

**Table 9A. Income and Cash Operating Summary; Upland Cotton, 1998**

COUNTY: Graham                      FARM: Graham County 98                      WATER SOURCE: Surface/Pump                      TILLAGE: Conventional  
 CROP: Cotton, Upland                      ACRES: 1.0                      IRRIGATION SYSTEM: Flood Furrow                      SOIL: Sandy-Loam  
 AREA: Safford Valley                      YIELD: 935.0 Lb / Acre                      PREVIOUS CROP: Cotton, Upland                      DATE: 2/4/99

Item	Unit	Quantity	Price/ Unit	Budgeted /Acre	Total /Acre	Your Farm Budget
INCOME	Lint	Pound	935.00	\$0.68	\$635.80	\$746.69
	Cottonseed	Ton	0.83	\$133.60	\$110.89	
CASH LAND PREPARATION AND GROWING EXPENSES (including sales tax)						
Paid Labor (including benefits)						114.02
	Tractor/Self Propelled			49.43		
	Hand			34.59		
	Irrigation			30.00		
Chemicals and Custom Applications						84.72
	Fertilizer			20.90		
	Insecticide			47.15		
	Herbicide			16.66		
Farm Machinery and Vehicles						58.35
	Diesel Fuel			22.68		
	Repairs and Maintenance			35.67		
Irrigation Water (excluding labor)						15.02
	Pump Energy - Electric			13.88		
	Repairs and Maintenance			1.13		
Water Assessment (See Note Below) **						
Other Purchased Inputs &						27.27
	Seed/Transplants			21.27		
	Other Services and Rentals			6.00		
TOTAL CASH LAND PREPARATION AND GROWING EXPENSES						299.37
CASH HARVEST AND POST HARVEST EXPENSES						
Paid Labor (including benefits)						18.74
	Tractor/Self Propelled			8.28		
	Other/Contract			10.47		
Chemicals and Custom Applications						8.49
	Other Chemicals			8.49		
Farm Machinery and Vehicles						68.53
	Diesel Fuel			9.26		
	Repairs and Maintenance			59.27		
Custom Harvest/Post Harvest						7.20
	Cotton Ginning				81.13	
	Crop Assessment				5.34	
	Other Materials				1.33	
TOTAL HARVEST AND POST HARVEST EXPENSE						190.77
OPERATING OVERHEAD PICKUP USE						15.14
OPERATING INTEREST AT 10.0%						15.92
TOTAL CASH OPERATING EXPENSES						\$521.20
RETURNS OVER CASH OPERATING EXPENSES						\$225.49

Notes: The above figures do not include ownership costs, see table B for detailed cost allocation.  
 \*\* A water assessment charge of \$25.00 per Acre is included as an ownership cost in Table B.

**Table 9B. Allocations of Ownership Costs; Upland Cotton, 1998**

COUNTY:Graham FARM: Graham County 98 WATER SOURCE: Surface/Pump TILLAGE: Conventional  
 CROP: Cotton, Upland ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Safford Valley YIELD: 935.0 Lb / Acre PREVIOUS CROP: Cotton, Upland DATE: 2/4/99

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	\$746.69		\$746.69	
TOTAL OPERATING EXPENSES	\$521.20		\$521.20	
RETURN OVER CASH OPERATING EXPENSES		\$225.49		\$225.49
CASH OVERHEAD EXPENSES				
Taxes, Housing and Insurance, Farm Machinery	12.28		12.28	
Wells and Irrigation System	5.41		5.41	
General and Office Overhead (5.0% of Total Operating Exp.)	26.06		26.06	
General Farm Maintenance (3.0% of Total Operating Exp.)	15.64		15.64	
Total Cash Overhead Expenses	59.40		59.40	
Total Cash Operating and Overhead Cost	580.60		580.60	
RETURNS OVER CASH OPER. AND OVER. EXPENSES		\$166.09		\$166.09
CAPITAL ALLOCATIONS (100% Equity)				
Capital Replacement, Machinery and Vehicles			86.51	
Wells and Irrigation System			10.20	
Interest on Equity, Machinery and Vehicles			35.36	
Wells and Irrigation System			3.69	
Total Capital Allocations			135.77	
RETURNS TO LAND, CAPITAL, MANAGEMENT AND RISK ----->		\$166.09		
RETURNS TO LAND, MANAGEMENT AND RISK ----->				\$30.33
Land Cost / Ownership (100% Equity)				
Property Taxes (\$600.00 X 16.0% X 0.093)	8.93		8.93	
Opportunity Interest on Land (100% X 6.0 X \$600.00)			36.00	
Water Assessment **	25.00		25.00	
Total Land Costs	33.93		69.93	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		\$132.16		
RETURNS TO MANAGEMENT AND RISK ----->				(\$39.60)
Management Services (8% of Total Operation Expenses)			41.70	
TOTAL OWNERSHIP COST	93.32		306.79	
TOTAL COST	\$614.52		\$827.99	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		\$132.16		
RETURNS TO RISK (PROFITS) ----->				(\$81.30)
BREAK-EVEN PRICE TO COVER OPERATING COST ( PER Lb )		\$0.44		\$0.44
BREAK-EVEN PRICE TO COVER OWNERSHIP COST		\$0.10		\$0.33
BREAK-EVEN PRICE TO COVER TOTAL COST		\$0.54		\$0.77

**Table 9C. Variable Operating Costs; Upland Cotton, 1998**

COUNTY:Graham FARM: Graham County 98 WATER SOURCE: Surface/Pump TILLAGE: Conventional  
 CROP: Cotton, Upland ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Safford Valley YIELD: 935.0 Lb / Acre PREVIOUS CROP: Cotton, Upland DATE: 2/4/99

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	Plow	0.900	1.000	14.90	8.19				23.09	1.0	23.09	L
2	Feb	Landplane	0.273	0.300	3.57	2.46				6.02	0.7	4.22	L
3	Feb	Laser Level	0.300	0.333	3.57	2.73				6.30	0.3	1.89	L
4	Feb	Apply Herbicide/Ground	0.225	0.250	1.87	2.05		3.29		7.21	1.0	7.21	G
5	Feb	Disk	0.225	0.250	3.46	2.05				5.51	1.0	5.51	L
6	Feb	List	0.225	0.250	1.92	2.05				3.97	1.0	3.97	L
7	Feb	Disk Ends	0.030	0.033	0.45	0.27				0.72	9.0	6.45	G
8	Feb	Buck Rows	0.030	0.033	0.22	0.27				0.49	7.0	3.42	G
9	Feb	Preirrigate		1.000		6.82				6.82	0.7	4.78	G
10	Feb	Preirrigate		1.500	11.12	10.24				21.36	0.3	6.41	G
11	Mar	Mulch	0.300	0.333	3.01	2.73				5.74	2.0	11.48	L
12	Apr	Plant		0.333		2.73		21.27		24.00	1.0	24.00	L
13	Apr	Remove Cap	0.180	0.200	1.27	1.64				2.91	1.0	2.91	G
14	Apr	Cultivate/Inject Fertiliz	0.450	0.500	5.87	4.09		20.90		30.86	1.0	30.86	L
15	May	Cultivate	0.450	0.500	4.63	4.09				8.73	1.0	8.73	G
16	May	Hand Weeding		3.333		21.62				21.62	1.0	21.62	G
17	Jun	Irrigate		0.269		1.84				1.84	6.3	11.56	G
18	Jun	Irrigate		0.403	3.71	2.75				6.46	2.7	17.44	G
19	Jun	Cultivate	0.300	0.333	2.47	2.73				5.20	3.0	15.60	G
20	Jun	Hand Weeding		2.000		12.97				12.97	1.0	12.97	G
21	Jul	Apply Herbicide/Ground	0.225	0.250	1.87	2.05		13.37		17.29	1.0	17.29	G
22	Jul	Field Scouting						6.00		6.00	1.0	6.00	G
23	Aug	Apply Insecticide/Air						4.23	11.49	15.72	3.0	47.15	G
24	Sep	Irrigate		0.403		2.75				2.75	0.7	1.93	G
25	Sep	Irrigate		0.606	5.56	4.14				9.70	0.3	2.91	G
26	Sep	Prepare Ends	0.045	0.050	0.33	0.41				0.74	1.0	0.74	H
27	Sep	Apply Defoliant/Air						5.54	2.95	8.49	1.0	8.49	H
28	Oct	Cotton, First Pick	0.900	1.000	36.55	6.82				43.37	1.0	43.37	H
29	Oct	Cotton, Make Modules	0.375	0.417	4.59	3.41		1.13		9.14	1.0	9.14	H
30	Nov	Cotton, Second Pick	0.600	0.667	24.37	4.55				28.92	0.8	23.13	H
31	Nov	Cotton, Make Modules	0.265	0.294	3.24	2.41		0.20		5.85	1.0	5.85	H
32	Oct	Haul, Custom .1 Mu						4.81		4.81	1.0	4.81	H
33	Oct	Cotton Ginning 27.5 Cs						81.13		81.13	1.0	81.13	P
34	Dec	Cotton Classing 1.9 Ba						2.39		2.39	1.0	2.39	M
35	Dec	Crop Assessment 1.9 Ba						5.34		5.34	1.0	5.34	M
36	Dec	Cut Stalks 1.9 Ba	0.225	0.250	4.33	2.05				6.38	1.0	6.38	P
		Pickup Use60 Mi/Acre	2.000		15.14					15.14		15.14	
		Operating Interest at 10.0						15.92		15.92		15.92	
TOTAL CASH OPERATING EXPENSES (includes all times over):											=====	521.20	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 \$25.00 per Acre is included as an ownership cost in Table B.

**Table 9C. Variable Operating Costs; Upland Cotton, 1998**

COUNTY:Graham FARM: Graham County 98 WATER SOURCE: Surface/Pump TILLAGE: Conventional  
 CROP: Cotton, Upland ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Safford Valley YIELD: 935.0 Lb / Acre PREVIOUS CROP: Cotton, Upland DATE: 2/4/99

OPERATING COST SUMMARY BY CLASS

Land Preparation (L)	105.01
Growing (G)	194.37
Harvest (H)	95.54
Post Harvest (P)	87.50
Marketing (M)	7.73
Operating Overhead (O)	31.06
	=====
Total (T)	\$521.20

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%	701.3	-115.23	-43.70	3.98	51.67	123.20	0.67
- 10%	841.5	-72.32	13.52	70.74	127.96	213.79	0.60
Budgeted	935.0	-43.71	51.66	115.24	178.82	274.19	0.56
+ 10%	1,028.5	-15.10	89.81	159.74	229.68	334.59	0.52
+ 25%	1,168.8	27.81	147.02	226.50	305.97	425.19	0.49
Break-even Yield		1,077.85	808.37	692.88	606.27	510.54	

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**Table 9D. Resource and Cash Flow Requirements; Upland Cotton, 1998**

COUNTY:Graham FARM: Graham County 98 WATER SOURCE: Surface/Pump TILLAGE: Conventional  
 CROP: Cotton, Upland ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Safford Valley YIELD: 935.0 Lb / Acre PREVIOUS CROP: Cotton, Upland DATE: 2/4/99

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			1.00		14.90	8.19				23.09
FEB C	0.3	3.6	1.31		11.02	10.27	2.63			23.92
MAR C	0.7	8.4	1.10		5.01	7.89	0.66			13.56
APR C			1.58		12.18	12.96	20.90	21.27		67.30
MAY C			3.85		4.85	25.85				30.70
JUN C	2.0	8.0	3.08		6.03	21.00				27.03
JUL C	3.0	12.0	1.64		9.01	12.18	13.37		6.00	40.57
AUG C	4.0	16.0	1.70		8.25	12.25	22.98		8.46	51.94
SEP C	1.0	6.0	0.55		2.44	3.85	14.44		9.77	30.50
OCT C			1.42		41.14	10.24		1.13	69.71	122.22
NOV C			0.83		22.74	6.05		0.20	16.23	45.21
DEC C			0.25		4.33	2.05			7.73	14.11
Pickup Use60 Mi/Acre					15.14					15.14
Operating Interest at 10.0									15.92	15.92
Water Assessment				**						
<b>Total</b>	<b>11.0</b>	<b>54.0</b>	<b>18.31</b>		<b>157.04</b>	<b>132.76</b>	<b>74.98</b>	<b>22.60</b>	<b>133.82</b>	<b>521.20</b>
<b>%</b>					<b>30.13</b>	<b>25.47</b>	<b>14.39</b>	<b>4.34</b>	<b>25.68</b>	<b>100.00</b>

**TOTAL RESOURCE REQUIREMENTS ( per Acre)**

Total N 102.5  
 Total P 0.0  
 Total K 0.0  
 Total Labor 18.3  
 Total Water 54.0

**TOTAL ENERGY REQUIREMENTS ( per Acre)**

Diesel Fuel 41.9 Gal  
 Unleaded Gas 6.0 Gal  
 Electric / Pumping 179.2 KWH  
 All Direct Energy 7.2 M BTU

**EQUIPMENT REQUIREMENTS ( per Acre)**

Blade Scraper, 10'	0.05 Hr	Cotton Picker, 2 Row	1.38 Hr	Cultivator, Sweep, 4 Rw	1.80 Hr
Dbl. Offset Disk, 13'	0.22 Hr	Drag Scraper, 10'	0.09 Hr	Fert. Side Dress Unit,	0.45 Hr
Landplane 12'X 45'	0.19 Hr	Laser, Complete System	0.09 Hr	Lister, 5 Bottom	0.22 Hr
Module Builder	0.64 Hr	Moldboard Plow, 3-16 2	0.90 Hr	Offset Disk, 13.5'	0.50 Hr
Pickup Truck, 1/2 Ton	2.00 Hr	Planter, Drill Type, 4 Row	0.00 Hr	Power Mulcher, 4 Rw	0.60 Hr
Rotary Stalk Cutter, 4 Row	0.22 Hr	Rowbuck, 10'	0.21 Hr	Saddle Tk Sprayer, 2 Tk 8	0.45 Hr
Section Harrow, 3 Section	0.18 Hr	Tractor, 80 PTO HP,	0.64 Hr	Tractor, 100 PTO HP	0.45 Hr
Tractor, 100 PTO HP,	3.06 Hr	Tractor, 125 PTO HP	0.78 Hr	Tractor, 150 PTO HP	1.13 Hr

**MATERIALS REQUIREMENT ( per Acre)**

82-00-00, Anhyd.	125.00 Lb	Lambdacyhalothrin	15.00 Oz	Module Tarps	25.22 C
MSMA/ANY	1.75 Qt	Prometryn	1.20 Pt	Sodium Chlorate	2.00 Ga
Trifluralin	1.00 Pt	Upl Cotton Sd+NU-Flow	28.00 Lb	Water, District	37.80 Al
Water, Pump	16.20 Al				

**LABOR REQUIREMENT ( per Acre)**

Hand Weeders	5.33 Hr	Harvest	1.53 Hr	Irrigators	4.40 Hr
Tractor	7.05 Hr				

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

\*\* A water assessment charge of \$25.00 per Acre is included as an ownership cost in Table B.

**Table 9E. Schedule of Operations; Upland Cotton, 1998**

COUNTY:Graham FARM: Graham County 98 WATER SOURCE: Surface/Pump TILLAGE: Conventional  
 CROP: Cotton, Upland ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Safford Valley YIELD: 935.0 Lb / Acre PREVIOUS CROP: Cotton, Upland DATE: 2/4/99

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			
1	Jan	1.0	Plow	150	Moldboard Plow, 3-16 2	1.00						Tractor
2	Feb	0.7	Landplane	125	Landplane 12'X 45'	3.30						Tractor
3	Feb	0.3	Laser Level	125	Drag Scraper, 10' Laser, Complete System	3.00						Tractor
4	Feb	1.0	Apply Herbicide/Ground	100	Saddle Tk Sprayer, 2 Tk 8	4.00	Trifluralin	1.00	Pt	24.95	Ga	Tractor
5	Feb	1.0	Disk	125	Dbl. Offset Disk, 13'	4.00						Tractor
6	Feb	1.0	List	100	Lister, 5 Bottom	4.00						Tractor
7	Feb	9.0	Disk Ends	125	Offset Disk, 13.5'	30.00						Tractor
8	Feb	7.0	Buck Rows	100	Rowbuck, 10'	30.00						Tractor
9	Feb	0.7	Preirrigate			1.00	Water, District	12.00	Al	0.00	AF	Irrigators
10	Feb	0.3	Preirrigate			0.67	Water, Pump	12.00	Al	11.12	AF	Irrigators
11	Mar	2.0	Mulch	100	Power Mulcher, 4 Rw	3.00						Tractor
12	Apr	1.0	Plant	100	Planter, Drill Type, 4 Row		Upl Cotton Sd+NU-Flow	28.00	Lb	72.00	Lb	Tractor
13	Apr	1.0	Remove Cap	100	Section Harrow, 3 Section	5.00						Tractor
14	Apr	1.0	Cultivate/Inject Fertiliz	100	Cultivator, Sweep, 4 Rw Fert. Side Dress Unit, 4Row	2.00	82-00-00, Anhyd.	125.00	Lb	317.00	Tn	Tractor
15	May	1.0	Cultivate	100	Cultivator, Sweep, 4 Rw	2.00						Tractor
16	May	1.0	Hand Weeding			0.30						Hand
17	Jun	6.3	Irrigate			3.72	Water, District	4.00	Al	0.00	AF	Irrigators
18	Jun	2.7	Irrigate			2.48	Water, Pump	4.00	Al	11.12	AF	Irrigators
19	Jun	3.0	Cultivate	100	Cultivator, Sweep, 4 Rw	3.00						Tractor
20	Jun	1.0	Hand Weeding			0.50						Hand
21	Jul	1.0	Apply Herbicide/Ground	100	Saddle Tk Sprayer, 2 Tk 8	4.00		1.75	Qt	18.33	Ga	Tractor
							Prometryn	1.20	Pt	31.04	Ga	
22	Jul	1.0	Field Scouting		CST Scout For Insects							6.00 Ac
23	Aug	3.0	Apply Insecticide/Air		CST Air Spray, 3 Gal Mix		Lambdacyhalothrin	5.00	Oz	278.75	Ga	4.23 Ac
24	Sep	0.7	Irrigate			2.48	Water, District	6.00	Al	0.00	AF	Irrigators
25	Sep	0.3	Irrigate			1.65	Water, Pump	6.00	Al	11.12	AF	Irrigators
26	Sep	1.0	Prepare Ends	100	Blade Scraper, 10'	20.00						Tractor
27	Sep	1.0	Apply Defoliant/Air		CST Air Spray, 10 Gal Mix		Sodium Chlorate	2.00	Ga	1.40	Ga	5.54 Ac
28	Oct	1.0	Cotton, First Pick		Cotton Picker, 2 Row	1.00						Harvest
29	Oct	1.0	Cotton, Make Modules		80 Module Builder	2.40	Module Tarps	21.45	C	0.05	CW	Tractor
30	Nov	0.8	Cotton, Second Pick		Cotton Picker, 2 Row	1.50						Harvest
31	Nov	1.0	Cotton, Make Modules		80 Module Builder	3.40	Module Tarps	3.77	C	0.05	CW	Tractor
32	Oct	1.0	Haul, Custom		CST Haul Cotton Modules							35.00Mu
33	Oct	1.0	Cotton Ginning		CST Gin Upland Cotton							2.95 Cs
34	Dec	1.0	Cotton Classing		CST Class Cotton, HVI							1.25 Ba
35	Dec	1.0	Crop Assessment		CST Upland (High Elev)							2.80 Ba
36	Dec	1.0	Cut Stalks		150 Rotary Stalk Cutter, 4 Row Offset Disk, 13.5'	4.00						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.