

TABLE 1. Basic cost information for the Artesia-Lake Arthur area, 2003.

Item		
Labor Wage Rate:		
Equipment operators	\$/hour	\$7.30
General & Irrigators	\$/hour	\$6.70
Purchased Inputs:		
Fertilizer:		
Nitrogen (N)	\$/pound	\$0.36
Phosphate (P205)	\$/pound	\$0.33
Seed:		
Alfalfa	\$/pound	\$3.00
Cotton picker	\$/pound	\$0.56
stripper	\$/pound	\$0.51
Oats	\$/pound	\$0.40
Barley	\$/pound	\$0.30
Wire:	\$/lb.	\$0.38
Natural gas	\$/MCF	\$3.28
(service charge)	\$/month	\$10.00
Diesel fuel	\$/gallon	\$1.30
Gasoline	\$/gallon	\$1.35
Electricity	cents/KwHr	3.64
LP Gas	\$/gallon	\$0.86
Employee Liability Insurance	\$/wages	20.00
Employee Benefits	percent/w ages	18.00%
Labor Downtime	percent	25.00%
Financial Rates:		
Operating Capital Interest Rate	percent	8.00%
Land Interest Rate	percent	7.00%
Equipment Interest Rate	percent	8.00%
Real Interest Rate	percent	4.00%
Land Taxes	\$217.50 /acre (full value)	\$1.75
Personal Property Tax Rate - NR	\$/ \$1,000 (Assessed Value)	\$24.18
- R		\$20.02
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%

BUDGET AREA..... ARTESIA-LAKE ARTHUR AREA, 2003.
 FARM SIZE 500 ACRES
 IRRIGATION TYPE..... SPRINKLER
 NUMBER OF CROPS... 6

ACREAGE SUMMARY:	LAND USE (ACRES)	WATER USE	
		AC.IN. PER AC.	TOTAL AC.IN.
ALFALFA ESTABLISHMENT	57.00	42	2,394
ALFALFA	285.00	48	13,680
BARLEY	8.50	28	238
ARP	0.00		
FLEX IN PICKER COTTON	1.50	28	42
OAT HAY	8.00	28	224
PICKER COTTON	59.50	28	1,666
ARP	0.00		
FLEX IN PICKER COTTON	10.50	28	294
STRIPPER COTTON	59.50	28	1,666
ARP	0.00		
FLEX IN PICKER COTTON	10.50	28	294
TOTAL	500.00		20,498
ACRE FEE PER ACRE OF WATER RIGHTS			3.42

TABLE 1a. Overhead cost information for the Artesia-Lake Arthur area, 2003.

ITEM		
Electricity (Domestic & Shop)	\$215.00 per month	\$2,580
Telephone	\$115.00 per month	\$1,380
Accounting & Legal		\$1,480
Misc. Supplies & Hand Tools		\$2,275
Pickup and Auto		
miles 20,000 @ \$0.365 per mile		\$7,300
Insurance		
- general liability (non-employee)		\$165
- fire/theft		\$1,360
Property Taxes		
- non-planted land		\$0
- other than land & machinery		\$610
Building repairs and maintenance		\$1,345
Dues, fees, publications		\$400
Farmstead Equipment		\$170
Total		\$19,064
Total Per Planted Acre		\$43.03

TABLE 2. Pumping costs and data for irrigation wells, Artesia-Lake Arthur area, 2003.

INPUT DATA							
DELIVERY PSI:		DEPTH CHARACTERISTICS:		DELIVERY PSI:			
SPRINKLER HEAD..	40	STATIC.....	60	BOOSTER PUMP..	45		
		DRAW DOV.....	20				
		TOTAL HEAD.....	80				
		CASING.....	250				
GALLONS PER MINUTE (GPM)...	500			GALLONS PER MINUTE (GPM)...	500		
WORK HORSEPOWER	10			WORK HORSEPOWER	6		
EFFICIENCY FACTOR:				EFFICIENCY FACTOR:			
ELECTRICITY.....	0.470			ELECTRICITY.....	0.470		
NATURAL GAS.....	0.120			NATURAL GAS.....	0.120		
LP GAS.....	0.120			LP GAS.....	0.120		
DIESEL.....	0.160			DIESEL.....	0.160		
FUEL COST PER UNIT :				FUEL COST PER HOUR:			
ELECTRICITY.....	0.00	CENTS/K	wHr	ELECTRICITY.....	0.00	CENTS/K	wHr
NATURAL GAS.....	\$0.00	\$/MCF		NATURAL GAS.....	\$0.00	\$/MCF	
LP GAS.....	\$0.00	\$/GAL		LP GAS.....	\$0.00	\$/GAL	
DIESEL.....	\$0.00	\$/GAL		DIESEL.....	\$0.00	\$/GAL	
<u>TOTAL FUEL COSTS:</u>				<u>TOTAL FUEL COSTS (BOOSTER PUMP):</u>			
ELECTRIC WELL:				ELECTRIC:			
	COST PER HOUR.....	\$	\$0.03		COST PER HOUR.....	\$	\$0.03
	COST PER ACRE INCF	\$	\$0.03		COST PER ACRE INCF	\$	\$0.03
NATURAL GAS WELL:				NATURAL GAS:			
	COST PER HOUR.....	\$	\$0.03		COST PER HOUR.....	\$	\$0.03
	COST PER ACRE INCF	\$	\$0.03		COST PER ACRE INCF	\$	\$0.03
LP GAS WELL:				LP GAS:			
	COST PER HOUR.....	\$	\$0.03		COST PER HOUR.....	\$	\$0.03
	COST PER ACRE INCF	\$	\$0.03		COST PER ACRE INCF	\$	\$0.03
DIESEL WELL:				DIESEL:			
	COST PER HOUR.....	\$	\$0.03		COST PER HOUR.....	\$	\$0.03
	COST PER ACRE INCF	\$	\$0.03		COST PER ACRE INCF	\$	\$0.03

TABLE 3. Equipment summary for a 500 acre sprinkler-irrigated farm with above average management, Artesia-Lake Arthur area, 2003.

EQUIPMENT		ANNUAL HOURS OF USE	NUMBER	VARIABLE COSTS					FIXED COSTS		
ITEM &	SIZE			TOTAL VALUE	FUEL AND LUBRICANT	REPAIR	FUEL,LUBE PER HR	REPAIR PER HR	DEPRECIATION	TAXES	TOTAL PER HOUR
TRACTOR 40 HP		74	1	\$1,600	\$299	\$15	\$4.04	\$0.21	\$50	\$10	\$0.81
TRACTOR 65 HP		245	1	\$2,400	\$1,611	\$275	\$6.56	\$1.12	\$138	\$22	\$0.65
TRACTOR 70 HP		169	1	\$6,790	\$814	\$294	\$4.80	\$1.73	\$705	\$85	\$4.66
TRACTOR 96 HP		356	1	\$19,240	\$3,291	\$1,651	\$9.24	\$4.63	\$1,430	\$173	\$4.50
TRACTOR 145 HP		310	1	\$31,475	\$3,639	\$1,774	\$11.74	\$5.72	\$4,652	\$281	\$15.92
COTTON PICKER 4-ROW		61	1	\$62,940	\$477	\$2,610	\$7.86	\$43.01	\$9,350	\$754	\$166.51
COTTON STRIPPER MTD		37	1	\$2,520		\$110		\$2.99	\$767	\$46	\$22.04
SWATHER 16 FT		177	1	\$24,740	\$861	\$1,665	\$4.87	\$9.41	\$3,621	\$292	\$22.12
BALE WAGON S.P.		321	1	\$13,230	\$3,357	\$7,159	\$10.47	\$22.32	\$2,250	\$181	\$7.58
BALER PTO		401	2	\$8,200		\$1,169		\$2.92	\$1,100	\$89	\$2.96
PLANTER 4-ROW		37	1	\$3,400		\$200		\$5.44	\$680	\$27	\$19.23
CULTIVATOR 4-ROW		119	1	\$1,500		\$100		\$0.84	\$200	\$12	\$1.78
DISC 12 FT		107	1	\$2,250		\$137		\$1.28	\$300	\$18	\$2.98
DRILL 12 FT		27	1	\$2,200		\$86		\$3.12	\$440	\$18	\$16.70
PLANE 14 FT		32	1	\$2,750		\$18		\$0.55	\$367	\$22	\$11.97
FLOAT 14 FT		50	1	\$600		\$7		\$0.14	\$60	\$4	\$1.27
PLOW (MOLDBOARD) 4-16 IN		103	1	\$4,000		\$235		\$2.28	\$533	\$32	\$5.48
SHREDDER 4-ROW		20	1	\$2,500		\$23		\$1.15	\$333	\$20	\$17.84
COTTON TRAILER		127	5	\$6,000		\$27		\$0.22	\$800	\$48	\$6.70
RAKE 8 FT		74	1	\$3,400		\$232		\$3.13	\$340	\$27	\$4.96
SLED		21	1	\$375		\$6		\$0.29	\$50	\$3	\$2.50
NATURAL GAS BOOSTER PUMP		18553	3	\$7,500	\$9,009	\$3,469	\$0.49	\$0.19	\$1,000	\$60	\$0.06
SIDE-ROLL SPRINKLER		18553	13	\$32,500		\$872		\$0.05	\$4,333	\$262	\$0.25
NATURAL GAS WELL		18553	11	\$121,000	\$14,849	\$3,711	\$0.80	\$0.20	\$11,000	\$975	\$0.72
				\$363,110	\$38,207	\$25,845			\$44,499	\$3,463	

TABLE 4. Alfalfa establishment, sprinkler-irrigated, budgeted per acre costs and returns for a 500 acre farm with above average management, Artesia-Lake Arthur area, 2003.
Planting dates: March 15 - April 30

ITEM	PRICE	YIELD						TOTAL
GROSS RETURNS								
ALFALFA HAY	\$120.00	4.50 TONS (STACKED)						\$540.00
TOTAL								\$540.00
<u>PURCHASED INPUTS</u>								
	PRICE	QUANTITY	PURCHASED INPUTS				FIXED COST	TOTAL
SEED	\$3.00	20 LBS	\$60.00					\$60.00
FERTILIZER (16-20-0)	\$0.170	200 LBS	\$34.00					\$34.00
HERBICIDE	\$31.77	1 ACRE	\$31.77					\$31.77
PUMP WATER*		42 AC. IN.						
SUBTOTAL			\$125.77					\$125.77
<u>PREHARVEST OPERATIONS</u>								
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DISC	145 HP	0.17 HR		\$1.24	\$2.00	\$1.19	\$3.21	\$7.64
PLOW	145 HP	0.48 HR		\$3.50	\$5.64	\$3.84	\$10.27	\$23.25
FLOAT	70 HP	0.16 HR		\$1.17	\$0.77	\$0.30	\$0.95	\$3.19
PLANE (3X)	145 HP	0.57 HR		\$4.16	\$6.69	\$3.58	\$15.90	\$30.32
DISC (2X)	145 HP	0.34 HR		\$2.48	\$3.99	\$2.38	\$6.42	\$15.28
FLOAT (2X)	70 HP	0.32 HR		\$2.34	\$1.54	\$0.60	\$1.90	\$6.37
DRILL (2X)	70 HP	0.42 HR		\$3.07	\$2.02	\$2.04	\$8.97	\$16.10
IRRIGATE (6X)		1.50 HR		\$10.05	\$48.88	\$16.50	\$38.83	\$114.26
SUBTOTAL		3.96 HR		\$28.01	\$71.52	\$30.43	\$86.46	\$216.42
<u>HARVEST OPERATIONS</u>								
SWATHER (3X)	16 FT	0.33 HR		\$2.41	\$1.61	\$3.11	\$7.30	\$14.42
RAKE	40 HP	0.05 HR		\$0.37	\$0.20	\$0.17	\$0.29	\$1.02
BALER (3X)	145 HP	0.75 HR		\$5.48	\$8.81	\$6.48	\$14.16	\$34.92
BALEWAGON (3X)	SP	0.60 HR		\$4.38	\$6.28	\$13.39	\$4.55	\$28.60
SUBTOTAL		1.73 HR		\$12.63	\$16.89	\$23.14	\$26.30	\$78.96
<u>OVERHEAD EXPENSES</u>								
DOWNTIME		1.05 HR		\$7.65				\$7.65
EMPLOYEE BENEFITS				\$7.31				\$7.31
INSURANCE			\$0.81					\$0.81
SUPERVISION AND MANAGEMENT				\$41.40				\$41.40
SUBTOTAL		1.05 HR	\$0.81	\$56.36				\$57.17
TOTAL OPERATING EXPENSES		6.74 HR	\$126.58	\$96.99	\$88.41	\$53.57	\$112.75	\$478.32
NET OPERATING PROFIT								\$61.68
INTEREST ON EQUIPMENT INVESTMENT								\$47.02
RETURN TO LAND AND RISK								\$14.67

BUDGET SUMMARY

GROSS RETURN		\$540.00	
VARIABLE OPERATING EXPENSES	\$268.57		
RETURN OVER VARIABLE EXPENSES		\$271.43	(GROSS MARGIN)
FIXED EXPENSES	\$112.75		
NET FARM INCOME		\$158.68	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$96.99		
NET OPERATING PROFIT		\$61.68	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$47.02		
RETURN TO LAND AND RISK		\$14.67	

TABLE 5. Alfalfa hay, sprinkler-irrigated, budgeted per acre costs and returns for a 500 acre farm with above average management, Artesia-Lake Arthur area, 2003.
Harvesting Dates: May 5 - November 1

ITEM	PRICE	YIELD						TOTAL	
GROSS RETURNS									
ALFALFA HAY	\$140.00	6.50 TONS (STACKED)						\$910.00	
GRAZING	\$40.00							\$40.00	
TOTAL								\$950.00	
PURCHASED INPUTS									
PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS				FIXED COST	TOTAL	
INSECTICIDE (CUSTOM)	\$34.60	2 X/ACRE	\$69.20					\$69.20	
HERBICIDE (CUSTOM)	\$40.92	1 X/ACRE	\$40.92					\$40.92	
INSECT SCOUTING	\$5.25	1 ACRE	\$5.25					\$5.25	
FERTILIZER (5-26-30)	\$0.19	200 LBS	\$38.00					\$38.00	
WIRE	\$0.38	56 LBS	\$21.17					\$21.17	
DRYING AGENT (AGRI-DRY)	\$8.26	1 /TON	\$53.66					\$53.66	
ESTABLISHMENT: Principal		5 YEARS					\$2.93	\$2.93	
: Interest							\$44.18	\$44.18	
PUMP WATER*		48 AC. IN.							
SUBTOTAL			\$228.20				\$47.12	\$275.32	
PREHARVEST OPERATIONS									
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL	
IRRIGATE (6X)		1.50 HR		\$10.05	\$55.87	\$18.86	\$44.38	\$129.15	
SUBTOTAL		1.50 HR		10.05	55.87	18.86	44.38	129.15	
HARVEST OPERATIONS									
SWATHER (5X)	16 FT SP	0.55 HR		\$4.02	\$2.68	\$5.18	\$12.17	\$24.04	
RAKE (5X)	40 HP	0.25 HR		\$1.83	\$1.01	\$0.83	\$1.44	\$5.11	
BALER (5X)	96 HP	1.25 HR		\$9.13	\$11.55	\$9.44	\$9.33	\$39.44	
BALE WAGON (5X)	SP	1.00 HR		\$7.30	\$10.47	\$22.32	\$7.58	\$47.66	
SUBTOTAL		3.05 HR		\$22.27	\$25.70	\$37.76	\$30.52	\$116.25	
OVERHEAD EXPENSES									
DOWNTIME		0.70 HR		\$5.11				\$5.11	
EMPLOYEE BENEFITS				\$5.82				\$5.82	
INSURANCE			\$0.65					\$0.65	
LAND TAXES							\$1.75	\$1.75	
SUPERVISION AND MANAGEMENT				\$69.53				\$69.53	
OTHER EXPENSES			\$43.03					\$43.03	
SUBTOTAL		0.70 HR		\$43.68	\$80.45			\$1.75	\$125.89
TOTAL OPERATING EXPENSES		5.25 HR		\$271.88	\$112.77	\$81.57	\$56.62	\$123.77	\$646.60
NET OPERATING PROFIT								\$303.40	
INTEREST ON OPERATING CAPITAL	(	138.07	@	8.00%				\$11.05
INTEREST ON EQUIPMENT INVESTMENT								\$26.27	
RETURN TO LAND AND RISK								\$266.09	

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

BUDGET SUMMARY

GROSS RETURN		\$950.00	
VARIABLE OPERATING EXPENSES	\$410.07		
RETURN OVER VARIABLE EXPENSES		\$539.93	(GROSS MARGIN)
FIXED EXPENSES	\$123.77		
NET FARM INCOME		\$416.17	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$112.77		
NET OPERATING PROFIT		\$303.40	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$37.31		
RETURN TO LAND AND RISK		\$266.09	

TABLE 6. Barley, sprinkler-irrigated, budgeted per acre costs and returns for a 500 acre farm with above average management, Artesia-Lake Arthur area, 2003.

Planting dates: August 20 - September 30

Harvesting dates: June 15 - July 1

ITEM	PRICE	YIELD							TOTAL
GROSS RETURNS									
BARLEY	\$3.30	35.00	CWT						\$115.50
DIRECT PAYMENT	\$0.206	35.00	CWT						\$7.21
COUNTER CYCLICAL PAYMENT	\$0.00								\$0.00
GRAZING	\$40.00								\$40.00
TOTAL									\$162.71
PURCHASED INPUTS									
PURCHASED INPUTS	PRICE	QUANTITY		PURCHASED INPUTS					TOTAL
SEED	\$0.30	110	LBS	\$33.00					\$33.00
NITROGEN (N)	\$0.36	150	LBS	\$54.00					\$54.00
INSECTICIDE (CUSTOM)	\$20.01	1	X/ACRE	\$20.01					\$20.01
PUMP WATER*		28	AC. IN.						
CROP INSURANCE	\$5.88			\$5.88					\$5.88
SUBTOTAL				\$112.89					\$112.89
PREHARVEST OPERATIONS									
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE		PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
PLOW	145 HP	0.48	HR		\$3.50	\$5.64	\$3.84	\$10.27	\$23.25
DISC (2X)	145 HP	0.34	HR		\$2.48	\$3.99	\$2.38	\$6.42	\$15.28
FERTILIZE	DEALER APPLIED								
DRILL	70 HP	0.21	HR		\$1.53	\$1.01	\$1.02	\$4.49	\$8.05
IRRIGATE (4X)		1.00	HR		\$6.70	\$32.59	\$11.00	\$25.89	\$76.17
SUBTOTAL		2.03	HR		\$14.22	\$43.22	\$18.24	\$47.07	\$122.76
HARVEST OPERATIONS									
COMBINE (CUSTOM)				\$17.91					\$17.91
HAUL (CUSTOM)				\$7.00					\$7.00
SUBTOTAL				\$24.91					\$24.91
OVERHEAD EXPENSES									
DOWNTIME		0.26	HR		\$1.88				\$1.88
EMPLOYEE BENEFITS					\$2.56				\$2.56
INSURANCE				\$0.28					\$0.28
LAND TAXES								\$1.75	\$1.75
SUPERVISION AND MANAGEMENT					\$12.90				\$12.90
OTHER EXPENSES				\$43.03					\$43.03
SUBTOTAL		0.26	HR	\$43.32	\$17.34			\$1.75	\$62.42
TOTAL OPERATING EXPENSES		2.29	HR	\$181.12	\$31.56	\$43.22	\$18.24	\$48.82	\$322.97
NET OPERATING PROFIT									(\$160.26)
INTEREST ON OPERATING CAPITAL	(	73.89	@	8.00%					\$5.91
INTEREST ON EQUIPMENT INVESTMENT								\$13.59	
RETURN TO LAND AND RISK									(\$179.76)

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

BUDGET SUMMARY

GROSS RETURN		\$162.71	
VARIABLE OPERATING EXPENSES	\$242.58		
RETURN OVER VARIABLE EXPENSES		(\$79.87)	(GROSS MARGIN)
FIXED EXPENSES	\$48.82		
NET FARM INCOME		(\$128.70)	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$31.56		
NET OPERATING PROFIT		(\$160.26)	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$19.50		
RETURN TO LAND AND RISK		(\$179.76)	

TABLE 7. Oat hay, sprinkler-irrigated, budgeted per acre costs and returns for a 500 acre farm with above average management, Artesia-Lake Arthur area, 2003.

Planting dates: February 1 - February 28

Harvesting Dates: June 1 - June 30

ITEM	PRICE	YIELD		PURCHASED INPUTS					TOTAL
GROSS RETURNS									
OAT HAY	\$100.00	3.50	TONS (STACKED)						\$350.00
TOTAL									\$350.00
PURCHASED INPUTS	PRICE	QUANTITY		PURCHASED INPUTS					TOTAL
SEED	\$0.40	100	LBS	\$40.00					\$40.00
FERTILIZER (16-20-0)	\$0.14	150	LBS	\$21.00					\$21.00
PUMP WATER*		28	AC. IN.						
SUBTOTAL				\$61.00					\$61.00
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE		PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
PLOW	145 HP	0.48	HR		\$3.50	\$5.64	\$3.84	\$10.27	\$23.25
DISC (2X)	145 HP	0.34	HR		\$2.48	\$3.99	\$2.38	\$6.42	\$15.28
DRILL	70 HP	0.21	HR		\$1.53	\$1.01	\$1.02	\$4.49	\$8.05
IRRIGATE (4X)		1.00	HR		\$6.70	\$32.59	\$11.00	\$25.89	\$76.17
SUBTOTAL		2.03	HR		\$14.22	\$43.22	\$18.24	\$47.07	\$122.76
HARVEST OPERATIONS									
SWATHER	14 FT	0.16	HR		\$1.17	\$0.78	\$1.51	\$3.54	\$6.99
BALER	145 HP	0.25	HR		\$1.83	\$2.94	\$2.16	\$4.72	\$11.64
BALE WAGON	S. P.	0.20	HR		\$1.46	\$2.09	\$4.46	\$1.52	\$9.53
SUBTOTAL		0.61	HR		\$4.45	\$5.81	\$8.13	\$9.78	\$28.16
OVERHEAD EXPENSES									
DOWNTIME		0.41	HR		\$2.99				\$2.99
EMPLOYEE BENEFITS					\$3.36				\$3.36
INSURANCE				\$0.37					\$0.37
LAND TAXES								\$1.75	\$1.75
SUPERVISION AND MANAGEMENT					\$26.32				\$26.32
OTHER EXPENSES				\$43.03					\$43.03
SUBTOTAL		0.41	HR	\$43.41	\$32.67			\$1.75	\$77.84
TOTAL OPERATING EXPENSES		3.05	HR	\$104.41	\$51.35	\$49.03	\$26.37	\$58.60	\$289.76
NET OPERATING PROFIT									\$60.24
INTEREST ON OPERATING CAPITAL	(	47.03	@	8.00%	)				\$3.76
INTEREST ON EQUIPMENT INVESTMENT									\$19.86
RETURN TO LAND AND RISK									\$36.62

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

BUDGET SUMMARY

GROSS RETURN		\$350.00	
VARIABLE OPERATING EXPENSES	\$179.81		
RETURN OVER VARIABLE EXPENSES		\$170.19	(GROSS MARGIN)
FIXED EXPENSES	\$58.60		
NET FARM INCOME		\$111.59	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$51.35		
NET OPERATING PROFIT		\$60.24	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$23.62		
RETURN TO LAND AND RISK		\$36.62	

TABLE 8. Upland cotton (picker), sprinkler-irrigated, budgeted per acre costs and returns for a 500 acre farm with above average management, Artesia-Lake Arthur area, 2003.
 Planting dates: April 15 - May 15
 Harvesting dates: October 15 - January 15

ITEM	PRICE	YIELD						TOTAL				
GROSS RETURNS												
COTTON LINT	\$0.570	700 LBS						\$399.00				
COTTON SEED	\$0.08	1,120 LBS						\$84.00				
DIRECT PAYMENT	\$0.0667	700 LBS						\$46.69				
COUNTER CYCLICAL PAYMENT	\$0.0873	700 LBS						\$61.11				
TOTAL							\$590.80					
PURCHASED INPUTS												
PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS					TOTAL				
SEED	\$0.56	15 LBS	\$8.40					\$8.40				
FOLIAR FERTILIZER	\$4.80	1 X/ACRE	\$4.80					\$4.80				
INSECT SCOUTING	\$5.25	1 ACRE	\$5.25					\$5.25				
HERBICIDE (CUSTOM)	\$47.77	1 X/ACRE	\$47.77					\$47.77				
INSECTICIDE (CUSTOM)	\$36.97	3 X/ACRE	\$36.97					\$36.97				
CROP INSURANCE			\$1.64					\$1.64				
PUMP WATER*		28 AC. IN.										
SUBTOTAL							\$104.83					
PREHARVEST OPERATIONS												
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL				
DISC	145 HP	0.17 HR		\$1.24	\$2.00	\$1.19	\$3.21	\$7.64				
PLOW	145 HP	0.48 HR		\$3.50	\$5.64	\$3.84	\$10.27	\$23.25				
DISC (2X)	145 HP	0.34 HR		\$2.48	\$3.99	\$2.38	\$6.42	\$15.28				
FLOAT	145 HP	0.16 HR		\$1.17	\$1.88	\$0.94	\$2.75	\$6.74				
PRE-IRRIGATE		0.25 HR		\$1.68	\$8.15	\$2.75	\$6.47	\$19.04				
CULTIVATOR	65 HP	0.21 HR		\$1.53	\$1.38	\$0.41	\$0.51	\$3.83				
PLANTER	70 HP	0.26 HR		\$1.90	\$1.25	\$1.87	\$6.21	\$11.22				
SLED	70 HP	0.15 HR		\$1.10	\$0.72	\$0.30	\$1.07	\$3.19				
CULTIVATOR (3X)	65 HP	0.63 HR		\$4.60	\$4.14	\$1.24	\$1.53	\$11.50				
HAND HOE (CUSTOMOM)			\$20.00					\$20.00				
IRRIGATE (3X)		0.75 HR		\$5.03	\$24.44	\$8.25	\$19.42	\$57.13				
SUBTOTAL							\$20.00	\$24.22	\$53.57	\$23.17	\$57.88	\$178.84
HARVEST OPERATIONS												
COTTON PICKER (2X)	2-ROW	0.74 HR		\$5.40	\$5.82	\$31.83	\$123.21	\$166.26				
HAUL (2X)	65 HP	1.00 HR		\$7.30	\$6.56	\$1.34	\$7.35	\$22.55				
GIN COTTON (CUSTOM)			\$104.30					\$104.30				
SUBTOTAL							\$104.30	\$12.70	\$12.38	\$33.17	\$130.56	\$293.11
POSTHARVEST OPERATIONS												
SHREDDER	70 HP	0.14 HR		\$1.02	\$0.67	\$0.40	\$3.15	\$5.25				
SUBTOTAL							\$1.02	\$0.67	\$0.40	\$3.15	\$5.25	
OVERHEAD EXPENSES												
DOWNTIME		1.03 HR		\$7.54				\$7.54				
EMPLOYEE BENEFITS				\$6.83				\$6.83				
INSURANCE			\$0.76					\$0.76				
LAND TAXES						\$1.75		\$1.75				
SUPERVISION AND MANAGEMENT				\$44.42				\$44.42				
OTHER EXPENSES			\$43.03					\$43.03				
SUBTOTAL							\$43.79	\$58.79	\$1.75	\$104.33		
TOTAL OPERATING EXPENSES							\$272.92	\$96.73	\$66.63	\$56.74	\$193.35	\$686.36
NET OPERATING PROFIT												(\$95.56)
INTEREST ON OPERATING CAPITAL	(75.66	@	8.00%)				\$6.05			
INTEREST ON EQUIPMENT INVESTMENT									\$115.34			
RETURN TO LAND AND RISK												(\$216.95)

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

BUDGET SUMMARY

GROSS RETURN		\$590.80	
VARIABLE OPERATING EXPENSES	\$396.29		
RETURN OVER VARIABLE EXPENSES	\$194.51	(GROSS MARGIN)	
FIXED EXPENSES	\$193.35		
NET FARM INCOME		\$1.17	(RETURN TO CAPITAL, LABOR, LAND & RISK)
aes	\$96.73		
NET OPERATING PROFIT		(\$95.56)	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$121.39		
RETURN TO LAND AND RISK		(\$216.95)	

TABLE 9. Upland cotton (stripper), sprinkler-irrigated, budgeted per acre costs and returns for a 500 acre farm with above average management, Artesia-Lake Arthur area, 2003.
 Planting dates: April 15 - May 15
 Harvesting dates: October 15 - January 15

ITEM	PRICE	YIELD						TOTAL	
GROSS RETURNS									
COTTON LINT	\$0.520	700	LBS					\$364.00	
COTTON SEED	\$0.08	1,120	LBS					\$84.00	
DIRECT PAYMENT	\$0.0667	700	LBS					\$46.69	
COUNTER CYCLICAL PAYMENT	\$0.1373	700	LBS					\$96.11	
TOTAL								\$590.80	
PURCHASED INPUTS									
PURCHASED INPUTS	PRICE	QUANTITY		PURCHASED INPUTS				TOTAL	
SEED	\$0.51	20	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)	\$47.92	1	X/ACRE	\$47.92				\$47.92	
INSECTICIDE (CUSTOM)	\$36.89	3	X/ACRE	\$36.89				\$36.89	
CROP INSURANCE			FCIC	\$1.19				\$1.19	
PUMP WATER*		28	AC. IN.						
SUBTOTAL				\$106.25				\$106.25	
PREHARVEST OPERATIONS									
	POWER UNIT	ACCOMPLISHMNT RATE		PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DISC	145 HP	0.17	HR		\$1.24	\$2.00	\$1.19	\$3.21	\$7.64
PLOW	145 HP	0.48	HR		\$3.50	\$5.64	\$3.84	\$10.27	\$23.25
DISC (2X)	145 HP	0.34	HR		\$2.48	\$3.99	\$2.38	\$6.42	\$15.28
FLOAT	145 HP	0.16	HR		\$1.17	\$1.88	\$0.94	\$2.75	\$6.74
PRE-IRRIGATE		0.25	HR		\$1.68	\$8.15	\$2.75	\$6.47	\$19.04
CULTIVATOR	65 HP	0.21	HR		\$1.53	\$1.38	\$0.41	\$0.51	\$3.83
PLANTER	70 HP	0.26	HR		\$1.90	\$1.25	\$1.87	\$6.21	\$11.22
SLED	70 HP	0.15	HR		\$1.10	\$0.72	\$0.30	\$1.07	\$3.19
CULTIVATOR (3X)	65 HP	0.63	HR		\$4.60	\$4.14	\$1.24	\$1.53	\$11.50
HAND HOE (CUSTOM)				\$20.00					\$20.00
IRRIGATE (3X)		0.75	HR		\$5.03	\$24.44	\$8.25	\$19.42	\$57.13
SUBTOTAL		3.40	HR	\$20.00	\$24.22	\$53.57	\$23.17	\$57.88	\$178.84
HARVEST OPERATIONS									
COTTON STRIPPER	70 HP	0.62	HR		\$4.53	\$2.98	\$2.93	\$16.55	\$26.99
HAUL	65 HP	0.75	HR		\$5.48	\$4.92	\$1.00	\$5.51	\$16.91
GIN COTTON (CUSTOM)				\$134.89					\$134.89
SUBTOTAL		1.37	HR	\$134.89	\$10.00	\$7.90	\$3.93	\$22.07	\$178.79
POSTHARVEST OPERATIONS									
SHREDDER	70 HP	0.14	HR		\$0.56	\$0.67	\$0.40	\$3.15	\$4.79
SUBTOTAL		0.14	HR		\$0.56	\$0.67	\$0.40	\$3.15	\$4.79
OVERHEAD EXPENSES									
DOWNTIME		0.98	HR		\$7.14				\$7.14
EMPLOYEE BENEFITS					\$6.26				\$6.26
INSURANCE				\$0.70					\$0.70
LAND TAXES							\$1.75		\$1.75
SUPERVISION AND MANAGEMENT					\$43.99				\$43.99
OTHER EXPENSES				\$43.03					\$43.03
SUBTOTAL		0.98	HR	\$43.73	\$57.38			\$1.75	\$102.87
TOTAL OPERATING EXPENSES		5.89	HR	\$304.87	\$92.16	\$62.15	\$27.51	\$84.85	\$571.54
NET OPERATING PROFIT								\$19.26	
INTEREST ON OPERATING CAPITAL	(	73.57	@	8.00%	)			\$5.89	
INTEREST ON EQUIPMENT INVESTMENT								\$34.53	
RETURN TO LAND AND RISK								(\$21.15)	

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

BUDGET SUMMARY

GROSS RETURN		\$590.80	
VARIABLE OPERATING EXPENSES	\$394.53		
RETURN OVER VARIABLE EXPENSES	\$196.27		(GROSS MARGIN)
FIXED EXPENSES	\$84.85		
NET FARM INCOME	\$111.43		(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$92.16		
NET OPERATING PROFIT	\$19.26		(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$40.42		
RETURN TO LAND AND RISK		(\$21.15)	

TABLE 10. Summary of per acre costs and returns for a 500 acre farm with above average management, Artesia-Lake Arthur area, 2003.

	ALFALFA ESTABLISHMENT	ALFALFA HAY	BARLEY ----- SPRINKLER-----	OAT HAY	PICKER COTTON	STRIPPER COTTON
	TONS	TONS	CWT	TONS	LBS	LBS
PRIMARY YIELD	4.50	6.50	35.00	3.50	700.00	700.00
PRIMARY PRICE	120.00	140.00	3.30	100.00	0.57	0.52
GOVERNMENT PAYMENTS	0.00	0.00	7.21	0.00	107.80	142.80
SECOND INCOME	0.00	40.00	40.00	0.00	84.00	84.00
GROSS RETURN	\$540.00	\$950.00	\$162.71	\$350.00	\$590.80	\$590.80
CASH OPERATING EXPENSES						
SEED	\$60.00		\$33.00	\$40.00	\$8.40	\$10.20
FERTILIZER	\$34.00	\$38.00	\$54.00	\$21.00	\$4.80	\$4.80
CHEMICALS	\$31.77	\$115.37	\$20.01		\$89.99	\$90.06
CROP INSURANCE			\$5.88		\$1.64	\$1.19
OTHER PURCHASED INPUTS		\$74.83				
CANAL WATER						
FUEL, OIL & LUBRICANTS-EQUIPMENT	\$39.53	\$25.70	\$10.64	\$16.44	\$34.04	\$29.56
FUEL-IRRIGATION	\$48.88	\$55.87	\$32.59	\$32.59	\$32.59	\$32.59
REPAIRS	\$53.57	\$56.62	\$18.24	\$26.37	\$56.74	\$27.51
CUSTOM CHARGES			\$24.91		\$124.30	\$154.89
LAND TAXES		\$1.75	\$1.75	\$1.75	\$1.75	\$1.75
OTHER EXPENSES	\$0.81	\$43.68	\$43.32	\$43.41	\$43.79	\$43.73
TOTAL CASH EXPENSES	\$268.57	\$411.82	\$244.34	\$181.56	\$398.04	\$396.28
RETURN OVER CASH EXPENSES	\$271.43	\$538.18	(\$81.63)	\$168.44	\$192.76	\$194.52
FIXED EXPENSES	\$112.75	\$122.01	\$47.07	\$56.85	\$191.59	\$83.10
TOTAL EXPENSES	\$381.32	\$533.83	\$291.41	\$238.41	\$589.63	\$479.37
NET FARM INCOME	\$158.68	\$416.17	(\$128.70)	\$111.59	\$1.17	\$111.43
LABOR AND MANAGEMENT COSTS	\$96.99	\$112.77	\$31.56	\$51.35	\$96.73	\$92.16
NET OPERATING PROFIT	\$61.68	\$303.40	(\$160.26)	\$60.24	(\$95.56)	\$19.26
CAPITAL COSTS						
INTEREST ON OPERATING CAPITAL		\$11.05	\$5.91	\$3.76	\$6.05	\$5.89
INTEREST ON EQUIPMENT INVESTMENT	\$47.02	\$26.27	\$13.59	\$19.86	\$115.34	\$34.53
TOTAL CAPITAL COSTS	\$47.02	\$37.31	\$19.50	\$23.62	\$121.39	\$40.42
RETURN TO LAND AND RISK	\$14.67	\$266.09	(\$179.76)	\$36.62	(\$216.95)	(\$21.15)

TABLE 11. Whole farm summary, Artesia-Lake Arthur area, 2003.

GROSS RETURNS		
ALFALFA HAY	342 ACRES	\$301,530
CROP		\$11,400
GRAZING		
BARLEY	8.5 ACRES	\$982
CROP		\$61
DIRECT PAYMENTS		\$0
COUNTER CYCLICAL PAYMENT		\$340
GRAZING		
OAT HAY	8 ACRES	\$2,800
CROP		
PICKER COTTON	82 ACRES	\$32,718
COTTON LINT		\$6,888
COTTON SEED		\$2,778
DIRECT PAYMENTS		\$5,011
COUNTER CYCLICAL PAYMENT		
STRIPPER COTTON	60 ACRES	\$21,658
COTTON LINT		\$4,998
COTTON SEED		\$2,778
DIRECT PAYMENTS		\$5,719
COUNTER CYCLICAL PAYMENT		
		\$399,661
GROSS RETURN		
CASH OPERATING EXPENSES		
SEED		\$5,316
FERTILIZER		\$14,074
CHEMICALS		\$47,599
CROP INSURANCE		\$150
OTHER PURCHASED INPUTS		\$21,327
CANAL WATER		\$0
FUEL, OIL & LUBRICANTS-EQUIPMENT		\$14,350
FUEL-IRRIGATION		\$23,857
REPAIRS		\$25,845
CUSTOM CHARGES		\$19,620
LAND TAXES		\$777
OTHER EXPENSES		\$19,404
		\$192,319
TOTAL CASH EXPENSES		
		\$207,342
RETURN OVER CASH EXPENSES		
		\$61,875
FIXED EXPENSES		
		\$254,194
TOTAL EXPENSES		
		\$145,467
NET FARM INCOME		
		\$51,762
LABOR AND MANAGEMENT COSTS		
		\$93,705
NET OPERATING PROFIT		
CAPITAL COSTS		
INTEREST ON OPERATING CAPITAL		\$4,075
INTEREST ON EQUIPMENT INVESTMENT		\$21,952
		\$26,027
TOTAL CAPITAL COSTS		
		\$67,678
RETURN TO LAND AND RISK		

LAND VALUE	RETURN TO RISK*	RETURN ON INVESTMENT**
\$1,000 /ACRE	\$47,678	10.86%
\$2,500 /ACRE	\$17,678	5.81%
\$4,000 /ACRE	(\$12,322)	3.97%
\$5,500 /ACRE	(\$42,322)	3.01%