COUNTY: Graham CROP: Corn Grain AREA: Safford Valley FARM: Graham County 98 ACRES: 1.0 YIELD: 8,000.0 Lb / Acre WATER SOURCE: Surface/Pump IRRIGATION SYSTEM: Flood Furrow PREVIOUS CROP: Cotton, Upland

TILLAGE: Conventional SOIL: Sandy-Loam DATE: 2/4/99

ltem	Unit	Quantity	Price/ Unit	Budgeted /Acre	Total /Acre	Your Farm Budget
INCOME Grain	Pound	8,000.00	\$0.06	\$488.00	\$488.00	
CASH LAND PREPARATION AND Paid Labor (including benefits) Tractor/Self Propelled Irrigation	GROWING EXPENSES (inc	cluding sales tax)		17.99 22.25	40.24	
Chemicals and Custom Applicati Fertilizer Insecticide Herbicide	ions			120.80 43.67 20.41	184.88	
Farm Machinery and Vehicles Diesel Fuel Repairs and Maintenance				9.29 16.42	25.71	
Irrigation Water (excluding labor) Pump Energy - Electric Repairs and Maintenance Water Assessment (See Note Be	,			41.13 3.36	44.49	
Other Purchased Inputs & Seed/Transplants				31.73	31.73	
0.0000000000000000000000000000000000000	TOTAL CASH LAND PRE	PARATION AND GROW	'ING EXPENSES		327.05	
CASH HARVEST AND POST HARV	VEST EXPENSES					
Paid Labor (including benefits) Tractor/Self Propelled				4.30	4.30	
Farm Machinery and Vehicles Diesel Fuel Repairs and Maintenance				1.81 2.50	4.31	
Custom Harvest/Post Harvest					105.50	
	TOTAL HARVEST AND P	OST HARVEST EXPEN	SE		114.11	
OPERATING OVERHEAD PICKI OPERATING INTEREST AT 10.0%	UP USE				12.62 9.80	
	TOTAL CASH OPERATIN RETURNS OVER CASH	IG EXPENSES I OPERATING EXPENS	ES		\$463.58 \$24.42	

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.

COUNTY:Graham FARM: Graham County 98 WATER SOURCE: Surface/Pump TILLAGE: Conventional CROP: Corn Grain ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam AREA: Safford Valley YIELD: 8,000.0 Lb / Acre PREVIOUS CROP: Cotton, Upland DATE: 2/4/99

	CASH COST BASI	S (\$/ACRE)	TOTAL COST BAS	IS (\$/ACRE)
Item	Income and Costs	Net Returns	Income and Costs	Net Returns
TOTAL INCOME at \$0.06 / Lb	\$488.00		\$488.00	
TOTAL OPERATING EXPENSES	\$463.58		\$463.58	
RETURN OVER CASH OPERATING EXPENSES		\$24.42		\$24.42
CASH OVERHEAD EXPENSES				
Taxes, Housing and Insurance, Farm Machinery Wells and Irrigation System	2.98 16.04		2.98 16.04	
General and Office Overhead (5.0% of Total Operating Exp.)	23.18		23.18	
General Farm Maintenance (3.0% of Total Operating Exp.)	13.91		13.91	
Total Cash Overhead Expenses	56.11		56.11	
Total Cash Operating and Overhead Cost	519.69		519.69	
RETURNS OVER CASH OPER. AND OVER. EXPENSES		(\$31.69)		(\$31.69)
CAPITAL ALLOCATIONS (100% Equity)			47.00	
Capital Replacement, Machinery and Vehicles Wells and Irrigation System			17.09 30.21	
Interest on Equity, Machinery and Vehicles			8.85	
Wells and Irrigation System			10.95	
Total Capital Allocations			67.10	
RETURNS TO LAND, CAPITAL, MANAGEMENT AND RISK	>	(\$31.69)		(\$98.79)
RETURNS TO LAND, MANAGEMENT AND RISK			>	(\$90.79)
Land Cost / Ownership (100% Equity)				
Property Taxes (\$600.00 X 16.0% X 0.093) Opportunity Interest on Land (100% X 6.0 X \$600.00)	8.93		8.93 36.00	
Water Assessment	25.00		25.00	
Total Land Costs	33.93		69.93	
RETURNS TO CAPITAL, MANAGEMENT AND RISK	>	(\$65.62)	00.00	
RETURNS TO MANAGEMENT AND RISK			 >	(\$168.71)
Management Services (8% of Total Operation Expenses)			37.09	
TOTAL OWNERSHIP COST	90.04		230.22	
TOTAL COST	\$553.62		\$693.80	
RETURNS TO CAPITAL, MANAGEMENT AND RISK	>	(\$65.62)		(\$ 00 5 00)
RETURNS TO RISK (PROFITS)			 >	(\$205.80)
BREAK-EVEN PRICE TO COVER OPERATING COST (PER Lb)		\$0.06		\$0.06
BREAK-EVEN PRICE TO COVER OWNERSHIP COST		\$0.01		\$0.03
BREAK-EVEN PRICE TO COVER TOTAL COST		\$0.07		\$0.09

COUNTY:Graham FARM: Graham County 98 WATER SOURCE: Surface/Pump TILLAGE: Conventional ACRES: Sandy-Loam CROP: Corn Grain IRRIGATION SYSTEM: Flood Furrow SOIL: YIELD: 8,000.0 Lb / Acre PREVIOUS CROP: 2/4/99 AREA: Safford Valley Cotton, Upland DATE:

	First	irst		s *	Operating Costs (\$/ACRE *) Per Operation						Tot. Cash	
No.	Month	Operation	Machine	Labor	Fuel/Rps.	Labor Ci	ist/Serv. Í	Materials .	Total	Times	Expenses	Class
1	Jan	Plow	0.360	0.400	6.00	3.28			9.28	1.0	9.28	L
2	Jan	Disk	0.129	0.143	1.91	1.17			3.09	1.0	3.09	L
3	Feb	Landplane	0.225	0.250	1.91	2.05			3.96	1.0	3.96	L
4	Mar	Apply Herb. & Incorporate	0.129	0.143	2.15	1.17		20.41	23.72	1.0	23.72	G
5	Mar	Apply Fert/Ground	0.075	0.083	0.72	0.68		29.96	31.36	1.0	31.36	G
6	Mar	List	0.180	0.200	2.36	1.64			4.00	1.0	4.00	L
7	Mar	Buck Rows	0.023	0.025	0.21	0.20			0.41	3.0	1.24	G
8	Apr	Preirrigate		0.704	9.27	4.80			14.07	1.0	14.07	G
9	Apr	Disk Ends	0.023	0.025	0.34	0.20			0.54	1.0	0.54	G
10	Apr	Mulch	0.150	0.167	1.36	1.37			2.73	1.0	2.73	L
11	Apr	Plant	0.180	0.200	2.52	1.64		40.07	44.23	1.0	44.23	L
12	Apr	Remove Cap	0.090	0.100	0.82	0.82			1.64	1.0	1.64	G
13	Apr	Apply Fert/Ground	0.129	0.143	1.85	1.17		70.65	73.67	1.0	73.67	G
14	Jun	Irrigate		0.333	4.63	2.27			6.91	6.0	41.44	G
15	Jun	Cultivate	0.112	0.125	1.22	1.02			2.24	1.0	2.24	G
16	Jul	Irrigate/Run Fertilizer		0.279	3.71	1.90		10.09	15.70	2.0	31.41	G
17	Jul	Apply Insecticide/Air					4.23	13.44	17.67	2.0	35.34	G
18	Aug	Prepare Ends	0.023	0.025	0.34	0.20			0.54	1.0	0.54	Н
19	Sep	Combine Harvest					57.50		57.50	1.0	57.50	Н
20	Sep	Field Transport	0.450	0.500	3.98	4.09			8.07	1.0	8.07	Н
21	Sep	Haul, Custom 80 CW					20.00		20.00	1.0	20.00	Н
22	Sep	Elevator Handling 80 CW					16.00		16.00	1.0	16.00	M
23	Sep	Drying 80 CW					12.00		12.00	1.0	12.00	Р
24	Oct	Disk Residue 80 CW	0.129	0.143	1.91	1.17			3.09	1.0	3.09	L
		Pickup Use50 Mi/Acre	1.667		12.62						12.62	
		Operating Interest at 10.0					9.80				9.80	
				ТОТ	AL CASH OPE	RATING EX	KPENSES	(includes a	Il times ove	er):	463.58	Т

^{*}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.

LIVATING COST SOMMANT DI	CLASS
Land Preparation (L)	70.37
Growing (G)	256.68
Harvest (H)	86.11
Post Harvest (P)	12.00
Marketing (M)	16.00
Operating Overhead (O)	22.42
Total (T)	\$463.58

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

Prices		- 25%	- 10%	Budgeted	+ 10%	+ 25%	,
Yields		\$0.05	\$0.05	\$0.06	\$0.07	\$0.08	Break-even Price
- 25% - 10%	6,000.0 7,200.0	-160.07 -122.28	-105.17 -56.40	-68.57 -12.48	-31.97 31.44	22.93 97.32	0.07 0.06
Budgeted + 10%	8,000.0 8,800.0	-97.09 -71.90	-23.89 8.62	24.91 62.30	73.71 115.98	146.91 196.50	0.06 0.05
Break-even	Yield	11,083.6	8,587.97	7,467.07	6,604.99	5,630.01	

COUNTY:Graham FARM: Graham County 98 WATER SOURCE: Surface/Pump TILLAGE: Conventional CROP: Corn Grain ACRES: IRRIGATION SYSTEM: Flood Furrow Sandy-Loam SOIL: YIELD: AREA: Safford Valley 8,000.0 Lb / Acre PREVIOUS CROP: Cotton, Upland DATE: 2/4/99

Water Operating Costs (\$/ACRE *)											
	Number	Applied	Total	Purchased	Fuel, Oil	Op.	ciating	g 00313 (¢/A	Other		
Month *	Irrigations	(inches)	Labor (Hrs)	Water	and Repairs	Lal	bor	Chemicals	Purchases	Services	Total
JAN C			0.40		6.00	;	3.28				9.28
FEB C			0.39		3.83		3.22				7.05
MAR C			0.45		5.43		3.69	50.37			59.50
APR C	0.7	7.0	0.71		8.77		5.13	23.70	9.52		47.11
MAY C	0.3	3.0	0.66		7.61		5.08	55.29	22.21		90.19
JUN C	2.0	10.0	0.79		12.61		5.57				18.18
JUL C	3.0	14.0	0.95		15.09		6.45	36.97		8.46	66.97
AUG C	2.0	9.0	0.66		8.89		4.59	10.09			23.57
SEP C	1.0	5.0	0.83		8.61		6.37			85.50	100.48
OCT C			0.14		1.91		1.17				3.09
Pickup Use				1	12.62						12.62
	nterest at 10.0)								9.80	9.80
Water Asse	ssment			**							
Total	9.0	48.0	5.98	I	91.36		4.54	176.42	31.73	119.53	463.58
%					19.71		9.61	38.06	6.84	25.78	100.00
TOTAL RES	SOURCE REC	UIREMENT	S (per Acre)	TOTAL ENF	RGY REQUIRE	MENTS (per Ac	ere)			
Total N	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	340.5	C (PG. 7.0.0)	Diesel F		14.6	Gal				
Total P		104.0		Unleade		5.0	Gal				
Total K		0.0			/ Pumping	531.0	KWH	4			
Total Lab	or	6.0			t Energy	4.5	M BT				
Total Wat		48.0		7 2 30	. =		2	. •			
	IT REQUIREM			E (11 D)		200 11		F 600 1		0.40.11	
	et Disk, 14' rt. 400 BU		13 Hr 45 Hr	Fertilizer Broadcas Landplane 12'X 45		0.08 Hr 0.22 Hr		Lister, 5 B	njector, 6 Row	0.13 Hr 0.18 Hr	
	rd Plow, 4-16		45 П 36 Hr	Offset Disk, 13.5'		0.30 Hr			uck, 1/2 Ton	1.67 Hr	
	Drill Type, 6 R		36 П 18 Hr	Rolling Cultivator,).30 Fi).11 Hr		Rowbuck,		0.07 Hr	
	k Spraver, 2 T		13 Hr	Section Harrow, 3		0.11 Hr 0.24 Hr			00 PTO HP	0.62 Hr	
	100 PTO HP.		85 Hr	Tractor, 125 PTO		0.24 III 0.61 Hr			50 PTO HP	0.36 Hr	
	, ,	0.	05 111	1140101, 1231 10		J.01 111		Tractor, 10	501 10111	0.50 111	
MATERIAI S	S REQUIREM	ENT (per A	cre)								
11-52-00			00 Lb	32-00-00, URAN 3	32, Lad 90	0.00 Ga		Butylate		5.00 Pt	
Chlorpyri			00 Pt	Cyanazine	, 1	1.00 Qt		Field Corn	Sd	32.00 Th	
Phorate			00 Lb	Water, Pump		3.00 AI					
	QUIREMENT		00 11-	Trootor		70 11-					
Irrigators		3.	26 Hr	Tractor	2	2.72 Hr					
*NOTE: F											

^{*}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.

COUNTY:Graham FARM: Graham County 98 WATER SOURCE: Surface/Pump TILLAGE: Conventional CROP: Corn Grain ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam AREA: Safford Valley YIELD: 8,000.0 Lb / Acre PREVIOUS CROP: Cotton, Upland DATE: 2/4/99

No	First .MonthTin	nes Operation	Equipment/ Custom Oper HP Self-Prop./ Implement	Job Rate Acres/Hr		Use and C		te \$/Ui		Service Cost \$ / Unit	Labor Type
1	Jan	1.0 Plow	150 Moldboard Plow, 4-16 2	2.50		126		7. 0.	_		Tractor
2		1.0 Disk	125 Offset Disk, 13.5'	7.00							Tractor
3		1.0 Landplane	100 Landplane 12'X 45'	4.00							Tractor
4	Mar	1.0 Apply Herb. &	125 Dbl. Offset Disk, 14'		Butylate	5.00	Pt	18.75	Ga		Tractor
		117	Saddle Tk Sprayer, 2 Tk 8 Row		Cyanazine	1.00	Qt	30.50	Ga		
5	Mar	1.0 Apply Fert/Ground	100 Fertilizer Broadcaster,		11-52-00, Dry	200.00	Lb	284.00	Tn		Tractor
6	Mar	1.0 List	125 Lister, 5 Bottom	5.00	, ,						Tractor
7	Mar	3.0 Buck Rows	100 Rowbuck, 10'	40.00							Tractor
8	Apr	1.0 Preirrigate		1.42	Water, Pump	10.00	ΑI	11.12	ΑF		Irrigators
9	Apr	1.0 Disk Ends	125 Offset Disk, 13.5'	40.00							Tractor
10	Apr	1.0 Mulch	100 Section Harrow, 3 Section	6.00							Tractor
11	Apr	1.0 Plant	100 Planter, Drill Type, 6 Row	5.00	Field Corn Sd	32.00	Th	0.94	Th		Tractor
					Phorate	5.00	Lb	1.58	Lb		
12	Apr	1.0 Remove Cap	100 Section Harrow, 3 Section	10.00							Tractor
13	Apr	1.0 Apply Fert/Ground	100 Fertilizer Injector, 6 Row	7.00	32-00-00, URAN 32,	70.00	Ga	173.00	Tn		Tractor
14	Jun	6.0 Irrigate		3.00	Water, Pump	5.00	ΑI	11.12	ΑF		Irrigators
15	Jun	1.0 Cultivate	100 Rolling Cultivator, 6 Rw	8.00							Tractor
16	Jul	2.0 Irrigate/Run Fertilizer		3.58	Water, Pump	4.00		11.12			Irrigators
					32-00-00, URAN 32,			173.00			
17	Jul	2.0 Apply Insecticide/Air	CST Air Spray, 3 Gal Mix		Chlorpyrifos	2.00	Pt	50.95	Ga	4.23 Ac	
18		1.0 Prepare Ends	125 Offset Disk, 13.5'	40.00							Tractor
19	Sep	1.0 Combine Harvest	CST Combine Corn							37.50 Ac	
20	Sep	1.0 Field Transport	100 Grain Cart, 400 BU	2.00							Tractor
21	Sep	1.0 Haul, Custom	CST Haul Grain							0.25 C	
22	Sep	1.0 Elevator Handling	CST Elevator Handling							0.20 C	
23	Sep	1.0 Drying	CST Dry Corn							0.15 C	
24	Oct	1.0 Disk Residue	125 Offset Disk, 13.5'	7.00							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.

ARIZONA COOPERATIVE EXTENSION
Department of Ag and Resource Economics
University of Arizona F 8 / 21