

MICROCOMPUTER CROP COST AND RETURN GENERATOR

BUDGET AREA..... ARTESIA-LAKE ARTHUR ARE/ Projected 2014
FARM SIZE..... 500 ACRES
IRRIGATION TYPE..... FLOOD
NUMBER OF CROPS..... 6

VERSION 1.0

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TABLE 11. Cucumbers, flood-irrigated, budgeted per acre costs and returns for a 500 acre farm with above average management, Artesia-Lake Arthur, 2003.
Planting dates: April 1 - April 15
Harvesting dates: June 1 - July 31

ITEM	PRICE	YIELD								TOTAL	
GROSS RETURNS											
CUCUMBERS	5	180 CWT								900	
TOTAL										900	
PURCHASED INPUTS											
	PRICE	QUANTITY	PURCHASED INPUTS								TOTAL
SEED	40	5 LBS	200								200
FERTILIZER (18-27-12)	0.14	150 LBS	21								21
FERTILIZER (32-0-0)	0.11	150 LBS	16.5								16.5
HERBICIDE	7.04	1 X/A	7.04								7.04
INSECTICIDE (CUSTOM)	16.854	1 X/A	16.854								16.854
PUMP WATER*		24 AC.									
SUBTOTAL										261.394	
PREHARVEST OPERATIONS											
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST			TOTAL	
DISC	126 HP	0.17 HR		1.224	5.609405405	1.149387	1.613751457			9.596543862	
PLOW	126 HP	0.48 HR		3.456	15.83832114	3.900048	5.031311434			28.22568058	
DISC (2X)	126 HP	0.34 HR		2.448	11.21881081	2.298774	3.227502914			19.19308772	
FLOAT	70 HP	0.16 HR		1.152	3.897344	0.153936	0.740819919			5.944099919	
FERTILIZE (CUSTOM)	DEALER APPLIED										
LISTER	126 HP	0.18 HR		1.296	5.939370429	1.071918	2.394321605			10.70161003	
PRE-IRRIGATE		0.05 HR		0.375	1.403917613	0.289642667	0.470968551			2.539528831	
CULTIVATOR	65 HP	0.21 HR		1.512	3.57357	0.481360256	1.167597681			6.734527937	
PLANTER	70 HP	0.26 HR		1.872	6.333184	0.669786	4.354302665			13.22927266	
CULTIVATOR (2X)	40 HP	0.42 HR		3.024	5.4978	0.872252511	4.40429456			13.79834707	
THIN & HOE (2X)			40							40	
IRRIGATE (14X)		7 HR		52.5	19.65484659	4.054997333	6.593559715			82.80340363	
SUBTOTAL										232.7661023	
HARVEST OPERATIONS											
HARVEST (CUSTOM)			585							585	
HAUL (VEG. TRAILER)	40 HP	1 HR		7.2	13.09	1.1065	8.810522792			30.20702279	
SUBTOTAL										615.2070228	
OVERHEAD EXPENSES											
DOWNTIME		0.805 HR		5.796						5.796	
EMPLOYEE BENEFITS				12.39462						12.39462	
INSURANCE			0.04957848							0.04957848	
LAND TAXES							2.116666667			2.116666667	
SUPERVISION AND MANAGEMENT				60.81521902						60.81521902	
OTHER EXPENSES			63.4282							63.4282	
SUBTOTAL										144.6002842	
TOTAL OPERATING EXPENSES											
										1253.967409	
NET OPERATING PROFIT											
										-353.967409	
INTEREST ON OPERATING CAPITAL	(205.4414198	@	0.075)					15.40810649	
INTEREST ON EQUIPMENT INVESTMENT										0	
RETURN TO LAND AND RISK										-369.375516	

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

BUDGET SUMMARY

GROSS RETURN		900	
VARIABLE OPERATING EXPENSES	1057.97695		
RETURN OVER VARIABLE EXPENSES	-157.97695	(GROSS MARGIN)	
FIXED EXPENSES	40.92561996		
NET FARM INCOME	-198.90257	(RETURN TO CAPITAL, LABOR, LAND & RISK)	
LABOR AND MANAGEMENT COST	155.064839		
NET OPERATING PROFIT	-353.967409	(RETURN TO CAPITAL, LAND & RISK)	
CAPITAL COSTS	15.40810649		
RETURN TO LAND AND RISK	-369.375516		

TABLE 1. Acreage Summary, Eddy County, Artesia Lake Arthur Area, Projected 2014

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	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 2014

Item		
Labor Wage Rate:		
Equipment operators	\$/hour	\$7.20
General & Irrigators	\$/hour	\$7.50
Purchased Inputs:		
Fertilizer:		
Nitrogen (N)	\$/pound	\$0.50
Phosphate (P ₂ O ₅)	\$/pound	\$0.40
Seed:		
Alfalfa	\$/pound	\$6.00
Cotton picker	\$/pound	\$7.55
stripper	\$/pound	\$7.55
Barley	\$/pound	\$0.47
Oats	\$/pound	\$0.38
Red Chile	\$/pound	\$22.00
Wire:	\$/lb.	\$0.03
Natural gas (service charge)	\$/MCF	\$4.00
Diesel fuel	\$/month	\$10.00
Diesel fuel	\$/gallon	\$4.00
Gasoline	\$/gallon	\$3.50
Electricity	cents/KwHr	\$8.32
LP Gas	\$/gallon	\$2.75
Employee Liability Insurance	\$/ \$1000 wages	\$0.72
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)	\$2.12
Personal Property Tax Rate	- NR - R	\$/ \$1,000 (Assessed Value)
		\$25.40
		\$22.37
Supervision Factors		
Field Crop-Irrigation	\$/labor hour	\$0.06
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 2014

Item			
Electricity (Domestic & Shop)	\$290.40	per month	\$3,485
Telephone	\$211.75	per month	\$2,541
Accounting & Legal			\$3,200
Misc. Supplies & Hand Tools			\$4,090
Pickup and Auto			
miles	24,200	@	\$0.500 per mile
Insurance			
- general liability (non-employee)			\$1,803
- fire/theft			\$2,716
Property Taxes			
- non-planted land			\$0
- other than land & machinery			\$0
Building repairs and maintenance			\$0
Dues, fees, publications			\$1,367
Farmstead Equipment			\$411
Total			<u>\$31,714</u>
Total Per Planted Acre			<u>\$63.43</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 2014
Planting dates: September 1 - September 30

ITEM	PRICE	QUANTITY	PURCHASED INPUTS					TOTAL
PURCHASED INPUTS								
SEED	\$6.00	20 LBS		\$120.00				\$120.00
HERBICIDE	\$32.40	1 ACRE		\$32.40				\$32.40
PUMP WATER		8 AC. IN.						
SUBTOTAL				\$152.40				\$152.40
PREHARVEST OPERATIONS								
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
PLOW	145 HP	0.48 HR		\$3.46	\$15.84	\$3.90	\$5.03	\$28.23
DISC (2X)	145 HP	0.34 HR		\$2.45	\$11.22	\$2.30	\$3.23	\$19.19
PLANE (3X)	145 HP	0.57 HR		\$4.10	\$18.81	\$2.33	\$10.21	\$35.45
DISC	145 HP	0.17 HR		\$1.22	\$5.61	\$1.15	\$1.61	\$9.60
FLOAT (2X)	70 HP	0.32 HR		\$2.30	\$7.79	\$0.31	\$1.48	\$11.89
DRILL (2X)	65 HP	0.42 HR		\$3.02	\$7.15	\$0.99	\$7.25	\$18.41
IRRIGATE (2X)		1.00 HR		\$7.50	\$7.02	\$1.45	\$2.35	\$18.32
SUBTOTAL		3.30 HR		\$24.06	\$73.44	\$12.42	\$31.17	\$141.08
OVERHEAD EXPENSES								
DOWNTIME		0.46 HR		\$3.28				\$3.28
EMPLOYEE BENEFITS				\$4.33				\$4.33
INSURANCE			\$0.02					\$0.02
SUPERVISION AND MANAGEMENT				\$20.65				\$20.65
SUBTOTAL		0.46 HR	\$0.02	\$28.26				\$28.28
TOTAL OPERATING EXPENSES		3.76 HR	\$152.41	\$52.32	\$73.44	\$12.42	\$31.17	\$321.76

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 2014
Harvesting dates: May 5 - November 1

ITEM	PRICE	YIELD						TOTAL
GROSS RETURNS								
ALFALFA HAY	\$245.00	6.50 TONS (STACKED)						\$1,592.50
GRAZING	\$40.00							\$40.00
TOTAL								\$1,632.50
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	\$0.03	56 LBS	\$1.74					\$1.74
DRYING AGENT (AGRI-DRY)	\$8.26	1 /TON	\$53.66					\$53.66
ESTABLISHMENT: Principal		5 YEARS					\$64.35	\$64.35
Interest							\$13.71	\$13.71
PUMP WATER*		50 AC. IN.						
SUBTOTAL			\$189.06				\$78.06	\$267.12
PREHARVEST OPERATIONS								
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
IRRIGATE (7X)		3.50 HR		\$26.25	\$43.87	\$9.05	\$14.72	\$93.89
SUBTOTAL		3.50 HR		\$26.25	\$43.87	\$9.05	\$14.72	\$93.89
HARVEST OPERATIONS								
SWATHER (5X)	16 FT SP	0.55 HR		\$3.96	\$8.24	\$0.80	\$12.20	\$25.20
RAKE (5X)	40 HP	0.25 HR		\$1.80	\$3.27	\$0.51	\$2.92	\$8.50
BALER (5X)	96 HP	1.25 HR		\$9.00	\$30.45	\$1.37	\$3.58	\$44.40
BALE WAGON (5X)	SP	1.00 HR		\$7.20	\$27.13	\$16.75	\$7.60	\$58.69
SUBTOTAL		3.05 HR		\$21.96	\$69.09	\$19.43	\$26.30	\$136.78
OVERHEAD EXPENSES								
DOWNTIME		0.70 HR		\$5.04				\$5.04
EMPLOYEE BENEFITS				\$8.68				\$8.68
INSURANCE			\$0.03					\$0.03
LAND TAXES							\$2.12	\$2.12
SUPERVISION AND MANAGEMENT				\$114.56				\$114.56
OTHER EXPENSES			\$63.43					\$63.43
SUBTOTAL		0.70 HR	\$63.46	\$128.28			\$2.12	\$193.86
TOTAL OPERATING EXPENSES		7.25 HR	\$252.53	\$176.49	\$112.96	\$28.48	\$121.19	\$691.65
NET OPERATING PROFIT								\$940.85
INTEREST ON OPERATING CAPITAL		(\$115.14 @ 7.50%)						\$8.64
INTEREST ON EQUIPMENT INVESTMENT								\$21.86
RETURN TO LAND AND RISK								\$910.35

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

BUDGET SUMMARY

GROSS RETURN		\$1,632.50	
VARIABLE OPERATING EXPENSES	\$393.97		
RETURN OVER VARIABLE EXPENSES		\$1,238.53	(GROSS MARGIN)
FIXED EXPENSES	\$121.19		
NET FARM INCOME		\$1,117.34	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$176.49		
NET OPERATING PROFIT		\$940.85	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$30.50		
RETURN TO LAND AND RISK		\$910.35	

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 2014
 Planting dates: August 20 - September 30
 Harvesting dates: June 15 - July 1

ITEM	PRICE	YIELD						TOTAL
GROSS RETURNS								
BARLEY	\$6.12	35.00	CWT					\$214.20
DIRECT PAYMENT	\$0.00	35.00	CWT					\$0.00
COUNTER CYCLICAL PAYMENT	\$0.00							\$0.00
GRAZING	\$40.00							\$40.00
TOTAL							\$254.20	
PURCHASED INPUTS								
	PRICE	QUANTITY	PURCHASED INPUTS					TOTAL
SEED	\$0.45	110	LBS	\$49.50				\$49.50
NITROGEN (N)	\$0.50	150	LBS	\$75.00				\$75.00
INSECTICIDE (CUSTOM)	\$20.01	1	ACRE	\$20.01				\$20.01
PUMP WATER*		28	AC. IN.					
CROP INSURANCE	\$2.94			\$2.94				\$2.94
SUBTOTAL			\$147.45					\$147.45
PREHARVEST OPERATIONS								
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
PLOW	145 HP	0.48 HR		\$3.46	\$15.84	\$3.90	\$5.03	\$28.23
DISC	145 HP	0.17 HR		\$1.22	\$5.61	\$1.15	\$1.61	\$9.60
FLOAT	70 HP	0.16 HR		\$1.15	\$3.90	\$0.15	\$0.74	\$5.94
FERTILIZE	DEALER APPLIED							
DRILL	70 HP	0.21 HR		\$1.51	\$5.12	\$0.42	\$3.95	\$11.00
IRRIGATE (4X)		2.00 HR		\$15.00	\$24.57	\$5.07	\$8.24	\$52.88
SUBTOTAL	3.02 HR		\$22.34		\$55.03	\$10.69	\$19.58	\$107.64
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				\$4.02				\$4.02
INSURANCE				\$0.02				\$0.02
LAND TAXES						\$2.12		\$2.12
SUPERVISION AND MANAGEMENT				\$17.93				\$17.93
OTHER EXPENSES				\$63.43				\$63.43
SUBTOTAL	0.22 HR		\$63.44		\$23.50	\$2.12		\$89.06
TOTAL OPERATING EXPENSES	3.24 HR		\$235.80		\$45.84	\$55.03	\$10.69	\$369.06
NET OPERATING PROFIT								(\$114.86)
INTEREST ON OPERATING CAPITAL		(\$92.23 @	7.50%)				\$6.92
INTEREST ON EQUIPMENT INVESTMENT								\$8.36
RETURN TO LAND AND RISK								(\$130.13)

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

BUDGET SUMMARY

GROSS RETURN		\$254.20	
VARIABLE OPERATING EXPENSES	\$301.52		
RETURN OVER VARIABLE EXPENSES		(\$47.32)	(GROSS MARGIN)
FIXED EXPENSES	\$21.69		
NET FARM INCOME		(\$69.02)	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$45.84		
NET OPERATING PROFIT		(\$114.86)	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$15.27		
RETURN TO LAND AND RISK	(\$130.13)		

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 2014
 Planting dates: February 1 - February 28
 Harvesting dates: June 1 - June 30

ITEM	PRICE	YIELD						TOTAL
GROSS RETURNS								
OAT HAY	\$195.00	3.50 TONS (STACKED)						\$682.50
TOTAL							\$682.50	
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	\$15.84	\$3.90	\$5.03	\$28.23
DISC	145 HP	0.34 HR		\$2.45	\$11.22	\$2.30	\$3.23	\$19.19
FLOAT	70 HP	0.16 HR		\$1.15	\$3.90	\$0.15	\$0.74	\$5.94
FERTILIZE (CUSTOM)			\$0.00					\$0.00
DRILL	70 HP	0.21 HR		\$1.51	\$5.12	\$0.42	\$3.95	\$11.00
IRRIGATE (4X)		2.00 HR		\$15.00	\$24.57	\$5.07	\$8.24	\$52.88
SUBTOTAL	3.19 HR			\$23.57	\$60.64	\$11.84	\$21.19	\$117.24
HARVEST OPERATIONS								
SWATHER	16 FT	0.11 HR		\$0.79	\$1.65	\$0.16	\$2.44	\$5.04
BALER	126 HP	0.25 HR		\$1.80	\$8.25	\$1.03	\$2.03	\$13.11
BALE WAGON	S. P.	0.20 HR		\$1.44	\$5.43	\$3.35	\$1.52	\$11.74
SUBTOTAL	0.56 HR			\$4.03	\$15.32	\$4.54	\$5.99	\$29.89
OVERHEAD EXPENSES								
DOWNTIME		0.40 HR		\$2.86				\$2.86
EMPLOYEE BENEFITS				\$4.97				\$4.97
INSURANCE			\$0.02					\$0.02
LAND TAXES							\$2.12	\$2.12
SUPERVISION AND MANAGEMENT				\$47.94				\$47.94
OTHER EXPENSES			\$63.43					\$63.43
SUBTOTAL	0.40 HR		\$63.45	\$55.77			\$2.12	\$121.33
TOTAL OPERATING EXPENSES	4.15 HR		\$126.95	\$83.37	\$75.96	\$16.38	\$29.30	\$331.96
NET OPERATING PROFIT								\$350.54
INTEREST ON OPERATING CAPITAL		(\$51.53 @ 7.50%)					\$3.86	
INTEREST ON EQUIPMENT INVESTMENT								\$14.02
RETURN TO LAND AND RISK								\$332.66

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

GROSS RETURN		\$682.50	
VARIABLE OPERATING EXPENSES	\$219.29		
RETURN OVER VARIABLE EXPENSES		\$463.21	(GROSS MARGIN)
FIXED EXPENSES	\$29.30		
NET FARM INCOME		\$433.91	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$83.37		
NET OPERATING PROFIT		\$350.54	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$17.88		
RETURN TO LAND AND RISK		\$332.66	

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	\$0.900	700 LBS						\$630.00
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								\$775.11
PURCHASED INPUTS								
PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS					TOTAL
SEED	\$7.55	15 LBS	\$113.25					\$113.25
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			\$236.30					\$236.30
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	\$5.61	\$1.15	\$1.61	\$9.60
PLOW	145 HP	0.48 HR		\$3.46	\$15.84	\$3.90	\$5.03	\$28.23
DISC (2X)	145 HP	0.34 HR		\$2.45	\$11.22	\$2.30	\$3.23	\$19.19
FLOAT	145 HP	0.16 HR		\$1.15	\$5.28	\$0.64	\$1.34	\$8.41
LISTER	145 HP	0.18 HR		\$1.30	\$5.94	\$1.07	\$2.39	\$10.70
PRE-IRRIGATE		0.75 HR		\$5.63	\$6.58	\$1.36	\$2.21	\$15.77
CULTIVATOR	65 HP	0.21 HR		\$1.51	\$3.57	\$0.48	\$1.17	\$6.73
PLANTER	70 HP	0.26 HR		\$1.87	\$6.33	\$0.67	\$4.35	\$13.23
SLED	70 HP	0.15 HR		\$1.08	\$3.65	\$0.18	\$0.82	\$5.74
CULTIVATOR (3X)	65 HP	0.63 HR		\$4.54	\$10.72	\$1.44	\$3.50	\$20.20
HAND HOE (CUSTOM)			\$20.00					\$20.00
IRRIGATE (3X)		1.50 HR		\$11.25	\$19.74	\$4.07	\$6.62	\$41.69
SUBTOTAL		4.83 HR	\$20.00	\$35.45	\$94.49	\$17.27	\$32.29	\$199.50
HARVEST OPERATIONS								
COTTON PICKER (2X)	2-ROW	0.74 HR		\$5.33	\$17.90	\$12.68	\$159.89	\$195.80
HAUL (2X)	65 HP	1.00 HR		\$7.20	\$17.02	\$1.32	\$5.42	\$30.95
GIN COTTON (CUSTOM)			\$104.30					\$104.30
SUBTOTAL		1.74 HR	\$104.30	\$12.53	\$34.92	\$14.00	\$165.30	\$331.06
POSTHARVEST OPERATIONS								
SHREDDER	70 HP	0.14 HR		\$1.01	\$3.41	\$0.19	\$2.21	\$6.82
SUBTOTAL		0.14 HR		\$1.01	\$3.41	\$0.19	\$2.21	\$6.82
OVERHEAD EXPENSES								
DOWNTIME		0.95 HR		\$6.82				\$6.82
EMPLOYEE BENEFITS				\$8.82				\$8.82
INSURANCE			\$0.04					\$0.04
LAND TAXES							\$2.12	\$2.12
SUPERVISION AND MANAGEMENT				\$54.50				\$54.50
OTHER EXPENSES			\$63.43					\$63.43
SUBTOTAL		0.95 HR	\$63.46	\$70.13			\$2.12	\$135.71
TOTAL OPERATING EXPENSES		7.66 HR	\$424.06	\$119.12	\$132.82	\$31.46	\$201.92	\$909.38
NET OPERATING PROFIT								(\$134.27)
INTEREST ON OPERATING CAPITAL		(\$151.06 @	7.50%)				\$11.33
INTEREST ON EQUIPMENT INVESTMENT								\$106.11
RETURN TO LAND AND RISK								(\$251.71)

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

GROSS RETURN		\$775.11	
VARIABLE OPERATING EXPENSES	\$588.34		
RETURN OVER VARIABLE EXPENSES	\$186.77	(GROSS MARGIN)	
FIXED EXPENSES	\$201.92		
NET FARM INCOME		(\$15.15)	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$119.12		
NET OPERATING PROFIT		(\$134.27)	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$117.44		
RETURN TO LAND AND RISK		(\$251.71)	

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 2014
 Planting dates: April 15 - May 15
 Harvesting dates: October 15 - January 15

ITEM	PRICE	YIELD						TOTAL
GROSS RETURNS								
COTTON LINT	\$0.850	700 LBS						\$595.00
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							\$775.11	
PURCHASED INPUTS								
PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS					TOTAL
SEED	\$7.55	20 LBS	\$151.00					\$151.00
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.						
CROP INSURANCE	\$0.00		\$0.00					\$0.00
SUBTOTAL			\$240.30					\$240.30
PREHARVEST OPERATIONS								
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DISC	145 HP	0.17 HR		\$1.22	\$5.61	\$1.15	\$1.61	\$9.60
PLOW	145 HP	0.48 HR		\$3.46	\$15.84	\$3.90	\$5.03	\$28.23
DISC (2X)	145 HP	0.34 HR		\$2.45	\$11.22	\$2.30	\$3.23	\$19.19
FLOAT	145 HP	0.16 HR		\$1.15	\$5.28	\$0.64	\$1.34	\$8.41
LIST	145 HP	0.18 HR		\$1.30	\$5.94	\$1.07	\$2.39	\$10.70
PRE-IRRIGATE		0.75 HR		\$5.63	\$6.58	\$1.36	\$2.21	\$15.77
CULTIVATOR	65 HP	0.21 HR		\$1.51	\$3.57	\$0.48	\$1.17	\$6.73
PLANTER	70 HP	0.26 HR		\$1.87	\$6.33	\$0.67	\$4.35	\$13.23
SLED	70 HP	0.15 HR		\$1.08	\$3.65	\$0.18	\$0.82	\$5.74
CULTIVATOR (3X)	65 HP	0.63 HR		\$4.54	\$10.72	\$1.44	\$3.50	\$20.20
HAND HOE (CUSTOM)			\$20.00					\$20.00
IRRIGATE (3X)		1.50 HR		\$11.25	\$19.74	\$4.07	\$6.62	\$41.69
SUBTOTAL		4.83 HR	\$20.00	\$35.45	\$94.49	\$17.27	\$32.29	\$199.50
HARVEST OPERATIONS								
COTTON STRIPPER	70 HP	0.62 HR		\$4.46	\$15.10	\$3.49	\$63.05	\$86.11
HAUL	65 HP	0.75 HR		\$5.40	\$12.76	\$0.99	\$4.06	\$23.22
GIN COTTON (CUSTOM)			\$134.89					\$134.89
SUBTOTAL		1.37 HR	\$134.89	\$9.86	\$27.86	\$4.48	\$67.11	\$244.21
POSTHARVEST OPERATIONS								
SHREDDER	70 HP	0.14 HR		\$0.56	\$3.41	\$0.19	\$2.21	\$6.37
SUBTOTAL		0.14 HR		\$0.56	\$3.41	\$0.19	\$2.21	\$6.37
OVERHEAD EXPENSES								
DOWNTIME		0.89 HR		\$6.43				\$6.43
EMPLOYEE BENEFITS				\$8.26				\$8.26
INSURANCE			\$0.03				\$0.03	
LAND TAXES							\$2.12	
SUPERVISION AND MANAGEMENT				\$54.44				\$54.44
OTHER EXPENSES			\$63.43				\$63.43	
SUBTOTAL		0.89 HR	\$63.46	\$69.13			\$2.12	\$134.70
TOTAL OPERATING EXPENSES		7.23 HR	\$458.65	\$115.00	\$125.77	\$21.93	\$103.73	\$825.08
NET OPERATING PROFIT								
							(\$49.97)	
INTEREST ON OPERATING CAPITAL			(\$151.68 @	7.50%)		\$11.38	
INTEREST ON EQUIPMENT INVESTMENT								\$55.19
RETURN TO LAND AND RISK							(\$116.54)	

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

BUDGET SUMMARY

GROSS RETURN		\$775.11		
VARIABLE OPERATING EXPENSES	\$606.35			
RETURN OVER VARIABLE EXPENSES	\$168.76	(GROSS MARGIN)		
FIXED EXPENSES	\$103.73			
NET FARM INCOME	\$65.03	(RETURN TO CAPITAL, LABOR, LAND & RISK)		
LABOR AND MANAGEMENT COST	\$115.00			
NET OPERATING PROFIT	(\$49.97)	(RETURN TO CAPITAL, LAND & RISK)		
CAPITAL COSTS	\$66.57			
RETURN TO LAND AND RISK		(\$116.54)		

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 2014
 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								
PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS					TOTAL
SEED	\$22.00	8 LBS	\$176.00					\$176.00
NITROGEN (N)	\$0.50	120 LBS	\$60.00					\$60.00
PHOSPHATE (P205)	\$0.40	70 LBS	\$28.00					\$28.00
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			\$359.47					\$359.47
PREHARVEST OPERATIONS								
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
PLOW	145 HP	0.48 HR		\$3.46	\$15.84	\$3.90	\$5.03	\$28.23
DISC (2X)	145 HP	0.34 HR		\$2.45	\$11.22	\$2.30	\$3.23	\$19.19
PLANE	145 HP	0.16 HR		\$1.15	\$5.28	\$0.65	\$2.87	\$9.95
FERTILIZE	DEALER APPLIED							
LIST	145 HP	0.18 HR		\$1.30	\$5.94	\$1.07	\$2.39	\$10.70
PRE-IRRIGATE		0.75 HR		\$5.63	\$5.26	\$1.09	\$1.77	\$13.74
CULTIVATOR	65 HP	0.21 HR		\$1.51	\$3.57	\$0.48	\$1.17	\$6.73
PLANTER	70 HP	0.26 HR		\$1.87	\$6.33	\$0.67	\$4.35	\$13.23
CULTIVATOR (5X)	65 HP	1.05 HR		\$7.56	\$17.87	\$2.41	\$5.84	\$33.67
THIN (CUSTOM)			\$45.00					\$45.00
IRRIGATE (7X)		3.50 HR		\$26.25	\$36.85	\$7.60	\$12.36	\$83.07
HAND HOE (CUSTOM)			\$20.00					\$20.00
CHEMICAL APPLICATION (CUSTOM)			\$0.00					\$0.00
SUBTOTAL	6.93 HR		\$65.00	\$51.17	\$108.17	\$20.17	\$39.01	\$283.52
HARVEST OPERATIONS								
HAND PICK (CUSTOM)			\$640.00					\$640.00
FIELD HAUL	145 HP	0.90 HR		\$6.48	\$29.70	\$3.60	\$8.28	\$48.06
HAUL (CUSTOM)			\$96.00					\$96.00
SUBTOTAL	0.90 HR		\$736.00	\$6.48	\$29.70	\$3.60	\$8.28	\$784.06
POSTHARVEST OPERATIONS								
SHREDDER	70 HP	0.14 HR		\$1.01	\$3.41	\$0.19	\$2.21	\$6.82
SUBTOTAL	0.14 HR			\$1.01	\$3.41	\$0.19	\$2.21	\$6.82
OVERHEAD EXPENSES								
DOWNTIME		0.93 HR		\$6.70				\$6.70
EMPLOYEE BENEFITS				\$10.56				\$10.56
INSURANCE			\$0.04					\$0.04
LAND TAXES						\$2.12		\$2.12
SUPERVISION AND MANAGEMENT				\$224.35				\$224.35
OTHER EXPENSES			\$63.43					\$63.43
SUBTOTAL	0.93 HR		\$63.47	\$241.60			\$2.12	\$307.19
TOTAL OPERATING EXPENSES	8.90 HR		\$1,223.94	\$300.26	\$141.28	\$23.96	\$51.62	\$1,741.05
NET OPERATING PROFIT								\$1,458.95
INTEREST ON OPERATING CAPITAL	(\$215.49	@	7.50%)			\$16.16
INTEREST ON EQUIPMENT INVESTMENT								\$25.56
RETURN TO LAND AND RISK								\$1,417.23

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

GROSS RETURN		\$3,200.00	
VARIABLE OPERATING EXPENSES	#####		
RETURN OVER VARIABLE EXPENSES		\$1,810.83	(GROSS MARGIN)
FIXED EXPENSES	\$51.62		
NET FARM INCOME		\$1,759.21	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$300.26		
NET OPERATING PROFIT		\$1,458.95	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$41.73		
RETURN TO LAND AND RISK		\$1,417.23	

TABLE 13. Summary of per acre costs and returns for a 500 acre farm with above average management, Artesia-Lake Arthur area,
Projected 2014

	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		\$245.00	\$6.12	\$195.00	\$0.90	\$0.85	\$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		\$1,632.50	\$254.20	\$682.50	\$775.11	\$775.11	\$3,200.00
CASH OPERATING EXPENSES							
SEED	\$120.00		\$49.50	\$38.00	\$113.25	\$151.00	\$176.00
FERTILIZER		\$42.00	\$75.00	\$25.50	\$4.80	\$4.80	\$88.00
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		\$60.65					
CANAL WATER							
FUEL, OIL & LUBRICANTS-EQUIPMENT	\$66.42	\$69.09	\$30.46	\$51.39	\$106.50	\$99.44	\$99.16
FUEL-IRRIGATION	\$7.02	\$43.87	\$24.57	\$24.57	\$26.32	\$26.32	\$42.12
REPAIRS	\$12.42	\$28.48	\$10.69	\$16.38	\$31.46	\$21.93	\$23.96
CUSTOM CHARGES			\$24.91		\$124.30	\$154.89	\$801.00
LAND TAXES		\$2.12	\$2.12	\$2.12	\$2.12	\$2.12	\$2.12
OTHER EXPENSES	\$0.02	\$63.46	\$63.44	\$63.45	\$63.46	\$63.46	\$63.47
TOTAL CASH EXPENSES	\$238.27	\$396.09	\$303.64	\$221.41	\$590.46	\$608.47	\$1,391.29
RETURN OVER CASH EXPENSES	(\$238.27)	\$1,236.41	(\$49.44)	\$461.09	\$184.65	\$166.64	\$1,808.71
FIXED EXPENSES	\$31.17	\$119.08	\$19.58	\$27.19	\$199.81	\$101.62	\$49.50
TOTAL EXPENSES	\$269.44	\$515.16	\$323.22	\$248.59	\$790.26	\$710.08	\$1,440.79
NET FARM INCOME	(\$269.44)	\$1,117.34	(\$69.02)	\$433.91	(\$15.15)	\$65.03	\$1,759.21
LABOR AND MANAGEMENT COSTS	\$52.32	\$176.49	\$45.84	\$83.37	\$119.12	\$115.00	\$300.26
NET OPERATING PROFIT	(\$321.76)	\$940.85	(\$114.86)	\$350.54	(\$134.27)	(\$49.97)	\$1,458.95
CAPITAL COSTS							
INTEREST ON OPERATING CAPITAL		\$8.64	\$6.92	\$3.86	\$11.33	\$11.38	\$16.16
INTEREST ON EQUIPMENT INVESTMENT		\$21.86	\$8.36	\$14.02	\$106.11	\$55.19	\$25.56
TOTAL CAPITAL COSTS	\$0.00	\$30.50	\$15.27	\$17.88	\$117.44	\$66.57	\$41.73
RETURN TO LAND AND RISK	(\$321.76)	\$910.35	(\$130.13)	\$332.66	(\$251.71)	(\$116.54)	\$1,417.23

TABLE 14. Whole farm summary, Artesia-Lake Arthur area,
Projected 2014

GROSS RETURNS		
ALFALFA HAY	260 ACRES	
CROP		\$424,450
BARLEY	17 ACRES	
CROP		\$4,321
DIRECT PAYMENT		\$0
COUNTER CYCLICAL PAYMENT		\$0
OAT HAY	20 ACRES	
CROP		\$13,650
PICKER COTTON	95 ACRES	
COTTON LINT		\$59,850
COTTON SEED		\$7,980
DIRECT PAYMENT		\$0
COUNTER CYCLICAL PAYMENT		\$5,805
STRIPPER COTTON	68 ACRES	
COTTON LINT		\$40,460
COTTON SEED		\$5,712
DIRECT PAYMENT		\$0
COUNTER CYCLICAL PAYMENT		\$6,535
RED CHILE	40 ACRES	
CROP		\$128,000
GROSS RETURN		<u>\$696,764</u>
CASH OPERATING EXPENSES		
SEED		\$35,908
FERTILIZER		\$17,007
CHEMICALS		\$44,390
CROP INSURANCE		\$950
OTHER PURCHASED INPUTS		\$15,770
CANAL WATER		\$0
FUEL, OIL & LUBRICANTS-EQUIPMENT		\$43,808
FUEL-IRRIGATION		\$18,656
REPAIRS		\$13,999
CUSTOM CHARGES		\$54,804
LAND TAXES		\$1,058
OTHER EXPENSES		\$31,732
TOTAL CASH EXPENSES		<u>\$278,084</u>
RETURN OVER CASH EXPENSES		\$418,681
FIXED EXPENSES		\$44,597
TOTAL EXPENSES		\$322,681
NET FARM INCOME		\$374,083
LABOR AND MANAGEMENT COSTS		\$82,201
NET OPERATING PROFIT		\$291,883
CAPITAL COSTS		
INTEREST ON OPERATING CAPITAL		\$4,937
INTEREST ON EQUIPMENT INVESTMENT		\$20,962
TOTAL CAPITAL COSTS		<u>\$25,899</u>
RETURN TO LAND AND RISK		<u>\$265,984</u>
LAND VALUE	RETURN TO RISK*	RETURN ON INVESTMENT**
\$1,000 /ACRE	\$230,984	42.23%
\$2,500 /ACRE	\$178,484	20.25%
\$4,000 /ACRE	\$125,984	13.32%
\$5,500 /ACRE	\$73,484	9.92%

* 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)