TABLE 13. Summary of per acre costs and returns for a 500 acre farm with above average management, Artesia-Lake Arthur area, Projected 2018

	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		$185.00	$6.12	$150.00	$0.75	$0.73	$0.60
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		$1,076.00	$254.20	$525.00	$670.11	$691.11	$1,920.00
CASH OPERATING EXPENSES							
SEED	$80.00		$49.50	$44.00	$113.25	$151.00	$128.00
FERTILIZER		$42.00	$46.50	$25.50	$4.80	$4.80	$54.00
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		$53.04					
CANAL WATER							
FUEL, OIL & LUBRICANTS-EQUIPMENT	$44.91	$46.96	$20.56	$34.75	$72.22	$67.41	$67.16
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		$1.78	$1.78	$1.78	$1.78	$1.78	$1.78
OTHER EXPENSES	$0.02	$66.61	$66.59	$66.59	$66.61	$66.61	$66.62
TOTAL CASH EXPENSES	$176.76	$369.16	$268.05	$213.57	$558.99	$579.25	$1,280.10
RETURN OVER CASH EXPENSES	($176.76)	$706.84	($13.85)	$311.43	$111.12	$111.86	$639.90
FIXED EXPENSES	$30.80	$102.17	$19.34	$26.84	$197.77	$100.50	$48.86
TOTAL EXPENSES	$207.56	$471.34	$287.39	$240.42	$756.76	$679.75	$1,328.96
NET FARM INCOME	($207.56)	$604.66	($33.19)	$284.58	($86.65)	$11.36	$591.04
LABOR AND MANAGEMENT COSTS	$47.99	$137.53	$45.84	$72.34	$111.77	$109.12	$210.66
NET OPERATING PROFIT	($255.55)	$467.13	($79.03)	$212.24	($198.43)	($97.76)	$380.38
CAPITAL COSTS							
INTEREST ON OPERATING CAPITAL		$8.21	$5.66	$3.84	$10.83	$10.89	$12.61
INTEREST ON EQUIPMENT INVESTMENT		$21.86	$8.36	$14.02	$106.11	$55.19	$25.56
TOTAL CAPITAL COSTS	$0.00	$30.07	$14.02	$17.85	$116.93	$66.08	$38.17
RETURN TO LAND AND RISK	($255.55)	$437.06	($93.05)	$194.39	($315.36)	($163.84)	$342.21

MICROCOMPUTER CROP COST AND RETURN GENERATOR

BUDGET AREA..... ARTESIA-LAKE ARTHUR ARE, Projected 2018
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	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	3.786348649	1.149387	1.591632387	7.751368036
PLOW	126 HP	0.48	HR		3.456	10.69086677	3.900048	4.964370417	23.01128519
DISC (2X)	126 HP	0.34	HR		2.448	7.572697297	2.298774	3.183264775	15.50273607
FLOAT	70 HP	0.16	HR		1.152	2.6307072	0.153936	0.729367454	4.666010654
FERTILIZE (CUSTOM)	DEALER APPLIED								
LISTER	126 HP	0.18	HR		1.296	4.00907504	1.071918	2.36442213	8.74141517
PRE-IRRIGATE		0.05	HR		0.375	1.403917613	0.289642667	0.464792274	2.533352554
CULTIVATOR	65 HP	0.21	HR		1.512	2.450448	0.481360256	1.151543291	5.595351547
PLANTER	70 HP	0.26	HR		1.872	4.2748992	0.669786	4.316472333	11.13315753
CULTIVATOR (2X)	40 HP	0.42	HR		3.024	3.76992	0.872252511	4.311454216	11.97762673
THIN & HOE (2X)				40					40
IRRIGATE (14X)		7	HR		52.5	19.65484659	4.054997333	6.507091838	82.71693576
SUBTOTAL		9.1	HR	40	68.859	60.24372636	14.94210177	29.58441112	213.6292392
HARVEST OPERATIONS									
HARVEST (CUSTOM)				585					585
HAUL (VEG. TRAILER)	40 HP	1	HR		7.2	8.976	1.1065	8.599186467	25.88168647
SUBTOTAL		1	HR	585	7.2	8.976	1.1065	8.599186467	610.8816865
OVERHEAD EXPENSES									
DOWNTIME		0.805	HR		5.796				5.796
EMPLOYEE BENEFITS					12.39462				12.39462
INSURANCE				0.04957848					0.04957848
LAND TAXES								1.781666667	1.781666667
SUPERVISION AND MANAGEMENT					58.75001909				58.75001909
OTHER EXPENSES				66.5734					66.5734
SUBTOTAL		0.805	HR	66.62297848	76.94063909			1.781666667	145.3452842
TOTAL OPERATING EXPENSES		10.905	HR	953.0169785	152.9996391	69.21972636	16.04860177	39.96526425	1231.25021
NET OPERATING PROFIT									-331.25021
INTEREST ON OPERATING CAPITAL	(	200.4002642	@	0.075)					15.03001982
INTEREST ON EQUIPMENT INVESTMENT									0
RETURN TO LAND AND RISK									-346.28023

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

BUDGET SUMMARY

GROSS RETURN		900	
VARIABLE OPERATING EXPENSES	1038.285307		
RETURN OVER VARIABLE EXPENSES		-138.285307	(GROSS MARGIN)
FIXED EXPENSES	39.96526425		
NET FARM INCOME		-178.250571	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	152.9996391		
NET OPERATING PROFIT		-331.25021	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	15.03001982		
RETURN TO LAND AND RISK		-346.28023	

TABLE 1. Acreage Summary, Eddy County, Artesia Lake Arthur Area, Projected 2018

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, Projected 2018

Item			
Labor Wage Rate:			
Equipment operators	$/hour		$7.20
General & Irrigators	$/hour		$7.50
Purchased Inputs:			
Fertilizer:			
Nitrogen (N)	$/pound		$0.31
Phosphate ($P_2 0_5$)	$/pound		$0.24
Seed:			
Alfalfa	$/pound		$4.00
Cotton			
picker	$/pound		$7.55
stripper	$/pound		$7.55
Barley	$/pound		$0.40
Oats	$/pound		$0.44
Red Chile	$/pound		$16.00
Wire:	$/lb.		$0.03
Natural gas	$/MCF		$4.00
(service charge)	$/month		$10.00
Diesel fuel	$/gallon		$2.70
Gasoline	$/gallon		$2.40
Electricity	cents/KwHr		$8.32
LP Gas	$/gallon		$2.90
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)		$1.78
Personal Property Tax Rat - NR	$/$1,000	(Assessed	$21.38
- R		Value)	$18.58
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 2018

Item					
Electricity (Domestic & Shop)			$304.80	per month	$3,658
Telephone			$222.25	per month	$2,667
Accounting & Legal					$3,359
Misc. Supplies & Hand Tools					$4,293
Pickup and Auto					
miles	25,400	@	$0.500	per mile	$12,700
Insurance					
- general liability (non-employee)					$1,892
- fire/theft					$2,851
Property Taxes					
- non-planted land					$0
- other than land & machinery					$0
Building repairs and maintenance					$0
Dues, fees, publications					$1,435
Farmstead Equipment					$432
				Total	$33,287
			Total Per Planted Acre		$66.57

TABLE 4 Pumping costs and data for irrigation wells Illinois Lake Arthur area
Program Crop

INPUTS/UNITS

DEPTH CHARACTERISTICS:
STATIC 60
DRAWDOWN 0
TOTAL HEAD 60
CASING 350

GALLONS PER MINUTE (GPM) 500
MORA HORSEPOWER 30

EFFICIENCY FACTOR:
ELECTRICITY 0.470
NATURAL GAS 0.120
LP GAS 0.120
DIESEL 0.160

FUEL COST PER UNIT:
ELECTRICITY $ 02 Cents/Kwhr
NATURAL GAS $3.50 $/CCF
LP GAS $2.50 $/GAL
DIESEL $2.70 $/GAL

TOTAL FUEL COSTS:

ELECTRIC WELL :
COST PER HOUR $1.34
COST PER ACRE INCH $1.24

NATURAL GAS WELL :
COST PER HOUR $0.97
COST PER ACRE INCH $0.89

LP GAS WELL :
COST PER HOUR $0.79
COST PER ACRE INCH $0.14

DIESEL WELL :
COST PER HOUR $3.09
COST PER ACRE INCH $1.26

TABLE 5 Equipment summary for a 500 acre flood irrigated farm with above average management Illinois Lake Arthur area
Program Crop

EQUIPMENT ITEM & SIZE		ANNUAL HOURS HP USE	NUMBER	TOTAL VALUE	ANNUAL COSTS FUEL, OIL LUBRICAN	REPAIR	FUEL OIL PER HR	REPAIR PER HR	FIXED COSTS DEPRECIATIO n	TAXES	TOTAL PER HR
TRACTOR	60 HP	65	1	$7,000	$503	$72	$8.96	$1.09	$360	$64	$9.52
TRACTOR	65 HP	100	1	$10,000	$1,035	$148	$10.35	$1.48	$514	$92	$11.83
TRACTOR	70 HP	178	1	$17,835	$2,909	$416	$16.44	$2.34	$926	$166	$19.26
TRACTOR	86 HP	335	1	$17,835	$5,541	$307	$16.44	$0.94	$926	$166	$17.79
TRACTOR	120 HP	1,000	1	$60,000	$16,605	$3,600	$16.61	$3.60	$3,086	$554	$23.80
COTTON PICKER	4 ROW	70	1	$39,517	$1,148	$1,335	$16.51	$27.14	$14,282	$765	$210.02
COTTON STRIPPER W/TD		22	1	$6,400		$287		$4.66	$2,908	$258	$97.91
PLANTER	16 FT	100	1	$9,000	$1,785	$180	$19.31	$1.80	$2,617	$233	$23.13
BALE WAGON S/P		121	1	$9,680	$3,972	$1,278	$24.82	$10.79	$2,356	$160	$37.61
BALER PTO		403	1	$14,600		$62		$0.15	$386	$27	$1.03
CULTIVATOR	4 ROW	100	1	$10,000		$167		$1.67	$2,617	$233	$3.57
CULTIVATOR	6 ROW	197	1	$19,000		$167		$0.83	$4,667	$765	$5.75
DISC	13 FT	133	1	$2,250		$371		$2.79	$338	$14	$2.84
DRILL	12 FT	80	1	$7,000		$83		$1.04	$1,167	$93	$2.21
PLANE	14 FT	39	1	$2,750		$3		$0.13	$257	$23	$12.13
PLOW	14 FT	48	1	$800		$1		$0.02	$80	$3	$0.30
PLOW(SUBSOILRIPP)	9 SH	100	1	$8,000		$833		$8.33	$1,167	$93	$9.26
LISTER		50	1	$1,600		$72		$1.44	$233	$11	$1.15
SHREDDER	4 ROW	28	1	$2,500		$11		$0.40	$233	$18	$12.56
VEGETABLE PLANTER		40	1	$3,000		$1		$0.03	$350	$28	$0.31
VEGETABLE TRAILER		80	1	$700		$1		$0.03	$70	$6	$2.93
TANK/RAISE	8 FT	74	1	$3,400		$73		$0.99	$340	$24	$4.92
SLED		24	1	$500		$1		$0.04	$117	$9	$0.25
NATURAL GAS WELL		19,245		$0	$18,656	$3,085	$0.97	$0.16	$1,500	$127	$0.12
				$249,517	$49,799	$10,424			$38,396	$2,977	

EQUIPMENT LIST

UNIT		NEW	USED	YEARS	EQUIP	MAX	FUEL	LUBE	ACCUM	INTEREST
		HR USE	HR USE	USE	CODE	USE HR	USAGE	CODE	ANN USE	PER ACRE/HR
TRACTOR	60 HP	17,976	7,000	50	1	800	0.42	0.10	976	15
TRACTOR	65 HP	21,500	4,950	40	1	800	0.42	0.10	5558	21
TRACTOR	70 HP	31,735	17,335	30	1	800	0.54	0.10	4097	23
TRACTOR	86 HP	31,735	17,335	30	1	800	0.54	0.10	4097	23
TRACTOR	120 HP	66,000	32,627	20	1	800	7.50	0.15	7500	22
COTTON PICKER	4 ROW	214,237	38,317	15	1	300	9.54	0.20	422	6
COTTON STRIPPER W/TD		22,000	10,000	15	1	300	0.54	0.20	422	6
SWATHER	16 FT	72,432	21,000	20	2	800	3.12	0.23	3062	4
BALE WAGON S/P		49,000	9,950	20	1	800	0.48	0.10	1639	8
BALER PTO		49,000	9,950	20	1	800			1639	8
PLANTER	4 ROW	6,000	3,000	10	4	300			688	11
CULTIVATOR	4 ROW	10,000	5,000	15	1	500			2667	16
DISC	13 FT	4,000	2,000	15	1	500			1333	16
DRILL	12 FT	4,000	2,000	10	8	300			1895	13
PLANE	14 FT	9,500	3,750	15	4	300			577	16
PLOW	14 FT	1,000	1,000	15	1	500			333	16
PLOW(SUBSOILRIPP)	9 SH	8,750	8,000	15	5	300			2533	16
LISTER		3,350	1,600	15	1	300			686	16
SHREDDER	4 ROW	5,000	2,500	15	1	500			1667	16
COTTON TRAILER		1,000	1,000	15	5	300			676	16
VEGETABLE TRAILER		2,400	700	20	4	20			648	18
TANK/RAISE	8 FT	6,000	3,400	20	5	500			1140	18
SLED		1,000	500	20	5	500			1140	18
NATURAL GAS WELL		17500	0	25	0.2	3000		0.05	2749	0

USAGE LIST

	ALFALFA EST	ALFALFA	BARLEY	CUCUMBERS	OAT HAY	PICKER	STRIPPER COTTON	RED CHILE	TOTAL
						HOURS PER ACRE			
	0	0.55	0	0	0	0	0	0	0.55
	0.42	9	0	0	0	1.61	1.06	0.26	9.11
	0.52	0	0.37	0	0.37	0.65	1.17	0.4	3.16
	0	0	0	0	0	0	0	0	0
	1.65	0	0.65	0	1.67	1.03	1.32	2.66	8
	0	0	0	0	0	0	0	0	0.74
	0	0	0	0	0	0	0	0	0.74
#REF!	0.55	0	0	0	0.11	0	0	0	#REF!
#REF!	1	0	0	0	0.2	0	0	0	#REF!
#REF!	0.55	0	0	0	0.11	0	0	0	#REF!
	0	0	0	0	0.15	0.26	0.26	0	0.73
	0	0	0	0	0.64	0.84	1.26	2	3.54
	0.42	0.55	0	0	0.11	0	0	0	1.08
	0.42	0	0.21	0	0.21	0	0	0	0.84
	0.52	0	0	0	0	0	0	0.16	0.73
	0.52	0	0.37	0	0.37	0.65	1.17	0.4	3.16
	0.48	0	0.48	0	0.48	0.48	0.48	0.48	2.88
	0	0	0	0	0.64	0.18	0.18	0.54	
	0.55	0	0	0	0.11	0.14	0.14	0.14	1.08
	0	0	0	0	0	0	0	0.16	0.16
	0	0	0	0	0	0	0.6	0.6	1.2
#REF!	0.26	0	0	0	0	0	0	0	#REF!
	0	0	0	0	0.14	0.32	0	0	0.71
7.3163827	65.29867	29.54373	0	26.54373	27.354	27.194	43.6464	200.6896	

INTEREST PROPIATION

ALFALFA HAY	BARLEY	CUCU	OAT HAY	PICKER COTTON	STRIPPER COTTON	RED CHILE
			dollars per acre			
2.592648	0	0	0	0	0	0
0	0	0	4.186614	3.4233277	2.668876	
0	0	0	1.22063	1.837794	1.5275873	0.132918
2.238471	0	0	0	0	0	0
0	3.5	0	0.63394	7.9973727	7.9973727	12.38804
0	0	0	0	84.5611	0	0
0	0	0	0	0	32.39103	0
0.437826	0	0	1.807523	0	0	0
0.437826	0	0	1.807523	0	0	0
0.592593	0	0	2.333333	0	0	0
0	0	0	0	1.2963334	1.2963334	2.2502343
0	0	0	0	1.2963334	1.2963334	2.2502343
0	0.2	0	0.453366	0.4427274	0.4427274	0.4102366
0	1.2	0	1.1702112	0	0	0
0	0.5	0	0	0.1111111	0.1111111	0.1929135
0	0.1	0	0.111222	0.111222	0.111222	0
0	0.9	0	0.9650435	0.9650435	0.9650435	0.9650435
0	0	0	0	0.8494335	0.8494335	0.8494335
0	0	0	0	0.5555333	0.5555333	0.5555333
0	0	0	0	0.3888888	0.2638892	0
0.903186	0	0	0	0	0	0
0	0	0	0	0	0	0
1.542548	0.9	0	0.9962236	0.9255549	0.9255549	0.8561004
11.99348	8.4	0	14.615365	104.1055	93.19577	26.56023

ALFALFA ESTABLISHMENT ACRES: 52 PUMP WATER: 0

MACHINE	POWER UNIT	TIMES OVER	ACCOMPLISHMENT RATE	TOTAL	CUSTOM
PLOW	145 HP	1	0.48	0.48	
DISC (24)	145 HP	2	0.17	0.34	
DISC (20)	145 HP	2	0.17	0.34	
PLANT	145 HP	1	0.17	0.17	
PLANT (19)	70 HP	2	0.14	0.32	
DRILL (12)	65 HP	2	0.21	0.42	
IRRIGATE (24)		2	0.166133	7.3343307	

ANNUAL ALFALFA ACRES: 260 PUMP WATER: 93

MACHINE	POWER UNIT	TIMES OVER	ACCOMPLISHMENT RATE	TOTAL	CUSTOM
IRRIGATE (74)		4	0.166133	49.29667	

SWATHER (64) 16 FT SP 5 0.11 0.55
RAKE (64) 65 HP 5 0.05 0.25
BALER (64) 86 HP 5 0.26 1.26
BALE WAGON (64) HP 5 0.2 1

BARLEY ACRES: 17 PUMP WATER: 28

MACHINE	POWER UNIT	TIMES OVER	ACCOMPLISHMENT RATE	TOTAL	CUSTOM
PLOW	145 HP	1	0.48	0.48	
DISC	145 HP	1	0.17	0.17	
PLANT	145 HP	1	0.18	0.18	
INSECT - LIDE	GEARED HP	1	0.18	0.18	
DRILL	70 HP	1	0.21	0.21	
IRRIGATE (45)		4	0.166133	29.39273	

COMBINE (CUSTOM) PER ACRE 14.69
PER CWT OVER 30 CWT 0.19
HAUL (CUSTOM) PER CWT 0.2

CUCUMBERS ACRES: 0 PUMP WATER: 24

MACHINE	POWER UNIT	TIMES OVER	ACCOMPLISHMENT RATE	TOTAL	CUSTOM
DISC	130 HP	1	0.17	0.17	
PLOW	145 HP	1	0.48	0.48	
DISC (24)	130 HP	2	0.17	0.34	
PLANT	70 HP	1	0.14	0.14	
FERTILIZER - LIDE (CUSTOM)	GEARED HP APPLIED				
LISTER	130 HP	1	0.18	0.18	
PRE-IRRIGATE		1	0.0400542	1.4480413	
CULTIVATOR	65 HP	1	0.21	0.21	
PLASTER	70 HP	1	0.26	0.26	
CULTIVATOR (3)	65 HP	2	0.21	0.42	
IRRIGATE (24)		14	0.1642791	20.215499	40

HARVEST (CUSTOM) [PER POUND] 0.0325
HAUL (SEE TRAILER) 65 HP 2 0.5 1

OAT HAY ACRES: 20 PUMP WATER: 28

MACHINE	POWER UNIT	TIMES OVER	ACCOMPLISHMENT RATE	TOTAL	CUSTOM
PLOW	145 HP	1	0.48	0.48	
DISC	145 HP	2	0.17	0.34	
PLANT	70 HP	2	0.18	0.18	
FERTILIZE (CUSTOM)					
DRILL	70 HP	1	0.21	0.21	
IRRIGATE (45)		4	0.166133	29.39273	

SWATHER 16 FT 1 0.11 0.11
BALER 130 HP 1 0.25 0.25
BALE WAGON 6 P 1 0.2 0.2

UPLAND COTTON (PICKER) ACRES: 65 PUMP WATER: 30

MACHINE	POWER UNIT	TIMES OVER	ACCOMPLISHMENT RATE	TOTAL	CUSTOM
DISC	145 HP	1	0.17	0.17	
PLOW	145 HP	1	0.48	0.48	
DISC (24)	145 HP	2	0.17	0.34	
PLANT	145 HP	1	0.14	0.14	
LISTER	145 HP	1	0.18	0.18	
PRE-IRRIGATE		1	0.1282821	8.3385	
CULTIVATOR	65 HP	1	0.21	0.21	
PLASTER	70 HP	1	0.26	0.26	
SLED	70 HP	1	0.15	0.15	
CULTI MOTOR (3X)	65 HP	3	0.21	0.63	
HAND HOE (CUST 1X6)					20
IRRIGATE (30)		5	0.67895	20.3685	

COTTON PICKER (24) 2 ROW 2 0.37 0.74
HAUL (24) 65 HP 2 0.5 1
GIN COTTON (CUSTOM) $/LINT/ 0.169

SHRED DER 70 HP 1 0.14 0.14

UPLAND COTTON (STRIPPER) ACRES: 69 PUMP WATER: 30

MACHINE	POWER UNIT	TIMES OVER	ACCOMPLISHMENT RATE	TOTAL	CUSTOM
DISC	145 HP	1	0.17	0.17	
PLOW	145 HP	1	0.48	0.48	
DISC (24)	145 HP	2	0.17	0.34	
PLANT	145 HP	1	0.14	0.14	
LISTER	145 HP	1	0.18	0.18	
PRE-IRRIGATE		1	0.1282821	8.8485	
CULTIVATOR	65 HP	1	0.21	0.21	
PLANT - BR	70 HP	1	0.24	0.24	
SLED	70 HP	1	0.15	0.15	
CULTI MOTOR (3X)	65 HP	3	0.21	0.63	
HAND HOE (CUST 1X6)					20
IRRIGATE (30)		5	0.67895	20.3685	

COTTON STRIPPER 70 HP 1 0.62 0.62
HAUL 65 HP 1 0.75 0.75
GIN COTTON (CUSTOM) 0.1827

SHRED DER 70 HP 1 0.14 0.14

RED CHILE ACRES: 40 PUMP WATER: 48

MACHINE	POWER UNIT	TIMES OVER	ACCOMPLISHMENT RATE	TOTAL	CUSTOM
PLOW	145 HP	1	0.48	0.48	
DISC (26)	145 HP	2	0.17	0.34	
PLANT	145 HP	1	0.14	0.14	
FERTILIZE	GEARLER APPLIED				
LISTER	145 HP	1	0.18	0.18	
PRE-IRRIGATE		1	0.1151547	5.0006	
CULTIVATOR	65 HP	1	0.21	0.21	
PLASTER	70 HP	1	0.26	0.26	
CULTI MOTOR (3X)	65 HP	3	0.21	0.63	
THIN (CUSTOM)					45
HARVEST		7	0.781992	39.9156	
HAND HOE (CUSTOM)					20

HANG PICK RED (CUSTOM) $/LB 0.2
FIELD HAUL 130 HP 1 0.9 0.9
HAUL (CUSTOM) $/LB 0.03

SHRED DER 70 HP 1 0.14 0.14

ANNUAL REPAIR COSTS AS A PERCENT OF NEW VALUE

Hours of Use	1	2	3	4	5	6	7	8	9
0	0.00008	0.00002	0.00062	0.00002	0.00008	0.00062	0.00008	0.00002	0.00008
50	0.00008	0.00002	0.00062	0.00002	0.00008	0.00062	0.00008	0.00002	0.00008
100	0.00008	0.00002	0.00065	0.00002	0.00008	0.00062	0.00008	0.00002	0.00008
150	0.00008	0.00002	0.00065	0.00002	0.00008	0.00062	0.00008	0.00002	0.00008
200	0.00008	0.00002	0.00065	0.00002	0.00008	0.00062	0.00008	0.00002	0.00008
250	0.00008	0.00002	0.00065	0.00002	0.00008	0.00062	0.00008	0.00002	0.00008
300	0.00008	0.00002	0.00065	0.00002	0.00008	0.00062	0.00008	0.00002	0.00008
350	0.00008	0.00002	0.00065	0.00002	0.00008	0.00062	0.00008	0.00002	0.00008
400	0.00008	0.00006	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
450	0.00008	0.00006	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
500	0.00008	0.00007	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
550	0.00008	0.00007	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
600	0.00008	0.00007	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
650	0.00008	0.00007	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
700	0.00008	0.00007	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
750	0.00008	0.00007	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
800	0.00008	0.00007	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
850	0.00008	0.00007	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
900	0.00008	0.00012	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
950	0.00008	0.00012	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
1000	0.00008	0.00012	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
1050	0.00008	0.00012	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
1100	0.00008	0.00014	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
1150	0.00008	0.00014	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
1200	0.00008	0.00014	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
1250	0.00008	0.00014	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
1300	0.00008	0.00014	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
1350	0.00008	0.00014	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
1400	0.00008	0.00014	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
1450	0.00008	0.00017	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
1500	0.00008	0.00017	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
1550	0.00008	0.00017	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
1600	0.00008	0.00017	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
1650	0.00008	0.00017	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
1700	0.00008	0.00017	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
1750	0.00008	0.00017	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
1800	0.00008	0.00017	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
1850	0.00008	0.00017	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
1900	0.00008	0.00017	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
1950	0.00008	0.00017	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
2000	0.00008	0.00017	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
2050	0.00008	0.00017	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
2100	0.00008	0.00017	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
2150	0.00008	0.00017	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
2200	0.00008	0.00017	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
2250	0.00008	0.00017	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
2300	0.00008	0.00017	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
2350	0.00008	0.00017	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
2400	0.00008	0.00017	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
2450	0.00008	0.00017	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
2500	0.00008	0.00017	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
2550	0.00008	0.00017	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
2600	0.00008	0.00017	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
2650	0.00008	0.00017	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
2700	0.00008	0.00017	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
2750	0.00008	0.00017	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
2800	0.00008	0.00017	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
2850	0.00008	0.00017	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
2900	0.00008	0.00017	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
2950	0.00008	0.00017	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
3000	0.00008	0.00017	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
3050	0.00008	0.00017	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
3100	0.00008	0.00017	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
3150	0.00008	0.00017	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
3200	0.00008	0.00017	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
3250	0.00008	0.00017	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
3300	0.00008	0.00017	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
3350	0.00008	0.00017	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
3400	0.00008	0.00017	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
3450	0.00008	0.00017	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
3500	0.00008	0.00017	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
3550	0.00008	0.00017	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
3600	0.00008	0.00017	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
3650	0.00008	0.00017	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
3700	0.00008	0.00017	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
3750	0.00008	0.00017	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008
3800	0.00008	0.00017	0.00067	0.00008	0.00008	0.00062	0.00008	0.00002	0.00008

* Based on unpublished data of D. R. Hunt Department of Agricultural Engineering University of Illinois

** Based on "Agricultural Machinery Data" to Agricultural Engineers Yearbook 1983

Codes

1 tractors
2 trailers, combines, forage harvesters, windrowers, pickups
3 rotary hoe, disks, multiforced plows, chisels, field cultivators row cultivators, lawn plows
4 mowers, rakes, tedders, forks, sick, drag, roller, swine furrow feed shears
5 balers, cotton pickers, cotton strippers, corn pickers, combines, windrowers, forage harvest, rotary mowers, self- droppers feed wagons, farm trucks
6 rollers, subsoiler mower
7 irrigation, center pivot, sprinkler
8 planters, drills, seeding equipment mounted sprayers
9 fertilizer distributing equipment

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 2018
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	$10.69	$3.90	$4.96	$23.01
DISC (2X)	145 HP	0.34 HR		$2.45	$7.57	$2.30	$3.18	$15.50
PLANE (3X)	145 HP	0.57 HR		$4.10	$12.70	$2.33	$10.09	$29.22
DISC	145 HP	0.17 HR		$1.22	$3.79	$1.15	$1.59	$7.75
FLOAT (2X)	70 HP	0.32 HR		$2.30	$5.26	$0.31	$1.46	$9.33
DRILL (2X)	65 HP	0.42 HR		$3.02	$4.90	$0.99	$7.19	$16.10
IRRIGATE (2X)		1.00 HR		$7.50	$7.02	$1.45	$2.32	$18.29
SUBTOTAL		3.30 HR		$24.06	$51.93	$12.42	$30.80	$119.21
OVERHEAD EXPENSES								
DOWNTIME		0.46 HR		$3.28				$3.28
EMPLOYEE BENEFITS				$4.33				$4.33
INSURANCE			$0.02					$0.02
SUPERVISION AND MANAGEMENT				$16.32				$16.32
SUBTOTAL		0.46 HR	$0.02	$23.93				$23.95
TOTAL OPERATING EXPENSES		3.76 HR	$112.41	$47.99	$51.93	$12.42	$30.80	$255.55

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 2018
Harvesting dates: May 5 - November 1

ITEM	PRICE	YIELD		TOTAL
GROSS RETURNS				
ALFALFA HAY	$185.00	5.60	TONS (STACKED)	$1,036.00
GRAZING	$40.00			$40.00
TOTAL				$1,076.00

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	48	LBS	$1.56		$1.56
DRYING AGENT (AGRI-DRY)	$8.26	1	/TON	$46.23		$46.23
ESTABLISHMENT: Principal		5	YEARS		$51.11	$51.11
Interest					$10.60	$10.60
PUMP WATER*		50	AC. IN.			
SUBTOTAL				$181.46	$61.71	$243.17

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	$14.52	$93.70
SUBTOTAL		3.50	HR		$26.25	$43.87	$9.05	$14.52	$93.70
HARVEST OPERATIONS									
SWATHER (5X)	16 FT SP	0.55	HR		$3.96	$5.56	$0.80	$12.05	$22.37
RAKE (5X)	40 HP	0.25	HR		$1.80	$2.24	$0.51	$2.86	$7.41
BALER (5X)	96 HP	1.25	HR		$9.00	$20.55	$1.37	$3.52	$34.44
BALE WAGON (5X)	SP	1.00	HR		$7.20	$18.60	$16.75	$7.51	$50.07
SUBTOTAL		3.05	HR		$21.96	$46.96	$19.43	$25.94	$114.29
OVERHEAD EXPENSES									
DOWNTIME		0.70	HR		$5.04				$5.04
EMPLOYEE BENEFITS					$8.68				$8.68
INSURANCE				$0.03					$0.03
LAND TAXES								$1.78	$1.78
SUPERVISION AND MANAGEMENT					$75.60				$75.60
OTHER EXPENSES				$66.57					$66.57
SUBTOTAL		0.70	HR	$66.61	$89.32			$1.78	$157.71
TOTAL OPERATING EXPENSES		7.25	HR	$248.06	$137.53	$90.83	$28.48	$103.96	$608.87
NET OPERATING PROFIT									$467.13
INTEREST ON OPERATING CAPITAL		($109.49	@	7.50%)					$8.21
INTEREST ON EQUIPMENT INVESTMENT									$21.86
RETURN TO LAND AND RISK									$437.06

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

BUDGET SUMMARY

GROSS RETURN		$1,076.00	
VARIABLE OPERATING EXPENSES	$367.38		
RETURN OVER VARIABLE EXPENSES		$708.62	(GROSS MARGIN)
FIXED EXPENSES	$103.96		
NET FARM INCOME		$604.66	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	$137.53		
NET OPERATING PROFIT		$467.13	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	$30.07		
RETURN TO LAND AND RISK		$437.06	

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 2018
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)	$0.31	150 LBS	$46.50	$46.50
INSECTICIDE (CUSTOM)	$20.01	1 ACRE	$20.01	$20.01
PUMP WATER*		28 AC. IN.		
CROP INSURANCE	$2.94		$2.94	$2.94
SUBTOTAL			$118.95	$118.95

PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
PLOW	145 HP	0.48 HR		$3.46	$10.69	$3.90	$4.96	$23.01
DISC	145 HP	0.17 HR		$1.22	$3.79	$1.15	$1.59	$7.75
FLOAT	70 HP	0.16 HR		$1.15	$2.63	$0.15	$0.73	$4.67
FERTILIZE	DEALER APPLIED							
DRILL	70 HP	0.21 HR		$1.51	$3.45	$0.42	$3.92	$9.30
IRRIGATE (4X)		2.00 HR		$15.00	$24.57	$5.07	$8.13	$52.77
SUBTOTAL		3.02 HR		$22.34	$45.13	$10.69	$19.34	$97.50
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							$1.78	$1.78
SUPERVISION AND MANAGEMENT				$17.93				$17.93
OTHER EXPENSES			$66.57					$66.57
SUBTOTAL		0.22 HR	$66.59	$23.50			$1.78	$91.87
TOTAL OPERATING EXPENSES		3.24 HR	$210.45	$45.84	$45.13	$10.69	$21.12	$333.23
NET OPERATING PROFIT								($79.03)
INTEREST ON OPERATING CAPITAL		($75.50 @	7.50%)					$5.66
INTEREST ON EQUIPMENT INVESTMENT								$8.36
RETURN TO LAND AND RISK								($93.05)

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

BUDGET SUMMARY

GROSS RETURN		$254.20	
VARIABLE OPERATING EXPENSES	$266.27		
RETURN OVER VARIABLE EXPENSES		($12.07)	(GROSS MARGIN)
FIXED EXPENSES	$21.12		
NET FARM INCOME		($33.19)	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	$45.84		
NET OPERATING PROFIT		($79.03)	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	$14.02		
RETURN TO LAND AND RISK		($93.05)	

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 2018
Planting dates: February 1 - February 28
Harvesting dates: June 1 - June 30

ITEM	PRICE	YIELD	TOTAL
GROSS RETURNS			
OAT HAY	$150.00	3.50 TONS (STACKED)	$525.00
TOTAL			$525.00

PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS	TOTAL
SEED	$0.44	100 LBS	$44.00	$44.00
FERTILIZER (16-20-0)	$0.17	150 LBS	$25.50	$25.50
PUMP WATER*		28 AC. IN.		
SUBTOTAL			$69.50	$69.50

PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
PLOW	145 HP	0.48 HR		$3.46	$10.69	$3.90	$4.96	$23.01
DISC	145 HP	0.34 HR		$2.45	$7.57	$2.30	$3.18	$15.50
FLOAT	70 HP	0.16 HR		$1.15	$2.63	$0.15	$0.73	$4.67
FERTILIZE (CUSTOM)			$0.00					$0.00
DRILL	70 HP	0.21 HR		$1.51	$3.45	$0.42	$3.92	$9.30
IRRIGATE (4X)		2.00 HR		$15.00	$24.57	$5.07	$8.13	$52.77
SUBTOTAL		3.19 HR		$23.57	$48.92	$11.84	$20.93	$105.25
HARVEST OPERATIONS								
SWATHER	16 FT	0.11 HR		$0.79	$1.11	$0.16	$2.41	$4.47
BALER	126 HP	0.25 HR		$1.80	$5.57	$1.03	$2.00	$10.40
BALE WAGON	S. P.	0.20 HR		$1.44	$3.72	$3.35	$1.50	$10.01
SUBTOTAL		0.56 HR		$4.03	$10.40	$4.54	$5.92	$24.89
OVERHEAD EXPENSES								
DOWNTIME		0.40 HR		$2.86				$2.86
EMPLOYEE BENEFITS				$4.97				$4.97
INSURANCE			$0.02					$0.02
LAND TAXES							$1.78	$1.78
SUPERVISION AND MANAGEMENT				$36.91				$36.91
OTHER EXPENSES			$66.57					$66.57
SUBTOTAL		0.40 HR	$66.59	$44.74			$1.78	$113.12
TOTAL OPERATING EXPENSES		4.15 HR	$136.09	$72.34	$59.32	$16.38	$28.62	$312.76
NET OPERATING PROFIT								$212.24
INTEREST ON OPERATING CAPITAL		($51.18 @	7.50%)					$3.84
INTEREST ON EQUIPMENT INVESTMENT								$14.02
RETURN TO LAND AND RISK								$194.39

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

BUDGET SUMMARY

GROSS RETURN		$525.00	
VARIABLE OPERATING EXPENSES	$211.79		
RETURN OVER VARIABLE EXPENSES		$313.21	(GROSS MARGIN)
FIXED EXPENSES	$28.62		
NET FARM INCOME		$284.58	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	$72.34		
NET OPERATING PROFIT		$212.24	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	$17.85		
RETURN TO LAND AND RISK		$194.39	

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	$0.750	700 LBS	$525.00
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			$670.11

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	$3.79	$1.15	$1.59	$7.75
PLOW	145 HP	0.48 HR		$3.46	$10.69	$3.90	$4.96	$23.01
DISC (2X)	145 HP	0.34 HR		$2.45	$7.57	$2.30	$3.18	$15.50
FLOAT	145 HP	0.16 HR		$1.15	$3.56	$0.64	$1.33	$6.68
LISTER	145 HP	0.18 HR		$1.30	$4.01	$1.07	$2.36	$8.74
PRE-IRRIGATE		0.75 HR		$5.63	$6.58	$1.36	$2.18	$15.74
CULTIVATOR	65 HP	0.21 HR		$1.51	$2.45	$0.48	$1.15	$5.60
PLANTER	70 HP	0.26 HR		$1.87	$4.27	$0.67	$4.32	$11.13
SLED	70 HP	0.15 HR		$1.08	$2.47	$0.18	$0.81	$4.54
CULTIVATOR (3X)	65 HP	0.63 HR		$4.54	$7.35	$1.44	$3.45	$16.79
HAND HOE (CUSTOM)			$20.00					$20.00
IRRIGATE (3X)		1.50 HR		$11.25	$19.74	$4.07	$6.54	$41.60
SUBTOTAL		4.83 HR	$20.00	$35.45	$72.49	$17.27	$31.88	$177.09
HARVEST OPERATIONS								
COTTON PICKER (2X)	2-ROW	0.74 HR		$5.33	$12.08	$12.68	$158.38	$188.47
HAUL (2X)	65 HP	1.00 HR		$7.20	$11.67	$1.32	$5.33	$25.52
GIN COTTON (CUSTOM)			$104.30					$104.30
SUBTOTAL		1.74 HR	$104.30	$12.53	$23.75	$14.00	$163.71	$318.29
POSTHARVEST OPERATIONS								
SHREDDER	70 HP	0.14 HR		$1.01	$2.30	$0.19	$2.19	$5.68
SUBTOTAL		0.14 HR		$1.01	$2.30	$0.19	$2.19	$5.68
OVERHEAD EXPENSES								
DOWNTIME		0.95 HR		$6.82				$6.82
EMPLOYEE BENEFITS				$8.82				$8.82
INSURANCE			$0.04					$0.04
LAND TAXES							$1.78	$1.78
SUPERVISION AND MANAGEMENT				$47.15				$47.15
OTHER EXPENSES			$66.57					$66.57
SUBTOTAL		0.95 HR	$66.61	$62.78			$1.78	$131.18
TOTAL OPERATING EXPENSES		7.66 HR	$427.21	$111.77	$98.54	$31.46	$199.55	$868.54
NET OPERATING PROFIT								($198.43)
INTEREST ON OPERATING CAPITAL		($144.36 @	7.50%)					$10.83
INTEREST ON EQUIPMENT INVESTMENT								$106.11
RETURN TO LAND AND RISK								($315.36)

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

BUDGET SUMMARY

GROSS RETURN		$670.11	
VARIABLE OPERATING EXPENSES	$557.21		
RETURN OVER VARIABLE EXPENSES		$112.90	(GROSS MARGIN)
FIXED EXPENSES	$199.55		
NET FARM INCOME		($86.65)	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	$111.77		
NET OPERATING PROFIT		($198.43)	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	$116.93		
RETURN TO LAND AND RISK		($315.36)	

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 2018
Planting dates: April 15 - May 15
Harvesting dates: October 15 - January 15

ITEM	PRICE	YIELD	TOTAL
GROSS RETURNS			
COTTON LINT	$0.730	700 LBS	$511.00
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			$691.11

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	$3.79	$1.15	$1.59	$7.75
PLOW	145 HP	0.48 HR		$3.46	$10.69	$3.90	$4.96	$23.01
DISC (2X)	145 HP	0.34 HR		$2.45	$7.57	$2.30	$3.18	$15.50
FLOAT	145 HP	0.16 HR		$1.15	$3.56	$0.64	$1.33	$6.68
LIST	145 HP	0.18 HR		$1.30	$4.01	$1.07	$2.36	$8.74
PRE-IRRIGATE		0.75 HR		$5.63	$6.58	$1.36	$2.18	$15.74
CULTIVATOR	65 HP	0.21 HR		$1.51	$2.45	$0.48	$1.15	$5.60
PLANTER	70 HP	0.26 HR		$1.87	$4.27	$0.67	$4.32	$11.13
SLED	70 HP	0.15 HR		$1.08	$2.47	$0.18	$0.81	$4.54
CULTIVATOR (3X)	65 HP	0.63 HR		$4.54	$7.35	$1.44	$3.45	$16.79
HAND HOE (CUSTOM)			$20.00					$20.00
IRRIGATE (3X)		1.50 HR		$11.25	$19.74	$4.07	$6.54	$41.60
SUBTOTAL		4.83 HR	$20.00	$35.45	$72.49	$17.27	$31.88	$177.09
HARVEST OPERATIONS								
COTTON STRIPPER	70 HP	0.62 HR		$4.46	$10.19	$3.49	$62.44	$80.58
HAUL	65 HP	0.75 HR		$5.40	$8.75	$0.99	$4.00	$19.14
GIN COTTON (CUSTOM)			$134.89					$134.89
SUBTOTAL		1.37 HR	$134.89	$9.86	$18.95	$4.48	$66.44	$234.61
POSTHARVEST OPERATIONS								
SHREDDER	70 HP	0.14 HR		$0.56	$2.30	$0.19	$2.19	$5.24
SUBTOTAL		0.14 HR		$0.56	$2.30	$0.19	$2.19	$5.24
OVERHEAD EXPENSES								
DOWNTIME		0.89 HR		$6.43				$6.43
EMPLOYEE BENEFITS				$8.26				$8.26
INSURANCE			$0.03					$0.03
LAND TAXES							$1.78	$1.78
SUPERVISION AND MANAGEMENT				$48.56				$48.56
OTHER EXPENSES			$66.57					$66.57
SUBTOTAL		0.89 HR	$66.61	$63.25			$1.78	$131.63
TOTAL OPERATING EXPENSES		7.23 HR	$461.79	$109.12	$93.74	$21.93	$102.28	$788.87
NET OPERATING PROFIT								($97.76)
INTEREST ON OPERATING CAPITAL		($145.16 @	7.50%)					$10.89
INTEREST ON EQUIPMENT INVESTMENT								$55.19
RETURN TO LAND AND RISK								($163.84)

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

BUDGET SUMMARY

GROSS RETURN		$691.11	
VARIABLE OPERATING EXPENSES	$577.47		
RETURN OVER VARIABLE EXPENSES		$113.64	(GROSS MARGIN)
FIXED EXPENSES	$102.28		
NET FARM INCOME		$11.36	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	$109.12		
NET OPERATING PROFIT		($97.76)	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	$66.08		
RETURN TO LAND AND RISK		($163.84)	

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 2018
Planting dates: April 1 - April 15
Harvesting dates: September 1 - October 30

ITEM	PRICE	YIELD	TOTAL
GROSS RETURNS			
RED CHILE	$0.60	3,200 LBS	$1,920.00
TOTAL			$1,920.00

PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS	TOTAL
SEED	$16.00	8 LBS	$128.00	$128.00
NITROGEN (N)	$0.31	120 LBS	$37.20	$37.20
PHOSPHATE (P205)	$0.24	70 LBS	$16.80	$16.80
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			$277.47	$277.47

PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
PLOW	145 HP	0.48 HR		$3.46	$10.69	$3.90	$4.96	$23.01
DISC (2X)	145 HP	0.34 HR		$2.45	$7.57	$2.30	$3.18	$15.50
PLANE	145 HP	0.16 HR		$1.15	$3.56	$0.65	$2.83	$8.20
FERTILIZE	DEALER APPLIED							
LIST	145 HP	0.18 HR		$1.30	$4.01	$1.07	$2.36	$8.74
PRE-IRRIGATE		0.75 HR		$5.63	$5.26	$1.09	$1.74	$13.72
CULTIVATOR	65 HP	0.21 HR		$1.51	$2.45	$0.48	$1.15	$5.60
PLANTER	70 HP	0.26 HR		$1.87	$4.27	$0.67	$4.32	$11.13
CULTIVATOR (5X)	65 HP	1.05 HR		$7.56	$12.25	$2.41	$5.76	$27.98
THIN (CUSTOM)			$45.00					$45.00
IRRIGATE (7X)		3.50 HR		$26.25	$36.85	$7.60	$12.20	$82.91
HAND HOE (CUSTOM)			$20.00					$20.00
CHEMICAL APPLICATION (CUSTOM)			$0.00					$0.00
SUBTOTAL		6.93 HR	$65.00	$51.17	$86.93	$20.17	$38.51	$261.79
HARVEST OPERATIONS								
HAND PICK (CUSTOM)			$640.00					$640.00
FIELD HAUL	145 HP	0.90 HR		$6.48	$20.05	$3.60	$8.16	$38.29
HAUL (CUSTOM)			$96.00					$96.00
SUBTOTAL		0.90 HR	$736.00	$6.48	$20.05	$3.60	$8.16	$774.29
POSTHARVEST OPERATIONS								
SHREDDER	70 HP	0.14 HR		$1.01	$2.30	$0.19	$2.19	$5.68
SUBTOTAL		0.14 HR		$1.01	$2.30	$0.19	$2.19	$5.68
OVERHEAD EXPENSES								
DOWNTIME		0.93 HR		$6.70				$6.70
EMPLOYEE BENEFITS				$10.56				$10.56
INSURANCE			$0.04					$0.04
LAND TAXES							$1.78	$1.78
SUPERVISION AND MANAGEMENT				$134.75				$134.75
OTHER EXPENSES			$66.57					$66.57
SUBTOTAL		0.93 HR	$66.62	$152.00			$1.78	$220.40
TOTAL OPERATING EXPENSES		8.90 HR	$1,145.08	$210.66	$109.28	$23.96	$50.64	$1,539.62
NET OPERATING PROFIT								$380.38
INTEREST ON OPERATING CAPITAL		($168.10 @	7.50%)					$12.61
INTEREST ON EQUIPMENT INVESTMENT								$25.56
RETURN TO LAND AND RISK								$342.21

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

BUDGET SUMMARY

GROSS RETURN		$1,920.00	
VARIABLE OPERATING EXPENSES	########		
RETURN OVER VARIABLE EXPENSES		$641.68	(GROSS MARGIN)
FIXED EXPENSES	$50.64		
NET FARM INCOME		$591.04	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	$210.66		
NET OPERATING PROFIT		$380.38	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	$38.17		
RETURN TO LAND AND RISK		$342.21	

TABLE 14. Whole farm summary, Artesia-Lake Arthur area, Projected 2018

GROSS RETURNS					
ALFALFA HAY	260	ACRES			
CROP			$279,760		
BARLEY	17	ACRES			
CROP			$4,321		
DIRECT PAYMENT			$0		
COUNTER CYCLICAL PAYMENT			$0		
OAT HAY	20	ACRES			
CROP			$10,500		
PICKER COTTON	95	ACRES			
COTTON LINT			$49,875		
COTTON SEED			$7,980		
DIRECT PAYMENT			$0		
COUNTER CYCLICAL PAYMENT			$5,805		
STRIPPER COTTON	68	ACRES			
COTTON LINT			$34,748		
COTTON SEED			$5,712		
DIRECT PAYMENT			$0		
COUNTER CYCLICAL PAYMENT			$6,535		
RED CHILE	40	ACRES			
CROP			$76,800		
GROSS RETURN				$482,037	
CASH OPERATING EXPENSES					
SEED			$32,028		
FERTILIZER			$15,163		
CHEMICALS			$44,390		
CROP INSURANCE			$950		
OTHER PURCHASED INPUTS			$13,791		
CANAL WATER			$0		
FUEL, OIL & LUBRICANTS-EQUIPMENT			$29,721		
FUEL-IRRIGATION			$18,656		
REPAIRS			$13,999		
CUSTOM CHARGES			$54,804		
LAND TAXES			$891		
OTHER EXPENSES			$33,305		
TOTAL CASH EXPENSES				$257,699	
RETURN OVER CASH EXPENSES					$224,338
FIXED EXPENSES			$43,321		
TOTAL EXPENSES				$301,020	
NET FARM INCOME					$181,018
LABOR AND MANAGEMENT COSTS			$66,945		
NET OPERATING PROFIT					$114,073
CAPITAL COSTS					
INTEREST ON OPERATING CAPITAL			$4,581		
INTEREST ON EQUIPMENT INVESTMENT			$20,962		
TOTAL CAPITAL COSTS				$25,543	
RETURN TO LAND AND RISK					$88,529

LAND VALUE	RETURN TO RISK*	RETURN ON INVESTMENT**
$1,000 /ACRE	$53,529	16.51%
$2,500 /ACRE	$1,029	7.92%
$4,000 /ACRE	($51,471)	5.21%
$5,500 /ACRE	($103,971)	3.88%

* 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)