

MICROCOMPUTER CROP COST AND RETURN GENERATOR

BUDGET AREA..... OTERO COUNTYProjected 2009.
FARM SIZE..... 320.00 ACRES
IRRIGATION TYPE..... SPRINKLER
NUMBER OF CROPS..... 4

VERSION 1.0

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TABLE 1. Acreage Summary, Otero County,
Projected 2009.

BUDGET AREA..... TULAROSA BASIN, OTERO COUNTY			
FARM SIZE.....	50 ACRES		
IRRIGATION TYPE.....	SPRINKLER		
NUMBER OF CROPS....	3		
	WATER USE		
ACREAGE SUMMARY:	LAND USE (ACRES)	AC.IN. PER AC.	TOTAL AC.IN.
ALFALFA ESTABLISHMENT	4.00 *	8	32
ALFALFA HAY	40.00	45	1,800
OAT HAY	5.00	18	90
SORGHUM/SUDAN	5.00 *	16	80
ROADS, DITCHES, HOMESTEAD	5.00		
TOTAL	50.00		2,002
ACRE FEET PER ACRE OF WATER RIGHTS			3.34

* DOUBLE-CROPPED

TABLE 2. Basic cost information for Tularosa Basin, Otero County,
Projected 2009.

Item		
Labor Wage Rate:		
Equipment operators	\$/hour	\$7.25
General & Irrigators	\$/hour	\$7.25
Purchased Inputs:		
Fertilizer:		
Seed: Nitrogen (N)	\$/pound	\$0.62
Alfalfa	\$/pound	\$4.00
Oats for Hay	\$/pound	\$0.42
Natural Gas (Gas NM) (service charge)	\$/MCF \$/month	\$5.90 \$10.00
Diesel fuel	\$/gallon	\$2.80
Gasoline	\$/gallon	\$2.50
Electricity (Otero Coop)	cents/KwHr	9.21
Employee Liability Insurance	\$/ \$1,000 wages	\$12.00
Employee Benefits	percent/wages	12.00%
Labor Downtime	percent	25.00%
Financial Rates:		
Operating Capital Interest Rate	percent	7.50%
Land Interest Rate	percent	7.25%
Equipment Interest Rate	percent	7.50%
Expected Inflation Rate	percent	3.00%
Land Taxes	\$300.00 /acre (full value)	\$2.81
Personal Property Tax Rate	- NR - R	\$/ \$1,000 (Assessed Value) \$28.13 \$22.05
Supervision Factors		
Field Crop-Irrigation	\$/acre	\$1.00
Field Crop-Equipment & General	\$/acre	\$0.50
Management Rate	percent	4.00%

TABLE 3. Overhead cost information for Tularosa Basin, Otero County,
Projected 2009.

Item		
Electricity (Domestic & Shop)		\$75.40 per month \$905
Telephone		\$81.20 per month \$974
Accounting & Legal		\$174
Misc. Supplies & Hand Tools		\$603
Pickup and Auto		
miles	5,974 @	\$0.415 per mile \$2,479
Insurance		
- general liability (non-employee)		\$278
- fire/theft		\$186
Property Taxes		
- non-planted land		\$0
- other than land & machinery		\$6,010
Building repairs and maintenance		\$278
Dues, fees, publications		\$151
Farmstead Equipment		\$186
		Total \$12,224
Total per planted acre		\$271.65

TABLE 4. Pumping costs and data for irrigation wells, Tularosa Basin, Otero County, February 2009

WELL DATA		DEPTH CHARACTERISTICS	
DELIVERY PIP	40	STATIC	145
SPRINKLER		DRYDOWN	35
		TOTAL HEAD	180
		CASING	270
GALLONS PER MINUTE (GPM)	300		
WORK-HORSEPOWER	21		
EFFICIENCY FACTOR:			
ELECTRICITY	0.230		
NATURAL GAS	0.151		
LP GAS	0.181		
DIESEL	0.180		
FUEL COST PER HOUR:			
ELECTRICITY	9.31 CENTS/KWH		
NATURAL GAS	\$1.80 BCU		
LP GAS	\$2.80 BCU		
DIESEL	\$2.80 BCU		
PUMPING COSTS			
ELECTRICAL WELL:			
COST PER HOUR	\$4.92		
COST PER ACRE INCH	\$7.42		
NATURAL GAS WELL:			
COST PER HOUR	\$2.28		
COST PER ACRE INCH	\$3.44		
BUTANE WELL:			
COST PER HOUR	\$2.38		
COST PER ACRE INCH	\$3.58		
DIESEL WELL:			
COST PER HOUR	\$6.79		
COST PER ACRE INCH	\$10.17		

TABLE 5. Equipment summary for a 50-acre part-time farm, Tularosa Basin, Otero County, February 2009

EQUIPMENT	ITEM & SIZE	ANNUAL HOURS OF USE	NUMBER	TOTAL VALUE	VARIABLE COSTS				FIXED COSTS		TOTAL PER HR
					FUEL, OIL, LUBRICANT	REPAIR	FUEL OR PER HR	REPAIR PER HR	DEPRECIATION	TAXES	
TRACTOR	50 HP	122	1	\$6,888	\$1,141	\$132	\$9.35	\$1.58	\$899	\$84	\$8.00
BALEWAGON PTD		45	1	\$1,500	205	\$7	\$0.15	\$0.28	\$600	\$75	\$10.20
PLOW	2 MWP	45	1	\$1,800	57	\$0.15	\$0.35	\$38	\$385	\$38	\$9.33
PLOW	2 BTM	4	1	\$200	\$1	\$0.31	\$0.31	\$0	\$33	\$0	\$8.40
FLOAT	8 FT	9	1	\$400	\$0	\$0.01	\$0.01	\$40	\$3	\$4.70	
DISC	8 FT	12	1	\$700	\$11	\$0.57	\$0.57	\$0	\$70	\$7	\$12.00
SPRINKLER	12 FT	3,020	1	\$2,500	\$0	\$0.00	\$333	\$23	\$0.12	\$3.00	
DRILL	12 FT	3	1	\$5,200	\$3	\$1.06	\$480	\$21	\$186.48	\$191.54	
SWATHER	14 FT	34	1	\$2,100	\$10	\$0.28	\$0.28	\$700	\$86	\$12.28	
NATURAL GAS WELL		3,020	1	\$13,025	\$6,885	\$0	\$2.28	\$0.00	\$1,942	\$122	\$8.43
					\$31,181	\$8,508	\$2.19		\$4,196	\$219	\$10.00

EQUIPMENT LIST

ITEM	NEW VALUE	USED VALUE	YEARS LIFE	EQUIP COST	MAX HOURS	FUEL UNIT/HR	LUBE COST	ACCUM HOURS	INTEREST PER ANNUAL USE
TRACTOR	17075.00	4888.00	20.00	5.00	800.00	3.40	0.10	1020.70	10.00
BALEWAGON PTD	1500.00	150.00	20.00	5.00	800.00			250.00	6.00
PLOW	1700.00	150.00	20.00	2.00	100.00			912.70	10.00
PLOW	500.00	250.00	15.00	3.00	300.00			47.20	10.00
FLOAT	400.00	400.00	15.00	4.00	150.00			134.40	10.00
DISC	1400.00	700.00	15.00	3.00	300.00			199.68	10.00
SPRINKLER	3000.00	2500.00	15.00	0.00	8742.00			4306.28	10.00
DRILL	1400.00	2200.00	10.00	8.00	100.00			38.22	10.00
SWATHER	1400.00	2100.00	20.00	0.00	800.00			447.20	10.00
NATURAL GAS WELL	20500.00	13025.00	25.00	0.00	8742.00			4306.28	10.00

USAGE LIST

ALFALFA ESTABLISHMENT	ACRES	4	PUMP WATER	8.00
MACHINE	POWER UNIT	TIMES OVER	RATE	TOTAL CUSTOM
DISC	50 HP	1.00	0.39	0.39
PLOW	50 HP	1.00	1.05	1.05
DISC (2X)	50 HP	2.00	0.39	0.78
FLAT (2X)	50 HP	2.00	0.32	0.64
DRILL	50 HP	1.00	0.21	0.21
IRRIGATE (4X)		4.00	1.51	15.07

INTEREST PROPORTION

ALFALFA ESTABLISHMENT	ACRES	4	PUMP WATER	8.00
MACHINE	POWER UNIT	TIMES OVER	RATE	TOTAL CUSTOM
DISC	50 HP	1.00	0.39	0.39
PLOW	50 HP	1.00	1.05	1.05
DISC (2X)	50 HP	2.00	0.39	0.78
FLAT (2X)	50 HP	2.00	0.32	0.64
DRILL	50 HP	1.00	0.21	0.21
IRRIGATE (4X)		4.00	1.51	15.07

ALFALFA HAY	ACRES	40	PUMP WATER	45.00
MACHINE	POWER UNIT	TIMES OVER	RATE	TOTAL CUSTOM
IRRIGATE (11X)		11.00	1.51	67.89

ALFALFA HAY	ACRES	40	PUMP WATER	45.00
MACHINE	POWER UNIT	TIMES OVER	RATE	TOTAL CUSTOM
SWATHER (4X)	14 FT	5.00	0.18	0.90
BALEWAGON PTD (5X)	50 HP	5.00	0.21	1.05
BALEWAGON PTD (5X)	50 HP	5.00	0.20	1.00

ALFALFA HAY	ACRES	40	PUMP WATER	45.00
MACHINE	POWER UNIT	TIMES OVER	RATE	TOTAL CUSTOM
DISC	50 HP	1.00	0.39	0.39
PLOW	50 HP	1.00	1.05	1.05
DISC (2X)	50 HP	2.00	0.39	0.78
FLAT (2X)	50 HP	2.00	0.32	0.64
DRILL	50 HP	1.00	0.21	0.21
IRRIGATE (4X)		4.00	1.51	15.07

ALFALFA HAY	ACRES	40	PUMP WATER	45.00
MACHINE	POWER UNIT	TIMES OVER	RATE	TOTAL CUSTOM
SWATHER	14 FT	1.00	0.18	0.18
BALEWAGON	50 HP	1.00	0.21	0.21
BALEWAGON	50 HP	1.00	0.20	0.20

ANNUAL REPAIR COSTS AS A PERCENT OF NEW VALUE

Hours of Use	1	2	3	4	5	6	7	8	9
0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
50	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
100	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
150	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
200	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
250	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
300	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
350	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
400	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
450	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
500	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
550	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
600	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
650	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
700	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
750	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
800	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

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

** Based on "Agricultural Machinery Data" in Agricultural Engineers Yearbook, 1963.

Codes

- 1 tractor
- 2 baler, combine, forage harrow, wheelrower, combine
- 3 rotary hoe, disk, moldboard plow, chisel, field cultivator
- 4 row cultivator, base plow
- 5 harrow, weeder, brush, sub soil, drag, roller, water furrow, bed planer
- 6 harrow, cotton picker, corn stripper, corn picker, corn head, forage equipment, rotary mower, disk chopper, feed wagon, farm truck
- 7 wheel collector/mower
- 8 planter, drill, seeding equipment, mounted sprayer
- 9 fertilizer distributing equipment

TABLE 6. Alfalfa establishment, sprinkler-irrigated, budgeted per acre costs and returns for a 50 acre part-time farm, Tularosa Basin, Otero County, Projected 2009.
Planting dates: September 1 - November 1

ITEM	PRICE	QUANTITY	PURCHASED INPUTS					TOTAL
PURCHASED INPUTS								
ALFALFA SEED	\$4.00	30 LBS	\$120.00					\$120.00
PUMP WATER*		8 AC. IN.						
SUBTOTAL			\$120.00					\$120.00
PREHARVEST OPERATIONS								
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DISC	50 HP	0.39 HR		\$2.83	\$3.65	\$0.42	\$3.19	\$10.08
PLOW	50 HP	1.05 HR		\$7.61	\$9.82	\$1.46	\$17.38	\$36.27
DISC (2X)	50 HP	0.78 HR		\$5.66	\$7.29	\$1.52	\$12.53	\$27.00
FLOAT (2X)	50 HP	0.64 HR		\$4.64	\$5.98	\$0.70	\$8.22	\$19.54
DRILL	50 HP	0.21 HR		\$1.52	\$1.96	\$0.45	\$34.59	\$38.53
IRRIGATE (4X)		2.00 HR		\$14.50	\$27.51	\$0.00	\$6.56	\$48.57
SUBTOTAL		5.07 HR		\$36.76	\$56.22	\$4.54	\$82.47	\$179.98
OVERHEAD EXPENSES								
DOWNTIME		0.77 HR		\$5.56				\$5.56
EMPLOYEE BENEFITS				\$4.41				\$4.41
FARM INSURANCE			\$0.44					\$0.44
SUPERVISION AND MANAGEMENT				\$15.53				\$15.53
SUBTOTAL		0.77 HR	\$0.44	\$25.51				\$25.95
TOTAL OPERATING EXPENSES		5.84 HR	\$120.44	\$62.27	\$56.22	\$4.54	\$82.47	\$325.93

TABLE 7. Alfalfa hay, sprinkler-irrigated, budgeted per acre costs and returns for a 50 acre part-time farm, Tularosa Basin, Otero County, Projected 2009.
Harvesting dates: May 10 - October 15

ITEM	PRICE	YIELD						TOTAL	
GROSS RETURNS									
ALFALFA HAY	\$140.00	6.00 TONS (STACKED)						\$840.00	
TOTAL								\$840.00	
PURCHASED INPUTS		PRICE	QUANTITY	PURCHASED INPUTS		FIXED COST	TOTAL		
FERT. (ALFALFA MIX)	\$0.16	250 LBS	\$40.00				\$40.00		
INSECTICIDE	\$23.97	1 ACRE	\$23.97				\$23.97		
WIRE	\$0.36	56 LBS	\$20.16				\$20.16		
ESTABLISHMENT: Principal		10 YEARS				\$32.59	\$32.59		
: Interest						\$11.12	\$11.12		
PUMP WATER*		45 AC. IN.							
SUBTOTAL			\$84.13			\$43.72	\$127.85		
PREHARVEST OPERATIONS		POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
IRRIGATE (11X)			5.50 HR		\$39.88	\$154.76	\$0.00	\$36.88	\$231.51
SUBTOTAL			5.50 HR		\$39.88	\$154.76	\$0.00	\$36.88	\$231.51
HARVEST OPERATIONS									
SWATHER (5X)	14 FT	0.80 HR		\$5.80	\$0.00	\$0.22	\$17.81	\$23.83	
BALER, PTO (5X)	50 HP	1.05 HR		\$7.61	\$9.82	\$1.29	\$18.25	\$36.98	
BALEWAGON, PTO (5X)	50 HP	1.00 HR		\$7.25	\$9.35	\$2.36	\$28.41	\$47.37	
SUBTOTAL		2.85 HR		\$20.66	\$19.17	\$3.88	\$64.47	\$108.18	
OVERHEAD EXPENSES									
DOWNTIME		0.71 HR		\$5.17				\$5.17	
EMPLOYEE BENEFITS				\$7.26				\$7.26	
FARM INSURANCE				\$0.73				\$0.73	
LAND TAXES							\$2.81	\$2.81	
SUPERVISION AND MANAGEMENT				\$40.53				\$40.53	
OTHER EXPENSES				\$271.65				\$271.65	
SUBTOTAL		0.71 HR		\$272.38	\$52.96		\$2.81	\$328.15	
TOTAL OPERATING EXPENSES		9.06 HR		\$356.51	\$113.49	\$173.92	\$3.88	\$147.88	\$795.68
NET OPERATING PROFIT									\$44.32
INTEREST ON OPERATING CAPITAL		(\$82.68	@	7.50%)			\$6.20
INTEREST ON EQUIPMENT INVESTMENT									\$70.38
RETURN TO LAND AND RISK									(\$32.26)

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

BUDGET SUMMARY

GROSS RETURN		\$840.00	
VARIABLE OPERATING EXPENSES	\$540.51		
RETURN OVER VARIABLE EXPENSES	\$299.49		(GROSS MARGINS)
FIXED EXPENSES	\$147.88		
NET FARM INCOME	\$151.61		(RETURNS TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$113.49		
NET OPERATING PROFIT	\$38.11		(RETURNS TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$70.38		
RETURN TO LAND AND RISK		(\$32.26)	

TABLE 8. Oats for hay, sprinkler-irrigated, budgeted per acre costs and returns for a 50 acre part-time farm, Tularosa Basin, Otero County, Projected 2009.
 Planting dates: September 1 - November 1
 Harvesting dates: April 15 - May 15

ITEM	PRICE	YIELD						TOTAL	
GROSS RETURNS									
OATS FOR HAY	\$100.00	3.00 TONS (STACKED)						\$300.00	
TOTAL							\$300.00		
<hr/>									
PURCHASED INPUTS		PRICE	QUANTITY	PURCHASED INPUTS				FIXED COST	TOTAL
OAT SEED	\$0.42	100 LBS	\$42.00					\$42.00	
NITROGEN (N)	\$0.62	100 LBS	\$62.00					\$62.00	
PUMP WATER*		18 AC. IN.							
SUBTOTAL							\$104.00	\$104.00	
<hr/>									
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL	
DISC	50 HP	0.39 HR		\$2.83	\$3.65	\$0.76	\$6.26	\$13.50	
PLow	50 HP	1.05 HR		\$7.61	\$9.82	\$1.46	\$17.38	\$36.27	
DISC (2X)	50 HP	0.78 HR		\$5.66	\$7.29	\$1.52	\$12.53	\$27.00	
FLOAT (2X)	50 HP	0.64 HR		\$4.64	\$5.98	\$0.70	\$8.22	\$19.54	
DRILL	50 HP	0.21 HR		\$1.52	\$1.96	\$0.45	\$34.59	\$38.53	
IRRIGATE (4X)		2.00 HR		\$14.50	\$61.90	\$0.00	\$14.75	\$91.15	
SUBTOTAL		5.07 HR		\$36.76	\$90.61	\$4.88	\$93.74	\$225.98	
<hr/>									
HARVEST OPERATIONS									
SWATHER	14 FT	0.16 HR		\$1.16	\$0.00	\$0.04	\$3.56	\$4.77	
BALER, PTO	50 HP	0.21 HR		\$1.52	\$1.96	\$0.26	\$3.65	\$7.40	
BALE WAGON	50 HP	0.20 HR		\$1.45	\$1.87	\$0.47	\$5.68	\$9.47	
SUBTOTAL		0.57 HR		\$4.13	\$3.83	\$0.78	\$12.89	\$21.64	
<hr/>									
OVERHEAD EXPENSES									
DOWNTIME		0.91 HR		\$6.60				\$6.60	
EMPLOYEE BENEFITS				\$4.91				\$4.91	
FARM INSURANCE			\$0.49					\$0.49	
LAND TAXES							\$1.41	\$1.41	
SUPERVISION AND MANAGEMENT				\$15.82				\$15.82	
OTHER EXPENSES			\$135.83					\$135.83	
SUBTOTAL		0.91 HR		\$136.32	\$27.32		\$1.41	\$165.05	
TOTAL OPERATING EXPENSES		6.55 HR		\$240.32	\$68.21	\$94.44	\$5.66	\$108.04	
NET OPERATING PROFIT								(\$216.67)	
INTEREST ON OPERATING CAPITAL							(\$76.26 @ 7.50%)	\$5.72	
INTEREST ON EQUIPMENT INVESTMENT								\$54.59	
RETURN TO LAND AND RISK								(\$276.97)	

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

BUDGET SUMMARY

GROSS RETURN		\$300.00	
VARIABLE OPERATING EXPENSES	\$346.13		
RETURN OVER VARIABLE EXPENSES		(\$46.13)	(GROSS MARGINS)
FIXED EXPENSES	\$108.04		
NET FARM INCOME		(\$154.17)	(RETURNS TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$68.21		
NET OPERATING PROFIT		(\$222.39)	(RETURNS TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$54.59		
RETURN TO LAND AND RISK		(\$276.97)	

TABLE 9. Sorghum-sudan hay, sprinkler-irrigated, budgeted per acre costs and returns for a 50 acre part-time farm, Tularosa Basin, Otero County, Projected 2009.
 Planting dates: May 1 - June 1
 Harvesting dates: June 1 - August 1

ITEM	PRICE	YIELD	TOTAL
GROSS RETURNS			
SORGHUM/SUDAN HAY	\$120.00	5.00 TONS (STACKED)	\$600.00
TOTAL			\$600.00

PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS	FIXED COST	TOTAL
SEED	\$1.04	50 LBS	\$52.00		\$52.00
NITROGEN (N)	\$0.62	100 LBS	\$62.00		\$62.00
PUMP WATER*		16 AC. IN.			
SUBTOTAL			\$114.00		\$114.00

PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DISC	50 HP	0.39 HR		\$2.83	\$3.65	\$0.76	\$6.26	\$13.50
FLOAT (2X)	50 HP	0.64 HR		\$4.64	\$5.98	\$0.70	\$8.22	\$19.54
DRILL	50 HP	0.21 HR		\$1.52	\$1.96	\$0.45	\$34.59	\$38.53
IRRIGATE (4X)		2.00 HR		\$14.50	\$55.02	\$0.00	\$13.11	\$82.64
SUBTOTAL		3.24 HR		\$23.49	\$66.62	\$1.91	\$62.19	\$154.20

HARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
SWATHER (2X)	14 FT	0.32 HR		\$2.32	\$0.00	\$0.09	\$7.12	\$9.53
BALER, PTO (2X)	50 HP	0.42 HR		\$3.05	\$3.93	\$0.52	\$7.30	\$14.79
BALE WAGON (2X)	50 HP	0.40 HR		\$2.90	\$3.74	\$0.94	\$11.36	\$18.95
SUBTOTAL		1.14 HR		\$8.27	\$7.67	\$1.55	\$25.79	\$43.27

OVERHEAD EXPENSES	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DOWNTIME	0.60 HR		\$4.31				\$4.31
EMPLOYEE BENEFITS			\$3.81				\$3.81
FARM INSURANCE		\$0.38					\$0.38
LAND TAXES						\$1.41	\$1.41
SUPERVISION AND MANAGEMENT			\$27.19				\$27.19
OTHER EXPENSES		\$135.83					\$135.83
SUBTOTAL	0.60 HR	\$136.21	\$35.31			\$1.41	\$172.93

TOTAL OPERATING EXPENSES	4.98 HR	\$250.21	\$67.07	\$74.29	\$3.46	\$89.38	\$484.40
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NET OPERATING PROFIT							\$115.60
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INTEREST ON OPERATING CAPITAL	(\$74.90	@	7.50%)		\$5.62
INTEREST ON EQUIPMENT INVESTMENT							\$48.87

RETURN TO LAND AND RISK							\$61.11
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* Pump water costs are shown under irrigation in the preharvest operations section.

BUDGET SUMMARY

GROSS RETURN		\$600.00	
VARIABLE OPERATING EXPENSES	\$333.57		
RETURN OVER VARIABLE EXPENSES		\$266.43	(GROSS MARGINS)
FIXED EXPENSES	\$89.38		
NET FARM INCOME		\$177.05	(RETURNS TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$67.07		
NET OPERATING PROFIT		\$109.98	(RETURNS TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$48.87		
RETURN TO LAND AND RISK		\$61.11	

TABLE 10. Summary of per acre costs and returns, 50-acre part-time farm, Tularosa Basin, Otero County, Projected 2009.

	ALFALFA ESTABLISHMENT	ALFALFA HAY	OATS FOR HAY	SORGHUM SUDAY HAY
		TONS	TONS	TONS
PRIMARY YIELD		6.00	3.00	5.00
PRIMARY PRICE		\$140.00	\$100.00	\$120.00
GOVERNMENT PAYMENTS		\$0.00	\$0.00	\$0.00
SECOND INCOME		\$0.00	\$0.00	\$0.00
GROSS RETURN		\$840.00	\$300.00	\$600.00
CASH OPERATING EXPENSES				
SEED	\$120.00		\$42.00	\$52.00
FERTILIZER		\$40.00	\$62.00	\$62.00
CHEMICALS		\$23.97		
CROP INSURANCE				
OTHER PURCHASED INPUTS		\$20.16		
CANAL WATER				
FUEL, OIL & LUBRICANTS-EQUIPMENT	\$28.70	\$19.17	\$32.54	\$19.26
FUEL-IRRIGATION	\$27.51	\$154.76	\$61.90	\$55.02
REPAIRS	\$4.54	\$3.88	\$5.66	\$3.46
CUSTOM CHARGES				
LAND TAXES		\$2.81	\$1.41	\$1.41
OTHER EXPENSES	\$0.44	\$272.38	\$136.32	\$136.21
TOTAL CASH EXPENSES	\$181.20	\$537.13	\$341.82	\$329.36
RETURN OVER CASH EXPENSES	(\$181.20)	\$302.87	(\$41.82)	\$270.64
FIXED EXPENSES	\$82.47	\$145.07	\$106.63	\$87.98
TOTAL EXPENSES	\$263.67	\$682.19	\$448.45	\$417.33
NET FARM INCOME	(\$263.67)	\$157.81	(\$148.45)	\$182.67
LABOR AND MANAGEMENT COSTS	\$62.27	\$113.49	\$68.21	\$67.07
NET OPERATING PROFIT	(\$325.93)	\$44.32	(\$216.67)	\$115.60
CAPITAL COSTS				
INTEREST ON OPERATING CAPITAL		\$6.20	\$5.72	\$5.62
INTEREST ON EQUIPMENT INVESTMENT		\$70.38	\$54.59	\$48.87
TOTAL CAPITAL COSTS	\$0.00	\$76.58	\$60.31	\$54.49
RETURN TO LAND AND RISK	(\$325.93)	(\$32.26)	(\$276.97)	\$61.11

TABLE 11. Whole farm summary, Tularosa Basin, Otero County,
Projected 2009.

GROSS RETURNS		
ALFALFA HAY	40.00 ACRES	
CROP		\$33,600
OATS FOR HAY	5.00 ACRES	
CROP		\$1,500
SORGHUM/SUDAN	5.00 ACRES	
CROP		\$3,000
GROSS RETURN		<u>\$38,100</u>
CASH OPERATING EXPENSES		
SEED		\$950
FERTILIZER		\$2,220
CHEMICALS		\$959
CROP INSURANCE		\$0
OTHER PURCHASED INPUTS		\$806
CANAL WATER		\$0
FUEL, OIL & LUBRICANTS-EQUIPMENT		\$1,141
FUEL-IRRIGATION		\$6,885
REPAIRS		\$219
CUSTOM CHARGES		\$0
LAND TAXES		\$127
OTHER EXPENSES		\$12,260
TOTAL CASH EXPENSES		<u>\$25,566</u>
RETURN OVER CASH EXPENSES		\$12,534
FIXED EXPENSES		\$5,362
TOTAL EXPENSES		\$30,928
NET FARM INCOME		\$7,172
LABOR AND MANAGEMENT COSTS		\$5,465
NET OPERATING PROFIT		\$1,707
CAPITAL COSTS		
INTEREST ON OPERATING CAPITAL		\$305
INTEREST ON EQUIPMENT INVESTMENT		\$3,332
TOTAL CAPITAL COSTS		<u>\$3,637</u>
RETURN TO LAND AND RISK		<u>(\$1,930)</u>

LAND VALUE	RETURNS TO RISK*	RETURN ON INVESTMENT**
\$700 /ACRE	(\$2,980)	2.58%
\$900 /ACRE	(\$3,280)	2.24%
\$1,100 /ACRE	(\$3,580)	1.98%
\$1,300 /ACRE	(\$3,880)	1.78%
\$1,500 /ACRE	(\$4,180)	1.61%
\$1,700 /ACRE	(\$4,480)	1.47%
\$1,900 /ACRE	(\$4,780)	1.35%
\$2,100 /ACRE	(\$5,080)	1.25%

* 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)