

Table 10A. Income and Cash Operating Summary; Bt. Upland Cotton, 1998

COUNTY: Maricopa FARM: Maricopa County 98 WATER SOURCE: Salt River Project TILLAGE: Dry Plant
 CROP: Cotton, Upland ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Salt River Project YIELD: 1,227.0 Lb / Acre PREVIOUS CROP: Cotton, Upland DATE: 3/31/99

Item	Unit	Quantity	Price/ Unit	Budgeted /Acre	Total /Acre	Your Farm Budget
INCOME	Lint	Pound	1,227.00	\$0.68	\$834.36	\$978.65
	Cottonseed	Ton	1.08	\$133.60	\$144.29	
CASH LAND PREPARATION AND GROWING EXPENSES (including sales tax)						
Paid Labor (including benefits)					66.00	
Tractor/Self Propelled					36.75	
Irrigation					29.25	
Chemicals and Custom Applications					204.96	
Fertilizer					44.30	
Insecticide					135.10	
Herbicide					14.22	
Other Chemicals					11.35	
Farm Machinery and Vehicles					40.34	
Diesel Fuel					16.46	
Repairs and Maintenance					23.88	
Irrigation Water (excluding labor)					30.00	
Water Assessment (See Note Below) **						
Other Purchased Inputs & Seed/Transplants					33.84	
TOTAL CASH LAND PREPARATION AND GROWING EXPENSES					375.14	
CASH HARVEST AND POST HARVEST EXPENSES						
Paid Labor (including benefits)					22.33	
Tractor/Self Propelled					8.69	
Other/Contract					13.65	
Chemicals and Custom Applications					28.16	
Other Chemicals					28.16	
Farm Machinery and Vehicles					60.07	
Diesel Fuel					8.35	
Repairs and Maintenance					51.72	
Custom Harvest/Post Harvest					10.18	
Cotton Ginning					104.66	
Crop Assessment					8.98	
TOTAL HARVEST AND POST HARVEST EXPENSE					234.38	
OPERATING OVERHEAD PICKUP USE					15.29	
OPERATING INTEREST AT 10.0%					25.68	
TOTAL CASH OPERATING EXPENSES					\$650.48	
RETURNS OVER CASH OPERATING EXPENSES					\$328.16	

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

** A water assessment charge of \$20.00 per Acre is included as an ownership cost in Table B.

Table 10B. Allocations of Ownership Costs; Bt. Upland Cotton, 1998

COUNTY: Maricopa FARM: Maricopa County 98 WATER SOURCE: Salt River Project
 CROP: Cotton, Upland ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow
 AREA: Salt River Project YIELD: 1,227.0 Lb / Acre PREVIOUS CROP: Cotton, Upland

TILLAGE: Dry Plant
 SOIL: Sandy-Loam
 DATE: 3/31/99

Item	-- CASH COST BASIS (\$/ACRE) --		-- TOTAL COST BASIS (\$/ACRE) --	
	Income and Costs	Net Returns	Income and Costs	Net Returns
TOTAL INCOME at \$0.68 / Lb	\$978.65		\$978.65	
TOTAL OPERATING EXPENSES	\$650.48		\$650.48	
RETURN OVER CASH OPERATING EXPENSES		\$328.16		\$328.16
CASH OVERHEAD EXPENSES				
Taxes, Housing and Insurance, Farm Machinery	10.72		10.72	
General and Office Overhead (5.0% of Total Operating Exp.)	32.52		32.52	
General Farm Maintenance (3.0% of Total Operating Exp.)	19.51		19.51	
Total Cash Overhead Expenses	62.76		62.76	
Total Cash Operating and Overhead Cost	713.24		713.24	
RETURNS OVER CASH OPER. AND OVER. EXPENSES		\$265.41		\$265.41
CAPITAL ALLOCATIONS (100% Equity)				
Capital Replacement, Machinery and Vehicles			74.90	
Interest on Equity, Machinery and Vehicles			31.41	
Total Capital Allocations			106.31	
RETURNS TO LAND, CAPITAL, MANAGEMENT AND RISK ----->		\$265.41		
RETURNS TO LAND, MANAGEMENT AND RISK ----->				\$159.10
Land Cost / Ownership (100% Equity)				
Property Taxes (\$619.00 X 16.0% X 0.141)	13.98		13.98	
Opportunity Interest on Land (100% X 6.0 X \$619.00)			37.14	
Water Assessment	20.00		20.00	
Total Land Costs	33.98		71.12	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		\$231.42		
RETURNS TO MANAGEMENT AND RISK ----->				\$87.98
Management Services (8% of Total Operation Expenses)			52.04	
TOTAL OWNERSHIP COST	96.74		292.22	
TOTAL COST	\$747.22		\$942.71	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		\$231.42		
RETURNS TO RISK (PROFITS) ----->				\$35.94
BREAK-EVEN PRICE TO COVER OPERATING COST (PER Lb)		\$0.41		\$0.41
BREAK-EVEN PRICE TO COVER OWNERSHIP COST		\$0.08		\$0.24
BREAK-EVEN PRICE TO COVER TOTAL COST		\$0.49		\$0.65

Table 10C. Variable Operating Costs; Bt. Upland Cotton, 1998

COUNTY: Maricopa FARM: Maricopa County 98 WATER SOURCE: Salt River Project TILLAGE: Dry Plant
 CROP: Cotton, Upland ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Salt River Project YIELD: 1,227.0 Lb / Acre PREVIOUS CROP: Cotton, Upland DATE: 3/31/99

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	Jan	Rip	0.214	0.238	2.65	2.32			4.97	1.0	4.97	L
2	Jan	Disk	0.170	0.189	2.71	1.84			4.55	1.0	4.55	L
3	Jan	Landplane	0.900	1.000	11.26	9.75			21.01	1.0	21.01	L
4	Jan	Apply Herb. & Incorporate	0.180	0.200	3.16	1.95		3.96	9.06	1.0	9.06	G
5	Jan	List	0.158	0.175	1.78	1.71			3.49	1.0	3.49	L
6	Mar	Mulch	0.200	0.222	2.49	2.16			4.65	1.0	4.65	L
7	Mar	Plant	0.170	0.189	2.62	1.84		33.84	38.30	1.0	38.30	L
8	Mar	Buck Rows	0.022	0.025	0.13	0.24			0.38	5.0	1.89	G
9	Mar	Irrigate		0.300		2.92		3.00	5.92	10.0	59.25	G
10	Apr	Disk Ends	0.011	0.013	0.08	0.13			0.21	4.0	0.84	G
11	May	Cultivate	0.171	0.190	1.54	1.85			3.39	3.0	10.17	G
12	May	Apply Fert/Ground	0.150	0.167	1.76	1.63		22.15	25.54	2.0	51.08	G
13	Jun	Hand Weeding		2.000						1.0		G
14	Jun	Apply Insecticide/Air					4.23	7.30	11.53	1.0	11.53	G
15	Jun	Apply Growth Regulator					4.23	7.12	11.35	1.0	11.35	G
16	Jul	Apply Insecticide/Air					4.23	13.12	17.35	1.0	17.35	G
17	Jul	Apply Insecticide/Air					4.23	37.01	41.24	1.0	41.24	G
18	Jul	Apply Herbicide/Ground	0.129	0.143	1.37	1.39		10.26	13.02	1.0	13.02	G
19	Aug	Apply Insecticide/Air					4.23	19.35	23.58	1.0	23.58	G
20	Aug	Apply Insecticide/Air					4.23	26.44	30.67	1.0	30.67	G
21	Aug	Apply Insecticide/Air					4.23	6.48	10.71	1.0	10.71	G
22	Aug	Apply Defoliant/Air					4.75	15.70	20.45	1.0	20.45	H
23	Sep	Apply Defoliant/Air					4.75	2.96	7.71	1.0	7.71	H
24	Oct	Prepare Ends	0.045	0.050	0.47	0.49			0.96	1.0	0.96	H
25	Oct	Cotton, First Pick	0.900	1.000	36.77	9.75			46.52	1.0	46.52	H
26	Oct	Cotton, Make Modules	0.300	0.333	3.73	3.25			6.97	1.0	6.97	H
27	Nov	Cotton, Second Pick	0.450	0.500	18.39	4.87			23.26	0.8	18.61	H
28	Nov	Cotton, Rood	0.257	0.286	2.59	2.79			5.38	1.0	5.38	H
29	Oct	Haul, Custom .2 Mu					7.02		7.02	1.0	7.02	H
30	Oct	Cotton Ginning 36.1 Cs					104.66		104.66	1.0	104.66	P
31	Dec	Cotton Classing 2.5 Ba					3.16		3.16	1.0	3.16	M
32	Dec	Crop Assessment 2.5 Ba					8.98		8.98	1.0	8.98	M
33	Dec	Cut Stalks 2.5 Ba	0.200	0.222	1.81	2.16			3.97	1.0	3.97	P
34	Dec	Disk Residue 2.5 Ba	0.300	0.333	3.16	3.25			6.41	1.0	6.41	L
		Pickup Use60 Mi/Acre	2.000		15.29						15.29	
		Operating Interest at 10.0					25.68				25.68	
=====												
TOTAL CASH OPERATING EXPENSES (includes all times over):												
650.48 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 \$20.00 per Acre is included as an ownership cost in Table B.

Table 10C. Variable Operating Costs; Bt. Upland Cotton, 1998

COUNTY: Maricopa FARM: Maricopa County 98 WATER SOURCE: Salt River Project TILLAGE: Dry Plant
 CROP: Cotton, Upland ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Salt River Project YIELD: 1,227.0 Lb / Acre PREVIOUS CROP: Cotton, Upland DATE: 3/31/99

OPERATING COST SUMMARY BY CLASS

Land Preparation (L)	83.38
Growing (G)	291.76
Harvest (H)	113.61
Post Harvest (P)	108.63
Marketing (M)	12.14
Operating Overhead (O)	40.97
	=====
Total (T)	\$650.48

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

Prices		- 25%	- 10%	Budgeted	+ 10%	+ 25%	
Yields		\$0.51	\$0.61	\$0.68	\$0.75	\$0.85	Break-even Price
- 25%	920.3	-121.91	-28.04	34.54	97.11	190.98	0.64
- 10%	1,104.3	-63.20	49.44	124.53	199.63	312.26	0.57
Budgeted	1,227.0	-24.06	101.09	184.53	267.97	393.12	0.53
+ 10%	1,349.7	15.08	152.75	244.53	336.31	473.98	0.50
+ 25%	1,533.8	73.79	230.23	334.52	438.82	595.26	0.46
Break-even Yield		1,302.43	986.86	849.62	745.89	630.44	

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Table 10D. Resource and Cash Flow Requirements; Bt. Upland Cotton, 1998

COUNTY: Maricopa FARM: Maricopa County 98 WATER SOURCE: Salt River Project TILLAGE: Dry Plant
 CROP: Cotton, Upland ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Salt River Project YIELD: 1,227.0 Lb / Acre PREVIOUS CROP: Cotton, Upland DATE: 3/31/99

Month *	Number Irrigations	Water Applied (inches)	Total Labor (Hrs)	Operating Costs (\$/ACRE *)							
				Purchased Water	Fuel, Oil and Repairs	Labor	Chemicals	Other Purchases	Services	Total	
JAN C			1.40		16.41	13.66	1.98			32.05	
FEB C			0.40		5.15	3.91	1.98			11.04	
MAR C	1.2	6.2	0.47		1.90	4.62		6.77		13.29	
APR C	1.8	6.8	0.56		3.34	5.48		27.07		35.89	
MAY C	1.0	6.0	0.69		3.52	6.78	22.15			32.44	
JUN C	2.0	12.0	2.99	5.83	3.52	9.70	36.58		8.46	64.09	
JUL C	2.0	12.0	0.97	10.00	3.12	9.47	60.40		8.46	91.45	
AUG C	2.0	12.0	0.64	10.00	0.22	6.22	52.27		12.69	81.40	
SEP C	1.0	6.0	0.30	6.92		2.92	9.33		4.75	23.92	
OCT C			0.45		12.62	4.39	9.33		38.25	64.59	
NOV C			1.34		38.92	11.71			55.84	106.47	
DEC C			0.83		10.31	8.10			34.48	52.89	
Pickup Use60 Mi/Acre					15.29					15.29	
Operating Interest at 10.0									25.68	25.68	
Water Assessment				**							
Total	11.0	61.0	11.06	32.75	114.32	86.95	194.01	33.84	187.69	650.48	
%				5.03	17.57	13.37	29.74	5.19	28.77	100.00	
TOTAL RESOURCE REQUIREMENTS (per Acre)			TOTAL ENERGY REQUIREMENTS (per Acre)								
Total N		150.0		Diesel Fuel		30.7	Gal				
Total P		0.0		Unleaded Gas		6.0	Gal				
Total K		0.0		All Direct Energy		5.0	M BTU				
Total Labor		11.1									
Total Water		61.0									
EQUIPMENT REQUIREMENTS (per Acre)											
Bed Shaper, 6 Rw		0.17	Hr	Cotton Picker, 2 Row		1.26	Hr	Dbl. Offset Disk, 16'		0.18	Hr
Directed Spray Rig, 8		0.13	Hr	Fert. Side Dress Unit,		0.30	Hr	Landplane 12'X 45'		0.90	Hr
Lister, 7 Bottom		0.16	Hr	Module Builder		0.30	Hr	Offset Disk, 13.5'		0.35	Hr
Offset Disk, 18'		0.17	Hr	Pickup Truck, 1/2 Ton		2.00	Hr	Planter, Drill Type, 6 Row		0.17	Hr
Power Mulcher, 6 Rw		0.20	Hr	Rolling Cultivator, 6 Rw		0.64	Hr	Rood, 3 Row W/Basket		0.26	Hr
Rotary Stalk Cutter, 4 Row		0.20	Hr	Rowbuck, 10'		0.11	Hr	Saddle Tk Sprayer, 2 Tk 8		0.18	Hr
Tandem Disk, 12'		0.04	Hr	Tractor, 80 PTO HP,		0.71	Hr	Tractor, 100 PTO HP,		1.86	Hr
Tractor, 125 PTO HP,		0.16	Hr	Tractor, 150 PTO HP,		1.46	Hr	V-Ripper, 5 Shnk		0.21	Hr
MATERIALS REQUIREMENT (per Acre)											
46-00-00, Urea 46		326.00	Lb	Acephate		0.67	Lb	Buprofezin		0.50	Lb
Mepiquat Chloride		0.50	Pt	Methidathion		3.00	Pt	Methomyl		1.00	Pt
Oxamyl		1.50	Pt	Prometryn		2.50	Pt	Pyriproxyfen		8.00	Oz
Sodium Chlorate		2.00	Ga	Technology Charge		1.00	Ac	Thidiazuron/diuron		9.50	Oz
Trifluralin		1.20	Pt	Upland Bt Cotton		16.00	Lb	Water, District		60.00	Al
LABOR REQUIREMENT (per Acre)											
Hand Weeders		2.00	Hr	Harvest		1.40	Hr	Irrigators		3.00	Hr
Tractor		4.66	Hr								

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

** A water assessment charge of \$20.00 per Acre is included as an ownership cost in Table B.

Table 10E. Schedule of Operations; Bt. Upland Cotton, 1998

COUNTY: Maricopa FARM: Maricopa County 98 WATER SOURCE: Salt River Project TILLAGE: Dry Plant
 CROP: Cotton, Upland ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Salt River Project YIELD: 1,227.0 Lb / Acre PREVIOUS CROP: Cotton, Upland DATE: 3/31/99

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	\$ / Unit		
1	Jan	1.0	Rip	150	V-Ripper, 5 Shnk	4.20						Tractor
2	Jan	1.0	Disk	150	Offset Disk, 18'	5.30						Tractor
3	Jan	1.0	Landplane	150	Landplane 12'X 45'	1.00						Tractor
4	Jan	1.0	Apply Herb. &	150	Dbl. Offset Disk, 16'	5.00	Trifluralin	1.20 Pt	24.95 Ga			Tractor
					Saddle Tk Sprayer, 2 Tk 8 Row							
5	Jan	1.0	List	125	Lister, 7 Bottom	5.70						Tractor
6	Mar	1.0	Mulch	100	Power Mulcher, 6 Rw	4.50						Tractor
7	Mar	1.0	Plant	100	Bed Shaper, 6 Rw	5.30	Upland Bt Cotton	16.00 Lb	200.00 CW			Tractor
					Planter, Drill Type, 6 Row		Technology Charge	1.00 Ac	32.00 Ac			
8	Mar	5.0	Buck Rows	80	Rowbuck, 10'	40.00						Tractor
9	Mar	10.0	Irrigate			3.33	Water, District	6.00 Al	6.00 AF			Irrigators
10	Apr	4.0	Disk Ends	80	Tandem Disk, 12'	80.00						Tractor
11	May	3.0	Cultivate	100	Rolling Cultivator, 6 Rw	5.30						Tractor
12	May	2.0	Apply Fert/Ground	100	Fert. Side Dress Unit,	6.00	46-00-00, Urea 46	163.00 Lb	257.00 Tn			Tractor
13	Jun	1.0	Hand Weeding			0.50						Hand
14	Jun	1.0	Apply Insecticide/Air		CST Air Spray, 3 Gal Mix		Acephate	0.67 Lb	10.31 Lb	4.23 Ac		
15	Jun	1.0	Apply Growth Regulator		CST Air Spray, 3 Gal Mix		Mepiquat Chloride	0.50 Pt	107.75 Ga	4.23 Ac		
16	Jul	1.0	Apply Insecticide/Air		CST Air Spray, 3 Gal Mix		Oxamyl	1.50 Pt	66.19 Ga	4.23 Ac		
17	Jul	1.0	Apply Insecticide/Air		CST Air Spray, 3 Gal Mix		Pyriproxyfen	8.00 Oz	560.00 Ga	4.23 Ac		
18	Jul	1.0	Apply Herbicide/Ground	100	Directed Spray Rig, 8	7.00	Prometryn	2.50 Pt	31.04 Ga			Tractor
					Rolling Cultivator, 6 Rw							
19	Aug	1.0	Apply Insecticide/Air		CST Air Spray, 3 Gal Mix		Methidathion	3.00 Pt	48.80 Ga	4.23 Ac		
20	Aug	1.0	Apply Insecticide/Air		CST Air Spray, 3 Gal Mix		Buprofezin	0.50 Lb	50.00 Lb	4.23 Ac		
21	Aug	1.0	Apply Insecticide/Air		CST Air Spray, 3 Gal Mix		Methomyl	1.00 Pt	49.05 Ga	4.23 Ac		
22	Aug	1.0	Apply Defoliant/Air		CST Air Spray, 5 Gal Mix		Thidiazuron/diuron	9.50 Oz	200.00 Ga	4.75 Ac		
23	Sep	1.0	Apply Defoliant/Air		CST Air Spray, 5 Gal Mix		Sodium Chlorate	2.00 Ga	1.40 Ga	4.75 Ac		
24	Oct	1.0	Prepare Ends	100	Offset Disk, 13.5'	20.00						Tractor
25	Oct	1.0	Cotton, First Pick		Cotton Picker, 2 Row	1.00						Harvest
26	Oct	1.0	Cotton, Make Modules		80 Module Builder	3.00						Tractor
27	Nov	0.8	Cotton, Second Pick		Cotton Picker, 2 Row	2.00						Harvest
28	Nov	1.0	Cotton, Rood		80 Rood, 3 Row W/Basket	3.50						Tractor
29	Oct	1.0	Haul, Custom		CST Haul Cotton Modules					35.00 Mu		
30	Oct	1.0	Cotton Ginning		CST Gin Upland Cotton					2.90 Cs		
31	Dec	1.0	Cotton Classing		CST Class Cotton, HVI					1.25 Ba		
32	Dec	1.0	Crop Assessment		CST Upland (Low Elev)					3.55 Ba		
33	Dec	1.0	Cut Stalks		100 Rotary Stalk Cutter, 4 Row	4.50						Tractor
34	Dec	1.0	Disk Residue		100 Offset Disk, 13.5'	3.00						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.