

Table 17A. Income and Cash Operating Summary; Early Potatoes, 1998

COUNTY: Pinal FARM: Pinal Vegetables 98 WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Conventional
 CROP: Potatoes, Early ACRES: 1.0 IRRIGATION SYSTEM: Linear Move Furrow SOIL: Sandy-Loam
 AREA: Maricopa YIELD: 280.0 CW / Acre PREVIOUS CROP: Wheat, Winter DATE: 9/2/99

Item	Unit	Quantity	Price/ Unit	Budgeted /Acre	Total /Acre	Your Farm Budget	
INCOME	Potatoes	Hundred Lbs	280.00	\$8.34	\$2,335.20	\$2,335.20	_____
CASH LAND PREPARATION AND GROWING EXPENSES (including sales tax)							
Paid Labor (including benefits)					114.13	_____	
Tractor/Self Propelled					58.75	_____	
Irrigation					31.20	_____	
Other/ Contract					24.18	_____	
Chemicals and Custom Applications					101.00	_____	
Fertilizer					84.67	_____	
Insecticide					11.38	_____	
Herbicide					4.96	_____	
Farm Machinery and Vehicles					75.46	_____	
Diesel Fuel					24.02	_____	
Gasoline					3.58	_____	
Repairs and Maintenance					47.86	_____	
Irrigation Water (excluding labor)					121.44	_____	
Irrigation Water					92.12	_____	
Pump Energy - Electric					0.33	_____	
Repairs and Maintenance					28.98	_____	
Water Assessment (See Note Below) **						_____	
Other Purchased Inputs &					469.40	_____	
Seed/Transplants					466.40	_____	
Other Services and Rentals					3.00	_____	
TOTAL CASH LAND PREPARATION AND GROWING EXPENSES					881.43	_____	
CASH HARVEST AND POST HARVEST EXPENSES							
Paid Labor (including benefits)					45.04	_____	
Tractor/Self Propelled					24.57	_____	
Other/Contract					20.47	_____	
Farm Machinery and Vehicles					42.81	_____	
Diesel Fuel					9.12	_____	
Repairs and Maintenance					33.68	_____	
TOTAL HARVEST AND POST HARVEST EXPENSE					87.84	_____	
OPERATING OVERHEAD PICKUP USE					15.41	_____	
OPERATING INTEREST AT 10.0%					29.13	_____	
TOTAL CASH OPERATING EXPENSES					\$1,013.82	_____	
RETURNS OVER CASH OPERATING EXPENSES					\$1,321.38	_____	

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 17B. Allocations of Ownership Costs; Early Potatoes, 1998

COUNTY: Pinal FARM: Pinal Vegetables 98 WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Conventional
 CROP: Potatoes, Early ACRES: 1.0 IRRIGATION SYSTEM: Linear Move Furrow SOIL: Sandy-Loam
 AREA: Maricopa YIELD: 280.0 CW / Acre PREVIOUS CROP: Wheat, Winter DATE: 9/2/99

Item	-- CASH COST BASIS (\$/ACRE) --		-- TOTAL COST BASIS (\$/ACRE) --	
	Income and Costs	Net Returns	Income and Costs	Net Returns
TOTAL INCOME at \$8.34 / CW	\$2,335.20		\$2,335.20	
TOTAL OPERATING EXPENSES	\$1,013.82		\$1,013.82	
RETURN OVER CASH OPERATING EXPENSES		\$1,321.38		\$1,321.38
CASH OVERHEAD EXPENSES				
Taxes, Housing and Insurance, Farm Machinery	14.40		14.40	
Wells and Irrigation System	5.53		5.53	
General and Office Overhead (5.0% of Total Operating Exp.)	50.69		50.69	
General Farm Maintenance (3.0% of Total Operating Exp.)	30.41		30.41	
Total Cash Overhead Expenses	101.03		101.03	
Total Cash Operating and Overhead Cost	1,114.85		1,114.85	
RETURNS OVER CASH OPER. AND OVER. EXPENSES		\$1,220.35		\$1,220.35
CAPITAL ALLOCATIONS (100% Equity)				
Capital Replacement, Machinery and Vehicles			85.60	
Wells and Irrigation System			20.17	
Interest on Equity, Machinery and Vehicles			34.90	
Wells and Irrigation System			19.75	
Total Capital Allocations			160.42	
RETURNS TO LAND, CAPITAL, MANAGEMENT AND RISK ----->		\$1,220.35		
RETURNS TO LAND, MANAGEMENT AND RISK ----->				\$1,059.93
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 ----->		\$1,095.35		
RETURNS TO MANAGEMENT AND RISK ----->				\$934.93
Management Services (8% of Total Operation Expenses)			81.11	
TOTAL OWNERSHIP COST	226.03		467.56	
TOTAL COST	\$1,239.85		\$1,481.38	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		\$1,095.35		
RETURNS TO RISK (PROFITS) ----->				\$853.82
BREAK-EVEN PRICE TO COVER OPERATING COST (PER Lb)		\$3.62		\$3.62
BREAK-EVEN PRICE TO COVER OWNERSHIP COST		\$0.81		\$1.67
BREAK-EVEN PRICE TO COVER TOTAL COST		\$4.43		\$5.29

Table 17C. Variable Operating Costs; Early Potatoes, 1998

COUNTY: Pinal FARM: Pinal Vegetables 98 WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Conventional
 CROP: Potatoes, Early ACRES: 1.0 IRRIGATION SYSTEM: Linear Move Furrow SOIL: Sandy-Loam
 AREA: Maricopa YIELD: 280.0 CW / Acre PREVIOUS CROP: Wheat, Winter DATE: 9/2/99

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	2.71	2.05			4.75	1.0	4.75	L
2	Nov	Plow	0.450	0.500	6.19	4.09			10.29	1.0	10.29	L
3	Nov	Disk	0.225	0.250	3.15	2.05			5.19	5.0	25.96	L
4	Nov	List	0.225	0.250	1.92	2.05			3.97	1.0	3.97	L
5	Dec	Mulch	0.300	0.333	2.27	2.73			4.99	1.0	4.99	L
6	Dec	Soil Fertility					3.00		3.00	1.0	3.00	G
7	Dec	Prep/Haul Seed Potato	0.900	2.000	18.37	9.97			28.34	1.0	28.34	L
8	Dec	Plant	0.750	1.666	23.32	12.51		524.70	560.53	1.0	560.53	L
9	Dec	Irrigate/Linear move		0.100	0.89			2.79	3.68	33.0	121.44	G
10	Jan	Apply Herbicide/Ground	0.300	0.333	3.02	2.73		4.96	10.70	1.0	10.70	G
11	Jan	Hilling	0.360	0.400	2.87	3.28			6.15	3.0	18.44	L
12	Jan	Irrigate/Run Fertilizer		2.000		15.60		13.18	28.78	2.0	57.56	G
13	Apr	Apply Insecticide/Air					4.75	6.62	11.38	1.0	11.38	G
14	May	Cut Vines	0.750	0.833	6.29	6.82			13.12	1.0	13.12	G
15	May	Roll Beds	0.129	0.143	0.61	1.17			1.78	1.0	1.78	L
16	Jun	Dig	0.900	2.000	30.94	15.01			45.96	1.0	45.96	H
17	Jun	Pick and Haul	1.800	4.000	11.86	30.03			41.89	1.0	41.89	H
18	Jun	Disk Residue	0.225	0.250	3.15	2.05			5.19	1.0	5.19	L
		Pickup Use60 Mi/Acre	2.000		15.41				15.41		15.41	
		Operating Interest at 10.0					29.13		29.13		29.13	
TOTAL CASH OPERATING EXPENSES (includes all times over):												
1,013.82 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		SENSITIVITY OF THE NET REVENUES OVER TOTAL CASH EXPENSES (\$/ACRE)						
		Prices	- 25%	- 10%	Budgeted	+ 10%	+ 25%	
Land Preparation (L)	655.88	Yields	\$6.26	\$7.51	\$8.34	\$9.17	\$10.43	Break-even Price
Growing (G)	225.55							
Harvest (H)	87.84							
Post Harvest (P)	0.00	- 25%	210.0	338.13	600.84	775.98	951.12	1,213.83
Marketing (M)	0.00	- 10%	252.0	587.66	902.91	1,113.08	1,323.25	1,638.50
Operating Overhead (O)	44.54	Budgeted	280.0	754.02	1,104.30	1,337.82	1,571.34	1,921.62
		+ 10%	308.0	920.37	1,305.68	1,562.55	1,819.43	2,204.73
Total (T)	\$1,013.82	+ 25%	350.0	1,169.91	1,607.76	1,899.66	2,191.56	2,629.41
		Break-even Yield		153.09	126.46	113.32	102.65	89.95

Table 17D. Resource and Cash Flow Requirements; Early Potatoes, 1998

COUNTY: Pinal FARM: Pinal Vegetables 98 WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Conventional
 CROP: Potatoes, Early ACRES: 1.0 IRRIGATION SYSTEM: Linear Move Furrow SOIL: Sandy-Loam
 AREA: Maricopa YIELD: 280.0 CW / Acre PREVIOUS CROP: Wheat, Winter DATE: 9/2/99

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			2.25		26.55	18.42				44.97
DEC P	6.0	6.0	9.27	16.75	32.57	41.92	58.30	466.40	3.00	618.94
JAN C	7.0	7.0	3.43	19.54	12.11	21.60	18.14			71.39
FEB C	7.0	7.0	2.70	19.54	6.22	15.60	13.18			54.54
MAR C	7.0	7.0	1.10	19.54	9.09	3.28				31.91
APR C	6.0	6.0	1.00	16.75	8.20	3.28	6.62		4.75	39.60
MAY C			0.98		6.91	7.99				14.90
JUN C			6.25		45.95	47.09				93.04
Pickup Use60 Mi/Acre					15.41					15.41
Operating Interest at 10.0 Water Assessment				**					29.13	29.13
Total	33.0	33.0	26.98	92.12	163.01	159.18	96.24	466.40	36.88	1,013.82
%				9.09	16.08	15.70	9.49	46.00	3.64	100.00

TOTAL RESOURCE REQUIREMENTS (per Acre)

Total N 164.0
 Total P 184.0
 Total Labor 27.0
 Total Water 33.0

TOTAL ENERGY REQUIREMENTS (per Acre)

Diesel Fuel 43.6 Gal
 Unleaded Gas 8.7 Gal
 Electric / Pumping 11.1 KWH
 All Direct Energy 7.2 M BTU

EQUIPMENT REQUIREMENTS (per Acre)

Bed Roller, 4 Rw 0.13 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' 1.35 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
Saddle Tk Sprayer, 2 Tk 8 0.30 Hr	Tractor, 60 PTO HP, 2.23 Hr	Tractor, 100 PTO HP, 3.11 Hr
Tractor, 150 PTO HP, 2.92 Hr	V-Ripper, 5 Shnk 0.22 Hr	Vegetable Trailer, Custom 1.80 Hr

MATERIALS REQUIREMENT (per Acre)

18-46-00, Dry 400.00 Lb	32-00-00, URAN 32, Lqd 26.00 Ga	Carbaryl 2.00 Pt
Potato Seed 20.00 C	Trifluralin 1.50 Pt	Water, District 33.00 Al

LABOR REQUIREMENT (per Acre)

Cutter 4.00 Hr	Irrigators 4.00 Hr	Other 5.50 Hr
Technican 3.30 Hr	Tractor 10.18 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 17E. Schedule of Operations; Early Potatoes, 1998

COUNTY: Pinal FARM: Pinal Vegetables 98 WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Conventional
 CROP: Potatoes, Early ACRES: 1.0 IRRIGATION SYSTEM: Linear Move Furrow SOIL: Sandy-Loam
 AREA: Maricopa YIELD: 280.0 CW / Acre PREVIOUS CROP: Wheat, Winter DATE: 9/2/99

First No.	Month	Times	Operation	Equipment/ Custom Oper		Job Rate Acres/Hr	Material Use and Cost				Service Cost \$ / Unit	Labor Type
				HP	Self-Prop./ Implement		Name	Appl. Rate	\$ / Unit			
1	Nov	1.0	Rip	150	V-Ripper, 5 Shnk	4.00						Tractor
2	Nov	1.0	Plow	150	Moldboard Plow, 4-16 2	2.00						Tractor
3	Nov	5.0	Disk	150	Offset Disk, 13.5'	4.00						Tractor
4	Nov	1.0	List	100	Lister, 5 Bottom	4.00						Tractor
5	Dec	1.0	Mulch	60	Power Mulcher, 4 Rw	3.00						Tractor
6	Dec	1.0	Soil Fertility		CST Soil Analysis (Surface)					3.00	Ac	
7	Dec	1.0	Prep/Haul Seed Potato		Pickup Truck, 1/2 Ton	1.00						Tractor
8	Dec	1.0	Plant	100	Planter, Potato 3 Comp. 4	1.20	Potato Seed	20.00	C	22.00	CW	Tractor
							18-46-00, Dry	400.00	Lb	275.00	Tn	Other
9	Dec	33.0	Irrigate/Linear move			0.50	Water, District	1.00	Al	33.50	AF	Technican
10	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							
11	Jan	3.0	Hilling	100	Hiller, 4 Row	2.50						Tractor
12	Jan	2.0	Irrigate/Run Fertilizer			0.50	32-00-00, URAN 32, Carbaryl	13.00	Ga	173.00	Tn	Irrigators
13	Apr	1.0	Apply Insecticide/Air		CST Air Spray, 5 Gal Mix			2.00	Pt	25.00	Ga	4.75 Ac
14	May	1.0	Cut Vines	100	Root Cutter-Puller, 4 Row	1.20						Tractor
15	May	1.0	Roll Beds	60	Bed Roller, 4 Rw	7.00						Tractor
16	Jun	1.0	Dig	150	Potato Harvester, 4 Row	1.00						Tractor
												Other
17	Jun	1.0	Pick and Haul	60	Vegetable Trailer, Custom	0.50						Tractor
												Other
18	Jun	1.0	Disk Residue	150	Offset Disk, 13.5'	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.