

MICROCOMPUTER CROP COST AND RETURN GENERATOR

BUDGET AREA..... ARTESIA-LAKE ARTHUR AREProjected 2009.
FARM SIZE..... 500 ACRES
IRRIGATION TYPE..... FLOOD
NUMBER OF CROPS..... 6

VERSION 1.0

COPYRIGHT (C) 1984 by NEW MEXICO STATE UNIVERSITY BOARD OF REGENTS

New Mexico State University is an equal opportunity employer. All programs are available to everyone regardless of race, color, religion, sex, age, handicap, or national origin. New Mexico State University and the U.S. Department of Agriculture Cooperating.

* YOU MAY ENTER DATA IN ANY INPUT TABLE WITH HIGHLIGHTED CELLS OR YOU MAY STRIKE [ENTER] AND RETURN TO THE MENU

** BE SURE PRINTER IS ON AND PAPER IS ALIGNED BEFORE YOU PRINT

TABLE 1. Acreage Summary, Eddy County, Artesia Lake Arthur Area, Projected 2009.

BUDGET AREA..... ARTESIA-LAKE ARTHUR AREA			
FARM SIZE.....	500.00 ACRES		
IRRIGATION TYPE.....	FLOOD		
NUMBER OF CROPS.....	6		
		WATER USE	
ACREAGE SUMMARY:	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		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 2009.

Item		
Labor Wage Rate:		
Equipment operators	\$/hour	\$7.20
General & Irrigators	\$/hour	\$7.25
Purchased Inputs:		
Fertilizer:		
Nitrogen (N)	\$/pound	\$0.62
Phosphate (P ₂ O ₅)	\$/pound	\$0.58
Seed:		
Alfalfa	\$/pound	\$4.00
Cotton picker stripper	\$/pound	\$1.86
Barley	\$/pound	\$1.86
Oats	\$/pound	\$0.34
Oats	\$/pound	\$0.38
Red Chile	\$/pound	\$22.00
Wire:	\$/lb.	\$0.04
Natural gas (service charge)	\$/MCF	\$5.89
Diesel fuel	\$/month	\$10.00
Diesel fuel	\$/gallon	\$2.80
Gasoline	\$/gallon	\$2.50
Electricity	cents/KwHr	\$7.64
LP Gas	\$/gallon	\$2.55
Employee Liability Insurance	\$/ \$1000 wages	\$0.29
Employee Benefits	percent/wages	18.00%
Labor Downtime	percent	25.00%
Financial Rates:		
Operating Capital Interest Rate	percent	7.50%
Land Interest Rate	percent	Amount
Equipment Interest Rate	percent	7.50%
Real Interest Rate	percent	7.00%
Land Taxes	\$250.00 /acre (full value)	\$1.86
Personal Property Tax Rate - NR	\$/ \$1,000 (Assessed Value)	\$22.28
- R		\$23.30
Supervision Factors		
Field Crop-Irrigation	\$/labor hour	\$0.08
Field Crop-Equipment & General	\$/labor hour	\$0.03
Vegetable Crop-Irrigation	\$/labor hour	\$0.00
Vegetable Crop-Equip. & General	\$/labor hour	\$0.00
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 2009.

Item		
Electricity (Domestic & Shop)		\$278.40 per month
Telephone		\$203.00 per month
Accounting & Legal		\$3,068
Misc. Supplies & Hand Tools		\$3,921
Pickup and Auto		
miles	23,200 @	\$0.415 per mile
Insurance		
- general liability (non-employee)		\$1,728
- fire/theft		\$2,604
Property Taxes		
- non-planted land		\$0
- other than land & machinery		\$0
Building repairs and maintenance		\$0
Dues, fees, publications		\$1,311
Farmstead Equipment		\$394
		Total
		<u>\$28,432</u>
		Total Per Planted Acre
		<u>\$56.86</u>

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 2009.

Planting dates: September 1 - September 30

ITEM	PRICE	QUANTITY	PURCHASED INPUTS				TOTAL	
PURCHASED INPUTS								
SEED	\$4.00	20 LBS	\$80.00				\$80.00	
HERBICIDE	\$32.40	1 ACRE	\$32.40				\$32.40	
PUMP WATER		8 AC. IN.						
SUBTOTAL			\$112.40				\$112.40	
PREHARVEST OPERATIONS								
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
PLOW	145 HP	0.48 HR		\$3.46	\$11.09	\$3.90	\$4.98	\$23.42
DISC (2X)	145 HP	0.34 HR		\$2.45	\$7.85	\$2.30	\$3.19	\$15.79
PLANE (3X)	145 HP	0.57 HR		\$4.10	\$13.17	\$2.33	\$10.12	\$29.71
DISC	145 HP	0.17 HR		\$1.22	\$3.93	\$1.15	\$1.60	\$7.90
FLOAT (2X)	70 HP	0.32 HR		\$2.30	\$5.46	\$0.67	\$2.72	\$11.15
DRILL (2X)	65 HP	0.42 HR		\$3.02	\$5.11	\$0.99	\$7.21	\$16.32
IRRIGATE (2X)		1.00 HR		\$7.25	\$10.23	\$1.45	\$2.33	\$21.26
SUBTOTAL		3.30 HR		\$23.81	\$56.83	\$12.78	\$32.14	\$125.55
OVERHEAD EXPENSES								
DOWNTIME		0.46 HR		\$3.28				\$3.28
EMPLOYEE BENEFITS				\$4.29				\$4.29
INSURANCE			\$0.01					\$0.01
SUPERVISION AND MANAGEMENT				\$16.79				\$16.79
SUBTOTAL		0.46 HR	\$0.01	\$24.35				\$24.35
TOTAL OPERATING EXPENSES		3.76 HR	\$112.40	\$48.16	\$56.83	\$12.78	\$32.14	\$262.31

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 2009.
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)	\$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	\$0.04	56 LBS	\$1.98					\$1.98
DRYING AGENT (AGRI-DRY)	\$8.26	1/TON	\$53.66					\$53.66
ESTABLISHMENT: Principal		5 YEARS					\$52.46	\$52.46
Interest							\$10.86	\$10.86
PUMP WATER*		50 AC. IN.						
SUBTOTAL			\$189.30				\$63.32	\$252.62
PREHARVEST OPERATIONS								
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
IRRIGATE (7X)		3.50 HR		\$25.38	\$63.96	\$9.05	\$14.57	\$112.95
SUBTOTAL		3.50 HR		\$25.38	\$63.96	\$9.05	\$14.57	\$112.95
HARVEST OPERATIONS								
SWATHER (5X)	16 FT SP	0.55 HR		\$3.96	\$5.77	\$0.80	\$14.73	\$25.25
RAKE (5X)	40 HP	0.25 HR		\$1.80	\$2.34	\$0.51	\$3.04	\$7.69
BALER (5X)	96 HP	1.25 HR		\$9.00	\$21.31	\$2.78	\$6.49	\$39.59
BALE WAGON (5X)	SP	1.00 HR		\$7.20	\$19.38	\$20.37	\$9.16	\$56.11
SUBTOTAL		3.05 HR		\$21.96	\$48.80	\$24.46	\$33.42	\$128.64
OVERHEAD EXPENSES								
DOWNTIME		0.70 HR		\$5.04				\$5.04
EMPLOYEE BENEFITS				\$8.52				\$8.52
INSURANCE			\$0.01					\$0.01
LAND TAXES							\$1.86	\$1.86
SUPERVISION AND MANAGEMENT				\$66.85				\$66.85
OTHER EXPENSES			\$56.86					\$56.86
SUBTOTAL		0.70 HR		\$56.88	\$80.41		\$1.86	\$139.15
TOTAL OPERATING EXPENSES		7.25 HR		\$246.18	\$127.75	\$112.76	\$33.51	\$633.36
NET OPERATING PROFIT								\$316.64
INTEREST ON OPERATING CAPITAL		(\$119.01 @ 7.50%)						\$8.93
INTEREST ON EQUIPMENT INVESTMENT								\$27.87
RETURN TO LAND AND RISK								\$279.84

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

BUDGET SUMMARY

GROSS RETURN		\$950.00	
VARIABLE OPERATING EXPENSES	\$392.45		
RETURN OVER VARIABLE EXPENSES		\$557.55	(GROSS MARGIN)
FIXED EXPENSES	\$113.16		
NET FARM INCOME		\$444.39	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$127.75		
NET OPERATING PROFIT		\$316.64	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$36.80		
RETURN TO LAND AND RISK		\$279.84	

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 2009.
 Planting dates: August 20 - September 30
 Harvesting dates: June 15 - July 1

ITEM	PRICE	YIELD							TOTAL
GROSS RETURNS									
BARLEY	\$6.00	35.00 CWT							\$210.00
DIRECT PAYMENT	\$0.00	35.00 CWT							\$0.00
COUNTER CYCLICAL PAYMENT	\$0.00								\$0.00
GRAZING	\$40.00								\$40.00
TOTAL									\$250.00
PURCHASED INPUTS									
PURCHASED INPUTS	PRICE	QUANTITY		PURCHASED INPUTS					TOTAL
SEED	\$0.34	110 LBS		\$37.40					\$37.40
NITROGEN (N)	\$0.62	150 LBS		\$93.00					\$93.00
INSECTICIDE (CUSTOM)	\$20.01	1 ACRE		\$20.01					\$20.01
PUMP WATER*		28 AC. IN.							
CROP INSURANCE	\$2.94			\$2.94					\$2.94
SUBTOTAL				\$153.35					\$153.35
PREHARVEST OPERATIONS									
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL	
PLOW	145 HP	0.48 HR		\$3.46	\$11.09	\$3.90	\$4.98	\$23.42	
DISC	145 HP	0.17 HR		\$1.22	\$3.93	\$1.15	\$1.60	\$7.90	
FLOAT	70 HP	0.16 HR		\$1.15	\$2.73	\$0.33	\$1.36	\$5.57	
FERTILIZE	DEALER APPLIED								
DRILL	70 HP	0.21 HR		\$1.51	\$3.58	\$0.66	\$4.75	\$10.50	
IRRIGATE (4X)		2.00 HR		\$14.50	\$35.82	\$5.07	\$8.16	\$63.54	
SUBTOTAL		3.02 HR		\$21.84	\$57.14	\$11.11	\$20.84	\$110.93	
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				\$3.93				\$3.93	
INSURANCE				\$0.01				\$0.01	
LAND TAXES							\$1.86	\$1.86	
SUPERVISION AND MANAGEMENT				\$17.68				\$17.68	
OTHER EXPENSES				\$56.86				\$56.86	
SUBTOTAL		0.22 HR		\$56.87	\$23.16		\$1.86	\$81.88	
TOTAL OPERATING EXPENSES		3.24 HR		\$235.13	\$45.00	\$57.14	\$11.11	\$22.69	\$371.07
NET OPERATING PROFIT									(\$121.07)
INTEREST ON OPERATING CAPITAL		(\$95.81 @	7.50%)				\$7.19
INTEREST ON EQUIPMENT INVESTMENT									\$9.82
RETURN TO LAND AND RISK									(\$138.08)

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

BUDGET SUMMARY

GROSS RETURN		\$250.00	
VARIABLE OPERATING EXPENSES	\$303.38		
RETURN OVER VARIABLE EXPENSES		(\$53.38)	(GROSS MARGIN)
FIXED EXPENSES	\$22.69		
NET FARM INCOME		(\$76.07)	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$45.00		
NET OPERATING PROFIT		(\$121.07)	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$17.01		
RETURN TO LAND AND RISK		(\$138.08)	

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 2009.
Planting dates: February 1 - February 28
Harvesting dates: June 1 - June 30

ITEM	PRICE	YIELD						TOTAL
GROSS RETURNS								
OAT HAY	\$100.00	3.50 TONS (STACKED)						\$350.00
TOTAL							\$350.00	
PURCHASED INPUTS								
	PRICE	QUANTITY	PURCHASED INPUTS					TOTAL
SEED	\$0.38	100 LBS	\$38.00					\$38.00
FERTILIZER (16-20-0)	\$0.17	150 LBS	\$25.50					\$25.50
PUMP WATER*		28 AC. IN.						
SUBTOTAL			\$63.50					\$63.50
PREHARVEST OPERATIONS								
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
PLOW	145 HP	0.48 HR		\$3.46	\$11.09	\$3.90	\$4.98	\$23.42
DISC	145 HP	0.34 HR		\$2.45	\$7.85	\$2.30	\$3.19	\$15.79
FLOAT	70 HP	0.16 HR		\$1.15	\$2.73	\$0.33	\$1.36	\$5.57
FERTILIZE (CUSTOM)			\$0.00					\$0.00
DRILL	70 HP	0.21 HR		\$1.51	\$3.58	\$0.66	\$4.75	\$10.50
IRRIGATE (4X)		2.00 HR		\$14.50	\$35.82	\$5.07	\$8.16	\$63.54
SUBTOTAL		3.19 HR		\$23.07	\$61.07	\$12.26	\$22.43	\$118.83
HARVEST OPERATIONS								
SWATHER	16 FT	0.11 HR		\$0.79	\$1.15	\$0.16	\$2.95	\$5.05
BALER	126 HP	0.25 HR		\$1.80	\$5.77	\$1.03	\$2.07	\$10.67
BALE WAGON	S. P.	0.20 HR		\$1.44	\$3.88	\$4.07	\$1.83	\$11.22
SUBTOTAL		0.56 HR		\$4.03	\$10.80	\$5.26	\$6.84	\$26.94
OVERHEAD EXPENSES								
DOWNTIME		0.40 HR		\$2.86				\$2.86
EMPLOYEE BENEFITS				\$4.88				\$4.88
INSURANCE			\$0.01					\$0.01
LAND TAXES							\$1.86	\$1.86
SUPERVISION AND MANAGEMENT				\$24.70				\$24.70
OTHER EXPENSES			\$56.86					\$56.86
SUBTOTAL		0.40 HR	\$56.87	\$32.44			\$1.86	\$91.17
TOTAL OPERATING EXPENSES		4.15 HR	\$120.37	\$59.54	\$71.87	\$17.52	\$31.13	\$300.44
NET OPERATING PROFIT								\$49.56
INTEREST ON OPERATING CAPITAL		(\$51.42	@	7.50%)		
INTEREST ON EQUIPMENT INVESTMENT								\$3.86
								\$16.12
RETURN TO LAND AND RISK								\$29.58

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

GROSS RETURN		\$350.00	
VARIABLE OPERATING EXPENSES	\$209.77		
RETURN OVER VARIABLE EXPENSES		\$140.23	(GROSS MARGIN)
FIXED EXPENSES	\$31.13		
NET FARM INCOME		\$109.10	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$59.54		
NET OPERATING PROFIT		\$49.56	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$19.97		
RETURN TO LAND AND RISK		\$29.58	

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	\$0.800	700 LBS						\$560.00
COTTON SEED	\$0.075	1,120 LBS						\$84.00
DIRECT PAYMENT	\$0.000	700 LBS						\$0.00
COUNTER CYCLICAL PAYMENT	\$0.087	700 LBS						\$61.11
TOTAL								\$705.11
PURCHASED INPUTS								
PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS					TOTAL
SEED	\$1.86	15 LBS	\$27.90					\$27.90
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			\$150.95					\$150.95
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	\$3.93	\$1.15	\$1.60	\$7.90
PLOW	145 HP	0.48 HR		\$3.46	\$11.09	\$3.90	\$4.98	\$23.42
DISC (2X)	145 HP	0.34 HR		\$2.45	\$7.85	\$2.30	\$3.19	\$15.79
FLOAT	145 HP	0.16 HR		\$1.15	\$3.70	\$0.64	\$1.33	\$6.82
LISTER	145 HP	0.18 HR		\$1.30	\$4.16	\$1.07	\$2.37	\$8.90
PRE-IRRIGATE		0.75 HR		\$5.44	\$9.59	\$1.36	\$2.19	\$18.57
CULTIVATOR	65 HP	0.21 HR		\$1.51	\$2.55	\$0.48	\$1.16	\$5.70
PLANTER	70 HP	0.26 HR		\$1.87	\$4.43	\$0.96	\$5.34	\$12.61
SLED	70 HP	0.15 HR		\$1.08	\$2.56	\$0.35	\$1.40	\$5.39
CULTIVATOR (3X)	65 HP	0.63 HR		\$4.54	\$7.66	\$1.44	\$3.47	\$17.10
HAND HOE (CUSTOM)			\$20.00					\$20.00
IRRIGATE (3X)		1.50 HR		\$10.88	\$28.78	\$4.07	\$6.56	\$50.29
SUBTOTAL		4.83 HR	\$20.00	\$34.89	\$86.30	\$17.73	\$33.58	\$192.49
HARVEST OPERATIONS								
COTTON PICKER (2X)	2-ROW	0.74 HR		\$5.33	\$12.53	\$12.68	\$158.72	\$189.26
HAUL (2X)	65 HP	1.00 HR		\$7.20	\$12.16	\$1.32	\$5.35	\$26.03
GIN COTTON (CUSTOM)			\$104.30					\$104.30
SUBTOTAL		1.74 HR	\$104.30	\$12.53	\$24.69	\$14.00	\$164.06	\$319.58
POSTHARVEST OPERATIONS								
SHREDDER	70 HP	0.14 HR		\$1.01	\$2.39	\$0.35	\$2.74	\$6.48
SUBTOTAL		0.14 HR		\$1.01	\$2.39	\$0.35	\$2.74	\$6.48
OVERHEAD EXPENSES								
DOWNTIME		0.95 HR		\$6.82				\$6.82
EMPLOYEE BENEFITS				\$8.72				\$8.72
INSURANCE			\$0.01					\$0.01
LAND TAXES						\$1.86		\$1.86
SUPERVISION AND MANAGEMENT				\$49.64				\$49.64
OTHER EXPENSES			\$56.86					\$56.86
SUBTOTAL		0.95 HR	\$56.88	\$65.18		\$1.86		\$123.91
TOTAL OPERATING EXPENSES		7.66 HR	\$332.12	\$113.60	\$113.37	\$32.08	\$202.24	\$793.42
NET OPERATING PROFIT								(\$88.31)
INTEREST ON OPERATING CAPITAL		(\$105.39 @ 7.50%)						\$7.90
INTEREST ON EQUIPMENT INVESTMENT								\$108.28
RETURN TO LAND AND RISK								(\$204.49)

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

BUDGET SUMMARY

GROSS RETURN		\$705.11	
VARIABLE OPERATING EXPENSES	\$477.58		
RETURN OVER VARIABLE EXPENSES	\$227.53	(GROSS MARGIN)	
FIXED EXPENSES	\$202.24		
NET FARM INCOME	\$25.30	(RETURN TO CAPITAL, LABOR, LAND & RISK)	
LABOR AND MANAGEMENT COST	\$113.60		
NET OPERATING PROFIT	(\$88.31)	(RETURN TO CAPITAL, LAND & RISK)	
CAPITAL COSTS	\$116.19		
RETURN TO LAND AND RISK	(\$204.49)		

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 2009.

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

ITEM	PRICE	YIELD						TOTAL
GROSS RETURNS								
COTTON LINT	\$0.760	700 LBS						\$532.00
COTTON SEED	\$0.075	1,120 LBS						\$84.00
DIRECT PAYMENT	\$0.000	700 LBS						\$0.00
COUNTER CYCLICAL PAYMENT	\$0.137	700 LBS						\$96.11
TOTAL								\$712.11
PURCHASED INPUTS								
PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS					TOTAL
SEED	\$1.86	20 LBS	\$37.20					\$37.20
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
CROP INSURANCE	\$0.00		\$0.00					\$0.00
SUBTOTAL			\$126.50					\$126.50
PREHARVEST OPERATIONS								
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DISC	145 HP	0.17 HR		\$1.22	\$3.93	\$1.15	\$1.60	\$7.90
PLOW	145 HP	0.48 HR		\$3.46	\$11.09	\$3.90	\$4.98	\$23.42
DISC (2X)	145 HP	0.34 HR		\$2.45	\$7.85	\$2.30	\$3.19	\$15.79
FLOAT	145 HP	0.16 HR		\$1.15	\$3.70	\$0.64	\$1.33	\$6.82
LIST	145 HP	0.18 HR		\$1.30	\$4.16	\$1.07	\$2.37	\$8.90
PRE-IRRIGATE		0.75 HR		\$5.44	\$9.59	\$1.36	\$2.19	\$18.57
CULTIVATOR	65 HP	0.21 HR		\$1.51	\$2.55	\$0.48	\$1.16	\$5.70
PLANTER	70 HP	0.26 HR		\$1.87	\$4.43	\$0.96	\$5.34	\$12.61
SLED	70 HP	0.15 HR		\$1.08	\$2.56	\$0.35	\$1.40	\$5.39
CULTIVATOR (3X)	65 HP	0.63 HR		\$4.54	\$7.66	\$1.44	\$3.47	\$17.10
HAND HOE (CUSTOM)			\$20.00					\$20.00
IRRIGATE (3X)		1.50 HR		\$10.88	\$28.78	\$4.07	\$6.56	\$50.29
SUBTOTAL		4.83 HR	\$20.00	\$34.89	\$86.30	\$17.73	\$33.58	\$192.49
HARVEST OPERATIONS								
COTTON STRIPPER	70 HP	0.62 HR		\$4.46	\$10.57	\$4.19	\$65.00	\$84.22
HAUL	65 HP	0.75 HR		\$5.40	\$9.12	\$0.99	\$4.01	\$19.52
GIN COTTON (CUSTOM)			\$134.89					\$134.89
SUBTOTAL		1.37 HR	\$134.89	\$9.86	\$19.69	\$5.18	\$69.01	\$238.63
POSTHARVEST OPERATIONS								
SHREDDER	70 HP	0.14 HR		\$0.56	\$2.39	\$0.35	\$2.74	\$6.03
SUBTOTAL		0.14 HR		\$0.56	\$2.39	\$0.35	\$2.74	\$6.03
OVERHEAD EXPENSES								
DOWNTIME		0.89 HR		\$6.43				\$6.43
EMPLOYEE BENEFITS				\$8.16				\$8.16
INSURANCE			\$0.01					\$0.01
LAND TAXES						\$1.86		\$1.86
SUPERVISION AND MANAGEMENT				\$50.06				\$50.06
OTHER EXPENSES			\$56.86					\$56.86
SUBTOTAL		0.89 HR	\$56.88	\$64.65		\$1.86		\$123.38
TOTAL OPERATING EXPENSES		7.23 HR	\$338.26	\$109.96	\$108.37	\$23.26	\$107.19	\$687.03
NET OPERATING PROFIT								\$25.08
INTEREST ON OPERATING CAPITAL		(\$92.01 @ 7.50%)						\$6.90
INTEREST ON EQUIPMENT INVESTMENT								\$59.83
RETURN TO LAND AND RISK								(\$41.65)

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

BUDGET SUMMARY

GROSS RETURN		\$712.11	
VARIABLE OPERATING EXPENSES	\$469.89		
RETURN OVER VARIABLE EXPENSES	\$242.22	(GROSS MARGIN)	
FIXED EXPENSES	\$107.19		
NET FARM INCOME	\$135.03	(RETURN TO CAPITAL, LABOR, LAND & RISK)	
LABOR AND MANAGEMENT COST	\$109.96		
NET OPERATING PROFIT	\$25.08	(RETURN TO CAPITAL, LAND & RISK)	
CAPITAL COSTS	\$66.73		
RETURN TO LAND AND RISK		(\$41.65)	

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 2009.

Planting dates: April 1 - April 15

Harvesting dates: September 1 - October 30

ITEM	PRICE	YIELD	TOTAL
GROSS RETURNS			
RED CHILE	\$1.00	3,200 LBS	\$3,200.00
TOTAL			\$3,200.00

PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS	TOTAL
SEED	\$22.00	8 LBS	\$176.00	\$176.00
NITROGEN (N)	\$0.62	120 LBS	\$74.40	\$74.40
PHOSPHATE (P205)	\$0.58	70 LBS	\$40.60	\$40.60
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			\$386.47	\$386.47

PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
PLOW	145 HP	0.48 HR		\$3.46	\$11.09	\$3.90	\$4.98	\$23.42
DISC (2X)	145 HP	0.34 HR		\$2.45	\$7.85	\$2.30	\$3.19	\$15.79
PLANE	145 HP	0.16 HR		\$1.15	\$3.70	\$0.65	\$2.84	\$8.34
FERTILIZE LIST	DEALER APPLIED 145 HP	0.18 HR		\$1.30	\$4.16	\$1.07	\$2.37	\$8.90
PRE-IRRIGATE		0.75 HR		\$5.44	\$7.68	\$1.09	\$1.75	\$15.95
CULTIVATOR	65 HP	0.21 HR		\$1.51	\$2.55	\$0.48	\$1.16	\$5.70
PLANTER	70 HP	0.26 HR		\$1.87	\$4.43	\$0.96	\$5.34	\$12.61
CULTIVATOR (5X)	65 HP	1.05 HR		\$7.56	\$12.76	\$2.41	\$5.78	\$28.51
THIN (CUSTOM)			\$45.00					\$45.00
IRRIGATE (7X)		3.50 HR		\$25.38	\$53.73	\$7.60	\$12.24	\$98.94
HAND HOE (CUSTOM)			\$20.00					\$20.00
CHEMICAL APPLICATION (CUSTOM)			\$0.00					\$0.00
SUBTOTAL		6.93 HR	\$65.00	\$50.11	\$107.94	\$20.46	\$39.64	\$283.16

HARVEST OPERATIONS								
HAND PICK (CUSTOM)			\$640.00					\$640.00
FIELD HAUL	145 HP	0.90 HR		\$6.48	\$20.79	\$3.60	\$8.19	\$39.06
HAUL (CUSTOM)			\$96.00					\$96.00
SUBTOTAL		0.90 HR	\$736.00	\$6.48	\$20.79	\$3.60	\$8.19	\$775.06

POSTHARVEST OPERATIONS								
SHREDDER	70 HP	0.14 HR		\$1.01	\$2.39	\$0.35	\$2.74	\$6.48
SUBTOTAL		0.14 HR		\$1.01	\$2.39	\$0.35	\$2.74	\$6.48

OVERHEAD EXPENSES								
DOWNTIME		0.93 HR		\$6.70				\$6.70
EMPLOYEE BENEFITS				\$10.37				\$10.37
INSURANCE			\$0.02					\$0.02
LAND TAXES						\$1.86		\$1.86
SUPERVISION AND MANAGEMENT				\$224.43				\$224.43
OTHER EXPENSES			\$56.86					\$56.86
SUBTOTAL		0.93 HR	\$56.88	\$241.49		\$1.86		\$300.23

TOTAL OPERATING EXPENSES 8.90 HR \$1,244.35 \$299.09 \$131.12 \$24.41 \$52.43 \$1,751.39

NET OPERATING PROFIT \$1,448.61

INTEREST ON OPERATING CAPITAL (\$228.05 @ 7.50%) \$17.10
 INTEREST ON EQUIPMENT INVESTMENT \$27.15

RETURN TO LAND AND RISK \$1,404.35

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

BUDGET SUMMARY

GROSS RETURN		\$3,200.00	
VARIABLE OPERATING EXPENSES	\$1,399.88		
RETURN OVER VARIABLE EXPENSES		\$1,800.12	(GROSS MARGIN)
FIXED EXPENSES	\$52.43		
NET FARM INCOME		\$1,747.70	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$299.09		
NET OPERATING PROFIT		\$1,448.61	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$44.25		
RETURN TO LAND AND RISK		\$1,404.35	

TABLE 13. Summary of per acre costs and returns for a 500 acre farm with above average management, Artesia-Lake Arthur area, Projected 2009.

	ALFALFA ESTABLISHMENT	ALFALFA HAY	BARLEY	OAT HAY	PICKER COTTON	STRIPPER COTTON	RED CHILE
		TONS	CWT	TONS	LBS	LBS	LBS
PRIMARY YIELD		6.50	35.00	3.50	700.00	700.00	3200.00
PRIMARY PRICE		\$140.00	\$6.00	\$100.00	\$0.80	\$0.76	\$1.00
GOVERNMENT PAYMENTS		\$0.00	\$0.00	\$0.00	\$61.11	\$96.11	\$0.00
SECOND INCOME		\$40.00	\$40.00	\$0.00	\$84.00	\$84.00	\$0.00
GROSS RETURN		\$950.00	\$250.00	\$350.00	\$705.11	\$712.11	\$3,200.00
CASH OPERATING EXPENSES							
SEED	\$80.00		\$37.40	\$38.00	\$27.90	\$37.20	\$176.00
FERTILIZER		\$42.00	\$93.00	\$25.50	\$4.80	\$4.80	\$115.00
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		\$60.89					
CANAL WATER							
FUEL, OIL & LUBRICANTS-EQUIPMENT	\$46.59	\$48.80	\$21.32	\$36.05	\$74.99	\$70.00	\$69.72
FUEL-IRRIGATION	\$10.23	\$63.96	\$35.82	\$35.82	\$38.38	\$38.38	\$61.40
REPAIRS	\$12.78	\$33.51	\$11.11	\$17.52	\$32.08	\$23.26	\$24.41
CUSTOM CHARGES			\$24.91		\$124.30	\$154.89	\$801.00
LAND TAXES		\$1.86	\$1.86	\$1.86	\$1.86	\$1.86	\$1.86
OTHER EXPENSES	\$0.01	\$56.88	\$56.87	\$56.87	\$56.88	\$56.88	\$56.88
TOTAL CASH EXPENSES	\$182.01	\$394.31	\$305.23	\$211.62	\$479.43	\$471.75	\$1,401.73
RETURN OVER CASH EXPENSES	(\$182.01)	\$555.69	(\$55.23)	\$138.38	\$225.68	\$240.36	\$1,798.27
FIXED EXPENSES	\$32.14	\$111.31	\$20.84	\$29.28	\$200.38	\$105.33	\$50.57
TOTAL EXPENSES	\$214.15	\$505.61	\$326.07	\$240.90	\$679.81	\$577.08	\$1,452.30
NET FARM INCOME	(\$214.15)	\$444.39	(\$76.07)	\$109.10	\$25.30	\$135.03	\$1,747.70
LABOR AND MANAGEMENT COSTS	\$48.16	\$127.75	\$45.00	\$59.54	\$113.60	\$109.96	\$299.09
NET OPERATING PROFIT	(\$262.31)	\$316.64	(\$121.07)	\$49.56	(\$88.31)	\$25.08	\$1,448.61
CAPITAL COSTS							
INTEREST ON OPERATING CAPITAL		\$8.93	\$7.19	\$3.86	\$7.90	\$6.90	\$17.10
INTEREST ON EQUIPMENT INVESTMENT		\$27.87	\$9.82	\$16.12	\$108.28	\$59.83	\$27.15
TOTAL CAPITAL COSTS	\$0.00	\$36.80	\$17.01	\$19.97	\$116.19	\$66.73	\$44.25
RETURN TO LAND AND RISK	(\$262.31)	\$279.84	(\$138.08)	\$29.58	(\$204.49)	(\$41.65)	\$1,404.35

TABLE 14. Whole farm summary, Artesia-Lake Arthur area,
Projected 2009.

GROSS RETURNS		
ALFALFA HAY	260 ACRES	
CROP		\$247,000
BARLEY	17 ACRES	
CROP		\$4,250
DIRECT PAYMENT		\$0
COUNTER CYCLICAL PAYMENT		\$0
OAT HAY	20 ACRES	
CROP		\$7,000
PICKER COTTON	95 ACRES	
COTTON LINT		\$53,200
COTTON SEED		\$7,980
DIRECT PAYMENT		\$0
COUNTER CYCLICAL PAYMENT		\$5,805
STRIPPER COTTON	68 ACRES	
COTTON LINT		\$36,176
COTTON SEED		\$5,712
DIRECT PAYMENT		\$0
COUNTER CYCLICAL PAYMENT		\$6,535
RED CHILE	40 ACRES	
CROP		\$128,000
GROSS RETURN		<u>\$501,659</u>
CASH OPERATING EXPENSES		
SEED		\$17,776
FERTILIZER		\$18,393
CHEMICALS		\$44,390
CROP INSURANCE		\$950
OTHER PURCHASED INPUTS		\$15,832
CANAL WATER		\$0
FUEL, OIL & LUBRICANTS-EQUIPMENT		\$30,866
FUEL-IRRIGATION		\$27,199
REPAIRS		\$15,522
CUSTOM CHARGES		\$54,804
LAND TAXES		\$928
OTHER EXPENSES		\$28,439
TOTAL CASH EXPENSES		<u>\$255,100</u>
RETURN OVER CASH EXPENSES		\$246,559
FIXED EXPENSES		\$46,132
TOTAL EXPENSES		\$301,232
NET FARM INCOME		\$200,427
LABOR AND MANAGEMENT COSTS		\$67,908
NET OPERATING PROFIT		\$132,519
CAPITAL COSTS		
INTEREST ON OPERATING CAPITAL		\$4,424
INTEREST ON EQUIPMENT INVESTMENT		\$23,177
TOTAL CAPITAL COSTS		<u>\$27,601</u>
RETURN TO LAND AND RISK		<u>\$104,918</u>
LAND VALUE	RETURN TO RISK*	RETURN ON INVESTMENT**
\$1,000 /ACRE	\$69,918	16.98%
\$2,500 /ACRE	\$17,418	8.66%
\$4,000 /ACRE	(\$35,082)	5.81%
\$5,500 /ACRE	(\$87,582)	4.37%

* 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)