

TABLE 1. Acreage Summary, Chaves County, Roswell-Hagermand Area, Projected 2004.

BUDGET AREA..... ROSWELL-HAGERMAN AREA, CHAVES COUNTY			
FARM SIZE.....	320	ACRES	
IRRIGATION TYPE.....	SPRINKLER		
NUMBER OF CROPS.....	5		
		WATER USE	
ACREAGE SUMMARY:	LAND USE (ACRES)	AC.IN. PER AC.	TOTAL AC.IN.
ALFALFA ESTABLISHMENT	35.00 *	16	560
ALFALFA	175.00	54	9,450
WHEAT	25.50	28	714
ARP	0.00		
FLEX IN OAT HAY	4.50	28	126
OAT HAY	25.00	21	525
PICKER COTTON	34.00	28	952
ARP	0.00		
FLEX IN OAT HAY	6.00	28	168
STRIPPER COTTON	34.00	28	952
ARP	0.00		
FLEX IN OAT HAY	6.00	28	168
ROADS, DITCHES, HOMESTEAD	10.00		
	<u>TOTAL</u>		<u>13,615</u>
	ACRE FEET PER ACRE OF WATER RIGHTS		3.55

* DOUBLE-CROPPED

TABLE 2. Basic cost information for the Roswell-Hagerman area, Chaves County, Projected 2004.

Item		
Labor Wage Rate:		
Equipment operators	\$/hour	\$7.45
General & Irrigators	\$/hour	\$6.35
Purchased Inputs:		
Fertilizer:		
Nitrogen (N)	\$/pound	\$0.29
Phosphate (P205)	\$/pound	\$0.20
Seed:		
Alfalfa	\$/pound	\$2.80
Cotton		
picker	\$/pound	\$0.68
stripper	\$/pound	\$0.68
Oat Hay	\$/pound	\$0.30
Corn	\$/bag	\$85.00
Plastic Twine:	\$/box	\$19.50
Natural gas	\$/MCF	\$7.22
Diesel fuel	\$/gallon	\$1.50
Gasoline	\$/gallon	\$1.45
Electricity	cents/KwHr	\$5.84
LP Gas	\$/gallon	\$1.21
Employee Liability Insurance	\$/wages	\$20.00
Employee Benefits	percent/wages	18.00%
Labor Downtime	percent	25.00%
Financial Rates:		
Operating Capital Interest Rate	percent	6.50%
Land Interest Rate	percent	6.00%
Equipment Interest Rate	percent	6.50%
Real Interest Rate	percent	4.00%
Land Taxes	\$185.00 /acre (full value)	\$1.53
Personal Property Tax Rate - NR	\$/ \$1,000 (Assessed Value)	\$24.78
- R		\$21.03
Supervision Factors		
Field Crop-Irrigation	\$/labor hour	\$1.00
Field Crop-Equipment & General	\$/labor hour	\$0.50
Management Rate	percent	7.00%

TABLE 3. Overhead cost information for Roswell-Hagerman area, Chaves County, Projected 2004.

Item		
Electricity (Domestic & Shop)	\$215.00 per month	\$2,580
Telephone	\$115.00 per month	\$1,380
Accounting & Legal		\$1,580
Misc. Supplies & Hand Tools		\$2,390
Pickup and Auto		
miles	20,000 @ \$0.365 per mile	\$7,300
Insurance		
- general liability (non-employee)		\$1,710
- fire/theft		\$1,355
Property Taxes		
- non-planted land		\$18
- other than land & machinery		\$620
Building repairs and maintenance		\$1,295
Dues, fees, publications		\$390
Farmstead Equipment		\$170
	Total	<u>\$20,788</u>
	Total Per Planted Acre	\$67.06

TABLE 4. Pumping costs and data for irrigation wells, Roswell-Hagerman area, Chaves County
Projected 2004.

INPUT DATA							
DELIVERY PSI:		DEPTH CHARACTERISTICS:		DELIVERY PSI:			
SPRINKLER	40	STATIC.....	150	BOOSTER PUMP	40		
		DRAW DOWN.....	30				
		TOTAL HEAD.....	180				
		CASING.....	600				
GALLONS PER MINUTE (GPM)	1,000			GALLONS PER MINUTE (GPM)	1,000		
WORK HORSEPOWER	69			WORK HORSEPOWER	23		
EFFICIENCY FACTOR:				EFFICIENCY FACTOR:			
ELECTRICITY	0.540			ELECTRICITY	0.540		
NATURAL GAS	0.154			NATURAL GAS	0.154		
LP GAS	0.154			LP GAS	0.154		
DIESEL	0.160			DIESEL	0.160		
FUEL COST PER UNIT:				FUEL COST PER UNIT:			
ELECTRICITY	5.84 CENTS/KwHr			ELECTRICITY	5.84 CENTS/KwHr		
NATURAL GAS	\$7.22 \$/MCF			NATURAL GAS	\$7.22 \$/MCF		
LP GAS	\$1.21 \$/GAL			LP GAS	\$1.21 \$/GAL		
DIESEL	\$1.50 \$/GAL			DIESEL	\$1.50 \$/GAL		
PUMPING FUEL COSTS				PUMPING FUEL COSTS			
ELECTRIC WELL:				ELECTRIC:			
COST PER HOUR	\$5.58			COST PER HOUR	\$1.91		
COST PER ACRE INCH	\$2.53			COST PER ACRE INCH	\$0.87		
NATURAL GAS WELL:				NATURAL GAS:			
COST PER HOUR	\$9.03			COST PER HOUR	\$3.08		
COST PER ACRE INCH	\$4.09			COST PER ACRE INCH	\$1.39		
LP GAS WELL:				LP GAS:			
COST PER HOUR	\$15.01			COST PER HOUR	\$5.11		
COST PER ACRE INCH	\$6.79			COST PER ACRE INCH	\$2.31		
DIESEL WELL:				DIESEL:			
COST PER HOUR	\$11.62			COST PER HOUR	\$3.96		
COST PER ACRE INCH	\$5.26			COST PER ACRE INCH	\$1.79		

TABLE 5. Equipment summary for a 320 acre sprinkler-irrigated farm with above average management, Roswell-Hagerman area,
Projected 2004.

EQUIPMENT	ANNUAL HOURS OF USE	NUMBER	VARIABLE COSTS					FIXED COSTS		
			TOTAL VALUE	FUEL, OIL, LUBRICANT	REPAIR	FUEL, OIL PER HR	REPAIR PER HR	DEPRECIATION	TAXES	TOTAL PER HR
TRACTOR 96 HP	213	1	\$26,855	\$2,192	\$690	\$10.30	\$3.24	\$1,930	\$239	\$10.19
TRACTOR 130 HP	155	1	\$13,277	\$1,699	\$474	\$10.94	\$3.05	\$2,907	\$180	\$19.88
TRACTOR 145 HP	176	1	\$31,475	\$2,380	\$1,348	\$13.55	\$7.68	\$4,652	\$288	\$28.12
COTTON PICKER 2 ROW	42	1	\$9,430	\$382	\$1,055	\$9.07	\$25.03	\$5,960	\$369	\$150.12
COTTON STRIPPER MTD	42	1	\$2,950		\$136		\$3.22	\$767	\$47	\$19.31
SWATHER 16 FT	103	1	\$21,350	\$578	\$671	\$5.62	\$6.52	\$3,621	\$299	\$38.09
BALER 1 TON	63	1	\$41,720		\$110		\$1.74	\$5,812	\$360	\$97.46
PLANTER 4 ROW	18	1	\$3,400		\$61		\$3.47	\$680	\$28	\$40.05
ROLLING CULT 4 ROW	61	1	\$2,000		\$75		\$1.24	\$267	\$17	\$4.68
DISC OFFSET 14 FT	51	1	\$5,750		\$186		\$3.68	\$767	\$47	\$16.07
DRILL 13 FT	21	1	\$2,150		\$58		\$2.71	\$430	\$18	\$20.90
FLOAT 14 FT	11	1	\$600		\$0		\$0.02	\$60	\$4	\$5.86
LISTER 4 ROW	12	1	\$1,600		\$17		\$1.38	\$213	\$13	\$18.51
PLOW (MOLDBOARD) 4-16 IN	62	1	\$4,000		\$153		\$2.48	\$533	\$33	\$9.18
SHREDDER 4 ROW	10	1	\$2,500		\$7		\$0.70	\$333	\$21	\$37.18
COTTON TRAILER	85	4	\$4,800		\$12		\$0.14	\$640	\$40	\$8.00
SPRAYER 12 FT	18	1	\$1,375		\$31		\$1.73	\$183	\$11	\$11.01
FRONT END LOADER (ATTACH)	46	1	\$2,550		\$75		\$1.63	\$255	\$21	\$6.02
SEMI-TRUCK & FLATBED	108	1	\$17,500	\$852	\$1,762	\$7.88	\$16.28	\$3,500	\$145	\$33.67
RAKES	46	1	\$3,400		\$122		\$2.65	\$340	\$28	\$8.03
V-DITCHER	17	1	\$1,250		\$2		\$0.10	\$167	\$10	\$10.41
SIDE-ROLL SPRINKLER	6109	8	\$20,000		\$287		\$0.05	\$2,667	\$165	\$0.46
NATURAL GAS BOOSTER PUMP	6109	2	\$5,000	\$18,830	\$1,142	\$3.08	\$0.19	\$667	\$41	\$0.12
ELECTRIC WELL	6109	2	\$85,000	\$34,103	\$553	\$5.58	\$0.09	\$7,083	\$702	\$1.27
			\$309,932	\$61,016	\$9,027			\$44,433	\$3,127	

TABLE 6. Alfalfa establishment, sprinkler-irrigated, budgeted per acre costs and returns for a 320 acre farm with above average management, Roswell-Hagerman area
 Projected 2004.
 Planting dates: September 1 - September 31

ITEM	PRICE	QUANTITY	PURCHASED INPUTS					TOTAL
PURCHASED INPUTS								
SEED	\$2.80	30 LBS		\$84.00				\$84.00
INSECTICIDE (CUSTOM)	\$8.77	1 ACRE		\$8.77				\$8.77
PUMP WATER*		16 AC. IN.						
SUBTOTAL				\$92.77				\$92.77
PREHARVEST OPERATIONS								
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DISC	145 HP	0.17 HR		\$1.27	\$2.30	\$1.93	\$7.51	\$13.01
PLOW	145 HP	0.48 HR		\$3.58	\$6.50	\$4.88	\$17.91	\$32.86
DISC (2X)	145 HP	0.34 HR		\$2.53	\$4.61	\$3.86	\$15.03	\$26.03
DRILL	96 HP	0.21 HR		\$1.56	\$2.16	\$1.25	\$6.53	\$11.51
DITCHER (2X)	130 HP	0.10 HR		\$0.75	\$1.09	\$0.32	\$3.03	\$5.18
IRRIGATE (2X)		0.50 HR		\$3.18	\$62.74	\$2.35	\$13.42	\$81.69
SUBTOTAL		1.80 HR		\$12.86	\$79.41	\$14.58	\$63.43	\$170.28
OVERHEAD EXPENSES								
DOWNTIME		0.33 HR		\$2.42				\$2.42
EMPLOYEE BENEFITS				\$2.31				\$2.31
INSURANCE			\$0.26					\$0.26
SUPERVISION AND MANAGEMENT				\$19.51				\$19.51
SUBTOTAL		0.33 HR	\$0.26	\$24.25				\$24.51
TOTAL OPERATING EXPENSES		2.13 HR	\$93.03	\$37.11	\$79.41	\$14.58	\$63.43	\$287.55

TABLE 7. Alfalfa hay, sprinkler-irrigated, budgeted per acre costs and returns for a 320 acre farm with above average management, Roswell-Hagerman area, Projected 2004.
Harvesting dates: May 20 - October 15

ITEM	PRICE	YIELD							TOTAL
GROSS RETURNS									
ALFALFA HAY	\$140.00	7.00 TONS (DELIVERED)							\$980.00
TOTAL									\$980.00
PURCHASED INPUTS		PRICE	QUANTITY	PURCHASED INPUTS		FIXED COST		TOTAL	
FERTILIZER (10-26-10)	\$0.20	200 LBS		\$40.00					\$40.00
INSECTICIDE (CUSTOM)	\$19.52	2 X/ACRE		\$39.04					\$39.04
HERBICIDE (CUSTOM)	\$26.09	1 X/ACRE		\$26.09					\$26.09
PLASTIC TWINE	\$19.50	170 FT/TON		\$5.80					\$5.80
ESTABLISHMENT: Principal		5 YEARS					\$57.51	\$57.51	
: Interest							\$9.11	\$9.11	
PUMP WATER*		54 AC. IN.							
SUBTOTAL				\$110.93			\$66.62	\$177.55	
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL	
IRRIGATE (6X)		1.50 HR		\$9.53	\$211.74	\$7.93	\$45.30	\$274.50	
SUBTOTAL		1.50 HR		\$9.53	\$211.74	\$7.93	\$45.30	\$274.50	
HARVEST OPERATIONS									
SWATHER (5X)	16 FT	0.55 HR		\$4.10	\$3.09	\$3.58	\$20.95	\$31.72	
RAKE (5X)	96 HP	0.25 HR		\$1.86	\$2.58	\$1.47	\$4.56	\$10.47	
BALER (5X)	145 HP	0.35 HR		\$2.61	\$4.74	\$3.30	\$43.95	\$54.60	
FRONT END LOADER (5X)	130 HP	0.25 HR		\$1.86	\$2.73	\$1.17	\$6.47	\$12.24	
HAUL	SEMI	0.50 HR		\$3.73	\$3.94	\$8.14	\$16.83	\$32.63	
SUBTOTAL		1.90 HR		\$14.16	\$17.08	\$17.66	\$92.77	\$141.67	
OVERHEAD EXPENSES									
DOWNTIME		0.48 HR		\$3.54					\$3.54
EMPLOYEE BENEFITS				\$4.26					\$4.26
INSURANCE			\$0.47					\$0.47	
LAND TAXES						\$1.53			\$1.53
SUPERVISION AND MANAGEMENT				\$71.05					\$71.05
OTHER EXPENSES			\$67.06					\$67.06	
SUBTOTAL		0.48 HR	\$67.53	\$78.85			\$1.53	\$147.91	
TOTAL OPERATING EXPENSES		3.88 HR	\$178.46	\$102.53	\$228.82	\$25.59	\$206.22	\$741.62	
NET OPERATING PROFIT								\$238.38	
INTEREST ON OPERATING CAPITAL		(\$113.28 @ 6.50%)						\$7.36	
INTEREST ON EQUIPMENT INVESTMENT								\$56.96	
RETURN TO LAND AND RISK								\$174.05	

* Pump water costs are shown under irrigation in the preharvest operations section.

BUDGET SUMMARY

GROSS RETURN		\$980.00	
VARIABLE OPERATING EXPENSES	\$432.87		
RETURN OVER VARIABLE EXPENSES		\$547.13	(GROSS MARGIN)
FIXED EXPENSES	\$206.22		
NET FARM INCOME		\$340.91	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$102.53		
NET OPERATING PROFIT		\$238.38	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$64.33		
RETURN TO LAND AND RISK		\$174.05	

TABLE 8. Wheat, sprinkler-irrigated, budgeted per acre costs and returns for a 320 acre farm with above average management, Roswell-Hagerman area, Projected 2004.
Planting dates: August 15 - November 1
Harvesting dates: June 15 - July 1

ITEM	PRICE	YIELD	BASE	TOTAL
GROSS RETURNS				
WHEAT	\$6.25	78.00 CWT		\$487.50
DIRECT PAYMENT	\$0.52	78.00 CWT	0.85	\$34.48
COUNTER CYCLICAL PAYMENT	\$0.00			\$0.00
GRAZING	\$44.00	1.00 ACRE		\$44.00
TOTAL				\$565.98

PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS	FIXED COST	TOTAL
SEED	\$0.11	100.00 LBS	\$11.00		\$11.00
NITROGEN (N)	\$0.29	150.00 LBS	\$43.50		\$43.50
PHOSPHATE (P205)	\$0.20	50.00 LBS	\$10.00		\$10.00
INSECTICIDE (CUSTOM)	\$18.62	1.00 ACRE	\$18.62		\$18.62
PUMP WATER*		28.00 AC. IN.			
CROP INSURANCE	\$1.96		\$1.96		\$1.96
SUBTOTAL			\$85.08		\$85.08

PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
PLOW	145 HP	0.48 HR		\$3.58	\$6.50	\$4.88	\$17.91	\$32.86
DISC (2X)	145 HP	0.28 HR		\$2.09	\$3.79	\$3.18	\$12.37	\$21.43
FERTILIZE	DEALER APPLIED							
DRILL	96 HP	0.21 HR		\$1.56	\$2.16	\$1.25	\$6.53	\$11.51
DITCHER (2X)	130 HP	0.10 HR		\$0.75	\$1.09	\$0.32	\$3.03	\$5.18
IRRIGATE (4X)		1.00 HR		\$6.35	\$109.79	\$4.11	\$23.49	\$143.74
SUBTOTAL		2.07 HR		\$14.32	\$123.34	\$13.73	\$63.33	\$214.73

HARVEST OPERATIONS

COMBINE (CUSTOM)		\$21.40		\$21.40
HAUL (CUSTOM)		\$15.60		\$15.60
COMBINE & HAUL (CUSTOM)		\$37.00		\$37.00

OVERHEAD EXPENSES

DOWNTIME	0.27 HR	\$1.99		\$1.99
EMPLOYEE BENEFITS		\$2.58		\$2.58
INSURANCE		\$0.29		\$0.29
LAND TAXES			\$1.53	\$1.53
SUPERVISION AND MANAGEMENT			\$41.10	\$41.10
OTHER EXPENSES		\$67.06		\$67.06
SUBTOTAL	0.27 HR	\$67.34	\$45.67	\$114.55

TOTAL OPERATING EXPENSES 2.34 HR \$189.43 \$60.00 \$123.34 \$13.73 \$64.86 \$451.36

NET OPERATING PROFIT \$114.62

INTEREST ON OPERATING CAPITAL	(\$79.89 @ 6.50%)	\$5.19
INTEREST ON EQUIPMENT INVESTMENT		\$24.92

RETURN TO LAND AND RISK \$84.50

* Pump water costs are shown under irrigation in the preharvest operations section.

BUDGET SUMMARY

GROSS RETURN		\$565.98	
VARIABLE OPERATING EXPENSES	\$326.50		
RETURN OVER VARIABLE EXPENSES		\$239.47	(GROSS MARGIN)
FIXED EXPENSES	\$64.86		
NET FARM INCOME		\$174.61	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$60.00		
NET OPERATING PROFIT		\$114.62	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$30.12		
RETURN TO LAND AND RISK		\$84.50	

TABLE 9. Oat hay, sprinkler-irrigated, budgeted per acre costs and returns for a 320 acre farm with above average management, Roswell-Hagerman area, Projected 2004.
 Planting dates: February 15 - April 1
 Harvesting dates: June 15 - July 1

ITEM	PRICE	YIELD	TOTAL
GROSS RETURNS			
OAT HAY	\$100.00	6.8 TONS (DELIVERED)	\$675.00
TOTAL			\$675.00

PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS	FIXED COST	TOTAL
SEED	\$0.30	80 LBS	\$24.00		\$24.00
NITROGEN (N)	\$0.29	85 LBS	\$24.65		\$24.65
PUMP WATER*		21 AC. IN.			
SUBTOTAL			\$48.65		\$48.65

PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DISC (2X)	145 HP	0.34 HR		\$2.53	\$4.61	\$3.86	\$15.03	\$26.03
DRILL	96 HP	0.21 HR		\$1.56	\$2.16	\$1.25	\$6.53	\$11.51
DITCHER (2X)	130 HP	0.10 HR		\$0.75	\$1.09	\$0.32	\$3.03	\$5.18
IRRIGATE (4X)		1.00 HR		\$6.35	\$82.34	\$3.08	\$17.62	\$109.39
SUBTOTAL		1.65 HR		\$11.19	\$90.21	\$8.51	\$42.20	\$152.11

HARVEST OPERATIONS

SWATHER	14 FT	0.16 HR		\$1.19	\$0.90	\$1.04	\$6.10	\$9.23
RAKE	96 HP	0.05 HR		\$0.37	\$0.52	\$0.29	\$0.91	\$2.09
BALER	145 HP	0.05 HR		\$0.37	\$0.68	\$0.47	\$6.28	\$7.80
FRONT END LOADER	130 HP	0.05 HR		\$0.37	\$0.55	\$0.23	\$1.29	\$2.45
HAUL	SEMI	0.50 HR		\$3.73	\$3.94	\$8.14	\$16.83	\$32.63
SUBTOTAL		0.81 HR		\$6.03	\$6.58	\$10.18	\$31.41	\$54.20

OVERHEAD EXPENSES

DOWNTIME		0.37 HR		\$2.72				\$2.72
EMPLOYEE BENEFITS				\$3.10				\$3.10
INSURANCE			\$0.34					\$0.34
LAND TAXES							\$1.53	\$1.53
SUPERVISION AND MANAGEMENT				\$48.93				\$48.93
OTHER EXPENSES			\$67.06					\$67.06
SUBTOTAL		0.37 HR	\$67.40	\$54.75			\$1.53	\$123.68

TOTAL OPERATING EXPENSES 2.83 HR \$116.05 \$71.98 \$96.78 \$18.69 \$75.15 \$378.65

NET OPERATING PROFIT \$296.35

INTEREST ON OPERATING CAPITAL (\$50.40 @ 6.50%) \$3.28
 INTEREST ON EQUIPMENT INVESTMENT \$29.43

RETURN TO LAND AND RISK \$263.64

* Pump water costs are shown under irrigation in the preharvest operations section.

BUDGET SUMMARY

GROSS RETURN		\$675.00	
VARIABLE OPERATING EXPENSES	\$231.52		
RETURN OVER VARIABLE EXPENSES	\$443.48	(GROSS MARGIN)	
FIXED EXPENSES	\$75.15		
NET FARM INCOME	\$368.33	(RETURN TO CAPITAL, LABOR, LAND & RISK)	
LABOR AND MANAGEMENT COST	\$71.98		
NET OPERATING PROFIT	\$296.35	(RETURN TO CAPITAL, LAND & RISK)	
CAPITAL COSTS	\$32.71		
RETURN TO LAND AND RISK	\$263.64		

TABLE 10. Upland cotton (picker), sprinkler-irrigated, budgeted per acre costs and returns for a 320 acre farm with above average management, Roswell-Hagerman area, Projected 2004.
Planting dates: April 15 - June 1
Harvesting dates: October 1 - December 31

ITEM	PRICE	YIELD	BASE						TOTAL
GROSS RETURNS									
COTTON LINT	\$0.55	905 LBS							\$497.75
COTTON SEED	\$0.08	1,448 LBS							\$108.60
DIRECT PAYMENT	\$0.0667	905 LBS	0.85						\$51.31
COUNTER CYCLICAL PAYMENT	\$0.1373	750 LBS	0.85						\$87.53
TOTAL									\$745.19
PURCHASED INPUTS									
PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS						TOTAL
SEED	\$0.68	20 LBS	\$13.60						\$13.60
NITROGEN (N)	\$0.29	32 LBS	\$9.28						\$9.28
PHOSPHATE (P205)	\$0.20	40 LBS	\$8.00						\$8.00
HERBICIDE	\$15.41	1 ACRE	\$15.41						\$15.41
HERBICIDE (CUSTOM)	\$15.68	1 ACRE	\$15.68						\$15.68
INSECTICIDE (CUSTOM)	\$19.52	2 X/ACRE	\$39.04						\$39.04
CROP INSURANCE			\$1.47						\$1.47
PUMP WATER*		28 AC. IN.							
SUBTOTAL			\$102.48						\$102.48
PREHARVEST OPERATIONS									
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL	
DISC	145 HP	0.17 HR		\$1.27	\$2.30	\$1.93	\$7.51	\$13.01	
FLOW	145 HP	0.48 HR		\$3.58	\$6.50	\$4.88	\$17.91	\$32.86	
FLOAT	130 HP	0.16 HR		\$1.19	\$1.75	\$0.49	\$4.12	\$7.55	
FERTILIZE	DEALER APPLIED								
LISTER	130 HP	0.18 HR		\$1.34	\$1.97	\$0.80	\$6.91	\$11.02	
PRE-IRRIGATE		0.25 HR		\$1.59	\$27.45	\$1.03	\$5.87	\$35.94	
CULT & SPRAY	96 HP	0.26 HR		\$1.94	\$2.68	\$1.62	\$6.73	\$12.96	
PLANTER	130 HP	0.26 HR		\$1.94	\$2.84	\$1.70	\$15.58	\$22.06	
CULTIVATOR (3X)	96 HP	0.63 HR		\$4.69	\$6.49	\$2.82	\$9.37	\$23.38	
HAND HOE (CUSTOM)			\$20.00					\$20.00	
DITCHER (2X)	130 HP	0.10 HR		\$0.75	\$1.09	\$0.32	\$3.03	\$5.18	
IRRIGATE (3X)		0.75 HR		\$4.76	\$82.34	\$3.08	\$17.62	\$107.81	
SUBTOTAL		3.24 HR	\$20.00	\$23.04	\$135.42	\$18.66	\$94.65	\$291.76	
HARVEST OPERATIONS									
COTTON PICKER (2X)	2-ROW	1.24 HR		\$9.24	\$11.25	\$31.04	\$186.15	\$237.68	
HAUL (2X)	65 HP	1.00 HR		\$7.45	\$10.30	\$3.39	\$18.19	\$39.33	
GIN COTTON (CUSTOM)			\$149.14					\$149.14	
SUBTOTAL		2.24 HR	\$149.14	\$16.69	\$21.55	\$34.43	\$204.34	\$426.15	
POSTHARVEST OPERATIONS									
SHREDDER	96 HP	0.14 HR		\$1.04	\$1.53	\$0.53	\$7.99	\$11.09	
SUBTOTAL		0.14 HR		\$1.04	\$1.53	\$0.53	\$7.99	\$11.09	
OVERHEAD EXPENSES									
DOWNTIME		1.16 HR		\$8.60				\$8.60	
EMPLOYEE BENEFITS				\$7.34				\$7.34	
INSURANCE			\$0.82					\$0.82	
LAND TAXES							\$1.53	\$1.53	
SUPERVISION AND MANAGEMENT				\$55.42				\$55.42	
OTHER EXPENSES			\$67.06					\$67.06	
SUBTOTAL		1.16 HR	\$67.87	\$71.37			\$1.53	\$140.77	
TOTAL OPERATING EXPENSES		6.78 HR	\$339.50	\$112.14	\$158.51	\$53.61	\$308.51	\$972.25	
NET OPERATING PROFIT								(\$227.07)	
INTEREST ON OPERATING CAPITAL		(\$94.94 @	6.50%)				\$6.17	
INTEREST ON EQUIPMENT INVESTMENT								\$29.43	
RETURN TO LAND AND RISK								(\$262.67)	

* Pump water costs are shown under irrigation in the preharvest operations section.

BUDGET SUMMARY

GROSS RETURN		\$745.19	
VARIABLE OPERATING EXPENSES	\$551.61		
RETURN OVER VARIABLE EXPENSES	\$193.57	(GROSS MARGIN)	
FIXED EXPENSES	\$308.51		
NET FARM INCOME	(\$114.93)	(RETURN TO CAPITAL, LABOR, LAND & RISK)	
LABOR AND MANAGEMENT COST	\$112.14		
NET OPERATING PROFIT	(\$227.07)	(RETURN TO CAPITAL, LAND & RISK)	
CAPITAL COSTS	\$35.61		
RETURN TO LAND AND RISK		(\$262.67)	

TABLE 11. Upland cotton (stripper), sprinkler-irrigated, budgeted per acre costs and returns for a 320 acre farm with above average management, Roswell-Hagerman area, Projected 2004.
Planting dates: April 15 - June 1
Harvesting dates: October 1 - December 31

ITEM	PRICE	YIELD	BASE					TOTAL
GROSS RETURNS								
COTTON LINT	\$0.50	905 LBS						\$452.50
COTTON SEED	\$0.08	1,448 LBS						\$108.60
DIRECT PAYMENT	\$0.0667	905 LBS	0.85					\$51.31
COUNTER CYCLICAL PAYMENT	\$0.1373	750 LBS	0.85					\$87.53
TOTAL								\$699.94
PURCHASED INPUTS								
	PRICE	QUANTITY	PURCHASED INPUTS					TOTAL
SEED	\$0.68	25 LBS	\$17.00					\$17.00
NITROGEN (N)	\$0.29	32 LBS	\$9.28					\$9.28
PHOSPHORUS (P205)	\$0.20	40 LBS	\$8.00					\$8.00
HERBICIDE	\$15.41	1 ACRE	\$15.41					\$15.41
HERBICIDE (CUSTOM)	\$15.68	1 ACRE	\$15.68					\$15.68
INSECTICIDE (CUSTOM)	\$14.86	2 X/ACRE	\$29.72					\$29.72
CROP INSURANCE			\$1.47					\$1.47
PUMP WATER*		28 AC. IN.						
SUBTOTAL			\$96.56					\$96.56
PREHARVEST OPERATIONS								
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DISC	145 HP	0.17 HR		\$1.27	\$2.30	\$1.93	\$7.51	\$13.01
FLOW	145 HP	0.48 HR		\$3.58	\$6.50	\$4.88	\$17.91	\$32.86
FLOAT	130 HP	0.16 HR		\$1.19	\$1.75	\$0.49	\$4.12	\$7.55
FERTILIZE	DEALER APPLIED							
LISTER	130 HP	0.18 HR		\$1.34	\$1.97	\$0.80	\$6.91	\$11.02
PRE-IRRIGATE		0.25 HR		\$1.59	\$27.45	\$1.03	\$5.87	\$35.94
CULT & SPRAY	96 HP	0.26 HR		\$1.94	\$2.68	\$1.62	\$6.73	\$12.96
PLANTER	130 HP	0.26 HR		\$1.94	\$2.84	\$1.70	\$15.58	\$22.06
CULTIVATOR (3X)	96 HP	0.63 HR		\$4.69	\$6.49	\$2.82	\$9.37	\$23.38
HAND HOE (CUSTOM)			\$20.00					\$20.00
DITCHER (2X)	130 HP	0.10 HR		\$0.75	\$1.09	\$0.32	\$3.03	\$5.18
IRRIGATE (3X)		0.75 HR		\$4.76	\$82.34	\$3.08	\$17.62	\$107.81
SUBTOTAL		3.24 HR	\$20.00	\$23.04	\$135.42	\$18.66	\$94.65	\$291.76
HARVEST OPERATIONS								
COTTON STRIPPER	130 HP	1.24 HR		\$9.24	\$13.56	\$7.78	\$48.59	\$79.17
HAUL	96 HP	1.50 HR		\$11.18	\$15.46	\$5.08	\$27.28	\$58.99
GIN COTTON (CUSTOM)			\$191.95					\$191.95
SUBTOTAL		2.74 HR	\$191.95	\$20.41	\$29.02	\$12.86	\$75.87	\$330.11
POSTHARVEST OPERATIONS								
SHREDDER	96 HP	0.14 HR		\$1.04	\$1.53	\$0.53	\$7.99	\$11.09
SUBTOTAL		0.14 HR		\$1.04	\$1.53	\$0.53	\$7.99	\$11.09
OVERHEAD EXPENSES								
DOWNTIME		1.28 HR		\$9.54				\$9.54
EMPLOYEE BENEFITS				\$8.01				\$8.01
INSURANCE			\$0.89					\$0.89
LAND TAXES						\$1.53		\$1.53
SUPERVISION AND MANAGEMENT				\$52.51				\$52.51
OTHER EXPENSES			\$67.06					\$67.06
SUBTOTAL		1.28 HR	\$67.95	\$70.05			\$1.53	\$139.53
TOTAL OPERATING EXPENSES		7.40 HR	\$376.46	\$114.54	\$165.98	\$32.04	\$180.04	\$869.06
NET OPERATING PROFIT								(\$169.12)
INTEREST ON OPERATING CAPITAL (\$90.81 @ 6.50%)								\$5.90
INTEREST ON EQUIPMENT INVESTMENT								\$81.86
RETURN TO LAND AND RISK								(\$256.88)

* Pump water costs are shown under irrigation in the preharvest operations section.

BUDGET SUMMARY

GROSS RETURN		\$699.94	
VARIABLE OPERATING EXPENSES	\$574.47		
RETURN OVER VARIABLE EXPENSES	\$125.46	(GROSS MARGIN)	
FIXED EXPENSES	\$180.04		
NET FARM INCOME	(\$54.57)	(RETURN TO CAPITAL, LABOR, LAND & RISK)	
LABOR AND MANAGEMENT COST	\$114.54		
NET OPERATING PROFIT	(\$169.12)	(RETURN TO CAPITAL, LAND & RISK)	
CAPITAL COSTS	\$87.76		
RETURN TO LAND AND RISK		(\$256.88)	

TABLE 12. Summary of per acre costs and returns for a 320 acre farm with above average management, Roswell-Hagerman area, Chaves County, Projected 2004.

	ALFALFA ESTABLISHMENT	ALFALFA HAY	WHEAT	OAT HAY	PICKER COTTON	STRIPPER COTTON
		TONS	CWT	TONS	LBS	LBS
PRIMARY YIELD		7.00	78.00	6.75	905.00	905.00
PRIMARY PRICE		\$140.00	\$6.25	\$100.00	\$0.55	\$0.50
GOVERNMENT PAYMENTS		\$0.00	\$34.48	\$0.00	\$138.84	\$138.84
SECOND INCOME		\$0.00	\$44.00	\$0.00	\$108.60	\$108.60
GROSS RETURN		\$980.00	\$565.98	\$675.00	\$745.19	\$699.94
CASH OPERATING EXPENSES						
SEED	\$84.00		\$11.00	\$24.00	\$13.60	\$17.00
FERTILIZER	\$8.77	\$40.00	\$53.50	\$24.65	\$17.28	\$17.28
CHEMICALS		\$65.13	\$18.62		\$70.13	\$60.81
CROP INSURANCE			\$1.96		\$1.47	\$1.47
OTHER PURCHASED INPUTS		\$5.80				
CANAL WATER						
FUEL, OIL & LUBRICANTS-EQUIPMENT	\$16.67	\$17.08	\$13.55	\$14.44	\$48.72	\$56.19
FUEL-IRRIGATION	\$62.74	\$211.74	\$109.79	\$82.34	\$109.79	\$109.79
REPAIRS	\$14.58	\$25.59	\$13.73	\$18.69	\$53.61	\$32.04
CUSTOM CHARGES			\$37.00		\$169.14	\$211.95
LAND TAXES		\$1.53	\$1.53	\$1.53	\$1.53	\$1.53
OTHER EXPENSES	\$0.26	\$67.53	\$67.34	\$67.40	\$67.87	\$67.95
TOTAL CASH EXPENSES	\$187.01	\$434.40	\$328.03	\$233.05	\$553.14	\$576.00
RETURN OVER CASH EXPENSES	(\$187.01)	\$545.60	\$237.94	\$441.95	\$192.05	\$123.94
FIXED EXPENSES	\$63.43	\$204.69	\$63.33	\$73.62	\$306.98	\$178.51
TOTAL EXPENSES	\$250.44	\$639.09	\$391.36	\$306.67	\$860.12	\$754.51
NET FARM INCOME	(\$250.44)	\$340.91	\$174.61	\$368.33	(\$114.93)	(\$54.57)
LABOR AND MANAGEMENT COSTS	\$37.11	\$102.53	\$60.00	\$71.98	\$112.14	\$114.54
NET OPERATING PROFIT	(\$287.55)	\$238.38	\$114.62	\$296.35	(\$227.07)	(\$169.12)
CAPITAL COSTS						
INTEREST ON OPERATING CAPITAL		\$7.36	\$5.19	\$3.28	\$6.17	\$5.90
INTEREST ON EQUIPMENT INVESTMENT		\$56.96	\$24.92	\$29.43	\$29.43	\$81.86
TOTAL CAPITAL COSTS	\$0.00	\$64.33	\$30.12	\$32.71	\$35.61	\$87.76
RETURN TO LAND AND RISK	(\$287.55)	\$174.05	\$84.50	\$263.64	(\$262.67)	(\$256.88)

TABLE 13. Whole farm summary, Roswell-Hagerman Area, Chaves County,
Projected 2004.

GROSS RETURNS		
ALFALFA HAY	175.00 ACRES	
CROP		\$171,500
WHEAT	25.50 ACRES	
CROP		\$12,431
GRAZING		\$1,122
DIRECT PAYMENT		\$879
COUNTER CYCLICAL PAYMENT		\$0
OAT HAY	41.50 ACRES	
CROP		\$28,013
UPLAND COTTON (PICKER)	34.00 ACRES	
COTTON LINT		\$16,924
COTTON SEED		\$3,692
DIRECT PAYMENT		\$898
COUNTER CYCLICAL PAYMENT		\$2,976
UPLAND COTTON (STRIPPER)	34.00 ACRES	
COTTON LINT		\$15,385
COTTON SEED		\$3,692
DIRECT PAYMENT		\$1,745
COUNTER CYCLICAL PAYMENT		\$2,976
GROSS RETURN		<u>\$262,233</u>
CASH OPERATING EXPENSES		
SEED		\$5,257
FERTILIZER		\$10,869
CHEMICALS		\$16,324
CROP INSURANCE		\$150
OTHER PURCHASED INPUTS		\$1,015
CANAL WATER		\$0
FUEL, OIL & LUBRICANTS-EQUIPMENT		\$8,084
FUEL-IRRIGATION		\$52,933
REPAIRS		\$9,027
CUSTOM CHARGES		\$13,901
LAND TAXES		\$474
OTHER EXPENSES		\$20,959
TOTAL CASH EXPENSES		<u>\$138,993</u>
RETURN OVER CASH EXPENSES		\$123,240
FIXED EXPENSES		\$49,154
TOTAL EXPENSES		\$188,146
NET FARM INCOME		\$74,086
LABOR AND MANAGEMENT COSTS		\$31,466
NET OPERATING PROFIT		\$42,621
CAPITAL COSTS		
INTEREST ON OPERATING CAPITAL		\$1,967
INTEREST ON EQUIPMENT INVESTMENT		\$15,610
TOTAL CAPITAL COSTS		<u>\$17,577</u>
RETURN TO LAND AND RISK		<u><u>\$25,044</u></u>

LAND VALUE	RETURN TO RISK*	RETURN ON INVESTMENT**
\$1,000 /ACRE	\$12,244	6.77%
\$3,000 /ACRE	(\$13,356)	3.36%
\$5,000 /ACRE	(\$38,956)	2.23%
\$7,000 /ACRE	(\$64,556)	1.67%
\$9,000 /ACRE	(\$90,156)	1.34%

* RETURN TO LAND AND RISK MINUS (INTEREST RATE TIMES LAND VALUE TIMES ACREAGE)

** NET OPERATING PROFIT DIVIDED BY (MACHINERY AND EQUIPMENT VALUE PLUS LAND VALUE)