

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

COUNTY: Maricopa FARM: Maricopa Veg 98 WATER SOURCE: Salt River Project TILLAGE: Double Crop
 CROP: Carrots ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Salt River Project YIELD: 915.0 Ct / Acre PREVIOUS CROP: Wheat, Winter DATE: 12/10/98

Item	Unit	Quantity	Price/ Unit	Budgeted /Acre	Total /Acre	Your Farm Budget	
INCOME	Carrots	Crtn	915.00	\$3.33	\$3,046.95	\$3,046.95	_____
CASH LAND PREPARATION AND GROWING EXPENSES (including sales tax)							
Paid Labor (including benefits)					133.92	_____	
Tractor/Self Propelled					46.93	_____	
Irrigation					68.46	_____	
Other/ Contract					18.52	_____	
Chemicals and Custom Applications					232.30	_____	
Fertilizer					68.53	_____	
Herbicide					66.32	_____	
Other Chemicals					97.46	_____	
Farm Machinery and Vehicles					51.92	_____	
Diesel Fuel					21.26	_____	
Repairs and Maintenance					30.66	_____	
Irrigation Water (excluding labor)					45.75	_____	
Water Assessment (See Note Below) **						_____	
Other Purchased Inputs &					49.53	_____	
Seed/Transplants					46.53	_____	
Other Services and Rentals					3.00	_____	
TOTAL CASH LAND PREPARATION AND GROWING EXPENSES					513.42	_____	
CASH HARVEST AND POST HARVEST EXPENSES							
Paid Labor (including benefits)					0.24	_____	
Tractor/Self Propelled					0.24	_____	
Farm Machinery and Vehicles					0.20	_____	
Diesel Fuel					0.08	_____	
Repairs and Maintenance					0.12	_____	
Custom Harvest/Post Harvest					1079.70	_____	
Other Materials					919.23	_____	
TOTAL HARVEST AND POST HARVEST EXPENSE					1999.38	_____	
OPERATING OVERHEAD PICKUP USE					12.74	_____	
OPERATING INTEREST AT 10.0%					31.47	_____	
TOTAL CASH OPERATING EXPENSES					\$2,557.00	_____	
RETURNS OVER CASH OPERATING EXPENSES					\$489.95	_____	

Notes: The above figures do not include ownership costs, see table B for detailed cost allocation.
 ** A water assessment charge of \$10.00 per Acre is included as an ownership cost in Table B.

Table 17B. Allocations of Ownership Costs; Carrots, 1998

COUNTY: Maricopa FARM: Maricopa Veg 98 WATER SOURCE: Salt River Project TILLAGE: Double Crop
 CROP: Carrots ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Salt River Project YIELD: 915.0 Ct / Acre PREVIOUS CROP: Wheat, Winter DATE: 12/10/98

Item	-- CASH COST BASIS (\$/ACRE) --		-- TOTAL COST BASIS (\$/ACRE) --	
	Income and Costs	Net Returns	Income and Costs	Net Returns
TOTAL INCOME at \$3.33 / Ct	\$3,046.95		\$3,046.95	
TOTAL OPERATING EXPENSES	\$2,557.00		\$2,557.00	
RETURN OVER CASH OPERATING EXPENSES		\$489.95		\$489.95
CASH OVERHEAD EXPENSES				
Taxes, Housing and Insurance, Farm Machinery	5.42		5.42	
General and Office Overhead (5.0% of Total Operating Exp.)	127.85		127.85	
General Farm Maintenance (3.0% of Total Operating Exp.)	76.71		76.71	
Total Cash Overhead Expenses	209.98		209.98	
Total Cash Operating and Overhead Cost	2,766.98		2,766.98	
RETURNS OVER CASH OPER. AND OVER. EXPENSES		\$279.97		\$279.97
CAPITAL ALLOCATIONS (100% Equity)				
Capital Replacement, Machinery and Vehicles			29.93	
Interest on Equity, Machinery and Vehicles			13.33	
Total Capital Allocations			43.27	
RETURNS TO LAND, CAPITAL, MANAGEMENT AND RISK ----->		\$279.97		
RETURNS TO LAND, MANAGEMENT AND RISK ----->				\$236.70
Land Cost / Ownership (100% Equity)				
Property Taxes (\$619.00 X 16.0% X 0.141)	6.99		6.99	
Opportunity Interest on Land (100% X 6.0 X \$619.00)			18.57	
Water Assessment	10.00		10.00	
Total Land Costs	16.99		35.56	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		\$262.98		
RETURNS TO MANAGEMENT AND RISK ----->				\$201.14
Management Services (8% of Total Operation Expenses)			204.56	
TOTAL OWNERSHIP COST	226.97		493.37	
TOTAL COST	\$2,783.97		\$3,050.37	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		\$262.98		
RETURNS TO RISK (PROFITS) ----->				(\$3.42)
BREAK-EVEN PRICE TO COVER OPERATING COST (PER Lb)		\$2.79		\$2.79
BREAK-EVEN PRICE TO COVER OWNERSHIP COST		\$0.25		\$0.54
BREAK-EVEN PRICE TO COVER TOTAL COST		\$3.04		\$3.33

Table 17C. Variable Operating Costs; Carrots, 1998

COUNTY: Maricopa FARM: Maricopa Veg 98 WATER SOURCE: Salt River Project TILLAGE: Double Crop
 CROP: Carrots ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Salt River Project YIELD: 915.0 Ct / Acre PREVIOUS CROP: Wheat, Winter DATE: 12/10/98

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	Jul	Rip	0.450	0.500	7.11	4.87			11.98	0.5	5.99	L
2	Jul	Plow	0.450	0.500	6.51	4.87			11.38	1.0	11.38	L
3	Jul	Disk	0.225	0.250	3.43	2.44			5.87	3.0	17.60	L
4	Jul	Laser Level	0.450	0.500	5.55	4.87			10.42	0.5	5.21	L
5	Aug	Soil Fertility					3.00		3.00	1.0	3.00	G
6	Aug	Apply Fert/Ground	0.112	0.125	1.13	1.22		38.18	40.52	1.0	40.52	G
7	Aug	List/Inject	0.225	0.250	3.51	2.44		97.46	103.40	1.0	103.40	L
8	Aug	Plant	0.450	1.000	3.39	9.75		46.53	59.66	1.0	59.66	L
9	Aug	Set Sprinklers	0.158	0.350	0.90	3.41			4.31	1.0	4.31	G
10	Aug	Irrigate/Sprinkler		0.091		0.89			0.89	3.0	2.66	G
11	Aug	Remove Sprinklers	0.158	0.350	0.90	3.41			4.31	1.0	4.31	G
12	Aug	Apply Herbicide/Ground	0.090	0.100	0.77	0.97		66.32	68.06	1.0	68.06	G
13	Aug	Buck Rows	0.045	0.050	0.34	0.49			0.83	4.0	3.30	G
14	Aug	Irrigate		0.800		7.80		5.72	13.52	8.0	108.14	G
15	Aug	Disk Ends	0.045	0.050	0.41	0.49			0.90	3.0	2.70	G
16	Aug	Cultivate	0.225	0.250	1.90	2.44			4.34	4.0	17.37	G
17	Oct	Apply Fert/Ground	0.257	0.286	3.47	2.79		15.18	21.43	2.0	42.87	G
18	Nov	Prepare Ends	0.023	0.025	0.21	0.24			0.45	1.0	0.45	H
19	Nov	Harvest 915 Ct					915.00	919.23	1834.23	1.0	1834.23	H
20	Nov	Haul, Custom 915 Ct					164.70		164.70	1.0	164.70	H
21	Dec	Disk Residue 915 Ct	0.150	0.167	2.29	1.63			3.91	1.0	3.91	L
		Pickup Use50 Mi/Acre	1.667		12.74						12.74	
		Operating Interest at 10.0					31.47				31.47	
TOTAL CASH OPERATING EXPENSES (includes all times over):					70.91	128.11	1114.17	1243.81			2557.00	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. A water assessment charge of \$10.00 per Acre is included as an ownership cost in Table B.

OPERATING COST SUMMARY BY CLASS

Land Preparation (L)	211.67
Growing (G)	301.74
Harvest (H)	1,999.38
Post Harvest (P)	0.00
Marketing (M)	0.00
Operating Overhead (O)	44.21
Total (T)	\$2,557.00

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

Prices	- 25%	- 10%	Budgeted	+ 10%	+ 25%	
Yields	\$2.50	\$3.00	\$3.33	\$3.66	\$4.16	Break-even Price
- 25%	686.3	-333.93	8.85	237.37	465.89	808.67
- 10%	823.5	-291.06	120.28	394.51	668.73	1,080.07
Budgeted	915.0	-262.47	194.57	499.26	803.96	1,261.00
+ 10%	1,006.5	-233.89	268.86	604.02	939.18	1,441.93
Break-even Yield	1,755.23	675.35	478.92	371.01	277.29	

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

COUNTY: Maricopa FARM: Maricopa Veg 98 WATER SOURCE: Salt River Project TILLAGE: Double Crop
 CROP: Carrots ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Salt River Project YIELD: 915.0 Ct / Acre PREVIOUS CROP: Wheat, Winter DATE: 12/10/98

Month *	Number Irrigations	Water Applied (inches)	Total Labor (Hrs)	Operating Costs (\$/ACRE *)							
				Purchased Water	Fuel, Oil and Repairs	Labor	Chemicals	Other Purchases	Services	Total	
JUL C			1.50		22.01	26.36					48.37
AUG C	5.0	27.0	5.70	2.50	22.12	64.57	209.44	46.53	3.00		348.16
SEP C	2.0	12.0	2.05	10.00	2.59	11.21					23.80
OCT C	2.0	12.0	2.44	10.00	5.60	13.51	15.18				44.29
NOV C	2.0	12.0	1.91	15.75	3.61	10.83	15.18	919.23	1079.70		2044.30
DEC C			0.17		2.24	1.63					3.87
Pickup Use50 Mi/Acre					12.74						12.74
Operating Interest at 10.0									31.47		31.47
Water Assessment				**							
Total	11.0	63.0	13.76	38.25	70.91	128.11	239.80	965.76	1114.17		2557.00
%				1.50	2.77	5.01	9.38	38.38	43.57		100.00

TOTAL RESOURCE REQUIREMENTS (per Acre)

Total N 154.2
 Total P 60.0
 Total K 0.0
 Total Labor 13.8
 Total Water 63.0

TOTAL ENERGY REQUIREMENTS (per Acre)

Diesel Fuel 26.4 Gal
 Unleaded Gas 5.0 Gal
 All Direct Energy 4.3 M BTU

EQUIPMENT REQUIREMENTS (per Acre)

Bed Shaper, 4 Rw	0.45 Hr	Cultivator, Sweep, 4 Rw	0.90 Hr	Drag Scraper, 14'	0.22 Hr
Fertilizer Broadcaster,	0.11 Hr	Fertilizer Injector, 4 Row	0.74 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'	0.16 Hr
Offset Disk, 16.5'	0.82 Hr	Pickup Truck, 1/2 Ton	1.67 Hr	Rowbuck, 10'	0.18 Hr
Saddle Tk Sprayer, 2 Tk 8	0.09 Hr	Sprinkler Trailer	0.32 Hr	Subsoiler, Heavy Duty, 7	0.22 Hr
Tractor, 60 PTO HP	0.32 Hr	Tractor, 80 PTO HP	1.78 Hr	Tractor, 100 PTO HP	0.85 Hr
Tractor, 150 PTO HP,	1.50 Hr	Tractor, 175 PTO HP,	0.22 Hr		

MATERIALS REQUIREMENT (per Acre)

16-20-00, Dry	300.00 Lb	32-00-00, URAN 32, Lqd	30.00 Ga	Boxes & Supplies	915.00 Ct
Carrot Seed (Raw/Hybrid)	200.00 Th	Dichloropropene	9.00 Ga	Linuron	1.00 Ga
Water, District	63.00 Al				

LABOR REQUIREMENT (per Acre)

Irrigators	7.02 Hr	Other	1.90 Hr	Tractor	4.84 Hr
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*NOTE: P = Previous Year C = Current Year N = Next Year

** A water assessment charge of \$10.00 per Acre is included as an ownership cost in Table B.

Table 17E. Schedule of Operations; Carrots, 1998

COUNTY: Maricopa FARM: Maricopa Veg 98 WATER SOURCE: Salt River Project TILLAGE: Double Crop
 CROP: Carrots ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Salt River Project YIELD: 915.0 Ct / Acre PREVIOUS CROP: Wheat, Winter DATE: 12/10/98

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	Jul	0.5	Rip	175 Subsoiler, Heavy Duty, 7	2.00				Tractor
2	Jul	1.0	Plow	150 Moldboard Plow, 4-16 2	2.00				Tractor
3	Jul	3.0	Disk	150 Offset Disk, 16.5'	4.00				Tractor
4	Jul	0.5	Laser Level	150 Drag Scraper, 14' Laser, Complete System	2.00				Tractor
5	Aug	1.0	Soil Fertility	CST Soil Analysis (Surface)				3.00 Ac	
6	Aug	1.0	Apply Fert/Ground	100 Fertilizer Broadcaster,	8.00	16-20-00, Dry	300.00 Lb	240.67 Tn	Tractor
7	Aug	1.0	List/Inject	100 Lister, 5 Bottom Fertilizer Injector, 4 Row	4.00	Dichloropropene	9.00 Ga	10.24 Ga	Tractor
8	Aug	1.0	Plant	80 Bed Shaper, 4 Rw	2.00	Carrot Seed	200.00 Th	0.22 Th	Tractor
9	Aug	1.0	Set Sprinklers	60 Sprinkler Trailer	5.70				Other Irrigators
10	Aug	3.0	Irrigate/Sprinkler		11.00	Water, District	5.00 AI	0.00 AF	Other Irrigators
11	Aug	1.0	Remove Sprinklers	60 Sprinkler Trailer	5.70				Other Irrigators
12	Aug	1.0	Apply Herbicide/Ground	80 Saddle Tk Sprayer, 2 Tk 8	10.00	Linuron	1.00 Ga	62.71 Ga	Tractor
13	Aug	4.0	Buck Rows	80 Rowbuck, 10'	20.00				Tractor
14	Aug	8.0	Irrigate		1.25	Water, District	6.00 AI	11.44 AF	Irrigators
15	Aug	3.0	Disk Ends	80 Offset Disk, 10.5'	20.00				Tractor
16	Aug	4.0	Cultivate	80 Cultivator, Sweep, 4 Rw	4.00				Tractor
17	Oct	2.0	Apply Fert/Ground	100 Fertilizer Injector, 4 Row	3.50	32-00-00, URAN 32,	15.00 Ga	173.00 Tn	Tractor
18	Nov	1.0	Prepare Ends	80 Offset Disk, 10.5'	40.00				Tractor
19	Nov	1.0	Harvest	CST Harvest Carrots		Boxes & Supplies	915.00 Ct	0.95 Ct	1.00 Ct
20	Nov	1.0	Haul, Custom	CST Haul Carrots					0.18 Ct
21	Dec	1.0	Disk Residue	150 Offset Disk, 16.5'	6.00				Tractor
			Pickup use 50 Mi/Ac	Pickup Truck, 1/2 Ton	0.60				

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

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