

TABLE 1. Acreage Summary, Eddy County, Artesia Lake Arthur Area, Projected 2004.

BUDGET AREA..... ARTESIA-LAKE ARTHUR AREA	
FARM SIZE.....	500.00 ACRES
IRRIGATION TYPE.....	FLOOD
NUMBER OF CROPS.....	6

ACREAGE SUMMARY:	WATER USE		
	LAND USE (ACRES)	AC.IN. PER AC.	TOTAL AC.IN.
ALFALFA ESTABLISHMENT	52.00 *	8	416
ALFALFA	260.00	50	13,000
BARLEY	17.00	28	476
ARP	0.00		
FLEX IN PICKER COTTON	3.00	30	90
OAT HAY	20.00	28	560
PICKER COTTON	68.00	30	2,040
ARP	0.00		
FLEX IN PICKER COTTON	12.00	30	360
STRIPPER COTTON	68.00	30	2,040
ARP	0.00		
FLEX IN PICKER COTTON	12.00	30	360
RED CHILE	40.00	48	1,920
TOTAL	500.00		21,262
ACRE FEET PER ACRE OF WATER RIGHTS			3.54

*DOUBLE-CROPPED

TABLE 2. Basic cost information for the Artesia-Lake Arthur area, Projected 2004.

Item		
Labor Wage Rate:		
Equipment operators	\$/hour	\$7.20
General & Irrigators	\$/hour	\$6.60
Purchased Inputs:		
Fertilizer:		
Nitrogen (N)	\$/pound	\$0.32
Phosphate (P ₂ O ₅)	\$/pound	\$0.30
Seed:		
Alfalfa	\$/pound	\$2.80
Cotton picker	\$/pound	\$0.68
stripper	\$/pound	\$0.68
Barley	\$/pound	\$0.25
Oats	\$/pound	\$0.30
Red Chile	\$/pound	\$19.00
Wire:	\$/lb.	\$0.38
Natural gas (service charge)	\$/MCF	\$3.28
Diesel fuel	\$/month	\$10.00
Gasoline	\$/gallon	\$1.50
Electricity	\$/gallon	\$1.45
LP Gas	cents/KwHr	\$6.34
	\$/gallon	\$1.13
Employee Liability Insurance	\$/1000 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	\$250.00 /acre (full value)	\$1.75
Personal Property Tax Rat - NR	\$/1,000 (Assessed Value)	\$20.99
- R		\$19.57
Supervision Factors		
Field Crop-Irrigation	\$/labor hour	\$1.00
Field Crop-Equipment & General	\$/labor hour	\$0.50
Vegetable Crop-Irrigation	\$/labor hour	\$2.90
Vegetable Crop-Equip. & General	\$/labor hour	\$1.00
Management Rate		
Field Crops	percent/GR	7.00%
Vegetable Crops	percent/TOE	10.00%

TABLE 3. Overhead cost information for the Artesia-Lake Arthur area, Projected 2004.

Item			
Electricity (Domestic & Shop)		\$215.00 per month	\$2,580
Telephone		\$115.00 per month	\$1,380
Accounting & Legal			\$1,525
Misc. Supplies & Hand Tools			\$1,430
Pickup and Auto			
miles	20,000 @	\$0.365 per mile	\$7,300
Insurance			
- general liability (non-employee)			\$1,710
- fire/theft			\$1,525
Property Taxes			
- non-planted land			\$0
- other than land & machinery			\$6,010
Building repairs and maintenance			\$1,290
Dues, fees, publications			\$405
Farmstead Equipment			\$185
Total			\$25,340
Total Per Planted Acre			\$50.68

TABLE 4. Pumping costs and data for irrigation wells, Artesia-Lake Arthur area, Projected 2004.

INPUT DATA		DEPTH CHARACTERISTICS:	
		STATIC.....	60
		DRAW DOWN.....	20
		TOTAL HEAD.....	80
		CASING.....	250
GALLONS PER MINUTE (GPM)	500		
WORK HORSEPOWER	10		
EFFICIENCY FACTOR:			
ELECTRICITY	0.470		
NATURAL GAS	0.120		
LP GAS	0.120		
DIESEL	0.160		
FUEL COST PER UNIT:			
ELECTRICITY	6.34	Cents/KwHr	
NATURAL GAS	\$3.28	\$/MCF	
LP GAS	\$1.13	\$/GAL	
DIESEL.	\$1.50	\$/GAL	
TOTAL FUEL COSTS:			
ELECTRIC WELL :			
	COST PER HOUR	\$1.05	
	COST PER ACRE INCH	\$0.95	
NATURAL GAS WELL :			
	COST PER HOUR	\$0.80	
	COST PER ACRE INCH	\$0.72	
LP GAS WELL :			
	COST PER HOUR	\$2.66	
	COST PER ACRE INCH	\$2.41	
DIESEL WELL :			
	COST PER HOUR	\$1.72	
	COST PER ACRE INCH	\$1.56	

TABLE 5.. Equipment summary for a 500 acre flood-irrigated farm with above average management, Artesia-Lake Arthur area, Projected 2004.

EQUIPMENT	ITEM & SIZE	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	40 HP	65	1	\$1,600	\$282	\$10	\$4.34	\$0.15	\$50	\$9	\$0.90
TRACTOR	65 HP	355	1	\$2,400	\$1,541	\$117	\$4.34	\$0.33	\$110	\$19	\$0.36
TRACTOR	70 HP	178	1	\$4,840	\$799	\$226	\$4.49	\$1.27	\$423	\$74	\$2.79
TRACTOR	96 HP	325	1	\$26,855	\$1,459	\$1,129	\$4.49	\$3.47	\$1,158	\$203	\$4.19
TRACTOR	145 HP	413	1	\$13,188	\$1,852	\$1,298	\$4.49	\$3.14	\$1,048	\$183	\$2.98
COTTON PICKER	4 ROW	70	1	\$56,120	\$316	\$789	\$4.49	\$11.22	\$3,740	\$654	\$62.51
COTTON STRIPPER MTD		42	1	\$2,950		\$29		\$0.69	\$230	\$40	\$6.41
SWATHER	16 FT	145	1	\$2,100	\$652	\$122	\$4.49	\$0.84	\$280	\$49	\$2.27
BALE WAGON S.P.		264	1	\$9,890	\$1,145	\$5,378	\$4.34	\$20.37	\$900	\$157	\$4.01
BALER PTO		330	1	\$41,720		\$1,726		\$5.23	\$1,744	\$305	\$6.21
PLANTER	4 ROW	53	1	\$3,600		\$23		\$0.43	\$144	\$25	\$3.21
CULTIVATOR	4 ROW	187	1	\$1,500		\$187		\$1.00	\$60	\$10	\$0.38
DISC	12 FT	133	1	\$2,250		\$36		\$0.27	\$90	\$16	\$0.80
DRILL	12 FT	30	1	\$2,200		\$8		\$0.26	\$88	\$15	\$3.49
PLANE	14 FT	36	1	\$2,750		\$12		\$0.33	\$110	\$19	\$3.59
FLOAT	14 FT	49	1	\$500		\$2		\$0.05	\$16	\$3	\$0.39
PLOW (MOLDBOARD)	4-16 IN	140	1	\$5,100		\$86		\$0.61	\$204	\$36	\$1.71
LISTER		37	1	\$1,600		\$7		\$0.19	\$64	\$11	\$2.06
SHREDDER	4 ROW	28	1	\$2,500		\$9		\$0.30	\$100	\$17	\$4.13
COTTON TRAILER		146	0	\$0		\$12		\$0.08	\$0	\$0	\$0.00
VEGETABLE TRAILER		36	0	\$0		\$3		\$0.08	\$0	\$0	\$0.00
TWIN RAKE	8 FT	65	1	\$3,400		\$27		\$0.41	\$136	\$24	\$2.46
SLED		24	1	\$375		\$7		\$0.28	\$50	\$3	\$2.15
NATURAL GAS WELL		19,245	7	\$77,000	\$15,402	\$3,849	\$0.80	\$0.20	\$11,000	\$539	\$0.64
				\$264,438	\$23,448	\$15,090			\$21,744	\$2,412	

TABLE 6. Alfalfa establishment, flood-irrigated, budgeted per acre costs and returns for a 500 acre farm with above average management, Artesia-Lake Arthur area, Projected 2004.

Planting dates: September 1 - September 30

ITEM	PRICE	QUANTITY	PURCHASED INPUTS					TOTAL
PURCHASED INPUTS								
SEED	\$2.80	20 LBS						\$56.00
HERBICIDE	\$32.40	1 ACRE						\$32.40
PUMP WATER		8 AC. IN.						
SUBTOTAL								\$88.40
PREHARVEST OPERATIONS								
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
PLOW	145 HP	0.48 HR		\$3.46	\$2.15	\$1.80	\$2.25	\$9.67
DISC (2X)	145 HP	0.34 HR		\$2.45	\$1.53	\$1.16	\$1.28	\$6.42
PLANE (3X)	145 HP	0.57 HR		\$4.10	\$2.56	\$1.98	\$3.74	\$12.39
DISC	145 HP	0.17 HR		\$1.22	\$0.76	\$0.58	\$0.64	\$3.21
FLOAT (2X)	70 HP	0.32 HR		\$2.30	\$1.44	\$0.42	\$1.02	\$5.18
DRILL (2X)	65 HP	0.42 HR		\$3.02	\$1.82	\$0.25	\$1.62	\$6.72
IRRIGATE (2X)		1.00 HR		\$6.60	\$5.80	\$1.45	\$4.66	\$18.50
SUBTOTAL		3.30 HR		\$23.16	\$16.05	\$7.64	\$15.22	\$62.08
OVERHEAD EXPENSES								
DOWNTIME		0.46 HR		\$3.28				\$3.28
EMPLOYEE BENEFITS				\$4.17				\$4.17
INSURANCE			\$0.46					\$0.46
SUPERVISION AND MANAGEMENT				\$12.44				\$12.44
SUBTOTAL		0.46 HR	\$0.46	\$19.89				\$20.35
TOTAL OPERATING EXPENSES		3.76 HR	\$88.86	\$43.05	\$16.05	\$7.64	\$15.22	\$170.82

TABLE 7. Alfalfa hay, flood-irrigated, budgeted per acre costs and returns for a 500 acre farm with above average management, Artesia-Lake Arthur area, Projected 2004.
Harvesting dates: May 5 - November 1

ITEM	PRICE	YIELD						TOTAL	
GROSS RETURNS									
ALFALFA HAY	\$130.00	6.50 TONS (STACKED)						\$845.00	
GRAZING	\$40.00							\$40.00	
TOTAL								\$885.00	
PURCHASED INPUTS									
PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS				FIXED COST	TOTAL	
INSECTICIDE (CUSTOM)	\$25.02	2 X/ACRE	\$50.05					\$50.05	
HERBICIDE (CUSTOM)	\$36.36	1 ACRE	\$36.36					\$36.36	
INSECT SCOUTING	\$5.25	1 ACRE	\$5.25					\$5.25	
FERTILIZER (5-26-30)	\$0.21	200 LBS	\$42.00					\$42.00	
WIRE	\$0.38	56 LBS	\$21.31					\$21.31	
DRYING AGENT (AGRI-DRY)	\$8.26	1 /TON	\$53.66					\$53.66	
ESTABLISHMENT: Principal		5 YEARS					\$34.16	\$34.16	
Interest							\$6.32	\$6.32	
PUMP WATER*		50 AC. IN.							
SUBTOTAL			\$208.63				\$40.49	\$249.12	
PREHARVEST OPERATIONS									
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL	
IRRIGATE (7X)		3.50 HR		\$23.10	\$36.22	\$9.05	\$29.11	\$97.48	
SUBTOTAL		3.50 HR		\$23.10	\$36.22	\$9.05	\$29.11	\$97.48	
HARVEST OPERATIONS									
SWATHER (5X)	16 FT SP	0.55 HR		\$3.96	\$2.47	\$0.46	\$1.25	\$8.14	
RAKE (5X)	40 HP	0.25 HR		\$1.80	\$1.08	\$0.14	\$0.84	\$3.86	
BALER (5X)	96 HP	1.25 HR		\$9.00	\$5.61	\$10.88	\$12.99	\$38.48	
BALE WAGON (5X)	SP	1.00 HR		\$7.20	\$4.34	\$20.37	\$4.01	\$35.92	
SUBTOTAL		3.05 HR		\$21.96	\$13.50	\$31.85	\$19.08	\$86.40	
OVERHEAD EXPENSES									
DOWNTIME		0.70 HR		\$5.04				\$5.04	
EMPLOYEE BENEFITS				\$8.11				\$8.11	
INSURANCE			\$0.90					\$0.90	
LAND TAXES							\$1.75	\$1.75	
SUPERVISION AND MANAGEMENT				\$66.98				\$66.98	
OTHER EXPENSES			\$50.68					\$50.68	
SUBTOTAL		0.70 HR	\$51.58	\$80.13				\$1.75	\$133.46
TOTAL OPERATING EXPENSES		7.25 HR	\$260.22	\$125.19	\$49.72	\$40.90	\$90.43	\$566.46	
NET OPERATING PROFIT								\$318.54	
INTEREST ON OPERATING CAPITAL		(\$119.41 @ 6.50%)						\$7.76	
INTEREST ON EQUIPMENT INVESTMENT								\$28.08	
RETURN TO LAND AND RISK								\$282.71	

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

BUDGET SUMMARY

GROSS RETURN		\$885.00	
VARIABLE OPERATING EXPENSES	\$350.84		
RETURN OVER VARIABLE EXPENSES		\$534.16	(GROSS MARGIN)
FIXED EXPENSES	\$90.43		
NET FARM INCOME		\$443.73	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$125.19		
NET OPERATING PROFIT		\$318.54	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$35.84		
RETURN TO LAND AND RISK		\$282.71	

TABLE 8. Barley, flood-irrigated, budgeted per acre costs and returns for a 500 acre farm with above average management, Artesia-Lake Arthur area, Projected 2004.

Planting dates: August 20 - September 30

Harvesting dates: June 15 - July 1

ITEM	PRICE	YIELD	TOTAL
GROSS RETURNS			
BARLEY	\$3.50	35.00 CWT	\$122.50
DIRECT PAYMENT	\$0.28	35.00 CWT	\$9.80
COUNTER CYCLICAL PAYMENT	\$0.00		\$0.00
GRAZING	\$40.00		\$40.00
TOTAL			\$172.30

PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS	TOTAL
SEED	\$0.25	110 LBS	\$27.50	\$27.50
NITROGEN (N)	\$0.32	150 LBS	\$48.00	\$48.00
INSECTICIDE (CUSTOM)	\$20.01	1 ACRE	\$20.01	\$20.01
PUMP WATER*		28 AC. IN.		
CROP INSURANCE	\$2.94		\$2.94	\$2.94
SUBTOTAL			\$98.45	\$98.45

PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
FLOW	145 HP	0.48 HR		\$3.46	\$2.15	\$1.80	\$2.25	\$9.67
DISC	145 HP	0.17 HR		\$1.22	\$0.76	\$0.58	\$0.64	\$3.21
FLOAT	70 HP	0.16 HR		\$1.15	\$0.72	\$0.21	\$0.51	\$2.59
FERTILIZE	DEALER APPLIED							
DRILL	70 HP	0.21 HR		\$1.51	\$0.94	\$0.32	\$1.32	\$4.10
IRRIGATE (4X)		2.00 HR		\$13.20	\$20.28	\$5.07	\$16.30	\$54.85
SUBTOTAL		3.02 HR		\$20.54	\$24.86	\$7.98	\$21.02	\$74.41

HARVEST OPERATIONS				
COMBINE (CUSTOM)			\$17.91	\$17.91
HAUL (CUSTOM)			\$7.00	\$7.00
SUBTOTAL			\$24.91	\$24.91

OVERHEAD EXPENSES				
DOWNTIME		0.22 HR	\$1.55	\$1.55
EMPLOYEE BENEFITS			\$3.70	\$3.70
INSURANCE			\$0.41	\$0.41
LAND TAXES				\$1.75
SUPERVISION AND MANAGEMENT			\$14.49	\$14.49
OTHER EXPENSES			\$50.68	\$50.68
SUBTOTAL		0.22 HR	\$51.09	\$72.58

TOTAL OPERATING EXPENSES 3.24 HR \$174.45 \$40.28 \$24.86 \$7.98 \$22.77 \$270.35

NET OPERATING PROFIT (\$98.05)

INTEREST ON OPERATING CAPITAL (\$59.51 @ 6.50%) \$3.87

INTEREST ON EQUIPMENT INVESTMENT \$7.47

RETURN TO LAND AND RISK (\$109.39)

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

BUDGET SUMMARY

GROSS RETURN		\$172.30	
VARIABLE OPERATING EXPENSES	\$207.29		
RETURN OVER VARIABLE EXPENSES		(\$34.99)	(GROSS MARGIN)
FIXED EXPENSES	\$22.77		
NET FARM INCOME		(\$57.77)	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$40.28		
NET OPERATING PROFIT		(\$98.05)	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$11.34		
RETURN TO LAND AND RISK		(\$109.39)	

TABLE 9. Oat hay, flood-irrigated, budgeted per acre costs and returns for a 500 acre farm with above average management, Artesia-Lake Arthur area, Projected 2004.
Planting dates: February 1 - February 28
Harvesting dates: June 1 - June 30

ITEM	PRICE	YIELD							TOTAL
GROSS RETURNS									
OAT HAY	\$120.00	3.50 TONS (STACKED)							\$420.00
TOTAL								\$420.00	
PURCHASED INPUTS									
	PRICE	QUANTITY	PURCHASED INPUTS						TOTAL
SEED	\$0.30	100 LBS	\$30.00						\$30.00
FERTILIZER (16-20-0)	\$0.17	150 LBS	\$25.50						\$25.50
PUMP WATER*		28 AC. IN.							
SUBTOTAL			\$55.50						\$55.50
PREHARVEST OPERATIONS									
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL	
PLOW	145 HP	0.48 HR		\$3.46	\$2.15	\$1.80	\$2.25	\$9.67	
DISC	145 HP	0.34 HR		\$2.45	\$1.53	\$1.16	\$1.28	\$6.42	
FLOAT	70 HP	0.16 HR		\$1.15	\$0.72	\$0.21	\$0.51	\$2.59	
FERTILIZE (CUSTOM)			\$0.00					\$0.00	
DRILL	70 HP	0.21 HR		\$1.51	\$0.94	\$0.32	\$1.32	\$4.10	
IRRIGATE (4X)		2.00 HR		\$13.20	\$20.28	\$5.07	\$16.30	\$54.85	
SUBTOTAL		3.19 HR		\$21.77	\$25.62	\$8.57	\$21.67	\$77.62	
HARVEST OPERATIONS									
SWATHER	16 FT	0.11 HR		\$0.79	\$0.49	\$0.09	\$0.25	\$1.63	
BALER	126 HP	0.25 HR		\$1.80	\$1.12	\$2.09	\$2.30	\$7.31	
BALE WAGON	S. P.	0.20 HR		\$1.44	\$0.87	\$4.07	\$0.80	\$7.18	
SUBTOTAL		0.56 HR		\$4.03	\$2.48	\$6.26	\$3.35	\$16.12	
OVERHEAD EXPENSES									
DOWNTIME		0.40 HR		\$2.86				\$2.86	
EMPLOYEE BENEFITS				\$4.64				\$4.64	
INSURANCE			\$0.52					\$0.52	
LAND TAXES							\$1.75	\$1.75	
SUPERVISION AND MANAGEMENT				\$32.28				\$32.28	
OTHER EXPENSES			\$50.68					\$50.68	
SUBTOTAL		0.40 HR		\$51.20	\$39.78		\$1.75	\$92.73	
TOTAL OPERATING EXPENSES		4.15 HR		\$106.70	\$65.58	\$28.11	\$14.83	\$241.97	
NET OPERATING PROFIT								\$178.03	
INTEREST ON OPERATING CAPITAL		(\$37.03	@	6.50%)		\$2.41	
INTEREST ON EQUIPMENT INVESTMENT								\$12.99	
RETURN TO LAND AND RISK								\$162.63	

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

BUDGET SUMMARY

GROSS RETURN		\$420.00	
VARIABLE OPERATING EXPENSES	\$149.63		
RETURN OVER VARIABLE EXPENSES		\$270.37	(GROSS MARGIN)
FIXED EXPENSES	\$26.76		
NET FARM INCOME		\$243.61	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$65.58		
NET OPERATING PROFIT		\$178.03	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$15.40		
RETURN TO LAND AND RISK		\$162.63	

TABLE 10. Upland cotton (picker), flood-irrigated, budgeted per acre costs and returns for a 500 acre farm with above average management, Artesia-Lake Arthur area, 2002.
Planting dates: April 15 - May 15
Harvesting dates: October 15 - January 15

ITEM	PRICE	YIELD						TOTAL
GROSS RETURNS								
COTTON LINT	\$0.550	1,000 LBS						\$550.00
COTTON SEED	\$0.075	1,600 LBS						\$120.00
DIRECT PAYMENT	\$0.067	1,000 LBS						\$66.70
COUNTER CYCLICAL PAYMENT	\$0.087	1,000 LBS						\$87.30
TOTAL								\$824.00
PURCHASED INPUTS								
PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS					TOTAL
SEED	\$0.68	15 LBS	\$10.20					\$10.20
FOLIAR FERTILIZER	\$4.80	1 X/ACRE	\$4.80					\$4.80
INSECT SCOUTING	\$5.25	1 ACRE	\$5.25					\$5.25
HERBICIDE (CUSTOM)	\$80.91	1 X/ACRE	\$80.91					\$80.91
INSECTICIDE (CUSTOM)	\$31.56	3 X/ACRE	\$31.56					\$31.56
CROP INSURANCE		FCIC	\$0.53					\$0.53
PUMP WATER*		30 AC. IN.						
SUBTOTAL			\$133.25					\$133.25
PREHARVEST OPERATIONS								
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DISC	145 HP	0.17 HR		\$1.22	\$0.76	\$0.58	\$0.64	\$3.21
PLOW	145 HP	0.48 HR		\$3.46	\$2.15	\$1.80	\$2.25	\$9.67
DISC (2X)	145 HP	0.34 HR		\$2.45	\$1.53	\$1.16	\$1.28	\$6.42
FLOAT	145 HP	0.16 HR		\$1.15	\$0.72	\$0.51	\$0.54	\$2.92
LISTER	145 HP	0.18 HR		\$1.30	\$0.81	\$0.60	\$0.91	\$3.61
PRE-IRRIGATE		0.75 HR		\$4.95	\$5.43	\$1.36	\$4.37	\$16.11
CULTIVATOR	65 HP	0.21 HR		\$1.51	\$0.91	\$0.28	\$0.16	\$2.86
PLANTER	70 HP	0.26 HR		\$1.87	\$1.17	\$0.44	\$1.56	\$5.04
SLED	70 HP	0.15 HR		\$1.08	\$0.67	\$0.23	\$0.74	\$2.73
CULTIVATOR (3X)	65 HP	0.63 HR		\$4.54	\$2.73	\$0.84	\$0.47	\$8.57
HAND HOE (CUSTOM)			\$20.00					\$20.00
IRRIGATE (3X)		1.50 HR		\$9.90	\$16.30	\$4.07	\$13.10	\$43.37
SUBTOTAL		4.83 HR	\$20.00	\$33.43	\$33.19	\$11.88	\$26.01	\$124.50
HARVEST OPERATIONS								
COTTON PICKER (2X)	2-ROW	0.74 HR		\$5.33	\$3.32	\$8.30	\$46.25	\$63.21
HAUL (2X)	65 HP	1.00 HR		\$7.20	\$4.34	\$0.41	\$0.36	\$12.32
GIN COTTON (CUSTOM)			\$149.00					\$149.00
SUBTOTAL		1.74 HR	\$149.00	\$12.53	\$7.66	\$8.72	\$46.62	\$224.52
POSTHARVEST OPERATIONS								
SHREDDER	70 HP	0.14 HR		\$1.01	\$0.63	\$0.22	\$0.97	\$2.83
SUBTOTAL		0.14 HR		\$1.01	\$0.63	\$0.22	\$0.97	\$2.83
OVERHEAD EXPENSES								
DOWNTIME		0.95 HR		\$6.82				\$6.82
EMPLOYEE BENEFITS				\$8.45				\$8.45
INSURANCE			\$0.94					\$0.94
LAND TAXES						\$1.75		\$1.75
SUPERVISION AND MANAGEMENT				\$61.83				\$61.83
OTHER EXPENSES			\$50.68					\$50.68
SUBTOTAL		0.95 HR	\$51.62	\$77.10			\$1.75	\$130.47
TOTAL OPERATING EXPENSES		7.66 HR	\$353.87	\$124.06	\$41.47	\$20.81	\$75.35	\$615.57
NET OPERATING PROFIT								\$208.43
INTEREST ON OPERATING CAPITAL		(\$79.47 @	6.50%)				\$5.17
INTEREST ON EQUIPMENT INVESTMENT								\$78.66
RETURN TO LAND AND RISK								\$124.60

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

BUDGET SUMMARY

GROSS RETURN		\$824.00	
VARIABLE OPERATING EXPENSES	\$416.15		
RETURN OVER VARIABLE EXPENSES		\$407.85	(GROSS MARGIN)
FIXED EXPENSES	\$75.35		
NET FARM INCOME		\$332.50	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$124.06		
NET OPERATING PROFIT		\$208.43	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$83.83		
RETURN TO LAND AND RISK		\$124.60	

TABLE 11. Upland cotton (stripper), flood-irrigated, budgeted per acre costs and returns for a 500 acre farm with above average management, Artesia-Lake Arthur area, Projected 2004.

Planting dates: April 15 - May 15
Harvesting dates: October 15 - January 15

ITEM	PRICE	YIELD						TOTAL
GROSS RETURNS								
COTTON LINT	\$0.500	1,000 LBS						\$500.00
COTTON SEED	\$0.075	1,600 LBS						\$120.00
DIRECT PAYMENT	\$0.067	1,000 LBS						\$66.70
COUNTER CYCLICAL PAYMENT	\$0.137	1,000 LBS						\$137.30
TOTAL								\$824.00
PURCHASED INPUTS								
PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS					TOTAL
SEED	\$0.68	20 LBS	\$13.60					\$13.60
FOLIAR FERTILIZER	\$4.80	1 X/ACRE	\$4.80					\$4.80
INSECT SCOUTING	\$5.25	1 ACRE	\$5.25					\$5.25
HERBICIDE (CUSTOM)	\$45.34	1 X/ACRE	\$45.34					\$45.34
INSECTICIDE (CUSTOM)	\$33.18	3 X/ACRE	\$33.18					\$33.18
CROP INSURANCE		FCIC	\$0.74					\$0.74
PUMP WATER*		30 AC. IN.	\$0.00					\$0.00
CROP INSURANCE	\$0.00		\$0.00					\$0.00
SUBTOTAL			\$102.90					\$102.90
PREHARVEST OPERATIONS								
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DISC	145 HP	0.17 HR		\$1.22	\$0.76	\$0.58	\$0.64	\$3.21
PLOW	145 HP	0.48 HR		\$3.46	\$2.15	\$1.80	\$2.25	\$9.67
DISC (2X)	145 HP	0.34 HR		\$2.45	\$1.53	\$1.16	\$1.28	\$6.42
FLOAT	145 HP	0.16 HR		\$1.15	\$0.72	\$0.51	\$0.54	\$2.92
LIST	145 HP	0.18 HR		\$1.30	\$0.81	\$0.60	\$0.91	\$3.61
PRE-IRRIGATE		0.75 HR		\$4.95	\$5.43	\$1.36	\$4.37	\$16.11
CULTIVATOR	65 HP	0.21 HR		\$1.51	\$0.91	\$0.28	\$0.16	\$2.86
PLANTER	70 HP	0.26 HR		\$1.87	\$1.17	\$0.44	\$1.56	\$5.04
SLED	70 HP	0.15 HR		\$1.08	\$0.67	\$0.23	\$0.74	\$2.73
CULTIVATOR (3X)	65 HP	0.63 HR		\$4.54	\$2.73	\$0.84	\$0.47	\$8.57
HAND HOE (CUSTOM)			\$20.00					\$20.00
IRRIGATE (3X)		1.50 HR		\$9.90	\$16.30	\$4.07	\$13.10	\$43.37
SUBTOTAL		4.83 HR	\$20.00	\$33.43	\$33.19	\$11.88	\$26.01	\$124.50
HARVEST OPERATIONS								
COTTON STRIPPER	70 HP	0.62 HR		\$4.46	\$2.78	\$1.21	\$5.70	\$14.16
HAUL	65 HP	0.75 HR		\$5.40	\$3.25	\$0.31	\$0.27	\$9.24
GIN COTTON (CUSTOM)			\$192.70					\$192.70
SUBTOTAL		1.37 HR	\$192.70	\$9.86	\$6.04	\$1.53	\$5.98	\$216.10
POSTHARVEST OPERATIONS								
SHREDDER	70 HP	0.14 HR		\$0.14	\$0.63	\$0.22	\$0.97	\$1.96
SUBTOTAL		0.14 HR		\$0.14	\$0.63	\$0.22	\$0.97	\$1.96
OVERHEAD EXPENSES								
DOWNTIME		0.89 HR		\$6.43				\$6.43
EMPLOYEE BENEFITS				\$7.82				\$7.82
INSURANCE			\$0.87					\$0.87
LAND TAXES						\$1.75		\$1.75
SUPERVISION AND MANAGEMENT				\$60.89				\$60.89
OTHER EXPENSES			\$50.68					\$50.68
SUBTOTAL		0.89 HR	\$51.55	\$75.13		\$1.75		\$128.43
TOTAL OPERATING EXPENSES		7.23 HR	\$367.15	\$118.56	\$39.85	\$13.62	\$34.71	\$573.89
NET OPERATING PROFIT								\$250.11
INTEREST ON OPERATING CAPITAL		(\$63.56 @ 6.50%)						\$4.13
INTEREST ON EQUIPMENT INVESTMENT								\$22.38
RETURN TO LAND AND RISK								\$223.60
* Pump water costs are shown under irrigation in the preharvest operation section.								
BUDGET SUMMARY								
GROSS RETURN			\$824.00					
VARIABLE OPERATING EXPENSES	\$420.62							
RETURN OVER VARIABLE EXPENSES	\$403.38	(GROSS MARGIN)						
FIXED EXPENSES	\$34.71							
NET FARM INCOME	\$368.67	(RETURN TO CAPITAL, LABOR, LAND & RISK)						
LABOR AND MANAGEMENT COST	\$118.56							
NET OPERATING PROFIT	\$250.11	(RETURN TO CAPITAL, LAND & RISK)						
CAPITAL COSTS	\$26.51							
RETURN TO LAND AND RISK			\$223.60					

TABLE 12. Red chile, flood-irrigated, budgeted per acre costs and returns for a 500 acre farm with above average management, Artesia-Lake Arthur area, Projected 2004.

Planting dates: April 1 - April 15
Harvesting dates: September 1 - October 30

ITEM	PRICE	YIELD						TOTAL
GROSS RETURNS								
RED CHILE	\$0.69	3,500 LBS						\$2,415.00
TOTAL							\$2,415.00	
PURCHASED INPUTS								
PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS					TOTAL
SEED	\$19.00	8 LBS	\$152.00					\$152.00
NITROGEN (N)	\$0.32	120 LBS	\$38.40					\$38.40
PHOSPHATE (P205)	\$0.30	70 LBS	\$21.00					\$21.00
HERBICIDE (CUSTOM)	\$34.59	1 X/ACRE	\$34.59					\$34.59
INSECTICIDE (CUSTOM)	\$40.88	3 X/ACRE	\$40.88					\$40.88
CROP INSURANCE		400 DOLLARS	\$20.00					\$20.00
NOVA CHEMICAL APPLICATION	\$4.30	0 AI OZ PER ACRE	\$0.00					\$0.00
PUMP WATER*		48 AC. IN.						
SUBTOTAL			\$306.87					\$306.87
PREHARVEST OPERATIONS								
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
PLOW	145 HP	0.48 HR		\$3.46	\$2.15	\$1.80	\$2.25	\$9.67
DISC (2X)	145 HP	0.34 HR		\$2.45	\$1.53	\$1.16	\$1.28	\$6.42
PLANE	145 HP	0.16 HR		\$1.15	\$0.72	\$0.56	\$1.05	\$3.48
FERTILIZE	DEALER APPLIED							
LIST	145 HP	0.18 HR		\$1.30	\$0.81	\$0.60	\$0.91	\$3.61
PRE-IRRIGATE		0.75 HR		\$4.95	\$4.35	\$1.09	\$3.49	\$13.88
CULTIVATOR	65 HP	0.21 HR		\$1.51	\$0.91	\$0.28	\$0.16	\$2.86
PLANTER	70 HP	0.26 HR		\$1.87	\$1.17	\$0.44	\$1.56	\$5.04
CULTIVATOR (5X)	65 HP	1.05 HR		\$7.56	\$4.56	\$1.39	\$0.78	\$14.29
THIN (CUSTOM)			\$45.00					\$45.00
IRRIGATE (7X)		3.50 HR		\$23.10	\$30.42	\$7.60	\$24.45	\$85.58
HAND HOE (CUSTOM)			\$20.00					\$20.00
CHEMICAL APPLICATION (CUSTOM)			\$0.00					\$0.00
SUBTOTAL		6.93 HR	\$65.00	\$47.35	\$46.61	\$14.93	\$35.93	\$209.81
HARVEST OPERATIONS								
HAND PICK (CUSTOM)			\$700.00					\$700.00
FIELD HAUL	145 HP	0.90 HR		\$6.48	\$4.04	\$2.91	\$2.68	\$16.11
HAUL (CUSTOM)			\$105.00					\$105.00
SUBTOTAL		0.90 HR	\$805.00	\$6.48	\$4.04	\$2.91	\$2.68	\$821.11
POSTHARVEST OPERATIONS								
SHREDDER	70 HP	0.14 HR		\$1.01	\$0.63	\$0.22	\$0.97	\$2.83
SUBTOTAL		0.14 HR		\$1.01	\$0.63	\$0.22	\$0.97	\$2.83
OVERHEAD EXPENSES								
DOWNTIME		0.93 HR		\$6.70				\$6.70
EMPLOYEE BENEFITS				\$9.87				\$9.87
INSURANCE			\$1.10					\$1.10
LAND TAXES						\$1.75		\$1.75
SUPERVISION AND MANAGEMENT				\$175.16				\$175.16
OTHER EXPENSES			\$50.68					\$50.68
SUBTOTAL		0.93 HR	\$51.78	\$191.73			\$1.75	\$245.25
TOTAL OPERATING EXPENSES		8.90 HR	\$1,228.65	\$246.56	\$51.28	\$18.05	\$41.34	\$1,585.87
NET OPERATING PROFIT							\$829.13	
INTEREST ON OPERATING CAPITAL		(\$169.61 @	6.50%)				\$11.02
INTEREST ON EQUIPMENT INVESTMENT								\$17.72
RETURN TO LAND AND RISK							\$800.39	

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

BUDGET SUMMARY

GROSS RETURN		\$2,415.00	
VARIABLE OPERATING EXPENSES	#####		
RETURN OVER VARIABLE EXPENSES		\$1,117.03	(GROSS MARGIN)
FIXED EXPENSES	\$41.34		
NET FARM INCOME		\$1,075.69	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$246.56		
NET OPERATING PROFIT		\$829.13	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$28.74		
RETURN TO LAND AND RISK		\$800.39	

TABLE 13. Summary of per acre costs and returns for a 500 acre farm with above average management, Artesia-Lake Arthur area, Projected 2004.

	ALFALFA ESTABLISHMENT	ALFALFA HAY	BARLEY	OAT HAY	PICKER COTTON	STRIPPER COTTON	RED CHILE
		TONS	CWT	TONS	LBS	LBS	LBS
PRIMARY YIELD		130.00	35.00	3.50	1000.00	1000.00	3500.00
PRIMARY PRICE		\$130.00	\$3.50	\$120.00	\$0.55	\$0.50	\$0.69
GOVERNMENT PAYMENTS		\$0.00	\$9.80	\$0.00	\$154.00	\$204.00	\$0.00
SECOND INCOME		\$40.00	\$40.00	\$0.00	\$120.00	\$120.00	\$0.00
GROSS RETURN		\$885.00	\$172.30	\$420.00	\$824.00	\$824.00	\$2,415.00
CASH OPERATING EXPENSES							
SEED	\$56.00		\$27.50	\$30.00	\$10.20	\$13.60	\$152.00
FERTILIZER		\$42.00	\$48.00	\$25.50	\$4.80	\$4.80	\$59.40
CHEMICALS	\$32.40	\$86.41	\$20.01		\$117.72	\$83.76	\$75.47
CROP INSURANCE			\$2.94		\$0.53	\$0.74	\$20.00
OTHER PURCHASED INPUTS		\$80.22					
CANAL WATER							
FUEL, OIL & LUBRICANTS-EQUIPMENT	\$10.26	\$13.50	\$4.58	\$7.82	\$19.74	\$18.12	\$16.51
FUEL-IRRIGATION	\$5.80	\$36.22	\$20.28	\$20.28	\$21.73	\$21.73	\$34.77
REPAIRS	\$7.64	\$40.90	\$7.98	\$14.83	\$20.81	\$13.62	\$18.05
CUSTOM CHARGES			\$24.91		\$169.00	\$212.70	\$870.00
LAND TAXES		\$1.75	\$1.75	\$1.75	\$1.75	\$1.75	\$1.75
OTHER EXPENSES	\$0.46	\$51.58	\$51.09	\$51.20	\$51.62	\$51.55	\$51.78
TOTAL CASH EXPENSES	\$112.56	\$352.59	\$209.04	\$151.38	\$417.90	\$422.37	\$1,299.72
RETURN OVER CASH EXPENSES	(\$112.56)	\$532.41	(\$36.74)	\$268.62	\$406.10	\$401.63	\$1,115.28
FIXED EXPENSES	\$15.22	\$88.68	\$21.02	\$25.01	\$73.60	\$32.96	\$39.59
TOTAL EXPENSES	\$127.78	\$441.27	\$230.07	\$176.39	\$491.50	\$455.33	\$1,339.31
NET FARM INCOME	(\$127.78)	\$443.73	(\$57.77)	\$243.61	\$332.50	\$368.67	\$1,075.69
LABOR AND MANAGEMENT COSTS	\$43.05	\$125.19	\$40.28	\$65.58	\$124.06	\$118.56	\$246.56
NET OPERATING PROFIT	(\$170.82)	\$318.54	(\$98.05)	\$178.03	\$208.43	\$250.11	\$829.13
CAPITAL COSTS							
INTEREST ON OPERATING CAPITAL		\$7.76	\$3.87	\$2.41	\$5.17	\$4.13	\$11.02
INTEREST ON EQUIPMENT INVESTMENT		\$28.08	\$7.47	\$12.99	\$78.66	\$22.38	\$17.72
TOTAL CAPITAL COSTS	\$0.00	\$35.84	\$11.34	\$15.40	\$83.83	\$26.51	\$28.74
RETURN TO LAND AND RISK	(\$170.82)	\$282.71	(\$109.39)	\$162.63	\$124.60	\$223.60	\$800.39

TABLE 14. Whole farm summary, Artesia-Lake Arthur area,
Projected 2004.

GROSS RETURNS		
ALFALFA HAY	260 ACRES	
CROP		\$230,100
BARLEY	17 ACRES	
CROP		\$2,763
DIRECT PAYMENT		\$167
COUNTER CYCLICAL PAYMENT		\$0
OAT HAY	20 ACRES	
CROP		\$8,400
PICKER COTTON	95 ACRES	
COTTON LINT		\$52,250
COTTON SEED		\$11,400
DIRECT PAYMENT		\$4,536
COUNTER CYCLICAL PAYMENT		\$8,294
STRIPPER COTTON	68 ACRES	
COTTON LINT		\$34,000
COTTON SEED		\$8,160
DIRECT PAYMENT		\$4,536
COUNTER CYCLICAL PAYMENT		\$9,336
RED CHILE	40 ACRES	
CROP		\$96,600
GROSS RETURN		<u>\$470,540</u>
CASH OPERATING EXPENSES		
SEED		\$11,953
FERTILIZER		\$15,404
CHEMICALS		\$44,390
CROP INSURANCE		\$950
OTHER PURCHASED INPUTS		\$20,858
CANAL WATER		\$0
FUEL, OIL & LUBRICANTS-EQUIPMENT		\$8,046
FUEL-IRRIGATION		\$15,402
REPAIRS		\$15,090
CUSTOM CHARGES		\$65,742
LAND TAXES		\$875
OTHER EXPENSES		\$25,808
TOTAL CASH EXPENSES		<u>\$224,518</u>
RETURN OVER CASH EXPENSES		\$246,022
FIXED EXPENSES		\$26,640
TOTAL EXPENSES		\$251,158
NET FARM INCOME		\$219,382
LABOR AND MANAGEMENT COSTS		\$66,494
NET OPERATING PROFIT		\$152,888
CAPITAL COSTS		
INTEREST ON OPERATING CAPITAL		\$3,345
INTEREST ON EQUIPMENT INVESTMENT		\$17,390
TOTAL CAPITAL COSTS		<u>\$20,734</u>
RETURN TO LAND AND RISK		<u>\$132,154</u>

LAND VALUE	RETURN TO RISK*	RETURN ON INVESTMENT**
\$1,000 /ACRE	\$112,154	20.00%
\$2,500 /ACRE	\$82,154	10.10%
\$4,000 /ACRE	\$52,154	6.75%
\$5,500 /ACRE	\$22,154	5.07%

* 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)