

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

BUDGET AREA..... ROSWELL-HAGERMAN AREA, CHAVES COUNTY			
FARM SIZE.....	640 ACRES		
IRRIGATION TYPE.....	FLOOD		
NUMBER OF CROPS.....	6		
		WATER USE	
ACREAGE SUMMARY:	LAND USE (ACRES)	AC.IN. PER AC.	TOTAL AC.IN.
ALFALFA ESTABLISHMENT	60.00 *	16	960
ALFALFA	300.00	54	16,200
WHEAT	51.00	28	1,428
ARP	0.00		
FLEX IN OAT HAY	9.00	28	252
OAT HAY	60.00	21	1,260
PICKER COTTON	51.00	28	1,428
ARP	0.00		
FLEX IN OAT HAY	9.00	28	252
STRIPPER COTTON	51.00	28	1,428
ARP	0.00		
FLEX IN OAT HAY	9.00	28	252
CORN SILAGE	60.00	48	2,880
ROADS, DITCHES, HOMESTEAD	40.00		
TOTAL	640.00		26,340
ACRE FEET PER ACRE OF WATER RIGHTS			3.43

\* DOUBLE-CROPPED

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

Item		
<b>Labor Wage Rate:</b>		
Equipment operators	\$/hour	\$7.55
General & Irrigators	\$/hour	\$6.45
<b>Purchased Inputs:</b>		
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	\$/pound	\$0.30
Corn	\$/bag	\$85.00
Plastic Twine:	\$/roll	\$19.50
Natural gas	\$/MCF	\$7.22
(service charge)	\$/month	\$10.00
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%
<b>Financial Rates:</b>		
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
<b>Supervision Factors</b>		
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	\$110.00 per month	\$1,320
Accounting & Legal		\$1,565
Misc. Supplies & Hand Tools		\$2,360
Pickup and Auto		
miles	20,000 @ \$0.365 per mile	\$7,300
Insurance		
- general liability (non-employee)		\$1,610
- fire/theft		\$1,350
Property Taxes		
- non-planted land		\$18
- other than land & machinery		\$620
Building repairs and maintenance		\$1,290
Dues, fees, publications		\$390
Farmstead Equipment		\$170
Total		\$20,573
Total Per Planted Acre		\$34.29

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

INPUT DATA	
DELIVERY PSI:	0
DEPTH CHARACTERISTICS:	
STATIC.....	150
DRAW DOWN.....	30
TOTAL HEAD.....	180
CASING.....	600
GALLONS PER MINUTE (GPM)	1,000
WORK HORSEPOWER	45
EFFICIENCY FACTOR:	
ELECTRICITY	0.540
NATURAL GAS	0.154
LP GAS	0.154
DIESEL	0.160
FUEL COST PER UNIT:	
ELECTRICITY	5.84 CENTS/KwHr
NATURAL GAS	\$7.22 \$/MCF
LP GAS	\$1.21 \$/GAL
DIESEL	\$1.50 \$/GAL

PUMPING FUEL COSTS

ELECTRIC WELL:	
COST PER HOUR	\$3.70
COST PER ACRE INCH	\$1.67
NATURAL GAS WELL:	
COST PER HOUR	\$5.98
COST PER ACRE INCH	\$2.70
LP GAS WELL:	
COST PER HOUR	\$9.92
COST PER ACRE INCH	\$4.49
DIESEL WELL:	
COST PER HOUR	\$7.69
COST PER ACRE INCH	\$3.48

TABLE 5. Equipment summary for a 640 acre flood-irrigated farm with above average management, Roswell-Hagerman area  
Projected 2004.

EQUIPMENT	ANNUAL HOURS OF USE	NUMBER	TOTAL VALUE	VARIABLE COSTS				FIXED COSTS			
				FUEL, OIL, LUBRICANT	REPAIR	FUEL, OIL PER HR	REPAIR PER HR	DEPRECIATION	TAXES	TOTAL PER HR	
TRACTOR	96 HP	380	1	\$26,855	\$3,916	\$2,684	\$10.30	\$7.06	\$1,447	\$239	\$4.44
TRACTOR	130 HP	315	1	\$13,277	\$3,441	\$2,222	\$10.94	\$7.06	\$1,453	\$180	\$5.19
TRACTOR	145 HP	345	1	\$31,475	\$4,680	\$2,314	\$13.55	\$6.70	\$4,652	\$288	\$14.30
COTTON PICKER	2 ROW	63	1	\$9,430	\$574	\$1,866	\$9.07	\$29.50	\$5,960	\$369	\$100.08
COTTON STRIPPER MTD		63	1	\$2,950		\$255		\$4.03	\$767	\$47	\$12.87
SWATHER	16 FT	179	1	\$21,350	\$1,005	\$1,684	\$5.62	\$9.41	\$3,621	\$299	\$21.91
BALER	1 TON	109	1	\$41,720		\$286		\$2.62	\$5,812	\$360	\$56.44
PLANTER	4 ROW	42	1	\$3,400		\$246		\$5.85	\$680	\$28	\$16.81
ROLLING CULT	4 ROW	132	1	\$1,500		\$111		\$0.84	\$200	\$12	\$1.61
DISC OFFSET	14 FT	105	1	\$5,750		\$344		\$3.28	\$767	\$47	\$7.75
DRILL	13 FT	42	1	\$2,150		\$154		\$3.70	\$430	\$18	\$10.77
PLANE	12 FT	29	1	\$2,500		\$13		\$0.45	\$333	\$21	\$12.29
FLOAT	14 FT	26	1	\$600		\$9		\$0.33	\$60	\$4	\$2.46
LISTER	4 ROW	29	1	\$1,600		\$35		\$1.18	\$213	\$13	\$7.77
PLOW (MOLDBOARD)	4-16 IN	131	1	\$4,000		\$294		\$2.24	\$533	\$33	\$4.32
SHREDDER	4 ROW	14	1	\$2,500		\$13		\$0.90	\$333	\$21	\$24.79
COTTON TRAILER		128	4	\$4,800		\$31		\$0.24	\$640	\$40	\$5.33
SPRAYER	12 FT	42	1	\$1,375		\$105		\$2.50	\$183	\$11	\$4.62
FRONT END LOADER (ATTACH)		79	1	\$2,550		\$123		\$1.56	\$255	\$21	\$3.48
SEMI-TRUCK & FLATBED		194	1	\$17,500	\$1,524	\$0	\$7.88	\$0.00	\$3,500	\$145	\$18.83
RAKES		79	1	\$3,400		\$248		\$3.13	\$340	\$28	\$4.64
V-DITCHER		32	1	\$1,250		\$8		\$0.25	\$167	\$10	\$5.59
NATURAL GAS WELL		11,835	3	\$127,500	\$70,722	\$2,692	\$5.98	\$0.23	\$10,625	\$1,053	\$1.02
				\$329,432	\$85,861	\$15,736			\$42,972	\$3,288	

TABLE 6. Alfalfa establishment, flood-irrigated, budgeted per acre costs and returns for a 640 acre farm with above average management, Roswell-Hagerman area  
 Projected 2004.  
 Planting dates: September 1 - September 31

ITEM	PRICE	QUANTITY	PURCHASED INPUTS					TOTAL
<b>PURCHASED INPUTS</b>								
SEED	\$2.80	30.00 LBS		\$84.00				\$84.00
INSECTICIDE (CUSTOM)	\$13.38	1 ACRE		\$13.38				\$13.38
PUMP WATER*		16.00 AC. IN.						
SUBTOTAL				\$97.38				\$97.38
<b>PREHARVEST OPERATIONS</b>								
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DISC	145 HP	0.17 HR		\$1.28	\$4.61	\$1.70	\$3.75	\$11.33
PLOW	145 HP	0.48 HR		\$3.62	\$6.50	\$4.29	\$8.94	\$23.36
DISC (2X)	145 HP	0.34 HR		\$2.57	\$4.61	\$3.39	\$7.50	\$18.06
PLANE (2X)	130 HP	0.48 HR		\$3.62	\$5.25	\$3.61	\$8.39	\$20.87
DRILL	96 HP	0.21 HR		\$1.59	\$2.16	\$2.26	\$3.19	\$9.20
DITCHER (2X)	130 HP	0.10 HR		\$0.76	\$1.09	\$0.73	\$1.08	\$3.66
IRRIGATE (2X)		1.00 HR		\$6.45	\$43.27	\$1.65	\$7.37	\$58.73
SUBTOTAL		2.78 HR		\$19.89	\$67.49	\$17.62	\$40.22	\$145.22
<b>OVERHEAD EXPENSES</b>								
DOWNTIME		0.45 HR		\$3.36				\$3.36
EMPLOYEE BENEFITS				\$3.58				\$3.58
INSURANCE			\$0.40					\$0.40
SUPERVISION AND MANAGEMENT				\$18.82				\$18.82
SUBTOTAL		0.45 HR	\$0.40	\$25.76				\$26.16
<b>TOTAL OPERATING EXPENSES</b>		3.23 HR	\$97.77	\$45.65	\$67.49	\$17.62	\$40.22	\$268.76

TABLE 7. Alfalfa hay, flood-irrigated, budgeted per acre costs and returns for a 640 acre farm with above average management, Roswell-Hagerman area  
 Projected 2004.  
 Harvesting dates: May 20 - October 15

ITEM	PRICE	YIELD						TOTAL
<b>GROSS RETURNS</b>								
ALFALFA HAY	\$140.00	7.0 TONS (DELIVERED)						\$980.00
<b>TOTAL</b>							<b>\$980.00</b>	
<b>PURCHASED INPUTS</b>								
PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS				FIXED COST	TOTAL
FERTILIZER (10-26-10)	\$0.20	200 LBS	\$40.00					\$40.00
INSECTICIDE (CUSTOM)	\$44.48	1 ACRE	\$44.48					\$44.48
HERBICIDE (CUSTOM)	\$28.11	1 ACRE	\$28.11					\$28.11
PLASTIC TWINE	\$19.50	170 FT/TON	\$5.80					\$5.80
ESTABLISHMENT: Principal		5 YEARS					\$53.75	\$53.75
: Interest							\$9.29	\$9.29
PUMP WATER*		54 AC. IN.						
<b>SUBTOTAL</b>			<b>\$118.39</b>				<b>\$63.04</b>	<b>\$181.43</b>
<b>PREHARVEST OPERATIONS</b>								
PURCHASED INPUTS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
IRRIGATE (6X)		3.00 HR		\$19.35	\$146.04	\$5.56	\$24.86	\$195.80
<b>SUBTOTAL</b>		<b>3.00 HR</b>		<b>\$19.35</b>	<b>\$146.04</b>	<b>\$5.56</b>	<b>\$24.86</b>	<b>\$195.80</b>
<b>HARVEST OPERATIONS</b>								
SWATHER (5X)	14 FT	0.55 HR		\$4.15	\$3.09	\$5.18	\$12.05	\$24.47
RAKE (5X)	96 HP	0.25 HR		\$1.89	\$2.58	\$2.55	\$2.27	\$9.28
BALER (5X)	145 HP	0.35 HR		\$2.64	\$4.74	\$3.26	\$24.76	\$35.40
FRONT END LOADER (5X)	130 HP	0.25 HR		\$1.89	\$2.73	\$2.15	\$2.17	\$8.95
HAUL	SEMI	0.50 HR		\$3.78	\$3.94	\$0.00	\$9.42	\$17.13
<b>SUBTOTAL</b>		<b>1.90 HR</b>		<b>\$14.35</b>	<b>\$17.08</b>	<b>\$13.14</b>	<b>\$50.66</b>	<b>\$95.23</b>
<b>OVERHEAD EXPENSES</b>								
DOWNTIME		0.48 HR		\$3.59				\$3.59
EMPLOYEE BENEFITS				\$6.07				\$6.07
INSURANCE			\$0.67					\$0.67
LAND TAXES							\$1.53	\$1.53
SUPERVISION AND MANAGEMENT				\$72.55				\$72.55
OTHER EXPENSES			\$34.29					\$34.29
<b>SUBTOTAL</b>		<b>0.48 HR</b>	<b>\$34.96</b>	<b>\$82.20</b>			<b>\$1.53</b>	<b>\$118.69</b>
<b>TOTAL OPERATING EXPENSES</b>		<b>5.38 HR</b>	<b>\$153.35</b>	<b>\$115.90</b>	<b>\$163.12</b>	<b>\$18.70</b>	<b>\$140.09</b>	<b>\$591.15</b>
<b>NET OPERATING PROFIT</b>								<b>\$388.85</b>
INTEREST ON OPERATING CAPITAL		( \$99.61 @ 6.50% )						\$6.47
INTEREST ON EQUIPMENT INVESTMENT								\$30.83
<b>RETURN TO LAND AND RISK</b>								<b>\$351.55</b>

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

**BUDGET SUMMARY**

GROSS RETURN		\$980.00	
VARIABLE OPERATING EXPENSES	\$335.17		
RETURN OVER VARIABLE EXPENSES		\$644.83	(GROSS MARGIN)
FIXED EXPENSES	\$140.09		
NET FARM INCOME		\$504.75	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$115.90		
NET OPERATING PROFIT		\$388.85	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$37.30		
RETURN TO LAND AND RISK		\$351.55	

TABLE 8. Wheat, flood-irrigated, budgeted per acre costs and returns for a 640 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
<b>GROSS RETURNS</b>				
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
<b>TOTAL</b>				<b>\$565.98</b>

PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS	FIXED COST	TOTAL
SEED	\$0.11	100 LBS	\$11.00		\$11.00
NITROGEN (N)	\$0.29	150 LBS	\$43.50		\$43.50
PHOSPHATE (P205)	\$0.20	50 LBS	\$10.00		\$10.00
INSECTICIDE	\$19.17	1 ACRE	\$19.17		\$19.17
PUMP WATER*		28 AC. IN.			
CROP INSURANCE	\$0.98		\$0.98		\$0.98
<b>SUBTOTAL</b>			<b>\$84.65</b>		<b>\$84.65</b>

PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
PLOW	145 HP	0.48 HR		\$3.62	\$6.50	\$4.29	\$8.94	\$23.36
DISC (2X)	145 HP	0.34 HR		\$2.57	\$4.61	\$3.39	\$7.50	\$18.06
FERTILIZE	DEALER APPLIED							
DRILL	96 HP	0.21 HR		\$1.59	\$2.16	\$2.26	\$3.19	\$9.20
DITCHER (2X)	130 HP	0.10 HR		\$0.76	\$1.09	\$0.73	\$1.08	\$3.66
IRRIGATE (4X)		2.00 HR		\$12.90	\$75.72	\$2.88	\$12.89	\$104.40
<b>SUBTOTAL</b>		<b>3.13 HR</b>		<b>\$21.43</b>	<b>\$90.09</b>	<b>\$13.56</b>	<b>\$33.60</b>	<b>\$158.68</b>

HARVEST OPERATIONS								
COMBINE (CUSTOM)			\$40.20					\$40.20
HAUL (CUSTOM)			\$13.26					\$13.26
<b>SUBTOTAL</b>			<b>\$53.46</b>					<b>\$53.46</b>

OVERHEAD EXPENSES								
DOWNTIME		0.28 HR		\$2.13				\$2.13
EMPLOYEE BENEFITS				\$3.86				\$3.86
INSURANCE			\$0.43					\$0.43
LAND TAXES						\$1.53		\$1.53
SUPERVISION AND MANAGEMENT				\$42.13				\$42.13
OTHER EXPENSES			\$34.29					\$34.29
<b>SUBTOTAL</b>		<b>0.28 HR</b>	<b>\$34.72</b>	<b>\$48.12</b>		<b>\$1.53</b>		<b>\$84.37</b>

TOTAL OPERATING EXPENSES 3.41 HR \$172.83 \$69.56 \$90.09 \$13.56 \$35.13 \$381.16

NET OPERATING PROFIT \$184.82

INTEREST ON OPERATING CAPITAL ( \$72.69 @ 6.50% ) \$4.73  
INTEREST ON EQUIPMENT INVESTMENT \$12.96

RETURN TO LAND AND RISK \$167.14

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

BUDGET SUMMARY

GROSS RETURN		\$565.98	
VARIABLE OPERATING EXPENSES	\$276.48		
RETURN OVER VARIABLE EXPENSES		\$289.50	(GROSS MARGIN)
FIXED EXPENSES	\$35.13		
NET FARM INCOME		\$254.37	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$69.56		
NET OPERATING PROFIT		\$184.82	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$17.68		
RETURN TO LAND AND RISK		\$167.14	

TABLE 9. Oat hay, flood-irrigated, budgeted per acre costs and returns for a 640 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	6.75 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		\$2.57	\$4.61	\$3.39	\$7.50	\$18.06
DRILL	96 HP	0.21 HR		\$1.59	\$2.16	\$2.26	\$3.19	\$9.20
DITCHER (2X)	130 HP	0.05 HR		\$0.38	\$0.55	\$0.37	\$0.54	\$1.83
IRRIGATE (3X)		1.50 HR		\$9.68	\$56.79	\$2.16	\$9.67	\$78.30
SUBTOTAL		2.10 HR		\$14.21	\$64.11	\$8.18	\$20.90	\$107.39

  

HARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
SWATHER	14 FT	0.16 HR		\$1.21	\$0.90	\$1.51	\$3.51	\$7.12
RAKE	96 HP	0.05 HR		\$0.38	\$0.52	\$0.51	\$0.45	\$1.86
BALER	145 HP	0.05 HR		\$0.38	\$0.68	\$0.47	\$3.54	\$5.06
FRONT END LOADER	130 HP	0.05 HR		\$0.38	\$0.55	\$0.43	\$0.43	\$1.79
HAUL	SEMI	0.50 HR		\$3.78	\$3.94	\$0.00	\$9.42	\$17.13
SUBTOTAL		0.81 HR		\$6.12	\$6.58	\$2.91	\$17.35	\$32.95

  

OVERHEAD EXPENSES	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL	
DOWNTIME	0.35 HR		\$2.66				\$2.66	
EMPLOYEE BENEFITS			\$3.66				\$3.66	
INSURANCE		\$0.41					\$0.41	
LAND TAXES						\$1.53	\$1.53	
SUPERVISION AND MANAGEMENT			\$49.43				\$49.43	
OTHER EXPENSES			\$34.29				\$34.29	
SUBTOTAL	0.35 HR	\$34.69	\$55.75				\$1.53	\$91.97

  

TOTAL OPERATING EXPENSES	3.26 HR	\$83.34	\$76.07	\$70.68	\$11.09	\$39.77	\$280.96
NET OPERATING PROFIT							\$394.04
INTEREST ON OPERATING CAPITAL	( \$43.19 @	6.50%	)				\$2.81
INTEREST ON EQUIPMENT INVESTMENT							\$15.14
RETURN TO LAND AND RISK							\$376.09

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

BUDGET SUMMARY

GROSS RETURN		\$675.00	
VARIABLE OPERATING EXPENSES	\$165.12		
RETURN OVER VARIABLE EXPENSES		\$509.88	(GROSS MARGIN)
FIXED EXPENSES	\$39.77		
NET FARM INCOME		\$470.11	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$76.07		
NET OPERATING PROFIT		\$394.04	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$17.95		
RETURN TO LAND AND RISK		\$376.09	

TABLE 10. Upland cotton (picker), flood-irrigated, budgeted per acre costs and returns for a 640 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
<b>GROSS RETURNS</b>				
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
<b>TOTAL</b>				<b>\$745.19</b>

PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS	FIXED COST	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	\$15.88	1 ACRE	\$15.88		\$15.88
HERBICIDE (CUSTOM)	\$16.96	1 ACRE	\$16.96		\$16.96
INSECTICIDE (CUSTOM) 2X	\$37.15	1 ACRE	\$37.15		\$37.15
CROP INSURANCE			\$0.98		\$0.98
PUMP WATER*		28 AC. IN.			
<b>SUBTOTAL</b>			<b>\$101.85</b>		<b>\$101.85</b>

PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DISC	145 HP	0.17 HR		\$1.28	\$2.30	\$1.70	\$3.75	\$9.03
PLOW	145 HP	0.48 HR		\$3.62	\$6.50	\$4.29	\$8.94	\$23.36
FLOAT	130 HP	0.16 HR		\$1.21	\$1.75	\$1.18	\$1.22	\$5.37
FERTILIZE	DEALER APPLIED							
LISTER	130 HP	0.18 HR		\$1.36	\$1.97	\$1.48	\$2.33	\$7.15
PRE-IRRIGATE		0.75 HR		\$4.84	\$18.93	\$0.72	\$3.22	\$27.71
CULT & SPRAY	96 HP	0.26 HR		\$1.96	\$2.68	\$2.71	\$2.78	\$10.12
PLANTER	130 HP	0.26 HR		\$1.96	\$2.84	\$3.36	\$5.72	\$13.89
CULTIVATOR (3X)	96 HP	0.63 HR		\$4.76	\$6.49	\$4.98	\$3.81	\$20.04
HAND HOE (CUSTOM)			\$20.00					\$20.00
DITCHER (2X)	130 HP	0.10 HR		\$0.76	\$1.09	\$0.73	\$1.08	\$3.66
IRRIGATE (3X)		1.50 HR		\$9.68	\$56.79	\$2.16	\$9.67	\$78.30
<b>SUBTOTAL</b>		<b>4.49 HR</b>	<b>\$20.00</b>	<b>\$31.42</b>	<b>\$101.36</b>	<b>\$23.31</b>	<b>\$42.52</b>	<b>\$218.61</b>

HARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
COTTON PICKER (2X)	2-ROW	1.24 HR		\$9.36	\$11.25	\$36.58	\$124.10	\$181.30
HAUL (2X)	65 HP	1.00 HR		\$7.55	\$10.30	\$7.30	\$9.77	\$34.92
GIN COTTON (CUSTOM)			\$149.14					\$149.14
<b>SUBTOTAL</b>		<b>2.24 HR</b>	<b>\$149.14</b>	<b>\$16.91</b>	<b>\$21.55</b>	<b>\$43.89</b>	<b>\$133.87</b>	<b>\$365.36</b>

POSTHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
SHREDDER	96 HP	0.14 HR		\$1.06	\$1.53	\$1.11	\$4.20	\$7.90
<b>SUBTOTAL</b>		<b>0.14 HR</b>		<b>\$1.06</b>	<b>\$1.53</b>	<b>\$1.11</b>	<b>\$4.20</b>	<b>\$7.90</b>

OVERHEAD EXPENSES	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DOWNTIME	1.16 HR		\$8.72				\$8.72
EMPLOYEE BENEFITS			\$8.89				\$8.89
INSURANCE		\$0.99					\$0.99
LAND TAXES						\$1.53	\$1.53
SUPERVISION AND MANAGEMENT			\$56.67				\$56.67
OTHER EXPENSES		\$34.29					\$34.29
<b>SUBTOTAL</b>	<b>1.16 HR</b>	<b>\$35.28</b>	<b>\$74.28</b>			<b>\$1.53</b>	<b>\$111.09</b>

TOTAL OPERATING EXPENSES 8.03 HR \$306.27 \$123.68 \$124.44 \$68.31 \$182.12 \$804.82

NET OPERATING PROFIT (\$59.63)

INTEREST ON OPERATING CAPITAL ( \$87.77 @ 6.50% ) \$5.70

INTEREST ON EQUIPMENT INVESTMENT \$15.14

RETURN TO LAND AND RISK (\$80.48)

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

GROSS RETURN		\$745.19	
VARIABLE OPERATING EXPENSES	\$499.02		
RETURN OVER VARIABLE EXPENSES		\$246.17	(GROSS MARGIN)
FIXED EXPENSES	\$182.12		
NET FARM INCOME		\$64.05	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$123.68		
NET OPERATING PROFIT		(\$59.63)	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$20.85		
RETURN TO LAND AND RISK		(\$80.48)	

TABLE 11. Upland cotton (stripper), flood-irrigated, budgeted per acre costs and returns for a 640 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				
<b>GROSS RETURNS</b>								
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				
<b>TOTAL</b>				<b>\$699.94</b>				
<b>PURCHASED INPUTS</b>								
	PRICE	QUANTITY	PURCHASED INPUTS	FIXED COST	TOTAL			
SEED	\$0.68	25 LBS	\$17.00		\$17.00			
NITROGEN (N)	\$0.29	32 LBS	\$9.28		\$9.28			
PHOSPHATE (P205)	\$0.20	40 LBS	\$8.00		\$8.00			
HERBICIDE	\$15.88	1 ACRE	\$15.88		\$15.88			
HERBICIDE (CUSTOM)	\$15.82	1 ACRE	\$15.82		\$15.82			
INSECTICIDE (CUSTOM) 2X	\$35.20	1 X/ACRE	\$35.20		\$35.20			
CROP INSURANCE			\$0.98		\$0.98			
PUMP WATER*		28 AC. IN.						
<b>SUBTOTAL</b>			<b>\$102.17</b>		<b>\$102.17</b>			
<b>PREHARVEST OPERATIONS</b>								
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DISC	145 HP	0.17 HR		\$1.28	\$2.30	\$1.70	\$3.75	\$9.03
PLOW	145 HP	0.48 HR		\$3.62	\$6.50	\$4.29	\$8.94	\$23.36
FLOAT	130 HP	0.16 HR		\$1.21	\$1.75	\$1.18	\$1.22	\$5.37
FERTILIZE	DEALER APPLIED							
LISTER	130 HP	0.18 HR		\$1.36	\$1.97	\$1.48	\$2.33	\$7.15
PRE-IRRIGATE		0.75 HR		\$4.84	\$18.93	\$0.72	\$3.22	\$27.71
CULT & SPRAY	96 HP	0.26 HR		\$1.96	\$2.68	\$2.71	\$2.78	\$10.12
PLANTER	130 HP	0.26 HR		\$1.96	\$2.84	\$3.36	\$5.72	\$13.89
CULTIVATOR (3X)	96 HP	0.63 HR		\$4.76	\$6.49	\$4.98	\$3.81	\$20.04
HAND HOE (CUSTOM)			\$20.00					\$20.00
DITCHER (2X)	130 HP	0.10 HR		\$0.76	\$1.09	\$0.73	\$1.08	\$3.66
IRRIGATE (3X)		1.50 HR		\$9.68	\$56.79	\$2.16	\$9.67	\$78.30
<b>SUBTOTAL</b>		<b>4.49 HR</b>	<b>\$20.00</b>	<b>\$31.42</b>	<b>\$101.36</b>	<b>\$23.31</b>	<b>\$42.52</b>	<b>\$218.61</b>
<b>HARVEST OPERATIONS</b>								
COTTON STRIPPER	96 HP	1.24 HR		\$9.36	\$13.56	\$13.75	\$22.40	\$59.08
HAUL	130 HP	1.50 HR		\$11.33	\$15.46	\$10.95	\$14.65	\$52.39
GIN COTTON (CUSTOM)			\$191.95					\$191.95
<b>SUBTOTAL</b>		<b>2.74 HR</b>	<b>\$191.95</b>	<b>\$20.69</b>	<b>\$29.02</b>	<b>\$24.70</b>	<b>\$37.06</b>	<b>\$303.42</b>
<b>POSTHARVEST OPERATIONS</b>								
SHREDDER	130 HP	0.14 HR		\$1.06	\$1.53	\$1.11	\$4.20	\$7.90
<b>SUBTOTAL</b>		<b>0.14 HR</b>		<b>\$1.06</b>	<b>\$1.53</b>	<b>\$1.11</b>	<b>\$4.20</b>	<b>\$7.90</b>
<b>OVERHEAD EXPENSES</b>								
DOWNTIME		1.28 HR		\$9.66				\$9.66
EMPLOYEE BENEFITS				\$9.57				\$9.57
INSURANCE			\$1.06					\$1.06
LAND TAXES						\$1.53		\$1.53
SUPERVISION AND MANAGEMENT				\$53.76				\$53.76
OTHER EXPENSES			\$34.29					\$34.29
<b>SUBTOTAL</b>		<b>1.28 HR</b>	<b>\$35.35</b>	<b>\$72.99</b>			<b>\$1.53</b>	<b>\$109.87</b>
<b>TOTAL OPERATING EXPENSES</b>		<b>8.65 HR</b>	<b>\$349.47</b>	<b>\$126.16</b>	<b>\$131.91</b>	<b>\$49.13</b>	<b>\$85.30</b>	<b>\$741.97</b>
<b>NET OPERATING PROFIT</b>								<b>(\$42.03)</b>
INTEREST ON OPERATING CAPITAL		( \$86.95 @	6.50%	)				\$5.65
INTEREST ON EQUIPMENT INVESTMENT								\$43.48
<b>RETURN TO LAND AND RISK</b>								<b>(\$91.16)</b>

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

**BUDGET SUMMARY**

GROSS RETURN		\$699.94	
VARIABLE OPERATING EXPENSES	\$530.50		
RETURN OVER VARIABLE EXPENSES		\$169.43	(GROSS MARGIN)
FIXED EXPENSES	\$85.30		
NET FARM INCOME		\$84.13	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$126.16		
NET OPERATING PROFIT		(\$42.03)	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$49.13		
RETURN TO LAND AND RISK		(\$91.16)	



TABLE 12. Corn silage, flood-irrigated, budgeted per acre costs and returns for a 640 acre farm with above average management, Roswell-Hagerman area, Projected 2004.  
 Planting dates: April 1 - April 15  
 Harvesting dates: August 1 - August 31

ITEM	PRICE	YIELD							TOTAL
<b>GROSS RETURNS</b>									
CORN FOR SILAGE	\$16.00	STANDING	24.0 TONS						\$384.00
<b>TOTAL</b>								<b>\$384.00</b>	
PURCHASED INPUTS			PRICE	QUANTITY	PURCHASED INPUTS		FIXED COST	TOTAL	
SEED	\$1.06		32 000		\$34.00			\$34.00	
NITROGEN (N)	\$0.29		200 LBS		\$58.00			\$58.00	
INSECTICIDE (CUSTOM) 2X	\$44.42		1 ACRE		\$44.42			\$44.42	
CROP INSURANCE			400 DOLLARS		\$20.00			\$20.00	
PUMP WATER*			48 AC. IN.						
<b>SUBTOTAL</b>					<b>\$156.42</b>			<b>\$156.42</b>	
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL	
DISC	145 HP	0.17 HR		\$1.28	\$2.30	\$1.70	\$3.75	\$9.03	
PLOW	145 HP	0.48 HR		\$3.62	\$6.50	\$4.29	\$8.94	\$23.36	
FLOAT	130 HP	0.16 HR		\$1.21	\$1.75	\$1.18	\$1.22	\$5.37	
FERTILIZE	DEALER APPLIED								
LISTER	130 HP	0.18 HR		\$1.36	\$1.97	\$1.48	\$2.33	\$7.15	
PRE-IRRIGATE		0.75 HR		\$4.84	\$21.64	\$0.82	\$3.68	\$30.98	
CULT & SPRAY	96 HP	0.26 HR		\$1.96	\$2.68	\$2.71	\$2.78	\$10.12	
PLANTER	130 HP	0.26 HR		\$1.96	\$2.84	\$3.36	\$5.72	\$13.89	
CULTIVATOR (2X)	96 HP	0.42 HR		\$3.17	\$4.33	\$3.32	\$2.54	\$13.36	
DITCHER (2X)	130 HP	0.10 HR		\$0.76	\$1.09	\$0.73	\$1.08	\$3.66	
IRRIGATE (5X)		2.50 HR		\$16.13	\$108.18	\$4.12	\$18.41	\$146.83	
<b>SUBTOTAL</b>		<b>5.28 HR</b>		<b>\$36.29</b>	<b>\$153.28</b>	<b>\$23.71</b>	<b>\$50.46</b>	<b>\$263.74</b>	
<b>OVERHEAD EXPENSES</b>									
DOWNTIME		0.51 HR		\$2.54				\$2.54	
EMPLOYEE BENEFITS				\$6.53				\$6.53	
INSURANCE			\$0.73					\$0.73	
LAND TAXES							\$1.53	\$1.53	
SUPERVISION AND MANAGEMENT				\$31.10				\$31.10	
OTHER EXPENSES				\$34.29				\$34.29	
<b>SUBTOTAL</b>		<b>0.51 HR</b>		<b>\$35.01</b>	<b>\$40.16</b>		<b>\$1.53</b>	<b>\$76.71</b>	
<b>TOTAL OPERATING EXPENSES</b>		<b>5.79 HR</b>		<b>\$191.43</b>	<b>\$76.45</b>	<b>\$153.28</b>	<b>\$23.71</b>	<b>\$496.86</b>	
<b>NET OPERATING PROFIT</b>								<b>(\$112.86)</b>	
INTEREST ON OPERATING CAPITAL		(	\$122.46	@	6.50%	)		\$7.96	
INTEREST ON EQUIPMENT INVESTMENT								\$20.91	
<b>RETURN TO LAND AND RISK</b>								<b>(\$141.73)</b>	

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

**BUDGET SUMMARY**

GROSS RETURN		\$384.00	
VARIABLE OPERATING EXPENSES	\$368.42		
RETURN OVER VARIABLE EXPENSES		\$15.58	(GROSS MARGIN)
FIXED EXPENSES	\$51.99		
NET FARM INCOME		(\$36.41)	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$76.45		
NET OPERATING PROFIT		(\$112.86)	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$28.87		
RETURN TO LAND AND RISK		(\$141.73)	

TABLE 13. Summary of per acre costs and returns for a 640 acre farm with above average management, Roswell-Hagerman area, Chaves County  
Projected 2004.

	ALFALFA ESTABLISHMENT	ALFALFA HAY	WHEAT	OAT HAY	PICKER COTTON	STRIPPER COTTON	CORN SILAGE
		TONS	CWT	TONS	LBS	LBS	TONS
PRIMARY YIELD		7.00	78.00	6.75	905.00	905.00	24.00
PRIMARY PRICE		\$140.00	\$140.00	\$100.00	\$0.55	\$0.50	\$16.00
GOVERNMENT PAYMENTS		\$0.00	\$34.48	\$0.00	\$138.84	\$138.84	\$0.00
SECOND INCOME		\$0.00	\$44.00	\$0.00	\$108.60	\$108.60	\$0.00
GROSS RETURN		\$980.00	\$565.98	\$675.00	\$745.19	\$699.94	\$384.00
CASH OPERATING EXPENSES							
SEED	\$84.00		\$11.00	\$24.00	\$13.60	\$17.00	\$34.00
FERTILIZER		\$40.00	\$53.50	\$24.65	\$17.28	\$17.28	\$58.00
CHEMICALS	\$13.38	\$72.59	\$19.17		\$69.99	\$66.91	\$44.42
CROP INSURANCE			\$0.98		\$0.98	\$0.98	\$20.00
OTHER PURCHASED INPUTS		\$5.80					
CANAL WATER							
FUEL, OIL & LUBRICANTS-EQUIPMENT	\$24.22	\$17.08	\$14.37	\$13.89	\$48.72	\$56.19	\$23.47
FUEL-IRRIGATION	\$43.27	\$146.04	\$75.72	\$56.79	\$75.72	\$75.72	\$129.81
REPAIRS	\$17.62	\$18.70	\$13.56	\$11.09	\$68.31	\$49.13	\$23.71
CUSTOM CHARGES			\$53.46		\$169.14	\$211.95	
LAND TAXES		\$1.53	\$1.53	\$1.53	\$1.53	\$1.53	\$1.53
OTHER EXPENSES	\$0.40	\$34.96	\$34.72	\$34.69	\$35.28	\$35.35	\$35.01
TOTAL CASH EXPENSES	\$182.89	\$336.70	\$278.01	\$166.65	\$500.55	\$532.03	\$369.95
RETURN OVER CASH EXPENSES	(\$182.89)	\$643.30	\$287.97	\$508.35	\$244.64	\$167.91	\$14.05
FIXED EXPENSES	\$40.22	\$138.56	\$33.60	\$38.24	\$180.59	\$83.78	\$50.46
TOTAL EXPENSES	\$223.11	\$475.25	\$311.60	\$204.89	\$681.14	\$615.81	\$420.41
NET FARM INCOME	(\$223.11)	\$504.75	\$254.37	\$470.11	\$64.05	\$84.13	(\$36.41)
LABOR AND MANAGEMENT COSTS	\$45.65	\$115.90	\$69.56	\$76.07	\$123.68	\$126.16	\$76.45
NET OPERATING PROFIT	(\$268.76)	\$388.85	\$184.82	\$394.04	(\$59.63)	(\$42.03)	(\$112.86)
CAPITAL COSTS							
INTEREST ON OPERATING CAPITAL		\$6.47	\$4.73	\$2.81	\$5.70	\$5.65	\$7.96
INTEREST ON EQUIPMENT INVESTMENT		\$30.83	\$12.96	\$15.14	\$15.14	\$43.48	\$20.91
TOTAL CAPITAL COSTS	\$0.00	\$37.30	\$17.68	\$17.95	\$20.85	\$49.13	\$28.87
RETURN TO LAND AND RISK	(\$268.76)	\$351.55	\$167.14	\$376.09	(\$80.48)	(\$91.16)	(\$141.73)

TABLE 14. Whole farm summary, Roswell-Hagerman area, Chaves County, Projected 2004.

GROSS RETURNS		
ALFALFA HAY	300 ACRES	
CROP		\$294,000
WHEAT	51 ACRES	
CROP		\$24,863
GRAZING		\$2,244
DIRECT PAYMENT		\$1,758
COUNTER CYCLICAL PAYMENT		\$0
SMALL GRAINS	87 ACRES	
CROP		\$58,725
UPLAND COTTON (PICKER)	51.00 ACRES	
COTTON LINT		\$25,385
COTTON SEED		\$5,539
DIRECT PAYMENT		\$1,231
COUNTER CYCLICAL PAYMENT		\$4,464
UPLAND COTTON (STRIPPER)	51.00 ACRES	
COTTON LINT		\$23,078
COTTON SEED		\$5,539
DIRECT PAYMENT		\$2,617
COUNTER CYCLICAL PAYMENT		\$4,464
CORN	60.00 ACRES	
CROP		\$23,040
GROSS RETURN		<u>\$476,946</u>
CASH OPERATING EXPENSES		
SEED		\$11,290
FERTILIZER		\$22,116
CHEMICALS		
CROP INSURANCE		\$1,350
OTHER PURCHASED INPUTS		\$1,740
CANAL WATER		\$0
FUEL, OIL & LUBRICANTS-EQUIPMENT		\$15,276
FUEL-IRRIGATION		\$70,722
REPAIRS		\$15,736
CUSTOM CHARGES		\$22,162
LAND TAXES		\$917
OTHER EXPENSES		\$21,004
TOTAL CASH EXPENSES		<u>\$182,314</u>
RETURN OVER CASH EXPENSES		\$294,632
FIXED EXPENSES		\$49,406
TOTAL EXPENSES		\$231,720
NET FARM INCOME		\$245,226
LABOR AND MANAGEMENT COSTS		\$65,002
NET OPERATING PROFIT		\$180,224
CAPITAL COSTS		
INTEREST ON OPERATING CAPITAL		\$3,484
INTEREST ON EQUIPMENT INVESTMENT		\$15,471
TOTAL CAPITAL COSTS		<u>\$18,955</u>
RETURN TO LAND AND RISK		<u>\$161,269</u>

LAND VALUE	RETURN TO RISK*	RETURN ON INVESTMENT**
\$1,000 /ACRE	\$135,669	18.59%
\$3,000 /ACRE	\$84,469	8.01%
\$5,000 /ACRE	\$33,269	5.11%
\$7,000 /ACRE	(\$17,931)	3.75%
\$9,000 /ACRE	(\$69,131)	2.96%

\* 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)