

Table 3A. Income and Cash Operating Summary; Fall Lettuce, 1998

COUNTY: Pima FARM: Pima Vegetables 98 WATER SOURCE: Marana, Electric TILLAGE: Conventional
 CROP: Lettuce, Iceberg ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Marana YIELD: 210.2 Ct / Acre PREVIOUS CROP: Cotton, Upland DATE: 11/11/98

Item	Unit	Quantity	Price/ Unit	Budgeted /Acre	Total /Acre	Your Farm Budget	
INCOME	Lettuce	Crtm	210.20	\$14.74	\$3,098.35	\$3,098.35	_____
CASH LAND PREPARATION AND GROWING EXPENSES (including sales tax)							
Paid Labor (including benefits)					77.07	_____	
Tractor/Self Propelled					40.71	_____	
Irrigation					36.35	_____	
Chemicals and Custom Applications					270.41	_____	
Fertilizer					126.81	_____	
Insecticide					63.16	_____	
Herbicide					80.45	_____	
Farm Machinery and Vehicles					50.70	_____	
Diesel Fuel					16.02	_____	
Repairs and Maintenance					34.68	_____	
Irrigation (excluding labor)					162.59	_____	
Pump Energy - Electric					145.30	_____	
Repairs and Maintenance					17.29	_____	
Other Purchased Inputs &					400.80	_____	
Seed/Transplants					100.80	_____	
Other Serv. and Rentals					300.00	_____	
TOTAL CASH LAND PREPARATION AND GROWING EXPENSES					961.57	_____	
CASH HARVEST AND POST HARVEST EXPENSES							
Custom Harvest/Post Harvest					1020.00	_____	
Other Materials					392.70	_____	
TOTAL HARVEST AND POST HARVEST EXPENSE					1412.70	_____	
OPERATING OVERHEAD PICKUP USE					14.82	_____	
OPERATING INTEREST AT 10.0%					10.58	_____	
TOTAL CASH OPERATING EXPENSES					\$2,399.68	_____	
RETURNS OVER CASH OPERATING EXPENSES					\$698.67	_____	

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

Table 3B. Allocations of Ownership Costs; Fall Lettuce, 1998

COUNTY:Pima FARM: Pima Vegetables 98 WATER SOURCE: Marana, Electric TILLAGE: Conventional
 CROP: Lettuce, Iceberg ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Marana YIELD: 210.2 Ct / Acre PREVIOUS CROP: Cotton, Upland DATE: 11/12/98

Item	-- CASH COST BASIS (\$/ACRE) --		-- TOTAL COST BASIS (\$/ACRE) --	
	Income and Costs	Net Returns	Income and Costs	Net Returns
TOTAL INCOME at \$14.74 / Ct	\$3,098.35		\$3,098.35	
TOTAL OPERATING EXPENSES	\$2,399.68		\$2,399.68	
RETURN OVER CASH OPERATING EXPENSES		\$698.67		\$698.67
CASH OVERHEAD EXPENSES				
Taxes, Housing and Insurance, Farm Machinery	5.47		5.47	
Wells and Irrigation System	12.35		12.35	
General and Office Overhead (5.0%of Total Operating Exp.)	119.98		119.98	
General Farm Maintenance (3.0% of Total Operating Exp.)	71.99		71.99	
Total Cash Overhead Expenses	209.79		209.79	
Total Cash Operating and Overhead Cost	2,609.47		2,609.47	
RETURNS OVER CASH OPER. AND OVER. EXPENSES		\$488.88		\$488.88
CAPITAL ALLOCATIONS (100% Equity)				
Capital Replacement, Machinery and Vehicles			31.78	
Wells and Irrigation System			35.02	
Interest on Equity, Machinery and Vehicles			11.81	
Wells and Irrigation System			19.23	
Total Capital Allocations			97.84	
RETURNS TO LAND, CAPITAL, MANAGEMENT AND RISK ----->		\$488.88		
RETURNS TO LAND, MANAGEMENT AND RISK ----->				\$391.04
Land Cost / Ownership (100% Equity)				
Property Taxes (\$540.00 X 16.0% X 0.183)	15.87		15.87	
Opportunity Interest on Land (100% X 6.0 X \$540.00)			32.40	
Total Land Costs	15.87		48.27	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		\$473.01		
RETURNS TO MANAGEMENT AND RISK ----->				\$342.77
Management Services (8% of Total Operation Expenses)			191.97	
TOTAL OWNERSHIP COST	225.66		547.88	
TOTAL COST	\$2,625.34		\$2,947.55	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		\$473.01		
RETURNS TO RISK (PROFITS) ----->				\$150.79
BREAK-EVEN PRICE TO COVER OPERATING COST (PER Lb)		\$11.42		\$11.42
BREAK-EVEN PRICE TO COVER OWNERSHIP COST		\$1.07		\$2.61
BREAK-EVEN PRICE TO COVER TOTAL COST		\$12.49		\$14.02

Table 3C. Variable Operating Costs; Fall Lettuce, 1998

COUNTY:Pima FARM: Pima Vegetables 98 WATER SOURCE: Marana, Electric TILLAGE: Conventional
 CROP: Lettuce, Iceberg ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Marana YIELD: 210.2 Ct / Acre PREVIOUS CROP: Cotton, Upland DATE: 11/11/98

No.	First Month	Operation	---- Hours * ----		---- Operating Costs (\$/ACRE *) Per Operation ----					Tot. Cash Expense	Class	
			Machine	Labor	Fuel/Rps.	Labor	Cust/Serv.	Materials	Total			Times
1	Jun	Disk	0.225	0.250	3.84	2.05			5.88	2.0	11.77	L
2	Jun	Plow	0.360	0.400	5.85	3.28			9.13	1.0	9.13	L
3	Jun	Landplane	0.257	0.286	3.28	2.34			5.62	2.0	11.23	L
4	Jul	Apply Fert/Ground	0.075	0.083	0.70	0.68		86.63	88.00	1.0	88.00	G
5	Jul	Apply Herbicide/Ground	0.225	0.250	2.99	2.05		80.45	85.49	1.0	85.49	G
6	Jul	Buck Rows	0.023	0.025	0.12	0.20			0.33	2.0	0.66	G
7	Jul	Shovel Ends		0.067		0.46			0.46	2.0	0.91	G
8	Jul	Preirrigate		1.000	29.45	6.82			36.27	1.0	36.27	G
9	Aug	Disk Ends	0.011	0.013	0.12	0.11			0.23	2.0	0.45	G
10	Aug	List	0.225	0.250	4.09	2.05			6.14	1.0	6.14	L
11	Aug	Plant	0.300	0.333	4.81	2.73		100.80	108.33	1.0	108.33	L
12	Aug	Irrigate		0.599	14.72	4.09			18.81	7.0	131.67	G
13	Sep	Roll Beds	0.129	0.143	0.79	1.17			1.96	1.0	1.96	L
14	Sep	Thinning					75.00		75.00	1.0	75.00	G
15	Sep	Apply Insecticide/Air					4.23	3.22	7.45	3.0	22.35	G
16	Sep	Cultivate	0.300	0.333	2.13	2.73			4.86	3.0	14.59	G
17	Sep	Apply Fert/Ground	0.300	0.333	3.91	2.73		20.09	26.72	2.0	53.45	G
18	Oct	Hand Weeding					75.00		75.00	3.0	225.00	G
19	Oct	Apply Insecticide/Air					4.23	9.37	13.60	3.0	40.81	G
20	Nov	Harvest 425 Ct					1020.00	392.70	1412.70	1.0	1412.70	H
21	Nov	Make Ditches 425 Ct	0.045	0.500	0.28	4.09			4.37	1.0	4.37	L
22	Dec	Disk Residue 425 Ct	0.180	0.200	3.07	1.64			4.71	1.0	4.71	L
		Pickup Use60 Mi/Acre		2.000	14.82						14.82	
		Operating Interest at 10.0						10.58			10.58	
TOTAL CASH OPERATING EXPENSES (includes all times over):					228.12	77.07	1355.96	738.53			2399.68	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)	153.27
Growing (G)	808.31
Harvest (H)	1,412.70
Post Harvest (P)	0.00
Marketing (M)	0.00
Operating Overhead (O)	25.40
Total (T)	<u>\$2,399.68</u>

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

Prices	- 25%	- 10%	Budgeted	+ 10%	+ 25%	
Yields	\$11.06	\$13.27	\$14.74	\$16.21	\$18.42	Break-even Price
- 25%	157.6	-318.46	30.10	262.48	494.86	843.42
- 10%	189.2	-181.80	236.48	515.33	794.18	1,212.46
Budgeted	210.2	-90.69	374.06	683.89	993.73	1,458.48
+ 10%	231.2	0.41	511.64	852.46	1,193.28	1,704.50
Break-even Yield	231.12	153.05	124.92	105.52	85.59	

Table 3D. Resource and Cash Flow Requirements; Fall Lettuce, 1998

COUNTY:Pima FARM: Pima Vegetables 98 WATER SOURCE: Marana, Electric TILLAGE: Conventional
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 AREA: Marana YIELD: 210.2 Ct / Acre PREVIOUS CROP: Cotton, Upland DATE: 11/11/98

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		12.75	7.66				20.41
JUL C	1.0	12.0	1.74		42.40	18.23	166.47			227.10
AUG C	1.0	6.0	1.31		28.67	9.63		100.80		139.10
SEP C	2.0	12.0	2.35		46.12	16.51	29.75		87.69	180.07
OCT C	2.0	12.0	1.86		41.39	9.54	38.84		158.46	248.23
NOV C	2.0	12.0	1.70		39.55	13.86	9.37	392.70	1099.23	1554.71
DEC C			0.20		3.02	1.64				4.66
Pickup Use60 Mi/Acre					14.82					14.82
Operating Interest at 10.0									10.58	10.58
Total	8.0	54.0	10.35		228.72	77.07	244.43	493.50	1355.96	2399.68
%					9.53	3.21	10.19	20.57	56.51	100.00

TOTAL RESOURCE REQUIREMENTS (per Acre)		TOTAL ENERGY REQUIREMENTS (per Acre)	
Total N	196.6	Diesel Fuel	23.7 Gal
Total P	240.0	Unleaded Gas	6.0 Gal
Total K	0.0	Electric / Pumping	2730.7 KWH
Total Labor	10.3	All Direct Energy	13.4 M BTU
Total Water	54.0		

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
Fertilizer Broadcaster,	0.08 Hr	Landplane 12'X 45'	0.51 Hr
Offset Disk, 10.5'	0.02 Hr	Offset Disk, 16.5'	0.63 Hr
Planter/Gramor, 4 Bd,8	0.30 Hr	Rolling Cultivator, 4 Rw	0.90 Hr
Tractor, 60 PTO HP	0.05 Hr	Tractor, 70 PTO HP	1.07 Hr
Tractor, 125 PTO HP	0.74 Hr	Tractor, 150 PTO HP	0.99 Hr
		Blade Scraper, 10'	0.05 Hr
		Fert. Side Dress Unit,	0.22 Hr
		Moldboard Plow, 4-16 2	0.36 Hr
		Pickup Truck, 1/2 Ton	2.00 Hr
		Rowbuck, 10'	0.05 Hr
		Tractor, 100 PTO HP	1.22 Hr

MATERIALS REQUIREMENT (per Acre)			
11-48-00, Dry	500.00 Lb	32-00-00, URAN 32, Lqd	40.00 Ga
Cypermethrin	12.00 Oz	Head Lettuce Sd	160.00 Th
Methomyl	1.50 Pt	Pronamide	2.00 Lb
		Benefin	2.00 Pt
		Lettuce Cartons	425.00 Ct
		Water, Pump	54.00 Al

LABOR REQUIREMENT (per Acre)			
Irrigators	5.33 Hr	Tractor	4.97 Hr

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

Table 3E. Schedule of Operations; Fall Lettuce, 1998

COUNTY:Pima FARM: Pima Vegetables 98 WATER SOURCE: Marana, Electric TILLAGE: Conventional
 CROP: Lettuce, Iceberg ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Marana YIELD: 210.2 Ct / Acre PREVIOUS CROP: Cotton, Upland DATE: 11/11/98

First No.	Month	Times	Operation	Equipment/ Custom Oper HP Self-Prop./ Implement	Job Rate Acres/Hr	Material Use and Cost Name	Appl. Rate \$ / Unit	Service Cost \$ / Unit	Labor Type
1	Jun	2.0	Disk	150 Offset Disk, 16.5'	4.00				Tractor
2	Jun	1.0	Plow	150 Moldboard Plow, 4-16 2	2.50				Tractor
3	Jun	2.0	Landplane	125 Landplane 12'X 45'	3.50				Tractor
4	Jul	1.0	Apply Fert/Ground	100 Fertilizer Broadcaster,	12.00	11-48-00, Dry	500.00 Lb	330.00 Tn	Tractor
5	Jul	1.0	Apply Herbicide/Ground	100 Fert. Side Dress Unit,	4.00	Benefin Pronamide	2.00 Pt 2.00 Lb	14.95 Ga 23.36 Lb	Tractor
6	Jul	2.0	Buck Rows	60 Rowbuck, 10'	40.00				Tractor
7	Jul	2.0	Shovel Ends		15.00				Irrigators
8	Jul	1.0	Preirrigate		1.00	Water, Pump	12.00 AI	39.28 AF	Irrigators
9	Aug	2.0	Disk Ends	100 Offset Disk, 10.5'	80.00				Tractor
10	Aug	1.0	List	125 Disk-Lister, 6 Rw	4.00				Tractor
11	Aug	1.0	Plant	100 Bed Shaper, 4 Rw Planter/Gramor, 4 Bd,8 Line/Be	3.00	Head Lettuce Sd	160.00 Th	0.60 Th	Tractor
12	Aug	7.0	Irrigate		1.67	Water, Pump	6.00 AI	39.28 AF	Irrigators
13	Sep	1.0	Roll Beds	70 Bed Roller, 4 Rw	7.00				Tractor
14	Sep	1.0	Thinning	CST Thinning					75.00 Ac
15	Sep	3.0	Apply Insecticide/Air	CST Air Spray, 3 Gal Mix		Methomyl	0.50 Pt	49.05 Ga	4.23 Ac
16	Sep	3.0	Cultivate	70 Rolling Cultivator, 4 Rw	3.00				Tractor
17	Sep	2.0	Apply Fert/Ground	100 Fert. Side Dress Unit,	3.00	32-00-00, URAN 32,	20.00 Ga	173.00 Tn	Tractor
18	Oct	3.0	Hand Weeding	CST Hand Weeding					75.00 Ac
19	Oct	3.0	Apply Insecticide/Air	CST Air Spray, 3 Gal Mix		Cypermethrin	4.00 Oz	285.64 Ga	4.23 Ac
20	Nov	1.0	Harvest	CST Harvest-Load-Haul		Lettuce Cartons	425.00 Ct	0.88 Ct	2.40 Ct
21	Nov	1.0	Make Ditches	70 Blade Scraper, 10'	20.00				Tractor
22	Dec	1.0	Disk Residue	150 Offset Disk, 16.5'	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.