

Table 7A. Income and Cash Operating Summary; Early Red Potatoes, 2001

COUNTY: Maricopa FARM: Maricopa Veg WATER SOURCE: Queen Creek, Elect TILLAGE: Conventional
 CROP: Potatoes, Early ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Queen Creek YIELD: 291.0 CW / Acre PREVIOUS CROP: Wheat, Winter DATE: 9/12/01

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)					153.63	_____
Tractor/Self Propelled				66.78		_____
Irrigation				54.99		_____
Other/ Contract				31.86		_____
Chemicals and Custom Applications					149.94	_____
Fertilizer				101.26		_____
Insecticide				11.36		_____
Herbicide				4.94		_____
Other Chemicals				32.37		_____
Farm Machinery and Vehicles					72.64	_____
Diesel Fuel				24.18		_____
Gasoline				3.51		_____
Repairs and Maintenance				44.95		_____
Irrigation Water (excluding labor)					516.51	_____
Pump Energy - Electric				480.48		_____
Repairs and Maintenance				36.03		_____
Water Assessment (See Note Below) **						_____
Other Purchased Inputs & Seed/Transplants				697.62	697.62	_____
TOTAL CASH LAND PREPARATION AND GROWING EXPENSES					1590.33	_____
CASH HARVEST AND POST HARVEST EXPENSES						
Paid Labor (including benefits)					59.47	_____
Tractor/Self Propelled				30.22		_____
Other/Contract				29.25		_____
Farm Machinery and Vehicles					46.33	_____
Diesel Fuel				10.50		_____
Repairs and Maintenance				35.83		_____
TOTAL HARVEST AND POST HARVEST EXPENSE					105.80	_____
OPERATING OVERHEAD -> PICKUP USE					15.25	_____
OPERATING INTEREST AT 10.0%32.17						_____
TOTAL CASH OPERATING EXPENSES					\$1,743.54	_____
RETURNS OVER CASH OPERATING EXPENSES					\$1,160.64	_____

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

Table 7B. Allocations of Ownership Costs; Early Red Potatoes, 2001

COUNTY: Maricopa FARM: Maricopa Veg WATER SOURCE: Queen Creek, Elect TILLAGE: Conventional
 CROP: Potatoes, Early ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Queen Creek YIELD: 291.0 CW / Acre PREVIOUS CROP: Wheat, Winter DATE: 9/12/01

35

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	\$1,743.54		\$1,743.54	
RETURN OVER CASH OPERATING EXPENSES		\$1,160.64		\$1,160.64
CASH OVERHEAD EXPENSES				
Taxes, Housing and Insurance, Farm Machinery	13.98		13.98	
Wells and Irrigation System	13.29		13.29	
General and Office Overhead (5.0% of Total Operating Exp.)	87.18		87.18	
General Farm Maintenance (3.0% of Total Operating Exp.)	52.31		52.31	
Total Cash Overhead Expenses	166.75		166.75	
Total Cash Operating and Overhead Cost	1,910.29		1,910.29	
RETURNS OVER CASH OPER. AND OVER. EXPENSES		\$993.89		\$993.89
CAPITAL ALLOCATIONS (100% Equity)				
Capital Replacement, Machinery and Vehicles			84.17	
Wells and Irrigation System			48.91	
Interest on Equity, Machinery and Vehicles			36.10	
Wells and Irrigation System			29.75	
Total Capital Allocations			198.93	
RETURNS TO LAND, CAPITAL, MANAGEMENT AND RISK ----->		\$993.89		
RETURNS TO LAND, MANAGEMENT AND RISK ----->				\$794.96
Land Cost / Rent or Lease	200.00		200.00	
Total Land Costs	200.00		200.00	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		\$793.89		
RETURNS TO MANAGEMENT AND RISK ----->				\$594.96
Management Services (8% of Total Operation Expenses)			139.48	
TOTAL OWNERSHIP COST	366.75		705.16	
TOTAL COST	\$2,110.29		\$2,448.71	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		\$793.89		
RETURNS TO RISK (PROFITS) ----->				\$455.47
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)		\$5.99		\$5.99
BREAK-EVEN PRICE TO COVER OWNERSHIP COST		\$1.26		\$2.42
BREAK-EVEN PRICE TO COVER TOTAL COST		\$7.25		\$8.41

Table 7C. Variable Operating Costs; Early Red Potatoes, 2001

COUNTY: Maricopa FARM: Maricopa Veg WATER SOURCE: Queen Creek, Elect TILLAGE: Conventional
 CROP: Potatoes, Early ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Queen Creek YIELD: 291.0 CW / Acre PREVIOUS CROP: Wheat, Winter DATE: 9/12/01

No.	First Month	Operation	---- Hours * ----		---- Operating Costs (\$/ACRE *) Per Operation ----				Total	Times	Tot. Cash Expenses	Class
			Machine	Labor	Fuel/Rps.	Labor	Cust/Serv.	Materials				
1	Nov	Rip	0.225	0.250	2.86	2.44			5.29	0.5	2.65	L
2	Nov	Plow	0.450	0.500	6.50	4.87			11.37	1.0	11.37	L
3	Nov	Disk	0.225	0.250	3.43	2.44			5.86	3.0	17.59	L
4	Nov	List	0.225	0.250	2.02	2.44			4.46	1.0	4.46	L
5	Nov	Buck Rows	0.045	0.050	0.23	0.49			0.72	3.0	2.15	G
6	Nov	Preirrigate		0.377	35.35	3.68			39.03	1.0	39.03	G
7	Dec	Mulch	0.300	0.333	2.35	3.25			5.59	1.0	5.59	L
8	Dec	Prep/Haul Seed Potato	0.900	2.000	9.94	11.62			21.56	1.0	21.56	L
9	Dec	Plant	0.750	1.666	15.29	16.24		762.76	794.29	1.0	794.29	L
10	Jan	Apply Herbicide/Ground	0.300	0.333	3.15	3.25		4.94	11.34	1.0	11.34	G
11	Jan	Hilling	0.360	0.400	3.03	3.90			6.93	3.0	20.80	L
12	Jan	Disk Ends	0.045	0.050	0.48	0.49			0.97	2.0	1.94	G
13	Jan	Irrigate/Run Fertilizer		0.658	61.86	6.41		24.73	93.01	2.0	186.02	G
14	Feb	Irrigate		0.658	61.86	6.41			68.28	6.0	409.67	G
15	Apr	Apply Insecticide/Air						4.75	25.63	1.0	30.38	G
16	Apr	Prepare Ends	0.045	0.050	0.48	0.49			0.97	1.0	0.97	H
17	Apr	Cut Vines	0.750	0.833	6.63	8.12			14.75	1.0	14.75	G
18	Apr	Prepare Ends	0.045	0.050	0.24	0.49			0.73	1.0	0.73	H
19	Apr	Knock Ditches	0.045	0.050	0.23	0.49			0.71	1.0	0.71	G
20	Apr	Roll Beds	0.129	0.143	0.65	1.39			2.04	1.0	2.04	L
21	Apr	Dig	0.900	2.000	31.55	19.50			51.05	1.0	51.05	H
22	Apr	Haul 10	1.800	4.000	14.06	38.99			53.05	1.0	53.05	H
23	May	Disk Residue	0.225	0.250	3.43	2.44			5.86	1.0	5.86	L
		Pickup Use 60 Mi/Acre	2.000		15.25						15.25	
		Operating Interest at 10.0						32.17			32.17	
TOTAL CASH OPERATING EXPENSES (includes all times over):											1743.54	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 ->	- 25%	- 10%	Budgeted	+ 10%	+ 25%	
Land Preparation (L)	886.21	Yields	\$7.48	\$8.98	\$9.98	\$10.98	\$12.47	Break-even Price
Growing (G)	704.11	- 25%	218.3	43.21	283.51	501.32	719.13	1,045.85
Harvest (H)	105.80	- 10%	261.9	267.64	659.70	921.08	1,182.45	1,574.52
Post Harvest (P)	0.00	Budgeted	291.0	474.87	910.50	1,200.92	1,491.33	1,926.96
Marketing (M)	0.00	+ 10%	320.1	682.11	1,161.30	1,480.76	1,800.22	2,279.40
Operating Overhead (O)	47.42	Break-even Yield		224.32	185.35	166.12	150.50	131.90
Total (T)	\$1,743.54							

Table 7D. Resource and Cash Flow Requirements; Early Red Potatoes, 2001

COUNTY: Maricopa FARM: Maricopa Veg WATER SOURCE: Queen Creek, Elect TILLAGE: Conventional
 CROP: Potatoes, Early ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Queen Creek YIELD: 291.0 CW / Acre PREVIOUS CROP: Wheat, Winter DATE: 9/12/01

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		52.38	17.57				69.95
DEC P			8.92		31.01	55.41	65.14	697.62		849.18
JAN C	1.0	7.0	1.49		68.76	14.54	29.68			112.98
FEB C	3.0	21.0	1.97		181.00	19.24	24.73			224.97
MAR C	2.0	14.0	1.72		122.17	16.73				138.90
APR C	2.0	14.0	8.94		176.72	87.17	25.63		4.75	294.27
MAY C			0.25		3.43	2.44				5.87
Pickup Use 60 Mi/Acre					15.25					15.25
Operating Interest at 10.0									32.17	32.17
Total	9.0	60.0	25.09		650.72	213.10	145.18	697.62	36.92	1743.54
%					37.32	12.22	8.33	40.01	2.12	100.00

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 5688.9 KWH
 All Direct Energy 26.2 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 7E. Schedule of Operations; Early Red Potatoes, 2001

COUNTY: Maricopa FARM: Maricopa Veg WATER SOURCE: Queen Creek, Elect TILLAGE: Conventional
 CROP: Potatoes, Early ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Queen Creek YIELD: 291.0 CW / Acre PREVIOUS CROP: Wheat, Winter DATE: 9/12/01

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
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 106.05	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 Rolling Cultivator, 4 Rw	3.00	Trifluralin	1.50	Pt 24.95	Ga	Tractor
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 106.05	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 106.05	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 Prepare 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
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 7F. Operations Calendar; Early Red Potatoes, 2001

COUNTY: Maricopa FARM: Maricopa Veg WATER SOURCE: Queen Creek, Elect TILLAGE: Conventional
 CROP: Red Potatoes ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Queen Creek YIELD: 291 CW/Acre PREVIOUS CROP: Wheat, Winter DATE: 09/17/2001

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