

**Table 16A. Income and Cash Operating Summary; Spring Lettuce, 1998**

COUNTY: Pinal FARM: Pinal Vegetables 98 WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Double Crop  
 CROP: Lettuce, Iceberg ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Maricopa YIELD: 470.0 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	470.00	\$8.72	\$4,098.40	\$4,098.40	_____
CASH LAND PREPARATION AND GROWING EXPENSES (including sales tax)						
Paid Labor (including benefits)					49.84	_____
Tractor/Self Propelled				32.55		_____
Irrigation				17.29		_____
Chemicals and Custom Applications					938.22	_____
Fertilizer				148.59		_____
Insecticide				679.87		_____
Herbicide				68.77		_____
Other Chemicals				40.99		_____
Farm Machinery and Vehicles					72.09	_____
Diesel Fuel				16.00		_____
Gasoline				14.20		_____
Repairs and Maintenance				41.89		_____
Irrigation Water (excluding labor)					84.00	_____
Water Assessment (See Note Below) **						_____
Other Purchased Inputs &					272.46	_____
Seed/Transplants				101.76		_____
Other Serv. and Rentals				170.70		_____
TOTAL CASH LAND PREPARATION AND GROWING EXPENSES					1416.61	_____
CASH HARVEST AND POST HARVEST EXPENSES						
Custom Harvest/Post Harvest					1128.00	_____
Other Materials					438.42	_____
TOTAL HARVEST AND POST HARVEST EXPENSE					1566.42	_____
OPERATING OVERHEAD PICKUP USE					15.41	_____
OPERATING INTEREST AT10.0%					27.30	_____
TOTAL CASH OPERATING EXPENSES					\$3,025.74	=====
RETURNS OVER CASH OPERATING EXPENSES					\$1,072.66	_____

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 16B. Allocations of Ownership Costs; Spring Lettuce, 1998**

COUNTY: Pinal FARM: Pinal Vegetables 98 WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Double Crop  
 CROP: Lettuce, Iceberg ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Maricopa YIELD: 470.0 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 \$8.72 / Ct	\$4,098.40		\$4,098.40	
TOTAL OPERATING EXPENSES	\$3,025.74		\$3,025.74	
RETURN OVER CASH OPERATING EXPENSES		\$1,072.66		\$1,072.66
CASH OVERHEAD EXPENSES				
Taxes, Housing and Insurance, Farm Machinery	8.12		8.12	
General and Office Overhead (5.0% of Total Operating Exp.)	151.29		151.29	
General Farm Maintenance (3.0% of Total Operating Exp.)	90.77		90.77	
Total Cash Overhead Expenses	250.17		250.17	
Total Cash Operating and Overhead Cost	3,275.91		3,275.91	
RETURNS OVER CASH OPER. AND OVER. EXPENSES		\$822.49		\$822.49
CAPITAL ALLOCATIONS (100% Equity)				
Capital Replacement, Machinery and Vehicles			37.17	
Interest on Equity, Machinery and Vehicles			10.60	
Total Capital Allocations			47.77	
RETURNS TO LAND, CAPITAL, MANAGEMENT AND RISK ----->		\$822.49		
RETURNS TO LAND, MANAGEMENT AND RISK ----->				\$774.72
Land Cost / Ownership (100% Equity)				
Property Taxes (\$447.00 X 16.0% X 0.169 )	6.08		6.08	
Opportunity Interest on Land (100% X 6.0 X \$447.00)			13.41	
Water Assessment	12.50		12.50	
Total Land Costs	18.58		31.99	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		\$803.91		
RETURNS TO MANAGEMENT AND RISK ----->				\$742.73
Management Services ( 8% of Total Operation Expenses)			242.06	
TOTAL OWNERSHIP COST	268.75		571.99	
TOTAL COST	\$3,294.49		\$3,597.73	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		\$803.91		
RETURNS TO RISK (PROFITS) ----->				\$500.67
BREAK-EVEN PRICE TO COVER OPERATING COST ( PER Lb )		\$6.44		\$6.44
BREAK-EVEN PRICE TO COVER OWNERSHIP COST		\$0.57		\$1.22
BREAK-EVEN PRICE TO COVER TOTAL COST		\$7.01		\$7.65

**Table 16C. Variable Operating Costs; Spring Lettuce, 1998**

COUNTY: Pinal FARM: Pinal Vegetables 98 WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Double Crop  
 CROP: Lettuce, Iceberg ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Maricopa YIELD: 470.0 Ct / Acre PREVIOUS CROP: Cotton, Upland DATE: 11/11/98

No.	First Month	Operation	--- Hours * ---		--- Operating Costs (\$/ACRE *) Per Operation ---					Tot. Cash		
			Machine	Labor	Fuel/Rps.	Labor	Cust/Serv.	Materials	Total	Times	Expense	Class
1	Oct	Rip	0.225	0.250	3.44	2.05			5.49	1.3	7.13	L
2	Oct	Disk	0.150	0.167	2.67	1.36			4.04	4.0	16.15	L
3	Oct	Laser Level	0.450	0.500	4.61	4.09			8.71	2.0	17.42	L
4	Oct	Make Borders	0.060	0.067	0.34	0.55			0.88	1.0	0.88	G
5	Oct	Preirrigate		0.667		4.55		15.00	19.55	2.0	39.10	G
6	Oct	Soil Fertility					3.00		3.00	1.0	3.00	G
7	Oct	Dust Control	0.009	0.010	0.16				0.16	170.0	26.72	G
8	Nov	Apply Fert/Ground	0.180	0.200	1.76	1.64		52.47	55.87	1.0	55.87	G
9	Nov	Apply Herbicide/Ground	0.225	0.250	3.54	2.05		68.77	74.36	1.0	74.36	G
10	Nov	List	0.225	0.250	2.43	2.05			4.48	1.0	4.48	L
11	Nov	Shape Beds	0.180	0.200	2.06	1.64		78.58	82.28	1.0	82.28	L
12	Nov	Plant	0.360	0.400	5.73	3.28		101.76	110.77	1.0	110.77	L
13	Nov	Make Ditches	0.023	0.025	0.32	0.20			0.52	1.0	0.52	G
14	Dec	Irrigate/Run Fertilizer		0.200		1.36		25.02	26.38	5.0	131.92	G
15	Dec	Field Scouting					6.00		6.00	2.0	12.00	G
16	Dec	Apply Insecticide/Air					4.75	29.81	34.56	3.0	103.69	G
17	Dec	Thinning					75.00		75.00	1.0	75.00	G
18	Dec	Cultivate	0.225	0.250	1.84	2.05			3.89	1.0	3.89	G
19	Dec	Apply Fungicide/Ground	0.015	0.017	0.09	0.14		39.92	40.14	1.0	40.14	G
20	Jan	Apply Insect./Ground	0.015	0.017	0.09	0.14		113.84	114.06	3.0	342.17	G
21	Jan	Bird Control					5.70		5.70	1.0	5.70	G
22	Jan	Make Ditches	0.011	0.013	0.16	0.10			0.26	2.0	0.52	G
23	Jan	Irrigate/Run Fertilizer		0.200		1.36		25.02	26.38	1.0	26.38	G
24	Jan	Hand Weeding					75.00		75.00	1.0	75.00	G
25	Feb	Apply Insect./Ground	0.015	0.017	0.09	0.14		78.58	78.80	2.0	157.60	G
26	Mar	Knock Borders	0.023	0.025	0.13	0.20			0.33	1.0	0.33	G
27	Mar	Knock Ditches	0.023	0.025	0.32	0.20			0.52	1.0	0.52	G
28	Mar	Harvest, Load & Haul 470					1128.00	438.42	1566.42	1.0	1566.42	H
29	Apr	Disk Residue 470 Ct	0.150	0.167	2.67	1.36			4.04	1.0	4.04	L
		Pickup Use60 Mi/Acre	2.000		15.41						15.41	
		Operating Interest at 10.0					27.30				27.30	
TOTAL CASH OPERATING EXPENSES (includes all times over):					88.47	49.84	1340.25	1548.14			3025.74	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		SENSITIVITY OF THE NET REVENUES OVER TOTAL CASH EXPENSES (\$/ACRE)							
		Prices	- 25%	- 10%	Budgeted	+ 10%	+ 25%		
Land Preparation (L)	242.26	Yields	\$6.54	\$7.85	\$8.72	\$9.59	\$10.90	Break-even Price	
Growing (G)	1,174.35								
Harvest (H)	1,566.42								
Post Harvest (P)	0.00	- 25%	352.5	-328.89	132.18	439.56	746.94	1,208.01	7.47
Marketing (M)	0.00	- 10%	423.0	-102.79	450.50	819.35	1,188.21	1,741.49	6.78
Operating Overhead (O)	42.71	Budgeted	470.0	47.95	662.71	1,072.55	1,482.39	2,097.15	6.44
		+ 10%	517.0	198.69	874.93	1,325.75	1,776.57	2,452.81	6.16
Total (T)	\$3,025.74	Break-even Yield		455.05	323.23	270.91	233.17	192.86	

**Table 16D. Resource and Cash Flow Requirements; Spring Lettuce, 1998**

COUNTY: Pinal FARM: Pinal Vegetables 98 WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Double Crop  
 CROP: Lettuce, Iceberg ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Maricopa YIELD: 470.0 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
OCT P	1.0	5.0	1.96	15.00	18.85	8.69			1.50	44.04
NOV P	1.0	5.0	2.82	15.00	26.47	21.40	199.82	50.88	1.50	315.07
DEC P	1.0	3.0	0.98	9.00	13.69	9.08	115.57	50.88	90.50	288.72
JAN C	2.5	7.5	0.95	22.50	9.46	5.02	183.70		53.95	274.63
FEB C	2.5	7.5	0.84	22.50	0.48	3.10	232.46		37.50	296.04
MAR C			0.39		0.91	0.78	192.42	349.77	1082.88	1626.76
APR C			0.28		3.20	1.77		87.68	45.12	137.77
Pickup Use60 Mi/Acre					15.41					15.41
Operating Interest at 10.0									27.30	27.30
Water Assessment				**						
<b>Total</b>	<b>8.0</b>	<b>28.0</b>	<b>8.21</b>	<b>84.00</b>	<b>88.47</b>	<b>49.84</b>	<b>923.97</b>	<b>539.21</b>	<b>1340.25</b>	<b>3025.74</b>
<b>%</b>				<b>2.78</b>	<b>2.92</b>	<b>1.65</b>	<b>30.54</b>	<b>17.82</b>	<b>44.29</b>	<b>100.00</b>

**TOTAL RESOURCE REQUIREMENTS ( per Acre)**

Total N 267.0  
 Total P 144.0  
 Total K 0.0  
 Total Labor 8.2  
 Total Water 28.0

**TOTAL ENERGY REQUIREMENTS ( per Acre)**

Diesel Fuel 21.1 Gal  
 Unleaded Gas 16.7 Gal  
 All Direct Energy 5.1 M BTU

**EQUIPMENT REQUIREMENTS ( per Acre)**

Bed Shaper, 4 Rw 0.18 Hr	Border Disk, 6' Disk 0.08 Hr	Drag Scraper, 14' 0.90 Hr
Fertilizer Broadcaster, 0.18 Hr	High Clearance Sprayer, 0.09 Hr	Laser, Complete System 0.90 Hr
Lister, 5 Bottom 0.22 Hr	Motor Grader, 12' 0.07 Hr	Offset Disk, 16.5' 0.98 Hr
Pickup Truck, 1/2 Ton 2.00 Hr	Planter, Stanhay, 4 Row 0.36 Hr	Saddle Tk Sprayer, 2 Tk 8 0.41 Hr
Section Harrow, 4 Section 0.22 Hr	Sled Cultivator, 4Rw 0.22 Hr	Tractor, 60 PTO HP 0.08 Hr
Tractor, 70 PTO HP 0.22 Hr	Tractor, 100 PTO HP 2.07 Hr	Tractor, 150 PTO HP 1.04 Hr
Truck, 5 Ton w/1000 Gal 1.53 Hr	V-Ripper, 5 Shnk 0.29 Hr	

**MATERIALS REQUIREMENT ( per Acre)**

11-48-00, Dry 300.00 Lb	20-00-00, Amm. Nitrate, 120.00 Ga	Benefin 2.00 Pt
Cypermethrin 6.00 Oz	Head Lettuce Sd 160.00 Th	Imidacloprid 48.00 Oz
Lettuce Cartons 470.00 Ct	Pronamide 2.00 Lb	Spinosad 18.00 Oz
Spreader-activator 9.60 Oz	Thiodicarb 6.00 Ga	Vinclozolin 2.00 Pt
Water, District 28.00 Al		

**LABOR REQUIREMENT ( per Acre)**

Irrigators 2.53 Hr	Tractor 3.98 Hr	Truck Driver 1.70 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 16E. Schedule of Operations; Spring Lettuce, 1998**

COUNTY: Pinal FARM: Pinal Vegetables 98 WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Double Crop  
 CROP: Lettuce, Iceberg ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Maricopa YIELD: 470.0 Ct / Acre PREVIOUS CROP: Cotton, Upland DATE: 11/11/98

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	\$ / Unit		
1	Oct	1.3	Rip	150	V-Ripper, 5 Shnk	4.00						Tractor
2	Oct	4.0	Disk	150	Offset Disk, 16.5'	6.00						Tractor
3	Oct	2.0	Laser Level	100	Drag Scraper, 14' Laser, Complete System	2.00						Tractor
4	Oct	1.0	Make Borders	60	Border Disk, 6' Disk	15.00						Tractor
5	Oct	2.0	Preirrigate			1.50	Water, District	5.00	Al	36.00	AF	Irrigators
6	Oct	1.0	Soil Fertility		CST Soil Analysis (Surface)						3.00	Ac
7	Oct	170.0	Dust Control		Truck, 5 Ton w/1000 Gal Tank	100.00						Truck
8	Nov	1.0	Apply Fert/Ground	100	Fertilizer Broadcaster,	5.00	11-48-00, Dry	300.00	Lb	330.00	Tn	Tractor
9	Nov	1.0	Apply Herbicide/Ground	100	Saddle Tk Sprayer, 2 Tk 8 Offset Disk, 16.5' Section Harrow, 4 Section	4.00	Benefin	2.00	Pt	9.08	Ga	Tractor
							Pronamide	2.00	Lb	23.36	Lb	
10	Nov	1.0	List	100	Lister, 5 Bottom	4.00						Tractor
11	Nov	1.0	Shape Beds	100	Saddle Tk Sprayer, 2 Tk 8 Bed Shaper, 4 Rw	5.00	Imidacloprid	16.00	Oz	591.67	Ga	Tractor
							Spreader-activator	1.60	Oz	13.50	Ga	
12	Nov	1.0	Plant	100	Planter, Stanhay, 4 Row	2.50	Head Lettuce Sd	160.00	Th	0.60	Th	Tractor
13	Nov	1.0	Make Ditches		Motor Grader, 12'	40.00						Tractor
14	Dec	5.0	Irrigate/Run Fertilizer			5.00	Water, District	3.00	Al	36.00	AF	Irrigators
							20-00-00, Amm. Nitrate,	20.00	Ga	155.00	Tn	
15	Dec	2.0	Field Scouting		CST Scout For Insects						6.00	Ac
16	Dec	3.0	Apply Insecticide/Air		CST Air Spray, 5 Gal Mix		Spinosad	6.00	Oz	600.00	Ga	4.75 Ac
17	Dec	1.0	Thinning		CST Thinning						75.00	Ac
18	Dec	1.0	Cultivate	70	Sled Cultivator, 4Rw	4.00						Tractor
19	Dec	1.0	Apply Fungicide/Ground		High Clearance Sprayer, 18	60.00	Vinclozolin	2.00	Pt	150.63	Ga	Tractor
20	Jan	3.0	Apply Insect./Ground		High Clearance Sprayer, 18	60.00	Thiodicarb	2.00	Ga	51.38	Ga	Tractor
							Cypermethrin	2.00	Oz	285.64	Ga	
							Spreader-activator	1.60	Oz	13.50	Ga	
21	Jan	1.0	Bird Control		CST Bird Control						5.70	Ac
22	Jan	2.0	Make Ditches		Motor Grader, 12'	80.00						Tractor
23	Jan	1.0	Irrigate/Run Fertilizer			5.00	Water, District	3.00	Al	36.00	AF	Irrigators
							20-00-00, Amm. Nitrate,	20.00	Ga	155.00	Tn	
24	Jan	1.0	Hand Weeding		CST Hand Weeding						75.00	Ac
25	Feb	2.0	Apply Insect./Ground		High Clearance Sprayer, 18	60.00	Imidacloprid	16.00	Oz	591.67	Ga	Tractor
							Spreader-activator	1.60	Oz	13.50	Ga	
26	Mar	1.0	Knock Borders	60	Border Disk, 6' Disk	40.00						Tractor
27	Mar	1.0	Knock Ditches		Motor Grader, 12'	40.00						Tractor
28	Mar	1.0	Harvest, Load & Haul		CST Harvest-Load-Haul		Lettuce Cartons	470.00	Ct	0.88	Ct	2.40 Ct
29	Apr	1.0	Disk Residue	150	Offset Disk, 16.5'	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.