

Table 12A. Income and Cash Operating Summary; Upland Cotton, 1998

COUNTY: Yuma FARM: Yuma County 98 WATER SOURCE: Yuma County Water TILLAGE: Conventional
 CROP: Cotton, Upland ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Yuma Valley South YIELD: 1,349.0 Lb / Acre PREVIOUS CROP: Cotton, Upland DATE: 1/25/99

Item	Unit	Quantity	Price/ Unit	Budgeted /Acre	Total /Acre	Your Farm Budget
INCOME	Lint	Pound	1,349.00	\$0.68	\$914.62	\$1,073.61
	Cottonseed	Ton	1.19	\$133.60	\$158.98	
CASH LAND PREPARATION AND GROWING EXPENSES (including sales tax)						
Paid Labor (including benefits)						63.48
	Tractor/Self Propelled				37.30	
	Irrigation				17.33	
	Other/ Contract				8.84	
Chemicals and Custom Applications						316.51
	Fertilizer				58.82	
	Insecticide				245.64	
	Herbicide				12.05	
Farm Machinery and Vehicles						46.12
	Diesel Fuel				15.25	
	Gasoline				4.91	
	Repairs and Maintenance				25.97	
Irrigation Water (excluding labor)						0.00
Water Assessment (See Note Below) **						
Other Purchased Inputs &						162.16
	Seed/Transplants				9.16	
	Other Services and Rentals				153.00	
TOTAL CASH LAND PREPARATION AND GROWING EXPENSES						588.26
CASH HARVEST AND POST HARVEST EXPENSES						
Paid Labor (including benefits)						10.29
	Tractor/Self Propelled				4.87	
	Other/Contract				5.41	
Chemicals and Custom Applications						62.90
	Insecticide				32.58	
	Other Chemicals				30.33	
Farm Machinery and Vehicles						36.81
	Diesel Fuel				5.05	
	Repairs and Maintenance				31.75	
Custom Harvest/Post Harvest						66.32
	Cotton Ginning				115.06	
	Crop Assessment				9.58	
	Other Materials				1.60	
TOTAL HARVEST AND POST HARVEST EXPENSE						302.55
OPERATING OVERHEAD PICKUP USE						15.11
OPERATING INTEREST AT 10.0%						26.54
TOTAL CASH OPERATING EXPENSES						\$932.47
RETURNS OVER CASH OPERATING EXPENSES						\$141.14

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

** A water assessment charge of \$62.00 per Acre is included as an ownership cost in Table B.

Table 12B. Allocations of Ownership Costs; Upland Cotton, 1998

COUNTY: Yuma FARM: Yuma County 98 WATER SOURCE: Yuma County Water TILLAGE: Conventional
 CROP: Cotton, Upland ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Yuma Valley South YIELD: 1,349.0 Lb / Acre PREVIOUS CROP: Cotton, Upland DATE: 1/25/99

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	\$1,073.61		\$1,073.61	
TOTAL OPERATING EXPENSES	\$932.47		\$932.47	
RETURN OVER CASH OPERATING EXPENSES		\$141.14		\$141.14
CASH OVERHEAD EXPENSES				
Taxes, Housing and Insurance, Farm Machinery	9.12		9.12	
General and Office Overhead (5.0% of Total Operating Exp.)	46.62		46.62	
General Farm Maintenance (3.0% of Total Operating Exp.)	27.97		27.97	
Total Cash Overhead Expenses	83.72		83.72	
Total Cash Operating and Overhead Cost	1,016.19		1,016.19	
RETURNS OVER CASH OPER. AND OVER. EXPENSES		\$57.42		\$57.42
CAPITAL ALLOCATIONS (100% Equity)				
Capital Replacement, Machinery and Vehicles			56.93	
Interest on Equity, Machinery and Vehicles			23.22	
Total Capital Allocations			80.16	
RETURNS TO LAND, CAPITAL, MANAGEMENT AND RISK ----->		\$57.42		
RETURNS TO LAND, MANAGEMENT AND RISK ----->				(\$22.74)
Land Cost / Ownership (100% Equity)				
Property Taxes (\$1,314. X 16.0% X 0.132)	27.79		27.79	
Opportunity Interest on Land (100% X 6.0 X \$1,314.)			78.84	
Water Assessment	62.00		62.00	
Total Land Costs	89.79		168.63	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		(\$32.37)		
RETURNS TO MANAGEMENT AND RISK ----->				(\$191.37)
Management Services (8% of Total Operation Expenses)			74.60	
TOTAL OWNERSHIP COST	173.51		407.10	
TOTAL COST	\$1,105.98		\$1,339.57	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		(\$32.37)		
RETURNS TO RISK (PROFITS) ----->				(\$265.96)
BREAK-EVEN PRICE TO COVER OPERATING COST (PER Lb)		\$0.57		\$0.57
BREAK-EVEN PRICE TO COVER OWNERSHIP COST		\$0.13		\$0.30
BREAK-EVEN PRICE TO COVER TOTAL COST		\$0.70		\$0.88

Table 12C. Variable Operating Costs; Upland Cotton, 1998

COUNTY: Yuma FARM: Yuma County 98 WATER SOURCE: Yuma County Water TILLAGE: Conventional
 CROP: Cotton, Upland ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Yuma Valley South YIELD: 1,349.0 Lb / Acre PREVIOUS CROP: Cotton, Upland DATE: 1/25/99

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	Dec	Rip	0.450	0.500	5.64	3.90			9.54	1.0	9.54	L
2	Dec	Disk	0.300	0.333	2.95	2.60			5.55	1.0	5.55	L
3	Jan	Laser Level	0.900	1.000	6.65	7.80			14.45	1.0	14.45	L
4	Jan	Apply Herb. & Incorporate	0.180	0.200	1.94	1.56		3.97	7.46	1.0	7.46	G
5	Jan	List	0.225	0.250	1.93	1.95			3.88	1.0	3.88	L
6	Feb	Preirrigate		0.667		4.33			4.33	1.0	4.33	G
7	Mar	Mulch	0.180	0.200	1.14	1.56			2.70	1.0	2.70	L
8	Mar	Plant	0.225	0.250	2.45	1.95		9.16	13.56	1.0	13.56	L
9	Mar	Remove Cap	0.150	0.167	1.10	1.30			2.40	1.0	2.40	G
10	Apr	Cultivate	0.225	0.250	1.43	1.95			3.38	3.0	10.13	G
11	Apr	Soil Fertility					3.00		3.00	1.0	3.00	G
12	May	Irrigate/Run Fertilizer		0.400		2.60		15.21	17.81	2.0	35.62	G
13	Jun	Irrigate		0.400		2.60			2.60	2.0	5.20	G
14	Jun	Hand Weeding					75.00		75.00	1.0	75.00	G
15	Jun	Apply Insect./Ground	0.180	0.200	1.52	1.56		48.03	51.12	1.0	51.12	G
16	Jun	Apply Herbicide/Ground	0.180	0.200	1.12	1.56		8.08	10.76	1.0	10.76	G
17	Jul	Apply Insect./Ground	0.180	0.200	1.52	1.56		35.27	38.35	1.0	38.35	G
18	Jul	Apply Insect./Ground	0.180	0.200	1.52	1.56		10.76	13.85	1.0	13.85	G
19	Jul	Hand Weeding					75.00		75.00	1.0	75.00	G
20	Jul	Apply Insecticide/Air					4.23	10.65	14.88	1.0	14.88	G
21	Aug	Apply Insecticide/Air					4.23	9.24	13.47	1.0	13.47	G
22	Aug	Apply Insecticide/Air					4.23	12.60	16.83	1.0	16.83	G
23	Aug	Apply Insecticide/Air					4.23	83.11	87.34	1.0	87.34	G
24	Aug	Irrigate/Run Fertilizer		0.400		2.60		28.39	30.99	1.0	30.99	G
25	Sep	Apply Insecticide/Air					4.23	14.81	19.04	1.0	19.04	G
26	Sep	Apply Defoliant/Air					4.75	39.63	44.38	1.0	44.38	H
27	Sep	Apply Defoliant/Air					4.75	13.78	18.53	1.0	18.53	H
28	Sep	Dust Control	0.009	0.010	0.15	0.14			0.30	61.0	18.24	G
29	Sep	Prepare Ends	0.037	0.041	0.36	0.32			0.68	1.0	0.68	H
30	Sep	Cotton, First Pick	0.750	0.833	30.50	5.41			35.92	1.0	35.92	H
31	Sep	Cotton, Make Modules	0.375	0.417	4.61	3.25		1.60	9.46	1.0	9.46	H
32	Nov	Cotton, Road 200 Cl					56.00		56.00	1.0	56.00	H
33	Sep	Haul, Custom .2 Mu					6.94		6.94	1.0	6.94	H
34	Sep	Cotton Ginning 39.7 Cs					115.06		115.06	1.0	115.06	P
35	Dec	Cotton Classing 2.7 Ba					3.37		3.37	1.0	3.37	M
36	Dec	Crop Assessment 2.7 Ba					9.58		9.58	1.0	9.58	M
37	Nov	Cut Stalks 2.7 Ba	0.150	0.167	1.33	1.30			2.63	1.0	2.63	P
38	Nov	Disk Residue 2.7 Ba	0.300	0.333	2.95	2.60			5.55	1.0	5.55	L
		Pickup Use60 Mi/Acre	2.000		15.11						15.11	
		Operating Interest at 10.0					26.54				26.54	
=====												
TOTAL CASH OPERATING EXPENSES (includes all times over):												
932.47 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 \$62.00 per Acre is included as an ownership cost in Table B.

Table 12C. Variable Operating Costs; Upland Cotton, 1998

COUNTY: Yuma FARM: Yuma County 98 WATER SOURCE: Yuma County Water TILLAGE: Conventional
 CROP: Cotton, Upland ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Yuma Valley South YIELD: 1,349.0 Lb / Acre PREVIOUS CROP: Cotton, Upland DATE: 1/25/99

OPERATING COST SUMMARY BY CLASS

Land Preparation (L)	55.23
Growing (G)	533.04
Harvest (H)	171.91
Post Harvest (P)	117.69
Marketing (M)	12.95
Operating Overhead (O)	41.65
	=====
Total (T)	\$932.47

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%	1,011.8		-341.37	-238.48	-169.88	-101.28	1.61	0.85
- 10%	1,214.1		-283.86	-160.39	-78.07	4.25	127.72	0.74
Budgeted	1,349.0		-245.52	-108.32	-16.86	74.60	211.79	0.69
+ 10%	1,483.9		-207.18	-56.26	44.34	144.95	295.87	0.65
+ 25%	1,686.3		-149.66	21.83	136.16	250.48	421.97	0.60
Break-even Yield			2,212.83	1,629.69	1,386.16	1,205.96	1,009.16	

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Table 12D. Resource and Cash Flow Requirements; Upland Cotton, 1998

COUNTY: Yuma FARM: Yuma County 98 WATER SOURCE: Yuma County Water TILLAGE: Conventional
 CROP: Cotton, Upland ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Yuma Valley South YIELD: 1,349.0 Lb / Acre PREVIOUS CROP: Cotton, Upland DATE: 1/25/99

Month *	Number Irrigations	Water Applied (inches)	Total Labor (Hrs)	Operating Costs (\$/ACRE *)							
				Purchased Water	Fuel, Oil and Repairs	Labor	Chemicals	Other Purchases	Services	Total	
DEC P			0.42		4.29	3.25				7.54	
JAN C			1.87		14.82	14.56	3.97			33.34	
FEB C	1.0	12.0	0.67			4.33				4.33	
MAR C			0.62		4.69	4.81		9.16		18.66	
APR C			0.25		1.43	1.95			3.00	6.38	
MAY C	1.0	6.0	0.65		1.43	4.55	15.21			21.19	
JUN C	2.0	12.0	1.45		4.07	10.27	71.32		75.00	160.66	
JUL C	1.0	6.0	0.80		3.05	5.72	56.69		79.23	144.68	
AUG C	1.0	6.0	0.71		4.78	7.09	133.35		12.69	157.91	
SEP C			0.57		11.83	6.24	61.33	0.32		35.76	
OCT C			0.77		21.25	5.36	6.89	0.96		63.38	
NOV C			0.55		9.59	4.07		0.32		92.60	
DEC C			0.20		1.71	1.56				12.95	
Pickup Use60 Mi/Acre					15.11					15.11	
Operating Interest at 10.0									26.54	26.54	
Water Assessment				**							
Total	6.0	42.0	9.52		98.04	73.76	348.76	10.76	401.15	932.47	
%					10.51	7.91	37.40	1.15	43.02	100.00	
TOTAL RESOURCE REQUIREMENTS (per Acre)			TOTAL ENERGY REQUIREMENTS (per Acre)								
Total N		205.3		Diesel Fuel		26.2	Gal				
Total P		0.0		Unleaded Gas		9.8	Gal				
Total K		0.0		All Direct Energy		4.9	MBTU				
Total Labor		9.5									
Total Water		42.0									
EQUIPMENT REQUIREMENTS (per Acre)											
Cotton Picker, 2 Row		0.75	Hr	Cultipacker, 13'		0.15	Hr	Directed Spray Rig, 8		0.18	Hr
Drag Scraper, 10'		0.90	Hr	Laser, Complete System		0.90	Hr	Lister, 5 Bottom		0.22	Hr
Module Builder		0.38	Hr	Offset Disk, 12'		0.64	Hr	Pickup Truck, 1/2 Ton		2.00	Hr
Planter, Drill Type, 4 Row		0.22	Hr	Rolling Cultivator, 4 Rw		0.86	Hr	Rotary Stalk Cutter, 4 Row		0.15	Hr
Row Crop Sprayer, 8 Rw		0.54	Hr	Saddle Tk Sprayer, 2 Tk 8		0.18	Hr	Tandem Disk, 12'		0.18	Hr
Tractor, 70 PTO HP,		1.80	Hr	Tractor, 80 PTO HP,		0.38	Hr	Tractor, 100 PTO HP,		2.24	Hr
Tractor, 150 PTO HP,		0.45	Hr	Truck, 5 Ton w/1000 Gal		0.55	Hr	V-Ripper, 7 Shnk		0.45	Hr
MATERIALS REQUIREMENT (per Acre)											
32-00-00, URAN 32, Lqd		58.00	Ga	Acephate		1.00	Lb	Acephate		1.59	Lb
Amitraz		0.25	Lb	Bifenthrin		4.00	Oz	Buprofezin		0.50	Lb
Chlorpyrifos		0.50	Pt	Cyanazine		1.00	Qt	Cyfluthrin		2.25	Oz
Endosulfan		1.50	Lb	Fenpropathrin		10.67	Oz	Lambdacyhalothrin		3.20	Oz
Module Tarps		30.21	C	Oxamyl		1.00	Pt	Pyriproxyfen		8.00	Oz
Sodium Chlorate		2.00	Ga	Sulphophos		1.00	Pt	Thidiazuron		0.30	Lb
Trifluralin		1.20	Pt	Upl Cotton Sd+NU-Flow		12.00	Lb	Water, District		42.00	Al
Zetacypermethrin		6.40	Oz								
LABOR REQUIREMENT (per Acre)											
Harvest		0.83	Hr	Irrigators		2.67	Hr	Tractor		5.41	Hr
Truck Driver		0.61	Hr								

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

** A water assessment charge of \$62.00 per Acre is included as an ownership cost in Table B.

Table 12E. Schedule of Operations; Upland Cotton, 1998

COUNTY: Yuma FARM: Yuma County 98 WATER SOURCE: Yuma County Water TILLAGE: Conventional
 CROP: Cotton, Upland ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Yuma Valley South YIELD: 1,349.0 Lb / Acre PREVIOUS CROP: Cotton, Upland DATE: 1/25/99

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	Dec	1.0	Rip	150 V-Ripper, 7 Shnk	2.00				Tractor
2	Dec	1.0	Disk	100 Offset Disk, 12'	3.00				Tractor
3	Jan	1.0	Laser Level	100 Drag Scraper, 10' Laser, Complete System	1.00				Tractor
4	Jan	1.0	Apply Herb. &	100 Tandem Disk, 12' Saddle Tk Sprayer, 2 Tk 8 Row	5.00	Trifluralin	1.20 Pt 24.95 Ga		Tractor
5	Jan	1.0	List	100 Lister, 5 Bottom	4.00				Tractor
6	Feb	1.0	Preirrigate		1.50	Water, District	12.00 Al 0.00 AF		Irrigators
7	Mar	1.0	Mulch	70 Rolling Cultivator, 4 Rw	5.00				Tractor
8	Mar	1.0	Plant	70 Planter, Drill Type, 4 Row	4.00	Upl Cotton Sd+NU-Flow	12.00 Lb 72.00 Lb		Tractor
9	Mar	1.0	Remove Cap	100 Cultipacker, 13'	6.00				Tractor
10	Apr	3.0	Cultivate	70 Rolling Cultivator, 4 Rw	4.00				Tractor
11	Apr	1.0	Soil Fertility	CST Soil Analysis (Surface)				3.00 Ac	
12	May	2.0	Irrigate/Run Fertilizer		2.50	Water, District	6.00 Al 0.00 AF		Irrigators
						32-00-00, URAN 32,	15.00 Ga 173.00 Tn		
13	Jun	2.0	Irrigate		2.50	Water, District	6.00 Al 0.00 AF		Irrigators
14	Jun	1.0	Hand Weeding	CST Hand Weeding				75.00 Ac	
15	Jun	1.0	Apply Insect./Ground	70 Row Crop Sprayer, 8 Rw	5.00	Pyriproxyfen	8.00 Oz 560.00 Ga		Tractor
						Acephate	1.00 Lb 10.31 Lb		
16	Jun	1.0	Apply Herbicide/Ground	70 Directed Spray Rig, 8 Row	5.00	Cyanazine	1.00 Qt 30.50 Ga		Tractor
17	Jul	1.0	Apply Insect./Ground	70 Row Crop Sprayer, 8 Rw	5.00	Buprofezin	0.50 Lb 50.00 Lb		Tractor
						Oxamyl	1.00 Pt 66.19 Ga		
18	Jul	1.0	Apply Insect./Ground	70 Row Crop Sprayer, 8 Rw	5.00	Lambdacyhalothrin	3.20 Oz 278.75 Ga		Tractor
						Chlorpyrifos	0.50 Pt 50.95 Ga		
19	Jul	1.0	Hand Weeding	CST Hand Weeding				75.00 Ac	
20	Jul	1.0	Apply Insecticide/Air	CST Air Spray, 3 Gal Mix		Endosulfan	1.50 Lb 6.70 Lb	4.23 Ac	
21	Aug	1.0	Apply Insecticide/Air	CST Air Spray, 3 Gal Mix		Cyfluthrin	2.25 Oz 496.00 Ga	4.23 Ac	
22	Aug	1.0	Apply Insecticide/Air	CST Air Spray, 3 Gal Mix		Amitraz	0.25 Lb 47.56 Lb	4.23 Ac	
23	Aug	1.0	Apply Insecticide/Air	CST Air Spray, 3 Gal Mix		Bifenthrin	4.00 Oz 549.00 Ga	4.23 Ac	
						Sulprophos	1.00 Pt 490.00 Ga		
24	Aug	1.0	Irrigate/Run Fertilizer		2.50	Water, District	6.00 Al 0.00 AF		Irrigators
						32-00-00, URAN 32,	28.00 Ga 173.00 Tn		
25	Sep	1.0	Apply Insecticide/Air	CST Air Spray, 3 Gal Mix		Zetacypermethrin	3.20 Oz 317.83 Ga	4.23 Ac	
						Acephate	0.67 Lb 9.00 Lb		
26	Sep	1.0	Apply Defoliant/Air	CST Air Spray, 5 Gal Mix		Thidiazuron	0.30 Lb 56.16 Lb	4.75 Ac	
						Fenpropathrin	10.67 Oz 174.00 Ga		
						Acephate	0.67 Lb 9.00 Lb		
27	Sep	1.0	Apply Defoliant/Air	CST Air Spray, 5 Gal Mix		Sodium Chlorate	2.00 Ga 1.40 Ga	4.75 Ac	
						Zetacypermethrin	3.20 Oz 317.83 Ga		
						Acephate	0.25 Lb 9.00 Lb		

Table 12E. Schedule of Operations; Upland Cotton, 1998

COUNTY: Yuma FARM: Yuma County 98 WATER SOURCE: Yuma County Water TILLAGE: Conventional
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 AREA: Yuma Valley South YIELD: 1,349.0 Lb / Acre PREVIOUS CROP: Cotton, Upland DATE: 1/25/99

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		
28	Sep	61.0	Dust Control		Truck, 5 Ton w/1000 Gal Tank	100.00					Truck
29	Sep	1.0	Prepare Ends		100 Offset Disk, 12'	24.40					Tractor
30	Sep	1.0	Cotton, First Pick		Cotton Picker, 2 Row	1.20					Harvest
31	Sep	1.0	Cotton, Make Modules		80 Module Builder	2.40	Module Tarps	30.21 C	0.05 CW		Tractor
32	Nov	1.0	Cotton, Rood		CST Rood Upland Cotton 2X					0.28	Cl
33	Sep	1.0	Haul, Custom		CST Haul Cotton Modules					35.00	Mu
34	Sep	1.0	Cotton Ginning		CST Gin Upland Cotton					2.90	Cs
35	Dec	1.0	Cotton Classing		CST Class Cotton, HVI					1.25	Ba
36	Dec	1.0	Crop Assessment		CST Upland (Low Elev)					3.55	Ba
37	Nov	1.0	Cut Stalks		100 Rotary Stalk Cutter, 4 Row	6.00					Tractor
38	Nov	1.0	Disk Residue		100 Offset Disk, 12'	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.

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