

TABLE 1. Acreage Summary, Eddy County, Artesia Lake Arthur Area, Actual 2024

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

ACREAGE SUMMARY:	LAND USE (ACRES)	WATER USE	
		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 2023

Item		
Labor Wage Rate:		
Equipment operators	\$/hour	\$20.00
General & Irrigators	\$/hour	\$16.77
Purchased Inputs:		
Fertilizer:		
Nitrogen (N)	\$/pound	\$0.35
Phosphate (P <sub>2</sub> O <sub>5</sub> )	\$/pound	\$0.48
Seed:		
Alfalfa	\$/pound	\$4.12
Cotton		
picker	\$/pound	\$8.45
stripper	\$/pound	\$8.45
Barley	\$/pound	\$0.38
Oats	\$/pound	\$0.70
Red Chile	\$/pound	\$125.00
Wire:	\$/lb.	\$0.03
Natural gas	\$/MCF	\$4.05
(service charge)	\$/month	\$10.00
Diesel fuel	\$/gallon	\$3.98
Gasoline	\$/gallon	\$3.12
Electricity	cents/Kwhr	12.08
LP Gas	\$/gallon	\$2.55
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	9.25%
Land Interest Rate	percent	8.15%
Equipment Interest Rate	percent	7.15%
Real Interest Rate	percent	1.82%
Land Taxes	\$250.00 /acre (full value)	\$1.79
Personal Property Tax Rai	- NR	
- R	\$/ \$1,000 (Assessed Value)	\$21.42
		\$19.14
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 2024

Item				
Electricity (Domestic & Shop)			\$307.20 per month	\$3,686
Telephone			\$224.00 per month	\$2,688
Accounting & Legal				\$3,386
Misc. Supplies & Hand Tools				\$4,326
Pickup and Auto				
miles	25,600	@	\$0.700 per mile	\$17,920
Insurance				
- general liability (non-employee)				\$1,907
- fire/theft				\$2,874
Property Taxes				
- non-planted land				\$0
- other than land & machinery				\$0
Building repairs and maintenance				\$0
Dues, fees, publications				\$1,446
Farmstead Equipment				\$435
Total				\$38,669
Total Per Planted Acre				\$77.34

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 2024  
Planting dates: September 1 - September 30

ITEM	PRICE	QUANTITY	PURCHASED INPUTS					TOTAL	
<u>PURCHASED INPUTS</u>									
SEED	\$4.12	20 LBS						\$82.40	
HERBICIDE	\$32.40	1 ACRE						\$32.40	
PUMP WATER		8 AC. IN.							
SUBTOTAL					\$114.80			\$114.80	
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL	
PLOW	145 HP	0.48 HR		\$9.60	\$15.76	\$3.89	\$4.95	\$34.21	
DISC (2X)	145 HP	0.34 HR		\$6.80	\$11.16	\$2.29	\$3.18	\$23.43	
PLANE (3X)	145 HP	0.57 HR		\$11.40	\$18.71	\$2.32	\$10.08	\$42.51	
DISC	145 HP	0.17 HR		\$3.40	\$5.58	\$1.15	\$1.59	\$11.72	
FLOAT (2X)	70 HP	0.32 HR		\$6.40	\$7.76	\$0.29	\$1.41	\$15.86	
DRILL (2X)	65 HP	0.42 HR		\$8.40	\$6.37	\$0.97	\$7.17	\$22.91	
IRRIGATE (2X)		1.00 HR		\$16.77	\$7.10	\$1.45	\$2.32	\$27.65	
SUBTOTAL		3.30 HR		\$62.77	\$72.45	\$12.37	\$30.70	\$178.29	
<u>OVERHEAD EXPENSES</u>									
DOWNTIME		0.46 HR		\$9.10				\$9.10	
EMPLOYEE BENEFITS				\$11.30				\$11.30	
INSURANCE			\$0.05					\$0.05	
SUPERVISION AND MANAGEMENT				\$20.63				\$20.63	
SUBTOTAL		0.46 HR	\$0.05	\$41.03				\$41.07	
TOTAL OPERATING EXPENSES			3.76 HR	\$114.84	\$103.80	\$72.45	\$12.37	\$30.70	\$334.15

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 2024  
Harvesting dates: May 5 - November 1

ITEM	PRICE	YIELD						TOTAL	
GROSS RETURNS									
ALFALFA HAY	\$250.00	6.10	TONS (STACKED)				\$1,525.00		
GRAZING	\$40.00						\$40.00		
TOTAL								\$1,565.00	
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	52	LBS	\$1.36				\$1.36	
DRYING AGENT (AGRI-DRY)	\$8.26	1	/TON	\$50.36				\$50.36	
ESTABLISHMENT: Principal		5	YEARS				\$66.83	\$66.83	
Interest							\$17.83	\$17.83	
PUMP WATER*		50	AC. IN.						
SUBTOTAL				\$185.38			\$84.66	\$270.05	
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL	
IRRIGATE (7X)		3.50	HR	\$58.70	\$44.40	\$9.05	\$14.53	\$126.68	
SUBTOTAL		3.50	HR	\$58.70	\$44.40	\$9.05	\$14.53	\$126.68	
HARVEST OPERATIONS									
SWATHER (5X)	16 FT SP	0.55	HR	\$11.00	\$8.20	\$0.76	\$11.45	\$31.40	
RAKE (5X)	40 HP	0.25	HR	\$5.00	\$2.92	\$0.49	\$2.76	\$11.17	
BALER (5X)	96 HP	1.25	HR	\$25.00	\$30.30	\$1.32	\$3.41	\$60.02	
BALE WAGON (5X)	SP	1.00	HR	\$20.00	\$24.19	\$16.75	\$7.09	\$68.03	
SUBTOTAL		3.05	HR	\$61.00	\$65.59	\$19.32	\$24.72	\$170.63	
OVERHEAD EXPENSES									
DOWNTIME		0.70	HR	\$14.00				\$14.00	
EMPLOYEE BENEFITS				\$21.55				\$21.55	
INSURANCE				\$0.09				\$0.09	
LAND TAXES							\$1.79	\$1.79	
SUPERVISION AND MANAGEMENT				\$109.84				\$109.84	
OTHER EXPENSES				\$77.34				\$77.34	
SUBTOTAL		0.70	HR	\$77.42	\$145.39			\$1.79	\$224.60
TOTAL OPERATING EXPENSES		7.25	HR	\$262.81	\$265.08	\$110.00	\$28.37	\$125.69	\$791.95
NET OPERATING PROFIT									\$773.05
INTEREST ON OPERATING CAPITAL		(	\$113.13	@	9.25%	)			\$10.46
INTEREST ON EQUIPMENT INVESTMENT									\$19.91
RETURN TO LAND AND RISK									\$742.68

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

**BUDGET SUMMARY**

GROSS RETURN		\$1,565.00	
VARIABLE OPERATING EXPENSES	\$401.18		
RETURN OVER VARIABLE EXPENSES		\$1,163.82	(GROSS MARGIN)
FIXED EXPENSES	\$125.69		
NET FARM INCOME		\$1,038.13	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$265.08		
NET OPERATING PROFIT		\$773.05	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$30.37		
RETURN TO LAND AND RISK		\$742.68	

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 2024  
Planting dates: August 20 - September 30  
Harvesting dates: June 15 - July 1

ITEM	PRICE	YIELD						TOTAL	
GROSS RETURNS									
BARLEY	\$15.39	35.00	CWT					\$538.65	
DIRECT PAYMENT	\$0.00	35.00	CWT					\$0.00	
COUNTER CYCLICAL PAYMENT	\$0.00							\$0.00	
GRAZING	\$40.00							\$40.00	
TOTAL								\$578.65	
PURCHASED INPUTS	PRICE	QUANTITY		PURCHASED INPUTS		TOTAL			
SEED	\$0.45	110	LBS	\$49.50					\$49.50
NITROGEN (N)	\$0.35	150	LBS	\$52.50					\$52.50
INSECTICIDE (CUSTOM)	\$20.01	1	ACRE	\$20.01					\$20.01
PUMP WATER*		28	AC. IN.						
CROP INSURANCE	\$2.94			\$2.94					\$2.94
SUBTOTAL				\$124.95					\$124.95
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE		PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
PLOW	145 HP	0.48	HR		\$9.60	\$15.76	\$3.89	\$4.95	\$34.21
DISC	145 HP	0.17	HR		\$3.40	\$5.58	\$1.15	\$1.59	\$11.72
FLOAT	70 HP	0.16	HR		\$3.20	\$3.88	\$0.15	\$0.70	\$7.93
FERTILIZE	DEALER APPLIED								
DRILL	70 HP	0.21	HR		\$4.20	\$5.09	\$0.41	\$3.88	\$13.58
IRRIGATE (4X)		2.00	HR		\$33.54	\$24.87	\$5.07	\$8.13	\$71.61
SUBTOTAL		3.02	HR		\$53.94	\$55.17	\$10.67	\$19.27	\$139.05
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		\$4.30				\$4.30
EMPLOYEE BENEFITS					\$9.71				\$9.71
INSURANCE				\$0.04					\$0.04
LAND TAXES							\$1.79		\$1.79
SUPERVISION AND MANAGEMENT					\$40.65				\$40.65
OTHER EXPENSES				\$77.34					\$77.34
SUBTOTAL		0.22	HR	\$77.38	\$54.66		\$1.79		\$133.82
TOTAL OPERATING EXPENSES		3.24	HR	\$227.23	\$108.60	\$55.17	\$10.67	\$21.05	\$422.72
NET OPERATING PROFIT									\$155.93
INTEREST ON OPERATING CAPITAL		(	\$81.01	@	9.25%	)			\$7.49
INTEREST ON EQUIPMENT INVESTMENT									\$7.90
RETURN TO LAND AND RISK									\$140.54

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

**BUDGET SUMMARY**

GROSS RETURN		\$578.65	
VARIABLE OPERATING EXPENSES	\$293.08		
RETURN OVER VARIABLE EXPENSES		\$285.57	(GROSS MARGIN)
FIXED EXPENSES	\$21.05		
NET FARM INCOME		\$264.52	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$108.60		
NET OPERATING PROFIT		\$155.93	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$15.39		
RETURN TO LAND AND RISK		\$140.54	

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 2024  
Planting dates: February 1 - February 28  
Harvesting dates: June 1 - June 30

ITEM	PRICE	YIELD							TOTAL
GROSS RETURNS									
OAT HAY	\$185.00	3.50 TONS (STACKED)							\$647.50
TOTAL									\$647.50
PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS						TOTAL
SEED	\$0.70	100 LBS	\$70.00						\$70.00
FERTILIZER (16-20-0)	\$0.17	150 LBS	\$25.50						\$25.50
PUMP WATER*		28 AC. IN.							
SUBTOTAL			\$95.50						\$95.50
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL	
PLOW	145 HP	0.48 HR		\$9.60	\$15.76	\$3.89	\$4.95	\$34.21	
DISC	145 HP	0.34 HR		\$6.80	\$11.16	\$2.29	\$3.18	\$23.43	
FLOAT	70 HP	0.16 HR		\$3.20	\$3.88	\$0.15	\$0.70	\$7.93	
FERTILIZE (CUSTOM)			\$0.00					\$0.00	
DRILL	70 HP	0.21 HR		\$4.20	\$5.09	\$0.41	\$3.88	\$13.58	
IRRIGATE (4X)		2.00 HR		\$33.54	\$24.87	\$5.07	\$8.13	\$71.61	
SUBTOTAL			3.19 HR	\$57.34	\$60.76	\$11.81	\$20.85	\$150.76	
HARVEST OPERATIONS									
SWATHER	16 FT	0.11 HR		\$2.20	\$1.64	\$0.15	\$2.29	\$6.28	
BALER	126 HP	0.25 HR		\$5.00	\$8.21	\$1.03	\$2.00	\$16.23	
BALE WAGON	S. P.	0.20 HR		\$4.00	\$4.84	\$3.35	\$1.42	\$13.61	
SUBTOTAL			0.56 HR	\$11.20	\$14.68	\$4.53	\$5.71	\$36.12	
OVERHEAD EXPENSES									
DOWNTIME		0.40 HR		\$7.95				\$7.95	
EMPLOYEE BENEFITS				\$12.34				\$12.34	
INSURANCE			\$0.05					\$0.05	
LAND TAXES							\$1.79	\$1.79	
SUPERVISION AND MANAGEMENT				\$45.49				\$45.49	
OTHER EXPENSES			\$77.34					\$77.34	
SUBTOTAL			0.40 HR	\$77.39	\$65.78		\$1.79	\$144.95	
TOTAL OPERATING EXPENSES									
		4.15 HR	\$172.89	\$134.32	\$75.44	\$16.35	\$28.35	\$427.34	
NET OPERATING PROFIT									
								\$220.16	
INTEREST ON OPERATING CAPITAL		(	\$67.49	@	9.25%	)	\$6.24		
INTEREST ON EQUIPMENT INVESTMENT									\$13.15
RETURN TO LAND AND RISK									
								\$200.77	

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

GROSS RETURN		\$647.50	
VARIABLE OPERATING EXPENSES	\$264.67		
RETURN OVER VARIABLE EXPENSES		\$382.83	(GROSS MARGIN)
FIXED EXPENSES	\$28.35		
NET FARM INCOME		\$354.48	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$134.32		
NET OPERATING PROFIT		\$220.16	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$19.39		
RETURN TO LAND AND RISK		\$200.77	

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	\$0.700	1,328	LBS						\$929.60	
COTTON SEED	\$0.075	2,125	LBS						\$159.36	
PROGRAM PAYMENT	\$0.000	1,328	LBS						\$0.00	
PLC PAYMENT	\$0.335	1,328	LBS						\$444.35	
TOTAL									\$1,533.31	
PURCHASED INPUTS	PRICE	QUANTITY		PURCHASED INPUTS		TOTAL				
SEED	\$8.45	15	LBS	\$126.75						\$126.75
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				\$249.80						\$249.80
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE		PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL	
DISC	145 HP	0.17	HR		\$3.40	\$5.58	\$1.15	\$1.59	\$11.72	
PLOW	145 HP	0.48	HR		\$9.60	\$15.76	\$3.89	\$4.95	\$34.21	
DISC (2X)	145 HP	0.34	HR		\$6.80	\$11.16	\$2.29	\$3.18	\$23.43	
FLOAT	145 HP	0.16	HR		\$3.20	\$5.25	\$0.64	\$1.32	\$10.41	
LISTER	145 HP	0.18	HR		\$3.60	\$5.91	\$1.07	\$2.36	\$12.94	
PRE-IRRIGATE		0.75	HR		\$12.58	\$6.66	\$1.36	\$2.18	\$22.77	
CULTIVATOR	65 HP	0.21	HR		\$4.20	\$3.19	\$0.47	\$1.14	\$9.00	
PLANTER	70 HP	0.26	HR		\$5.20	\$6.30	\$0.66	\$4.28	\$16.44	
SLED	70 HP	0.15	HR		\$3.00	\$3.64	\$0.18	\$0.79	\$7.60	
CULTIVATOR (3X)	65 HP	0.63	HR		\$12.60	\$9.56	\$1.42	\$3.42	\$26.99	
HAND HOE (CUSTOM)				\$20.00					\$20.00	
IRRIGATE (3X)		1.50	HR		\$25.16	\$19.98	\$4.07	\$6.54	\$55.75	
SUBTOTAL		4.83	HR	\$20.00	\$89.33	\$92.99	\$17.20	\$31.74	\$251.26	
HARVEST OPERATIONS										
COTTON PICKER (2X)	2-ROW	0.74	HR		\$14.80	\$17.81	\$11.56	\$144.32	\$188.49	
HAUL (2X)	65 HP	1.00	HR		\$20.00	\$15.17	\$1.28	\$5.27	\$41.72	
GIN COTTON (CUSTOM)				\$197.87					\$197.87	
SUBTOTAL		1.74	HR	\$197.87	\$34.80	\$32.98	\$12.83	\$149.59	\$428.08	
POSTHARVEST OPERATIONS										
SHREDDER	70 HP	0.14	HR		\$2.80	\$3.39	\$0.18	\$2.16	\$8.54	
SUBTOTAL		0.14	HR		\$2.80	\$3.39	\$0.18	\$2.16	\$8.54	
OVERHEAD EXPENSES										
DOWNTIME		0.95	HR		\$18.95				\$18.95	
EMPLOYEE BENEFITS					\$22.85				\$22.85	
INSURANCE				\$0.09					\$0.09	
LAND TAXES							\$1.79		\$1.79	
SUPERVISION AND MANAGEMENT					\$107.57				\$107.57	
OTHER EXPENSES				\$77.34					\$77.34	
SUBTOTAL		0.95	HR	\$77.43	\$149.37		\$1.79		\$228.59	
TOTAL OPERATING EXPENSES		7.66	HR	\$545.10	\$276.31	\$129.36	\$30.21	\$185.28	\$1,166.26	
NET OPERATING PROFIT									\$367.05	
INTEREST ON OPERATING CAPITAL										
INTEREST ON EQUIPMENT INVESTMENT										
RETURN TO LAND AND RISK									\$258.76	

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

BUDGET SUMMARY

GROSS RETURN		\$1,533.31	
VARIABLE OPERATING EXPENSES	\$704.68		
RETURN OVER VARIABLE EXPENSES		\$828.63	(GROSS MARGIN)
FIXED EXPENSES	\$185.28		
NET FARM INCOME		\$643.35	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$276.31		
NET OPERATING PROFIT		\$367.05	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$108.29		
RETURN TO LAND AND RISK		\$258.76	

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 2024

Planting dates: April 15 - May 15

Harvesting dates: October 15 - January 15

ITEM	PRICE	YIELD						TOTAL
GROSS RETURNS								
COTTON LINT	\$0.700	1,228 LBS						\$859.60
COTTON SEED	\$0.075	1,965 LBS						\$147.36
PROGRAM PAYMENT	\$0.000	1,228 LBS						\$0.00
PLC PAYMENT	\$0.335	1,228 LBS						\$410.89
TOTAL								\$1,417.85
PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS					TOTAL
SEED	\$8.45	20 LBS	\$169.00					\$169.00
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			\$258.30					\$258.30
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DISC	145 HP	0.17 HR		\$3.40	\$5.58	\$1.15	\$1.59	\$11.72
PLOW	145 HP	0.48 HR		\$9.60	\$15.76	\$3.89	\$4.95	\$34.21
DISC (2X)	145 HP	0.34 HR		\$6.80	\$11.16	\$2.29	\$3.18	\$23.43
FLOAT	145 HP	0.16 HR		\$3.20	\$5.25	\$0.64	\$1.32	\$10.41
LIST	145 HP	0.18 HR		\$3.60	\$5.91	\$1.07	\$2.36	\$12.94
PRE-IRRIGATE		0.75 HR		\$12.58	\$6.66	\$1.36	\$2.18	\$22.77
CULTIVATOR	65 HP	0.21 HR		\$4.20	\$3.19	\$0.47	\$1.14	\$9.00
PLANTER	70 HP	0.26 HR		\$5.20	\$6.30	\$0.66	\$4.28	\$16.44
SLED	70 HP	0.15 HR		\$3.00	\$3.64	\$0.18	\$0.79	\$7.60
CULTIVATOR (3X)	65 HP	0.63 HR		\$12.60	\$9.56	\$1.42	\$3.42	\$26.99
HAND HOE (CUSTOM)			\$20.00					\$20.00
IRRIGATE (3X)		1.50 HR		\$25.16	\$19.98	\$4.07	\$6.54	\$55.75
SUBTOTAL		4.83 HR	\$20.00	\$89.33	\$92.99	\$17.20	\$31.74	\$251.26
HARVEST OPERATIONS								
COTTON STRIPPER	70 HP	0.62 HR		\$12.40	\$15.03	\$3.46	\$62.35	\$93.23
HAUL	65 HP	0.75 HR		\$15.00	\$11.38	\$0.96	\$3.95	\$31.29
GIN COTTON (CUSTOM)			\$236.64					\$236.64
SUBTOTAL		1.37 HR	\$236.64	\$27.40	\$26.40	\$4.42	\$66.30	\$361.16
POSTHARVEST OPERATIONS								
SHREDDER	70 HP	0.14 HR		\$0.56	\$3.39	\$0.18	\$2.16	\$6.30
SUBTOTAL		0.14 HR		\$0.56	\$3.39	\$0.18	\$2.16	\$6.30
OVERHEAD EXPENSES								
DOWNTIME		0.89 HR		\$17.85				\$17.85
EMPLOYEE BENEFITS				\$21.11				\$21.11
INSURANCE			\$0.08					\$0.08
LAND TAXES							\$1.79	\$1.79
SUPERVISION AND MANAGEMENT				\$99.44				\$99.44
OTHER EXPENSES			\$77.34					\$77.34
SUBTOTAL		0.89 HR	\$77.42	\$138.40			\$1.79	\$217.61
TOTAL OPERATING EXPENSES		7.23 HR	\$592.36	\$255.69	\$122.78	\$21.80	\$101.99	\$1,094.63
NET OPERATING PROFIT								\$323.22
INTEREST ON OPERATING CAPITAL								( \$160.16 @ 9.25% ) \$14.81
INTEREST ON EQUIPMENT INVESTMENT								\$52.30
RETURN TO LAND AND RISK								\$256.11

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

BUDGET SUMMARY

GROSS RETURN		\$1,417.85	
VARIABLE OPERATING EXPENSES	\$736.94		
RETURN OVER VARIABLE EXPENSES	\$680.91	(GROSS MARGIN)	
FIXED EXPENSES	\$101.99		
NET FARM INCOME	\$578.92	(RETURN TO CAPITAL, LABOR, LAND & RISK)	
LABOR AND MANAGEMENT COST	\$255.69		
NET OPERATING PROFIT	\$323.22	(RETURN TO CAPITAL, LAND & RISK)	
CAPITAL COSTS	\$67.12		
RETURN TO LAND AND RISK	\$256.11		

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 2024  
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	\$125.00	8 LBS		\$1,000.00						\$1,000.00
NITROGEN (N)	\$0.35	120 LBS		\$42.00						\$42.00
PHOSPHATE (P205)	\$0.48	70 LBS		\$33.60						\$33.60
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				\$1,171.07						\$1,171.07
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE		PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL	
PLOW	145 HP	0.48	HR		\$9.60	\$15.76	\$3.89	\$4.95	\$34.21	
DISC (2X)	145 HP	0.34	HR		\$6.80	\$11.16	\$2.29	\$3.18	\$23.43	
PLANE	145 HP	0.16	HR		\$3.20	\$5.25	\$0.65	\$2.83	\$11.93	
FERTILIZE	DEALER APPLIED									
LIST		145 HP	0.18	HR		\$3.60	\$5.91	\$1.07	\$2.36	\$12.94
PRE-IRRIGATE		0.75	HR		\$12.58	\$5.33	\$1.09	\$1.74	\$20.74	
CULTIVATOR	65 HP	0.21	HR		\$4.20	\$3.19	\$0.47	\$1.14	\$9.00	
PLANTER	70 HP	0.26	HR		\$5.20	\$6.30	\$0.66	\$4.28	\$16.44	
CULTIVATOR (5X)	65 HP	1.05	HR		\$21.00	\$15.93	\$2.36	\$5.70	\$44.99	
THIN (CUSTOM)				\$45.00					\$45.00	
IRRIGATE (7X)		3.50	HR		\$58.70	\$37.30	\$7.60	\$12.20	\$115.80	
HAND HOE (CUSTOM)				\$20.00					\$20.00	
CHEMICAL APPLICATION (CUSTOM)				\$0.00					\$0.00	
SUBTOTAL		6.93	HR	\$65.00	\$124.87	\$106.13	\$20.09	\$38.38	\$354.47	
HARVEST OPERATIONS										
HAND PICK (CUSTOM)				\$640.00					\$640.00	
FIELD HAUL	145 HP	0.90	HR		\$18.00	\$29.55	\$3.59	\$8.14	\$59.28	
HAUL (CUSTOM)				\$96.00					\$96.00	
SUBTOTAL		0.90	HR	\$736.00	\$18.00	\$29.55	\$3.59	\$8.14	\$795.28	
POSTHARVEST OPERATIONS										
SHREDDER	70 HP	0.14	HR		\$2.80	\$3.39	\$0.18	\$2.16	\$8.54	
SUBTOTAL		0.14	HR		\$2.80	\$3.39	\$0.18	\$2.16	\$8.54	
OVERHEAD EXPENSES										
DOWNTIME		0.93	HR		\$18.60				\$18.60	
EMPLOYEE BENEFITS					\$26.22				\$26.22	
INSURANCE				\$0.10					\$0.10	
LAND TAXES								\$1.79	\$1.79	
SUPERVISION AND MANAGEMENT					\$224.36				\$224.36	
OTHER EXPENSES				\$77.34					\$77.34	
SUBTOTAL		0.93	HR	\$77.44	\$269.18			\$1.79	\$348.40	
TOTAL OPERATING EXPENSES		8.90	HR	\$2,049.51	\$414.85	\$139.07	\$23.86	\$50.47	\$2,677.77	
NET OPERATING PROFIT									\$522.23	
INTEREST ON OPERATING CAPITAL		(	\$620.74	@	9.25%	)				
INTEREST ON EQUIPMENT INVESTMENT									\$57.42	
									\$24.18	
RETURN TO LAND AND RISK									\$440.63	

\* 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		\$987.56	(GROSS MARGIN)	
FIXED EXPENSES	\$50.47			
NET FARM INCOME		\$937.08	(RETURN TO CAPITAL, LABOR, LAND & RISK)	
LABOR AND MANAGEMENT COST	\$414.85			
NET OPERATING PROFIT		\$522.23	(RETURN TO CAPITAL, LAND & RISK)	
CAPITAL COSTS	\$81.60			
RETURN TO LAND AND RISK		\$440.63		



TABLE 13. Summary of per acre costs and returns for a 500 acre farm with above average management, Artesia-Lake Arthur area,  
Actual 2024

	ALFALFA ESTABLISHMENT	ALFALFA HAY	BARLEY	OAT HAY	PICKER COTTON	STRIPPER COTTON	RED CHILE
		TONS	CWT	TONS	LBS	LBS	LBS
PRIMARY YIELD		6.10	35.00	3.50	1328.00	1228.00	3200.00
PRIMARY PRICE		\$250.00	\$15.39	\$185.00	\$0.70	\$0.70	\$1.00
GOVERNMENT PAYMENTS		\$0.00	\$0.00	\$0.00	\$444.35	\$410.89	\$0.00
SECOND INCOME		\$40.00	\$40.00	\$0.00	\$159.36	\$147.36	\$0.00
GROSS RETURN		\$1,565.00	\$578.65	\$647.50	\$1,533.31	\$1,417.85	\$3,200.00
CASH OPERATING EXPENSES							
SEED	\$82.40		\$49.50	\$70.00	\$126.75	\$169.00	\$1,000.00
FERTILIZER		\$42.00	\$52.50	\$25.50	\$4.80	\$4.80	\$75.60
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		\$56.97					
CANAL WATER							
FUEL, OIL & LUBRICANTS-EQUIPMENT	\$65.34	\$65.59	\$30.31	\$50.57	\$102.72	\$96.14	\$96.44
FUEL-IRRIGATION	\$7.10	\$44.40	\$24.87	\$24.87	\$26.64	\$26.64	\$42.63
REPAIRS	\$12.37	\$28.37	\$10.67	\$16.35	\$30.21	\$21.80	\$23.86
CUSTOM CHARGES			\$24.91		\$217.87	\$256.64	\$801.00
LAND TAXES		\$1.79	\$1.79	\$1.79	\$1.79	\$1.79	\$1.79
OTHER EXPENSES	\$0.05	\$77.42	\$77.38	\$77.39	\$77.43	\$77.42	\$77.44
TOTAL CASH EXPENSES	\$199.66	\$402.96	\$294.86	\$266.46	\$706.46	\$738.72	\$2,214.23
RETURN OVER CASH EXPENSES	(\$199.66)	\$1,162.04	\$283.79	\$381.04	\$826.85	\$679.13	\$985.77
FIXED EXPENSES	\$30.70	\$123.91	\$19.27	\$26.56	\$183.50	\$100.21	\$48.69
TOTAL EXPENSES	\$230.36	\$526.87	\$314.13	\$293.02	\$889.96	\$838.93	\$2,262.92
NET FARM INCOME	(\$230.36)	\$1,038.13	\$264.52	\$354.48	\$643.35	\$578.92	\$937.08
LABOR AND MANAGEMENT COSTS	\$103.80	\$265.08	\$108.60	\$134.32	\$276.31	\$255.69	\$414.85
NET OPERATING PROFIT	(\$334.15)	\$773.05	\$155.93	\$220.16	\$367.05	\$323.22	\$522.23
CAPITAL COSTS							
INTEREST ON OPERATING CAPITAL		\$10.46	\$7.49	\$6.24	\$14.54	\$14.81	\$57.42
INTEREST ON EQUIPMENT INVESTMENT		\$19.91	\$7.90	\$13.15	\$93.75	\$52.30	\$24.18
TOTAL CAPITAL COSTS	\$0.00	\$30.37	\$15.39	\$19.39	\$108.29	\$67.12	\$81.60
RETURN TO LAND AND RISK	(\$334.15)	\$742.68	\$140.54	\$200.77	\$258.76	\$256.11	\$440.63

TABLE 14. Whole farm summary, Artesia-Lake Arthur area,  
Actual 2024

GROSS RETURNS		
ALFALFA HAY	260 ACRES	
CROP		\$406,900
BARLEY	17 ACRES	
CROP		\$9,837
PROGRAM PAYMENT		\$0
PLC PAYMENT		\$0
OAT HAY	20 ACRES	
CROP		\$12,950
PICKER COTTON	95 ACRES	
COTTON LINT		\$88,312
COTTON SEED		\$15,139
PROGRAM PAYMENT		\$0
PLC PAYMENT		\$42,213
STRIPPER COTTON	68 ACRES	
COTTON LINT		\$58,453
COTTON SEED		\$10,020
PROGRAM PAYMENT		\$0
PLC PAYMENT		\$27,940
RED CHILE	40 ACRES	
CROP		\$128,000
GROSS RETURN		<u>\$799,765</u>
CASH OPERATING EXPENSES		
SEED		\$70,060
FERTILIZER		\$16,129
CHEMICALS		\$44,390
CROP INSURANCE		\$950
OTHER PURCHASED INPUTS		\$14,812
CANAL WATER		\$0
FUEL, OIL & LUBRICANTS-EQUIPMENT		\$42,133
FUEL-IRRIGATION		\$18,882
REPAIRS		\$13,834
CUSTOM CHARGES		\$70,613
LAND TAXES		\$893
OTHER EXPENSES		\$38,714
TOTAL CASH EXPENSES		<u>\$331,409</u>
RETURN OVER CASH EXPENSES		\$468,356
FIXED EXPENSES		\$43,489
TOTAL EXPENSES		\$374,898
NET FARM INCOME		\$424,867
LABOR AND MANAGEMENT COSTS		\$139,082
NET OPERATING PROFIT		\$285,785
CAPITAL COSTS		
INTEREST ON OPERATING CAPITAL		\$7,658
INTEREST ON EQUIPMENT INVESTMENT		\$19,003
TOTAL CAPITAL COSTS		<u>\$26,661</u>
RETURN TO LAND AND RISK		<u>\$259,124</u>
LAND VALUE	RETURN TO RISK*	RETURN ON INVESTMENT**
\$1,000 /ACRE	\$250,044	41.35%
\$2,500 /ACRE	\$236,424	19.83%
\$4,000 /ACRE	\$222,804	13.04%
\$5,500 /ACRE	\$209,184	9.72%

\* 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)