$11.70		\$15.30	
1999	\$4.79		\$10.35		\$4.79		\$5.53	
2000	\$6.39		\$14.70		\$6.39		\$4.64	
Average	\$6.88		\$13.10		\$6.88		\$9.33	
	<u>Pinal Potatoes</u>		<u>Arizona Chilies 4/</u>		<u>Watermelons</u>		<u>Sweet Corn 4/</u>	
	Harvested Acres	Yield/Acre (cwt)	Harvested Acres	Yield/Acre (Tons)	Harvested Acres	Yield/Acre (Tons)	Harvested Acres	Yield/Acre (Cartons)
<b>Southern Arizona Acreage and Yields</b>								
1996	3,700	285	2,500	3.8	2,300	16.40	1,400	108
1997	1,600	274	3,800	3.9	2,000	16.85	1,800	140
1998	3,300	277	5,500	2.6	1,900	15.75	1,640	204
1999	2,100	297	6,100	2.9	1,800	17.15	2,000	142
2000	2,500	285	3,300	3.8	900	18.00	2,400	148
Average	2,640	284	4,240	3.4	1,780	16.83	1,848	148
<b>Arizona Prices ( Dollars per Carton )</b>								
	<u>Potatoes</u>		<u>Arizona Chilies 4/</u>		<u>Watermelons</u>		<u>Sweet Corn 4/</u>	
	Price per	100	Price per	2000	Price per	2000	Price per	50
	pound sack		pounds		pound container		pound carton	
1996	\$10.20		\$737.89		\$144.00		\$4.67	
1997	\$8.75		\$852.20		\$156.00		\$4.40	
1998	\$11.30		\$631.97		\$160.00		\$3.70	
1999	\$9.05		\$649.44		\$112.00		\$10.32	
2000	\$10.60		\$543.49		\$136.00		\$4.20	
Average	\$9.98		\$683.00		\$141.60		\$5.46	

1 Maricopa County Numbers

2 Year 2000 state average number

3 All counties except La Paz and Maricopa

4 State Averages

**Table 2. Representative Farm Description for Budget Estimation**

	<u>Vegetables</u>		
	<b>Cochise County</b>	<b>Pinal County</b>	<b>Pima County</b>
<b>General Characteristics</b>			
Farm Size	500	1,000	1,000 Acres
Land Rent	\$50	\$100	\$100 / Acre
Property Tax Rate (Average)	\$14.4971	\$16.9889	\$19.0228 / \$100 Assessment
Assessment Rate	16%	16%	16% of Appraised Value
Appraised Land Value	\$368	\$447	\$540 / Acre
Land Cash Value	\$1,200	\$2,000	\$2,000 / Acre
Land Equity	100%	100%	100%
Sales Tax	5.5%	6%	5% of Material Purchases
General Overhead	3%	3%	3% of Operating Costs
Office Overhead	2%	2%	2% of Operating Costs
Maintenance Overhead	3%	3%	3% of Operating Costs
Management Overhead	6%	8%	8% of Operating Costs
<b>Energy and Equipment</b>			
Equipment Equity			
Machine Hours	90%	90%	90%
Unleaded Gasoline	\$1.150	\$1.150	\$1.060 / Gallon
Diesel Fuel	\$0.763	\$0.740	\$0.662 / Gallon
L P Gas	\$0.900	\$0.810	\$0.850 / Gallon
Natural Gas	\$0.41286	\$0.37065	\$0.37065 / cu.ft.
Electricity	\$0.07827	\$0.03050	\$0.05321 / kwh
Lubrication Factor	15%	15%	15% of Fuel Costs
<b>Interest Rates</b>			
Operating Credit	10%	10%	10%
Long Term	6%	6%	6%
Average Investment	10%	10%	10%
<b>Labor Benefits</b>			
FICA	7.65%	7.65%	7.65% of Cash Wages
Worker Compensation	7.73%	7.73%	7.73% of Cash Wages
FUTA	1.56%	1.56%	1.56% of Cash Wages
Fringe Benefits	13%	13%	13% of Cash Wages

# **2001–2002 Arizona Vegetable Crop Budgets Tables**

## **Southern Arizona Cochise, Pima, and Pinal Counties**

Note: Column and row totals may not exactly equal the sum of a row or column due to rounding error. Differences are usually less than \$.10.

**Table 3A. Income and Cash Operating Summary; Green Chiles, 2001**

COUNTY: Cochise                      FARM: Southern AZ Veg                      WATER SOURCE: Ks Settlement, NG                      TILLAGE: Conventional  
 CROP: Chile, Green                      ACRES: 1.0                      IRRIGATION SYSTEM: Flood Furrow                      SOIL: Sandy-Loam  
 AREA: Kansas Settlement                      YIELD: 3.4 Tn / Acre                      PREVIOUS CROP: Wheat, Winter                      DATE: 10/8/01

Item	Unit	Quantity	Price/ Unit	Budgeted /Acre	Total /Acre	Your Farm Budget
INCOME -> Gr. Chile	Ton	3.40	\$366.33	\$1,245.52	\$1,714.52	_____
Rd. Chile	Pound	700.00	\$0.67	\$469.00		_____
CASH LAND PREPARATION AND GROWING EXPENSES (including sales tax)						
Paid Labor (including benefits)					62.31	_____
Tractor/Self Propelled				31.09		_____
Irrigation				28.91		_____
Other/ Contract				2.30		_____
Chemicals and Custom Applications					148.48	_____
Fertilizer				97.24		_____
Insecticide				7.52		_____
Herbicide				9.87		_____
Other Chemicals				33.85		_____
Farm Machinery and Vehicles					37.83	_____
Diesel Fuel				16.71		_____
Repairs and Maintenance				21.11		_____
Irrigation Water (excluding labor)					213.63	_____
Natural Gas/Pumping				186.06		_____
Repairs and Maintenance				27.58		_____
Water Assessment (See Note Below) **						_____
Other Purchased Inputs &					255.56	_____
Seed/Transplants				180.56		_____
Other Services and Rentals				75.00		_____
TOTAL CASH LAND PREPARATION AND GROWING EXPENSES					717.81	_____
CASH HARVEST AND POST HARVEST EXPENSES						
Paid Labor (including benefits)					1.82	_____
Tractor/Self Propelled				1.82		_____
Farm Machinery and Vehicles					1.85	_____
Diesel Fuel				0.87		_____
Repairs and Maintenance				0.98		_____
Custom Harvest/Post Harvest					338.00	_____
TOTAL HARVEST AND POST HARVEST EXPENSE					341.67	_____
OPERATING OVERHEAD -> PICKUP USE					20.34	_____
OPERATING INTEREST AT 10.0%					23.85	_____
TOTAL CASH OPERATING EXPENSES					\$1,103.66	_____
RETURNS OVER CASH OPERATING EXPENSES					\$610.86	_____

Notes: The above figures do not include ownership costs, see table B for detailed cost allocation.

**Table 3B. Allocations of Ownership Costs; Green Chiles, 2001**

COUNTY: Cochise                      FARM: Southern AZ Veg                      WATER SOURCE: Ks Settlement, NG                      TILLAGE: Conventional  
 CROP: Chile, Green                      ACRES: 1.0                      IRRIGATION SYSTEM: Flood Furrow                      SOIL: Sandy-Loam  
 AREA: Kansas Settlement                      YIELD: 3.4 Tn / Acre                      PREVIOUS CROP: Wheat, Winter                      DATE: 10/8/01

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Item	-- CASH COST BASIS (\$/ACRE) --		-- TOTAL COST BASIS (\$/ACRE) --	
	Income and Costs	Net Returns	Income and Costs	Net Returns
TOTAL INCOME at \$366.33 / Tn	\$1,714.52		\$1,714.52	
TOTAL OPERATING EXPENSES	\$1,103.66		\$1,103.66	
RETURN OVER CASH OPERATING EXPENSES		\$610.86		\$610.86
CASH OVERHEAD EXPENSES				
Taxes, Housing and Insurance, Farm Machinery	4.33		4.33	
Wells and Irrigation System	16.26		16.26	
General and Office Overhead (5.0%of Total Operating Exp.)	55.18		55.18	
General Farm Maintenance (3.0% of Total Operating Exp.)	33.11		33.11	
Total Cash Overhead Expenses	108.89		108.89	
Total Cash Operating and Overhead Cost	1,212.55		1,212.55	
RETURNS OVER CASH OPER. AND OVER. EXPENSES		\$501.98		\$501.98
CAPITAL ALLOCATIONS (100% Equity)				
Capital Replacement, Machinery and Vehicles			23.63	
Wells and Irrigation System			60.53	
Interest on Equity, Machinery and Vehicles			11.88	
Wells and Irrigation System			30.86	
Total Capital Allocations			126.90	
RETURNS TO LAND, CAPITAL, MANAGEMENT AND RISK ----->		\$501.98		
RETURNS TO LAND, MANAGEMENT AND RISK ----->				\$375.07
Land Cost / Rent or Lease	75.00		75.00	
Total Land Costs	75.00		75.00	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		\$426.98		
RETURNS TO MANAGEMENT AND RISK ----->				\$300.07
Management Services (8% of Total Operation Expenses)			88.29	
TOTAL OWNERSHIP COST	183.89		399.08	
TOTAL COST	\$1,287.55		\$1,502.74	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		\$426.98		
RETURNS TO RISK (PROFITS) ----->				\$211.78
Item	-- CASH COST BASIS (\$/ACRE) --		-- TOTAL COST BASIS (\$/ACRE) --	
	Income and Costs	Net Returns	Income and Costs	Net Returns
BREAK-EVEN PRICE TO COVER OPERATING COST ( PER Lb )		\$186.66		\$186.66
BREAK-EVEN PRICE TO COVER OWNERSHIP COST		\$54.08		\$117.38
BREAK-EVEN PRICE TO COVER TOTAL COST		\$240.75		\$304.04

**Table 3C. Variable Operating Costs; Green Chiles, 2001**

COUNTY: Cochise FARM: Southern AZ Veg WATER SOURCE: Ks Settlement, NG TILLAGE: Conventional  
 CROP: Chile, Green ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Kansas Settlement YIELD: 3.4 Tn / Acre PREVIOUS CROP: Wheat, Winter DATE: 10/8/01

No.	First Month	Operation	---- Hours * ----		---- Operating Costs (\$/ACRE *) Per Operation ----					Tot. Cash	Class	
			Machine	Labor	Fuel/Rps.	Labor	Cust/Serv.	Materials	Total			Times
1	Jan	Plow	0.321	0.357	4.27	3.13			7.41	1.0	7.41	L
2	Feb	Disk	0.225	0.250	2.92	2.19			5.12	2.0	10.23	L
3	Feb	Laser Level	0.900	2.000	11.81	16.44			28.26	0.3	8.48	L
4	Feb	Landplane	0.225	0.250	2.64	2.19			4.83	0.5	2.41	L
5	Feb	List	0.180	0.200	2.18	1.75			3.94	1.0	3.94	L
6	Mar	Apply Herbicide/Ground	0.150	0.167	1.73	1.47		9.87	13.06	1.0	13.06	G
7	Mar	Buck Rows	0.023	0.025	0.19	0.22			0.41	5.0	2.04	G
8	Mar	Preirrigate		0.424	23.74	3.25			26.99	1.0	26.99	G
9	Mar	Disk Ends	0.023	0.025	0.27	0.22			0.49	4.0	1.96	G
10	Mar	Apply Fert/Ground	0.150	0.167	1.82	1.47		37.45	40.74	1.0	40.74	G
11	Apr	Plant	0.225	0.250	3.62	2.19		180.56	186.37	1.0	186.37	L
12	Apr	Irrigate		0.279	15.82	2.14			17.96	10.0	179.64	G
13	May	Cultivate	0.200	0.222	1.93	1.95			3.88	5.0	19.40	G
14	Jun	Thinning					75.00		75.00	1.0	75.00	G
15	Jun	Irrigate/Run Fertilizer		0.278	15.82	2.13		29.89	47.85	2.0	95.70	G
16	Jun	Apply Fungicide/Air					5.23	6.05	11.28	3.0	33.84	G
17	Aug	Apply Insecticide/Air					4.75	2.77	7.52	1.0	7.52	G
18	Sep	Prepare Ends	0.022	0.025	0.26	0.22			0.48	1.0	0.48	H
19	Sep	Pick 3.4 Tn					255.00		255.00	1.0	255.00	H
20	Sep	Haul, Custom 3.4 Tn					34.00		34.00	1.0	34.00	H
21	Nov	Pick .3 Tn					28.00		28.00	1.0	28.00	H
22	Nov	Haul, Custom .3 Tn					21.00		21.00	1.0	21.00	H
23	Nov	Cut Stalks .3 Tn	0.164	0.182	1.59	1.60			3.19	1.0	3.19	P
24	Nov	Disk Residue .3 Tn	0.129	0.143	1.82	1.25			3.07	1.0	3.07	L
		Pickup Use 80 Mi/Acre	2.667		20.34						20.34	
		Operating Interest at 10.0					23.85				23.85	
TOTAL CASH OPERATING EXPENSES (includes all times over):											1,103.66	T

\*NOTES: Machine and labor hours and operating cost are for one time over the designated acreage. The "Tot. Cash Expense" column and the "TOTAL CASH OPERATING EXPENSES" row include all operations, all times over. Classes are defined below.

OPERATING COST SUMMARY BY CLASS

Land Preparation (L)	221.91
Growing (G)	495.90
Harvest (H)	338.48
Post Harvest (P)	3.19
Marketing (M)	0.00
Operating Overhead (O)	44.18
Total (T)	\$1,103.66

SENSITIVITY OF THE NET REVENUES OVER TOTAL CASH EXPENSES (\$/ACRE)

Prices ->		- 25%	- 10%	Budgeted	+ 10%	+ 25%	
Yields		\$274.75	\$329.70	\$366.33	\$402.96	\$457.91	Break-even Price
- 25%	2.6	-325.17	-185.05	-91.64	1.78	141.90	402.27
- 10%	3.1	-236.30	-68.16	43.94	156.04	324.18	351.97
Budgeted	3.4	-177.05	9.77	134.33	258.88	445.71	326.82
+ 10%	3.7	-117.81	87.71	224.71	361.72	567.23	306.25
Break-even Yield		4.42	3.36	2.89	2.54	2.15	

**Table 3D. Resource and Cash Flow Requirements; Green Chiles, 2001**

COUNTY: Cochise FARM: Southern AZ Veg WATER SOURCE: Ks Settlement, NG TILLAGE: Conventional  
 CROP: Chile, Green ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Kansas Settlement YIELD: 3.4 Tn / Acre PREVIOUS CROP: Wheat, Winter DATE: 10/8/01

Month *	Number Irrigations	Water Applied (inches)	Total Labor (Hrs)	Operating Costs (\$/ACRE *)						
				Purchased Water	Fuel, Oil and Repairs	Labor	Chemicals	Other Purchases	Services	Total
JAN C			0.86		10.12	7.52				17.64
FEB C			0.93		7.05	7.78				14.83
MAR C	1.0	6.0	0.81		27.74	6.62	47.32			81.68
APR C	2.0	8.0	0.83		35.45	6.69		180.56		222.70
MAY C	2.0	8.0	0.83		34.04	6.67				40.71
JUN C	3.0	12.0	1.33		51.80	10.75	35.95		80.23	178.73
JUL C	2.0	8.0	1.05		35.97	8.61	6.05		5.23	55.86
AUG C	3.0	12.0	0.84		47.47	6.41	38.72		9.98	102.58
SEP C			0.03		0.26	0.22			289.00	289.48
NOV C			0.32		3.41	2.85			49.00	55.26
Pickup Use 80 Mi/Acre					20.34					20.34
Operating Interest at 10.0									23.85	23.85
Water Assessment				**						
<b>Total</b>	<b>13.0</b>	<b>54.0</b>	<b>7.82</b>		<b>273.65</b>	<b>64.12</b>	<b>128.04</b>	<b>180.56</b>	<b>457.29</b>	<b>1103.66</b>
<b>%</b>					<b>24.79</b>	<b>5.81</b>	<b>11.60</b>	<b>16.36</b>	<b>41.43</b>	<b>100.00</b>

TOTAL RESOURCE REQUIREMENTS (per Acre)

Total N 234.4  
 Total P 106.0  
 Total Labor 7.8  
 Total Water 54.0

TOTAL ENERGY REQUIREMENTS (per Acre)

Diesel Fuel 18.6 Gal  
 Unleaded Gas 8.0 Gal  
 Nat Gas/Pumping 436.7 Therms  
 All Direct Energy 47.3 M BTU

EQUIPMENT REQUIREMENTS (per Acre)

Bed Shaper, 6 Rw	0.22 Hr	Drag Scraper, 10'	0.27 Hr	Fert. Side Dress Unit,	0.15 Hr
Landplane 12'X 45'	0.11 Hr	Laser, Complete System	0.27 Hr	Lister, 7 Bottom	0.18 Hr
Moldboard Plow, 4-16 2	0.32 Hr	Offset Disk, 12'	0.45 Hr	Offset Disk, 16.5'	0.24 Hr
Pickup Truck, 1/2 Ton	2.67 Hr	Planter, Drill Type, 6 Row	0.22 Hr	Rolling Cultivator, 6 Rw	1.15 Hr
Rotary Stalk Cutter, 4 Row	0.16 Hr	Rowbuck, 10'	0.12 Hr	Saddle Tk Sprayer, 2 Tk 8	0.15 Hr
Tractor, 100 PTO HP,	1.92 Hr	Tractor, 125 PTO HP	0.27 Hr	Tractor, 125 PTO HP,	1.19 Hr

MATERIALS REQUIREMENT (per Acre)

11-53-00, Dry	200.00 Lb	32-00-00, URAN 32, Lqd	60.00 Ga	BT	0.25 Lb
Chile Pepper Sd (OP)	5.00 Lb	Copper hydroxide	6.75 Lb	Trifluralin	3.00 Pt
Water, Pump	54.00 Al				

LABOR REQUIREMENT (per Acre)

Irrigators	3.77 Hr	Other	0.30 Hr	Tractor	3.75 Hr
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\*NOTE: P = Previous Year C = Current Year N = Next Year

**Table 3E. Schedule of Operations; Green Chiles, 2001**

COUNTY: Cochise FARM: Southern AZ Veg WATER SOURCE: Ks Settlement, NG TILLAGE: Conventional  
 CROP: Chile, Green ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Kansas Settlement YIELD: 3.4 Tn / Acre PREVIOUS CROP: Wheat, Winter DATE: 10/8/01

First No. Month	Times	Operation	Equipment/ Custom Oper		Job Rate Acre/Hr	Material Use and Cost				Service Cost \$ / Unit	Labor Type
			HP	Self-Prop./ Implement		Name	Appl. Rate	\$ / Unit			
Jan	1.0	Plow	125	Moldboard Plow, 4-16 2	2.80						Tractor
Feb	2.0	Disk	125	Offset Disk, 12'	4.00						Tractor
Feb	0.3	Laser Level	125	Drag Scraper, 10'	1.00						Tractor
				Laser, Complete System							Other
Feb	0.5	Landplane	125	Landplane 12'X 45'	4.00						Tractor
Feb	1.0	List	125	Lister, 7 Bottom	5.00						Tractor
Mar	1.0	Apply Herbicide/Ground	100	Rolling Cultivator, 6 Rw Saddle Tk Sprayer, 2 Tk 8 Row	6.00	Trifluralin	3.00 Pt	24.95 Ga			Tractor
Mar	5.0	Buck Rows	100	Rowbuck, 10'	40.00						Tractor
Mar	1.0	Preirrigate			2.40	Water, Pump	6.00 Al	47.47 AF			Irrigators
Mar	4.0	Disk Ends	100	Offset Disk, 16.5'	40.00						Tractor
Mar	1.0	Apply Fert/Ground	100	Fert. Side Dress Unit,	6.00	11-53-00, Dry	200.00 Lb	355.00 Tn			Tractor
Apr	1.0	Plant	100	Bed Shaper, 6 Rw Planter, Drill Type, 6 Row	4.00	Chile Pepper Sd (OP)	5.00 Lb	34.23 Lb			Tractor
Apr	10.0	Irrigate			3.60	Water, Pump	4.00 Al	47.47 AF			Irrigators
May	5.0	Cultivate	100	Rolling Cultivator, 6 Rw	4.50						Tractor
Jun	1.0	Thinning		CST Thinning						75.00 Ac	
Jun	2.0	Irrigate/Run Fertilizer			3.60	Water, Pump	4.00 Al	47.47 AF			Irrigators
						32-00-00, URAN 32,	30.00 Ga	170.80 Tn			
Jun	3.0	Apply Fungicide/Air		CST Air Spray, 7 Gal Mix		Copper hydroxide	2.25 Lb	2.55 Lb		5.23 Ac	
Aug	1.0	Apply Insecticide/Air		CST Air Spray, 5 Gal Mix		BT	0.25 Lb	10.50 Lb		4.75 Ac	
Sep	1.0	Prepare Ends	100	Offset Disk, 16.5'	40.00						Tractor
Sep	1.0	Pick		CST Pick Green Chiles						75.00 Tn	
Sep	1.0	Haul, Custom		CST Haul Green Chiles						10.00 Tn	
Nov	1.0	Pick		CST Pick Red Chile after Green						80.00 Tn	
Nov	1.0	Haul, Custom		CST Haul Red Chiles						60.00 Tn	
Nov	1.0	Cut Stalks	100	Rotary Stalk Cutter, 4 Row	5.50						Tractor
Nov	1.0	Disk Residue	125	Offset Disk, 16.5'	7.00						Tractor
		Pickup use 80 Mi/Ac		Pickup Truck, 1/2 Ton	0.38						

\*NOTES: Machine times, labor times, and material rates are for one time over the designated acreage.

**Table 3F Operations Calendar; Green Chiles, 2001**

COUNTY: Cochise FARM: Southern Vegetables WATER SOURCE: Ks Settlement, NG TILLAGE: Conventional  
 CROP: Chile, Green ACRES: 1.0 IRRIGATION SYSTEM: Flodd Furrow SOIL: Sandy-Loam  
 AREA: Kansas Settlement YIELD: 3.4 Tn/Acre PREVIOUS CROP: Wheat, Winter DATE: 10/08/01

No.	Operation	Month and Times Operation Performed											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	Plow	1.0 C											
2	Disk	2.0 C											
3	Laser Level	0.3 C											
4	Landplane	0.5 C											
5	List		1.0 C										
6	Apply Herbicide/Ground			1.0 C									
7	Buck Rows			1.0 C									
8	Preirrigate			1.0 C									
9	Disk Ends			1.0 C		1.0 C	1.0 C	1.0 C					
10	Apply Fert/Ground			1.0 C									
11	Plant				1.0 C								
12	Irrigate				2.0 C								
13	Cultivate					1.0 C	2.0 C	2.0 C					
14	Thinning						1.0 C						
15	Irrigate/Run Fertilizer						1.0 C		1.0 C				
16	Apply Fungicide/Air						1.0 C	1.0 C	1.0 C				
17	Apply Insecticide/Air								1.0 C				
18	Prepare Ends									1.0 C			
19	Pick, Green									1.0 C			
20	Haul, Custom									1.0 C			
21	Pick, Red											1.0 C	
22	Haul, Custom											1.0 C	
23	Cut Stalks											1.0 C	
24	Disk Residue											1.0 C	

**Table 4A. Income and Cash Operating Summary; Pumpkins, 2001**

COUNTY: Cochise                      FARM: Southern AZ Veg                      WATER SOURCE: Ks Settlement, NG                      TILLAGE: Conventional  
 CROP: Pumpkins                      ACRES: 1.0                      IRRIGATION SYSTEM: Flood Furrow                      SOIL: Sandy-Loam  
 AREA: Kansas Settlement                      YIELD: 10.0 Tn / Acre                      PREVIOUS CROP: Wheat, Durum                      DATE: 10/8/01

Item	Unit	Quantity	Price/ Unit	Budgeted /Acre	Total /Acre	Your Farm Budget
INCOME -> Pumpkins	Ton	10.00	\$102.00	\$1,020.00	\$1,020.00	_____
CASH LAND PREPARATION AND GROWING EXPENSES (including sales tax)						
Paid Labor (including benefits)					57.59	_____
Tractor/Self Propelled				28.66		_____
Irrigation				28.93		_____
Chemicals and Custom Applications					120.10	_____
Fertilizer				57.97		_____
Insecticide				30.40		_____
Herbicide				3.29		_____
Other Chemicals				28.44		_____
Farm Machinery and Vehicles					38.18	_____
Diesel Fuel				16.39		_____
Repairs and Maintenance				21.79		_____
Irrigation Water (excluding labor)					166.16	_____
Natural Gas/Pumping				144.71		_____
Repairs and Maintenance				21.45		_____
Water Assessment (See Note Below) **						_____
Other Purchased Inputs & Seed/Transplants				272.65	272.65	_____
TOTAL CASH LAND PREPARATION AND GROWING EXPENSES					654.68	_____
CASH HARVEST AND POST HARVEST EXPENSES						
Paid Labor (including benefits)					144.89	_____
Tractor/Self Propelled				52.86		_____
Other/Contract				92.03		_____
Farm Machinery and Vehicles					53.18	_____
Diesel Fuel				19.23		_____
Repairs and Maintenance				33.95		_____
TOTAL HARVEST AND POST HARVEST EXPENSE					198.07	_____
OPERATING OVERHEAD -> PICKUP USE					5.08	_____
OPERATING INTEREST AT 10.0%					16.27	_____
TOTAL CASH OPERATING EXPENSES					\$874.11	_____
RETURNS OVER CASH OPERATING EXPENSES					\$145.89	_____

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Notes: The above figures do not include ownership costs, see table B for detailed cost allocation.

**Table 4B. Allocations of Ownership Costs; Pumpkins, 2001**

COUNTY: Cochise                      FARM: Southern AZ Veg                      WATER SOURCE: Ks Settlement, NG                      TILLAGE: Conventional  
 CROP: Pumpkins                      ACRES: 1.0                      IRRIGATION SYSTEM: Flood Furrow                      SOIL: Sandy-Loam  
 AREA: Kansas Settlement                      YIELD: 10.0 Tn / Acre                      PREVIOUS CROP: Wheat, Durum                      DATE: 10/8/01

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Item	-- CASH COST BASIS (\$/ACRE) --		-- TOTAL COST BASIS (\$/ACRE) --	
	Income and Costs	Net Returns	Income and Costs	Net Returns
TOTAL INCOME at \$102.00 / Tn	\$1,020.00		\$1,020.00	
TOTAL OPERATING EXPENSES	\$874.11		\$874.11	
RETURN OVER CASH OPERATING EXPENSES		\$145.89		\$145.89
CASH OVERHEAD EXPENSES				
Taxes, Housing and Insurance, Farm Machinery	6.76		6.76	
Wells and Irrigation System	12.65		12.65	
General and Office Overhead (5.0%of Total Operating Exp.)	43.71		43.71	
General Farm Maintenance (3.0% of Total Operating Exp.)	26.22		26.22	
Total Cash Overhead Expenses	89.34		89.34	
Total Cash Operating and Overhead Cost	963.45		963.45	
RETURNS OVER CASH OPER. AND OVER. EXPENSES		\$56.55		\$56.55
CAPITAL ALLOCATIONS (100% Equity)				
Capital Replacement, Machinery and Vehicles			44.68	
Wells and Irrigation System			47.08	
Interest on Equity, Machinery and Vehicles			21.00	
Wells and Irrigation System			24.00	
Total Capital Allocations			136.77	
RETURNS TO LAND, CAPITAL, MANAGEMENT AND RISK ----->		\$56.55		
RETURNS TO LAND, MANAGEMENT AND RISK ----->				(\$80.21)
Land Cost / Rent or Lease	75.00		75.00	
Total Land Costs	75.00		75.00	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		(\$18.45)		
RETURNS TO MANAGEMENT AND RISK ----->				(\$155.21)
Management Services (8% of Total Operation Expenses)			69.93	
TOTAL OWNERSHIP COST	164.34		371.03	
TOTAL COST	\$1,038.45		\$1,245.14	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		(\$18.45)		
RETURNS TO RISK (PROFITS) ----->				(\$225.14)
Item	-- CASH COST BASIS (\$/ACRE) --		-- TOTAL COST BASIS (\$/ACRE) --	
	Income and Costs	Net Returns	Income and Costs	Net Returns
BREAK-EVEN PRICE TO COVER OPERATING COST ( PER Lb )		\$87.41		\$87.41
BREAK-EVEN PRICE TO COVER OWNERSHIP COST		\$16.43		\$37.10
BREAK-EVEN PRICE TO COVER TOTAL COST		\$103.84		\$124.51

**Table 4C. Variable Operating Costs; Pumpkins, 2001**

COUNTY: Cochise FARM: Southern AZ Veg WATER SOURCE: Ks Settlement, NG TILLAGE: Conventional  
 CROP: Pumpkins ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Kansas Settlement YIELD: 10.0 Tn / Acre PREVIOUS CROP: Wheat, Durum DATE: 10/8/01

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No.	First Month	Operation	---- Hours * ----		---- Operating Costs (\$/ACRE *) Per Operation ----					Tot. Cash Expenses	Class	
			Machine	Labor	Fuel/Rps.	Labor	Cust/Serv.	Materials	Total			Times
1	Apr	Disk	0.225	0.250	3.75	2.19			5.95	2.0	11.89	L
2	Apr	Apply Fert/Ground	0.075	0.083	1.00	0.73		30.07	31.79	1.0	31.79	G
3	Apr	Laser Level	0.900	1.000	11.81	8.77			20.59	0.3	6.18	L
4	Apr	Landplane	0.225	0.250	2.59	2.19			4.78	0.5	2.39	L
5	May	List	0.180	0.200	2.58	1.75			4.33	1.0	4.33	L
6	May	Buck Rows	0.023	0.025	0.23	0.22			0.45	3.0	1.35	G
7	May	Preirrigate		0.565	23.74	4.33			28.07	1.0	28.07	G
8	May	Scratch	0.180	0.200	1.83	1.75			3.59	1.0	3.59	G
9	Jun	Plant	0.225	0.250	2.59	2.19		272.65	277.44	1.0	277.44	L
10	Jun	Apply Insect./Ground	0.112	0.125	1.25	1.10		30.40	32.75	1.0	32.75	G
11	Jun	Remove Cap	0.150	0.167	1.53	1.47			2.99	1.0	2.99	G
12	Jun	Cult/Spread Herbicide	0.225	0.250	2.94	2.19		3.29	8.43	1.0	8.43	G
13	Jun	Irrigate		0.424	15.82	3.25			19.08	2.0	38.15	G
14	Jun	Disk Ends	0.023	0.025	0.30	0.22			0.52	3.0	1.56	G
15	Jul	Cultivate	0.300	0.333	3.37	2.92			6.29	1.0	6.29	G
16	Jul	Irrigate		0.337	15.82	2.58			18.41	6.0	110.46	G
17	Jul	Irrigate/Run Fertilizer		0.337	15.82	2.58		27.90	46.31	1.0	46.31	G
18	Aug	Apply Fungicide/Ground	0.150	0.167	1.70	1.47		14.22	17.38	2.0	34.76	G
19	Oct	Prepare Ends	0.023	0.025	0.30	0.22			0.52	1.0	0.52	H
20	Oct	Pick and Load	1.800	4.000	17.63	71.38			89.01	1.0	89.01	H
21	Oct	Haul 1	3.600	4.000	35.26	73.28			108.54	1.0	108.54	H
22	Oct	Disk Residue	0.225	0.250	3.75	2.19			5.95	1.0	5.95	L
		Pickup Use 20 Mi/Acre	0.667		5.08						5.08	
		Operating Interest at 10.0					16.27				16.27	
TOTAL CASH OPERATING EXPENSES (includes all times over):											797.42	T

\*NOTES: Machine and labor hours and operating cost are for one time over the designated acreage. The "Tot. Cash Expense" column and the "TOTAL CASH OPERATING EXPENSES" row include all operations, all times over. Classes are defined below.

OPERATING COST SUMMARY BY CLASS

Land Preparation (L)	308.18
Growing (G)	346.50
Harvest (H)	198.07
Post Harvest (P)	0.00
Marketing (M)	0.00
Operating Overhead (O)	21.36
Total (T)	\$874.11

SENSITIVITY OF THE NET REVENUES OVER TOTAL CASH EXPENSES (\$/ACRE)

Prices ->	Yields	- 25%	- 10%	Budgeted	+ 10%	+ 25%	Break-even Price
		\$76.50	\$91.80	\$102.00	\$112.20	\$127.50	
- 25%	7.5	-177.05	-62.30	14.20	90.70	205.45	100.11
- 10%	9.0	-80.51	57.19	148.99	240.79	378.49	85.45
Budgeted	10.0	-16.15	136.85	238.85	340.85	493.85	78.11
+ 10%	11.0	48.21	216.51	328.71	440.91	609.21	72.12
Break-even Yield		10.25	8.28	7.34	6.59	5.72	

**Table 4D. Resource and Cash Flow Requirements; Pumpkins, 2001**

COUNTY: Cochise FARM: Southern AZ Veg WATER SOURCE: Ks Settlement, NG TILLAGE: Conventional  
 CROP: Pumpkins ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Kansas Settlement YIELD: 10.0 Tn / Acre PREVIOUS CROP: Wheat, Durum DATE: 10/8/01

Month *	Number Irrigations	Water Applied (inches)	Total Labor (Hrs)	Operating Costs (\$/ACRE *)						
				Purchased Water	Fuel, Oil and Repairs	Labor	Chemicals	Other Purchases	Services	Total
APR C			1.01		13.34	8.84	30.07			52.25
MAY C	1.0	6.0	0.99		28.38	8.06				36.44
JUN C	1.0	4.0	1.29		24.97	10.86	33.69	272.65		342.17
JUL C	3.0	12.0	1.48		51.38	11.78	27.90			91.06
AUG C	3.0	12.0	1.35		50.87	10.68	28.44			89.99
SEP C	2.0	8.0	0.67		31.65	5.17				36.82
OCT C			18.27		56.94	147.09				204.03
Pickup Use 20 Mi/Acre					5.08					5.08
Operating Interest at 10.0									16.27	16.27
<b>Total</b>	<b>10.0</b>	<b>42.0</b>	<b>25.06</b>		<b>262.61</b>	<b>202.48</b>	<b>120.10</b>	<b>272.65</b>	<b>16.27</b>	<b>874.11</b>
<b>%</b>					<b>30.04</b>	<b>23.16</b>	<b>13.74</b>	<b>31.19</b>	<b>1.86</b>	<b>100.00</b>

TOTAL RESOURCE REQUIREMENTS (per Acre)

Total N 124.1  
 Total P 132.5  
 Total Labor 25.1  
 Total Water 42.0

TOTAL ENERGY REQUIREMENTS (per Acre)

Diesel Fuel 37.8 Gal  
 Unleaded Gas 2.0 Gal  
 Nat Gas/Pumping 339.6 Therms  
 All Direct Energy 39.5 M BTU

EQUIPMENT REQUIREMENTS (per Acre)

Directed Spray Rig, 8	0.11 Hr	Drag Scraper, 10'	0.27 Hr	Fertilizer Broadcaster,	0.08 Hr
Landplane 12'X 45'	0.11 Hr	Laser, Complete System	0.27 Hr	Lister, 5 Bottom	0.18 Hr
Offset Disk, 13.5'	0.09 Hr	Offset Disk, 16.5'	0.67 Hr	Pickup Truck, 1/2 Ton	0.67 Hr
Planter, Planet Jr, 4 Row	0.22 Hr	Rolling Cultivator, 4 Rw	0.52 Hr	Rowbuck, 10'	0.07 Hr
Saddle Tk Sprayer, 2 Tk 8	0.52 Hr	Section Harrow, 4 Section	0.33 Hr	Tractor, 70 PTO HP	5.40 Hr
Tractor, 100 PTO HP	1.76 Hr	Tractor, 125 PTO HP	1.20 Hr	Vegetable Trailer Flat Bed	5.40 Hr

MATERIALS REQUIREMENT (per Acre)

10-53-00, Dry	250.00 Lb	32-00-00, URAN 32, Lqd	28.00 Ga	Benomyl	0.50 Lb
Carbofuran	3.00 Pt	Pumpkin Seed (Hyb)	13.00 Th	Triadimefon	0.24 Lb
Trifluralin	1.00 Pt	Water, Pump	42.00 Al		

LABOR REQUIREMENT (per Acre)

Irrigators	3.77 Hr	Other	12.00 Hr	Tractor	9.29 Hr
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\*NOTE: P = Previous Year C = Current Year N = Next Year

**Table 4E. Schedule of Operations; Pumpkins, 2001**

COUNTY: Cochise                      FARM: Southern AZ Veg                      WATER SOURCE: Ks Settlement, NG                      TILLAGE: Conventional  
 CROP: Pumpkins                      ACRES: 1.0                      IRRIGATION SYSTEM: Flood Furrow                      SOIL: Sandy-Loam  
 AREA: Kansas Settlement                      YIELD: 10.0 Tn / Acre                      PREVIOUS CROP: Wheat, Durum                      DATE: 10/8/01

First No. Month	Times	Operation	Equipment/ Custom Oper		Job Rate Acre/Hr	Material Use and Cost				Service Cost \$ / Unit	Labor Type
			HP	Self-Prop./ Implement		Name	Appl. Rate	\$ / Unit			
Apr	2.0	Disk	125	Offset Disk, 16.5'	4.00						Tractor
Apr	1.0	Apply Fert/Ground	125	Fertilizer Broadcaster,	12.00	10-53-00, Dry	250.00	Lb	228.00	Tn	Tractor
Apr	0.3	Laser Level	125	Drag Scraper, 10'	1.00						Tractor
				Laser, Complete System							
Apr	0.5	Landplane	100	Landplane 12'X 45'	4.00						Tractor
May	1.0	List	125	Lister, 5 Bottom	5.00						Tractor
May	3.0	Buck Rows	100	Rowbuck, 10'	40.00						Tractor
May	1.0	Preirrigate	1.77	Water, Pump	6.00	Al	47.47	AF			Irrigators
May	1.0	Scratch	100	Section Harrow, 4 Section	5.00						Tractor
Jun	1.0	Plant	100	Planter, Planet Jr, 4 Row	4.00	Pumpkin Seed (Hyb)	13.00	Th	19.88	Th	Tractor
Jun	1.0	Apply Insect./Ground	100	Directed Spray Rig, 8	8.00	Carbofuran	3.00	Pt	76.85	Ga	Tractor
Jun	1.0	Remove Cap	100	Section Harrow, 4 Section	6.00						Tractor
Jun	1.0	Cult/Spread Herbicide	100	Rolling Cultivator, 4 Rw	4.00	Trifluralin	1.00	Pt	24.95	Ga	Tractor
				Saddle Tk Sprayer, 2 Tk 8 Row							
Jun	2.0	Irrigate	2.36	Water, Pump	4.00	Al	47.47	AF			Irrigators
Jun	3.0	Disk Ends	100	Offset Disk, 13.5'	40.00						Tractor
Jul	1.0	Cultivate	100	Rolling Cultivator, 4 Rw	3.00						Tractor
Jul	6.0	Irrigate	2.97	Water, Pump	4.00	Al	47.47	AF			Irrigators
Jul	1.0	Irrigate/Run Fertilizer	2.97	Water, Pump	4.00	Al	47.47	AF			Irrigators
				32-00-00, URAN 32,	28.00	Ga	170.80	Tn			
Aug	2.0	Apply Fungicide/Ground	100	Saddle Tk Sprayer, 2 Tk 8	6.00	Benomyl	0.25	Lb	20.25	Lb	Tractor
				Triadimefon	0.12	Lb	70.12	Lb			
Oct	1.0	Prepare Ends	100	Offset Disk, 13.5'	40.00						Tractor
Oct	1.0	Pick and Load	70	Vegetable Trailer Flat Bed	0.50						Tractor
											Other
Oct	1.0	Haul	70	Vegetable Trailer Flat Bed	0.25						Tractor
Oct	1.0	Disk Residue	125	Offset Disk, 16.5'	4.00						Tractor
		Pickup use 20 Mi/Ac		Pickup Truck, 1/2 Ton	1.50						

\*NOTES: Machine times, labor times, and material rates are for one time over the designated acreage.

**Table 4F Operations Calendar; Pumpkins, 2001**

COUNTY: Cochise FARM: Southern Vegetables WATER SOURCE: Ks Settlement, NG TILLAGE: Conventional  
 CROP: Pumpkins ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Kansas Settlement YIELD: 10.0 Tn/Acre PREVIOUS CROP: Wheat, Duram DATE: 10/08/01

No.	Operation	Month and Times Operation Performed											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	Disk				2.0 C								
2	Apply Fert/Ground				1.0 C								
3	Laser Level				0.3 C								
4	Landplane				0.5 C								
5	List					1.0 C							
6	Buck Rows					1.0 C	1.0 C	1.0 C					
7	Preirrigate					1.0 C							
8	Scratch					1.0 C							
9	Plant						1.0 C						
10	Apply Fert/Ground						1.0 C						
11	Remove Cap						1.0 C						
12	Cult/Spread Herbicide						1.0 C						
13	Irrigate						1.0 C	1.0 C					
14	Disk Ends						2.0 C	1.0 C					
15	Cultivate							1.0 C					
16	Irrigate							1.0 C	3.0 C	2.0 C			
17	Irrigate/Run Fertilizer							1.0 C					
18	Apply Fungicide/Ground								1.0 C				
19	Prepare Ends										1.0 C		
20	Pick and Load										1.0 C		
21	Haul										1.0 C		
22	Disk Residue										1.0 C		

\* NOTE: P = Previous Year C = Current Year N = Next Year

**Table 5A. Income and Cash Operating Summary; Red Chiles, 2001**

COUNTY: Cochise                      FARM: Southern AZ Veg                      WATER SOURCE: Ks Settlement, Elect                      TILLAGE: Conventional  
 CROP: Chile, Red                      ACRES: 1.0                      IRRIGATION SYSTEM: Flood Furrow                      SOIL: Sandy-Loam  
 AREA: Kansas Settlement                      YIELD: 2,269.0 Lb / Acre                      PREVIOUS CROP: Cotton, Upland                      DATE: 10/8/01

Item	Unit	Quantity	Price/ Unit	Budgeted /Acre	Total /Acre	Your Farm Budget
INCOME -> Red Chile	Pound	2,269.00	\$0.67	\$1,520.23	\$1,520.23	_____
CASH LAND PREPARATION AND GROWING EXPENSES (including sales tax)						
Paid Labor (including benefits)					72.77	_____
Tractor/Self Propelled				42.05		_____
Irrigation				29.76		_____
Other/ Contract				0.96		_____
Chemicals and Custom Applications					121.98	_____
Fertilizer				73.63		_____
Insecticide				35.55		_____
Herbicide				12.80		_____
Farm Machinery and Vehicles					62.23	_____
Diesel Fuel				26.26		_____
Repairs and Maintenance				35.98		_____
Irrigation Water (excluding labor)					336.35	_____
Pump Energy - Electric				311.69		_____
Repairs and Maintenance				24.66		_____
Other Purchased Inputs &					480.56	_____
Seed/Transplants				180.56		_____
Other Services and Rentals				300.00		_____
TOTAL CASH LAND PREPARATION AND GROWING EXPENSES					1073.89	_____
CASH HARVEST AND POST HARVEST EXPENSES						
Paid Labor (including benefits)					43.85	_____
Tractor/Self Propelled				31.07		_____
Other/Contract				12.78		_____
Farm Machinery and Vehicles					63.30	_____
Diesel Fuel				11.82		_____
Repairs and Maintenance				51.48		_____
Custom Harvest/Post Harvest					67.80	_____
Other Materials					10.02	_____
TOTAL HARVEST AND POST HARVEST EXPENSE					184.97	_____
OPERATING OVERHEAD -> PICKUP USE					20.34	_____
OPERATING INTEREST AT 10.0%					29.81	_____
TOTAL CASH OPERATING EXPENSES					\$1,309.00	_____
RETURNS OVER CASH OPERATING EXPENSES					\$211.23	_____

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Notes: The above figures do not include ownership costs, see table B for detailed cost allocation.

**Table 5B. Allocations of Ownership Costs; Red Chiles, 2001**

COUNTY: Cochise FARM: Southern AZ Veg WATER SOURCE: Ks Settlement, Elect TILLAGE: Conventional  
 CROP: Chile, Red ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Kansas Settlement YIELD: 2,269.0 Lb / Acre PREVIOUS CROP: Cotton, Upland DATE: 10/8/01

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Item	-- CASH COST BASIS (\$/ACRE) --		-- TOTAL COST BASIS (\$/ACRE) --	
	Income and Costs	Net Returns	Income and Costs	Net Returns
TOTAL INCOME at \$0.67 / Lb	\$1,520.23		\$1,520.23	
TOTAL OPERATING EXPENSES	\$1,309.00		\$1,309.00	
RETURN OVER CASH OPERATING EXPENSES		\$211.23		\$211.23
CASH OVERHEAD EXPENSES				
Taxes, Housing and Insurance, Farm Machinery	9.86		9.86	
Wells and Irrigation System	13.97		13.97	
General and Office Overhead (5.0% of Total Operating Exp.)	65.45		65.45	
General Farm Maintenance (3.0% of Total Operating Exp.)	39.27		39.27	
Total Cash Overhead Expenses	128.56		128.56	
Total Cash Operating and Overhead Cost	1,437.56		1,437.56	
RETURNS OVER CASH OPER. AND OVER. EXPENSES		\$82.67		\$82.67
CAPITAL ALLOCATIONS (100% Equity)				
Capital Replacement, Machinery and Vehicles			68.78	
Wells and Irrigation System			48.22	
Interest on Equity, Machinery and Vehicles			24.20	
Wells and Irrigation System			26.53	
Total Capital Allocations			167.74	
RETURNS TO LAND, CAPITAL, MANAGEMENT AND RISK ----->		\$82.67		
RETURNS TO LAND, MANAGEMENT AND RISK ----->				(\$85.07)
Land Cost / Rent or Lease	75.00		75.00	
Total Land Costs	75.00		75.00	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		\$7.67		
RETURNS TO MANAGEMENT AND RISK ----->				(\$160.07)
Management Services (8% of Total Operation Expenses)			104.72	
TOTAL OWNERSHIP COST	203.56		476.02	
TOTAL COST	\$1,512.56		\$1,785.02	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		\$7.67		
RETURNS TO RISK (PROFITS) ----->				(\$264.79)
Item	-- CASH COST BASIS (\$/ACRE) --		-- TOTAL COST BASIS (\$/ACRE) --	
	Income and Costs	Net Returns	Income and Costs	Net Returns
BREAK-EVEN PRICE TO COVER OPERATING COST ( PER Lb )		\$0.58		\$0.58
BREAK-EVEN PRICE TO COVER OWNERSHIP COST		\$0.09		\$0.21
BREAK-EVEN PRICE TO COVER TOTAL COST		\$0.67		\$0.79

**Table 5C. Variable Operating Costs; Red Chiles, 2001**

COUNTY: Cochise FARM: Southern AZ Veg WATER SOURCE: Ks Settlement, Elect TILLAGE: Conventional  
 CROP: Chile, Red ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Kansas Settlement YIELD: 2,269.0 Lb / Acre PREVIOUS CROP: Cotton, Upland DATE: 10/8/01

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No.	First Month	Operation	---- Hours * ----		---- Operating Costs (\$/ACRE *) Per Operation ----					Tot. Cash Expenses	Class	
			Machine	Labor	Fuel/Rps.	Labor	Cust/Serv.	Materials	Total			Times
1	Jan	Plow	0.321	0.357	5.83	3.13			8.96	1.0	8.96	L
2	Jan	Rip	0.300	0.333	4.92	2.92			7.84	1.0	7.84	L
3	Feb	Apply Fert/Ground	0.150	0.167	1.70	1.47		35.76	38.93	1.0	38.93	G
4	Jan	Disk	0.225	0.250	4.26	2.19			6.45	2.0	12.90	L
5	Feb	Landplane	0.225	0.250	3.72	2.19			5.91	2.0	11.82	L
6	Feb	List	0.180	0.200	3.05	1.75			4.81	1.0	4.81	L
7	Mar	Buck Rows	0.023	0.050	0.23	0.41			0.64	5.0	3.21	G
8	Mar	Preirrigate		0.424	36.04	3.25			39.29	1.0	39.29	G
9	Mar	Disk Ends	0.023	0.025	0.20	0.22			0.42	4.0	1.67	G
10	Mar	Mulch	0.225	0.250	2.94	2.19			5.13	1.0	5.13	L
11	Apr	Plant	0.225	0.250	4.09	2.19		189.20	195.49	1.0	195.49	L
12	Apr	Remove Cap	0.180	0.200	1.81	1.75			3.57	1.0	3.57	G
13	Apr	Irrigate		0.279	24.03	2.14			26.16	10.0	261.65	G
14	May	Cultivate	0.225	0.250	2.65	2.19			4.84	4.0	19.38	G
15	Jun	Apply Herbicide/Ground	0.150	0.167	1.66	1.47			15.93	1.0	15.93	G
16	Jun	Thinning						75.00	75.00	1.0	75.00	G
17	Jun	Hand Weeding						75.00	75.00	3.0	225.00	G
18	Jul	Cultivate	0.150	0.167	1.77	1.47			3.23	3.0	9.70	G
19	Aug	Irrigate/Run Fertilizer		0.333	30.03	2.55			51.52	2.0	103.04	G
20	Aug	Apply Insecticide/Air						4.75	22.15	1.0	26.90	G
21	Sep	Prepare Ends	0.023	0.025	0.38	0.22			0.59	1.0	0.59	H
22	Oct	Harvest	1.500	3.334	47.70	27.41			75.11	1.0	75.11	H
23	Oct	Load Produce	1.500	1.667	13.29	14.63			37.94	1.0	37.94	H
24	Oct	Haul, Custom 1.1 Tn						67.80	67.80	1.0	67.80	H
25	Nov	Cut Stalks 1.1 Tn	0.164	0.182	1.94	1.60			3.53	1.0	3.53	P
26	Nov	Disk Residue 1.1 Tn	0.129	0.143	2.43	1.25			3.69	1.0	3.69	L
		Pickup Use 80 Mi/Acre	2.667		20.34				20.34		20.34	
		Operating Interest at 10.0						29.81			29.81	
TOTAL CASH OPERATING EXPENSES (includes all times over):											1,309.00	T

\*NOTES: Machine and labor hours and operating cost are for one time over the designated acreage. The "Tot. Cash Expense" column and the "TOTAL CASH OPERATING EXPENSES" row include all operations, all times over. Classes are defined below.

OPERATING COST SUMMARY BY CLASS

Land Preparation (L)	250.63
Growing (G)	823.26
Harvest (H)	181.44
Post Harvest (P)	3.53
Marketing (M)	0.00
Operating Overhead (O)	50.14
Total (T)	\$1,309.00

SENSITIVITY OF THE NET REVENUES OVER TOTAL CASH EXPENSES (\$/ACRE)

Prices ->		- 25%	- 10%	Budgeted	+ 10%	+ 25%	Break-even Price
Yields		\$0.50	\$0.60	\$0.67	\$0.74	\$0.84	
- 25%	1,701.8	-827.83	-656.80	-542.78	-428.77	-257.74	0.99
- 10%	2,042.1	-684.55	-479.32	-342.49	-205.67	-0.44	0.84
Budgeted	2,269.0	-589.03	-360.99	-208.97	-56.95	171.09	0.76
+ 10%	2,495.9	-493.51	-242.67	-75.44	91.78	342.62	0.70
Break-even Yield		3,668.18	2,961.25	2,624.10	2,355.88	2,042.69	

**Table 5D. Resource and Cash Flow Requirements; Red Chiles,2001**

COUNTY: Cochise FARM: Southern AZ Veg WATER SOURCE: Ks Settlement, Elect TILLAGE: Conventional  
 CROP: Chile, Red ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Kansas Settlement YIELD: 2,269.0 Lb / Acre PREVIOUS CROP: Cotton, Upland DATE: 10/8/01

Month *	Number Irrigations	Water Applied (inches)	Total Labor (Hrs)	Operating Costs (\$/ACRE *)						
				Purchased Water	Fuel, Oil and Repairs	Labor	Chemicals	Other Purchases	Services	Total
JAN C			0.94		15.00	8.25				23.25
FEB C			1.12		16.44	9.80	35.76			62.00
MAR C	1.0	6.0	0.62		37.93	4.98				42.91
APR C	1.0	4.0	0.90		31.63	7.60	8.64	180.56		228.43
MAY C	2.0	8.0	0.88		51.13	7.10				58.23
JUN C	2.0	8.0	1.55		58.09	12.96	12.80		150.00	233.85
JUL C	2.0	8.0	0.97		52.01	7.84			75.00	134.85
AUG C	4.0	18.0	1.39		109.88	10.85	60.02		79.75	260.50
SEP C	1.0	4.0	0.30		24.40	2.36				26.76
OCT C			5.00		60.99	42.04		10.02	67.80	180.85
NOV C			0.32		4.37	2.85				7.22
Pickup Use 80 Mi/Acre					20.34					20.34
Operating Interest at 10.0									29.81	29.81
Water Assessment				**						
<b>Total</b>	<b>13.0</b>	<b>56.0</b>	<b>14.01</b>		<b>482.21</b>	<b>116.63</b>	<b>117.22</b>	<b>190.58</b>	<b>402.36</b>	<b>1309.00</b>
<b>%</b>					<b>36.84</b>	<b>8.91</b>	<b>8.95</b>	<b>14.56</b>	<b>30.74</b>	<b>100.00</b>

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TOTAL RESOURCE REQUIREMENTS (per Acre)		TOTAL ENERGY REQUIREMENTS (per Acre)	
Total N	216.7	Diesel Fuel	40.4 Gal
Total P	38.8	Unleaded Gas	8.0 Gal
Total Labor	14.0	Electric / Pumping	3893.7 KWH
Total Water	56.0	All Direct Energy	19.9 M BTU

EQUIPMENT REQUIREMENTS (per Acre)			
Bed Shaper, 6 Rw	0.22 Hr	Chili Harvester, SP 2 Row	1.50 Hr
Flat Trailer	1.50 Hr	Landplane 12'X 45'	0.45 Hr
Moldboard Plow, 4-16 2	0.32 Hr	Offset Disk, 12'	0.09 Hr
Pickup Truck, 1/2 Ton	2.67 Hr	Planter, Drill Type, 6 Row	0.22 Hr
Rolling Cultivator, 6 Rw	1.35 Hr	Rotary Stalk Cutter, 4 Row	0.16 Hr
Saddle Tk Sprayer, 2 Tk 8	0.15 Hr	Section Harrow, 3 Section	0.18 Hr
Tractor, 100 PTO HP	2.56 Hr	Tractor, 125 PTO HP	0.02 Hr
V-Ripper, 5 Shnk	0.30 Hr	Directed Spray Rig, 8	0.15 Hr
		Lister, 7 Bottom	0.18 Hr
		Offset Disk, 16.5'	0.60 Hr
		Power Mulcher, 4 Rw	0.22 Hr
		Rowbuck, 10'	0.11 Hr
		Tractor, 60 PTO HP	1.59 Hr
		Tractor, 150 PTO HP	1.83 Hr

MATERIALS REQUIREMENT (per Acre)			
10-34-00, Lqd	10.00 Ga	32-00-00, URAN 32, Lqd	58.00 Ga
BT	2.00 Lb	Carbofuran	7.00 Lb
Dicamba	1.00 Pt	Water, Pump	56.00 Al
		Boxes & Supplies	10.00 Ct
		Chile Pepper Sd (OP)	5.00 Lb

LABOR REQUIREMENT (per Acre)			
Irrigators	3.88 Hr	Other	1.79 Hr
		Tractor	8.33 Hr

\*NOTE: P = Previous Year C = Current Year N = Next Year

**Table 5E. Schedule of Operations; Red Chiles, 2001**

COUNTY: Cochise FARM: Southern AZ Veg WATER SOURCE: Ks Settlement, Elect TILLAGE: Conventional  
 CROP: Chile, Red ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Kansas Settlement YIELD: 2,269.0 Lb / Acre PREVIOUS CROP: Cotton, Upland DATE: 10/8/01

First No. Month	Times	Operation	Equipment/ Custom Oper		Job Rate Acre/Hr	Material Use and Cost				Service Cost \$ / Unit	Labor Type
			HP	Self-Prop./ Implement		Name	Appl. Rate	\$ / Unit			
Jan	1.0	Plow	150	Moldboard Plow, 4-16 2	2.80						Tractor
Jan	1.0	Rip	150	V-Ripper, 5 Shnk	3.00						Tractor
Feb	1.0	Apply Fert/Ground	100	Saddle Tk Sprayer, 2 Tk 8	6.00	32-00-00, URAN 32,	20.00	Ga	170.80	Tn	Tractor
						10-34-00, Lqd	10.00	Ga	263.33	Tn	
Jan	2.0	Disk	150	Offset Disk, 16.5'	4.00						Tractor
Feb	2.0	Landplane	150	Landplane 12'X 45'	4.00						Tractor
Feb	1.0	List	150	Lister, 7 Bottom	5.00						Tractor
Mar	5.0	Buck Rows	100	Rowbuck, 10'	40.00						Tractor
Mar	1.0	Preirrigate			2.36	Water, Pump	6.00	Al	72.08	AF	Other
Mar	4.0	Disk Ends	60	Offset Disk, 12'	40.00						Irrigators
Mar	1.0	Mulch	100	Power Mulcher, 4 Rw	4.00						Tractor
Apr	1.0	Plant	100	Bed Shaper, 6 Rw	4.00	Chile Pepper Sd (OP)	5.00	Lb	34.23	Lb	Tractor
				Planter, Drill Type, 6 Row		Carbofuran	7.00	Lb	1.17	Lb	
Apr	1.0	Remove Cap	100	Section Harrow, 3 Section	5.00						Tractor
Apr	10.0	Irrigate			3.58	Water, Pump	4.00	Al	72.08	AF	Irrigators
May	4.0	Cultivate	100	Rolling Cultivator, 6 Rw	4.00						Tractor
Jun	1.0	Apply Herbicide/Ground	100	Directed Spray Rig, 8	6.00	Dicamba	1.00	Pt	97.06	Ga	Tractor
Jun	1.0	Thinning		CST Thinning							75.00 Ac
Jun	3.0	Hand Weeding		CST Hand Weeding							75.00 Ac
Jul	3.0	Cultivate	100	Rolling Cultivator, 6 Rw	6.00						Tractor
Aug	2.0	Irrigate/Run Fertilizer			3.00	Water, Pump	5.00	Al	72.08	AF	Irrigators
						32-00-00, URAN 32,	19.00	Ga	170.80	Tn	
Aug	1.0	Apply Insecticide/Air		CST Air Spray, 5 Gal Mix		BT	2.00	Lb	10.50	Lb	4.75 Ac
Sep	1.0	Prepare Ends	125	Offset Disk, 16.5'	40.00						Tractor
Oct	1.0	Harvest		Chili Harvester, SP 2 Row	0.60						Tractor
Oct	1.0	Load Produce	60	Flat Trailer	0.60	Boxes & Supplies	10.00	Ct	0.95	Ct	Tractor
Oct	1.0	Haul, Custom		CST Haul Red Chiles							60.00 Tn
Nov	1.0	Cut Stalks	100	Rotary Stalk Cutter, 4 Row	5.50						Tractor
Nov	1.0	Disk Residue	150	Offset Disk, 16.5'	7.00						Tractor
		Pickup use 80 Mi/Ac		Pickup Truck, 1/2 Ton	0.38						

\*NOTES: Machine times, labor times, and material rates are for one time over the designated acreage.

**Table 5F Operations Calendar; Red Chiles, 2001**

COUNTY: Cochise      FARM: Southern Vegetables      WATER SOURCE: Ks Settlement, NG      TILLAGE: Conventional  
 CROP: Chile, Red      ACRES: 1.0      IRRIGATION SYSTEM: Flood Furrow      SOIL: Sandy-Loam  
 AREA: Kansas Settlement      YIELD: 2,269 Lb/Acre      PREVIOUS CROP: Cotton, Upland      DATE: 10/08/01

No.	Operation	Month and Times Operation Performed											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	Plow	1.0 C											
2	Rip	1.0 C											
3	Disk	1.0 C	1.0 C										
4	Apply Fert/Ground		1.0 C										
5	Landplane		2.0 C										
6	List		1.0 C										
7	Buck Rows			1.0 C									
8	Preirrigate			1.0 C									
9	Disk Ends			1.0 C		1.0 C	1.0 C	1.0 C					
10	Mulch			0.5 C	0.5 C								
11	Plant				1.0 C								
12	Remove Cap				1.0 C								
13	Irrigate				1.0 C	2.0 C	2.0 C	2.0 C	2.0 C	1.0 C			
14	Cultivate					1.0 C	3.0 C						
15	Apply Herbicide/Ground						1.0 C						
16	Thinning						1.0 C						
17	Hand Weeding						1.0 C	1.0 C	1.0 C				
18	Cultivate							2.0 C	1.0 C				
19	Irrigate/Run Fertilizer								2.0 C				
20	Apply Insecticide/Air								1.0 C				
21	Prepare Ends									1.0 C			
22	Harvest										1.0 C		
23	Load Produce										1.0 C		
24	Haul, Custom										1.0 C		
25	Cut Stalks											1.0 C	
26	Disk Residue												1.0 C

\* NOTE: P = Previous Year    C = Current Year    N = Next Year

**Table 6A. Income and Cash Operating Summary; Spring Lettuce, 2001**

COUNTY: Cochise                      FARM: Southern AZ Veg                      WATER SOURCE: Ks Settlement, NG                      TILLAGE: Conventional  
 CROP: Lettuce, Iceberg                      ACRES: 1.0                      IRRIGATION SYSTEM: Flood Furrow                      SOIL: Sandy-Loam  
 AREA: Kansas Settlement                      YIELD: 545.0 Ct / Acre                      PREVIOUS CROP: Chile, Green                      DATE: 10/8/01

Item	Unit	Quantity	Price/ Unit	Budgeted /Acre	Total /Acre	Your Farm Budget
INCOME -> Lettuce	Ctrn	545.00	\$8.96	\$4,883.20	\$4,883.20	_____
CASH LAND PREPARATION AND GROWING EXPENSES (including sales tax)						
Paid Labor (including benefits)					67.48	_____
Tractor/Self Propelled				36.61		_____
Irrigation				30.87		_____
Chemicals and Custom Applications					458.34	_____
Fertilizer				152.93		_____
Insecticide				305.41		_____
Farm Machinery and Vehicles					56.00	_____
Diesel Fuel				23.16		_____
Repairs and Maintenance				32.83		_____
Irrigation Water (excluding labor)					225.50	_____
Natural Gas/Pumping				196.39		_____
Repairs and Maintenance				29.11		_____
Water Assessment (See Note Below) **						_____
Other Purchased Inputs & Seed/Transplants				126.60	276.60	_____
Other Services and Rentals				150.00		_____
TOTAL CASH LAND PREPARATION AND GROWING EXPENSES					1083.92	_____
CASH HARVEST AND POST HARVEST EXPENSES						
Custom Harvest/Post Harvest					1308.00	_____
Other Materials					505.98	_____
TOTAL HARVEST AND POST HARVEST EXPENSE					1813.98	_____
OPERATING OVERHEAD -> PICKUP USE					15.25	_____
OPERATING INTEREST AT 10.0%					21.91	_____
TOTAL CASH OPERATING EXPENSES					\$2,935.06	_____
RETURNS OVER CASH OPERATING EXPENSES					\$1,948.14	_____

Notes: The above figures do not include ownership costs, see table B for detailed cost allocation.

**Table 6B. Allocations of Ownership Costs; Spring Lettuce, 2001**

COUNTY: Cochise FARM: Southern AZ Veg WATER SOURCE: Ks Settlement, NG TILLAGE: Conventional  
 CROP: Lettuce, Iceberg ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Kansas Settlement YIELD: 545.0 Ct / Acre PREVIOUS CROP: Chile, Green DATE: 10/8/01

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Item	-- CASH COST BASIS (\$/ACRE) --		-- TOTAL COST BASIS (\$/ACRE) --	
	Income and Costs	Net Returns	Income and Costs	Net Returns
TOTAL INCOME at \$8.96 / Ct	\$4,883.20		\$4,883.20	
TOTAL OPERATING EXPENSES	\$2,935.06		\$2,935.06	
RETURN OVER CASH OPERATING EXPENSES		\$1,948.14		\$1,948.14
CASH OVERHEAD EXPENSES				
Taxes, Housing and Insurance, Farm Machinery	5.05		5.05	
Wells and Irrigation System	17.16		17.16	
General and Office Overhead (5.0%of Total Operating Exp.)	146.75		146.75	
General Farm Maintenance (3.0% of Total Operating Exp.)	88.05		88.05	
Total Cash Overhead Expenses	257.02		257.02	
Total Cash Operating and Overhead Cost	3,192.08		3,192.08	
RETURNS OVER CASH OPER. AND OVER. EXPENSES		\$1,691.12		\$1,691.12
CAPITAL ALLOCATIONS (100% Equity)				
Capital Replacement, Machinery and Vehicles			28.88	
Wells and Irrigation System			63.89	
Interest on Equity, Machinery and Vehicles			13.53	
Wells and Irrigation System			32.58	
Total Capital Allocations			138.89	
RETURNS TO LAND, CAPITAL, MANAGEMENT AND RISK ----->		\$1,691.12		
RETURNS TO LAND, MANAGEMENT AND RISK ----->				\$1,552.23
Land Cost / Rent or Lease	75.00		75.00	
Total Land Costs	75.00		75.00	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		\$1,616.12		
RETURNS TO MANAGEMENT AND RISK ----->				\$1,477.23
Management Services (8% of Total Operation Expenses)			234.80	
TOTAL OWNERSHIP COST	332.02		705.71	
TOTAL COST	\$3,267.08		\$3,640.78	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		\$1,616.12		
RETURNS TO RISK (PROFITS) ----->				\$1,242.42
Item	-- CASH COST BASIS (\$/ACRE) --		-- TOTAL COST BASIS (\$/ACRE) --	
	Income and Costs	Net Returns	Income and Costs	Net Returns
BREAK-EVEN PRICE TO COVER OPERATING COST ( PER Lb )		\$5.39		\$5.39
BREAK-EVEN PRICE TO COVER OWNERSHIP COST		\$0.61		\$1.29
BREAK-EVEN PRICE TO COVER TOTAL COST		\$5.99		\$6.68

**Table 6C. Variable Operating Costs; Spring Lettuce, 2001**

COUNTY: Cochise FARM: Southern AZ Veg WATER SOURCE: Ks Settlement, NG TILLAGE: Conventional  
 CROP: Lettuce, Iceberg ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Kansas Settlement YIELD: 545.0 Ct / Acre PREVIOUS CROP: Chile, Green DATE: 10/8/01

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No.	First Month	Operation	---- Hours * ----		---- Operating Costs (\$/ACRE *) Per Operation ----					Tot. Cash Expenses	Class	
			Machine	Labor	Fuel/Rps.	Labor	Cust/Serv.	Materials	Total			Times
1	Dec	Disk	0.225	0.250	4.13	2.19			6.32	3.0	18.96	L
2	Dec	Plow	0.321	0.357	5.83	3.13			8.96	1.0	8.96	L
3	Dec	Laser Level	0.900	1.000	12.19	8.77			20.96	0.3	6.29	L
4	Dec	Landplane	0.225	0.250	3.72	2.19			5.91	0.5	2.96	L
5	Dec	Apply Fert/Ground	0.075	0.083	0.79	0.73		84.27	85.79	1.0	85.79	G
6	Jan	Apply Herbicide/Ground	0.112	0.125	1.35	1.10			2.45	1.0	2.45	G
7	Jan	List	0.180	0.200	2.98	1.75			4.74	1.0	4.74	L
8	Jan	Shape Beds	0.138	0.154	1.69	1.35		77.60	80.64	1.0	80.64	L
9	Jan	Plant	0.333	0.370	5.55	3.25		126.60	135.40	1.0	135.40	L
10	Jan	Buck Rows	0.023	0.025	0.23	0.22			0.45	3.0	1.35	G
11	Jan	Irrigate		0.847	47.47	6.50			53.97	1.0	53.97	G
12	Jan	Irrigate		0.212	11.87	1.62			13.49	15.0	202.40	G
13	Jan	Disk Ends	0.023	0.025	0.29	0.22			0.51	2.0	1.01	G
14	Jan	Cultivate	0.300	0.333	3.37	2.92			6.29	3.0	18.88	G
15	Jan	Apply Fert/Ground	0.150	0.167	2.14	1.46		34.33	37.93	2.0	75.86	G
16	Feb	Thinning						75.00	75.00	1.0	75.00	G
17	Mar	Apply Insecticide/Air						4.75	22.43	4.0	108.72	G
18	Mar	Hand Weeding						75.00	75.00	1.0	75.00	G
19	Apr	Apply Insecticide/Air						4.75	30.15	1.0	34.90	G
20	Apr	Apply Insecticide/Air						4.75	37.35	2.0	84.20	G
21	May	Harvest 545 Ct						1308.00	505.98	1.0	1813.98	H
22	May	Disk Residue 545 Ct	0.225	0.250	4.26	2.19			6.45	1.0	6.45	L
		Pickup Use 60 Mi/Acre	2.000		15.25						15.25	
		Operating Interest at 10.0						21.91			21.91	
TOTAL CASH OPERATING EXPENSES (includes all times over):											2,935.06	T

\*NOTES: Machine and labor hours and operating cost are for one time over the designated acreage. The "Tot. Cash Expense" column and the "TOTAL CASH OPERATING EXPENSES" row include all operations, all times over. Classes are defined below.

OPERATING COST SUMMARY BY CLASS

Land Preparation (L)	264.39
Growing (G)	819.53
Harvest (H)	1,813.98
Post Harvest (P)	0.00
Marketing (M)	0.00
Operating Overhead (O)	37.16
Total (T)	\$2,935.06

SENSITIVITY OF THE NET REVENUES OVER TOTAL CASH EXPENSES (\$/ACRE)

Prices ->	Yields	- 25%	- 10%	Budgeted	+ 10%	+ 25%	Break-even Price
				\$6.72	\$8.06	\$8.96	
- 25%	408.8	220.64	770.00	1,136.24	1,502.48	2,051.84	6.18
- 10%	490.5	497.90	1,157.14	1,596.62	2,036.11	2,695.34	5.70
Budgeted	545.0	682.75	1,415.23	1,903.55	2,391.87	3,124.35	5.47
+ 10%	599.5	867.59	1,673.32	2,210.47	2,747.62	3,553.35	5.27
Break-even Yield		343.70	246.15	206.99	178.58	148.09	

**Table 6D. Resource and Cash Flow Requirements; Spring Lettuce, 2001**

COUNTY: Cochise FARM: Southern AZ Veg WATER SOURCE: Ks Settlement, NG TILLAGE: Conventional  
 CROP: Lettuce, Iceberg ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Kansas Settlement YIELD: 545.0 Ct / Acre PREVIOUS CROP: Chile, Green DATE: 10/8/01

Month *	Number Irrigations	Water Applied (inches)	Total Labor (Hrs)	Operating Costs (\$/ACRE *)						
				Purchased Water	Fuel, Oil and Repairs	Labor	Chemicals	Other Purchases	Services	Total
DEC P			1.12		16.26	9.79	84.27			110.32
JAN C	3.0	18.0	2.95		93.17	24.44	111.93	126.60		356.13
FEB C	3.0	9.0	1.41		45.47	11.67	34.33		75.00	166.47
MAR C	5.0	15.0	1.39		62.71	11.05	67.28		89.25	230.29
APR C	4.0	12.0	0.85		47.47	6.50	127.29		19.00	200.26
MAY C	1.0	3.0	0.49		16.41	4.04		505.98	1308.00	1834.43
Pickup Use 60 Mi/Acre					15.25					15.25
Operating Interest at 10.0									21.91	21.91
<b>Total</b>	<b>16.0</b>	<b>57.0</b>	<b>8.20</b>		<b>296.74</b>	<b>67.48</b>	<b>425.10</b>	<b>632.58</b>	<b>1513.16</b>	<b>2935.06</b>
<b>%</b>					<b>10.11</b>	<b>2.30</b>	<b>14.48</b>	<b>21.55</b>	<b>51.55</b>	<b>100.00</b>

TOTAL RESOURCE REQUIREMENTS (per Acre)

Total N 270.3  
 Total P 238.5  
 Total Labor 8.2  
 Total Water 57.0

TOTAL ENERGY REQUIREMENTS (per Acre)

Diesel Fuel 24.6 Gal  
 Unleaded Gas 6.0 Gal  
 Nat Gas/Pumping 460.9 Therms  
 All Direct Energy 50.3 M BTU

EQUIPMENT REQUIREMENTS (per Acre)

Bed Shaper, 4 Rw	0.14 Hr	Blade Scraper, 10'	0.27 Hr	Directed Spray Rig, 16	0.11 Hr
Fert. Side Dress Unit,	0.30 Hr	Fertilizer Broadcaster,	0.08 Hr	Landplane 12'X 45'	0.11 Hr
Laser, Complete System	0.27 Hr	Lister, 5 Bottom	0.18 Hr	Moldboard Plow, 4-16 2	0.32 Hr
Offset Disk, 12'	0.05 Hr	Offset Disk, 13.5'	0.67 Hr	Offset Disk, 16.5'	0.22 Hr
Pickup Truck, 1/2 Ton	2.00 Hr	Planter, Stanhay, 4 Row	0.33 Hr	Rolling Cultivator, 4 Rw	0.90 Hr
Rowbuck, 10'	0.07 Hr	Saddle Tk Sprayer, 2 Tk 8	0.14 Hr	Tractor, 100 PTO HP	1.97 Hr
Tractor, 125 PTO HP	0.27 Hr	Tractor, 150 PTO HP	1.51 Hr		

MATERIALS REQUIREMENT (per Acre)

11-53-00, Dry	450.00 Lb	46-00-00, Urea 46	480.00 Lb	Benefin	3.00 Pt
Chlorpyrifos	12.00 Pt	Cypermethrin	20.00 Oz	Head Lettuce Sd	200.00 Th
Imidacloprid	16.00 Oz	Lettuce Cartons	545.00 Ct	Methomyl	8.00 Pt
Spinosad	6.00 Oz	Water, Pump	57.00 Al		

LABOR REQUIREMENT (per Acre)

Irrigators 4.03 Hr Tractor 4.17 Hr

\*NOTE: P = Previous Year C = Current Year N = Next Year

**Table 6E. Schedule of Operations; Spring Lettuce, 2001**

COUNTY: Cochise FARM: Southern AZ Veg WATER SOURCE: Ks Settlement, NG TILLAGE: Conventional  
 CROP: Lettuce, Iceberg ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Kansas Settlement YIELD: 545.0 Ct / Acre PREVIOUS CROP: Chile, Green DATE: 10/8/01

First No. Month Times	Operation	Equipment/ Custom Oper		Job Rate Acre/Hr	Material Use and Cost				Service Cost \$ / Unit	Labor Type
		HP	Self-Prop./ Implement		Name	Appl. Rate	\$ / Unit			
Dec 3.0	Disk	150	Offset Disk, 13.5'	4.00						Tractor
Dec 1.0	Plow	150	Moldboard Plow, 4-16 2	2.80						Tractor
Dec 0.3	Laser Level	125	Blade Scraper, 10'	1.00						Tractor
			Laser, Complete System							
Dec 0.5	Landplane	150	Landplane 12'X 45'	4.00						Tractor
Dec 1.0	Apply Fert/Ground	100	Fertilizer Broadcaster,	12.00	11-53-00, Dry	450.00	Lb	355.00	Tn	Tractor
Jan 1.0	Apply Herbicide/Ground	100	Directed Spray Rig, 16	8.00	Benefin	3.00	Pt	0.00	Ga	Tractor
Jan 1.0	List	150	Lister, 5 Bottom	5.00						Tractor
Jan 1.0	Shape Beds	100	Bed Shaper, 4 Rw	6.50	Imidacloprid	16.00	Oz	588.40	Ga	Tractor
			Saddle Tk Sprayer, 2 Tk 8 Row							
Jan 1.0	Plant	100	Planter, Stanhay, 4 Row	2.70	Head Lettuce Sd	200.00	Th	0.60	Th	Tractor
Jan 3.0	Buck Rows	100	Rowbuck, 10'	40.00						Tractor
Jan 1.0	Irrigate			1.18	Water, Pump	12.00	Al	47.47	AF	Irrigators
Jan 15.0	Irrigate			4.72	Water, Pump	3.00	Al	47.47	AF	Irrigators
Jan 2.0	Disk Ends	100	Offset Disk, 12'	40.00						Tractor
Jan 3.0	Cultivate	100	Rolling Cultivator, 4 Rw	3.00						Tractor
Jan 2.0	Apply Fert/Ground	100	Fert. Side Dress Unit,	6.00	46-00-00, Urea 46	240.00	Lb	271.17	Tn	Tractor
Feb 1.0	Thinning		CST Thinning							75.00 Ac
Mar 4.0	Apply Insecticide/Air		CST Air Spray, 5 Gal Mix		Methomyl	2.00	Pt	39.45	Ga	4.75 Ac
					Cypermethrin	5.00	Oz	291.66	Ga	
Mar 1.0	Hand Weeding		CST Hand Weeding							75.00 Ac
Apr 1.0	Apply Insecticide/Air		CST Air Spray, 5 Gal Mix		Spinosad	6.00	Oz	609.67	Ga	4.75 Ac
Apr 2.0	Apply Insecticide/Air		CST Air Spray, 5 Gal Mix		Chlorpyrifos	6.00	Pt	47.21	Ga	4.75 Ac
May 1.0	Harvest		CST Harv/pack/haul Lettuce		Lettuce Cartons	545.00	Ct	0.88	Ct	2.40 Ct
May 1.0	Disk Residue	150	Offset Disk, 16.5'	4.00						Tractor
	Pickup use 60 Mi/Ac		Pickup Truck, 1/2 Ton	0.50						

\*NOTES: Machine times, labor times, and material rates are for one time over the designated acreage.

**Table 6F Operations Calendar; Lettuce (Spring), 2001**

COUNTY: Cochise      FARM: Southern Vegetables      WATER SOURCE: Ks Settlement, NG      TILLAGE: Conventional  
 CROP: Lettuce, Iceberg      ACRES: 1.0      IRRIGATION SYSTEM: Flood Furrow      SOIL: Sandy-Loam  
 AREA: Kansas Settlement      YIELD: 545.0 Ct/Acre      PREVIOUS CROP: Chile, Green      DATE: 10/08/01

No.	Operation	Month and Times Operation Performed											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	Disk	1.0 C	1.0 C										1.0 P
2	Plow												1.0 P
3	Laser Level												0.3 P
4	Landplane												0.5 P
5	Apply Fert/Ground												1.0 P
6	Apply Herbicide/Ground	1.0 C											
7	List	1.0 C											
8	Shape Beds	1.0 C											
9	Plant	1.0 C											
10	Buck Rows	2.0 C	1.0 C										
11	Irrigate	1.0 C											
12	Irrigate	2.0 C	3.0 C	5.0 C	4.0 C	1.0 C							
13	Disk Ends	1.0 C											
14	Cultivate	1.0 C	1.0 C	1.0 C									
15	Apply Fert/Ground	1.0 C	1.0 C										
16	Thinning		1.0 C										
17	Apply Insecticide/Air			3.0 C	1.0 C								
18	Hand Weeding			1.0 C									
19	Apply Insecticide/Air				1.0 C								
20	Apply Insecticide/Air				2.0 C								
21	Harvest/Pack/Haul					1.0 C							
22	Disk Residue					1.0 C							

\* NOTE: P = Previous Year    C = Current Year    N = Next Year

**Table 7A. Income and Cash Operating Summary; Sweet Corn, 2001**

COUNTY: Cochise                      FARM: Southern AZ Veg                      WATER SOURCE: Ks Settlement, NG                      TILLAGE: Conventional  
 CROP: Corn, Sweet                      ACRES: 1.0                      IRRIGATION SYSTEM: Flood Furrow                      SOIL: Sandy-Loam  
 AREA: Kansas Settlement                      YIELD: 148.0 Ct / Acre                      PREVIOUS CROP: Watermelons                      DATE: 10/8/01

Item	Unit	Quantity	Price/ Unit	Budgeted /Acre	Total /Acre	Your Farm Budget
INCOME -> Ears	Crtm	148.00	\$5.46	\$808.08	\$808.08	_____
CASH LAND PREPARATION AND GROWING EXPENSES (including sales tax)						
Paid Labor (including benefits)					58.41	_____
Tractor/Self Propelled				26.48		_____
Irrigation				31.93		_____
Chemicals and Custom Applications					194.52	_____
Fertilizer				82.29		_____
Insecticide				103.26		_____
Herbicide				8.96		_____
Farm Machinery and Vehicles					43.39	_____
Diesel Fuel				17.42		_____
Repairs and Maintenance				25.97		_____
Irrigation Water (excluding labor)					189.90	_____
Natural Gas/Pumping				165.38		_____
Repairs and Maintenance				24.51		_____
Other Purchased Inputs & Seed/Transplants					116.60	_____
TOTAL CASH LAND PREPARATION AND GROWING EXPENSES					602.82	_____
CASH HARVEST AND POST HARVEST EXPENSES						
Paid Labor (including benefits)					278.81	_____
Tractor/Self Propelled				48.75		_____
Other/Contract				230.06		_____
Farm Machinery and Vehicles					48.97	_____
Diesel Fuel				17.70		_____
Repairs and Maintenance				31.27		_____
Other Materials					189.06	_____
TOTAL HARVEST AND POST HARVEST EXPENSE					516.83	_____
OPERATING OVERHEAD -> PICKUP USE					7.63	_____
OPERATING INTEREST AT 10.0%					7.07	_____
TOTAL CASH OPERATING EXPENSES					\$1,134.35	_____
RETURNS OVER CASH OPERATING EXPENSES					(\$326.27)	_____

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Notes: The above figures do not include ownership costs, see table B for detailed cost allocation.

**Table 7B. Allocations of Ownership Costs; Sweet Corn, 2001**

COUNTY: Cochise FARM: Southern AZ Veg WATER SOURCE: Ks Settlement, NG TILLAGE: Conventional  
 CROP: Corn, Sweet ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Kansas Settlement YIELD: 148.0 Ct / Acre PREVIOUS CROP: Watermelons DATE: 10/8/01

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Item	-- CASH COST BASIS (\$/ACRE) --		-- TOTAL COST BASIS (\$/ACRE) --	
	Income and Costs	Net Returns	Income and Costs	Net Returns
TOTAL INCOME at \$5.46 / Ct	\$808.08		\$808.08	
TOTAL OPERATING EXPENSES	\$1,134.35		\$1,134.35	
RETURN OVER CASH OPERATING EXPENSES		(\$326.27)		(\$326.27)
CASH OVERHEAD EXPENSES				
Taxes, Housing and Insurance, Farm Machinery	6.94		6.94	
Wells and Irrigation System	14.45		14.45	
General and Office Overhead (5.0% of Total Operating Exp.)	56.72		56.72	
General Farm Maintenance (3.0% of Total Operating Exp.)	34.03		34.03	
Total Cash Overhead Expenses	112.14		112.14	
Total Cash Operating and Overhead Cost	1,246.49		1,246.49	
RETURNS OVER CASH OPER. AND OVER. EXPENSES		(\$438.41)		(\$438.41)
CAPITAL ALLOCATIONS (100% Equity)				
Capital Replacement, Machinery and Vehicles			46.64	
Wells and Irrigation System			53.80	
Interest on Equity, Machinery and Vehicles			15.64	
Wells and Irrigation System			27.43	
Total Capital Allocations			143.51	
RETURNS TO LAND, CAPITAL, MANAGEMENT AND RISK ----->		(\$438.41)		
RETURNS TO LAND, MANAGEMENT AND RISK ----->				(\$581.92)
Land Cost / Rent or Lease	75.00		75.00	
Total Land Costs	75.00		75.00	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		(\$513.41)		
RETURNS TO MANAGEMENT AND RISK ----->				(\$656.92)
Management Services (8% of Total Operation Expenses)			90.75	
TOTAL OWNERSHIP COST	187.14		421.40	
TOTAL COST	\$1,321.49		\$1,555.75	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		(\$513.41)		
RETURNS TO RISK (PROFITS) ----->				(\$747.67)
Item	-- CASH COST BASIS (\$/ACRE) --		-- TOTAL COST BASIS (\$/ACRE) --	
	Income and Costs	Net Returns	Income and Costs	Net Returns
BREAK-EVEN PRICE TO COVER OPERATING COST ( PER Lb )		\$7.66		\$7.66
BREAK-EVEN PRICE TO COVER OWNERSHIP COST		\$1.26		\$2.85
BREAK-EVEN PRICE TO COVER TOTAL COST		\$8.93		\$10.51

**Table 7C. Variable Operating Costs; Sweet Corn, 2001**

COUNTY: Cochise FARM: Southern AZ Veg WATER SOURCE: Ks Settlement, NG TILLAGE: Conventional  
 CROP: Corn, Sweet ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Kansas Settlement YIELD: 148.0 Ct / Acre PREVIOUS CROP: Watermelons DATE: 10/8/01

No.	First Month	Operation	---- Hours * ----		---- Operating Costs (\$/ACRE *) Per Operation ----					Tot. Cash Expenses	Class	
			Machine	Labor	Fuel/Rps.	Labor	Cust/Serv.	Materials	Total			Times
1	Mar	Disk	0.180	0.200	3.40	1.75			5.16	2.0	10.32	L
2	Mar	Apply Fert/Ground	0.075	0.083	1.00	0.73		37.45	39.18	1.0	39.18	G
3	Mar	Chisel	0.214	0.238	3.51	2.09			5.60	1.0	5.60	L
4	Mar	List	0.180	0.200	2.58	1.75			4.33	1.0	4.33	L
5	Mar	Buck Rows	0.023	0.025	0.23	0.22			0.45	4.0	1.80	G
6	Mar	Preirrigate		0.333	15.82	2.92			18.75	1.0	18.75	G
7	Apr	Disk Ends	0.023	0.025	0.29	0.22			0.51	4.0	2.03	G
8	Apr	Plant	0.180	0.200	3.07	1.75		116.60	121.42	1.0	121.42	L
9	Apr	Irrigate		0.333	15.82	2.55			18.38	8.0	147.03	G
10	Apr	Apply Herbicide/Ground	0.180	0.200	2.16	1.75		8.96	12.87	1.0	12.87	G
11	May	Irrigate/Run Fertilizer		0.333	15.82	2.55		14.95	33.33	3.0	99.98	G
12	May	Cultivate	0.150	0.167	1.77	1.28			3.05	3.0	9.14	G
13	Jul	Apply Insect./Ground	0.075	0.083	1.05	0.73		12.91	14.68	8.0	117.47	G
14	Jul	Pick and Load	4.500	10.00	44.07	168.29		189.06	401.42	1.0	401.42	H
15	Jul	Haul 1	0.500	0.556	4.90	100.74			115.41	1.0	115.41	H
16	Aug	Disk Residue	0.225	0.250	4.26	2.19			6.45	2.0	12.90	L
		Pickup Use 30 Mi/Acre	1.000		7.63						7.63	
		Operating Interest at 10.0						7.07			7.07	
TOTAL CASH OPERATING EXPENSES (includes all times over):											942.63	T

\*NOTES: Machine and labor hours and operating cost are for one time over the designated acreage. The "Tot. Cash Expense" column and the "TOTAL CASH OPERATING EXPENSES" row include all operations, all times over. Classes are defined below.

OPERATING COST SUMMARY BY CLASS		SENSITIVITY OF THE NET REVENUES OVER TOTAL CASH EXPENSES (\$/ACRE)							
		Prices ->					Break-even Price		
		- 25%	- 10%	Budgeted	+ 10%	+ 25%			
Land Preparation (L)	154.57								
Growing (G)	448.25								
Harvest (H)	516.83								
Post Harvest (P)	0.00	- 25%	111.0	-399.73	-308.83	-248.22	-187.61	-96.70	7.70
Marketing (M)	0.00	- 10%	133.2	-357.59	-248.50	-175.77	-103.05	6.04	6.78
Operating Overhead (O)	14.69	Budgeted	148.0	-329.50	-208.29	-127.48	-46.67	74.54	6.32
		+ 10%	162.8	-301.40	-168.07	-79.18	9.71	143.04	5.95
Total (T)	\$1,134.35	+ 25%	185.0	-259.26	-107.75	-6.74	94.27	245.79	5.50
		Break-even Yield		321.58	224.65	187.06	160.25	131.89	

**Table 7D. Resource and Cash Flow Requirements; Sweet Corn, 2001**

COUNTY: Cochise FARM: Southern AZ Veg WATER SOURCE: Ks Settlement, NG TILLAGE: Conventional  
 CROP: Corn, Sweet ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Kansas Settlement YIELD: 148.0 Ct / Acre PREVIOUS CROP: Watermelons DATE: 10/8/01

Month *	Number Irrigations	Water Applied (inches)	Total Labor (Hrs)	Operating Costs (\$/ACRE *)						
				Purchased Water	Fuel, Oil and Repairs	Labor	Chemicals	Other Purchases	Services	Total
MAR C	1.0	4.0	1.28		29.95	11.22	37.45			78.62
APR C	2.0	8.0	1.12		37.39	9.06	8.96	116.60		172.01
MAY C	3.0	12.0	1.55		53.30	11.94	14.95			80.19
JUN C	3.0	12.0	1.05		47.99	8.10	29.89			85.98
JUL C	3.0	12.0	37.24		105.11	292.52	103.26	189.06		689.95
AUG C			0.50		8.51	4.39				12.90
Pickup Use 30 Mi/Acre					7.63					7.63
Operating Interest at 10.0								7.07		7.07
<b>Total</b>	<b>12.0</b>	<b>48.0</b>	<b>42.74</b>		<b>289.88</b>	<b>337.23</b>	<b>194.51</b>	<b>305.66</b>	<b>7.07</b>	<b>1135.35</b>
<b>%</b>					<b>25.55</b>	<b>29.73</b>	<b>17.15</b>	<b>26.95</b>	<b>0.62</b>	<b>100.00</b>

TOTAL RESOURCE REQUIREMENTS (per Acre)

Total N 181.3  
 Total P 106.0  
 Total Labor 42.7  
 Total Water 48.0

TOTAL ENERGY REQUIREMENTS (per Acre)

Diesel Fuel 37.2 Gal  
 Unleaded Gas 3.0 Gal  
 Nat Gas/Pumping 388.1 Therms  
 All Direct Energy 44.4 M BTU

EQUIPMENT REQUIREMENTS (per Acre)

Directed Spray Rig, 16	0.18 Hr	Fertilizer Broadcaster,	0.08 Hr	Lister, 5 Bottom	0.18 Hr
Offset Disk, 12'	0.09 Hr	Offset Disk, 16.5'	0.81 Hr	Pickup Truck, 1/2 Ton	1.00 Hr
Planter, Drill Type, 6 Row	0.18 Hr	Rolling Cultivator, 6 Rw	0.45 Hr	Rowbuck, 10'	0.09 Hr
Sprayer, Air Blast 500	0.60 Hr	Tractor, 70 PTO HP	5.00 Hr	Tractor, 100 PTO HP	1.59 Hr
Tractor, 125 PTO HP	0.25 Hr	Tractor, 150 PTO HP	1.02 Hr	V-Ripper, 5 Shnk	0.21 Hr
Vegetable Trailer Flat Bed	5.00 Hr				

MATERIALS REQUIREMENT (per Acre)

11-53-00, Dry	200.00 Lb	32-00-00, URAN 32, Lqd	45.00 Ga	Alachlor	2.50 Pt
Methomyl	16.00 Pt	Sweet Corn (Super)	12.00 Lb	Water, Pump	48.00 AI
Wirebound Crates	112.00 Ct				

LABOR REQUIREMENT (per Acre)

Irrigators	4.16 Hr	Other	30.00 Hr	Tractor	8.57 Hr
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\*NOTE: P = Previous Year C = Current Year N = Next Year

**Table 7E. Schedule of Operations; Sweet Corn, 2001**

COUNTY: Cochise                      FARM: Southern AZ Veg                      WATER SOURCE: Ks Settlement, NG                      TILLAGE: Conventional  
 CROP: Corn, Sweet                      ACRES: 1.0                      IRRIGATION SYSTEM: Flood Furrow                      SOIL: Sandy-Loam  
 AREA: Kansas Settlement                      YIELD: 148.0 Ct / Acre                      PREVIOUS CROP: Watermelons                      DATE: 10/8/01

First No. Month	Times	Operation	Equipment/ Custom Oper		Job Rate Acre/Hr	Material Use and Cost				Service Cost \$ / Unit	Labor Type
			HP	Self-Prop./ Implement		Name	Appl. Rate	\$ / Unit			
Mar	2.0	Disk	150	Offset Disk, 16.5'	5.00						Tractor
Mar	1.0	Apply Fert/Ground	125	Fertilizer Broadcaster,	12.00	11-53-00, Dry	200.00	Lb	355.00	Tn	Tractor
Mar	1.0	Chisel	150	V-Ripper, 5 Shnk	4.20						Tractor
Mar	1.0	List	125	Lister, 5 Bottom	5.00						Tractor
Mar	4.0	Buck Rows	100	Rowbuck, 10'	40.00						Tractor
Mar	1.0	Preirrigate			3.00	Water, Pump	4.00	Al	47.47	AF	Tractor
Apr	4.0	Disk Ends	100	Offset Disk, 12'	40.00						Tractor
Apr	1.0	Plant	100	Planter, Drill Type, 6 Row	5.00	Sweet Corn (Super	12.00	Lb	9.21	Lb	Tractor
Apr	8.0	Irrigate			3.00	Water, Pump	4.00	Al	47.47	AF	Irrigators
Apr	1.0	Apply Herbicide/Ground	100	Directed Spray Rig, 16	5.00	Alachlor	2.50	Pt	27.18	Ga	Tractor
May	3.0	Irrigate/Run Fertilizer			3.00	Water, Pump	4.00	Al	47.47	AF	Irrigators
						32-00-00, URAN 32,	15.00	Ga	170.80	Tn	
May	3.0	Cultivate	100	Rolling Cultivator, 6 Rw	6.00						Irrigators
Jul	8.0	Apply Insect./Ground	100	Sprayer, Air Blast 500	12.00	Methomyl	2.00	Pt	48.94	Ga	Tractor
Jul	1.0	Pick and Load	70	Vegetable Trailer Flat Bed	0.20	Wirebound Crates	112.00	Ct	1.60	Ct	Tractor
											Other
Jul	1.0	Haul	70	Vegetable Trailer Flat Bed	1.80						Tractor
Aug	2.0	Disk Residue	150	Offset Disk, 16.5'	4.00						Tractor
		Pickup use 30 Mi/Ac		Pickup Truck, 1/2 Ton	1.00						

\*NOTES: Machine times, labor times, and material rates are for one time over the designated acreage.

**Table 7F Operations Calendar; Sweet Corn, 2001**

COUNTY: Cochise      FARM: Southern Vegetables      WATER SOURCE: Ks Settlement, NG      TILLAGE: Conventional  
 CROP: Corn, Sweet      ACRES: 1.0      IRRIGATION SYSTEM: Flood Furrow      SOIL: Sandy-Loam  
 AREA: Kansas Settlement      YIELD: 148.0 Ct/Acre      PREVIOUS CROP: Watermelons      DATE: 10/08/01

No.	Operation	Month and Times Operation Performed											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	Disk			1.0 C									
2	Apply Fert/Ground			1.0 C									
3	Chisel			1.0 C									
4	List			1.0 C									
5	Buck Rows			1.0 C	1.0 C	1.0 C	1.0 C						
6	Preirrigate			1.0 C									
7	Disk Ends				1.0 C	1.0 C	1.0 C	1.0 C					
8	Plant				1.0 C								
9	Irrigate				2.0 C	2.0 C	1.0 C	3.0 C					
10	Apply Herbicide/Ground				1.0 C								
11	Irrigate/Run Fertilizer					1.0 C	2.0 C						
12	Cultivate					3.0 C							
13	Apply Insect./Ground										8.0 C		
14	Pick and Load										1.0 C		
15	Haul										1.0 C		
16	Disk Residue											2.0 C	

\* NOTE: P = Previous Year    C = Current Year    N = Next Year

**Table 8A. Income and Cash Operating Summary; Watermelons, 2001**

COUNTY: Cochise                      FARM: Southern AZ Veg                      WATER SOURCE: Ks Settlement, NG                      TILLAGE: Conventional  
 CROP: Watermelons                      ACRES: 1.0                      IRRIGATION SYSTEM: Flood Furrow                      SOIL: Sandy-Loam  
 AREA: Kansas Settlement                      YIELD: 16.8 Tn / Acre                      PREVIOUS CROP: Wheat, Winter                      DATE: 10/8/01

Item	Unit	Quantity	Price/ Unit	Budgeted /Acre	Total /Acre	Your Farm Budget
INCOME -> Melons	Ton	16.83	\$141.60	\$2,383.13	\$2,383.13	_____
CASH LAND PREPARATION AND GROWING EXPENSES (including sales tax)						
Paid Labor (including benefits)					59.91	_____
Tractor/Self Propelled				28.53		_____
Irrigation				31.37		_____
Chemicals and Custom Applications					54.19	_____
Fertilizer				50.90		_____
Herbicide				3.29		_____
Farm Machinery and Vehicles					41.09	_____
Diesel Fuel				17.32		_____
Repairs and Maintenance				23.77		_____
Irrigation Water (excluding labor)					229.46	_____
Natural Gas/Pumping				199.84		_____
Repairs and Maintenance				29.62		_____
Other Purchased Inputs &					133.45	_____
Seed/Transplants				58.45		_____
Other Services and Rentals				75.00		_____
TOTAL CASH LAND PREPARATION AND GROWING EXPENSES					518.10	_____
CASH HARVEST AND POST HARVEST EXPENSES						
Paid Labor (including benefits)					131.98	_____
Tractor/Self Propelled				70.63		_____
Other/Contract				61.35		_____
Farm Machinery and Vehicles					58.52	_____
Diesel Fuel				18.43		_____
Repairs and Maintenance				40.08		_____
Other Materials					319.03	_____
TOTAL HARVEST AND POST HARVEST EXPENSE					509.53	_____
OPERATING OVERHEAD -> PICKUP USE					15.25	_____
OPERATING INTEREST AT 10.0%					44.04	_____
TOTAL CASH OPERATING EXPENSES					\$1,086.91	_____
RETURNS OVER CASH OPERATING EXPENSES					\$1,296.22	_____

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Notes: The above figures do not include ownership costs, see table B for detailed cost allocation.

**Table 8B. Allocations of Ownership Costs; Watermelons, 2001**

COUNTY: Cochise                      FARM: Southern AZ Veg                      WATER SOURCE: Ks Settlement, NG                      TILLAGE: Conventional  
 CROP: Watermelons                      ACRES: 1.0                      IRRIGATION SYSTEM: Flood Furrow                      SOIL: Sandy-Loam  
 AREA: Kansas Settlement                      YIELD: 16.8 Tn / Acre                      PREVIOUS CROP: Wheat, Winter                      DATE: 10/8/01

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Item	-- CASH COST BASIS (\$/ACRE) --		-- TOTAL COST BASIS (\$/ACRE) --	
	Income and Costs	Net Returns	Income and Costs	Net Returns
TOTAL INCOME at \$141.60 / Tn	\$2,383.13		\$2,383.13	
TOTAL OPERATING EXPENSES	\$1,086.91		\$1,086.91	
RETURN OVER CASH OPERATING EXPENSES		\$1,296.22		\$1,296.22
CASH OVERHEAD EXPENSES				
Taxes, Housing and Insurance, Farm Machinery	7.59		7.59	
Wells and Irrigation System	17.46		17.46	
General and Office Overhead (5.0%of Total Operating Exp.)	54.35		54.35	
General Farm Maintenance (3.0% of Total Operating Exp.)	32.61		32.61	
Total Cash Overhead Expenses	112.00		112.00	
Total Cash Operating and Overhead Cost	1,198.92		1,198.92	
RETURNS OVER CASH OPER. AND OVER. EXPENSES		\$1,184.21		\$1,184.21
CAPITAL ALLOCATIONS (100% Equity)				
Capital Replacement, Machinery and Vehicles			51.34	
Wells and Irrigation System			65.01	
Interest on Equity, Machinery and Vehicles			17.10	
Wells and Irrigation System			33.15	
Total Capital Allocations			166.60	
RETURNS TO LAND, CAPITAL, MANAGEMENT AND RISK ----->		\$1,184.21		
RETURNS TO LAND, MANAGEMENT AND RISK ----->				\$1,017.62
Land Cost / Rent or Lease	75.00		75.00	
Total Land Costs	75.00		75.00	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		\$1,109.21		
RETURNS TO MANAGEMENT AND RISK ----->				\$942.62
Management Services (8% of Total Operation Expenses)			86.95	
TOTAL OWNERSHIP COST	187.00		440.55	
TOTAL COST	\$1,273.92		\$1,527.46	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		\$1,109.21		
RETURNS TO RISK (PROFITS) ----->				\$855.66
Item	-- CASH COST BASIS (\$/ACRE) --		-- TOTAL COST BASIS (\$/ACRE) --	
	Income and Costs	Net Returns	Income and Costs	Net Returns
BREAK-EVEN PRICE TO COVER OPERATING COST ( PER Lb )		\$64.58		\$64.58
BREAK-EVEN PRICE TO COVER OWNERSHIP COST		\$11.11		\$26.18
BREAK-EVEN PRICE TO COVER TOTAL COST		\$75.69		\$90.76

**Table 8C. Variable Operating Costs; Watermelons, 2001**

COUNTY: Cochise FARM: Southern AZ Veg WATER SOURCE: Ks Settlement, NG TILLAGE: Conventional  
 CROP: Watermelons ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Kansas Settlement YIELD: 16.8 Tn / Acre PREVIOUS CROP: Wheat, Winter DATE: 10/8/01

No.	First Month	Operation	---- Hours * ----		---- Operating Costs (\$/ACRE *) Per Operation ----					Tot. Cash Expenses	Class	
			Machine	Labor	Fuel/Rps.	Labor	Cust/Serv.	Materials	Total			Times
1	Jan	Plow	0.321	0.357	5.83	3.13			8.96	1.0	8.96	L
2	Feb	Disk	0.225	0.250	3.62	2.19			5.82	2.0	11.63	L
3	Mar	Apply Fert/Ground	0.075	0.083	0.79	0.73	39.64		41.16	1.0	41.16	G
4	Feb	Laser Level	0.900	1.000	11.81	8.77			20.59	0.3	6.18	L
5	Mar	Landplane	0.225	0.250	2.59	2.19			4.78	0.5	2.39	L
6	Apr	List	0.180	0.200	2.58	1.75			4.33	1.0	4.33	L
7	Apr	Buck Rows	0.023	0.025	0.23	0.22			0.45	4.0	1.80	G
8	Apr	Preirrigate		0.565	31.65	4.33			35.98	1.0	35.98	G
9	Apr	Plant	0.333	0.370	4.77	3.25	58.45		66.47	1.0	66.47	L
10	May	Apply Herbicide/Ground	0.150	0.167	1.70	1.47	3.29		6.45	1.0	6.45	G
11	May	Cultivate	0.225	0.250	2.53	2.19			4.72	3.0	14.16	G
12	May	Irrigate		0.279	15.82	2.14			17.96	2.0	35.93	G
13	Jun	Thinning					75.00		75.00	1.0	75.00	G
14	Jun	Disk Ends	0.023	0.025	0.29	0.22			0.51	2.0	1.01	G
15	Jun	Irrigate		0.424	23.74	3.25			26.99	6.0	161.93	G
16	Jun	Irrigate/Run Fertilizer		0.424	23.74	3.25	11.26		38.25	1.0	38.25	G
17	Jul	Prepare Ends	0.023	0.025	0.29	0.22			0.51	2.0	1.01	H
18	Aug	Harvest, Load & Haul	3.600	8.000	28.97	65.77	159.52		254.26	2.0	508.51	H
19	Sep	Disk Residue	0.225	0.250	4.26	2.19			6.45	1.0	6.45	L
		Pickup Use 60 Mi/Acre	2.000		15.25						15.25	
		Operating Interest at 10.0					44.04				44.04	
TOTAL CASH OPERATING EXPENSES (includes all times over):											1086.91	T

\*NOTES: Machine and labor hours and operating cost are for one time over the designated acreage. The "Tot. Cash Expense" column and the "TOTAL CASH OPERATING EXPENSES" row include all operations, all times over. Classes are defined below.

OPERATING COST SUMMARY BY CLASS

Land Preparation (L)	106.41
Growing (G)	411.69
Harvest (H)	509.53
Post Harvest (P)	0.00
Marketing (M)	0.00
Operating Overhead (O)	59.29
Total (T)	\$1,086.91

SENSITIVITY OF THE NET REVENUES OVER TOTAL CASH EXPENSES (\$/ACRE)

Prices ->		- 25%	- 10%	Budgeted	+ 10%	+ 25%	Break-even Price
Yields		\$106.20	\$127.44	\$141.60	\$155.76	\$177.00	
- 25%	12.6	425.02	693.12	871.85	1,050.59	1,318.69	72.53
- 10%	15.1	616.69	938.41	1,152.89	1,367.38	1,689.10	65.49
Budgeted	16.8	744.47	1,101.94	1,340.25	1,578.57	1,936.04	61.97
+ 10%	18.5	872.25	1,265.47	1,527.61	1,789.76	2,182.97	59.08
+ 25%	21.0	1,063.93	1,510.76	1,808.65	2,106.55	2,553.38	55.63
Break-even Yield		7.02	5.49	4.79	4.25	3.64	

**Table 8D. Resource and Cash Flow Requirements; Watermelons, 2001**

COUNTY: Cochise FARM: Southern AZ Veg WATER SOURCE: Ks Settlement, NG TILLAGE: Conventional  
 CROP: Watermelons ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Kansas Settlement YIELD: 16.8 Tn / Acre PREVIOUS CROP: Wheat, Winter DATE: 10/8/01

Month *	Number Irrigations	Water Applied (inches)	Total Labor (Hrs)	Operating Costs (\$/ACRE *)						
				Purchased Water	Fuel, Oil and Repairs	Labor	Chemicals	Other Purchases	Services	Total
JAN C			0.36		5.83	3.13				8.96
FEB C			0.55		7.17	4.83				12.00
MAR C			0.46		5.71	4.02	39.64			49.37
APR C	1.0	8.0	1.16		39.23	9.55		58.45		107.23
MAY C	1.0	4.0	0.70		20.05	5.80	3.29			29.14
JUN C	3.0	18.0	1.87		77.30	15.02	11.26		75.00	178.58
JUL C	4.0	24.0	1.72		95.24	13.23				108.47
AUG C	1.0	4.0	16.33		74.28	134.11		319.03		527.42
SEP C			0.25		4.26	2.19				6.45
Pickup Use 60 Mi/Acre					15.25					15.25
Operating Interest at 10.0									44.04	44.04
<b>Total</b>	<b>10.0</b>	<b>58.0</b>	<b>23.39</b>		<b>344.32</b>	<b>191.88</b>	<b>54.19</b>	<b>377.48</b>	<b>119.04</b>	<b>1086.91</b>
<b>%</b>					<b>31.68</b>	<b>17.65</b>	<b>4.99</b>	<b>34.73</b>	<b>10.95</b>	<b>100.00</b>

TOTAL RESOURCE REQUIREMENTS (per Acre)

Total N 88.0  
 Total P 60.0  
 Total Labor 23.4  
 Total Water 58.0

TOTAL ENERGY REQUIREMENTS (per Acre)

Diesel Fuel 37.9 Gal  
 Unleaded Gas 6.0 Gal  
 Nat Gas/Pumping 469.0 Therms  
 All Direct Energy 52.9 M BTU

EQUIPMENT REQUIREMENTS (per Acre)

Bed Shaper, 4 Rw	0.33 Hr	Drag Scraper, 10'	0.27 Hr	Fertilizer Broadcaster,	0.08 Hr
Landplane 12'X 45'	0.11 Hr	Laser, Complete System	0.27 Hr	Lister, 5 Bottom	0.18 Hr
Moldboard Plow, 4-16 2	0.32 Hr	Offset Disk, 12'	0.09 Hr	Offset Disk, 13.5'	0.45 Hr
Offset Disk, 16.5'	0.22 Hr	Pickup Truck, 1/2 Ton	2.00 Hr	Planter, Stanhay, 2 Row	0.33 Hr
Rolling Cultivator, 4 Rw	0.67 Hr	Rowbuck, 10'	0.09 Hr	Saddle Tk Sprayer, 2 Tk 8	0.15 Hr
Tractor, 50 PTO HP	7.20 Hr	Tractor, 100 PTO HP	1.53 Hr	Tractor, 125 PTO HP	0.90 Hr
Tractor, 150 PTO HP	0.55 Hr	Vegetable Trailer Flat Bed	7.20 Hr		

MATERIALS REQUIREMENT (per Acre)

16-20-00, Dry	300.00 Lb	32-00-00, URAN 32, Lqd	11.30 Ga	Trifluralin	1.00 Pt
Water, Pump	58.00 Al	Watermelon Bins	33.60 Ea	Watermelon Seed (OP)	2.00 Th

LABOR REQUIREMENT (per Acre)

Irrigators	4.09 Hr	Other	8.00 Hr	Tractor	11.30 Hr
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\*NOTE: P = Previous Year C = Current Year N = Next Year

**Table 8E. Schedule of Operations; Watermelons, 2001**

COUNTY: Cochise FARM: Southern AZ Veg WATER SOURCE: Ks Settlement, NG TILLAGE: Conventional  
 CROP: Watermelons ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Kansas Settlement YIELD: 16.8 Tn / Acre PREVIOUS CROP: Wheat, Winter DATE: 10/8/01

First No. Month	Times	Operation	Equipment/ Custom Oper		Job Rate Acre/Hr	Material Use and Cost				Service Cost \$ / Unit	Labor Type
			HP	Self-Prop./ Implement		Name	Appl. Rate	\$ / Unit			
Jan	1.0	Plow	150	Moldboard Plow, 4-16 2	2.80						Tractor
Feb	2.0	Disk	125	Offset Disk, 13.5'	4.00						Tractor
Mar	1.0	Apply Fert/Ground	100	Fertilizer Broadcaster,	12.00	16-20-00, Dry	300.00	Lb	250.50	Tn	Tractor
Feb	0.3	Laser Level	125	Drag Scraper, 10'	1.00						Tractor
Mar	0.5	Landplane	100	Landplane 12'X 45'	4.00						Tractor
Apr	1.0	List	125	Lister, 5 Bottom	5.00						Tractor
Apr	4.0	Buck Rows	100	Rowbuck, 10'	40.00						Tractor
Apr	1.0	Preirrigate			1.77	Water, Pump	8.00	Al	47.47	AF	Irrigators
Apr	1.0	Plant	100	Bed Shaper, 4 Rw	2.70	Watermelon Seed (OP)	2.00	Th	27.70	Th	Tractor
May	1.0	Apply Herbicide/Ground	100	Saddle Tk Sprayer, 2 Tk 8	6.00	Trifluralin	1.00	Pt	24.95	Ga	Tractor
May	3.0	Cultivate	100	Rolling Cultivator, 4 Rw	4.00						Tractor
May	2.0	Irrigate			3.58	Water, Pump	4.00	Al	47.47	AF	Irrigators
Jun	1.0	Thinning		CST Thinning						75.00	Ac
Jun	2.0	Disk Ends	100	Offset Disk, 12'	40.00						Tractor
Jun	6.0	Irrigate			2.36	Water, Pump	6.00	Al	47.47	AF	Irrigators
Jun	1.0	Irrigate/Run Fertilizer			2.36	Water, Pump	6.00	Al	47.47	AF	Irrigators
Jul	2.0	Prepare Ends	100	Offset Disk, 12'	40.00						Tractor
Aug	2.0	Harvest, Load & Haul	50	Vegetable Trailer Flat Bed	0.25	Watermelon Bins	16.80	Ea	9.00	Ea	Tractor Other
Sep	1.0	Disk Residue	150	Offset Disk, 16.5'	4.00						Tractor
		Pickup use 60 Mi/Ac		Pickup Truck, 1/2 Ton	0.50						

\*NOTES: Machine times, labor times, and material rates are for one time over the designated acreage.

**Table 8F Operations Calendar; Watermelons, 2001**

COUNTY: Cochise      FARM: Southern Vegetables      WATER SOURCE: Ks Settlement, NG      TILLAGE: Conventional  
 CROP: Watermelons      ACRES: 1.0      IRRIGATION SYSTEM: Flood Furrow      SOIL: Sandy-Loam  
 AREA: Kansas Settlement      YIELD: 16.8 Tn/Acre      PREVIOUS CROP: Wheat, Winter      DATE: 10/08/01

No.	Operation	Month and Times Operation Performed											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	Plow	1.0 C											
2	Disk		1.0 C	1.0 C									
3	Laser Level		0.3 C										
4	Apply Fert/Ground			1.0 C									
5	Landplane			0.5 C									
6	List				1.0 C								
7	Buck Rows				1.0 C		2.0 C		1.0 C				
8	Preirrigate				1.0 C								
9	Plant				1.0 C								
10	Apply Herbicide/Ground					1.0 C							
11	Cultivate					1.0 C	2.0 C						
12	Irrigate					1.0 C			1.0 C				
13	Thinning						1.0 C						
14	Disk Ends						2.0 C						
15	Irrigate						2.0 C	4.0 C					
16	Irrigate/Run Fertilizer						1.0 C						
17	Prepare Ends							1.0 C	1.0 C				
18	Harvest, Load & Haul								1.0 C				
19	Disk Residue											1.0 C	

\* NOTE: P = Previous Year    C = Current Year    N = Next Year

**Table 9A. Income and Cash Operating Summary; Fall Lettuce, 2001**

COUNTY: Pima                      FARM: Southern AZ Veg                      WATER SOURCE: Cortaro-Marana                      TILLAGE: Conventional  
 CROP: Lettuce, Iceberg                      ACRES: 1.0                      IRRIGATION SYSTEM: Flood Furrow                      SOIL: Sandy-Loam  
 AREA: Marana                      YIELD: 401.0 Ct / Acre                      PREVIOUS CROP: Cotton, Upland                      DATE: 10/9/01

Item	Unit	Quantity	Price/ Unit	Budgeted /Acre	Total /Acre	Your Farm Budget
INCOME -> Lettuce	Ctrn	401.00	\$6.88	\$2,758.88	\$2,758.88	_____
CASH LAND PREPARATION AND GROWING EXPENSES (including sales tax)						
Paid Labor (including benefits)					80.09	_____
Tractor/Self Propelled				39.24		_____
Irrigation				40.85		_____
Chemicals and Custom Applications					245.25	_____
Fertilizer				126.29		_____
Insecticide				63.79		_____
Herbicide				55.17		_____
Farm Machinery and Vehicles					49.67	_____
Diesel Fuel				20.68		_____
Repairs and Maintenance				28.99		_____
Irrigation Water (excluding labor)					135.00	_____
Water Assessment (See Note Below) **						_____
Other Purchased Inputs & Seed/Transplants				100.80	400.80	_____
Other Services and Rentals				300.00		_____
TOTAL CASH LAND PREPARATION AND GROWING EXPENSES					910.80	_____
CASH HARVEST AND POST HARVEST EXPENSES						
Custom Harvest/Post Harvest					962.40	_____
Other Materials					370.52	_____
TOTAL HARVEST AND POST HARVEST EXPENSE					1332.92	_____
OPERATING OVERHEAD -> PICKUP USE					15.25	_____
OPERATING INTEREST AT 10.0%					131.92	_____
TOTAL CASH OPERATING EXPENSES					\$2,390.90	_____
RETURNS OVER CASH OPERATING EXPENSES					\$367.98	_____

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Notes: The above figures do not include ownership costs, see table B for detailed cost allocation.  
 \*\* A water assessment charge of \$45.00 per Acre is included as an ownership cost in Table B.



**Table 9C. Variable Operating Costs; Fall Lettuce, 2001**

COUNTY: Pima FARM: Southern AZ Veg WATER SOURCE: Cortaro-Marana TILLAGE: Conventional  
 CROP: Lettuce, Iceberg ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Marana YIELD: 401.0 Ct / Acre PREVIOUS CROP: Cotton, Upland DATE: 10/9/01

No.	First Month	Operation	---- Hours * ----		---- Operating Costs (\$/ACRE *) Per Operation ----					Tot. Cash Expenses	Class	
			Machine	Labor	Fuel/Rps.	Labor	Cust/Serv.	Materials	Total			Times
1	Jun	Disk	0.225	0.250	3.32	2.19			5.51	2.0	11.02	L
2	Jun	Plow	0.360	0.400	5.23	3.51			8.74	1.0	8.74	L
3	Jun	Landplane	0.257	0.286	3.32	2.51			5.83	2.0	11.66	L
4	Jul	Apply Fert/Ground	0.075	0.083	0.34	0.73		86.63	87.70	1.0	87.70	G
5	Jul	Apply Herbicide/Ground	0.225	0.250	3.59	2.19		55.17	60.95	1.0	60.95	G
6	Jul	Buck Rows	0.023	0.025	0.10	0.22			0.32	2.0	0.64	G
7	Jul	Shovel Ends		0.067		0.51			0.51	2.0	1.03	G
8	Jul	Preirrigate		1.000		7.67		30.00	37.67	1.0	37.67	G
9	Aug	Disk Ends	0.011	0.013	0.16	0.11			0.28	2.0	0.55	G
10	Aug	List	0.225	0.250	4.13	2.19			6.33	1.0	6.33	L
11	Aug	Plant	0.300	0.333	3.80	2.92		100.80	107.53	1.0	107.53	L
12	Aug	Irrigate		0.599		4.59		15.00	19.59	7.0	137.15	G
13	Sep	Roll Beds	0.129	0.143	0.73	1.25			1.99	1.0	1.99	L
14	Sep	Thinning						75.00	75.00	1.0	75.00	G
15	Sep	Apply Insecticide/Air						4.24	3.21	3.0	22.35	G
16	Sep	Cultivate	0.300	0.333	1.99	2.92			4.92	3.0	14.75	G
17	Sep	Apply Fert/Ground	0.300	0.333	4.70	2.92		19.84	27.46	2.0	54.92	G
18	Oct	Hand Weeding						75.00	75.00	3.0	225.00	G
19	Oct	Apply Insecticide/Air						4.24	9.57	3.0	41.43	G
20	Nov	Harvest 401 Ct						962.40	370.52	1.0	1332.92	H
21	Dec	Disk Residue 401 Ct	0.180	0.200	2.65	1.75			4.41	1.0	4.41	L
		Pickup Use 60 Mi/Acre	2.000		15.25						15.25	
		Operating Interest at 10.0						131.92			131.92	
TOTAL CASH OPERATING EXPENSES (includes all times over):											2,390.90	T

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\*NOTES: Machine and labor hours and operating cost are for one time over the designated acreage. The "Tot. Cash Expense" column and the "TOTAL CASH OPERATING EXPENSES" row include all operations, all times over. Classes are defined below. A water assessment charge of \$45.00 per Acre is included as an ownership cost in Table B.

OPERATING COST SUMMARY BY CLASS

Land Preparation (L)	151.66
Growing (G)	759.15
Harvest (H)	1,332.92
Post Harvest (P)	0.00
Marketing (M)	0.00
Operating Overhead (O)	147.17
Total (T)	\$2,390.90

SENSITIVITY OF THE NET REVENUES OVER TOTAL CASH EXPENSES (\$/ACRE)

Prices ->		- 25%	- 10%	Budgeted	+ 10%	+ 25%	Break-even Price
Yields		\$5.16	\$6.19	\$6.88	\$7.57	\$8.60	
- 25%	300.8	-874.76	-564.38	-357.47	-150.55	159.82	8.07
- 10%	360.9	-764.32	-391.87	-143.57	104.73	477.17	7.28
Budgeted	401.0	-690.70	-276.87	-0.98	274.91	688.74	6.88
+ 10%	441.1	-617.07	-161.86	141.62	445.09	900.31	6.56
Break-even Yield		777.20	497.54	401.27	336.22	270.46	

**Table 9D. Resource and Cash Flow Requirements; Fall Lettuce, 2001**

COUNTY: Pima FARM: Southern AZ Veg WATER SOURCE: Cortaro-Marana TILLAGE: Conventional  
 CROP: Lettuce, Iceberg ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Marana YIELD: 401.0 Ct / Acre PREVIOUS CROP: Cotton, Upland DATE: 10/9/01

Month *	Number Irrigations	Water Applied (inches)	Total Labor (Hrs)	Operating Costs (\$/ACRE *)							
				Purchased Water	Fuel, Oil and Repairs	Labor	Chemicals	Other Purchases	Services	Total	
JUN C			1.19		15.18	10.41					25.59
JUL C	1.0	12.0	1.74	30.00	7.35	13.83	141.79				192.97
AUG C	1.0	6.0	1.31	15.00	8.20	10.56		100.80			134.56
SEP C	2.0	12.0	2.35	30.00	9.58	19.32	29.47		87.72		176.09
OCT C	2.0	12.0	1.86	30.00	6.70	15.03	38.98		158.48		249.19
NOV C	2.0	12.0	1.20	30.00		9.20	9.57	370.52	1041.64		1460.93
DEC C			0.20		2.65	1.75					4.40
Pickup Use 60 Mi/Acre					15.25						15.25
Operating Interest at 10.0									131.92		131.92
Water Assessment				**							
<b>Total</b>	<b>8.0</b>	<b>54.0</b>	<b>9.85</b>	<b>135.00</b>	<b>64.91</b>	<b>80.10</b>	<b>219.81</b>	<b>471.32</b>	<b>1419.76</b>		<b>2390.90</b>
<b>%</b>				<b>5.65</b>	<b>2.71</b>	<b>3.35</b>	<b>9.19</b>	<b>19.71</b>	<b>59.38</b>		<b>100.00</b>

TOTAL RESOURCE REQUIREMENTS (per Acre)

Total N 196.6  
 Total P 240.0  
 Total Labor 9.8  
 Total Water 54.0

TOTAL ENERGY REQUIREMENTS (per Acre)

Diesel Fuel 24.0 Gal  
 Unleaded Gas 6.0 Gal  
 All Direct Energy 4.1 M BTU

EQUIPMENT REQUIREMENTS (per Acre)

Bed Roller, 4 Rw 0.13 Hr	Bed Shaper, 4 Rw 0.30 Hr	Disk-Lister, 6 Rw 0.22 Hr
Fert. Side Dress Unit, 0.60 Hr	Fert. Side Dress Unit, 0.22 Hr	Fertilizer Broadcaster, 0.08 Hr
Landplane 12'X 45' 0.51 Hr	Moldboard Plow, 4-16 2 0.36 Hr	Offset Disk, 13.5' 0.65 Hr
Pickup Truck, 1/2 Ton 2.00 Hr	Planter/Gramor, 4 Bd,8 0.30 Hr	Rolling Cultivator, 4 Rw 0.90 Hr
Rowbuck, 10' 0.05 Hr	Tractor, 50 PTO HP, 0.12 Hr	Tractor, 70 PTO HP, 1.33 Hr
Tractor, 150 PTO HP, 2.58 Hr		

MATERIALS REQUIREMENT (per Acre)

11-48-00, Dry 500.00 Lb	32-00-00, URAN 32, Lqd 40.00 Ga	Benefin 2.00 Pt
Cypermethrin 12.00 Oz	Head Lettuce Sd 160.00 Th	Lettuce Cartons 401.00 Ct
Methomyl 1.50 Pt	Pronamide 2.00 Lb	Water, District 54.00 AI

LABOR REQUIREMENT (per Acre)

Irrigators 5.33 Hr Tractor 4.47 Hr

\*NOTE: P = Previous Year C = Current Year N = Next Year

\*\* A water assessment charge of \$45.00 per Acre is included as an ownership cost in Table B.

**Table 9E. Schedule of Operations; Fall Lettuce, 2001**

COUNTY: Pima FARM: Southern AZ Veg WATER SOURCE: Cortaro-Marana TILLAGE: Conventional  
 CROP: Lettuce, Iceberg ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Marana YIELD: 401.0 Ct / Acre PREVIOUS CROP: Cotton, Upland DATE: 10/9/01

First No. Month Times	Operation	Equipment/ Custom Oper HP Self-Prop./ Implement	Job Rate Acre/Hr	Material Use and Cost				Service Cost \$ / Unit	Labor Type
				Name	Appl. Rate	\$ / Unit			
Jun	2.0	Disk	150 Offset Disk, 13.5'	4.00					Tractor
Jun	1.0	Plow	150 Moldboard Plow, 4-16 2	2.50					Tractor
Jun	2.0	Landplane	150 Landplane 12'X 45'	3.50					Tractor
Jul	1.0	Apply Fert/Ground	50 Fertilizer Broadcaster,	12.00	11-48-00, Dry	500.00	Lb 330.00	Tn	Tractor
Jul	1.0	Apply Herbicide/Ground	150 Fert. Side Dress Unit,	4.00	Benefin	2.00	Pt 0.00	Ga	Tractor
					Pronamide	2.00	Lb 26.27	Lb	
Jul	2.0	Buck Rows	50 Rowbuck, 10'	40.00					Tractor
Jul	2.0	Shovel Ends		15.00					Irrigators
Jul	1.0	Preirrigate		1.00	Water, District	12.00	Al 30.00	AF	Irrigators
Aug	2.0	Disk Ends	150 Offset Disk, 13.5'	80.00					Tractor
Aug	1.0	List	150 Disk-Lister, 6 Rw	4.00					Tractor
Aug	1.0	Plant	70 Bed Shaper, 4 Rw	3.00	Head Lettuce Sd	160.00	Th 0.60	Th	Tractor
			Planter/Gramor, 4 Bd,8 Line/Be						
Aug	7.0	Irrigate		1.67	Water, District	6.00	Al 30.00	AF	Irrigators
Sep	1.0	Roll Beds	70 Bed Roller, 4 Rw	7.00					Tractor
Sep	1.0	Thinning	CST Thinning						75.00 Ac
Sep	3.0	Apply Insecticide/Air	CST Air Spray, 3 Gal Mix		Methomyl	0.50	Pt 48.94	Ga	4.24 Ac
Sep	3.0	Cultivate	70 Rolling Cultivator, 4 Rw	3.00					Tractor
Sep	2.0	Apply Fert/Ground	150 Fert. Side Dress Unit,	3.00	32-00-00, URAN 32,	20.00	Ga 170.80	Tn	Tractor
Oct	3.0	Hand Weeding	CST Hand Weeding						75.00 Ac
Oct	3.0	Apply Insecticide/Air	CST Air Spray, 3 Gal Mix		Cypermethrin	4.00	Oz 291.66	Ga	4.24 Ac
Nov	1.0	Harvest	CST Harv/pack/haul Lettuce		Lettuce Cartons	401.00	Ct 0.88	Ct	2.40 Ct
Dec	1.0	Disk Residue	150 Offset Disk, 13.5'	5.00					Tractor
		Pickup use 60 Mi/Ac	Pickup Truck, 1/2 Ton	0.50					

\*NOTES: Machine times, labor times, and material rates are for one time over the designated acreage.

**Table 9F Operations Calendar; Fall Lettuce, 2001**

COUNTY: Pima FARM: Southern Vegetables WATER SOURCE: Cortaro-Marana TILLAGE: Conventional  
 CROP: Lettuce, Iceberg ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Marana YIELD: 401.0 Ct/Acre PREVIOUS CROP: Cotton, Upland DATE: 10/09/01

No.	Operation	Month and Times Operation Performed											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	Disk						2.0 C						
2	Plow						1.0 C						
3	Landplane						1.0 C						
4	Apply Fert/Ground							1.0 C					
5	Apply Herbicide/Ground							1.0 C					
6	Buck Rows							1.0 C	1.0 C				
7	Shovel Ends							1.0 C	1.0 C				
8	Preirrigate							1.0 C					
9	Disk Ends								1.0 C	1.0 C			
10	List								1.0 C				
11	Plant								1.0 C				
12	Irrigate								1.0 C				
13	Roll Beds									2.0 C	2.0 C	2.0 C	
14	Thinning									1.0 C			
15	Apply Insecticide/Air									3.0 C			
16	Cultivate									2.0 C	1.0 C		
17	Apply Fert/Ground									1.0 C	1.0 C		
18	Hand Weeding										2.0 C	1.0 C	
19	Apply Insecticide/Air										2.0 C	1.0 C	
20	Harvest/Pack/Haul											1.0 C	
22	Disk Residue												1.0 C

\* NOTE: P = Previous Year C = Current Year N = Next Year

**Table 10A. Income and Cash Operating Summary; Pumpkins, 2001**

COUNTY: Pima                      FARM: Southern AZ Veg                      WATER SOURCE: Avra Valley, Electric                      TILLAGE: Conventional  
 CROP: Pumpkins                      ACRES: 1.0                      IRRIGATION SYSTEM: Flood Furrow                      SOIL: Sandy-Loam  
 AREA: Avra Valley                      YIELD: 3.6 Tn / Acre                      PREVIOUS CROP: Cotton, Upland                      DATE: 10/9/01

Item	Unit	Quantity	Price/ Unit	Budgeted /Acre	Total /Acre	Your Farm Budget
INCOME -> Pumpkins	Ton	3.60	\$102.00	\$367.20	\$367.20	_____
CASH LAND PREPARATION AND GROWING EXPENSES (including sales tax)						
Paid Labor (including benefits)					40.55	_____
Tractor/Self Propelled				19.96		_____
Irrigation				20.59		_____
Chemicals and Custom Applications					170.83	_____
Fertilizer				42.15		_____
Insecticide				82.27		_____
Other Chemicals				46.41		_____
Farm Machinery and Vehicles					25.87	_____
Diesel Fuel				10.39		_____
Repairs and Maintenance				15.48		_____
Irrigation Water (excluding labor)					129.69	_____
Pump Energy - Electric				111.67		_____
Repairs and Maintenance				18.01		_____
Water Assessment (See Note Below) **						_____
Other Purchased Inputs &					400.49	_____
Seed/Transplants				250.49		_____
Other Services and Rentals				150.00		_____
TOTAL CASH LAND PREPARATION AND GROWING EXPENSES					767.43	_____
CASH HARVEST AND POST HARVEST EXPENSES						
Paid Labor (including benefits)					143.59	_____
Tractor/Self Propelled				52.62		_____
Other/Contract				90.98		_____
Farm Machinery and Vehicles					68.00	_____
Diesel Fuel				24.95		_____
Repairs and Maintenance				43.05		_____
TOTAL HARVEST AND POST HARVEST EXPENSE					211.59	_____
OPERATING OVERHEAD -> PICKUP USE					5.08	_____
OPERATING INTEREST AT 10.0%					14.89	_____
TOTAL CASH OPERATING EXPENSES					\$998.99	_____
RETURNS OVER CASH OPERATING EXPENSES					(\$631.79)	_____

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Notes: The above figures do not include ownership costs, see table B for detailed cost allocation.

**Table 10B. Allocations of Ownership Costs; Pumpkins, 2001**

COUNTY: Pima FARM: Southern AZ Veg WATER SOURCE: Avra Valley, Electric TILLAGE: Conventional  
 CROP: Pumpkins ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Avra Valley YIELD: 3.6 Tn / Acre PREVIOUS CROP: Cotton, Upland DATE: 10/9/01

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Item	-- CASH COST BASIS (\$/ACRE) --		-- TOTAL COST BASIS (\$/ACRE) --	
	Income and Costs	Net Returns	Income and Costs	Net Returns
TOTAL INCOME at \$102.00 / Tn	\$367.20		\$367.20	
TOTAL OPERATING EXPENSES	\$998.99		\$998.99	
RETURN OVER CASH OPERATING EXPENSES		(\$631.79)		(\$631.79)
CASH OVERHEAD EXPENSES				
Taxes, Housing and Insurance, Farm Machinery	7.16		7.16	
Wells and Irrigation System	10.19		10.19	
General and Office Overhead (5.0%of Total Operating Exp.)	49.95		49.95	
General Farm Maintenance (3.0% of Total Operating Exp.)	29.97		29.97	
Total Cash Overhead Expenses	97.27		97.27	
Total Cash Operating and Overhead Cost	1,096.26		1,096.26	
RETURNS OVER CASH OPER. AND OVER. EXPENSES		(\$729.06)		(\$729.06)
CAPITAL ALLOCATIONS (100% Equity)				
Capital Replacement, Machinery and Vehicles			46.09	
Wells and Irrigation System			27.83	
Interest on Equity, Machinery and Vehicles			20.72	
Wells and Irrigation System			15.88	
Total Capital Allocations			110.52	
RETURNS TO LAND, CAPITAL, MANAGEMENT AND RISK ----->		(\$729.06)		
RETURNS TO LAND, MANAGEMENT AND RISK ----->				(\$839.58)
Land Cost / Rent or Lease	100.00		100.00	
Total Land Costs	100.00		100.00	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		(\$829.06)		
RETURNS TO MANAGEMENT AND RISK ----->				(\$939.58)
Management Services (8% of Total Operation Expenses)			79.92	
TOTAL OWNERSHIP COST	197.27		387.71	
TOTAL COST	\$1,196.26		\$1,386.70	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		(\$829.06)		
RETURNS TO RISK (PROFITS) ----->				(\$1,019.50)
Item	-- CASH COST BASIS (\$/ACRE) --		-- TOTAL COST BASIS (\$/ACRE) --	
	Income and Costs	Net Returns	Income and Costs	Net Returns
BREAK-EVEN PRICE TO COVER OPERATING COST ( PER Lb )		\$277.50		\$277.50
BREAK-EVEN PRICE TO COVER OWNERSHIP COST		\$54.80		\$107.70
BREAK-EVEN PRICE TO COVER TOTAL COST		\$332.29		\$385.19

**Table 10C. Variable Operating Costs; Pumpkins, 2001**

COUNTY: Pima FARM: Southern AZ Veg WATER SOURCE: Avra Valley, Electric TILLAGE: Conventional  
 CROP: Pumpkins ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Avra Valley YIELD: 3.6 Tn / Acre PREVIOUS CROP: Cotton, Upland DATE: 10/9/01

No.	First Month	Operation	---- Hours * ----		---- Operating Costs (\$/ACRE *) Per Operation ----					Tot. Cash Expenses	Class		
			Machine	Labor	Fuel/Rps.	Labor	Cust/Serv.	Materials	Total			Times	
1	May	Disk	0.225	0.250	4.11	2.19			6.30	1.0	6.30	L	
2	May	Landplane	0.360	0.400	3.99	3.51			7.50	1.0	7.50	L	
3	May	List	0.225	0.250	3.19	2.19			5.38	1.0	5.38	L	
4	May	Buck Rows	0.023	0.025	0.22	0.22			0.44	3.0	1.32	G	
5	May	Preirrigate		0.565	23.71	4.33			28.05	1.0	28.05	G	
6	May	Mulch	0.225	0.250	2.84	2.19			5.03	1.0	5.03	L	
7	Jun	Plant	0.225	0.250	2.43	2.19		250.49	255.11	1.0	255.11	L	
8	Jul	Irrigate/Run Fertilizer		0.424	23.71	3.25		8.43	35.40	5.0	176.98	G	
9	Jul	Disk Ends	0.023	0.025	0.29	0.22			0.51	2.0	1.02	G	
10	Jul	Cultivate	0.225	0.250	2.44	2.19			4.63	2.0	9.26	G	
11	Jul	Hand Weeding						75.00	75.00	2.0	150.00	G	
12	Aug	Apply Fungicide/Air						4.75	14.15	18.90	2.0	37.80	G
13	Sep	Apply Insecticide/Air						4.75	17.97	22.72	4.0	90.88	G
14	Oct	Prepare Ends	0.023	0.025	0.29	0.22			0.51	1.0	0.51	H	
15	Oct	Pick and Load	2.000	4.444	25.21	34.66			59.87	1.0	59.87	H	
16	Oct	Haul 1	3.371	3.750	42.49	32.90			75.39	1.0	75.39	H	
17	Oct	Disk Residue	0.225	0.250	3.20	2.19			5.39	1.0	5.39	L	
		Pickup Use 20 Mi/Acre	0.667		5.08						5.08		
		Operating Interest at 10.0						14.89			14.89		
TOTAL CASH OPERATING EXPENSES (includes all times over):											998.99	T	

\*NOTES: Machine and labor hours and operating cost are for one time over the designated acreage. The "Tot. Cash Expense" column and the "TOTAL CASH OPERATING EXPENSES" row include all operations, all times over. Classes are defined below.

OPERATING COST SUMMARY BY CLASS

Land Preparation (L)	284.72
Growing (G)	558.53
Harvest (H)	135.77
Post Harvest (P)	0.00
Marketing (M)	0.00
Operating Overhead (O)	19.97
Total (T)	\$998.99

SENSITIVITY OF THE NET REVENUES OVER TOTAL CASH EXPENSES (\$/ACRE)

	Prices ->	- 25% - 10% Budgeted + 10% + 25%					Break-even Price
		- 25%	- 10%	Budgeted	+ 10%	+ 25%	
Yields		\$76.50	\$91.80	\$102.00	\$112.20	\$127.50	
- 25%	2.7	-896.89	-855.58	-828.04	-800.50	-759.19	408.68
- 10%	3.2	-875.95	-826.38	-793.33	-760.28	-710.71	346.85
Budgeted	3.6	-861.99	-806.91	-770.19	-733.47	-678.39	315.94
+ 10%	4.0	-848.02	-787.43	-747.04	-706.65	-646.06	290.65
+ 25%	4.5	-827.08	-758.23	-712.33	-666.43	-597.58	260.30
Break-even Yield		25.82	18.52	15.58	13.45	11.16	

**Table 10D. Resource and Cash Flow Requirements; Pumpkins, 2001**

COUNTY: Pima FARM: Southern AZ Veg WATER SOURCE: Avra Valley, Electric TILLAGE: Conventional  
 CROP: Pumpkins ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Avra Valley YIELD: 3.6 Tn / Acre PREVIOUS CROP: Cotton, Upland DATE: 10/9/01

Month *	Number Irrigations	Water Applied (inches)	Total Labor (Hrs)	Operating Costs (\$/ACRE *)						
				Purchased Water	Fuel, Oil and Repairs	Labor	Chemicals	Other Purchases	Services	Total
MAY C	1.0	8.0	1.74		38.06	14.64				52.70
JUN C			0.28		2.65	2.41		250.49		255.55
JUL C	2.0	16.0	1.15		50.38	9.14	16.86		75.00	151.38
AUG C	2.0	16.0	1.12		50.16	8.92	45.16		84.50	188.74
SEP C	1.0	8.0	0.42		23.71	3.25	80.31		19.00	126.27
OCT C			19.58		71.19	133.19				204.38
Pickup Use 20 Mi/Acre					5.08					5.08
Operating Interest at 10.0 Water Assessment				**					14.89	14.89
<b>Total</b>	<b>6.0</b>	<b>48.0</b>	<b>24.29</b>		<b>241.23</b>	<b>171.55</b>	<b>142.33</b>	<b>250.49</b>	<b>193.39</b>	<b>998.99</b>
<b>%</b>					<b>24.15</b>	<b>17.17</b>	<b>14.25</b>	<b>25.07</b>	<b>19.36</b>	<b>100.00</b>

**TOTAL RESOURCE REQUIREMENTS (per Acre)**

Total N 150.4  
 Total Labor 24.3  
 Total Water 48.0

**TOTAL ENERGY REQUIREMENTS per Acre)**

Diesel Fuel 41.0 Gal  
 Unleaded Gas 2.0 Gal  
 Electric / Pumping 2844.4 KWH  
 All Direct Energy 15.6 M BTU

**EQUIPMENT REQUIREMENTS (per Acre)**

Cultivator, Sweep, 4 Rw	0.45 Hr	Disk-Lister, 4 Rw	0.22 Hr	Flexi-Planter - 4 Units	0.22 Hr
Landplane 12'X 45'	0.36 Hr	Offset Disk, 12'	0.22 Hr	Offset Disk, 13.5'	0.07 Hr
Offset Disk, 16.5'	0.22 Hr	Pickup Truck, 1/2 Ton	0.67 Hr	Power Mulcher, 4 Rw	0.22 Hr
Rowbuck, 10'	0.07 Hr	Tractor, 100 PTO HP	6.99 Hr	Tractor, 150 PTO HP	0.22 Hr
Tractor, 150 PTO HP,	0.22 Hr	Vegetable Trailer Flat Bed	5.37 Hr		

**MATERIALS REQUIREMENT (per Acre)**

32-00-00, URAN 32, Lqd	42.50 Ga	Benomyl	0.50 Lb	Endosulfan	4.00 Pt
Esfenvalerate	38.40 Oz	Pumpkin Seed (Hyb)	12.00 Th	Surfactant (spreader)	4.00 Pt
Triadimefon	0.24 Lb	Water, Pump	48.00 Al		

**LABOR REQUIREMENT (per Acre)**

Irrigators	2.68 Hr	Other	13.33 Hr	Tractor	8.27 Hr
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\*NOTE: P = Previous Year C = Current Year N = Next Year

**Table 10E. Schedule of Operations; Pumpkins, 2001**

COUNTY: Pima                      FARM: Southern AZ Veg                      WATER SOURCE: Avra Valley, Electric                      TILLAGE: Conventional  
 CROP: Pumpkins                      ACRES: 1.0                      IRRIGATION SYSTEM: Flood Furrow                      SOIL: Sandy-Loam  
 AREA: Avra Valley                      YIELD: 3.6 Tn / Acre                      PREVIOUS CROP: Cotton, Upland                      DATE: 10/9/01

First No. Month	Times	Operation	Equipment/ Custom Oper		Job Rate Acre/Hr	Material Use and Cost				Service Cost \$ / Unit	Labor Type	
			HP	Self-Prop./ Implement		Name	Appl. Rate	\$ / Unit				
May	1.0	Disk	150	Offset Disk, 16.5'	4.00						Tractor	
May	1.0	Landplane	100	Landplane 12'X 45'	2.50						Tractor	
May	1.0	List	100	Disk-Lister, 4 Rw	4.00						Tractor	
May	3.0	Buck Rows	100	Rowbuck, 10'	40.00						Tractor	
May	1.0	Preirrigate			1.77	Water, Pump	8.00	Al	35.57	AF	Irrigators	
May	1.0	Mulch	100	Power Mulcher, 4 Rw	4.00						Tractor	
Jun	1.0	Plant	100	Flexi-Planter - 4 Units	4.00	Pumpkin Seed (Hyb)	12.00	Th	19.88	Th	Tractor	
Jul	5.0	Irrigate/Run Fertilizer			2.36	Water, Pump	8.00	Al	35.57	AF	Irrigators	
						32-00-00, URAN 32,	8.50	Ga	170.80	Tn		
Jul	2.0	Disk Ends	100	Offset Disk, 13.5'	40.00						Tractor	
Jul	2.0	Cultivate	100	Cultivator, Sweep, 4 Rw	4.00						Tractor	
Jul	2.0	Hand Weeding		CST Hand Weeding						75.00	Ac	
Aug	2.0	Apply Fungicide/Air		CST Air Spray, 5 Gal Mix		Benomyl	0.25	Lb	20.25	Lb	4.75	Ac
						Triadimefon	0.12	Lb	70.12	Lb		
Sep	4.0	Apply Insecticide/Air		CST Air Spray, 5 Gal Mix		Esfenvalerate	9.60	Oz	144.04	Ga	4.75	Ac
						Endosulfan	1.00	Pt	34.08	Ga		
						Surfactant (spreader)	1.00	Pt	16.40	Ga		
Oct	1.0	Prepare Ends	100	Offset Disk, 13.5'	40.00						Tractor	
Oct	1.0	Pick and Load	100	Vegetable Trailer Flat Bed	0.45						Tractor	
											Other	
Oct	1.0	Haul	100	Vegetable Trailer Flat Bed	0.27						Tractor	
Oct	1.0	Disk Residue	150	Offset Disk, 12'	4.00						Tractor	
		Pickup use 20 Mi/Ac		Pickup Truck, 1/2 Ton	1.50							

\*NOTES: Machine times, labor times, and material rates are for one time over the designated acreage.

**Table 10F Operations Calendar; Pumpkins, 2001**

COUNTY: Pima                      FARM: Southern Vegetables                      WATER SOURCE: Avra Valley, Elect.                      TILLAGE: Conventional  
 CROP: Pumpkins                      ACRES: 1.0                      IRRIGATION SYSTEM: Flood Furrow                      SOIL: Sandy-Loam  
 AREA: Marana                      YIELD: 3.6 Tn/Acre                      PREVIOUS CROP: Cotton, Upland                      DATE: 10/09/01

No.	Operation	Month and Times Operation Performed											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	Disk					1.0 C							
2	Landplane					1.0 C							
3	List					1.0 C							
4	Buck Rows					1.0 C	1.0 C	1.0 C					
5	Preirrigate					1.0 C							
6	Mulch					1.0 C							
7	Plant						1.0 C						
8	Irrigate/Run Fertilizer							2.0 C	2.0 C	1.0 C			
9	Disk Ends							1.0 C	1.0 C				
10	Cultivate							1.0 C	1.0 C				
11	Hand Weeding							1.0 C	1.0 C				
12	Apply Fungicide/Air								2.0 C				
13	Apply Insecticide/Air									4.0 C			
14	Prepare Ends										1.0 C		
15	Pick and Load										1.0 C		
16	Haul										1.0 C		
17	Disk Residue										1.0 C		

\* NOTE: P = Previous Year    C = Current Year    N = Next Year



**Table 11B. Allocations of Ownership Costs; Cauliflower, 2001**

COUNTY: Pinal FARM: Southern AZ Veg WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Double Crop  
 CROP: Cauliflower ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Maricopa YIELD: 816.0 Ct / Acre PREVIOUS CROP: Pimento DATE: 10/9/01

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Item	-- CASH COST BASIS (\$/ACRE) --		-- TOTAL COST BASIS (\$/ACRE) --	
	Income and Costs	Net Returns	Income and Costs	Net Returns
TOTAL INCOME at \$7.74 / Ct	\$6,315.84		\$6,315.84	
TOTAL OPERATING EXPENSES	\$3,947.37		\$3,947.37	
RETURN OVER CASH OPERATING EXPENSES		\$2,368.47		\$2,368.47
CASH OVERHEAD EXPENSES				
Taxes, Housing and Insurance, Farm Machinery	6.31		6.31	
General and Office Overhead (5.0% of Total Operating Exp.)	197.37		197.37	
General Farm Maintenance (3.0% of Total Operating Exp.)	118.42		118.42	
Total Cash Overhead Expenses	322.10		322.10	
Total Cash Operating and Overhead Cost	4,269.47		4,269.47	
RETURNS OVER CASH OPER. AND OVER. EXPENSES		\$2,046.37		\$2,046.37
CAPITAL ALLOCATIONS (100% Equity)				
Capital Replacement, Machinery and Vehicles			36.21	
Interest on Equity, Machinery and Vehicles			10.90	
Total Capital Allocations			47.12	
RETURNS TO LAND, CAPITAL, MANAGEMENT AND RISK ----->		\$2,046.37		
RETURNS TO LAND, MANAGEMENT AND RISK ----->				\$1,999.25
Land Cost / Rent or Lease	100.00		100.00	
Water Assessment **	12.50		12.50	
Total Land Costs	112.50		112.50	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		\$1,933.87		
RETURNS TO MANAGEMENT AND RISK ----->				\$1,886.75
Management Services (8% of Total Operation Expenses)			315.79	
TOTAL OWNERSHIP COST	434.60		797.51	
TOTAL COST	\$4,381.97		\$4,744.88	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		\$1,933.87		
RETURNS TO RISK (PROFITS) ----->				\$1,570.96
Item	-- CASH COST BASIS (\$/ACRE) --		-- TOTAL COST BASIS (\$/ACRE) --	
	Income and Costs	Net Returns	Income and Costs	Net Returns
BREAK-EVEN PRICE TO COVER OPERATING COST ( PER Lb )		\$4.84		\$4.84
BREAK-EVEN PRICE TO COVER OWNERSHIP COST		\$0.53		\$0.98
BREAK-EVEN PRICE TO COVER TOTAL COST		\$5.37		\$5.81

**Table 11C. Variable Operating Costs; Cauliflower, 2001**

COUNTY: Pinal FARM: Southern AZ Veg WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Double Crop  
 CROP: Cauliflower ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Maricopa YIELD: 816.0 Ct / Acre PREVIOUS CROP: Pimento DATE: 10/9/01

No.	First Month	Operation	---- Hours * ----		---- Operating Costs (\$/ACRE *) Per Operation ----					Tot. Cash Expenses	Class	
			Machine	Labor	Fuel/Rps.	Labor	Cust/Serv.	Materials	Total			Times
1	Jul	Plow	0.180	0.200	2.87	1.75			4.62	1.0	4.62	L
2	Jul	Disk	0.090	0.100	1.52	0.88			2.40	3.0	7.20	L
3	Jul	Landplane	0.300	0.333	3.88	2.92			6.80	1.0	6.80	L
4	Jul	List	0.225	0.250	2.03	2.19			4.23	1.0	4.23	L
5	Jul	Buck Rows	0.022	0.025	0.10	0.22			0.31	3.0	0.94	G
6	Jul	Preirrigate		0.800		6.14		11.17	17.30	1.0	17.30	G
7	Jul	Soil Fertility					3.00		3.00	1.0	3.00	G
8	Jul	Disk Ends	0.023	0.025	0.12	0.22			0.34	5.0	1.71	G
9	Jul	Apply Fert/Ground	0.300	0.333	3.44	2.92		41.37	47.73	1.0	47.73	G
10	Jul	Apply Herbicide/Ground	0.225	0.250	1.67	2.19		3.31	7.16	1.0	7.16	G
11	Aug	Mulch	0.225	0.250	2.86	2.19			5.05	1.0	5.05	L
12	Aug	Plant	0.450	0.500	3.51	4.39		101.76	109.66	1.0	109.66	L
13	Aug	Irrigate		0.800		6.14		11.17	17.30	13.0	224.92	G
14	Aug	Cultivate	0.300	0.333	2.00	2.92			4.92	4.0	19.70	G
15	Aug	Apply Fert/Ground	0.300	0.333	2.49	2.92		39.83	45.24	1.0	45.24	G
16	Aug	Apply Insect./Ground	0.180	0.200	0.97	1.75			2.72	10.0	27.21	G
17	Aug	Apply Fert/Ground	0.300	0.333	3.44	2.92		13.62	19.97	3.0	59.92	G
18	Nov	Harvest 816 Ct					2652.00	683.32	3335.32	1.0	3335.32	H
19	Jan	Disk Residue 816 Ct	0.090	0.100	1.38	0.88			2.26	1.0	2.26	L
		Pickup Use 40 Mi/Acre	1.333		10.21						10.21	
		Operating Interest at 10.0					7.18				7.18	
TOTAL CASH OPERATING EXPENSES (includes all times over):											3947.37	T

\*NOTES: Machine and labor hours and operating cost are for one time over the designated acreage. The "Tot. Cash Expense" column and the "TOTAL CASH OPERATING EXPENSES" row include all operations, all times over. Classes are defined below. A water assessment charge of \$12.50 per Acre is included as an ownership cost in Table B.

OPERATING COST SUMMARY BY CLASS

Land Preparation (L)	139.81
Growing (G)	454.85
Harvest (H)	3,335.32
Post Harvest (P)	0.00
Marketing (M)	0.00
Operating Overhead (O)	17.39
Total (T)	\$3,947.37

SENSITIVITY OF THE NET REVENUES OVER TOTAL CASH EXPENSES (\$/ACRE)

Prices ->	Budgeted					Break-even Price
	- 25%	- 10%	Budgeted	+ 10%	+ 25%	
Yields	\$5.80	\$6.97	\$7.74	\$8.51	\$9.67	5.08
- 25%	612.0	446.30	1,156.83	1,630.52	2,104.21	2,814.74
- 10%	734.4	656.54	1,509.17	2,077.60	2,646.03	3,498.66
Budgeted	816.0	796.69	1,744.07	2,375.65	3,007.24	3,954.61
+ 10%	897.6	936.85	1,978.96	2,673.70	3,368.45	4,410.56
+ 25%	1,020.0	1,147.08	2,331.30	3,120.78	3,910.26	5,094.48
Break-even Yield		352.16	210.13	165.60	136.64	108.25

**Table 11D. Resource and Cash Flow Requirements; Cauliflower, 2001**

COUNTY: Pinal FARM: Southern AZ Veg WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Double Crop  
 CROP: Cauliflower ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Maricopa YIELD: 816.0 Ct / Acre PREVIOUS CROP: Pimento DATE: 10/9/01

Month *	Number Irrigations	Water Applied (inches)	Total Labor (Hrs)	Operating Costs (\$/ACRE *)						
				Purchased Water	Fuel, Oil and Repairs	Labor	Chemicals	Other Purchases	Services	Total
JUL C	1.0	4.0	2.52	11.17	18.66	21.19	44.67		3.00	98.69
AUG C	4.0	16.0	13.16	44.67	29.39	59.23	80.68	101.76		315.73
SEP C	3.0	12.0	3.81	33.50	7.18	30.76				71.44
OCT C	3.0	12.0	2.60	33.50	0.97	20.16				54.63
NOV C	3.0	12.0	2.40	33.50		18.41		683.32	2652.00	3387.23
DEC C			0.10		1.38	0.88				2.26
Pickup Use 40 Mi/Acre					10.21					10.21
Operating Interest at 10.0 Water Assessment				**					7.18	7.18
<b>Total</b>	<b>14.0</b>	<b>56.0</b>	<b>24.58</b>	<b>156.34</b>	<b>67.79</b>	<b>150.63</b>	<b>125.35</b>	<b>785.08</b>	<b>2662.18</b>	<b>3947.37</b>
<b>%</b>				<b>3.96</b>	<b>1.72</b>	<b>3.82</b>	<b>3.18</b>	<b>19.89</b>	<b>67.44</b>	<b>100.00</b>

TOTAL RESOURCE REQUIREMENTS (per Acre)

Total N 222.0  
 Total P 160.8  
 Total Labor 24.6  
 Total Water 56.0

TOTAL ENERGY REQUIREMENTS (per Acre)

Diesel Fuel 26.3 Gal  
 Unleaded Gas 4.0 Gal  
 All Direct Energy 4.1 M BTU

EQUIPMENT REQUIREMENTS (per Acre)

Bed Shaper, 4 Rw	0.45 Hr	Cultivator, Sweep, 4 Rw	1.20 Hr	Fert. Side Dress Unit,	0.30 Hr
Fertilizer Injector, 4 Row	1.20 Hr	Landplane 12'X 45'	0.30 Hr	Lister, 5 Bottom	0.22 Hr
Moldboard Plow, 5-16 2	0.18 Hr	Offset Disk, 16.5'	0.09 Hr	Offset Disk, 21'	0.27 Hr
Offset Disk, 8'	0.11 Hr	Pickup Truck, 1/2 Ton	1.33 Hr	Planter, Planet Jr, 4 Row	0.45 Hr
Power Mulcher, 6 Rw	0.22 Hr	Row Crop Sprayer, 8 Rw	0.22 Hr	Rowbuck, 10'	0.07 Hr
Saddle Tk Sprayer, 2 Tk 8	1.80 Hr	Tractor, 50 PTO HP,	2.51 Hr	Tractor, 70 PTO HP,	1.65 Hr
Tractor, 100 PTO HP,	1.65 Hr	Tractor, 150 PTO HP,	0.84 Hr		

MATERIALS REQUIREMENT (per Acre)

10-34-00, Lqd	26.00 Ga	16-20-00, Dry	300.00 Lb	32-00-00, URAN 32, Lqd	40.80 Ga
Boxes for Cauliflower	816.00 Ct	Cauliflower Sd (Hyb)	20.00 Th	Methomyl	0.00 Pt
Trifluralin	1.00 Pt	Water, District	56.00 Al		

LABOR REQUIREMENT (per Acre)

Irrigators 11.20 Hr Tractor 7.38 Hr

\*NOTE: P = Previous Year C = Current Year N = Next Year

\*\* A water assessment charge of \$12.50 per Acre is included as an ownership cost in Table B.

**Table 11E. Schedule of Operations; Cauliflower, 2001**

COUNTY: Pinal FARM: Southern AZ Veg WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Double Crop  
 CROP: Cauliflower ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Maricopa YIELD: 816.0 Ct / Acre PREVIOUS CROP: Pimento DATE: 10/9/01

First No. Month Times	Operation	Equipment/ Custom Oper HP Self-Prop./ Implement	Job Rate Acre/Hr	Material Use and Cost				Service Cost \$ / Unit	Labor Type
				Name	Appl. Rate	\$ / Unit			
Jul 1.0	Plow	150 Moldboard Plow, 5-16 2	5.00						Tractor
Jul 3.0	Disk	150 Offset Disk, 21'	10.00						Tractor
Jul 1.0	Landplane	150 Landplane 12'X 45'	3.00						Tractor
Jul 1.0	List	100 Lister, 5 Bottom	4.00						Tractor
Jul 3.0	Buck Rows	50 Rowbuck, 10'	40.00						Tractor
Jul 1.0	Preirrigate		1.25	Water, District	4.00	Al	33.50	AF	Irrigators
Jul 1.0	Soil Fertility	CST Soil Analysis (Surface)							3.00 Ac
Jul 5.0	Disk Ends	50 Offset Disk, 8'	40.00						Tractor
Jul 1.0	Apply Fert/Ground	100 Fertilizer Injector, 4 Row	3.00	10-34-00, Lqd	26.00	Ga	263.33	Tn	Tractor
Jul 1.0	Apply Herbicide/Ground	50 Row Crop Sprayer, 8 Rw	4.00	Trifluralin	1.00	Pt	24.95	Ga	Tractor
Aug 1.0	Mulch	100 Power Mulcher, 6 Rw	4.00						Tractor
Aug 1.0	Plant	70 Planter, Planet Jr, 4 Row Bed Shaper, 4 Rw	2.00	Cauliflower Sd (Hyb)	20.00	Th	4.80	Th	Tractor
Aug 13.0	Irrigate		1.25	Water, District	4.00	Al	33.50	AF	Irrigators
Aug 4.0	Cultivate	70 Cultivator, Sweep, 4 Rw	3.00						Tractor
Aug 1.0	Apply Fert/Ground	50 Fert. Side Dress Unit, 4Row	3.00	16-20-00, Dry	300.00	Lb	250.50	Tn	Tractor
Aug 10.0	Apply Insect./Ground	50 Saddle Tk Sprayer, 2 Tk 8	5.00	Methomyl	0.00	Pt	48.94	Ga	Tractor
Aug 3.0	Apply Fert/Ground	100 Fertilizer Injector, 4 Row	3.00	32-00-00, URAN 32,	13.60	Ga	170.80	Tn	Tractor
Nov 1.0	Harvest	CST Harv/pack/haul		Boxes for Cauliflower	816.00	Ct	0.79	Ct	3.25 Ct
Jan 1.0	Disk Residue	150 Offset Disk, 16.5'	10.00						Tractor
	Pickup use 40 Mi/Ac	Pickup Truck, 1/2 Ton	0.75						

\*NOTES: Machine times, labor times, and material rates are for one time over the designated acreage.

**Table 11F Operations Calendar; Cauliflower, 2001**

COUNTY: Pinal                      FARM: Southern Vegetables                      WATER SOURCE: MSID                      TILLAGE: Double Crop  
 CROP: Cauliflower                      ACRES: 1.0                      IRRIGATION SYSTEM: Flood Furrow                      SOIL: Sandy-Loam  
 AREA: Maricopa                      YIELD: 816 Ct/Acre                      PREVIOUS CROP: Pimento                      DATE: 10/09/01

No.	Operation	Month and Times Operation Performed												
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	Plow							1.0 C						
2	Disk							3.0 C						
3	Landplane							1.0 C						
4	List							1.0 C						
5	Buck Rows							1.0 C	1.0 C	1.0 C				
6	Preirrigate							1.0 C						
7	Soil Fertility							1.0 C						
8	Disk Ends							1.0 C	2.0 C	2.0 C				
9	Apply Fert/Ground							1.0 C						
10	Apply Herbicide/Ground							1.0 C						
11	Mulch								1.0 C					
12	Plant								1.0 C					
13	Irrigate								4.0 C	3.0 C	3.0 C	3.0 C		
14	Cultivate								3.0 C	1.0 C				
15	Apply Fert/Ground								1.0 C					
16	Apply Insect./Ground								4.0 C	5.0 C	1.0 C			
17	Apply Fert/Ground								3.0 C					
18	Harvest											1.0 C		
19	Disk Residue													1.0 C

\* NOTE: P = Previous Year    C = Current Year    N = Next Year

**Table 12A. Income and Cash Operating Summary; Green Chiles, 2001**

COUNTY: Pinal                      FARM: Southern AZ Veg                      WATER SOURCE: Maricopa-Stanfield Irrig.                      TILLAGE: Conventional  
 CROP: Chile, Green                      ACRES: 1.0                      IRRIGATION SYSTEM: Flood Furrow                      SOIL: Sandy-Loam  
 AREA: Maricopa                      YIELD: 2.3 Tn / Acre                      PREVIOUS CROP: Wheat, Winter                      DATE: 10/9/01

Item	Unit	Quantity	Price/ Unit	Budgeted /Acre	Total /Acre	Your Farm Budget
INCOME -> Gr. Chile	Ton	2.28	\$366.33	\$835.23	\$1,304.23	_____
Rd. Chile	Pound	700.00	\$0.67	\$469.00		_____
CASH LAND PREPARATION AND GROWING EXPENSES (including sales tax)						
Paid Labor (including benefits)					66.54	_____
Tractor/Self Propelled Irrigation				35.48		_____
				31.06		_____
Chemicals and Custom Applications					197.54	_____
Fertilizer				98.59		_____
Insecticide				32.57		_____
Herbicide				32.44		_____
Other Chemicals				33.94		_____
Farm Machinery and Vehicles					53.09	_____
Diesel Fuel				20.22		_____
Repairs and Maintenance				32.86		_____
Irrigation Water (excluding labor)					161.92	_____
Water Assessment (See Note Below) **						_____
Other Purchased Inputs & Seed/Transplants				181.42	256.42	_____
Other Services and Rentals				75.00		_____
TOTAL CASH LAND PREPARATION AND GROWING EXPENSES					735.50	_____
CASH HARVEST AND POST HARVEST EXPENSES						
Paid Labor (including benefits)					1.82	_____
Tractor/Self Propelled				1.82		_____
Farm Machinery and Vehicles					2.15	_____
Diesel Fuel				0.86		_____
Repairs and Maintenance				1.29		_____
Custom Harvest/Post Harvest					246.30	_____
TOTAL HARVEST AND POST HARVEST EXPENSE					250.27	_____
OPERATING OVERHEAD -> PICKUP USE					20.43	_____
OPERATING INTEREST AT 10.0%					21.61	_____
TOTAL CASH OPERATING EXPENSES					\$1,027.81	_____
RETURNS OVER CASH OPERATING EXPENSES					\$276.42	_____

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Notes: The above figures do not include ownership costs, see table B for detailed cost allocation.  
 \*\* A water assessment charge of \$25.00 per Acre is included as an ownership cost in Table B.

**Table 12B. Allocations of Ownership Costs; Green Chiles, 2001**

COUNTY: Pinal                      FARM: Southern AZ Veg                      WATER SOURCE: Maricopa-Stanfield Irrig.                      TILLAGE: Conventional  
 CROP: Chile, Green                      ACRES: 1.0                      IRRIGATION SYSTEM: Flood Furrow                      SOIL: Sandy-Loam  
 AREA: Maricopa                      YIELD: 2.3 Tn / Acre                      PREVIOUS CROP: Wheat, Winter                      DATE: 10/9/01

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Item	-- CASH COST BASIS (\$/ACRE) --		-- TOTAL COST BASIS (\$/ACRE) --	
	Income and Costs	Net Returns	Income and Costs	Net Returns
TOTAL INCOME at \$366.33 / Tn	\$1,304.23		\$1,304.23	
TOTAL OPERATING EXPENSES	\$1,027.81		\$1,027.81	
RETURN OVER CASH OPERATING EXPENSES		\$276.42		\$276.42
CASH OVERHEAD EXPENSES				
Taxes, Housing and Insurance, Farm Machinery	5.11		5.11	
General and Office Overhead (5.0%of Total Operating Exp.)	51.39		51.39	
General Farm Maintenance (3.0% of Total Operating Exp.)	30.83		30.83	
Total Cash Overhead Expenses	87.34		87.34	
Total Cash Operating and Overhead Cost	1,115.15		1,115.15	
RETURNS OVER CASH OPER. AND OVER. EXPENSES		\$189.09		\$189.09
CAPITAL ALLOCATIONS (100% Equity)				
Capital Replacement, Machinery and Vehicles			29.66	
Interest on Equity, Machinery and Vehicles			14.20	
Total Capital Allocations			43.86	
RETURNS TO LAND, CAPITAL, MANAGEMENT AND RISK ----->		\$189.09		
RETURNS TO LAND, MANAGEMENT AND RISK ----->				\$145.23
Land Cost / Rent or Lease	100.00		100.00	
Water Assessment **	25.00		25.00	
Total Land Costs	125.00		125.00	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		\$64.09		
RETURNS TO MANAGEMENT AND RISK ----->				\$20.23
Management Services (8% of Total Operation Expenses)			82.22	
TOTAL OWNERSHIP COST	212.34		338.42	
TOTAL COST	\$1,240.15		\$1,366.23	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		\$64.09		
RETURNS TO RISK (PROFITS) ----->				(\$62.00)
Item	-- CASH COST BASIS (\$/ACRE) --		-- TOTAL COST BASIS (\$/ACRE) --	
	Income and Costs	Net Returns	Income and Costs	Net Returns
BREAK-EVEN PRICE TO COVER OPERATING COST ( PER Lb )		\$245.09		\$245.09
BREAK-EVEN PRICE TO COVER OWNERSHIP COST		\$93.13		\$148.43
BREAK-EVEN PRICE TO COVER TOTAL COST		\$338.22		\$393.52

**Table 12C. Variable Operating Costs; Green Chiles, 2001**

COUNTY: Pinal FARM: Southern AZ Veg WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Conventional  
 CROP: Chile, Green ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Maricopa YIELD: 2.3 Tn / Acre PREVIOUS CROP: Wheat, Winter DATE: 10/9/01

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No.	First Month	Operation	---- Hours * ----		---- Operating Costs (\$/ACRE *) Per Operation ----					Tot. Cash Expenses	Class	
			Machine	Labor	Fuel/Rps.	Labor	Cust/Serv.	Materials	Total			Times
1	Jan	Plow	0.321	0.357	5.62	3.13			8.75	1.0	8.75	L
2	Feb	Disk	0.225	0.250	4.11	2.19			6.30	2.0	12.61	L
3	Feb	Laser Level	0.900	1.000	13.25	8.77			22.02	0.3	6.61	L
4	Feb	Landplane	0.225	0.250	2.49	2.19			4.69	0.5	2.34	L
5	Feb	List	0.180	0.200	2.93	1.75			4.69	1.0	4.69	L
6	Mar	Apply Herbicide/Ground	0.150	0.167	1.98	1.47		32.44	35.88	1.0	35.88	G
7	Mar	Buck Rows	0.023	0.025	0.22	0.22			0.44	5.0	2.21	G
8	Mar	Preirrigate		0.424		3.25		16.75	20.00	1.0	20.00	G
9	Mar	Disk Ends	0.023	0.025	0.29	0.22			0.51	4.0	2.04	G
10	Mar	Apply Fert/Ground	0.150	0.167	2.07	1.47		37.63	41.17	1.0	41.17	G
11	Mar	Mulch	0.225	0.250	2.84	2.19			5.03	1.0	5.03	L
12	Apr	Plant	0.225	0.250	4.60	2.19		181.42	188.21	1.0	188.21	L
13	Apr	Irrigate		0.279		2.14		11.17	13.31	12.0	159.67	G
14	May	Cultivate	0.200	0.222	2.27	1.95			4.22	5.0	21.09	G
15	Jun	Thinning						75.00	75.00	1.0	75.00	G
16	Jun	Apply Fert/Ground	0.225	0.250	3.63	2.19		35.93	41.75	1.0	41.75	G
17	Jun	Apply Fungicide/Air						5.23	6.08	3.0	33.93	G
18	Aug	Irrigate/Run Fertilizer		0.278		2.13			36.20	1.0	38.33	G
19	Aug	Apply Insecticide/Air						4.75	27.82	1.0	32.57	G
20	Sep	Prepare Ends	0.023	0.025	0.29	0.22			0.51	1.0	0.51	H
21	Sep	Pick 2.3 Tn						172.50	172.50	1.0	172.50	H
22	Sep	Load Produce 2.3 Tn						4.60	4.60	1.0	4.60	H
23	Sep	Haul, Custom 2.3 Tn						23.00	23.00	1.0	23.00	H
24	Nov	Pick .3 Tn						28.00	28.00	1.0	28.00	H
25	Nov	Load Produce .3 Tn						0.70	0.70	1.0	0.70	H
26	Nov	Haul, Custom .3 Tn						17.50	17.50	1.0	17.50	H
27	Nov	Cut Stalks .3 Tn	0.164	0.182	1.86	1.60			3.46	1.0	3.46	P
28	Nov	Disk Residue .3 Tn	0.129	0.143	2.35	1.25			3.60	1.0	3.60	L
		Pickup Use 80 Mi/Acre	2.667		20.43						20.43	
		Operating Interest at 10.0						21.61			21.61	
TOTAL CASH OPERATING EXPENSES (includes all times over):											1,027.81	T

\*NOTES: Machine and labor hours and operating cost are for one time over the designated acreage. The "Tot. Cash Expense" column and the "TOTAL CASH OPERATING EXPENSES" row include all operations, all times over. Classes are defined below. A water assessment charge of \$25.00 per Acre is included as an ownership cost in Table B.

OPERATING COST SUMMARY BY CLASS

Land Preparation (L)	231.84
Growing (G)	503.66
Harvest (H)	246.81
Post Harvest (P)	3.46
Marketing (M)	0.00
Operating Overhead (O)	42.04
Total (T)	\$1,027.81

SENSITIVITY OF THE NET REVENUES OVER TOTAL CASH EXPENSES (\$/ACRE)

Prices ->		- 25%	- 10%	Budgeted	+ 10%	+ 25%	Break-even Price
Yields		\$274.75	\$329.70	\$366.33	\$402.96	\$457.91	
- 25%	1.7	-505.19	-411.23	-348.58	-285.94	-191.98	570.18
- 10%	2.1	-448.77	-336.01	-260.84	-185.67	-72.91	493.44
Budgeted	2.3	-411.15	-285.87	-202.34	-118.82	6.47	455.08
+ 10%	2.5	-373.54	-235.72	-143.85	-51.97	85.84	423.69
Break-even Yield		4.77	3.58	3.07	2.69	2.26	

**Table 12D. Resource and Cash Flow Requirements; Green Chiles, 2001**

COUNTY: Pinal FARM: Southern AZ Veg WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Conventional  
 CROP: Chile, Green ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Maricopa YIELD: 2.3 Tn / Acre PREVIOUS CROP: Wheat, Winter DATE: 10/9/01

Month *	Number Irrigations	Water Applied (inches)	Total Labor (Hrs)	Operating Costs (\$/ACRE *)						
				Purchased Water	Fuel, Oil and Repairs	Labor	Chemicals	Other Purchases	Services	Total
JAN C			0.86		13.84	7.52				21.36
FEB C			0.63		8.16	5.48				13.64
MAR C	1.0	6.0	0.93	16.75	5.99	7.72	70.07			100.53
APR C	2.0	8.0	0.96	22.33	6.24	7.79		181.42		217.78
MAY C	3.0	12.0	1.11	33.50	2.78	8.81				45.09
JUN C	2.0	8.0	1.30	22.33	8.68	10.81	42.01		80.23	164.06
JUL C	2.0	8.0	1.05	22.33	5.05	8.61	6.08		5.23	47.30
AUG C	4.0	16.0	1.12	44.67		8.55	58.94		9.98	122.14
SEP C			0.03		0.29	0.22			200.10	200.61
NOV C			0.32		4.21	2.85			46.20	53.26
Pickup Use 80 Mi/Acre					20.43					20.43
Operating Interest at 10.0									21.61	21.61
Water Assessment				**						
<b>Total</b>	<b>14.0</b>	<b>58.0</b>	<b>8.30</b>	<b>161.91</b>	<b>75.67</b>	<b>68.36</b>	<b>177.10</b>	<b>181.42</b>	<b>365.35</b>	<b>1027.81</b>
<b>%</b>				<b>15.75</b>	<b>7.36</b>	<b>6.65</b>	<b>17.23</b>	<b>17.65</b>	<b>35.35</b>	<b>100.00</b>

TOTAL RESOURCE REQUIREMENTS (per Acre)

Total N 225.5  
 Total P 106.0  
 Total Labor 8.3  
 Total Water 58.0

TOTAL ENERGY REQUIREMENTS (per Acre)

Diesel Fuel 24.4 Gal  
 Unleaded Gas 8.0 Gal  
 All Direct Energy 4.4 M BTU

EQUIPMENT REQUIREMENTS (per Acre)

Bed Shaper, 6 Rw	0.22 Hr	Drag Scraper, 10'	0.27 Hr	Fert. Side Dress Unit,	0.38 Hr
Landplane 12'X 45'	0.11 Hr	Laser, Complete System	0.27 Hr	Lister, 7 Bottom	0.18 Hr
Moldboard Plow, 4-16 2	0.32 Hr	Offset Disk, 13.5'	0.11 Hr	Offset Disk, 16.5'	0.58 Hr
Pickup Truck, 1/2 Ton	2.67 Hr	Planter, Drill Type, 6 Row	0.22 Hr	Power Mulcher, 4 Rw	0.22 Hr
Rolling Cultivator, 6 Rw	1.38 Hr	Rotary Stalk Cutter, 4 Row	0.16 Hr	Rowbuck, 10'	0.11 Hr
Saddle Tk Sprayer, 2 Tk 8	0.15 Hr	Tractor, 100 PTO HP	2.25 Hr	Tractor, 125 PTO HP	0.22 Hr
Tractor, 150 PTO HP	1.35 Hr				

MATERIALS REQUIREMENT (per Acre)

11-53-00, Dry	200.00 Lb	32-00-00, URAN 32, Lqd	25.00 Ga	46-00-00, Urea 46	250.00 Lb
BT	2.50 Lb	Chile Pepper Sd (OP)	5.00 Lb	Copper hydroxide	6.75 Lb
Napropamide	4.00 Lb	Water, District	58.00 Al		

LABOR REQUIREMENT (per Acre)

Irrigators 4.05 Hr Tractor 4.25 Hr

\*NOTE: P = Previous Year C = Current Year N = Next Year

\*\* A water assessment charge of \$25.00 per Acre is included as an ownership cost in Table B.

**Table 12E. Schedule of Operations; Green Chiles, 2001**

COUNTY: Pinal FARM: Southern AZ Veg WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Conventional  
 CROP: Chile, Green ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Maricopa YIELD: 2.3 Tn / Acre PREVIOUS CROP: Wheat, Winter DATE: 10/9/01

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First No. Month	Times	Operation	Equipment/ Custom Oper		Job Rate Acre/Hr	Material Use and Cost				Service Cost \$ / Unit	Labor Type
			HP	Self-Prop./ Implement		Name	Appl. Rate	\$ / Unit			
Jan	1.0	Plow	150	Moldboard Plow, 4-16 2	2.80						Tractor
Feb	2.0	Disk	150	Offset Disk, 16.5'	4.00						Tractor
Feb	0.3	Laser Level	150	Drag Scraper, 10'	1.00						Tractor
				Laser, Complete System							
Feb	0.5	Landplane	100	Landplane 12'X 45'	4.00						Tractor
Feb	1.0	List	150	Lister, 7 Bottom	5.00						Tractor
Mar	1.0	Apply Herbicide/Ground	100	Rolling Cultivator, 6 Rw Saddle Tk Sprayer, 2 Tk 8 Row	6.00	Napropamide	4.00 Lb	7.65 Lb			Tractor
Mar	5.0	Buck Rows	100	Rowbuck, 10'	40.00						Tractor
Mar	1.0	Preirrigate			2.40	Water, District	6.00 Al	33.50 AF			Irrigators
Mar	4.0	Disk Ends	100	Offset Disk, 13.5'	40.00						Tractor
Mar	1.0	Apply Fert/Ground	100	Fert. Side Dress Unit,	6.00	11-53-00, Dry	200.00 Lb	355.00 Tn			Tractor
Mar	1.0	Mulch	100	Power Mulcher, 4 Rw	4.00						Tractor
Apr	1.0	Plant	125	Bed Shaper, 6 Rw Planter, Drill Type, 6 Row	4.00	Chile Pepper Sd (OP)	5.00 Lb	34.23 Lb			Tractor
Apr	12.0	Irrigate			3.60	Water, District	4.00 Al	33.50 AF			Irrigators
May	5.0	Cultivate	100	Rolling Cultivator, 6 Rw	4.50						Tractor
Jun	1.0	Thinning		CST Thinning						75.00 Ac	
Jun	1.0	Apply Fert/Ground	100	Rolling Cultivator, 6 Rw Fert. Side Dress Unit, 4Row	4.00	46-00-00, Urea 46	250.00 Lb	271.17 Tn			Tractor
Jun	3.0	Apply Fungicide/Air		CST Air Spray, 7 Gal Mix		Copper hydroxide	2.25 Lb	2.55 Lb		5.23 Ac	
Aug	1.0	Irrigate/Run Fertilizer			3.60	Water, District	4.00 Al	33.50 AF			Irrigators
						32-00-00, URAN 32, BT	25.00 Ga	170.80 Tn			
Aug	1.0	Apply Insecticide/Air		CST Air Spray, 5 Gal Mix			2.50 Lb	10.50 Lb		4.75 Ac	
Sep	1.0	Prepare Ends	100	Offset Disk, 13.5'	40.00						Tractor
Sep	1.0	Pick		CST Pick Green Chiles						75.00 Tn	
Sep	1.0	Load Produce		CST Load Chiles						2.00 Tn	
Sep	1.0	Haul, Custom		CST Haul Green Chiles						10.00 Tn	
Nov	1.0	Pick		CST Pick Red Chile after Green						80.00 Tn	
Nov	1.0	Load Produce		CST Load Chiles						2.00 Tn	
Nov	1.0	Haul, Custom		CST Haul Red Chiles						50.00 Tn	
Nov	1.0	Cut Stalks	100	Rotary Stalk Cutter, 4 Row	5.50						Tractor
Nov	1.0	Disk Residue	150	Offset Disk, 16.5'	7.00						Tractor
		Pickup use 80 Mi/Ac		Pickup Truck, 1/2 Ton	0.38						

\*NOTES: Machine times, labor times, and material rates are for one time over the designated acreage.

**Table 12F Operations Calendar; Green Chiles, 2001**

COUNTY: Pinal                      FARM: Southern Vegetables                      WATER SOURCE: MSID                      TILLAGE: Conventional  
 CROP: Chile, Green                      ACRES: 1.0                      IRRIGATION SYSTEM: Flood Furrow                      SOIL: Sandy-Loam  
 AREA: Maricopa                      YIELD: 2.3 Tn/Acre                      PREVIOUS CROP: Wheat, Winter                      DATE: 10/09/01

No.	Operation	Month and Times Operation Performed											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	Plow	1.0 C											
2	Disk	2.0 C											
3	Laser Level		0.3 C										
4	Landplane		0.5 C										
5	List		1.0 C										
6	Apply Herbicide/Ground			1.0 C									
7	Buck Rows			1.0 C									
8	Preirrigate			1.0 C									
9	Disk Ends			1.0 C		1.0 C	1.0 C	1.0 C					
10	Apply Fert/Ground			1.0 C									
11	Mulch			0.5 C	0.5 C								
12	Plant				1.0 C								
13	Irrigate				2.0 C	3.0 C	2.0 C	2.0 C	3.0 C				
14	Cultivate					1.0 C	2.0 C	2.0 C					
15	Thinning						1.0 C						
16	Apply Fert/Ground						1.0 C						
17	Apply Fungicide/Air						1.0 C	1.0 C	1.0 C				
18	Irrigate/Run Fertilizer								1.0 C				
19	Apply Insecticide/Air								1.0 C				
20	Prepare Ends									1.0 C			
21	Pick, Green									1.0 C			
22	Load Produce									1.0 C			
23	Haul, Custom									1.0 C			
24	Pick, Red										1.0 C		
25	Load Produce											1.0 C	
26	Haul, Custom												1.0 C
27	Cut Stalks												1.0 C
28	Disk Residue												1.0 C

\* NOTE: P = Previous Year    C = Current Year    N = Next Year

**Table 13A. Income and Cash Operating Summary; Dry Onions, 2001**

COUNTY: Pinal                      FARM: Pinal Vegetables                      WATER SOURCE: Maricopa-Stanfield Irrig.                      TILLAGE: Conventional  
 CROP: Onions, Dry                      ACRES: 1.0                      IRRIGATION SYSTEM: Flood Furrow                      SOIL: Sandy-Loam  
 AREA: Maricopa                      YIELD: 404.0 Sk / Acre                      PREVIOUS CROP: Cotton, Upland                      DATE: 10/8/01

Item	Unit	Quantity	Price/ Unit	Budgeted /Acre	Total /Acre	Your Farm Budget
INCOME -> Onions	Sack	404.00	\$9.33	\$3,769.32	\$3,769.32	_____
CASH LAND PREPARATION AND GROWING EXPENSES (including sales tax)						
Paid Labor (including benefits)					80.66	_____
Tractor/Self Propelled				39.24		_____
Irrigation				33.74		_____
Other/ Contract				7.67		_____
Chemicals and Custom Applications					239.42	_____
Fertilizer				108.41		_____
Herbicide				131.02		_____
Farm Machinery and Vehicles					45.27	_____
Diesel Fuel				17.31		_____
Repairs and Maintenance				27.96		_____
Irrigation Water (excluding labor)					122.83	_____
Water Assessment (See Note Below) **						_____
Other Purchased Inputs & Seed/Transplants				943.40	946.40	_____
Other Services and Rentals				3.00		_____
TOTAL CASH LAND PREPARATION AND GROWING EXPENSES					1434.58	_____
CASH HARVEST AND POST HARVEST EXPENSES						
Paid Labor (including benefits)					0.44	_____
Tractor/Self Propelled				0.44		_____
Farm Machinery and Vehicles					0.49	_____
Diesel Fuel				0.19		_____
Repairs and Maintenance				0.29		_____
Custom Harvest/Post Harvest					1329.16	_____
Other Materials					376.85	_____
TOTAL HARVEST AND POST HARVEST EXPENSE					1706.94	_____
OPERATING OVERHEAD -> PICKUP USE					15.32	_____
OPERATING INTEREST AT 10.0%					61.38	_____
TOTAL CASH OPERATING EXPENSES					\$3,218.22	_____
RETURNS OVER CASH OPERATING EXPENSES					\$551.10	_____

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Notes: The above figures do not include ownership costs, see table B for detailed cost allocation.  
 \*\* A water assessment charge of \$25.00 per Acre is included as an ownership cost in Table B.

**Table 13B. Allocations of Ownership Costs; Dry Onions, 2001**

COUNTY: Pinal FARM: Pinal Vegetables WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Conventional  
 CROP: Onions, Dry ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Maricopa YIELD: 404.0 Sk / Acre PREVIOUS CROP: Cotton, Upland DATE: 10/8/01

Item	-- CASH COST BASIS (\$/ACRE) --		-- TOTAL COST BASIS (\$/ACRE) --	
	Income and Costs	Net Returns	Income and Costs	Net Returns
TOTAL INCOME at \$9.33 / Sk	\$3,769.32		\$3,769.32	
TOTAL OPERATING EXPENSES	\$3,218.22		\$3,218.22	
RETURN OVER CASH OPERATING EXPENSES		\$551.10		\$551.10
CASH OVERHEAD EXPENSES				
Taxes, Housing and Insurance, Farm Machinery	5.76		5.76	
General and Office Overhead (5.0%of Total Operating Exp.)	160.91		160.91	
General Farm Maintenance (3.0% of Total Operating Exp.)	96.55		96.55	
Total Cash Overhead Expenses	263.22		263.22	
Total Cash Operating and Overhead Cost	3,481.44		3,481.44	
RETURNS OVER CASH OPER. AND OVER. EXPENSES		\$287.88		\$287.88
CAPITAL ALLOCATIONS (100% Equity)				
Capital Replacement, Machinery and Vehicles			31.43	
Interest on Equity, Machinery and Vehicles			13.49	
Total Capital Allocations			44.93	
RETURNS TO LAND, CAPITAL, MANAGEMENT AND RISK ----->		\$287.88		
RETURNS TO LAND, MANAGEMENT AND RISK ----->				\$242.95
Land Cost / Rent or Lease	100.00		100.00	
Water Assessment **	25.00		25.00	
Total Land Costs	125.00		125.00	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		\$162.88		
RETURNS TO MANAGEMENT AND RISK ----->				\$117.95
Management Services (8% of Total Operation Expenses)			257.46	
TOTAL OWNERSHIP COST	388.22		690.60	
TOTAL COST	\$3,606.44		\$3,908.82	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		\$162.88		
RETURNS TO RISK (PROFITS) ----->				(\$139.50)
Item	-- CASH COST BASIS (\$/ACRE) --		-- TOTAL COST BASIS (\$/ACRE) --	
	Income and Costs	Net Returns	Income and Costs	Net Returns
BREAK-EVEN PRICE TO COVER OPERATING COST ( PER Lb )		\$7.97		\$7.97
BREAK-EVEN PRICE TO COVER OWNERSHIP COST		\$0.96		\$1.71
BREAK-EVEN PRICE TO COVER TOTAL COST		\$8.93		\$9.68

**Table 13C. Variable Operating Costs; Dry Onions, 2001**

COUNTY: Pinal FARM: Pinal Vegetables WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Conventional  
 CROP: Onions, Dry ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Maricopa YIELD: 404.0 Sk / Acre PREVIOUS CROP: Cotton, Upland DATE: 10/8/01

No.	First Month	Operation	---- Hours * ----		---- Operating Costs (\$/ACRE *) Per Operation ----					Tot. Cash Expenses	Class	
			Machine	Labor	Fuel/Rps.	Labor	Cust/Serv.	Materials	Total			Times
1	Oct	Disk	0.225	0.250	2.81	2.19			5.00	3.0	15.01	L
2	Oct	Plow	0.321	0.357	4.11	3.13			7.25	1.0	7.25	L
3	Nov	List	0.300	0.333	2.71	2.92			5.63	1.0	5.63	L
4	Nov	Buck Rows	0.045	0.050	0.23	0.44			0.67	3.0	2.01	G
5	Nov	Preirrigate		0.800		6.14			22.33	1.0	28.47	G
6	Nov	Soil Fertility					3.00		3.00	1.0	3.00	G
7	Nov	Disk Ends	0.045	0.050	0.27	0.44			0.71	2.0	1.43	G
8	Nov	Apply Fert/Ground	0.180	0.200	0.96	1.75		48.34	51.05	1.0	51.05	G
9	Nov	Plant	0.900	2.000	13.27	16.44		943.40	973.11	1.0	973.11	L
10	Nov	Apply Herbicide/Ground	0.225	0.250	1.38	2.19		65.51	69.08	2.0	138.16	G
11	Nov	Irrigate		0.400		3.07		11.17	14.23	9.0	128.11	G
12	Dec	Cultivate	0.225	0.250	2.47	2.19			4.66	1.0	4.66	G
13	Feb	Apply Fert/Ground	0.300	0.333	3.44	2.92		30.04	36.39	2.0	72.79	G
14	Apr	Prepare Ends	0.045	0.050	0.49	0.44			0.93	1.0	0.93	H
15	May	Harvest 404 Sk					876.68	214.12	1090.80	1.0	1090.80	H
16	May	Field Grade 404 Sk					404.00	162.73	566.73	1.0	566.73	H
17	May	Haul, Custom 404 Sk					48.48		48.48	1.0	48.48	H
18	Jun	Disk Residue 404 Sk	0.150	0.167	2.45	1.47			3.92	1.0	3.92	L
		Pickup Use 60 Mi/Acre	2.000		15.32						15.32	
		Operating Interest at 10.0					61.38				61.38	
TOTAL CASH OPERATING EXPENSES (includes all times over):											3218.22	T

\*NOTES: Machine and labor hours and operating cost are for one time over the designated acreage. The "Tot. Cash Expense" column and the "TOTAL CASH OPERATING EXPENSES" row include all operations, all times over. Classes are defined below. A water assessment charge of \$25.00 per Acre is included as an ownership cost in Table B.

OPERATING COST SUMMARY BY CLASS

Land Preparation (L)	1,004.92
Growing (G)	429.67
Harvest (H)	1,706.94
Post Harvest (P)	0.00
Marketing (M)	0.00
Operating Overhead (O)	76.70
Total (T)	\$3,218.22

SENSITIVITY OF THE NET REVENUES OVER TOTAL CASH EXPENSES (\$/ACRE)

Prices ->	- 25%	- 10%	Budgeted	+ 10%	+ 25%	Break-even Price
Yields	\$7.00	\$8.40	\$9.33	\$10.26	\$11.66	
- 25%	303.0	-609.86	-185.82	96.88	379.58	803.63
- 10%	363.6	-441.86	67.00	406.24	745.48	1,254.34
Budgeted	404.0	-329.85	235.55	612.48	989.41	1,554.81
+ 10%	444.4	-217.84	404.09	818.72	1,233.34	1,855.28
+ 25%	505.0	-49.84	656.91	1,128.08	1,599.24	2,305.99
Break-even Yield		522.98	347.54	284.02	240.13	194.95

**Table 13D. Resource and Cash Flow Requirements; Dry Onions, 2001**

COUNTY: Pinal FARM: Pinal Vegetables WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Conventional  
 CROP: Onions, Dry ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Maricopa YIELD: 404.0 Sk / Acre PREVIOUS CROP: Cotton, Upland DATE: 10/8/01

Month *	Number Irrigations	Water Applied (inches)	Total Labor (Hrs)	Operating Costs (\$/ACRE *)							
				Purchased Water	Fuel, Oil and Repairs	Labor	Chemicals	Other Purchases	Services	Total	
OCT P			0.86		9.74	7.52					17.25
NOV P	2.0	12.0	4.33	33.50	21.63	35.56	113.84	943.40	3.00		1150.93
DEC P	1.0	4.0	0.95	11.17	4.08	7.89	65.51				88.65
JAN C	1.0	4.0	0.50	11.17	0.50	3.94					15.61
FEB C	1.0	4.0	0.73	11.17	3.44	5.99	30.04				50.64
MAR C	2.0	8.0	1.13	22.33	3.44	9.06	30.04				64.87
APR C	3.0	12.0	1.25	33.50	0.49	9.64					43.63
MAY C								376.85	1329.16		1706.01
JUN C			0.17		2.45	1.47					3.92
Pickup Use 60 Mi/Acre					15.32						15.32
Operating Interest at 10.0 Water Assessment				**					61.38		61.38
<b>Total</b>	<b>10.0</b>	<b>44.0</b>	<b>9.92</b>	<b>122.84</b>	<b>61.09</b>	<b>81.07</b>	<b>239.43</b>	<b>1320.25</b>	<b>1393.54</b>		<b>3218.22</b>
<b>%</b>				<b>3.82</b>	<b>1.90</b>	<b>2.52</b>	<b>7.44</b>	<b>41.02</b>	<b>43.30</b>		<b>100.00</b>

TOTAL RESOURCE REQUIREMENTS (per Acre)		TOTAL ENERGY REQUIREMENTS (per Acre)	
Total N	252.4	Diesel Fuel	20.3 Gal
Total P	212.0	Unleaded Gas	6.0 Gal
Total Labor	9.9	All Direct Energy	3.6 M BTU
Total Water	44.0		

EQUIPMENT REQUIREMENTS (per Acre)			
Bed Shaper, 4 Rw	0.90 Hr	Cultivator, Sweep, 4 Rw	0.22 Hr
Fertilizer Injector, 4 Row	0.60 Hr	Lister, 5 Bottom	0.30 Hr
Offset Disk, 12'	0.67 Hr	Offset Disk, 13.5'	0.05 Hr
Offset Disk, 8'	0.09 Hr	Pickup Truck, 1/2 Ton	2.00 Hr
Rowbuck, 10'	0.14 Hr	Saddle Tk Sprayer, 2 Tk 8	0.45 Hr
Tractor, 100 PTO HP,	1.84 Hr	Tractor, 125 PTO HP,	1.22 Hr
		Fertilizer Broadcaster,	0.18 Hr
		Moldboard Plow, 4-16 2	0.32 Hr
		Offset Disk, 18'	0.15 Hr
		Planter/Gramor, 4 Bd,8	0.90 Hr
		Tractor, 60 PTO HP,	0.86 Hr
		Tractor, 150 PTO HP,	0.15 Hr

MATERIALS REQUIREMENT (per Acre)			
10-53-00, Dry	400.00 Lb	32-00-00, URAN 32, Lqd	60.00 Ga
D CPA	20.00 Lb	Onion Bags 50# Mesh	404.00 Sk
Water, District	44.00 Al	Burlap Sacks	404.00 Sk
		Onion Seed (Pelletized)	1000.00 Th

LABOR REQUIREMENT (er Acre)			
Irrigators	4.40 Hr	Other	1.00 Hr
		Tractor	4.52 Hr

\*NOTE: P = Previous Year C = Current Year N = Next Year

\*\* A water assessment charge of \$25.00 per Acre is included as an ownership cost in Table B.

**Table 13E. Schedule of Operations; Dry Onions, 2001**

COUNTY: Pinal FARM: Pinal Vegetables WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Conventional  
 CROP: Onions, Dry ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Maricopa YIELD: 404.0 Sk / Acre PREVIOUS CROP: Cotton, Upland DATE: 10/8/01

First No. Month	Times	Operation	Equipment/ Custom Oper		Job Rate Acre/Hr	Material Use and Cost				Service Cost \$ / Unit	Labor Type
			HP	Self-Prop./ Implement		Name	Appl. Rate	\$ / Unit			
Oct	3.0	Disk	125	Offset Disk, 12'	4.00						Tractor
Oct	1.0	Plow	125	Moldboard Plow, 4-16 2	2.80						Tractor
Nov	1.0	List	100	Lister, 5 Bottom	3.00						Tractor
Nov	3.0	Buck Rows	60	Rowbuck, 10'	20.00						Tractor
Nov	1.0	Preirrigate			1.25	Water, District	8.00	Al	33.50	AF	Irrigators
Nov	1.0	Soil Fertility		CST Soil Analysis (Surface)							3.00 Ac
Nov	2.0	Disk Ends	60	Offset Disk, 8'	20.00						Tractor
Nov	1.0	Apply Fert/Ground	60	Fertilizer Broadcaster,	5.00	10-53-00, Dry	400.00	Lb	228.00	Tn	Tractor
Nov	1.0	Plant	100	Planter/Gramor, 4 Bd,8 Bed Shaper, 4 Rw	1.00	Onion Seed (Pelletized)	1000.00	Th	0.89	Th	Tractor Other
Nov	2.0	Apply Herbicide/Ground	60	Saddle Tk Sprayer, 2 Tk 8	4.00	DCPA	10.00	Lb	6.18	Lb	Tractor
Nov	9.0	Irrigate			2.50	Water, District	4.00	Al	33.50	AF	Irrigators
Dec	1.0	Cultivate	125	Cultivator, Sweep, 4 Rw	4.00						Tractor
Feb	2.0	Apply Fert/Ground	100	Fertilizer Injector, 4 Row	3.00	32-00-00, URAN 32,	30.00	Ga	170.80	Tn	Tractor
Apr	1.0	Prepare Ends	100	Offset Disk, 13.5'	20.00						Tractor
May	1.0	Harvest		CST Cut/Top/Field Sack Dry		Burlap Sacks	404.00	Sk	0.50	Sk	2.17 Sk
May	1.0	Field Grade		CST Grade/Size/Pack Onions		Onion Bags 50# Mesh	404.00	Sk	0.38	Sk	1.00 Sk
May	1.0	Haul, Custom		CST Field Haul Dry Onions							0.12 Sk
Jun	1.0	Disk Residue	150	Offset Disk, 18'	6.00						Tractor
		Pickup use 60 Mi/Ac		Pickup Truck, 1/2 Ton	0.50						

\*NOTES: Machine times, labor times, and material rates are for one time over the designated acreage.

**Table 13F Operations Calendar; Dry Onions, 2001**

COUNTY: Pinal                      FARM: Southern Vegetables                      WATER SOURCE:                      MSID                      TILLAGE:                      Conventional  
 CROP: Onions, Dry                      ACRES: 1.0                      IRRIGATION SYSTEM:                      Flood Furrow                      SOIL:                      Sandy-Loam  
 AREA: Maricopa                      YIELD: 404 Sk/Acre                      PREVIOUS CROP:                      Cantaloupe                      DATE:                      10/08/01

No.	Operation	Month and Times Operation Performed											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	Disk										2.0 P	1.0 P	
2	Plow										1.0 P		
3	List											1.0 P	
4	Buck Rows											1.0 P	1.0 P
5	Preirrigate											1.0 P	
6	Soil Fertility											1.0 P	
7	Disk Ends	1.0 C										1.0 P	
8	Apply Fert/Ground											1.0 P	
9	Plant											1.0 P	
10	Apply Herbicide/Ground											1.0 P	1.0 P
11	Irrigate	1.0 C	1.0 C	2.0 C	3.0 C							1.0 P	1.0 P
12	Cultivate												1.0 P
13	Apply Fert/Ground		1.0 C	1.0 C									
14	Prepare Ends				1.0 C								
15	Harvest												1.0 C
16	Field Grade												1.0 C
17	Haul, Custom												1.0 C
18	Disk Residue												1.0 C

\* NOTE: P = Previous Year    C = Current Year    N = Next Year

**Table 14A. Income and Cash Operating Summary; Fall Cantaloupe, 2001**

COUNTY: Pinal                      FARM: Southern AZ Veg                      WATER SOURCE: Maricopa-Stanfield Irrig.                      TILLAGE: Double Crop  
 CROP: Cantaloupes                      ACRES: 1.0                      IRRIGATION SYSTEM: Flood Furrow                      SOIL: Sandy-Loam  
 AREA: Maricopa                      YIELD: 260.0 Ct / Acre                      PREVIOUS CROP: Wheat, Winter                      DATE: 10/9/01

Item	Unit	Quantity	Price/ Unit	Budgeted /Acre	Total /Acre	Your Farm Budget
INCOME -> Melons	Crtm	260.00	\$13.10	\$3,406.00	\$3,406.00	_____
CASH LAND PREPARATION AND GROWING EXPENSES (including sales tax)						
Paid Labor (including benefits)					92.20	_____
Tractor/Self Propelled				48.21		_____
Irrigation				40.92		_____
Other/ Contract				3.07		_____
Chemicals and Custom Applications					304.31	_____
Fertilizer				104.98		_____
Insecticide				142.91		_____
Herbicide				56.42		_____
Farm Machinery and Vehicles					48.48	_____
Diesel Fuel				20.80		_____
Repairs and Maintenance				27.68		_____
Irrigation Water (excluding labor)					0.00	_____
Water Assessment (See Note Below) **						_____
Other Purchased Inputs & Seed/Transplants				15.04	189.04	_____
Other Services and Rentals				174.00		_____
TOTAL CASH LAND PREPARATION AND GROWING EXPENSES					634.04	_____
CASH HARVEST AND POST HARVEST EXPENSES						
Custom Harvest/Post Harvest					403.00	_____
Other Materials					192.92	_____
TOTAL HARVEST AND POST HARVEST EXPENSE					595.92	_____
OPERATING OVERHEAD -> PICKUP USE					7.66	_____
OPERATING INTEREST AT 10.0%					5.43	_____
TOTAL CASH OPERATING EXPENSES					\$1,243.05	_____
RETURNS OVER CASH OPERATING EXPENSES					\$2,162.95	_____

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Notes: The above figures do not include ownership costs, see table B for detailed cost allocation.

\*\* A water assessment charge of \$12.50 per Acre is included as an ownership cost in Table B.

**Table 14B. Allocations of Ownership Costs; Fall Cantaloupe, 2001**

COUNTY: Pinal FARM: Southern AZ Veg WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Double Crop  
 CROP: Cantaloupes ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Maricopa YIELD: 260.0 Ct / Acre PREVIOUS CROP: Wheat, Winter DATE: 10/9/01

Item	-- CASH COST BASIS (\$/ACRE) --		-- TOTAL COST BASIS (\$/ACRE) --	
	Income and Costs	Net Returns	Income and Costs	Net Returns
TOTAL INCOME at \$13.10 / Ct	\$3,406.00		\$3,406.00	
TOTAL OPERATING EXPENSES	\$1,243.05		\$1,243.05	
RETURN OVER CASH OPERATING EXPENSES		\$2,162.95		\$2,162.95
CASH OVERHEAD EXPENSES				
Taxes, Housing and Insurance, Farm Machinery	5.36		5.36	
General and Office Overhead (5.0% of Total Operating Exp.)	62.15		62.15	
General Farm Maintenance (3.0% of Total Operating Exp.)	37.29		37.29	
Total Cash Overhead Expenses	104.81		104.81	
Total Cash Operating and Overhead Cost	1,347.85		1,347.85	
RETURNS OVER CASH OPER. AND OVER. EXPENSES		\$2,058.15		\$2,058.15
CAPITAL ALLOCATIONS (100% Equity)				
Capital Replacement, Machinery and Vehicles			29.13	
Interest on Equity, Machinery and Vehicles			12.84	
Total Capital Allocations			41.97	
RETURNS TO LAND, CAPITAL, MANAGEMENT AND RISK ----->		\$2,058.15		
RETURNS TO LAND, MANAGEMENT AND RISK ----->				\$2,016.18
Land Cost / Rent or Lease	100.00		100.00	
Water Assessment **	12.50		12.50	
Total Land Costs	112.50		112.50	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		\$1,945.65		
RETURNS TO MANAGEMENT AND RISK ----->				\$1,903.68
Management Services (8% of Total Operation Expenses)			99.44	
TOTAL OWNERSHIP COST	217.31		358.72	
TOTAL COST	\$1,460.35		\$1,601.77	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		\$1,945.65		
RETURNS TO RISK (PROFITS) ----->				\$1,804.23
Item	-- CASH COST BASIS (\$/ACRE) --		-- TOTAL COST BASIS (\$/ACRE) --	
	Income and Costs	Net Returns	Income and Costs	Net Returns
BREAK-EVEN PRICE TO COVER OPERATING COST ( PER Lb )		\$4.78		\$4.78
BREAK-EVEN PRICE TO COVER OWNERSHIP COST		\$0.84		\$1.38
BREAK-EVEN PRICE TO COVER TOTAL COST		\$5.62		\$6.16



**Table 14D. Resource and Cash Flow Requirements; Fall Cantaloupe, 2001**

COUNTY: Pinal FARM: Southern AZ Veg WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Double Crop  
 CROP: Cantaloupes ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Maricopa YIELD: 260.0 Ct / Acre PREVIOUS CROP: Wheat, Winter DATE: 10/9/01

Month *	Number Irrigations	Water Applied (inches)	Total Labor (Hrs)	Operating Costs (\$/ACRE *)						
				Purchased Water	Fuel, Oil and Repairs	Labor	Chemicals	Other Purchases	Services	Total
JUN C			1.66		19.14	14.56	34.98		3.00	71.68
JUL C	4.0	20.0	4.77		14.05	38.44	110.82	15.04	81.00	259.35
AUG C	4.0	20.0	3.85		8.04	30.87	95.00		94.24	228.15
SEP C			0.95		7.26	8.33	55.03	192.92	407.24	670.78
Pickup Use 30 Mi/Acre					7.66					7.66
Operating Interest at 10.0 Water Assessment				**					5.43	5.43
<b>Total</b>	<b>8.0</b>	<b>40.0</b>	<b>11.23</b>		<b>56.15</b>	<b>92.20</b>	<b>295.83</b>	<b>207.96</b>	<b>590.91</b>	<b>1243.05</b>
<b>%</b>					<b>4.52</b>	<b>7.42</b>	<b>23.80</b>	<b>16.73</b>	<b>47.54</b>	<b>100.00</b>

TOTAL RESOURCE REQUIREMENTS (per Acre)

Total N 158.2  
 Total P 126.0  
 Total K 15.0  
 Total Labor 11.2  
 Total Water 40.0

TOTAL ENERGY REQUIREMENTS (per Acre)

Diesel Fuel 24.1 Gal  
 Unleaded Gas 3.0 Gal  
 All Direct Energy 3.7 M BTU

EQUIPMENT REQUIREMENTS (per Acre)

Bed Shaper, 4 Rw	0.36 Hr	Cultivator, Sweep, 4 Rw	2.02 Hr	Directed Spray Rig, 8	0.18 Hr
Drag Scraper, 14'	0.22 Hr	Fertilizer Broadcaster,	0.18 Hr	Fertilizer Injector, 4 Row	0.26 Hr
Laser, Complete System	0.22 Hr	Lister, 5 Bottom	0.22 Hr	Moldboard Plow, 4-16 2	0.45 Hr
Offset Disk, 16.5'	0.18 Hr	Offset Disk, 18'	0.30 Hr	Pickup Truck, 1/2 Ton	1.00 Hr
Planter, Drill Type, 4 Row	0.36 Hr	Rowbuck, 10'	0.23 Hr	Saddle Tk Sprayer, 2 Tk 8	0.22 Hr
Tractor, 35 PTO HP	0.60 Hr	Tractor, 50 PTO HP,	0.63 Hr	Tractor, 70 PTO HP,	2.02 Hr
Tractor, 100 PTO HP,	1.02 Hr	Tractor, 150 PTO HP,	1.27 Hr	V-Ripper, 5 Shnk	0.11 Hr

MATERIALS REQUIREMENT (per Acre)

10-10-05, Lqd	30.00 Ga	11-48-00, Dry	200.00 Lb	32-00-00, URAN 32, Lqd	30.00 Ga
Abamectin	10.00 Oz	Bensulide	10.00 Pt	Bifenthrin	10.00 Oz
Cantaloupe Cartons	260.00 Ct	Cantaloupe Sd	1.50 Lb	Endosulfan	2.00 Pt
Imidacloprid	5.00 Oz	Water, Pump	40.00 Al		

LABOR REQUIREMENT (per Acre)

Irrigators	5.34 Hr	Other	0.40 Hr	Tractor	5.49 Hr
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\*NOTE: P = Previous Year C = Current Year N = Next Year

\*\* A water assessment charge of \$12.50 per Acre is included as an ownership cost in Table B.

**Table 14E. Schedule of Operations; Fall Cantaloupe, 2001**

COUNTY: Pinal FARM: Southern AZ Veg WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Double Crop  
 CROP: Cantaloupes ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Maricopa YIELD: 260.0 Ct / Acre PREVIOUS CROP: Wheat, Winter DATE: 10/9/01

First No. Month Times	Operation	Equipment/ Custom Oper HP Self-Prop./ Implement	Job Rate Acre/Hr	Material Use and Cost Name	Appl. Rate \$ / Unit	Service Cost \$ / Unit	Labor Type
Jun	0.5 Rip	150 V-Ripper, 5 Shnk	4.00				Tractor
Jun	2.0 Disk	150 Offset Disk, 18'	6.00				Tractor
Jun	1.0 Plow	150 Moldboard Plow, 4-16 2	2.00				Tractor
Jun	0.5 Laser Level	150 Drag Scraper, 14' Laser, Complete System	2.00				Tractor
Jun	1.0 Soil Fertility	CST Soil Analysis (Surface)				3.00 Ac	
Jun	1.0 Apply Fert/Ground	100 Fertilizer Broadcaster,	5.00	11-48-00, Dry	200.00 Lb	330.00 Tn	Tractor
Jun	1.0 List	100 Lister, 5 Bottom	4.00				Tractor
Jul	1.0 Plant	100 Planter, Drill Type, 4 Row Bed Shaper, 4 Rw	2.50	Cantaloupe Sd	1.50 Lb	9.46 Lb	Tractor Other
Jul	1.0 Apply Herbicide/Ground	50 Saddle Tk Sprayer, 2 Tk 8	4.00	Bensulide	10.00 Pt	42.58 Ga	Tractor
Jul	1.0 Apply Insect./Ground	50 Directed Spray Rig, 8 Row	5.00	Imidacloprid	5.00 Oz	588.40 Ga	Tractor
Jul	5.0 Buck Rows	50 Rowbuck, 10'	20.00				Tractor
Jul	7.0 Irrigate		1.50	Water, Pump	5.00 Al	0.00 AF	Irrigators
Jul	9.0 Cultivate	70 Cultivator, Sweep, 4 Rw	4.00				Tractor
Jul	1.0 Plant Fertility	CST Plant Tissue Anal.(Petiole)				6.00 Ac	
Jul	1.0 Irrigate/Run Fertilizer	Tractor, 35 PTO HP	1.50	Water, Pump 32-00-00, URAN 32,	5.00 Al 30.00 Ga	0.00 AF 170.80 Tn	Irrigators
Jul	1.0 Thinning	CST Thinning				75.00 Ac	
Aug	2.0 Apply Insecticide/Air	CST Air Spray, 3 Gal Mix		Bifenthrin Endosulfan Abamectin	5.00 Oz 1.00 Pt 5.00 Oz	490.00 Ga 33.17 Ga 732.91 Ga	4.24 Ac
Aug	1.0 Hand Weeding	CST Hand Weeding				75.00 Ac	
Aug	1.0 Apply Fert/Ground	100 Fertilizer Injector, 4 Row	3.50	10-10-05, Lqd	30.00 Ga	251.33 Tn	Tractor
Aug	1.0 Pollinate	CST Bee Hive Rental				15.00 Ac	
Sep	1.0 Harvest, Load & Haul	CST Harv/pack/haul Melons		Cantaloupe Cartons	260.00 Ct	0.70 Ct	1.55 Ct
Sep	1.0 Disk Residue	150 Offset Disk, 16.5'	5.00				Tractor
	Pickup use 30 Mi/Ac	Pickup Truck, 1/2 Ton	1.00				

\*NOTES: Machine times, labor times, and material rates are for one time over the designated acreage.

**Table 14F Operations Calendar; Fall Cantaloupe, 2001**

COUNTY: Pinal                      FARM: Southern Vegetables                      WATER SOURCE: MSID                      TILLAGE: Conventional  
 CROP: Cantaloupes                      ACRES: 1.0                      IRRIGATION SYSTEM: Flood Furrow                      SOIL: Sandy-Loam  
 AREA: Maricopa                      YIELD: 260 Ct/Acre                      PREVIOUS CROP: Wheat, Winter                      DATE: 10/09/01

No.	Operation	Month and Times Operation Performed											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	Rip						0.5 C						
2	Disk						2.0 C						
3	Plow						1.0 C						
4	Laser Level						0.5 C						
5	Soil Fertility						1.0 C						
6	Apply Fert/Ground						1.0 C						
7	List						1.0 C						
8	Plant							1.0 C					
9	Apply Herbicide/Ground							1.0 C					
10	Apply Insect/Ground							1.0 C					
11	Buck Rows							2.0 C	3.0 C				
12	Irrigate							3.0 C	4.0 C				
13	Cultivate							3.0 C	3.0 C	3.0 C			
14	Plant Fertility							1.0 C					
15	Irrigate/Run Fertilizer							1.0 C					
16	Thinning							1.0 C					
17	Apply Insecticide/Air								1.0 C	1.0 C			
18	Hand Weeding								1.0 C				
19	Apply Fert/Ground								1.0 C				
20	Pollinate								1.0 C				
21	Harvest, Load & Haul									1.0 C			
22	Disk Residue									1.0 C			

\* NOTE: P = Previous Year    C = Current Year    N = Next Year

**Table 15A. Income and Cash Operating Summary; Fall Honeydews, 2001**

COUNTY: Pinal                      FARM: Southern AZ Veg                      WATER SOURCE: Maricopa-Stanfield Irrig.                      TILLAGE: Double Crop  
 CROP: Honeydew Melons                      ACRES: 1.0                      IRRIGATION SYSTEM: Flood Furrow                      SOIL: Sandy-Loam  
 AREA: Maricopa                      YIELD: 638.0 Ct / Acre                      PREVIOUS CROP: Wheat, Winter                      DATE: 10/9/01

Item	Unit	Quantity	Price/ Unit	Budgeted /Acre	Total /Acre	Your Farm Budget
INCOME -> Melons	Crtm	638.00	\$5.84	\$3,725.92	\$3,725.92	_____
CASH LAND PREPARATION AND GROWING EXPENSES (including sales tax)						
Paid Labor (including benefits)					92.20	_____
Tractor/Self Propelled				48.21		_____
Irrigation				40.92		_____
Other/ Contract				3.07		_____
Chemicals and Custom Applications					304.31	_____
Fertilizer				104.98		_____
Insecticide				142.91		_____
Herbicide				56.42		_____
Farm Machinery and Vehicles					47.67	_____
Diesel Fuel				20.42		_____
Repairs and Maintenance				27.26		_____
Irrigation Water (excluding labor)					0.00	_____
Water Assessment (See Note Below) **						_____
Other Purchased Inputs & Seed/Transplants				32.23	206.23	_____
Other Services and Rentals				174.00		_____
TOTAL CASH LAND PREPARATION AND GROWING EXPENSES					650.41	_____
CASH HARVEST AND POST HARVEST EXPENSES						
Custom Harvest/Post Harvest					988.90	_____
Other Materials					912.98	_____
TOTAL HARVEST AND POST HARVEST EXPENSE					1901.88	_____
OPERATING OVERHEAD -> PICKUP USE					7.66	_____
OPERATING INTEREST AT 10.0%					5.64	_____
TOTAL CASH OPERATING EXPENSES					\$2,565.59	_____
RETURNS OVER CASH OPERATING EXPENSES					\$1,160.33	_____

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Notes: The above figures do not include ownership costs, see table B for detailed cost allocation.

\*\* A water assessment charge of \$12.50 per Acre is included as an ownership cost in Table B.

**Table 14B. Allocations of Ownership Costs; Fall Honeydews, 2001**

COUNTY: Pinal FARM: Southern AZ Veg WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Double Crop  
 CROP: Honeydew Melons ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Maricopa YIELD: 638.0 Ct / Acre PREVIOUS CROP: Wheat, Winter DATE: 10/9/01

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Item	-- CASH COST BASIS (\$/ACRE) --		-- TOTAL COST BASIS (\$/ACRE) --	
	Income and Costs	Net Returns	Income and Costs	Net Returns
TOTAL INCOME at \$5.84 / Ct	\$3,725.92		\$3,725.92	
TOTAL OPERATING EXPENSES	\$2,565.59		\$2,565.59	
RETURN OVER CASH OPERATING EXPENSES		\$1,160.33		\$1,160.33
CASH OVERHEAD EXPENSES				
Taxes, Housing and Insurance, Farm Machinery	5.27		5.27	
General and Office Overhead (5.0%of Total Operating Exp.)	128.28		128.28	
General Farm Maintenance (3.0% of Total Operating Exp.)	76.97		76.97	
Total Cash Overhead Expenses	210.51		210.51	
Total Cash Operating and Overhead Cost	2,776.10		2,776.10	
RETURNS OVER CASH OPER. AND OVER. EXPENSES		\$949.82		\$949.82
CAPITAL ALLOCATIONS (100% Equity)				
Capital Replacement, Machinery and Vehicles			28.66	
Interest on Equity, Machinery and Vehicles			12.56	
Total Capital Allocations			41.21	
RETURNS TO LAND, CAPITAL, MANAGEMENT AND RISK ----->		\$949.82		
RETURNS TO LAND, MANAGEMENT AND RISK ----->				\$908.60
Land Cost / Rent or Lease	100.00		100.00	
Water Assessment **	12.50		12.50	
Total Land Costs	112.50		112.50	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		\$837.32		
RETURNS TO MANAGEMENT AND RISK ----->				\$796.10
Management Services (8% of Total Operation Expenses)			205.25	
TOTAL OWNERSHIP COST	323.01		569.48	
TOTAL COST	\$2,888.60		\$3,135.06	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		\$837.32		
RETURNS TO RISK (PROFITS) ----->				\$590.86
Item	-- CASH COST BASIS (\$/ACRE) --		-- TOTAL COST BASIS (\$/ACRE) --	
	Income and Costs	Net Returns	Income and Costs	Net Returns
BREAK-EVEN PRICE TO COVER OPERATING COST ( PER Lb )		\$4.02		\$4.02
BREAK-EVEN PRICE TO COVER OWNERSHIP COST		\$0.51		\$0.89
BREAK-EVEN PRICE TO COVER TOTAL COST		\$4.53		\$4.91

**Table 15C. Variable Operating Costs; Fall Honeydews, 2001**

COUNTY: Pinal FARM: Southern AZ Veg WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Double Crop  
 CROP: Honeydew Melons ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Maricopa YIELD: 638.0 Ct / Acre PREVIOUS CROP: Wheat, Winter DATE: 10/9/01

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No.	First Month	Operation	---- Hours * ----		---- Operating Costs (\$/ACRE *) Per Operation ----					Tot. Cash Expenses	Class	
			Machine	Labor	Fuel/Rps.	Labor	Cust/Serv.	Materials	Total			Times
1	Jun	Rip	0.225	0.250	2.88	2.19			5.07	0.5	2.53	L
2	Jun	Disk	0.150	0.167	2.45	1.47			3.92	2.0	7.83	L
3	Jun	Plow	0.450	0.500	6.53	4.39			10.92	1.0	10.92	L
4	Jun	Laser Level	0.450	0.500	5.58	4.39			9.97	0.5	4.98	L
5	Jun	Soil Fertility					3.00		3.00	1.0	3.00	G
6	Jun	Apply Fert/Ground	0.180	0.200	1.44	1.75		34.98	38.17	1.0	38.17	G
7	Jun	List	0.225	0.250	2.03	2.19			4.23	1.0	4.23	L
8	Jul	Plant	0.360	0.800	5.08	6.58		32.23	43.88	1.0	43.88	L
9	Jul	Apply Herbicide/Ground	0.225	0.250	1.21	2.19		56.42	59.82	1.0	59.82	G
10	Jul	Apply Insect./Ground	0.180	0.200	0.92	1.75		24.36	27.04	1.0	27.04	G
11	Jul	Buck Rows	0.045	0.050	0.20	0.44			0.63	5.0	3.17	G
12	Jul	Irrigate		0.667		5.12			5.12	7.0	35.81	G
13	Jul	Cultivate	0.225	0.250	1.50	2.19			3.70	9.0	33.26	G
14	Jul	Plant Fertility					6.00		6.00	1.0	6.00	G
15	Jul	Irrigate/Run Fertilizer	0.600	0.667	1.94	5.12		30.04	37.09	1.0	37.09	G
16	Jul	Thinning					75.00		75.00	1.0	75.00	G
17	Aug	Apply Insecticide/Air					4.24	55.03	59.27	2.0	118.54	G
18	Aug	Hand Weeding					75.00		75.00	1.0	75.00	G
19	Aug	Apply Fert/Ground	0.257	0.286	2.94	2.51		39.96	45.41	1.0	45.41	G
20	Aug	Pollinate					15.00		15.00	1.0	15.00	G
21	Sep	Harvest, Load & Haul 638					988.90	912.98	1901.88	1.0	1901.88	H
22	Sep	Disk Residue 638 Ct	0.180	0.200	1.95	1.75			3.70	1.0	3.70	L
		Pickup Use 30 Mi/Acre	1.000		7.66						7.66	
		Operating Interest at 10.0					5.64				5.64	
TOTAL CASH OPERATING EXPENSES (includes all times over):											2565.59	T

\*NOTES: Machine and labor hours and operating cost are for one time over the designated acreage. The "Tot. Cash Expense" column and the "TOTAL CASH OPERATING EXPENSES" row include all operations, all times over. Classes are defined below. A water assessment charge of \$12.50 per Acre is included as an ownership cost in Table B.

OPERATING COST SUMMARY BY CLASS

Land Preparation (L)	78.08
Growing (G)	572.33
Harvest (H)	1,901.88
Post Harvest (P)	0.00
Marketing (M)	0.00
Operating Overhead (O)	13.30
Total (T)	\$2,574.0

SENSITIVITY OF THE NET REVENUES OVER TOTAL CASH EXPENSES (\$/ACRE)

Prices ->	- 25%					- 10%		Budgeted	+ 10%	+ 25%	Break-even Price
	Yields										
		2.87	422.03	701.48	980.92	1,400.09	4.37				
		136.75	639.75	975.08	1,310.42	1,813.42	4.14				
Budgeted	638.0	226.01	784.90	1,157.49	1,530.08	2,088.97	4.03				
+ 10%	701.8	315.26	930.04	1,339.89	1,749.74	2,364.52	3.93				
Break-even Yield		476.45	292.99	233.14	193.60	154.33					

**Table 15D. Resource and Cash Flow Requirements; Fall Honeydews, 2001**

COUNTY: Pinal FARM: Southern AZ Veg WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Double Crop  
 CROP: Honeydew Melons ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Maricopa YIELD: 638.0 Ct / Acre PREVIOUS CROP: Wheat, Winter DATE: 10/9/01

Month *	Number Irrigations	Water Applied (inches)	Total Labor (Hrs)	Operating Costs (\$/ACRE *)						
				Purchased Water	Fuel, Oil and Repairs	Labor	Chemicals	Other Purchases	Services	Total
JUN C			1.66		19.14	14.56	34.98		3.00	71.67
JUL C	4.0	20.0	4.77		14.05	38.43	110.82	32.23	81.00	276.53
AUG C	4.0	20.0	3.85		8.04	30.87	95.00		94.24	228.14
SEP C			0.95		6.45	8.33	55.03	912.98	993.14	1975.94
Pickup Use 30 Mi/Acre					7.66					7.66
Operating Interest at 10.0									5.64	5.64
Water Assessment				**						
<b>Total</b>	<b>8.0</b>	<b>40.0</b>	<b>11.23</b>		<b>55.34</b>	<b>92.19</b>	<b>295.83</b>	<b>945.21</b>	<b>1177.04</b>	<b>2565.59</b>
<b>%</b>					<b>2.16</b>	<b>3.59</b>	<b>11.53</b>	<b>36.84</b>	<b>45.88</b>	<b>100.00</b>

TOTAL RESOURCE REQUIREMENTS (per Acre)

Total N 158.2  
 Total P 126.0  
 Total K 15.0  
 Total Labor 11.2  
 Total Water 40.0

TOTAL ENERGY REQUIREMENTS (per Acre)

Diesel Fuel 23.7 Gal  
 Unleaded Gas 3.0 Gal  
 All Direct Energy 3.7 M BTU

EQUIPMENT REQUIREMENTS (per Acre)

Bed Shaper, 4 Rw	0.36 Hr	Cultivator, Sweep, 4 Rw	2.02 Hr	Directed Spray Rig, 8	0.18 Hr
Drag Scraper, 14'	0.22 Hr	Fertilizer Broadcaster,	0.18 Hr	Fertilizer Injector, 4 Row	0.26 Hr
Laser, Complete System	0.22 Hr	Lister, 5 Bottom	0.22 Hr	Moldboard Plow, 4-16 2	0.45 Hr
Offset Disk, 13.5'	0.18 Hr	Offset Disk, 18'	0.30 Hr	Pickup Truck, 1/2 Ton	1.00 Hr
Planter, Drill Type, 4 Row	0.36 Hr	Rowbuck, 10'	0.23 Hr	Saddle Tk Sprayer, 2 Tk 8	0.22 Hr
Tractor, 35 PTO HP	0.60 Hr	Tractor, 50 PTO HP,	0.63 Hr	Tractor, 70 PTO HP,	2.02 Hr
Tractor, 100 PTO HP,	1.20 Hr	Tractor, 150 PTO HP,	1.09 Hr	V-Ripper, 5 Shnk	0.11 Hr

MATERIALS REQUIREMENT (per Acre)

10-10-05, Lqd	30.00 Ga	11-48-00, Dry	200.00 Lb	32-00-00, URAN 32, Lqd	30.00 Ga
Abamectin	10.00 Oz	Bensulide	10.00 Pt	Bifenthrin	10.00 Oz
Endosulfan	2.00 Pt	Honeydew Seeds	1.50 Th	Imidacloprid	5.00 Oz
Water, Pump	40.00 Al	Waxed Cartons	638.00 Ct		

LABOR REQUIREMENT (per Acre)

Irrigators	5.34 Hr	Other	0.40 Hr	Tractor	5.49 Hr
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\*NOTE: P = Previous Year C = Current Year N = Next Year

\*\* A water assessment charge of \$12.50 per Acre is included as an ownership cost in Table B.

**Table 15E. Schedule of Operations; Fall Honeydews, 2001**

COUNTY: Pinal FARM: Southern AZ Veg WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Double Crop  
 CROP: Honeydew Melons ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Maricopa YIELD: 638.0 Ct / Acre PREVIOUS CROP: Wheat, Winter DATE: 10/9/01

First No. Month Times	Operation	Equipment/ Custom Oper		Job Rate Acre/Hr	Material Use and Cost				Service Cost \$ / Unit	Labor Type
		HP	Self-Prop./ Implement		Name	Appl. Rate	\$ / Unit			
Jun	0.5 Rip	150	V-Ripper, 5 Shnk	4.00						Tractor
Jun	2.0 Disk	150	Offset Disk, 18'	6.00						Tractor
Jun	1.0 Plow	150	Moldboard Plow, 4-16 2	2.00						Tractor
Jun	0.5 Laser Level	150	Drag Scraper, 14' Laser, Complete System	2.00						Tractor
Jun	1.0 Soil Fertility		CST Soil Analysis (Surface)						3.00 Ac	
Jun	1.0 Apply Fert/Ground	100	Fertilizer Broadcaster,	5.00	11-48-00, Dry	200.00	Lb	330.00	Tn	Tractor
Jun	1.0 List	100	Lister, 5 Bottom	4.00						Tractor
Jul	1.0 Plant	100	Planter, Drill Type, 4 Row Bed Shaper, 4 Rw	2.50	Honeydew Seeds	1.50	Th	20.27	Th	Tractor Other
Jul	1.0 Apply Herbicide/Ground	50	Saddle Tk Sprayer, 2 Tk 8	4.00	Bensulide	10.00	Pt	42.58	Ga	Tractor
Jul	1.0 Apply Insect./Ground	50	Directed Spray Rig, 8 Row	5.00	Imidaclopid	5.00	Oz	588.40	Ga	Tractor
Jul	5.0 Buck Rows	50	Rowbuck, 10'	20.00						Tractor
Jul	7.0 Irrigate			1.50	Water, Pump	5.00	Al	0.00	AF	Irrigators
Jul	9.0 Cultivate	70	Cultivator, Sweep, 4 Rw	4.00						Tractor
Jul	1.0 Plant Fertility		CST Plant Tissue Anal.(Petiole)						6.00 Ac	
Jul	1.0 Irrigate/Run Fertilizer		Tractor, 35 PTO HP	1.50	Water, Pump 32-00-00, URAN 32,	5.00	Al	0.00	AF	Irrigators
Jul	1.0 Thinning		CST Thinning							75.00 Ac
Aug	2.0 Apply Insecticide/Air		CST Air Spray, 3 Gal Mix		Bifenthrin	5.00	Oz	490.00	Ga	4.24 Ac
					Endosulfan	1.00	Pt	33.17	Ga	
					Abamectin	5.00	Oz	732.91	Ga	
Aug	1.0 Hand Weeding		CST Hand Weeding							75.00 Ac
Aug	1.0 Apply Fert/Ground	100	Fertilizer Injector, 4 Row	3.50	10-10-05, Lqd	30.00	Ga	251.33	Tn	Tractor
Aug	1.0 Pollinate		CST Bee Hive Rental							15.00 Ac
Sep	1.0 Harvest, Load & Haul		CST Harv/pack/haul Melons		Waxed Cartons	638.00	Ct	1.35	Ct	1.55 Ct
Sep	1.0 Disk Residue	100	Offset Disk, 13.5'	5.00						Tractor
	Pickup use 30 Mi/Ac		Pickup Truck, 1/2 Ton	1.00						

\*NOTES: Machine times, labor times, and material rates are for one time over the designated acreage.

**Table 15F Operations Calendar; Fall Honeydews, 2001**

COUNTY: Pinal FARM: Southern Vegetables WATER SOURCE: MSID TILLAGE: Conventional  
 CROP: Honeydew Melons ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Maricopa YIELD: 638 Ct/Acre PREVIOUS CROP: Wheat, Winter DATE: 10/09/01

No.	Operation	Month and Times Operation Performed											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	Rip						0.5 C						
2	Disk						2.0 C						
3	Plow						1.0 C						
4	Laser Level						0.5 C						
5	Soil Fertility						1.0 C						
6	Apply Fert/Ground						1.0 C						
7	List						1.0 C						
8	Plant							1.0 C					
9	Apply Herbicide/Ground							1.0 C					
10	Apply Insect/Ground							1.0 C					
11	Buck Rows							2.0 C	3.0 C				
12	Irrigate							3.0 C	4.0 C				
13	Cultivate							3.0 C	3.0 C	3.0 C			
14	Plant Fertility							1.0 C					
15	Irrigate/Run Fertilizer							1.0 C					
16	Thinning							1.0 C					
17	Apply Insecticide/Air								1.0 C	1.0 C			
18	Hand Weeding								1.0 C				
19	Apply Fert/Ground								1.0 C				
20	Pollinate								1.0 C				
21	Harvest, Load & Haul									1.0 C			
22	Disk Residue									1.0 C			

\* NOTE: P = Previous Year C = Current Year N = Next Year

**Table 16A. Income and Cash Operating Summary; Red Potatoes, 2001**

COUNTY: Pinal                      FARM: Southern AZ Veg                      WATER SOURCE: Coolidge, Electric                      TILLAGE: Conventional  
 CROP: Potatoes, Early                      ACRES: 1.0                      IRRIGATION SYSTEM: Flood Furrow                      SOIL: Sandy-Loam  
 AREA: Coolidge Area                      YIELD: 291.0 CW / Acre                      PREVIOUS CROP: Wheat, Winter                      DATE: 10/9/01

Item	Unit	Quantity	Price/ Unit	Budgeted /Acre	Total /Acre	Your Farm Budget
INCOME -> Potatoes	Hundred Lbs	291.00	\$9.98	\$2,904.18	\$2,904.18	_____
CASH LAND PREPARATION AND GROWING EXPENSES (including sales tax)						
Paid Labor (including benefits)					130.09	_____
Tractor/Self Propelled				60.54		_____
Irrigation				43.26		_____
Other/ Contract				26.29		_____
Chemicals and Custom Applications					150.35	_____
Fertilizer				101.55		_____
Insecticide				11.38		_____
Herbicide				4.96		_____
Other Chemicals				32.47		_____
Farm Machinery and Vehicles					73.23	_____
Diesel Fuel				24.60		_____
Gasoline				3.54		_____
Repairs and Maintenance				45.09		_____
Irrigation Water (excluding labor)					171.68	_____
Pump Energy - Electric				147.06		_____
Repairs and Maintenance				24.62		_____
Water Assessment (See Note Below) **						_____
Other Purchased Inputs & Seed/Transplants				699.60	699.60	_____
TOTAL CASH LAND PREPARATION AND GROWING EXPENSES					1224.96	_____
CASH HARVEST AND POST HARVEST EXPENSES						
Paid Labor (including benefits)					49.77	_____
Tractor/Self Propelled				26.76		_____
Other/Contract				23.01		_____
Farm Machinery and Vehicles					46.23	_____
Diesel Fuel				10.54		_____
Repairs and Maintenance				35.69		_____
TOTAL HARVEST AND POST HARVEST EXPENSE					96.00	_____
OPERATING OVERHEAD -> PICKUP USE					15.32	_____
OPERATING INTEREST AT 10.0%					29.02	_____
TOTAL CASH OPERATING EXPENSES					\$1,365.30	_____
RETURNS OVER CASH OPERATING EXPENSES					\$1,538.88	_____

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Notes: The above figures do not include ownership costs, see table B for detailed cost allocation.

**Table 16B. Allocations of Ownership Costs; Red Potatoes, 2001**

COUNTY: Pinal                      FARM: Southern AZ Veg                      WATER SOURCE: Coolidge, Electric                      TILLAGE: Conventional  
 CROP: Potatoes, Early                      ACRES: 1.0                      IRRIGATION SYSTEM: Flood Furrow                      SOIL: Sandy-Loam  
 AREA: Coolidge Area                      YIELD: 291.0 CW / Acre                      PREVIOUS CROP: Wheat, Winter                      DATE: 10/9/01

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Item	-- CASH COST BASIS (\$/ACRE) --		-- TOTAL COST BASIS (\$/ACRE) --	
	Income and Costs	Net Returns	Income and Costs	Net Returns
TOTAL INCOME at \$9.98 / CW	\$2,904.18		\$2,904.18	
TOTAL OPERATING EXPENSES	\$1,365.30		\$1,365.30	
RETURN OVER CASH OPERATING EXPENSES		\$1,538.88		\$1,538.88
CASH OVERHEAD EXPENSES				
Taxes, Housing and Insurance, Farm Machinery	13.98		13.98	
Wells and Irrigation System	8.30		8.30	
General and Office Overhead (5.0%of Total Operating Exp.)	68.26		68.26	
General Farm Maintenance (3.0% of Total Operating Exp.)	40.96		40.96	
Total Cash Overhead Expenses	131.50		131.50	
Total Cash Operating and Overhead Cost	1,496.80		1,496.80	
RETURNS OVER CASH OPER. AND OVER. EXPENSES		\$1,407.38		\$1,407.38
CAPITAL ALLOCATIONS (100% Equity)				
Capital Replacement, Machinery and Vehicles			84.17	
Wells and Irrigation System			31.83	
Interest on Equity, Machinery and Vehicles			36.10	
Wells and Irrigation System			15.73	
Total Capital Allocations			167.83	
RETURNS TO LAND, CAPITAL, MANAGEMENT AND RISK ----->		\$1,407.38		
RETURNS TO LAND, MANAGEMENT AND RISK ----->				\$1,239.56
Land Cost / Rent or Lease	100.00		100.00	
Total Land Costs	100.00		100.00	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		\$1,307.38		
RETURNS TO MANAGEMENT AND RISK ----->				\$1,139.56
Management Services (8% of Total Operation Expenses)			109.22	
TOTAL OWNERSHIP COST	231.50		508.55	
TOTAL COST	\$1,596.80		\$1,873.85	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		\$1,307.38		
RETURNS TO RISK (PROFITS) ----->				\$1,030.33
Item	-- CASH COST BASIS (\$/ACRE) --		-- TOTAL COST BASIS (\$/ACRE) --	
	Income and Costs	Net Returns	Income and Costs	Net Returns
BREAK-EVEN PRICE TO COVER OPERATING COST ( PER Lb )		\$4.69		\$4.69
BREAK-EVEN PRICE TO COVER OWNERSHIP COST		\$0.80		\$1.75
BREAK-EVEN PRICE TO COVER TOTAL COST		\$5.49		\$6.44

**Table 16C. Variable Operating Costs; Red Potatoes, 2001**

COUNTY: Pinal FARM: Southern AZ Veg WATER SOURCE: Coolidge, Electric TILLAGE: Conventional  
 CROP: Potatoes, Early ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Coolidge Area YIELD: 291.0 CW / Acre PREVIOUS CROP: Wheat, Winter DATE: 10/9/01

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No.	First Month	Operation	---- Hours * ----		---- Operating Costs (\$/ACRE *) Per Operation ----					Tot. Cash Expenses	Class		
			Machine	Labor	Fuel/Rps.	Labor	Cust/Serv.	Materials	Total			Times	
1	Nov	Rip	0.225	0.250	2.88	2.19			5.07	0.5	2.53	L	
2	Nov	Plow	0.450	0.500	6.53	4.39			10.92	1.0	10.92	L	
3	Nov	Disk	0.225	0.250	3.44	2.19			5.64	3.0	16.91	L	
4	Nov	List	0.225	0.250	2.03	2.19			4.23	1.0	4.23	L	
5	Nov	Buck Rows	0.045	0.050	0.23	0.44			0.67	3.0	2.01	G	
6	Nov	Preirrigate		0.377	11.95	2.89			14.84	1.0	14.84	G	
7	Dec	Mulch	0.300	0.333	2.36	2.92			5.28	1.0	5.28	L	
8	Dec	Prep/Haul Seed Potato	0.900	2.000	9.97	10.55			20.53	1.0	20.53	L	
9	Dec	Plant	0.750	1.666	15.33	13.70		764.93	793.96	1.0	793.96	L	
10	Jan	Apply Herbicide/Ground	0.300	0.333	3.17	2.92		4.96	11.05	1.0	11.05	G	
11	Jan	Hilling	0.360	0.400	3.05	3.51			6.56	3.0	19.69	L	
12	Jan	Disk Ends	0.045	0.050	0.49	0.44			0.93	2.0	1.85	G	
13	Jan	Irrigate/Run Fertilizer		0.658	20.90	5.05		24.80	50.75	2.0	101.51	G	
14	Feb	Irrigate		0.658	20.90	5.05			25.95	6.0	155.70	G	
15	Apr	Apply Insecticide/Air						4.75	25.70	30.45	1.0	30.45	G
16	Apr	Prepare Ends	0.045	0.050	0.49	0.44			0.93	1.0	0.93	H	
17	Apr	Cut Vines	0.750	0.833	6.67	7.31			13.98	1.0	13.98	G	
18	Apr	Disk Ends	0.045	0.050	0.24	0.44			0.68	1.0	0.68	G	
19	Apr	Knock Ditches	0.045	0.050	0.23	0.44			0.67	1.0	0.67	G	
20	Apr	Roll Beds	0.129	0.143	0.65	1.25			1.91	1.0	1.91	L	
21	Apr	Dig	0.900	2.000	31.63	16.44			48.07	1.0	48.07	H	
22	Apr	Haul 10	1.800	4.000	14.12	32.88			47.00	1.0	47.00	H	
23	May	Disk Residue	0.225	0.250	3.44	2.19			5.64	1.0	5.64	L	
		Pickup Use 60 Mi/Acre	2.000		15.32						15.32		
		Operating Interest at 10.0						29.02			29.02		
TOTAL CASH OPERATING EXPENSES (includes all times over):											1365.30	T	

\*NOTES: Machine and labor hours and operating cost are for one time over the designated acreage. The "Tot. Cash Expense" column and the "TOTAL CASH OPERATING EXPENSES" row include all operations, all times over. Classes are defined below.

OPERATING COST SUMMARY BY CLASS

Land Preparation (L)	881.59
Growing (G)	343.37
Harvest (H)	96.00
Post Harvest (P)	0.00
Marketing (M)	0.00
Operating Overhead (O)	44.34
Total (T)	\$1,365.30

SENSITIVITY OF THE NET REVENUES OVER TOTAL CASH EXPENSES (\$/ACRE)

Prices ->	- 25%					- 10%		Budgeted	+ 10%	+ 25%	Break-even Price
	Yields										
- 25%	218.3	331.95	658.67	876.49	1,094.30	1,421.02	5.96				
- 10%	261.9	644.27	1,036.34	1,297.71	1,559.09	1,951.15	5.03				
Budgeted	291.0	852.49	1,288.11	1,578.53	1,868.95	2,304.58	4.56				
+ 10%	320.1	1,060.70	1,539.89	1,859.35	2,178.81	2,658.00	4.17				
Break-even Yield		171.86	142.12	127.42	115.48	101.25					

**Table16D. Resource and Cash Flow Requirements; Red Potatoes, 2001**

COUNTY: Pinal FARM: Southern AZ Veg WATER SOURCE: Coolidge, Electric TILLAGE: Conventional  
 CROP: Potatoes, Early ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Coolidge Area YIELD: 291.0 CW / Acre PREVIOUS CROP: Wheat, Winter DATE: 10/9/01

Month *	Number Irrigations	Water Applied (inches)	Total Labor (Hrs)	Operating Costs (\$/ACRE *)						
				Purchased Water	Fuel, Oil and Repairs	Labor	Chemicals	Other Purchases	Services	Total
NOV P	1.0	4.0	1.80		29.07	15.39				44.46
DEC P			8.92		31.11	47.49	65.33	699.60		839.95
JAN C	1.0	7.0	1.49		27.84	12.35	29.76			69.95
FEB C	3.0	21.0	1.97		62.71	15.14	24.80			102.65
MAR C	2.0	14.0	1.72		44.86	13.60				58.46
APR C	2.0	14.0	8.94		99.60	73.69	25.70		4.75	199.86
MAY C			0.25		3.44	2.19				5.63
Pickup Use 60 Mi/Acre					15.32					15.32
Operating Interest at 10.0									29.02	29.02
<b>Total</b>	<b>9.0</b>	<b>60.0</b>	<b>25.09</b>		<b>313.95</b>	<b>172.09</b>	<b>145.59</b>	<b>699.90</b>	<b>33.77</b>	<b>1365.30</b>
<b>%</b>					<b>22.99</b>	<b>12.60</b>	<b>10.66</b>	<b>51.26</b>	<b>2.47</b>	<b>100.00</b>

TOTAL RESOURCE REQUIREMENTS (per Acre)

Total N 150.0  
 Total P 184.0  
 Total Labor 25.1  
 Total Water 60.0

TOTAL ENERGY REQUIREMENTS (per Acre)

Diesel Fuel 40.7 Gal  
 Unleaded Gas 8.7 Gal  
 Electric / Pumping 3887.4 KWH  
 All Direct Energy 20.0 M BTU

EQUIPMENT REQUIREMENTS (per Acre)

Bed Roller, 4 Rw	0.13 Hr	Blade Scraper, 10'	0.05 Hr	Flat Trailer	0.90 Hr
Hiller, 4 Row	1.08 Hr	Lister, 5 Bottom	0.22 Hr	Moldboard Plow, 4-16 2	0.45 Hr
Offset Disk, 13.5'	0.14 Hr	Offset Disk, 16.5'	0.90 Hr	Offset Disk, 8'	0.05 Hr
Pickup Truck, 1/2 Ton	2.90 Hr	Planter, Potato 3 Comp. 4	0.75 Hr	Potato Harvester, 4 Row	0.90 Hr
Power Mulcher, 4 Rw	0.30 Hr	Rolling Cultivator, 4 Rw	0.30 Hr	Root Cutter-Puller, 4 Row	0.75 Hr
Rowbuck, 10'	0.14 Hr	Saddle Tk Sprayer, 2 Tk 8	0.30 Hr	Tractor, 50 PTO HP,	0.05 Hr
Tractor, 60 PTO HP,	2.41 Hr	Tractor, 100 PTO HP,	3.24 Hr	Tractor, 150 PTO HP,	2.36 Hr
V-Ripper, 5 Shnk	0.11 Hr	Vegetable Trailer Flat Bed	1.80 Hr		

MATERIALS REQUIREMENT (per Acre)

18-46-00, Dry	400.00 Lb	20-0-0-45, Nitro-Sul	40.00 Ga	Carbaryl	2.00 Pt
Metalaxyl	0.50 Pt	Paraquat	0.50 Ga	Potato Seed	30.00 C
Trifluralin	1.50 Pt	Water, Pump	60.00 Al		

LABOR REQUIREMENT (per Acre)

Cutter	4.00 Hr	Irrigators	5.64 Hr	Other	5.50 Hr
Tractor	9.95 Hr				

\*NOTE: P = Previous Year C = Current Year N = Next Year

**Table 16E. Schedule of Operations; Red Potatoes, 2001**

COUNTY: Pinal FARM: Southern AZ Veg WATER SOURCE: Coolidge, Electric TILLAGE: Conventional  
 CROP: Potatoes, Early ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Coolidge Area YIELD: 291.0 CW / Acre PREVIOUS CROP: Wheat, Winter DATE: 10/9/01

First No. Month	Times	Operation	Equipment/ Custom Oper		Job Rate Acre/Hr	Material Use and Cost				Service Cost \$ / Unit	Labor Type
			HP	Self-Prop./ Implement		Name	Appl. Rate	\$ / Unit	\$ / Unit		
Nov	0.5	Rip	150	V-Ripper, 5 Shnk	4.00						Tractor
Nov	1.0	Plow	150	Moldboard Plow, 4-16 2	2.00						Tractor
Nov	3.0	Disk	150	Offset Disk, 16.5'	4.00						Tractor
Nov	1.0	List	100	Lister, 5 Bottom	4.00						Tractor
Nov	3.0	Buck Rows	60	Rowbuck, 10'	20.00						Tractor
Nov	1.0	Preirrigate			2.65	Water, Pump	4.00	Al	35.84	AF	Irrigators
Dec	1.0	Mulch	60	Power Mulcher, 4 Rw	3.00						Tractor
Dec	1.0	Prep/Haul Seed Potato		Pickup Truck, 1/2 Ton	1.00						Tractor
Dec	1.0	Plant		100 Planter, Potato 3 Comp. 4	1.20	Potato Seed	30.00	C	22.00	CW	Tractor
						18-46-00, Dry	400.00	Lb	245.00	Tn	Other
						Metalaxyl	0.50	Pt	202.05	Ga	
Jan	1.0	Apply Herbicide/Ground	100	Saddle Tk Sprayer, 2 Tk 8	3.00	Trifluralin	1.50	Pt	24.95	Ga	Tractor
				Rolling Cultivator, 4 Rw							
Jan	3.0	Hilling	100	Hiller, 4 Row	2.50						Tractor
Jan	2.0	Disk Ends	100	Offset Disk, 13.5'	20.00						Tractor
Jan	2.0	Irrigate/Run Fertilizer			1.52	Water, Pump	7.00	Al	35.84	AF	Irrigators
						20-0-0-45, Nitro-Sul	20.00	Ga	240.00	Tn	
Feb	6.0	Irrigate			1.52	Water, Pump	7.00	Al	35.84	AF	Irrigators
Apr	1.0	Apply Insecticide/Air		CST Air Spray, 5 Gal Mix		Carbaryl	2.00	Pt	25.00	Ga	4.75 Ac
						Paraquat	0.50	Ga	36.00	Ga	
Apr	1.0	Prepare Ends	100	Offset Disk, 13.5'	20.00						Tractor
Apr	1.0	Cut Vines	100	Root Cutter-Puller, 4 Row	1.20						Tractor
Apr	1.0	Disk Ends	50	Offset Disk, 8'	20.00						Tractor
Apr	1.0	Knock Ditches	60	Blade Scraper, 10'	20.00						Tractor
Apr	1.0	Roll Beds	60	Bed Roller, 4 Rw	7.00						Tractor
Apr	1.0	Dig	150	Potato Harvester, 4 Row	1.00						Tractor
											Other
Apr	1.0	Haul	60	Vegetable Trailer Flat Bed	0.50						Tractor
											Other
May	1.0	Disk Residue	150	Offset Disk, 16.5'	4.00						Tractor
		Pickup use 60 Mi/Ac		Pickup Truck, 1/2 Ton	0.50						

\*NOTES: Machine times, labor times, and material rates are for one time over the designated acreage.

**Table 16F Operations Calendar; Red Potatoes, 2001**

COUNTY: Pinal                      FARM: Southern Vegetables                      WATER SOURCE: Coolidge, Electric                      TILLAGE: Conventional  
 CROP: Potatoes                      ACRES: 1.0                      IRRIGATION SYSTEM: Flood Furrow                      SOIL: Sandy-Loam  
 AREA: Coolidge Area                      YIELD: 291.0 Cw/Acre                      PREVIOUS CROP: Wheat, Winter                      DATE: 10/09/01

No.	Operation	Month and Times Operation Performed											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	Rip												0.5 P
2	Plow												1.0 P
3	Disk												2.0 P
4	List												1.0 P
5	Buck Rows	1.0 C			1.0 C								1.0 P
6	Preirrigate												1.0 P
7	Mulch												1.0 P
8	Prep/Haul Seed Potato												1.0 P
9	Plant												1.0 P
10	Apply Herbicide/Ground	1.0 C											
11	Hilling	1.0 C		1.0 C	1.0 C								
12	Disk Ends	1.0 C			1.0 C								
13	Irrigate/Run Fertilizer	1.0 C	1.0 C										
14	Irrigate		2.0 C	2.0 C	2.0 C								
15	Apply Insecticide/Air				1.0 C								
16	Prepare Ends				1.0 C								
17	Cut Vines				1.0 C								
18	Disk Ends				1.0 C								
19	Knock Ditches				1.0 C								
20	Roll Beds				1.0 C								
21	Dig				1.0 C								
22	Haul				1.0 C								
23	Disk Residue												1.0 C

\* NOTE: P = Previous Year    C = Current Year    N = Next Year

**Table 17A. Income and Cash Operating Summary; Spring Cantaloupe, 2001**

COUNTY: Pinal                      FARM: Southern AZ Veg                      WATER SOURCE: Maricopa-Stanfield Irrig.                      TILLAGE: Double Crop  
 CROP: Cantaloupes                      ACRES: 1.0                      IRRIGATION SYSTEM: Flood Furrow                      SOIL: Sandy-Loam  
 AREA: Maricopa                      YIELD: 360.0 Ct / Acre                      PREVIOUS CROP: Cotton, Upland                      DATE: 10/8/01

Item	Unit	Quantity	Price/ Unit	Budgeted /Acre	Total /Acre	Your Farm Budget
INCOME -> Melons	Ctrn	360.00	\$13.10	\$4,716.00	\$4,716.00	_____
CASH LAND PREPARATION AND GROWING EXPENSES (including sales tax)						
Paid Labor (including benefits)					100.06	_____
Tractor/Self Propelled				43.92		_____
Irrigation				51.15		_____
Other/ Contract				4.98		_____
Chemicals and Custom Applications					186.07	_____
Fertilizer				129.65		_____
Herbicide				56.42		_____
Farm Machinery and Vehicles					44.30	_____
Diesel Fuel				18.45		_____
Repairs and Maintenance				25.86		_____
Irrigation Water (excluding labor)					111.67	_____
Water Assessment (See Note Below) **						_____
Other Purchased Inputs & Seed/Transplants				20.06	263.06	_____
Other Services and Rentals				243.00		_____
TOTAL CASH LAND PREPARATION AND GROWING EXPENSES					705.15	_____
CASH HARVEST AND POST HARVEST EXPENSES						
Custom Harvest/Post Harvest					558.00	_____
Other Materials					267.12	_____
TOTAL HARVEST AND POST HARVEST EXPENSE					825.12	_____
OPERATING OVERHEAD -> PICKUP USE					7.66	_____
OPERATING INTEREST AT 10.0%					9.19	_____
TOTAL CASH OPERATING EXPENSES					\$1,547.12	_____
RETURNS OVER CASH OPERATING EXPENSES					\$3,168.88	_____

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Notes: The above figures do not include ownership costs, see table B for detailed cost allocation.

\*\* A water assessment charge of \$12.50 per Acre is included as an ownership cost in Table B.

**Table 17B. Allocations of Ownership Costs; Spring Cantaloupe, 2001**

COUNTY: Pinal                      FARM: Southern AZ Veg                      WATER SOURCE: Maricopa-Stanfield Irrig.                      TILLAGE: Double Crop  
 CROP: Cantaloupes                      ACRES: 1.0                      IRRIGATION SYSTEM: Flood Furrow                      SOIL: Sandy-Loam  
 AREA: Maricopa                      YIELD: 360.0 Ct / Acre                      PREVIOUS CROP: Cotton, Upland                      DATE: 10/8/01

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Item	-- CASH COST BASIS (\$/ACRE) --		-- TOTAL COST BASIS (\$/ACRE) --	
	Income and Costs	Net Returns	Income and Costs	Net Returns
TOTAL INCOME at \$13.10 / Ct	\$4,716.00		\$4,716.00	
TOTAL OPERATING EXPENSES	\$1,547.12		\$1,547.12	
RETURN OVER CASH OPERATING EXPENSES		\$3,168.88		\$3,168.88
CASH OVERHEAD EXPENSES				
Taxes, Housing and Insurance, Farm Machinery	4.99		4.99	
General and Office Overhead (5.0% of Total Operating Exp.)	77.36		77.36	
General Farm Maintenance (3.0% of Total Operating Exp.)	46.41		46.41	
Total Cash Overhead Expenses	128.76		128.76	
Total Cash Operating and Overhead Cost	1,675.88		1,675.88	
RETURNS OVER CASH OPER. AND OVER. EXPENSES		\$3,040.12		\$3,040.12
CAPITAL ALLOCATIONS (100% Equity)				
Capital Replacement, Machinery and Vehicles			27.64	
Interest on Equity, Machinery and Vehicles			12.08	
Total Capital Allocations			39.72	
RETURNS TO LAND, CAPITAL, MANAGEMENT AND RISK ----->		\$3,040.12		
RETURNS TO LAND, MANAGEMENT AND RISK ----->				\$3,000.40
Land Cost / Rent or Lease	100.00		100.00	
Water Assessment **	12.50		12.50	
Total Land Costs	112.50		112.50	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		\$2,927.62		
RETURNS TO MANAGEMENT AND RISK ----->				\$2,887.90
Management Services (8% of Total Operation Expenses)			123.77	
TOTAL OWNERSHIP COST	241.26		404.75	
TOTAL COST	\$1,788.38		\$1,951.87	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		\$2,927.62		
RETURNS TO RISK (PROFITS) ----->				\$2,764.13
Item	-- CASH COST BASIS (\$/ACRE) --		-- TOTAL COST BASIS (\$/ACRE) --	
	Income and Costs	Net Returns	Income and Costs	Net Returns
BREAK-EVEN PRICE TO COVER OPERATING COST ( PER Lb )		\$4.30		\$4.30
BREAK-EVEN PRICE TO COVER OWNERSHIP COST		\$0.67		\$1.12
BREAK-EVEN PRICE TO COVER TOTAL COST		\$4.97		\$5.42

**Table 17C. Variable Operating Costs; Spring Cantaloupe, 2001**

COUNTY: Pinal FARM: Southern AZ Veg WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Double Crop  
 CROP: Cantaloupes ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Maricopa YIELD: 360.0 Ct / Acre PREVIOUS CROP: Cotton, Upland DATE: 10/8/01

No.	First Month	Operation	---- Hours * ----		---- Operating Costs (\$/ACRE *) Per Operation ----					Tot. Cash Expenses	Class	
			Machine	Labor	Fuel/Rps.	Labor	Cust/Serv.	Materials	Total			Times
1	Feb	Disk	0.150	0.167	2.45	1.47			3.92	2.0	7.83	L
2	Feb	Plow	0.450	0.500	6.53	4.39			10.92	1.0	10.92	L
3	Feb	Laser Level	0.450	1.000	4.52	8.22			12.74	0.5	6.37	L
4	Feb	Soil Fertility					3.00		3.00	1.0	3.00	G
5	Feb	Apply Fert/Ground	0.180	0.200	1.44	1.75		34.98	38.17	1.0	38.17	G
6	Feb	Apply Herbicide/Ground	0.225	0.250	1.46	2.19		56.42	60.08	1.0	60.08	G
7	Feb	Incorporate Herbicide	0.225	0.250	2.31	2.19			4.50	1.0	4.50	G
8	Feb	List	0.225	0.250	2.03	2.19			4.23	1.0	4.23	L
9	Mar	Plant	0.360	0.800	5.08	6.58		20.06	31.71	1.0	31.71	L
10	Mar	Buck Rows	0.023	0.025	0.10	0.22			0.32	6.0	1.92	G
11	Mar	Irrigate		0.667		5.12		11.17	16.28	10.0	162.82	G
12	Mar	Disk Ends	0.023	0.025	0.14	0.22			0.36	6.0	2.15	G
13	Mar	Cultivate	0.225	0.250	1.50	2.19			3.70	6.0	22.18	G
14	Mar	Apply Fert/Ground	0.257	0.286	2.94	2.51		54.71	60.17	1.0	60.17	G
15	Mar	Thinning					75.00		75.00	1.0	75.00	G
16	Apr	Hand Weeding					75.00		75.00	2.0	150.00	G
17	Apr	Apply Fert/Ground	0.257	0.286	2.94	2.51		39.96	45.41	1.0	45.41	G
18	Apr	Pollinate					15.00		15.00	1.0	15.00	G
19	May	Harvest, Load & Haul 360					558.00	267.12	825.12	1.0	825.12	H
20	May	Disk Residue 360 Ct	0.180	0.200	1.95	1.75			3.70	1.0	3.70	L
		Pickup Use 30 Mi/Acre	1.000		7.66						7.66	
		Operating Interest at 10.0					9.19				9.19	
TOTAL CASH OPERATING EXPENSES (includes all times over):											1547.12	T

\*NOTES: Machine and labor hours and operating cost are for one time over the designated acreage. The "Tot. Cash Expense" column and the "TOTAL CASH OPERATING EXPENSES" row include all operations, all times over. Classes are defined below. A water assessment charge of \$12.50 per Acre is included as an ownership cost in Table B.

OPERATING COST SUMMARY BY CLASS

Land Preparation (L)	64.76
Growing (G)	640.39
Harvest (H)	825.12
Post Harvest (P)	0.00
Marketing (M)	0.00
Operating Overhead (O)	16.85
Total (T)	\$1,547.12

SENSITIVITY OF THE NET REVENUES OVER TOTAL CASH EXPENSES (\$/ACRE)

Prices ->	- 25%	- 10%	Budgeted	+ 10%	+ 25%		
Yields	\$9.83	\$11.79	\$13.10	\$14.41	\$16.38	Break-even Price	
- 25%	270.0	1,171.09	1,701.64	2,055.34	2,409.04	2,939.59	5.49
- 10%	324.0	1,577.88	2,214.54	2,638.98	3,063.42	3,700.08	4.96
Budgeted	360.0	1,849.06	2,556.46	3,028.06	3,499.67	4,207.06	4.69
+ 10%	396.0	2,120.25	2,898.39	3,417.15	3,935.91	4,714.05	4.47
+ 25%	450.0	2,527.03	3,411.28	4,000.78	4,590.29	5,474.53	4.21
Break-even Yield		114.54	90.84	79.83	71.20	61.27	

**Table 17D. Resource and Cash Flow Requirements; Spring Cantaloupe, 2001**

COUNTY: Pinal FARM: Southern AZ Veg WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Double Crop  
 CROP: Cantaloupes ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Maricopa YIELD: 360.0 Ct / Acre PREVIOUS CROP: Cotton, Upland DATE: 10/8/01

Month *	Number Irrigations	Water Applied (inches)	Total Labor (Hrs)	Operating Costs (\$/ACRE *)						
				Purchased Water	Fuel, Oil and Repairs	Labor	Chemicals	Other Purchases	Services	Total
FEB C			2.28		20.95	19.76	91.40		3.00	135.11
MAR C	4.0	16.0	4.58	44.67	12.87	36.78	54.71	20.06	75.00	244.09
APR C	3.0	12.0	2.91	33.50	6.56	23.34	39.96		165.00	268.36
MAY C	3.0	12.0	2.35	33.50	1.98	18.42				53.90
JUN C			0.20		1.95	1.75		267.12	558.00	828.82
Pickup Use 30 Mi/Acre					7.66					7.66
Operating Interest at 10.0 Water Assessment				**					9.19	9.19
<b>Total</b>	<b>10.0</b>	<b>40.0</b>	<b>12.33</b>	<b>111.67</b>	<b>51.97</b>	<b>100.05</b>	<b>186.07</b>	<b>287.18</b>	<b>810.19</b>	<b>1547.12</b>
<b>%</b>				<b>7.22</b>	<b>3.36</b>	<b>6.47</b>	<b>12.03</b>	<b>18.56</b>	<b>52.37</b>	<b>100.00</b>

**TOTAL RESOURCE REQUIREMENTS (per Acre)**

Total N 101.9  
 Total P 152.6  
 Total K 28.3  
 Total Labor 12.3  
 Total Water 40.0

**TOTAL ENERGY REQUIREMENTS (per Acre)**

Diesel Fuel 21.4 Gal  
 Unleaded Gas 3.0 Gal  
 All Direct Energy 3.3 M BTU

**EQUIPMENT REQUIREMENTS (per Acre)**

Bed Shaper, 4 Rw	0.36 Hr	Cultivator, Sweep, 4 Rw	1.35 Hr	Directed Spray Rig, 8	0.22 Hr
Drag Scraper, 10'	0.22 Hr	Fertilizer Broadcaster,	0.18 Hr	Fertilizer Injector, 4 Row	0.51 Hr
Laser, Complete System	0.22 Hr	Lister, 5 Bottom	0.22 Hr	Moldboard Plow, 4-16 2	0.45 Hr
Offset Disk, 10.5'	0.14 Hr	Offset Disk, 12'	0.22 Hr	Offset Disk, 13.5'	0.18 Hr
Offset Disk, 18'	0.30 Hr	Pickup Truck, 1/2 Ton	1.00 Hr	Planter, Drill Type, 4 Row	0.36 Hr
Rowbuck, 10'	0.14 Hr	Tractor, 50 PTO HP,	0.28 Hr	Tractor, 70 PTO HP,	1.57 Hr
Tractor, 100 PTO HP,	1.68 Hr	Tractor, 125 PTO HP,	0.22 Hr	Tractor, 150 PTO HP,	0.75 Hr

**MATERIALS REQUIREMENT (per Acre)**

10-10-05, Lqd	30.00 Ga	11-48-00, Dry	200.00 Lb	15-08-04, Lqd	30.00 Ga
Bensulide	10.00 Pt	Cantaloupe Cartons	360.00 Ct	Cantaloupe Sd	2.00 Lb
Water, District	40.00 Al				

**LABOR REQUIREMENT (per Acre)**

Irrigators	6.67 Hr	Other	0.65 Hr	Tractor	5.01 Hr
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\*NOTE: P = Previous Year C = Current Year N = Next Year

\*\* A water assessment charge of \$12.50 per Acre is included as an ownership cost in Table B.

**Table 17E. Schedule of Operations; Spring Cantaloupe, 2001**

COUNTY: Pinal FARM: Southern AZ Veg WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Double Crop  
 CROP: Cantaloupes ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Maricopa YIELD: 360.0 Ct / Acre PREVIOUS CROP: Cotton, Upland DATE: 10/8/01

First No. Month Times	Operation	Equipment/ Custom Oper		Job Rate Acre/Hr	Material Use and Cost			Service Cost \$ / Unit	Labor Type
		HP	Self-Prop./ Implement		Name	Appl. Rate	\$ / Unit		
Feb 2.0	Disk	150	Offset Disk, 18'	6.00					Tractor
Feb 1.0	Plow	150	Moldboard Plow, 4-16 2	2.00					Tractor
Feb 0.5	Laser Level	125	Drag Scraper, 10'	2.00					Tractor
			Laser, Complete System						Other
Feb 1.0	Soil Fertility		CST Soil Analysis (Surface)					3.00 Ac	
Feb 1.0	Apply Fert/Ground	100	Fertilizer Broadcaster,	5.00	11-48-00, Dry	200.00 Lb	330.00 Tn		Tractor
Feb 1.0	Apply Herbicide/Ground	70	Directed Spray Rig, 8 Row	4.00	Bensulide	10.00 Pt	42.58 Ga		Tractor
Feb 1.0	Incorporate Herbicide	100	Offset Disk, 12'	4.00					Tractor
Feb 1.0	List	100	Lister, 5 Bottom	4.00					Tractor
Mar 1.0	Plant	100	Planter, Drill Type, 4 Row	2.50	Cantaloupe Sd	2.00 Lb	9.46 Lb		Tractor
			Bed Shaper, 4 Rw						Other
Mar 6.0	Buck Rows		50 Rowbuck, 10'	40.00					Tractor
Mar 10.0	Irrigate			1.50	Water, District	4.00 Al	33.50 AF		Irrigators
Mar 6.0	Disk Ends	50	Offset Disk, 10.5'	40.00					Tractor
Mar 6.0	Cultivate	70	Cultivator, Sweep, 4 Rw	4.00					Tractor
Mar 1.0	Apply Fert/Ground	100	Fertilizer Injector, 4 Row	3.50	15-08-04, Lqd	30.00 Ga	310.00 Tn		Tractor
Mar 1.0	Thinning		CST Thinning					75.00 Ac	
Apr 2.0	Hand Weeding		CST Thinning					75.00 Ac	
Apr 1.0	Apply Fert/Ground	100	Fertilizer Injector, 4 Row	3.50	10-10-05, Lqd	30.00 Ga	251.33 Tn		Tractor
Apr 1.0	Pollinate		CST Bee Hive Rental					15.00 Ac	
May 1.0	Harvest, Load & Haul		CST Harv/pack/haul Melons		Cantaloupe Cartons	360.00 Ct	0.70 Ct	1.55 Ct	
May 1.0	Disk Residue	100	Offset Disk, 13.5'	5.00					Tractor
	Pickup use 30 Mi/Ac		Pickup Truck, 1/2 Ton	1.00					

\*NOTES: Machine times, labor times, and material rates are for one time over the designated acreage.

**Table 17F Operations Calendar; Spring Cantaloupe, 2001**

COUNTY: Pinal                      FARM: Southern Vegetables                      WATER SOURCE: MSID                      TILLAGE: Conventional  
 CROP: Cantaloupes                      ACRES: 1.0                      IRRIGATION SYSTEM: Flood Furrow                      SOIL: Sandy-Loam  
 AREA: Maricopa                      YIELD: 260 Ct/Acre                      PREVIOUS CROP: Wheat, Winter                      DATE: 10/08/01

No.	Operation	Month and Times Operation Performed											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	Disk		2.0 C										
2	Plow		1.0 C										
3	Laser Level		0.5 C										
4	Soil Fertility		1.0 C										
5	Apply Fert/Ground		1.0 C										
6	Apply Herbicide/Ground		1.0 C										
7	Incorporate Herbicide		1.0 C										
8	List		1.0 C										
9	Plant			1.0 C									
10	Buck Rows			2.0 C	2.0 C	2.0 C							
11	Irrigate			4.0 C	3.0 C	3.0 C							
12	Disk Ends			1.0 C	3.0 C	2.0 C							
13	Cultivate			3.0 C	2.0 C	1.0 C							
14	Apply Fert/Ground			1.0 C									
15	Thinning			1.0 C									
16	Hand Weeding				2.0 C								
17	Apply Fert/Ground				1.0 C								
18	Pollinate				1.0 C								
19	Harvest, Load & Haul											1.0 C	
20	Disk Residue											1.0 C	

\* NOTE: P = Previous Year    C = Current Year    N = Next Year

**Table 18A. Income and Cash Operating Summary; Sweet Corn, 2001**

COUNTY: Pinal                      FARM: Southern AZ Veg                      WATER SOURCE: Maricopa-Stanfield Irrig.                      TILLAGE: Conventional  
 CROP: Corn, Sweet                      ACRES: 1.0                      IRRIGATION SYSTEM: Flood Furrow                      SOIL: Sandy-Loam  
 AREA: Maricopa                      YIELD: 148.0 Ct / Acre                      PREVIOUS CROP: Cotton, Upland                      DATE: 10/8/01

Item	Unit	Quantity	Price/ Unit	Budgeted /Acre	Total /Acre	Your Farm Budget
INCOME -> Ears	Crtm	148.00	\$5.46	\$808.08	\$808.08	_____
CASH LAND PREPARATION AND GROWING EXPENSES (including sales tax)						
Paid Labor (including benefits)					70.43	_____
Tractor/Self Propelled				28.22		_____
Irrigation				42.20		_____
Chemicals and Custom Applications					176.23	_____
Fertilizer				77.03		_____
Insecticide				90.20		_____
Herbicide				9.00		_____
Farm Machinery and Vehicles					49.73	_____
Diesel Fuel				18.34		_____
Repairs and Maintenance				31.39		_____
Irrigation Water (excluding labor)					100.50	_____
Water Assessment (See Note Below) **						_____
Other Purchased Inputs & Seed/Transplants				117.15	120.15	_____
Other Services and Rentals				3.00		_____
TOTAL CASH LAND PREPARATION AND GROWING EXPENSES					517.04	_____
CASH HARVEST AND POST HARVEST EXPENSES						
Paid Labor (including benefits)					278.81	_____
Tractor/Self Propelled				48.75		_____
Other/Contract				230.06		_____
Farm Machinery and Vehicles					63.03	_____
Diesel Fuel				23.13		_____
Repairs and Maintenance				39.90		_____
Other Materials					251.01	_____
TOTAL HARVEST AND POST HARVEST EXPENSE					592.85	_____
OPERATING OVERHEAD -> PICKUP USE					7.66	_____
OPERATING INTEREST AT 10.0%					15.16	_____
TOTAL CASH OPERATING EXPENSES					\$1,132.71	_____
RETURNS OVER CASH OPERATING EXPENSES					(\$324.63)	_____

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Notes: The above figures do not include ownership costs, see table B for detailed cost allocation.

\*\* A water assessment charge of \$25.00 per Acre is included as an ownership cost in Table B.

**Table 18B. Allocations of Ownership Costs; Sweet Corn, 2001**

COUNTY: Pinal FARM: Southern AZ Veg WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Conventional  
 CROP: Corn, Sweet ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Maricopa YIELD: 148.0 Ct / Acre PREVIOUS CROP: Cotton, Upland DATE: 10/8/01

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Item	-- CASH COST BASIS (\$/ACRE) --		-- TOTAL COST BASIS (\$/ACRE) --	
	Income and Costs	Net Returns	Income and Costs	Net Returns
TOTAL INCOME at \$5.46 / Ct	\$808.08		\$808.08	
TOTAL OPERATING EXPENSES	\$1,132.71		\$1,132.71	
RETURN OVER CASH OPERATING EXPENSES		(\$324.63)		(\$324.63)
CASH OVERHEAD EXPENSES				
Taxes, Housing and Insurance, Farm Machinery	8.91		8.91	
General and Office Overhead (5.0% of Total Operating Exp.)	56.64		56.64	
General Farm Maintenance (3.0% of Total Operating Exp.)	33.98		33.98	
Total Cash Overhead Expenses	99.53		99.53	
Total Cash Operating and Overhead Cost	1,232.24		1,232.24	
RETURNS OVER CASH OPER. AND OVER. EXPENSES		(\$424.16)		(\$424.16)
CAPITAL ALLOCATIONS (100% Equity)				
Capital Replacement, Machinery and Vehicles			56.68	
Interest on Equity, Machinery and Vehicles			22.06	
Total Capital Allocations			78.74	
RETURNS TO LAND, CAPITAL, MANAGEMENT AND RISK ----->		(\$424.16)		
RETURNS TO LAND, MANAGEMENT AND RISK ----->				(\$502.90)
Land Cost / Rent or Lease	100.00		100.00	
Water Assessment **	25.00		25.00	
Total Land Costs	125.00		125.00	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		(\$549.16)		
RETURNS TO MANAGEMENT AND RISK ----->				(\$627.90)
Management Services (8% of Total Operation Expenses)			90.62	
TOTAL OWNERSHIP COST	224.53		393.89	
TOTAL COST	\$1,357.24		\$1,526.60	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		(\$549.16)		
RETURNS TO RISK (PROFITS) ----->				(\$718.52)
Item	-- CASH COST BASIS (\$/ACRE) --		-- TOTAL COST BASIS (\$/ACRE) --	
	Income and Costs	Net Returns	Income and Costs	Net Returns
BREAK-EVEN PRICE TO COVER OPERATING COST ( PER Lb )		\$7.65		\$7.65
BREAK-EVEN PRICE TO COVER OWNERSHIP COST		\$1.52		\$2.66
BREAK-EVEN PRICE TO COVER TOTAL COST		\$9.17		\$10.31

**Table 18C. Variable Operating Costs; Sweet Corn, 2001**

COUNTY: Pinal FARM: Southern AZ Veg WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Conventional  
 CROP: Corn, Sweet ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Maricopa YIELD: 148.0 Ct / Acre PREVIOUS CROP: Cotton, Upland DATE: 10/8/01

No.	First Month	Operation	---- Hours * ----		---- Operating Costs (\$/ACRE *) Per Operation ----					Tot. Cash Expenses	Class	
			Machine	Labor	Fuel/Rps.	Labor	Cust/Serv.	Materials	Total			Times
1	Feb	Rip	0.225	0.250	3.54	2.19			5.74	1.0	5.74	L
2	Feb	Disk	0.225	0.250	4.11	2.19			6.30	3.0	18.91	L
3	Feb	Soil Fertility					3.00		3.00	1.0	3.00	G
4	Feb	Apply Fert/Ground	0.090	0.100	0.91	0.88		34.98	36.77	1.0	36.77	G
5	Feb	List	0.225	0.250	3.10	2.19			5.30	1.0	5.30	L
6	Feb	Buck Rows	0.045	0.050	0.44	0.44			0.88	6.0	5.30	G
7	Feb	Preirrigate		0.333		2.55		22.33	24.89	1.0	24.89	G
8	Feb	Disk Ends	0.045	0.050	0.58	0.44			1.02	5.0	5.10	G
9	Feb	Apply Herbicide/Ground	0.600	0.667	9.09	5.85		9.00	23.94	1.0	23.94	G
10	Mar	Plant	0.360	0.400	5.98	3.51		117.15	126.64	1.0	126.64	L
11	Mar	Irrigate/Run Fertilizer		0.667		5.12		17.17	22.29	7.0	156.02	G
12	Apr	Cultivate	0.150	0.167	1.70	1.28			2.98	3.0	8.95	G
13	Apr	Apply Insect./Ground					4.75	17.80	22.55	4.0	90.20	G
14	Jun	Pick and Load	4.500	10.00	133.42	197.24		251.01	581.67	1.0	581.67	H
15	Jun	Haul 1	0.500	0.556	6.30	4.88			11.18	1.0	11.18	H
16	Aug	Disk Residue	0.225	0.250	4.11	2.19			6.30	1.0	6.30	L
		Pickup Use 30 Mi/Acre	1.000		7.66						7.66	
		Operating Interest at 10.0					15.16				15.16	
TOTAL CASH OPERATING EXPENSES (includes all times over):											1,132.71	T

\*NOTES: Machine and labor hours and operating cost are for one time over the designated acreage. The "Tot. Cash Expense" column and the "TOTAL CASH OPERATING EXPENSES" row include all operations, all times over. Classes are defined below.  
 A water assessment charge of \$25.00 per Acre is included as an ownership cost in Table B.

OPERATING COST SUMMARY BY CLASS

Land Preparation (L)	162.88
Growing (G)	354.16
Harvest (H)	592.85
Post Harvest (P)	0.00
Marketing (M)	0.00
Operating Overhead (O)	22.82
<b>Total (T)</b>	<b>\$1,132.71</b>

SENSITIVITY OF THE NET REVENUES OVER TOTAL CASH EXPENSES (\$/ACRE)

Prices ->	- 25%	- 10%	Budgeted	+ 10%	+ 25%		
Yields	\$4.10	\$4.91	\$5.46	\$6.01	\$6.82	Break-even Price	
- 25%	111.0	-428.00	-337.09	-276.49	-215.88	-124.97	7.95
- 10%	133.2	-397.26	-288.17	-215.44	-142.72	-33.63	7.08
Budgeted	148.0	-376.77	-255.56	-174.75	-93.94	27.27	6.64
+ 10%	162.8	-356.28	-222.94	-134.05	-45.17	88.17	6.28
+ 25%	185.0	-325.54	-174.02	-73.01	28.00	179.51	5.85
Break-even Yield		420.10	263.97	211.55	176.50	141.37	

**Table 18D. Resource and Cash Flow Requirements; Sweet Corn, 2001**

COUNTY: Pinal FARM: Southern AZ Veg WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Conventional  
 CROP: Corn, Sweet ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Maricopa YIELD: 148.0 Ct / Acre PREVIOUS CROP: Cotton, Upland DATE: 10/8/01

Month *	Number Irrigations	Water Applied (inches)	Total Labor (Hrs)	Operating Costs (\$/ACRE *)						
				Purchased Water	Fuel, Oil and Repairs	Labor	Chemicals	Other Purchases	Services	Total
FEB C	1.0	8.0	2.15	22.33	25.30	18.50	43.98		3.00	113.11
MAR C	1.0	4.0	1.42	11.17	11.11	11.70	6.01	117.15		157.14
APR C	2.0	8.0	1.60	22.33	2.73	12.39	29.81		4.75	72.01
MAY C	2.0	8.0	1.87	22.33	5.45	14.55	29.81		4.75	76.89
JUN C	2.0	8.0	36.99	22.33	64.06	289.93	47.61	251.01	9.50	684.44
JUL C			0.25		4.11	2.19				6.30
Pickup Use 30 Mi/Acre					7.66					7.66
Operating Interest at 10.0 Water Assessment				**					15.16	15.16
<b>Total</b>	<b>8.0</b>	<b>36.0</b>	<b>44.28</b>	<b>100.49</b>	<b>120.42</b>	<b>349.26</b>	<b>157.22</b>	<b>368.16</b>	<b>37.16</b>	<b>1132.71</b>
<b>%</b>				<b>8.87</b>	<b>10.63</b>	<b>30.83</b>	<b>13.88</b>	<b>32.50</b>	<b>3.28</b>	<b>100.00</b>

**TOTAL RESOURCE REQUIREMENTS (per Acre)**

Total N 170.6  
 Total P 96.0  
 Total Labor 44.3  
 Total Water 36.0

**TOTAL ENERGY REQUIREMENTS (per Acre)**

Diesel Fuel 48.1 Gal  
 Unleaded Gas 3.0 Gal  
 All Direct Energy 7.0 M BTU

**EQUIPMENT REQUIREMENTS (per Acre)**

Directed Spray Rig, 16	0.60 Hr	Fertilizer Broadcaster,	0.09 Hr	Lister, 5 Bottom	0.22 Hr
Offset Disk, 13.5'	0.23 Hr	Offset Disk, 16.5'	0.90 Hr	Pickup Truck, 1/2 Ton	1.00 Hr
Planter, Drill Type, 6 Row	0.36 Hr	Power Mulcher, 4 Rw	0.60 Hr	Rolling Cultivator, 6 Rw	0.45 Hr
Rowbuck, 10'	0.27 Hr	Tractor, 100 PTO HP	6.99 Hr	Tractor, 125 PTO HP	0.22 Hr
Tractor, 150 PTO HP	1.13 Hr	V-Ripper, 5 Shnk	0.22 Hr	Vegetable Trailer Flat Bed	5.00 Hr

**MATERIALS REQUIREMENT (per Acre)**

11-48-00, Dry	200.00 Lb	32-00-00, URAN 32, Lqd	42.00 Ga	Alachlor	2.50 Pt
Cypermethrin	8.00 Oz	Methomyl	8.00 Pt	Sweet Corn (Super)	12.00 Lb
Water, District	36.00 Al	Wirebound Crates	148.00 Ct		

**LABOR REQUIREMENT (per Acre)**

Irrigators	5.50 Hr	Other	30.00 Hr	Tractor	8.77 Hr
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\*NOTE: P = Previous Year C = Current Year N = Next Year

\*\* A water assessment charge of \$25.00 per Acre is included as an ownership cost in Table B.

**Table 18E. Schedule of Operations; Sweet Corn, 2001**

COUNTY: Pinal                      FARM: Southern AZ Veg                      WATER SOURCE: Maricopa-Stanfield Irrig.                      TILLAGE: Conventional  
 CROP: Corn, Sweet                      ACRES: 1.0                      IRRIGATION SYSTEM: Flood Furrow                      SOIL: Sandy-Loam  
 AREA: Maricopa                      YIELD: 148.0 Ct / Acre                      PREVIOUS CROP: Cotton, Upland                      DATE: 10/8/01

First No. Month	Times	Operation	Equipment/ Custom Oper		Job Rate Acre/Hr	Material Use and Cost				Service Cost \$ / Unit	Labor Type
			HP	Self-Prop./ Implement		Name	Appl. Rate	\$ / Unit			
Feb	1.0	Rip	150	V-Ripper, 5 Shnk	4.00						Tractor
Feb	3.0	Disk	150	Offset Disk, 16.5'	4.00						Tractor
Feb	1.0	Soil Fertility		CST Soil Analysis (Surface)						3.00 Ac	
Feb	1.0	Apply Fert/Ground	100	Fertilizer Broadcaster,	10.00	11-48-00, Dry	200.00	Lb	330.00	Tn	Tractor
Feb	1.0	List	125	Lister, 5 Bottom	4.00						Tractor
Feb	6.0	Buck Rows	100	Rowbuck, 10'	20.00						Tractor
Feb	1.0	Preirrigate			3.00	Water, District	8.00	Al	33.50	AF	Irrigators
Feb	5.0	Disk Ends	100	Offset Disk, 13.5'	20.00						Tractor
Feb	1.0	Apply Herbicide/Ground	100	Directed Spray Rig, 16 Power Mulcher, 4 Rw	1.50	Alachlor	2.50	Pt	27.18	Ga	Tractor
Mar	1.0	Plant	100	Planter, Drill Type, 6 Row	2.50	Sweet Corn (Super	12.00	Lb	9.21	Lb	Tractor
Mar	7.0	Irrigate/Run Fertilizer			1.50	Water, District	4.00	Al	33.50	AF	Irrigators
						32-00-00, URAN 32,	6.00	Ga	170.80	Tn	
Apr	3.0	Cultivate	100	Rolling Cultivator, 6 Rw	6.00						Irrigators
Apr	4.0	Apply Insect./Ground		CST Air Spray, 5 Gal Mix		Methomyl	2.00	Pt	48.94	Ga	4.75 Ac
						Cypermethrin	2.00	Oz	291.66	Ga	
Jun	1.0	Pick and Load	100	Vegetable Trailer Flat Bed	0.20	Wirebound Crates	148.00	Ct	1.60	Ct	Tractor Other
Jun	1.0	Haul	100	Vegetable Trailer Flat Bed	1.80						Tractor
Aug	1.0	Disk Residue	150	Offset Disk, 16.5'	4.00						Tractor
		Pickup use 30 Mi/Ac		Pickup Truck, 1/2 Ton	1.00						

\*NOTES: Machine times, labor times, and material rates are for one time over the designated acreage.

**Table 18F Operations Calendar; Sweet Corn, 2001**

COUNTY: Pinal	FARM: Southern Vegetables	WATER SOURCE: MSID	TILLAGE: Conventional
CROP: Corn, Sweet	ACRES: 1.0	IRRIGATION SYSTEM: Flood Furrow	SOIL: Sandy-Loam
AREA: Maricopa	YIELD: 148 Ct/Acre	PREVIOUS CROP: Cotton, Upland	DATE: 10/08/01

No.	Operation	Month and Times Operation Performed											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	Rip		1.0 C										
2	Disk		2.0 C	1.0 C									
3	Soil Fertility		1.0 C										
4	Apply Fert/Ground		1.0 C										
5	List		1.0 C										
6	Buck Rows		1.0 C	1.0 C	1.0 C	2.0 C	1.0 C						
7	Preirrigate		1.0 C										
8	Disk Ends		1.0 C	1.0 C	1.0 C	2.0 C	1.0 C						
9	Apply Herbicide/Ground		1.0 C										
10	Plant			1.0 C									
11	Irrigate/Run Fertilizer			1.0 C	2.0 C	2.0 C	2.0 C						
12	Cultivate				1.0 C	2.0 C							
13	Apply Insect./Ground				1.0 C	1.0 C	2.0 C						
14	Pick and Load						1.0 C						
15	Haul						1.0 C						
16	Disk Residue								1.0 C				

\* NOTE: P = Previous Year C = Current Year N = Next Year

**Table 19A. Income and Cash Operating Summary; Watermelons, 2001**

COUNTY: Pinal                      FARM: Southern AZ Veg                      WATER SOURCE: Maricopa-Stanfield Irrig.                      TILLAGE: Conventional  
 CROP: Watermelons                      ACRES: 1.0                      IRRIGATION SYSTEM: Flood Furrow                      SOIL: Sandy-loam  
 AREA: Maricopa                      YIELD: 16.8 Tn / Acre                      PREVIOUS CROP: Wheat, Winter                      DATE: 10/9/01

Item	Unit	Quantity	Price/ Unit	Budgeted /Acre	Total /Acre	Your Farm Budget
INCOME -> Melons	Ton	16.80	\$141.60	\$2,378.88	\$2,378.88	_____
CASH LAND PREPARATION AND GROWING EXPENSES (including sales tax)						
Paid Labor (including benefits)					96.33	_____
Tractor/Self Propelled				46.48		_____
Irrigation				49.85		_____
Chemicals and Custom Applications					136.07	_____
Fertilizer				71.56		_____
Insecticide				25.21		_____
Herbicide				39.30		_____
Farm Machinery and Vehicles					54.81	_____
Diesel Fuel				21.92		_____
Repairs and Maintenance				32.89		_____
Irrigation Water (excluding labor)					181.46	_____
Water Assessment (See Note Below) **						_____
Other Purchased Inputs & Seed/Transplants				88.09	631.09	_____
Other Services and Rentals				543.00		_____
TOTAL CASH LAND PREPARATION AND GROWING EXPENSES					1099.76	_____
CASH HARVEST AND POST HARVEST EXPENSES						
Custom Harvest/Post Harvest					1344.00	_____
Other Materials					160.27	_____
TOTAL HARVEST AND POST HARVEST EXPENSE					1504.27	_____
OPERATING OVERHEAD -> PICKUP USE					15.32	_____
OPERATING INTEREST AT 10.0%					16.05	_____
TOTAL CASH OPERATING EXPENSES					\$2,635.40	_____
RETURNS OVER CASH OPERATING EXPENSES					(\$256.52)	_____

Notes: The above figures do not include ownership costs, see table B for detailed cost allocation.

\*\* A water assessment charge of \$25.00 per Acre is included as an ownership cost in Table B.

**Table 19B. Allocations of Ownership Costs; Watermelons, 2001**

COUNTY: Pinal                      FARM: Southern AZ Veg                      WATER SOURCE: Maricopa-Stanfield Irrig.                      TILLAGE: Conventional  
 CROP: Watermelons                      ACRES: 1.0                      IRRIGATION SYSTEM: Flood Furrow                      SOIL: Sandy-loam  
 AREA: Maricopa                      YIELD: 16.8 Tn / Acre                      PREVIOUS CROP: Wheat, Winter                      DATE: 10/9/01

Item	-- CASH COST BASIS (\$/ACRE) --		-- TOTAL COST BASIS (\$/ACRE) --	
	Income and Costs	Net Returns	Income and Costs	Net Returns
TOTAL INCOME at \$141.60 / Tn	\$2,378.88		\$2,378.88	
TOTAL OPERATING EXPENSES	\$2,635.40		\$2,635.40	
RETURN OVER CASH OPERATING EXPENSES		(\$256.52)		(\$256.52)
CASH OVERHEAD EXPENSES				
Taxes, Housing and Insurance, Farm Machinery	5.26		5.26	
General and Office Overhead (5.0%of Total Operating Exp.)	131.77		131.77	
General Farm Maintenance (3.0% of Total Operating Exp.)	79.06		79.06	
Total Cash Overhead Expenses	216.10		216.10	
Total Cash Operating and Overhead Cost	2,851.50		2,851.50	
RETURNS OVER CASH OPER. AND OVER. EXPENSES		(\$472.62)		(\$472.62)
CAPITAL ALLOCATIONS (100% Equity)				
Capital Replacement, Machinery and Vehicles			30.11	
Interest on Equity, Machinery and Vehicles			10.11	
Total Capital Allocations			40.22	
RETURNS TO LAND, CAPITAL, MANAGEMENT AND RISK ----->		(\$472.62)		
RETURNS TO LAND, MANAGEMENT AND RISK ----->				(\$512.84)
Land Cost / Rent or Lease	100.00		100.00	
Water Assessment **	25.00		25.00	
Total Land Costs	125.00		125.00	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		(\$597.62)		
RETURNS TO MANAGEMENT AND RISK ----->				(\$637.84)
Management Services (8% of Total Operation Expenses)			210.83	
TOTAL OWNERSHIP COST	341.10		592.15	
TOTAL COST	\$2,976.50		\$3,227.55	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		(\$597.62)		
RETURNS TO RISK (PROFITS) ----->				(\$848.67)
Item	-- CASH COST BASIS (\$/ACRE) --		-- TOTAL COST BASIS (\$/ACRE) --	
	Income and Costs	Net Returns	Income and Costs	Net Returns
BREAK-EVEN PRICE TO COVER OPERATING COST ( PER Lb )		\$156.87		\$156.87
BREAK-EVEN PRICE TO COVER OWNERSHIP COST		\$20.30		\$35.25
BREAK-EVEN PRICE TO COVER TOTAL COST		\$177.17		\$192.12

**Table 19C. Variable Operating Costs; Watermelons, 2001**

COUNTY: Pinal FARM: Southern AZ Veg WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Conventional  
 CROP: Watermelons ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-loam  
 AREA: Maricopa YIELD: 16.8 Tn / Acre PREVIOUS CROP: Wheat, Winter DATE: 10/9/01

No.	First Month	Operation	---- Hours * ----		---- Operating Costs (\$/ACRE *) Per Operation ----					Tot. Cash Expenses	Class	
			Machine	Labor	Fuel/Rps.	Labor	Cust/Serv.	Materials	Total			Times
1	Dec	Rip	0.450	0.500	5.75	4.39			10.14	1.0	10.14	L
2	Dec	Disk	0.225	0.250	4.11	2.19			6.30	2.0	12.61	L
3	Dec	Landplane	0.225	0.250	3.57	2.19			5.77	2.0	11.53	L
4	Dec	List	0.300	0.333	3.89	2.92		39.30	46.12	1.0	46.12	L
5	Dec	Buck Rows	0.045	0.050	0.27	0.44			0.71	5.0	3.55	G
6	Dec	Preirrigate		0.500		3.83		13.96	17.79	1.0	17.79	G
7	Jan	Disk Ends	0.045	0.050	0.58	0.44			1.02	5.0	5.10	G
8	Jan	Plant	0.300	0.333	3.33	2.92		88.09	94.34	1.0	94.34	L
9	Jan	Soil Fertility					3.00		3.00	1.0	3.00	G
10	Jan	Apply Fert/Ground	0.300	0.333	3.21	2.92		25.97	32.11	1.0	32.11	G
11	Feb	Irrigate		0.400		3.07		11.17	14.23	9.0	128.11	G
12	Feb	Cultivate	0.257	0.286	1.98	2.51			4.49	6.0	26.95	G
13	Feb	Thinning					75.00		75.00	1.0	75.00	G
14	Mar	Hand Weeding					75.00		75.00	2.0	150.00	G
15	Apr	Apply Fert/Ground	0.300	0.333	2.99	2.92		21.56	27.47	1.0	27.47	G
16	Apr	Pollinate					15.00		15.00	1.0	15.00	G
17	Apr	Turn Vines					75.00		75.00	4.0	300.00	G
18	Apr	Irrigate/Run Fertilizer		0.400		3.07		15.17	18.24	6.0	109.43	G
19	Apr	Apply Insecticide/Air					4.24	8.37	12.61	2.0	25.22	G
20	Jun	Harvest, Load & Haul 16.8					1344.00	160.27	1504.27	1.0	1504.27	H
21	Jul	Disk Residue 16.8 Tn	0.225	0.250	4.11	2.19			6.30	1.0	6.30	L
		Pickup Use 60 Mi/Acre	2.000		15.32						15.32	
		Operating Interest at 10.0					16.05				16.05	
TOTAL CASH OPERATING EXPENSES (includes all times over):											2,635.40	T

\*NOTES: Machine and labor hours and operating cost are for one time over the designated acreage. The "Tot. Cash Expense" column and the "TOTAL CASH OPERATING EXPENSES" row include all operations, all times over. Classes are defined below. A water assessment charge of \$25.00 per Acre is included as an ownership cost in Table B.

OPERATING COST SUMMARY BY CLASS

Land Preparation (L)	181.04
Growing (G)	918.72
Harvest (H)	1,504.27
Post Harvest (P)	0.00
Marketing (M)	0.00
Operating Overhead (O)	31.37
Total (T)	\$2,635.40

SENSITIVITY OF THE NET REVENUES OVER TOTAL CASH EXPENSES (\$/ACRE)

Prices ->	Yields	Budgeted					Break-even Price
		- 25%	- 10%	Budgeted	+ 10%	+ 25%	
		\$106.20	\$127.44	\$141.60	\$155.76	\$177.00	
- 25%	12.6	-1,963.64	-1,696.02	-1,517.60	-1,339.19	-1,071.56	262.04
- 10%	15.1	-1,921.66	-1,600.51	-1,386.41	-1,172.31	-851.17	233.29
Budgeted	16.8	-1,893.67	-1,536.84	-1,298.95	-1,061.06	-704.23	218.92
+ 10%	18.5	-1,865.68	-1,473.17	-1,211.49	-949.81	-557.30	207.16
Break-even Yield		130.47	57.35	41.75	32.82	24.85	

**Table 19D. Resource and Cash Flow Requirements; Watermelons, 2001**

COUNTY: Pinal FARM: Southern AZ Veg WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Conventional  
 CROP: Watermelons ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-loam  
 AREA: Maricopa YIELD: 16.8 Tn / Acre PREVIOUS CROP: Wheat, Winter DATE: 10/9/01

Month *	Number Irrigations	Water Applied (inches)	Total Labor (Hrs)	Operating Costs (\$/ACRE *)						
				Purchased Water	Fuel, Oil and Repairs	Labor	Chemicals	Other Purchases	Services	Total
DEC P	1.0	5.0	2.38	13.96	25.28	20.36	39.30			98.90
JAN C			0.72		7.12	6.28	25.97	88.09	3.00	130.46
FEB C	3.0	12.0	1.59	33.50	2.83	12.59			75.00	123.92
MAR C	3.0	12.0	1.77	33.50	3.97	14.22			75.00	126.69
APR C	5.0	20.0	3.19	55.83	8.94	25.79	37.93		244.24	372.73
MAY C	4.0	16.0	1.80	44.67	1.71	14.02	24.39		154.24	239.03
JUN C			0.10		0.85	0.88		160.27	1344.00	1506.00
JUL C			0.25		4.11	2.19				6.30
Pickup Use 60 Mi/Acre					15.32					15.32
Operating Interest at 10.0									16.05	16.05
Water Assessment				**						
<b>Total</b>	<b>16.0</b>	<b>65.0</b>	<b>11.80</b>	<b>181.46</b>	<b>70.13</b>	<b>96.33</b>	<b>127.59</b>	<b>248.36</b>	<b>1916.53</b>	<b>2635.40</b>
<b>%</b>				<b>6.89</b>	<b>2.66</b>	<b>3.66</b>	<b>4.84</b>	<b>9.42</b>	<b>72.53</b>	<b>100.00</b>

TOTAL RESOURCE REQUIREMENTS (per Acre)

Total N 189.9  
 Total P 92.0  
 Total Labor 11.8  
 Total Water 65.0

TOTAL ENERGY REQUIREMENTS (per Acre)

Diesel Fuel 25.4 Gal  
 Unleaded Gas 6.0 Gal  
 All Direct Energy 4.3 M BTU

EQUIPMENT REQUIREMENTS (per Acre)

Cultivator, Sweep, 4 Rw	1.54 Hr	Fert. Side Dress Unit,	0.60 Hr	Landplane 12'X 45'	0.45 Hr
Lister, 5 Bottom	0.30 Hr	Offset Disk, 13.5'	0.23 Hr	Offset Disk, 16.5'	0.67 Hr
Pickup Truck, 1/2 Ton	2.00 Hr	Planter, Planet Jr, 4 Row	0.30 Hr	Rowbuck, 10'	0.23 Hr
Saddle Tk Sprayer, 2 Tk 8	0.30 Hr	Tractor, 60 PTO HP	0.53 Hr	Tractor, 70 PTO HP	1.84 Hr
Tractor, 100 PTO HP	0.83 Hr	Tractor, 150 PTO HP	1.13 Hr	Tractor, 150 PTO HP,	0.45 Hr
V-Ripper, 5 Shnk	0.45 Hr				

MATERIALS REQUIREMENT (per Acre)

18-46-00, Dry	200.00 Lb	32-00-00, URAN 32, Lqd	24.00 Ga	46-00-00, Urea 46	150.00 Lb
BT	4.00 Pt	DCPA	6.00 Lb	Water, District	65.00 Al
Watermelon Bins	16.80 Ea	Watermelon Seed (OP)	3.00 Th		

LABOR REQUIREMENT (per Acre)

Irrigators 6.50 Hr Tractor 5.30 Hr

\*NOTE: P = Previous Year C = Current Year N = Next Year

\*\* A water assessment charge of \$25.00 per Acre is included as an ownership cost in Table B.

**Table 19E. Schedule of Operations; Watermelons, 2001**

COUNTY: Pinal FARM: Southern AZ Veg WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Conventional  
 CROP: Watermelons ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-loam  
 AREA: Maricopa YIELD: 16.8 Tn / Acre PREVIOUS CROP: Wheat, Winter DATE: 10/9/01

First No. Month	Times	Operation	Equipment/ Custom Oper		Job Rate Acre/Hr	Material Use and Cost				Service Cost \$ / Unit	Labor Type	
			HP	Self-Prop./ Implement		Name	Appl. Rate	\$ / Unit				
Dec	1.0	Rip	150	V-Ripper, 5 Shnk	2.00							Tractor
Dec	2.0	Disk	150	Offset Disk, 16.5'	4.00							Tractor
Dec	2.0	Landplane	150	Landplane 12'X 45'	4.00							Tractor
Dec	1.0	List	100	Lister, 5 Bottom	3.00	DCPA	6.00	Lb	6.18	Lb		Tractor
				Saddle Tk Sprayer, 2 Tk 8 Row								
Dec	5.0	Buck Rows	60	Rowbuck, 10'	20.00							Tractor
Dec	1.0	Preirrigate			2.00	Water, District	5.00	Al	33.50	AF		Irrigators
Jan	5.0	Disk Ends	100	Offset Disk, 13.5'	20.00							Tractor
Jan	1.0	Plant	100	Planter, Planet Jr, 4 Row	3.00	Watermelon Seed (OP)	3.00	Th	27.70	Th		Tractor
Jan	1.0	Soil Fertility		CST Soil Analysis (Surface)							3.00	Ac
Jan	1.0	Apply Fert/Ground	70	Fert. Side Dress Unit, 4Row	3.00	18-46-00, Dry	200.00	Lb	245.00	Tn		Tractor
Feb	9.0	Irrigate			2.50	Water, District	4.00	Al	33.50	AF		Irrigators
Feb	6.0	Cultivate	70	Cultivator, Sweep, 4 Rw	3.50							Tractor
Feb	1.0	Thinning		CST Thinning							75.00	Ac
Mar	2.0	Hand Weeding		CST Hand Weeding							75.00	Ac
Apr	1.0	Apply Fert/Ground	60	Fert. Side Dress Unit, 4Row	3.00	46-00-00, Urea 46	150.00	Lb	271.17	Tn		Tractor
Apr	1.0	Pollinate		CST Bee Hive Rental							15.00	Ac
Apr	4.0	Turn Vines		CST Hand Weeding							75.00	Ac
Apr	6.0	Irrigate/Run Fertilizer			2.50	Water, District	4.00	Al	33.50	AF		Irrigators
						32-00-00, URAN 32,	4.00	Ga	170.80	Tn		
Apr	2.0	Apply Insecticide/Air		CST Air Spray, 3 Gal Mix		BT	2.00	Pt	31.57	Ga	4.24	Ac
Jun	1.0	Harvest, Load & Haul		CST Harv/pack/haul	0.25	Watermelon Bins	16.80	Ea	9.00	Ea	80.00	Tn
Jul	1.0	Disk Residue	150	Offset Disk, 16.5'	4.00							Tractor
		Pickup use 60 Mi/Ac		Pickup Truck, 1/2 Ton	0.50							

\*NOTES: Machine times, labor times, and material rates are for one time over the designated acreage.

**Table 19F Operations Calendar; Watermelons, 2001**

COUNTY: Pinal FARM: Southern Vegetables WATER SOURCE: MSID TILLAGE: Conventional  
 CROP: Watermelons ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Maricopa YIELD: 16.8 Tn/Acre PREVIOUS CROP: Wheat, Winter DATE: 10/09/01

No.	Operation	Month and Times Operation Performed											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	Rip												1.0 P
2	Disk												2.0 P
3	Landplane												2.0 P
4	List												1.0 P
5	Buck Rows		1.0 C			2.0 C	1.0 C						1.0 P
6	Preirrigate												1.0 P
7	Disk Ends	1.0 C	1.0 C			2.0 C	1.0 C						
8	Plant	1.0 C											
9	Soil Fertility	1.0 C											
10	Apply Fert/Ground	1.0 C											
11	Irrigate		3.0 C	3.0 C	3.0 C								
12	Cultivate		1.0 C	2.0 C	3.0 C								
13	Thinning		1.0 C										
14	Hand Weeding			1.0 C	1.0 C								
15	Apply Fert/Ground				1.0 C								
16	Pollinate				1.0 C								
17	Turn Vines				2.0 C	2.0 C							
18	Irrigate/Run Fertilizer				2.0 C	4.0 C							
19	Apply Insecticide/Air				1.0 C	1.0 C							
20	Harvest, Load & Haul						1.0 C						
21	Disk Residue							1.0 C					

\* NOTE: P = Previous Year C = Current Year N = Next Year

## **Appendix A. Tables of Prices of Selected Inputs for Cochise, Pima, and Pinal Counties, Arizona**

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Table A.1	Estimated Costs of Pumping Irrigation Water	A-2
Table A.2	Water Cost in Irrigation Districts	A-3
Table A.3	Selected Labor and Price Rates	A-3
Table A.4	Property Taxes and Tax Assessments	A-4
Table A.5	Costs of Selected Custom Operations	A-5
Table A.6	Costs of Owning and Operating Irrigation Systems (This table is included only when such irrigation systems are included in the budget tables.)	A-6

**Table A.1 Estimated Cost of Pumping Irrigation Water in Southern Arizona, 2001**

Area	Energy	Price	Pump Lift (Ft)	Pump Rate (GPM)	Case Diam (in)	Case Depth (Ft)	Overall Pump Efficiency	Well Cost	Ownership Cost * (\$/Yr)	Annual Pump (AF)	Cost of Pumping Irrigation Water				TOTAL	
											Fixed /AF	Variable Cost/AF			TOTAL COST /AF	
												Energy	Repairs	P Tax		Total
<b>Cochise County</b>																
KANSAS SETTLEMENT AREA	Diesel	0.82000 /Gal	440	800	16	600	0.16	104015	11539	530	\$21.77	\$54.71	\$6.13	\$60.84	<b>\$82.61</b>	
KANSAS SETTLEMENT AREA	Electric	0.08005 /Kwh	440	800	16	600	0.54	94424	10077	530	\$19.01	\$66.76	\$5.28	\$72.04	<b>\$91.06</b>	
KANSAS SETTLEMENT AREA	Nat. Gas	0.42609 /Th	440	800	16	600	0.154	112942	12679	530	\$23.92	\$41.35	\$6.13	\$47.48	<b>\$71.40</b>	
STEWART AREA	Diesel	0.82000 /Gal	340	800	16	600	0.16	97558	10564	530	\$19.93	\$42.28	\$4.74	\$47.02	<b>\$66.95</b>	
STEWART AREA	Electric	0.08124 /Kwh	340	800	16	600	0.54	88533	9280	530	\$17.51	\$52.38	\$4.08	\$56.46	<b>\$73.97</b>	
STEWART AREA	Nat. Gas	0.42918 /Th	340	800	16	600	0.154	87321	9481	530	\$17.89	\$32.18	\$4.74	\$36.92	<b>\$54.80</b>	
BOWIE AREA	Diesel	0.82000 /Gal	470	1200	16	800	0.16	157502	17745	795	\$22.32	\$58.44	\$6.55	\$64.99	<b>\$87.31</b>	
BOWIE AREA	Electric	0.07978 /Kwh	470	1200	16	800	0.54	148419	16210	795	\$20.39	\$71.10	\$5.64	\$76.74	<b>\$97.13</b>	
BOWIE AREA	Nat. Gas	0.42219 /Th	470	1200	16	800	0.154	166113	18899	795	\$23.77	\$43.76	\$6.55	\$50.31	<b>\$74.08</b>	
ELFRIDA-MCNEAL AREA	Diesel	0.82000 /Gal	340	800	16	600	0.16	98583	10609	530	\$20.02	\$42.28	\$4.74	\$47.02	<b>\$67.03</b>	
ELFRIDA-MCNEAL AREA	Electric	0.08101 /Kwh	340	800	16	600	0.54	88533	9218	530	\$17.39	\$52.23	\$4.08	\$56.31	<b>\$73.71</b>	
ELFRIDA-MCNEAL AREA	Nat. Gas	0.42868 /Th	340	800	16	600	0.154	88346	9535	530	\$17.99	\$32.14	\$4.74	\$36.88	<b>\$54.87</b>	
SAN SIMON AREA	Diesel	0.82000 /Gal	360	800	16	600	0.16	99416	10949	530	\$20.66	\$44.77	\$5.01	\$49.78	<b>\$70.44</b>	
SAN SIMON AREA	Electric	0.08080 /Kwh	360	800	16	600	0.54	92160	9763	530	\$18.42	\$55.16	\$4.32	\$59.48	<b>\$77.90</b>	
SAN SIMON AREA	Nat. Gas	0.42635 /Th	360	800	16	600	0.154	88907	9822	530	\$18.53	\$33.85	\$5.01	\$38.86	<b>\$57.40</b>	
<b>Pima County</b>																
AVRA VALLEY AREA	Diesel	0.75000 /Gal	375	1300	16	1000	0.188	160713	18165	1034	\$17.57	\$36.30	\$5.22	\$3.15	\$44.67	<b>\$62.24</b>
AVRA VALLEY AREA	Electric	0.03926 /Kwh	375	1300	16	1000	0.54	128823	13931	1034	\$13.47	\$27.92	\$4.50	\$3.15	\$35.57	<b>\$49.05</b>
AVRA VALLEY AREA	Nat. Gas	0.42054 /Th	375	1300	16	1000	0.154	157534	18031	1034	\$17.44	\$34.78	\$5.22	\$3.15	\$43.15	<b>\$60.59</b>
MARANA AREA	Diesel	0.75000 /Gal	320	950	16	800	0.188	113448	13095	756	\$17.32	\$30.97	\$4.46	\$3.15	\$38.58	<b>\$55.90</b>
MARANA AREA	Electric	0.03929 /Kwh	320	950	16	800	0.54	101171	11188	756	\$14.80	\$23.84	\$3.84	\$3.15	\$30.83	<b>\$45.63</b>
MARANA AREA	Nat. Gas	0.42336 /Th	320	950	16	800	0.154	127892	14952	756	\$19.78	\$29.88	\$4.46	\$3.15	\$37.49	<b>\$57.27</b>
<b>Pinal County</b>																
COOLIDGE AREA	Diesel	0.75000 /Gal	410	900	16	600	0.188	120973	14310	915	\$15.64	\$39.69	\$5.71	\$1.50	\$46.90	<b>\$62.54</b>
COOLIDGE AREA	Electric	0.03783 /Kwh	410	900	16	600	0.54	89348	10222	915	\$11.17	\$29.41	\$4.92	\$1.50	\$35.83	<b>\$47.01</b>
COOLIDGE AREA	Nat. Gas	0.42436 /Th	410	900	16	600	0.154	117799	14187	915	\$15.50	\$38.37	\$5.71	\$1.50	\$45.58	<b>\$61.09</b>
CASA GRANDE AREA	Diesel	0.75000 /Gal	575	1050	16	1500	0.188	210821	23482	835	\$28.12	\$55.66	\$8.01	\$1.50	\$65.17	<b>\$93.29</b>
CASA GRANDE AREA	Electric	0.03776 /Kwh	575	1050	16	1500	0.54	179281	19152	835	\$22.94	\$41.17	\$6.91	\$1.50	\$49.58	<b>\$72.51</b>
CASA GRANDE AREA	Nat. Gas	0.42337 /Th	575	1050	16	1500	0.154	259901	29503	835	\$35.33	\$53.69	\$8.01	\$1.50	\$63.20	<b>\$98.53</b>
ELOY AREA	Diesel	0.75000 /Gal	620	800	16	1800	0.188	238013	26140	636	\$41.10	\$60.01	\$8.64	\$1.50	\$70.15	<b>\$111.25</b>
ELOY AREA	Electric	0.03779 /Kwh	620	800	16	1800	0.54	201768	21391	636	\$33.63	\$44.43	\$7.45	\$1.50	\$53.38	<b>\$87.01</b>
ELOY AREA	Nat. Gas	0.42414 /Th	620	800	16	1800	0.154	287804	32244	636	\$50.70	\$57.99	\$8.64	\$1.50	\$68.13	<b>\$118.82</b>
STANFIELD AREA	Diesel	0.75000 /Gal	640	1000	16	1500	0.188	232407	25839	795	\$32.50	\$61.95	\$8.91	\$1.50	\$72.36	<b>\$104.87</b>
STANFIELD AREA	Electric	0.03781 /Kwh	640	1000	16	1500	0.54	194869	20742	795	\$26.09	\$45.88	\$7.69	\$1.50	\$55.07	<b>\$81.16</b>
STANFIELD AREA	Nat. Gas	0.42317 /Th	640	1000	16	1500	0.154	277182	31392	795	\$39.49	\$59.73	\$8.91	\$1.50	\$70.14	<b>\$109.63</b>
MARICOPA AREA	Diesel	0.75000 /Gal	495	1800	16	1200	0.188	222447	26250	1432	\$18.33	\$47.91	\$6.89	\$1.50	\$56.30	<b>\$74.64</b>
MARICOPA AREA	Electric	0.03773 /Kwh	495	1800	16	1200	0.54	167509	18940	1432	\$13.23	\$35.41	\$5.94	\$1.50	\$42.85	<b>\$56.08</b>
MARICOPA AREA	Nat. Gas	0.42223 /Th	495	1800	16	1200	0.154	260976	31311	1432	\$21.87	\$46.09	\$6.89	\$1.50	\$54.48	<b>\$76.35</b>

**Table A.2. Estimated Cost of Surface Irrigation Water in Southern Arizona, 2001**

Name		Assessment	Water Costs Dollars per Acre Foot (AF)	
<b>Pinal County</b>				
Central Arizona Irrigation District	CAID	\$19.80	plus	\$38.00 /AF
Hohokam Irrigation District	HID	\$25.00	plus	\$22.50 /AF
Maricopa-Stanfield Irrigation District	MSID	\$25.00	plus	\$33.50 /AF
New Magma Irrigation District	NMID	\$24.00	plus	\$33.00 /AF
Queen Creek Irrigation District	QCID	\$10.00	plus	\$32.00 /AF
San Carlos Irrigation District	SCID	\$42.00	plus	\$20.00 /AF
San Carlos Indian Irrigation Project	SCIIP	\$43.00	plus	\$20.00 /AF
<b>Pima County</b>				
Cortaro-Marana Irrigation District	C-MID	\$45.00	plus	\$30.00 /AF

A-3

**Table A.3. Wage and Piece Rates, Southern Arizona, 2001**

Labor Group	Wage Rate
Hand Weeders	\$6.62 /Hr
Harvest	\$6.77 /Hr
Irrigators	\$6.62 /Hr
Tractor	\$6.77 /Hr
Other	\$6.77 /Hr
Truck Driver	\$11.00 /Hr
Produce Loader	\$5.75 /Hr
Contract Labor	\$6.75 /Hr
Contract Labor, Harvest	\$6.75 /Hr
Picker	\$5.75 /Hr
Cutter	\$1.37 /Box

**Table A. 4. Custom Service Costs, Southern Arizona 2001**

Operation	
Air Spray, 5 Gal Mix	\$5.55 / Acre
Air Spray, 7 Gal Mix	\$7.50 / Acre
Hand Weeding	\$75.00 / Acre
Thinning	\$75.00 / Acre
Scout For Insects	\$15.00 / Acre
Bee Hive Rental	\$35.00 / Acre
Bird Control	\$3.50 / Acre
Soil Analysis (Complete)	\$35.00 / Acre
Soil Analysis (Surface)	\$10.00 / Acre
Harvest-Load-Haul Lettuce	\$3.40 / Crtn
Cut/Top/Field Sack Dry Onions	\$3.17 / Sack
Harvest Garlic	\$3.50 / Crtn
Pick Red Chile after Green	\$400 / Ton
Load Chiles	\$5.00 / Ton
Pick Green Chiles	\$85.00 / Ton
Pick Red Chiles	\$0.30 / lb
Haul Garlic	\$0.25 / Crtn
Haul Green Chiles	\$15.00 / Ton
Haul Red Chiles	\$60.00 / Ton
Field Haul Dry Onions	\$0.21 / Sack
Sales Brokerage	\$0.60 / Sack

**Table A.5. Property Taxes Assessments, Southern Arizona**

State Code	Budget System Area Description	State Area Description	2000 Primary	2000 Secondary	2000 Total
<b>Cochise County (02) Property Taxes</b>					
1300	Kansas Settlement	Wilcox Outside	\$9.5536	\$4.4433	<b>\$13.9969</b>
1300	Stewart	Wilcox Outside	\$9.5536	\$4.4433	<b>\$13.9969</b>
1400	Bowie	Bowie	\$16.5423	\$1.4871	<b>\$18.0294</b>
1200	Elfrida		\$8.5039	\$1.4885	<b>\$9.9924</b>
4500	Double Adobe		\$10.3661	\$0.5148	<b>\$10.8809</b>
5304	Ash Creek (VUHSD)		\$14.0668	\$2.4608	<b>\$16.5276</b>
5500	McNeal		\$13.3055	\$0.5148	<b>\$13.8203</b>
	Elfrida/McNeal		<b>\$11.5606</b>	<b>\$1.2447</b>	<b>\$12.8053</b>
1800	San Simon	San Simon	\$15.1676	\$1.0773	<b>\$16.2449</b>
	<b>Average</b>		<b>\$12.1324</b>	<b>\$2.0537</b>	<b>\$14.1862</b>
<b>Pima County (10) Property Taxes,</b>			<b>Primary</b>	<b>Secondary</b>	<b>Total</b>
600	Avra Valley	Avra Valley	\$9.8919	\$8.4770	<b>\$18.3689</b>
610	Marana	Marana	\$9.8919	\$8.4770	<b>\$18.3689</b>
	<b>Average</b>		<b>\$9.8919</b>	<b>\$8.4770</b>	<b>\$18.3689</b>
3000	Sahuarita	Sahuarita	\$5.9840	\$5.8956	<b>\$11.8796</b>
	<b>Special District Tax</b>	<b>Assessment</b>			
830	Cortaro-Marana Irrigation District	\$1.00			
987	CAWCD	\$187.00			
<b>Pinal County (11) Property Taxes</b>					
2100	Coolidge	Coolidge OCL/ED2 (21)	\$10.0656	\$3.6319	<b>\$13.6975</b>
400	Casa Grande	Casa Grande OCL/ED2 (82-4)	\$12.4261	\$3.8292	<b>\$16.2553</b>
1100	Eloy	Eloy OFD/OCL/ED4 (40-11)	\$12.0912	\$3.5642	<b>\$15.6554</b>
2400	Stanfield	Stanfield ED3 (82-24)	\$11.8762	\$3.9511	<b>\$15.8273</b>
2000	Maricopa	Maricopa (20)	\$14.9539	\$6.2863	<b>\$21.2402</b>
	<b>Average</b>		<b>\$12.5872</b>	<b>\$3.8506</b>	<b>\$16.4378</b>
500	Red Rock	Red Rock (40-5)	\$12.1302	\$1.9397	<b>\$14.0699</b>
	<b>Special District Tax</b>	<b>Assessment</b>			
601	San Carlos ID	\$43.0000			
602	Maricopa-Stanfield ID	\$25.0000			
603	Central Arizona ID	\$19.8000			
604	New Magma ID	\$24.0000			
605	Queen Creek ID	\$10.0000			
606	Silver Bell	\$3.0000			
608	Hohokam ID	\$23.0000			

## **Appendix B. Tables of Prices of Selected Inputs, Arizona**

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Table B.1	Prices of Materials Used	B-2
Table B.2	Cost Data for Equipment and Implements	B-6

Note: These average input prices are used for all Arizona counties when appropriate.  
Not all items listed are used in all counties.

**Table B.1 Prices of Materials Used**

Common Name	Example Trade Name	1998 Price	2001 Price
<b>Fertilizers</b>			
0-0-12 LQD	0-0-12 LQD	\$55.00 / Tn	\$55.00
7.5-26-0-8 LQD	7.5-26-0-8 LQD	\$260.00 / Tn	\$260.00
00-45-00, TREBLE SUPER	00-45-00, TREBLE SUPER	\$317.50 / Tn	\$260.00
00-52-00 LQD	00-52-00 LQD	\$317.00 / Tn	\$299.50
05-26-00-08 PHOSFURIC	05-26-00-08 PHOSFURIC	\$290.00 / Tn	\$290.00
10-34-00 LQD	10-34-00 LQD	\$266.40 / Tn	\$263.33
11-48-00 DRY	11-48-00 DRY	\$330.00 / Tn	\$330.00
11-52-00 DRY	11-52-00 DRY	\$284.00 / Tn	\$273.33
15-0-0-16 N-phuric ACID	15-0-0-16 N-phuric ACID	\$205.00 / Tn	\$205.00
15-15-15 DRY	15-15-15 DRY	\$320.00 / Tn	\$320.00
16-20-00 DRY	16-20-00 DRY	\$240.67 / Tn	\$250.50
16-20-00 LQD	16-20-00 LQD	\$220.00 / Tn	\$220.00
17-00-00 LQD, CAN 17	17-00-00 LQD, CAN 17	\$0.00 / Tn	\$175.00
18-46-00 DRY	18-46-00 DRY	\$275.00 / Tn	\$245.00
20-0-0-40 Nitro-Sul	20-0-0-40 Nitro-Sul	\$0.00 / Tn	\$280.00
20-00-00 Amm. NITRATE, DRY	20-00-00 Amm. NITRATE, DRY	\$0.00 / Tn	\$222.50
20-00-00 Amm. NITRATE, LQD	20-00-00 Amm. NITRATE, LQD	\$0.00 / Tn	\$155.00
21-00-00 Amm SULFATE	21-00-00 Amm SULFATE	\$0.00 / Tn	\$184.00
28-0-0-9 N-Phuric ACID	28-0-0-9 N-Phuric ACID	\$0.00 / Tn	\$240.00
32-00-00 URAN 32, LQD	32-00-00 URAN 32, LQD	\$173.00 / Tn	\$170.80
33-00-00 Amm. NITRATE, DRY	33-00-00 Amm. NITRATE, DRY	\$320.00 / Tn	\$320.00
46-00-00 L B UREA	46-00-00 L B UREA	\$0.00 / Tn	\$30.00
46-00-00 UREA 46	46-00-00 UREA 46	\$257.00 / Tn	\$271.17
82-00-00 Anhyd. AMMONIA	82-00-00 Anhyd. AMMONIA	\$317.00 / Tn	\$306.67
<b>Herbicides</b>			
Atrazine	AATREX, 4L, 2.5 GAL	\$0.00 / Lb	\$15.75
Atrazine	AATREX, 80W, 5 LB	\$2.18 / Lb	\$2.98
Benefin	BALAN, 1.5EC, 2.5 GAL	\$14.95 / Ga	\$8.69
Dicamba	BANVEL, 4E, 1 GAL	\$85.76 / Ga	\$97.06
Cyanazine	BLADEX, 4L, 2.5 GAL	\$25.26 / Ga	\$31.25
Bromoxynil	BRONCO, 2.6/1.4L, 2.5 GAL	\$52.93 / Ga	\$53.30
Bromoxynil	BUCTRIL, 4E, 2.5 GAL	\$67.93 / Ga	\$105.81
Prometryn	CAPAROL, 4L, 2.5 GAL	\$30.00 / Ga	\$29.63
2,4-d	D - 2,4-D AMINE, 4E, 1 GAL	\$11.71 / Ga	\$15.15
Metolachlor	DUAL, 8E, 2.5 GAL	\$0.00 / Ga	\$82.50
Metolachlor	DUAL, 8E, 30 GAL	\$60.84 / Ga	\$65.23
EPTC	EPTAM, 7E, 5 GAL	\$26.08 / Ga	\$34.09
Fluazifop	FUSILADE, 2000 (1E)	\$120.00 / Ga	\$125.00
Diclofop Methyl	HOELON, 3EC, 5 GAL	\$55.54 / Ga	\$67.75
Pronamide	KERB, 50W, 3LB	\$22.75 / Lb	\$26.27
MSMA	BUENO 6	\$0.00 / Ga	\$20.60
MSMA	MSMA ANY BRAND, 6S, 5 GAL	\$18.33 / Ga	\$18.00
Bensulide	PREFAR, 4E, 5 GAL	\$38.12 / Ga	\$42.58
Pendimethalin	PROWL, 4E, 5 GAL	\$27.52 / Ga	\$22.23
Pyritiodac-sodium	STAPLE Oz.	\$23.00 / Oz	\$24.72
Butylate	SUTAN+, 6.7E, 2.5 GAL	\$17.98 / Ga	\$18.75
Trifluralin	TREFLAN, 4E, 30 GAL	\$0.00 / Ga	\$24.95
Trifluralin	TREFLAN, 4E, 2.5 GAL	\$29.75 / Ga	\$21.15
Trifluralin	TREFLAN, TR10, 50 LB	\$0.00 / Ga	\$0.85
Glyphosate	ROUNDUP, 4S, 2.5 GAL	\$44.00 / Ga	\$42.00
Glyphosate	ROUND UP ULTRA	\$0.00 / Ga	\$47.20
Thiazopyr	VISOR	\$0.00 / Ga	\$241.81

**Table B.1 Prices of Materials Used**

Common Name	Example Trade Name	1998 Price	2001 Price
<b>Herbicides Continued</b>			
Oryzalin	SURFLAN	\$0.00 / Ga	\$80.86
Napropamide	DEVRIKOL	\$0.00 / Ga	\$8.75
Simazine	PRINCEP 4L	\$0.00 / Ga	\$19.50
Carfentrazone-ethyl	AIM	\$0.00 / Oz	\$8.80
Diglycolamine	CLARITY	\$0.00 / Ga	\$91.30
Clethodim	SELECT 2 EC	\$0.00 / Ga	\$192.71
Pronamide	COTTON PRO	\$0.00 / Ga	\$28.00
Imazethapyr	PURSUIT DG	\$0.00 / Oz	\$10.65
Sethoxydim	POAST	\$0.00 / Ga	\$67.85
<b>Insecticides</b>			
Imidacloprid	ADMIRE, F	\$591.67 / Ga	\$588.40
Abamectin	AGRI-MEK, 15EC, 1 GAL	\$706.00 / Ga	\$732.91
Permethrin	AMBUSH, 2E, 1GAL	\$115.83 / Ga	\$120.50
Cypermethrin	AMMO, 2.5EC, 1GAL	\$285.64 / Ga	\$291.66
Fenvalerate	ASANA, XL, 1 GAL	\$146.61 / Ga	\$144.04
Cyfluthrin	BAYTHROID, 2E, 1 GAL	\$496.00 / Ga	\$520.67
Sulprophos	BOLSTAR, 6E, 5 GAL	\$490.00 / Ga	\$288.38
Bifenthrin	CAPTURE, 2EC, 1 GAL	\$549.00 / Ga	\$490.00
Profenofos	CURACRON, 6E, 2.5 GAL	\$120.00 / Ga	\$120.00
Profenofos	CURACRON, 8E, 2.5 GAL	\$0.00 / Ga	\$113.00
Dimethoate	CYGON,'267', 5 GAL	\$26.50 / Ga	\$26.50
Dimethoate	CYGON,'400', 2.5 GAL	\$35.13 / Ga	\$35.59
Dimethoate	CYGON,'400', 5 GAL	\$38.00 / Ga	\$38.00
Malathion	CYTHON, ULV, 5 GAL	\$29.42 / Ga	\$32.00
Fenpropathrin	DANITOL	\$174.00 / Ga	\$167.83
Dimethoate	DIMETHONATE, 4E, 2.5 GAL	\$24.75 / Ga	\$12.00
BT	DIPEL, 2X, 1 LB	\$10.50 / Lb	\$11.02
Disulfoton	DISYSTON, 15G, 10 LB	\$1.79 / Lb	\$1.74
Disulfoton	DISYSTON, 15G, 50 LB	\$0.00 / Lb	\$20.50
Disulfoton	DISYSTON, 8E, 5 GAL	\$71.08 / Ga	\$66.44
Carbofuran	FURADAN, 15G, 50 LB	\$1.65 / Lb	\$1.17
Carbofuran	FURADAN, 4F, 2.5GAL	\$75.95 / Ga	\$76.85
Azinphos Methyl	GUTHION, 2L, 5 GAL	\$31.25 / Ga	\$30.30
Lambdacyhalothrin	KARATE, 1E, 1 GAL	\$278.75 / Ga	\$270.00
Methomyl	LANNATE, 24%L, 2.5 GAL	\$49.05 / Ga	\$48.94
Chlorpyrifos	LOCK - ON	\$37.08 / Ga	\$37.73
Chlorpyrifos	LORSBAN, 4E, 2.5 GAL	\$50.95 / Ga	\$47.21
Malathion	MALATHION, 5S, 2.5 GAL	\$20.00 / Ga	\$21.50
Malathion	MALATHION, 8E, 5 GAL	\$30.73 / Ga	\$31.69
Methamidophos	MONITOR, 4L, 2 GAL	\$76.50 / Ga	\$77.00
Methamidophos	MONITOR, 4L, 5 GAL	\$86.48 / Ga	\$82.98
Zetacypermethrin	MUSTANG (FURY)	\$317.83 / Ga	\$321.18
Acephate	ORTHENE, 75S, 10 LB	\$9.00 / Lb	\$9.61
Acephate	ORTHENE, 90S, 10 LB	\$10.31 / Lb	\$10.49
Amitraz	OVASYN, 5 GAL	\$47.56 / Lb	\$46.74
Methyl Parathion	PARATHION/METHYL, 4E, 5 GAL	\$0.00 / Ga	\$30.00
Methyl Parathion	PENNCAP M, 2L, 5 GAL	\$27.50 / Ga	\$25.75
Endosulfan	PHASER, 3EC, 1 GAL	\$33.47 / Ga	\$34.08
Tralomethrin	SCOUT X-TRA, 1 GAL	\$283.89 / Ga	\$330.00
Carbaryl	SEVIN, 4F, 2.5 GAL	\$28.75 / Ga	\$28.75
Carbaryl	SEVIN, 80S, 10 LB	\$4.76 / Lb	\$4.98
Carbaryl	SEVIN, XLR PLUS, 2.5 GAL	\$25.00 / Ga	\$25.00
Spinosad	SUCCESS	\$600.00 / Ga	\$609.67
Phorate	THIMET, 20G, 50 LB	\$2.18 / Lb	\$2.03
Endosulfan	THIODAN, 3EC, 2.5 GAL	\$34.80 / Ga	\$33.17
Abamectin	ZEPHYR, 15EC, 2.5 GAL	\$550.00 / Ga	\$550.00
Lambdacyhalothrin	WARRIOR T	\$0.00 / Ga	\$336.00

**Table B.1 Prices of Materials Used**

Common Name	Example Trade Name	1998 Price	2001 Price
<b>Fungicides</b>			
Triadimefon	BAYETON, 50WP, 5 LB	\$61.50 / Lb	\$70.12
Benomyl	BENLATE, 50WP, 2 LB	\$19.03 / Lb	\$20.25
Chlorothalonil	BRAVO 500, 2.5 GAL	\$59.00 / Ga	\$42.60
Mancozeb	DITHANE, M45, 80W, 3 LB	\$0.00 / Lb	\$3.20
Mancozeb	DITHANE, M45, 80W, 50 LB	\$3.20 / Lb	\$3.10
Metalaxyl	RIDOMIL, 2E, 1 GAL	\$204.58 / Ga	\$202.05
Vinclozolin	RONILAN, 50DF, 5 LB	\$23.20 / Lb	\$24.59
<b>Defoliants</b>			
Endothall	ACCELERATE, 0.5S, 5 GAL	\$24.33 / Ga	\$24.35
Tribufos	DEF-6, 6E, 2.5 GAL	\$45.92 / Ga	\$46.28
Thidiazuron	DROPP, 50WP, 1 LB	\$56.16 / Lb	\$59.00
Merphos	FOLEX, 6E, 5 GAL	\$46.88 / Ga	\$50.78
Thidiazuron/Diuron	GINSTAR	\$200.00 / Lb	\$216.71
Paraquat	GRAMOXONE EXTRA, 2.5L, 2.5 GAL	\$0.00 / Ga	\$43.00
Paraquat	GRAMOXONE, 2S, 5 GAL	\$40.00 / Ga	\$40.78
	SODIUM CHLORATE 3, 1 GAL	\$1.40 / Ga	\$1.25
	SODIUM CHLORATE #2, 3, 1 GAL	\$0.00 / Ga	\$6.50
<b>Miscellaneous</b>			
Chlorine Comp. Gas	Chlorine Comp. Gas	\$0.80 / Lb	\$0.80
Mepiquat Chloride	PIX, .35L, 1 GAL	\$107.75 / Ga	\$118.60
Ethephon	PREP, 6E, 5 GAL	\$62.67 / Ga	\$64.33
Spreader-Activator	Sorba Spray Zip	\$13.50 / Ga	\$13.50
Sulfuric Acid	Sulfuric Acid Bulk	\$75.00 / Tn	\$75.00
Surfactant	Surfactant (Spreader)	\$16.13 / Ga	\$16.40
Vegetable Oil	Vegetable Oil Concentrate	\$13.00 / Ga	\$14.75

**Table B.1 Prices of Materials Used**

Common Name	Example Trade Name	1998 Price	2001 Price
<b>Cartons &amp; Boxes</b>			
Boxes & Supplies	Boxes & Supplies	\$0.95 / Ct	\$0.95
Boxes for Cauliflower	Boxes for Cauliflower	\$0.95 / Ct	\$0.95
Boxes for Leaf Lettuce	Boxes for Leaf Lettuce	\$1.05 / Ct	\$1.09
Broccoli Boxes	Broccoli Boxes	\$0.82 / Ct	\$0.90
Field Crates (Bu)	Field Crates (Bu)	\$0.00 / Sk	\$7.58
Cantaloupe Cartons	Cantaloupe Cartons	\$0.87 / Ct	\$1.00
Corn Sacks 5 Dz Cap	Corn Sacks 5 Dz Cap	\$0.49 / Sk	\$0.84
Lettuce Cartons	Lettuce Cartons	\$1.00 / Ct	\$1.15
Onion Bags	Onion Bags	\$1.10 / Sk	\$1.10
Plastic Mulch (Average)	Plastic Mulch (Average)	\$75.00 / Roll	\$85.00
Watermelon Bins	Watermelon Bins	\$9.00 / Ea	\$11.00
Waxed Cartons	Waxed Cartons	\$1.20 / Ct	\$1.30
Wirebound Crates	Wirebound Crates	\$1.60 / Ct	\$1.70
<b>Vegetable Seeds</b>			
Beet Seed	Beet Seed	\$5.67 / Lb	\$6.08
Bell Pepper (OP)	Bell Pepper (OP)	\$31.67 / Lb	\$32.67
Broccoli Seed (Hybrid)	Broccoli Seed (Hybrid)	\$2.36 / Th	\$2.65
Broccoli Seed (OP)	Broccoli Seed (OP)	\$15.00 / Lb	\$15.00
Butternut Squash Sd	Butternut Squash Sd	\$11.18 / Lb	\$11.80
Cabbage Sd (OP)	Cabbage Sd (OP)	\$16.75 / Lb	\$17.13
Cabbage Seed (Hybrid)	Cabbage Seed (Hybrid)	\$2.54 / Th	\$2.89
Cantaloupe Sd (Hybrid)	Cantaloupe Sd (Hybrid)	\$9.46 / Lb	\$9.90
Carrot Seed (Raw/Hybrid)	Carrot Seed (Raw/Hybrid)	\$0.22 / Th	\$0.25
Cauliflower Sd (Hyb)	Cauliflower Sd (Hyb)	\$4.80 / Th	\$5.10
Cauliflower Seed	Cauliflower Seed	\$61.67 / Lb	\$71.67
Cauliflower Trans	Cauliflower Trans	\$32.50 / Th	\$33.00
Chile Pepper Sd (OP)	Chile Pepper Sd (OP)	\$34.23 / Lb	\$32.67
Chinese Cabbage Sd	Chinese Cabbage Sd	\$0.87 / Lb	\$1.07
Collard Seed	Collard Seed	\$5.50 / Lb	\$5.50
Egg Plant (Hybrid)	Egg Plant (Hybrid)	\$2.86 / Th	\$2.95
Garlic Cloves	Garlic Cloves	\$10.00 / Cw	\$10.00
Green Bean Sd	Green Bean Sd	\$2.49 / Lb	\$3.00
Green Onion Seed	Green Onion Seed	\$21.18 / Lb	\$12.33
Head Lettuce Sd	Head Lettuce Sd	\$0.60 / Th	\$0.60
Head Lettuce Sd, Coated	Head Lettuce Sd, Coated	\$0.77 / Th	\$0.77
Head Lettuce Sd, Pellet	Head Lettuce Sd, Pellet	\$0.77 / Th	\$0.77
Honeydew Melons(Hybrid)	Honeydew Melons(Hybrid)	\$20.27 / Lb	\$21.43
Leaf Lettuce Sd (raw)	Leaf Lettuce Sd (raw)	\$0.36 / Th	\$0.54
Okra Seed	Okra Seed	\$4.83 / Lb	\$4.42
Okra Seed (Hybrid)	Okra Seed (Hybrid)	\$61.33 / Lb	\$61.33
Onion Seed (Pelletized)	Onion Seed (Pelletized)	\$0.87 / Th	\$0.87
Parsley Seed	Parsley Seed	\$11.83 / Lb	\$12.67
Pickling Cucumber (Hyb)	Pickling Cucumber (Hyb)	\$19.48 / Lb	\$19.48
Potato Seed	Potato Seed	\$16.00 / Cw	\$16.00
Potato Seed + Fung.	Potato Seed + Fung.	\$0.00 / Cw	\$0.00
Pumpkin Seed (Hyb)	Pumpkin Seed (Hyb)	\$19.88 / Th	\$20.25
Radish Seed	Radish Seed	\$4.51 / Lb	\$5.75
Rappini Seed	Rappini Seed	\$16.50 / Lb	\$19.00
Slicer Cucumber (Hyb)	Slicer Cucumber (Hyb)	\$44.67 / Lb	\$44.67
Snap Bean Seed	Snap Bean Seed	\$2.55 / Lb	\$2.55
Spinach Seed (Hyb)	Spinach Seed (Hyb)	\$2.84 / Lb	\$2.84
Summer Squash	Summer Squash	\$38.14 / Lb	\$38.14
Sweet Corn (Super Sweets)	Sweet Corn (Super Sweets)	\$9.21 / Lb	\$9.21
Sweet Corn Seed	Sweet Corn Seed	\$7.58 / Lb	\$7.58
Sweet Corn Seed + Fung.	Sweet Corn Seed + Fung.	\$8.50 / Lb	\$8.50
Sweet Potato Slips	Sweet Potato Slips	\$20.00 / Th	\$20.00
Tomato Seed (Hybrid)	Tomato Seed (Hybrid)	\$10.34 / Th	\$10.09
Turnip Sd (Hyb)	Turnip Sd (Hyb)	\$25.17 / Lb	\$25.17
Turnip Seed (OP)	Turnip Seed (OP)	\$4.75 / Lb	\$4.75
Watermelon Seed (Hyb)	Watermelon Seed (Hyb)	\$30.26 / Th	\$31.58
Watermelon Seed (OP)	Watermelon Seed (OP)	\$27.70 / Th	\$27.70
Watermelon, Seedless	Watermelon, Seedless	\$186.00 / Lb	\$189.00
Zucchini Seed (Hybrid)	Zucchini Seed (Hybrid)	\$50.00 / Lb	\$47.01

**Table B.2 Cost Data for Equipment and Implements**

Name	New Price	Hrs to Wearout	Annual Hours	Dollar Cost per Hour of Use					Total	
				Deprec	Opp. Int.	THI	Repairs	Fuel		
<b>Tractors</b>										
Tractor, 25 PTO HP	\$13,003	12,000	1200	\$0.76	\$0.59	\$0.14	\$1.09	\$1.12	\$3.71	
Tractor, 25 PTO HP, MFWD	\$16,577	16,000	1200	\$0.80	\$0.71	\$0.17	\$0.80	\$1.03	\$3.51	
Tractor, 35 PTO HP	\$20,550	12,000	1200	\$1.21	\$0.94	\$0.22	\$1.73	\$1.57	\$5.66	
Tractor, 35 PTO HP, MFWD	\$22,786	16,000	1200	\$1.11	\$0.97	\$0.23	\$1.09	\$1.45	\$4.85	
Tractor, 40 PTO HP	\$21,942	12,000	1200	\$1.29	\$1.00	\$0.24	\$1.84	\$1.80	\$6.17	
Tractor, 40 PTO HP, MFWD	\$25,371	16,000	1200	\$1.23	\$1.08	\$0.26	\$1.22	\$1.66	\$5.45	
Tractor, 50 PTO HP	\$25,307	12,000	1200	\$1.49	\$1.15	\$0.27	\$2.13	\$2.25	\$7.29	
Tractor, 50 PTO HP, MFWD	\$29,041	16,000	1200	\$1.41	\$1.24	\$0.30	\$1.39	\$2.07	\$6.41	
Tractor, 60 PTO HP	\$29,285	12,000	1200	\$1.72	\$1.33	\$0.32	\$2.46	\$2.70	\$8.53	
Tractor, 60 PTO HP, MFWD	\$35,664	16,000	1200	\$1.73	\$1.52	\$0.36	\$1.71	\$2.48	\$7.81	
Tractor, 70 PTO HP	\$32,461	12,000	1200	\$1.91	\$1.48	\$0.35	\$2.73	\$3.15	\$9.61	
Tractor, 70 PTO HP, MFWD	\$39,646	16,000	1200	\$1.92	\$1.69	\$0.40	\$1.90	\$2.90	\$8.82	
Tractor, 80 PTO HP	\$36,784	12,000	1200	\$2.16	\$1.67	\$0.40	\$3.09	\$3.60	\$10.92	
Tractor, 80 PTO HP, MFWD	\$45,029	16,000	1200	\$2.18	\$1.92	\$0.46	\$2.16	\$3.31	\$10.04	
Tractor, 100 PTO HP	\$50,344	12,000	1200	\$2.96	\$2.29	\$0.54	\$4.23	\$4.50	\$14.52	
Tractor, 100 PTO HP, MFWD	\$61,243	16,000	1200	\$2.97	\$2.62	\$0.62	\$2.94	\$4.14	\$13.29	
Tractor, 125 PTO HP	\$65,746	12,000	1200	\$3.86	\$2.99	\$0.71	\$5.52	\$6.07	\$19.16	
Tractor, 125 PTO HP, MFWD	\$76,656	16,000	1200	\$3.72	\$3.28	\$0.78	\$3.68	\$5.59	\$17.04	
Tractor, 150 PTO HP	\$81,578	12,000	1200	\$4.79	\$3.71	\$0.88	\$6.85	\$6.74	\$22.98	
Tractor, 150 PTO HP, MFWD	\$92,268	16,000	1200	\$4.48	\$3.94	\$0.94	\$4.43	\$6.21	\$20.00	
Tractor, 175 PTO HP	\$98,877	12,000	1200	\$5.81	\$4.50	\$1.07	\$8.31	\$7.87	\$27.55	
Tractor, 175 PTO HP, MFWD	\$110,999	16,000	1200	\$5.39	\$4.74	\$1.13	\$5.33	\$7.24	\$23.83	
Tractor, 200 PTO HP, 4WD	\$119,274	16,000	2000	\$4.85	\$3.41	\$0.80	\$5.73	\$8.99	\$23.79	
Tractor, 85 hp "MUDDER"	\$42,913	12,000	1200	\$2.52	\$1.95	\$0.46	\$3.60	\$3.73	\$12.27	
Tractor, 235 Eng HP, Art.	\$118,900	16,000	2000	\$4.84	\$3.40	\$0.80	\$5.71	\$7.87	\$22.62	
Tractor, 300 Eng HP, Art.	\$134,560	16,000	2000	\$5.48	\$3.85	\$0.91	\$6.46	\$10.12	\$26.81	
Tractor, 335 Eng HP, Art.	\$137,034	16,000	2000	\$5.58	\$3.92	\$0.92	\$6.58	\$11.02	\$28.01	
Tractor, 375 Eng HP, Art.	\$151,900	16,000	2000	\$6.18	\$4.35	\$1.02	\$7.29	\$12.81	\$31.66	
Tractor, Crawler, Rubber Track	\$160,240	16,000	2000	\$6.52	\$4.58	\$1.08	\$7.69	\$10.57	\$30.44	
Skip Loader, Wheeled	\$89,426	12,000	1000	\$5.59	\$4.69	\$1.12	\$7.51	\$4.05	\$22.96	
Motor Grader, 12'	\$184,230	16,000	1200	\$8.94	\$7.87	\$1.88	\$8.84	\$5.62	\$33.15	
<b>Self Propelled Harvest Equipment</b>										
Bale Wagon, SP PRC	\$107,880	3,000	300	\$30.02	\$17.96	\$4.19	\$59.75	\$4.44	\$116.37	
Bale Wagon, SP PRC W/Squeeze	\$110,680	3,000	300	\$30.80	\$18.43	\$4.30	\$61.30	\$4.44	\$119.28	
Combine, Sm. Gr., PL20, 155 Bu	\$126,986	3,000	400	\$31.49	\$17.21	\$3.99	\$17.01	\$4.19	\$73.89	
Combine, Sm. Gr., PL20, 190 Bu	\$140,511	3,000	400	\$34.85	\$19.04	\$4.41	\$18.82	\$4.61	\$81.73	
Combine, Corn, 190 Bu, 6 Row	\$157,934	3,000	400	\$39.17	\$21.40	\$4.96	\$21.15	\$4.61	\$91.29	
Cotton Picker, 4Rw, HDC C PC	\$232,671	3,000	500	\$53.71	\$26.49	\$6.09	\$61.64	\$6.71	\$154.62	
Cotton Picker, 5Rw, HDC C PC	\$244,800	3,000	500	\$56.51	\$27.87	\$6.40	\$64.85	\$6.71	\$162.33	
Cotton Picker, 2Rw	\$139,749	3,000	500	\$32.26	\$15.91	\$3.66	\$37.02	\$4.61	\$93.45	
Cotton Stripper, 4Rw PSB PC	\$122,138	3,000	500	\$28.19	\$13.90	\$3.19	\$32.35	\$5.53	\$83.18	
Forage Harv, SP RC 3.0 PSB FC	\$173,618	4,000	400	\$36.24	\$21.68	\$5.06	\$20.83	\$4.19	\$88.00	
Forage Harv, SP SB 14.0 PSB FC	\$208,616	4,000	300	\$46.43	\$32.73	\$7.72	\$25.03	\$4.19	\$116.10	
Windrower, 14.0', HS, SC	\$62,738	3,000	300	\$17.46	\$10.44	\$2.44	\$11.29	\$2.93	\$44.57	
Lettuce Harvester, 12Rw	\$89,000	12,000	1000	\$6.32	\$4.34	\$1.02	\$64.08	\$3.82	\$79.58	
Cauliflower Harvester, 18 Row	\$105,000	12,000	1000	\$7.46	\$5.12	\$1.21	\$75.60	\$3.82	\$93.20	
Chili Harvester, SP 2 Row	\$125,000	4,000	1000	\$18.98	\$7.72	\$1.74	\$30.00	\$3.73	\$62.18	
Chili Harvester, SP 2 Row	\$125,000	4,000	1000	\$18.98	\$7.72	\$1.74	\$30.00	\$3.82	\$62.27	
Chili Harvester, SP 4 Row	\$188,000	4,000	1000	\$28.55	\$11.61	\$2.62	\$45.12	\$4.05	\$91.95	
Nut Harvester, w/4' Head	\$29,500	4,000	400	\$5.98	\$3.75	\$0.88	\$7.08	\$3.47	\$21.15	
Catch Frame Harvester	\$133,493	4,000	400	\$27.08	\$16.95	\$3.97	\$32.04	\$2.52	\$82.55	
Tree Shaker, SP 7'	\$80,157	4,000	400	\$16.26	\$10.18	\$2.38	\$19.24	\$2.52	\$50.57	
Sweeper, 7.5' w/30 HP Wisc	\$33,400	4,000	400	\$6.77	\$4.24	\$0.99	\$8.02	\$2.18	\$22.20	
<b>Trucks</b>										
Pickup Truck, Mini	\$14,703	3,000	600	\$4.17	\$1.29	\$0.70	\$2.95	\$2.67	\$11.79	
Pickup Truck, 1/2 Ton	\$17,860	4,000	600	\$3.80	\$1.52	\$0.86	\$3.69	\$4.00	\$13.87	
Pickup Truck, 3/4 Ton	\$21,212	4,000	600	\$4.51	\$1.81	\$1.02	\$4.39	\$4.67	\$16.39	
Pickup Truck, 3/4 Ton 4WD	\$23,169	5,500	600	\$3.58	\$1.92	\$1.11	\$4.95	\$5.34	\$16.89	
Pickup Truck, 1 Ton	\$22,875	5,500	600	\$3.54	\$1.90	\$1.10	\$4.88	\$7.34	\$18.75	
Truck, 5 Ton w/1000 Gal Tank	\$39,638	5,500	600	\$6.13	\$3.28	\$1.90	\$8.46	\$9.34	\$29.11	
Truck, 5 Ton, Grain	\$48,138	5,500	600	\$7.44	\$3.99	\$2.31	\$10.28	\$9.34	\$33.35	
Crew Bus, 44 Passenger	\$54,638	5,500	600	\$8.44	\$4.53	\$2.62	\$11.66	\$9.34	\$36.59	
Truck, Module Hauler	\$144,955	5,500	1000	\$22.40	\$7.56	\$4.17	\$30.94	\$5.03	\$70.11	
Truck, Mixer/Feeder w/Scales	\$41,524	12,000	1000	\$2.94	\$2.03	\$0.48	\$3.49	\$5.03	\$13.96	

Fuel Prices: Diesel (D) \$0.729, Gasoline (UG) \$1.16

**Table B.2 Cost Data for Equipment and Implements**

Name	New Price	Hrs to Wearout	Annual Hours	Dollar Cost per Hour of Use					Total
				Deprec	Opp. Int.	THI	Repairs	Fuel	
<b>Spray Equipment</b>									
High Clearance Sprayer, 18 Rw	\$70,308	12,000	900	\$5.22	\$3.68	\$0.87	\$5.91	\$5.34	\$21.00
Over Vine Sprayer, 2 row	\$22,100	1,500	200	\$11.43	\$5.87	\$1.35	\$10.23		\$28.89
Directed Spray Rig, 8 Row	\$3,775	1,500	500	\$1.54	\$0.48	\$0.10	\$1.75		\$3.87
Directed Spray Rig, 16 Row	\$8,250	1,500	500	\$3.37	\$1.05	\$0.23	\$3.82		\$8.47
Saddle Tk Sprayer, 2 Tk 8 Row	\$8,250	1,500	200	\$4.27	\$2.19	\$0.51	\$3.82		\$10.78
Manual Spray Rig, 150 g on ski	\$2,400	1,500	200	\$1.24	\$0.64	\$0.15	\$1.11		\$3.14
Sprayer, Air Blast 500 GAL ENG	\$51,000	2,000	500	\$16.74	\$6.15	\$1.37	\$15.46	\$4.67	\$44.39
Sprayer, Air Blast 500 GAL PTO	\$14,818	2,000	500	\$4.86	\$1.79	\$0.40	\$4.49		\$11.54
Spraycab	\$12,000	3,000	500	\$2.85	\$1.35	\$0.31	\$0.25		\$4.76
<b>Trailed Harvest Equipment</b>									
Bale Wagon, Pull	\$32,284	3,000	300	\$8.99	\$5.37	\$1.25	\$8.53		\$24.14
Baler, 1 Tn, 'BIG BALE'	\$90,000	3,000	500	\$21.93	\$10.01	\$2.28	\$21.67		\$55.90
Baler, 2 Wire Auto PTO	\$21,935	2,000	300	\$8.25	\$3.98	\$0.91	\$8.78		\$21.92
Baler, 3 wire w/motor	\$51,045	2,000	300	\$19.19	\$9.26	\$2.12	\$20.44	\$3.34	\$54.35
Forage Harvester PTO RC2	\$36,672	2,500	300	\$11.70	\$6.35	\$1.47	\$9.53		\$29.05
Forage Harvester PTO SB8.0	\$36,873	2,500	300	\$11.77	\$6.38	\$1.48	\$9.58		\$29.21
Forage Harvester PTO WP6.2	\$32,023	2,500	300	\$10.22	\$5.54	\$1.28	\$8.32		\$25.37
Forage Wagon PTO Unloader	\$30,000	2,000	400	\$10.44	\$4.33	\$0.98	\$6.82		\$22.57
Tree Shaker, PTO	\$7,635	2,500	400	\$2.26	\$1.05	\$0.24	\$2.41		\$5.96
Nut Harvester	\$14,835	2,500	400	\$4.39	\$2.05	\$0.47	\$4.63		\$11.53
Module Builder	\$28,339	3,000	400	\$7.33	\$3.76	\$0.87	\$7.49		\$19.45
Module Handler	\$62,000	3,000	200	\$18.81	\$14.26	\$3.38	\$16.38		\$52.84
Mower, 7'	\$3,903	2,000	300	\$1.47	\$0.71	\$0.16	\$2.92		\$5.25
Potato Harvester, 2 Rw	\$70,350	2,500	450	\$20.15	\$8.84	\$2.01	\$19.28		\$50.27
Potato Harvester, 4 Rw	\$92,000	2,500	450	\$26.35	\$11.55	\$2.63	\$25.22		\$65.75
Combine Pickup Regular Head	\$10,239	2,000	450	\$3.45	\$1.34	\$0.30	\$2.33		\$7.43
Bean Knife Rig - 3 Pt/8 Row	\$13,040	2,000	450	\$4.25	\$1.73	\$0.39	\$3.95		\$10.32
Bean Rod/Windower 10 Row	\$6,589	2,000	450	\$2.15	\$0.88	\$0.20	\$2.00		\$5.22
Rake, 9.5' LH	\$13,619	2,500	300	\$4.35	\$2.36	\$0.55	\$3.34		\$10.59
Rake, 9.5' LH AND RH	\$17,600	2,500	300	\$5.62	\$3.05	\$0.71	\$4.32		\$13.68
Sweeper, 13' Tractor Mounted	\$22,475	250	200	\$46.69	\$8.52	\$1.67	\$4.91		\$61.78
<b>Leveling Equipment</b>									
Blade Scraper, 10'	\$4,560	2,500	130	\$1.72	\$1.55	\$0.37	\$0.96		\$4.60
Blade Scraper, 8'	\$3,145	2,500	130	\$1.19	\$1.07	\$0.26	\$0.66		\$3.17
Drag Scraper, 14'	\$5,127	2,500	130	\$1.93	\$1.75	\$0.42	\$1.08		\$5.18
Landplane 14'X 60'	\$25,600	2,500	200	\$8.91	\$6.14	\$1.45	\$14.03		\$30.53
Laser Receiver, Complete Syste	\$24,500	20,000	1500	\$1.08	\$0.77	\$0.18	\$0.49		\$2.53
<b>Plows</b>									
Moldboard Plow, 3-16 2 Way	\$7,235	2,000	200	\$2.98	\$1.82	\$0.43	\$3.65		\$8.88
Moldboard Plow, 4-16 2 Way	\$7,470	2,000	200	\$3.07	\$1.88	\$0.44	\$3.77		\$9.17
Moldboard Plow, 5-16 2 Way	\$10,329	2,000	110	\$4.83	\$4.19	\$1.00	\$5.22		\$15.24
Switch Plow, 6-16	\$10,200	2,000	110	\$4.77	\$4.14	\$0.99	\$5.15		\$15.05
Subsoiler, Heavy Duty, 3 Shank	\$4,400	2,000	120	\$2.03	\$1.66	\$0.40	\$1.63		\$5.71
Subsoiler, Heavy Duty, 7 Shank	\$7,290	2,000	110	\$3.41	\$2.96	\$0.71	\$2.69		\$9.77
Ripper, 3 Shank	\$3,743	2,000	110	\$1.75	\$1.52	\$0.36	\$1.38		\$5.01
V-Ripper, 5 Sk	\$5,331	2,000	110	\$2.49	\$2.16	\$0.52	\$1.97		\$7.14
V-Ripper, 7 Sk	\$6,440	2,000	110	\$3.01	\$2.61	\$0.62	\$2.38		\$8.63
V-Ripper, 7 Sk with Wings	\$7,650	2,000	110	\$3.58	\$3.11	\$0.74	\$2.83		\$10.25
V-Ripper, 9 Sk	\$8,031	2,000	200	\$3.31	\$2.02	\$0.47	\$2.97		\$8.77
V-Ripper, 11 Sk	\$8,206	2,000	200	\$3.38	\$2.07	\$0.48	\$3.03		\$8.96
<b>Disks</b>									
Border Disk, Dbl. Gang	\$5,600	2,000	200	\$2.30	\$1.41	\$0.33	\$1.64		\$5.68
Border Disk, 6 Disk	\$2,372	2,000	200	\$0.98	\$0.60	\$0.14	\$0.69		\$2.41
Border Disk, Heavy Duty	\$2,551	2,000	200	\$1.05	\$0.64	\$0.15	\$0.75		\$2.59
Dbl. Offset Disk, 11.5'	\$13,979	2,000	200	\$5.75	\$3.52	\$0.82	\$4.09		\$14.18
Dbl. Offset Disk, 13'	\$8,768	2,000	200	\$3.61	\$2.21	\$0.52	\$2.56		\$8.90
Dbl. Offset Disk, 16'	\$18,156	2,000	200	\$7.47	\$4.57	\$1.07	\$5.31		\$18.42
Dbl. Offset Disk, 21'	\$20,808	2,000	200	\$8.56	\$5.24	\$1.22	\$6.08		\$21.11
Offset Disk, 10.5'	\$8,851	2,000	200	\$3.64	\$2.23	\$0.52	\$2.59		\$8.98
Offset Disk, 12'	\$11,758	2,000	200	\$4.84	\$2.96	\$0.69	\$3.44		\$11.93
Offset Disk, 13.5'	\$13,604	2,000	200	\$5.60	\$3.43	\$0.80	\$3.98		\$13.80
Offset Disk, 16.5'	\$16,163	2,000	200	\$6.65	\$4.07	\$0.95	\$4.73		\$16.40
Offset Disk, 18'	\$19,224	2,000	200	\$7.91	\$4.84	\$1.13	\$5.62		\$19.51
Offset Disk, 21'	\$21,342	2,000	200	\$8.78	\$5.37	\$1.26	\$6.24		\$21.66
Offset Disk, 8'	\$6,787	2,000	200	\$2.79	\$1.71	\$0.40	\$1.98		\$6.89
Tandem Disk, 10'	\$7,800	2,000	200	\$3.21	\$1.96	\$0.46	\$2.28		\$7.91
Tandem Disk, 12'	\$8,600	2,000	200	\$3.54	\$2.17	\$0.51	\$2.51		\$8.73
<b>Cultivators</b>									
Section Harrow, 3 Section	\$1,437	2,000	200	\$0.59	\$0.36	\$0.08	\$0.51		\$1.55
Section Harrow, 4 Section	\$1,699	2,000	200	\$0.70	\$0.43	\$0.10	\$0.61		\$1.83
Vegetable Cultivator, 4 Row	\$7,850	2,000	250	\$3.04	\$1.66	\$0.39	\$3.07		\$8.15
Rolling Cultivator, 4 Rw	\$4,823	2,000	250	\$1.87	\$1.02	\$0.24	\$1.88		\$5.01
Rolling Cultivator, 6 Rw	\$6,492	2,000	250	\$2.51	\$1.37	\$0.32	\$2.54		\$6.74
Rotary Hoe, 4 Rw	\$4,710	2,000	250	\$1.82	\$1.00	\$0.23	\$1.43		\$4.48
Rotary Hoe, 6 Rw	\$5,587	2,000	250	\$2.16	\$1.18	\$0.27	\$1.70		\$5.31
Cultivator, Sweep, 4 Rw	\$4,721	2,000	250	\$1.83	\$1.00	\$0.23	\$1.68		\$4.74
Cultivator, Sweep, 6 Rw	\$6,527	2,000	250	\$2.53	\$1.38	\$0.32	\$2.33		\$6.55
Cultivator, 6 Row	\$6,100	2,000	250	\$2.36	\$1.29	\$0.30	\$2.17		\$6.12
Spring Tooth Revovator, 16'	\$7,497	2,000	200	\$3.09	\$1.89	\$0.44	\$2.67		\$8.09

**Table B.2 Cost Data for Equipment and Implements**

Name	New Price	Hrs to Wearout	Annual Hours	Dollar Cost per Hour of Use					Total
				Deprec	Opp. Int.	THI	Repairs	Fuel	
<b>Miscellaneous Tillage</b>									
Cultipacker, 13'	\$4,800	2,000	200	\$1.98	\$1.21	\$0.71	\$0.95		\$4.84
Pegasus, 4 Row	\$26,436	2,000	250	\$10.23	\$5.59	\$3.24	\$5.21		\$24.28
Pegasus, 6 Row	\$36,174	2,000	250	\$14.00	\$7.65	\$1.77	\$7.13		\$30.56
Furrow Spike, 4 Rw	\$5,200	2,000	250	\$2.01	\$1.10	\$0.26	\$1.85		\$5.22
Lister, 5 Bottom	\$5,597	2,000	200	\$2.30	\$1.41	\$0.33	\$2.83		\$6.87
Lister, 7 Bottom	\$6,628	2,000	200	\$2.73	\$1.67	\$0.39	\$3.35		\$8.14
Mulch Layer, 1 Rw	\$1,225	2,500	200	\$0.43	\$0.29	\$0.07	\$1.10		\$1.89
Row Checker, 6 Row	\$1,967	2,500	200	\$0.68	\$0.47	\$0.11	\$0.49		\$1.76
Power Mulcher, 4 Rw	\$5,198	2,000	200	\$2.14	\$1.31	\$0.31	\$3.74		\$7.50
Power Mulcher, 6 Rw	\$8,538	2,000	200	\$3.51	\$2.15	\$0.50	\$6.15		\$12.31
Rowbuck, 10'	\$2,719	2,500	150	\$1.00	\$0.82	\$0.20	\$0.93		\$2.95
Rototiller, 6'	\$3,876	1,500	200	\$1.96	\$1.04	\$0.24	\$2.09		\$5.34
Disk-Lister, 2 Rw	\$9,850	2,000	200	\$4.05	\$2.48	\$0.58	\$2.88		\$9.99
Disk-Lister, 4 Rw	\$19,164	2,000	200	\$7.89	\$4.83	\$1.13	\$5.60		\$19.45
Disk-Lister, 6 Rw	\$27,026	2,000	200	\$11.12	\$6.81	\$1.59	\$7.90		\$27.42
Bed Roller, 4 Rw	\$9,367	2,000	110	\$4.38	\$3.80	\$0.91	\$1.85		\$10.93
Bed Roller, 6 Rw	\$12,704	2,000	110	\$5.94	\$5.16	\$1.23	\$2.50		\$14.83
Root Cutter-Puller, 2 Rw	\$4,005	2,000	250	\$1.55	\$0.85	\$0.20	\$1.22		\$3.81
Root Cutter-Puller, 4 Rw	\$6,190	2,000	250	\$2.40	\$1.31	\$0.30	\$1.88		\$5.89
Root Cutter-Puller, 6 Row	\$8,734	2,000	250	\$3.38	\$1.85	\$0.43	\$2.65		\$8.31
<b>Fertilizer Application</b>									
Fert. Side Dress Unit, 4Rw	\$8,400	1,200	150	\$5.42	\$2.96	\$0.69	\$5.59		\$14.66
Fert. Side Dress Unit, 6Rw	\$9,300	1,200	150	\$6.00	\$3.28	\$0.76	\$6.19		\$16.23
Fertilizer Injector, 3 Rw	\$5,686	1,200	200	\$3.37	\$1.60	\$0.37	\$3.78		\$9.12
Fertilizer Injector, 4 Rw	\$7,108	1,200	200	\$4.22	\$2.00	\$0.46	\$4.73		\$11.40
Fertilizer Injector, 6 Rw	\$9,296	1,200	200	\$5.51	\$2.62	\$0.60	\$6.19		\$14.91
<b>Planters</b>									
Air Planter 8 Row	\$30,000	1,500	300.00	\$13.49	\$5.84	\$3.32	\$15.00		\$37.64
Seeder, Broadcast	\$15,643	1,500	80.00	\$9.80	\$8.69	\$5.19	\$13.20		\$36.87
Grain Drill, 12'	\$9,180	1,500	140.00	\$5.13	\$3.25	\$1.91	\$4.59		\$14.88
Grain Drill 12' W/Fert Box	\$10,614	1,500	140.00	\$5.93	\$3.76	\$2.20	\$5.31		\$17.20
Grain Drill, 14'	\$11,010	1,500	140.00	\$6.15	\$3.90	\$2.29	\$5.50		\$17.84
Flexi-Planter - 4 Units	\$3,610	1,500	150.00	\$1.98	\$1.21	\$0.71	\$1.80		\$5.71
Planter, Drill Type, 4 Rw	\$10,956	1,500	150.00	\$6.01	\$3.68	\$2.15	\$5.48		\$17.32
Planter, Drawn Drill Type 4 Rw	\$18,666	1,500	150.00	\$10.24	\$6.27	\$3.66	\$9.33		\$29.50
Planter, Drill Type, 6 Rw	\$15,643	1,500	150.00	\$8.58	\$5.25	\$3.07	\$7.82		\$24.73
Planter, Drawn Drill Type 6 Rw	\$16,481	1,500	150.00	\$9.04	\$5.53	\$3.23	\$8.24		\$26.05
Planter/Gramor, 4 Bd,6 Line/Be	\$11,958	1,500	150.00	\$6.56	\$4.02	\$2.35	\$5.98		\$18.90
Planter/Gramor, 4 Bd,8 Line/Be	\$13,891	1,500	120.00	\$8.05	\$5.56	\$3.27	\$6.94		\$23.83
Planter, Potato, 3 Comp, 4 Rw	\$32,000	1,500	120.00	\$18.55	\$12.80	\$7.54	\$16.00		\$54.89
Planter, Potato 3 Comp. 6 Row	\$43,000	1,500	120.00	\$24.93	\$17.20	\$10.13	\$21.49		\$73.75
Planter, Planet Jr, 2R, 4 Unit	\$2,562	1,500	120.00	\$1.49	\$1.02	\$0.60	\$1.28		\$4.39
Planter, Planet Jr, 4 Rw	\$5,124	1,500	120.00	\$2.97	\$2.05	\$1.21	\$2.56		\$8.79
Planter, Flex 2 Line	\$886	1,500	120.00	\$0.51	\$0.35	\$0.21	\$0.44		\$1.52
Planter, Stanhay, 4 Rw	\$14,375	1,500	120.00	\$8.33	\$5.75	\$3.39	\$7.19		\$24.66
Transplanter, Veg, 2Rw	\$4,228	1,500	120.00	\$2.45	\$1.69	\$1.00	\$2.11		\$7.25
Transplanter, Veg, 4Rw	\$9,578	1,500	120.00	\$5.55	\$3.83	\$2.26	\$4.79		\$16.43
<b>Miscellaneous</b>									
Brush Rake	\$5,356	2,500	200	\$1.86	\$1.29	\$0.30	\$1.31		\$4.76
Cane Trimmer, 1 Head	\$1,775	2,000	200	\$0.73	\$0.45	\$0.10	\$0.66		\$1.94
Cane Trimmer, 2 Heads	\$3,013	2,000	200	\$1.24	\$0.76	\$0.18	\$1.11		\$3.29
Rotary Stalk Cutter, 2 Rw	\$5,129	2,000	200	\$2.11	\$1.29	\$0.30	\$1.89		\$5.60
Rotary Stalk Cutter, 4 Rw	\$9,152	2,000	200	\$3.77	\$2.30	\$0.54	\$3.38		\$9.99
Row Crop Shredder, 4 Row	\$12,600	2,000	200	\$5.19	\$3.17	\$0.74	\$4.66		\$13.76
Rotary Mower, Offset 10.7'	\$8,007	2,000	200	\$3.30	\$2.02	\$0.47	\$7.05		\$12.83
3 Point Guidance Hitch	\$7,164	12,000	1200	\$0.42	\$0.33	\$0.08	\$0.09		\$0.91
Post Hole Digger, PTO Drive	\$6,445	2,500	200	\$2.24	\$1.55	\$0.36	\$5.80		\$9.95
French Plow	\$4,565	2,000	200	\$1.88	\$1.15	\$0.27	\$2.30		\$5.60
Berm Sweep	\$5,800	2,000	200	\$2.39	\$1.46	\$0.34	\$2.91		\$7.10
Water Wagon, 1000 Gal Tank	\$4,600	3,000	200	\$1.39	\$1.06	\$0.25	\$1.22		\$3.92
Mixer/Feeder Wagon w/Scales	\$42,274	3,000	1000	\$8.23	\$2.72	\$1.50	\$11.17		\$23.62
Border Blocker	\$5,200	3,000	500	\$1.23	\$0.59	\$0.13	\$1.16		\$3.11
Front End Loader	\$7,272	5,000	500	\$1.20	\$0.73	\$0.17	\$1.89		\$3.99
Flat Trailer	\$1,615	3,000	200	\$0.49	\$0.37	\$0.09	\$0.43		\$1.38
Vineyard Shredder, 7'	\$9,495	2,500	200	\$3.30	\$2.28	\$0.54	\$3.15		\$9.27
Bin Trailer	\$1,275	3,000	200	\$0.38	\$0.29	\$0.07	\$0.34		\$1.09
Cattle Trailer, Gooseneck	\$3,012	3,000	500	\$0.71	\$0.34	\$0.08	\$0.80		\$1.93
Vineyard Tiller 8'	\$13,500	2,000	200	\$5.56	\$3.40	\$0.79	\$4.99		\$14.74
Vineyard Tiller 6'	\$9,142	2,000	200	\$3.76	\$2.30	\$0.54	\$3.38		\$9.98
Orchard Trimmer Heavy Duty	\$147,300	3,000	300	\$41.00	\$24.52	\$5.72	\$99.32	\$3.86	\$174.43
Orchard Trimmer Mid Range	\$89,030	3,000	300	\$24.78	\$14.82	\$3.46	\$60.03	\$3.86	\$106.95
Orchard Trimmer Small Range	\$36,816	2,000	200	\$15.37	\$9.19	\$2.15	\$12.69		\$39.40