

TABLE 1. Acreage Summary, Eddy County, Artesia Lake Arthur Area, Actual 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, Actual 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
Gasoline	\$/gallon		\$3.83
Electricity	\$/gallon		\$2.55
LP Gas	cents/KwHR		\$8.32
	\$/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 Rat - NR	\$/ \$1,000 (Assessed Value)		\$25.40
- R			\$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, Actual 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	\$12,100
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			\$31,714
Total Per Planted Acre			\$63.43

Table with 4 columns: Crop, Area (ha), Yield (t/ha), and Water Use (mm). Rows include Wheat, Barley, Oats, and various other crops.

Table 2. Summary of the 2018 and 2019 crop production and water use for the 2018-2019 season.

Table with 4 columns: Crop, Area (ha), Yield (t/ha), and Water Use (mm). Rows include Wheat, Barley, Oats, and various other crops.

Table 3. Summary of the 2018 and 2019 crop production and water use for the 2018-2019 season.

Table with 4 columns: Crop, Area (ha), Yield (t/ha), and Water Use (mm). Rows include Wheat, Barley, Oats, and various other crops.

Table 4. Summary of the 2018 and 2019 crop production and water use for the 2018-2019 season.

Table with 4 columns: Crop, Area (ha), Yield (t/ha), and Water Use (mm). Rows include Wheat, Barley, Oats, and various other crops.

Table 5. Summary of the 2018 and 2019 crop production and water use for the 2018-2019 season.

Table with 4 columns: Crop, Area (ha), Yield (t/ha), and Water Use (mm). Rows include Wheat, Barley, Oats, and various other crops.

Table 6. Summary of the 2018 and 2019 crop production and water use for the 2018-2019 season.

Table with 4 columns: Crop, Area (ha), Yield (t/ha), and Water Use (mm). Rows include Wheat, Barley, Oats, and various other crops.

Table 7. Summary of the 2018 and 2019 crop production and water use for the 2018-2019 season.

Table with 4 columns: Crop, Area (ha), Yield (t/ha), and Water Use (mm). Rows include Wheat, Barley, Oats, and various other crops.

Table 8. Summary of the 2018 and 2019 crop production and water use for the 2018-2019 season.

Table with 4 columns: Crop, Area (ha), Yield (t/ha), and Water Use (mm). Rows include Wheat, Barley, Oats, and various other crops.

Table 9. Summary of the 2018 and 2019 crop production and water use for the 2018-2019 season.

Table with 4 columns: Crop, Area (ha), Yield (t/ha), and Water Use (mm). Rows include Wheat, Barley, Oats, and various other crops.

Table 10. Summary of the 2018 and 2019 crop production and water use for the 2018-2019 season.

Table with 4 columns: Crop, Area (ha), Yield (t/ha), and Water Use (mm). Rows include Wheat, Barley, Oats, and various other crops.

Table 11. Summary of the 2018 and 2019 crop production and water use for the 2018-2019 season.

Table with 4 columns: Crop, Area (ha), Yield (t/ha), and Water Use (mm). Rows include Wheat, Barley, Oats, and various other crops.

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, Actual 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	\$15.17	\$3.90	\$5.03	\$27.55
DISC (2X)	145 HP	0.34 HR		\$2.45	\$10.74	\$2.30	\$3.23	\$18.72
PLANE (3X)	145 HP	0.57 HR		\$4.10	\$18.01	\$2.33	\$10.21	\$34.65
DISC	145 HP	0.17 HR		\$1.22	\$5.37	\$1.15	\$1.61	\$9.36
FLOAT (2X)	70 HP	0.32 HR		\$2.30	\$7.46	\$0.31	\$1.48	\$11.56
DRILL (2X)	65 HP	0.42 HR		\$3.02	\$5.21	\$0.99	\$7.25	\$16.47
IRRIGATE (2X)		1.00 HR		\$7.50	\$7.02	\$1.45	\$2.35	\$18.32
SUBTOTAL		3.30 HR		\$24.06	\$68.98	\$12.42	\$31.17	\$136.62
OVERHEAD EXPENSES								
DOWNTIME		0.46 HR		\$3.28				\$3.28
EMPLOYEE BENEFITS				\$4.33				\$4.33
INSURANCE			\$0.02					\$0.02
SUPERVISION AND MANAGEMENT				\$20.34				\$20.34
SUBTOTAL		0.46 HR	\$0.02	\$27.95				\$27.97
TOTAL OPERATING EXPENSES		3.76 HR	\$152.41	\$52.01	\$68.98	\$12.42	\$31.17	\$316.99

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, Actual 2014
Harvesting dates: May 5 - November 1

ITEM	PRICE	YIELD						TOTAL
GROSS RETURNS								
ALFALFA HAY	\$245.00	5.60 TONS (STACKED)						\$1,372.00
GRAZING	\$40.00							\$40.00
TOTAL								\$1,412.00
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	\$0.03	48 LBS	\$1.50					\$1.50
DRYING AGENT (AGRI-DRY)	\$8.26	1 /TON	\$46.23					\$46.23
ESTABLISHMENT: Principal		5 YEARS					\$63.40	\$63.40
Interest							\$13.48	\$13.48
PUMP WATER*		50 AC. IN.						
SUBTOTAL			\$181.39				\$76.88	\$258.27
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	\$7.89	\$0.80	\$12.20	\$24.85
RAKE (5X)	40 HP	0.25 HR		\$1.80	\$2.38	\$0.51	\$2.92	\$7.61
BALER (5X)	96 HP	1.25 HR		\$9.00	\$29.15	\$1.37	\$3.58	\$43.10
BALE WAGON (5X)	SP	1.00 HR		\$7.20	\$19.77	\$16.75	\$7.60	\$51.32
SUBTOTAL		3.05 HR		\$21.96	\$59.19	\$19.43	\$26.30	\$126.89
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				\$99.12				\$99.12
OTHER EXPENSES			\$63.43					\$63.43
SUBTOTAL		0.70 HR		\$63.46	\$112.84		\$2.12	\$178.42
TOTAL OPERATING EXPENSES		7.25 HR		\$244.86	\$161.05	\$103.06	\$28.48	\$657.47
NET OPERATING PROFIT								\$754.53
INTEREST ON OPERATING CAPITAL		(\$110.48 @ 7.50%)						\$8.29
INTEREST ON EQUIPMENT INVESTMENT								\$21.86
RETURN TO LAND AND RISK								\$724.38

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

BUDGET SUMMARY		
GROSS RETURN		\$1,412.00
VARIABLE OPERATING EXPENSES	\$376.40	
RETURN OVER VARIABLE EXPENSES	\$1,035.60	(GROSS MARGIN)
FIXED EXPENSES	\$120.01	
NET FARM INCOME	\$915.58	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$161.05	
NET OPERATING PROFIT	\$754.53	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$30.15	
RETURN TO LAND AND RISK	\$724.38	

TABLE 8. Barley, flood-irrigated, budgeted per acre costs and returns for a 500 acre farm with above average management, Artesia-Lake Arthur area, Actual 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										
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										
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE		PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL	
PLOW	145 HP	0.48	HR		\$3.46	\$15.17	\$3.90	\$5.03	\$27.55	
DISC	145 HP	0.17	HR		\$1.22	\$5.37	\$1.15	\$1.61	\$9.36	
FLOAT	70 HP	0.16	HR		\$1.15	\$3.73	\$0.15	\$0.74	\$5.78	
FERTILIZE	DEALER APPLIED									
DRILL	70 HP	0.21	HR		\$1.51	\$4.90	\$0.42	\$3.95	\$10.78	
IRRIGATE (4X)		2.00	HR		\$15.00	\$24.57	\$5.07	\$8.24	\$52.88	
SUBTOTAL			3.02 HR			\$22.34	\$53.73	\$10.69	\$19.58	\$106.35
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	\$53.73	\$10.69	\$21.69	\$367.77	
NET OPERATING PROFIT									(\$113.57)	
INTEREST ON OPERATING CAPITAL			(\$91.91 @ 7.50%)					\$6.89		
INTEREST ON EQUIPMENT INVESTMENT									\$8.36	
RETURN TO LAND AND RISK									(\$128.81)	

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

BUDGET SUMMARY

GROSS RETURN		\$254.20	
VARIABLE OPERATING EXPENSES	\$300.23		
RETURN OVER VARIABLE EXPENSES		(\$46.03)	(GROSS MARGIN)
FIXED EXPENSES	\$21.69		
NET FARM INCOME		(\$67.72)	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$45.84		
NET OPERATING PROFIT		(\$113.57)	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$15.25		
RETURN TO LAND AND RISK			(\$128.81)

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, Actual 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	\$15.17	\$3.90	\$5.03	\$27.55
DISC	145 HP	0.34 HR		\$2.45	\$10.74	\$2.30	\$3.23	\$18.72
FLOAT	70 HP	0.16 HR		\$1.15	\$3.73	\$0.15	\$0.74	\$5.78
FERTILIZE (CUSTOM)			\$0.00					\$0.00
DRILL	70 HP	0.21 HR		\$1.51	\$4.90	\$0.42	\$3.95	\$10.78
IRRIGATE (4X)		2.00 HR		\$15.00	\$24.57	\$5.07	\$8.24	\$52.88
SUBTOTAL		3.19 HR		\$23.57	\$59.11	\$11.84	\$21.19	\$115.71
HARVEST OPERATIONS								
SWATHER	16 FT	0.11 HR		\$0.79	\$1.58	\$0.16	\$2.44	\$4.97
BALER	126 HP	0.25 HR		\$1.80	\$7.90	\$1.03	\$2.03	\$12.76
BALE WAGON	S. P.	0.20 HR		\$1.44	\$3.95	\$3.35	\$1.52	\$10.26
SUBTOTAL		0.56 HR		\$4.03	\$13.43	\$4.54	\$5.99	\$28.00
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	\$72.53	\$16.38	\$328.54
NET OPERATING PROFIT							\$353.96	
INTEREST ON OPERATING CAPITAL		(	\$50.98	@	7.50%	)	\$3.82	
INTEREST ON EQUIPMENT INVESTMENT							\$14.02	
RETURN TO LAND AND RISK							\$336.12	

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

GROSS RETURN		\$682.50	
VARIABLE OPERATING EXPENSES	\$215.87		
RETURN OVER VARIABLE EXPENSES		\$466.63	(GROSS MARGIN)
FIXED EXPENSES	\$29.30		
NET FARM INCOME		\$437.33	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$83.37		
NET OPERATING PROFIT		\$353.96	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$17.84		
RETURN TO LAND AND RISK		\$336.12	

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								
	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								
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DISC	145 HP	0.17 HR		\$1.22	\$5.37	\$1.15	\$1.61	\$9.36
PLOW	145 HP	0.48 HR		\$3.46	\$15.17	\$3.90	\$5.03	\$27.55
DISC (2X)	145 HP	0.34 HR		\$2.45	\$10.74	\$2.30	\$3.23	\$18.72
FLOAT	145 HP	0.16 HR		\$1.15	\$5.06	\$0.64	\$1.34	\$8.19
LISTER	145 HP	0.18 HR		\$1.30	\$5.69	\$1.07	\$2.39	\$10.45
PRE-IRRIGATE		0.75 HR		\$5.63	\$6.58	\$1.36	\$2.21	\$15.77
CULTIVATOR	65 HP	0.21 HR		\$1.51	\$2.60	\$0.48	\$1.17	\$5.76
PLANTER	70 HP	0.26 HR		\$1.87	\$6.06	\$0.67	\$4.35	\$12.96
SLED	70 HP	0.15 HR		\$1.08	\$3.50	\$0.18	\$0.82	\$5.59
CULTIVATOR (3X)	65 HP	0.63 HR		\$4.54	\$7.81	\$1.44	\$3.50	\$17.29
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	\$88.32	\$17.27	\$32.29	\$193.33
HARVEST OPERATIONS								
COTTON PICKER (2X)	2-ROW	0.74 HR		\$5.33	\$17.14	\$12.68	\$159.89	\$195.04
HAUL (2X)	65 HP	1.00 HR		\$7.20	\$12.40	\$1.32	\$5.42	\$26.34
GIN COTTON (CUSTOM)			\$104.30					\$104.30
SUBTOTAL		1.74 HR	\$104.30	\$12.53	\$29.54	\$14.00	\$165.30	\$325.68
POSTHARVEST OPERATIONS								
SHREDDER	70 HP	0.14 HR		\$1.01	\$3.27	\$0.19	\$2.21	\$6.67
SUBTOTAL		0.14 HR		\$1.01	\$3.27	\$0.19	\$2.21	\$6.67
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	\$121.13	\$31.46	\$201.92	\$897.69
NET OPERATING PROFIT								(\$122.58)
INTEREST ON OPERATING CAPITAL		(	\$149.04	@	7.50%	)		\$11.18
INTEREST ON EQUIPMENT INVESTMENT								\$106.11
RETURN TO LAND AND RISK								(\$239.86)

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

BUDGET SUMMARY

GROSS RETURN		\$775.11	
VARIABLE OPERATING EXPENSES	\$576.65		
RETURN OVER VARIABLE EXPENSES	\$198.46	(GROSS MARGIN)	
FIXED EXPENSES	\$201.92		
NET FARM INCOME		(\$3.46)	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$119.12		
NET OPERATING PROFIT		(\$122.58)	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$117.28		
RETURN TO LAND AND RISK		(\$239.86)	

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, Actual 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.	\$0.00					\$0.00
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	\$5.37	\$1.15	\$1.61	\$9.36
PLOW	145 HP	0.48 HR		\$3.46	\$15.17	\$3.90	\$5.03	\$27.55
DISC (2X)	145 HP	0.34 HR		\$2.45	\$10.74	\$2.30	\$3.23	\$18.72
FLOAT	145 HP	0.16 HR		\$1.15	\$5.06	\$0.64	\$1.34	\$8.19
LIST	145 HP	0.18 HR		\$1.30	\$5.69	\$1.07	\$2.39	\$10.45
PRE-IRRIGATE		0.75 HR		\$5.63	\$6.58	\$1.36	\$2.21	\$15.77
CULTIVATOR	65 HP	0.21 HR		\$1.51	\$2.60	\$0.48	\$1.17	\$5.76
PLANTER	70 HP	0.26 HR		\$1.87	\$6.06	\$0.67	\$4.35	\$12.96
SLED	70 HP	0.15 HR		\$1.08	\$3.50	\$0.18	\$0.82	\$5.59
CULTIVATOR (3X)	65 HP	0.63 HR		\$4.54	\$7.81	\$1.44	\$3.50	\$17.29
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	\$88.32	\$17.27	\$32.29	\$193.33
HARVEST OPERATIONS								
COTTON STRIPPER	70 HP	0.62 HR		\$4.46	\$14.46	\$3.49	\$63.05	\$85.46
HAUL	65 HP	0.75 HR		\$5.40	\$9.30	\$0.99	\$4.06	\$19.75
GIN COTTON (CUSTOM)			\$134.89					\$134.89
SUBTOTAL		1.37 HR	\$134.89	\$9.86	\$23.76	\$4.48	\$67.11	\$240.10
POSTHARVEST OPERATIONS								
SHREDDER	70 HP	0.14 HR		\$0.56	\$3.27	\$0.19	\$2.21	\$6.22
SUBTOTAL		0.14 HR		\$0.56	\$3.27	\$0.19	\$2.21	\$6.22
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		\$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	\$115.34	\$21.93	\$103.73	\$814.66
NET OPERATING PROFIT							(\$39.55)	
INTEREST ON OPERATING CAPITAL		(	\$149.76	@	7.50%	)	\$11.23	
INTEREST ON EQUIPMENT INVESTMENT							\$55.19	
RETURN TO LAND AND RISK							(\$105.98)	

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

GROSS RETURN		\$775.11	
VARIABLE OPERATING EXPENSES	\$595.93		
RETURN OVER VARIABLE EXPENSES		\$179.18	(GROSS MARGIN)
FIXED EXPENSES	\$103.73		
NET FARM INCOME		\$75.45	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$115.00		
NET OPERATING PROFIT		(\$39.55)	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$66.43		
RETURN TO LAND AND RISK		(\$105.98)	

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, Actual 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		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	\$15.17	\$3.90	\$5.03	\$27.55	
DISC (2X)	145 HP	0.34 HR		\$2.45	\$10.74	\$2.30	\$3.23	\$18.72	
PLANE	145 HP	0.16 HR		\$1.15	\$5.06	\$0.65	\$2.87	\$9.73	
FERTILIZE	DEALER APPLIED								
LIST	145 HP	0.18 HR		\$1.30	\$5.69	\$1.07	\$2.39	\$10.45	
PRE-IRRIGATE		0.75 HR		\$5.63	\$5.26	\$1.09	\$1.77	\$13.74	
CULTIVATOR	65 HP	0.21 HR		\$1.51	\$2.60	\$0.48	\$1.17	\$5.76	
PLANTER	70 HP	0.26 HR		\$1.87	\$6.06	\$0.67	\$4.35	\$12.96	
CULTIVATOR (5X)	65 HP	1.05 HR		\$7.56	\$13.02	\$2.41	\$5.84	\$28.82	
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	\$100.45	\$20.17	\$275.80	
HARVEST OPERATIONS									
HAND PICK (CUSTOM)				\$640.00				\$640.00	
FIELD HAUL	145 HP	0.90 HR		\$6.48	\$28.43	\$3.60	\$8.28	\$46.80	
HAUL (CUSTOM)				\$96.00				\$96.00	
SUBTOTAL		0.90 HR		\$736.00	\$6.48	\$28.43	\$3.60	\$782.80	
POSTHARVEST OPERATIONS									
SHREDDER	70 HP	0.14 HR		\$1.01	\$3.27	\$0.19	\$2.21	\$6.67	
SUBTOTAL		0.14 HR		\$1.01	\$3.27	\$0.19	\$2.21	\$6.67	
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	\$132.15	\$23.96	\$1,731.93	
NET OPERATING PROFIT								\$1,468.07	
INTEREST ON OPERATING CAPITAL		(\$213.42 @		7.50%	)			\$16.01
INTEREST ON EQUIPMENT INVESTMENT								\$25.56	
RETURN TO LAND AND RISK								\$1,426.50	

* 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		\$1,819.95	(GROSS MARGIN)
FIXED EXPENSES	\$51.62		
NET FARM INCOME		\$1,768.33	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$300.26		
NET OPERATING PROFIT		\$1,468.07	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$41.57		
RETURN TO LAND AND RISK		\$1,426.50	

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

	ALFALFA ESTABLISHMENT	ALFALFA HAY	BARLEY	OAT HAY	PICKER COTTON	STRIPPER COTTON	RED CHILE
		TONS	CWT	TONS	LBS	LBS	LBS
PRIMARY YIELD		5.60	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		\$1,412.00	\$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		\$52.98					
CANAL WATER							
FUEL, OIL & LUBRICANTS-EQUIPMENT	\$61.96	\$59.19	\$29.17	\$47.97	\$94.80	\$89.02	\$90.03
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	\$233.81	\$378.52	\$302.34	\$217.98	\$578.76	\$598.04	\$1,382.17
RETURN OVER CASH EXPENSES	(\$233.81)	\$1,033.48	(\$48.14)	\$464.52	\$196.35	\$177.07	\$1,817.83
FIXED EXPENSES	\$31.17	\$117.90	\$19.58	\$27.19	\$199.81	\$101.62	\$49.50
TOTAL EXPENSES	\$264.98	\$496.42	\$321.92	\$245.17	\$778.57	\$699.66	\$1,431.67
NET FARM INCOME	(\$264.98)	\$915.58	(\$67.72)	\$437.33	(\$3.46)	\$75.45	\$1,768.33
LABOR AND MANAGEMENT COSTS	\$52.01	\$161.05	\$45.84	\$83.37	\$119.12	\$115.00	\$300.26
NET OPERATING PROFIT	(\$316.99)	\$754.53	(\$113.57)	\$353.96	(\$122.58)	(\$39.55)	\$1,468.07
CAPITAL COSTS							
INTEREST ON OPERATING CAPITAL		\$8.29	\$6.89	\$3.82	\$11.18	\$11.23	\$16.01
INTEREST ON EQUIPMENT INVESTMENT		\$21.86	\$8.36	\$14.02	\$106.11	\$55.19	\$25.56
TOTAL CAPITAL COSTS	\$0.00	\$30.15	\$15.25	\$17.84	\$117.28	\$66.43	\$41.57
RETURN TO LAND AND RISK	(\$316.99)	\$724.38	(\$128.81)	\$336.12	(\$239.86)	(\$105.98)	\$1,426.50

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

GROSS RETURNS		
ALFALFA HAY	260 ACRES	
CROP		\$367,120
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>\$639,434</u>
CASH OPERATING EXPENSES		
SEED		\$35,908
FERTILIZER		\$17,007
CHEMICALS		\$44,390
CROP INSURANCE		\$950
OTHER PURCHASED INPUTS		\$13,775
CANAL WATER		\$0
FUEL, OIL & LUBRICANTS-EQUIPMENT		\$38,728
FUEL-IRRIGATION		\$18,656
REPAIRS		\$13,999
CUSTOM CHARGES		\$54,804
LAND TAXES		\$1,058
OTHER EXPENSES		\$31,732
TOTAL CASH EXPENSES		<u>\$271,009</u>
RETURN OVER CASH EXPENSES		\$368,425
FIXED EXPENSES		\$44,539
TOTAL EXPENSES		\$315,548
NET FARM INCOME		\$323,886
LABOR AND MANAGEMENT COSTS		\$78,172
NET OPERATING PROFIT		\$245,715
CAPITAL COSTS		
INTEREST ON OPERATING CAPITAL		\$4,814
INTEREST ON EQUIPMENT INVESTMENT		\$20,962
TOTAL CAPITAL COSTS		<u>\$25,776</u>
RETURN TO LAND AND RISK		<u>\$219,939</u>
LAND VALUE	RETURN TO RISK*	RETURN ON INVESTMENT**
\$1,000 /ACRE	\$184,939	35.55%
\$2,500 /ACRE	\$132,439	17.05%
\$4,000 /ACRE	\$79,939	11.21%
\$5,500 /ACRE	\$27,439	8.35%

* 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)