

Table 8A. Income and Cash Operating Summary; Pima (ELS) Cotton, 1998

COUNTY: Yuma FARM: Yuma County 98 WATER SOURCE: Yuma County Water TILLAGE: Conventional
 CROP: Cotton, Pima ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Yuma Valley South YIELD: 1,167.0 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	1,167.00	\$1.03	\$1,202.01	\$1,339.62
	CottonSeed	Ton	1.03	\$133.60	\$137.61	
CASH LAND PREPARATION AND GROWING EXPENSES (including sales tax)						
Paid Labor (including benefits)					84.92	
	Tractor/Self Propelled			32.10		
	Hand			24.44		
	Irrigation			25.13		
	Other/ Contract			3.25		
Chemicals and Custom Applications					317.27	
	Fertilizer			60.85		
	Insecticide			244.37		
	Herbicide			12.05		
Farm Machinery and Vehicles					39.57	
	Diesel Fuel			12.96		
	Gasoline			4.02		
	Repairs and Maintenance			22.59		
Irrigation Water (excluding labor)					0.00	
Water Assessment (See Note Below) **						
Other Purchased Inputs &					11.14	
	Seed/Transplants			8.14		
	Other Services and Rentals			3.00		
TOTAL CASH LAND PREPARATION AND GROWING EXPENSES					452.89	
CASH HARVEST AND POST HARVEST EXPENSES						
Paid Labor (including benefits)					12.02	
	Tractor/Self Propelled			5.52		
	Other/Contract			6.50		
Chemicals and Custom Applications					39.42	
	Insecticide			9.09		
	Other Chemicals			30.33		
Farm Machinery and Vehicles					43.83	
	Diesel Fuel			5.92		
	Repairs and Maintenance			37.91		
Custom Harvest/Post Harvest					36.92	
Cotton Ginning					133.86	
Crop Assessment					10.62	
Other Materials					1.60	
TOTAL HARVEST AND POST HARVEST EXPENSE					278.28	
OPERATING OVERHEAD PICKUP USE					15.11	
OPERATING INTEREST AT 10.0%					30.57	
TOTAL CASH OPERATING EXPENSES					\$776.86	
RETURNS OVER CASH OPERATING EXPENSES					\$562.76	

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 8B. Allocations of Ownership Costs; Pima (ELS) Cotton, 1998

COUNTY: Yuma FARM: Yuma County 98 WATER SOURCE: Yuma County Water TILLAGE: Conventional
 CROP: Cotton, Pima ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Yuma Valley South YIELD: 1,167.0 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 \$1.03 / Lb	\$1,339.62		\$1,339.62	
TOTAL OPERATING EXPENSES	\$776.86		\$776.86	
RETURN OVER CASH OPERATING EXPENSES		\$562.76		\$562.76
CASH OVERHEAD EXPENSES				
Taxes, Housing and Insurance, Farm Machinery	8.89		8.89	
General and Office Overhead (5.0% of Total Operating Exp.)	38.84		38.84	
General Farm Maintenance (3.0% of Total Operating Exp.)	23.31		23.31	
Total Cash Overhead Expenses	71.04		71.04	
Total Cash Operating and Overhead Cost	847.90		847.90	
RETURNS OVER CASH OPER. AND OVER. EXPENSES		\$491.72		\$491.72
CAPITAL ALLOCATIONS (100% Equity)				
Capital Replacement, Machinery and Vehicles			58.76	
Interest on Equity, Machinery and Vehicles			23.13	
Total Capital Allocations			81.89	
RETURNS TO LAND, CAPITAL, MANAGEMENT AND RISK ----->		\$491.72		
RETURNS TO LAND, MANAGEMENT AND RISK ----->				\$409.83
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 ----->		\$401.93		
RETURNS TO MANAGEMENT AND RISK ----->				\$241.20
Management Services (8% of Total Operation Expenses)			62.15	
TOTAL OWNERSHIP COST	160.83		383.71	
TOTAL COST	\$937.69		\$1,160.57	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		\$401.93		
RETURNS TO RISK (PROFITS) ----->				\$179.05
BREAK-EVEN PRICE TO COVER OPERATING COST (PER Lb)		\$0.55		\$0.55
BREAK-EVEN PRICE TO COVER OWNERSHIP COST		\$0.14		\$0.33
BREAK-EVEN PRICE TO COVER TOTAL COST		\$0.69		\$0.88

Table 8C. Variable Operating Costs; Pima (ELS) Cotton, 1998

COUNTY: Yuma FARM: Yuma County 98 WATER SOURCE: Yuma County Water TILLAGE: Conventional
 CROP: Cotton, Pima ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Yuma Valley South YIELD: 1,167.0 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	5.21	3.90			9.11	1.0	9.11	L
2	Dec	Disk	0.300	0.333	2.95	2.60			5.55	1.0	5.55	L
3	Jan	Laser Level	0.300	0.333	2.22	2.60			4.81	1.0	4.81	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		8.14	12.54	1.0	12.54	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	5.0	13.00	G
14	Jun	Hand Weeding		3.333		20.58			20.58	1.0	20.58	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		12.30	15.38	1.0	15.38	G
19	Jul	Hand Weeding		1.250		7.72			7.72	0.5	3.86	G
20	Jul	Apply Insecticide/Air					4.23	6.92	11.15	1.0	11.15	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	Sep	Apply Insecticide/Air					4.23	83.11	87.34	1.0	87.34	G
24	Aug	Irrigate/Run Fertilizer		0.400		2.60		30.42	33.02	1.0	33.02	G
25	Sep	Apply Insecticide/Air					4.23	15.75	19.98	1.0	19.98	G
26	Oct	Apply Defoliant/Air					4.75	26.95	31.70	1.0	31.70	H
27	Oct	Apply Defoliant/Air					4.75	2.97	7.72	1.0	7.72	H
28	Oct	Dust Control	0.009	0.010	0.15	0.06			0.22	50.0	10.95	G
29	Oct	Prepare Ends	0.037	0.041	0.36	0.32			0.68	1.0	0.68	H
30	Oct	Cotton, First Pick	0.900	1.000	36.61	6.50			43.10	1.0	43.10	H
31	Oct	Cotton, Make Modules	0.450	0.500	5.53	3.90		1.60	11.03	1.0	11.03	H
32	Nov	Cotton, Rood 100 Cl					28.00		28.00	1.0	28.00	H
33	Nov	Haul, Custom .2 Mu					6.01		6.01	1.0	6.01	H
34	Nov	Cotton Ginning 34.3 Cs					133.86		133.86	1.0	133.86	P
35	Nov	Cotton Classing 2.3 Ba					2.92		2.92	1.0	2.92	M
36	Dec	Crop Assessment 2.3 Ba					10.62		10.62	1.0	10.62	M
37	Dec	Cut Stalks 2.3 Ba	0.150	0.167	1.33	1.30			2.63	1.0	2.63	P
38	Dec	Disk Residue 2.3 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		15.11	
		Operating Interest at 10.0					30.57		30.57		30.57	
TOTAL CASH OPERATING EXPENSES (includes all times over):											=====	T
											776.86	

*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 8C. Variable Operating Costs; Pima (ELS) Cotton, 1998

COUNTY: Yuma FARM: Yuma County 98 WATER SOURCE: Yuma County Water TILLAGE: Conventional
 CROP: Cotton, Pima ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Yuma Valley South YIELD: 1,167.0 Lb / Acre PREVIOUS CROP: Cotton, Upland DATE: 1/25/99

OPERATING COST SUMMARY BY CLASS		SENSITIVITY OF THE NET REVENUES OVER TOTAL CASH EXPENSES (\$/ACRE)							
		Prices	- 25%	- 10%	Budgeted	+ 10%	+ 25%	Break-even Price	
Land Preparation (L)	44.15	Yields	\$0.77	\$0.93	\$1.03	\$1.13	\$1.29		
Growing (G)	408.75	- 25%	875.3	-30.18	105.05	195.20	285.35	420.58	0.81
Harvest (H)	128.24	- 10%	1,050.3	63.31	225.58	333.76	441.94	604.21	0.71
Post Harvest (P)	136.49	Budgeted	1,167.0	125.63	305.93	426.13	546.34	726.64	0.66
Marketing (M)	13.54	+ 10%	1,283.7	187.96	386.29	518.51	650.73	849.06	0.63
Operating Overhead (O)	45.68	+ 25%	1,458.8	281.44	506.82	657.07	807.32	1,032.70	0.58
Total (T)	\$776.86	Break-even Yield		931.75	722.68	628.64	556.26	474.34	

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Table 8D. Resource and Cash Flow Requirements; Pima (ELS) Cotton, 1998

COUNTY: Yuma FARM: Yuma County 98 WATER SOURCE: Yuma County Water TILLAGE: Conventional
 CROP: Cotton, Pima ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Yuma Valley South YIELD: 1,167.0 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		4.08	3.25				7.33
JAN C			1.20		10.17	9.35	3.97			23.49
FEB C	1.0	12.0	0.67			4.33				4.33
MAR C			0.62		4.69	4.81		8.14		17.65
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	4.78		4.07	30.85	71.32			106.24
JUL C	2.0	12.0	1.83		3.05	12.18	54.49		4.23	73.94
AUG C	2.0	12.0	0.80			5.20	52.27		8.46	65.93
SEP C	1.0	6.0	0.40			2.60	98.86		8.46	109.92
OCT C			1.07		25.87	7.31	28.44	0.80	7.13	69.54
NOV C			0.97		24.33	6.66	1.48	0.80	171.70	204.98
DEC C			0.50		4.28	3.90			12.08	20.26
Pickup Use60 Mi/Acre					15.11					15.11
Operating Interest at 10.0 Water Assessment				**					30.57	30.57
Total	9.0	60.0	14.15		98.51	96.94	326.04	9.74	245.63	776.86
%					12.68	12.48	41.97	1.25	31.62	100.00
TOTAL RESOURCE REQUIREMENTS (per Acre)			TOTAL ENERGY REQUIREMENTS (per Acre)							
Total N		212.4		Diesel Fuel	24.4	Gal				
Total P		0.0		Unleaded Gas	9.1	Gal				
Total K		0.0		All Direct Energy	4.5	M BTU				
Total Labor		14.1								
Total Water		60.0								
EQUIPMENT REQUIREMENTS (per Acre)										
Cotton Picker, 2 Row		0.90	Hr	Cultipacker, 13'	0.15	Hr	Directed Spray Rig, 8		0.18	Hr
Drag Scraper, 10'		0.30	Hr	Laser, Complete System	0.30	Hr	Lister, 5 Bottom		0.22	Hr
Module Builder		0.45	Hr	Offset Disk, 12'	0.64	Hr	Pickup Truck, 1/2 Ton		2.00	Hr
Planter, Drill Type, 4 Row		0.22	Hr	Ripper, 3 Shank	0.45	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,		0.45	Hr
Tractor, 100 PTO HP,		1.64	Hr	Tractor, 150 PTO HP,	0.45	Hr	Truck, 5 Ton w/1000 Gal		0.45	Hr
MATERIALS REQUIREMENT (per Acre)										
32-00-00, URAN 32, Lqd		60.00	Gal	Acephate	1.67	Lb	Amitraz		0.25	Lb
Bifenthrin		6.00	Oz	Buprofezin	0.50	Lb	Chlorpyrifos		1.00	Pt
Cyanazine		1.00	Qt	Cyfluthrin	2.25	Oz	Endosulfan		1.50	Pt
Lambdacyhalothrin		3.20	Oz	Module Tarps	30.21	C	Oxamyl		1.00	Pt
Pima Cotton Sd + Fung		12.00	Lb	Pyriproxyfen	8.00	Oz	Sodium Chlorate		2.00	Gal
Sulprophos		1.00	Pt	Thidiazuron	0.30	Lb	Trifluralin		1.20	Pt
Water, District		60.00	Al	Zetacypermethrin	3.20	Oz				
LABOR REQUIREMENT (per Acre)										
Hand Weeders		3.96	Hr	Harvest	1.00	Hr	Irrigators		3.87	Hr
Other		0.50	Hr	Tractor	4.82	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 8E. Schedule of Operations; Pima (ELS) Cotton, 1998

COUNTY: Yuma FARM: Yuma County 98 WATER SOURCE: Yuma County Water TILLAGE: Conventional
 CROP: Cotton, Pima ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Yuma Valley South YIELD: 1,167.0 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 Ripper, 3 Shank	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	3.00				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	Pima Cotton Sd + Fung	12.00 Lb 0.64 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	5.0	Irrigate		2.50	Water, District	6.00 Al 0.00 AF		Irrigators
14	Jun	1.0	Hand Weeding		0.30				Hand
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	1.00 Pt 37.08 Ga		
19	Jul	0.5	Hand Weeding		0.80				Hand
20	Jul	1.0	Apply Insecticide/Air	CST Air Spray, 3 Gal Mix		Endosulfan	1.50 Pt 34.80 Ga	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	Sep	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,	30.00 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 10.31 Lb		
26	Oct	1.0	Apply Defoliant/Air	CST Air Spray, 5 Gal Mix		Thidiazuron	0.30 Lb 56.16 Lb	4.75 Ac	
						Bifenthrin	2.00 Oz 549.00 Ga		
27	Oct	1.0	Apply Defoliant/Air	CST Air Spray, 5 Gal Mix		Sodium Chlorate	2.00 Ga 1.40 Ga	4.75 Ac	
28	Oct	50.0	Dust Control	Truck, 5 Ton w/1000 Gal Tank	100.00				Other
29	Oct	1.0	Prepare Ends	100 Offset Disk, 12'	24.40				Tractor
30	Oct	1.0	Cotton, First Pick	Cotton Picker, 2 Row	1.00				Harvest
31	Oct	1.0	Cotton, Make Modules	80 Module Builder	2.00	Module Tarps	30.21 C 0.05 CW		Tractor
32	Nov	1.0	Cotton, Rood	CST Rood Pima Cotton 2X				0.28 Cl	
33	Nov	1.0	Haul, Custom	CST Haul Cotton Modules				35.00 Mu	
34	Nov	1.0	Cotton Ginning	CST Gin Pima Cotton				3.90 Cs	
35	Nov	1.0	Cotton Classing	CST Class Cotton, HVI				1.25 Ba	
36	Dec	1.0	Crop Assessment	CST Pima (Low Elev)				4.55 Ba	
37	Dec	1.0	Cut Stalks	100 Rotary Stalk Cutter, 4 Row	6.00				Tractor
38	Dec	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.